Wauwatosa, WI

Plan Commission

Meeting Agenda - Final

7725 W. North Avenue
Wauwatosa, WI 53213

Monday, June 12, 2023 **6:00 PM** **Council Chambers and Zoom: https://us02web.zoom.us/j/83599194279, Meeting ID: 835 9919 4279**

Regular Meeting

HYBRID MEETING INFORMATION

Members of the public may observe and participate in the meeting in-person or via Zoom at the link above. To access the Zoom meeting via phone, call 1-312-626-6799 and enter the Meeting ID.

CALL TO ORDER

ROLL CALL

NEW BUSINESS

1. Public hearing and consideration of the request by Alison Cebulla, Hatched, for a Conditional Use in the C2 District at 11500 W. North Avenue for an eating establishment — **23-409**

2. Public hearing and consideration of the request by Jason Growel, 67 North LLC., for a Conditional Use in the C1/North Avenue Overlay District at 6715 W. North Avenue for an eating establishment — **23-598**

3. Request by Joe Vavrina, HR Green, Inc., for a Land Combination via Certified Survey Map at 2825 N. Mayfair Road — **23-593**

4. Public hearing and consideration of the request by Joe Vavrina, HR Green, Inc., for a Conditional Use in the C2/Mayfair Overlay District at 2825 N. Mayfair Road for an eating establishment with drive-through — **23-191**

5. Request to amend various sections of Chapter 24, Zoning Code — **23-245**

ADJOURNMENT

NOTICE TO PERSONS WITH A DISABILITY
Persons with a disability who need assistance to participate in this meeting should call the City Clerk's office at (414) 479-8917 or send an email to tclerk@wauwatosa.net, with as much advance notice as possible.

File #: 23-409 **Agenda Date:** 6/12/2023 **Agenda #:** 1.

Public hearing and consideration of the request by Alison Cebulla, Hatched, for a Conditional Use in the C2 District at 11500 W. North Avenue for an eating establishment

A. Background/Options

The applicant is proposing to operate a 2,918 square foot bakery and cafe at 11500 W. North Avenue in the General Commercial (C-2) Zone. Surrounding land uses include single family residential to the north and commercial uses to the south, east, and west. In accordance with Wauwatosa Municipal Code (WMC) Table 24.07.030, a Conditional Use Permit is required for the use.

The floor plan contains a dining area, kitchen, order counter, cooler & freezer space, restrooms, and merchandise display area. No outdoor dining is requested. The entrance into the space is located at the south end of the space adjacent to the parking lot. The proposed operating hours are Monday through Thursday, from 7:00 am to 5:00 pm; Friday and Saturday from 7:00 am to 7:00 pm, and Sunday from 7:00 am to 3:00 pm.

B. Staff Comments

Planning/Zoning Division
The project site contains a sufficient amount of parking for the proposed use and the adjacent tenant, Papa Johns, which is a carry out pizza restaurant. Shared use of the parking area, as allowed in accordance with WMC 24.11.050, is justified in that peak times for the proposed bakery and cafe (morning and afternoon) offset from peak hours for carry out pizza restaurant (evenings).

No bike parking is provided. Both short- and long-term bicycle parking in compliance with City Code 24.11.080 is required prior to occupancy permit issuance.

Building Division
Plan review & applicable building permits required. DSPS plan approvals may be required depending on scope of work.

City Assessor’s Office
Provide detailed costs of any alterations and/or new construction, as well as income and expense information as requested by the Assessor's Office.

City Clerk’s Office
No comments provided.

Public Works Department
No comments provided.

Engineering Division
For existing buildings, any building project in excess of $100,000 is subject to sanitary sewer lateral replacement or repair if the existing lateral does not pass Board of Public Works testing requirements according to City Code

13.30.030.

Roof drains are required to be directly connected to the City's storm sewer through underground piping per City Code 15.04.060.F.2.

If a trash dumpster is located outside, it must be screened from view of streets and all abutting lots according to the requirements outlined in City Code 24.12.040.

Fire Department
All applicable fire codes shall be followed.

Health Department
Applicable license required.

Police Department
No comments provided.

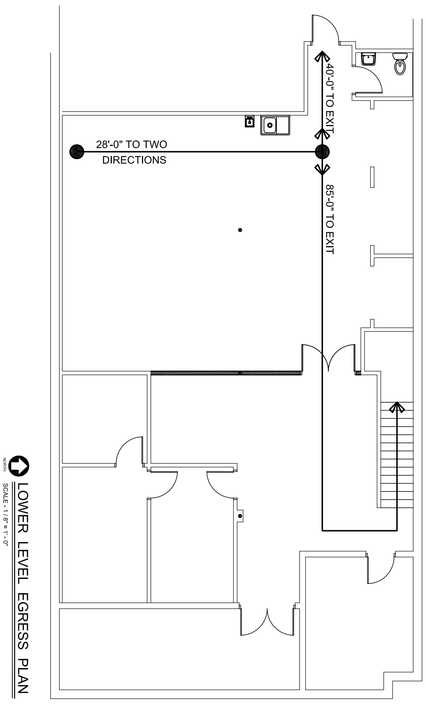
C. Recommendation

Staff recommends approvals subject to:

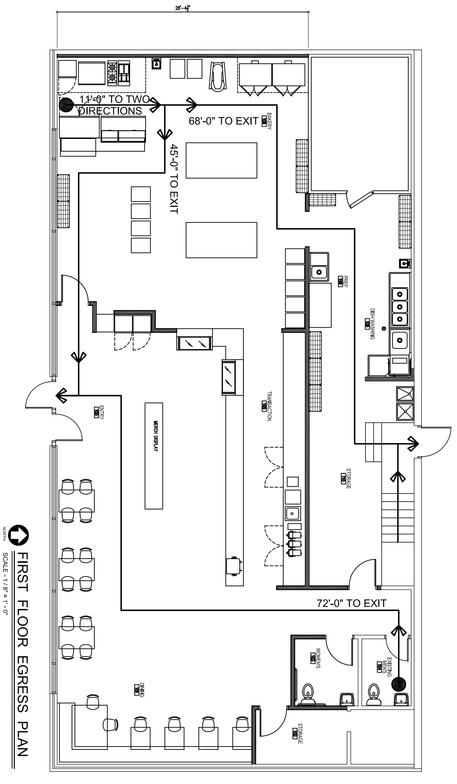
1. Establishing hours of operation.
2. Providing detailed costs of any alterations and/or new construction, as well as income & expense as requested by the Assessor's office.
3. Providing short- and long-term bicycle parking in compliance with City Code 24.11.080 prior to occupancy permit issuance.
4. If the building project exceeds $100,000, the project is subject to sanitary sewer lateral replacement or repair if the existing lateral does not pass Board of Public Works testing requirements according to City Code 13.30.030.
5. Roof drains are required to be directly connected to the City's storm sewer through underground piping per City Code 15.04.060.F.2.
6. If a trash dumpster is located outside, it must be screened from view of streets and all abutting lots according to the requirements outlined in City Code 24.12.040.
7. Under WMC 24.16.040I., a Conditional Use will lapse and have no further effect one year after it is approved by the Common Council, unless a building permit has been issued (if required); the use or structure has been lawfully established; or unless a different lapse of approval period or point of expiration has been expressly established by the Common Council.
8. Obtaining other required licenses, permits, and approvals.

11500 W. North Ave.

City of Wauwatosa



LOWER LEVEL EGRESS PLAN
SCALE: 1/8" = 1'-0"

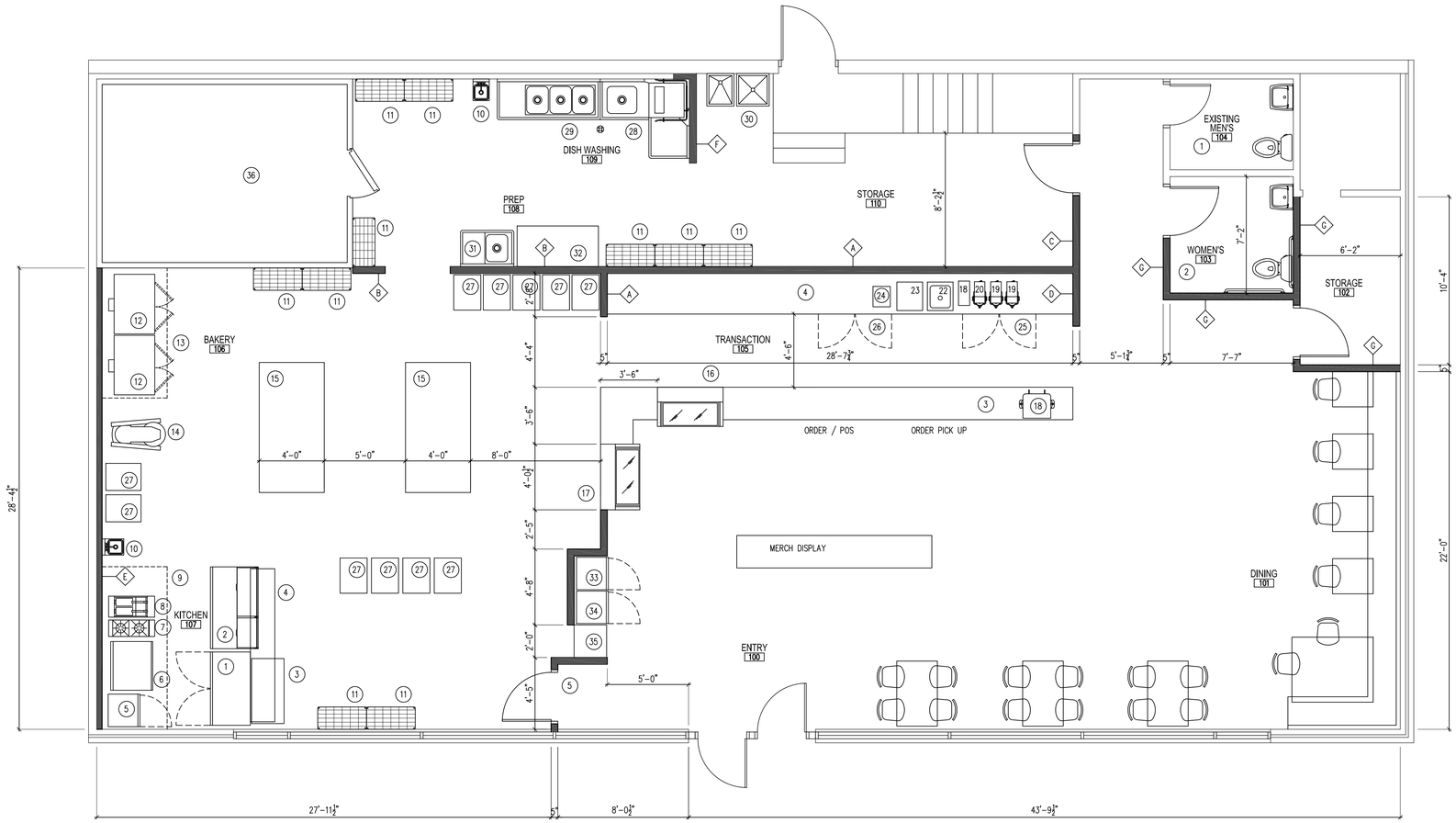


FIRST FLOOR EGRESS PLAN
SCALE: 1/8" = 1'-0"

A1-00	JOB NO.: 2023-0000 DRAWN BY: TEV	DATE: 5/8/2023 REVISION DATE:	PROJECT TITLE HATCHED 11500 W NORTH AVE WAUWATOSA, WISCONSIN 53226

FIRST FLOOR EGRESS PLAN
LOWER LEVEL EGRESS PLAN

VAVRA DESIGN



FLOOR PLAN KEYED NOTES

1. THE EXISTING BATHROOM TO RECEIVE NEW FINISHES. (ALTERNATE BID – MOVE THE SOUTH WALL OVER 1'-8" AND RELOCATE THE TOILET TO MAKE THE BATHROOM MEET ADA)
2. NEW ADA BATHROOM
3. NEW TRANSACTION COUNTER TOP OPEN BELOW FOR SHELVING UNITS
4. NEW CASEWORK AND COUNTERTOP
5. DELIVERY ENTRANCE

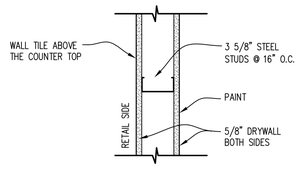
EQUIPMENT KEY LIST

KEY	DESCRIPTION
1	60" REFRIGERATED WORKTOP
2	60" REFRIGERATED SANDWICH PREP
3	24" x 48" STAINLESS STEEL TABLE WITH TWO LOWER SHELVES FOR EXPEDITING
4	10' STAINLESS STEEL TWO SHELF EXPEDITING PASS WITH HEAT LAMP
5	24" COMBI OVEN
6	36" FLAT TOP GRIDDLE
7	2 BURNER STOVE
8	DEEP FRYER
9	10'-0" EXHAUST HOOD
10	STAINLESS STEEL HAND SINK
11	36" NSF ADJUSTABLE SHELVING UNIT
12	DECK OVEN
13	8'-0" EXHAUST HOOD
14	MIXER
15	48" x 96" WOOD TOP BAKING TABLE
16	BAKERY DISPLAY CASE
17	REFRIGERATED BAKERY DISPLAY CASE
18	ESPRESSO MACHINE
19	COFFEE MACHINE
20	TEA MACHINE
21	COFFEE GRINDER
22	DROP IN SINK
23	ICE BIN
24	DRINK MIXER
25	UNDER COUNTER REFRIGERATOR
26	UNDER COUNTER FREEZER
27	PAN RACK
28	DISH WASHER
29	THREE COMPARTMENT SINK
30	EXISTING MOP SINK
31	STAINLESS STEEL PREP SINK
32	60" x 30" STAINLESS STEEL PREP TABLE
33	TWO DOOR REACH IN REFRIGERATED GLASS DOOR MERCHANDISER – (TO GO)
34	TWO DOOR REACH IN FREEZER GLASS DOOR MERCHANDISER – (TO GO)
35	HOT TO GO SHELF
36	EXISTING WALK-IN COOLER

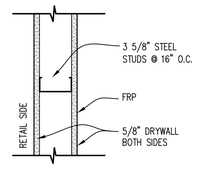
FIRST FLOOR PLAN

NORTH

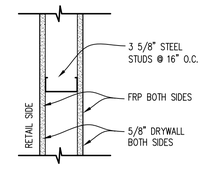
SCALE - 1 / 4" = 1' - 0"



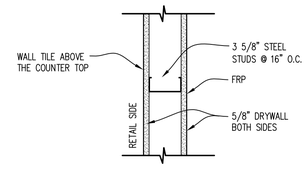
D INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"



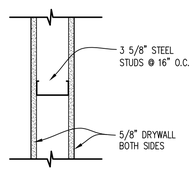
C INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"



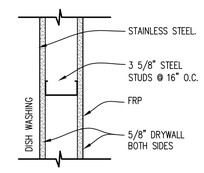
B INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"



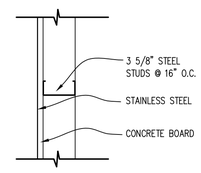
A INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"



G INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"



F INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"



E INTERIOR PARTITION
SCALE: 1 1/2" = 1'-0"

VAVRA DESIGN

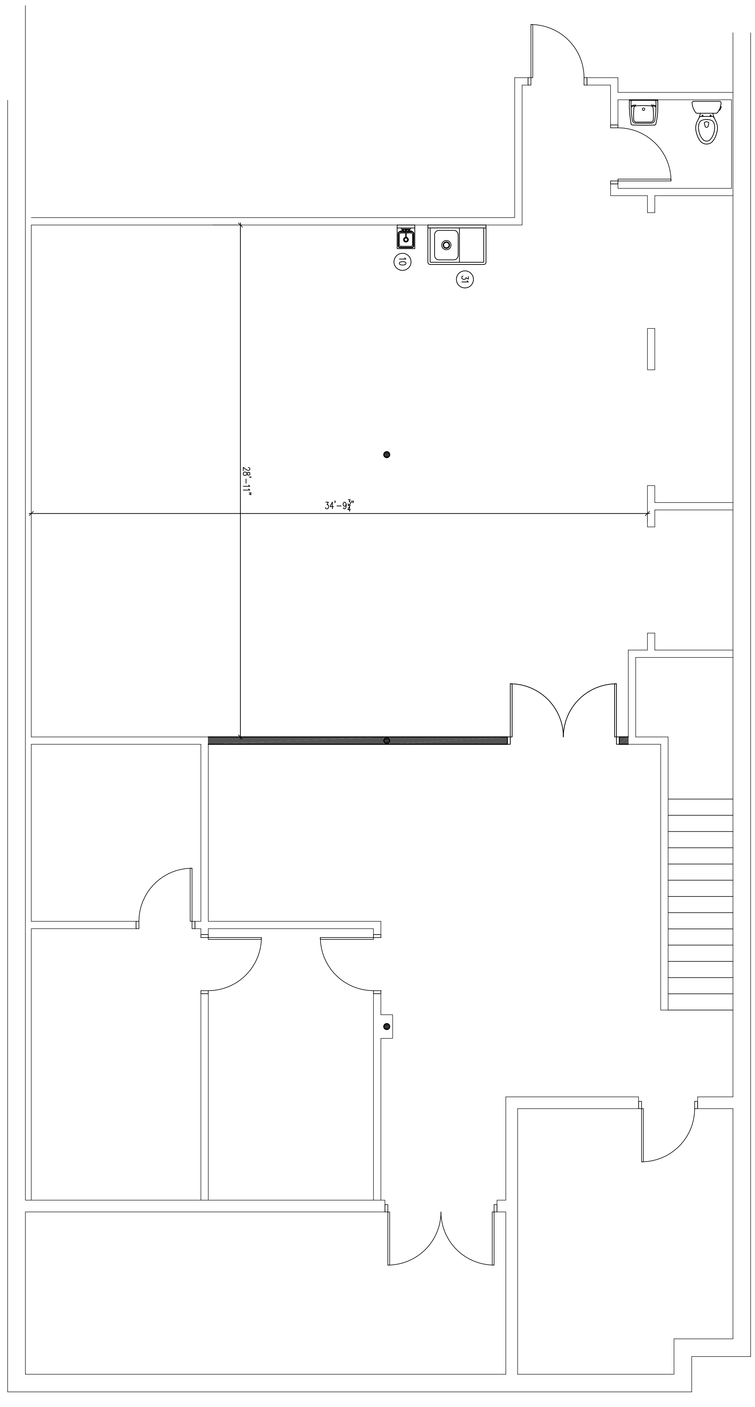
FIRST FLOOR PLAN
WALL TYPES

PROJECT TITLE
HATCHED
11500 W NORTH AVE
WAUWATOSA, WISCONSIN 53226

DATE:
5/8/2023
REVISION DATE:

JOB NO.:
202324.00
DRAWN BY:
TEV

A2-00



NORTH

LOWER LEVEL FLOOR PLAN

SCALE - 1 1/4" = 1' - 0"

A2-01	JOB NO.: 2023-0000 DRAWN BY: TEV	DATE: 5/8/2023 REVISION DATE:	PROJECT TITLE: HATCHED 11500 W NORTH AVE WAUWATOSA, WISCONSIN 53226

LOWER LEVEL FLOOR PLAN

VAVRA DESIGN

Hatched Bakery

Projected plans (2023-2024 build out) for 11500 W North Ave.

Project description: Full build out of commercial kitchen, café, and small retail/ section. Kitchen space will include a production area as well as a hot/cold line for day of serve for the café. The café/retail space will include 20-30 seats, pre-order pick up spaces, merchandise table, and bakery display cases.

Hours of operation:

- Monday 7am – 5pm
- Tuesday 7am – 5pm
- Wednesday 7am – 5pm
- Thursday 7am – 5pm
- Friday 7am – 7pm
- Saturday 7am – 7pm
- Sunday 7am – 3pm

Number of employees: 10 - 15

Description of business: Scratch bakery and café offering morning baked goods (muffins, scones, hand pies, cinnamon rolls, etc.) along with a full sandwich, soup, and salad menu and coffee/tea program. For the last 5 years we've specialized in pie (classic 9" and 6", hand pies, pot pies, etc.) while working out of a ghost kitchen, but we will be expanding our menu and offerings, including but not limited to, breakfast and lunch items, after school snacks/programs for the surrounding schools, catering, and produce/popsicle/ice cream stand. We are looking for a permanent home to allow customers to come and enjoy breakfast, coffee, and everything in between.

File #: 23-598 **Agenda Date:** 6/12/2023 **Agenda #:** 2.

Public hearing and consideration of the request by Jason Growel, 67 North LLC., for a Conditional Use in the C1/North Avenue Overlay District at 6715 W. North Avenue for an eating establishment

A. Background/Options

The applicant is proposing to operate a 2,450 square foot restaurant at 6715 W. North Avenue in the Village Commercial Zone and North Avenue Overlay District (C1/NOR). Surrounding land uses include single family residential to the south and commercial uses to the north, east, and west. In accordance with Wauwatosa Municipal Code (WMC) Table 24.07.030, a Conditional Use Permit is required for the use.

The floor plan contains a dining area, bar, kitchen, and restrooms. A 570 square foot outdoor patio area is proposed at the south end of the building. Entrances into the space are located at the north end of the suite adjacent to North Avenue and south end of the building adjacent to the onsite parking area. The proposed operating hours are Monday through Sunday, from 6:00 am to 2:00 am.

B. Staff Comments

Planning/Zoning Division
Due to the project site's proximity to residential properties, staff recommends the patio area for the establishment close at 11:00 pm. Indoor operations of the site may occur during proposed hours (6:00 am to 2:00 pm) as this is controlled by the alcohol license.

If the parking lot is modified, compliance with landscaping requirements (24.12) may be required. Short term bike parking is provided in front of the building to the east. Long term bike parking is not required as this is not a change of use.

Building Division
Design Review Board approval required; plan review and all applicable building permits required. DSPS plan approvals may be required depending on scope of work.

City Assessor’s Office
Provide detailed costs of any alterations and/or new construction, as well as income and expense information as requested by the Assessor's Office.

City Clerk’s Office
Applicable alcohol license required.

Public Works Department
No comments provided.

Engineering Division
For existing buildings, any building project in excess of $100,000 is subject to sanitary sewer lateral replacement or repair if the existing lateral does not pass Board of Public Works testing requirements according to City Code

13.30.030.

City records show that this building is served by an existing 1-inch lead water lateral from the building to the former County water main in W. North Ave. The existing water lateral must be disconnected from the former County water main per City standards and connect to the 12-inch City water main in W. North Ave. Staff strongly recommends that all existing lead piping is replaced. If sprinklers are required by the Fire Department based on the proposed occupant load, fire flow calculations in accordance with City Code 14.20.080 will be required.

Roof drains are required to be directly connected to the City's storm sewer through underground piping per City Code 15.04.060.F.2.

If a trash dumpster is located outside, it must be screened from view of streets and all abutting lots according to the requirements outlined in City Code 24.12.040.

Fire Department
All applicable fire codes shall be followed.

Health Department
Applicable food license required.

Police Department
No comments provided.

C. Recommendation

Staff recommends approvals subject to:

1. Establishing hours of operation. The outdoor patio area shall close no later than 11:00 pm. If the City receives noise complaints regarding facility operations, the applicant shall take corrective action to resolve those complaints to the satisfaction of the Zoning Administrator and may include modifying hours of operation.
2. Provide detailed costs of any alterations and/or new construction, as well as income & expense as requested by the Assessor's office.
3. The existing water lateral must be disconnected from the former County water main per City standards and connect to the 12-inch City water main in W. North Ave.
4. Design Review Board approval required; plan review and all applicable building permits required. DSPS plan approvals may be required depending on scope of work.
5. If the building project exceeds $100,000, the project is subject to sanitary sewer lateral replacement or repair if the existing lateral does not pass Board of Public Works testing requirements according to City Code 13.30.030.
6. Roof drains are required to be directly connected to the City's storm sewer through underground piping per City Code 15.04.060.F.2.
7. If a trash dumpster is located outside, it must be screened from view of streets and all abutting lots according to the requirements outlined in City Code 24.12.040.
8. Under WMC 24.16.040I., a Conditional Use will lapse and have no further effect one year after it is approved by the Common Council, unless a building permit has been issued (if required); the use or structure has been lawfully established; or unless a different lapse of approval period or point of expiration has been expressly established by the Common Council.
9. Obtaining other required licenses, permits, and approvals.

6715 W. North Ave.

City of Wauwatosa

CITY OF WAUWATOSA | 7725 N. NORTH AVE | WAUWATOSA WI, 53213 | WAUWATOSA.NET

1 " = 89 '

Thursday, May 11, 2

Description Growlers East Tosa

Growlers East Tosa a 2450sq ft venue will be a full restaurant Gastropub with a throwback sports and beer theme through the building. Walking into the front entrance on the right is the full-service bar with 25-30 seats. Walking straight through the door will be the dinning/viewing area which will seat around 26 people, and on the right side Infront of the bar will be an additional 18 seats for larger groups. In the south end back area will be a space for Darts, golf simulator, and shuffleboard. Behind that wall will be our full-service kitchen and prep area. Our patio will be on the south end of the building near the parking lot, we have 26 parking spots allocated for us and our customers to use.

Menu will consist of high-quality bar food wings, burgers, pizza, appetizers, and a few shared platters specifically geared towards sports watching food. We plan on serving full menu until 9 or 10pm, and after that having a late-night menu consisting of smaller plate items. 24 beers on tap with give us the variety to indulge into lots of local craft beers, and we will be working with distributors on creating a vast craft cocktail menu focused on local spirts. We will also have a vast variety of bourbons with flights available for tasting.

Staffing will consist of a full crew of back of the house/kitchen staff and front of the house servers, bartenders, bar backs, and 1-2 managers. In early stages we estimate our staff 12-16 employees, and as we ramp up and continue to grow our business, we see that number reaching 25 members on staff.

Bartenders 4-6

Cooks 3-5

Barbacks 2-3

General Manger/Agent

Kitchen Manger

Servers 4-5

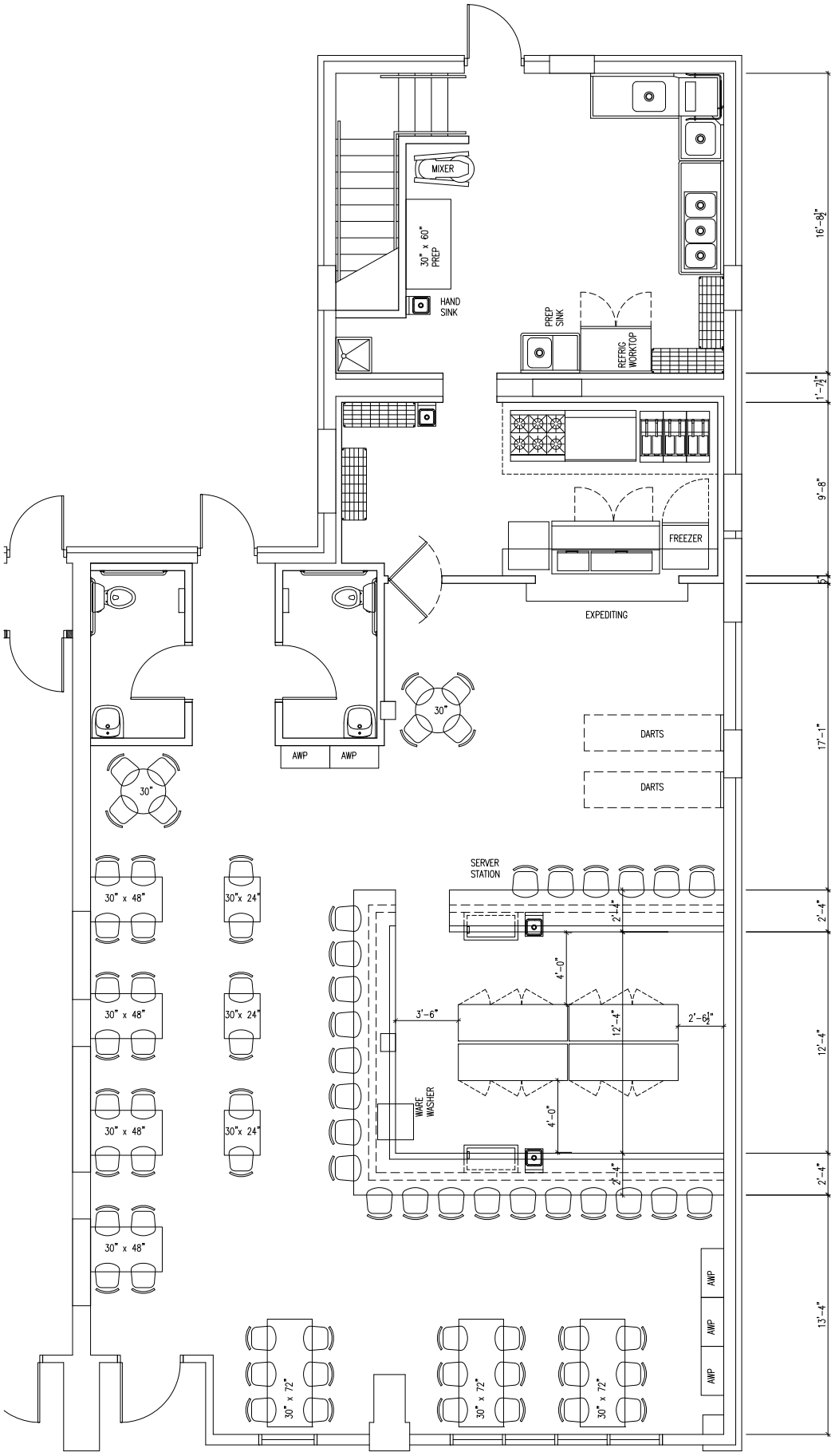
Assistant Managers 2

Hosts/ Food Runners 2-4

Hours of Operations will consist of being open every day from 11am until bar close. We will be doing lunch service starting at 11am, and brunch on Sundays will start once we are staffed up starting at earlier times of 9am. We will be applying for full hours of operations 6am through bar close Sunday – Saturday. We are a sports orientated establishment and some games will run

early or late into the night. Premier soccer, overseas NFL Games, West Coast Bucks or Brewers games, etc.

Growlers East Tosa will be the premiere place to watch local sports games, try different craft beers and bourbons, and come together with your friends and family to enjoy our delicious food.

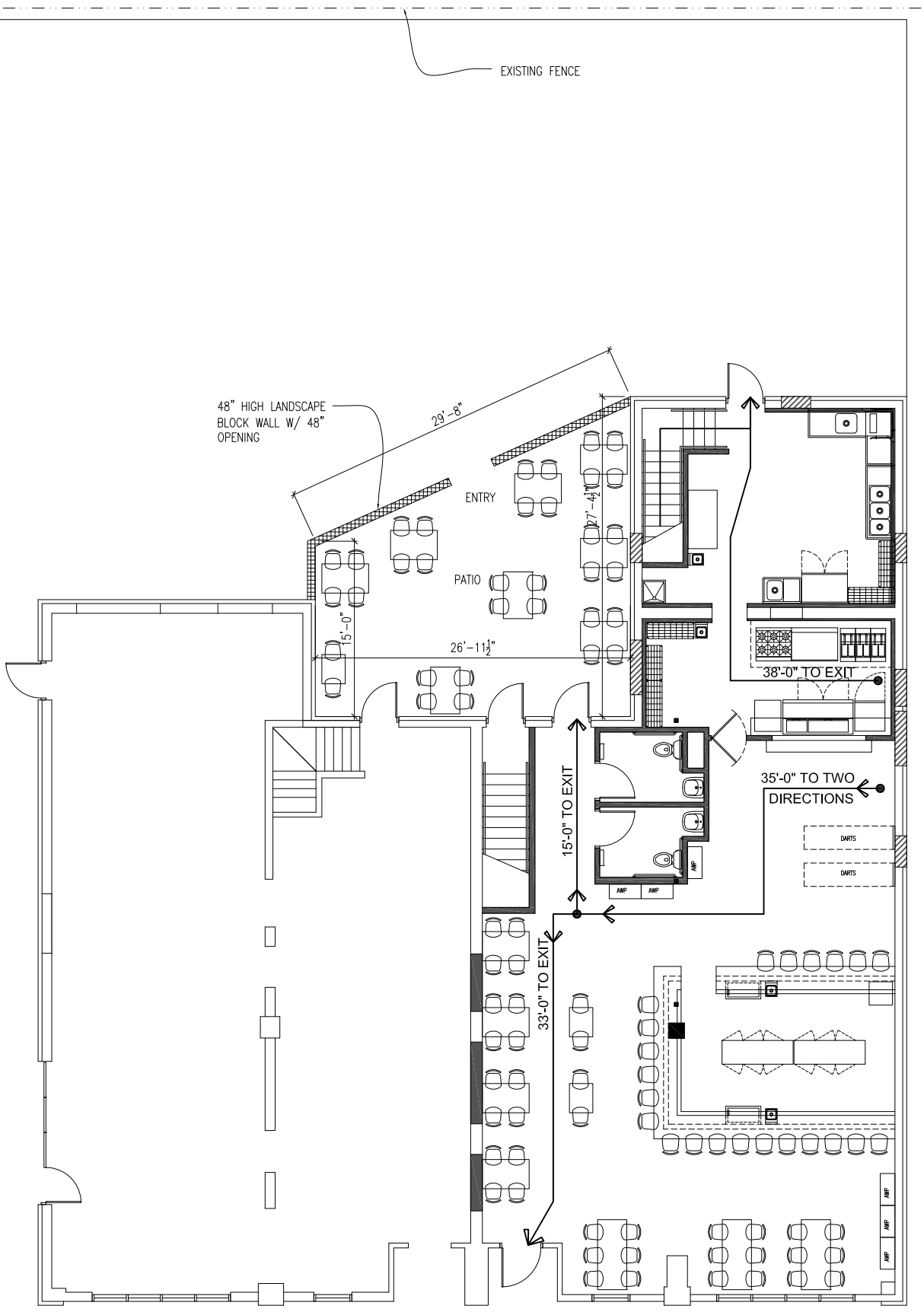


NORTH

PROPOSED FIRST FLOOR PLAN

SCALE - 1 / 4" = 1' - 0"

OPTION 'A'



FIRST FLOOR EGRESS PLAN

File #: 23-593 **Agenda Date:** 6/12/2023 **Agenda #:** 3.

Request by Joe Vavrina, HR Green, Inc., for a Land Combination via Certified Survey Map at 2825 N. Mayfair Road

A. Background/Options

The applicant is proposing to combine two adjacent parcels into one large parcel via a Certified Survey Map (CSM) to accommodate the proposed development described in the next agenda item. Currently the properties are developed with office buildings, a shared parking lot, and shared reciprocal access.

Attached to this report is the proposed CSM.

B. Staff Comments

Planning/Zoning Division
No issues with combining the parcels. However, the 2022 property taxes must be paid in full prior to recording the CSM.

Building Division
No issues.

City Assessor's Office
No issues.

City Clerk's Office
No issues.

Public Works Department
No issues.

Engineering Division
No issues.

Fire Department
No issues.

Health Department
No issues.

Police Department
No issues.

C. Recommendation

Staff recommends approval subject to:

1. Any technical corrections as identified by the Register of Deeds and City staff.
2. Payment of property taxes prior to recording the CSM.
3. Per State Statute 236.34 (2), the CSM is to be recorded within 12 months of the Common Council approval.

2825-2835 N. Mayfair Rd

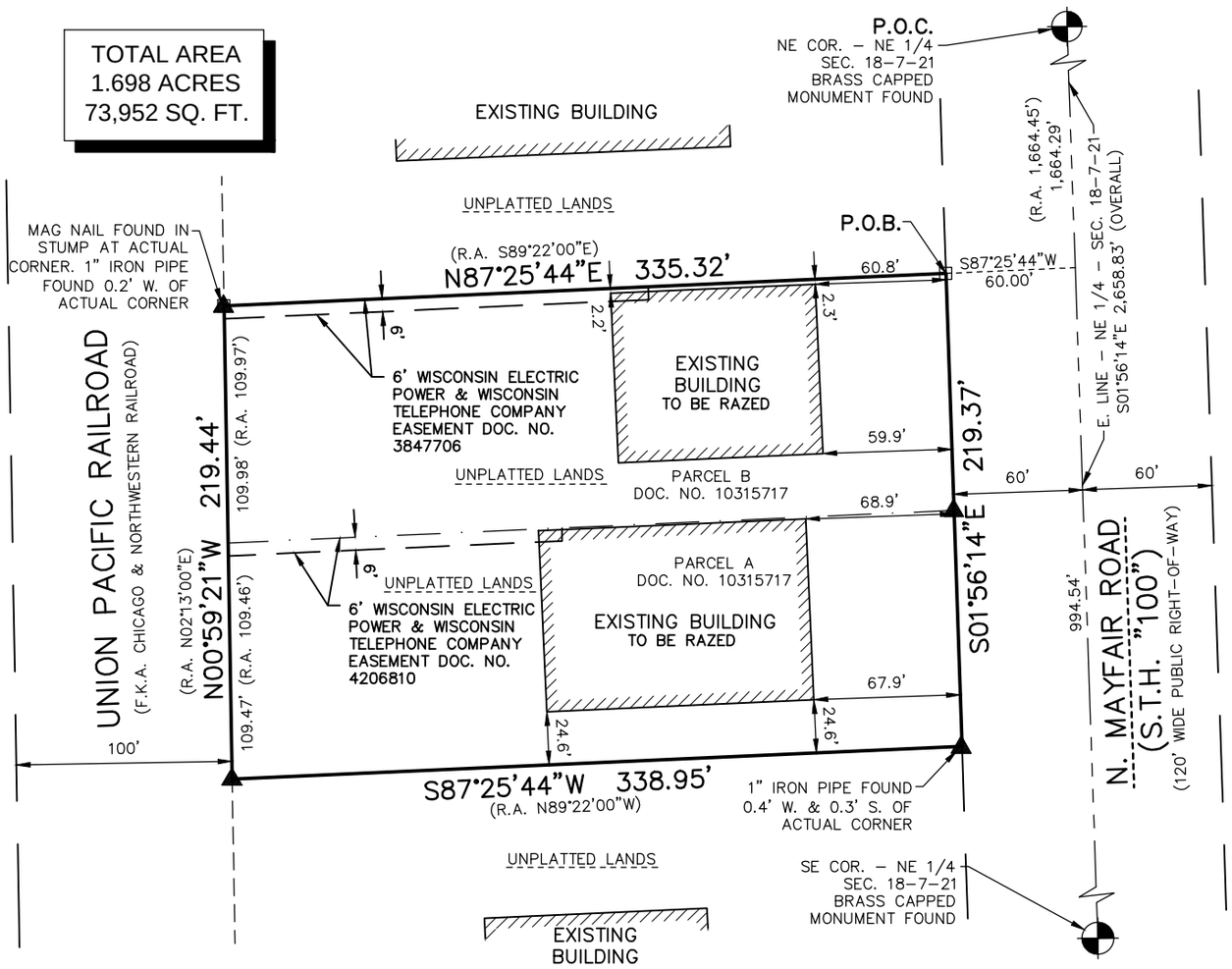
City of Wauwatosa

CERTIFIED SURVEY MAP NO. _____

FOR

CHICK–FIL–A, INC.

PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 18, TOWNSHIP 7 NORTH, RANGE 21 EAST, CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.



LEGEND

(R.A.) "RECORDED AS" INFORMATION

▲ – 1" IRON PIPE FOUND

⊡ – MAG NAIL FOUND

⌖ – SECTION CORNER MONUMENT FOUND

NORTH POINT REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD27). THE EAST LINE OF THE NORTHEAST 1/4 OF SECTION 18 HAS A BEARING OF SOUTH 01°–56'–14" EAST.

NORTH

80' 0 80' 160'

1"= 80'

SCALE FEET

OWNER:
CHICK–FIL–A, INC.
5200 BUFFINGTON ROAD
ATLANTA, GA 30349

SHEET 1 OF 3 SHEETS

EXCEL
ARCHITECTS • ENGINEERS • SURVEYORS
Always a Better Plan
100 Camelot Drive
Fond Du Lac, WI 54935
Phone: (920) 926-9800
www.EXCELENGINEER.com
JOB NO. 2258540

CERTIFIED SURVEY MAP NO. _____

PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 18, TOWNSHIP 7 NORTH, RANGE 21 EAST, CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

I, Ryan Wilgreen, Professional Land Surveyor, hereby certify:

That I have surveyed, divided and mapped a parcel of land described below.

That I have made such Certified Survey under the direction of Chick-fil-a, Inc. bounded and described as follows:

Part of the Southeast 1/4 of the Northeast 1/4 of Section 18, Township 7 North, Range 21 East, City of Wauwatosa, Milwaukee County, Wisconsin being more particularly described as follows:

Commencing at Northeast corner of the Northeast 1/4 of said Section 18; thence South 01°-56'-14" East, along the East line of said Northeast 1/4, a distance of 1,664.29 feet; thence South 87°-25'-44" West, a distance of 60.00 feet to the Westerly right-of-way line of N. Mayfair Road, said point also being the point of beginning; thence South 01°-56'-14" East along said Westerly line, a distance of 219.37 feet to the South line of lands described as "Parcel A" in Warranty Deed recorded in the Milwaukee County Register of Deeds office on November 25, 2013 as Document No. 10315717; thence South 87°-25'-44" West along said South line, a distance of 338.95 feet to the East right-of-way line of the Union Pacific Railroad; thence North 00°-59'-21" West along said East line, a distance of 219.44 feet to the North line of lands described as "Parcel B" in said Warranty Deed; thence North 87°-25'-44" East along said North line, a distance of 335.32 feet to the point of beginning and containing 1.698 acres (73,952 sq. ft.) of land more or less.

That such is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

That I have fully complied with the provisions of Section 236.34 of the Wisconsin Statutes and the Subdivision Ordinance of the City of Wauwatosa in surveying, dividing and mapping the same.

_____

Ryan Wilgreen, P.L.S. No. S-2647
ryan.w@excelengineer.com
Excel Engineering, Inc.
Fond du Lac, Wisconsin 54935
Project Number: 2258540

CERTIFIED SURVEY MAP NO. _____

PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 18, TOWNSHIP 7 NORTH, RANGE 21 EAST, CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

Chick-fil-a, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Georgia, as owner, does hereby certify that said corporation caused the land described on this map to be surveyed, divided and mapped as represented on this map.

Chick-fil-a, Inc. does further certify that this map is required by s.236.10 or s.236.12 to be submitted to the following for approval or objection:

1. City of Wauwatosa

WITNESS the hand and seal of said owner this _____ day of _____, 20__.

Chick-fil-a, Inc.

_____

_____, _____
(Print) (Title)

STATE OF _____)

_____COUNTY)SS

Personally, came before me this _____ day of _____, 20___, the above named

_____ to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____

Notary Public, _____ County, ____

My Commission Expires:_____

PLANNING COMMISSION APPROVAL

Approved by the Planning Commission of the City of Wauwatosa this _____ day of _____, 20___.

_____ _____

_____, Chairperson _____, Secretary

COMMON COUNCIL APPROVAL

Approved by the Common Council of the City of Wauwatosa this _____ day of _____, 20___.

_____
Steven Braatz, City Clerk
SHEET 3 OF 3 SHEETS

File #: 23-191 **Agenda Date:** 6/12/2023 **Agenda #:** 4.

Public hearing and consideration of the request by Joe Vavrina, HR Green, Inc., for a Conditional Use in the C2/Mayfair Overlay District at 2825 N. Mayfair Road for an eating establishment with drive-through

A. Background/Options

The applicant is requesting approval of a Conditional Use Permit to develop and establish a drive-through restaurant at 2825 and 2835 N. Mayfair Road in the General Commercial and Mayfair Corridor Overlay (C2/MAY) Zone. The application was submitted in October 2022, which is prior to the project site being incorporated into the MAY Zone (March 2023). Therefore, only the C2 zoning standards are applicable to the project. Surrounding land uses include commercial buildings to the north and south, Blue Mound Golf and Country Club to the east, and the Union Pacific Railroad to the west.

The project site plan contains a 5,224 square foot restaurant building, double-lane drive-through, parking lot containing 68 parking spaces, and landscaping. Vehicular ingress and egress is provided at the east end of the site from Mayfair Road. The drive-through queuing area begins at the northwest corner of the site and extends south and east onto Mayfair Road.

A traffic impact analysis (TIA) was submitted with the application outlining recommendations to address traffic impacts associated with the project. These recommendations have been reviewed and accepted by the Wisconsin Department of Transportation (WisDOT). However, the City's Traffic Engineering Division, Police Department, and Fire Department have expressed concerns regarding anticipated backups on Mayfair Road as a result of the project design and projected traffic volumes which would impede emergency response and cause additional crashes on Mayfair Road. A letter from the Police Chief is attached to this report and the Fire Department's concern is indicated below. The City's Traffic Engineering Division has provided a summary of their findings and conclusions in the comment section below.

B. Staff Comments

Planning/Zoning Division
The project complies with the development standards of the C2 zone as well as development standards for a drive-through. A drive through restaurant within the C2 zone requires issuance of a conditional use permit.

Building Division
Design Review Board approval required; plan review, applicable building permits and DSPS plan approvals required.

City Assessor’s Office
Provide detailed costs of any alterations and/or new construction, as well as income and expense information as requested by the Assessor's Office.

City Clerk’s Office
No issues.

Public Works Department
No issues.

Engineering Division
Site plans showing adequate sewer capacity, construction staging information, lighting, and storm water management subject to approval by the Engineering Division.

Any building project in excess of $100,000 is subject to sanitary sewer lateral replacement or repair if the existing lateral does not pass Board of Public Works testing requirements according to City Code 13.30.030. Any existing sanitary sewer laterals that are not re-used must be abandoned at the main.

Water supply calculations are required due to the proposed upgrade to the existing lateral needed to serve the water demands of the development. The existing water laterals must be abandoned at the main.

Because the storm sewer in Mayfair Road is owned by WisDOT, storm sewer connections are subject to approval by WisDOT.

Proposed roadway work plans within Mayfair Road must be prepared by the applicant, is required to follow WisDOT permit plan guidelines, and is subject to approval by WisDOT.

The applicant is responsible for obtaining all necessary WisDOT construction permits and in coordination with the Engineering Division.

This block of N. Mayfair Road between Center and Burleigh has only sidewalk on the west side of the road and there are 2 bus stops located on this same block. To help with pedestrian safety, Engineering strongly recommends that the sidewalk be shifted to the west within the limits of this redevelopment so that at least 5 feet of terrace is provided to match what has been approved for the redevelopment at 2929 N. Mayfair Road. A public sidewalk easement will be required for any sidewalk width that must be constructed within private property.

Per City Code 24.14.030, when pedestrian connections to the public right-of-way crosses a driveway or parking area, it must be clearly differentiated though the use of elevation changes or a different paving material. Striping does not meet this requirement.

Per City Code 8.44.090, the drive approach at Mayfair Road shall not exceed 30 feet in width at the opening. A driveway opening variance will be required through the Board of Public Works. The drive approach must also be constructed in accordance with City standards. The Mayfair Road sidewalk must also be shown continuous through the drive approach.

Applicant shall meet all requirements of code chapter 24.12 pertaining to landscaping; including the requirement for a landscape performance guarantee (Section 24.12.070).

The plans show concentrated stormwater discharge to the railroad right-of-way and is subject to approval by the Railroad. Railroad permits may be required during construction and when working within 25 feet of the railroad.

Engineering - Traffic:

WisDOT Traffic Impact Analysis (TIA) Process

The Wisconsin Department of Transportation (WisDOT) is the regulating authority for access control on

Mayfair Road and is required by law to permit access to the Chick-Fil-A site to avoid landlocking the property. WisDOT required the preparation of a traffic impact analysis (TIA) for the proposed Chick-Fil-A. The purpose of a TIA is to identify the traffic impacts of development and to identify mitigation measures to address those impacts. WisDOT reviewed the TIA prepared by the developer's consultant TADI and issued a TIA acceptance letter. The following is a highlight summary of the WisDOT's access requirements for the Chick-Fil-A site. A copy of the WisDOT TIA acceptance letter is included in the attachments for this agenda item.

- One full access driveway to Mayfair Road directly across from the existing median opening. The driveway shall provide two eastbound lanes (one exclusive left-turn lane, one exclusive right-turn lane). Each exiting turn lane shall have a minimum storage length of 50 feet that is not intersected by internal circulation drive aisles or parking. The entrance shall be designed to prevent the blocking of entering vehicles by vehicles circulating on site to avoid the potential for queue spill back onto WIS 100.
- The Mayfair Road southbound U-turn lane shall be removed and replaced with a raised median.
- Cross access easements shall be provided to the parcels to the north and south of the development parcel and shall be submitted for review and approval by WisDOT.
- Property or business owners impacted as a result of the proposed development must be notified, and written documentation that notification occurred shall be provided to WisDOT prior to access permit submittal.

Contact with Peer Communities

City staff contacted representatives of communities where Chick-Fil-As opened within the past few years. These include the City of Ashwaubenon (city engineer), City of Glendale (director of public works), Town of Grand Chute (police captain), and City of Onalaska (director of public works). The following are the key themes that were shared by the communities.

- There was a very high traffic demand for the first several weeks of the restaurant opening dates ("the opening period"). Traffic waiting to enter the sites would spill into the public street and/or adjacent properties.
- Temporary traffic patterns were required at development entrances during the opening period. These included right-in/right-out only operations (no left-in and no left-out) through use of traffic barrels and appropriate signs. If necessary, a live lane of through traffic was reassigned for traffic stopped and waiting to enter the site.
- Police officers were required during the opening period to manage traffic at development entrances.
- With the exception of the Grand Chute site - which was undersized and later corrected to provide additional drive-through storage - drive-through traffic was fully contained on-site following the opening period.

Drive-Through Operations

At the City's request, the developer's consultant TADI performed a drive-through study the Brookfield Chick-Fil -A (12625 W. Capitol Drive), Greendale Chick-Fil-A (5351 S. 76th Street), and Glendale Chick-Fil-A (5201 N. Port Washington Road). The studies were performed after the opening period during the weekday evening rush hours of 4:00 to 6:00pm and Saturday rush hours of 11:00 to 1:00pm. The average number of vehicles observed waiting in the drive-throughs was 13 vehicles. The maximum number of vehicles observed waiting in the drive-throughs was 32 vehicles. These observations suggest that the proposed drive-through stacking for 41 vehicles at the Wauwatosa site will be sufficient after the opening period.

Driveway Safety & Operations

Mayfair Road is a posted 40-mph six-lane divided state highway. Crash statistics were collected for Mayfair Road from 500-feet north of Burleigh Road to 500-feet south of Center Street. In the 5-year span of January 1, 2018 through December 31, 2022, this segment of Mayfair Road experienced 259 total crashes and a crash rate of 693.53 crashes per hundred million vehicle miles traveled (HMVMT). The statewide average for divided highways posted 40 mph or less is 444.81 crashes per HMVMT. That is, crashes in this general area of Mayfair Road are approximately 56% higher than the statewide average.

Closer attention was given to the 28 crashes that have occurred from 500-feet south of Burleigh Street to 500-feet north of Center Street. The crashes show a pattern of sideswipe, rear-end, and run-off-the-road crashes. Contributing factors include lane changes around slowing traffic, vehicles slowing or stopped in traffic lanes to turn into driveways or backed-up from traffic signals, and inattentive and reckless driving. This information shows the necessity for keeping traffic from backing-up at the entrance of the Chick-Fil-A site onto Mayfair Road.

The City reviewed the traffic models of the Mayfair Road & the Chick-Fil-A driveway. The models estimate peak hour traffic back-ups on the driveway waiting to leave Chick-Fil-A to head north on Mayfair Road are expected to reach 12+ vehicles with average vehicle delays exceeding a minute ("level of service F"). The internal site intersection is located only 50-feet (or 2-vehicle lengths) west of Mayfair Road. This means that back-ups will occur through this internal intersection.

The Chick-Fil-A internal intersection is proposed to be striped and signed DO NOT BLOCK INTERSECTION. However, these signs and striping will not stop motorists from blocking the internal intersection. When blocked, motorists entering the site from Mayfair Road who need to head south to the handicap parking stalls, mobile order/curbside parking stalls, and the eventual cross access to the property to the south will not be able to complete their turn and will block other motorists trying to enter the site. This will lead to motorists being backed-up and stopped in the live traffic lanes of Mayfair Road - especially during rush hours. With Mayfair Road posted at 40-mph and with the demonstrated history of crashes related to lane changes, stopped traffic, and inattentive and reckless driving, any back-ups onto Mayfair Road are unacceptable to public safety.

Fire Department
The Wauwatosa Fire Department is concerned with any project that has potential to create frequent lane restrictions due to traffic queuing. These concerns are elevated if these restrictions were to occur on an arterial street such as Mayfair Road. Any such restriction has the potential to increase our response times to emergency calls.

Health Department
Applicable food license required.

Police Department
See attached WPD response.

C. Recommendation

Staff recommends denial of the project based on public safety concerns, as expressed by the City's Police, Fire and Public Works (Engineering) Departments, due to anticipated backups on Mayfair Road as a result of the project design and projected traffic volumes. Due to these concerns, the project has been deemed contrary to the required Conditional Use criteria and standards outlined in Wauwatosa Municipal Code (WMC) 24.16.040.G. Of the required criteria, staff has determined:

1. The establishment and operation of the conditional use will be detrimental to and endanger the public health,

safety and general welfare (WMC 24.16.040.G.1);

2. adequate and necessary street improvements are not being provided to accommodate the development (WMC 24.16.040.G.4);
3. and, that adequate measures are not being taken to provide ingress and egress that will minimize on- and off-site traffic congestion (WMC 24.16.040.G.5).

2825 & 2835 N. Mayfair Rd.

City of Wauwatosa

Chick-fil-A, Inc. | 5200 Buffington Road Atlanta, Georgia 30349-2998 | chick-fil-a.com | 404.765.8000

Chick-fil-A Wauwatosa

Project Narrative

May 10, 2023

Site Summary

Chick-fil-A (CFA) will redevelop an approximate 1.70-acre parcel located along North Mayfair Road (STH 100) in the City of Wauwatosa. The CFA site is more specifically located at 2825 & 2835 N. Mayfair Road. The subject parcel abuts STH 100, is surrounded by commercial and retail uses on each side, and the two mainline tracks of the Union Pacific railroad run along the west property line.

A pair of functionally obsolete office buildings currently stand at the CFA parcel surrounded by asphalt parking lots with minimal landscaping. CFA will raze the office buildings and redevelop the site with a new single story 5,224 square foot free-standing restaurant, outdoor patio seating, dual drive-thru facility with free-standing canopies, parking areas with attractive perimeter and interior landscaping, and associated utilities. The property is zoned C-2 General Commercial District. Per the City's Zoning Code, restaurants with drive-thru facilities are permitted within this district as Conditional Uses. Operating hours for CFA restaurants are generally Monday thru Saturday, between 6:00 AM to 10:30 PM, closed on Sundays. CFA will employ approximately 60-80 people with 15-20 employees at the restaurant during the largest shift. Approximately 120 construction jobs will be created by construction of the restaurant.

Lot Layout/Configuration

The CFA building will be constructed at the southeast corner of the site in order to achieve the following: create attractively landscaped perimeter and interior areas; establish a safe and functional vehicle and pedestrian traffic pattern; provide for adequate parking and efficient traffic circulation; and to place a modern building with quality materials in a prominent location in the City. The outdoor patio to the east of the new building will feature 5 tables (for a total of 20 outdoor seats). A decorative fence will be installed around the perimeter to create a barrier between the patio and the adjacent parking lot.

Stormwater management will be handled by an underground detention system as well as a series of water quality features to reduce the amount of stormwater runoff to surrounding right of way while enhancing the water quality level.

Parking for CFA will surround the restaurant building with the required perimeter and interior parking lot landscaping. The number of parking spaces provided will satisfy the City Code requirements. Both short term (outdoor) bicycle parking and the required long term (indoor) bicycle parking are provided as shown on the plans. The internal site circulation for the drive-thru queue will be configured to accommodate approximately 41 vehicles which will minimize backups within the parking lot and prevent any vehicles from waiting on the adjacent roadways.

Last but not least with respect to the site layout, Chick-fil-A carefully considered the existing traffic volume and patterns in the trade area as well as the traffic expected at its restaurant with drive-thru lanes. CFA recognizes that with its success and popularity, its restaurants were the focus of both real and perceived traffic issues in the past. However, it found that often the traffic issues were attributable to prior drive-thru layout designs (that are not being used here, as detailed below) or where Chick-fil-A opens its first restaurant in a community (which is not the case here with restaurants nearby in Brookfield and West Allis).

Nevertheless, the CFA team has been working to address the various traffic questions from the beginning of its design process. On file is a Traffic Impact Analysis by the traffic engineers at the reputable local firm, Traffic Analysis & Design, Inc., as well as a Technical Memorandum (Median Alternatives Analysis & Chick-Fil-A Queue Study). Both documents contain numerous data and tables as well as detailed analysis (collectively these materials are hereinafter referred to as the "traffic studies"). The traffic studies are further supported by significant and technical dialogue and discussion at various design stages and in multiple forms by working closely with the Wisconsin Department of Transportation (with formal jurisdiction over Mayfair Road (STH 100) and the City of Wauwatosa Engineering Services Division.

As a result of the traffic studies and the requested design changes by the State and City, CFA has substantially revised the plans that are now on file. The design will close three of the four existing access points to Mayfair Road per the Wisconsin Department of Transportation to create one mid-point, full access drive in order to reduce the number of merge points with traffic on Mayfair Road thereby reducing congestion. Additionally, median modifications will be made per the Wisconsin Department of Transportation. Upon the traffic studies and follow up review and discussion, the Wisconsin Department of Transportation has determined these improvements to be acceptable and that it will issue permits accordingly. Finally, at the request of the City Engineering Department, an extended access drive was added to the plan along with provisions to provide cross access connection to the properties to the north and south .

<u>Drive-Thru Features & Operations</u>

CFA will install two free-standing canopies over the drive-thru lane: An order point canopy to be located southwest of the CFA building; and an order meal delivery canopy to be located on the south side of the CFA building, over the pick-up window.

CFA's drive-thru operation consists of two lanes of customer ordering and two lanes of meal fulfillment. This dual flex lane concept allows the restaurant operator to use the outer lane as either a second meal fulfillment lane or as a by-pass lane at their discretion to properly support the operational needs of his or her business. If/when the outer lane is not in use, a series of magnetic delineators will be used to merge cars back into one lane for meal fulfillment at the window. Providing the two full lanes gives the operator the most flexibility to service their guests effectively and efficiently.

Additionally, Chick-fil-A has a philosophy of encouraging a team member forward of the drive-thru operation to provide a personal guest experience and increase overall efficiency. CFA has achieved this through incorporating the ability for team members to take meal orders and payment face-to-face prior to guests arriving at the meal fulfillment area and through team members executing outdoor meal delivery in the meal fulfillment area.

Enhancements have also been made at the pick-up window through implementation of a drive thru door. The enhancement constitutes replacing the typical window with a multi-function door that also can function as a window. The purpose of the drive thru door is to allow team members to stage more meals and beverages indoors while they are delivering meals outside, directly to vehicle windows. The door also allows easier access to the meals without passing them through a small window. This change helps to create an efficient drive-thru operation and improve the overall guest experience.

Bike Racks, Deliveries & Refuse/Recycling

Bike racks for short term bicycle parking are provided adjacent to the restaurant at the northwest corner of the building. Wall-mounted, indoor bike racks for long term bicycle parking are provided for employees within the secured storage room of the refuse enclosure on the west end of the site.

Standard deliveries to the site via smaller box trucks will typically occur daily during non-peak operating hours. Larger semi-truck deliveries will occur after operating hours via key drops and will occur 2-3 times a week.

The storage room and refuse enclosure will be constructed utilizing materials to compliment the restaurant building. The dual-bin dumpsters inside of the enclosure will be screened from the front by durable double gates with prefinished plastic lumber (weathered wood).

Signage

CFA's signage will be attractive and compliant with the City Code including building signage, a monument sign, and directional signage.

Building Elevations

The City's Design Review Board reviewed the building design over the course of several meetings and granted approval unanimously. The Chick-fil-A building has been designed with a mixture of brick veneer, prefinished metal, and glass. The materials align with the adjacent buildings in the surrounding commercial area. Similarly, the building height will be compatible with the surrounding developments and provide for a street presence that aligns with the City's master plan tenets for the overall area. The enhanced building height will also allow for a parapet wall that screens the heating/cooling mechanical units from the ground level. Accent light via wall sconces are proposed around the building to provide nighttime interest.

Community Role

The history of Chick-fil-A and the food that it serves, as well as its customer service emphasis, is detailed in the Addendum (attached). Upon those foundational principles, the Company's philosophy is that their restaurants become integral parts of the communities in which they are located. Chick-fil-A looks forward to serving the many Wauwatosa customers with this location that is part of a vibrant commercial district and being a convenient place of employment for City residents. The Company makes scholarships available to store employees and sponsors the Winshape Foundation which supports a family of programs designed to encourage outstanding young people nationwide. The Foundation has a college program and operates a series of camps, homes, and retreats. On the local level, individual restaurant operators typically engage in community support activities such as sponsoring youth sports teams, supporting educational activities, and leadership initiatives.

Zoning Ordinance Compliance & Conditional Use Permit Standards

The site is zoned C-2, General Commercial district. Under the City of Wauwatosa Code of Ordinances, the C-2 district accommodates a "broad range of business and commercial uses, often in the physical form of shopping centers, large-format retail and other destination-oriented uses in which a large percentage of customers will arrive by automobile." *See* Sec. 24.03.010.B.3., Code. The CFA drive-thru restaurant use unequivocally fits the C-2 standards.

However, all drive-thru restaurants in the City require a conditional use permit. Under Sec. 24.16.040.G., conditional use permits may be issued when the standards set forth in the ordinance are met. The ordinance standards must be applied pursuant to State of Wisconsin Act 67 (2017) that created requirements for the City to grant a conditional use permit if the applicant "meets or agrees to meet all of the requirements and conditions specified in the city ordinance" and that further, any condition imposed by the City must be reasonable and be "related to the purpose of the ordinance and be based on substantial evidence." *See* Sec. 62.23(7)(de), Wis. Stats. (Act 67). Further, there is no required finding under Act 67 that the use is consistent with the comprehensive plan. *See* Sec. 66.1001(2m)(b).

The City's review and action on proposed conditional uses pursuant to its zoning ordinance must comply with Act 67. Section 24.16.040.G. sets forth the following standards:

- **The establishment, maintenance or operation of this conditional use will not be detrimental to or endanger the public health, safety, or general welfare.**
  The restaurant with drive-thru lanes, specifically designed for the site and trade area, will not endanger the public health, safety, morals, or comfort. The drive-thru lanes have been designed to accommodate a sufficient queue of cars on-site which will minimize backups onto the adjacent access drives and prevent any vehicles from waiting on public roads. By reducing the current 4 curb cuts to access Mayfair Road (STH 100) down to one, and incorporating the State's and City's designs for the median, extended access drive, and potential future cross access connections, the restaurant will serve to enhance the public health, safety and general welfare. Locating the building as described provides pedestrian access to the public sidewalk via a marked crosswalk to allow for safe passage across one of the traffic lanes. Such pedestrian accommodations as well as the short term and long term bicycle parking will add to the activity level in the City where the community has

embraced bike-ped features. These design features collectively represent reasonable and related obligations of the restaurant with drive-thru lanes that satisfies this standard pursuant to substantial evidence.

- **The uses, values and enjoyment of surrounding properties for purposes already permitted in the district will not be substantially impaired or diminished by the establishment, maintenance or operation of the conditional use.**
  Per the City Zoning Map, the subject property is zoned C-2 General Commercial which allows for restaurant with drive-thru as a conditional use. All properties that border the subject site have the same commercial zoning designation and, in fact, are similar uses (restaurants and commercial uses/retail stores). The current low-scale office buildings are functionally obsolete and have not attracted any developers for renovation or rehabilitation, nor have the sites attracted full-scale redevelopment. A new restaurant with drive-thru is compatible with the general land use of the neighboring properties and will dramatically improve rather than dimmish or impair property values. For these reasons and pursuant to substantial evidence, the restaurant with drive-thru lanes satisfies this standard.

- **The establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding properties for uses permitted in the district.**
  The properties surrounding the subject property all have the same zoning designation and operate as similar uses. The normal and orderly development and improvement of the surrounding properties will be enhanced by virtue of replacing functionally obsolete office buildings with a popular restaurant specifically designed for the site and trade area pursuant to the C-2 General Commercial district standards.

  Importantly, this is not a rezoning request that is legally required to be consistent with the City's comprehensive plan and sub-plans. Rather, a restaurant with drive-thru lanes is permitted by conditional use permit and under Wisconsin law, there is no required finding that the use is consistent with the comprehensive plan. *See* Sec. 66.1001(2m)(b), Wis. Stats. However, to the extent that this CUP standard generally relates to the City's land use visioning plan from 8+ years ago, the restaurant with drive-thru as designed for this site and trade area satisfies the vision plan. *See* Burleigh Triangle & Mayfair Road Corridor North Redevelopment Vision and Plan (2015).

  The site is within the Mayfair Corridor area of the 2015 Plan and the "mix of desired land uses" and "overarching development goals" for the area are set forth at pp. 7 and 9. Specifically, the Mayfair Corridor should have:

  ► Infill with mixed use and commercial buildings – **this restaurant is an infill commercial building.**

► Locate parking areas along the railroad tracks, away from Mayfair Road – **the site plan layout accomplishes this for the parking area and also positions the building in a manner that holds the street edge while accommodating the extended access drive as well as future connections to the properties to the north and south requested by City staff.**

► Combine parking areas between properties to maximize density – **the site plan layout accommodates future connections to the properties to the north and south for this to be accomplished and for those properties to potentially have access to the median break.**

► Encourage structured parking – **acknowledging the encouragement as well as the 2015 Plan's desire and goal for such features but not all of the surrounding commercial properties have structured parking. Other redevelopment sites may be able to utilize structured parking.**

In sum, CFA meets the 2015 Plan principles to the extent that they are relevant to the City's CUP standards and the development will not inhibit the City from implementing the 2015 Plan's "mix of desired land uses" and "overarching development goals" throughout the overall planning area. And specifically related to substantial evidence where consistency with the comprehensive plan is **not** a legal standard for CUP approval under Sec. 66.1001(2m)(b), the restaurant with drive-thru lanes satisfies this ordinance standard.

- **Adequate utilities, access roads, storm water and other necessary improvements have been or are being provided.**

  The proposed CFA building will attempt to reutilize existing water and sanitary sewer services to the site; however, if this will not be possible new water & sanitary sewer service will be extended from the mains within Mayfair Road (STH 100). The site currently sheet drains to both the west toward the Union Pacific right of way as well as to the east toward Mayfair Road (STH 100). As part of the redevelopment of the site CFA is proposing to install an underground detention system as well as a series of water quality features to reduce the amount of stormwater runoff to surrounding right of way while enhancing the water quality level.

  Regarding traffic, the project team has carefully and comprehensively studied the area traffic and submitted its studies and designs to the Wisconsin Department of Transportation and City of Wauwatosa Engineering Services Division. *See also,* next section. CFA will be closing three of the four existing access points. Reduction in access to Mayfair Road (STH 100) will reduce the number of merge points with traffic on Mayfair Road thereby reducing congestion. Additionally, median modifications will be made per the Wisconsin Department of Transportation and at the request of the City Engineering Department, and extended access drive was added to the plan along with provisions to provide cross access connection to the properties to the north and south to provide those properties access to the median break. Upon the traffic studies and follow up review and discussion, the Wisconsin Department of

Transportation has determined these improvements to be acceptable and that it will issue permits accordingly.

Recognizing the City's emphasis on bike-ped accommodations means that providing adequate "access roads" must be considered in a broad context, the designed pedestrian accommodations as well as the short term and long term bicycle parking satisfy that component of this standard.

These design features collectively represent reasonable and related obligations of the restaurant with drive-thru lanes that satisfies this standard pursuant to substantial evidence.

- **Adequate measures have been, or will be, taken to provide ingress and egress that will minimize on- and off-site traffic congestion.**
  The subject site and the Mayfair Road (STH 100) median have been designed in a way to maintain a full access onto Mayfair Road and promote site circulation to accommodate approximately 41 vehicles in the drive-thru lanes. The layout will provide for a counterclockwise traffic flow throughout the site that will minimize backups within the parking lot and prevent any vehicles from waiting on the adjacent roadways. The reduction in curb cut access to Mayfair Road and the median modifications will enhance safety on the public roads. *See also,* above section (including the extended access drive, cross access connections, the traffic studies on file, and the Wisconsin Department of Transportation's determination).

  On- and off-site traffic congestion will also be minimized through the designed pedestrian accommodations as well as the short term and long term bicycle parking so that customers and employees can travel to the restaurant not by vehicle.

  Finally, it is important for this CUP review to detail the design of the drive-thru lanes. Chick-fil-A has recently implemented a full dual lane drive-thru operation to enhance its efficiency. Providing the two full lanes gives the operator the most flexibility to service their guests effectively and efficiently. Enhancements have also been made at the pick-up window through implementation of a drive thru door. The purpose of the drive thru door is to allow team members to stage more meals and beverages indoors while they are delivering meals outside, directly to vehicle windows. This change helps to create an efficient drive-thru operation and improve the overall guest experience.

  These design features collectively represent reasonable and related obligations of the restaurant with drive-thru lanes that satisfies this standard pursuant to substantial evidence.

- **The conditional use complies with all applicable regulations of the subject zoning district.**
  The subject site and the Chick-fil-A drive-thru lanes have been designed to conform to the applicable regulations of the C-2 General Commercial district in which it is located. The site

has been configured in an efficient way to accommodate CFA's operations while promoting site circulation and maintaining safety.

Finally, the conditional use complies with the C-2 General Commercial district standards set forth in Sec. 24.03.010.B.3., Code. For these reasons and pursuant to the foregoing – and the substantial evidence -- the restaurant with drive-thru lanes satisfies the legal standards under Sec. 24.16.040.G., Code, for a conditional use permit.

It is also notable – and indeed relevant as evidence from the City's public records pursuant to the Act 67 substantial evidence standards – that the City has routinely approved restaurants with drive-thru lanes as conditional uses throughout Wauwatosa and all along Mayfair Road.

Conclusion

Beginning with our CUP application and accompanying materials – and as supplemented by our additional reports, plans and submissions, as well as in accord with the Design Review Board's unanimous approval – and upon the record materials to be added to the CUP file, the information to be presented to the Plan Commission and its resulting recommendation, and the public hearing testimony to be received by the Common Council, Chick-fil-A presents substantial evidence relevant and directly pertaining to the requirements and conditions in Sec. 24.16.040.G. of the City's conditional use permit ordinance.

Chick-fil-A respectfully requests that the Conditional Use Permit be granted for the new restaurant with drive-thru lanes at 2825 & 2835 N. Mayfair Road.

Respectfully Submitted,

Chick-fil-A
Shaun Walker, Principal Development Lead, Development & Construction – Midwest Region

HR Green
Joe Vavrina, PE, LEED AP, Civil Engineers for Project

Amundsen Davis LLC
Brian C. Randall, Esq. and Katherine M. Hampel, Esq., Attorneys for Chick-fil-A

Chipman Design Architecture
Meryl Rosemarin, Project Manager, Architects for Chick-fil-A

Traffic Analysis & Design, Inc.
John Bieberitz, P.E., P.T.O.E.. Traffic Engineers for Chick-fil-A

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CUP Narrative Addendum

The Chick-fil-A Story

It's a story that began when a man named Truett Cathy was born in 1921 in the small town of Eatonton, Georgia, about 80 miles from Atlanta, where he grew up. Truett's mom ran a boarding house, which meant she had to cook a lot of meals – but Truett helped, and he paid close attention, and picked up cooking and serving tips that would come in quite handy later. Along the way, he also learned to be quite the entrepreneur. He sold magazines door to door, delivered newspapers all over the neighborhood, and sold Coca-Colas from a stand in his front yard and all the while he was learning the importance of good customer service.

After serving his country in World War II, in 1946 Truett used the business experience he gained growing up and opened his first restaurant with his brother, Ben, calling it the Dwarf Grill (later renamed the Dwarf House). Hamburgers were on the menu but, ironically, no chicken because he said it took too long to cook. Truett worked hard with that first venture, but considered Sunday to be a day of rest, for himself and his employees and as you know, that's a practice that Chick-fil-A honors to this day.

The early 60s would be a pivotal time in Truett's life. That's when he first took a boneless breast of chicken and spent the next few years experimenting until he found the perfect mix of seasonings. He breaded and cooked the filet so that it stayed juicy, put it between two buttered buns and added two pickles for extra measure and in 1963 unveiled what we now know as the Chick-fil-A Chicken Sandwich. As far as the name, Truett says it just came to him. He had it registered that year in 1963 and created a logo that has been updated but is still very similar to the original designed 50 years ago.

The Chick-fil-A sandwich was a huge hit, and in 1967 Truett opened his first Chick-fil-A restaurant in an enclosed shopping mall where, up to that point, food normally wasn't sold. Frankly, the developer of the Greenbriar Shopping Center in Atlanta wasn't too keen on serving food inside his mall, but as we know that turned out to be a very smart decision on his part, and especially Truett's. Today, Truett is recognized as the pioneer in quick-service mall food. It wasn't until 1986 that Chick-fil-A opened its first "freestanding" restaurant on North Druid Hills Road in Atlanta. Today there are over 2,700 restaurants locations in 47 states and it's become so popular that people literally camp out in the parking lot the night before a grand opening of a new restaurant; they're hoping to be one of the first 100 people in line because they'll be rewarded with free Chick-fil-A for a year, which gives new meaning to the phrase "happy campers!"

Chick-fil-A is now the largest quick-service chicken restaurant and one of the largest that's privately-held. Three generations of Cathy family members are involved in the business, including Truett's sons Dan (the president and CEO) and Bubba (senior VP) and also, his grandchildren.

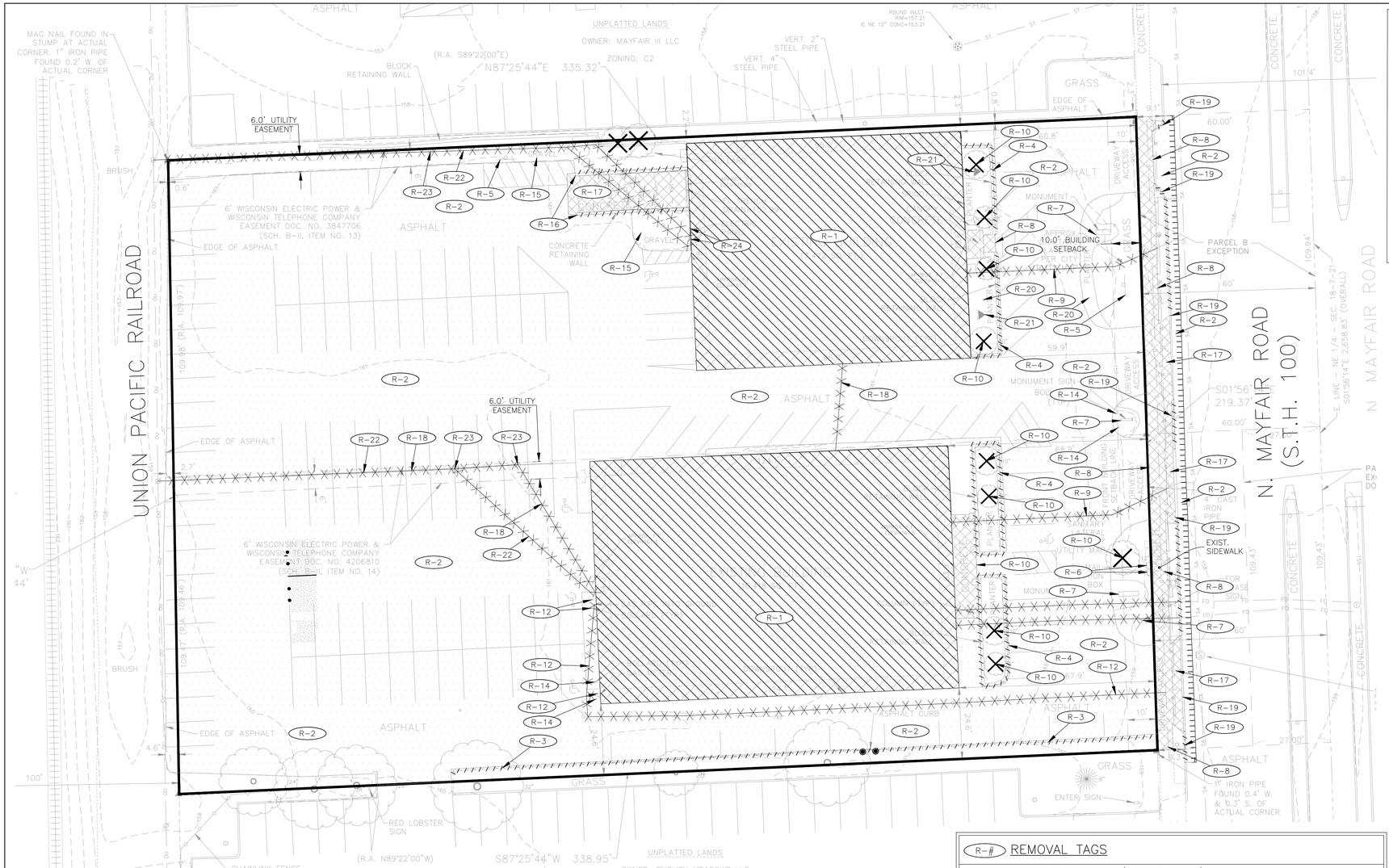
Finally, Chick-fil-A's operator model is key to its success and is very unique in the fast food industry. In their situation, the operator is part owner with Chick-fil-A. It's similar to a franchise except they usually have one location. Sometimes they have two but for the most part they have one location and what that provides is a situation where they have very competent partners with great character in the restaurants who are deeply involved in the community. What Chick-fil-A likes to say is that their operators are in business for themselves, but not by themselves. It is very unusual for an operator to shut down and the retention rate for operators is about 98%.

Our Food

There are a lot of things people say they like about Chick-fil-A, but it all begins with the food, and especially the Original Chick-fil-A Chicken Sandwich. It was a significant product innovation, and it remains our best-selling item on the menu. Our innovations didn't stop with the chicken sandwich. In 1982, we were the first restaurant to sell chicken nuggets nationally, and three years later added our trademark Waffle Potato Fries to the menu, and we still use 100% fully refined peanut oil, which is cholesterol and trans fat free. In 2010, we introduced the Chick-fil-A Spicy Chicken Sandwich. With its special blend of peppers and other seasonings, it became such a "hot" selling item that we soon after introduced the Spicy Chicken Biscuit. More recently and within the last couple years we introduced to our menu a new grilled chicken sandwich and grilled chicken nuggets along with the most recent addition of mac and cheese. People also like the fact that we offer a variety of menu options for those wanting foods that are lower in calories, carbs or fats, such as the Chick-fil-A Chargrilled Chicken Sandwich, entrée salads and fruit cups and by the way, fruit cups are an option with our kid's meals these days. In fact, Men's Health magazine named us "America's Healthiest Chain Restaurant for Kids." The high quality of our food is the number one reason people keep coming back to Chick-fil-A but there are a few more reasons – and one has four legs and is a terrible speller.

Serving our Customers

Finally, and in accordance with company policy, the operators and employees in each Chick-fil-A Restaurant strive for a level of customer service unequaled in the quick-service food industry. It is quite common to go into a Chick-fil-A and have your tray carried to your table, have people clear your table, and ask if they can come and refresh your beverage. Whenever you ask people what they like about Chick-fil-A, one of first things they say is "the service" and it's an important part of our story, because it goes back to Truett's experience as a young businessman and to the values he instilled in Chick-fil-A. We call it Second Mile Service, and it's based on the belief that if someone asks you to carry something for them one mile, you do one better and carry it for them two. Its doing those unexpected things that make people feel special. Our drive-thru has been voted "America's #1 drive-thru" for 10 years in a row. We do our best to ensure a quick and pleasurable experience, and might even have a nugget for the family pet when you arrive at the window. But no matter if you're being served in our restaurants, at our drive-thrus, or with an outside delivery, you can always count on our team members responding to your words of thanks with two special words of their own – "My pleasure."



LEGEND

- INDICATES FULL DEPTH SAWCUT
- INDICATES CONC./SIDEWALK REMOVAL (FULL DEPTH)
- INDICATES BIT./ASPHALT REMOVAL (FULL DEPTH)
- INDICATES BUILDING/FOUNDATION REMOVAL
- INDICATES CONC. CURB / PAVEMENT STRIPING REMOVAL
- (R-#) INDICATES MISC. REMOVAL ITEMS (SEE THIS SHEET FOR SIZE AND QUANTITY)
- DENOTES EXIST. CONCRETE CURB & GUTTER, WALL OR FENCE REMOVAL
- DENOTES UTILITIES TO BE REMOVED
- INDICATES TREE AND BRUSH REMOVAL (SEE LANDSCAPING PLANS FOR SIZE AND QUANTITY)
- INDICATES TREE AND BRUSH PROTECTION (SEE LANDSCAPING PLANS FOR SIZE AND QUANTITY)

PROJECT NOTES:

- LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.) SEE SHEET C-302 FOR EROSION CONTROL MEASURES)
- ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.
- ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE.
- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.
- ALL BITUMINOUS PAVEMENT REMOVAL AREAS SHALL BE SAWCUT.
- CONTRACTOR SHALL INSTALL CONSTRUCTION FENCING AND SIGNAGE AROUND CONSTRUCTION BOUNDARIES TO PROTECT PEDESTRIANS.

TRAFFIC CONTROL NOTES:

- ALL APPLICABLE **CITY** PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN **CITY** ROW OR LANE CLOSURES.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- PERMANENT SIGNING THAT CONVEYS A MESSAGE CONTRARY TO THE MESSAGE OF TEMPORARY SIGNING AND NOT APPLICABLE TO THE WORKING CONDITIONS SHALL BE COVERED BY THE CONTRACTOR WHEN DIRECTED BY THE **CITY**.
- THE CONTRACTOR SHALL COORDINATE HIS TRAFFIC CONTROL WITH OTHER CONSTRUCTION PROJECTS IN THE AREA.
- SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

STAGING NOTES:

(STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

1. EROSION CONTROL MEASURES AND STOCKPILE STAGING
2. CONSTRUCTION ENTRANCES
3. PLAN REMOVALS
4. PROPOSED UNDERGROUND
5. BUILDING CONSTRUCTION
6. GRADING
7. PAVING

(R-#) REMOVAL TAGS

REMOVALS / RELOCATES / ADJUSTMENTS

NUMBER		REMARKS
R-1	BUILDING AND FOUNDATION	REMOVE
R-2	BITUMINOUS PAVEMENT	REMOVE
R-3	BITUMINOUS CURB	REMOVE
R-4	PLANTER W/ BLOCK WALLS	REMOVE
R-5	SIGN	REMOVE
R-6	MAIL BOX	REMOVE
R-7	MONUMENT SIGN	REMOVE
R-8	CONCRETE SIDEWALK	REMOVE
R-9	SANITARY SERVICE	REMOVE CAP R.O.W.
R-10	TREE	REMOVE
R-11	FIBER OPTIC	REMOVE (COORDINATE W/ UTILITY COMPANY)
R-12	GAS SERVICE	REMOVE (COORDINATE W/ UTILITY COMPANY)
R-13	GAS METER	REMOVE (COORDINATE W/ UTILITY COMPANY)
R-14	BOLLARD	REMOVE
R-15	GRAVEL	REMOVE
R-16	CONCRETE RETAINING WALL	REMOVE
R-17	CONCRETE PAVEMENT	REMOVE
R-18	ELECTRIC SERVICE	REMOVE (COORDINATE W/ UTILITY COMPANY)
R-19	CONCRETE CURB & GUTTER	REMOVE
R-20	LANDSCAPING	REMOVE
R-21	LANDSCAPE LIGHTING	REMOVE
R-22	TELEPHONE SERVICE	REMOVE (COORDINATE W/ UTILITY COMPANY)
R-23	UTILITY POLE	REMOVE (COORDINATE W/ UTILITY COMPANY)
R-24	ELECTRIC METER	REMOVE (COORDINATE W/ UTILITY COMPANY)

DIGGERS HOTLINE

CALL DIGGERS HOTLINE
1-800-242-8511

WITH THE FOLLOWING:
COUNTY: MILWAUKEE COUNTY
CITY-TOWNSHIP: CITY OF WAUWATOSA / TOWNSHIP 7N
SEC. & 1/4 SEC. NO.#: NE1/4 OF SEC18-T7N-R21E

3 working days prior notice before digging. Diggers Hotline is open 24 hours a day, 7 days a week, 365 days a year!

NORTH

0 20'
1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS
0 1"
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
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DRAWN BY: ECH
CHECKED BY: JFV

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SHEET
SITE DEMOLITION PLAN

SHEET NUMBER
C-100

SITE PLAN DESIGN NOTES & KEY PLAN

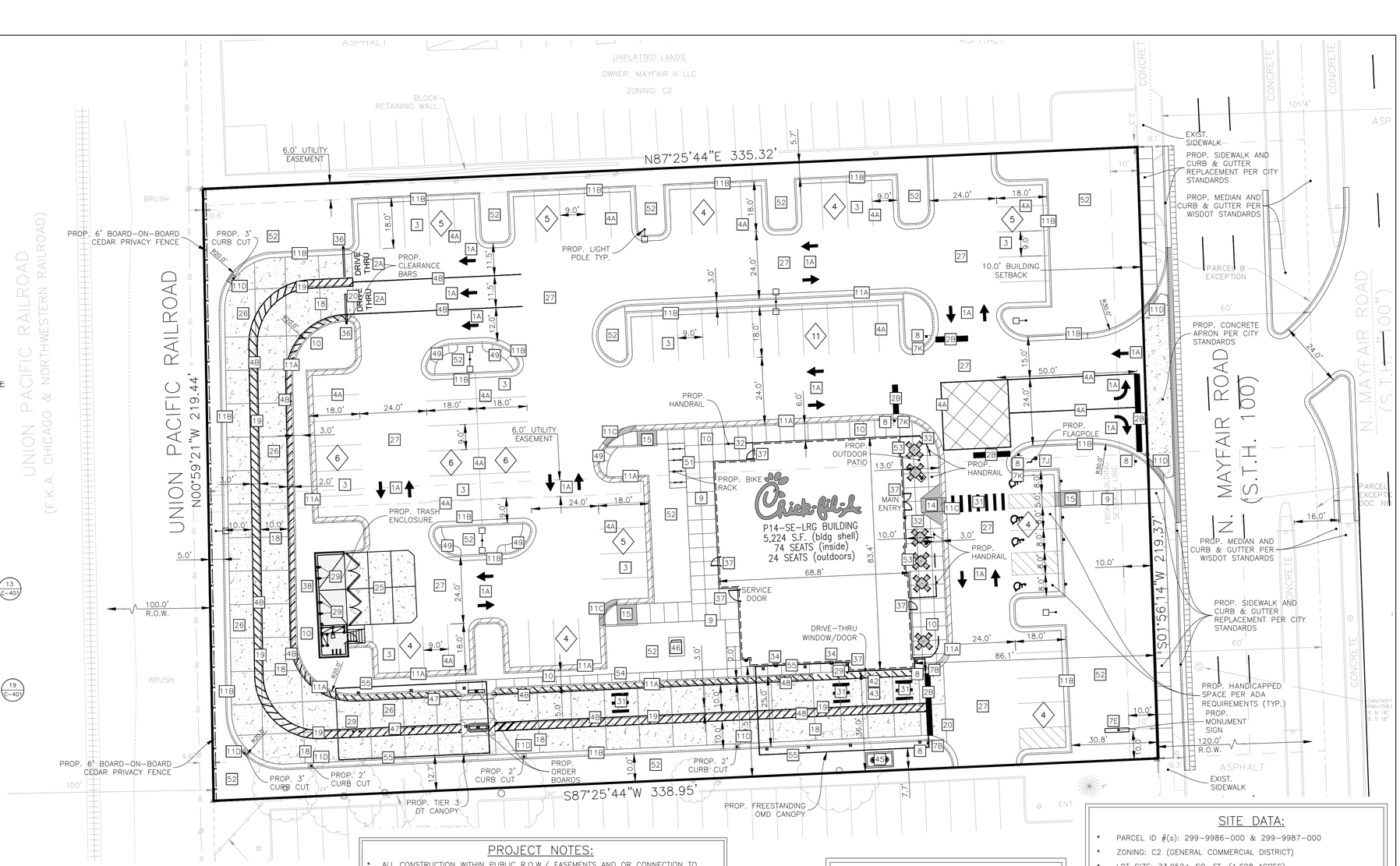
1A DIRECTIONAL ARROW (1A C-400)
1B PAINTED HANDICAP PARKING SYMBOL (1B C-400)
2A DRIVE-THRU GRAPHICS (2A C-400)
2B STOP LINE GRAPHIC (2B C-400)
3 STANDARD PARKING STALL (9.0'x18.0') PER CODE (3 C-400)
4 ~~STANDARD 60 DEGREE PARKING STALL~~ (4 C-400)
4A 4" SOLID WHITE STRIPING
4B 4" SOLID YELLOW STRIPING
4C ~~4" SKIP DASH YELLOW STRIPING~~
5 BOLLARD MOUNTED SIGN (5 C-400)
6 ADA ACCESSIBLE PARKING SIGN (6 C-400)
7 DIRECTIONAL SIGNAGE

ALL SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U.S. DEPARTMENT OF TRANSPORTATION. (SEE SIGN LEGEND)

7A THRU 7D (SEE SIGNAGE LEGEND, THIS SHEET)

7E CHICK-FIL-A MONUMENT SIGN, SEE SIGNAGE PACKAGE
7F ~~CHICK-FIL-A "ENTER" SIGN, SEE SIGNAGE PACKAGE~~
7G ~~CHICK-FIL-A "EXIT" SIGN, SEE SIGNAGE PACKAGE~~
7H ~~CHICK-FIL-A "DRIVE THRU" SIGN, SEE SIGNAGE PACKAGE~~
7I DRIVE THRU ORDERING STATION, SEE SIGNAGE PACKAGE
7J FLAGPOLE, 50', SEE SIGNAGE PACKAGE

8 STOP SIGN, SEE SIGNAGE PACKAGE (8 C-400)
9 TYPICAL CONCRETE SIDEWALK, 5' MIN. (9 C-400)
10 7' WIDE SIDEWALK w/ CURB & GUTTER (10 C-400)
11 24" CONCRETE CURB & GUTTER (11 C-400)
11A SPILLING CURB SECTION
11B CATCHING CURB SECTION
11C DEPRESSED SPILLING CURB
11D DEPRESSED CATCHING CURB
12 ~~CONCRETE PAVEMENT SECTIONS~~ (12 C-400)
13 ~~HANDICAP RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)~~ (13 C-401)
14 HANDICAP RAMP w/ FLARED SIDES (IN SIDEWALK) (14 C-401)
15 RETURNED CURB HANDICAP RAMP (15 C-401)
16 SIDEWALK (ADA COMPLIANT) RAMP (16 C-401)
17 ~~DETECTABLE WARNING DEVICE~~ (17 C-401)
18 TRANSVERSE & LONGITUDINAL CONTRACTION JOINT (18 C-401)
19 TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT (19 C-401)
20 PAVEMENT EDGE DETAIL (20 C-401)
21 CONTRACTION JOINT (21 C-401)
22 KEYED CONSTRUCTION JOINT (22 C-401)
23 LONGITUDINAL BUTT JOINT (23 C-401)
24 EXPANSION JOINT
FOR CONCRETE PAVING (24 C-401)
25 CONCRETE APRON @ TRASH ENCLOSURE (25 C-402)
26 CONCRETE PAVEMENT DRIVE-THRU LANE (26 C-402)
27 TYPICAL HMA PAVEMENT SECTION (27 C-402)
28 ~~BUTT JOINT~~ (28 C-402)
29 CONCRETE BOLLARD (29 C-402)
30 ~~MULTI-LANE DIRECTIONAL GRAPHICS~~ (30 C-402)
31 CROSSWALK MARKINGS (31 C-402)
32 ALUMINUM HANDRAIL (32 C-402)
33 ~~TYPICAL ADA RAMP & HANDRAIL~~ (33 C-402)
34 BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM) (34 C-402)
35 ~~ROLLOVER/MOUNTABLE CURB~~ (35 C-402)
36 DRIVE-THRU CLEARANCE BAR (36 C-402)
37 ENTRY DOOR FROST SLAB DETAIL (37 C-403)
38 SCREENED REFUSE ENCLOSURE FOUNDATION (38 C-403)
39 MENU BOARD LOOP DETECTION SYSTEM (39 C-403)
40 MENU BOARD LOOP DETECTION SYSTEM (ISO VIEW) (40 C-403)
41 DRIVE-THRU ORDER POINT ISLAND (41 C-403)
42 DRIVE-THRU PLAN FLUSH WITH FFE (42 C-403)
43 DRIVE-THRU ISOMETRIC PLAN (43 C-403)
44 ~~DRIVE-THRU PLAN - 2" BELOW FFE~~ (44 C-403)
45 GREASE TRAP
46 PROPOSED TRANSFORMER
47 DRIVE-THRU STRIPING (47 C-404)
48 MEAL DELIVERY AREA STRIPING (48 C-404)
49 LANDSCAPE & IRRIGATION PROTECTOR (49 C-404)
50 ~~SOLID PLASTIC WHEEL STOP~~ (50 C-404)
51 BIKE RACK
52 LANDSCAPED AREA
53 TYPICAL LOCATION FOR OUTDOOR TABLES.(SEE EQUIPMENT SCHEDULE)
54 CONCRETE PAD FOR OPTIONAL CASH STATION
55 FACE-TO-FACE DRIVE-THRU CANOPY SYSTEMS



HATCH LEGEND

DENOTES STANDARD PAVEMENT SECTION 27
DENOTES CONCRETE SECTION 25 26
DENOTES PROP. SIDEWALK 9 10
DENOTES AREA OF DEPRESSED SIDEWALK
DENOTES AREA OF DEPRESSED CURB AND GUTTER WITH LENGTH NOTED ON PLANS. 11C 11D
DENOTES REVERSE CURB & GUTTER 11A 11C
DENOTES PERMEABLE PAVER SECTION 56

PROJECT NOTES:

* ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND OR CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE CITY OF WAUWATOSA STANDARD CONSTRUCTION SPECIFICATIONS.
* AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE CITY TO OBTAIN APPLICABLE CITY PERMITS.
* INGRESS/EGRESS WILL BE PROVIDED INTERNAL AND EXTERNAL TO THIS SITE.
* ALL CONCRETE CURB & GUTTER SHALL BE 24" (B6.18) UNLESS OTHERWISE NOTED ON THE PLANS.
* ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
* ALL CURB ADJOINING SIDEWALKS SHALL BE DOWELED INTO THE CURB. SEE DETAIL ON SHEET C-400
* ALL CONSTRUCTION MATERIALS, DUMPSTER, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC RIGHT-OF-WAY"

SIGN LEGEND

6 RESERVED PARKING $500 FINE — DENOTES "HANDICAPPED PARKING" R7-8, 12" X 18" (TYP.) / DENOTES "$250 FINE" R7-1101 6" X 12" (TYP.)
7A VAN ACCESSIBLE — DENOTES "VAN ACCESSIBLE" D9-6P (BOLLARD MOUNTED WITH 6B)
7B DO NOT ENTER — DENOTES "DO NOT ENTER" R5-1, 30" X 30" (TYP.)
7C Pedestrian Crosswalk — DENOTES "PEDESTRIAN CROSSWALK" 12" X 18" (TYP.)
7D ONLY — DENOTES "RIGHT TURN ONLY" R3-5R, 30" X 36" (TYP.)
7K DO NOT BLOCK INTERSECTION — DENOTES "DO NOT BLOCK INTERSECTION" R10-7, 24" X 30" (TYP.)
8 STOP — DENOTES "STOP" R1-1, 30" X 30" (TYP.)

SITE DATA:

* PARCEL ID #(s): 299-9986-000 & 299-9987-000
* ZONING: C2 (GENERAL COMMERCIAL DISTRICT)
* LOT SIZE: 73,952± SQ. FT. (1.698 ACRES)
* IMPERVIOUS AREA: 58,136± SQ. FT. (78.6%)

BUILDING DATA:

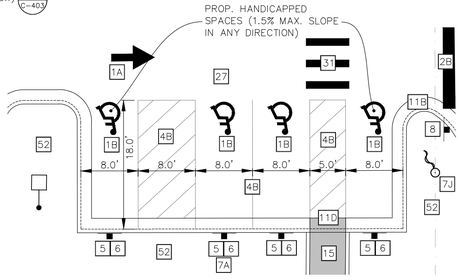
* BUILDING FLOOR AREA: 5,224± SQ. FT.
* BUILDING COVERAGE: 7.1%
* NUMBER OF EMPLOYEES DURING LARGEST SHIFT = 15 EMPLOYEES
* TOTAL NUMBER OF SEATS = 98
  ** INDOOR SEATS = 74
  ** OUTDOOR SEATS = 24

PARKING DATA:

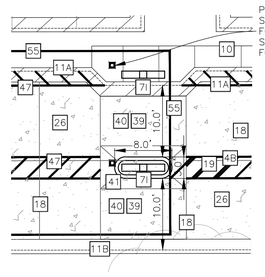
* NUMBER OF REGULAR PARKING SPACES: 71
* NUMBER OF ADA SPACES: 4
* TOTAL NUMBER OF SPACES PROVIDED: 73
* TOTAL NUMBER OF SPACES REQUIRED: 42
* TYPICAL PARKING WIDTH: 9.0'
* TYPICAL 90° PARKING LENGTH: 18.0'
* MINIMUM ISLE WIDTH: 24.0' (90°)

PARKING FORMULA:

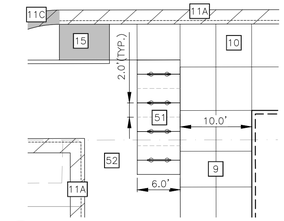
* EATING & DRINKING ESTABLISHMENTS (DRIVE-THROUGH):
  ** 8 SPACES PER 1,000 SQUARE FEET GFA
  *** TOTAL REQUIRED PARKING = 42 SPACES



1 C-200 ADA PARKING STALL LAYOUT DETAIL
SCALE: 1"=10'



2 C-200 ORDER CANOPY LAYOUT DETAIL
SCALE: 1"=10'



3 C-200 BIKE RACK LAYOUT DETAIL
SCALE: 1"=10'

NORTH
0 20'
1" = 20'
BAR IS ONE INCH ON OFFICIAL DRAWINGS
0 1"
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen.com
HRGreen

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

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ENGINEER'S PROJECT # 220756
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CHECKED BY: JFV

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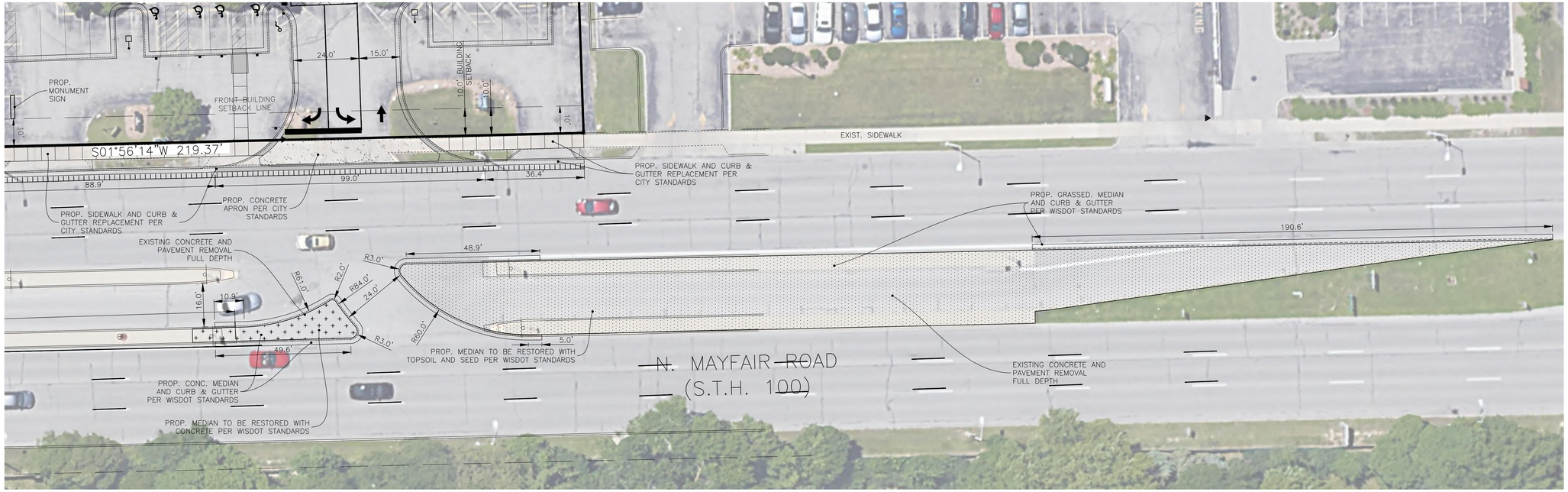
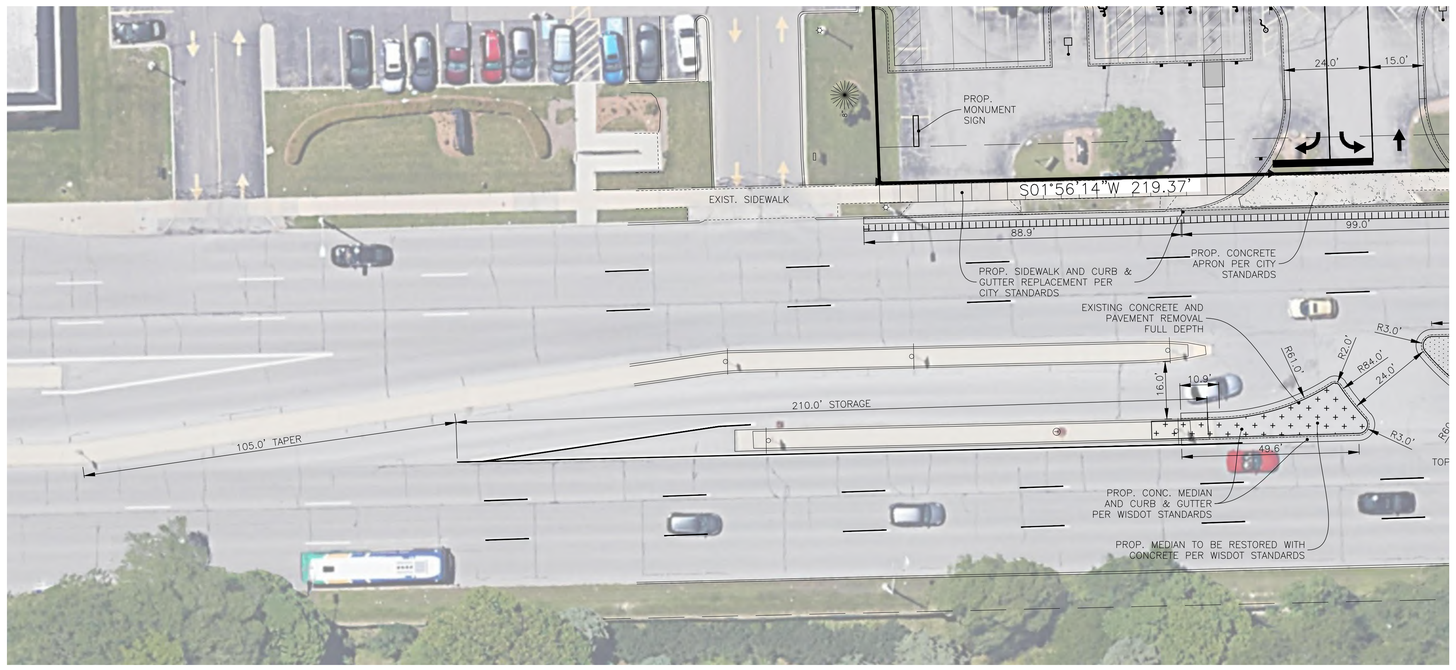
SHEET
SITE PLAN

SHEET NUMBER
C-200



1 C-201 NORTH MEDIAN LAYOUT DETAIL
SCALE: 1"=20'



2 C-201 SOUTH MEDIAN AND TURN LANE LAYOUT DETAIL
SCALE: 1"=20'

HATCH LEGEND

- DENOTES STANDARD PAVEMENT SECTION
- DENOTES CONCRETE SECTION
- DENOTES PROP. SIDEWALK
- DENOTES AREA OF DEPRESSED SIDEWALK
- DENOTES AREA OF DEPRESSED CURB AND GUTTER WITH LENGTH NOTED ON PLANS.
- DENOTES REVERSE CURB & GUTTER
- DENOTES CONCRETE AND PAVEMENT REMOVAL AND RESTORE WITH TOPSOIL AND SEED.
- DENOTES CONCRETE AND PAVEMENT REMOVAL AND RESTORE WITH TOPSOIL AND SEED.

PROJECT NOTES:

- ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND OR CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE **CITY OF WAUWATOSA AND WISDOT** STANDARD CONSTRUCTION SPECIFICATIONS.
- AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE **CITY** TO OBTAIN APPLICABLE **CITY** PERMITS.
- INGRESS/EGRESS WILL BE PROVIDED INTERNAL AND EXTERNAL TO THIS SITE.
- ALL CONCRETE CURB & GUTTER SHALL BE 24" (B6.18) UNLESS OTHERWISE NOTED ON THE PLANS.
- ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL CURB ADJOINING SIDEWALKS SHALL BE DOWELED INTO THE CURB. SEE DETAIL ON SHEET C-400
- ALL CONSTRUCTION MATERIALS, DUMPSTER, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC RIGHT-OF-WAY"

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0 20'
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PRELIMINARY
NOT FOR CONSTRUCTION

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HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

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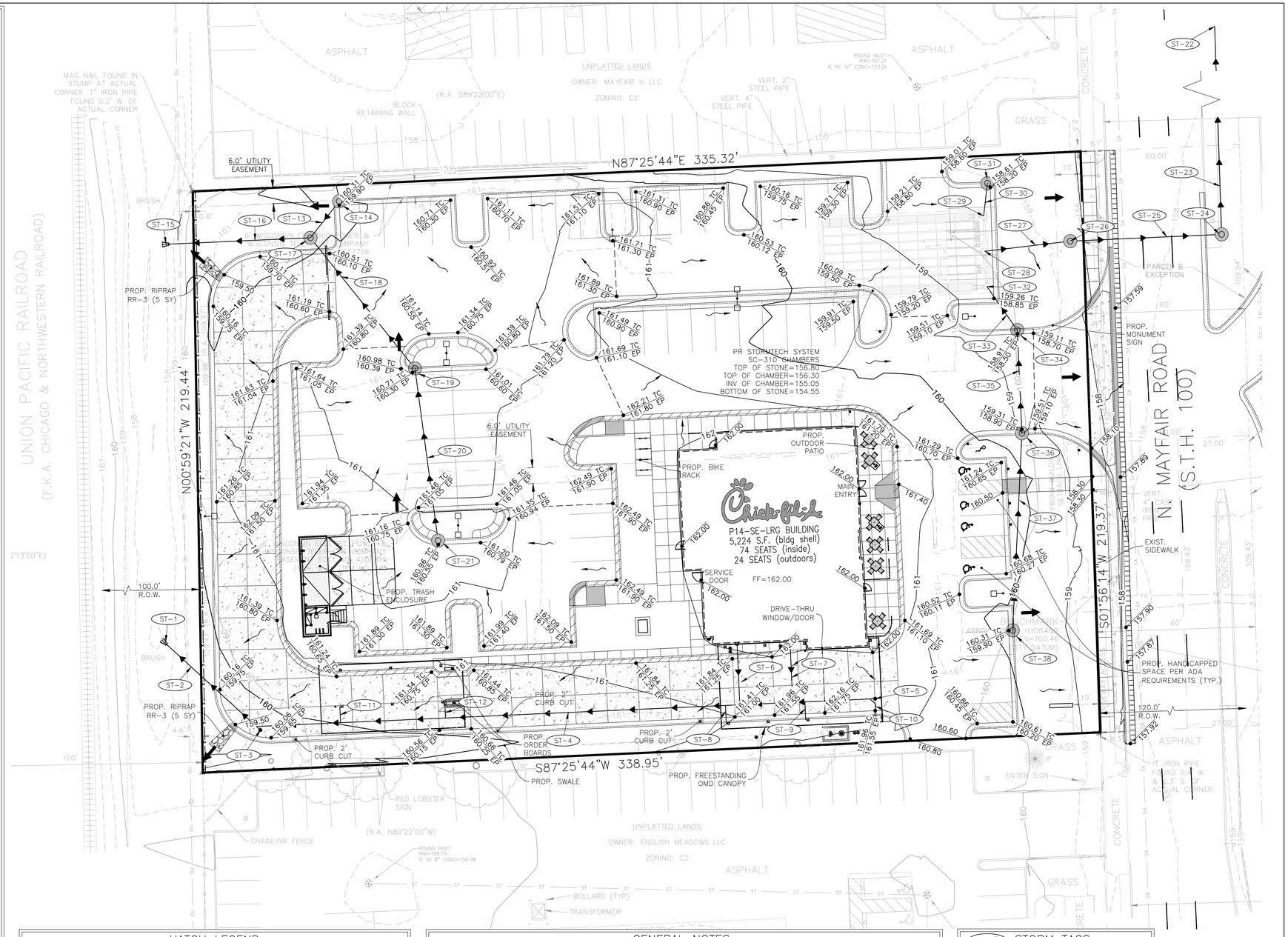
SHEET
SITE PLAN OFFSITE

SHEET NUMBER
C-201

GRADING & DRAINAGE NOTES

1. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
2. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT, ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
3. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
4. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
5. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
6. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
8. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
9. IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
10. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.
11. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
12. SEE EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES AND NOTES.
13. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. NO ON SITE BURNING WILL BE ALLOWED
14. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
15. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
16. GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
17. NO PART OF THE PROPOSED PROJECT IS LOCATED WITHIN A FLOOD HAZARD AREA
18. SPOT ELEVATIONS SHOWN ARE @ EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.
19. ALL CONCRETE CURB & GUTTER SHALL BE TYPE B-6.18 CURB UNLESS OTHERWISE NOTED ON THE PLANS.
20. ALL STORM SEWER JOINTS SHALL HAVE O-RING GASKETS.
21. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
22. BACKFILL TO THE TOP OF CURBS.
23. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS
24. ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 1.5%.
25. DESIGNATED HANDICAP PARKING AREAS SHALL BE GRADED TO A MAXIMUM OF 1.5%
26. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING OF PAVEMENT.
27. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
28. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
29. ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.
30. ALL STORM DRAINAGE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT **CITY OF WAUWATOSA STANDARDS AND SPECIFICATIONS.**



HATCH LEGEND

- DENOTES REVERSE (SPILLING) CURB & GUTTER
- DENOTES CONCRETE CURB & GUTTER (CATCHING)
- DENOTES AREA OF DEPRESSED SPILLING CURB & GUTTER
- DENOTES AREA OF DEPRESSED CATCHING CURB & GUTTER
- DENOTES AREA OF DEPRESSED SIDEWALK
- XXX.XX DENOTES EXISTING AND OR PROPOSED SPOT ELEVATIONS.
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW.
- DENOTES PROPOSED OVERFLOW DIRECTION ARROW.

TRAFFIC CONTROL NOTES:

- ALL APPLICABLE **CITY/STATE** PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN **CITY/STATE** ROW OR LANE CLOSURES.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

GENERAL NOTES:

- ACCESSIBLE PARKING, RAMPS, AND SIGNAGE SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS, NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- 1 WEEK PRIOR TO CONSTRUCTION WITHIN **CITY OR STATE** ROW OR ANY CONNECTION TO PUBLIC SEWERS, CONTRACTOR SHALL NOTIFY THE APPROPRIATE CITY ENGINEERING DIVISIONS:
- CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/ SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT. CUT/TRIM EXPANSION JOINTS TO BE FLUSH WITH SURFACE.
- ALL PROPERTY PINS SHALL BF PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
- DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT-OF-WAY.
- THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OR MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
- THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE **CITY**.
- ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH **CITY** CONSTRUCTION SPECIFICATIONS AND THE LATEST EDITION OF **WISDOT** DESIGN STANDARDS
- EXCAVATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
- CONTRACTOR TO GRADE 4" BELOW THE BACK OF CURB TO ALLOW FOR THE PLACEMENT OF TOPSOIL. A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED IN ALL PLANTING BEDS AND ALL GRASSED AREAS. GRADED AREAS TO BE HELD DOWN TO THE APPROPRIATE ELEVATION TO ACCOUNT FOR TOPSOIL. SEE SHEET L-101 FOR DETAILS.

(ST-#) STORM TAGS

* REFER TO SHEET PS-101 FOR TAG INFO

NOTE:

* ALL STORM STRUCTURES WITHIN PAVED AREAS REQUIRE WEEP HOLES. SEE DETAILS 40 & 40A ON SHEET C-403 FOR WEEP HOLE DETAILS.

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT #	220756
PRINTED FOR	PRELIMINARY
DATE	11/09/2022
DRAWN BY: ECH	
CHECKED BY: JFV	

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SHEET
GRADING PLAN

SHEET NUMBER
C-300

NOTES:

1. Site Description.

a. The following is a description of the construction activity which is the subject of this plan: **CHICK-FIL-A, WAUWATOSA, WI**

The proposed development consists of construction of a **parking lot** and restaurant. The construction activities for site improvements will include: site clearing, grubbing, mass grading, pavement construction, installation of utilities including storm sewers, soil erosion and sedimentation control measures, as a minimum.

b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site such as grubbing, excavation, and grading:

The sequence of the construction activities may be as follows: 1) Install perimeter construction fence. 2) Install inlet protection in all existing storm inlets (shall remain until site is stabilized). 3) Install stabilized construction entrance. 4) Removal of existing pavement and other items as required. 5) Mass grading. 6) Tree removal and transplanting, where necessary. 7) Continue grading, stabilize completed areas with permanent stabilization or inactive areas with temporary stabilization within 7 days. (inlet protection shall remain until site is stabilized). 8) Install utilities, storm sewer, curb and gutter, with inlet and outlet protection. 9) Apply stone to parking areas. 10) Construct buildings. 11) Complete grading and install sod and plantings. 12) Complete final paving. 13) When all construction activity is complete and the site is stabilized, resod any remaining disturbed areas. 14) Remove all temporary erosion control measures once site is stabilized. 15) Contractor shall adhere to all provisions and requirements as noted in the stormwater prevention plan for this project. 16) Remove all debris that spilled over into the R.O.W. at the end of each work day. Contractor shall also maintain and sweep debris off of all access drives and other disturbed areas each day. 17) All exposed soil areas not disturbed for up to seven days must be immediately restored with seed and mulch. 18) Between September 15 and October 15: stabilize with mulch, tackifier, and a perennial seed mixed with winter wheat, annual oats, or annual rye, as appropriate for the region and soil type. October 15 through winter: stabilize with a polymer and dormant seed mix, as appropriate for region and soil type. 19) The soil erosion and sedimentation control items will be constructed as needed during the above construction activities.

c. The total area of the construction site is estimated to be **1.698 acres.**

d. The total area of distubance has been estimated to be **1.698 acres.**

e. The estimated runoff coefficients of the various areas of the site after construction activities are completed area contained in the project drainage study, titled FINAL ENGINEERING DRAINAGE REPORT for **CHICK-FIL-A, WAUWATOSA, WI** with (latest revision date) prepared by HR GREEN, INC. which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained in the Geotechnical Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.

2. Controls.

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b above. For each measure discussed, the contractors will be responsible for its implementation as indicated. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan.

a. Erosion and Sediment Controls.

(1. STABILIZATION PRACTICES. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Except as provided in 2.a. (1) (A) and 2.b. stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased. All exposed soil areas not disturbed for up to seven (7) days must be immediately restored with seed and mulch.

(A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following interim and permanent stabilization practices, as a minimum will be implemented to stabilize the disturbed area of the site:

1. Permanent Seeding/Sodding
2. Inlet Protection
3. Silt Filter Fence
4. Stabilized Construction Entrance
5. Temporary Seed and Mulch

(2. STRUCTURAL PRACTICES. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. The installation of these devices may be subject to Section 404 of the Clean Water Act and Wisconsin Administrative Code Chapter NR 151.

1. Storm Sewer System
2. Up-Flo Filter
3. Permanent Sodding
4. Inlet Protection
5. Silt Filter Fence

b. Stormwater Management.

(1. Provided below is a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act and Wisconsin Administrative Code Chapter NR 151.

The practices selected for implantation were determined on the basis of the technical guidance contained in **Wisconsin DNR Storm Water Construction Technical Standards.**

The stormwater pollutant control measures shall include:
1. Silt Filter Fence
2. Inlet Protection Filter
3. Storm Sewers
4. Up-Flo Filter

c. Other Controls.

(1. Waste Disposal. The solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed off-site by the contractor. The contractor is responsible to acquire any permit required for such disposal. Burning on the site will not be permitted. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit and Wisconsin Administrative Code Chapter NR 151.

(2. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

(3. Maintenance and general observations of the storm sewer system shall become the responsibility of the owner upon final acceptance of the site improvements from the general contractor. At that time the owner shall perform monthly observations on the storm sewer system and inlets to verify working conditions as originally installed.

HATCH LEGEND

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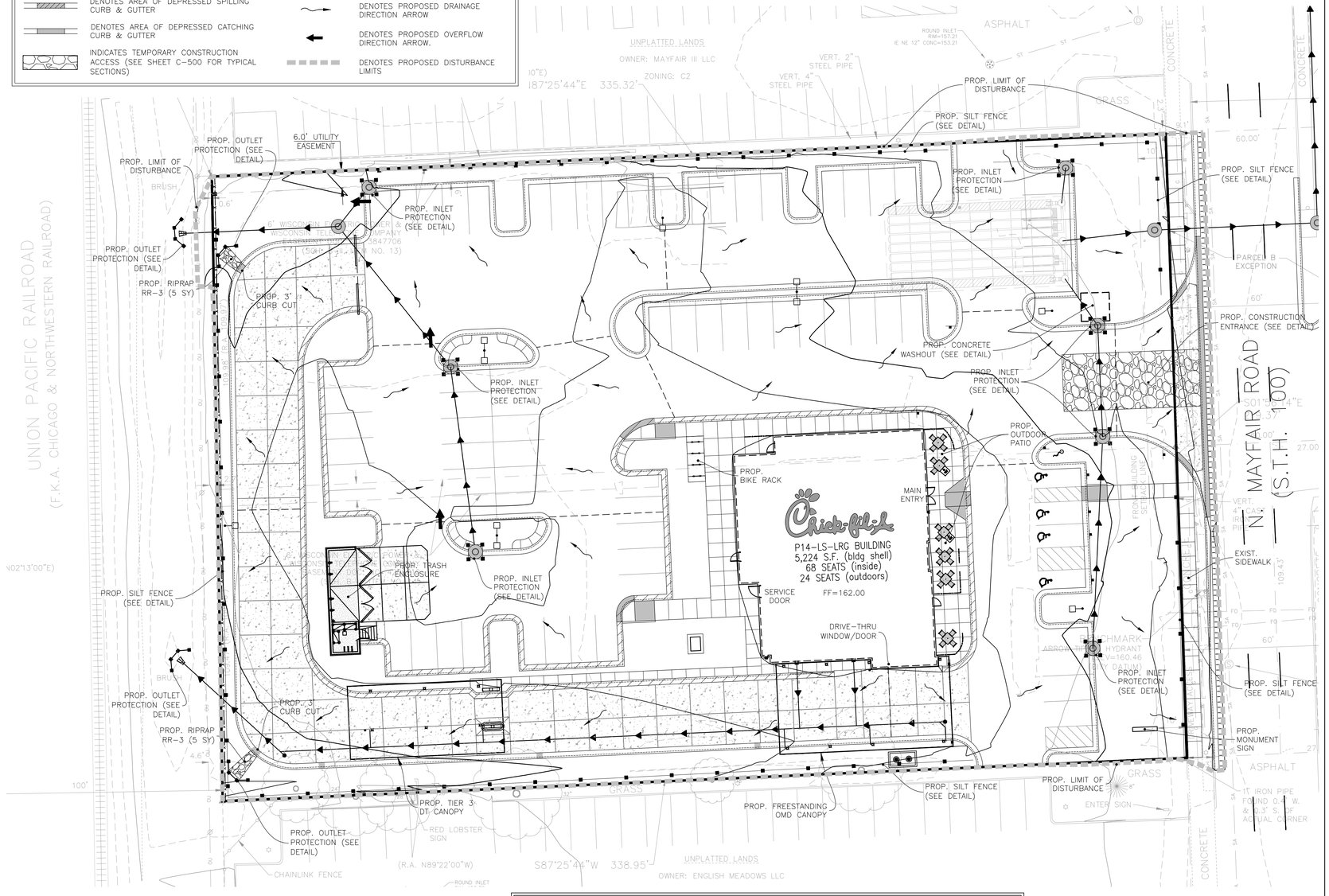
- DENOTES CONCRETE CURB & GUTTER (CATCHING)
- DENOTES AREA OF DEPRESSED SPILLING CURB & GUTTER
- DENOTES AREA OF DEPRESSED CATCHING CURB & GUTTER
- INDICATES TEMPORARY CONSTRUCTION ACCESS (SEE SHEET C-500 FOR TYPICAL SECTIONS)
- INDICATES STAGING AREA
- DENOTES PERIMETER EROSION BARRIER (SILT FENCE), INLET & PIPE PROTECTION AND DITCH CHECK
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW
- DENOTES PROPOSED OVERFLOW DIRECTION ARROW.
- DENOTES PROPOSED DISTURBANCE LIMITS



EROSION CONTROL NOTES:

1. ALL SEDIMENTATION AND EROSION CONTROL REGULATIONS SHALL BE ADHERED TO PER THE **CITY OF WAUWATOSA** REQUIREMENTS.
2. NO LAND DISTURBING ACTIVITIES SHALL COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.)
3. UTILIZE EXCELSIOR BLANKET OR SOD ON ALL SLOPES OF 5:1 OR GREATER.
4. ALL STREETS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
5. IF ANY ADDITIONAL SOIL EROSION MEASURES ARE DEEMED NECESSARY BY THE **CITY** ENGINEER OR HIS REPRESENTATIVE. THESE MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR.
6. REMOVE ALL DEBRIS TRANSFERRED INTO THE ROW OR ADJOINING PROPERTY AT THE END OF EACH WORK DAY.
7. INSTALL AND MAINTAIN INLET FILTER BASKET ASSEMBLIES AT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS.
8. PER THE NPDES CONSTRUCTION STORM WATER PERMIT, THE DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS MUST BE DOCUMENTED. RAINFALL AMOUNTS MUST BE OBTAINED FROM A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION WITHIN 1 MILE OF THE SITE, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
9. CONTRACTOR SHALL PROVIDE WEEKLY EROSION CONTROL INSPECTION REPORTS TO THE **CITY** IN AN ACCEPTABLE FORMAT.
10. SEE SHEET C-500 FOR EROSION CONTROL DETAILS.

SEQUENCE OF CONSTRUCTION ACTIVITIES:

1. INSTALL PERIMETER CONSTRUCTION FENCE AS NOTED ON THE PLAN.
2. INSTALL INLET PROTECTION IN ALL EXISTING STORM INLETS. (SHALL REMAIN UNTIL SITE IS STABILIZED)
3. REMOVAL OF EXISTING PAVEMENT AND OTHER ITEMS AS REQUIRED.
4. TREE REMOVAL AND TRANSPLANTING, WHERE NECESSARY.
5. MASS GRADING.
6. CONTINUE GRADING, STABILIZE COMPLETED AREAS WITH PERMANENT STABILIZATION OR INACTIVE AREAS WITH TEMPORARY STABILIZATION WITHIN 7 DAYS. (INLET PROTECTION SHALL REMAIN UNTIL SITE IS STABILIZED.)
7. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER, WITH INLET PROTECTION.
8. APPLY STONE TO PARKING AREA.
9. CONSTRUCT BUILDING.
10. COMPLETE GRADING AND INSTALL PERMANENT SODING AND PLANTINGS.
11. COMPLETE FINAL PAVING.
12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED,RESOD ANY REMAINING DISTURBED AREAS.
13. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES ONCE SITE IS STABILIZED.
14. CONTRACTOR SHALL ADHERE TO ALL PROVISIONS AND REQUIREMENTS OF **CITY OF WAUWATOSA** & THE **WDNR**.
15. REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY. CONTRACTOR SHALL ALSO MAINTAIN AND SWEEP DEBRIS OFF OF ALL ACCESS DRIVES AND OTHER DISTURBED AREAS EACH DAY.
16. ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN (7) DAYS MUST BE IMMEDIATELY RESTORED WITH SEED AND MULCH.
17. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR THE REGION AND SOIL TYPE. OCTOBER 15 THROUGH WINTER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.

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0 20'

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30349-2998

HRGreen.com
HRGreen

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT #	220756
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DATE	11/09/2022
DRAWN BY:	ECH
CHECKED BY:	JFV

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SHEET
EROSION CONTROL PLAN

SHEET NUMBER
C-302

LAYOUT NOTES

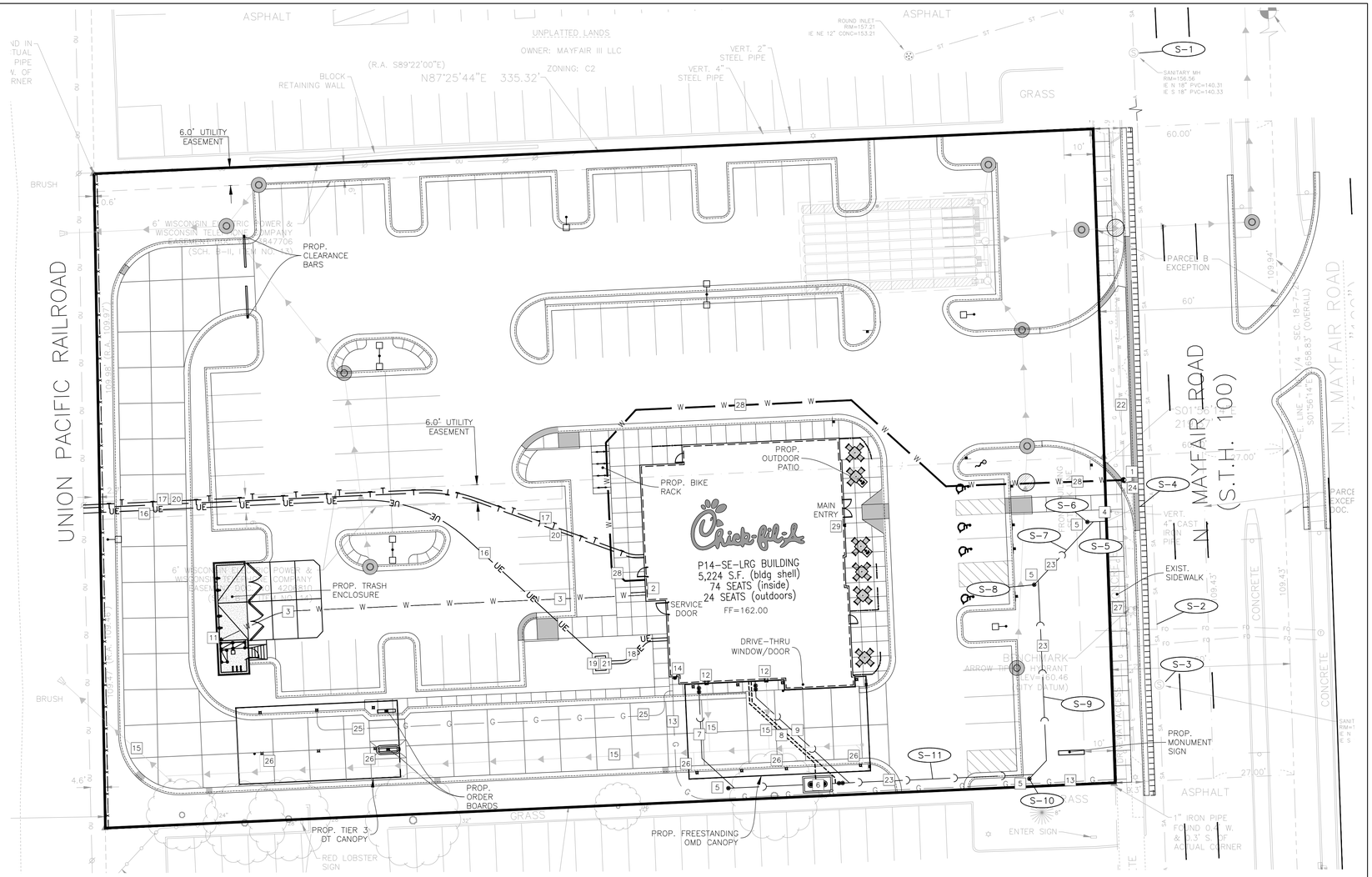
1. PAY CONNECTION FEES FOR 2" DOMESTIC & 6" FIRE WATER SERVICES AND METERS. FIRE/DOMESTIC SERVICE LINE TO TAP EXISTING WATER MAIN.
2. 1.5" SOFT COPPER (TYPE K) IRRIGATION LINE TO HAVE SEPARATE METER LOCATION ADJACENT TO DOMESTIC WATER METER INTERNAL TO THE BUILDING. MAINTAIN MIN. 6.0' COVER.
3. 3/4" CW TO DUMPSTER POST HYDRANT (SOFT COPPER TYPE K). MAINTAIN MIN. 6.0' COVER.
4. CONNECTION TO EXIST. SANITARY SERVICE STUB. CONTRACTOR TO VERIFY INVERT, SIZE, & CONDITIONS OF EXISTING STUB PRIOR TO ORDERING STRUCTURES. NOTIFY ENGINEER W/ ANY DISCREPANCIES. SEE SANITARY TAGS FOR INFO.
5. 4" OR 6" CLEAN OUT (SEE DETAIL). CLEANOUT SHALL BE FLUSH w/ PAVEMENT & INSTALLED UNDER A PROTECTIVE METAL BOX COVER SIMILAR TO A METER PIT COVER WITH A TRAFFIC BEARING LID.
6. PRECAST 1,250 GAL. CAPACITY GREASE TRAP. PLUMBING CONTRACTOR TO COORDINATE WITH BUILDING CONTRACTOR. TOP OF MANHOLE TO BE 0.2' ABOVE FINISH GRADE AND MATCH SIDEWALK GRADES WHERE REQUIRED.VERIFY GREASE TRAP MEETS CITY/COUNTY SPECIFICATIONS PRIOR TO INSTALLATION. REFER TO PLUMBING PLAN. SHEET P-101.
7. 4" KITCHEN WASTE LINE (SEE SANITARY TAGS FOR INFO)
8. 3" VENT LINE. CONNECT TO GREASE INTERCEPTOR. (SEE SHEET P-101 FOR LOCATION)
9. 4" RESTROOM WASTE LINE (SEE SANITARY TAGS FOR INFO)
10. 4" OR 6" TWO-WAY CLEAN OUT (REFER TO PLUMBING PLANS)(SEE DETAIL 37/C-403)
11. DUMPSTER POST HYDRANT. REFER TO THE FIXTURE CONNECTION SCHEDULE (P-303) DEPICTED ON THE PROJECT PLUMBING PLANS.
12. DOWNSPOUT FOR ROOF DRAINAGE (REFER TO ARCHITECTURAL PLANS)
13. PROPOSED GAS SERVICE (SEE NOTE 19)
14. COORDINATE GAS METER INSTALLATION WITH GAS COMPANY.
15. 8" PVC SDR 26 ROOF DRAIN PIPE SYSTEM (CONNECT TO SITE STORM DRAIN)
16. UNDERGROUND PRIMARY ELECTRIC SERVICE. (SEE NOTE 21)
17. UNDERGROUND PRIMARY TELEPHONE SERVICE. (SEE NOTE 20)
18. UNDERGROUND SECONDARY ELECTRIC SERVICE TO BUILDING. (SEE NOTE 21)
19. PROPOSED PAD MOUNTED TRANSFORMER PER ELECTRIC COMPANY STANDARDS. SEE SERVICE UTILITY NOTES, THIS SHEET.
20. UNDERGROUND ISP SERVICE (SEE NOTE 22)
21. INSTALL TRANSFORMER PAD (SEE NOTE 21)
22. EXISTING 16" WATERMAIN (CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH, & MATERIAL)
23. 6" PVC SDR 26 – SANITARY SERVICE PIPE
24. 6" PRESSURE TAP AND VALVE & VALVE BOX
25. 1.5" GAS SERVICE LINE TO DRIVE-THRU CANOPY
26. 6" PVC SDR 26 CANOPY DRAIN SYSTEM (CONNECT TO SITE STORM DRAIN)
27. EXISTING FIRE HYDRANT
28. 6" FIRE SERVICE LINE – PVC C900 PIPE – OPEN TRENCH
29. FIRE DEPARTMENT CONNECTION

ONSITE WATERLINE NOTES:

* THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
* ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED AUXILIARY GATE VALVE.
* ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED BEFORE ACCEPTANCE. SEE SITE WORK SPECIFICATIONS.
* ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
* GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
* ALL WATER MAIN SHALL BE INSTALLED WITH TRACER WIRE IN ACCORDANCE WITH CITY STANDARDS.
* CONTRACTOR TO COORDINATE WATER TAP WITH THE CITY OF WAUWATOSA WATER UTILITY DEPARTMENT.

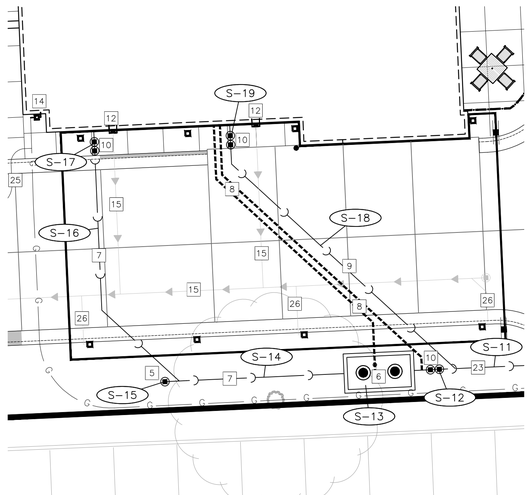
S-# SANITARY SEWER TAGS

* REFER TO SHEET PS-101 FOR TAG INFO



UTILITY NOTES

1. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING PLANS FOR DUTY SERVICE SIZES AND EXACT LOCATIONS. CONTRACTOR TO CONFIRM SIZES OF ALL SERVICES PRIOR TO INSTALLATION. REFER TO ELECTRICAL PLANS FOR ELECTRIC AND TELEPHONE SERVICE CONSTRUCTION DETAILS. REFER TO MECHANICAL PLANS FOR GAS SERVICE CONSTRUCTION DETAILS.
2. FIELD VERIFY ELEVATIONS AND LOCATIONS OF ALL CONNECTIONS TO EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
3. PROVIDE TEMPORARY SUPPORT FOR EXISTING UTILITY LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETE.
4. MAINTAIN A MINIMUM OF 6.0' COVER OVER ALL WATER MAINS.
5. MAINTAIN A MINIMUM OF 6.0' COVER OVERALL SANITARY SEWER.
6. ADJUST ALL MANHOLES AND FRAMES TO FINISHED GRADES.
7. ALL SANITARY SEWER AND WATER SERVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF WAUWATOSA AND STATE OF WISCONSIN PLUMBING CODE.
8. 12" MINIMUM VERTICAL CLEARANCE BETWEEN STORM SEWER AND SANITARY SEWER PIPES. 18" MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY/STORM SEWER AND WATER MAIN.
9. MAINTAIN A MINIMUM OF 8' HORIZONTAL SEPARATION BETWEEN SANITARY SEWER LINES AND PUBLIC WATER MAINS.
10. WHERE PUBLIC UTILITY FIXTURES ARE SHOWN AS EXISTING ON THE PLANS OR ENCOUNTERED WITHIN THE CONSTRUCTION AREA, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE OWNERS OF THOSE UTILITIES PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. THE CONTRACTOR SHALL AFFORD ACCESS TO THESE FACILITIES FOR NECESSARY MODIFICATION OF SERVICES. UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS AND THEREFORE, THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS. THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATIONS AND TO AVOID DAMAGE THERETO. NO CLAIMS FOR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR ANY INTERFERENCE OR DELAY CAUSED BY SUCH WORK. THE CONTRACTOR IS REQUIRED TO UTILIZE THE UTILITY CALL DIGGERS HOTLINE AT 1-800-242-8511 AT LEAST 72 HOURS PRIOR TO EXCAVATING ANYWHERE ON THE PROJECT.
11. LOCATION OF SITE UTILITIES SHALL BE VERIFIED WITH PROPER UTILITY COMPANY PROVIDING SERVICE.
12. ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
13. SEE SITE SPECIFICATIONS "UNDERGROUND UTILITIES" FOR BACKFILLING AND COMPACTION REQUIREMENTS.
14. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
15. ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT-OF-WAY TO TRANSFORMER LOCATION. ASSOCIATED COST BY GENERAL CONTRACTOR.
16. ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
17. FOR EXACT LIGHT POLE LOCATIONS SEE PHOTOMETRICS PLAN.
18. MATERIAL PERMITTED FOR USE AS SANITARY SEWER PIPES SHALL BE SDR 26 FOR 4" & 6".
19. WE ENERGIES WILL FURNISH AND INSTALL THE GAS MAINS AND GAS SERVICE UP TO AND INCLUDING THE METER. WE ENERGIES WILL BORE THE NEW SERVICE LINE UNDER PAVEMENT.
20. CONTRACTOR TO FURNISH AND INSTALL (1) 4" SCHEDULE 40 PVC CONDUITS FOR TELEPHONE SERVICE FROM AT&T PEDESTAL TO BUILDING. AT&T TO SUPPLY, PROVIDE AND INSTALL PRIMARY TELEPHONE SERVICE. CONDUITS TO BE INSTALLED A MINIMUM 24" BELOW FINISHED GRADE.
21. CONTRACTOR TO FURNISH AND INSTALL (2) 4" SCHEDULE 40 PVC CONDUITS WITH PULL WIRE FOR PRIMARY ELECTRIC SERVICE. WE ENERGIES TO PROVIDE AND INSTALL PRIMARY ELECTRIC SERVICE. CONTRACTOR TO FURNISH AND INSTALL (4) 4" SCHEDULE 40 PVC CONDUITS WITH PULL WIRE FOR SECONDARY ELECTRIC SERVICE. CONDUITS SHALL HAVE A MINIMUM OF 36" OF COVER. CONTRACTOR TO PROVIDE AND INSTALL TRANSFORMER PAD AND SECONDARY SERVICE IN ACCORDANCE WITH WE ENERGIES SPECIFICATIONS AND REQUIREMENTS. TRANSFORMER PAD SHALL BE INSTALLED TO FINAL GRADE AND LEVELED.
22. CONTRACTOR TO FURNISH AND INSTALL (1) 3" SCHEDULE 40 PVC CONDUIT WITH PULL STRING FOR ISP SERVICE FROM AT&T MAIN TO BUILDING. AT&T TO SUPPLY, PROVIDE AND INSTALL ISP SERVICE. CONDUIT TO BE INSTALLED MINIMUM 24" BELOW FINISHED GRADE.
23. ALL SEWER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE CITY OF WAUWATOSA.
24. ALL CONNECTIONS TO PUBLIC SANITARY SEWERS SHALL BE PER CITY STANDARD SPECIFICATIONS.
25. THE CFA FIRE WATER SERVICE PIPE SHALL BE PVC C900 PIPE.
26. ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.
27. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
28. PROVIDE UNDERDRAINS FROM SEEPS OR SPRINGS ENCOUNTERED. EXTEND TO STORM SEWER SYSTEM OR DAYLIGHT AT THE BOTTOM OF THE FILL SLOPE.
29. ALL PROPOSED PIPE CONNECTIONS TO EXISTING OR PROPOSED MANHOLES SHALL CONFORM TO ASTM-C923.
30. TRACER WIRE IS REQUIRED PER STATE AND CITY STANDARDS.
31. IF EXISTING SANITARY/WATER LATERALS ARE NOT TO BE USED/REUSED, THEY SHALL BE ABANDONED AT MAIN PER CITY STANDARDS.



1 PS-100 UTILITY LAYOUT BLOW-UP DETAIL
SCALE: 1"=10'

MISCELLANEOUS NOTES:

* ALL BUILDING UTILITY SERVICE LOCATIONS TO BE VERIFIED W/ ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
* FOR EXACT LIGHT POLE LOCATIONS SEE PHOTOMETRICS PLAN.
* AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE CITY AND/OR WISDOT TO OBTAIN APPLICABLE PERMITS.
* WORK WITHIN THE ROW SHALL BE DONE IN ACCORDANCE WITH THE CITY SPECIFICATIONS.
* ONLY THE CITY OF WAUWATOSA WATER UTILITY DEPARTMENT MAY OPERATE EXISTING VALVES.
* THE CONTRACTOR MUST CONTACT THE CITY OF WAUWATOSA TO SCHEDULE INSPECTIONS FOR ALL WORK WITHIN THE ROW.
* TRACER WIRE ON THE WATER SERVICE SHALL BE CONNECTED TO THE TRACER WIRE ON THE WATER MAIN AND INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS.
* ANY WORK PERFORMED IN THE ROW SHALL BE PERFORMED BY A CITY "QUALIFIED" CONTRACTOR AND MONITORED BY THE CITY.

LEGEND:

DENOTES MAINTAIN 18" VERTICAL SEPARATION PER WIDNR'S REQUIREMENTS

A CONFLICT TAGS

* REFER TO SHEET PS-101 FOR TAG INFO

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

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Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT #	220756
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SHEET
PLUMBING SITE PLAN

SHEET NUMBER
PS-100

(A) CONFLICT TAGS

OMITTED FOR THIS SUBMITTAL

(ST-#) STORM TAGS

ST-1 FES, 8"
INV = 157.00

ST-2 51 LIN FT SS PVC SDR-26, 8"
@ 0.49%

ST-3 CLEANOUT (SEE DETAIL)
RIM = 159.75
INV = 157.25

ST-4 234 LIN FT SS PVC SDR-26, 8"
@ 0.54%
INV @ ST-2 = 157.24

ST-5 CLEANOUT (SEE DETAIL)
RIM = 161.65
INV = 158.50

ST-6 23 LIN FT SS PVC SDR-26, 8" (BLDG DRAIN)
@ 1.00%
INV @ ST-4 = 158.23
INV @ DOWNSPOUT = 158.25

ST-7 23 LIN FT SS PVC SDR-26, 8" (BLDG DRAIN)
@ 1.00%
INV @ ST-4 = 158.33
INV @ DOWNSPOUT = 158.38

ST-8 7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 158.20
INV @ DOWNSPOUT = 158.20

ST-9 7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 158.36
INV @ DOWNSPOUT = 158.20

ST-10 8 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 158.49
INV @ DOWNSPOUT = 158.35

ST-11 7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 157.41
INV @ DOWNSPOUT = 158.45

ST-12 7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 157.63
INV @ DOWNSPOUT = 158.57

ST-13 14 LIN FT SS ADS N-12 WT, 12"
@ 0.71%

ST-14 STM SWR CB 3' DIA., R-3235 OL
T/C = 160.31
INV = 157.75 SW 12" ADS

ST-15 FES, 12"
INV = 157.50

ST-16 54 LIN FT SS ADS N-12 WT, 12"
@ 0.28%

ST-17 PROP. HYRDO INTERNATIONAL UP-FLO FILTER, 4' DIA.
# OF FILTERS DETERMINED BY HYDRO INTERNATIONAL
RIM = 160.50
INV = 157.65 W 12" ADS
INV = 157.75 SE 12" ADS
INV = 157.65 NE 12" ADS

ST-18 60 LIN FT SS ADS N-12, 12"
@ 0.25%

ST-19 STM SWR CB 3' DIA., R-3235 OL
T/C = 160.71
RIM = 160.30
INV = 157.90

ST-20 64 LIN FT SS ADS N-12, 12"
@ 0.25%

ST-21 STM SWR CB 3' DIA., R-3235 OL
T/C = 160.96
INV = 158.06 N 12" ADS

ST-22 EX. STM INLET (RIM AND INVERT ESTIMATED)
RIM = 157.00
INV = 153.00 S 15" RCP
CONTRACTOR TO FIELD VERIFY RIM AND INVERT

ST-23 181 LIN FT SS, 15" RCP
@ 0.50%

ST-24 STM SWR CB 4' DIA., R-3235 CL
RIM = 158.50
INV = 153.90 N 15" RCP
INV = 153.90 W 15" RCP

ST-25 54 LIN FT SS, 15" RCP
@ 0.56%

ST-26 STM SWR CB 4' DIA., R-2504 CL
RIM = 158.50
INV = 154.20 E 15" RCP
INV = 154.20 W 15" ADS

ST-27 30 LIN FT SS ADS N-12, 15"
@ 0.50%

ST-28 NYLOPLAST 30" DIA. DRAIN BASIN, H-20 SOLID GRATE
RIM = 158.55
WEIR PLATE TOP = 156.80
INV = 154.55 8.25" DIA. WEIR PLATE ORIFICE
INV = 154.35 E 15" ADS

ST-29 NYLOPLAST 30" DIA. DRAIN BASIN, H-20 SOLID GRATE
RIM = 158.40
INV = 154.35 N 12" ADS

ST-30 10 LIN FT SS ADS N-12, 12"
@ 0.50%

ST-31 STM SWR CB 2' DIA., R-3235 OL
T/C = 158.61
RIM = 158.15
INV = 154.40 S 12" ADS

ST-32 NYLOPLAST 30" DIA. DRAIN BASIN, H-20 SOLID GRATE
RIM = 158.80
INV = 154.35 SE 18" ADS

ST-33 17 LIN FT SS ADS N-12, 18"
@ 0.59%

ST-34 STM SWR CB 4' DIA., R-3235 OL
T/C = 158.91
RIM = 158.00
INV = 154.45 NW 18" ADS
INV = 154.45 S 12" RCP

ST-35 35 LIN FT SS, 12" RCP
@ 0.57%

ST-36 STM SWR CB 4' DIA., R-3235 OL
T/C = 159.31
RIM = 158.35
INV = 154.65 N 12" RCP
INV = 154.65 S 12" RCP

ST-37 72 LIN FT SS, 12" RCP
@ 0.49%

ST-38 STM SWR CB 2' DIA., R-3235 OL
T/C = 160.31
RIM = 158.55
INV = 155.00 N 12" RCP

NOTE:
* ALL STORM STRUCTURES WITHIN PAVED AREAS REQUIRE WEEP HOLES. SEE DETAILS 51 & 52 ON SHEET C-404 FOR WEEP HOLE DETAILS.

(S-#) SANITARY SEWER TAGS

S-1 EXIST. SAN MH
EXIST. RIM = 156.56
INV = 140.31 N 18" PVC
INV = 140.33 S 18" PVC

S-2 EXIST. 283 LF SAN SWR MAIN, 18" PVC
@ 0.48%

S-3 EXIST. SAN MH
EXIST. RIM = 158.04
INV = 141.69 N 18" PVC
INV = 141.69 S 18" PVC

S-4 EXIST. 17 LF SAN SERVICE, 6" PVC
(PIPE SIZE TO BE VERIFIED)
INV @ MAIN = 141.91 (APPROX.)
(PIPE ASSUMED TO HAVE RISER. CONTRACTOR TO VERIFY INVERT AT END OF STUB PRIOR TO ORDERING STRUCTURES. NOTIFY ENGINEER W/ FINDINGS.)

S-5 7 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ STUB = 152.28 (APPROX.)
(CONTRACTOR TO VERIFY STUB INVERT. NOTIFY ENGINEER W/ ANY DISCREPANCIES FROM PLAN.)

S-6 CLEANOUT (SEE DETAIL)
RIM = 159.00
INV = 152.35

S-7 29 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ S-5 = 152.33

S-8 CLEANOUT (SEE DETAIL)
RIM = 159.80
INV = 152.63

S-9 69 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ S-7 = 152.61

S-10 CLEANOUT (SEE DETAIL)
RIM = 160.00
INV = 153.33

S-11 68 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ S-9 = 153.31

S-12 TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 160.95
INV = +/- 153.99

S-13 GREASE TRAP (1,250 GAL.)
SEE BUILDING PLUMBING PLAN FOR DETAILS
RIM(S) = 161.10 W, 161.10 E
INV = 154.19 (INLET)
INV = 154.02 (OUTLET)

S-14 25 LF SAN SERVICE, 4" PVC SDR 26
@ 2.08%

S-15 CLEANOUT (SEE DETAIL)
RIM = 161.15
INV = 154.71

S-16 40 LF SAN SERVICE, 4" PVC SDR 26
@ 2.08%
INV @ S-14 = 154.67
INV @ BLDG = 155.50
(VERIFY WITH ARCHITECT/PLANS)

S-17 TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 161.95
INV = +/- 155.46

S-18 48 LF SAN SERVICE, 4" PVC SDR 26
@ 3.21%
INV @ S-11 = 153.96
INV @ BLDG = 155.50
(VERIFY WITH ARCHITECT/PLANS)

S-19 TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 161.95
INV = +/- 155.44

BIKE RACK

Manufacturer:
Belson Outdoors

Contact Information:
Belson Outdoors
800-323-5664
sales@belson.com

Standard Description:
Orion In-ground or surface mount steel bike rack

Dimensions: 40"L x 33"H x 2-3/8" round tube

Finish: Black Powder Coated

Product Used In:
Concepts: FSR, In-Line, Licensee
Prototype: All
Palette: All

Ordering Information:
In Ground: ORN-2-IG-P
Surface Mount: ORN-2-SF-P

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Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756
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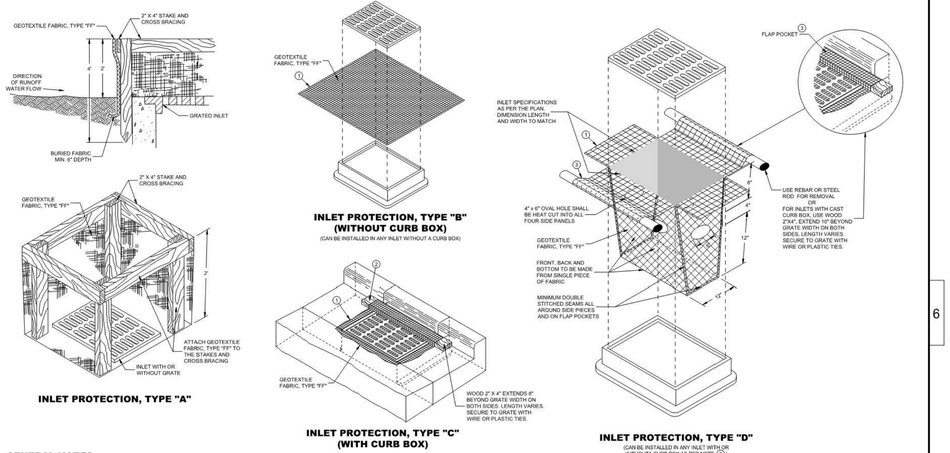
SHEET
UTILITY TAGS

SHEET NUMBER
PS-101

SDD 08E10 Inlet Protection, Types A, B, C and D



GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

1. FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
2. FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
3. FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPES B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

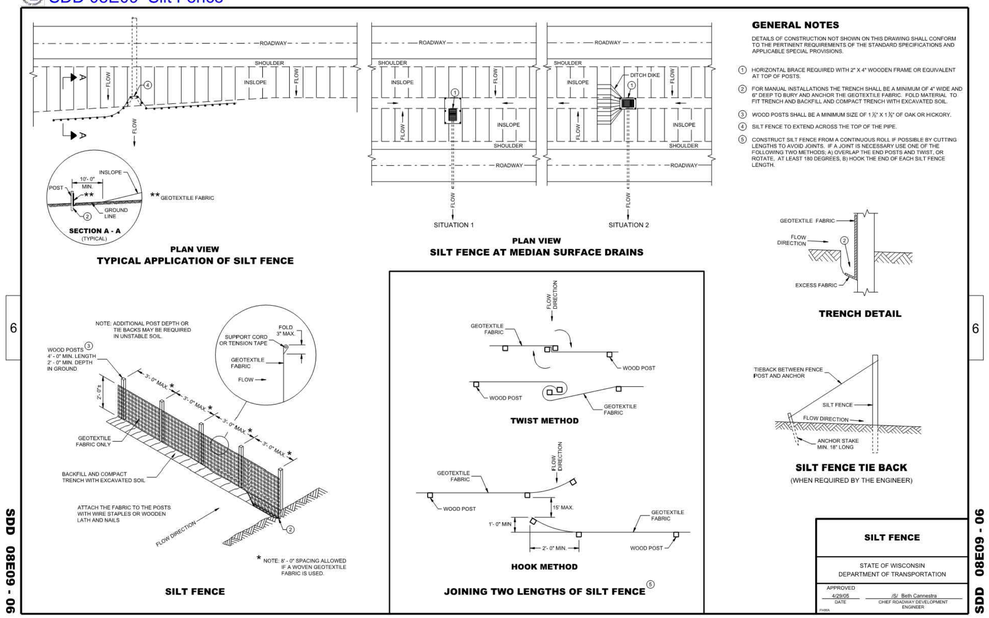
DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION TYPES A, B, C AND D	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 (DATE)	/S/ Beth Cannestra ROADWAY STANDARDS DEVELOPMENT ENGINEER

SDD 08E10 - 02

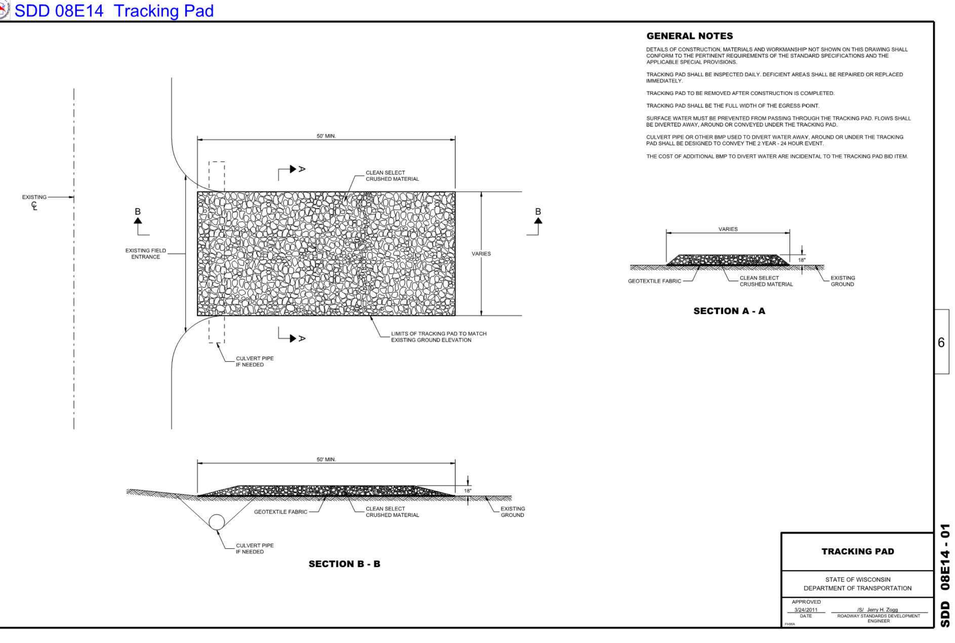
SDD 08E09 Silt Fence



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4/29/05 (DATE)	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER

SDD 08E09 - 06

SDD 08E14 Tracking Pad



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

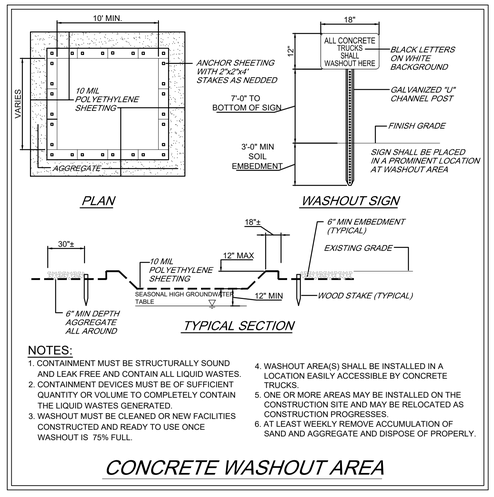
SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.

TRACKING PAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 3/24/2011 (DATE)	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER

SDD 08E14 - 01



NOTES:

1. CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

CONCRETE WASHOUT AREA

NOTE:

1) IF ANY DISCREPANCIES OCCUR BETWEEN DETAILS, THE MOST RESTRICTIVE DETAIL SHALL GOVERN

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5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen.com
HRGreen

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO:	DATE	DESCRIPTION
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PRELIMINARY

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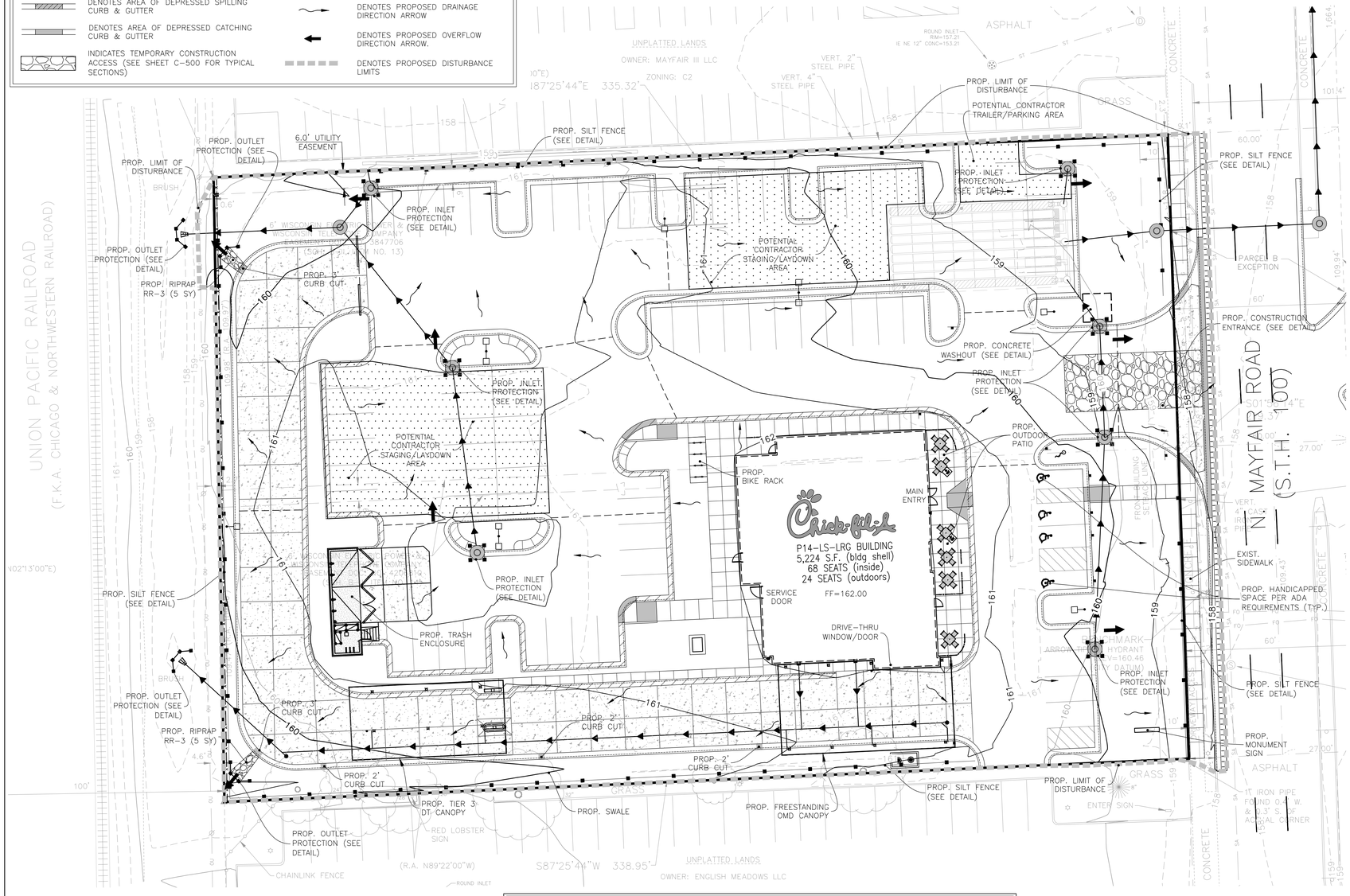
SHEET
EROSION CONTROL DETAILS

SHEET NUMBER
C-500

HATCH LEGEND

- DENOTES REVERSE (SPILLING) CURB & GUTTER
- DENOTES CONCRETE CURB & GUTTER (CATCHING)
- DENOTES AREA OF DEPRESSED SPILLING CURB & GUTTER
- DENOTES AREA OF DEPRESSED CATCHING CURB & GUTTER
- INDICATES TEMPORARY CONSTRUCTION ACCESS (SEE SHEET C-500 FOR TYPICAL SECTIONS)
- INDICATES STAGING AREAS
- DENOTES PERIMETER EROSION BARRIER (SILT FENCE), INLET & PIPE PROTECTION AND DITCH CHECK
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW
- DENOTES PROPOSED OVERFLOW DIRECTION ARROW.
- DENOTES PROPOSED DISTURBANCE LIMITS



EROSION CONTROL NOTES:

1. ALL SEDIMENTATION AND EROSION CONTROL REGULATIONS SHALL BE ADHERED TO PER THE CITY OF WAUWATOSA REQUIREMENTS.
2. NO LAND DISTURBING ACTIVITIES SHALL COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.)
3. UTILIZE EXCELSIOR BLANKET OR SOD ON ALL SLOPES OF 5:1 OR GREATER.
4. ALL STREETS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
5. IF ANY ADDITIONAL SOIL EROSION MEASURES ARE DEEMED NECESSARY BY THE CITY ENGINEER OR HIS REPRESENTATIVE. THESE MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR.
6. REMOVE ALL DEBRIS TRANSFERRED INTO THE ROW OR ADJOINING PROPERTY AT THE END OF EACH WORK DAY.
7. INSTALL AND MAINTAIN INLET FILTER BASKET ASSEMBLIES AT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS.
8. PER THE NPDES CONSTRUCTION STORM WATER PERMIT, THE DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS MUST BE DOCUMENTED. RAINFALL AMOUNTS MUST BE OBTAINED FROM A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION WITHIN 1 MILE OF THE SITE, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
9. CONTRACTOR SHALL PROVIDE WEEKLY EROSION CONTROL INSPECTION REPORTS TO THE CITY IN AN ACCEPTABLE FORMAT.

SEQUENCE OF CONSTRUCTION ACTIVITIES:

1. INSTALL PERIMETER CONSTRUCTION FENCE AS NOTED ON THE PLAN.
2. INSTALL INLET PROTECTION IN ALL EXISTING STORM INLETS. (SHALL REMAIN UNTIL SITE IS STABILIZED)
3. REMOVAL OF EXISTING PAVEMENT AND OTHER ITEMS AS REQUIRED.
4. TREE REMOVAL AND TRANSPLANTING, WHERE NECESSARY.
5. MASS GRADING.
6. CONTINUE GRADING, STABILIZE COMPLETED AREAS WITH PERMANENT STABILIZATION OR INACTIVE AREAS WITH TEMPORARY STABILIZATION WITHIN 7 DAYS. (INLET PROTECTION SHALL REMAIN UNTIL SITE IS STABILIZED.)
7. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER, WITH INLET PROTECTION.
8. APPLY STONE TO PARKING AREA.
9. CONSTRUCT BUILDING.
10. COMPLETE GRADING AND INSTALL PERMANENT SODING AND PLANTINGS.
11. COMPLETE FINAL PAVING.
12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED,RESOD ANY REMAINING DISTURBED AREAS.
13. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES ONCE SITE IS STABILIZED.
14. CONTRACTOR SHALL ADHERE TO ALL PROVISIONS AND REQUIREMENTS OF CITY OF WAUWATOSA & THE WDNR.
15. REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY. CONTRACTOR SHALL ALSO MAINTAIN AND SWEEP DEBRIS OFF OF ALL ACCESS DRIVES AND OTHER DISTURBED AREAS EACH DAY.
16. ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN (7) DAYS MUST BE IMMEDIATELY RESTORED WITH SEED AND MULCH.
17. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR THE REGION AND SOIL TYPE. OCTOBER 15 THROUGH WINTER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
DATE 11/09/2022
DRAWN BY: ECH
CHECKED BY: JFV

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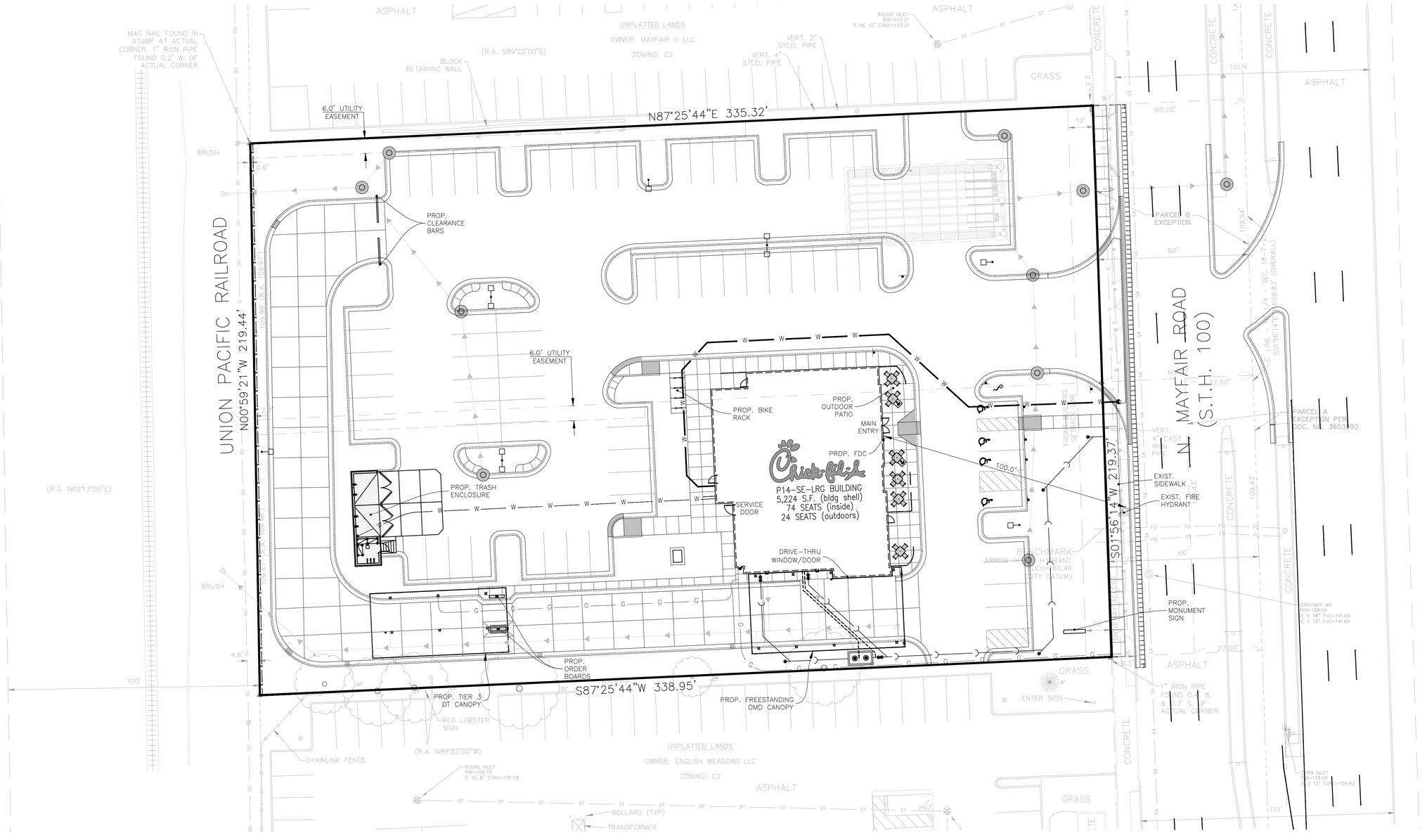
SHEET
CONSTRUCTION STAGING PLAN

SHEET NUMBER
EX-300



NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A

WAUWATOSA (WI) FSU

2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT #	220756
PRINTED FOR	PRELIMINARY
DATE	11/09/2022

DRAWN BY: ECH
CHECKED BY: JFV

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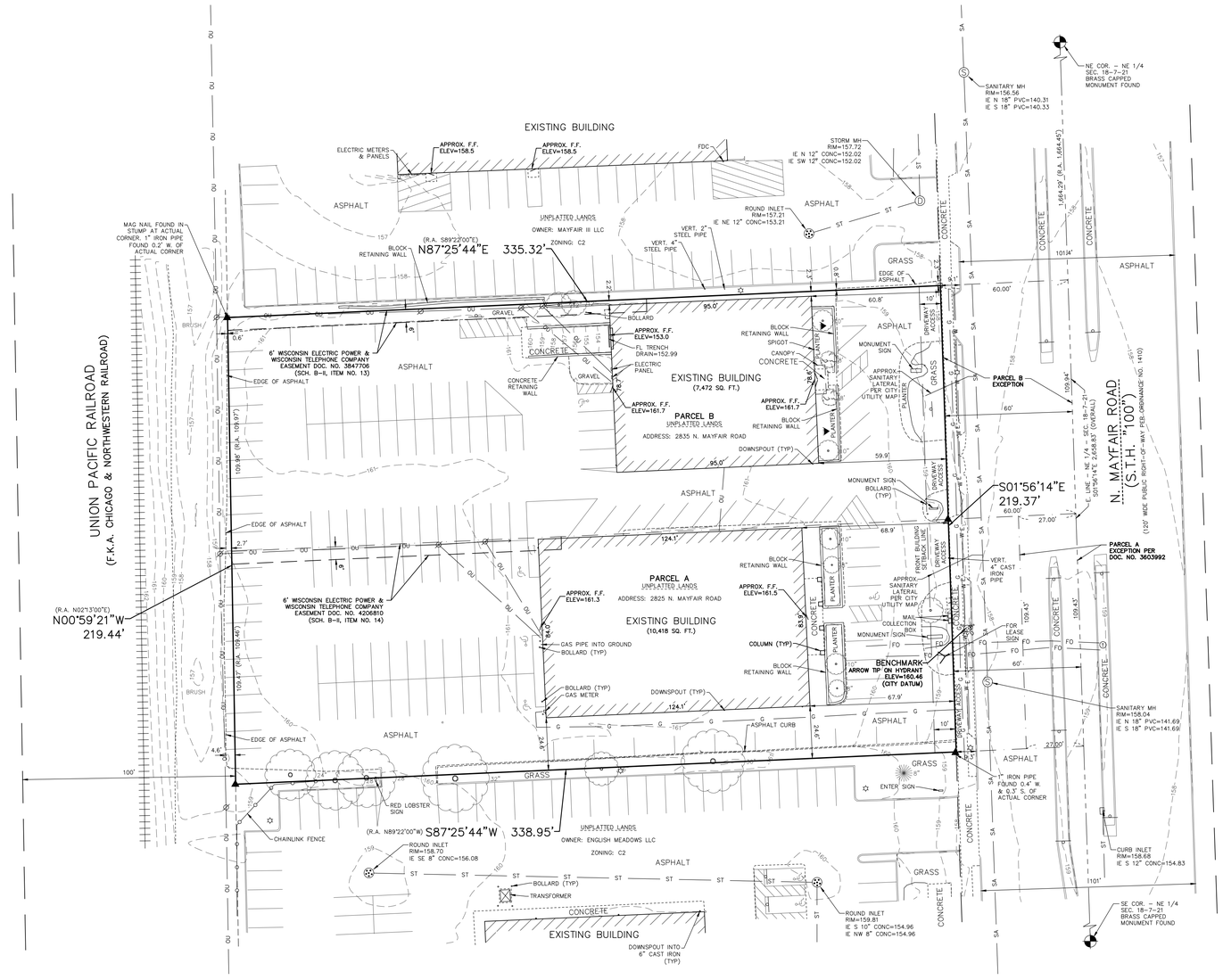
SHEET
FIRE ACCESS PLAN

SHEET NUMBER
EX-400



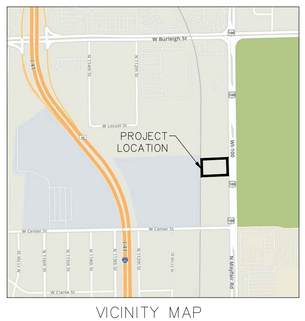
TOTAL AREA
1.698 ACRES
73,952 SQ. FT.

LEGEND:

WATER VALVE IN BOX	EXISTING STORM SEWER AND MANHOLE
TELEPHONE MANHOLE	EXISTING SANITARY SEWER AND MANHOLE
EXISTING ROUND CATCH BASIN	EXISTING WATER LINE AND HYDRANT
EXISTING CURB INLET	EXISTING OVERHEAD UTILITY LINE
UTILITY POLE WITH GUY WIRE	EXISTING UNDERGROUND FIBER OPTIC LINE
ELECTRIC TRANSFORMER	EXISTING UNDERGROUND ELECTRIC CABLE
EXISTING LIGHT POLE	EXISTING UNDERGROUND GAS LINE
EXISTING SIGN	EXISTING CURB AND GUTTER
HANDICAP PARKING STALL	EXISTING CHAINLINK FENCE
FLOOD LIGHT	PROPERTY LINE
1" IRON PIPE FOUND	RIGHT-OF-WAY LINE
MAG NAIL FOUND	ADJACENT PROPERTY LINE
DECIDUOUS TREE	EXISTING GROUND CONTOUR
CONIFEROUS TREE	
SHRUB	
(R.A.) "RECORDED AS" INFORMATION	

1"= 30' SCALE: 30' 0 30' 60' FEET

NOTE:
SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS ON THE SURVEYED PARCEL HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES CRITICAL TO CONSTRUCTION.



VICINITY MAP
NOT TO SCALE

CURRENT ZONING: C2 - General Commercial District

Building Setbacks:
Front: 10 feet

Street Side: 5 feet

Interior Side: 3 feet, no side setback is required abutting another C-zoned lot occupied by a building with no side setback along the shared lot line

Rear: 10 feet, none if abutting railroad right-of-way

Maximum Building Height: None

Parking Requirements:
8 spaces per 1,000 square feet plus vehicle stacking spaces as required. All drive-through facilities must provide at least 4 stacking spaces for vehicles at the pick-up or teller window and at least 4 spaces from the order box. Each stacking space must be at least 20 feet in length.

The current Zoning Setbacks have been listed per the City of Wauwatosa Zoning Code. Zoning information shown hereon was obtained through research by Excel. Zoning information was not provided by the client as part of this survey as required by ALTA Table A, Item 6(b) and may be incomplete.

ALTA / NSPS LAND TITLE SURVEY

SURVEYOR'S CERTIFICATE
ALTA / NSPS Land Title Survey

To:
1. Fidelity National Title Insurance Company
2. Chicago Title Company
3. Chick-fil-A, Inc.
4. MAYFAIR OFFICE, LLC, a Wisconsin limited liability company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 5, 6(b), 7(a), 7(b)(1), 8, 9, 11(a), 13, 16, 17, 18, 19 & 20(a) of Table A thereof. The field work was completed on July 28, 2022.

_____ Date of Plat or Map:_____

Ryan Wilgreen, P.L.S. No. S-2647
ryan.w@excelengineer.com
Excel Engineering, Inc.
Fond du Lac, Wisconsin 54935
Project Number: 2258540

LANDS DESCRIBED IN COMMITMENT NO. CO-12770, PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY WITH A COMMITMENT DATE OF MAY 6, 2022:

PARCEL A:
That part of the Northeast 1/4 of Section 18, Town 7 North, Range 21 East, in the City of Wauwatosa, County of Milwaukee, State of Wisconsin, bounded and described as follows: Commencing at a point on the East line and 1774.39 feet South of the Northeast corner of said 1/4 Section; thence South along the East line of said 1/4 Section 109.43 feet to a point; thence North 89°22' West on a line which is parallel to the North line of said 1/4 Section, 398.95 feet to a point on the East line of the right-of-way of the Chicago & Northwestern Railway; thence North 2°13' East along the East line of the right-of-way of said Railway, 109.46 feet to a point; thence South 89°22' East on a line which is parallel to the North line of said 1/4 Section, 397.14 feet to the place of beginning, except that portion conveyed to the State of Wisconsin by Warranty Deed recorded August 29, 1957, in Volume 3736 of Deeds, Page 272, as Document No. 3603992.
Tax Key: 299-9986-00
Address: 2825 N. Mayfair Road

PARCEL B:
That part of the Northeast 1/4 of Section 18, Town 7 North, Range 21 East, in the City of Wauwatosa, County of Milwaukee, State of Wisconsin, bounded and described as follows: Commencing at a point on the East line and 1664.45 feet South of the Northeast corner of said 1/4 Section; thence South along the East line of said 1/4 Section 109.94 feet to a point; thence North 89° 22' West on a line which is parallel to the North line of said 1/4 Section 397.14 feet to a point on the East line of the right of way of the Chicago & Northwestern Railway; thence North 2°13' East along the East line of the right of way of said Railway 109.97 feet to a point; thence South 89° 22' East on a line which is parallel to the North line of said 1/4 Section 395.32 feet to the place of beginning, excepting the East 60 feet thereof.
Tax Key No.: 299-9987-00
Address: 2835 N. Mayfair Road

ALTA NOTES:

1. Bearings are referenced to the Wisconsin State Plane Coordinate System, South Zone (NAD27). The East line of the Northeast 1/4 of Section 18-7-21 has a bearing of North 01°-56'-14" West.

2. Only the improvements that were visible from above ground at time of survey and through a normal search and walk through of the site are shown on the face of this plat. Lawn sprinkler systems, if any, are not shown on this survey.

3. Surface indications of utilities along with Digger's Hotline markings on the surveyed parcel have been shown. Offsite observations have not been made to determine the extent of utilities serving or existing on the property. Public records have not been provided for additional information. Controlled underground exploratory effort together with Digger's Hotline markings is recommended to determine the full extent of underground service and utility lines. Contact Digger's Hotline at 1-800-242-8511.

4. This survey may not reflect all utilities, or improvements, if such items are hidden by landscaping, or areas covered by such items as dumpsters or trailers.

5. The locations of the property lines shown on the face of this plat are based on the description and information furnished by the client, together with the title commitment. The parcel that is defined may not reflect actual ownership, but reflects what was surveyed. For ownership, consult your title company.

6. Based upon a review of the Federal Emergency Management Agency Flood Insurance Rate Map No. 55079C0058E with an effective date of September 26, 2008, the property falls within Zone "X" (Unshaded-areas determined to be outside the 0.2% annual chance flood hazard).

7. The property described hereon contains 1.698 acres (73,952 sq. ft.) of land, more or less.

8. **Fidelity National Title Insurance Company, Commitment No. CO-12770, with a commitment date of May 6, 2022 has been reviewed in conjunction with the preparation of this survey. Notes related to the review of this title policy, Schedule B-II Exceptions are as follows:**

   #11 Rights and easements, if any, in and to any and all railroad switches, sidetracks, spur tracks, and rights of way located upon or appurtenant to the Land.

   #12 Rights of the public in so much of the subject premises as are affected by Ordinance adopted by the Board of Supervisors of Milwaukee County on June 29, 1926 and approved by the various towns in said County, establishing the width of Lovers Lane at 120 feet, and ordaining that said highway be widened to the width so established. A notice and plat etc. in said matter was filed in Milwaukee County on November 12, 1926 as No 1410. **This document establishes the width of N. Mayfair Road (previously Lovers Lane) to be a 120' wide public right-of-way. Right-of-way width is depicted on this survey.**

   #13 Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document recorded on November 22, 1960, as Document No. 3847706. **Easement is depicted on this survey.**

   #14 Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document recorded on September 15, 1965, as Document No. 4206810. **Easement is depicted on this survey.**

   #15 Easement Deed by Court Order in Settlement of Landowner Action recorded August 12, 2013 as Document No. 10282052. **This document affects the subject property and contains a general easement for the installation, maintenance, replacement, relocation, removal, etc. of cables, handholes, etc. for a telecommunication cable system. This document does not contain enough information to graphically plot the 20' wide easement referenced on page 3 of this document.**

9. Other commitment items not specified hereon may not have been considered relevant to an ALTA/NSPS Land Title Survey, and have not been reviewed in conjunction with preparation of this plat (i.e. Annexation agreements, Leases, Mortgages, Liens, special assessments, covenants, trusts, unspecified or unrecorded rights).

10. In regards to ALTA/NSPS "Table A", Item No. 9, the subject property contains 129 regular striped parking stalls and 5 handicap accessible striped parking stalls for a total of 134 striped parking stalls.

11. In regards to ALTA/NSPS "Table A", Item No. 13, adjacent owner information was taken from the Milwaukee County GIS Website on the sheet issue date of this survey.

12. In regards to ALTA/NSPS "Table A", Item No. 16, at the time of this survey there was no visible sign of earth moving work, building construction, or building additions.

13. In regards to ALTA/NSPS "Table A", Item No. 17, no proposed changes to the street right-of-way lines have been disclosed by the City of Wauwatosa or the current Title Commitment. There was no visible evidence of recent street or sidewalk construction or repairs at the time of the survey fieldwork.

14. In regards to ALTA/NSPS "Table A", Item No. 18, all plottable offsite easements or servitudes benefiting the subject property as disclosed in record documents provided to Excel Engineering, Inc. have been depicted on this survey.

15. In regards to ALTA/NSPS "Table A", Item No. 19, Excel Engineering, Inc. carries a $2,000,000 Professional Liability Insurance Policy. Certificate of Insurance will be provided upon request.

16. In regards to ALTA/NSPS "Table A", Item No. 20(a), through the normal course of conducting a survey, there was no visible evidence of the subject property being used as a solid waste dump, sump or sanitary landfill.

EXCEL
ARCHITECTS • ENGINEERS • SURVEYORS
Always a **Better Plan**
100 Camelot Drive
Fond Du Lac, WI 54935
Phone: (920) 926-9800
www.EXCELENGINEER.com

PROJECT INFORMATION

ALTA/NSPS LAND TITLE SURVEY
2825 & 2835 N. MAYFAIR ROAD • WAUWATOSA, WI 53222

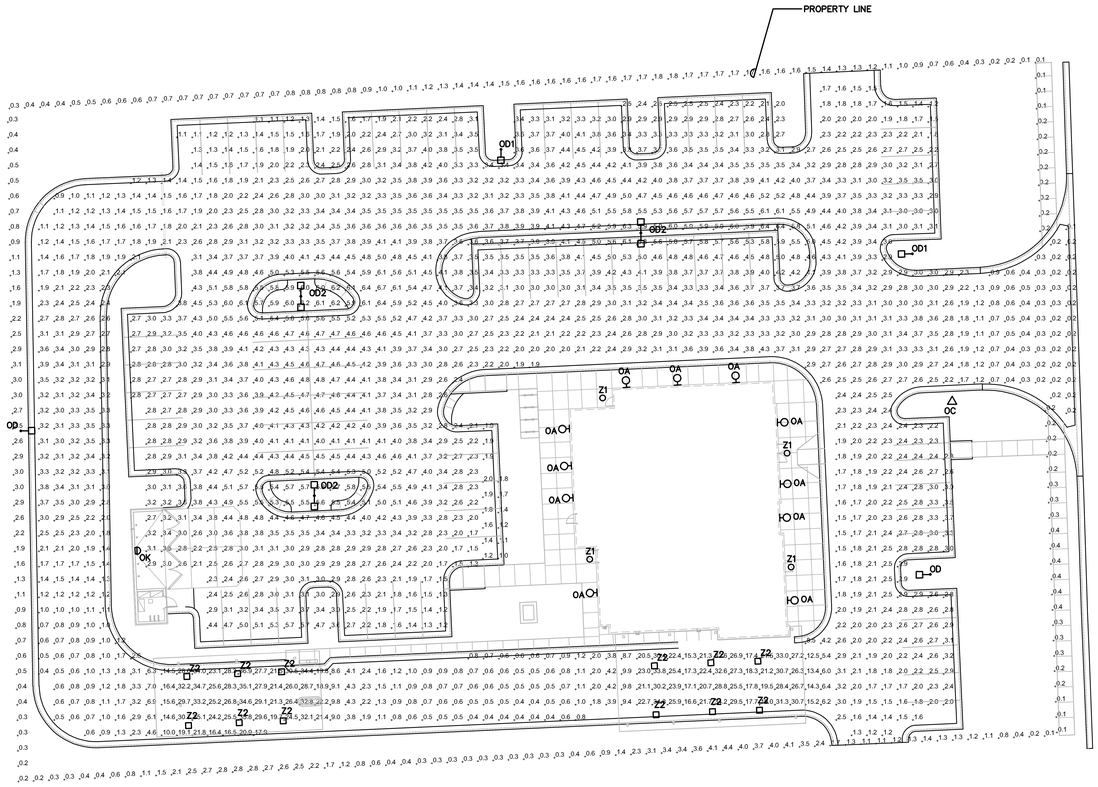
PROFESSIONAL SEAL

SHEET DATES
ISSUE DATE AUG. 9, 2022
REVISIONS

JOB NUMBER
2258540

SHEET NUMBER
AL

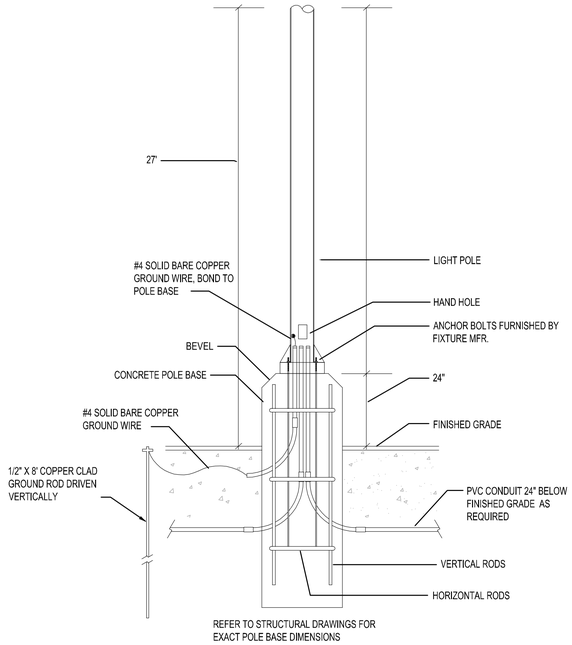
2022 © EXCEL ENGINEERING, INC.



1 PHOTOMETRIC PLAN

SCALE: 1"=20'-0"

0 10 20 30 40



2 TYPICAL POLE BASE DETAIL

NOT TO SCALE

PHOTOMETRIC STATISTICS (MAINTAINED) IN PARKING LOT (NOT INCLUDING UNDER CANOPY LIGHTING)	
AVERAGE	3.1 FC
MAX	6.5 FC
MIN	0.3 FC

FIXTURE	HEIGHT (UNLESS NOTED OTHERWISE)	LIGHT LOSS FACTOR	COLOR	LIGHT FIXTURE SPECIFICATION	POLE	COMMENTS
OC	ON GRADE	.9	4000K	HUBBELL – FLL-42L-95-4K7-N-U-K-DB		
OD	27'	.9	4000K	COOPER/LUMARK – PRV-C60D-UNV-T3-SA-BZ	SSS-4A-25-SFM-1-4 (SINGLE LUMINAIRE)	
OD1	27'	.9	4000K	COOPER/LUMARK – PRV-C60D-UNV-T4-SA-BZ	SSS-4A-25-SFM-1-4 (SINGLE LUMINAIRE)	
OD2	27'	.9	4000K	(2) COOPER/LUMARK – PRV-C60D-UNV-T4-SA-BZ	SSS-4A-25-SFM-2-4 (TWO LUMINAIRES)	
OA	8'	.9	3000K	PROGRESS LIGHTING – P5675-31 WITH TOP COVER LENS		
OK	8'	.9	3000K	HUBBELL – LNC-SLU-3K-3-1		
Z1	10'	.9	3000K	PROVIDED WITH CANOPY		
Z2	9.5'	.5	3000K	LSI – CRUS-SC-LED-LW30-UE-WHT		

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998

DICKERSON ENGINEERING, INC.
Professional Electrical Engineers
2434 JUTLAND DRIVE, SUITE 200
ATLANTA, GEORGIA 30340
TEL (847) 966-0290
FAX (847) 966-0294

CHICK-FIL-A

WAUWATOSA FSU
2825 N MAYFAIR RD
WAUWATOSA, WI 53222

FSR# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

ARCHITECT'S PROJECT #	#
PRINTED FOR	ZONING REVIEW
DATE	04/05/2023
DRAWN BY	JR/GD

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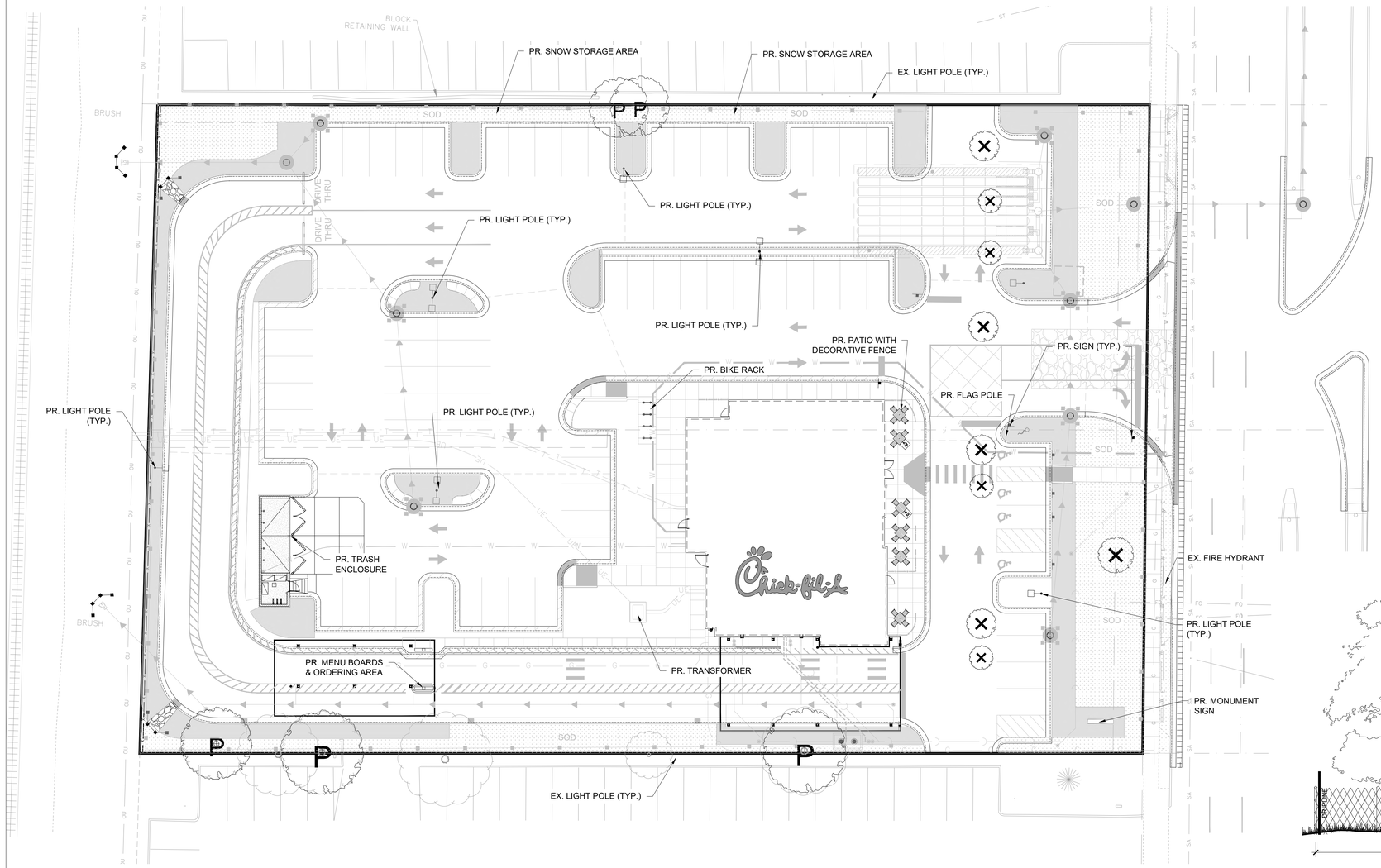
SHEET
PHOTOMETRIC PLAN

SHEET NUMBER
E-102



TREE PROTECTION KEY

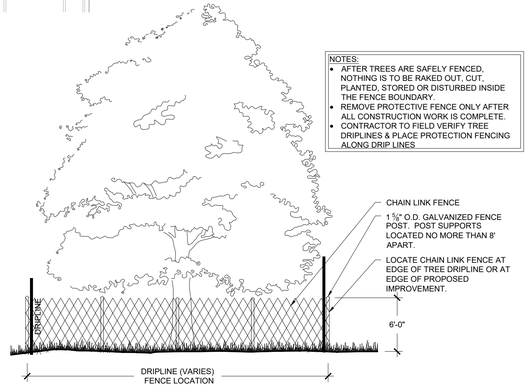
- EXIST. TREE TO BE PRESERVED
- EXIST. TREE TO BE REMOVED
- TRUNK PROTECTIVE FENCING
- CRITICAL ROOT ZONE

TOTAL QUANTITIES (IN VICINITY OF DISTURBANCE AND PROPOSED IMPROVEMENTS)

EXIST. TREES TO BE PRESERVED	5
EXIST. TREES TO BE REMOVED	9
TOTAL EXISTING TREES TAGGED	14

GENERAL NOTES

1. THE INTENT IS TO KEEP THE EXISTING TREES TO BE PRESERVED IN TACT THROUGHOUT THE DURATION OF CONSTRUCTION ON-SITE. IF THE TREES ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR REPLACING PER THE MUNICIPALITY'S ORDINANCE.
2. CONTRACTOR IS RESPONSIBLE FOR THE HAUL-OFF OF ALL TREES AND OTHER VEGETATION TO BE REMOVED.



1 TYP. TREE PROTECTION FENCE DETAIL

SCALE: NTS

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A

WAUWATOSA (WI) FSU

2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	10/07/2022	PER CITY COMMENTS
2	05/10/2023	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
DATE 08/16/2022
DRAWN BY: JTK
CHECKED BY: JFR

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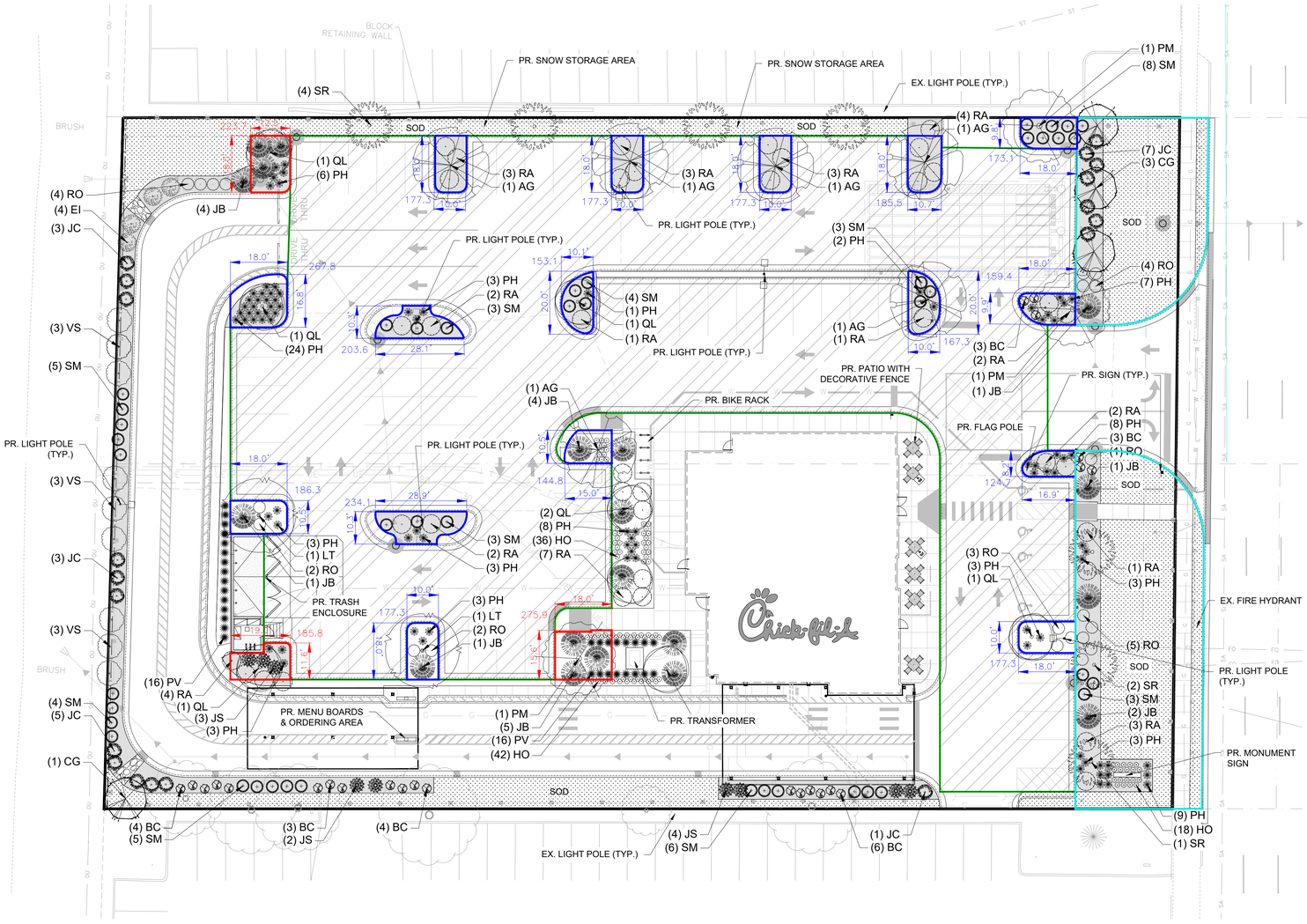
SHEET
TREE PRESERVATION PLAN

SHEET NUMBER
L-100



PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME
	AG	6	AESCULUS GLABRA 'JN SELECT' TM / EARLY GLOW OHIO BUCKEYE
	CG	4	CORNUS MAS 'GOLDEN GLORY' / GOLDEN GLORY CORNELIAN CHEI
	LT	2	LIRIODENDRON TULIPIFERA / TULIP POPLAR
	PM	3	PLATANUS X ACERIFOLIA 'MORTON CIRCLE' / EXCLAMATION!™ LON
	QL	8	QUERCUS ROBUR X BICOLOR 'LONG' / REGAL PRINCE® OAK
	SR	7	SYRINGA RETICULATA / JAPANESE TREE LILAC

DECIDUOUS SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	BC	25	BERBERIS THUNBERGII 'CRIMSON PYGMY' / CRIMSON PYGMY JAPA
	RA	38	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC
	RO	21	ROSA X 'KNOCK OUT' / KNOCK OUT ROSE
	SM	44	SPIRAEA X BUMALDA 'GOLDMOUND' / GOLD MOUND SPIREA
	VS	10	VIBURNUM DENTATUM 'SYNNESTVEDT' / CHICAGO LUSTRE® ARRO'

EVERGREEN SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME
	EI	4	EUONYMUS FORTUNEI 'IVORY JADE' / IVORY JADE WINTERCREEPEI
	JS	9	JUNIPERUS CHINENSIS 'SPARTAN' / SPARTAN JUNIPER
	JC	19	JUNIPERUS CHINENSIS `SARGENTII' / SARGENT JUNIPER
	JB	19	JUNIPERUS HORIZONTALIS 'BLUE CHIP' / BLUE CHIP JUNIPER

GRASSES	CODE	QTY	BOTANICAL / COMMON NAME
	PV	32	PANICUM VIRGATUM / SWITCH GRASS
	PH	89	PENNISETUM ALOPECUROIDES `HAMELN' / HAMELN FOUNTAIN GR/

PERENNIALS	CODE	QTY	BOTANICAL / COMMON NAME
×	HO	96	HEMEROCALLIS X 'STELLA DE ORO' / STELLA DE ORO DAYLILY

SITE CALCULATIONS

ZONING:	C2 GENERAL COMMERCIAL
TOTAL SITE AREA:	1.70 AC.
NUMBER OF REGULAR PARKING STALLS:	89
NUMBER OF HANDICAP PARKING STALLS:	4
TOTAL NUMBER OF STALLS:	93

ORDINANCE LANDSCAPE REQUIREMENTS

PERIMETER VEHICULAR USE AREA LANDSCAPING (21.12.020)

10' YARDS REQUIRED ALONG THE ROW, NO YARD REQUIRED FOR OTHER SIDES. AT LEAST 2 DECIDUOUS TREES AND 8 SHRUBS PER 50 FEET OF VEHICULAR USE AREA FRONTAGE. WHEN EXISTING TREES ARE PRESERVED, THE AREA WITHIN THE DRIPLINE OF THE TREE IS EXEMPT FROM THE REQUIRED FRONTAGE AREA. EXISTING SHRUBS CAN CONTRIBUTE TO SHRUB REQUIREMENT AT A ONE TO ONE RATIO. THE MINIMUM HEIGHT IN REQUIRED PERIMETER VEHICULAR USE AREA LANDSCAPE STRIPS IS 24 INCHES.

R.O.W. FRONTAGE = 162 LF / 50 = 3.24 MULTIPLIER
3.24 x 2 = 6.5 TREES = 7 TREES
3.24 x 8 = 25.92 SHRUBS = 26 SHRUBS

MATERIAL	REQUIRED	PROVIDED	NOTES
TREES	7 EA	7 EA	
SHRUBS	26 EA	41 EA	

INTERIOR VEHICULAR USE AREA LANDSCAPING (24.12.030)

AT LEAST 10% OF THE INTERIOR OF VEHICULAR USE AREAS MUST BE LANDSCAPED. LANDSCAPE ISLANDS SHALL BE PROVIDED AT THE END OF EACH PARKING ROW AND WITHIN THE ROW OF PARKING SPACES SO THAT THERE ARE NO MORE THAN 15 CONSECUTIVE PARKING SPACES WITHOUT A LANDSCAPE ISLAND. LANDSCAPED AREAS WITHIN THE CORNERS OF THE VEHICULAR USE AREA MAY BE COUNTED UP TO A MAXIMUM OF 200 SQUARE FEET FOR EACH CORNER, IF AT LEAST ONE SHADE TREE IS LOCATED WITHIN THE AREA. SHADE TREES MUST BE PROVIDED IN INTERIOR LANDSCAPE ISLANDS AT A MINIMUM RATE OF ONE TREE PER 180 SQUARE FEET OF REQUIRED INTERIOR LANDSCAPE AREA.

33,682 SF OF VEHICULAR USE AREA x 10% = 3,368 SF OF MINIMUM INTERIOR LANDSCAPING AREA. 3,368 SF / 180 = 18.7 TREES = 19 TREES.

MATERIAL	REQUIRED	PROVIDED	NOTES
INTERIOR LANDSCAPE AREA	3,368 SF	3,572 SF	
TREES	19 EA	23 EA	

LEGEND:

DENOTES VEHICULAR USE AREA
(AREA = 33,682 SQ.FT.)

DENOTES INTERIOR LANDSCAPE ISLAND AREA
(AREA AND DIMENSIONS SHOWN HEREON)
(TOTAL AREA OF BLUE ISLANDS = 2,886.2 SQ.FT.)

DENOTES INTERIOR LANDSCAPE CORNER AREA
(AREA AND DIMENSIONS SHOWN HEREON)
(TOTAL AREA OF RED ISLANDS = 685.4 SQ.FT.)

AREA OF 10% OF VEHICLE USE = 3,368 SQ. FT.
TOTAL AREA OF ALL INTERIOR ISLANDS = 3,571.6 SQ. FT.

DENOTES PERIMETER LANDSCAPE AREA
(AREA SHOWN HEREON)
(TOTAL AREA OF CYAN PERIMETER = 6,964.2 SQ.FT.)

GROUNDCOVER LEGEND

MATERIAL	QUANTITY	UNIT
SOD	####	SF
SHREDDED CEDAR MULCH	6265	SF
1-2" CRUSHED GRANITE	3203	SF

NORTH

0 20'
1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS
0 1"
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
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Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A

WAUWATOSA (WI) FSU

2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	10/07/2022	PER CITY COMMENTS
2	05/10/2023	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT #	220756
PRINTED FOR	PRELIMINARY
DATE	08/16/2022
DRAWN BY:	JTK
CHECKED BY:	JFR

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SHEET
LANDSCAPE PLAN

SHEET NUMBER
L-200

GENERAL NOTES

1. BASE MAP INFORMATION IS ACCURATE AS OF THE DATE PRINTED ON THIS PACKAGE.
2. THE LANDSCAPE PLANS CONTAINED HEREIN ILLUSTRATE APPROXIMATE LOCATIONS OF ALL SITE CONDITIONS. REFER TO SURVEY, ARCHITECTURAL, CIVIL ENGINEERING, STRUCTURAL, ELECTRICAL, IRRIGATION AND ALL OTHER DRAWINGS, IF AVAILABLE, FOR ADDITIONAL DETAILED INFORMATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BECOMING AWARE OF AND FIELD VERIFYING ALL RELATED EXISTING AND PROPOSED CONDITIONS, UTILITIES, PIPES AND STRUCTURES, ETC. PRIOR TO BIDDING AND CONSTRUCTION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR CONTACTING ####, THE MUNICIPAL PUBLIC WORKS DEPARTMENT, THE COUNTY AND ANY OTHER PUBLIC OR PRIVATE AGENCIES NECESSARY FOR UTILITY LOCATION PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF APPARENT CONFLICTS WITH CONSTRUCTION AND UTILITIES SO THAT ADJUSTMENTS CAN BE PLANNED PRIOR TO INSTALLATION. IF FIELD ADJUSTMENTS ARE NECESSARY DUE TO EXISTING UTILITY LOCATIONS THEY MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR ANY AND ALL COSTS OR OTHER LIABILITIES INCURRED DUE TO DAMAGE OF SAID UTILITIES/STRUCTURES/ETC.
4. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS. THE CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS APPARENT THAT UNKNOWN OBSTRUCTIONS AND/OR GRADE DIFFERENCES EXIST THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE FOR CLARIFICATION. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL LIABILITIES, INCLUDING NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
5. THE CONTRACTOR SHALL APPLY FOR AND PROCURE ALL REQUIRED PERMITS PRIOR TO COMMENCING WORK.
6. THE CONTRACTOR SHALL COMPLY WITH ALL CODES APPLICABLE TO THIS WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH SUBCONTRACTORS AND OTHER CONTRACTORS OF RELATED TRADES, AS REQUIRED, TO ACCOMPLISH THE PLANTING AND RELATED OPERATIONS.
8. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL PLANT MATERIAL WITH THE INSTALLATION OF OTHER IMPROVEMENTS SUCH AS HARDSCAPE ELEMENTS AND RELATED STRUCTURES. ANY DAMAGE TO EXISTING IMPROVEMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR.
9. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ALL AREAS OF THE SITE, OR ADJACENT AREAS, WHERE DISTURBED BY OPERATIONS OF OR RELATED TO THE CONTRACTOR'S WORK.
10. ALL SURFACE DRAINAGE SHALL BE DIVERTED AWAY FROM STRUCTURES AND NOTED SITE FEATURES IN ALL AREAS AT A MINIMUM OF 2% SLOPE AS SHOWN ON THE CIVIL ENGINEERING PLANS. ALL AREAS SHALL POSITIVELY DRAIN AND ALL ISLANDS SHALL BE CROWNED 1" IN HEIGHT PER 1' IN ISLAND WIDTH.
11. THE CONTRACTOR SHALL STAKE ALL IMPROVEMENTS AS NOTED ON THE FOLLOWING PLANS, AS WELL AS, TREE LOCATIONS AND THE PERIMETER OF SHRUB/PERENNIAL BEDS PRIOR TO INSTALLATION AND CONTACT THE OWNER'S REPRESENTATIVE FOR APPROVAL. FINAL LOCATION AND STAKING OF ALL IMPROVEMENTS SHALL BE ACCEPTED BY THE OWNER'S REPRESENTATIVE IN ADVANCE OF INSTALLATION.
12. IF CONFLICTS ARISE BETWEEN THE SIZE OF AREAS AND PLANS, THE CONTRACTOR IS REQUIRED TO CONTACT THE OWNER'S REPRESENTATIVE FOR RESOLUTION PRIOR TO INSTALLATION.
13. WHERE PROVIDED, AREA TAKEOFFS AND PLANT QUANTITY ESTIMATES IN THE PLANT LIST ARE FOR INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE TO DO THEIR OWN QUANTITY TAKE-OFFS FOR ALL PLANT MATERIALS AND SIZES SHOWN ON PLANS. IN CASE OF ANY DISCREPANCIES, PLANS TAKE PRECEDENCE OVER CALL-OUTS AND/OR THE PLANT LIST(S).
14. ALL PLANTS SHALL BE NURSERY GROWN PLANTS MEETING AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) STANDARDS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-LATEST EDITION). PLANTS ARE TO BE TYPICAL IN SHAPE AND SIZE FOR SPECIES. PLANTS PLANTED IN ROWS OR GROUPS SHALL BE MATCHED IN FORM. PLANT MATERIAL OF THE SAME SPECIES SHALL BE OBTAINED FROM THE SAME SOURCE. PLANTS SHALL NOT BE ROOT-BOUND OR LOOSE IN THEIR CONTAINERS. HANDLE ALL PLANTS WITH CARE IN TRANSPORTING, PLANTING AND MAINTENANCE UNTIL INSPECTION AND FINAL ACCEPTANCE. FIELD COLLECTED, PARK GRADE, OR BARE ROOT MATERIAL SHALL NOT BE USED UNLESS APPROVED BY THE OWNER'S REPRESENTATIVE.
15. ALL PLANTING BED EDGES TO BE SHOVEL CUT.
16. CONTRACTOR SHALL USE CAUTION WHEN DIGGING TREE PITS IN THE VICINITY OF UNDERGROUND UTILITY LINES AND MAY NEED TO HAND DIG THE PITS IN MANY OF THESE INSTANCES.
17. ALL AREAS DESIGNED TO RECEIVE SOLID SOD SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO GRASSING OPERATIONS. FINISH GRADE AT TURF AREAS SHALL BE 3/4"-1" BELOW TOP OF ADJACENT PAVEMENT OR CURBS.
18. CONTRACTOR SHALL FIELD ADJUST PLANT LOCATIONS TO ACCOMMODATE ALL LIGHTING AND ENSURE PLANTS WILL NOT INTERFERE WITH LIGHTING.
19. FERTILIZING, AS SPECIFIED, STAKING, WATERING AND ONE (1) YEAR PLANT WARRANTY FOR INSTALLED PLANT MATERIAL, SHALL BE CONSIDERED INCIDENTAL TO THE PLANT ITEMS.
20. MUSHROOM COMPOST SHALL BE FINELY SCREENED, HOMOGENOUS, DECOMPOSED ORGANIC MATERIAL SUITABLE FOR HORTICULTURAL USE AS AVAILABLE FROM MIDWEST TRADING HORTICULTURAL SUPPLIES, INC. ST. CHARLES, IL 60174 (630) 365-1990 OR APPROVED EQUAL. MIX THOROUGHLY IN PLANT BED BEFORE INSTALLING PLANTS.
21. WARRANTY: ONE (1) YEAR REPLACEMENT WARRANTY FOR ALL PLANT MATERIALS SHALL BE CONSIDERED INCIDENTAL TO THIS PROJECT. WARRANTY SHALL COVER PLANTS WHICH HAVE DIED OR PARTIALLY DIED (THEREBY RUINING THEIR NATURAL SHAPE), BUT SHALL NOT INCLUDE DAMAGE BY VANDALISM, BROWSING, HAIL, ABNORMAL FREEZES, DROUGHT OR NEGLIGENCE BY THE OWNER. THE WARRANTY IS INTENDED TO COVER CONTRACTOR NEGLIGENCE, INFESTATIONS, DISEASE AND DAMAGE OR SHOCK TO PLANTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND WATERING THE PLANT MATERIAL AS NECESSARY, TO ENSURE GROWTH AND ESTABLISHMENT DURING THE 1-YEAR WARRANTY PERIOD. ANY PLANTS THAT ARE NOT IN A LIVE, HEALTHY, GROWING CONDITION AT THE END OF THE 1-YEAR WARRANTY PERIOD SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. PLANTS REPLACED UNDER WARRANTY WILL BE WARRANTED FOR ONE (1) YEAR FOLLOWING REPLACEMENT.

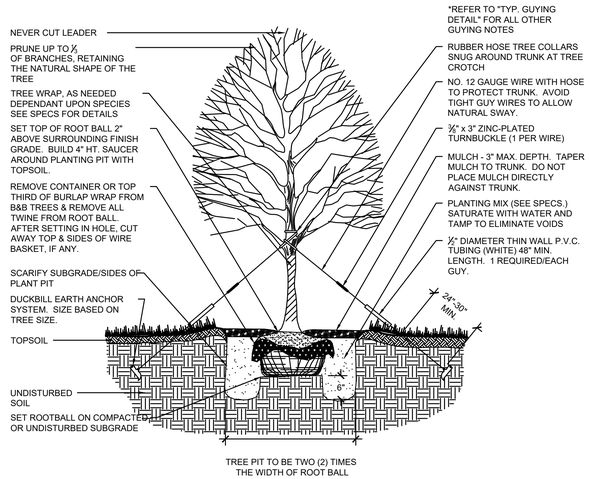
GENERAL NOTES - SPECIAL REQUIREMENTS- WARRANTY AND MAINTENANCE OF SODDED AND SEEDED AREAS

1. MOWING, TRIMMING AND REMOVAL OF GRASS CLIPPINGS IN TURF AREAS, DURING INITIAL 60 DAYS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DURING THIS TIME, CONTRACTOR SHALL MOW TURF AREAS AT REGULAR INTERVALS WHEN GRASS REACHES A HEIGHT BETWEEN 3 AND 4 INCHES AND SHALL MOW TO A 2 TO 2.5 INCH HEIGHT. CONTRACTOR SHALL ALSO NEATLY TRIM EDGES WHERE NECESSARY AND REMOVE CLIPPINGS AFTER MOWING AND TRIMMING.
2. WARRANTY:
   A. WARRANTY OF SEEDED AND SODDED AREAS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM.
   B. THE WARRANTY IS TO GUARANTEE COMPLETED SEED/SOD AREAS FOR A PERIOD OF 1 YEAR AFTER INITIAL ACCEPTANCE HAS BEEN DOCUMENTED.
   C. REPLACEMENT COSTS ARE THE CONTRACTOR'S RESPONSIBILITY, EXCEPT FOR THOSE RESULTING FROM LOSS OR DAMAGE DUE TO VANDALISM, CIVIL DISOBEDIENCE, ACTS OF NEGLECT ON THE PART OF OTHERS, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, FIRE, OR LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITY, OR BY "ACTS OF GOD."
3. MAINTENANCE:
   A. CONTRACTOR SHALL COORDINATE MAINTENANCE OPERATIONS AND ACTIVITIES WITH THE OWNER DURING THE WARRANTY PERIOD.
   B. MAINTENANCE OF SEED/SOD AREAS SHALL BE PERFORMED BY TRAINED PERSONNEL SKILLED IN IDENTIFYING DESIRED AND UNDESIRED PLANT MATERIAL.
   C. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF SODDED AND SEEDED AREAS DURING THE 1 YEAR WARRANTY PERIOD WITH THE EXCEPTION OF ROUTINE MOWING OF TURF AREAS AFTER THE INITIAL 60 DAYS. ROUTINE MOWING OF TURF AREAS, DURING THE 1 YEAR WARRANTY PERIOD AFTER THE INITIAL 60 DAYS, WILL BE THE RESPONSIBILITY OF THE OWNER.
   D. MAINTENANCE OF SEEDED AND SOD AREAS SHALL INCLUDE:
      - WATERING TO PREVENT GRASS AND SOIL FROM DRYING OUT.
      - ROLLING THE SURFACE TO REMOVE MINOR DEPRESSIONS OR IRREGULARITIES.
      - CONTROLLING GROWTH OF WEEDS. WEEDING AND APPLY HERBICIDES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMEDY DAMAGE RESULTING FROM IMPROPER USE OF HERBICIDES.
      - PROTECTING SEEDED/SOD AREAS WITH WARNING SIGNS DURING MAINTENANCE AND WARRANTY PERIOD AS DEEMED NECESSARY.
      - EACH SPRING DURING THE 1 YEAR WARRANTY PERIOD, THE CONTRACTOR SHALL CORRECT AND RE-SEED/RE-SOD AS ORIGINALLY SPECIFIED, ANY DEFECTS IN THE SEEDED/SOD AREAS AND GRASS STAND, SUCH AS WEEDY AREAS, ERODED AREAS, AND BARE SPOTS, UNTIL AFFECTED AREAS ARE ACCEPTABLE TO THE OWNER'S REPRESENTATIVE.
      - EACH SPRING DURING THE 1 YEAR WARRANTY PERIOD, THE CONTRACTOR SHALL REPLACE OR REPAIR TO ORIGINAL CONDITION, ALL DAMAGES TO PROPERTY RESULTING FROM THE SEEDING/SODDING OPERATION OR FROM THE REMEDYING OF DEFECTS, AT THE CONTRACTOR'S EXPENSE.

SPECIAL REQUIREMENTS - WARRANTY

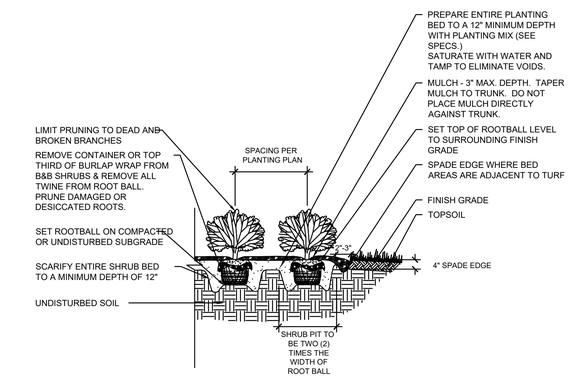
A. A WARRANTY IS REQUIRED TO GUARANTEE COMPLETED SEEDING/SODDING OPERATIONS PROVIDING A UNIFORMLY DENSE, LIVE, AND HEALTHY STAND OF GRASS, FREE OF WEEDS AND UNDESIRABLE GRASSES, DEBRIS, AND FREE OF ERODED AREAS, BARE SPOTS, DISEASES, AND INSECTS AT THE END OF ONE YEAR FOLLOWING PROJECT ACCEPTANCE.

B. CONTRACTOR TO REPLACE AS ORIGINALLY SPECIFIED AREAS THAT HAVE FAILED TO SURVIVE, AS OFTEN AS REQUIRED, TO ESTABLISH THE SEEDED/SODDED LAWN AREA UNTIL ACCEPTED; AT NO ADDITIONAL COMPENSATION.



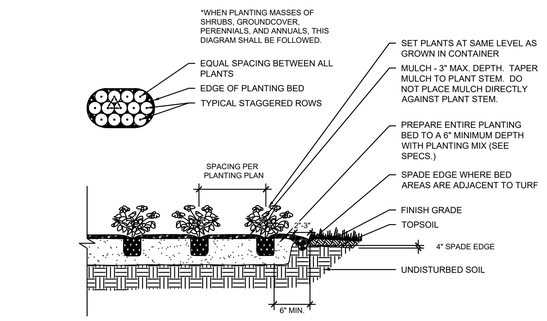
1 TYP. DECIDUOUS TREE PLANTING DETAIL

SCALE: NTS



2 TYP. SHRUB PLANTING DETAIL

SCALE: NTS



3 TYP. PERENNIAL PLANTING DETAIL

SCALE: NTS

P R E L I M I N A R Y
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Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	10/07/2022	PER CITY COMMENTS
2	05/10/2023	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
DATE 08/16/2022
DRAWN BY: JTK
CHECKED BY: JFR

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SHEET
LANDSCAPE DETAILS

SHEET NUMBER
L-300

LANDSCAPE SPECIFICATIONS

PART 1 - GENERAL

DESCRIPTION
Provide trees, shrubs, ground covers, sod, and annuals/perennials as shown and specified on the landscape plan. The work includes:
1. Soil preparation.
2. Trees, shrubs, ground covers, and annuals/perennials.
3. Planting mixes.
4. Top Soil, Mulch and Planting accessories.
5. Maintenance.
6. Decorative stone.

Related Work:
1. Irrigation System; see irrigation specifications (sheet L-2.2)

QUALITY ASSURANCE
Plant names indicated; comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock". A plant shall be dimensioned as it stands in its natural position.

All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of 2 years.

Nursery Stock furnished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional cost, and providing that the larger plants will not be cut back to size indicated. Provide plants indicated by two measurements so that only a maximum of 25% are of the minimum size indicated and 75% are of the maximum size indicated.

Before submitting a bid, the Contractor shall have investigated the sources of supply and be satisfied that they can supply the listed plants in the size, variety and quality as specified. Failure to take this precaution will not relieve the Contractor from their responsibility for furnishing and installing all plant materials in strict accordance with the Contract Documents without additional cost to the Owner. The Landscape Architect shall approve any substitutes of plant material, or changes in plant material size, prior to the Landscape Contractor submitting a bid.

DELIVER, STORAGE AND HANDLING
Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to the Landscape Architect. Water heeled-in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Cover plants transported on open vehicles with a protective covering to prevent wind burn.

PROJECT CONDITIONS
Protect existing utilities, paving, and other facilities from damage caused by landscape operations.

A complete list of plants, including a schedule of sizes, quantities, and other requirements are shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

The irrigation system will be installed prior to planting. Locate, protect and maintain the irrigation system during planting operations. Repair irrigation system components damaged during planting operations; at the Contractor's expense. Refer to the irrigation specifications, irrigation plan and irrigation details.

Do not begin landscape accessory work before completion of final grading or surfacing.

WARRANTY
Warrant plant material to remain alive, be healthy and in a vigorous condition for a period of 1 year after completion and final acceptance of entire project.

Replace, in accordance with the drawings and specifications, all plants that are dead or, are in an unhealthy, or unsightly condition, and have lost their natural shape due to dead branches, or other causes due to the Contractor's negligence. The cost of such replacement(s) is at the Contractor's expense. Warrant all replacement plants for 1 year after installation.

Warranty shall not include damage, loss of trees, plants, or ground covers caused by fires, floods, freezing rains, lightning storms, winds over 75 miles per hour, winter kill caused by extreme cold, severe winter conditions not typical of planting area, and/or acts of vandalism or negligence on a part of the Owner.

Remove and immediately replace all plants, found to be unsatisfactory during the initial planting installation.

Maintain and protect plant material, lawns, and irrigation until final acceptance is made.

ACCEPTANCE
Inspection of planted areas will be made by the Owner's representative.
1. Planted areas will be accepted provided all requirements, including maintenance, have been complied with and plant materials are alive and in a healthy, vigorous condition.

Upon acceptance, the Contractor shall commence the specified plant maintenance.

CODES, PERMITS AND FEES
Obtain any necessary permits for this Section of Work and pay any fees required for permits.

The entire installation shall fully comply with all local and state laws and ordinances, and with all established codes applicable thereto; also as depicted on the landscape and irrigation construction set.

PART 2 - PRODUCTS

MATERIALS
Plants: Provide typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces. Plants held on storage will be rejected if they show signs of growth during the storage period.
1. Balled and plants wrapped with burlap, to have firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls, or signs of circling roots are not acceptable.
2. Container- grown stock: Grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
   a. No plants shall be loose in the container.
   b. Container stock shall not be pot bound.
3. Plants planted in rows shall be matched in form.
4. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
   a. If the use of larger plants is acceptable, increase the spread of roots or root ball in proportion to the size of the plant.
5. The height of the trees, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated in the plant list.
6. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
7. Evergreen trees shall be branched to the ground or as specified in plant list.
8. Shrubs and small plants shall meet the requirements for spread and height indicated in the plant list.
   a. The measurements for height shall be taken from the ground level to the height of the top of the plant and not the longest branch.
   b. Single stemmed or thin plants will not be accepted.
   c. Side branches shall be generous, well-twigged, and the plant as a whole well-bushed to the ground.
   d. Plants shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.

ACCESSORIES
Topsoil: Shall be Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, roots, sticks, and other foreign materials, with acidity range of between pH 6.0 and 6.8.

Note: All planting areas shall be cleaned of construction debris (ie. Concrete, rubble, stones, building material, etc.) prior to adding and spreading of the top soil.
1. *Sod Areas:* Spread a minimum 4" layer of top soil and rake smooth.
2. *Planting bed areas:* Spread a minimum 4" layer of top soil and rake smooth.
3. *Landscape Islands/Medians:* Fracture/loosen existing subgrade to a minimum 24" depth. Remove and replace any subgrade unsuitable for planting. Once subgrade is clean of debris and loosened, add topsoil to a minimum berm 6"-8" height above island curbing.
4. *Annual/Perennial bed areas:* Add a minimum of 4" organic matter and till to a minimum 12" depth.

Mulch: Type selected dependent on region and availability; see landscape plans for type of much to be used. Hold mulch 4" from tree trunks and shrub stems.
1. Hardwood: 6 month old well rotted double shredded native hardwood bark mulch not larger than 4" in length and ½" in width, free of wood chips and sawdust. Install minimum depth of 3".
2. Pine Straw: Pine straw to be fresh harvest, free of debris, bright in color. Bales to be wired and tightly bound. Needles to be dry. Install minimum depth of 3".
3. River Rock: (color) light gray to buff to dark brown, washed river rock, 1" – 3" in size. Install in shrub beds to an even depth of 3". Weed control barrier to be installed under all rock mulch areas. Use caution during installation not to damage plant material.
4. Mini Nuggets: Install to a minimum depth of 2"-3" at all locations of annual and perennial beds. Lift the stems and leaves of the annuals and carefully spread the mulch to avoid injuring the plants. Gently brush the mulch off the plants.

Guying/Staking:
1. Arbortie: Green (or white) staking and guying material to be flat, woven, polypropylene material, ¾" wide 900 lb. break strength. Arbortie shall be fastened to stakes in a manner which permits tree movement and supports the tree.
2. Remove Guying/Staking after one year from planting.

Tree Wrap: Tree wraps should be used on young, newly planted thin-barked trees (Cherry, Crabapple, Honey Locust, Linden, Maple, Mountain Ash, Plum) that are most susceptible to sun scald/Sunburn. Standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe Draft paper weighing not less than 30 lbs. per ream, cemented together with asphalt. Wrap the tree in the fall and leave the wrap in place throughout the winter and early spring. Tree wraps are temporary and no longer needed once trees develop corky bark.

PART 3 – EXECUTION

INSPECTION
Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve top soil provided by the General Contractor and observe the site conditions under which the work is to be done. Notify the General Contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Contractor.

PREPARATION
Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.

Locate plants as indicated on the plans or as approved in the field after staking by the Landscape Contractor. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate plant locations have been selected and approved by the Landscape Architect; spacing of plant material shall be as shown on the landscape plan.

Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds. Provide shrub pits at least 12" greater than the diameter of the root system and 24" greater for trees. Depth of pit shall accommodate the root system. Provide undisturbed sub grade to hold root ball at nursery grade as shown on the drawings.

INSTALLATION
Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb, and faced to give the best appearance or relationship to each other or adjacent structure. Set plant material 2" – 3" above the finish grade. No filling will be permitted around trunks or stems. Backfill the pit with topsoil mix and excavated material. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water.

After balled and wrapped in burlap plants are set, muddle planting soil mixture around bases of balls and fill all voids.
1. Remove all burlap, ropes, and wires from the top 1/3 of the root ball

Space ground cover plants in accordance with indicated dimensions. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within 24" of the trunks of trees and shrubs within planting bed and to within 18" of edge of bed.

Mulching:
1. Mulch tree and shrub planting pits and shrub beds with required mulching material (see landscape plan for mulch type); depth of mulch as noted above. **Hold mulch back 4" away from tree trunks and shrub stems.** Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

Decorative Stone: (where indicated on landscape plan)
1. Install weed control barrier over sub-grade prior to installing stone. Lap 6" on all sides.
2. Place stone without damaging weed barrier.
3. Arrange stones for best appearance and to cover all weed barrier fabric.

Wrapping, guying, staking:
1. Inspect trees for injury to trunks, evidence of insect infestation, and improper pruning before wrapping.
2. Wrapping:
   a. Wrap trunks of all young newly planted trees known to have thin bark. Wrap spirally from bottom to top with specified tree wrap and secure in place.
   b. Overlap ½ the width of the tree wrap strip and cover the trunk from the ground to the height of the second branch.
   c. Secure tree wrap in place with twine wound spirally downward in the opposite direction, tied around the tree in at least 3 places in addition to the top and bottom.
   d. Wrap the trees in the fall and leave the wrap in place throughout the winter and early spring.
   d. Tree wraps are temporary and no longer needed once the trees develop corky bark.
3. Staking/Guying:
   a. Stake/guy all trees immediately after lawn sodding operations and prior to acceptance.
   b. Stake deciduous trees 2" caliper and less. Stake evergreen trees under 7'-0" tall.
      1. Stakes are placed in line with prevailing wind direction and driven into undisturbed soil.
      2. Ties are attached to the tree, usually at the lowest branch.
   c. Guy deciduous trees over 2" caliper. Guy evergreen trees 7'-0" tall and over.
      1. Guy wires to be attached to three stakes driven into undisturbed soil, with one stake placed in the direction of the prevailing wind.
      2. Ties are attached to the tree as high as practical.
      3. The axis of the stake should be at 90 degree angle to the axis on the pull of the guy wire.
4. **Remove all guying and staking after one year from planting.**

Pruning:
1. Prune deciduous trees and evergreens only to remove broken or damaged branches.

WORKMANSHIP
During landscape/irrigation installation operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of installation operations, all excess materials, equipment, debris and waste material shall be cleaned up and removed from the site; unless provisions have been granted by the owner to use on-site trash receptacles. Sweep parking and walks clean of dirt and debris. Remove all plant tags and other debris from lawns and planting areas.

Any damage to the landscape, the structure, or the irrigation system caused by the landscape contractor shall be repaired by the landscape contractor without charge to the owner.

MAINTENANCE
Contractor shall provide maintenance until work has been accepted by the Owner's Representative.

Maintenance shall include mowing, fertilizing, mulching, pruning, cultivation, weeding, watering, and application of appropriate insecticides and fungicides necessary to maintain plants and lawns free of insects and disease.
1. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent material and remove dead material.
2. repair guy wires and stakes as required. Remove all stakes and guy wires after 1 year.
3. Correct defective work as soon as possible after deficiencies become apparent and weather and season permit.
4. Water trees, plants and ground cover beds within the first 24 hours of initial planting, and not less than twice per week until final acceptance.

LANDSCAPE MAINTENANCE SPECIFICATIONS

The Contractor shall provide as a separate bid, maintenance for a period of ***1 year*** after final acceptance of the project landscaping. The Contractor must be able to provide continued maintenance if requested by the Owner or provide the name of a reputable landscape contractor who can provide maintenance.

STANDARDS
All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

APPROVALS
Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative (General Manager of the restaurant).

All seasonal color selections shall be approved by the General Manager prior to ordering and installation.

SOIL TESTING
The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Acceptable Soil Test Results

	Landscape Trees and Shrubs	Turf
pH Range	5.0-7.0	6.0-7.0
Organic Matter	>1.5%	>2.5%
Magnesium (Mg)	100+lbs./acre	100+lbs./acre
Phosphorus (P2O6)	150+lbs./acre	150+lbs./acre
Potassium (K2O)	120+lbs./acre	120+lbs./acre
Soluble salts/ Conductivity	Not to exceed 900ppm/1.9 mmhos/cm in soil; not to exceed 1400 ppm/2.5 mmhos/cm in high organic mix	Not to exceed 750ppm/0.75 mmhos/cm in soil; not to exceed 2000 ppm/2.0 mmhos/cm in high organic mix

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

Boron	3 pounds per acre
Manganese	50 pounds per acre
Potassium (K2O)	450 pounds per acre
Sodium	20 pounds per acre

WORKMANSHIP
During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the owner.

TURF

GENERAL CLEAN UP
Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

MOWING
Warm season grasses (i.e. Bermuda grass) shall be maintained at a height of 1" to 2" during the growing season.

Cool season grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Weed eaters should NOT be used around trees because of potential damage to the bark.

EDGING
Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

LIMING & FERTILIZING
A soil test shall be taken to determine whether an application of limestone in late fall is necessary. If limestone is required, the landscape contractor shall specify the rate, obtain approval from the owner and apply it at an additional cost. A unit price for liming of turf shall accompany the bid based on a rate of 50 pounds per 1000 square feet.

Fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES
Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. **Read the label prior to applying any chemical.**

INSECT & DISEASE CONTROL FOR TURF
The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

TREES, SHRUBS, & GROUND COVER

PRUNING
All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. **Do not shear trees or shrubs**. If previous maintenance practice has been to shear and bail, then a natural shape will be restored gradually.

Pruning Guidelines:
1. Prune those that flower before the end of June immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune those that flower in summer or autumn in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as cotoneasters, pyracanthas and viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
   A. Yews, junipers, hemlocks, arborvitae, and false-cypress may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
   B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
   C. Pines may be lightly pruned in early June by reducing candles.
8. Groundcover shall be edged and pruned as needed to contain it within its borders.
9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating excessive growth. Thinning is used on crepe myrtles, lilacs, viburnums, smoke bush,etc.
10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on abelia, forsythia, deutzia, spiraea, etc.

Plants overhanging passageways and parking areas and damaged plants shall be pruned as needed.

Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of work.

SPRING CLEANUP
Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter, e.g. ornamental grasses, Sedum Autumn Joy.

FERTILIZING
For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet; for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep, or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area. Ericaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

MULCHING
Annually, all tree and shrub beds will be prepared and mulched, to a minimum depth of 3" with quality mulch to match existing. Bed preparation shall include removing all weeds, cleaning up said bed, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed areas. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

WEEDING
All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times.

Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

The maintenance contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning or physical removal of damaged plant parts will be performed as part of the contract. For an additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it.

If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent with the intent of the landscape design.

NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is *Insects that feed on Trees and Shrubs* by Johnson and Lyon, Comstock Publishing Associates. For plan pathogenic diseases, two references are suggested: *Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries*, authorized by Gary Moorman, published by Penn State College of Agricultural Sciences, and *Diseases of Trees and Shrubs* by Sinclair and Lyon, published by Comstock Publishing Press.

TRASH REMOVAL
The maintenance contractor shall remove trash from all shrub and groundcover beds with each visit.

LEAF REMOVAL
All fallen leaves shall be removed from the site in November and once in December. If requested by the owner, the maintenance contractor, at an additional cost to the owner shall perform supplemental leaf removals.

WINTER CLEAN-UP
The project shall receive a general clean-up once during each of the winter months, i.e., January, February, and March.

Clean-up includes:
- Cleaning curbs and parking areas
- Removing all trash and unwanted debris
- Turning mulch where necessary
- Inspection of grounds

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

SEASONAL COLOR MAINTENANCE

Perennialization of Bulbs:
1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet, or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:
1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner, and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
   a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
   b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly; or mulch with compost 1" deep.
   c. Removal: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.

Perennials:
1. After initial installation, if a time-released fertilizer has been incorporated during plant installation, no more fertilizer need be applied the first growing season.
2. The following year:
   a. Fertilize perennials with a slow-release fertilizer or any 50% organic fertilizer, or mulch perennials with compost 1" deep.
   b. Cut all deciduous perennials flush to the ground by March 1, if this was not done the previous fall, to allow new growth to develop freely.
   c. Mulch the perennial bed once in early spring at 1"-2" depth. If soil is bared in late fall, re-mulch lightly after ground is frozen to protect perennials.
   d. Inspect for insect or disease problems on perennials. Monitor and control slugs on hostas and lily plantains. Powdery mildew on phlox, monardas, and asters can be prevented with properly timed fungicides or use of disease-resistant varieties.
   e. Weed perennial bed as specified in "WEEDING" above.
   f. Prune branching species to increase density. Cut only the flowering stems after blooming. Do not remove the foliage.
3. The following fall cut back deteriorating plant parts unless instructed to retain for winter interest, e.g. Sedum Autumn Joy and ornamental grasses.
4. Long-term Care:
   a. Divide plants that overcrowd the space provided. Divide according to the species. Some need frequent dividing, e.g. asters and yarrow every two years; other rarely, if ever, e.g. peonies, hostas, and astilbe.
   b. For detailed information regarding the care of specific perennials, refer to *All About Perennials* by Ortho, *Perennials: How to Select, Grow and Enjoy* by Pamela Harper and Frederick McGourty, Hp Books Publisher, *Herbaceous Perennial Plants: A Treatise on their Identification, Culture and Garden Attributes* by Allan Armitage, Stipes Pub LLC.

SUMMARY OF MAINTENANCE

LAWN MAINTENANCE
1. Soil analysis performed annually to determine pH. If pH does not fall within specified range, adjust according to soil test recommendations.
2. Maintain proper fertility and pH levels of the soil to provide an environment conducive to turf vitality for cool season grasses
3. Mow warm and cool season on a regular basis and as season and weather dictates. Remove no more than the top 1/3 of leaf blade. Clippings on paved and bed areas will be removed.
4. Aerate warm season turf areas to maintain high standards of turf appearance.
5. Apply pre-emergent to turf in two applications in early February and early April to extend barrier.
6. Apply post emergent as needed to control weeds.
7. Mechanically edge curbs and walks.
8. Apply non-selective herbicide, to mulched bed areas and pavement and remove excess runners to maintain clean defined beds.

TREE, GROUNDCOVER, AND SHRUB BED MAINTENANCE
1. Prune shrubs, trees and groundcover to encourage healthy growth and create a natural appearance.
2. Mulch to be applied in February/March with a half rate in late summer to top dress.
3. Apply pre-emergent herbicides in February and April.
4. Manual weed control to maintain clean bed appearance.
5. Apply fungicides and insecticides as needed to control insects and disease.
6. Ornamental shrubs, trees and groundcovers to be fertilized three (3) times per year with a balanced material (January/February, April/May, and October/November)
7. Edge all mulched beds.
8. Remove all litter and debris.

GENERAL MAINTENANCE
1. Remove all man-made debris, blow edges.
2. Inspect grounds on a monthly basis and schedule inspection with Unit Operator.

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	10/07/2022	PER CITY COMMENTS
2	05/10/2023	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT #	220756
PRINTED FOR	PRELIMINARY
DATE	08/16/2022
DRAWN BY:	JTK
CHECKED BY:	JFR

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SHEET
LANDSCAPE SPECIFICATIONS

SHEET NUMBER
L-400

FLOOR PLAN GENERAL NOTES

A.1 ALL DIMENSIONS SHOWN ARE FRAMING DIMENSIONS (FACE OF STUD/JAMB) UNLESS OTHERWISE NOTED.
A.2 FASTENERS, ANCHORS, CLIPS, STRAPS, ETC WHICH ARE IN CONTACT WITH PRESERVATIVE AND/OR FIRE TREATED WOOD SHALL BE OF G-185 HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, OR AN APPROVED EQUAL.
A.3 REFER TO CIVIL AND LANDSCAPE FOR LOCATIONS OF WALKS, BOLLARDS, LANDSCAPING AREAS, FLAG POLE, AND OTHER SITE ITEMS.
A.4 REFER TO INTERIOR ELEVATIONS FOR LOCATIONS AND TYPES OF CORNER GUARDS.
A.5 CONTRACTOR TO COORDINATE LOCATION OF POLE MOUNTED EXTERIOR CAMERA WITH STRONG SYSTEMS AND INSTALL UNDERGROUND CONDUIT AS REQUIRED. RE: ELECTRICAL.
A.6 REFER TO ACCESSIBILITY PLAN AND FURNITURE DRAWINGS FOR SEATING LAYOUT & SPECIFICATIONS. CONTACT: OWNER.
A.7 REFER TO ACCESSIBILITY PLAN AND OWNER DRAWINGS FOR CONDIMENT COUNTERS AND TRASH RECEPTACLES.
A.8 REFER TO IT WALLBOARD USER GUIDE FOR WALLBOARD INSTALLATION, IF APPLICABLE.
A.9 REFER TO MILLWORK PLAN FOR RAISED CONCRETE CURB LOCATIONS.
A.10 FREEZER AND COOLER DOORS AND HARDWARE SUPPLIED BY FREEZER/COOLER MANUFACTURER

FLOOR PLAN LEGEND:

CT CABINET
RE: ELECTRICAL

MDP RE: ELECTRICAL

STEEL WALL BY OWNER RE: OWNER FOR EXACT LOCATIONS

ITEM BY OWNER

SOFFIT OR BULKHEAD ABOVE RE: REFLECTED CEILING PLAN

2-SIDED BRAND ICON
RE: OWNER DRAWINGS

RECESSED PIN AND SLEEVE BOX, RE: A4/A620 & MEP DRAWINGS.

ELECTRICAL PANEL RE: ELECTRICAL

INSULATION SCHEDULE

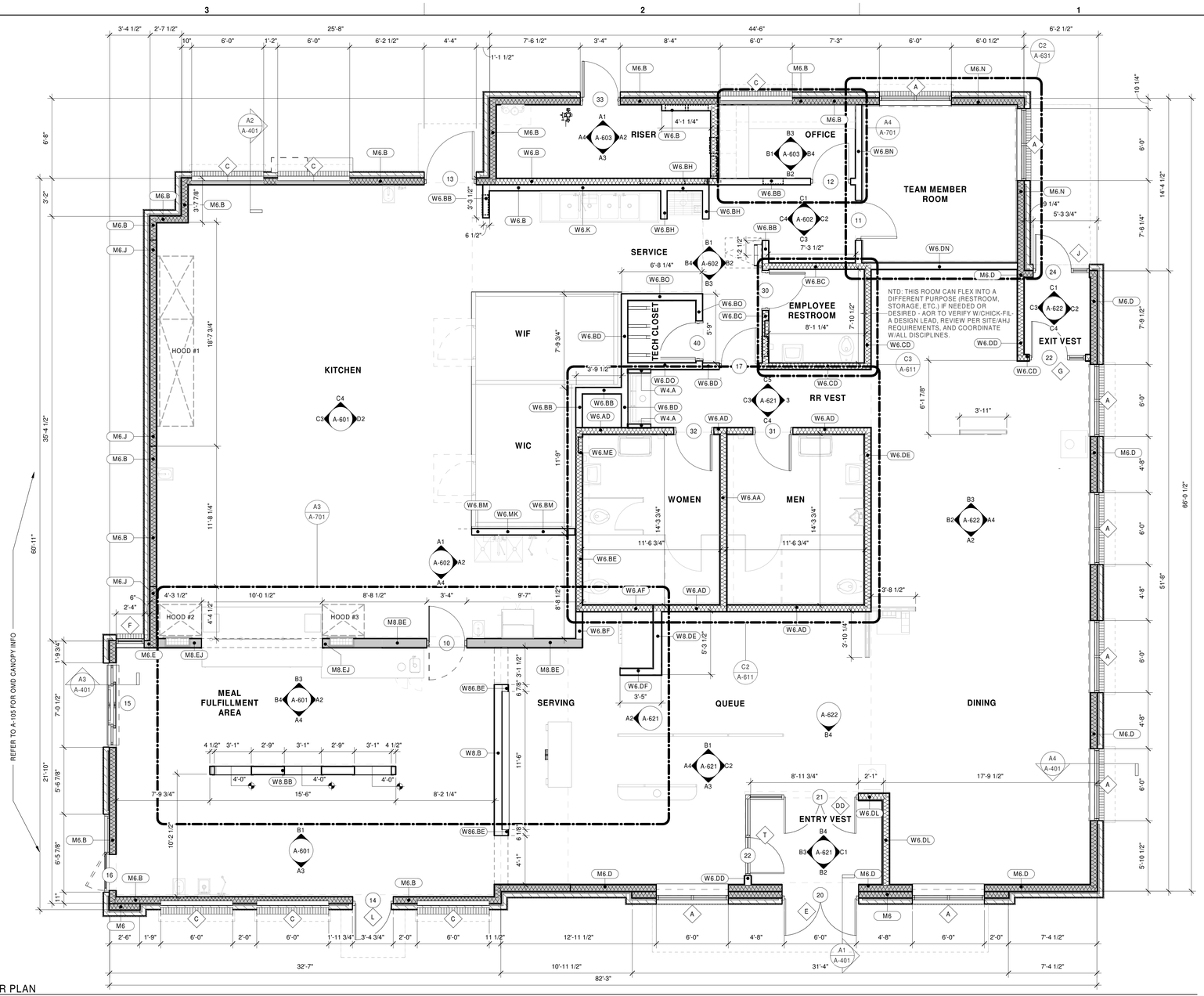
LOCATION	R-VALUE	THICKNESS
ROOF	R-17.4	3" RIGID
WALL (CONTINUOUS)	R-5	1" RIGID
WALL (CAVITY)	R-19	6" BATT
SLAB	R-10	2" RIGID

NOTES:
1. REFER TO FLOOR PLAN AND WALL SECTION SHEETS FOR INSULATION EXTENTS AND LOCATIONS.
2. REFER TO SPECIFICATIONS FOR INSULATION PRODUCT INFORMATION.

UPDATE THE R-VALUE AND THICKNESS INFORMATION IN THE INSULATION SCHEDULE PER LOCATION/JURISDICTION REQUIREMENTS.

FOR PROJECTS NEEDING EXTERIOR WOOD FRAMING, FOLLOW THE STEPS BELOW TO UPDATE WALL TAGS:

- IDENTIFY ANY EXTERIOR WALLS ADJACENT TO HOODS THAT NEED TO REMAIN AS METAL STUD
- SELECT ANY NEIGHBORING WALLS THAT WILL NEED TO BE SWAPPED TO A WOOD VERSION W/ ADDITIONAL SHEATHING (SWAP TO "W6.B+" WALL TYPE)
- FOR ALL OTHER EXTERIOR WALLS, RIGHT-CLICK AND SELECT "SELECT ALL INSTANCES...IN ENTIRE PROJECT"
- SWAP THE "M6.X" WALL TO THE CORRESPONDING "W6.X" WALL (TYPE NAME WILL BE THE SAME, EXCEPT "W" WILL BE SHOWN INSTEAD OF "M")
- REPEAT ABOVE STEP UNTIL ALL EXTERIOR WALLS ARE SHOWN AS WOOD WALLS IN FLOOR PLAN (EXCEPT THOSE ADJACENT TO HOODS)
- REFER TO WALL TYPES LEGEND ON THE FLOOR PLAN TO CONFIRM THAT ALL WALLS HAVE BEEN SWAPPED CORRECTLY (TAG AND GRAPHICS)
- WALL GEOMETRY, FOOTPRINT, GRIDS, ROOF FRAMING, AND LAYOUTS REMAIN THE SAME
- ADDITIONAL ½" TOLERANCE AT WALL CAVITIES IS PROVIDED IN THE FIELD



B3 FLOOR PLAN
1/4" = 1'-0"

REFER TO LEGEND BELOW FOR WALL CAVITY FRAMING AND INSULATION
REFER TO WALL TYPES ON THE RIGHT FOR SHEATHING AND MATERIALS ON EXPOSED SIDE(S) OF WALL (REFER TO ROOM LABELS FOR ORIENTATION)
PLUS SIGN INDICATES ADDITIONAL LAYER OF SHEATHING

WOOD STUD WALL	
W4	2x4 WOOD STUDS
W6	2x6 WOOD STUDS
W8	2x8 WOOD STUDS
METAL STUD WALL	
M4	3 5/8" METAL STUDS
M6	6" METAL STUDS
M8	8" METAL STUDS
BATT INSULATION	

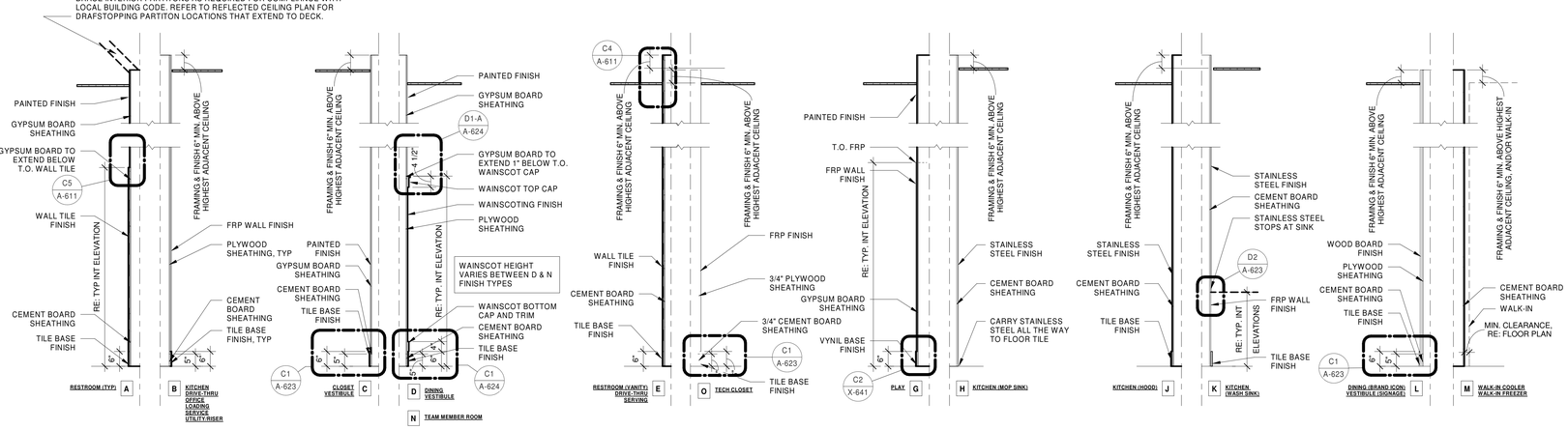
NOTE 1: WALL BLOCKING SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY. BLOCKING SHALL INCLUDE, BUT IS NOT LIMITED TO: AREAS INDICATED ON INTERIOR ELEVATIONS FOR GRAB BARS, SHELVING BRACKETS, MONITORS, FIXTURES, ETC, AS WELL AS BLOCKING FOR WINDOWS, CANOPIES ROOF FRAMING, ROOF TOP UNITS, ETC.

NOTE 2: REFER TO STRUCTURAL DRAWINGS AND WALL SECTIONS FOR EXTERIOR WALL CONSTRUCTION.

NOTE 3: REFER TO FINISH PLAN FOR WALL FINISH INFO AND SPECIFICATIONS FOR WALL SHEATHING INFO

NOTE 4: GENERAL CONTRACTOR TO PROVIDE AND/OR VERIFY FIRE BLOCKING AT 10' MAX VERTICAL SPACING AND AT CEILING HEIGHT IN ALL COMBUSTIBLE STUD WALLS, ACCORDING TO LOCAL CODE REQUIREMENTS.

BRACE INTERIOR PARTITONS AS REQUIRED FOR COMPLIANCE WITH LOCAL BUILDING CODE. REFER TO REFLECTED CEILING PLAN FOR DRAFSTOPPING PARTITON LOCATIONS THAT EXTEND TO DECK.



WALL TYPES LEGEND
N.T.S.

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

SITE ADAPT LOGO AND ADDRESS

PROTOTYPICAL SET

NOT FOR REGULATORY APPROVAL, BIDDING, OR CONSTRUCTION

CHICK-FIL-A
Project Name

Street Address
City, GA 00000

FSR#00000

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22.08
PRINTED FOR

PROJECT STATUS

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

CONSULTANT PROJECT # ####
DATE MM/DD/YY
DRAWN BY Author

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SHEET
FLOOR PLAN

SHEET NUMBER
A-201

8/19/2022 2:00:10 PM Autodesk Docs://00_CFA_FSR_Templates/00000_NewStore_SE_ARC.rvt
10-SE-00000-A-201-FLOOR PLAN

EXTERIOR FINISHES

BR-A
BRICK VENEER
COLOR: DARK BROWN
SIZE: MODULAR

EC-1
PREFINISHED METAL COPING
COLOR: MIDNIGHT BRONZE

BR-B
BRICK VENEER
COLOR: LIGHT BROWN
SIZE: MODULAR

PT-1
EXTERIOR PAINT
COLOR: DARK BRONZE
FINISH: SEMI-GLOSS

ST-1
STOREFRONT
COLOR: DARK BRONZE

SOUTH EAST PERSPECTIVE VIEW

SOUTH WEST PERSPECTIVE VIEW

PERSPECTIVE VIEW

NORTH EAST PERSPECTIVE VIEW

PERSPECTIVE VIEW

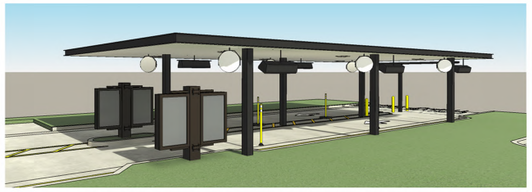
REF. ENCLOSURE FINISHES

EC-1
PREFINISHED METAL COPING
COLOR: MIDNIGHT BRONZE

BR-A
BRICK VENEER
COLOR: DARK BROWN
SIZE: MODULAR

WEST EXTERIOR ELEVATION

SOUTH EXTERIOR ELEVATION



PERSPECTIVE VIEW

OP CANOPY FINISHES

CP-1
PREFINISHED METAL
COLOR: DARK BRONZE

CP-2
METAL DECKING
COLOR: WHITE

EAST EXTERIOR ELEVATION

NORTH EXTERIOR ELEVATION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

CHIPMAN DESIGN ARCHITECTURE INC
1350 E TOUHY AVE
FIRST FLOOR EAST
DES PLAINES, IL 60018
TEL: 847.298.6900

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CHICK-FIL-A Wauwatosa FSU

2835 N. MAYFAIR RD.
WAUWATOSA, WI 53226

FSR#05293

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22.08

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

DESIGN DEVELOPMENT

CONSULTANT PROJECT # 05293
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DATE 02/06/2023
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CHECKED BY CG

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X-900

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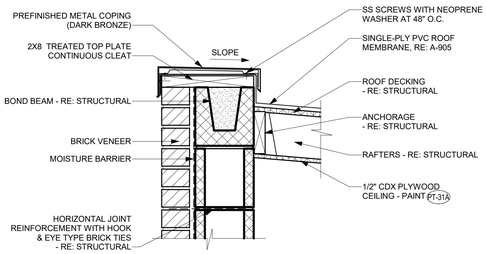

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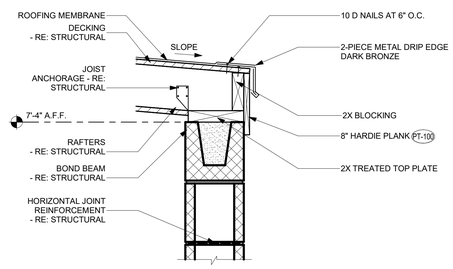

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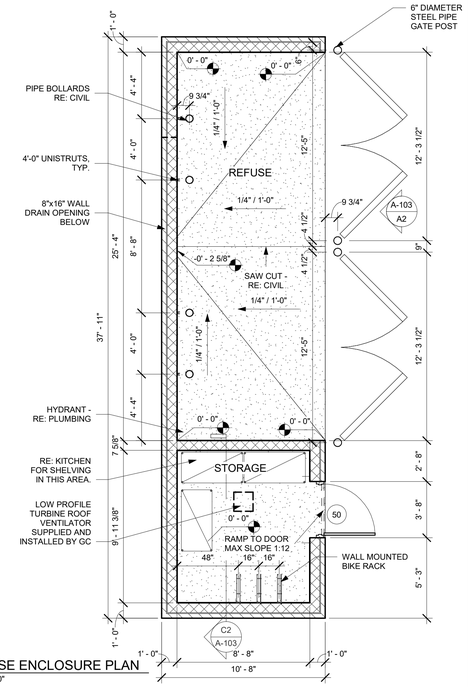

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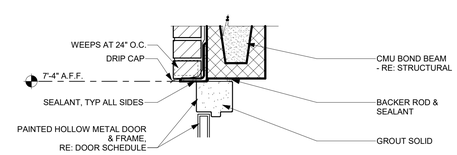
REFUSE ENCLOSURE NOTES

1. ** IN THE ARCHITECTURAL DRAWINGS, REFUSE ENCLOSURE AND MAIN BUILDING ARE BOTH NOTED WITH FINISH SLAB AT 0'-0". ACTUAL FINISH SLAB HEIGHTS WILL VARY BETWEEN MAIN BUILDING AND REFUSE ENCLOSURE. REFER TO CIVIL FOR ALL FINISH SLAB HEIGHTS.



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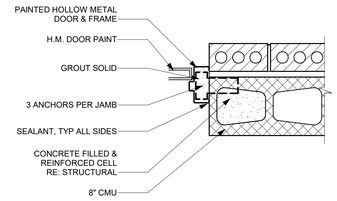

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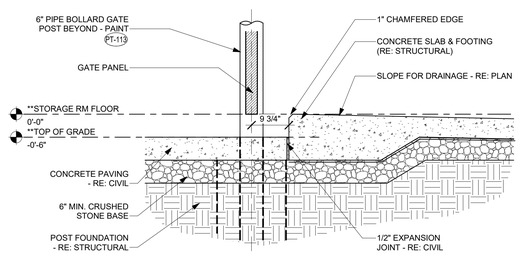

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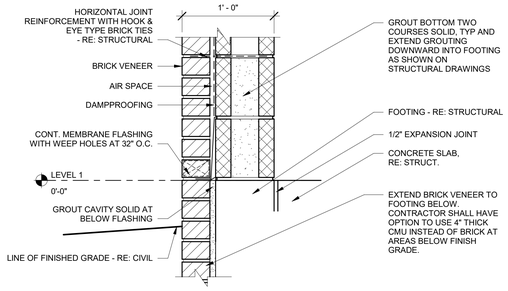

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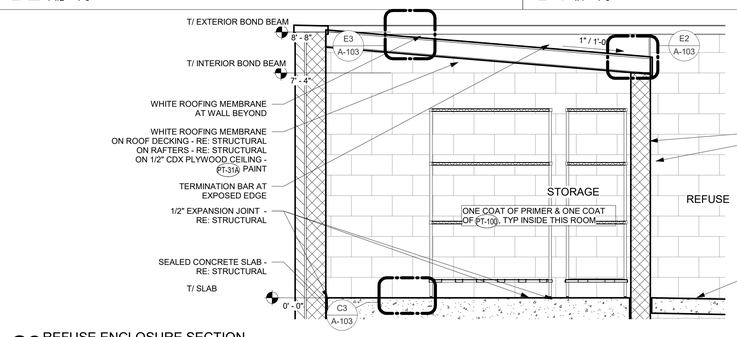

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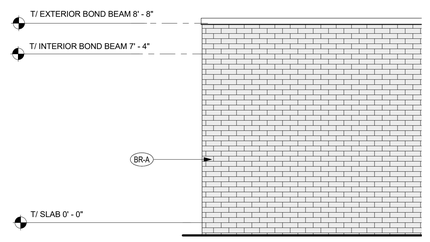

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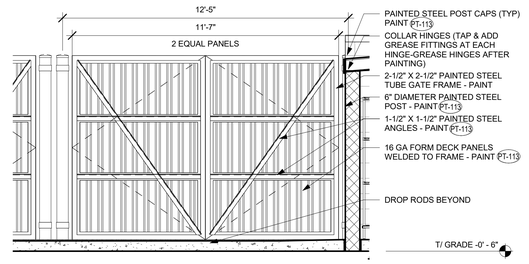

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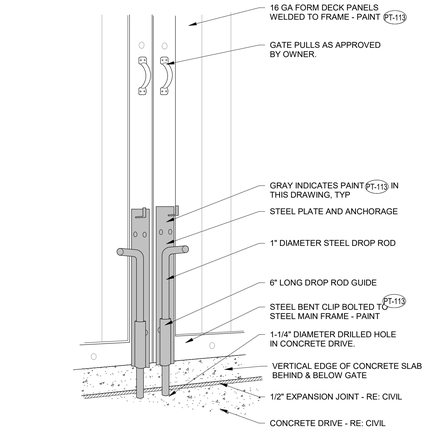

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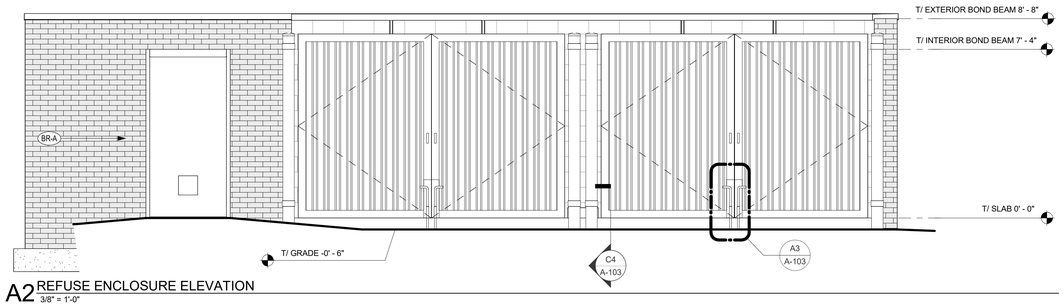

A2 REFUSE ENCLOSURE ELEVATION
3/8" = 1'-0"

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CHICK-FIL-A
APPLETON NORTH FSU

2835 N. MAYFAIR RD.
WAUWATOSA, WI 53226

FSR#05293

BUILDING TYPE / SIZE: P14 SE LRG
RELEASE: 22.08

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

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TRAFFIC ANALYSIS & DESIGN, INC.

P.O. Box 128
Cedarburg, WI 53012
800.605.3091
www.tadi-us.com

Chick-Fil-A Development
Abbreviated Traffic Impact Analysis

City of Wauwatosa
Milwaukee County, Wisconsin
October 28, 2022

ABBREVIATED TRAFFIC IMPACT STUDY FOR:

CHICK-FIL-A DEVELOPMENT

WAUWATOSA, WISCONSIN

OCTOBER 28, 2022

TRAFFIC ANALYSIS & DESIGN, INC.

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Tammi Czewski, P.E., PTOE (WisDOT TIA Certification #SE05-804-045)

"I certify that this Traffic Impact Analysis has been prepared by me or under my immediate supervision and that I have experience and training in the field of traffic and transportation engineering."

Chick-Fil-A Development TIA
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Year 2023 Total Traffic – with Modifications

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CHAPTER I – INTRODUCTION & EXECUTIVE SUMMARY

PART A – PURPOSE OF REPORT AND STUDY OBJECTIVES

A Chick-Fil-A restaurant is proposed to be constructed on property currently occupied two office buildings on the west side of the State Trunk Highway (STH) 100 between Burleigh Street and Center Street in the City of Wauwatosa, Milwaukee County. The four existing site access driveways to STH 100 are proposed to be reduced to only two driveways for the Chick-Fil-A restaurant.

This Abbreviated Traffic Impact Analysis (TIA) report follows the Wisconsin Department of Transportation (WisDOT) *Statewide TIA Guidelines* and was prepared to evaluate traffic impacts and recommended modifications with buildout of the proposed Chick-Fil-A restaurant and off-site developments nearby along STH 100 and Burleigh Street. The TIA evaluates the weekday PM and Saturday midday peak hour operating conditions at study intersections along STH 100.

PART B – EXECUTIVE SUMMARY

The executive summary includes a description of the study area, description of the development and conclusions based on the findings of this TIA.

B1. Study Area

The intersections evaluated in this study are listed below.

- STH 100 & Burleigh Street
- STH 100 & Center Street
- STH 100 & Chick-Fil-A Full-Access Driveway
- STH 100 & Chick-Fil-A Right-Out driveway

The STH 100 intersections with Burleigh Street and Center Street operate with traffic signal control that is coordinated with other traffic signals along STH 100.

B2. Proposed Development

The site plan for the Chick-Fil-A development is on Exhibit 1-1. Trip generation for the 4,996-square foot Chick-Fil-A restaurant was estimated at 2,340 driveway trips on a typical weekday, 265 driveway trips during the weekday PM peak hour, and 440 driveway trips during the Saturday midday peak hour. The Chick-Fil-A full-access driveway is proposed to be located directly across from the median opening north of Center Street, and the Chick-Fil-A right-out driveway is proposed to be located directly across from the drive-through exit lanes, approximately 110 feet to the south of the full-access driveway. This study evaluates two access scenarios for the Chick-Fil-A site:

- Scenario A: Includes both the Chick-Fil-A full-access and right-out driveways.
- Scenario B: Includes only the Chick-Fil-A full-access driveway.

This study also evaluates traffic impacts from off-site developments along Burleigh Street (various developments evaluated in the *June 15, 2020 Fulfillment Center TIA*) and STH 100 (Campbell Apartments). Combined, the trip generation for the Burleigh Street developments is 29,610 new trips on a typical weekday, 2,610 new trips during the weekday PM peak hour, and 2,525 new trips during the Saturday midday peak hour. Trip generation for the Campbell Apartments is 1,730 new trips on a typical weekday, 130 new trips during the weekday PM peak hour, and 105 trips during the Saturday midday peak hour.

B3. Traffic Operations

The study intersections operate with movements at LOS E and F during the peak hours with the Background (existing) traffic volumes developed for the study. All movements are under capacity, however, and with the exception of the eastbound movements at the STH 100/Center Street intersection all queues are reasonably within the amount of available turn lane storage. The railroad bridge on the west side of this intersection limits the extension of the eastbound turn lanes on Center Street.

The study intersections operate with adaptive traffic control and timing plans with high cycle lengths (150 seconds) during the weekday PM and Saturday midday peak hours. Obtaining LOS D or better operations for non-coordinated movements (only northbound/southbound through movements are coordinated) with such high cycle lengths is difficult to achieve by the nature of how long non-coordinated movements must indicate red to service other movements.

With the additional traffic from the off-site developments (Build traffic volumes), the STH 100 intersection with Burleigh Street operates with increased delays and queues compared to the Year 2023 Background traffic condition. Several movements at this intersection operate over capacity during the peak hours, and with queues that exceed the amount of available turn lane storage. Modifications recommended in the *June 15, 2020 Fulfillment Center TIA* mitigate some of these delays, reduce queues at critical turn lanes, and improve capacity so that the volume-to-capacity ratios for all movements are less than 1.0. With off-site development traffic, the STH 100 intersection with Center Street is expected to operate with increased delays, but under capacity for all movements during the peak hours.

With the additional traffic from the proposed Chick-Fil-A restaurant (Year 2023 Total traffic volumes), only minor additional increases to the delays and queues are expected during the peak hours. The Chick-Fil-A right-out driveway to STH 100 (Scenario A) operates with eastbound right-turn movements at LOS B during the peak hours. With two-vehicle storage/two-stage turning movements and considerations for signal coordination along STH 100, the analysis for the Chick-Fil-A full-access driveway to STH 100 is reported as LOS C or better during the peak hours for both access Scenario A and B. Depending on the arrival patterns from the adjacent signals, actual delays could be higher during the peak hours. This study conservatively estimates that all traffic exiting to the north on STH 100 makes a left-turn at the full-access driveway, but in reality, many may choose to turn right first and then make a U-turn movement at a downstream intersection or median opening. If more traffic makes a right-turn to exit the site instead of a left-turn, then the potential for congestion at the full-access driveway is lessened. Access Scenario A would encourage more traffic to make a right-turn at the exit as it is positioned directly in front of the drive-through exit lane and provides a convenient exit location that doesn't require navigating back to the full-access driveway location.

B4. Recommendations

Modifications to address traffic impacts are shown on Exhibit 1-2 and split into two categories:

- "Off-Site Development Traffic" are modifications recommended to accommodate traffic volumes generated by the Campbell Apartments and Burleigh Street off-site developments.
- "Chick-Fil-A Traffic" are modifications recommended to accommodate traffic volumes generated by the proposed Chick-Fil-A restaurant on STH 100.

Recommended modifications are for jurisdictional consideration and are not legally binding. WisDOT and the City of Wauwatosa reserve the right to determine alternative solutions.

STH 100 & Burleigh Street

- Off-Site Development Traffic: Implement the modifications recommended in the *June 15, 2020 Fulfillment Center TIA*.
    - Extend the Burleigh Street eastbound dual-left-turn lanes as far west as practical to avoid the railroad bridge pier.
    - Redesignate the Burleigh Street westbound right-turn lane as a shared through/right-turn lane.
    - Install eastbound protected-overlap right-turn indications. The overlap will operate concurrently with both the eastbound through and northbound left-turn indications. If an eastbound protected-overlap right-turn indication is not installed, the eastbound right-turn movement is expected to either operate at LOS F with the one right-turn lane or require dual right-turn lanes to obtain acceptable operations.
- Chick-Fil-A Traffic: No additional modifications.

STH 100 & Center Street

- Off-Site Development Traffic: No modifications
- Chick-Fil-A Traffic: No modifications.

STH 100 & Chick-Fil-A Full-Access Driveway (Scenario A and Scenario B)

- Off-Site Development Traffic: N/A
- Chick-Fil-A Traffic:
    - Provide one full-access driveway directly across from the median opening north of Center Street.
    - Construct the eastbound driveway approach to STH 100 with one entering lane and two exiting lanes striped for left-turn and right-turn movements.
    - Install stop sign control on the eastbound driveway approach to STH 100.

STH 100 & Chick-Fil-A Right-Out Driveway (Scenario A)*

- Off-Site Development Traffic: N/A
- Chick-Fil-A Traffic:
    - Provide one right-out driveway approximately 110 feet south of the Chick-Fil-A full-access driveway.
    - Construct the eastbound driveway approach to STH 100 with one exiting lane striped for right-turn movements.
    - Install stop sign control on the eastbound driveway approach to STH 100.

*Access Scenario A is recommended for the Chick-Fil-A development site. By providing a right-out only driveway to STH 100, drive-through traffic exiting the site will not have to navigate back to the full-access driveway and add to the delays and queues exiting left onto STH 100. With an exit directly across from the drive-through lane, more drive-through traffic heading north on STH 100 will be encouraged to exit first as a right-turn movement and then U-turn at a downstream intersection or median opening.

Without this lane, all drive-through traffic must exit to the full-access driveway, which has a stacking distance less than one vehicle length between the stop bar and the curb for the westbound-only lane along the north side of the restaurant. Depending on the amount of exiting

traffic from the parking area, drive-through traffic therefore may not have room to enter the queue and exit at the full-access driveway, potentially resulting in backups and blockages through the drive-through lanes.

PART B – CONCLUSION

The recommendations noted above are expected to accommodate off-site and on-site development traffic movements and volumes proposed for the study area.

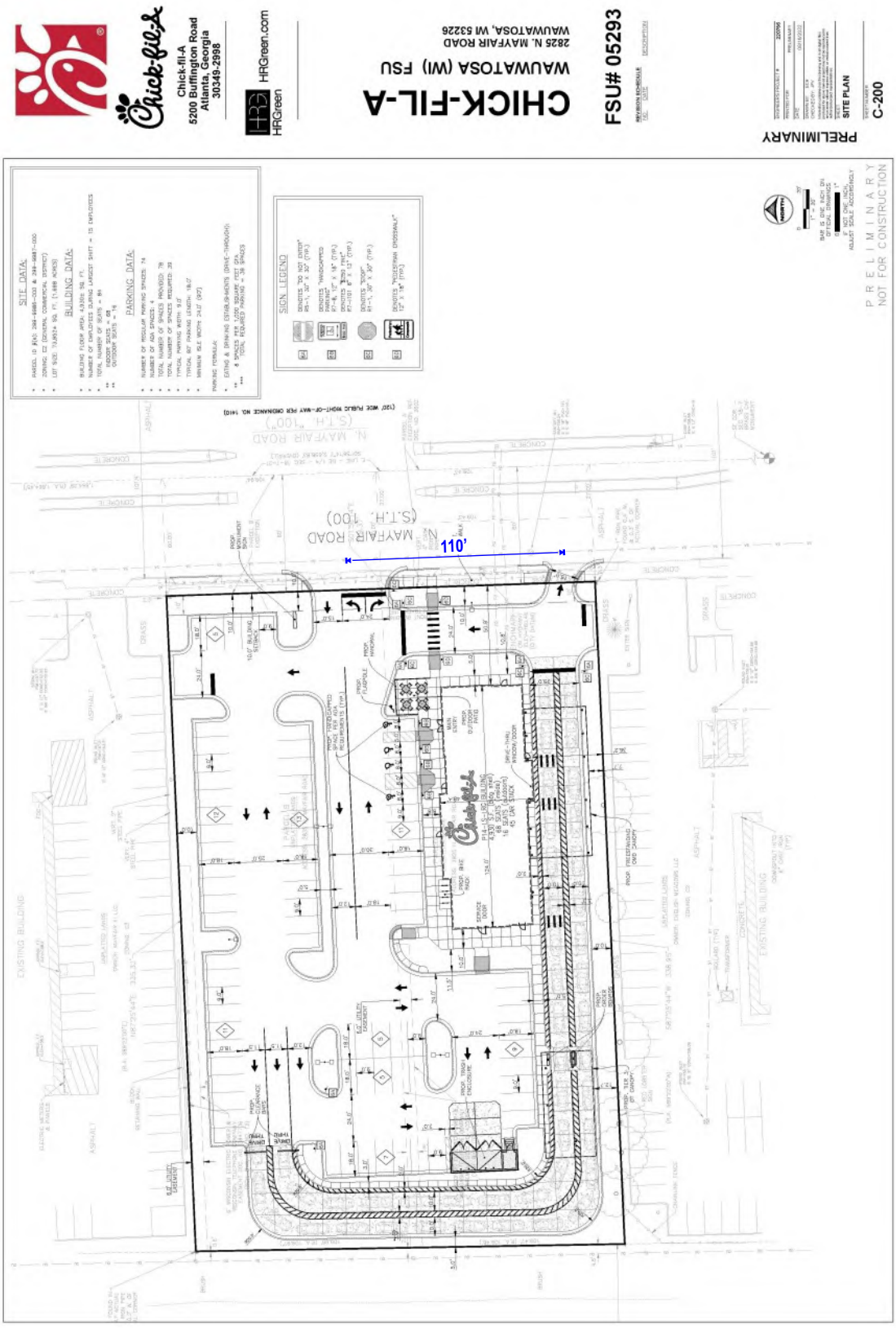

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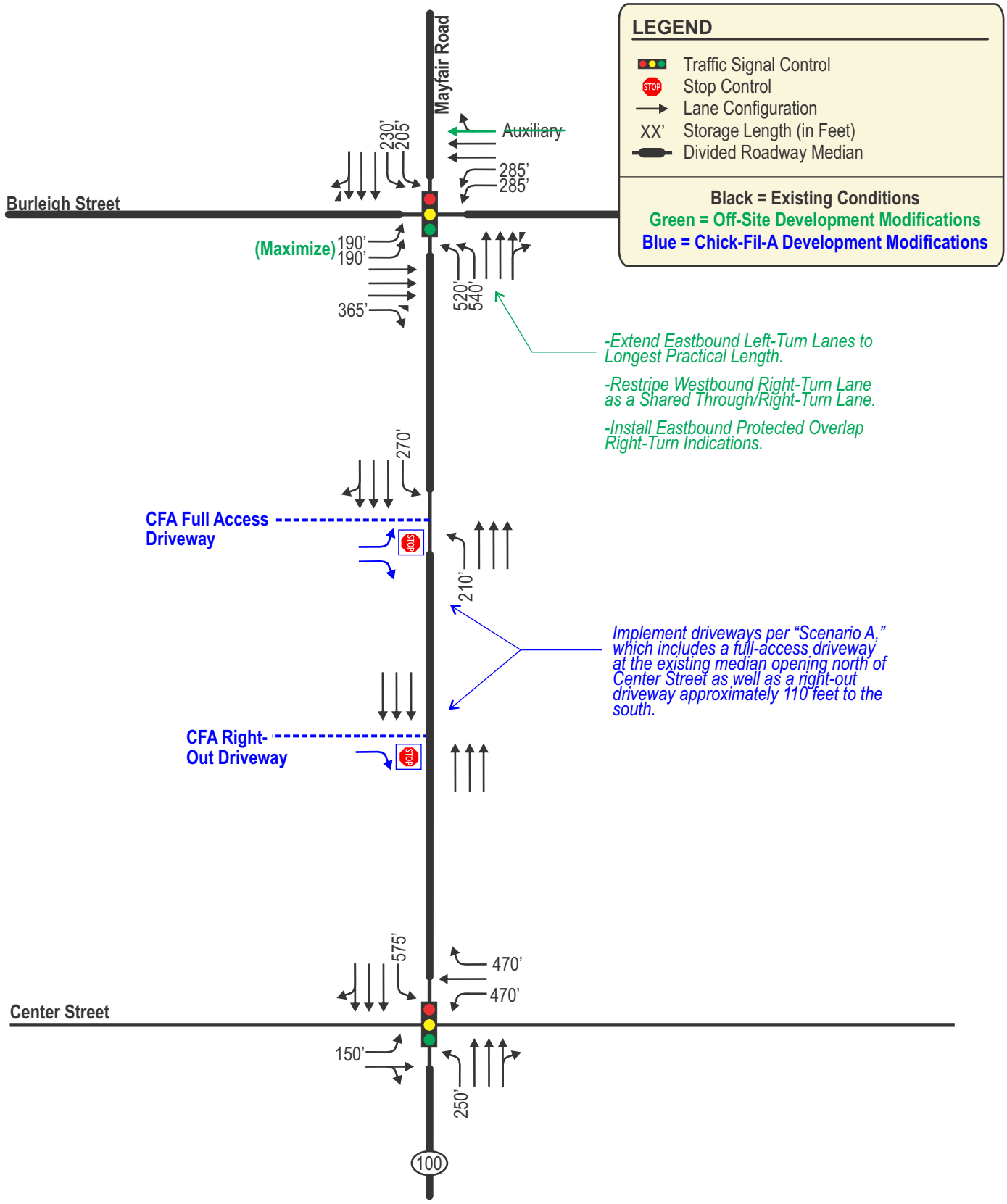
EXHIBIT 1-1
CONCEPTUAL SITE PLAN

WAUWATOSA, WISCONSIN



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N
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EXHIBIT 1-2
RECOMMENDATIONS

WAUWATOSA, WISCONSIN

CHAPTER II – PROPOSED DEVELOPMENT

PART A – ON-SITE DEVELOPMENT

A street map illustrating the location of the proposed development with respect to the surrounding roadway system is shown on Exhibit 2-1. Exhibit 2-2 shows the conceptual site plan for the proposed 4,996-square foot Chick-Fil-A restaurant, which will be constructed in a single development stage in 2023. Therefore, this TIA evaluates traffic for the base year 2023.

PART B – STUDY AREA

B1. Influence Area

The primary influence area for this traffic study includes the City of Wauwatosa and its surrounding communities.

B2. Area of Significant Traffic Impact

The following study intersections are evaluated in the TIA. These intersections are also identified on the site location map on Exhibit 2-1.

- STH 100 & Burleigh Street
- STH 100 & Center Street
- STH 100 & Chick-Fil-A Full-Access Driveway
- STH 100 & Chick-Fil-A Right-Out driveway

The STH 100 intersections with Burleigh Street and Center Street operate with traffic signal control that is coordinated with other traffic signals along STH 100.

PART C – OFF-SITE LAND USE AND DEVELOPMENT

Several off-site developments were identified along Burleigh Street, west of STH 100. The traffic impacts of these developments were documented and analyzed in the *June 15, 2020, Fulfillment Center TIA*. The Burleigh Street off-site developments include the following.

- Fulfillment Center - A redevelopment of the former JC Penny site located northeast of Burleigh Street & IH 41. This 541,640-square foot development was not yet operational at the time of data collection.
- Nordstrom Rack Redevelopment – Nordstrom Rack occupied approximately 50,000 square feet of space within Mayfair Collection ("MFC") that was vacant when turning movement traffic counts were collected in 2019 and 2020. A comparable use (apparel store) was assumed for future redevelopment of this space.
- The Mayfair Collection (MFC) Phase III includes 792 multifamily housing units, 256 senior adult housing units, and 508,480 square feet of general office space that was not operational at time of data collection.
- Remaining 11800 Development - Approximately 638,200-square feet of the former JC Penny's warehouse building space remains (after construction of the Fulfillment Center). This study assumes redevelopment of the site into a high-cube transload/short-term storage warehouse.
- Burleigh South Developments – A range of development options exist for the area south of Burleigh Street from I-41 to east of the railroad. This study estimates potential uses on this site including 299 multi-family housing units, 151,100 square feet of retail, 470,000 square feet of office space, a 9,000-square foot high-turnover restaurant and a five-field sports complex.

One off-site development was identified along STH 100. The 258-unit Campbell Apartments development is currently under construction on the west side of STH 100 just north of the development site.

PART D – SITE ACCESSIBILITY

D1. Study Area Roadways

The study area roadways are described below:

STH 100 is a north/south arterial highway with six-lane divided cross-section and a posted speed limit of 40 mph. According to WisDOT, the Year 2019 annual average daily traffic (AADT) volume on STH 100 was approximately 31,000 vehicles per day (vpd) south of Burleigh Street.

Burleigh Street is an east/west arterial street with six-lane divided cross-section west of STH 100 and a four-lane divided cross-section east of STH 100. The posted speed limit is 35 mph. The WisDOT AADT volumes were approximately 22,900 vpd west of STH 100 (Year 2019) and 19,600 vpd east of Menomonee River Parkway-West (east of study area, Year 2016).

Center Street is a two-lane east/west local street with an unposted statutory speed limit of 25 mph. The WisDOT Year 2019 AADT volume was approximately 4,500 vpd west of STH 100. Mayfair Mall's northernmost access aligns with Center Street on the east side of STH 100.

D2. Pedestrian & Bicycle Accommodations

No dedicated bicycle accommodations exist at the study area intersections. Pedestrian accommodations exist as follows:

- Along the west side of STH 100.
- Along the east side of STH 100 to the north of Burleigh Street and a short distance of approximately 125-feet south of Burleigh Street.
- Along the north side of Burleigh Street.
- Along the south side of Burleigh Street to the west of STH 100.
- Along both sides of Center Street to the west of STH 100.

D3. Transit Accommodations

The Milwaukee County Transit System (MCTS) operates the following routes within the study area.

- Route 28: 108th Street operates west on Burleigh Street and north/south along STH 100 with stops at Mayfair Mall.
- Route 66: Burleigh Street operates east on Burleigh Street and north/south along STH 100 to Mayfair Mall.
- Route 21: North Avenue and Route 31: State-Highland also operate with stops at Mayfair Mall and continue north/south on STH 100 south of the study area.

D4. Anticipated Infrastructure Projects

The WisDOT Transportation Improvement Program (https://wisdot.maps.arcgis.com, accessed 8/10/2022) anticipates a Year 2025 bridge replacement and rehabilitation project on STH 100 from Burleigh Street to north of STH 190/Capitol Drive.

WisDOT's ongoing Zoo Interchange North Leg reconstruction is expected to continue along IH 41 in Year 2023. At the time of this report preparation, construction for the project included a

full closure of the IH 41 & North Avenue interchange and full closure of North Avenue through the interchange. These closures may have impacted traffic volumes at the time of data collection in 2022.

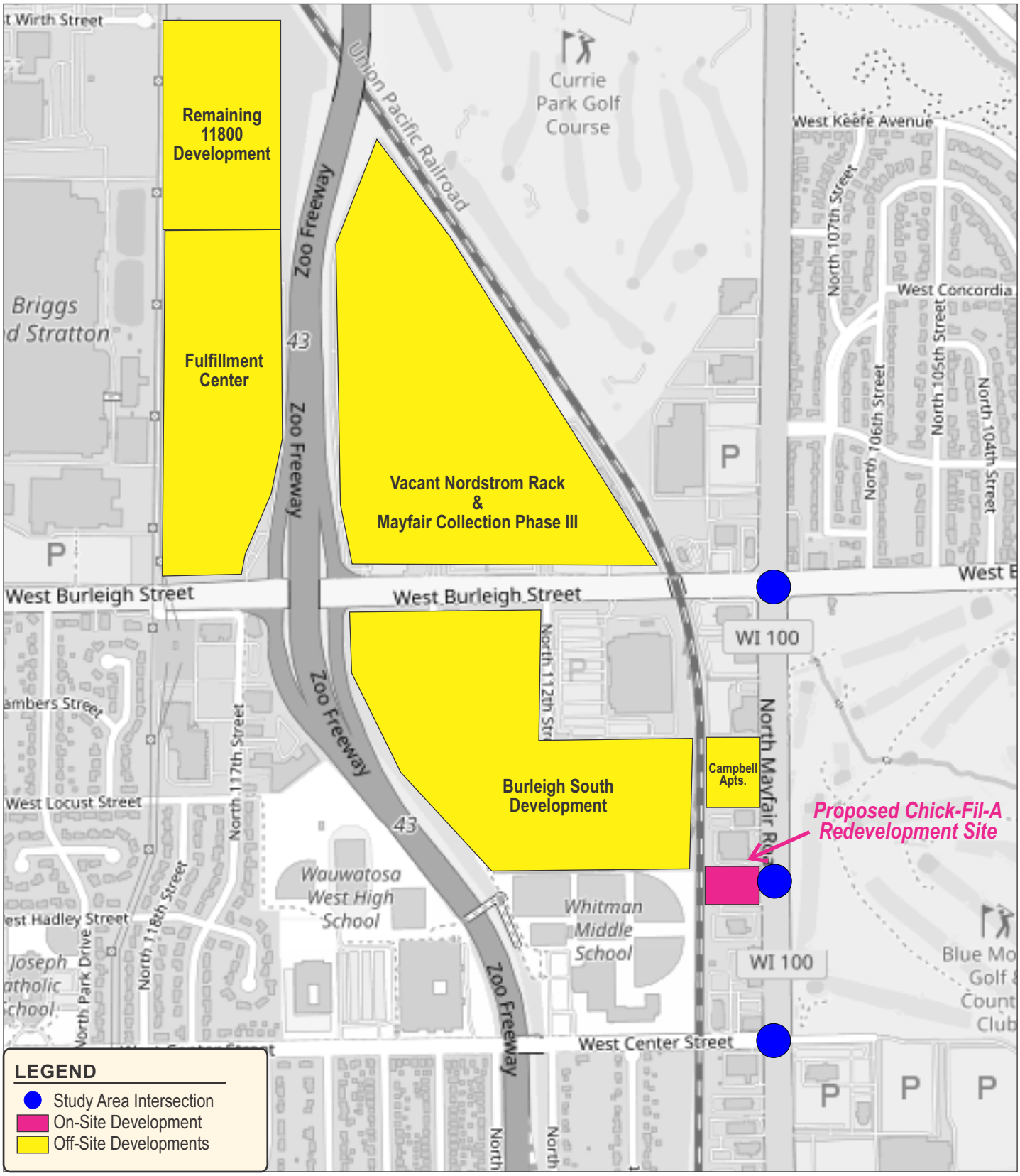

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EXHIBIT 2-1
SITE LOCATION MAP

WAUWATOSA, WISCONSIN

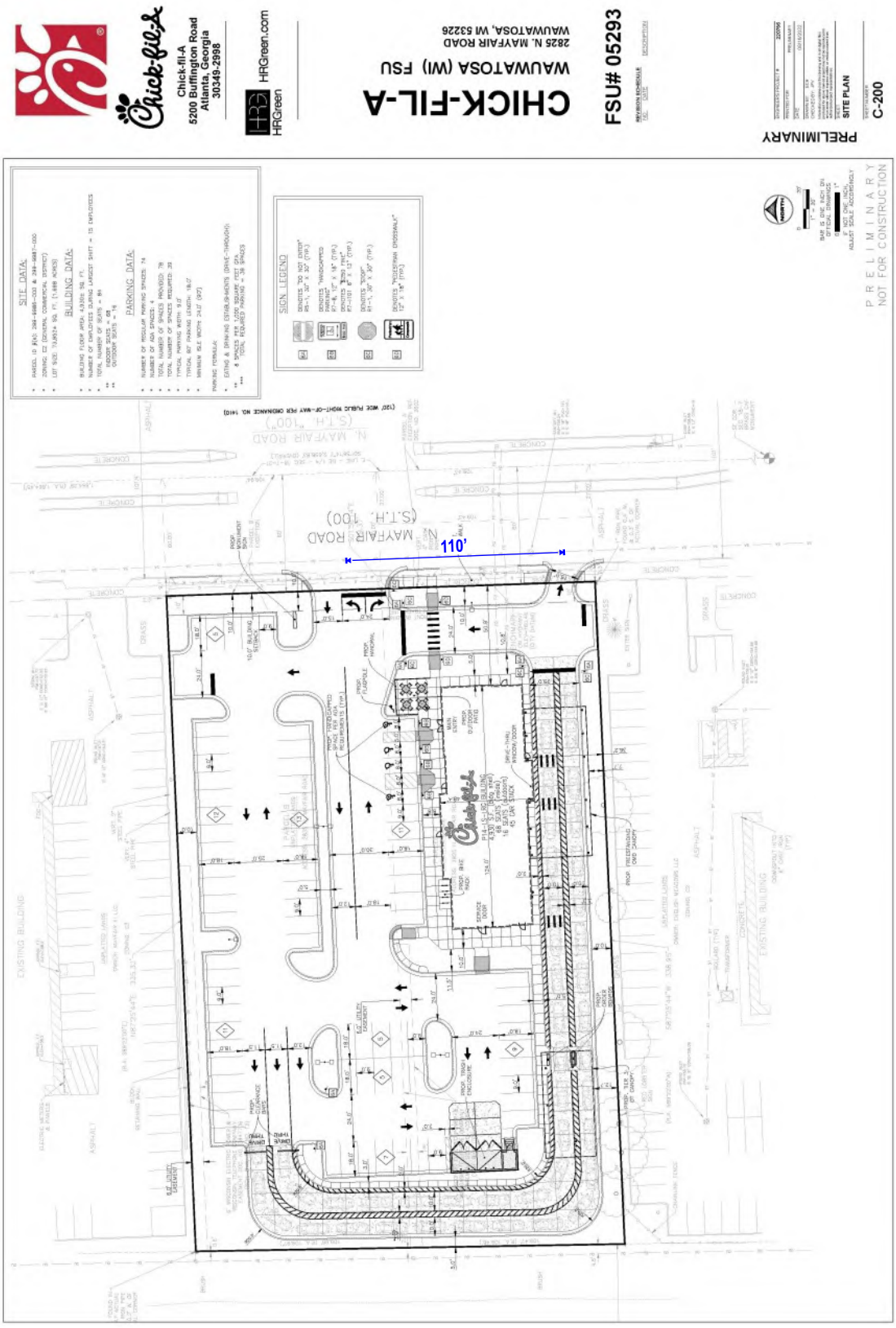

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EXHIBIT 2-2
CONCEPTUAL SITE PLAN

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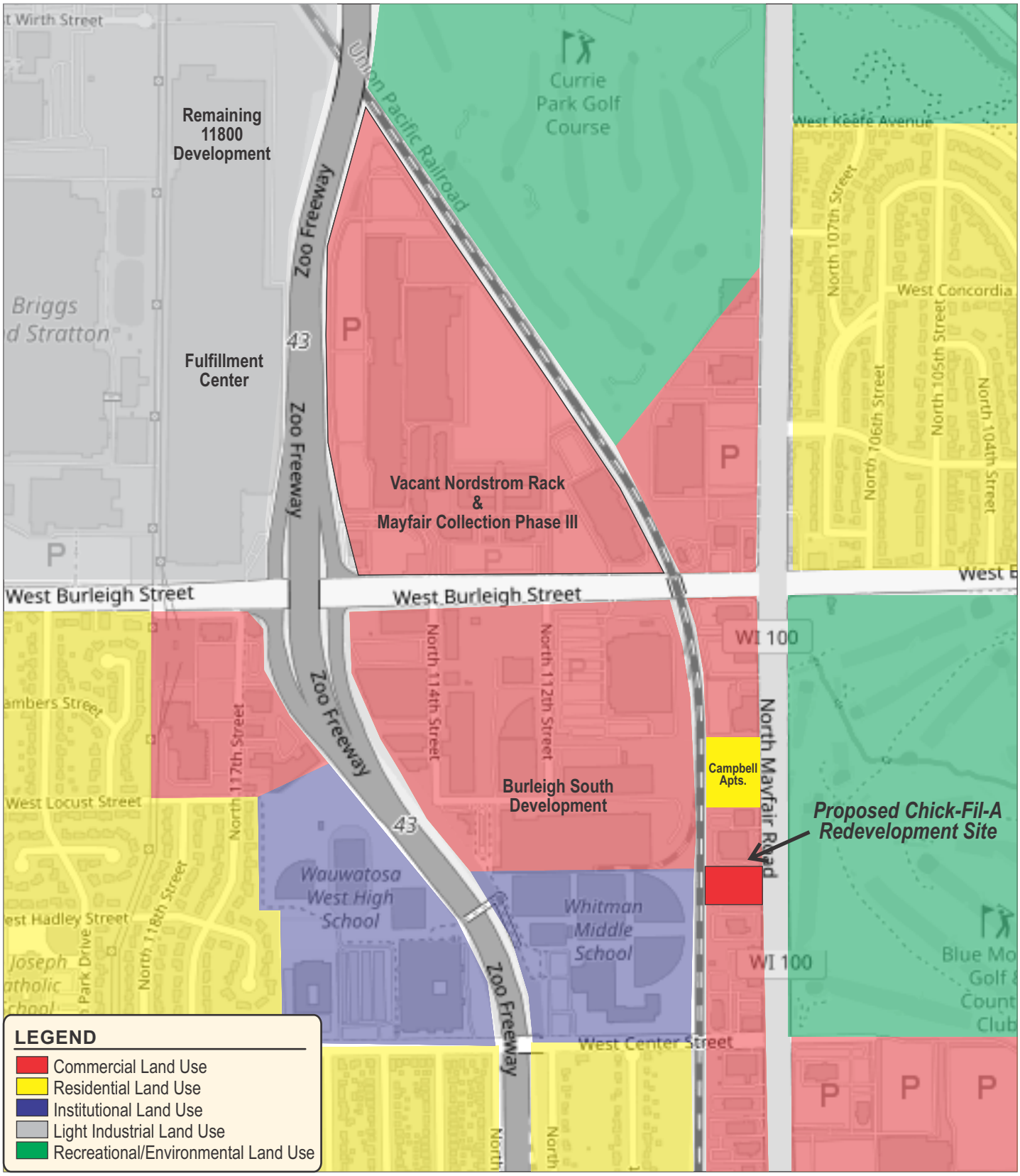

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EXHIBIT 2-4
EXISTING & PROPOSED LAND USES

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CHAPTER III – ANALYSIS OF EXISTING CONDITIONS

PART A – PHYSICAL CHARACTERISTICS

A transportation detail showing the existing lane configurations, traffic controls, posted speed limits, and approximate intersection spacing is included in Exhibit 3-1.

PART B – TRAFFIC VOLUMES

Data Collection

The intersection turning movement count data collected for this study is summarized in Table 1. The data is a combination of WisDOT traffic counts collected in 2019 and TADI counts collected in 2020 and 2022. The traffic count data collected for each study intersection is in Appendix A.

Table 1. Turning Movement Count Data

Intersection	Weekday PM	Saturday Midday
STH 100 & Burleigh Street	11/16/19 (WisDOT)	4/18/2020 (TADI)
STH 100 & Center Street	9/25/19 (WisDOT)	8/6/2022 (TADI)
STH 100 & Median Opening U-Turns *(proposed Chick-Fil-A Full Access Dwy loc.)*	9/14/2022 (TADI)	9/10/2022 (TADI)

The following outlines key notes regarding the Saturday midday peak hour counts.

- The Saturday traffic count at STH 100 & Burleigh Street was collected during the COVID-19 Safer-At-Home orders. The Fulfillment Center TIA showed that there was substantial imbalance with the Year 2019 Saturday midday traffic counts collected at intersections to the west on Burleigh Street in Year 2019. Fratar factoring was performed at the intersection as part of the Fulfillment Center TIA and is described in more detail in that study (Fulfillment Center TIA, page 16). The purpose of Fratar factoring was to adjust the Year 2020 count to a pre-pandemic volume estimate.
- The Saturday traffic count at STH 100 & Center Street was collected during the ongoing Zoo Interchange North Leg reconstruction. At the time of Saturday peak hour data collection, construction for the project included a full closure of the IH 41 & North Avenue interchange and full closure of North Avenue through the interchange. These closures may have impacted traffic Saturday traffic volumes at this intersection.
- The Saturday peak hour at STH 100 & Burleigh Street was 12:45 to 1:45pm while the Saturday peak hour at STH 100 & Center Street was 11:45 to 12:45pm. The total intersection volume difference at STH 100 & Burleigh Street between the two hours is approximately 38 vehicles, which is relatively low. Additionally, WisDOT used the Fratar-factored counts at STH 100 & Burleigh Street to estimate a Year 2020 forecast that closely balances with the STH 100 & Center Street. Therefore, TADI used the Year 2020 forecast at STH 100 & Burleigh Street, which is also shown in the Fulfillment Center TIA Exhibit 3-2d: East, to represent "existing" peak hour volumes at that intersection.

Peak Hour Time Periods

Based on the traffic count data collected, the weekday peak hours were determined to occur during the following times:

- Weekday afternoon (PM) peak hour: 4:30-5:30 p.m.
- Saturday midday (MID) peak hour: 11:45-12:45 p.m.

Year 2023 Background Traffic Volumes

The existing traffic volumes at the study intersections were compiled for the weekday PM and Saturday midday peak hours and are shown as the Year 2023 Background Traffic Volumes on Exhibit 3-2.

PART C – CAPACITY/LEVEL OF SERVICE ANALYSIS

The study area intersections were analyzed based on the procedures set forth in the *Highway Capacity Manual* (HCM), 6th Edition using the Synchro 11 traffic analysis software.

C1. Level of Service Definitions

Intersection operation is defined by "Level of Service". Level of Service (LOS) is a quantitative measure that refers to the overall quality of flow at an intersection ranging from very good, represented by LOS 'A', to very poor, represented by LOS 'F'. For the purposes of this study, and as is standard for use in the WisDOT Southeast Region, LOS D or better was used to define desirable peak hour operating conditions. LOS E conditions were deemed acceptable in select cases as outlined in Chapter V. LOS descriptions are shown in Table 2.

Table 2. LOS Descriptions

LOS	Signalized Intersections Control Delay/Vehicle (sec/veh)	Unsignalized Intersections Avg. Control Delay (sec/veh)	Relative Delay
A	≤10	≤10	Short Delays
	Free-flow traffic operations at avearge travel speeds. Vehicles completely unimpeded in ability to maneuver. Minimal delay at signalized intersections.		
B	> 10 - 20	> 10 - 15	
	Reasonably unimpeded traffic operations at average travel speeds. Vehicle maneuverability slightly restricted. Low traffic delays.		
C	> 20 - 35	> 15 - 25	
	Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow travel speeds. Longer intersection delays.		
D	> 35 - 55	> 25 - 35	Moderate Delays
	Small increases in traffic flow can cause increased delays. Delays likely attributable to increased traffic, reduced signal progression, and adverse timing.		
E	> 55 - 80	> 35 - 50	
	Significant delays. Travel speeds reduced to one-third of average free flow travel speed.		
F	> 80	> 50	Long Delays
	Extremely low speeds. Intersection congestion. Long delays. Extensive traffic queues at intersections.		

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010

C2. Background Traffic Operating Conditions – *Existing Transportation System*

The Year 2023 Background Traffic Volumes (no off-site or on-site developments) were analyzed with the existing geometrics and traffic control at the STH 100 intersections with Burleigh Street and Center Street. The Year 2023 Background traffic capacity analysis tables showing the peak hour LOS, delays (in seconds per vehicle), capacity (v/c) and 95th percentile queues (in feet) for each study intersection are shown on Exhibit 3-3. The corresponding Synchro capacity analysis worksheets are in Appendix B.

With the Year 2023 Background traffic volumes, the study intersections operate with movements at LOS E and F during the peak hours. All movements are under capacity, however, and with the exception of the eastbound movements at the STH 100/Center Street intersection all queues are within the amount of available turn lane storage. The railroad bridge on the west side of this intersection limits the extension of the eastbound turn lanes on Center Street.

The study intersections operate with adaptive traffic control and back-up timing plans with high cycle lengths (150 seconds) during the weekday PM and Saturday midday peak hours. Obtaining LOS D or better operations for non-coordinated movements (only northbound/southbound through movements are coordinated) with such high cycle lengths is difficult to achieve by the nature of how long non-coordinated movements must indicate red to service other movements.

PART D – SOURCES OF DATA

The following sources of data were obtained for use in conducting this traffic study:

- AADT counts – WisDOT online TCMap
- Turning movement traffic counts – TADI & WisDOT (Appendix A)
- Traffic Signal Timings – WisDOT (Appendix A)
- Transit information – RideMCTS.com
- Existing field geometrics – TADI & Google Earth

LEGEND

- Traffic Signal Control
- Stop Control
- Existing Lane Configuration
- XX' Existing Storage Length (in Feet)
- *XX'* Distance Between Roadways (in Feet)
- Divided Roadway Median

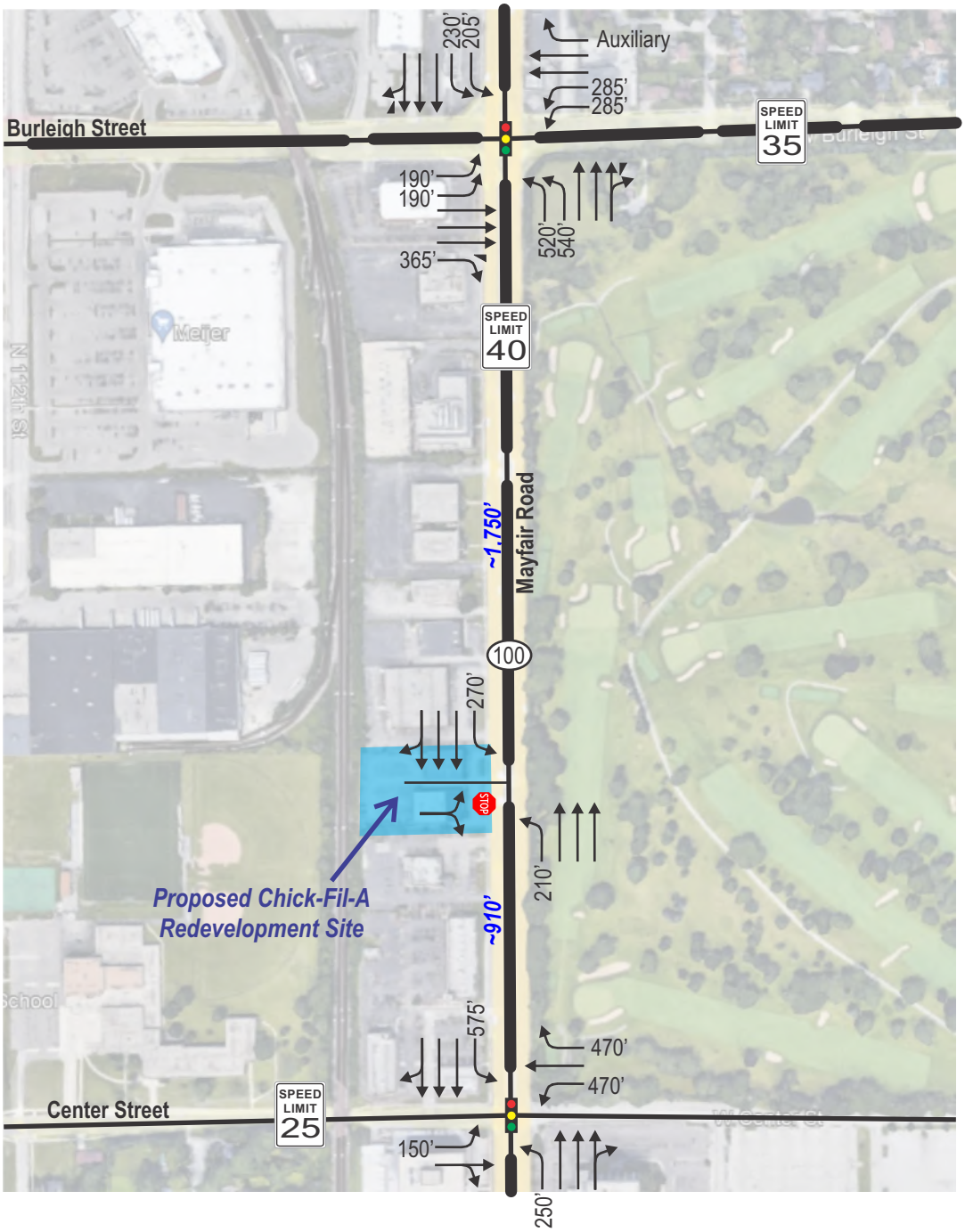

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EXHIBIT 3-1
EXISTING TRANSPORTATION SYSTEM

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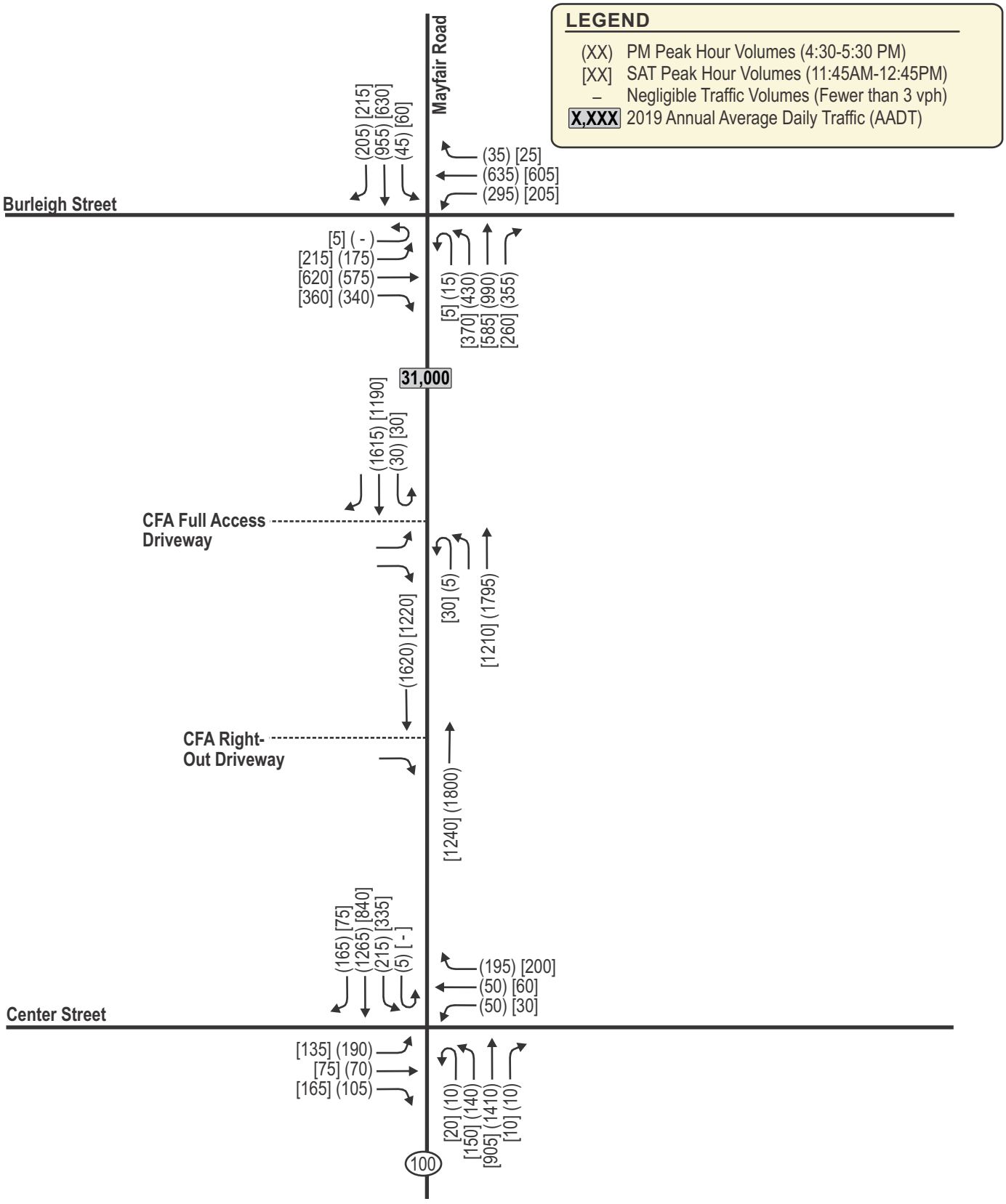

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EXHIBIT 3-2
YEAR 2023 BACKGROUND TRAFFIC VOLUMES

WAUWATOSA, WISCONSIN

Year 2023 Background Traffic Peak Hour Operating Conditions

Existing Transportation System

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*2*	*1*	*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	E	E	E	D	F	F		D	C		E
		Delay	71	60	65	73	64	48	90	81		41	34		62
		v/c	0.80	0.73	0.87	0.84	0.91	0.07	0.91	0.86		0.05	0.54		
		Queue	130'	230'	290'	200'	375'	40'	260'	540'		45'	480'		
	SAT	LOS	E	E	E	E	E	C	F	D		E	C		E
		Delay	75	62	62	61	60	28	121	39		73	28		56
		v/c	0.84	0.83	0.97	0.50	0.90	0.05	1.02	0.33		0.58	0.39		
		Queue	160'	245'	305'	145'	370'	30'	240'	140'		55'	340'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	D	D		E	E	E	C	C		B	A		C
		Delay	53	50		65	64	58	26	20		16	9		21
		v/c	0.62	0.47		0.34	0.32	0.51	0.29	0.49		0.73	0.65		
		Queue	235'	225'		100'	95'	150'	120'	490'		190'	225'		
	SAT	LOS	E	E		E	E	E	C	B		B	D		C
		Delay	55	57		68	65	56	24	15		13	45		33
		v/c	0.53	0.73		0.26	0.38	0.48	0.28	0.29		0.67	0.38		
		Queue	175'	310'		65'	110'	160'	90'	240'		260'	265'		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.

CHAPTER IV – FORECASTED TRAFFIC

PART A – BACKGROUND TRAFFIC FORECASTING

The Abbreviated TIA for the proposed development site evaluated base year 2023 traffic conditions. Therefore, no traffic forecasting was prepared for this TIA.

PART B – ON-SITE AND OFF-SITE DEVELOPMENT TRAFFIC FORECASTING

Trips generated by the on-site and off-site developments were calculated based on trip rates or equations published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 11th Edition*. The use of trip rates or equations was determined based on procedures listed in the trip generation manual and in the ITE *Trip Generation Handbook, 3rd Edition*.

B1. On-Site Development Trip Generation

The on-site development trip generation table for the Chick-Fil-A restaurant is on Exhibit 4-3. For the fast-food restaurant with drive-through land use, the peak hour trips for the restaurant were increased by a factor of 1.6 to reflect higher Chick-Fil-A generated trips compared to typical fast-food restaurants. WisDOT provided this factor from data at Chick-Fil-A sites in Brookfield, Wisconsin and South Bend, Indiana. With these factors, the Chick-Fil-A development on STH 100 generates 2,340 driveway trips on a typical weekday, with 265 driveway trips (135 in/130 out) in the weekday PM peak hour and 440 driveway trips (225 in/215 out) in the Saturday midday peak hour.

Approximately 35% of the driveway trips are estimated to be pass-by trips. Pass-by trips occur when a motorist already on the roadway system stops at a development prior to continuing on their intended route (e.g., a motorist on southbound STH 100 makes a stop at the restaurant prior to continuing southbound on STH 100). The Chick-Fil-A site is estimated to generate 820 pass-by trips on a typical weekday, with 90 pass-by trips (45 in/45 out) in the weekday PM peak hour and 150 driveway trips (75 in/75 out) in the Saturday midday peak hour.

B2. Off-Site Development Trip Generation

The off-site development trip generation table for the Campbell Apartments is also shown on Exhibit 4-3. Based on ITE rates and equations, the Campbell Apartments on STH 100 generates 1,730 driveway trips on a typical weekday, with 130 driveway trips (80 in/50 out) in the weekday PM peak hour and 105 driveway trips (55 in/50 out) in the Saturday midday peak hour.

The off-site development trip generation tables for the Burleigh Street developments are included in Appendix A. These trip generation tables were presented on exhibits in the *June 15, 2020 Fulfillment Center TIA*. In total, these developments generate 29,610 new trips on a typical weekday, with 2,610 new trips (1,035 in/1,575 out) in the weekday PM peak hour and 2,525 new trips (1,270 in/1,255 out) in the Saturday midday peak hour.

B3. Mode Split

For this study, the effect of organized carpools, van pools, buses, bicycles, and pedestrians were considered insignificant factors on traffic volumes in the area, and therefore, the effects of these alternative modes of travel were not included in this project.

B4. Development Trip Distribution

The trip distributions for the Burleigh Street off-site developments were generated for the *June 15, 2020 Fulfillment Center TIA* and are included below the Burleigh Street off-site development trip generation tables in Appendix A. The trip distributions for the Chick-Fil-A on-site development and Campbell Apartments off-site development are included on the trip generation exhibits on Exhibit 4-3, shown graphically on Exhibit 4-4, and listed below.

On-Site Development Trip Distribution – Chick-Fil-A Restaurant

The trip distribution for the Chick-Fil-A restaurant was based on existing traffic patterns at the study intersections as well as the approximate location of population centers in proximity to the development site and major roadways such as STH 190 (Capital Drive) to the north, USH 45 to the west, and North Avenue to the south:

- 10% to and from the north on STH 100
- 45% to and from the south on STH 100
- 15% to and from the west on Burleigh Street
- 20% to and from the east on Burleigh Street
- 5% to and from the west on Center Street
- 5% to and from the east on Center Street

The pass-by trip distributions were estimated separately for the AM, PM, and Saturday midday peak hours from traffic on STH 100 passing through the site driveways. The peak hour pass-by trip distributions estimated for the Chick-Fil-A restaurant are listed below.

- 52% PM (47% SAT) northbound on STH 100
- 48% PM (53% SAT) southbound on STH 100

Off-Site Development Trip Distribution – Campbell Apartments

The trip distribution for the Campbell Apartments off-site development provided by WisDOT for use in this study:

- 10% to and from the north on STH 100
- 50% to and from the south on STH 100
- 30% to and from the west on Burleigh Street
- 5% to and from the east on Burleigh Street
- 5% to and from the west on Center Street
- 0% to and from the east on Center Street

B5. Development Trip Assignment

The on-site and off-site development new and pass-by trips were assigned to the study intersections based on the trip distributions described above. The traffic assignments are on the following exhibits:

- Exhibit 4-5A: On-Site Development New Trips
- Exhibit 4-5B: On-Site Development Pass-by Trips
- Exhibit 4-5C: On-Site Development Driveway Trips
- Exhibit 4-8A: Off-Site Development New Trips: Campbell Apartments
- Exhibit 4-8B: Off-Site Development New Trips: Burleigh Street Developments

The traffic assignments for the individual Burleigh Street developments are included in Appendix A.

PART C – BUILD & TOTAL TRAFFIC

C1. Year 2023 Build Traffic Volumes

Build traffic volumes reflect the sum of Background traffic (without development) and off-site development traffic volumes from buildout of the Burleigh Street developments and the Campbell Apartments on STH 100.

The Year 2023 Build traffic volumes, shown in Exhibit 4-11, were calculated by summing the Year 2023 Background traffic volumes (Exhibit 3-2), the Campbell Apartments new trips (Exhibit 4-8A), and the Burleigh Street Developments new trips (Exhibit 4-8B).

C2. Year 2023 Total Traffic Volumes

Total traffic volumes reflect the sum of Build traffic (with off-site developments) and proposed Chick-Fil-A restaurant traffic volumes.

The Year 2023 Total traffic volumes, shown in Exhibit 4-14, were calculated by summing the Year 2023 Build traffic volumes (Exhibit 4-11) and Chick-Fil-A driveway trips (Exhibit 4-5C).

Chick-Fil-A On-Site Development Trip Generation Table [1]

Land Use	ITE Code	Proposed Size	Weekday Daily	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
Fast-Food Restaurant with Drive-Through	934	4.996 x 1,000 SF	2,340 (467.48)	85 (52%)	80 (48%)	165 (33.03)	140 (51%)	135 (49%)	275 (55.25)
Total Driveway Trips (PM & SAT Trip Gen x 1.6) [2]			**2,340**	**135**	**130**	**265**	**225**	**215**	**440**
Minus Pass-by Trips		*35%*	*820*	*45*	*45*	*90*	*75*	*75*	*150*
Total New Trips			**1,520**	**90**	**85**	**175**	**150**	**140**	**290**

[1] ITE Trip Rates (X.XX) and/or Fitted Curve Equations (FCE) are from the ITE Trip Generation Manual, 11th Edition.

[2] LU 934 peak hour trip rates were factored up by 1.6 to reflect higher Chick-Fil-A trips compared to ITE rates for a fast-food restaurant. Per WisDOT, the factor is based on data from Chick-Fil-A sites in Brookfield, WI and South Bend, IN.

Trip Distribution (Trips To/From):

North on STH 100	10%	150	10	10		15	15
South on STH 100	45%	680	40	40		70	65
West on Burleigh	15%	230	15	10		25	20
East on Burleigh	20%	300	15	15		30	30
West on Center	5%	80	5	5		5	5
East on Center	5%	80	5	5		5	5
	100%	***1520***	***90***	***85***		***150***	***140***

Campbell Apartments Off-Site Development Trip Generation Table [1]

Land Use	ITE Code	Proposed Size	Weekday Daily	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
Multifamily Housing *Low-Rise*	220	258 Units	1,730 FCE	80 (63%)	50 (37%)	130 FCE	55 (50%)	50 (50%)	105 (0.41)
Total New Trips			**1,730**	**80**	**50**	**130**	**55**	**50**	**105**

[1] ITE Trip Rates (X.XX) and/or Fitted Curve Equations (FCE) are from the ITE Trip Generation Manual, 11th Edition.

Trip Distribution (Trips To/From):

North on STH 100	10%	170	5	5		5	5
South on STH 100	50%	860	40	25		30	25
West on Burleigh	30%	520	25	15		15	15
East on Burleigh	5%	90	5	5		5	5
West on Center	5%	90	5	0		0	0
East on Center	0%	0	0	0		0	0
	100%	***1730***	***80***	***50***		***55***	***50***

Burleigh Street Area Off-Site Development Trip Generation Table Summary [1]

Land Use			Weekday Daily	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
Fulfillment Center			1,470	60	30	90	35	100	135
Vacant Nordstrom Site			2,990	95	90	185	120	115	235
MFC Phase III			9,920	305	570	875	355	325	680
Remaining 11800 Redevelopment			890	20	45	65	40	35	75
Burleigh South Development			14,340	555	840	1,395	720	680	1,400
Total New Trips			**29,610**	**1,035**	**1,575**	**2,610**	**1,270**	**1,255**	**2,525**

[1] Trip Generation from June 15, 2020 Fulfillment Center TIA. Trip Generation tables included in Appendix A of the CFA TIA.

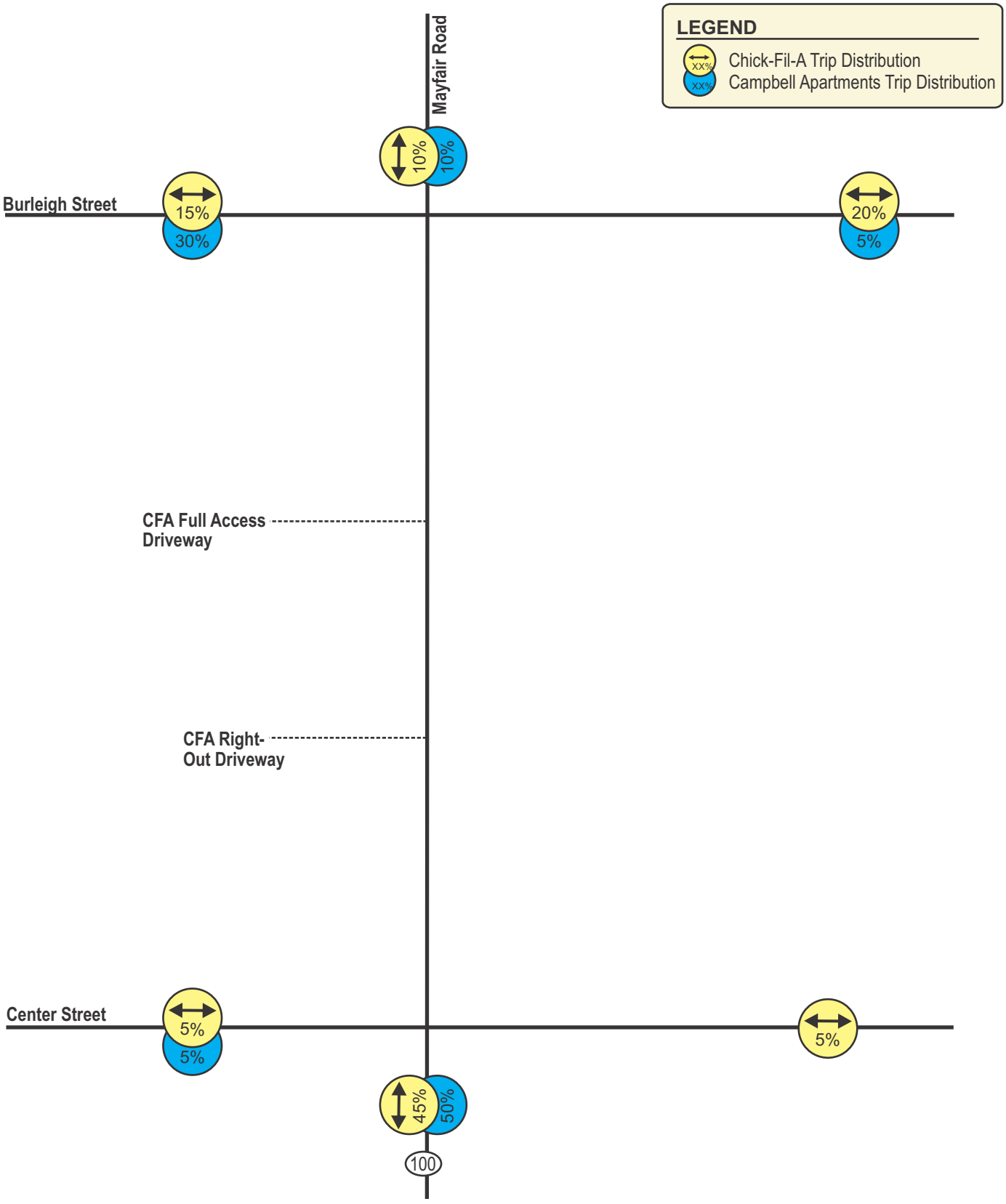

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EXHIBIT 4-4
TRIP DISTRIBUTION

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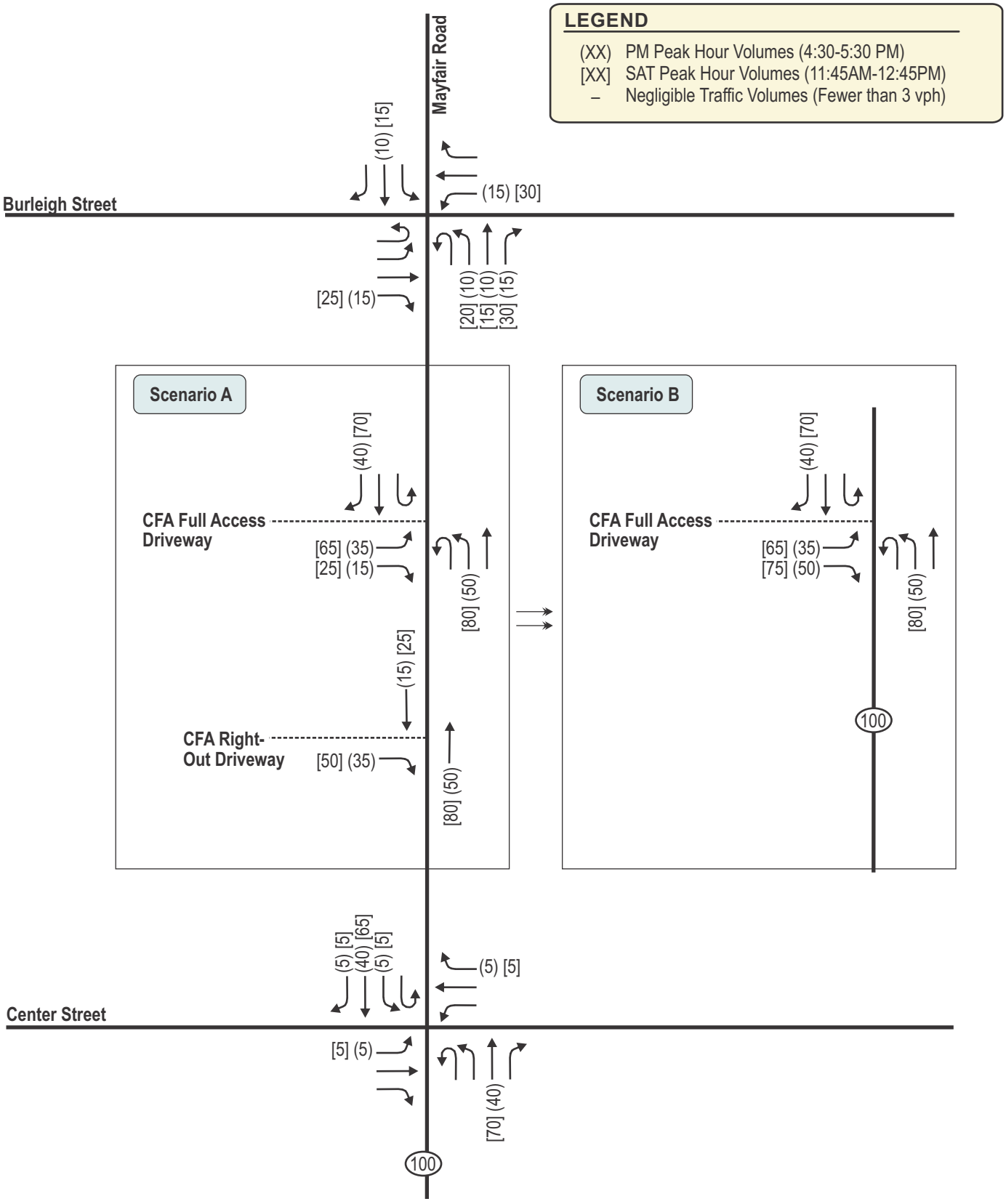

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EXHIBIT 4-5A
ON-SITE DEVELOPMENT NEW TRIPS

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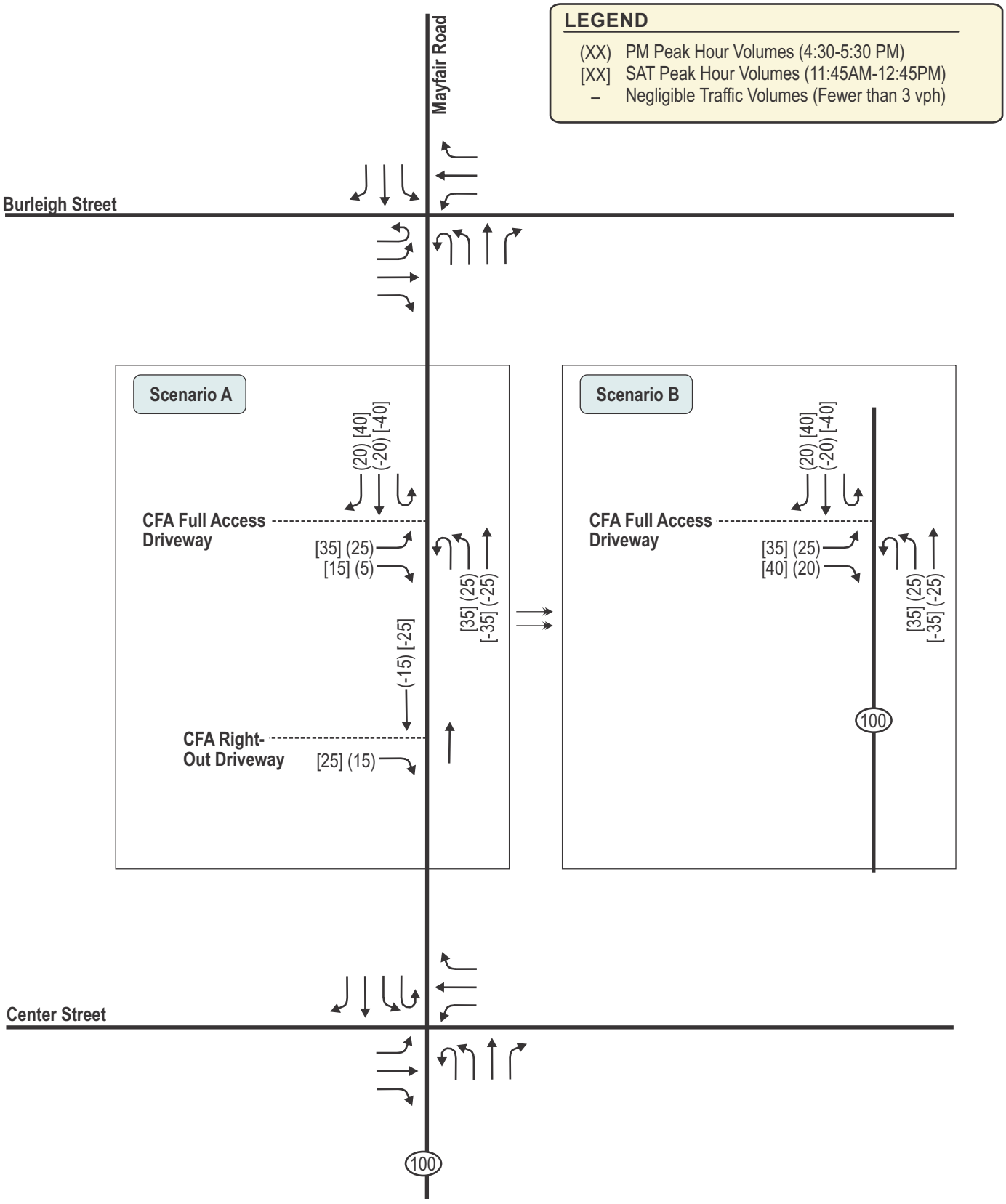

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EXHIBIT 4-5B
ON-SITE DEVELOPMENT PASS-BY TRIPS

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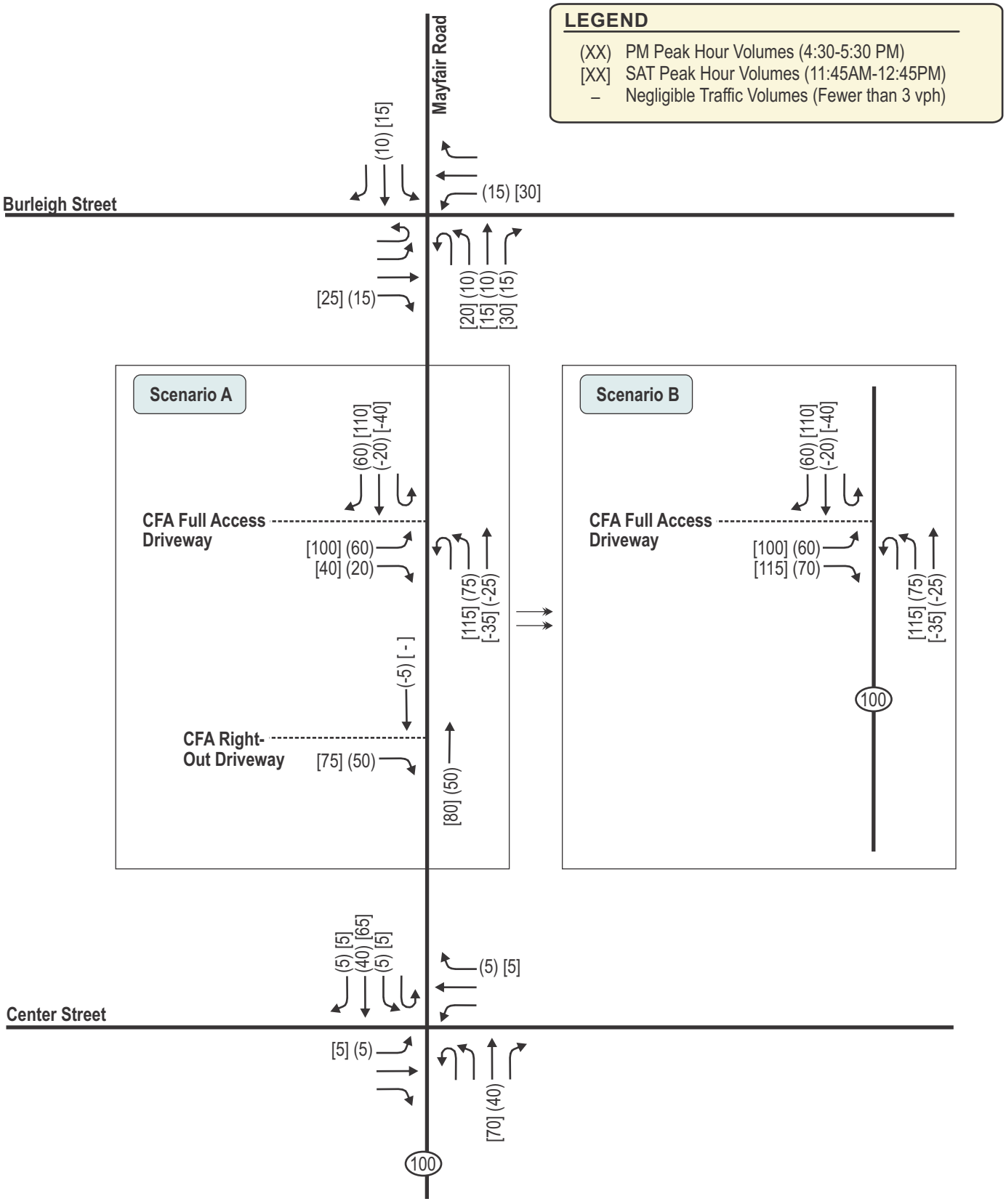

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EXHIBIT 4-5C
ON-SITE DEVELOPMENT DRIVEWAY TRIPS

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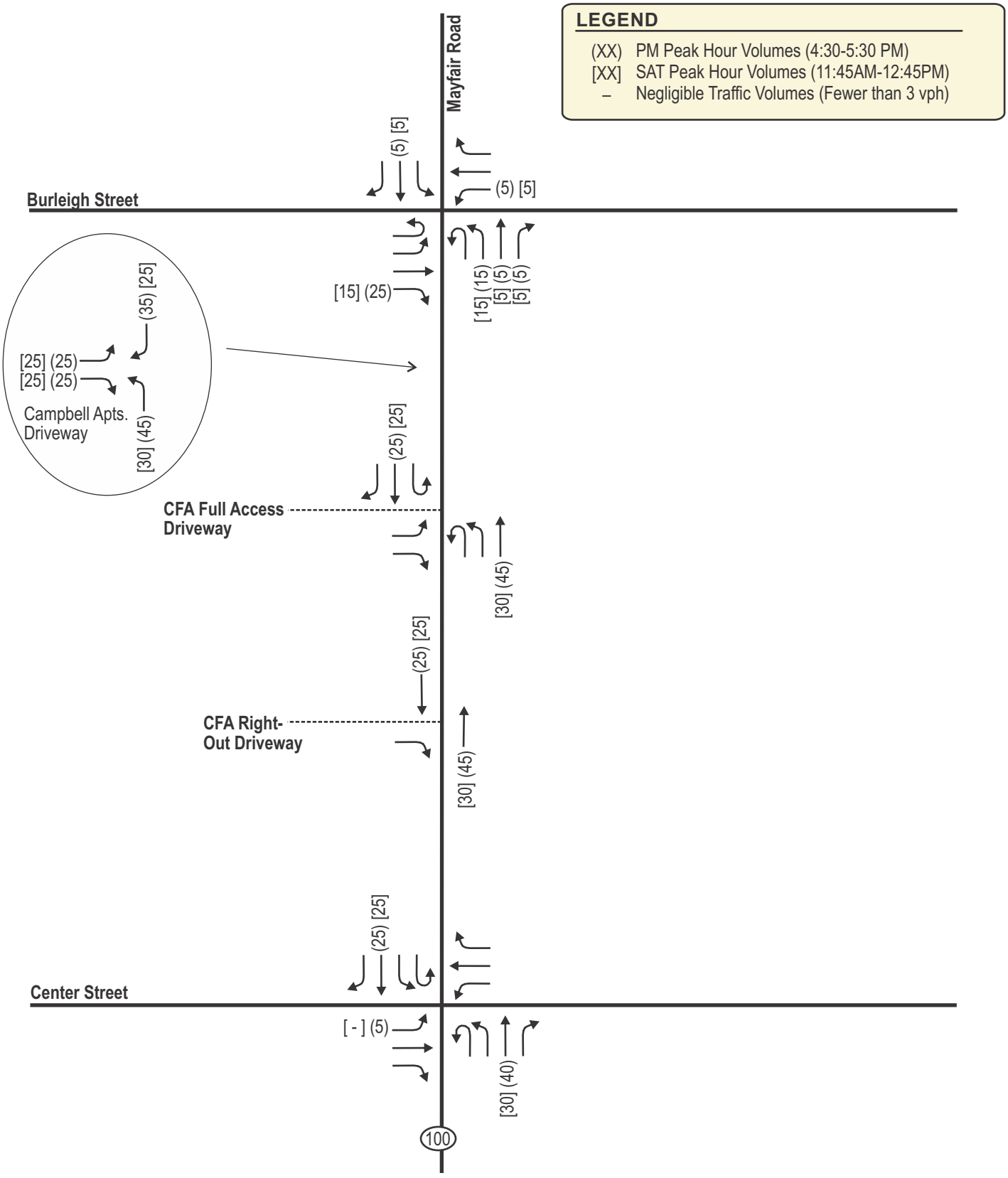

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EXHIBIT 4-8A
OFF-SITE DEVELOPMENT NEW TRIPS
CAMPBELL APARTMENTS

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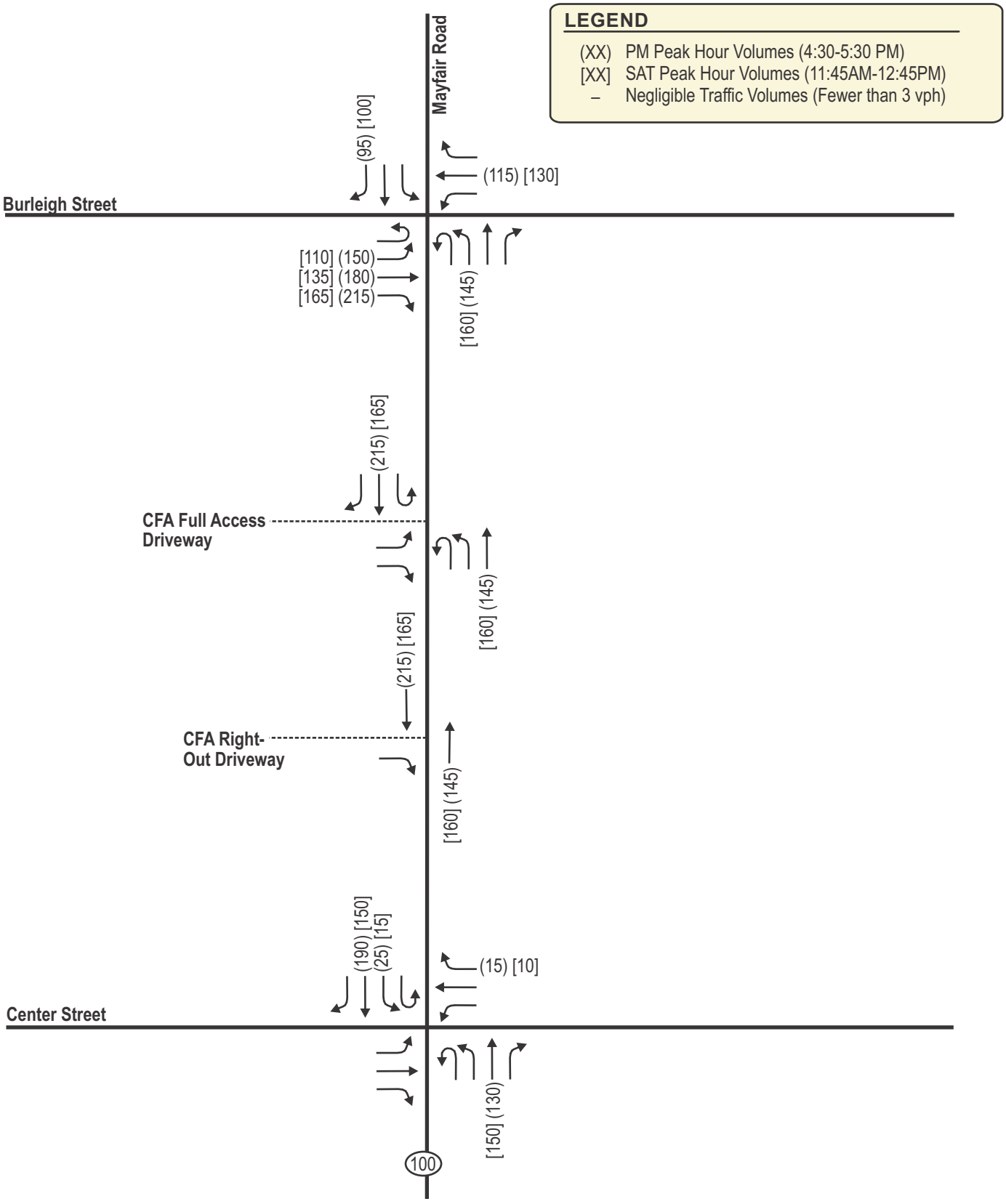

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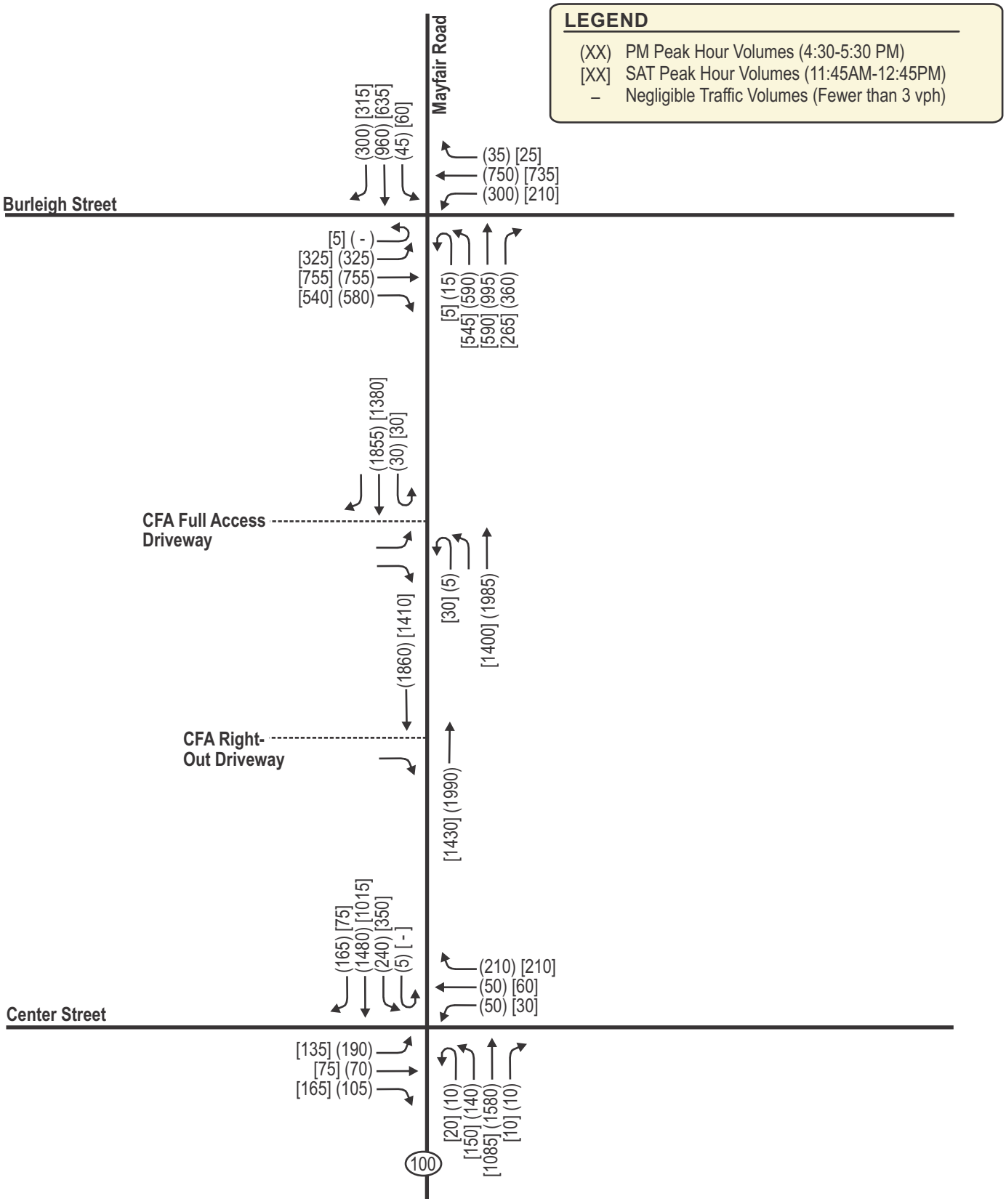
EXHIBIT 4-8B
OFF-SITE DEVELOPMENT NEW TRIPS
BURLEIGH STREET DEVELOPMENTS
(JUNE 15, 2020 WAUWATOSA FULFILLMENT CENTER TIA)

WAUWATOSA, WISCONSIN



TADI TRAFFIC ANALYSIS & DESIGN, INC.

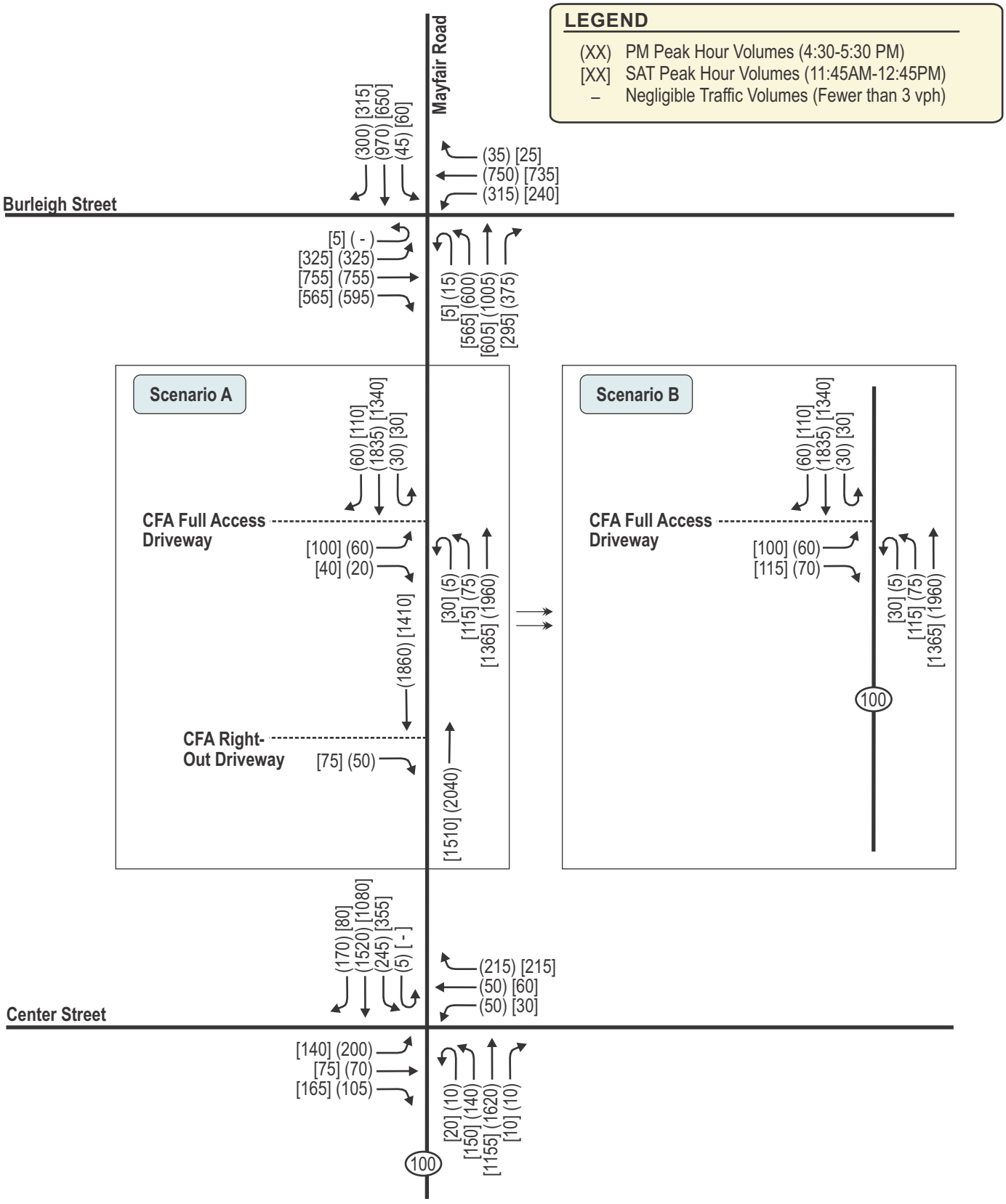
#2923 - 10/28/22

N

NOT TO SCALE

EXHIBIT 4-11
YEAR 2023 BUILD TRAFFIC VOLUMES

WAUWATOSA, WISCONSIN



TADI TRAFFIC ANALYSIS & DESIGN, INC.

#2923 - 10/28/22

N

NOT TO SCALE

EXHIBIT 4-14
YEAR 2023 TOTAL TRAFFIC VOLUMES

WAUWATOSA, WISCONSIN

CHAPTER V – TRAFFIC AND IMPROVEMENT ANALYSIS

PART A – SITE ACCESS

Access to the Chick-Fil-A development is proposed at the following locations:

- Full-access driveway to STH 100, directly across from the median opening north of Center Street.
- Right-out driveway to STH 100, approximately 110 feet south of the Chick-Fil-A full-access driveway. This driveway will primarily be used by drive-through customers exiting the site, reducing the congesting and traffic queues at the exit to the full-access driveway.

This study evaluates two access scenarios for the Chick-Fil-A site: Scenario A includes site access at both the full-access driveway and the right-out driveway; Scenario B evaluates traffic at only the full-access driveway.

PART B – CAPACITY/LEVEL OF SERVICE ANALYSIS

B1. Build & Total Traffic Operating Conditions – *Existing Transportation System*

The Build and Total traffic analyses were completed with the existing geometrics and traffic control at the study intersections, plus a separate left-turn and right-turn lane exiting the Chick-Fil-A full-access driveway. The Year 2023 Build traffic capacity analysis tables are shown on Exhibit 5-3 and the corresponding Synchro capacity analysis worksheets are in Appendix C. The Year 2023 Total traffic capacity analysis tables are shown on Exhibit 5-6 and the corresponding Synchro capacity analysis worksheets are in Appendix D.

With the additional traffic from the off-site developments (Year 2023 Build traffic volumes), the STH 100 intersection with Burleigh Street operates with increased delays and queues compared to the Year 2023 Background traffic condition. Several movements at this intersection operate over capacity during the peak hours, and with queues that exceed the amount of available turn lane storage. The STH 100 intersection with Center Street is expected to operate with increased delays, but under capacity for all movements during the peak hours. Traffic operations for movements on STH 100 are expected to continue to operate at LOS D or better.

With the additional traffic from the proposed Chick-Fil-A restaurant (Year 2023 Total traffic volumes), only minor additional increases to the delays and queues are expected during the peak hours. The Chick-Fil-A right-out driveway to STH 100 (Scenario A) operates with eastbound right-turn movements at LOS B during the peak hours.

With two-vehicle storage/two-stage turning movements and considerations for signal coordination along STH 100, the analysis for the Chick-Fil-A full-access driveway to STH 100 is reported as LOS C or better during the peak hours for both access Scenario A and B. Depending on the arrival patterns from the adjacent signals, actual delays could be higher during the peak hours. This study conservatively estimates that all traffic exiting to the north on STH 100 makes a left-turn at the full-access driveway, but in reality, many may choose to turn right first and then make a U-turn movement at a downstream intersection or median opening. If more traffic makes a right-turn to exit the site instead of a left-turn, then the potential for congestion at the full-access driveway is lessened. Access Scenario A would encourage more traffic to make a right-turn at the exit as it is positioned directly in front of the drive-through exit lane and provides a convenient exit location that doesn't require navigating back to the full-access driveway location.

B2. Build & Total Traffic Operating Conditions – *Modified Transportation System*

The *June 15, 2020 Fulfillment Center TIA* proposes signal and lane modifications to the STH 100 intersection with Burleigh Street that increases capacity so that all v/c ratios are less than 1.0, reduces overall intersection delay, and reduces queues for some critical turning movements. Even with these modifications, many movements at the intersection continue to operate at LOS E and F during the weekday PM and Saturday midday peak hours. These same signal and lane modifications were evaluated with the Year 2023 Build and Total traffic volumes in this study.

Even though eastbound and westbound movements at the STH 100 intersection with Center Street operate at LOS E during the peak hours, no modifications to this intersection were included in this study. The LOS E conditions are due to the long cycle length (150 seconds) and priority for STH 100 movements and adjusting the green splits or adding turn lanes do not improve operations to acceptable levels. All traffic movements at this intersection operate below capacity and except for the eastbound approach, which is restricted by the adjacent railroad bridge, all queues are within the amount of available turn lane storage.

The Year 2023 Build traffic capacity analysis tables with these modifications are shown on Exhibit 5-12 and the corresponding Synchro capacity analysis worksheets are in Appendix F. The Year 2023 Total traffic capacity analysis tables with these modifications are shown on Exhibit 5-15 and the corresponding Synchro capacity analysis worksheets are in Appendix G.

PART C – QUEUEING ANALYSIS

A queues analysis was completed to estimate storage length requirements for turn bays at the study area intersections with modifications. The 50th percentile and 95th percentile probable queue lengths were used in conjunction with WisDOT Facilities Development Manual (FDM) 11-25-5 to determine the recommended turn bay storage at WisDOT intersections and to ensure turn lanes are sufficient to store traffic queues at City intersections. The expected maximum queue lengths are shown in tabular format with the LOS tables in Exhibits 3-3 and Exhibits 5-3 through 5-15. Queue analysis worksheets are included in Appendix A.

PART D – PEDESTRIAN, BICYCLE AND MULTI-USE TRAIL CONSIDERATIONS

Pedestrian/multi-modal accommodations with connectivity to the roadway network are encouraged to promote alternative modes of transportation and relieve motorized-vehicle demands on the roadway network.

PART E – SPEED CONSIDERATIONS/SIGHT DISTANCE

The party responsible for designing the intersections will be responsible for cross-checking, verifying, and designing for all applicable sight distances. Site observation indicates that intersection sight distance (ISD) is expected to be met. ISD must be double checked during the permit application stage of development.

PART F – TRAFFIC CONTROL NEEDS

The STH 100 intersections with Burleigh Street and Center Street currently operate with adaptive traffic signal control that coordinate movements along STH 100. With additional traffic volumes from the off-site developments, installing an eastbound right-turn protected overlap phase at the STH 100/Burleigh Street intersection will help lower delays and queues for that movement. Based on the Synchro/HCS traffic analysis, stop-sign control at the proposed Chick-Fil-A driveways to STH 100 provide acceptable traffic operations during the peak hours.

PART G – TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrant studies are based on traffic volume warrants from the *Manual on Uniform Traffic Control Devices* (MUTCD). Chapter 4C of the MUTCD outlines the standards for

determining the need for traffic signals at a particular location. Even though acceptable peak hour traffic operations are reported for the Chick-Fil-A full-access driveway to STH 100, a signal warrant analysis was completed to determine if signals are warranted with buildout of this on-site development.

MUTCD Warrants 1, 2, and 3 were compared to hourly traffic volumes that include the existing hourly traffic volume counts, plus additional hourly traffic expected from buildout of the Chick-Fil-A development site. It was not necessary to include additional traffic from buildout of the off-site developments as the through volumes on STH 100 are already high enough to meet major traffic volume thresholds for these warrants.

The speed limit on STH 100 is 40 mph; therefore, the warrant analysis was evaluated against the 100% volume thresholds. Following MUTCD recommendations for minor streets, the Chick-Fil-A full-access driveway right-turn lane was evaluated with zero percent right-turn volumes. With these parameters, none of the MUTCD warrants are expected to be met at the STH 100 intersection with the Chick-Fil-A full-access driveway. The traffic signal warrant analysis volumes and worksheets are in Appendix I.

Year 2023 Build Traffic Peak Hour Operating Conditions

Existing Transportation System

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*2*	*1*	*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	F	D	E	E	E	D	F	F		D	D		E
		Delay	82	49	79	75	59	42	192	82		52	52		77
		v/c	0.89	0.60	0.93	0.87	0.87	0.06	1.23	0.87		0.08	0.75		
		Queue	250'	290'	550'	205'	450'	40'	525'	585'		45'	570'		
	SAT	LOS	F	E	F	E	E	C	F	D		E	D		F
		Delay	90	58	121	58	60	25	305	45		73	38		87
		v/c	0.91	0.78	1.12	0.43	0.91	0.04	1.49	0.38		0.58	0.53		
		Queue	225'	295'	505'	140'	430'	30'	525'	335'		55'	395'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	D	D		E	E	E	C	C		C	B		C
		Delay	53	49		64	63	56	34	23		27	12		23
		v/c	0.62	0.46		0.33	0.30	0.50	0.32	0.56		0.87	0.75		
		Queue	240'	225'		100'	95'	155'	160'	590'		195'	315'		
	SAT	LOS	D	E		E	E	E	C	B		C	D		C
		Delay	54	57		67	64	55	27	17		20	38		32
		v/c	0.52	0.72		0.26	0.37	0.47	0.30	0.35		0.78	0.45		
		Queue	175'	310'		65'	110'	165'	90'	295'		235'	310'		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.

Year 2023 Total Traffic Peak Hour Operating Conditions

Existing Transportation System

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Node 100: Mayfair Road & Burleigh Street		*Lanes->*	*2*	*3*	*1*	*2*	*2*	*1*	*2*	*3>*		*2*	*3>*		
Traffic Signal Control	PM	LOS	F	D	F	E	E	D	F	F		D	E		E
		Delay	82	49	80	76	57	41	201	84		54	55		79
		v/c	0.89	0.59	0.94	0.88	0.84	0.06	1.25	0.89		0.09	0.78		
		Queue	250'	290'	570'	215'	450'	40'	540'	605'		45'	575'		
	SAT	LOS	F	E	F	E	E	C	F	D		E	D		F
		Delay	90	58	142	59	60	25	328	46		73	38		91
		v/c	0.91	0.78	1.17	0.49	0.91	0.04	1.54	0.41		0.58	0.53		
		Queue	225'	295'	540'	155'	430'	30'	565'	285'		55'	405'		
Node 200: Mayfair Road & Center Street		*Lanes->*	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Traffic Signal Control	PM	LOS	D	D		E	E	E	D	C		C	B		C
		Delay	52	48		64	63	56	36	24		31	12		23
		v/c	0.62	0.45		0.33	0.30	0.50	0.33	0.58		0.90	0.77		
		Queue	250'	225'		100'	95'	155'	165'	615'		205'	375'		
	SAT	LOS	D	E		E	E	D	C	B		C	C		C
		Delay	54	56		67	64	54	27	18		25	29		29
		v/c	0.53	0.71		0.25	0.36	0.47	0.30	0.38		0.82	0.48		
		Queue	175'	310'		65'	110'	170'	90'	320'		310'	330'		
Scenario A (Two Site Driveways to Mayfair Road)															
Node 300: Mayfair Road & Chick-Fil-A Full-Access Driveway		*Lanes->*	*1*	-	*1*	-			*1*	*3*		*1*	*3>*		
Stop Sign Control (EB)	PM	LOS	C	-	B	-			B	*		A	*		A
		Delay	18	-	12	-			11	*		9	*		0.7
		v/c	0.20	-	0.04	-			0.14	*		0.04	*		
		Queue	20'	-	5'	-			15'	*		5'	*		
Scenario A	SAT	LOS	C	-	B	-			B	*		A	*		A
		Delay	16	-	11	-			10	*		8	*		1
		v/c	0.25	-	0.07	-			0.19	*		0.03	*		
		Queue	25'	-	5'	-			20'	*		5'	*		
Node 3400: Mayfair Road & Chick-Fil-A Right-Out Only Driveway		*Lanes->*	-	-	*1*	-			-	*3*		-	*3*		
Stop Sign Control (EB)	PM	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	13	-			-	*		-	*		0.2
		v/c	-	-	0.11	-			-	*		-	*		
		Queue	-	-	10'	-			-	*		-	*		
Scenario A	SAT	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	12	-			-	*		-	*		0.3
		v/c	-	-	0.13	-			-	*		-	*		
		Queue	-	-	15'	-			-	*		-	*		
Scenario B (One Site Driveway to Mayfair Road)															
Node 300: Mayfair Road & Chick-Fil-A Full-Access Driveway		*Lanes->*	*1*	-	*1*	-			*1*	*3*		*1*	*3>*		
Stop Sign Control (EB)	PM	LOS	C	-	B	-			B	*		A	*		A
		Delay	18	-	13	-			11	*		9	*		0.9
		v/c	0.19	-	0.15	-			0.14	*		0.04	*		
		Queue	20'	-	15'	-			15'	*		5'	*		
Scenario B	SAT	LOS	C	-	B	-			B	*		A	*		A
		Delay	16	-	12	-			10	*		8	*		1
		v/c	0.25	-	0.19	-			0.19	*		0.03	*		
		Queue	25'	-	20'	-			20'	*		5'	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.

TRAFFIC ANALYSIS & DESIGN, INC.

#2923 - 10/28/22

EXHIBIT 5-6
YEAR 2023 TOTAL TRAFFIC CAPACITY/LOS & QUEUES
EXISTING TRANSPORTATION SYSTEM

WAUWATOSA, WISCONSIN

Year 2023 Build Traffic Peak Hour Operating Conditions

With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	C	E	E		F	E		E	D		E
		Delay	76	67	20	72	78		86	60		55	46		60
		v/c	0.88	0.88	0.65	0.85	0.89		0.93	0.67		0.09	0.69		
		Queue	220'	320'	235'	205'	335'		420'	500'		45'	570'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	65	77		81	39		73	39		55
		v/c	0.89	0.87	0.63	0.60	0.89		0.92	0.34		0.58	0.54		
		Queue	225'	315'	200'	150'	325'		220'	235'		55'	400'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	D	D		E	E	E	C	C		C	B		C
		Delay	53	49		64	63	56	34	23		27	12		23
		v/c	0.62	0.46		0.33	0.30	0.50	0.32	0.56		0.87	0.75		
		Queue	240'	225'		100'	95'	155'	160'	590'		195'	315'		
	SAT	LOS	D	E		E	E	E	C	B		C	D		C
		Delay	54	57		67	64	55	27	17		20	38		32
		v/c	0.52	0.72		0.26	0.37	0.47	0.30	0.35		0.78	0.45		
		Queue	175'	310'		65'	110'	165'	90'	295'		235'	310'		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.

Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*		*Lanes->*	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		435'	490'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		275'	195'		55'	410'		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*		*Lanes->*	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
	PM	LOS	D	D		E	E	E	D	C		C	B		C
		Delay	52	48		64	63	56	36	24		31	12		23
		v/c	0.62	0.45		0.33	0.30	0.50	0.33	0.58		0.90	0.77		
		Queue	250'	225'		100'	95'	155'	165'	615'		265'	340'		
	SAT	LOS	D	E		E	E	D	C	B		C	C		C
		Delay	54	56		67	64	54	27	18		25	29		29
		v/c	0.53	0.71		0.25	0.36	0.47	0.30	0.38		0.82	0.48		
		Queue	175'	310'		65'	110'	170'	90'	320'		345'	305'		
Scenario A (Two Site Driveways to Mayfair Road)															
Node 300: Mayfair Road & Chick-Fil-A Full-Access Driveway *Stop Sign Control (EB)* Scenario A		*Lanes->*	*1*	-	*1*	-			*1*	*3*		*1*	*3>*		
	PM	LOS	C	-	B	-			B	*		A	*		A
		Delay	18	-	12	-			11	*		9	*		0.7
		v/c	0.20	-	0.04	-			0.14	*		0.04	*		
		Queue	20'	-	5'	-			15'	*		5'	*		
	SAT	LOS	C	-	B	-			B	*		A	*		A
		Delay	16	-	11	-			10	*		8	*		1
		v/c	0.25	-	0.07	-			0.19	*		0.03	*		
		Queue	25'	-	5'	-			20'	*		5'	*		
Node 3400: Mayfair Road & Chick-Fil-A Right-Out Only Driveway *Stop Sign Control (EB)* Scenario A		*Lanes->*	-	-	*1*	-			-	*3*		-	*3*		
	PM	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	13	-			-	*		-	*		0.2
		v/c	-	-	0.11	-			-	*		-	*		
		Queue	-	-	10'	-			-	*		-	*		
	SAT	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	12	-			-	*		-	*		0.3
		v/c	-	-	0.13	-			-	*		-	*		
		Queue	-	-	15'	-			-	*		-	*		
Scenario B (One Site Driveway to Mayfair Road)															
Node 300: Mayfair Road & Chick-Fil-A Full-Access Driveway *Stop Sign Control (EB)* Scenario B		*Lanes->*	*1*	-	*1*	-			*1*	*3*		*1*	*3>*		
	PM	LOS	C	-	B	-			B	*		A	*		A
		Delay	18	-	13	-			11	*		9	*		0.9
		v/c	0.19	-	0.15	-			0.14	*		0.04	*		
		Queue	20'	-	15'	-			15'	*		5'	*		
	SAT	LOS	C	-	B	-			B	*		A	*		A
		Delay	16	-	12	-			10	*		8	*		1
		v/c	0.25	-	0.19	-			0.19	*		0.03	*		
		Queue	25'	-	20'	-			20'	*		5'	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.

TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 10/28/22

EXHIBIT 5-15
YEAR 2023 TOTAL TRAFFIC CAPACITY/LOS & QUEUES
MODIFIED TRANSPORTATION SYSTEM

WAUWATOSA, WISCONSIN

CHAPTER VI – RECOMMENDATIONS AND CONCLUSION

PART A – RECOMMENDATIONS

Modifications to address traffic impacts are split into two categories:

- "Off-Site Development Traffic" are modifications recommended to accommodate traffic volumes generated by the Campbell Apartments and Burleigh Street off-site developments.
- "Chick-Fil-A Traffic" are modifications recommended to accommodate traffic volumes generated by the proposed Chick-Fil-A restaurant on STH 100.

Recommended modifications are for jurisdictional consideration and are not legally binding. WisDOT and the City of Wauwatosa reserve the right to determine alternative solutions.

STH 100 & Burleigh Street

- Off-Site Development Traffic: Implement the modifications recommended in the *June 15, 2020 Fulfillment Center TIA*.
    - Extend the Burleigh Street eastbound dual-left-turn lanes as far west as practical to avoid the railroad bridge pier.
    - Redesignate the Burleigh Street westbound right-turn lane as a shared through/right-turn lane.
    - Install eastbound protected-overlap right-turn indications. The overlap will operate concurrently with both the eastbound through and northbound left-turn indications. If an eastbound protected-overlap right-turn indication is not installed, the eastbound right-turn movement is expected to either operate at LOS F with the one right-turn lane or require dual right-turn lanes to obtain acceptable operations.
- Chick-Fil-A Traffic: No additional modifications.

STH 100 & Center Street

- Off-Site Development Traffic: No modifications
- Chick-Fil-A Traffic: No modifications.

STH 100 & Chick-Fil-A Full-Access Driveway (Scenario A and Scenario B)

- Off-Site Development Traffic: N/A
- Chick-Fil-A Traffic:
    - Provide one full-access driveway directly across from the median opening north of Center Street.
    - Construct the eastbound driveway approach to STH 100 with one entering lane and two exiting lanes striped for left-turn and right-turn movements.
    - Install stop sign control on the eastbound driveway approach to STH 100.

STH 100 & Chick-Fil-A Right-Out Driveway (Scenario A)*

- Off-Site Development Traffic: N/A
- Chick-Fil-A Traffic:
    - Provide one right-out driveway approximately 110 feet south of the Chick-Fil-A full-access driveway.

- Construct the eastbound driveway approach to STH 100 with one exiting lane striped for right-turn movements.
- Install stop sign control on the eastbound driveway approach to STH 100.

*Access Scenario A is recommended for the Chick-Fil-A development site. By providing a right-out only driveway to STH 100, drive-through traffic exiting the site will not have to navigate back to the full-access driveway and add to the delays and queues exiting left onto STH 100. With an exit directly across from the drive-through lane, more drive-through traffic heading north on STH 100 will be encouraged to exit first as a right-turn movement and then U-turn at a downstream intersection or median opening.

Without this lane, all drive-through traffic must exit to the full-access driveway, which has a stacking distance less than one vehicle length between the stop bar and the curb for the westbound-only lane along the north side of the restaurant. Depending on the amount of exiting traffic from the parking area, drive-through traffic therefore may not have room to enter the queue and exit at the full-access driveway, potentially resulting in backups and blockages through the drive-through lanes.

PART B – CONCLUSIONS

The recommendations noted above are expected to accommodate off-site and on-site development traffic movements and volumes proposed for the study area.

APPENDIX A

TRAFFIC VOLUMES

Existing Traffic Counts
Summary of PHF and Percent Heavy Vehicles

Intersection Traffic Volume Report

Count Basics	Version 2011.M3		Page 1 of 13
Start Date:	Wednesday, October 16, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Base Information, Observed (13) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 / Mayfair Rd & W. Burleigh St

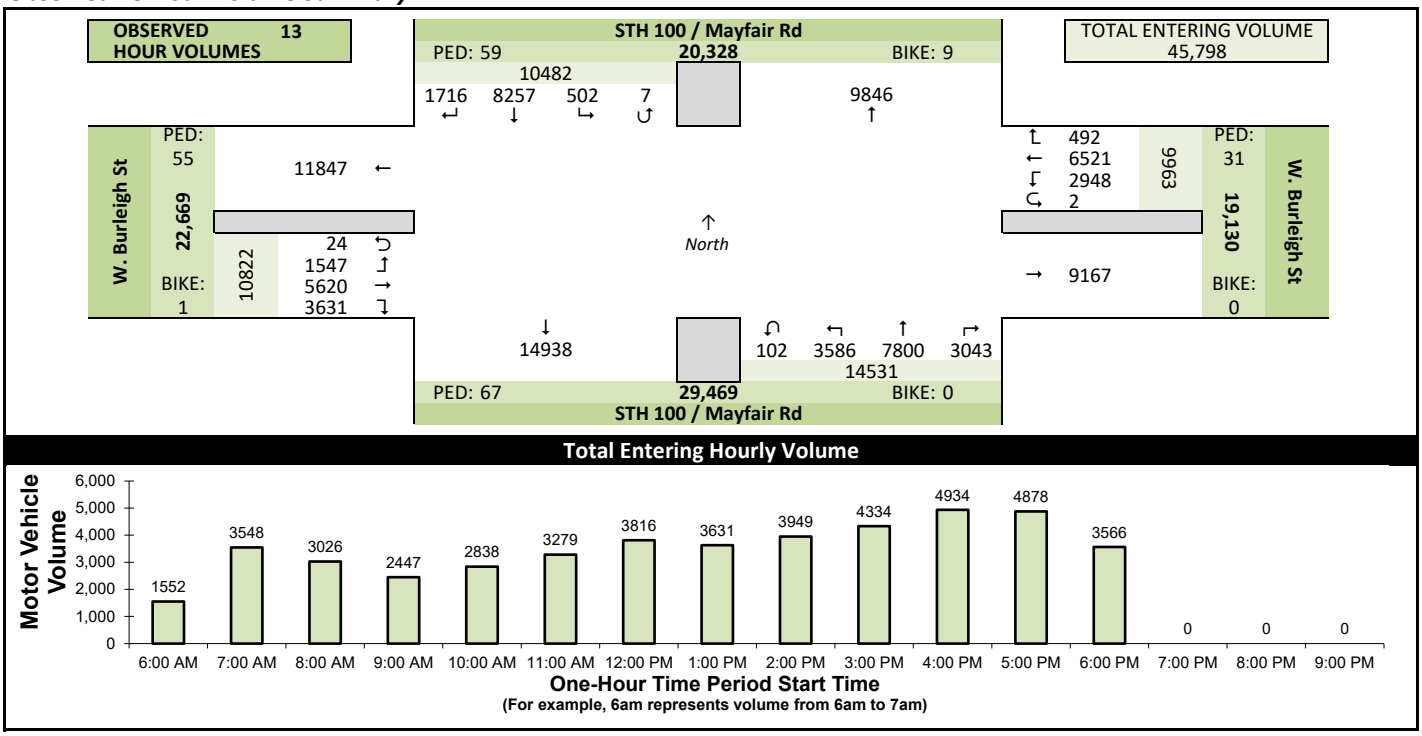
Site Information

Municipality	City of Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Traffic Signal		
Roadway Names		North Direction	↑
North Leg	STH 100 / Mayfair Rd		
East Leg	W. Burleigh St		
South Leg	STH 100 / Mayfair Rd		
West Leg	W. Burleigh St		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

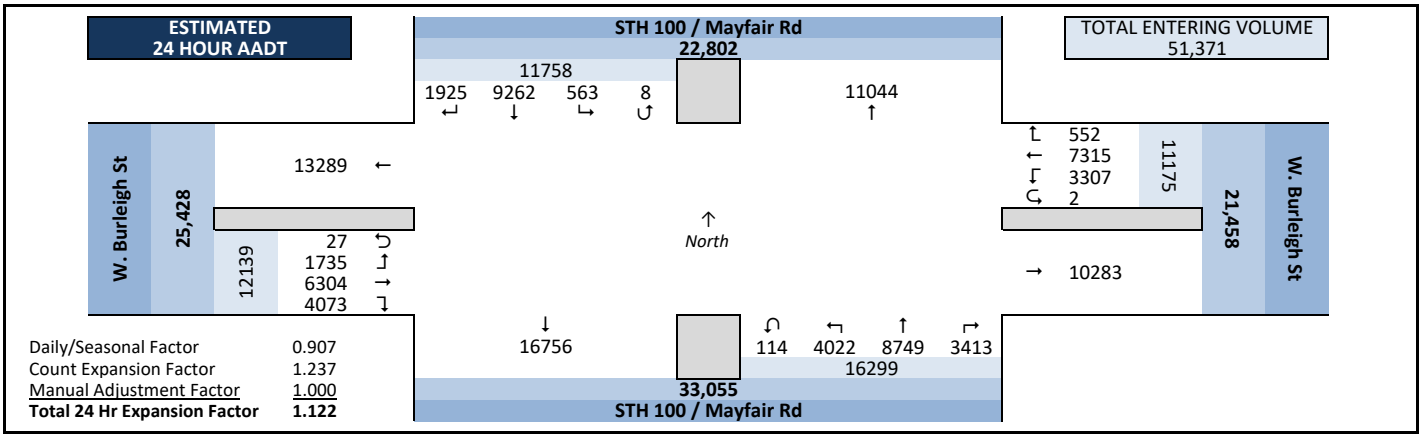
Count Information

Hrs Counted:	6:00 AM-7:00 PM				
1st Day of Count	Wednesday, October 16, 2019			Weather	
AM Peak Period	Wednesday, October 16, 2019			Clear & Dry	
Midday Peak Period	Wednesday, October 16, 2019			Clear & Dry	
PM Peak Period	Wednesday, October 16, 2019			Clear & Dry	
Calculated Peak Hours					
AM	7:15-8:15am	MD	12:15-1:15pm	PM	4:30-5:30pm
Peak Hours Selected for Analysis					
AM	7:15-8:15am	MD	12:15-1:15pm	PM	4:30-5:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	0.907	Count Expansion Factor	1.237		
Company Name	OD Data Solution Professionals			Manual Adj.	1.000
Observers	AM Peak Period	OD Data Solution Video Recording			
	Midday Peak Period	OD Data Solution Video Recording			
	PM Peak Period	OD Data Solution Video Recording			
Comments	2018 DOT Seasonal Factors				

Observed 13 Hour Volume Summary



Estimated 24 Hour AADT



Daily/Seasonal Factor	0.907
Count Expansion Factor	1.237
Manual Adjustment Factor	1.000
Total 24 Hr Expansion Factor	**1.122**

Intersection Traffic Volume Report

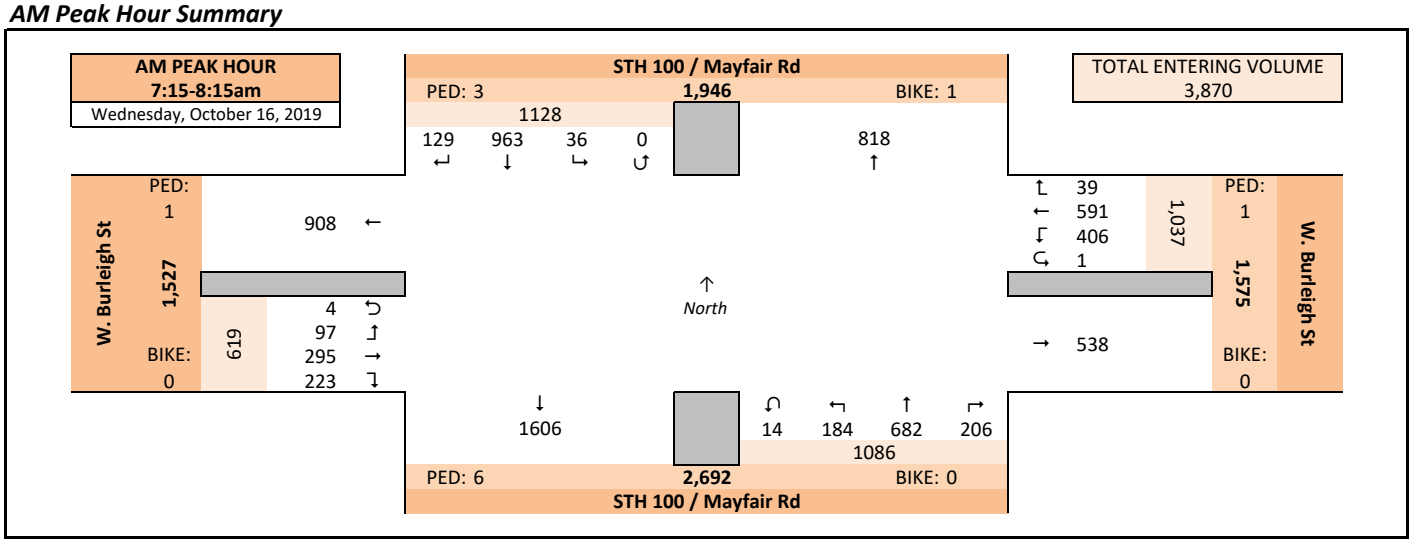
Count Basics			Page 2 of 13
Start Date:	Wednesday, October 16, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

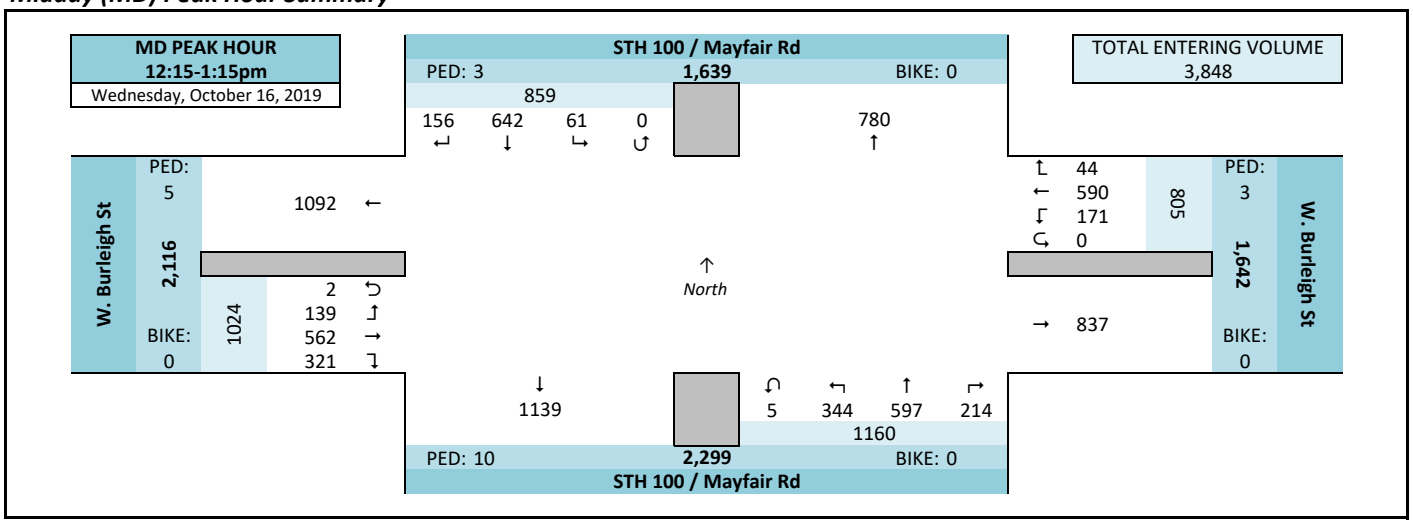
STH 100 / Mayfair Rd & W. Burleigh St

All Motor Vehicles

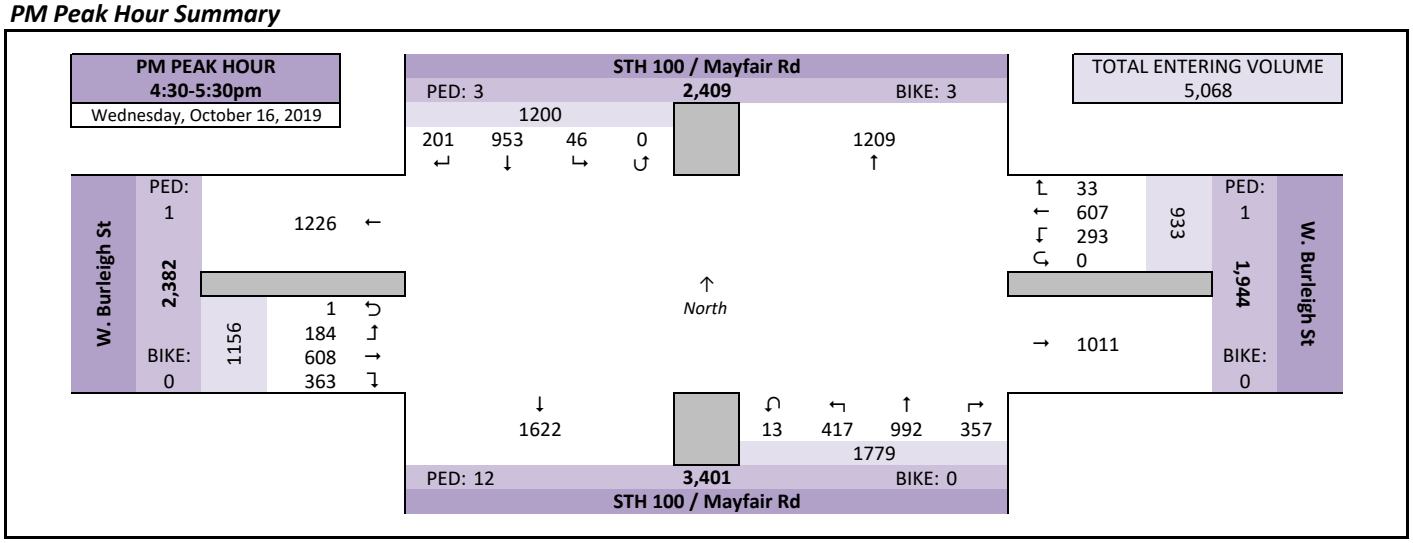
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			*Page 3 of 13*
Start Date:	Wednesday, October 16, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 / Mayfair Rd & W. Burleigh St

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Wednesday, October 16, 2019		From North					From East					From South					From West					
	AM Peak Hour	STH 100 / Mayfair Rd					W. Burleigh St					STH 100 / Mayfair Rd					W. Burleigh St					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	7:15 AM	28	209	5	0	242	11	137	83	0	231	38	161	36	2	237	31	73	9	0	113	823
	7:30 AM	31	241	6	0	278	8	161	152	1	322	53	151	40	4	248	52	74	27	2	155	1003
	7:45 AM	41	306	7	0	354	11	174	97	0	282	57	194	59	6	316	74	88	28	2	192	1144
	8:00 AM	29	207	18	0	254	9	119	74	0	202	58	176	49	2	285	66	60	33	0	159	900
	Peak Hour Volume	129	963	36	0	1128	39	591	406	1	1037	206	682	184	14	1086	223	295	97	4	619	3870
	Rounded Hourly Volume	130	965	35	0	1130	40	590	405	0	1035	205	680	185	15	1085	225	295	95	5	620	3870
	% Single Unit Trucks	0.8	1.1	8.3	0.0	1.3	2.6	0.2	1.0	0.0	0.6	3.9	3.4	6.5	0.0	4.0	4.9	5.1	1.0	0.0	4.4	2.4
	% Heavy Trucks	0.8	0.6	0.0	0.0	0.6	5.1	0.2	0.2	0.0	0.4	0.0	0.4	0.5	0.0	0.4	0.4	0.3	0.0	0.0	0.3	0.4
	% Trucks (Total)	1.6	1.8	8.3	0.0	2.0	7.7	0.3	1.2	0.0	1.0	3.9	3.8	7.1	0.0	4.3	5.4	5.4	1.0	0.0	4.7	2.8
	Peak Hour Factor (PHF)	0.79	0.79	0.50	0.00	0.80	0.89	0.85	0.67	0.25	0.81	0.89	0.88	0.78	0.58	0.86	0.75	0.84	0.73	0.50	0.81	0.85

Wednesday, October 16, 2019		From North					From East					From South					From West					
	MD Peak Hour	STH 100 / Mayfair Rd					W. Burleigh St					STH 100 / Mayfair Rd					W. Burleigh St					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:15 PM	43	154	13	0	210	6	139	29	0	174	60	156	87	0	303	78	171	39	0	288	975
	12:30 PM	40	160	15	0	215	9	136	56	0	201	51	138	96	0	285	80	139	36	1	256	957
	12:45 PM	32	188	15	0	235	15	142	40	0	197	44	153	74	1	272	66	124	33	1	224	928
	1:00 PM	41	140	18	0	199	14	173	46	0	233	59	150	87	4	300	97	128	31	0	256	988
	Peak Hour Volume	156	642	61	0	859	44	590	171	0	805	214	597	344	5	1160	321	562	139	2	1024	3848
	Rounded Hourly Volume	155	640	60	0	855	45	590	170	0	805	215	595	345	5	1160	320	560	140	0	1020	3840
	% Single Unit Trucks	3.2	1.9	4.9	0.0	2.3	4.5	0.7	1.8	0.0	1.1	2.3	2.0	1.7	0.0	2.0	3.1	1.1	0.7	0.0	1.7	1.8
	% Heavy Trucks	0.0	0.3	0.0	0.0	0.2	0.0	0.3	0.0	0.0	0.2	0.0	0.5	0.6	0.0	0.4	0.9	0.2	0.0	0.0	0.4	0.3
	% Trucks (Total)	3.2	2.2	4.9	0.0	2.6	4.5	1.0	1.8	0.0	1.4	2.3	2.5	2.3	0.0	2.4	4.0	1.2	0.7	0.0	2.1	2.1
	Peak Hour Factor (PHF)	0.91	0.85	0.85	0.00	0.91	0.73	0.85	0.76	0.00	0.86	0.89	0.96	0.90	0.31	0.96	0.83	0.82	0.89	0.50	0.89	0.97

Wednesday, October 16, 2019		From North					From East					From South					From West					
	PM Peak Hour	STH 100 / Mayfair Rd					W. Burleigh St					STH 100 / Mayfair Rd					W. Burleigh St					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:30 PM	50	268	11	0	329	12	158	82	0	252	98	231	112	0	441	76	148	41	0	265	1287
	4:45 PM	48	243	9	0	300	11	130	56	0	197	76	252	96	5	429	93	142	49	0	284	1210
	5:00 PM	53	233	10	0	296	5	160	71	0	236	104	268	98	2	472	110	144	55	0	309	1313
	5:15 PM	50	209	16	0	275	5	159	84	0	248	79	241	111	6	437	84	174	39	1	298	1258
	Peak Hour Volume	201	953	46	0	1200	33	607	293	0	933	357	992	417	13	1779	363	608	184	1	1156	5068
	Rounded Hourly Volume	200	955	45	0	1200	35	605	295	0	935	355	990	415	15	1775	365	610	185	0	1160	5070
	% Single Unit Trucks	0.5	1.6	0.0	0.0	1.3	0.0	0.7	1.7	0.0	1.0	1.1	1.5	0.7	0.0	1.2	0.8	0.5	0.5	0.0	0.6	1.1
	% Heavy Trucks	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.2	0.6	0.0	0.0	0.0	0.2	0.2
	% Trucks (Total)	0.5	1.9	0.0	0.0	1.6	0.0	0.7	1.7	0.0	1.0	1.4	1.7	0.7	0.0	1.4	1.4	0.5	0.5	0.0	0.8	1.2
	Peak Hour Factor (PHF)	0.95	0.89	0.72	0.00	0.91	0.69	0.95	0.87	0.00	0.93	0.86	0.93	0.93	0.54	0.94	0.82	0.87	0.84	0.25	0.94	0.96

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 / Mayfair Rd			W. Burleigh St			STH 100 / Mayfair Rd			W. Burleigh St			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	7:15 AM	1	0	1	0	0	0	3	0	3	0	0	0	4
	7:30 AM	2	0	2	0	0	0	2	0	2	1	0	1	5
	7:45 AM	0	1	1	1	0	1	1	0	1	0	0	0	3
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3	1	4	1	0	1	6	0	6	1	0	1	12
MD	12:15 PM	0	0	0	1	0	1	6	0	6	1	0	1	8
	12:30 PM	1	0	1	1	0	1	2	0	2	0	0	0	4
	12:45 PM	0	0	0	1	0	1	2	0	2	0	0	0	3
	1:00 PM	2	0	2	0	0	0	0	0	0	4	0	4	6
	Total	3	0	3	3	0	3	10	0	10	5	0	5	21
PM	4:30 PM	2	1	3	0	0	0	7	0	7	1	0	1	11
	4:45 PM	1	2	3	0	0	0	5	0	5	0	0	0	8
	5:00 PM	0	0	0	1	0	1	0	0	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	3	3	6	1	0	1	12	0	12	1	0	1	20

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Wednesday, October 16, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 / Mayfair Rd & W. Burleigh St

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 / Mayfair Rd					From East (←) W. Burleigh St					From South (↑) STH 100 / Mayfair Rd					From West (→) W. Burleigh St					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	10	59	1	0	70	1	52	24	0	77	11	42	12	1	66	11	43	7	0	61	274	1552	0.75
	6:15 AM	11	82	2	0	95	1	55	17	0	73	11	57	20	0	88	24	37	8	0	69	325	1856	0.80
	6:30 AM	23	95	4	0	122	0	67	51	1	119	29	60	16	0	105	22	57	8	0	87	433	2354	0.72
	6:45 AM	31	95	5	0	131	5	80	68	0	153	27	83	23	0	133	44	48	11	0	103	520	2924	0.73
	7:00 AM	17	144	3	1	165	13	98	43	0	154	29	110	21	3	163	40	45	11	0	96	578	3548	0.78
	7:15 AM	28	209	5	0	242	11	137	83	0	231	38	161	36	2	237	31	73	9	0	113	823	3870	0.85
	7:30 AM	31	241	6	0	278	8	161	152	1	322	53	151	40	4	248	52	74	27	2	155	1003	3826	0.84
	7:45 AM	41	306	7	0	354	11	174	97	0	282	57	194	59	6	316	74	88	28	2	192	1144	3558	0.78
	8:00 AM	29	207	18	0	254	9	119	74	0	202	58	176	49	2	285	66	60	33	0	159	900	3026	0.84
	8:15 AM	8	182	6	1	197	19	110	56	0	185	68	154	32	3	257	47	78	15	0	140	779	2748	0.88
	8:30 AM	26	126	15	1	168	8	109	69	0	186	61	136	41	0	238	53	72	17	1	143	735	2526	0.86
	8:45 AM	25	105	4	0	134	19	84	43	0	146	43	110	34	3	190	53	67	22	0	142	612	2411	0.97
	9:00 AM	25	126	7	0	158	7	85	52	0	144	27	124	40	0	191	49	54	24	2	129	622	2447	0.94
	9:15 AM	15	106	5	0	126	6	72	51	0	129	39	79	41	0	159	33	84	26	0	143	557	2473	0.95
	9:30 AM	12	95	10	0	117	16	83	59	0	158	38	99	47	0	184	52	90	18	1	161	620	2625	0.93
	9:45 AM	18	107	9	0	134	4	94	61	0	159	39	91	32	0	162	66	103	24	0	193	648	2753	0.92
Midday Peak Period	10:00 AM	30	113	10	0	153	24	81	33	0	138	42	62	63	2	169	67	99	22	0	188	648	2838	0.95
	10:15 AM	26	119	7	0	152	6	106	40	0	152	41	108	56	3	208	59	121	17	0	197	709	2922	0.98
	10:30 AM	24	147	7	0	178	14	115	42	0	171	46	94	55	0	195	74	109	21	0	204	748	3048	0.91
	10:45 AM	28	138	6	0	172	9	109	36	0	154	47	102	62	1	212	79	87	28	1	195	733	3149	0.93
	11:00 AM	17	124	10	0	151	9	96	42	0	147	41	90	79	4	214	83	107	30	0	220	732	3279	0.95
	11:15 AM	38	135	12	0	185	12	96	43	0	151	46	155	65	3	269	93	115	21	1	230	835	3503	0.92
	11:30 AM	36	71	9	0	116	7	128	56	0	191	48	159	75	2	284	105	124	29	0	258	849	3643	0.93
	11:45 AM	38	119	12	0	169	7	102	52	0	161	54	122	97	6	279	95	124	34	1	254	863	3751	0.96
	12:00 PM	45	148	9	0	202	3	149	40	0	192	42	154	97	0	293	83	155	31	0	269	956	3816	0.98
	12:15 PM	43	154	13	0	210	6	139	29	0	174	60	156	87	0	303	78	171	39	0	288	975	3848	0.97
	12:30 PM	40	160	15	0	215	9	136	56	0	201	51	138	96	0	285	80	139	36	1	256	957	3744	0.95
	12:45 PM	32	188	15	0	235	15	142	40	0	197	44	153	74	1	272	66	124	33	1	224	928	3687	0.93
	1:00 PM	41	140	18	0	199	14	173	46	0	233	59	150	87	4	300	97	128	31	0	256	988	3631	0.92
	1:15 PM	25	146	6	0	177	5	120	46	0	171	69	117	105	1	292	97	97	36	1	231	871	3597	0.94
	1:30 PM	35	143	12	0	190	7	127	55	0	189	66	118	98	4	286	88	121	26	0	235	900	3676	0.96
	1:45 PM	47	128	11	1	187	16	115	56	0	187	61	137	82	3	283	89	94	32	0	215	872	3867	0.89
PM Peak Period	2:00 PM	46	158	7	0	211	13	157	61	0	231	50	156	94	1	301	87	88	35	1	211	954	3949	0.90
	2:15 PM	54	133	6	0	193	9	127	62	0	198	66	163	87	1	317	79	115	45	3	242	950	4014	0.92
	2:30 PM	39	171	9	0	219	14	185	59	0	258	93	148	100	4	345	97	122	50	0	269	1091	4134	0.95
	2:45 PM	40	152	13	0	205	9	179	64	0	252	73	139	78	2	292	80	90	34	1	205	954	4186	0.92
	3:00 PM	32	209	10	0	251	15	163	42	0	220	66	185	77	0	328	70	114	36	0	220	1019	4334	0.95
	3:15 PM	47	252	14	0	313	11	113	50	0	174	68	181	88	0	337	60	149	37	0	246	1070	4541	0.93
	3:30 PM	27	265	15	0	307	8	154	67	0	229	77	197	84	0	358	68	148	32	1	249	1143	4682	0.95
	3:45 PM	37	226	13	0	276	11	163	49	0	223	71	205	97	0	373	62	136	32	0	230	1102	4826	0.94
	4:00 PM	46	208	15	0	269	7	173	74	0	254	97	242	94	2	435	87	143	38	0	268	1226	4934	0.96
	4:15 PM	43	241	23	0	307	24	153	55	0	232	101	253	86	0	440	68	119	45	0	232	1211	5021	0.96
	4:30 PM	50	268	11	0	329	12	158	82	0	252	98	231	112	0	441	76	148	41	0	265	1287	5068	0.96
	4:45 PM	48	243	9	0	300	11	130	56	0	197	76	252	96	5	429	93	142	49	0	284	1210	4976	0.95
	5:00 PM	53	233	10	0	296	5	160	71	0	236	104	268	98	2	472	110	144	55	0	309	1313	4878	0.93
	5:15 PM	50	209	16	0	275	5	159	84	0	248	79	241	111	6	437	84	174	39	1	298	1258	4604	0.91
	5:30 PM	53	219	14	0	286	5	148	70	0	223	97	199	86	10	392	86	174	34	0	294	1195	4341	0.91
	5:45 PM	53	193	11	3	260	4	120	70	0	194	87	166	96	10	359	96	158	45	0	299	1112	3948	0.89
	6:00 PM	13	112	6	0	131	8	176	70	0	254	86	199	90	0	375	91	149	38	1	279	1039	3566	0.86
	6:15 PM	42	116	7	0	165	8	155	56	0	219	69	236	65	0	370	69	125	47	0	241	995		
	6:30 PM	26	98	6	0	130	9	129	48	0	186	70	158	69	1	298	61	99	27	1	188	802		
	6:45 PM	22	93	8	0	123	3	105	46	0	154	70	139	57	0	266	57	95	34	1	187	730		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		1716	8257	502	7	10482	492	6521	2948	2	9963	3043	7800	3586	102	14531	3631	5620	1547	24	10822	45798		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 / Mayfair Rd					From East (←) W. Burleigh St					From South (↑) STH 100 / Mayfair Rd					From West (→) W. Burleigh St					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	7:15 AM	129	963	36	0	1128	39	591	406	1	1037	206	682	184	14	1086	223	295	97	4	619	3870	0.85
MD	12:15 PM	156	642	61	0	859	44	590	171	0	805	214	597	344	5	1160	321	562	139	2	1024	3848	0.97
PM	4:30 PM	201	953	46	0	1200	33	607	293	0	933	357	992	417	13	1779	363	608	184	1	1156	5068	0.96

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Wednesday, October 16, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 / Mayfair Rd & W. Burleigh St

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) STH 100 / Mayfair Rd					From East (←) W. Burleigh St					From South (↑) STH 100 / Mayfair Rd					From West (→) W. Burleigh St					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	3	0	5	1	2	0	0	3	8	40
	6:15 AM	0	1	0	0	1	0	0	0	0	0	1	1	2	0	4	2	0	3	0	5	10	59
	6:30 AM	1	4	2	0	7	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2	11	68
	6:45 AM	0	1	0	0	1	0	1	2	0	3	0	0	2	0	2	3	1	1	0	5	11	93
	7:00 AM	1	8	2	0	11	2	3	1	0	6	2	5	2	0	9	1	0	0	0	1	27	109
	7:15 AM	0	2	0	0	2	0	1	2	0	3	1	3	2	0	6	2	6	0	0	8	19	108
	7:30 AM	0	7	1	0	8	1	1	2	0	4	2	10	4	0	16	2	6	0	0	8	36	124
	7:45 AM	2	5	0	0	7	2	0	0	0	2	3	7	4	0	14	2	2	0	0	4	27	116
	8:00 AM	0	3	2	0	5	0	0	1	0	1	2	6	3	0	11	6	2	1	0	9	26	115
	8:15 AM	1	8	1	0	10	2	2	1	0	5	4	7	1	0	12	0	7	1	0	8	35	108
	8:30 AM	2	3	1	0	6	0	3	2	0	5	1	7	2	0	10	2	2	3	0	7	28	92
	8:45 AM	1	3	0	0	4	1	0	1	0	2	2	6	3	0	11	7	2	0	0	9	26	81
	9:00 AM	2	4	0	0	6	0	2	1	0	3	2	6	0	0	8	0	1	1	0	2	19	78
	9:15 AM	1	4	0	0	5	0	0	1	0	1	3	4	1	0	8	2	3	0	0	5	19	84
	9:30 AM	0	1	0	0	1	1	0	2	0	3	0	3	2	0	5	3	5	0	0	8	17	84
	9:45 AM	2	3	0	0	5	0	2	1	0	3	2	6	3	0	11	0	3	1	0	4	23	99
Midday Peak Period	10:00 AM	0	3	1	0	4	1	1	1	0	3	5	4	2	0	11	3	3	1	0	7	25	97
	10:15 AM	0	5	0	0	5	0	0	1	0	1	3	4	2	0	9	3	1	0	0	4	19	87
	10:30 AM	2	9	0	0	11	0	2	1	0	3	6	4	2	0	12	2	4	0	0	6	32	79
	10:45 AM	0	3	1	0	4	0	3	1	0	4	2	4	3	0	9	1	2	1	0	4	21	56
	11:00 AM	1	1	1	0	3	1	0	1	0	2	1	4	1	0	6	1	3	0	0	4	15	49
	11:15 AM	0	0	0	0	0	1	1	0	0	2	1	4	0	0	5	2	1	1	0	4	11	56
	11:30 AM	0	1	0	0	1	0	1	0	0	1	2	2	1	0	5	1	1	0	0	2	9	66
	11:45 AM	1	1	0	0	2	0	3	0	0	3	2	3	0	0	5	1	2	1	0	4	14	80
	12:00 PM	0	6	1	0	7	1	2	1	0	4	2	3	2	0	7	2	2	0	0	4	22	80
	12:15 PM	2	4	0	0	6	0	1	0	0	1	3	2	2	0	7	4	2	1	0	7	21	82
	12:30 PM	2	5	1	0	8	1	2	1	0	4	1	4	1	0	6	3	2	0	0	5	23	74
	12:45 PM	0	1	1	0	2	1	0	0	0	1	1	2	1	0	4	5	2	0	0	7	14	75
	1:00 PM	1	4	1	0	6	0	3	2	0	5	0	7	4	0	11	1	1	0	0	2	24	76
	1:15 PM	0	3	0	0	3	0	1	0	0	1	1	5	0	0	6	0	2	1	0	3	13	71
	1:30 PM	0	4	0	0	4	0	1	2	0	3	2	7	4	0	13	3	1	0	0	4	24	75
	1:45 PM	0	3	1	0	4	0	1	2	0	3	1	2	1	0	4	2	2	0	0	4	15	80
PM Peak Period	2:00 PM	1	7	0	0	8	2	1	0	0	3	2	3	1	0	6	1	0	1	0	2	19	84
	2:15 PM	2	4	0	0	6	1	2	2	0	5	1	1	1	0	3	2	1	0	0	3	17	86
	2:30 PM	1	12	0	0	13	1	6	0	0	7	1	5	3	0	9	0	0	0	0	0	29	90
	2:45 PM	1	2	1	0	4	0	3	1	0	4	1	3	2	0	6	4	1	0	0	5	19	78
	3:00 PM	1	6	0	0	7	1	1	1	0	3	4	2	0	0	6	4	0	1	0	5	21	74
	3:15 PM	1	3	0	0	4	2	2	2	0	6	2	2	1	0	5	2	3	1	0	6	21	73
	3:30 PM	1	3	0	0	4	0	1	1	0	2	0	5	4	0	9	1	1	0	0	2	17	66
	3:45 PM	1	3	0	0	4	0	2	3	0	5	2	0	2	0	4	2	0	0	0	2	15	64
	4:00 PM	0	6	0	0	6	0	1	5	0	6	2	4	2	0	8	0	0	0	0	0	20	63
	4:15 PM	0	3	0	0	3	1	0	1	0	2	1	7	0	0	8	1	0	0	0	1	14	63
	4:30 PM	0	5	0	0	5	0	1	2	0	3	1	4	1	0	6	1	0	0	0	1	15	62
	4:45 PM	0	5	0	0	5	0	0	1	0	1	1	4	1	0	6	1	1	0	0	2	14	68
	5:00 PM	1	5	0	0	6	0	2	1	0	3	2	5	0	0	7	1	2	1	0	4	20	61
	5:15 PM	0	3	0	0	3	0	1	1	0	2	1	4	1	0	6	2	0	0	0	2	13	52
	5:30 PM	0	7	0	0	7	0	0	2	0	2	2	3	2	0	7	3	1	1	0	5	21	43
	5:45 PM	0	0	0	0	0	0	3	0	0	3	0	2	1	0	3	0	1	0	0	1	7	29
	6:00 PM	1	2	0	0	3	0	0	1	0	1	1	2	1	0	4	1	2	0	0	3	11	27
	6:15 PM	0	1	0	0	1	0	0	1	0	1	0	1	1	0	2	0	0	0	0	0	4	
	6:30 PM	0	1	0	0	1	0	0	1	0	1	1	2	1	0	4	1	0	0	0	1	7	
	6:45 PM	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	1	1	0	0	2	5	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		33	188	18	0	239	23	63	58	0	144	84	193	87	0	364	95	89	22	0	206	953	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 / Mayfair Rd					From East (←) W. Burleigh St					From South (↑) STH 100 / Mayfair Rd					From West (→) W. Burleigh St					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	7:15 AM	2	17	3	0	22	3	2	5	0	10	8	26	13	0	47	12	16	1	0	29	108
MD	12:15 PM	5	14	3	0	22	2	6	3	0	11	5	15	8	0	28	13	7	1	0	21	82
PM	4:30 PM	1	18	0	0	19	0	4	5	0	9	5	17	3	0	25	5	3	1	0	9	62

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, April 18, 2020	Weekend	Schools in Session
Total Number of Hours Counted: 3		Non-Holiday	No Special Events

Base Information, Observed (3) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 and Burleigh Street

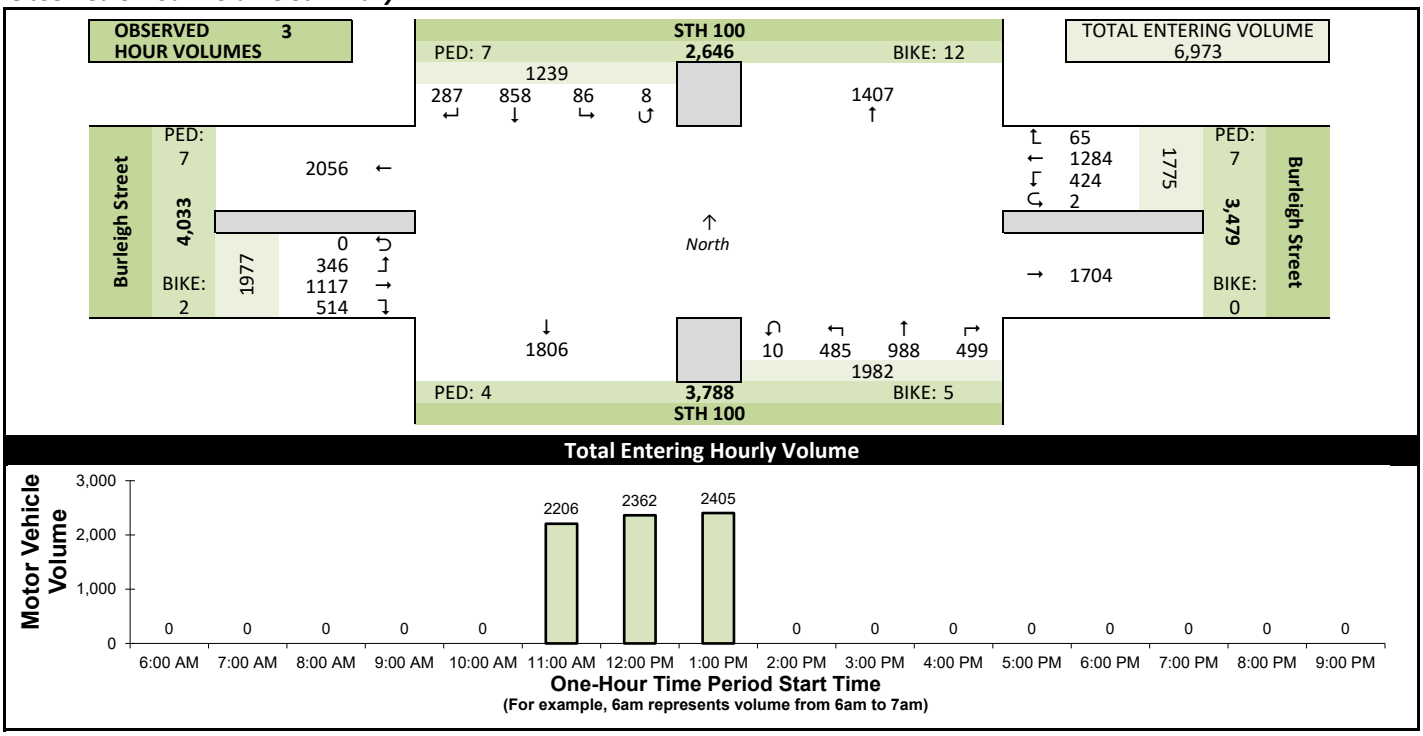
Site Information

Municipality	City of Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Traffic Signal		
Roadway Names		North Direction	↑
North Leg	STH 100		
East Leg	Burleigh Street		
South Leg	STH 100		
West Leg	Burleigh Street		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None	None	

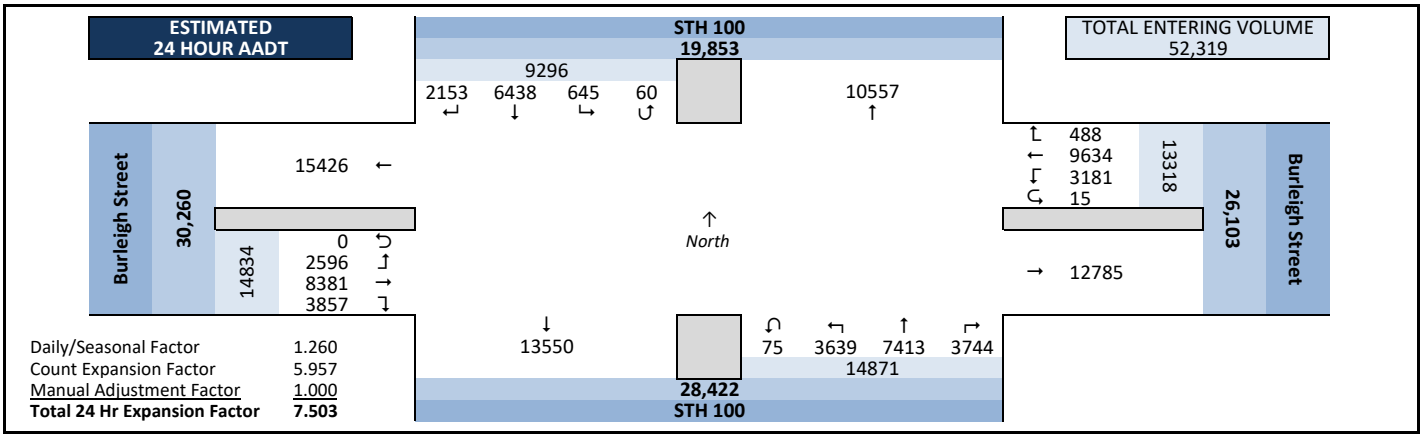
Count Information

Hrs Counted:	11:00 AM-2:00 PM				
1st Day of Count	Saturday, April 18, 2020			Weather	
AM Peak Period	Saturday, April 18, 2020			Clear & Dry	
Midday Peak Period	Saturday, April 18, 2020			Clear & Dry	
PM Peak Period	Saturday, April 18, 2020			Clear & Dry	
Calculated Peak Hours					
AM		MD	12:45-1:45pm	PM	
Peak Hours Selected for Analysis					
AM		MD	12:45-1:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.260	Count Expansion Factor	5.957		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Amy Scheuerlein, Jeff Schleif			
	PM Peak Period	None			
Comments	2018 DOT Seasonal Factors				

Observed 3 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

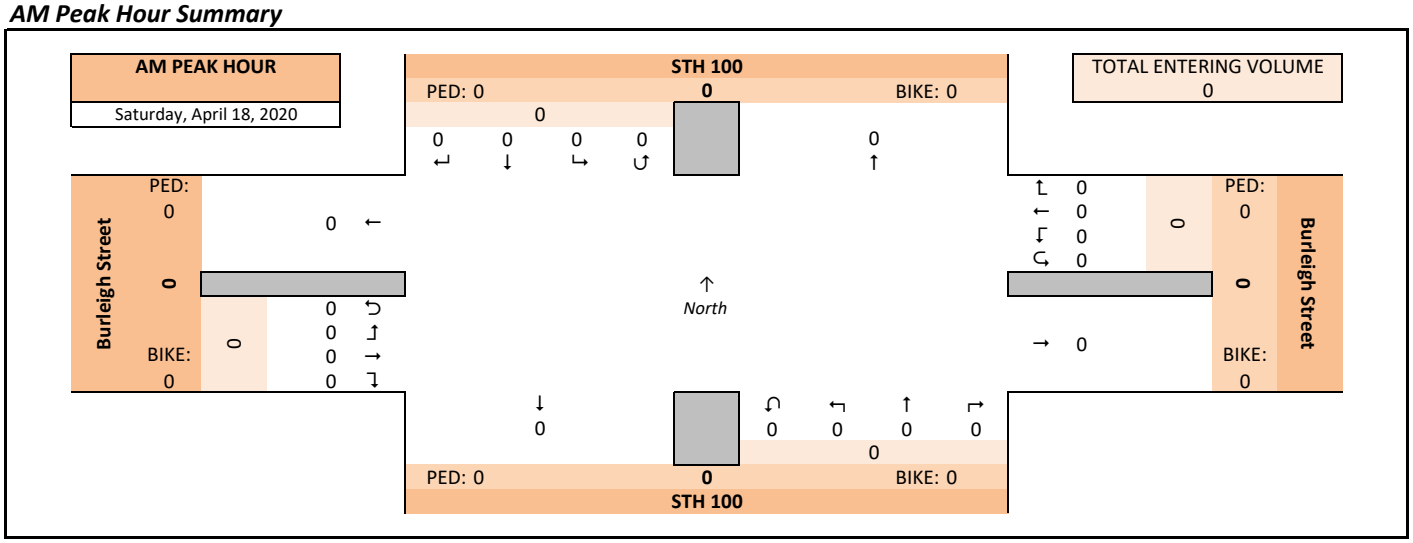
Count Basics			Page 2 of 13
Start Date:	Saturday, April 18, 2020	Weekend	Schools in Session
Total Number of Hours Counted: 3		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

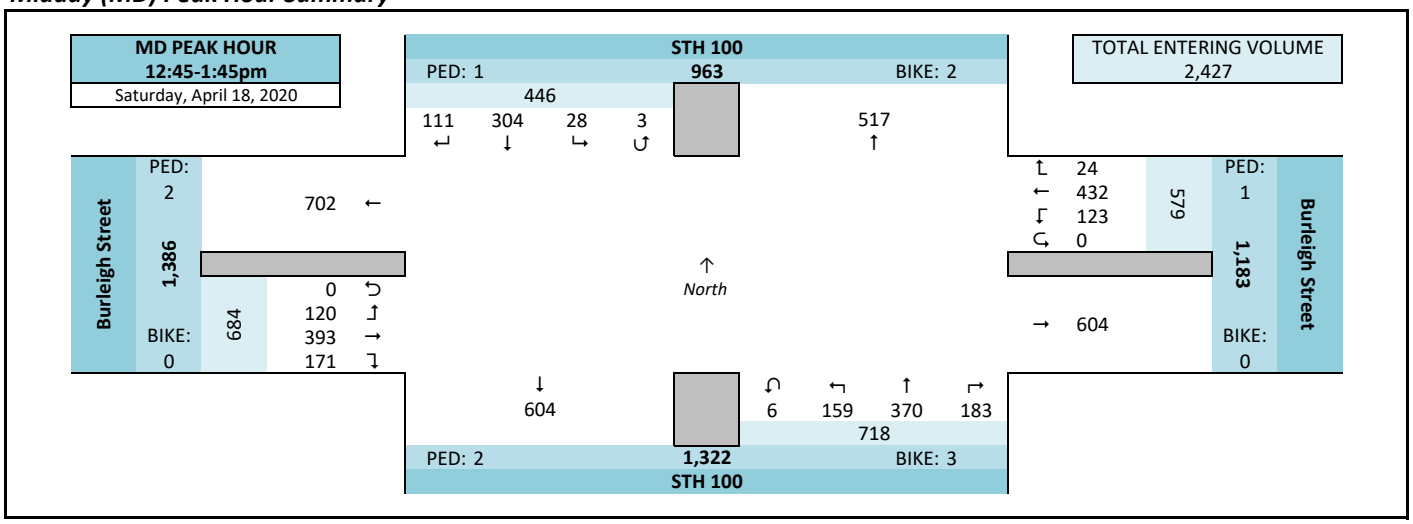
All Motor Vehicles

STH 100 and Burleigh Street

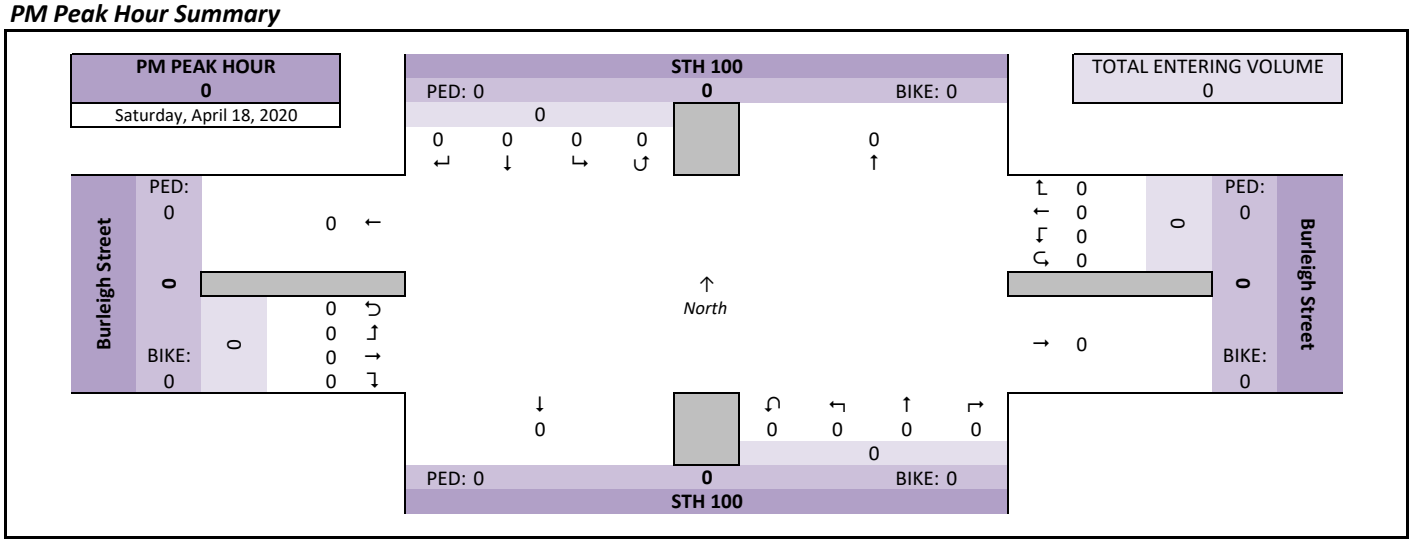
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary

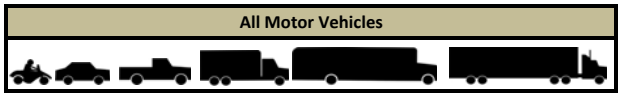


Intersection Traffic Volume Report

Count Basics		*Page 3 of 13*
Start Date: Saturday, April 18, 2020	Weekend	Schools in Session
Total Number of Hours Counted: 3	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 and Burleigh Street



Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, April 18, 2020		From North (↓)					From East (←)					From South (↑)					From West (→)					
	AM Peak Hour	STH 100					Burleigh Street					STH 100					Burleigh Street					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, April 18, 2020		From North (↓)					From East (←)					From South (↑)					From West (→)					
	MD Peak Hour	STH 100					Burleigh Street					STH 100					Burleigh Street					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:45 PM	25	80	11	1	117	4	108	31	0	143	44	100	50	0	194	45	75	30	0	150	604
	1:00 PM	29	79	7	0	115	9	111	31	0	151	55	100	33	2	190	41	100	32	0	173	629
	1:15 PM	25	71	5	0	101	4	113	26	0	143	41	87	41	3	172	41	112	31	0	184	600
	1:30 PM	32	74	5	2	113	7	100	35	0	142	43	83	35	1	162	44	106	27	0	177	594
	Peak Hour Volume	111	304	28	3	446	24	432	123	0	579	183	370	159	6	718	171	393	120	0	684	2427
	Rounded Hourly Volume	110	305	30	5	450	25	430	125	0	580	185	370	160	5	720	170	395	120	0	685	2435
	% Single Unit Trucks	0.0	3.3	0.0	0.0	2.2	0.0	0.5	5.7	0.0	1.6	2.7	1.9	3.1	0.0	2.4	1.8	1.0	0.0	0.0	1.0	1.8
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	3.3	0.0	0.0	2.2	0.0	0.5	5.7	0.0	1.6	2.7	1.9	3.1	0.0	2.4	1.8	1.0	0.0	0.0	1.0	1.8
	Peak Hour Factor (PHF)	0.87	0.95	0.64	0.37	0.95	0.67	0.96	0.88	0.00	0.96	0.83	0.92	0.79	0.50	0.93	0.95	0.88	0.94	0.00	0.93	0.96

Saturday, April 18, 2020		From North (↓)					From East (←)					From South (↑)					From West (→)					
	PM Peak Hour	STH 100					Burleigh Street					STH 100					Burleigh Street					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100			Burleigh Street			STH 100			Burleigh Street			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	1
	1:00 PM	0	0	0	0	0	0	1	1	2	0	0	0	2
	1:15 PM	1	0	1	0	0	0	0	1	1	0	0	0	2
	1:30 PM	0	1	1	1	0	1	1	1	2	2	0	2	6
	Total	1	2	3	1	0	1	2	3	5	2	0	2	11
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, April 18, 2020	Weekend	Schools in Session
Total Number of Hours Counted: 3	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 and Burleigh Street

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100					From East (←) Burleigh Street					From South (↑) STH 100					From West (→) Burleigh Street					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	29	47	4	1	81	9	101	32	0	142	32	70	40	0	142	41	66	25	0	132	497	2206	0.87
	11:15 AM	16	58	7	0	81	3	103	53	1	160	38	80	40	0	158	37	76	25	0	138	537	2285	0.91
	11:30 AM	18	64	6	0	88	5	132	33	0	170	38	50	39	0	127	37	84	35	0	156	541	2358	0.93
	11:45 AM	25	81	12	0	118	5	122	42	0	169	43	88	41	0	172	49	102	21	0	172	631	2389	0.95
	12:00 PM	25	68	7	2	102	3	101	41	0	145	46	78	45	1	170	41	83	35	0	159	576	2362	0.97
	12:15 PM	22	77	7	0	106	5	102	38	1	146	44	76	42	1	163	52	115	28	0	195	610	2415	0.96
	12:30 PM	22	78	8	0	108	7	80	37	0	124	41	84	47	1	173	43	104	20	0	167	572	2405	0.96
	12:45 PM	25	80	11	1	117	4	108	31	0	143	44	100	50	0	194	45	75	30	0	150	604	2427	0.96
	1:00 PM	29	79	7	0	115	9	111	31	0	151	55	100	33	2	190	41	100	32	0	173	629	2405	0.96
	1:15 PM	25	71	5	0	101	4	113	26	0	143	41	87	41	3	172	41	112	31	0	184	600		
	1:30 PM	32	74	5	2	113	7	100	35	0	142	43	83	35	1	162	44	106	27	0	177	594		
	1:45 PM	19	81	7	2	109	4	111	25	0	140	34	92	32	1	159	43	94	37	0	174	582		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		287	858	86	8	1239	65	1284	424	2	1775	499	988	485	10	1982	514	1117	346	0	1977	6973		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100					From East (←) Burleigh Street					From South (↑) STH 100					From West (→) Burleigh Street					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	12:45 PM	111	304	28	3	446	24	432	123	0	579	183	370	159	6	718	171	393	120	0	684	2427	0.96
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, April 18, 2020	Weekend	Schools in Session
Total Number of Hours Counted: 3		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 and Burleigh Street

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) STH 100					From East (←) Burleigh Street					From South (↑) STH 100					From West (→) Burleigh Street					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	2	1	0	0	3	0	1	0	0	1	1	2	1	0	4	2	3	1	0	6	14	43
	11:15 AM	1	0	0	0	1	0	1	1	0	2	0	0	1	0	1	1	1	0	0	2	6	38
	11:30 AM	0	2	0	0	2	0	2	2	0	4	1	3	0	0	4	0	0	0	0	0	10	42
	11:45 AM	1	3	0	0	4	0	0	1	0	1	1	0	2	0	3	3	2	0	0	5	13	40
	12:00 PM	0	4	0	0	4	0	0	2	0	2	0	0	1	0	1	2	0	0	0	2	9	39
	12:15 PM	0	2	0	0	2	0	1	1	0	2	2	3	1	0	6	0	0	0	0	0	10	39
	12:30 PM	0	1	0	0	1	0	0	1	0	1	1	0	1	0	2	1	3	0	0	4	8	40
	12:45 PM	0	2	0	0	2	0	0	2	0	2	1	3	1	0	5	2	1	0	0	3	12	43
	1:00 PM	0	2	0	0	2	0	0	3	0	3	3	0	1	0	4	0	0	0	0	0	9	43
	1:15 PM	0	3	0	0	3	0	1	1	0	2	0	1	3	0	4	1	1	0	0	2	11	
	1:30 PM	0	3	0	0	3	0	1	1	0	2	1	3	0	0	4	0	2	0	0	2	11	
	1:45 PM	0	2	0	0	2	1	2	0	0	3	2	3	1	0	6	1	0	0	0	1	12	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		4	25	0	0	29	1	9	15	0	25	13	18	13	0	44	13	13	1	0	27	125	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100					From East (←) Burleigh Street					From South (↑) STH 100					From West (→) Burleigh Street					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:45 PM	0	10	0	0	10	0	2	7	0	9	5	7	5	0	17	3	4	0	0	7	43
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2011.M3		Page 1 of 13
Start Date:	Wednesday, September 25, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Base Information, Observed (13) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 & W Center St

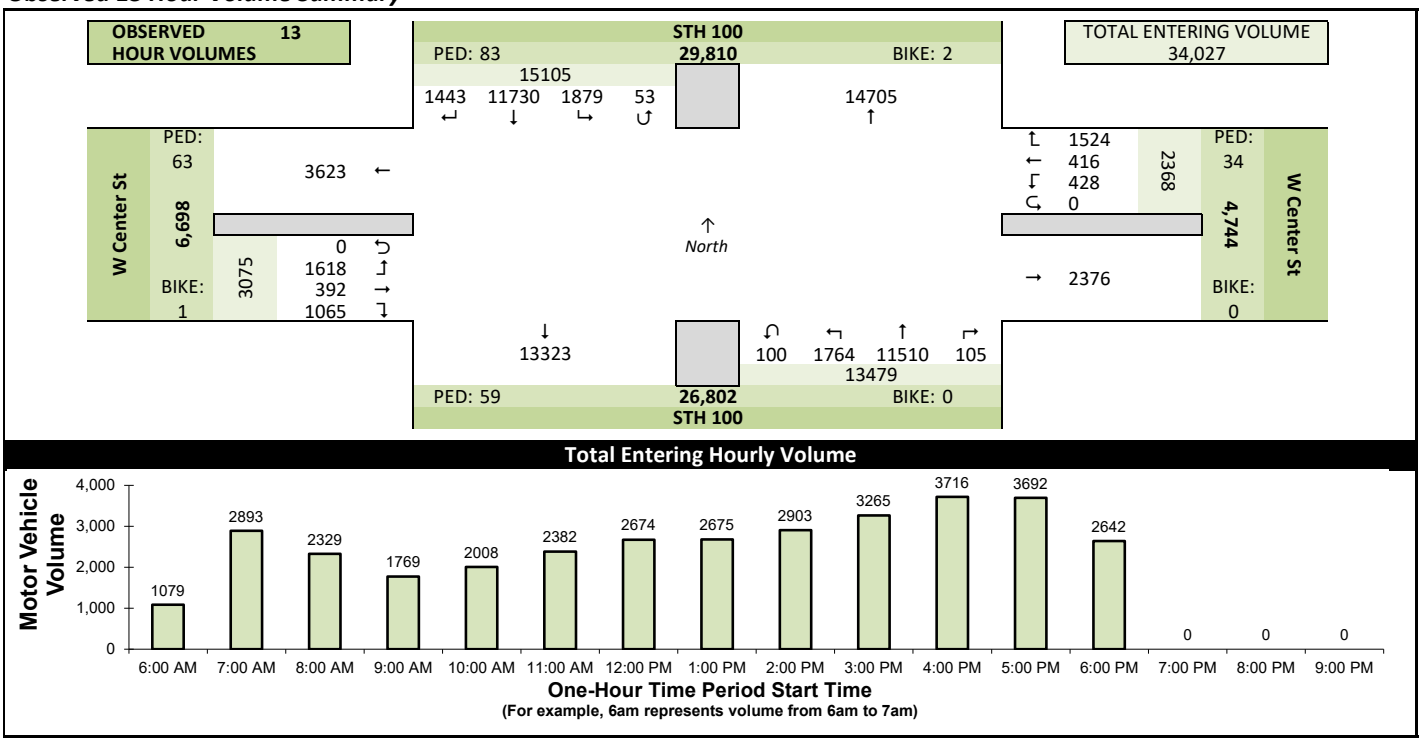
Site Information

Municipality	City of Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Traffic Signal		
Roadway Names		North Direction	↑
North Leg	STH 100		
East Leg	W Center St		
South Leg	STH 100		
West Leg	W Center St		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None	None	

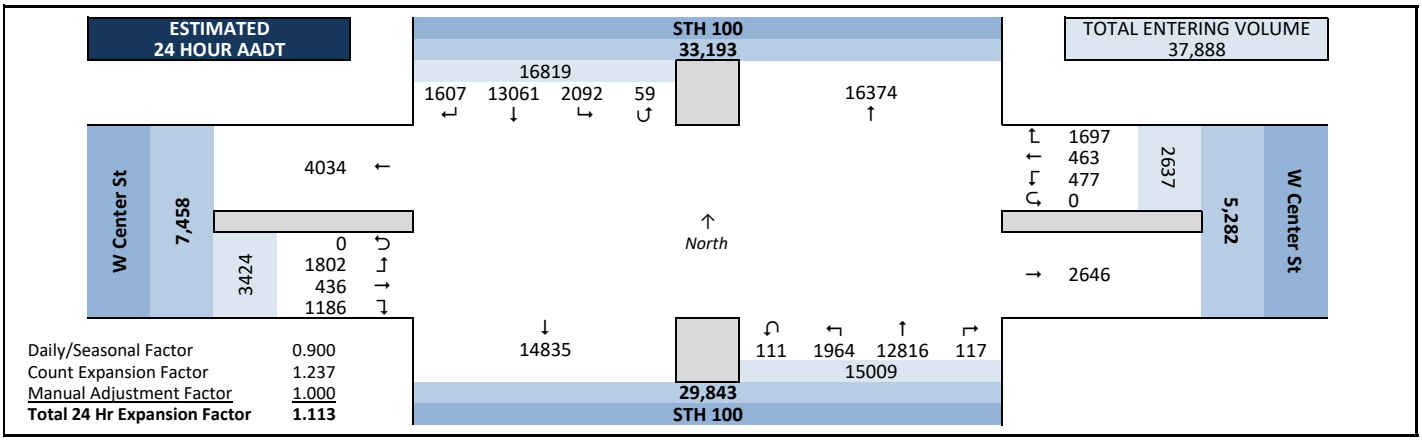
Count Information

Hrs Counted:	6:00 AM-7:00 PM				
1st Day of Count	Wednesday, September 25, 2019			Weather	
AM Peak Period	Wednesday, September 25, 2019			Clear & Dry	
Midday Peak Period	Wednesday, September 25, 2019			Clear & Dry	
PM Peak Period	Wednesday, September 25, 2019			Clear & Dry	
Calculated Peak Hours					
AM	7:15-8:15am	MD	12:15-1:15pm	PM	4:30-5:30pm
Peak Hours Selected for Analysis					
AM	7:15-8:15am	MD	12:15-1:15pm	PM	4:30-5:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	0.900	Count Expansion Factor	1.237		
Company Name	OD Data Solution Professionals			Manual Adj.	1.000
Observers	AM Peak Period	OD Data Solutions Video recording			
	Midday Peak Period	OD Data Solutions Video recording			
	PM Peak Period	OD Data Solutions Video recording			
Comments	2018 DOT Seasonal Factors				

Observed 13 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

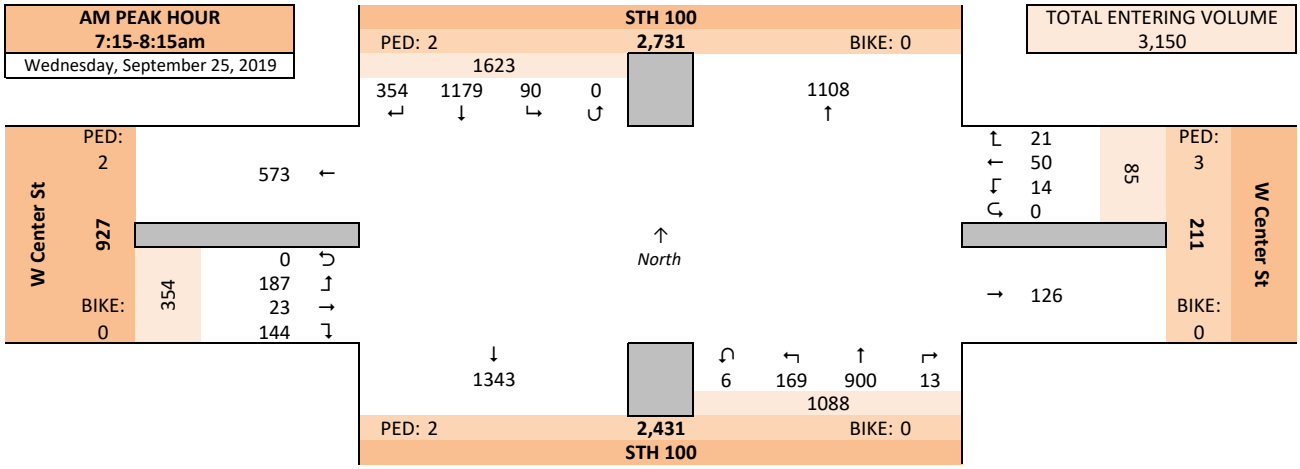
Count Basics			Page 2 of 13
Start Date:	Wednesday, September 25, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

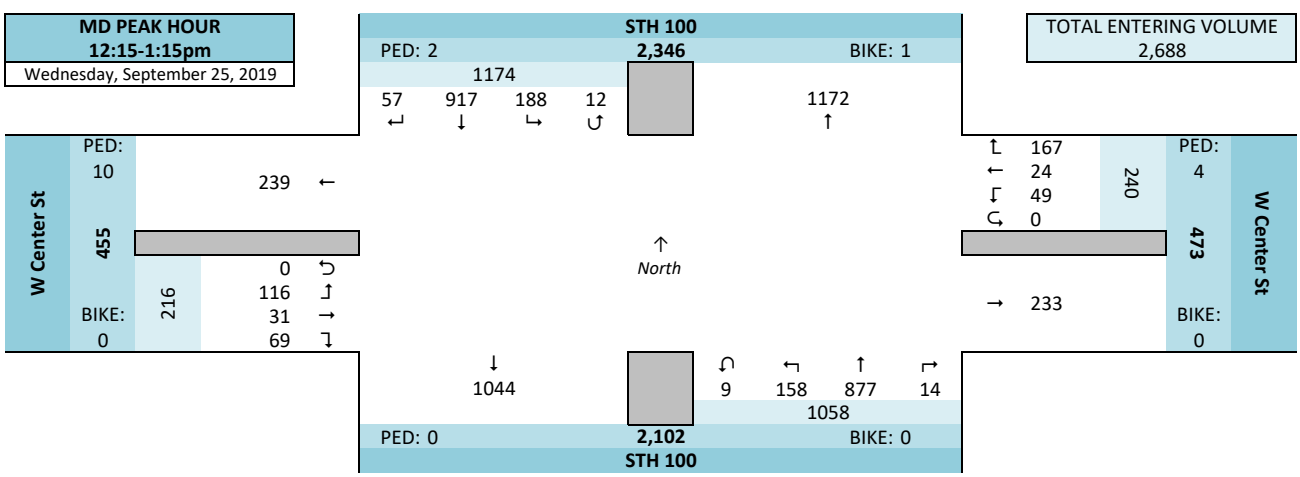
All Motor Vehicles

STH 100 & W Center St

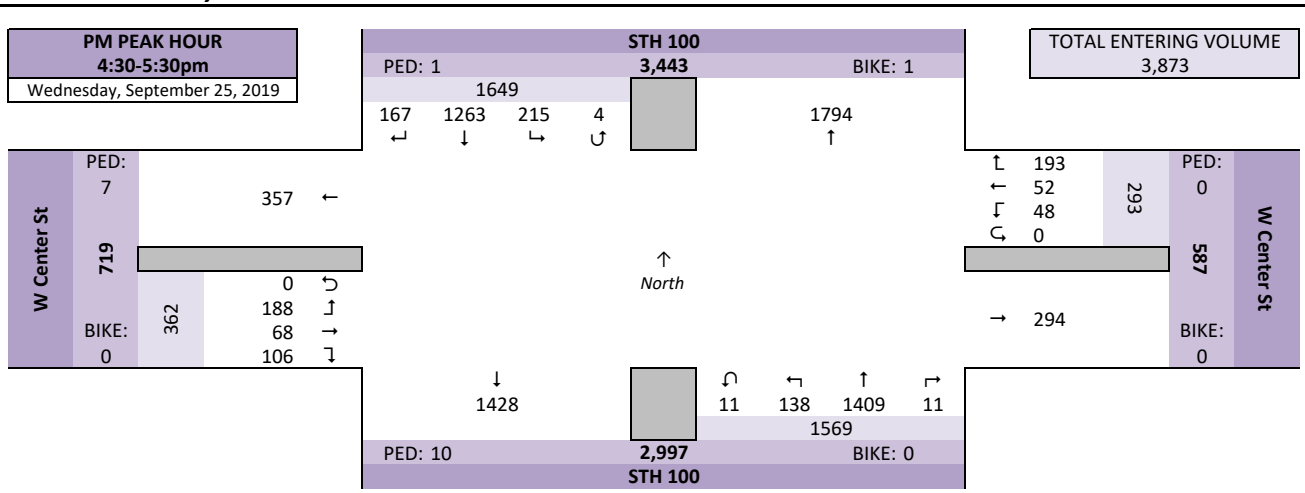
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			*Page 3 of 13*
Start Date:	Wednesday, September 25, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 & W Center St

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Wednesday, September 25, 2019		From North (↓)					From East (←)					From South (↑)					From West (→)					
	AM Peak Hour	STH 100					W Center St					STH 100					W Center St					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	7:15 AM	70	241	16	0	327	2	6	2	0	10	3	215	42	0	260	19	3	24	0	46	643
	7:30 AM	113	315	20	0	448	5	19	2	0	26	5	197	50	1	253	37	4	52	0	93	820
	7:45 AM	121	340	31	0	492	7	23	3	0	33	2	251	49	2	304	67	12	65	0	144	973
	8:00 AM	50	283	23	0	356	7	2	7	0	16	3	237	28	3	271	21	4	46	0	71	714
	Peak Hour Volume	354	1179	90	0	1623	21	50	14	0	85	13	900	169	6	1088	144	23	187	0	354	3150
	Rounded Hourly Volume	355	1180	90	0	1625	20	50	15	0	85	15	900	170	5	1090	145	25	185	0	355	3155
	% Single Unit Trucks	0.3	1.0	12.2	0.0	1.5	19.0	4.0	50.0	0.0	15.3	7.7	3.0	1.2	0.0	2.8	0.0	4.3	0.5	0.0	0.6	2.2
	% Heavy Trucks	0.0	0.6	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.4
	% Trucks (Total)	0.3	1.6	12.2	0.0	1.9	19.0	4.0	50.0	0.0	15.3	7.7	3.8	1.2	0.0	3.4	0.0	4.3	0.5	0.0	0.6	2.6
	Peak Hour Factor (PHF)	0.73	0.87	0.73	0.00	0.82	0.75	0.54	0.50	0.00	0.64	0.65	0.90	0.84	0.50	0.89	0.54	0.48	0.72	0.00	0.61	0.81

Wednesday, September 25, 2019		From North (↓)					From East (←)					From South (↑)					From West (→)					
	MD Peak Hour	STH 100					W Center St					STH 100					W Center St					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:15 PM	12	207	49	3	271	39	3	9	0	51	3	236	48	0	287	22	8	29	0	59	668
	12:30 PM	17	229	56	3	305	39	6	14	0	59	9	216	36	5	266	21	9	28	0	58	688
	12:45 PM	13	250	41	5	309	34	7	9	0	50	2	212	30	1	245	15	4	24	0	43	647
	1:00 PM	15	231	42	1	289	55	8	17	0	80	0	213	44	3	260	11	10	35	0	56	685
	Peak Hour Volume	57	917	188	12	1174	167	24	49	0	240	14	877	158	9	1058	69	31	116	0	216	2688
	Rounded Hourly Volume	55	915	190	10	1170	165	25	50	0	240	15	875	160	10	1060	70	30	115	0	215	2685
	% Single Unit Trucks	1.8	1.9	4.8	0.0	2.3	2.4	0.0	10.2	0.0	3.7	7.1	2.4	1.3	0.0	2.3	1.4	0.0	1.7	0.0	1.4	2.3
	% Heavy Trucks	0.0	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
	% Trucks (Total)	1.8	2.3	4.8	0.0	2.6	2.4	0.0	10.2	0.0	3.7	7.1	2.7	1.3	0.0	2.6	1.4	0.0	1.7	0.0	1.4	2.6
	Peak Hour Factor (PHF)	0.84	0.92	0.84	0.60	0.95	0.76	0.75	0.72	0.00	0.75	0.39	0.93	0.82	0.45	0.92	0.78	0.77	0.83	0.00	0.92	0.98

Wednesday, September 25, 2019		From North (↓)					From East (←)					From South (↑)					From West (→)					
	PM Peak Hour	STH 100					W Center St					STH 100					W Center St					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:30 PM	33	336	65	3	437	52	9	8	0	69	2	356	25	2	385	22	13	37	0	72	963
	4:45 PM	44	307	52	0	403	50	14	18	0	82	2	335	32	7	376	21	18	48	0	87	948
	5:00 PM	43	317	63	0	423	58	18	13	0	89	2	368	43	0	413	36	16	50	0	102	1027
	5:15 PM	47	303	35	1	386	33	11	9	0	53	5	350	38	2	395	27	21	53	0	101	935
	Peak Hour Volume	167	1263	215	4	1649	193	52	48	0	293	11	1409	138	11	1569	106	68	188	0	362	3873
	Rounded Hourly Volume	165	1265	215	5	1650	195	50	50	0	295	10	1410	140	10	1570	105	70	190	0	365	3880
	% Single Unit Trucks	0.0	0.8	4.2	0.0	1.2	1.6	0.0	14.6	0.0	3.4	0.0	1.3	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	1.2
	% Heavy Trucks	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
	% Trucks (Total)	0.0	1.0	4.2	0.0	1.3	1.6	0.0	14.6	0.0	3.4	0.0	1.3	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	1.3
	Peak Hour Factor (PHF)	0.89	0.94	0.83	0.33	0.94	0.83	0.72	0.67	0.00	0.82	0.55	0.96	0.80	0.39	0.95	0.74	0.81	0.89	0.00	0.89	0.94

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike Volume
		STH 100			W Center St			STH 100			W Center St			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	7:15 AM	0	0	0	1	0	1	0	0	0	0	0	0	1
	7:30 AM	2	0	2	2	0	2	0	0	0	0	0	0	4
	7:45 AM	0	0	0	0	0	0	2	0	2	2	0	2	4
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2	0	2	3	0	3	2	0	2	2	0	2	9
MD	12:15 PM	0	0	0	1	0	1	0	0	0	0	0	0	1
	12:30 PM	0	1	1	2	0	2	0	0	0	4	0	4	7
	12:45 PM	0	0	0	1	0	1	0	0	0	5	0	5	6
	1:00 PM	2	0	2	0	0	0	0	0	0	1	0	1	3
	Total	2	1	3	4	0	4	0	0	0	10	0	10	17
PM	4:30 PM	1	1	2	0	0	0	2	0	2	0	0	0	4
	4:45 PM	0	0	0	0	0	0	3	0	3	0	0	0	3
	5:00 PM	0	0	0	0	0	0	4	0	4	5	0	5	9
	5:15 PM	0	0	0	0	0	0	1	0	1	2	0	2	3
	Total	1	1	2	0	0	0	10	0	10	7	0	7	19

Intersection Traffic Volume Report

Count Basics		Page 5 of 13
Start Date: Wednesday, September 25, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 & W Center St

15-Minute Motor Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100					From East (←) W Center St					From South (↑) STH 100					From West (→) W Center St					15-Min Totals	Hourly Sum	PHF
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
AM Peak Period	6:00 AM	2	89	7	0	98	3	2	2	0	7	2	58	3	0	63	1	0	7	0	8	176	1079	0.72
	6:15 AM	8	109	8	0	125	5	1	0	0	6	2	79	15	0	96	2	1	6	0	9	236	1360	0.74
	6:30 AM	6	151	7	1	165	4	1	1	0	6	1	92	15	0	108	5	1	6	0	12	291	1767	0.69
	6:45 AM	14	177	8	0	199	4	3	2	0	9	0	124	23	0	147	9	3	9	0	21	376	2296	0.70
	7:00 AM	25	185	22	0	232	8	3	2	0	13	2	139	36	0	177	14	2	19	0	35	457	2893	0.74
	7:15 AM	70	241	16	0	327	2	6	2	0	10	3	215	42	0	260	19	3	24	0	46	643	3150	0.81
	7:30 AM	113	315	20	0	448	5	19	2	0	26	5	197	50	1	253	37	4	52	0	93	820	3131	0.80
	7:45 AM	121	340	31	0	492	7	23	3	0	33	2	251	49	2	304	67	12	65	0	144	973	2856	0.73
	8:00 AM	50	283	23	0	356	7	2	7	0	16	3	237	28	3	271	21	4	46	0	71	714	2329	0.82
	8:15 AM	26	240	29	0	295	1	2	2	0	5	2	226	35	1	264	23	3	34	0	60	624	2091	0.84
	8:30 AM	15	208	21	0	244	8	6	2	0	16	5	221	25	1	252	15	2	16	0	33	545	1857	0.85
	8:45 AM	15	156	24	0	195	5	2	6	0	13	0	165	27	2	194	14	6	24	0	44	446	1753	0.92
	9:00 AM	11	197	24	0	232	12	2	4	0	18	2	162	21	2	187	13	4	22	0	39	476	1769	0.93
	9:15 AM	13	152	26	1	192	10	2	3	0	15	2	137	12	4	155	12	3	13	0	28	390	1725	0.93
	9:30 AM	16	157	30	0	203	16	2	3	0	21	0	153	37	0	190	8	1	18	0	27	441	1833	0.92
	9:45 AM	18	173	39	1	231	7	5	9	0	21	2	154	27	2	185	16	3	6	0	25	462	1913	0.92
Midday Peak Period	10:00 AM	10	174	30	0	214	20	4	9	0	33	8	128	22	0	158	10	2	15	0	27	432	2008	0.90
	10:15 AM	8	183	31	1	223	27	4	8	0	39	1	171	24	4	200	14	8	14	0	36	498	2121	0.95
	10:30 AM	8	211	46	0	265	26	6	6	0	38	2	155	24	0	181	16	11	10	0	37	521	2241	0.91
	10:45 AM	19	192	44	2	257	13	11	8	0	32	1	173	38	0	212	22	9	25	0	56	557	2313	0.94
	11:00 AM	16	192	43	0	251	22	12	8	0	42	3	164	40	1	208	14	6	24	0	44	545	2382	0.95
	11:15 AM	21	211	44	0	276	33	7	7	0	47	2	215	28	4	249	14	7	25	0	46	618	2508	0.93
	11:30 AM	9	183	32	0	224	43	9	6	0	58	0	222	32	2	256	20	10	25	0	55	593	2558	0.95
	11:45 AM	22	199	49	1	271	30	14	11	0	55	2	221	26	1	250	14	12	24	0	50	626	2653	0.96
	12:00 PM	23	207	45	1	276	31	4	15	0	50	2	234	51	2	289	19	6	31	0	56	671	2674	0.97
	12:15 PM	12	207	49	3	271	39	3	9	0	51	3	236	48	0	287	22	8	29	0	59	668	2688	0.98
	12:30 PM	17	229	56	3	305	39	6	14	0	59	9	216	36	5	266	21	9	28	0	58	688	2687	0.98
	12:45 PM	13	250	41	5	309	34	7	9	0	50	2	212	30	1	245	15	4	24	0	43	647	2672	0.98
	1:00 PM	15	231	42	1	289	55	8	17	0	80	0	213	44	3	260	11	10	35	0	56	685	2675	0.98
	1:15 PM	29	221	43	3	296	48	7	7	0	62	3	205	37	5	250	15	11	33	0	59	667	2714	0.94
	1:30 PM	23	216	53	3	295	46	11	18	0	75	2	213	37	0	252	14	10	27	0	51	673	2776	0.95
	1:45 PM	43	205	30	1	279	58	13	9	0	80	2	199	38	1	240	16	7	28	0	51	650	2890	0.92
PM Peak Period	2:00 PM	45	234	29	2	310	48	15	13	0	76	1	210	46	5	262	22	9	45	0	76	724	2903	0.92
	2:15 PM	36	202	37	0	275	41	15	10	0	66	0	208	68	4	280	26	13	69	0	108	729	2932	0.93
	2:30 PM	28	267	41	1	337	41	6	10	0	57	3	227	40	2	272	43	9	69	0	121	787	2999	0.94
	2:45 PM	18	244	33	1	296	33	7	12	0	52	2	217	33	3	255	13	11	36	0	60	663	3086	0.88
	3:00 PM	25	265	37	1	328	33	7	19	0	59	2	261	30	5	298	27	4	37	0	68	753	3265	0.93
	3:15 PM	32	298	39	2	371	40	10	11	0	61	1	260	29	4	294	27	8	35	0	70	796	3417	0.94
	3:30 PM	24	353	35	1	413	43	4	15	0	62	1	304	40	4	349	18	6	26	0	50	874	3521	0.97
	3:45 PM	22	289	41	3	355	42	10	10	0	62	3	290	41	2	336	39	6	44	0	89	842	3610	0.94
	4:00 PM	29	289	59	2	379	46	10	14	0	70	2	355	31	2	390	20	6	40	0	66	905	3716	0.96
	4:15 PM	30	306	37	2	375	40	7	13	0	60	0	381	34	3	418	16	2	29	0	47	900	3838	0.93
	4:30 PM	33	336	65	3	437	52	9	8	0	69	2	356	25	2	385	22	13	37	0	72	963	3873	0.94
	4:45 PM	44	307	52	0	403	50	14	18	0	82	2	335	32	7	376	21	18	48	0	87	948	3807	0.93
	5:00 PM	43	317	63	0	423	58	18	13	0	89	2	368	43	0	413	36	16	50	0	102	1027	3692	0.90
	5:15 PM	47	303	35	1	386	33	11	9	0	53	5	350	38	2	395	27	21	53	0	101	935	3421	0.91
	5:30 PM	48	279	55	1	383	53	19	9	0	81	3	282	53	1	339	26	16	52	0	94	897	3208	0.89
	5:45 PM	29	281	60	2	372	44	18	7	0	69	1	277	34	0	312	34	11	35	0	80	833	2917	0.88
	6:00 PM	28	194	51	1	274	47	8	10	0	65	0	312	38	1	351	28	11	27	0	66	756	2642	0.87
	6:15 PM	23	180	39	1	243	42	8	7	0	57	0	309	33	3	345	28	13	36	0	77	722		
	6:30 PM	25	147	35	0	207	36	9	4	0	49	0	233	41	1	275	28	10	37	0	75	606		
	6:45 PM	23	155	23	2	203	34	4	5	0	43	0	188	35	2	225	31	7	49	0	87	558		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		1443	11730	1879	53	15105	1524	416	428	0	2368	105	11510	1764	100	13479	1065	392	1618	0	3075	34027		

Peak Hour All Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100					From East (←) W Center St					From South (↑) STH 100					From West (→) W Center St					Total Hourly Volume	PHF
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM	7:15 AM	354	1179	90	0	1623	21	50	14	0	85	13	900	169	6	1088	144	23	187	0	354	3150	0.81
MD	12:15 PM	57	917	188	12	1174	167	24	49	0	240	14	877	158	9	1058	69	31	116	0	216	2688	0.98
PM	4:30 PM	167	1263	215	4	1649	193	52	48	0	293	11	1409	138	11	1569	106	68	188	0	362	3873	0.94

Intersection Traffic Volume Report

Count Basics		*Page 9 of 13*
Start Date: Wednesday, September 25, 2019	Weekday	Schools in Session
Total Number of Hours Counted: 13	Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

STH 100 & W Center St

15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100					From East (←) W Center St					From South (↑) STH 100					From West (→) W Center St					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	2	2	0	4	1	1	2	0	4	0	2	0	0	2	0	0	0	0	0	10	50
	6:15 AM	0	0	4	0	4	1	0	0	0	1	2	4	0	0	6	0	0	0	0	0	11	53
	6:30 AM	0	5	2	0	7	1	0	1	0	2	0	4	0	0	4	0	0	0	0	0	13	64
	6:45 AM	0	6	2	0	8	0	0	2	0	2	0	6	0	0	6	0	0	0	0	0	16	64
	7:00 AM	0	2	1	0	3	2	0	1	0	3	0	5	1	0	6	0	0	1	0	1	13	68
	7:15 AM	0	8	3	0	11	1	1	1	0	3	0	8	0	0	8	0	0	0	0	0	22	83
	7:30 AM	0	2	3	0	5	2	0	2	0	4	1	3	0	0	4	0	0	0	0	0	13	85
	7:45 AM	0	3	3	0	6	0	1	2	0	3	0	11	0	0	11	0	0	0	0	0	20	87
	8:00 AM	1	6	2	0	9	1	0	2	0	3	0	12	2	0	14	0	1	1	0	2	28	96
	8:15 AM	1	7	3	0	11	0	0	1	0	1	0	11	0	0	11	0	0	1	0	1	24	89
	8:30 AM	1	3	2	0	6	1	0	1	0	2	0	6	0	0	6	0	0	1	0	1	15	80
	8:45 AM	1	6	2	0	9	1	0	4	0	5	0	13	0	0	13	0	2	0	0	2	29	88
	9:00 AM	0	2	2	0	4	1	0	0	0	1	0	16	0	0	16	0	0	0	0	0	21	79
	9:15 AM	0	3	2	0	5	1	1	1	0	3	0	7	0	0	7	0	0	0	0	0	15	73
	9:30 AM	0	9	4	0	13	0	0	2	0	2	0	8	0	0	8	0	0	0	0	0	23	82
	9:45 AM	0	7	1	0	8	1	0	1	0	2	0	9	0	0	9	1	0	0	0	1	20	73
Midday Peak Period	10:00 AM	0	2	2	0	4	1	0	1	0	2	0	5	3	0	8	0	0	1	0	1	15	69
	10:15 AM	0	8	1	0	9	1	0	4	0	5	0	9	0	0	9	1	0	0	0	1	24	65
	10:30 AM	0	3	2	0	5	0	0	1	0	1	1	7	0	0	8	0	0	0	0	0	14	62
	10:45 AM	1	2	3	0	6	1	0	0	0	1	0	6	2	0	8	0	0	1	0	1	16	61
	11:00 AM	2	6	0	0	8	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	11	63
	11:15 AM	0	5	4	0	9	3	0	3	0	6	0	6	0	0	6	0	0	0	0	0	21	67
	11:30 AM	0	2	1	0	3	1	0	0	0	1	0	8	0	0	8	1	0	0	0	1	13	65
	11:45 AM	0	5	4	0	9	0	0	2	0	2	0	6	0	0	6	1	0	0	0	1	18	75
	12:00 PM	1	2	2	0	5	1	0	2	0	3	0	7	0	0	7	0	0	0	0	0	15	67
	12:15 PM	0	5	3	0	8	2	0	1	0	3	0	8	0	0	8	0	0	0	0	0	19	70
	12:30 PM	0	8	3	0	11	1	0	1	0	2	1	8	0	0	9	0	0	1	0	1	23	69
	12:45 PM	0	3	0	0	3	0	0	2	0	2	0	3	2	0	5	0	0	0	0	0	10	69
	1:00 PM	1	5	3	0	9	1	0	1	0	2	0	5	0	0	5	1	0	1	0	2	18	76
	1:15 PM	0	5	0	0	5	1	0	0	0	1	0	11	1	0	12	0	0	0	0	0	18	77
	1:30 PM	0	4	3	0	7	2	1	2	0	5	0	6	2	0	8	2	0	1	0	3	23	88
	1:45 PM	0	4	2	0	6	0	0	1	0	1	0	5	1	0	6	1	1	2	0	4	17	96
PM Peak Period	2:00 PM	1	6	1	0	8	1	0	2	0	3	0	8	0	0	8	0	0	0	0	0	19	93
	2:15 PM	1	6	4	0	11	1	0	1	0	2	0	14	0	0	14	1	0	1	0	2	29	94
	2:30 PM	0	6	1	0	7	1	1	3	0	5	0	16	1	0	17	1	0	1	0	2	31	82
	2:45 PM	0	3	2	0	5	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	14	70
	3:00 PM	0	6	3	0	9	1	0	1	0	2	0	9	0	0	9	0	0	0	0	0	20	74
	3:15 PM	0	5	2	0	7	0	0	2	0	2	0	8	0	0	8	0	0	0	0	0	17	70
	3:30 PM	0	4	1	0	5	1	0	3	0	4	0	8	1	0	9	1	0	0	0	1	19	67
	3:45 PM	0	7	2	0	9	0	0	1	0	1	1	5	0	0	6	0	0	2	0	2	18	65
	4:00 PM	0	4	4	0	8	1	0	3	0	4	0	3	1	0	4	0	0	0	0	0	16	59
	4:15 PM	1	2	1	0	4	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	14	56
	4:30 PM	0	6	3	0	9	2	0	2	0	4	0	4	0	0	4	0	0	0	0	0	17	51
	4:45 PM	0	4	1	0	5	0	0	2	0	2	0	5	0	0	5	0	0	0	0	0	12	49
	5:00 PM	0	2	3	0	5	1	0	1	0	2	0	6	0	0	6	0	0	0	0	0	13	51
	5:15 PM	0	1	2	0	3	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	9	49
	5:30 PM	0	3	1	0	4	2	0	1	0	3	0	7	0	0	7	1	0	0	0	1	15	50
	5:45 PM	0	5	2	0	7	0	0	0	0	0	0	6	0	0	6	1	0	0	0	1	14	45
	6:00 PM	0	0	3	0	3	2	0	1	0	3	0	5	0	0	5	0	0	0	0	0	11	41
	6:15 PM	0	1	0	0	1	1	0	2	0	3	0	5	0	0	5	1	0	0	0	1	10	
	6:30 PM	0	1	3	0	4	1	0	1	0	2	0	4	0	0	4	0	0	0	0	0	10	
	6:45 PM	0	2	2	0	4	0	0	1	0	1	0	5	0	0	5	0	0	0	0	0	10	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		12	214	112	0	338	45	6	75	0	126	6	366	17	0	389	14	4	15	0	33	886	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100					From East (←) W Center St					From South (↑) STH 100					From West (→) W Center St					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	7:15 AM	1	19	11	0	31	4	2	7	0	13	1	34	2	0	37	0	1	1	0	2	83
MD	12:15 PM	1	21	9	0	31	4	0	5	0	9	1	24	2	0	27	1	0	2	0	3	70
PM	4:30 PM	0	13	9	0	22	3	0	7	0	10	0	19	0	0	19	0	0	0	0	0	51

Intersection Traffic Volume Report

Count Basics		Version 2013.J4.1	Page 1 of 13
Start Date:	Saturday, August 6, 2022	Weekend	Schools Not in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Center Street

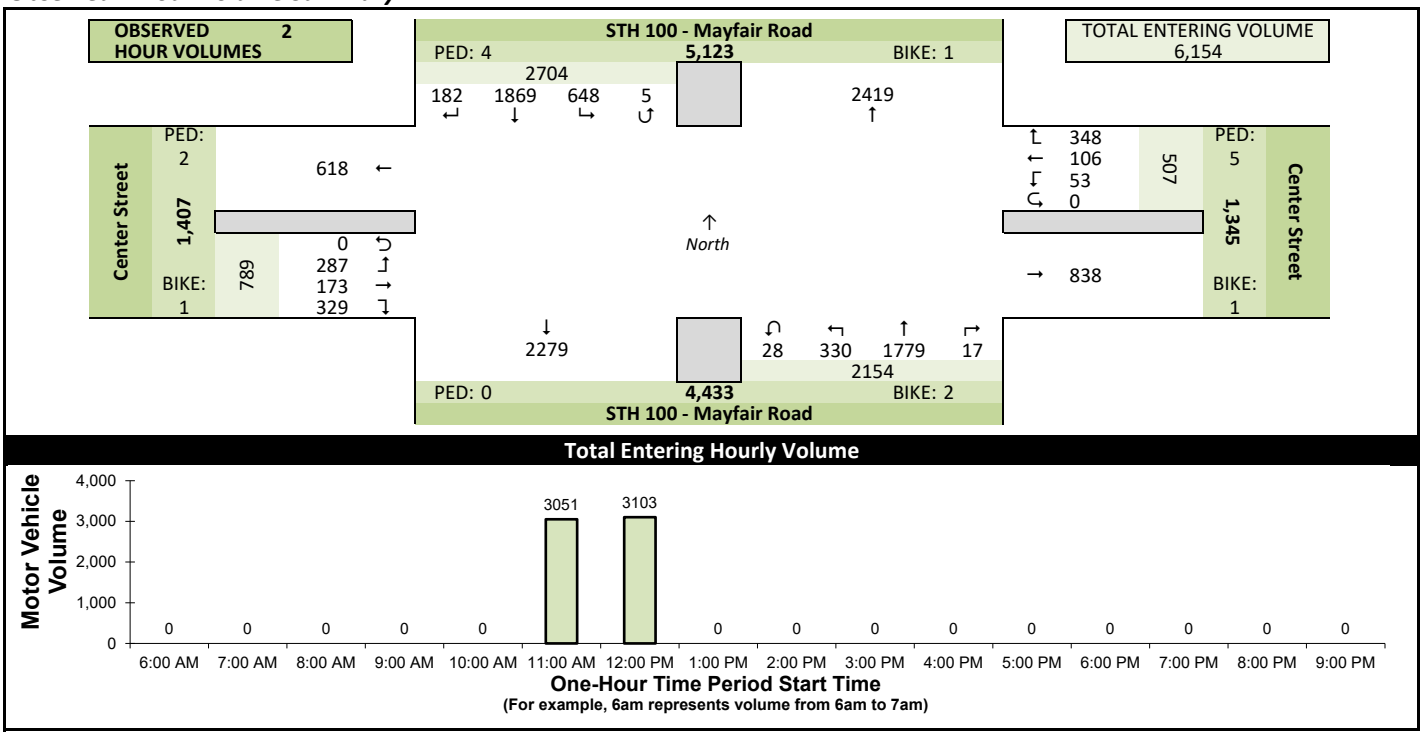
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Traffic Signal		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg	Center Street		
South Leg	STH 100 - Mayfair Road		
West Leg	Center Street		
Special Considerations			
Schools	Not in Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

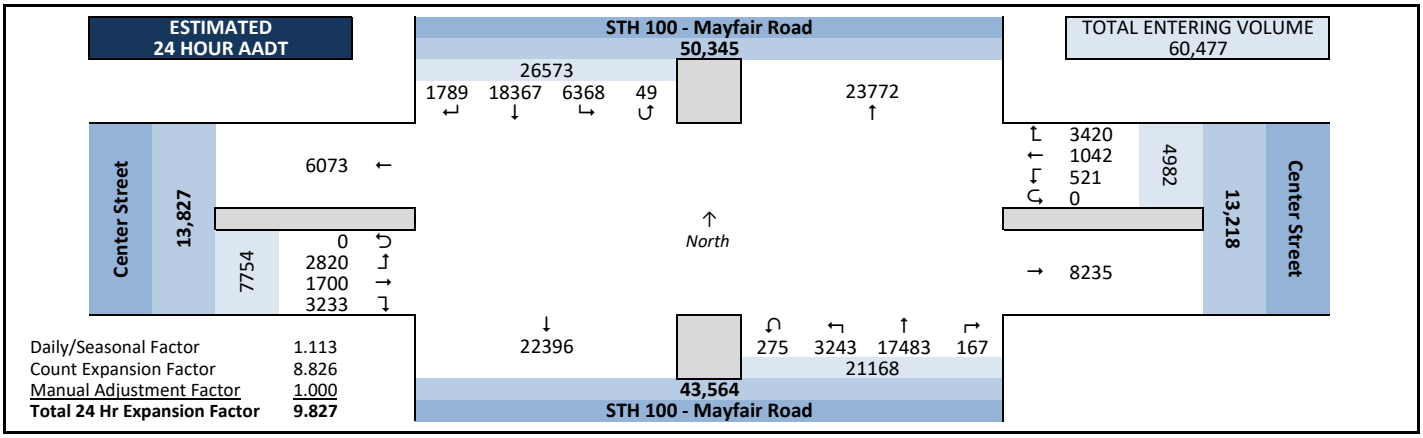
Count Information

Hrs Counted:	11:00 AM-1:00 PM				
1st Day of Count	Saturday, August 6, 2022			Weather	
AM Peak Period	Saturday, August 6, 2022			Clear & Dry	
Midday Peak Period	Saturday, August 6, 2022			Clear & Dry	
PM Peak Period	Saturday, August 6, 2022			Clear & Dry	
Calculated Peak Hours					
AM		MD	11:45-12:45pm	PM	
Peak Hours Selected for Analysis					
AM		MD	11:45-12:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.113	Count Expansion Factor	8.826		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Jane Fait, Lori Atwell			
	PM Peak Period	None			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

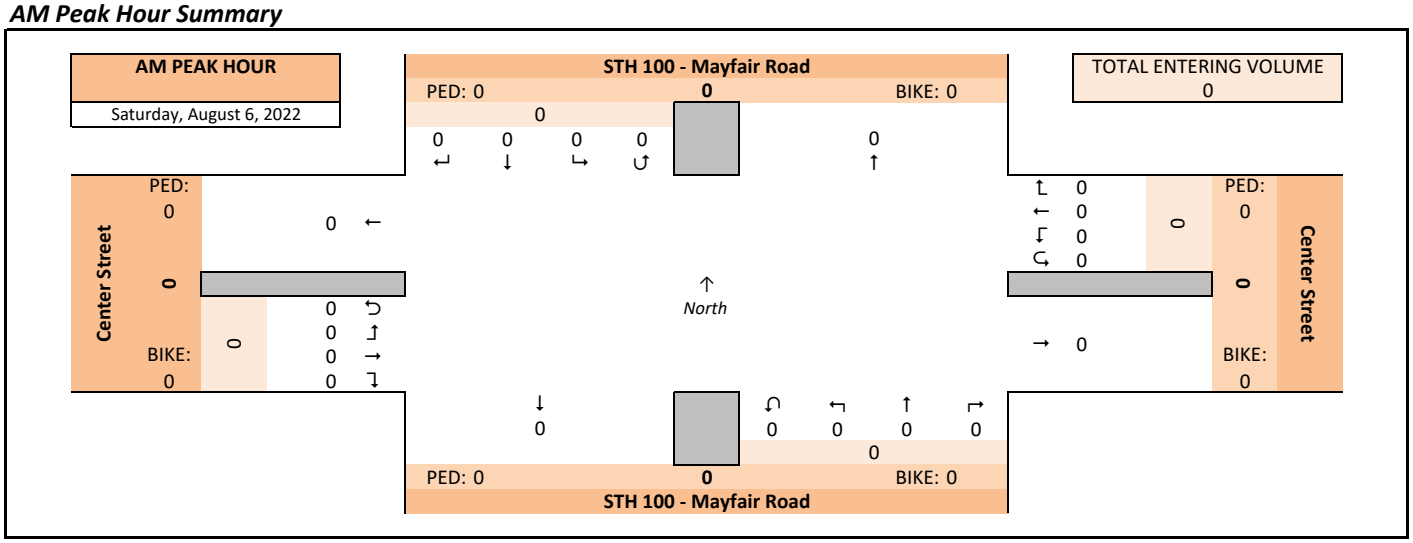
Count Basics			Page 2 of 13
Start Date:	Saturday, August 6, 2022	Weekend	Schools Not in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

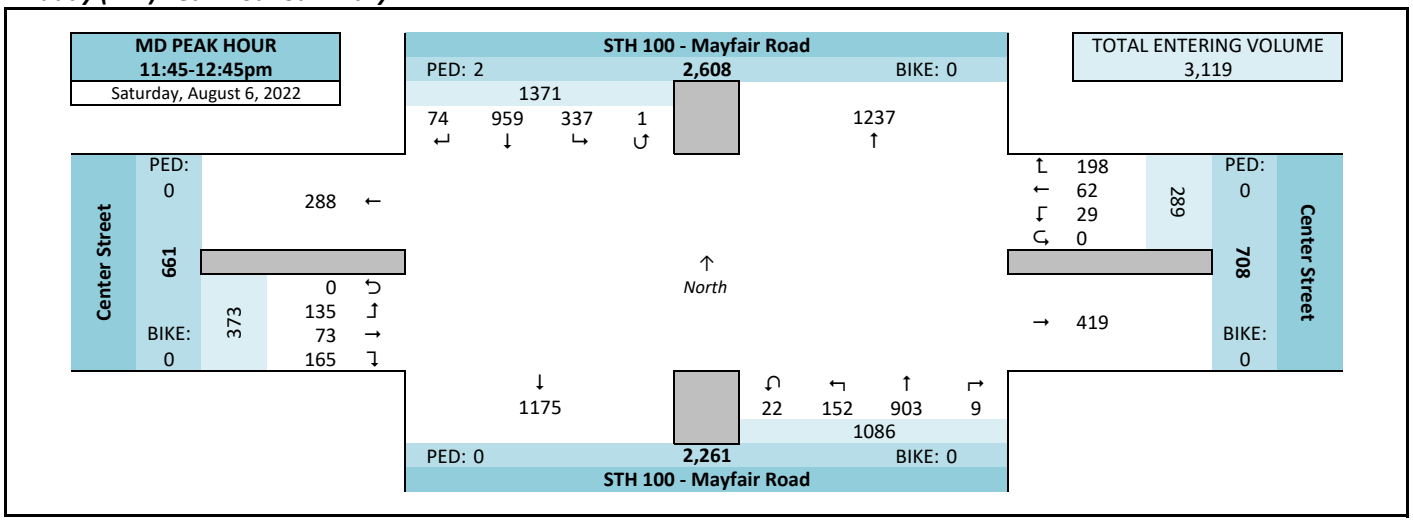
STH 100 - Mayfair Road and Center Street

All Motor Vehicles

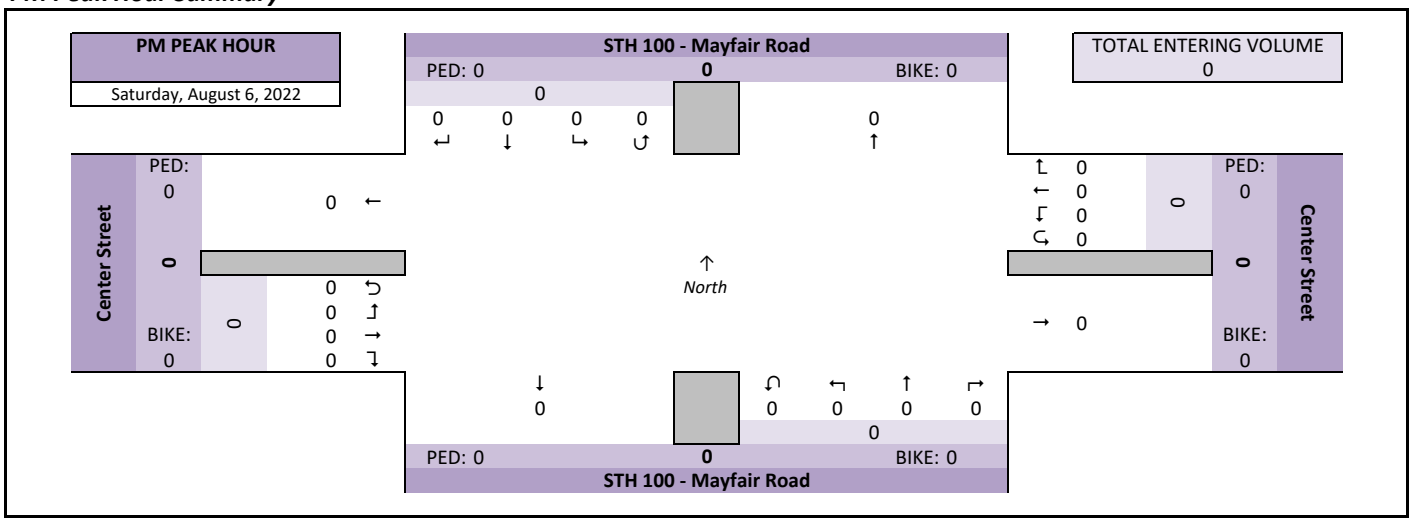
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		*Page 3 of 13*
Start Date: Saturday, August 6, 2022	Weekend	Schools Not in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Center Street

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, August 6, 2022		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road					Center Street					STH 100 - Mayfair Road					Center Street					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, August 6, 2022		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road					Center Street					STH 100 - Mayfair Road					Center Street					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	25	251	92	0	368	49	18	3	0	70	2	213	44	3	262	40	31	28	0	99	799
	12:00 PM	16	248	74	1	339	50	15	12	0	77	1	215	40	5	261	44	12	38	0	94	771
	12:15 PM	15	218	85	0	318	55	16	6	0	77	4	246	42	7	299	41	14	38	0	93	787
	12:30 PM	18	242	86	0	346	44	13	8	0	65	2	229	26	7	264	40	16	31	0	87	762
	Peak Hour Volume	74	959	337	1	1371	198	62	29	0	289	9	903	152	22	1086	165	73	135	0	373	3119
	Rounded Hourly Volume	75	960	335	0	1370	200	60	30	0	290	10	905	150	20	1085	165	75	135	0	375	3120
	% Single Unit Trucks	1.4	0.8	2.1	0.0	1.2	3.0	0.0	13.8	0.0	3.5	0.0	1.3	1.3	0.0	1.3	1.8	0.0	0.0	0.0	0.8	1.4
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	1.4	0.8	2.1	0.0	1.2	3.0	0.0	13.8	0.0	3.5	0.0	1.4	1.3	0.0	1.4	1.8	0.0	0.0	0.0	0.8	1.4
	Peak Hour Factor (PHF)	0.74	0.96	0.92	0.25	0.93	0.90	0.86	0.60	0.00	0.94	0.56	0.92	0.86	0.79	0.91	0.94	0.59	0.89	0.00	0.94	0.98

Saturday, August 6, 2022		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road					Center Street					STH 100 - Mayfair Road					Center Street					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road			Center Street			STH 100 - Mayfair Road			Center Street			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	2	0	2	0	0	0	0	0	0	0	0	0	2
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2	0	2	0	0	0	0	0	0	0	0	0	2
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, August 6, 2022	Weekend	Schools Not in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Center Street

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Center Street					From South (↑) STH 100 - Mayfair Road					From West (→) Center Street					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	24	216	73	3	316	23	13	6	0	42	1	208	40	2	251	55	22	41	0	118	727	3051	0.95
	11:15 AM	23	230	71	0	324	46	9	5	0	60	3	226	43	0	272	41	27	44	0	112	768	3095	0.97
	11:30 AM	36	252	91	1	380	36	5	7	0	48	3	186	44	1	234	37	25	33	0	95	757	3114	0.97
	11:45 AM	25	251	92	0	368	49	18	3	0	70	2	213	44	3	262	40	31	28	0	99	799	3119	0.98
	12:00 PM	16	248	74	1	339	50	15	12	0	77	1	215	40	5	261	44	12	38	0	94	771	3103	0.99
	12:15 PM	15	218	85	0	318	55	16	6	0	77	4	246	42	7	299	41	14	38	0	93	787		
	12:30 PM	18	242	86	0	346	44	13	8	0	65	2	229	26	7	264	40	16	31	0	87	762		
	12:45 PM	25	212	76	0	313	45	17	6	0	68	1	256	51	3	311	31	26	34	0	91	783		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		182	1869	648	5	2704	348	106	53	0	507	17	1779	330	28	2154	329	173	287	0	789	6154		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Center Street					From South (↑) STH 100 - Mayfair Road					From West (→) Center Street					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	11:45 AM	74	959	337	1	1371	198	62	29	0	289	9	903	152	22	1086	165	73	135	0	373	3119	0.98
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, August 6, 2022	Weekend	Schools Not in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Center Street

15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←) Center Street					From South (↑) STH 100 - Mayfair Road					From West (→) Center Street					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	1	0	1	0	4	1	0	5	1	0	0	0	1	7	47
	11:15 AM	1	5	2	0	8	1	0	2	0	3	0	8	1	0	9	0	0	1	0	1	21	52
	11:30 AM	0	2	1	0	3	0	0	2	0	2	0	2	2	0	4	0	0	1	0	1	10	39
	11:45 AM	1	1	1	0	3	2	0	0	0	2	0	3	0	0	3	1	0	0	0	1	9	44
	12:00 PM	0	4	2	0	6	2	0	2	0	4	0	1	1	0	2	0	0	0	0	0	12	41
	12:15 PM	0	0	1	0	1	0	0	0	0	0	0	5	1	0	6	1	0	0	0	1	8	
	12:30 PM	0	3	3	0	6	2	0	2	0	4	0	4	0	0	4	1	0	0	0	1	15	
	12:45 PM	0	1	0	0	1	0	0	1	0	1	0	3	1	0	4	0	0	0	0	0	6	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		2	16	10	0	28	7	0	10	0	17	0	30	7	0	37	4	0	2	0	6	88	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←) Center Street					From South (↑) STH 100 - Mayfair Road					From West (→) Center Street					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	1	8	7	0	16	6	0	4	0	10	0	13	2	0	15	3	0	0	0	3	44
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, September 10, 2022	Weekend	Schools in Session
Total Number of Hours Counted: 1		Non-Holiday	No Special Events

Base Information, Observed (1) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Red Lobster Median Opening

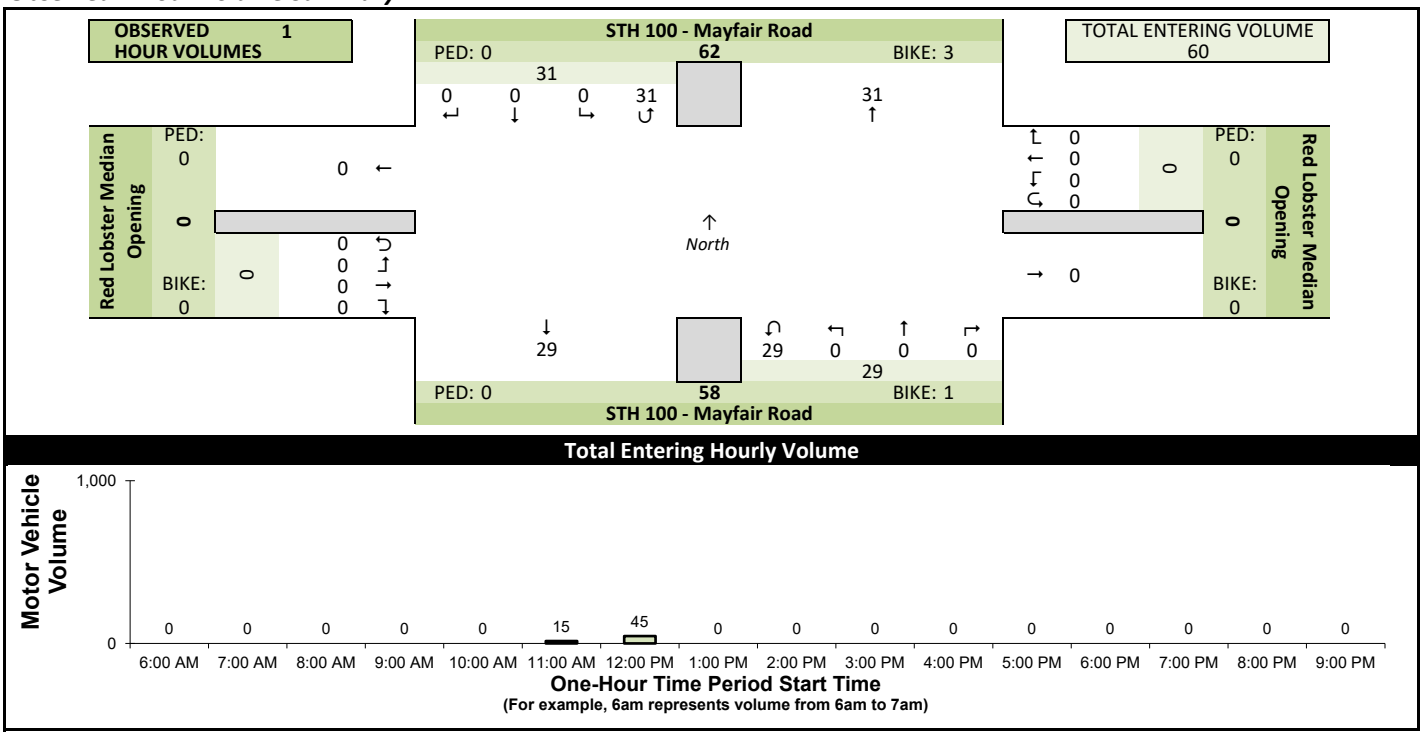
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg	Red Lobster Median Opening		
South Leg	STH 100 - Mayfair Road		
West Leg	Red Lobster Median Opening		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None	None	

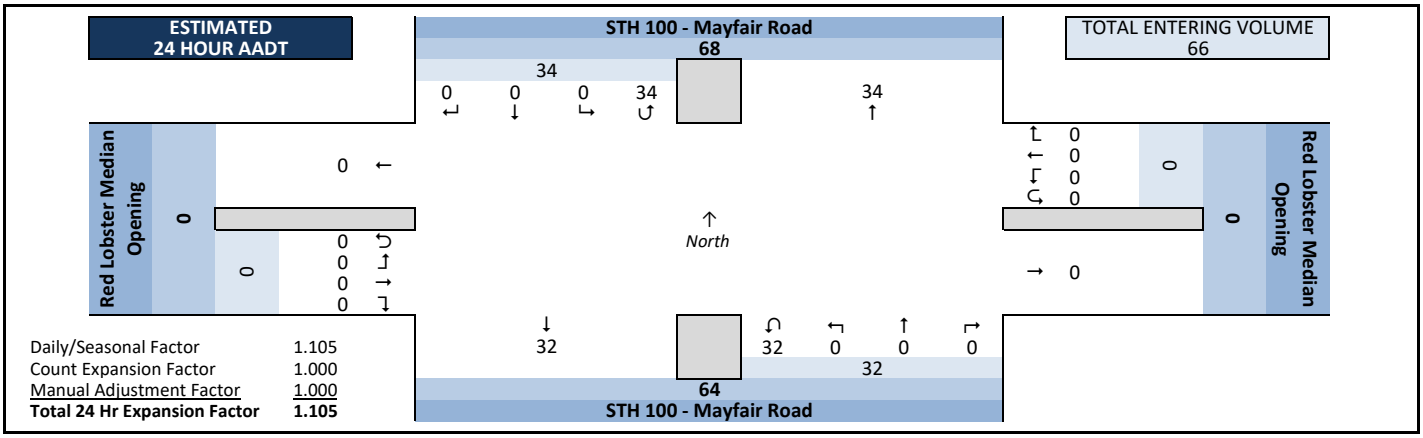
Count Information

Hrs Counted:	11:45 AM-12:45 PM				
1st Day of Count	Saturday, September 10, 2022			Weather	
AM Peak Period	Saturday, September 10, 2022			Clear & Dry	
Midday Peak Period	Saturday, September 10, 2022			Clear & Dry	
PM Peak Period	Saturday, September 10, 2022			Clear & Dry	
Calculated Peak Hours					
AM		MD	11:45-12:45pm	PM	
Peak Hours Selected for Analysis					
AM		MD	11:45-12:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.105	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Lori Atwell			
	PM Peak Period	None			
Comments	2019 DOT Seasonal Factors				

Observed 1 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

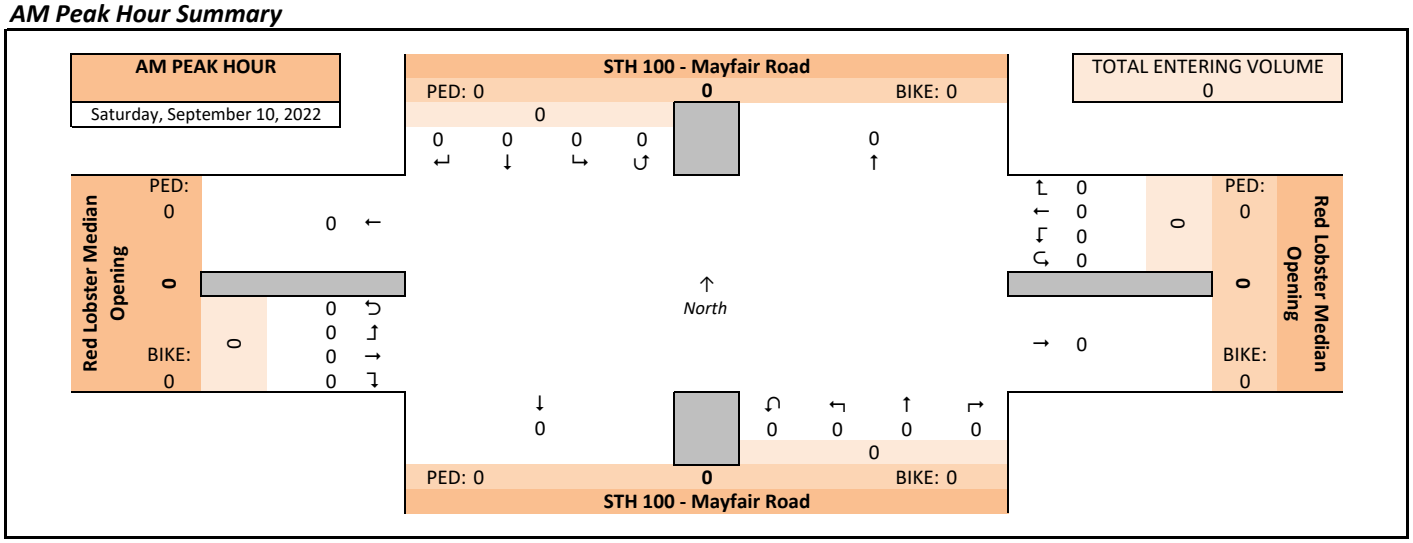
Count Basics			Page 2 of 13
Start Date:	Saturday, September 10, 2022	Weekend	Schools in Session
Total Number of Hours Counted: 1		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

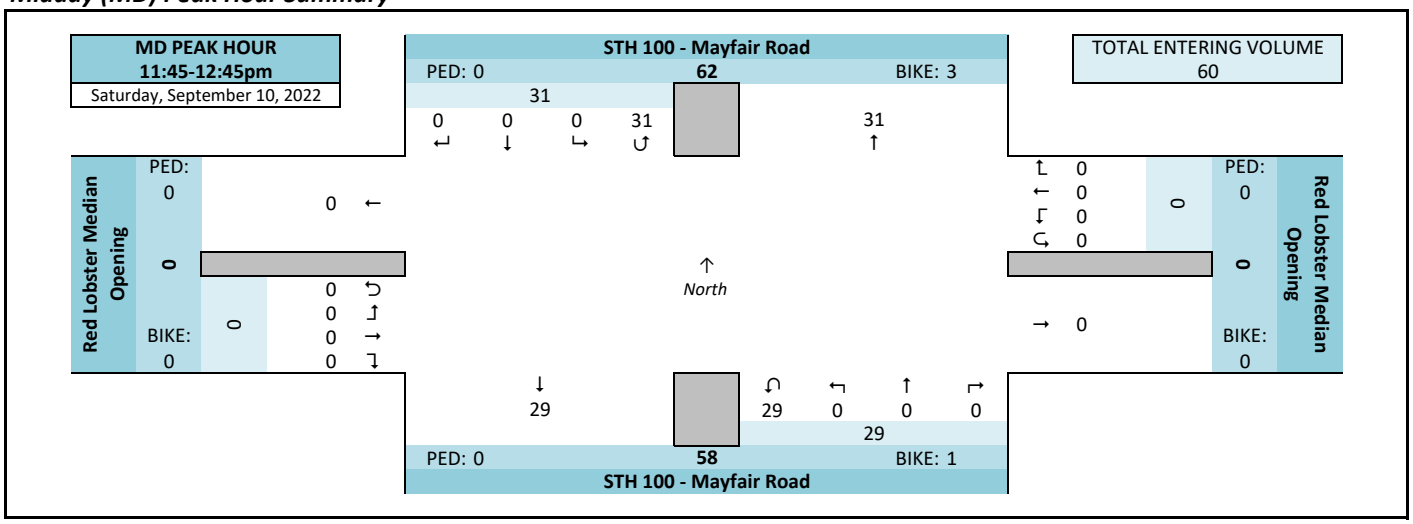
STH 100 - Mayfair Road and Red Lobster Median Opening

All Motor Vehicles

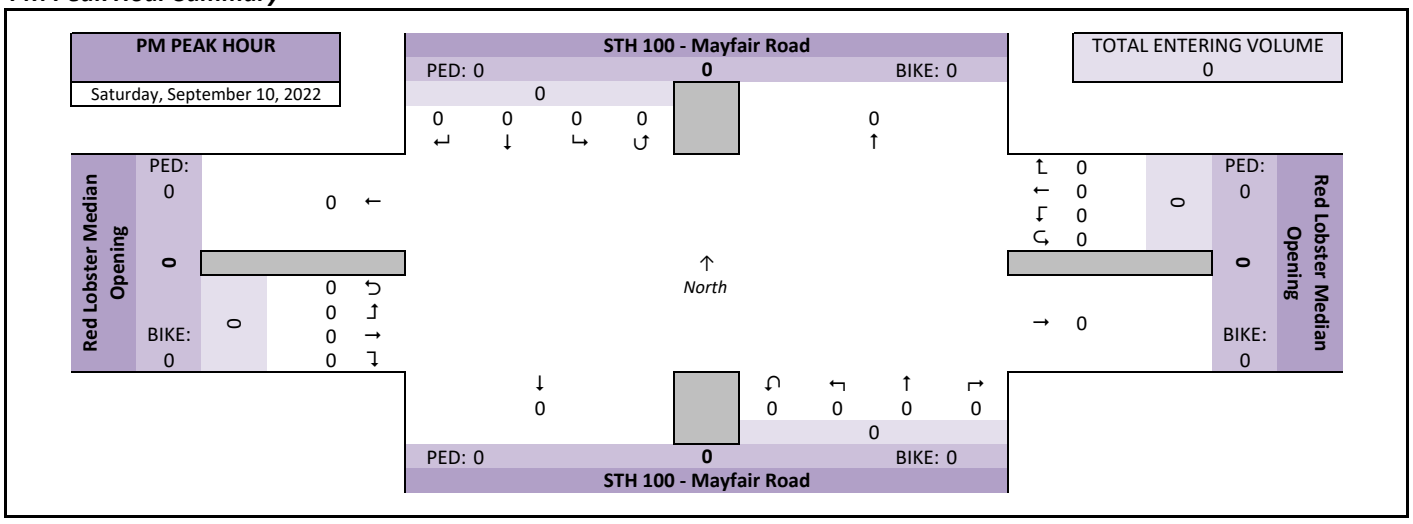
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		*Page 3 of 13*
Start Date: Saturday, September 10, 2022	Weekend	Schools in Session
Total Number of Hours Counted: 1	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Red Lobster Median Opening

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, September 10, 2022		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road					Red Lobster Median Opening					STH 100 - Mayfair Road					Red Lobster Median Opening					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, September 10, 2022		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road					Red Lobster Median Opening					STH 100 - Mayfair Road					Red Lobster Median Opening					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	0	0	0	9	9	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	15
	12:00 PM	0	0	0	14	14	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	23
	12:15 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	8
	12:30 PM	0	0	0	6	6	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	14
	Peak Hour Volume	0	0	0	31	31	0	0	0	0	0	0	0	0	29	29	0	0	0	0	0	60
	Rounded Hourly Volume	0	0	0	30	30	0	0	0	0	0	0	0	0	30	30	0	0	0	0	0	60
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.00	0.00	0.00	0.65

Saturday, September 10, 2022		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road					Red Lobster Median Opening					STH 100 - Mayfair Road					Red Lobster Median Opening					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike Volume
		STH 100 - Mayfair Road			Red Lobster Median Opening			STH 100 - Mayfair Road			Red Lobster Median Opening			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	3	3	0	0	0	0	1	1	0	0	0	4
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	3	3	0	0	0	0	1	1	0	0	0	4
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, September 10, 2022	Weekend	Schools in Session
Total Number of Hours Counted: 1	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Red Lobster Median Opening

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	9	9	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	15	60	0.65
	12:00 PM	0	0	0	14	14	0	0	0	0	0	0	0	0	9	9	0	0	0	0	0	23		
	12:15 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	8		
	12:30 PM	0	0	0	6	6	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	14		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		0	0	0	31	31	0	0	0	0	0	0	0	0	29	29	0	0	0	0	0	60		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	11:45 AM	0	0	0	31	31	0	0	0	0	0	0	0	0	29	29	0	0	0	0	0	60	0.65
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, September 10, 2022	Weekend	Schools in Session
Total Number of Hours Counted: 1		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

STH 100 - Mayfair Road and Red Lobster Median Opening

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					15-Min	Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					Total Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Tuesday, September 13, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Base Information, Observed (13) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Red Lobster Median Opening

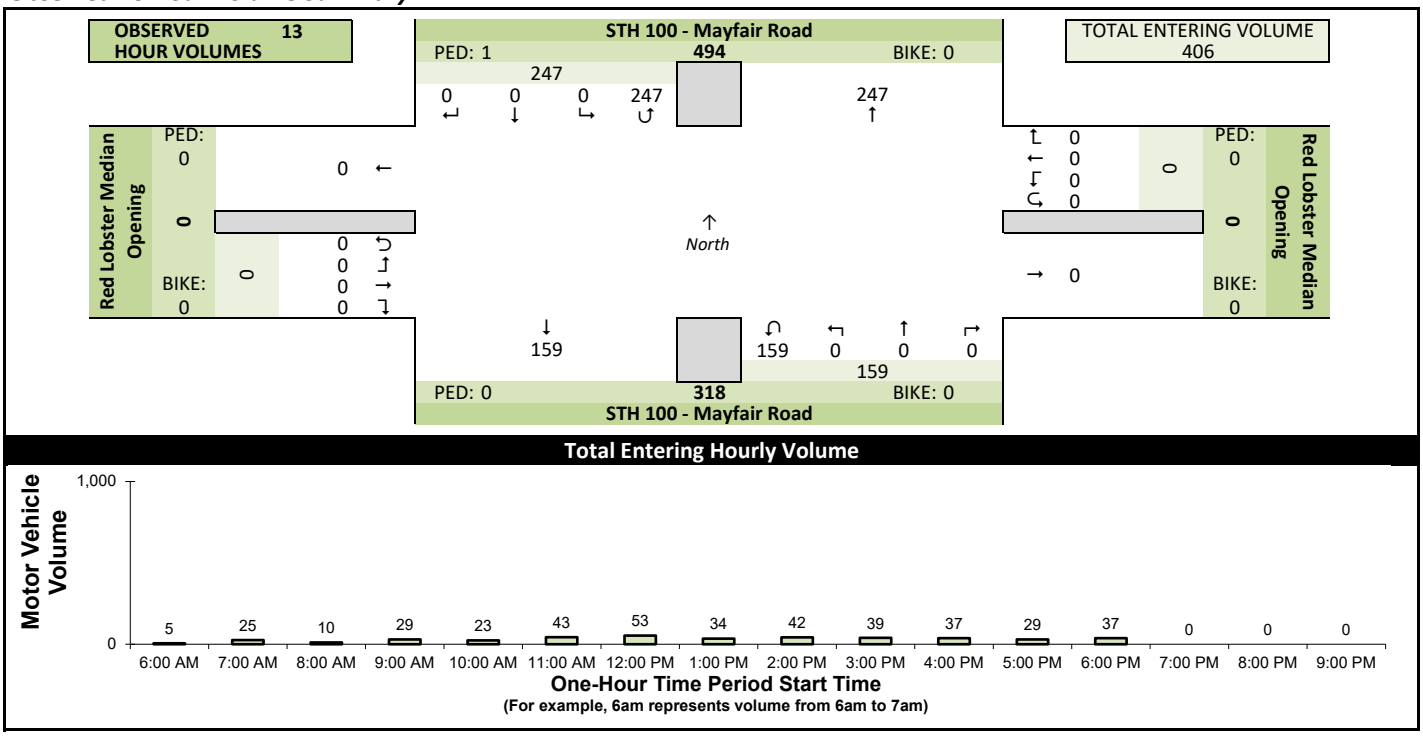
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg	Red Lobster Median Opening		
South Leg	STH 100 - Mayfair Road		
West Leg	Red Lobster Median Opening		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None	None	

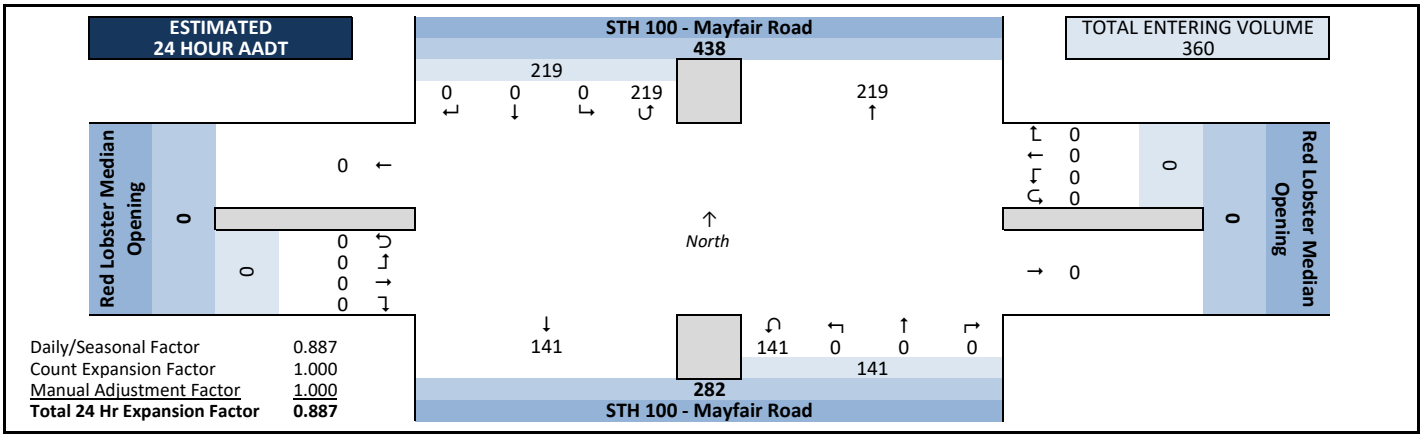
Count Information

Hrs Counted:	6:00 AM-7:00 PM				
1st Day of Count	Tuesday, September 13, 2022			Weather	
AM Peak Period	Tuesday, September 13, 2022			Clear & Dry	
Midday Peak Period	Wednesday, September 14, 2022			Clear & Dry	
PM Peak Period	Wednesday, September 14, 2022			Clear & Dry	
Calculated Peak Hours					
AM	9:00-10:00am	MD	11:45-12:45pm	PM	2:00-3:00pm
Peak Hours Selected for Analysis					
AM	7:15-8:15am	MD	11:45-12:45pm	PM	4:30-5:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	0.887	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	LuAnn Gaertner			
	Midday Peak Period	Dani Ruffalo			
	PM Peak Period	Jane Fait			
Comments	2019 DOT Seasonal Factors				

Observed 13 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

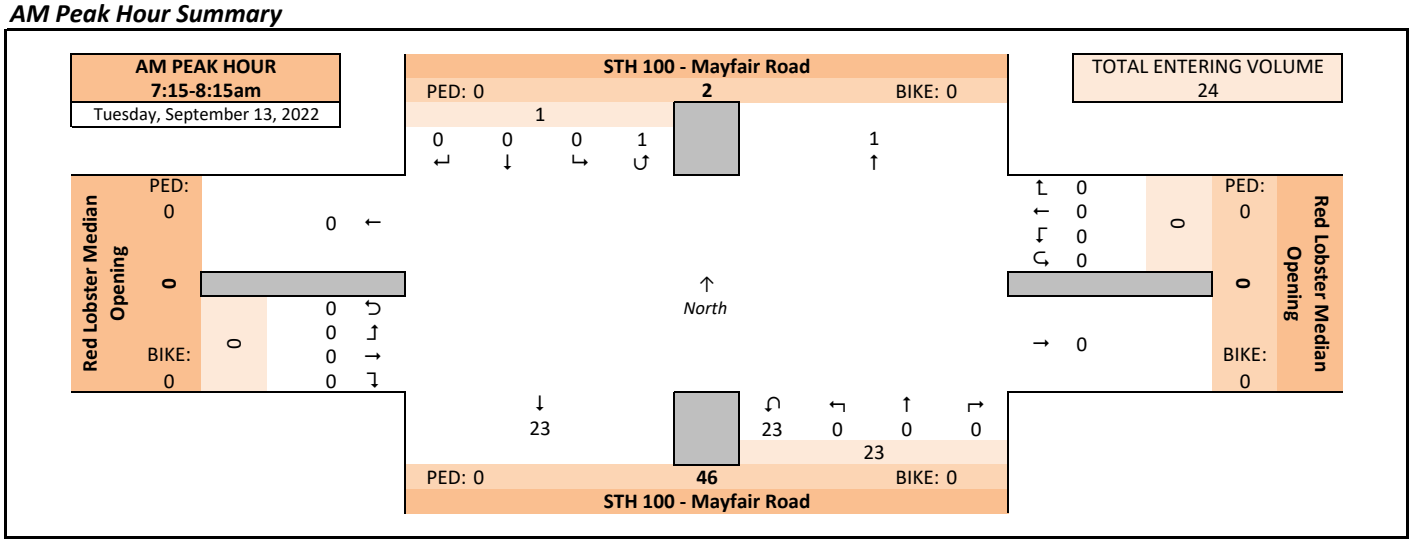
Count Basics			Page 2 of 13
Start Date:	Tuesday, September 13, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

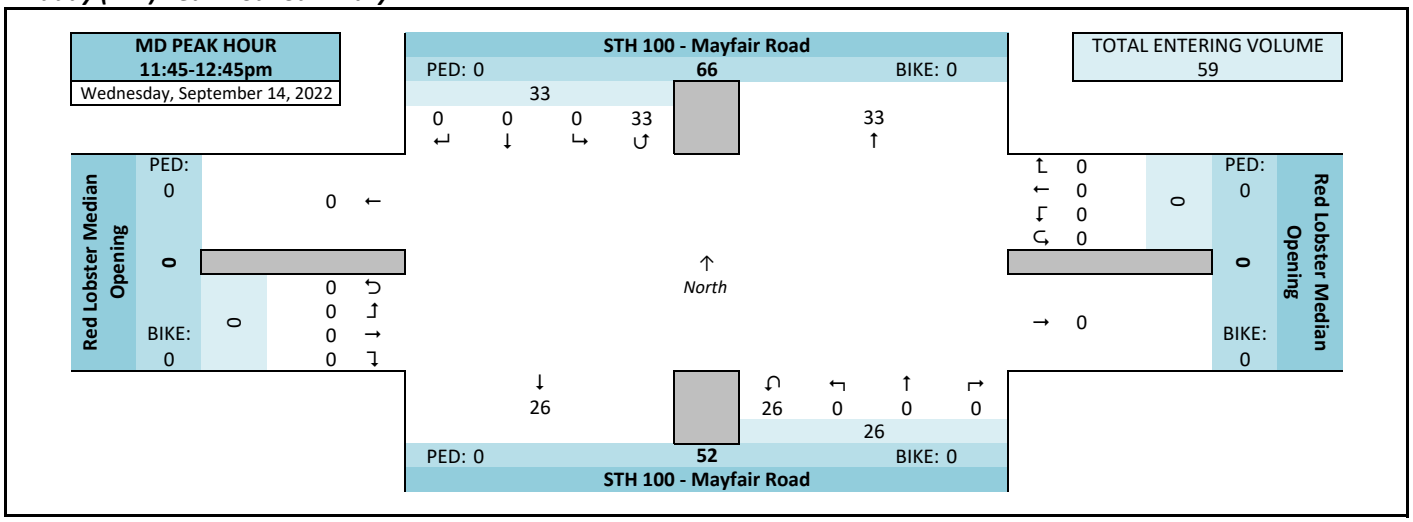
STH 100 - Mayfair Road and Red Lobster Median Opening

All Motor Vehicles

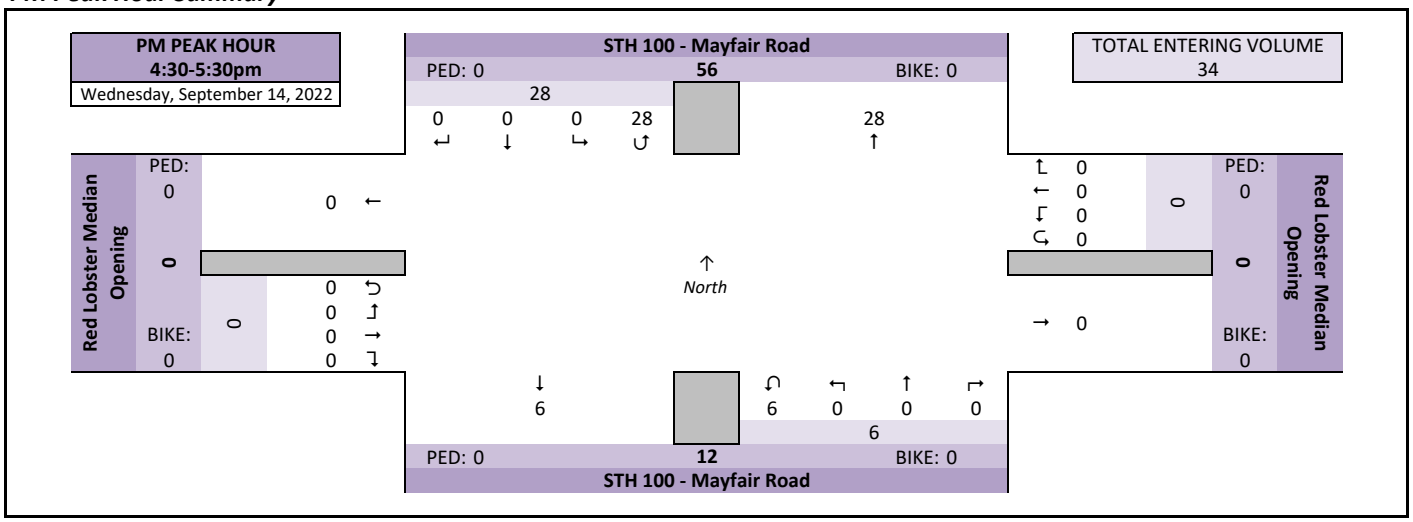
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			*Page 3 of 13*
Start Date:	Tuesday, September 13, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Red Lobster Median Opening

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Tuesday, September 13, 2022		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road					Red Lobster Median Opening					STH 100 - Mayfair Road					Red Lobster Median Opening					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3
	7:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	8
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0	0	11
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
	Peak Hour Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	23	23	0	0	0	0	0	24
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	25	25	0	0	0	0	0	25
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.52	0.00	0.00	0.00	0.00	0.00	0.55

Wednesday, September 14, 2022		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road					Red Lobster Median Opening					STH 100 - Mayfair Road					Red Lobster Median Opening					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	0	0	0	6	6	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	13
	12:00 PM	0	0	0	10	10	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	17
	12:15 PM	0	0	0	7	7	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	11
	12:30 PM	0	0	0	10	10	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	18
	Peak Hour Volume	0	0	0	33	33	0	0	0	0	0	0	0	0	26	26	0	0	0	0	0	59
	Rounded Hourly Volume	0	0	0	35	35	0	0	0	0	0	0	0	0	25	25	0	0	0	0	0	60
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.82	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.81	0.00	0.00	0.00	0.00	0.00	0.82

Wednesday, September 14, 2022		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road					Red Lobster Median Opening					STH 100 - Mayfair Road					Red Lobster Median Opening					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:30 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	9
	4:45 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	9
	5:00 PM	0	0	0	10	10	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	13
	5:15 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
	Peak Hour Volume	0	0	0	28	28	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	34
	Rounded Hourly Volume	0	0	0	30	30	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	35
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.70	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.65

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike Volume
		STH 100 - Mayfair Road			Red Lobster Median Opening			STH 100 - Mayfair Road			Red Lobster Median Opening			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Tuesday, September 13, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 13	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Red Lobster Median Opening

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0.63
	6:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0.58
	6:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	9	0.75
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	15	0.47
	7:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3	25	0.57
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3	24	0.55
	7:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	8	22	0.50
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	0	0	0	0	0	11	17	0.39
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2	10	0.63
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	12	0.75
	8:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3	25	0.45
	8:45 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	26	0.46
	9:00 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	29	0.52
	9:15 AM	0	0	0	4	4	0	0	0	0	0	0	0	0	10	10	0	0	0	0	0	14	29	0.52
	9:30 AM	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	24	0.67
	9:45 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	7	24	0.67
Midday Peak Period	10:00 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	23	0.64
	10:15 AM	0	0	0	6	6	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	9	28	0.78
	10:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	4	27	0.75
	10:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	6	36	0.69
	11:00 AM	0	0	0	6	6	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	9	43	0.83
	11:15 AM	0	0	0	5	5	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	8	51	0.75
	11:30 AM	0	0	0	8	8	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	13	54	0.79
	11:45 AM	0	0	0	6	6	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	13	59	0.82
	12:00 PM	0	0	0	10	10	0	0	0	0	0	0	0	0	7	7	0	0	0	0	0	17	53	0.74
	12:15 PM	0	0	0	7	7	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	11	39	0.54
	12:30 PM	0	0	0	10	10	0	0	0	0	0	0	0	0	8	8	0	0	0	0	0	18	35	0.49
	12:45 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	7	29	0.60
	1:00 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	34	0.71
	1:15 PM	0	0	0	4	4	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	7	42	0.88
	1:30 PM	0	0	0	7	7	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	12	42	0.88
	1:45 PM	0	0	0	7	7	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	12	42	0.88
PM Peak Period	2:00 PM	0	0	0	9	9	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	11	42	0.88
	2:15 PM	0	0	0	6	6	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	7	40	0.83
	2:30 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	12	40	0.83
	2:45 PM	0	0	0	7	7	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	12	42	0.75
	3:00 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	9	39	0.70
	3:15 PM	0	0	0	5	5	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	7	38	0.68
	3:30 PM	0	0	0	9	9	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	14	42	0.75
	3:45 PM	0	0	0	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	37	0.84
	4:00 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	37	0.84
	4:15 PM	0	0	0	9	9	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	11	42	0.81
	4:30 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	9	34	0.65
	4:45 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	9	32	0.62
	5:00 PM	0	0	0	10	10	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	13	29	0.56
	5:15 PM	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3	24	0.75
	5:30 PM	0	0	0	6	6	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	7	29	0.91
	5:45 PM	0	0	0	3	3	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	6	32	0.80
	6:00 PM	0	0	0	5	5	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	8	37	0.84
	6:15 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8		
	6:30 PM	0	0	0	6	6	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	10		
	6:45 PM	0	0	0	8	8	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	11		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		0	0	0	247	247	0	0	0	0	0	0	0	0	159	159	0	0	0	0	0	406		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	7:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	23	23	0	0	0	0	0	24	0.55
MD	11:45 AM	0	0	0	33	33	0	0	0	0	0	0	0	0	26	26	0	0	0	0	0	59	0.82
PM	4:30 PM	0	0	0	28	28	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	34	0.65

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Tuesday, September 13, 2022	Weekday	Schools in Session
Total Number of Hours Counted: 13		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Red Lobster Median Opening

15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←) Red Lobster Median Opening					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster Median Opening					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHF & %HV Summary Table

Intersection	Peak Hour	PHF	%HV By Approach											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
STH 100 & Burleigh Street	AM	**0.85**	5%			1%			4%			2%		
	PM	0.96	1%			1%			1%			2%		
	SAT	*0.95*	*2%*			*1%*			*2%*			*3%*		
STH 100 & Chick-Fil-A Full Access	AM	**0.81**	1%			--			3%			2%		
	PM	0.94	1%			--			1%			1%		
	SAT	0.98	1%			--			1%			1%		
STH 100 & Chick-Fil-A Right-Out Access	AM	**0.81**	1%			--			3%			2%		
	PM	0.94	1%			--			1%			1%		
	SAT	0.98	1%			--			1%			1%		
STH 100 & Center Street	AM	**0.81**	1%			15%			3%			2%		
	PM	0.94	1%			3%			1%			1%		
	SAT	0.98	1%			4%			1%			1%		

APPENDIX A

OFF-SITE TRAFFIC

Off-Site Trip Generation & Assignments
(Burleigh Street Developments)

Fulfillment Center Typical Day Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak			Mid-AM Peak			PM Peak			SAT Peak		
				In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Fulfillment Center Employees	--	541.64 x 1,000 SF	850	0	0	0	130	0	130	0	0	0	35	100	135
Fulfillment Center Heavy Trucks			40	0	0	0	0	0	0	0	0	0	0	0	0
Fulfillment Center Vans			580	0	0	0	0	180	180	60	30	90	0	0	0
Total New Trips			**1,470**	**0**	**0**	**0**	**130**	**180**	**310**	**60**	**30**	**90**	**35**	**100**	**135**

Trip generation based on information provided by Kimley-Horn. PM Peak "vans" are flex-scheduled deliveries made with personal vehicles.
AM values represent highest trip generating hour from 7:00 to 9:00am.
Mid-AM values represent highest trip generating hour from 9:00 to 11:00am.
PM values represent highest trip generating hour from 4:00 to 5:00pm.
SAT volumes represent highest trip generating hour from 11:00 to 2:00pm.
Daily volumes are rounded to the nearest 10. Peak hour volumes are rounded to the nearest 5.

Trip Distribution - Employees

North on 124th	10%	90	0	0	15	0	0	0	5	10
West on Burleigh	5%	40	0	0	5	0	0	0	5	5
South on 124th	5%	40	0	0	5	0	0	0	0	5
North on IH 41	25%	210	0	0	35	0	0	0	10	25
South on IH 41	30%	260	0	0	40	0	0	0	10	30
North on STH 100	5%	40	0	0	5	0	0	0	0	5
East on Burleigh	15%	130	0	0	20	0	0	0	5	15
South on STH 100	5%	40	0	0	5	0	0	0	0	5
	100%	***850***	***0***	***0***	***130***	***0***	***0***	***0***	***35***	***100***

Trip Distribution - Heavy Vehicles

North on 124th	0%	0	0	0	0	0	0	0	0	0
West on Burleigh	0%	0	0	0	0	0	0	0	0	0
South on 124th	0%	0	0	0	0	0	0	0	0	0
North on IH 41	50%	20	0	0	0	0	0	0	0	0
South on IH 41	50%	20	0	0	0	0	0	0	0	0
North on STH 100	0%	0	0	0	0	0	0	0	0	0
East on Burleigh	0%	0	0	0	0	0	0	0	0	0
South on STH 100	0%	0	0	0	0	0	0	0	0	0
	100%	***40***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

Trip Distribution - Vans

North on 124th	10%	60	0	0	0	20	5	0	0	0
West on Burleigh	15%	80	0	0	0	25	10	5	0	0
South on 124th	10%	60	0	0	0	20	5	5	0	0
North on IH 41	15%	90	0	0	0	25	10	5	0	0
South on IH 41	15%	90	0	0	0	25	10	5	0	0
North on STH 100	10%	60	0	0	0	20	5	5	0	0
East on Burleigh	15%	80	0	0	0	25	10	5	0	0
South on STH 100	10%	60	0	0	0	20	5	0	0	0
	100%	***580***	***0***	***0***	***0***	***180***	***60***	***30***	***0***	***0***

TADI TRAFFIC ANALYSIS & DESIGN, INC.
2531; 06-15-2020

EXHIBIT 4-3a
FULFILLMENT CENTER TYPICAL DAY TRIP GENERATION & DISTRIBUTION TABLES

CITY OF WAUWATOSA, WISCONSIN

Vacant Nordstrom Off-Site Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak In	AM Peak Out	AM Peak Total	Mid-AM Peak In	Mid-AM Peak Out	Mid-AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
Apparel	876	50.0 x 1,000 SF	3,320 (66.40)	40 (80%)	10 (20%)	50 (1.00)	130 (80%)	35 (20%)	165 Prop	105 (51%)	100 (49%)	205 (4.12)	135 (50%)	130 (50%)	265 (5.32)
Total Trips			**3,320**	**40**	**10**	**50**	**130**	**35**	**165**	**105**	**100**	**205**	**135**	**130**	**265**
Minus Linked Trips		*10%*	*330*	*5*	*0*	*5*	*15*	*5*	*20*	*10*	*10*	*20*	*15*	*15*	*30*
Total New Trips			**2,990**	**35**	**10**	**45**	**115**	**30**	**145**	**95**	**90**	**185**	**120**	**115**	**235**

Land use, density & linked trip percentage estimates per November 1, 2019 Ayres Memo, page 4.

Prop. = Proportion of 9-10am trips to 7-9am peak hour trips, per ITE. ITE 876: 5.0/1.5. Also matches 5.0% of daily per ITE. Assumes same In/Out split as AM Peak Hour.

Trip Distribution, Without Wirth Connection

North on 124th	5%	150	5	0	5	0	5	5	5	5
West on Burleigh	5%	150	0	0	5	0	5	5	5	5
South on 124th	5%	150	0	0	5	0	5	5	5	5
North on IH 41	20%	600	5	5	25	5	20	20	25	25
South on IH 41	25%	740	10	5	30	10	20	25	30	30
North on STH 100	10%	300	5	0	10	5	10	10	10	10
East on Burleigh	15%	450	5	0	15	5	15	10	20	15
South on STH 100	15%	450	5	0	20	5	15	10	20	20
	100%	***2990***	***35***	***10***	***115***	***30***	***95***	***90***	***120***	***115***

Trip Distribution, With Wirth Connection

North on 124th	10%	300	5	0	10	0	10	10	10	10
West on Burleigh	5%	150	0	0	5	0	5	5	5	5
South on 124th	5%	150	0	0	5	0	5	5	5	5
North on IH 41	15%	450	5	5	20	5	15	15	20	20
South on IH 41	25%	740	10	5	30	10	20	25	30	30
North on STH 100	10%	300	5	0	10	5	10	10	10	10
East on Burleigh	15%	450	5	0	15	5	15	10	20	15
South on STH 100	15%	450	5	0	20	5	15	10	20	20
	100%	***2990***	***35***	***10***	***115***	***30***	***95***	***90***	***120***	***115***

MFC Phase III Off-Site Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak In	AM Peak Out	AM Peak Total	Mid-AM Peak In	Mid-AM Peak Out	Mid-AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
Multifamily Housing (Mid-Rise)	221	792 Units	4,310 FCE	70 (26%)	190 (74%)	260 FCE	40 (26%)	110 (74%)	150 Prop.	200 (61%)	125 (39%)	325 FCE	170 (49%)	180 (51%)	350 (0.44)
Senior Adult Housing-Attached	252	256 Units	1,000 FCE	20 (35%)	30 (65%)	50 FCE	20 (35%)	35 (65%)	55 Prop.	35 (55%)	30 (45%)	65 (0.26)	55 (62%)	35 (38%)	90 FCE
General Office Building	710	508.48 x 1,000 SF	5,140 FCE	435 (86%)	70 (14%)	505 FCE	225 (86%)	35 (14%)	260 Prop.	85 (16%)	450 (84%)	535 FCE	145 (54%)	125 (46%)	270 (0.53)
Total Trips			**10,450**	**525**	**290**	**815**	**285**	**180**	**465**	**320**	**605**	**925**	**370**	**340**	**710**
Minus Linked Trips	*Res.*	*5%*	*270*	*5*	*10*	*15*	*5*	*5*	*10*	*10*	*10*	*20*	*10*	*10*	*20*
Minus Linked Trips	*Offc*	*5%*	*260*	*20*	*5*	*25*	*10*	*0*	*10*	*5*	*25*	*30*	*5*	*5*	*10*
Total New Trips			**9,920**	**500**	**275**	**775**	**270**	**175**	**445**	**305**	**570**	**875**	**355**	**325**	**680**

Land use, density & linked trip percentage estimates per November 1, 2019 Ayres Memo, page 8.
FCE = Fitted Curve Equation.
Prop. = Proportion of 9-10am trips to 7-9am peak hour trips, per ITE. ITE 221: 4.3/7.5; ITE 252: 5.6/5.0; ITE 710: 5.4/10.5. Assumes same In/Out split as AM Peak Hour.

Trip Distribution, Without Wirth Connection

North on 124th	5%	500	25	15	15	10	15	30	20	15
West on Burleigh	5%	500	25	15	15	10	15	30	20	15
South on 124th	5%	500	25	15	15	10	15	30	20	15
North on IH 41	20%	1980	100	55	55	35	60	115	70	65
South on IH 41	25%	2470	125	70	65	45	80	140	90	80
North on STH 100	10%	990	50	25	25	15	30	55	35	35
East on Burleigh	15%	1490	75	40	40	25	45	85	50	50
South on STH 100	15%	1490	75	40	40	25	45	85	50	50
	100%	***9920***	***500***	***275***	***270***	***175***	***305***	***570***	***355***	***325***

Trip Distribution, With Wirth Connection

North on 124th	10%	990	50	30	25	20	30	55	35	30
West on Burleigh	5%	500	25	15	15	10	15	30	20	15
South on 124th	5%	500	25	15	15	10	15	30	20	15
North on IH 41	15%	1490	75	40	45	25	45	90	55	50
South on IH 41	25%	2470	125	70	65	45	80	140	90	80
North on STH 100	10%	990	50	25	25	15	30	55	35	35
East on Burleigh	15%	1490	75	40	40	25	45	85	50	50
South on STH 100	15%	1490	75	40	40	25	45	85	50	50
	100%	***9920***	***500***	***275***	***270***	***175***	***305***	***570***	***355***	***325***

Remaining 11800 Off-Site Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak In	AM Peak Out	AM Peak Total	Mid-AM Peak In	Mid-AM Peak Out	Mid-AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
High-Cube Transload & Short-Term Storage Warehouse	154	638.2 x 1,000 SF	890 (1.40)	40 (77%)	10 (23%)	50 (0.08)	60 (77%)	15 (23%)	75 Prop	20 (28%)	45 (72%)	65 (0.10)	40 (50%)	35 (50%)	75 (0.12)
Total New Trips			**890**	**40**	**10**	**50**	**60**	**15**	**75**	**20**	**45**	**65**	**40**	**35**	**75**

Land use, density & linked trip percentage estimates per November 1, 2019 Ayres Memo, page 4.
Prop. = Proportion of 9-10am trips to 7-9am peak hour trips, per ITE. ITE 154: 7.2/4.8. Assumes same In/Out split as AM Peak Hour.

Trip Distribution

North on 124th	5%	40	0	0	5	0	0	5	0	0	
West on Burleigh	5%	40	0	0	5	0	0	0	0	0	
South on 124th	5%	40	0	0	0	0	0	0	0	0	
North on IH 41	30%	270	15	5	20	5	5	15	15	10	
South on IH 41	35%	310	15	5	20	5	10	15	15	15	
North on STH 100	5%	50	0	0	0	0	0	0	0	0	
East on Burleigh	5%	50	5	0	5	0	0	5	5	5	
South on STH 100	10%	90	5	0	5	5	5	5	5	5	
	100%	***890***	***40***	***10***	***60***	***15***	***20***	***45***	***40***	***35***	

TADI TRAFFIC ANALYSIS & DESIGN, INC.
2531; 06-15-2020

EXHIBIT 4-3g
REMAINING 11800 OFF-SITE TRIP GENERATION & DISTRIBUTION TABLES

CITY OF WAUWATOSA, WISCONSIN

Burleigh-South Off-Site Trip Generation Table

Land Use	ITE Code	Proposed Size	Weekday Daily	AM Peak In	AM Peak Out	AM Peak Total	Mid-AM Peak In	Mid-AM Peak Out	Mid-AM Peak Total	PM Peak In	PM Peak Out	PM Peak Total	SAT Peak In	SAT Peak Out	SAT Peak Total
Multifamily Housing (Mid-Rise)	221	299 Units	1,630 FCE	25 (26%)	75 (74%)	100 FCE	15 (26%)	40 (74%)	55 Prop.	75 (61%)	50 (39%)	125 FCE	65 (49%)	65 (51%)	130 FCE
Retail	820	151.10 x 1,000 SF	7,960 FCE	140 (62%)	85 (38%)	225 FCE	140 (62%)	85 (38%)	225 FCE	355 (48%)	385 (52%)	740 FCE	445 (52%)	415 (48%)	860 FCE
General Office Building	710	470.00 x 1,000 SF	4,760 FCE	405 (86%)	65 (14%)	470 FCE	205 (86%)	35 (14%)	240 Prop.	80 (16%)	415 (84%)	495 FCE	135 (54%)	115 (46%)	250 (0.53)
High-Turnover Sit-Down Restaurant	932	9.0 x 1,000 SF	1,010 (112.18)	50 (55%)	40 (45%)	90 (9.94)	55 (55%)	45 (45%)	100 Prop.	55 (62%)	35 (38%)	90 (9.77)	50 (51%)	50 (49%)	100 (11.19)
Sports Complex	488	5 Fields	360 (71.33)	5 (61%)	0 (39%)	5 (0.99)	5 (61%)	0 (39%)	5 (0.99)	55 (66%)	25 (34%)	80 (16.43)	95 (48%)	105 (52%)	200 (40.10)
Total Trips			**15,720**	**625**	**265**	**890**	**420**	**205**	**625**	**620**	**910**	**1,530**	**790**	**750**	**1,540**
Minus Linked Trips	*(221)*	*5%*	*80*	*0*	*5*	*5*	*0*	*0*	*0*	*5*	*5*	*10*	*5*	*5*	*10*
Minus Linked Trips	*(710)*	*5%*	*240*	*20*	*5*	*25*	*10*	*0*	*10*	*5*	*20*	*25*	*5*	*5*	*10*
Minus Linked Trips	*(932)*	*15%*	*150*	*10*	*5*	*15*	*10*	*5*	*15*	*10*	*5*	*15*	*10*	*10*	*20*
Minus Linked Trips	*(488)*	*5%*	*20*	*0*	*0*	*0*	*0*	*0*	*0*	*5*	*0*	*5*	*5*	*5*	*10*
Total Driveway Trips			**15,230**	**595**	**250**	**845**	**400**	**200**	**600**	**595**	**880**	**1,475**	**765**	**725**	**1,490**
Minus Pass-by Trips	*(820)*	*10%*	*800*	*10*	*10*	*20*	*10*	*10*	*20*	*35*	*35*	*70*	*40*	*40*	*80*
Minus Pass-by Trips	*(932)*	*10%*	*90*	*5*	*5*	*10*	*5*	*5*	*10*	*5*	*5*	*10*	*5*	*5*	*10*
Total New Trips			**14,340**	**580**	**235**	**815**	**385**	**185**	**570**	**555**	**840**	**1,395**	**720**	**680**	**1,400**

Land use & density estimates per City-provided TIF Projections dated 7-30-2014. Sports Center of 135,000-sf (2 small soccer fields) + 3 outdoor fields assumed.
FCE = Fitted Curve Equation. ITE 820 Mid-AM set to equal AM Peak.
Prop. = Proportion of 9-10am trips to 7-9am peak hour trips, per ITE. ITE 221: 4.3/7.5; ITE 710: 5.4/10.5; ITE 932: 3.6/3.2. Assumes same In/Out split as AM Peak Hour.
ITE 488 Mid-AM set equal to AM Peak.
Incorporates Neighborhood Center (South), Employment Center, and Mixed Use/Community Recreation areas south of Burleigh from IH 41 to railroad tracks.

Trip Distribution (Total Area)

North on 124th	5%	720	30	10	20	10	30	40	35	35	
West on Burleigh	5%	720	30	10	20	10	30	40	35	35	
South on 124th	5%	720	30	10	20	10	25	40	35	35	
North on IH 41	20%	2870	115	50	75	35	110	170	145	135	
South on IH 41	20%	2870	115	45	75	35	110	170	145	135	
North on STH 100	10%	1430	60	25	40	20	55	85	70	70	
East on Burleigh	10%	1430	60	25	40	20	55	85	70	70	
South on STH 100	15%	2150	85	35	55	25	85	125	110	100	
North on 112th & 114th	10%	1430	55	25	40	20	55	85	75	65	
	100%	***14340***	***580***	***235***	***385***	***185***	***555***	***840***	***720***	***680***	

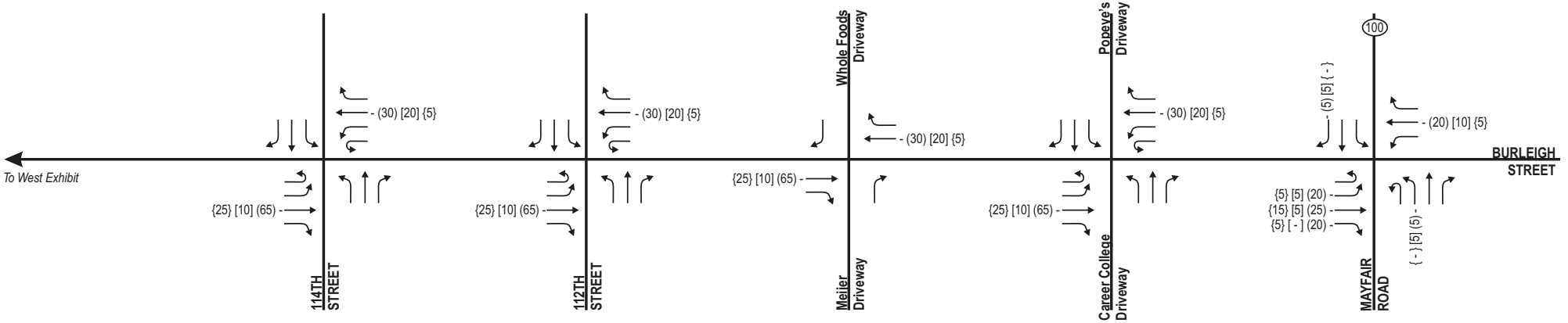
TADI TRAFFIC ANALYSIS & DESIGN, INC.
2531; 06-15-2020

EXHIBIT 4-3h
BURLEIGH-SOUTH OFF-SITE TRIP GENERATION & DISTRIBUTION TABLES

CITY OF WAUWATOSA, WISCONSIN

LEGEND

XX	AM Peak Hour Volumes (7:15-8:15 AM)
(XX)	Mid AM Peak Hour Volumes (9:00-10:00AM)
[XX]	PM Peak Hour Volumes (4:30-5:30 PM)
{XX}	Saturday Peak Hour Volumes (11:45AM-12:45 PM)
–	Negligible Traffic Volumes (Fewer than 3 vph)



TADI TRAFFIC ANALYSIS & DESIGN, INC.

2531; 6-15-2020

N

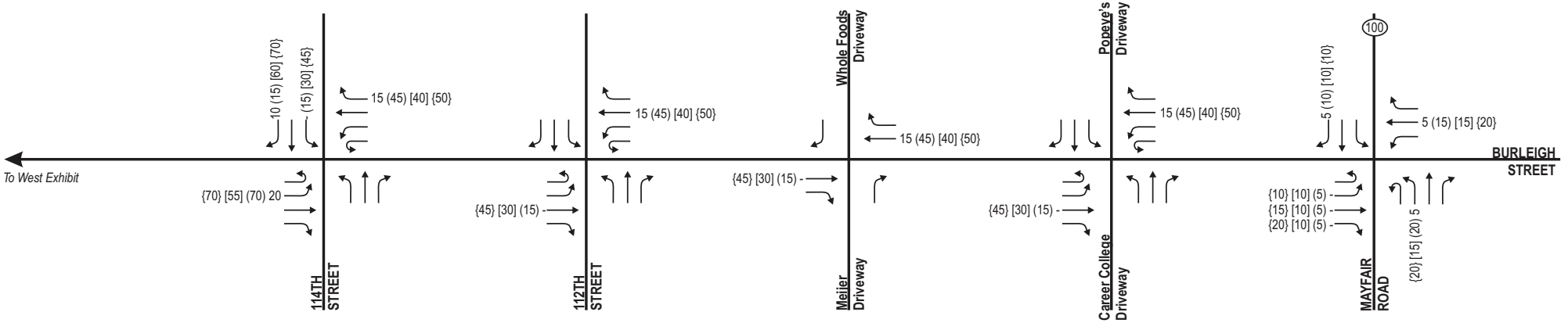
NOT TO SCALE

EXHIBIT 4-5a: EAST
FULFILLMENT CENTER TYPICAL DAY NEW TRIPS
WITH RIGHT-IN/OUT

CITY OF WAUWATOSA, WISCONSIN

LEGEND

XX	AM Peak Hour Volumes (7:15-8:15 AM)
(XX)	Mid AM Peak Hour Volumes (9:00-10:00AM)
[XX]	PM Peak Hour Volumes (4:30-5:30 PM)
{XX}	Saturday Peak Hour Volumes (11:45AM-12:45 PM)
–	Negligible Traffic Volumes (Fewer than 3 vph)



TADI TRAFFIC ANALYSIS & DESIGN, INC.

2531; 6-15-2020

N

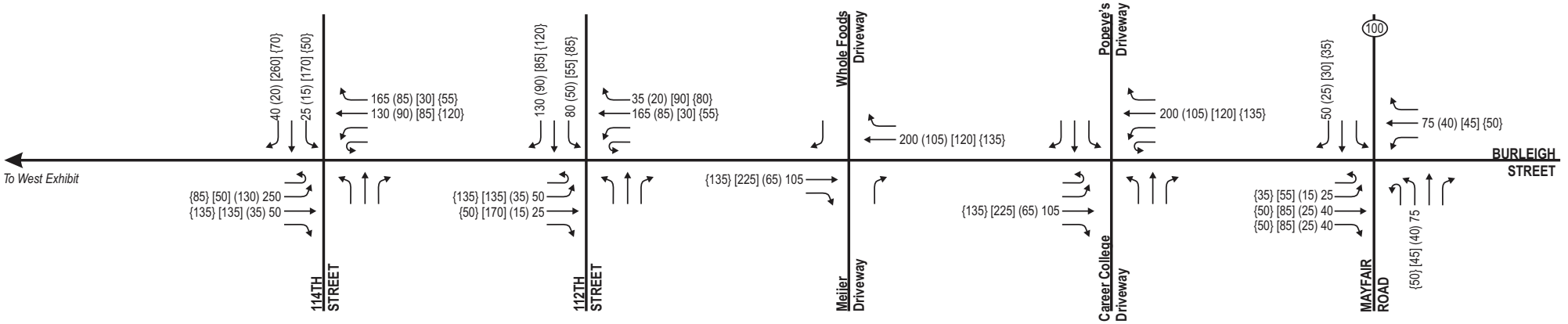
NOT TO SCALE

EXHIBIT 4-8b: EAST
VACANT NORDSTROM OFF-SITE NEW TRIPS
NO WIRTH CONNECTION

CITY OF WAUWATOSA, WISCONSIN

LEGEND

XX	AM Peak Hour Volumes (7:15-8:15 AM)
(XX)	Mid AM Peak Hour Volumes (9:00-10:00AM)
[XX]	PM Peak Hour Volumes (4:30-5:30 PM)
{XX}	Saturday Peak Hour Volumes (11:45AM-12:45 PM)
–	Negligible Traffic Volumes (Fewer than 3 vph)



TADI TRAFFIC ANALYSIS & DESIGN, INC.

2531; 6-15-2020

N

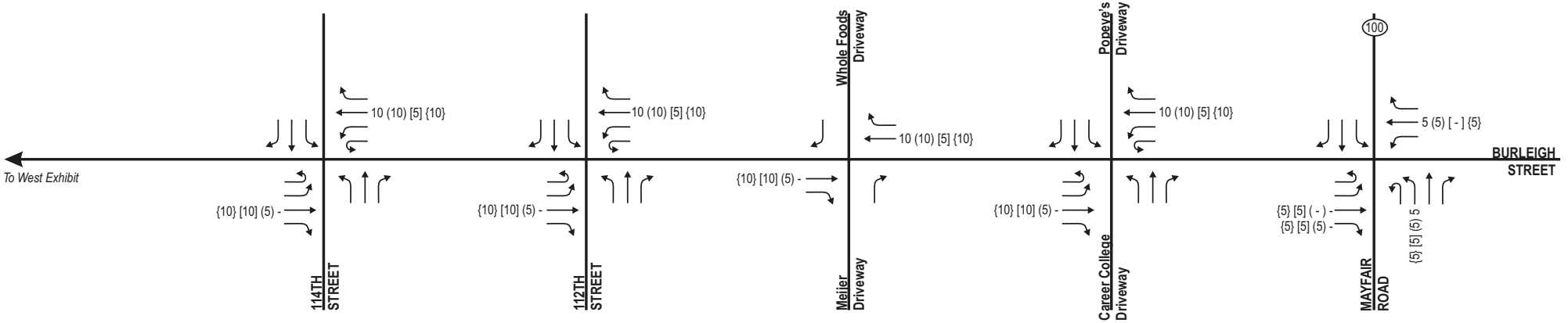
NOT TO SCALE

EXHIBIT 4-8d: EAST
MFC PHASE III OFF-SITE NEW TRIPS
NO WIRTH CONNECTION

CITY OF WAUWATOSA, WISCONSIN

LEGEND

XX	AM Peak Hour Volumes (7:15-8:15 AM)
(XX)	Mid AM Peak Hour Volumes (9:00-10:00AM)
[XX]	PM Peak Hour Volumes (4:30-5:30 PM)
{XX}	Saturday Peak Hour Volumes (11:45AM-12:45 PM)
–	Negligible Traffic Volumes (Fewer than 3 vph)



TADI TRAFFIC ANALYSIS & DESIGN, INC.

2531; 6-15-2020

N

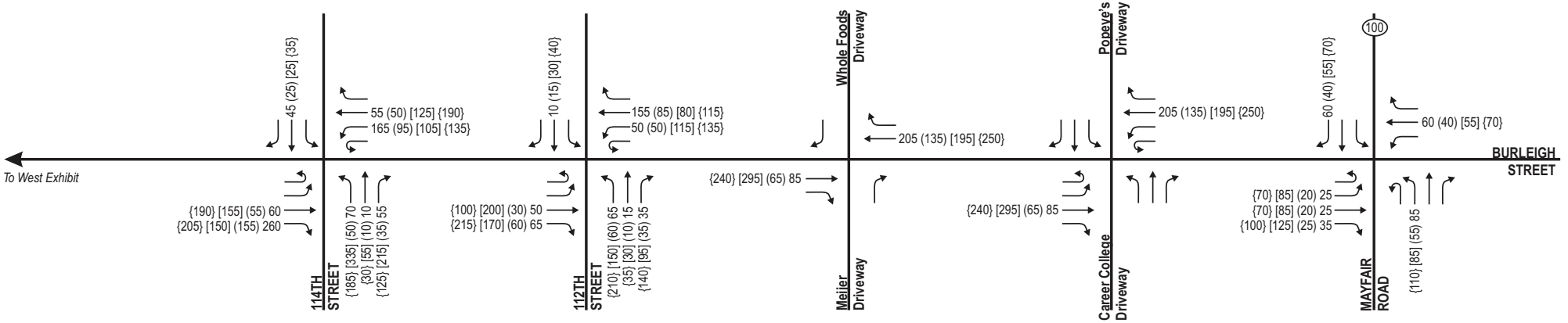
NOT TO SCALE

EXHIBIT 4-9a: EAST
REMAINING 11800 OFF-SITE NEW TRIPS
WITH RIGHT-IN/OUT

CITY OF WAUWATOSA, WISCONSIN

LEGEND

XX	AM Peak Hour Volumes (7:15-8:15 AM)
(XX)	Mid AM Peak Hour Volumes (9:00-10:00AM)
[XX]	PM Peak Hour Volumes (4:30-5:30 PM)
{XX}	Saturday Peak Hour Volumes (11:45AM-12:45 PM)
–	Negligible Traffic Volumes (Fewer than 3 vph)



TADI TRAFFIC ANALYSIS & DESIGN, INC.

2531; 6-15-2020

N

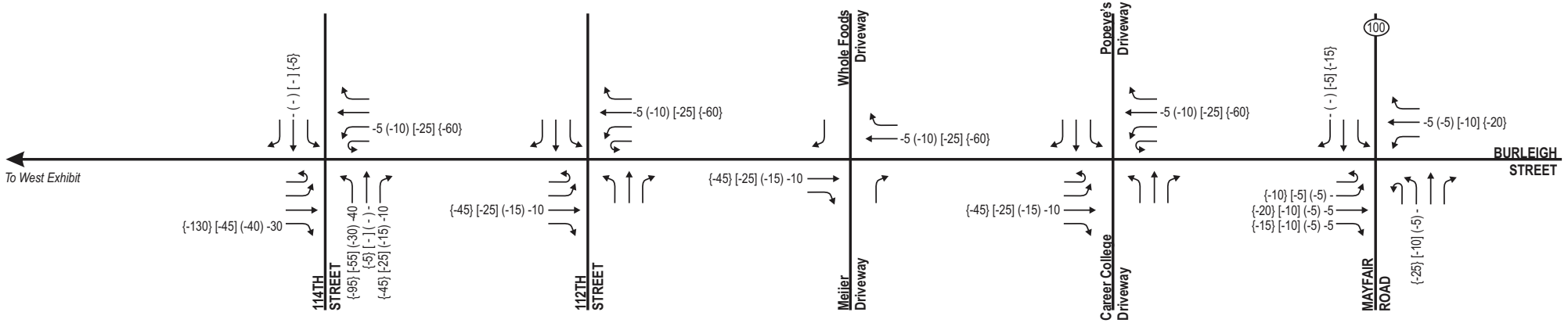
NOT TO SCALE

EXHIBIT 4-9e: EAST
BURLEIGH-SOUTH OFF-SITE DRIVEWAY TRIPS

CITY OF WAUWATOSA, WISCONSIN

LEGEND

XX	AM Peak Hour Volumes (7:15-8:15 AM)
(XX)	Mid AM Peak Hour Volumes (9:00-10:00AM)
[XX]	PM Peak Hour Volumes (4:30-5:30 PM)
{XX}	Saturday Peak Hour Volumes (11:45AM-12:45 PM)
–	Negligible Traffic Volumes (Fewer than 3 vph)



TADI TRAFFIC ANALYSIS & DESIGN, INC.

2531; 6-15-2020

N

NOT TO SCALE

EXHIBIT 4-9g: EAST
REMOVAL OF EXISTING 114TH STREET TRAFFIC

CITY OF WAUWATOSA, WISCONSIN

APPENDIX A

TRAFFIC DATA & WORKSHEETS

Existing Signal Timings
Saturation Flow Rate Calculations
Queue Storage Calculations

Timing Cover Sheet for Signal: S1085 HWY: 100 and W Burleigh St

Date:	6/13/2022	Changes Made By:	D. Brantner
Signal No:	S1085	Highway:	100
County:	MIL	Local Hwy:	N Mayfair Rd
Controller:	ECONOLITE	Location:	W Burleigh St
School:	None	Ped:	Audible

Pre-emption

Preemption:	Type:	Phases:
Emergency - Emitter	3M Opticom	2+5, 6+1, 4+7, 8+3

Municipal Id: 0663-42-20
EVP Contact: Fire Dept. Asst. Chief Jim Case
Community:
Contact Phone: (414) 471-8490
Email:

Coordination

System No: SS-40-0013
Coordination Type: Adaptive
Comm Type: Fiber

Controller IP Address: 172.22.69.208
Comments: Adaptive Coordination
Processor IP: 172.22.69.210

	Length	Split 1	Split 2	Split 3	Split 4
Cycle 1=	150 sec	6:30am - 9:15am M-F 12:00pm - 4:00pm S-S			
Cycle 2=	130 sec	9:15am - 3:00pm M-F; 6:30pm - 9:00pm M-F; 8:45am - 12:00pm S-S; 4:00pm - 9:00pm S-S			
Cycle 3=	150 sec	3:00pm - 6:30pm M-F			
Cycle 4=					

Cabinet Type: TS2

☐ Battery Backup

Part of a Local System: No

Local Contact:
Phone Number:

Overlaps

Overlap A = Phases: 1,4
Overlap B = Phases:
Overlap C = Phases:
Overlap D = Phases:

Turn Operations

Phases with

FYA TOD	☐		Phase Omit	☐	
5 Section Head	☐		Dynamic FYA	☐	
Lead/Lag	☑	3,5,7	Split Phase	☐	

Detector Timing

Dilemma Zone: No Bike Detection ☐ Detection Type(s): Loop

Detector Number	**	13	14	41	53	54	81	82	83					
Stretch				*			*							
Right Turn Delay	**							*	*					
Left Turn Delay	**	*	*		*	*								

Unique Features

* See program for detector settings.
Cycle lengths and splits correspond to backup timing plan.
** See InSync WebUI for details (configure detectors)
InSync Program: Manual Action Plan 90 (MM-5-1)
Backup Program: Manual Action Plan 0

Signal S1085 IP Addresses

Signal No	I-	Hwy	Local_Hwy	Location	County	Gateway:	Subnet Mask:
S1085		100	N Mayfair Rd	W Burleigh St	MIL	172.22.68.1	255.255.252.0

IP Device:	IP Address:
Ethernet Switch (Ruggedcom)	172.16.15.57
Controller (Cobalt)	172.22.69.208
MMU (EDI)	172.22.69.209
InSync Processor	172.22.69.210
NB Camera	172.22.69.211
EB Camera	172.22.69.212
SB Camera	172.22.69.213
WB Camera	172.22.69.214
DIN Relay	172.22.69.215
APS Comm Manager 1	172.22.69.216
APS Comm Manager 2	172.22.69.217

Timing Changes Log for Signal S1085 on Hwy 100 in MILWAUKEE County

W Burleigh St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
06/13/22	6/13/2022	Activated Ped Phase 3 along with the APS.	APS and phase 3 ped heads installed.	D. Brantner	No
01/18/22	1/18/2022	Changed the Max Detect in the InSync Processor for the NBLT back to 99=99 forr the following configurations, "130 NB Lane Close", AM 150-130 Diversion" and "Tunnelless".	54 hr IH 41 NB/SB full freeway closure ended.	D. Brantner	No
01/14/22	1/14/2022	Changed the Max Detect in the InSync Processor for the NBLT to 3=20 for the following confguations, " 130 NB Lane Close", "AM 150-130: Diversion" and "Tunnelless"	54 hr IH 41 NB/SB full freeway closure.	D. Brantner	Yes
08/25/21	8/26/2021	Activate OLA; Update color check, startup data, and preempt C operation	Signalize EBRT	D. Wolford	No
06/23/21	6/23/2021	Changed the Max Detect to 2=30 for the NBLT for the "PM Peak ALL" Configurattion in the InSync Processor.	More green time need to the NBLT from 3:30pm - 5:30pm due to STH 100 being an alternate route for the Zoo Int North Leg Project.	D. Brantner	Yes
10/20/20	10/20/2020	Update IP Addressing parameters; Set Manual Action Plan to 90	Update signal equipment to 172.22.68.1 network; InSync Processor working	D. Wolford	No
09/24/20	9/24/2020	Set Manual Action Plan to 0	InSync Processor is unresponsive	D. Wolford	Yes
01/30/20	1/30/2020	Put controller back in Action Plan "90"	New InSync Processor installed.	D. Brantner	No
07/19/19	7/19/2019	Create Timing Plan 3 and Action Plan 10 to favor Phase 1 for detour; Create Day Plans and Expection Days for detour; Change System Source to SYS; Update Preempt Filtering; Update Loops 41 & 81 extend time	NB full freeway closure Friday (7/19/19) night, Saturday (7/20/19) night, Sunday (7/28/19) morning, and Tuesday (7/30/19) night; Update timing parameters	D. Wolford	No
04/09/19	4/9/2019	Implemented backup timing plan.	InSync Processor failed.	D. Brantner	Yes

Timing Changes Log for Signal S1085 on Hwy 100 in MILWAUKEE County

W Burleigh St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
07/07/17	7/7/2017	Changed the Max Detect for WB (Phase 8) to 6=20, EB (Phase 4) to 8=20 and NBLT (Phase 1) to 5=30 in the processor for the PM Peak. Started the NB tunnel 8 sec earlier for the PM Peak.	Complaint of NBLT green time being very short durindg the PM Peak.	D. Brantner	No
05/16/16	5/16/2016	New Aries Timing	Replace with Econolite Controller	D. Wolford	No
04/12/16	4/12/2016	Changed the local duration SB to 32. Changed the NB duration to 38 and local offset to 3. Changed the SB local offset to 10. All changes were made in the procesor.	Give more green time to EB/WB Burleigh St.	D. Brantner	No
04/05/16	4/5/2016	Changed the tunnel truncation for the NB & SB tunnels to 60 % along with changing the gap time to sec in the processor for the AM Mid-day and PM. Changed the max detect to 5=25 for the EB & WB throughs for the AM, Mid-day and PM.	Citizen complaint of long wait times along with long queues EB & WB.	D. Brantner	No
02/11/16	2/11/2016	Updated adaptive signal timing to current adaptive standards. Changed passage to 1.0 sec. Updated detector assignments based on added loops to west approach.	Construction completed. Switched from tempoary signal back to permanent.	D. Brantner	No
01/28/16	1/28/2016	Implemented temporary timing change for Center St bridge demo. Signal to run free from 9 pm Jan 29th to 10 am Jan 30th and 9pm Jan 30th to 10 am Jan 31st. Increased max green time for phase 1 to 65 sec.	Center St bridge demo over IH 41.	D. Brantner	Yes
10/09/15	10/9/2015	Implemented temporary signal timing. Turned off adaptive signal equipment.	Switched from permanent to temporary signal.	D. Brantner	Yes
09/29/15	9/29/2015	Changed the max detect back to 99 = 99 for the NB for the AM, MID, PM and Tunneless configurations.	NB left turn opened back up to two lanes.	D. Brantner	No
09/23/15	9/23/2015	Changed Max Detect to 5 = 20 for the NB LT for the Tunnuless Configuration.	IH 41 NB full closure overnight.	D. Brantner	Yes
09/22/15	9/22/2015	Changed the max detect back to 99=99 for the WB TH and WB LT for AM PeakAll and PM Peak All. Changed the max detect to 5=20 for the AM Peak All, Mid Peak All 2 and PM Peak All.	The NB LT was reduced from 2 lanes to one and the the WB TH was opened back up to 2 TH lanes.	D. Brantner	Yes

Timing Changes Log for Signal S1085 on Hwy 100 in MILWAUKEE County

W Burleigh St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
09/01/15	9/10/2015	Updated signal and system timings; Updated preempt operation; Put backup timing plan on spare datakey in cabinet	Signal Timing and Operation Review	D. Wolford	No
07/31/15	7/31/2015	Disconnected loop 41	Loop 41 was hit	D. Wolford	Yes
07/01/15	7/1/2015	Changed the max detection to 9 = 25 for the WBTH and WBLT during the AM and PM Peak.	Citizen complaint.	D. Brantner	No
03/31/15	3/31/2015	Implemented incident CentralSync configuration	USH 45 SB incident at WTP	J. Effinger	Yes
03/31/15	3/31/2015	Reverted back to normal CentralSync configuration	USH 45 SB incident cleared	J. Effinger	No
03/20/15	3/20/2015	CentralSync parameters modified	Calibration complete	J. Effinger	No
02/26/15	2/26/2015	Downloaded new Central Sync configuration.	System ramp closures in the Zoo Interchange.	D. Brantner	Yes
11/26/14	11/26/2014	Implemented NB incident CentralSync file	USH 45 closed due to construction	J. Effinger	Yes
11/26/14	11/26/2014	Reverted back to normal CentralSync file	Construction is complete	J. Effinger	No
11/24/14	11/24/2014	Implemented backup timing plan	Rhythm Engineering needed to fix corrupted file	J. Effinger	Yes

Timing Changes Log for Signal S1085 on Hwy 100 in MILWAUKEE County

W Burleigh St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
11/24/14	11/24/2014	Put intersection back into adaptive mode	Corrupted file is fixed	J. Effinger	No
11/14/14	11/14/2014	Reverted back to normal CentralSync file	IH 94 closure complete	J. Effinger	No
11/14/14	11/14/2014	Implemented incident CentralSync file	Closure of IH 94 between Zoo IC and Moorland Rd due to incident	J. Effinger	Yes
02/28/13	2/28/2013	Changed passage to 0.4.	Recommendation of Rhythm. It helps with short detector calls to the controller caused by loop detectors.	J. Effinger	No
02/02/13	2/19/2013	Density settings, recall, passage, nonlocking, coord set free, delays removed	Adaptive operation	E. Schneider	No
11/14/12	11/13/2012	Phase 6 pedestrian recall removed	push button installation completed	E. Schneider	No
11/08/12	10/30/2012	Weekend coordination times	Coordination begin/end too early/late	E. Schneider	No
10/25/12	10/25/2012	New TS-2 timing	Signal reconstruction	E. Schneider	No
05/31/11	6/1/2011	Change C1 Offset 2	Midday Progression	E. Schneider	No
12/21/07		Decreased Offset 1 for Dial 2 by 4s to a new value of 37s.	To more accurately reflect the coordinated timing plan produced by SYNCHRO 6.	J. Haug	No

Timing Changes Log for Signal S1085 on Hwy 100 in MILWAUKEE County

W Burleigh St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
12/19/07		Increased Offset 1 for Dial 3 by 6s to a new value of 58s.	To more accurately reflect the coordinated timing plan produced by SYNCHRO 6.	J. Haug	No
11/30/07		Changed Offsets	Better Progression on STH 100	S. Pierce	No
11/16/07		New system timing.	New controllers installed at the Mayfair South Entrance, Mayfair Center Entrance and Center Street.	S. Pierce	No
02/12/07		DST	DST	J. Dimmer	No
04/03/06		DST	DST	D. Lucente	No
02/25/04		DST		M. Milam	No
12/04/03		Update system timing between W. Burleigh St. and W. North Ave.	Increase efficiency and accommodate peds along the system.	J. Haug	No
02/12/02		DST		M. Milam	No
01/04/02		Timing for EVP put in computer	Timing for EVP already was in controller needed in office computer	D. Brantner	No
03/28/01		DST		D. Brantner	No

Timing Changes Log for Signal S1085 on Hwy 100 in MILWAUKEE County

W Burleigh St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
05/02/00	5/2/2000	New TOD program	Consultant timings - prep for closed loop	S. Pierce	No
03/02/00	3/1/2000	time of day events	consistency	S. Pierce	No

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	8	7	12	11	16	15	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.

Ring 2	**6**	**5**	**8**	**7**	**12**	**11**	**16**	**15**	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	**2**	**1**	**4**	**3**	**10**	**9**	**14**	**13**	.	.	.	.	.	.	.	.
Ring 2	**6**	**5**	**8**	**7**	**12**	**11**	**16**	**15**	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Phases In Use	X	X	X	X	X	X	X	X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
1	5
1	6
2	5
2	6
3	7
3	8
4	7
4	8
9	11
9	12
10	11
10	12
13	15
13	16
14	15
14	16

Phase and Overlap Descriptions

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Approach	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Movement																
Associated PED																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Approach	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Movement																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC	No
CRC (16 bit)	87C3
Enable Automatic Backup to Datakey	Yes

Backup Prevent (MM) 1-1-3

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases	2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
	6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
	8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

	Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	2	.		.	.	.	X	.	.	.	.	.	.	.	.	.	.
	3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
	4	.	.	.		.	.	.	X	.	.	.	.	.	.	.	.
	5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase	6	.	X	.	.	.		.	.	.	.	.	.	.	.	.	.
Must	7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap	8	.	.	.	X	.	.	.		.	.	.	.	.	.	.	.
With	9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase	10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
	12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
	13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
	14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
	15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
	Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		X
2	2	V				-	Auto	X		
3	3	V				-	Auto	X		X
4	4	V				-	Auto	X		
5	5	V				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			
10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		X
14	2	O				+	Auto	X		X

15	3	P				-	Auto	X		
16	4	O				+	Auto	X		

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility	X	X						
Detector Rack	X	X						

Enable TS2/MMU Type Cabinet: Yes
Enable MMU Extended Status: Yes
Enable SDLC Stop Time: Yes
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**
1	5
1	6
1	11
1	13
2	5
2	6
2	9
2	11
3	7
3	8
3	12
3	15
4	7
4	8
4	10
4	12
4	13
5	9
5	13
6	9
6	11
6	13
7	10
7	13
7	15
8	10
8	12
8	13
8	15
9	11
10	12

10	13
11	13
12	13
12	15

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green	X	X	X	X	X	X	X	X	X	X	X	X	X		X	
Yellow	X	X	X	X	X	X	X	X					X			
Red	X	X	X	X	X	X	X	X					X			

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

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ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

DHCP Enable:	No
Controller IP:	172.22.69.208
Subnet Mask:	255.255.252.0
Default Gateway IP:	172.22.68.1
Server IP:	172.20.3.32

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	2
Port 3B Priority (Port C22S for 2070):	3

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Comm Module	None	Auto	Auto
Protocol	NTCIP	NTCIP	TERMINAL
Enable	Yes	Yes	No
Data Rate (BPS)	19.2K	19.2K	1200
Data, Parity, Stop	8 N 1	8 N 1	8 O 1
Address	1	1	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Full	Full	Full
Flow Control	Yes	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	3.0
RTS Turn Off Delay	n/a	n/a	2.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

Wireless Configuration (MM) 1-5-7
Wireless Channel Number: 1
Wireless Access Code:

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	Yes
Switch to Graphics Mode:	No
LED Mode:	Single Color
Display Mode:	Basic
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: INTERSECTION NAME:
Sign On Message Line 2: SE WisDOT Database 150828

Software Modules (MM) 8-7

Application Version: 32.67.30
OS (Boot) Version: 06.15.00

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
1	D
2	D
3	D
4	D
5	D
6	D
7	D
8	D
9	D
10	D

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	PED ON PH PED CLR	4	IS On
OR	--	F	PED ON PH PED CLR	8	IS On
AND	--	F	COORD PLAN	IS	1

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 2 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	LP LOGIC FLAG	1	IS On

Then:

Assignment	#	State
CRD SET FREE		On

Logic #: 3 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	VEH GREEN ON PH	2	IS On
OR	--	F	VEH GREEN ON PH	6	IS On

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	Off

Logic #: 4 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	PED ON PH PED CLR	4	IS On
OR	--	F	PED ON PH PED CLR	8	IS On
AND	--	F	COORD PLAN	IS	2

Then:

Assignment	#	State

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 5 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	PED ON PH PED CLR	4	IS On
OR	--	F	PED ON PH PED CLR	8	IS On
AND	--	F	COORD PLAN	IS	3

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 6 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	DET	49	IS On

Then:

Assignment	#	State
CTR CALL PED PHASE	2	On

Logic #: 7 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	DET	50	IS On

Then:

Assignment	#	State
CTR CALL PED PHASE	3	On

Logic #: 8 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	DET	51	IS On

Then:

Assignment	#	State
CTR CALL PED PHASE	4	On

Logic #: 9 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	DET	52	IS On

Then:

Assignment	#	State
	6	On

Then:

Assignment	#	State
CTR CALL PED PHASE		

Logic #: 10 - "????????????"

If:

	Peer	T/F	Assignment	#	State
IF	--	F	DET	53	IS On

Then:

Assignment	#	State
CTR CALL PED PHASE	8	On

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Min Green	5	10	5	5	5	10	5	5	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	7	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	27	6	30	0	29	0	32	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	20	45	20	40	20	45	20	40	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.9	3.5	3.6	3.5	3.9	3.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	2.0	2.3	2.0	2.8	2.0	2.3	2.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Min Green	8	15	6	10	8	15	8	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	7	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	27	6	30	0	29	0	32	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	4.9	1.5	1.5	1.5	4.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	20	45	20	40	20	45	20	40	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.9	3.5	3.6	3.5	3.9	3.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	2.0	2.3	2.0	2.8	2.0	2.3	2.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	2.3	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	6	28	6	10	6	28	6	10	0	0	0	0	0	0	0	0
Time B4	20	28	20	40	20	28	20	40	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	17	0	0	0	17	0	0	0	0	0	0	0	0	0	0
Min Gap	1.5	2.0	1.5	1.5	1.5	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 3 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Min Green	8	12	6	10	8	12	8	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	7	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	27	6	30	0	29	0	32	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	4.9	1.5	1.5	1.5	4.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	90	35	20	30	20	35	20	30	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.9	3.5	3.6	3.5	3.9	3.5	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	2.0	2.3	2.0	2.8	2.0	2.3	2.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	2.3	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	6	27	6	10	6	27	6	10	0	0	0	0	0	0	0	0
Time B4	60	27	20	30	20	27	20	30	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	15	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0
Min Gap	2.0	3.9	1.5	1.5	1.5	3.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 4 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Min Green	5	15	5	10	5	15	5	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	7.0	3.0	5.0	3.0	7.0	3.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	15	45	15	35	15	45	15	35	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
A	1	Yes	No	No	No		No	No	.
A	4	Yes	No	No	No		No	No	.

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	1	0	7	3.0	0.0	1
B02	1	0	7	3.0	0.0	1
C03	1	0	7	3.0	0.0	1
D04	1	0	7	3.0	0.0	1
E05	1	0	7	3.0	0.0	1
F06	1	0	7	3.0	0.0	1
G07	1	0	7	3.0	0.0	1
H08	1	0	7	3.0	0.0	1
I09	1	0	7	3.0	0.0	1
J10	1	0	7	3.0	0.0	1
K11	1	0	7	3.0	0.0	1
L12	1	0	7	3.0	0.0	1
M13	1	0	7	3.0	0.0	1
N14	1	0	7	3.0	0.0	1
O15	1	0	7	3.0	0.0	1
P16	1	0	7	3.0	0.0	1

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Controller Pedestrian Overlaps
Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	G
3	.
4	.
5	.
6	G
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A

Flash Thru Mon: No
Flash Time: 0
All Red: 6
Power Start Seq: 1
MUTCD Enabled: Yes
Y->G: No

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A

Flash Thru Mon: No
Exit Flash: G
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

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S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I																
Non-Act II																
Dual Entry	X	X	X	X	X	X	X	X								
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: On Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																
Al Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Plan # 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

Plan # 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
Al Calc																

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S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	Yes
Re-sync Count	3	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

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S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	150	Std (COS)	0	Offsets In	Seconds
Offset Value	19s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	11		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 1)	22	45	35	48	18	49	22	61	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	130	Std (COS)	0	Offsets In	Seconds
Offset Value	58s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 2)	30	41	27	32	22	49	24	35	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	130s	130s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0	

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	150	Std (COS)	0	Offsets In	Seconds
Offset Value	69s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	7		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Splits (Split Pat 3)	27	48	27	48	22	53	24	51	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	

Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Split Demand Pat 1 0

Split Demand Pat 2 0

Crossing Arterial Pat 0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

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Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Split (seconds)	22	45	35	48	18	49	22	61	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Split (seconds)	30	41	27	32	22	49	24	35	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	130s	130s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Split (seconds)	27	48	27	48	22	53	24	51	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

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S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Det Lock	Yes	Delay	1	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	5	255	5	25.5	25.5
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	25.5	25.5
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	10	5.0	0	25.5	25.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	1-F1
Inhibit Extension Time	0.0	Ped Priority Return	Off

Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Det Lock	Yes	Delay	1	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	5	255	5	25.5	25.5
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	25.5	25.5
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	5.0	0	25.5	25.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	1-F1
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	.	.	X	.	.	X	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases				X				X								
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Det Lock	Yes	Delay	1	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	5	255	5	25.5	25.5
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	25.5	25.5
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	5.0	0	25.5	25.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	1-F1
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases				X				X								
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Det Lock	Yes	Delay	1	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	5	255	5	25.5	25.5
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	25.5	25.5
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**
Dwell / Cycle-Exit	10	5.0	0	25.5	25.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	1-F1
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	PREEMPTION 1	TSP/SCP 1
2	PREEMPTION 2	TSP/SCP 2
3	PREEMPTION 3	TSP/SCP 3
4	PREEMPTION 4	TSP/SCP 4
5	PREEMPTION 5	...BYPASSED...
6	PREEMPTION 6	...BYPASSED...
7	PREEMPTION 7	...BYPASSED...
8	PREEMPTION 8	...BYPASSED...
9	PREEMPTION 9	...BYPASSED...
10	PREEMPTION 10	...BYPASSED...

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Time Base Clock/Calendar

Clock/Calendar Data (MM) 5-1

Manual Action Plan:	90
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1 - "1"

Pattern	1	Override Sys	No
Timing Plan	2	Sequence	11
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2 - "2"

Pattern	2	Override Sys	No
Timing Plan	2	Sequence	5
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3 - "3"

Pattern	3	Override Sys	No
Timing Plan	2	Sequence	7
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 10 - "10"

Pattern	Free	Override Sys	No
Timing Plan	3	Sequence	0
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall	X															
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 90 - "????????????"

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 99 - "????????????"

Pattern	Flash	Override Sys	No
Timing Plan	0	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	Yes	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)																
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 100 - "????????????"

Pattern	Free	Override Sys	No
Timing Plan	2	Sequence	0
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1 - "1"

Event	Action Plan	Start Time
1	100	00:01
2	2	08:45
3	1	12:00
4	2	16:00
5	100	21:00

Day Plan #2 - "2"

Event	Action Plan	Start Time
1	100	00:01
2	1	06:30
3	2	09:15
4	3	15:00
5	2	18:30
6	100	21:00

Day Plan #3 - "3"

Event	Action Plan	Start Time
1	100	00:01
2	1	06:30
3	2	09:15
4	3	15:00
5	2	18:30
6	100	21:00
7	10	23:00

Day Plan #4 - "4"

Event	Action Plan	Start Time
1	10	00:01
2	100	06:30
3	2	08:45
4	1	12:00
5	2	16:00
6	100	21:00
7	10	23:00

Day Plan #5 - "5"

Event	Action Plan	Start Time
1	10	00:01
2	100	08:30
3	2	08:45

4	1	12:00
5	2	16:00
6	100	21:00

Day Plan #6 - "6"

Event	Action Plan	Start Time
1	10	00:01
2	100	05:00
3	1	06:30
4	2	09:15
5	3	15:00
6	2	18:30
7	100	21:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1		N
2	1		N
3	2		N
4	3		N
5	3		N
6	4		N
7	4		N
8	4		N
9	4		N
10	5		N
11	5		N
12	6		N
13	7		N
14	8		N
15	8		N
16	8		N
17	4		N
18	7		N
19	7		N
25	1	1	N
26	2	2	N
27	3	3	N
28	4	4	N
29	5	5	N
30	6	6	N
31	7	7	N
32	8	8	N
49	10		N
50	10		N
51	10		N
52	10		N
53	10		N

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type
1	1		N
2	1		N
3	2		N
4	3		N
5	3		N
6	4		N
7	4		N
8	4		N

9	4		N
10	5		N
11	5		N
12	6		N
13	7		N
14	8		N
15	8		N
16	8		N
17	4		N
18	7		N
19	7		N
49	2		N
50	3		N
51	4		N
52	6		N
53	8		N

Vehicle Detector Plan Number - 3

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Plan Number - 4

Veh Detector	Assigned Phase	Called Phase	Type

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	N-NTCIP	Yes	
2	N-NTCIP	Yes	
3	N-NTCIP	Yes	
4	N-NTCIP	Yes	
5	N-NTCIP	Yes	
6	N-NTCIP	Yes	
7	N-NTCIP	Yes	
8	N-NTCIP	Yes	
9	N-NTCIP	Yes	
10	N-NTCIP	Yes	
11	N-NTCIP	Yes	
12	N-NTCIP	Yes	
13	N-NTCIP	Yes	
14	N-NTCIP	Yes	
15	N-NTCIP	Yes	
16	N-NTCIP	Yes	
17	N-NTCIP	Yes	
18	N-NTCIP	Yes	
19	N-NTCIP	Yes	
20	N-NTCIP	Yes	
21	N-NTCIP	Yes	
22	N-NTCIP	Yes	
23	N-NTCIP	Yes	
24	N-NTCIP	Yes	
25	N-NTCIP	Yes	
26	N-NTCIP	Yes	
27	N-NTCIP	Yes	
28	N-NTCIP	Yes	
29	N-NTCIP	Yes	
30	N-NTCIP	Yes	
31	N-NTCIP	Yes	

32	N-NTCIP	Yes	
33	N-NTCIP	Yes	
34	N-NTCIP	Yes	
35	N-NTCIP	Yes	
36	N-NTCIP	Yes	
37	N-NTCIP	Yes	
38	N-NTCIP	Yes	
39	N-NTCIP	Yes	
40	N-NTCIP	Yes	
41	N-NTCIP	Yes	
42	N-NTCIP	Yes	
43	N-NTCIP	Yes	
44	N-NTCIP	Yes	
45	N-NTCIP	Yes	
46	N-NTCIP	Yes	
47	N-NTCIP	Yes	
48	N-NTCIP	Yes	
49	N-NTCIP	Yes	
50	N-NTCIP	Yes	
51	N-NTCIP	Yes	
52	N-NTCIP	Yes	
53	N-NTCIP	Yes	
54	N-NTCIP	Yes	
55	N-NTCIP	Yes	
56	N-NTCIP	Yes	
57	N-NTCIP	Yes	
58	N-NTCIP	Yes	
59	N-NTCIP	Yes	
60	N-NTCIP	Yes	
61	N-NTCIP	Yes	
62	N-NTCIP	Yes	
63	N-NTCIP	Yes	
64	N-NTCIP	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	No	0.0	None	0.0	0	No	0	None	No	No	No
2	1	No	No	0.0	None	0.0	0	No	0	None	No	No	No
3	2	No	No	0.0	None	0.0	0	No	0	None	No	No	No
4	3	No	No	0.0	None	0.0	0	No	0	None	No	No	No
5	3	No	No	0.0	None	0.0	0	No	0	None	No	No	No
6	4	No	No	0.0	None	0.0	0	No	0	None	No	No	No
7	4	No	No	0.0	None	0.0	0	No	0	None	No	No	No
8	4	No	No	0.0	None	0.0	0	No	0	None	No	No	No
9	4	No	No	0.0	None	0.0	0	No	0	None	No	No	No
10	5	No	No	0.0	None	0.0	0	No	0	None	No	No	No
11	5	No	No	0.0	None	0.0	0	No	0	None	No	No	No
12	6	No	No	0.0	None	0.0	0	No	0	None	No	No	No
13	7	No	No	0.0	None	0.0	0	No	0	None	No	No	No
14	8	No	No	0.0	None	0.0	0	No	0	None	No	No	No
15	8	No	No	0.0	None	0.0	0	No	0	None	No	No	No
16	8	No	No	0.0	None	0.0	0	No	0	None	No	No	No
17	4	No	No	0.0	None	0.0	0	No	0	None	No	No	No

18	7	No	No	0.0	None	0.0	0	No	0	None	No	No	No
19	7	No	No	0.0	None	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	10	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	1	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
3	2	No	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
4	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

5	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	4	No	No	0.0	Passage	2.6	0	No	0	None	No	No	No
7	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	5	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
12	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	8	No	No	0.0	Passage	2.6	0	No	0	None	No	No	No
15	8	No	Yes	8.0	Passage	0.0	0	No	0	None	No	No	No
16	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	3	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 3

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 4

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
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52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
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56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: Econolite

Ped Detector Number	Called Phase															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1085 - STH 100 (N Mayfair Rd) & W Burleigh St - Econolite Type - Cobalt

Detectors

Detectors - Pg 2

Log - Speed Detector Setup (MM) 6-4

NTCIP Log Period: 60 | ECPI Log Period: 2 | Length Unit: Inches

Speed Detector	Local Detector	One/Two Detector	Vehicle Length	Trap length	Enable Log
1	0	1	0	0	No
2	0	1	0	0	No
3	0	1	0	0	No
4	0	1	0	0	No
5	0	1	0	0	No
6	0	1	0	0	No
7	0	1	0	0	No
8	0	1	0	0	No
9	0	1	0	0	No
10	0	1	0	0	No
11	0	1	0	0	No
12	0	1	0	0	No
13	0	1	0	0	No
14	0	1	0	0	No
15	0	1	0	0	No
16	0	1	0	0	No

Vehicle Detector Diagnostics (MM) 6-5

Veh Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Veh Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier	Failed Time	Failed Call Delay

Pedestrian Detector Diagnostics (MM) 6-6

Ped Diagnostic Plan Number - 1

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 2

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 3

Det	Counts	Act	Pres	Multiplier

Ped Diagnostic Plan Number - 4

Det	Counts	Act	Pres	Multiplier

2

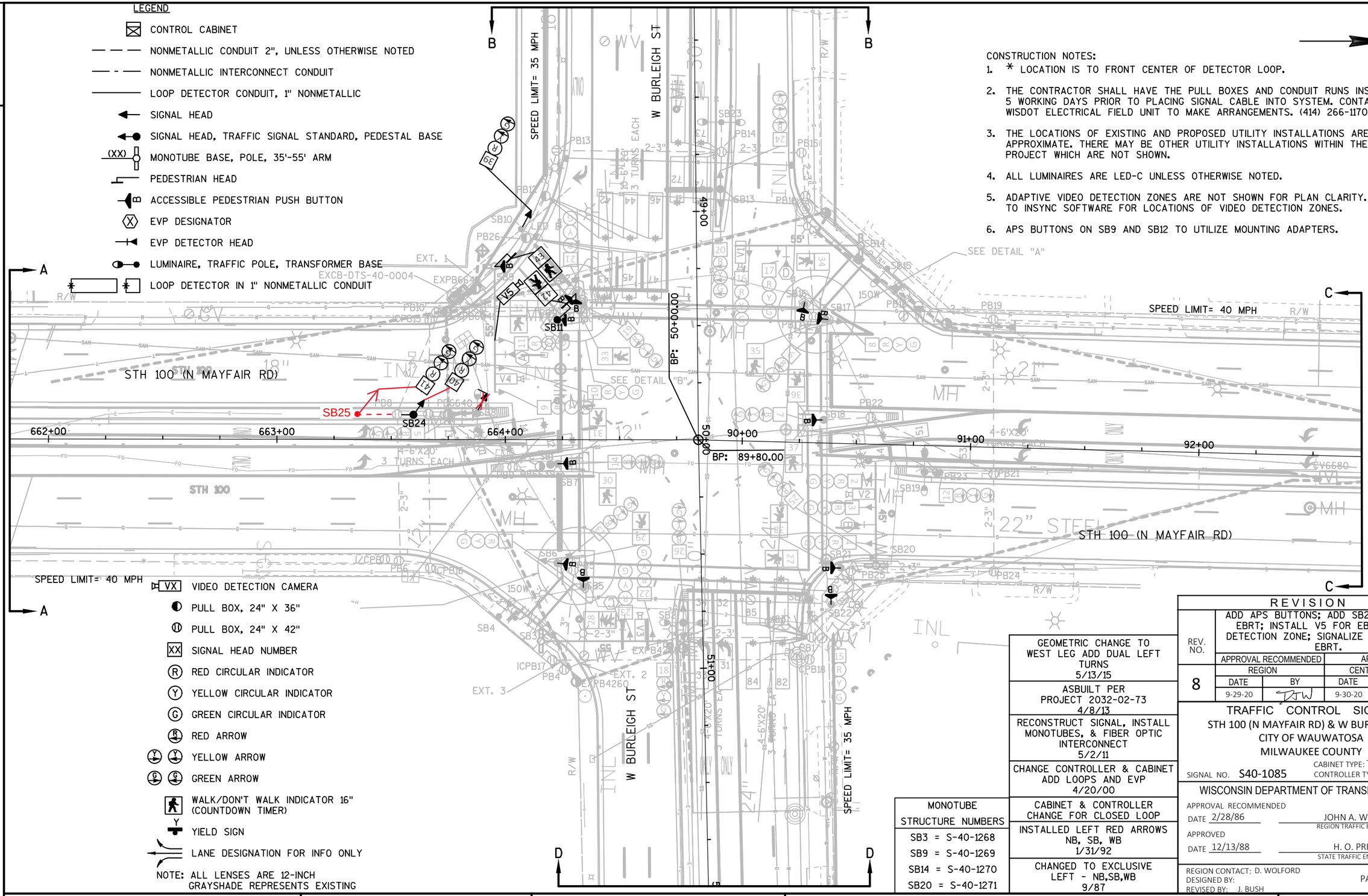
2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- NONMETALLIC INTERCONNECT CONDUIT
- LOOP DETECTOR CONDUIT, 1" NONMETALLIC
- SIGNAL HEAD
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD
- ACCESSIBLE PEDESTRIAN PUSH BUTTON
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT

CONSTRUCTION NOTES:

1. * LOCATION IS TO FRONT CENTER OF DETECTOR LOOP.
2. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM. CONTACT THE WISDOT ELECTRICAL FIELD UNIT TO MAKE ARRANGEMENTS. (414) 266-1170.
3. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
4. ALL LUMINAIRES ARE LED-C UNLESS OTHERWISE NOTED.
5. ADAPTIVE VIDEO DETECTION ZONES ARE NOT SHOWN FOR PLAN CLARITY. REFER TO INSYNC SOFTWARE FOR LOCATIONS OF VIDEO DETECTION ZONES.
6. APS BUTTONS ON SB9 AND SB12 TO UTILIZE MOUNTING ADAPTERS.



SPEED LIMIT= 40 MPH

- VX VIDEO DETECTION CAMERA
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- Y YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH GRAYSHADE REPRESENTS EXISTING

MONOTUBE STRUCTURE NUMBERS
SB3 = S-40-1268
SB9 = S-40-1269
SB14 = S-40-1270
SB20 = S-40-1271

GEOMETRIC CHANGE TO WEST LEG ADD DUAL LEFT TURNS 5/13/15
ASBUILT PER PROJECT 2032-02-73 4/8/13
RECONSTRUCT SIGNAL, INSTALL MONOTUBES, & FIBER OPTIC INTERCONNECT 5/2/11
CHANGE CONTROLLER & CABINET ADD LOOPS AND EVP 4/20/00
CABINET & CONTROLLER CHANGE FOR CLOSED LOOP
INSTALLED LEFT RED ARROWS NB, SB, WB 1/31/92
CHANGED TO EXCLUSIVE LEFT - NB,SB,WB 9/87

REVISION

REV. NO.	ADD APS BUTTONS; ADD SB24; SIGNALIZE EBRT; INSTALL V5 FOR EBRT INSYNC DETECTION ZONE; SIGNALIZE PED ACROSS EBRT.			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
8	DATE	BY	DATE	BY
	9-29-20	JJW	9-30-20	JRH

TRAFFIC CONTROL SIGNAL

STH 100 (N MAYFAIR RD) & W BURLEIGH ST
CITY OF WAUWATOSA
MILWAUKEE COUNTY

SIGNAL NO. S40-1085
CABINET TYPE: TS2-S
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 2/28/86 — JOHN A. WHITE, REGION TRAFFIC ENGINEER

APPROVED
DATE 12/13/88 — H. O. PRICE, STATE TRAFFIC ENGINEER

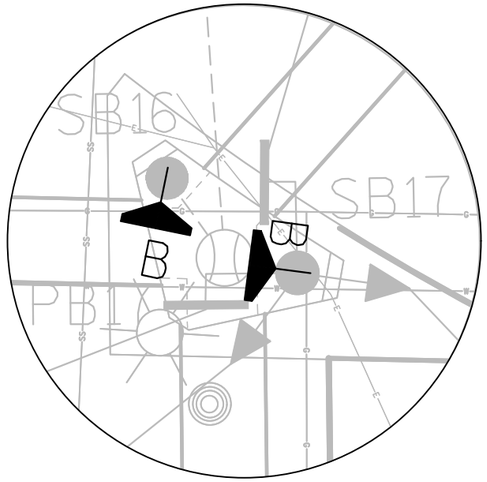
REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: J. BUSH

PAGE 1 OF 3

PROJECT NO: 1060-43-99	HWY: STH 100	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : N:\PDS\C3D\CAD\00820300\SIG\S40-1085\S40-1085_R8_14-16.DWG
LAYOUT NAME - S40-1085_R8_PG1

PLOT DATE : 10/12/2020 10:27 AM PLOT BY : VANDE LEEST, CYNTHIAPLOT NAME : PLOT SCALE : 1 IN:40 FT



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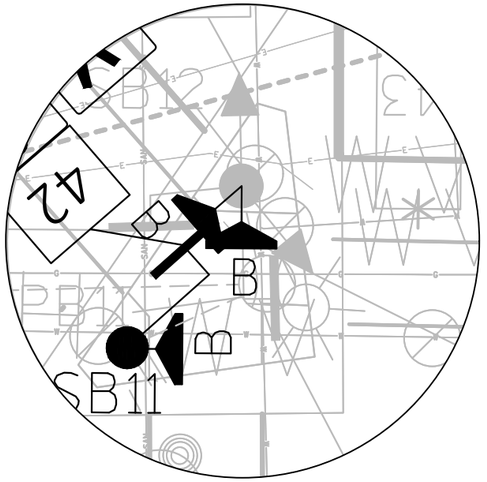

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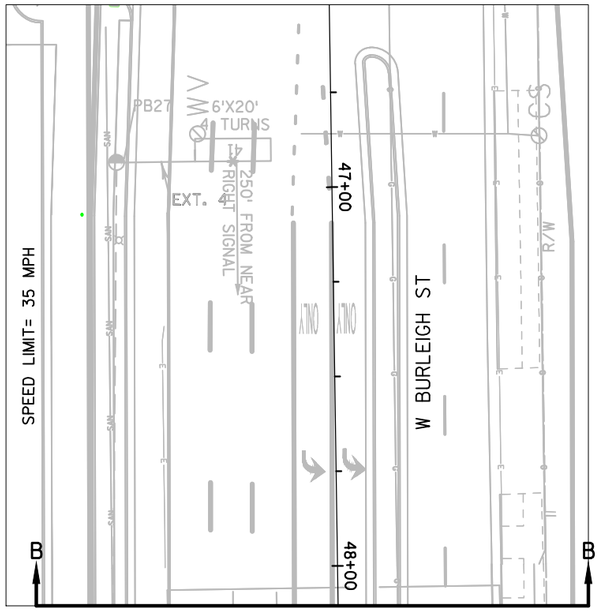
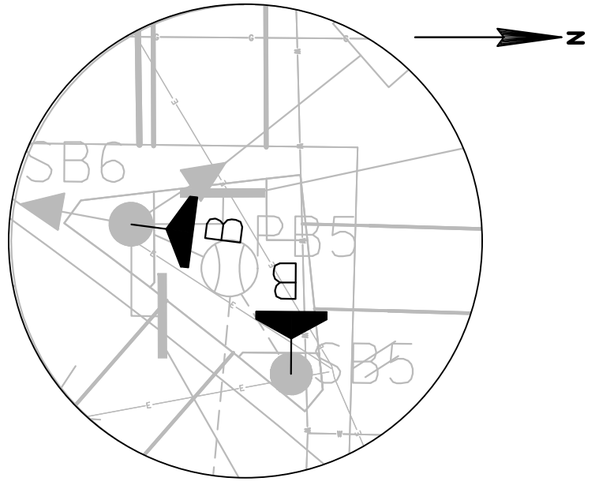
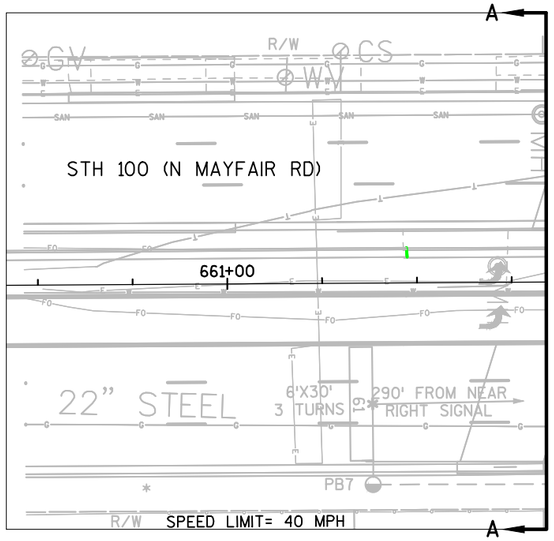
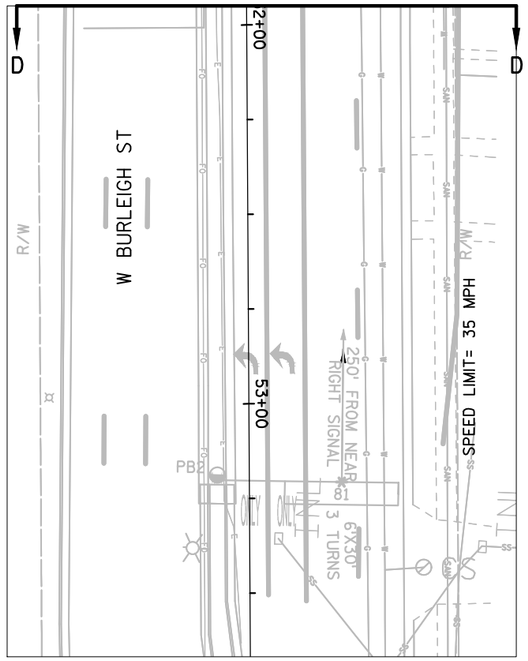
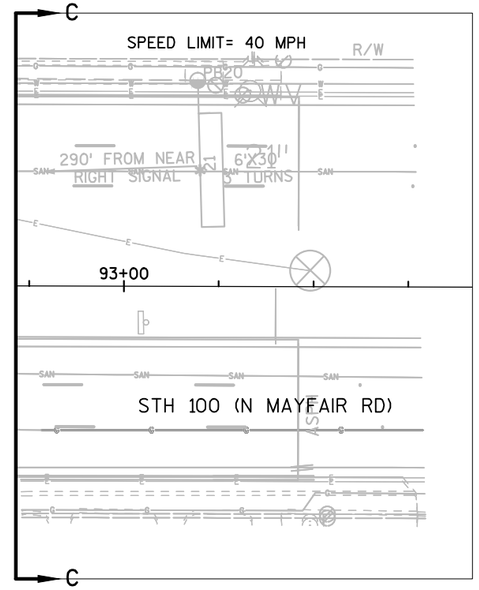




DETAIL "C"







TRAFFIC CONTROL SIGNAL
STH 100 (N MAYFAIR RD) & W BURLEIGH ST
CITY OF WAUWATOSA
MILWAUKEE COUNTY

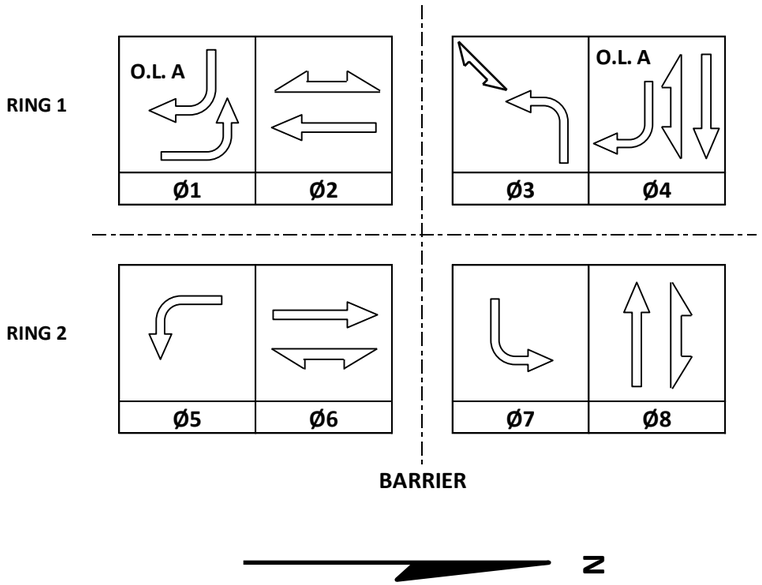
SIGNAL NO. S40-1085

REGION CONTACT: D. WOLFORD
DESIGNED BY:
REVISED BY: J. BUSH

PAGE 2 OF 3

PROJECT NO: 1060-43-99	HWY: STH 100	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET	E

	HEAD NUMBERS	FLASH
Ø1	5,6,7	R
Ø2	8,9,10,11	R
Ø3	18,19,20	R
Ø4	21,22,23	R
Ø5	12,13,14	R
Ø6	1,2,3,4	R
Ø7	24,25,26	R
Ø8	15,16,17	R
Ø2P	33,34	
Ø3P	42,43	
Ø4P	29,30,31,32	
Ø6P	27,28	
Ø8P	35,36,37,38	
OLA	39,40,41	R
OLE		
OLF		
OLG		
OLH		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3		8		X
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	C	D
MOVEMENT			O.L. A	
PHASE	2+5	6+1	4+7	8+3

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 4+7 OR 8+3, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	X
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 40-0013

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13	19	17	23	21	27	25	31	29	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	21	11/12	46	33/34	53/54	42/45	82/83	71/72	74	47							PLAN LOOP DETECTOR*(S)
CALLED PHASE	2	1	4	3	5	4	8	7	7	4							CALLED PHASE
CALL OPTION	X	X	X	X	X	X	X	X	X	X							CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X	X	X							EXTENTION OPTION
EXTEND TIME																	EXTEND TIME
USE ADDED INITIAL	X																USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14	20	18	24	22	28	26	32	30	DETECTOR INPUT
PLAN LOOP DETECTOR*(S)	31/32	13/14	43/44	41	61	51/52	84/85	81		73							PLAN LOOP DETECTOR*(S)
CALLED PHASE	3	1	4	4	6	5	8	8		7							CALLED PHASE
CALL OPTION	X	X	X		X	X	X			X							CALL OPTION
DELAY TIME																	DELAY TIME
EXTENTION OPTION	X	X	X	X	X	X	X	X		X							EXTENTION OPTION
EXTEND TIME				X				X									EXTEND TIME
USE ADDED INITIAL					X												USE ADDED INITIAL
CROSS SWITCH PHASE																	CROSS SWITCH PHASE

GENERAL NOTES:

1. INTERSECTION UTILIZES VIDEO DETECTION CAMERAS FOR INSYNC ADAPTIVE CONTROL. THESE DETECTION ZONES ARE NOT INCLUDED IN THE DETECTOR LOGIC CHART. REFER TO INSYNC PROGRAMMING FOR DETAILS.

STH 100 (N MAYFAIR RD) & W BURLEIGH ST
CITY OF WAUWATOSA
MILWAUKEE COUNTY

SIGNAL NO:	S40-1085	CABINET TYPE: TS2-S
		CONTROLLER TYPE: ECONOLITE
DATE:	9/20	PAGE NUMBER: 3 OF 3

PROJECT NO: 1060-43-99	HWY: STH 100	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET NO:	E

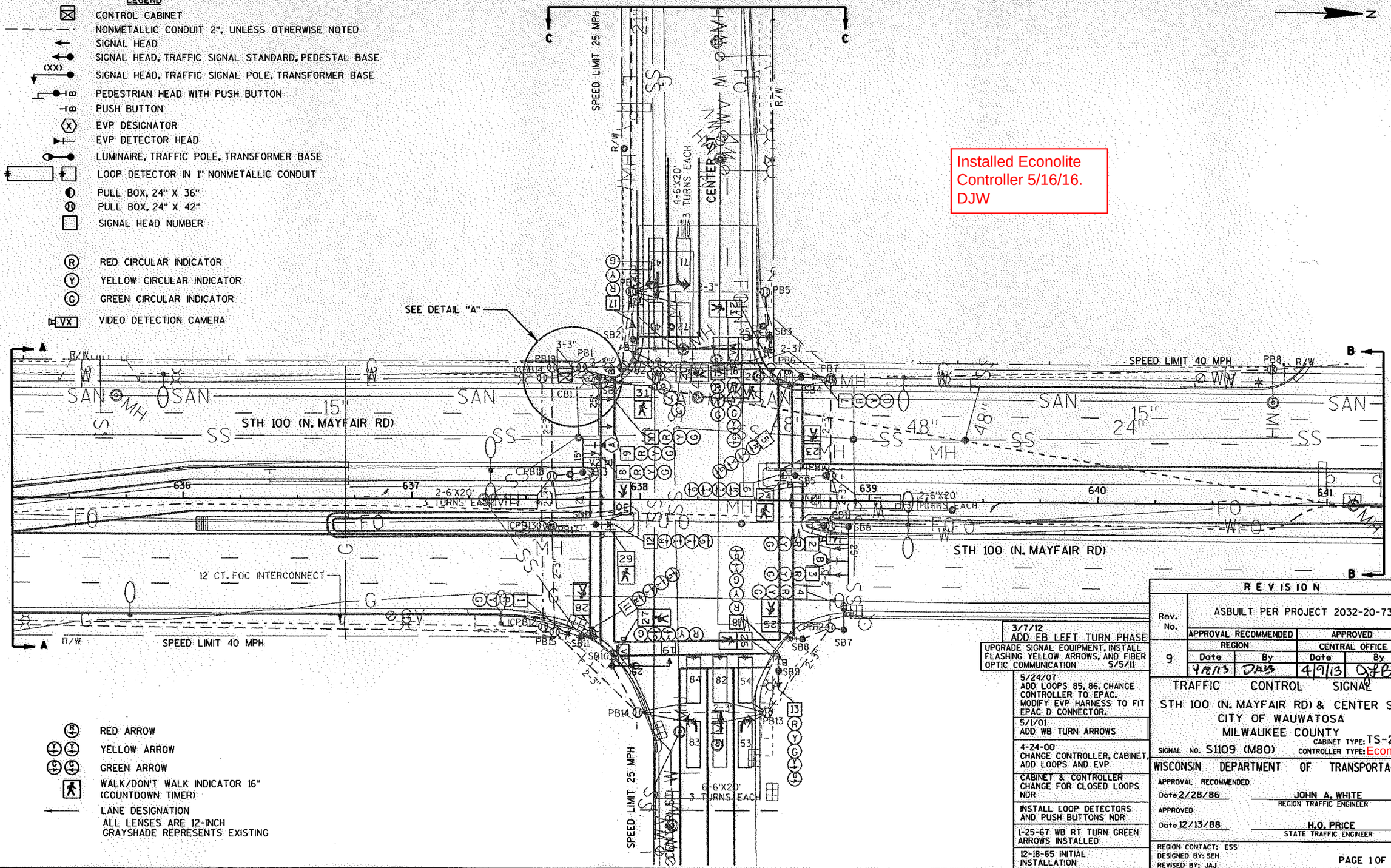
LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER

- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- VX VIDEO DETECTION CAMERA

- RED ARROW
- YELLOW ARROW
- GREEN ARROW
- WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- LANE DESIGNATION

ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



Installed Econolite Controller 5/16/16. DJW

REVISION				
Rev. No.	ASBUILT PER PROJECT 2032-20-73			
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By
9	4/8/13	DAS	4/9/13	SFB

3/7/12
ADD EB LEFT TURN PHASE
UPGRADE SIGNAL EQUIPMENT, INSTALL FLASHING YELLOW ARROWS, AND FIBER OPTIC COMMUNICATION 5/5/11

5/24/07
ADD LOOPS 85, 86. CHANGE CONTROLLER TO EPAC. MODIFY EVP HARNESS TO FIT EPAC D CONNECTOR.

5/1/01
ADD WB TURN ARROWS

4-24-00
CHANGE CONTROLLER, CABINET, ADD LOOPS AND EVP

CABINET & CONTROLLER CHANGE FOR CLOSED LOOPS NDR

INSTALL LOOP DETECTORS AND PUSH BUTTONS NDR

1-25-67 WB RT TURN GREEN ARROWS INSTALLED

12-18-65 INITIAL INSTALLATION

TRAFFIC CONTROL SIGNAL

STH 100 (N. MAYFAIR RD) & CENTER ST
CITY OF WAUWATOSA
MILWAUKEE COUNTY

SIGNAL NO. S1109 (M80)
CABINET TYPE: TS-2
CONTROLLER TYPE: Econolite

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 2/28/86 — JOHN A. WHITE, REGION TRAFFIC ENGINEER

APPROVED
Date 12/13/88 — H.O. PRICE, STATE TRAFFIC ENGINEER

REGION CONTACT: ESS
DESIGNED BY: SEH
REVISED BY: JAJ

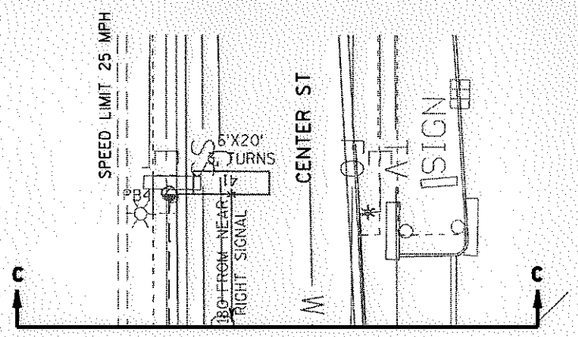
PAGE 1 OF 3

JRE 4/8/13

PROJECT NO:	HWY: STH 100	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : J:\projects\d2_signals_com\S1109_I.dgn
PLOT DATE : 27-MAR-2013 11:24
PLOT BY : dotjaj
PLOT NAME :
PLOT SCALE : 40.067509:1
WISDOT/CADDS SHEET 42

2



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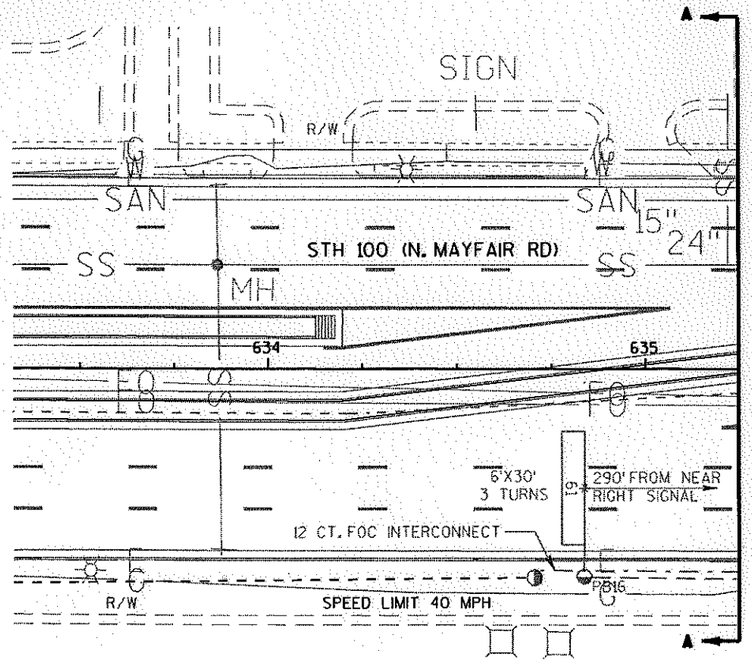
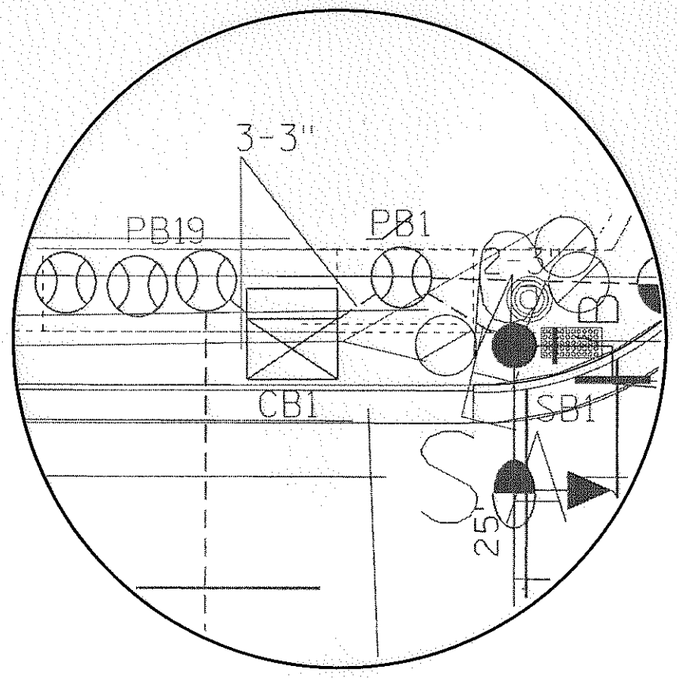
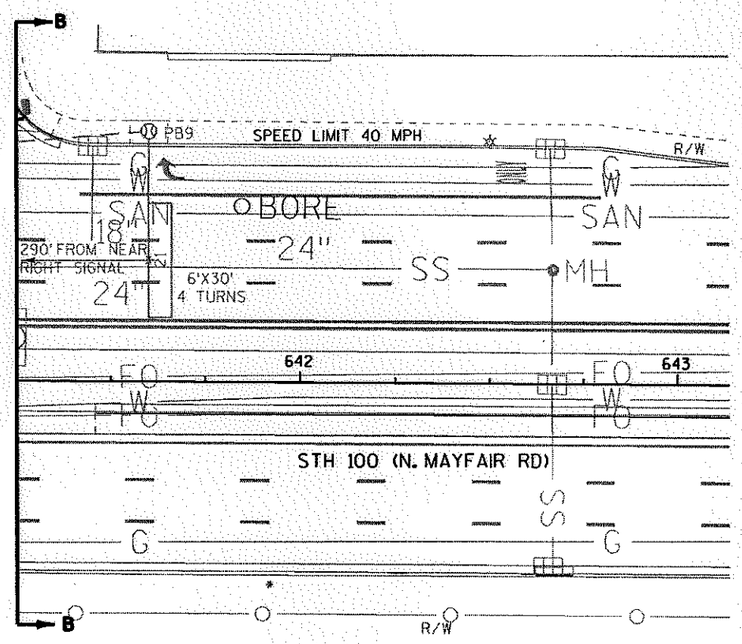




DETAIL "A"



TRAFFIC CONTROL SIGNAL
STH 100 (N. MAYFAIR RD) & CENTER ST
CITY OF WAUWATOSA
MILWAUKEE COUNTY

SIGNAL NO. S1109 (M80)

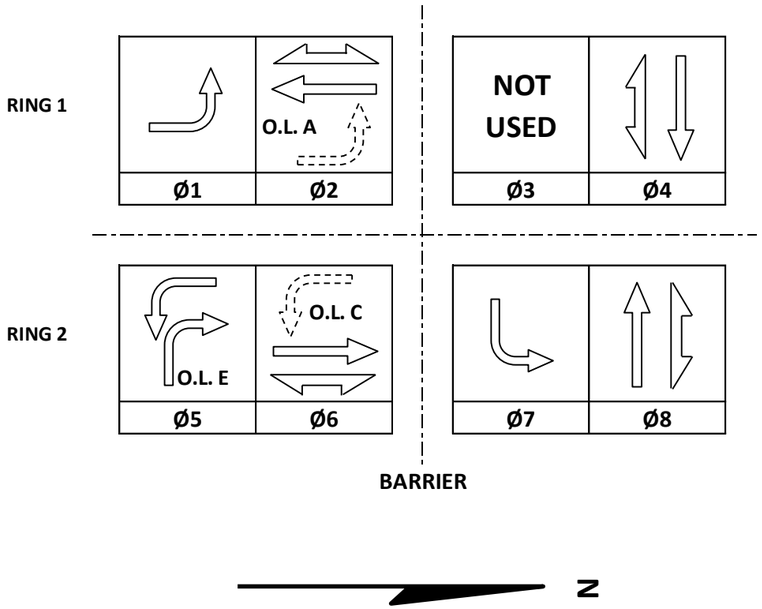
REGION CONTACT: ESS
DESIGNED BY: SEH
REVISED BY: JAJ

PAGE 2 OF 3

PROJECT NO:	HWY: STH 100	COUNTY: MILWAUKEE	TRAFFIC SIGNAL PLAN	SHEET	E

FILE NAME : J:\projects\d2_signals_com\S1109_I.dgn PLOT DATE : 20-FEB-2013 12:17 PLOT BY : dotjaj PLOT NAME : PLOT SCALE : 40:1 WISDOT/CADDS SHEET 42

	HEAD NUMBERS	FLASH
Ø1	5,6	-
Ø2	7,8,9,10	R
Ø3		
Ø4	17,18,19	R
Ø5	11,12,13,16	-
Ø6	1,2,3,4	R
Ø7	18,19	-
Ø8	13,14,15,16	R
Ø2P	20,21	
Ø4P	28,29,30,31	
Ø6P	26,27	
Ø8P	22,23,24,25	
OLA	5,6	R ←
OLB		
OLC	11,12	R ←
OLD		



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4		8		X
5		2		X
6	X	2	MIN	X
7		4		X
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B
MOVEMENT		
PHASE	2+5	6+1

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	X
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	
TRAFFIC RESPONSIVE	
ADAPTIVE	X
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM NO:	SS- 00-13

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	X
GTT	X
TOMAR	
HARDWIRE	
OTHER	
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR*(S)	41	11/12	61	51/52		81/82		
CALLED PHASE	4	1	6	5		8		
CALL OPTION		X	X	X		X		
DELAY TIME								
EXTENTION OPTION	X	X	X	X		X		
EXTEND TIME	X							
USE ADDED INITIAL			X					
CROSS SWITCH PHASE								

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR*(S)	42/43	21	71/72	53/54		83/84		
CALLED PHASE	4	2	7	5		8		
CALL OPTION	X	X	X	X		X		
DELAY TIME	X		X	X		X		
EXTENTION OPTION	X	X	X	X		X		
EXTEND TIME								
USE ADDED INITIAL		X						
CROSS SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR*(S)
								CALLED PHASE
								CALL OPTION
								DELAY TIME
								EXTENTION OPTION
								EXTEND TIME
								USE ADDED INITIAL
								CROSS SWITCH PHASE

GENERAL NOTES:

1. INTERSECTION UTILIZES VIDEO DETECTION CAMERAS FOR INSYNC ADAPTIVE CONTROL. THESE CAMERAS ARE NOT INCLUDED IN THE DETECTOR LOGIC CHART. REFER TO INSYNC PROGRAMMING FOR DETAILS.

STH 100 (N. MAYFAIR RD) & CENTER ST
CITY OF WAUWATOSA
MILWAUKEE COUNTY

SIGNAL NO: S40-1109 CABINET TYPE: TS2
CONTROLLER TYPE: ECONOLITE
DATE: 5/16 PAGE NO. 3 OF 3

PROJECT NO:	HWY: STH 100	COUNTY: MILWAUKEE	SEQUENCE OF OPERATIONS	SHEET NO:	E

Timing Cover Sheet for Signal: S1109 HWY: 100 and W Center St

Date:	12/2/2021	Changes Made By:	D. Wolford
Signal No:	S1109	Highway:	100
County:	MIL	Local Hwy:	N Mayfair Rd
Controller:	ECONOLITE	Location:	W Center St
School:	High, Middle & Elementary	Ped:	Standard

Pre-emption

Preemption:	Type:	Phases:
Emergency - Emitter	3M Opticom	2+5, 6+1

Municipal Id: 0663-42-20
EVP Contact: Fire Dept. Asst. Chief Jim Case
Community:
Contact Phone: (414) 471-8490
Email:

Coordination

System No: SS-40-0013
Coordination Type: Adaptive
Comm Type: Fiber

Controller IP Address: 172.22.69.197
Comments: Adaptive Coordination
Processor IP: 172.22.69.199

	Length	Split 1	Split 2	Split 3	Split 4
Cycle 1=	150 sec	6:30am - 9:15am M-F 12:00pm - 4:00pm S-S			
Cycle 2=	130 sec	9:15am - 3:00pm M-F; 6:30pm - 9:00pm M-F; 8:45am - 12:00pm S-S; 4:00pm - 9:00pm S-S			
Cycle 3=	150 sec	3:00pm - 6:30pm M-F			
Cycle 4=					

Cabinet Type: TS2

☐ Battery Backup

Part of a Local System: No

Local Contact:
Phone Number:

Overlaps

Overlap A = Phases:
Overlap B = Phases:
Overlap C = Phases:
Overlap D = Phases:

Turn Operations

Phases with

FYA TOD	☑	5	Phase Omit	☐
5 Section Head	☐		Dynamic FYA	☐
Lead/Lag	☐		Split Phase	☐

Detector Timing

Dilemma Zone: No Bike Detection ☐ Detection Type(s): Loop

Detector Number	**	41	42	43	53	54	71	72	83	84				
Stretch														
Right Turn Delay	**		*	*	*	*								
Left Turn Delay	**	*					*	*	*	*				

Unique Features

OL E is Phase 5, Channel 14
* See program for detector settings
Cycle lengths and splits correspond to backup timing plan
** See InSync WebUI for details (configure detectors)
InSync Program: Manual Action Plan 90 (MM-5-1)
Backup Program: Manual AP 0

Signal S1109 IP Addresses

Signal No	I-	Hwy	Local_Hwy	Location	County	Gateway:	Subnet Mask:
S1109		100	N Mayfair Rd	W Center St	MIL	172.22.68.1	255.255.252.0

IP Device:	IP Address:
Controller (ASC/3)	172.22.69.197
DIN Relay	172.22.69.204
EB Camera	172.22.69.202
InSync Processor	172.22.69.199
MMU (EDI)	172.22.69.198
NB Camera	172.22.69.200
SB Camera	172.22.69.201
Switch (Ruggedcom)	172.16.15.97
WB Camera	172.22.69.203

Timing Changes Log for Signal S1109 on Hwy 100 in MILWAUKEE County

W Center St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
12/02/21	12/2/2021	Add logic statements and enable special function bit to make SBLT operate protected-only during coordination	SBLT crash trend	D. Wolford	No
02/25/21	2/25/2021	Update IP addressing parameters and preempt filtering	Update signal equipment to 172.22.68.1 network and update preempt operation	D. Wolford	No
05/16/16	5/16/2016	New Aries Timing	Replace with Econolite Controller	D. Wolford	No
01/28/16	1/28/2016	Special event created inInSync	Center St Bridge demo	J. Effinger	Yes
12/12/15	12/12/2015	Added InSync special events to enable AM Peak at certain time intervals	Holiday shopping	J. Effinger	Yes
09/01/15	9/10/2015	Updated signal and system timings; Updated preempt operation; Put backup timing plan on spare datakey in cabinet	Signal Timing and Operation Review	D. Wolford	No
03/31/15	3/31/2015	Reverted back to normal CentralSync configuration	USH 45 SB incident cleared	J. Effinger	No
03/31/15	3/31/2015	Implemented incident CentralSync configuration	USH 45 SB incident at WTP	J. Effinger	Yes
03/20/15	3/20/2015	CentralSync parameters modified	Calibrration complete	J. Effinger	No
02/26/15	2/26/2015	Downloaded new Central Sync configuration.	System ramp closures in the Zoo Interchange.	D. Brantner	No

Timing Changes Log for Signal S1109 on Hwy 100 in MILWAUKEE County

W Center St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
11/26/14	11/26/2014	Implemented NB incident CentralSync file	USH 45 closed due to construction	J. Effinger	Yes
11/26/14	11/26/2014	Reverted back to normal CentralSync file	Construction is complete	J. Effinger	No
11/14/14	11/14/2014	Reverted back to normal CentralSync file	IH 94 closure complete	J. Effinger	No
11/14/14	11/14/2014	Implemented incident CentralSync file	Closure of IH 94 between Zoo IC and Moorland Rd due to incident	J. Effinger	Yes
03/11/13	3/7/2013	Changed passage to 0.4.	Recommendation of Rhythm. It helps with short detector calls to the controller caused by loop detectors.	J. Effinger	No
02/15/13	2/19/2013	Density settings, recall, passage, nonlocking, coord set free, delays removed	Adaptive operation	E. Schneider	No
12/03/12		Revise coordination, add pm split.	School traffic	E. Schneider	No
11/08/12	11/6/2012	Change coordination mode	Signal will not operate coordinated	E. Schneider	No
10/25/12	10/29/2012	New TS-2 timing	Signal reconstruction	E. Schneider	No
12/28/11		Initialized phase 7 and added signal timing for phase 7.	EB left turn phase (7) warranted.	D. Brantner	No

Timing Changes Log for Signal S1109 on Hwy 100 in MILWAUKEE County

W Center St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
06/28/11		Added 3/2/1 to lag north/south bound left turns	Citizen complaint	J. Dimmer	No
05/31/11	6/1/2011	Change D2\S2 offset 1	Midday progression	E. Schneider	No
11/09/07		New system timing.	New controllers installed at the Mayfair South Entrance, Mayfair Center Entrance and Center Street.	J. Haug	No
10/18/07		New EPAC timing.	Replaced TCT controller with an EPAC.	J. Haug	No
09/14/07	9/14/2007	Phase 5 operational. No LAN change.	SB far left repaired.	E. Lloyd-Weis	No
09/13/07	9/13/2007	Deactivated phase 5. No LAN change.	SB far left indication knocked down.	E. Lloyd-Weis	Yes
02/12/07		DST	DST	J. Dimmer	No
04/03/06		DST	DST	D. Lucente	No
02/25/04		DST		M. Milam	No
02/18/04	2/19/2004	Decreased phase 5 block time.	SBLT remaining green longer than necessary.	J. Haug	No

Timing Changes Log for Signal S1109 on Hwy 100 in MILWAUKEE County

W Center St

Date Computer Changed	Date Change Made in Field	Timing Change	Reason for Change	Change By	Temp Timing
12/04/03		Update system timing between W. Burleigh St. and W. North Ave.	Increase efficiency and accommodate peds along the system.	J. Haug	No
10/03/03	10/6/2003	Added 2 seconds to min green for phase 1, left turn arrow	Complaint that the green arrow is often too short	B. Barnard	No
08/07/03		took phases 1 & 5 off max recall; changed phases 1 & 5 min green to 6 sec and max green to 20 sec	Phases 1 & 5 loops installed	M. Milam	No
02/12/02		DST		M. Milam	No
01/07/02		Timing for EVP put in computer	Timing for EVP already was in controller needed in office computer	D. Brantner	No
04/04/01		New timing for LC8000	EVP installation	S. Pierce	No
03/28/01		DST		D. Brantner	No
05/01/00	5/1/2000	New TOD program	Consultant timings - prep for closed loop	S. Pierce	No
03/02/00	3/1/2000	time of day events	consistency	S. Pierce	No

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Configuration Controller Sequence

Phase Ring Sequence and Assignment (MM) 1-1-1

Hardware Alternate Sequence Enable: No

Phase Ring Sequence.....(Note: Sequences identical to the prior one are not printed)

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16
Sequence 1																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 2																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 3																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 4																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	7	8	11	12	15	16	.	.	.	.	.	.	.	.
Sequence 5																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 6																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 7																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 8																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	6	5	7	8	12	11	15	16	.	.	.	.	.	.	.	.
Sequence 9																
Ring 1	1	2	3	4	9	10	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 10																
Ring 1	2	1	3	4	10	9	13	14	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 11																
Ring 1	1	2	4	3	9	10	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 12																
Ring 1	2	1	4	3	10	9	14	13	.	.	.	.	.	.	.	.
Ring 2	5	6	8	7	11	12	16	15	.	.	.	.	.	.	.	.
Sequence 13																

Ring 1	**1**	**2**	**3**	**4**	**9**	**10**	**13**	**14**	.	.	.	.	.	.	.	.
Ring 2	**6**	**5**	**8**	**7**	**12**	**11**	**16**	**15**	.	.	.	.	.	.	.	.
Sequence 14																
Ring 1	**2**	**1**	**3**	**4**	**10**	**9**	**13**	**14**	.	.	.	.	.	.	.	.
Ring 2	**6**	**5**	**8**	**7**	**12**	**11**	**16**	**15**	.	.	.	.	.	.	.	.
Sequence 15																
Ring 1	**1**	**2**	**4**	**3**	**9**	**10**	**14**	**13**	.	.	.	.	.	.	.	.
Ring 2	**6**	**5**	**8**	**7**	**12**	**11**	**16**	**15**	.	.	.	.	.	.	.	.
Sequence 16																
Ring 1	**2**	**1**	**4**	**3**	**10**	**9**	**14**	**13**	.	.	.	.	.	.	.	.
Ring 2	**6**	**5**	**8**	**7**	**12**	**11**	**16**	**15**	.	.	.	.	.	.	.	.

Phases In Use/Exclusive Ped (MM) 1-2

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Phases In Use	X	X		X	X	X	X	X								
Exclusive Ped																

Phase Compatibility (MM) 1-1-2

Phase	
1	5
1	6
2	5
2	6
3	7
3	8
4	7
4	8
9	11
9	12
10	11
10	12
13	15
13	16
14	15
14	16

Phase and Overlap Descriptions

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Description																
Overlap	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**
Description																

Administration (MM) 1-7-1

Enable Controller/Cabinet Interlock CRC No

CRC (16 bit)	E739
Enable Automatic Backup to Datakey	Yes

Backup Prevent (MM) 1-1-3

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Timing 1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Phases 2	.		.	.	.	.	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.		.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.		.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	

Simultaneous Gap (MM) 1-1-4

Phases	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1		.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.		.	.	.	X	.	.	.	.	.	.	.	.	.	.
3	.	.		.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.		.	.	.	X	.	.	.	.	.	.	.	.
5	.	.	.	.		.	.	.	.	.	.	.	.	.	.	.
Phase 6	.	X	.	.	.		.	.	.	.	.	.	.	.	.	.
Must 7	.	.	.	.	.	.		.	.	.	.	.	.	.	.	.
Gap 8	.	.	.	X	.	.	.		.	.	.	.	.	.	.	.
With 9	.	.	.	.	.	.	.	.		.	.	.	.	.	.	.
Phase 10	.	.	.	.	.	.	.	.	.		.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.		.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.		.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.		.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.		.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.		.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
Disable	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Load Switch Assignments (MM) 1-3

	Phase / Overlap	Type	Dimming				Power Up	Auto		Flash Together
			Red	Yellow	Green	Dark		Red	Yellow	
1	1	V				-	Auto	X		X
2	2	V				-	Auto	X		
3	3	V				-	Auto	X		X
4	4	V				-	Auto	X		
5	5	V				+	Auto	X		
6	6	V				+	Auto	X		X
7	7	V				+	Auto	X		
8	8	V				+	Auto	X		X
9	2	P				-	Auto			

10	4	P				-	Auto			
11	6	P				+	Auto			
12	8	P				+	Auto			
13	1	O				-	Auto	X		X
14	5	O				+	Auto	X		X
15	3	O				-	Auto	X		
16	4	O				+	Auto	X		

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Configuration Port 1 (SDLC)

Port 1 SDLC (MM) 1-4-1

BIU	1	2	3	4	5	6	7	8
Term & Facility	X	X						
Detector Rack	X							

Enable TS2/MMU Type Cabinet: Yes
Enable MMU Extended Status: Yes
Enable SDLC Stop Time: Yes
Enable 3 Critical RFE's Lockup: Yes

MMU Program (MM) 1-4-2

Channel Can Serve With Channel	
Channel 1	**Channel 2**
1	5
1	6
1	11
1	13
1	14
1	15
2	5
2	6
2	9
2	11
2	13
2	14
2	15
4	7
4	8
4	10
4	12
4	14
5	9
5	13
5	14
5	15
6	9
6	11
6	13
6	15

7	10
8	10
8	12
9	11
9	13
9	14
9	15
10	12
11	13
11	15
13	14
13	15
14	15

Color Check Enable (MM) 1-4-3

Enable Color Check: Yes

MMU/LS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Green	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yellow		X	X	X		X	X	X					X	X	X	X
Red		X		X		X		X								

Secondary Stations/Tests (MM) 1-4-4

ID	1	2	3	4	5	6	7	8	MMU
Term & Facility									

ID	1	2	3	4	5	6	7	8	Diag
Detector Rack									

Enable SDLC Diagnostic Test: No

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ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Configuration Communications 1 (SDLC)

Ethernet Port Configuration (MM) 1-5-1

DHCP Enable:	No
Controller IP:	172.22.69.197
Subnet Mask:	255.255.252.0
Default Gateway IP:	172.22.68.1
Server IP:	172.20.3.32

NTCIP (MM) 1-5-5

NTCIP Backup Time (Sec):	0
NTCIP UDP Port:	501
Ethernet Priority:	1
Port 2 Priority (Port C50S for 2070):	4
Port 3A Priority (Port C21S for 2070):	2
Port 3B Priority (Port C22S for 2070):	3

Port Configuration (MM) 1-5-2 to 1-5-4

Port	2 (C50S)	3A (C21S)	3B (C22S)
Protocol	NTCIP	NTCIP	TERMINAL
Enable	Yes	Yes	No
Data Rate (BPS)	19.2K	19.2K	1200
Data, Parity, Stop	8 N 1	8 N 1	8 O 1
Address	1	1	0
Telemetry Response Delay	0.0	0.0	0.0
Duplex - Half or Full	Full	Full	Full
Flow Control	Yes	Yes	Yes
Group Address	0	0	0
Single Flag Enable	Yes	Yes	Yes
RTS to CTS Delay	n/a	n/a	3.0
RTS Turn Off Delay	n/a	n/a	2.0
Dropout Time	10	10	10
Early RTS	n/a	n/a	No
Telemetry Mode	n/a	n/a	FSK
ATCS Railroad	0	n/a	n/a
ATCS Railroad Line	0	n/a	n/a
ATCS Group	0	n/a	n/a
Wayside Device	0	n/a	n/a
ATC Device	0	n/a	n/a
Wayside Subnode	0	n/a	n/a
ATC Subnode	0	n/a	n/a

ECPIP (MM) 1-5-6

Controller Address:	0
Expanded System Detector Address:	0

System Detector Assignment

System Detector	Local Detector

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Configuration Logging / Display

Event Logging (MM) 1-6-1

Critical RFE's (MMU/TF)	Yes	3 Critical Errors Within 24 Hours	Yes
MMU Flash Faults	Yes	Local Flash Fault	Yes
Non-Critical RFE's (Det/Test)	Yes	Detector Errors	Yes
Coordination Errors	Yes	Controller Download	Yes
Preemption Events	Yes	TSP Events	Yes
Power On/Off	Yes	Low Battery	Yes
Access	Yes	Data Change	Yes
Online / Offline	Yes		

Alarm Event	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Enable Logging	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Display Options (MM) 1-7-2

Key Click Enable:	Yes
Backlight Enable:	Yes
LED Mode:	Single Color
Display Mode:	Basic
Screen Format:	Advanced
Trans Mode Pop-Up Disable:	No

Sign On (MM) 8-5

Sign On Message Line 1: INTERSECTION NAME:
Sign On Message Line 2: SE WisDOT Database 150828

Software Modules (MM) 8-7

Application Version: 02.65.30
OS (Boot) Version: 01.14.03

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S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Logic Processor Page 1

Logic Statement Control (MM) 1-8-1

Logic #	Statement Control
1	E
2	E
3	E
4	E
5	E
6	E
7	E
8	E
9	E
10	E
11	E
12	E
13	E
14	E
15	E
16	E
17	E

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MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Logic Processor Page 2

Logic Statements (MM) 1-8-2

Logic #: 1

If:

	Assignment	#		State
IF	PED ON PH PED CLR	4	IS	On
OR	PED ON PH PED CLR	8	IS	On
AND	COORD PLAN		IS	1

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 2

If:

	Assignment	#		State
IF	LP LOGIC FLAG	1	IS	On

Then:

Assignment	#	State
CRD SET FREE		On

Logic #: 3

If:

	Assignment	#		State
IF	VEH GREEN ON PH	2	IS	On
OR	VEH GREEN ON PH	6	IS	On

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	Off

Logic #: 4

If:

	Assignment	#		State
IF	PED ON PH PED CLR	4	IS	On
OR		8	IS	On

	PED ON PH PED CLR			
AND	COORD PLAN		IS	2

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 5

If:

	Assignment	#		State
IF	PED ON PH PED CLR	4	IS	On
OR	PED ON PH PED CLR	8	IS	On
AND	COORD PLAN		IS	3

Then:

Assignment	#	State
LP SET LOGIC FLAG	1	On

Logic #: 6

If:

	Assignment	#		State
IF	TOD DAY OF WEEK		IS	1
OR	TOD DAY OF WEEK		IS	7
AND	TOD ACTION PLAN #		IS	90
AND	TOD HOUR		IS	8
AND	TOD MINUTE		IS	45

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 7

If:

	Assignment	#		State
IF	TOD DAY OF WEEK		IS	1
OR	TOD DAY OF WEEK		IS	7
AND	TOD ACTION PLAN #		IS	90
AND	TOD HOUR		IS	8
AND	TOD MINUTE		>	45

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 8

If:

	Assignment	#		State
IF	TOD DAY OF WEEK		IS	1
OR	TOD DAY OF WEEK		IS	7
AND	TOD ACTION PLAN #		IS	90
AND	TOD HOUR		IS	9

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 9

If:

	Assignment	#		State
IF	TOD DAY OF WEEK		IS	1
OR	TOD DAY OF WEEK		IS	7
AND	TOD ACTION PLAN #		IS	90
AND	TOD HOUR		>	9

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 10

If:

	Assignment	#		State
IF	TOD DAY OF WEEK		IS	1
OR	TOD DAY OF WEEK		IS	7
AND	TOD ACTION PLAN #		IS	90
AND	TOD HOUR		IS	21

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	Off

Logic #: 11

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	1
OR	TOD DAY OF WEEK	IS	7
AND	TOD ACTION PLAN #	IS	90
AND	TOD HOUR	>	21

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	Off

Logic #: 12

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	2
OR	TOD DAY OF WEEK	IS	3
OR	TOD DAY OF WEEK	IS	4
OR	TOD DAY OF WEEK	IS	5
OR	TOD DAY OF WEEK	IS	6
AND	TOD ACTION PLAN #	IS	90
AND	TOD HOUR	IS	6
AND	TOD MINUTE	IS	30

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 13

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	2
OR	TOD DAY OF WEEK	IS	3
OR	TOD DAY OF WEEK	IS	4
OR	TOD DAY OF WEEK	IS	5
OR	TOD DAY OF WEEK	IS	6
AND		IS	90

	TOD ACTION PLAN #		
AND	TOD HOUR	IS	6
AND	TOD MINUTE	>	30

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 14

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	2
OR	TOD DAY OF WEEK	IS	3
OR	TOD DAY OF WEEK	IS	4
OR	TOD DAY OF WEEK	IS	5
OR	TOD DAY OF WEEK	IS	6
AND	TOD ACTION PLAN #	IS	90
AND	TOD HOUR	IS	7

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 15

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	2
OR	TOD DAY OF WEEK	IS	3
OR	TOD DAY OF WEEK	IS	4
OR	TOD DAY OF WEEK	IS	5
OR	TOD DAY OF WEEK	IS	6
AND	TOD ACTION PLAN #	IS	90
AND	TOD HOUR	>	7

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	On

Logic #: 16

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	2
OR	TOD DAY OF WEEK	IS	3
OR	TOD DAY OF WEEK	IS	4
OR	TOD DAY OF WEEK	IS	5
OR	TOD DAY OF WEEK	IS	6
AND	TOD ACTION PLAN #	IS	90
AND	TOD HOUR	IS	21

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	Off

Logic #: 17

If:

	Assignment	#	State
IF	TOD DAY OF WEEK	IS	2
OR	TOD DAY OF WEEK	IS	3
OR	TOD DAY OF WEEK	IS	4
OR	TOD DAY OF WEEK	IS	5
OR	TOD DAY OF WEEK	IS	6
AND	TOD ACTION PLAN #	IS	90
AND	TOD HOUR	>	21

Then:

Assignment	#	State
OL OMIT OVLP A-P	3	Off

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Controller Timing Plan (MM) 2-1

Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	6	15	0	10	6	15	6	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	15	0	34	0	21	0	32	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	20	45	0	45	20	45	20	45	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.9	0.0	4.2	3.5	3.9	3.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	2.0	1.8	0.0	3.0	2.0	1.8	1.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction																
Min Green	6	15	0	10	6	15	6	10	0	0	0	0	0	0	0	0
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	0	0	0	0	0	0	0
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	15	0	34	0	21	0	32	0	0	0	0	0	0	0	0
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	1.5	4.9	0.0	1.5	1.5	4.9	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	20	45	0	45	20	45	20	45	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	3.5	3.9	0.0	4.2	3.5	3.9	3.5	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Clear	2.0	1.8	0.0	3.0	2.0	1.8	1.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	45	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	2.3	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	6	28	0	10	6	28	6	10	0	0	0	0	0	0	0	0
Time B4	20	28	0	45	20	28	20	45	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	17	0	0	0	17	0	0	0	0	0	0	0	0	0	0
Min Gap	1.5	2.0	0.0	1.5	1.5	2.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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MOVING TRAFFIC FORWARD

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Controller Overlaps

Vehicle Overlaps (MM) 2-2

Overlap	Type	Lag Green	Yellow	Red	Adv. Green

Phases

Overlap	Phase	Included	Protect	Ped Protect	Not Overlap	Modifier	Lag X Phases	Lag 2 Phases	Flash Green
E	5	Yes	No	No	No		No	No	.

PPLT FYA

Overlap	Protected Phase (Left Turn)	Permissive Phase (Opposing Thru)	Flashing Arrow Output	Flashing Arrow Output CH	Delay Start of FYA	Delay Start of Clearance	Action Plan SF Bit Disable	Ped Protected Enable
A	1	2	Isolate	13	0.0	0.0	0	No
C	5	6	Isolate	15	0.0	0.0	5	No

Guaranteed Minimum Time Data (MM) 2-4

Phase	Min Green	Walk	Ped Clear	Yellow	Red Clear	Overlap Green
A01	1	0	7	3.0	0.0	1
B02	1	0	7	3.0	0.0	1
C03	1	0	7	3.0	0.0	1
D04	1	0	7	3.0	0.0	1
E05	1	0	7	3.0	0.0	1
F06	1	0	7	3.0	0.0	1
G07	1	0	7	3.0	0.0	1
H08	1	0	7	3.0	0.0	1
I09	1	0	7	3.0	0.0	1
J10	1	0	7	3.0	0.0	1
K11	1	0	7	3.0	0.0	1
L12	1	0	7	3.0	0.0	1
M13	1	0	7	3.0	0.0	1
N14	1	0	7	3.0	0.0	1
O15	1	0	7	3.0	0.0	1
P16	1	0	7	3.0	0.0	1

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Controller Pedestrian Overlaps

Vehicle / Pedestrian Overlaps (MM) 2-3

Included	Pedestrian Overlaps

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MOVING TRAFFIC FORWARD

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Controller Start / Flash Data (MM) 2-5

Start Up

Phase	Phase Setting
1	.
2	G
3	.
4	.
5	.
6	G
7	.
8	.
9	.
10	.
11	.
12	.
13	.
14	.
15	.
16	.

Overlap
A
C
E

Flash Thru Mon: No
Flash Time: 0
All Red: 6
Power Start Seq: 1
MUTCD Enabled: Yes
Y->G: No

Automatic Flash

Entry
2
6

Exit
2
6

Overlap Exit
A
C
E

Flash Thru Mon: No
Exit Flash: G
Minimum Flash: 8
Mimimum Recall: No
Cycle Through Phase: No

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MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Controller Options

Controller Options (MM) 2-6-1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Grn Ph	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Guar Passage																
Non-Act I																
Non-Act II																
Dual Entry	X	X		X	X	X	X	X								
Cond Service																
Cond Reservice																
Ped Re-Service																
Rest In Walk																
Flashing Walk																
Ped Clr-Yel																
Ped Clr-Red																
IGRN + Veh Ext																

Ped Clear Protect: On Unit Red Revert: 2.0 MUTCD 3 Seconds Don't Walk: No

Pre-Timed Mode (MM) 2-7

Enable Pre-Timed Mode: No Free Input Disables Pre-Timed: No

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Pre-Timed																

Phase Recall Options (MM) 2-8

Plan # 1

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector																
Vehicle Recall																
Ped Recall																
Max Recall																
Soft Recall		X				X										
No Rest																
AI Calc																

Plan # 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																

Max Recall															
Soft Recall															
No Rest															
AI Calc															

Plan # 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

Plan # 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Lock Detector		X				X										
Vehicle Recall		X				X										
Ped Recall																
Max Recall																
Soft Recall																
No Rest																
AI Calc																

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MOVING TRAFFIC FORWARD

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Coordination Options

Options (MM) 3-1

Manual Pattern	Auto	ECPI Coord	Yes
System Source	SYS	System Format	STD
Splits In	Seconds	Offsets In	Seconds
Transition	Smooth	Max Select	MAXINH
Dwell / Add Time	0		
Delay Coord Wk-LZ	No	Force Off	Fixed
Offset Reference	Lead	Use Ped Time	No
Ped Recall	No	Ped Reservice	No
Local Zero Override	No	FO Added Ini Green	Yes
Re-sync Count	3	Multisync	No

Auto Perm Minimum Green (Seconds) (MM) 3-4

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Split Demand (MM) 3-5

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Demand 1																
Demand 2																

Demand	1	2
Detector	0	0
Call Time (Sec)	0	0
Cycle Count	0	0

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Coordination Pattern Data
Coordinator Pattern Data (MM) 3-2

Coordinator Pattern # 1

Split Pattern	1	TS2 (Pat-Off)	0-1	Splits In	Seconds
Cycle	150	Std (COS)	0	Offsets In	Seconds
Offset Value	96s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	2		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 1)	24	75	0	51	20	79	26	25	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

Coordinator Pattern # 2

Split Pattern	2	TS2 (Pat-Off)	0-2	Splits In	Seconds
Cycle	130	Std (COS)	0	Offsets In	Seconds
Offset Value	16s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	5		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 2)	26	51	0	53	28	49	25	28	0	0	0	0	0	0	0	0
Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	130s	130s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0	
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0	

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

Coordinator Pattern # 3

Split Pattern	3	TS2 (Pat-Off)	0-3	Splits In	Seconds
Cycle	150	Std (COS)	0	Offsets In	Seconds
Offset Value	129s	Dwell/Add Time	0		
Actuated Coord	Yes	Timing Plan	0		
Actuated Walk Rest	No	Sequence	2		
Phase Reservice	No	Action Plan	0		
Max Select	None	Force Off	None		

Split Preference Phases

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Splits (Split Pat 3)	26	72	0	52	32	66	25	27	0	0	0	0	0	0	0	0

Pref 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pref 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring	1	2	3	4
Ring Split Ext	0	0	0	0
Ring Displacement	-	0	0	0
Split Sum	150s	150s	0s	0s

Misc. Data

Veh Perm 1	0	Veh Perm 2	0	Veh Perm 2 Disp	0
Split Demand Pat 1	0	Split Demand Pat 2	0	Crossing Arterial Pat	0

Split Pattern

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																
Special Funciton Outputs																

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ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Coordination Split Pattern
Split Pattern Data (MM) 3-3

Split Pattern # 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Split (seconds)	24	75	0	51	20	79	26	25	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

Split Pattern # 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Split (seconds)	26	51	0	53	28	49	25	28	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	130s	130s	0s	0s

Split Pattern # 3

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Description																
Split (seconds)	26	72	0	52	32	66	25	27	0	0	0	0	0	0	0	0
Coord Phase		X				X										
Vehicle Recall																
Pedestrian Recall																
Recall to Max. Time																
Omit Phase																

Ring	1	2	3	4
Split Sum	150s	150s	0s	0s

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MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Preempt Plan

Preempt Plan (MM) 4-1

Preempt Plan 1

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	.	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	1-F1	.	1-F1	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Det Lock	Yes	Delay	1	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	5	0	5	25.5	25.5
	Min Grn	Ext Grn	Max Grn	Yellow	Red
Track Clear	0	0	0	25.5	25.5
	Min Dwell	Pmt Ext	Max Time	Yellow	Red
Dwell / Cycle-Exit	10	5.0	0	25.5	25.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	1-F1
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Preempt Plan 2

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Overlap	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trk Clr Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trk Clr Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Enable Trailing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dwell Veh	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
Dwell Ped																
Dwell Overlap	1-F1	.	1-F1	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Veh	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Cycling Ped																
Cycling Overlap	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Exit Phases		X				X										
Exit Calls																
Special Function																

Enable	Yes	Preempt Override	No	Interlock Enable	No
Det Lock	Yes	Delay	1	Inhibit	0
Override Flash	No	Duration	0	CLR > GRN	No
Term Ovlp Asap	No	PC Through Yel	No	Terminate Phase	No
Ped Dark	No	Track Clear Rsrv	No	Dwell Flash	Off
Linked Pmt	0	FL Exit Color	Grn	Exit Options	Off
Exit Timing Plan	0	Reservice	0	Fault Type	Hard

Ring	1	2	3	4
Free During Pmt	No	No	No	No

Timing	Walk	Ped Clr	Min Grn	Yellow	Red
Entrance	5	0	5	25.5	25.5
	Min Grn	**Ext Grn**	**Max Grn**	**Yellow**	**Red**
Track Clear	0	0	0	25.5	25.5
	Min Dwell	**Pmt Ext**	**Max Time**	**Yellow**	**Red**

Dwell / Cycle-Exit	10	5.0	0	25.5	25.5

Preemption Active Out	On	Preempt Act Dwell	No
Other - Priority Preempt	Off	Non-Priority Pmt	1-F1
Inhibit Extension Time	0.0	Ped Priority Return	Off
Veh Priority Return	Off	Queue Delay	Off
Conditional Delay	Off		

Phase	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Veh Pri Return %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Preempt Preempt Filtering
Enable Preempt Filtering & TSP/SCP (MM) 4-2

Input	Solid	Pulsing
1	PREEMPTION 1	TSP/SCP 1
2	PREEMPTION 2	TSP/SCP 2
3	PREEMPTION 3	TSP/SCP 3
4	PREEMPTION 4	TSP/SCP 4
5	PREEMPTION 5	...BYPASSED...
6	PREEMPTION 6	...BYPASSED...
7	PREEMPTION 7	...BYPASSED...
8	PREEMPTION 8	...BYPASSED...
9	PREEMPTION 9	...BYPASSED...
10	PREEMPTION 10	...BYPASSED...

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MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Time Base Clock/Calendar

Clock/Calendar Data (MM) 5-1

Manual Action Plan:	90
SYNC Reference Time:	00:00
SYNC Reference:	Reference Time
Day Light Savings:	No
Time Reset Input Set Time:	3:30:00
Standard Time From GMT:	0

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MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Time Base Action Plan
Action Plan (MM) 5-2

Action Plan - 1

Pattern	1	Override Sys	No
Timing Plan	2	Sequence	2
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																
Spec Func (1-8)					X											
Aux Func (1-3)																

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 2

Pattern	2	Override Sys	No
Timing Plan	2	Sequence	5
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)					X			

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 3

Pattern	3	Override Sys	No
Timing Plan	2	Sequence	2
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)					X			

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 90

Pattern	Free	Override Sys	No
Timing Plan	1	Sequence	0
Veh Detector Plan	1	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 99

Pattern	Flash	Override Sys	No
Timing Plan	0	Sequence	0
Veh Detector Plan	0	Det Log	None
Flash	Yes	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Action Plan - 100

Pattern	Free	Override Sys	No
Timing Plan	2	Sequence	0
Veh Detector Plan	2	Det Log	None
Flash	No	Red Rest	No
Veh Det Diag Plan	0	Ped Det Diag Plan	0
Dimming Enable	No	Pmt Veh Priority Ret	No
Pmt Ped Priority Ret	No	Pmt Queue Delay	No
Pmt Cond Delay	No		

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ped Recall																
Walk 2																
Veh Ext 2																
Veh Recall																
Max Recall																
Max 2																
Max 3																
CS Inhibit																
Omit																

Spec Func (1-8)								

Aux Func (1-3)			

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Time Base Day Plan/Schedule
Day Plan (MM) 5-3

Day Plan #1

Event	Action Plan	Start Time
1	100	00:01
2	2	08:45
3	1	12:00
4	2	16:00
5	100	21:00

Day Plan #2

Event	Action Plan	Start Time
1	100	00:01
2	1	06:30
3	2	09:15
4	3	15:00
5	2	18:30
6	100	21:00

Schedule (MM) 5-4

Schedule Number - 1

Day Plan No.: 1

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X						X

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Schedule Number - 2

Day Plan No.: 2

Month	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	X	X	X	X	X	X	X	X	X	X	X	X

Day (DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
		X	X	X	X	X	

Day (DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
	X	X	X	X	X	X	X	X	X	X	X
	23	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**		
	X	X	X	X	X	X	X	X	X		

Wisconsin DOT

ECONOLITE

MOVING TRAFFIC FORWARD

S 40-1109 - STH 100 & Center St - Econolite Type - ASC/3

Detectors

Detectors - Pg 1

Veh Det Phase Assignment (MM) 6-1

Vehicle Detector Plan Number - 1

Veh Detector	Assigned Phase	Called Phase	Type
1	1		N
2	2		N
3	4		N
4	4		N
5	5		N
6	5		N
7	6		N
8	7		N
9	8		N
10	8		N

Vehicle Detector Plan Number - 2

Veh Detector	Assigned Phase	Called Phase	Type
1	1		N
2	2		N
3	4		N
4	4		N
5	5		N
6	5		N
7	6		N
8	7		N
9	8		N
10	8		N

Vehicle Detector Setup (MM) 6-2

Veh Detector	Type	TS2 Detector	Description
1	N-NTCIP	Yes	
2	N-NTCIP	Yes	
3	N-NTCIP	Yes	
4	N-NTCIP	Yes	
5	N-NTCIP	Yes	
6	N-NTCIP	Yes	
7	N-NTCIP	Yes	
8	N-NTCIP	Yes	
9	N-NTCIP	Yes	
10	N-NTCIP	Yes	

11	N-NTCIP	Yes	
12	N-NTCIP	Yes	
13	N-NTCIP	Yes	
14	N-NTCIP	Yes	
15	N-NTCIP	Yes	
16	N-NTCIP	Yes	
17	N-NTCIP	Yes	
18	N-NTCIP	Yes	
19	N-NTCIP	Yes	
20	N-NTCIP	Yes	
21	N-NTCIP	Yes	
22	N-NTCIP	Yes	
23	N-NTCIP	Yes	
24	N-NTCIP	Yes	
25	N-NTCIP	Yes	
26	N-NTCIP	Yes	
27	N-NTCIP	Yes	
28	N-NTCIP	Yes	
29	N-NTCIP	Yes	
30	N-NTCIP	Yes	
31	N-NTCIP	Yes	
32	N-NTCIP	Yes	
33	N-NTCIP	Yes	
34	N-NTCIP	Yes	
35	N-NTCIP	Yes	
36	N-NTCIP	Yes	
37	N-NTCIP	Yes	
38	N-NTCIP	Yes	
39	N-NTCIP	Yes	
40	N-NTCIP	Yes	
41	N-NTCIP	Yes	
42	N-NTCIP	Yes	
43	N-NTCIP	Yes	
44	N-NTCIP	Yes	
45	N-NTCIP	Yes	
46	N-NTCIP	Yes	
47	N-NTCIP	Yes	
48	N-NTCIP	Yes	
49	N-NTCIP	Yes	
50	N-NTCIP	Yes	
51	N-NTCIP	Yes	
52	N-NTCIP	Yes	
53	N-NTCIP	Yes	
54	N-NTCIP	Yes	
55	N-NTCIP	Yes	
56	N-NTCIP	Yes	
57	N-NTCIP	Yes	
58	N-NTCIP	Yes	
59	N-NTCIP	Yes	
60	N-NTCIP	Yes	
61	N-NTCIP	Yes	

62	N-NTCIP	Yes	
63	N-NTCIP	Yes	
64	N-NTCIP	Yes	

Vehicle Detector Plan Number - 1

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
3	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
4	4	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
7	6	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
8	7	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
9	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
11	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Vehicle Detector Plan Number - 2

Veh Detector	Phase	ECPI Log	Call Option	Delay Time	Ext Option	Extend Time / Passage Time	Queue Lim. / Discon. Time	Use Added Initial	Cross Switch Ph	Lock In	NTCIP Vol.	NTCIP Occ.	Pmt Queue Delay
1	1	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
2	2	No	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
3	4	No	No	0.0	Passage	3.8	0	No	0	None	No	No	No
4	4	No	Yes	8.0	Passage	0.0	0	No	0	None	No	No	No
5	5	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
6	5	No	Yes	8.0	Passage	0.0	0	No	0	None	No	No	No
7	6	No	Yes	0.0	Passage	0.0	0	Yes	0	None	No	No	No
8	7	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
9	8	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
10	8	No	Yes	2.0	Passage	0.0	0	No	0	None	No	No	No
11	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
12	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
13	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
14	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
15	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
16	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
17	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
18	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
19	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
20	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
21	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
22	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

23	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
24	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
25	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
26	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
27	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
28	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
29	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
30	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
31	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
32	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
33	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
34	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
35	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
36	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
37	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
38	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
39	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
40	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
41	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
42	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
43	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
44	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
45	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
46	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
47	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
48	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
49	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
50	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
51	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
52	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
53	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
54	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
55	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
56	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
57	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
58	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
59	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
60	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
61	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
62	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
63	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No
64	0	No	Yes	0.0	Passage	0.0	0	No	0	None	No	No	No

Ped Detector Phase Assignment (MM) 6-3

Mode: Econolite

Ped Detector Number	Called Phase															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Ped Detector Number	Called Phase															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
3	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.
4	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
5	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.
6	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
7	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
8	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.
9	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.
10	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.
11	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.
12	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.
13	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.
14	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.
16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X

Date: October 18, 2022

BASE SATURATION FLOW RATE CALCULATIONS

Intersection Name
Mayfair Road & Burleigh Street

Urbanized Area/Cluster Population
1,376,476

Exit Ramp:	No
Speed Limit:	40

Sat. Flow Rate (pc/h/ln)				
	1943	1943		1943

N

# of Lanes				
Lane Type				
	1	2		2
R	T-R	T	L-T	L

Exit Ramp:	Sat. Flow (pc/h/ln)	# of Lanes	Lane Type						Lane Type	# of Lanes	Sat. Flow (pc/h/ln)	Exit Ramp:
No	1912	2	L				R	1			1900	No
Speed Limit:			L-T				T-R					Speed Limit:
	1912	3	T	Traffic Signal			T	2			1903	
			T-R				L-T					
35	1900	1	R				L	2			1903	35

L	L-T	T	T-R	R
2		2	1	

Lane Type
# of Lanes

1943		1943	1943	
Sat. Flow Rate (pc/h/ln)				

Speed Limit:	40
Exit Ramp:	No

Bureau of Traffic Operations
Last Updated: **4/7/2022**

Date: October 18, 2022

BASE SATURATION FLOW RATE CALCULATIONS

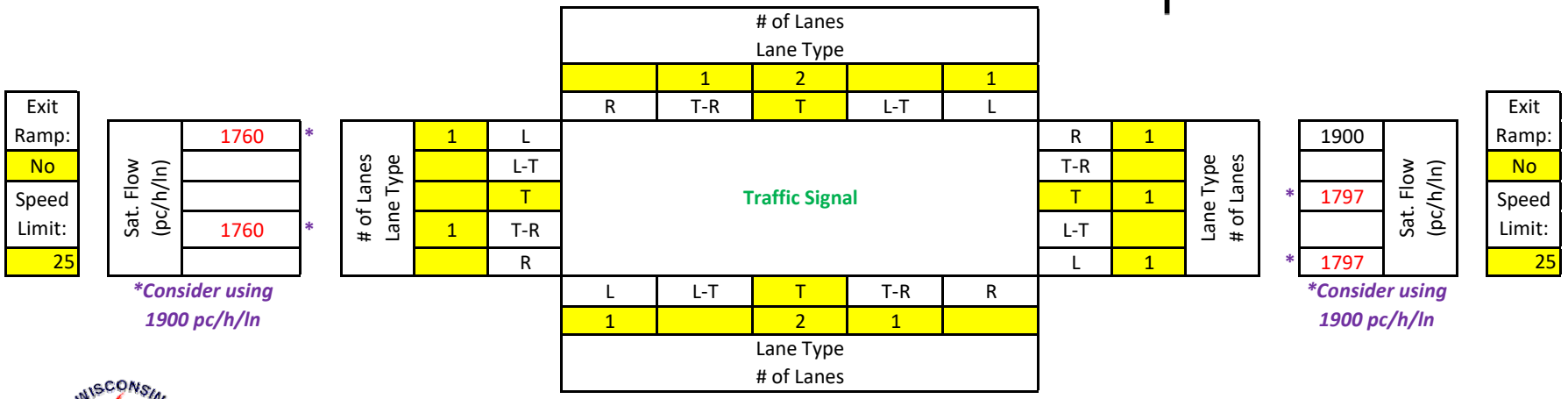
Intersection Name
Mayfair Road & Center Street

Urbanized Area/Cluster Population
1,376,476

Exit Ramp:	No
Speed Limit:	40

Sat. Flow Rate (pc/h/ln)				
	1931	1931		1931

N



Consider using 1900 pc/h/ln

Consider using 1900 pc/h/ln

Sat. Flow Rate (pc/h/ln)				
1931		1931	1931	

Speed Limit:	40
Exit Ramp:	No

Bureau of Traffic Operations

Last Updated: **4/7/2022**

Turn Lane Storage Calcuations per WisDOT SE Region Guidance for TIAs *(WisDOT Last Guidance Update 9/18/2018)*

Project:	2923 Wauwatosa STH 100 Chick-Fil-A TIA
Intersection:	STH 100 & Burleigh Street
EB Setting:	5. Urban Low-Speed (3,4,5)
WB Setting:	5. Urban Low-Speed (3,4,5)
NB Setting:	5. Urban Low-Speed (3,4,5)
SB Setting:	5. Urban Low-Speed (3,4,5)
User:	TADI - TSC
Date:	10/19/2022

(1,3, & 5 use desirable d4 = 100'; 2, 4, & 6 use desirable d4 = 50')

Select "Yes" for the background condition in Column "O". Select "No" for all other conditions. -->

										Yes	*No*	*No*
Design Speed (mph)	**Direction**	**Movement**	**OffRamp?**	**New U-Turn, SF, or Ag?**	**Existing Storage**	**d3 (ft)**			**Metric**	**Year 2023 Background**	**Year 2023 Build**	**Year 2023 Total**
						Back'd	**Min**	**Des**				
40	EB	Left	No	No	190'	30'	100'	150'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	160'	225'	225'
									Min Storage (ft)*	190'	255'	255'
									Des Storage (ft)*	190'	255'	255'
40	EB	Right	No	No	365'	60'	100'	150'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	305'	235'	245'
									Min Storage (ft)*	365'	365'	365'
									Des Storage (ft)*	365'	365'	365'
40	WB	Left	No	No	285'	85'	100'	150'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	200'	205'	215'
									Min Storage (ft)*	285'	290'	300'
									Des Storage (ft)*	285'	290'	300'
40	WB	Right	No	No	450'	410'	100'	150'	Control	Signal	Does Not Exist	Does Not Exist
									d4, Queue (ft)*	40'	0'	0'
									Min Storage (ft)*	450'	0'	0'
									Des Storage (ft)*	450'	0'	0'
45	NB	Left	No	No	530'	270'	150'	200'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	260'	420'	435'
									Min Storage (ft)*	530'	570'	585'
									Des Storage (ft)*	530'	570'	585'
45	SB	Left	No	No	215'	160'	150'	200'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	55'	55'	55'
									Min Storage (ft)*	215'	215'	215'
									Des Storage (ft)*	215'	215'	215'

- Urban low-speed roadways posted 40 mph or less (design speed 45 mph or less).
- Urban transitional/high-speed roadways posted 45 mph or greater (design speed 55 mph or greater)
- Rural roadways posted 55 mph or greater (design speed 60 mph or greater) & are not near urbanized area.
- Right-turn movements at intersections with no-control do not have a minimum d4 (d4 = queue only).

^ Off-ramp d3 values equal stopping sight distance from ramp gore to back of queue (d4). Therefore, storage calculations on off-ramp approaches equal d4 only.

** Side road turn lanes must accommodate queues only; d3 not required for side roads unless local jurisdiction (County/Municipality) requires it.*

Do not extend lanes with less than 50-ft of change (unless you cannot accommodate the queue)

Form last updated 6-1-2021 by MPM

Turn Lane Storage Calcuations per WisDOT SE Region Guidance for TIAs *(WisDOT Last Guidance Update 9/18/2018)*

Project:	2923 Wauwatosa STH 100 Chick-Fil-A TIA	
Scenario:		
Intersection:	STH 100 & Center Street	
EB Setting:	5. Urban Low-Speed (3,4,5)	*(1,3, & 5 use desirable d4 = 100'; 2, 4, & 6 use desirable d4 = 50')*
WB Setting:	5. Urban Low-Speed (3,4,5)	*(1,3, & 5 use desirable d4 = 100'; 2, 4, & 6 use desirable d4 = 50')*
NB Setting:	5. Urban Low-Speed (3,4,5)	*(1,3, & 5 use desirable d4 = 100'; 2, 4, & 6 use desirable d4 = 50')*
SB Setting:	5. Urban Low-Speed (3,4,5)	*(1,3, & 5 use desirable d4 = 100'; 2, 4, & 6 use desirable d4 = 50')*
User:	TADI - TSC	
Date:	10/19/2022	

Select "Yes" for the background condition in Column "O". Select "No" for all other conditions. -->

										Yes	No	No
Design Speed (mph)	**Direction**	**Movement**	**OffRamp?**	**New U-Turn, SF, or Ag?**	**Existing Storage**	**d3 (ft)**			**Metric**	**Year 2023 Background**	**Year 2023 Build**	**Year 2023 Total**
						Back'd	**Min**	**Des**				
30	EB	Left	No	No	150'	0'	50'	75'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	235'	240'	250'
									Min Storage (ft)*	285'	290'	300'
									Des Storage (ft)*	310'	315'	325'
30	WB	Left	No	No	470'	370'	50'	75'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	100'	100'	100'
									Min Storage (ft)*	470'	470'	470'
									Des Storage (ft)*	470'	470'	470'
30	WB	Right	No	No	470'	310'	50'	75'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	160'	165'	170'
									Min Storage (ft)*	470'	470'	470'
									Des Storage (ft)*	470'	470'	470'
45	NB	Left	No	No	250'	130'	150'	200'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	120'	160'	165'
									Min Storage (ft)*	250'	290'	295'
									Des Storage (ft)*	250'	290'	295'
45	SB	Left	No	No	575'	315'	150'	200'	Control	Signal	Signal	Signal
									d4, Queue (ft)*	260'	235'	345'
									Min Storage (ft)*	575'	575'	575'
									Des Storage (ft)*	575'	575'	575'

- Urban low-speed roadways posted 40 mph or less (design speed 45 mph or less).
- Urban transitional/high-speed roadways posted 45 mph or greater (design speed 55 mph or greater)
- Rural roadways posted 55 mph or greater (design speed 60 mph or greater) & are not near urbanized area.
- Right-turn movements at intersections with no-control do not have a minimum d4 (d4 = queue only).

^ Off-ramp d3 values equal stopping sight distance from ramp gore to back of queue (d4). Therefore, storage calculations on off-ramp approaches equal d4 only.

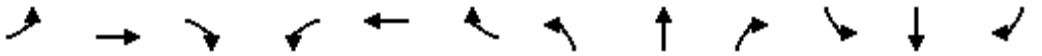
** Side road turn lanes must accommodate queues only; d3 not required for side roads unless local jurisdiction (County/Municipality) requires it.*

Do not extend lanes with less than 50-ft of change (unless you cannot accommodate the queue)

APPENDIX B

Year 2023 Background Traffic Operational Analysis

Existing Transportation System



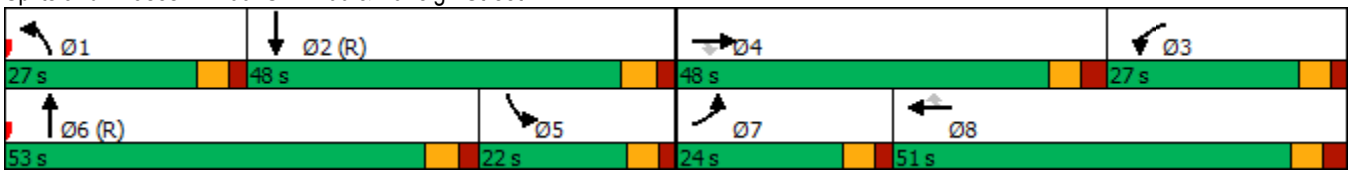
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	575	340	295	635	35	445	990	355	45	955	205
Future Volume (vph)	175	575	340	295	635	35	445	990	355	45	955	205
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	599	220	307	661	23	464	1401	0	47	1209	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	24.0	48.0	48.0	27.0	51.0	51.0	27.0	53.0		22.0	48.0	
Total Split (%)	16.0%	32.0%	32.0%	18.0%	34.0%	34.0%	18.0%	35.3%		14.7%	32.0%	
Maximum Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.71	0.69	0.84	0.73	0.87	0.07	0.82	0.63		0.15	0.68	
Control Delay	82.6	61.5	85.7	73.1	68.4	43.1	55.4	24.3		61.8	44.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	82.6	61.5	85.7	73.1	68.4	43.1	55.4	24.3		61.8	44.0	
90th %ile Green (s)	15.7	35.9	35.9	22.6	42.8	42.8	26.1	51.4		16.5	41.8	
90th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Max	Coord		Hold	Coord	
70th %ile Green (s)	13.4	30.6	30.6	19.7	36.9	36.9	28.0	59.6		16.5	48.1	
70th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Gap	Coord		Hold	Coord	
50th %ile Green (s)	11.8	25.9	25.9	19.5	33.6	33.6	26.7	64.5		16.5	54.3	
50th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Hold	Coord	
30th %ile Green (s)	10.2	22.0	22.0	18.8	30.6	30.6	25.4	69.1		16.5	60.2	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Hold	Coord	
10th %ile Green (s)	7.9	17.0	17.0	17.2	26.3	26.3	22.5	97.7		0.0	69.7	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	91	204	212	151	332	18	212	428		21	366	
Queue Length 95th (ft)	130	230	289	200	376	41	259	540		43	479	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	401	1384	413	469	994	443	568	2226		360	1789	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.43	0.53	0.65	0.66	0.05	0.82	0.63		0.13	0.68	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street



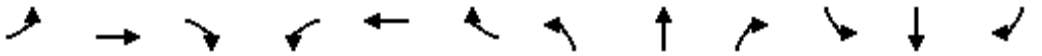
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	575	340	295	635	35	445	990	355	45	955	205
Future Volume (veh/h)	175	575	340	295	635	35	445	990	355	45	955	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	182	599	220	307	661	23	464	1031	370	47	995	214
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	228	819	253	364	730	325	510	1193	428	911	1858	399
Arrive On Green	0.07	0.16	0.16	0.10	0.20	0.20	0.05	0.10	0.10	0.26	0.43	0.43
Sat Flow, veh/h	3501	5174	1598	3492	3591	1598	3566	3823	1372	3538	4308	925
Grp Volume(v), veh/h	182	599	220	307	661	23	464	947	454	47	804	405
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1796	1598	1783	1756	1683	1769	1742	1748
Q Serve(g_s), s	7.7	16.5	20.2	12.9	27.0	1.7	19.4	39.8	39.8	1.5	25.6	25.7
Cycle Q Clear(g_c), s	7.7	16.5	20.2	12.9	27.0	1.7	19.4	39.8	39.8	1.5	25.6	25.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.82	1.00		0.53
Lane Grp Cap(c), veh/h	228	819	253	364	730	325	510	1096	525	911	1503	754
V/C Ratio(X)	0.80	0.73	0.87	0.84	0.90	0.07	0.91	0.86	0.86	0.05	0.54	0.54
Avail Cap(c_a), veh/h	432	1435	443	501	1068	475	511	1096	525	911	1503	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.1	60.1	61.6	66.0	58.3	48.3	70.5	64.2	64.2	41.9	31.5	31.6
Incr Delay (d2), s/veh	2.4	0.5	3.6	7.0	6.1	0.0	20.0	9.1	17.1	0.0	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	11.7	13.2	10.2	18.7	1.3	16.2	27.6	28.0	1.2	16.4	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	60.6	65.2	73.0	64.5	48.3	90.5	73.3	81.2	41.9	32.9	34.3
LnGrp LOS	E	E	E	E	E	D	F	E	F	D	C	C
Approach Vol, veh/h		1001			991			1865			1256	
Approach Delay, s/veh		63.6			66.7			79.5			33.7	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.9	70.9	22.0	30.1	44.8	53.0	15.3	36.9
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	21.5	* 42	* 22	* 42	* 17	* 47	18.5	* 45
Max Q Clear Time (g_c+I1), s	21.4	27.7	14.9	22.2	3.5	41.8	9.7	29.0
Green Ext Time (p_c), s	0.0	2.7	0.1	1.6	0.0	1.9	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	62.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



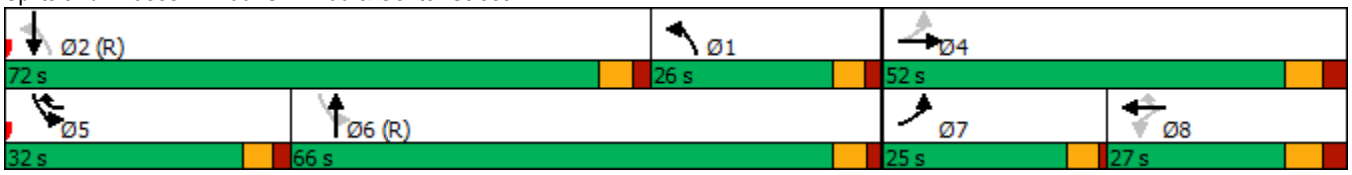
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	70	105	50	50	195	150	1410	10	220	1265	165
Future Volume (vph)	190	70	105	50	50	195	150	1410	10	220	1265	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	186	0	53	53	129	160	1511	0	234	1522	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	66.0		32.0	72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	44.0%		21.3%	48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	60.3		26.5	66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.63	0.51		0.56	0.36	0.35	0.45	0.54		0.69	0.56	
Control Delay	57.4	55.5		87.6	71.4	48.0	34.6	25.6		44.2	18.3	

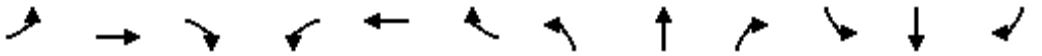
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.4	55.5		87.6	71.4	48.0	34.6	25.6		44.2	18.3	
90th %ile Green (s)	20.5	41.2		16.2	16.2	26.5	20.5	63.9		26.5	69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	22.0	20.5	71.7		22.0	73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	20.3	35.3		10.5	10.5	18.8	20.5	77.5		18.8	75.8	
50th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	17.3	31.8		10.0	10.0	15.6	20.5	84.2		15.6	79.3	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.9	20.5	107.9		10.9	98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	168	158		51	51	105	51	360		92	198	
Queue Length 95th (ft)	236	225		98	95	149	121	489		188	224	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	337	511		158	248	449	353	2815		428	2711	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.60	0.36		0.34	0.21	0.29	0.45	0.54		0.55	0.56	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 200: STH 100 & Center Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	70	105	50	50	195	150	1410	10	220	1265	165
Future Volume (veh/h)	190	70	105	50	50	195	150	1410	10	220	1265	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	202	74	112	53	53	129	160	1500	11	234	1346	176
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	327	157	237	155	167	255	544	3076	23	322	2068	270
Arrive On Green	0.11	0.23	0.23	0.09	0.09	0.09	0.20	0.57	0.57	0.14	0.88	0.88
Sat Flow, veh/h	1795	677	1024	1207	1885	1598	1824	5354	39	1824	4678	612
Grp Volume(v), veh/h	202	0	186	53	53	129	160	976	535	234	1003	519
Grp Sat Flow(s),veh/h/ln	1795	0	1701	1207	1885	1598	1824	1743	1908	1824	1743	1805
Q Serve(g_s), s	14.9	0.0	14.1	6.3	4.0	11.1	0.0	24.8	24.8	8.5	11.8	11.8
Cycle Q Clear(g_c), s	14.9	0.0	14.1	6.3	4.0	11.1	0.0	24.8	24.8	8.5	11.8	11.8
Prop In Lane	1.00		0.60	1.00		1.00	1.00		0.02	1.00		0.34
Lane Grp Cap(c), veh/h	327	0	394	155	167	255	544	2003	1096	322	1540	798
V/C Ratio(X)	0.62	0.00	0.47	0.34	0.32	0.51	0.29	0.49	0.49	0.73	0.65	0.65
Avail Cap(c_a), veh/h	369	0	508	207	249	324	544	2003	1096	515	1540	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	0.0	49.7	65.2	64.1	57.6	26.0	18.9	18.9	15.0	5.5	5.5
Incr Delay (d2), s/veh	1.5	0.0	0.3	0.5	0.4	0.6	0.1	0.9	1.6	1.2	2.1	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.3	0.0	10.2	3.6	3.5	8.1	7.8	15.2	16.7	5.2	4.8	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.7	0.0	50.0	65.7	64.5	58.2	26.1	19.7	20.4	16.1	7.7	9.6
LnGrp LOS	D	A	D	E	E	E	C	B	C	B	A	A
Approach Vol, veh/h		388			235			1671			1756	
Approach Delay, s/veh		51.9			61.3			20.5			9.4	
Approach LOS		D			E			C			A	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.0	72.0		42.0	16.1	91.9	21.5	20.5				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 21	* 66		44.8	26.5	* 60	20.5	19.8				
Max Q Clear Time (g_c+I1), s	2.0	13.8		16.1	10.5	26.8	16.9	13.1				
Green Ext Time (p_c), s	0.1	29.5		0.6	0.2	22.0	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		21.1	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	0	0	0	1795	0	1615	0
Future Volume (vph)	0	0	0	1795	0	1615	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%			0%		0%	
Storage Length (ft)	0	0	210		275		0
Storage Lanes	1	0	1		1		0
Taper Length (ft)	75		75		75		
Link Speed (mph)	30			40		40	
Link Distance (ft)	339			902		1744	
Travel Time (s)	7.7			15.4		29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	1910	0	1718	0
Sign Control	Stop			Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

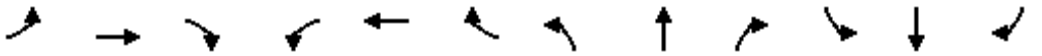
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	0	0	1795	0	1615	0
Future Vol, veh/h	0	0	0	1795	0	1615	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	1910	0	1718	0

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2482	859	1718	0	1394	-	0
Stage 1	1718	-	-	-	-	-	-
Stage 2	764	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*268	*552	*694	-	*847	-	-
Stage 1	*567	-	-	-	-	-	-
Stage 2	*513	-	-	-	-	-	-
Platoon blocked, %	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*268	*552	*694	-	*847	-	-
Mov Cap-2 Maneuver	*424	-	-	-	-	-	-
Stage 1	*567	-	-	-	-	-	-
Stage 2	*513	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 694	-	-	* 847	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



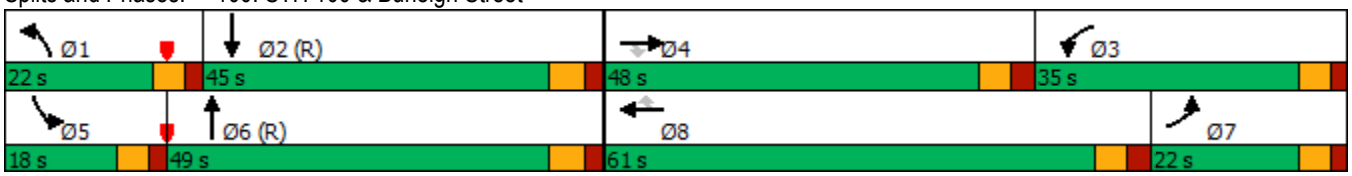
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	620	360	205	605	25	375	585	260	60	630	215
Future Volume (vph)	220	620	360	205	605	25	375	585	260	60	630	215
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	653	235	216	637	16	395	890	0	63	889	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	22.0	48.0	48.0	35.0	61.0	61.0	22.0	49.0		18.0	45.0	
Total Split (%)	14.7%	32.0%	32.0%	23.3%	40.7%	40.7%	14.7%	32.7%		12.0%	30.0%	
Maximum Green (s)	16.5	41.6	41.6	29.5	54.6	54.6	16.5	42.8		12.5	38.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.76	0.70	0.85	0.52	0.86	0.05	0.70	0.37		0.45	0.52	
Control Delay	82.2	60.6	83.9	65.9	68.7	43.6	75.3	17.8		79.6	41.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	82.2	60.6	83.9	65.9	68.7	43.6	75.3	17.8		79.6	41.1	
90th %ile Green (s)	18.6	37.9	37.9	21.2	40.5	40.5	26.7	58.7		8.6	40.6	
90th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
70th %ile Green (s)	16.0	32.4	32.4	19.7	36.1	36.1	25.3	67.0		7.3	49.0	
70th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
50th %ile Green (s)	14.2	28.5	28.5	18.8	33.1	33.1	25.0	72.8		6.3	54.1	
50th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
30th %ile Green (s)	12.4	23.6	23.6	18.8	30.0	30.0	25.4	78.6		5.4	58.6	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
10th %ile Green (s)	9.8	18.6	18.6	16.8	25.6	25.6	27.7	96.5		0.0	63.3	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	115	220	224	103	318	12	177	121		31	249	
Queue Length 95th (ft)	159	247	304	145	369	32	239	141		57	339	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	363	1370	409	637	1217	543	568	2391		270	1697	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.64	0.48	0.57	0.34	0.52	0.03	0.70	0.37		0.23	0.52	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street



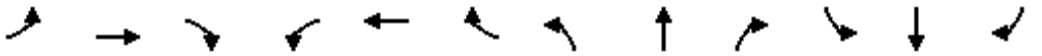
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	620	360	205	605	25	375	585	260	60	630	215
Future Volume (veh/h)	220	620	360	205	605	25	375	585	260	60	630	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	232	653	235	216	637	16	395	616	274	63	663	226
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	277	786	243	432	708	315	389	1908	830	109	1750	586
Arrive On Green	0.08	0.15	0.15	0.12	0.20	0.20	0.04	0.18	0.18	0.03	0.46	0.46
Sat Flow, veh/h	3474	5133	1585	3492	3591	1598	3538	3567	1552	3510	3838	1286
Grp Volume(v), veh/h	232	653	235	216	637	16	395	601	289	63	596	293
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1796	1598	1769	1742	1635	1755	1729	1668
Q Serve(g_s), s	9.9	18.5	19.2	8.7	26.0	0.9	16.5	22.6	23.1	2.7	17.0	17.4
Cycle Q Clear(g_c), s	9.9	18.5	19.2	8.7	26.0	0.9	16.5	22.6	23.1	2.7	17.0	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.77
Lane Grp Cap(c), veh/h	277	786	243	432	708	315	389	1864	875	109	1576	760
V/C Ratio(X)	0.84	0.83	0.97	0.50	0.90	0.05	1.02	0.32	0.33	0.58	0.38	0.39
Avail Cap(c_a), veh/h	382	1424	440	687	1307	582	389	1864	875	292	1576	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.1	61.6	47.8	61.4	58.8	28.5	72.3	38.0	38.3	71.7	26.8	26.9
Incr Delay (d2), s/veh	8.4	0.9	15.5	0.3	1.8	0.0	49.5	0.5	1.0	1.8	0.7	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	12.8	13.5	7.0	17.6	0.9	16.0	16.1	15.7	2.2	11.5	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.4	62.5	63.3	61.7	60.5	28.5	121.8	38.5	39.3	73.5	27.5	28.4
LnGrp LOS	E	E	E	E	E	C	F	D	D	E	C	C
Approach Vol, veh/h		1120			869			1285			952	
Approach Delay, s/veh		65.6			60.2			64.3			30.8	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	74.6	24.0	29.4	10.1	86.4	17.5	36.0
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	16.5	* 39	* 30	41.6	12.5	* 43	* 17	54.6
Max Q Clear Time (g_c+I1), s	18.5	19.4	10.7	21.2	4.7	25.1	11.9	28.0
Green Ext Time (p_c), s	0.0	2.0	0.1	1.7	0.0	2.0	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	56.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



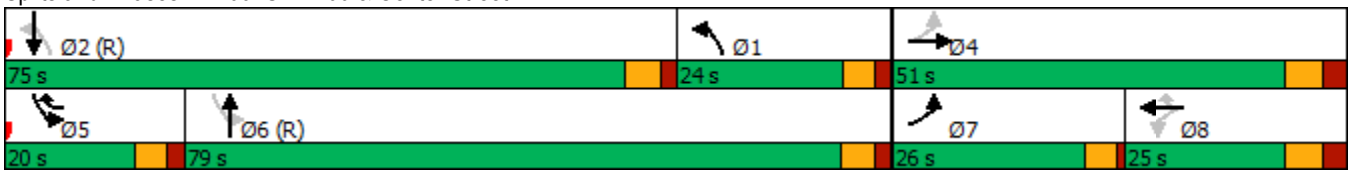
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	200	170	905	10	335	840	75
Future Volume (vph)	135	75	165	30	60	200	170	905	10	335	840	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	245	0	31	61	127	173	933	0	342	934	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	79.0		20.0	75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	52.7%		13.3%	50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	73.3		14.5	69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.49	0.78		0.40	0.47	0.41	0.34	0.30		0.71	0.32	
Control Delay	56.1	74.2		81.2	78.8	53.9	12.9	17.2		19.4	13.7	

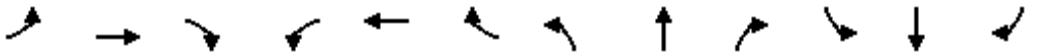
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	74.2		81.2	78.8	53.9	12.9	17.2		19.4	13.7	
90th %ile Green (s)	19.2	36.6		12.9	12.9	21.7	18.5	73.3		21.7	76.5	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
70th %ile Green (s)	16.2	31.3		10.6	10.6	17.8	18.5	82.5		17.8	81.8	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	14.2	28.7		10.0	10.0	14.9	18.5	88.0		14.9	84.4	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	12.0	26.5		10.0	10.0	12.9	18.5	92.2		12.9	86.6	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	9.5	18.5	105.0		9.5	96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	117	230		30	59	108	47	161		178	186	
Queue Length 95th (ft)	173	311		66	109	159	88	239		258	266	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	312	492		131	216	322	505	3061		498	2922	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.44	0.50		0.24	0.28	0.39	0.34	0.30		0.69	0.32	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 200: STH 100 & Center Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	75	165	30	60	200	170	905	10	335	840	75
Future Volume (veh/h)	135	75	165	30	60	200	170	905	10	335	840	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1841	1841	1841	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	138	77	168	31	61	127	173	923	10	342	857	77
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	4	4	4	1	1	1	1	1	1
Cap, veh/h	263	105	230	118	162	265	625	3176	34	512	2257	202
Arrive On Green	0.08	0.20	0.20	0.09	0.09	0.09	0.21	0.60	0.60	0.03	0.15	0.15
Sat Flow, veh/h	1795	527	1151	1117	1841	1560	1824	5332	58	1824	4884	437
Grp Volume(v), veh/h	138	0	245	31	61	127	173	603	330	342	611	323
Grp Sat Flow(s),veh/h/ln	1795	0	1678	1117	1841	1560	1824	1743	1905	1824	1743	1836
Q Serve(g_s), s	10.2	0.0	20.5	4.0	4.7	11.0	0.0	12.7	12.7	10.2	23.6	23.8
Cycle Q Clear(g_c), s	10.2	0.0	20.5	7.8	4.7	11.0	0.0	12.7	12.7	10.2	23.6	23.8
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.03	1.00		0.24
Lane Grp Cap(c), veh/h	263	0	335	118	162	265	625	2076	1134	512	1610	848
V/C Ratio(X)	0.53	0.00	0.73	0.26	0.38	0.48	0.28	0.29	0.29	0.67	0.38	0.38
Avail Cap(c_a), veh/h	374	0	490	152	218	313	625	2076	1134	538	1610	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	0.0	56.3	67.8	64.5	56.2	24.3	14.8	14.8	11.4	44.2	44.3
Incr Delay (d2), s/veh	0.6	0.0	1.2	0.4	0.5	0.5	0.1	0.4	0.6	2.3	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	13.8	2.1	4.1	7.9	7.3	8.7	9.5	8.5	16.7	17.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	0.0	57.4	68.2	65.1	56.7	24.4	15.2	15.5	13.7	44.9	45.6
LnGrp LOS	E	A	E	E	E	E	C	B	B	B	D	D
Approach Vol, veh/h		383			219			1106			1276	
Approach Delay, s/veh		56.6			60.7			16.7			36.7	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.9	75.0		37.1	17.8	95.0	16.7	20.4				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 19	* 69		43.8	14.5	* 73	21.5	17.8				
Max Q Clear Time (g_c+I1), s	2.0	25.8		22.5	12.2	14.7	12.2	13.0				
Green Ext Time (p_c), s	0.1	13.9		0.8	0.1	14.8	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		33.6	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	0	0	0	1210	0	1190	0
Future Volume (vph)	0	0	0	1210	0	1190	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%			0%		0%	
Storage Length (ft)	0	0	210		275		0
Storage Lanes	1	0	1		1		0
Taper Length (ft)	75		75		75		
Link Speed (mph)	30			40		40	
Link Distance (ft)	339			902		1744	
Travel Time (s)	7.7			15.4		29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	1235	0	1214	0
Sign Control	Stop			Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	0	0	1210	0	1190	0
Future Vol, veh/h	0	0	0	1210	0	1190	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	1235	0	1214	0

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1708	607	1214	0	901	-	0
Stage 1	1214	-	-	-	-	-	-
Stage 2	494	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*367	*638	*803	-	*1081	-	-
Stage 1	*656	-	-	-	-	-	-
Stage 2	*656	-	-	-	-	-	-
Platoon blocked, %	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*367	*638	*803	-	*1081	-	-
Mov Cap-2 Maneuver	*531	-	-	-	-	-	-
Stage 1	*656	-	-	-	-	-	-
Stage 2	*656	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

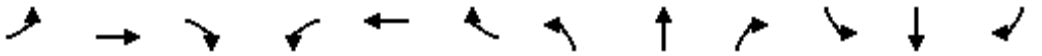
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 803	-	-	* 1081	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX C

Year 2023 Build Traffic Operational Analysis

Existing Transportation System



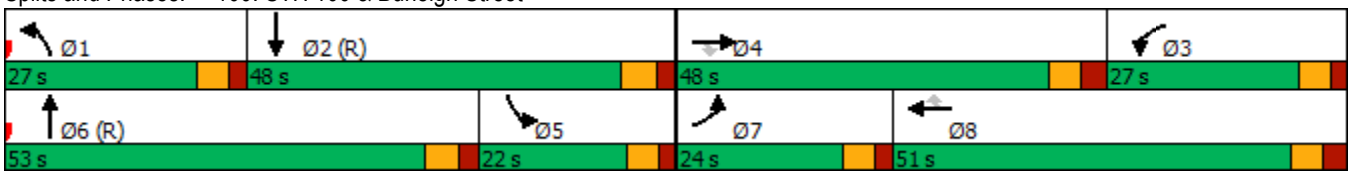
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	580	300	750	35	605	995	360	45	960	300
Future Volume (vph)	325	755	580	300	750	35	605	995	360	45	960	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	375	313	781	23	630	1411	0	47	1313	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	24.0	48.0	48.0	27.0	51.0	51.0	27.0	53.0		22.0	48.0	
Total Split (%)	16.0%	32.0%	32.0%	18.0%	34.0%	34.0%	18.0%	35.3%		14.7%	32.0%	
Maximum Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.90	0.60	0.95	0.82	0.88	0.06	1.04	0.76		0.15	0.97	
Control Delay	91.2	50.1	88.8	82.4	64.9	39.5	91.9	32.0		61.8	71.8	

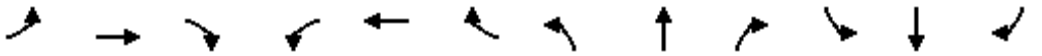
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	91.2	50.1	88.8	82.4	64.9	39.5	91.9	32.0		61.8	71.8	
90th %ile Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Hold	Coord	
70th %ile Green (s)	18.5	41.6	41.6	20.0	43.1	43.1	23.0	48.3		16.5	41.8	
70th %ile Term Code	Max	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
50th %ile Green (s)	18.5	41.6	41.6	17.9	41.0	41.0	25.1	50.4		16.5	41.8	
50th %ile Term Code	Max	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
30th %ile Green (s)	17.5	40.1	40.1	15.8	38.4	38.4	28.7	54.0		16.5	41.8	
30th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Max	Coord		Hold	Coord	
10th %ile Green (s)	14.3	33.1	33.1	12.8	31.6	31.6	38.7	86.0		0.0	41.8	
10th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Max	Coord		Skip	Coord	
Queue Length 50th (ft)	170	242	356	156	383	17	~371	487		21	468	
Queue Length 95th (ft)	#248	290	#550	205	450	40	#525	#584		43	#571	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	401	1384	413	464	994	443	604	1857		360	1351	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.85	0.57	0.91	0.67	0.79	0.05	1.04	0.76		0.13	0.97	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





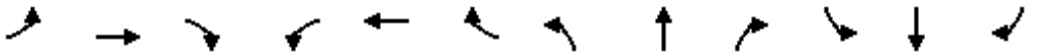
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	580	300	750	35	605	995	360	45	960	300
Future Volume (veh/h)	325	755	580	300	750	35	605	995	360	45	960	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	375	312	781	23	630	1036	375	47	1000	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	383	1304	403	357	901	401	511	1190	431	586	1338	417
Arrive On Green	0.11	0.25	0.25	0.10	0.25	0.25	0.05	0.10	0.10	0.17	0.34	0.34
Sat Flow, veh/h	3501	5174	1598	3492	3591	1598	3566	3813	1380	3538	3948	1230
Grp Volume(v), veh/h	339	786	375	312	781	23	630	954	457	47	883	429
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1796	1598	1783	1756	1681	1769	1742	1693
Q Serve(g_s), s	14.3	20.1	34.4	13.2	31.2	1.6	21.5	40.2	40.2	1.7	33.6	33.7
Cycle Q Clear(g_c), s	14.3	20.1	34.4	13.2	31.2	1.6	21.5	40.2	40.2	1.7	33.6	33.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.82	1.00		0.73
Lane Grp Cap(c), veh/h	383	1304	403	357	901	401	511	1096	525	586	1181	574
V/C Ratio(X)	0.89	0.60	0.93	0.87	0.87	0.06	1.23	0.87	0.87	0.08	0.75	0.75
Avail Cap(c_a), veh/h	432	1435	443	501	1068	475	511	1096	525	586	1181	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	49.5	54.8	66.4	53.8	42.7	71.5	64.3	64.3	52.9	43.9	43.9
Incr Delay (d2), s/veh	16.6	0.4	24.4	9.2	6.0	0.0	120.9	9.5	17.7	0.0	4.3	8.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	13.6	23.1	10.5	21.1	1.2	28.6	27.9	28.3	1.4	21.4	21.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	49.8	79.2	75.5	59.7	42.7	192.3	73.8	82.0	52.9	48.2	52.5
LnGrp LOS	F	D	E	E	E	D	F	E	F	D	D	D
Approach Vol, veh/h		1500			1116			2041			1359	
Approach Delay, s/veh		64.6			63.8			112.2			49.7	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	57.1	21.8	44.2	31.1	53.0	21.9	44.0
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	21.5	* 42	* 22	* 42	* 17	* 47	18.5	* 45
Max Q Clear Time (g_c+I1), s	23.5	35.7	15.2	36.4	3.7	42.2	16.3	33.2
Green Ext Time (p_c), s	0.0	2.1	0.1	1.4	0.0	1.9	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	77.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

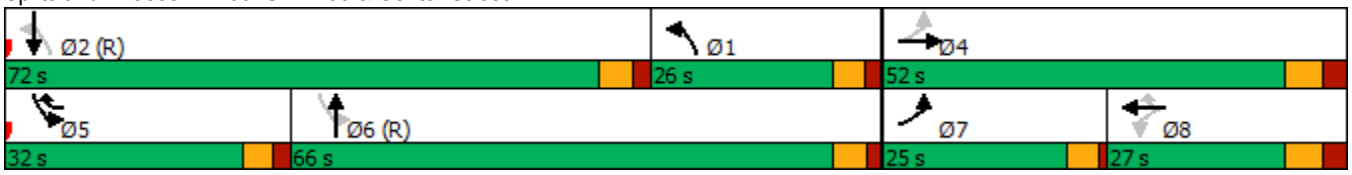


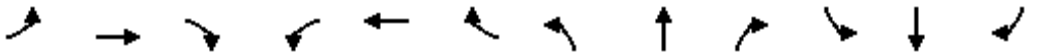
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Future Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	186	0	53	53	139	160	1692	0	261	1750	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	66.0		32.0	72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	44.0%		21.3%	48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	60.3		26.5	66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.64	0.51		0.56	0.36	0.35	0.50	0.62		0.79	0.65	
Control Delay	57.9	55.4		87.6	71.4	46.2	44.6	29.1		63.5	20.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.9	55.4		87.6	71.4	46.2	44.6	29.1		63.5	20.7	
90th %ile Green (s)	20.5	41.2		16.2	16.2	29.2	20.5	61.2		29.2	69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	24.6	20.5	69.1		24.6	73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	21.3	20.5	74.8		21.3	75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	17.8	32.3		10.0	10.0	17.8	20.5	81.5		17.8	78.8	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	13.0	20.5	105.8		13.0	98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	172	157		51	51	111	74	441		193	272	
Queue Length 95th (ft)	242	225		98	95	154	159	589		m194	m317	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	338	511		158	248	455	317	2726		401	2711	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.61	0.36		0.34	0.21	0.31	0.50	0.62		0.65	0.65	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	70	105	50	50	210	150	1580	10	245	1480	165
Future Volume (veh/h)	195	70	105	50	50	210	150	1580	10	245	1480	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	207	74	112	53	53	139	160	1681	11	261	1574	176
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	335	161	244	161	176	278	497	2991	20	301	2109	235
Arrive On Green	0.12	0.24	0.24	0.09	0.09	0.09	0.20	0.56	0.56	0.16	0.88	0.88
Sat Flow, veh/h	1795	677	1024	1207	1885	1598	1824	5359	35	1824	4772	533
Grp Volume(v), veh/h	207	0	186	53	53	139	160	1093	599	261	1149	601
Grp Sat Flow(s),veh/h/ln	1795	0	1701	1207	1885	1598	1824	1743	1909	1824	1743	1819
Q Serve(g_s), s	15.2	0.0	14.0	6.2	3.9	11.8	0.0	30.3	30.3	9.9	16.8	16.9
Cycle Q Clear(g_c), s	15.2	0.0	14.0	6.2	3.9	11.8	0.0	30.3	30.3	9.9	16.8	16.9
Prop In Lane	1.00		0.60	1.00		1.00	1.00		0.02	1.00		0.29
Lane Grp Cap(c), veh/h	335	0	406	161	176	278	497	1945	1065	301	1540	804
V/C Ratio(X)	0.62	0.00	0.46	0.33	0.30	0.50	0.32	0.56	0.56	0.87	0.75	0.75
Avail Cap(c_a), veh/h	374	0	508	207	249	340	497	1945	1065	476	1540	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	48.8	64.5	63.4	56.0	34.3	21.3	21.3	21.0	5.8	5.8
Incr Delay (d2), s/veh	1.5	0.0	0.3	0.4	0.4	0.5	0.1	1.2	2.1	6.0	3.3	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	0.0	10.2	3.5	3.5	8.5	8.5	18.1	19.9	9.0	5.9	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	49.1	64.9	63.8	56.6	34.4	22.5	23.5	27.0	9.2	12.1
LnGrp LOS	D	A	D	E	E	E	C	C	C	C	A	B
Approach Vol, veh/h		393			245			1852			2011	
Approach Delay, s/veh		51.2			59.9			23.9			12.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.0	72.0		43.0	17.6	89.4	21.8	21.2				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 21	* 66		44.8	26.5	* 60	20.5	19.8				
Max Q Clear Time (g_c+I1), s	2.0	18.9		16.0	11.9	32.3	17.2	13.8				
Green Ext Time (p_c), s	0.1	32.8		0.6	0.2	21.4	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.1	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	0	0	0	1985	0	1855	0
Future Volume (vph)	0	0	0	1985	0	1855	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%			0%		0%	
Storage Length (ft)	0	0	210		275		0
Storage Lanes	1	0	1		1		0
Taper Length (ft)	75		75		75		
Link Speed (mph)	30			40		40	
Link Distance (ft)	339			902		1744	
Travel Time (s)	7.7			15.4		29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	2112	0	1973	0
Sign Control	Stop			Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

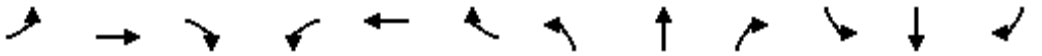
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	0	0	1985	0	1855	0
Future Vol, veh/h	0	0	0	1985	0	1855	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	2112	0	1973	0

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2818	987	1973	0	1542	-	0
Stage 1	1973	-	-	-	-	-	-
Stage 2	845	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*215	*482	*607	-	*759	-	-
Stage 1	*496	-	-	-	-	-	-
Stage 2	*460	-	-	-	-	-	-
Platoon blocked, %	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*215	*482	*607	-	*759	-	-
Mov Cap-2 Maneuver	*369	-	-	-	-	-	-
Stage 1	*496	-	-	-	-	-	-
Stage 2	*460	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 607	-	-	* 759	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



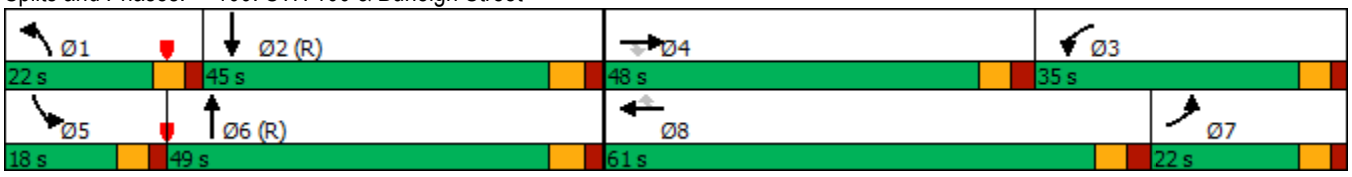
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	540	210	735	25	550	590	265	60	635	315
Future Volume (vph)	330	755	540	210	735	25	550	590	265	60	635	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	352	221	774	16	579	900	0	63	1000	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	22.0	48.0	48.0	35.0	61.0	61.0	22.0	49.0		18.0	45.0	
Total Split (%)	14.7%	32.0%	32.0%	23.3%	40.7%	40.7%	14.7%	32.7%		12.0%	30.0%	
Maximum Green (s)	16.5	41.6	41.6	29.5	54.6	54.6	16.5	42.8		12.5	38.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.76	0.63	0.94	0.45	0.88	0.04	0.99	0.46		0.45	0.82	
Control Delay	72.9	51.7	87.1	60.3	64.4	38.3	94.7	24.2		79.6	58.7	

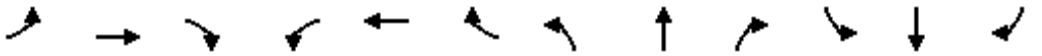
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	72.9	51.7	87.1	60.3	64.4	38.3	94.7	24.2		79.6	58.7	
90th %ile Green (s)	23.4	41.6	41.6	29.5	47.7	47.7	16.5	46.7		8.6	38.8	
90th %ile Term Code	Max	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
70th %ile Green (s)	22.9	41.6	41.6	24.6	43.3	43.3	21.4	52.9		7.3	38.8	
70th %ile Term Code	Gap	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
50th %ile Green (s)	21.8	41.5	41.5	19.8	39.5	39.5	26.3	58.8		6.3	38.8	
50th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Gap	Coord	
30th %ile Green (s)	20.6	37.0	37.0	19.7	36.1	36.1	30.9	64.3		5.4	38.8	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Gap	Coord	
10th %ile Green (s)	18.2	29.3	29.3	20.2	31.3	31.3	38.1	82.4		0.0	38.8	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Skip	Coord	
Queue Length 50th (ft)	170	246	329	105	384	12	~219	162		31	339	
Queue Length 95th (ft)	224	294	#503	139	432	30	#526	333		57	397	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	459	1370	409	637	1217	543	582	1951		270	1224	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.76	0.58	0.86	0.35	0.64	0.03	0.99	0.46		0.23	0.82	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





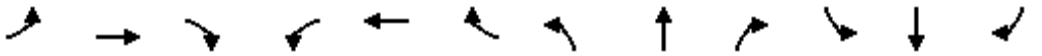
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	540	210	735	25	550	590	265	60	635	315
Future Volume (veh/h)	330	755	540	210	735	25	550	590	265	60	635	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	352	221	774	16	579	621	279	63	668	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	382	1020	315	515	848	377	389	1655	728	109	1336	622
Arrive On Green	0.11	0.20	0.20	0.15	0.24	0.24	0.04	0.15	0.15	0.03	0.39	0.39
Sat Flow, veh/h	3474	5133	1585	3492	3591	1598	3538	3555	1563	3510	3457	1610
Grp Volume(v), veh/h	347	795	352	221	774	16	579	609	291	63	668	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1796	1598	1769	1742	1633	1755	1729	1610
Q Serve(g_s), s	14.8	22.0	25.7	8.6	31.5	0.9	16.5	23.5	24.1	2.7	22.0	23.9
Cycle Q Clear(g_c), s	14.8	22.0	25.7	8.6	31.5	0.9	16.5	23.5	24.1	2.7	22.0	23.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	382	1020	315	515	848	377	389	1622	760	109	1336	622
V/C Ratio(X)	0.91	0.78	1.12	0.43	0.91	0.04	1.49	0.38	0.38	0.58	0.50	0.53
Avail Cap(c_a), veh/h	382	1424	440	687	1307	582	389	1622	760	292	1336	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	57.0	44.7	58.2	55.8	25.0	72.3	43.9	44.1	71.7	35.0	35.6
Incr Delay (d2), s/veh	24.3	1.2	76.7	0.2	4.9	0.0	232.9	0.7	1.5	1.8	1.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	14.7	24.9	6.9	21.0	0.8	32.0	16.7	16.3	2.2	14.5	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.3	58.1	121.4	58.4	60.7	25.0	305.1	44.6	45.6	73.5	36.3	38.8
LnGrp LOS	F	E	F	E	E	C	F	D	D	E	D	D
Approach Vol, veh/h		1494			1011			1479			1063	
Approach Delay, s/veh		80.5			59.6			146.8			39.3	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	64.2	27.6	36.2	10.1	76.0	22.0	41.8
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	16.5	* 39	* 30	41.6	12.5	* 43	* 17	54.6
Max Q Clear Time (g_c+I1), s	18.5	25.9	10.6	27.7	4.7	26.1	16.8	33.5
Green Ext Time (p_c), s	0.0	2.1	0.1	2.1	0.0	2.0	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	87.1
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

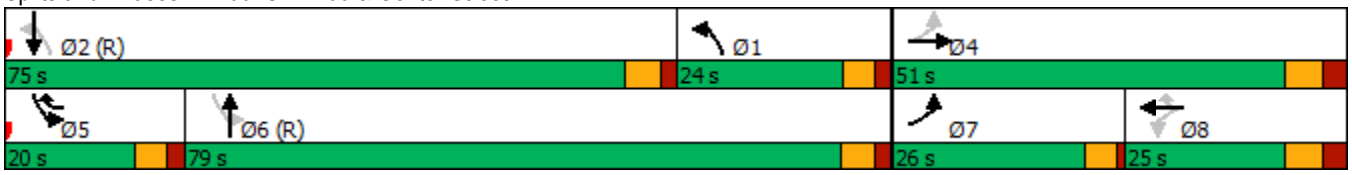


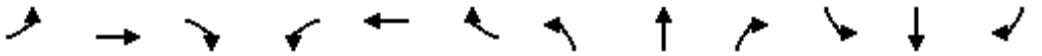
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Future Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	245	0	31	61	133	173	1117	0	357	1113	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	79.0		20.0	75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	52.7%		13.3%	50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	73.3		14.5	69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.49	0.78		0.40	0.47	0.35	0.39	0.40		0.75	0.38	
Control Delay	56.1	74.2		81.2	78.8	47.6	16.6	21.6		16.5	11.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	74.2		81.2	78.8	47.6	16.6	21.6		16.5	11.8	
90th %ile Green (s)	19.2	36.6		12.9	12.9	21.7	18.5	73.3		21.7	76.5	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
70th %ile Green (s)	16.2	31.3		10.6	10.6	24.4	18.5	75.9		24.4	81.8	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	14.2	28.7		10.0	10.0	23.2	18.5	79.7		23.2	84.4	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	12.0	26.5		10.0	10.0	22.2	18.5	82.9		22.2	86.6	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	22.4	18.5	92.1		22.4	96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	117	230		30	59	105	47	232		92	209	
Queue Length 95th (ft)	173	311		66	109	166	88	294		m235	310	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	312	492		131	216	385	445	2806		478	2928	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.44	0.50		0.24	0.28	0.35	0.39	0.40		0.75	0.38	

Intersection Summary
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: STH 100 & Center Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	75	165	30	60	210	170	1085	10	350	1015	75
Future Volume (veh/h)	135	75	165	30	60	210	170	1085	10	350	1015	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1841	1841	1841	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	138	77	168	31	61	133	173	1107	10	357	1036	77
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	4	4	4	1	1	1	1	1	1
Cap, veh/h	266	107	233	121	167	281	587	3131	28	457	2294	170
Arrive On Green	0.08	0.20	0.20	0.09	0.09	0.09	0.21	0.59	0.59	0.06	0.31	0.31
Sat Flow, veh/h	1795	527	1151	1117	1841	1560	1824	5343	48	1824	4965	369
Grp Volume(v), veh/h	138	0	245	31	61	133	173	722	395	357	727	386
Grp Sat Flow(s),veh/h/ln	1795	0	1678	1117	1841	1560	1824	1743	1906	1824	1743	1849
Q Serve(g_s), s	10.2	0.0	20.5	4.0	4.7	11.5	0.0	16.2	16.2	11.3	25.1	25.2
Cycle Q Clear(g_c), s	10.2	0.0	20.5	7.8	4.7	11.5	0.0	16.2	16.2	11.3	25.1	25.2
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.03	1.00		0.20
Lane Grp Cap(c), veh/h	266	0	339	121	167	281	587	2042	1117	457	1610	854
V/C Ratio(X)	0.52	0.00	0.72	0.26	0.37	0.47	0.29	0.35	0.35	0.78	0.45	0.45
Avail Cap(c_a), veh/h	377	0	490	153	218	324	587	2042	1117	471	1610	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	55.9	67.3	64.1	55.1	27.5	16.2	16.2	13.2	36.5	36.5
Incr Delay (d2), s/veh	0.6	0.0	1.1	0.4	0.5	0.5	0.1	0.5	0.9	7.2	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	13.8	2.1	4.0	8.1	8.0	10.7	11.6	9.5	16.9	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	0.0	57.0	67.7	64.6	55.6	27.6	16.7	17.1	20.5	37.4	38.3
LnGrp LOS	D	A	E	E	E	E	C	B	B	C	D	D
Approach Vol, veh/h		383			225			1290			1470	
Approach Delay, s/veh		56.2			59.7			18.3			33.5	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.5	75.0		37.5	18.9	93.6	16.7	20.8				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 19	* 69		43.8	14.5	* 73	21.5	17.8				
Max Q Clear Time (g_c+I1), s	2.0	27.2		22.5	13.3	18.2	12.2	13.5				
Green Ext Time (p_c), s	0.1	17.3		0.8	0.1	19.0	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		32.0	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	0	0	0	1400	0	1380	0
Future Volume (vph)	0	0	0	1400	0	1380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%			0%		0%	
Storage Length (ft)	0	0	210		275		0
Storage Lanes	1	0	1		1		0
Taper Length (ft)	75		75		75		
Link Speed (mph)	30			40		40	
Link Distance (ft)	339			902		1744	
Travel Time (s)	7.7			15.4		29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	1429	0	1408	0
Sign Control	Stop			Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	0	0	1400	0	1380	0
Future Vol, veh/h	0	0	0	1400	0	1380	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	1429	0	1408	0

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1980	704	1408	0	1043	-	0
Stage 1	1408	-	-	-	-	-	-
Stage 2	572	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-
Platoon blocked, %	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*296	*604	*759	-	*1023	-	-
Mov Cap-2 Maneuver	*486	-	-	-	-	-	-
Stage 1	*620	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 759	-	-	* 1023	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX D

Year 2023 Total Traffic Operational Analysis

Existing Transportation System

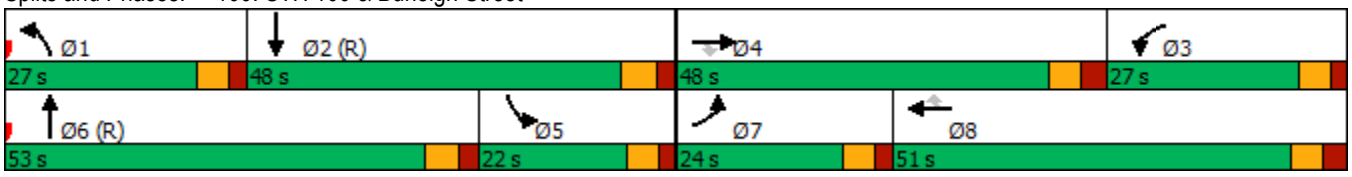
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	781	23	641	1438	0	47	1323	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	24.0	48.0	48.0	27.0	51.0	51.0	27.0	53.0		22.0	48.0	
Total Split (%)	16.0%	32.0%	32.0%	18.0%	34.0%	34.0%	18.0%	35.3%		14.7%	32.0%	
Maximum Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.90	0.59	0.96	0.84	0.86	0.06	1.11	0.79		0.15	0.98	
Control Delay	91.2	49.5	89.5	83.3	61.8	39.1	113.7	34.0		61.8	73.0	

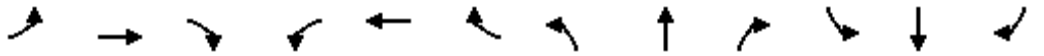
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	91.2	49.5	89.5	83.3	61.8	39.1	113.7	34.0		61.8	73.0	
90th %ile Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Hold	Coord	
70th %ile Green (s)	18.5	41.6	41.6	20.7	43.8	43.8	22.3	47.6		16.5	41.8	
70th %ile Term Code	Max	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
50th %ile Green (s)	18.5	41.6	41.6	18.6	41.7	41.7	24.4	49.7		16.5	41.8	
50th %ile Term Code	Max	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
30th %ile Green (s)	17.5	41.6	41.6	16.4	40.5	40.5	26.6	51.9		16.5	41.8	
30th %ile Term Code	Gap	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
10th %ile Green (s)	14.3	35.0	35.0	13.3	34.0	34.0	36.3	83.6		0.0	41.8	
10th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Max	Coord		Skip	Coord	
Queue Length 50th (ft)	170	242	368	163	381	17	~391	502		21	472	
Queue Length 95th (ft)	#248	290	#570	215	450	40	#540	#605		43	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	401	1384	413	464	994	443	578	1816		360	1353	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.85	0.57	0.93	0.71	0.79	0.05	1.11	0.79		0.13	0.98	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	23	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	383	1328	410	373	935	416	511	1179	440	553	1305	403
Arrive On Green	0.11	0.26	0.26	0.11	0.26	0.26	0.05	0.10	0.10	0.16	0.33	0.33
Sat Flow, veh/h	3501	5174	1598	3492	3591	1598	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	781	23	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1796	1598	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	20.0	35.3	13.9	30.8	1.6	21.5	41.0	41.0	1.7	34.4	34.5
Cycle Q Clear(g_c), s	14.3	20.0	35.3	13.9	30.8	1.6	21.5	41.0	41.0	1.7	34.4	34.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	383	1328	410	373	935	416	511	1096	523	553	1149	559
V/C Ratio(X)	0.89	0.59	0.94	0.88	0.84	0.06	1.25	0.89	0.89	0.08	0.77	0.77
Avail Cap(c_a), veh/h	432	1435	443	501	1068	475	511	1096	523	553	1149	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	48.9	54.5	66.0	52.4	41.6	71.5	64.7	64.7	54.1	45.2	45.3
Incr Delay (d2), s/veh	16.6	0.3	25.6	10.7	4.7	0.0	129.7	10.8	19.7	0.0	5.1	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	13.5	23.8	11.0	20.7	1.2	29.6	28.6	29.0	1.4	21.9	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	49.2	80.2	76.7	57.1	41.7	201.2	75.5	84.4	54.1	50.3	55.3
LnGrp LOS	F	D	F	E	E	D	F	E	F	D	D	E
Approach Vol, veh/h		1509			1132			2079			1369	
Approach Delay, s/veh		64.6			62.5			116.2			52.0	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	55.7	22.4	44.9	29.7	53.0	21.9	45.4
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	21.5	* 42	* 22	* 42	* 17	* 47	18.5	* 45
Max Q Clear Time (g_c+I1), s	23.5	36.5	15.9	37.3	3.7	43.0	16.3	32.8
Green Ext Time (p_c), s	0.0	1.9	0.1	1.2	0.0	1.6	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	79.0
HCM 6th LOS	E

Notes

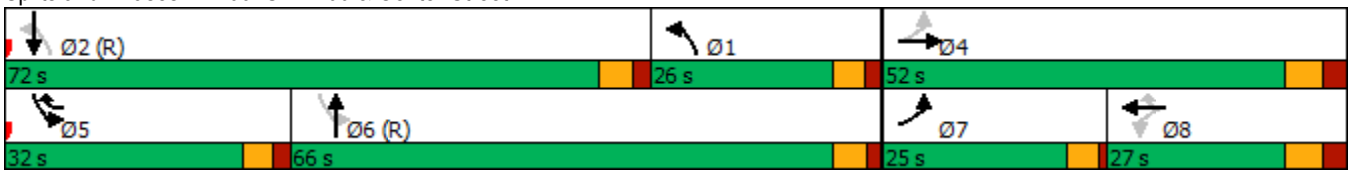
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

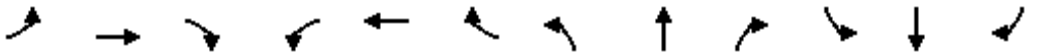
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			792	
Travel Time (s)		34.1			16.0			28.1			13.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	266	1798	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	66.0		32.0	72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	44.0%		21.3%	48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	60.3		26.5	66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.36	0.51	0.64		0.80	0.66	
Control Delay	58.7	55.3		87.6	71.4	46.0	46.6	30.0		66.1	21.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	46.0	46.6	30.0		66.1	21.6	
90th %ile Green (s)	20.5	41.2		16.2	16.2	29.7	20.5	60.7		29.7	69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	25.0	20.5	68.7		25.0	73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	21.7	20.5	74.4		21.7	75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	18.3	20.5	80.6		18.3	78.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	13.3	20.5	105.5		13.3	98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	178	157		51	51	113	81	460		202	291	
Queue Length 95th (ft)	249	225		98	95	156	166	614		m203	m377	
Internal Link Dist (ft)		1169			507			1571			712	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	456	311	2709		396	2708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.31	0.51	0.64		0.67	0.66	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street





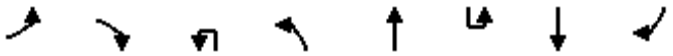
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (veh/h)	200	70	105	50	50	215	150	1620	10	250	1520	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	213	74	112	53	53	142	160	1723	11	266	1617	181
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	342	164	249	163	179	284	483	2956	19	296	2109	236
Arrive On Green	0.12	0.24	0.24	0.09	0.09	0.09	0.19	0.55	0.55	0.17	0.88	0.88
Sat Flow, veh/h	1795	677	1024	1207	1885	1598	1824	5360	34	1824	4771	533
Grp Volume(v), veh/h	213	0	186	53	53	142	160	1120	614	266	1180	618
Grp Sat Flow(s),veh/h/ln	1795	0	1701	1207	1885	1598	1824	1743	1909	1824	1743	1819
Q Serve(g_s), s	15.6	0.0	13.9	6.2	3.9	12.0	0.0	31.9	31.9	10.3	18.3	18.4
Cycle Q Clear(g_c), s	15.6	0.0	13.9	6.2	3.9	12.0	0.0	31.9	31.9	10.3	18.3	18.4
Prop In Lane	1.00		0.60	1.00		1.00	1.00		0.02	1.00		0.29
Lane Grp Cap(c), veh/h	342	0	413	163	179	284	483	1922	1053	296	1540	804
V/C Ratio(X)	0.62	0.00	0.45	0.33	0.30	0.50	0.33	0.58	0.58	0.90	0.77	0.77
Avail Cap(c_a), veh/h	376	0	508	207	249	343	483	1922	1053	467	1540	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	0.0	48.3	64.3	63.2	55.6	36.2	22.2	22.2	22.3	5.9	5.9
Incr Delay (d2), s/veh	1.8	0.0	0.3	0.4	0.3	0.5	0.1	1.3	2.4	9.2	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	0.0	10.1	3.5	3.5	8.6	8.5	18.9	20.8	9.4	6.1	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.9	0.0	48.6	64.7	63.6	56.1	36.4	23.5	24.6	31.5	9.6	12.9
LnGrp LOS	D	A	D	E	E	E	D	C	C	C	A	B
Approach Vol, veh/h		399			248			1894			2064	
Approach Delay, s/veh		50.9			59.6			25.0			13.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.4	72.0		43.6	17.9	88.4	22.2	21.4				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 21	* 66		44.8	26.5	* 60	20.5	19.8				
Max Q Clear Time (g_c+I1), s	2.0	20.4		15.9	12.3	33.9	17.6	14.0				
Green Ext Time (p_c), s	0.1	33.0		0.6	0.2	20.8	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.9	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	60	20	5	75	1960	30	1835	60
Future Volume (vph)	60	20	5	75	1960	30	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				110		1744	
Travel Time (s)	7.7				1.9		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	64	21	0	85	2085	32	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

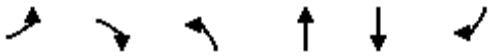
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	60	20	5	75	1960	30	1835	60
Future Vol, veh/h	60	20	5	75	1960	30	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	64	21	5	80	2085	32	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	3052	1008	1472	2016	0	1522	-	0
Stage 1	2048	-	-	-	-	-	-	-
Stage 2	1004	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*220	*482	*817	*607	-	*788	-	-
Stage 1	*496	-	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*182	*482	*616	*616	-	*788	-	-
Mov Cap-2 Maneuver	*327	-	-	-	-	-	-	-
Stage 1	*427	-	-	-	-	-	-	-
Stage 2	*458	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0.5	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 616	-	327	482	* 788	-	-
HCM Lane V/C Ratio	0.138	-	0.195	0.044	0.041	-	-
HCM Control Delay (s)	11.8	-	18.7	12.8	9.8	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.7	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	50	0	2040	1860	0
Future Volume (vph)	0	50	0	2040	1860	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			792	110	
Travel Time (s)	7.7			13.5	1.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	53	0	2170	1979	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

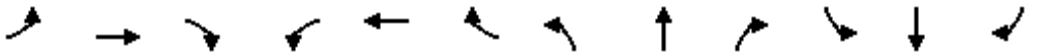
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	50	0	2040	1860	0
Future Vol, veh/h	0	50	0	2040	1860	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	53	0	2170	1979	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	990	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*482	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %		1		-	-	
Mov Cap-1 Maneuver	-	*482	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	482	-
HCM Lane V/C Ratio	-	0.11	-
HCM Control Delay (s)	-	13.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



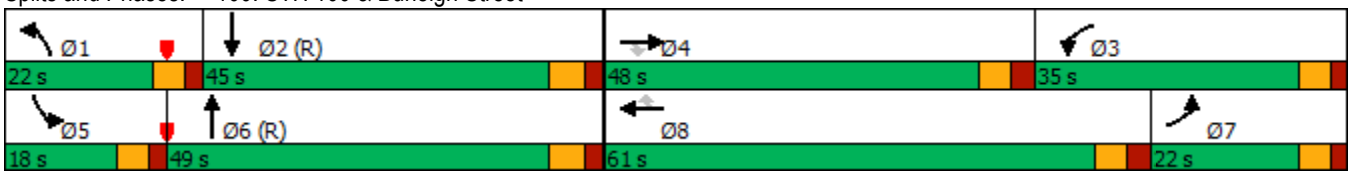
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	774	16	600	948	0	63	1016	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	22.0	48.0	48.0	35.0	61.0	61.0	22.0	49.0		18.0	45.0	
Total Split (%)	14.7%	32.0%	32.0%	23.3%	40.7%	40.7%	14.7%	32.7%		12.0%	30.0%	
Maximum Green (s)	16.5	41.6	41.6	29.5	54.6	54.6	16.5	42.8		12.5	38.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.76	0.61	0.95	0.54	0.88	0.04	1.03	0.49		0.45	0.83	
Control Delay	72.9	50.5	88.6	63.4	64.4	38.3	115.5	24.4		79.6	59.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	72.9	50.5	88.6	63.4	64.4	38.3	115.5	24.4		79.6	59.4	
90th %ile Green (s)	23.4	41.6	41.6	29.5	47.7	47.7	16.5	46.7		8.6	38.8	
90th %ile Term Code	Max	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
70th %ile Green (s)	22.9	41.6	41.6	24.6	43.3	43.3	21.4	52.9		7.3	38.8	
70th %ile Term Code	Gap	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
50th %ile Green (s)	21.8	41.6	41.6	19.7	39.5	39.5	26.3	58.8		6.3	38.8	
50th %ile Term Code	Gap	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
30th %ile Green (s)	20.5	39.7	39.7	16.9	36.1	36.1	31.0	64.4		5.4	38.8	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Gap	Coord	
10th %ile Green (s)	18.2	32.7	32.7	16.8	31.3	31.3	38.1	82.4		0.0	38.8	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Skip	Coord	
Queue Length 50th (ft)	170	246	350	122	384	12	~302	138		31	346	
Queue Length 95th (ft)	224	294	#542	157	432	30	#564	287		57	404	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	458	1370	409	637	1217	543	582	1947		270	1225	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.76	0.58	0.90	0.40	0.64	0.03	1.03	0.49		0.23	0.83	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	16	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	382	1022	316	514	848	377	389	1622	755	109	1336	622
Arrive On Green	0.11	0.20	0.20	0.15	0.24	0.24	0.04	0.15	0.15	0.03	0.39	0.39
Sat Flow, veh/h	3474	5133	1585	3492	3591	1598	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	774	16	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1796	1598	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.0	25.8	10.0	31.5	0.9	16.5	24.7	26.0	2.7	22.7	23.9
Cycle Q Clear(g_c), s	14.8	22.0	25.8	10.0	31.5	0.9	16.5	24.7	26.0	2.7	22.7	23.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	1022	316	514	848	377	389	1622	755	109	1336	622
V/C Ratio(X)	0.91	0.78	1.17	0.49	0.91	0.04	1.54	0.39	0.41	0.58	0.51	0.53
Avail Cap(c_a), veh/h	382	1424	440	687	1307	582	389	1622	755	292	1336	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	56.9	44.7	58.8	55.8	25.0	72.3	44.4	44.9	71.7	35.2	35.6
Incr Delay (d2), s/veh	24.3	1.1	97.6	0.3	4.9	0.0	256.4	0.7	1.7	1.8	1.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	14.7	27.9	7.9	21.0	0.8	34.1	17.4	17.3	2.2	14.8	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.3	58.1	142.2	59.1	60.7	25.0	328.6	45.1	46.6	73.5	36.6	38.8
LnGrp LOS	F	E	F	E	E	C	F	D	D	E	D	D
Approach Vol, veh/h		1511			1043			1548			1079	
Approach Delay, s/veh		86.0			59.7			155.3			39.4	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	64.2	27.6	36.3	10.1	76.0	22.0	41.8
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	16.5	* 39	* 30	41.6	12.5	* 43	* 17	54.6
Max Q Clear Time (g_c+I1), s	18.5	25.9	12.0	27.8	4.7	28.0	16.8	33.5
Green Ext Time (p_c), s	0.0	2.2	0.2	2.1	0.0	2.1	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	91.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

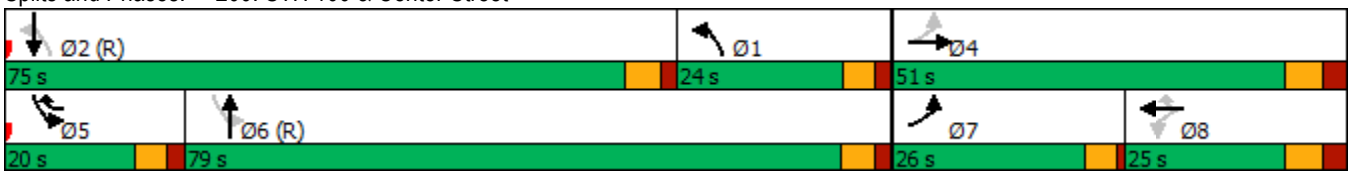
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			792	
Travel Time (s)		34.1			16.0			28.1			13.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	79.0		20.0	75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	52.7%		13.3%	50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	73.3		14.5	69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.32	0.41	0.45		0.74	0.41	
Control Delay	56.1	72.9		81.2	78.8	45.2	19.1	24.3		21.4	14.7	

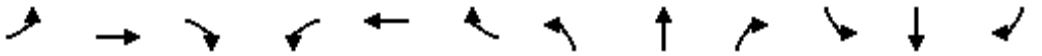
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	45.2	19.1	24.3		21.4	14.7	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	73.3		21.2	76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	26.5	18.5	73.3		26.5	81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	26.2	18.5	76.3		26.2	84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	26.9	18.5	77.8		26.9	86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	31.7	18.5	82.8		31.7	96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	121	229		30	59	104	48	265		114	243	
Queue Length 95th (ft)	177	309		66	109	170	89	318		m#312	332	
Internal Link Dist (ft)		1169			507			1571			712	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	424	423	2665		488	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.32	0.41	0.45		0.74	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: STH 100 & Center Street





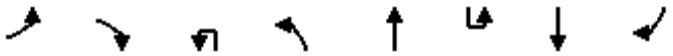
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (veh/h)	140	75	165	30	60	215	170	1155	10	355	1080	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1841	1841	1841	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	143	77	168	31	61	136	173	1179	10	362	1102	82
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	4	4	4	1	1	1	1	1	1
Cap, veh/h	271	109	237	126	169	291	577	3084	26	441	2294	171
Arrive On Green	0.08	0.21	0.21	0.09	0.09	0.09	0.21	0.58	0.58	0.09	0.46	0.46
Sat Flow, veh/h	1795	527	1151	1117	1841	1560	1824	5347	45	1824	4965	369
Grp Volume(v), veh/h	143	0	245	31	61	136	173	768	421	362	773	411
Grp Sat Flow(s),veh/h/ln	1795	0	1678	1117	1841	1560	1824	1743	1907	1824	1743	1849
Q Serve(g_s), s	10.5	0.0	20.4	4.0	4.7	11.7	0.0	18.0	18.0	12.2	23.0	23.0
Cycle Q Clear(g_c), s	10.5	0.0	20.4	7.3	4.7	11.7	0.0	18.0	18.0	12.2	23.0	23.0
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.02	1.00		0.20
Lane Grp Cap(c), veh/h	271	0	345	126	169	291	577	2010	1100	441	1610	854
V/C Ratio(X)	0.53	0.00	0.71	0.25	0.36	0.47	0.30	0.38	0.38	0.82	0.48	0.48
Avail Cap(c_a), veh/h	378	0	490	156	218	333	577	2010	1100	445	1610	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	55.4	66.7	64.0	54.3	27.3	17.2	17.2	14.4	27.9	27.9
Incr Delay (d2), s/veh	0.6	0.0	1.0	0.4	0.5	0.4	0.1	0.6	1.0	10.8	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	13.7	2.1	4.0	8.2	8.0	11.6	12.6	10.0	14.8	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.0	56.4	67.1	64.4	54.8	27.4	17.8	18.2	25.2	28.9	29.8
LnGrp LOS	D	A	E	E	E	D	C	B	B	C	C	C
Approach Vol, veh/h		388			228			1362			1546	
Approach Delay, s/veh		55.6			59.0			19.1			28.3	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.9	75.0		38.1	19.7	92.2	17.1	21.0				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 19	* 69		43.8	14.5	* 73	21.5	17.8				
Max Q Clear Time (g_c+I1), s	2.0	25.0		22.4	14.2	20.0	12.5	13.7				
Green Ext Time (p_c), s	0.1	19.2		0.8	0.0	20.6	0.1	0.1				

Intersection Summary			
HCM 6th Ctrl Delay		29.8	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	100	40	30	115	1365	30	1340	110
Future Volume (vph)	100	40	30	115	1365	30	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				110		1744	
Travel Time (s)	7.7				1.9		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	102	41	0	148	1393	31	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

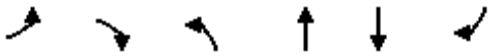
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	100	40	30	115	1365	30	1340	110
Future Vol, veh/h	100	40	30	115	1365	30	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	102	41	31	117	1393	31	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	2338	740	1080	1479	0	1017	-	0
Stage 1	1485	-	-	-	-	-	-	-
Stage 2	853	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*234	*604	*793	*793	-	*1023	-	-
Mov Cap-2 Maneuver	*411	-	-	-	-	-	-	-
Stage 1	*504	-	-	-	-	-	-	-
Stage 2	*601	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	1	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 793	-	411	604	* 1023	-	-
HCM Lane V/C Ratio	0.187	-	0.248	0.068	0.03	-	-
HCM Control Delay (s)	10.6	-	16.6	11.4	8.6	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	1	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	75	0	1510	1410	0
Future Volume (vph)	0	75	0	1510	1410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			30	30	
Link Distance (ft)	338			792	110	
Travel Time (s)	7.7			18.0	2.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	77	0	1541	1439	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

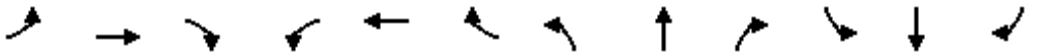
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	75	0	1510	1410	0
Future Vol, veh/h	0	75	0	1510	1410	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	77	0	1541	1439	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	720	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*578	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %		1		-	-	
Mov Cap-1 Maneuver	-	*578	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	578	-
HCM Lane V/C Ratio	-	0.132	-
HCM Control Delay (s)	-	12.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



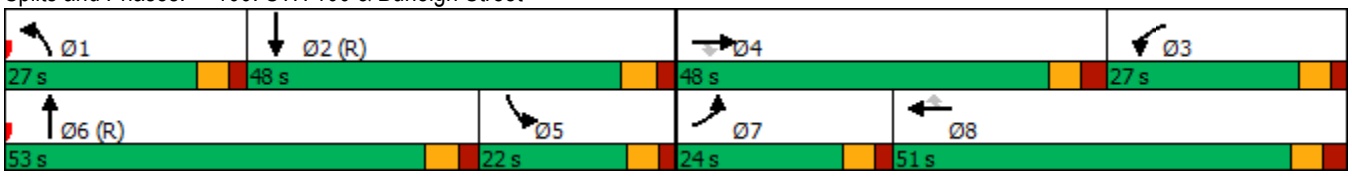
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	781	23	641	1438	0	47	1323	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	24.0	48.0	48.0	27.0	51.0	51.0	27.0	53.0		22.0	48.0	
Total Split (%)	16.0%	32.0%	32.0%	18.0%	34.0%	34.0%	18.0%	35.3%		14.7%	32.0%	
Maximum Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.90	0.59	0.96	0.84	0.86	0.06	1.11	0.79		0.15	0.98	
Control Delay	91.2	49.5	89.5	83.3	61.8	39.1	113.7	34.0		61.8	73.0	

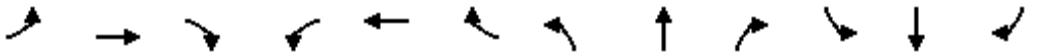
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	91.2	49.5	89.5	83.3	61.8	39.1	113.7	34.0		61.8	73.0	
90th %ile Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Max	Coord		Hold	Coord	
70th %ile Green (s)	18.5	41.6	41.6	20.7	43.8	43.8	22.3	47.6		16.5	41.8	
70th %ile Term Code	Max	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
50th %ile Green (s)	18.5	41.6	41.6	18.6	41.7	41.7	24.4	49.7		16.5	41.8	
50th %ile Term Code	Max	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
30th %ile Green (s)	17.5	41.6	41.6	16.4	40.5	40.5	26.6	51.9		16.5	41.8	
30th %ile Term Code	Gap	Max	Max	Gap	Hold	Hold	Max	Coord		Hold	Coord	
10th %ile Green (s)	14.3	35.0	35.0	13.3	34.0	34.0	36.3	83.6		0.0	41.8	
10th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Max	Coord		Skip	Coord	
Queue Length 50th (ft)	170	242	368	163	381	17	~391	502		21	472	
Queue Length 95th (ft)	#248	290	#570	215	450	40	#540	#605		43	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	401	1384	413	464	994	443	578	1816		360	1353	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.85	0.57	0.93	0.71	0.79	0.05	1.11	0.79		0.13	0.98	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	23	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	383	1328	410	373	935	416	511	1179	440	553	1305	403
Arrive On Green	0.11	0.26	0.26	0.11	0.26	0.26	0.05	0.10	0.10	0.16	0.33	0.33
Sat Flow, veh/h	3501	5174	1598	3492	3591	1598	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	781	23	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1796	1598	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	20.0	35.3	13.9	30.8	1.6	21.5	41.0	41.0	1.7	34.4	34.5
Cycle Q Clear(g_c), s	14.3	20.0	35.3	13.9	30.8	1.6	21.5	41.0	41.0	1.7	34.4	34.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	383	1328	410	373	935	416	511	1096	523	553	1149	559
V/C Ratio(X)	0.89	0.59	0.94	0.88	0.84	0.06	1.25	0.89	0.89	0.08	0.77	0.77
Avail Cap(c_a), veh/h	432	1435	443	501	1068	475	511	1096	523	553	1149	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	48.9	54.5	66.0	52.4	41.6	71.5	64.7	64.7	54.1	45.2	45.3
Incr Delay (d2), s/veh	16.6	0.3	25.6	10.7	4.7	0.0	129.7	10.8	19.7	0.0	5.1	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	13.5	23.8	11.0	20.7	1.2	29.6	28.6	29.0	1.4	21.9	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	82.5	49.2	80.2	76.7	57.1	41.7	201.2	75.5	84.4	54.1	50.3	55.3
LnGrp LOS	F	D	F	E	E	D	F	E	F	D	D	E
Approach Vol, veh/h		1509			1132			2079			1369	
Approach Delay, s/veh		64.6			62.5			116.2			52.0	
Approach LOS		E			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	55.7	22.4	44.9	29.7	53.0	21.9	45.4
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	21.5	* 42	* 22	* 42	* 17	* 47	18.5	* 45
Max Q Clear Time (g_c+I1), s	23.5	36.5	15.9	37.3	3.7	43.0	16.3	32.8
Green Ext Time (p_c), s	0.0	1.9	0.1	1.2	0.0	1.6	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	79.0
HCM 6th LOS	E

Notes

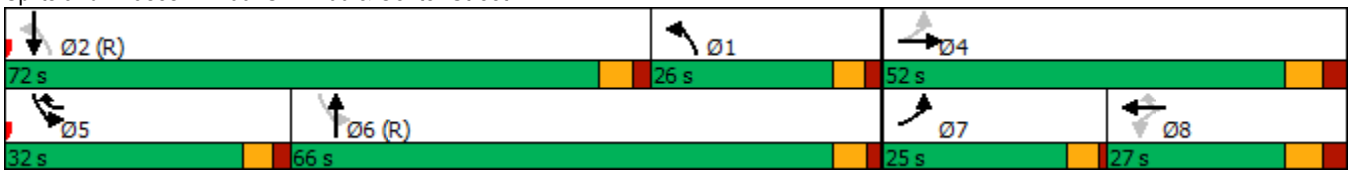
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

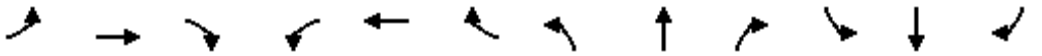
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	266	1798	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	66.0		32.0	72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	44.0%		21.3%	48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	60.3		26.5	66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.36	0.51	0.64		0.80	0.66	
Control Delay	58.7	55.3		87.6	71.4	46.0	46.6	30.0		66.1	21.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	46.0	46.6	30.0		66.1	21.6	
90th %ile Green (s)	20.5	41.2		16.2	16.2	29.7	20.5	60.7		29.7	69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	25.0	20.5	68.7		25.0	73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	21.7	20.5	74.4		21.7	75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	18.3	20.5	80.6		18.3	78.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	13.3	20.5	105.5		13.3	98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	178	157		51	51	113	81	460		202	291	
Queue Length 95th (ft)	249	225		98	95	156	166	614		m203	m377	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	456	311	2709		396	2708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.31	0.51	0.64		0.67	0.66	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street





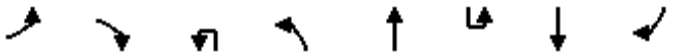
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (veh/h)	200	70	105	50	50	215	150	1620	10	250	1520	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	213	74	112	53	53	142	160	1723	11	266	1617	181
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	342	164	249	163	179	284	483	2956	19	296	2109	236
Arrive On Green	0.12	0.24	0.24	0.09	0.09	0.09	0.19	0.55	0.55	0.17	0.88	0.88
Sat Flow, veh/h	1795	677	1024	1207	1885	1598	1824	5360	34	1824	4771	533
Grp Volume(v), veh/h	213	0	186	53	53	142	160	1120	614	266	1180	618
Grp Sat Flow(s),veh/h/ln	1795	0	1701	1207	1885	1598	1824	1743	1909	1824	1743	1819
Q Serve(g_s), s	15.6	0.0	13.9	6.2	3.9	12.0	0.0	31.9	31.9	10.3	18.3	18.4
Cycle Q Clear(g_c), s	15.6	0.0	13.9	6.2	3.9	12.0	0.0	31.9	31.9	10.3	18.3	18.4
Prop In Lane	1.00		0.60	1.00		1.00	1.00		0.02	1.00		0.29
Lane Grp Cap(c), veh/h	342	0	413	163	179	284	483	1922	1053	296	1540	804
V/C Ratio(X)	0.62	0.00	0.45	0.33	0.30	0.50	0.33	0.58	0.58	0.90	0.77	0.77
Avail Cap(c_a), veh/h	376	0	508	207	249	343	483	1922	1053	467	1540	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	0.0	48.3	64.3	63.2	55.6	36.2	22.2	22.2	22.3	5.9	5.9
Incr Delay (d2), s/veh	1.8	0.0	0.3	0.4	0.3	0.5	0.1	1.3	2.4	9.2	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	0.0	10.1	3.5	3.5	8.6	8.5	18.9	20.8	9.4	6.1	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.9	0.0	48.6	64.7	63.6	56.1	36.4	23.5	24.6	31.5	9.6	12.9
LnGrp LOS	D	A	D	E	E	E	D	C	C	C	A	B
Approach Vol, veh/h		399			248			1894			2064	
Approach Delay, s/veh		50.9			59.6			25.0			13.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.4	72.0		43.6	17.9	88.4	22.2	21.4				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 21	* 66		44.8	26.5	* 60	20.5	19.8				
Max Q Clear Time (g_c+I1), s	2.0	20.4		15.9	12.3	33.9	17.6	14.0				
Green Ext Time (p_c), s	0.1	33.0		0.6	0.2	20.8	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.9	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	60	70	5	75	1960	30	1835	60
Future Volume (vph)	60	70	5	75	1960	30	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	64	74	0	85	2085	32	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	60	70	5	75	1960	30	1835	60
Future Vol, veh/h	60	70	5	75	1960	30	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	64	74	5	80	2085	32	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	3052	1008	1472	2016	0	1522	-	0
Stage 1	2048	-	-	-	-	-	-	-
Stage 2	1004	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*233	*482	*817	*607	-	*788	-	-
Stage 1	*496	-	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*192	*482	*612	*612	-	*788	-	-
Mov Cap-2 Maneuver	*331	-	-	-	-	-	-	-
Stage 1	*427	-	-	-	-	-	-	-
Stage 2	*458	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	0.5	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 612	-	331	482	* 788	-	-
HCM Lane V/C Ratio	0.139	-	0.193	0.154	0.041	-	-
HCM Control Delay (s)	11.8	-	18.5	13.8	9.8	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.7	0.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

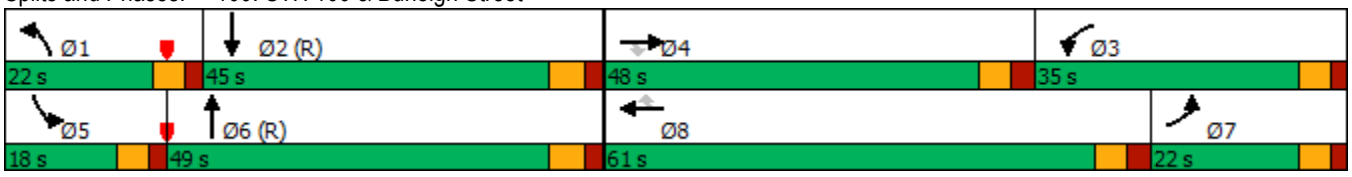
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	774	16	600	948	0	63	1016	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	22.0	48.0	48.0	35.0	61.0	61.0	22.0	49.0		18.0	45.0	
Total Split (%)	14.7%	32.0%	32.0%	23.3%	40.7%	40.7%	14.7%	32.7%		12.0%	30.0%	
Maximum Green (s)	16.5	41.6	41.6	29.5	54.6	54.6	16.5	42.8		12.5	38.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.76	0.61	0.95	0.54	0.88	0.04	1.03	0.49		0.45	0.83	
Control Delay	72.9	50.5	88.6	63.4	64.4	38.3	108.2	24.5		79.6	59.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	72.9	50.5	88.6	63.4	64.4	38.3	108.2	24.5		79.6	59.4	
90th %ile Green (s)	23.4	41.6	41.6	29.5	47.7	47.7	16.5	46.7		8.6	38.8	
90th %ile Term Code	Max	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
70th %ile Green (s)	22.9	41.6	41.6	24.6	43.3	43.3	21.4	52.9		7.3	38.8	
70th %ile Term Code	Gap	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
50th %ile Green (s)	21.8	41.6	41.6	19.7	39.5	39.5	26.3	58.8		6.3	38.8	
50th %ile Term Code	Gap	Max	Max	Hold	Gap	Gap	Max	Coord		Gap	Coord	
30th %ile Green (s)	20.5	39.7	39.7	16.9	36.1	36.1	31.0	64.4		5.4	38.8	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Gap	Coord	
10th %ile Green (s)	18.2	32.7	32.7	16.8	31.3	31.3	38.1	82.4		0.0	38.8	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Max	Coord		Skip	Coord	
Queue Length 50th (ft)	170	246	350	122	384	12	~276	131		31	346	
Queue Length 95th (ft)	224	294	#542	157	432	30	#551	345		57	404	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	458	1370	409	637	1217	543	582	1947		270	1225	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.76	0.58	0.90	0.40	0.64	0.03	1.03	0.49		0.23	0.83	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street



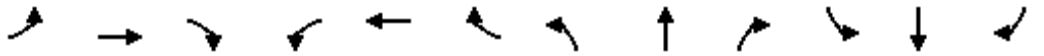
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	16	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	382	1022	316	514	848	377	389	1622	755	109	1336	622
Arrive On Green	0.11	0.20	0.20	0.15	0.24	0.24	0.04	0.15	0.15	0.03	0.39	0.39
Sat Flow, veh/h	3474	5133	1585	3492	3591	1598	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	774	16	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1796	1598	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.0	25.8	10.0	31.5	0.9	16.5	24.7	26.0	2.7	22.7	23.9
Cycle Q Clear(g_c), s	14.8	22.0	25.8	10.0	31.5	0.9	16.5	24.7	26.0	2.7	22.7	23.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	1022	316	514	848	377	389	1622	755	109	1336	622
V/C Ratio(X)	0.91	0.78	1.17	0.49	0.91	0.04	1.54	0.39	0.41	0.58	0.51	0.53
Avail Cap(c_a), veh/h	382	1424	440	687	1307	582	389	1622	755	292	1336	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	56.9	44.7	58.8	55.8	25.0	72.3	44.4	44.9	71.7	35.2	35.6
Incr Delay (d2), s/veh	24.3	1.1	97.6	0.3	4.9	0.0	256.4	0.7	1.7	1.8	1.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	14.7	27.9	7.9	21.0	0.8	34.1	17.4	17.3	2.2	14.8	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.3	58.1	142.2	59.1	60.7	25.0	328.6	45.1	46.6	73.5	36.6	38.8
LnGrp LOS	F	E	F	E	E	C	F	D	D	E	D	D
Approach Vol, veh/h		1511			1043			1548			1079	
Approach Delay, s/veh		86.0			59.7			155.3			39.4	
Approach LOS		F			E			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	64.2	27.6	36.3	10.1	76.0	22.0	41.8
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	16.5	* 39	* 30	41.6	12.5	* 43	* 17	54.6
Max Q Clear Time (g_c+I1), s	18.5	25.9	12.0	27.8	4.7	28.0	16.8	33.5
Green Ext Time (p_c), s	0.0	2.2	0.2	2.1	0.0	2.1	0.0	2.0

Intersection Summary	
HCM 6th Ctrl Delay	91.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



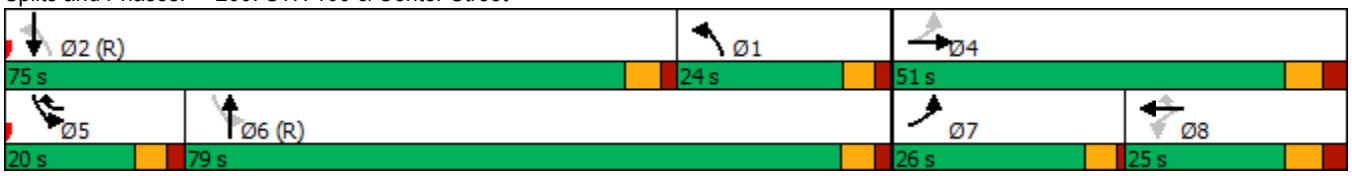
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	79.0		20.0	75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	52.7%		13.3%	50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	73.3		14.5	69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.32	0.41	0.45		0.74	0.41	
Control Delay	56.1	72.9		81.2	78.8	45.2	19.1	24.3		21.7	14.3	

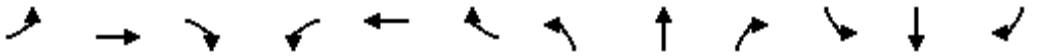
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	45.2	19.1	24.3		21.7	14.3	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	73.3		21.2	76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	26.5	18.5	73.3		26.5	81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	26.2	18.5	76.3		26.2	84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	26.9	18.5	77.8		26.9	86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	31.7	18.5	82.8		31.7	96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	121	229		30	59	104	48	265		119	242	
Queue Length 95th (ft)	177	309		66	109	170	89	318		m#314	328	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	424	423	2665		488	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.32	0.41	0.45		0.74	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: STH 100 & Center Street





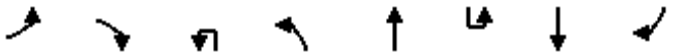
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (veh/h)	140	75	165	30	60	215	170	1155	10	355	1080	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1841	1841	1841	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	143	77	168	31	61	136	173	1179	10	362	1102	82
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	4	4	4	1	1	1	1	1	1
Cap, veh/h	272	109	237	127	170	286	564	3101	26	437	2294	171
Arrive On Green	0.08	0.21	0.21	0.09	0.09	0.09	0.21	0.58	0.58	0.06	0.31	0.31
Sat Flow, veh/h	1795	527	1151	1117	1841	1560	1824	5347	45	1824	4965	369
Grp Volume(v), veh/h	143	0	245	31	61	136	173	768	421	362	773	411
Grp Sat Flow(s),veh/h/ln	1795	0	1678	1117	1841	1560	1824	1743	1907	1824	1743	1849
Q Serve(g_s), s	10.5	0.0	20.4	4.0	4.7	11.7	0.0	17.8	17.8	11.7	27.0	27.0
Cycle Q Clear(g_c), s	10.5	0.0	20.4	7.3	4.7	11.7	0.0	17.8	17.8	11.7	27.0	27.0
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.02	1.00		0.20
Lane Grp Cap(c), veh/h	272	0	346	127	170	286	564	2021	1106	437	1610	854
V/C Ratio(X)	0.53	0.00	0.71	0.24	0.36	0.47	0.31	0.38	0.38	0.83	0.48	0.48
Avail Cap(c_a), veh/h	378	0	490	156	218	328	564	2021	1106	447	1610	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	55.4	66.7	63.9	54.8	30.4	17.0	17.0	15.2	37.2	37.2
Incr Delay (d2), s/veh	0.6	0.0	1.0	0.4	0.5	0.5	0.1	0.5	1.0	11.3	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	13.7	2.1	4.0	8.3	8.5	11.5	12.6	10.3	18.0	19.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.0	56.4	67.0	64.4	55.2	30.5	17.5	18.0	26.5	38.2	39.1
LnGrp LOS	D	A	E	E	E	E	C	B	B	C	D	D
Approach Vol, veh/h		388			228			1362			1546	
Approach Delay, s/veh		55.6			59.3			19.3			35.7	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.9	75.0		38.1	19.2	92.7	17.1	21.0				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 19	* 69		43.8	14.5	* 73	21.5	17.8				
Max Q Clear Time (g_c+I1), s	2.0	29.0		22.4	13.7	19.8	12.5	13.7				
Green Ext Time (p_c), s	0.1	18.4		0.8	0.0	20.6	0.1	0.1				

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	100	115	30	115	1365	30	1340	110
Future Volume (vph)	100	115	30	115	1365	30	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	102	117	0	148	1393	31	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	100	115	30	115	1365	30	1340	110
Future Vol, veh/h	100	115	30	115	1365	30	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	102	117	31	117	1393	31	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	2338	740	1080	1479	0	1017	-	0
Stage 1	1485	-	-	-	-	-	-	-
Stage 2	853	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*232	*604	*772	*772	-	*1023	-	-
Mov Cap-2 Maneuver	*409	-	-	-	-	-	-	-
Stage 1	*501	-	-	-	-	-	-	-
Stage 2	*601	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	1	0.2
HCM LOS	B		

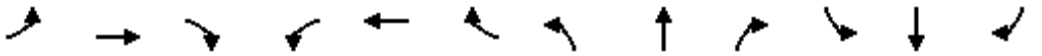
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 772	-	409	604	* 1023	-	-
HCM Lane V/C Ratio	0.192	-	0.249	0.194	0.03	-	-
HCM Control Delay (s)	10.8	-	16.7	12.4	8.6	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	1	0.7	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX F

Year 2023 Build Traffic Operational Analysis

Modified Transportation System



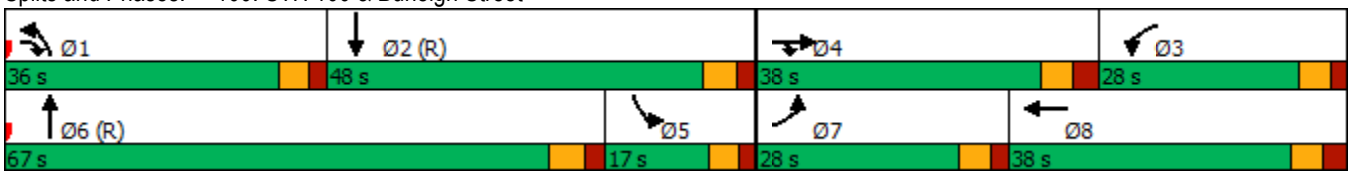
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	580	300	750	35	605	995	360	45	960	300
Future Volume (vph)	325	755	580	300	750	35	605	995	360	45	960	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	375	313	817	0	630	1411	0	47	1313	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.74	0.90		0.93	0.61		0.21	0.84	
Control Delay	82.3	68.6	26.6	73.7	72.5		61.8	23.8		67.5	53.6	

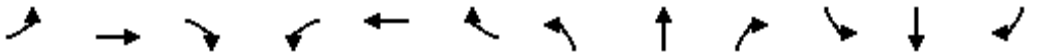
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	73.7	72.5		61.8	23.8		67.5	53.6	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		33.7	66.8		11.5	44.6	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		31.0	71.2		11.5	51.7	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		26.9	94.7		0.0	62.3	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	178	153	288		313	442		22	455	
Queue Length 95th (ft)	220	318	237	204	335		#419	500		44	#571	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	610	486	1008		693	2309		251	1566	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.61	0.64	0.81		0.91	0.61		0.19	0.84	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





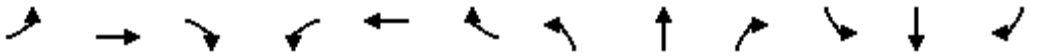
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	580	300	750	35	605	995	360	45	960	300
Future Volume (veh/h)	325	755	580	300	750	35	605	995	360	45	960	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	375	312	781	36	630	1036	375	47	1000	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	580	366	878	40	679	1546	559	528	1456	454
Arrive On Green	0.11	0.17	0.17	0.10	0.17	0.17	0.06	0.13	0.13	0.15	0.37	0.37
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3813	1380	3538	3948	1230
Grp Volume(v), veh/h	339	786	375	312	531	286	630	954	457	47	883	429
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1681	1769	1742	1693
Q Serve(g_s), s	14.3	22.2	18.9	13.2	22.6	22.7	26.4	38.8	38.8	1.7	32.1	32.2
Cycle Q Clear(g_c), s	14.3	22.2	18.9	13.2	22.6	22.7	26.4	38.8	38.8	1.7	32.1	32.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.82	1.00		0.73
Lane Grp Cap(c), veh/h	384	893	580	366	597	321	679	1424	682	528	1286	625
V/C Ratio(X)	0.88	0.88	0.65	0.85	0.89	0.89	0.93	0.67	0.67	0.09	0.69	0.69
Avail Cap(c_a), veh/h	525	1090	641	524	725	389	725	1424	682	528	1286	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.6	66.0	60.6	60.6	69.3	55.4	55.4	55.0	40.0	40.0
Incr Delay (d2), s/veh	10.2	6.4	1.3	6.6	10.1	17.5	17.1	2.5	5.2	0.0	3.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.4	10.3	16.0	17.9	20.5	26.0	25.6	1.4	20.3	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	67.0	20.0	72.7	70.7	78.2	86.3	58.0	60.6	55.0	43.0	46.1
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1500			1129			2041			1359	
Approach Delay, s/veh		57.3			73.1			67.3			44.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.0	61.5	22.1	32.3	28.6	67.0	22.0	32.4
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.4	34.2	15.2	24.2	3.7	40.8	16.3	24.7
Green Ext Time (p_c), s	0.2	2.3	0.2	1.7	0.0	3.5	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	60.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

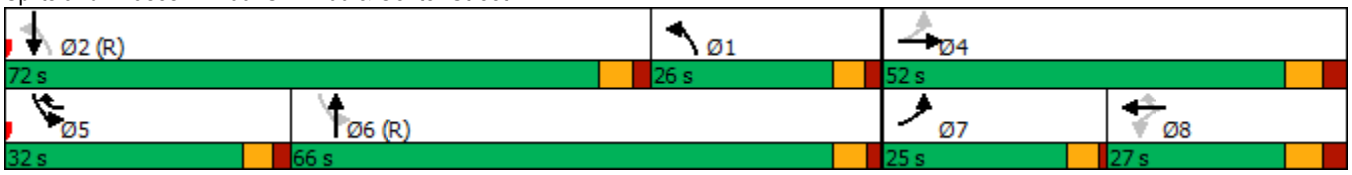


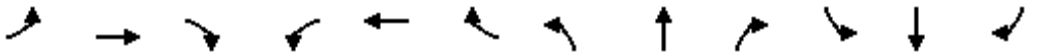
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Future Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	186	0	53	53	139	160	1692	0	261	1750	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	66.0		32.0	72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	44.0%		21.3%	48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	60.3		26.5	66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.64	0.51		0.56	0.36	0.35	0.50	0.62		0.79	0.65	
Control Delay	57.9	55.4		87.6	71.4	46.2	44.6	29.1		64.8	19.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.9	55.4		87.6	71.4	46.2	44.6	29.1		64.8	19.0	
90th %ile Green (s)	20.5	41.2		16.2	16.2	29.2	20.5	61.2		29.2	69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	24.6	20.5	69.1		24.6	73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	21.3	20.5	74.8		21.3	75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	17.8	32.3		10.0	10.0	17.8	20.5	81.5		17.8	78.8	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	13.0	20.5	105.8		13.0	98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	172	157		51	51	111	74	441		189	289	
Queue Length 95th (ft)	242	225		98	95	154	159	589		m260	321	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	338	511		158	248	455	317	2726		401	2711	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.61	0.36		0.34	0.21	0.31	0.50	0.62		0.65	0.65	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	70	105	50	50	210	150	1580	10	245	1480	165
Future Volume (veh/h)	195	70	105	50	50	210	150	1580	10	245	1480	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	207	74	112	53	53	139	160	1681	11	261	1574	176
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	335	161	244	161	176	278	497	2991	20	301	2109	235
Arrive On Green	0.12	0.24	0.24	0.09	0.09	0.09	0.20	0.56	0.56	0.16	0.88	0.88
Sat Flow, veh/h	1795	677	1024	1207	1885	1598	1824	5359	35	1824	4772	533
Grp Volume(v), veh/h	207	0	186	53	53	139	160	1093	599	261	1149	601
Grp Sat Flow(s),veh/h/ln	1795	0	1701	1207	1885	1598	1824	1743	1909	1824	1743	1819
Q Serve(g_s), s	15.2	0.0	14.0	6.2	3.9	11.8	0.0	30.3	30.3	9.9	16.8	16.9
Cycle Q Clear(g_c), s	15.2	0.0	14.0	6.2	3.9	11.8	0.0	30.3	30.3	9.9	16.8	16.9
Prop In Lane	1.00		0.60	1.00		1.00	1.00		0.02	1.00		0.29
Lane Grp Cap(c), veh/h	335	0	406	161	176	278	497	1945	1065	301	1540	804
V/C Ratio(X)	0.62	0.00	0.46	0.33	0.30	0.50	0.32	0.56	0.56	0.87	0.75	0.75
Avail Cap(c_a), veh/h	374	0	508	207	249	340	497	1945	1065	476	1540	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	48.8	64.5	63.4	56.0	34.3	21.3	21.3	21.0	5.8	5.8
Incr Delay (d2), s/veh	1.5	0.0	0.3	0.4	0.4	0.5	0.1	1.2	2.1	6.0	3.3	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.5	0.0	10.2	3.5	3.5	8.5	8.5	18.1	19.9	9.0	5.9	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	49.1	64.9	63.8	56.6	34.4	22.5	23.5	27.0	9.2	12.1
LnGrp LOS	D	A	D	E	E	E	C	C	C	C	A	B
Approach Vol, veh/h		393			245			1852			2011	
Approach Delay, s/veh		51.2			59.9			23.9			12.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.0	72.0		43.0	17.6	89.4	21.8	21.2				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 21	* 66		44.8	26.5	* 60	20.5	19.8				
Max Q Clear Time (g_c+I1), s	2.0	18.9		16.0	11.9	32.3	17.2	13.8				
Green Ext Time (p_c), s	0.1	32.8		0.6	0.2	21.4	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.1	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	0	0	0	1985	0	1855	0
Future Volume (vph)	0	0	0	1985	0	1855	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%			0%		0%	
Storage Length (ft)	0	0	210		275		0
Storage Lanes	1	0	1		1		0
Taper Length (ft)	75		75		75		
Link Speed (mph)	30			40		40	
Link Distance (ft)	339			902		1744	
Travel Time (s)	7.7			15.4		29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	2112	0	1973	0
Sign Control	Stop			Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	0	0	1985	0	1855	0
Future Vol, veh/h	0	0	0	1985	0	1855	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	2112	0	1973	0

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	2818	987	1973	0	1542	-	0
Stage 1	1973	-	-	-	-	-	-
Stage 2	845	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*215	*482	*607	-	*759	-	-
Stage 1	*496	-	-	-	-	-	-
Stage 2	*460	-	-	-	-	-	-
Platoon blocked, %	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*215	*482	*607	-	*759	-	-
Mov Cap-2 Maneuver	*369	-	-	-	-	-	-
Stage 1	*496	-	-	-	-	-	-
Stage 2	*460	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 607	-	-	* 759	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

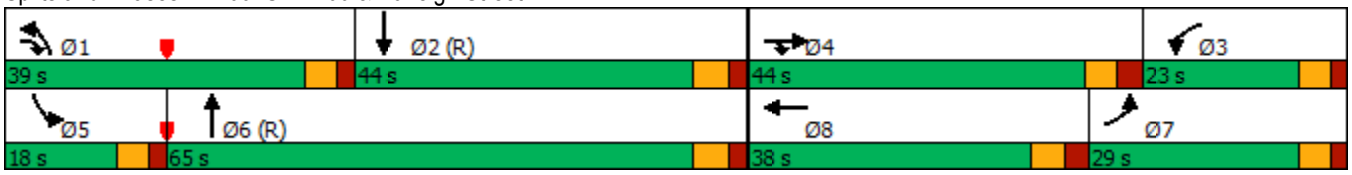
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	540	210	735	25	550	590	265	60	635	315
Future Volume (vph)	330	755	540	210	735	25	550	590	265	60	635	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	352	221	800	0	579	900	0	63	1000	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.63	0.55	0.89		0.91	0.38		0.45	0.64	
Control Delay	81.8	67.0	25.7	66.6	72.1		61.5	16.2		79.6	46.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	67.0	25.7	66.6	72.1		61.5	16.2		79.6	46.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		32.6	65.8		7.3	40.5	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		29.9	72.0		6.3	48.4	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		27.2	77.4		5.4	55.6	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	22.4		14.7	23.0		23.1	94.8		0.0	66.2	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	176	105	282		169	142		31	308	
Queue Length 95th (ft)	223	314	202	150	327		218	237		57	400	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	649	418	1007		732	2383		270	1568	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.54	0.53	0.79		0.79	0.38		0.23	0.64	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 100: STH 100 & Burleigh Street



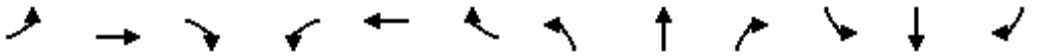
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	540	210	735	25	550	590	265	60	635	315
Future Volume (veh/h)	330	755	540	210	735	25	550	590	265	60	635	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	352	221	774	26	579	621	279	63	668	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	564	368	872	29	631	1879	827	109	1318	614
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3555	1563	3510	3457	1610
Grp Volume(v), veh/h	347	795	352	221	519	281	579	609	291	63	668	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1633	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	18.1	9.1	22.1	22.2	24.4	22.9	23.5	2.7	22.2	24.1
Cycle Q Clear(g_c), s	14.8	22.6	18.1	9.1	22.1	22.2	24.4	22.9	23.5	2.7	22.2	24.1
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	564	368	585	316	631	1842	864	109	1318	614
V/C Ratio(X)	0.88	0.87	0.62	0.60	0.89	0.89	0.92	0.33	0.34	0.58	0.51	0.54
Avail Cap(c_a), veh/h	544	1287	680	407	725	392	790	1842	864	292	1318	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.2	64.1	60.8	60.9	69.5	38.6	38.9	71.7	35.6	36.2
Incr Delay (d2), s/veh	9.9	3.7	0.6	1.2	9.6	16.5	12.2	0.5	1.1	1.8	1.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	10.9	7.4	15.7	17.5	18.6	16.3	15.9	2.2	14.6	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	65.2	70.5	77.4	81.7	39.1	39.9	73.5	37.0	39.6
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1494			1021			1479			1063	
Approach Delay, s/veh		56.1			71.2			56.0			39.9	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.2	63.4	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	26.4	26.1	11.1	24.6	4.7	25.5	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.1	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



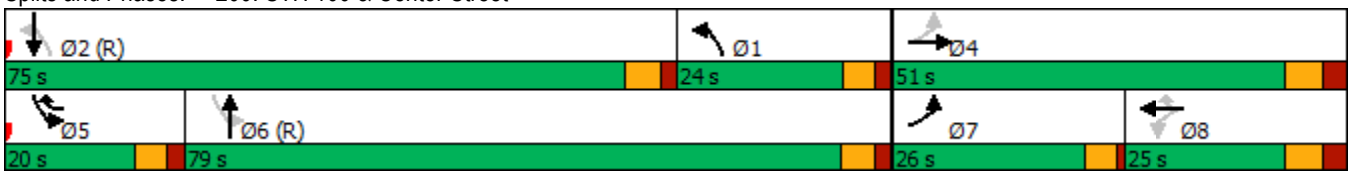
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Future Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	245	0	31	61	133	173	1117	0	357	1113	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	79.0		20.0	75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	52.7%		13.3%	50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	73.3		14.5	69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.49	0.78		0.40	0.47	0.35	0.39	0.40		0.75	0.38	
Control Delay	56.1	74.2		81.2	78.8	47.6	16.6	21.6		20.6	17.3	

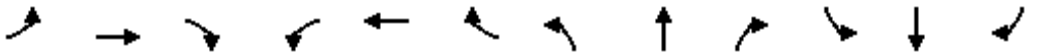
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	74.2		81.2	78.8	47.6	16.6	21.6		20.6	17.3	
90th %ile Green (s)	19.2	36.6		12.9	12.9	21.7	18.5	73.3		21.7	76.5	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
70th %ile Green (s)	16.2	31.3		10.6	10.6	24.4	18.5	75.9		24.4	81.8	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	14.2	28.7		10.0	10.0	23.2	18.5	79.7		23.2	84.4	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	12.0	26.5		10.0	10.0	22.2	18.5	82.9		22.2	86.6	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	22.4	18.5	92.1		22.4	96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	117	230		30	59	105	47	232		95	251	
Queue Length 95th (ft)	173	311		66	109	166	88	294		#247	267	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	312	492		131	216	385	445	2806		478	2928	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.44	0.50		0.24	0.28	0.35	0.39	0.40		0.75	0.38	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	75	165	30	60	210	170	1085	10	350	1015	75
Future Volume (veh/h)	135	75	165	30	60	210	170	1085	10	350	1015	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1841	1841	1841	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	138	77	168	31	61	133	173	1107	10	357	1036	77
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	4	4	4	1	1	1	1	1	1
Cap, veh/h	266	107	233	121	167	281	587	3131	28	457	2294	170
Arrive On Green	0.08	0.20	0.20	0.09	0.09	0.09	0.21	0.59	0.59	0.06	0.31	0.31
Sat Flow, veh/h	1795	527	1151	1117	1841	1560	1824	5343	48	1824	4965	369
Grp Volume(v), veh/h	138	0	245	31	61	133	173	722	395	357	727	386
Grp Sat Flow(s),veh/h/ln	1795	0	1678	1117	1841	1560	1824	1743	1906	1824	1743	1849
Q Serve(g_s), s	10.2	0.0	20.5	4.0	4.7	11.5	0.0	16.2	16.2	11.3	25.1	25.2
Cycle Q Clear(g_c), s	10.2	0.0	20.5	7.8	4.7	11.5	0.0	16.2	16.2	11.3	25.1	25.2
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.03	1.00		0.20
Lane Grp Cap(c), veh/h	266	0	339	121	167	281	587	2042	1117	457	1610	854
V/C Ratio(X)	0.52	0.00	0.72	0.26	0.37	0.47	0.29	0.35	0.35	0.78	0.45	0.45
Avail Cap(c_a), veh/h	377	0	490	153	218	324	587	2042	1117	471	1610	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	0.0	55.9	67.3	64.1	55.1	27.5	16.2	16.2	13.2	36.5	36.5
Incr Delay (d2), s/veh	0.6	0.0	1.1	0.4	0.5	0.5	0.1	0.5	0.9	7.2	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	0.0	13.8	2.1	4.0	8.1	8.0	10.7	11.6	9.5	16.9	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.7	0.0	57.0	67.7	64.6	55.6	27.6	16.7	17.1	20.5	37.4	38.3
LnGrp LOS	D	A	E	E	E	E	C	B	B	C	D	D
Approach Vol, veh/h		383			225			1290			1470	
Approach Delay, s/veh		56.2			59.7			18.3			33.5	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.5	75.0		37.5	18.9	93.6	16.7	20.8				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 19	* 69		43.8	14.5	* 73	21.5	17.8				
Max Q Clear Time (g_c+I1), s	2.0	27.2		22.5	13.3	18.2	12.2	13.5				
Green Ext Time (p_c), s	0.1	17.3		0.8	0.1	19.0	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		32.0	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	0	0	0	1400	0	1380	0
Future Volume (vph)	0	0	0	1400	0	1380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%			0%		0%	
Storage Length (ft)	0	0	210		275		0
Storage Lanes	1	0	1		1		0
Taper Length (ft)	75		75		75		
Link Speed (mph)	30			40		40	
Link Distance (ft)	339			902		1744	
Travel Time (s)	7.7			15.4		29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%			0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	0	0	1429	0	1408	0
Sign Control	Stop			Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	0	0	0	1400	0	1380	0
Future Vol, veh/h	0	0	0	1400	0	1380	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	0	0	0	1429	0	1408	0

Major/Minor	Minor2		Major1		Major2		
Conflicting Flow All	1980	704	1408	0	1043	-	0
Stage 1	1408	-	-	-	-	-	-
Stage 2	572	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-
Platoon blocked, %	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*296	*604	*759	-	*1023	-	-
Mov Cap-2 Maneuver	*486	-	-	-	-	-	-
Stage 1	*620	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 759	-	-	* 1023	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s)	0	-	0	0	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX G

Year 2023 Total Traffic Operational Analysis

Modified Transportation System

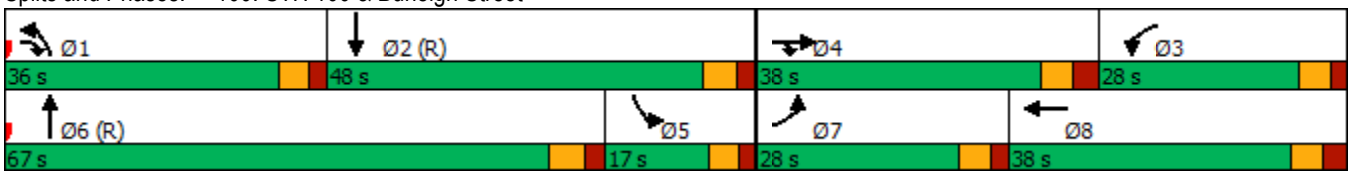
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		61.8	24.1		67.5	54.9	

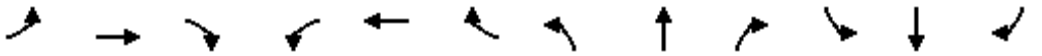
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		61.8	24.1		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		317	452		22	463	
Queue Length 95th (ft)	220	318	244	213	335		#433	489		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

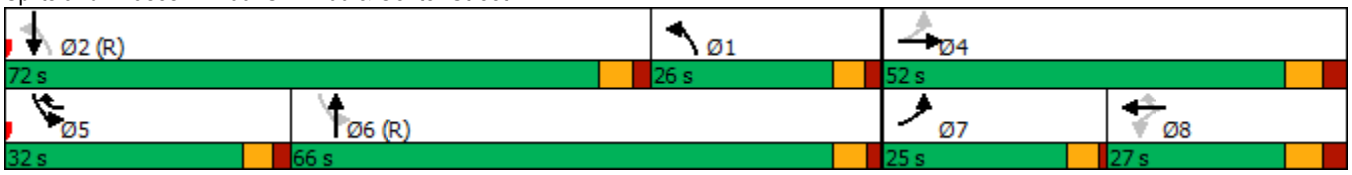
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

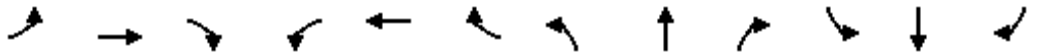
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			792	
Travel Time (s)		34.1			16.0			28.1			13.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	266	1798	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	66.0		32.0	72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	44.0%		21.3%	48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	60.3		26.5	66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.36	0.51	0.64		0.80	0.66	
Control Delay	58.7	55.3		87.6	71.4	46.0	46.6	30.0		67.4	19.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	46.0	46.6	30.0		67.4	19.9	
90th %ile Green (s)	20.5	41.2		16.2	16.2	29.7	20.5	60.7		29.7	69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	25.0	20.5	68.7		25.0	73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	21.7	20.5	74.4		21.7	75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	18.3	20.5	80.6		18.3	78.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	13.3	20.5	105.5		13.3	98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	178	157		51	51	113	81	460		199	308	
Queue Length 95th (ft)	249	225		98	95	156	166	614		m265	342	
Internal Link Dist (ft)		1169			507			1571			712	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	456	311	2709		396	2708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.31	0.51	0.64		0.67	0.66	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street





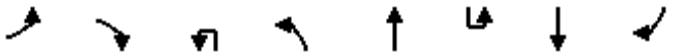
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (veh/h)	200	70	105	50	50	215	150	1620	10	250	1520	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	213	74	112	53	53	142	160	1723	11	266	1617	181
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	342	164	249	163	179	284	483	2956	19	296	2109	236
Arrive On Green	0.12	0.24	0.24	0.09	0.09	0.09	0.19	0.55	0.55	0.17	0.88	0.88
Sat Flow, veh/h	1795	677	1024	1207	1885	1598	1824	5360	34	1824	4771	533
Grp Volume(v), veh/h	213	0	186	53	53	142	160	1120	614	266	1180	618
Grp Sat Flow(s),veh/h/ln	1795	0	1701	1207	1885	1598	1824	1743	1909	1824	1743	1819
Q Serve(g_s), s	15.6	0.0	13.9	6.2	3.9	12.0	0.0	31.9	31.9	10.3	18.3	18.4
Cycle Q Clear(g_c), s	15.6	0.0	13.9	6.2	3.9	12.0	0.0	31.9	31.9	10.3	18.3	18.4
Prop In Lane	1.00		0.60	1.00		1.00	1.00		0.02	1.00		0.29
Lane Grp Cap(c), veh/h	342	0	413	163	179	284	483	1922	1053	296	1540	804
V/C Ratio(X)	0.62	0.00	0.45	0.33	0.30	0.50	0.33	0.58	0.58	0.90	0.77	0.77
Avail Cap(c_a), veh/h	376	0	508	207	249	343	483	1922	1053	467	1540	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	0.0	48.3	64.3	63.2	55.6	36.2	22.2	22.2	22.3	5.9	5.9
Incr Delay (d2), s/veh	1.8	0.0	0.3	0.4	0.3	0.5	0.1	1.3	2.4	9.2	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.7	0.0	10.1	3.5	3.5	8.6	8.5	18.9	20.8	9.4	6.1	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.9	0.0	48.6	64.7	63.6	56.1	36.4	23.5	24.6	31.5	9.6	12.9
LnGrp LOS	D	A	D	E	E	E	D	C	C	C	A	B
Approach Vol, veh/h		399			248			1894			2064	
Approach Delay, s/veh		50.9			59.6			25.0			13.4	
Approach LOS		D			E			C			B	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	34.4	72.0		43.6	17.9	88.4	22.2	21.4				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 21	* 66		44.8	26.5	* 60	20.5	19.8				
Max Q Clear Time (g_c+I1), s	2.0	20.4		15.9	12.3	33.9	17.6	14.0				
Green Ext Time (p_c), s	0.1	33.0		0.6	0.2	20.8	0.1	0.2				

Intersection Summary			
HCM 6th Ctrl Delay		23.9	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	60	20	5	75	1960	30	1835	60
Future Volume (vph)	60	20	5	75	1960	30	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				110		1744	
Travel Time (s)	7.7				1.9		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	64	21	0	85	2085	32	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

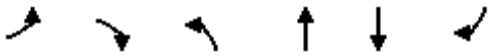
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	60	20	5	75	1960	30	1835	60
Future Vol, veh/h	60	20	5	75	1960	30	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	64	21	5	80	2085	32	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	3052	1008	1472	2016	0	1522	-	0
Stage 1	2048	-	-	-	-	-	-	-
Stage 2	1004	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*220	*482	*817	*607	-	*788	-	-
Stage 1	*496	-	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*182	*482	*616	*616	-	*788	-	-
Mov Cap-2 Maneuver	*327	-	-	-	-	-	-	-
Stage 1	*427	-	-	-	-	-	-	-
Stage 2	*458	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.2	0.5	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 616	-	327	482	* 788	-	-
HCM Lane V/C Ratio	0.138	-	0.195	0.044	0.041	-	-
HCM Control Delay (s)	11.8	-	18.7	12.8	9.8	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.7	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	50	0	2040	1860	0
Future Volume (vph)	0	50	0	2040	1860	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			40	40	
Link Distance (ft)	338			792	110	
Travel Time (s)	7.7			13.5	1.9	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	53	0	2170	1979	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	50	0	2040	1860	0
Future Vol, veh/h	0	50	0	2040	1860	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	53	0	2170	1979	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	990	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*482	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %		1		-	-	
Mov Cap-1 Maneuver	-	*482	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	482	-
HCM Lane V/C Ratio	-	0.11	-
HCM Control Delay (s)	-	13.4	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

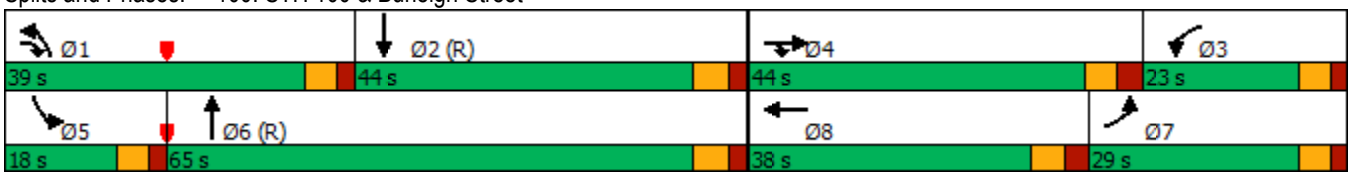
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		82.3	16.0		79.6	47.7	

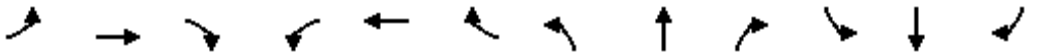
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		82.3	16.0		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		235	106		31	318	
Queue Length 95th (ft)	223	314	214	169	327		273	194		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





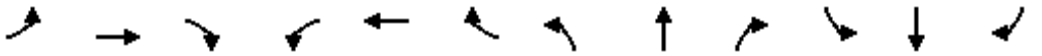
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



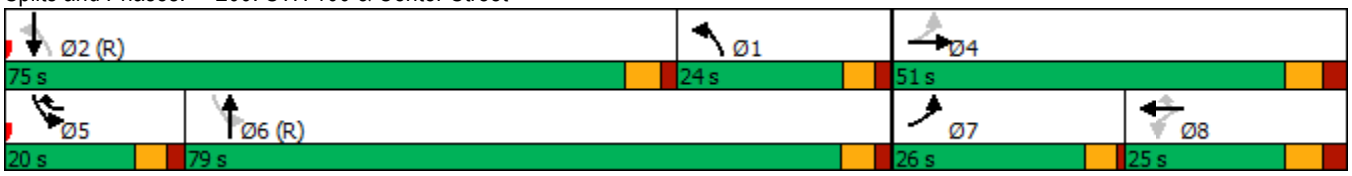
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			792	
Travel Time (s)		34.1			16.0			28.1			13.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Turn Type	pm+pt	NA		Perm	NA	pm+ov	D.P+P	NA		D.P+P	NA	
Protected Phases	7	4			8	5	1	6		5	2	
Permitted Phases	4			8		8	2			6		
Detector Phase	7	4		8	8	5	1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0		6.0	15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7		11.5	20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	79.0		20.0	75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	52.7%		13.3%	50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	73.3		14.5	69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9		3.5	3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8		2.0	1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9		1.5	4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0		1.5	2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0		20.0	28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0		0.0	17.0	
Recall Mode	None	None		None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.32	0.41	0.45		0.74	0.41	
Control Delay	56.1	72.9		81.2	78.8	45.2	19.1	24.3		24.2	19.0	

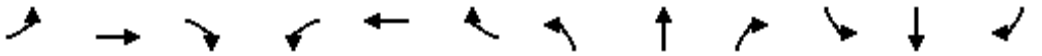
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	45.2	19.1	24.3		24.2	19.0	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	73.3		21.2	76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	26.5	18.5	73.3		26.5	81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord		Max	Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	26.2	18.5	76.3		26.2	84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	26.9	18.5	77.8		26.9	86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord		Gap	Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	31.7	18.5	82.8		31.7	96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord		Gap	Coord	
Queue Length 50th (ft)	121	229		30	59	104	48	265		113	271	
Queue Length 95th (ft)	177	309		66	109	170	89	318		#344	304	
Internal Link Dist (ft)		1169			507			1571			712	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	424	423	2665		488	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.32	0.41	0.45		0.74	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBSB, Start of 1st Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street





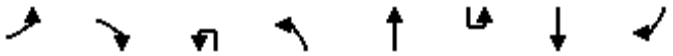
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (veh/h)	140	75	165	30	60	215	170	1155	10	355	1080	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1841	1841	1841	1915	1915	1915	1915	1915	1915
Adj Flow Rate, veh/h	143	77	168	31	61	136	173	1179	10	362	1102	82
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	4	4	4	1	1	1	1	1	1
Cap, veh/h	271	109	237	126	169	291	577	3084	26	441	2294	171
Arrive On Green	0.08	0.21	0.21	0.09	0.09	0.09	0.21	0.58	0.58	0.09	0.46	0.46
Sat Flow, veh/h	1795	527	1151	1117	1841	1560	1824	5347	45	1824	4965	369
Grp Volume(v), veh/h	143	0	245	31	61	136	173	768	421	362	773	411
Grp Sat Flow(s),veh/h/ln	1795	0	1678	1117	1841	1560	1824	1743	1907	1824	1743	1849
Q Serve(g_s), s	10.5	0.0	20.4	4.0	4.7	11.7	0.0	18.0	18.0	12.2	23.0	23.0
Cycle Q Clear(g_c), s	10.5	0.0	20.4	7.3	4.7	11.7	0.0	18.0	18.0	12.2	23.0	23.0
Prop In Lane	1.00		0.69	1.00		1.00	1.00		0.02	1.00		0.20
Lane Grp Cap(c), veh/h	271	0	345	126	169	291	577	2010	1100	441	1610	854
V/C Ratio(X)	0.53	0.00	0.71	0.25	0.36	0.47	0.30	0.38	0.38	0.82	0.48	0.48
Avail Cap(c_a), veh/h	378	0	490	156	218	333	577	2010	1100	445	1610	854
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	55.4	66.7	64.0	54.3	27.3	17.2	17.2	14.4	27.9	27.9
Incr Delay (d2), s/veh	0.6	0.0	1.0	0.4	0.5	0.4	0.1	0.6	1.0	10.8	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.5	0.0	13.7	2.1	4.0	8.2	8.0	11.6	12.6	10.0	14.8	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.3	0.0	56.4	67.1	64.4	54.8	27.4	17.8	18.2	25.2	28.9	29.8
LnGrp LOS	D	A	E	E	E	D	C	B	B	C	C	C
Approach Vol, veh/h		388			228			1362			1546	
Approach Delay, s/veh		55.6			59.0			19.1			28.3	
Approach LOS		E			E			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.9	75.0		38.1	19.7	92.2	17.1	21.0				
Change Period (Y+Rc), s	* 5.7	* 5.7		7.2	5.5	* 5.7	4.5	7.2				
Max Green Setting (Gmax), s	* 19	* 69		43.8	14.5	* 73	21.5	17.8				
Max Q Clear Time (g_c+I1), s	2.0	25.0		22.4	14.2	20.0	12.5	13.7				
Green Ext Time (p_c), s	0.1	19.2		0.8	0.0	20.6	0.1	0.1				

Intersection Summary			
HCM 6th Ctrl Delay		29.8	
HCM 6th LOS		C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	100	40	30	115	1365	30	1340	110
Future Volume (vph)	100	40	30	115	1365	30	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				110		1744	
Travel Time (s)	7.7				1.9		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	102	41	0	148	1393	31	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.3

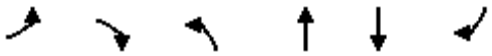
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	100	40	30	115	1365	30	1340	110
Future Vol, veh/h	100	40	30	115	1365	30	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	102	41	31	117	1393	31	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	2338	740	1080	1479	0	1017	-	0
Stage 1	1485	-	-	-	-	-	-	-
Stage 2	853	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*234	*604	*793	*793	-	*1023	-	-
Mov Cap-2 Maneuver	*411	-	-	-	-	-	-	-
Stage 1	*504	-	-	-	-	-	-	-
Stage 2	*601	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	1	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 793	-	411	604	* 1023	-	-
HCM Lane V/C Ratio	0.187	-	0.248	0.068	0.03	-	-
HCM Control Delay (s)	10.6	-	16.6	11.4	8.6	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	1	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	75	0	1510	1410	0
Future Volume (vph)	0	75	0	1510	1410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	0			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			30	30	
Link Distance (ft)	338			792	110	
Travel Time (s)	7.7			18.0	2.5	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	77	0	1541	1439	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	75	0	1510	1410	0
Future Vol, veh/h	0	75	0	1510	1410	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	77	0	1541	1439	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	720	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*578	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %		1		-	-	
Mov Cap-1 Maneuver	-	*578	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
Capacity (veh/h)	-	578	-
HCM Lane V/C Ratio	-	0.132	-
HCM Control Delay (s)	-	12.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX I

Warrant Analysis for Intersection Traffic Control

Wisconsin Department of Transportation Traffic Signal Warrant Summary Worksheet

100%

The Worksheet(s) attached are provided as an attachment to the Engineering Investigation Study for:

Intersection: STH 100 & Chick-Fil-A Driveway
County: Milwaukee
City: Wauwatosa, WI

Major Street: STH 100
Critical Approach Speed: 40 mph
Lanes: 2 or more lanes

Minor Street: Chick-Fil-A Driveway
Critical Approach Speed: 25 mph
Lanes: 1 lane

% Right Turns Included
From North (SB) 100%
From East (WB) 100%
From South (NB) 100%
From West (EB) 0%

In built-up area of isolated community of < 10,000 population? No
Total number of approaches at intersection? 3
If it is a "T" intersection, inflate minor threshold to 150%? Yes
Manually set volume level?

Analysis based on PROJECTED volume data.

Forecast Year	Within 5 Years of Construction?	Time (HH:MM)			
		From	AM / PM	To	AM / PM
Total Traffic		6:00	AM	7:00	PM

Warrant Evaluation Summary	Warrant Met:
Warrant 1: Eight - Hour Vehicular Volume	**No**
Condition A: Minimum Vehicular Volume	No
Condition B: Interruption of Continuous Traffic	No
Condition C: Combination: 80% of A and B	No
Warrant 2: Four-Hour Volume	**No**
Warrant 3: Peak Hour Volume	**No**
Warrant 4: Pedestrian Volume	**N/A**
Criterion A: Four-Hour	
Criterion B: Peak-Hour	
Warrant 5: School Crossing	**N/A**
Warrant 6: Coordinated Signal System	**N/A**
Warrant 7: Crash Experience	**N/A**
Warrant 8: Roadway Network	**N/A**
Warrant 9: Intersection Near a Grade Crossing	**N/A**

Warrant Analysis Conducted By:
Name: Tammi Czewski
Agency: TADI
Date: 10/18/2022

Warrant 1: Eight - Hour Vehicular Volume 100%

Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition A : Min. Veh. Volume		
Volume Level	100%	80%
Major Rd. Req	600	480
Minor Rd. Req	225	180
Number of Hours	0	0

Satisfied? No

Condition B: Interruption of Continuous Traffic		
Volume Level	100%	80%
Major Rd. Req	900	720
Minor Rd. Req	112.5	90
Number of Hours	0	0

Satisfied? No

Condition C: Combination of A & B at 80%

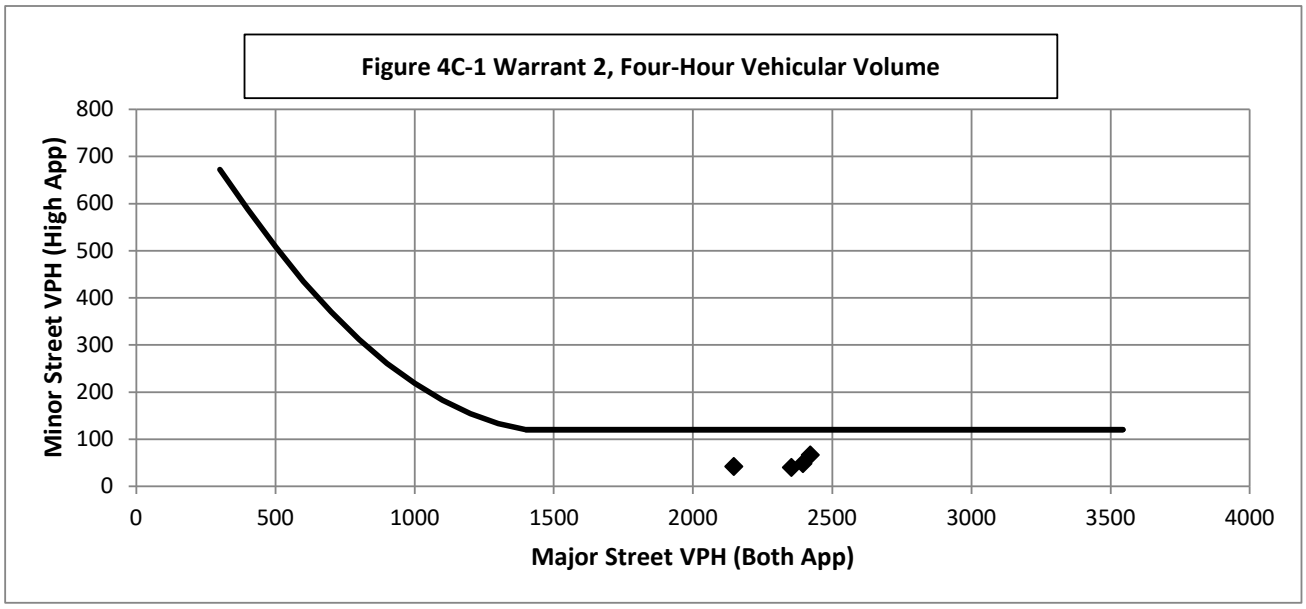
Satisfied? No

6:00 AM	Enter Start Time (Military Time) (HH:MM)				
Time Period	**From**	**To**	**Major Road: Both App. (VPH)**	**Minor Road: High App. (VPH)**	**Total**
1	6:00	7:00	1003	10	1013
2	7:00	8:00	2488	18	2506
3	8:00	9:00	2102	19	2121
4	9:00	10:00	1591	18	1609
5	10:00	11:00	1767	21	1788
6	11:00	12:00	2147	42	2189
7	12:00	13:00	2422	66	2488
8	13:00	14:00	2395	48	2443
9	14:00	15:00	2529	35	2564
10	15:00	16:00	2955	31	2986
11	16:00	17:00	3444	31	3475
12	17:00	18:00	3289	37	3326
13	18:00	19:00	2354	40	2394
14	19:00	20:00	0	0	0
15	20:00	21:00	0	0	0
16	21:00	22:00	0	0	0

Warrant 2: Four-Hour Volume 100%

Warrant Evaluated? Yes
Warrant Satisfied? No
Manually Set To:

Hour Start	12:00	13:00	11:00	18:00
Major Road Vol.	2422	2395	2147	2354
Minor Road Vol.	66	48	42	40



Warrant 3: Peak Hour Volume 100%

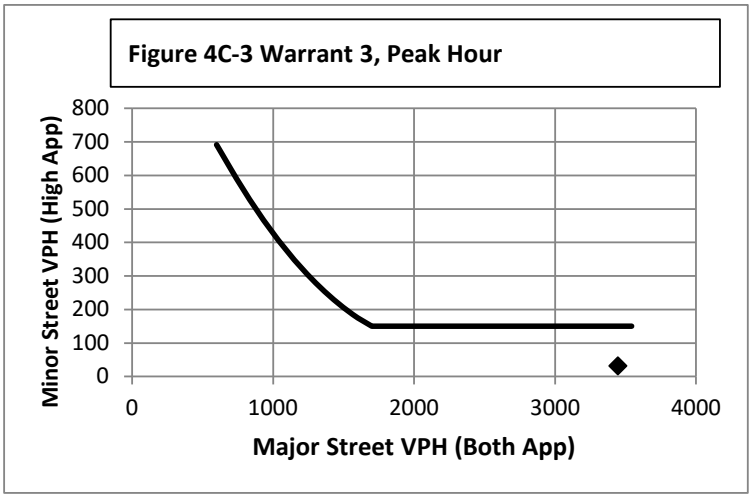
Warrant Evaluated? Yes **Warrant Satisfied? No** **Manually Set To:**

Condition justifying use of warrant:

Criteria		Met?
Delay on Minor Approach	4	
Volume on Minor Approach	100	No
Total Entering Volume (veh/h)	650	

Manually Set Peak Hour?

Peak Hour	Major Road Vol. (Both App.)	Minor Road Vol. (High App.)
16:00	3444	31



Crite
1
2
3

Crite
1
2
3

Warrant 4: Pedestrian Volume 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

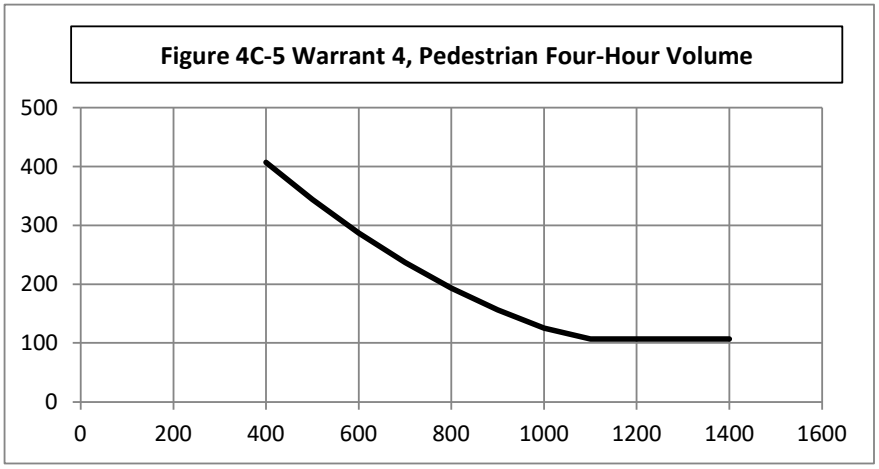
Criterion A: Four Hour

Hour (Start)	Pedestrian Volume	Major Road Vol.
		0
		0
		0
		0

Manually Set Major Rd Vol?

Avg. walk speed less than 3.5 ft/s?

Criterion A Satisfied?



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1
2
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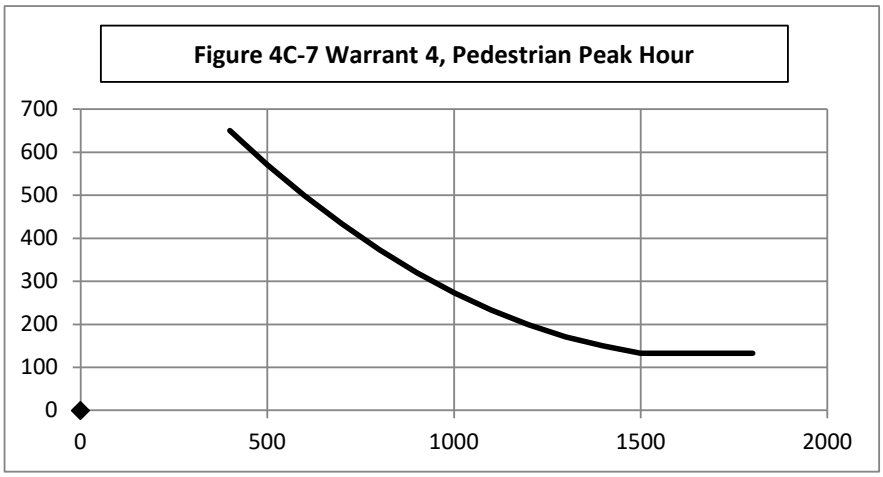
Criterion B: Peak Hour

Peak Hour	Pedestrian Vol.	Major Road Vol.
0:00	0	0

Criterion B Satisfied?



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1
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1
2
3

Warrant 5: School Crossing 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

eria	Fulfilled?
There are a MINIMUM of 20 school children during the highest crossing hour.	
There are fewer adequate gaps in the major road traffic stream during the period when the school children are using the crossing than the number of minutes in the same period.	
The nearest traffic signal along the major road is located more than 300 ft away. Or, the nearest traffic signal is within 300 ft but the proposed traffic signal will not restrict the progressive movement of traffic.	

Warrant 6: Coordinated Signal System 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

eria	Fulfilled?
Signal spacing > 1000 ft	
On a one-way road or a road that has traffic predominantly in one direction, the adjacent signals are so far apart that they do not provide the necessary degree of vehicle platooning.	
On a two-way road, adjacent signals do not provide the necessary degree of platooning and the proposed and the adjacent signals will collectively provide a progressive operation.	

Warrant 7: Crash Experience 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

eria		Met?	Fulfilled?
Adequate trial of other remedial measures has failed to reduce crash frequency.			
Measures Tried:			
Five or more reported crashes, of types susceptible to correction by signal, have occurred within a 12 month period.	# of crashes per 12 months		
Warrant 1, Condition A (80%)		No	Yes
Warrant 1, Condition B (80%)		No	
Warrant 4, Criterion A (80%)		No	
Warrant 4, Criterion B (80%)		Yes	

Warrant 8: Roadway Network 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

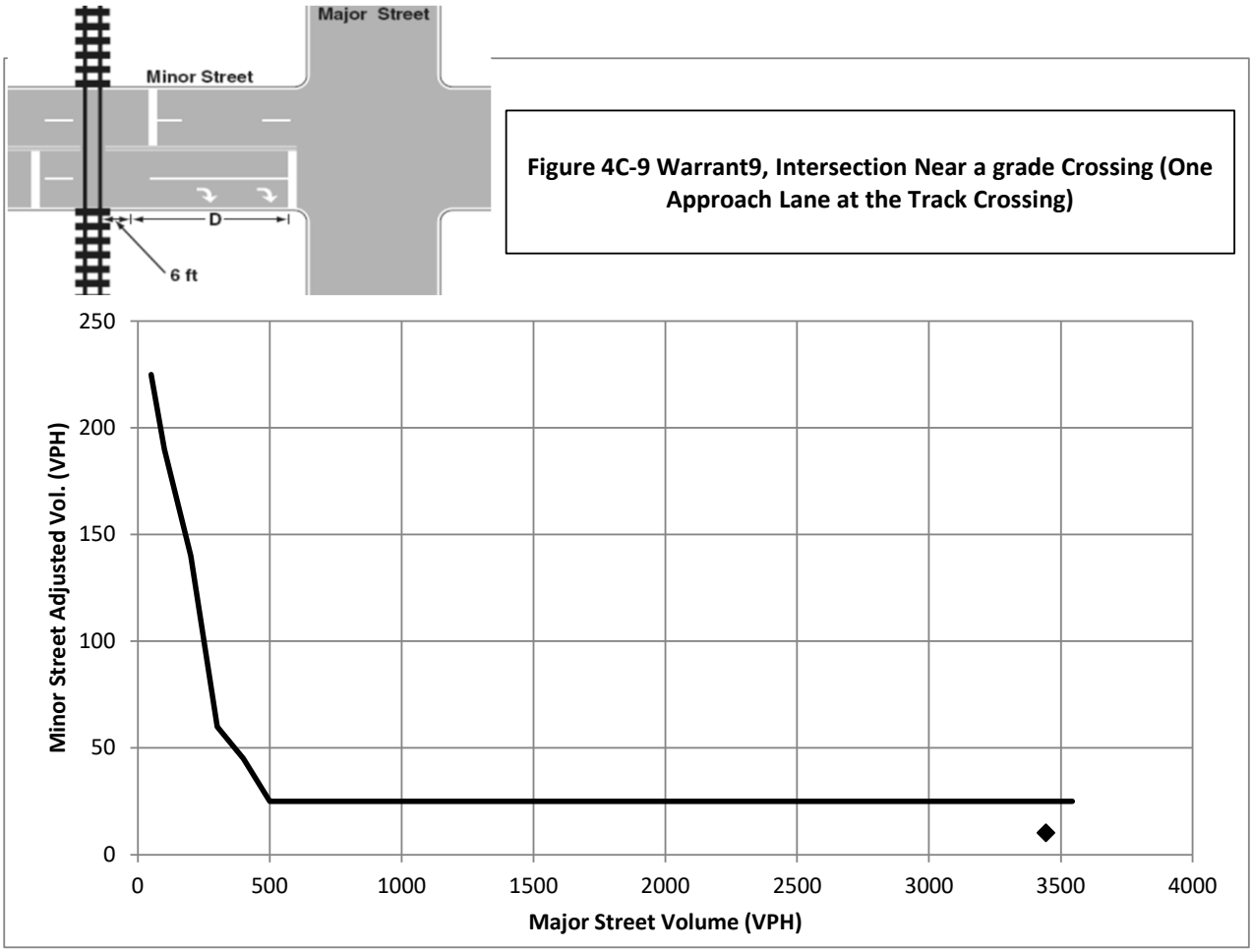
eria					Met?	Fulfilled?
Total entering volume of at least 1,000 veh/h during typical weekday peak hour				3475	Yes	No
Five-year projected volumes that satisfy one or more of Warrants 1, 2, or 3.					No	
Total entering vol. of at least 1,000 veh/h for each of any 5 hrs of non-normal business day (Sat. or Sun.)						
	Hour					
	Volume					

acteristics of Major Routes - Select yes if all intersecting routes have characteristic	Fulfilled?
Part of the road or highway system that serves as the principal roadway network for through traffic flow	
Rural or suburban highway outside of, entering, or traversing a city	
Appears as a major route on an official plan	

Warrant 9: Intersection Near a Grade Crossing 100%

Warrant Evaluated? **Warrant Satisfied? N/A** **Manually Set To:**

Adjustment Factors			Manually Set Peak Hour?				
Rail Traffic per Day	% High Occupancy Buses on Minor Road	% Tractor-Trailer Trucks on Minor Road	D	Peak Hour	Major Road Vol.	Minor Road Vol.	Adjusted Minor Vol.
1	0	0% to 2.5%	660	16:00	3444	31	10.385



Conclusions/Comments:

Separate LT & RT lanes are proposed for the EB Chick-Fil-A driveway approach to STH 100. Therefore, 0% of the right-turn volumes are included in the warrant analysis. With 0% right-turn volumes, signal warrants are not met with buildout of the Chick-Fil-A.

Updated: 12/6/2017

Hourly Volume Data

One Hour Time Period Start Time		From North (SB)					From East (WB)					From South (NB)					From West (EB)					Total Vehicle Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	6:00	13	580	0	3	596	0	0	0	0	0	0	391	14	2	407	12	0	10	0	22	1025
	7:00	19	1469	0	2	1490	0	0	0	0	0	0	954	21	23	998	20	0	18	0	38	2526
	8:00	19	1076	0	3	1098	0	0	0	0	0	0	976	21	7	1004	21	0	19	0	40	2142
	9:00	19	834	0	12	865	0	0	0	0	0	0	688	21	17	726	21	0	18	0	39	1630
MD	10:00	22	938	0	10	970	0	0	0	0	0	0	759	25	13	797	23	0	21	0	44	1811
	11:00	50	985	0	25	1060	0	0	0	0	0	0	1012	57	18	1087	48	0	42	0	90	2237
	12:00	66	1112	0	29	1207	0	0	0	0	0	0	1116	75	24	1215	75	0	66	0	141	2563
	13:00	43	1130	0	21	1194	0	0	0	0	0	0	1139	49	13	1201	54	0	48	0	102	2497
PM	14:00	32	1194	0	30	1256	0	0	0	0	0	0	1224	37	12	1273	40	0	35	0	75	2604
	15:00	31	1447	0	31	1509	0	0	0	0	0	0	1402	36	8	1446	36	0	31	0	67	3022
	16:00	32	1578	0	33	1643	0	0	0	0	0	0	1760	37	4	1801	35	0	31	0	66	3510
	17:00	38	1542	0	21	1601	0	0	0	0	0	0	1637	43	8	1688	42	0	37	0	79	3368
	18:00	40	902	0	27	969	0	0	0	0	0	0	1329	46	10	1385	46	0	40	0	86	2440
	19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20:00																					0
	21:00																					0
Totals		424	14787	0	247	15458	0	0	0	0	0	0	14387	482	159	15028	473	0	416	0	889	31375

Note: Copy volume data and paste into cells using paste special -> values

Note: U-Turns are counted as Left Turns in the Volume Totals

Please Select the Major Road: **N/S**

Major Road Left Turn as Minor Approach? **No**

% Right Turns Included (Default 0%)

From North (SB)	**100%**
From East (WB)	**100%**
From South (NB)	**100%**
From West (EB)	**0%**

Major Road Volume Totals: North/South				
Right	Thru	Left	T+LT	Total
13	971	19	990	1003
19	2423	46	2469	2488
19	2052	31	2083	2102
19	1522	50	1572	1591
22	1697	48	1745	1767
50	1997	100	2097	2147
66	2228	128	2356	2422
43	2269	83	2352	2395
32	2418	79	2497	2529
31	2849	75	2924	2955
32	3338	74	3412	3444
38	3179	72	3251	3289
40	2231	83	2314	2354
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
424	29174	888	30062	30486

Minor Road Highest Volume: East/West				
Right	Thru	Left	T+LT	Total
0	0	10	10	10
0	0	18	18	18
0	0	19	19	19
0	0	18	18	18
0	0	21	21	21
0	0	42	42	42
0	0	66	66	66
0	0	48	48	48
0	0	35	35	35
0	0	31	31	31
0	0	31	31	31
0	0	37	37	37
0	0	40	40	40
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	416	416	416

TRAFFIC SIGNAL WARRANT VOLUME CALCULATIONS: **STH 100 & CFA Driveway**

By: TSC
Date: 10/18/2022

Year 2022 Existing Traffic

	↓ STH 100				← CFA Driveway				↑ STH 100				→ CFA Driveway				Intersection
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Totals
6-7am	0	585	0	3	0	0	0	0	0	396	0	2	0	0	0	0	986
7-8am	0	1476	0	2	0	0	0	0	0	961	0	23	0	0	0	0	2462
8-9am	0	1083	0	3	0	0	0	0	0	983	0	7	0	0	0	0	2076
9-10am	0	841	0	12	0	0	0	0	0	695	0	17	0	0	0	0	1565
10-11am	0	946	0	10	0	0	0	0	0	767	0	13	0	0	0	0	1736
11am-12pm	0	1004	0	25	0	0	0	0	0	1031	0	18	0	0	0	0	2078
12-1pm	0	1137	0	29	0	0	0	0	0	1141	0	24	0	0	0	0	2331
1-2pm	0	1146	0	21	0	0	0	0	0	1155	0	13	0	0	0	0	2335
2-3pm	0	1206	0	30	0	0	0	0	0	1236	0	12	0	0	0	0	2484
3-4pm	0	1459	0	31	0	0	0	0	0	1414	0	8	0	0	0	0	2912
4-5pm	0	1590	0	33	0	0	0	0	0	1772	0	4	0	0	0	0	3399
5-6pm	0	1556	0	21	0	0	0	0	0	1651	0	8	0	0	0	0	3236
6-7pm	0	917	0	27	0	0	0	0	0	1344	0	10	0	0	0	0	2298
7-8pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes
NB & SB through volumes are from the 9/2019 turning movement count collected at STH 100 & Center Street, minus NB & SB U-turns.
NB & SB U-turn volumes are from the 9/2022 U-turn turning movement count collected at STH 100 & the median opening across from the proposed Chick-Fil-A site driveway.

Year 2023 Background Traffic

	↓ STH 100				← CFA Driveway				↑ STH 100				→ CFA Driveway				Intersection
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Totals
6-7am	0	585	0	3	0	0	0	0	0	396	0	2	0	0	0	0	986
7-8am	0	1476	0	2	0	0	0	0	0	961	0	23	0	0	0	0	2462
8-9am	0	1083	0	3	0	0	0	0	0	983	0	7	0	0	0	0	2076
9-10am	0	841	0	12	0	0	0	0	0	695	0	17	0	0	0	0	1565
10-11am	0	946	0	10	0	0	0	0	0	767	0	13	0	0	0	0	1736
11am-12pm	0	1004	0	25	0	0	0	0	0	1031	0	18	0	0	0	0	2078
12-1pm	0	1137	0	29	0	0	0	0	0	1141	0	24	0	0	0	0	2331
1-2pm	0	1146	0	21	0	0	0	0	0	1155	0	13	0	0	0	0	2335
2-3pm	0	1206	0	30	0	0	0	0	0	1236	0	12	0	0	0	0	2484
3-4pm	0	1459	0	31	0	0	0	0	0	1414	0	8	0	0	0	0	2912
4-5pm	0	1590	0	33	0	0	0	0	0	1772	0	4	0	0	0	0	3399
5-6pm	0	1556	0	21	0	0	0	0	0	1651	0	8	0	0	0	0	3236
6-7pm	0	917	0	27	0	0	0	0	0	1344	0	10	0	0	0	0	2298
7-8pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Growth Rates	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	
PM Growth Rates	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	

Notes

Chick-Fil-A New Trips - Scenario B

	↓ STH 100				← CFA Driveway				↑ STH 100				→ CFA Driveway				Intersection
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Totals
6-7am	8	0	0	0	0	0	0	0	0	0	9	0	8	0	6	0	31
7-8am	12	0	0	0	0	0	0	0	0	0	14	0	13	0	11	0	50
8-9am	12	0	0	0	0	0	0	0	0	0	14	0	14	0	12	0	52
9-10am	12	0	0	0	0	0	0	0	0	0	14	0	14	0	11	0	51
10-11am	14	0	0	0	0	0	0	0	0	0	17	0	15	0	13	0	59
11am-12pm	31	0	0	0	0	0	0	0	0	0	38	0	32	0	26	0	127
12-1pm	41	0	0	0	0	0	0	0	0	0	50	0	50	0	41	0	182
1-2pm	27	0	0	0	0	0	0	0	0	0	33	0	36	0	30	0	126
2-3pm	20	0	0	0	0	0	0	0	0	0	25	0	27	0	22	0	94
3-4pm	19	0	0	0	0	0	0	0	0	0	24	0	24	0	19	0	86
4-5pm	20	0	0	0	0	0	0	0	0	0	25	0	23	0	19	0	87
5-6pm	24	0	0	0	0	0	0	0	0	0	29	0	28	0	23	0	104
6-7pm	25	0	0	0	0	0	0	0	0	0	31	0	31	0	25	0	112
7-8pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
IN %	45%										55%						IN %
OUT %													55%		45%		OUT %

IN	OUT
17	14
26	24
26	26
26	25
30	28
69	58
90	91
60	66
45	49
43	43
45	42
53	50
56	56
0	0

AADT IN	AADT OUT	
760	760	
0%	0%	<- % Reduction, Sensitivity Test
760	760	
% AADT IN	% AADT OUT	Notes
2.3%	1.9%	ITE #934 Hourly Distributions
3.4%	3.1%	
3.5%	3.4%	
3.4%	3.3%	
4.0%	3.7%	
9.1%	7.7%	
11.9%	12.0%	
7.9%	8.7%	
5.9%	6.5%	
5.7%	5.7%	
5.9%	5.6%	
6.9%	6.5%	
7.4%	7.4%	

By: TSC
Date: 10/18/2022

Chick-Fil-A Pass-by Trips

Start Time	STH 100 ↓ Right	Thru	Left	U-Turn	CFA Driveway ← Right	Thru	Left	U-Turn	STH 100 ↑ Right	Thru	Left	U-Turn	CFA Driveway → Right	Thru	Left	U-Turn	Intersection Totals	IN	OUT	% AADT IN	% AADT OUT	Notes
6-7am	5	-5	0	0	0	0	0	0	0	-5	5	0	4	0	4	0	8	9	8	2.3%	1.9%	ITE #934 Hourly Distributions
7-8am	7	-7	0	0	0	0	0	0	0	-7	7	0	7	0	7	0	14	14	13	3.4%	3.1%	
8-9am	7	-7	0	0	0	0	0	0	0	-7	7	0	7	0	7	0	14	14	14	3.5%	3.4%	
9-10am	7	-7	0	0	0	0	0	0	0	-7	7	0	7	0	7	0	14	14	13	3.4%	3.3%	
10-11am	8	-8	0	0	0	0	0	0	0	-8	8	0	8	0	8	0	16	16	15	4.0%	3.7%	
11am-12pm	19	-19	0	0	0	0	0	0	0	-19	19	0	16	0	16	0	32	37	31	9.1%	7.7%	
12-1pm	25	-25	0	0	0	0	0	0	0	-25	25	0	25	0	25	0	50	49	49	11.9%	12.0%	
1-2pm	16	-16	0	0	0	0	0	0	0	-16	16	0	18	0	18	0	36	32	36	7.9%	8.7%	
2-3pm	12	-12	0	0	0	0	0	0	0	-12	12	0	13	0	13	0	26	24	26	5.9%	6.5%	
3-4pm	12	-12	0	0	0	0	0	0	0	-12	12	0	12	0	12	0	24	23	23	5.7%	5.7%	
4-5pm	12	-12	0	0	0	0	0	0	0	-12	12	0	12	0	12	0	24	24	23	5.9%	5.6%	
5-6pm	14	-14	0	0	0	0	0	0	0	-14	14	0	14	0	14	0	28	28	27	6.9%	6.5%	
6-7pm	15	-15	0	0	0	0	0	0	0	-15	15	0	15	0	15	0	30	30	30	7.4%	7.4%	
7-8pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
IN %	50%	-50%								-50%	50%						IN %					
OUT %													50%		50%		OUT %					

AADT IN	AADT OUT	
410	410	
0%	0%	<- % Reduction, Sensitivity Test
410	410	

Start Time	STH 100 ↓ Right	Thru	Left	U-Turn	CFA Driveway ← Right	Thru	Left	U-Turn	STH 100 ↑ Right	Thru	Left	U-Turn	CFA Driveway → Right	Thru	Left	U-Turn	Intersection Totals	IN	OUT	% AADT IN	% AADT OUT	Notes
6-7am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7-8am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8-9am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9-10am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
10-11am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
11am-12pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
12-1pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1-2pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2-3pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3-4pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4-5pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5-6pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6-7pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7-8pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
IN %																	IN %					
OUT %																	OUT %					

AADT IN	AADT OUT	
0	0	
0%	0%	<- % Reduction, Sensitivity Test
0	0	

Start Time	STH 100 ↓ Right	Thru	Left	U-Turn	CFA Driveway ← Right	Thru	Left	U-Turn	STH 100 ↑ Right	Thru	Left	U-Turn	CFA Driveway → Right	Thru	Left	U-Turn	Intersection Totals	IN	OUT	% AADT IN	% AADT OUT	Notes
6-7am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7-8am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8-9am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
9-10am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
10-11am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
11am-12pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
12-1pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
1-2pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2-3pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3-4pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4-5pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5-6pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
6-7pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7-8pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
IN %																	IN %					
OUT %																	OUT %					

AADT IN	AADT OUT	
0	0	
0%	0%	<- % Reduction, Sensitivity Test
0	0	

TECHNICAL MEMORANDUM

Date: April 3, 2023

To: City of Wauwatosa

From: Tammi Czewski, P.E., PTOE
Traffic Analysis & Design, Inc.

Subject: **Chick-fil-A Wauwatosa, Wisconsin**
Median Alternatives Analysis & Chick-fil-A Queue Study

INTRODUCTION

This technical memorandum was prepared as an addendum to the WisDOT TIA to address City comments and requests for additional data collection and analyses for the proposed Chick-fil-A restaurant on STH 100 in Wauwatosa, Wisconsin. The traffic counts, trip generation, assignment, and other data from the October 28, 2022, *Chick fil-A Development WisDOT Abbreviated Traffic Impact Analysis* serves as a basis for all analysis in this report. Specifically, this memo addresses the following additional items:

- Revised Year 2023 Background and Build Analysis (with modifications recommended in the TIA) to reflect the southbound lead and lag protected left-turn phasing at the STH 100/Center Street intersection.
- Alternatives analysis of different median configurations at the median across from the proposed Chick-fil-A driveway.
- Evaluation of cross-access traffic through the Chick-fil-A site from the adjacent Dollar Tree store and Red Lobster restaurant.
- Documentation of drive-through queues and drive-through processing times from area busy Chick-fil-A restaurants.
- Estimation of drive-through queues and STH 100/driveway intersection queues at the Wauwatosa Chick-fil-A site.
- Identification of typical "opening period" of Chick-fil-A sites before traffic normalizes as well as on -site parking needs and allocations.

REVISED YEAR 2023 BACKGROUND & BUILD ANALYSES

The analysis for the Year 2023 Background & Build Traffic (with modifications) was revised to reflect the southbound lead and lag protected left-turn phasing at the STH 100/Center Street intersection. This intersection was modeled with southbound protected/permitted left-turn phasing in the Chick-fil-A TIA. The traffic analysis was updated in this report to serve as a basis for comparing traffic operations with buildout of the Chick-fil-A on STH 100. The Synchro analysis reports are included in Appendix A, and the analysis results (LOS, delays, and queues) are shown on the following exhibits:

- Exhibit 1: Year 2023 Background Capacity/LOS Analysis
- Exhibit 2: Year 2023 Build (with Modifications) Capacity/LOS Analysis

WisDOT recently implemented protected only southbound left-turn phasing to address crash issues occurring at the intersection. With this change, intersection delays and queueing increase, especially for the southbound left-turn movement. According to discussions with the City of Wauwatosa, WisDOT is investigating geometric changes to the intersection (such as dual southbound left-turn lanes) to mitigate delays and queues. It is noted that the southbound left-turn lane at STH 100/Center Street is approximately 575 feet. For all traffic analyses completed in this study (including the median alternatives), none of the southbound left-turn queues exceed this distance.

DATA COLLECTION

For the cross-access evaluation, TADI collected turning movement counts for the Dollar Tree and Red Lobster driveways north and south of the Chick-fil-A site. Weekday counts were collected from 4:00-6:00 p.m. and Saturday counts were collected from 11:00 a.m. to 1:00 p.m.

Drive-through queues and processing times were collected at the following three area Chick-fil-A restaurants:

- 12625 W. Capitol Drive, Brookfield Chick-fil-A
- 5201 N. Port Washington Road, Glendale Chick-fil-A
- 5351 S. 76th Street, Greendale Chick-fil-A

Drive-through queues at each site were documented every five minutes on weekdays from 4:00-6:00 p.m. and Saturdays from 11:00 a.m. to 1:00 p.m. Queues were documented for each lane between the pick-up window and order kiosks, and between the order kiosks and end of queue.

Drive-through processing times at each site were documented from a sampling of drive-through customers on weekdays from 4:00-6:00 p.m. and Saturdays from 11:00 a.m. to 1:00 p.m. The processing times were recorded from the time a Chick-fil-A customer placed an order to the time the customer received their order and was able to leave the queue (customers occasionally received orders but were unable to exit due to being blocked in the queue line). Note that the Brookfield and Greendale Chick-fil-A sites are older model stores, and therefore have lower queue storage capacity on site than the newer model stores such as the Glendale and the proposed Wauwatosa sites.

All data collected for this study is in Appendix B.

MEDIAN ALTERNATIVES ANALYSIS – NO CROSS-ACCESS

At the request of the City of Wauwatosa, four median alternatives were evaluated with the "Total" traffic volumes developed for the Chick-fil-A TIA. The Total traffic volumes represent existing balanced traffic volumes plus additional traffic from area off-site developments and the proposed Chick-fil-A development.

The four median alternatives are:

- Alternative A – existing configuration at the STH 100 median opening across from the driveway for the proposed Chick-fil-A site. The existing configuration allows for U-turns on STH 100 and full-access turning movements to and from the driveway.
- Alternative B – existing configuration at the STH 100 median opening, but with southbound-to-northbound U-turns restricted. This alternative is required by WisDOT with the buildout of the Chick-fil-A site.
- Alternative C – existing configuration at the STH 100 median opening, but with eastbound left-turn exits from the proposed Chick-fil-A driveway restricted.
- Alternative D – median opening closed, restricting access at the proposed Chick-fil-A driveway to right-in/right-out only movements.

The Year 2023 Total traffic volumes from the October 2022 Chick-fil-A TIA represent traffic for Alternative A evaluated in this study. These volumes were adjusted for the turn restrictions noted for median Alternatives B, C, and D. For median Alternative B, the southbound-to-northbound U-turn volumes at the Chick-fil-A median opening were reassigned to the southbound-to-northbound U-turn movement at the STH 100/Center Street intersection. For median Alternative C, the eastbound left-turn volumes from the Chick-fil-A driveway were reassigned to the eastbound right-turn volumes and then to the southbound-to-northbound U-turn movement at the STH 100/Center Street intersection. For median Alternative D, in addition to the Alternative B and C rerouting, the northbound left-turn volumes and northbound U-turn volumes were assigned to the northbound U-turn located between the Chick-fil-A driveway and Burleigh Street.

Peak hour driveway volumes from the Dollar Tree and Red Lobster sites were added to the volume exhibits. The Year 2023 Total traffic peak hour volume exhibits for each median alternative are:

- Exhibit 3A: Year 2023 Total Traffic Volumes – Alternative A
- Exhibit 3B: Year 2023 Total Traffic Volumes – Alternative B
- Exhibit 3C: Year 2023 Total Traffic Volumes – Alternative C
- Exhibit 3D: Year 2023 Total Traffic Volumes – Alternative D

The Synchro analysis reports for the median alternatives are included in Appendix C, and the analysis results (LOS, delays, and queues) are shown on the following exhibits:

- Exhibit 4A: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative A
- Exhibit 4B: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative B
- Exhibit 4C: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative C
- Exhibit 4D: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative D

For the WisDOT-required median Alternative B (no southbound-to-northbound U-turn at the Chick-fil-A median), U-turn traffic is shifted south to U-turn at STH 100/Center Street. Even with the additional U-turn traffic at this intersection, traffic models show that the southbound left-turn/U-turn traffic queues do not extend past the left-turn storage area. The models also show that southbound traffic on STH 100 does not extend from Center Street and block the median opening or driveway for the Chick-fil-A site.

MEDIAN ALTERNATIVES ANALYSIS – IMPACTS OF CROSS-ACCESS EASEMENT

With the development of the Chick-fil-A site, WisDOT is requiring that the Chick-fil-A provide cross-access easements to the properties immediately north (Dollar Tree) and south (Red Lobster) of the development site. With the cross-access easements, traffic from these properties will be able to use the Chick-fil-A driveway to make direct left-turn exits or left-turn entrances instead of making right-in/right-out only movements and U-turning at adjacent median openings. Conversely, Chick-fil-A traffic will be able to use the Dollar Tree and Red Lobster driveways to make turning movements easier under certain median Alternatives evaluated in this study. The Dollar Tree, Red Lobster, and Chick-fil-A traffic was rerouted through the cross-access easements based on generalized assumptions of use. These assumptions and the revised Year 2023 Total traffic volumes for each alternative are shown on the following exhibits:

- Exhibit 5A: Year 2023 Total Traffic Volumes – Alternative A with Cross-Access Easement
- Exhibit 5B: Year 2023 Total Traffic Volumes – Alternative B with Cross-Access Easement
- Exhibit 5C: Year 2023 Total Traffic Volumes – Alternative C with Cross-Access Easement
- Exhibit 5D: Year 2023 Total Traffic Volumes – Alternative D with Cross-Access Easement

The Synchro analysis reports for the median alternatives with cross-access easements are included in Appendix D, and the analysis results (LOS, delays, and queues) are shown on the following exhibits:

- Exhibit 6A: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative A with Cross-Access Easement
- Exhibit 6B: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative B with Cross-Access Easement
- Exhibit 6C: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative C with Cross-Access Easement
- Exhibit 6D: Year 2023 Total Traffic Capacity/LOS Analysis – Alternative D with Cross-Access Easement

With the cross-access easements open between the Chick-fil-A site and the Dollar Tree and Red Lobster sites, eastbound traffic queues exiting the Chick-fil-A driveway increase slightly during the peak hours (2-3 additional seconds of delay in the peak hours), and southbound left-turn/U-turn queues at the STH 100/Center Street intersection decrease.

DRIVE-THROUGH QUEUES & PROCESSING TIMES – COMPARISON SITES

Based on the drive-through data collected for this study, the average total drive-through queues (from order pick-up point to end of queue) were 13 vehicles in the weekday PM peak period and 16 vehicles in the Saturday midday peak period. The maximum drive-through queues collected were 32 vehicles in the weekday PM peak period and 33 vehicles in the Saturday midday peak period.

The average processing times between placing an order and leaving with the order was 3:03 (minutes:seconds) in the weekday PM peak period and 3:33 in the Saturday midday peak period . The minimum/maximum processing times were 1:02/6:53 in the weekday PM peak period and 1:27/7:53 in the Saturday midday peak period.

DRIVE-THROUGH & DRIVEWAY QUEUES – WAUWATOSA CHICK-FIL-A SITE

Using drive-through queue data collected from the three area Chick-fil-A sites, plus the peak hour queues evaluated for the Chick-fil-A driveway to STH 100, queue diagrams were prepared to show the extent of queuing on the Chick-Fil-A site. The queue diagrams (Exhibit 7) show both the average and maximum drive-through queues as well as the 95th percentile STH 100/Chick-fil-A driveway intersection queues for the weekday PM and Saturday midday peak hours. The queues represent analysis completed for the WisDOT-required median configuration (Alternative B, no southbound-to-northbound U-turn) and the WisDOT-required cross-access easements between the Chick-fil-A, Dollar Tree, and Red Lobster sites. The extent of the drive-through queues shown on the queue diagrams assume vehicle stacking fully in both lanes of the Chick-fil-A drive through.

Based on the drive-through queue data from area Chick-fil-A restaurants and based on 95th percentile queues reported in the HCM, queues are not expected to back up through or impact operations at the STH 100 intersection with the median opening/Chick-fil-A driveway. Plans for the site include stop bars, stop signs, and cross-hatched pavement markings at the internal site intersection to prevent vehicles from blocking traffic. As shown on Exhibit 7, any additional queues that may occur would be positioned outside of these stop bars/stop signs, leaving the internal intersection free of traffic, allowing all incoming traffic to move freely into the site and along the cross-access roadway.

OPENING PERIOD, ON-SITE PARKING NEEDS AND ALLOCATIONS

Chick-fil-A representatives have reported that typical "opening periods" for their restaurants last approximately 30 days. Note that there are three existing Chick-fil-A stores roughly within a five-mile radius from the proposed Chick-fil-A site in Wauwatosa (located at W. Capitol Drive in Brookfield, Moorland Road in Brookfield, and STH 100 in West Allis). Therefore, the expectation is that the Wauwatosa Chick-fil-A will not experience the same opening traffic surge than other new Chick-fil-A stores opening in areas with no nearby Chick-fil-A presence. During the opening period time, the local operator typically uses team members, along with additional support from the grand opening team, to manage traffic flow during this period.

The parking allocation for team members, mobile order/curbside pick-up, large delivery truck orders, and third-party deliveries is shown on the proposed plan in Appendix E.

CONCLUSIONS

The median alternatives analysis shows that the Chick-fil-A driveway operates with acceptable traffic operations under Alternatives A, B, C, and D. With full-access turning movements, the WisDOT-required closure of the southbound-to-northbound median U-turn (Alternative B), and cross-access open between the Dollar Tree and Red Lobster sites, the routing of traffic to the STH 100/Center Street intersection is minimized. With more restrictive median closures (Alternatives C and D), all Dollar Tree and Chick-fil-A traffic traveling north on STH 100 are routed through the U-turn at the STH 100/Center Street intersection. This intersection currently operates with many movements at LOS E and F during the peak hours, and the increase in U-turn traffic negatively impacts the delays and queues during these time periods. Therefore, it is recommended that the WisDOT-required median Alternative B be implemented for this site.

With median Alternative B, traffic entering the site is not impacted by internal traffic queues between exiting vehicles and cross-access traffic. The stop signs, stop bars, and cross-hatched intersection keep the internal intersection clear of traffic to keep inbound traffic flowing freely into the site and along the cross-access roadway.

Year 2023 Background Traffic Peak Hour Operating Conditions

Existing Transportation System

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*2*	*1*	*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	E	E	E	D	F	F		D	C		E
		Delay	71	60	65	73	64	48	90	81		41	34		62
		v/c	0.80	0.73	0.87	0.84	0.91	0.07	0.91	0.86		0.05	0.54		
		Queue	130'	230'	290'	200'	375'	40'	255'	585'		45'	480'		
	SAT	LOS	E	E	E	E	E	C	F	D		E	C		E
		Delay	76	62	63	61	60	28	121	39		73	28		56
		v/c	0.84	0.83	0.97	0.50	0.90	0.05	1.02	0.33		0.58	0.39		
		Queue	160'	245'	305'	145'	370'	30'	240'	100'		55'	340'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	D	D		F	E	E	D	D		F	B		D
		Delay	53	50		84	68	61	35	37		87	16		35
		v/c	0.63	0.48		0.67	0.43	0.56	0.50	0.69		0.66	0.55		
		Queue	230'	220'		100'	95'	165'	120'	585'		240'	225'		
	SAT	LOS	D	E		E	E	E	B	C		E	B		D
		Delay	53	64		70	74	57	16	31		64	13		35
		v/c	0.51	0.74		0.48	0.58	0.50	0.35	0.43		0.83	0.33		
		Queue	175'	310'		65'	110'	160'	90'	320'		260'	265'		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.

Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

U-Turns at #100 & #200 are included in the left-turn volume.

With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Year 2023 Build Traffic Peak Hour Operating Conditions

With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

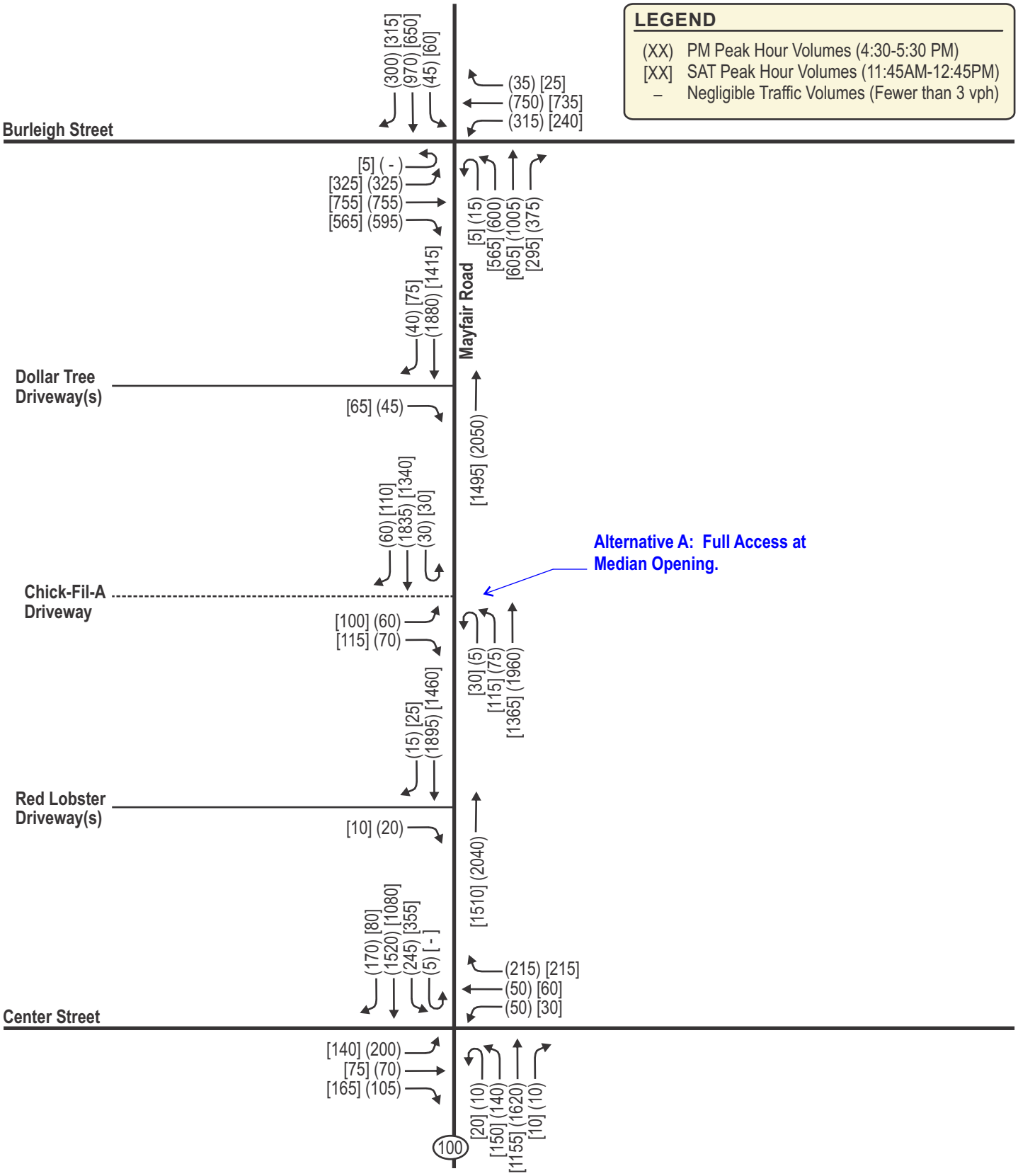
Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	C	E	E		F	E		E	D		E
		Delay	76	67	20	72	78		86	60		55	46		60
		v/c	0.88	0.88	0.65	0.85	0.89		0.93	0.67		0.09	0.69		
		Queue	220'	320'	235'	205'	335'		440'	565'		45'	570'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	65	77		81	39		73	39		55
		v/c	0.89	0.87	0.62	0.60	0.89		0.92	0.34		0.58	0.54		
		Queue	225'	315'	200'	150'	325'		220'	200'		55'	400'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	D	D		F	E	E	D	D		E	B		D
		Delay	54	51		84	68	61	39	42		64	17		36
		v/c	0.65	0.49		0.67	0.43	0.58	0.54	0.80		0.69	0.64		
		Queue	240'	225'		100'	95'	175'	155'	745'		215'	320'		
	SAT	LOS	D	E		E	E	E	C	C		E	B		D
		Delay	53	64		70	74	57	20	34		56	17		35
		v/c	0.51	0.74		0.48	0.58	0.50	0.39	0.53		0.83	0.39		
		Queue	175'	310'		65'	110'	165'	90'	395'		240'	265'		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.

Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.

U-Turns at #100 & #200 are included in the left-turn volume.

With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

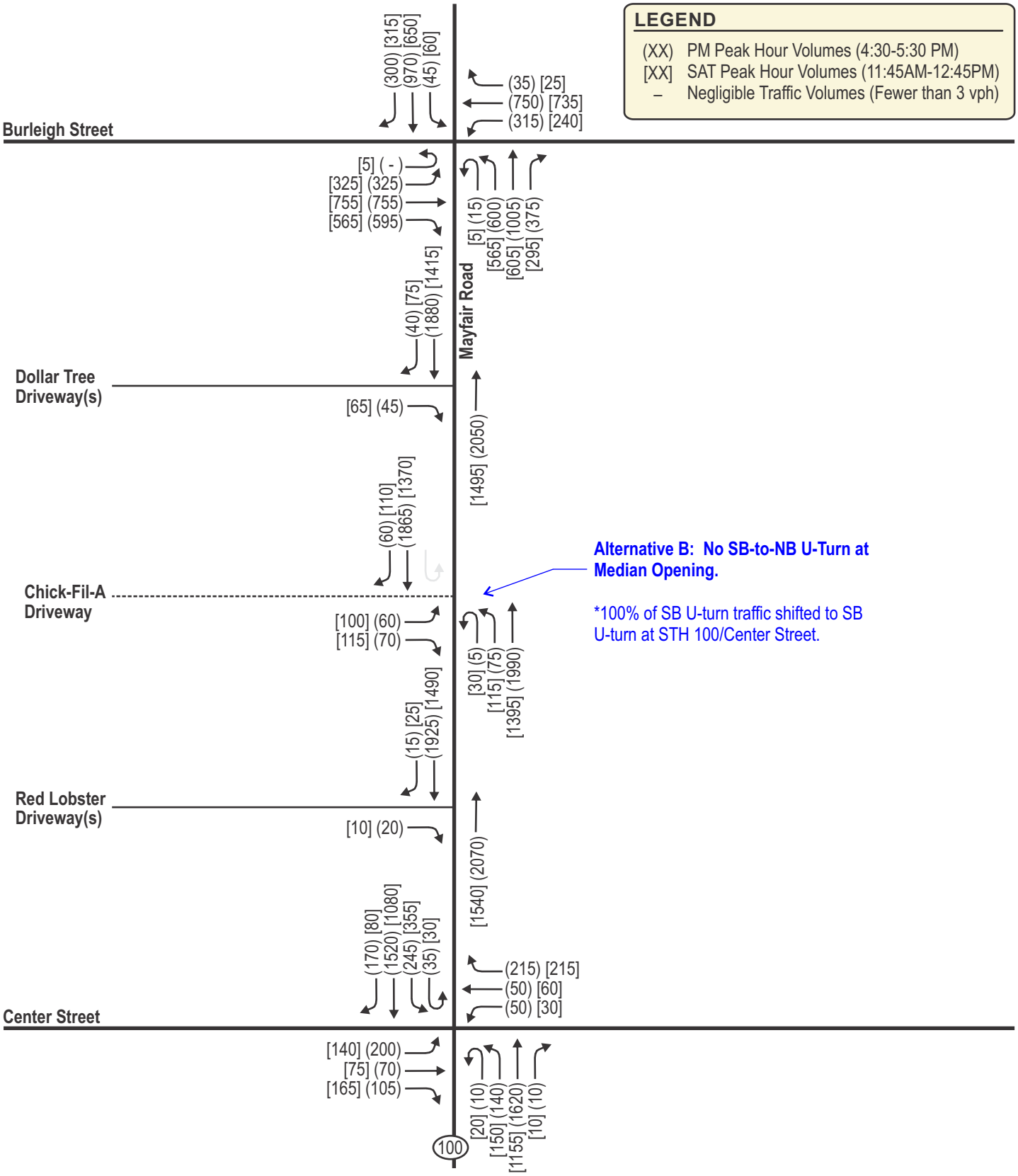


TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

N
NOT TO SCALE

EXHIBIT 3A
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE A: FULL ACCESS AT MEDIAN OPENING
NO CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN

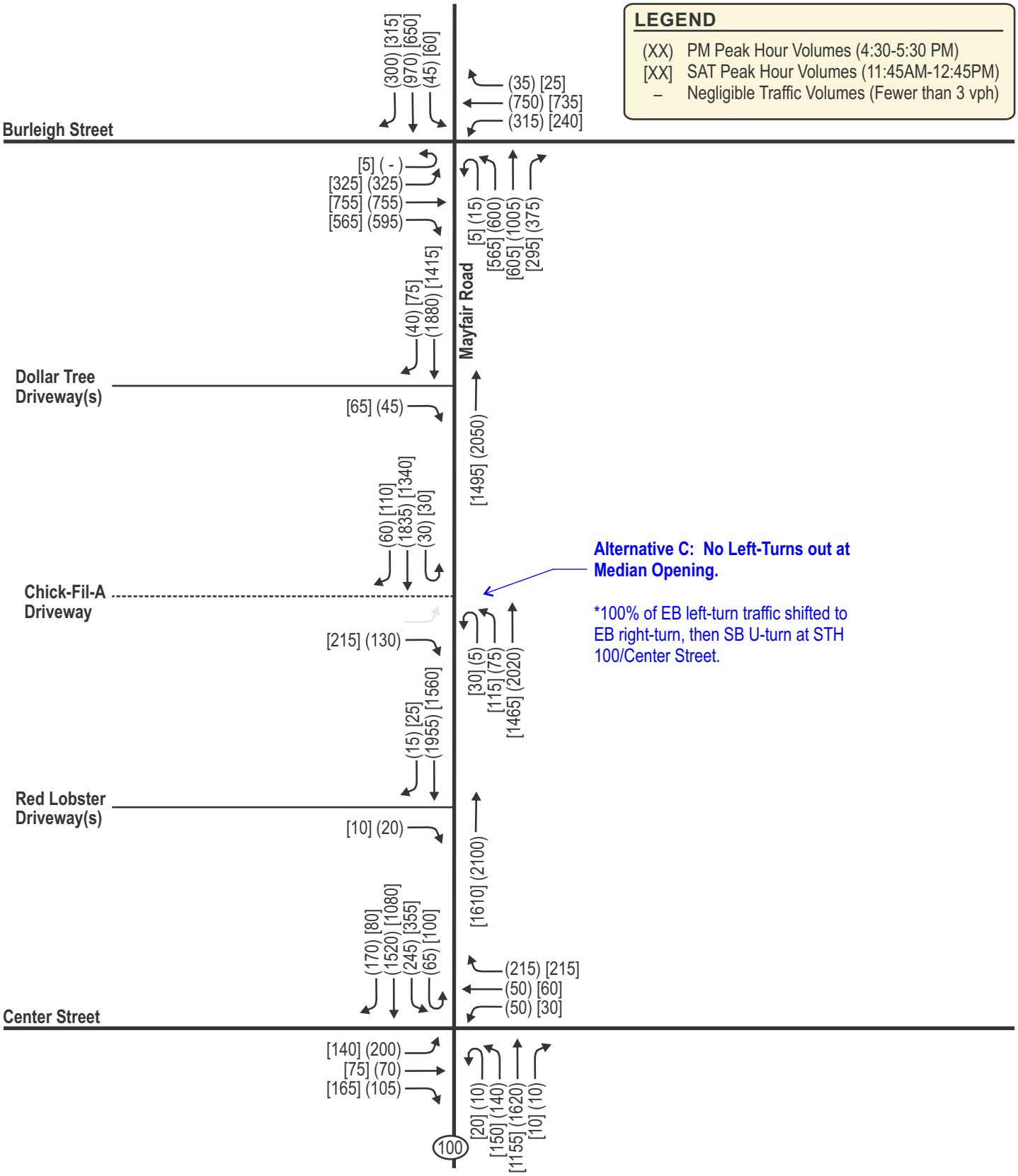


TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

N
NOT TO SCALE

EXHIBIT 3B
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE B: NO SB-TO-NB U-TURN AT MEDIAN OPENING
NO CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN

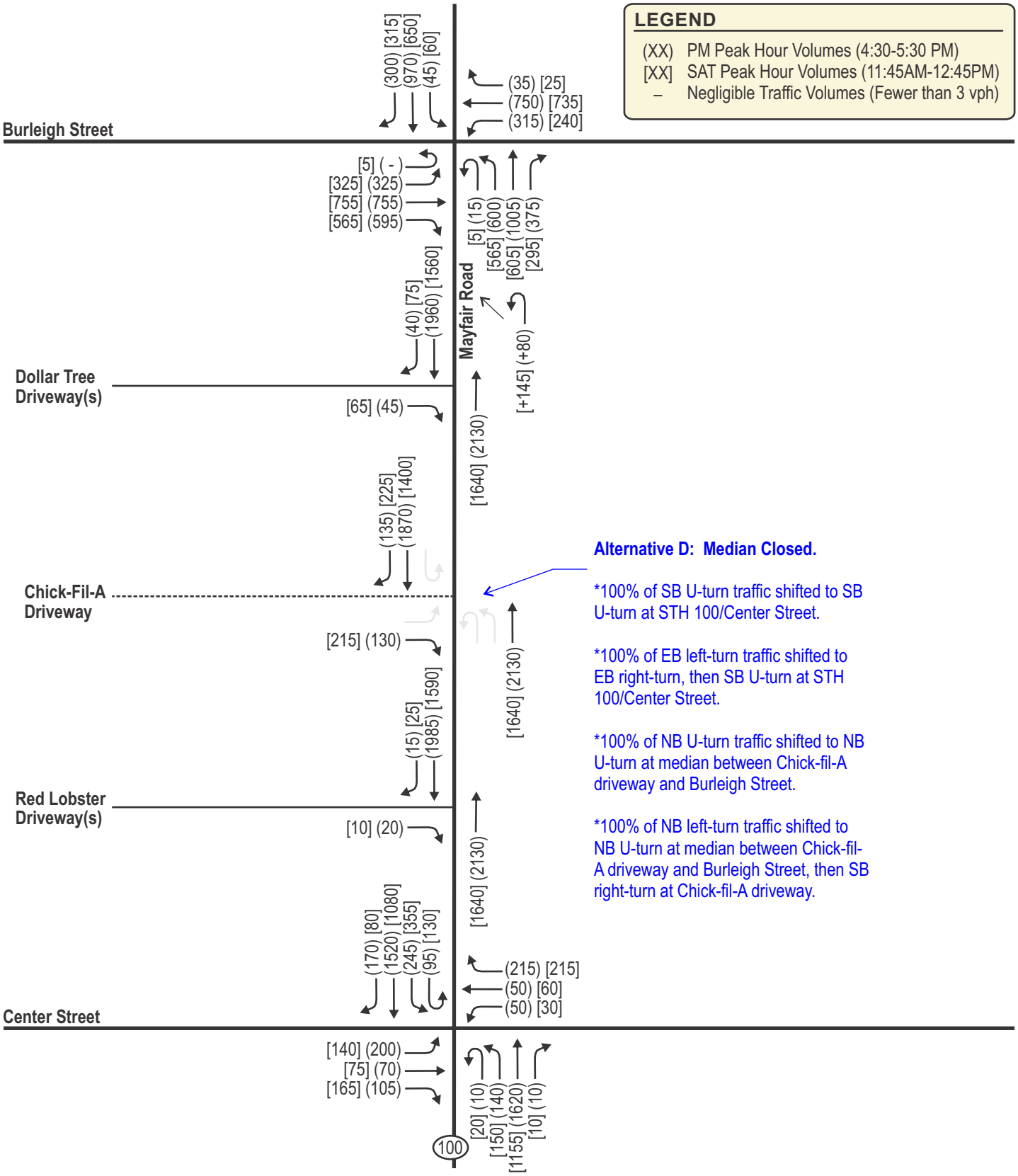


TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

N
NOT TO SCALE

EXHIBIT 3C
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE C: NO LEFT-TURNS OUT AT MEDIAN OPENING
NO CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN



TADI
TRAFFIC ANALYSIS & DESIGN, INC.

#2923 - 04/03/23

N

NOT TO SCALE

EXHIBIT 3D
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE D: MEDIAN CLOSED (RIGHT-IN/RIGHT-OUT ONLY)
NO CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN

Access Alternative A: Full-Access Median on STH 100
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		455'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		275'	220'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	D	D		F	E	E	D	D		E	B		D
		Delay	53	50		84	68	61	40	43		64	18		37
		v/c	0.67	0.48		0.67	0.43	0.58	0.54	0.82		0.69	0.66		
		Queue	250'	225'		100'	95'	175'	170'	780'		215'	340'		
	SAT	LOS	D	E		E	E	E	C	D		E	B		D
		Delay	53	63		70	74	56	28	35		58	18		36
		v/c	0.53	0.73		0.48	0.58	0.51	0.43	0.57		0.84	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		245'	310'		
		Lanes->	*1*	-	*1*	-			*1*	*3*		*1*	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative A	PM	LOS	C	-	B	-			B	*		A	*		A
		Delay	18	-	13	-			11	*		9	*		0.9
		v/c	0.19	-	0.15	-			0.14	*		0.01	*		
		Queue	20'	-	15'	-			15'	*		5'	*		
	SAT	LOS	C	-	B	-			B	*		A	*		A
		Delay	16	-	12	-			10	*		8	*		1
		v/c	0.29	-	0.19	-			0.19	*		0.03	*		
		Queue	25'	-	20'	-			20'	*		5'	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Access Alternative B: No SB-to-NB U-Turn at Median
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		455'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		270'	220'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	B		D
		Delay	55	51		84	68	59	40	46		67	19		38
		v/c	0.67	0.49		0.67	0.43	0.56	0.53	0.85		0.73	0.67		
		Queue	250'	225'		100'	95'	175'	175'	805'		240'	340'		
	SAT	LOS	D	E		E	E	D	C	D		D	B		D
		Delay	53	63		70	74	53	31	39		51	18		36
		v/c	0.52	0.73		0.48	0.58	0.44	0.45	0.61		0.82	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		295'	310'		
		Lanes->	*1*	-	*1*		-		*1*	*3*		-	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative B	PM	LOS	C	-	B		-		B	*		-	*		A
		Delay	18	-	13		-		12	*		-	*		0.7
		v/c	0.19	-	0.15		-		0.14	*		-	*		
		Queue	20'	-	15'		-		15'	*		-	*		
	SAT	LOS	C	-	B		-		B	*		-	*		A
		Delay	16	-	12		-		10	*		-	*		1
		v/c	0.42	-	0.19		-		0.19	*		-	*		
		Queue	25'	-	20'		-		20'	*		-	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Access Alternative C: Driveway LI-RI-RO Access at Median (No Lefts Out)
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

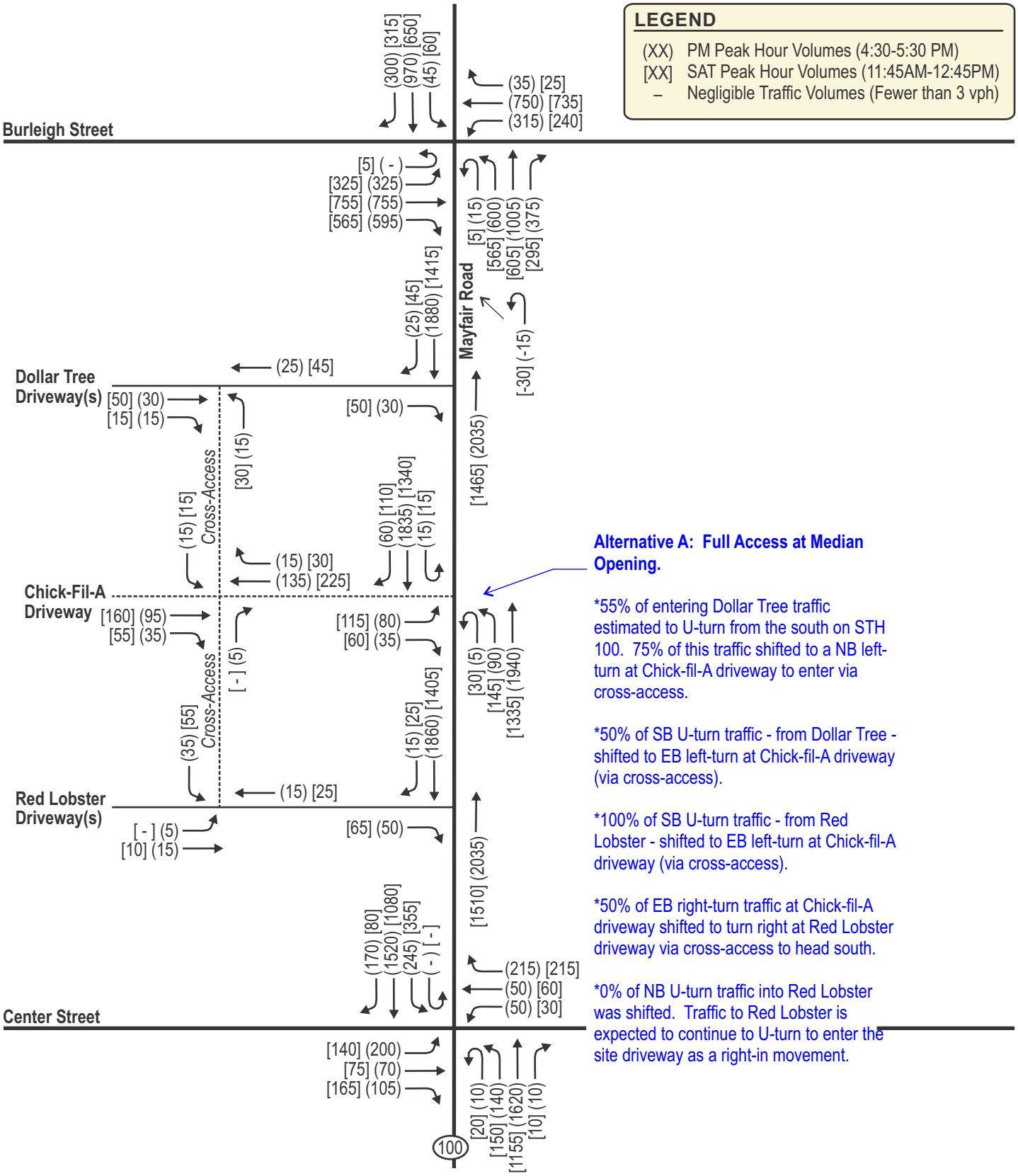
Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		450'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		270'	220'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	B		D
		Delay	55	51		84	68	58	40	48		71	19		40
		v/c	0.67	0.49		0.67	0.43	0.53	0.52	0.87		0.77	0.68		
		Queue	250'	225'		100'	95'	170'	175'	830'		265'	345'		
	SAT	LOS	D	E		E	E	D	D	D		D	B		D
		Delay	53	63		70	74	45	37	47		44	18		39
		v/c	0.52	0.73		0.48	0.58	0.34	0.48	0.71		0.79	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		435'	310'		
		Lanes->	-	-	*1*	-			*1*	*3*		*1*	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative C	PM	LOS	-	-	C	-			B	*		A	*		A
		Delay	-	-	15	-			11	*		9	*		0.8
		v/c	-	-	0.29	-			0.14	*		0.04	*		
		Queue	-	-	30'	-			15'	*		5'	*		
	SAT	LOS	-	-	B	-			B	*		A	*		A
		Delay	-	-	14	-			11	*		8	*		1
		v/c	-	-	0.36	-			0.20	*		0.03	*		
		Queue	-	-	45'	-			20'	*		5'	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Access Alternative D: No Median Opening (RIRO)
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		435'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		270'	215'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	C		D
		Delay	55	51		84	68	56	40	51		77	20		41
		v/c	0.67	0.49		0.67	0.43	0.51	0.52	0.89		0.81	0.68		
		Queue	250'	225'		100'	95'	165'	175'	855'		290'	355'		
	SAT	LOS	D	E		E	E	D	D	D		D	B		D
		Delay	53	63		70	74	45	37	47		48	18		39
		v/c	0.52	0.73		0.48	0.58	0.34	0.48	0.71		0.85	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		510'	310'		
		Lanes->	-	-	*1*	-			-	*3*		-	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative D	PM	LOS	-	-	C	-			-	*		-	*		A
		Delay	-	-	15	-			-	*		-	*		0.5
		v/c	-	-	0.29	-			-	*		-	*		
		Queue	-	-	30'	-			-	*		-	*		
	SAT	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	14	-			-	*		-	*		0.9
		v/c	-	-	0.36	-			-	*		-	*		
		Queue	-	-	45'	-			-	*		-	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

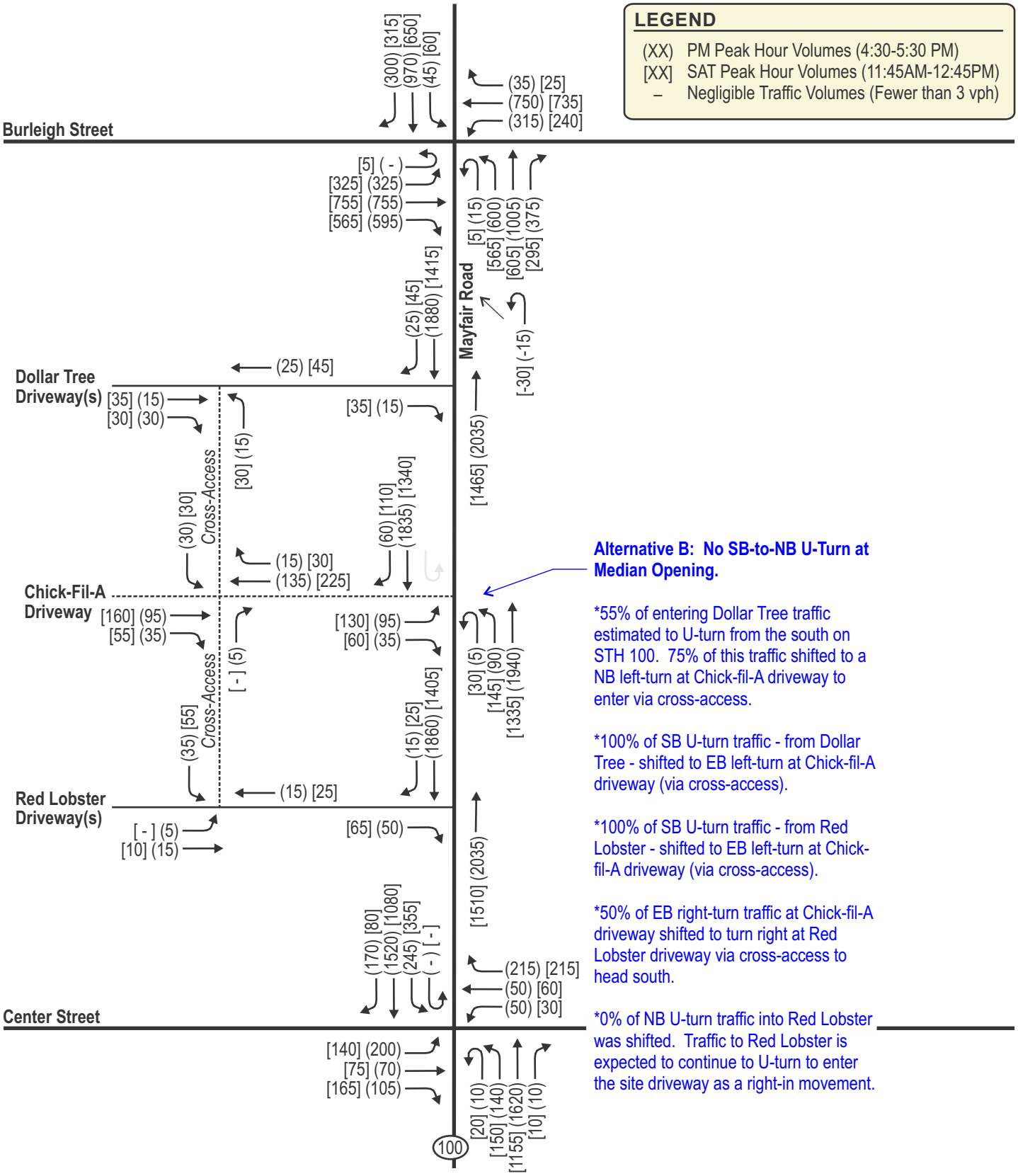


TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

N
NOT TO SCALE

EXHIBIT 5A
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE A: FULL ACCESS AT MEDIAN OPENING
WITH CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN



TRAFFIC ANALYSIS & DESIGN, INC.

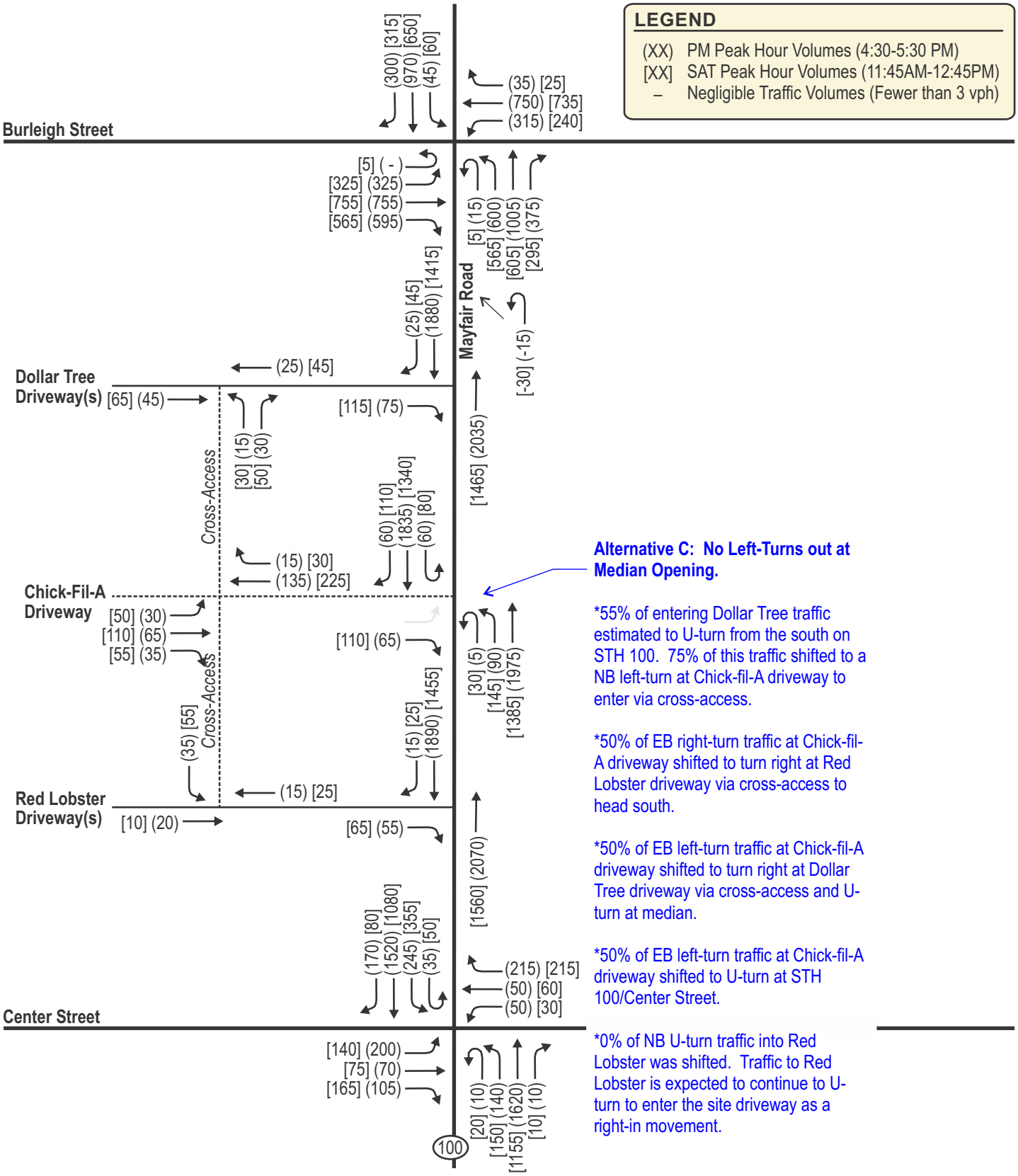
#2923 - 04/03/23

N

NOT TO SCALE

EXHIBIT 5B
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE B: NO SB-TO-NB U-TURN AT MEDIAN OPENING
WITH CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN

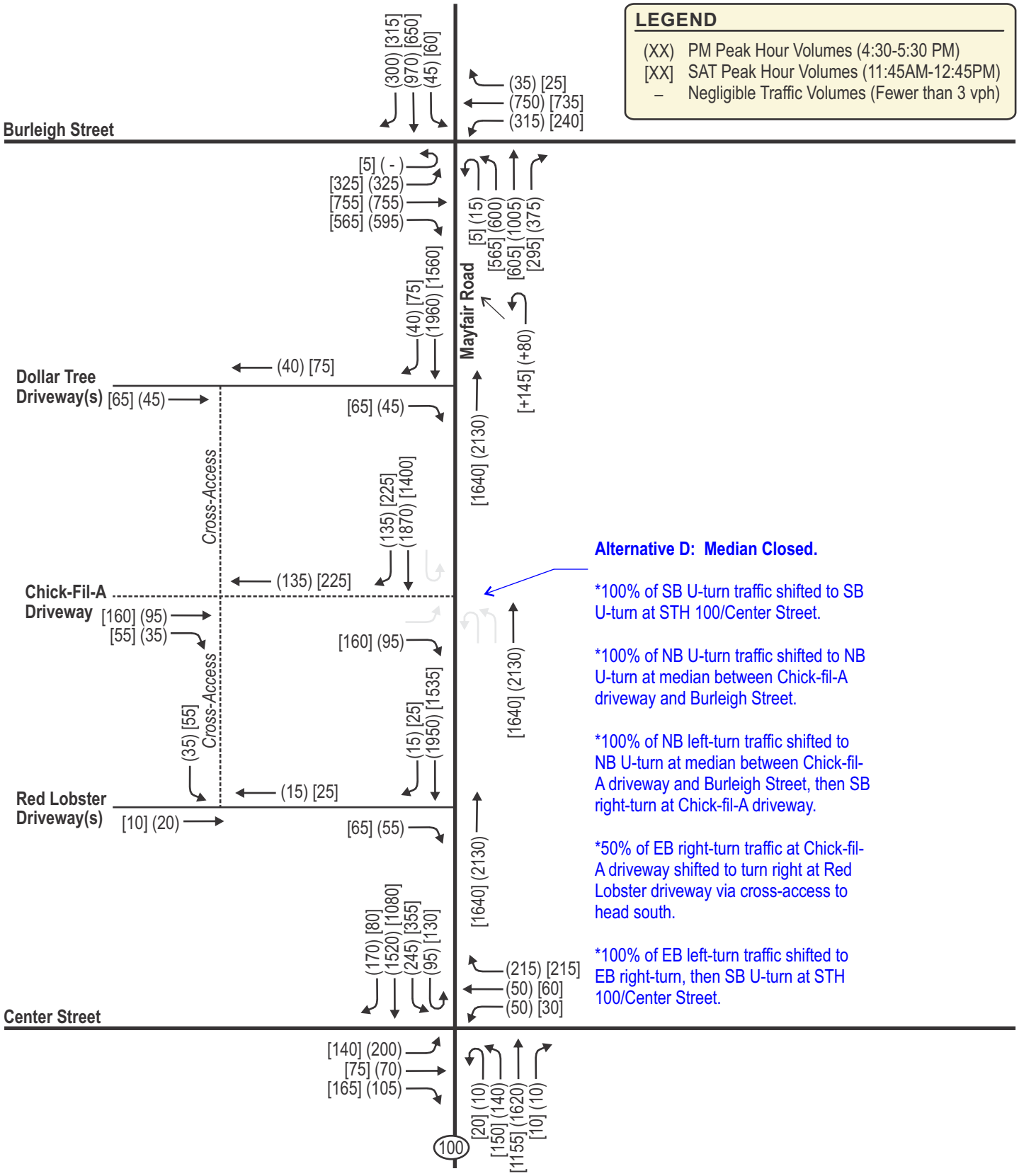


TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

N
NOT TO SCALE

EXHIBIT 5C
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE C: NO LEFT-TURNS OUT AT MEDIAN OPENING
WITH CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN



TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

N
NOT TO SCALE

EXHIBIT 5D
YEAR 2023 TOTAL TRAFFIC VOLUMES
ALTERNATIVE D: MEDIAN CLOSED (RIGHT-IN/RIGHT-OUT ONLY)
WITH CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN

Access Alternative A: Full-Access Median on STH 100 & Chick-fil-A Cross-Access Easement
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		455'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		275'	220'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	B		D
		Delay	55	50		84	68	61	41	43		64	18		36
		v/c	0.67	0.48		0.67	0.43	0.58	0.55	0.82		0.69	0.66		
		Queue	250'	225'		100'	95'	175'	170'	780'		210'	340'		
	SAT	LOS	D	E		E	E	E	C	D		E	B		D
		Delay	53	63		70	74	56	28	35		58	18		36
		v/c	0.52	0.73		0.48	0.58	0.51	0.43	0.57		0.84	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		245'	310'		
		Lanes->	*1*	-	*1*	-			*1*	*3*		*1*	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative A	PM	LOS	C	-	B	-			B	*		A	*		A
		Delay	19	-	13	-			12	*		9	*		0.8
		v/c	0.26	-	0.08	-			0.17	*		0.02	*		
		Queue	25'	-	5'	-			15'	*		5'	*		
	SAT	LOS	C	-	B	-			B	*		A	*		A
		Delay	17	-	11	-			10	*		8	*		1
		v/c	0.29	-	0.10	-			0.23	*		0.02	*		
		Queue	30'	-	10'	-			25'	*		0'	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Access Alternative B: No SB-to-NB U-Turn at Median & Chick-fil-A Cross-Access Easement
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		455'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		275'	225'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	B		D
		Delay	55	50		84	68	61	41	43		64	18		36
		v/c	0.67	0.48		0.67	0.43	0.58	0.55	0.82		0.69	0.66		
		Queue	250'	225'		100'	95'	175'	170'	780'		210'	340'		
	SAT	LOS	D	E		E	E	E	C	D		E	B		D
		Delay	53	63		70	74	56	28	35		58	18		36
		v/c	0.52	0.73		0.48	0.58	0.51	0.43	0.57		0.84	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		245'	310'		
		Lanes->	*1*	-	*1*		-		*1*	*3*		-	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative B	PM	LOS	C	-	B		-		B	*		-	*		A
		Delay	20	-	13		-		12	*		-	*		0.9
		v/c	0.30	-	0.08		-		0.17	*		-	*		
		Queue	30'	-	5'		-		15'	*		-	*		
	SAT	LOS	C	-	B		-		B	*		-	*		A
		Delay	18	-	11		-		10	*		-	*		1
		v/c	0.33	-	0.10		-		0.23	*		-	*		
		Queue	35'	-	10'		-		25'	*		-	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Access Alternative C: Driveway LI-RI-RO Access at Median (No Lefts Out) & Chick-fil-A Cross-Access Easement
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

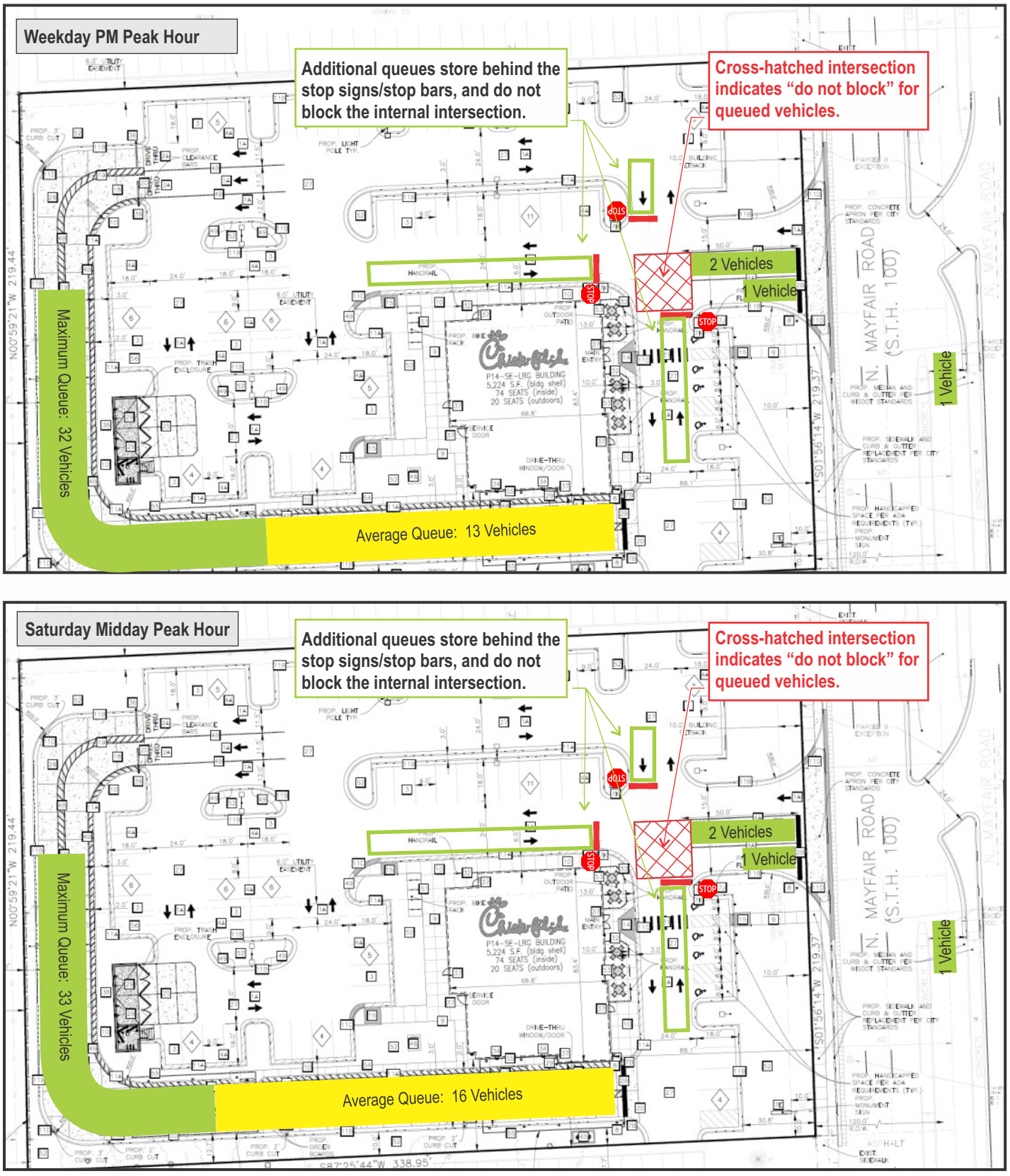
Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		455'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		280'	230'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	B		D
		Delay	55	51		84	68	59	40	46		67	19		38
		v/c	0.67	0.49		0.67	0.43	0.56	0.53	0.85		0.73	0.67		
		Queue	250'	225'		100'	95'	175'	175'	805'		240'	345'		
	SAT	LOS	D	E		E	E	D	C	D		D	B		D
		Delay	53	63		70	74	50	34	42		47	18		37
		v/c	0.52	0.73		0.48	0.58	0.39	0.46	0.64		0.79	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		330'	310'		
		Lanes->	-	-	*1*	-			*1*	*3*		*1*	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative C	PM	LOS	-	-	B	-			B	*		A	*		A
		Delay	-	-	13	-			12	*		9	*		0.7
		v/c	-	-	0.14	-			0.17	*		0.08	*		
		Queue	-	-	15'	-			15'	*		10'	*		
	SAT	LOS	-	-	B	-			B	*		A	*		A
		Delay	-	-	12	-			11	*		8	*		1
		v/c	-	-	0.19	-			0.23	*		0.08	*		
		Queue	-	-	20'	-			25'	*		10'	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).

Access Alternative D: No Median Opening (RIRO) & Chick-fil-A Cross-Access Easement
Year 2023 Total Traffic Peak Hour Operating Conditions
With Modifications Recommended in June 15, 2020 Fulfillment Center TIA

Intersection	Peak Hour	Metric	Level of Service (LOS) per Movement by Approach												I/S LOS & Delay
			Eastbound			Westbound			Northbound			Southbound			
			↗	→	↘	↙	←	↖	↖	↑	↗	↘	↓	↙	
		Lanes->	*2*	*3*	*1*	*2*	*3>*		*2*	*3>*		*2*	*3>*		
Node 100: Mayfair Road & Burleigh Street *Traffic Signal Control*	PM	LOS	E	E	B	E	E		F	E		E	D		E
		Delay	76	66	19	75	76		86	61		55	47		61
		v/c	0.88	0.88	0.66	0.88	0.88		0.93	0.68		0.09	0.70		
		Queue	220'	320'	245'	215'	335'		435'	575'		45'	575'		
	SAT	LOS	E	E	B	E	E		F	D		E	D		E
		Delay	75	63	19	67	77		82	40		73	40		56
		v/c	0.89	0.87	0.64	0.69	0.89		0.92	0.36		0.58	0.55		
		Queue	225'	315'	215'	170'	325'		270'	215'		55'	410'		
		Lanes->	*1*	*1>*		*1*	*1*	*1*	*1*	*3>*		*1*	*3>*		
Node 200: Mayfair Road & Center Street *Traffic Signal Control*	PM	LOS	E	D		F	E	E	D	D		E	C		D
		Delay	55	51		84	68	56	40	51		77	20		41
		v/c	0.67	0.49		0.67	0.43	0.51	0.52	0.89		0.81	0.68		
		Queue	250'	225'		100'	95'	165'	175'	855'		290'	355'		
	SAT	LOS	D	E		E	E	D	D	D		D	B		D
		Delay	53	63		70	74	45	37	47		48	18		39
		v/c	0.52	0.73		0.48	0.58	0.34	0.48	0.71		0.85	0.41		
		Queue	175'	310'		65'	110'	170'	145'	425'		510'	310'		
		Lanes->	-	-	*1*	-			-	*3*		-	*3>*		
Node 300: Mayfair Road & Chick-Fil-A Driveway *Stop Sign Control (EB)* Alternative D	PM	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	14	-			-	*		-	*		0.3
		v/c	-	-	0.21	-			-	*		-	*		
		Queue	-	-	20'	-			-	*		-	*		
	SAT	LOS	-	-	B	-			-	*		-	*		A
		Delay	-	-	13	-			-	*		-	*		0.6
		v/c	-	-	0.27	-			-	*		-	*		
		Queue	-	-	30'	-			-	*		-	*		

(-) indicates a movement that is prohibited or does not exist; (*) indicates a freeflow movement.
Delay is reported in seconds. Queue is the maximum of the 50th & 95th percentile queue, measured in feet.
U-Turns at #100 & #200 are included in the left-turn volume.
With adaptive control, the SB LT phase at #200 operates as both Lead and Lag. Due to this custom phasing, delay & v/c output is reported in HCM 2000 (not HCM 6th Edition).



TADI
TRAFFIC ANALYSIS & DESIGN, INC.
#2923 - 04/03/23

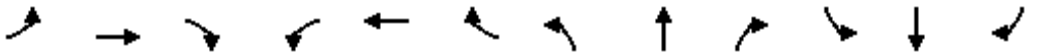
N
NOT TO SCALE

EXHIBIT 7
YEAR 2023 TOTAL TRAFFIC AVERAGE & MAXIMUM QUEUES
ALTERNATIVE B: NO SB-TO-NB U-TURN AT MEDIAN OPENING
WITH CROSS-ACCESS CONNECTIONS

WAUWATOSA, WISCONSIN

APPENDIX A
SYNCHRO ANALYSIS
(REVISED FROM TIA)

Year 2023 Background Analysis (Revised from TIA)
Year 2023 Build Analysis (Revised from TIA)

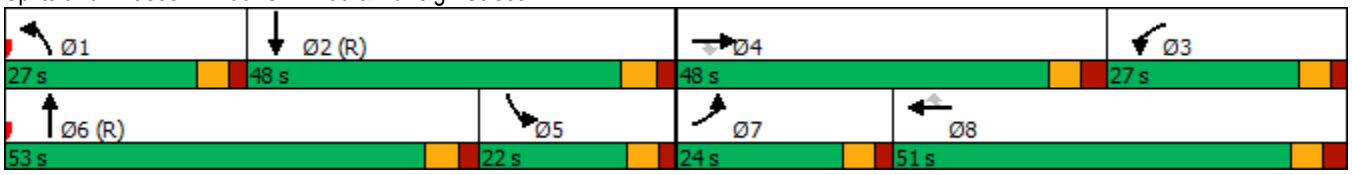


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	575	340	295	635	35	445	990	355	45	955	205
Future Volume (vph)	175	575	340	295	635	35	445	990	355	45	955	205
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	182	599	220	307	661	23	464	1401	0	47	1209	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	24.0	48.0	48.0	27.0	51.0	51.0	27.0	53.0		22.0	48.0	
Total Split (%)	16.0%	32.0%	32.0%	18.0%	34.0%	34.0%	18.0%	35.3%		14.7%	32.0%	
Maximum Green (s)	18.5	41.6	41.6	21.5	44.6	44.6	21.5	46.8		16.5	41.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.71	0.69	0.84	0.73	0.87	0.07	0.82	0.63		0.15	0.68	
Control Delay	82.6	61.5	85.7	73.1	68.4	43.1	43.4	33.1		61.8	44.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	82.6	61.5	85.7	73.1	68.4	43.1	43.4	33.1		61.8	44.0	
90th %ile Green (s)	15.7	35.9	35.9	22.6	42.8	42.8	26.1	51.4		16.5	41.8	
90th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Max	Coord		Hold	Coord	
70th %ile Green (s)	13.4	30.6	30.6	19.7	36.9	36.9	28.0	59.6		16.5	48.1	
70th %ile Term Code	Gap	Gap	Gap	Gap	Hold	Hold	Gap	Coord		Hold	Coord	
50th %ile Green (s)	11.8	25.9	25.9	19.5	33.6	33.6	26.7	64.5		16.5	54.3	
50th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Hold	Coord	
30th %ile Green (s)	10.2	22.0	22.0	18.8	30.6	30.6	25.4	69.1		16.5	60.2	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Hold	Coord	
10th %ile Green (s)	7.9	17.0	17.0	17.2	26.3	26.3	22.5	97.7		0.0	69.7	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	91	204	212	151	332	18	230	522		21	366	
Queue Length 95th (ft)	130	230	289	200	376	41	255	583		43	479	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	401	1384	413	469	994	443	568	2226		360	1789	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.43	0.53	0.65	0.66	0.05	0.82	0.63		0.13	0.68	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 100: STH 100 & Burleigh Street



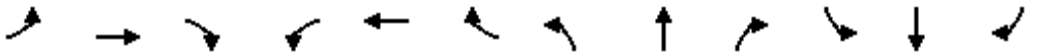
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	575	340	295	635	35	445	990	355	45	955	205
Future Volume (veh/h)	175	575	340	295	635	35	445	990	355	45	955	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1885	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	182	599	220	307	661	23	464	1031	370	47	995	214
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	228	819	253	364	730	325	510	1193	428	911	1858	399
Arrive On Green	0.07	0.16	0.16	0.10	0.20	0.20	0.05	0.10	0.10	0.26	0.43	0.43
Sat Flow, veh/h	3501	5174	1598	3492	3591	1598	3566	3823	1372	3538	4308	925
Grp Volume(v), veh/h	182	599	220	307	661	23	464	947	454	47	804	405
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1796	1598	1783	1756	1683	1769	1742	1748
Q Serve(g_s), s	7.7	16.5	20.2	12.9	27.0	1.7	19.4	39.8	39.8	1.5	25.6	25.7
Cycle Q Clear(g_c), s	7.7	16.5	20.2	12.9	27.0	1.7	19.4	39.8	39.8	1.5	25.6	25.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.82	1.00		0.53
Lane Grp Cap(c), veh/h	228	819	253	364	730	325	510	1096	525	911	1503	754
V/C Ratio(X)	0.80	0.73	0.87	0.84	0.90	0.07	0.91	0.86	0.86	0.05	0.54	0.54
Avail Cap(c_a), veh/h	432	1435	443	501	1068	475	511	1096	525	911	1503	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.1	60.1	61.6	66.0	58.3	48.3	70.5	64.2	64.2	41.9	31.5	31.6
Incr Delay (d2), s/veh	2.4	0.5	3.6	7.0	6.1	0.0	20.0	9.1	17.1	0.0	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	11.7	13.2	10.2	18.7	1.3	16.2	27.6	28.0	1.2	16.4	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.6	60.6	65.2	73.0	64.5	48.3	90.5	73.3	81.2	41.9	32.9	34.3
LnGrp LOS	E	E	E	E	E	D	F	E	F	D	C	C
Approach Vol, veh/h		1001			991			1865			1256	
Approach Delay, s/veh		63.6			66.7			79.5			33.7	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.9	70.9	22.0	30.1	44.8	53.0	15.3	36.9
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	21.5	* 42	* 22	* 42	* 17	* 47	18.5	* 45
Max Q Clear Time (g_c+I1), s	21.4	27.7	14.9	22.2	3.5	41.8	9.7	29.0
Green Ext Time (p_c), s	0.0	2.7	0.1	1.6	0.0	1.9	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	62.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	70	105	50	50	195	150	1410	10	220	1265	165
Future Volume (vph)	190	70	105	50	50	195	150	1410	10	220	1265	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	202	186	0	53	53	129	160	1511	0	234	1522	0
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.61	0.50		0.56	0.36	0.44	0.50	0.67		0.66	0.54	
Control Delay	56.1	54.6		87.6	71.4	56.6	35.9	38.5		53.0	17.1	

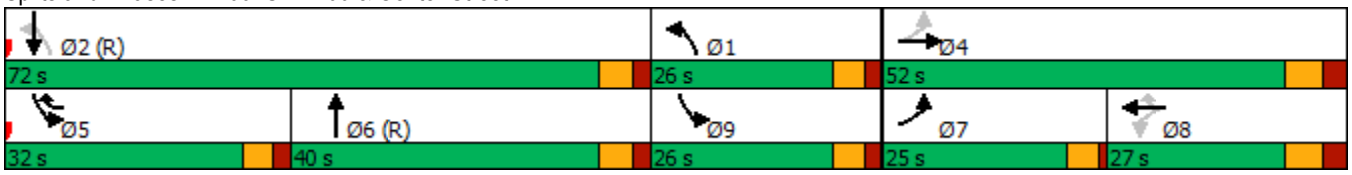
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	54.6		87.6	71.4	56.6	35.9	38.5		53.0	17.1	
90th %ile Green (s)	22.1	42.8		16.2	16.2	16.3	18.9	48.1			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	21.9	39.3		12.9	12.9	13.2	19.1	54.5			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.3	35.3		10.5	10.5	11.1	17.9	61.8			78.4	
50th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	17.3	31.8		10.0	10.0	9.3	15.9	69.1			83.9	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	9.4	14.5	89.4			104.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	168	158		51	51	112	51	445		184	195	
Queue Length 95th (ft)	232	221		98	95	165	120	584		242	224	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	345	511		158	248	449	360	2243		568	2801	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.59	0.36		0.34	0.21	0.29	0.44	0.67		0.41	0.54	

Intersection Summary

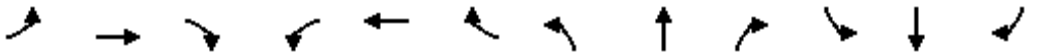
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.9
90th %ile Term Code	Gap
70th %ile Green (s)	19.1
70th %ile Term Code	Gap
50th %ile Green (s)	17.9
50th %ile Term Code	Gap
30th %ile Green (s)	15.9
30th %ile Term Code	Gap
10th %ile Green (s)	14.5
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

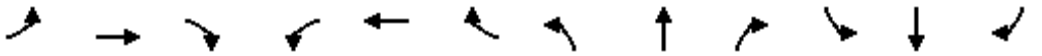
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	70	105	50	50	195	150	1410	10	220	1265	165
Future Volume (vph)	190	70	105	50	50	195	150	1410	10	220	1265	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5211		1815	5126	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.11	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	207	5211		1815	5126	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	202	74	112	53	53	129	160	1500	11	234	1346	176
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	202	186	0	53	53	129	160	1511	0	234	1522	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Actuated Green, G (s)	33.8	33.8		9.9	9.9	21.8	97.8	63.1		29.2	80.4	
Effective Green, g (s)	33.8	33.8		9.9	9.9	21.8	97.8	63.1		29.2	80.4	
Actuated g/C Ratio	0.23	0.23		0.07	0.07	0.15	0.65	0.42		0.19	0.54	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	320	385		79	124	232	321	2192		353	2747	
v/s Ratio Prot	c0.08	0.11			0.03	0.04	0.06	c0.29		c0.13	c0.30	
v/s Ratio Perm	c0.06			0.04		0.04	0.27					
v/c Ratio	0.63	0.48		0.67	0.43	0.56	0.50	0.69		0.66	0.55	
Uniform Delay, d1	50.8	50.5		68.5	67.3	59.6	34.8	35.5		55.8	23.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.52	0.69	
Incremental Delay, d2	3.0	0.3		16.2	0.9	1.6	0.4	1.8		3.0	0.7	
Delay (s)	53.8	50.9		84.6	68.2	61.2	35.3	37.3		87.6	16.5	
Level of Service	D	D		F	E	E	D	D		F	B	
Approach Delay (s)		52.4			68.1			37.1			26.0	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

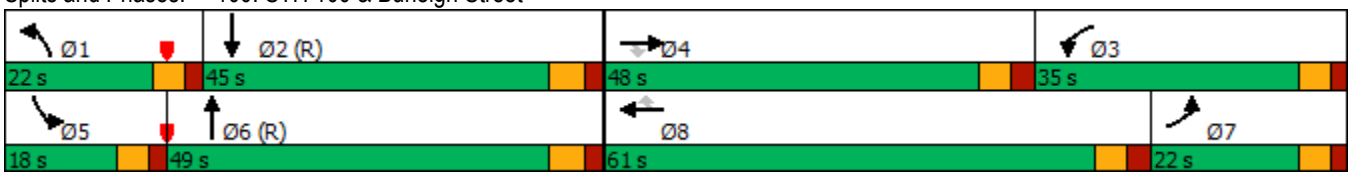


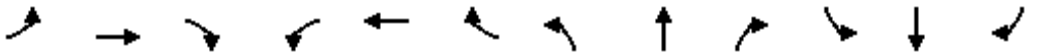
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	620	360	205	605	25	375	585	260	60	630	215
Future Volume (vph)	220	620	360	205	605	25	375	585	260	60	630	215
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1900	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		1	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	232	653	235	216	637	16	395	890	0	63	889	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		1	6		5	2	
Permitted Phases			4			8						
Detector Phase	7	4	4	3	8	8	1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4	11.4	10.5	11.4	11.4	10.5	16.2		10.5	16.2	
Total Split (s)	22.0	48.0	48.0	35.0	61.0	61.0	22.0	49.0		18.0	45.0	
Total Split (%)	14.7%	32.0%	32.0%	23.3%	40.7%	40.7%	14.7%	32.7%		12.0%	30.0%	
Maximum Green (s)	16.5	41.6	41.6	29.5	54.6	54.6	16.5	42.8		12.5	38.8	
Yellow Time (s)	3.5	3.6	3.6	3.5	3.6	3.6	3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8	2.8	2.0	2.8	2.8	2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4	6.4	5.5	6.4	6.4	5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.76	0.70	0.85	0.52	0.86	0.05	0.70	0.37		0.45	0.52	
Control Delay	82.2	60.6	83.9	65.9	68.7	43.6	80.3	9.3		79.6	41.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	82.2	60.6	83.9	65.9	68.7	43.6	80.3	9.3		79.6	41.1	
90th %ile Green (s)	18.6	37.9	37.9	21.2	40.5	40.5	26.7	58.7		8.6	40.6	
90th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
70th %ile Green (s)	16.0	32.4	32.4	19.7	36.1	36.1	25.3	67.0		7.3	49.0	
70th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
50th %ile Green (s)	14.2	28.5	28.5	18.8	33.1	33.1	25.0	72.8		6.3	54.1	
50th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
30th %ile Green (s)	12.4	23.6	23.6	18.8	30.0	30.0	25.4	78.6		5.4	58.6	
30th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Gap	Coord	
10th %ile Green (s)	9.8	18.6	18.6	16.8	25.6	25.6	27.7	96.5		0.0	63.3	
10th %ile Term Code	Gap	Gap	Gap	Hold	Gap	Gap	Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	115	220	224	103	318	12	179	83		31	249	
Queue Length 95th (ft)	159	247	304	145	369	32	239	98		57	339	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	363	1370	409	637	1217	543	568	2391		270	1697	
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	
Reduced v/c Ratio	0.64	0.48	0.57	0.34	0.52	0.03	0.70	0.37		0.23	0.52	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	

Splits and Phases: 100: STH 100 & Burleigh Street





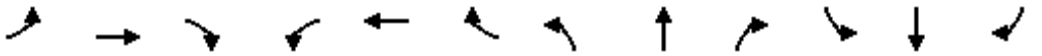
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	620	360	205	605	25	375	585	260	60	630	215
Future Volume (veh/h)	220	620	360	205	605	25	375	585	260	60	630	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1885	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	232	653	235	216	637	16	395	616	274	63	663	226
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	277	786	243	432	708	315	389	1908	830	109	1750	586
Arrive On Green	0.08	0.15	0.15	0.12	0.20	0.20	0.04	0.18	0.18	0.03	0.46	0.46
Sat Flow, veh/h	3474	5133	1585	3492	3591	1598	3538	3567	1552	3510	3838	1286
Grp Volume(v), veh/h	232	653	235	216	637	16	395	601	289	63	596	293
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1796	1598	1769	1742	1635	1755	1729	1668
Q Serve(g_s), s	9.9	18.5	19.2	8.7	26.0	0.9	16.5	22.6	23.1	2.7	17.0	17.4
Cycle Q Clear(g_c), s	9.9	18.5	19.2	8.7	26.0	0.9	16.5	22.6	23.1	2.7	17.0	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.95	1.00		0.77
Lane Grp Cap(c), veh/h	277	786	243	432	708	315	389	1864	875	109	1576	760
V/C Ratio(X)	0.84	0.83	0.97	0.50	0.90	0.05	1.02	0.32	0.33	0.58	0.38	0.39
Avail Cap(c_a), veh/h	382	1424	440	687	1307	582	389	1864	875	292	1576	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.1	61.6	47.8	61.4	58.8	28.5	72.3	38.0	38.3	71.7	26.8	26.9
Incr Delay (d2), s/veh	8.4	0.9	15.5	0.3	1.8	0.0	49.5	0.5	1.0	1.8	0.7	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	12.8	13.5	7.0	17.6	0.9	16.0	16.1	15.7	2.2	11.5	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.4	62.5	63.3	61.7	60.5	28.5	121.8	38.5	39.3	73.5	27.5	28.4
LnGrp LOS	E	E	E	E	E	C	F	D	D	E	C	C
Approach Vol, veh/h		1120			869			1285			952	
Approach Delay, s/veh		65.6			60.2			64.3			30.8	
Approach LOS		E			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	74.6	24.0	29.4	10.1	86.4	17.5	36.0
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	16.5	* 39	* 30	41.6	12.5	* 43	* 17	54.6
Max Q Clear Time (g_c+I1), s	18.5	19.4	10.7	21.2	4.7	25.1	11.9	28.0
Green Ext Time (p_c), s	0.0	2.0	0.1	1.7	0.0	2.0	0.1	1.6

Intersection Summary	
HCM 6th Ctrl Delay	56.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	200	170	905	10	335	840	75
Future Volume (vph)	135	75	165	30	60	200	170	905	10	335	840	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	245	0	31	61	127	173	933	0	342	934	0
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.49	0.78		0.40	0.47	0.41	0.34	0.42		0.83	0.32	
Control Delay	56.1	74.2		81.2	78.8	53.5	12.9	32.5		45.5	13.7	

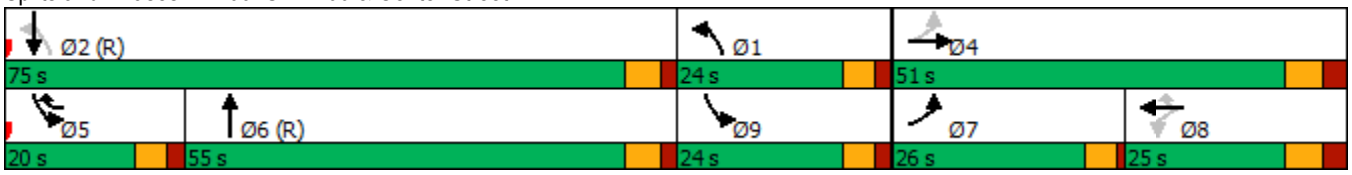
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	74.2		81.2	78.8	53.5	12.9	32.5		45.5	13.7	
90th %ile Green (s)	19.2	36.6		12.9	12.9	21.7	18.5	49.3			76.5	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.2	31.3		10.6	10.6	18.3	18.5	58.0			81.8	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.2	28.7		10.0	10.0	15.3	18.5	63.6			84.4	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.0	26.5		10.0	10.0	13.2	18.5	67.9			86.6	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	9.8	18.5	80.7			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	117	230		30	59	107	47	232		178	186	
Queue Length 95th (ft)	173	311		66	109	159	88	320		258	266	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	312	492		131	216	324	505	2217		427	2922	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.44	0.50		0.24	0.28	0.39	0.34	0.42		0.80	0.32	

Intersection Summary

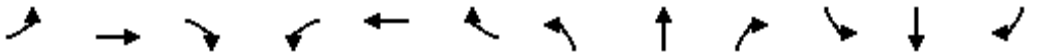
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBT, Start of 1st Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	200	170	905	10	335	840	75
Future Volume (vph)	135	75	165	30	60	200	170	905	10	335	840	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5208		1815	5152	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.26	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	495	5208		1815	5152	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	138	77	168	31	61	127	173	923	10	342	857	77
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	138	245	0	31	61	127	173	933	0	342	934	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Actuated Green, G (s)	29.5	29.5		8.7	8.7	24.4	102.1	62.4		34.2	83.6	
Effective Green, g (s)	29.5	29.5		8.7	8.7	24.4	102.1	62.4		34.2	83.6	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.16	0.68	0.42		0.23	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	272	331		64	105	252	499	2166		413	2871	
v/s Ratio Prot	0.06	c0.15			0.03	0.05	0.04	c0.18		c0.19	0.18	
v/s Ratio Perm	0.04			0.03		0.03	0.19					
v/c Ratio	0.51	0.74		0.48	0.58	0.50	0.35	0.43		0.83	0.33	
Uniform Delay, d1	52.5	56.6		68.5	68.9	57.3	16.1	31.2		55.1	18.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.96	0.75	
Incremental Delay, d2	0.5	7.6		2.1	5.2	0.6	0.2	0.6		11.3	0.3	
Delay (s)	53.1	64.2		70.6	74.1	57.9	16.2	31.8		64.4	13.7	
Level of Service	D	E		E	E	E	B	C		E	B	
Approach Delay (s)		60.2			64.2			29.4			27.3	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

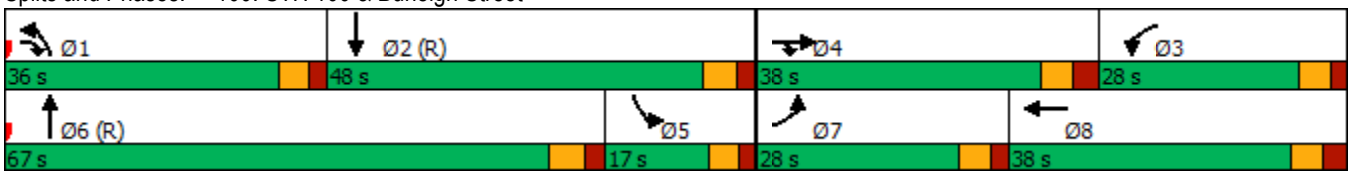
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	580	300	750	35	605	995	360	45	960	300
Future Volume (vph)	325	755	580	300	750	35	605	995	360	45	960	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	375	313	817	0	630	1411	0	47	1313	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.74	0.90		0.93	0.61		0.21	0.84	
Control Delay	82.3	68.6	26.6	73.7	72.5		52.9	33.5		67.5	53.6	

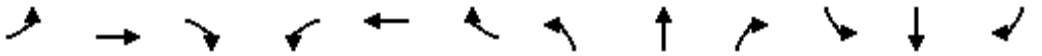
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	73.7	72.5		52.9	33.5		67.5	53.6	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		33.7	66.8		11.5	44.6	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		31.0	71.2		11.5	51.7	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		26.9	94.7		0.0	62.3	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	178	153	288		326	507		22	455	
Queue Length 95th (ft)	220	318	237	204	335		#441	567		44	#571	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	610	486	1008		693	2309		251	1566	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.61	0.64	0.81		0.91	0.61		0.19	0.84	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





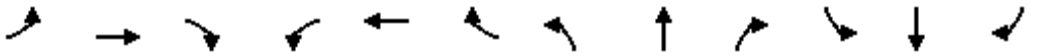
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	580	300	750	35	605	995	360	45	960	300
Future Volume (veh/h)	325	755	580	300	750	35	605	995	360	45	960	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	375	312	781	36	630	1036	375	47	1000	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	580	366	878	40	679	1546	559	528	1456	454
Arrive On Green	0.11	0.17	0.17	0.10	0.17	0.17	0.06	0.13	0.13	0.15	0.37	0.37
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3813	1380	3538	3948	1230
Grp Volume(v), veh/h	339	786	375	312	531	286	630	954	457	47	883	429
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1681	1769	1742	1693
Q Serve(g_s), s	14.3	22.2	18.9	13.2	22.6	22.7	26.4	38.8	38.8	1.7	32.1	32.2
Cycle Q Clear(g_c), s	14.3	22.2	18.9	13.2	22.6	22.7	26.4	38.8	38.8	1.7	32.1	32.2
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.82	1.00		0.73
Lane Grp Cap(c), veh/h	384	893	580	366	597	321	679	1424	682	528	1286	625
V/C Ratio(X)	0.88	0.88	0.65	0.85	0.89	0.89	0.93	0.67	0.67	0.09	0.69	0.69
Avail Cap(c_a), veh/h	525	1090	641	524	725	389	725	1424	682	528	1286	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.6	66.0	60.6	60.6	69.3	55.4	55.4	55.0	40.0	40.0
Incr Delay (d2), s/veh	10.2	6.4	1.3	6.6	10.1	17.5	17.1	2.5	5.2	0.0	3.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.4	10.3	16.0	17.9	20.5	26.0	25.6	1.4	20.3	20.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	67.0	20.0	72.7	70.7	78.2	86.3	58.0	60.6	55.0	43.0	46.1
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1500			1129			2041			1359	
Approach Delay, s/veh		57.3			73.1			67.3			44.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.0	61.5	22.1	32.3	28.6	67.0	22.0	32.4
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.4	34.2	15.2	24.2	3.7	40.8	16.3	24.7
Green Ext Time (p_c), s	0.2	2.3	0.2	1.7	0.0	3.5	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	60.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



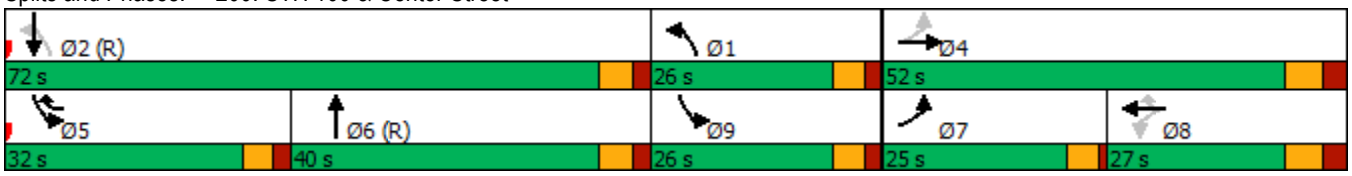
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Future Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	186	0	53	53	139	160	1692	0	261	1750	0
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.63	0.51		0.56	0.36	0.46	0.54	0.78		0.69	0.63	
Control Delay	57.4	55.1		87.6	71.4	56.4	45.3	42.6		40.3	18.3	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.4	55.1		87.6	71.4	56.4	45.3	42.6		40.3	18.3	
90th %ile Green (s)	20.9	41.6		16.2	16.2	17.5	20.1	46.9			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.8	38.2		12.9	12.9	14.2	20.2	53.5			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.8	35.8		10.5	10.5	12.1	19.4	58.8			76.4	
50th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	17.8	32.3		10.0	10.0	10.1	17.3	66.4			82.0	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.0	15.9	87.4			102.9	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	172	157		51	51	121	71	543		176	288	
Queue Length 95th (ft)	241	224		98	95	174	156	#747		m217	321	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	341	511		158	248	449	322	2175		568	2770	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.61	0.36		0.34	0.21	0.31	0.50	0.78		0.46	0.63	

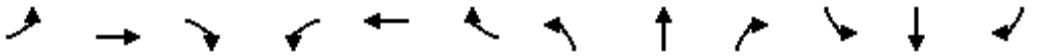
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:NBSB and 6:NBT, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.1
90th %ile Term Code	Gap
70th %ile Green (s)	20.2
70th %ile Term Code	Gap
50th %ile Green (s)	19.4
50th %ile Term Code	Gap
30th %ile Green (s)	17.3
30th %ile Term Code	Gap
10th %ile Green (s)	15.9
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Future Volume (vph)	195	70	105	50	50	210	150	1580	10	245	1480	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.07	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	138	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	207	74	112	53	53	139	160	1681	11	261	1574	176
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	207	186	0	53	53	139	160	1692	0	261	1750	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Actuated Green, G (s)	33.6	33.6		9.9	9.9	22.7	98.0	61.1		31.4	79.4	
Effective Green, g (s)	33.6	33.6		9.9	9.9	22.7	98.0	61.1		31.4	79.4	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.15	0.65	0.41		0.21	0.53	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	318	383		79	124	241	298	2123		379	2719	
v/s Ratio Prot	c0.08	0.11			0.03	0.05	0.07	c0.32		c0.14	c0.34	
v/s Ratio Perm	c0.06			0.04		0.04	0.29					
v/c Ratio	0.65	0.49		0.67	0.43	0.58	0.54	0.80		0.69	0.64	
Uniform Delay, d1	51.2	50.7		68.5	67.3	59.2	38.8	39.0		54.8	25.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.13	0.67	
Incremental Delay, d2	3.6	0.4		16.2	0.9	2.1	0.9	3.2		3.2	0.9	
Delay (s)	54.8	51.0		84.6	68.2	61.3	39.8	42.2		64.9	17.8	
Level of Service	D	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.0			67.8			42.0			23.9	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		

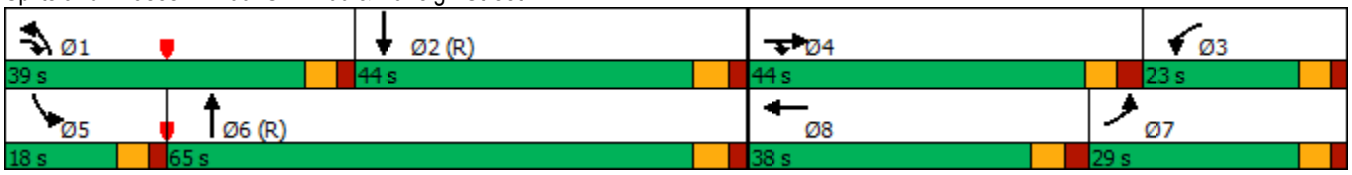
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	540	210	735	25	550	590	265	60	635	315
Future Volume (vph)	330	755	540	210	735	25	550	590	265	60	635	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	352	221	800	0	579	900	0	63	1000	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.63	0.55	0.89		0.91	0.38		0.45	0.64	
Control Delay	81.8	67.0	25.7	66.6	72.1		54.9	15.6		79.6	46.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	67.0	25.7	66.6	72.1		54.9	15.6		79.6	46.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		32.6	65.8		7.3	40.5	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		29.9	72.0		6.3	48.4	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		27.2	77.4		5.4	55.6	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	22.4		14.7	23.0		23.1	94.8		0.0	66.2	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	176	105	282		146	257		31	308	
Queue Length 95th (ft)	223	314	202	150	327		218	202		57	400	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	649	418	1007		732	2383		270	1568	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.54	0.53	0.79		0.79	0.38		0.23	0.64	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 100: STH 100 & Burleigh Street



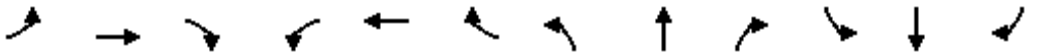
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	540	210	735	25	550	590	265	60	635	315
Future Volume (veh/h)	330	755	540	210	735	25	550	590	265	60	635	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	352	221	774	26	579	621	279	63	668	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	564	368	872	29	631	1879	827	109	1318	614
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3555	1563	3510	3457	1610
Grp Volume(v), veh/h	347	795	352	221	519	281	579	609	291	63	668	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1633	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	18.1	9.1	22.1	22.2	24.4	22.9	23.5	2.7	22.2	24.1
Cycle Q Clear(g_c), s	14.8	22.6	18.1	9.1	22.1	22.2	24.4	22.9	23.5	2.7	22.2	24.1
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	564	368	585	316	631	1842	864	109	1318	614
V/C Ratio(X)	0.88	0.87	0.62	0.60	0.89	0.89	0.92	0.33	0.34	0.58	0.51	0.54
Avail Cap(c_a), veh/h	544	1287	680	407	725	392	790	1842	864	292	1318	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.2	64.1	60.8	60.9	69.5	38.6	38.9	71.7	35.6	36.2
Incr Delay (d2), s/veh	9.9	3.7	0.6	1.2	9.6	16.5	12.2	0.5	1.1	1.8	1.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	10.9	7.4	15.7	17.5	18.6	16.3	15.9	2.2	14.6	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	65.2	70.5	77.4	81.7	39.1	39.9	73.5	37.0	39.6
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1494			1021			1479			1063	
Approach Delay, s/veh		56.1			71.2			56.0			39.9	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.2	63.4	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	26.4	26.1	11.1	24.6	4.7	25.5	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.1	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	55.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Future Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	245	0	31	61	133	173	1117	0	357	1113	0
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.49	0.78		0.40	0.47	0.41	0.39	0.51		0.84	0.38	
Control Delay	56.1	74.2		81.2	78.8	52.8	16.6	35.0		41.1	17.3	

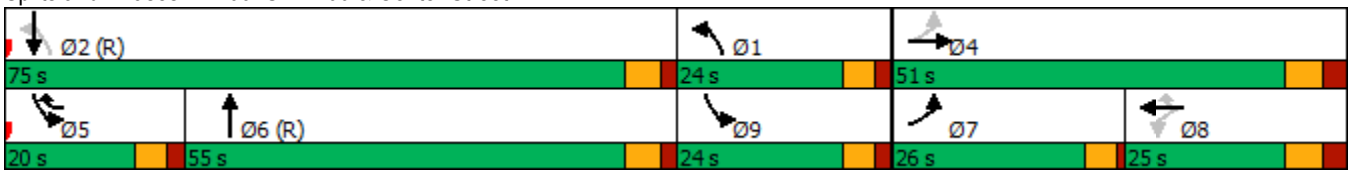
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	74.2		81.2	78.8	52.8	16.6	35.0		41.1	17.3	
90th %ile Green (s)	19.2	36.6		12.9	12.9	21.7	18.5	49.3			76.5	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.2	31.3		10.6	10.6	19.8	18.5	56.5			81.8	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.2	28.7		10.0	10.0	17.0	18.5	61.9			84.4	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.0	26.5		10.0	10.0	14.7	18.5	66.4			86.6	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	11.1	18.5	79.4			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	117	230		30	59	111	47	297		184	251	
Queue Length 95th (ft)	173	311		66	109	166	88	394		241	267	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	312	492		131	216	331	445	2178		436	2928	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.44	0.50		0.24	0.28	0.40	0.39	0.51		0.82	0.38	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:NBSB and 6:NBT, Start of 1st Green
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Future Volume (vph)	135	75	165	30	60	210	170	1085	10	350	1015	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.20	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	389	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	138	77	168	31	61	133	173	1107	10	357	1036	77
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	138	245	0	31	61	133	173	1117	0	357	1113	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	D.P+P	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	2					
Actuated Green, G (s)	29.5	29.5		8.7	8.7	25.6	102.1	61.2		35.4	83.6	
Effective Green, g (s)	29.5	29.5		8.7	8.7	25.6	102.1	61.2		35.4	83.6	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.17	0.68	0.41		0.24	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	272	331		64	105	265	440	2125		428	2877	
v/s Ratio Prot	0.06	c0.15			0.03	0.06	0.05	c0.21		c0.20	0.22	
v/s Ratio Perm	0.04			0.03		0.03	0.22					
v/c Ratio	0.51	0.74		0.48	0.58	0.50	0.39	0.53		0.83	0.39	
Uniform Delay, d1	52.5	56.6		68.5	68.9	56.4	20.1	33.5		54.5	18.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.83	0.91	
Incremental Delay, d2	0.5	7.6		2.1	5.2	0.5	0.2	0.9		11.2	0.3	
Delay (s)	53.1	64.2		70.6	74.1	57.0	20.4	34.4		56.5	17.3	
Level of Service	D	E		E	E	E	C	C		E	B	
Approach Delay (s)		60.2			63.5			32.5			26.8	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

APPENDIX B
DATA COLLECTION

Dollar Tree & Red Lobster Driveway Counts

Area Chick-fil-A Drive-Through Queues

Area Chick-fil-A Drive-Through Processing Times

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Dollar Tree North DW

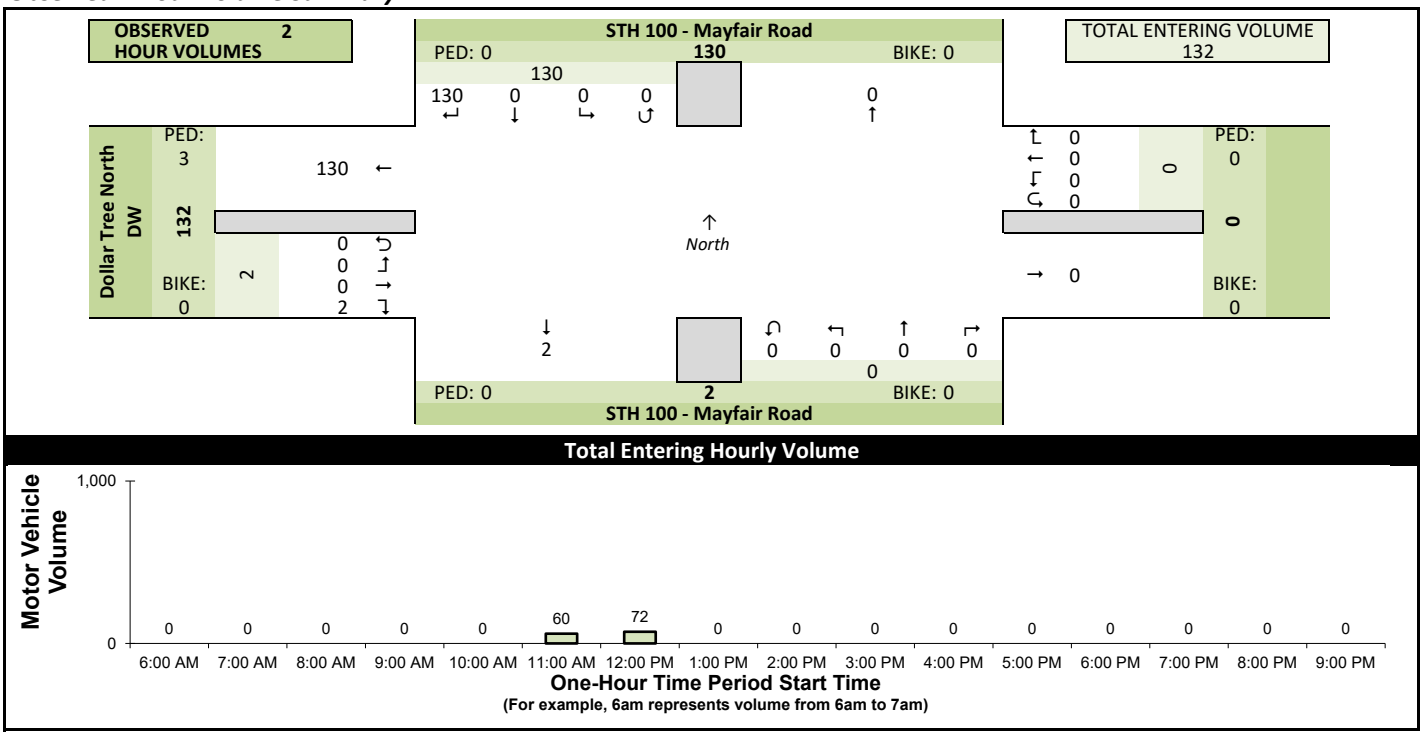
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Dollar Tree North DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

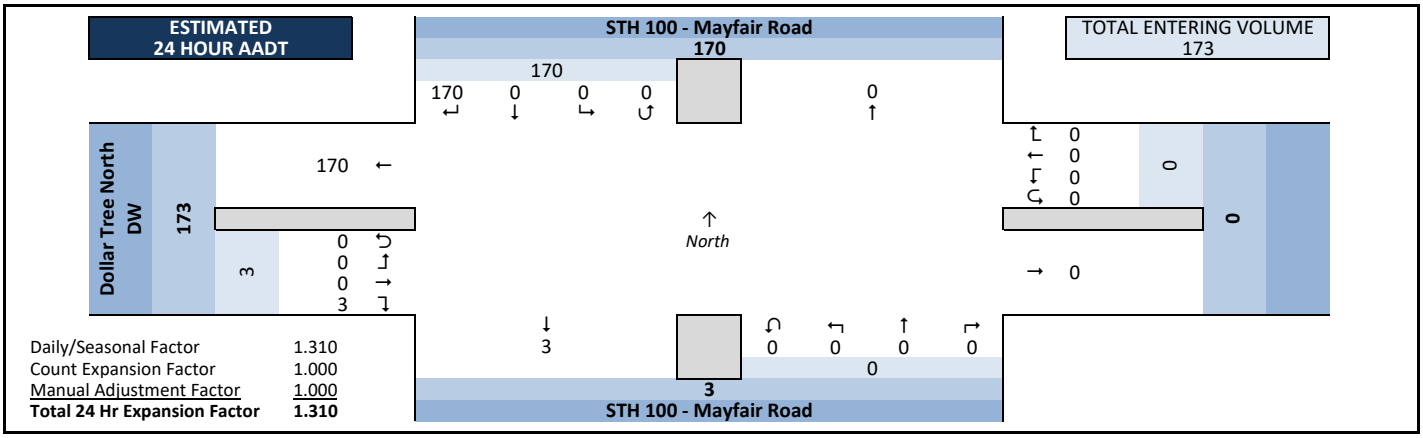
Count Information

Hrs Counted:	11:00 AM-1:00 PM				
1st Day of Count	Saturday, February 25, 2023			Weather	
AM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Midday Peak Period	Saturday, February 25, 2023			Clear & Dry	
PM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD	12:00-1:00pm	PM	
Peak Hours Selected for Analysis					
AM		MD	11:45-12:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.310	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Jane Fait			
	PM Peak Period	None			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

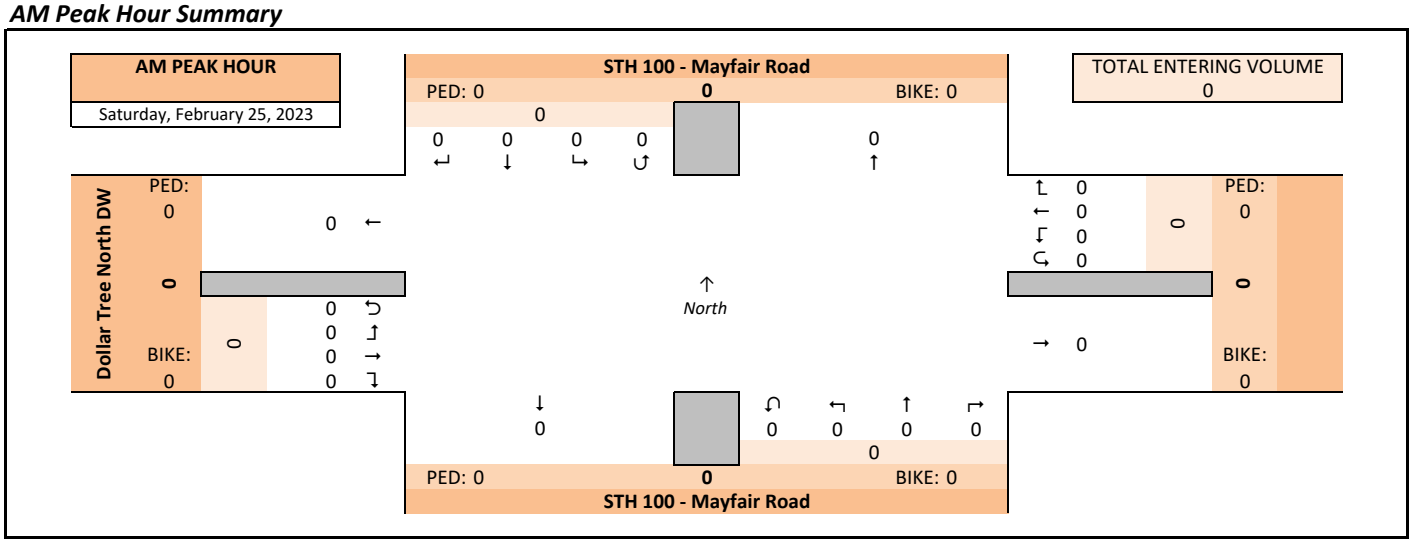
Count Basics			Page 2 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

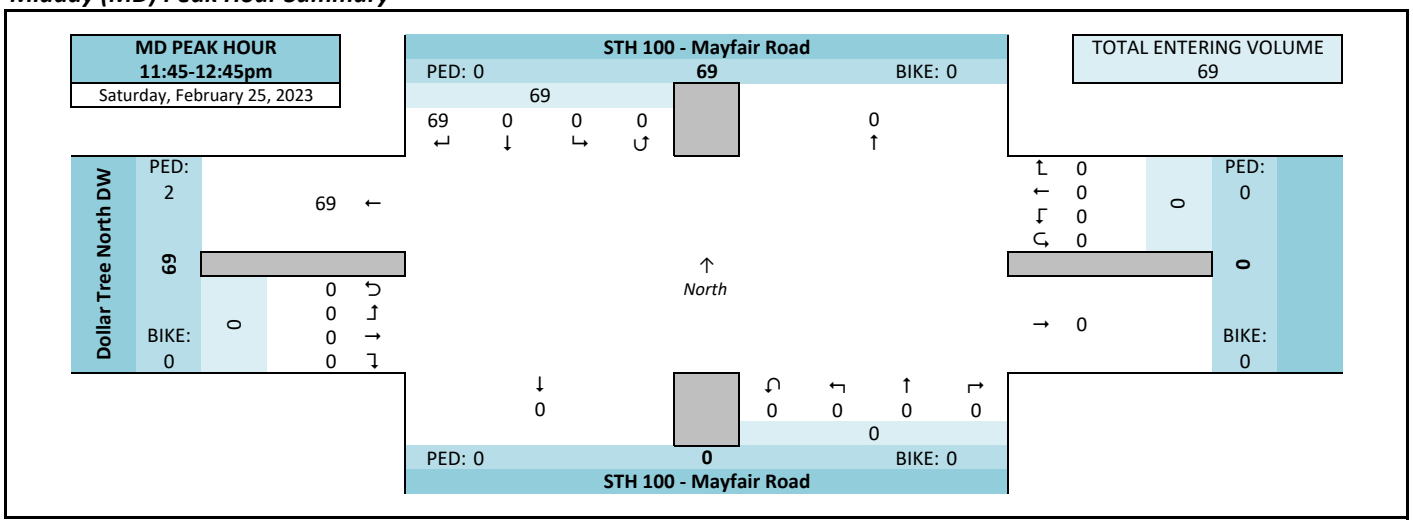
All Motor Vehicles

STH 100 - Mayfair Road and Dollar Tree North DW

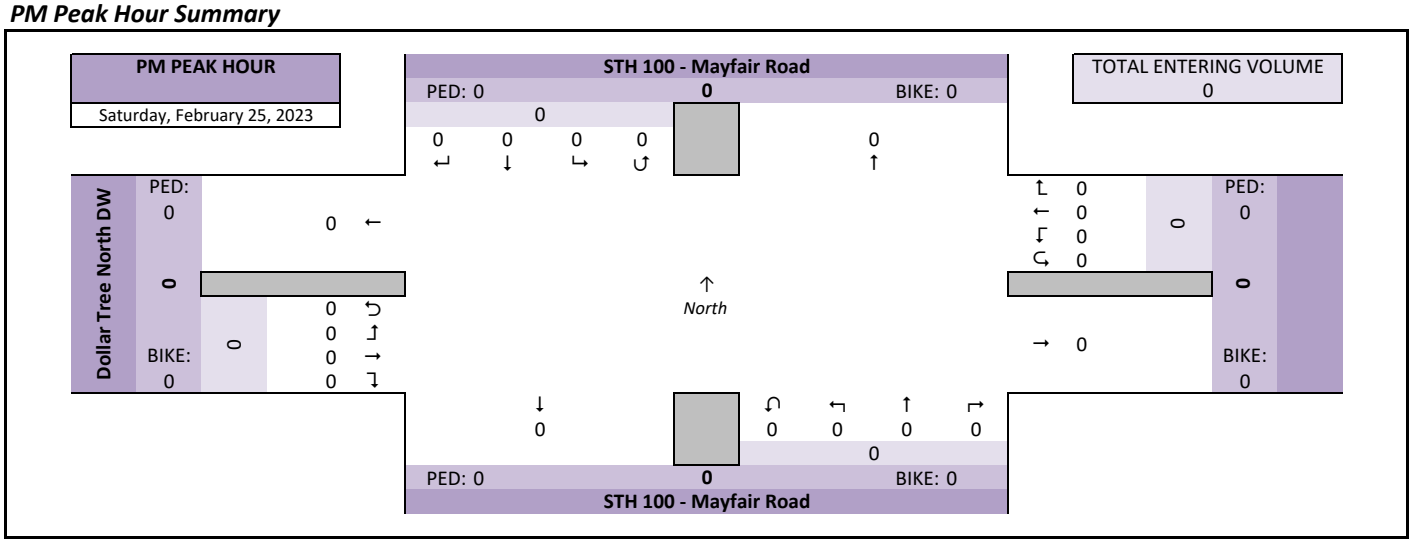
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		Page 3 of 13
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Dollar Tree North DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, February 25, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, February 25, 2023		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	16	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	12:00 PM	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	12:15 PM	23	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
	12:30 PM	17	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	Peak Hour Volume	69	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
	Rounded Hourly Volume	70	0	0	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75

Saturday, February 25, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Dollar Tree North DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	2	0	2	2
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Dollar Tree North DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree North DW					15-Min	Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	12	60	0.83
	11:15 AM	14	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	61	0.85
	11:30 AM	18	0	0	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	70	0.76
	11:45 AM	16	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	69	0.75
	12:00 PM	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	72	0.78
	12:15 PM	23	0	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23		
	12:30 PM	17	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17		
	12:45 PM	19	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		130	0	0	0	130	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	132		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree North DW					Total Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	11:45 AM	69	0	0	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	0.75
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Dollar Tree North DW

15-Minute Heavy Vehicle Data

15-Minute Time Period	Start Time	From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree North DW					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period	Start Time	From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree North DW					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Tuesday, February 28, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Dollar Tree North DW

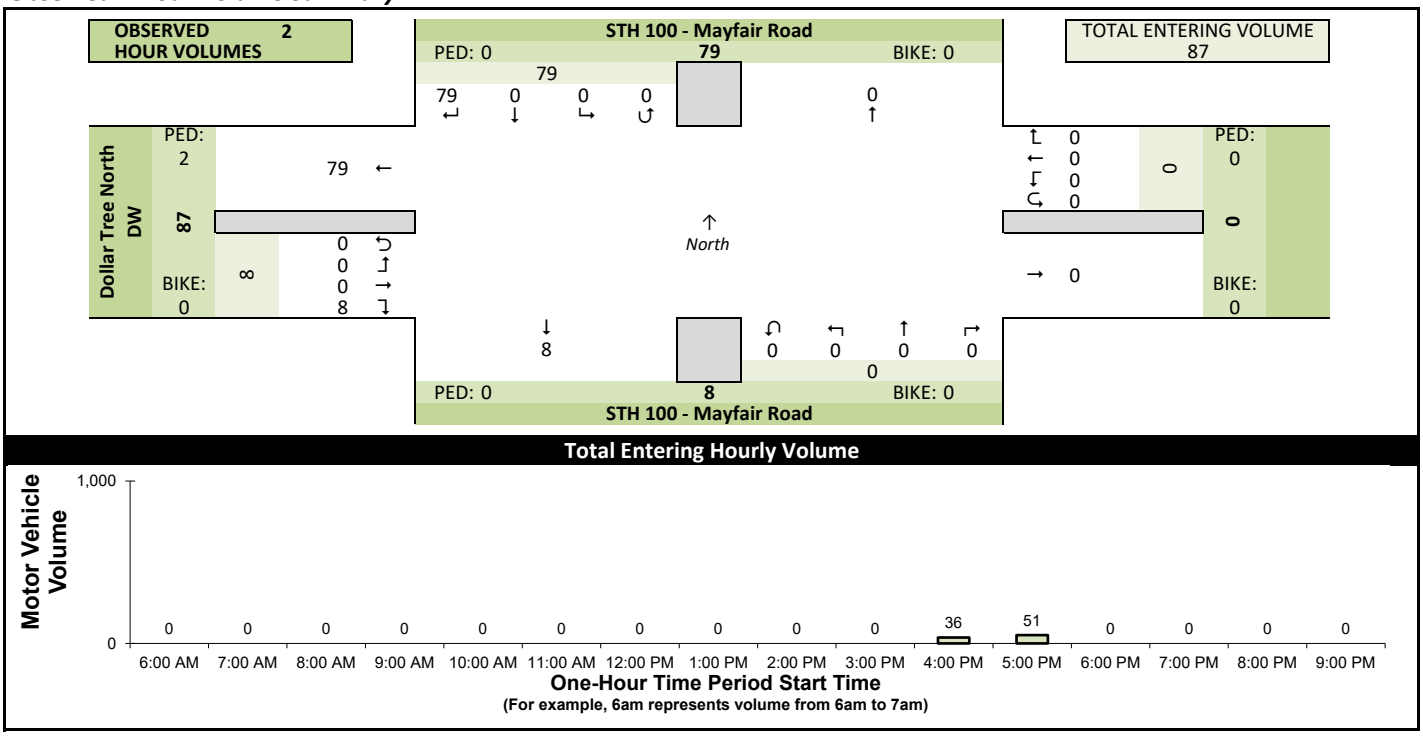
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Dollar Tree North DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

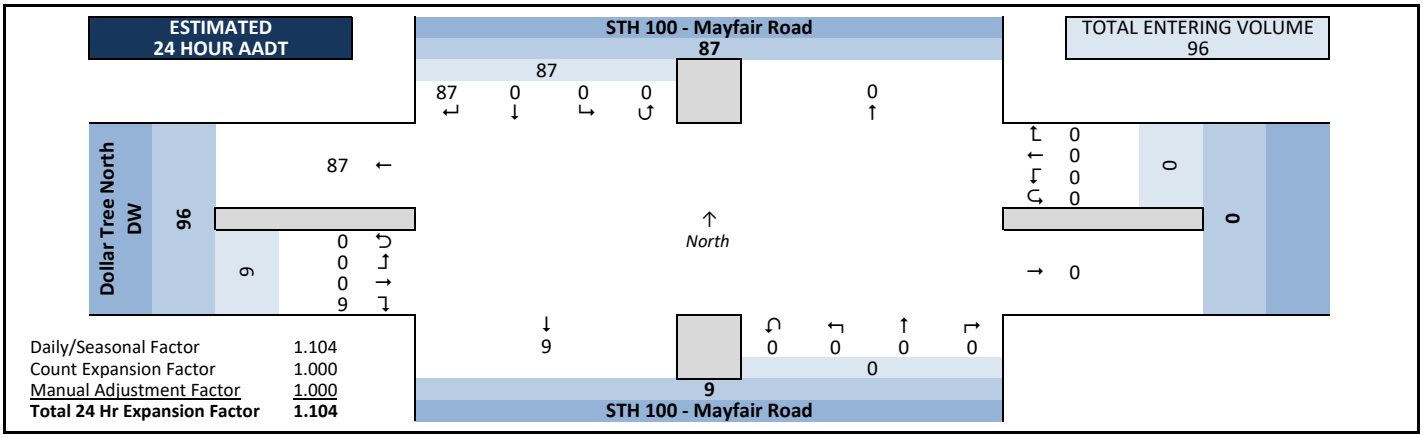
Count Information

Hrs Counted:	4:00 PM-6:00 PM				
1st Day of Count	Tuesday, February 28, 2023			Weather	
AM Peak Period	Tuesday, February 28, 2023			Clear & Dry	
Midday Peak Period	Tuesday, February 28, 2023			Clear & Dry	
PM Peak Period	Tuesday, February 28, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD		PM	5:00-6:00pm
Peak Hours Selected for Analysis					
AM		MD		PM	4:30-5:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.104	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	None			
	PM Peak Period	Jane Fait			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

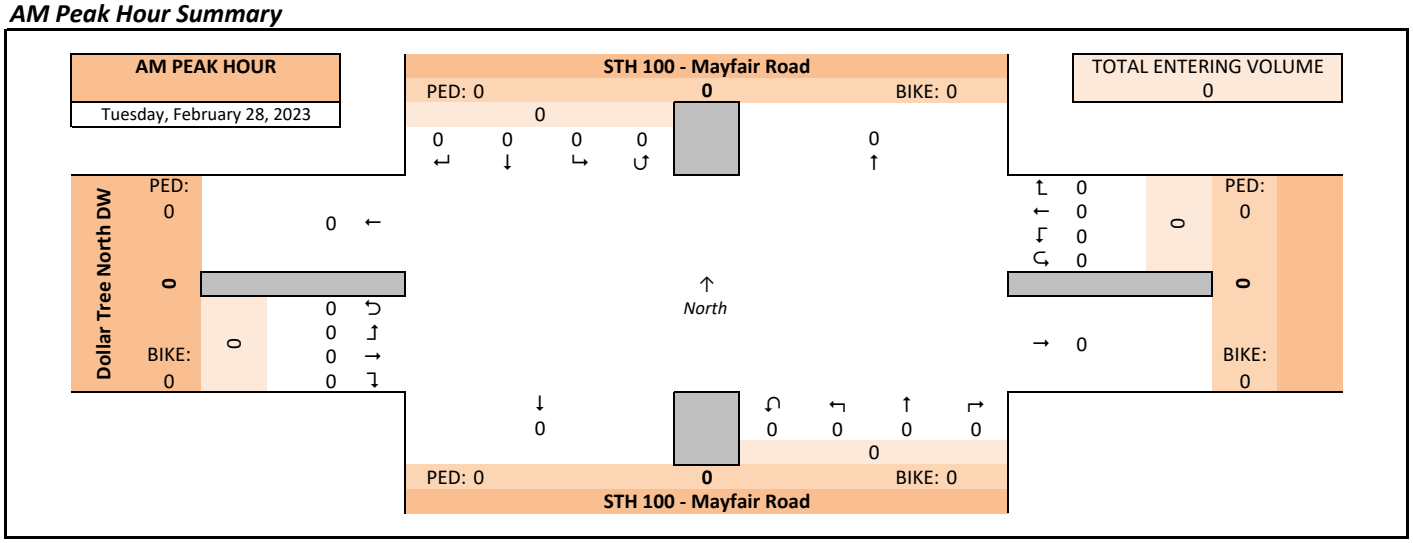
Count Basics			Page 2 of 13
Start Date:	Tuesday, February 28, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

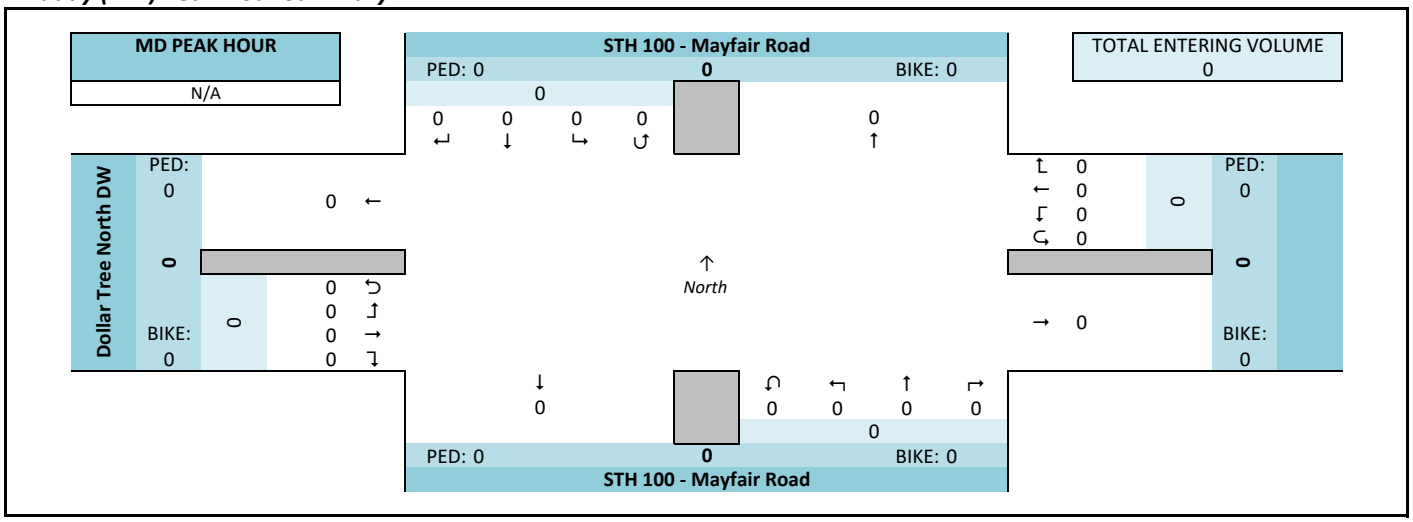
STH 100 - Mayfair Road and Dollar Tree North DW

All Motor Vehicles

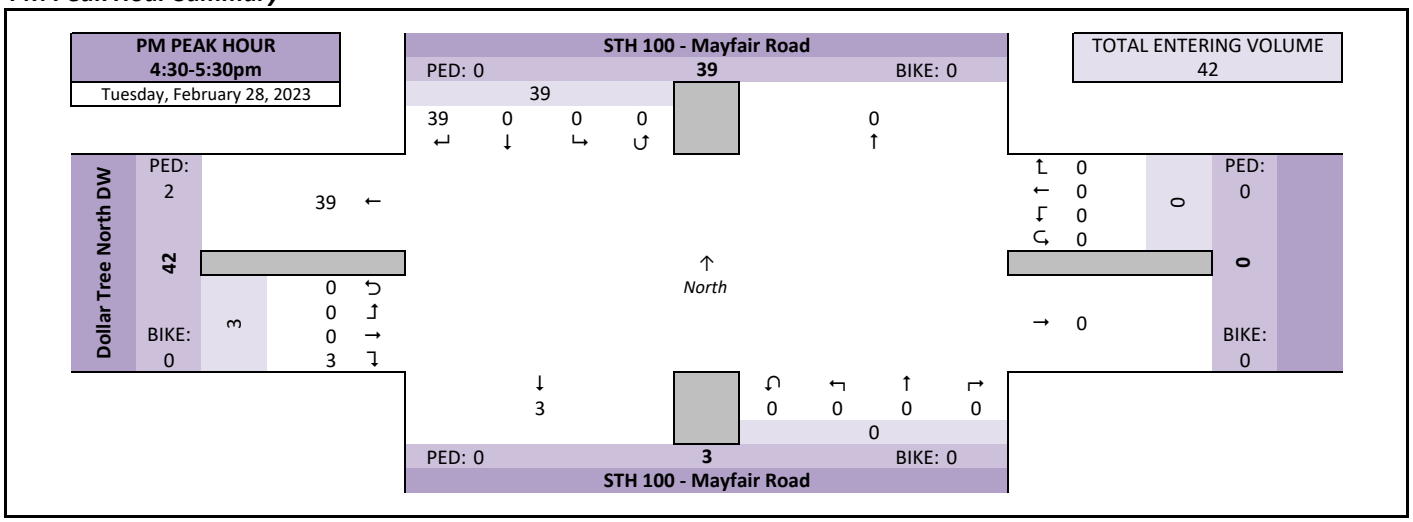
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			*Page 3 of 13*
Start Date:	Tuesday, February 28, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Dollar Tree North DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Tuesday, February 28, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N/A		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tuesday, February 28, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:30 PM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	4:45 PM	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	5:00 PM	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	12
	5:15 PM	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	13
	Peak Hour Volume	39	0	0	0	39	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	42
	Rounded Hourly Volume	40	0	0	0	40	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	45
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.89	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.37	0.81

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Dollar Tree North DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
	4:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	2	0	2	2

Intersection Traffic Volume Report

Count Basics			*Page 5 of 13*
Start Date:	Tuesday, February 28, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Dollar Tree North DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree North DW					15-Min	Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	9	36	0.90
	4:15 PM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	10	39	0.81
	4:30 PM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	42	0.81
	4:45 PM	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	48	0.92
	5:00 PM	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	12	51	0.98
	5:15 PM	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	13		
	5:30 PM	12	0	0	0	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	13		
	5:45 PM	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		79	0	0	0	79	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	87		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree North DW					Total Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM	4:30 PM	39	0	0	0	39	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	42	0.81

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Tuesday, February 28, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Dollar Tree North DW

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓)					From East (←)					From South (↑)					From West (→)					15-Min	Hourly
		STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					Totals	Sum
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓)					From East (←)					From South (↑)					From West (→)					Total Hourly
		STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree North DW					
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Dollar Tree South DW

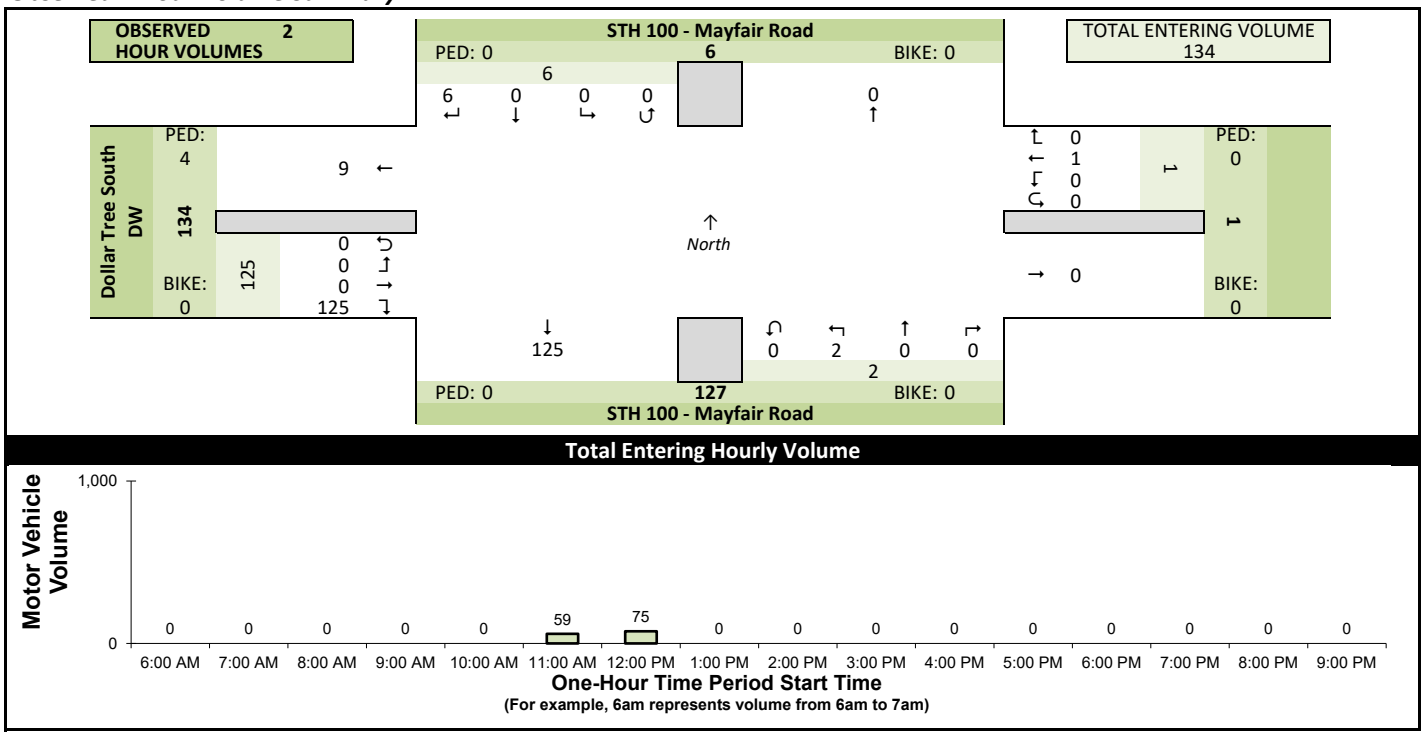
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Dollar Tree South DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

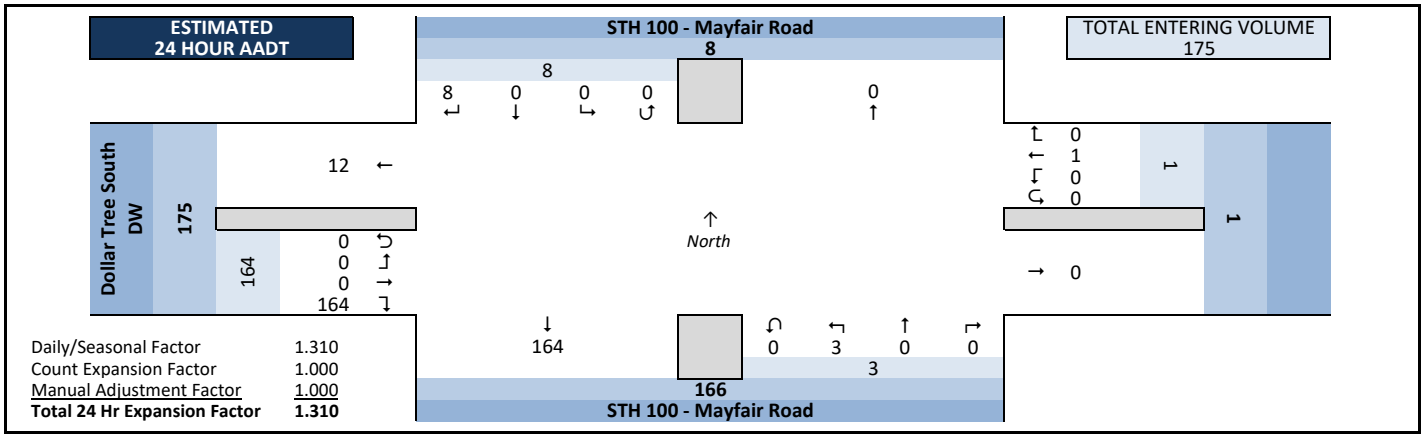
Count Information

Hrs Counted:	11:00 AM-1:00 PM				
1st Day of Count	Saturday, February 25, 2023			Weather	
AM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Midday Peak Period	Saturday, February 25, 2023			Clear & Dry	
PM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD	12:00-1:00pm	PM	
Peak Hours Selected for Analysis					
AM		MD	11:45-12:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.310	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Dani Ruffalo			
	PM Peak Period	None			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

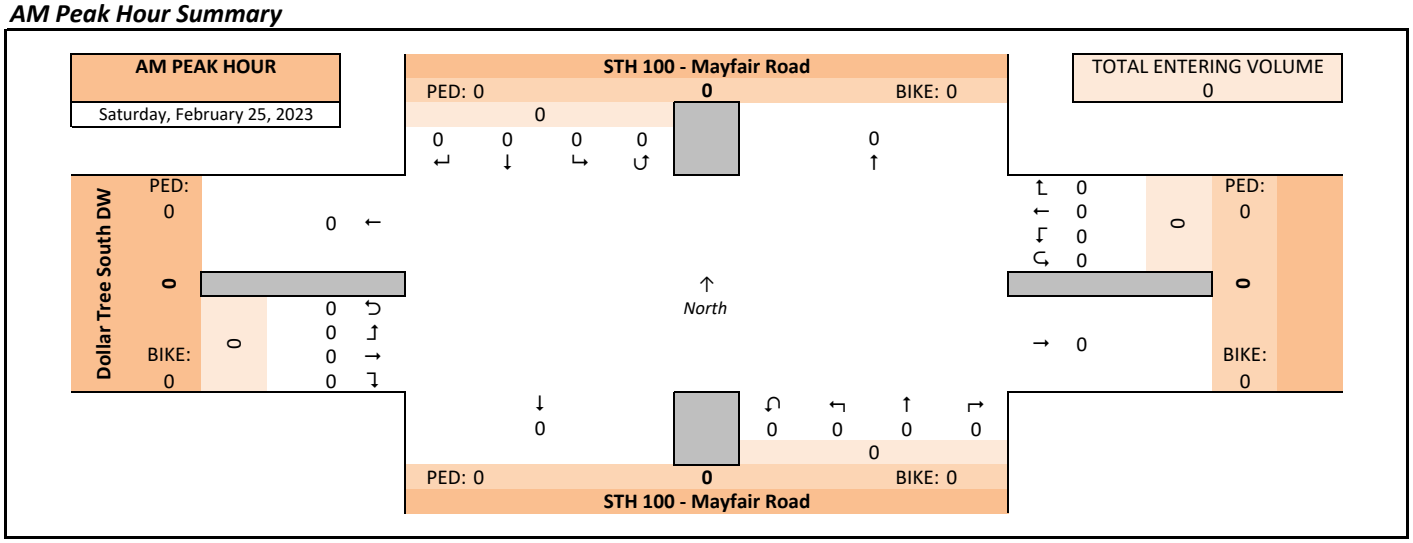
Count Basics			Page 2 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

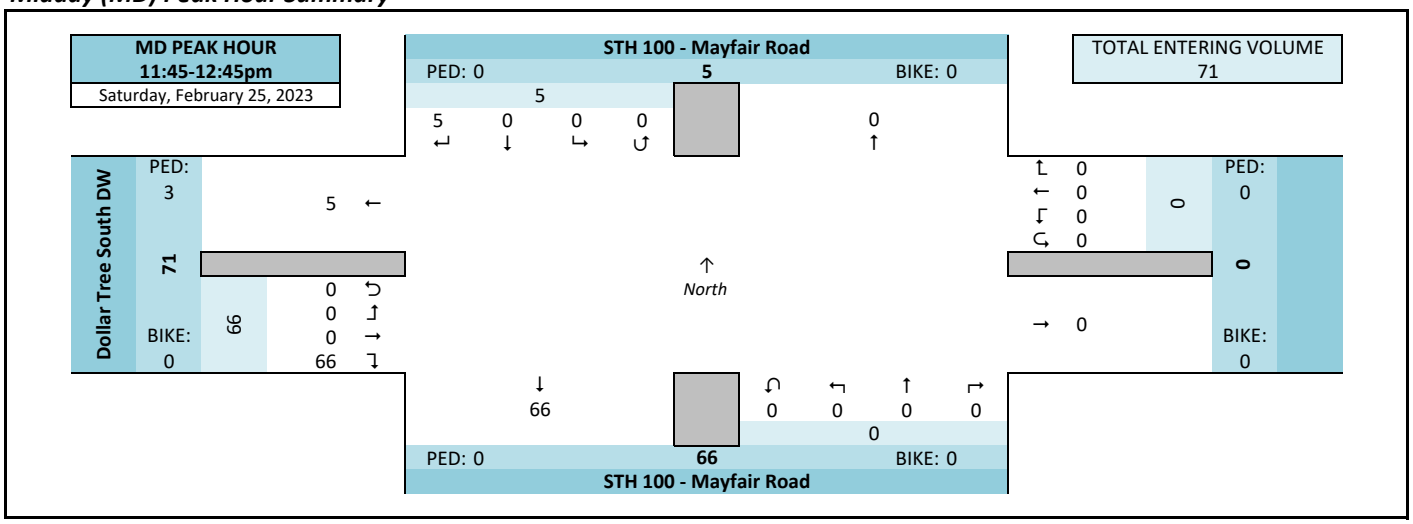
All Motor Vehicles

STH 100 - Mayfair Road and Dollar Tree South DW

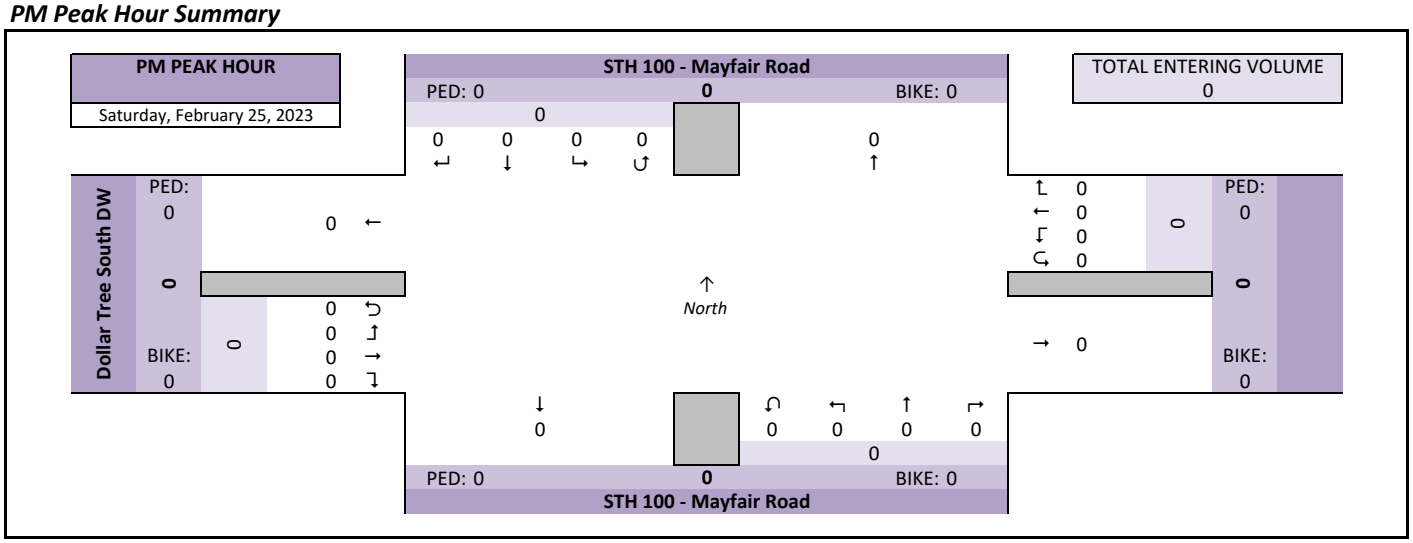
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		Page 3 of 13
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Dollar Tree South DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, February 25, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree South DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, February 25, 2023		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree South DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	18
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	9
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	21	21
	12:30 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	19	0	0	0	19	23
	Peak Hour Volume	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	66	0	0	0	66	71
	Rounded Hourly Volume	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	65	0	0	0	65	70
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.31	0.00	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.79	0.77

Saturday, February 25, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree South DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Dollar Tree South DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
	12:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	1
	Total	0	0	0	0	0	0	0	0	0	3	0	3	3
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Dollar Tree South DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	13	0	0	0	13	15	59	0.82
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	10	53	0.74
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15	0	0	0	15	16	64	0.76
	11:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	18	71	0.77
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	9	75	0.82
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	21	21		
	12:30 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	19	0	0	0	19	23		
	12:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	21	0	0	0	21	22		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		6	0	0	0	6	0	1	0	0	1	0	0	2	0	2	125	0	0	0	125	134		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	11:45 AM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	66	0	0	0	66	71	0.77
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Dollar Tree South DW

15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Dollar Tree South DW

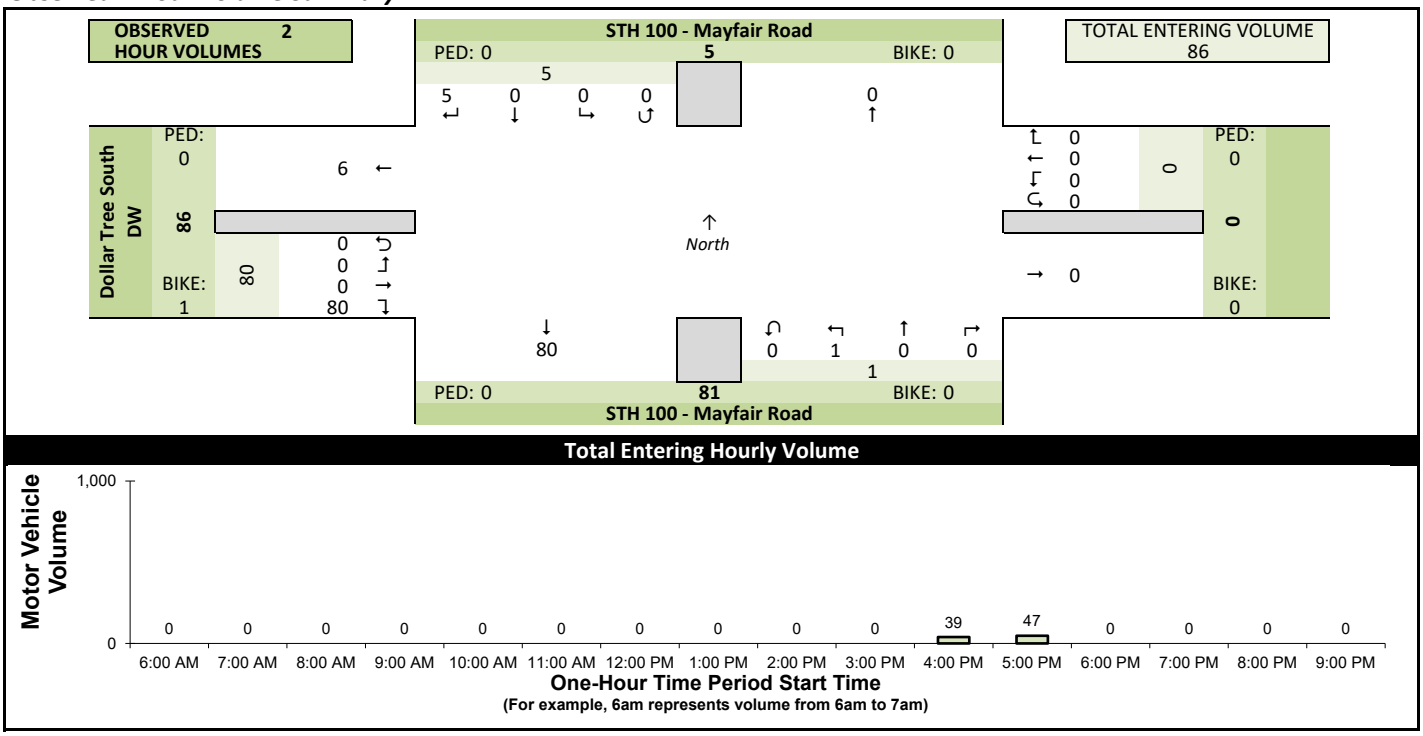
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Dollar Tree South DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

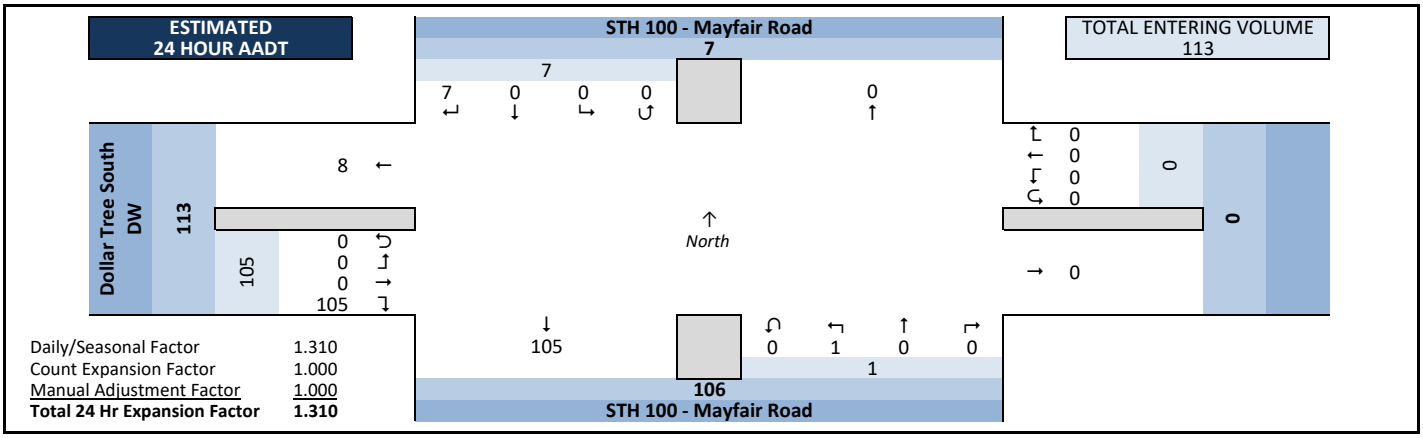
Count Information

Hrs Counted:	4:00 PM-6:00 PM				
1st Day of Count	Saturday, February 25, 2023			Weather	
AM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Midday Peak Period	Saturday, February 25, 2023			Clear & Dry	
PM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD		PM	5:00-6:00pm
Peak Hours Selected for Analysis					
AM		MD		PM	4:30-5:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.310	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	None			
	PM Peak Period	Wendy Picard			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

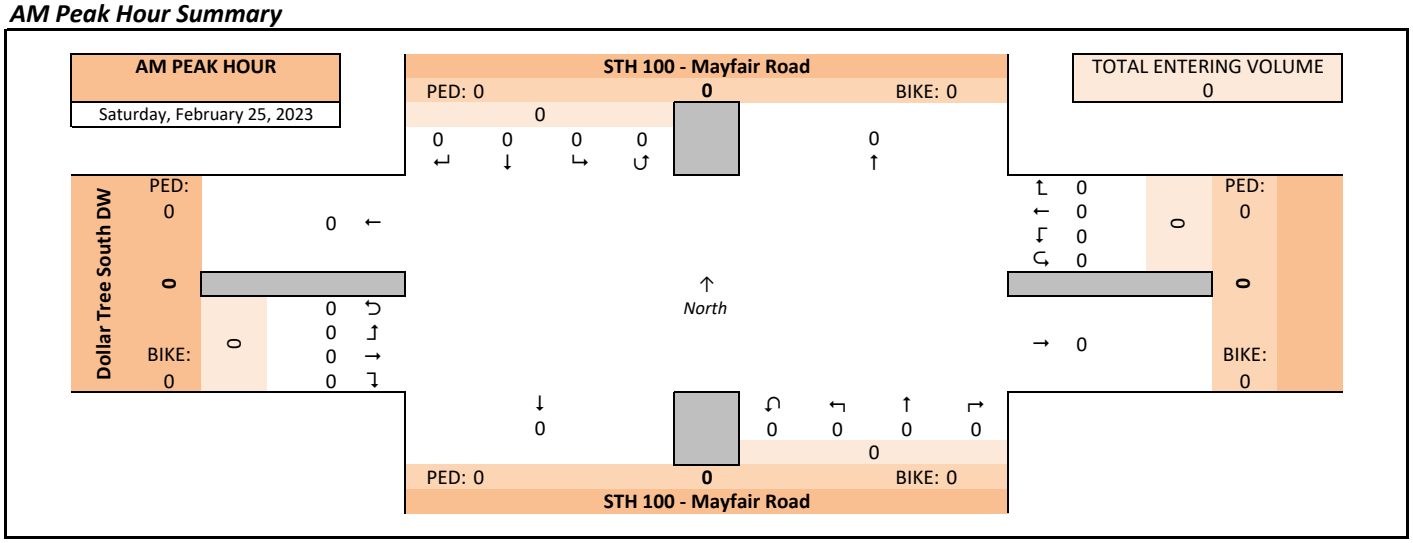
Count Basics			Page 2 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

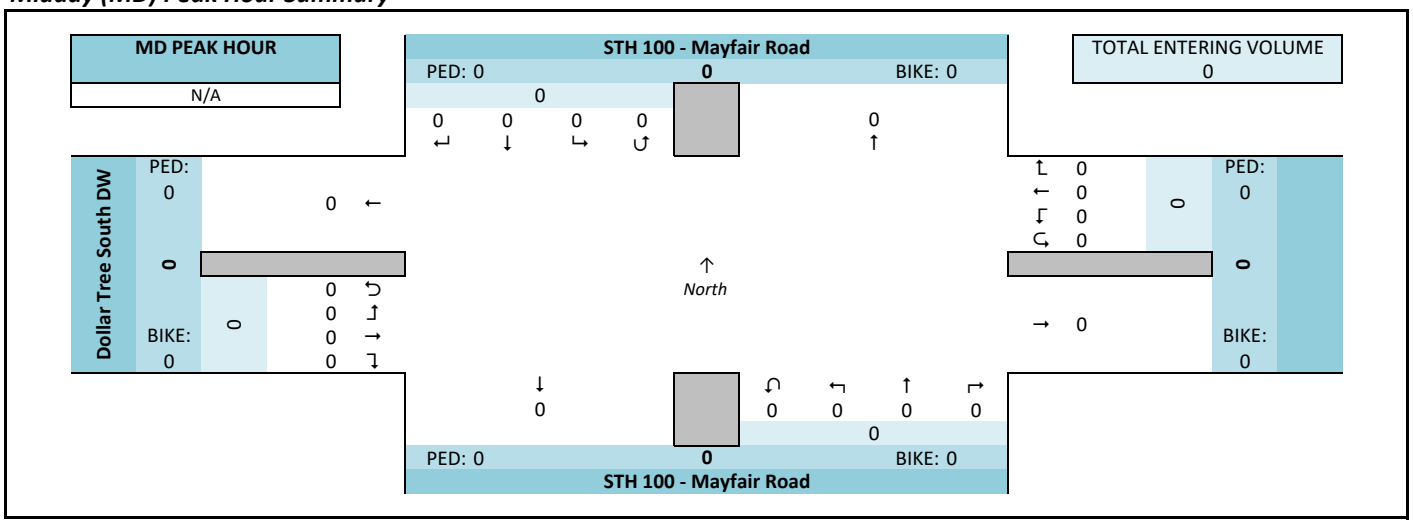
STH 100 - Mayfair Road and Dollar Tree South DW

All Motor Vehicles

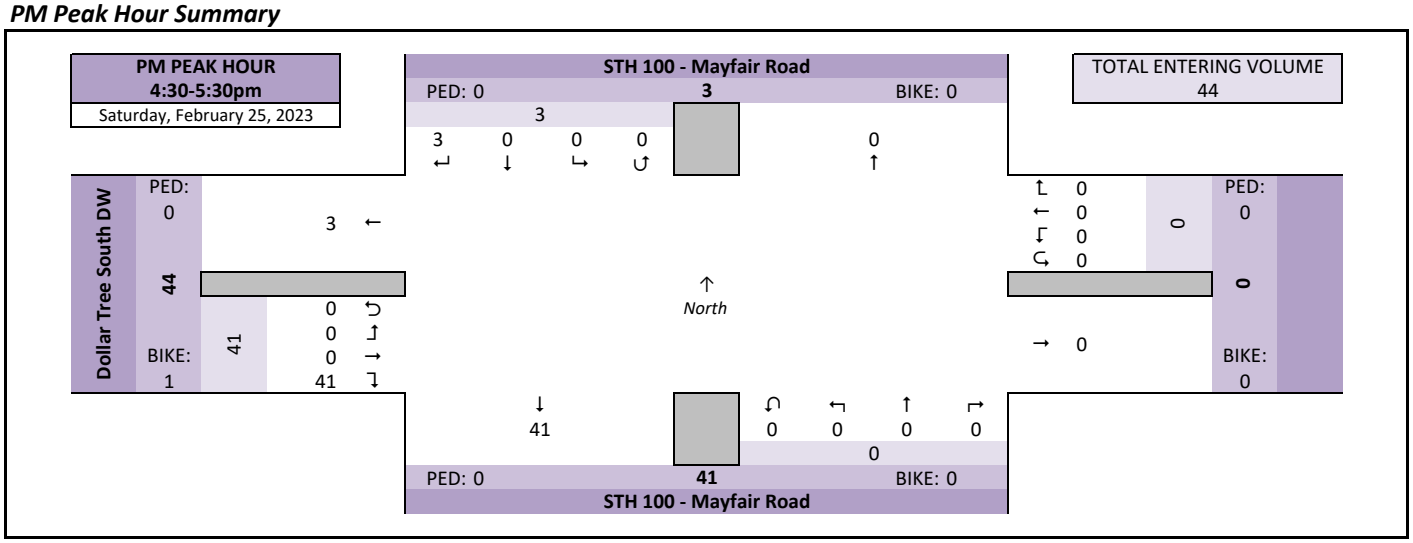
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		*Page 3 of 13*
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Dollar Tree South DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, February 25, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree South DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N/A		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree South DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, February 25, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Dollar Tree South DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	16	0	0	0	16	17
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	7
	5:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	11
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	9
	Peak Hour Volume	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	41	0	0	0	41	44
	Rounded Hourly Volume	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	40	0	0	0	40	45
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.37	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.64	0.65

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Dollar Tree South DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	1	1	1

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Dollar Tree South DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					15-Min	Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5	39	0.57
	4:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	8	0	0	0	8	10	45	0.66
	4:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	16	0	0	0	16	17	44	0.65
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	7	43	0.67
	5:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	11	47	0.73
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	9	9		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	16	16		
	5:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	11		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		5	0	0	0	5	0	0	0	0	0	0	0	1	0	1	80	0	0	0	80	86		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					Total Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM	4:30 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	41	0	0	0	41	44	0.65

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Dollar Tree South DW

15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Dollar Tree South DW					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Tuesday, March 7, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Red Lobster North DW

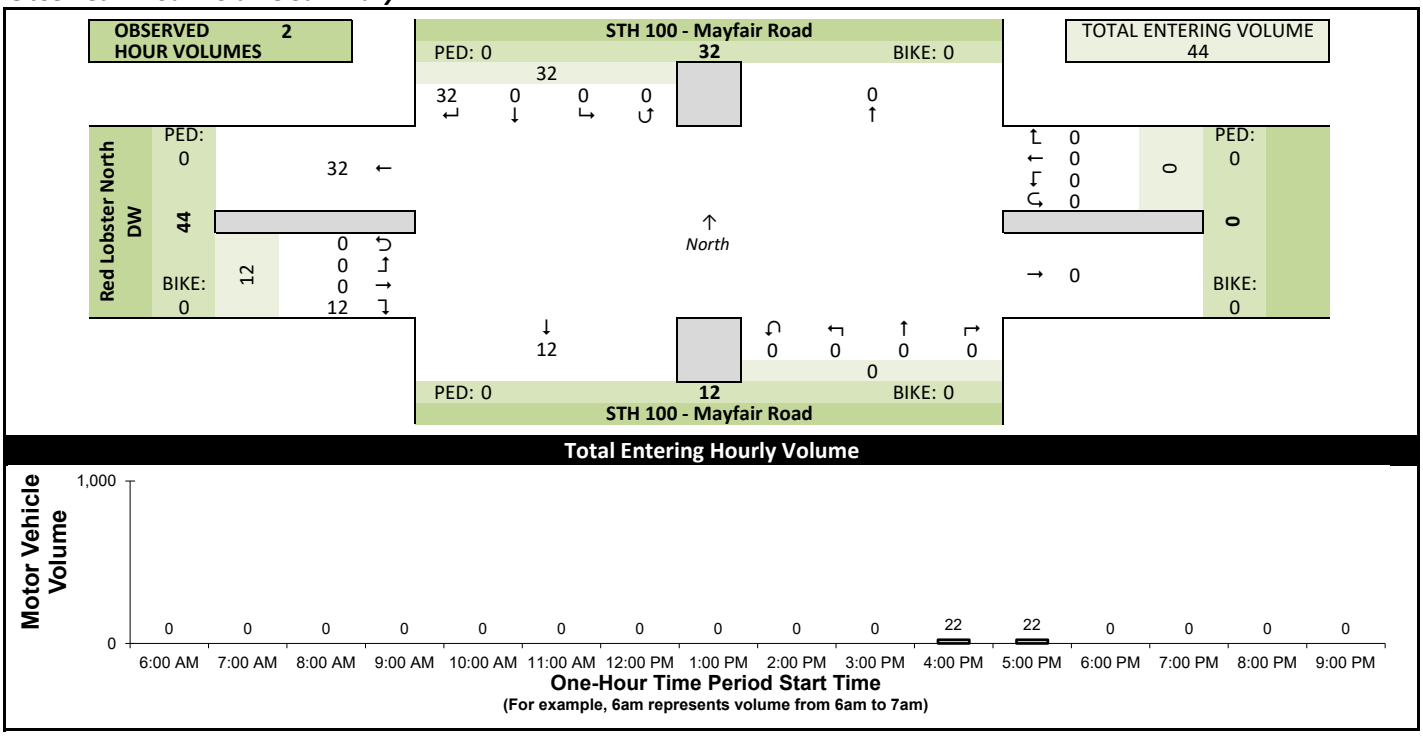
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Red Lobster North DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

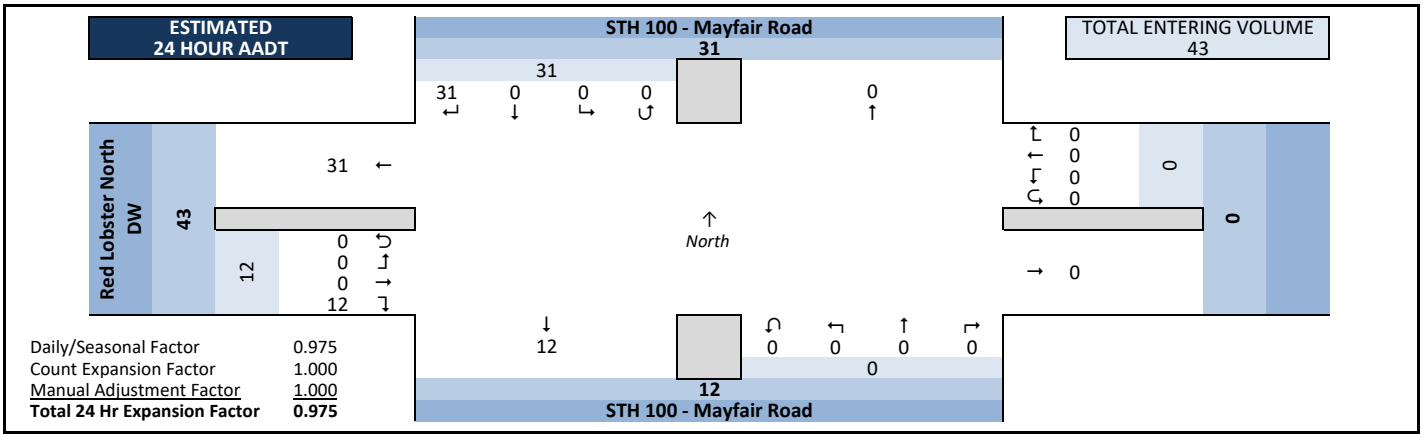
Count Information

Hrs Counted:	4:00 PM-6:00 PM				
1st Day of Count	Tuesday, March 7, 2023			Weather	
AM Peak Period	Tuesday, March 7, 2023			Clear & Dry	
Midday Peak Period	Tuesday, March 7, 2023			Clear & Dry	
PM Peak Period	Tuesday, March 7, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD		PM	4:15-5:15pm
Peak Hours Selected for Analysis					
AM		MD		PM	4:30-5:30pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	0.975	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	None			
	PM Peak Period	Lori Atwell			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

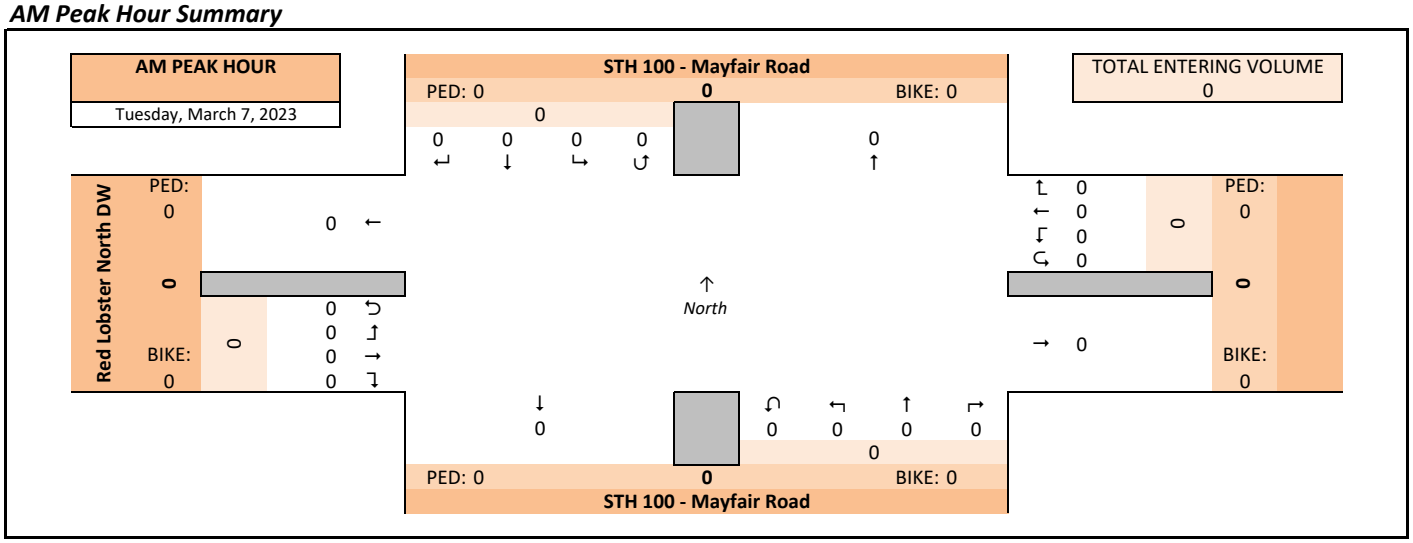
Count Basics			Page 2 of 13
Start Date:	Tuesday, March 7, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

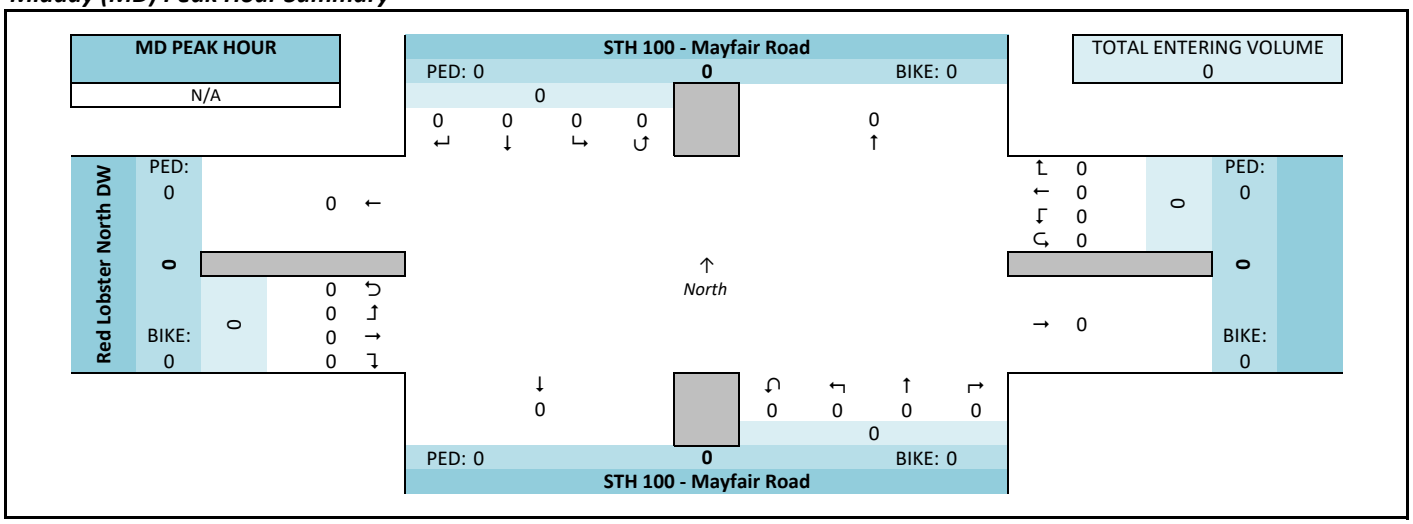
STH 100 - Mayfair Road and Red Lobster North DW

All Motor Vehicles

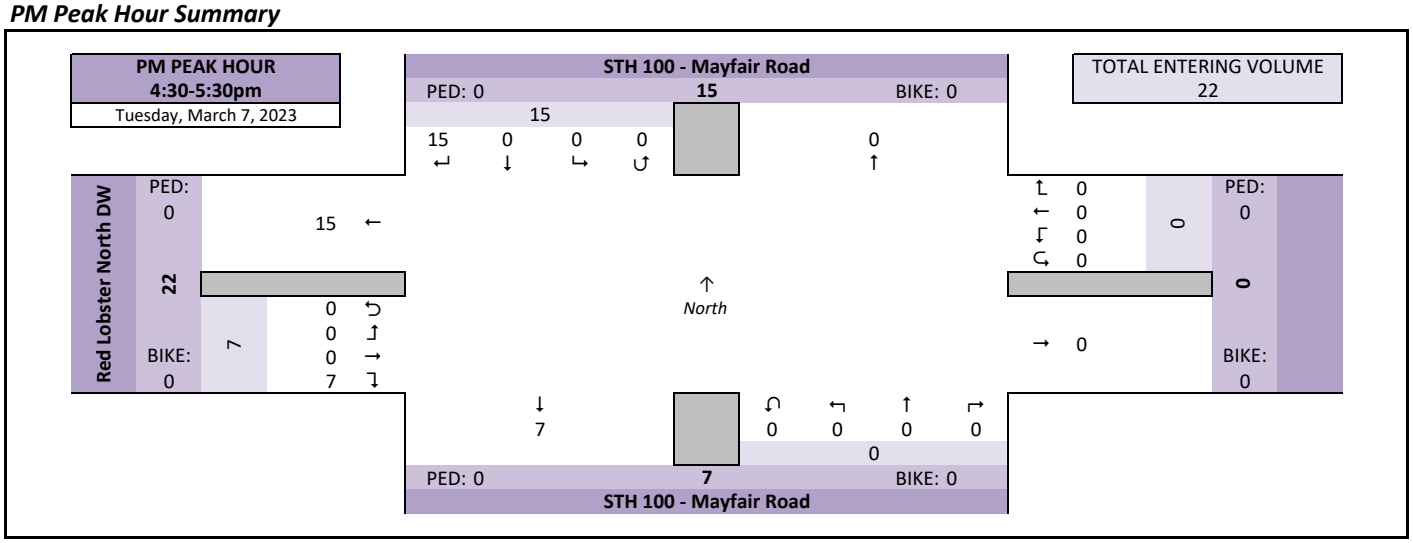
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics			Page 3 of 13
Start Date:	Tuesday, March 7, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Red Lobster North DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Tuesday, March 7, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

N/A		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Tuesday, March 7, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:30 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
	4:45 PM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	6
	5:00 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	9
	5:15 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Peak Hour Volume	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	22
	Rounded Hourly Volume	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	20
	% Single Unit Trucks	6.7	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	6.7	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
	Peak Hour Factor (PHF)	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.35	0.61

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Red Lobster North DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Tuesday, March 7, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Red Lobster North DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	22	0.61
	4:15 PM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	9	29	0.81
	4:30 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5	22	0.61
	4:45 PM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	6	23	0.64
	5:00 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	9	22	0.61
	5:15 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
	5:30 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	6		
	5:45 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		32	0	0	0	32	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	44		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM	4:30 PM	15	0	0	0	15	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	22	0.61

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Tuesday, March 7, 2023	Weekday	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Red Lobster North DW

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					15-Min	Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					Total Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 1.25		Non-Holiday	No Special Events

Base Information, Observed (1.25) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Red Lobster North DW

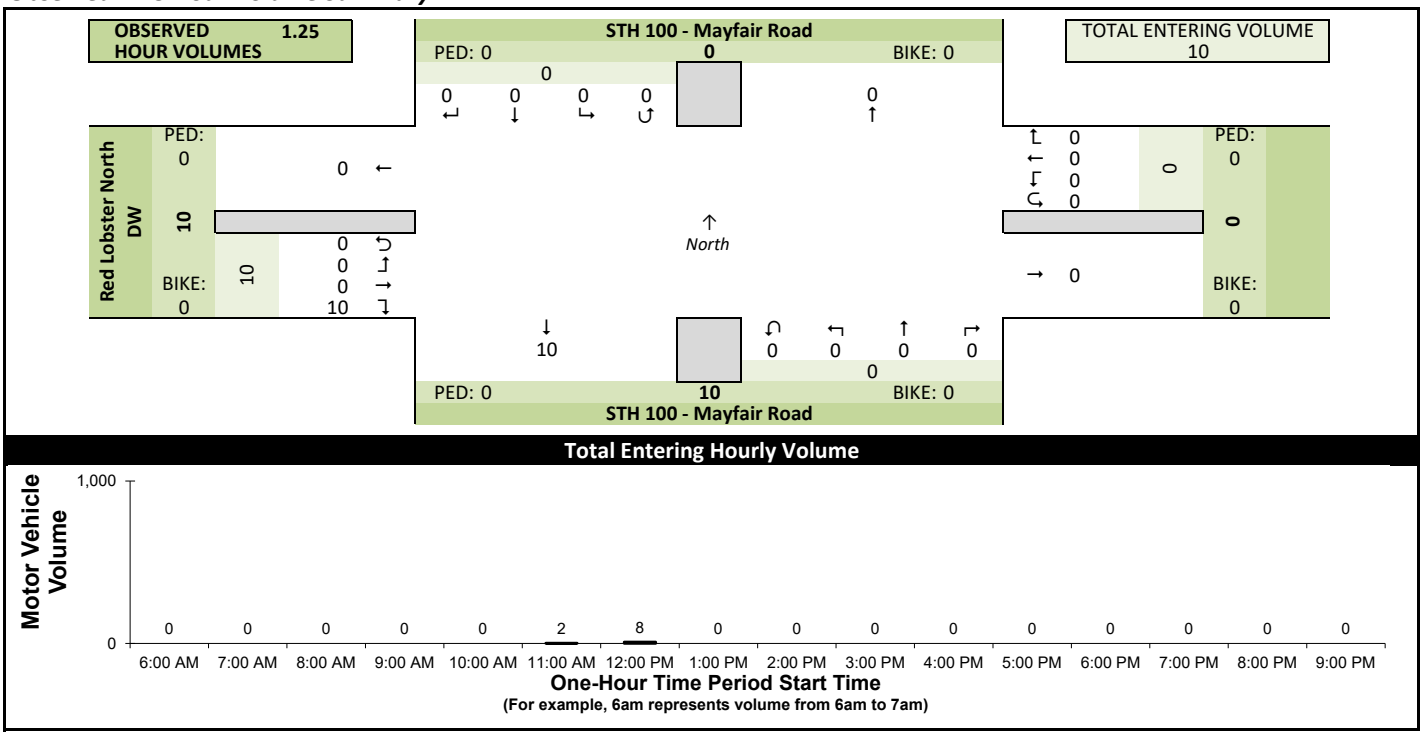
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Red Lobster North DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

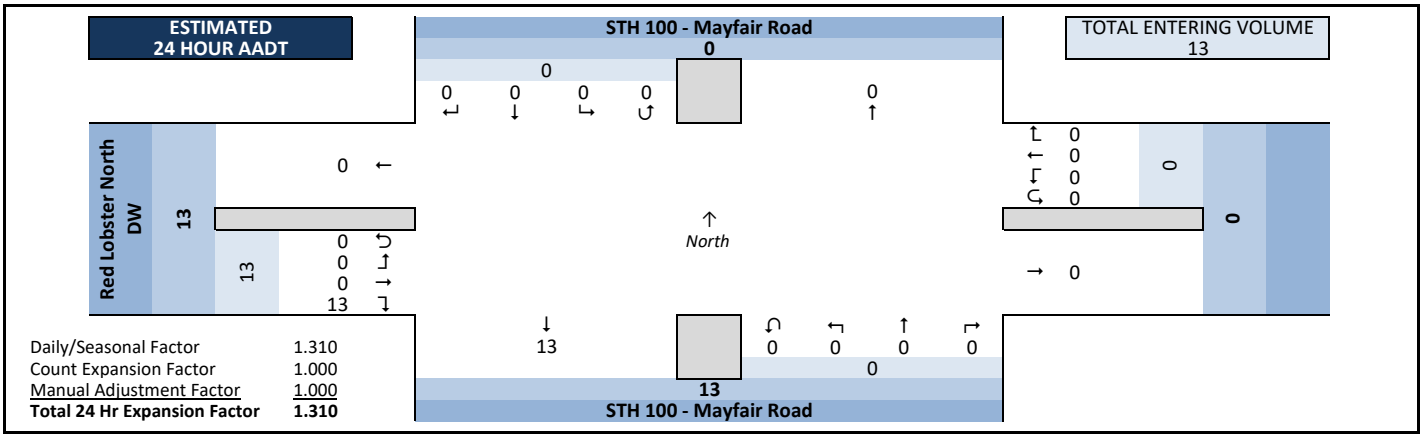
Count Information

Hrs Counted:	11:30 AM-11:45 AM and 12:00 PM-1:00 PM				
1st Day of Count	Saturday, February 25, 2023			Weather	
AM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Midday Peak Period	Saturday, February 25, 2023			Clear & Dry	
PM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD	12:00-1:00pm	PM	
Peak Hours Selected for Analysis					
AM		MD	11:45-12:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.310	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Lori Atwell			
	PM Peak Period	None			
Comments	2019 DOT Seasonal Factors				

Observed 1.25 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

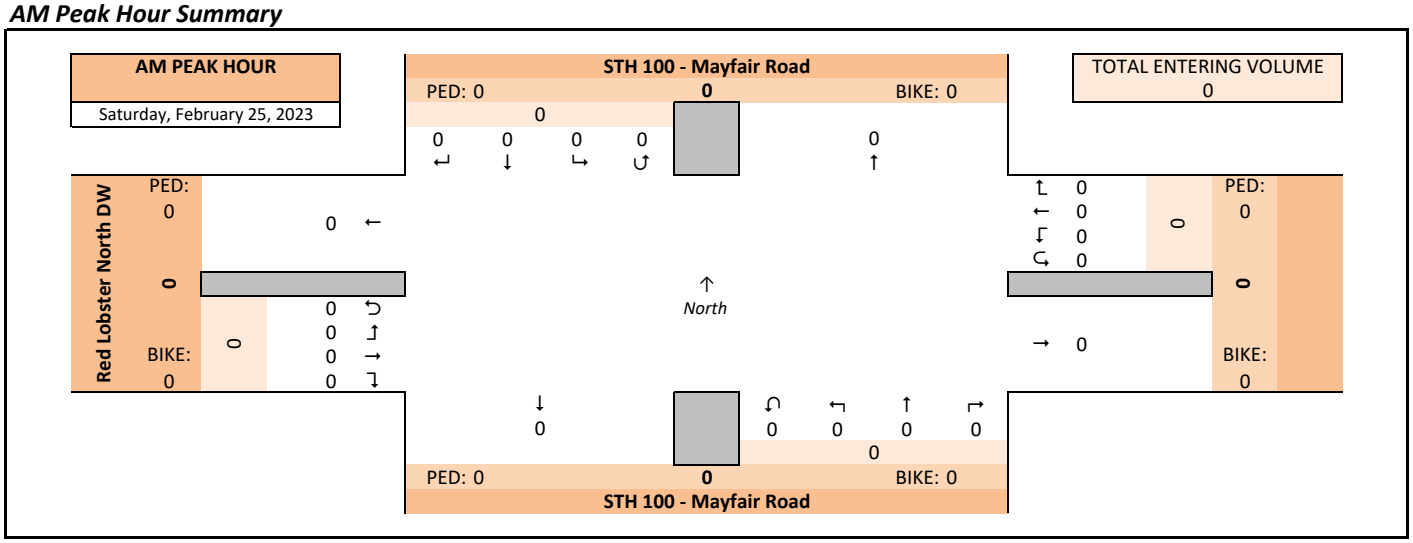
Count Basics			Page 2 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 1.25		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

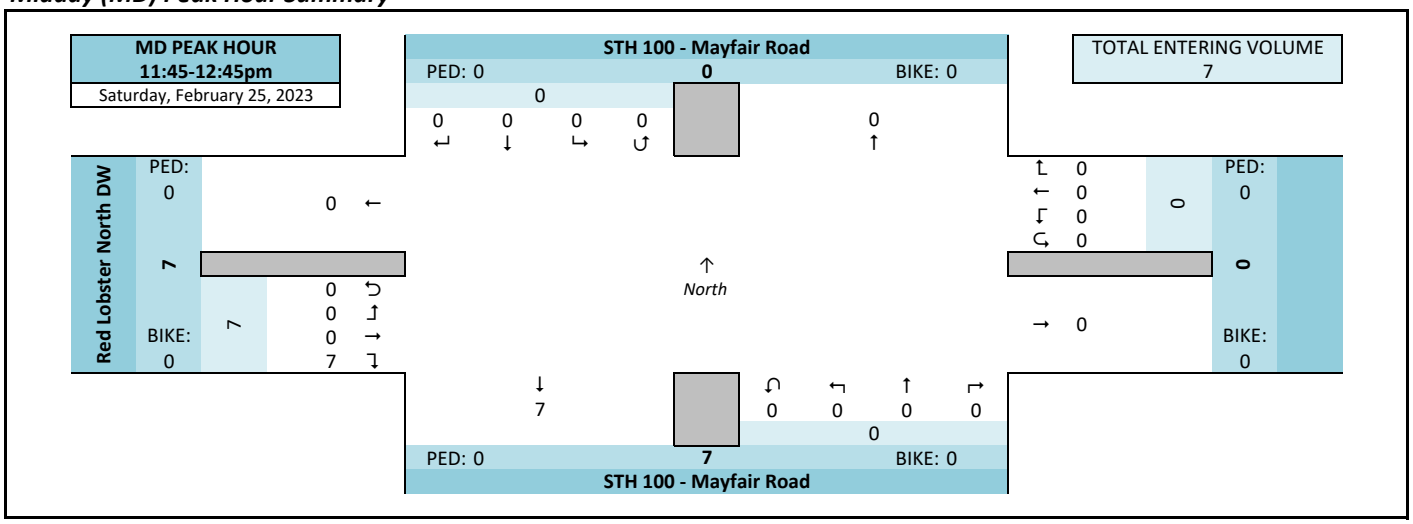
STH 100 - Mayfair Road and Red Lobster North DW

All Motor Vehicles

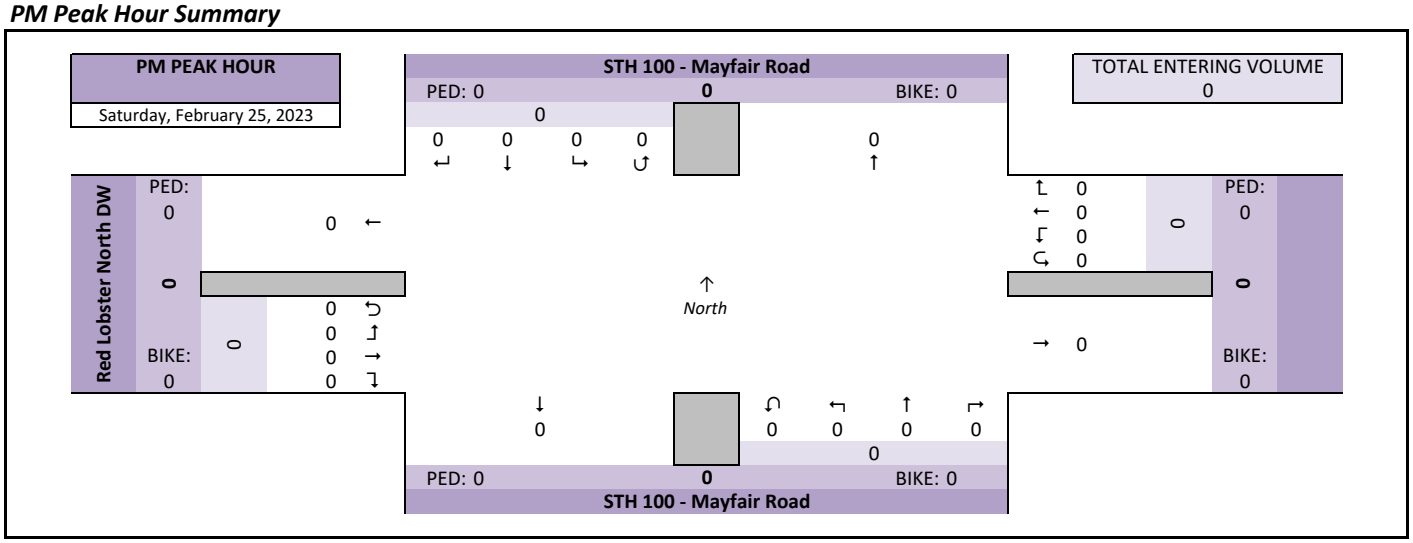
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		Page 3 of 13
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 1.25	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Red Lobster North DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, February 25, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, February 25, 2023		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	7
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	5
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00	0.44	0.44

Saturday, February 25, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Red Lobster North DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics			*Page 5 of 13*
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 1.25		Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Red Lobster North DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					15-Min	Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2		
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	8	0.50
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2		
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	4		
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	10		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					Total Hourly	
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	7	
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 1.25		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Red Lobster North DW

15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					15-Min Totals	Hourly Sum
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period Start Time		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					Total Hourly Volume
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics	Version 2013.J4.1		Page 1 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Base Information, Observed (2) Hour and Estimated (24) Hour Volume Summaries

Intersection of: STH 100 - Mayfair Road and Red Lobster North DW

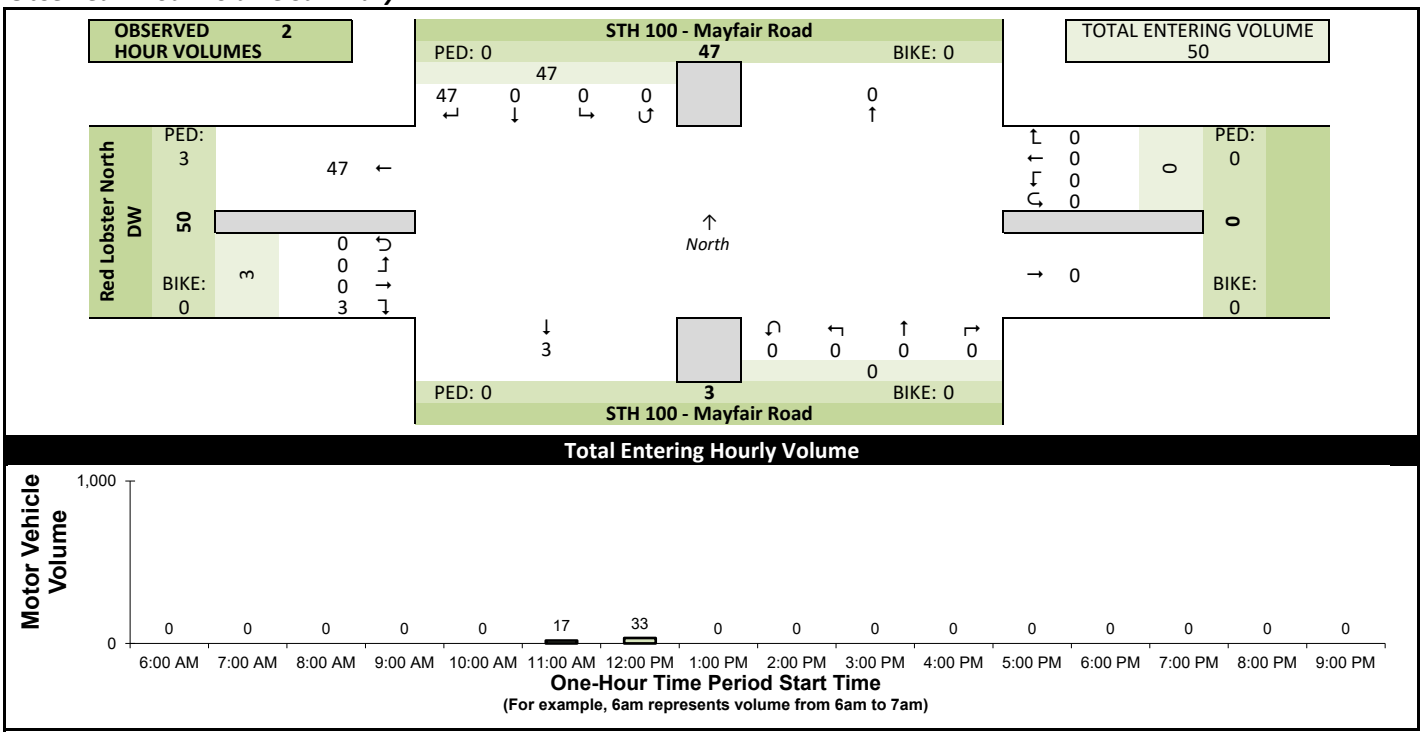
Site Information

Municipality	Wauwatosa		
County	Milwaukee	WisDOT Region	SE
Traffic Control	Uncontrolled		
Roadway Names		North Direction	↑
North Leg	STH 100 - Mayfair Road		
East Leg			
South Leg	STH 100 - Mayfair Road		
West Leg	Red Lobster North DW		
Special Considerations			
Schools	In Session		
Holidays	None		
Special Events	None		
Special Pedestrians Observed			
Pre-school children	None		
Elementry school age children	None		
Visually impaired (white cane/helper dog)	None		
Elderly/disabled (except wheelchairs)	None		
Wheelchairs/electric scooters	None		
Other (describe)	None		

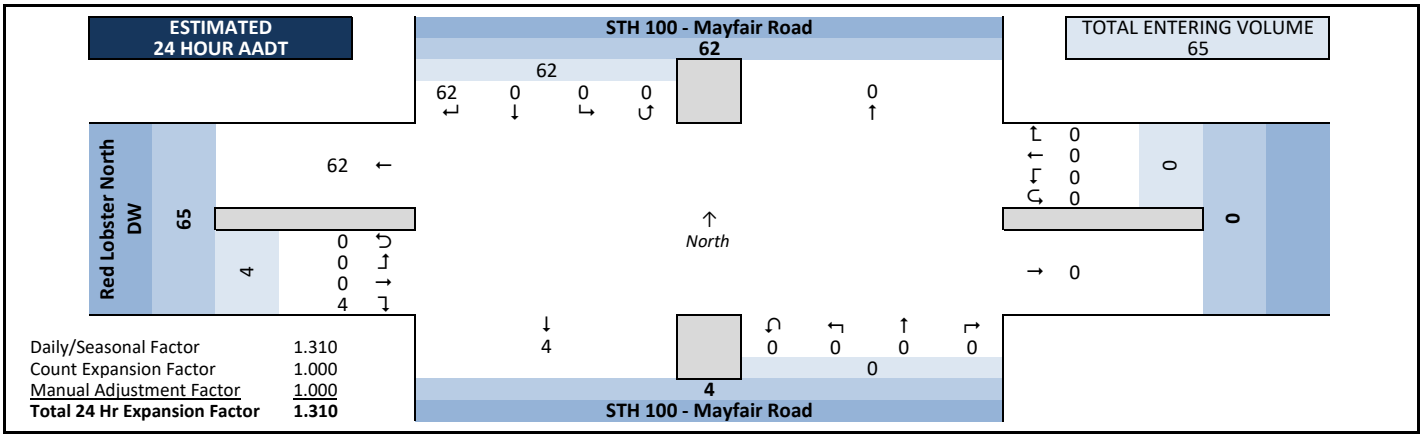
Count Information

Hrs Counted:	11:00 AM-1:00 PM				
1st Day of Count	Saturday, February 25, 2023			Weather	
AM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Midday Peak Period	Saturday, February 25, 2023			Clear & Dry	
PM Peak Period	Saturday, February 25, 2023			Clear & Dry	
Calculated Peak Hours					
AM		MD	12:00-1:00pm	PM	
Peak Hours Selected for Analysis					
AM		MD	11:45-12:45pm	PM	
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors				
Count Expansion Group	(2) Urban Arterials & Collectors				
Daily/Seasonal Adjustment Factor	1.310	Count Expansion Factor	1.000		
Company Name	TADI, Inc.			Manual Adj.	1.000
Observers	AM Peak Period	None			
	Midday Peak Period	Wendy Picard			
	PM Peak Period	None			
Comments	2019 DOT Seasonal Factors				

Observed 2 Hour Volume Summary



Estimated 24 Hour AADT



Intersection Traffic Volume Report

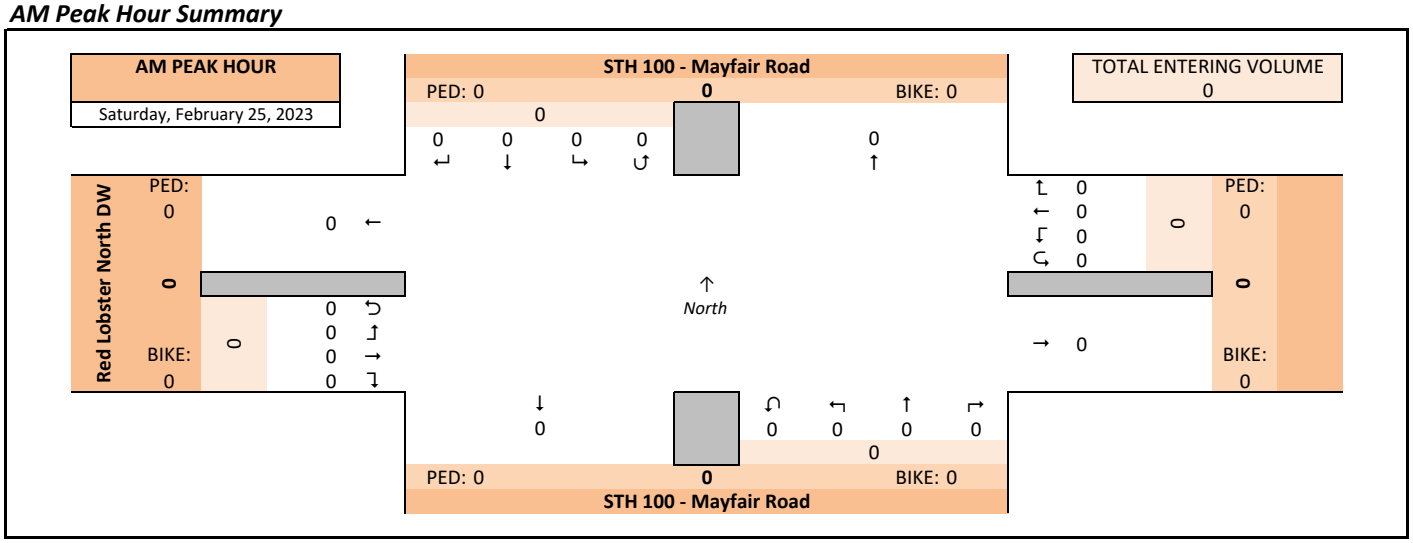
Count Basics			Page 2 of 13
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

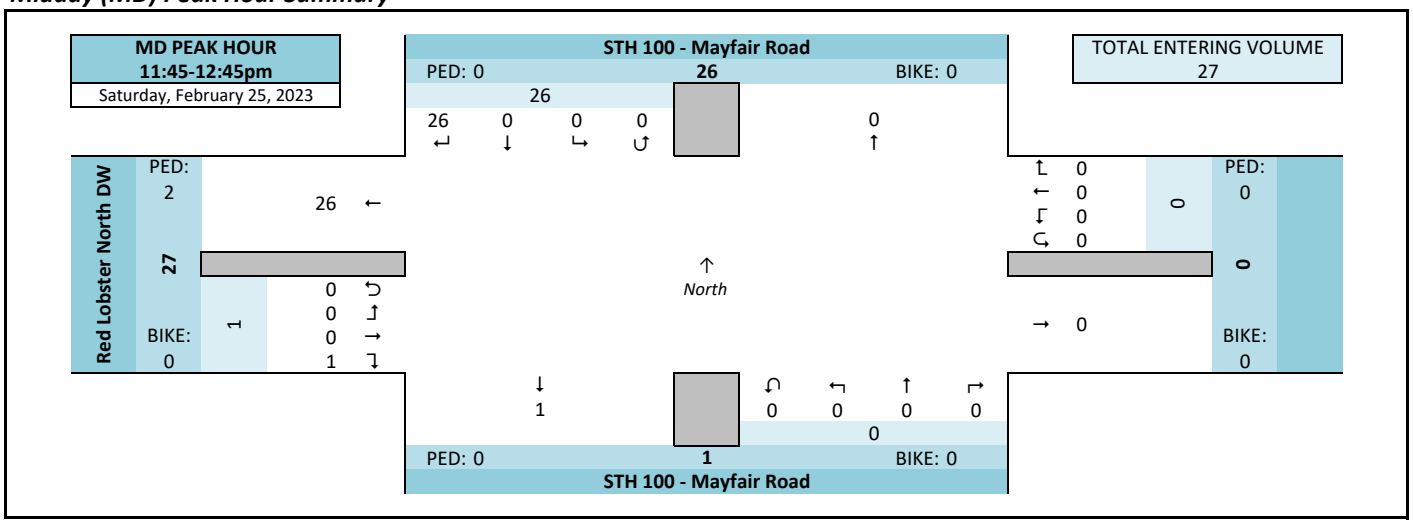
STH 100 - Mayfair Road and Red Lobster North DW

All Motor Vehicles

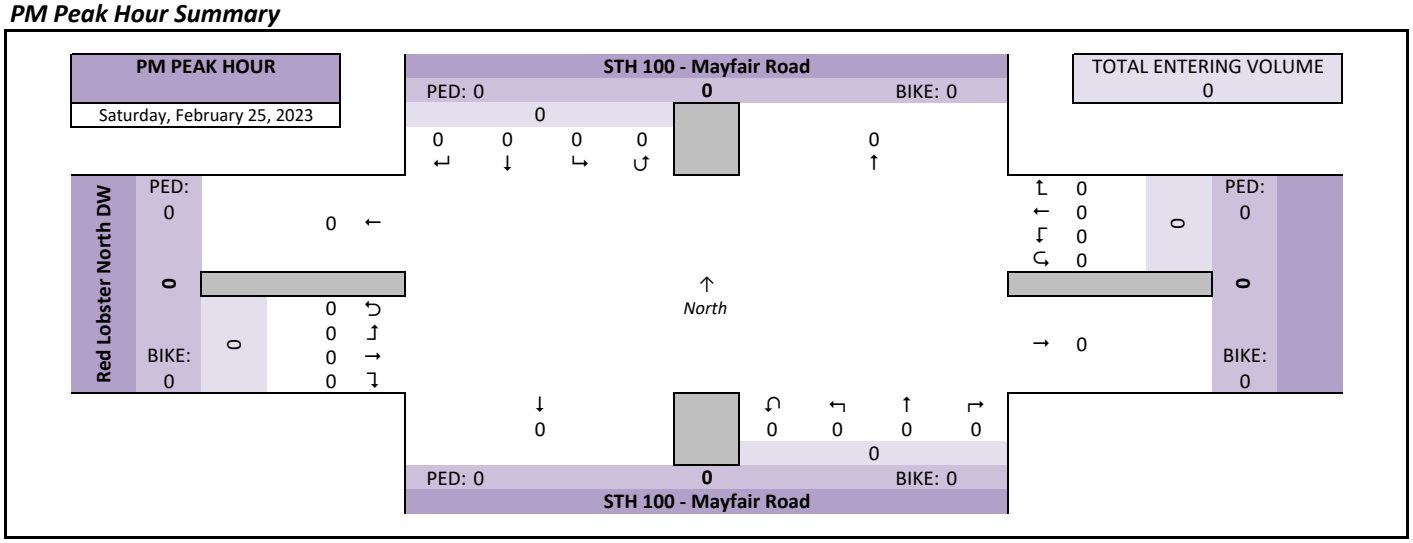
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary



Intersection Traffic Volume Report

Count Basics		*Page 3 of 13*
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

Peak Hour Volume Summary

STH 100 - Mayfair Road and Red Lobster North DW

All Motor Vehicles

Peak Hour Volumes, Truck Percentages, and PHFs

Saturday, February 25, 2023		From North					From East					From South					From West					
	AM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
AM Peak Hour	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Saturday, February 25, 2023		From North					From East					From South					From West					
	MD Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
Midday (MD) Peak Hour	11:45 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:00 PM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	9
	12:15 PM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	12:30 PM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	Peak Hour Volume	26	0	0	0	26	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	27
	Rounded Hourly Volume	25	0	0	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.81	0.00	0.00	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.25	0.75

Saturday, February 25, 2023		From North					From East					From South					From West					
	PM Peak Hour	STH 100 - Mayfair Road										STH 100 - Mayfair Road					Red Lobster North DW					
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals
PM Peak Hour	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Peak Hour Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Rounded Hourly Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Peak Hour Factor (PHF)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Peak Hour Pedestrian and Bicyclist Volumes

Pedestrians and Bicyclists		Crossing North Approach			Crossing East Approach			Crossing South Approach			Crossing West Approach			Total Ped & Bike
		STH 100 - Mayfair Road						STH 100 - Mayfair Road			Red Lobster North DW			
	15-Minute Start Time	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	2	0	2	2
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Traffic Volume Report

Count Basics		*Page 5 of 13*
Start Date: Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2	Non-Holiday	No Special Events

15-Minute Motor Vehicle Data

All Motor Vehicles

STH 100 - Mayfair Road and Red Lobster North DW

15-Minute Motor Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					15-Min	Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum	PHF
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	11:00 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	17	0.71
	11:15 AM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	24	0.67
	11:30 AM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	27	0.75
	11:45 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	27	0.75
	12:00 PM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	9	33	0.83
	12:15 PM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8		
	12:30 PM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6		
	12:45 PM	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	10		
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Totals		47	0	0	0	47	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	50		

Peak Hour All Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					Total Hourly	
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume	PHF
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MD	11:45 AM	26	0	0	0	26	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	27	0.75
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Intersection Traffic Volume Report

Count Basics			*Page 9 of 13*
Start Date:	Saturday, February 25, 2023	Weekend	Schools in Session
Total Number of Hours Counted: 2		Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Heavy Vehicles (Single-Unit Trucks, Buses & Semi-Trucks)

STH 100 - Mayfair Road and Red Lobster North DW

15-Minute Heavy Vehicle Data

15-Minute Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					15-Min	Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals	Sum
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

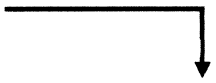
Peak Hour Heavy Vehicle Volume Summary

Hourly Time Period		From North (↓) STH 100 - Mayfair Road					From East (←)					From South (↑) STH 100 - Mayfair Road					From West (→) Red Lobster North DW					Total Hourly
	Start Time	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

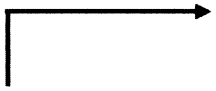
3/7/2023
2923-PL
STH 100 &
Red Lobster
South Drive
Lori Atwell

*Note:
- on North Entrance -
① police car entered 3:50
② police cars entered 4:05 - exited South Dr.

IN



OUT



4:00		II police cars (2) I
4:15		I police car III
4:30		𝍸 I
4:45		III

5:00		I
5:15		II
5:30		II
5:45		II

Brookfield Chick-fil-A Drive-Through Queues

12625 W. Capitol Drive, Brookfield, WI

TIME	End of Queue to Order Point				Order Point to Pick-up Point				Notes
	Lane 1 (Inside)	Lane 2 (Outside)	Totals	Queue Summary	Lane 1 (Inside)	Lane 2 (Outside)	Totals	Queue Summary	
03/01/23 4PM - 6PM Wednesday									
4:00 PM	4	4	8		6		6		
4:05 PM	4	3	7	Average	6		6	Average	
4:10 PM	4	3	7	Queue	6		6	Queue	
4:15 PM	3	1	4	9	6		6	5	
4:20 PM	4	3	7		6		6		
4:25 PM	2	3	5	Maximum	5		5	Maximum	
4:30 PM	2	1	3	Queue	5		5	Queue	
4:35 PM	0	3	3	17	2		2	7	
4:40 PM	2	3	5		6		6		
4:45 PM	5	6	11		2		2		
4:50 PM	5	5	10		5		5		
4:55 PM	6	4	10		6		6		
5:00 PM	5	6	11		7		7		More vehicles fit in queue due to smaller cars.
5:05 PM	4	6	10		4		4		
5:10 PM	3	7	10		5		5		
5:15 PM	4	4	8		5		5		
5:20 PM	*11	8	8		1		1		*4 vehicles beyond parking lot, added to lane 1
5:25 PM	8	9	17		5		5		
5:30 PM	8	9	17		0		0		
5:35 PM	8	6	14		3		3		
5:40 PM	*11	9	9		6		6		*2 vehicles beyond parking lot, added to lane 1
5:45 PM	6	8	14		6		6		
5:50 PM	9	7	16		5		5		
5:55 PM	5	4	9		6		6		
6:00 PM	5	4	9		3		3		
03/04/23 11AM - 1PM Saturday									
11:00 AM	1	0	1		4		4		
11:05 AM	2	2	4	Average	3		3	Average	
11:10 AM	3	3	6	Queue	4		4	Queue	
11:15 AM	1	3	4	10	5		5	4	
11:20 AM	5	4	9		6		6		
11:25 AM	8	8	16	Maximum	5		5	Maximum	
11:30 AM	7	9	16	Queue	3		3	Queue	
11:35 AM	7	7	14	18	5		5	6	
11:40 AM	*11	7	7		2		2		*2 vehicles beyond parking lot, added to lane 1
11:45 AM	*10	7	7		4		4		*3 vehicles beyond parking lot, added to lane 1
11:50 AM	6	8	14		5		5		
11:55 AM	4	6	10		5		5		
12:00 PM	8	7	15		6		6		
12:05 PM	8	7	15		5		5		
12:10 PM	*11	6	6		3		3		*3 vehicles beyond parking lot, added to lane 1
12:15 PM	9	7	16		6		6		
12:20 PM	8	7	15		6		6		
12:25 PM	9	9	18		6		6		
12:30 PM	*10	7	7		6		6		*2 vehicles beyond parking lot, added to lane 1
12:35 PM	*11	6	6		1		1		*3 vehicles beyond parking lot, added to lane 1
12:40 PM	*11	8	8		3		3		*3 vehicles beyond parking lot, added to lane 1
12:45 PM	*10	6	6		3		3		*2 vehicles beyond parking lot, added to lane 1
12:50 PM	*12	9	9		4		4		*3 vehicles beyond parking lot, added to lane 1
12:55 PM	*12	8	8		4		4		*3 vehicles beyond parking lot, added to lane 1
1:00 PM	*11	7	7		6		6		*3 vehicles beyond parking lot, added to lane 1

General Notes:

After the order kiosks, 2 lanes merge into one single lane going to the pick-up point and there is no option to exit prior. It appeared that all orders were received at pick-up point.

Employee processing payments sometimes causes a gap in the queue.

Greendale Chick-fil-A Drive-Through Queues

5351 S. 76th Street, Greendale, WI

TIME	End of Queue to Order Point				Order Point to Pick-up Point				Notes
	Lane 1 (Inside)	Lane 2 (Outside)	Totals	Queue Summary	Lane 1 (Inside)	Lane 2 (Outside)	Totals	Queue Summary	
03/08/23 4PM - 6PM Wednesday									
4:00 PM	1	1	2		6		6		
4:05 PM	3	2	5	Average	3		3	Average	
4:10 PM	2	1	3	Queue	5		5	Queue	
4:15 PM	1	0	1	4	5		5	5	
4:20 PM	2	1	3		3		3		
4:25 PM	0	0	0	Maximum	5		5	Maximum	
4:30 PM	3	2	5	Queue	6		6	Queue	
4:35 PM	6	2	8	12	3		3	6	
4:40 PM	2	1	3		5		5		
4:45 PM	2	1	3		3		3		2 employees came out to take orders
4:50 PM	0	0	0		4		4		
4:55 PM	2	2	4		3		3		
5:00 PM	3	2	5		5		5		
5:05 PM	2	2	4		5		5		
5:10 PM	3	2	5		6		6		
5:15 PM	2	1	3		4		4		
5:20 PM	3	1	4		3		3		
5:25 PM	1	1	2		5		5		
5:30 PM	3	2	5		6		6		
5:35 PM	11	1	12		4		4		
5:40 PM	11	1	12		6		6		
5:45 PM	6	2	8		6		6		
5:50 PM	4	1	5		5		5		
5:55 PM	2	2	4		5		5		1st time a food runner came out
6:00 PM	2	1	3		4		4		
03/11/23 11AM - 1PM Saturday									
11:00 AM	6	2	8		6		6		
11:05 AM	2	2	4	Average	6		6	Average	
11:10 AM	2	4	6	Queue	4		4	Queue	
11:15 AM	2	2	4	7	5		5	5	
11:20 AM	3	2	5		5		5		
11:25 AM	3	2	5	Maximum	5		5	Maximum	
11:30 AM	5	2	7	Queue	5		5	Queue	
11:35 AM	4	2	6	15	6		6	6	employees take orders/pmts at hut.
11:40 AM	4	2	6		5		5		
11:45 AM	4	2	6		6		6		
11:50 AM	7	3	10		5		5		
11:55 AM	8	2	10		5		5		
12:00 PM	2	2	4		6		6		
12:05 PM	2	2	4		5		5		
12:10 PM	5	2	7		6		6		
12:15 PM	12	2	14		6		6		
12:20 PM	13	2	15		6		6		
12:25 PM	10	2	12		6		6		
12:30 PM	11	2	13		4		4		
12:35 PM	5	2	7		4		4		
12:40 PM	7	2	9		6		6		
12:45 PM	5	2	7		6		6		
12:50 PM	0	0	0		6		6		
12:55 PM	0	1	1		6		6		
1:00 PM	2	1	3		4		4		

General Notes:

After the order kiosks, 2 lanes merge into one single lane going to the pick-up point and there is no option to exit prior. Approximately 2 cars fit in each lane before the merge around the building. All orders were received at pick-up point.

Glendale Chick-fil-A Drive-Through Queues

5201 N. Port Washington Road, Glendale, WI

TIME	End of Queue to Order Point				Order Point to Pick-up Point				Notes
	Lane 1 (Inside)	Lane 2 (Outside)	Totals	Queue Summary	Lane 1 (Inside)	Lane 2 (Outside)	Totals	Queue Summary	
02/21/23 4PM - 6PM Tuesday									
4:00 PM	2	2	4		5	0	5		
4:05 PM	3	1	4	Average	4	3	7	Average	1-2 veh at pick-up point, others backed up in
4:10 PM	1	2	3	Queue	4	3	7	Queue	lane 1 by employees on north end of building
4:15 PM	3	1	4	10	6	1	7	7	
4:20 PM	2	2	4		5	0	5		
4:25 PM	3	1	4	Maximum	7	2	9	Maximum	
4:30 PM	3	2	5	Queue	7	1	8	Queue	
4:35 PM	1	1	2	22	7	1	8	11	
4:40 PM	0	1	1		2	0	2		
4:45 PM	1	1	2		5	0	5		
4:50 PM	3	4	7		7	3	10		
4:55 PM	7	7	14		6	0	6		
5:00 PM	7	8	15		7	1	8		
5:05 PM	8	8	16		6	3	9		
5:10 PM	9	9	18		8	3	11		
5:15 PM	10	11	21		6	2	8		
5:20 PM	10	10	20		7	2	9		
5:25 PM	10	12	22		7	3	10		
5:30 PM	9	10	19		6	2	8		
5:35 PM	6	5	11		8	3	11		
5:40 PM	9	9	18		4	2	6		
5:45 PM	5	5	10		8	1	9		
5:50 PM	0	1	1		7	1	8		
5:55 PM	1	4	5		4	0	4		
6:00 PM	7	6	13		4	0	4		
02/11/23 11AM - 1PM Saturday									
11:00 AM	4	4	8		7	0	7		
11:05 AM	2	0	2	Average	6	2	8	Average	
11:10 AM	6	6	12	Queue	8	2	10	Queue	
11:15 AM	6	6	12	12	8	3	11	9	
11:20 AM	8	7	15		8	3	11		
11:25 AM	5	8	13	Maximum	8	3	11	Maximum	
11:30 AM	4	7	11	Queue	8	3	11	Queue	
11:35 AM	7	8	15	21	8	1	9	12	
11:40 AM	6	5	11		9	1	10		
11:45 AM	7	8	15		8	3	11		
11:50 AM	8	9	17		6	2	8		
11:55 AM	9	12	21		9	3	12		
12:00 PM	4	12	16		8	3	11		
12:05 PM	6	7	13		9	3	12		
12:10 PM	5	3	8		7	2	9		
12:15 PM	4	5	9		7	2	9		
12:20 PM	7	6	13		6	3	9		
12:25 PM	9	9	18		7	2	9		
12:30 PM	9	8	17		8	2	10		
12:35 PM	8	9	17		8	2	10		
12:40 PM	7	7	14		7	2	9		
12:45 PM	8	7	15		8	2	10		
12:50 PM	5	8	13		7	1	8		
12:55 PM	0	1	1		6	0	6		
1:00 PM	0	0	0		5	0	5		

General Notes:

Chick-fil-A Drive-Through Queues - Weekday PM

TIME	Total Vehicles in Queue			
	3/1/2023 Brookfield	3/8/2023 Greendale	2/21/2023 Glendale	Queue Summary
4:00 PM	14	8	9	
4:05 PM	13	8	11	Average
4:10 PM	13	8	10	Queue
4:15 PM	10	6	11	13
4:20 PM	13	6	9	
4:25 PM	10	5	13	Maximum
4:30 PM	8	11	13	Queue
4:35 PM	5	11	10	32
4:40 PM	11	8	3	
4:45 PM	13	6	7	
4:50 PM	15	4	17	
4:55 PM	16	7	20	
5:00 PM	18	10	23	
5:05 PM	14	9	25	
5:10 PM	15	11	29	
5:15 PM	13	7	29	
5:20 PM	9	7	29	
5:25 PM	22	7	32	
5:30 PM	17	11	27	
5:35 PM	17	16	22	
5:40 PM	15	18	24	
5:45 PM	20	14	19	
5:50 PM	21	10	9	
5:55 PM	15	9	9	
6:00 PM	12	7	17	

Chick-fil-A Drive-Through Queues - Saturday

TIME	Total Vehicles in Queue			
	3/1/2023 Brookfield	3/8/2023 Greendale	2/21/2023 Glendale	Queue Summary
11:00 AM	5	14	15	
11:05 AM	7	10	10	Average
11:10 AM	10	10	22	Queue
11:15 AM	9	9	23	16
11:20 AM	15	10	26	
11:25 AM	21	10	24	Maximum
11:30 AM	19	12	22	Queue
11:35 AM	19	12	24	33
11:40 AM	9	11	21	
11:45 AM	11	12	26	
11:50 AM	19	15	25	
11:55 AM	15	15	33	
12:00 PM	21	10	27	
12:05 PM	20	9	25	
12:10 PM	9	13	17	
12:15 PM	22	20	18	
12:20 PM	21	21	22	
12:25 PM	24	18	27	
12:30 PM	13	17	27	
12:35 PM	7	11	27	
12:40 PM	11	15	23	
12:45 PM	9	13	25	
12:50 PM	13	6	21	
12:55 PM	12	7	7	
1:00 PM	13	7	5	

Chick-fil-A Drive-Through Processing Time - Weekday PM

Vehicle	Weekday 4:00p.m. - 6:00 p.m.					
	3/1/2023 Brookfield	3/9/2023 Brookfield	3/8/2023 Greendale	3/3/2023 Glendale	3/6/2023 Glendale	Time Summary
1	3:02	4:22	3:09	2:28	5:39	
2	4:39	5:13	2:58	3:10	3:34	Average
3	3:13	2:57	4:11	3:26	4:53	Time
4	4:11	2:39	3:12	2:46	1:32	3:03
5	4:49	2:48	3:03	3:36	2:45	
6	2:44	2:35	2:12	1:22	4:47	Maximum
7	2:34	2:36	4:48	2:54	1:14	Time
8	2:07	3:33	3:57	3:46	1:40	6:53
9	1:20	2:21	3:28	5:58	2:44	
10	2:25	1:45	2:13	3:46	3:15	Minimum
11	2:17	3:14	1:32	5:10	2:31	Time
12	3:12	3:24	3:28	4:20	3:07	1:02
13	3:23	2:52	3:08	2:21	2:20	
14	2:11	2:16	1:14	6:53	1:26	
15	2:37	2:35	1:40	3:36	2:03	
16	5:27	3:25	1:18	1:49	2:15	
17	2:57	2:08	2:12	1:22	3:39	
18	3:16	2:42	2:44	1:02	1:53	
19	4:15	1:34	4:31	2:23	1:05	
20	1:57	3:23	4:03	1:17	1:18	
21	3:23	2:43	4:08	1:29	5:16	
22	2:14	3:24	2:54	3:58	3:59	
23	2:05	3:55	2:31	5:01	5:51	
24	1:45	3:23	2:29	2:59	2:32	
25	1:34	5:02	1:19	3:55	3:45	
26	2:23	4:10	1:31	2:05	3:57	
27	2:28	4:08	2:16	2:37	5:07	
28	3:10	3:15	2:55	5:58	1:13	
29	3:05	3:17	5:25	3:24	3:33	
30	2:55	4:13	3:41	2:40	5:59	
31	2:03	3:40	4:48	2:57	2:30	
32	3:40	4:33	1:44	4:21	2:18	
33	2:54	3:29	3:29	2:39	1:51	
34	2:14	4:39	3:11	2:08	1:21	
35		3:09	2:42	1:39	2:15	
36		3:13	2:42	2:31	3:22	
37			3:50	2:15	4:30	
38				2:38	3:31	
39				1:57	2:05	
40				3:40	1:14	
41				2:14		

Chick-fil-A Drive-Through Processing Time - Saturday

Vehicle	Saturday 11:00 a.m. - 1:00 p.m.				
	3/4/2023 Brookfield	3/11/2023 Greendale	3/11/2023 Glendale	3/18/2023 Glendale	Time Summary
1	3:05	3:57	4:01	3:04	
2	3:34	3:14	1:57	3:42	Average
3	3:25	3:15	1:43	3:48	Time
4	3:18	3:03	3:42	3:44	3:33
5	5:17	4:04	3:09	7:23	
6	4:25	3:26	5:12	4:35	Maximum
7	3:27	3:57	3:59	4:21	Time
8	1:49	4:58	3:11	3:55	7:53
9	2:49	2:47	4:37	1:34	
10	3:56	5:58	4:25	5:15	Minimum
11	1:53	4:04	7:53	4:44	Time
12	3:14	3:08	4:38	3:29	1:27
13	2:40	1:44	4:04	3:22	
14	2:18	2:32	3:05	6:50	
15	2:18	3:47	3:06	3:50	
16	2:48	2:54	2:54	3:18	
17	2:14	2:58	3:40	6:44	
18	1:58	3:28	3:12	4:12	
19	2:52	7:42	4:39	3:58	
20	2:57	3:49	3:36	4:01	
21	2:02	3:44	2:36	3:19	
22	2:31	2:41	2:46	3:28	
23	2:05	2:21	5:29	3:37	
24	3:48	1:59	5:54	3:04	
25	5:05	3:06	1:27	3:51	
26	3:48	3:07	4:21	3:07	
27	3:46	4:09	3:24		
28	1:48	4:22	6:27		
29	3:22	4:25	1:29		
30	2:21	3:53	3:56		
31	1:59				
32	1:37				
33	2:12				
34	2:33				
35	2:13				
36	1:48				
37	4:00				
38	4:48				
39					
40					
41					

APPENDIX C
SYNCHRO ANALYSIS
MEDIAN ALTERNATIVES
NO CROSS-ACCESS

Year 2023 Total Traffic – Alternative A

Year 2023 Total Traffic – Alternative B

Year 2023 Total Traffic – Alternative C

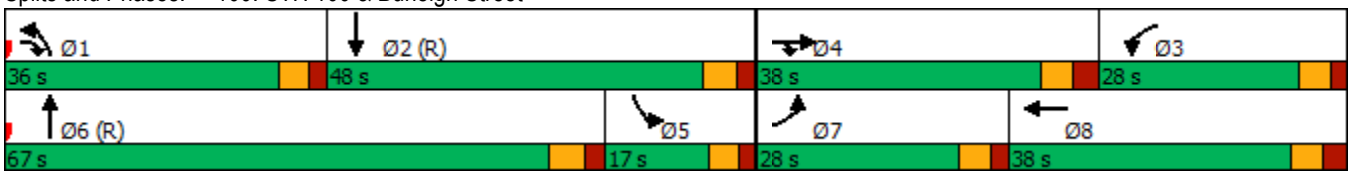
Year 2023 Total Traffic – Alternative D

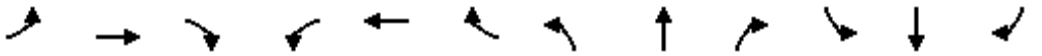
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		52.9	33.5		67.5	54.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		52.9	33.5		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	514		22	463	
Queue Length 95th (ft)	220	318	244	213	335		#454	575		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

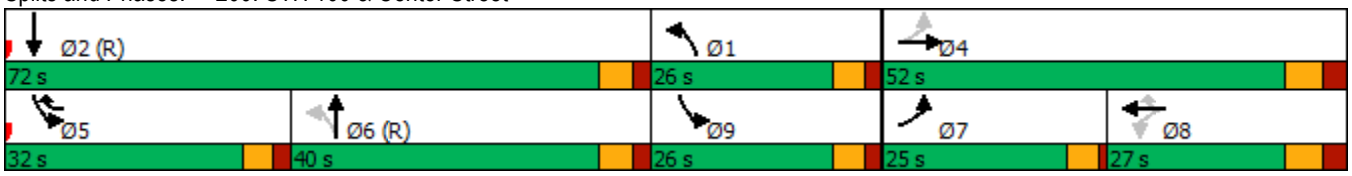
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	266	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.65	0.51		0.56	0.36	0.47	0.54	0.80		0.69	0.65	
Control Delay	58.1	54.9		87.6	71.4	56.5	51.4	43.9		40.1	19.2	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.1	54.9		87.6	71.4	56.5	51.4	43.9		40.1	19.2	
90th %ile Green (s)	20.7	41.4		16.2	16.2	17.7	20.3	46.7			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.7	38.1		12.9	12.9	14.3	20.3	53.4			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	21.4	36.4		10.5	10.5	12.4	19.6	57.7			75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	10.3	17.5	65.6			81.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	16.2	86.9			102.6	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	176	156		51	51	123	74	570		175	308	
Queue Length 95th (ft)	248	224		98	95	177	172	#781		m213	342	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	342	511		158	248	449	315	2156		568	2758	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.62	0.36		0.34	0.21	0.32	0.51	0.80		0.47	0.65	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



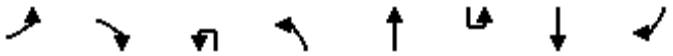
Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.3
90th %ile Term Code	Gap
70th %ile Green (s)	20.3
70th %ile Term Code	Gap
50th %ile Green (s)	19.6
50th %ile Term Code	Gap
30th %ile Green (s)	17.5
30th %ile Term Code	Gap
10th %ile Green (s)	16.2
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	250	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	163	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	266	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	266	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.7	33.7		9.9	9.9	22.9	79.5	60.6		31.8	79.0	
Effective Green, g (s)	33.7	33.7		9.9	9.9	22.9	79.5	60.6		31.8	79.0	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.15	0.53	0.40		0.21	0.53	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	319	384		79	124	244	294	2105		384	2706	
v/s Ratio Prot	c0.09	0.11			0.03	0.05	0.07	c0.33		c0.15	c0.35	
v/s Ratio Perm	c0.06			0.04		0.04	0.22					
v/c Ratio	0.67	0.48		0.67	0.43	0.58	0.54	0.82		0.69	0.66	
Uniform Delay, d1	51.3	50.6		68.5	67.3	59.1	39.8	39.9		54.6	25.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.11	0.68	
Incremental Delay, d2	4.1	0.4		16.2	0.9	2.3	1.1	3.8		3.4	1.0	
Delay (s)	55.3	50.9		84.6	68.2	61.4	40.9	43.7		64.3	18.7	
Level of Service	E	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.3			67.8			43.5			24.6	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	60	70	5	75	1960	30	1835	60
Future Volume (vph)	60	70	5	75	1960	30	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	64	74	0	85	2085	32	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	60	70	5	75	1960	30	1835	60
Future Vol, veh/h	60	70	5	75	1960	30	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	64	74	5	80	2085	32	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	3052	1008	1472	2016	0	1522	-	0
Stage 1	2048	-	-	-	-	-	-	-
Stage 2	1004	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*233	*482	*817	*607	-	*788	-	-
Stage 1	*496	-	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*192	*482	*612	*612	-	*788	-	-
Mov Cap-2 Maneuver	*331	-	-	-	-	-	-	-
Stage 1	*427	-	-	-	-	-	-	-
Stage 2	*458	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	0.5	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 612	-	331	482	* 788	-	-
HCM Lane V/C Ratio	0.139	-	0.193	0.154	0.041	-	-
HCM Control Delay (s)	11.8	-	18.5	13.8	9.8	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.5	-	0.7	0.5	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

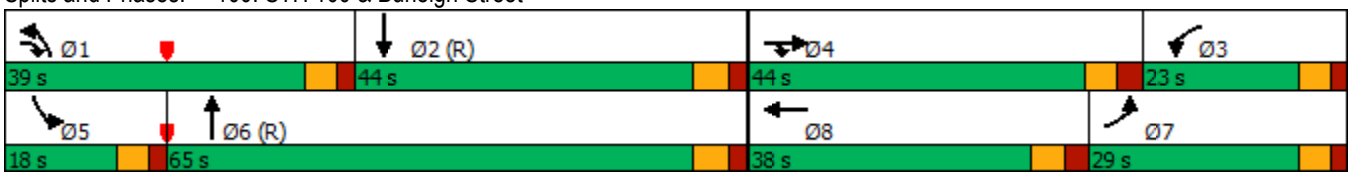
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		58.1	15.9		79.6	47.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		58.1	15.9		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		165	234		31	318	
Queue Length 95th (ft)	223	314	214	169	327		273	221		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street



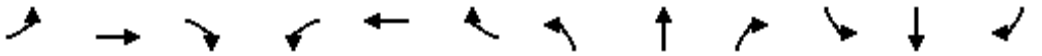
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



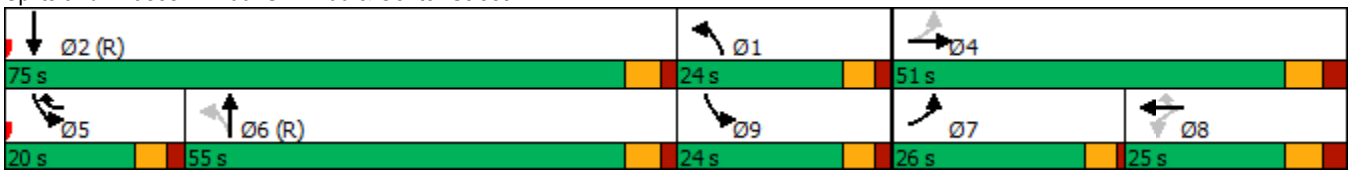
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.42	0.43	0.55		0.84	0.41	
Control Delay	56.1	72.9		81.2	78.8	52.8	32.0	36.3		42.2	18.7	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	52.8	32.0	36.3		42.2	18.7	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	20.3	18.5	55.5			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	17.6	18.5	60.9			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	15.3	18.5	65.4			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	11.5	18.5	79.0			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	113	78	325		195	268	
Queue Length 95th (ft)	177	309		66	109	170	143	426		245	309	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	333	402	2155		438	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.41	0.43	0.55		0.83	0.41	

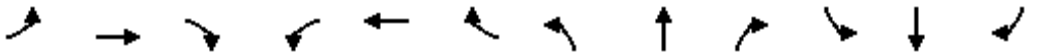
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	362	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	25.9	79.1	60.6		35.7	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	25.9	79.1	60.6		35.7	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.17	0.53	0.40		0.24	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	268	398	2104		431	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.06	0.05	c0.23		c0.20	0.23	
v/s Ratio Perm	0.05			0.03		0.03	0.18					
v/c Ratio	0.52	0.73		0.48	0.58	0.51	0.43	0.57		0.84	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	56.3	27.9	34.5		54.4	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.86	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.6	0.3	1.1		11.6	0.4	
Delay (s)	53.2	63.3		70.6	74.1	56.8	28.2	35.6		58.3	18.6	
Level of Service	D	E		E	E	E	C	D		E	B	
Approach Delay (s)		59.6			63.3			34.7			27.9	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	100	115	30	115	1365	30	1340	110
Future Volume (vph)	100	115	30	115	1365	30	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	102	117	0	148	1393	31	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

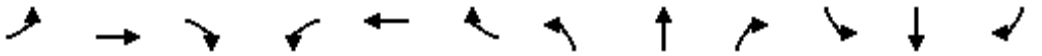
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	100	115	30	115	1365	30	1340	110
Future Vol, veh/h	100	115	30	115	1365	30	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	102	117	31	117	1393	31	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	2338	740	1080	1479	0	1017	-	0
Stage 1	1485	-	-	-	-	-	-	-
Stage 2	853	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*232	*604	*772	*772	-	*1023	-	-
Mov Cap-2 Maneuver	*409	-	-	-	-	-	-	-
Stage 1	*501	-	-	-	-	-	-	-
Stage 2	*601	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	1	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 772	-	409	604	* 1023	-	-
HCM Lane V/C Ratio	0.192	-	0.249	0.194	0.03	-	-
HCM Control Delay (s)	10.8	-	16.7	12.4	8.6	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	1	0.7	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



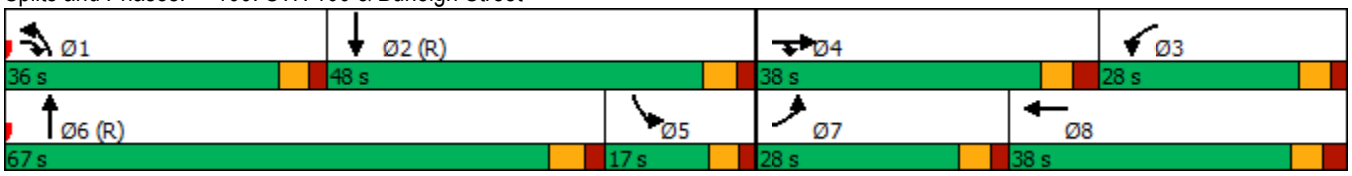
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		51.5	32.9		67.5	54.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		51.5	32.9		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	517		22	463	
Queue Length 95th (ft)	220	318	244	213	335		#455	575		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street



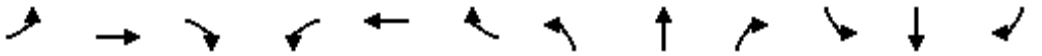
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	298	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.45	0.52	0.83		0.73	0.66	
Control Delay	58.7	55.3		87.6	71.4	55.0	50.6	45.8		42.1	19.5	

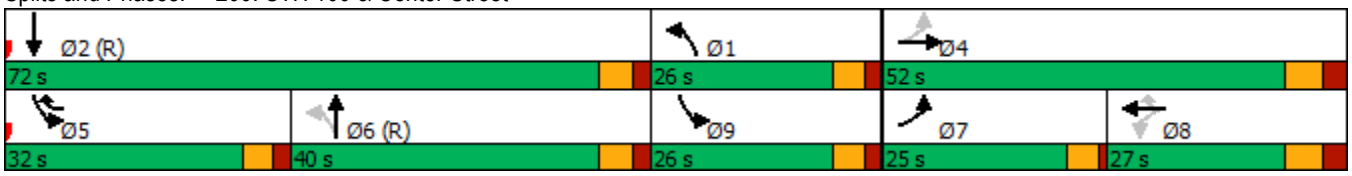
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	55.0	50.6	45.8		42.1	19.5	
90th %ile Green (s)	20.5	41.2		16.2	16.2	19.5	20.5	44.9			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	15.7	20.5	52.0			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	13.4	20.5	56.7			75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	11.3	19.4	62.7			79.5	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	18.0	85.1			100.8	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	178	157		51	51	122	74	577		199	308	
Queue Length 95th (ft)	249	225		98	95	174	174	#804		m240	342	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	449	314	2094		568	2733	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.32	0.51	0.83		0.52	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.5
90th %ile Term Code	Max
70th %ile Green (s)	20.5
70th %ile Term Code	Max
50th %ile Green (s)	20.5
50th %ile Term Code	Max
30th %ile Green (s)	19.4
30th %ile Term Code	Gap
10th %ile Green (s)	18.0
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	164	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	298	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	298	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.4	33.4		9.9	9.9	23.9	78.7	58.9		33.8	78.4	
Effective Green, g (s)	33.4	33.4		9.9	9.9	23.9	78.7	58.9		33.8	78.4	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.16	0.52	0.39		0.23	0.52	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	316	380		79	124	254	303	2046		408	2685	
v/s Ratio Prot	c0.09	0.11			0.03	0.05	0.07	c0.33		c0.16	c0.35	
v/s Ratio Perm	c0.06			0.04		0.04	0.21					
v/c Ratio	0.67	0.49		0.67	0.43	0.56	0.53	0.85		0.73	0.67	
Uniform Delay, d1	51.5	50.9		68.5	67.3	58.2	39.7	41.5		53.9	26.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.17	0.68	
Incremental Delay, d2	4.4	0.4		16.2	0.9	1.5	0.8	4.6		4.6	1.1	
Delay (s)	55.9	51.2		84.6	68.2	59.7	40.4	46.0		67.7	19.1	
Level of Service	E	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.7			66.8			45.6			26.0	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	60	70	5	75	1990	1865	60
Future Volume (vph)	60	70	5	75	1990	1865	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)	0	0		210			0
Storage Lanes	1	1		1			0
Taper Length (ft)	75			75			
Link Speed (mph)	30				40	40	
Link Distance (ft)	339				902	1744	
Travel Time (s)	7.7				15.4	29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	64	74	0	85	2117	2048	0
Sign Control	Stop				Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	60	70	5	75	1990	1865	60
Future Vol, veh/h	60	70	5	75	1990	1865	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	210	-	-	-
Veh in Median Storage, #	2	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	64	74	5	80	2117	1984	64

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3033	1024	1495	2048	0	-	0
Stage 1	2016	-	-	-	-	-	-
Stage 2	1017	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	-	-
Pot Cap-1 Maneuver	*215	*482	*817	*607	-	-	-
Stage 1	*496	-	-	-	-	-	-
Stage 2	*460	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	-	-
Mov Cap-1 Maneuver	*185	*482	*612	*612	-	-	-
Mov Cap-2 Maneuver	*338	-	-	-	-	-	-
Stage 1	*427	-	-	-	-	-	-
Stage 2	*460	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 612	-	338	482	-	-
HCM Lane V/C Ratio	0.139	-	0.189	0.154	-	-
HCM Control Delay (s)	11.8	-	18.1	13.8	-	-
HCM Lane LOS	B	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.7	0.5	-	-

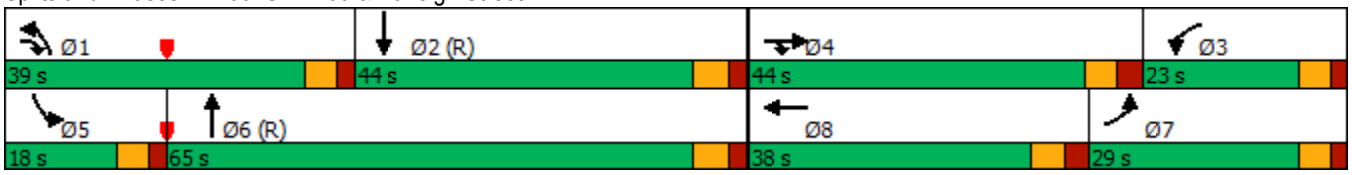
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

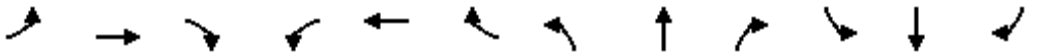
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		63.6	14.3		79.6	47.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		63.6	14.3		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		174	156		31	318	
Queue Length 95th (ft)	223	314	214	169	327		271	220		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	385	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	385	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	393	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.37	0.44	0.59		0.82	0.41	
Control Delay	56.1	72.9		81.2	78.8	49.1	34.4	39.2		37.7	18.7	

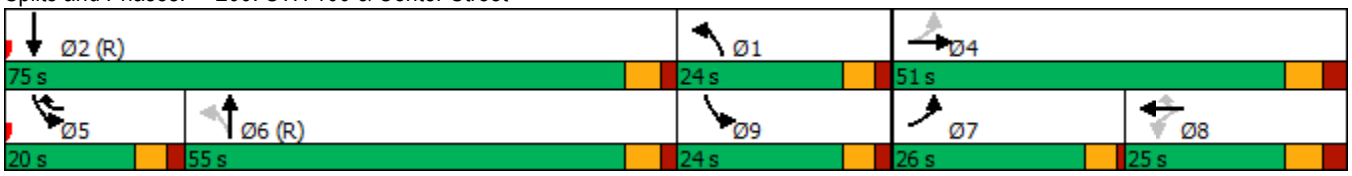
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	49.1	34.4	39.2		37.7	18.7	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	23.2	18.5	52.6			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	21.6	18.5	56.9			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	21.2	18.5	59.5			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	18.9	18.5	71.6			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	109	84	341		188	268	
Queue Length 95th (ft)	177	309		66	109	170	143	426		#293	308	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	369	391	2014		480	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.37	0.44	0.59		0.82	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	385	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	385	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	393	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	393	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	29.9	75.1	56.6		39.7	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	29.9	75.1	56.6		39.7	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.20	0.50	0.38		0.26	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	309	387	1965		480	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.06	0.06	c0.23		c0.22	0.23	
v/s Ratio Perm	0.05			0.03		0.03	0.17					
v/c Ratio	0.52	0.73		0.48	0.58	0.44	0.45	0.61		0.82	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	52.7	31.2	37.7		51.8	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.82	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.4	0.3	1.4		8.9	0.4	
Delay (s)	53.2	63.3		70.6	74.1	53.1	31.5	39.1		51.5	18.7	
Level of Service	D	E		E	E	D	C	D		D	B	
Approach Delay (s)		59.6			61.1			38.1			26.8	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	100	115	30	115	1395	1370	110
Future Volume (vph)	100	115	30	115	1395	1370	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)	0	0		210			0
Storage Lanes	1	1		1			0
Taper Length (ft)	75			75			
Link Speed (mph)	30				40	40	
Link Distance (ft)	339				902	1744	
Travel Time (s)	7.7				15.4	29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	102	117	0	148	1423	1510	0
Sign Control	Stop				Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	100	115	30	115	1395	1370	110
Future Vol, veh/h	100	115	30	115	1395	1370	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	210	-	-	-
Veh in Median Storage, #	2	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	102	117	31	117	1423	1398	112

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	2319	755	1102	1510	0	-	0
Stage 1	1454	-	-	-	-	-	-
Stage 2	865	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	-	-
Stage 1	*620	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	-	-
Mov Cap-1 Maneuver	*239	*604	*772	*772	-	-	-
Mov Cap-2 Maneuver	*421	-	-	-	-	-	-
Stage 1	*501	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.2	1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 772	-	421	604	-	-
HCM Lane V/C Ratio	0.192	-	0.242	0.194	-	-
HCM Control Delay (s)	10.8	-	16.3	12.4	-	-
HCM Lane LOS	B	-	C	B	-	-
HCM 95th %tile Q(veh)	0.7	-	0.9	0.7	-	-

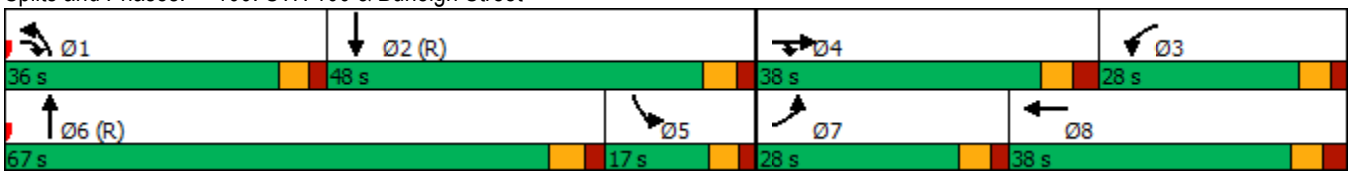
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

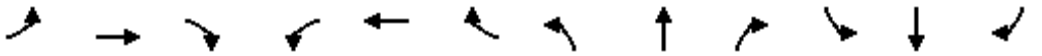
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		50.2	32.2		67.5	54.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		50.2	32.2		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	517		22	463	
Queue Length 95th (ft)	220	318	244	213	335		m#448	575		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 100: STH 100 & Burleigh Street





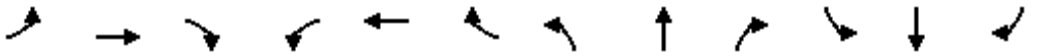
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



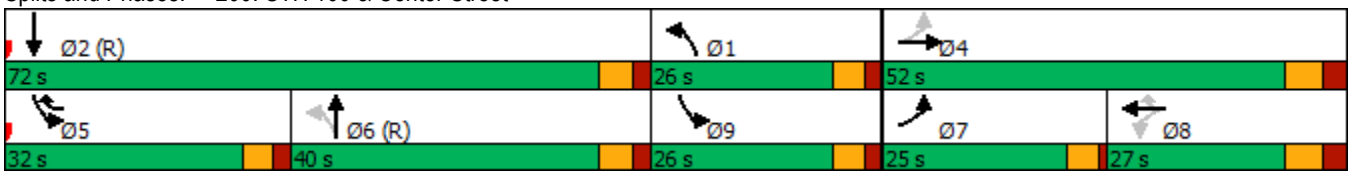
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	310	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	310	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	330	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.43	0.52	0.85		0.77	0.66	
Control Delay	58.7	55.3		87.6	71.4	53.4	50.8	47.8		45.0	20.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	53.4	50.8	47.8		45.0	20.0	
90th %ile Green (s)	20.5	41.2		16.2	16.2	21.4	20.5	43.0			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	17.2	20.5	50.5			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	14.7	20.5	55.4			75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	12.3	20.5	60.6			78.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	19.8	83.3			99.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	178	157		51	51	121	76	585		222	312	
Queue Length 95th (ft)	249	225		98	95	170	176	#829		m264	347	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	449	312	2034		568	2713	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.32	0.51	0.85		0.58	0.66	

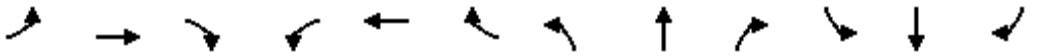
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.5
90th %ile Term Code	Max
70th %ile Green (s)	20.5
70th %ile Term Code	Max
50th %ile Green (s)	20.5
50th %ile Term Code	Max
30th %ile Green (s)	20.5
30th %ile Term Code	Max
10th %ile Green (s)	19.8
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	310	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	310	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	165	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	330	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	330	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.4	33.4		9.9	9.9	25.1	77.6	57.1		35.6	77.7	
Effective Green, g (s)	33.4	33.4		9.9	9.9	25.1	77.6	57.1		35.6	77.7	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.17	0.52	0.38		0.24	0.52	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	316	380		79	124	267	310	1984		430	2661	
v/s Ratio Prot	c0.09	0.11			0.03	0.05	0.07	c0.33		c0.18	c0.35	
v/s Ratio Perm	c0.06			0.04		0.04	0.20					
v/c Ratio	0.67	0.49		0.67	0.43	0.53	0.52	0.87		0.77	0.68	
Uniform Delay, d1	51.5	50.9		68.5	67.3	57.1	39.6	43.1		53.3	26.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.23	0.69	
Incremental Delay, d2	4.4	0.4		16.2	0.9	1.0	0.6	5.7		5.9	1.1	
Delay (s)	55.9	51.2		84.6	68.2	58.1	40.2	48.8		71.7	19.7	
Level of Service	E	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.7			65.9			48.1			27.8	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	0	130	5	75	2020	30	1835	60
Future Volume (vph)	0	130	5	75	2020	30	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	0	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	138	0	85	2149	32	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	0	130	5	75	2020	30	1835	60
Future Vol, veh/h	0	130	5	75	2020	30	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	-	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	0	138	5	80	2149	32	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	-	1008	1472	2016	0	1569	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	0	*482	*817	*607	-	*759	-	-
Stage 1	0	-	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-	-
Platoon blocked, %		1	1	1	-	1	-	-
Mov Cap-1 Maneuver	-	*482	*606	*606	-	*759	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0.5	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 606	-	482	* 759	-	-
HCM Lane V/C Ratio	0.14	-	0.287	0.042	-	-
HCM Control Delay (s)	11.9	-	15.4	10	-	-
HCM Lane LOS	B	-	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	1.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

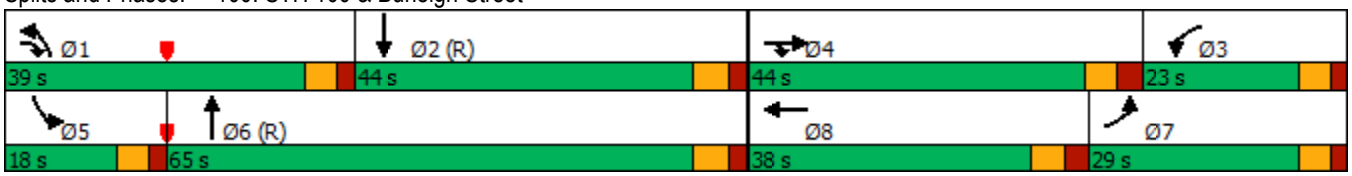
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		81.4	13.1		79.6	47.7	

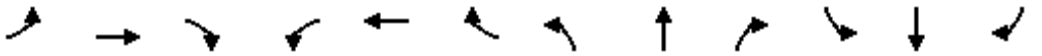
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		81.4	13.1		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		225	86		31	318	
Queue Length 95th (ft)	223	314	214	169	327		272	219		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





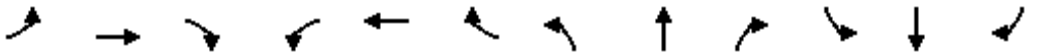
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	455	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	455	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	464	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.30	0.47	0.69		0.79	0.41	
Control Delay	56.1	72.9		81.2	78.8	43.2	39.4	46.4		33.8	18.9	

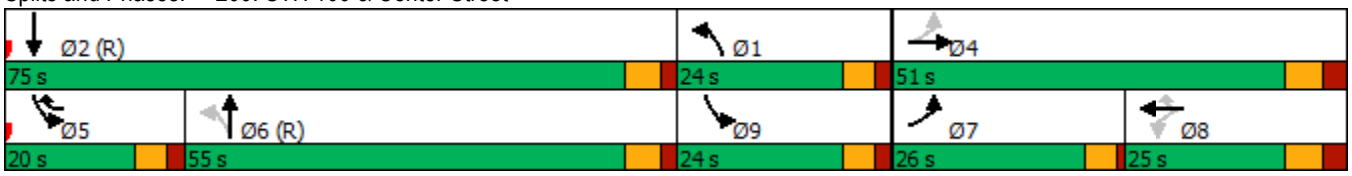
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	43.2	39.4	46.4		33.8	18.9	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	26.5	18.5	49.3			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	29.2	18.5	49.3			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Max	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	31.4	18.5	49.3			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Max	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	41.2	18.5	49.3			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Max	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	101	94	371		207	268	
Queue Length 95th (ft)	177	309		66	109	170	143	426		#435	309	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	459	366	1713		585	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.30	0.47	0.69		0.79	0.41	

Intersection Summary

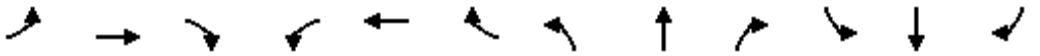
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	455	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	455	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	464	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	464	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	38.6	66.4	47.9		48.4	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	38.6	66.4	47.9		48.4	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.26	0.44	0.32		0.32	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	399	362	1663		585	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.07	0.06	c0.23		c0.26	0.23	
v/s Ratio Perm	0.05			0.03		0.02	0.15					
v/c Ratio	0.52	0.73		0.48	0.58	0.34	0.48	0.71		0.79	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	45.3	36.9	45.0		46.2	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.82	0.96	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.2	0.4	2.7		6.2	0.4	
Delay (s)	53.2	63.3		70.6	74.1	45.5	37.2	47.7		44.0	18.8	
Level of Service	D	E		E	E	D	D	D		D	B	
Approach Delay (s)		59.6			56.6			46.4			25.9	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	0	215	30	115	1465	30	1340	110
Future Volume (vph)	0	215	30	115	1465	30	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	0	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	219	0	148	1495	31	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

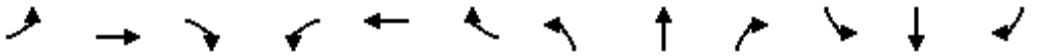
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	0	215	30	115	1465	30	1340	110
Future Vol, veh/h	0	215	30	115	1465	30	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	-	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	0	219	31	117	1495	31	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	-	740	1080	1479	0	1091	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	0	*604	*1023	*759	-	*993	-	-
Stage 1	0	-	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-	-
Platoon blocked, %		1	1	1	-	1	-	-
Mov Cap-1 Maneuver	-	*604	*736	*736	-	*993	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	1	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 736	-	604	* 993	-	-
HCM Lane V/C Ratio	0.201	-	0.363	0.031	-	-
HCM Control Delay (s)	11.1	-	14.3	8.7	-	-
HCM Lane LOS	B	-	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	1.7	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

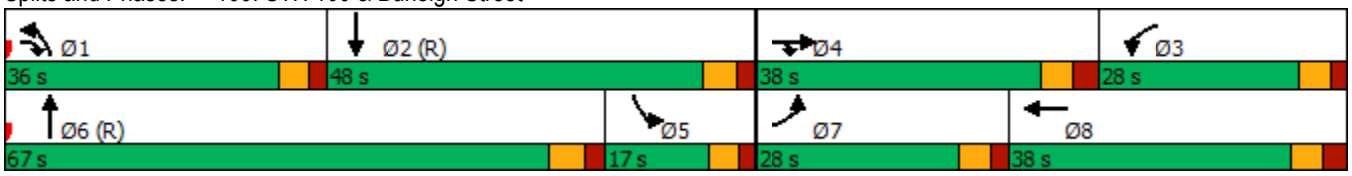


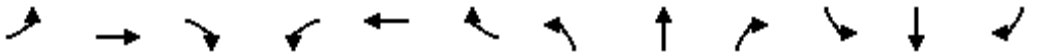
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		49.2	31.6		67.5	54.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		49.2	31.6		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	517		22	463	
Queue Length 95th (ft)	220	318	244	213	335		m#435	575		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 100: STH 100 & Burleigh Street





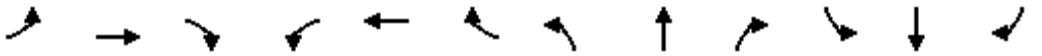
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



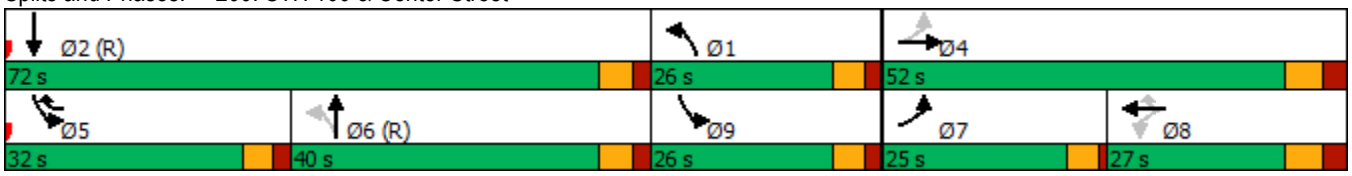
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	362	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.42	0.51	0.87		0.81	0.66	
Control Delay	58.7	55.3		87.6	71.4	51.8	51.0	49.6		48.9	20.4	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	51.8	51.0	49.6		48.9	20.4	
90th %ile Green (s)	20.5	41.2		16.2	16.2	23.4	20.5	41.0			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	18.8	20.5	48.9			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	16.0	20.5	54.1			75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	13.4	20.5	59.5			78.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	20.5	82.6			98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	178	157		51	51	119	78	594		244	317	
Queue Length 95th (ft)	249	225		98	95	167	177	#854		m289	353	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	449	312	1988		568	2708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.32	0.51	0.87		0.64	0.66	

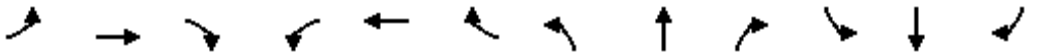
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.5
90th %ile Term Code	Max
70th %ile Green (s)	20.5
70th %ile Term Code	Max
50th %ile Green (s)	20.5
50th %ile Term Code	Max
30th %ile Green (s)	20.5
30th %ile Term Code	Max
10th %ile Green (s)	20.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

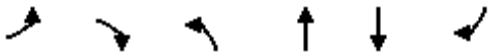
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	168	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	362	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	362	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.4	33.4		9.9	9.9	26.3	76.3	55.8		36.9	77.7	
Effective Green, g (s)	33.4	33.4		9.9	9.9	26.3	76.3	55.8		36.9	77.7	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.18	0.51	0.37		0.25	0.52	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	316	380		79	124	280	310	1938		446	2661	
v/s Ratio Prot	c0.09	0.11			0.03	0.06	0.07	c0.33		c0.20	0.35	
v/s Ratio Perm	c0.06			0.04		0.03	0.19					
v/c Ratio	0.67	0.49		0.67	0.43	0.51	0.52	0.89		0.81	0.68	
Uniform Delay, d1	51.5	50.9		68.5	67.3	56.0	39.7	44.3		53.3	26.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.29	0.70	
Incremental Delay, d2	4.4	0.4		16.2	0.9	0.5	0.6	6.9		8.6	1.2	
Delay (s)	55.9	51.2		84.6	68.2	56.5	40.3	51.2		77.4	20.0	
Level of Service	E	D		F	E	E	D	D		E	C	
Approach Delay (s)		53.7			65.0			50.3			29.6	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	130	0	2130	1870	135
Future Volume (vph)	0	130	0	2130	1870	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	210			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			40	40	
Link Distance (ft)	339			902	1744	
Travel Time (s)	7.7			15.4	29.7	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	138	0	2266	2133	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.5

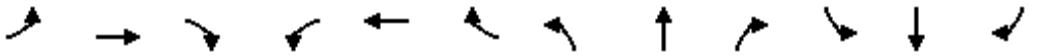
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	130	0	2130	1870	135
Future Vol, veh/h	0	130	0	2130	1870	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	138	0	2266	1989	144

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1067	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*482	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*482	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	482	-	-
HCM Lane V/C Ratio	-	0.287	-	-
HCM Control Delay (s)	-	15.4	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	1.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



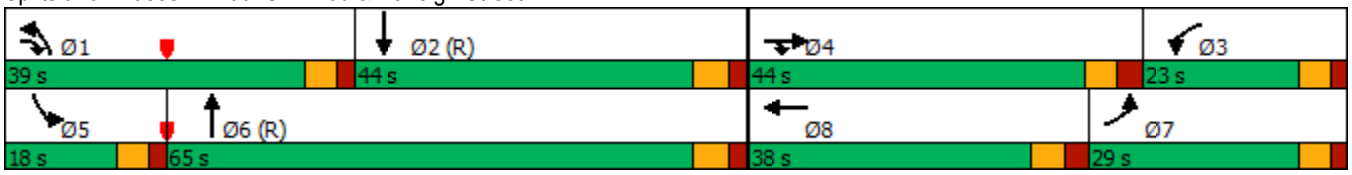
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		81.4	12.9		79.6	47.7	

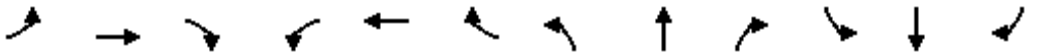
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		81.4	12.9		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		224	84		31	318	
Queue Length 95th (ft)	223	314	214	169	327		268	216		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





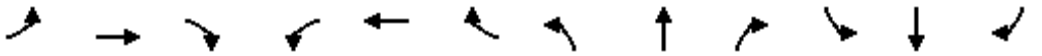
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	495	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.30	0.47	0.69		0.85	0.41	
Control Delay	56.1	72.9		81.2	78.8	43.2	39.4	46.4		38.5	18.8	

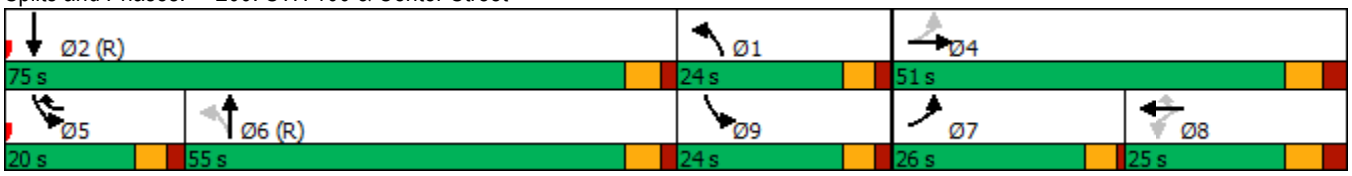
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	43.2	39.4	46.4		38.5	18.8	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	26.5	18.5	49.3			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	29.2	18.5	49.3			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Max	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	31.4	18.5	49.3			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Max	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	41.2	18.5	49.3			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Max	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	101	94	371		221	265	
Queue Length 95th (ft)	177	309		66	109	170	143	426		#509	309	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	459	366	1713		585	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.30	0.47	0.69		0.85	0.41	

Intersection Summary

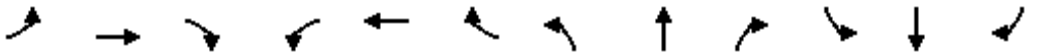
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

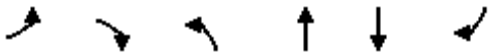
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	495	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	495	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	38.6	66.4	47.9		48.4	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	38.6	66.4	47.9		48.4	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.26	0.44	0.32		0.32	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	399	362	1663		585	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.07	0.06	c0.23		c0.27	0.23	
v/s Ratio Perm	0.05			0.03		0.02	0.15					
v/c Ratio	0.52	0.73		0.48	0.58	0.34	0.48	0.71		0.85	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	45.3	36.9	45.0		47.3	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.81	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.2	0.4	2.7		9.8	0.4	
Delay (s)	53.2	63.3		70.6	74.1	45.5	37.2	47.7		48.2	18.8	
Level of Service	D	E		E	E	D	D	D		D	B	
Approach Delay (s)		59.6			56.6			46.4			27.4	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	215	0	1640	1400	225
Future Volume (vph)	0	215	0	1640	1400	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	210			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			40	40	
Link Distance (ft)	339			902	1744	
Travel Time (s)	7.7			15.4	29.7	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	219	0	1673	1659	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	215	0	1640	1400	225
Future Vol, veh/h	0	215	0	1640	1400	225
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	219	0	1673	1429	230

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	830	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*604	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*604	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	604	-	-
HCM Lane V/C Ratio	-	0.363	-	-
HCM Control Delay (s)	-	14.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	1.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX D
SYNCHRO ANALYSIS
MEDIAN ALTERNATIVES
WITH CROSS-ACCESS

Year 2023 Total Traffic – Alternative A

Year 2023 Total Traffic – Alternative B

Year 2023 Total Traffic – Alternative C

Year 2023 Total Traffic – Alternative D

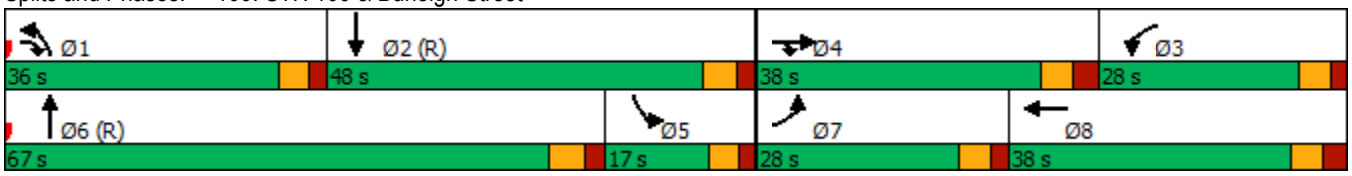
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		53.2	33.5		67.5	54.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		53.2	33.5		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	513		22	463	
Queue Length 95th (ft)	220	318	244	213	335		#455	574		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street



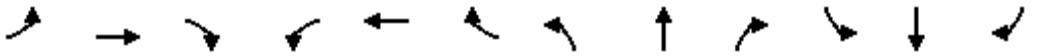
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



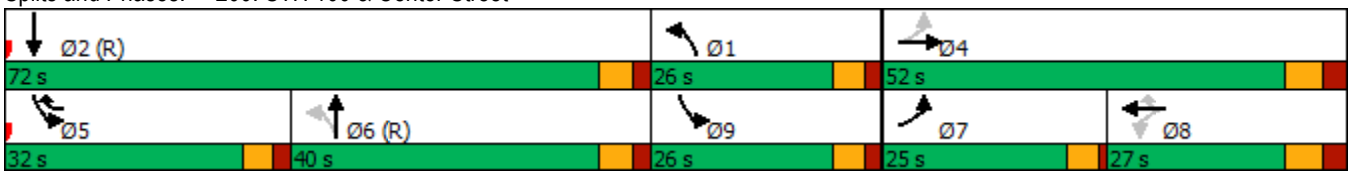
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	261	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.65	0.50		0.56	0.36	0.47	0.55	0.80		0.69	0.65	
Control Delay	57.9	54.8		87.6	71.4	56.7	51.7	43.6		40.0	19.1	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.9	54.8		87.6	71.4	56.7	51.7	43.6		40.0	19.1	
90th %ile Green (s)	20.9	41.6		16.2	16.2	17.5	20.1	46.9			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.9	38.3		12.9	12.9	14.2	20.1	53.5			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	21.4	36.4		10.5	10.5	12.2	19.3	58.2			75.9	
50th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	10.2	17.2	66.0			81.7	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	15.9	87.2			102.9	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	176	156		51	51	124	74	567		172	306	
Queue Length 95th (ft)	248	224		98	95	177	172	#778		m210	341	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	343	511		158	248	449	315	2166		568	2764	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.62	0.36		0.34	0.21	0.32	0.51	0.80		0.46	0.65	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.1
90th %ile Term Code	Gap
70th %ile Green (s)	20.1
70th %ile Term Code	Gap
50th %ile Green (s)	19.3
50th %ile Term Code	Gap
30th %ile Green (s)	17.2
30th %ile Term Code	Gap
10th %ile Green (s)	15.9
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	163	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	261	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	261	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.8	33.8		9.9	9.9	22.8	79.5	60.9		31.4	79.2	
Effective Green, g (s)	33.8	33.8		9.9	9.9	22.8	79.5	60.9		31.4	79.2	
Actuated g/C Ratio	0.23	0.23		0.07	0.07	0.15	0.53	0.41		0.21	0.53	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	320	385		79	124	243	291	2116		379	2712	
v/s Ratio Prot	c0.09	0.11			0.03	0.05	0.07	c0.33		c0.14	c0.35	
v/s Ratio Perm	c0.06			0.04		0.04	0.22					
v/c Ratio	0.67	0.48		0.67	0.43	0.58	0.55	0.82		0.69	0.66	
Uniform Delay, d1	51.2	50.5		68.5	67.3	59.2	39.9	39.7		54.8	25.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.11	0.68	
Incremental Delay, d2	4.0	0.3		16.2	0.9	2.3	1.1	3.7		3.3	1.0	
Delay (s)	55.2	50.9		84.6	68.2	61.5	41.1	43.4		64.1	18.5	
Level of Service	E	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.2			67.9			43.2			24.3	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	80	35	5	90	1940	15	1835	60
Future Volume (vph)	80	35	5	90	1940	15	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	85	37	0	101	2064	16	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	80	35	5	90	1940	15	1835	60
Future Vol, veh/h	80	35	5	90	1940	15	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	85	37	5	96	2064	16	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	3044	1008	1472	2016	0	1507	-	0
Stage 1	2016	-	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*233	*482	*817	*607	-	*788	-	-
Stage 1	*496	-	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*190	*482	*613	*613	-	*788	-	-
Mov Cap-2 Maneuver	*333	-	-	-	-	-	-	-
Stage 1	*414	-	-	-	-	-	-	-
Stage 2	*468	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.6	0.6	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 613	-	333	482	* 788	-	-
HCM Lane V/C Ratio	0.165	-	0.256	0.077	0.02	-	-
HCM Control Delay (s)	12	-	19.5	13.1	9.7	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.6	-	1	0.2	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

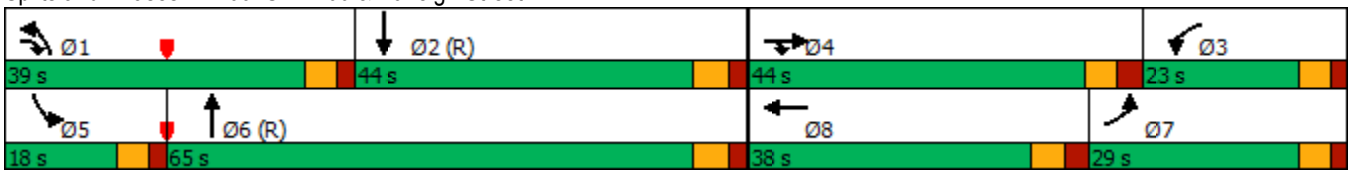
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		58.6	16.1		79.6	47.7	

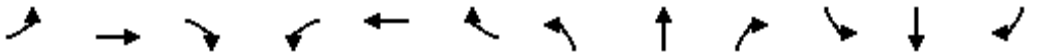
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		58.6	16.1		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		172	233		31	318	
Queue Length 95th (ft)	223	314	214	169	327		277	222		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.42	0.43	0.55		0.84	0.41	
Control Delay	56.1	72.9		81.2	78.8	52.8	32.0	36.3		42.1	18.7	

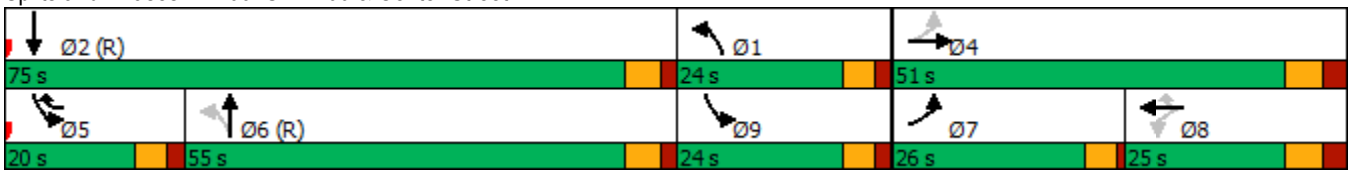
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	52.8	32.0	36.3		42.1	18.7	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	20.3	18.5	55.5			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	17.6	18.5	60.9			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	15.3	18.5	65.4			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	11.5	18.5	79.0			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	113	78	325		195	268	
Queue Length 95th (ft)	177	309		66	109	170	143	426		244	309	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	333	402	2155		438	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.41	0.43	0.55		0.83	0.41	

Intersection Summary

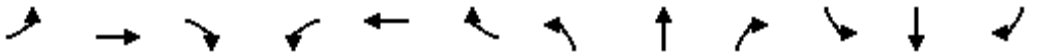
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	362	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	25.9	79.1	60.6		35.7	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	25.9	79.1	60.6		35.7	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.17	0.53	0.40		0.24	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	268	398	2104		431	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.06	0.05	c0.23		c0.20	0.23	
v/s Ratio Perm	0.05			0.03		0.03	0.18					
v/c Ratio	0.52	0.73		0.48	0.58	0.51	0.43	0.57		0.84	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	56.3	27.9	34.5		54.4	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.85	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.6	0.3	1.1		11.6	0.4	
Delay (s)	53.2	63.3		70.6	74.1	56.8	28.2	35.6		58.1	18.6	
Level of Service	D	E		E	E	E	C	D		E	B	
Approach Delay (s)		59.6			63.3			34.7			27.9	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	115	60	30	145	1335	15	1340	110
Future Volume (vph)	115	60	30	145	1335	15	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	1	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	117	61	0	179	1362	15	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.5

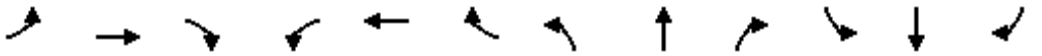
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	115	60	30	145	1335	15	1340	110
Future Vol, veh/h	115	60	30	145	1335	15	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	0	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	117	61	31	148	1362	15	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	2356	740	1080	1479	0	994	-	0
Stage 1	1453	-	-	-	-	-	-	-
Stage 2	903	-	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	*1023	-	-
Stage 1	*620	-	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	1	-	-
Mov Cap-1 Maneuver	*225	*604	*783	*783	-	*1023	-	-
Mov Cap-2 Maneuver	*402	-	-	-	-	-	-	-
Stage 1	*478	-	-	-	-	-	-	-
Stage 2	*611	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.5	1.3	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	* 783	-	402	604	* 1023	-	-
HCM Lane V/C Ratio	0.228	-	0.292	0.101	0.015	-	-
HCM Control Delay (s)	11	-	17.6	11.6	8.6	-	-
HCM Lane LOS	B	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.9	-	1.2	0.3	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



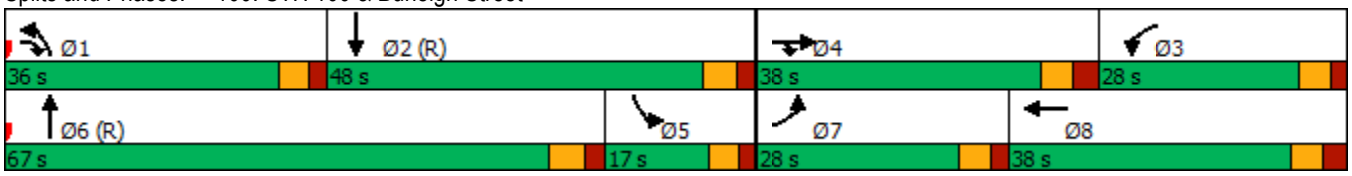
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		53.2	33.5		67.5	54.9	

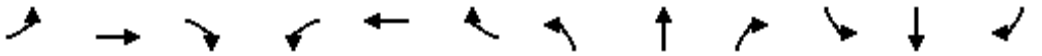
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		53.2	33.5		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	513		22	463	
Queue Length 95th (ft)	220	318	244	213	335		#455	574		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 100: STH 100 & Burleigh Street





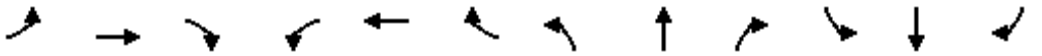
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



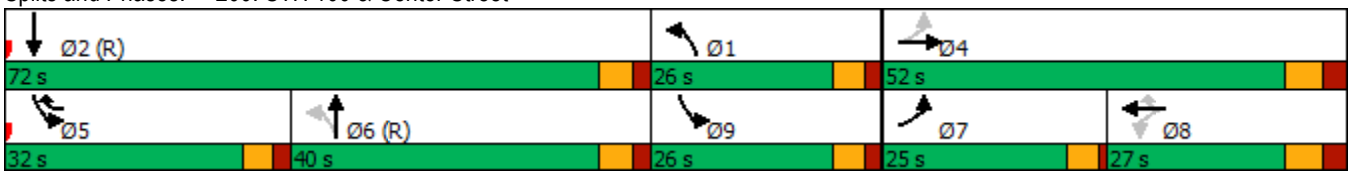
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	261	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.65	0.50		0.56	0.36	0.47	0.55	0.80		0.69	0.65	
Control Delay	57.9	54.8		87.6	71.4	56.7	51.7	43.6		40.0	19.0	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	57.9	54.8		87.6	71.4	56.7	51.7	43.6		40.0	19.0	
90th %ile Green (s)	20.9	41.6		16.2	16.2	17.5	20.1	46.9			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.9	38.3		12.9	12.9	14.2	20.1	53.5			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	21.4	36.4		10.5	10.5	12.2	19.3	58.2			75.9	
50th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	10.2	17.2	66.0			81.7	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	15.9	87.2			102.9	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	176	156		51	51	124	74	567		173	305	
Queue Length 95th (ft)	248	224		98	95	177	172	#778		m211	339	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	343	511		158	248	449	315	2166		568	2764	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.62	0.36		0.34	0.21	0.32	0.51	0.80		0.46	0.65	

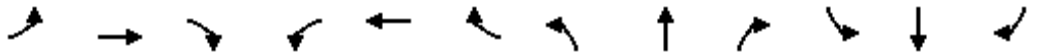
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.1
90th %ile Term Code	Gap
70th %ile Green (s)	20.1
70th %ile Term Code	Gap
50th %ile Green (s)	19.3
50th %ile Term Code	Gap
30th %ile Green (s)	17.2
30th %ile Term Code	Gap
10th %ile Green (s)	15.9
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	245	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	163	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	261	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	261	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.8	33.8		9.9	9.9	22.8	79.5	60.9		31.4	79.2	
Effective Green, g (s)	33.8	33.8		9.9	9.9	22.8	79.5	60.9		31.4	79.2	
Actuated g/C Ratio	0.23	0.23		0.07	0.07	0.15	0.53	0.41		0.21	0.53	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	320	385		79	124	243	291	2116		379	2712	
v/s Ratio Prot	c0.09	0.11			0.03	0.05	0.07	c0.33		c0.14	c0.35	
v/s Ratio Perm	c0.06			0.04		0.04	0.22					
v/c Ratio	0.67	0.48		0.67	0.43	0.58	0.55	0.82		0.69	0.66	
Uniform Delay, d1	51.2	50.5		68.5	67.3	59.2	39.9	39.7		54.8	25.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.11	0.68	
Incremental Delay, d2	4.0	0.3		16.2	0.9	2.3	1.1	3.7		3.2	1.0	
Delay (s)	55.2	50.9		84.6	68.2	61.5	41.1	43.4		64.1	18.5	
Level of Service	E	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.2			67.9			43.2			24.3	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	95	35	5	90	1940	1835	60
Future Volume (vph)	95	35	5	90	1940	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)	0	0		210			0
Storage Lanes	1	1		1			0
Taper Length (ft)	75			75			
Link Speed (mph)	30				40	40	
Link Distance (ft)	339				902	1744	
Travel Time (s)	7.7				15.4	29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	101	37	0	101	2064	2016	0
Sign Control	Stop				Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.9

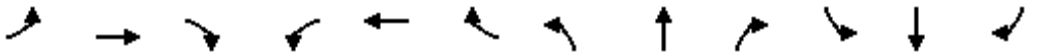
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	95	35	5	90	1940	1835	60
Future Vol, veh/h	95	35	5	90	1940	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	210	-	-	-
Veh in Median Storage, #	2	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	101	37	5	96	2064	1952	64

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3012	1008	1472	2016	0	-	0
Stage 1	1984	-	-	-	-	-	-
Stage 2	1028	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	-	-
Pot Cap-1 Maneuver	*233	*482	*817	*607	-	-	-
Stage 1	*496	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	-	-
Mov Cap-1 Maneuver	*194	*482	*613	*613	-	-	-
Mov Cap-2 Maneuver	*340	-	-	-	-	-	-
Stage 1	*414	-	-	-	-	-	-
Stage 2	*478	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.1	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 613	-	340	482	-	-
HCM Lane V/C Ratio	0.165	-	0.297	0.077	-	-
HCM Control Delay (s)	12	-	20	13.1	-	-
HCM Lane LOS	B	-	C	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



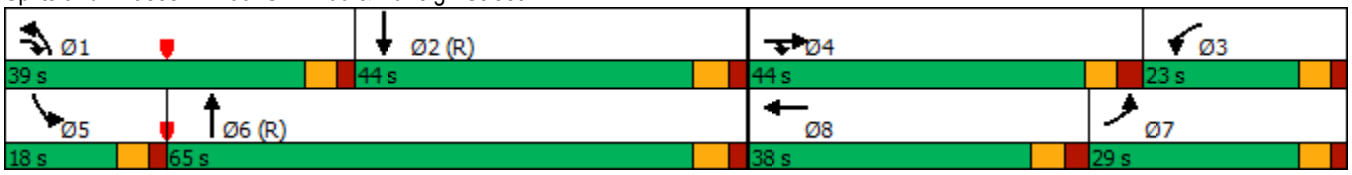
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		58.5	16.2		79.6	47.7	

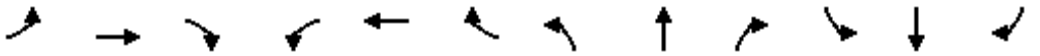
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		58.5	16.2		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		172	234		31	318	
Queue Length 95th (ft)	223	314	214	169	327		277	223		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





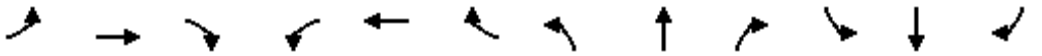
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary			
HCM 6th Ctrl Delay		56.1	
HCM 6th LOS		E	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



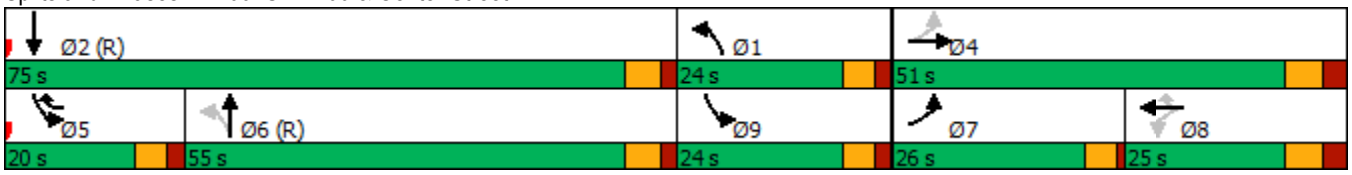
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.42	0.43	0.55		0.84	0.41	
Control Delay	56.1	72.9		81.2	78.8	52.8	32.0	36.3		42.0	18.7	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	52.8	32.0	36.3		42.0	18.7	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	20.3	18.5	55.5			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	17.6	18.5	60.9			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	15.3	18.5	65.4			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	11.5	18.5	79.0			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	113	78	325		195	269	
Queue Length 95th (ft)	177	309		66	109	170	143	426		246	309	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	333	402	2155		438	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.41	0.43	0.55		0.83	0.41	

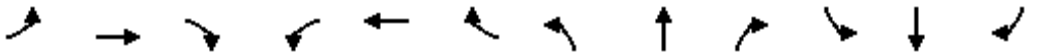
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	355	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	362	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	362	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	25.9	79.1	60.6		35.7	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	25.9	79.1	60.6		35.7	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.17	0.53	0.40		0.24	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	268	398	2104		431	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.06	0.05	c0.23		c0.20	0.23	
v/s Ratio Perm	0.05			0.03		0.03	0.18					
v/c Ratio	0.52	0.73		0.48	0.58	0.51	0.43	0.57		0.84	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	56.3	27.9	34.5		54.4	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.85	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.6	0.3	1.1		11.6	0.4	
Delay (s)	53.2	63.3		70.6	74.1	56.8	28.2	35.6		58.0	18.6	
Level of Service	D	E		E	E	E	C	D		E	B	
Approach Delay (s)		59.6			63.3			34.7			27.8	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	130	60	30	145	1335	1340	110
Future Volume (vph)	130	60	30	145	1335	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)	0%				0%	0%	
Storage Length (ft)	0	0		210			0
Storage Lanes	1	1		1			0
Taper Length (ft)	75			75			
Link Speed (mph)	30				40	40	
Link Distance (ft)	339				902	1744	
Travel Time (s)	7.7				15.4	29.7	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)	0%				0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	133	61	0	179	1362	1479	0
Sign Control	Stop				Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	130	60	30	145	1335	1340	110
Future Vol, veh/h	130	60	30	145	1335	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	0	-	210	-	-	-
Veh in Median Storage, #	2	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1
Mvmt Flow	133	61	31	148	1362	1367	112

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	2326	740	1080	1479	0	-	0
Stage 1	1423	-	-	-	-	-	-
Stage 2	903	-	-	-	-	-	-
Critical Hdwy	5.72	7.12	5.62	5.32	-	-	-
Critical Hdwy Stg 1	6.62	-	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-	-
Follow-up Hdwy	3.81	3.91	2.31	3.11	-	-	-
Pot Cap-1 Maneuver	*296	*604	*1023	*759	-	-	-
Stage 1	*620	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	-	-	-
Mov Cap-1 Maneuver	*228	*604	*783	*783	-	-	-
Mov Cap-2 Maneuver	*406	-	-	-	-	-	-
Stage 1	*478	-	-	-	-	-	-
Stage 2	*620	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16	1.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	* 783	-	406	604	-	-
HCM Lane V/C Ratio	0.228	-	0.327	0.101	-	-
HCM Control Delay (s)	11	-	18.1	11.6	-	-
HCM Lane LOS	B	-	C	B	-	-
HCM 95th %tile Q(veh)	0.9	-	1.4	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

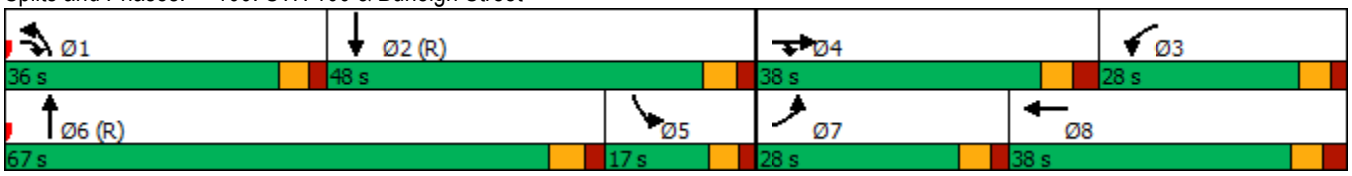
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		51.1	33.2		67.5	54.9	

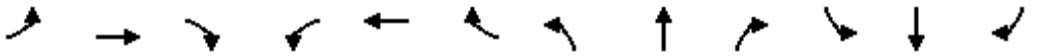
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		51.1	33.2		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	519		22	463	
Queue Length 95th (ft)	220	318	244	213	335		m#455	577		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 100: STH 100 & Burleigh Street





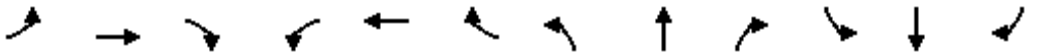
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	298	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.45	0.52	0.83		0.73	0.66	
Control Delay	58.7	55.3		87.6	71.4	55.0	50.6	45.8		42.1	19.8	

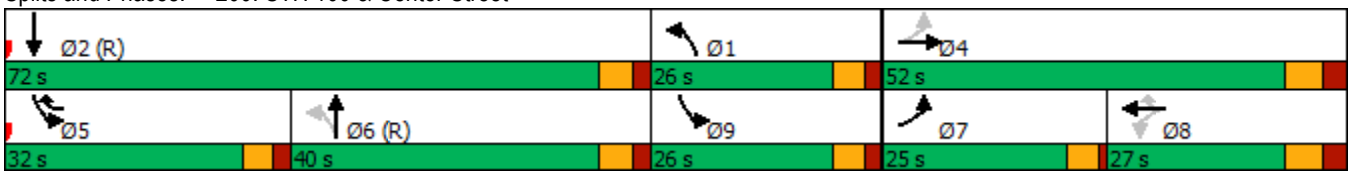
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	55.0	50.6	45.8		42.1	19.8	
90th %ile Green (s)	20.5	41.2		16.2	16.2	19.5	20.5	44.9			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	15.7	20.5	52.0			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	13.4	20.5	56.7			75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	11.3	19.4	62.7			79.5	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	18.0	85.1			100.8	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	178	157		51	51	122	74	577		197	312	
Queue Length 95th (ft)	249	225		98	95	174	174	#804		m238	347	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	449	314	2094		568	2733	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.32	0.51	0.83		0.52	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 200: STH 100 & Center Street



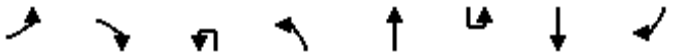
Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.5
90th %ile Term Code	Max
70th %ile Green (s)	20.5
70th %ile Term Code	Max
50th %ile Green (s)	20.5
50th %ile Term Code	Max
30th %ile Green (s)	19.4
30th %ile Term Code	Gap
10th %ile Green (s)	18.0
10th %ile Term Code	Gap
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	280	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	164	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	298	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	298	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.4	33.4		9.9	9.9	23.9	78.7	58.9		33.8	78.4	
Effective Green, g (s)	33.4	33.4		9.9	9.9	23.9	78.7	58.9		33.8	78.4	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.16	0.52	0.39		0.23	0.52	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	316	380		79	124	254	303	2046		408	2685	
v/s Ratio Prot	c0.09	0.11			0.03	0.05	0.07	c0.33		c0.16	c0.35	
v/s Ratio Perm	c0.06			0.04		0.04	0.21					
v/c Ratio	0.67	0.49		0.67	0.43	0.56	0.53	0.85		0.73	0.67	
Uniform Delay, d1	51.5	50.9		68.5	67.3	58.2	39.7	41.5		53.9	26.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.17	0.69	
Incremental Delay, d2	4.4	0.4		16.2	0.9	1.5	0.8	4.6		4.7	1.1	
Delay (s)	55.9	51.2		84.6	68.2	59.7	40.4	46.0		67.4	19.3	
Level of Service	E	D		F	E	E	D	D		E	B	
Approach Delay (s)		53.7			66.8			45.6			26.2	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	0	65	5	90	1975	60	1835	60
Future Volume (vph)	0	65	5	90	1975	60	1835	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	0	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	69	0	101	2101	64	2016	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	0	65	5	90	1975	60	1835	60
Future Vol, veh/h	0	65	5	90	1975	60	1835	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	-	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	0	69	5	96	2101	64	1952	64

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	-	1008	1472	2016	0	1534	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	0	*482	*817	*607	-	*788	-	-
Stage 1	0	-	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-	-
Platoon blocked, %		1	1	1	-	1	-	-
Mov Cap-1 Maneuver	-	*482	*612	*612	-	*788	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.7	0.6	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 612	-	482	* 788	-	-
HCM Lane V/C Ratio	0.165	-	0.143	0.081	-	-
HCM Control Delay (s)	12	-	13.7	10	-	-
HCM Lane LOS	B	-	B	A	-	-
HCM 95th %tile Q(veh)	0.6	-	0.5	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

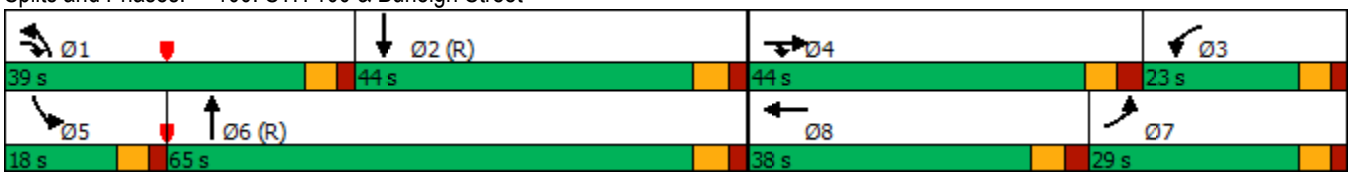
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		71.3	14.4		79.6	47.7	

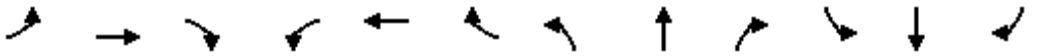
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		71.3	14.4		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		193	120		31	318	
Queue Length 95th (ft)	223	314	214	169	327		278	230		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	405	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	405	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	413	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.34	0.45	0.63		0.79	0.41	
Control Delay	56.1	72.9		81.2	78.8	46.5	36.4	41.9		34.5	18.8	

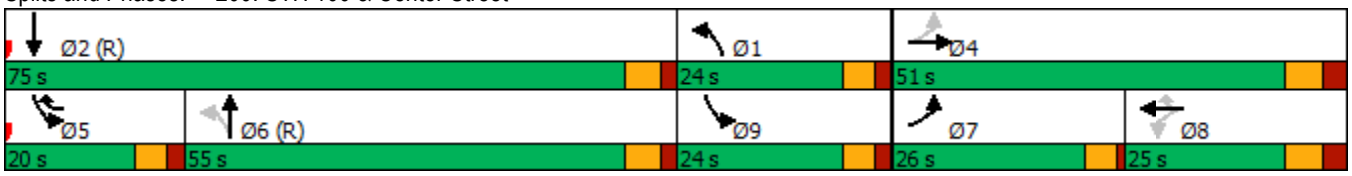
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	46.5	36.4	41.9		34.5	18.8	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	25.7	18.5	50.1			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	24.1	18.5	54.4			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	25.2	18.5	55.5			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	27.5	18.5	63.0			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	106	87	350		192	265	
Queue Length 95th (ft)	177	309		66	109	170	143	426		#331	308	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	405	381	1892		523	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.34	0.45	0.63		0.79	0.41	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street



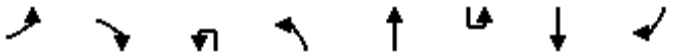
Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	405	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	405	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	413	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	413	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	33.4	71.6	53.1		43.2	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	33.4	71.6	53.1		43.2	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.22	0.48	0.35		0.29	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	345	377	1844		522	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.06	0.06	c0.23		c0.23	0.23	
v/s Ratio Perm	0.05			0.03		0.02	0.16					
v/c Ratio	0.52	0.73		0.48	0.58	0.39	0.46	0.64		0.79	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	49.7	34.1	40.6		49.2	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.82	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.3	0.3	1.8		6.8	0.4	
Delay (s)	53.2	63.3		70.6	74.1	50.0	34.5	42.3		47.0	18.7	
Level of Service	D	E		E	E	D	C	D		D	B	
Approach Delay (s)		59.6			59.2			41.3			26.1	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	0	110	30	145	1385	80	1340	110
Future Volume (vph)	0	110	30	145	1385	80	1340	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12
Grade (%)	0%				0%		0%	
Storage Length (ft)	0	0		210		275		0
Storage Lanes	0	1		1		1		0
Taper Length (ft)	75			75		75		
Link Speed (mph)	30				40		40	
Link Distance (ft)	339				902		1744	
Travel Time (s)	7.7				15.4		29.7	
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0
Parking (#/hr)								
Mid-Block Traffic (%)	0%				0%		0%	
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	112	0	179	1413	82	1479	0
Sign Control	Stop				Free		Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	1.2

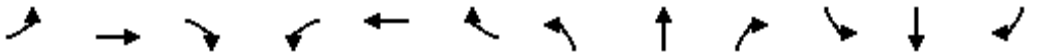
Movement	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBR
Lane Configurations								
Traffic Vol, veh/h	0	110	30	145	1385	80	1340	110
Future Vol, veh/h	0	110	30	145	1385	80	1340	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	-	None
Storage Length	-	0	-	210	-	275	-	-
Veh in Median Storage, #	2	-	-	-	0	-	0	-
Grade, %	0	-	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1	1	1
Mvmt Flow	0	112	31	148	1413	82	1367	112

Major/Minor	Minor2		Major1			Major2		
Conflicting Flow All	-	740	1080	1479	0	1032	-	0
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-
Critical Hdwy	-	7.12	5.62	5.32	-	5.62	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	2.31	3.11	-	2.31	-	-
Pot Cap-1 Maneuver	0	*604	*1023	*759	-	*1023	-	-
Stage 1	0	-	-	-	-	-	-	-
Stage 2	0	-	-	-	-	-	-	-
Platoon blocked, %		1	1	1	-	1	-	-
Mov Cap-1 Maneuver	-	*604	*771	*771	-	*1023	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	1.2	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBU	SBT	SBR
Capacity (veh/h)	* 771	-	604	* 1023	-	-
HCM Lane V/C Ratio	0.232	-	0.186	0.08	-	-
HCM Control Delay (s)	11.1	-	12.3	8.8	-	-
HCM Lane LOS	B	-	B	A	-	-
HCM 95th %tile Q(veh)	0.9	-	0.7	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

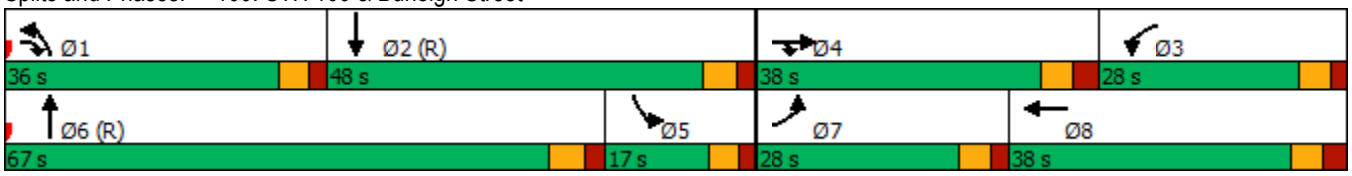


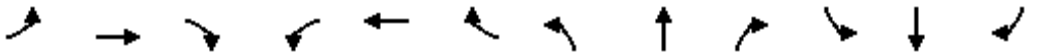
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (vph)	325	755	595	315	750	35	615	1005	375	45	970	300
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	339	786	384	328	817	0	641	1438	0	47	1323	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	28.0	38.0		28.0	38.0		36.0	67.0		17.0	48.0	
Total Split (%)	18.7%	25.3%		18.7%	25.3%		24.0%	44.7%		11.3%	32.0%	
Maximum Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.85	0.66	0.78	0.90		0.93	0.62		0.21	0.86	
Control Delay	82.3	68.6	26.6	76.1	72.5		49.2	31.6		67.5	54.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	82.3	68.6	26.6	76.1	72.5		49.2	31.6		67.5	54.9	
90th %ile Green (s)	22.5	31.6		22.5	31.6		30.5	60.8		11.5	41.8	
90th %ile Term Code	Max	Max		Max	Max		Max	Coord		Hold	Coord	
70th %ile Green (s)	21.2	30.8		22.5	32.1		31.3	61.6		11.5	41.8	
70th %ile Term Code	Gap	Gap		Hold	Gap		Max	Coord		Hold	Coord	
50th %ile Green (s)	19.0	27.9		20.2	29.1		34.5	66.8		11.5	43.8	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
30th %ile Green (s)	16.9	25.8		17.9	26.8		32.2	71.2		11.5	50.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Hold	Coord	
10th %ile Green (s)	13.7	22.7		14.5	23.5		28.1	94.7		0.0	61.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	169	275	181	161	288		332	517		22	463	
Queue Length 95th (ft)	220	318	244	213	335		m#435	575		44	#577	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	487	1051	616	486	1008		702	2307		251	1547	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.70	0.75	0.62	0.67	0.81		0.91	0.62		0.19	0.86	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 69 (46%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 100: STH 100 & Burleigh Street





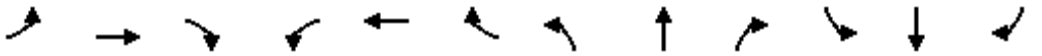
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Future Volume (veh/h)	325	755	595	315	750	35	615	1005	375	45	970	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1895	1895	1885	1890	1890	1890	1930	1930	1930	1915	1915	1915
Adj Flow Rate, veh/h	339	786	384	328	781	36	641	1047	391	47	1010	312
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	2	2	2
Cap, veh/h	384	893	585	373	889	41	689	1531	572	520	1440	444
Arrive On Green	0.11	0.17	0.17	0.11	0.18	0.18	0.06	0.13	0.13	0.15	0.36	0.36
Sat Flow, veh/h	3501	5174	1598	3492	5056	232	3566	3778	1411	3538	3958	1222
Grp Volume(v), veh/h	339	786	384	328	531	286	641	973	465	47	889	433
Grp Sat Flow(s),veh/h/ln	1751	1725	1598	1746	1720	1848	1783	1756	1676	1769	1742	1695
Q Serve(g_s), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Cycle Q Clear(g_c), s	14.3	22.2	19.2	13.9	22.5	22.7	26.8	39.6	39.6	1.7	32.7	32.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.84	1.00		0.72
Lane Grp Cap(c), veh/h	384	893	585	373	605	325	689	1424	679	520	1268	617
V/C Ratio(X)	0.88	0.88	0.66	0.88	0.88	0.88	0.93	0.68	0.68	0.09	0.70	0.70
Avail Cap(c_a), veh/h	525	1090	645	524	725	389	725	1424	679	520	1268	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.8	60.5	18.4	66.0	60.2	60.3	69.2	55.8	55.8	55.3	40.8	40.8
Incr Delay (d2), s/veh	10.2	6.4	1.5	9.3	9.3	16.2	17.6	2.7	5.5	0.0	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.2	15.5	11.6	10.9	15.9	17.7	20.9	26.5	26.0	1.4	20.6	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	76.0	66.9	19.9	75.3	69.5	76.5	86.8	58.5	61.3	55.3	44.0	47.3
LnGrp LOS	E	E	B	E	E	E	F	E	E	E	D	D
Approach Vol, veh/h		1509			1145			2079			1369	
Approach Delay, s/veh		57.0			72.9			67.8			45.4	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.5	60.8	22.4	32.3	28.3	67.0	22.0	32.8
Change Period (Y+Rc), s	5.5	* 6.2	* 6.4	* 6.4	* 6.2	* 6.2	5.5	* 6.4
Max Green Setting (Gmax), s	30.5	* 42	* 23	* 32	* 12	* 61	22.5	* 32
Max Q Clear Time (g_c+I1), s	28.8	34.7	15.9	24.2	3.7	41.6	16.3	24.7
Green Ext Time (p_c), s	0.1	2.3	0.2	1.7	0.0	3.6	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	61.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



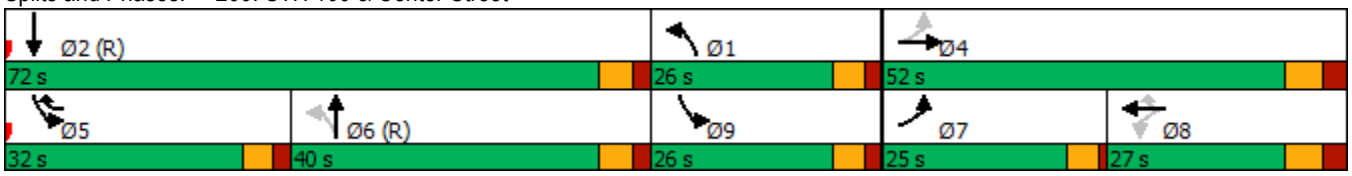
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	362	1798	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	25.0	52.0		27.0	27.0	32.0	26.0	40.0			72.0	
Total Split (%)	16.7%	34.7%		18.0%	18.0%	21.3%	17.3%	26.7%			48.0%	
Maximum Green (s)	20.5	44.8		19.8	19.8	26.5	20.5	34.3			66.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.66	0.51		0.56	0.36	0.42	0.51	0.87		0.81	0.66	
Control Delay	58.7	55.3		87.6	71.4	51.8	51.0	49.6		48.9	20.4	

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	26.0
Total Split (%)	17%
Maximum Green (s)	20.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	58.7	55.3		87.6	71.4	51.8	51.0	49.6		48.9	20.4	
90th %ile Green (s)	20.5	41.2		16.2	16.2	23.4	20.5	41.0			69.9	
90th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
70th %ile Green (s)	20.5	37.9		12.9	12.9	18.8	20.5	48.9			73.2	
70th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
50th %ile Green (s)	20.5	35.5		10.5	10.5	16.0	20.5	54.1			75.6	
50th %ile Term Code	Max	Hold		Gap	Gap	Gap	Hold	Coord			Coord	
30th %ile Green (s)	18.2	32.7		10.0	10.0	13.4	20.5	59.5			78.4	
30th %ile Term Code	Gap	Hold		Min	Min	Gap	Hold	Coord			Coord	
10th %ile Green (s)	15.5	12.8		0.0	0.0	10.2	20.5	82.6			98.3	
10th %ile Term Code	Hold	Gap		Skip	Skip	Gap	Hold	Coord			Coord	
Queue Length 50th (ft)	178	157		51	51	119	78	594		244	317	
Queue Length 95th (ft)	249	225		98	95	167	177	#854		m289	353	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	339	511		158	248	449	312	1988		568	2708	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.63	0.36		0.34	0.21	0.32	0.51	0.87		0.64	0.66	

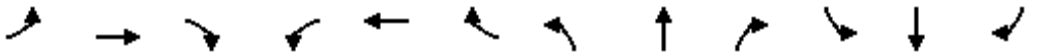
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 129 (86%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	20.5
90th %ile Term Code	Max
70th %ile Green (s)	20.5
70th %ile Term Code	Max
50th %ile Green (s)	20.5
50th %ile Term Code	Max
30th %ile Green (s)	20.5
30th %ile Term Code	Max
10th %ile Green (s)	20.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

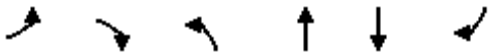
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Future Volume (vph)	200	70	105	50	50	215	150	1620	10	340	1520	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.91		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1711		1787	1881	1599	1815	5212		1815	5138	
Flt Permitted	0.50	1.00		0.64	1.00	1.00	0.09	1.00		0.95	1.00	
Satd. Flow (perm)	934	1711		1205	1881	1599	168	5212		1815	5138	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	213	74	112	53	53	142	160	1723	11	362	1617	181
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	213	186	0	53	53	142	160	1734	0	362	1798	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	33.4	33.4		9.9	9.9	26.3	76.3	55.8		36.9	77.7	
Effective Green, g (s)	33.4	33.4		9.9	9.9	26.3	76.3	55.8		36.9	77.7	
Actuated g/C Ratio	0.22	0.22		0.07	0.07	0.18	0.51	0.37		0.25	0.52	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	316	380		79	124	280	310	1938		446	2661	
v/s Ratio Prot	c0.09	0.11			0.03	0.06	0.07	c0.33		c0.20	0.35	
v/s Ratio Perm	c0.06			0.04		0.03	0.19					
v/c Ratio	0.67	0.49		0.67	0.43	0.51	0.52	0.89		0.81	0.68	
Uniform Delay, d1	51.5	50.9		68.5	67.3	56.0	39.7	44.3		53.3	26.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.29	0.70	
Incremental Delay, d2	4.4	0.4		16.2	0.9	0.5	0.6	6.9		8.6	1.2	
Delay (s)	55.9	51.2		84.6	68.2	56.5	40.3	51.2		77.4	20.0	
Level of Service	E	D		F	E	E	D	D		E	C	
Approach Delay (s)		53.7			65.0			50.3			29.6	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	95	0	2130	1870	135
Future Volume (vph)	0	95	0	2130	1870	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	210			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			40	40	
Link Distance (ft)	339			902	1744	
Travel Time (s)	7.7			15.4	29.7	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	101	0	2266	2133	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.3

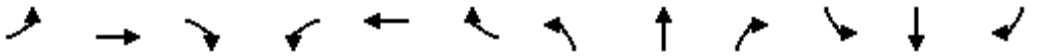
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	95	0	2130	1870	135
Future Vol, veh/h	0	95	0	2130	1870	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	101	0	2266	1989	144

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1067	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*482	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*482	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	482	-	-
HCM Lane V/C Ratio	-	0.21	-	-
HCM Control Delay (s)	-	14.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



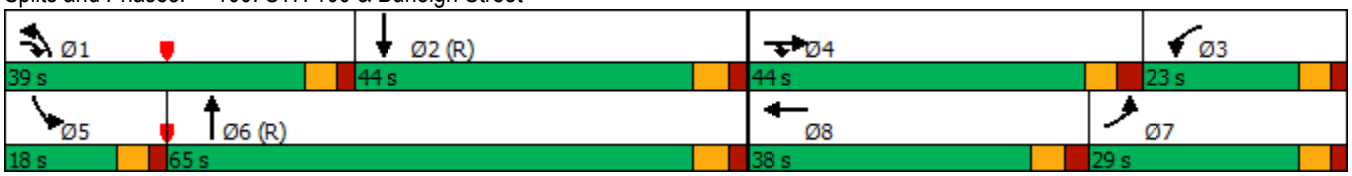
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (vph)	330	755	565	240	735	25	570	605	295	60	650	315
Ideal Flow (vphpl)	1910	1910	1900	1905	1905	1905	1945	1945	1945	1945	1945	1945
Lane Width (ft)	10	11	10	10	10	10	10	11	11	10	11	11
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	190		275	285		0	530		0	220		0
Storage Lanes	2		1	2		0	2		0	2		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		656			565			1744			904	
Travel Time (s)		12.8			11.0			29.7			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	62%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	795	369	253	800	0	600	948	0	63	1016	0
Turn Type	Prot	NA	pt+ov	Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4	4 1	3	8		1	6		5	2	
Permitted Phases												
Detector Phase	7	4	4	3	8		1	6		5	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	10.5	11.4		10.5	11.4		10.5	16.2		10.5	16.2	
Total Split (s)	29.0	44.0		23.0	38.0		39.0	65.0		18.0	44.0	
Total Split (%)	19.3%	29.3%		15.3%	25.3%		26.0%	43.3%		12.0%	29.3%	
Maximum Green (s)	23.5	37.6		17.5	31.6		33.5	58.8		12.5	37.8	
Yellow Time (s)	3.5	3.6		3.5	3.6		3.5	3.9		3.5	3.9	
All-Red Time (s)	2.0	2.8		2.0	2.8		2.0	2.3		2.0	2.3	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	6.4		5.5	6.4		5.5	6.2		5.5	6.2	
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Minimum Gap (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.84	0.84	0.64	0.63	0.89		0.91	0.40		0.45	0.66	
Control Delay	81.8	66.5	25.9	69.6	72.1		81.4	12.9		79.6	47.7	

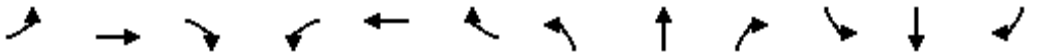
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	81.8	66.5	25.9	69.6	72.1		81.4	12.9		79.6	47.7	
90th %ile Green (s)	23.5	34.6		20.5	31.6		33.5	62.7		8.6	37.8	
90th %ile Term Code	Max	Gap		Hold	Max		Max	Coord		Gap	Coord	
70th %ile Green (s)	21.8	31.6		21.7	31.5		33.8	65.8		7.3	39.3	
70th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
50th %ile Green (s)	19.6	28.6		19.5	28.5		31.1	72.0		6.3	47.2	
50th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
30th %ile Green (s)	17.3	26.4		17.2	26.3		28.3	77.4		5.4	54.5	
30th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Gap	Coord	
10th %ile Green (s)	14.1	23.3		13.8	23.0		24.2	94.8		0.0	65.1	
10th %ile Term Code	Gap	Gap		Hold	Gap		Gap	Coord		Skip	Coord	
Queue Length 50th (ft)	173	278	184	122	282		224	84		31	318	
Queue Length 95th (ft)	223	314	214	169	327		268	216		57	408	
Internal Link Dist (ft)		576			485			1664			824	
Turn Bay Length (ft)	190		275	285			530			220		
Base Capacity (vph)	504	1238	659	418	1007		733	2378		270	1541	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.69	0.64	0.56	0.61	0.79		0.82	0.40		0.23	0.66	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 19 (13%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 100: STH 100 & Burleigh Street





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Future Volume (veh/h)	330	755	565	240	735	25	570	605	295	60	650	315
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1880	1880	1870	1890	1890	1890	1915	1915	1915	1899	1899	1899
Adj Flow Rate, veh/h	347	795	369	253	774	26	600	637	311	63	684	332
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	3	3	3
Cap, veh/h	392	912	574	368	872	29	651	1842	858	109	1298	604
Arrive On Green	0.11	0.18	0.18	0.11	0.17	0.17	0.06	0.17	0.17	0.03	0.38	0.38
Sat Flow, veh/h	3474	5133	1585	3492	5127	172	3538	3485	1623	3510	3457	1610
Grp Volume(v), veh/h	347	795	369	253	519	281	600	637	311	63	684	332
Grp Sat Flow(s),veh/h/ln	1737	1711	1585	1746	1720	1859	1769	1742	1623	1755	1729	1610
Q Serve(g_s), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Cycle Q Clear(g_c), s	14.8	22.6	19.0	10.5	22.1	22.2	25.3	24.1	25.3	2.7	23.1	24.3
Prop In Lane	1.00		1.00	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	912	574	368	585	316	651	1842	858	109	1298	604
V/C Ratio(X)	0.88	0.87	0.64	0.69	0.89	0.89	0.92	0.35	0.36	0.58	0.53	0.55
Avail Cap(c_a), veh/h	544	1287	689	407	725	392	790	1842	858	292	1298	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.6	60.0	19.0	64.7	60.8	60.9	69.4	39.1	39.6	71.7	36.5	36.9
Incr Delay (d2), s/veh	9.9	3.7	0.8	3.2	9.6	16.5	13.1	0.5	1.2	1.8	1.5	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.4	15.3	11.3	8.4	15.7	17.5	19.2	17.0	16.9	2.2	15.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	75.4	63.7	19.8	67.9	70.5	77.4	82.5	39.6	40.8	73.5	38.0	40.4
LnGrp LOS	E	E	B	E	E	E	F	D	D	E	D	D
Approach Vol, veh/h		1511			1053			1548			1079	
Approach Delay, s/veh		55.7			71.7			56.5			40.8	
Approach LOS		E			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.1	62.5	21.3	33.1	10.1	85.5	22.4	31.9
Change Period (Y+Rc), s	5.5	* 6.2	* 5.5	6.4	5.5	* 6.2	* 5.5	6.4
Max Green Setting (Gmax), s	33.5	* 38	* 18	37.6	12.5	* 59	* 24	31.6
Max Q Clear Time (g_c+I1), s	27.3	26.3	12.5	24.6	4.7	27.3	16.8	24.2
Green Ext Time (p_c), s	0.3	2.1	0.1	2.1	0.0	2.3	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	56.1
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	150		0	470		470	250		0	575		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	75			75			75			75		
Right Turn on Red			No			No			No			No
Link Speed (mph)		25			25			40			40	
Link Distance (ft)		1249			587			1651			902	
Travel Time (s)		34.1			16.0			28.1			15.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	495	1184	0
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Detector Phase	7	4		8	8	5	1	6		5 9	2	
Switch Phase												
Minimum Initial (s)	6.0	10.0		10.0	10.0	6.0	6.0	15.0			15.0	
Minimum Split (s)	10.5	17.2		17.2	17.2	11.5	11.5	20.7			20.7	
Total Split (s)	26.0	51.0		25.0	25.0	20.0	24.0	55.0			75.0	
Total Split (%)	17.3%	34.0%		16.7%	16.7%	13.3%	16.0%	36.7%			50.0%	
Maximum Green (s)	21.5	43.8		17.8	17.8	14.5	18.5	49.3			69.3	
Yellow Time (s)	3.5	4.2		4.2	4.2	3.5	3.5	3.9			3.9	
All-Red Time (s)	1.0	3.0		3.0	3.0	2.0	2.0	1.8			1.8	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag			Lead	
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes			Yes	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Minimum Gap (s)	1.5	1.5		1.5	1.5	1.5	1.5	2.0			2.0	
Time Before Reduce (s)	20.0	45.0		45.0	45.0	20.0	20.0	28.0			28.0	
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	17.0			17.0	
Recall Mode	None	None		None	None	None	None	C-Max			C-Max	
Walk Time (s)												
Flash Dont Walk (s)												
Pedestrian Calls (#/hr)												
v/c Ratio	0.51	0.77		0.40	0.47	0.30	0.47	0.69		0.85	0.41	
Control Delay	56.1	72.9		81.2	78.8	43.2	39.4	46.4		38.5	18.8	

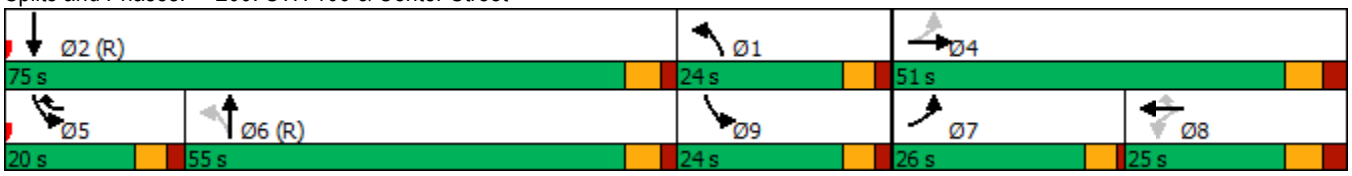
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Right Turn on Red	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	11.5
Total Split (s)	24.0
Total Split (%)	16%
Maximum Green (s)	18.5
Yellow Time (s)	3.5
All-Red Time (s)	2.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Vehicle Extension (s)	3.0
Minimum Gap (s)	3.0
Time Before Reduce (s)	0.0
Time To Reduce (s)	0.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
v/c Ratio	
Control Delay	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	56.1	72.9		81.2	78.8	43.2	39.4	46.4		38.5	18.8	
90th %ile Green (s)	19.7	37.1		12.9	12.9	21.2	18.5	49.3			76.0	
90th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
70th %ile Green (s)	16.7	31.8		10.6	10.6	26.5	18.5	49.3			81.3	
70th %ile Term Code	Gap	Hold		Gap	Gap	Max	Hold	Coord			Coord	
50th %ile Green (s)	14.6	29.1		10.0	10.0	29.2	18.5	49.3			84.0	
50th %ile Term Code	Gap	Hold		Min	Min	Max	Hold	Coord			Coord	
30th %ile Green (s)	12.4	26.9		10.0	10.0	31.4	18.5	49.3			86.2	
30th %ile Term Code	Gap	Hold		Min	Min	Max	Hold	Coord			Coord	
10th %ile Green (s)	19.8	17.1		0.0	0.0	41.2	18.5	49.3			96.0	
10th %ile Term Code	Hold	Gap		Skip	Skip	Max	Hold	Coord			Coord	
Queue Length 50th (ft)	121	229		30	59	101	94	371		221	265	
Queue Length 95th (ft)	177	309		66	109	170	143	426		#509	309	
Internal Link Dist (ft)		1169			507			1571			822	
Turn Bay Length (ft)	150			470		470	250			575		
Base Capacity (vph)	315	492		131	216	459	366	1713		585	2916	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.45	0.50		0.24	0.28	0.30	0.47	0.69		0.85	0.41	

Intersection Summary

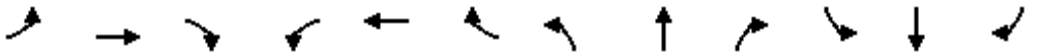
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 96 (64%), Referenced to phase 2:SBT and 6:NBTL, Start of 1st Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 200: STH 100 & Center Street



Lane Group	Ø9
Queue Delay	
Total Delay	
90th %ile Green (s)	18.5
90th %ile Term Code	Max
70th %ile Green (s)	18.5
70th %ile Term Code	Max
50th %ile Green (s)	18.5
50th %ile Term Code	Max
30th %ile Green (s)	18.5
30th %ile Term Code	Max
10th %ile Green (s)	18.5
10th %ile Term Code	Max
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

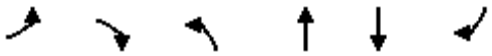
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Future Volume (vph)	140	75	165	30	60	215	170	1155	10	485	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1930	1930	1930	1930	1930	1930
Total Lost time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7		5.5	5.7	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1787	1688		1736	1827	1553	1815	5210		1815	5163	
Flt Permitted	0.47	1.00		0.61	1.00	1.00	0.23	1.00		0.95	1.00	
Satd. Flow (perm)	889	1688		1109	1827	1553	433	5210		1815	5163	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor (vph)	100%	100%	100%	100%	100%	62%	100%	100%	100%	100%	100%	100%
Adj. Flow (vph)	143	77	168	31	61	136	173	1179	10	495	1102	82
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	143	245	0	31	61	136	173	1189	0	495	1184	0
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA		Perm	NA	custom	pm+pt	NA		Prot	NA	
Protected Phases	7	4			8	5	1	6		5 9	2	
Permitted Phases	4			8		8	6					
Actuated Green, G (s)	29.8	29.8		8.7	8.7	38.6	66.4	47.9		48.4	83.3	
Effective Green, g (s)	29.8	29.8		8.7	8.7	38.6	66.4	47.9		48.4	83.3	
Actuated g/C Ratio	0.20	0.20		0.06	0.06	0.26	0.44	0.32		0.32	0.56	
Clearance Time (s)	4.5	7.2		7.2	7.2	5.5	5.5	5.7			5.7	
Vehicle Extension (s)	1.5	1.5		1.5	1.5	1.5	1.5	4.9			4.9	
Lane Grp Cap (vph)	275	335		64	105	399	362	1663		585	2867	
v/s Ratio Prot	0.06	c0.15			0.03	0.07	0.06	c0.23		c0.27	0.23	
v/s Ratio Perm	0.05			0.03		0.02	0.15					
v/c Ratio	0.52	0.73		0.48	0.58	0.34	0.48	0.71		0.85	0.41	
Uniform Delay, d1	52.4	56.3		68.5	68.9	45.3	36.9	45.0		47.3	19.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		0.81	0.95	
Incremental Delay, d2	0.8	6.9		2.1	5.2	0.2	0.4	2.7		9.8	0.4	
Delay (s)	53.2	63.3		70.6	74.1	45.5	37.2	47.7		48.2	18.8	
Level of Service	D	E		E	E	D	D	D		D	B	
Approach Delay (s)		59.6			56.6			46.4			27.4	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	28.4
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	160	0	1640	1400	225
Future Volume (vph)	0	160	0	1640	1400	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	210			0
Storage Lanes	0	1	0			0
Taper Length (ft)	75		75			
Link Speed (mph)	30			40	40	
Link Distance (ft)	339			902	1744	
Travel Time (s)	7.7			15.4	29.7	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	163	0	1673	1659	0
Sign Control	Stop			Free	Free	

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	160	0	1640	1400	225
Future Vol, veh/h	0	160	0	1640	1400	225
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	163	0	1673	1429	230

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	830	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.12	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.91	-	-	-	-
Pot Cap-1 Maneuver	0	*604	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %		1		-	-	-
Mov Cap-1 Maneuver	-	*604	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	604	-	-
HCM Lane V/C Ratio	-	0.27	-	-
HCM Control Delay (s)	-	13.2	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	1.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

APPENDIX E
PARKING ALLOCATION PLAN

SITE PLAN DESIGN NOTES & KEY PLAN

1A DIRECTIONAL ARROW (1A C-400)
1B PAINTED HANDICAP PARKING SYMBOL (1B C-400)
2A DRIVE-THRU GRAPHICS (2A C-400)
2B STOP LINE GRAPHIC (2B C-400)
3 STANDARD PARKING STALL (9.0'x18.0') PER CODE (3 C-400)
4 ~~STANDARD 60 DEGREE PARKING STALL~~ (4 C-400)
4A 4" SOLID WHITE STRIPING
4B 4" SOLID YELLOW STRIPING
4C ~~4" SKIP DASH YELLOW STRIPING~~
5 BOLLARD MOUNTED SIGN (5 C-400)
6 ADA ACCESSIBLE PARKING SIGN (6 C-400)
7 DIRECTIONAL SIGNAGE

ALL SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" BY THE U.S. DEPARTMENT OF TRANSPORTATION. (SEE SIGN LEGEND)

7A THRU 7D (SEE SIGNAGE LEGEND, THIS SHEET)

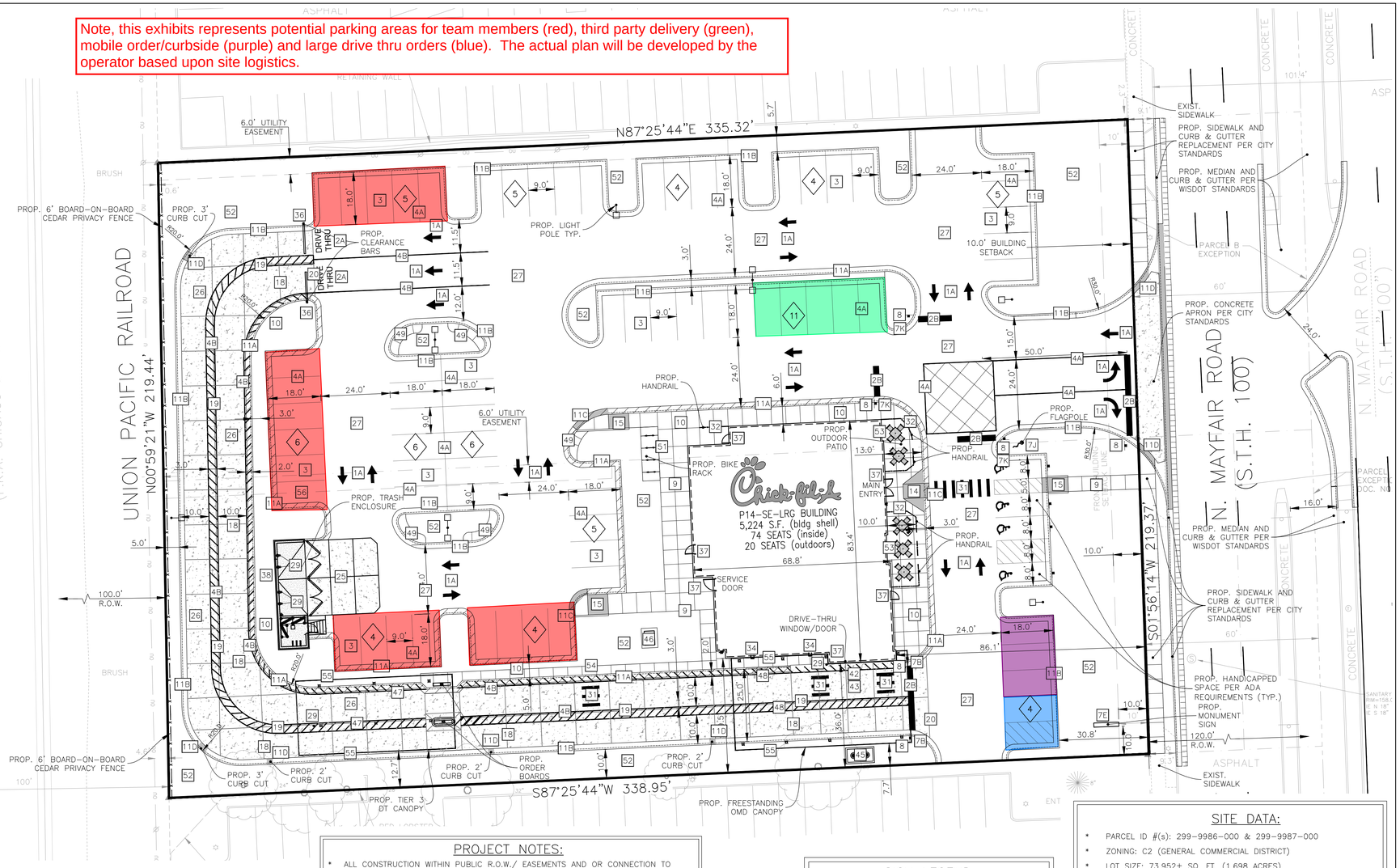
7E CHICK-FIL-A MONUMENT SIGN, SEE SIGNAGE PACKAGE
7F ~~CHICK-FIL-A "ENTER" SIGN, SEE SIGNAGE PACKAGE~~
7G ~~CHICK-FIL-A "EXIT" SIGN, SEE SIGNAGE PACKAGE~~
7H ~~CHICK-FIL-A "DRIVE THRU" SIGN, SEE SIGNAGE PACKAGE~~
7I DRIVE THRU ORDERING STATION, SEE SIGNAGE PACKAGE
7J FLAGPOLE, 50', SEE SIGNAGE PACKAGE

8 STOP SIGN, SEE SIGNAGE PACKAGE (8 C-400)
9 TYPICAL CONCRETE SIDEWALK, 5' MIN. (9 C-400)
10 7' WIDE SIDEWALK w/ CURB & GUTTER (10 C-400)
11 24" CONCRETE CURB & GUTTER (11 C-400)
11A SPILLING CURB SECTION
11B CATCHING CURB SECTION
11C DEPRESSED SPILLING CURB
11D DEPRESSED CATCHING CURB
12 ~~CONCRETE PAVEMENT SECTIONS~~ (12 C-400)
13 ~~HANDICAP RAMP w/ SHORT FLARED SIDES (GRASSED AREAS)~~ (13 C-401)
14 HANDICAP RAMP w/ FLARED SIDES (IN SIDEWALK) (14 C-401)
15 RETURNED CURB HANDICAP RAMP (15 C-401)
16 SIDEWALK (ADA COMPLIANT) RAMP (16 C-401)
17 ~~DETECTABLE WARNING DEVICE~~ (17 C-401)
18 TRANSVERSE & LONGITUDINAL CONTRACTION JOINT (18 C-401)
19 TRANSVERSE & LONGITUDINAL DOWELED CONSTRUCTION JOINT (19 C-401)
20 PAVEMENT EDGE DETAIL (20 C-401)
21 CONTRACTION JOINT (21 C-401)
22 KEYED CONSTRUCTION JOINT (22 C-401)
23 LONGITUDINAL BUTT JOINT (23 C-401)
24 EXPANSION JOINT (24 C-401)

(21–24 FOR CONCRETE PAVING)

25 CONCRETE APRON @ TRASH ENCLOSURE (25 C-402)
26 CONCRETE PAVEMENT DRIVE-THRU LANE (26 C-402)
27 TYPICAL HMA PAVEMENT SECTION (27 C-402)
28 ~~BUTT JOINT~~ (28 C-402)
29 CONCRETE BOLLARD (29 C-402)
30 ~~MULTI-LANE DIRECTIONAL GRAPHICS~~ (30 C-402)
31 CROSSWALK MARKINGS (31 C-402)
32 ALUMINUM HANDRAIL (32 C-402)
33 ~~TYPICAL ADA RAMP & HANDRAIL~~ (33 C-402)
34 BUILDING DOWNSPOUT CONNECTION (TO SITE DRAINAGE SYSTEM) (34 C-402)
35 ~~ROLLOVER/MOUNTABLE CURB~~ (35 C-402)
36 DRIVE-THRU CLEARANCE BAR (36 C-402)
37 ENTRY DOOR FROST SLAB DETAIL (37 C-403)
38 SCREENED REFUSE ENCLOSURE FOUNDATION (38 C-403)
39 MENU BOARD LOOP DETECTION SYSTEM (39 C-403)
40 MENU BOARD LOOP DETECTION SYSTEM (ISO VIEW) (40 C-403)
41 DRIVE-THRU ORDER POINT ISLAND (41 C-403)
42 DRIVE-THRU PLAN FLUSH WITH FFE (42 C-403)
43 DRIVE-THRU ISOMETRIC PLAN (43 C-403)
44 ~~DRIVE-THRU PLAN = 2" BELOW FFE~~ (44 C-403)
45 GREASE TRAP
46 PROPOSED TRANSFORMER
47 DRIVE-THRU STRIPING (47 C-404)
48 MEAL DELIVERY AREA STRIPING (48 C-404)
49 LANDSCAPE & IRRIGATION PROTECTOR (49 C-404)
50 ~~SOLID PLASTIC WHEEL STOP~~ (50 C-404)
51 BIKE RACK
52 LANDSCAPED AREA
53 TYPICAL LOCATION FOR OUTDOOR TABLES.(SEE EQUIPMENT SCHEDULE)
54 CONCRETE PAD FOR OPTIONAL CASH STATION
55 FACE-TO-FACE DRIVE-THRU CANOPY SYSTEMS

Note, this exhibits represents potential parking areas for team members (red), third party delivery (green), mobile order/curbside (purple) and large drive thru orders (blue). The actual plan will be developed by the operator based upon site logistics.



HATCH LEGEND

DENOTES STANDARD PAVEMENT SECTION 27
DENOTES CONCRETE SECTION 25 26
DENOTES PROP. SIDEWALK 9 10
DENOTES AREA OF DEPRESSED SIDEWALK
DENOTES AREA OF DEPRESSED CURB AND GUTTER WITH LENGTH NOTED ON PLANS. 11C 11D
DENOTES REVERSE CURB & GUTTER 11A 11C
DENOTES PERMEABLE PAVER SECTION 56

PROJECT NOTES:

* ALL CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND OR CONNECTION TO PUBLIC SEWERS AND STREETS SHALL COMPLY WITH THE **CITY OF WAUWATOSA** STANDARD CONSTRUCTION SPECIFICATIONS.
* AT LEAST ONE WEEK PRIOR TO ANY CONSTRUCTION WITHIN PUBLIC R.O.W./ EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, THE CONTRACTOR SHALL CONTACT THE **CITY** TO OBTAIN APPLICABLE **CITY** PERMITS.
* INGRESS/EGRESS WILL BE PROVIDED INTERNAL AND EXTERNAL TO THIS SITE.
* ALL CONCRETE CURB & GUTTER SHALL BE 24" (B6.18) UNLESS OTHERWISE NOTED ON THE PLANS.
* ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
* ALL CURB ADJOINING SIDEWALKS SHALL BE DOWELED INTO THE CURB. SEE DETAIL ON SHEET C-400
* ALL CONSTRUCTION MATERIALS, DUMPSTER, DETACHED TRAILERS OR SIMILAR ITEMS ARE PROHIBITED ON PUBLIC STREETS OR WITHIN THE PUBLIC RIGHT-OF-WAY"

SIGN LEGEND

6 DENOTES "HANDICAPPED PARKING" R7-8, 12" X 18" (TYP.) / DENOTES "$250 FINE" R7-1101 6" X 12" (TYP.)
7A DENOTES "VAN ACCESSIBLE" D9-6P (BOLLARD MOUNTED WITH 6B)
7B DENOTES "DO NOT ENTER" R5-1, 30" X 30" (TYP.)
7C DENOTES "PEDESTRIAN CROSSWALK" 12" X 18" (TYP.)
7D DENOTES "RIGHT TURN ONLY" R3-5R, 30" X 36" (TYP.)
7K DENOTES "DO NOT BLOCK INTERSECTION" R10-7, 24" X 30" (TYP.)
8 DENOTES "STOP" R1-1, 30" X 30" (TYP.)

SITE DATA:

* PARCEL ID #(s): 299-9986-000 & 299-9987-000
* ZONING: C2 (GENERAL COMMERCIAL DISTRICT)
* LOT SIZE: 73,952± SQ. FT. (1.698 ACRES)
* IMPERVIOUS AREA: 58,136± SQ. FT. (78.6%)

BUILDING DATA:

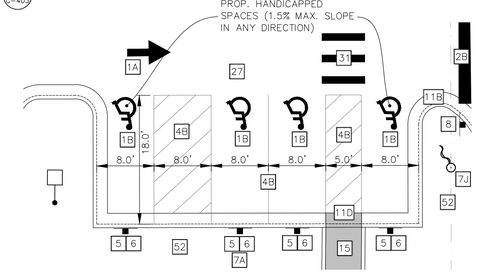
* BUILDING FLOOR AREA: 5,224± SQ. FT.
* BUILDING COVERAGE: 7.1%
* NUMBER OF EMPLOYEES DURING LARGEST SHIFT = 15 EMPLOYEES
* TOTAL NUMBER OF SEATS = 94
  ** INDOOR SEATS = 74
  ** OUTDOOR SEATS = 20

PARKING DATA:

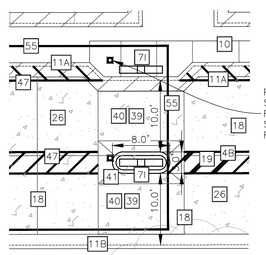
* NUMBER OF REGULAR PARKING SPACES: 71
* NUMBER OF ADA SPACES: 4
* TOTAL NUMBER OF SPACES PROVIDED: 73
* TOTAL NUMBER OF SPACES REQUIRED: 42
* TYPICAL PARKING WIDTH: 9.0'
* TYPICAL 90° PARKING LENGTH: 18.0'
* MINIMUM ISLE WIDTH: 24.0' (90°)

PARKING FORMULA:

* EATING & DRINKING ESTABLISHMENTS (DRIVE-THROUGH):
  ** 8 SPACES PER 1,000 SQUARE FEET GFA
  *** TOTAL REQUIRED PARKING = 42 SPACES



1 C-200 ADA PARKING STALL LAYOUT DETAIL
SCALE: 1"=10'



2 C-200 ORDER CANOPY LAYOUT DETAIL
SCALE: 1"=10'

NORTH
0 20'
1" = 20'
BAR IS ONE INCH ON OFFICIAL DRAWINGS
0 1"
IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE
NO. DATE DESCRIPTION

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
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CHECKED BY: JFV

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SHEET
SITE PLAN

SHEET NUMBER
C-200

WisDOT Division of Transportation System Development
Southeast Regional Office
141 N.W. Barstow Street
P.O. Box 798
Waukesha, WI 53187-0798

Governor Tony Evers
Secretary Craig Thompson
wisconsindot.gov
Telephone: (262) 548-5903
FAX: (262) 548-5662
Email: waukesha.dtd@dot.wi.gov

December 22, 2022

BILL WEHRLEY
CITY OF WAUWATOSA
7725 WEST NORTH AVENUE
WAUWATOSA WI 53213

Subject: Log #319294 – Development Submittal
Chick-fil-A
WIS 100 north of Center Street
Milwaukee County

Dear Mr. Wehrley:

The Traffic Impact Analysis (TIA) performed by Traffic Analysis and Design, Inc. (TADI) covering the Chick-fil-A Development has allowed the Department to understand the impacts of the subject development and identify the necessary improvements. The attached lists the improvements that are to be constructed as a result of this development.

The development can now proceed to the Department's Permit Process. The permit plans will require design preparation (please see attached plan requirements). **All permits will be issued to the maintaining authority and the design consultant will need to forward permit plans for review and submittal.**

If you have any questions regarding this letter, please contact the undersigned at (262) 548-6707. Kevin Koehnke at (262) 548-5891 will coordinate the permit issuance for this project. Please reference the log number (#319294) when forwarding all correspondence.

Sincerely,

Art Baumann, P.E.
Traffic Operations Engineer

Attachment

Cc: Tony Barth / Brian Roper / Robert Elkin / Don Berghammer, DOT
Karen Martens / Kolin Erickson / Erika Shepard, DOT
Dave Brantner / Kevin Koehnke / Jorge Salazar, DOT
Michael May / Jennifer Stilling, City of Wauwatosa
Tammi Czewski, TADi

Project: Log #319294 – Chick-fil-A Development
WIS 100 north of Center Street, Milwaukee County
Review Unit: Traffic Operations
Reviewer: Art Baumann, Sam Zimny – SE Region
Date: December 22, 2022

Improvement Measures

General Notes

Design

1) Contact the WisDOT permit coordinator (Kevin Koehnke at 262-548-5891) prior to plan submittal to identify the plans that are required and obtain any supplemental design guidelines. Incomplete submittals will be returned without review.
2) The design for the improvements at all WisDOT intersections shall be prepared in accordance with the FDM requirements for design and plan preparation. The design shall accommodate the appropriate design and check vehicles per the FDM. All lanes are to be a minimum of 12 feet in width, unless otherwise specified (final width to be determined during design). All left turn lanes *should* be opposing. All necessary drainage, utility, signage and pavement marking improvements shall be provided. The signing plan (separate plan sheets from other roadway improvement plan sheets) shall include sign details and signs that require moving. WIS 100 is an over-size, over-weight (OSOW) route. This must be taken into account when designing the permit plans.
3) For questions regarding signing or pavement marking, please contact Karen Martens at karen.martens@dot.wi.gov or 262-548-6892.
4) For questions regarding work zone traffic control plans, please contact the permit coordinator.

Multimodal Accommodations

1) Bike and pedestrian accommodations shall be provided in accordance with the FDM and ADA requirements as listed below. Please contact Erika Shepard, WisDOT Pedestrian/Bicycle Facilities Coordinator, at (262) 548-8708 or erika.shepard@dot.wi.gov with questions regarding pedestrian/bicycle accommodations.
2) For intersections under WisDOT jurisdiction: install bicycle accommodations between the travel lane and all new exclusive right turn lanes; install bicycle accommodations along all new bypass lanes; and bicycle accommodations shall also be installed along all travel lanes that are being reconstructed and have shoulders 6 feet in width or greater.
3) There are existing pedestrian accommodations within the limits of the improvements required to accommodate this development. Any sidewalks and curb ramps impacted by road improvements shall be restored. Improvements that meet the Americans with Disabilities Act (ADA) definition of an “alteration” will require curb ramp improvements. This includes sidewalks at intersections and those adjacent to roadways.
4) All impacted multimodal accommodations (bike, pedestrian, transit, etc.) shall be restored with the reconstruction of any intersection radii.

Right of Way

1) A party other than the WisDOT shall acquire any required right-of-way for the improvements.

Utilities

1) Utility coordination is the responsibility of the municipality/developer (or their consultant representative) constructing the work.
2) Utility relocations that occur as a result of this work may not be covered under Wisconsin Administrative Rule TRANS 220. The municipality/developer (or their consultant representative)

requesting the work shall be responsible for all costs associated with the needed relocation of any utility facility as a result of the work.

Access

1) WisDOT will allow one access to WIS 100 located directly across from the existing median opening. **WisDOT is willing to consider the relocation of the development driveway and the WIS 100 median opening further to the north to help facilitate the requirements of this letter.**
2) **Cross access easements shall be provided to the parcels to the north and south of the development parcel. The location(s) of the cross access easements shall be submitted for review and approval by WisDOT.**
3) **The municipality/developer (or their consultant representative) shall be responsible for notifying any offsite property or business owners whose access or operations will be impacted as a result of the proposed development. The municipality/developer shall provide the department with written documentation verifying that all impacted property or business owners have been contacted prior to permit submittal.**

Development Improvements

The following improvements shall be designed, constructed and paid for by the City of Wauwatosa/Developer prior to the restaurant opening for operation.

WIS 100 & Chick-fil-A Driveway

1) A full access driveway shall be constructed across from the existing median opening. The driveway shall provide two eastbound lanes (one exclusive left-turn lane, one exclusive right-turn lane). Each exiting turn lane shall have a minimum storage length of 50 feet that is not intersected by internal circulation drive aisles or parking. **The entrance shall be designed to prevent the blocking of entering vehicles by vehicles circulating on site to avoid the potential for queue spill back onto WIS 100. The site plan provided with the TIA does not meet these requirements. Before proceeding to the permit process, a revised site plan meeting the requirements of this letter shall be submitted to WisDOT for review and approval.**
2) The north approach shall provide three southbound lanes (two through lanes, one shared through/right-turn lane). The southbound U-turn lane shall be removed and replaced with a raised median. See the enclosed median concept design exhibit for more information.
3) The south approach shall maintain four northbound lanes (one exclusive left-turn lane, three through lanes). The northbound left-turn lane shall maintain a storage length of 210 feet.

Chick fil A Wauwatosa

Required median improvements

Randall, Brian C.

From: John Bieberitz <jbieberitz@traffic-ad.com>
Sent: Tuesday, May 9, 2023 2:29 PM
To: Randall, Brian C.; Shaun Walker; Vavrina, Joseph
Subject: Fwd: FW: Chick-Fil-A - Alternatives Analysis & Queue Study

See below for the WIsDOT email to the CIty of Wauwatosa.

John A. Bieberitz, PE, PTOE

TADI (Traffic Analysis & Design, Inc.)

Serving Wisconsin, Illinois, Indiana and Michigan

1-800-605-3091 Ext. 80

Direct: 262-377-1845

Cell: 414-379-1434

e-mail: jbieberitz@tadi-us.com

http://www.tadi-us.com

http://www.linkedin.com/in/jbieberitztraffic

---------- Forwarded message ---------
From: **Baumann, Art - DOT** <Art.Baumann@dot.wi.gov>
Date: Tue, May 9, 2023 at 2:16 PM
Subject: FW: Chick-Fil-A - Alternatives Analysis & Queue Study
To: John Bieberitz <jbieberitz@traffic-ad.com>

Per your request.

Art Baumann

Traffic Operations Engineer

Art.Baumann@dot.wi.gov

(262) 548-6707

From: Baumann, Art - DOT <Art.Baumann@dot.wi.gov>
Sent: Tuesday, May 09, 2023 7:56 AM
To: Michael May <mmay@wauwatosa.net>
Cc: Jennifer Stilling <jstilling@wauwatosa.net>; Zimny, Samantha - DOT <samantha.zimny@dot.wi.gov>; Elkin, Robert - DOT <Robert.Elkin@dot.wi.gov>; Koehnke, Kevin F - DOT <Kevin.Koehnke@dot.wi.gov>
Subject: RE: Chick-Fil-A - Alternatives Analysis & Queue Study

Mike,

WisDOT has completed its review of the Alternative Analysis & Queue Study. The improvements required as part of our letter dated December 22, 2022, are still applicable and no further improvements will be required.

If this development proceeds and the City of Wauwatosa has concerns regarding operations during the opening weeks, WisDOT is willing to consider interim traffic control measures on Mayfair Road to address these concerns. Depending on the measures, a special event permit may be needed. Contact me several months prior to opening to begin discussions regarding the interim traffic control measures.

Please let me know if you have any questions.

Art Baumann

Traffic Operations Engineer

Art.Baumann@dot.wi.gov

(262) 548-6707

From: Michael May <mmay@wauwatosa.net>
Sent: Tuesday, April 11, 2023 9:34 AM
To: Baumann, Art - DOT <Art.Baumann@dot.wi.gov>
Cc: Jennifer Stilling <jstilling@wauwatosa.net>
Subject: Chick-Fil-A - Alternatives Analysis & Queue Study

CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning, Art,

Late last week Wednesday we received the attached study for Chick-Fil-A. Based on your current schedule, when do you anticipate your team will be able to complete the review of the attached?

Thanks, Art. Please feel free to contact me at any time.

Mike

Michael May, PE, PTOE
Senior Civil Engineer – Traffic & Transportation

City of Wauwatosa

7725 W. North Avenue

Wauwatosa, WI 53213

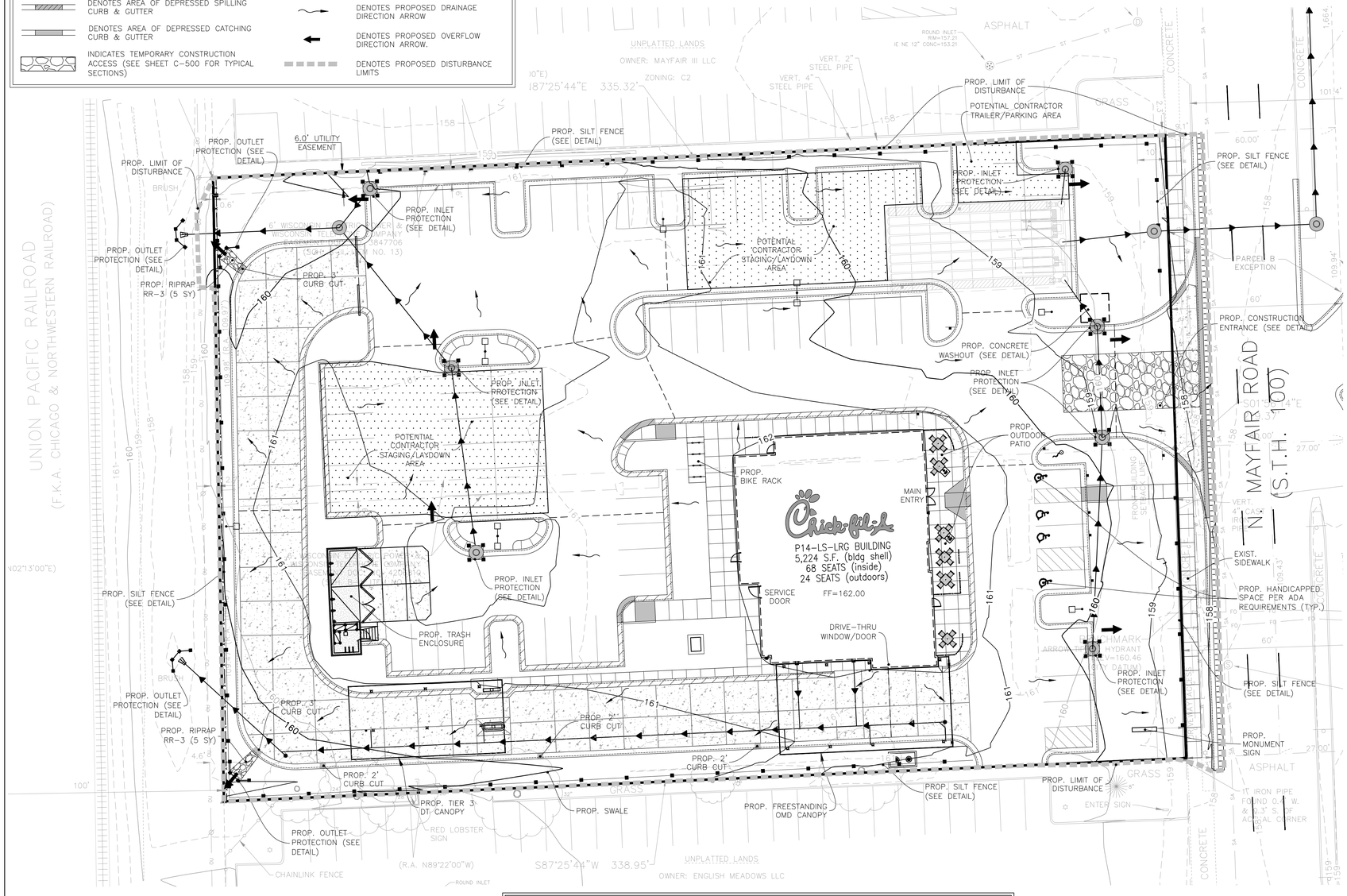
General: 414-479-8900

Direct: 414-479-8930

mmay@wauwatosa.net

HATCH LEGEND

- DENOTES REVERSE (SPILLING) CURB & GUTTER
- DENOTES CONCRETE CURB & GUTTER (CATCHING)
- DENOTES AREA OF DEPRESSED SPILLING CURB & GUTTER
- DENOTES AREA OF DEPRESSED CATCHING CURB & GUTTER
- INDICATES TEMPORARY CONSTRUCTION ACCESS (SEE SHEET C-500 FOR TYPICAL SECTIONS)
- INDICATES STAGING AREAS
- DENOTES PERIMETER EROSION BARRIER (SILT FENCE), INLET & PIPE PROTECTION AND DITCH CHECK
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW
- DENOTES PROPOSED OVERFLOW DIRECTION ARROW.
- DENOTES PROPOSED DISTURBANCE LIMITS



EROSION CONTROL NOTES:

1. ALL SEDIMENTATION AND EROSION CONTROL REGULATIONS SHALL BE ADHERED TO PER THE CITY OF WAUWATOSA REQUIREMENTS.
2. NO LAND DISTURBING ACTIVITIES SHALL COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.)
3. UTILIZE EXCELSIOR BLANKET OR SOD ON ALL SLOPES OF 5:1 OR GREATER.
4. ALL STREETS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL TIMES.
5. IF ANY ADDITIONAL SOIL EROSION MEASURES ARE DEEMED NECESSARY BY THE CITY ENGINEER OR HIS REPRESENTATIVE. THESE MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE CONTRACTOR.
6. REMOVE ALL DEBRIS TRANSFERRED INTO THE ROW OR ADJOINING PROPERTY AT THE END OF EACH WORK DAY.
7. INSTALL AND MAINTAIN INLET FILTER BASKET ASSEMBLIES AT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASINS.
8. PER THE NPDES CONSTRUCTION STORM WATER PERMIT, THE DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS MUST BE DOCUMENTED. RAINFALL AMOUNTS MUST BE OBTAINED FROM A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION WITHIN 1 MILE OF THE SITE, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
9. CONTRACTOR SHALL PROVIDE WEEKLY EROSION CONTROL INSPECTION REPORTS TO THE CITY IN AN ACCEPTABLE FORMAT.

SEQUENCE OF CONSTRUCTION ACTIVITIES:

1. INSTALL PERIMETER CONSTRUCTION FENCE AS NOTED ON THE PLAN.
2. INSTALL INLET PROTECTION IN ALL EXISTING STORM INLETS. (SHALL REMAIN UNTIL SITE IS STABILIZED)
3. REMOVAL OF EXISTING PAVEMENT AND OTHER ITEMS AS REQUIRED.
4. TREE REMOVAL AND TRANSPLANTING, WHERE NECESSARY.
5. MASS GRADING.
6. CONTINUE GRADING, STABILIZE COMPLETED AREAS WITH PERMANENT STABILIZATION OR INACTIVE AREAS WITH TEMPORARY STABILIZATION WITHIN 7 DAYS. (INLET PROTECTION SHALL REMAIN UNTIL SITE IS STABILIZED.)
7. INSTALL UTILITIES, STORM SEWER, CURB AND GUTTER, WITH INLET PROTECTION.
8. APPLY STONE TO PARKING AREA.
9. CONSTRUCT BUILDING.
10. COMPLETE GRADING AND INSTALL PERMANENT SODING AND PLANTINGS.
11. COMPLETE FINAL PAVING.
12. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED,RESOD ANY REMAINING DISTURBED AREAS.
13. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES ONCE SITE IS STABILIZED.
14. CONTRACTOR SHALL ADHERE TO ALL PROVISIONS AND REQUIREMENTS OF CITY OF WAUWATOSA & THE WDNR.
15. REMOVE ALL DEBRIS SPILLED INTO R.O.W. AT THE END OF EACH WORK DAY. CONTRACTOR SHALL ALSO MAINTAIN AND SWEEP DEBRIS OFF OF ALL ACCESS DRIVES AND OTHER DISTURBED AREAS EACH DAY.
16. ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN (7) DAYS MUST BE IMMEDIATELY RESTORED WITH SEED AND MULCH.
17. BETWEEN SEPTEMBER 15 AND OCTOBER 15: STABILIZE WITH MULCH, TACKIFIER, AND A PERENNIAL SEED MIXED WITH WINTER WHEAT, ANNUAL OATS, OR ANNUAL RYE, AS APPROPRIATE FOR THE REGION AND SOIL TYPE. OCTOBER 15 THROUGH WINTER: STABILIZE WITH A POLYMER AND DORMANT SEED MIX, AS APPROPRIATE FOR REGION AND SOIL TYPE.

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

PRELIMINARY

ENGINEER'S PROJECT #	220756
PRINTED FOR	PRELIMINARY
DATE	11/09/2022
DRAWN BY:	ECH
CHECKED BY:	JFV

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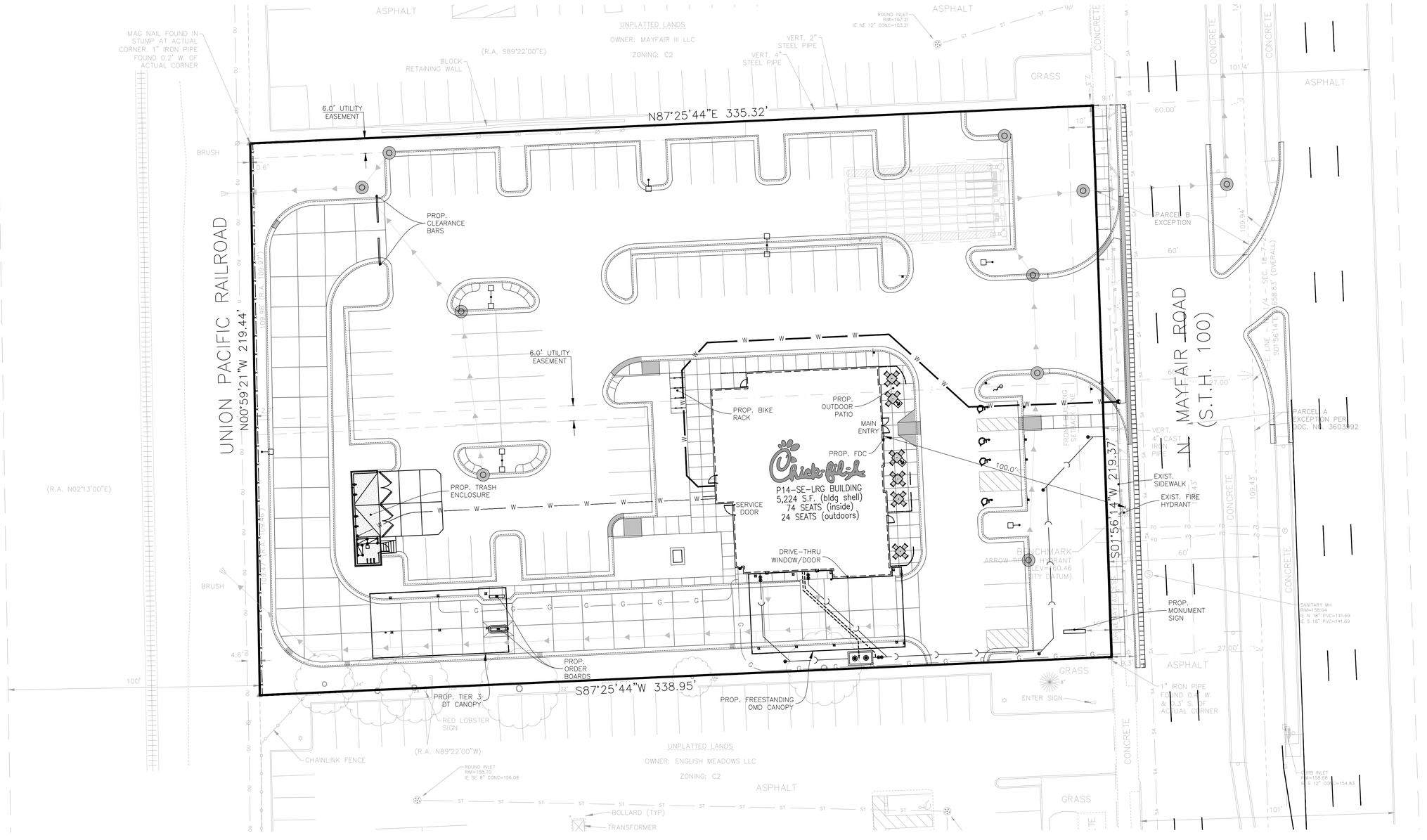
SHEET
CONSTRUCTION STAGING PLAN

SHEET NUMBER
EX-300



NORTH

0 20'

1" = 20'

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Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A

WAUWATOSA (WI) FSU

2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

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ENGINEER'S PROJECT #	220756
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SHEET
FIRE ACCESS PLAN

SHEET NUMBER
EX-400

Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	

Lumark

OD

Prevail LED

Area / Site Luminaire

Product Features

LumenSafe Technology

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Configurations page 4
- Product Specifications page 4
- Energy and Performance Data page 5
- Control Options page 6

Product Certifications

Quick Facts

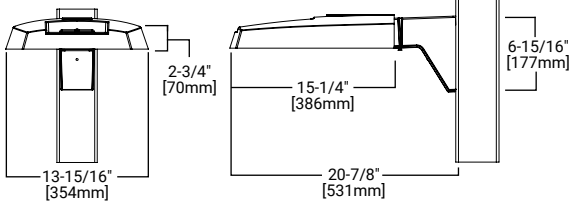
- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

Connected Systems

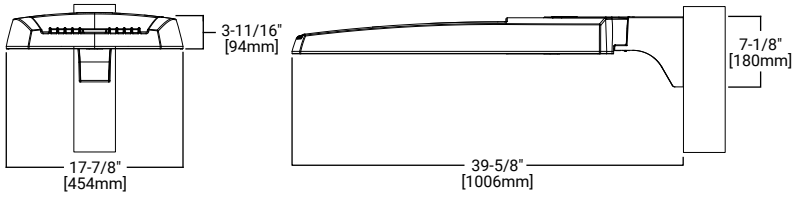
- WaveLinx

Dimensional Details

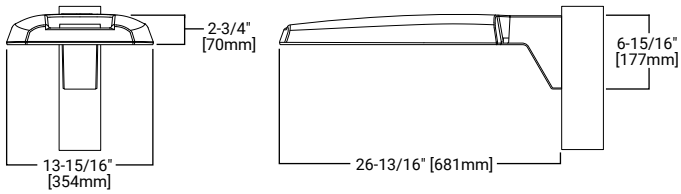
Prevail Petite



Prevail XL



Prevail



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: **PRV-XL-C75-D-UNV-T4-SA-BZ**

Product Family [1, 2]	Light Engine [4]	Driver	Voltage	Distribution	Mounting	Color
PRV-P=Prevail Petite **BAA-PRV-P**=Prevail Petite BAA Compliant [3] **TAA-PRV-P**=Prevail Petite TAA Compliant [3]	**C10**=(1 LED) 4,900 Nominal Lumens **C15**=(1 LED) 6,900 Nominal Lumens **C20**=(1 LED) 9,800 Nominal Lumens **C25**=(1 LED) 11,800 Nominal Lumens	**D**=Dimming (0-10V)	**UNV**=Universal (120-277V) **347**=347V **480**=480V [5] **DV**=DuraVolt (277-480V) [5, 6]	**T2**=Type II **T3**=Type III **T4**=Type IV **T5**=Type V	**SA**=Standard Versatile Arm **MA**=Mast Arm **WM**=Wall Mount Arm **ADJA**=Adjustable Arm - Pole Mount **ADJS**=Adjustable Arm - Slipfitter, 3in vertical tenon **ADJA-WM**=Adjustable Arm - Wall Mount	**BZ**=Bronze **AP**=Grey **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White
PRV=Prevail **BAA-PRV**=Prevail BAA Compliant [3] **TAA-PRV**=Prevail TAA Compliant [3]	**C15**=(1 LED) 7,100 Nominal Lumens **C25**=(2 LEDs) 13,100 Nominal Lumens **C40**=(2 LEDs) 17,100 Nominal Lumens **C60**=(2 LEDs) 20,000 Nominal Lumens					
PRV-XL=Prevail XL **BAA-PRV-XL**=Prevail XL BAA Compliant [3] **TAA-PRV-XL**=Prevail XL TAA Compliant [3]	**C75**=(4 LED) 26,100 Nominal Lumens **C100**=(4 LED) 31,000 Nominal Lumens **C125**=(4 LED) 36,000 Nominal Lumens **C150**=(6 LED) 41,100 Nominal Lumens **C175**=(6 LED) 48,600 Nominal Lumens					

Options (Add as Suffix)

7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
HSS=House Side Shield [8]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
10K=10kV UL 1449 Fused Surge Protective Device
20MSP=20kV MOV Surge Protective Device
20K=Series 20kV UL 1449 Surge Protective Device
HA=50°C High Ambient Temperature [9]
CC=Coastal Construction [10]
PER=NEMA 3-PIN Twistlock Photocontrol Receptacle [11]
PER7=NEMA 7-PIN Twistlock Photocontrol R eceptacle [11]
MS/DIM-L08=Dimming Motion and Daylight Sensor, IR Remote Programmable, < 8' Mounting [12, 13]
MS/DIM-L20=Dimming Motion and Daylight Sensor, IR Remote Programmable, 8' - 20' Mounting [12, 13]
MS/DIM-L40=Dimming Motion and Daylight Sensor, IR Remote Programmable, 21' - 40' Mounting [12, 13]
SPB1=Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting [12, 14]
SPB2=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting [12, 14]
SPB4=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 21' - 40' Mounting [12, 14]
ZW=Wavelinx-enabled 4-PIN Twistlock Receptacle [12]
ZD=SR Driver-enabled 4-PIN Twistlock Receptacle [12]
ZW-SWPD4XX=WaveLinx, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 15, 16, 17]
ZW-SWPD5XX=WaveLinx, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 15, 16, 17]
ZD-SWPD4XX=WaveLinx, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 15, 16, 17]
ZD-SWPD5XX=WaveLinx, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 15, 16, 17]
(See Table Below)=LumenSafe Integrated Network Security Camera [18, 19]

Accessories (Order Separately) [20, 21]

PRVSA-XX=Standard Arm Mounting Kit [22]
PRVMA-XX=Mast Arm Mounting Kit [22]
PRVWM-XX=Wall Mount Kit [22]
PRV-ADJA-XX=Adjustable Arm - Pole Mount Kit [22]
PRV-ADJS-XX=Adjustable Arm - Slipfitter Kit [22]
PRV-ADJA-WM-XX=Adjustable Arm - Wall Mount Kit [22]
PRVXLSA-XX=Standard Arm Mounting Kit [18]
PRVXLMA-XX=Mast Arm Mounting Kit [18]
PRVXLWM-XX=Wall Mount Kit [18]
PRV-XL-ADJA-XX=Adjustable Arm - Pole Mount Kit [18]
PRV-XL-ADJS-XX=Adjustable Arm - Slipfitter Kit [18]
PRV-XL-ADJA-WM-XX=Adjustable Arm - Wall Mount Kit [18]
MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
SRA238=Tenon Adapter from 2-3/8" to 3"
PRV/COB-FDV=Full Drop Visor [23]
PRVXL/COB-FDV=Full Drop Visor [18]
HS/VERD=House Side Shield [8, 24]
VGS-F/B=Vertical Glare Shield, Front/Back [24]
VGS-SIDE=Vertical Glare Shield, Side [24]
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=NEMA Photocontrol - 120V
OA/RA1016=NEMA Photocontrol - Multi-Tap 105-285V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1027=NEMA Photocontrol - 480V
FSIR-100=Wireless Configuration Tool for Occupancy Sensor [25]
SWPD4-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [15, 16, 17, 26]
SWPD5-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [15, 16, 17, 26]
WOLC-7P-10A=WaveLinx Outdoor Control Module (7-PIN) [27]

NOTES:

1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for alll applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
3. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
4. Standard 4000K CCT and 70CRI.
5. 480V not to be used with ungrounded or impedance grounded systems.
6. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
7. Use dedicated IES files on product website for non-standard CCTs.
8. House Side Shield not suitable with T5 distribution. Not available with PRV-C60 lumen package.
9. Not available with PRV-C60 lumen package. Not available with PRV-P-C25 lumen package.
10. Salt spray tested to over 5,000-hours per ASTM B117 with a scribe rating of 9 per ASTM D1654. Also achieves 7,000-hour rating per ASTM B117 with a scribe rating of 4 per ASTM D1654. Extended lead times may apply.
11. If DuraVolt (DV) is specified, use a photocontrol that matches the input voltage used.
12. Controls system is not available in combination with a photocontrol receptacle (PER or PER7) or another controls system (MS, SPB, ZD, or ZW). Option not available with DuraVolt (DV) voltage option.
13. Utilizes the Wattstopper sensor FSP-211. Sensor color white unless specified otherwise via PDR. To field-configure, order FSIR-100 accessory separately.
14. Utilizes the Wattstopper sensor FSP-3XX series. Sensor color determined by product finish. See Sensor Color Reference Table. Field-configures via mobile application. See Controls section for details.
15. Sensor passive infrared (PIR) may be overly sensitive when operating below -20°C (-4°F).
16. For the device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more Wavelinx application information.
17. Replace XX with sensor color (WH, BZ, or BK).
18. Only available in PRV-XL configurations C75, C100, C125, C150, or C175.
19. Not available with 347V, 480V, DV, or HA options. Consult LumenSafe system product pages for additional details and compatability information.
20. Replace XX with paint color.
21. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
22. Only for use with PRV and PRV-P.
23. Only for use with PRV. Not available for use with PRV-P or PRV-XL configurations.
24. Must order one per optic/LED when ordering as a field-installable accessory (1, 2, 4, or 6).
25. This tool enables adjustment to Motion Sensor (MS) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative for more information.
26. Requires 4-PIN twistlock receptacle (ZD or ZW) option.
27. Requires 7-PIN NEMA twistlock photocontrol receptacle (PER7) option. The WOLC-7 cannot be used in conjunction with other controls systems (MS, ZD, ZW or LWR). Operates on 120-347V input voltages.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul		
L=LumenSafe Technology	**H**=Dome Camera, High Res **Z**=Dome Camera, Remote PTZ	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card	**V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**E**=Ethernet Networking

Stock Ordering Information

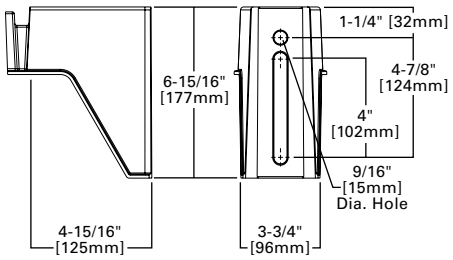
Product Family [1]	Light Engine	Voltage	Distribution
PRVS=Prevail	**C15**=(1 LED) 7,100 Nominal Lumens **C25**=(2 LEDs) 13,100 Nominal Lumens **C40**=(2 LEDs) 17,100 Nominal Lumens **C60**=(2 LEDs) 20,000 Nominal Lumens	**UNV**=Universal (120-277V) **347**=347V [2]	**T3**=Type III **T4**=Type IV
PRVS-XL=Prevail XL	**C75**=(4 LED) 26,100 Nominal Lumens **C100**=(4 LED) 31,000 Nominal Lumens **C125**=(4 LED) 36,000 Nominal Lumens **C150**=(6 LED) 41,100 Nominal Lumens **C175**=(6 LED) 48,600 Nominal Lumens		

NOTES:

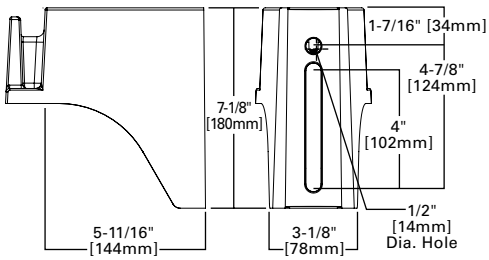
1. All stock configurations are standard 4000K/70CRI, bronze finish, and include the standard versatile mounting arm.
2. Only available in PRVS configurations C15, C25, C40 or C60.

Mounting Details

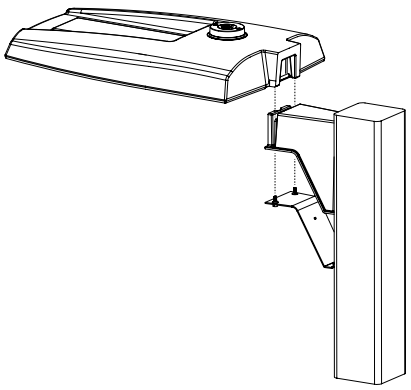
Pole Mount Arm (PRV & PRV-P)



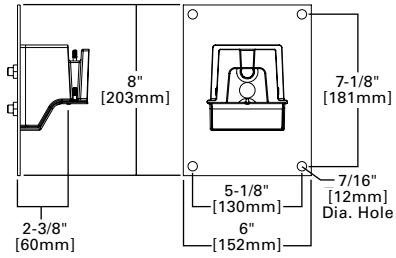
Pole Mount Arm (PRV-XL)



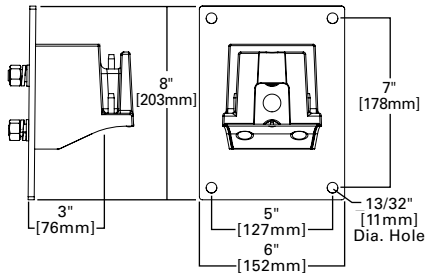
Versatile Mount System



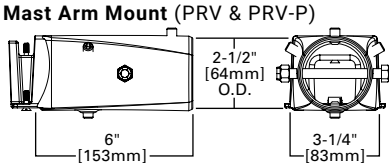
Wall Mount (PRV & PRV-P)



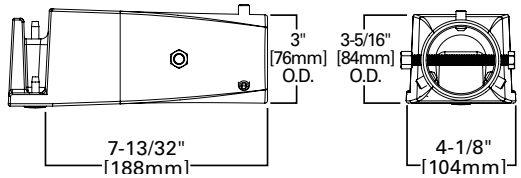
Wall Mount (PRV-XL)



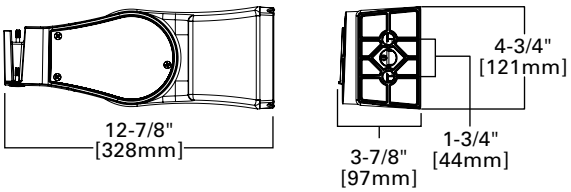
Mast Arm Mount (PRV & PRV-P)



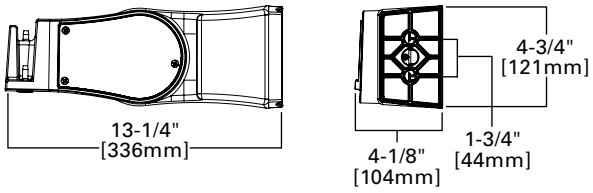
Mast Arm Mount (PRV-XL)



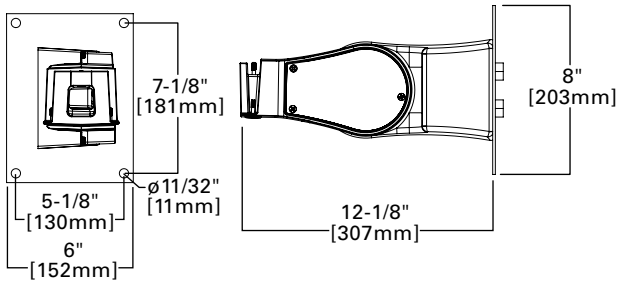
Adjustable Pole Mount Arm (PRV & PRV-P)



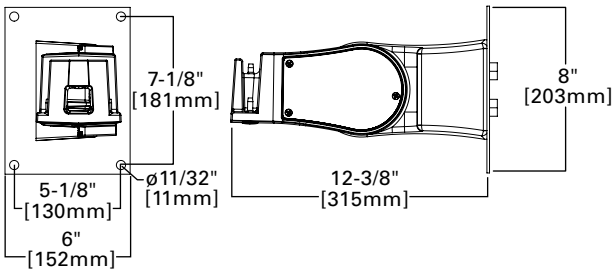
Adjustable Pole Mount Arm (PRV-XL)



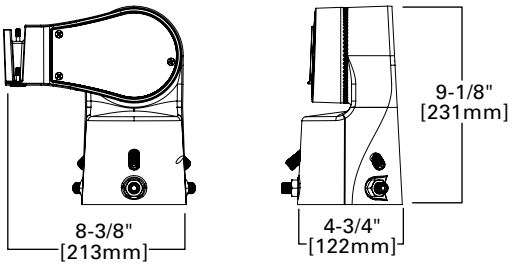
Adjustable Wall Mount (PRV & PRV-P)



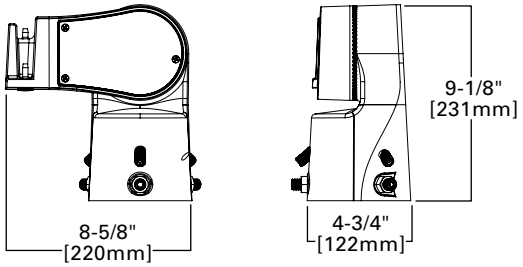
Adjustable Wall Mount (PRV-XL)



Adjustable Slipfitter (PRV & PRV-P)



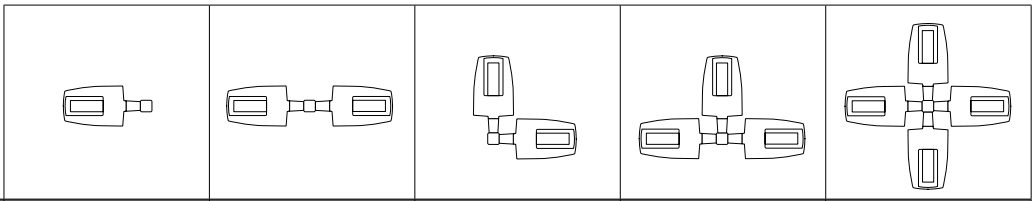
Adjustable Slipfitter (PRV-XL)



Mounting Details

Mounting Configurations and EPAs

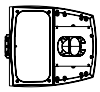
NOTE: For 2 PRV's mounted at 90°, requires minimum 3" square or 4" round pole for fixture clearance. For 2 PRV-XL's mounted at 90°, requires minimum 4" square or round pole for fixture clearance. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications.



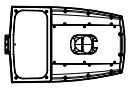
Housing Size	Tilt Angle (Degrees)	Arm Mount Single	Arm Mount 2 @ 180°	Arm Mount 2 @ 90°	Arm Mount 3 @ 90°	Arm Mount 4 @ 90°
Prevail Petite	0°	0.54	1.08	0.84	1.38	1.38
	60°	1.68	1.85	2.42	3.15	3.30
Prevail	0°	0.92	1.35	1.42	1.63	1.63
	60°	2.20	2.40	3.05	3.88	4.07
	60° + Full Drop Visor	2.20	2.40	3.25	4.28	4.47
Prevail XL	0°	1.12	2.25	2.13	2.52	2.52
	60°	3.99	4.30	5.26	6.51	6.79
	60° + Full Drop Visor	3.99	4.30	5.59	7.17	7.49

Optical Configurations

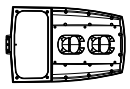
PRV-P-C10/C15/C20/C25 (4,900/6,900/9,800/11,800 Nominal Lumens)



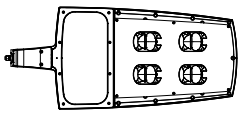
PRV-C15 (7,100 Nominal Lumens)



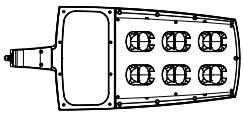
PRV-C25/C40/C60 (13,100/17,100/20,000 Nominal Lumens)



PRV-XL-C75/C100/C125 (26,100/31,000/36,300 Nominal Lumens)

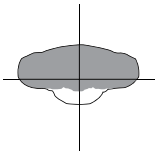


PRV-XL-C150/C175 (41,100/48,600 Nominal Lumens)

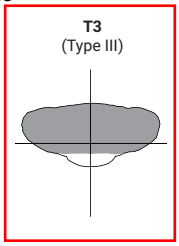


Optical Distributions

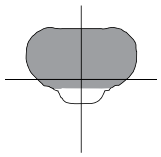
T2 (Type II)



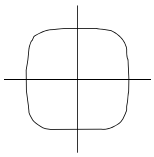
T3 (Type III)



T4 (Type IV)



T5 (Type V)



= Distribution with House Side Shield (HSS)

= Optical Distribution

Product Specifications

Construction

- Single-piece die-cast aluminum housing
- Tethered die-cast aluminum door

Optics

- Dark Sky Approved (3000K CCT and warmer only)
- Precision molded polycarbonate optics

Electrical

- -40°C minimum operating temperature
- 40°C maximum operating temperature
- >.9 power factor
- <20% total harmonic distortion
- Class 1 electronic drivers have expected life of 100,000 hours with <1% failure rate
- 0-10V dimming driver is standard with leads external to the fixture
- Standard MOV surge protective device designed to withstand 10kV of transient line surge

Mounting

- Versatile, patented, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8" (Type M drilling recommended for new installations)
- A knock-out on the standard mounting arm enables round pole mounting
- Adjustable pole and wall mount arms adjust in 5° increments from 0° to 60°; Downward facing orientation only (Type N drilling required for ADJA mount)
- Adjustable slipfitter arm adjusts in 5° increments from -5° to 85°; Downward facing orientation only
- Adjustable Arms: 1.5G vibration rated
- Prevail and Prevail Petite: 3G vibration rated
- Prevail XL Mast Arm: 3G vibration rated
- Prevail XL Standard Arm: 1.5G vibration rated

Typical Applications

- Parking lots, Walkways, Roadways and Building Areas

Finish

- Five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Finish is compliant to 3,000 hour salt spray standard (per ASTM B117)

Shipping Data

- Prevail Petite: 18 lbs. (7.94 kgs.)
- Prevail: 20 lbs. (9.09 kgs.)
- Prevail XL: 45 lbs. (20.41 kgs.)

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

View PRV-P IES files | View PRV IES files | View PRV-XL IES files

Power and Lumens

Product Family		Prevail Petite				Prevail				Prevail XL				
Light Engine		C10	C15	C20	C25	C15	C25	C40	C60	C75	C100	C125	C150	C175
Power (Watts)		35	49	73	94	52	96	131	153	176	217	264	285	346
Input Current @ 120V (A)		0.29	0.41	0.61	0.79	0.43	0.80	1.09	1.32	1.50	1.84	2.21	2.38	2.92
Input Current @ 277V (A)		0.13	0.18	0.27	0.35	0.19	0.35	0.48	0.57	0.66	0.82	0.97	1.04	1.25
Input Current @ 347V (A)		0.11	0.16	0.23	0.29	0.17	0.30	0.41	0.48	0.54	0.66	0.79	0.84	1.02
Input Current @ 480V (A)		0.08	0.12	0.17	0.22	0.12	0.22	0.30	0.35	0.40	0.48	0.57	0.62	0.74
Distribution [1]														
Type II	4000K Lumens	4,775	6,717	9,542	11,521	7,123	13,205	17,172	20,083	26,263	31,231	36,503	41,349	48,876
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5
	Lumens per Watt	138	137	131	122	137	138	131	131	149	144	138	145	141
	3000K Lumens [1]	4,869	6,595	9,369	11,312	6,994	12,965	16,860	19,718	25,786	30,664	35,840	40,598	47,989
Type III	4000K Lumens	4,782	6,727	9,556	11,538	7,111	13,183	17,144	20,050	26,120	31,061	36,304	41,124	48,610
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	138	137	131	123	137	137	131	131	148	143	138	144	140
	3000K Lumens [1]	4,695	6,605	9,383	11,329	6,982	12,944	16,832	19,686	25,646	30,497	35,645	40,377	47,727
Type IV	4000K Lumens	4,880	6,865	9,752	11,774	7,088	13,140	17,087	19,984	26,098	31,035	36,274	41,089	48,569
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	141	140	134	125	136	137	130	131	148	143	137	144	140
	3000K Lumens [1]	4,792	6,740	9,575	11,561	6,959	12,901	16,777	19,621	25,624	30,471	35,615	40,343	47,687
Type V	4000K Lumens	5,067	7,128	10,126	12,226	7,576	14,045	18,264	21,360	28,129	33,450	39,097	44,287	52,349
	BUG Rating	B3-U0-G2	B3-U0-G2	B4-U0-G3	B4-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	146	145	139	130	146	146	139	140	160	154	148	155	151
	3000K Lumens [1]	4,975	6,999	9,942	12,004	7,438	13,790	17,932	20,972	27,618	32,843	38,387	43,483	51,398

NOTES:
1. For 3000K, 5000K or HSS data, refer to published IES files.

Lumen Maintenance

Configuration	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
Prevail and Prevail Petite at 25°C	91.30%	> 194,000
Prevail and Prevail Petite at 40°C	87.59%	> 134,000
Prevail XL at 25°C	91.40%	> 204,000
Prevail XL at 40°C	89.41%	> 158,000

Sensor Color Reference Table (SPBx)

Housing Finish	Sensor Color
AP=Grey	Grey
BZ=Bronze	Bronze
BK=Black	Black
DP=Dark Platinum	Grey
GM=Graphite Metallic	Black
WH=White	White

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

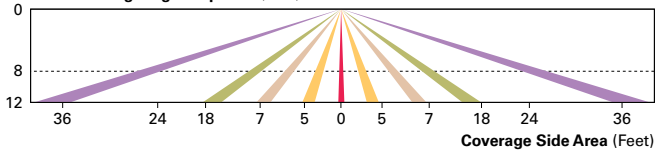
Control Options

0-10V This fixture provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

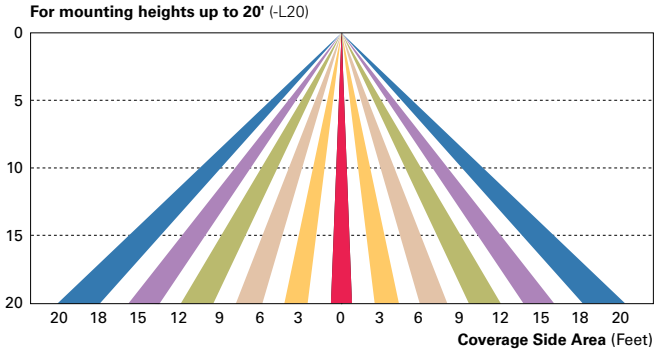
Photocontrol (PER and PER7) Photocontrol receptacles provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-PIN standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the luminaire will dim down after five minutes of no activity detected. When activity is detected, the luminaire returns to full light output. When a sensor for ON/OFF operation (MS-LXX) is selected, the luminaire will turn off after five minutes of no activity. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or "daylight harvesting." Factory default is enabled for the MS sensors and disabled for the SPB. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes.

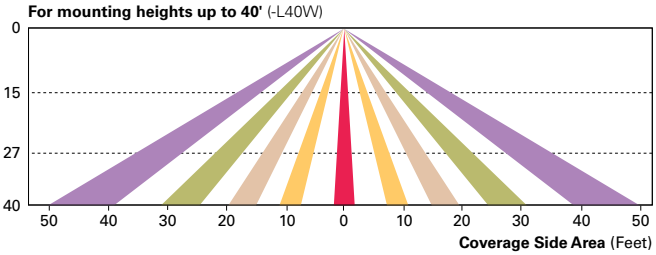
For mounting heights up to 8' (-L08)



For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40W)

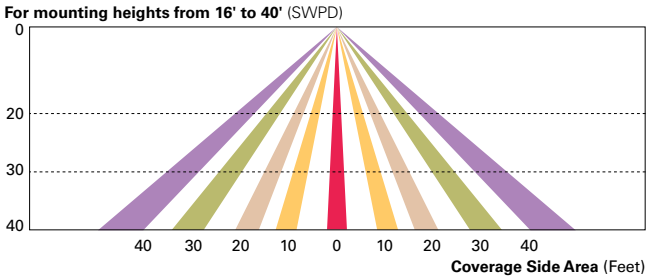


WaveLinx Wireless Control and Monitoring System Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets).

WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

WaveLinx Wireless Sensor (SWPD4 and SWPD5) These outdoor sensors offer passive infrared (PIR) occupancy sensing and a photocell for closed-loop daylight sensing. These sensors can be factory installed or field-installed via simple, tool-less integration into luminaires equipped with the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW). These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected, and the photocell for "dusk-to-dawn" control is default enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-40'.

For mounting heights from 16' to 40' (SWPD)



LumenSafe (LD) The LumenSafe integrated network camera is a streamlined, outdoor-ready camera that provides high definition video surveillance. This IP camera solution is optimally designed to integrate into virtually any video management system or security software platform of choice. No additional wiring is needed beyond providing line power to the luminaire. LumenSafe features factory-installed power and networking gear in a variety of networking options allowing security integrators to design the optimal solution for active surveillance.

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Peachtree City, GA 30269
P: 770-486-4800
www.cooperlighting.com

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Specifications and dimensions
subject to change without notice.

Project		**Catalog #**		**Type**	
Prepared by		**Notes**		**Date**	

Lumark

OD1 and OD2

Prevail LED

Area / Site Luminaire

Product Features

LumenSafe Technology

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Configurations page 4
- Product Specifications page 4
- Energy and Performance Data page 5
- Control Options page 6

Product Certifications

Quick Facts

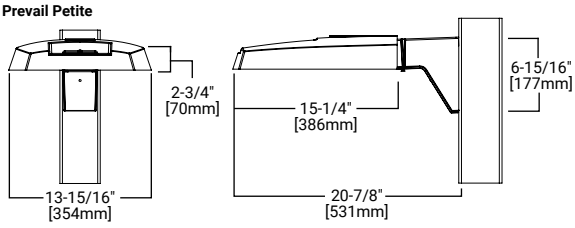
- Lumen packages range from 4,800 - 52,300 lumens (35W - 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 160 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

Connected Systems

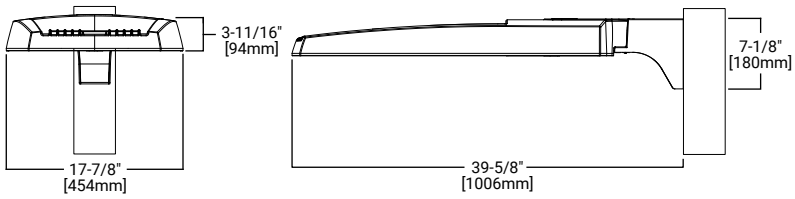
- WaveLinx

Dimensional Details

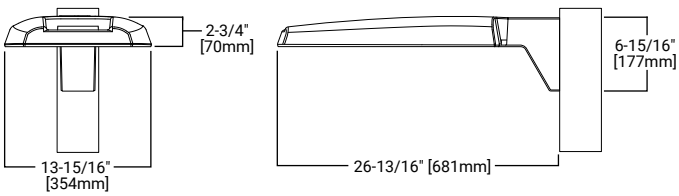
Prevail Petite



Prevail XL



Prevail



NOTES:
1. Visit https://www.designlights.org/search/ to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: **PRV-XL-C75-D-UNV-T4-SA-BZ**

Product Family [1, 2]	Light Engine [4]	Driver	Voltage	Distribution	Mounting	Color
PRV-P=Prevail Petite **BAA-PRV-P**=Prevail Petite BAA Compliant [3] **TAA-PRV-P**=Prevail Petite TAA Compliant [3]	**C10**=(1 LED) 4,900 Nominal Lumens **C15**=(1 LED) 6,900 Nominal Lumens **C20**=(1 LED) 9,800 Nominal Lumens **C25**=(1 LED) 11,800 Nominal Lumens	**D**=Dimming (0-10V)	**UNV**=Universal (120-277V) **347**=347V **480**=480V [5] **DV**=DuraVolt (277-480V) [5, 6]	**T2**=Type II **T3**=Type III **T4**=Type IV **T5**=Type V	**SA**=Standard Versatile Arm **MA**=Mast Arm **WM**=Wall Mount Arm **ADJA**=Adjustable Arm - Pole Mount **ADJS**=Adjustable Arm - Slipfitter, 3in vertical tenon **ADJA-WM**=Adjustable Arm - Wall Mount	**BZ**=Bronze **AP**=Grey **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White
PRV=Prevail **BAA-PRV**=Prevail BAA Compliant [3] **TAA-PRV**=Prevail TAA Compliant [3]	**C15**=(1 LED) 7,100 Nominal Lumens **C25**=(2 LEDs) 13,100 Nominal Lumens **C40**=(2 LEDs) 17,100 Nominal Lumens **C60**=(2 LEDs) 20,000 Nominal Lumens					
PRV-XL=Prevail XL **BAA-PRV-XL**=Prevail XL BAA Compliant [3] **TAA-PRV-XL**=Prevail XL TAA Compliant [3]	**C75**=(4 LED) 26,100 Nominal Lumens **C100**=(4 LED) 31,000 Nominal Lumens **C125**=(4 LED) 36,000 Nominal Lumens **C150**=(6 LED) 41,100 Nominal Lumens **C175**=(6 LED) 48,600 Nominal Lumens					

Options (Add as Suffix)

7030=70 CRI / 3000K CCT [7]
7050=70 CRI / 5000K CCT [7]
HSS=House Side Shield [8]
L90=Optics Rotated 90° Left
R90=Optics Rotated 90° Right
10K=10kV UL 1449 Fused Surge Protective Device
20MSP=20kV MOV Surge Protective Device
20K=Series 20kV UL 1449 Surge Protective Device
HA=50°C High Ambient Temperature [9]
CC=Coastal Construction [10]
PER=NEMA 3-PIN Twistlock Photocontrol Receptacle [11]
PER7=NEMA 7-PIN Twistlock Photocontrol R eceptacle [11]
MS/DIM-L08=Dimming Motion and Daylight Sensor, IR Remote Programmable, < 8' Mounting [12, 13]
MS/DIM-L20=Dimming Motion and Daylight Sensor, IR Remote Programmable, 8' - 20' Mounting [12, 13]
MS/DIM-L40=Dimming Motion and Daylight Sensor, IR Remote Programmable, 21' - 40' Mounting [12, 13]
SPB1=Dimming Motion and Daylight Sensor, Bluetooth Programmable, < 8' Mounting [12, 14]
SPB2=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 8' - 20' Mounting [12, 14]
SPB4=Dimming Motion and Daylight Sensor, Bluetooth Programmable, 21' - 40' Mounting [12, 14]
ZW=Wavelinx-enabled 4-PIN Twistlock Receptacle [12]
ZD=SR Driver-enabled 4-PIN Twistlock Receptacle [12]
ZW-SWPD4XX=WaveLinx, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 15, 16, 17]
ZW-SWPD5XX=WaveLinx, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 15, 16, 17]
ZD-SWPD4XX=WaveLinx, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [12, 15, 16, 17]
ZD-SWPD5XX=WaveLinx, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [12, 15, 16, 17]
(See Table Below)=LumenSafe Integrated Network Security Camera [18, 19]

Accessories (Order Separately) [20, 21]

PRVSA-XX=Standard Arm Mounting Kit [22]
PRVMA-XX=Mast Arm Mounting Kit [22]
PRVWM-XX=Wall Mount Kit [22]
PRV-ADJA-XX=Adjustable Arm - Pole Mount Kit [22]
PRV-ADJS-XX=Adjustable Arm - Slipfitter Kit [22]
PRV-ADJA-WM-XX=Adjustable Arm - Wall Mount Kit [22]
PRVXLSA-XX=Standard Arm Mounting Kit [18]
PRVXLMA-XX=Mast Arm Mounting Kit [18]
PRVXLWM-XX=Wall Mount Kit [18]
PRV-XL-ADJA-XX=Adjustable Arm - Pole Mount Kit [18]
PRV-XL-ADJS-XX=Adjustable Arm - Slipfitter Kit [18]
PRV-XL-ADJA-WM-XX=Adjustable Arm - Wall Mount Kit [18]
MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon
MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon
MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon
MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon
SRA238=Tenon Adapter from 2-3/8" to 3"
PRV/COB-FDV=Full Drop Visor [23]
PRVXL/COB-FDV=Full Drop Visor [18]
HS/VERD=House Side Shield [8, 24]
VGS-F/B=Vertical Glare Shield, Front/Back [24]
VGS-SIDE=Vertical Glare Shield, Side [24]
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=NEMA Photocontrol - 120V
OA/RA1016=NEMA Photocontrol - Multi-Tap 105-285V
OA/RA1201=NEMA Photocontrol - 347V
OA/RA1027=NEMA Photocontrol - 480V
FSIR-100=Wireless Configuration Tool for Occupancy Sensor [25]
SWPD4-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting [15, 16, 17, 26]
SWPD5-XX=WaveLinx Sensor, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting [15, 16, 17, 26]
WOLC-7P-10A=WaveLinx Outdoor Control Module (7-PIN) [27]

NOTES:

1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
2. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for alll applications. Refer to installation instructions IB500002EN and pole white paper WP513001EN for additional support information.
3. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
4. Standard 4000K CCT and 70CRI.
5. 480V not to be used with ungrounded or impedance grounded systems.
6. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information.
7. Use dedicated IES files on product website for non-standard CCTs.
8. House Side Shield not suitable with T5 distribution. Not available with PRV-C60 lumen package.
9. Not available with PRV-C60 lumen package. Not available with PRV-P-C25 lumen package.
10. Salt spray tested to over 5,000-hours per ASTM B117 with a scribe rating of 9 per ASTM D1654. Also achieves 7,000-hour rating per ASTM B117 with a scribe rating of 4 per ASTM D1654. Extended lead times may apply.
11. If DuraVolt (DV) is specified, use a photocontrol that matches the input voltage used.
12. Controls system is not available in combination with a photocontrol receptacle (PER or PER7) or another controls system (MS, SPB, ZD, or ZW). Option not available with DuraVolt (DV) voltage option.
13. Utilizes the Wattstopper sensor FSP-211. Sensor color white unless specified otherwise via PDR. To field-configure, order FSIR-100 accessory separately.
14. Utilizes the Wattstopper sensor FSP-3XX series. Sensor color determined by product finish. See Sensor Color Reference Table. Field-configures via mobile application. See Controls section for details.
15. Sensor passive infrared (PIR) may be overly sensitive when operating below -20°C (-4°F).
16. For the device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more Wavelinx application information.
17. Replace XX with sensor color (WH, BZ, or BK).
18. Only available in PRV-XL configurations C75, C100, C125, C150, or C175.
19. Not available with 347V, 480V, DV, or HA options. Consult LumenSafe system product pages for additional details and compatability information.
20. Replace XX with paint color.
21. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.
22. Only for use with PRV and PRV-P.
23. Only for use with PRV. Not available for use with PRV-P or PRV-XL configurations.
24. Must order one per optic/LED when ordering as a field-installable accessory (1, 2, 4, or 6).
25. This tool enables adjustment to Motion Sensor (MS) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative for more information.
26. Requires 4-PIN twistlock receptacle (ZD or ZW) option.
27. Requires 7-PIN NEMA twistlock photocontrol receptacle (PER7) option. The WOLC-7 cannot be used in conjunction with other controls systems (MS, ZD, ZW or LWR). Operates on 120-347V input voltages.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul		
L=LumenSafe Technology	**H**=Dome Camera, High Res **Z**=Dome Camera, Remote PTZ	**C**=Cellular, Customer Installed SIM Card **A**=Cellular, Factory Installed AT&T SIM Card	**V**=Cellular, Factory Installed Verizon SIM Card **S**=Cellular, Factory Installed Sprint SIM Card	**E**=Ethernet Networking

Stock Ordering Information

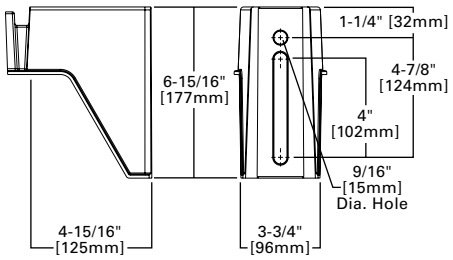
Product Family [1]	Light Engine	Voltage	Distribution
PRVS=Prevail	**C15**=(1 LED) 7,100 Nominal Lumens **C25**=(2 LEDs) 13,100 Nominal Lumens **C40**=(2 LEDs) 17,100 Nominal Lumens **C60**=(2 LEDs) 20,000 Nominal Lumens	**UNV**=Universal (120-277V) **347**=347V [2]	**T3**=Type III **T4**=Type IV
PRVS-XL=Prevail XL	**C75**=(4 LED) 26,100 Nominal Lumens **C100**=(4 LED) 31,000 Nominal Lumens **C125**=(4 LED) 36,000 Nominal Lumens **C150**=(6 LED) 41,100 Nominal Lumens **C175**=(6 LED) 48,600 Nominal Lumens		

NOTES:

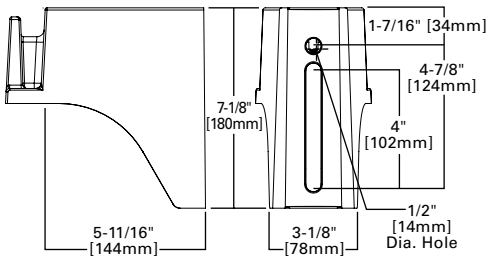
1. All stock configurations are standard 4000K/70CRI, bronze finish, and include the standard versatile mounting arm.
2. Only available in PRVS configurations C15, C25, C40 or C60.

Mounting Details

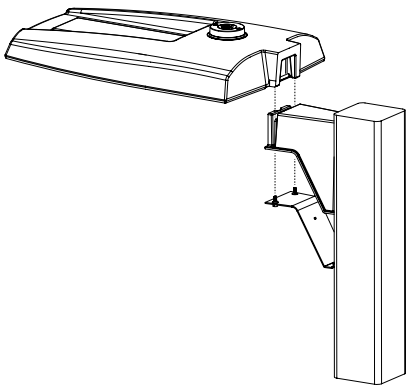
Pole Mount Arm (PRV & PRV-P)



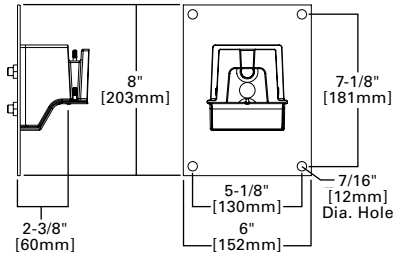
Pole Mount Arm (PRV-XL)



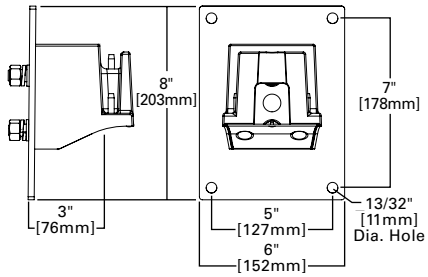
Versatile Mount System



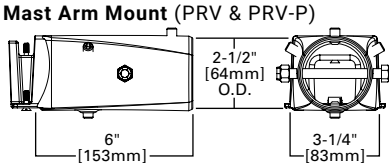
Wall Mount (PRV & PRV-P)



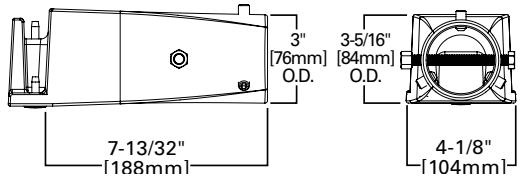
Wall Mount (PRV-XL)



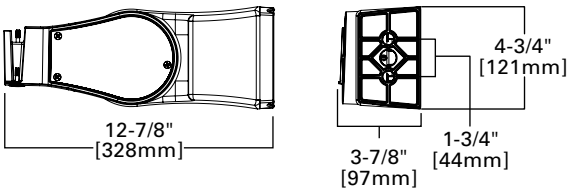
Mast Arm Mount (PRV & PRV-P)



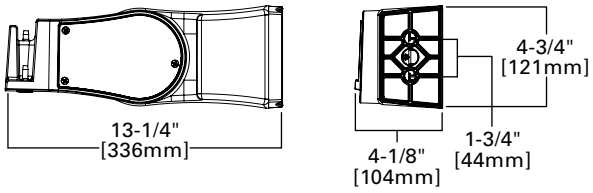
Mast Arm Mount (PRV-XL)



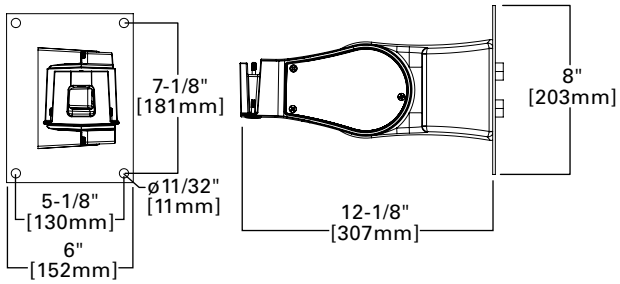
Adjustable Pole Mount Arm (PRV & PRV-P)



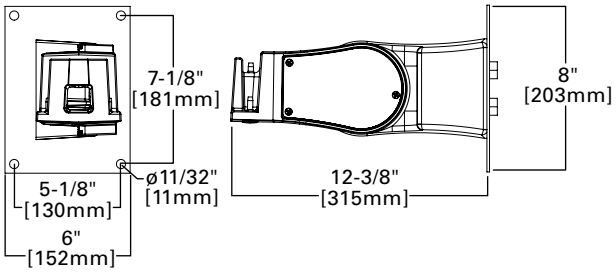
Adjustable Pole Mount Arm (PRV-XL)



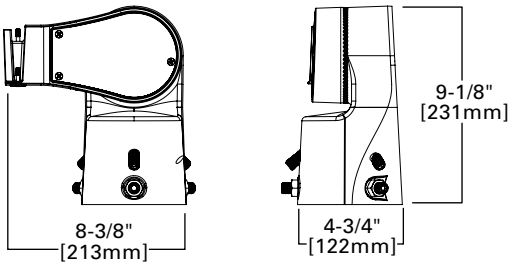
Adjustable Wall Mount (PRV & PRV-P)



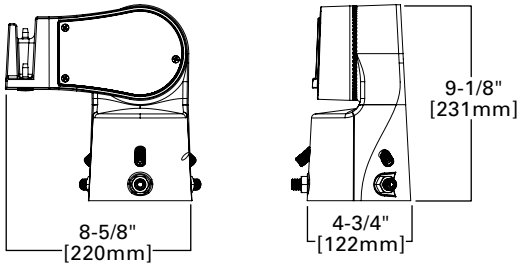
Adjustable Wall Mount (PRV-XL)



Adjustable Slipfitter (PRV & PRV-P)



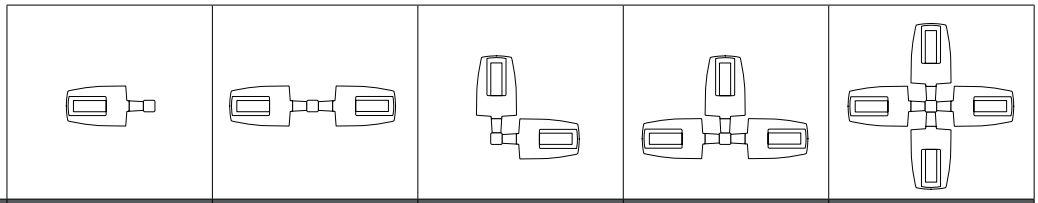
Adjustable Slipfitter (PRV-XL)



Mounting Details

Mounting Configurations and EPAs

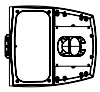
NOTE: For 2 PRV's mounted at 90°, requires minimum 3" square or 4" round pole for fixture clearance. For 2 PRV-XL's mounted at 90°, requires minimum 4" square or round pole for fixture clearance. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications.



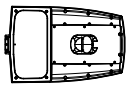
Housing Size	Tilt Angle (Degrees)	Arm Mount Single	Arm Mount 2 @ 180°	Arm Mount 2 @ 90°	Arm Mount 3 @ 90°	Arm Mount 4 @ 90°
Prevail Petite	0°	0.54	1.08	0.84	1.38	1.38
	60°	1.68	1.85	2.42	3.15	3.30
Prevail	0°	0.92	1.35	1.42	1.63	1.63
	60°	2.20	2.40	3.05	3.88	4.07
	60° + Full Drop Visor	2.20	2.40	3.25	4.28	4.47
Prevail XL	0°	1.12	2.25	2.13	2.52	2.52
	60°	3.99	4.30	5.26	6.51	6.79
	60° + Full Drop Visor	3.99	4.30	5.59	7.17	7.49

Optical Configurations

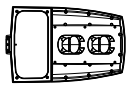
PRV-P-C10/C15/C20/C25 (4,900/6,900/9,800/11,800 Nominal Lumens)



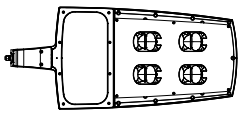
PRV-C15 (7,100 Nominal Lumens)



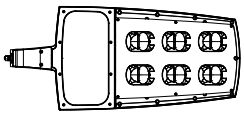
PRV-C25/C40/C60 (13,100/17,100/20,000 Nominal Lumens)



PRV-XL-C75/C100/C125 (26,100/31,000/36,300 Nominal Lumens)

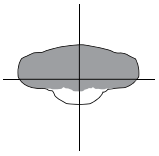


PRV-XL-C150/C175 (41,100/48,600 Nominal Lumens)

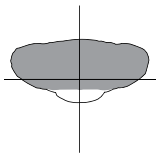


Optical Distributions

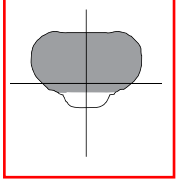
T2 (Type II)



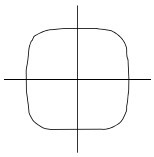
T3 (Type III)

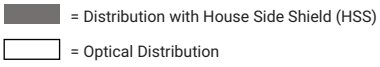


T4 (Type IV)



T5 (Type V)





Product Specifications

Construction

- Single-piece die-cast aluminum housing
- Tethered die-cast aluminum door

Optics

- Dark Sky Approved (3000K CCT and warmer only)
- Precision molded polycarbonate optics

Electrical

- -40°C minimum operating temperature
- 40°C maximum operating temperature
- >.9 power factor
- <20% total harmonic distortion
- Class 1 electronic drivers have expected life of 100,000 hours with <1% failure rate
- 0-10V dimming driver is standard with leads external to the fixture
- Standard MOV surge protective device designed to withstand 10kV of transient line surge

Mounting

- Versatile, patented, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8" (Type M drilling recommended for new installations)
- A knock-out on the standard mounting arm enables round pole mounting
- Adjustable pole and wall mount arms adjust in 5° increments from 0° to 60°; Downward facing orientation only (Type N drilling required for ADJA mount)
- Adjustable slipfitter arm adjusts in 5° increments from -5° to 85°; Downward facing orientation only
- Adjustable Arms: 1.5G vibration rated
- Prevail and Prevail Petite: 3G vibration rated
- Prevail XL Mast Arm: 3G vibration rated
- Prevail XL Standard Arm: 1.5G vibration rated

Typical Applications

- Parking lots, Walkways, Roadways and Building Areas

Finish

- Five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Finish is compliant to 3,000 hour salt spray standard (per ASTM B117)

Shipping Data

- Prevail Petite: 18 lbs. (7.94 kgs.)
- Prevail: 20 lbs. (9.09 kgs.)
- Prevail XL: 45 lbs. (20.41 kgs.)

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal

Energy and Performance Data

View PRV-P IES files | View PRV IES files | View PRV-XL IES files

Power and Lumens

Product Family		Prevail Petite				Prevail				Prevail XL				
Light Engine		C10	C15	C20	C25	C15	C25	C40	C60	C75	C100	C125	C150	C175
Power (Watts)		35	49	73	94	52	96	131	153	176	217	264	285	346
Input Current @ 120V (A)		0.29	0.41	0.61	0.79	0.43	0.80	1.09	1.32	1.50	1.84	2.21	2.38	2.92
Input Current @ 277V (A)		0.13	0.18	0.27	0.35	0.19	0.35	0.48	0.57	0.66	0.82	0.97	1.04	1.25
Input Current @ 347V (A)		0.11	0.16	0.23	0.29	0.17	0.30	0.41	0.48	0.54	0.66	0.79	0.84	1.02
Input Current @ 480V (A)		0.08	0.12	0.17	0.22	0.12	0.22	0.30	0.35	0.40	0.48	0.57	0.62	0.74
Distribution [1]														
Type II	4000K Lumens	4,775	6,717	9,542	11,521	7,123	13,205	17,172	20,083	26,263	31,231	36,503	41,349	48,876
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5
	Lumens per Watt	138	137	131	122	137	138	131	131	149	144	138	145	141
	3000K Lumens [1]	4,869	6,595	9,369	11,312	6,994	12,965	16,860	19,718	25,786	30,664	35,840	40,598	47,989
Type III	4000K Lumens	4,782	6,727	9,556	11,538	7,111	13,183	17,144	20,050	26,120	31,061	36,304	41,124	48,610
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	138	137	131	123	137	137	131	131	148	143	138	144	140
	3000K Lumens [1]	4,695	6,605	9,383	11,329	6,982	12,944	16,832	19,686	25,646	30,497	35,645	40,377	47,727
Type IV	4000K Lumens	4,880	6,865	9,752	11,774	7,088	13,140	17,087	19,984	26,098	31,035	36,274	41,089	48,569
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	141	140	134	125	136	137	130	131	148	143	137	144	140
	3000K Lumens [1]	4,792	6,740	9,575	11,561	6,959	12,901	16,777	19,621	25,624	30,471	35,615	40,343	47,687
Type V	4000K Lumens	5,067	7,128	10,126	12,226	7,576	14,045	18,264	21,360	28,129	33,450	39,097	44,287	52,349
	BUG Rating	B3-U0-G2	B3-U0-G2	B4-U0-G3	B4-U0-G3	B3-U0-G3	B4-U0-G3	B4-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	146	145	139	130	146	146	139	140	160	154	148	155	151
	3000K Lumens [1]	4,975	6,999	9,942	12,004	7,438	13,790	17,932	20,972	27,618	32,843	38,387	43,483	51,398

NOTES:
1. For 3000K, 5000K or HSS data, refer to published IES files.

Lumen Maintenance

Configuration	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
Prevail and Prevail Petite at 25°C	91.30%	> 194,000
Prevail and Prevail Petite at 40°C	87.59%	> 134,000
Prevail XL at 25°C	91.40%	> 204,000
Prevail XL at 40°C	89.41%	> 158,000

Sensor Color Reference Table (SPBx)

Housing Finish	Sensor Color
AP=Grey	Grey
BZ=Bronze	Bronze
BK=Black	Black
DP=Dark Platinum	Grey
GM=Graphite Metallic	Black
WH=White	White

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

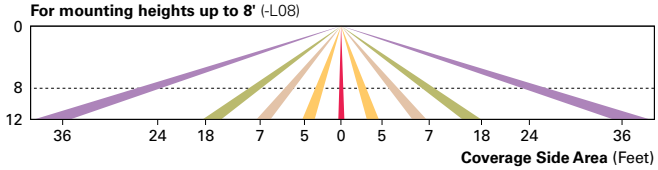
Control Options

0-10V This fixture provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

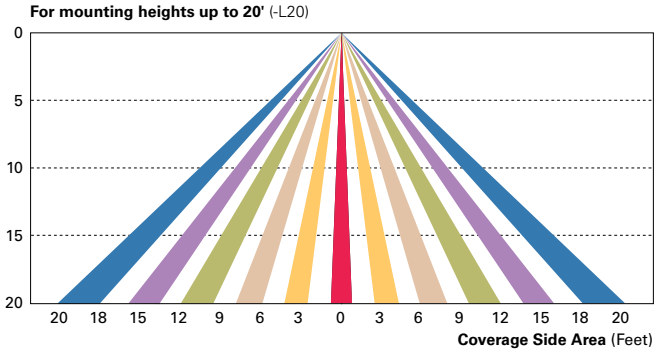
Photocontrol (PER and PER7) Photocontrol receptacles provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-PIN standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the luminaire will dim down after five minutes of no activity detected. When activity is detected, the luminaire returns to full light output. When a sensor for ON/OFF operation (MS-LXX) is selected, the luminaire will turn off after five minutes of no activity. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or "daylight harvesting." Factory default is enabled for the MS sensors and disabled for the SPB. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes.

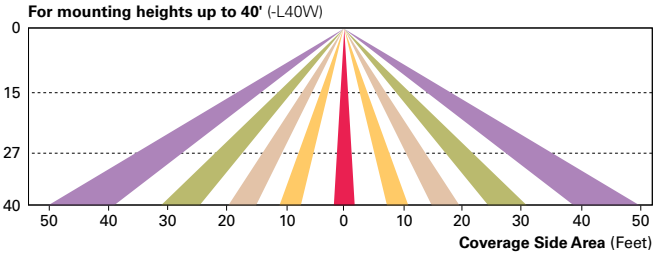
For mounting heights up to 8' (-L08)



For mounting heights up to 20' (-L20)



For mounting heights up to 40' (-L40W)

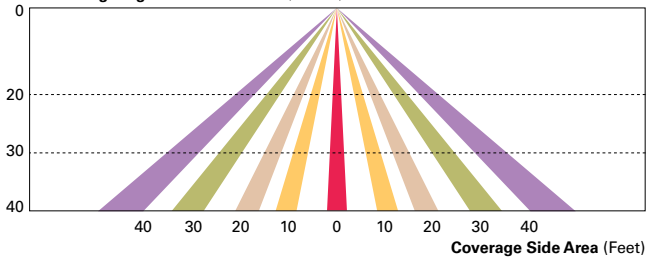


WaveLinx Wireless Control and Monitoring System Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets).

WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

WaveLinx Wireless Sensor (SWPD4 and SWPD5) These outdoor sensors offer passive infrared (PIR) occupancy sensing and a photocell for closed-loop daylight sensing. These sensors can be factory installed or field-installed via simple, tool-less integration into luminaires equipped with the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW). These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected, and the photocell for "dusk-to-dawn" control is default enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-40'.

For mounting heights from 16' to 40' (SWPD)



LumenSafe (LD) The LumenSafe integrated network camera is a streamlined, outdoor-ready camera that provides high definition video surveillance. This IP camera solution is optimally designed to integrate into virtually any video management system or security software platform of choice. No additional wiring is needed beyond providing line power to the luminaire. LumenSafe features factory-installed power and networking gear in a variety of networking options allowing security integrators to design the optimal solution for active surveillance.

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Specifications and dimensions
subject to change without notice.

SSS SQUARE STRAIGHT STEEL

Catalog #		Type
Project		POLE
Comments		Date
Prepared by		

FEATURES
- ASTM Grade steel base plate with ASTM A366 base cover
- Hand hole assembly 3" x 5" on 5" and 6" pole; and 2" x 4" on 4" pole
- 10'-39' mounting heights
- Drilled or tenon (specify)

DESIGN CONSIDERATIONS - VIBRATIONS AND NON-GROUND MOUNTED INSTALLATIONS

The information contained herein is for general guidance only and is not a replacement for professional judgment. Design considerations for wind-induced vibrations and non-ground mounted installations (e.g., installations on bridges or buildings) are not included in this document. Consult with a professional, and local and federal standards, before ordering to ensure product is appropriate for the intended purpose and installation location. Refer to the Cooper Lighting Solutions Light Pole White Paper for risk factors and design considerations. Learn more.

NOTE: The Limited Warranty for this product specifically excludes fatigue failure or similar damage resulting from vibration, harmonic oscillation or resonance.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Cooper Lighting Solutinos or visit www.cooperlighting.com for available options, accessories and ordering information.

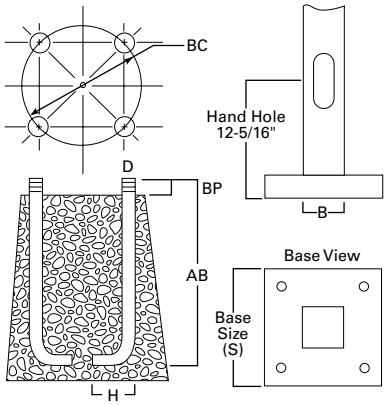
ORDERING INFORMATION

SAMPLE NUMBER: SSA5A20SFM1XG

Product Family	Shaft Size (Inches)[1]	Wall Thickness (Inches)	Mounting Height (Feet)	Base Type	Finish	Mounting Type	Number and Location of Arms	Arm Lengths (Feet)	Options (Add as Suffix)
SSS=Square Straight Steel	**4**=4"	**A**=0.120"	**10**=10'	**S**=Square Steel Base	**F**=Dark Bronze	**2**=2-3/8" O.D. Tenon (4" Long)	**1**=Single	**X**=None	**A**=1/2" Tapped Hub[3]
	5=5"	**M**=0.188"	**15**=15'		**G**=Galvanized Steel	**3**=3-1/2" O.D. Tenon (5" Long)	**2**=2 at 180°	**2**=2'	**B**=3/4" Tapped Hub[3]
	6=6"	**X**=0.250"	**20**=20'		**J**=Summit White	**4**=4" O.D. Tenon (6" Long)	**3**=Triple[2]	**3**=2.5'	**C**=Convenience Outlet[4]
			25=25'		**K**=Carbon Bronze	**9**=3" O.D. Tenon (4" Long)	**4**=4 at 90°	**4**=4'	**E**=GFCI Convenience Outlet[4]
			30=30'		**L**=Dark Platinum	**6**=2-3/8" O.D. Tenon (6" Long)	**5**=2 at 90°	**6**=6'	**G**=Ground Lug
			35=35'		**R**=Hartford Green	**7**=4" O.D. Tenon (10" Long)	**X**=None	**8**=8'	**H**=Additional Hand Hole[5]
			39=39'		**S**=Silver	**A**=Type A Drilling			**V**=Vibration Dampener
					T=Graphite Metallic	**C**=Type C Drilling			
					V=Grey	**E**=Type E Drilling			
					W=White	**F**=Type F Drilling			
					X=Custom Color	**G**=Type G Drilling			
					Y=Black	**J**=Type J Drilling			
						K=Type K Drilling			
						M=Type M Drilling			
						N=Type N Drilling			
						R=Type R Drilling			
						S=Standard Upsweep Arm[6]			
						Z=Type Z Drilling			

NOTES: 1. All shaft sizes nominal. **2.** Square poles are 3 at 90°, round poles are 3 at 120°. **3.** Tapped Hub is located 5' below the pole top and on the same side of pole as hand hole, unless specified otherwise. **4.** Outlet is located 4' above base and on same side of pole as hand hole, unless specified otherwise. Receptacle not included, provision only. **5.** Additional hand hole is located 12" below pole top and 90° from standard hand hole location, unless otherwise specified. **6.** Arm must be ordered separately.

ANCHORAGE DATA



See technical information.

Pole	Template Number	Bolt Number	Bolt Circle (inches)	Number of Bolts	Bolt Size (inches)
SSS4	TMP1	AB1	8.5 - 11.0	4	3/4 x 25 x 3
SSS5	TMP1	AB1	11.0	4	3/4 x 25 x 3
SSS6	TMP2	AB3	12.5	4	1 x 36 x 4

EFFECTIVE PROJECTED AREA (At Pole Top)

Mounting Height (Feet)	Catalog Number [1,2]	Wall Thickness (Inches)	Base Square [3] (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection [3] (Inches)	Shaft Size [3] (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) [4]				Max. Fixture Load - Includes Bracket (Pounds)
MH			S	BC	BP	B	D x AB x H		80 mph	90 mph	100 mph	110 mph	
10	SSS4A10S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	85	30.0	22.0	17.0	13.0	100
15	SSS4A15S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	118	15.0	11.5	8.7	6.5	100
20	SSS4A20S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	150	8.7	5.9	3.9	2.5	150
20	SSS5A20S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	183	15.4	11.1	7.9	5.5	150
25	SSS4A25S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	181	3.7	1.7	0.3	--	200
25	SSS5A25S	0.120	10-1/2	11	5	5	3/4 x 25 x 3	222	9.3	6.0	3.5	1.6	200
25	SSS6A25S	0.120	12-1/2	12-1/2	5	6	1 x 36 x 4	284	9.9	6.1	3.5	1.2	200
30	SSS5A30S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	260	4.7	2.1	--	--	200
30	SSS5M30S	0.188	10-1/2	11	4-1/2	5	3/4 x 25 x 3	392	10.4	6.4	3.5	1.5	200
30	SSS6A30S	0.120	12-1/2	12-1/2	5	6	1 x 36 x 4	330	4.3	1.4	--	--	200
30	SSS6M30S	0.188	12-1/2	12-1/2	5	6	1 x 36 x 4	489	19.0	13.0	8.7	5.6	200
35	SSS5M35S	0.188	10-1/2	11	4-1/2	5	3/4 x 25 x 3	453	5.8	2.8	--	--	200
35	SSS6M35S	0.188	12-1/2	12-1/2	5	6	1 x 36 x 4	564	12.8	7.2	3.7	1.0	200
35	SSS6X35S	0.250	12-1/2	12-1/2	5	6	1 x 36 x 4	738	16.5	11.0	6.8	3.5	200
39	SSS6M39S	0.188	12-1/2	12-1/2	5	6	1 x 36 x 4	618	7.3	3.0	--	--	300
39	SSS6X39S	0.250	12-1/2	12-1/2	5	6	1 x 36 x 4	816	13.0	7.0	3.7	0.8	300

EFFECTIVE PROJECTED AREA (Two Feet Above Pole Top)

Mounting Height (Feet)	Catalog Number [1,2]	Wall Thickness (Inches)	Base Square [3] (Inches)	Bolt Circle Diameter (Inches)	Anchor Bolt Projection [3] (Inches)	Shaft Size [3] (Inches)	Anchor Bolt Diameter x Length x Hook (Inches)	Net Weight (Pounds)	Maximum Effective Projected Area (Square Feet) [4]				Max. Fixture Load - Includes Bracket (Pounds)
MH			S	BC	BP	B	D x AB x H		80 mph	90 mph	100 mph	110 mph	
10	SSS4A10S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	85	23.0	17.5	14.0	11.0	100
15	SSS4A15S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	118	13.4	10.0	7.5	5.7	100
20	SSS4A20S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	150	7.6	5.2	3.4	2.1	150
20	SSS5A20S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	183	13.8	9.9	7.1	4.9	150
25	SSS4A25S	0.120	10-1/2	11	4-1/2	4	3/4 x 25 x 3	181	3.4	1.6	0.3	--	200
25	SSS5A25S	0.120	10-1/2	11	5	5	3/4 x 25 x 3	222	8.5	5.5	3.2	1.5	200
25	SSS6A25S	0.120	12-1/2	12-1/2	5	6	1 x 36 x 4	284	9.1	5.6	3.0	1.2	200
30	SSS5A30S	0.120	10-1/2	11	4-1/2	5	3/4 x 25 x 3	260	1.8	--	--	--	200
30	SSS5M30S	0.188	10-1/2	11	4-1/2	5	3/4 x 25 x 3	392	9.6	5.9	1.9	0.2	200
30	SSS6A30S	0.120	12-1/2	12-1/2	5	6	1 x 36 x 4	330	4.1	1.3	--	--	200
30	SSS6M30S	0.188	12-1/2	12-1/2	5	6	1 x 36 x 4	489	18.5	12.5	8.4	5.3	200
35	SSS5M35S	0.188	10-1/2	11	4-1/2	5	3/4 x 25 x 3	453	5.5	2.4	--	--	200
35	SSS6M35S	0.188	12-1/2	12-1/2	5	6	1 x 36 x 4	564	11.8	7.0	3.5	1.0	200
35	SSS6X35S	0.250	12-1/2	12-1/2	5	6	1 x 36 x 4	738	16.0	10.5	6.4	3.4	200
39	SSS6M39S	0.188	12-1/2	12-1/2	5	6	1 x 36 x 4	618	7.0	2.4	--	--	300
39	SSS6X39S	0.250	12-1/2	12-1/2	5	6	1 x 36 x 4	816	12.0	6.7	3.0	0.5	300

NOTES:

1. Catalog number includes pole with hardware kit. Anchor bolts not included. Before installing, make sure proper anchor bolts and templates are obtained.
2. Tenon size or machining for rectangular arms must be specified. Hand hole position relative to drill location.
3. Shaft size, base square, anchor bolts and projections may vary slightly. All dimensions nominal.
4. EPAs based on shaft properties with wind normal to flat. EPAs calculated using base wind velocity as indicated plus 30% gust factor.

VIBRATION

Vibrations may cause damage to structures, including poles. Vibrations are unpredictable, and there are many factors and variables that can cause damaging vibrations. Many wind conditions exist that can create damaging vibrations to poles and luminaires, such as constant winds between 10-30 mph. Although all pole types can experience vibration, straight square poles seem to be most prone. Vibration dampers and/or a round tapered design may be used to mitigate damage from vibrations, but there is no guarantee damaging vibrations will be prevented. Vibration dampers are not included with this pole but can be ordered separately. Consult with a professional, and local and federal standards, to ensure this pole is appropriate for the intended purpose and installation location. Refer to Cooper Lighting Solutions' Light Pole White Paper for risk factors and design considerations.

MAINTENANCE

Perform inspections periodically. A prudent inspection schedule would be: one week after installation, one month after installation, yearly after installation, and following any major wind event. During the inspection, check the poles for cracks. If cracks are detected, remedial action is required. Recheck anchor bolt torques and re-tighten according to the recommended torque values. Check for missing covers and pole caps and replace as necessary. Check the pole for corrosion and deterioration of the finish. Should there be corrosion or deterioration, take remedial action to correct.

WARNING: Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to pole white paper WP513001EN for additional support information. Before installing, make sure proper anchor bolts and templates are obtained. The use of unauthorized accessories such as banners, signs, cameras or pennants for which the pole was not designed voids the pole warranty and may result in pole failure causing serious injury or property damage. Information regarding total loading capacity can be supplied upon request. The pole warranty is void unless poles are used and installed as a complete pole and luminaire combination. This warranty specifically excludes failure as the result of a third party act or omission, misuse, unanticipated uses, fatigue failure or similar phenomena resulting from induced vibration, harmonic oscillation or resonance associated with movement of air currents around the product.

Specifications and dimensions subject to change without notice. Consult your lighting representative at Cooper Lighting Solutions or visit www.cooperlighting.com for available options, accessories and ordering information.

DATE: TYPE: OA

NAME: CFA - P12 exterior wall sconce

PROJECT:

Halogen/incandescent

P5675-31

Cylinder

5" up/down cylinder with heavy duty aluminum construction and die cast wall bracket. Powder coated finish. Wet location listed when used with P8799 top cover lens

Width: 5"
Height: 14"
Depth: 7-7/8"
H/CTR: 7"

Category: Outdoor

Finish: Black (powdercoat)

Construction: Cast aluminum construction

metal shade

MOUNTING	ELECTRICAL	LAMPING	ADDITIONAL INFORMATION
Wall mounted Mounting strap for outlet box included Back plate covers a standard 4" hexagonal recessed outlet box 4-1/2" sq.	Pre-wired 6" of wire supplied 120V	Quantity: 2 75W PAR-30 or BR-30 Medium base porcelain sockets With two General Electric retrofit lamps #LED12P30RW83025	cCSAus Damp location listed location listed 1 year warranty Companion fixtures are available

FLL LED FLOODLIGHT

Cat.#

Job

Type
OC

HUBBELL Outdoor Lighting

Approvals

SPECIFICATIONS

Intended Use:
Large LED flood with beam distribution for lighting applications such as safety/security, facade, area, or signs

Construction:
- Corrosion resistant, rugged die-cast aluminum housing with powder coat paint finish
- Tempered glass lens protects LEDs and allows for cleaning/debris removal
- Vented housing isolates LED module from driver, maximizing product life and performance
- Visor, louver and vandal accessories available

LED:
- 28 high power LED's (Stock/MTO)
- 42 high power LED's (MTO)
- 140 high power LED's (Stock)
- Ambient operating temperature -35°C to 40°C
- Stock Versions: 4000K and 5000K CCT
- MTO Versions: 3000K nominal with 80 CRI, 4000K and 5000K CCT nominal with 70 CRI

Optical/Electrical:
- Variety of NEMA distributions - N (3x3), M (4x4), RM (5x4) and W (6x6) - for wide range of lighting applications; Stock version Wide (6x6) only
- 120-277V operation, 50/60Hz, 95W, 1050mA, 100 LPW (Stock/MTO - 28LED)
- 120-277V operation, 50/60Hz, 150W, 158mA, 98 LPW (Stock only - 140LED)

Optical/Electrical (Cont.)
- 120-277V, 347V, and 480V operation, 50/60Hz, 95W, 700mA, up to 119 LPW (MTO only - 42LED)
- IP65 fixture, Driver IP66 and RoHS compliant
- 10KV surge protector comes standard
- 0-10V dimming driver standard, continuous dimming option to have leads pulled out for easy connection

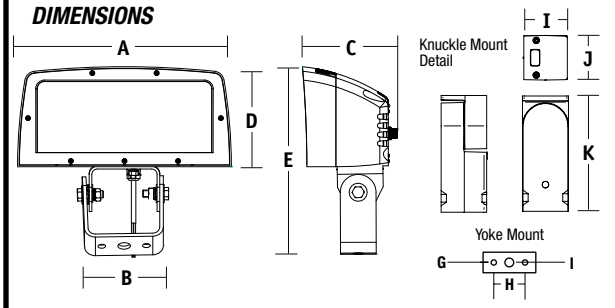
Installation:
- Knuckle mount 15' aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes
- Heavy duty steel yoke with adjustable stainless steel hardware, mounting holes for one center - 3/4" bolt or two side - 3/8" bolts
- 3' SEOOW cord with yoke mount

Listings:
- IP65, Listed to UL1598 for use in wet locations.
- DLC Qualified (4000K and 5000K models only); Consult DLC website for more details: https://www.designlights.org/QPL
- EPA = 1.0ft^2

Warranty:
For more information visit:
http://www.hubbelllighting.com/resources/warranty/

PRODUCT IMAGE(S)

DIMENSIONS



A	B	C	D	E	F	G	H	I	J	K
14.9"	5.5"	6.0"	7.0	14.57"	17/32"	7/8"	3-1/8"	3.0"	2.9"	7.57"
378mm	140mm	152mm	177mm	370mm	14mm	22mm	79mm	77mm	75mm	192mm

CERTIFICATIONS/LISTINGS

IP65

SHIPPING INFORMATION

Catalog Number	G.W(kg)/CTN	Carton Dimensions		
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)
FLL (Single Carton)	25 (12.3) lbs	17.72" (45)	13.0" (33)	10.00" (25.5)

Carton dimensions for shipping purposes only

ORDERING INFORMATION - STOCK VERSION

Catalog Number	Mount	Max Candle Power	Beam Pattern	Wattage	# Drivers/ Current	Voltage	Color Temperature/ CRI	Lumens	LPW	Weight lbs. (kg)	Finish
FLL-95-Y	Yoke	7789	Wide	97w	1@700mA	120-277V	5000K/70	10600	109	20 (9.0)	Bronze
FLL-95-4K-Y	Yoke	7265	Wide	97w	1@700mA	120-277V	4000K/70	10173	105	20 (9.0)	
FLL-150-4K-U-Y	Yoke	5627	Wide	150w	1@158mA	120-277V	4000K/80	14665	98	20 (9.0)	
FLL-150-5K-U-Y	Yoke	5731	Wide	150w	1@158mA	120-277V	5000K/80	14764	98.4	20 (9.0)	
FLL-150-4K-U-K	Knuckle	5627	Wide	150w	1@158mA	120-277V	4000K/80	14665	98	20 (9.0)	
FLL-150-5K-U-K	Knuckle	5731	Wide	150w	1@158mA	120-277V	5000K/80	14764	98.4	20 (9.0)	

ORDERING INFORMATION - MADE TO ORDER

FLL - [ ] - [ ] - [ ] - 7 - [ ] - [ ] - [ ] - [ ] - [ ] - [ ] - [ ]

FAMILY	# LEDS	WATTS	CCT	CRI	DISTRIBUTION	VOLTAGE	MOUNTING	FINISH	CONTROL OPTION	OPTIONS
FLL FACTOR Flood Large	**28L** 28 LED	**95** 95W	**3K** 3000K	**7** 70 CRI	**N** 3x3	**U** 120V-277V	**K** Knuckle	**DB** Bronze	**PC** Photocontrol (voltage specified and determined by voltage field)	**F** Fusing 120 or 277V only (determined by voltage field)
	42L 42 LED		**4K** 4000K		**M** 4x4	**1** 120V	**Y** Yoke	**BL** Black	**CD** Continuous dim-ming	
			5K 5000K		**RM** 5x4	**2** 208V		**WH** White		
					W 6x6	**3** 240V		**GR** Gray		
						4 277V		**PS** Platinum silver		
						5[1] 480V		**CC** Custom Color		
						F[1] 347V				

[1] 42L only

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ACCESSORIES & REPLACEMENT PARTS - Order Separately

Catalog Number	Description
FLL-VISOR-DB	Bronze top visor (Tap holes in lens frame for field installation)
93053186	FLL28, 95w, 120-277V Dimming driver, 1050mA (1 Qty)
93053187	FLL140, 95w, 120-277V Dimming driver, 700mA (1 Qty)
FLL-LOUVER-BL	Black adjustable louver
ARF-SPC	Polycarbonate vandal shield
4024C	Steel slipfitter for 2" pipe, 2 3/8" OD yoke mount, bronze finish
4040	Heavy-duty steel wall/pole bracket; bronze Lektrocote®

FLL-LOUVER-BL

ARF-SPC

FLL-VISOR-XX

PERFORMANCE DATA - Stock

				4K (4000K nominal)				5K (5000K nominal)		
# OF LEDS	DRIVE CURRENT (MILLIAMPS	SYSTEM WATTS	DISTRIBUTION TYPE	NEMA	LUMENS	LPW	MAX BEAM CANDLEPOWER	LUMENS	LPW	MAX BEAM CANDLEPOWER
28	1050mA	95W	W	6 x 6	8992	94.5	6805	9557	100.6	6935
140	158mA	150W	W	7 x 7	14665	98	5627	14764	98.4	5731

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown.
Actual performance may differ as a result of end-user environment, application and inherent performance tolerances of the electrical components.

PERFORMANCE DATA - MTO

						5K (5000K nominal, 70 CRI)			4K (4000K nominal, 70 CRI)			3K (3000K nominal, 80 CRI)		
# OF LEDS	DRIVE CURRENT	SYSTEM WATTS	DIST. TYPE	NEMA	FIELD ANGLE H° X V°	LUMENS	LPW[1]	MAX BEAM CANDLEPOWER	LUMENS	LPW[1]	MAX BEAM CANDLEPOWER	LUMENS	LPW[1]	MAX BEAM CANDLEPOWER
28	1050mA	95W	W	6 x 6	107° x 107°	9557	100.6	6935	-	-	-	-	-	-
42	700mA	97W	N	3 x 3	32° x 32°	10860	114	91770	10263	108	85000	7473	80	63093
			M	4 x 4	53° x 53°	11400	119	46836	10335	108	33566	7654	81	26201
			RM	5 x 5	84° x 86°	9806	102	17388	8889	93	14733	6702	71	11395
			W	6 x 6	107° x 107°	10967	113	8024	10173	105	7265	7694	79	5475

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

PROJECTED LUMEN MAINTENANCE

	OPERATING HOURS – FLL-28L					
AMBIENT TEMP.	0	25,000	50,000	[1]TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°F	1.00	0.94	0.91	0.88	0.79	>149,000
40°C / 104°F	1.00	0.92	0.90	0.87	0.76	>132,000

Nichia 219B, 1080mA, 85°C

	OPERATING HOURS – FLL-42L					
AMBIENT TEMP.	0	25,000	50,000	[1]TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°F	1.00	0.98	0.96	0.96	0.94	>625,000
40°C / 104°F	1.00	0.96	0.94	0.93	0.90	>435,000

	OPERATING HOURS – FLL-150					
AMBIENT TEMP.	0	25,000	50,000	[1]TM-21-11 60,000	100,000	Calculated L70 (HOURS)
25°C / 77°C	1.00	0.96	0.94	0.93	0.89	>331,000
40°C / 104°F	1.00	0.95	0.92	0.90	0.85	>237,000

Nichia NFSL757DT-V1, 150mA, 85°C

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (W)
28	1	1050mA	120	0.82	95
			277	0.36	95
42	1	700mA	120	.80	96
			277	.35	96
140	1	158mA	120	1.25	150
			277	0.54	150

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

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LNC SERIES

Cat.#

Job

Type
OK

HUBBELL Outdoor Lighting

Approvals

SPECIFICATIONS

Intended Use:
The compact LED LNC is designed for entry/perimeter illumination for safety, security and identity. Typical mounting height is up to 12 feet with 40ft fixture spacing (without acrylic diffuser) and 30ft spacing with acrylic diffuser installed. Photocontrol option is available to provide dusk-to-dawn control for additional energy savings.

Construction:
Decorative die-cast aluminum housing and door. Rugged design protects internal components and provides excellent thermal management for long life – 60,000 hours minimum LED life at L96 rating per IESNA TM-21-11. Powder paint finishes provide lasting appearance in outdoor environments.

Optics/Electrical
LED:
Drivers are 120-277V, 50/60Hz Type II, III and Type IV lenses provide wide lateral spread.
0-10V dimming 120-277V only.

- LNC5L – 5 LEDs, Types II, III or IV available, see page 2 for electrical details
- LNC7L – 7 LEDs, Type II, III or IV available, see page 2 for electrical details
- LNC9L – 9 LEDs, Types II, III or IV available, see page 2 for electrical details
- 3000K - 80 CRI, 4000K - 70 CRI, and 5000K - 70 CRI, CCT nominal
- Minimum operating temperature is -40˚C/-40˚F
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion

Lenses:
Full cut-off distribution; Ambient diffuser included, use for applications near enterances or locations where reduced brightness is desired.

Installation:
Quick mount adapter provides quick installation, designed for recessed box 4" square junction box.

Listings:
Listed and labeled to UL 1598 for wet locations, 25˚ C ambient environments. DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at: http://www.designlights.org/

- IES Progress Award Winner - 2012

Warranty:
Five year limited warranty. For more information visit: http://www.hubbelloutdoor.com/resources/warranty/

CERTIFICATIONS/LISTINGS

*3000K and warmer CCTs only

PRODUCT IMAGE(S)

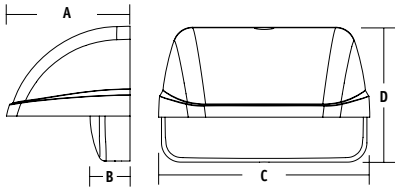
LNC-5L

LNC-7L

LNC-9L

With diffuser

DIMENSIONS



A	B	C	D
4.81" (122 mm)	1.55" (39 mm)	8.22" (209 mm)	5.25" (133 mm)

SHIPPING INFORMATION

Catalog Number	G.W(kg)/ CTN	Carton Dimensions			Carton Qty. per Master Pack
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)	
LNC-5LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2
LNC-7LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2
LNC-9LU	9.6 (4.36)	14.5 (37)	9.6 (24.5)	6.8 (17.5)	2

ORDERING INFORMATION

ORDERING EXAMPLE: LNC-9LU-5K-3-1-PCU

LNC - [ ] OC - [ ] - [ ] - [ ] - [ ]

SERIES	NUMBER OF LEDS	VOLTAGE	CCT	IES DISTRIBUTION	FINISH	OPTIONS
LNC LNC zero uplight	5L 5 LEDs	U 120V-277V	3K 3000K nominal, 70 CRI	2 Type II	1 Bronze	PCU Universal Button Photocell
	7L 7 LEDs	1 120V	4K 4000K nominal, 70 CRI	3 Type III	2 Black	
	9L 9 LEDs	2 208V	5K 5000K nominal	4 Type IV	3 Gray	
		3 240V	AM[1] Amber (590 µm available for "Turtle Friendly"/ observatory applications, 350 mA (consult factory)		4 White	
		4 277V			5 Platinum	

1 Amber LEDs only available on 7LU and 9LU configurations, 350 mA only

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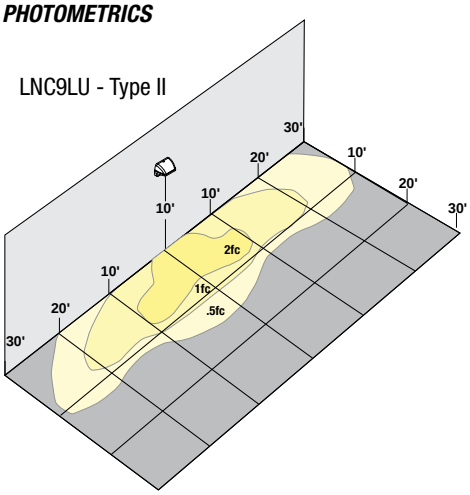
REPLACEMENT PART

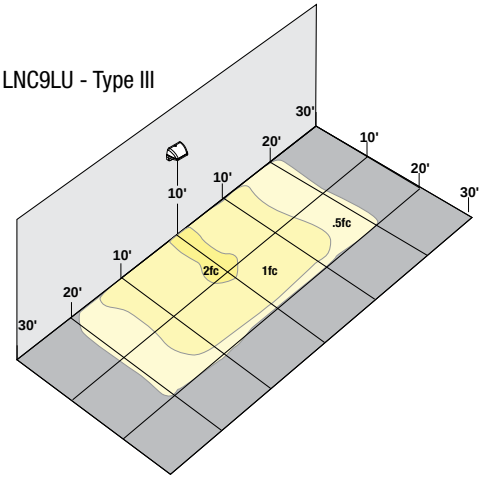
CATALOG NUMBER	DESCRIPTION
93039574	Frosted comfort shield, improved uniformity with only 5% reduction

PHOTOMETRICS

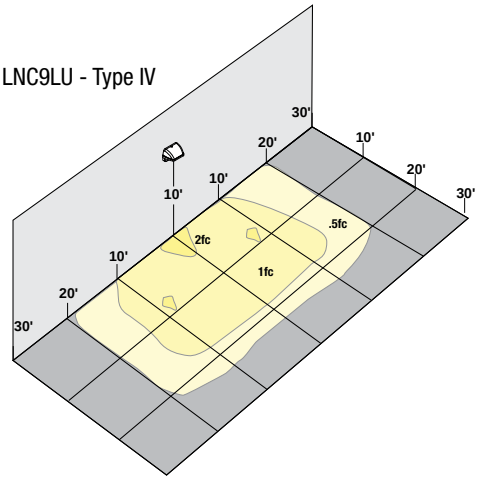
LNC9LU - Type II



LNC9LU - Type III



LNC9LU - Type IV



PERFORMANCE DATA

				5K (5000K nominal, 70 CRI)		4K (4000K nominal, 70 CRI)		3K (3000K nominal, 80 CRI)		AM (<580 nm wave-length)		
# OF LEDS	DRIVE CURRENT	SYSTEM WATTS	DIST. TYPE	LUMENS	LPW[1]	LUMENS	LPW[1]	LUMENS	LPW[1]	LUMENS	SYSTEM WATTS	LPW[1]
5	STD. (700mA) AM (350mA)	13W	2	1,150	88.5	1,052	81	883	68			
			3	1,132	87	1,077	83	833	64			
			4	1,146	88	1,053	81	849	65			
7		17W	2	1,515	89	1,369	80.5	1,272	75			
			3	1,500	88	1,539	90.5	1,392	82	268	6.6	59
			4	1,557	91.5	1,535	90	1,425	84			
9		22W	2	2,069	94	2,033	92	1,588	72			
			3	2,024	92	1,989	90	1,623	74			
			4	2,095	95	2,059	93.5	1,680	76	382	8.3	46

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application. Please consult IES files for BUG ratings.

PROJECTED LUMEN MAINTENANCE

	OPERATING HOURS					
Ambient Temp.	0	25,000	50,000	TM-21-11[1] L96 60,000	100,000	L70 (hours)
25°C / 77°F	1.00	0.98	0.97	0.96	0.95	>791,000
40°C / 104°F	0.99	0.98	0.96	0.96	0.94	>635,000

1. Projected per IESNA TM-21-11 * (Nichia 219B, 700mA, 85°C Ts, 10,000hrs)
Data references the extrapolated performance projections for the LNC-12LU-5K base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0° C	32° F	1.02
10° C	50° F	1.01
20° C	68° F	1.00
25° C	77° F	1.00
30° C	86° F	1.00
40° C	104° F	0.99
50° C	122° F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

ELECTRICAL DATA

# OF LEDS	DRIVE CURRENT (mA)	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (w)
5	1	STD. (700mA)	120	0.11	13
			277	0.05	13
7	1	STD. (700mA)	120	0.14	17
			277	0.07	17
9	1	STD. (700mA)	120	0.17	22
			277	0.09	22

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DESCRIPTION

The Halo Surface LED Downlight (SLD) i[illegible] technology to create an ultra-low profile[illegible] with the performance and look of a traditional downlight. SLD4 is designed for installation in many 3-1/2" and 4" round or octagon junction boxes. May also retrofit in 4" aperture IC and Non-IC recessed housings*. Dedicated LED wiring connector meets high-efficacy code requirement in recessed downlighting. Suitable for residential or commercial installations. Ideal for closets, storage areas, attics and basements. Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

Z1

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

CONSTRUCTION
- Die cast aluminum trim ring and die formed aluminum frame

OPTICS
- WaveStream™ technology provides uniform luminance from a low profile flat lens
- AccuAim™ optics provide directional control for the "cone-of-light" beam distribution of a traditional downlight
- Precision molded lens features high transmission polymer with UV stabilized protecting film

DESIGNER TRIMS
Accessories (sold separately)
SLD designer trims are accessory rings that attach to the SLD for a permanent finish. Refer to SLD accessories specification sheet for details.
- White (Paintable)
- Satin Nickel
- Tuscan Bronze

ELECTRICAL JUNCTION BOX MOUNTING
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 3-1/2" and 4" octagon and round electrical junction boxes.
  Note: Driver consumes 3 cubic inches of junction box.
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building codes.
- Proprietary Slot-N-Lock quick installation system for junction box installation
- T-bracket with Slot-N-Lock mounting tabs included.

RECESSED HOUSING MOUNTING
Friction Blade
- Pre-installed precision formed friction blades included
- Friction blade design allows the SLD to be installed in any position within the housing aperture (360 degrees)

* **Note:** Not for use in recessed housings in direct contact with spray foam insulation refer to NEMA LSD 57-2013

LED
- Trilateral linear LED assembly is integrated in trim perimeter.
- Color Temperature: 2700K, 3000K, 3500K, 4000K
- CRI options: 80 and 90†
  - 90 CRI can be used to comply with California Title 24 High Efficacy requirements. Certified to California Appliance Efficiency Database under JA8
- L70 at 50,000 hours projected in accordance with TM-21

WARRANTY
Eaton provides a five year limited warranty on the SLD LED

LED CHROMATICITY
- A tight chromaticity specification ensures LED color uniformity, sustainable Color Rendering Index (CRI) and Correlated Color Temperature (CCT) over the useful life of the LED
- LED chromaticity of 3 SDCM exceeds ENERGY STAR® color standards per ANSI C78.377-2008
- 90 CRI model features high color performance with R9 greater than 50
- Every Halo LED is quality tested, measured, and serialized in a permanent record to register lumens, wattage, CRI and CCT.
- Halo LED serialized testing and measurement ensures color and lumen consistency on a per-unit basis, and validates long-term product consistency over time

ELECTRICAL CONNECTIONS
Junction Box
- Compatible with many 3-1/2" x 2" and 4" x 1-1/2" round and octagon boxes (2-1/8" deep boxes recommended)
- Supply Wire Adapter with LED quick connector included

Recessed Housings
- LED connector is compatible with Halo 4" H995 and H245 Series LED Housings
- LED Connector meets California Title-24 high-efficacy luminaire standard as a non-screw base
- The included E26 Edison screw-base adapter provides capability for retrofit*
- LED connector is a non-screwbase luminaire disconnect for tool-less installation

LED DRIVER
- Driver is a 120V input high efficiency, dimmable electronic power supply providing DC power to the LED array
- Driver features high power factor, low THD, and has integral thermal protection in the event of over temperature or internal failure.
- Driver is replaceable if it should be required

SLD4058xxWH
80CRI
2700K, 3000K, 3500K, and 4000K

SLD4059xxWH
90CRI
2700K, 3000K, 3500K, and 4000K

4" Surface LED Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 4" recessed housing retrofit (IC, Non-IC & AIR-TITE™)

ENERGY DATA

	80 CRI	90 CRI
Lumens (4000K models)	800	710
Input Voltage	120V	120V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.10 A	0.10 A
Input Power	12.2 W	12 W
Efficiency (4000K models)	66 lm/W	59 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

NOMENCLATURE

SLD 405 8 30 WH
405 = 4" SLD
8 = >80 CRI
30 = 3000K
WH = Matte White

80 CRI nominal CCT 2700K 3000K 3500K 4000K

ENERGY STAR | Can be used for IECC International Energy Conservation Code High Efficacy Compliance | RoHS | airtight Shallowlight

Refer to ENERGY STAR® Certified Products List.

90 CRI nominal CCT 2700K 3000K 3500K 4000K 5000K

ENERGY STAR | Can be used for IECC International Energy Conservation Code High Efficacy Compliance | Efficiency Standards T24 California Title 24 Residential and Non-Residential Compliant | RoHS | airtight Shallowlight

Refer to ENERGY STAR® Qualified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.
Indoor LED nominal CCT of 4000K or less.

DIMMING

- Designed for continuous dimming capability to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) phase control dimmers. Dimming to 5% is best assured using dimmers with low end trim adjustment. Consult dimmer manufacturer for compatibility and conditions of use. (Note some dimmers require a neutral in the wallbox.)

COMPLIANCE

- cULus Listed ceiling and wall
- cULus Damp Location listed ceiling and wall
- cULus Wet Location Listed, ceiling only (shower rated)
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- May be installed in IC recessed housings in direct contact with insulation (Not for use in recessed housings in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013)
- UL Classified when used in retrofit with listed housings (See Housing Compatibility)
- EMI/RFI: meets FCC 47CFR Part 15 Class B limits, and is suitable for use in residential and commercial installations
- Airtight certified per ASTM E283 (not exceeding 2.0 CFM under 57 Pascals pressure difference)
- 90 CRI: Can be used to comply with California Title 24 High Efficacy requirements.
- 80 CRI: Can be used to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED luminaire.
- Can be used for International Energy Conservation Code (IECC)
- ENERGY STAR® Certified luminaire - consult ENERGY STAR® Certified Product List
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79
- Lumen maintenance projections in accordance with IES LM-80 and TM-21

SLD4058xxWH

80CRI

2700K, 3000K, 3500K, and 4000K

SLD4059xxWH

90CRI

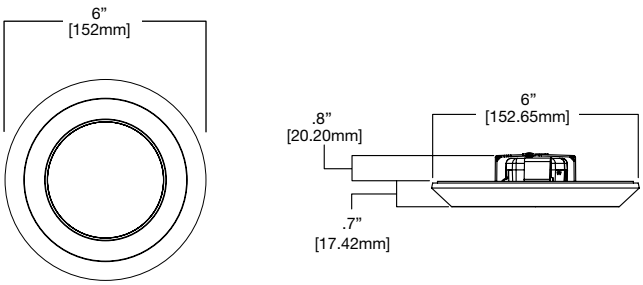
2700K, 3000K, 3500K, and 4000K

4” Surface LED Downlight

Suitable for ceiling or wall electrical junction boxes

Suitable for 4” recessed housing retrofit (IC, Non-IC & AIR-TITE™)

DIMENSIONS



ORDERING INFORMATION

SAMPLE NUMBER: SLD405927WH SLD4TRMSN
Junction Box Installation: Order junction box separately, as supplied by others, to complete installation.
Recessed Installation: Order Halo recessed housing separately to complete installation.

Models	Color Rendering Index	Color Temperature (CCT)	Finish	Accessories
SLD405= 4” Surface LED Downlight, 120V California non-E26 Models **SLD405927WH**-CA **SLD405930WH**-CA **SSLD405935WH**-CA **SSLD405940WH**-CA	**8**=80 CRI **9**=90 CRI	**27**=2700K **30**=3000K **35**=3500K **40**=4000K	**WH**=White	Designer Trims Fit over the SLD4 for a designer finish **SLD4TRMSN**=4” SLD Satin Nickel **SLD4TRMTBZ**=4” SLD Tuscan Bronze **SLD4TRMWH**=4” SLD White (paintable) J-Box Spacer Extension Ring Add 15/16” depth when SLD driver cannot fit into installed junction box **SLD4EXT**=4” Surface LED J-Box Extender, 7.75” O.D. RAD Adapters When junction box is mounted flat on a ceiling or beam surface (not recessed in ceiling) **SLD4RAD**=4” SLD Round Surface J-Box Adapter, 6.15” O.D. (For 4-inch round or octagon junction boxes) Spare Parts **SLD4ACCKIT**=4” Accessory Parts Replacement Kit (Screwbase adapter, torsion springs, friction blades) **SLD4BRKT**=4” Junction Box Bracket & Screws Refer to SLD Accessories specification sheet for further information.

HOUSING COMPATIBILITY

The SLD4 is UL Listed in Halo recessed housings, and is UL Classified for use with any 4 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 62.3 in³ in addition to those noted below:

Compatible Halo LED Housings with LED luminaire connector (high-efficacy compliant)		
HALO LED	**Recessed Can Size**	**Catalog Number**
	4"	H995ICAT, H995RICAT, H245ICAT, H245RICAT
Compatible Halo Incandescent E26 Screwbase Housings		
HALO	**Recessed Can Size**	**Catalog Number**
	4"	H99ICAT, H99TAT, H99RTAT, E4ICATSB, E4TATSB, E4RTATSB

COMPATIBLE WITH EATON'S CROUSE-HINDS JUNCTION BOXES

TP316
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

TP317
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

- **TP316** - for non-metallic cable
- **TP317** - for metal clad cable
- UL Listed
- Refer to www.crouse-hinds.com

COMPATIBLE WITH MANY OTHER JUNCTION BOXES*

4" octagon light fixture/fan steel box
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

4" octagon steel box
4" x 4" x 1-1/2"
(102mm x 102mm x 38mm)

4" round new work non-metallic box with hanger bar assembly
4" diameter x 2-3/16" (102mm x 56mm)

4" round new work non-metallic light fixture/fan box
4" diameter x 2-3/16"
(102mm x 56mm)

3-1/2" round new work non-metallic ceiling box
3-1/2" diameter x 2-3/4"
(89mm x 70mm)

3-1/2" round old work non-metallic box
4-1/4" O.D. flange, 3-1/2" I.D. x 2-5/8"
(108mm O.D., 89mm I.D. x 67mm)

4" round surface mount box
4" diameter x 1-1/2"
(102mm x 38mm)
Requires SLD4RAD adapter

*This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Eaton makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the SLD mounting bracket in the box.

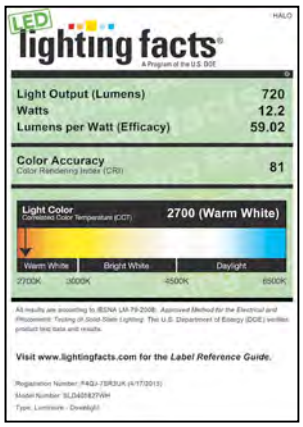
PRODUCT DATA

Cat No.	CRI	CCT	Lumens	Power (W)	LPW
SLD405827WH	81	2700	720	12.2	59
SLD405830WH	81	3000	750	12.2	61
SLD405835WH	81	3500	780	12.2	64
SLD405840WH	81	4000	800	12.2	66
SLD405927WH	92	2700	650	12	54
SLD405930WH	92	3000	670	12	56
SLD405935WH	92	3500	690	12	58
SLD405940WH	92	4000	710	12	59

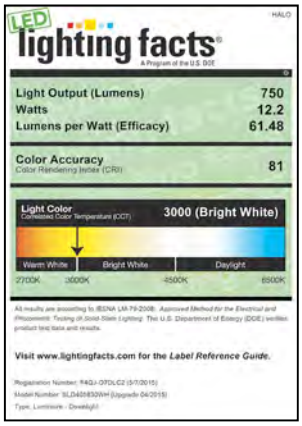
Performance values are presented as typical for the model(s) indicated. Field results may vary.

LIGHTING FACTS®

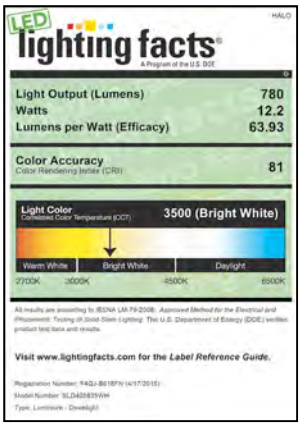
SLD405827WH - 80 CRI



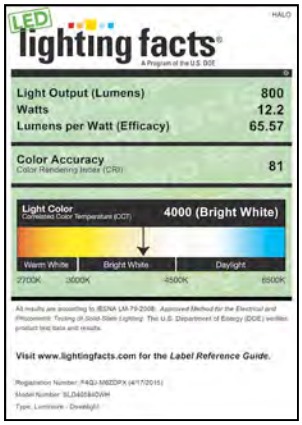
SLD405830WH - 80 CRI



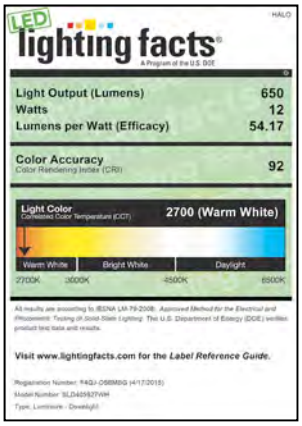
SLD405835WH - 80 CRI



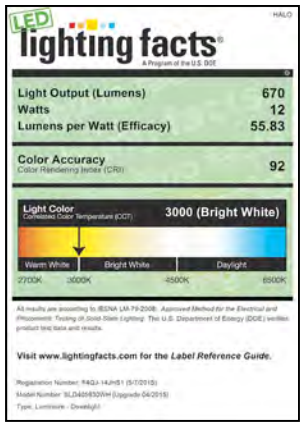
SLD405840WH - 80 CRI



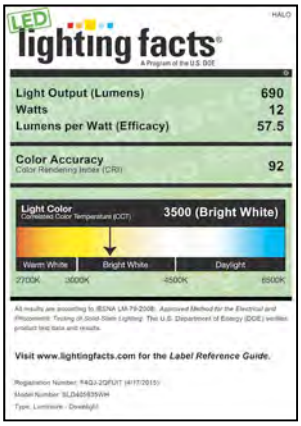
SLD405927WH - 90 CRI



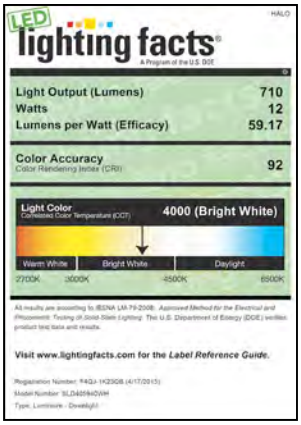
SLD405930WH - 90 CRI



SLD405935WH - 90 CRI



SLD405940WH - 90 CRI



Catalog # : _____ Project : _____

Z2 Prepared By : _____ Date : _____

Scottsdale® Legacy (CRUS)

LED Canopy Luminaire

OVERVIEW	
Lumen Package	6,000 - 22,000
Wattage Range	61 - 159
Efficacy Range (LPW)	95 - 148
Weight lbs(kg)	27 (12.2)

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Features a ultra-slim 3/4" profile die-cast housing, with flat glass lens. Unit is water-resistant, sealed and IP67 rated. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.
- Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.
- Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

Optical System

- Features an array of select, mid-power, high brightness, high efficiency LED chips; 5000K, 4000K, 3000K color temperature, 70 CRI.
- Choice of Symmetrical or Asymmetrical, which directs light through a clear tempered glass lens, to provide a uniform distribution.
- Five Lumen Packages: VLW (9,000), LW (10,000), SS (13,000), HO (18,000), VHO (22,000).

Electrical

- High performance factory programmable driver features over-voltage, under voltage, short-circuit and over temperature protection with integral surge protection that meets IEEE C62.41.2 and ANSI C82.77-5 Location Category C Low standards. Additional 10kV surge protection device meets a minimum Category C Low standards (per ANSI/IEEE C62.41.2).
- Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.
- Die-cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry, provide easy "knock-out" connection of primary wiring and contributes to attaining the lowest operating temperatures available. Seals to optical housing via one-piece molded silicone gasket.
- Universal voltage power supply, 120-277 VAC, 50/60 HZ and 347-480 VAC, 50/60 HZ input.
- -40°C to 50°C (-40°F to +122°F) ambient operating temperature.
- Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location. See LSI website for specific guidance.

Hazardous Locaiton

- Designed for lighter than air fuel applications. Product is suitable for Class 1 Divisions 2 only when properly installed per LSI installation intructions. See lsi-industries.com for specific guidance. LW and SS lumen packages only.

Installation

- One-person installation.
- Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SC/ECTA without having to relocate the conduit.
- Retro panels are available for existing Encores as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

Warranty

- LSI LED Fixtures carry a 5-year warranty or 10-year warranty with registration for petroleum applications only (contact your LSI representative for details).

Listings

- UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.
- Meets Buy American Act requirements.

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ORDERING GUIDE

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TYPICAL ORDER EXAMPLE: **CRUS SC LED SS 50 UE WHT**

Prefix	Distribution	Light Source	Drive Current	Color Temp	Input Voltage	Finish	Options
CRUS - LED Canopy Luminaire	**SC** - Symmentric **AC**[1] - Asymmetric	**LED**	**VLW** - Very Low Watt **LW** - Low Watt **SS** - Super Saver **HO** - High Output **VHO** - Very High Output	**50** - 5,000K **40** - 4,000K **30** - 3,000K	**UE** - Universal Voltage (120 - 277V) **347 - 480V**	**WHT** - White **BRZ** - Bronze **BLK** - Black	**HL**[2] - Hazardous Location

Notes:
1 - AC distribution utilizes a reflector which alters the look from a standard SC distribution.
2 - LW and SS lumen packages only

PERFORMANCE

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DELIVERED LUMENS*

Lumen Package	Distribution	3000K CCT			4000K CCT			5000K CCT			Avg. Watts
		Delivered Lumens	Efficacy	BUG Ratings	Delivered Lumens	Efficacy	BUG Ratings	Delivered Lumens	Efficacy	BUG Ratings	
VLW	SC	7933	130	B3-U0-G1	7977	131	B3-U0-G1	9055	148	B3-U0-G1	61
	AC	6687	110	B2-U0-G1	6723	110	B2-U0-G1	7632	125	B2-U0-G2	
LW	SC	9221	125	B3-U0-G1	9272	125	B3-U0-G1	10525	142	B3-U0-G1	74
	AC	7783	105	B2-U0-G1	7826	106	B2-U0-G1	8884	120	B2-U0-G2	
SS	SC	11980	122	B3-U0-G1	12046	128	B3-U0-G1	13674	140	B3-U0-G1	98
	AC	10159	104	B3-U0-G2	10215	104	B3-U0-G2	11595	118	B3-U0-G2	
HO	SC	16325	124	B3-U0-G1	16415	124	B3-U0-G1	18633	141	B3-U0-G1	132
	AC	13269	101	B3-U0-G2	13342	101	B3-U0-G2	15145	115	B3-U0-G2	
VHO	SC	19641	124	B4-U0-G2	19749	124	B4-U0-G2	22418	141	B4-U0-G2	159
	AC	15124	95	B3-U0-G2	15207	96	B3-U0-G2	17262	109	B3-U0-G2	

*LED Chips are frequently updated therefore values are nominal.

RECOMMENDED LUMEN MAINTENANCE

Ambient Temperature C	0 hrs.	25K hrs.	50K hrs.	75K hrs.	100K hrs
25	25	100%	97%	92%	88%
30	30	100%	97%	92%	88%
35	40	100%	95%	90%	85%
40	50	100%	94%	89%	83%

FOOTNOTES:
1 - Lumen maintenance values at 25˚C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing.
2 - In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).
3 - In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times NA LM-80-08 total test duration (in hours) for the device under testing ((DUT) i.e. the packaged LED chip).

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PHOTOMETRICS

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Luminaire photometry has been conducted by an accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See http://www.lsi-industries.com/products/led-lighting-solutions.aspx for detailed photometric data.

CRUS-SC-SS-50

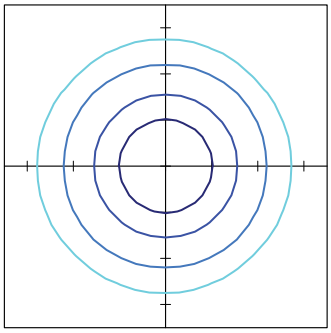
LUMINAIRE DATA

Wide Distribution	
Description	5000 Kelvin, 70 CRI
Delivered Lumens	13,674
Watts	97.9
Efficacy	140
IES Type	Type VS - Very Short
BUG Rating	B3-U0-G1

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)°	3652.2	26.7%
Medium (30-60)°	7382.4	54.0%
High (60-80)°	2489.8	18.2%
Very High (80-90)°	149.4	1.1%
Uplight (90-180)°	0.0	0.0%
Total Flux	13673.8	100%

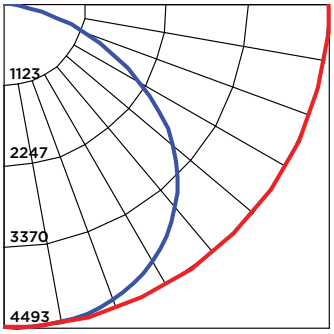
ISO FOOTCANDLE PLOT



15' Mounting Height / 10' Grid Spacing

10 FC 5 FC 2 FC 1 FC

POLAR CURVE



CRUS-AC-SS-50

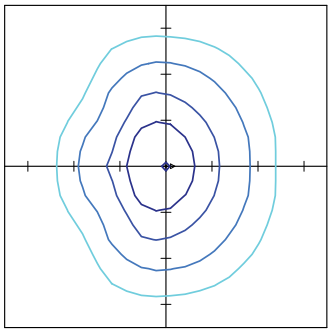
LUMINAIRE DATA

Wide Distribution	
Description	5000 Kelvin, 70 CRI
Delivered Lumens	11595
Watts	98.8
Efficacy	117
IES Type	Type III - Very Short
BUG Rating	B2-U0-G2

Zonal Lumen Summary

Zone	Lumens	%Luminaire
Low (0-30)°	2766.0	23.9%
Medium (30-60)°	5868.8	50.6%
High (60-80)°	2712.2	23.4%
Very High (80-90)°	248.1	2.1%
Uplight (90-180)°	0.0	0.0%
Total Flux	11595.1	100%

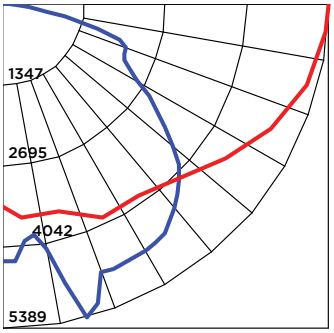
ISO FOOTCANDLE PLOT



15' Mounting Height / 10' Grid Spacing

10 FC 5 FC 2 FC 1 FC

POLAR CURVE



PRODUCT DIMENSIONS

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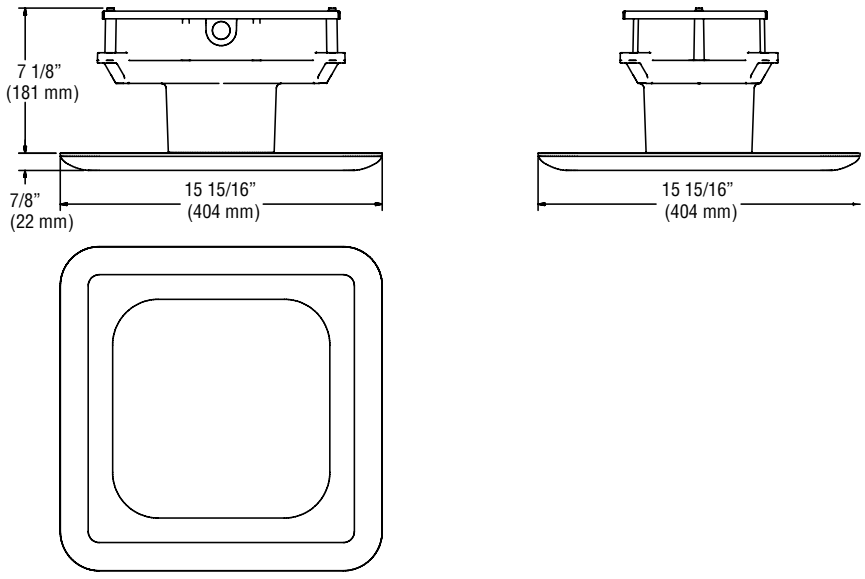
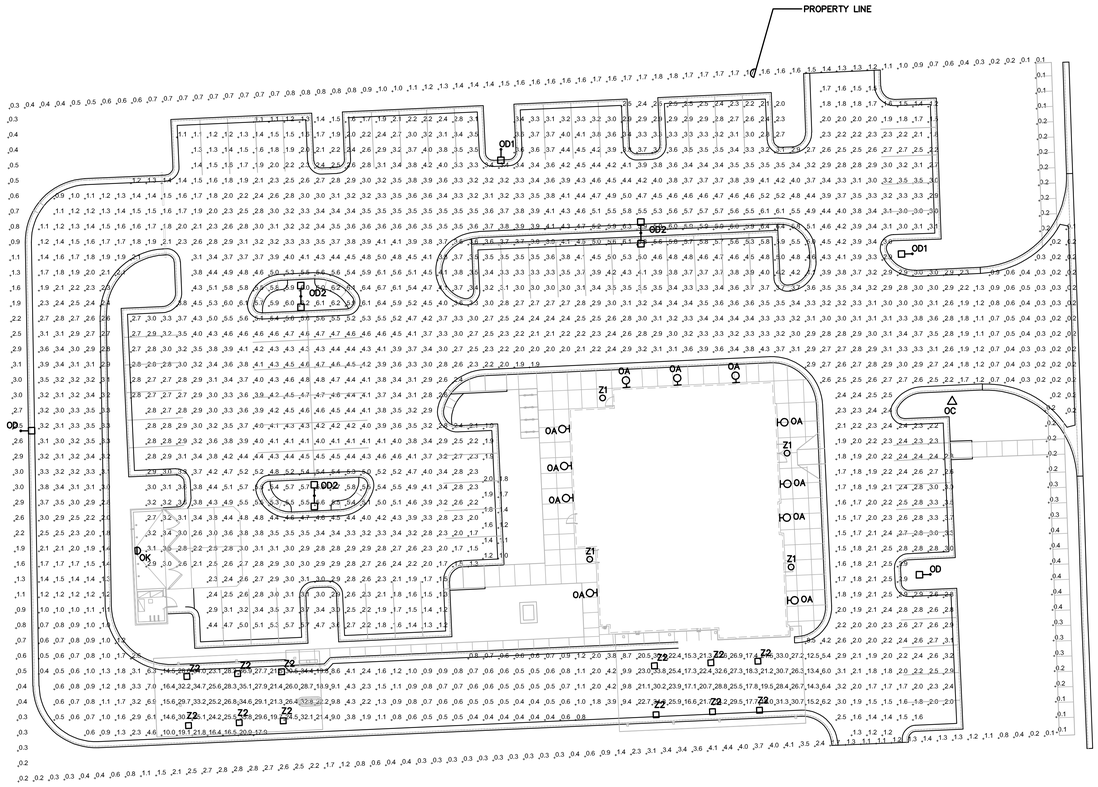
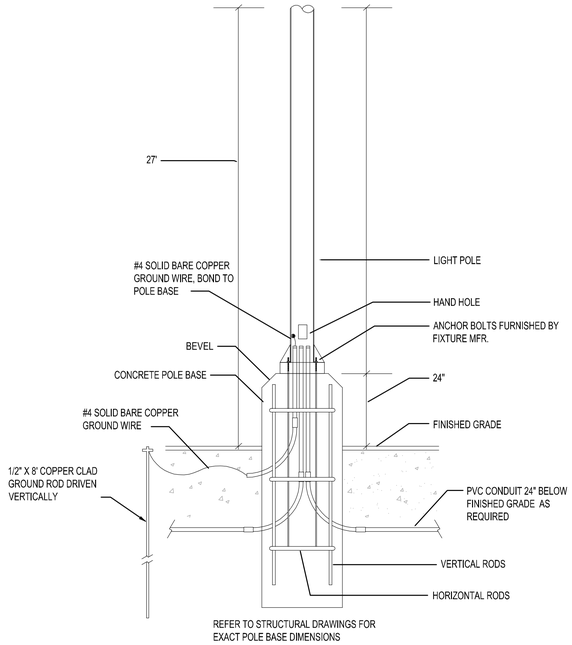




1 PHOTOMETRIC PLAN

SCALE: 1"=20'-0"

0 10 20 30 40



2 TYPICAL POLE BASE DETAIL

NOT TO SCALE

PHOTOMETRIC STATISTICS (MAINTAINED) IN PARKING LOT (NOT INCLUDING UNDER CANOPY LIGHTING)	
AVERAGE	3.1 FC
MAX	6.5 FC
MIN	0.3 FC

FIXTURE	HEIGHT (UNLESS NOTED OTHERWISE)	LIGHT LOSS FACTOR	COLOR	LIGHT FIXTURE SPECIFICATION	POLE	COMMENTS
0C	ON GRADE	.9	4000K	HUBBELL – FLL-42L-95-4K7-N-U-K-DB		
0D	27'	.9	4000K	COOPER/LUMARK – PRV-C60D-UNV-T3-SA-BZ	SSS-4A-25-SFM-1-4 (SINGLE LUMINAIRE)	
0D1	27'	.9	4000K	COOPER/LUMARK – PRV-C60D-UNV-T4-SA-BZ	SSS-4A-25-SFM-1-4 (SINGLE LUMINAIRE)	
0D2	27'	.9	4000K	(2) COOPER/LUMARK – PRV-C60D-UNV-T4-SA-BZ	SSS-4A-25-SFM-2-4 (TWO LUMINAIRES)	
0A	8'	.9	3000K	PROGRESS LIGHTING – P5675-31 WITH TOP COVER LENS		
0K	8'	.9	3000K	HUBBELL – LNC-SLU-3K-3-1		
Z1	10'	.9	3000K	PROVIDED WITH CANOPY		
Z2	9.5'	.5	3000K	LSI – CRUS-SC-LED-LW30-UE-WHT		

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998

DICKERSON ENGINEERING, INC.
Professional Electrical Engineers
2434 JOHN F. KENNEDY BLVD.
JERSEY CITY, NJ 07304
TEL (847) 966-0290
FAX (847) 966-0294

CHICK-FIL-A

WAUWATOSA FSU
2825 N MAYFAIR RD
WAUWATOSA, WI 53222

FSR# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

ARCHITECT'S PROJECT #	#
PRINTED FOR	ZONING REVIEW
DATE	04/05/2023
DRAWN BY	JR/GD

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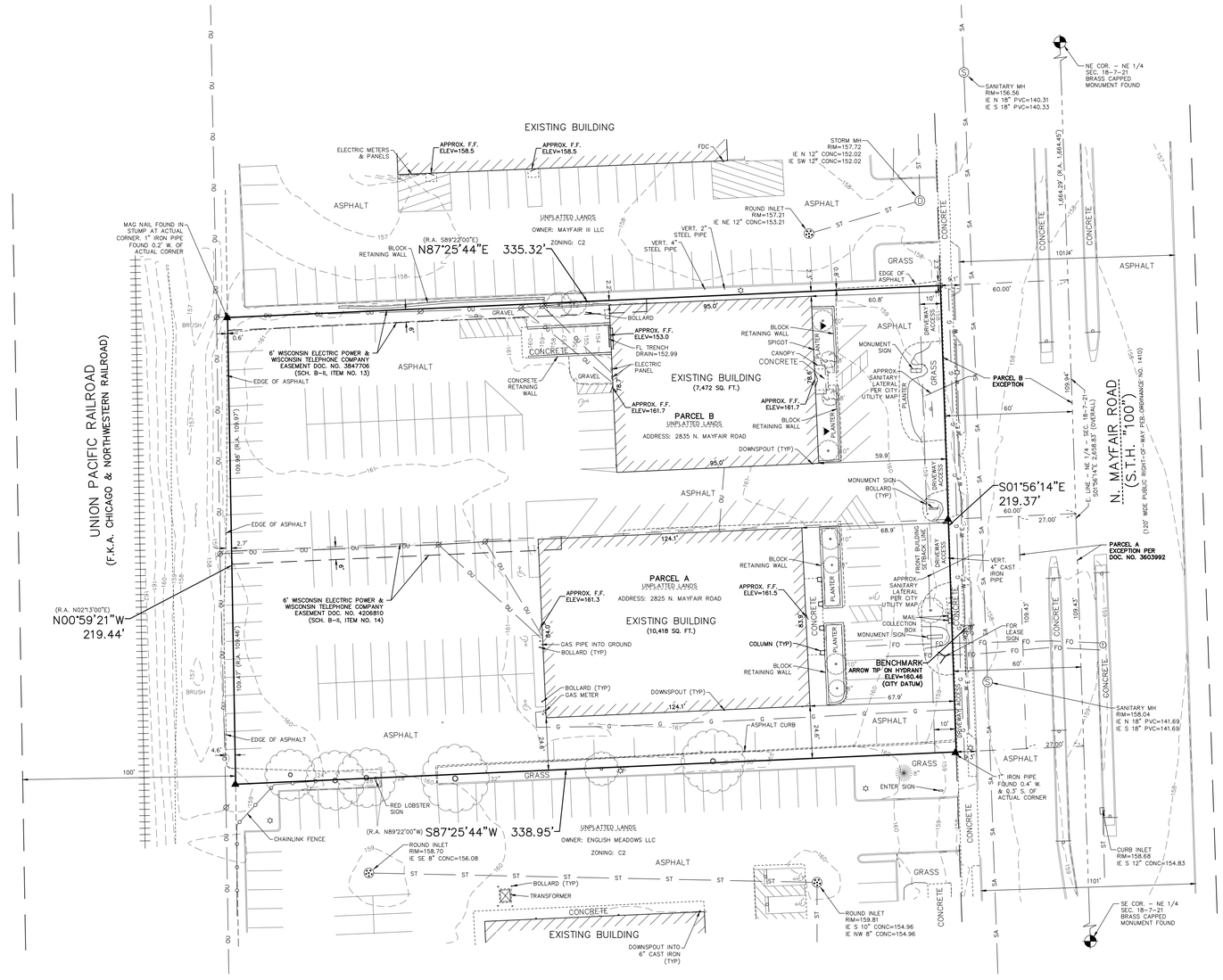
SHEET
PHOTOMETRIC PLAN

SHEET NUMBER
E-102



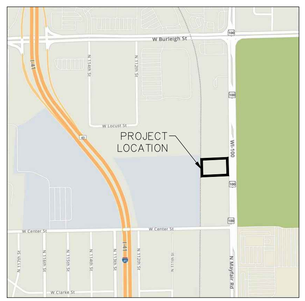
TOTAL AREA
1.698 ACRES
73,952 SQ. FT.

LEGEND:

WATER VALVE IN BOX	EXISTING STORM SEWER AND MANHOLE
TELEPHONE MANHOLE	EXISTING SANITARY SEWER AND MANHOLE
EXISTING ROUND CATCH BASIN	EXISTING WATER LINE AND HYDRANT
EXISTING CURB INLET	EXISTING OVERHEAD UTILITY LINE
UTILITY POLE WITH GUY WIRE	EXISTING UNDERGROUND FIBER OPTIC LINE
ELECTRIC TRANSFORMER	EXISTING UNDERGROUND ELECTRIC CABLE
EXISTING LIGHT POLE	EXISTING UNDERGROUND GAS LINE
EXISTING SIGN	EXISTING CURB AND GUTTER
HANDICAP PARKING STALL	EXISTING CHAINLINK FENCE
FLOOD LIGHT	PROPERTY LINE
1" IRON PIPE FOUND	RIGHT-OF-WAY LINE
MAG NAIL FOUND	ADJACENT PROPERTY LINE
DECIDUOUS TREE	EXISTING GROUND CONTOUR
CONIFEROUS TREE	
SHRUB	
(R.A.) "RECORDED AS" INFORMATION	

1"= 30' SCALE 30' 0 30' 60' FEET

NOTE:
SURFACE INDICATIONS OF UTILITIES ALONG WITH DIGGER'S HOTLINE MARKINGS ON THE SURVEYED PARCEL HAVE BEEN SHOWN. SIZES AND ELEVATION OF UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS OF VISIBLE STRUCTURES IN COMBINATION WITH AVAILABLE DATA PROVIDED TO EXCEL ENGINEERING. EXCEL ENGINEERING MAKES NO GUARANTEE THAT ALL THE EXISTING UTILITIES IN THE SURVEYED AREA HAVE BEEN SHOWN NOR THAT THEY ARE IN THE EXACT LOCATION INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES CRITICAL TO CONSTRUCTION.



VICINITY MAP
NOT TO SCALE

CURRENT ZONING: C2 - General Commercial District

Building Setbacks:
Front: 10 feet

Street Side: 5 feet

Interior Side: 3 feet, no side setback is required abutting another C-zoned lot occupied by a building with no side setback along the shared lot line

Rear: 10 feet, none if abutting railroad right-of-way

Maximum Building Height: None

Parking Requirements:
8 spaces per 1,000 square feet plus vehicle stacking spaces as required. All drive-through facilities must provide at least 4 stacking spaces for vehicles at the pick-up or teller window and at least 4 spaces from the order box. Each stacking space must be at least 20 feet in length.

The current Zoning Setbacks have been listed per the City of Wauwatosa Zoning Code. Zoning information shown hereon was obtained through research by Excel. Zoning information was not provided by the client as part of this survey as required by ALTA Table A, Item 6(b) and may be incomplete.

ALTA / NSPS LAND TITLE SURVEY

SURVEYOR'S CERTIFICATE
ALTA / NSPS Land Title Survey

To:
1. Fidelity National Title Insurance Company
2. Chicago Title Company
3. Chick-fil-A, Inc.
4. MAYFAIR OFFICE, LLC, a Wisconsin limited liability company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 5, 6(b), 7(a), 7(b)(1), 8, 9, 11(a), 13, 16, 17, 18, 19 & 20(a) of Table A thereof. The field work was completed on July 28, 2022.

_____ Date of Plat or Map:_____

Ryan Wilgreen, P.L.S. No. S-2647
ryan.w@excelengineer.com
Excel Engineering, Inc.
Fond du Lac, Wisconsin 54935
Project Number: 2258540

LANDS DESCRIBED IN COMMITMENT NO. CO-12770, PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY WITH A COMMITMENT DATE OF MAY 6, 2022:

PARCEL A:
That part of the Northeast 1/4 of Section 18, Town 7 North, Range 21 East, in the City of Wauwatosa, County of Milwaukee, State of Wisconsin, bounded and described as follows: Commencing at a point on the East line and 1774.39 feet South of the Northeast corner of said 1/4 Section; thence South along the East line of said 1/4 Section 109.43 feet to a point; thence North 89°22' West on a line which is parallel to the North line of said 1/4 Section, 398.95 feet to a point on the East line of the right-of-way of the Chicago & Northwestern Railway; thence North 2°13' East along the East line of the right-of-way of said Railway, 109.46 feet to a point; thence South 89°22' East on a line which is parallel to the North line of said 1/4 Section, 397.14 feet to the place of beginning, except that portion conveyed to the State of Wisconsin by Warranty Deed recorded August 29, 1957, in Volume 3736 of Deeds, Page 272, as Document No. 3603992.
Tax Key: 299-9986-00
Address: 2825 N. Mayfair Road

PARCEL B:
That part of the Northeast 1/4 of Section 18, Town 7 North, Range 21 East, in the City of Wauwatosa, County of Milwaukee, State of Wisconsin, bounded and described as follows: Commencing at a point on the East line and 1664.45 feet South of the Northeast corner of said 1/4 Section; thence South along the East line of said 1/4 Section 109.94 feet to a point; thence North 89° 22' West on a line which is parallel to the North line of said 1/4 Section 397.14 feet to a point on the East line of the right of way of the Chicago & Northwestern Railway; thence North 2°13' East along the East line of the right of way of said Railway 109.97 feet to a point; thence South 89° 22' East on a line which is parallel to the North line of said 1/4 Section 395.32 feet to the place of beginning, excepting the East 60 feet thereof.
Tax Key No.: 299-9987-00
Address: 2835 N. Mayfair Road

ALTA NOTES:

1. Bearings are referenced to the Wisconsin State Plane Coordinate System, South Zone (NAD27). The East line of the Northeast 1/4 of Section 18-7-21 has a bearing of North 01°-56'-14" West.

2. Only the improvements that were visible from above ground at time of survey and through a normal search and walk through of the site are shown on the face of this plat. Lawn sprinkler systems, if any, are not shown on this survey.

3. Surface indications of utilities along with Digger's Hotline markings on the surveyed parcel have been shown. Offsite observations have not been made to determine the extent of utilities serving or existing on the property. Public records have not been provided for additional information. Controlled underground exploratory effort together with Digger's Hotline markings is recommended to determine the full extent of underground service and utility lines. Contact Digger's Hotline at 1-800-242-8511.

4. This survey may not reflect all utilities, or improvements, if such items are hidden by landscaping, or areas covered by such items as dumpsters or trailers.

5. The locations of the property lines shown on the face of this plat are based on the description and information furnished by the client, together with the title commitment. The parcel that is defined may not reflect actual ownership, but reflects what was surveyed. For ownership, consult your title company.

6. Based upon a review of the Federal Emergency Management Agency Flood Insurance Rate Map No. 55079C0058E with an effective date of September 26, 2008, the property falls within Zone "X" (Unshaded-areas determined to be outside the 0.2% annual chance flood hazard).

7. The property described hereon contains 1.698 acres (73,952 sq. ft.) of land, more or less.

8. **Fidelity National Title Insurance Company, Commitment No. CO-12770, with a commitment date of May 6, 2022 has been reviewed in conjunction with the preparation of this survey. Notes related to the review of this title policy, Schedule B-II Exceptions are as follows:**

   #11 Rights and easements, if any, in and to any and all railroad switches, sidetracks, spur tracks, and rights of way located upon or appurtenant to the Land.

   #12 Rights of the public in so much of the subject premises as are affected by Ordinance adopted by the Board of Supervisors of Milwaukee County on June 29, 1926 and approved by the various towns in said County, establishing the width of Lovers Lane at 120 feet, and ordaining that said highway be widened to the width so established. A notice and plat etc. in said matter was filed in Milwaukee County on November 12, 1926 as No 1410. **This document establishes the width of N. Mayfair Road (previously Lovers Lane) to be a 120' wide public right-of-way. Right-of-way width is depicted on this survey.**

   #13 Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document recorded on November 22, 1960, as Document No. 3847706. **Easement is depicted on this survey.**

   #14 Easement(s) for the purpose(s) and rights incidental thereto, as granted in a document recorded on September 15, 1965, as Document No. 4206810. **Easement is depicted on this survey.**

   #15 Easement Deed by Court Order in Settlement of Landowner Action recorded August 12, 2013 as Document No. 10282052. **This document affects the subject property and contains a general easement for the installation, maintenance, replacement, relocation, removal, etc. of cables, handholes, etc. for a telecommunication cable system. This document does not contain enough information to graphically plot the 20' wide easement referenced on page 3 of this document.**

9. Other commitment items not specified hereon may not have been considered relevant to an ALTA/NSPS Land Title Survey, and have not been reviewed in conjunction with preparation of this plat (i.e. Annexation agreements, Leases, Mortgages, Liens, special assessments, covenants, trusts, unspecified or unrecorded rights).

10. In regards to ALTA/NSPS "Table A", Item No. 9, the subject property contains 129 regular striped parking stalls and 5 handicap accessible striped parking stalls for a total of 134 striped parking stalls.

11. In regards to ALTA/NSPS "Table A", Item No. 13, adjacent owner information was taken from the Milwaukee County GIS Website on the sheet issue date of this survey.

12. In regards to ALTA/NSPS "Table A", Item No. 16, at the time of this survey there was no visible sign of earth moving work, building construction, or building additions.

13. In regards to ALTA/NSPS "Table A", Item No. 17, no proposed changes to the street right-of-way lines have been disclosed by the City of Wauwatosa or the current Title Commitment. There was no visible evidence of recent street or sidewalk construction or repairs at the time of the survey fieldwork.

14. In regards to ALTA/NSPS "Table A", Item No. 18, all plottable offsite easements or servitudes benefiting the subject property as disclosed in record documents provided to Excel Engineering, Inc. have been depicted on this survey.

15. In regards to ALTA/NSPS "Table A", Item No. 19, Excel Engineering, Inc. carries a $2,000,000 Professional Liability Insurance Policy. Certificate of Insurance will be provided upon request.

16. In regards to ALTA/NSPS "Table A", Item No. 20(a), through the normal course of conducting a survey, there was no visible evidence of the subject property being used as a solid waste dump, sump or sanitary landfill.

EXCEL
ARCHITECTS • ENGINEERS • SURVEYORS
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100 Camelot Drive
Fond Du Lac, WI 54935
Phone: (920) 926-9800
www.EXCELENGINEER.com

PROJECT INFORMATION

ALTA/NSPS LAND TITLE SURVEY
2825 & 2835 N. MAYFAIR ROAD • WAUWATOSA, WI 53222

PROFESSIONAL SEAL

SHEET DATES
ISSUE DATE AUG. 9, 2022
REVISIONS

JOB NUMBER
2258540

SHEET NUMBER
AL

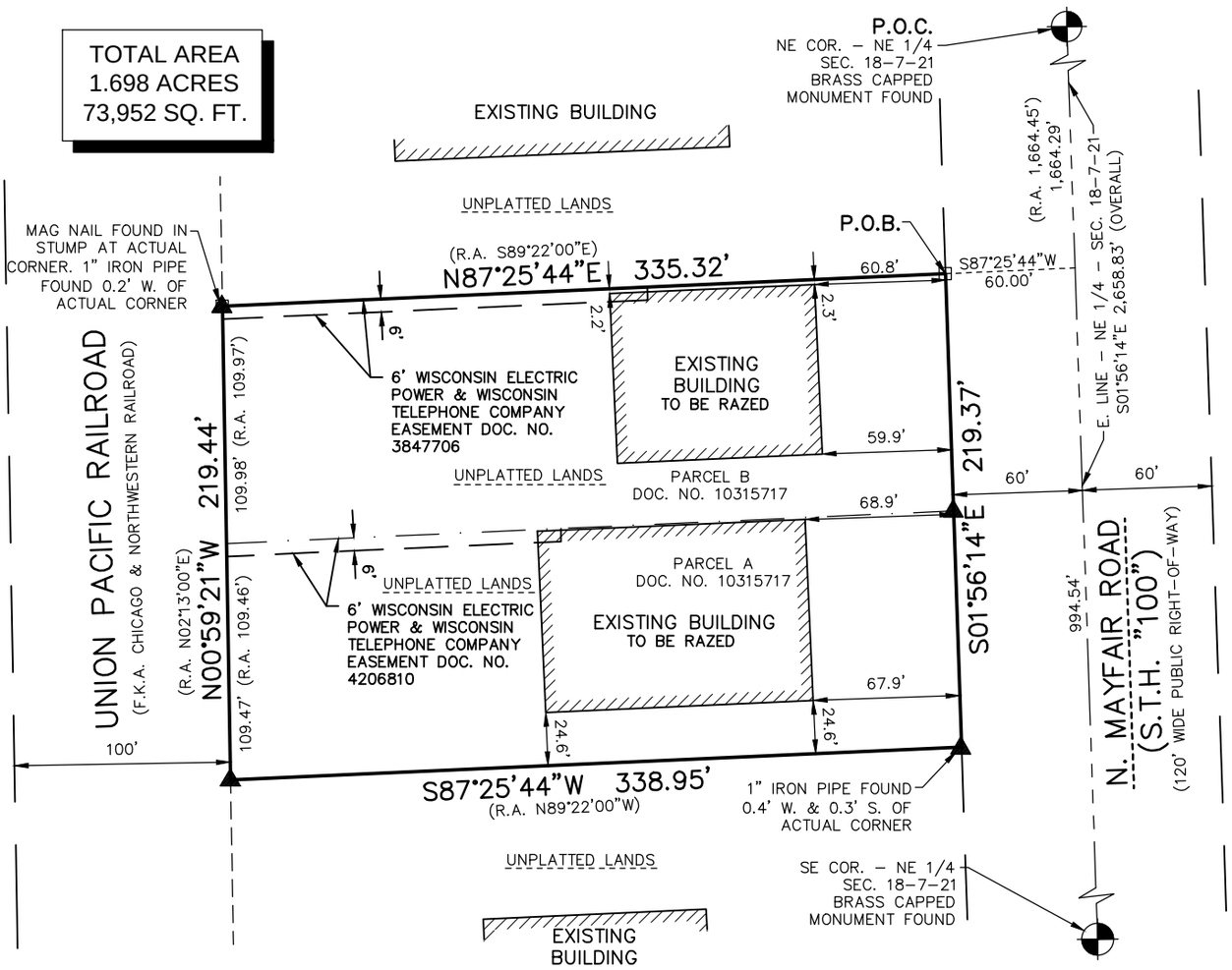
2022 © EXCEL ENGINEERING, INC

CERTIFIED SURVEY MAP NO. _____

FOR

CHICK–FIL–A, INC.

PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 18, TOWNSHIP 7 NORTH, RANGE 21 EAST, CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.



LEGEND

(R.A.) "RECORDED AS" INFORMATION

▲ – 1" IRON PIPE FOUND

⊡ – MAG NAIL FOUND

⌖ – SECTION CORNER MONUMENT FOUND

NORTH POINT REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD27). THE EAST LINE OF THE NORTHEAST 1/4 OF SECTION 18 HAS A BEARING OF SOUTH 01°–56'–14" EAST.

NORTH

80' 0 80' 160'

1"= 80'

SCALE FEET

OWNER:
CHICK–FIL–A, INC.
5200 BUFFINGTON ROAD
ATLANTA, GA 30349

SHEET 1 OF 3 SHEETS

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100 Camelot Drive
Fond Du Lac, WI 54935
Phone: (920) 926-9800
www.EXCELENGINEER.com
JOB NO. 2258540

CERTIFIED SURVEY MAP NO. _____

PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 18, TOWNSHIP 7 NORTH, RANGE 21 EAST, CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

I, Ryan Wilgreen, Professional Land Surveyor, hereby certify:

That I have surveyed, divided and mapped a parcel of land described below.

That I have made such Certified Survey under the direction of Chick-fil-a, Inc. bounded and described as follows:

Part of the Southeast 1/4 of the Northeast 1/4 of Section 18, Township 7 North, Range 21 East, City of Wauwatosa, Milwaukee County, Wisconsin being more particularly described as follows:

Commencing at Northeast corner of the Northeast 1/4 of said Section 18; thence South 01°-56'-14" East, along the East line of said Northeast 1/4, a distance of 1,664.29 feet; thence South 87°-25'-44" West, a distance of 60.00 feet to the Westerly right-of-way line of N. Mayfair Road, said point also being the point of beginning; thence South 01°-56'-14" East along said Westerly line, a distance of 219.37 feet to the South line of lands described as "Parcel A" in Warranty Deed recorded in the Milwaukee County Register of Deeds office on November 25, 2013 as Document No. 10315717; thence South 87°-25'-44" West along said South line, a distance of 338.95 feet to the East right-of-way line of the Union Pacific Railroad; thence North 00°-59'-21" West along said East line, a distance of 219.44 feet to the North line of lands described as "Parcel B" in said Warranty Deed; thence North 87°-25'-44" East along said North line, a distance of 335.32 feet to the point of beginning and containing 1.698 acres (73,952 sq. ft.) of land more or less.

That such is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

That I have fully complied with the provisions of Section 236.34 of the Wisconsin Statutes and the Subdivision Ordinance of the City of Wauwatosa in surveying, dividing and mapping the same.

_____

Ryan Wilgreen, P.L.S. No. S-2647
ryan.w@excelengineer.com
Excel Engineering, Inc.
Fond du Lac, Wisconsin 54935
Project Number: 2258540

CERTIFIED SURVEY MAP NO. _____

PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION 18, TOWNSHIP 7 NORTH, RANGE 21 EAST, CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

Chick-fil-a, Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Georgia, as owner, does hereby certify that said corporation caused the land described on this map to be surveyed, divided and mapped as represented on this map.

Chick-fil-a, Inc. does further certify that this map is required by s.236.10 or s.236.12 to be submitted to the following for approval or objection:

1. City of Wauwatosa

WITNESS the hand and seal of said owner this _____ day of _____, 20__.

Chick-fil-a, Inc.

_____

_____, _____
(Print) (Title)

STATE OF _____)

_____COUNTY)SS

Personally, came before me this _____ day of _____, 20___, the above named

_____ to me known to be the person who executed the foregoing instrument and acknowledged the same.

_____

Notary Public, _____ County, ____

My Commission Expires:_____

PLANNING COMMISSION APPROVAL

Approved by the Planning Commission of the City of Wauwatosa this _____ day of _____, 20___.

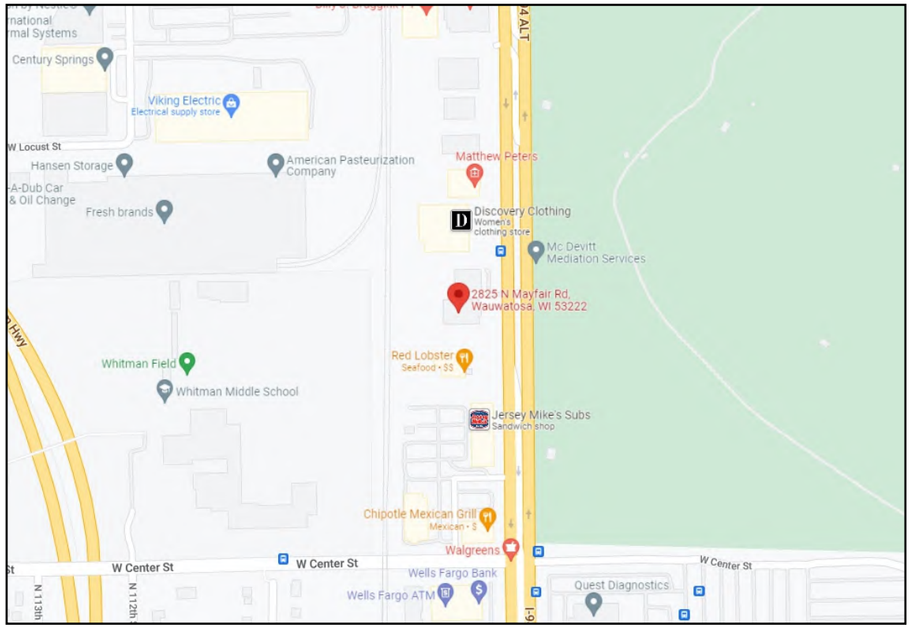
_____ _____

_____, Chairperson _____, Secretary

COMMON COUNCIL APPROVAL

Approved by the Common Council of the City of Wauwatosa this _____ day of _____, 20___.

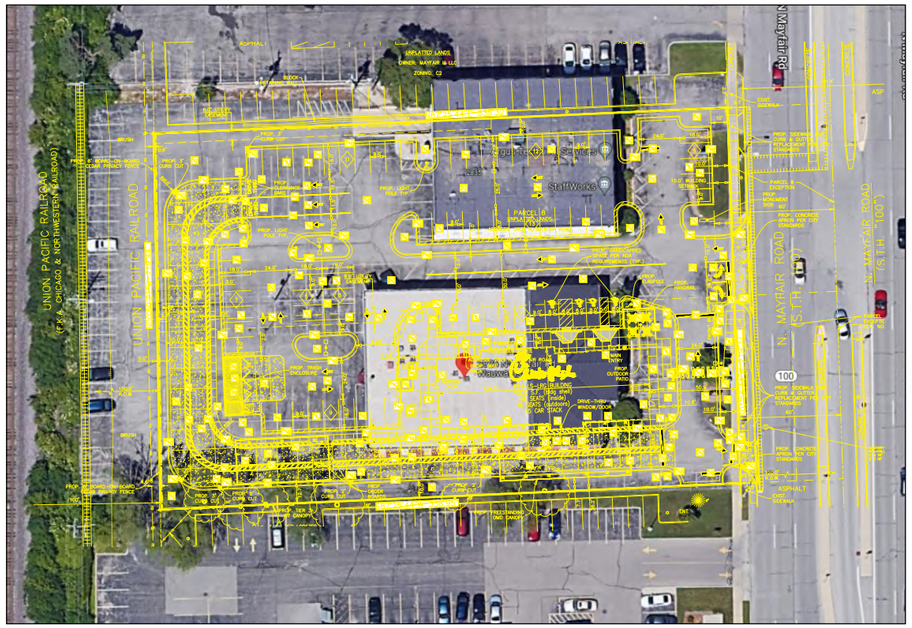
_____
Steven Braatz, City Clerk
SHEET 3 OF 3 SHEETS



VICINITY MAP

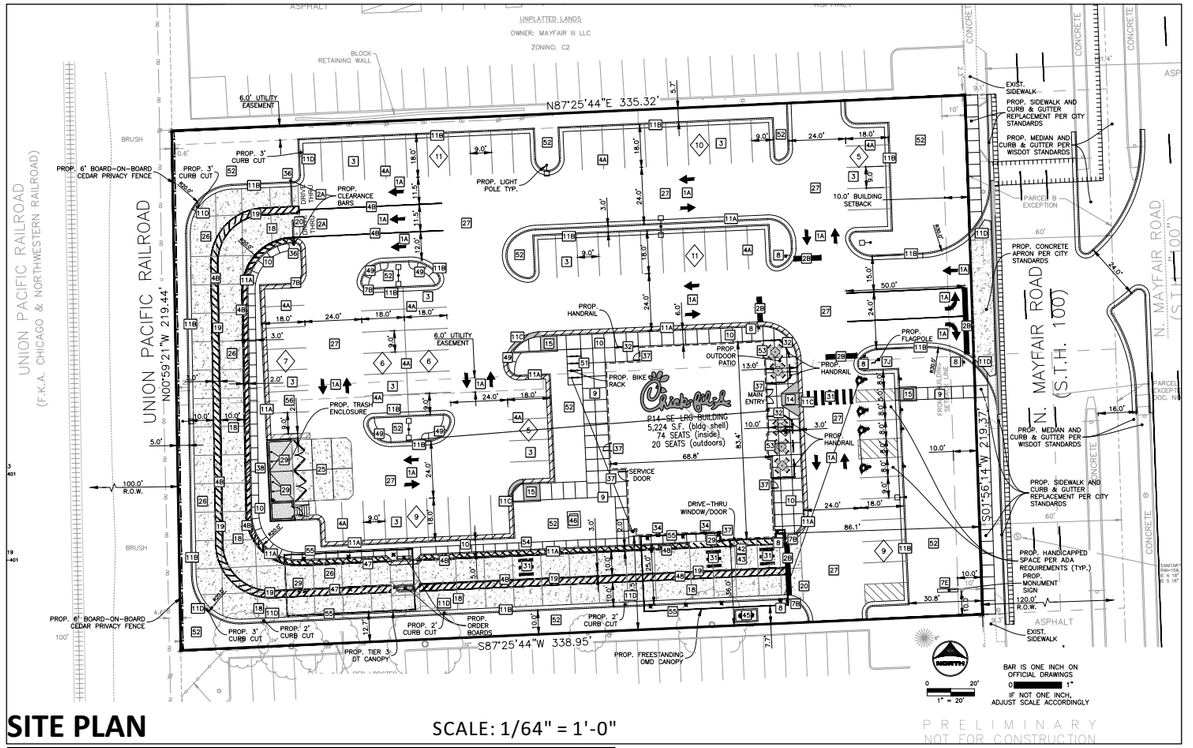
N.T.S.

NORTH



AERIAL VIEW

N.T.S.



SITE PLAN

SCALE: 1/64" = 1'-0"

NORTH

Design #
0633168AR2
Sheet 1 of 19
Client
#5293
Address
2825 N Mayfair Rd, Wauwatosa, WI 53222
Account Rep. KRISTEN HAMILTON, BRIAN HEAD
Designer LEAH LANSFORD
Date 8/6/22

Approval / Date	
Client	
Sales	
Estimating	
Art	
Engineering	
Landlord	

Revision/Date

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS. LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS. DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

CHANDLER SIGNS

National Headquarters	14201 Sovereign Road #101 Fort Worth, TX 76155 (214)902-2000 Fax(214)902-2044
San Antonio	17319 San Pedro Ave Ste 200 San Antonio, TX 78232 (210)349-3804 Fax (210)349-8724
Northeast US	2301 River Road Ste 201 Louisville, KY 40206 (502) 897-9800 Cell (502) 554-2575
Georgia	111 Woodstone Place Dawsonville, GA 30534 (678) 725-8852 Fax (210) 349-8724
South Texas	PO BOX 125 206 Doral Drive Portland, TX 78374 (361) 563-5599 Fax (361) 643-6533

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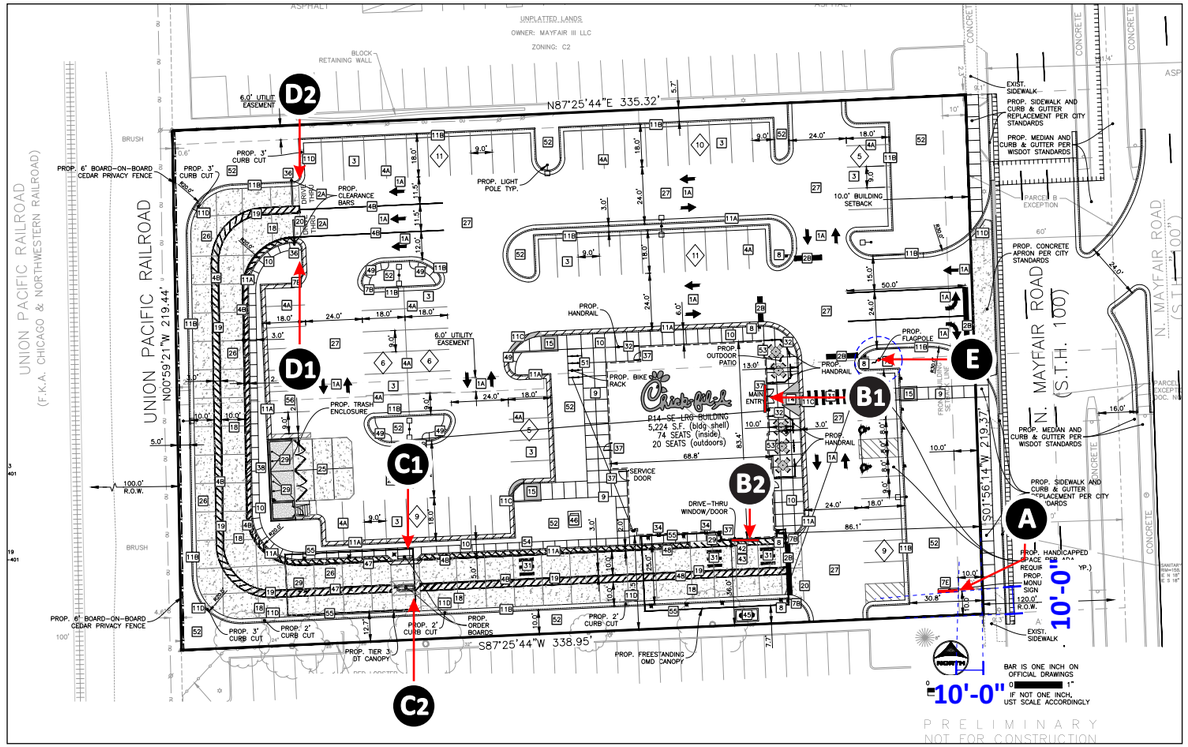
Chick-fil-A

SITE PLAN

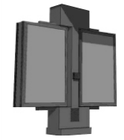
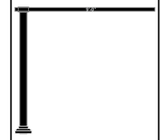
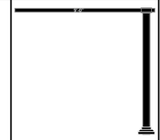


SITE PLAN 1

SCALE: 1/64" = 1'-0"

NORTH

NOTE:
FOR LOCATIONS OF TRAFFIC D.O.T. SIGNS; REFER TO SITE PLAN 2 ON PAGE 3 AND PAGE 16.
FOR LOCATIONS OF BUILDING AWNINGS; REFER TO SITE PLAN 3 ON PAGE 4 AND PAGE 22.

SIGN I-D LETTER	FACE A	FACE B
A		
B1-2	5'-0" Chick-fil-A	N/A
C1 C2		N/A
D1		N/A
D2		N/A
E	50'	N/A

Design #	**0633168AR2**
Sheet	2 of 19
Client	#5293
Address	2825 N Mayfair Rd, Wauwatosa, WI 53222
Account Rep.	KRISTEN HAMILTON, BRIAN HEAD
Designer	LEAH LANSFORD
Date	8/6/22

Approval / Date	
Client	
Sales	
Estimating	
Art	
Engineering	
Landlord	

Revision/Date

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS. LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS. DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

CHANDLER SIGNS

National Headquarters	14201 Sovereign Road #101 Fort Worth, TX 76155 (214)902-2000 Fax(214)902-2044
San Antonio	17319 San Pedro Ave Ste 200 San Antonio, TX 78232 (210)349-3804 Fax (210)349-8724
Northeast US	2301 River Road Ste 201 Louisville, KY 40206 (502) 897-9800 Cell (502) 554-2575
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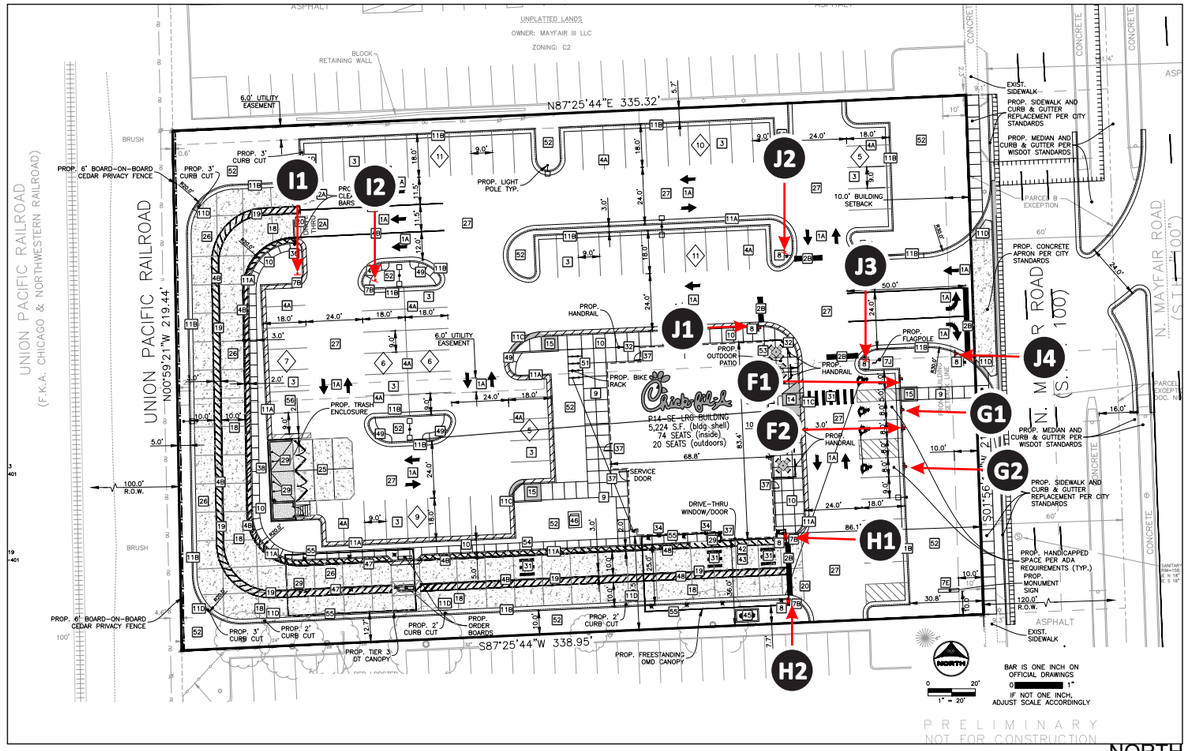
Chick-fil-A

SITE PLAN 1



SITE PLAN 2

SCALE: 1/64" = 1'-0"

NOTE:

FOR LOCATION OF BUILDING SIGNS AND DRIVE-THRU ITEMS; REFER TO SITE PLAN 1 ON PAGE 2.

FOR LOCATIONS OF BUILDING AWNINGS; REFER TO SITE PLAN 3 ON PAGE 4 AND PAGE 22.

SIGN I-D LETTER	FACE A	FACE B
F1 F2	WITH BOLLARD	N/A
G1 G2	WITH BOLLARD	N/A
H1 H2		
I1 I2		N/A
J1-4		N/A

Design #	**0633168AR2**
Sheet	3 of 19
Client	#5293
Address	2825 N Mayfair Rd, Wauwatosa, WI 53222
Account Rep.	KRISTEN HAMILTON, BRIAN HEAD
Designer	LEAH LANSFORD
Date	8/6/22

Approval / Date	
Client	
Sales	
Estimating	
Art	
Engineering	
Landlord	

Revision/Date:

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS. LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS. DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

CHANDLER SIGNS

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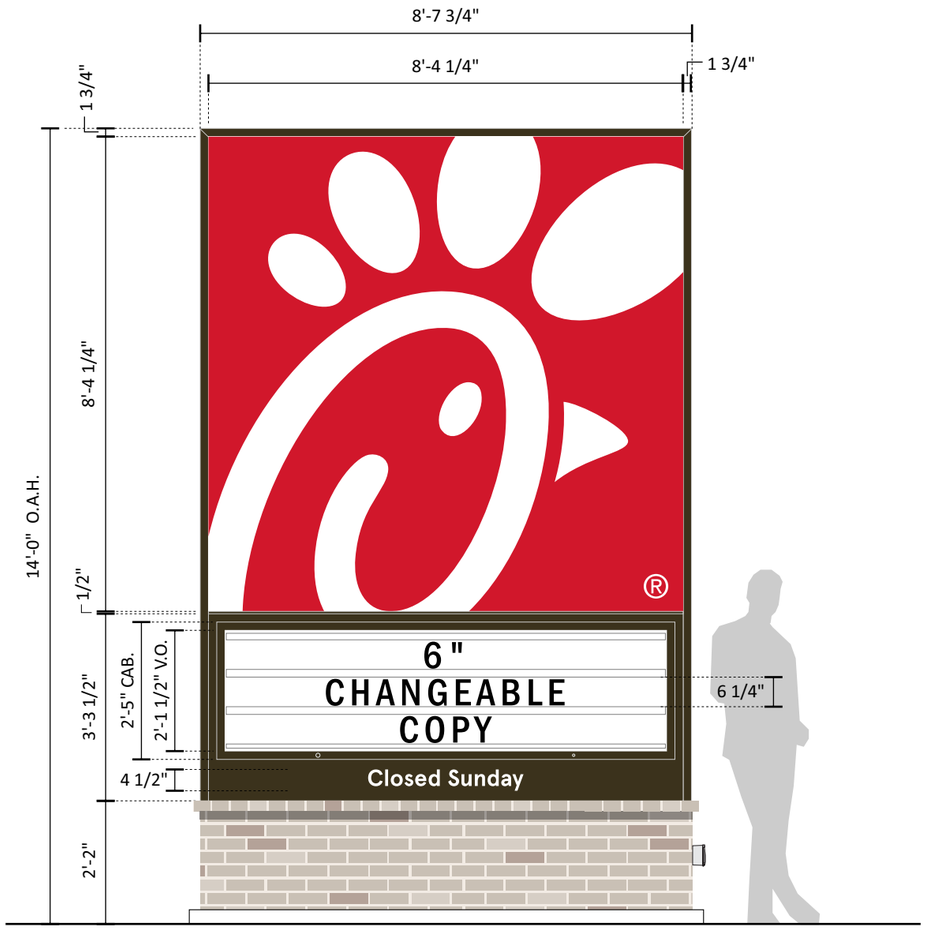
Chick-fil-A

SITE PLAN 2



A **D/F MONUMENT SIGN** SCALE: 3/8" = 1'-0"

ONE (1) REQUIRED - MANUFACTURE AND INSTALL 102 SQ. FT.

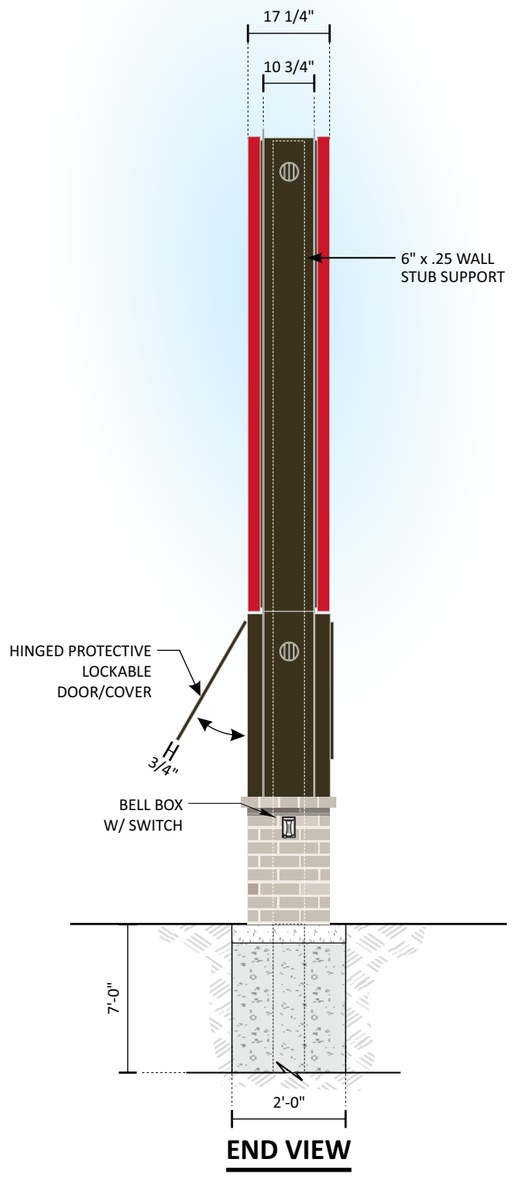
SPECS:
MONUMENT IS EXTRUDED ALUMINUM FRAME WITH ALUMINUM TUBE FRAME BASE WITH .080 ALUM. CLADDING. BASE PAINTED MATTHEWS #74155 DARK BRONZE, SEMI-GLOSS.

MAIN ID
EXTRUDED ALUMINUM CABINET PAINTED MATTHEWS #74155 DARK BRONZE, SEMI-GLOSS. WHITE FLEX FACES DECORATED WITH 3M #3630-53 CARDINAL RED TRANSLUCENT VINYL APPLIED FIRST SURFACE. TENTION FRAME RETAINER TO BE PAINTED GENESIS M SINGLE STAGE (G2-SERIES) RED #48247 CABINET IS INTERNALLY ILLUMINATED WITH WHITE LED'S.

READER BOARD DISPLAY
.125" ALUM. FACE PAN PANEL WITH ROUTED OUT OPENING FOR READER BOARD AND R.O.S.T. COPY READING "CLOSED SUNDAY", WITH HINGED LOCKABLE F-TRACK VANDAL COVER PAINTED MATTHEWS #74155 DARK BRONZE, SEMI-GLOSS. CLEAR LEXAN FACE WITH HINGED VANDAL COVER FRAME. INSET 3/16" #7328 WHITE PLEX. TRACK TO ACCOMODATE THREE (3) LINES OF 6" CHICK-FIL-A COMMERCIAL WAGNER ZIP LETTER SET OF 334. INTERNALLY ILLUMINATED WHITE LED'S..

CONCRETE PAD AND BACKER BOARD BY C.S.I.

BRICK MASONRY PROVIDED AND INSTALLED BY CUSTOMER.
BRICK TO MATCH THAT OF BUILDING.



END VIEW

DAL - MANUFACTURING
NEW RB FONT

Design #	**0633168AR2**
Sheet	4 of 19
Client	#5293
Address	2825 N Mayfair Rd, Wauwatosa, WI 53222
Account Rep.	KRISTEN HAMILTON, BRIAN HEAD
Designer	LEAH LANSFORD
Date	8/6/22

Approval / Date	
Client	
Sales	
Estimating	
Art	
Engineering	
Landlord	

Revision/Date

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS, LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS. DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

CHANDLER SIGNS

National Headquarters	14201 Sovereign Road #101 Fort Worth, TX 76155 (214)902-2000 Fax(214)902-2044
San Antonio	17319 San Pedro Ave Ste 200 San Antonio, TX 78232 (210)349-3804 Fax (210)349-8724
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South Texas	PO BOX 125 206 Doral Drive Portland, TX 78374 (361) 563-5599 Fax (361) 643-6533

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FINAL ELECTRICAL CONNECTION BY CUSTOMER

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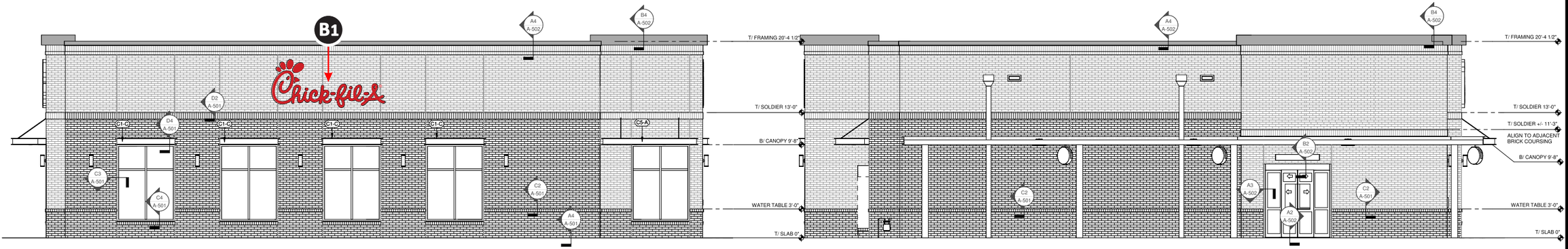
Chick-fil-A

A

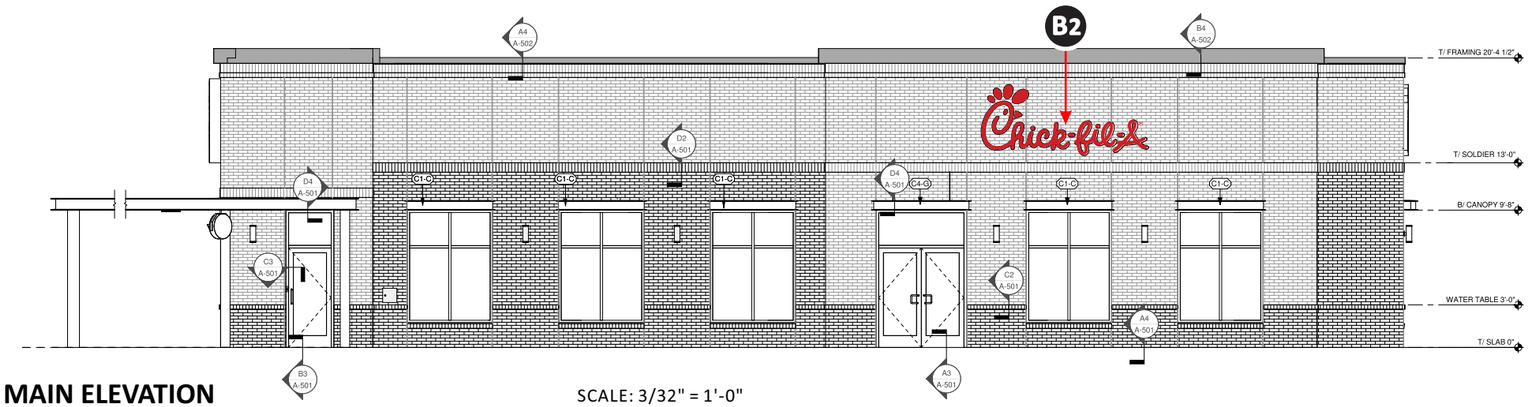


FRONT ELEVATION

SCALE: 3/32" = 1'-0"

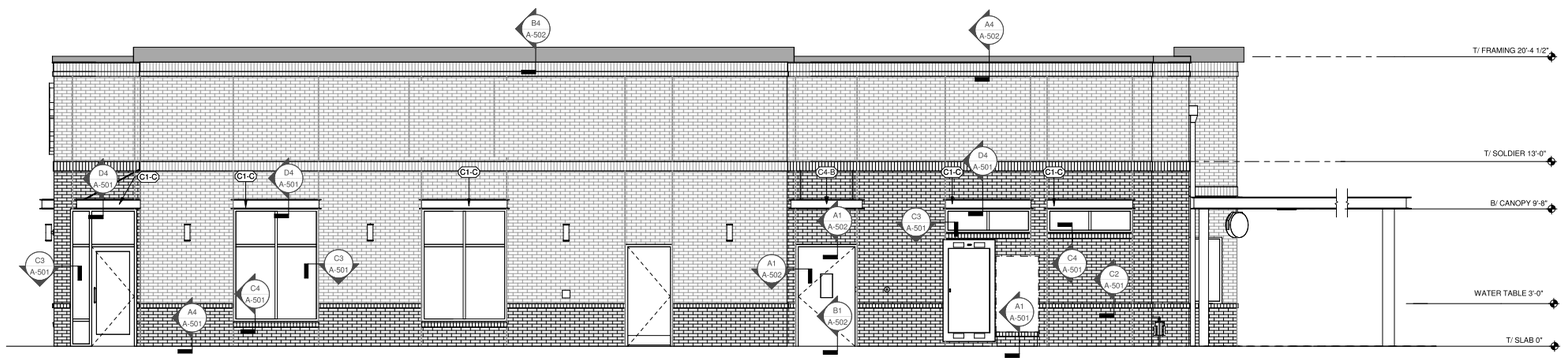
DRIVE THRU ELEVATION

SCALE: 3/32" = 1'-0"



MAIN ELEVATION

SCALE: 3/32" = 1'-0"



REAR ELEVATION

SCALE: 3/32" = 1'-0"

Design #
0633168AR2
Sheet 5 of 19
Client
#5293
Address
2825 N Mayfair Rd, Wauwatosa, WI 53222
Account Rep. KRISTEN HAMILTON, BRIAN HEAD
Designer LEAH LANSFORD
Date 8/6/22

Approval / Date	
Client	
Sales	
Estimating	
Art	
Engineering	
Landlord	

Revision/Date

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS, LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS. DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

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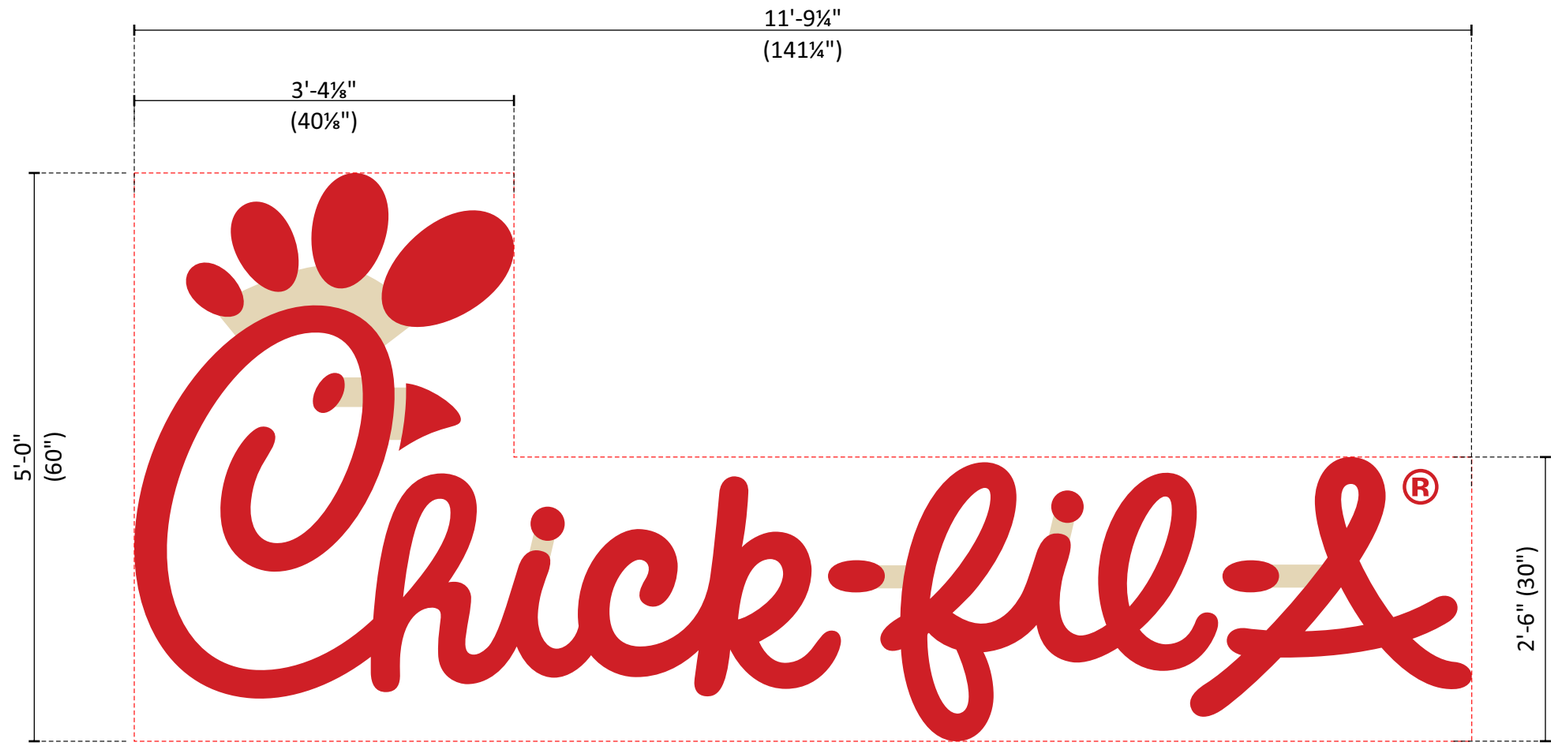
ELEVATIONS



B1-2 **CFA - PCL 5-0** SCALE: 3/4" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL

LIVE AREA: 38 SQ. FT.

OVERALL AREA: 59 SQ. FT.

SEE SECTION DETAIL

DAL - MANUFACTURING

NEW CFA LOGO

Design #	0633168AR2
Sheet	6 of 19
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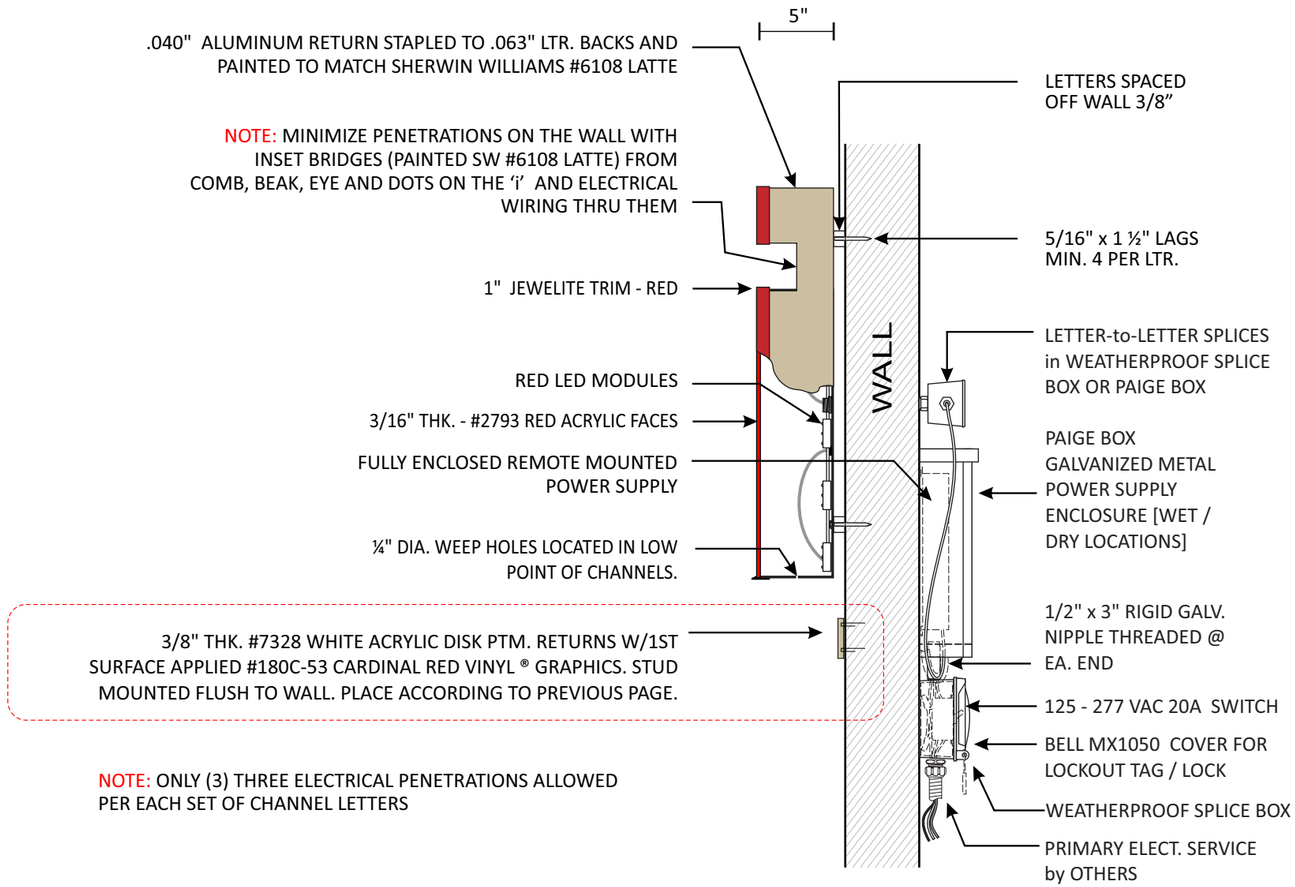
B1-2



CFA - PCL NOT TO SCALE

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Sheet	7 of 19
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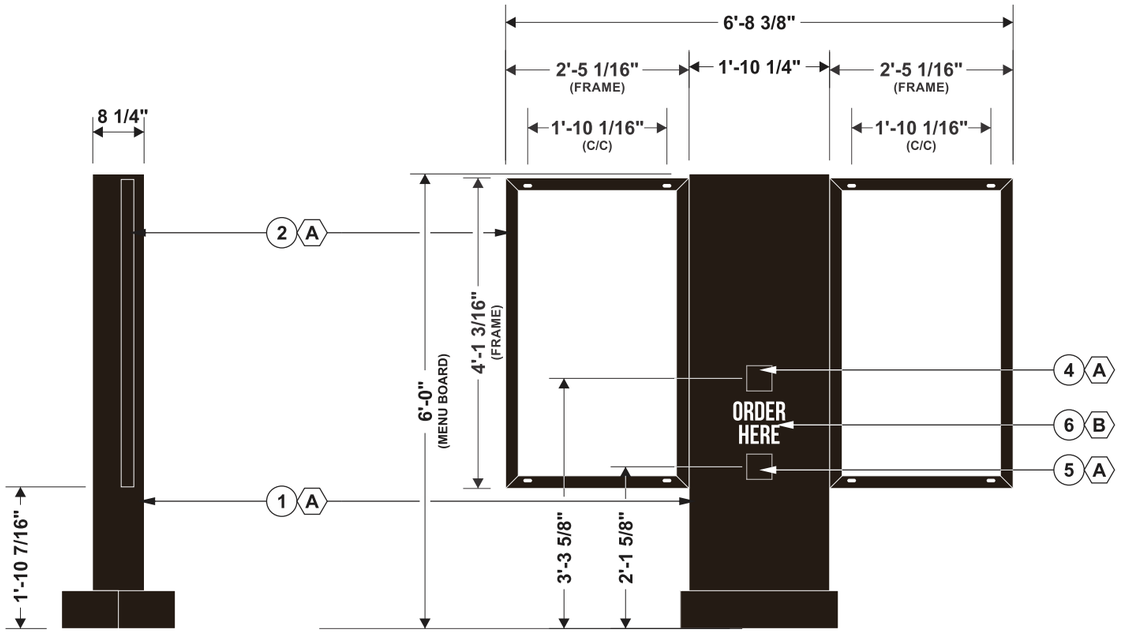
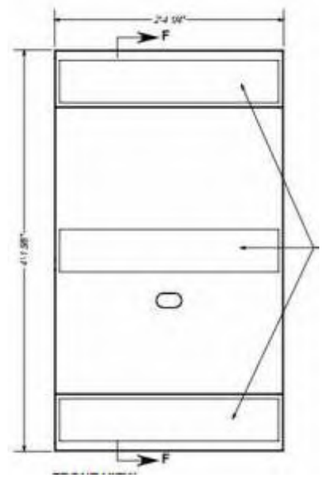
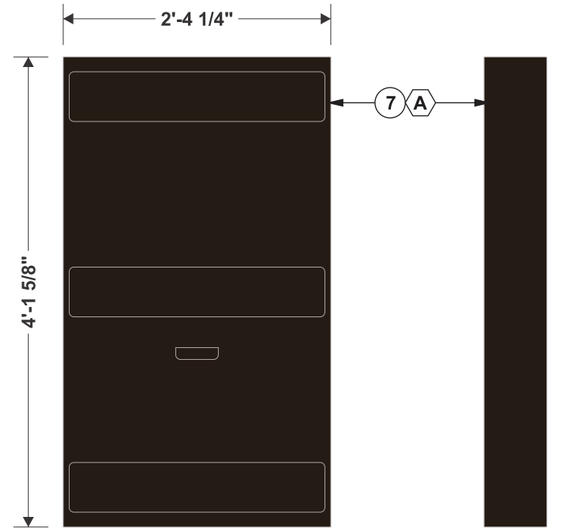
Chick-fil-A

B1-2



SIDE VIEW **FRONT VIEW**





BACK VIEW
SCALE:3/8"=1'-0"

SIDE VIEW

D1 D2 CFA - C7 DIGITAL ORDERING STATION-6FT OAH

SCALE: 1/2" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE & INSTALL

CHFI0ME3AX0001					
DRIVE-THRU MENU BOARD					
Installation: ☐	Interior:	☑	Exterior:		
Electrical specifications:					
Volts:	120	Amp.:	1.4	Circ.:	2

#	Descriptions:
1	FABRICATED C-CHANNEL STRUCTURE COVERED WITH ALUMINUM
2	2"X 2" STEEL ANGLES FRAME BOLTED TO STRUCTURE (TO HOLD DISPLAYS)
3	PLASTIC BUSHINGS (ONE EACH SIDE)
4	SPEAKER
5	MICROPHONE
6	VINYL DECAL APPLIED TO FIRST SURFACE
7	ALUMINUM ENCLOSURE FOR DISPLAY (2X)

#		Colors:
A		PAINTED CFA BRONZE
B		WHITE REFLECTIVE VINYL #680-10

SUPPLIED BY OTHERS, FOOTER INSTALLED BY CSI

Design # 0633168AR2

Sheet 8 of 19

Client #5293

Address 2825 N Mayfair Rd, Wauwatosa, WI 53222

Account Rep. KRISTEN HAMILTON, BRIAN HEAD

Designer LEAH LANSFORD

Date 8/6/22

Approval / Date	
Client	
Sales	
Estimating	
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Landlord	

Revision/Date

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS, LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

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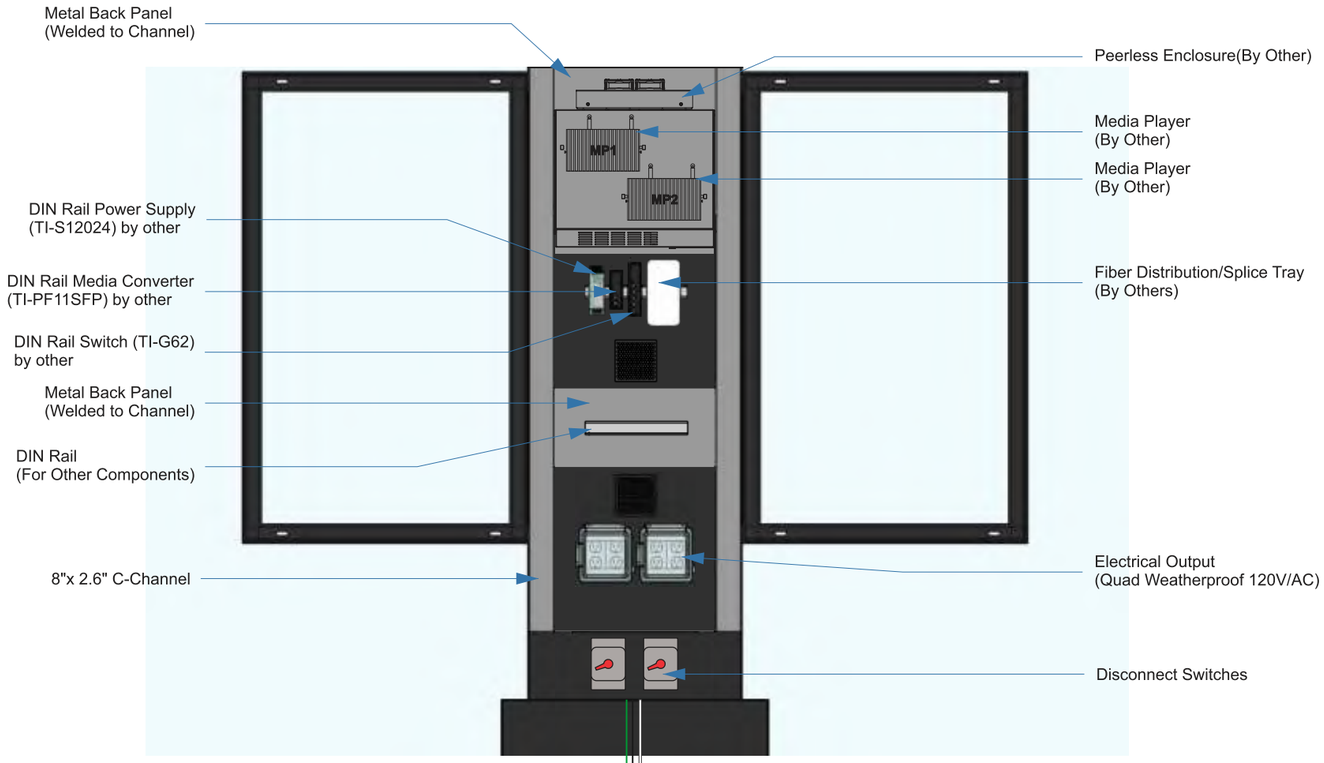
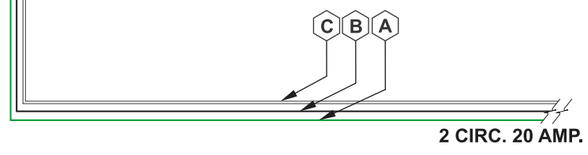
Chick-fil-A

C1-2



ELECTRICAL COMPONENTS



#		Colors:
A		GREEN ELECTRICAL WIRE
B		BLACK ELECTRICAL WIRE
C		WHITE ELECTRICAL WIRE

SECTION DETAIL

SCALE: N.T.S.

Design #
0633168AR2
Sheet 9 of 19
Client
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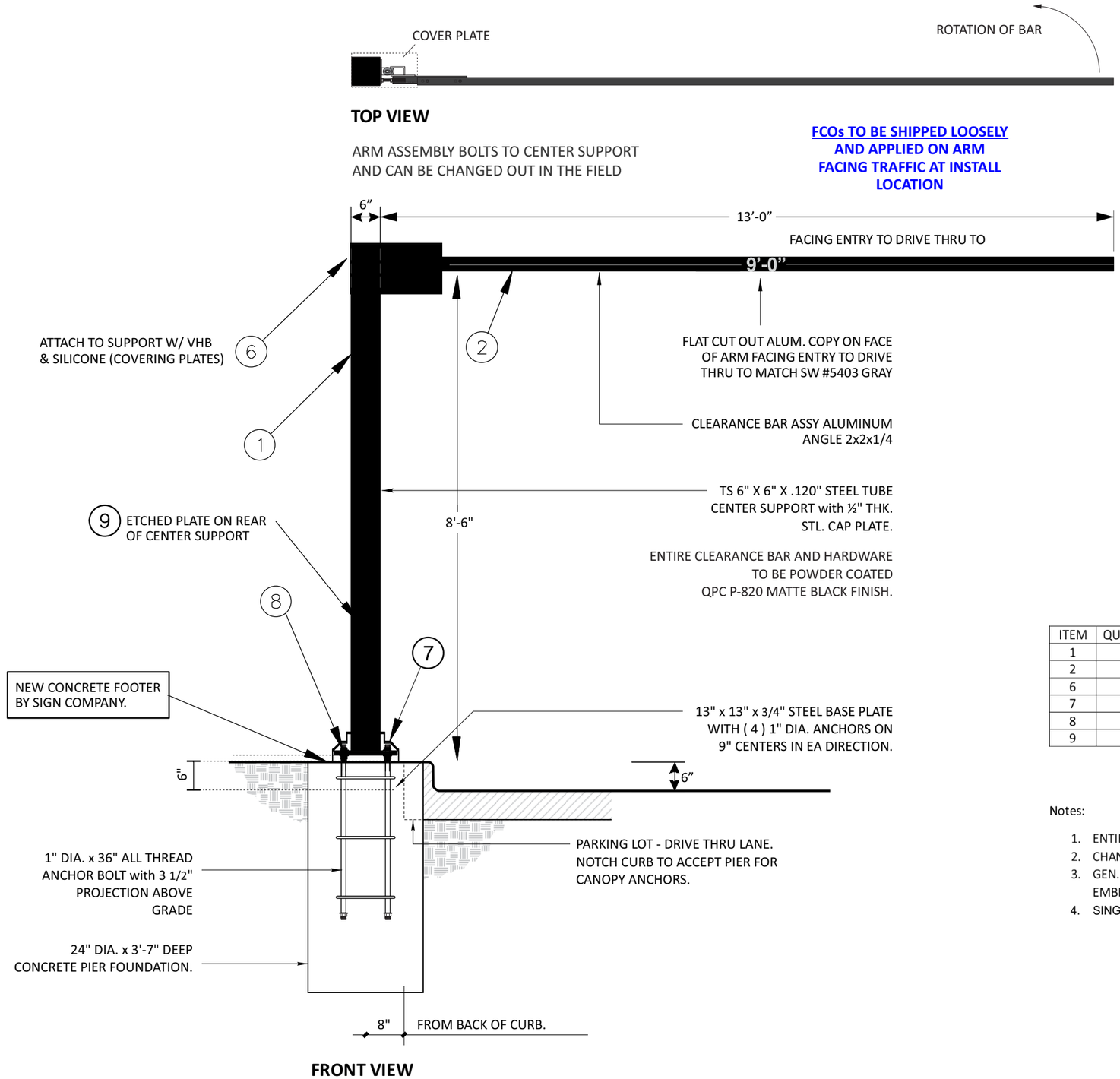
Chick-fil-A

C1-2



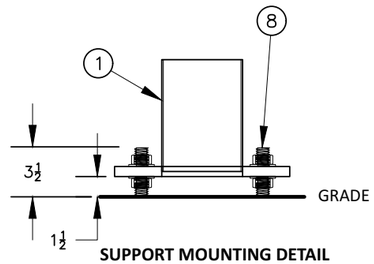
FRONT VIEW

D1 CFA - EXTENDED SINGLE ARM CLEARANCE BAR - MATTE BLACK

SCALE: 1/2" = 1'-0"

ONE (1) REQUIRED - MANUFACTURE AND INSTALL

BAR PROFILE VIEW



SUPPORT MOUNTING DETAIL

ITEM	QUANTITY	DESCRIPTION
1	1	CENTER POST ASSEMBLY, 6”X 6” STEEL
2	1	CLEARANCE BAR ASSEMBLY, 2” X 2” ALUM ANGLE
6	1	TOP COVER, .125” ALUM, BREAK FORMED
7	1	BASE COVER, .08” ALUM, BREAK FORMED
8	4	1” X 36” LONG, ALL TREAD ANCHORS, INCLUDING NUTS AND WASHERS
9	1	CLEARANCE BAR ID PLATE

Notes:

1. ENTIRE CLEARANCE BAR AND HARDWARE TO BE POWDER-COATED P-820 MATTE BLACK FINISH
2. CHANDLER TO PROVIDE ALL-THREAD ANCHORS WITH FENDER WASHERS AND HEX BOLTS
3. GEN. CONTRACTOR TO POUR NEW CONCRETE FOOTER. FOUR ALL-THREAD ANCHORS TO BE EMBEDDED INTO FOOTER ON 9-INCH CENTERS
4. SINGLE ARM BARS ARE SIZED FOR INSTALLATION ON 6" CURB

Design # 0633168AR2

Sheet 10 of 19

Client #5293

Address
2825 N Mayfair Rd,
Wauwatosa, WI 53222

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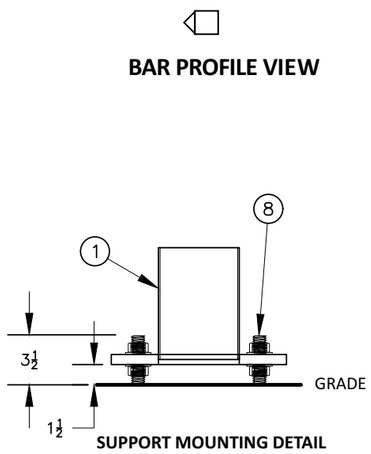
Chick-fil-A

D1

TOP VIEW

FCOs TO BE SHIPPED LOOSELY AND APPLIED ON ARM FACING TRAFFIC AT INSTALL LOCATION

ARM ASSEMBLY BOLTS TO CENTER SUPPORT AND CAN BE CHANGED OUT IN THE FIELD



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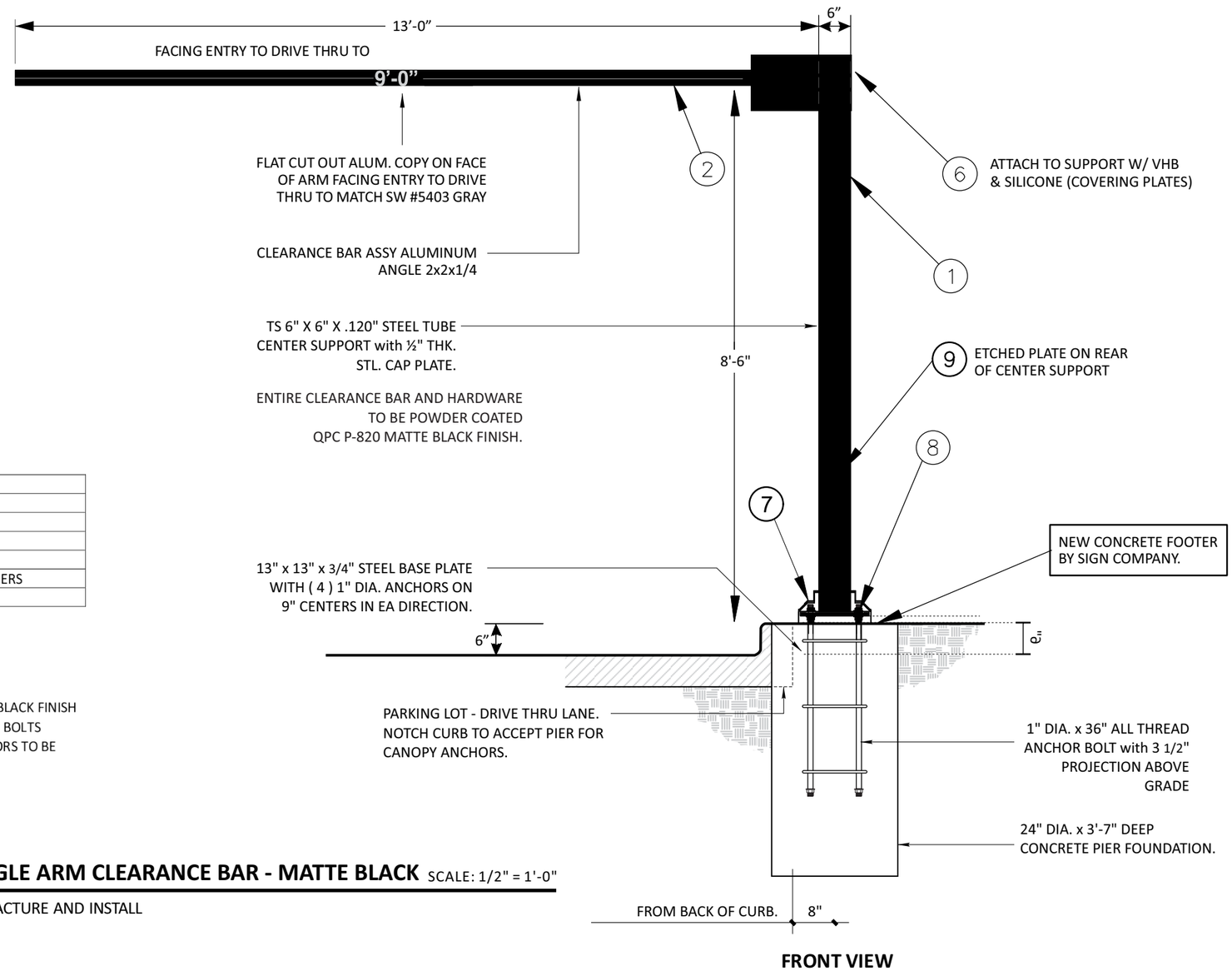

FRONT VIEW

D2 CFA - EXTENDED SINGLE ARM CLEARANCE BAR - MATTE BLACK SCALE: 1/2" = 1'-0"

ONE (1) REQUIRED - MANUFACTURE AND INSTALL

Design #
0633168AR2

Sheet 11 of 19

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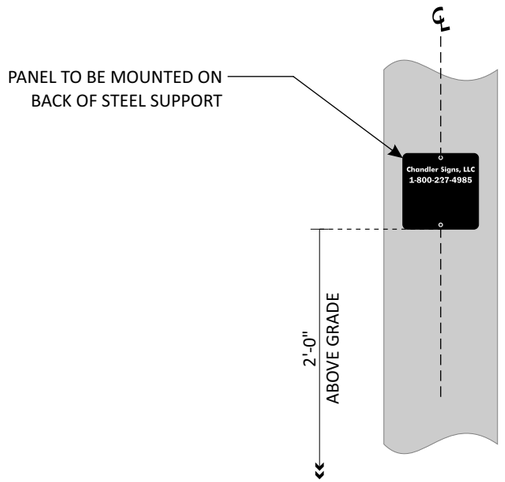
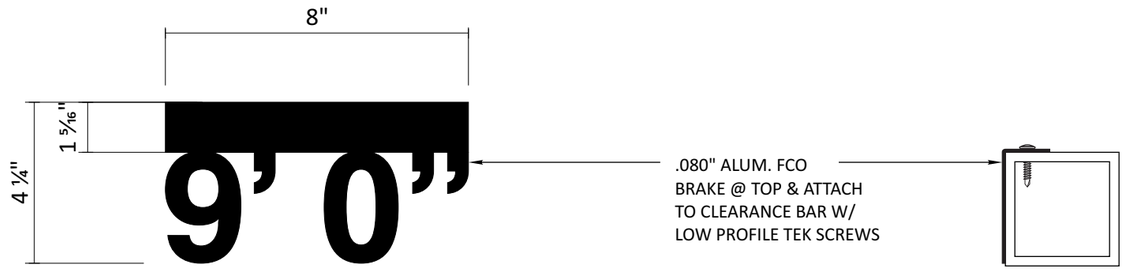
Chick-fil-A

D2

ETCHED PLATE TO BE APPLIED WHEN ORDER PULLED. DIRECTION T.B.D.



REAR OF SUPPORT

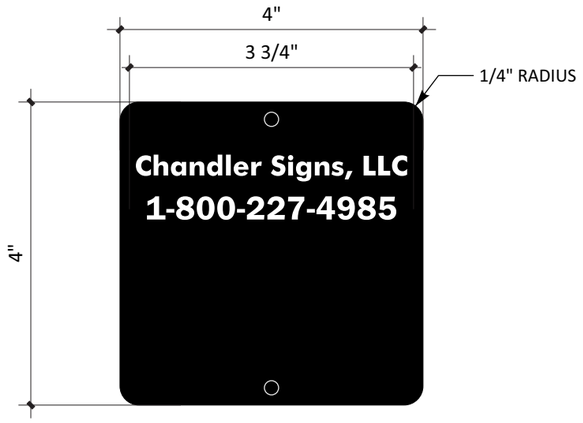


FCO DETAIL

SCALE: 3"=1'-0"

(1) REQUIRED PER BAR

FCOs TO BE SHIPPED LOOSE



CHANDLER SIGNS ETCHED PLATE

SCALE: 6" = 1'-0"

ONE (1) PER CLEARANCE BAR

ETCHED ALUMINUM PLATES WITH BLACK BACKGROUND. ETCHED COPY.

Design #	**0633168AR2**
Sheet	12 of 19
Client	#5293
Address	2825 N Mayfair Rd, Wauwatosa, WI 53222
Account Rep.	KRISTEN HAMILTON BRIAN HEAD
Designer	LEAH LANSFORD
Date	8/6/22

Approval / Date	
Client	
Sales	
Estimating	
Art	
Engineering	
Landlord	

Revision/Date

R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS, LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS, DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

CHANDLER SIGNS

National Headquarters	14201 Sovereign Road #101 Fort Worth, TX 76155 (214)902-2000 Fax(214)902-2044
San Antonio	17319 San Pedro Ave Ste 200 San Antonio, TX 78232 (210)349-3804 Fax (210)349-8724
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FINAL ELECTRICAL CONNECTION BY CUSTOMER

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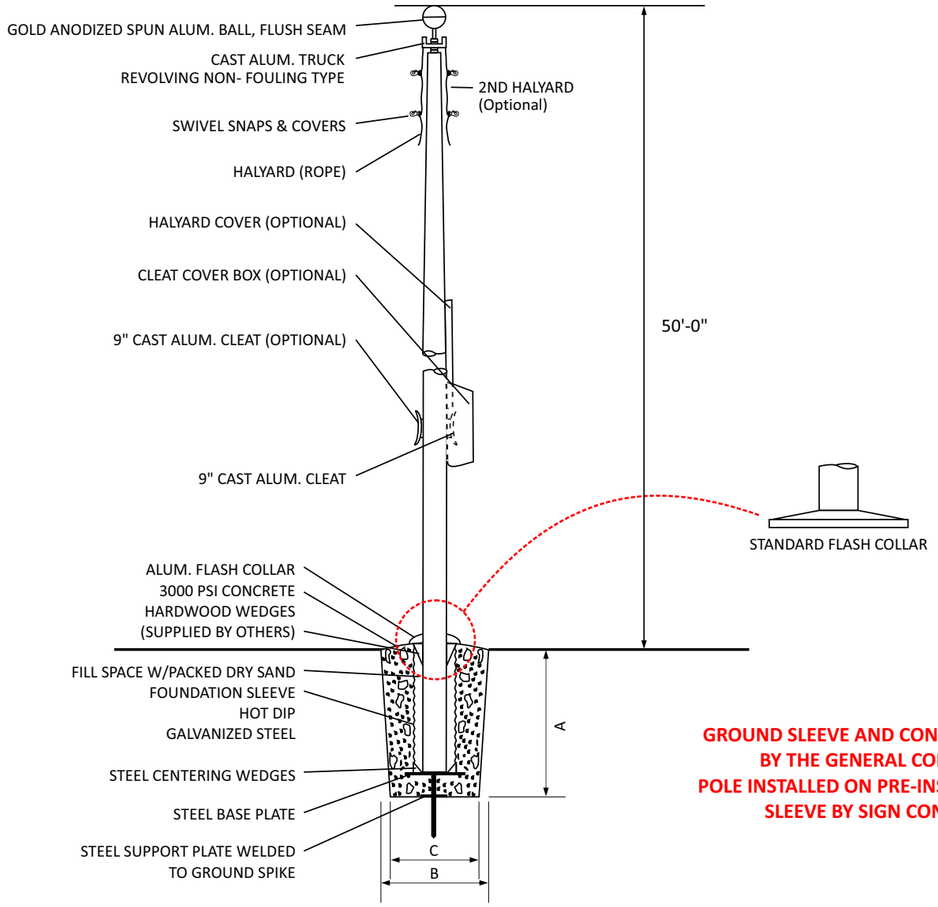
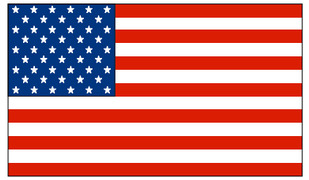
Chick-fil-A

D1-2





FLAG PROVIDED BY CSI

FOUNDATION SIZES

HEIGHT	A	B	C	FLAG SIZE
20'	3'-6"	30"	24"	6'-10'
25'	3'-6"	30"	24"	6'-10'
30'	3'-6"	30"	24"	6'-10'
35'	4'-0"	36"	30"	6'-10'
40'	4'-6"	42"	36"	12'-18'
45'	5'-0"	48"	42"	12'-18'
50'	**5'-6"**	**48"**	**42"**	**12'-18'**

GROUND SLEEVE AND CONCRETE INSTALLED BY THE GENERAL CONTRACTOR
POLE INSTALLED ON PRE-INSTALLED GROUND SLEEVE BY SIGN CONTRACTOR

F CFA - FLAG 50

N.T.S.

ONE (1) REQUIRED - PROVIDE AND INSTALL

Design #
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Sheet 13 of 19

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#5293

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BRIAN HEAD

Designer LEAH LANSFORD

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R1(11/14/22)AM: UPDATED SITE PLAN AND ELEVATIONS. LOWERED ICON CABINET BY 4 BRICKS, UPDATED WAYFINDING PANELS TO VIS22 STANDARDS AND CLEARANCE BARS TO THE NEW EXTENDED ARM STYLE.

(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS. DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

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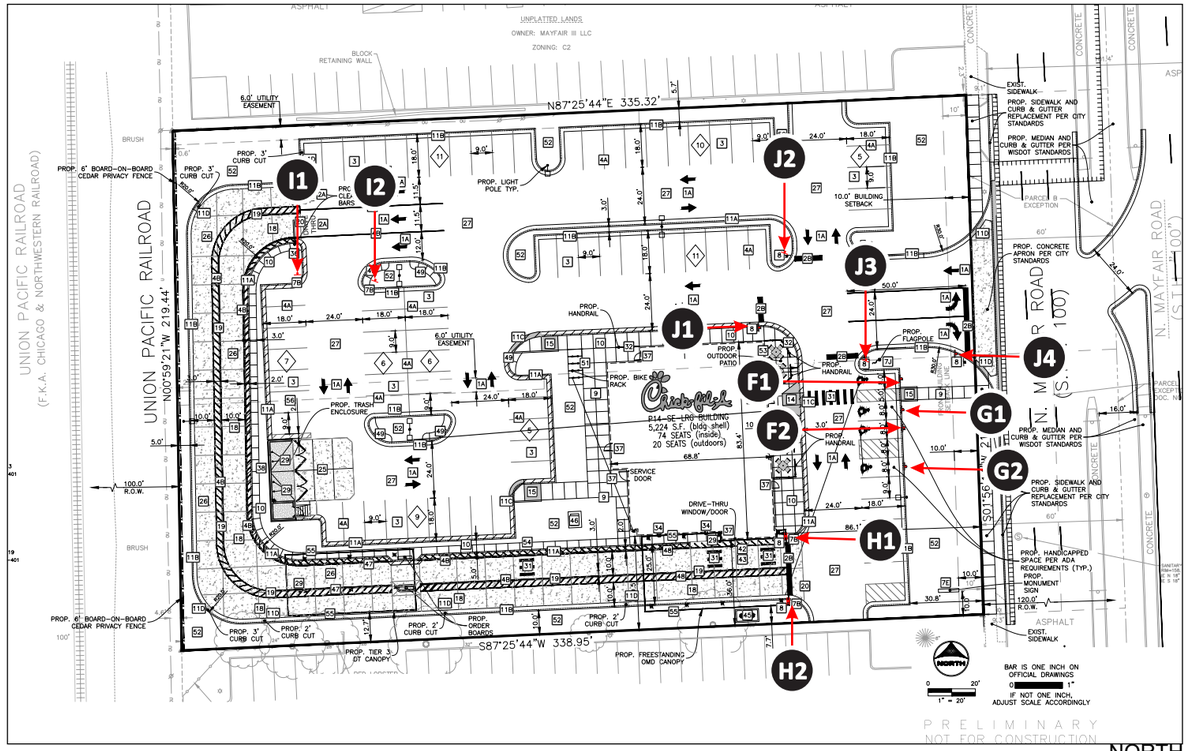
Chick-fil-A

E



SITE PLAN 2

SCALE: 1/64" = 1'-0"

NOTE:

FOR LOCATION OF BUILDING SIGNS AND DRIVE-THRU ITEMS; REFER TO SITE PLAN 1 ON PAGE 2.

FOR LOCATIONS OF BUILDING AWNINGS; REFER TO SITE PLAN 3 ON PAGE 4 AND PAGE 22.

SIGN I-D LETTER	FACE A	FACE B
F1 F2	WITH BOLLARD	N/A
G1 G2	WITH BOLLARD	N/A
H1 H2		
I1 I2		N/A
J1-4		N/A

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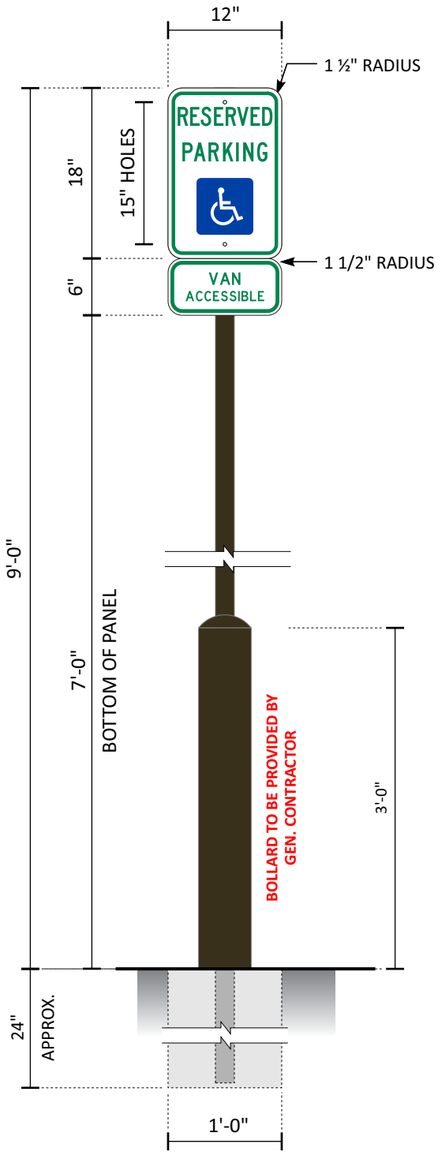
Chick-fil-A

SITE PLAN 2

BOLLARD MOUNTED HANDICAP SIGNS



SPECIFICATIONS

SIGN PANELS

.080 ALUMINUM WITH BACKS PAINTED MATTHEWS #20181 DARK BRONZE, SATIN AND REFLECTIVE VINYL GRAPHICS APPLIED 1ST SURFACE.

SIGN PANELS ARE TO BE SECURED TO SIGN POST WITH NUTS AND BOLTS PAINTED TO MATCH VINYL BACKGROUND

SIGN POST

2" x 2" ALUMINUM SQ. TUBE, CAPPED ON TOP WITH PUSH IN PLASTIC CAP PAINTED MATTHEWS #20181 DARK BRONZE, SATIN.
CAP IS A BUYOUT FROM MCMASTER CARR #9565K31 INVENTORY #02948

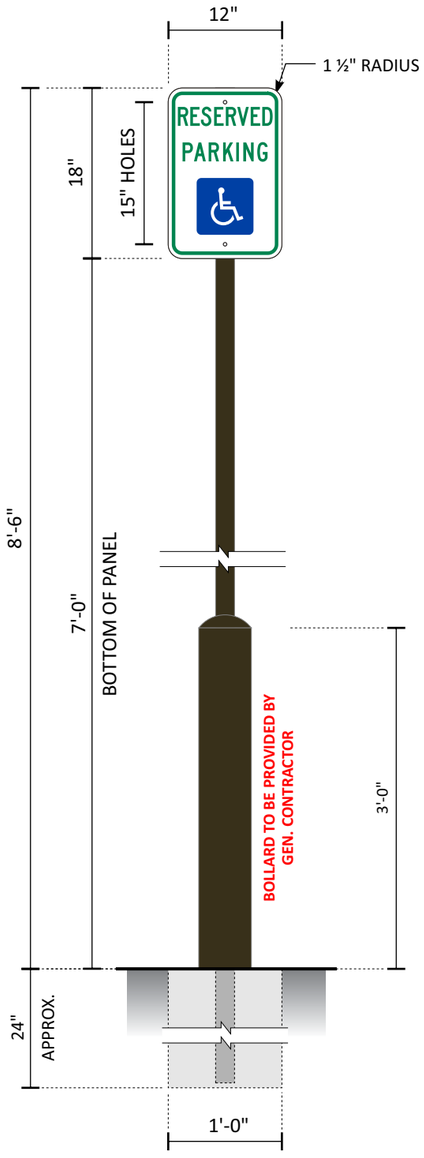
BOLLARD - TO BE PROVIDED BY GEN.CONTRACTOR

5 9/16" O.D. x .280 WALL THICKNESS STEEL PIPE.

BOLLARD AND CONCRETE TOP TO BE PAINTED MATTHEWS #74155 DARK BRONZE, SEMI-GLOSS. INSTALLER TO PROVIDE PAINT.

DAL - MANUFACTURING

MUTCD PANEL - UPPERCASE



F1 F2 **CFA - S/F HCVA SIGN** SCALE: 3/4" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL — 2 SQ. FT.

G1 G2 **CFA - S/F HC SIGN** SCALE: 3/4" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL — 1.5 SQ. FT.

DFW MANUFACTURING / NEW VIS 2022 MUTCD PANEL

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Account Rep.	KRISTEN HAMILTON, BRIAN HEAD
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(11/21/22)AM: UPDATED DRIVE THRU ELEVATIONS AND DELETED AWNINGS.

R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS, DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

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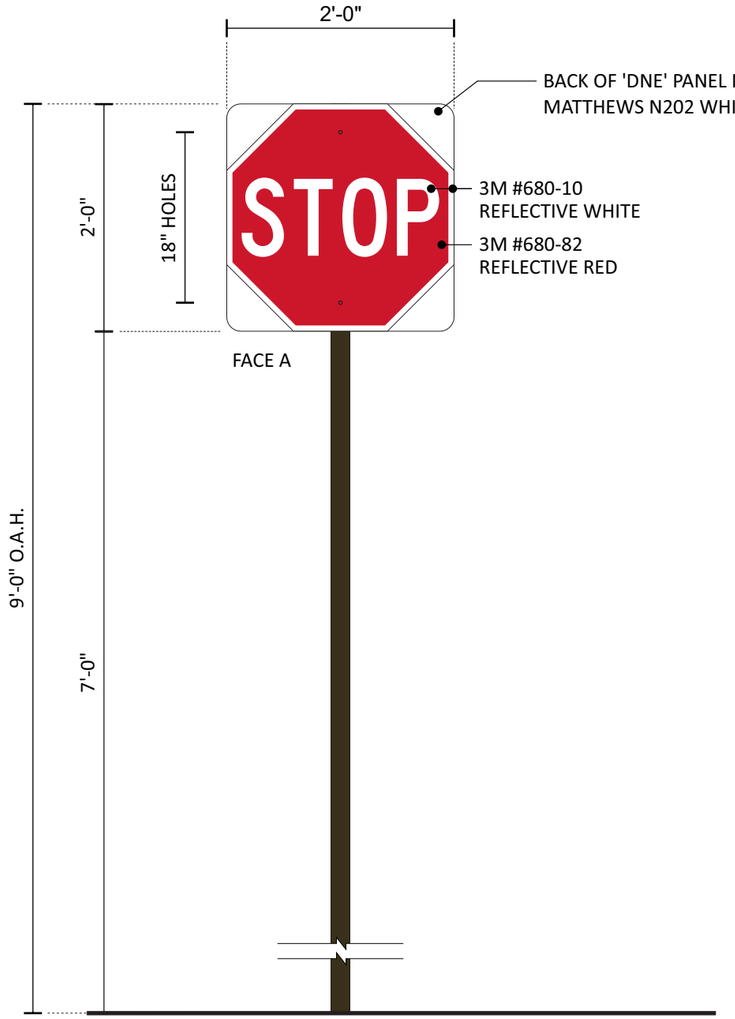
Chick-fil-A

F1-2, G1-2



SPECIFICATIONS

SIGN PANELS
.080 ALUMINUM PANELS WITH BACKS PAINTED **MATTHEWS N202 WHITE**, SATIN AND REFLECTIVE VINYL GRAPHICS APPLIED 1ST SURFACE.

SIGN PANEL IS TO BE SECURED TO SIGN POST WITH NUTS AND BOLTS PAINTED TO MATCH VINYL BACKGROUND

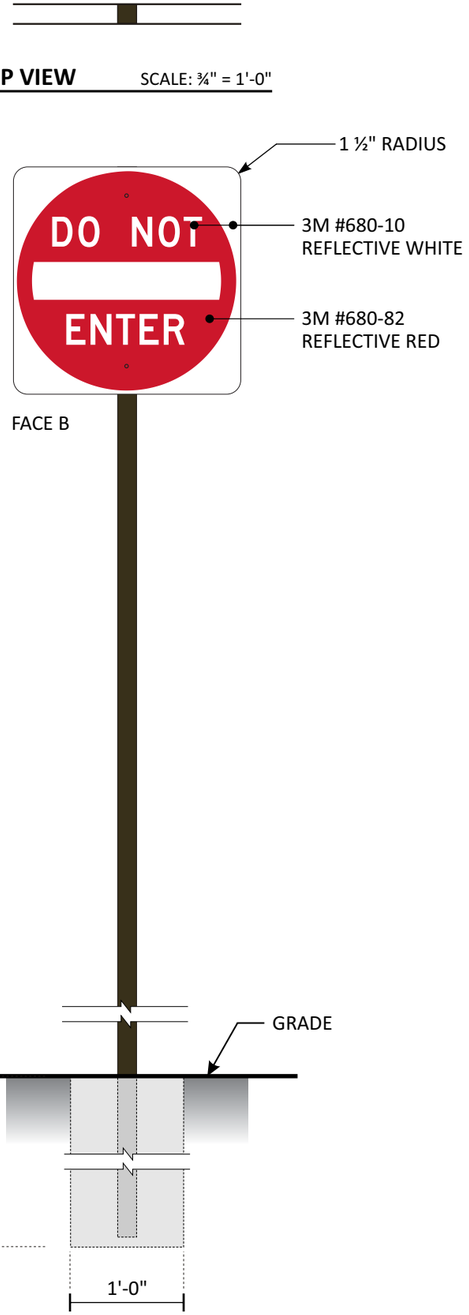
SIGN POST
2" x 2" ALUMINUM SQ. TUBE, CAPPED ON TOP WITH PUSH IN PLASTIC CAP.
PAINTED MATTHEWS #20181 DARK BRONZE, SATIN.
CAP IS A BUYOUT FROM MCMASTER CARR #9565K31
INVENTORY #02948

NOTE:
IF SIGN IS LOCATED ON SIDEWALK, THEN IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INSTALL A PVC SLEEVE INTO THE CONCRETE WHEN THE SIDEWALK IS POURED PRIOR TO INSTALLATION OF THE SIGN.

DAL - MANUFACTURING

MUTCD PANEL - UPPERCASE

TOP VIEW SCALE: ¾" = 1'-0"



H1 H2 **CFA - DOT D/F STOP/DNE SIGN** SCALE: 3/4" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL 4 SQ. FT.

DFW MANUFACTURING / VIS22 - NEW COLOR SPECIFICATION

Design #	0633168AR2
Sheet	16 of 19
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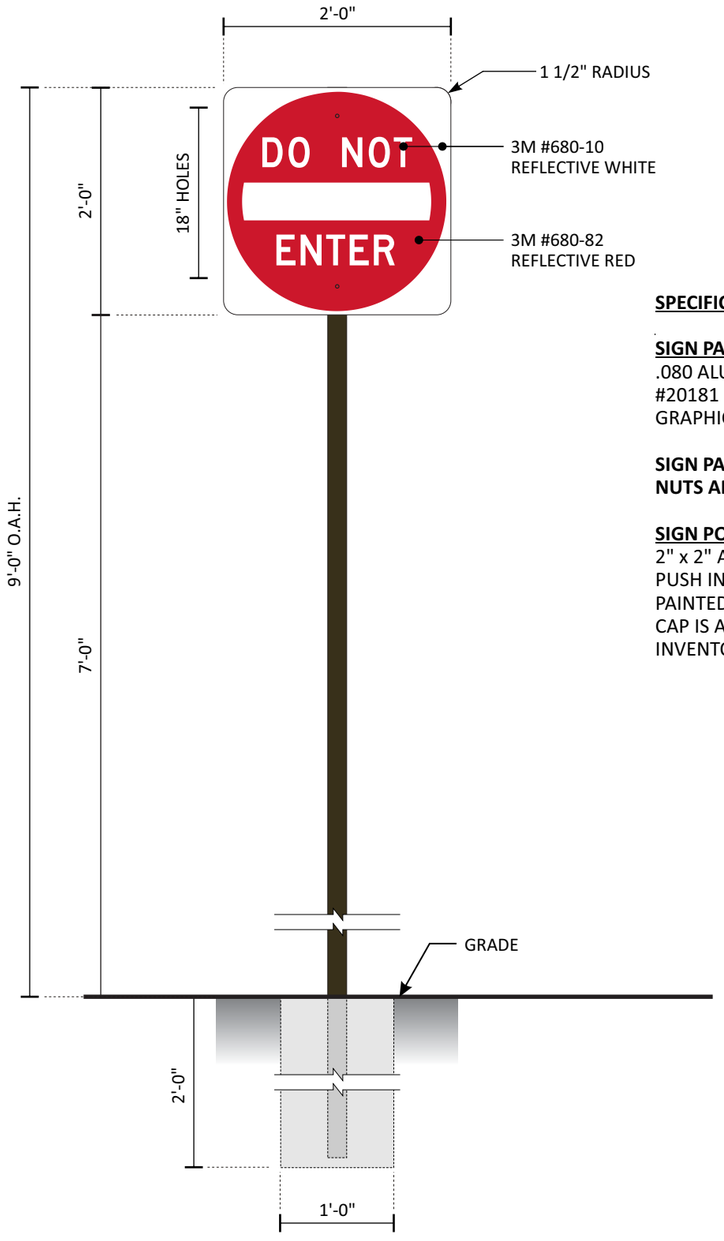
Chick-fil-A

H1-2



SPECIFICATIONS

SIGN PANEL
.080 ALUMINUM PANELS WITH BACKS PAINTED MATTHEWS #20181 DK. BRONZE, SATIN AND REFLECTIVE VINYL GRAPHICS APPLIED 1ST SURFACE.

SIGN PANEL IS TO BE SECURED TO SIGN POST WITH NUTS AND BOLTS PAINTED TO MATCH VINYL BACKGROUND

SIGN POST
2" x 2" ALUMINUM SQ. TUBE, CAPPED ON TOP WITH PUSH IN PLASTIC CAP.
PAINTED MATTHEWS #20181 DARK BRONZE, SATIN.
CAP IS A BUYOUT FROM MCMASTER CARR #9565K31
INVENTORY #02948

I1 I2 CFA - DOT S/F DNE SIGN SCALE: 3/4" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL 4 SQ. FT.

DFW MANUFACTURING / NEW VIS 2022 MUTCD PANEL

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Sheet	17 of 19
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Address	2825 N Mayfair Rd, Wauwatosa, WI 53222
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R2(2/8/23)LL:UPDATED SITE PLAN AND ELEVATIONS. ADDED STOPSIGNS, DELETED NO LONGER NEEDED WAYFINDING, RE LETTERED VINYL

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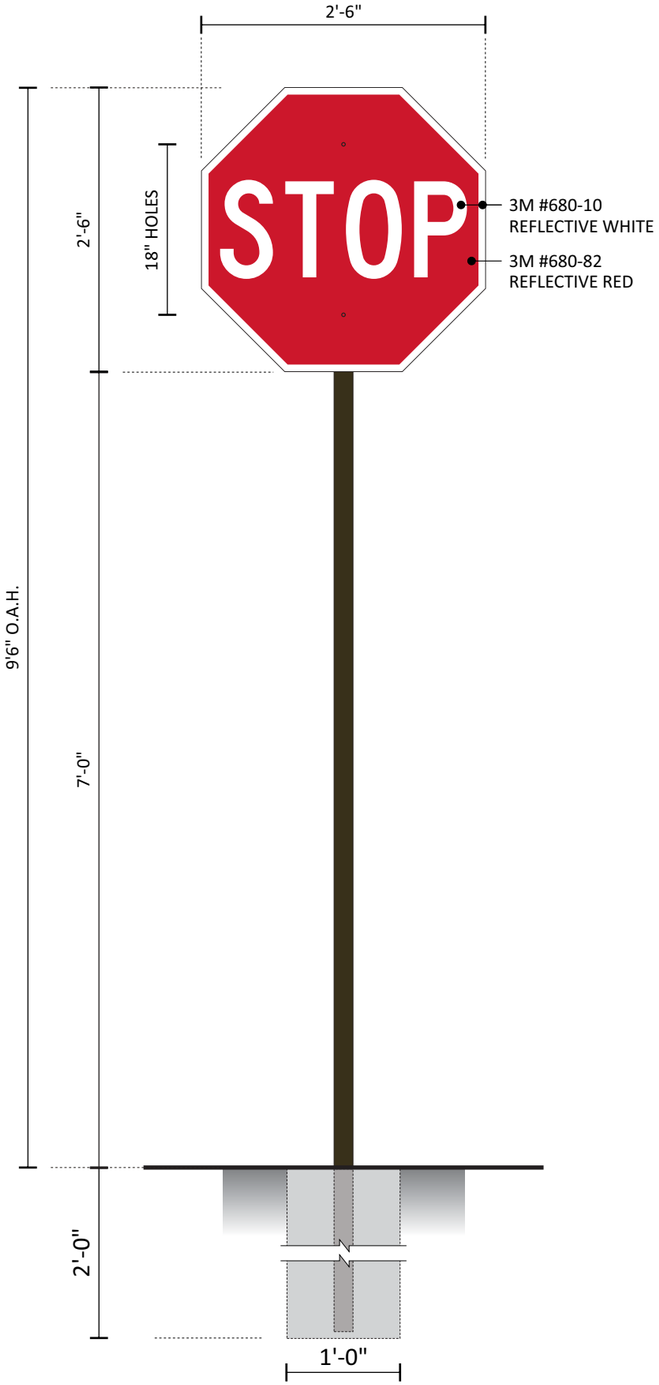
Chick-fil-A

I1-2



J1-4

CFA - DOT S/F STOP SIGN

SCALE: 3/4" = 1'-0"

FOUR (4) REQUIRED - MANUFACTURE AND INSTALL

5 SQ. FT.

SPECIFICATIONS

SIGN PANELS
.080 ALUMINUM PANELS WITH BACKS PAINTED MATTHEWS #20181 DK. BRONZE, SATIN AND REFLECTIVE VINYL GRAPHICS APPLIED 1ST SURFACE.

SIGN PANEL IS TO BE SECURED TO SIGN POST WITH NUTS AND BOLTS PAINTED TO MATCH VINYL BACKGROUND

SIGN POST
2" x 2" ALUMINUM SQ. TUBE, CAPPED ON TOP WITH PUSH IN PLASTIC CAP PAINTED MATTHEWS #20181 DARK BRONZE, SATIN.
CAP IS A BUYOUT FROM MCMASTER CARR #9565K31
INVENTORY #02948

NOTE:
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DAL - MANUFACTURING

MUTCD PANEL - UPPERCASE

DFW MANUFACTURING / VIS22 - NEW COLOR SPECIFICATION

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Chick-fil-A

J1-4

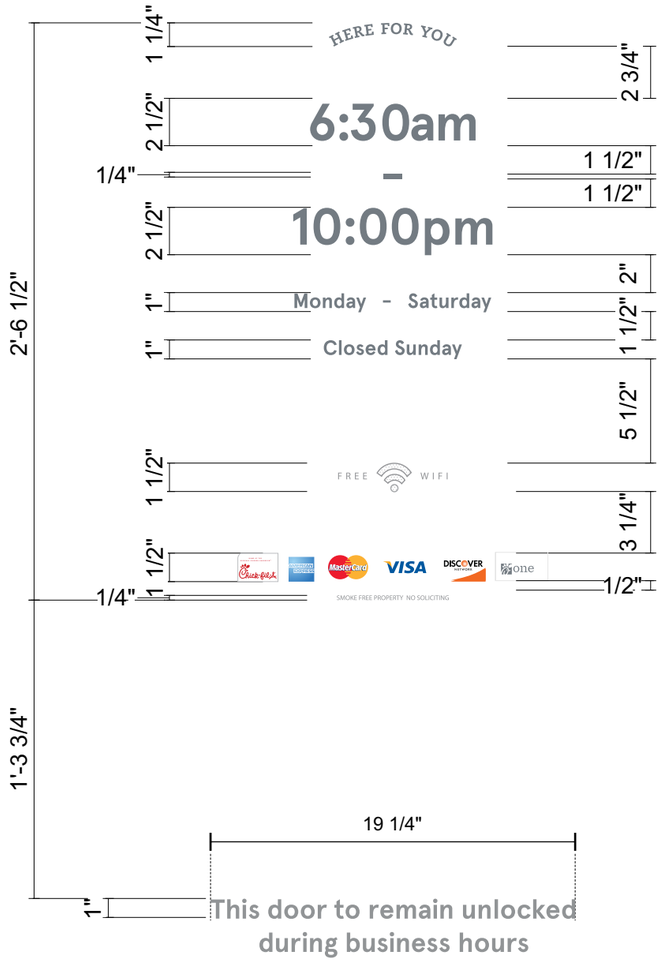
DOOR ELEVATIONS

SCALE: 3/8" = 1'-0"

VINYL COPY SHOWN IN GRAY FOR VISUAL PURPOSES ONLY

1 3 5 0

VINYL NOTE:
EXTRA VINYL NUMBERS TO BE INCLUDED ON VINYL SHEET FOR LATER USE OF POSSIBLE HOUR CHANGE.



K1 K2 CFA - ADDRESS VINYL

SCALE: 1 1/2" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL

COPY TO BE OPAQUE WHITE VINYL.
APPLIED 1ST SURFACE. (EXTERIOR OF DOOR)

ADDRESS, COPY AND TWO GRAPHIC LINES TO BE OPAQUE WHITE VINYL, APPLIED 1ST SURFACE TO EXTERIOR OF DOOR

L1 L2 CFA - DOOR VINYL

SCALE: 1 1/2" = 1'-0"

TWO (2) REQUIRED - MANUFACTURE AND INSTALL

COPY TO BE OPAQUE WHITE VINYL.
APPLIED 1ST SURFACE. (EXTERIOR OF DOOR)

EACH DIGITAL PRINT LOGO TO BE CUT INDIVIDUALLY

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Chick-fil-A

K1-2, L1-2

HRGreen

1391 Corporate Drive | Suite 203 | McHenry, IL 60050
Main 815.385.1778 + Fax 815.385.1781

HRGREEN.COM

February 8th, 2023

To: City of Wauwatosa
7725 W. North Avenue
Wauwatosa, WI 53213

From: Joseph Vavrina, P.E.

Subject: Stormwater Memo
Chick-fil-A – Wauwatosa, WI
Job #: 220756

Background

Chick-fil-A (CFA) is proposing the construction of an approximate 5,224 square foot free-standing restaurant, drive-thru lane, parking facilities, and associated utilities located at 2825 & 2835 N. Mayfair Road (STH 100) in the City of Wauwatosa. This project is more generally located on the west side of Mayfair Road, approximately 1,750 feet south of the Mayfair Road / W. Burleigh Street intersection. The proposed stormwater management improvements have been designed in accordance with the City of Wauwatosa's and the Wisconsin DNR Stormwater Management Requirements.

Existing Conditions

The subject CFA parcel is currently comprised of two parcels, each with existing commercial/office buildings and associated parking lots. The two lots will be consolidated into one lot as part of this project. The site lies adjacent to Mayfair Road to the east, a Red Lobster restaurant to the south, the Union Pacific Railroad to the east, and a commercial retail store to the north. The consolidated parcel will be approximately 1.70 acres (73,952 square feet) in size. In the existing condition, the impervious and pervious areas within the subject parcel are calculated to be 67,709 square feet and 6,243 square feet respectively, resulting in the site to be 91.6% impervious.

The property currently has two distinct drainage patterns. Based on ALTA survey topography, approximately 36% of the site currently drains to the Mayfair Road (STH 100) right-of-way (ROW) via sheet flow. This area has been delineated as drainage areas EX-DA-1N and EX-DA-1S on exhibit EX-100. The property is located at a crest of Mayfair Road so drainage either flows north or south down Mayfair Road and is tributary to the WisDOT storm sewer system. The remainder of the subject property (drainage area EX-DA-2) drains to the Union Pacific Railroad right-of way via sheet flow. There are currently no storm sewer or detention/treatment facilities onsite.

Proposed Conditions

The proposed improvements to the site consist of the construction of the Chick-fil-A restaurant, drive-thru, parking facilities, and the installation of underground utilities. In the proposed condition, the impervious and pervious areas within the subject parcel are calculated to be 58,162 square feet and 15,790 square feet respectively, resulting in the site to be 78.6% impervious. The proposed improvements will reduce the impervious surface by about 9,547 square feet from the existing condition.

Per coordination with the City and WisDOT, the CFA development will be required to extend storm sewer to the site as sheet flow to Mayfair Road will not be allowed. The portion of the site that drains to Mayfair Road is split with 2/3rds draining north and 1/3rd drainage south. It was noted by the city that whatever storm sewer pipe we decided to extend that all the drainage toward Mayfair would need to be routed to it without increasing existing discharge rates. As such an underground detention system has been proposed to maintain the existing release rate.

Stormwater treatment will be required for the CFA site as required by the City and WDNR. The CFA site will need to meet a 40% TSS removal efficiency since this project is classified as redevelopment.

The CFA site has been graded and designed to drain runoff via a combination of underground storm sewers and roof drains. As the site does not currently have a storm sewer to tie into in Mayfair Road (STH 100) an offsite storm sewer extension is proposed within the right of way to provide a connection point. The eastern portion of the property has been designed to be tributary to a proposed underground detention system which will outlet to the aforementioned storm sewer extension within the WisDOT ROW. The western portion of the property has been designed to sheet flow to onsite inlets and swales that ultimately reach the U.P. Railroad right-of-way, matching existing drainage patterns. The building and canopies are part of this western half and are proposed to drain to the railroad right-of-way via roof drains. The site was graded to match existing drainage areas to the maximum extent practicable so that Mayfair Road and the U.P. Railroad right-of-way do not see more runoff than in the existing condition. The table below breaks down the tributary areas to each in the existing and proposed conditions. As can be seen, the proposed CFA project will be improving the drainage patterns to both the roadway and railroad due to the reduction of impervious surface.

	AREA (SQ-FT)	AREA PAVED	AREA GRASS
TO STH 100 (MAYFAIR ROAD)			
EXISTING CONDITION	26,326	22,267	4,059
PROPOSED CONDITION	28,415	21,111	7,304
TO U.P. RAILROAD			
EXISTING CONDITION	47,626	45,442	2,184
PROPOSED CONDITION	45,537	37,051	8,486

Stormwater treatment for the site will be completed via the use of an underground detention system, Hydro International filters, and vegetated swales. All proposed drainage areas and patterns have been delineated on exhibit EX-200 and in the Rational Calc C Table included in this report. The CFA site has been designed to provide overland flood routes throughout the parking lot and drive-thru lane to direct water away from the CFA building and either towards Mayfair Road or the U.P. Railroad. The overland flood routes through the CFA site have been shown via bold arrows on the Grading Plan (C-300).

The majority of the western portion of the site will drain through a series of underground storm sewers and through a water quality structure before being discharged to the railroad ROW. A vegetated swale will be constructed along the south side of the property which will treat runoff generated by a portion of the drive-thru lane. The drainage areas PR-DA-2 through PR-DA-4 are tributary to the railroad ROW and pass through a water quality structure by Hydro International to filter runoff prior to being discharged from the site. Drainage areas PR-DA-5 and PR-DA-6 are tributary to the railroad ROW via sheet flow. Drainage area PR-DA-7 represents roof areas that are tributary to the railroad ROW via roof drains.

The eastern portion of the site will drain to the WisDOT ROW by being routed through an underground Stormtech detention system and water quality structure. Drainage areas PR-DA-1A, B, & C are areas tributary to the Stormtech system via proposed onsite storm sewer Drainage area PR-DA-1D will go undetained to the right-of-way due to grading constraints but it is comprised of almost all pervious area. The Stormtech system is proposed to discharge to the existing storm sewer within the WisDOT ROW which is located approximately 150 feet north of the northeast

corner of the property. Per the Rational Calculations included in this report, the area of the existing site that discharges to the north storm sewer has a calculated runoff of 3.59 cfs during the 100-year storm event. The proposed Stormtech system restricts outflow from the system using a 8.25" diameter orifice in a weir plate set in the outlet structure. Per the HydroCAD model included with this report, the peak discharge from the StormTech system and the undetained area during the 100-year storm event is calculated to be 3.52 cfs, which is less than the existing runoff under existing conditions.

WinSLAMM v10.4.1 was utilized to model the removal efficiency of these BMPs. It was calculated that these BMPs will remove 47.95% TSS, thus satisfying the City & DNR requirements.

Erosion Control

Installation of sediment and erosion control measures will be placed prior to the start of construction. Inlet protection baskets and silt fence are planned to be installed to control erosion and silt displacement until vegetation is established.

HRGreen

RATIONAL METHOD "C" CALCULATION

Project #: 220756
Project: CHICK-FIL-A
Location: Wauwatosa, WI

By FDT Date 2/8/2023
Checked ECH Date
Revised Date

Existing runoff from site to WisDOT sewer north of the site

Rainfall Data per NOAA Atlas 14 for Wauwatosa

BASIN NO.	AREA (SQ-FT)	AREA PAVED	AREA GRASS	%PAVED 0.95	%GRASS 0.22	RUNOFF "C"	AREA (acres)	10-YR, 5-MIN INTENSITY (IN/HR)	10-YR, 5-MIN FLOW (CFS)	100-YR, 5-MIN INTENSITY (IN/HR)	100-YR, 5-MIN FLOW (CFS)
CFA PARCEL								7.032		10.500	
EXISTING CONDITION	73,952	67,709	6,243	91.6%	8.4%	**0.89**	**1.70**	7.032	10.61	10.500	15.84
PROPOSED CONDITION	73,952	58,162	15,790	78.6%	21.4%	**0.79**	**1.70**	7.032	9.48	10.500	14.16
TO STH 100 (MAYFAIR ROAD)											
EXISTING CONDITION	26,326	22,267	4,059	84.6%	15.4%	**0.84**	**0.60**	7.032	3.56	10.500	5.31
PROPOSED CONDITION	28,415	21,111	7,304	74.3%	25.7%	**0.76**	**0.65**	7.032	3.50	10.500	5.22
TO U.P. RAILROAD											
EXISTING CONDITION	47,626	45,442	2,184	95.4%	4.6%	**0.92**	**1.09**	7.032	7.05	10.500	10.52
PROPOSED CONDITION	45,537	37,051	8,486	81.4%	18.6%	**0.81**	**1.05**	7.032	5.98	10.500	8.93
EXISTING DRAINAGE AREAS											
EX-DA-1 TOTAL	26,326	22,267	4,059	84.6%	15.4%	**0.84**	**0.60**	7.032	3.56	10.500	5.31
EX-DA-1 NORTH	17,715	15,064	2,651	85.0%	15.0%	**0.84**	**0.41**	7.032	2.40	10.500	**3.59**
EX-DA-1 SOUTH	8,611	7,203	1,408	83.6%	16.4%	**0.83**	**0.20**	7.032	1.15	10.500	**1.72**
EX-DA-2	47,626	45,442	2,184	95.4%	4.6%	**0.92**	**1.09**	7.032	7.05	10.500	10.52
PROPOSED DRAINAGE AREAS											
TOTAL TO STORMTECH (DA 1A-1C)	22,009	20,026	1,983	91%	9%	**0.88**	**0.51**	7.032	3.14	10.500	4.69
PR-DA-1A	7,462	6,523	940	87%	13%	**0.86**	**0.17**	7.032	1.03	10.500	**1.54**
PR-DA-1B	8,662	7,943	720	92%	8%	**0.89**	**0.20**	7.032	1.24	10.500	**1.86**
PR-DA-1C	5,885	5,561	324	94%	6%	**0.91**	**0.14**	7.032	0.86	10.500	**1.29**
PR-DA-1D (Undetained)	6,406	1,085	5,320	17%	83%	**0.34**	**0.15**	7.032	0.36	10.500	**0.53**
TOTAL TO UP-FLO FILTER (DA 2-4)	21,835	19,469	2,366	89%	11%	**0.87**	**0.50**	7.032	3.07	10.500	4.58
PR-DA-2	5,993	5,717	277	95%	5%	**0.92**	**0.14**	7.032	0.89	10.500	1.32
PR-DA-3	7,968	7,392	575	93%	7%	**0.90**	**0.18**	7.032	1.15	10.500	1.72
PR-DA-4	7,874	6,360	1,514	81%	19%	**0.81**	**0.18**	7.032	1.03	10.500	1.54
TOTAL SHEET FLOW TO RAIL (DA 5-6)	15,229	9,109	6,120	60%	40%	**0.66**	**0.35**	7.032	1.61	10.500	2.41
PR-DA-5 (Sheet flow to Railroad)	5,955	3,187	2,768	54%	46%	**0.61**	**0.14**	7.032	0.59	10.500	0.88
PR-DA-6 (Sheet flow to Railroad)	9,274	5,922	3,351	64%	36%	**0.69**	**0.21**	7.032	1.03	10.500	1.53
PR-DA-7 (Roof Area)	8,473	8,473	0	100%	0%	**0.95**	**0.19**	7.032	1.30	10.500	1.94

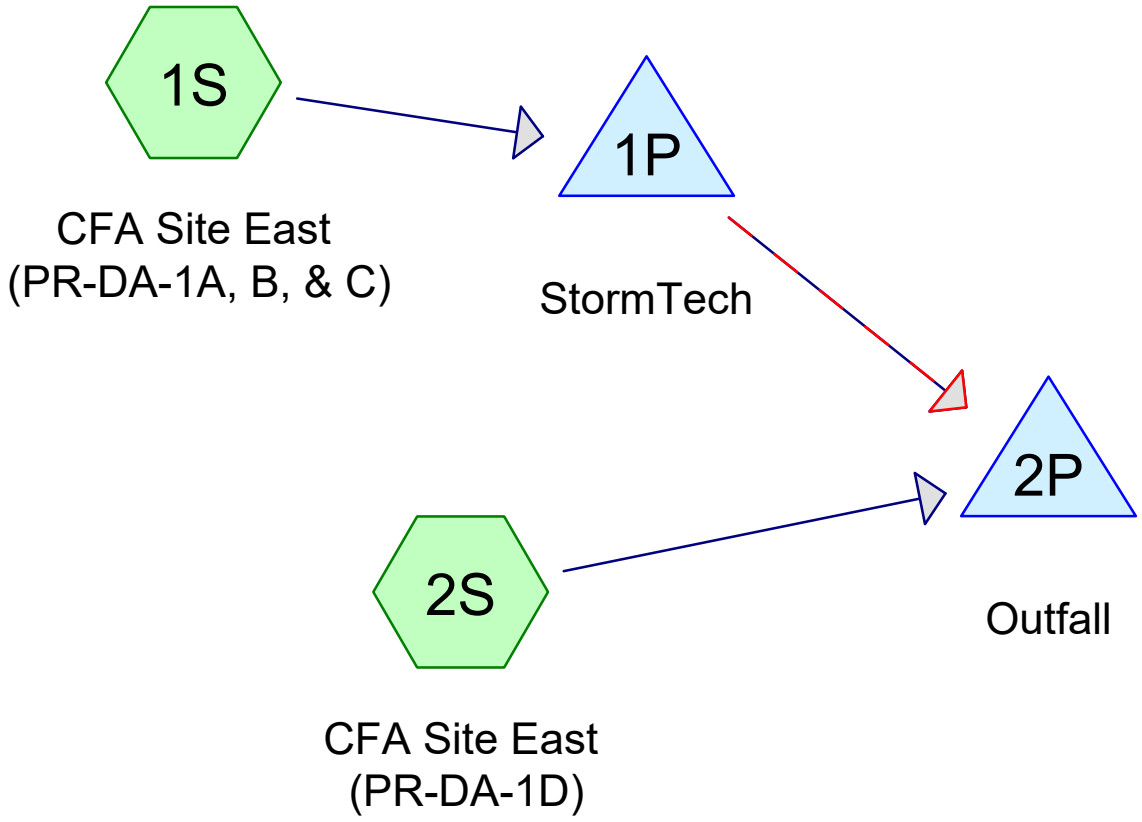
Detail A - Runoff Coefficients (C), Rational Formula

Land Use	Percent Impervious Area	Hydrologic Soil Group											
		A			B			C			D		
		Slope Range Percent			Slope Range Percent			Slope Range Percent			Slope Range Percent		
		0-2	2-6	6 & over	0-2	2-6	6 & over	0-2	2-6	6 & over	0-2	2-6	6 & over
Industrial	90	0.67 0.85	0.68 0.85	0.68 0.86	0.68 0.85	0.68 0.86	0.69 0.86	0.68 0.86	0.69 0.86	0.69 0.87	0.69 0.86	0.69 0.86	0.70 0.88
Commercial	95	0.71 0.88	0.71 0.89	0.72 0.89	0.71 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.89	0.72 0.90	0.72 0.89	0.72 0.89	0.72 0.90
High Density Residential	60	0.47 0.58	0.49 0.60	0.50 0.61	0.48 0.59	0.50 0.61	0.52 0.64	0.49 0.60	0.51 0.62	0.54 0.66	0.51 0.62	0.53 0.64	0.56 0.69
Med. Density Residential	30	0.25 0.33	0.28 0.37	0.31 0.40	0.27 0.35	0.30 0.39	0.35 0.44	0.30 0.38	0.33 0.42	0.38 0.49	0.33 0.41	0.36 0.45	0.42 0.54
Low Density Residential	15	0.14 0.22	0.19 0.26	0.22 0.29	0.17 0.24	0.21 0.28	0.26 0.34	0.20 0.28	0.25 0.32	0.31 0.40	0.24 0.31	0.28 0.35	0.35 0.46
Agriculture	5	0.08 0.14	0.13 0.18	0.16 0.22	0.11 0.16	0.15 0.21	0.21 0.28	0.14 0.20	0.19 0.25	0.26 0.34	0.18 0.24	0.23 0.29	0.31 0.41
Open Space	2	0.05 0.11	0.10 0.16	0.14 0.20	0.08 0.14	0.13 0.19	0.19 0.26	0.12 0.18	0.17 0.23	0.24 0.32	0.16 0.22	0.21 0.27	0.28 0.39
Freeways & Expressways	70	0.57 0.70	0.59 0.71	0.60 0.72	0.58 0.71	0.60 0.72	0.61 0.74	0.59 0.72	0.61 0.73	0.63 0.76	0.60 0.73	0.62 0.75	0.64 0.78

Detail B - Runoff Coefficients for Specific Land Use

Land Use	Hydrologic Soil Group											
	A			B			C			D		
	Slope Range Percent			Slope Range Percent			Slope Range Percent			Slope Range Percent		
	0-2	2-6	6 & over	0-2	2-6	6 & over	0-2	2-6	6 & over	0-2	2-6	6 & over
Row Crops	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
Median Stripturf	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
Side Slopeturf			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT												
Asphalt	.70 - .95											
Concrete	.80 - .95											
Brick	.70 - .80											
Drives, Walks	.75 - .85											
Roofs	.75 - .95											
Gravel Roads Shoulders	.40 - .60											

NOTE: The lower C values in each range should be used with the relatively low intensities associated with 2 to 10-year design recurrence intervals whereas the higher C values should be used for intensities associated with the longer 25 to 100 year deign recurrence intervals.



Subcat Reach Pond Link

Routing Diagram for 220756_Proposed Conditions
Prepared by {enter your company name here}, Printed 2/8/2023
HydroCAD® 10.10-7b s/n 00980 © 2022 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	100-Year	MSE 24-hr	3	Default	24.00	1	7.10	2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.168	74	>75% Grass cover, Good, HSG C (1S, 2S)
0.485	98	Paved parking, HSG C (1S, 2S)
0.652	**92**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.652	HSG C	1S, 2S
0.000	HSG D	
0.000	Other	
0.652		**TOTAL AREA**

Summary for Subcatchment 1S: CFA Site East (PR-DA-1A, B, & C)

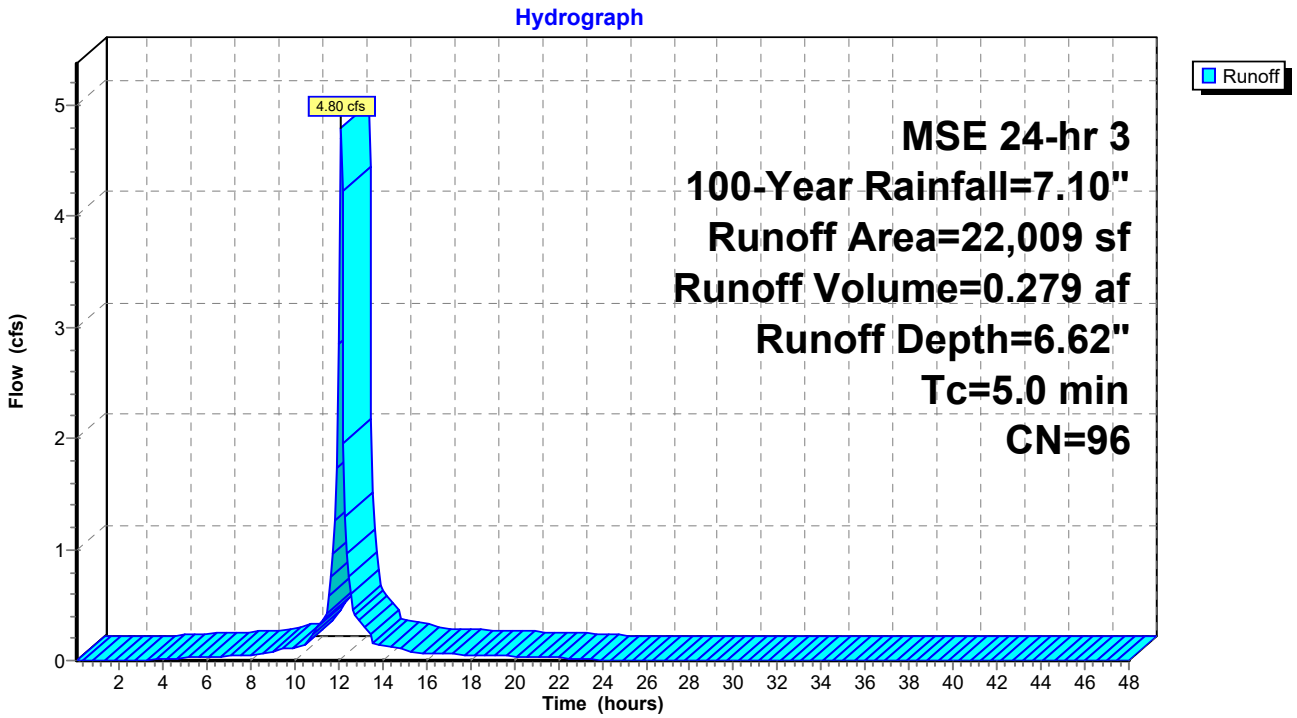
Runoff = 4.80 cfs @ 12.10 hrs, Volume= 0.279 af, Depth= 6.62"
Routed to Pond 1P : StormTech

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.08-48.00 hrs, dt= 0.08 hrs
MSE 24-hr 3 100-Year Rainfall=7.10"

Area (sf)	CN	Description
20,026	98	Paved parking, HSG C
1,983	74	>75% Grass cover, Good, HSG C
22,009	96	Weighted Average
1,983		9.01% Pervious Area
20,026		90.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: CFA Site East (PR-DA-1A, B, & C)



Summary for Subcatchment 2S: CFA Site East (PR-DA-1D)

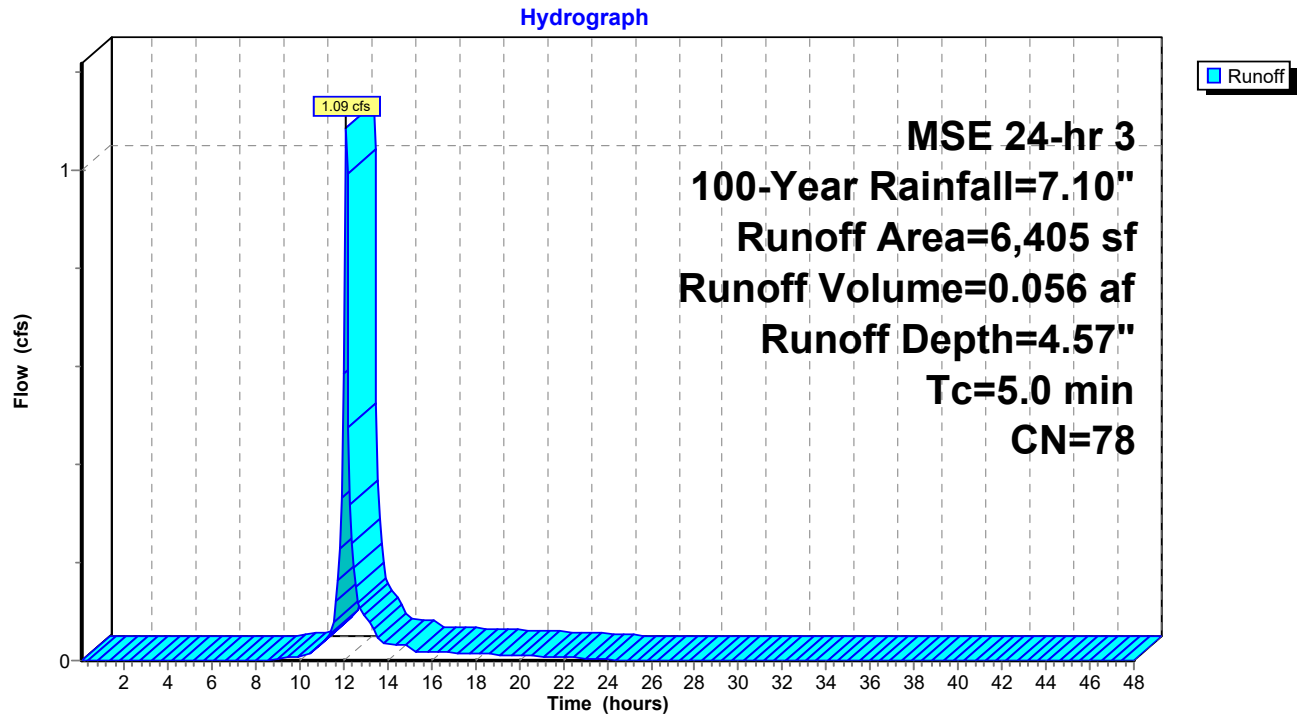
Runoff = 1.09 cfs @ 12.11 hrs, Volume= 0.056 af, Depth= 4.57"
Routed to Pond 2P : Outfall

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.08-48.00 hrs, dt= 0.08 hrs
MSE 24-hr 3 100-Year Rainfall=7.10"

Area (sf)	CN	Description
5,320	74	>75% Grass cover, Good, HSG C
1,085	98	Paved parking, HSG C
6,405	78	Weighted Average
5,320		83.06% Pervious Area
1,085		16.94% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: CFA Site East (PR-DA-1D)



Summary for Pond 1P: StormTech

Inflow Area = 0.505 ac, 90.99% Impervious, Inflow Depth = 6.62" for 100-Year event
Inflow = 4.80 cfs @ 12.10 hrs, Volume= 0.279 af
Outflow = 2.43 cfs @ 12.24 hrs, Volume= 0.279 af, Atten= 49%, Lag= 8.2 min
Primary = 2.43 cfs @ 12.24 hrs, Volume= 0.279 af
Routed to Pond 2P : Outfall
Secondary = 0.00 cfs @ 0.08 hrs, Volume= 0.000 af
Routed to Pond 2P : Outfall

Routing by Stor-Ind method, Time Span= 0.08-48.00 hrs, dt= 0.08 hrs
Peak Elev= 156.79' @ 12.24 hrs Surf.Area= 0.049 ac Storage= 0.060 af

Plug-Flow detention time= 20.5 min calculated for 0.279 af (100% of inflow)
Center-of-Mass det. time= 19.7 min (769.2 - 749.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	154.55'	0.035 af	**54.83'W x 38.80'L x 2.33'H Field A** 0.114 af Overall - 0.027 af Embedded = 0.087 af x 40.0% Voids
#2A	155.05'	0.027 af	**ADS_StormTech SC-310 +Cap** x 80 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 80 Chambers in 16 Rows
		0.062 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	154.55'	**8.2" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Secondary	156.79'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)

Primary OutFlow Max=2.43 cfs @ 12.24 hrs HW=156.78' (Free Discharge)
1=Orifice/Grate (Orifice Controls 2.43 cfs @ 6.62 fps)

Secondary OutFlow Max=0.00 cfs @ 0.08 hrs HW=154.55' (Free Discharge)
2=Sharp-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 1P: StormTech - Chamber Wizard Field A

Chamber Model = ADS_StormTechSC-310 +Cap (ADS StormTech®SC-310 with cap length)
Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf
Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

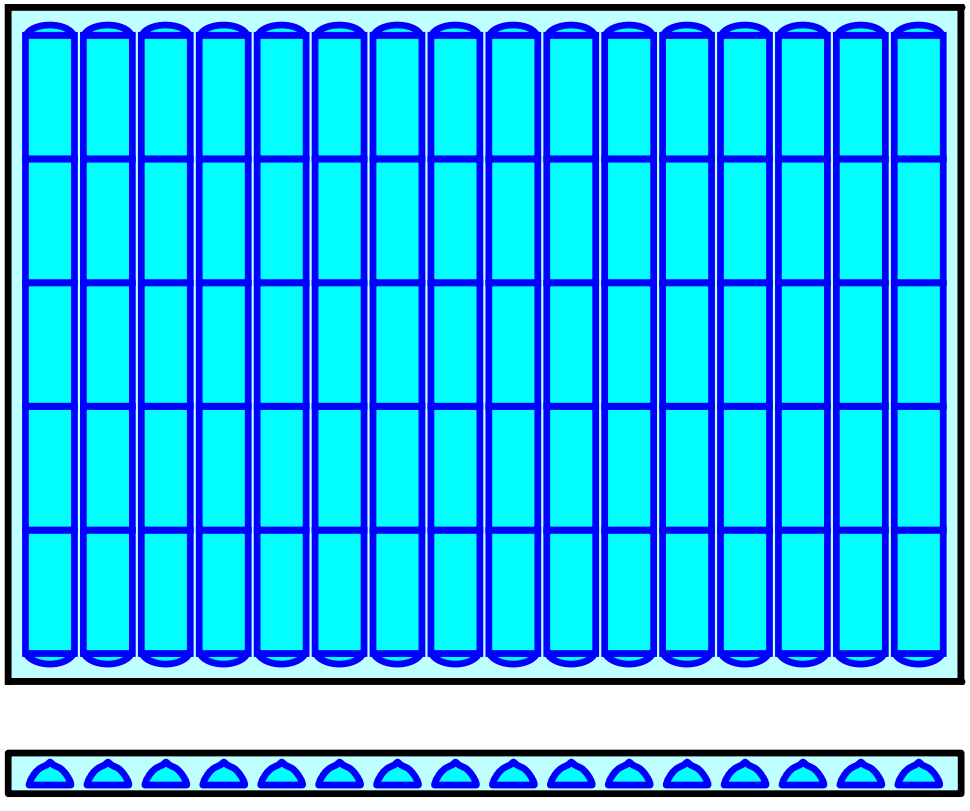
5 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 36.80' Row Length +12.0" End Stone x 2 = 38.80' Base Length
16 Rows x 34.0" Wide + 6.0" Spacing x 15 + 12.0" Side Stone x 2 = 54.83' Base Width
6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

80 Chambers x 14.7 cf = 1,179.4 cf Chamber Storage

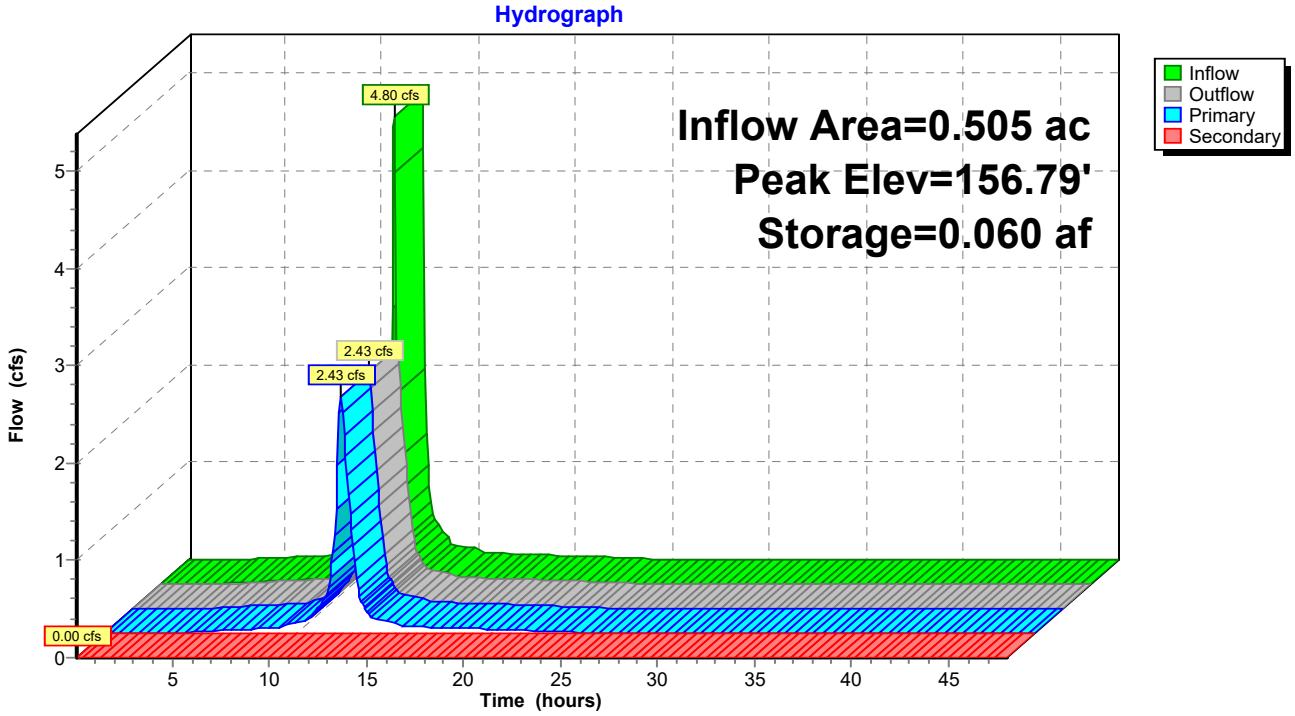
4,964.2 cf Field - 1,179.4 cf Chambers = 3,784.9 cf Stone x 40.0% Voids = 1,514.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,693.3 cf = 0.062 af
Overall Storage Efficiency = 54.3%
Overall System Size = 38.80' x 54.83' x 2.33'

80 Chambers
183.9 cy Field
140.2 cy Stone



Pond 1P: StormTech

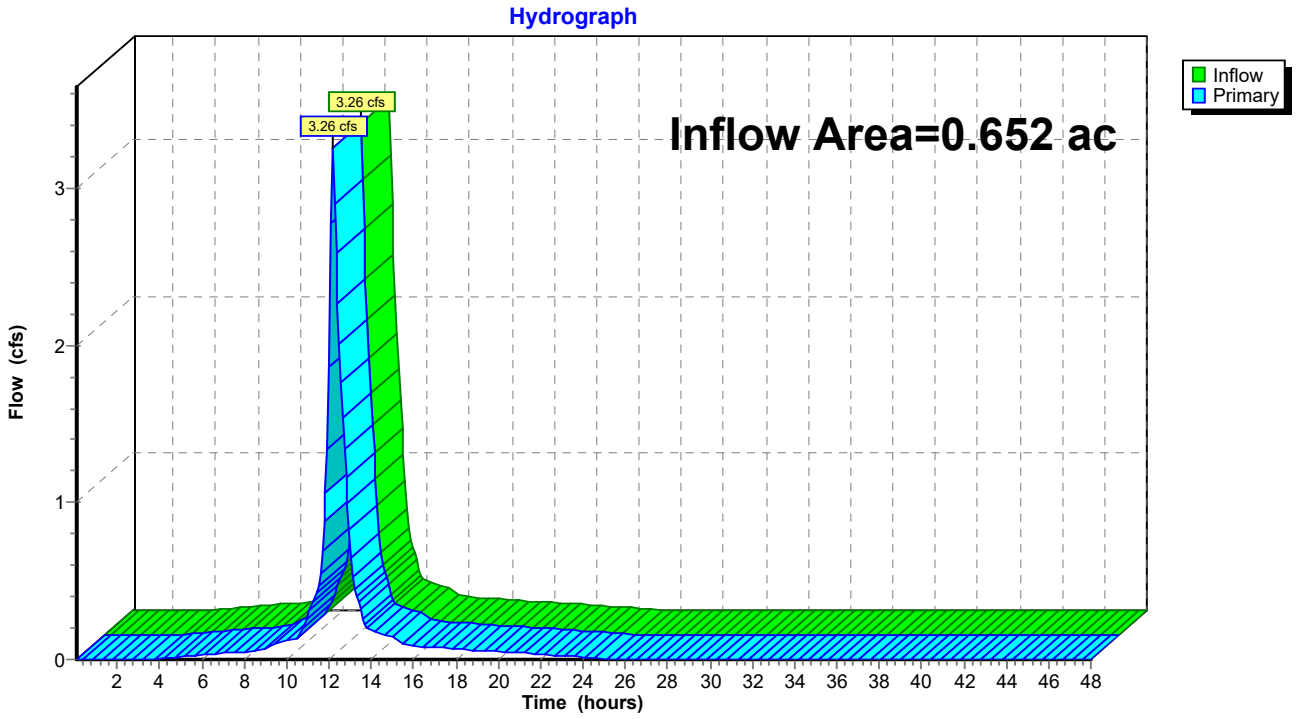


Summary for Pond 2P: Outfall

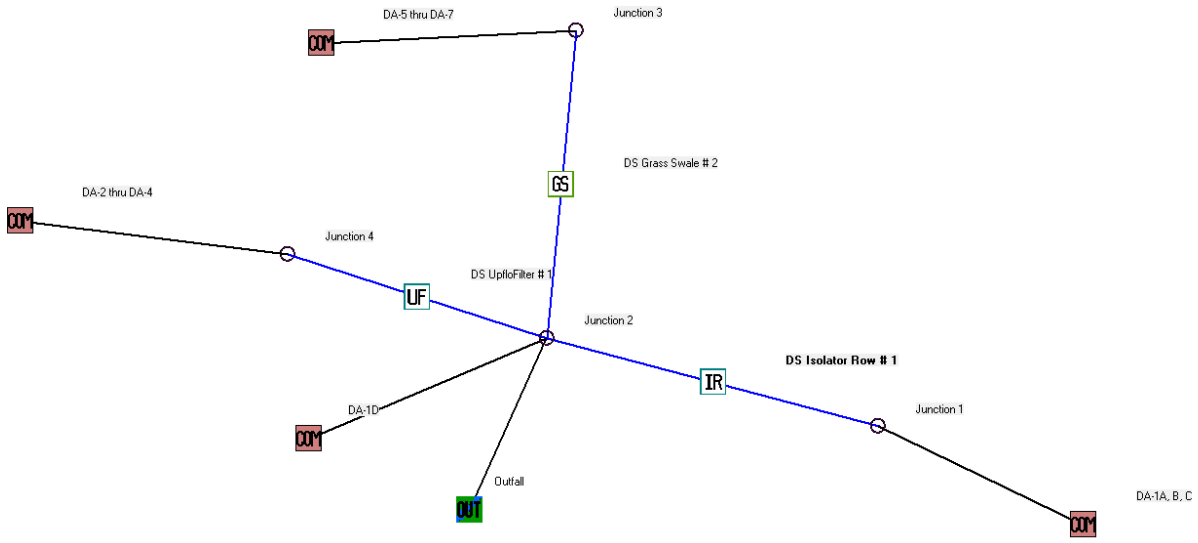
Inflow Area = 0.652 ac, 74.30% Impervious, Inflow Depth = 6.16" for 100-Year event
Inflow = 3.26 cfs @ 12.17 hrs, Volume= 0.335 af
Primary = 3.26 cfs @ 12.17 hrs, Volume= 0.335 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.08-48.00 hrs, dt= 0.08 hrs

Pond 2P: Outfall



WinSLAMM Model



File Name:

J:\2022\220756\Design\Calc\Storm\WinSLAMM\220756_WinSLAMM.mdb

Outfall Output Summary

	Runoff Volume (cu. ft.)	Percent Runoff Reduction	Runoff Coefficient (Rv)	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of All Land Uses without Controls	103397		0.52	118.0	761.6	
Outfall Total with Controls	93103	9.96 %	0.47	68.20	396.4	47.95 %

Current File Output: Annualized Total After Outfall Controls: 93358 Years in Model Run: 1.00 397.5

Print Output Summary to .csv File
Print Output Summary to Text File
Print Output Summary to Printer

Total Area Modeled (ac): 1.698

Total Control Practice Costs

Capital Cost	N/A
Land Cost	N/A
Annual Maintenance Cost	N/A
Present Value of All Costs	N/A
Annualized Value of All Costs	N/A

Perform Outfall Flow Duration Curve Calculations

Receiving Water Impacts Due To Stormwater Runoff

(CWP Impervious Cover Model)

	Calculated Rv	Approximate Urban Stream Classification
Without Controls	0.52	Poor
With Controls	0.47	Poor

Data file name: J:\2022\220756\Design\Calc\Storm\WinSLAMM\220756_WinSLAMM.mdb
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 02-08-2023 Time: 16:13:55
Site information:

LU# 1 - Commercial: DA-1A, B, C Total area (ac): 0.506
13 - Paved Parking 1: 0.460 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.046 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Commercial: DA-2 thru DA-4 Total area (ac): 0.501
13 - Paved Parking 1: 0.447 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.054 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Commercial: DA-5 thru DA-7 Total area (ac): 0.544
1 - Roofs 1: 0.195 ac. Flat Connected PSD File: C:\WinSLAMM Files\NURP.cpz
13 - Paved Parking 1: 0.209 ac. Disconnected Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.140 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Commercial: DA-1D Total area (ac): 0.147
13 - Paved Parking 1: 0.025 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
51 - Small Landscaped Areas 1: 0.122 ac. Normal Clayey Low Density PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Grass Swale CP# 1 (DS) - DS Grass Swale # 2
Total drainage area (acres)= 0.544
Fraction of drainage area served by swales (ac) = 1.00
Swale density (ft/ac) = 235.73
Total swale length (ft) = 190
Average swale length to outlet (ft)= 190
Typical bottom width (ft) = 3.0
Typical swale side slope (_H:1V) = 4.0
Typical longitudinal slope (ft.H/ft.V) = 0.010
Swale retardance factor: C
Typical grass height (in) = 4.0
Swale dynamic infiltration rate (in/hr)= 0.050
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True
Control Practice 2: Isolator Row CP# 1 (DS) - DS Isolator Row # 1
Total available system length (ft) = 65
Total available system width (ft) = 35
Available height from chamber base to surface (ft) = 4.00
Number of isolator rows = 1
Native soil infiltration rate (in/hr) = 0.00
Assumed stone porosity () = 0.40
Sizing option: Use all available area
Selected Chamber Information
Chamber type: SC-310
Chamber height (in): 16.00
Chamber width (in): 40.00
Chamber segment length (in): 85.40
Final storage volume (cf): 2139.667
Number of rows: 9
Row length (ft): 57.2
Total system length (ft): 448.4
Total system width (ft): 30.0
Number of chambers: 63
Overflow weir invert elevation (ft) = 2.45
Orifice 1 invert elevation (ft) = 0.00
Orifice 1 diameter (ft) = 1.00
Orifice 2 invert elevation (ft) = 0.00
Orifice 2 diameter (ft) = 0.00

LEGEND:

- EXISTING DRAINAGE AREA BOUNDARY
- EXISTING PERVIOUS AREA
- DRAINAGE ARROW
- OVERFLOW ROUTE ARROW

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

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WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	10/7/2022	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756

PRINTED FOR PRELIMINARY

DATE 08/16/2022

DRAWN BY: ECH

CHECKED BY: JFV

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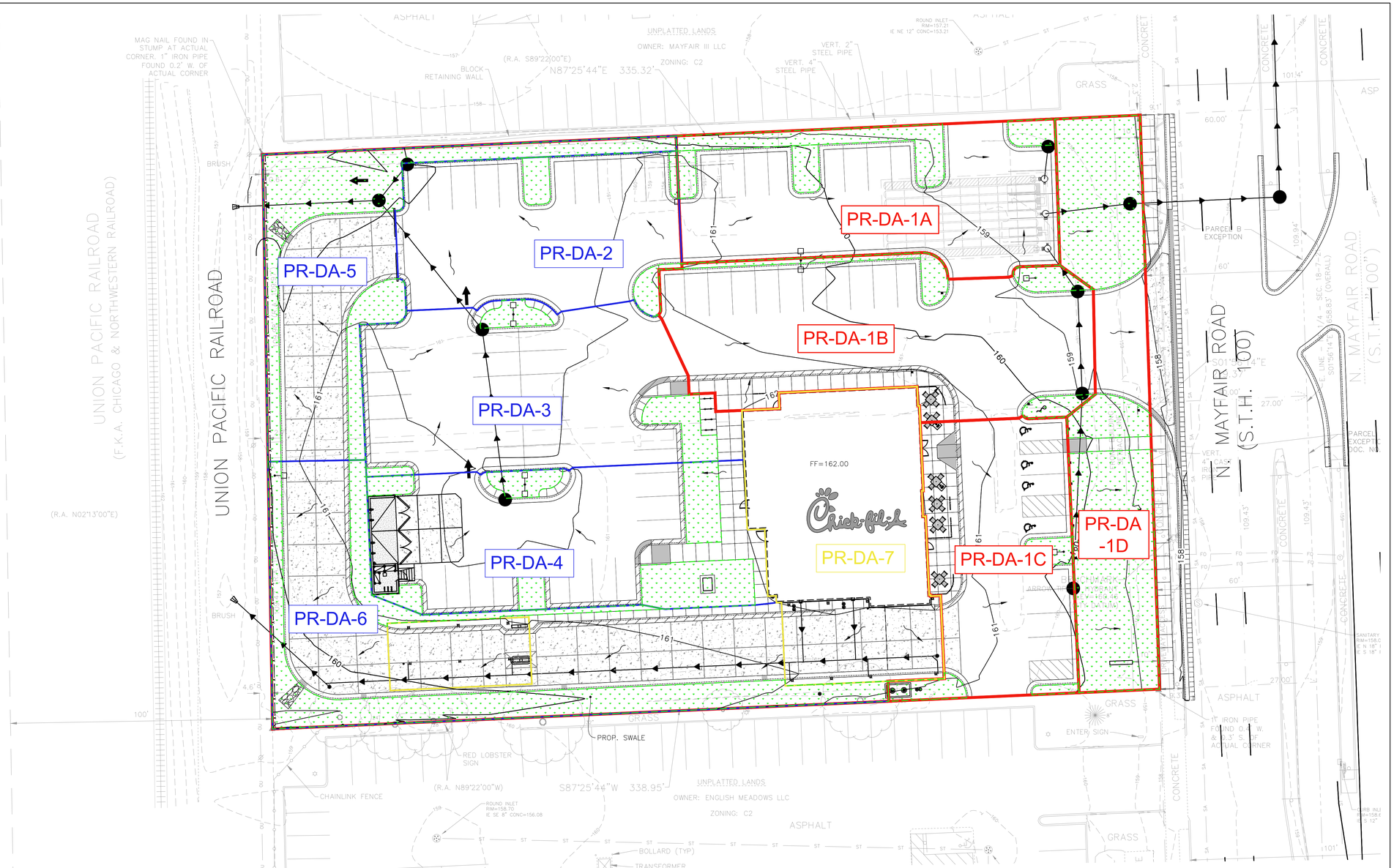
SHEET

EXISTING DRAINAGE PLAN

SHEET NUMBER

EX-100



LEGEND:

- PROPOSED DRAINAGE AREA BOUNDARY
- DRAINAGE BOUNDARY TRIBUTARY TO PAVERS OR OFFSITE
- BUILDING DRAINAGE BOUNDARY
- PROPOSED PERVIOUS AREA
- DRAINAGE ARROW
- OVERFLOW ROUTE ARROW

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

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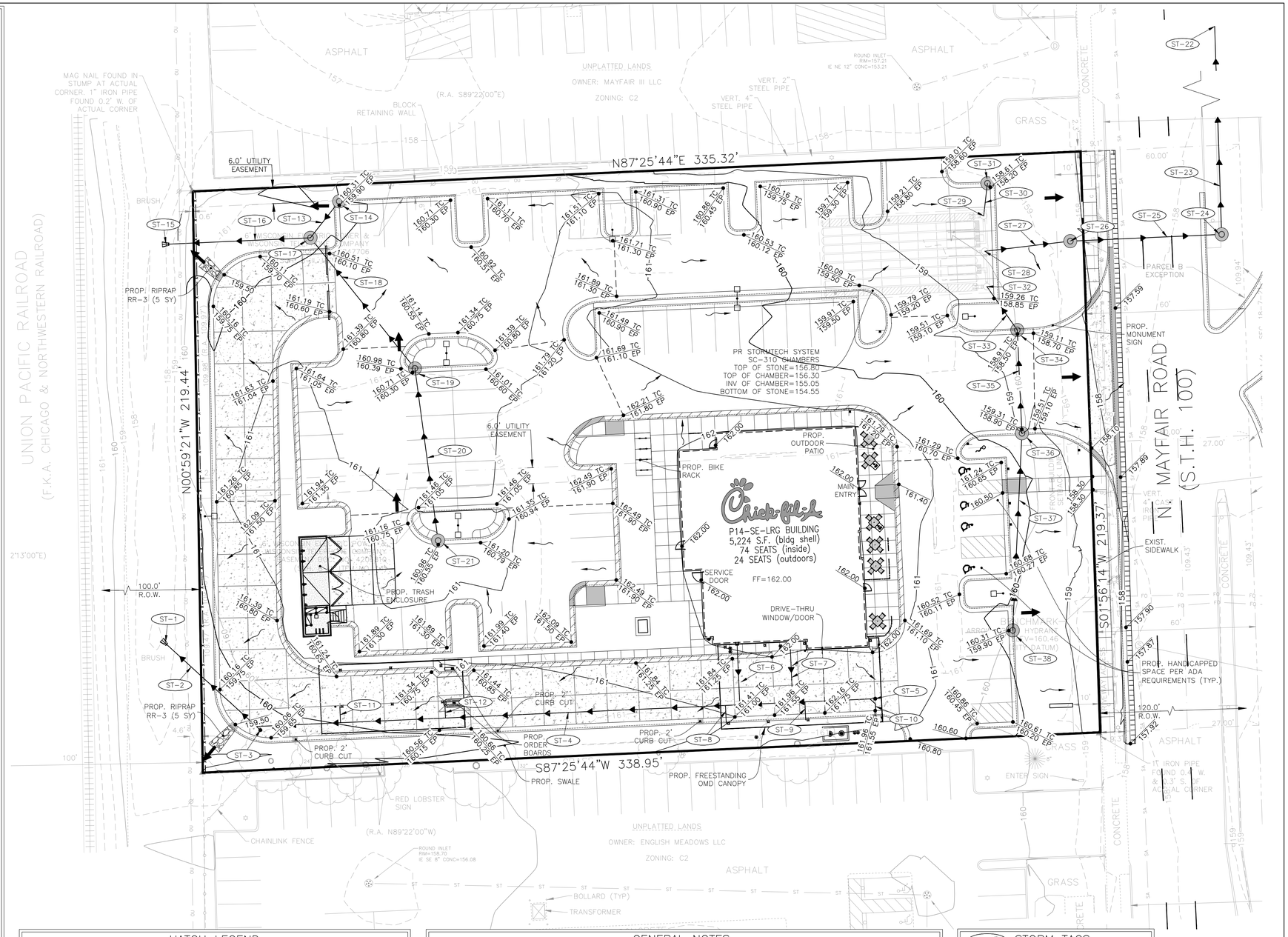
SHEET
PROPOSED DRAINAGE PLAN

SHEET NUMBER
EX-200

GRADING & DRAINAGE NOTES

1. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
2. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT, ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
3. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
4. THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
5. PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
6. THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
7. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
8. PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
9. IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
10. CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.
11. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
12. SEE EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES AND NOTES.
13. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. NO ON SITE BURNING WILL BE ALLOWED
14. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
15. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
16. GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
17. NO PART OF THE PROPOSED PROJECT IS LOCATED WITHIN A FLOOD HAZARD AREA
18. SPOT ELEVATIONS SHOWN ARE @ EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.
19. ALL CONCRETE CURB & GUTTER SHALL BE TYPE B-6.18 CURB UNLESS OTHERWISE NOTED ON THE PLANS.
20. ALL STORM SEWER JOINTS SHALL HAVE O-RING GASKETS.
21. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
22. BACKFILL TO THE TOP OF CURBS.
23. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS
24. ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 1.5%.
25. DESIGNATED HANDICAP PARKING AREAS SHALL BE GRADED TO A MAXIMUM OF 1.5%
26. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING OF PAVEMENT.
27. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
28. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
29. ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.
30. ALL STORM DRAINAGE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT **CITY OF WAUWATOSA STANDARDS AND SPECIFICATIONS.**



HATCH LEGEND

- DENOTES REVERSE (SPILLING) CURB & GUTTER
- DENOTES CONCRETE CURB & GUTTER (CATCHING)
- DENOTES AREA OF DEPRESSED SPILLING CURB & GUTTER
- DENOTES AREA OF DEPRESSED CATCHING CURB & GUTTER
- DENOTES AREA OF DEPRESSED SIDEWALK
- XXX.XX DENOTES EXISTING AND OR PROPOSED SPOT ELEVATIONS.
- DENOTES PROPOSED DRAINAGE DIRECTION ARROW.
- DENOTES PROPOSED OVERFLOW DIRECTION ARROW.

TRAFFIC CONTROL NOTES:

- ALL APPLICABLE **CITY/STATE** PERMITS, INCLUDING BUT NOT LIMITED TO CLOSURE PERMITS, SHALL BE OBTAINED PRIOR TO ANY CONSTRUCTION WITHIN **CITY/STATE** ROW OR LANE CLOSURES.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- SIDEWALK CLOSED SIGNS REQUIRED FOR ALL SIDEWALK CLOSURES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

GENERAL NOTES:

- ACCESSIBLE PARKING, RAMPS, AND SIGNAGE SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS, NOTHING INDICATED ON THE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
- 1 WEEK PRIOR TO CONSTRUCTION WITHIN **CITY OR STATE** ROW OR ANY CONNECTION TO PUBLIC SEWERS, CONTRACTOR SHALL NOTIFY THE APPROPRIATE CITY ENGINEERING DIVISIONS:
- CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS. PLACE 3/4 INCH EXPANSION JOINT BETWEEN ALL P.C.C. PAVEMENT/ SIDEWALKS AND BUILDING. PLACE 1/2 INCH EXPANSION JOINT BETWEEN SIDEWALKS AND P.C.C. PAVEMENT. CUT/TRIM EXPANSION JOINTS TO BE FLUSH WITH SURFACE.
- ALL PROPERTY PINS SHALL BF PROTECTED FROM GRADING OR OTHER OPERATIONS. ANY PINS DISTURBED SHALL BE RESET AT THE CONTRACTOR'S EXPENSE.
- DO NOT STORE CONSTRUCTION MATERIALS AND EQUIPMENT IN THE RIGHT-OF-WAY.
- THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OR MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK.
- THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE **CITY**.
- ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH **CITY** CONSTRUCTION SPECIFICATIONS AND THE LATEST EDITION OF **WISDOT** DESIGN STANDARDS
- EXCAVATION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
- CONTRACTOR TO GRADE 4" BELOW THE BACK OF CURB TO ALLOW FOR THE PLACEMENT OF TOPSOIL. A MINIMUM OF 4" OF TOPSOIL SHALL BE PLACED IN ALL PLANTING BEDS AND ALL GRASSED AREAS. GRADED AREAS TO BE HELD DOWN TO THE APPROPRIATE ELEVATION TO ACCOUNT FOR TOPSOIL. SEE SHEET L-101 FOR DETAILS.

(ST-#) STORM TAGS

* REFER TO SHEET PS-101 FOR TAG INFO

NOTE:

* ALL STORM STRUCTURES WITHIN PAVED AREAS REQUIRE WEEP HOLES. SEE DETAILS 40 & 40A ON SHEET C-403 FOR WEEP HOLE DETAILS.

NORTH

0 20'

1" = 20'

BAR IS ONE INCH ON OFFICIAL DRAWINGS

0 1"

IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY

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2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

PRELIMINARY

ENGINEER'S PROJECT #	220756
PRINTED FOR	PRELIMINARY
DATE	11/09/2022
DRAWN BY: ECH	
CHECKED BY: JFV	

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SHEET
GRADING PLAN

SHEET NUMBER
C-300

A CONFLICT TAGS

OMITTED FOR THIS SUBMITTAL

ST-# STORM TAGS

ST-1
FES, 8"
INV = 157.00

ST-2
51 LIN FT SS PVC SDR-26, 8"
@ 0.49%

ST-3
CLEANOUT (SEE DETAIL)
RIM = 159.75
INV = 157.25

ST-4
234 LIN FT SS PVC SDR-26, 8"
@ 0.54%
INV @ ST-2 = 157.24

ST-5
CLEANOUT (SEE DETAIL)
RIM = 161.65
INV = 158.50

ST-6
23 LIN FT SS PVC SDR-26, 8" (BLDG DRAIN)
@ 1.00%
INV @ ST-4 = 158.23
INV @ DOWNSPOUT = 158.25

ST-7
23 LIN FT SS PVC SDR-26, 8" (BLDG DRAIN)
@ 1.00%
INV @ ST-4 = 158.33
INV @ DOWNSPOUT = 158.38

ST-8
7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 158.20
INV @ DOWNSPOUT = 158.20

ST-9
7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 158.36
INV @ DOWNSPOUT = 158.20

ST-10
8 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 158.49
INV @ DOWNSPOUT = 158.35

ST-11
7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 157.41
INV @ DOWNSPOUT = 158.45

ST-12
7 LIN FT SS PVC SDR-26, 6" (CANOPY DRAIN)
@ 1.00%
INV @ ST-4 = 157.63
INV @ DOWNSPOUT = 158.57

ST-13
14 LIN FT SS ADS N-12 WT, 12"
@ 0.71%

ST-14
STM SWR CB 3' DIA., R-3235 OL
T/C = 160.31
INV = 157.75 SW 12" ADS

ST-15
FES, 12"
INV = 157.50

ST-16
54 LIN FT SS ADS N-12 WT, 12"
@ 0.28%

ST-17
PROP. HYRDO INTERNATIONAL UP-FLO FILTER, 4' DIA.
# OF FILTERS DETERMINED BY HYDRO INTERNATIONAL
RIM = 160.50
INV = 157.65 W 12" ADS
INV = 157.75 SE 12" ADS
INV = 157.65 NE 12" ADS

ST-18
60 LIN FT SS ADS N-12, 12"
@ 0.25%

ST-19
STM SWR CB 3' DIA., R-3235 OL
T/C = 160.71
RIM = 160.30
INV = 157.90

ST-20
64 LIN FT SS ADS N-12, 12"
@ 0.25%

ST-21
STM SWR CB 3' DIA., R-3235 OL
T/C = 160.96
INV = 158.06 N 12" ADS

ST-22
EX. STM INLET (RIM AND INVERT ESTIMATED)
RIM = 157.00
INV = 153.00 S 15" RCP
CONTRACTOR TO FIELD VERIFY RIM AND INVERT

ST-23
181 LIN FT SS, 15" RCP
@ 0.50%

ST-24
STM SWR CB 4' DIA., R-3235 CL
RIM = 158.50
INV = 153.90 N 15" RCP
INV = 153.90 W 15" RCP

ST-25
54 LIN FT SS, 15" RCP
@ 0.56%

ST-26
STM SWR CB 4' DIA., R-2504 CL
RIM = 158.50
INV = 154.20 E 15" RCP
INV = 154.20 W 15" ADS

ST-27
30 LIN FT SS ADS N-12, 15"
@ 0.50%

ST-28
NYLOPLAST 30" DIA. DRAIN BASIN, H-20 SOLID GRATE
RIM = 158.55
WEIR PLATE TOP = 156.80
INV = 154.55 8.25" DIA. WEIR PLATE ORIFICE
INV = 154.35 E 15" ADS

ST-29
NYLOPLAST 30" DIA. DRAIN BASIN, H-20 SOLID GRATE
RIM = 158.40
INV = 154.35 N 12" ADS

ST-30
10 LIN FT SS ADS N-12, 12"
@ 0.50%

ST-31
STM SWR CB 2' DIA., R-3235 OL
T/C = 158.61
RIM = 158.15
INV = 154.40 S 12" ADS

ST-32
NYLOPLAST 30" DIA. DRAIN BASIN, H-20 SOLID GRATE
RIM = 158.80
INV = 154.35 SE 18" ADS

ST-33
17 LIN FT SS ADS N-12, 18"
@ 0.59%

ST-34
STM SWR CB 4' DIA., R-3235 OL
T/C = 158.91
RIM = 158.00
INV = 154.45 NW 18" ADS
INV = 154.45 S 12" RCP

ST-35
35 LIN FT SS, 12" RCP
@ 0.57%

ST-36
STM SWR CB 4' DIA., R-3235 OL
T/C = 159.31
RIM = 158.35
INV = 154.65 N 12" RCP
INV = 154.65 S 12" RCP

ST-37
72 LIN FT SS, 12" RCP
@ 0.49%

ST-38
STM SWR CB 2' DIA., R-3235 OL
T/C = 160.31
RIM = 158.55
INV = 155.00 N 12" RCP

NOTE:
* ALL STORM STRUCTURES WITHIN PAVED AREAS REQUIRE WEEP HOLES. SEE DETAILS 51 & 52 ON SHEET C-404 FOR WEEP HOLE DETAILS.

S-# SANITARY SEWER TAGS

S-1
EXIST. SAN MH
EXIST. RIM = 156.56
INV = 140.31 N 18" PVC
INV = 140.33 S 18" PVC

S-2
EXIST. 283 LF SAN SWR MAIN, 18" PVC
@ 0.48%

S-3
EXIST. SAN MH
EXIST. RIM = 158.04
INV = 141.69 N 18" PVC
INV = 141.69 S 18" PVC

S-4
EXIST. 17 LF SAN SERVICE, 6" PVC
(PIPE SIZE TO BE VERIFIED)
INV @ MAIN = 141.91 (APPROX.)
(PIPE ASSUMED TO HAVE RISER. CONTRACTOR TO VERIFY INVERT AT END OF STUB PRIOR TO ORDERING STRUCTURES. NOTIFY ENGINEER W/ FINDINGS.)

S-5
7 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ STUB = 152.28 (APPROX.)
(CONTRACTOR TO VERIFY STUB INVERT. NOTIFY ENGINEER W/ ANY DISCREPANCIES FROM PLAN.)

S-6
CLEANOUT (SEE DETAIL)
RIM = 159.00
INV = 152.35

S-7
29 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ S-5 = 152.33

S-8
CLEANOUT (SEE DETAIL)
RIM = 159.80
INV = 152.63

S-9
69 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ S-7 = 152.61

S-10
CLEANOUT (SEE DETAIL)
RIM = 160.00
INV = 153.33

S-11
68 LF SAN SERVICE, 6" PVC SDR 26
@ 1.04%
INV @ S-9 = 153.31

S-12
TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 160.95
INV = +/- 153.99

S-13
GREASE TRAP (1,250 GAL.)
SEE BUILDING PLUMBING PLAN FOR DETAILS
RIM(S) = 161.10 W, 161.10 E
INV = 154.19 (INLET)
INV = 154.02 (OUTLET)

S-14
25 LF SAN SERVICE, 4" PVC SDR 26
@ 2.08%

S-15
CLEANOUT (SEE DETAIL)
RIM = 161.15
INV = 154.71

S-16
40 LF SAN SERVICE, 4" PVC SDR 26
@ 2.08%
INV @ S-14 = 154.67
INV @ BLDG = 155.50
(VERIFY WITH ARCHITECT/PLANS)

S-17
TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 161.95
INV = +/- 155.46

S-18
48 LF SAN SERVICE, 4" PVC SDR 26
@ 3.21%
INV @ S-11 = 153.96
INV @ BLDG = 155.50
(VERIFY WITH ARCHITECT/PLANS)

S-19
TWO-WAY CLEAN OUT (SEE DETAIL)
RIM = 161.95
INV = +/- 155.44

BIKE RACK

Manufacturer:
Belson Outdoors

Contact Information:
Belson Outdoors
800-323-5664
sales@belson.com

Standard Description:
Orion In-ground or surface mount steel bike rack

Dimensions: 40"L x 33"H x 2-3/8" round tube

Finish: Black Powder Coated

Product Used In:
Concepts: FSR, In-Line, Licensee
Prototype: All
Palette: All

Ordering Information:
In Ground: ORN-2-IG-P
Surface Mount: ORN-2-SF-P

PRELIMINARY
NOT FOR CONSTRUCTION

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A
WAUWATOSA (WI) FSU
2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE
NO. DATE DESCRIPTION

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
DATE 11/09/2022
DRAWN BY: ECH
CHECKED BY: JFV

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SHEET
UTILITY TAGS

SHEET NUMBER
PS-101

DATE: May 16, 2023

TO: Wauwatosa Plan Commission

FROM: Police Chief James MacGillis

SUBJECT: Planning proposal for Chick-Fil-A restaurant at 2825/2835 N. Mayfair Road

---

Members of the Plan Commission,

I have serious concerns regarding the development proposal for building a Chick-Fil-A restaurant at 2825/2835 N. Mayfair Road. Chick-Fil-A restaurants bring an innumerable daily customer base as seen from their success in other municipalities. I believe that would also happen in the City of Wauwatosa due to the restaurant's popularity, however the proposed location will have a significant negative affect on traffic and pedestrian safety. I want to bring these concerns to your attention.

The roadway between the 2700 block (Center St.) and 3100 block (Burleigh Road) of N. Mayfair Road is a high traffic volume/high traffic congestion area. Data shows that the two of the three busiest and highest motor vehicle crash intersections in the City of Wauwatosa are Mayfair & Center and Mayfair & Burleigh based on accident frequency and severity. Further research has also shown that crashes in this area are 56% higher than the statewide average on similar roadways.

After my review of the site proposal and consulting with internal PD staff, it is clear that the median cut or pass through at approximately 2800 N. Mayfair Road will further compound traffic congestion. I fear it will further contribute to more crashes due to the high volume of potential customers at the proposed Chick-Fil-A exiting the parking lot to cross over the south-bound lanes to turn north in the median. That exiting traffic flow would cause a log-jam of vehicles, that would adversely affect both north bound and south bound lanes on Mayfair Road. Vehicles exiting south out of the proposed Chick-Fil-A parking lot would further contribute to an already high volume of vehicular traffic on Mayfair Road. The posting of additional restrictive signage (turns, speed, U-turns) would not alleviate these problems.

Because of high traffic flow, consistent disregarding of existing signs and signals, excessive speeds of drivers, reckless driving, and frequent traffic congestion due to existing retail establishments on Mayfair Road (2700-3100 N. Mayfair Road), I deploy directed patrol missions (DPM's) in that area. The intent is to slow down drivers via presence and enforcement, and thereby reduce vehicle crashes in that specific area. DPM's cannot be conducted with the required frequency to have a long-term impact due to increased calls for police service and existing staffing shortages at the Police Department.

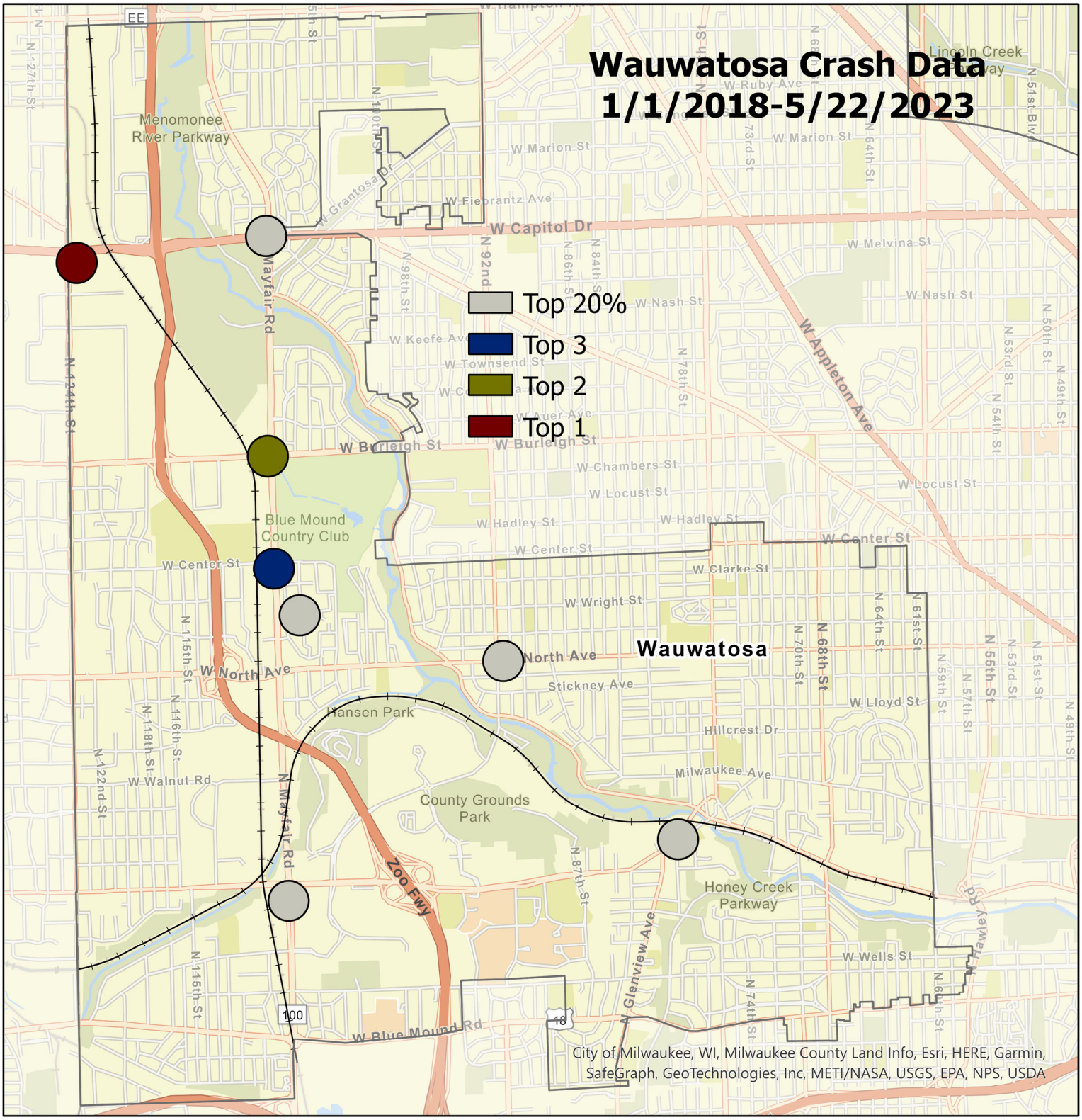
Emergency first responder vehicles utilize the 2700-3100 N. Mayfair roadway to access areas of the City of Wauwatosa both north of Burleigh Road and west of Mayfair Road. Geographic limitations are compounded by the location of the Blue Mound Country Club on the east side of N. Mayfair Road, the location of the railroad tracks that run parallel to Mayfair Road, and the location of Mayfair Mall.

Any blockage, congestion, or slow down may require emergency first responders to deviate several blocks west to N. 117th St (a residential only street surrounded by several school zones) to have a north/south thoroughfare, or to deviate several blocks south to North Ave. and then east to the Menomonee River Parkway (approximately 9100 West at North Ave. and 9900 West at Burleigh Road). Any deviation will have a significant impact on response times for emergency first responders, where minutes and seconds matter.

I bring these concerns to you, and respectfully request that they be made part of the conversation and deliberation by our Common Council. I am and will be available to answer any questions from you, the Council, or the community regarding this matter.

Respectfully,

James H. MacGillis
Chief of Police



Location	Cluster Count
12345 W Capitol Dr,A	192
W Burleigh St/Mayfair Rd	188
Mayfair Rd/W Center St	179
10.5 N Mayfair Rd	156
Harwood Av/Kavanaugh Pl	117
Mayfair Rd/W Capitol Dr	110
2500 N Mayfair Rd,PKL	103
Swan Bl/W North Av	98

AMUNDSEN DAVIS

June 9, 2023

VIA EMAIL
mayor@wauwatosa.net
Mayor Dennis McBride
City of Wauwatosa
7725 W. North Ave.
Wauwatosa, WI 53213

Re: ***Conditional Use Permit for Chick-fil-A at 2825 and 2835 N. Mayfair Road***

Subj: *Supplement to the Record and Proposed Conditions of Approval*

Dear Mayor McBride:

As you know, we represent Chick-fil-A, Inc. in connection with the application for a Conditional Use Permit at 2825 and 2835 N. Mayfair Road. Our application is scheduled for a public hearing before the Plan Commission on Monday, June 12th.

Accompanying this letter are the following documents to be added to the record as supplemental materials:

1. Overall Plan (Sheet OV-1);
2. Color Landscape Plan;
3. Rendering of View Looking North;
4. Rendering of View Looking West;
5. CFA Wauwatosa-Brookfield Compare Slide;
6. CFA Wauwatosa-Glendale Compare Slide; and
7. CBRE Real Estate Listing for 2825 and 2835 N. Mayfair Road (16 pages).

By copy to the City staff members identified below, we request that the supplemental materials be added to the formal record as well as the City's online Meeting Portal. We will bring paper copies of the same to the meeting upon request.

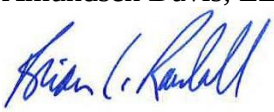
Finally, we reviewed the City's Memo with the staff recommendation for denial. However, the Plan Commission may vote to recommend approval of the Conditional Use Permit upon its review of the substantial evidence at the public hearing and pursuant to the applicable legal standards

under Sec. 24.16.040.G., Wauwatosa Code of Ordinances and Sec. 62.23(7)(de), Wis. Stats. (Act 67). In that case, the Plan Commissioners may benefit from a draft list of approval conditions to include the standard ones used for restaurants (##1-5, 8-9) as well as certain conditions specific to this application (##6-7).

Accordingly, accompanying this letter is an approval resolution prepared consistent with the City's customary format that contains the draft list of approval conditions.

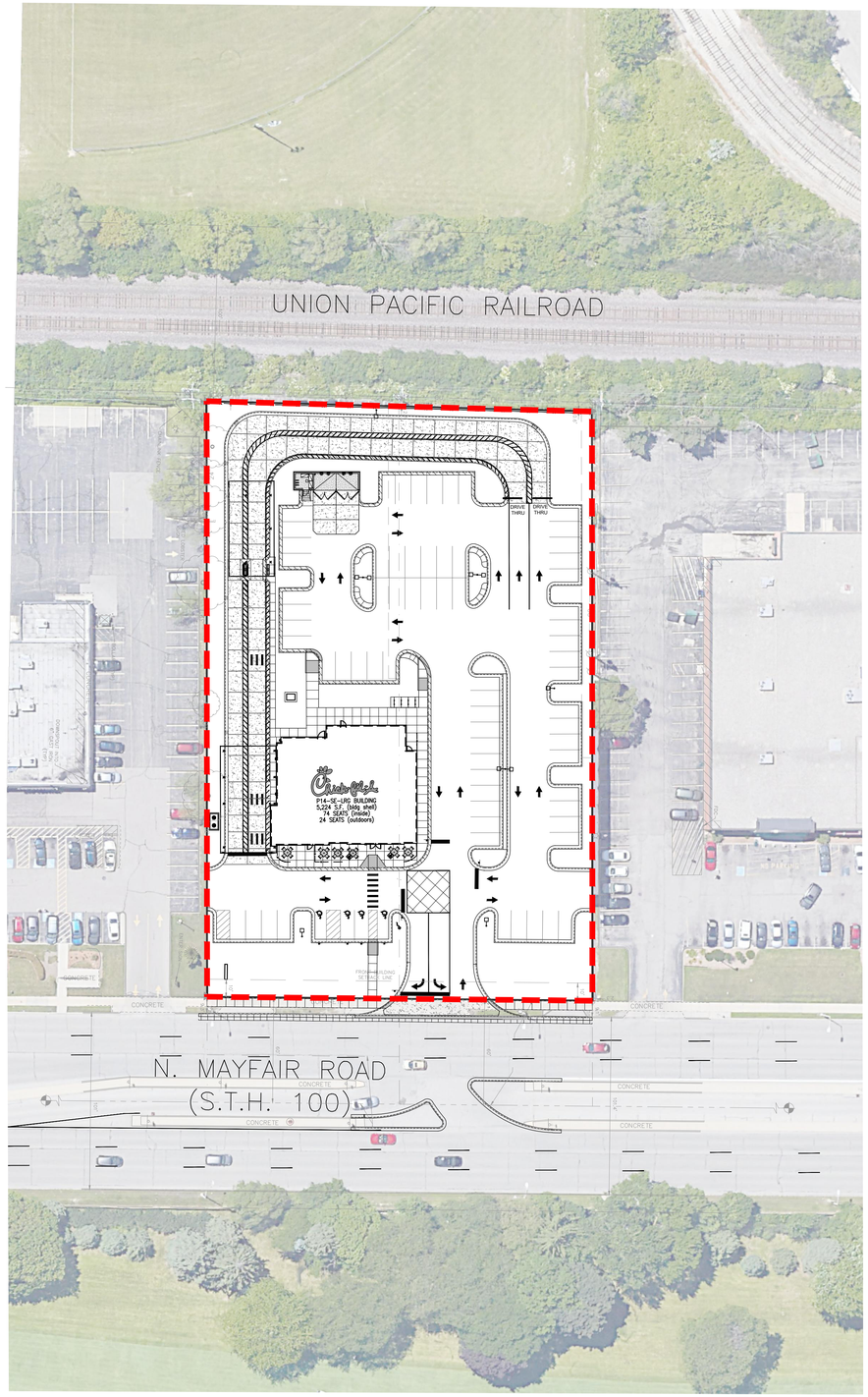
Very truly yours,

Amundsen Davis, LLC



Brian C. Randall

Attachments
cc: Ald. Michael Morgan, 7th District
Ald. Amanda Fuerst, 7th District
Ms. Paulette Enders, Director of Development
Ms. Tammy Szudy – Planning & Zoning Manager
Mr. Art Piñon – Planner
Mr. William Wehrley – City Engineer
Ms. Jennifer Stilling – Senior Civil Engineer
Mr. Michael May – Senior Civil Engineer
Mr. James Archambo – City Administrator
Mr. Alan Kesner – City Attorney
Mr. Steven Braatz – City Clerk
Chick-fil-A Project Team



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998

HRGreen
HRGreen.com

CHICK-FIL-A

WAUWATOSA (WI) FSU

2825 N. MAYFAIR ROAD
WAUWATOSA, WI 53226

FSU# 05293

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	04/05/23	PER CITY COMMENTS

PRELIMINARY

ENGINEER'S PROJECT # 220756
PRINTED FOR PRELIMINARY
DATE 05/25/2023
DRAWN BY: MRJ
CHECKED BY: JFV

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SHEET
OVERALL PLAN

SHEET NUMBER
OV-1

CHICK-FIL-A

WAUWATOSA, WISCONSIN

HRGreen

748

ENTER

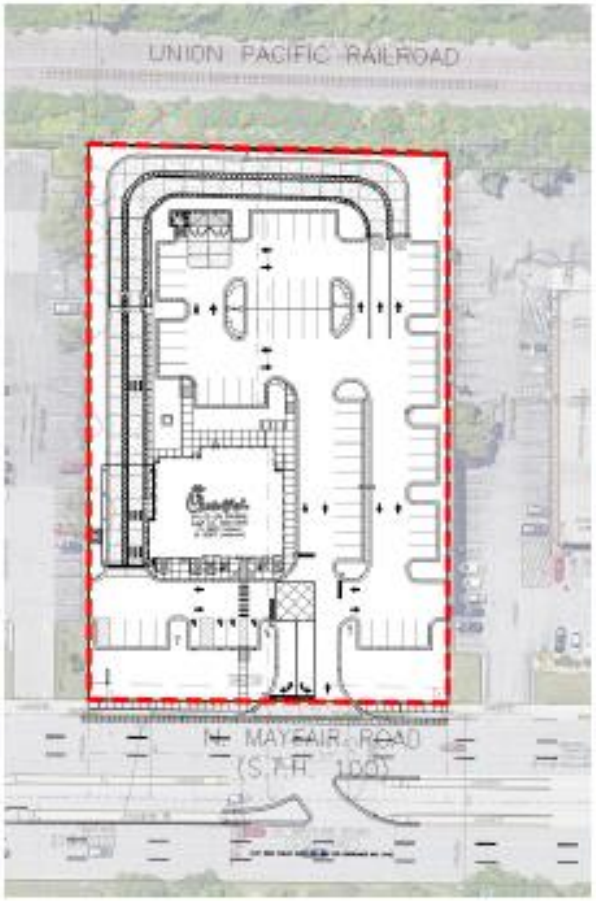
Chick-fil-A

SITE INFORMATION

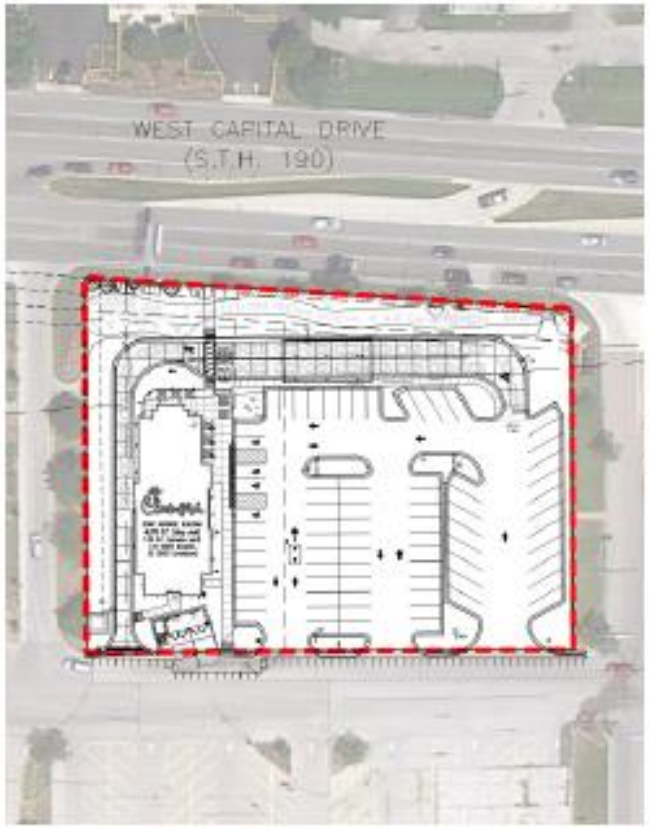
- Parcel Area: 1.70 acres

SITE DESIGN

- 41 car stack/15 car overflow
- Full dual lane drive thru to maximize stack.



WAUWATOSA



SITE INFORMATION

- Opened in 2013
- Parcel Area: 1.52 acres

SITE DESIGN

- 28 car stack/7 car overflow
- Dual lane order point with single lane to pickup window

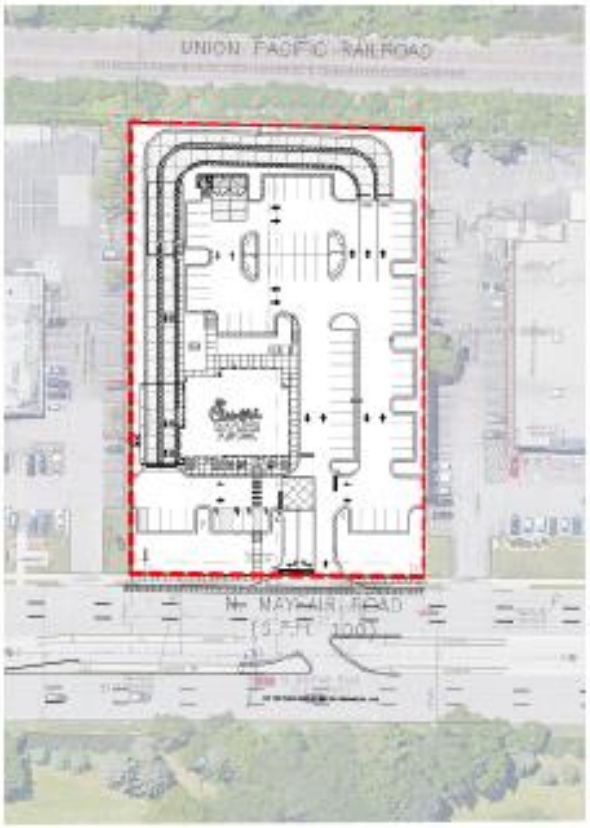
124th & CAPITOL DR.

SITE INFORMATION

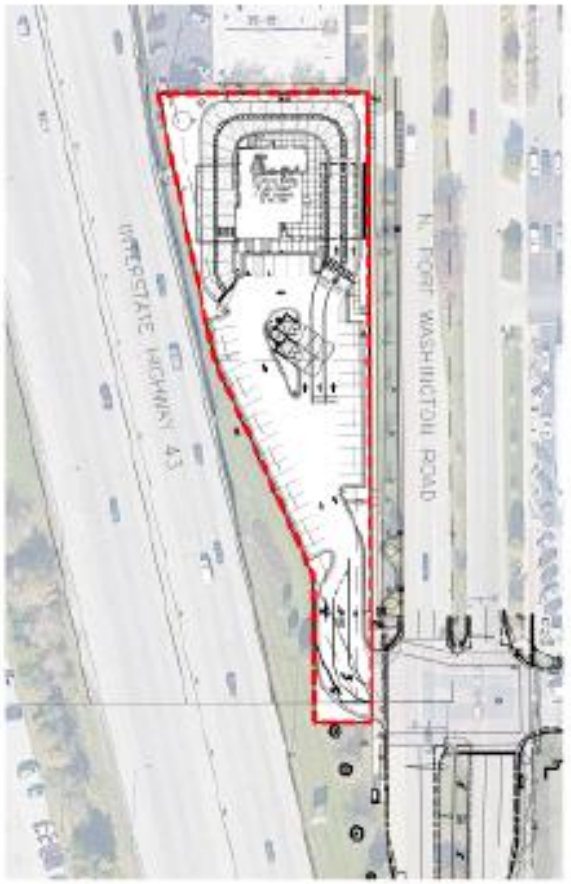
- Parcel Area: 1.70 acres

SITE DESIGN

- 41 car stack/15 car overflow
- Full dual lane drive thru to maximize stack.



WAUWATOSA



GLENDALE

SITE INFORMATION

- Opened in 2022
- Parcel Area: 0.98 acres

SITE DESIGN

- 27 car stack/20 car overflow
- Full dual lane drive thru to maximize stack

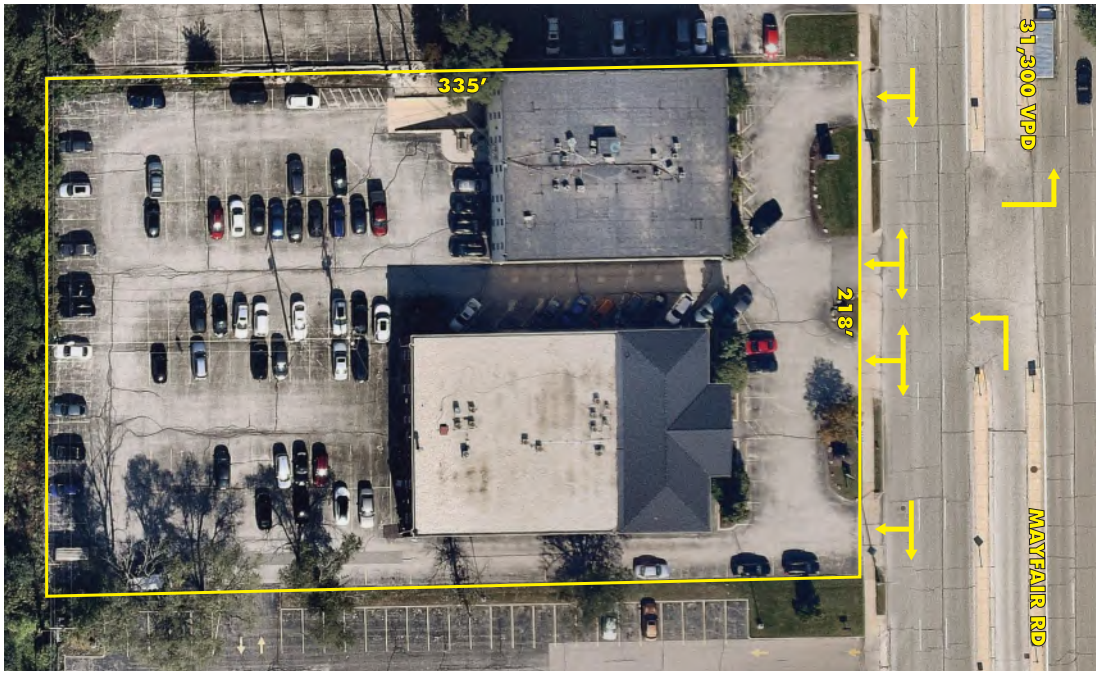
DEVELOPMENT SITE
1.7 ACRES

2825 & 2835 N MAYFAIR RD | MILWAUKEE, WI

PROPERTY **INFO**

The property is centrally located within the Milwaukee metropolitan area and is immediately east of Interstate 41, which carries 148,000 vehicles per day.

- Land: 1.7 Acres
- Dimensions: 218′ (frontage) x 335′ (deep)
- Zoning: C2 General Commercial
- Asking Price: $2,450,000
- 2825 Building Size: 26,054 SF
- 2835 Building Size: 17,888 SF
- Traffic Counts: Mayfair Rd 31,300 VPD
  W Burleigh St 23,100 VPD



2021 DEMOGRAPHICS

	1 MILE	3 MILES	5 MILES
Population	8,067	95,216	312,307
Avg. H.H. Income	$103,115	$93,906	$79,849
Daytime Population	13,455	113,240	318,786

TRAFFIC COUNTS

Mayfair Rd	31,300 VPD
W Burleigh St	23,100 VPD

TREMENDOUS OPPORTUNITY

Incredible opportunity to acquire 1.7 developable acres located on the main commercial corridor of Mayfair Road/Highway 100 in the Milwaukee Metropolitan Statistical Area.

EXCEPTIONAL VISIBILITY & ACCESS

The property has over 200 feet of unobstructed visibility along North Mayfair Road/Highway 100, which has traffic of 31,000 vehicles per day. The site is also easily accessible to Interstate 41 with an on/off ramp located just half of a mile south of the center.

STRONG DEMOGRAPHICS

The buildings have access to 95,989 people with an average household income of $89,182 within a 3-mile radius, and 310,669 people with average household income of $77,158 within the primary 5-mile trade area.

PROPERTY DETAILS

NAME:	Sterling Center
ADDRESS:	2825 N Mayfair Rd, Wauwatosa, WI
NET RENTABLE AREA:	26,054 SF
YEAR BUILT:	1965
NUMBER OF FLOORS:	3
EXTERIOR WALLS:	Brick

PROPERTY DETAILS

NAME:	Bradley Building
ADDRESS:	2835 N Mayfair Rd, Wauwatosa, WI
NET RENTABLE AREA:	17,888 SF
YEAR BUILT:	1990
NUMBER OF FLOORS:	3
EXTERIOR WALLS:	Brick

SITE DETAILS

SITE SIZE:	1.00 Acres
PARCEL ID #:	2999986000
2020 ASSESSED LAND VALUE:	$739,900
2020 IMPROVEMENTS VALUE:	$127,800
2020 TOTAL ASSESSED VALUE:	$867,700
2020 PROPERTY TAX BILL:	$19,503.12

SITE DETAILS

SITE SIZE:	0.84 Acres
PARCEL ID #:	2999987000
2019 ASSESSED LAND VALUE:	$739,400
IMPROVEMENTS VALUE:	$69,700
2019 TOTAL ASSESSED VALUE:	$809,100
2019 PROPERTY TAX BILL:	$18,127.44

DICK'S SPORTING GOODS
DSW DESIGNER SHOE WAREHOUSE
J.CREW
T.J.maxx
OLD NAVY
ULTA BEAUTY
VERSONA
NORDSTROM rack
maurices
carter's
WHOLE FOODS MARKET
HomeGoods
Milwaukee Habitat for Humanity
LRO
Alro Steel
Metals • Industrial Supplies • Plastics
meijer
VIKING electric
A Sonepar Company
HANSEN STORAGE CO.
AMERICAN APC PASTEURIZATION COMPANY
Milwaukee Career College
Aurora Health Care
ADVENT
DOLLAR TREE
Discovery clothing company
ARGUS TECHNICAL SERVICES
Mayfair Rd - 31,000 VPD

NORDSTROM
Crate&Barrel
BARNES&NOBLE
The Container Store
macy's
ALDO
J.CREW
The Cheesecake Factory
TEXAS de BRAZIL
Panera
MAGGIANO'S
Eddie Bauer
Walgreens
Radisson
usbank
BEST BUY
theVitamin Shoppe
BUFFALO WILD WINGS
Associated Bank
WELLS FARGO
Massage Envy
Jersey Mike's
Spectrum
Gigi's cupcakes
RED LOBSTER
ARGUS
TECHNICAL SERVICES
Mayfair Rd - 31,000 VPD
DOLLAR TREE
Discovery
clothing company
ADVENT
Whitman Middle School

CONTACT **US**

RETAIL | WISCONSIN

ANDY STEFANICH
First Vice President
+1 414 274 1645
andrew.stefanich@cbre.com

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MARKET OVERVIEW

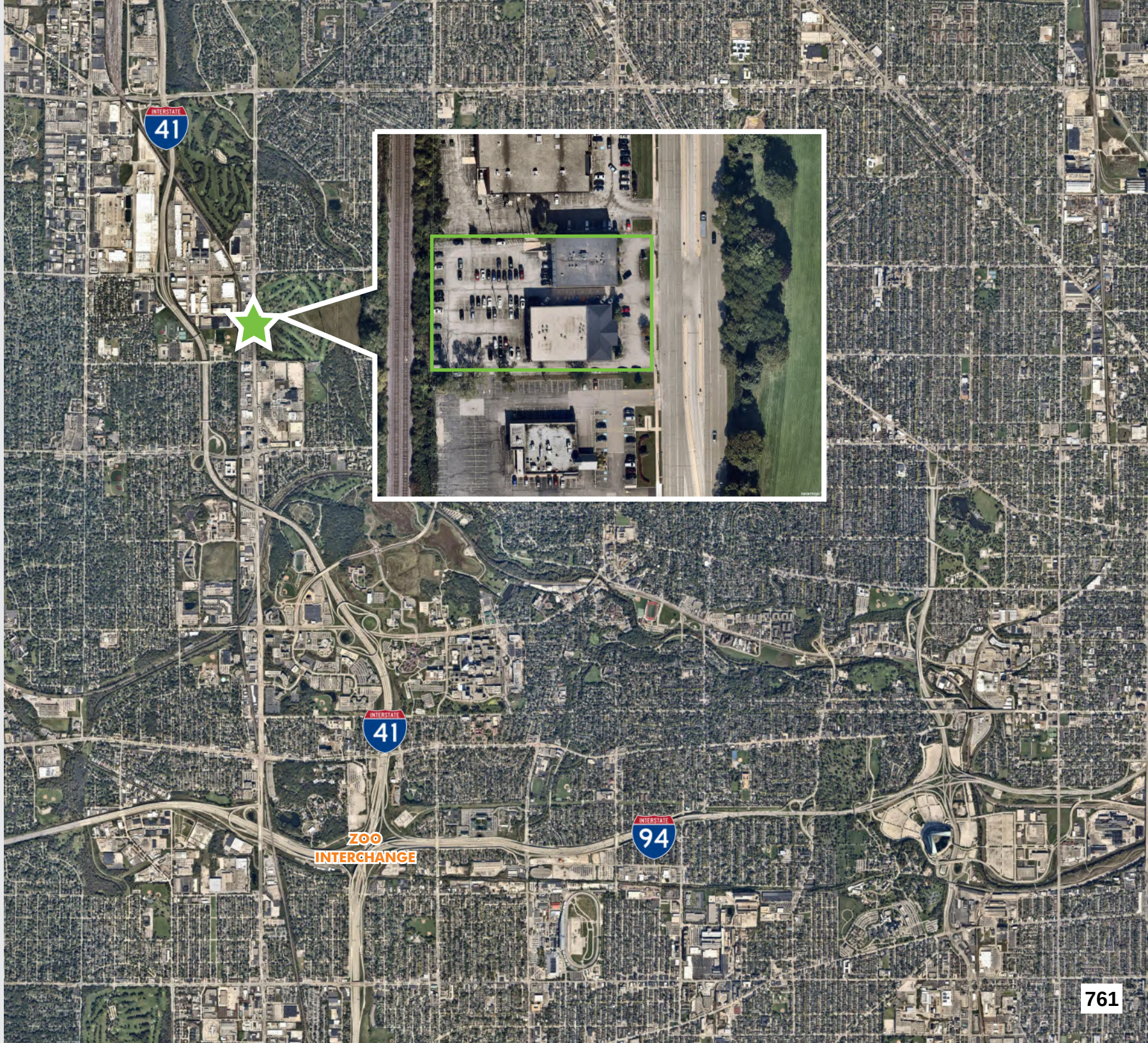
TRADE AREA **OVERVIEW**

Sterling Center & the Bradley Building are located in Wauwatosa, WI, a northwestern suburb of Milwaukee located just four miles or 15 minutes west of downtown with proximity to everything the region has to offer. Known affectionately by locals as "Tosa," the city is filled with unique local shops and restaurants, and many of Milwaukee's most popular spots are opening up second locations in this neighboring city. The city is also home to the Milwaukee Regional Medical Center as well as several colleges and universities.

Situated directly in between the prime suburban office markets of Brookfield, Milwaukee West, Milwaukee Northwest and West Allis, the Mayfair/Wauwatosa submarket provides excellent access to the entire metropolitan Milwaukee market and the greater Midwest region.

The Mayfair/Wauwatosa submarket is a office submarket in suburban Milwaukee located just east of the Brookfield submarket along Interstate 41 and just north of Interstate 94 acting as the southern border of the submarket. The submarket contains 6M square feet of office space and a vacancy rate of 11.0% as of first quarter of 2021.

11% Office Vacancy	6M SF Inventory	310,669 Population
124,369 Households	$77,158 Avg Household Income	162,653 Employees

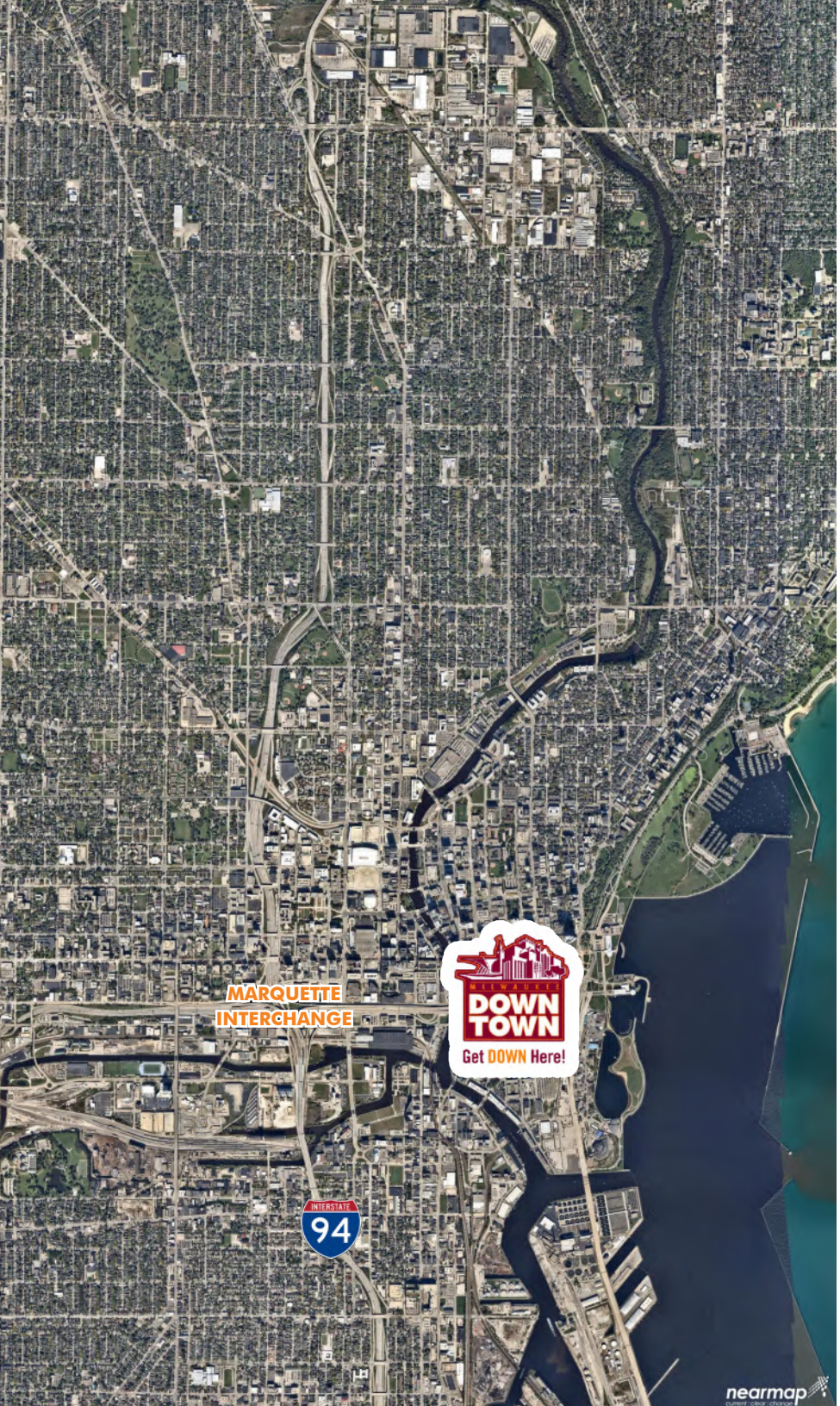


Interstate 41
0.8 Miles
3 Minutes

Zoo Interchange
2.9 Miles
5 Minutes

Downtown
10 Miles
15 Minutes

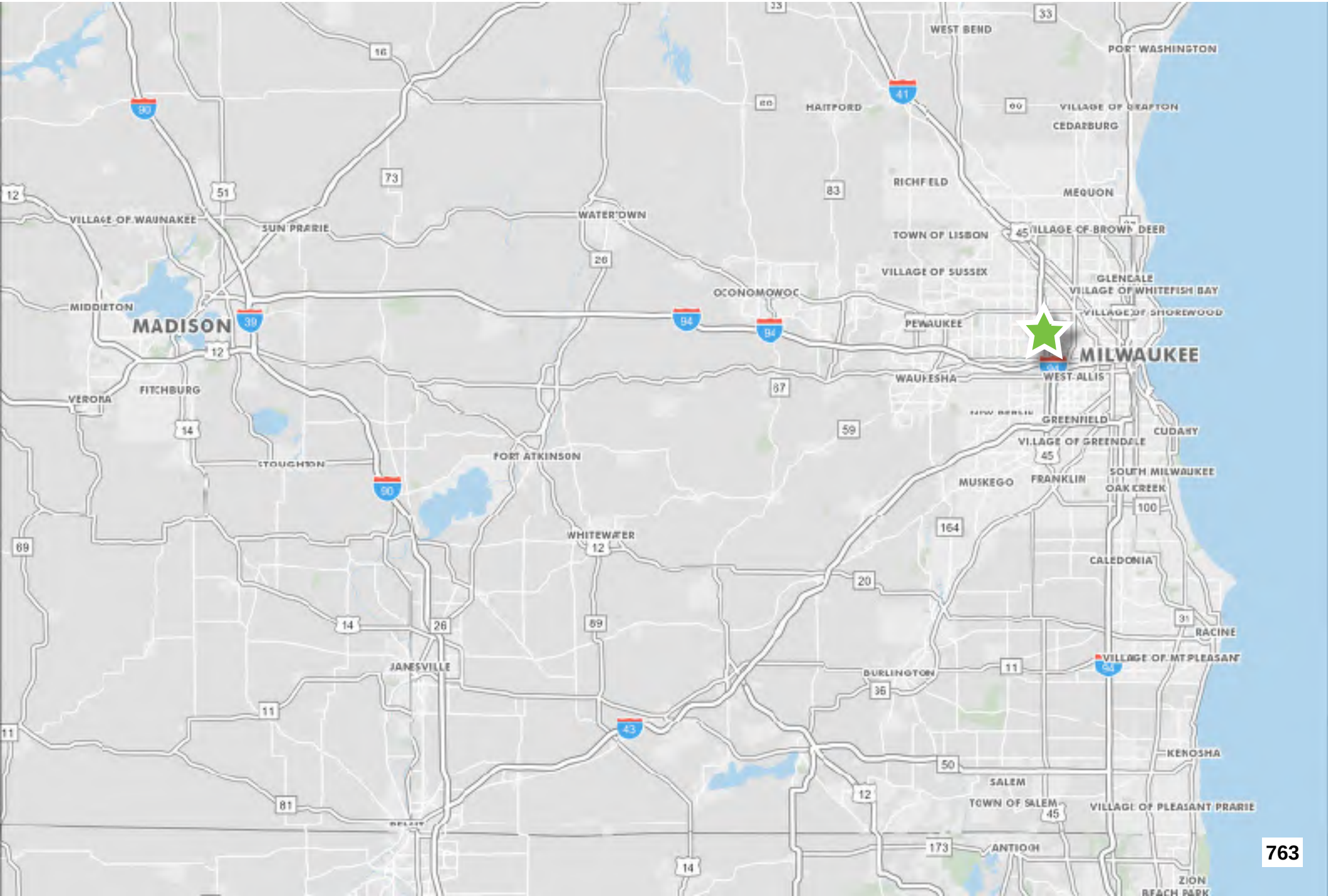
Mitchell International
16.9 Miles
20 Minutes

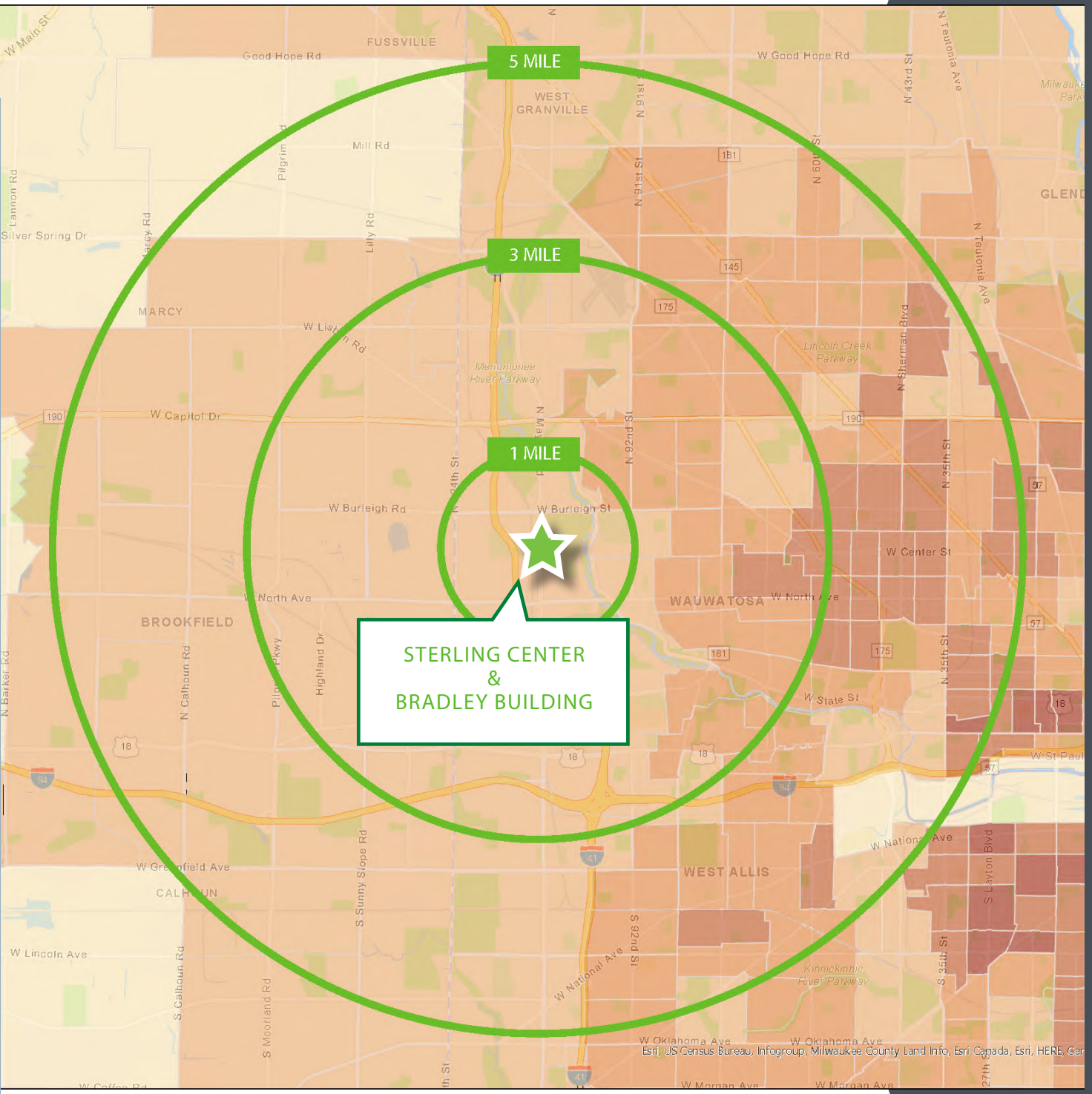


DEMOGRAPHICS

	1 MILE	3 MILES	5 MILES
2020 Population - Current Year Estimate	7,696	94,558	310,763
2025 Population - Five Year Projection	7,989	95,000	313,363
2010 Population - Census	7,049	92,977	310,120
2000 Population - Census	7,444	93,824	317,793
2010-2020 Annual Population Growth Rate	0.86%	0.16%	0.02%
2020-2025 Annual Population Growth Rate	0.75%	0.09%	0.17%
2020 Households - Current Year Estimate	3,458	40,422	124,591
2025 Households - Five Year Projection	3,596	40,536	125,537
2010 Households - Census	3,116	39,761	124,113
2000 Households - Census	3,279	40,644	125,803
2010-2020 Annual Household Growth Rate	1.02%	0.16%	0.04%
2020-2025 Annual Household Growth Rate	0.79%	0.06%	0.15%
2020 Average Household Size	2.18	2.29	2.46
2020 Average Household Income	$94,999	$90,141	$77,041
2025 Average Household Income	$104,645	$100,422	$85,542
2020 Median Household Income	$73,382	$65,456	$53,913
2025 Median Household Income	$79,113	$71,816	$57,733
2020 Per Capita Income	$42,759	$38,524	$30,893
2025 Per Capita Income	$47,142	$42,837	$34,277
2020 Housing Units	3,724	43,442	137,119
2020 Vacant Housing Units	266	3,020	12,528
2020 Occupied Housing Units	3,458	40,422	124,591
2020 Owner Occupied Housing Units	1,833	24,878	68,957
2020 Renter Occupied Housing Units	1,625	15,544	55,634
2020 Population 25 and Over	5,583	65,905	205,754
HS and Associates Degrees	2,222	30,792	115,551
Bachelor's Degree or Higher	3,149	31,550	72,327
2020 Businesses	735	4,526	10,891
2020 Employees	14,149	72,944	162,210

REGIONAL **MAP**





POPULATION DENSITY

2020 POPULATION

1 MILE | 7,696
3 MILES | 94,558
5 MILES | 310,763

2025 POPULATION

1 MILE | 7,989
3 MILES | 95,000
5 MILES | 313,363

POPULATION DENSITY 2020

- Less than 1,000
- 1,000 to 5,000
- 5,000 to 10,000
- 10,000 to 20,000
- 20,000 or more

AVERAGE INCOME

2020 AVERAGE HOUSEHOLD INCOME

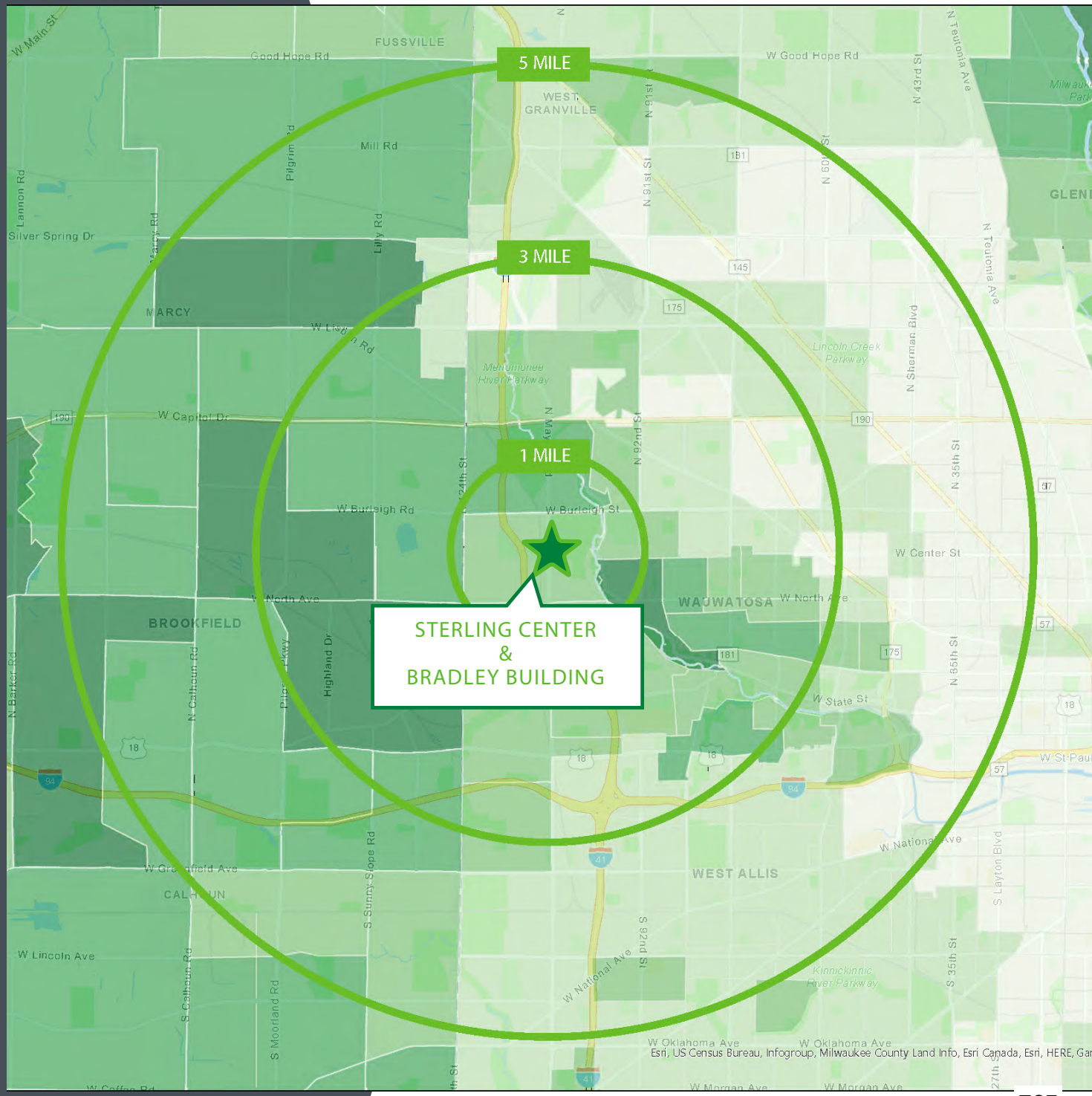
1 MILE | $94,999
3 MILES | $90,141
5 MILES | $77,041

2025 AVERAGE HOUSEHOLD INCOME

1 MILE | $104,645
3 MILES | $100,422
5 MILES | $85,542

AVERAGE HOUSEHOLD INCOME – 2020

- Over $120,000
- $90,000 to $120,000
- $70,000 to $90,000
- $50,000 to $70,000
- Less than $50,000



MILWAUKEE **OVERVIEW**

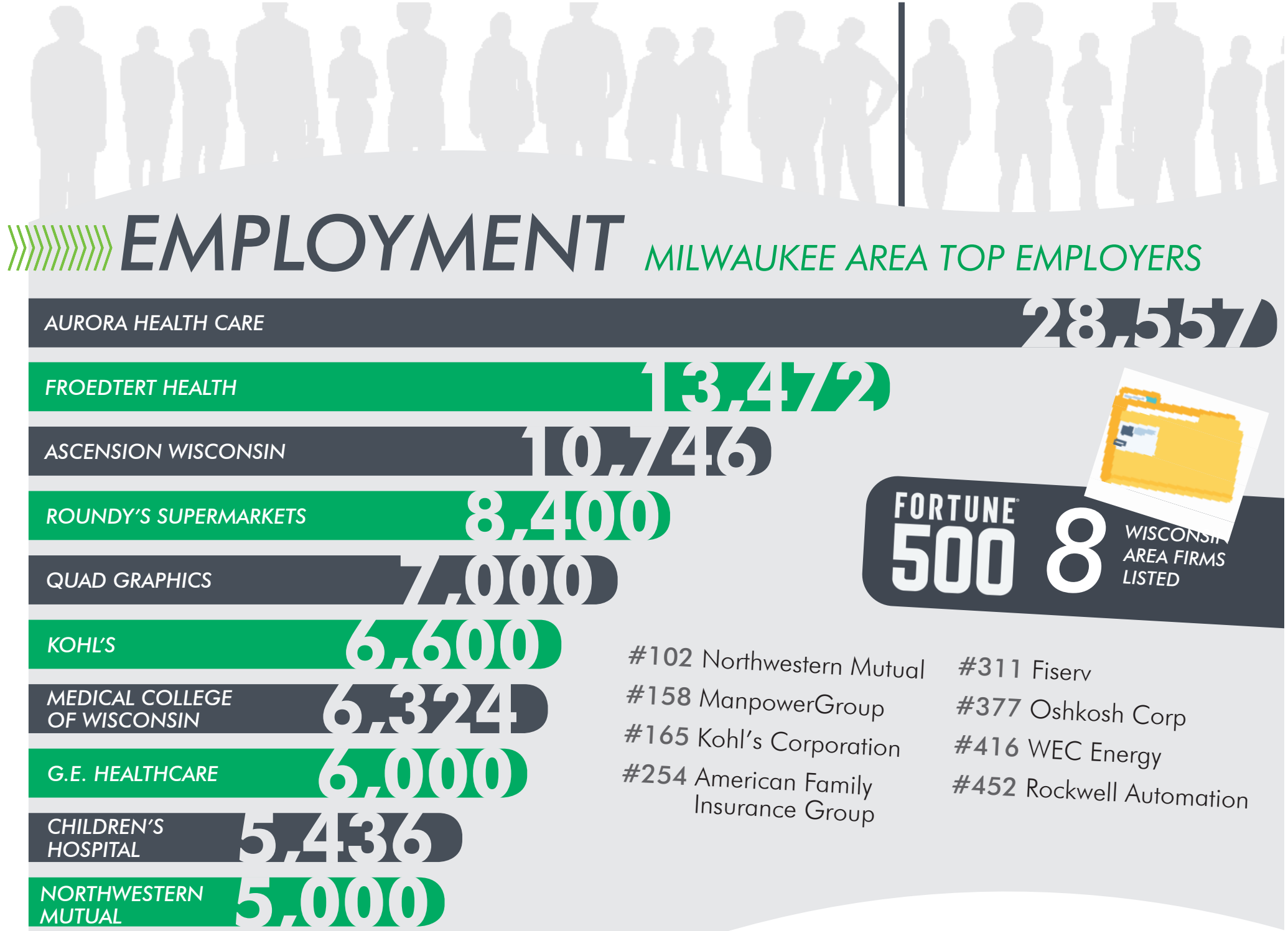
The Milwaukee Metro area covers 1,460 square miles and is located in the Midwestern United States. Other major metropolitan areas in the region include: Chicago, Illinois (90 miles south); Indianapolis, Indiana (276 miles southeast); Detroit, Michigan (364 miles east); Minneapolis, Minnesota (337 miles northwest); and St. Louis, Missouri (370 miles southwest). The Milwaukee Metropolitan Statistical Area ("MSA") consists of four county regions in southeast Wisconsin.

Long known as a hub of brewing and manufacturing employment, Milwaukee has reinvented its economy for the 21st century; the city is home to a growing number of startups and technology companies, and has recently positioned itself as the a major player in the water technology and research industry. As of 2021, Wisconsin was home to eight Fortune 500 companies, with 6 being located in the Milwaukee Metro area. Recent investments by industry-leading financial services & technology companies including Amazon, Northwestern Mutual, and American Family Insurance are expected to fuel strong economic growth in both the near- and long-term.

Milwaukee is home to a thriving cultural and art community that benefits and educates its residents and visitors. Venues and major attractions include the Harley-Davidson Museum, Pabst Theater, Milwaukee Public Museum, Santiago Calatrava-designed Milwaukee Art Museum, the Betty Brinn Children's Museum, Discovery World, the Milwaukee County Historical Society, Mitchell Park Horticultural Conservatory, the Milwaukee County Zoo and the Grohmann Museum, part of the Milwaukee School of Engineering. During the summer, Henry Maier Festival Park is home to numerous festivals such as SummerFest, one of the world's largest music festivals. The city has also gained the nickname of the "City of Festivals" due to the wide variety of festivals hosted through the city each year. The grounds are home to a different festival every weekend from April to October. The Wisconsin State Fairgrounds, located just west of downtown, hosts the annual State Fair. Milwaukee is known nationwide for its extremely devoted and passionate sports fans that cheer on professional and collegiate sports teams. The city's sports franchises include the Milwaukee Brewers (MLB) and Milwaukee Bucks (NBA) as well as collegiate teams such as the Marquette Golden Eagles (NCAA) and the University of Wisconsin-Milwaukee Panthers (NCAA). The city's prominent sports venues include Miller Park (home to the Milwaukee Brewers [MLB]) and the newly constructed Fiserv Forum, home to the Milwaukee Bucks [NBA].

EMPLOYMENT

MILWAUKEE AREA TOP EMPLOYERS



FORTUNE 500 **8** WISCONSIN AREA FIRMS LISTED

#102 Northwestern Mutual
#158 ManpowerGroup
#165 Kohl's Corporation
#254 American Family Insurance Group
#311 Fiserv
#377 Oshkosh Corp
#416 WEC Energy
#452 Rockwell Automation

STATE OF WISCONSIN BROKER DISCLOSURE
TO NON-RESIDENTIAL CUSTOMERS

Wisconsin Law requires all real estate licensees to give the following information about brokerage services to prospective customers.

Prior to negotiating on your behalf the Broker must provide you the following disclosure statement:

BROKER DISCLOSURE TO CUSTOMERS

You are the customer of the broker. The broker is either an agent of another party in the transaction or a sub-agent of another broker who is the agent of another party in the transaction. The broker, or a salesperson acting on the behalf of the broker, may provide brokerage services to you. Whenever the broker is providing brokerage services to you, the broker owes you, the customer the following duties:

- The duty to prove brokerage services to you fairly and honestly.
- The duty to exercise reasonable skill and care in providing brokerage services to you.
- The duty to provide you with accurate information about market conditions within a reasonable time if you request it, unless disclosure of the information is prohibited by law.
- The duty to disclose to you in writing certain material adverse facts about a property, unless disclosure of the information is prohibited by law (see "Definition of Material Adverse Facts" below).
- The duty to protect your confidentiality. Unless the law requires it, the broker will not disclose your confidential information of other parties.
- The duty to safeguard trust funds and other property the broker holds.
- The duty, when negotiating, to present contract proposals in an objective and unbiased manner and disclose the advantages and disadvantages of the proposals.
-

Please review this information carefully. A broker or salesperson can answer your questions about brokerage services, but if you need legal advice, tax advice, or a professional home inspection, contact an attorney, tax advisor, or home inspector. This disclosure is required by section 452.135 of the Wisconsin Statutes and is for information only. It is a plain language summary of a broker's duties to a customer under section 452.133(l) of the Wisconsin Statutes.

CONFIDENTIALITY NOTICE TO CUSTOMERS

Broker will keep confidential any information given to broker in confidence, or any information obtained by broker that he or she knows a reasonable person would want to be kept confidential by law, or authorize the broker to disclose particular information. A broker shall continue to keep the information confidential after broker is no longer providing brokerage services to you.
The following information is required to be disclosed by law.

1. Material adverse facts, as defined in section 452.01 (5g) of the Wisconsin statutes (see "definition of material adverse facts" below).
2. Any facts known by the broker that contradict any information included in a written inspection report on the property or real estate that is the subject of transaction. To ensure that the broker is aware of what specific information below. At a later time, you may also provide the broker with other information that you consider to be confidential.

CONFIDENTIAL INFORMATION:
_____

NON-CONFIDENTIAL INFORMATION:
_____

(Insert information you authorize to broker to disclose such as financial qualification information)

CONSENT TO TELEPHONE SOLICITATION

I/We agree the Broker and any affiliated settlement service providers (for example, a mortgage company or title company) may call our/my home or cell phone numbers regarding issues, goods an services related to the real estate transaction until I/we withdraw this consent in writing. List Home/Cell Numbers:
_____

SEX OFFENDER REGISTRY

Notice: You may obtain information about the sex offender registry and persons registered with the registry by contacting the Wisconsin Department of Corrections on the internet at http://offender.doc.state.wi.us/public/ or by phone at (608) 240-5830.

DEFINITION OF MATERIAL ADVERSE FACTS

A "material adverse act" is defined in Wis. Stat. 452.01 (5g) as an adverse fact that a party indicates is of such significance, or that is generally recognized by a competent licensee as being of such significant to a reasonable party that it affects or would affect the party's decision to enter into a contract or agreement concerning a transaction or affects or would affect the party's decision about the terms of such a contract or agreement. An "adverse fact" is defined in Wis. Stat. 452.01 (le) as a condition or occurrence that a competent licensee generally recognizes will significantly adversely affect the value of the property, significantly reduce the structural integrity of improvements to real estate, or present a significant health risk to occupants of the property, or information that indicates that a party to a transition not able to or does not intent to meet his or her obligation under a contract or agreement made concerning the transaction.

No representation is made as to the legal validity of any provision or the adequacy of any provision on any specific transaction.

CBRE

DRAFT RESOLUTION SUBMITTED BY APPLICANT

CITY OF WAUWATOSA R-__-_
Resolution

By:

Resolution approving a Conditional Use Permit in the C2/Mayfair Overlay District at 2825 and 2835 N. Mayfair Road for an eating establishment with drive-through (Chick-fil-A), Joe Vavrina, HR Green, Inc., applicant

WHEREAS Joe Vavrina, on behalf of Chick-fil-A, applied for a Conditional Use Permit in the C2/Mayfair Overlay District at 2825 and 2835 N. Mayfair Road to operate a drive-thru restaurant, and;

WHEREAS, this request was reviewed by the City Plan Commission and the Common Council found it to be necessary for the public convenience at that location; located and proposed to be operated in such manner which will protect the public health, safety, and welfare; and was found to be compatible with surrounding uses;

NOW, THEREFORE, BE IT RESOLVED by the Common Council of the City of Wauwatosa, Wisconsin hereby grants a Conditional Use Permit to Joe Vavrina on behalf of Chick-fil-A subject to:

1. Hours of operation. 6:00 am to 10:30 pm Monday through Saturday.
2. Bicycle Parking. Providing short- and long-term bicycle parking in compliance with WMC 24.11.080 prior to occupancy permit issuance.
3. Site plans showing adequate sewer capacity, construction staging information, lighting, and storm water management subject to approval by the Engineering Division. Site plans shall also incorporate staff comments related to water supply, pedestrian connections, the drive approach, and landscaping requirements.
4. Providing detailed costs of any alterations and/or new construction, as well as income & expense as requested by the Assessor's office.
5. Under WMC 24.16.040.I., a Conditional Use will lapse and have no further effect one year after it is approved by the Common Council, unless a building permit has been issued (if required); the use or structure has been lawfully established; or unless a different lapse of approval period or point of expiration has been expressly established by the Common Council.
6. Under WMC 24.14.030, the use of elevation changes or different paving material be implemented where pedestrian connections to the public right-of-way crosses the driveways and parking areas.
7. Obtain a driveway opening variance through the Board of Public Works in accordance with WMC 8.44.090.
8. If a trash dumpster is located outside, it must be screened from view of streets and all abutting lots according to the requirements outlined in WMC 24.12.040.
9. Obtaining other required licenses, permits, and approvals (including Design Review Board approval).

Passed and Dated _____

Adopted:
Page:
Journal:

_____
Clerk

Approved _____

_____
Mayor

AMUNDSEN DAVIS

June 16, 2023

VIA EMAIL
mayor@wauwatosa.net
Mayor Dennis McBride
City of Wauwatosa
7725 W. North Ave.
Wauwatosa, WI 53213

Re: ***Conditional Use Permit for Chick-fil-A at 2825 and 2835 N. Mayfair Road***

Subj: *Applicant's Agreement to CUP Conditions of Approval*

Dear Mayor McBride:

As you know, we represent Chick-fil-A in connection with the application for a Conditional Use Permit (CUP) at 2825 and 2835 North Mayfair Road.

The site is zoned C-2, General Commercial district which is defined to accommodate a "broad range of business and commercial uses, often in the physical form of shopping centers, large-format retail and other destination-oriented uses in which a large percentage of customers will arrive by automobile." *See* Sec. 24.03.010.B.3., Code. All drive-thru restaurants in the City require a CUP and an application for CUP is to be considered pursuant to the ordinance standards set forth in Sec. 24.16.040.G., Code.

The City must apply the legal standards under its CUP ordinance in accordance with Sec. 62.23(7)(de), Wis. Stats. (Act 67). The CUP decision must be based upon "substantial evidence" that is defined in Act 67 as "facts and information, other than merely personal preferences or speculation, directly pertaining to the requirements and conditions an applicant must meet to obtain a conditional use permit and that reasonable persons would accept in support of a conclusion."

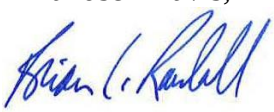
In the record from our submissions and the public hearing are facts and information directly pertaining to traffic and safety issues that reasonable persons would accept in support of granting the CUP.

Accordingly, accompanying this letter is the draft approval resolution that we prepared consistent with the City's customary format containing a list of approval conditions. The conditions listed are reasonable, related to the purpose of the City's ordinance, and are supported by substantial evidence in the record in accordance with Act 67. Please be advised that Chick-fil-A meets or agrees to meet all of the conditions in the draft resolution such that the City must grant the CUP pursuant to Act 67. *See* Sec. 62.23(7)(de)2.a.

By copy to the City staff members identified below, we request that this letter be forwarded to the Common Council members for consideration at its upcoming meeting.

Very truly yours,

Amundsen Davis, LLC



Brian C. Randall

Attachment
cc: All Common Council Members
Mr. James Archambo – City Administrator
Ms. Paulette Enders – Director of Development
Ms. Tammy Szudy – Planning & Zoning Manager
Mr. Art Piñon – Planner
Mr. William Wehrley – City Engineer
Ms. Jennifer Stilling – Senior Civil Engineer
Mr. Michael May – Senior Civil Engineer
Mr. Alan Kesner – City Attorney
Mr. Steven Braatz – City Clerk
Chick-fil-A Project Team

CITY OF WAUWATOSA R-__-_

Resolution

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Passed and Dated _____

Adopted:
Page:
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Clerk

Approved _____

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Mayor

File #: 23-245 **Agenda Date:** 6/12/2023 **Agenda #:** 5.

Title/Recommendation

Request to amend various sections of Chapter 24, Zoning Code

Memo Body

A. Background/Options

Attached to this memo are proposed amendments to various sections of the zoning code, primarily for clarification and housekeeping purposes. As this is a text amendment process, the Plan Commission should include scheduling a public hearing before the Common Council for July 18, 2023 as part of the motion.

B. Recommendation

Staff recommends approval and setting a pubic hearing date of July 18, 2023.

Proposed zoning text amendments
June 2023

1. **Chapter 24.05 – OVERLAY DISTRICTS. 24.05.040 - /PUD, Planned Unit Development Overlay.**
   A. Purpose. 2k. Objectives.
   Remove signage as an item that can be modified as part of a PUD Overlay approval. There is contradictory language in the code regarding signage for PUDs. In addition, specific sign plans for PUDs are difficult to administer and manage and allows for inconsistency in signage throughout the City.

   Existing: k. attractive, high-quality landscaping, lighting, architecture and signage, including the use of native landscaping, that reflects the unique character of the development.
   Proposed: k. attractive, high-quality landscaping, lighting, and architecture ~~and signage~~, including the use of native landscaping, that reflects the unique character of the development.

2. **Chapter 24.12 - LANDSCAPING AND SCREENING. 24.12.010 - General.**
   Add an appeal procedure. Proposal is the Board of Public Works will review exception requests, which is consistent with the appeal procedure for 24.11 Parking and Loading.

   Existing: None.
   Proposed: D. Exceptions. The board of public works is authorized to grant exceptions to the landscaping and screening regulations of this chapter.

3. **Chapter 24.14 - GENERAL DEVELOPMENT FEATURES**
   Add an appeal procedure. Proposal is the Board of Public Works will review exception requests, which is consistent with the appeal procedure for 24.11 Parking and Loading.

   Existing: None.
   Proposed: 24.14.005. Exceptions. The board of public works is authorized to grant exceptions to the regulations of this chapter unless otherwise stated.

4. **Chapter 24.16 - PROCEDURES. 24.16.010 – Common Provisions.**
   C. Applications and Fees. 4.B. Application Completeness Accuracy and Sufficiency.
   Increase time for staff to review applications and modify that review timeframe is from the meeting deadline. With many staff involved in application review as well as 24-7 online application submittals, modifying the timeframe is helpful to have a specific and consistent date for application review.

   Existing: b. The zoning administrator must make a determination of application completeness within 5 working days of application filing.
   Proposed: b. The zoning administrator must make a determination of application completeness within ~~5~~ seven working days of application ~~filing~~deadline.

5. **Chapter 24.16 - PROCEDURES. 24.16.010 – Common Provisions.**
   F. Action by Review Bodies and Decision-Making Bodies.
   Add language for postponement and inactive applications.

Existing: None
Proposed: 5. An applicant may postpone review of an application at any time prior to the scheduled time of a meeting by written or electronic communication to the City Clerk. Such item shall be immediately removed from any upcoming agenda and no further action shall be taken until requested by the applicant. Applications with no activity for six months will be considered withdrawn and further consideration of said item must follow the process described within this code for a new application.

6. **Chapter 24.16 - PROCEDURES. 24.16.040 – Conditional Use Permits.**
D. Notice of Hearing.
Correct public hearing body and State Statutes reference.

Existing: 2. Class 2 notice of the common council's required public hearing on a zoning map amendment must be published in accordance with chapter 985 of the Wisconsin Statutes.
Proposed: 2. Class 2 notice of the ~~common council's~~plan commission's required public hearing on a zoning map amendment must be published in accordance with chapter ~~985~~ 62.23 (dm) of the Wisconsin Statutes..

7. **Chapter 24.16 - PROCEDURES. 24.16.040 - Conditional Use Permits.**
Add a procedure to clarify when an amendment is required.

Existing: None
Proposed: J. Amendments. No modification or alteration of any conditional use permit approved pursuant to this section will be permitted unless approved by the Common Council.
1. Any application for an alteration, extension or other modification will be filed and processed as an original application under this section.
2. Alterations and modifications shall be subject to the same standards and criteria as original applications and shall be in conformance with all the provisions of this section.
3. Minor Deviations. Minor Deviations to conditional uses including maintenance, repair, or renovation of existing buildings, structures or improvements and alterations, extensions, or other modifications of such uses that do not increase, intensify, expand, substantially change the character of the conditional use, or adversely affect adjacent property or property owners may be authorized by the Zoning Administrator and do not require approval by the Common Council

8. **Chapter 24.18 - TERMINOLOGY AND MEASUREMENTS. 24.18.020 Definitions**
Modify lot definition to also allow parcels with no street frontage at Mayfair Mall with appropriate access easements.

Existing: **Lot.** A parcel of land under a single tax key number having frontage on a public street or permanent deeded access to a street when zoned PUD overlay or SP-MED District, occupied or intended to be occupied by a principal structure together with accessory buildings and uses, sufficient in size to meet the lot width, lot frontage, lot area, yard, parking area, and other open space provisions of this ordinance.
Proposed: **Lot. .** A parcel of land under a single tax key number having frontage on a public street or permanent deeded access to a street when zoned PUD overlay or SP-MED District, or part of a regional shopping mall, occupied or intended to be occupied by a principal structure together with

accessory buildings and uses, sufficient in size to meet the lot width, lot frontage, lot area, yard, parking area, and other open space provisions of this ordinance.