Wauwatosa, WI

Plan Commission

Meeting Agenda - Final

7725 W. North Avenue
Wauwatosa, WI 53213

Monday, May 13, 2024 **6:00 PM** **Council Chambers and Zoom: https://servetosa.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 Jingduan Jiang for a Conditional Use Permit in the General Commercial and Mayfair Overlay (C2/MAY) zone at 853 N. Mayfair Road for an eating & drinking establishment — 24-0557

2. Public hearing and consideration of the request by Jay Knetter, Jaknetter Architects, on behalf of Wisconsin Athletic Club, for a Conditional Use Permit in the Special Purpose - Medical Center (SP-MED) District at 8700 W. Watertown Plank Road to expand an existing Sports & Recreation, Participant (Indoor) facility — 24-0569

3. Request by Alex Eppel, Brookfield Properties, and the City of Wauwatosa Community Development Authority for a land division via Certified Survey Map at 2400 N. Mayfair Road and 10400 W. North Avenue — 24-0568

4. Request by Phillip Aiello, Mandel Group Inc., for a land combination via Certified Survey Map at 1330 Wauwatosa Avenue; 7463 Harwood Avenue; and 7460, 7462, and 7470 Blanchard Street for a multi-unit residential development — 24-0573

5. Request by Phillip Aiello, Mandel Group Inc., for a Zoning Map Amendment from Single Family Residential (R1-6) District to Neighborhood Village Trade/Planned Unit Development (C1/PUD) District at 7460/7462 Blanchard Street — 24-0575

6. Request by Phillip Aiello, Mandel Group Inc., for a Preliminary Planned Unit Development at 1330 Wauwatosa Avenue, 7463 Harwood Avenue, and 7460/7462 and 7470 Blanchard Street for a multi-unit residential development **24-0572**

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 #: 24-0557 **Agenda Date:** 5/13/2024 **Agenda #:** 1.

Public hearing and consideration of the request by Jingduan Jiang for a Conditional Use Permit in the General Commercial and Mayfair Overlay (C2/MAY) zone at 853 N. Mayfair Road for an eating & drinking establishment

Submitted by:
Art Piñon
Department:
Development

A. Background/Options

The applicant is requesting approval of a Conditional Use Permit to operate a 2,300 square foot eating establishment at 853 N. Mayfair Rd. in the general Commercial and Mayfair Overlay (C2/MAY) zone in a space that was previously an eating establishment. Facility operating hours are 11:00 am to 10:30 pm, Monday through Sunday. All business operations will occur inside the building, no outdoor dining is being requested.

B. Staff Comments

Planning/Zoning Division
No additional vehicular parking is required as the eating establishment will be replacing a previous eating establishment.

Twenty-two (22) public notification letters related to the project were sent per City regulations.

Building Division
Final Occupancy inspection and approval required prior to occupancy.

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

City Clerk's Office
Applicant may need to apply for all appropriate business licenses.

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 6-inch water lateral. The water lateral material is unknown.

If sprinklers are required by the Fire Department, fire flow calculations in accordance with City Code 14.20.080 will be required.

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
Applicant will need to follow all applicable fire code.

Health Department
No comments provided.

Police Department
No comments provided.

C. Recommendation

Staff recommends approval 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. Final Occupancy inspection and approval required prior to occupancy.
4. 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.
5. If sprinklers are required by the Fire Department, fire flow calculations in accordance with City Code 14.20.080 will be required.
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.



Wauwatosa GIS

City of Wauwatosa

Dear offices,

We are opening a stir fry grill and fried chicken restaurant.

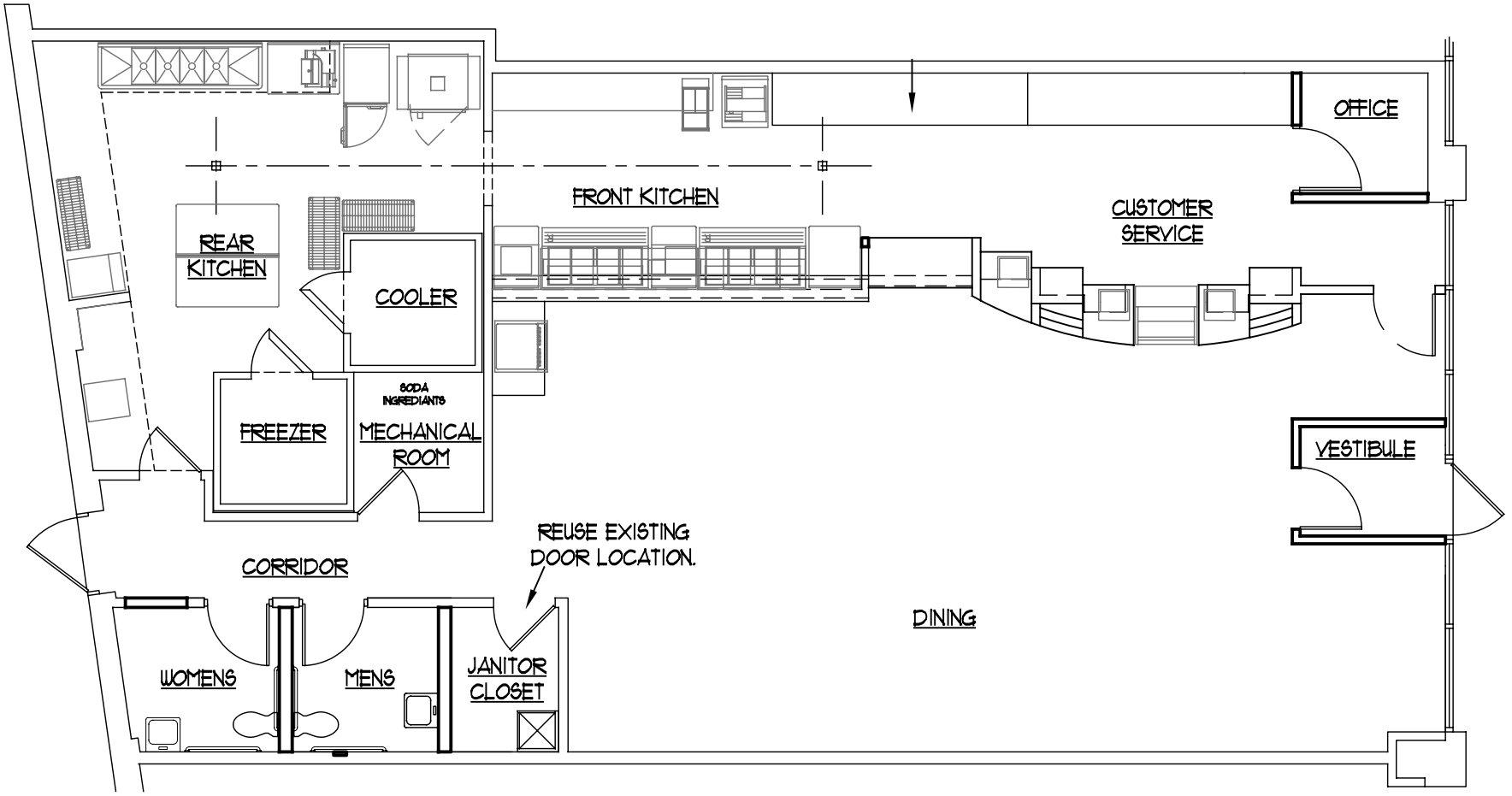
Concept :We have hibachi grill and fried chicken wings with 15 different flavors to pick from. We will have a cold bar in the ordering area for the hibachi grill section. Customers can choose their own proteins, vegetables, eggs, rice, noodles… and the chef will cook it right away for them. We expect many to go orders as well in this location. For the fried chicken wings, we have recipes for more than 15 popular flavors. They have been tested over time to be American' favorites.

We will server fresh order to make food and beverages including sodas and bubble teas. We anticipate most of the orders will be to go orders. We will have 20 t0 40 seats for dine in, no table services. We will hire 4 to 8 employees. The operating hours will be 11:00am to 10:00pm Monday to Thursday and Sunday, 11:00am to 10:30pm Friday to Saturday.

Thank you and have a great day!

Jessie Jin

Lava Grill and Wings Inc


OFFICE
FRONT KITCHEN
CUSTOMER SERVICE
REAR KITCHEN
COOLER
SODA INGREDIANTS
FREEZER
MECHANICAL ROOM
VESTIBULE
REUSE EXISTING DOOR LOCATION.
CORRIDOR
DINING
WOMENS
MENS
JANITOR CLOSET

File #: 24-0569 **Agenda Date:** 5/13/2024 **Agenda #:** 2.

Public hearing and consideration of the request by Jay Knetter, Jaknetter Architects, on behalf of Wisconsin Athletic Club, for a Conditional Use Permit in the Special Purpose - Medical Center (SP-MED) District at 8700 W. Watertown Plank Road to expand an existing Sports & Recreation, Participant (Indoor) facility

Submitted by:
Art Piñon
Department:
Development

A. Background/Options

The applicant is requesting approval of a Conditional Use Permit to expand an existing Sports & Recreation, Participant (Indoor) facility (Wisconsin Athletic Club) in the Special Purpose - Medical Center (SP-MED) District at 8700 W. Watertown Plank Road. Currently, the facility is 45,776 square feet in size and the applicant is requesting to add an additional 8,251 square feet. The additional space is proposed within the buildings lower level, which was previously occupied by a dental office and medical office. The addition will contain a new free weights area, spinning, and mind/body fitness rooms. No changes to facility hours or overall operations are proposed.

B. Staff Comments

Planning/Zoning Division
No additional parking is needed since the parking requirement for a sports and recreation (indoor) facility is less than that of a medical/dental office space. This includes short- and long-term bike parking.

Sixteen (16) public notification letters related to the project were sent per City regulations.

Building Division
Architectural supervision, plan review and applicable building permits required.

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

City Clerk's Office
No issues.

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 6-inch ductile iron water lateral.

Fire Department
Applicant will follow all applicable fire code.

Health Department
No comments provided.

Police Department
No comments provided.

C. Recommendation

Staff recommends approval subject to:

1. Providing detailed costs of any alterations and/or new construction, as well as income & expense as requested by the Assessor's office.
2. 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.
3. 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.
4. The project must comply with all applicable fire codes.
5. Obtaining other required licenses, permits, and approvals.

JAK architecture + interior design
JAKnetter Architects
N16 W23217 STONE RIDGE DRIVE, SUITE 300
WAUKESHA, WI 53188 | www.jaknetter.com
office 262 513 9800 | fax 262 513 9815

April 10, 2024

City of Wauwatosa
Planning Division
7725 West North Avenue
Wauwatosa, WI. 53213

RE: Wisconsin Athletic Club (WAC) – Wauwatosa Interior Alteration Expansion Area
8700 West Watertown Plank Road

As the Architect of Record for the Wisconsin Athletic Club Interior Alteration in Wauwatosa, we are providing a project description for the Conditional Use Permit required for this interior alteration. The WAC is looking to expand their floor area in the Lower Level of the building by taking over 3,008 SF of area currently being used as a Dentist Office. The existing tenant is vacating the building and the Wisconsin Athletic Club will be removing the tenant suite wall partitions and utilizing the space for their free-weights fitness area.

Please feel free to contact me directly with any questions at 262-751-0840.

Sincerely,
JAKnetter ARCHITECTS, Inc.

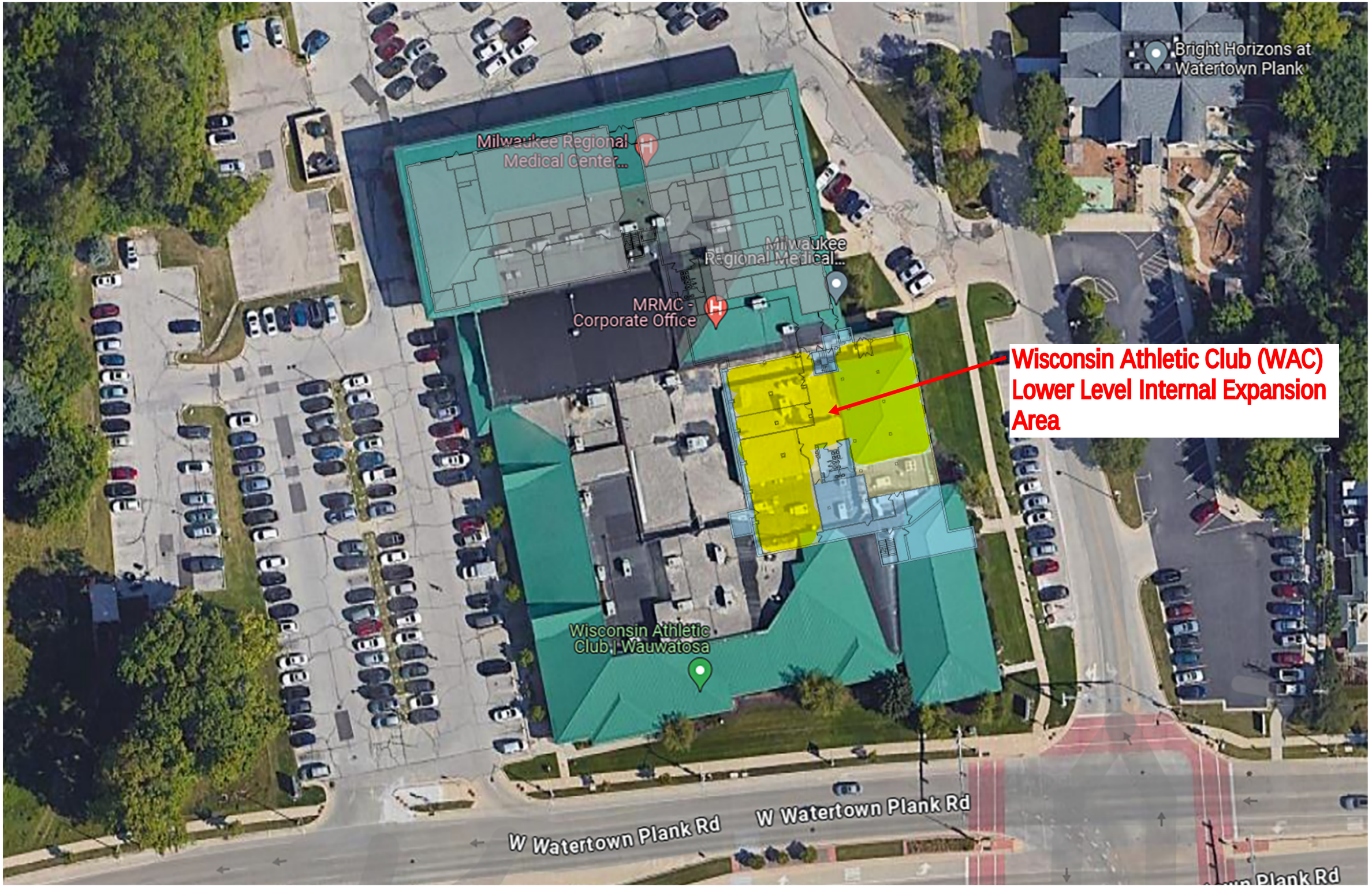


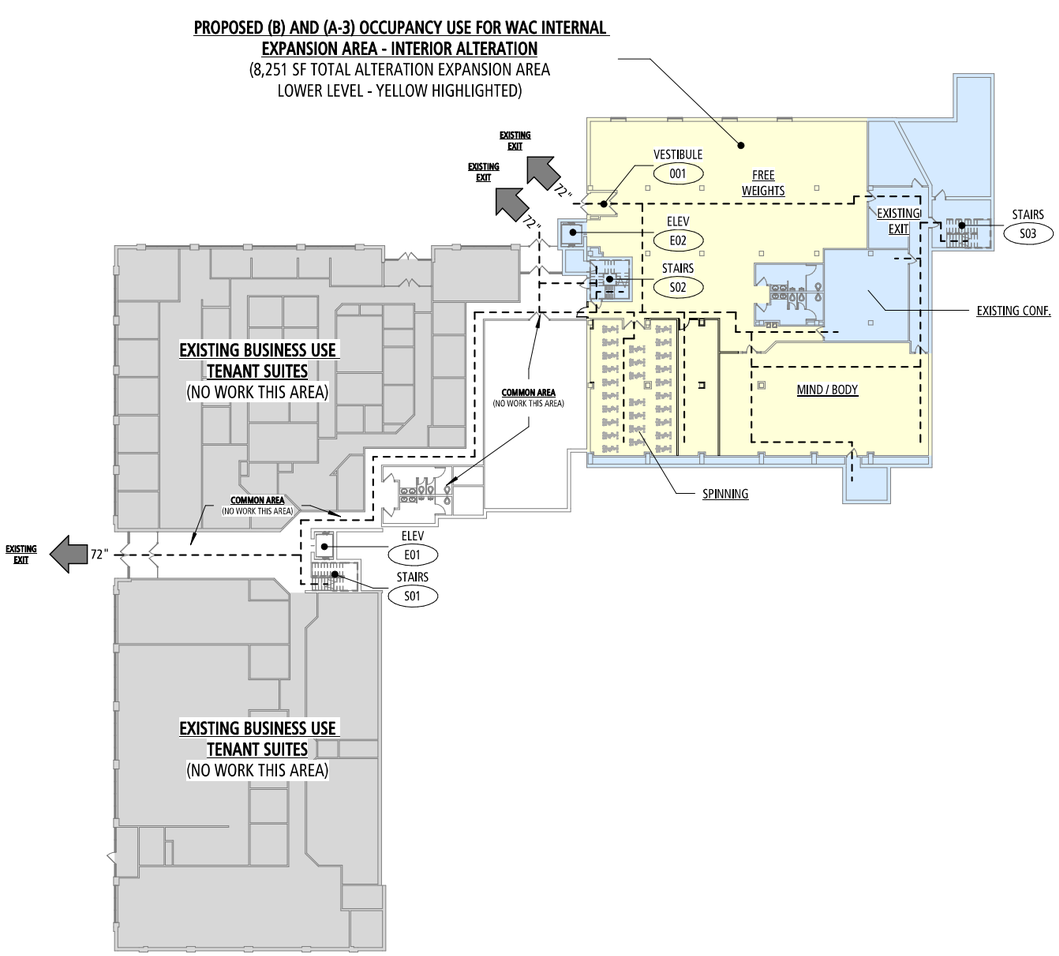
Jay Knetter, AIA
President



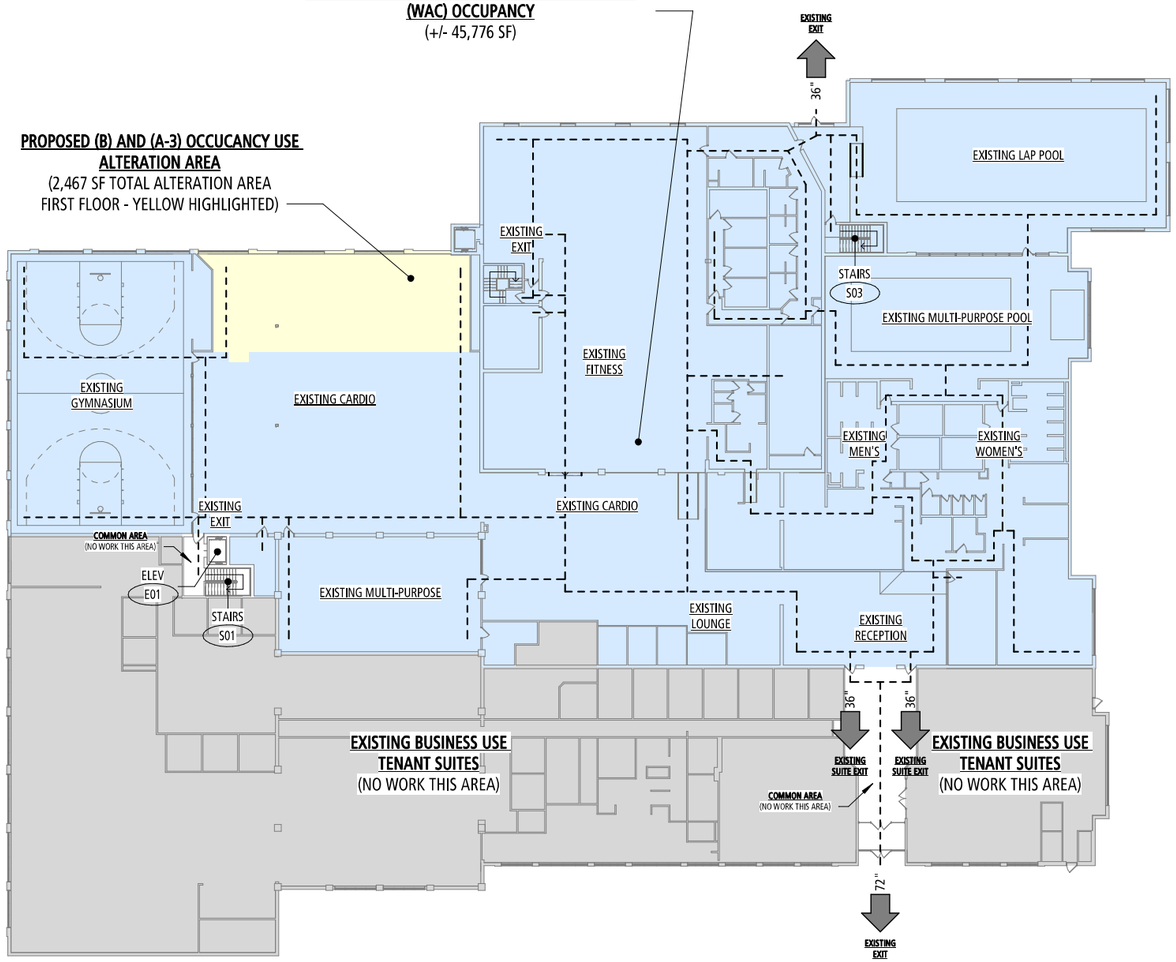
8700 W. Watertown Plank Rd.

City of Wauwatosa


Bright Horizons at Watertown Plank
Milwaukee Regional Medical Center...
Milwaukee Regional Medical...
MRMC - Corporate Office
Wisconsin Athletic Club | Wauwatosa
W Watertown Plank Rd
W Watertown Plank Rd
Wisconsin Athletic Club (WAC) Lower Level Internal Expansion Area



21 LOWER LEVEL LIFE SAFETY PLAN
1" = 30'-0"



24 FIRST FLOOR LIFE SAFETY PLAN
1" = 30'-0"

Wisconsin Athletic Club (WAC)
Wauwatosa, WI., 8700 Watertown Plank Road.

JAK architecture + interior design
JAKnetter Architects
N16 W23217 STONE RIDGE DRIVE, SUITE 300
WAUKESHA, WI 53188 | www.jaknetter.com
office 262 513 9800 | fax 262 513 9815

File #: 24-0568 **Agenda Date:** 5/13/2024 **Agenda #:** 3.

Request by Alex Eppel, Brookfield Properties, and the City of Wauwatosa Community Development Authority for a land division via Certified Survey Map at 2400 N. Mayfair Road and 10400 W. North Avenue

Submitted by:
Art Piñon
Department:
Development

A. Background/Options

The applicant is proposing a certified survey map to divide two (2) contiguous properties into eight (8) lots at 2400 N. Mayfair Road and 10400 W. North Avenue (south end of Mayfair Mall) in the General Commercial and Mayfair Overlay (C2/MAY) Zone. The map area is 21.03 acres in size and will be divided up as follows:

Lot	Square Footage
1	175,809
2	174,719
3	29,325
4	26,429
5	63,631
6	278,745
7	121,025
8	47,025

The map is being proposed to facilitate the transfer of properties for future development of the site. Attached is the proposed Certified Survey Map.

B. Staff Comments

Planning/Zoning Division
All lots meet the required lot standards for the C2 and MAY Overlay zones. Lots without direct access to a public street are permitted on the Mayfair Mall property with access easements.

Forty-four (44) public notification letters related to the project were sent per City regulations.

Building Division
No issues.

City Assessor's Office

No issues.

City Clerk's Office
No issues.
Engineering Division
No issues.

Fire Department
No Issues

Health Department
No comments provided.

Police Department
No comments provided.

C. Recommendation

Staff recommends approval subject to:

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

Brookfield
Properties

March 22, 2024

Tamara Szudy
Planning Manager
7725 W. North Ave.
Wauwatosa, WI 53213

RE: Mayfair Mall Former Boston Store Parcel – Certified Survey Map Project Narrative

Tamara Szudy,

Brookfield and the City of Wauwatosa, WI, an agency of which owns the former Boston Store parcel, are negotiating a redevelopment a portion of the Shopping Center, pursuant to which Brookfield will acquire a portion of the Former Boston Store Parcel from the City the redevelopment of the existing retail building and surrounding common areas for a replacement retail anchor. The city will convey the balance of the Former Boston Store Parcel to a residential developer, which will design and construct a residential apartment development consisting of the following three phases:

Phase A: Two multi-family residential buildings, two new commercial condominium units on the ground floor, and ancillary above-ground structure parking spaces for residential and retail use.

Phase B: A multi-family residential building with above ground structure parking spaces for residential and retail use.

Phase C: A multi-family residential building over a portion of the existing East Deck parking structure with ancillary above-ground structure parking spaces for residential and retail use.

This Certified Survey Map is being submitted to support the transfer of various portions of the property to support ongoing redevelopment efforts between Brookfield, the city, and their partners. We are very excited about this opportunity, especially as the replacement retail anchor tenant as it will bring life to the vacant Former Boston Store Parcel. We believe the Redevelopment will be a positive draw for the Shopping Center.

Regards,

Alex Eppel

Director, Brookfield Properties



2400 N. Mayfair Rd.

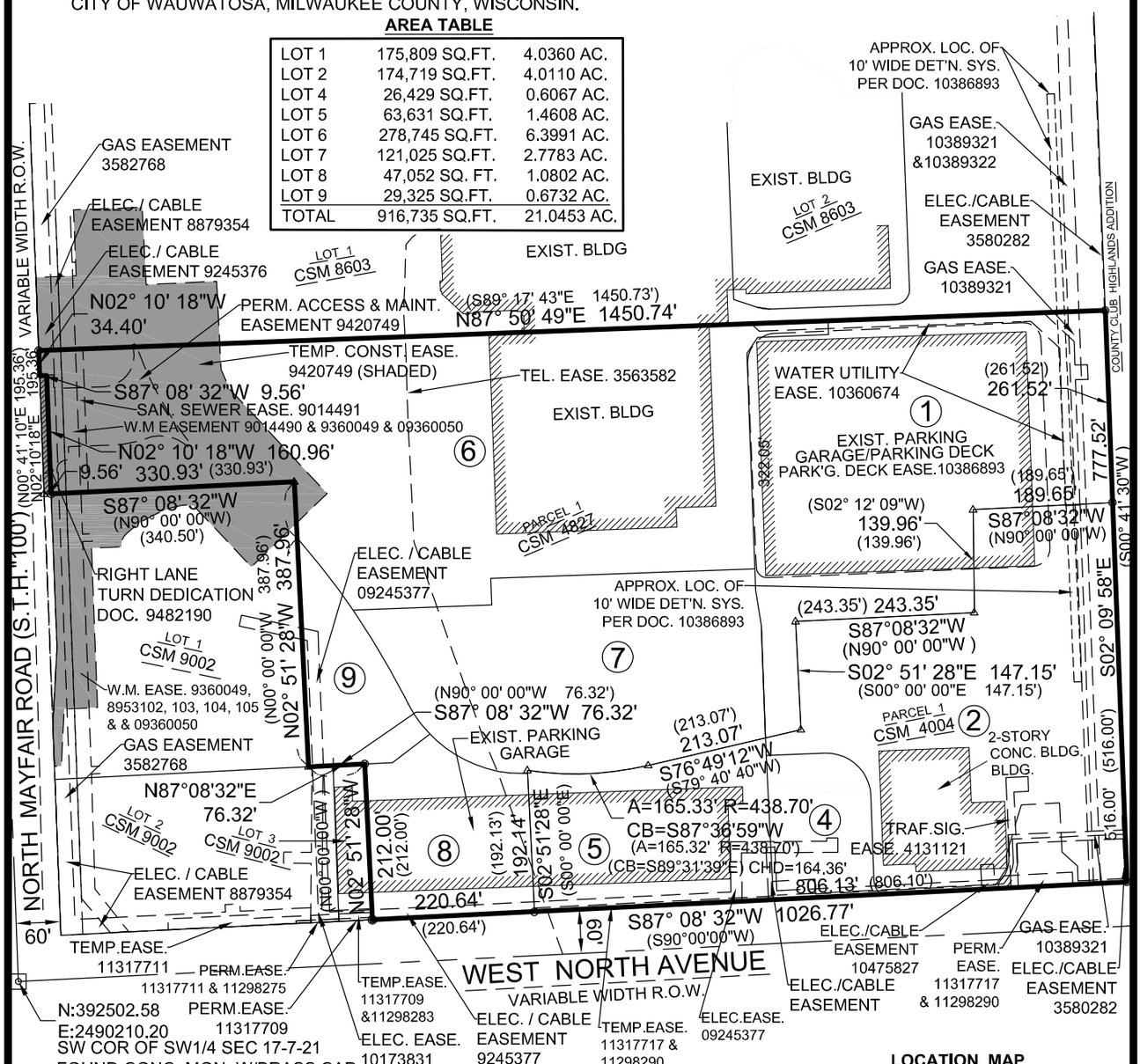
City of Wauwatosa

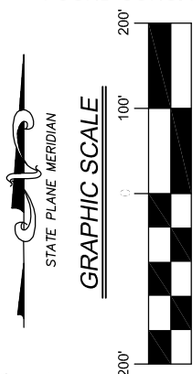
CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF PART OF PARCEL 1 IN CERTIFIED SURVEY MAP 4827 AND PARCEL 1 IN CERTIFIED SURVEY MAP 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

AREA TABLE

LOT 1	175,809 SQ.FT.	4.0360 AC.
LOT 2	174,719 SQ.FT.	4.0110 AC.
LOT 4	26,429 SQ.FT.	0.6067 AC.
LOT 5	63,631 SQ.FT.	1.4608 AC.
LOT 6	278,745 SQ.FT.	6.3991 AC.
LOT 7	121,025 SQ.FT.	2.7783 AC.
LOT 8	47,052 SQ. FT.	1.0802 AC.
LOT 9	29,325 SQ.FT.	0.6732 AC.
TOTAL	916,735 SQ.FT.	21.0453 AC.





LEGEND

●	SET 1-1/16" O.D. IRON PIPE, 24" LONG WEIGHING 1.2 LBS. PER LINEAR FOOT
○	FOUND IRON PIPE
◎	FOUND IRON ROD
⊗	FOUND CHISELED CROSS
△	FOUND PK NAIL
N	NORTH
E	EAST
S	SOUTH
W	WEST
R	RADIUS OF CURVE
A	LENGTH OF CURVE
CB	CHORD BEARING OF CURVE
CD	CHORD DISTANCE
(XXX)	"RECORDED AS"
R.O.W.	RIGHT-OF-WAY
(#)	NEW LOT NUMBER

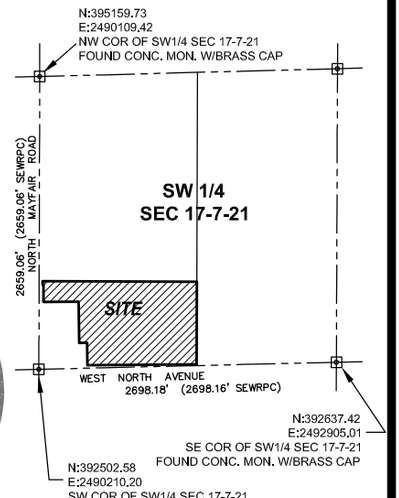
NOTES:
1. NO NEW EASEMENTS ARE GRANTED BY THIS MAP.
2. NUMBER OF LOTS AND LOT NUMBERING IS IN ACCORDANCE WITH CITY ORDINANCE O-19-13

REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

BASIS OF BEARINGS: HORIZONTAL DATUM IS BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE (NAD83/2011). ALL DIMENSIONS ARE GROUND

WISCONSIN
CHARLES W. BARTOSZ
LS-3153-8
WOODRIDGE IL
LAND SURVEYOR

LOCATION MAP



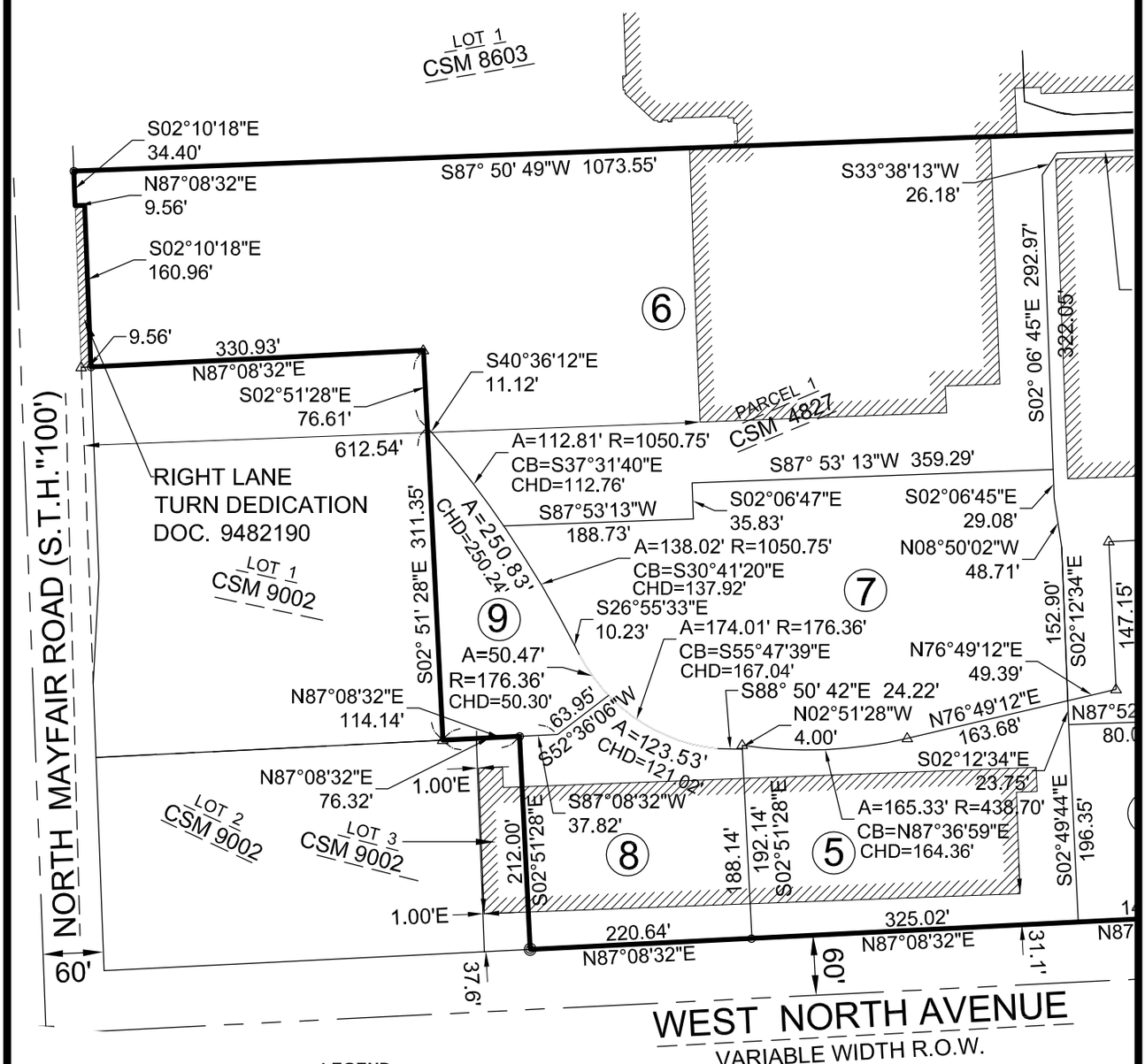
SHEET 1 OF 7

PREPARED BY:	PREPARED FOR:	
Engineers Scientists Surveyors 7325 JANES Avenue, Suite 100 Woodridge, IL 60517 630.724.9200 voice 630.724.0384 fax v3co.com	BROOKFIELD PROPERTIES RETAIL 350 N ORLEANS STREET - ST 300 CHICAGO, ILLINOIS 60654 312.960.5951	PROJECT NO. 230117 GROUP NO. VP01.2 SCALE: 1" = 200' DATE: 02/05/2024

N:\2023\230117\Drawings\ACAD\SVY\VP01.2 8 Lot CSM\CSM230117_8-LOT_SPCOORDS_20240312_R03.dwg, 4/30/2024 9:00:05 AM, Bluebeam PDF

CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF PART OF PARCEL 1 IN CERTIFIED SURVEY MAP 4827 AND PARCEL 1 IN CERTIFIED SURVEY MAP 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.



LEGEND

●	SET 1-1/16" O.D. IRON PIPE, 24" LONG WEIGHING 1.2 LBS. PER LINEAR FOOT
○	FOUND IRON PIPE
◎	FOUND IRON ROD
⊗	FOUND CHISELED CROSS
△	FOUND PK NAIL
N	NORTH
E	EAST
S	SOUTH
W	WEST
R	RADIUS OF CURVE
A	LENGTH OF CURVE
CB	CHORD BEARING OF CURVE
CD	CHORD DISTANCE
(XXX)	"RECORDED AS"
R.O.W.	RIGHT-OF-WAY
(#)	NEW LOT NUMBER

STATE PLANE MERIDIAN

GRAPHIC SCALE 150' 75' 0 150' 1" = 150'

WISCONSIN
CHARLES W. BARTOSZ
LS-3153-8
WOODRIDGE IL
LAND SURVEYOR

REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

BASIS OF BEARINGS: HORIZONTAL DATUM IS BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE (NAD83/2011). ALL DIMENSIONS ARE GROUND

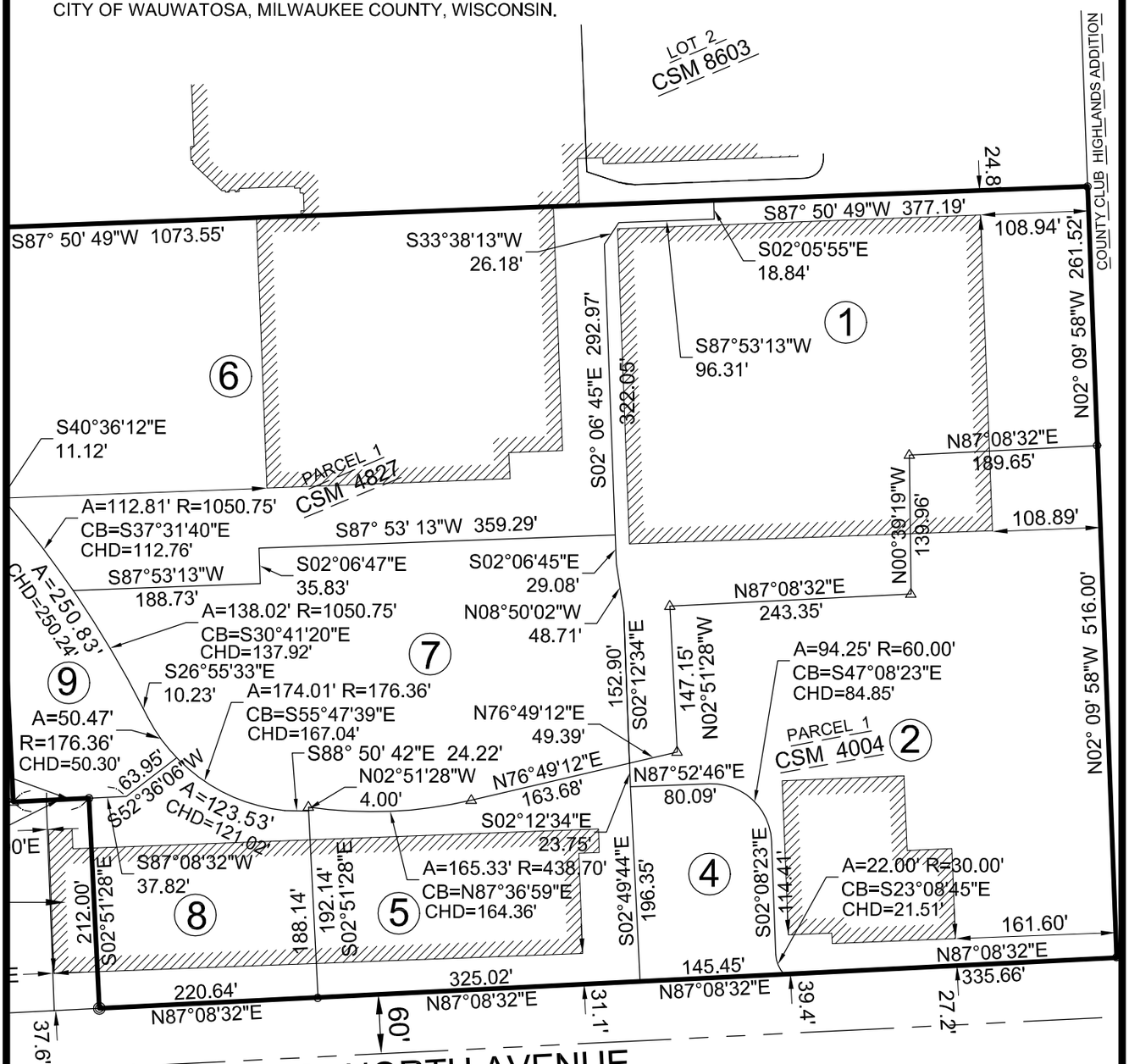
SHEET 2 OF 7

PREPARED BY:	PREPARED FOR:	
Engineers Scientists Surveyors 7325 JANES Avenue, Suite 100 Woodridge, IL 60517 630.724.9200 voice 630.724.0384 fax v3co.com	BROOKFIELD PROPERTIES RETAIL 350 N ORLEANS STREET - ST 300 CHICAGO, ILLINOIS 60654 312.960.5951	PROJECT NO. 230117 GROUP NO. VP01.2 SCALE: 1" = 150' DATE: 02/05/2024

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CERTIFIED SURVEY MAP NO. _____

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LEGEND

●	SET 1-1/16" O.D. IRON PIPE, 24" LONG WEIGHING 1.2 LBS. PER LINEAR FOOT
○	FOUND IRON PIPE
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⊗	FOUND CHISELED CROSS
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N	NORTH
E	EAST
S	SOUTH
W	WEST
R	RADIUS OF CURVE
A	LENGTH OF CURVE
CB	CHORD BEARING OF CURVE
CD	CHORD DISTANCE
(XXX)	"RECORDED AS"
R.O.W.	RIGHT-OF-WAY
(#)	NEW LOT NUMBER

WISCONSIN
CHARLES W. BARTOSZ
LS-3153-8
WOODRIDGE IL
LAND SURVEYOR

REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

BASIS OF BEARINGS: HORIZONTAL DATUM IS BASED ON THE WISCONSIN STATE PLANE COORDINATE SYSTEM GRID, SOUTH ZONE (NAD83/2011). ALL DIMENSIONS ARE GROUND

SHEET 3 OF 7

PREPARED BY:	PREPARED FOR:	
Engineers Scientists Surveyors 7325 JANES Avenue, Suite 100 Woodridge, IL 60517 630.724.9200 voice 630.724.0384 fax v3co.com	BROOKFIELD PROPERTIES RETAIL 350 N ORLEANS STREET - ST 300 CHICAGO, ILLINOIS 60654 312.960.5951	PROJECT NO. 230117 GROUP NO. VP01.2 SCALE: 1" = 150' DATE: 02/05/2024

N:\2023\230117\Drawings\ACAD\SVY\VP01.2 8 Lot CSM\CSM230117_8-LOT_SPCOORDS_20240312_R03.dwg, 4/30/2024 9:05:38 AM, Bluebeam PDF

CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF PART OF PARCEL 1 IN CERTIFIED SURVEY MAP 4827 AND PARCEL 1 IN CERTIFIED SURVEY MAP 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE:

STATE OF ILLINOIS)
) SS
COUNTY OF DUPAGE)

I CHARLES W. BARTOSZ, PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY:

THAT I HAVE SURVEYED, DIVIDED AND MAPPED PARCEL 1 IN CERTIFIED SURVEY MAP NO. 4827, RECORDED OCTOBER 14, 1986, REEL 1974 IMAGE I, AS DOCUMENT NO. 5973150, BEING A REDIVISION OF PARCEL 2 OF CERTIFIED SURVEY MAP NO. 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, COUNTY OF MILWAUKEE, WISCONSIN;

EXCEPT THAT PORTION CONVEYED IN QUIT CLAIM DEED RECORDED AS DOCUMENT NO. 9482190.

TOGETHER WITH:

PARCEL 1 IN CERTIFIED SURVEY MAP NO. 4004, AS RECORDED APRIL 2, 1981, REEL 1366 IMAGE 596-598, AS DOCUMENT NO. 5466402, BEING A DIVISION OF PARCEL 2 IN CERTIFIED SURVEY MAP NO. 3066, AND BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, COUNTY OF MILWAUKEE, WISCONSIN.

GROSS AREA OF SAID PARCEL CONTAINS 916,735 SQUARE FEET (OR 21.0453 ACRES) OF LAND, MORE OR LESS.

THAT SUCH MAP IS A CORRECT REPRESENTATION OF ALL THE EXTERIOR BOUNDARIES OF THE LAND SURVEYED AND THE LAND DIVISION THEREOF MADE.

THAT I HAVE MADE SUCH SURVEY, LAND DIVISION AND MAP AT THE DIRECTION OF, MAYFAIR MALL, LLC, THE OWNER OF SAID LANDS.

THAT I HAVE FULLY COMPLIED WITH THE PROVISIONS OF CHAPTER 236 OF THE WISCONSIN STATE STATUTES AND THE PLATTING ORDINANCES OF THE CITY OF WAUWATOSA IN SURVEYING, DIVIDING AND MAPPING THE SAME.

DATED THIS _____ DAY OF _____, 20___.



_____
CHARLES W. BARTOSZ
WISCONSIN PROFESSIONAL LAND SURVEYOR NO. S-3153-8
MY LICENSE EXPIRES ON JANUARY 31, 2026
cbartosz@v3co.com

REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

SHEET 4 OF 7

PREPARED BY:
Engineers
Scientists
Surveyors
7325 JANES Avenue, Suite 100
Woodridge, IL 60517
630.724.9200 voice
630.724.0384 fax
v3co.com

PREPARED FOR:
BROOKFIELD PROPERTIES RETAIL
350 N ORLEANS STREET - ST 300
CHICAGO, ILLINOIS 60654
312.960.5951

PROJECT NO. 230117
GROUP NO. VP01.2
SCALE: 1"=NA
DATE: 02/05/2024

N:\2023\230117\Drawings\ACAD\SVY\VP01.2 8 Lot CSM\CSM230117_8-LOT_SPCOORDS_20240312_R03.dwg, 4/30/2024 9:06:32 AM, Bluebeam PDF

CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF PART OF PARCEL 1 IN CERTIFIED SURVEY MAP 4827 AND PARCEL 1 IN CERTIFIED SURVEY MAP 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

MAYFAIR MALL, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AS OWNER, DOES HEREBY CERTIFY THAT IT CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED, AND MAPPED AS REPRESENTED ON THIS MAP IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 236 OF THE WISCONSIN STATUES AND THE PLATTING ORDINANCES OF THE CITY OF WAUWATOSA,

THIS _____ DAY OF _____, 20___.

_____
By:

BY: _____
(NAME)

_____
(SIGNATURE)

ITS _____
(TITLE)

STATE OF _____)
) SS
COUNTY OF _____)

PERSONALLY CAME BEFORE ME THIS ____ DAY OF _____, 20___, _____, (AUTHORIZED SIGNATORY), OF THE ABOVE NAMED LIMITED LIABILITY COMPANY, TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AND TO ME KNOWN TO BE SUCH AUTHORIZED SIGNATORY OF SAID COMPANY AND ACKNOWLEDGED THAT THEY EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICER AS THE DEED OF SAID COMPANY, BY ITS AUTHORITY.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

WISCONSIN
CHARLES W. BARTOSZ
LS-3153-8
WOODRIDGE IL
LAND SURVEYOR

REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

SHEET 5 OF 7

PREPARED BY:
Engineers
Scientists
Surveyors
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PREPARED FOR:
BROOKFIELD PROPERTIES RETAIL
350 N ORLEANS STREET - ST 300
CHICAGO, ILLINOIS 60654
312.960.5951

PROJECT NO. 230117
GROUP NO. VP01.7
SCALE: 1"=NP
DATE: 02/05/2024

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CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF PART OF PARCEL 1 IN CERTIFIED SURVEY MAP 4827 AND PARCEL 1 IN CERTIFIED SURVEY MAP 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

OWNER'S CERTIFICATE

Community Development Authority, AS OWNER, DOES HEREBY CERTIFY THAT IT CAUSED THE LAND DESCRIBED ON THIS MAP TO BE SURVEYED, DIVIDED, AND MAPPED AS REPRESENTED ON THIS MAP IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 236 OF THE WISCONSIN STATUES AND THE PLATTING ORDINANCES OF THE CITY OF WAUWATOSA,

THIS _____ DAY OF _____, 20___.

_____
By:

BY: _____
(NAME)

_____
(SIGNATURE)

ITS _____
(TITLE)

STATE OF _____)
) SS
COUNTY OF _____)

PERSONALLY CAME BEFORE ME THIS ____ DAY OF _____, 20___, _____, (AUTHORIZED SIGNATORY), OF THE ABOVE NAMED AUTHORITY, TO BE THE PERSON WHO EXECUTED THE FOREGOING INSTRUMENT AND TO ME KNOWN TO BE SUCH AUTHORIZED SIGNATORY OF SAID AGENCY AND ACKNOWLEDGED THAT THEY EXECUTED THE FOREGOING INSTRUMENT AS SUCH OFFICER AS THE DEED OF SAID COMPANY, BY ITS AUTHORITY.

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES _____

WISCONSIN
CHARLES W. BARTOSZ
LS-3153-8
WOODRIDGE IL
LAND SURVEYOR

REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

SHEET 6 OF 7

PREPARED BY:
Engineers
Scientists
Surveyors
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PREPARED FOR:
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350 N ORLEANS STREET - ST 300
CHICAGO, ILLINOIS 60654
312.960.5951

PROJECT NO. 230117
GROUP NO. VP01.7
SCALE: 1"=NP
DATE: 02/05/2024

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CERTIFIED SURVEY MAP NO. _____

BEING A REDIVISION OF PART OF PARCEL 1 IN CERTIFIED SURVEY MAP 4827 AND PARCEL 1 IN CERTIFIED SURVEY MAP 4004, BEING A PART OF THE SOUTHWEST 1/4 OF SECTION 17, TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

PLANNING COMMISSION APPROVAL

APPROVED BY THE PLANNING COMMISSION OF THE CITY OF WAUWATOSA.

DATED _____, 20____.

_____ _____

CHAIRMAN NAME | CHAIRMAN SIGNATURE

_____ _____

PLANNING COMMISSION SECRETARY NAME | PLANNING COMMISSION SECRETARY SIGNATURE

COMMON COUNCIL APPROVAL

APPROVED BY THE COMMON COUNCIL OF THE CITY OF WAUWATOSA, BY RESOLUTION NO. _____ DATED _____, 20____.

_____ _____

MAYOR NAME | MAYOR SIGNATURE

_____ _____

CITY CLERK NAME | CITY CLERK SIGNATURE



REVISED:04/26/2024
REVISED:03/21/2024
REVISED:03/12/2024

SHEET 7 OF 7

PREPARED BY:
Engineers
Scientists
Surveyors
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Woodridge, IL 60517
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312.960.5951

PROJECT NO. 230117
GROUP NO. VP01.2
SCALE: 1"=NP
DATE: 02/05/2024

N:\2023\230117\Drawings\ACAD\SVY\VP01.2 8 Lot CSM\CSM230117_8-LOT_SPCOORDS_20240312_R03.dwg, 4/30/2024 9:11:08 AM, Bluebeam PDF

Staff Report

File #: 24-0573 **Agenda Date:** 5/13/2024 **Agenda #:** 4.

Request by Phillip Aiello, Mandel Group Inc., for a land combination via Certified Survey Map at 1330 Wauwatosa Avenue; 7463 Harwood Avenue; and 7460, 7462, and 7470 Blanchard Street for a multi-unit residential development

Submitted by:
Art Piñon
Department:
Development

A. Background/Options

The applicant proposes to consolidate (5) parcels into one (1) parcel at the northern corner of Wauwatosa Avenue and Blanchard Street. The land combination is being proposed to accommodate a multi-unit residential development that is discussed in the next agenda items.

The City's Community Development Authority, with permission from the Common Council, issued a request for proposal (RFP) in 2020 to redevelop the parcels and selected Mandel Group as the preferred developer.

B. Staff Comments

Planning/Zoning Division
The legal description for 7463 Harwood Avenue is described to the centerline of Harwood Avenue. The applicant shall transfer the street right-of-way to the City via a deed prior to recording the CSM.

Building Division
No issues.

City Assessor's Office
No issues.

City Clerk's Office
No issues.

Public Works Department
See Engineering comments.

Engineering Division
Easements/agreements will be required for public spaces including sidewalk and parking. This can be done via separate documents.

Fire Department

No Issues

Health Department
No comments provided.

Police Department
No comments provided.

C. Recommendation

Staff recommends approval subject to:

1. Any technical corrections as identified by the Register of Deeds and City staff.
2. Easements/agreements will be required for public spaces including sidewalk and parking. This can be done via separate documents.
3. Per State Statute 236.34 (2), the CSM is to be recorded within 12 months of the Common Council approval.



1330 Wauwatosa Ave

City of Wauwatosa

Harlow & Hem
APARTMENTS

PROJECT DESCRIPTION – CERTIFIED SURVEY MAP

Related to a Preliminary Planned Unit Development application, Zoning Map Amendment application, and Site Plan Review application Mandel Group, Inc. ("Mandel") has applied for a Certified Survey Map approval to consolidate five parcels into one parcel. The consolidation of these parcels allows Mandel to build a single multifamily apartment building without crossing property lines and thereby following building codes. The consolidation also creates a clear delineation of the uses in the comprehensive plan and a clear delineation of the underlying zoning code.

The existing property delineation is shown below with the associated tax keys of 3700362000, 3700337001, 3700323000, 3700359000, and 3700324001. Note the 3700359000 parcel is shown split in two to highlight that the portion of the site in and near Harwood will be dedicated to the City as right-of-way.



CERTIFIED SURVEY MAP NO._____

BEING LOT 1, 2, 3, 4, 5 AND 6 OF SPORLEDER'S SUBIDVISION, PART OF LOT 1 AND 2 OF ASSESSOR'S PLAT NO. 14, AND PART OF LOTS 4, 5, 6, 7 AND 10 IN J.S. AND CHAS. STICKNEY'S SUBDIVISION OF 23.5168 ACRES OF LAND IN THE SOUTHWEST ONE-QUARTER (1/4), ALL IN THE SOUTHWEST 1/4 OF SECTION 22 IN TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

Prepared For:
Harlow & Hem Apartments, LLC

ADDRESS: Blanchard St., 7460 Blanchard St., 7471 Harwood Ave., Park St., 7463 Harwood Ave., Wauwatosa Ave.
TAX KEY: 370-0323-00, 370-0324-01, 370-0036-00, 370-0337-01, 370-0359-00, 370-0362-00

LEGEND:

SET $\frac{3}{4}$" DIA. REBAR 18" LONG @ 1.50 LBS/LN FT.

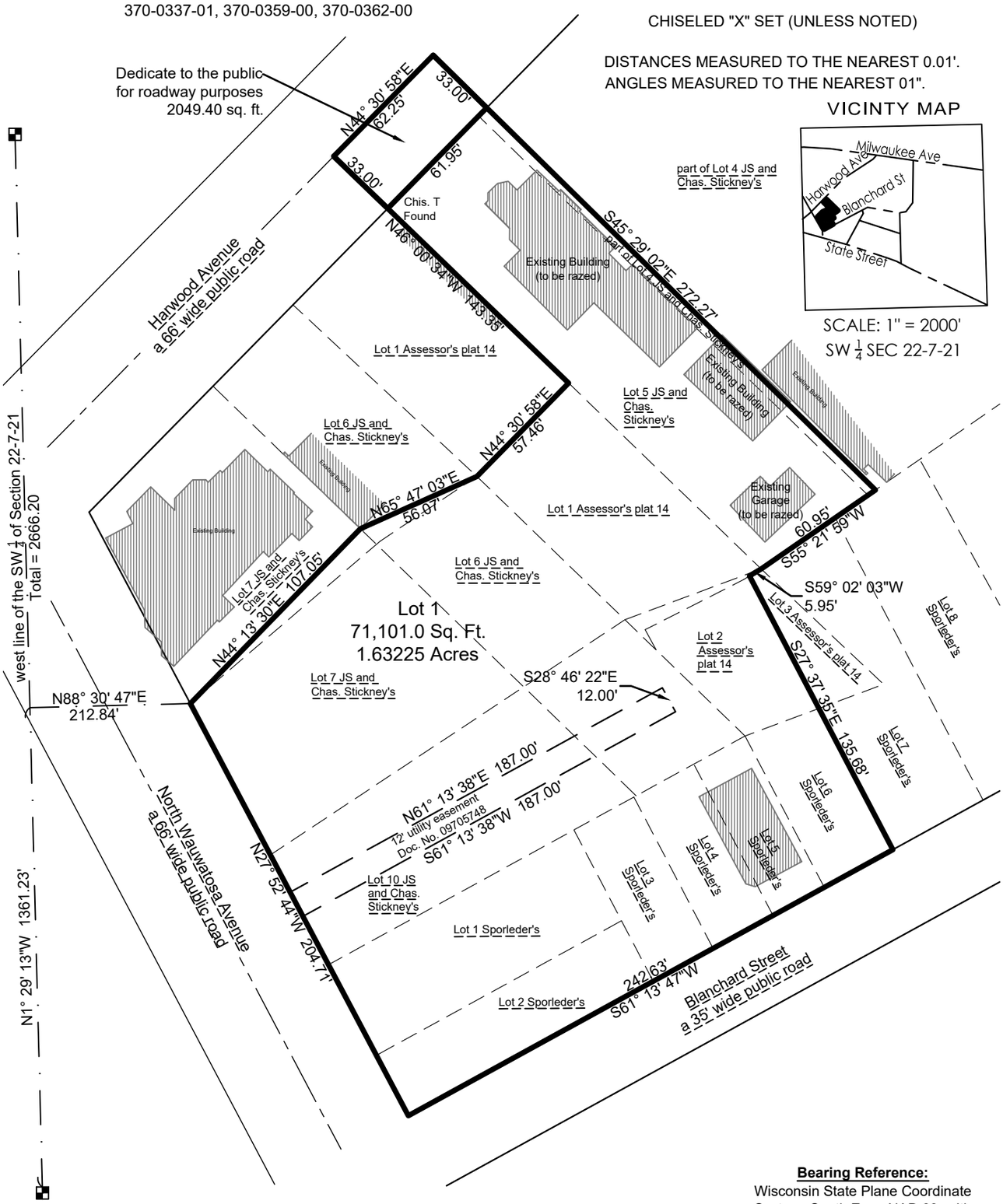
IRON ROD FOUND

CHISELED "X" SET (UNLESS NOTED)

DISTANCES MEASURED TO THE NEAREST 0.01'.
ANGLES MEASURED TO THE NEAREST 01".

VICINITY MAP

SCALE: 1" = 2000'
SW $\frac{1}{4}$ SEC 22-7-21



Bearing Reference:
Wisconsin State Plane Coordinate System, South Zone NAD 83, with the West line of the SW 1/4 of Sec. 22-7-21 bearing N1°29'13"W

GRAPHIC SCALE

0 60' 120'

www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

PROJECT NUMBER 20176 DRAFTED BY KAS 4-3-2024

Sheet 1 of 3

CERTIFIED SURVEY MAP NO._____

BEING LOT 1, 2, 3, 4, 5 AND 6 OF SPORLEDER'S SUBIDVISION, PART OF LOT 1 AND 2 OF ASSESSOR'S PLAT NO. 14, AND PART OF LOTS 4, 5, 6, 7 AND 10 IN J.S. AND CHAS. STICKNEY'S SUBDIVISION OF 23.5168 ACRES OF LAND IN THE SOUTHWEST ONE-QUARTER (1/4), ALL IN THE SOUTHWEST 1/4 OF SECTION 22 IN TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

SURVEYOR'S CERTIFICATE

State of Wisconsin)
)SS
Milwaukee County)

I, Kevin A. Slottke, Professional Land Surveyor, hereby certify that I have surveyed, dedicated, divided, and mapped Lot 1, 2, 3, 4, 5 and 6 of Sporleder's Subdivision, part of Lot 1 and 2 of Assessor's Plat No. 14, and part of Lots 4, 5, 6, 7 & 10 in J.S. and Chas. Stickney's subdivision of 23.5168 acres of land in the Southwest $\frac{1}{4}$, all in the Southwest $\frac{1}{4}$ of Section 22, in Township 7 North, Range 21 East, in the the City of Wauwatosa, Milwaukee County, Wisconsin, bounded and described as follows:

Commencing at the Southwest corner of said Section 22; thence North 1°29'13" West, along the west line of the southwest $\frac{1}{4}$ of said Section 22, 1360.93 feet; thence North 88°30'47" East, 212.84 feet to the easterly right of way line of North Wauwatosa Avenue and the point of beginning; thence North 44°13'30" East, 107.05 feet; thence North 65°47'03" East, 56.07 feet; thence North 44°30'58" East, 57.46 feet; thence North 46°00'34" West, 143.35 feet to the centerline of Harwood Avenue; thence North 44°30'58" East, along said centerline, 62.25 feet; thence South 45°29'02" East, 272.27 feet; thence South 55°21'59" West, 60.95 feet; thence South 59°02'03" West, 5.95 feet; thence South 24°37'35" East, 135.68 feet to the northerly right of way line of Blanchard Street; thence South 61°13'47" West along said northerly right of way line, 242.63 feet to the easterly right of way line of North Wauwatosa Avenue; thence North 27°52'44" West along said easterly right of way line, 204.71 feet to the point of beginning.

Containing 71,101.0 Square Feet, 1.63225 Acres.

That I have made the survey, land division, and map by the direction of Harlow & Hem Apartments, LLC, owner of said land, that the map 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 s. 236.34 of the Wisconsin Statutes and the City of Wauwatosa land division ordinance in surveying, dividing and mapping the same.

_____
Kevin A. Slottke, PLS 2503 Date

OWNER'S CERTIFICATE

Harlow & Hem Apartments, LLC, a Wisconsin limited liability company, duly organized and existing under and by virtue of the laws of the State of Wisconsin, as owner, certifies that said owner has caused the land described on this map to be surveyed, divided, mapped and dedicated as represented on this map in accordance with Chapter 236 Wisconsin Statutes.

Harlow & Hem Apartments, LLC 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: **the City of Wauwatosa**

Witness the hand and seal of said owner on this _____ day of _____, 20_____.

Harlow & Hem Apartments, LLC

_____
[signature]

_____
[printed name & title]

State of Wisconsin
)SS
Milwaukee County)

Personally came before me this_____day of _____, 20____, the above-named _____,

to me known to be the person who executed the foregoing instrument, and to me known to be the

_____ of **Harlow & Hem Apartments, LLC** and acknowledged that they executed the foregoing instrument.

_____ _____
(SEAL) notary public, State of Wisconsin

my commission expires _____.

CERTIFIED SURVEY MAP NO._____

BEING LOT 1, 2, 3, 4, 5 AND 6 OF SPORLEDER'S SUBIDVISION, PART OF LOT 1 AND 2 OF ASSESSOR'S PLAT NO. 14, AND PART OF LOTS 4, 5, 6, 7 AND 10 IN J.S. AND CHAS. STICKNEY'S SUBDIVISION OF 23.5168 ACRES OF LAND IN THE SOUTHWEST ONE-QUARTER (1/4), ALL IN THE SOUTHWEST 1/4 OF SECTION 22 IN TOWNSHIP 7 NORTH, RANGE 21 EAST, IN THE CITY OF WAUWATOSA, MILWAUKEE COUNTY, WISCONSIN.

PLANNING COMMISSION APPROVAL

APPROVED BY THE PLANNING COMMISSION OF THE CITY OF WAUWATOSA ON THIS _____ DAY OF

_____, 20____

_____

DENNIS McBRIDE, CHAIRPERSON

_____

TAMARA SZUDY, SECRETARY

COMMON COUNCIL APPROVAL

APPROVED AND ACCEPTED BY THE COMMON COUNCIL OF THE CITY OF WAUWATOSA IN ACCORDANCE WITH THE

RESOLUTION ADOPTED ON THIS _____ DAY OF _____, 20____

_____

STEVEN A. BRAATZ, JR, CITY CLERK

File #: 24-0575 **Agenda Date:** 5/13/2024 **Agenda #:** 5.

Request by Phillip Aiello, Mandel Group Inc., for a Zoning Map Amendment from Single Family Residential (R1-6) District to Neighborhood Village Trade/Planned Unit Development (C1/PUD) District at 7460/7462 Blanchard Street

Submitted by:
Art Piñon
Department:
Development

A. Background/Options

The applicant is requesting a Zoning Map Amendment for a 0.21acre parcel located at 7460/7462 Blanchard Street. The amendment would rezone the property from Single Family Residential (R1-6) District to C1 District/Planned Unit Development (PUD) Overlay for a portion of a proposed multi-unit residential development.

The next agenda item provides additional information about the development.

B. Staff Comments

Planning/Zoning Division
This request is contingent upon the approval and filing of the related Certified Survey Map. A public hearing on June 18, 2024 is required.

Fifty-one (51) public notification letters related to the project were sent per City regulations.

Comprehensive Plan Compliance: The Future Land Use Map in the 2008-2030 Comprehensive Plan classifies this parcel as "Downtown", a category "intended for a mix of retail, commercial service, office, institutional, and residential (mainly upper story units) uses arranged in a pedestrian-oriented environment with on-street parking; minimal building setbacks; and building designs, materials, placement, and scale that are compatible with the character of existing development." In addition, many goals, objectives, and policies found in Volume Two: Polices and Recommendations, primarily in chapter 2.1 Land Use and chapter 2.3 Housing and Neighborhood Development, support multifamily housing development opportunities in the City. Volume Two of the Comprehensive Plan is found here:

<https://www.wauwatosa.net/home/showpublisheddocument?id=480>

Strategic Plan Compliance: The Village of Wauwatosa Strategic Development Plan, adopted in 2011, discusses three strategic approaches for retail growth in the Village, one being "increasing the number of resident

households adjacent to the Village. New residential development in and around the study area can add a substantial number of local customers for the Village." The Plan also proposes a redevelopment concept for the City's Blanchard Street parking lot consisting of a mid-rise building that is "capable of including offices, a boutique hotel, or housing" and takes advantage of the change in topography. The Village Plan is found here: showpublisheddocument (wauwatosa.net) <https://www.wauwatosa.net/home/showpublisheddocument?id=514>

Housing Study Alignment: The City's 2016 Housing Study and Needs Analysis and 2023 Housing Study & Needs Assessment identifies a demand for subsidized and workforce housing as well as market rate units. The Housing Studies can be found here: <https://www.wauwatosa.net/government/departments/development/economic-development/housing-studies-

Building Division
No issues.

City Assessor's Office
No issues.

City Clerk's Office
No issues.

Engineering Division
No issues.

Fire Department
No Issues

Health Department
No comments provided.

Police Department
No comments provided.

C. Recommendation

Staff recommends approval and setting a public hearing date of June 18, 2024.

Harlow & Hem

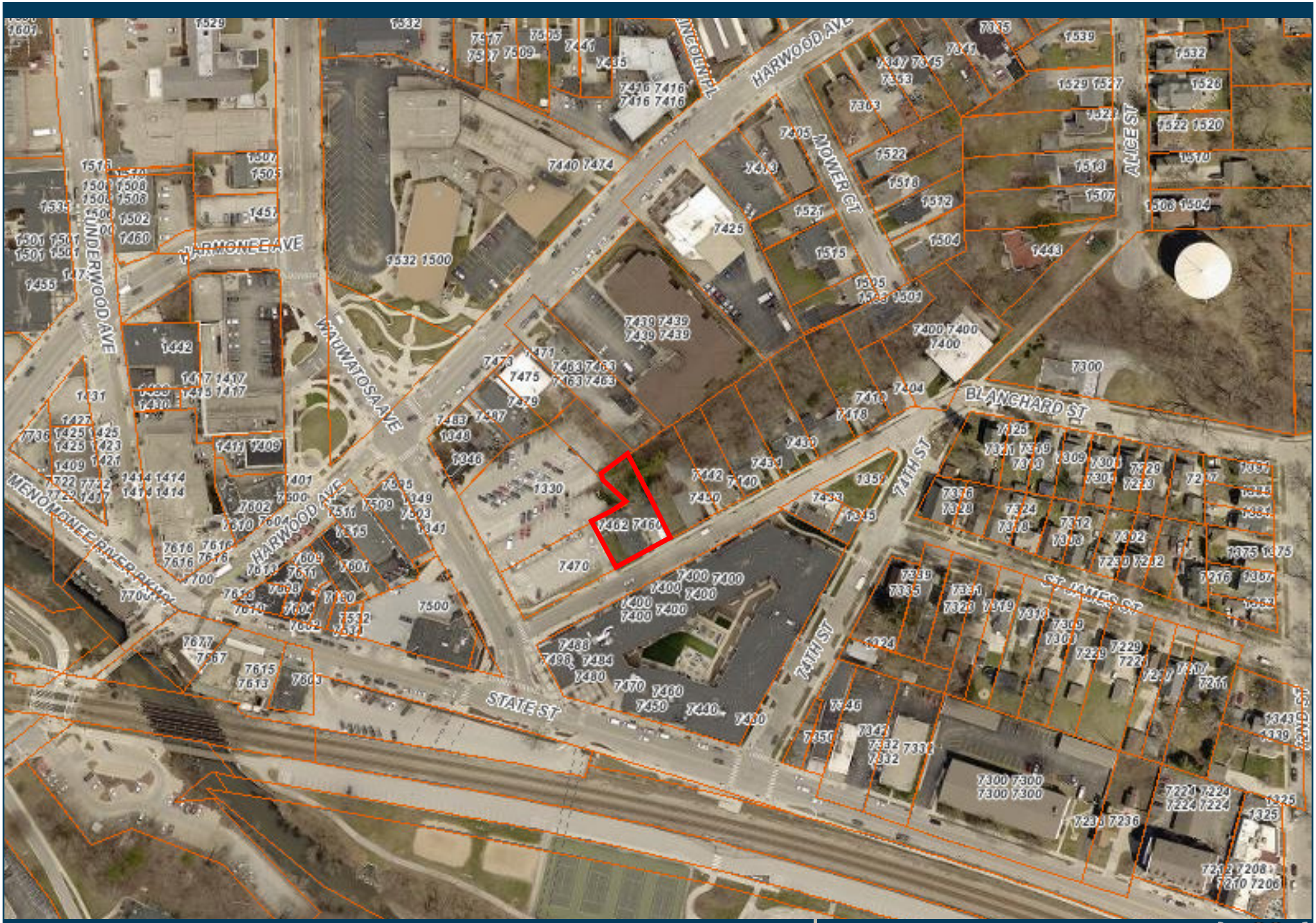
APARTMENTS

ZONING MAP AMENDMENT REQUEST AND PROJECT DESCRIPTION

Related to a Preliminary Planned Unit Development application, Certified Survey Map application, and Site Plan Review application Mandel Group, Inc. ("Mandel") has applied for a Zoning Map Amendment approval to change the zoning map from Single-unit Residential-6 (R1-6) to Neighborhood/Village Trade (C1). The subject parcel is 3700324001 and commonly known as 7460 Blanchard Street and 7462 Blanchard Street. The parcel is shown below. Please note that the use under the Comprehensive Plan does not need to be modified as it is already designated as Downtown use.

Changing the underlying zoning to C1 will make the zoning of this parcel consistent with the adjacent parcels that are part of Mandel's proposed multifamily apartment community and make the zoning and land use consistent with each other.





7460 & 7462 Blanchard St.

City of Wauwatosa

File #: 24-0572 **Agenda Date:** 5/13/2024 **Agenda #:** 6.

Request by Phillip Aiello, Mandel Group Inc., for a Preliminary Planned Unit Development at 1330 Wauwatosa Avenue, 7463 Harwood Avenue, and 7460/7462 and 7470 Blanchard Street for a multi-unit residential development

Submitted by:
Art Piñon
Department:
Development

A. Background/Options

The applicant is proposing to construct a 157-unit multi-unit housing development on a 1.63-acre site located at the northern corner of Wauwatosa Avenue and Blanchard Street. Currently the site contains a public parking lot with 98 stalls, duplex residence, and a commercial building. The development is proposed to be 5-7 stories in height containing 54 studio apartments, 59 one-bedroom units, 27 two-bedroom units, and 17 three-bedroom units. The units are distributed within 5 levels over 2 levels of private and public parking. Planned amenities include a rooftop patio, community room and kitchen, fitness center, pet spa, café/lounge, bike repair, and electric vehicle chargers.

By utilizing grade change from Harwood Avenue to Blanchard Street, the development will have two levels of partially underground parking consisting of 189 private parking spaces and 51 public spaces. A surface lot is also provided at the north end of the site (accessed from Harwood Ave.) that will provide 47 public parking spaces. In total, the project provides 98 public parking spaces, replacing the sites existing public parking at a 1 to 1 ratio. Entrances to the public and private structured parking will be off Blanchard Street and Wauwatosa Avenue.

The PUD is being requested to provide flexibility to the following development standards:

- City Code 24.03.030 - Building Height: Maximum building height in the C1 District is 40 feet. The proposed building varies to a maximum height of 50 feet to 60 feet on Wauwatosa Avenue and 79 feet on Blanchard Street.
- City Code 8.44.080 - Parking Space Setback (Surface Lot): City Code requires 2 feet and the applicant is proposing a setback that gradually tapers from 2 feet to 0.3 feet for approximately 200 feet along the east side of the proposed public surface parking lot.
- City of Wauwatosa parking lot standards require a drive aisle width of 24 feet for 2-way traffic with 90-degree parking lot stalls. The applicant is proposing a drive aisle width of 22 feet for the proposed public surface parking lot.
- City Code 24.12.020.B.1: A landscape strip with a minimum depth of 10 feet must be provided between the vehicular use area and the public right-of-way. The northeast perimeter island has a proposed depth of 8 feet 7 inches.

- City Code 24.12.030.B.2: At least 10% of the interior of vehicular use areas must be landscaped. The landscaping plans propose an interior landscaping area of 1.8%.
- City Code 24.12.030.B.3.a: Landscape islands and medians must be at least 10 feet in width. The two landscape islands provided have a width of 9.9 and 4.4 feet.
- City Code 24.12.030.B.3.b: 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. On the east side of the proposed public surface parking lot, there are 24 consecutive parking spaces.
- City Code 24.12.030.B.3.d: 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. The required interior landscape area is 1,265 square feet. Therefore, the number of required shade trees is 7. The applicant is proposing 2 shade trees.

As of May 7, 2024, one (1) written public comment was received and is attached.

Attached to this report are the project description and plans.

B. Staff Comments

Planning/Zoning Division
A total of fifty-one (51) public notification letters were sent out per City Regulations.

A public hearing on June 18, 2024 is required.

This request is contingent upon approval of the Zoning Map Amendment application (7462 Blanchard Street) and the Certified Survey Map application.

Public parking agreements shall be recorded prior to ownership transfer of the City's parking lots.

The 2024 Wauwatosa vacancy rate for buildings with 4-25 units was 2.5% and for buildings with 26+ units was 5.9%. Please note that new apartments were built in Wauwatosa in late 2023, so it's anticipated vacancy will decrease as we move into summer. Given pent up demand from many years where no housing was constructed, the City's large non-resident workforce population, and continued developer interest in undertaking multi-family projects, demonstrates there remains demand for apartments at varying rent levels, including higher end. Vacancy rates are one of the key statistics the National Association of Home Builders track to judge the health and direction of the housing market. Low vacancy rates are typically interpreted as a sign of tight housing markets, with lower vacancy rates signaling a greater housing shortage, and vice versa for high vacancy rates. While the general perception of property vacancies may be a negative one, vacancy on some level is necessary for a healthy market and economy. Healthy vacancy rates ensure rents remain relatively stable and assist employers in recruiting and retaining workers who can find and afford a place to live in the community. The median rental vacancy rate in the United States has hovered around 7% in recent years and an average vacancy rate between 5-8 % is considered healthy. While there is a low vacancy rate, leasing agencies generally advertise because they want potential tenants to inquire about their residential communities and availability to have a database of prospective clients to contact when units become available.

Building Division
Design Review Board approval required; plan review, 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 & expense information as requested by the Assessor's Office.

City Clerk's Office
No issues.

Public Works Department
A perpetual public parking lot agreement is required to be fully executed prior to building permit issuance that will give the City sole authority to determine parking regulations within the public parking lots, including the potential for overnight parking options. The electronic space monitoring system required for the structured public parking lot shall utilize open source API integration so that the City can integrate open parking space count data on its website or a 3rd party application that will allow the public to view parking availability from their hand-held devices as well as the variable message sign that will be located outside of the parking entrance. The system shall also utilize a data collection method that will allow the City to collect and review historical parking occupancy data.

A public parking displacement plan is needed for the parking that will be lost during construction of the development prior to Final PUD application submittal.

The public parking lot shall include a minimum of three Level 2 Electric Vehicle charging stations, which may be 3rd party owned and operated, but must be available to and advertised to the general public for their use.

It is strongly encouraged that placement of a Solar PV system be considered for the rooftops of the buildings.

Engineering Division
Plans showing adequate sewer capacity, storm water management, traffic/access improvement, parking lot lighting, and construction staging impacts shall be submitted and approved by the Engineering Division prior to building permit issuance.

Applicant must contact Engineering to discuss addressing for the proposed multi-family development. Addressing must be finalized prior to building permit issuance.

Retaining walls greater than four (4) feet in height requires a structural design by a licensed professional engineer. All walls adjacent to pedestrian areas must include fencing on top of the retaining wall. Stamped structural drawings must be submitted to the Engineering Department prior to building permit issuance.

Existing City parking lot signage/monuments and decorative light poles that are in the public right-of-way and adjacent to the proposed development may need to be relocated. Applicant will work with Engineering staff on the final location of parking lot and wayfinding signage/monuments. The existing Village monument sign on Wauwatosa Ave that is currently damaged will be within the proposed construction staging area for this development. The applicant will be required to repair the base as needed and re-install the sign that the City has already purchased. Parking lot signage/monuments and decorative light pole comments must be addressed prior to final site plan approval.

Fire and domestic water demand calculations must be submitted prior to final site plan approval. Fire flow calculations must be in accordance with City Code Section 14.20.080 and NFPA 13.

A maintenance agreement for any required storm water quality devices must signed by the owner/person responsible for maintenance and recorded with Milwaukee County prior to Final Building Occupancy issuance.

Detailed plans showing how all overhead electric facilities will be relocated on the property will be required prior to final PUD submittal.

A tree replacement fee is required for any existing City street trees and Silva cells that are removed for the proposed development. The fee must be paid prior to final site plan approval.

The applicant requests that deviations to the interior and perimeter landscaping code be granted through the PUD process for proposed surface lot on Harwood Ave. The narrative states that that permeable pavers have been provided to compensate for the deviations to the landscaping code. The plans do include permeable asphalt pavement along the southwest side of the surface parking lot. The permeable pavement is not required by City or MMSD Codes and does provide water quality and quantity benefits. While it is acknowledged that the landscaping code cannot be met while also providing public parking at a 1:1 ratio based on existing public parking counts, interior and perimeter landscaping does help reduce the heat island effect, provide water quality and quantity benefits, and natural aesthetics.

In addition, deviations to the surface parking lot required setback and minimum drive aisle width have been requested. A turning template for both a mid-size car and a large pick-up truck have been provided to demonstrate how vehicles will enter and exit from the proposed parking stalls. The proposed parking lot at the south end is spatially restricted due to the location of the existing Overlook Apartments building on the east side and proposed retaining walls on the south and west sides. Restricting the parking stalls on the south end of the parking lot to only compact size vehicles may be required. Screening between the proposed parking lot and the Overlook Apartments building may be required based on the façade of the existing building. If screening is required, it must be included in the plans prior to final site plan approval.

The applicant has submitted an initial traffic study outlining the trip generation for the proposed development as requested by the City's traffic engineer for the preliminary PUD. The development is expected to generate 60 trips during the weekday morning rush hour (15 in/45 out) and 65 trips during the weekday evening rush hour (40 in/25 out). This is a low volume trip generator. A comprehensive traffic analysis of the development driveways, as well as of Wauwatosa Avenue from Harmonee Avenue to State Street is required prior to Final PUD application submittal. The comprehensive traffic analysis will identify modifications, if necessary, to improve traffic safety and operations in the study area.

The initial traffic study also states that under the proposed development plan, the proximity of the building to the sidewalk will result in limited visibility to pedestrians at the Wauwatosa Avenue structured parking exit. The study recommends mitigation options for the sidewalk sight line such as providing signing that encourages exiting vehicles to be aware of the potential presence of pedestrians. In addition to signage and mirrors, the applicant is encouraged to work with staff on moving the proposed pedestrian exit to the north side of the garage opening to help with the pedestrian lines of sight for vehicles exiting the structure. All pedestrian visibility concerns must be addressed prior to final PUD application submittal.

The plans show a 16-foot overhead door on Blanchard Street. The applicant is encouraged to work with staff in providing more details regarding the access system and how much this will impact pedestrian accessibility at the sidewalk prior to final site plan approval.

The current construction staging plan shows long term sidewalk closures on the east side of Wauwatosa Ave and the north side of Blanchard Street and a proposed crane swing encroachment within the public right-of-way, which are all subject to approval by the Board of Public Works. A detailed phased construction staging plan is required and must include where deliveries will be made during each phase and where construction materials will be stored. The construction staging plan must also accurately depict if any lane closures will be necessary.

Lane closures are subject to approval by the Board of Public Works prior to building permit issuance.

A shoring and soil stabilization plan showing how Wauwatosa Ave and adjacent neighboring structures will be protected during construction will be required prior to building permit issuance.

A profile of the existing grade and the proposed building must be provided to assess how much excavation will be proposed. Recent redevelopment in the area encountered high groundwater during and after construction. For this proposal, a dewatering plan may be necessary during construction and extra foundation protection measures may need to be considered post construction and must be submitted to Engineering prior to building permit issuance.

The City is currently engaged in a Village Area Parking Study with Walker Consultants. The study is nearly complete and results are anticipated in the coming weeks. The study will include recommendations for public parking within the study area.

Fire Department
No Issues

Health Department
No comments provided.

Police Department
No comments provided.

C. Recommendation

Staff recommends approval subject to:

1. Approval of the CSM and zoning map amendment applications.
2. Setting a public hearing on June 18, 2024.
3. Compliance with all conditions in the Public Works and Engineering comment sections of this report.
4. Approval from the Design Review Board is required prior to submitting for Final PUD approval.
5. Providing detailed costs of any alterations and/or new construction as well as income and expense information as requested by the Assessor's office.
6. Filing application for Final PUD approval within 12 months of the date of Preliminary PUD approval.
7. Obtaining all necessary approvals, licenses, and permits.



1330 Wauwatosa Ave

City of Wauwatosa

Harlow & Hem
APARTMENTS

PROJECT DESCRIPTION – PRELIMINARY PUD

Background

Mandel Group ("Mandel") previously received approval for a Final Planned Unit Development in July 2022 for Harlow and Hem Apartments. During the approval process, construction costs nationwide and Harlow and Hem specifically escalated by 24% over the course of approximately nine months. The impact of these construction increases was compounded by the fastest increase in short-term and long-term interest rates in the past four decades. The previous plan became financially infeasible due to these economic conditions. Consequently, Harlow and Hem had to be reconceived to reduce costs to be feasible once again.

After trial and error on reconceiving the design, we landed on this submitted plan whereby the biggest move of removing 47 parking stalls from the structured parking garage to a surface lot and increasing the number of apartments from 130 to 157 resulted in a feasible development. We appreciate the City of Wauwatosa's patience as we navigated the difficult economic environment.

Program Statement

Harlow and Hem is an urban-infill residential development that aligns with the Village strategic plan and brings approximately 157 high-end residential units to the Wauwatosa village center. By replacing an underutilized piece of property with a high-density development, it invites people to live in Wauwatosa, activates the Village, and gives prominence to one of the most visible corners in the village center.

The residential program is made up of a mix of Studio, one-bedroom, two-bedroom, and three-bedroom units to cater to a diverse demographic and lifestyle. Units are distributed on five levels over two levels of private and public parking. The design of the building works with the existing topography to create varied massing and scale as you move from Blanchard to Harwood. This change of scale is further reinforced by intentionally peeling back the top floor along Wauwatosa Avenue, so that the building is non-uniform and presents at a pedestrian-scale along this primary street. Embedding the building within the topography also allows us to conceal most of the parking underground. This minimizes the visual impact of the parking structure and allows the residential use to take centerstage. The prominent corner of Wauwatosa Avenue and Blanchard Street is activated by a double height lobby and accentuated by the stone veneer, ample glazing, landscaping, and lighting.

The design and articulation of the façade is based on a modern aesthetic emphasizing clean and simple geometry and form. Materials are chosen for durability and to craft a diverse palette of texture and color in the façade. Dark brick creates a solid base and provides a contrast to the white and grey fiber cement panels. Stone veneer is used along the most visible angles along Wauwatosa to impart a timeless elegance to the building. Wood accent panels are used as highlight and counterpoint to the fiber cement. All these materials, along with the unit balconies, articulate and activate the facade. Manufacturer recommendations, best practices and installation methods will be followed rigorously to create a building that stands the test of time.

Harlow & Hem
APARTMENTS

Amenities such as underground parking, rooftop patio, community room and kitchen, fitness center, pet spa, café/lounge, bike repair, and electric vehicle chargers are included in the project. Being in the heart of the village center, these amenities will provide a rich variety of social and lifestyle opportunities for its residents.

A high-level summary of the program is shown below.

Apartments	Approximately 157
Structured Private Parking	189
Structured Public Parking	51
Surface Public Parking	47
Total Public Parking	**98**

Note there are 98 existing public parking spaces in the Blanchard Lot. The 98 public parking spaces in the revised Harlow and Hem plan replace these spaces in a one-for-one ratio. The entrance to the public surface parking will be off Harwood Avenue. The entrance to the public structured parking will be off Wauwatosa Avenue to place the parking near retailers.

Planned Unit Development Improvements

The subsequent table compares Harlow & Hem to the underlying C1 zoning classification. The PUD would allow for taller building heights than the 40' maximum for C1 zoning. The u-shaped building height from grade at the mid-points of various parts of the building range from 50' for the north wing along Wauwatosa Avenue, 60' for the south wing along Wauwatosa Avenue, and 79' for the south wing along Blanchard Street. The drastic change in grade along Wauwatosa Avenue is a significant hurdle that contributes to the difficulty in economic feasibility. The deviation from the maximum building height allowed in C1 zoning allows economic feasibility and overcomes the grade-change hurdle while remaining in context with Overlook Apartments and State Street Station.

The City's housing study identified a need for a variety of housing types including market-rate multifamily housing for young professionals and baby boomers. Our proposed concept addresses these needs.

Harlow & Hem will weave together the historic framework in place and embrace the future goals of the Village through architecture and creativity. The 7463 Harwood Ave currently is a dated commercial building that does not accurately reflect the history and character of the Village. The public parking, while functional, visually does not contribute to the character of the Village. While some of the public parking will remain a surface lot, this lot will have a limited presence off a secondary street rather than a larger presence off Wauwatosa Avenue. Our proposed concept, with a sensitivity to contextual precedent within the Village, would revitalize this area of the Village. The focus on public parks, green space and pedestrian interaction further activates the area and allows for the integration and activation of businesses, like Anodyne, Draft & Vessel, Mooi, and Flannel Fox.

Harlow & Hem
APARTMENTS

We are requesting deviations from the code for the surface parking lot landscape requirements as indicated in the table below. To replace all 98 existing parking spaces, we are requesting a deviation from the number of islands, dimension and size of the island, and percentage of landscaping required. These minor deviations will allow us to meet the public parking replacement requirement while allowing for adequate private parking in the parking structure.

To compensate for these small deviations to the code, we have included permeable pavers as both a green infrastructure element and an enhanced aesthetic element for the lot. The combination of the landscaping strips at the heads of the parking stalls, the landscape island, the permeable pavers, appropriate lighting, and the relocation of the attractive city wayfinding parking lot sign will make the parking lot a welcoming and attractive space for patrons of the retail shops.

The drive aisle width reduction from 24’ to 22’ also contributes to our ability to meet the parking replacement requirement. The turning radius for vehicles are included to demonstrate that small and large vehicles can make parking maneuvers successfully.

Harlow & Hem
APARTMENTS

Deviations from C1 Zoning

Zoning Item	Proposed PUD Overlay	C1 Neighborhood Village Trade/City Ordinances
Maximum Height	~50' and 60' on Wauwatosa Avenue ~79' on Blanchard Street	40'
Surface Lot Drive Aisle Width	22'	24'
Minimum parking space setback from property line	Tapers from 2' to 0.3' on east side	2'
Maximum entrance/exit width	36.25'	30'
Minimum landscape strip depth	8'7"	10'
Minimum landscape island width	9.9' and 4.4'	10'
Surface Lot Interior Landscaping Percentage Minimum	1.8%	10%
Provide 1 Tree Per 180 SF of Required Interior Landscaping	2 trees provided for 1,265 SF of required interior landscaping	7 trees needed for 1,265 SF of required interior landscaping
One Landscape Island per 15 Stalls	Do not meet this requirement on east side of parking lot	

Notable Zoning Requirements – In Compliance

Zoning Item	Proposed PUD Overlay	C1 Neighborhood Village Trade/City Ordinances
Permitted use	Multifamily	Multifamily
Minimum lot area	-	None
Minimum lot width	-	None
Minimum setbacks - Front - Street side - Interior Side - Rear	Proposed: 3' 8'-11' 12' Varies 5'-29'	 0 0 0 0
Max. building coverage	Building Footprint: 44,500 SF Lot area: 69,051 SF = 64.4% coverage	No Maximum
Parking for 157 apartments	190 Provided (+ 98 Public stalls)	188 Needed

Harlow & Hem
APARTMENTS

Neighborhood Meeting Summary
A neighborhood meeting was held on May 1, 2024, in the ballroom at Echelon Apartments. Property owners within 200' of the development were sent a notification of the meeting. Approximately eight residents or business owners participated in the meeting. In addition, Alders Margaret Arney, Joseph Makhlouf, and Melissa Dolan participated in the meeting.

Site Plan Comments
The primary comments from the participants centered around connectivity between the development and the public, concerns about the walk from the surface parking lot to the retail in the Village, and the proximity of the building to the Draft and Vessel patio area.

We indicated that we will investigate connectivity and the proximity of the building to Draft and Vessel but also indicated concerns that adjustments could impact feasibility.

Building Comments
Participants shared concerns about the height of the building and the desire for the palette of materials to reflect the colors and tones of the Village. Specifically, there was concern about the white fiber cement siding color.

We indicated that the height of the building is in context with the adjacent buildings (State Street Station, Overlook Apartments) and needed to redevelop these underutilized properties into an economically feasible development. We also indicated that we want to obtain comments at the Design Review Board with respect to the architecture and material palette before considering adjustments.

Construction Comments
Participants were concerned about contractor parking, demolition dust, and trucking routes during construction. Many experienced the disruption of construction when State Street Station was built and want to get ahead of their concerns.

We indicated that we intend to place gravel down where the proposed surface parking lot is located and intend to have contractor parking in this location. We indicated that demolition is minimal at this location, but we would work with the demolition contractor on dust control. Figuring out truck routes and other specifics were deferred until we have a construction manager on board and are months out from construction commencement.

Operational Comments
The participants expressed concerns about operational issues related to location of trucks during move-ins and move-outs and dog-walking. We indicated that we have a loading zone that is outside of the Blanchard right-of-way. In addition, the leasing office is next to the loading zone, allowing our associates to manage the location of the trucks during move-ins and move-outs. We also indicated that we will have a dog run on the courtyard above the structured parking. While no amount of "policing" will eliminate all issues, we are willing to work with neighbors on these issues.

HARLOW AND HEM

7487 HARWOOD AVENUE, WAUWATOSA, WI

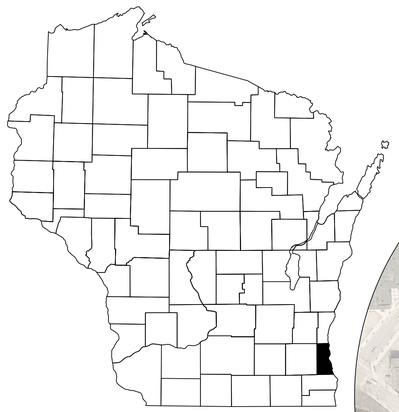
CIVIL ENGINEERING PLANS

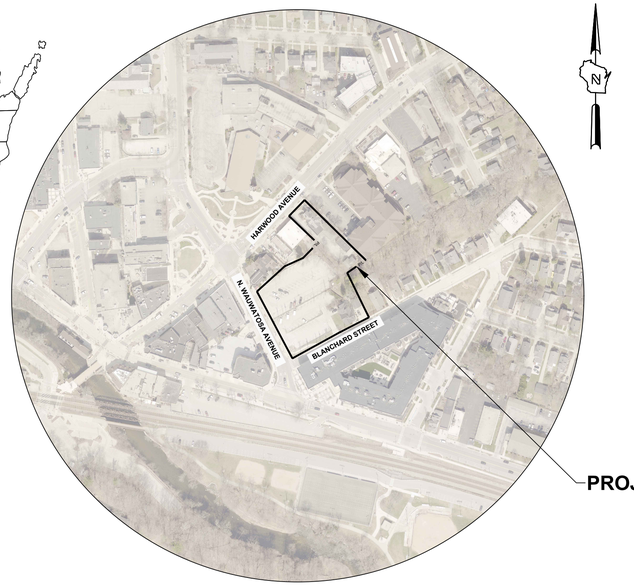
PREPARED BY:

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

SITE LOCATION MAP:

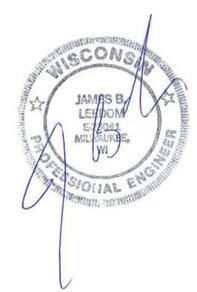
NOT TO SCALE





Sheet List Table

SHEET NO.	SHEET NAME
C000	COVER SHEET
C001	SITE SURVEY
C002	SITE PREPARATION & EROSION CONTROL PLAN
C100	SITE PLAN
C200	GRADING PLAN
C300	UTILITY PLAN
C400	DETAILS
C401	DETAILS
C402	DETAILS
C403	DETAILS
C500	SPECIFICATIONS
C501	SPECIFICATIONS
C502	SPECIFICATIONS



PUD SUBMITTAL: APRIL 10, 2024

2024.04.09



LEGEND:

SECTION 1/4 SECTION LINE	UNKNOWN MANHOLE
PROPERTY LINE	SANITARY MANHOLE
EASEMENT	STORM MANHOLE
CHAIN LINK FENCE	ELECTRIC MANHOLE
GUARD RAIL	MMSD MANHOLE
METAL FENCE	TELEPHONE MANHOLE
WOOD FENCE	CLEANOUT
TREE LINE	CATCH BASIN
OVERHEAD UTILITY LINE	CATCH BASIN (ROUND)
ELECTRIC	ROOF DRAIN
TELEPHONE	CULVERT END
FIBER OPTIC	HYDRANT
CABLE TV	WATER VALVE
SANITARY SEWER	GAS VALVE
FORCE MAIN	GAS METER
STORM SEWER	ELECTRIC METER
WATER MAIN	UTILITY PEDESTAL
GAS	HANDHOLE
EXISTING CONTOUR	VENT
WETLAND	MONITORING WELL
FLOODPLAIN	

IRON PIPE FOUND/SET	
REBAR FOUND/SET	
CHISELED CROSS FOUND/SET	
PK NAIL FOUND/SET	
SPIKE/NAIL	
MONUMENT	
BENCHMARK	
SIGN	
PARKING METER	
FLAG POLE	
8" DECIDUOUS TREE	
8" CONIFEROUS TREE	
BUSH	
POST	
SOIL BORING	
TRAFFIC SIGNAL	
LIGHT POLE	
UTILITY POLE	
GUY WIRE	
GUY POLE	

GRAPHIC SCALE
0 30 60

GENERAL NOTES:

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

3. DRAWING IS BASED ON FIELD SURVEY COMPLETED BY THE SIGMA GROUP, INC. ON JUNE 16, 2021.

4. DATUM FOR THE PROJECT SURVEY IS CITY OF WAUWATOSA DATUM. BENCHMARK FOR THE PROJECT SURVEY IS THE WEST 1/4 CORNER OF SECTION 22-7-1 CONCRETE MONUMENT ELEV 127.85.

5. CONTRACTOR TO VERIFY EXISTING CONDITIONS, CONTACT ENGINEER WITH DISCREPANCIES.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE
MILW. AREA 259-1181

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

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Fax: 414-643-4210

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

SITE SURVEY

PRELIMINARY NOT FOR CONSTRUCTION

ISSUANCE	DATE

NO.	REVISION	DATE

PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.04.09
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----

SHEET NO:
C001

AKUSKE
C001
20176

I:\Mandel\20176 Harlow & Hem Tosa Development Surveying\060 CAD 2024\030_Production Sheets\100_Civil\C001 Site Survey.dwg

2024.04.09

REMOVE LIGHT POLE

CURB REMOVAL FOR NEW DRIVE OPENING, REPLACE INLET GRATES

THE CITY STREET LIGHTING CABLE ALONG THE PROJECT LIMITS IS CABLE-IN-DUCT (CID) BEHIND THE CURB IN CITY ROW. AS THE PROPOSED CONSTRUCTION ENTRANCES WILL HAVE TRUCK TRAFFIC CROSSING OVER THIS CID, THE CITY WILL REQUIRE THE INSTALLATION OF AN EMPTY 2 INCH RIGID STEEL CONDUIT SLEEVE TO BE INSTALLED IN CASE OF DAMAGE DURING CONSTRUCTION OF THE NEW DRIVE APPROACHES. ALL CONDUITS SHOULD HAVE REMOVABLE SEALS ON EACH END FOR FUTURE USE.

TREE PROTECTION

HARWOOD AVENUE

N. WAUWATOSA AVENUE

EXISTING UTILITY POLE AND GUY WIRE TO BE REMOVED, TYP.

PROPOSED TRACKING PAD, TYP.

DISCONNECT EXISTING WATER SERVICE AND SANITARY LATERAL AND REMOVE TO AND CAP AT THE MAIN

REMOVE, SALVAGE AND RETURN TO THE CITY EXISTING TREE AND ASSOCIATED SILVA CELLS

CONSTRUCTION LIMITS (FENCING)

EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION

EX. BUILDING, SITE STRUCTURES, FOOTINGS, FOUNDATIONS, COMPLETELY REMOVED

EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION

RELOCATE EXISTING POWER LINES TO EXISTING BUILDINGS. COORDINATE WITH WE ENERGIES.

EXISTING CITY BLANCHARD STREET PARKING PEDESTAL SIGN AND LIMESTONE BASE TO BE RELOCATED

EXISTING STONE WALL TO BE REMOVED, TYP.

STEPS AND PORTION OF EXISTING WALL TO BE REMOVED

EXISTING LIGHT POLE TO BE PROTECTED DURING CONSTRUCTION

EXISTING HAND HOLE STRUCTURE TO BE ADJUSTED AND/OR RELOCATED

DRIVE APRON CURB REMOVAL, TYP.

EXISTING PUBLIC IDENTITY SIGN TO BE MAINTAINED

REMOVE EXISTING SIGNAGE, TYP.

SALVAGE ALL EX. CITY LIGHT POLES AT DPW YARD (6). COORDINATE DELIVERY WITH CITY ELECTRICAL SUPERINTENDENT RANDY MICHELZ 414-471-8429

SILVA CELLS TO BE PROTECTED DURING CONSTRUCTION. REFER TO SILVA CELL DETAIL FOR ADDITIONAL INFORMATION

TREE PROTECTION

TEMPORARY STOCKPILE WITHIN ERS. STOCKPILE TO BE SURROUNDED WITH SILT FENC

THE CITY STREET LIGHTING CABLE ALONG THE PROJECT LIMITS IS CABLE-IN-DUCT (CID) BEHIND THE CURB IN CITY ROW. AS THE PROPOSED CONSTRUCTION ENTRANCES WILL HAVE TRUCK TRAFFIC CROSSING OVER THIS CID, THE CITY WILL REQUIRE THE INSTALLATION OF AN EMPTY 2 INCH RIGID STEEL CONDUIT SLEEVE TO BE INSTALLED IN CASE OF DAMAGE DURING CONSTRUCTION OF THE NEW DRIVE APPROACHES. ALL CONDUITS SHOULD HAVE REMOVABLE SEALS ON EACH END FOR FUTURE USE.

SALVAGE ALL EX. CITY LIGHT POLES AT DPW YARD (6). COORDINATE DELIVERY WITH CITY ELECTRICAL SUPERINTENDENT RANDY MICHELZ 414-471-8429

EXISTING STORM SEWER TO BE REMOVED, TYP.

PROPOSED TRACKING PAD, TYP.

CONTRACTOR TO COORDINATE DISCONNECT AND REMOVAL OF UTILITY PEDESTAL WITH UTILITY PROVIDER, TYP.

CURB AND GUTTER REMOVAL FOR PROPOSED DRIVE APRON

SALVAGE ALL EX. CITY LIGHT POLES AT DPW YARD (6). COORDINATE DELIVERY WITH CITY ELECTRICAL SUPERINTENDENT RANDY MICHELZ 414-471-8429

EXISTING CITY PUBLIC PARKING SIGN TO BE RELOCATED

SILVA CELLS TO BE PROTECTED DURING CONSTRUCTION. REFER TO SILVA CELL DETAIL FOR ADDITIONAL INFORMATION

TREE PROTECTION

EXISTING WALL TO BE REMOVED, TYP.

EXISTING STORM SEWER AND STORM STRUCTURE TO BE REMOVED, TYP.

REMOVE EXISTING STORM STRUCTURE, TYP.

PROTECT EXISTING HYDRANT THROUGHOUT CONSTRUCTION

REMOVE, SALVAGE AND RETURN TO THE CITY EXISTING TREE AND ASSOCIATED SILVA CELLS

CONSTRUCTION LIMITS (FENCING)

EXISTING STORM SEWER TO BE ABANDONED. CAP IN EX. CATCH BASIN

CONSTRUCTION LIMITS (FENCING)

REMOVE AND SALVAGE CITY PARKING WAYFINDING PEDESTAL SIGN AND LIMESTONE BASE

REMOVE EXISTING STORM STRUCTURE, TYP. SALVAGE AND RELOCATE CITY DOUBLE STORM SEWER INLET OR REPLACE IN KIND IF ANY DAMAGE OCCURS (2' X 6' RECTANGULAR CATCH BASIN; NEENAH CASTING R-3295-2(L)

CONSTRUCTION LIMITS (FENCING)

EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION

EXISTING UTILITY POLE TO BE REMOVED, TYP.

EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION

EXISTING UTILITY POLE AND GUY WIRE TO BE REMOVED, TYP.

CONTRACTOR TO COORDINATE DISCONNECT AND REMOVAL OF UTILITY PEDESTAL WITH UTILITY PROVIDER, TYP.

EXISTING WALL TO BE REMOVED, TYP.

SALVAGE ALL EX. CITY LIGHT POLES AT DPW YARD (6). COORDINATE DELIVERY WITH CITY ELECTRICAL SUPERINTENDENT RANDY MICHELZ 414-471-8429

THE CITY STREET LIGHTING CABLE ALONG THE PROJECT LIMITS IS CABLE-IN-DUCT (CID) BEHIND THE CURB IN CITY ROW. AS THE PROPOSED CONSTRUCTION ENTRANCES WILL HAVE TRUCK TRAFFIC CROSSING OVER THIS CID, THE CITY WILL REQUIRE THE INSTALLATION OF AN EMPTY 2 INCH RIGID STEEL CONDUIT SLEEVE TO BE INSTALLED IN CASE OF DAMAGE DURING CONSTRUCTION OF THE NEW DRIVE APPROACHES. ALL CONDUITS SHOULD HAVE REMOVABLE SEALS ON EACH END FOR FUTURE USE.

BLANCHARD STREET

Existing Building 4,160 Sq. Ft.

Existing Building 3,200 Sq. Ft.

Existing Building 600 Sq. Ft.

Existing Building 7000 Sq. Ft. Garage

Existing Building

LEGEND:

- PROPOSED SILT FENCE AND/OR SEDIMENT LOG/SILT SOCK
- CONSTRUCTION FENCE
- PROPOSED INLET PROTECTION
- PROPOSED TRACKING PAD
- EXISTING CONTOUR
- PROPOSED CONTOUR
- UTILITY REMOVAL
- STRUCTURE REMOVAL
- PAVEMENT REMOVAL
- WALL/STRUCTURE REMOVAL
- TREE REMOVAL

GRAPHIC SCALE
0 20 40

GENERAL NOTES:

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2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
5. SEE SHEET C400 FOR A COMPLETE LIST OF EROSION CONTROL NOTES AND DETAILS. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO START OF LAND DISTURBING ACTIVITIES.
6. DO NOT BEGIN LAND DISTURBING ACTIVITIES UNTIL AN EROSION CONTROL PERMIT IS OBTAINED FROM LOCAL JURISDICTION.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
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TOLL FREE

WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

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THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

SITE PREPARATION & EROSION CONTROL PLAN

PRELIMINARY NOT FOR CONSTRUCTION

ISSUANCE	DATE

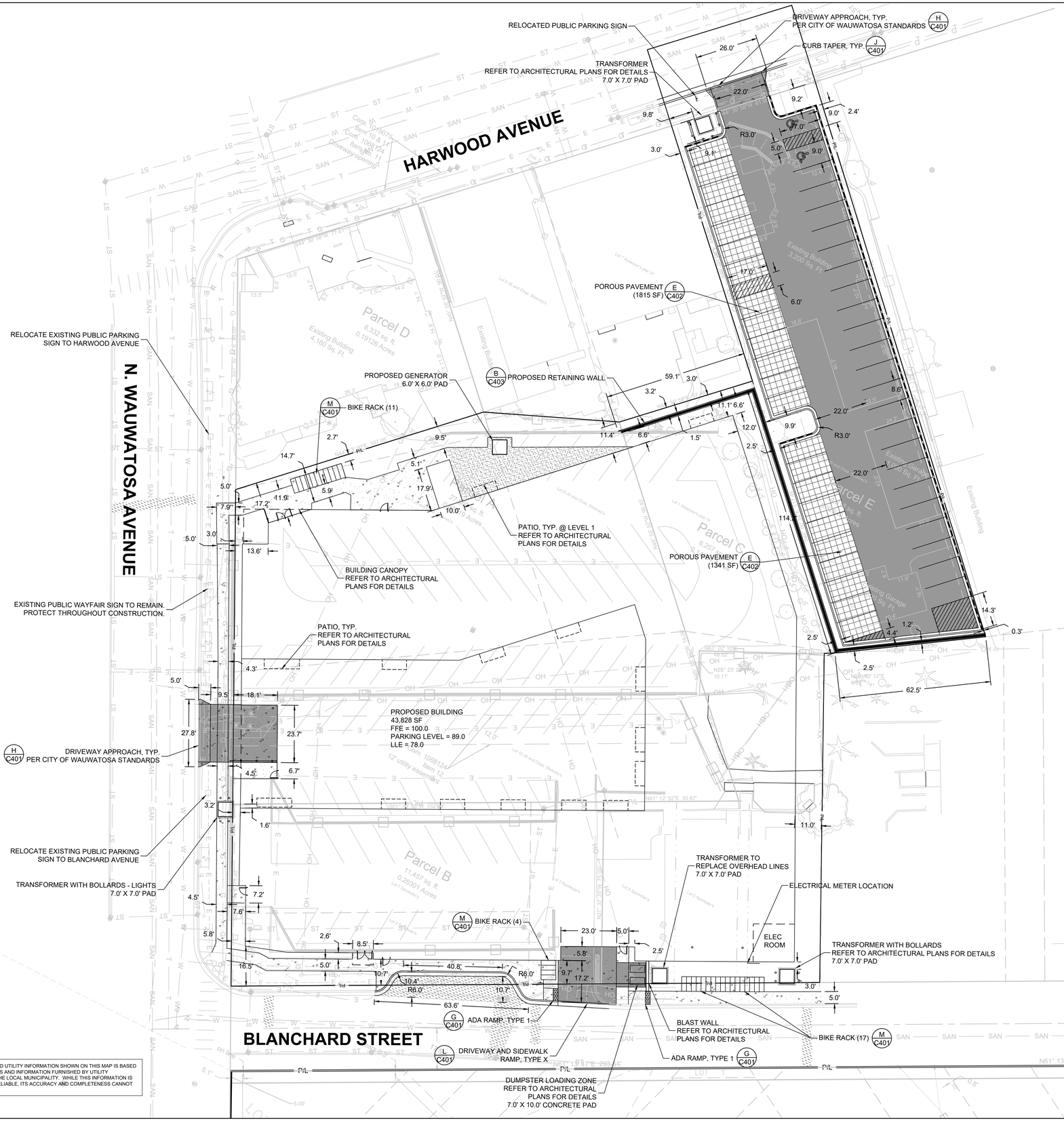
NO. REVISION	DATE

PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.04.09
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	C002

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C002
20176

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2024.04.09



SITE INFORMATION			
SITE AREA	69053	1.585 AC	
SITE DISTURBED AREA	71304	1.637 AC	
EXISTING IMPERVIOUS AREA	59322	1.362 AC	85.9 %
PROPOSED IMPERVIOUS AREA	62831	1.442 AC	91.0 %
TOTAL PARKING SPACES	----		
ADA PARKING SPACES	----		

LEGEND:

- A C401 — 5" THICK CONCRETE WALK
- C C401 — CONCRETE PAVEMENT
- B C401 — ASPHALT SURFACE
- E C402 — POROUS PAVEMENT
- D C401 — CITY OF WAUWATOSA ASPHALT SURFACE
- C C403 — CRUSHED GRANITE PATHWAY MIX
- E C401 — CURB & GUTTER (ACCEPT)
- E C401 — CURB & GUTTER (REJECT)

GRAPHIC SCALE
0 20 40

GENERAL NOTES:

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2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
5. DIMENSIONS ARE FROM FACE OF CURB OR EDGE OF PAVEMENT.
6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.
7. EARTHWORK SHALL BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

TO OBTAIN LOCATIONS OF PARTICIPANT'S UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN.

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

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MILW. AREA 259-1181

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HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

SITE PLAN

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUANCE	DATE

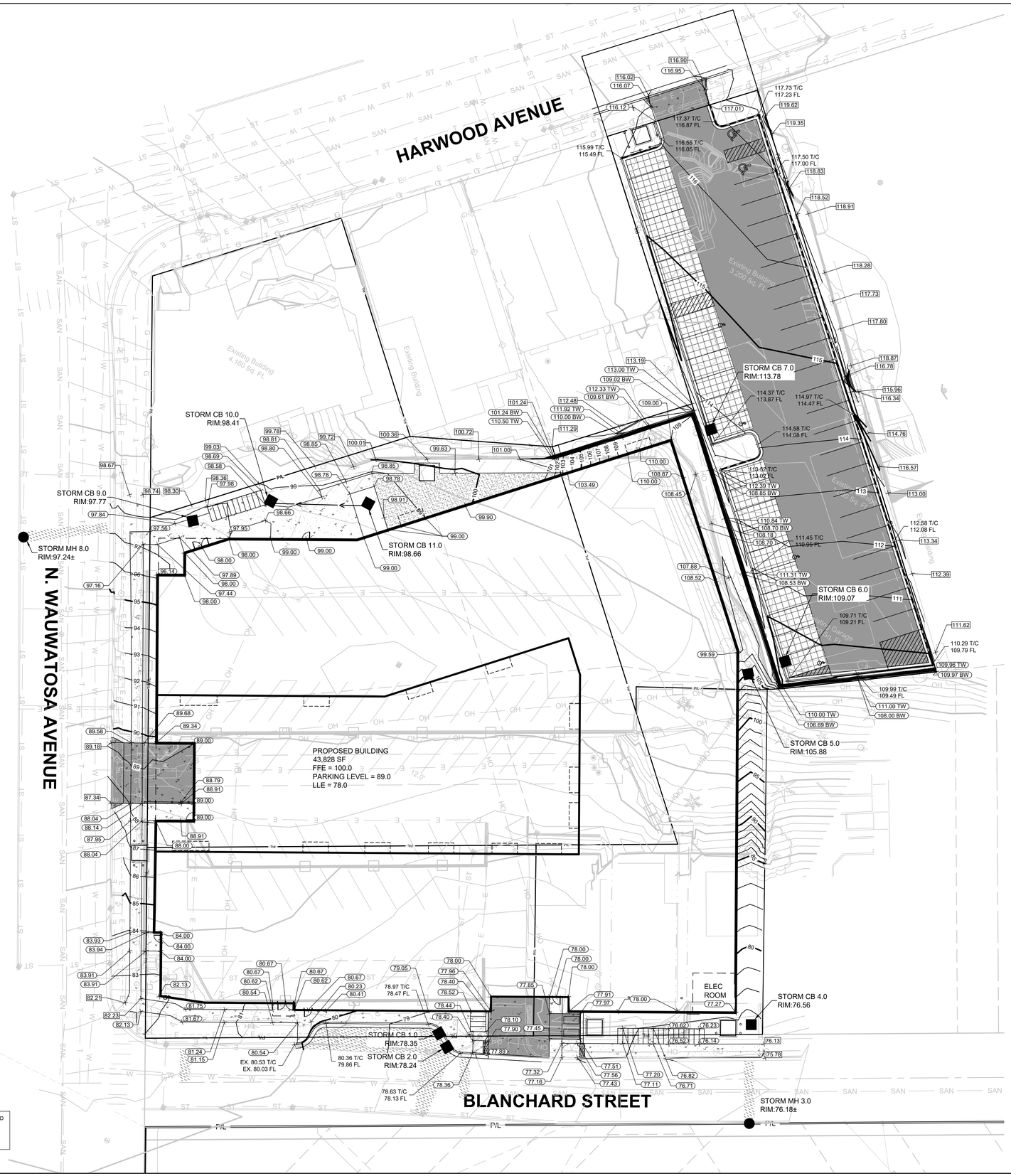
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APPROVED BY:	----
SHEET NO:	C100

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C100
20176

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2024.04.09



LEGEND:

- A C401 — 5" THICK CONCRETE WALK
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- B C401 — ASPHALT SURFACE
- E C402 — POROUS PAVEMENT
- D C401 — CITY OF WAUWATOSA ASPHALT SURFACE
- E C403 — CURB & GUTTER (CROSSES GRANITE PATHWAY MIX (ACCEPT)
- E C401 — CURB & GUTTER (REJECT)
- GRADE BREAK LINE
- 5 — EXISTING CONTOUR
- 5 — PROPOSED CONTOUR
- 100.50 T/C 100.00 FL — PROPOSED CURB & GUTTER SPOT GRADE T/C: TOP OF CURB GRADE FL: FLOW LINE CURB GRADE
- 100.00 — PROPOSED SURFACE SPOT GRADE
- TW: 100.00 BW: 100.00 — PROPOSED TOP OF WALL AT FINISHED GRADE PROPOSED BOTTOM OF WALL AT FINISHED GRADE
- 100.00 — EXISTING SURFACE SPOT GRADE (MATCH)

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GRAPHIC SCALE
0 20 40

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

GRADING PLAN

PRELIMINARY NOT FOR CONSTRUCTION

ISSUANCE	DATE

NO.	REVISION	DATE

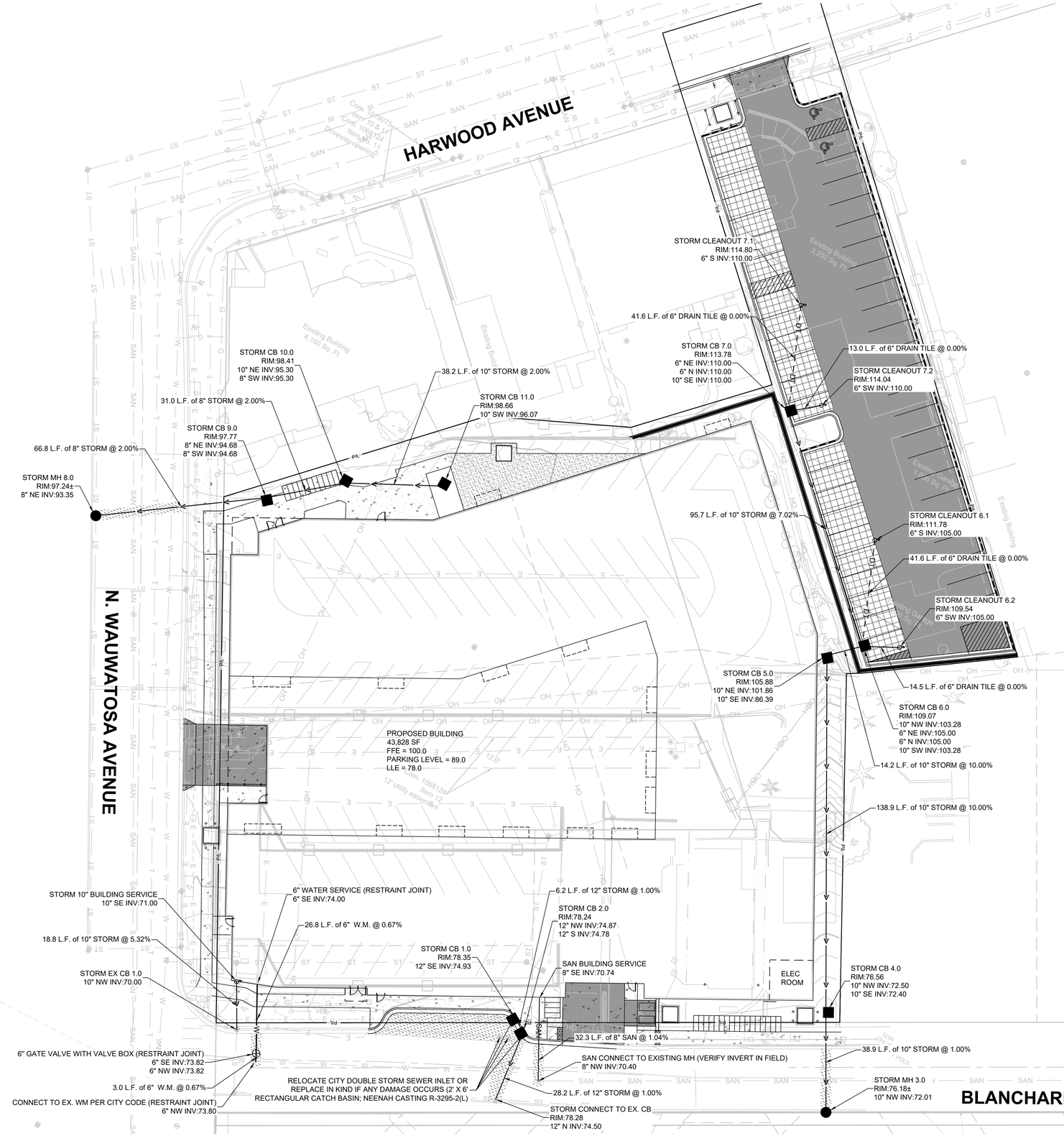
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C200
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2024.04.09



LEGEND:

W	PROPOSED WATER SERVICE
SAN	PROPOSED SANITARY SERVICE
→	PROPOSED STORM SEWER
DT	PROPOSED DRAIN TILE (UNDERDRAIN)
E	PROPOSED ELECTRICAL SERVICE
T	PROPOSED TELEPHONE SERVICE
G	PROPOSED GAS SERVICE
CUC	PROPOSED CITY UNDERGROUND CONDUIT
C C402	PROPOSED STORM INLET
B C402	PROPOSED STORM MANHOLE
A C401	5" THICK CONCRETE WALK
C C401	CONCRETE PAVEMENT
B C401	ASPHALT SURFACE
E C402	POROUS PAVEMENT
D C401	CITY OF WAUWATOSA ASPHALT SURFACE
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5. ALL UTILITIES WITHIN 5 FEET OF PAVED AREAS SHALL REQUIRE GRANULAR BACKFILL. SLURRY BACKFILL IS REQUIRED FOR ALL WORK IN PUBLIC RIGHT OF WAY.
6. PRIVATE STORM INLETS IN PAVEMENT SHALL REQUIRE DRAIN TILE STUBS OF 10 FEET IN TWO DIRECTIONS FOR SUBDRAINAGE. RIM GRADE FOR STORM INLETS IN CURB AND GUTTER ARE FLOW LINE GRADES.
7. WORK IN PUBLIC RIGHT OF WAY SHALL FOLLOW MATERIAL AND INSTALLATION REQUIREMENTS PER MUNICIPAL AND/OR COUNTY.
8. PRIVATE STORM SEWER 12-INCH DIAMETER OR LARGER SHALL BE HDPE. BELOW 12-INCH DIAMETER SHALL BE PVC SDR-35 ASTM D3034. PRIVATE WATER MAIN SHALL BE CLASS 235 DR 18 PVC CONFORMING TO AWWA C-900. PRIVATE SANITARY SEWER SHALL BE PVC SDR-35 ASTM D3034.
9. COORDINATE FINAL LOCATION AND DESIGN OF PRIVATE UTILITY SERVICES (ELECTRIC, GAS, PHONE, CABLE) WITH UTILITY COMPANIES.
10. IF PROJECT IS DESIGN BUILD MEP, THE GENERAL CONTRACTOR IS REQUIRED TO PROVIDE FINAL SEWER AND WATER DESIGN SHOWING LOCATION, INVERTS AND SIZES TO THE ENGINEER FOR FINAL REVIEW AND VERIFICATION PRIOR TO STARTING UNDERGROUND UTILITY CONSTRUCTION.
11. WATER MAIN CONNECTION: TAP WATER MAIN WITH SIZE AND LOCATION INDICATED ON PLAN IN ACCORDANCE WITH LOCAL WATER UTILITY REQUIREMENTS. COORDINATE CONNECTION WITH LOCAL WATER UTILITY. ALL JOINTS HALL BE RESTRAINED FROM CONNECTION OF WATER MAIN TO BUILDING WALL. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS. INSTALL MEGA-LUG OR APPROVED EQUAL TIGHT TO WALL FOR RESTRAINT FOR ALL BUILDING WALL PENETRATIONS AS APPROVED BY LOCAL PLUMBING INSPECTOR AND WATER UTILITY. INSTALL THRUST BLOCKING AND MEGA-LUG AT BEND BELOW FLOOR FOR ALL FLOOR PENETRATIONS.
12. INSTALL JOINT RESTRAINT AND CONCRETE THRUST BLOCKS AT ALL OFFSET FITTINGS (TEES, BENDS, DEAD ENDS, VALVES, REDUCERS) USING MEGA-LUG OR APPROVED EQUAL. CONCRETE THRUST BLOCKS SHALL BE INSTALLED PER FILE NO'S:44,45,46 FROM THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SEE DETAIL FOR MINIMUM LENGTH OF RESTRAINED JOINT REQUIRED. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS.

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GRAPHIC SCALE
0 20 40

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

UTILITY PLAN

PRELIMINARY NOT FOR CONSTRUCTION

ISSUANCE	DATE

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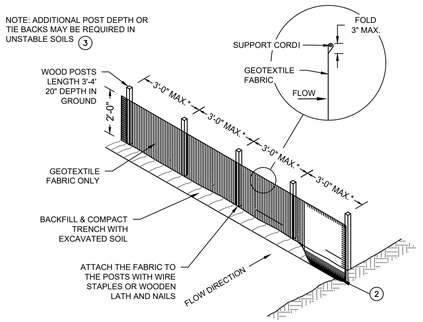
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SHEET NO:
C300

AKUSKE
C300
20176

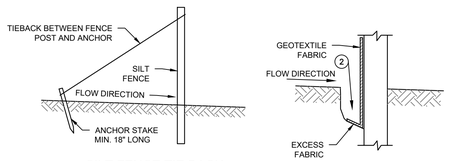
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2024.04.09



* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

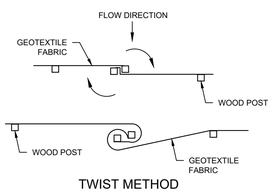
SILT FENCE



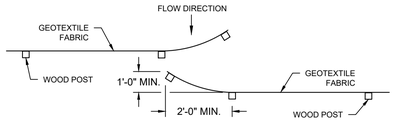
SILT FENCE TIE BACK
(WHEN ADDITIONAL SUPPORT REQUIRED)

TRENCH DETAIL

A SILT FENCE - WDNR TS-1056
SCALE:NTS



TWIST METHOD

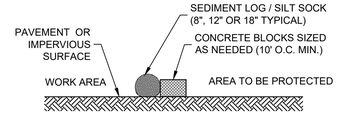


HOOK METHOD (5)

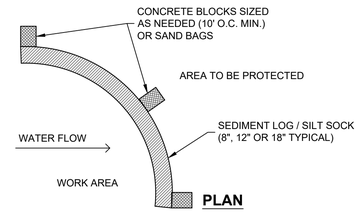
JOINING TWO LENGTHS OF SILT FENCE

GENERAL NOTES

1. HORIZONTAL BRACE REQUIRED WITH 2"X4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. (2) TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. (3) WOOD POSTS SHALL BE A MINIMUM SIZE OF 1-1/32" X 1-1/32" OF OAK OR HICKORY.
4. WHERE SILT FENCE CROSSES A CULVERT, SILT FENCE SHALL BE DIVERTED OVER THE CULVERT OVER THE CULVERT TO NOT RESTRICT FLOW.
5. (5) CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ON THE FOLLOWING TWO METHODS: A) OVERLAP THE END POSTS AND TWIST OR ROTATE, AT LEAST 180 DEGREES. B) HOOK THE END OF EACH SILT FENCE LENGTHS.
6. SILT FENCE SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1056
7. THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 9-6

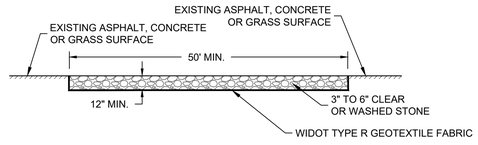


SECTION



PLAN

B SEDIMENT LOG - SILT SOCK ON PAVEMENT
SCALE:NTS



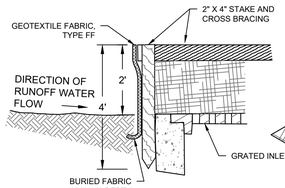
GENERAL NOTE:

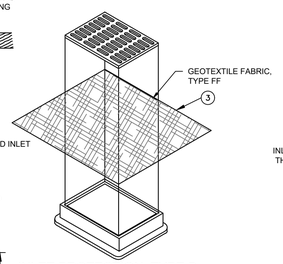
1. STONE TRACKING PAD SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1057
2. AN APPROVED MANUFACTURED TRACKOUT CONTROL DEVICE SYSTEM CONFORMING TO WDNR TECHNICAL STANDARD #1057 MAY BE USED AS AN ALTERNATIVE TO A STONE TRACKING PAD

E CONSTRUCTION ENTRANCE - WDNR TS-1057
SCALE:NTS

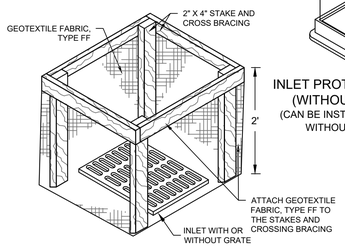
CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:

1. ANTICIPATED START OF CONSTRUCTION:
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. INSTALL SILT FENCING AND INLET PROTECTION.
4. TOPSOIL AND PAVEMENT REMOVAL SHALL BE REMOVED IN A PROGRESSIVE MANNER IN ORDER TO MINIMIZE EXPOSED SOILS AT ONE TIME.
5. STRIP TOPSOIL FROM SITE IN A PROGRESSIVE MANNER.
6. REMOVE EXISTING PAVEMENT AND DEMOLISH EXISTING BUILDINGS.
7. CONSTRUCT EARTH RETENTION SYSTEM.
8. PERFORM ROUGH SITE GRADING. STABILIZE FINISHED AREAS AS THE WORK PROGRESSES. USE EROSION MATTING WHERE CALLED FOR ON THE PLANS. PER WDNR TECHNICAL STANDARD 1059: AREAS THAT RECEIVE TEMPORARY SEEDING SHALL HAVE A MINIMUM TOPSOIL DEPTH OF 2 INCHES. AREAS THAT RECEIVE PERMANENT SEEDING SHALL HAVE A MINIMAL TOPSOIL DEPTH OF 4 INCHES.
9. PREPARE BUILDING PAD AND BEGIN FOUNDATIONS WORK FOR BUILDING.
10. INSTALL UTILITIES. INSTALL ANY ADDITIONAL INLET PROTECTION ON NEW STORM SEWER.
11. PERFORM FINAL GRADING AND INSTALLATION OF STONE BASE.
12. INSTALL PAVEMENTS.
13. INSTALL TOPSOIL AND LANDSCAPING.
14. STABILIZE AREAS REMAINING AREAS WITHIN 7 DAYS OF COMPLETION OF FINAL GRADING AND TOPSOILING
15. PERSCRIPTIVE SOIL STABILIZATION:
    - 15.1. BARE SOIL - LIMIT THE DURATION OF SOIL EXPOSURE TO NO MORE THAN 30 DAYS.
    - 15.2. PERIODS OF INACTIVITY - PLANNED ACTIVITY: STABILIZE IMMEDIATELY IF AREA WILL BE LEFT INACTIVE FOR MORE THAN 14 DAYS. UNPLANNED INACTIVITY: STABILIZE AREA IMMEDIATELY IF PERIOD OF INACTIVITY REACHES 14 DAYS.
    - 15.3. FINAL GRADE - PERMANTENT FEATURES: STABILIZE AREA IMMEDIATELY AFTER REACHING FINAL GRADE.
16. REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.
17. ANTICIPATED END OF CONSTRUCTION:

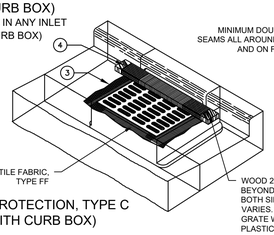




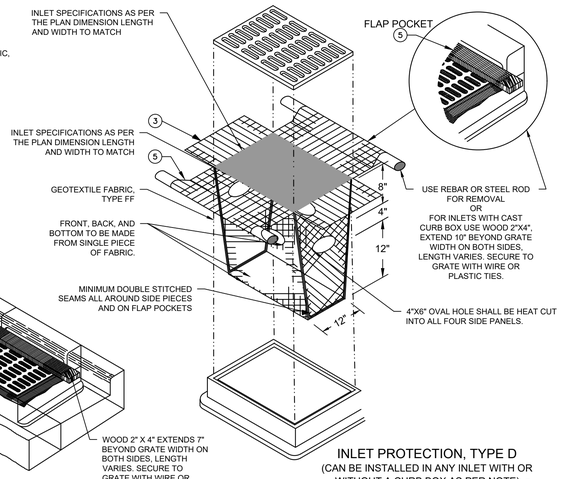
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)
(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE A



INLET PROTECTION, TYPE C
(WITH CURB BOX)



INLET PROTECTION, TYPE D
(CAN BE INSTALLED IN ANY INLET WITH OR WITHOUT A CURB BOX AS PER NOTE) (4)

GENERAL NOTES:

1. MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.
2. 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.
3. (3) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL
4. (4) 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.
5. (5) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.
6. INLET PROTECTION SHALL CONFORM TO WDNR CONSERVATION PRACTICE STANDARD #1060
7. THIS DRAWING IS BASED ON WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING 8 E 10-2

INSTALLATION NOTES:

TYPE 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
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. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" 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 PLACES AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

D INLET PROTECTION - WDNR TS-1060
SCALE:NTS

EROSION CONTROL NOTES:

1. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL MUNICIPALITY AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
2. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY. DOCUMENT AND MAINTAIN RECORDS OF INSPECTIONS IN ACCORDANCE WITH WDNR NR216 REQUIREMENTS.
4. SILT FENCE SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS. SEDIMENT DEPOSITS SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN DEPOSITS REACH A DEPTH OF 6 INCHES. THE SILT FENCE SHALL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
5. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
6. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
7. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN ADJACENT STREETS FREE OF DUST AND DIRT.
8. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ANY TOPSOIL AND FILL STOCKPILES.
9. SITE DEWATERING. WATER PUMPED FROM THE SITE SHALL BE TREATED BY SEDIMENT BASINS OR OTHER APPROPRIATE MEASURES SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
10. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
11. TRACKING. EACH SITE SHALL HAVE GRAVELED ROADS, ACCESS DRIVES AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE CITY OF WAUWATOSA, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY A SEDIMENT BASIN OR PRACTICE SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS. NOTIFY THE CITY OF WAUWATOSA OF ANY CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
12. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORKDAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORKDAY.
13. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, MULCHING, SODDING, COVERING WITH TARPS, OR EQUIVALENT PRACTICE FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARD. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
14. SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILES. IF REMAINING FOR MORE THAN THIRTY DAYS, PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS OR OTHER MEANS.
15. WHEN THE DISTURBED AREA HAS BEEN STABILIZED BY PERMANENT VEGETATION OR OTHER MEANS, TEMPORARY PRACTICES, SUCH AS FILTER FABRIC FENCES, STRAW BALES, SEDIMENT AND SEDIMENT TRAPS, FOUND IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS SHALL BE REMOVED.
16. NOTIFY THE LOCAL MUNICIPALITY HAVING JURISDICTION WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
17. OBTAIN PERMISSION FROM THE LOCAL MUNICIPALITY HAVING JURISDICTION PRIOR TO MODIFYING THE EROSION CONTROL PLAN.
18. REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
19. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
20. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE DISTURBANCE OF EXISTING VEGETATION DURING CONSTRUCTION.
21. CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE COMPACTION OF TOPSOIL AND PRESERVE TOPSOIL IN GREENSPACE AREAS.
22. WASH WATER FROM VEHICLES AND WHEEL WASHING SHALL BE CONTAINED AND TREATED PRIOR TO DISCHARGE.
23. CONTRACTOR SHALL MAINTAIN SPILL KITS ON-SITE.
24. PERMAMENT TURF SEEDING OF DISTURBED AREA MUST OCCUR PRIOR TO SEPTEMBER 15TH. IF ADEQUATE TIME IS NOT AVAILABLE TO APPLY PERMANENT SEEDING PRIOR TO SEPTEMBER 15TH, THEN DISTURBED AREAS SHALL BE TEMPORARILY SEEDED WITH AN ANNUAL RYE GRASS PER WDNR TECHNICAL STANDARD 1059, WHERE THE TEMPORARY SEEDING MUST OCCUR PRIOR TO OCTOBER 15TH.
25. IF TEMPORARY SEEDING IS NOT COMPLETED BY OCTOBER 15TH, APPLY SOIL STABILIZERS AND DORMANT SEED TO DISTURBED AREA PER WDNR TECHNICAL STANDARD 1050. INSPECT ANIONIC PAM APPLICATION AT A MINIMUM FREQUENCY OF EVERY TWO MONTHS AND REAPPLY AS NECESSARY

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

DETAILS

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUANCE	DATE

NO. REVISION	DATE

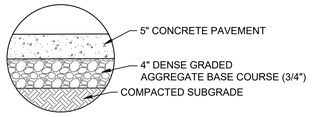
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PLOT DATE:	2024.04.09
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CHECKED BY:	----
APPROVED BY:	----

SHEET NO:
C400

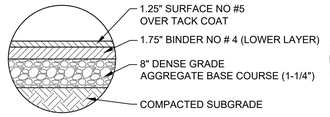
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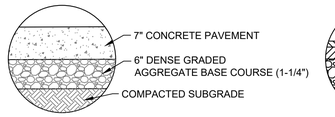
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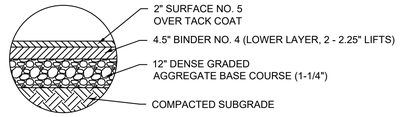
A CONCRETE SIDEWALK SECTION
SCALE:NTS



B ASPHALT PAVEMENT SECTION
SCALE:NTS

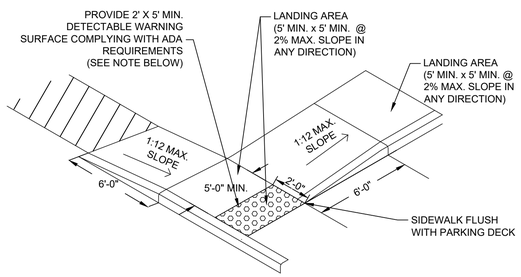


C CONCRETE PAVEMENT SECTION
SCALE:NTS



(BLANCHARD, WAUWTOSA AND HARWOOD)

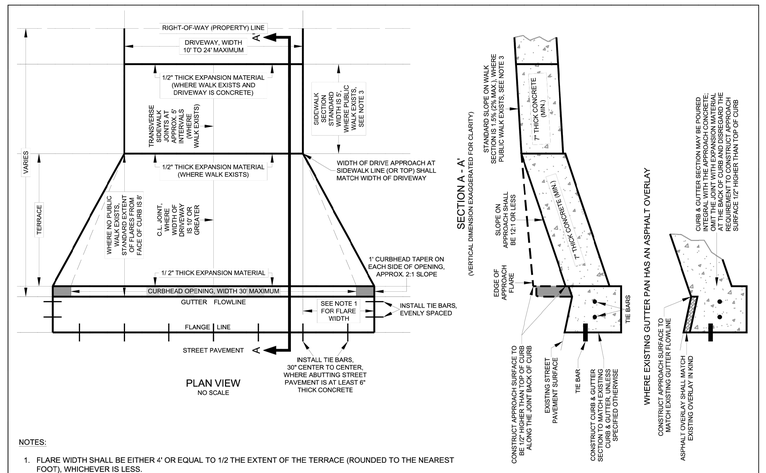
D ASPHALT PAVEMENT SECTION
SCALE:NTS



NOTES:

1. CONTRACTOR TO VERIFY ADA RAMP DETAIL WITH CITY AND ADJUST AS NEEDED.
2. PROVIDE DETECTABLE WARNING CONSISTING OF RAISED TRUNCATED DOMES OF SIZE, SPACING AND CONTRAST REQUIRED BY ADA GUIDELINES.
3. DETECTABLE WARNINGS SHALL BE PER CITY STANDARDS.

G ADA RAMP - TYPE 1
SCALE:NTS



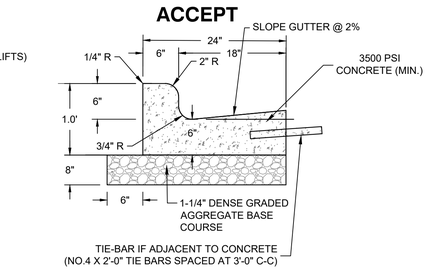
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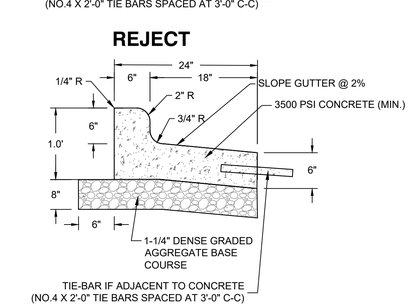
1. FLARE WIDTH SHALL BE EITHER 4' OR EQUAL TO 1/2 THE EXTENT OF THE TERRACE (ROUNDED TO THE NEAREST FOOT), WHICHEVER IS LESS.
2. WHERE POSSIBLE, DRIVE APPROACHES SHALL BE CONSTRUCTED SO THAT 8" OF WATER DEPTH IN THE GUTTER FLOWLINE CANNOT LEAVE THE CITY PUBLIC RIGHT-OF-WAY. EXCEPTIONS MUST BE APPROVED IN WRITING BY THE ENGINEERING SERVICES.
3. SIDEWALK SECTION IS OPTIONAL WHERE NO PUBLIC SIDEWALK EXISTS. IF THE OPTIONAL SIDEWALK SECTION IS OMITTED THEN A STRAIGHT GRADE MAY BE BUILT FROM BACK OF CURB TO 15' BACK OF CURB FACE OR TO THE RIGHT-OF-WAY (PROPERTY) LINE, WHICHEVER IS LESS; SLOPE SHALL BE 12:1 OR LESS.

CITY OF WAUWATOSA
ENGINEERING SERVICES DIVISION

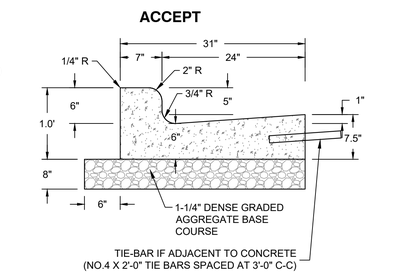
DETAIL D1: TYPICAL DRIVEWAY & ALLEY APPROACH - P.C. CONCRETE
REVISED MAY, 2020

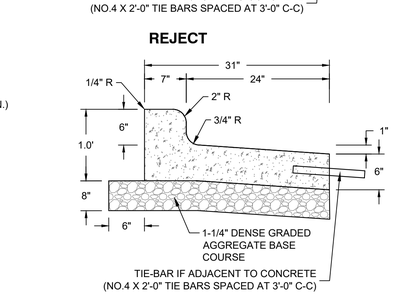
H CONCRETE DRIVEWAY APPROACH
SCALE:NTS



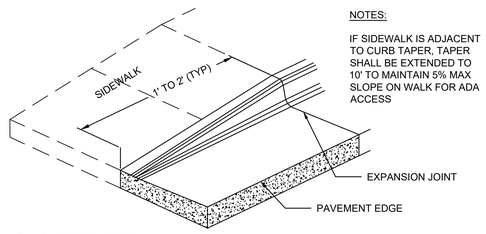


E 24 INCH CONCRETE CURB AND GUTTER
SCALE:NTS





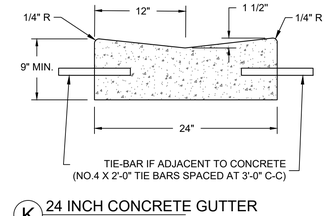
F 31 INCH CONCRETE CURB AND GUTTER
SCALE:NTS



NOTES:

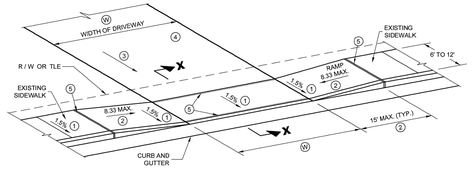
IF SIDEWALK IS ADJACENT TO CURB TAPER, TAPER SHALL BE EXTENDED TO 10' TO MAINTAIN 5% MAX SLOPE ON WALK FOR ADA ACCESS

J CURB TAPER
SCALE:NTS

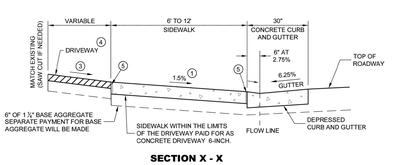


K 24 INCH CONCRETE GUTTER
SCALE:NTS

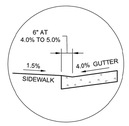
SDD 8D18 Driveway and Sidewalk Ramps Types X and Y



TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



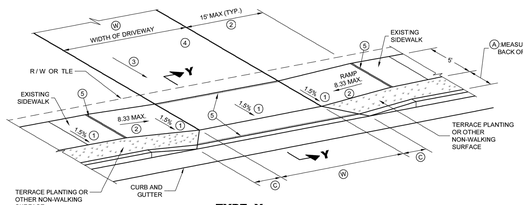
SECTION X - X



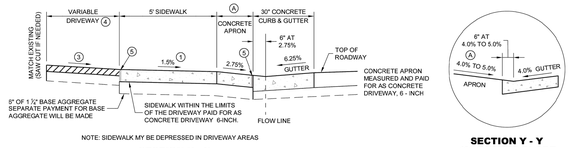
SECTION X - X
4% GUTTER SLOPE

TABLE Y	
Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

Ⓦ 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)



TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y - Y
DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

SECTION Y - Y
4% GUTTER SLOPE

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES, DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

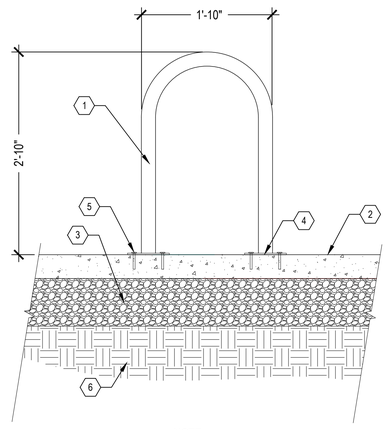
DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

SDD 08D18 - 03

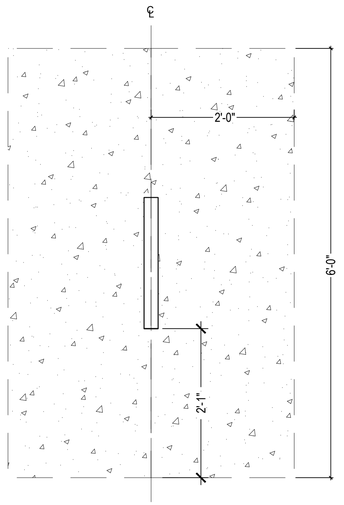
L DRIVEWAY AND SIDEWALK RAMP (TYPE X)
SCALE:NTS



1. BIKE RACK
2. FINISH SURFACE OF CONCRETE PAVING
3. DENSE GRADED BASE
4. BASE PLATE
5. ANCHOR BOLTS FOR SURFACE MOUNT
6. COMPACTED SUBGRADE

NOTE:
1. BASIS OF DESIGN: 1 LOOP WAVE STYLE BIKE RACK AS MANUFACTURED BY ULINE
2. COLOR AND FINISH : GALVANIZED BLACK POWDER COAT
3. MOUNTING: SURFACE MOUNT.
4. INSTALL PRE MANUFACTURER'S RECOMMENDATION.
5. BIKE STALLS SHALL BE A MINIMUM OF 2' BY 6'. PLACEMENT SHALL NOT RESULT IN A BICYCLE OBSTRUCTING A WALKWAY.
6. RACKS SHALL BE SPACED MIN. 3'-0" APART & 3'-0" FROM EDGE OF PAVEMENT

SECTION VIEW - SURFACE MOUNT



PLAN VIEW

M BIKE RACK DETAIL
SCALE:NTS

THE SIGMA GROUP
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HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

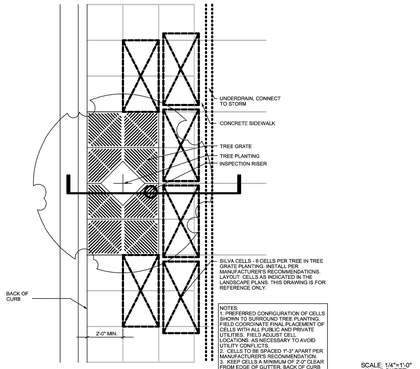
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NO.	REVISION	DATE

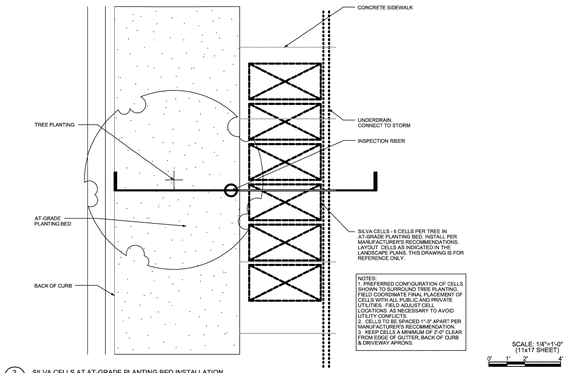
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PLOT DATE:	2024.04.09
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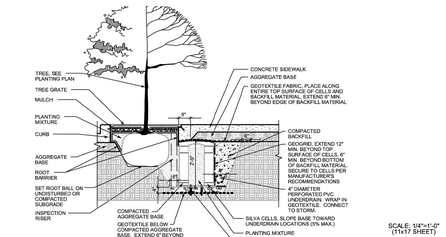
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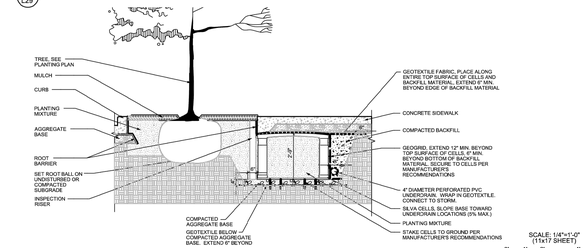
1 L29 SILVA CELLS AT TREE GRATE INSTALLATION



2 L29 SILVA CELLS AT AT-GRADE PLANTING BED INSTALLATION

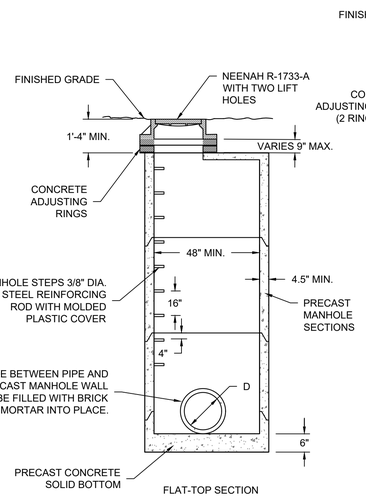


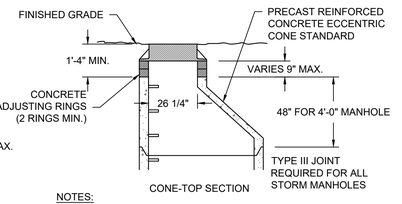
3 L29 SILVA CELLS AT TREE GRATE TYPICAL SECTION



4 L29 SILVA CELLS AT AT-GRADE PLANTING BED TYPICAL SECTION

A EXISTING SILVA CELLS DETAILS - FOR INFORMATION ONLY
SCALE:NTS





NOTES:

1. CONSTRUCT MANHOLE IN ACCORDANCE WITH FILE NO. 12 OF THE STATE STANDARD SPECIFICATIONS FOR SEWER AND WATER.
2. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY RINGS SHALL BE GROOVED TO RECEIVE STEP.
3. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
4. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING MORTAR, OR FLEXIBLE RUBBER TYPE GASKETS FOR STORM MANHOLES.
5. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ. INCH PER LINEAL FOOT MIN.
6. 3" OF BEDDING STONE UNDER BASE.
7. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL MANHOLE SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

B PRECAST STORM MANHOLE
SCALE:NTS

DESCRIPTION | DATE

KEN SAIKI DESIGN
LANDSCAPE ARCHITECTS

CITY OF WAUWATOSA
MILWAUKEE COUNTY, WISCONSIN
THE VILLAGE REDEVELOPMENT- PHASE 3
STREETSCAPE DETAILS

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DATE: 03/13/2017
SCALE:
JOB NO.
PROJECT MANAGER: KS
DESIGNED BY: JS
CHECKED BY: NS
SHEET NUMBER
L29

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7487 HARWOOD AVENUE
WAUWATOSA, WI

DETAILS

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUANCE	DATE

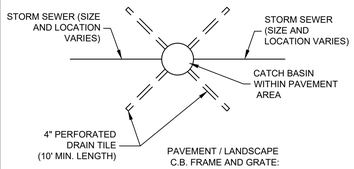
NO. REVISION	DATE

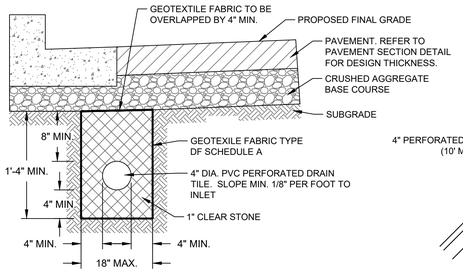
PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.04.09
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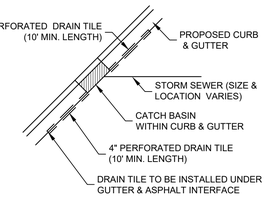
CATCH BASIN
WITHIN LOW POINT OF PAVEMENT AREA



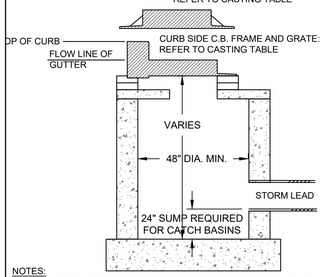


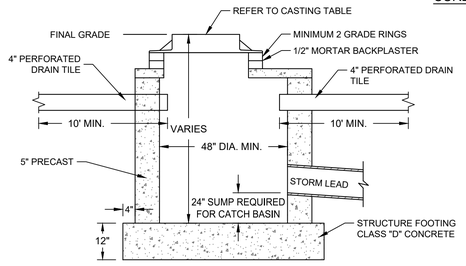
CURB INLET LOCATION SECTION

NOTE:
DRAIN TILE SHALL HAVE TWO (2) SEGMENTS POSITIONED ALONG THE GUTTER & ASPHALT INTERFACE.



CURB INLET WITHIN CURB & GUTTER PLAN



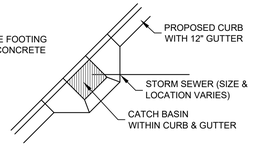


NOTES:
1. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING.
2. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
3. 3" MIN. BEDDING OF STONE UNDER BASE REQUIRED , ADDITIONAL BEDDING STOME MAY BE REQUIRED ON WET SUB-GRADE.
4. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL CATCH BASIN SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

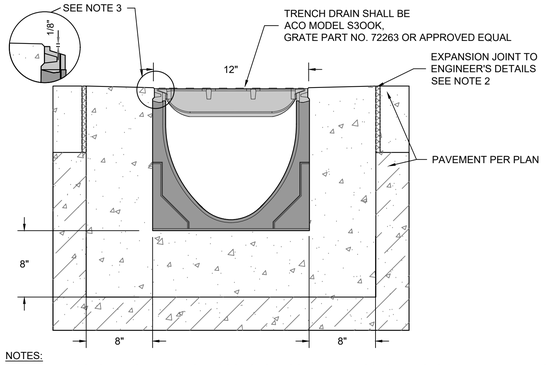
C INLET AND CATCH BASIN
SCALE:NTS

CATCH BASIN / INLET CASTING TABLE

	IF 18" CURB & GUTTER		IF 24" CURB & GUTTER		IF 30" CURB AND GUTTER	
	CASTING	GRATE	CASTING	GRATE	CASTING	GRATE
CURB INLET	NEENAH R-3067	A	NEENAH R-3067	A	NEENAH R-3228H	C
AREA INLET	NEENAH R-2050	C				

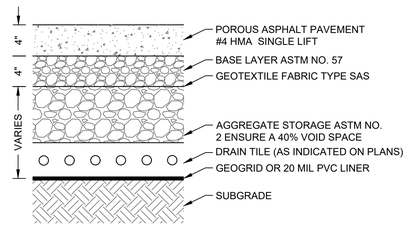


CONCRETE BUMP OUT TO BE APPLIED FOR 12" GUTTER PAN



NOTES:
1. MINIMUM CONCRETE STRENGTH OF 4,OOO PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
2. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
3. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" ABOVE THE TOPE OF THE CHANNEL EDGE.
4. CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS.
5. REFER TO ACO'S LATEST INSTALLATION INSTRUCTION FOR FURTHER DETAILS.
6. GRADE TYPE E-EN SHALL BE USED FOR ADA AREAS.

D PREFABRCATED TRENCH DRAIN
SCALE:NTS



NOTES:
1. PAVEMENT SURFACE PERCENT VOIDS SHOULD BE LESS THAN 25%.
2. JOINT STONE AND BEDDING COURSE SHALL CONSIST OF ASTM C-33, 8, 9, 89, OR 57 AGGREGATE.
3. AGGREGATE STORAGE RESERVOIR DEPTH SHALL BE A MINIMUM OF 12 INCHES. AGGREGATE STORAGE RESERVOIR SHALL USE AN OPEN GRADED BASE CONSISTING OF CRUSHED STONE OR CRUSHED GRAVEL WITH NO GREATER THAN 5% PASSING THE NO. 200 SIEVE.
4. UNDERDRAINS CAN BE LOCATED WITHIN OR BELOW THE AGGREGATE STORAGE RESERVOIR. UNDERDRAINS (OR EQUIVALENT) ARE REQUIRED IF THE AGGREGATE STORAGE RESERVOIR DRAIN DOWN TIME WILL EXCEED 72 HOURS. THE SLOPE OF THE SUBGRADE SHALL BE AS FLAT AS POSSIBLE BE NO GREATER THAN 2%.
5. POROUS PAVEMENT SHALL CONFORM TO THE WDNR TECHNICAL STANDARD # 1008

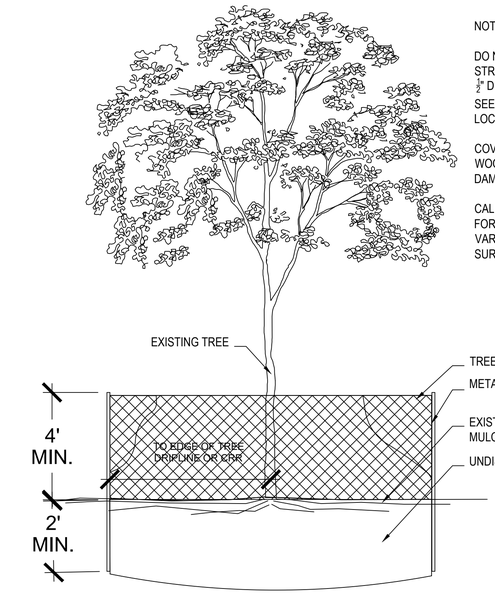
E POROUS ASPHALT WITH LINER
SCALE:NTS

C402

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2024.04.09



NOTES:

DO NOT DRIVE POSTS INTO ANY STRUCTURAL ROOT OR ROOTS OVER ½" DIAM.

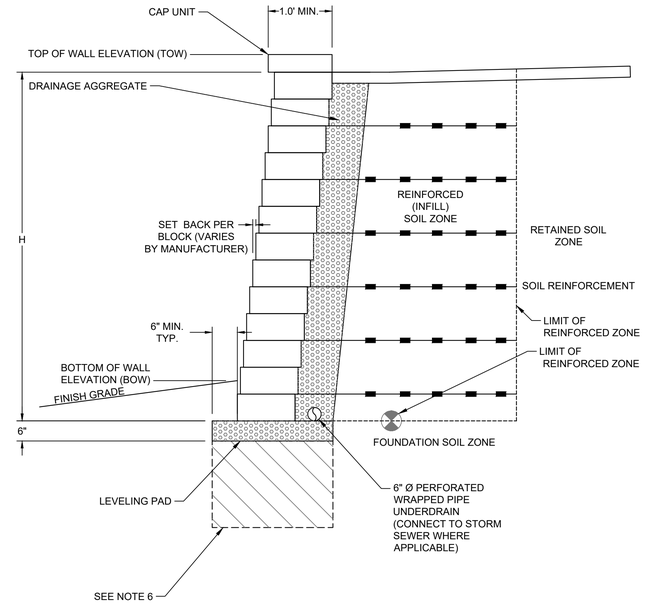
SEE PLAN FOR TREE PROTECTION LOCATIONS AND ADDITIONAL NOTES

COVER ANY EXPOSED ROOTS W/ COMPOST AND WOOD MULCH TO PROTECT FROM FURTHER DAMAGE DURING CONSTRUCTION

CALIPER MEASURED 4.5' FROM GROUND. SEE PLANS FOR TREE PROTECTION BOUNDARIES AS THEY MAY VARY FROM THE CRR* INDICATED DUE TO SURROUNDING SITE CONDITIONS.

*CRR = CRITICAL ROOT RADIUS IS DEFINED AS TREE DIAMETER (AT LEAST 4.5' FROM GROUND) X 1.5 = CRR VALUE EXPRESSED IN FEET.

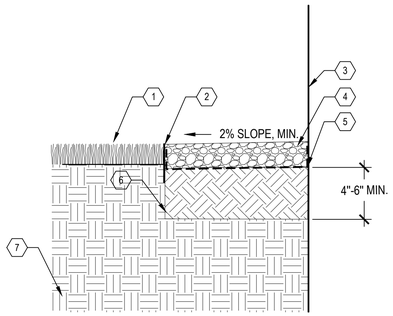
A TREE PROTECTION
SCALE:NTS



B MODULAR BLOCK MSE WALL
SCALE:NTS

NOTES:

1. RETAINING WALL SYSTEM SHALL BE KEYSTONE, ROCKWOOD, OR APPROVED EQUAL.
2. TYPICAL SECTION IS FOR CONCEPTUAL DESIGN ONLY.THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN, PLANS, DETAILS, SPECIFICATIONS, AND STAMPED AND SEALED SHOP DRAWINGS AND STABILITY CALCULATIONS FOR THE RETAINING WALLS TO THE ENGINEER. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF THESE ITEMS SHALL BE INCLUDED.
3. STAMPED AND SEALED RETAINING WALL DESIGN, PLANS, DETAILS AND CALCULATIONS SHALL BE PROVIDED TO THE CITY.
4. GEOGRID REINFORCEMENT SPACING AND LENGTH PER MANUFACTURER'S ENGINEER RECOMMENDATIONS.
5. GEOTECHNICAL ENGINEER MAY REQUIRE THAT ADDITIONAL DRAIN PIPING IS NEEDED DEPENDENT UPON SOILS ENCOUNTERED DURING WALL CONSTRUCTION.
6. WALL STRUCTURE TO BE VERIFIED WITH GEOTECHNICAL ENGINEER.
7. ANY SPECIAL TREATMENT SOILS BELOW LEVELING PAD WHICH ARE SUBJECT TO FROST HEAVE SHALL BE DESIGNED BY STRUCTURAL ENGINEER OF RECORD.
8. PLANS, ELEVATIONS, AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS, AND DETAILS COMMON TO THE WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.
9. THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET AND GRADING PLAN SHEETS.
10. STYLE AND COLOR OF THE MODULAR BLOCK SHALL BE SELECTED BY THE OWNER AND ARCHITECT
11. PROTECTIVE RAILINGS/GUARD RAILS REQUIRED FOR ALL RETAINING WALLS ADJACENT TO PEDESTRIAN PATHS TO BE VERIFIED BY WALL DESIGNER, ARCHITECT, AND LOCAL JURISDICTION.



KEYED LEGEND

1. LAWN ADJACENT TO CRUSHED GRANITE
2. BLACK ANODIZED ALUMINUM EDGING
3. BUILDING FACE
4. 3" DEPTH KAFKA PATHWAY MIX
5. WOVEN GEOTEXTILE FILTER FABRIC, WRAP UP SIDES OF BUILDING AND EDGING
6. LOCAL DOT ROAD BASE MATERIAL
7. COMPACTED SUBGRADE

NOTE:
1. CRUSHED GRANITE SHALL BE A LOCAL DOT APPROVED AGGREGATE BASE.
2. THE COMPACTED SUBGRADE DEPTH SHALL BE A MINIMUM OF 4" FOR PEDESTRIAN TRAFFIC AND 6" MINIMUM DEPTH FOR VEHICULAR TRAFFIC.
3. THE APPROVED AGGREGATE BASE IS TO BE INSTALLED IN MULTIPLE 2-3 INCH LIFTS AND COMPACTED TO A MINIMUM OF 90%.
4. SUBGRADE SHALL BE UNIFORM AND FREE OF DEBRIS SUCH AS ORGANIC MATERIALS, NAILS, AND LOOSE SOIL.
5. PRIOR TO PLACEMENT, PRESOAK ALL AREAS OF APPLICATION.

C CRUSHED GRANITE EDGE (KAFKA GRANITE STANDARD PATHWAY MIX)
SCALE:NTS

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HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

DETAILS

PRELIMINARY NOT FOR CONSTRUCTION

ISSUANCE	DATE

NO. REVISION	DATE

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APPROVED BY:	----

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2024.04.09

GENERAL:

1. EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR THEIR ACCURACY OR COMPLETENESS.
2. CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. CONTRACTOR SHALL HAVE SITE MARKED BY DIGGER'S HOTLINE AND SHALL HAVE PRIVATE UTILITIES MARKED BY A PRIVATE UTILITY LOCATOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, LOCATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL UTILITY CROSSINGS AND PROPOSED CONNECTIONS FOR CONFLICTS/DISCREPANCIES PRIOR TO INITIATING CONSTRUCTION. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED.
3. LENGTHS OF ALL UTILITIES ARE TO CENTER OF STRUCTURES OR FITTINGS AND MAY VARY SLIGHTLY FROM PLANS. LENGTHS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

SITE CLEARING:

1. EXCEPT FOR STRIPPED TOPSOIL OR OTHER MATERIALS INDICATED TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY AND SHALL BE REMOVED FROM PROJECT SITE.
2. MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
3. SALVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.
4. UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
5. DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.
6. PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
7. LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.
8. PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION; RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.
9. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED; ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
10. EXISTING UTILITIES: DO NOT INTERRUPT UTILITIES SERVING FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY THE OWNER AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY UTILITY SERVICES.
11. FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY SOIL MATERIAL UNLESS FURTHER EXCAVATION OR EARTHWORK IS INDICATED; PLACE FILL MATERIAL IN HORIZONTAL LAYERS NOT EXCEEDING A LOOSE DEPTH OF 8 INCHES, AND COMPACT EACH LAYER TO A DENSITY EQUAL TO ADJACENT ORIGINAL GROUND.
12. REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
13. STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
14. STOCKPILE TOPSOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS WITHOUT INTERMIXING WITH SUBSOIL. GRADE AND SHAPE STOCKPILES TO DRAIN SURFACE WATER. COVER TO PREVENT WINDBLOWN DUST.
15. REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.
16. SAWCUT ALL PAVEMENTS FULL DEPTH PRIOR TO REMOVAL; SAWCUTS SHALL BE IN STRAIGHT LINES PERPENDICULAR AND/OR PARALLEL TO EXISTING PAVEMENT JOINTS AND PAVEMENT EDGES.
17. REMOVE SURPLUS SOIL MATERIAL, UNSUITABLE TOPSOIL, OBSTRUCTIONS, DEMOLISHED MATERIALS, AND WASTE MATERIALS INCLUDING TRASH AND DEBRIS, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
18. SEPARATE RECYCLABLE MATERIALS PRODUCED DURING SITE CLEARING FROM OTHER NONRECYCLABLE MATERIALS. STORE OR STOCKPILE WITHOUT INTERMIXING WITH OTHER MATERIALS AND TRANSPORT THEM TO RECYCLING FACILITIES.

SITE WATER SERVICE:

1. COMPLY WITH STANDARDS OF STATE PLUMBING CODE (SPS CH. 382, 384), LOCAL WATER UTILITY REQUIREMENTS AND STANDARDS OF AUTHORITIES HAVING JURISDICTION FOR FIRE-SUPPRESSION AND WATER SERVICE PIPING INCLUDING MATERIALS, FITTINGS, APPURTENANCES, INSTALLATION, TESTING, SERVICE TAPS, ETC. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND STATE PLUMBING CODE OR LOCAL JURISDICTIONAL AUTHORITY, STATE PLUMBING CODE AND LOCAL JURISDICTIONAL AUTHORITY REQUIREMENTS GOVERN.
2. DO NOT INTERRUPT SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED BY OWNERS OF SUCH FACILITIES AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY WATER-DISTRIBUTION SERVICE.
3. WATER SERVICE PIPING MAY BE EITHER DUCTILE IRON WATER PIPE OR PVC WATER PIPE AS ALLOWED BY THE LOCAL WATER UTILITY.
4. DUCTILE IRON WATER PIPE CONFORMING TO THE REQUIREMENTS OF THE AMERICAN NATIONAL STANDARD FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST, AWWA C151/A21.51 - LATEST REVISION AND REQUIREMENTS OF CHAPTER 8.18.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
   a. CLASS 52
   b. CEMENT MORTAR LINING AND INTERNAL AND EXTERNAL BITUMINOUS COATS IN ACCORDANCE WITH SECTION 51.8 OF AWWA C151.
   c. PUSH-ON GASKET PIPE
   d. PLAIN RUBBER GASKETS
   e. BONDING STRAPS TO PROVIDE ELECTRICAL CONDUCTIVITY WITHOUT FIELD TESTING
5. JOINTS FOR DUCTILE IRON PIPE: JOINTS SHALL BE RUBBER GASKET JOINTS; CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR RUBBER GASKET JOINTS FOR DUCTILE IRON PRESSURE PIPE AND FITTINGS (ANSI/AWWA C111/A21.11, LATEST EDITION)
6. FITTINGS FOR DUCTILE IRON PIPE: CONFORM TO THE REQUIREMENTS OF AMERICAN NATIONAL STANDARD FOR DUCTILE IRON AND GRAY IRON FITTINGS, 3" THROUGH 48" FOR WATER ANSI/AWWA C110/A21.10, LATEST EDITION); CLASS 250 MECHANICAL JOINT PIPE FITTINGS; CEMENT LINED; ALL BELLS; ENTIRE FITTING TARRED; CONDUCTIVE MECHANICAL JOINT (NO LEAD) RUBBER GASKETS, FLANGES, AND BOLTS.
7. PVC AWWA PIPE: AWWA C900, CLASS 235 WITH BELL END WITH GASKET AND WITH SPIGOT END AND MEETING REQUIREMENTS OF CHAPTER 8.20.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. FITTINGS SHALL BE IN ACCORDANCE WITH CHAPTER 8.22.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. MECHANICAL -JOINT, DUCTILE IRON FITTINGS: AWWA C153, DUCTILE-IRON COMPACT PATTERN. GLANDS, GASKETS AND BOLTS: AWWA C111, DUCTILE IRON GLANDS, RUBBER GASKETS AND STEEL BOLTS.
8. GATE VALVES: CONFORM TO AWWA C-500 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN SUITABLE FOR DIRECT BURY.
9. VALVE BOXES: CAST IRON CONFORMING TO ASTM DESIGNATION A-48, CLASS 20 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
10. FIRE HYDRANTS: TO MEET LOCAL STANDARDS.
11. WATER MAIN CONNECTION: TAP WATER MAIN WITH SIZE AND LOCATION INDICATED ON PLAN IN ACCORDANCE WITH LOCAL WATER UTILITY REQUIREMENTS. COORDINATE CONNECTION WITH LOCAL WATER UTILITY. ALL JOINTS HALL BE RESTRAINED FROM CONNECTION OF WATER MAIN TO BUILDING WALL. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS. INSTALL MEGA-LUG OR APPROVED EQUAL TIGHT TO WALL FOR RESTRAINT FOR ALL BUILDING WALL PENETRATIONS AS APPROVED BY LOCAL PLUMBING INSPECTOR AND WATER UTILITY. INSTALL THRUST BLOCKING AND MEGA-LUG AT BEND BELOW FLOOR FOR ALL FLOOR PENETRATIONS
12. GENERAL WATER PIPE INSTALLATION: IN ACCORDANCE WITH CHAPTER 4.3.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
13. INSTALL DUCTILE-IRON, WATER-SERVICE PIPING ACCORDING TO AWWA C600 AND CHAPTER 4.4.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
14. ALL DUCTILE IRON PIPE SHALL BE ENCASED IN POLYETHYLENE PER AWWA C105, LATEST EDITION AND IN ACCORDANCE WITH CHAPTER 4.4.4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. ALL JOINTS AND FITTINGS SHALL HAVE POLYETHYLENE ENCASEMENT INSTALLED PER MANUFACTURER'S REQUIREMENTS AND PROCEDURES.
15. INSTALL PVC AWWA PIPE ACCORDING TO ASTM F645 AND AWWA M23 AND CHAPTER 4.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
16. INSTALL JOINT RESTRAINT AND CONCRETE THRUST BLOCKS AT ALL OFFSET FITTINGS (TEES, BENDS, DEAD ENDS, VALVES, REDUCERS) USING MEGA-LUG OR APPROVED EQUAL. CONCRETE THRUST BLOCKS SHALL BE INSTALLED PER FILE NO'S:44,45,46 FROM THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN. SEE DETAIL FOR MINIMUM LENGTH OF RESTRAINED JOINT REQUIRED. SUBMIT JOINT RESTRAINT DETAILS FOR ALL JOINT TYPES INCLUDING PUSH-ON AND MECHANICAL CONNECTIONS.INSTALL WATER SERVICE PIPING SUCH THAT THERE IS A MINIMUM OF 6' OF COVER OVER THE TOP OF THE WATER SERVICE PIPING.

SITE WATER SERVICE CONT.:

17. BEDDING AND COVER FOR WATER SERVICE PIPING SHALL BE IN ACCORDANCE WITH SECTION 4.3.3 AND FILE NO. 36 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. TRENCH BACKFILL SHALL BE GRANULAR B BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION ON-SITE.
18. INSTALL TRACER WIRE FOR NON-METALLIC WATER SERVICES IN ACCORDANCE WITH SPS SECTION 382.40(8)(K). TRACER WIRE INSULATION COLOR SHALL BE BLUE FOR POTABLE WATER SERVICE PIPING.
19. DUCTILE-IRON PIPING, RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 4.4.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
20. PVC PIPING GASKETED JOINTS: USING JOINING MATERIALS ACCORDING TO AWWA C900. CONSTRUCT JOINTS WITH ELASTOMERIC SEALS AND LUBRICANTS ACCORDING TO ASTM D2774 OR ASTM D3139 AND PIPE MANUFACTURER'S WRITTEN INSTRUCTIONS.
21. CONDUCT HYDROSTATIC TESTS IN ACCORDANCE WITH CHAPTER 4.15.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
22. CLEAN AND DISINFECT WATER SERVICE PIPING IN ACCORDANCE WITH SPS CHAPTER 82.40(8)(I) AND AWWA C651.

SANITARY SEWERAGE:

1. ALL PRIVATE SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS.
2. ALL PUBLIC SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS.
3. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.
4. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
5. MANHOLES DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
6. SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D).
7. PIPE JOINT CONSTRUCTION: FOLLOW PIPING MANUFACTURER'S RECOMMENDATIONS; JOIN PVC SEWER PIPE ACCORDING TO ASTM D2321 AND ASTM D 3212 FOR ELASTOMERIC GASKET JOINTS. JOIN DISSIMILAR PIPE MATERIALS WITH NONPRESSURE-TYPE, FLEXIBLE COUPLINGS
7. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FORM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
8. CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS.
9. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
10. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
11. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS. TEST NEW BUILDING SEWER IN ACCORDANCE WITH SECTION 5.4.0 OF THE STANDARD SPECIFICATIONS. REPLACE LEAKING PIPE USING NEW PIPE MATERIALS AAND REPEAT TESTING UNTIL LEAKAGE IS WITHIN ALLOWANCES SPECIFIED.

STORM DRAINAGE:

1. ALL PRIVATE STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DSPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS.
2. ALL PUBLIC STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION (STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS.
3. PVC SEWER PIPE AND FITTINGS: ASTM D 3034, SDR 35, WITH BELL-AND-SPIGOT ENDS WITH RUBBER GASKETED JOINTS IN ACCORDANCE WITH CHAPTER 8.10.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. JOINTS SHALL CONFORM TO ASTM D-3212.
4. REINFORCED CONCRETE PIPE: ASTM C76 WITH BELL AND SPIGOT ENDS AND GASKETED JOINTS WITH ASTM C443 RUBBER GASKETS IN ACCORDANCE WITH CHAPTER 8.6.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
5. HDPE PIPE: ADS N12 PIPE AS APPROVED ON THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCT REGISTER.
6. CATCH BASINS: STANDARD PRECAST CONCRETE CATCH BASINS CONFORMING TO CHAPTER 3.6.0 OF THE STANDARD SPECIFICATIONS AND IN GENERAL CONFORMANCE WITH FILE NO. 26 OF THE STANDARD SPECIFICATIONS. DEPTH AND DIAMETER AS INDICATED ON PLANS. CATCH BASIN SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
7. FRAMES AND GRATES: AS INDICATED ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SPECIFIED FRAME/GRATE IS COMPATIBLE WITH STRUCTURE; IF NOT, NOTIFY ENGINEER.
8. MANHOLES: STANDARD PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO ASTM C478, SECTION 8.39.0 OF THE STANDARD SPECIFICATIONS AND CONFORMING TO FILE NOS. 12, 13 AND 15 OF THE STANDARD SPECIFICATIONS. DIAMETER AND DEPTH AS INDICATED ON PLANS. MANHOLE SIZES TO BE VERIFIED BY CONTRACTOR AND SHOP DRAWINGS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ORDERING STRUCTURES.
9. MANHOLES AND CATCH BASINS DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
10. SEWERS SHALL BE INSTALLED IN CONFORMANCE WITH SECTION 3.2.0 OF THE STANDARD SPECIFICATIONS. INSTALL PROPER SIZE INCREASERS, REDUCERS AND COUPLINGS WHERE DIFFERENT SIZES OR MATERIALS OF PIPES AND FITTINGS ARE CONNECTED. INSTALL TRACER PIPE OVER NON-METALLIC PIPING IN ACCORDANCE WITH SPS SECTION 382.30(11)(H) AND 382.36(7)(D).
11. PROVIDE AND INSTALL CLEANOUTS IN ACCORDANCE WITH SPS CHAPTER 382.35. INSTALL CLEANOUTS AND RISER EXTENSIONS FORM SEWER PIPES TO PROPOSED GRADE. INSTALL PIPING SO CLEANOUTS OPEN IN DIRECTION OF FLOW IN SEWER PIPE. USE LIGHT DUTY, TOP LOADING CLASSIFICATION CLEANOUTS IN EARTH OR UNPAVED FOOT TRAFFIC AREAS; USE MEDIUM DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN PAVED FOOT TRAFFIC AREAS; USE HEAVY DUTY, TOP-LOADING CLASSIFICATION CLEANOUTS IN VEHICULAR TRAFFIC AREAS. SET CLEANOUT FRAMES AND COVERS IN PAVEMENT AREAS FLUSH WITH PAVEMENT SURFACE.
12. CLASS B COMPACTED TRENCH SECTION (FILE NO. NO. 4 OF STANDARD SPECIFICATIONS) SHALL BE UTILIZED. BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF THE STANDARD SPECIFICATIONS.
13. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
14. MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
15. CATCH BASIN INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.6 OF THE STANDARD SPECIFICATIONS. CATCH BASIN EXCAVATION AND PREPARATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.4(A) AND (B) OF THE STANDARD SPECIFICATIONS. FRAMES AND GRATES SHALL BE SET TO THE ELEVATIONS SHOWN ON THE PLANS.
16. AFTER INSTALLATION OF SEWER PIPE CLEAN ALL DEBRIS FROM SEWER AND INSPECT INTERIOR OF PIPING TO DETERMINE WHETHER LINE DISPLACEMENT OR OTHER DAMAGE HAS OCCURRED. CONDUCT DEFLECTION TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SECTION 3.2.6(I)4 OF THE STANDARD SPECIFICATIONS; REPLACE ANY PIPE SECTION NOT PASSING THE DEFLECTION TESTING USING NEW PIPE MATERIALS.

EARTH MOVING:

1. ALL EARTH WORK SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER PRESENTED IN THE SITE GEOTECHNICAL REPORT, GEOTECHNICAL ENGINEER RECOMMENDATIONS MADE IN THE FIELD AND THESE SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THESE SPECIFICATIONS AND THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
2. CONTRACTOR SHALL PROVIDE MATERIAL TEST REPORTS FROM A QUALIFIED TESTING AGENCY INDICATING TEST RESULTS FOR CLASSIFICATION ACCORDING TO ASTM D2487 AND LABORATORY COMPACTION CURVES ACCORDING TO ASTM D 1557 FOR EACH ON-SITE AND OFF-SITE SOIL MATERIAL PROPOSED FOR FILL AND BACKFILL.
3. CONTRACTOR SHALL PROVIDE PREEXCAVATION PHOTOS OR VIDEOS SHOWING EXISTING CONDITIONS OF ADJOINING STRUCTURES AND SITE IMPROVEMENTS THAT MIGHT BE MISCONSTRUED AS DAMAGE CAUSED BY EARTHWORK OPERATIONS.
4. OLD BUILDING FOUNDATIONS, BUILDING REMNANTS OR UNSUITABLE BACKFILL MATERIAL SHALL BE COMPLETELY REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND THE NEW BUILDING PAD AREAS. THE RESULTING EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL.
5. FOUNDATIONS, FOUNDATION WALLS OR CONCRETE FLOOR SLABS SHALL BE REMOVED TO A MINIMUM OF TWO FEET BELOW PROPOSED SUBGRADE WITHIN PROPOSED PARKING AND GREENSPACE AREAS. BASEMENT SLABS LOCATED BELOW 2 FEET FROM PLANNED SUBGRADE ELEVATION MAY BE LEFT IN PLACE BUT SHALL BE BROKEN INTO MAXIMUM 6 INCH PIECES TO FACILITATE DRAINAGE.
6. SATISFACTORY SOILS FOR FILL: ASTM D 2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER OR ANY SOIL GROUP OR COMBINATION OF GROUPS APPROVED OF BY THE PROJECT GEOTECHNICAL ENGINEER.
7. UNSATISFACTORY SOILS FOR FILL: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487 OR A COMBINATION OF THESE GROUPS UNLESS DEEMED SATISFACTORY BY THE PROJECT GEOTECHNICAL ENGINEER. UNSATISFACTORY SOILS ALSO INCLUDE SOILS NOT MAINTAINED WITHIN 3 PERCENT OF OPTIMUM SOIL MOISTURE CONTENT AT THE TIME OF COMPACTION.
8. AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION.
9. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE OR ANY SOIL DEEMED ACCEPTABLE FOR ENGINEERED FILL BY THE PROJECT GEOTECHNICAL ENGINEER. ENGINEERED FILL SHALL BE FREE OF ORGANIC, FROZEN, OR OTHER DELETERIOUS MATERIAL AND HAVE A MAXIMUM PARTICLE SIZE LESS THAN 3 INCHES. CLAY FILLS SHALL HAVE A LIQUID LIMIT OF LESS THAN 49 AND PLASTICITY INDEX BETWEEN 11 AND 25.
10. BEDDING COURSE FOR SEWERS AND WATER SERVICE: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND CONFORMING TO THE REQUIREMENTS OF SECTION 8.43.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
11. DRAINAGE COURSE BENEATH BUILDING SLABS: NARROWLY GRADED MIXTURE OF WASHED, CRUSHED STONE, OR CRUSHED OR UNCRUSHED GRAVEL; ASTM D 448; COARSE-AGGREGATE GRADING SIZE 57; WITH 100 PERCENT PASSING A 1-1/2-INCH (37.5-MM) SIEVE AND 0 TO 5 PERCENT PASSING A NO. 8 SIEVE.
12. TRENCH BACKFILL MATERIAL SHALL BE GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF THE STANDARD SPECIFICATIONS BENEATH AND WITHIN FIVE FEET OF PAVEMENT AREAS; COMPACTED SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF THE STANDARD SPECIFICATIONS MAY BE USED BENEATH LANDSCAPE AREAS.
13. PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
14. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
15. SHORING, SHEETING AND BRACING: SHORE, BRACE OR SLOPE BANKS OF EXCAVATION TO PROTECT WORKMEN, BANKS, ADJACENT PAVING, STRUCTURES, AND UTILITIES TO MEET OSHA REQUIREMENTS. DESIGN OF TEMPORARY SUPPORT OF EXCAVATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
16. EXCAVATE TO SUBGRADE ELEVATIONS REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. UNCLASSIFIED EXCAVATED MATERIALS MAY INCLUDE ROCK, SOIL MATERIALS, AND OBSTRUCTIONS. NO CHANGES IN THE CONTRACT SUM OR THE CONTRACT TIME WILL BE AUTHORIZED FOR ROCK EXCAVATION OR REMOVAL OF OBSTRUCTIONS.
17. PROOF-ROLL SUBGRADE BELOW THE BUILDING SLABS AND PAVEMENTS WITH FULLY LOADED TANDEM AXLE DUMP TRUCK OR RUBBER TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT, TYPICALLY 9 TONS/AXLE, WHERE COHESIVE SOILS ARE ENCOUNTERED OR WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PRESENT. DO NOT PROOF-ROLL WET OR SATURATED SUBGRADES AND PROOFROLL IN DRY WEATHER. PROOF ROLL IN PRESENCE OF PROJECT GEOTECHNICAL ENGINEER OR TECHNICIAN. SOILS THAT ARE OBSERVED TO RUT OR DEFLECT EXCESSIVELY UNDER THE MOVING LOAD (TYPICALLY >1") SHALL BE UNDERCUT AND REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL. IN PAVEMENT AREAS WHERE UNDERCUTS ARE PERFORMED, THE EDGES OF THE OVEREXCAVATIONS SHALL BE FEATHERED INOT THE SURROUNDING SUITABLE SOIL SO THAT EDGE FAILURE OF THE OVEREXCAVATED AREA DOES NOT OCCUR.
18. DUE TO CLAYEY SOILS, IF UNDERCUTS OCCUR WITHIN PAVEMENT AREAS AND THEY ARE BACKFILLED WITH GRANULAR SOILS, THE BOTTOM OF THE OVEREXCAVATION SHALL BE SLOPED TO A DRAINTILE THAT IS IN KIND SLOPED TOWARD THE NEAREST STORM SEWER. MINIMUM SLOPES OF SUCH DRAINTILES SHALL BE 0.5%.
19. CONVENTIONAL DISKING AND AERATION TECHNIQUES SHALL BE USED TO DRY SOILS BEFORE PROOF ROLLING. ALLOT FOR PROPER DRYING TIME IN PROJECT SCHEDULE.
20. ENGINEERED FILL SHALL BE PLACED IN MAXIMUM LIFTS OF EIGHT INCHES OF LOOSE MATERIAL AND COMPACTED WITHIN 3% OF OPTIMUM SOIL MOISTURE CONTENT VALUE AND A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST ASTM D1557. EACH LIFT OF COMPACTED ENGINEERED FILL SH

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CONCRETE PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF CONCRETE PAVEMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTIONS 415, 416, 501, 601, AND 602 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS) AND LOCAL MUNICIPAL REQUIREMENTS AND SPECIFICATIONS.
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER OF READY-MIXED CONCRETE PRODUCTS WHO COMPLIES WITH ASTM C 94/C 94M REQUIREMENTS FOR PRODUCTION FACILITIES AND EQUIPMENT AND APPROVED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
4. CONCRETE GRADE: GRADE A, GRADE A-2, OR A-FA CONFORMING TO SECTION 501.3.1.3 OF THE WISDOT STANDARD SPECIFICATIONS
5. AGGREGATES: CONFORM TO SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS. PROVIDE AGGREGATES FROM A SINGLE SOURCE.
6. WATER: ASTM C 94/C 94M AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
7. AIR-ENTRAINING ADMIXTURE: ASTM C 260 AND SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
8. CHEMICAL ADMIXTURES: PER SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
9. CURING MATERIALS IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
10. EXPANSION JOINT MATERIAL: CONFORM TO SECTION 415.2.3 OF THE WISDOT STANDARD SPECIFICATIONS.
11. MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE IN ACCORDANCE WITH SECTION 501 OF THE WISDOT STANDARD SPECIFICATIONS.
12. GENERAL EXECUTION: CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS.
13. PROOFROLL SUBGRADE AND AGGREGATE BASE AS OUTLINED IN EARTH MOVING SPECIFICATION PRIOR TO PLACEMENT OF PAVEMENTS.
14. SET, BRACE, AND SECURE EDGE FORMS, BULKHEADS, AND INTERMEDIATE SCREED GUIDES FOR PAVEMENT TO REQUIRED LINES, GRADES, AND ELEVATIONS. INSTALL FORMS TO ALLOW CONTINUOUS PROGRESS OF WORK AND SO FORMS CAN REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE PLACEMENT.
15. CLEAN FORMS AFTER EACH USE AND COAT WITH FORM-RELEASE AGENT TO ENSURE SEPARATION FROM CONCRETE WITHOUT DAMAGE.
16. JOINTS GENERAL: FORM CONSTRUCTION, ISOLATION, AND CONTRACTION JOINTS AND TOOL EDGINGS TRUE TO LINE WITH FACES PERPENDICULAR TO SURFACE PLANE OF CONCRETE. CONSTRUCT TRANSVERSE JOINTS AT RIGHT ANGLES TO CENTERLINE, UNLESS OTHERWISE INDICATED. CONFORM TO SECTION 415 OF THE WISDOT STANDARD SPECIFICATIONS
17. CONSTRUCTION JOINTS: SET CONSTRUCTION JOINTS AT SIDE AND END TERMINATIONS OF PAVEMENT AND AT LOCATIONS WHERE PAVEMENT OPERATIONS ARE STOPPED FOR MORE THAN ONE-HALF HOUR UNLESS PAVEMENT TERMINATES AT ISOLATION JOINTS.
18. ISOLATION JOINTS: FORM ISOLATION JOINTS OF PREFORMED JOINT-FILLER STRIPS ABUTTING CONCRETE CURBS, CATCH BASINS, MANHOLES, INLETS, STRUCTURES, WALKS, OTHER FIXED OBJECTS, AND WHERE INDICATED.
19. CONTRACTION JOINTS: FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF THE CONCRETE THICKNESS TO MATCH JOINTING OF EXISTING ADJACENT CONCRETE PAVEMENT.
20. EDGING: TOOL EDGES OF PAVEMENT, GUTTERS, CURBS, AND JOINTS IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING OF EDGES AFTER APPLYING SURFACE FINISHES. ELIMINATE TOOL MARKS ON CONCRETE SURFACES.
21. CURBING: COMPLY WITH SECTION 601 OF THE WISDOT STANDARD SPECIFICATIONS.
22. SIDEWALKS: COMPLY WITH SECTION 602 OF THE WISDOT STANDARD SPECIFICATIONS.
23. MOISTEN AGGREGATE TO PROVIDE A UNIFORM DAMPENED CONDITION AT TIME CONCRETE IS PLACED.
24. FINISH CURBING IN ACCORDANCE WITH SECTION 601.3.5 OF THE WISDOT STANDARD SPECIFICATIONS.
25. FINISH SIDEWALK AND PATIO IN ACCORDANCE WITH SECTION 602.3.2.3 OF THE WISDOT STANDARD SPECIFICATIONS (LIGHT BROOM FINISH).
26. FINISH CONCRETE VEHICULAR PAVEMENTS AND PADS IN ACCORDANCE WITH SECTION 415.3.8 OF THE WISDOT STANDARD SPECIFICATIONS (ARTIFICIAL TURF DRAG FINISH).
27. PROTECT AND CURE SIDEWALK IN ACCORDANCE WITH SECTION 602.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
28. PROTECT AND CURE CURBING IN ACCORDANCE WITH SECTION 601.3.7 OF THE WISDOT STANDARD SPECIFICATIONS.
29. PROTECT AND CURE VEHICULAR CONCRETE PAVING IN ACCORDANCE WITH SECTION 415.3.12 OF THE WISDOT STANDARD SPECIFICATIONS.
30. REMOVE AND REPLACE CONCRETE PAVEMENT THAT IS BROKEN, DAMAGED, OR DEFECTIVE OR THAT DOES NOT COMPLY WITH REQUIREMENTS IN THIS SECTION.
31. PROTECT CONCRETE FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVEMENT FOR AT LEAST 7 DAYS AFTER PLACEMENT.
32. MAINTAIN CONCRETE PAVEMENT FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PAVEMENT NOT MORE THAN TWO DAYS BEFORE DATE SCHEDULED FOR SUBSTANTIAL COMPLETION INSPECTIONS.

ASPHALTIC PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF ASPHALTIC PAVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460, 465, AND 475 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS).
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER SHALL BE REGISTERED WITH AND APPROVED BY THE DOT OF THE STATE IN WHICH PROJECT IS LOCATED.
4. ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF BASE COURSE IS WET OR EXCESSIVELY DAMP OR IF THE FOLLOWING CONDITIONS ARE NOT MET: APPLY TACK COAT WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES FAHRENHEIT FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION; PLACE ASPHALTIC CONCRETE SURFACE COURSE WHEN TEMPERATURE IS ABOVE 40 DEGREES FAHRENHEIT; BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEGREES FAHRENHEIT AND RISING. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. DO NOT APPLY BELOW THE MINIMUM PAVEMENT TEMPERATURE AS RECOMMENDED BY THE MANUFACTURER.
5. AGGREGATES SHALL BE IN ACCORDANCE WITH SECTION 460.2.2 OF THE WISDOT STANDARD SPECIFICATIONS.
6. ASPHALT MATERIALS SHALL BE IN ACCORDANCE WITH CHAPTER 455 OF THE WISDOT STANDARD SPECIFICATIONS.
7. PAVEMENT MARKING PAINT: PROVIDE PAINT FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON PLANS.
8. HOT-MIX ASPHALT: ASPHALTIC BINDER COURSE AND SURFACE COURSE SHALL BE MIXTURE LT FOR REGULAR DUTY PAVEMENT AND LT FOR HEAVY DUTY PAVEMENT COMPLYING WITH THE WISDOT STANDARD SPECIFICATIONS. ASPHALTIC BINDER SHALL BE 58-28 S UNLESS NOTED.
9. AGGREGATE BASE COURSE BENEATH PAVEMENTS: SHALL BE 1-1/4" DENSE GRADED BASE COURSE CONFORMING TO SECTION 305 OF THE WISDOT STANDARD SPECIFICATIONS.
10. PAVEMENT PLACEMENT GENERAL: ASPHALT CONCRETE PAVING EQUIPMENT, WEATHER LIMITATIONS, JOB-MIX FORMULA, MIXING, CONSTRUCTION METHODS, COMPACTION, FINISHING, TOLERANCE AND PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS.
11. PREPARE AND PROOFROLL SUBGRADES AND AGGREGATE BASE COURSE AS OUTLINED IN EARTH MOVING SPECIFICATIONS PRIOR TO PLACEMENT OF ASPHALT PAVEMENTS.
12. SWEEP LOOSE GRANULAR PARTICLES FROM SURFACE OF AGGREGATE BASE COURSE PRIOR TO PAVEMENT PLACEMENT. DO NOT DISLODGE OR DISTURB AGGREGATE EMBEDDED IN COMPACTED SURFACE OF BASE COURSE.
13. SPREAD AND FINISH ASPHALTIC MIXTURE IN ACCORDANCE WITH SECTION 450.3.2.5 OF THE WISDOT STANDARD SPECIFICATIONS. PAVEMENT THICKNESSES SHALL BE AS INDICATED ON THE PLANS.
14. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH HOT-MIX ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.
15. COMPACT ASPHALTIC PAVEMENT IN ACCORDANCE WITH SECTION 450.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS.
16. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT UNTIL IT HAS COOLED AND HARDENED. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.
17. THICKNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS ¼ INCH FOR BINDER COURSE AND PLUS ¼ INCH FOR SURFACE COURSE, NO MINUS.
18. SURFACE SMOOTHNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS: BINDER COURSE: ¼ INCH; SURFACE COURSE: 1/8 INCH. REMOVE AND REPLACE ALL HUMPS OR DEPRESSIONS EXCEEDING THE SPECIFIED TOLERANCES.
19. DO NOT APPLY PAVEMENT-MARKING PAINT UNTIL LAYOUT, COLORS, AND PLACEMENT HAVE BEEN VERIFIED WITH ENGINEER.
20. APPLY MARKINGS TO A DRY SURFACE FREE FROM FROST. REMOVE DUST, DIRT, OIL, GREASE, GRAVEL, DEBRIS OR OTHER MATERIAL THAT MAY PREVENT BONDING TO THE PAVEMENT.
21. APPLY PAINT AS THE MANUFACTURER SPECIFIES WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS INDICATED, WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES AT A MINIMUM RATE OF 17.6 GALLONS/MILE FOR A CONTINUOUS 4" LINE.
22. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND TO PREPARE TEST REPORTS.

POROUS PAVEMENT:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF ASPHALTIC PAVEMENTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTIONS 450, 455, 460, 465, AND 475 OF THE STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION (WISDOT STANDARD SPECIFICATIONS) AND WISCONSIN ASPHALT PAVEMENT ASSOCIATION (WAPA) POROUS ASPHALT PAVEMENTS TECHNICAL BULLETIN.
2. CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH TYPE OF PRODUCT INDICATED - INCLUDE TECHNICAL DATA AND TESTED PHYSICAL AND PERFORMANCE PROPERTIES; JOB-MIX DESIGNS: CERTIFICATION THAT MIX MEETS OR EXCEEDS WISDOT STANDARD SPECIFICATIONS; AND MATERIAL CERTIFICATES CERTIFYING COMPLIANCE WITH WISDOT STANDARD SPECIFICATIONS.
3. MANUFACTURER QUALIFICATIONS: MANUFACTURER SHALL BE REGISTERED WITH AND APPROVED BY THE DOT OF THE STATE IN WHICH PROJECT IS LOCATED.
4. ENVIRONMENTAL LIMITATIONS: DO NOT APPLY ASPHALT MATERIALS IF BASE COURSE IS WET OR EXCESSIVELY DAMP OR IF THE FOLLOWING CONDITIONS ARE NOT MET: APPLY TACK COAT WHEN AMBIENT TEMPERATURE IS ABOVE 50 DEGREES FAHRENHEIT AND WHEN TEMPERATURE HAS NOT BEEN BELOW 35 DEGREES FAHRENHEIT FOR 12 HOURS IMMEDIATELY PRIOR TO APPLICATION; PLACE ASPHALTIC CONCRETE SURFACE COURSE WHEN TEMPERATURE IS ABOVE 40 DEGREES FAHRENHEIT; BASE COURSE MAY BE PLACED WHEN AIR TEMPERATURE IS ABOVE 30 DEGREES FAHRENHEIT AND RISING. PROCEED WITH PAVEMENT MARKING ONLY ON CLEAN, DRY SURFACES. DO NOT APPLY BELOW THE MINIMUM PAVEMENT TEMPERATURE AS RECOMMENDED BY THE MANUFACTURER.
5. AGGREGATES SHALL BE IN ACCORDANCE WITH SECTION 460.2.2 OF THE WISDOT STANDARD SPECIFICATIONS AS MODIFIED BY THE WAPA POROUS ASPHALT PAVEMENTS TECHNICAL BULLETIN.
6. ASPHALT MATERIALS SHALL BE IN ACCORDANCE WITH CHAPTER 455 OF THE WISDOT STANDARD SPECIFICATIONS AS MODIFIED BY THE WAPA POROUS ASPHALT PAVEMENTS TECHNICAL BULLETIN.
7. PAVEMENT MARKING PAINT: PROVIDE PAINT FROM THE WISCONSIN DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS INDICATED OTHERWISE ON PLANS.
8. POROUS ASPHALT: POROUS ASPHALT MIXES SHALL BE COMPATIBLE WITH WISDOT-APPROVED WARM-MIX ASPHALT TECHNOLOGIES. ASPHALTIC BINDER SHALL BE GRADE 28 IN ACCORDANCE WITH WAPA POROUS ASPHALTIC TECHNICAL BULLETIN.
9. AGGREGATE STORAGE RESERVOIR: USE A WASHED OR OPEN-GRADED BASE CONSISTING OF CRUSHED STONE OR CRUSHED GRAVEL WITH NO GREATER THAN 50% PASSING THE NO. 200 SIEVE. PROVIDE A MINIMUM POROSITY OF 30% PER ASTM C29 STANDARD TEST METHOD FOR BULK DENSITY AND VOIDS IN AGGREGATE. COMPLY WITH SOUNDNESS, WEAR, AND FRACTURE REQUIREMENTS LISTED IN WISCONSIN DOT STANDARD SPECIFICATION SECTION 301.2.4.5 - AGGREGATE BASE PHYSICAL PROPERTIES.
10. PAVEMENT PLACEMENT GENERAL: ASPHALT CONCRETE PAVING EQUIPMENT, WEATHER LIMITATIONS, JOB-MIX FORMULA, MIXING, CONSTRUCTION METHODS, COMPACTION, FINISHING, TOLERANCE AND PROTECTION SHALL CONFORM TO THE REQUIREMENTS OF THE APPROPRIATE SECTIONS OF THE WISDOT STANDARD SPECIFICATIONS AS MODIFIED BY THE WAPA POROUS ASPHALT PAVEMENTS TECHNICAL BULLETIN.
11. PREPARE AND PROOFROLL SUBGRADES AND AGGREGATE BASE COURSE AS OUTLINED IN EARTH MOVING SPECIFICATIONS PRIOR TO PLACEMENT OF ASPHALT PAVEMENTS. THE SLOPE OF THE SUBGRADE SHALL BE AS FLAT AS POSSIBLE BUT NO GREATER THAN 2%.
12. SWEEP LOOSE GRANULAR PARTICLES FROM SURFACE OF AGGREGATE BASE COURSE PRIOR TO PAVEMENT PLACEMENT. DO NOT DISLODGE OR DISTURB AGGREGATE EMBEDDED IN COMPACTED SURFACE OF BASE COURSE.
13. SPREAD AND FINISH ASPHALTIC MIXTURE IN ACCORDANCE WITH SECTION 450.3.2.5 OF THE WISDOT STANDARD SPECIFICATIONS AS MODIFIED BY THE WAPA POROUS PAVEMENTS TECHNICAL BULLETIN. PAVEMENT THICKNESSES SHALL BE AS INDICATED ON THE PLANS.
14. PROMPTLY CORRECT SURFACE IRREGULARITIES IN PAVING COURSE BEHIND PAVER. USE SUITABLE HAND TOOLS TO REMOVE EXCESS MATERIAL FORMING HIGH SPOTS. FILL DEPRESSIONS WITH POROUS ASPHALT TO PREVENT SEGREGATION OF MIX; USE SUITABLE HAND TOOLS TO SMOOTH SURFACE.
15. COMPACT ASPHALTIC PAVEMENT IN ACCORDANCE WITH SECTION 450.3.2.6 OF THE WISDOT STANDARD SPECIFICATIONS AS MODIFIED BY THE WAPA POROUS ASPHALT PAVEMENTS TECHNICAL BULLETIN. POROUS ASPHALT SHOULD BE COMPACTED WITH TWO TO FOUR PASSES OF A 10-TON ROLLER.
16. PROTECTION: AFTER FINAL ROLLING, DO NOT PERMIT VEHICULAR TRAFFIC ON PAVEMENT FOR AT LEAST 24 HOURS. ERECT BARRICADES TO PROTECT PAVING FROM TRAFFIC UNTIL MIXTURE HAS COOLED ENOUGH NOT TO BECOME MARKED.
17. THICKNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS ¼ INCH FOR BINDER COURSE AND PLUS ¼ INCH FOR SURFACE COURSE, NO MINUS.
18. SURFACE SMOOTHNESS TOLERANCE: COMPACT EACH COURSE TO PRODUCE A SURFACE SMOOTHNESS WITHIN THE FOLLOWING TOLERANCES AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED TRANSVERSELY OR LONGITUDINALLY TO PAVED AREAS: BINDER COURSE: ¼ INCH; SURFACE COURSE: 1/8 INCH. REMOVE AND REPLACE ALL HUMPS OR DEPRESSIONS EXCEEDING THE SPECIFIED TOLERANCES.
19. DO NOT APPLY PAVEMENT-MARKING PAINT UNTIL LAYOUT, COLORS, AND PLACEMENT HAVE BEEN VERIFIED WITH ENGINEER.
20. APPLY MARKINGS TO A DRY SURFACE FREE FROM FROST. REMOVE DUST, DIRT, OIL, GREASE, GRAVEL, DEBRIS OR OTHER MATERIAL THAT MAY PREVENT BONDING TO THE PAVEMENT.
21. APPLY PAINT AS THE MANUFACTURER SPECIFIES WITH MECHANICAL EQUIPMENT TO PRODUCE PAVEMENT MARKINGS, OF DIMENSIONS INDICATED, WITH UNIFORM, STRAIGHT EDGES. APPLY AT MANUFACTURER'S RECOMMENDED RATES AT A MINIMUM RATE OF 17.6 GALLONS/MILE FOR A CONTINUOUS 4" LINE.
22. TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTING AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS AND TO PREPARE TEST REPORTS.

TMEYER

C501

20176

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Fax: 414-643-4210

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

SPECIFICATIONS

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUANCE	DATE

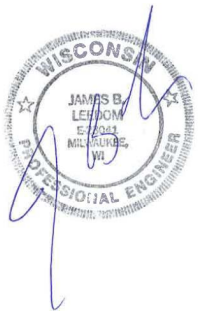
NO. REVISION	DATE

PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.04.09
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----

SHEET NO:
C501

Harlow and Hem Mixed Use Development Stormwater Management Report

7470 Blanchard Street
Wauwatosa, WI



PREPARED FOR
Mandel Group
330 E. Kilbourn Ave.
Milwaukee, WI, 53202

PREPARED BY
THE SIGMA GROUP
Single Source. Sound Solutions.

Project Number – 20176
2024/04/03

Terry Meyer, P.E.
Senior Civil Engineer

James Leedom, P.E., LEED A.P.,
Senior Project Engineer

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Appendix A Calculations - Storm Water Quality (WinSLAMM)
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1. Introduction

This Storm Water Management memo presents the design calculations and considerations for the proposed redevelopment located at the corner of Wauwatosa Avenue and Blanchard Street in Wauwatosa, WI. The proposed redevelopment encompasses approximately 1.58 acres. The proposed project will disturb more than one acre of land but less than two acres. The project will also result in an increase of impervious area over the site by approximately 3509 square feet. This storm water management report serves as a summary of calculations showing the proposed development meets all applicable ordinances.

2. Design Criteria

Wauwatosa, Wisconsin

Wauwatosa Water Quality

- Total Suspended Solids. BMPs shall be designed, installed, and maintained to control total suspended solids carried in runoff from the post-construction site as follows:
    - For redevelopment, reduce to the maximum extent practicable, the total suspended solids load from exposed parking areas and roads by 40%, based on the average annual rainfall, as compared to no runoff management controls.

Wauwatosa Water Quantity and Management of Peak Runoff

- Stormwater quantity control requirements under the City of Wauwatosa storm water management regulations (Chapter 24.13.040) apply to projects that increase impervious area by ½ acre or more. As the project does not create more than ½-acre of additional impervious surface, the City's storm water quantity requirements do not apply to the project.

Wisconsin Department of Natural Resources

- WDNR – Technical Standards (NR151 and NR216)

DNR Water Quality:

- For redevelopment, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on the average annual rainfall, as compared to no runoff management controls.

MMSD Quantity:

- MMSD Chapter 13 storm water management regulations apply to projects that either create more than 5,000 square feet of additional impervious surface, creates more than 1/2-acre of additional impervious surface or a redevelopment project that disturbs more than 2-acres of land. The project will not create more than 1/2-acre of additional impervious surface or disturb more than 2-acres of land. Therefore, the project is exempt from the MMSD peak flow control requirements.
- The project will create between 5,000 square feet and ½-acre of additional impervious. As such, the MMSD Green Infrastructure requirements apply. For projects that create between 5,000 square feet and ½-acre of additional impervious surface, green infrastructure must be designed and implemented with a detention volume equal to ½-inch multiplied by the net new impervious surface area. Green infrastructure includes, but is not limited to, rain gardens, green roofs, bioswales, permeable paving, cisterns and rain gardens. The green infrastructure requirement will be met using porous pavement to be constructed in the surface parking lot.

3. Design Analysis

- Rainfall data used in the hydrologic analysis were obtained from the NOAA Atlas 14 precipitation depths, and the appropriate NRCS Wisconsin MSE3 precipitation distribution for 24 hour duration (1-yr, 2-yr, 10-yr, and 100-yr storm events).

1 year	2 year	10 year	100 year
2.34”	2.64”	3.73”	6.06”

- Curve numbers for the soils within the analysis region were selected from the values published in TR-55. Native soil types were determined from NRCS maps and borings.
- Time of concentration values were calculated based on the standard TR-55 method.
- The hydraulic calculations and analysis presented in this report were performed using HydroCad Watershed Modeling software which utilizes the methodologies of TR-55 for a hydrograph based analysis of watershed conditions. Hydrographs were developed using a standard MSE-3 24-hour hydrograph for the various 24-hr storm events.
- Sediment reduction characteristics for the proposed water quality facilities were determined using WinSLAMM (Version 10.3.4) Source Loading and Management Model.

4. Existing Condition Analysis

The project site currently includes an existing residential/commercial building along Harwood Avenue, a residential building and garage along Blanchard Street and a public surface parking lot at the north east quadrant of Wauwatosa Avenue and Blanchard Street. Approximately 1.36 acres of the disturbed area is covered with impervious surface (buildings or pavements). There are significant grade changes across the site with an approximate 37 ft grade difference between the high north end of the site along Harwood Avenue and the low southern end of the site along Blanchard Street. There are several existing retaining walls on the project used to accommodate the grade changes. An existing conditions survey is included as Appendix C.

5. Proposed Developed Conditions Description

The project site will be redeveloped with a multi-family residential development with below grade parking, and roof top terrace for residence to community gather. A public surface parking is proposed that will have access from Harwood Avenue. The project will disturb the entire site and will result in approximately 1.44 acres of impervious surface which is an increase of 3,509 square feet from existing conditions. The proposed site plan is included in Appendix C.

6. Storm Water Quality Modeling

NR 151 regulations require that the project employ BMPs to reduce sediment load leaving the site from parking and roads by 40% compared to no controls.
Quality Summary Table

Total Suspended Solids Loading	
Total TSS prior to controls/treatment	178.3 lbs
Total TSS After controls/treatment	52.31 lbs
Total Percent TSS Reduction	70.66%

7. Green Infrastructure

The project will create 3508 square feet of additional impervious surface. As such, green infrastructure with a detention volume of 146 cubic feet (1093 gallons) is required for the project. See calculation below.

1/2-inch/12 inches / ft X 3508 SF = 146 CF
92 CF X 7.481 gallons/CF = 1093 gallons

The green infrastructure requirement will be met using two porous pavement areas within the surface parking lot. The northern porous pavement has approximately 1815 square feet, with 12" of stone storage. The southern porous pavement has approximately 1341 square feet, with 12" of stone storage. Stormwater will infiltrate through the porous pavement and stored in the 12" stone storage layer. A 6 inch underdrain will collect the stormwater from the stone storage layer and convey the stormwater into a private storm sewer system. The storm sewer system will connect into the public storm sewer system within Blanchard Street.

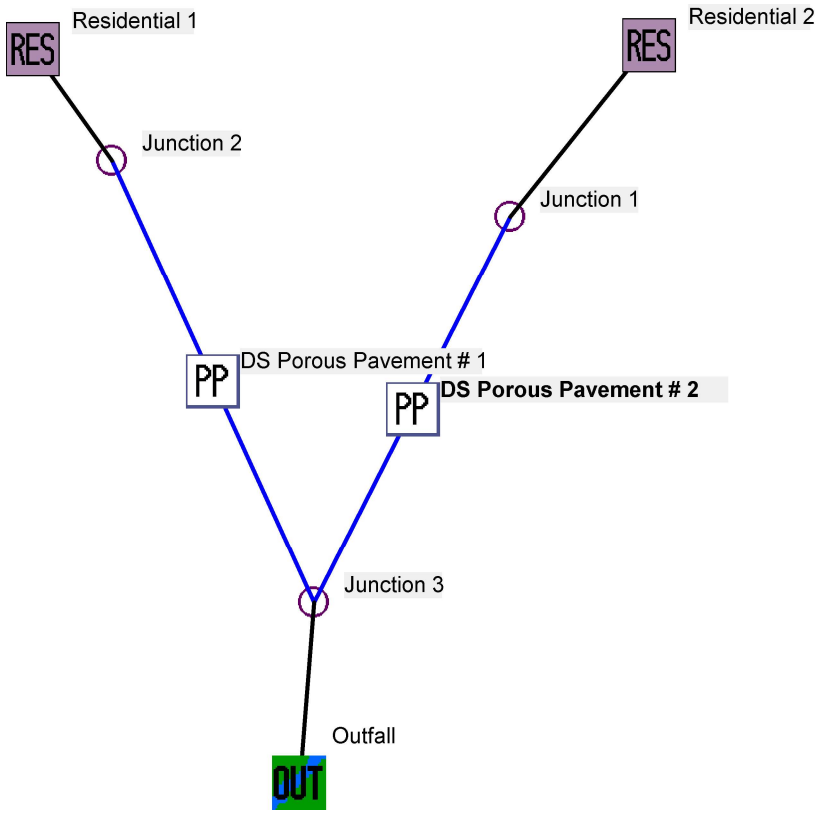
MMSD volume credit for porous pavement is 3 gallons per square feet of porous pavement. The proposed porous pavement for the project is 3156 square feet. The redevelopment would provide 9468 gallons of storage which exceeds the required green infrastructure volume of 1093 gallons.

Therefore, the project meets and exceeds the MMSD and the City of Wauwatosa green infrastructure requirements.

8. Conclusion

The proposed stormwater management plan meets the requirements of the local municipality, WDNR, and other regulatory bodies through the implementation of best management practices described within this report to the greatest extent practicable.

Appendix A Calculations - Storm Water Quality (WinSLAMM)


Residential 1
RES
Residential 2
RES
Junction 2
Junction 1
DS Porous Pavement # 1
PP
DS Porous Pavement # 2
PP
Junction 3
Outfall
OUT

Data file name: I:\Mandel\20176 Harlow & Hem Tosa Development Surveying\060 CAD 2024\800_SWMP\040_WinSLAMM\20176 H&H WINSLAMM.mdb
WinSLAMM Version 10.4.1
Rain file name: N:\000-CAD Resource Library\Software Support Files\WinSLAMM\Vers 10.0.2 Downloaded November 11, 2013\Parameter Files v10\WisReg - Milwauke
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: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Date: 04-03-2024 Time: 12:52:14
Site information:

LU# 1 - Residential: Residential 1 Total area (ac): 0.161
13 - Paved Parking 1: 0.161 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Residential: Residential 2 Total area (ac): 0.125
13 - Paved Parking 1: 0.125 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Porous Pavement CP# 1 (DS) - DS Porous Pavement # 1
Porous pavement area (ac): 0.042
Inflow hydrograph peak to average flow ratio: 3.8
Porous pavement thickness (in): 4
Porous pavement porosity: 0.24
Aggregate bedding thickness (in): 4
Aggregate bedding porosity: 0.3
Aggregate base reservoir thickness (in): 12
Aggregate base reservoir porosity: 0.4
Underdrain diameter (in): 6
Underdrain outlet invert elevation (inches above datum): 0
Number of underdrains: 1
Subgrade seepage rate (in/hr): 0.05
Use random number generation to account for uncertainty in seepage rate: 0
Subgrade seepage rate COV: 0
Surface pavement initial infiltration rate (in/hr): 100
Surface pavement initial infiltration rate (in/hr): 100
Surface Pavement Percent Solids Removal Upon Cleaning: 50
Porous pavement surface clogging load (lbs/sf): 0.06
Porous pavement restorative cleaning frequency: Semi-annually
TSS concentration reduction percentage through underdrain: 0
Porous pavement particle size distribution file name: Not needed - calculated by program
Control Practice 2: Porous Pavement CP# 2 (DS) - DS Porous Pavement # 2
Porous pavement area (ac): 0.031
Inflow hydrograph peak to average flow ratio: 3.8
Porous pavement thickness (in): 4
Porous pavement porosity: 0.24
Aggregate bedding thickness (in): 4
Aggregate bedding porosity: 0.3
Aggregate base reservoir thickness (in): 12
Aggregate base reservoir porosity: 0.4
Underdrain diameter (in): 6
Underdrain outlet invert elevation (inches above datum): 0
Number of underdrains: 1
Subgrade seepage rate (in/hr): 0.05
Use random number generation to account for uncertainty in seepage rate: 0
Subgrade seepage rate COV: 0
Surface pavement initial infiltration rate (in/hr): 100
Surface pavement initial infiltration rate (in/hr): 100
Surface Pavement Percent Solids Removal Upon Cleaning: 50
Porous pavement surface clogging load (lbs/sf): 0.06
Porous pavement restorative cleaning frequency: Semi-annually
TSS concentration reduction percentage through underdrain: 0
Porous pavement particle size distribution file name: Not needed - calculated by program

SLAMM for Windows Version 10.4.1
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Data file name: I:\Mandel\20176 Harlow & Hem Tosa Development Surveying\060 CAD 2024\800_SWMP\040_WinSLAMM\20176 H&H WINSLAMM.mdb
WinSLAMM Version 10.4.1
Rain file name: N:\000-CAD Resource Library\Software Support Files\WinSLAMM\Vers 10.0.2 Downloaded November 11, 2013\Parameter Files v10\WisReg - Milwauke
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
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
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: 01/05/69 Study period ending date: 12/31/69
Start of Winter Season: 12/06 End of Winter Season: 03/28
Model Run Start Date: 01/05/69 Model Run End Date: 12/31/69
Date of run: 04-03-2024 Time of run: 12:51:48
Total Area Modeled (acres): 0.286
Years in Model Run: 0.99

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	21972	-	130.0	178.3	-
Outfall Total with Controls:	19365	11.87%	27.54	33.29	81.33%
Annualized Total After Outfall Controls:	19634			33.76	

Appendix B Green Infrastructure Detention Volume Calculations

Green Infrastructure Detention Volume Calculations

[1] New and Redeveloped Impervious Area

Land Type	**Area** *acres*	**Area** *sq.ft.*
Building	1.006	43828
Greenspace	0.143	6229
Impervious	0.436	18992

Existing Impervious	1.362	59322
Proposed Impervious	1.442	62831
New pervious area	0.081	3507

[2]

Required Detention Volume	**1093 gallons**

[3] Green Infrastructure Unit Detention Volume

Green Infrastructure	**Unit Detention Volume**
Bioswale	7.5 gal. per sq.ft.
Cistern	Capacity of cistern
Constructed wetlands	8.3 gal. per sq.ft.
Green roof	1 gal. per sq.ft.
Native landscaping	0.4 gal. per sq.ft.
Porous pavement	3 gal. per sq.ft.
Rain garden	4.4 gal. per sq.ft.
Rain barrel	Capacity of barrel
Tree	25 gal. per tree

per MMSD's Chapter 13: Surface Water and Stormwater

[4] Proposed Green Infrastructure

Proposed Green Infrastructure	**Area**
Porous Pavement (North)	1815 SF
Porous Pavement (South)	1341 SF
Porous Pavement (North)	5445 gallons
Porous Pavement (South)	4023 gallons
Total Green Infrasture Area	**9468 gallons**

[5]

Proposed Detention Volume	**9468 gallons**
Required Detention Volume	**1093 gallons**

[6]

Does it meet requirements?	**Yes**

Appendix C Figures

2024.04.03



LEGEND:

	SECTION 1/4 SECTION LINE
	PROPERTY LINE
	EASEMENT
X X	CHAIN LINK FENCE
	GUARD RAIL
	METAL FENCE
	WOOD FENCE
	TREE LINE
OH	OVERHEAD UTILITY LINE
E	ELECTRIC
T	TELEPHONE
FO	FIBER OPTIC
CTV	CABLE TV
SAN	SANITARY SEWER
FS	FORCE MAIN
ST	STORM SEWER
W	WATER MAIN
G	GAS
670	EXISTING CONTOUR
WET	WETLAND
FP	FLOODPLAIN
UNKNOWN MANHOLE	IRON PIPE FOUND/SET
SANITARY MANHOLE	REBAR FOUND/SET
STORM MANHOLE	CHISELED CROSS FOUND/SET
ELECTRIC MANHOLE	PK NAIL FOUND/SET
MMSD MANHOLE	SPIKE/NAIL
TELEPHONE MANHOLE	MONUMENT
CLEANOUT	BENCHMARK
CATCH BASIN	SIGN
CATCH BASIN (ROUND)	PARKING METER
ROOF DRAIN	FLAG POLE
CULVERT END	8" DECIDUOUS TREE
HYDRANT	8" CONIFEROUS TREE
WATER VALVE	BUSH
GAS VALVE	POST
GAS METER	SOIL BORING
ELECTRIC METER	TRAFFIC SIGNAL
UTILITY PEDESTAL	LIGHT POLE
HANDHOLE	UTILITY POLE
VENT	GUY WIRE
MONITORING WELL	GUY POLE

GENERAL NOTES:

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

3. DRAWING IS BASED ON FIELD SURVEY COMPLETED BY THE SIGMA GROUP, INC. ON JUNE 16, 2021.

4. DATUM FOR THE PROJECT SURVEY IS CITY OF WAUWATOSA DATUM. BENCHMARK FOR THE PROJECT SURVEY IS THE WEST 1/4 CORNER OF SECTION 22-7-1 CONCRETE MONUMENT ELEV 127.85.

5. CONTRACTOR TO VERIFY EXISTING CONDITIONS, CONTACT ENGINEER WITH DISCREPANCIES.

TO OBTAIN LOCATIONS OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE
WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE
MILW. AREA 259-1181

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 30 60

HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

SITE SURVEY

PRELIMINARY NOT FOR CONSTRUCTION

ISSUANCE	DATE

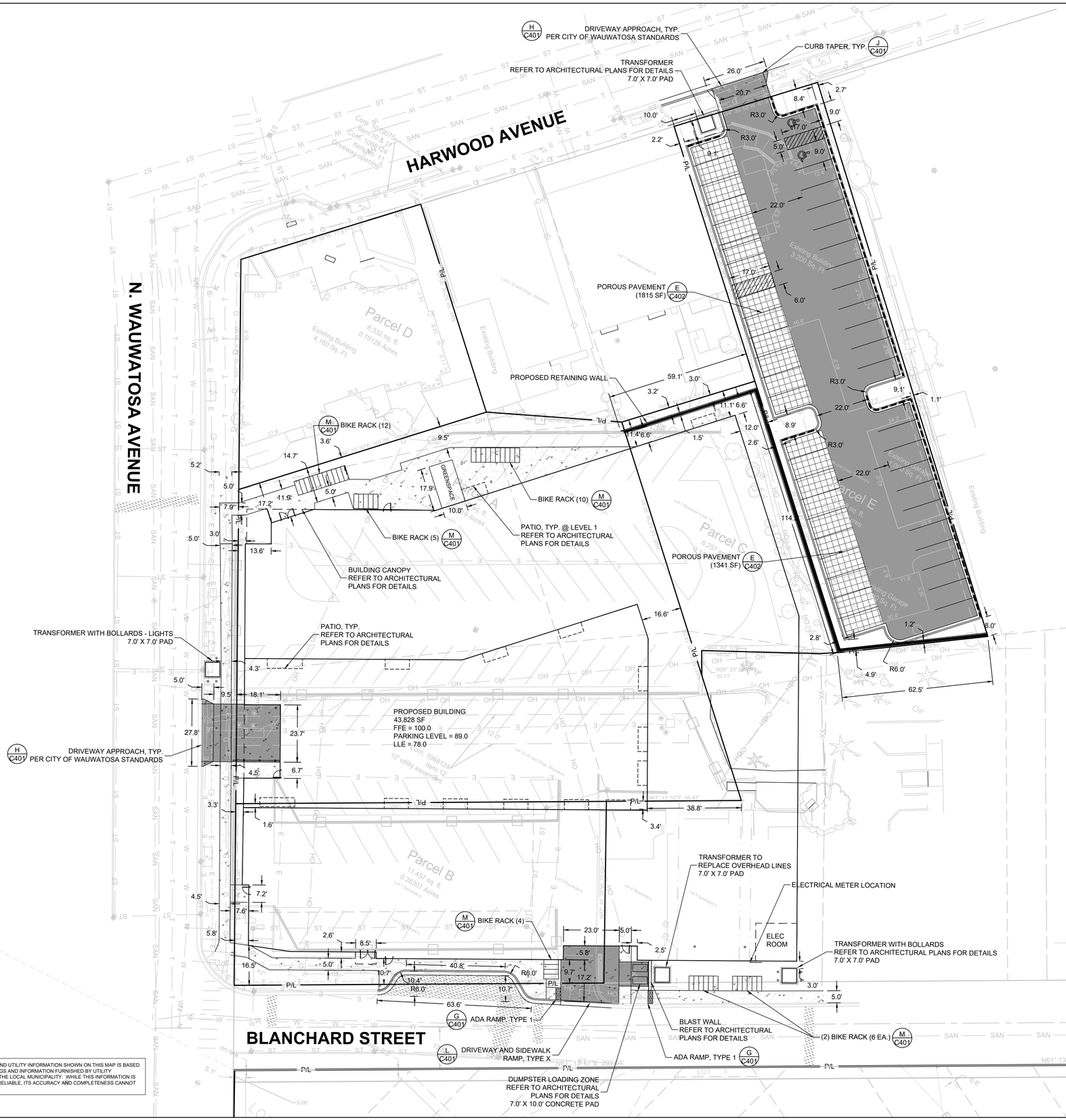
NO.	REVISION	DATE

PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.04.03
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----

SHEET NO:
C001

AKUSKE
C001
20176

i:\Mandell\20176 harlow & hem tosa development surveying\060 cad 2024\030_Production Sheets\100_Civil\C001 Site Survey.dwg



SITE INFORMATION			
SITE AREA	69053	1.585 AC	
SITE DISTURBED AREA	71304	1.637 AC	
EXISTING IMPERVIOUS AREA	59322	1.362 AC	85.9 %
PROPOSED IMPERVIOUS AREA	62831	1.442 AC	91.0 %
TOTAL PARKING SPACES	----		
ADA PARKING SPACES	----		

LEGEND:

- A C401 — 5" THICK CONCRETE WALK
- C C401 — CONCRETE PAVEMENT
- B C401 — ASPHALT SURFACE
- E C402 — POROUS PAVEMENT
- D C401 — CITY OF WAUWATOSA ASPHALT SURFACE
- E C401 — CURB & GUTTER (ACCEPT)
- E C401 — CURB & GUTTER (REJECT)

GRAPHIC SCALE 0 20 40

GENERAL NOTES:

1. THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS DRAWING IS BASED ON FIELD LOCATIONS AND/OR RECORDS FURNISHED BY MUNICIPALITIES AND UTILITY COMPANIES. THE LOCATION AND ACCURACY OF WHICH CANNOT BE GUARANTEED. THERE MAY BE ADDITIONAL UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. VERIFY ACTUAL LOCATIONS AND INVERTS IN THE FIELD. ANY POTENTIAL ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
3. WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
4. ELECTRONIC CIVIL FILES ARE AVAILABLE UPON WRITTEN REQUEST. DO NOT USE ELECTRONIC CIVIL FILES TO LAYOUT FOUNDATIONS, COLUMN LINES, LIGHT POLES, OR OTHER NON CIVIL SITE WORK. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF BUILDING AND ARCHITECTURAL FEATURES.
5. DIMENSIONS ARE FROM FACE OF CURB OR EDGE OF PAVEMENT.
6. WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO DRIVEWAY OPENINGS, SIDEWALK AND RAMPS, PAVING, AND CURB AND GUTTER SHALL BE COMPLETED PER MUNICIPAL AND/OR COUNTY REQUIREMENTS AND STANDARDS.
7. EARTHWORK SHALL BE IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

TO OBTAIN LOCATIONS OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

CALL DIGGERS HOTLINE
1-800-242-8511
TOLL FREE

WIS STATUTE 182.0175(1974) REQUIRES MIN. 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

MILW. AREA 259-1181

THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

THE SIGMA GROUP
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HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

SITE PLAN

PRELIMINARY NOT FOR CONSTRUCTION

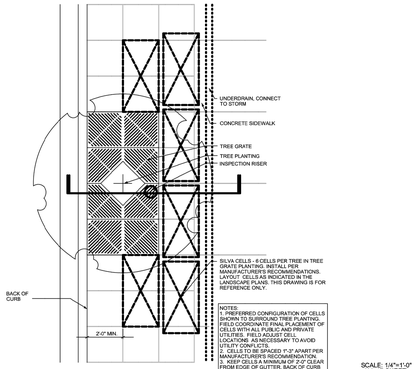
ISSUANCE	DATE

NO. REVISION	DATE

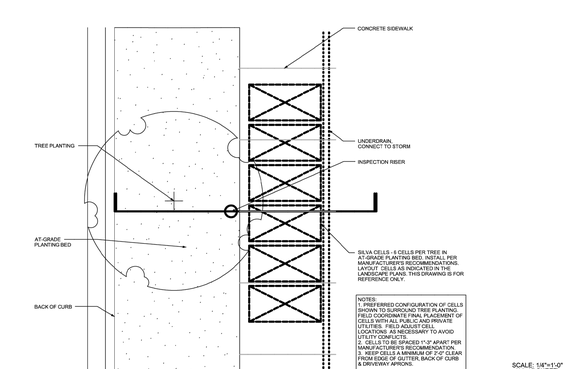
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DESIGN DATE:	----
PLOT DATE:	2024.04.03
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----

SHEET NO: C100

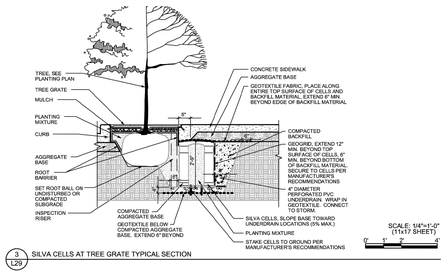
2024.04.03



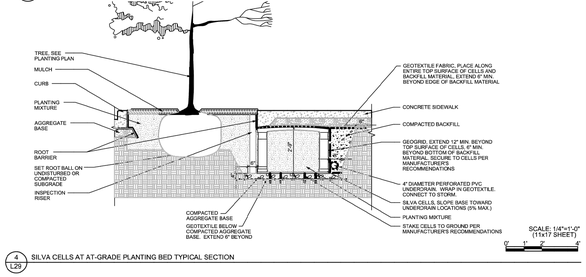
1 L29 SILVA CELLS AT TREE GRATE INSTALLATION



2 L29 SILVA CELLS AT AT-GRADE PLANTING BED INSTALLATION



3 L29 SILVA CELLS AT TREE GRATE TYPICAL SECTION



4 L29 SILVA CELLS AT AT-GRADE PLANTING BED TYPICAL SECTION

A EXISTING SILVA CELLS DETAILS - FOR INFORMATION ONLY
SCALE:NTS

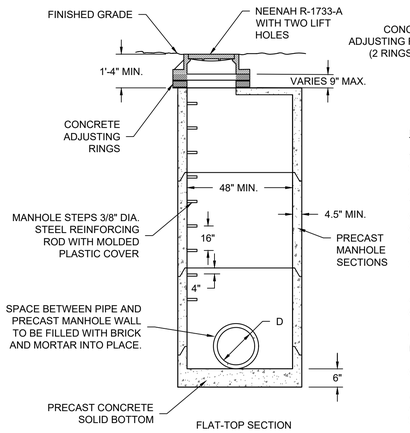
DESCRIPTION | DATE

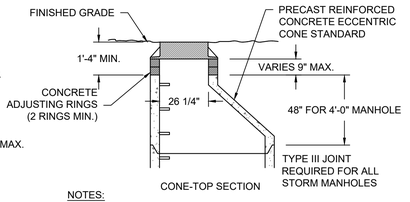
KEN SAIKI DESIGN
LANDSCAPE ARCHITECTS

CITY OF WAUWATOSA
MILWAUKEE COUNTY, WISCONSIN
THE VILLAGE REDEVELOPMENT- PHASE 3
STREETSCAPE DETAILS

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By Ken Saiki Design, Inc.

DATE: 03/13/2017
SCALE:
JOB NO.
PROJECT MANAGER: KS
DESIGNED BY: JS
CHECKED BY: NS
SHEET NUMBER
L29





NOTES:

1. CONSTRUCT MANHOLE IN ACCORDANCE WITH FILE NO. 12 OF THE STATE STANDARD SPECIFICATIONS FOR SEWER AND WATER.
2. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY RINGS SHALL BE GROOVED TO RECEIVE STEP.
3. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
4. JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING MORTAR, OR FLEXIBLE RUBBER TYPE GASKETS FOR STORM MANHOLES.
5. AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ. INCH PER LINEAL FOOT MIN.
6. 3" OF BEDDING STONE UNDER BASE.
7. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL MANHOLE SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

B PRECAST STORM MANHOLE
SCALE:NTS

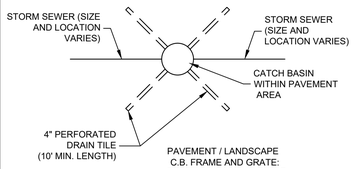
THE SIGMA GROUP
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www.thesigmagroup.com
1300 West Canal Street
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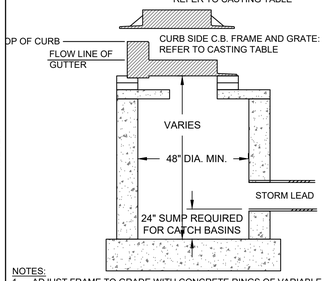
HARLOW AND HEM
7487 HARWOOD AVENUE
WAUWATOSA, WI

DETAILS

TMEYER

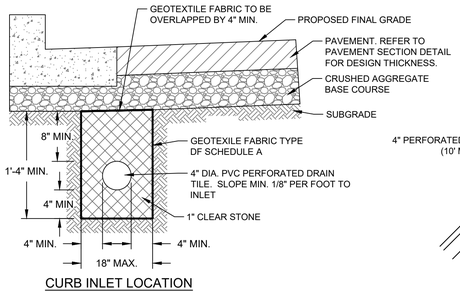
CATCH BASIN WITHIN LOW POINT OF PAVEMENT AREA





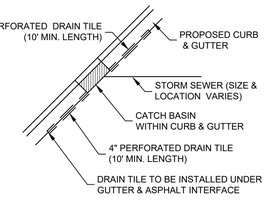
NOTES:
1. ADJUST FRAME TO GRADE WITH CONCRETE RINGS OF VARIABLE THICKNESS. MAXIMUM RING HEIGHT = 6". MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING.
2. CONCRETE AND REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION C-478.
3. 3" MIN. BEDDING OF STONE UNDER BASE REQUIRED , ADDITIONAL BEDDING STOME MAY BE REQUIRED ON WET SUB-GRADE.
4. UNLESS NOTED ON THE PLANS CONTRACTOR IS RESPONSIBLE FOR ALL CATCH BASIN SIZING AND SHALL PROVIDE A SHOP DRAWING TO THE SIGMA GROUP, INC. BEFORE THEY ARE RELEASED FOR PRODUCTION.

C INLET AND CATCH BASIN
SCALE:NTS

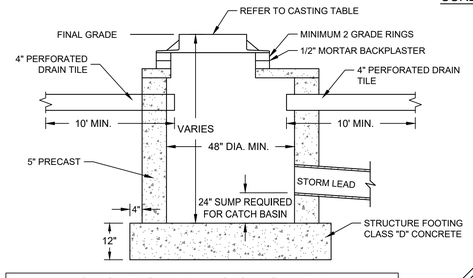


CURB INLET LOCATION SECTION

NOTE:
DRAIN TILE SHALL HAVE TWO (2) SEGMENTS POSITIONED ALONG THE GUTTER & ASPHALT INTERFACE.

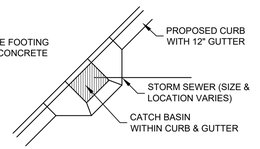


CURB INLET WITHIN CURB & GUTTER PLAN

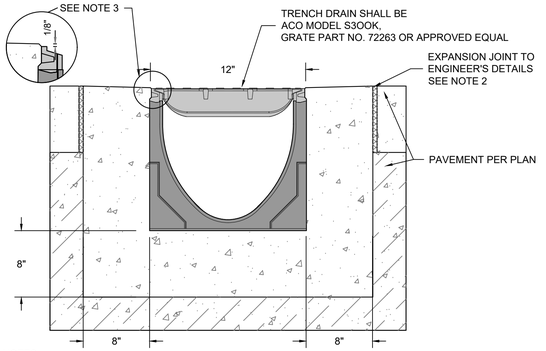


CATCH BASIN / INLET CASTING TABLE

	IF 18" CURB & GUTTER		IF 24" CURB & GUTTER		IF 30" CURB AND GUTTER	
	CASTING	GRATE	CASTING	GRATE	CASTING	GRATE
CURB INLET	NEENAH R-3067	A	NEENAH R-3067	A	NEENAH R-3228H	C
AREA INLET	NEENAH R-2050	C				

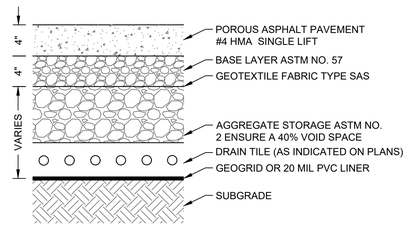


CONCRETE BUMP OUT TO BE APPLIED FOR 12" GUTTER PAN



NOTES:
1. MINIMUM CONCRETE STRENGTH OF 4,OOO PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
2. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
3. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" ABOVE THE TOPE OF THE CHANNEL EDGE.
4. CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS.
5. REFER TO ACO'S LATEST INSTALLATION INSTRUCTION FOR FURTHER DETAILS.
6. GRADE TYPE E-EN SHALL BE USED FOR ADA AREAS.

D PREFABRCATED TRENCH DRAIN
SCALE:NTS



NOTES:
1. PAVEMENT SURFACE PERCENT VOIDS SHOULD BE LESS THAN 25%.
2. JOINT STONE AND BEDDING COURSE SHALL CONSIST OF ASTM C-33, 8, 9, 89, OR 57 AGGREGATE.
3. AGGREGATE STORAGE RESERVOIR DEPTH SHALL BE A MINIMUM OF 12 INCHES. AGGREGATE STORAGE RESERVOIR SHALL USE AN OPEN GRADED BASE CONSISTING OF CRUSHED STONE OR CRUSHED GRAVEL WITH NO GREATER THAN 5% PASSING THE NO. 200 SIEVE.
4. UNDERDRAINS CAN BE LOCATED WITHIN OR BELOW THE AGGREGATE STORAGE RESERVOIR. UNDERDRAINS (OR EQUIVALENT) ARE REQUIRED IF THE AGGREGATE STORAGE RESERVOIR DRAIN DOWN TIME WILL EXCEED 72 HOURS. THE SLOPE OF THE SUBGRADE SHALL BE AS FLAT AS POSSIBLE BE NO GREATER THAN 2%.
5. POROUS PAVEMENT SHALL CONFORM TO THE WDNR TECHNICAL STANDARD # 1008

E POROUS ASPHALT WITH LINER
SCALE:NTS

PRELIMINARY
NOT FOR
CONSTRUCTION

ISSUANCE	DATE

NO. REVISION	DATE

PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.04.03
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----

SHEET NO:
C402

C402

20176

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4 OVERALL ELEVATION - NORTH SITE

Scale: 1/16" = 1'-0"

0' 4' 8' 16' 24'



3 OVERALL ELEVATION - WAUWATOSA AVENUE

Scale: 1/16" = 1'-0"

0' 4' 8' 16' 24'



2 OVERALL ELEVATION - SOUTH

Scale: 1/16" = 1'-0"

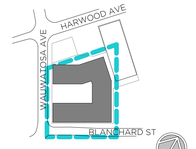
0' 4' 8' 16' 24'



1 OVERALL ELEVATION - NORTH EAST

Scale: 1/16" = 1'-0"

0' 4' 8' 16' 24'



KEY PLAN

NO SCALE

T 414.220.9640

751 N Jefferson St.
Suite 200
Milwaukee, WI 53202

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CONSULTANTS:

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HARLOW AND HEM

7460 BLANCHARD ST, WAUWATOSA, WI 53213; Tax Key ID 370-0324-001
7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000
BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL ELEVATIONS

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A04-1**



4 NORTH WING - NORTHWEST

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



2 NORTH WING - NORTH ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'

EXTERIOR MATERIAL LEGEND

FIBER CEMENT HORIZONTAL SIDING
SMOOTH LAP SIDING ALTERNATING SIZES (8.25" / 6.25" / 5.25")
SEE ENLARGED ELEVATION FOR TYP. PATTERN
METAL TRIM SYSTEM W/ EXPOSED FASTENERS
COLOR: NIGHT GRAY/LIGHT MIST
BASIS OF DESIGN - JAMES HARDIE COLLECTION - OR EQUAL

FIBER CEMENT PANEL SIDING
SMOOTH TEXTURED PANELS
METAL TRIM SYSTEM
W/ EXPOSED FASTENERS

FCP-01
COLOR: ARTIC WHITE

FCP-02
COLOR: IRON GRAY

FCP-03
COLOR: LIGHT MIST

BASIS OF DESIGN - JAMES HARDIE COLLECTION - OR EQUAL

COMPOSITE/ALUMINUM SIDING
COLOR: WOOD
BASIS OF DESIGN - LONGBOARD ALUMINUM SIDING

MASONRY
FACE BRICK 02, (LINEAR) 3-5/8" H x 23-5/8" L x 3-5/8" D
COLOR: - ALABASTER
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

BASE BRICK 02, (LINEAR) 3-5/8" H x 23-5/8" L x 3-5/8" D
COLOR: - ALABASTER
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

MASONRY
FACE BRICK 01, MODULAR SIZE 3-5/8"H x 7-5/8"L x 3-5/8"D
COLOR: MANGANESE IRONSPOT, SMOOTH
BASIS OF DESIGN - ENDICOTT BRICK - OR EQUAL

BASE BRICK 01, MODULAR SIZE 3 5/8"H x 7 5/8"L x 3 5/8"D
COLOR: - MIDNIGHT GROUND
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

CONCRETE
CAST-IN PLACE CONCRETE

GENERAL EXTERIOR ELEVATION NOTES TO CONTRACTOR

1.



3 EAST WING - EAST ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



1 EAST WING - NORTHEAST ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



KEY PLAN

NO SCALE

T 414.220.9640

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Suite 200
Milwaukee, WI 53202

CONSULTANTS:

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HARLOW AND HEM

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
EXTERIOR ELEVATIONS

REVISIONS:

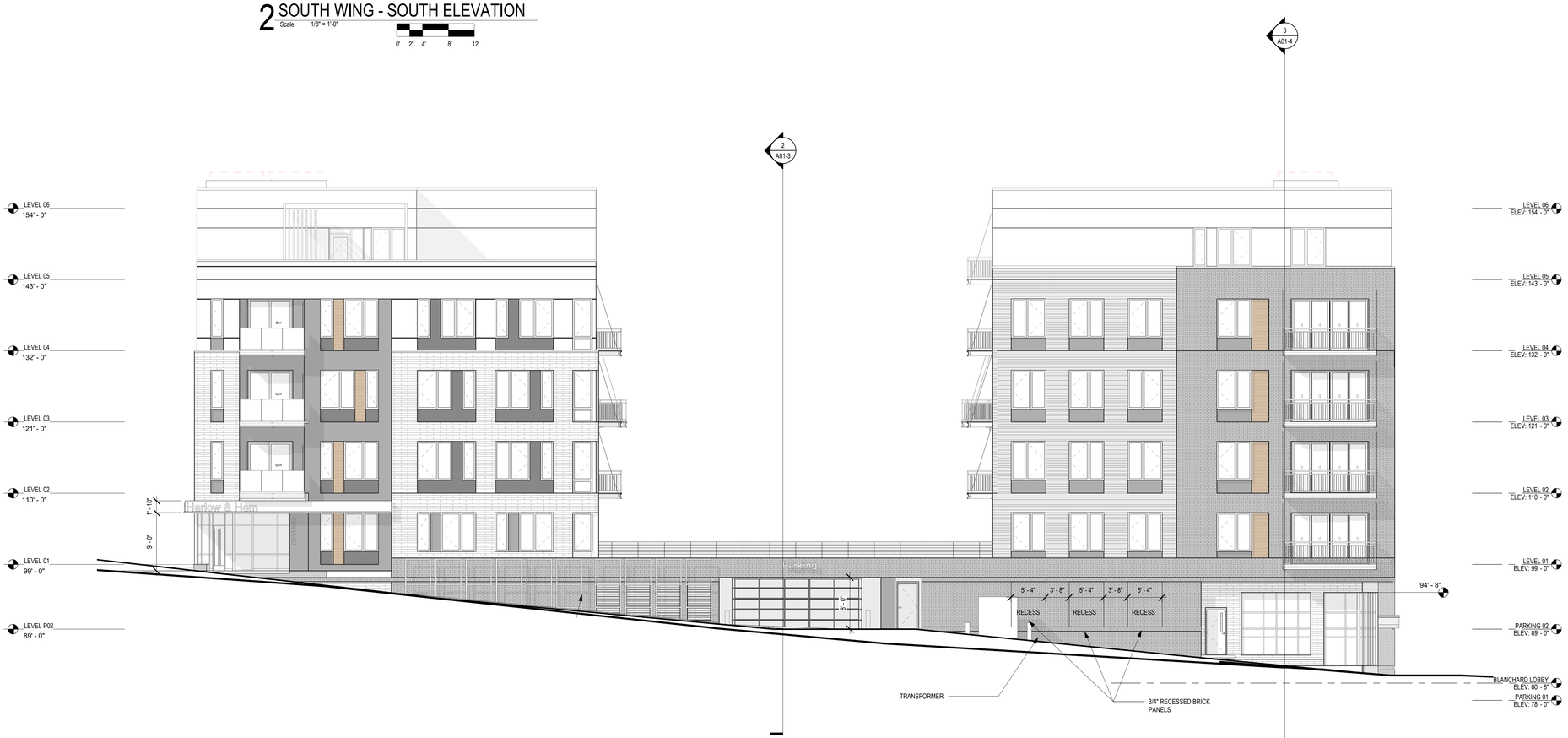
SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A04-2**



2 SOUTH WING - SOUTH ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



1 SOUTH WING - WEST ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'

EXTERIOR MATERIAL LEGEND

FIBER CEMENT HORIZONTAL SIDING
SMOOTH LAP SIDING ALTERNATING SIZES (8.25" / 6.25" / 5.25")
SEE ENLARGED ELEVATION FOR TYP. PATTERN
METAL TRIM SYSTEM W/ EXPOSED FASTENERS
COLOR: NIGHT GRAY/LIGHT MIST
BASIS OF DESIGN - JAMES HARDIE COLLECTION - OR EQUAL

FCP-01
COLOR: ARTIC WHITE

FCP-02
COLOR: IRON GRAY

FCP-03
COLOR: LIGHT MIST

FIBER CEMENT PANEL SIDING
SMOOTH TEXTURED PANELS
METAL TRIM SYSTEM
W/ EXPOSED FASTENERS
BASIS OF DESIGN - JAMES HARDIE COLLECTION - OR EQUAL

COMPOSITE/ALUMINUM SIDING
COLOR: WOOD
BASIS OF DESIGN - LONGBOARD ALUMINUM SIDING

MASONRY
FACE BRICK 02, (LINEAR) 3-5/8" H x 23-5/8" L x 3-5/8" D
COLOR: - ALABASTER
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL
BASE BRICK 02, (LINEAR) 3-5/8" H x 23-5/8" L x 3-5/8" D
COLOR: - ALABASTER
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

MASONRY
FACE BRICK 01, MODULAR SIZE 3-5/8"H x 7-5/8"L x 3-5/8"D
COLOR: MANGANESE IRONSPOT, SMOOTH
BASIS OF DESIGN - ENDICOTT BRICK - OR EQUAL
BASE BRICK 01, MODULAR SIZE 3 5/8"H x 7 5/8"L x 3 5/8"D
COLOR: - MIDNIGHT GROUND
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

CONCRETE
CAST-IN PLACE CONCRETE

GENERAL EXTERIOR ELEVATION NOTES TO CONTRACTOR

1.



KEY PLAN
NO SCALE

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Suite 200
Milwaukee, WI 53202

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7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key/ ID 370-0359-000
BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
EXTERIOR ELEVATIONS

REVISIONS:

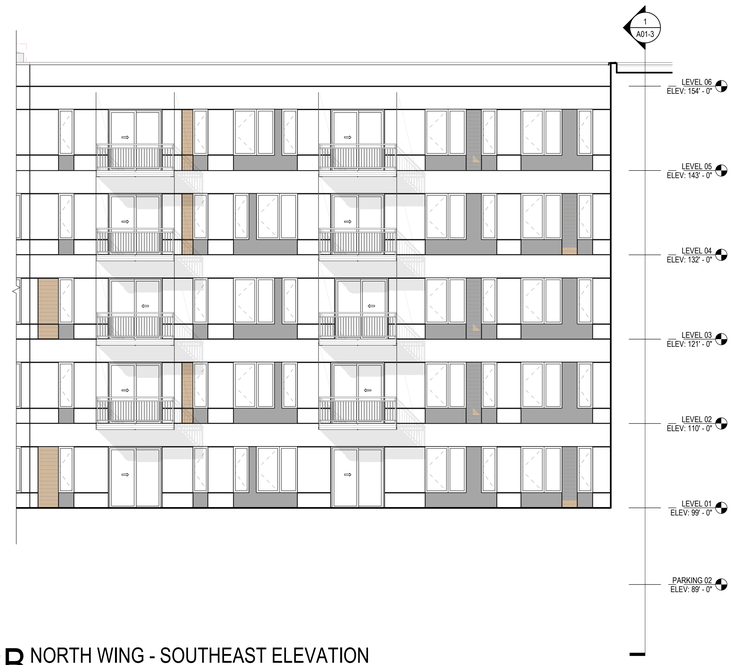
SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A04-3**



3A NORTH WING - SOUTH ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



3B NORTH WING - SOUTHEAST ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



2A EAST WING - SOUTHWEST ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'

2B EAST WING - WEST ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'



1 SOUTH WING - NORTH ELEVATION

Scale: 1/8" = 1'-0"

0' 2' 4' 8' 12'

EXTERIOR MATERIAL LEGEND

FIBER CEMENT HORIZONTAL SIDING
SMOOTH LAP SIDING ALTERNATING SIZES (8.25" / 6.25" / 5.25")
SEE ENLARGED ELEVATION FOR TYP. PATTERN
METAL TRIM SYSTEM W/ EXPOSED FASTENERS
COLOR: NIGHT GRAY/LIGHT MIST
BASIS OF DESIGN - JAMES HARDIE COLLECTION - OR EQUAL

FIBER CEMENT PANEL SIDING
SMOOTH TEXTURED PANELS
METAL TRIM SYSTEM
W/ EXPOSED FASTENERS

FCP-01
COLOR: ARTIC WHITE

FCP-02
COLOR: IRON GRAY

FCP-03
COLOR: LIGHT MIST

BASIS OF DESIGN - JAMES HARDIE COLLECTION - OR EQUAL

COMPOSITE/ALUMINUM SIDING
COLOR: WOOD
BASIS OF DESIGN - LONGBOARD ALUMINUM SIDING

MASONRY
FACE BRICK 02, (LINEAR) 3-5/8" H x 23-5/8" L x 3-5/8" D
COLOR: - ALABASTER
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

BASE BRICK 02, (LINEAR) 3-5/8" H x 23-5/8" L x 3-5/8" D
COLOR: - ALABASTER
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

MASONRY
FACE BRICK 01, MODULAR SIZE 3-5/8"H x 7-5/8"L x 3-5/8"D
COLOR: MANGANESE IRONSPOT, SMOOTH
BASIS OF DESIGN - ENDICOTT BRICK - OR EQUAL

BASE BRICK 01, MODULAR SIZE 3 5/8"H x 7 5/8"L x 3 5/8"D
COLOR: - MIDNIGHT GROUND
BASIS OF DESIGN - CORDOVA STONE BY ECHELON MASONRY - OR EQUAL

CONCRETE
CAST-IN PLACE CONCRETE

GENERAL EXTERIOR ELEVATION NOTES TO CONTRACTOR

1.

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
EXTERIOR ELEVATIONS - COURTYARD

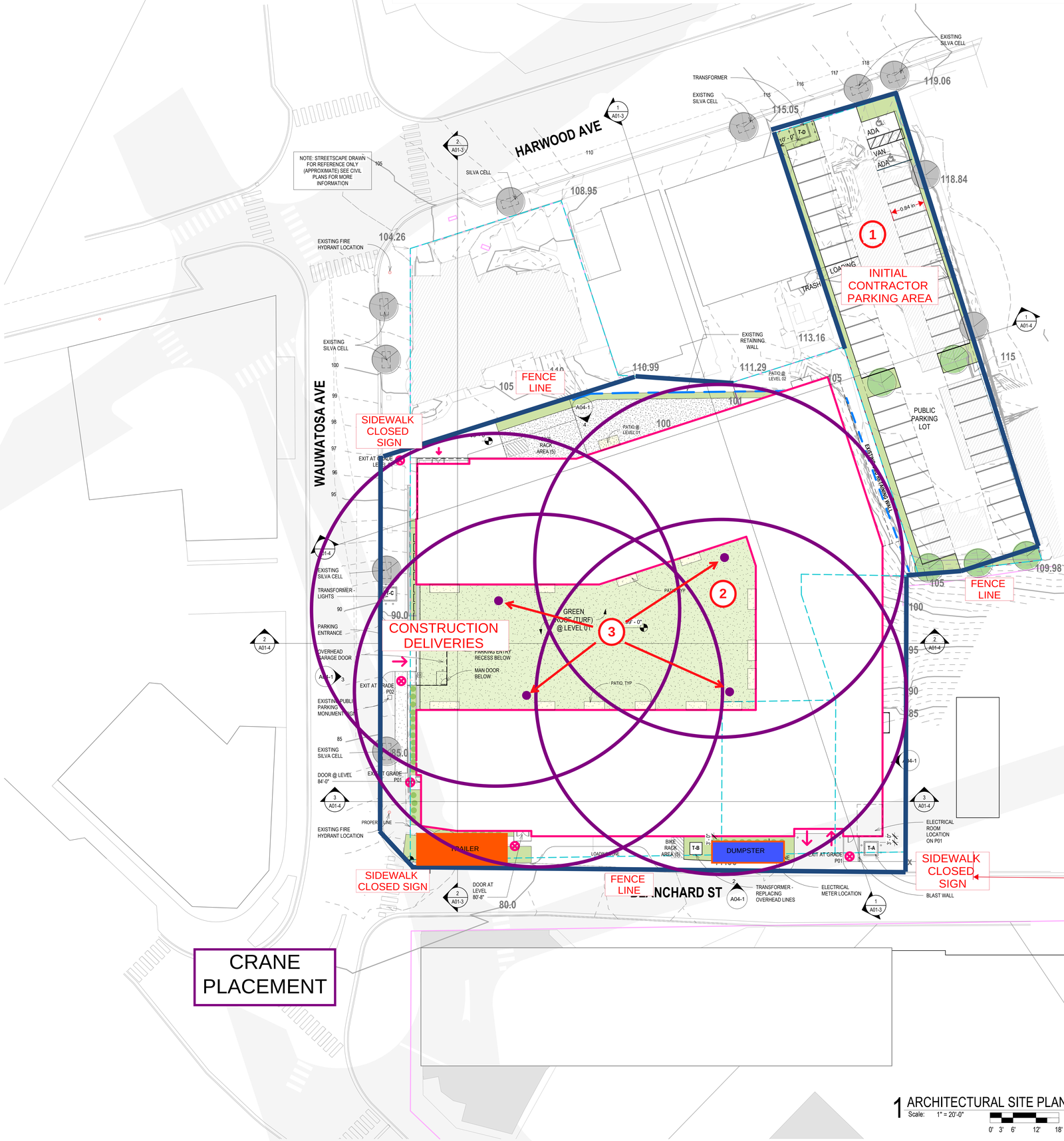
REVISIONS:



KEY PLAN
NO SCALE

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A04-4**

HARLOW AND HEM CONSTRUCTION STAGING PLAN



NOTES

1. The building in this area will be demolished and the Initial Contractor Parking Area will be created at the outset of construction and prior to significant numbers of contractor vehicles needing parking at the site. Temporary stairs or a ramp will be built to connect the parking area to the main construction site. We anticipate this parking area to fulfill the needs of our contractor and subcontractors throughout construction.

2. The green area is the courtyard of the building below which is part of the parking garage. This portion of the parking garage will be left out to facilitate material deliveries and building construction. This portion of the parking garage will be installed towards the end of construction.

3. The purple circles indicate the location of a crane throughout construction. The crane will be located in each of the four locations moving from location to location as construction progresses. The cranes will be located to avoid the need for air right easements frfom adjoining property owners.

1 ARCHITECTURAL SITE PLAN
Scale: 1" = 20'-0"
0' 3' 6' 12' 18'



KEY PLAN
NO SCALE

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
ARCHITECTURAL SITE PLAN

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**CHECK SET**
DATE ISSUED	**03/25/2024**
SHEET NUMBER	**A01-2**

OVERALL PLANT SCHEDULE:

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
Deciduous Trees						
Ace / Red	1	Acer x freemanii 'Ed Gartner'	Redhead Maple	2 1/2"-3"	BB	
Car / Fir	4	Carpinus caroliniana 'JN Upright'	Firespire Musclewood	1 1/2"-2"	BB	
Gle / Str	2	Gleditsia triacanthos 'Draves' PPAF	Street Keeper Honeylocust	2 1/2"-3"	BB	
Ost / vir	7	Ostrya virginiana	Ironwood	2 1/2"-3"	BB	
Que / Reg	2	Quercus robur x bicolor 'Long'	Regal Prince English Oak	2 1/2"-3"	BB	
Evergreen Trees						
Jun / low	32	Juniperus chinensis 'Iowa'	Iowa Juniper	5' - 6' ht.	BB	
Thu / Tec	15	Thuja occidentalis 'Bail John' PP15,850	Technito Arborvitae	5' - 6' ht.	BB	
Evergreen Shrubs						
Jun / Kal	17	Juniperus chinensis 'Pfitzeriana Kallay'	Kallays Compact Juniper	18" - 24"	Cont.	
Tax / Den	10	Taxus x media 'Densiformus'	Densi Yew	24" - 30"	Cont.	
Thu / Eme	14	Thuja occidentalis ' Smaragd'	Emerald Arborvitae	4' - 5' ht.	Cont.	
Evergreen Shrubs (broadleaf)						
Bux / Gre	34	Buxus x 'Green Mound'	Green Mound Boxwood	3 gallon	Cont.	
Deciduous Shrubs						
Aro / mel	6	Aronia melanocarpa	Black Chokeberry	24" - 30"	Cont.	
Cor / Art	3	Cornus stolonifera 'Farrow' PP18,523	Artic Fire Dogwood	18" - 24"	Cont.	
Rha / Fin	3	Rhamnus frangula 'Fine Line Ron Williams'	Fine Line Buckthorn	4' ht.	Cont.	
Rhu / Gro	5	Rhus aromatica 'Gro-low'	Gro-low Sumac	2 gallon	Cont.	
Sam / Lem	8	Sambucus racemosa 'SMNSRD4'	Lemony Lace Elderberry	2 gallon	Cont.	
Ste / inc	13	Stephanandra incisa 'Crispa'	Cutleaf Stephanandra	18"	Cont.	
Perennials						
Hos / Sum	8	Hosta 'Sum and Substance'	Sum and Substance Hosta	1 gallon	Cont.	
Ornamental Grasses						
Cal / Kar	17	Calamagrostis acutiflora 'Karl Foerster'	Karl Foerster Feather Reed Grass	1 gallon	Cont.	
Pan / Nor	15	Panicum virgatum 'Northwind'	Northwind Switch Grass	1 gallon	Cont.	
Vines						
Cam / Ato	9	Campsis radicans 'Stromboli'	Atomic Red Trumpet Vine	1 gallon	Cont.	requires trellis

VEHICLE USE AREA (VUA) - GREEN SPACE CALCULATIONS:

INTERIOR VUA LANDSCAPE REQUIREMENTS:
Vehicle Use Area (VUA) = On-site resident parking and additional public parking is located in underground parking garage. VUA in surface public parking lot is 12,653 S.F.

- Interior VUA Parking Lot Landscape Area Required (10% of area) = 1,265 S.F.
- Interior VUA Parking Lot Landscape Area Provided = **1,333 S.F.**
- Number of Shade Trees Required = 1,265 S.F. / 180 S.F. = 7 Shade Trees
- Number of Shade Trees Provided = **4 Shade Trees**
- Parking Lot Island Landscape Widths & Area Dimensions Shown on Plan

PERIMETER VUA LANDSCAPE REQUIREMENTS:
Perimeter Length of Vehicle Use Area (VUA) Adjacent to Street Public ROW = 40 L.F.
Required Trees & Shrubs (2 deciduous trees and 8 shrubs per 50 L.F.)
- Required Trees (0.8 X 2) = 2 Trees
- Required Shrubs (0.8 X 8) = 7 Shrubs

- Number of Trees Provided Adjacent to Street Public ROW = **2 Trees**
- Number of Shrubs Provided Adjacent to Street Public ROW = **9 Shrubs**

VEHICLE USE AREA (VUA):

PAVEMENT

AREA OF PARKING LOT INTERIOR GREEN SPACE — 951 SF

LENGTH OF PARKING LOT PERIMETER ALONG R.O.W. — 20'-0"

WIDTH OF PARKING LOT ISLAND — 11'-2"

SNOW STORAGE AREA

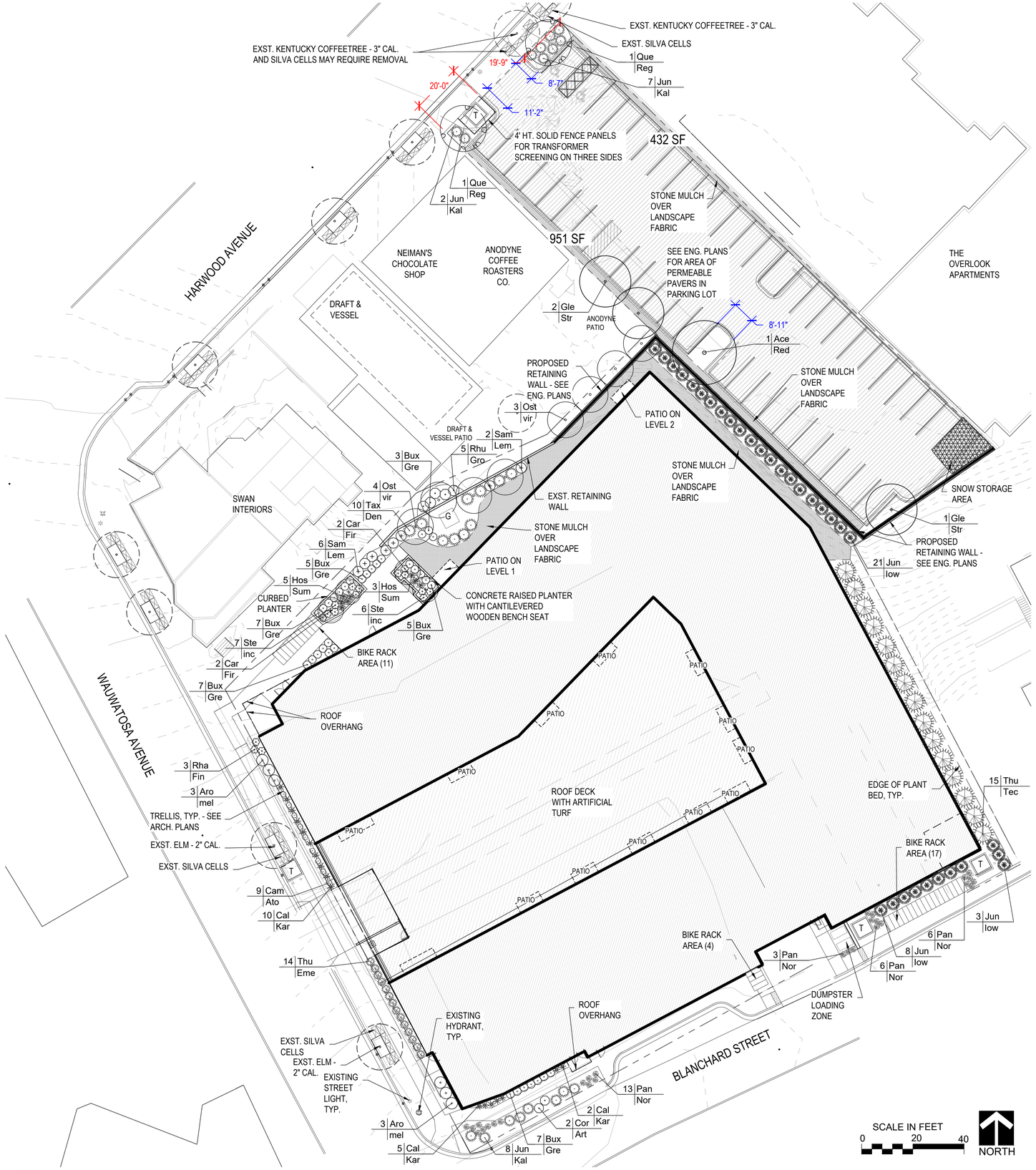
PLANTING - GROUNDCOVER KEY:

STONE MULCH OVER LANDSCAPE FABRIC

NOTES:

A. LANDSCAPE IRRIGATION: AUTOMATED LANDSCAPE IRRIGATION SYSTEM TO BE INSTALLED. LANDSCAPE IRRIGATION SYSTEM TO BE DESIGNED AND INSTALLED BY LANDSCAPE CONTRACTOR OR IRRIGATION CONSULTANT.

B. SNOW REMOVAL ON SITE: PEDESTRIAN ROUTES SHALL BE KEPT CLEAR OF SNOW. SNOW TO BE PUSHED OR BLOWN TO THE SIDE OF THE ROUTE TO ALLOW PASSAGE. SEE PLAN FOR LOCATION OF SNOW STORAGE IN PARKING LOT.



1 L00-1 SITE LANDSCAPE PLAN

SCALE: 1" = 20'-0"

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CONSULTANTS:

new eden LANDSCAPE ARCHITECTURE
131 W. Seeboth Street, Suite 240
Milwaukee, WI 53204
Tel: (414) 530-1080 www.neweedenlandscape.com

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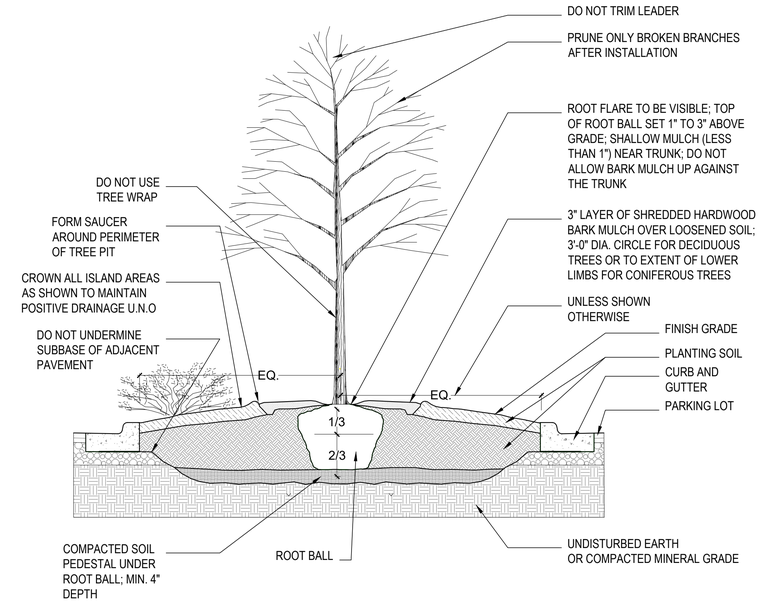
7460 BLANCHARD ST; WAUWATOSA, WI 53213; Tax Key ID 370-0324-001
7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000

BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE: **Site Landscape Plan**

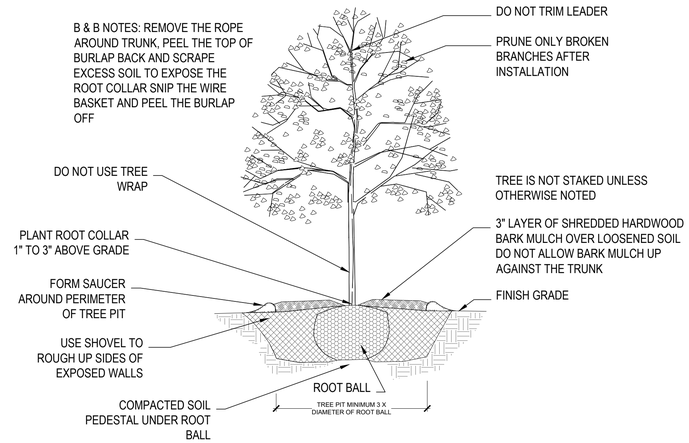
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SET TYPE	**PUD PRELIMINARY SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**L00-1**



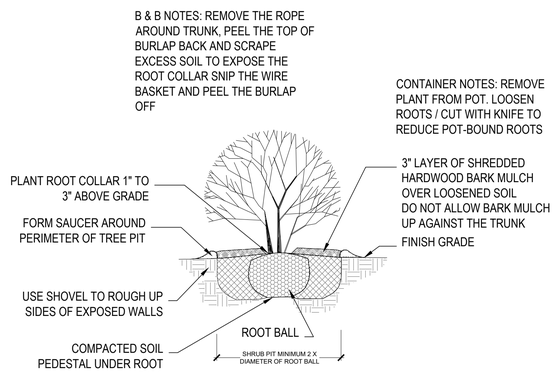
3 L00-2 TREE PLANTING - IN PARKING LOT ISLAND

NOT TO SCALE



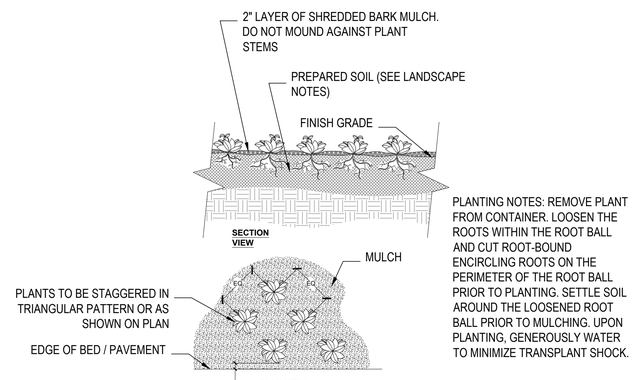
4 L00-2 TREE PLANTING - TYPICAL DETAIL

NOT TO SCALE



2 L00-2 SHRUB PLANTING - TYPICAL DETAIL

NOT TO SCALE



1 L00-2 PERENNIAL PLANTING - TYPICAL DETAIL

NOT TO SCALE

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Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE: **Planting Details**

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	201103
SET TYPE	**PUD PRELIMINARY SUBMITTAL**
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SHEET NUMBER	**L00-2**

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04/10/2024

PRELIMINARY PUD SUBMITTAL

CAP PROJECT #: 230702

OWNER:
MANDEL GROUP
330 E KILBOURN AVE.
MILWAUKEE, WI 53202
TEL. (414) 347-3600

CONSULTING ARCHITECT:
CONTINUUM ARCHITECTS + PLANNERS
751 N JEFFERSON ST - SUITE 200
MILWAUKEE, WI 53202
TEL. (414) 220-9640

CONSULTING CIVIL ENGINEER:
THE SIGMA GROUP, INC
1300 W. CANAL STREET
MILWAUKEE, WI 53233
TEL. (414) 643-4169

CONSULTING LANDSCAPE ARCHITECT:
NEW EDEN LANDSCAPE ARCHITECTURE, LLC
131 W. SEEBOTH STREET
MILWAUKEE, WI 53204
TEL. (414) 530-1080

SHEET INDEX:

CIVIL

C000	COVER SHEET
C001	SITE SURVEY
C002	SITE PREPARATION & EROSION CONTROL PLAN
C100	SITE PLAN
C200	GRADING PLAN
C300	UTILITY PLAN
C400	DETAILS
C401	DETAILS
C402	DETAILS
C403	DETAILS
C500	SPECIFICATIONS
C501	SPECIFICATIONS
C502	SPECIFICATIONS

ARCHITECTURAL

A00-0	COVER SHEET
A01-2	ARCHITECTURAL SITE PLAN
A01-3	SITE SECTIONS
A01-4	SITE SECTIONS
A01-5	SITE SECTIONS
A02-1	PARKING PLAN - LEVEL P01
A02-2	PARKING PLAN - LEVEL P02
A03-1	OVERALL PLAN - LEVEL 01
A03-2	OVERALL PLAN - LEVEL 02
A03-3	OVERALL PLAN - LEVEL 03
A03-4	OVERALL PLAN - LEVEL 04
A03-5	OVERALL PLAN - LEVEL 05
A03-6	OVERALL PLAN - LEVEL 06
A04-1	OVERALL ELEVATIONS
A04-2	EXTERIOR ELEVATIONS
A04-3	EXTERIOR ELEVATIONS
A04-4	EXTERIOR ELEVATIONS - COURTYARD
A04-5	UNIT MATRIX
A04-9	FIRE ACCESS PLAN

LANDSCAPE

L00-1	SITE LANDSCAPE PLAN
L00-2	PLANTING DETAILS

ELECTRICAL

E000	SITE LIGHTING LAYOUT



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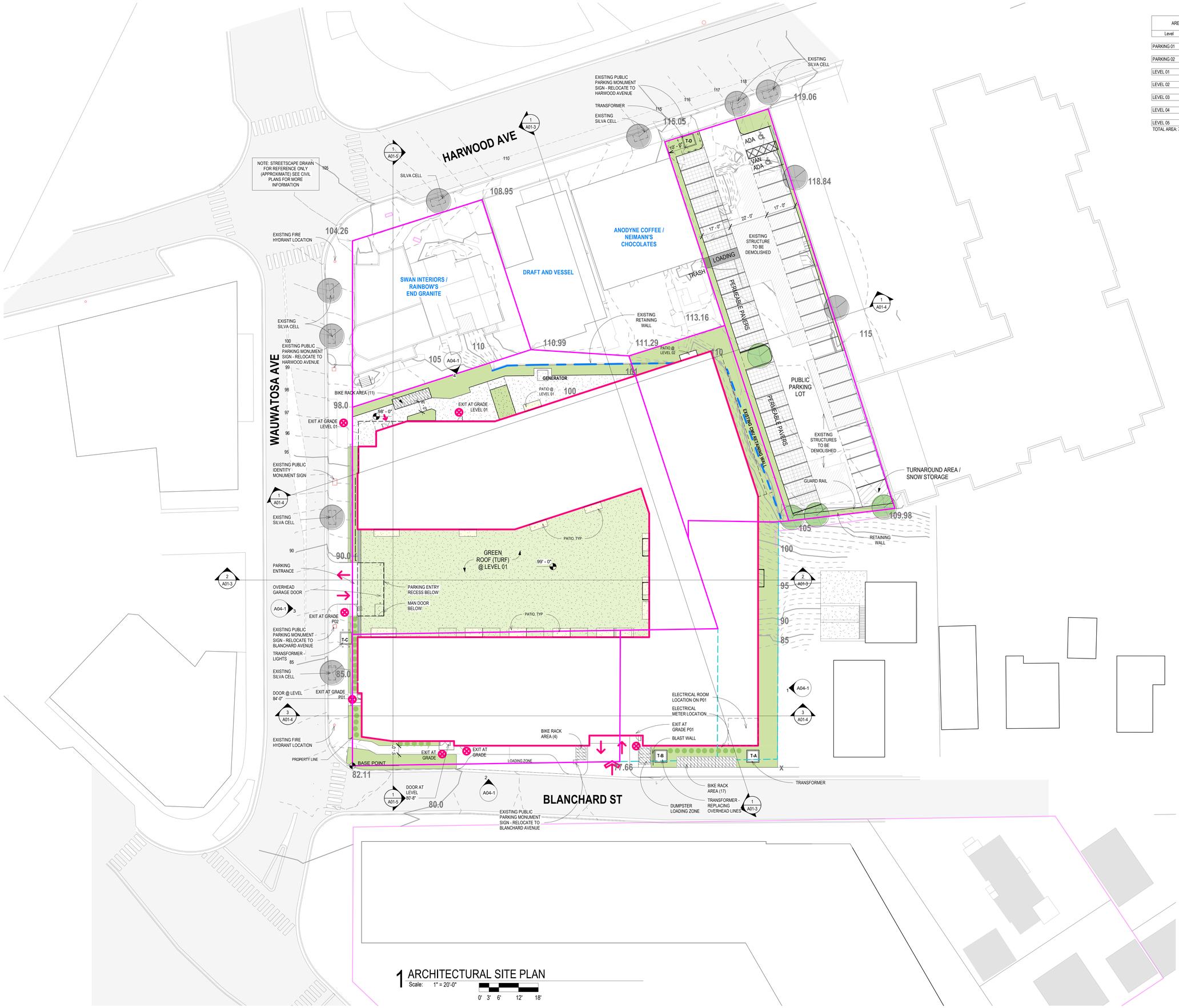
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SHEET TITLE:
COVER SHEET

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A00-0**

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4/10/2024 10:28:06 AM



1 ARCHITECTURAL SITE PLAN
Scale: 1" = 20'-0"
0' 3' 6' 12' 18'

KEY PLAN
NO SCALE

AREA SCHEDULE	
Level	Area
PARKING 01	44411 SF
PARKING 02	44117 SF
LEVEL 01	32958 SF
LEVEL 02	33146 SF
LEVEL 03	33146 SF
LEVEL 04	33146 SF
LEVEL 05	26455 SF
TOTAL AREA: 7	247380 SF

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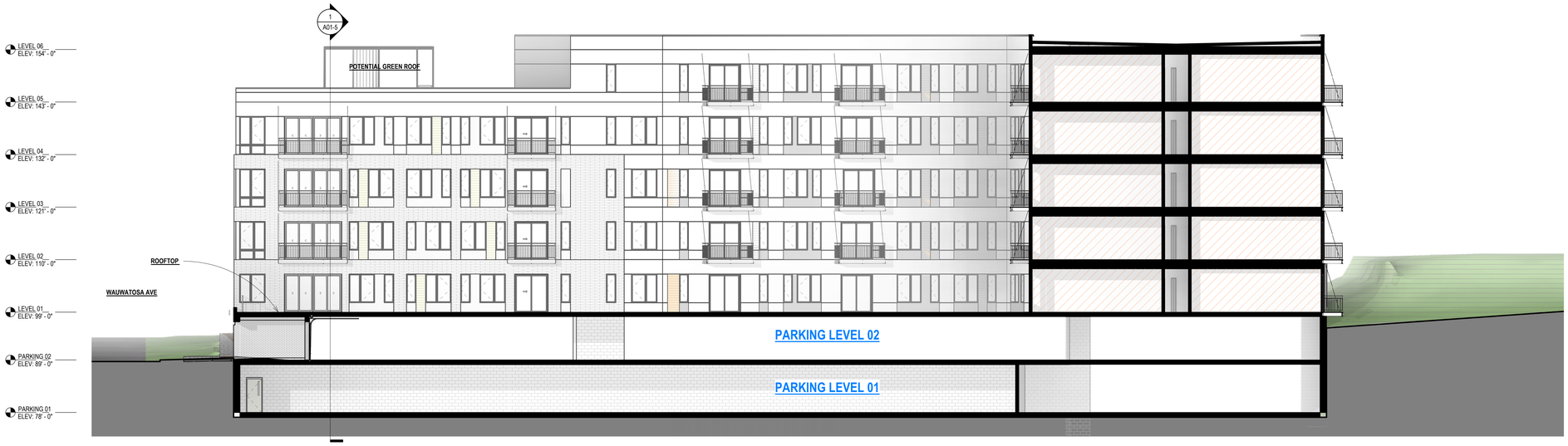
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SHEET TITLE:
ARCHITECTURAL SITE PLAN

REVISIONS:

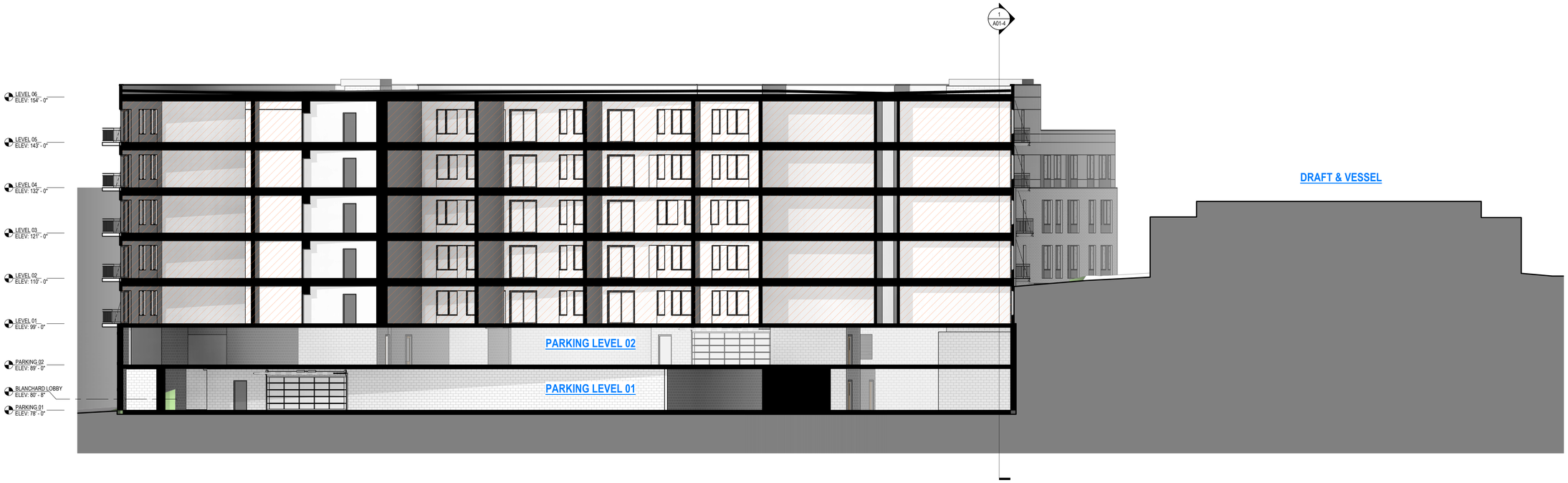
SCALE	VARIES
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DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A01-2**



2 EAST-WEST SITE SECTION THROUGH COURTYARD

Scale: 3/32" = 1'-0"

0' 3' 6' 12' 18'



1 NORTH-SOUTH SITE SECTION

Scale: 3/32" = 1'-0"

0' 3' 6' 12' 18'



KEY PLAN

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SHEET TITLE:
SITE SECTIONS

REVISIONS:

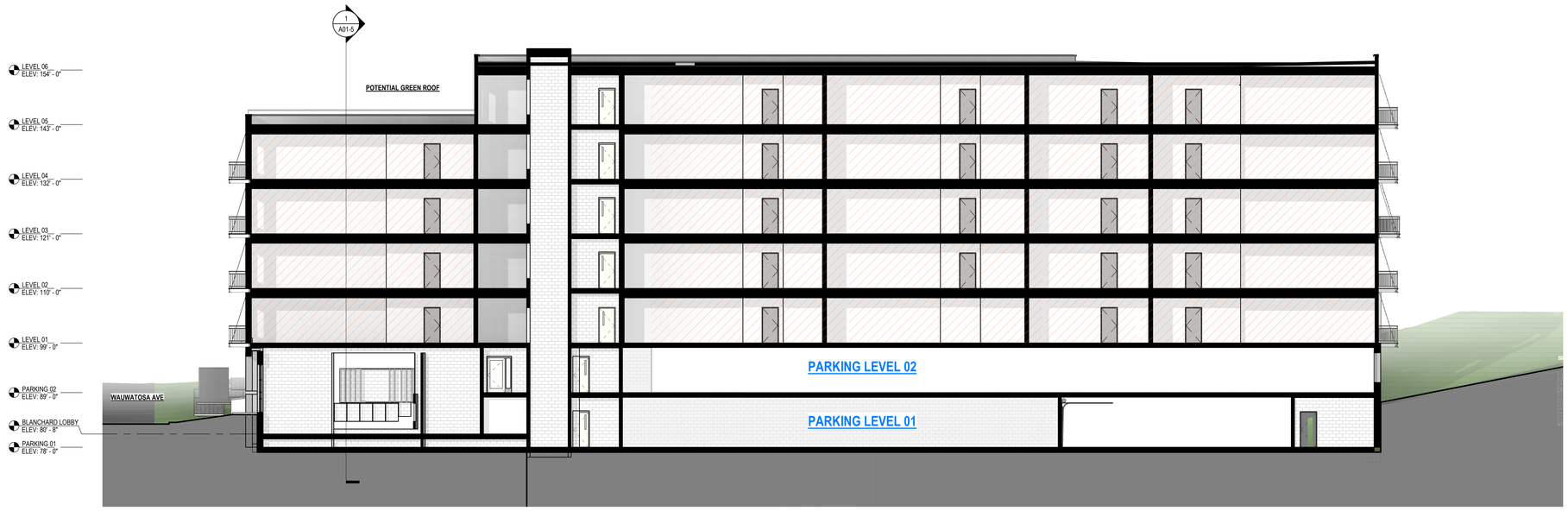
SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A01-3**



1 EAST-WEST SITE SECTION THROUGH LOBBY

Scale: 3/32" = 1'-0"

0' 3' 6' 12' 18'



3 EAST-WEST SITE SECTION

Scale: 3/32" = 1'-0"

0' 3' 6' 12' 18'



KEY PLAN

NO SCALE

T 414.220.9640

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CONSULTANTS:

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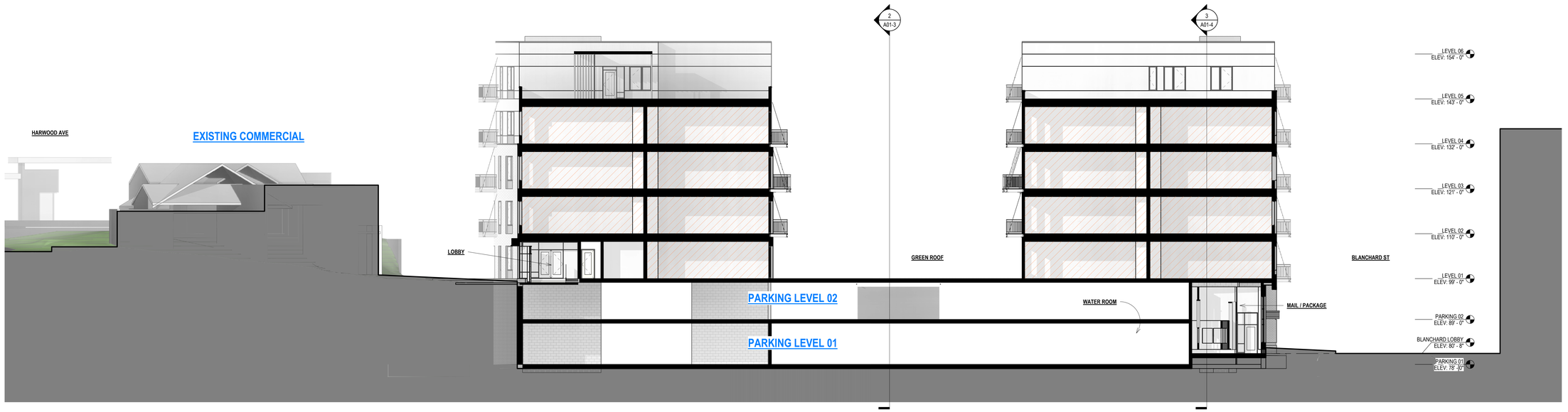
HARLOW AND HEM

7460 BLANCHARD ST, WAUWATOSA, WI 53213; Tax Key ID 370-0324-001
7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000
BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
SITE SECTIONS

REVISIONS:

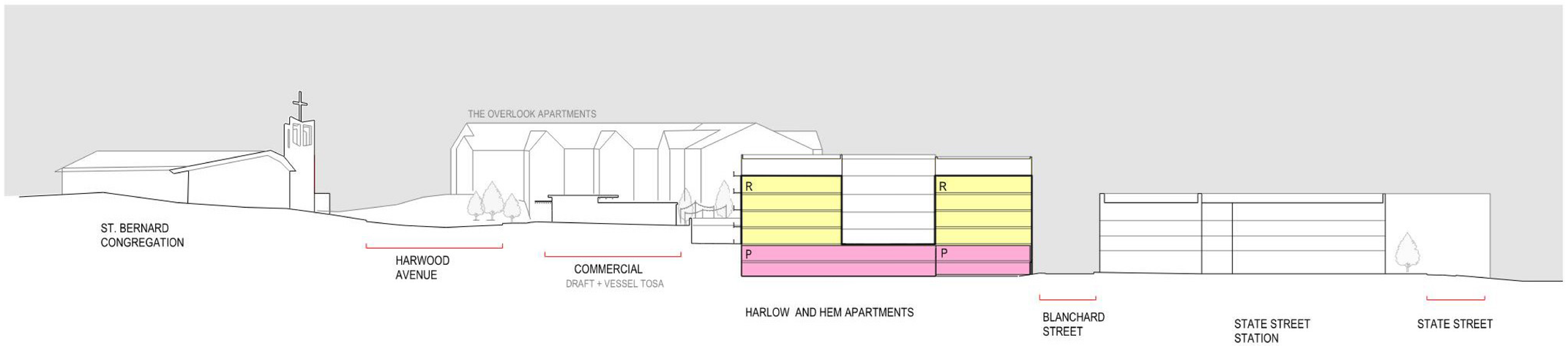
SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A01-4**



1 NORTH-SOUTH SITE SECTION THROUGH LOBBY

Scale: 3/32" = 1'-0"

0' 3' 6' 12' 18'



SITE CONTEXT SECTION **NORTH-SOUTH**



KEY PLAN

NO SCALE

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HARLOW AND HEM

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
SITE SECTIONS

REVISIONS:

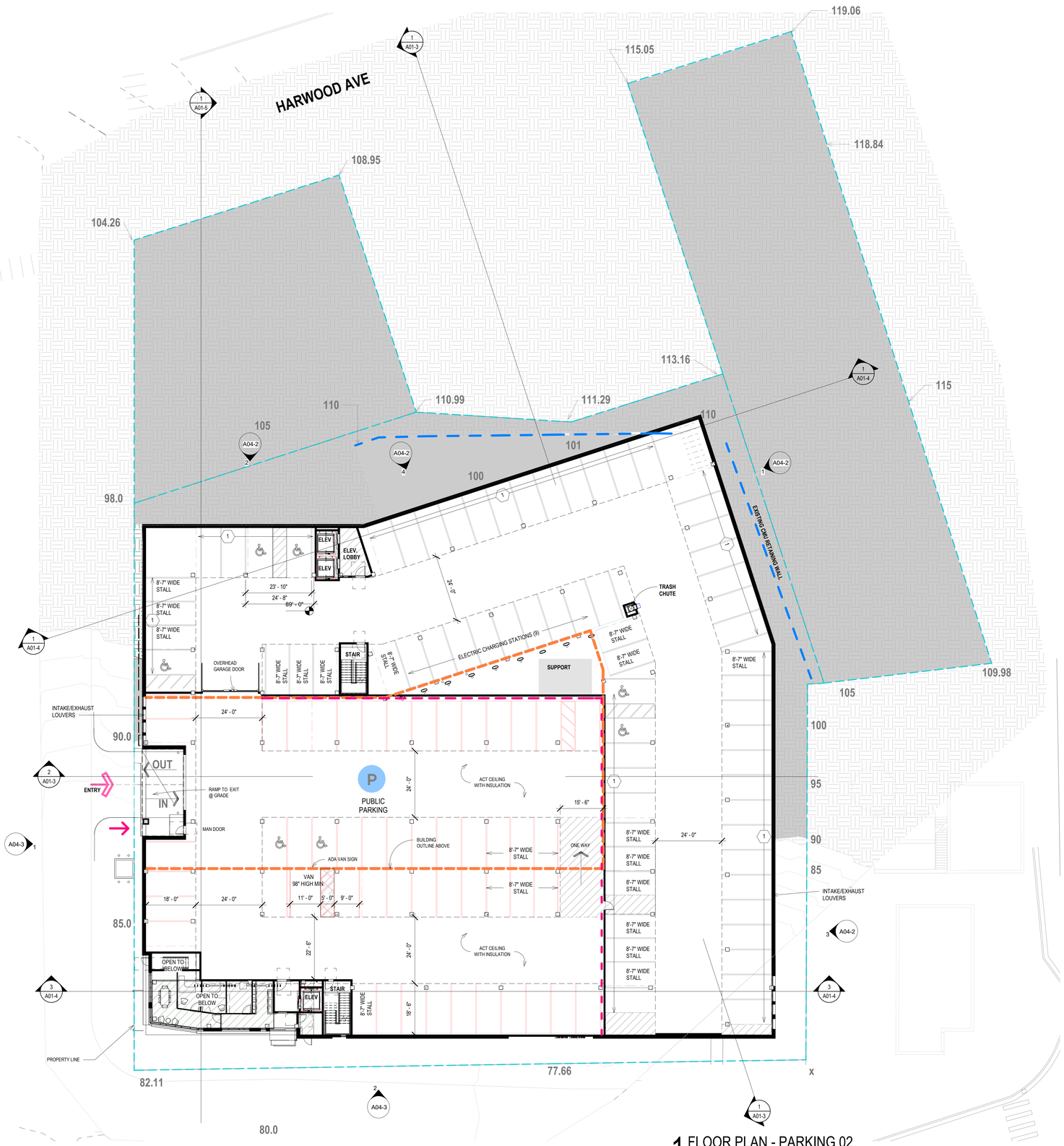
SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A01-5**

NEW WORK PLAN KEY NOTES

SEE PROJECT GENERAL CONDITIONS, GENERAL INFORMATION ON SHEET A001 AND SELECTIVE DEMOLITION, CUTTING AND PATCHING SPECIFICATIONS THAT ARE USED IN ASSOCIATION WITH THESE NOTES.

NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.



1 FLOOR PLAN - PARKING 02

Scale: 1/16" = 1'-0"

0' 3' 6' 12' 18'

PARKING SCHEDULE

Level	Space Size	Comments	#
PARKING 01			
PARKING 01	Parking Space	PRIVATE	119
PARKING 01	Parking Space - ADA	PRIVATE	1
PARKING 01	Parking Space - ADA VAN	PRIVATE	1
			121
			121
PARKING 02			
PARKING 02	Parking Space	PRIVATE	65
PARKING 02	Parking Space 17' Deep	PRIVATE	2
PARKING 02	Parking Space - ADA	PRIVATE	2
			69
PARKING 02	Parking Space	PUBLIC	49
PARKING 02	Parking Space - ADA	PUBLIC	2
PARKING 02	Parking Space - ADA VAN	PUBLIC	1
			52
			121
LEVEL 02			
LEVEL 02	Parking Space 17' Deep	PUBLIC	45
LEVEL 02	Parking Space - ADA	PUBLIC	2
			47
			47
Grand total			289

Req. Residential Parking - Multi Unit Building			TOTAL
STUDIO	1.0 SPACE PER DWELLING UNIT	54	**54**
1 BED	1.0 SPACE PER DWELLING UNIT	59	**59**
2 BED	1.5 SPACES PER DWELLING UNIT	27	**40.5**
3 BED	2.0 SPACES PER DWELLING UNIT	17	**34**
PARKING TOTAL		157	**187.5**

Min. ADA Parking Spaces			TOTAL
PRIVATE LEVEL 01	*121*		
PRIVATE LEVEL 02	*70*		
	191	*151-200*	**6** Stalls
PUBLIC LEVEL 02	*51*		
PUBLIC LEVEL 02 - SURFACE	*47*		
	98	*76-100*	**4** Stalls
			10 Stalls

REQ BICYCLE PARKING		
SHORT-TERM BICYCLE PARKING		
• 1 SPACE PER 5 DWELLING UNIT • 157 TOTAL UNITS	31.4	**32**
• 50% WITHIN 50'-0" OF ENTRANCE	2'Wx6'Lx7'H	
• 50% WITHIN 100'-0" OF ANY ENTRANCE		
• LONG TERM BICYCLE STORAGE - 1 SPACE PER 4 DWELLING UNITS • WALL MTD HOOKS @ PARKING STALLS		

Parking Schedule Total

Comments	Count
PRIVATE	190
PUBLIC	99
Grand total	289

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE
PARKING PLAN - LEVEL P02

REVISIONS:



KEY PLAN
NO SCALE

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**COORDINATION**
DATE ISSUED	**04/19/2024**
SHEET NUMBER	**A02-2**

NEW WORK PLAN KEY NOTES

SEE PROJECT GENERAL CONDITIONS, GENERAL INFORMATION ON SHEET A001 AND SELECTIVE DEMOLITION, CUTTING AND PATCHING SPECIFICATIONS THAT ARE USED IN ASSOCIATION WITH THESE NOTES.

NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.

PARKING SCHEDULE

Level	Space Size	Comments	#
PARKING 01			
PARKING 01	Parking Space	PRIVATE	119
PARKING 01	Parking Space - ADA	PRIVATE	1
PARKING 01	Parking Space - ADA VAN	PRIVATE	1
			121
			121
PARKING 02			
PARKING 02	Parking Space	PRIVATE	65
PARKING 02	Parking Space 17' Deep	PRIVATE	2
PARKING 02	Parking Space - ADA	PRIVATE	2
			69
PARKING 02	Parking Space	PUBLIC	49
PARKING 02	Parking Space - ADA	PUBLIC	2
PARKING 02	Parking Space - ADA VAN	PUBLIC	1
			52
			121
LEVEL 02			
LEVEL 02	Parking Space 17' Deep	PUBLIC	45
LEVEL 02	Parking Space - ADA	PUBLIC	2
			47
			47
Grand total			289

Req. Residential Parking - Multi Unit Building			TOTAL
STUDIO	1.0 SPACE PER DWELLING UNIT	54	**54**
1 BED	1.0 SPACE PER DWELLING UNIT	59	**59**
2 BED	1.5 SPACES PER DWELLING UNIT	27	**40.5**
3 BED	2.0 SPACES PER DWELLING UNIT	17	**34**
PARKING TOTAL		157	**187.5**

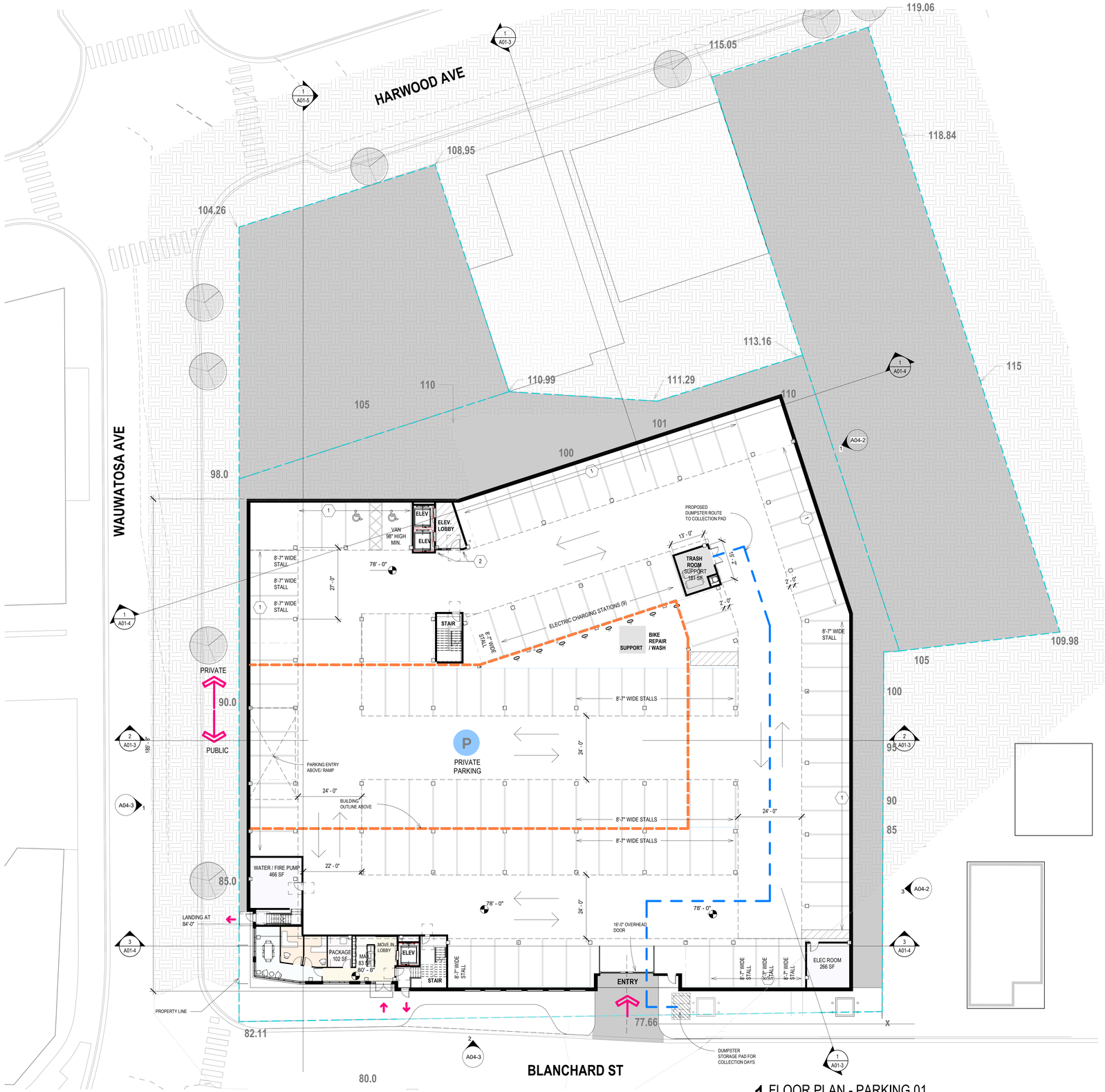
Min. ADA Parking Spaces			TOTAL
PRIVATE LEVEL 01	*121*		
PRIVATE LEVEL 02	*70*		
	191	*151-200*	**6** Stalls
PUBLIC LEVEL 02	*51*		
PUBLIC LEVEL 02 - SURFACE	*47*		
	98	*76-100*	**4** Stalls
			10 Stalls

REQ BICYCLE PARKING

SHORT-TERM BICYCLE PARKING		
• 1 SPACE PER 5 DWELLING UNIT • 157 TOTAL UNITS	31.4	**32**
• 50% WITHIN 50'-0" OF ENTRANCE	2'Wx6'Lx7'H	
• 50% WITHIN 100'-0" OF ANY ENTRANCE		
• LONG TERM BICYCLE STORAGE - 1 SPACE PER 4 DWELLING UNITS • WALL MTD HOOKS @ PARKING STALLS		

Parking Schedule Total

Comments	Count
PRIVATE	190
PUBLIC	99
Grand total	289



1 FLOOR PLAN - PARKING 01
Scale: 1/16" = 1'-0"
0' 2' 4' 8' 12'



KEY PLAN
NO SCALE

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7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000

BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
PARKING PLAN - LEVEL P01

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**COORDINATION**
DATE ISSUED	**04/19/2024**
SHEET NUMBER	**A02-1**

NEW WORK PLAN KEY NOTES

SEE PROJECT GENERAL CONDITIONS, GENERAL INFORMATION ON SHEET A001 AND SELECTIVE DEMOLITION, CUTTING AND PATCHING SPECIFICATIONS THAT ARE USED IN ASSOCIATION WITH THESE NOTES.

NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.



1 FLOOR PLAN - LEVEL 01

Scale: 1/16" = 1'-0"

0' 3' 6' 12' 18'



KEY PLAN

NO SCALE

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL PLAN - LEVEL 01

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A03-1**

NEW WORK PLAN KEY NOTES

SEE PROJECT GENERAL CONDITIONS, GENERAL INFORMATION ON SHEET A001 AND SELECTIVE DEMOLITION, CUTTING AND PATCHING SPECIFICATIONS THAT ARE USED IN ASSOCIATION WITH THESE NOTES.

NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.

PARKING SCHEDULE

Level	Space Size	Comments	#
PARKING 01			
PARKING 01	Parking Space	PRIVATE	63
PARKING 01	Parking Space 17' Deep	PRIVATE	2
PARKING 01	Parking Space - ADA	PRIVATE	2
PARKING 01	Parking Space - ADA VAN	PRIVATE	1
			68
PARKING 01	Parking Space	PUBLIC	49
PARKING 01	Parking Space - ADA	PUBLIC	2
PARKING 01	Parking Space - ADA VAN	PUBLIC	1
			52
			120
PARKING 02			
PARKING 02	Parking Space	PRIVATE	119
PARKING 02	Parking Space 17' Deep	PRIVATE	2
PARKING 02	Parking Space - ADA	PRIVATE	1
			122
			122
LEVEL 02			
LEVEL 02	Parking Space 17' Deep	PUBLIC	45
LEVEL 02	Parking Space - ADA	PUBLIC	2
			47
			47
Grand total			289

HARWOOD AVE
WAUWATOSA AVE
BLANCHARD ST
PROPERTY LINE
TRANSF
ADA
VAN ADA
EXISTING TREE
LOADING
TRASH
PERMEABLE PAVERS
47 SPOTS
EXISTING CMU RETAINING WALL
TURNAROUND AREA / SNOW STORAGE
RETAINING WALL
ELEV
ELEV
ELEV. LOBBY
110' - 0"
SUPPORT
TRASH
ELEC 55 SF
STAIR
SUPPORT 67 SF
ELEV
SUPPORT 55 SF
ELEV LOBBY
MECH DATA TELECOM
227' - 3 1/2"
61' - 8 1/4"
119.06
115.05
118.84
108.95
104.26
113.16
110.99
111.29
109.98
82.11
77.66
80.0

1 FLOOR PLAN - LEVEL 02
Scale: 1/16" = 1'-0"
0' 3' 6' 12' 18'

KEY PLAN
NO SCALE

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7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000

BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL PLAN - LEVEL 02

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A03-2**

NEW WORK PLAN KEY NOTES

SEE PROJECT GENERAL CONDITIONS, GENERAL INFORMATION ON SHEET A001 AND SELECTIVE DEMOLITION, CUTTING AND PATCHING SPECIFICATIONS THAT ARE USED IN ASSOCIATION WITH THESE NOTES.

NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.



1 FLOOR PLAN - LEVEL 03

Scale: 1/16" = 1'-0"

0' 3' 6' 12' 18'



KEY PLAN

NO SCALE

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7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000

BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL PLAN - LEVEL 03

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A03-3**

NEW WORK PLAN KEY NOTES

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NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.



1 FLOOR PLAN - LEVEL 04

Scale: 1/16" = 1'-0"

0' 3' 6' 12' 18'



KEY PLAN

NO SCALE

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BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL PLAN - LEVEL 04

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A03-4**

NEW WORK PLAN KEY NOTES

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NEW WORK PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.

1	WALL MTD BIKE HOOK AT EACH STALL, TYP.
2	BOLLARD, TYP.



1 FLOOR PLAN - LEVEL 05

Scale: 1/16" = 1'-0"

0' 3' 6' 12' 18'

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Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL PLAN - LEVEL 05

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A03-5**



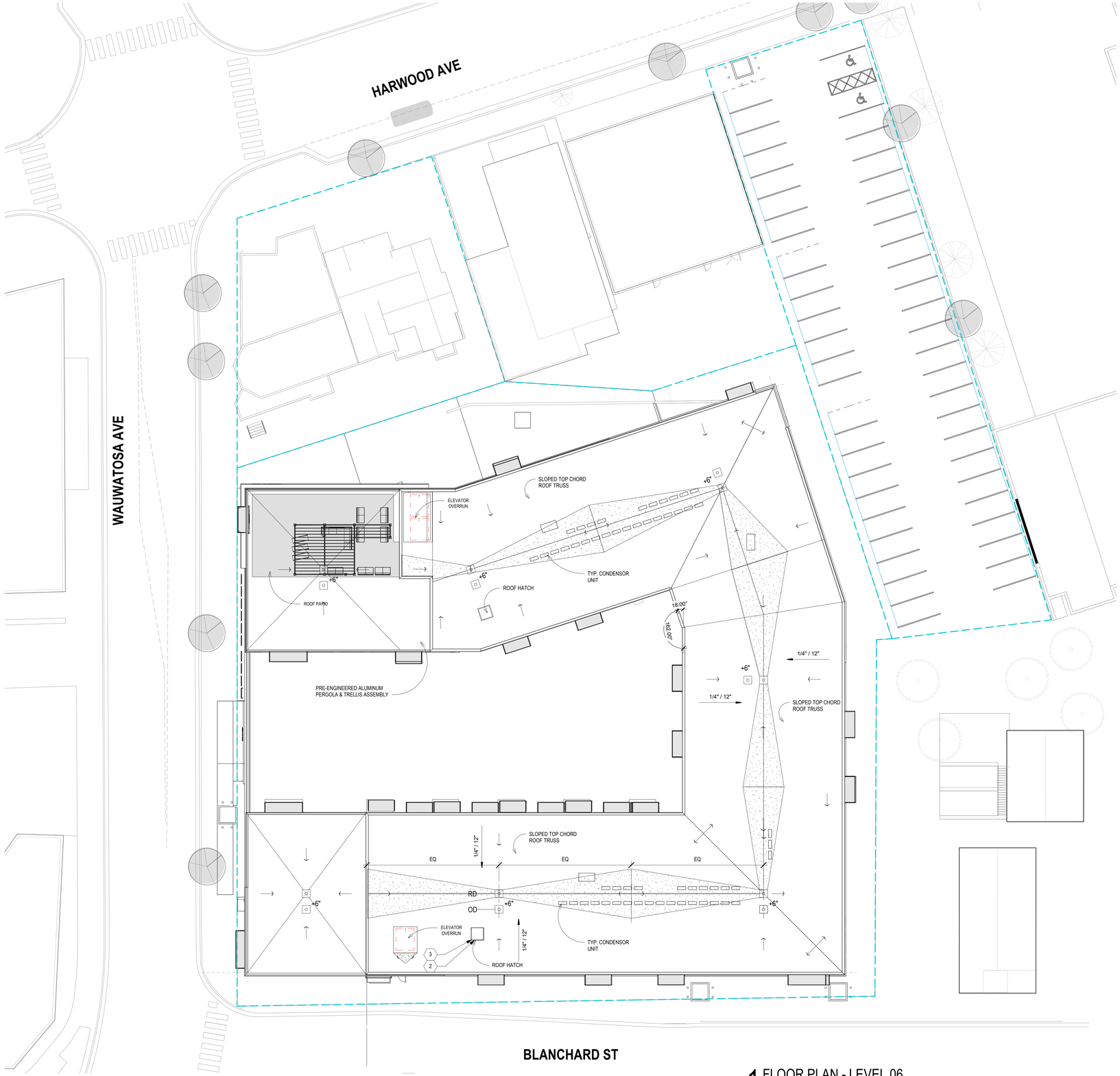
KEY PLAN

NO SCALE

NEW WORK ROOF PLAN KEY NOTES

SEE PROJECT GENERAL CONDITIONS, GENERAL INFORMATION ON SHEET A001 AND SELECTIVE DEMOLITION, CUTTING AND PATCHING SPECIFICATIONS THAT ARE USED IN ASSOCIATION WITH THESE NOTES.

NEW WORK ROOF PLAN KEY NOTES APPLY TO ALL NEW WORK DRAWINGS AND MAY NOT BE USED ON EVERY SHEET.



1 FLOOR PLAN - LEVEL 06
Scale: 1/16" = 1'-0"
0' 3' 6' 12' 18'



KEY PLAN
NO SCALE

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7463 HARWOOD AVE, WAUWATOSA, WI 53213; Tax Key ID 370-0359-000

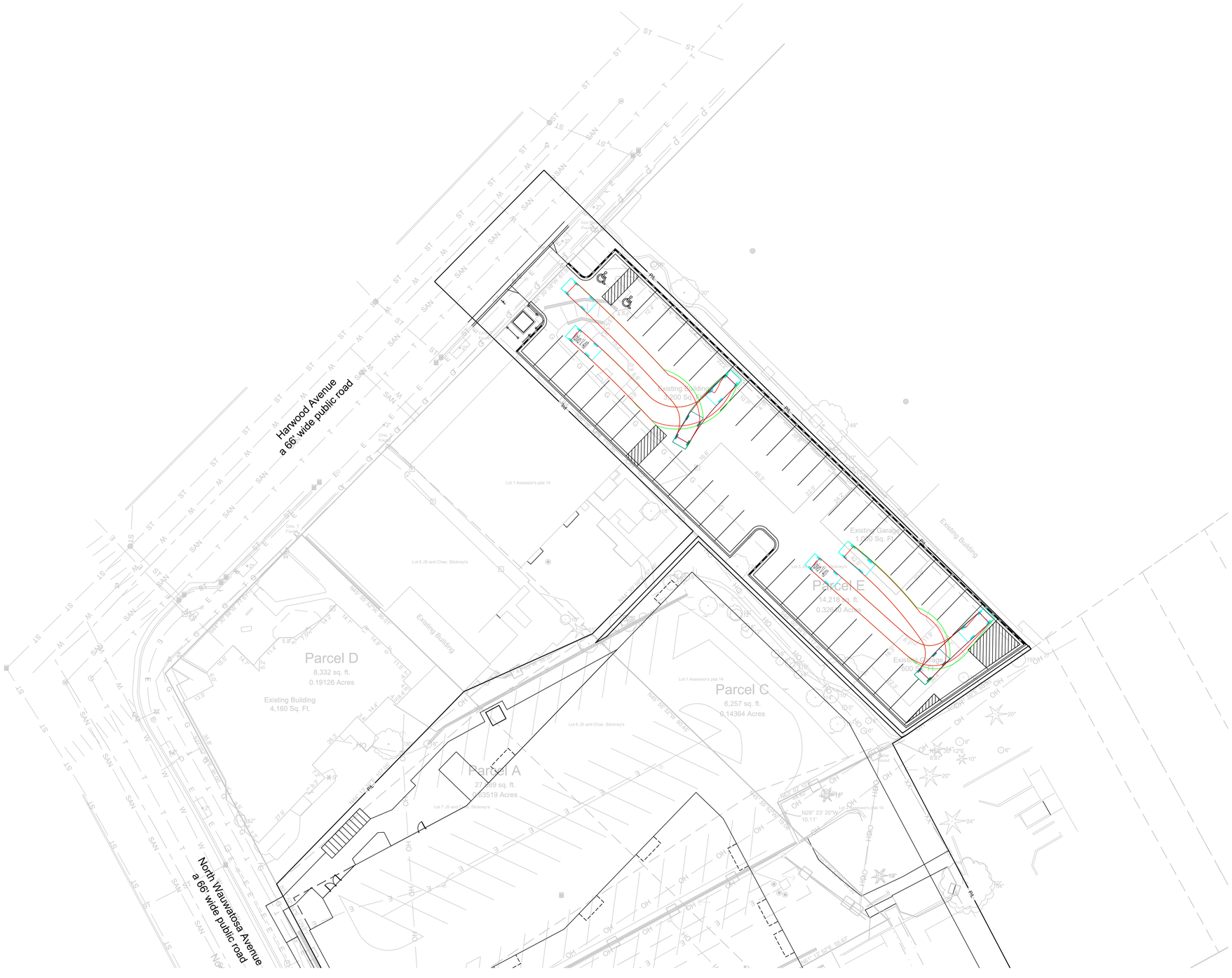
BLANCHARD ST PUBLIC PARKING LOTS, WAUWATOSA, WI
Tax Key IDs: 3700362000; 3700323000; 3700337001

SHEET TITLE:
OVERALL PLAN - LEVEL 06

REVISIONS:

SCALE	VARIES
PROJECT NUMBER	230702
SET TYPE	**PRELIMINARY PUD SUBMITTAL**
DATE ISSUED	**04/10/2024**
SHEET NUMBER	**A03-6**

2024.05.02


Harwood Avenue
a 66' wide public road
North Wauwatosa Avenue
a 66' wide public road
Parcel A
27,559 sq. ft.
0.63519 Acres
Parcel C
6,257 sq. ft.
0.14364 Acres
Parcel D
8,332 sq. ft.
0.19126 Acres
Parcel E
14,218 sq. ft.
0.32650 Acres
Existing Building
4,160 Sq. Ft.
Existing Building
5,000 Sq. Ft.
Existing Garage
1,000 Sq. Ft.
Existing Building
Existing Building
Existing Building
Lot 1 Assessor's plat 14
Lot 6 JS and Chas. Stickney's
Lot 7 JS and Chas. Stickney's
PL
PL
PL

2024.05.02



KBAFFIN

EX 1

20176

EXHIBIT 1 - VEHICLE TRACKING

THE SIGMA GROUP
Single Source. Sound Solutions.
www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
Phone: 414-643-4200
Fax: 414-643-4210

GRAPHIC SCALE
0 20 40

7487 HARWOOD AVENUE
WAUWATOSA, WI

HARLOW AND HEM

PRELIMINARY NOT FOR CONSTRUCTION

NO.	REVISION	DATE	BY

PROJECT NO:	20176
DESIGN DATE:	----
PLOT DATE:	2024.05.02
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	EX 1

I:\Mandel\20176 Harlow & Hem Tosa Development Surveying\060 CAD 2024\030_Production Sheets\800_SWMP\EX 1 Exhibit 1 - Vehicle Tracking.dwg

From: Nat Davauer
To: Arthur Pinon; Jennifer Ferguson; Tamara Szudy
Subject: [External] Harlow and Hem
Date: Tuesday, April 30, 2024 4:07:23 PM

Hello Art, Jen and Tammy,

Nat Davauer here, owner of Draft and Vessel. I'm reaching out to you about H&H. I've had zero direct communication with Mandel since Ian left.

I do have concerns with their new design and it's proximity to my existing back patio operations. From the rendering it's not clear what that space looks like behind my building. In the past, there was discussion and negotiation with Ian about this space and leaving room so both my customers and their residents have the best opportunity to be happy with the final results.

Let me know if you're the right people to speak with about this or at the very least for me to see what they're planning with more views than the public image.

Thank you in advance!
Nat

May 13, 2024

To: Wauwatosa Plan Commission
Wauwatosa Design Review Board
Common Council
City of Wauwatosa Development Dept

Re: Housing Coalition Comments about Harlow and Hem Project Proposal

The Wauwatosa Joint Housing Coalition* is deeply disappointed with the current proposal for the Harlow and Hem apartment project on the city owned Blanchard parking lot site because it is unclear how the city's requirement for the inclusion of 20% affordable housing will be met, concerns about accessibility issues, and TIF funding use.

The Coalition was a strong supporter of the original proposals by the Mandel Group which included integrating affordable units of varying sizes into a market rate development. In addition, at the Coalition's suggestion, those original plans were reviewed and revised based on consultation with the accessible housing staff of Independence First, a local service agency serving persons with disabilities.

The Housing Coalition has three concerns with the new plans we'd like to see addressed by the Plan Commission, Design Review Board, and City Council as appropriate to address the city's documented need for, and stated goals for, the increase of affordable and accessible housing on city owned property and when city funds are requested - both of which apply to this project:

Inclusion of Affordable Units in this project:
We understand that the economic situation has changed drastically since the first proposals. However, the city of Wauwatosa has a documented need for, and stated goal of increasing affordable housing. In the Mayfair Mall project, the city accepted a payment to the Housing Fund in lieu of affordable units in the project, which the Coalition opposed. The Coalition has been told this might be an option for the Harlow and Hem project as well.

The Housing Coalition rejects this idea for the Harlow and Hem project. We believe the city needs affordable housing now, not at some undetermined future time. While high end apartment buildings help increase the tax base, the School District's long range planning process documents the need for increased housing options for families of moderate means if the city and school system is to remain viable. In addition, our senior citizens and persons with disabilities need affordable options now.

The Housing Coalition urges the Plan Commission, Design Review Board, and the City Council to require that the Mandel Group honor the affordable housing requirement in the original RFP for the Blanchard site.

This is especially true since they are asking for height restriction variances. New city policy allows for height variances only for buildings which include affordable housing.

The Coalition urges that you do not give them the height variances unless they include affordable units in a variety of sizes in this building.

Accessibility Concerns:
As the Housing Coalition has learned from its representatives from the Commission for Citizens with Disabilities, truly accessible housing requires more than meeting ADA requirements. As a result, we have several recommendations:

- Require a review of the current plans, including both interior and exterior public and private spaces and the parking structure and lot, by the housing staff at Independence First to identify modifications that could increase the accessibility of the building and parking for both the residents and the public.

- Since any of us may experience permanent or temporary disability at any point of our lives, require that all units in the building are "accessible ready." This means a unit could be easily modified as a resident's needs change or for a new resident with disabilities. Examples include already having blocking in bathroom walls for addition of grab bars, and door widths that accommodate mobility devices. How to do this could be part of the consultation with Independence First.

City TIF for Harlow and Hem

The original 2022 approved TIF for this project was $8.8 million which included:

- $2.25 million for affordable housing for 4 units at 30%AMI and 22 Units at 80%AMI;
- $4.3 million for public parking replacement
- $2million for site grading, demolition and environmental remedies.

We understand the new TIF request is for $4.5 million exclusively for parking replacement. If the city was willing to contribute $8.8 million previously, we urge the city review the TFI request and provide additional TIF funding for the integration of affordable housing in this market rate building as was the intent of the original RFP.

And, given the high cost of providing parking spaces, we ask the city and Mandel Group to seriously consider the total number of private and public parking spaces required for this building and whether city TIF funding to replace all of the public parking is the best use of city funds. In a building with great public transportation access and with an increased number of studio units likely to attract a younger demographic that may be more geared to using car alternatives for transportation, are all the planned private and public parking spaces needed? Could some of the public spaces be used jointly for public and private parking – especially for resident overnight parking when public parking will be unused? Could savings from reducing the total number of parking spaces be better used to help subsidize affordable housing units instead?

Sincerely,

For the Joint Housing Coalition*:

- Ann Heidkamp, Tosa Together, 2330 N. Swan Blvd, Wauwatosa, WI 53226
- Ursula Twombly, Tosa Together, 11617 West Meinecke Ave, Wauwatosa, WI 53226
- Dain Maddox, Wauwatosa Senior Commission, 105 N. 88th St, Wauwatosa, WI 53226
- Kathy Causier, Wauwatosa Senior Commission 8213 Aberdeen Court, Wauwatosa, WI 53213
- Mary Walz-Chojnacki, Wauwatosa Commission for Persons with Disabilities 8007 Portland Ave, Wauwatosa, WI 53213
- Rosemary Fox, Wauwatosa Equity and Inclusion Commission 2020 N. Wauwatosa Ave, Wauwatosa, WI 53213
- Mike Arney, Wauwatosa Sustainability Committee, 1447 St Charles St, Wauwatosa, WI 53213

*The Wauwatosa Joint Housing Coalition works to increase affordable, accessible, equitable and sustainable housing in Wauwatosa. Our group consists of the Wauwatosa citizen Commissions for Seniors, Equity and Inclusion, Persons with Disabilities, and Sustainability, and the Tosa Together community organization working for equity and inclusion.

Plan Commission
May 13, 2024

Design Review Board
May 16, 2024

Common Council

Re: Multi-Family Housing at Blanchard Street

Dear Plan Commission, Design Review and Common Council Members

The Blanchard Street site is one of the very few parcels of land that is owned by the City of Wauwatosa. As such the city has significantly more opportunities to direct and influence this development. As a signatory of the Housing Coalition's letter I will not repeat our disappointment at losing affordable and accessible housing.

On a more personal note, my husband and I are looking to sell our 3,000SF home sited on a large lot in the Mayfair Park neighborhood. Our 4-bedroom home should belong to a young family, with kids and dogs, supporting our school system and growing our city. We were excited to become one of the first tenants in the previously approved Hem and Harlow project.

We can afford market rate or even luxury housing and would have loved to live in a mixed income development, with interesting public spaces in the heart of the village. But this revised design is just more of the same. More 1-bedroom units, less larger units, and the loss of interesting public spaces and connections to the downtown.

Seniors like us continue to ask for housing options, yet again the city leadership is failing us by pushing this project forward as redesigned. We have invested in Wauwatosa both financially and in terms of community engagement for the past 35 years, but we likely will be forced to leave Wauwatosa to find a housing choice that suits us.

Please deny this revised Planned Development outright and ask that affordable and accessible housing, and community spaces be restored. As a city owned property you have a great opportunity to restart the public RFP process or let the site sit until economic conditions are more favorable.

Sincerely

Ursula Twombly, 11716 West Meinecke Ave

From: Theresa Islo <islo.kalsch@gmail.com>
Sent: Monday, May 13, 2024 2:40 PM
To: tclerk
Subject: [External] Plan Commission - Harlow and Hem

I would like to register a concern about the proposed Harlow and Hem development. Overall, the changes from what Mandel initially proposed are dramatic and much of it disappointing, from the increased density to loss of public access. I understand that market conditions have also changed dramatically since the initial proposal.

Most concerning to me, however, is that the affordable housing units have been eliminated. I would like to urge the Plan Commission to press for a way to incorporate affordable housing in this development and the Village in general wherever there is an opportunity.

I know this is challenging but I strongly believe we need to find a way to offer something more than just high-end housing in the Village. People who work here should be able to live here.

Thank you,

Theresa Islo
414.378.6909
7430 Lincoln Pl, Wauwatosa, WI 53213
Islo.kalsch@gmail.com

From: Russ Drover <russdrover@yahoo.com>
Sent: Monday, May 13, 2024 1:59 PM
To: public comment
Subject: [External] Plan Committee , regarding Mandel Development on city Blanchard parking lot

It was recently demonstrated regarding a proposal to development St Bernard's parcel at a design review meeting that "Blanket Zoning" , Large Scale/High Density Multi-Family Proposal and Architectural Design shown were opposition to a majority present , It is fairly apparent that the Mandel proposal would also be opposed by a majority since it is very similar to what was opposed at the St Bernard's meeting.

At the St Bernard's meeting there was an estimated over 200 residents were present. And only a handful were in support, while the vast majority of Tosa residents were in opposition to the development proposed.

Since, the Blanchard parking lot is owned by the city, especial " Due Diligence" should be more important then a privately owned parcel. It doesn't follow since Mandel had previously presented the plan year's back. that a new proposal is given less consideration in starting over.

What is needed in the Mandel plan at least would be the following:
1) fewer units while increasing greatly the number of 2 and 3 bedroom units while decreasing the number of transitory studios and 1 bedroom units. in order to make the use favor family type units,

2) Providing priority in allocating designated units for lower income and disability to be given to Tosa residents over non-residents.

3) A compatible architecture design that creates an authentic and charming feeling found in the Village Center, such as the "Noodles Building" done in the 90s..

4) A high quality design similar to what Mandel did in the Echelon apartments bringing high esthetic design rendering unity with the original building there. And under construction, on the former church property being a higher end architectural design, I ask why can't they do this here.

5) A unique design that would in the future be a much needed ideal condo conversion.

In summary, the city has a real need to consider the best for this city owned parcel and nothing less. there is no rush to push this through especially since very few in the broader area of this city have no knowledge of what is being proposed. What is proposed is a huge proposed change threatening the character and uniqueness of the village center.

I therefore ask the plan presented here requires major change and awareness of what is proposed before it is approved, since awareness is clearing lacking.

sincerely

R. Drover

village center

Agenda Item --	Name --	Comment --	Position --	Submitted At --
6. 24-0572 Request by Phillip Aiello, Mandel Group Inc., for a Preliminary Planned Unit Development at 1330 Wauwatosa Avenue, 7463 Harwood Avenue, and 7460/7462 and 7470 Blanchard Street for a multi-unit residential development	Robin Palm	To whom it may concern, It seems as this project is starting over from scratch, but you all may want to check that the existing approvals and zoning specifications for the approved Harlow & Hem project from 2022 are still valid for all of the parcels except the two added residential lots. According to 2017 Wisconsin Act 243: 66.10015(5)(5), all PUD approvals are good for 5 years. However, it's not very clear what those exact zoning specifications are. The only detailed zoning standards that were ever specified were only located in the introductory narrative documents from the applicant and not in any of the documents that received final approvals from the city. TLDR: To be thorough, make sure it's acknowledged that the 2022 approval is still valid, and to void that approval by ordinance if a new PUD is to be adopted. Also don't place 12 month expiration dates in the approval conditions. And be precise enough about the zoning standards that the PUD district has all the descriptions that any other zone would have in the Municipal Code. Thanks	Neutral	05-13-2024 01:59 pm
6. 24-0572 Request by Phillip Aiello, Mandel Group Inc., for a Preliminary Planned Unit Development at 1330 Wauwatosa Avenue, 7463 Harwood Avenue, and 7460/7462 and 7470 Blanchard Street for a multi-unit residential development	Ursula Twombly	Dear Plan Commission Members The Blanchard Street site is one of the very few parcels of land that is owned by the City of Wauwatosa. As such the city has significantly more opportunities to direct and influence this development. As a signatory of the Housing Coalition's letter I will not repeat our disappointment at losing affordable and accessible housing. On a more personal note, my husband and I are looking to sell our 3,000SF home sited on a large lot in the Mayfair Park neighborhood. Our 4-bedroom home should belong to a young family, with kids and dogs, supporting our school system and growing our city. We were excited to become one of the first tenants in the previously approved Hem and Harlow project. We can afford market rate or even luxury housing and would have loved to live in a mixed income development, with interesting public spaces in the heart of the village. But this revised design is just more of the same. More 1-bedroom units, less larger units, and the loss of interesting public spaces and connections to the downtown. Seniors like us continue to ask for housing options, yet again the city leadership is failing us by pushing this project forward as redesigned. We have invested in Wauwatosa both financially and in terms of community engagement for the past 35 years, but we likely will be forced to leave Wauwatosa to find a housing choice that suits us. Please deny this revised Planned Development outright and ask that affordable and accessible housing, and community spaces be restored. As a city owned property you have a great opportunity to restart the public RFP process or let the site sit until economic conditions are more favorable. Sincerely Ursula Twombly, 11716 West Meinecke Ave	Oppose	05-13-2024 09:42 am