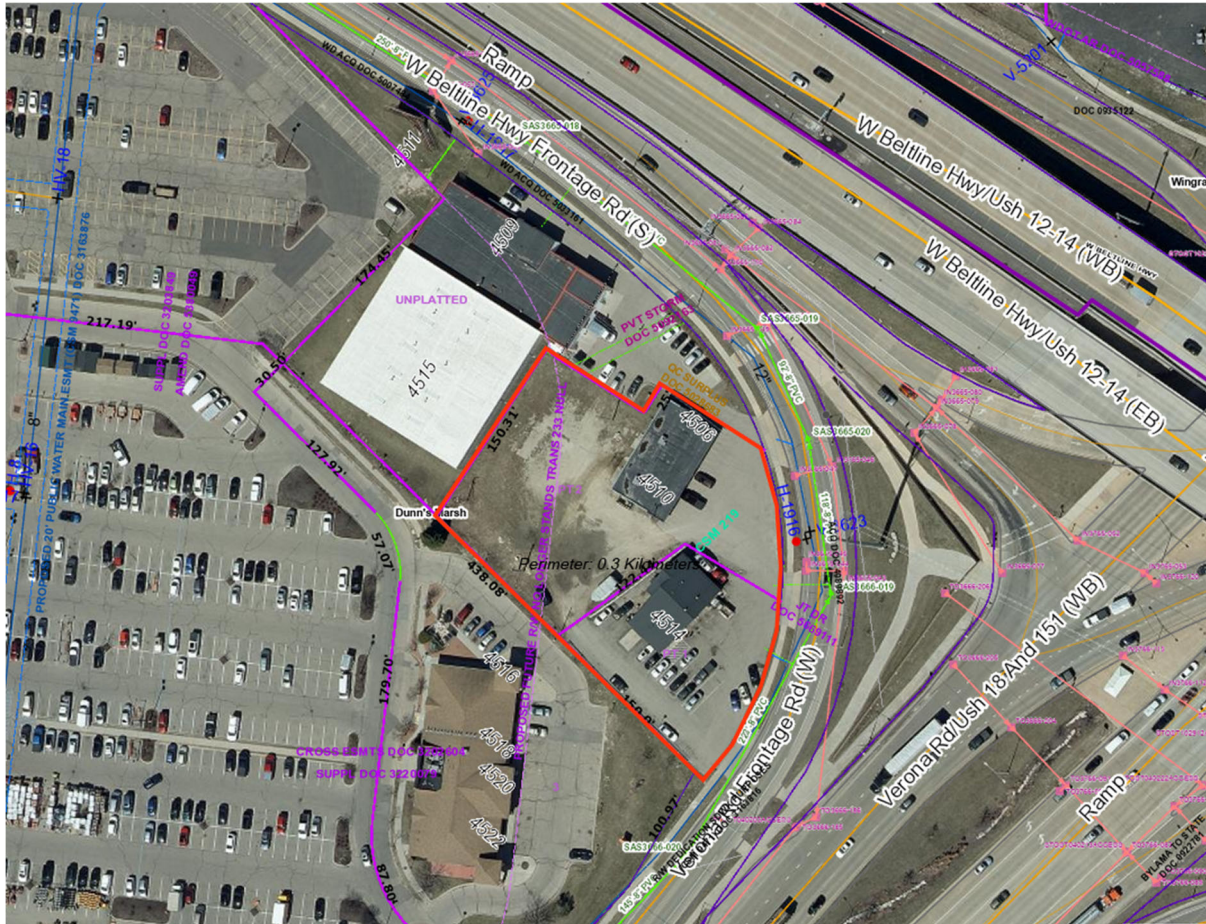


**4504 Verona Road**  
**Contract 9692**  
**MUNIS 15945**  
**Developer: Timberline Terrace LLC**



**Summary of Improvements:**

- Developer to complete the Certified Survey Map (CSM) required for the redevelopment. Provide a public sidewalk easement to a width approved by Engineering and Traffic Engineering along entire length of Verona Road Frontage Road. Obtain easements to serve the development from utility companies serving this area.
- Developer to construct 5' sidewalk, 8' terrace and provide 1' maintenance width where applicable on Verona Road Frontage Road adjacent to the development along with curb and gutter and pavement to a plan approved by the City Engineer.
- Developer to construct mid-block crosswalk across Verona Frontage Road adjacent to the southeast corner of the project site to include pedestrian ramp, pavement markings and signs to a plan approved by City Traffic Engineering and City Engineering.

- Developer to rebuild pedestrian ramp on the east side of Verona Road Frontage Road with detectable warning field to a plan approved by the City Traffic Engineering and City Engineering. The City shall reimburse the Developer for the cost of constructing the pedestrian ramp and detectable warning field not to exceed \$25,000.
- Developer to construct new commercial drive aprons and ingress/egress to the development on Verona Road Frontage Road to a plan approved by the City Traffic Engineer.
- Existing driveway approaches to be abandoned shall be removed and replaced with curb and gutter by the Developer to a plan approved by Engineering and Traffic Engineering.
- Developer to construct traffic signing and marking to a plan approved by the City Traffic Engineer.
- Developer to construct private sanitary, storm, and water service laterals as needed to serve the redevelopment.
- Developer to provide and install public street terrace trees adjacent to the project to a plan approved by City Forestry.
- Developer to repair or replace existing public sidewalk, street terrace, curb and gutter, street terrace, and street pavement as necessary to accommodate the private redevelopment project.
- Developer to follow all WDNR and DSPS regulations for proper handling and disposal of any contamination encountered as a result of residual contamination.

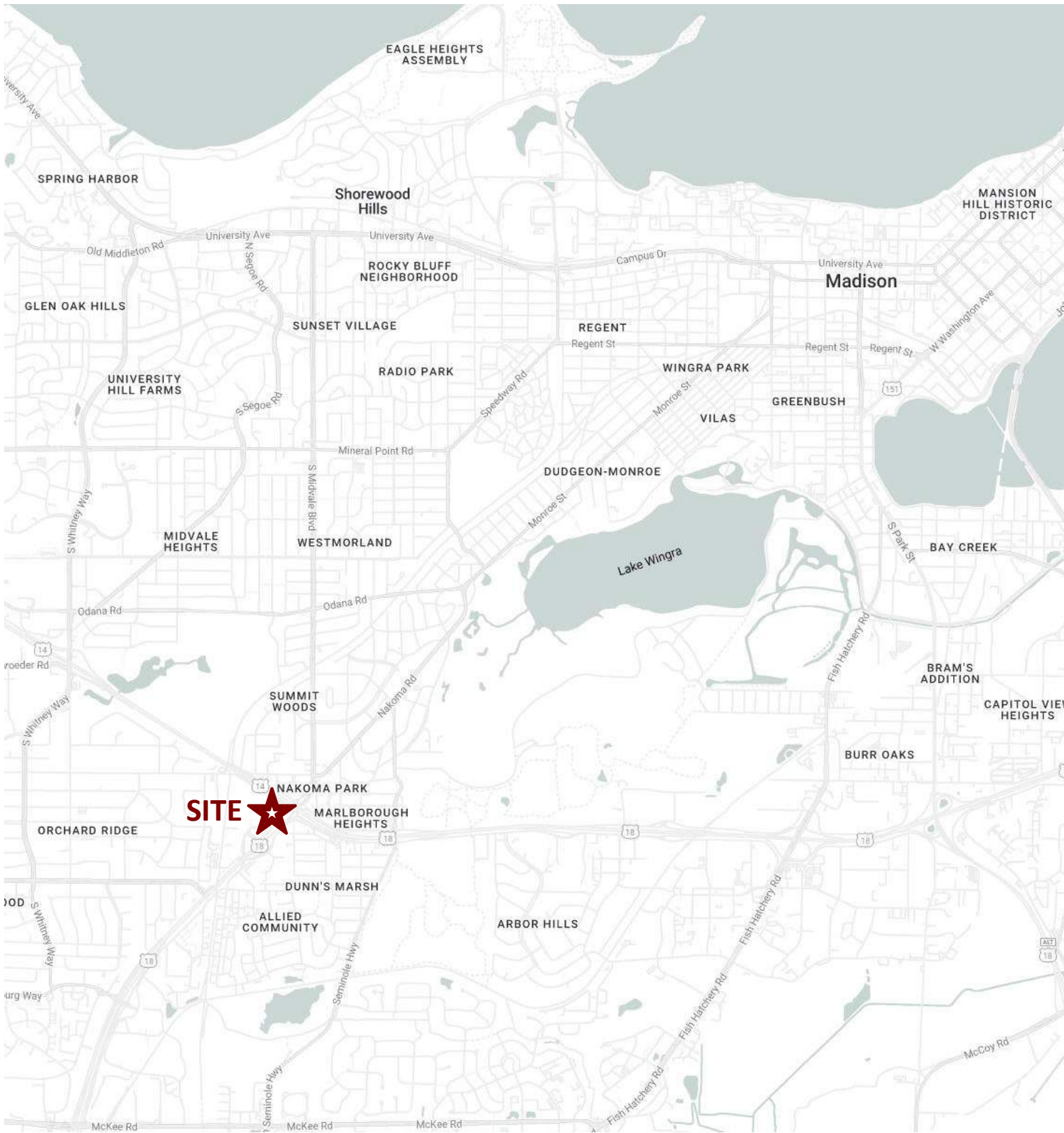




Timberline Terrace Lincoln Avenue  
Communities

4506 & 4514 Verona Rd. Madison, Wisconsin

5 STORY, 93 UNIT APARTMENT BUILDING; 1  
LEVEL UNDERGROUND PARKING



SHEET INDEX

G 000	Cover Sheet	L100	LANDSCAPE PLAN
CA101	SITE PLAN - ARCHITECTURAL	L200	LANDSCAPE DETAILS
CA102	SITE PLAN - LIGHTING	L300	LANDSCAPE SPECIFICATIONS
CA103	SITE PLAN - FIRE ACCESS		
CA104	SITE PLAN - LOT COVERAGE	AC100	BASEMENT FLOOR PLAN
		AC101	FIRST FLOOR PLAN
C001	SITE SURVEY	AC102	SECOND FLOOR PLAN
C002	EROSION CONTROL	AC103	THIRD FLOOR PLAN
C003	SITE DEMOLITION	AC104	FOURTH FLOOR PLAN
C100	SITE PLAN	AC105	FIFTH FLOOR PLAN
C200	GRADING PLAN	AC106	ROOF PLAN
C300	UTILITY PLAN		
C400	EROSION CONTROL DETAILS	AC201	EXTERIOR ELEVATIONS
C401	PAVEMENT DETAILS	AC202	EXTERIOR ELEVATIONS
C402	STORMWATER DETAILS	AC203	EXTERIOR ELEVATIONS - COLOR
C500	SPECIFICATIONS	AC204	EXTERIOR ELEVATIONS- COLOR
C501	SPECIFICATIONS		

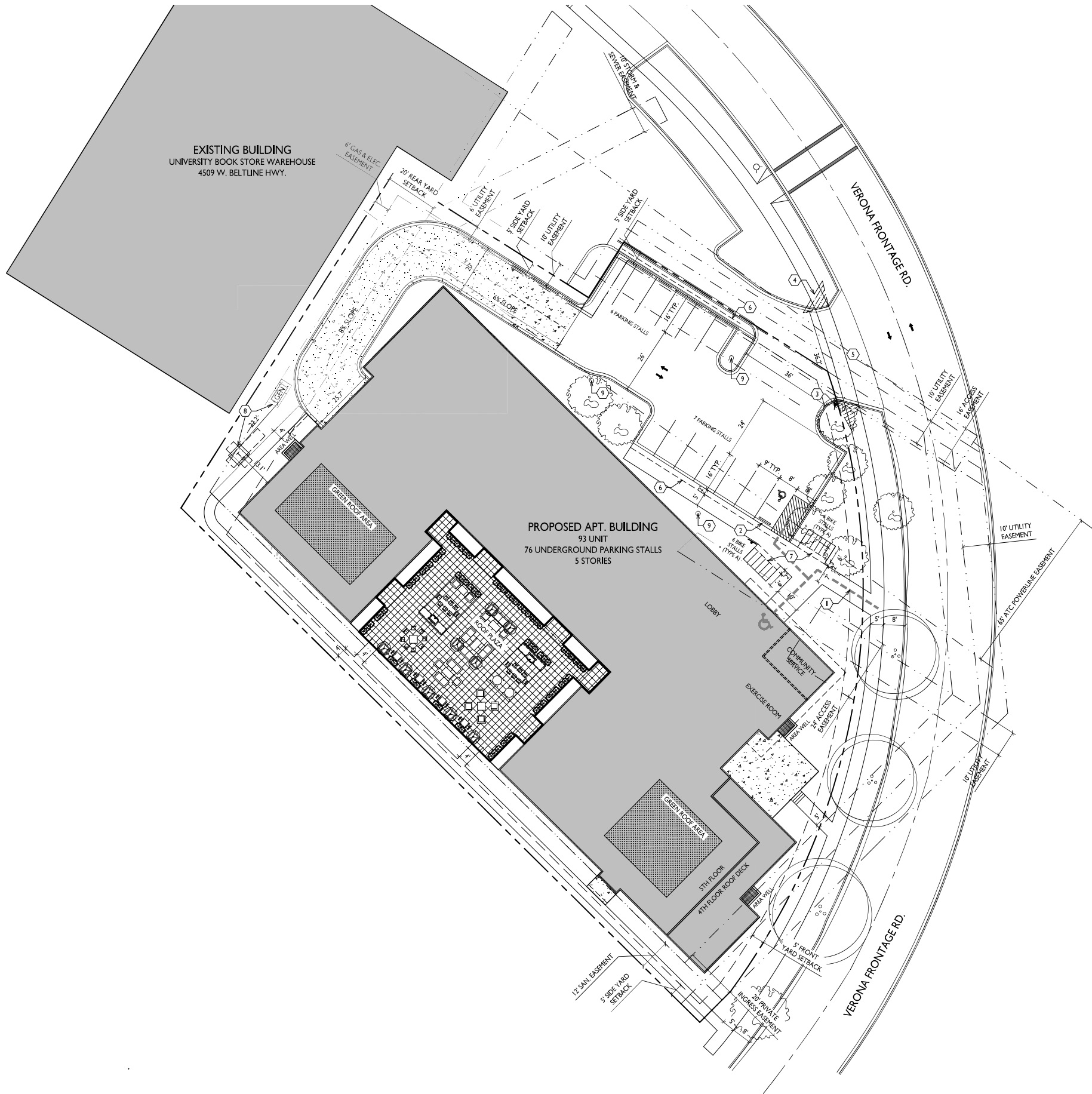
PROJECT DATE: 2025.04.07

ISSUED FOR:

LUA Submittal - 2025.04.07

PROJECT NUMBER 2512





SITE DEVELOPMENT DATA:	
ZONING	COMMERCIAL CENTER (CC)
DENSITIES:	
LOT AREA	48,489 S.F. / 1.12 ACRES
DWELLING UNITS	93 UNITS
DENSITY	521 S.F. / D.U.
BUILDING HEIGHT	5 STORIES / 59'-6"
COMMERCIAL AREA	324 S.F.
LOT COVERAGE	36,886 S.F. (75%)
GROSS BUILDING AREA	107,210 S.F.
RESIDENTIAL GARAGE	26,897 S.F.
TOTAL	134,107 S.F.
DWELLING UNIT MIX:	
ONE BEDROOM	45
TWO BEDROOM	23
THREE BEDROOM	25
TOTAL	93 DWELLING UNITS
VEHICLE PARKING STALLS:	
UNDERGROUND GARAGE	76 (INCL 2 ADA)
SURFACE	13 (INCL 1 ADA)
TOTAL	89 VEHICLE STALLS
10% EV READY (9)	
BICYCLE PARKING:	
GARAGE LONG-TERM	85
FIRST FLOOR LONG-TERM	21
SURFACE SHORT-TERM - GUESTS	1
SURFACE - COMMERCIAL	11
TOTAL	118 BICYCLE STALLS

BIKE RACKS

TYPE A  
EXTERIOR FLOOR  
MOUNTED: "INVERTED U"  
TYPE: MADRAX UX OR  
SARIS BIKE DOCK

TYPE B  
INTERIOR FLOOR  
MOUNTED: MADRAX  
SPARTAN RACK OR SARIS  
CITY BIKE RACK

TYPE C  
INTERIOR WALL MOUNTED:  
MADRAX VERTICAL RACK  
OR SARIS BIKE TRACK

KEYED PLAN NOTES	
1	ACCESSIBLE ROUTE - 5% RUNNING SLOPE / 2% CROSS SLOPE MAXIMUM.
2	ACCESSIBLE PARKING STALL - MAXIMUM 2% SLOPE IN ALL DIRECTIONS. MOUNT ACCESSIBLE PARKING SIGN @ 60" HIGH TO BOTTOM OF SIGN.
3	STOP SIGN - MOUNT @ 7' HIGH TO BOTTOM OF SIGN
4	10' VISION TRIANGLE - NO VISUAL OBSTRUCTIONS BETWEEN 30" AND 10' IN HEIGHT WITHIN HATCHED AREA.
5	CLASS III DRIVEWAY APPROACH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS
6	2' VEHICLE OVERHANG
7	2' BICYCLE OVERHANG
8	TRANSFORMER & GENERATOR ON CONCRETE PADS
9	LIGHT POLE - SEE SHEET CA102 FOR FIXTURE SCHEDULE

- GENERAL NOTES:
1. THE APPLICANT SHALL REPLACE ALL SIDEWALK AND CURB AND GUTTER THAT ABUTS THE PROPERTY THAT IS DAMAGED BY THE CONSTRUCTION, OR ANY SIDEWALK AND CURB AND GUTTER WHICH THE CITY ENGINEER DETERMINES NEEDS TO BE REPLACED BECAUSE IT IS NOT AT A DESIRABLE GRADE. REGARDLESS OF WHETHER THE CONDITION EXISTED PRIOR TO BEGINNING CONSTRUCTION.

2. ALL WORK IN THE PUBLIC RIGHT OF WAY SHALL BE PERFORMED BY A CITY-LICENSED CONTRACTOR.

3. ALL DAMAGE TO THE PAVEMENT ON CITY STREETS, AND ADJACENT TO THIS DEVELOPMENT SHALL BE RESTORED IN ACCORDANCE WITH THE CITY OF MADISON'S PAVEMENT PATCHING CRITERIA.

4. ALL PROPOSED STREET TREE REMOVALS WITHIN THE RIGHT OF WAY SHALL BE REVIEWED BY CITY FORESTRY BEFORE THE PLAN COMMISSION MEETING. STREET TREE REMOVALS REQUIRE APPROVAL AND A TREE REMOVAL PERMIT ISSUED BY CITY FORESTRY. ANY STREET TREE REMOVALS REQUESTED AFTER THE DEVELOPMENT PLAN IS APPROVED BY THE PLAN COMMISSION OR THE BOARD OF PUBLIC WORKS AND CITY FORESTRY WILL REQUIRE A MINIMUM OF A 72-HOUR REVIEW PERIOD WHICH SHALL INCLUDE THE NOTIFICATION OF THE ALDERPERSON WITHIN WHO'S DISTRICT IS AFFECTED BY THE STREET TREE REMOVAL(S) PRIOR TO A TREE REMOVAL PERMIT BEING ISSUED.

5. AS DEFINED BY THE SECTION 107.13 OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION: NO EXCAVATION IS PERMITTED WITHIN 5 FEET OF THE TRUNK OF THE STREET TREE OR WHEN CUTTING ROOTS OVER 3 INCHES IN DIAMETER. IF EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT MADISON CITY FORESTRY (266-4816) PRIOR TO EXCAVATION. CITY OF MADISON FORESTRY PERSONNEL SHALL ASSESS THE IMPACT TO THE TREE AND TO ITS ROOT SYSTEM PRIOR TO WORK COMMENCING. TREE PROTECTION SPECIFICATIONS CAN BE FOUND ON THE FOLLOWING WEBSITE: CITYOFMADISON.COM/BUSINESS/PW/SPECS.CFM

6. CONTRACTOR SHALL TAKE PRECAUTIONS DURING CONSTRUCTION TO NOT DISHURE, SCAR, OR IMPAIR THE HEALTH OF ANY STREET TREE. CONTRACTOR SHALL OPERATE EQUIPMENT IN A MANNER AS TO NOT DAMAGE THE BRANCHES OF THE STREET TREE(S). THIS MAY REQUIRE USING SMALLER EQUIPMENT AND LOADING AND UNLOADING MATERIALS IN A DESIGNATED SPACE AWAY FROM TREES ON THE CONSTRUCTION SITE. ANY DAMAGE OR INJURY TO EXISTING STREET TREES (EITHER ABOVE OR BELOW GROUND) SHALL BE REPORTED IMMEDIATELY TO CITY FORESTRY AT 266-4816. PENALTIES AND REMEDIATION SHALL BE REQUIRED.

7. SECTION 107.13(G) OF CITY OF MADISON STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (WEBSITE: CITYOFMADISON.COM/BUSINESS/PW/SPECS.CFM) ADDRESSES SOIL COMPACTION NEAR STREET TREES AND SHALL BE FOLLOWED BY CONTRACTOR. THE STORAGE OF PARKED VEHICLES, CONSTRUCTION EQUIPMENT, BUILDING MATERIALS, REFUSE, EXCAVATED SPOILS OR DUMPING OF POISONOUS MATERIALS ON OR AROUND TREES AND ROOTS WITHIN FIVE (5) FEET OF THE TREE OR WITHIN THE PROTECTION ZONE IS PROHIBITED.

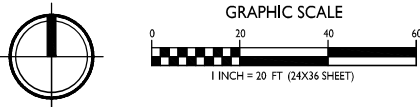
8. ON THIS PROJECT, STREET TREE PROTECTION ZONE FENCING IS REQUIRED. THE FENCING SHALL BE ERRECTED BEFORE THE DEMOLITION, GRADING OR CONSTRUCTION BEGINS. THE FENCE SHALL INCLUDE THE ENTIRE WIDTH OF TERRACE AND, EXTEND AT LEAST 5 FEET ON BOTH SIDES OF THE OUTSIDE EDGE OF THE TREE TRUNK. DO NOT REMOVE THE FENCING TO ALLOW FOR DELIVERIES OR EQUIPMENT ACCESS THROUGH THE TREE PROTECTION ZONE.

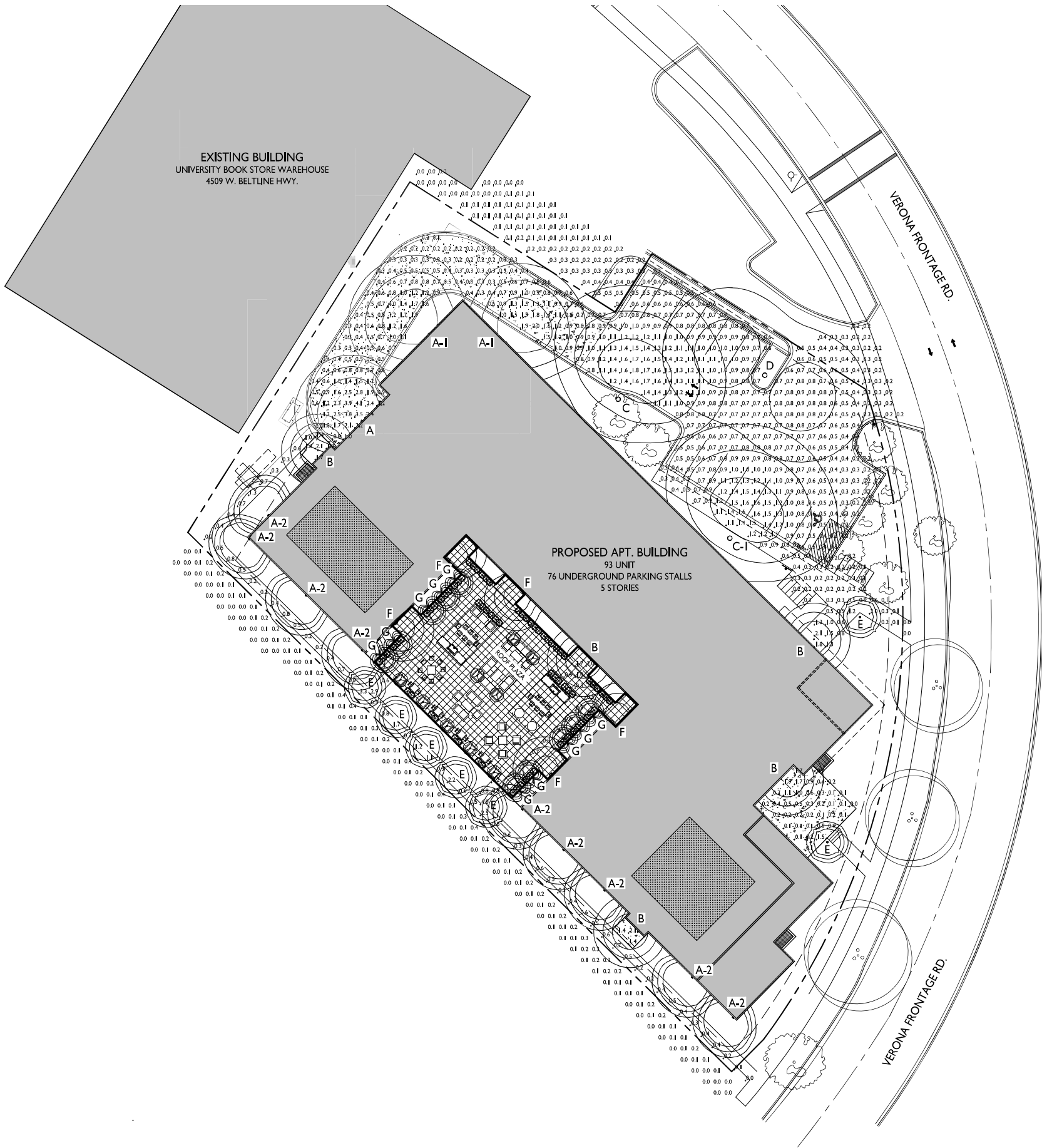
9. STREET TREE PRUNING SHALL BE COORDINATED WITH MADISON FORESTRY AT A MINIMUM OF TWO WEEKS PRIOR TO THE START OF CONSTRUCTION FOR THIS PROJECT. ALL PRUNING SHALL FOLLOW THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 - PART 1 STANDARDS FOR PRUNING.

10. AT LEAST ONE WEEK PRIOR TO STREET TREE PLANTING, CONTRACTOR SHALL CONTACT CITY FORESTRY AT (608) 266-4816 TO SCHEDULE INSPECTION AND APPROVAL OF NURSERY TREE STOCK AND REVIEW PLANTING SPECIFICATIONS WITH THE LANDSCAPER.

11. APPROVAL OF PLANS FOR THIS PROJECT DOES NOT INCLUDE ANY APPROVAL TO PRUNE, REMOVE, OR PLANT TREES IN THE PUBLIC RIGHT-OF-WAY. PERMISSION FOR SUCH ACTIVITIES MUST BE OBTAINED FROM THE CITY FORESTER (266-4816).

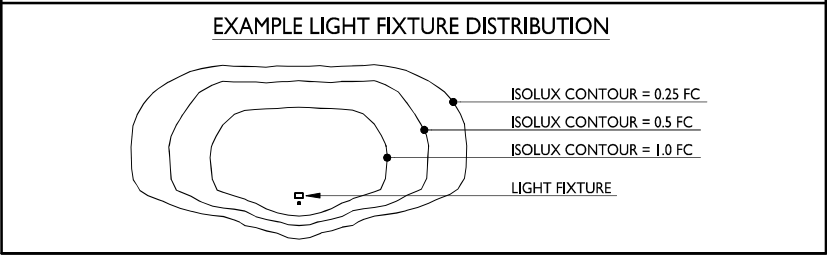
12. THE PUBLIC RIGHT-OF-WAY IS THE SOLE JURISDICTION OF THE CITY OF MADISON AND IS SUBJECT TO CHANGE AT ANY TIME PER THE RECOMMENDATION/PLAN OF THE TRAFFIC ENGINEERING AND CITY ENGINEERING DIVISIONS. NO ITEMS SHOWN ON THIS SITE PLAN IN THE RIGHT-OF-WAY ARE PERMANENT AND MAY NEED TO BE REMOVED AT THE APPLICANTS EXPENSE UPON NOTIFICATION BY THE CITY.



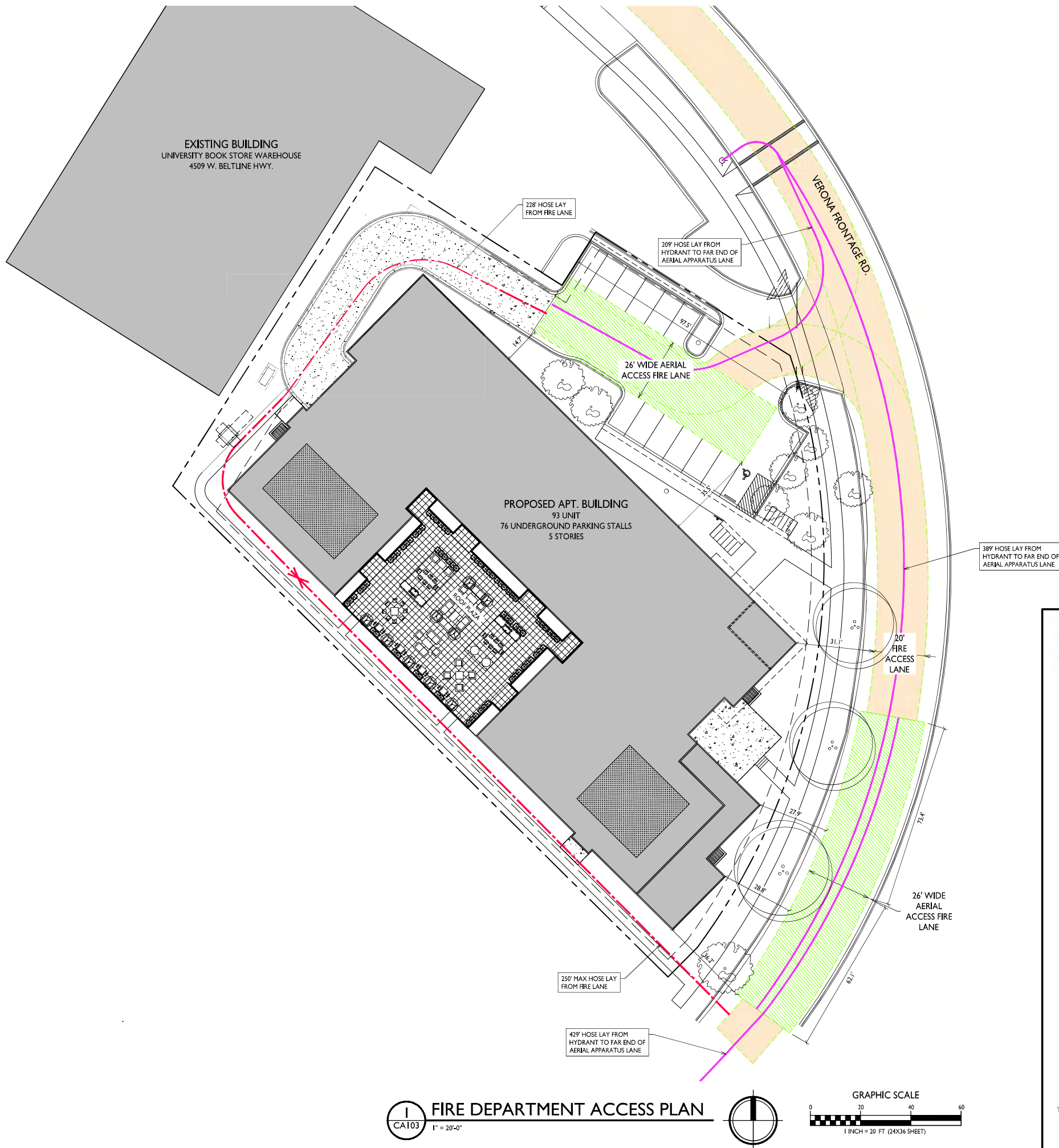


LIGHT LEVEL STATISTICS						
DESCRIPTION	SYMBOL	AVG.	MAX.	MIN.	MAX. / MIN.	AVG. / MIN.
Surface Parking & Drive Aisle	+	0.8 fc	4.1 fc	0.2 fc	20.5:1	4.0:1
Egress Lighting - South Pathway	+	0.7 fc	4.2 fc	0.2 fc	N/A:1	N/A:1

LUMINAIRE SCHEDULE						
SYMBOL	LABEL	QTY.	MANUF.	CATALOG	DESCRIPTION	FILE
	A	1	LITHONIA LIGHTING	ARCI LED PI 30K MVOLT DDBXD	LED WALL MOUNT, 3000K, 4W, 1500 LUMEN	ARCI_LED_PI_30K.ies
	A-1	2	LITHONIA LIGHTING	ARCI LED PI 30K MVOLT DDBXD	LED WALL MOUNT, 3000K, 4W, 1500 LUMEN	ARCI_LED_PI_30K.ies
	A-2	9	LITHONIA LIGHTING	ARCI LED PI 30K MVOLT DDBXD	LED WALL MOUNT, 3000K, 4W, 1500 LUMEN	ARCI_LED_PI_30K.ies
	B	5	LITHONIA LIGHTING	WF3 LED 27K ORB	3\"/>	WF3_LED_27K.ies
	C	2	LITHONIA LIGHTING	RADI LED PI 27K ASY MVOLT HS DDBXD	LED 2700K, MVOLT POLE MOUNT LIGHT W/ HOUSESIDE SHIELD	RADI_LED_PI_27K_ASY_HS.ies
	C-1	1	LITHONIA LIGHTING	RADI LED PI 27K ASY MVOLT HS DDBXD	LED 2700K, MVOLT POLE MOUNT LIGHT W/ HOUSESIDE SHIELD	RADI_LED_PI_27K_ASY_HS.ies
	D	1	LITHONIA LIGHTING	RADI LED PI 27K PATH MVOLT DDBXD	LED 2700K, MVOLT POLE MOUNT LIGHT - DARK BRONZE	RADI_LED_PI_27K_PATH.ies
	E	7	LITHONIA LIGHTING	RADB LED PI 27K SYM MVOLT BTT BCF DBLXD	36\"/>	RADB_LED_PI_27K_SYM_DBLXD.ies
	F	5	LUMINIS	JA112-L2L5-27K -MVOLT-BKT	HALF-SHIELD WALL SCONCE, 27K 80CRI, JET BLACK	JA112-L2L5-27K.ies
	G	5	AURORA LIGHT	LFL1-27 (2700K)	LED PATH LIGHT, 2700K, 3W, NATURAL BRASS	LFL1-27 (2700K).ies







FIRE ACCESS DATA

BUILDING PERIMETER	886 LINEAR FEET
26' WIDE AERIAL APPARATUS FIRE LANE	222 LR. FT. REQUIRED (25%) 233 LR. FT. PROVIDED
20' WIDE FIRE ACCESS LANE	
250' MAX. HOSE LAY FROM 20' FIRE ACCESS LANE	
500' MAX. HOSE LAY FROM HYDRANT TO FAR END OF AERIAL APPARATUS LANE	



City of Madison Fire Department

314 W Dayton Street, Madison, WI 53703  
Phone: 608-266-4420 • Fax: 608-267-3100 • E-mail: fire@cityofmadison.com

Project Address: 4506 & 4514 Verona Rd. Madison, WI 53711

Contact Name & Phone #: Kevin Burrow, 608-836-3680

FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If non-sprinklered, fire lanes extend to within 150-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
If sprinklered, fire lanes are within 250-feet of all portions of the exterior wall?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the fire lane a minimum unobstructed width of at least 20-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Is the minimum inside turning radius of the fire lane at least 28-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Is the grade of the fire lane not more than a slope of 8%?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Is the fire lane posted as fire lane? (Provide detail of signage.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the gate a minimum of 20-feet clear opening?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, see IFC 3206.6 for further requirements.			
6. Is any part of the building greater than 30-feet above the grade plane?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, answer the following questions:			
a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are there any overhead power or utility lines located across the aerial apparatus fire lane?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.			
a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is there at least 40' between a hydrant and the building?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.			

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on MGO 34.503 and IFC 2021 Edition Chapter 5 and Appendix D; please see the codes for further information.

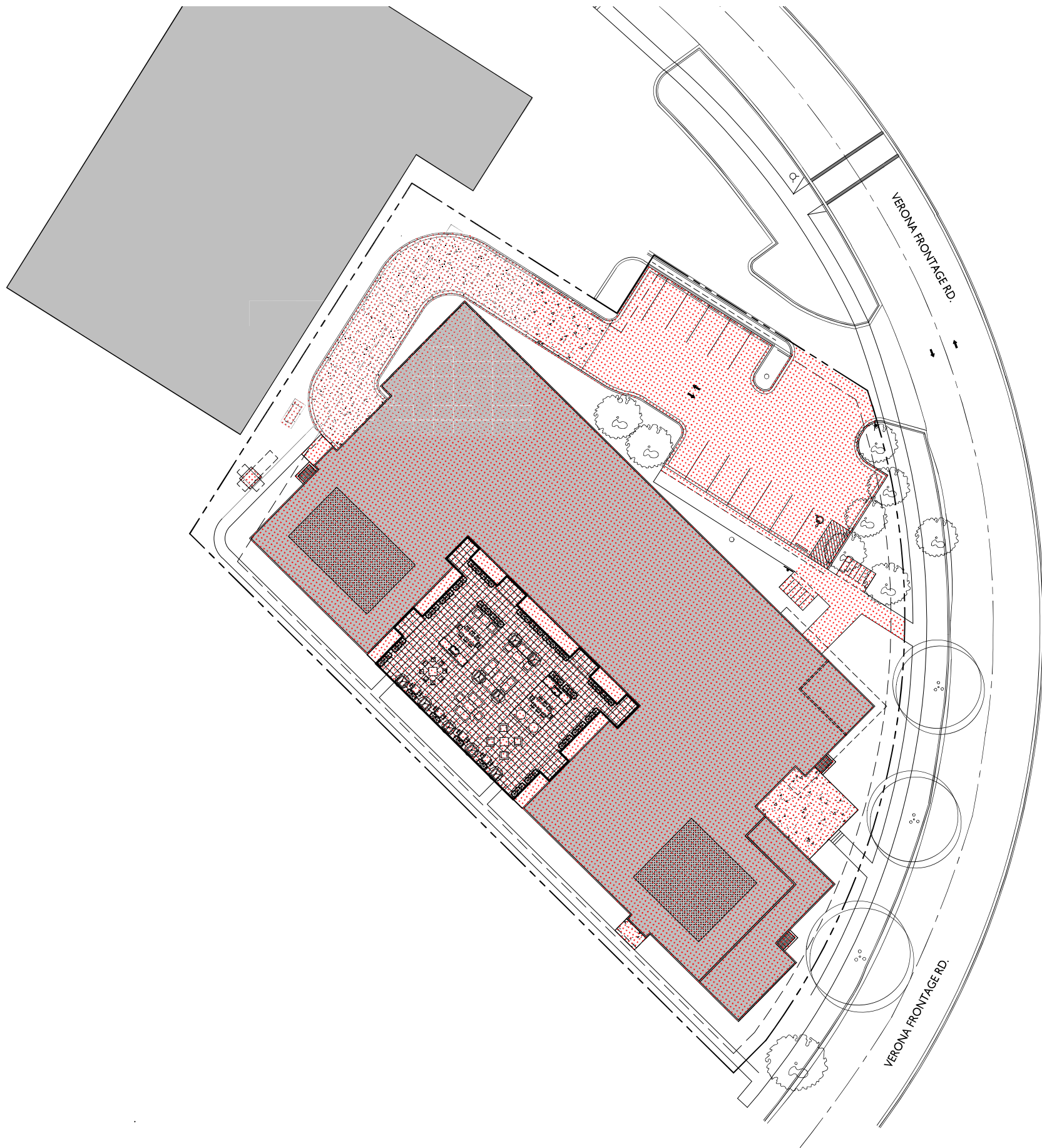
Revised 06/2022

ISSUED  
Land Use Application - April 07, 2025

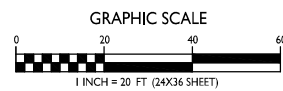
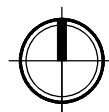
PROJECT TITLE  
Timberline Terrace  
Lincoln Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin  
SHEET TITLE  
Fire Department  
Access Plan

SHEET NUMBER  
CA103  
PROJECT NO. 2512  
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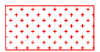


**LOT COVERAGE**  
CA104 1" = 20'-0"



**LOT COVERAGE**

ZONING	COMMERCIAL CENTER (CC)
MAXIMUM LOT COVERAGE	41,268 S.F. / 85%
LOT AREA	48,489 S.F.
PROPOSED LOT COVERAGE	36,886 S.F. / 75%



ISSUED  
Land Use Application - April 07, 2025

PROJECT TITLE  
**Timberline Terrace**  
Lincoln Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin

SHEET TITLE  
**Lot Coverage**

SHEET NUMBER

**CA104**

PROJECT NO. **2512**  
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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.

LEGEND:

- SECTION 1/4 SECTION LINE

PROPERTY LINE

EASEMENT

CHAIN LINK FENCE

GUARD RAIL

METAL FENCE

WOOD FENCE

TREE LINE

OVERHEAD UTILITY LINE

ELECTRIC

TELEPHONE

FIBER OPTIC

CABLE TV

SAN

FS

ST

W

G

670

WET

FP

UNKNOWN MANHOLE

SANITARY MANHOLE

STORM MANHOLE

ELECTRIC MANHOLE

MMSD MANHOLE

TELEPHONE MANHOLE

CLEANOUT

CATCH BASIN

CATCH BASIN (ROUND)

ROOF DRAIN

CULVERT END

HYDRANT

WATER VALVE

GAS VALVE

GAS METER

ELECTRIC METER

UTILITY PEDESTAL

HANDHOLE

VENT

MONITORING WELL

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

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 ON MARCH 20, 2025.
4. DATUM FOR THE PROJECT SURVEY IS NGVD29. BENCHMARK FOR THE PROJECT SURVEY IS HYDRANT ON VERONA ROAD WITH AN ELEVATION OF 999.25.
5. CONTRACTOR TO VERIFY EXISTING CONDITIONS, CONTACT ENGINEER WITH DISCREPANCIES.

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

N

GRAPHIC SCALE

0 20 40

TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

4504 VERONA RD.

MADISON, WI 53711

SITE SURVEY

PRELIMINARY

NOT FOR

CONSTRUCTION

ISSUANCE

DATE

SITE PLAN REVIEW

08/25/2025

NO. REVISION

DATE

PROJECT NO:

23909

DESIGN DATE:

----

PLOT DATE:

2025.10.13

DRAWN BY:

----

CHECKED BY:

----

APPROVED BY:

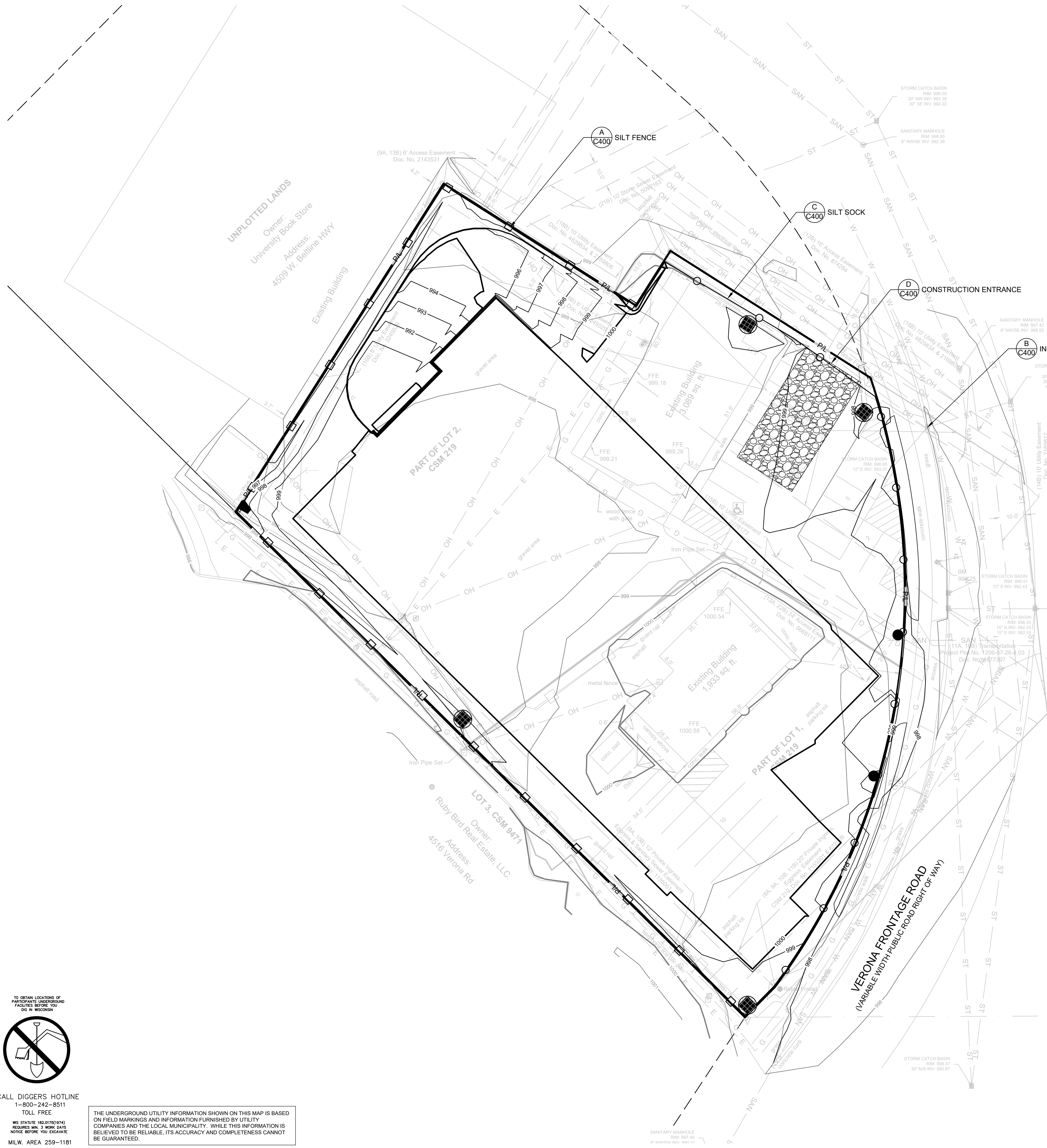
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SHEET NO:

C001

i:\knothe bruce\23909 - 4506 verona road\060 CAD\030\_Production Sheets\100\_Civil\C001 Site Survey.dwg





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



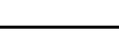










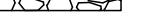
CALL DIGGERS HOTLINE  
1-800-242-8511  
TOLL FREE

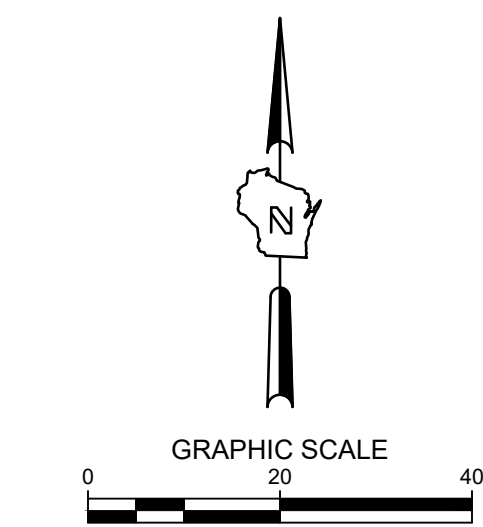
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REQUIRES MIN. 3 WORK DAYS  
NOTICE BEFORE YOU DIG

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.

- LEGEND:**

  - 

**PROPOSED SILT FENCE**
  - 

**PROPOSED SEDIMENT LOG**
  - 

**PROPOSED INLET PROTECTION**
  - 

**PROPOSED TRACKING PAD**
  - 

**PROPOSED EROSION MATTING WISDOT APPROVED CLASS 1 TYPE B**
  - 
**EXISTING CONTOUR**
  - 
**PROPOSED CONTOUR**



TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

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4504 VERONA RD.  
MADISON, WI 53711

EROSION CONTROL

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

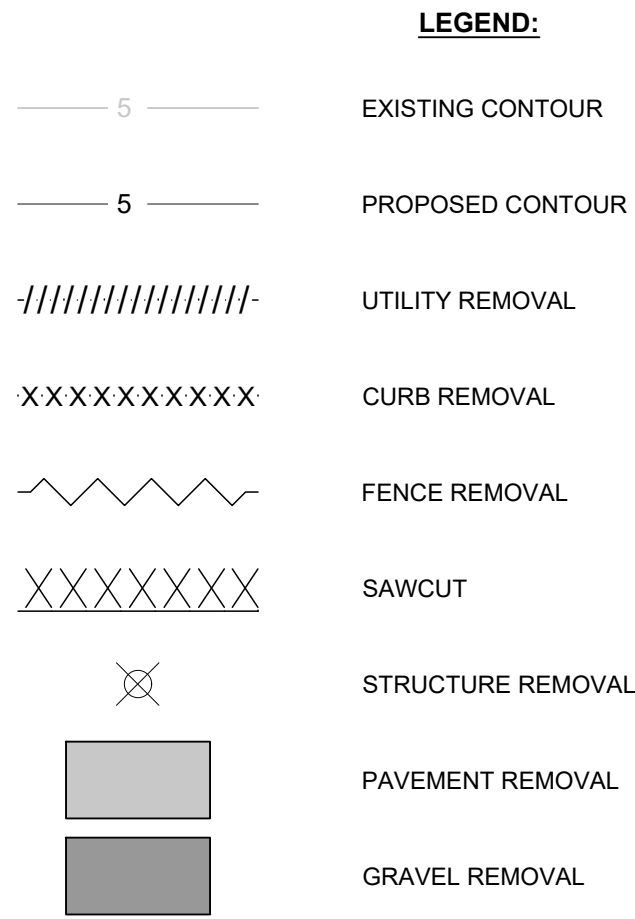
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SITE PLAN REVIEW	08/25/2023
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PROJECT NO:	23909
DESIGN DATE:	----
PLOT DATE:	2025.10.13
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SHEET NO:	

C002



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



**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. 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.

TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES  
4504 VERONA RD.  
MADISON, WI 53711

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SITE DEMOLITION

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

ISSUANCE		DATE	
SITE PLAN REVIEW		08/25/2025	
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








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NOTICE BEFORE YOU EXCAVATE

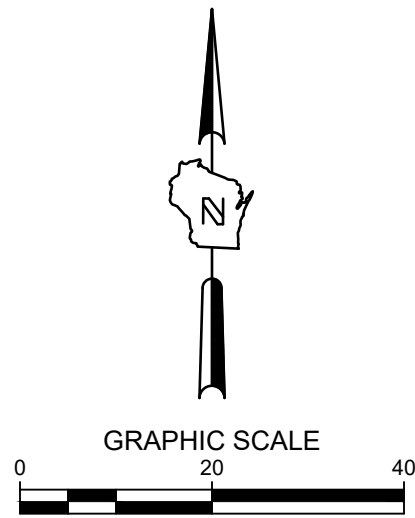
MILW. AREA 259-1181

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.

SITE INFORMATION			
SITE AREA	48090	1.104 AC	
SITE DISTURBED AREA	48439	1.112 AC	
EXISTING IMPERVIOUS AREA	44214	1.015 AC	91.9 %
PROPOSED IMPERVIOUS AREA	38899	0.893 AC	80.9 %
TOTAL EXTERIOR PARKING SPACES	13		
ADA PARKING SPACES	1		

**LEGEND:**

- |   |   |                           |
|---|---|---------------------------|
|  |  | 5" THICK CONCRETE WALK    |
|  |  | CONCRETE PAVEMENT         |
|  |  | ASPHALT SURFACE           |
|  |  | POROUS SURFACE            |
|  |  | CURB & GUTTER<br>(ACCEPT) |
|  |  | CURB & GUTTER<br>(REJECT) |



TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

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4504 VERONA RD.  
MADISON, WI 53711

SITE PLAN

PRELIMINARY  
( NOT FOR )  
CONSTRUCTION

ISSUANCE	DATE
SITE PLAN REVIEW	08/25/2025

NO. REVISION	DATE
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PROJECT NO:	23909
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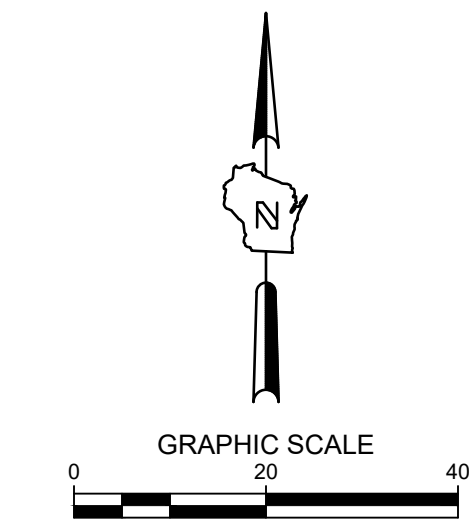
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THE UNDERGROUND UTILITY INFORMATION SHOWN ON THIS MAP IS BASED ON FIELD MARKINGS AND INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED.

		5" THICK CONCRETE WALK
		CONCRETE PAVEMENT
		ASPHALT SURFACE
		POROUS SURFACE
	 	CURB & GUTTER (ACCEPT)
	 	CURB & GUTTER (REJECT)
		GRADE BREAK LINE
		EXISTING CONTOUR
		PROPOSED CONTOUR
		PROPOSED CURB & GUTTER SPOT GRADE T/C: TOP OF CURB GRADE F/L: FLOW LINE CURB GRADE
		PROPOSED SURFACE SPOT GRADE
		FINISHED GRADE AT TOP/BOTTOM OF WALL
		EXISTING SURFACE SPOT GRADE (MATCH)



GRACE LINCOLN AVENUE COMMUNITIES  
4504 VERONA RD.  
MADISON, WI 53711

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GRADING PLAN

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

NO. REVISION	DATE
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PROJECT NO:	23909
DESIGN DATE:	----
PLOT DATE:	2025.10.13
DRAWN BY:	----
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APPROVED BY:	----
SHEET NO:	

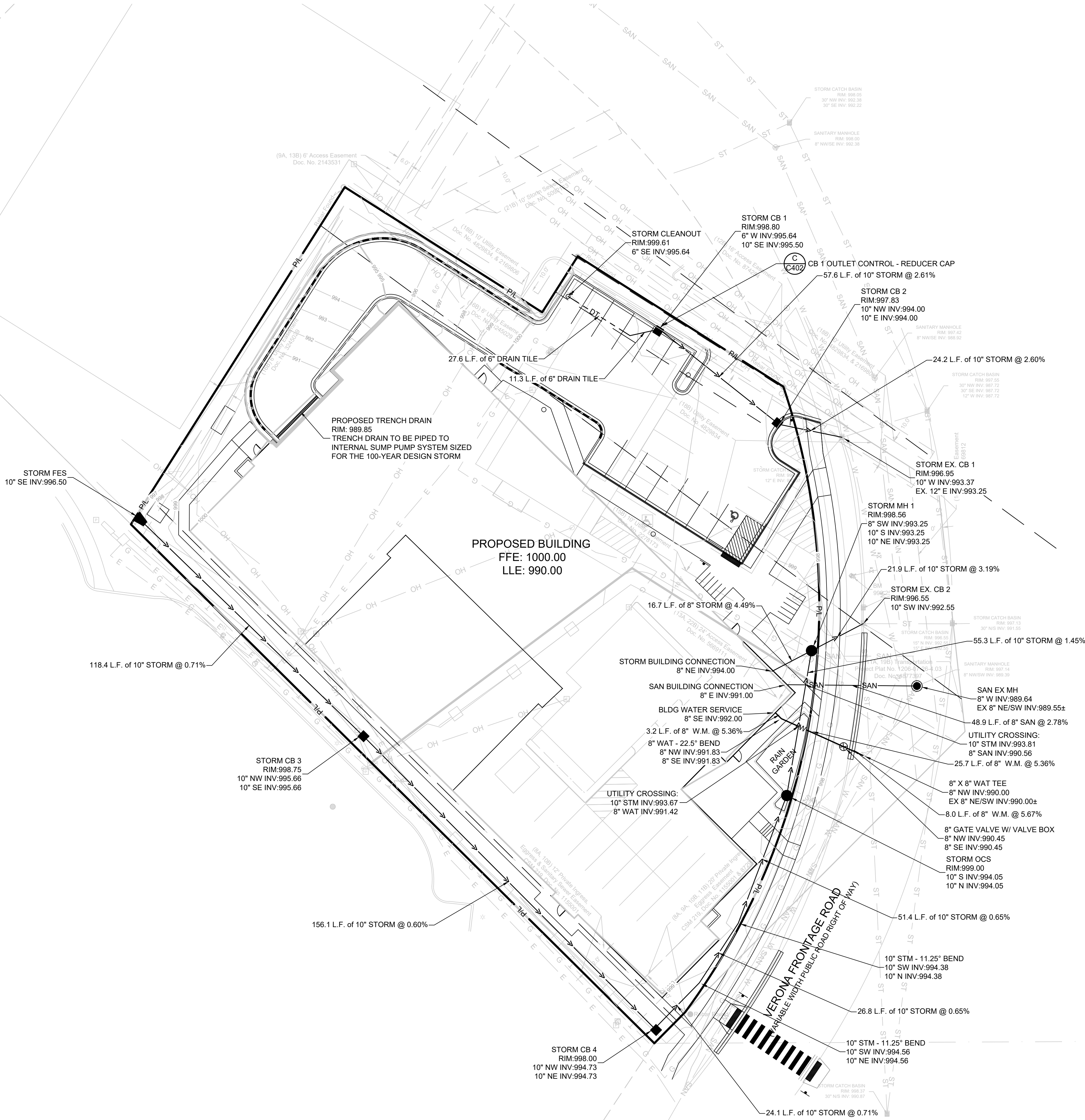
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WIS. STATUTE 182.07(2)(197A)  
REQUIRES MIN. 3 WORK DAYS  
NOTICE BEFORE YOU EXCAVATE  
MILW. AREA 259-1181

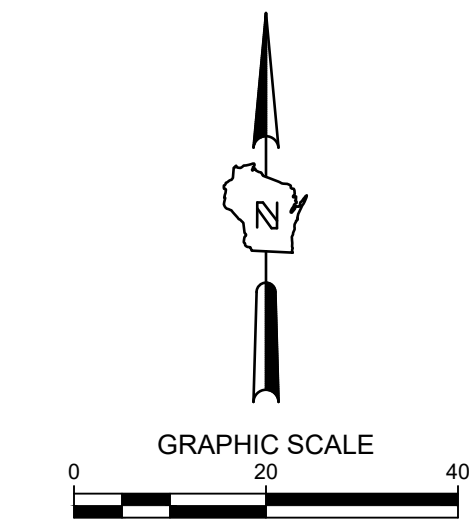
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- LEGEND:**
- W PROPOSED WATER SERVICE
  - SAN PROPOSED SANITARY SERVICE
  - ST PROPOSED STORM SEWER
  - DT PROPOSED DRAIN TILE (UNDERDRAIN)
  - PROPOSED STORM INLET
  - PROPOSED CLEANOUT

- GENERAL NOTES:**
- 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.
  - 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.
  - WORK TO BE COMPLETED IS INDICATED IN BOLD TYPE LINES AND EXISTING CONDITIONS ARE INDICATED BY LIGHT TYPE LINES.
  - 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.
  - ALL UTILITIES WITHIN 5 FEET OF PAVED AREAS SHALL REQUIRE GRANULAR BACKFILL. SLURRY BACKFILL IS REQUIRED FOR ALL WORK IN PUBLIC RIGHT OF WAY.
  - 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.
  - WORK IN PUBLIC RIGHT OF WAY SHALL FOLLOW MATERIAL AND INSTALLATION REQUIREMENTS PER MUNICIPAL AND/OR COUNTY.
  - 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.
  - COORDINATE FINAL LOCATION AND DESIGN OF PRIVATE UTILITY SERVICES (ELECTRIC, GAS, PHONE, CABLE) WITH UTILITY COMPANIES.
  - 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.
  - 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.
  - 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.

**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



TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES  
4504 VERONA RD.  
MADISON, WI 53711

UTILITY PLAN

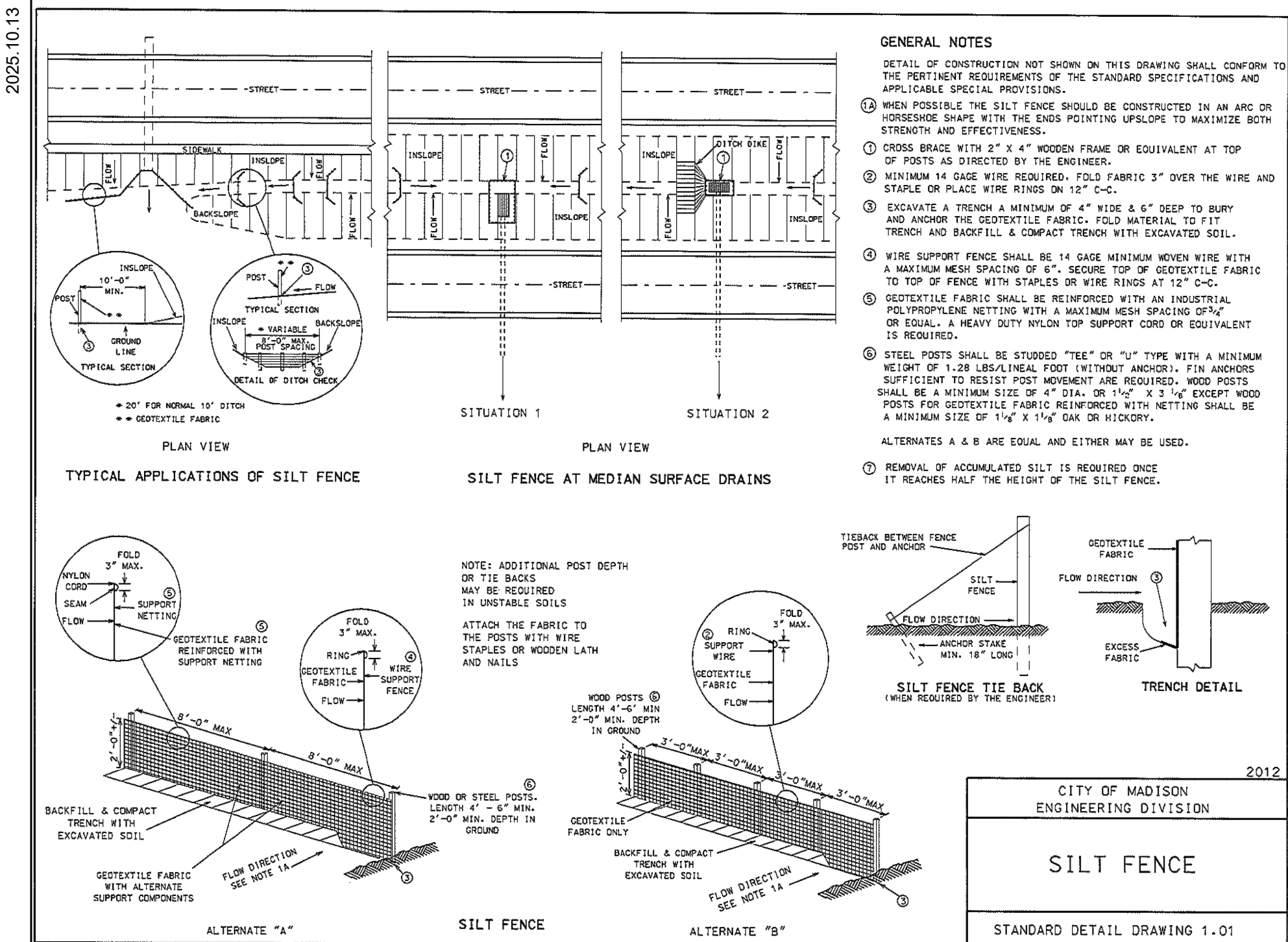
**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

ISSUANCE	DATE
SITE PLAN REVIEW	08/25/2025

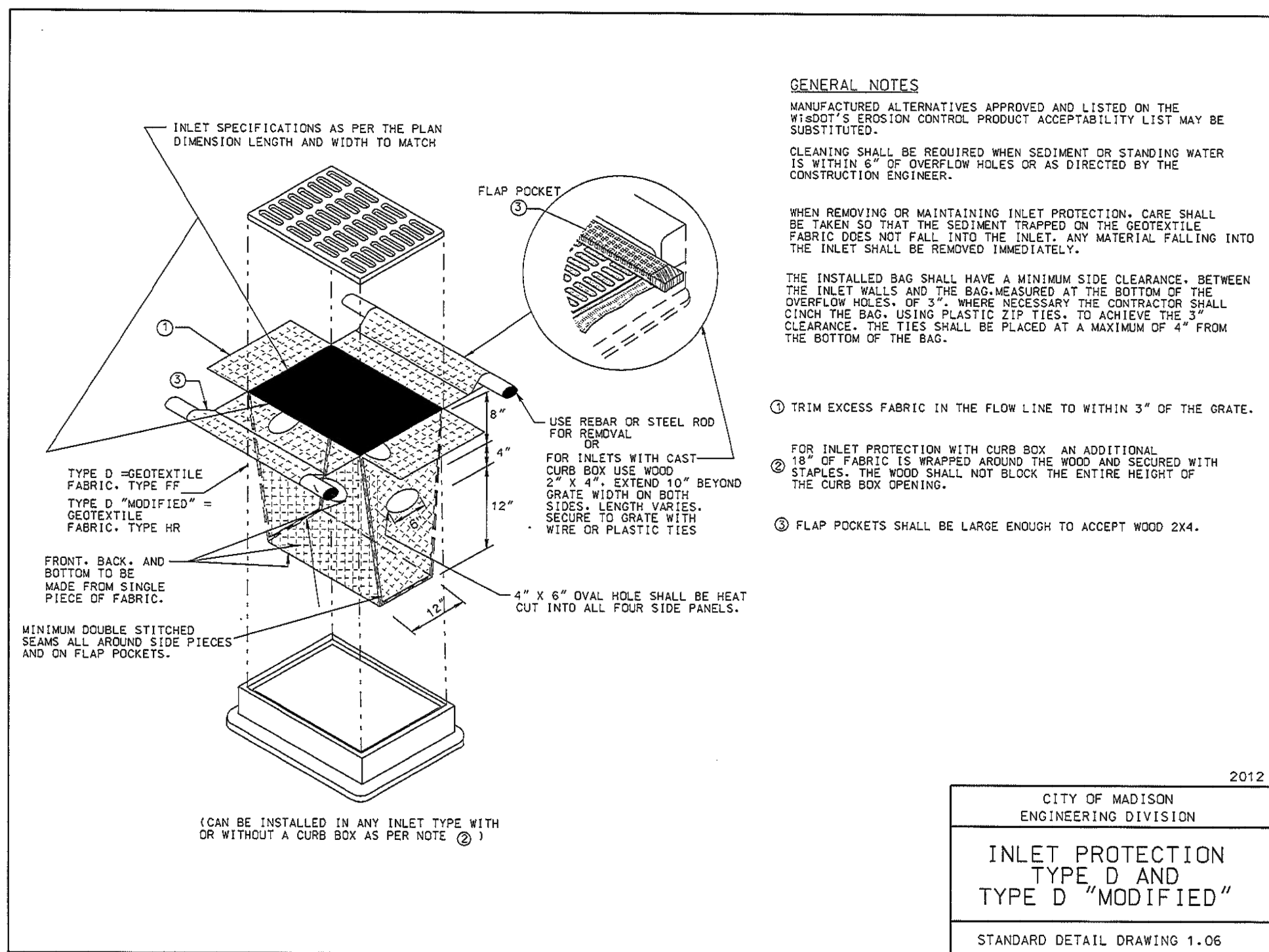
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PROJECT NO:	23909
DESIGN DATE:	----
PLOT DATE:	2025.10.13
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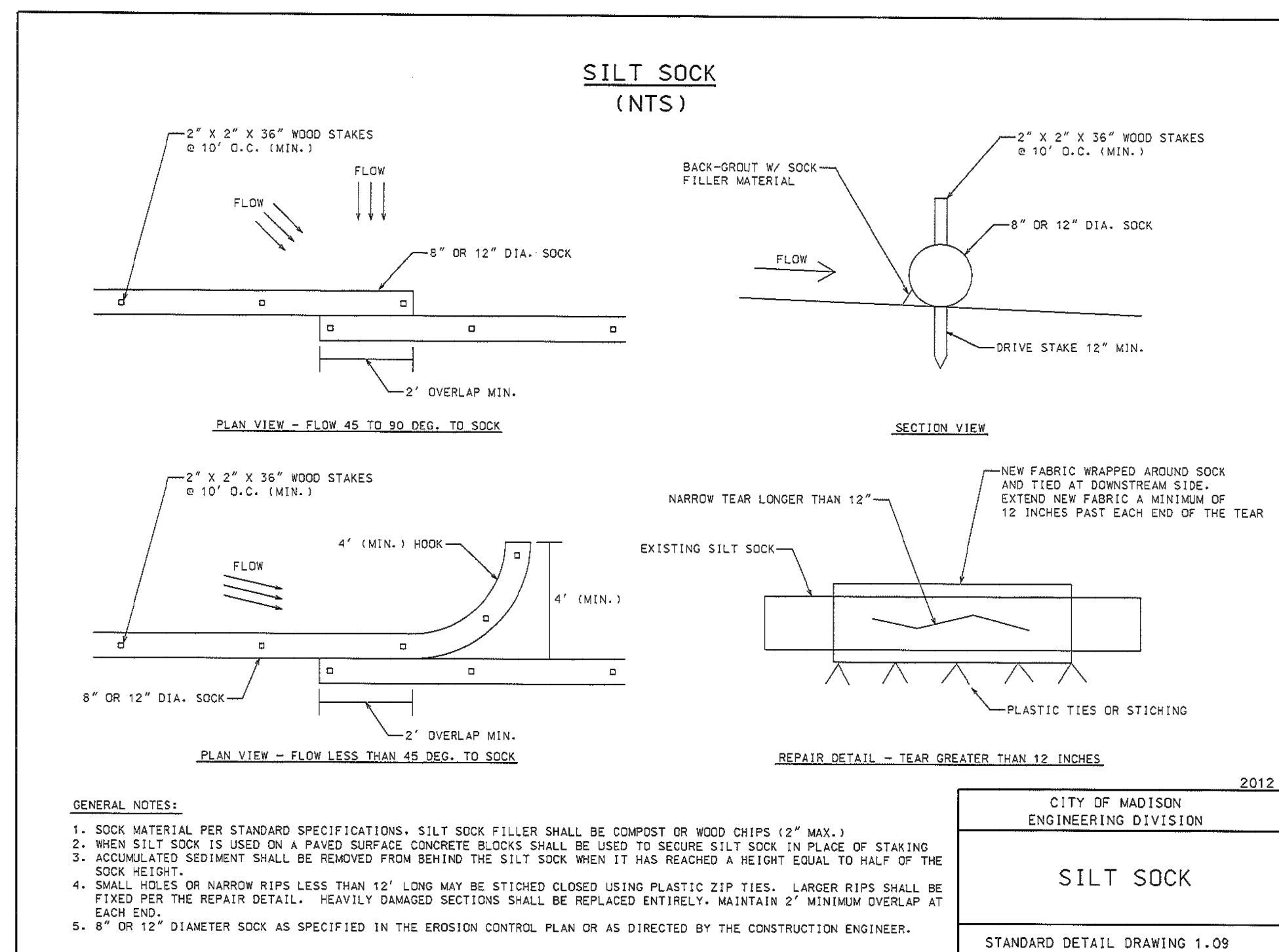




### A SILT FENCE SCALE: NTS



### B INLET PROTECTION TYPE D SCALE: NTS



### C SILT SOCK SCALE: NTS

#### EROSION CONTROL NOTES:

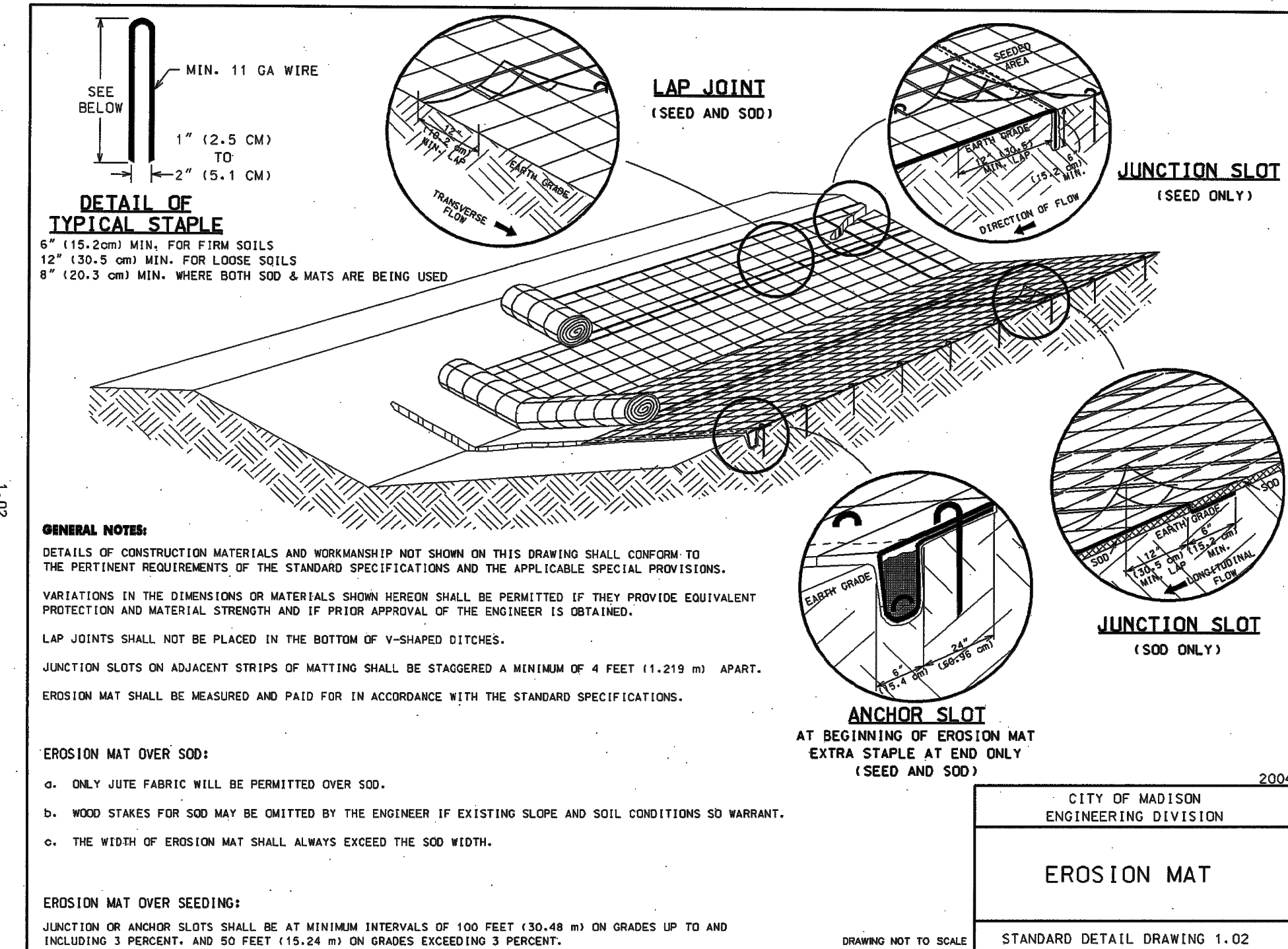
- CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL MUNICIPALITY AND SHALL EMPLOY EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
- ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED 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.
- 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 MAINTAIN 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.
- 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.
- FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS.
- EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
- PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN ADJACENT STREETS FREE OF DUST AND DIRT.
- SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ANY TOPSOIL AND FILL STOCKPILES.
- 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.
- 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.
- 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 MUNICIPALITY, 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 MUNICIPALITY OF ANY CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
- 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.
- 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.
- 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.
- 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.
- NOTIFY THE LOCAL MUNICIPALITY HAVING JURISDICTION WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
- OBTAIN PERMISSION FROM THE LOCAL MUNICIPALITY HAVING JURISDICTION PRIOR TO MODIFYING THE EROSION CONTROL PLAN.
- REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
- KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
- CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE DISTURBANCE OF EXISTING VEGETATION DURING CONSTRUCTION.
- CONTRACTOR SHALL, TO THE EXTENT POSSIBLE, MINIMIZE COMPACTION OF TOPSOIL AND PRESERVE TOPSOIL IN GREENSPACE AREAS.
- WASH WATER FROM VEHICLES AND WHEEL WASHING SHALL BE CONTAINED AND TREATED PRIOR TO DISCHARGE.
- CONTRACTOR SHALL MAINTAIN SPILL KITS ON-SITE.
- PERMANENT 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.
- 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.

### D CONSTRUCTION ENTRANCE SCALE: NTS

#### CONSTRUCTION SEQUENCE FOR EROSION CONTROL INCLUDES:

- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- INSTALL SILT FENCING AND INLET PROTECTION.
- INITIATE STOCKPILING OF IMPORTED MATERIAL. PLACE SILT FENCE AROUND STOCKPILE(S).
- STRIP TOPSOIL FROM REMAINDER OF SITE IN A PROGRESSIVE MANNER, AND STOCKPILE.
- 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 MINIMUM TOPSOIL DEPTH OF 4 INCHES.
- PREPARE BUILDING PAD AND BEGIN FOUNDATIONS WORK FOR BUILDING.
- INSTALL UTILITIES. INSTALL ANY ADDITIONAL INLET PROTECTION ON NEW STORM SEWER AND INSTALL RIP-RAP AT NEW STORM SEWER OUTFALLS.
- STABILIZE AREAS REMAINING AREAS WITHIN 7 DAYS OF COMPLETION OF FINAL GRADING AND TOPSOILING.
- REMOVE EROSION CONTROL MEASURES ONLY WHEN SITE IS FULLY STABILIZED.

### E EROSION MAT SCALE: NTS



TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

4504 VERONA RD.  
MADISON, WI 53711

EROSION CONTROL DETAILS

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SITE PLAN REVIEW 08/25/2025

CITY OF MADISON  
ENGINEERING DIVISION

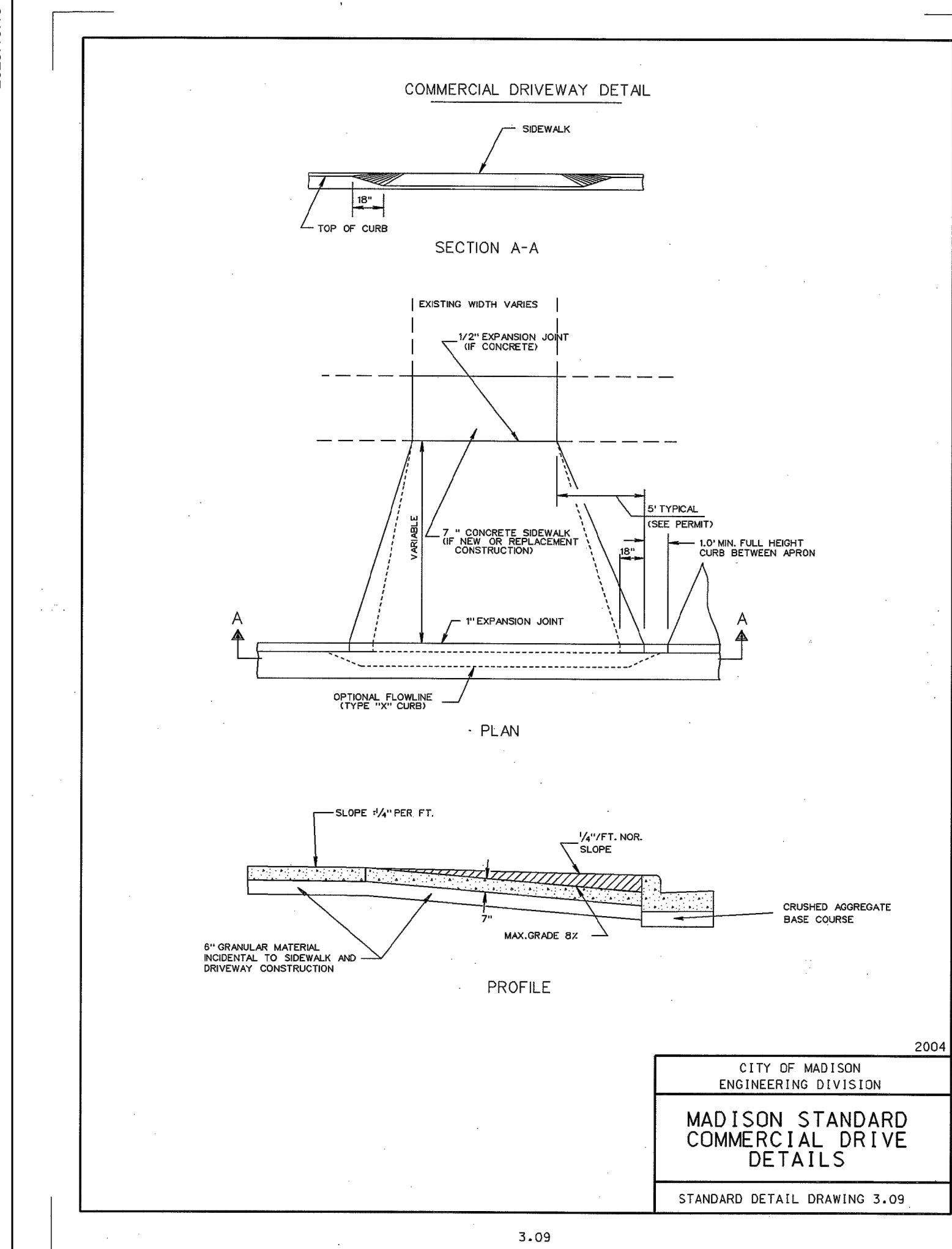
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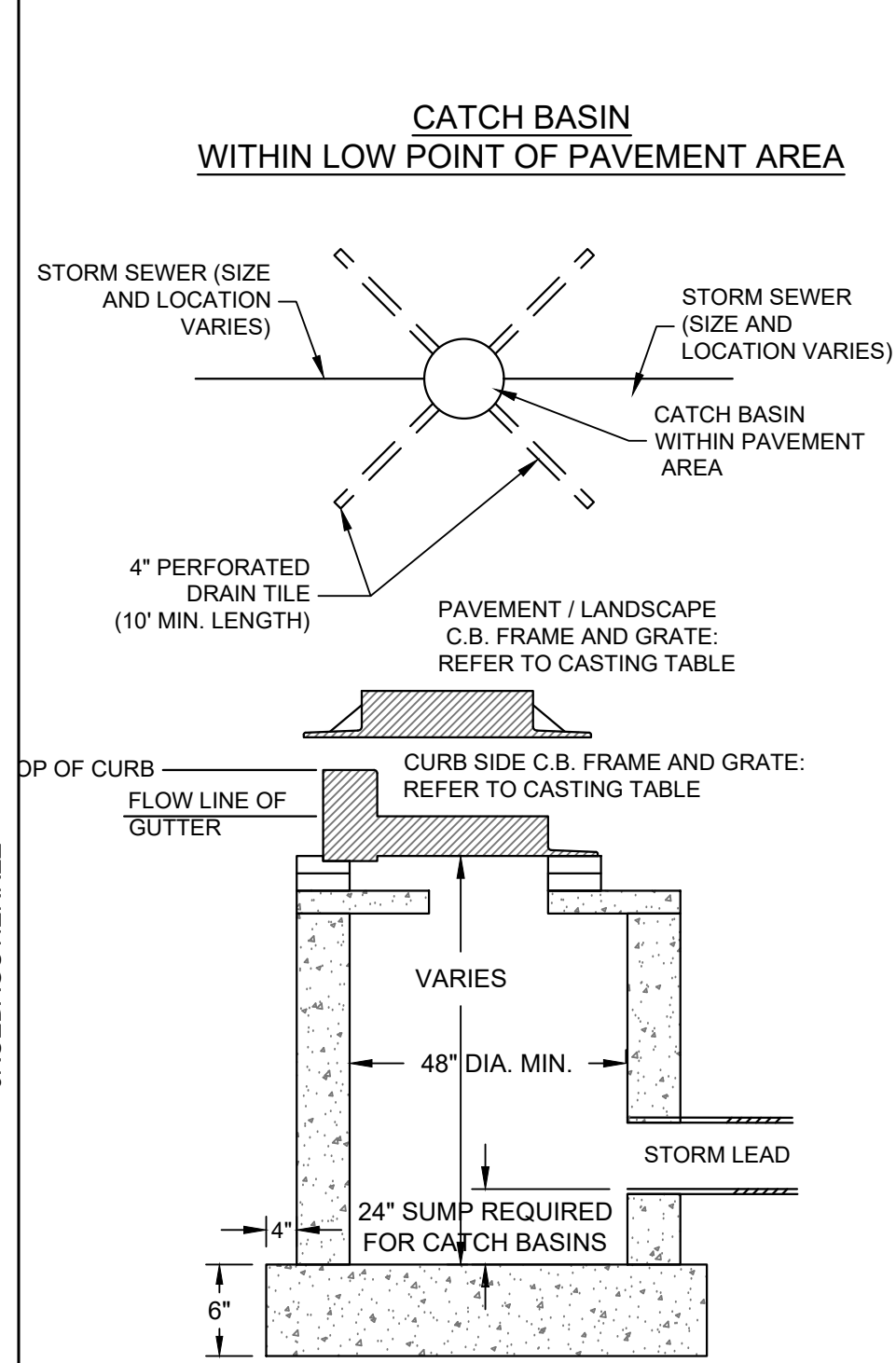
PROJECT NO: 23909  
DESIGN DATE: ---  
PLOT DATE: 2025.10.13  
DRAWN BY: ---  
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APPROVED BY: ---  
SHEET NO:

C400





**A** COMMERCIAL DRIVE  
SCALE: NTS



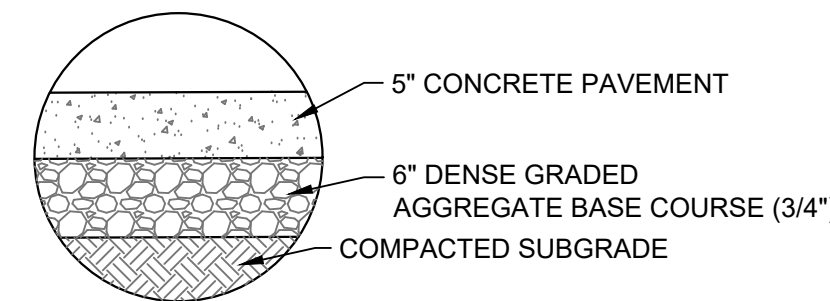
**NOTES:**

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 STONE 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.

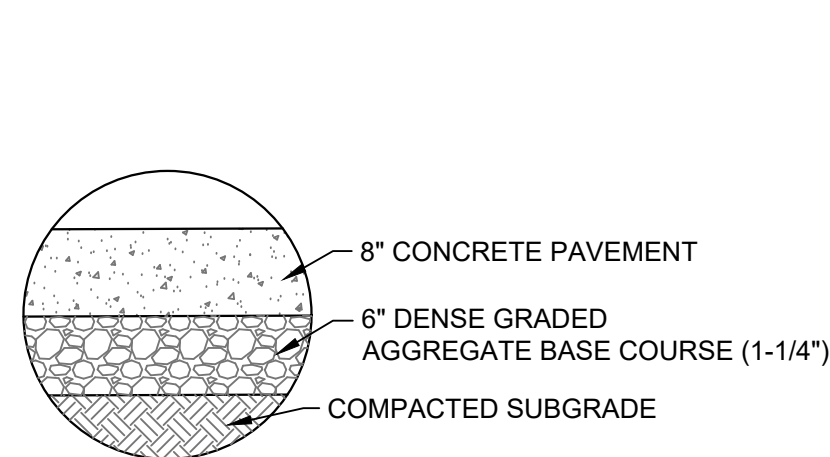
**H** INLET AND CATCH BASIN  
SCALE: NTS

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				

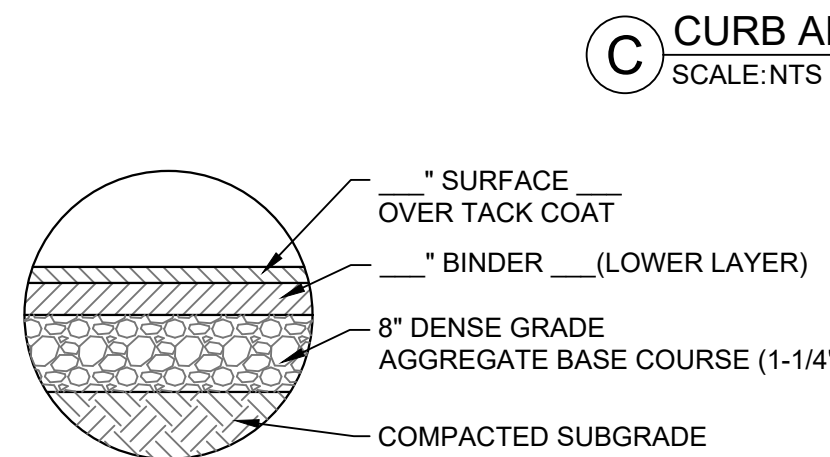
**B** CURB AND GUTTER  
SCALE: NTS



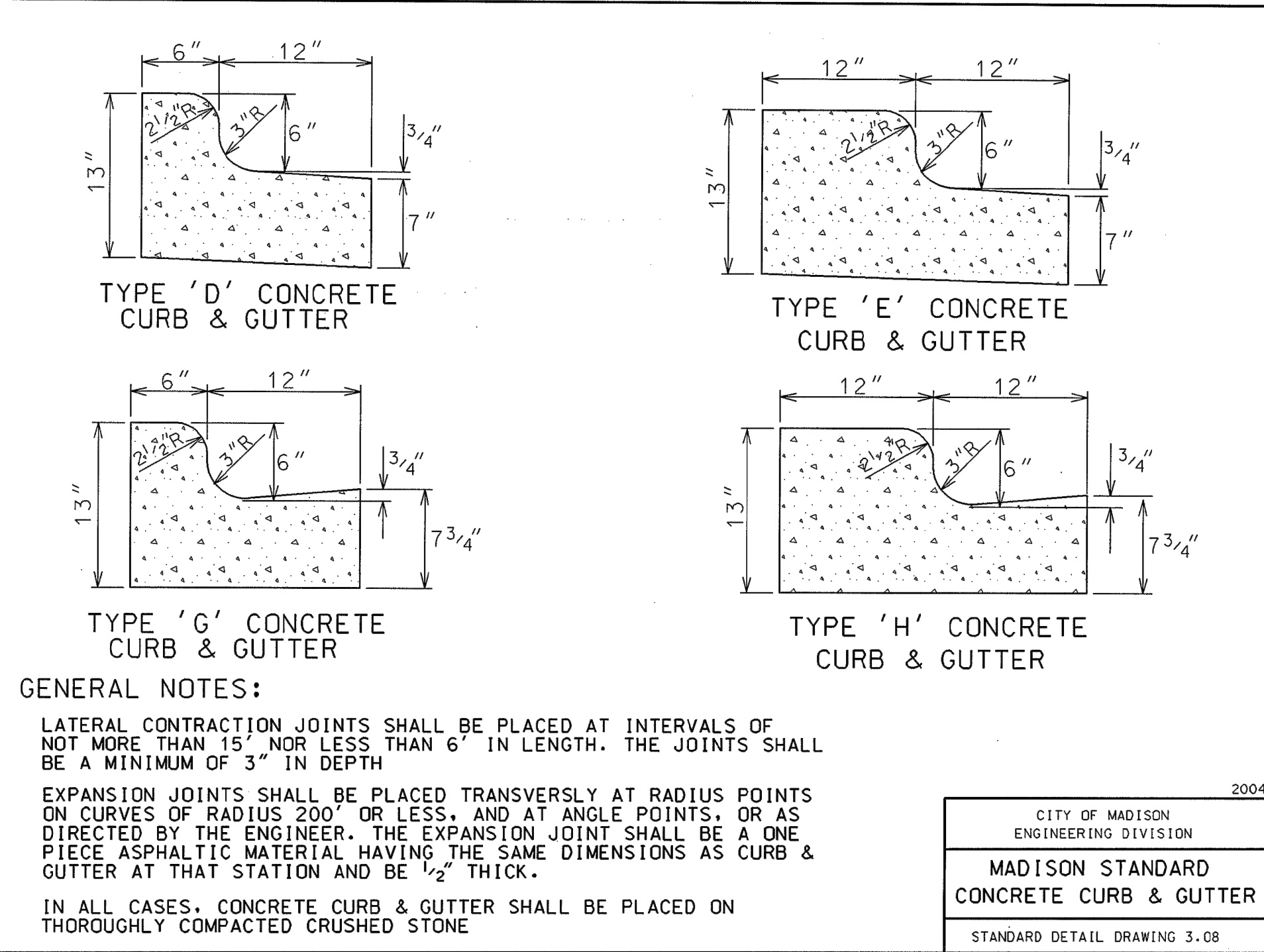
**E** CONCRETE SIDEWALK SECTION  
SCALE: NTS



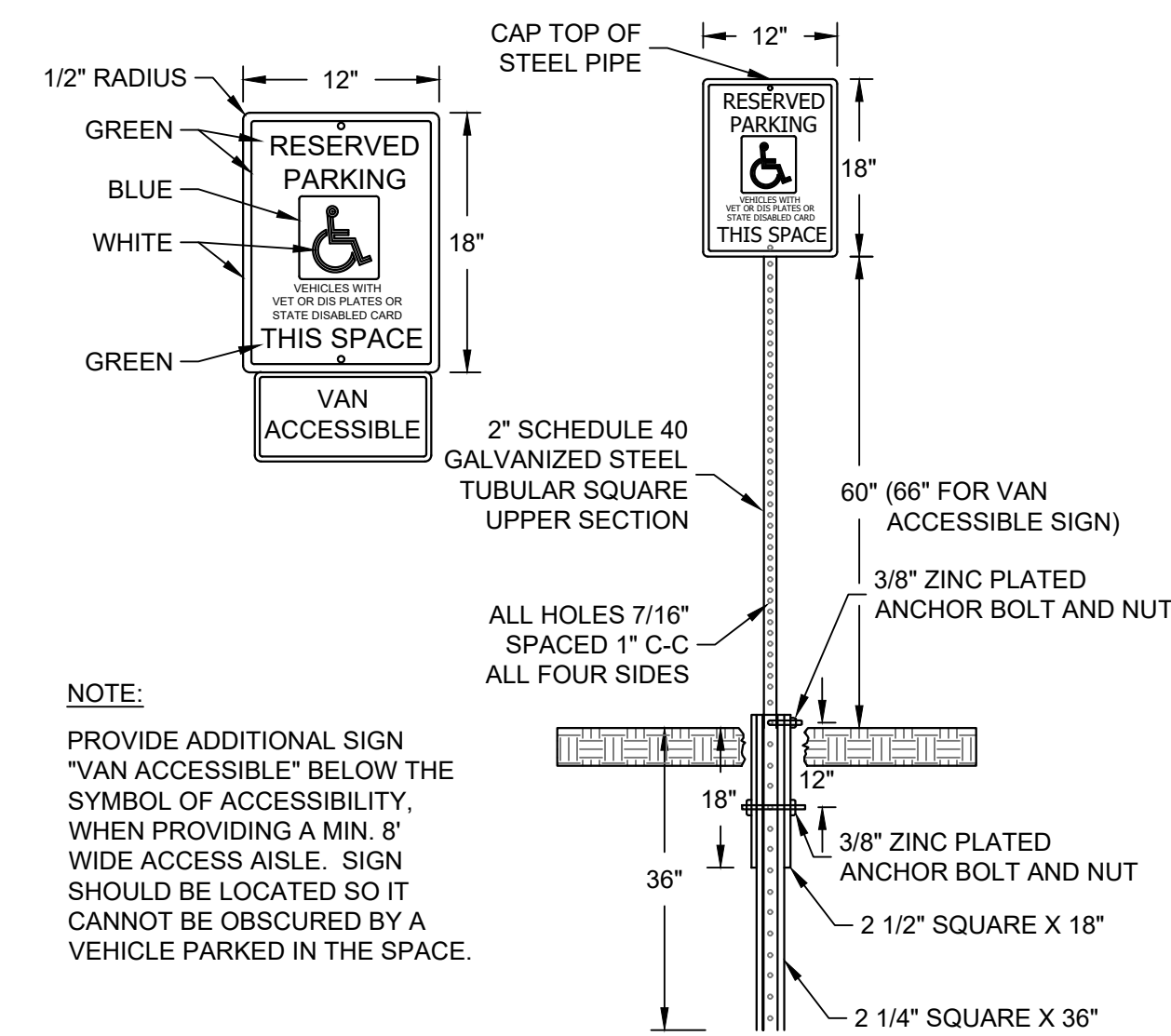
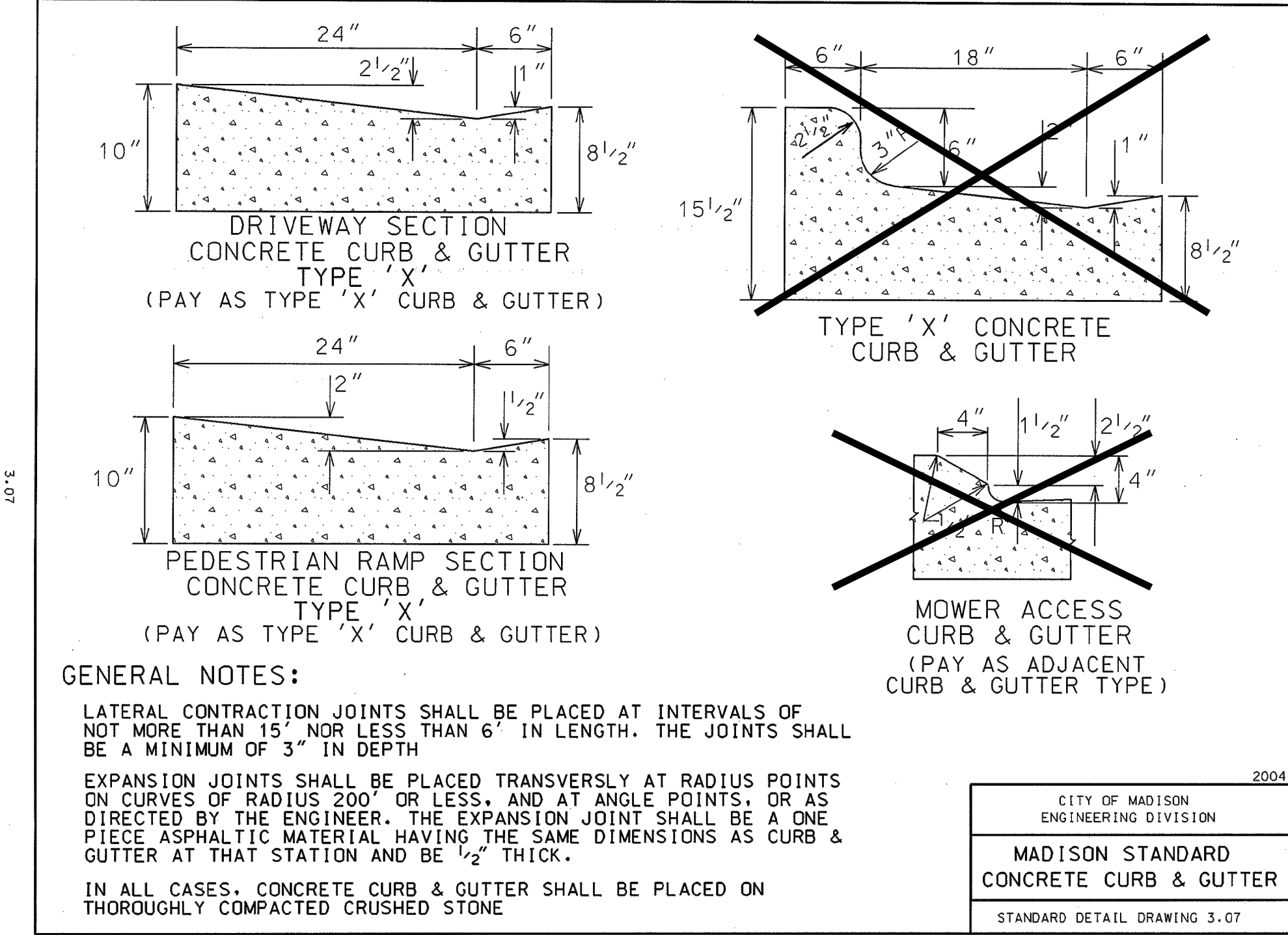
**F** CONCRETE PAVEMENT SECTION  
SCALE: NTS



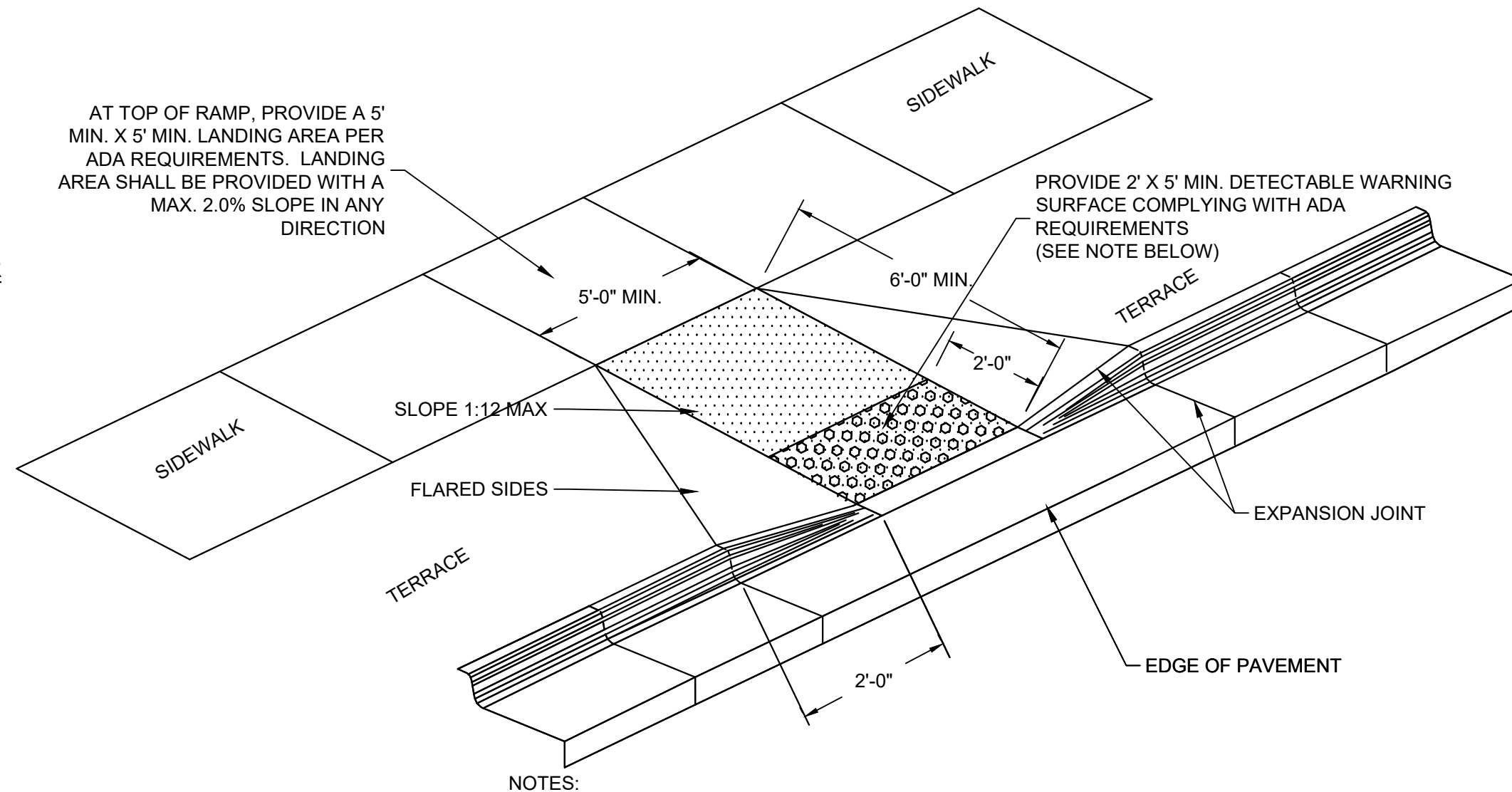
**G** ASPHALT PAVEMENT SECTION  
SCALE: NTS



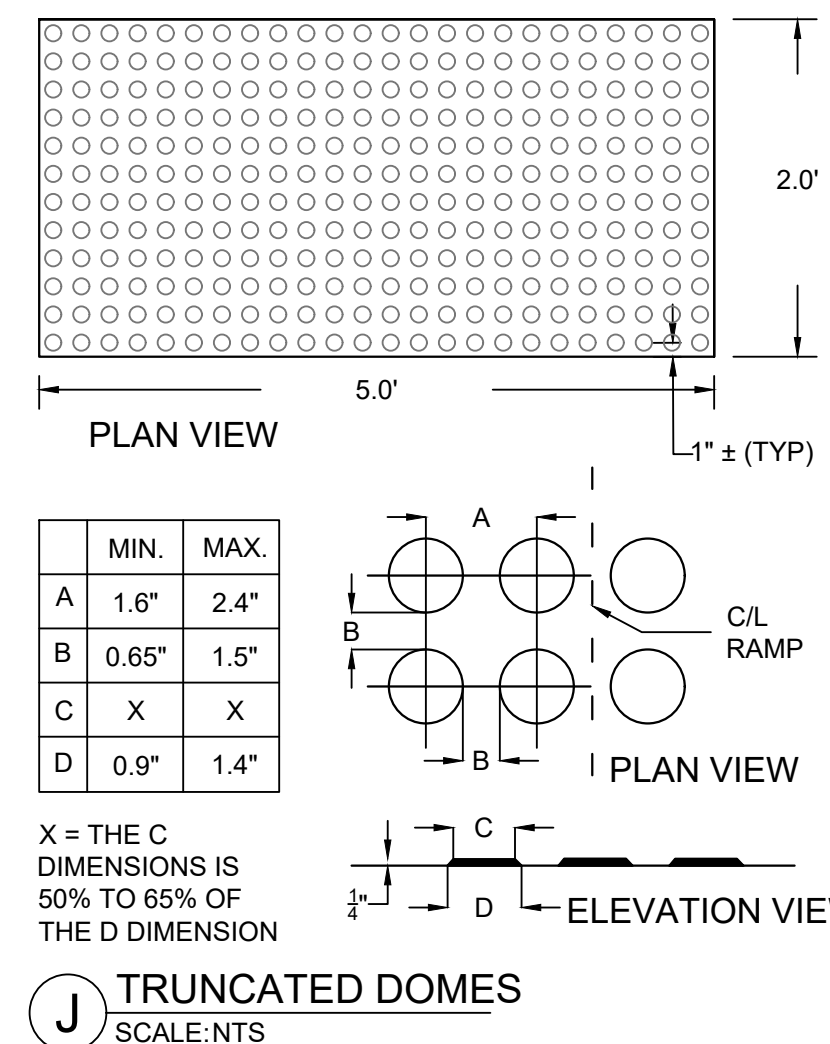
**C** CURB AND GUTTER  
SCALE: NTS



**D** ADA SIGN AND POST  
SCALE: NTS

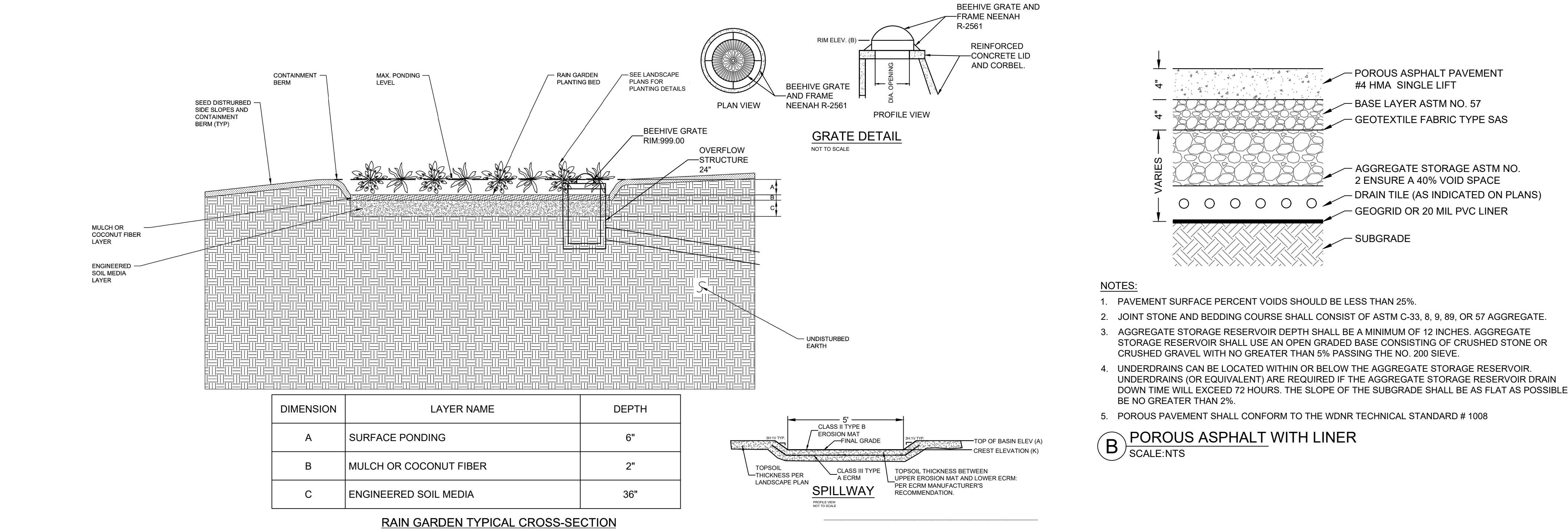


**I** ADA RAMP - TYPE 2  
SCALE: NTS

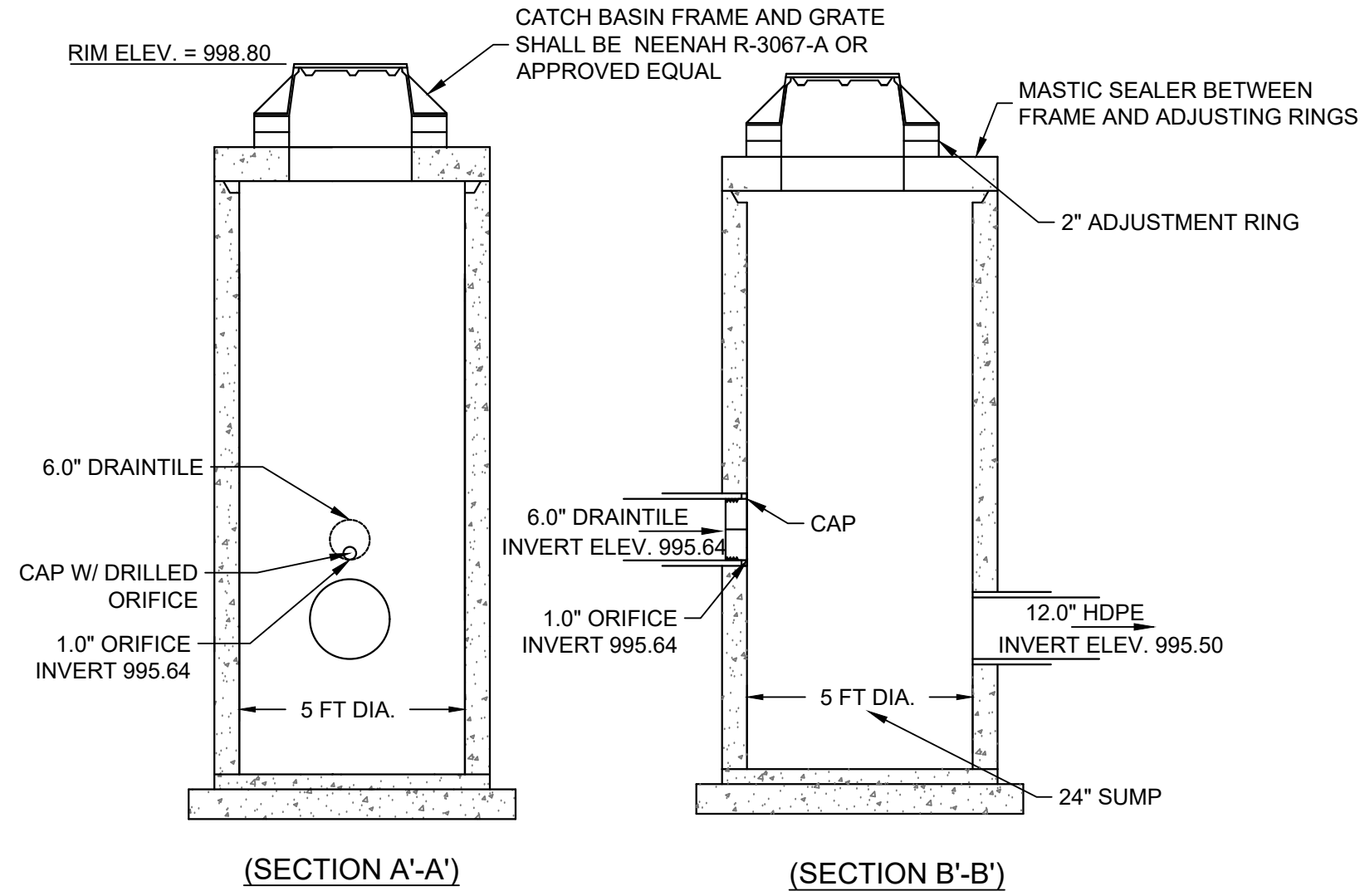


**J** TRUNCATED DOMES  
SCALE: NTS





**A** RAIN GARDEN  
SCALE: NTS



**C** CB 1 OUTLET CONTROL - REDUCER CAP  
SCALE: NTS

TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

4504 VERONA RD.  
MADISON, WI 53711

STORMWATER DETAILS

**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

ISSUANCE	DATE
SITE PLAN REVIEW	08/25/2025

NO. REVISION	DATE
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PROJECT NO:	23909
DESIGN DATE:	----
PLOT DATE:	2025.10.13
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----

SHEET NO:

C402



GENERAL:

- EXISTING UTILITIES ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY, AND NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR THEIR ACCURACY OR COMPLETENESS.
- 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.
- 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:

- 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.
- MINIMIZE INTERFERENCE WITH ADJOINING ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES DURING SITE-CLEARING OPERATIONS.
- SALVABLE IMPROVEMENTS: CAREFULLY REMOVE ITEMS INDICATED TO BE SALVAGED AND STORE ON OWNER'S PREMISES WHERE INDICATED.
- UTILITY LOCATOR SERVICE: NOTIFY UTILITY LOCATOR SERVICE FOR AREA WHERE PROJECT IS LOCATED BEFORE SITE CLEARING.
- DO NOT COMMENCE SITE CLEARING OPERATIONS UNTIL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE.
- PROTECT AND MAINTAIN BENCHMARKS AND SURVEY CONTROL POINTS FROM DISTURBANCE DURING CONSTRUCTION.
- LOCATE AND CLEARLY FLAG TREES AND VEGETATION TO REMAIN OR TO BE RELOCATED.
- PROTECT EXISTING SITE IMPROVEMENTS TO REMAIN FROM DAMAGE DURING CONSTRUCTION; RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER.
- LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF UTILITIES INDICATED TO BE REMOVED; ARRANGE WITH UTILITY COMPANIES TO SHUT OFF INDICATED UTILITIES.
- 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.
- 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.
- REMOVE SOD AND GRASS BEFORE STRIPPING TOPSOIL.
- STRIP TOPSOIL TO WHATEVER DEPTHS ARE ENCOUNTERED IN A MANNER TO PREVENT INTERMINGLING WITH UNDERLYING SUBSOIL OR OTHER WASTE MATERIALS.
- 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.
- REMOVE EXISTING ABOVE- AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION.
- 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.
- 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:

- 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.
- 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.
- WATER SERVICE PIPING MAY BE EITHER DUCTILE IRON WATER PIPE OR PVC WATER PIPE AS ALLOWED BY THE LOCAL WATER UTILITY.
- 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.
  - CLASS 52
  - CEMENT MORTAR LINING AND INTERNAL AND EXTERNAL BITUMINOUS COATS IN ACCORDANCE WITH SECTION 51.8 OF AWWA C151.
  - PUSH-ON GASKET PIPE
  - PLAIN RUBBER GASKETS
  - BONDING STRAPS TO PROVIDE ELECTRICAL CONDUCTIVITY WITHOUT FIELD TESTING
- 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)
- 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 TAPPED; CONDUCTIVE MECHANICAL JOINT (NO LEAD) RUBBER GASKETS, FLANGES, AND BOLTS.
- 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 C163, DUCTILE-IRON COMPACT PATTERN. GLANDS, GASKETS AND BOLTS: AWWA C111, DUCTILE IRON GLANDS, RUBBER GASKETS AND STEEL BOLTS.
- GATE VALVES: CONFORM TO AWWA C-500 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN SUITABLE FOR DIRECT BURY.
- VALVE BOXES: CAST IRON CONFORMING TO ASTM DESIGNATION A-48, CLASS 20 AND STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- FIRE HYDRANTS: TO MEET LOCAL STANDARDS.
- 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 SHALL 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
- GENERAL WATER PIPE INSTALLATION: IN ACCORDANCE WITH CHAPTER 4.3.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- 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.
- 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.
- 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.
- 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.:

- 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.
- 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.
- DUCTILE-IRON PIPING, RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTION 4.4.2 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- 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.
- CONDUCT HYDROSTATIC TESTS IN ACCORDANCE WITH CHAPTER 4.15.0 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
- CLEAN AND DISINFECT WATER SERVICE PIPING IN ACCORDANCE WITH SPS CHAPTER 82.40(8)(I) AND AWWA C651.

SANITARY SEWERAGE:

- ALL PRIVATE SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS.
- 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.
- 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.
- 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.
- MANHOLES DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
- 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).
- 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
- 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.
- 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.
- 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.
- MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
- 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:

- ALL PRIVATE STORM SEWER WORK SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES (DPS) PLUMBING CODE - CHAPTERS SPS 382 AND SPS 384 AND LOCAL MUNICIPAL REQUIREMENTS.
- 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.
- 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.
- 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.
- HDPE PIPE: ADS N12 PIPE AS APPROVED ON THE DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCT REGISTER.
- 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.
- FRAMES AND GRATES: AS INDICATED ON PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING SPECIFIED FRAME/GRATE IS COMPATIBLE WITH STRUCTURE; IF NOT, NOTIFY ENGINEER.
- 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.
- MANHOLES AND CATCH BASINS DEEPER THAN FOUR FEET SHALL BE PROVIDED WITH MANHOLE STEPS CONFORMING TO SECTION 8.40.0 OF THE STANDARD SPECIFICATIONS.
- 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).
- 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.
- 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.
- 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.
- MANHOLE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3.5.0 OF THE STANDARD SPECIFICATIONS. SET MANHOLE RIMS TO ELEVATIONS INDICATED ON PLANS.
- 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.
- 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:

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- PIPE COVER MATERIAL: CONFORM TO SECTION 8.43.3 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA.
- 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.
- 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.
- 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.
- 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 DRAINITLE THAT IS IN KIND SLOPED TOWARD THE NEAREST STORM SEWER. MINIMUM SLOPES OF SUCH DRAINITLES SHALL BE 0.5%.
- CONVENTIONAL DISKING AND AERATION TECHNIQUES SHALL BE USED TO DRY SOILS BEFORE PROOF ROLLING. ALLOT FOR PROPER DRYING TIME IN PROJECT SCHEDULE.
- 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 SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
- EXISTING OLD FILL MATERIAL SHALL BE REMOVED BELOW FOOTINGS OR FOUNDATION SUPPORTING FILL. ENGINEERED FILL BELOW FOOTINGS SHOULD HAVE AN IN-PLACE DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. ENGINEERED FILL BELOW FOOTINGS SHALL BE EVALUATED BY IN-FIELD DENSITY TESTS DURING CONSTRUCTION.
- WHERE UNSUITABLE BEARING SOILS ARE ENCOUNTERED IN A FOOTING EXCAVATION, THE EXCAVATION SHALL BE DEEPEENED TO COMPETENT BEARING SOIL AND THE FOOTING LOWERED OR AN OVEREXCAVATION AND BACKFILL PROCEDURE PERFORMED. OVEREXCAVATION AND BACKFILL TREATMENT REQUIRES WIDENING THE DEEPEENED EXCAVATION IN ALL DIRECTIONS AT LEAST 6 INCHES BEYOND THE EDGE OF THE FOOTING FOR EACH 12 INCHES OF OVEREXCAVATION DEPTH. THE OVEREXCAVATION SHALL BE BACKFILLED UP TO FOOTING BASE ELEVATION IN MAXIMUM 8 INCH LOOSE LIFTS WITH SUITABLE GRANULAR FILL MATERIAL AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AND A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. SOILS AT FOUNDATION BEARING ELEVATION IN THE FOOTING EXCAVATIONS SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
- A MINIMUM OF FOUR INCHES OF DRAINAGE COURSE MAT SHALL BE PLACED BELOW BUILDING FLOOR SLABS. DRAINAGE COURSE SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557)
- UTILITY TRENCHES FOR SEWER AND WATER SHALL CONFORM TO CLASS B COMPACTED TRENCH SECTION IN ACCORDANCE WITH FILE NO. 4 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION.
- BACKFILL UTILITY TRENCHES IN 4 TO 6 INCH LOOSE LIFTS COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557. BACKFILL SHALL BE MOISTURE CONDITIONED TO BE WITH 3% OF OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557.
- UTILITY BEDDING PLACEMENT: CONFORM TO SECTION 3.2.6 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, LATEST EDITION. BEDDING MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% COMPACTION WITH RESPECT TO THE MODIFIED PROCTOR (ASTM D1557).
- COMPACTION TESTING OF UTILITY TRENCHES SHALL BE PERFORMED ONE FOR EVERY 200 CUBIC YARDS OF BACKFILL PLACED OR ONE FOR TEST PER 200 LINEAR FEET OF TRENCH FOR EACH LIFT, WHICHEVER IS LESS.
- AGGREGATE BASE COURSE BENEATH PAVEMENTS SHALL BE PLACED AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 3% OF OPTIMUM AS DETERMINED BY ASTM D1557. AGGREGATE BASE SHALL BE OBSERVED AND TESTED BY A QUALIFIED GEOTECHNICAL ENGINEER OR TECHNICIAN.
- GRADING GENERAL: UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. SLOPE GRADES TO DIRECT WATER AWAY FROM BUILDINGS AND TO PREVENT PONDING.
- TESTING AGENCY: CONTRACTOR SHALL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY-CONTROL TESTING.
- FOOTING SUBGRADE TESTING: EACH ISOLATED FOOTING SHALL INCLUDE AT LEAST ONE TEST PROBE. TEST PROBES SHALL BE PERFORMED EVERY 20 LINEAR FEET IN CONTINUOUS FOOTINGS.
- BUILDING SLAB AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EVERY 2500 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS.
- PAVEMENT AREA TESTING: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST ONE TEST FOR EVERY LIFT FOR EVERY 2,500 SQUARE FEET OF PAVEMENT AREA, BUT IN NO CASES FEWER THAN 3 TESTS.
- FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST PER LIFT FOR EACH 50 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.
- WHEN TESTING AGENCY REPORTS THAT SUBGRADES, FILLS, OR BACKFILLS HAVE NOT ACHIEVED DEGREE OF COMPACTION SPECIFIED, SCARIFY AND MOISTEN OR AERATE, OR REMOVE AND REPLACE SOIL TO DEPTH REQUIRED; RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION IS OBTAINED.
- DISPOSAL: REMOVE SURPLUS SOIL AND WASTE MATERIAL, INCLUDING UNSATISFACTORY SOIL, TRASH, AND DEBRIS, AND LEGALLY DISPOSE OF IT OFF OWNER'S PROPERTY.



TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

4504 VERONA RD.  
MADISON, WI 53711

SPECIFICATIONS

PRELIMINARY  
NOT FOR  
CONSTRUCTION

ISSUANCE	DATE
SITE PLAN REVIEW	08/25/2025
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NO. REVISION	DATE
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PROJECT NO:	23909
DESIGN DATE:	----
PLOT DATE:	2025.10.13
DRAWN BY:	----
CHECKED BY:	----
APPROVED BY:	----
SHEET NO:	

C500



CONCRETE PAVING:

1. THE COMPOSITION, PLACING AND CONSTRUCTION OF CONCRETE PAVEMENTS SHALL BE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTION 415, 501, 502 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 COMPLES 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, CONFORMING TO SECTION 501.3.2.2.1 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 PAYER, 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 1/4 INCH FOR BINDER COURSE AND PLUS 1/4 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: 1/4 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.

BIOFILTRATION BASIN:

1. BIOFILTRATION BASIN SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH WDNR TECHNICAL STANDARD 1004: BIORETENTION FOR INFILTRATION AND THESE SPECIFICATIONS.
2. ENGINEERED SOIL MIX SHALL CONSIST OF A MIX OF 70 TO 85% SAND AND 15 TO 30% COMPOST BASED ON VOLUME, SAND SHALL MEET THE REQUIREMENTS FOR FINE AGGREGATE SAND SPECIFIED SECTION 501.2.5.3.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION OR MEET ASTM C33 (FINE AGGREGATE CONCRETE SAND).
3. PRIOR TO PLACEMENT IN THE BIOFILTRATION BASIN, THE ENGINEERED SOIL SHALL BE PREMIXED AND THE MOISTURE CONTENT SHALL BE LOW ENOUGH TO PREVENT CLUMPING AND COMPACTION DURING PLACEMENT.
4. THE ENGINEERED SOIL SHALL BE PLACED IN MULTIPLE LIFTS, EACH APPROXIMATELY 12 INCHES IN DEPTH.
5. ENGINEERED SOIL MIX SHALL BE FREE OF ROCKS, STUMPS, ROOTS, BRUSH OR OTHER MATERIAL OVER ONE INCH IN DIAMETER, NO OTHER MATERIALS SHALL BE MIXED WITH THEE PLANTING SOIL THAT MAY BE HARMFUL TO PLANT GROWTH OR BE A HINDRANCE TO PLANTING OR MAINTENANCE.
6. ENGINEERED SOIL AND GRAVEL SHALL BE IN ACCORDANCE WITH THE LATEST WDNR TECHNICAL STANDARD 1004.
7. PEA GRAVEL SHALL BE GRADED SUCH THAT MINIMUM PARTICLE SIZE IS LARGE ENOUGH TO PREVENT FALLING THROUGH PERFORATIONS OF THE UNDERDRAIN PIPE.
8. BIOFILTRATION BASIN DRAIN PIPE: 6-INCH SCHEDULE 40 PVC PIPE MEETING PERFORATION REQUIREMENTS OF AASHTO M278 HIGHWAY UNDERDRAIN SPECIFICATIONS WITH 3/8" PERFORATIONS ON 6" CENTERS WITH 4 HOLES PER ROW.
9. BEEHIVE INLET: NEENAH R-256I, OR EQUAL
10. RISER STRUCTURE: 36" DIAMETER PRECAST CATCH BASIN STRUCTURE WITH 24" TOP OPENING TO ACCOMMODATE BEEHIVE INLET. IN GENERAL ACCORDANCE WITH FILE NO. 26 OF THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN.
11. GRAVEL STORAGE LAYER (IF INDICATED ON PLANS): COURSE AGGREGATE #2 IN ACCORDANCE WITH SECTION 501.2.5.4.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
12. FILTER FABRIC: GEOTEXTILE FABRIC IN ACCORDANCE WITH SECTION 645.2.2.4 OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION
13. EXCAVATE TO GRADES AS INDICATED ON PLANS.
14. CONSTRUCT TEMPORARY DIVERSION SWALES OR PROVIDE OTHER MEANS AS NECESSARY TO PREVENT CONSTRUCTION SITE RUNOFF FROM DISTURBED AREAS, AND RUNOFF FROM Pervious AREAS WHICH HAVE NOT YET BEEN STABILIZED, FROM ENTERING THE BIORETENTION AREA.
15. CONSTRUCTION SHALL BE SUSPENDED DURING PERIODS OF RAINFALL OR SNOWMELT, CONSTRUCTION SHALL REMAIN SUSPENDED IF PONDED WATER IS PRESENT OR IF RESIDUAL SOIL MOISTURE CONTRIBUTES SIGNIFICANTLY TO THE POTENTIAL FOR SOIL SMEARING, CLUMPING OR OTHER FORMS OF COMPACTION.
16. COMPACTION AND SMEARING OF THE ENGINEERED SOIL AND TOP SOIL BENEATH THE FLOORS, IN THE SOIL PLANTING BED, AND THE SIDE SLOPES OF THE BASIN, AND COMPACTION OF THE ENGINEERED SOILS IN THE BASIN SHALL BE MINIMIZED, DURING SITE DEVELOPMENT, THE AREA DEDICATED TO THE BIOFILTRATION BASIN SHALL BE CORDONED OFF TO PREVENT ACCESS BY HEAVY EQUIPMENT, ACCEPTABLE EQUIPMENT FOR CONSTRUCTING THE BIOFILTRATION BASIN INCLUDES EXCAVATION HOES, LIGHT EQUIPMENT WITH TURF TYPE TIRES, MARSH EQUIPMENT OR WIDE-TRACK LOADERS.
17. IF COMPACTION OCCURS AT THE BASE OF THE BIOFILTRATION BASIN, THE SOIL SHALL BE REFRACTURED TO A DEPTH OF AT LEAST 12 INCHES. IF SMEARING OCCURS, THE SMEARED AREAS OF THE INTERFACE SHALL BE CORRECTED BY RAKING OR ROTO-TILLING.
18. STEPS MAY BE TAKEN TO INDUCE MILD SETTling OF THE ENGINEERED SOIL BED AS NEEDED TO PREPARE A STABLE PLANTING MEDIUM AND TO STABILIZE THE PONDING DEPTH, VIBRATING PLATE-STYLE COMPACTORS SHALL NOT BE UTILIZED.
19. ANY SEDIMENT ACCUMULATED IN THE BASIN DUE TO CONSTRUCTION ACTIVITIES SHOULD BE REMOVED AND THE ENGINEERED SOIL SHALL BE DEEP TILLED PRIOR TO PLANTING.
20. IMPERVIOUS LINER SHALL BE 45 MIL FIRESTONE EPDM (GSI PRODUCTS), OR 30 MIL PVC (GSI PRODUCTS), OR EQUAL.

RAIN GARDEN:

1. RAIN GARDEN SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH WDNR TECHNICAL STANDARD 1009: RAIN GARDEN AND THESE SPECIFICATIONS.
2. ENGINEERED SOIL MIX SHALL CONSIST OF A MIX OF 70 TO 85% SAND AND 15 TO 30% COMPOST BASED ON VOLUME, SAND SHALL MEET THE REQUIREMENTS FOR FINE AGGREGATE SAND SPECIFIED SECTION 501.2.5.3.4 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION, LATEST EDITION OR MEET ASTM C33 (FINE AGGREGATE CONCRETE SAND).
3. PRIOR TO PLACEMENT IN THE RAIN GARDEN, THE ENGINEERED SOIL SHALL BE PREMIXED AND THE MOISTURE CONTENT SHALL BE LOW ENOUGH TO PREVENT CLUMPING AND COMPACTION DURING PLACEMENT.
4. THE ENGINEERED SOIL SHALL BE PLACED IN MULTIPLE LIFTS, EACH APPROXIMATELY 12 INCHES IN DEPTH.
5. ENGINEERED SOIL MIX SHALL BE FREE OF ROCKS, STUMPS, ROOTS, BRUSH OR OTHER MATERIAL OVER ONE INCH IN DIAMETER, NO OTHER MATERIALS SHALL BE MIXED WITH THEE PLANTING SOIL THAT MAY BE HARMFUL TO PLANT GROWTH OR BE A HINDRANCE TO PLANTING OR MAINTENANCE.
6. ENGINEERED SOIL SHALL BE IN ACCORDANCE WITH THE LATEST WDNR TECHNICAL STANDARD 1004.
7. EXCAVATE TO GRADES AS INDICATED ON PLANS.
8. CONSTRUCT TEMPORARY DIVERSION SWALES OR PROVIDE OTHER MEANS AS NECESSARY TO PREVENT CONSTRUCTION SITE RUNOFF FROM DISTURBED AREAS, AND RUNOFF FROM Pervious AREAS WHICH HAVE NOT YET BEEN STABILIZED, FROM ENTERING THE RAIN GARDEN AREA.
9. CONSTRUCTION SHALL BE SUSPENDED DURING PERIODS OF RAINFALL OR SNOWMELT, CONSTRUCTION SHALL REMAIN SUSPENDED IF PONDED WATER IS PRESENT OR IF RESIDUAL SOIL MOISTURE CONTRIBUTES SIGNIFICANTLY TO THE POTENTIAL FOR SOIL SMEARING, CLUMPING OR OTHER FORMS OF COMPACTION.
10. COMPACTION AND SMEARING OF THE ENGINEERED SOIL AND TOP SOIL BENEATH THE FLOORS, IN THE SOIL PLANTING BED, AND THE SIDE SLOPES OF THE BASIN, AND COMPACTION OF THE ENGINEERED SOILS IN THE BASIN SHALL BE MINIMIZED, DURING SITE DEVELOPMENT, THE AREA DEDICATED TO THE RAIN GARDEN BASIN SHALL BE CORDONED OFF TO PREVENT ACCESS BY HEAVY EQUIPMENT, ACCEPTABLE EQUIPMENT FOR CONSTRUCTING THE RAIN GARDEN BASIN INCLUDES EXCAVATION HOES, LIGHT EQUIPMENT WITH TURF TYPE TIRES, MARSH EQUIPMENT OR WIDE-TRACK LOADERS.
11. IF COMPACTION OCCURS AT THE BASE OF THE RAIN GARDEN BASIN, THE SOIL SHALL BE REFRACTURED TO A DEPTH OF AT LEAST 12 INCHES. IF SMEARING OCCURS, THE SMEARED AREAS OF THE INTERFACE SHALL BE CORRECTED BY RAKING OR ROTO-TILLING.
12. STEPS MAY BE TAKEN TO INDUCE MILD SETTling OF THE ENGINEERED SOIL BED AS NEEDED TO PREPARE A STABLE PLANTING MEDIUM AND TO STABILIZE THE PONDING DEPTH, VIBRATING PLATE-STYLE COMPACTORS SHALL NOT BE UTILIZED.
13. ANY SEDIMENT ACCUMULATED IN THE BASIN DUE TO CONSTRUCTION ACTIVITIES SHOULD BE REMOVED AND THE ENGINEERED SOIL SHALL BE DEEP TILLED PRIOR TO PLANTING.

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



























SPECIFICATIONS

PRELIMINARY  
NOT FOR  
CONSTRUCTION

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PLANT SCHEDULE L100						
SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	
DECIDUOUS TREES						
	GP	Ginkgo biloba 'Princeton Sentry' / Princeton Sentry Maidenhair Tree	3" Cal.	B&B	1	
	QL	Quercus robur x bicolor 'Long' / Regal Prince® Oak	3" Cal.	B&B	4	
	TT	Tilia tomentosa 'PNI 6051' / Green Mountain® Silver Linden	3" Cal.	B&B	1	
ORNAMENTAL TREES						
	CJ	Carpinus caroliniana 'J.N. Upright' / Firespire® American Hornbeam	1.5" Cal.	B&B	6	
	HM	Heptacodium miconioides / Seven Son Flower	6' Ht. (Multi-Stem)	B&B	2	
	SI	Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	1.5" Cal.	B&B	7	
STREET TREES						
	AG3	Aesculus glabra 'JN Select' / Early Glow™ Ohio Buckeye	2" Cal.	B&B	1	
	GS	Gleditsia triacanthos inermis 'Skyline' / Skyline Honey Locust	2" Cal.	B&B	1	
	GD	Gymnocladus dioicus 'Espresso' / Kentucky Coffeetree	2" Cal.	B&B	1	
	MR	Malus x 'Red Jewel' / Red Jewel Crabapple	2" Cal.	B&B	1	
	TA	Tilia americana 'Kromm' / Sweet Street™ American Linden	2" Cal.	B&B	1	
DECIDUOUS SHRUBS						
	CF	Cornus sericea 'Farrow' / Arctic Fire® Red Twig Dogwood	2.5' Ht.	Cont.	20	
	SL	Diervilla lonicera 'Jewel' / Jewell Bush Honeysuckle	3 gal.	Cont.	32	
	HL	Hydrangea paniculata 'SMHPLQF' / Little Quick Fire® Panicle Hydrangea	3 gal.	Cont.	8	
	HA	Hypericum kalmianum 'Ames' / Ames St. Johnswort	3 gal.	Cont.	16	
	PD	Physocarpus opulifolius 'Donna May' / Little Devil™ Dwarf Ninebark	2.5' Ht.	Cont.	6	
	RA	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	3 gal.	Cont.	10	
	SN	Spiraea japonica 'SMNSJMFR' / Double Play® Red Spirea	3 gal.	Cont.	8	
	SM	Syringa meyeri 'Palibin' / Dwarf Korean Lilac	3' Ht.	Cont.	14	
	VJ	Viburnum x juddii / Judd Viburnum	4' Ht.	Cont.	6	
EVERGREEN SHRUBS						
	BG	Buxus x 'Green Velvet' / Green Velvet Boxwood	3 gal.	Cont.	5	
	JD	Juniperus chinensis 'Daub's Frosted' / Daub's Frosted Juniper	3 gal.	Cont.	12	
	JL	Juniperus chinensis 'Iowa' / Iowa Juniper	5' Ht.	Cont.	22	
ORNAMENTAL GRASSES						
	CA	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	1 gal.	Cont.	29	
	PN	Panicum virgatum 'Northwind' / Northwind Switch Grass	1 gal.	Cont.	8	
PERENNIALS						
	AM	Alchemilla mollis / Lady's Mantle	1 gal.	Cont.	20	
	HH	Hemerocallis x 'Happy Returns' / Happy Returns Daylily	1 gal.	Cont.	13	
	HB	Heuchera x 'Berry Timeless' / Berry Timeless Coral Bells	1 gal.	Cont.	11	
	HM2	Hosta x 'August Moon' / August Moon Hosta	1 gal.	Cont.	7	
	LK	Liatris spicata 'Kobold' / Kobold Blazing Star	1 gal.	Cont.	17	
	RK	Rudbeckia fulgida 'Blow' / Viette's Little Suzy Coneflower	1 gal.	Cont.	11	

LEGEND:

TURFGRASS SEED

BIOINFILTRATION PLUGS

HARDWOOD BARK MULCH PLANT BED

STONE MULCH

PROPERTY LINE

SHOVEL CUT PLANT EDGING

METAL PLANT EDGING

5' THICK CONCRETE WALK

CONCRETE PAVEMENT

ASPHALT SURFACE

POROUS SURFACE

CURB & GUTTER (ACCEPT)

CURB & GUTTER (REJECT)

LANDSCAPE GENERAL NOTES:

1. VERIFY EXISTING AND PROPOSED CONDITIONS, UTILITIES, PIPES, AND STRUCTURES, ETC., PRIOR TO BIDDING AND CONSTRUCTION.

2. INSPECT THE SITE PRIOR TO COMMENCING WORK, DOCUMENT IN WRITING AND PHOTOGRAPH EXISTING CONDITIONS WITHIN, AND IN AREAS ADJACENT TO THE LIMITS OF CONSTRUCTION. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES NOT DOCUMENTED IN THE PHOTOGRAPHS PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.

3. COORDINATE THE INSTALLATION OF PLANT MATERIAL WITH INSTALLATION OF ADJACENT PAVEMENTS, DRAINAGE, CURB RELATED STRUCTURES WITH OTHER TRADES.

4. RESTORE AREAS OF THE SITE, OR ADJACENT AREAS, WHERE DISTURBED, DAMAGE CAUSED DURING LANDSCAPE INSTALLATION TO EXISTING CONDITIONS AND IMPROVEMENTS IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.

5. CONTRACTOR SHALL THOROUGHLY REVIEW ALL SPECIFICATIONS RELATED TO TREE PROTECTION, SOIL PREPARATION, TURF, GRASSES AND PLANTS. THESE SECTIONS PROVIDE ADDITIONAL INFORMATION ON MATERIALS AND SET STANDARDS FOR QUALITY AND INSTALLATION REQUIREMENTS.

6. PROVIDE 3" DOUBLE SHREDDED BARK MULCH FOR ALL PLANTED TREES, SHRUBS AND LANDSCAPE BEDS.

THE SIGMA GROUP

Single Source. Sound Solutions.

www.thesigmagroup.com

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Milwaukee, WI 53233

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Fax: 414-643-4210

GRAPHIC SCALE

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TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

4506 & 4514 VERONA RD.

MADISON, WI 53711

LANDSCAPE PLAN

PRELIMINARY

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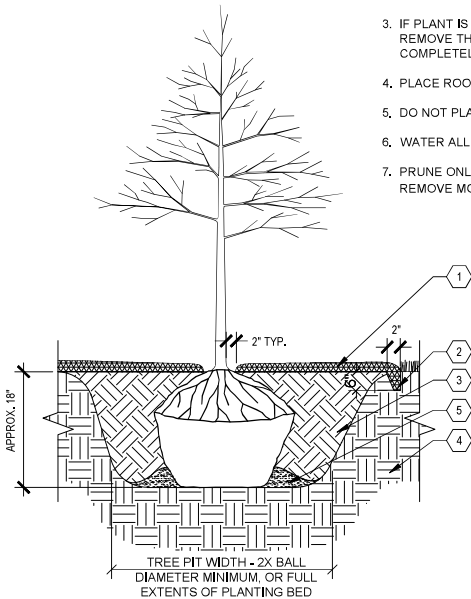
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PROJECT NO:	23909
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PLOT DATE:	2025.04.07
DRAWN BY:	---
CHECKED BY:	---
APPROVED BY:	---
SHEET NO:	L100



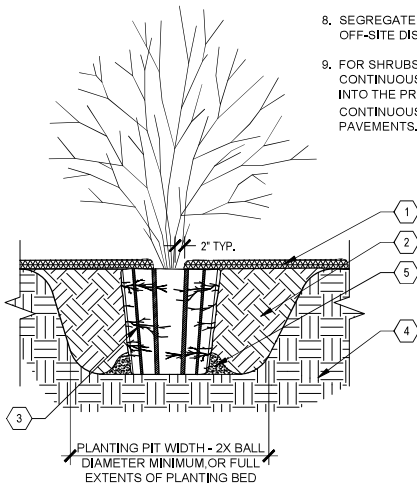
## LANDSCAPE DETAILS

1. PLANT EACH TREE SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. DEPTH OF THE PLANTING HOLE SHOULD BE DETERMINED AND DUG AFTER THE ROOT FLARE IS LOCATED. PLANTING HOLE MUST BE NO DEEPER THAN THE HEIGHT OF THE ROOT BALL.
3. IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT AND REMOVE THE WIRE BASKET ENTIRELY. REMOVE ALL TWINE, ROPE, AND BURLAP COMPLETELY FROM ALL ROOT BALLS.
4. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
5. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.



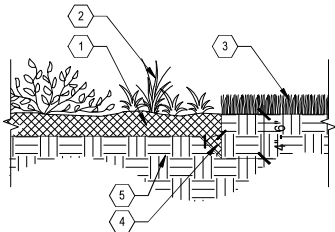
- 1 3" DEPTH SHREDDED HARDWOOD BARK MULCH, PROVIDE 4'-0" DIAMETER MULCH RINGS AT THE BASE OF ANY TREES PLANTED IN LAWN.
- 2 PROVIDE SPADED EDGE, 2" WIDE, 6" DEEP FOR ENTIRE PERIMETER OF BARK MULCH RINGS AT BASE OF TREES PLANTED IN LAWNS
- 3 PLANTING SOIL, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED.
- 4 PREPARED SUBGRADE
- 5 TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

1. MAKE 1" TO 2" DEEP VERTICAL CUTS EVERY 6" AROUND THE CIRCUMFERENCE OF THE ROOT BALL BEFORE PLANTING TO LOOSEN POT-BOUND ROOTS.
2. PLANT EACH SHRUB SUCH THAT THE ROOT FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
3. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
4. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
5. PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
6. WATER ALL PLANTS WITHIN 2 HOURS OF INSTALLATION.
7. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY BRANCHES. DO NOT REMOVE MORE THAN 1/2 OF THE ORIGINAL PLANT MASS.
8. SEGREGATE ANY SOIL FROM BELOW WARNING LAYER EXCAVATED DURING PLANTING FOR OFF-SITE DISPOSAL. COORDINATE DISPOSAL WITH ENVIRONMENTAL CONSULTANT.
9. FOR SHRUBS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD 1/2" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.



- 1 3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE SPECIFIED, KEEP 2" CLEAR OF STEMS
- 2 PLANTING SOIL AS SPECIFIED, PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE ENTIRE AREA OF ANY GIVEN PLANT BED
- 3 1" TO 2" DEEP VERTICAL CUTS EVERY 6" AROUND PERIMETER
- 4 PREPARED SUBGRADE
- 5 TAMP SOIL AROUND BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT BALL DOES NOT SHIFT

- 1 3' DEPTH OF MULCH LAYER
- 2 SHRUB PLANTING BED
- 3 LAWN ADJACENT TO PLANTING BED
- 4 45 DEGREE ANGLE SHOVEL CUT EDGE TOWARD PLANTING BED
- 5 COMPACTED SUBGRADE

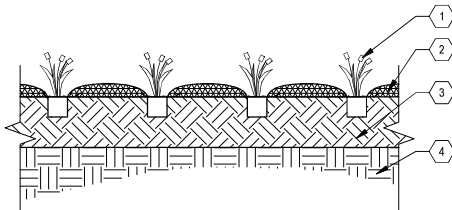


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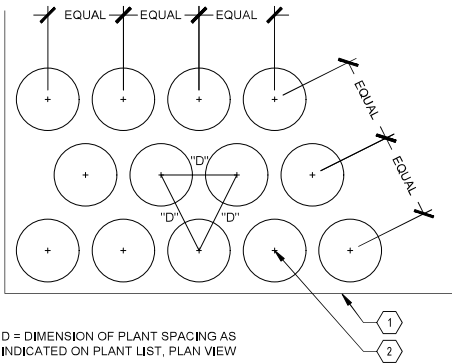
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1. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
2. PLANTING HOLE MUST NOT BE DEEPER THAN THE HEIGHT OF THE ROOT BALL.
3. DO NOT PLACE MULCH IN CONTACT WITH STEMS.
4. WATER ALL PLANTS THOROUGHLY WITHIN 2 HOURS OF INSTALLATION.
5. PRUNE ONLY AS NECESSARY TO REMOVE UNHEALTHY OR DEAD PLANT PARTS. DO NOT REMOVE MORE THAN 1/3 OF THE ORIGINAL PLANT MASS.
6. FOR PLANTS PLANTED WITHIN PLANTING BEDS, CONTRACTOR SHALL PROVIDE PLANTING SOIL CONTINUOUSLY FOR THE ENTIRE PLANTING BED AND INDIVIDUAL SHRUBS SHALL BE PLANTED INTO THE PREPARED PLANTING SOIL. MULCH SURFACE FOR PLANTING BEDS SHALL ALSO BE CONTINUOUS ACROSS THE ENTIRE SURFACE AND HELD 2" MIN. TO 1" MAX. BELOW ADJACENT PAVEMENTS.



- 1 PERENNIAL, ORNAMENTAL GRASS, OR GROUND COVER PLUG,  
SEE LANDSCAPE PLAN SHEETS L100-L103
- 2 3" DEPTH TWICE-SHREDDED HARDWOOD BARK MULCH,  
UNLESS OTHERWISE INDICATED, KEEP 3" CLEAR OF STEMS
- 3 PLANTING SOIL, PLANTING SOIL SHALL BE  
PLACED IN ONE CONTINUOUS VOLUME FOR  
THE ENTIRE AREA OF ANY GIVEN PLANT BED
- 4 PREPARED SUBGRADE

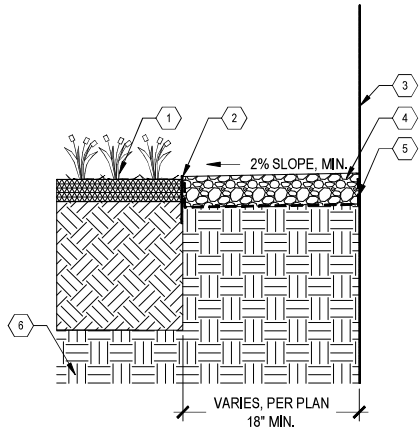
1. SET FINISH GRADE OF PLANTING AREA 2" BELOW FINISH SURFACE OF PAVING, CURB, OR HEADER
2. SEE PLANTING SCHEDULE FOR SPACING OF ALL SHRUBS AND GROUNDCOVERS
3. ALL SHRUBS / GROUNDCOVER TO BE PLANTED AT EQUAL SPACING (TRIANGULAR) UNLESS OTHERWISE INDICATED ON PLANS.
4. TO DETERMINE APPROPRIATE PLANT QUANTITIES REFER TO THE PLANTING SCHEDULE OR PLAN.



1 EDGE OF ADJACENT PAVEMENT

2 SHRUB, PERENNIAL OR ORNAMENTAL GRASS PLANT CENTER LOCATION

- 1 ADJACENT PLANTING BED
- 2 BLACK ANODIZED ALUMINUM EDGING
- 3 BUILDING FACE
- 4 3" DEPTH STONE MULCH
- 5 VISQUEEN PLASTIC, WRAP UP SIDES OF BUILDING AND EDGING
- 6 PREPARED SUBGRADE



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PLANTING QUALITY ASSURANCE

1.

PLANTS ARE TO BE INSPECTED UPON DELIVERY TO PROJECT SITE AND THE LANDSCAPE ARCHITECT OR OWNER'S PROJECT REPRESENTATIVE MAY REJECT ANY SPECIMENS NO LONGER MEETING THE SPECIFIED STANDARDS OR THAT HAVE BEEN DAMAGED IN TRANSIT.
2.

ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES AND VARIETY/HYBRID/CULTIVAR SPECIFIED, AND NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE OF THE SITE LOCATION, SPECIMENS NURSERY-DUG TO BE REPLANTED SHALL HAVE BEEN FRESHLY DUG AND PROPERLY PREPARED FOR PLANTING.
3.

TREES:
- 3.1.

SHALL BE TRAINED IN DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, COMPACTNESS AND SYMMETRY, TREES WITH MULTIPLE LEADERS, UNLESS SPECIFIED OTHERWISE, AND SHRUBS WITH DAMAGED OR CUT MAINSTEM(S), WILL BE REJECTED.
- 3.2.

WITH A DAMAGED, CUT OR CROOKED LEADER, ABRASION OF BARK, SUNSCALD, FROST CRACK, DISFIGURING KNOTS, INSECTS (INCLUDING EGGS AND LARVAE) OR INSECT DAMAGE, CANKERS/CANKEROUS LESIONS OR FUNGAL MATS, MOLD, PREMATURELY-OPENED BUDS, OR CUTS OF LIMBS OVER 3/4" DIAMETER THAT ARE NOT COMPLETELY CALLEDUSD WILL BE REJECTED.
- 3.3.

SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS, AND BE FREE FROM PHYSICAL DAMAGE OR OTHER HINDRANCES TO HEALTHY GROWTH.
- 3.4.

BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH SOLID BALLS OF A DIAMETER NOT LESS THAN THAT RECOMMENDED BY THE AMERICAN STANDARDS FOR NURSERY STOCK, AND OF SUFFICIENT DEPTH TO INCLUDE BOTH FIBROUS AND FEEDING ROOTS, BALLS SHALL BE SECURELY WRAPPED WITH BURLAP, AND TIGHTLY BOUND WITH ROPE OR TWINE, NO PLANTS SHALL BE BOUND WITH ROPE OR WIRE IN SUCH A MANNER AS TO DAMAGE BARK OR BREAK BRANCHES, THE ROOT FLARE SHOULD BE WITHIN THE TOP 2" OF THE SOIL BALL, BALLED AND BURLAPPED PLANTS WILL NOT BE ACCEPTED IF THE BALL IS DRY, CRACKED, OR BROKEN BEFORE OR DURING PLANTING.
4.

PLANTS SHALL CONFORM TO THE MEASUREMENTS SPECIFIED WITHIN THE PLANT SCHEDULE.

PLANTING PROJECT CONDITIONS:

1.

VERIFY SERVICE AND UTILITY LOCATIONS, AND DIMENSIONS OF CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
2.

INTERRUPTION OF EXISTING SERVICES OR UTILITIES; DO NOT INTERRUPT SERVICES OR UTILITIES UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY SERVICES OR UTILITIES ACCORDING TO REQUIREMENTS INDICATED:
- 2.1.

NOTIFY OWNER'S PROJECT REPRESENTATIVE NO FEWER THAN TWO DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF EACH SERVICE OR UTILITY.
- 2.2.

DO NOT PROCEED WITH INTERRUPTION OF SERVICES OR UTILITIES WITHOUT REPRESENTATIVE'S WRITTEN PERMISSION.
3.

PLANTING RESTRICTIONS: PLANTING SHALL OCCUR DURING THE FOLLOWING ACCEPTABLE INSTALLATION PERIODS:
- 3.1.

DECIDUOUS TREES AND SHRUBS - APRIL 15 TO OCTOBER 15.
- 3.2.

NATIVE SEEDING AND TURFGRASS: APRIL 15 - OCTOBER 15
4.

WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED, APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.
5.

CONTRACTOR SHALL PROTECT ALL EXISTING AND/OR NEWLY INSTALLED PLANTS, LAWNS, AND GRASS AREAS FROM DAMAGE AT ALL TIMES, DAMAGED PLANTS, LAWNS OR GRASS AREAS SHALL BE REPLACED OR TREATED AS REQUIRED TO CONFORM TO SPECIFICATIONS HEREIN FOR FRESH STOCK, WORK AREA SHALL BE KEPT CLEAN AND ORDERLY DURING THE INSTALLATION PERIOD, UNDER NO CIRCUMSTANCES SHALL DEBRIS FROM PLANTING ACTIVITIES RESULT IN A SAFETY HAZARD ON-SITE OR ADJACENT OFF-SITE PROPERTY, DAMAGE TO SITE IMPROVEMENTS OR ADJACENT LANDSCAPES INCURRED AS A RESULT OF PLANTING OR REPLACEMENT OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR THAT CAUSES THE DAMAGE AT NO COST TO THE OWNER.
6.

EXAMINE AREAS TO RECEIVE PLANTS FOR COMPLIANCE WITH REQUIREMENTS AND CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE, PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
- 6.1.

VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN PLANTING AREAS.
- 6.2.

DO NOT MIX OR PLAGE SOILS IN FROZEN, WET, OR MUDDY CONDITIONS.

PLANTING DELIVERY, STORAGE, & HANDLING:

1.

BULK MATERIALS:
- 1.1.

DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
2.

DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY, PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE, DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE, PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY, DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.
3.

HANDLE PLANTING STOCK BY ROOT BALL.
4.

DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY, IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN SHADED LOCATION, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
- 4.1.

SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL.
- 4.2.

WATER ROOT SYSTEMS OF PLANTS STORED ON-SITE DEEPLY AND THOROUGHLY WITH A FINE-MIST SPRAY, WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY WET CONDITION.

EXCAVATION FOR TREES & SHRUBS

1.

EXCAVATE CIRCULAR PLANTING PITS AS INDICATED IN DRAWINGS, TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER, DO NOT FURTHER DISTURB BASE, ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING, SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.
- 1.1.

EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR BALLED AND BURLAPPED STOCK.
- 1.2.

DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT FLARE TO THE BOTTOM OF THE ROOT BALL.
- 1.3.

IF AREA UNDER THE PLANT WAS INITIALLY DUG TOO DEEP, ADD SOIL TO RAISE IT TO CORRECT LEVEL AND THOROUGHLY TAMP THE ADDED SOIL TO PREVENT SETTLING.
- 1.4.

MAINTAIN REQUIRED ANGLES OF REPOSE OF ADJACENT MATERIALS AS SHOWN IN DRAWINGS, DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR EXISTING IMPROVEMENTS.
- 1.5.

MAINTAIN SUPERVISION OF EXCAVATIONS DURING WORKING HOURS.
- 1.6.

KEEP EXCAVATIONS COVERED OR OTHERWISE PROTECTED WHEN UNATTENDED BY INSTALLER'S PERSONNEL.
2.

SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY BE USED AS PLANTING SOIL IF THEY CONFORM TO THE REQUIREMENTS LISTED IN THESE SPECIFICATIONS.
3.

NOTIFY OWNER'S PROJECT REPRESENTATIVE IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS.
4.

NOTIFY OWNER'S PROJECT REPRESENTATIVE IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PLANTING PITS.

TREE & SHRUB PLANTING

1.

BEFORE PLANTING VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL, IF ROOT FLARE IS NOT VISIBLE, REMOVE SOIL IN A LEVEL MANNER FROM THE ROOT BALL TO WHERE THE TOP-MOST ROOT EMERGES FROM THE TRUNK, AFTER SOIL REMOVAL TO EXPOSE ROOT FLARE, VERIFY THAT ROOT BALL STILL MEETS SIZE REQUIREMENTS, PLANT MATERIAL WITHOUT ROOT FLARE VISIBLE OR PLANTED TOO LOW WILL BE RE-PLANTED AT THE REQUEST OF THE LANDSCAPE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
2.

PLANTS FOUND TO HAVE STEM GIRDLING ROOTS AND/OR KINKED ROOTS AT THE TIME OF PLANTING WILL BE REJECTED AND REPLACEMENTS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
3.

REMOVE ALL TWINE, STRING, WIRE, AND ALL OTHER NON-BIODEGRADABLE MATERIAL ENTIRELY FROM ROOT BALL AREA.
4.

REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES, DO NOT PRUNE FOR SHAPE, DO CUT TREE LEADERS.
5.

SET BALLED AND BURLAPPED STOCK PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 2 INCHES ABOVE ADJACENT FINISH GRADES.
- 5.1.

USE SOIL MATERIALS FROM EXCAVATION FOR BACKFILL.
- 5.2.

CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM THE ENTIRE ROOT BALL, REMOVE PALLETS, IF ANY, BEFORE SETTING, DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.
- 5.3.

BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS, WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL, REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.
- 5.4.

CONTINUE BACKFILLING PROCESS, WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.

TREE & SHRUB MATERIAL:

1.

GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT SCHEDULE SHOWN AND DRAWINGS, AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING, PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
- 1.1.

TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN 2" IN DIAMETER, OR WITH STEM GIRDLING ROOTS WILL BE REJECTED.
- 1.2.

COLLECTED STOCK: DO NOT USE PLANTS HARVESTED FROM THE WILD, FROM NATIVE STANDS, FROM AN ESTABLISHED LANDSCAPE PLANTING, OR NOT GROWN IN A STATE CERTIFIED NURSERY.
- 1.3.

PLANT MATERIAL SHALL BE PROVIDED IN THE CONTAINER TYPE INDICATED IN THE DRAWINGS (B&B, CONTAINER, BARE ROOT, ETC.), UNLESS THE CONTRACTOR RECEIVES WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT THAT SUBSTITUTION OF CONTAINER TYPE IS ACCEPTABLE.
2.

FURNISH TREES WITH ROOT BALLS MEASURED FROM TOP OF ROOT BALL, ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.
3.

SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD.

PLANTING SOIL:

- PLANTING SOIL SHALL BE PLACED IN ONE CONTINUOUS VOLUME FOR THE WIDTH OF LANDSCAPE AREAS, AND A MINIMUM OF 3X THE DIAMETER OF THE ROOT BALL LENGTHWISE
1.

INSTALL PLANTING SOIL FOR PLANT BEDS IN 6" LIFTS, MINIMUM 8" DEPTH.
2.

DO NOT APPLY PLANTING SOIL TO SATURATED OR FROZEN SUBGRADES.
3.

PLANTING SOIL SHALL BE A MIX OF 6-PARTS TOPSOIL, 1-PART COMPOST (APPROVED FOR USE ON THE PROJECT), THOROUGHLY BLEND PLANTING SOIL OFF-SITE BEFORE SPREADING.
- 3.1.

THE PROJECT WILL ACCEPT ONLY CLEAN, SALVAGED OR IMPORTED TOPSOIL CAPABLE OF PASSING THE 1" SIEVE, FREE OF ROCKS, DEBRIS, AND OF NOXIOUS WEEDS.
- 3.2.

STRIPPED, SALVAGED, OR MINED TOPSOIL MUST BE TAKEN FROM THE TOP 6-INCHES OF THE HORIZON, HAVING A DARK BROWN TO BLACK COLOR WITH A GRANULAR STRUCTURE AND CLAY CONTENT OF LESS THAN 25%, VERIFIED WITH A RIBBON TEST THAT YIELDS NO MORE THAN 1-INCH.

METAL EDGING

1.

STANDARD PROFILE, COMMERCIAL-GRADE, EXTRUDED ALUMINUM EDGING, FABRICATED IN STANDARD LENGTHS WITH INTERLOCKING SECTIONS WITH LOOPS STAMPED FROM FACE OF SECTIONS TO RECEIVE STAKES.
- 1.1.

BASIS OF DESIGN: CLEANLINE BY PERMALOC OR APPROVED EQUAL.
- 1.2.

EDGING SIZE: 3/16-INCH-WIDE BY 5.5 INCHES DEEP
- 1.3.

STAKES: ALUMINUM, ASTM 221, ALLOY 6061-T6, 18-INCHES LONG.
- 1.4.

FINISH: BLACK DURAFLEX
- 1.5.

MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING: CURV-RITE, INC., PERMALOC CORPORATION, RUSSELL, J.D. COMPANY (THE), SURE-LOC EDGING CORPORATION
2.

INSTALL METAL EDGE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
3.

ENSURE THAT METAL EDGING IS PROPERLY INSTALLED AND SECURED BEFORE INSTALLING STONE MULCH.

STONE MULCH MATERIAL & INSTALLATION:

1.

SHALL BE HARD, DURABLE, STONE, WASHED FREE OF LOAM, SAND, CLAY, AND OTHER FOREIGN SUBSTANCES, OF THE FOLLOWING TYPE, SIZE RANGE, AND COLOR:
- 1.1.

MATERIAL: ANGULAR WASHED STONE.
- 1.2.

SIZE: 1-1/2" DIAMETER
- 1.3.

DEPTH: 3" MINIMUM DEPTH PLACED IN ONE LIFT
- 1.4.

COLOR RANGE: BLEND OF DARK GREY & BLUE TONES
- 1.5.

BASIS OF DESIGN: 1-1/2" 'AMERICAN HERITAGE' AGGREGATE BY COUNTY MATERIALS.
2.

LIGHTLY COMPACT AREAS TO RECEIVE STONE MULCH
3.

INSTALL WEED BARRIER FABRIC IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, COMPLETELY COVER AREA TO BE MULCHED, OVERLAPPING EDGES OF FABRIC LENGTHS A MINIMUM OF 6-INCHES AND SECURING SEAMS WITH GALVANIZED PINS, WEED BARRIER FABRIC SHALL BE WRAPPED VERTICALLY UP THE OUTSIDE EDGES OF SURROUNDING CONCRETE FLATWORK OR CURB AND SECURED IN PLACE, HOLD FABRIC 2" CLEAR OF TOP OF ADJACENT CURB AND CONCRETE FLATWORK SO IT IS NOT VISIBLE FROM SURFACE.
4.

PLACE AND FINISH STONE MULCH AS INDICATED IN DRAWINGS, ENSURING A SMOOTH, LEVEL TOP SURFACE FOR ALL STONE MULCH AREAS HELD APPROXIMATELY 1/2" BELOW THE TOP SURFACE OF ADJACENT PAVED AREAS OR METAL EDGING.

BARK MULCH MATERIAL & INSTALLATION

1.

TWICE-SHREDDED HARDWOOD BARK MULCH TO BE PROVIDED AS TOP-DRESSING FOR ALL AT-GRADE PLANTING BEDS IN LOCATIONS INDICATED ON PLANTING PLANS.
- 1.1.

SIZE RANGE: MAXIMUM 2.5" TO 3"
- 1.2.

COLOR: NATURAL, UN-DYED
- 1.3.

PROVIDE 3" DEPTH MULCH FOR ALL PLANTING BEDS INDICATED AS BARK MULCH PLANTING BED.
2.

KEEP BARK MULCH 2" CLEAR OF ALL STEMS OF PLANT MATERIAL.

TURF SEEDING:

1.

DELIVERY:
- 1.1.

DELIVER PACKAGED SEED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS LABELED AS TO NAME AND ADDRESS OF SUPPLIER; SPECIFIC BLEND OF SEED; AND INDICATION OF CONFORMANCE WITH STATE AND FEDERAL LAWS, AS APPLICABLE.
2.

PROJECT CONDITIONS:
- 2.1.

SEED DURING ONE OF THE FOLLOWING PERIODS.
- 2.1.1.

SPRING SEEDING SEASON: APRIL 1 TO JUNE 15.
- 2.1.2.

FALL SEEDING SEASON: AUGUST 15 TO OCTOBER 1.
3.

PRODUCTS
- 3.0.1.

PROVIDE THE FOLLOWING FOR TURFGRASS SEED BASIS OF DESIGN: REINDEERS DELUXE 50 SEED MIX OR APPROVED EQUAL
- 3.0.2.

TURFGRASS SEED MIX TO BE FERTILIZED WITH 'SCOTT'S STARTER FERTILIZER' BY THE 'SCOTT'S MIRACLE-GRO COMPANY' OR APPROVED EQUAL.
4.

PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN MET.
5.

REMOVE ANY AND ALL UNDESIRABLE VEGETATION THAT HAS GERMINATED IN THE AREAS TO BE SEEDDED OR SODDED, CONTRACTOR SHALL EVALUATE THE USE OF A BROAD SPECTRUM, NON-PERSISTENT GLYPHOSATE-BASED HERBICIDE BASED ON SITE CONDITIONS.
- 5.1.

DO NOT APPLY SEED UNTIL FIVE TO SEVEN DAYS AFTER LAST HERBICIDE TREATMENT.
6.

FINISH GRADING: GRADE AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE, GRADE TO WITHIN PLUS OR MINUS 1/4 INCH OF FINISH ELEVATION, ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES, LIMIT FINISH GRADING TO AREAS THAT CAN BE IMMEDIATELY SEEDDED AND STABILIZED WITH EROSION CONTROL MATERIAL
7.

MOISTEN PREPARED AREA BEFORE SEEDING IF SOIL IS DRY, WATER THOROUGHLY AND ALLOW SURFACE DRY BEFORE SEEDING OR SODDING, DO NOT CREATE MUDDY SOIL.
8.

NO SEEDING SHALL OCCUR ON FROZEN GROUND OR AT TEMPERATURES LOWER THAN 32 DEGREES FARENHEIT OR IN THE FOLLOWING 5 DAYS AFTER PLANNED SEEDING OR SODDING.
9.

SEEDING RATES TO BE PERFORMED IN ACCORDANCE WITH SEED SUPPLIER RECOMMENDATIONS.

CLEAN-UP AND PROTECTION

1.

DURING PLANTING, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
2.

PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES, MAINTAIN PROTECTION DURING INSTALLATION, TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.
3.

AFTER INSTALLATION REMOVE ALL NURSERY TAGS, NURSERY STAKES, TIE TAPE, LABELS, WIRE, STRING, AND OTHER DEBRIS FROM PLANT MATERIAL, PLANTING AREAS, AND PROJECT SITE.

Botanical Name	Common Name	Quantity	Size	Comments	%	Total Quantity	Total Trays	Total Plants
<i>Asclepias incarnata</i>	Marsh Milkweed	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	4%	6	0.20	32.00
<i>Aster Novae-angliae</i>	New England Aster	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Carex stipdata</i>	Common Fox Sedge	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	4%	6	0.20	32.00
<i>Carex vulpinoides</i>	Brown Fox Sedge	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Eupatorium maculatum</i>	Spotted Joe Pye Weed	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Helenium autumnale</i>	Sneezeweed	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Liatris spicata</i>	Marsh Blazingstar	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Lobelia cardinalis</i>	Cardinal Flower	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Monarda fistulosa</i>	Wild Bergamot	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Panicum virgatum</i>	Switchgrass	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Ratibida pinnata</i>	Yellow Coneflower	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Rudbeckia hirta</i>	Black-Eyed Susan	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Scirpus atrovirens</i>	Dark-Green Bulrush	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Scirpus cyperinus</i>	Wool Grass	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Spartina pectinata</i>	Prairie Cordgrass	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Tradescantia ohienensis</i>	Ohio Spiderwort	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	6%	10	0.30	32.00
<i>Verbena hastata</i>	Blue Vervain	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	4%	6	0.20	32.00
<i>Vernonia fasciculata</i>	Ironweed	32.00	Round Tapered Plug	18" O.C. in clusters of 5-12 plants per species	4%	6	0.20	32.00
					100%	161		

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BIOINFILTRATION PLUGS LIST

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THE



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TIMBERLINE TERRACE LINCOLN AVENUE COMMUNITIES

4506 & 4514 VERONA RD.

MADISON, WI 53711

LANDSCAPE SPECIFICATIONS

PRELIMINARY  
NOT FOR  
CONSTRUCTION

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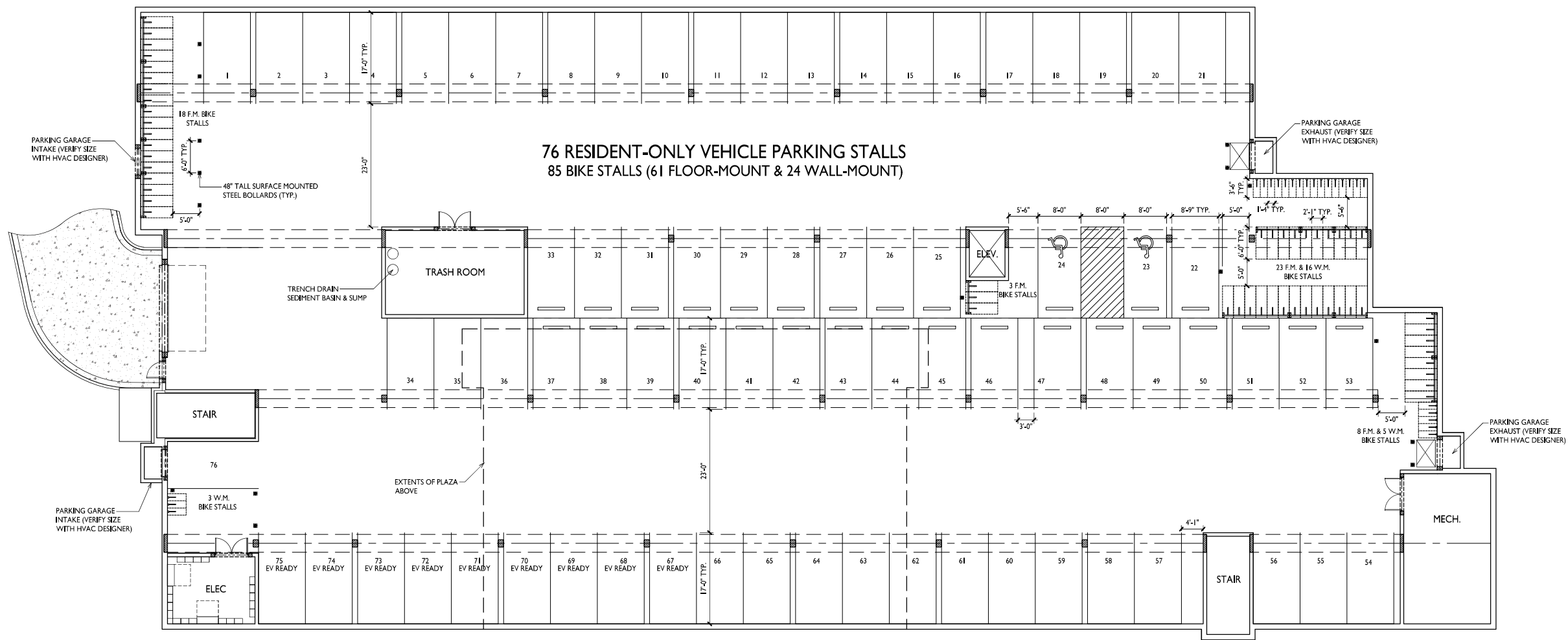
ISSUED  
Review - March 19, 2025  
Land Use Application - April 07, 2025

PROJECT TITLE  
Timberline Terrace  
Lincoln Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin  
SHEET TITLE  
Basement  
Floor Plan

SHEET NUMBER

AC100  
PROJECT NO. 2512  
© Knothe & Bruce Architects, LLC



1  
AC100  
BASEMENT FLOOR PLAN  
3/32" = 1'-0"





ISSUED  
LUA Submittal - 2025.04.07

PROJECT TITLE  
Timberline  
Terrace Lincoln  
Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin  
SHEET TITLE

FIRST FLOOR PLAN

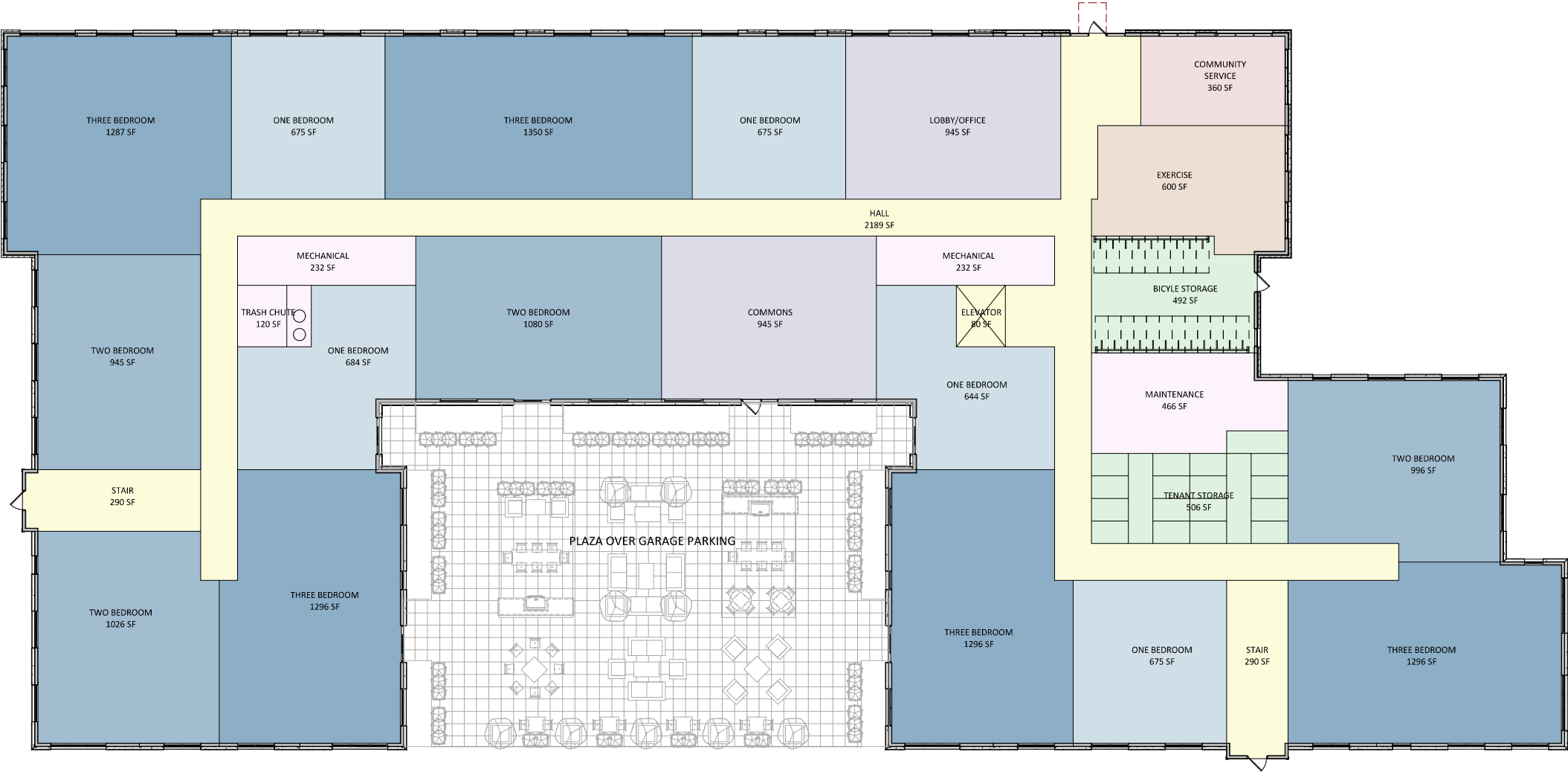
SHEET NUMBER

AC101

PROJECT NUMBER

2512

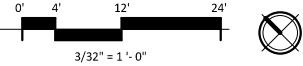
© Knothe & Bruce Architects, LLC



1 CITY - 01 - FIRST FLOOR  
AC101 3/32" = 1'-0"

LEGEND

- 1 Bed
- 2 Bed
- 3 Bed
- Amenity - Active
- Amenity - Leisure
- Circulation
- Commercial
- Storage
- Utility



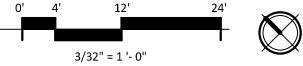




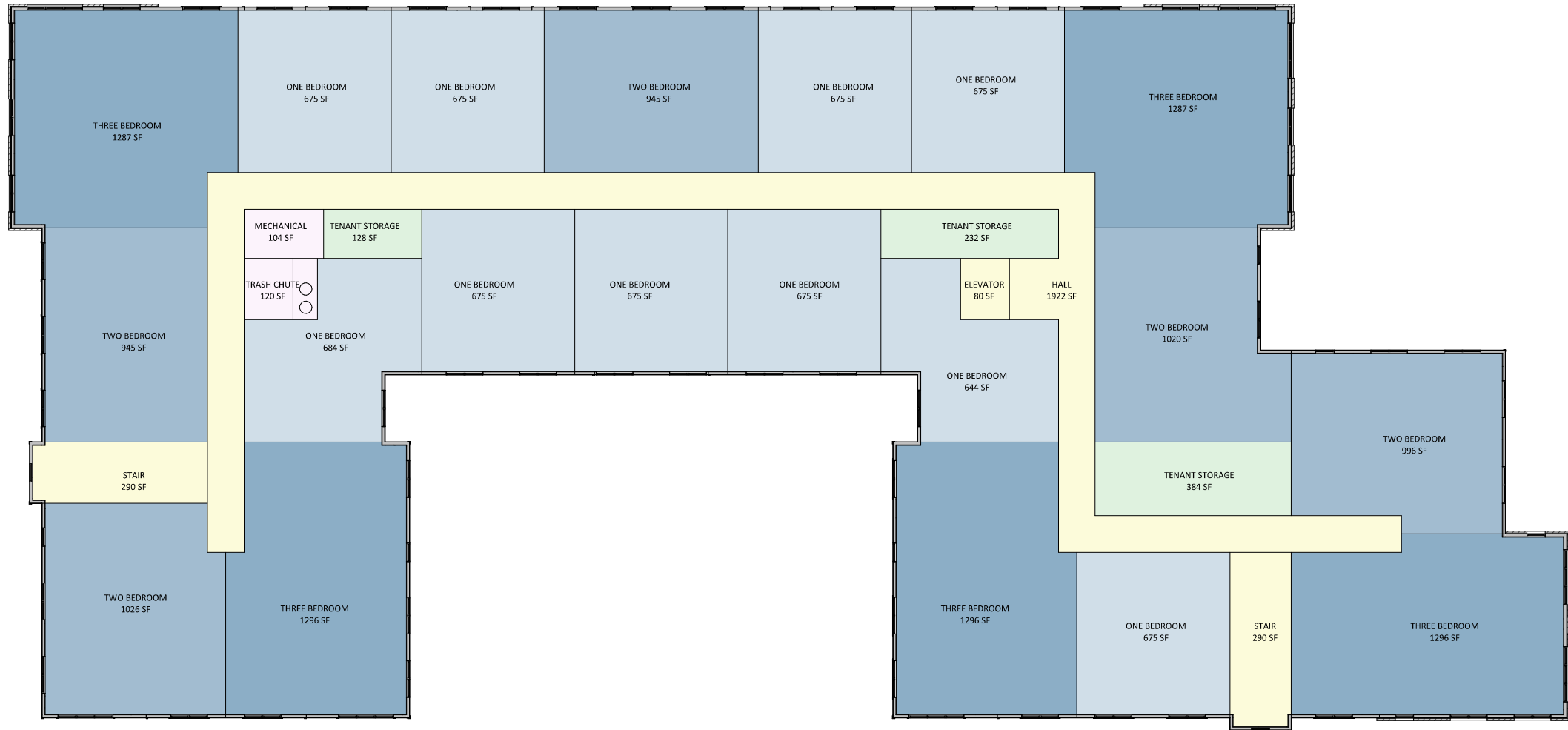
1 CITY - 02 - SECOND FLOOR  
AC102 3/32" = 1'-0"

LEGEND

- 1 Bed
- 2 Bed
- 3 Bed
- Amenity - Active
- Amenity - Leasure
- Circulation
- Commercial
- Storage
- Utility







SUED  
A Submittal - 2025.04.07

PROJECT TITLE  
 Timberline  
 Terrace Lincoln  
 Avenue  
 Communities

506 & 4514 Verona Rd.  
Madison, Wisconsin

THIRD FLOOR  
PLAN

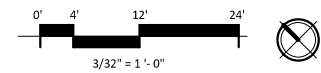
SHEET NUMBER

AC103

PROJECT NUMBER  
512

Knothe &amp; Bruce Architects, LLC

1 CITY - 03 - THIRD FLOOR  
AC103  $3/32'' = 1'-0''$



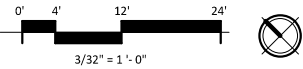
### LEGEND

- |                   |                   |
|-------------------|-------------------|
| 1 Bed             | 1 Bed             |
| 2 Bed             | 2 Bed             |
| 3 Bed             | 3 Bed             |
| Amenity - Active  | Amenity - Active  |
| Amenity - Leasure | Amenity - Leasure |
| Circulation       | Circulation       |
| Commercial        | Commercial        |
| Storage           | Storage           |
| Utility           | Utility           |





1 CITY - 04 - FOURTH FLOOR  
AC104 3/32" = 1'-0"



LEGEND

- 1 Bed
- 2 Bed
- 3 Bed
- Amenity - Active
- Amenity - Leasure
- Circulation
- Commercial
- Storage
- Utility

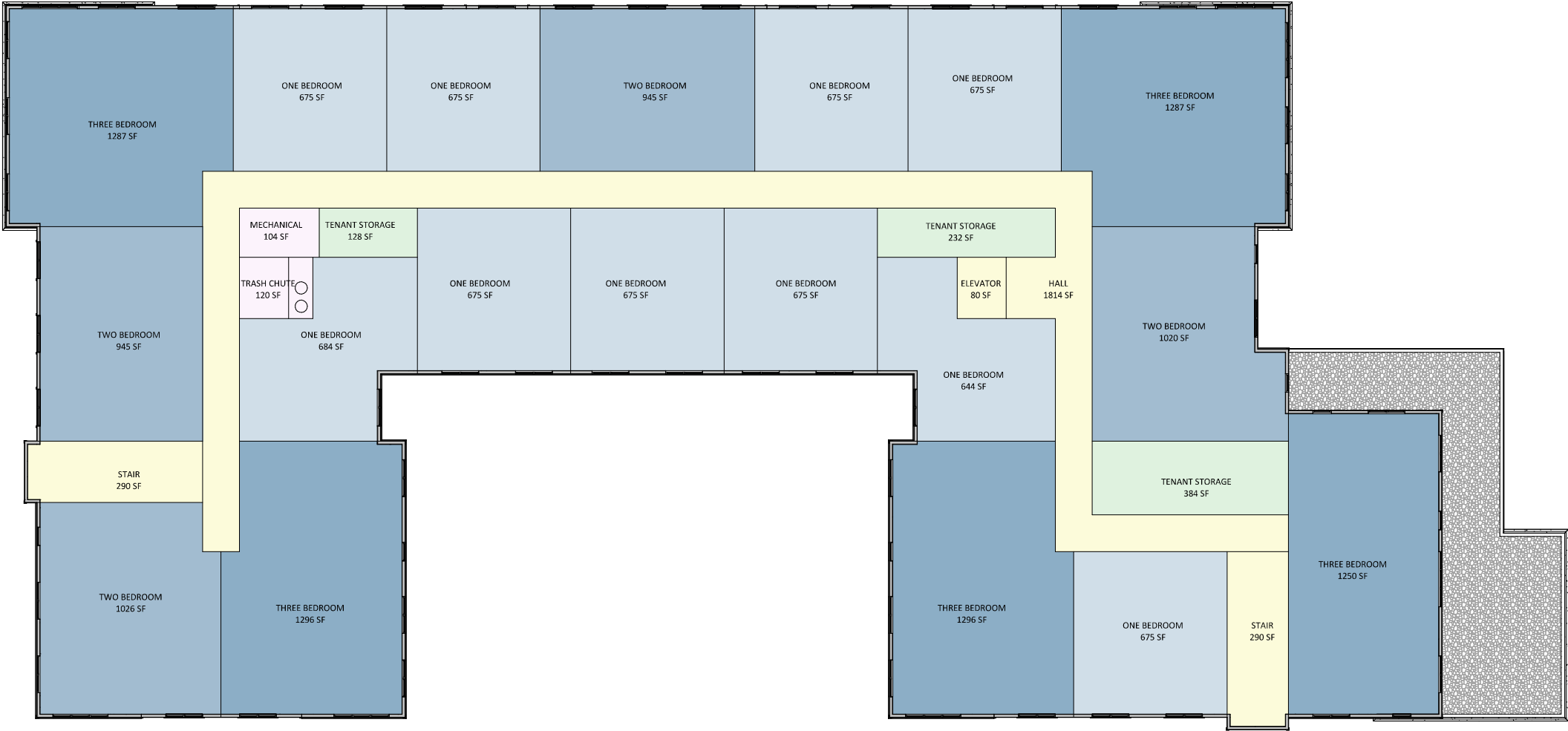


ISSUED  
LUA Submittal - 2025.04.07

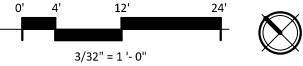
PROJECT TITLE  
Timberline  
Terrace Lincoln  
Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin  
SHEET TITLE  
FIFTH FLOOR  
PLAN

SHEET NUMBER  
AC105  
PROJECT NUMBER  
2512



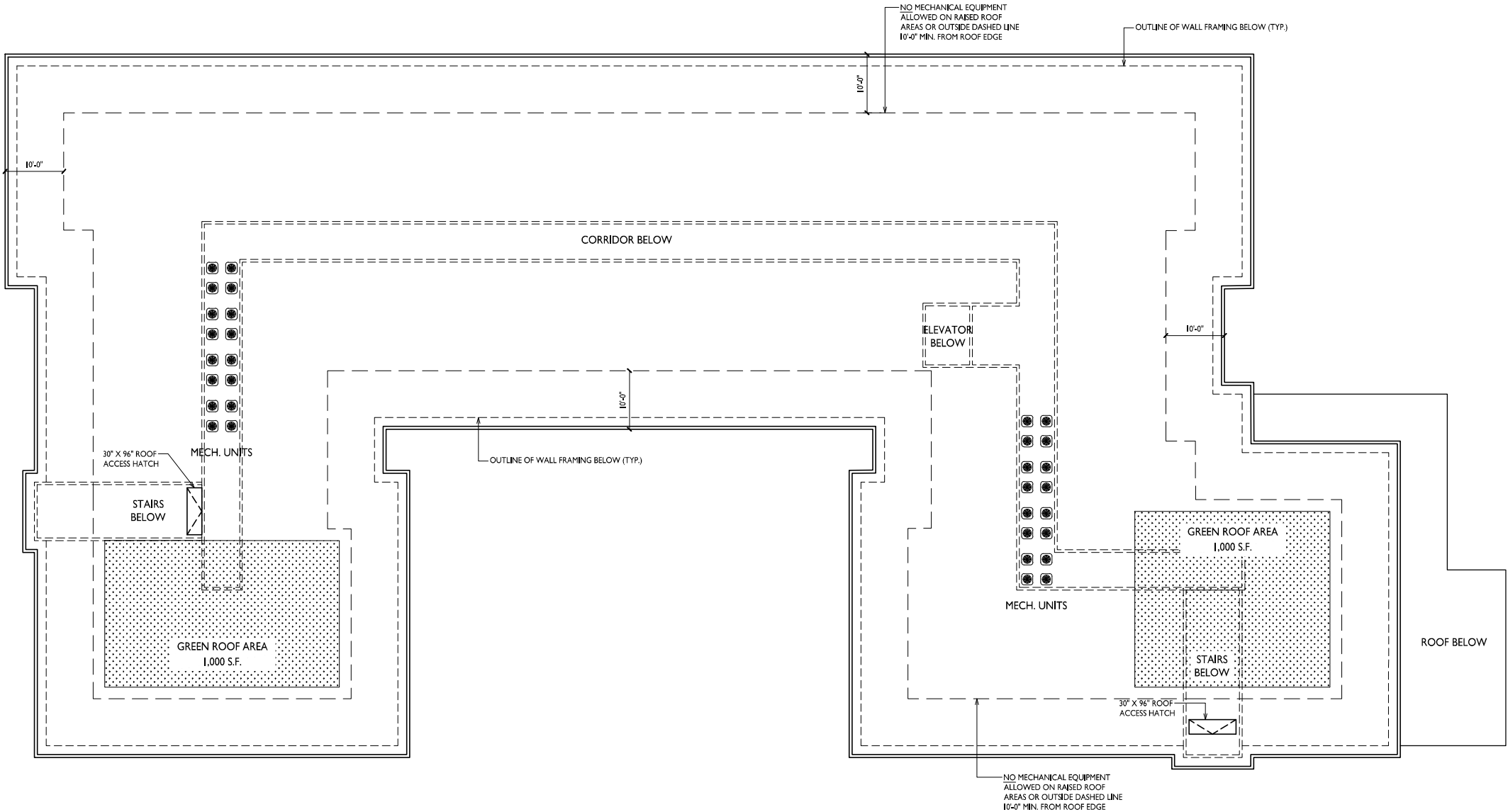
1 CITY - 05 - FIFTH FLOOR  
AC105 3/32" = 1'-0"



LEGEND

- 1 Bed
- 2 Bed
- 3 Bed
- Amenity - Active
- Amenity - Leasure
- Circulation
- Commercial
- Storage
- Utility

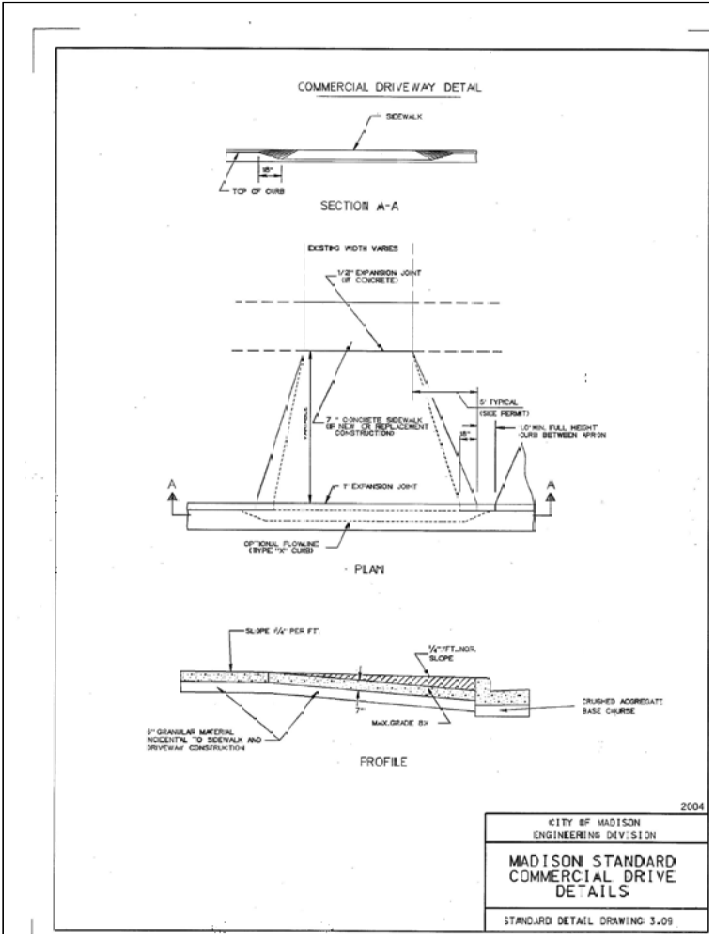




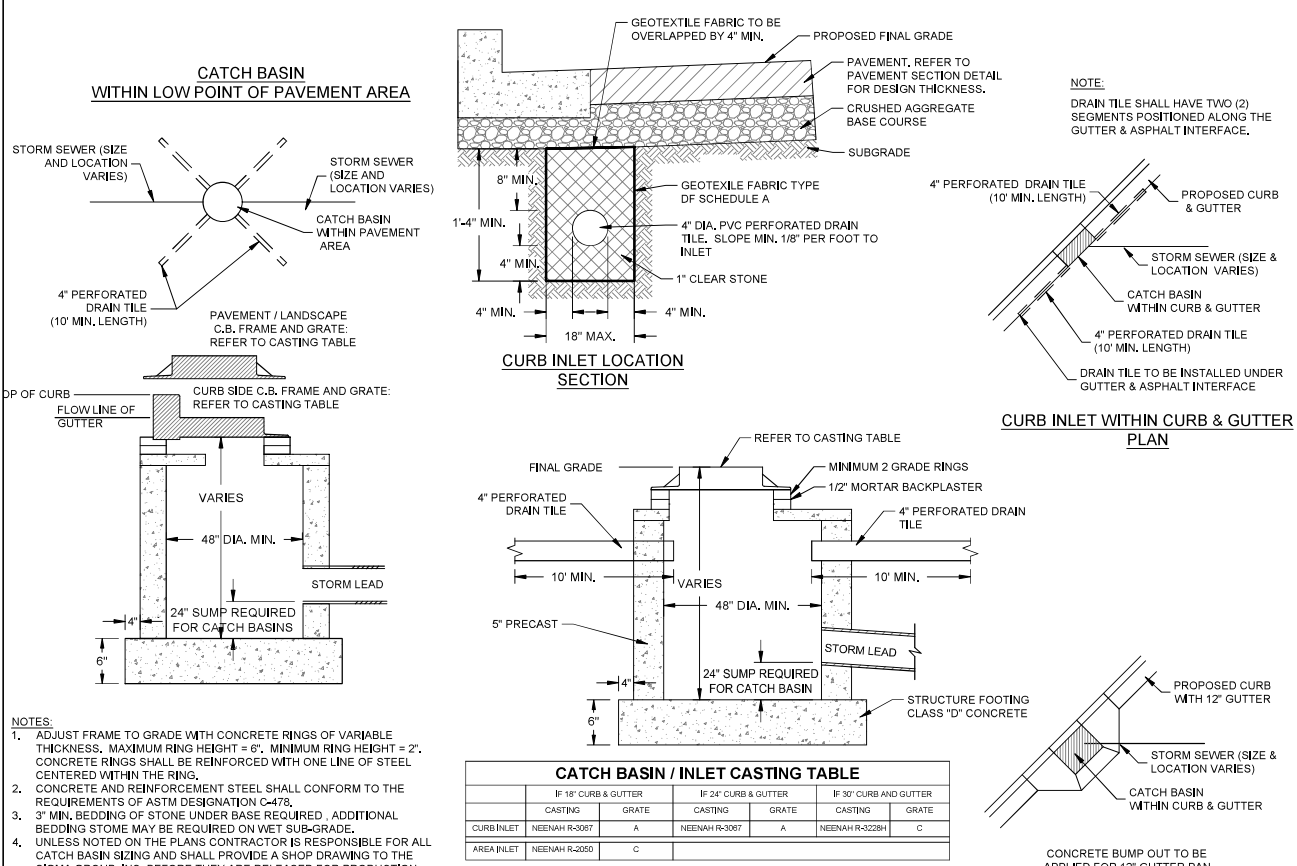




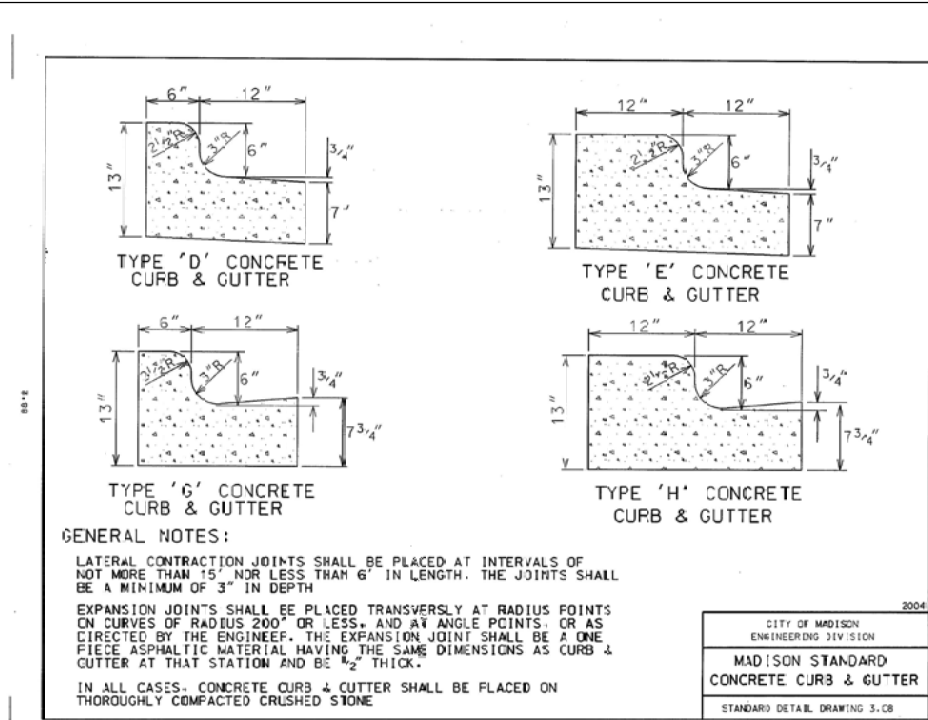




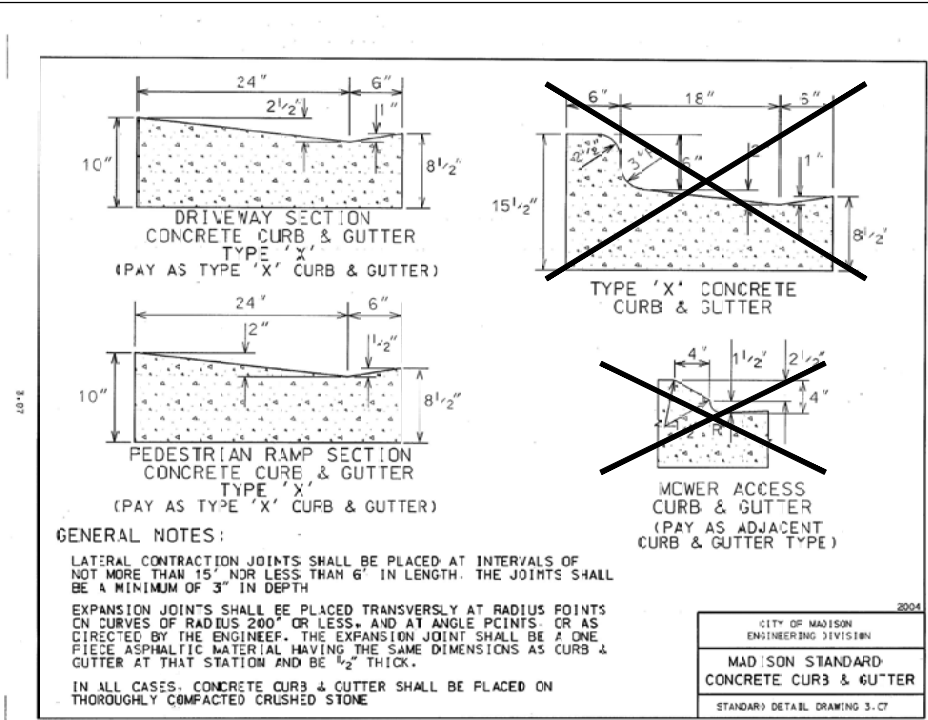
**A** COMMERCIAL DRIVE  
SCALE: NTS



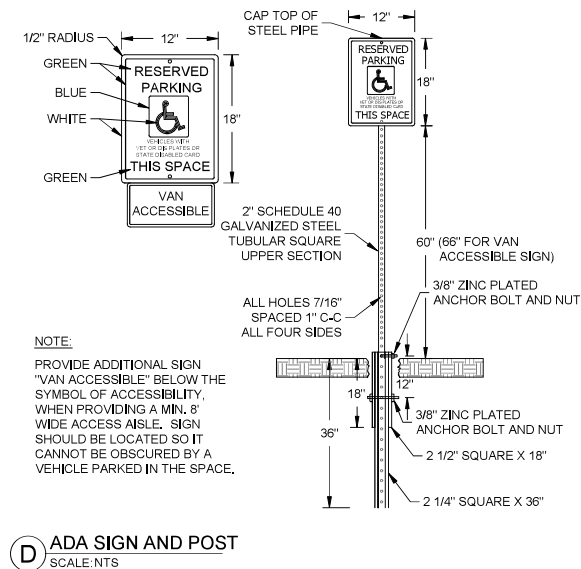
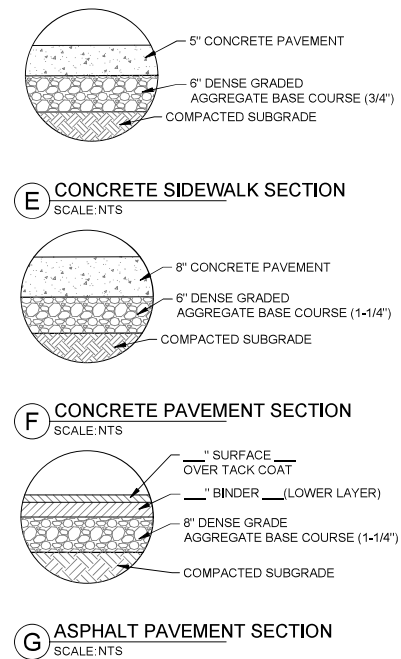
**I** INLET AND CATCH BASIN  
SCALE: NTS



**B** CURB AND GUTTER  
SCALE: NTS



**C** CURB AND GUTTER  
SCALE: NTS

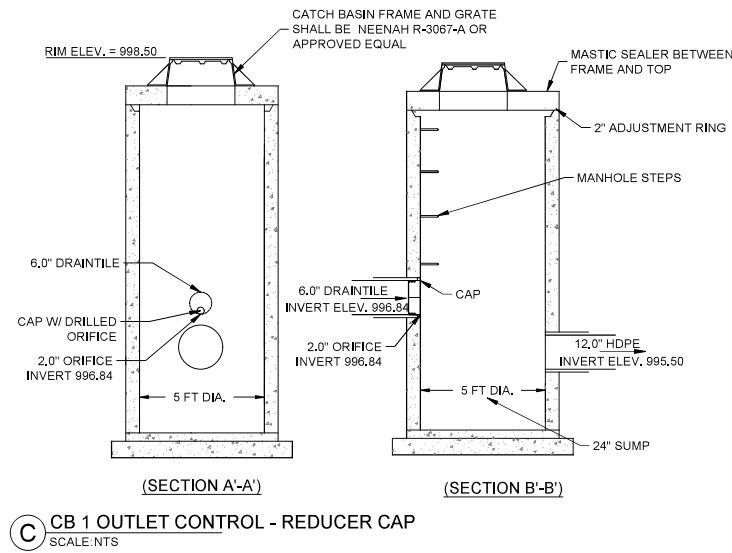


**D** ADA SIGN AND POST  
SCALE: NTS

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1 CITY ELEVATION - NORTHEAST  
AC201 3/32" = 1'-0"

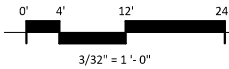


2 CITY ELEVATION - SOUTHEAST  
AC201 3/32" = 1'-0"



3 CITY ELEVATION - NORTHWEST  
AC201 3/32" = 1'-0"

EXTERIOR MATERIAL SCHEDULE			
MARK	BUILDING ELEMENT	MANUFACTURER	COLOR
01	COMPOSITE LAP SIDING 7"	JAMES HARDIE	COBBLESTONE
02	COMPOSITE LAP SIDING 5"	JAMES HARDIE	MONTEREY TAUPE
03	COMPOSITE PANEL	JAMES HARDIE	COUNTRYLANE RED
04	COMPOSITE TRIM	JAMES HARDIE	TIMBER BARK
05	BRICK VENEER	TBD	MED GREY- MIXED
06	BRICK VENEER	TBD	DARK GREY- MIXED
07	CAST STONE	ROCKCAST	SMOKEHOUSE
08	COMPOSITE WINDOWS	PELLA	CLAY
09	ALUMINUM STOREFRONT	N/A	BRONZE





ISSUED

LUA Submittal - 2025.04.07



1

CITY ELEVATION - SOUTHWEST

3/32" = 1'-0"



2

CITY ELEVATION - COURTYARD NORTHWEST

3/32" = 1'-0"

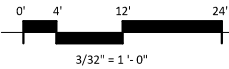


3

CITY ELEVATION - COURTYARD SOUTHEAST

3/32" = 1'-0"

EXTERIOR MATERIAL SCHEDULE			
MARK	BUILDING ELEMENT	MANUFACTURER	COLOR
01	COMPOSITE LAP SIDING 7"	JAMES HARDIE	COBBLESTONE
02	COMPOSITE LAP SIDING 5"	JAMES HARDIE	MONTEREY TAUPE
03	COMPOSITE PANEL	JAMES HARDIE	COUNTRYLANE RED
04	COMPOSITE TRIM	JAMES HARDIE	TIMBER BARK
05	BRICK VENEER	TBD	MED GREY- MIXED
06	BRICK VENEER	TBD	DARK GREY- MIXED
07	CAST STONE	ROCKCAST	SMOKEHOUSE
08	COMPOSITE WINDOWS	PELLA	CLAY
09	ALUMINUM STOREFRONT	N/A	BRONZE



PROJECT TITLE

Timberline  
Terrace Lincoln  
Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin

SHEET TITLE

EXTERIOR  
ELEVATIONS

SHEET NUMBER

AC202

PROJECT NUMBER

2512





1 CITY ELEVATION - NORTHEAST - COLOR  
AC203/ 3/32" = 1'-0"

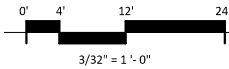


2 CITY ELEVATION - SOUTHEAST - COLOR  
AC203/ 3/32" = 1'-0"



3 CITY ELEVATION - NORTHWEST - COLOR  
AC203/ 3/32" = 1'-0"

EXTERIOR MATERIAL SCHEDULE			
MARK	BUILDING ELEMENT	MANUFACTURER	COLOR
01	COMPOSITE LAP SIDING 7"	JAMES HARDIE	COBBLESTONE
02	COMPOSITE LAP SIDING 5"	JAMES HARDIE	MONTEREY TAUPE
03	COMPOSITE PANEL	JAMES HARDIE	COUNTRYLANE RED
04	COMPOSITE TRIM	JAMES HARDIE	TIMBER BARK
05	BRICK VENEER	TBD	MED GREY- MIXED
06	BRICK VENEER	TBD	DARK GREY- MIXED
07	CAST STONE	ROCKCAST	SMOKEHOUSE
08	COMPOSITE WINDOWS	PELLA	CLAY
09	ALUMINUM STOREFRONT	N/A	BRONZE







1 CITY ELEVATION - SOUTHWEST - COLOR  
AC204/ 3/32" = 1'-0"

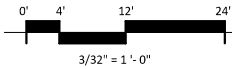


2 CITY ELEVATION - COURTYARD NORTHWEST - COLOR  
AC204/ 3/32" = 1'-0"



3 CITY ELEVATION - COURTYARD SOUTHEAST - COLOR  
AC204/ 3/32" = 1'-0"

EXTERIOR MATERIAL SCHEDULE			
MARK	BUILDING ELEMENT	MANUFACTURER	COLOR
01	COMPOSITE LAP SIDING 7"	JAMES HARDIE	COBBLESTONE
02	COMPOSITE LAP SIDING 5"	JAMES HARDIE	MONTEREY TAUPE
03	COMPOSITE PANEL	JAMES HARDIE	COUNTRYLANE RED
04	COMPOSITE TRIM	JAMES HARDIE	TIMBER BARK
05	BRICK VENEER	TBD	MED GREY- MIXED
06	BRICK VENEER	TBD	DARK GREY- MIXED
07	CAST STONE	ROCKCAST	SMOKEHOUSE
08	COMPOSITE WINDOWS	PELLA	CLAY
09	ALUMINUM STOREFRONT	N/A	BRONZE



PROJECT TITLE  
Timberline  
Terrace Lincoln  
Avenue  
Communities

4506 & 4514 Verona Rd.  
Madison, Wisconsin  
SHEET TITLE

EXTERIOR  
ELEVATIONS -  
COLOR

SHEET NUMBER

AC204

PROJECT NUMBER  
2512





Concept Image

Timberline Terrace Lincoln Avenue Communities  
4506 & 4514 Verona Rd. Madison, Wisconsin

LUA SUBMITTAL | 2025.04.07 | 2512







Concept Image

Timberline Terrace Lincoln Avenue Communities  
4506 & 4514 Verona Rd. Madison, Wisconsin

LUA SUBMITTAL | 2025.04.07 | 2512







Concept Image

Timberline Terrace Lincoln Avenue Communities  
4506 & 4514 Verona Rd. Madison, Wisconsin

LUA SUBMITTAL | 2025.04.07 | 2512

