



February 10, 2020

Via Email and Hand Delivery

Department of Planning, Community and Economic Development – Planning Division
City of Madison Plan Commission
Madison Municipal Building, Suite 017
215 Martin Luther King Jr. Blvd.
Madison, WI 53703
pcapplications@cityofmadison.com

RE: Letter of Intent for West Towne Mall Redevelopment
36 West Towne Mall – Boston Store Demo for Von Maur Building Pad

Dear Planning Staff & Plan Commission Members:

CBL Properties is pleased to submit this letter in connection with the enclosed Land Use Application and supplemental materials for the above mentioned project.

Project Summary – The existing Boston Store at West Towne Mall will be demolished for the creation of a building pad dedicated to the proposed Von Maur Development. The project will include site improvements consisting of additional landscape islands, new surface pavement, and underground detention for stormwater management.

Waiver Request – Per MGO Section 33.24(4)(f)7.a. "Sidewalks shall be provided along all sides of the site abutting a public or private right of way". We are proposing a pedestrian walkway from the new building to the existing transit stop located along the outer ring road of the mall. We are requesting a waiver to excuse us from constructing a sidewalk along the east side of the outer mall ring road for the following reasons:

- Currently, there is no sidewalk in front of the Von Maur project at the outer ring road. However, existing sidewalk is stubbed at the north and south boundaries on the west side of the ring road. For continuity and safety, it is appropriate to maintain the sidewalk on the west side of the ring road.
- Pedestrian safety would become a concern if a short segment of sidewalk would be constructed on the east side of the street. It would be necessary for pedestrians to cross the ring road twice in order to walk along the ring road in front of Von Maur.
- Due to the location of existing property lines, any sidewalk constructed on the east side of the ring would end approximately 120' short of any existing sidewalk along the outer ring road.
- Sidewalk has not been provided on the east side of the ring road as part of other recent developments (Total Wine and Dave & Busters) in order to maintain continuity as noted in the first point.

Project Data –

<u>Location:</u>	West Towne Mall 36 West Town Mall (Current Boston Store Parcel)
<u>Building Sq. Ft.:</u>	Approx. 82,378 SF (Permitted and Constructed By Others)
<u>Start Construction:</u>	March 15, 2020
<u>Complete Construction:</u>	October 15, 2021
<u>Land Area:</u>	9.45 Acres
<u>Project Area:</u>	7.66 Acres
<u>Vehicle Parking:</u>	557 (12 ADA)
<u>Bicycle Parking:</u>	42 Spaces

Project Team –

<u>Owner:</u>	CBL Properties Ken Wittler
<u>Architect.:</u>	Nelson World Wide Kevin Spring
<u>Civil:</u>	RaSmith Matt Kocourek
<u>Landscape:</u>	RaSmith Luke Haas
<u>Land Use:</u>	Husch Blackwell Bill White

Sincerely,

CBL & Associates Properties, Inc.



Ken Wittler
Vice President of Development

WEST TOWNE MALL REDEVELOPMENT CITY OF MADISON DANE COUNTY, WISCONSIN

Known as 36 West Towne Mall, City of Madison, Dane County, Wisconsin

PART OF LOT TWO (2), CERTIFIED SURVEY MAP NO. 3422, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS FOR DANE COUNTY, WISCONSIN, IN VOLUME 13 OF CERTIFIED SURVEY MAPS, PAGE 250, AS DOCUMENT NO. 1657742, AND PART OF THE NORTHEAST QUARTER (NE¼) OF SECTION TWENTY-SIX (26), TOWNSHIP SEVEN (7) NORTH, RANGE EIGHT (8) EAST, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN, DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SECTION 26, A BRASS MONUMENT AT THE INTERSECTION OF GAMMON ROAD AND MINERAL POINT ROAD; THENCE SOUTH 00° 54' 46" WEST ALONG THE EASTERLY LINE OF THE NORTHEAST ¼ OF SAID SECTION 26, 774.35 FEET; THENCE NORTH 89° 05' 14" WEST AT RIGHT ANGLES TO SAID EASTERLY LINE, NORTHEAST ¼ OF SECTION 26, 1018.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE SOUTH 00° 54' 46" WEST, 180.0 FEET; THENCE SOUTH 89° 05' 14" EAST 75.0 FEET; THENCE SOUTH 00° 54' 46" WEST, 210.0 FEET; THENCE SOUTH 89° 05' 14" EAST, 70 FEET; THENCE SOUTH 00° 54' 46" WEST, 25.0 FEET; THENCE SOUTH 89° 05' 14" EAST, 29.11 FEET; THENCE SOUTH 00° 57' 36" WEST 100.0 FEET; THENCE NORTH 89° 05' 14" WEST, 29.03 FEET; THENCE SOUTH 00° 54' 46" WEST, 25.0 FEET; THENCE NORTH 89° 05' 14" WEST, 170.0 FEET; THENCE SOUTH 00° 54' 46" 40.0 FEET; THENCE NORTH 89° 05' 14" WEST, 185.5 FEET; THENCE NORTH 00° 54'46" EAST 58.77 FEET; THENCE NORTH 89° 05' 14" WEST, 486.93 FEET; THENCE NORTH 00° 48' 02" EAST, 319.45 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF A 300.0 FOOT RADIUS CURVE, CONCAVE TO THE SOUTHEAST, HAVING A CHORD LENGTH OF 67.97 FEET BEARING NORTH 07° 18' 26" EAST, THENCE SOUTH 89° 05' 14" EAST, 293.67 FEET; THENCE NORTH 00° 54' 46" EAST, 266.89 FEET; THENCE SOUTH 89° 05' 14" EAST, 276.81 FEET; THENCE SOUTH 00° 54' 56" WEST, 132.64 FEET; THENCE SOUTH 89° 05' 14" EAST, 120.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

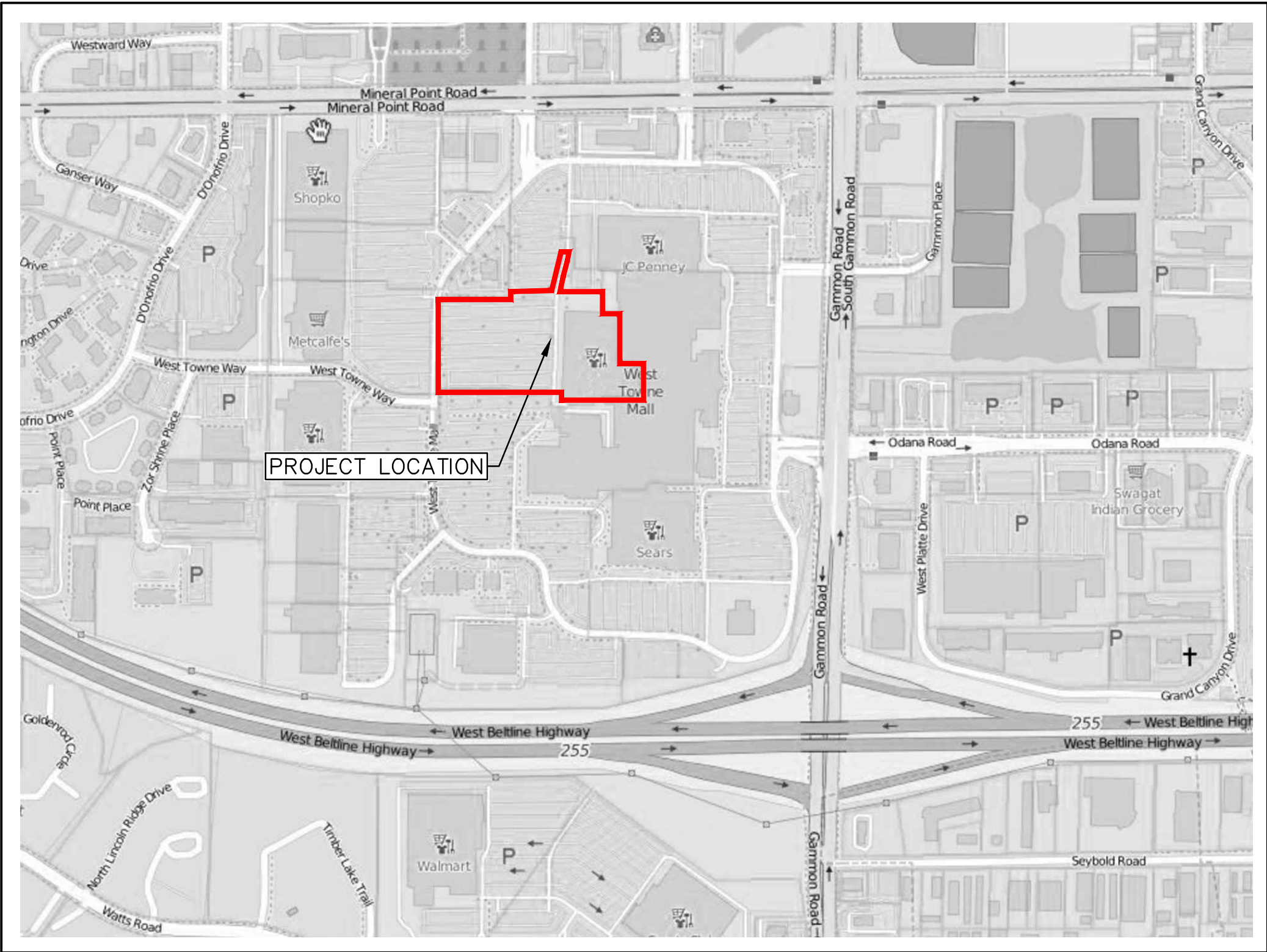
TOGETHER WITH THE NON-EXCLUSIVE EASEMENTS FOR INGRESS-EGRESS, PARKING, AND UTILITIES AS SET OUT IN THE EASEMENT, RESTRICTION AND OPERATING AGREEMENT, RECORDED IN VOLUME 100 OF RECORDS, PAGE 396, AS DOCUMENT NO. 1239177; AS AMENDED BY THE FOLLOWING:FIRST AMENDMENT TO EASEMENT, RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 283 OF RECORDS, PAGE 238, DOCUMENT NO. 1303874; SECOND SUPPLEMENT TO EASEMENT, RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 243 OF RECORDS, PAGE 140, DOCUMENT NO. 1288279; THIRD SUPPLEMENT TO EASEMENT RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 425 OF RECORDS, PAGE 512 DOCUMENT NO. 1359322; FOURTH SUPPLEMENT TO EASEMENT, RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 1667 OF RECORDS, PAGE 35, DOCUMENT NO. 1657737; FIFTH SUPPLEMENT TO EASEMENT, RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 3853 OF RECORDS, PAGE 25, DOCUMENT NO. 1752610; SIXTH SUPPLEMENT TO EASEMENT, RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 4628 OF RECORDS, PAGE 33, DOCUMENT NO. 1786646; SEVENTH SUPPLEMENT TO EASEMENT, RESTRICTION AND OPERATING AGREEMENT RECORDED IN VOLUME 12447 OF RECORDS, PAGE 4, DOCUMENT NO. 2124846.

November 18, 2019

Prepared for: CBL Properties

Survey No. 167972-KAC

VICINITY MAP



PLAN INDEX

SHEET NO.

DESCRIPTION

C000	PROJECT INFORMATION
C001	EXISTING CONDITIONS
C100	DEMOLITION PLAN
C200	SITE PLAN
C300	GRADING & EROSION CONTROL PLAN
C301	PAVING PLAN – WEST
C302	PAVING PLAN – EAST
C400	UTILITY PLAN
C500	EROSION CONTROL DETAILS
C501	SITE DETAILS
C502	UTILITY DETAILS
C503	CONTECH DETAILS 1
C504	CONTECH DETAILS 2
C505	CONTECH DETAILS 3
C506	CONTECH DETAILS 4
C600	SPECIFICATIONS
L100	TREE INVENTORY
L101	LANDSCAPE PLAN – NORTH
L102	LANDSCAPE PLAN–SOUTH

UTILITY CONTACTS / CITY OF MADISON DEPARTMENT CONTACTS:

STORM SEWER UTILITY:
CITY OF MADISON
GREG FRIES, P.E.
ASSISTANT CITY ENGINEER
CITY-COUNTY BUILDING
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EMAIL: GFRIES@CITYOFMADISON.COM

ELECTRIC UTILITY:
ALLIANT ENERGY
DENISE GEVELINGER
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(608) 575-7833

SANITARY SEWER UTILITY:
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ASSISTANT CITY ENGINEER
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PH: (608) 266-4751
EMAIL: GFRIES@CITYOFMADISON.COM

MADISON FIRE DEPARTMENT:
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FIRE PROTECTION ENGINEER
CITY OF MADISON FIRE DEPARTMENT
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EMAIL: WSULLIVAN@CITYOFMADISON.COM

WATER UTILITY:
MADISON WATER UTILITY
ADAM WIEDERHOEFT
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MADISON, WI 53713
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EMAIL: AWIEDERHOEFT@MADISONWATER.ORG

GAS UTILITY:
MADISON GAS & ELECTRIC COMPANY
STEVEN BEVERSDORF, P.E.
133 S BLAIR ST
MADISON, WI 53788
PH: (608) 252-1552 OFFICE
(608) 444-9620 MOBILE

CIVIL ENGINEER:

raSmith

CREATIVITY BEYOND ENGINEERING

RAS PROJECT: 3190329
CONTACT: MATT KOCOUREK, P.E.

OWNER/DEVELOPER:

CBL

CBL PROPERTIES

CBL Center, Suite 500 | 2030 Hamilton Place Boulevard | Chattanooga, TN 37421-6000
p: (423) 855-0001 f: (423) 490-9662 | cblproperties.com | NYSE: CBL

CONTACT: KEN WITTLER

16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

PLAN DATE: JANUARY 8, 2020

REVISION	ISSUE DATE	ISSUED SHEETS	ISSUED FOR
1	1/28/2020	ALL	BID SET
2	2/4/2020	C200,C300,C400, L101,L102	SIDEWALK REVISION



Know what's below.
Call before you dig.

WEST TOWNE MALL REDEVELOPMENT
CITY OF MADISON, WI

PROJECT INFORMATION

DESCRIPTION

DATE

16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

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CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: N.T.S.

JOB NO. 3190329

PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: DVW

CHECKED BY: RJY

SHEET NUMBER

C000



 PROJECT LOCATION

R.A.SMITH, INC. ASSUMES NO
RESPONSIBILITY FOR DAMAGES, LIABILITY
OR COSTS RESULTING FROM CHANGES OR
ALTERATIONS MADE TO THIS PLAN
WITHOUT THE EXPRESSED WRITTEN
CONSENT OF R.A.SMITH, INC.

WEST TOWNE MALL REDEVELOPMENT
CITY OF MADISON, WI

VOM MAUR REDEVELOPMENT
VICINITY MAP



CREATIVITY BEYOND ENGINEERING

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(262) 781-1000
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Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
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DATE	DESCRIPTION

© COPYRIGHT 2020 R.A. Smith, Inc.
DATE: 02/04/2020
SCALE: 1" = 150'
JOB NO. 3190329
PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.
DESIGNED BY: DVW
CHECKED BY: RJY
SHEET NUMBER
EXHIBIT

To: CBL & Associates Management, Inc., a Delaware Corporation
First American Title Insurance Company
S&B Detrick Limited Partnership, a Delaware limited partnership

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS and includes items 1, 2, 3, 4, 5, 6(a), 6(b), 7(a), 7(b)(1), 7(c), 8, 9, 10(a), 11, 13 and 20 of Table A thereof. The fieldwork was completed on November 15, 2019.

Date of Plat or Map: November 18, 2019
Drafting Revision: December 10, 2019

Eric R. Sturm
Professional Land Surveyor
Registration Number 2309
eric.sturm@rasmith.com

ALTA/NSPS LAND TITLE SURVEY

Known as 36 West Towne Mall, City of Madison, Dane County, Wisconsin

PART OF LOT TWO (2), CERTIFIED SURVEY MAP NO. 3422, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS FOR DANE COUNTY, WISCONSIN, IN VOLUME 13 OF CERTIFIED SURVEY MAPS, PAGE 250, AS DOCUMENT NO. 165742, AND PART OF THE NORTHEAST QUARTER (NE $\frac{1}{4}$) OF SECTION TWENTY-SIX (26), TOWNSHIP SEVEN (7) NORTH, RANGE EIGHT (8) EAST, IN THE CITY OF MADISON, DANE COUNTY, WISCONSIN, DESCRIBED AS FOLLOWS, COMMENCING AT THE NORTHEAST CORNER OF SECTION 26, A BRASS MONUMENT AT THE INTERSECTION OF GAMMON ROAD AND MINERAL POINT ROAD, THENCE SOUTH 00° 54' 48" WEST ALONG THE EASTERLY LINE OF THE NORTHEAST $\frac{1}{4}$ OF SAID SECTION 26, 774.35 FEET, THENCE NORTH 89° 05' 14" WEST AT RIGHT ANGLES TO SAID EASTERLY LINE, NORTHEAST $\frac{1}{4}$ OF SECTION 26, 1018.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION, THENCE SOUTH 89° 05' 14" EAST 75.0 FEET, THENCE SOUTH 89° 05' 14" EAST 75.0 FEET, THENCE SOUTH 00° 54' 48" WEST, 210.0 FEET; THENCE SOUTH 89° 05' 14" EAST, 70 FEET; THENCE SOUTH 00° 54' 48" WEST, 25.0 FEET; THENCE SOUTH 89° 05' 14" EAST, 29.11 FEET; THENCE SOUTH 00° 57' 36" WEST 100.0 FEET; THENCE NORTH 89° 05' 14" WEST, 29.03 FEET; THENCE SOUTH 00° 54' 48" WEST, 25.0 FEET; THENCE NORTH 89° 05' 14" WEST, 170.0 FEET; THENCE SOUTH 00° 54' 48" WEST 40.0 FEET; THENCE NORTH 89° 05' 14" WEST, 183.65 FEET; THENCE NORTH 00° 54' 48" EAST 58.77 FEET; THENCE NORTH 89° 05' 14" WEST, 486.83 FEET; THENCE NORTH 00° 48' 02" EAST, 319.45 FEET TO A POINT OF CURVATURE, THENCE ALONG THE ARC OF A 300.0 FOOT RADIUS CURVE, CONCAVE TO THE SOUTHEAST, HAVING A CHORD LENGTH OF 67.97 FEET BEARING NORTH 07° 18' 29" EAST, THENCE SOUTH 88° 05' 14" EAST, 293.67 FEET; THENCE NORTH 00° 54' 48" EAST, 266.89 FEET; THENCE SOUTH 89° 05' 14" EAST, 276.81 FEET; THENCE SOUTH 00° 54' 56" WEST, 132.64 FEET; THENCE SOUTH 89° 05' 14" EAST, 120.0 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

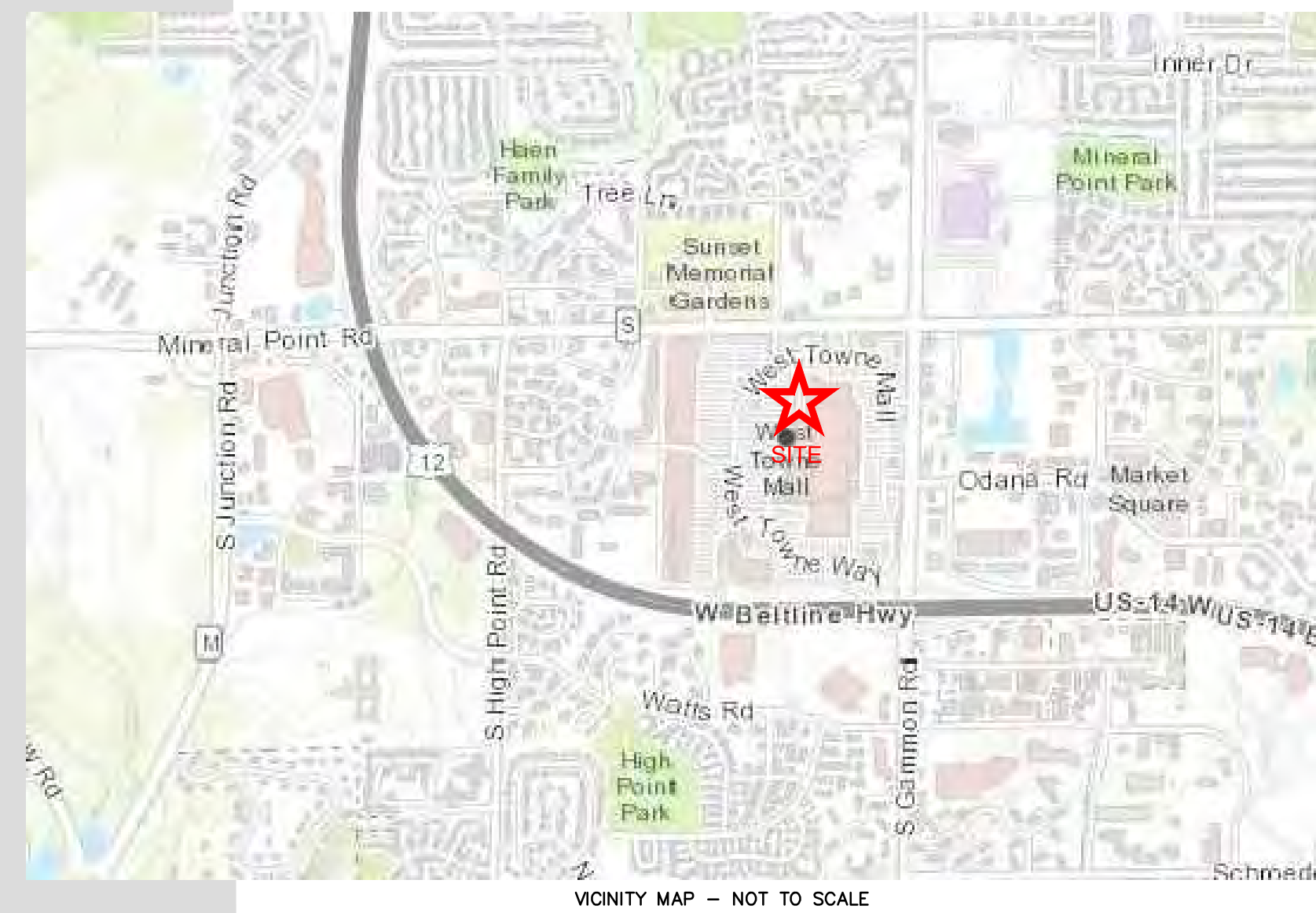
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November 18, 2019

Prepared for: CBL Properties

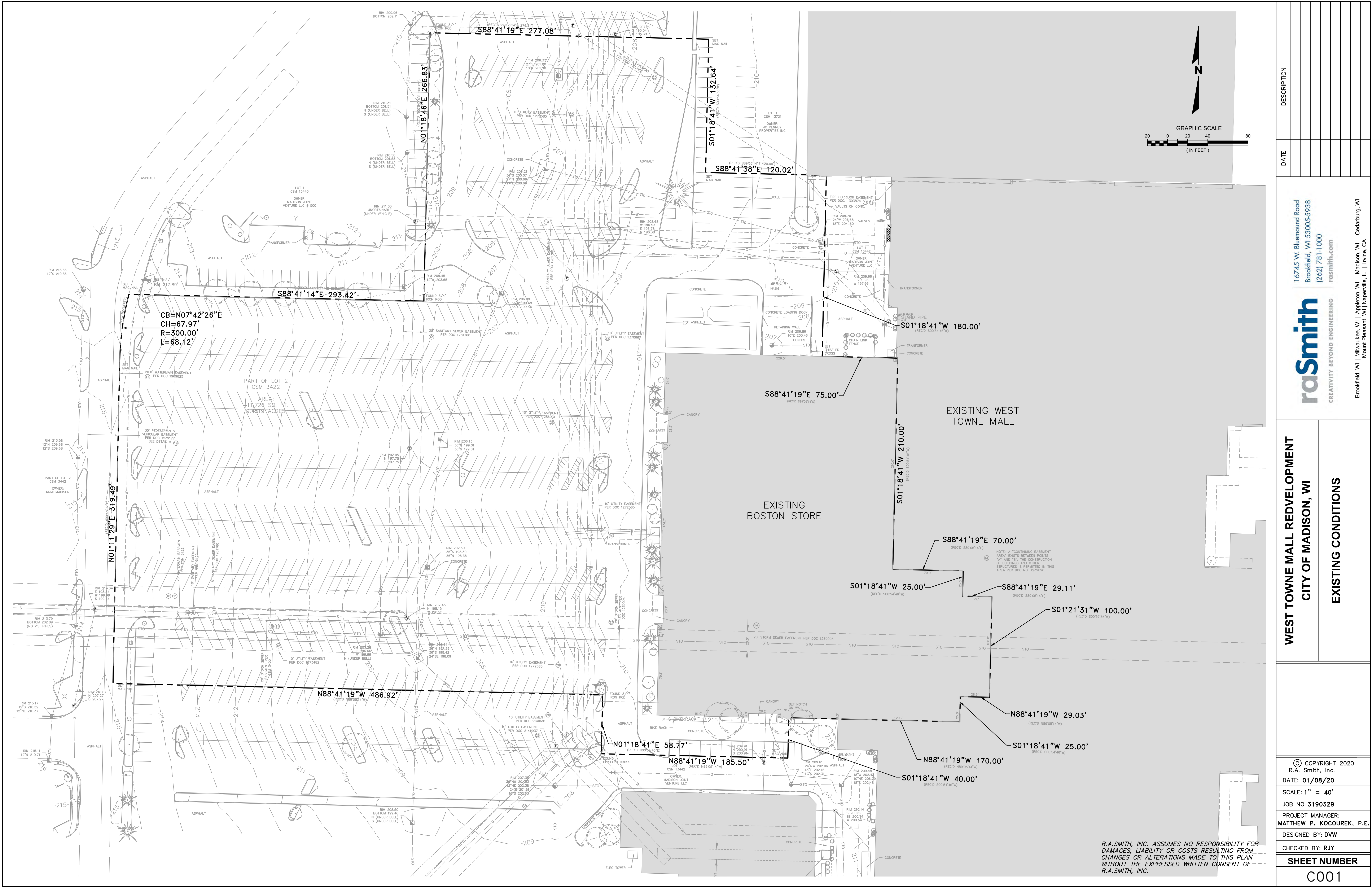
Survey No. 167972-KAC

- A. Basis of Bearings**
Bearings are based on the North line of the Northeast 1/4 of Section 26, Township 7 North, Range 8 East, which is platted to bear North 89° 10' 36" East.
- B. Title Commitment**
This survey was prepared based on First American Title Insurance Company title commitment number NCS-971100-SA1, effective date of July 23, 2019, which lists the following easements and/or restrictions from schedule B-I:
- 1-3, 30. Visible evidence shown, if any
- 4-9, 27-29. Not survey related
10. All matters as disclosed by Certified Survey Map No. 3422. **Affects site by location - Shown**
11. Terms and Provisions contained in easement restriction and operating agreement Recorded in Volume 100 of Records, Page 396 Document No. 1239177 Supplemented Volume 283 of Records, Page 238 Document No. 1303874 Volume 243 of Records, Page 140 Document No. 1288279 Volume 425 of Records, Page 512 Document No. 1359322 Volume 1667 of Records, Page 35 Document No. 1657737 Volume 3863 of Records, Page 25 Document No. 1752910 Volume 4628 of Records, Page 33 Document No. 1786646 Noted on Certified Survey Map No. 3422 by reference to Access Easements Further supplemented Volume 12447 of Records, Page 4 Document No. 2124846 Supplemented by Commercial Site Map Recorded in Volume 16775 of Records, Page 1, as Document No. 2291039. And recorded in Volume 20024 of Records, Page 53, as Document No. 2388739. **Affects site by location - Shown**
12. Agreement for construction of Sanitary Sewer Recorded in Volume 115 of Records, Page 45 Document No. 1244090 **Affects site by location - General in nature, cannot be plotted**
13. Sanitary Sewer Easement to City of Madison Recorded in Volume 225 of Records, Page 83 Document No. 1261760 On Certified Survey Map No. 3422, the use of which has been extended to Wisconsin Power and Light Company by virtue of the consent Recorded in Volume 2182 of Records, Page 28 Document No. 1677835 **Affects site by location - Shown**
14. Easement Restriction and Operating Agreement Recorded in Volume 1668 of Records, Page 10 Document No. 1657745 Modified and amended by the Amended and Restated Easement, Restriction and Operating Agreement Recorded in Volume 3600 of Records, Page 1 Document No. 1740913 And as noted on Certified Survey Map No. 3422, Supplemented by Commercial Site Map Recorded in Volume 16775 of Records, Page 1, as Document No. 2291039. And recorded in Volume 20024 of Records, Page 53, as Document No. 2388739. **Affects site by location - General in nature, cannot be plotted**
15. Easement to Wisconsin Power and Light Company Recorded in Volume 2096 of Records, Page 14 Document No. 1673482 **Affects site by location - Shown**
16. Telephone Easement Agreement Recorded in Volume 6794 of Records, Page 78 Document No. 1879749 **Does not affect site by location - Not shown**
17. Water Main Easement to City of Madison Recorded in Volume 8914 of Records, Page 36 Document No. 1969825 **Affects site by location - Shown**
18. Telephone Easement to Mid-Plains Telephone Company Recorded in Volume 1667 of Records, Page 26 Document No. 1657736 **Does not affect site by location - Not shown**
19. Pedestrian and Traffic Easement Recorded in Volume 100 of Records, Page 396 Document No. 1239177 Amended Volume 283 of Records, Page 238 Document No. 1303874 **Benefits site by location - Shown**
20. Easement to Wisconsin Power and Light Company Recorded in Volume 198 of Records, Page 498 Document No. 1272585 **Affects site by location - Shown**
21. Easement to Madison Gas and Electric Company Recorded in Volume 239 of Records, Page 375 Document No. 1268931 **Affects site by location - Shown**
22. Water Main Easement Recorded in Volume 453 of Records, Page 35 Document No. 1370667 **Affects site by location - Shown**
23. Public Storm Sewer Easement Recorded in Volume 100 of Records, Page 242 Document No. 1239096 **Affects site by location - Shown**
24. Easement Agreement Recorded in Volume 359 of Records, Page 357 Document No. 1333086 **Does not affect site by location - Not shown**
25. Easement to Madison Gas and Electric Company Recorded in Volume 12827 of Records, Page 31 Document No. 2140691 **Does not affect site by location - Shown**
26. Easement Agreement Recorded in Volume 12881 of Records, Page 9 Document No. 2142937 **Does not affect site by location - Shown**
- C. Flood Note**
According to flood insurance rate map of the City of Madison, community panel number 55025C0395G, effective date of January 2, 2009, this site falls in zone X (area determined to be outside the 0.2% annual chance floodplain).
- D. Parking Spaces**
There are 761 regular and 13 handicapped parking spaces marked on this site.
- E. Municipal Zoning**
No zoning report was provided
- F. Notes**
- There is evidence of existing party walls on the property.
- Due to existing snow cover, there may be improvements on the site that were not visible or observed as of the date of this survey.



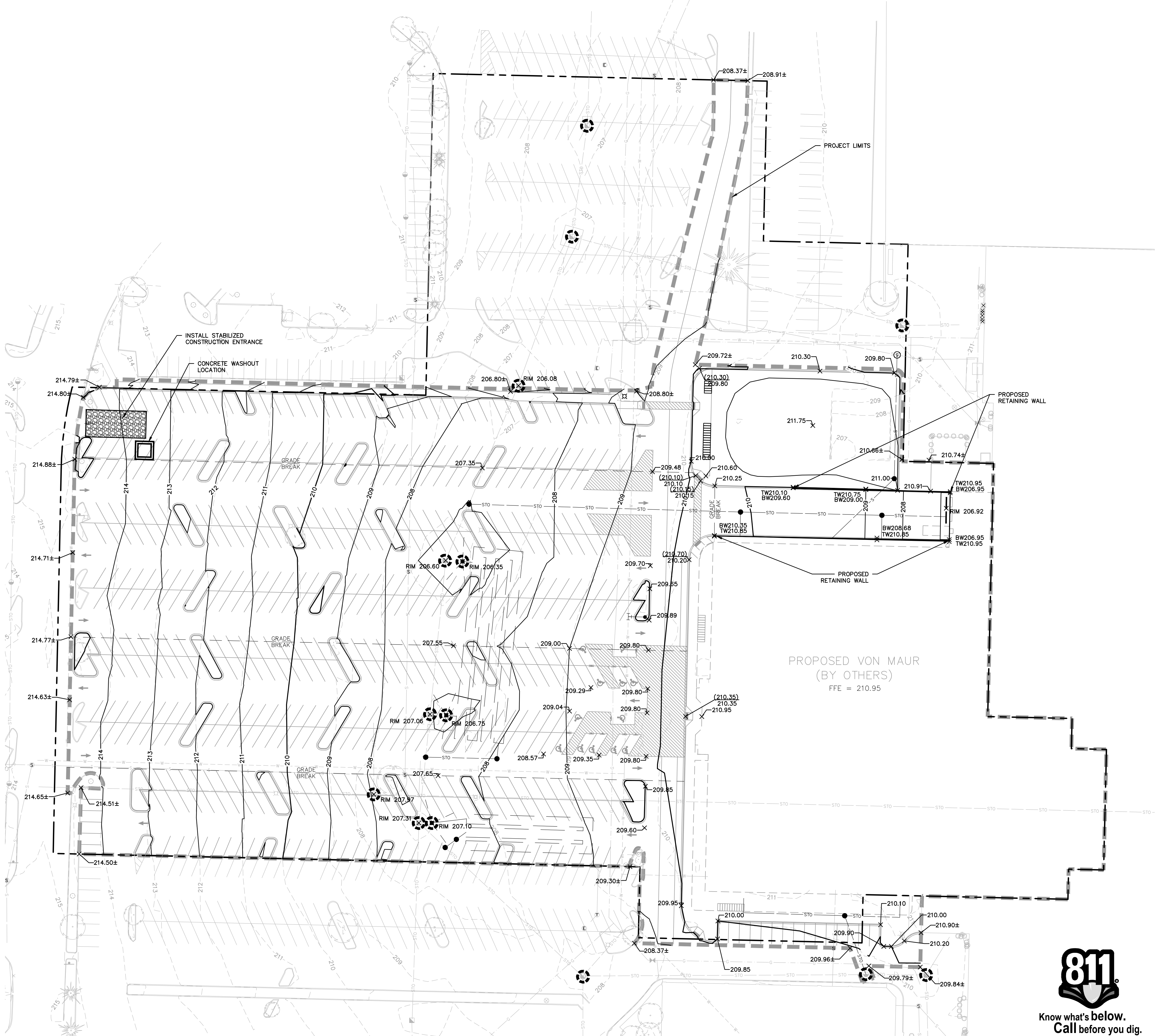
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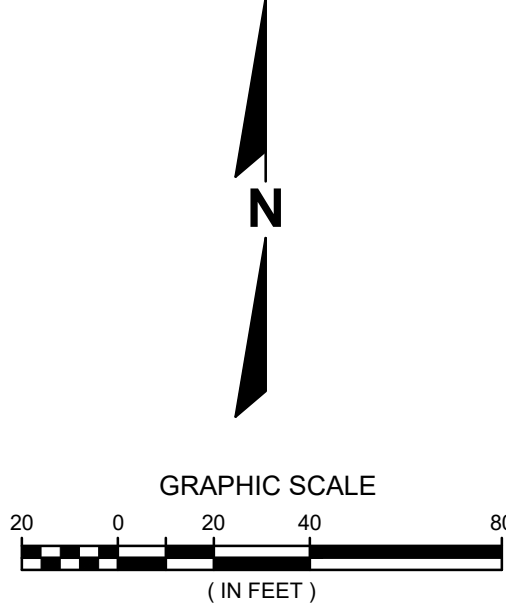


DESCRIPTION	
DATE	
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 raSmith.com	
raSmith CREATIVITY BEYOND ENGINEERING	
Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA	
WEST TOWNE MALL REDEVELOPMENT CITY OF MADISON, WI	
EXISTING CONDITIONS	
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DATE: 01/08/20	
SCALE: 1" = 40'	
JOB NO. 3190329	
PROJECT MANAGER: MATTHEW P. KOCUREK, P.E.	
DESIGNED BY: DVW	
CHECKED BY: RJY	
SHEET NUMBER	
C001	

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KEY MAP
NTS



LEGEND

- 200--- EXISTING 5-FT CONTOUR
- 201--- EXISTING 1-FT CONTOUR
- 200--- PROPOSED 5-FT CONTOUR
- 201--- PROPOSED 1-FT CONTOUR
- 100.00 X PROPOSED SPOT GRADE
- (100.50) X PROPOSED TOP OF CURB
- TW100.00 X PROPOSED TOP OF WALL ELEVATION
- BW100.50 X PROPOSED BOTTOM OF WALL ELEVATION
- RIM 100.00 X PROPOSED INLET ELEVATION
- 100.00± X MATCH EXISTING ELEVATION
- PROPOSED RETAINING WALL
- STO--- PROPOSED PRIVATE STORM SEWER
- S--- PROPOSED PRIVATE SANITARY SEWER
- W--- PROPOSED PRIVATE WATERMAIN
- STO--- EXISTING PUBLIC STORM SEWER
- S--- EXISTING PUBLIC SANITARY SEWER
- W--- EXISTING PUBLIC WATERMAIN
- PROPOSED STORM MANHOLE
- PROPOSED STORM INLET
- PROPOSED SANITARY STRUCTURE
- PROPOSED WATER STRUCTURE
- STORM SEWER INLET PROTECTION

GENERAL NOTES:

- THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES.
- RASMITH ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF RASMITH.
- SLOPES IN HANDICAP PARKING STALLS SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
- ALL SIDEWALKS TO BE SLOPED AT LESS THAN 5.0% AND NO MORE THAN 2.0% CROSS SLOPE.
- MAXIMUM SLOPE ON ALL CURB RAMPS SHALL BE 12:1 (8.33%).
- CONTRACTOR SHALL PROVIDE EROSION CONTROL FACILITIES IN ACCORDANCE WITH THE CITY OF MADISON EROSION CONTROL ORDINANCE, THE WISCONSIN DNR STORMWATER CONSTRUCTION AND POST CONSTRUCTION TECHNICAL STANDARDS, WDNR PERMIT CONDITIONS, AND THESE DOCUMENTS; THE MOST STRINGENT TO APPLY.
- ALL PROPOSED SPOT GRADES ARE FLOW LINE, GUTTER GRADES OR PROPOSED PAVEMENT GRADES UNLESS OTHERWISE NOTED.
- ALL CURB SHOULD BE HIGH SIDE CURB UNLESS OTHERWISE NOTED.
- ADJUST ALL MANHOLE, HYDRANTS, VALVES, INLETS, ETC. TO FINISHED GRADE AS NECESSARY.

EROSION CONTROL NOTES:

- EROSION CONTROL MEASURES MUST BE INSPECTED AND REPAIRED WEEKLY AND AFTER EACH RAIN TOTALING ONE-HALF INCH OR MORE. THE INSPECTIONS SHALL BE POSTED TO THE CITY OF MADISON WEB SITE AS AS REQUIRED BY CHAPTER 37 OF THE MADISON GENERAL ORDINANCES.
- ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD OR SIDEWALK SHALL BE REMOVED BY STREET CLEANING, OTHER THAN FLUSHING, IMMEDIATELY.
- CONTRACTOR SHALL KEEP A COPY OF THE EROSION CONTROL PLANS AT THE PROJECT SITE AND PROVIDE COMPLETED EROSION CONTROL CHECK SHEETS TO THE CONSTRUCTION INSPECTOR. CITY OF MADISON AND WDNR MAY REQUEST INSPECTION REPORTS AT ANY TIME.
- ALL EROSION CONTROL METHODS SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS AND CITY OF MADISON REQUIREMENTS AND STANDARDS.
- ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN DAYS SHALL BE IMMEDIATELY RESTORED WITH SEED AND MULCH.
- COPIES OF THE INSPECTION REPORTS SHALL BE KEPT AT THE PROJECT SITE FOR CITY OR WDNR ACCESS.
- DEWATERING AS NEEDED TO BE DONE ACCORDING TO WDNR STANDARD 1061.
- DISTURBED AREAS THAT CANNOT BE STABILIZED WITH A DENSE GROWTH OF VEGETATION BY SEEDING AND MULCHING DUE TO TEMPERATURE (WINTER) OR TIMING OF CONSTRUCTION SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM) IN ACCORDANCE WITH WDNR TECHNICAL STANDARD 1050.
- CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL MEASURES AND PERFORMING MAINTENANCE THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

SEQUENCE OF CONSTRUCTION

SEQUENCE FOR INSTALLATION OF EROSION CONTROL MEASURES & SITE IMPROVEMENTS SHALL BE:

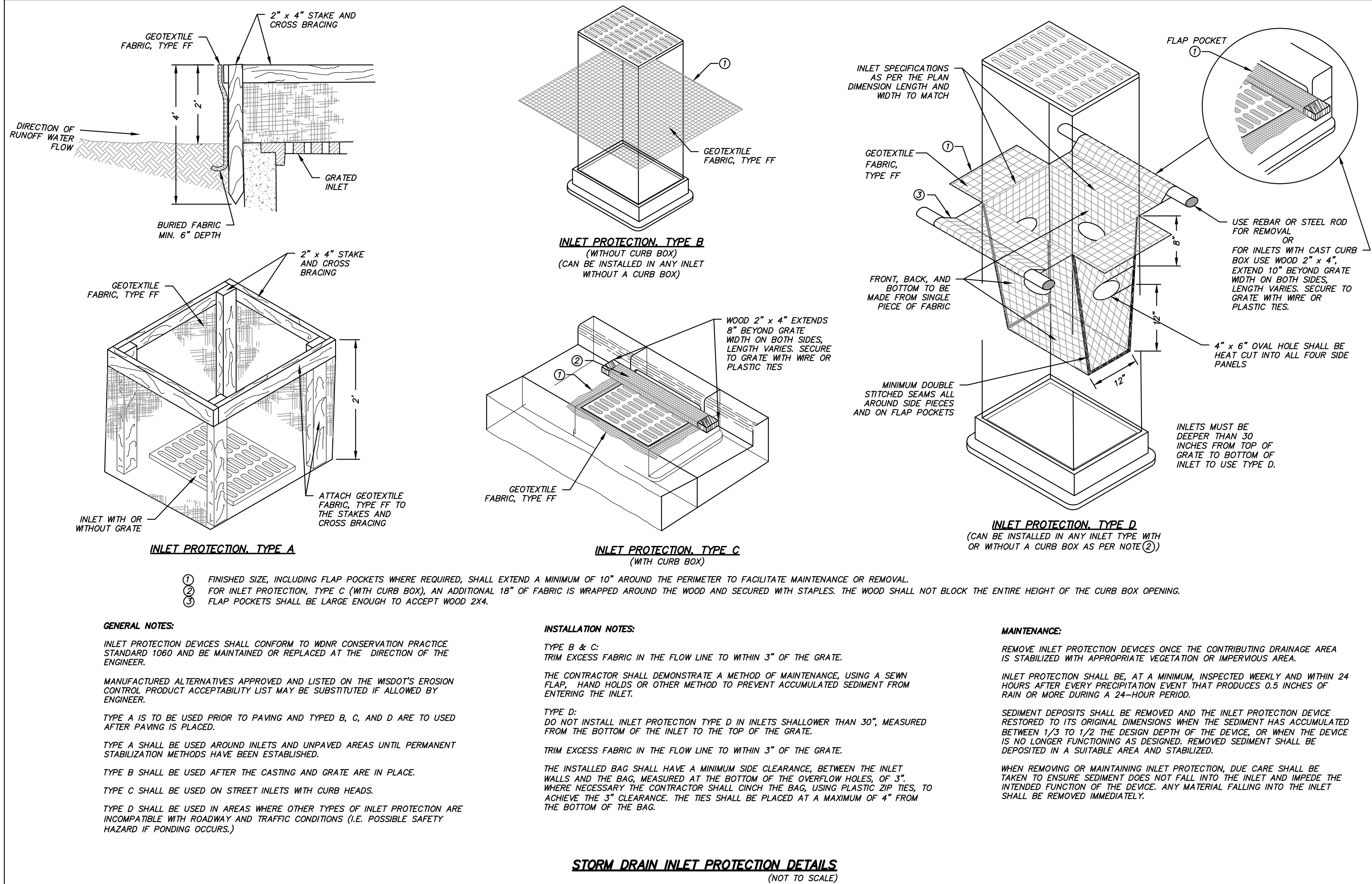
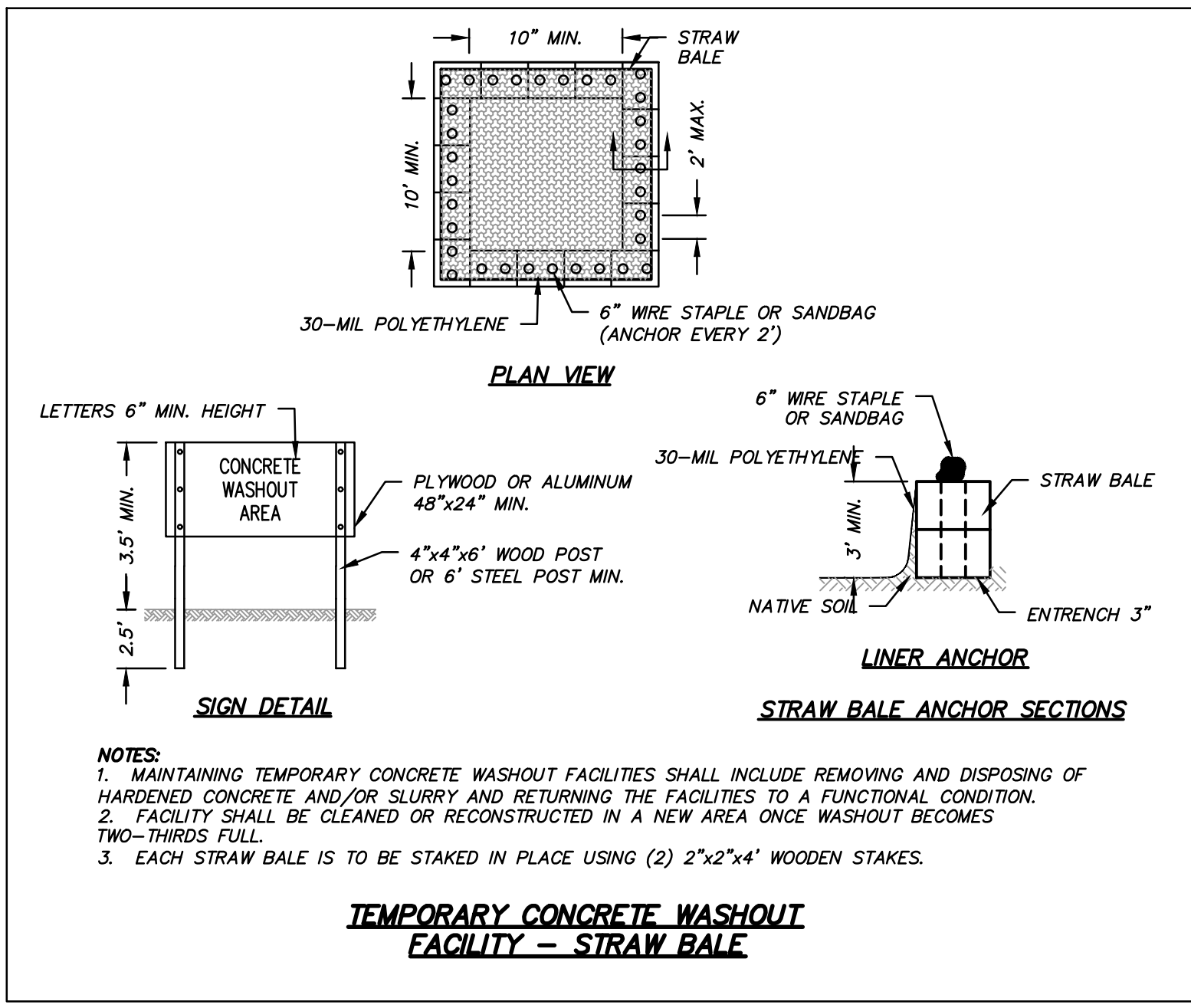
GENERAL NOTE THROUGHOUT ENTIRE CONSTRUCTION PERIOD: ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN DAYS MUST BE IMMEDIATELY RESTORED WITH SEED AND MULCH. ALL SLOPES MUST BE TOPSOILED, SEEDDED AND MATTED WITHIN 2 DAYS OF COMPLETED GRADING.

- INSTALL SITE CONSTRUCTION ENTRANCE AND INLET PROTECTION.
- SAWCUT AND REMOVE EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER.
- GRADE SITE TO SUBGRADE. INSTALL CURB, GUTTER, AND WALKS. INSTALL ASPHALT/CONCRETE PAVEMENT.
- SPREAD TOPSOIL IN LANDSCAPE AREAS AND RESTORE WITH SEED, MULCH, AND FERTILIZER.
- CONTRACTOR MAY MODIFY SEQUENCING AS NEEDED TO COMPLETE CONSTRUCTION IF EROSION CONTROLS ARE MAINTAINED IN ACCORDANCE WITH THE CONSTRUCTION SITE EROSION CONTROL REQUIREMENTS SET FORTH IN FEDERAL, STATE & LOCAL PERMITS. ALL CHANGES MUST BE SUBMITTED IN WRITING TO THE CITY OF MADISON & raSmith, INC. 5 WORKING DAYS PRIOR TO CHANGE.
- AS SITE CONDITIONS WARRANT DURING CONSTRUCTION ADDITIONAL BMPs SHALL BE INSTALLED TO REDUCE THE MIGRATION OF SEDIMENT TO THE MOST EXTENT PRACTICABLE.
- REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AFTER DISTURBED AREA IS COVERED BY 70% ESTABLISHED VEGETATION.

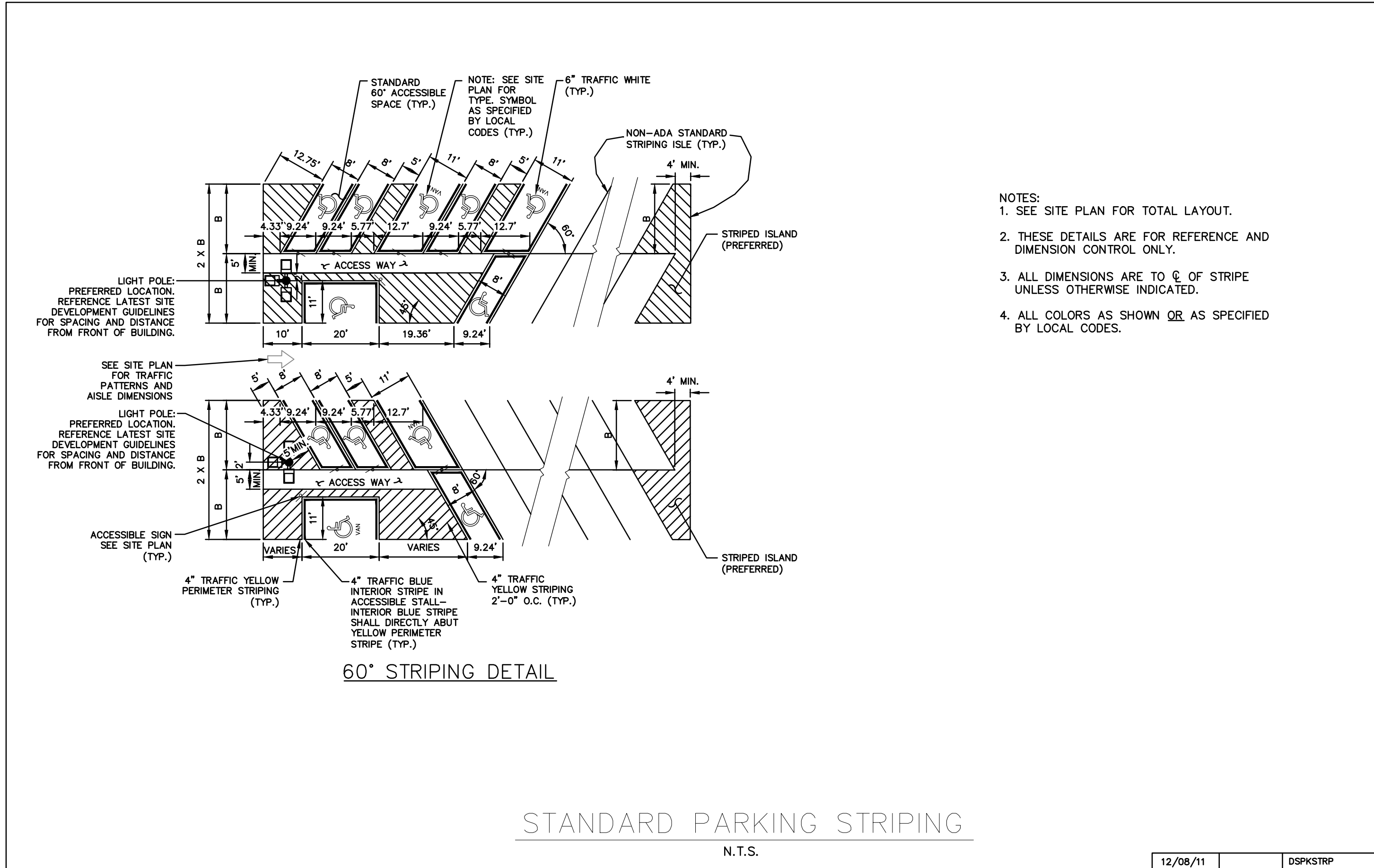


Know what's below.
Call before you dig.

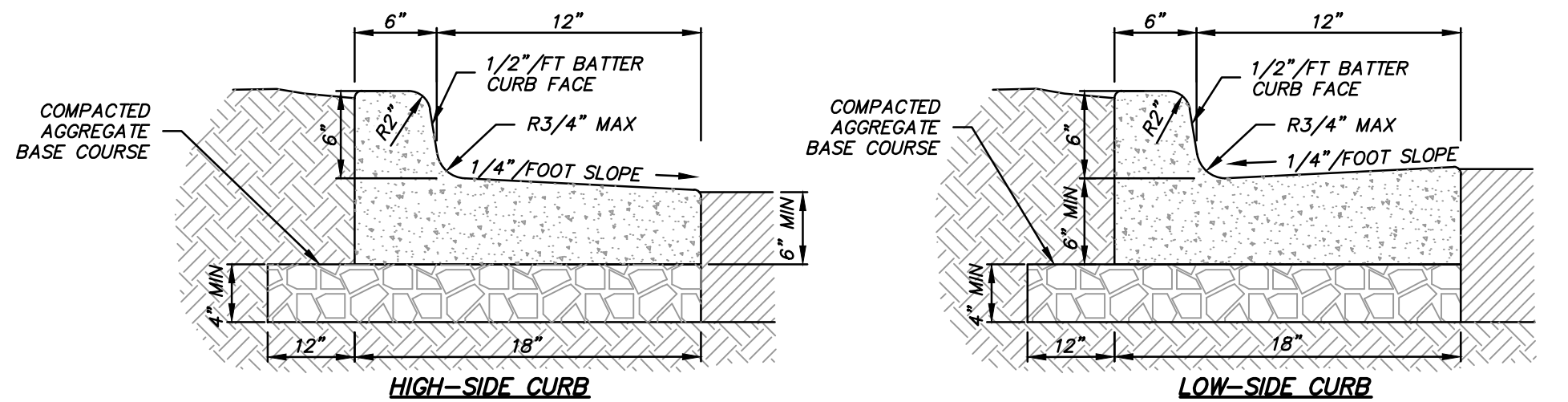
DESCRIPTION	
DATE	01/28/2020 BID SET
	02/04/2020 SIDEWALK REVISION
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com	
raSmith CREATIVITY BEYOND ENGINEERING	
Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA	
WEST TOWNE MALL REDEVELOPMENT CITY OF MADISON, WI	
GRADING & EROSION CONTROL PLAN	
© COPYRIGHT 2020 R.A. Smith, Inc.	
DATE: 01/08/20	
SCALE: 1" = 40'	
JOB NO. 3190329	
PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.	
DESIGNED BY: DVW	
CHECKED BY: RJY	
SHEET NUMBER	
C300	



<div><div>WEST TOWNE MALL REDVELOPMENT CITY OF MADISON, WI</div><div>EROSION CONTROL DETAILS</div></div>		<div><div><div><div>raSmith</div><div>CREATIVITY BEYOND ENGINEERING</div></div><div>16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com</div></div><div><div>Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA</div></div></div>		DATE	DESCRIPTION
<div>© COPYRIGHT 2020 R.A. Smith, Inc.</div>					
DATE: 01/08/20					
SCALE: N.T.S.					
JOB NO. 3190329					
PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.					
DESIGNED BY: DWV					
CHECKED BY: RJY					
SHEET NUMBER					
C500					

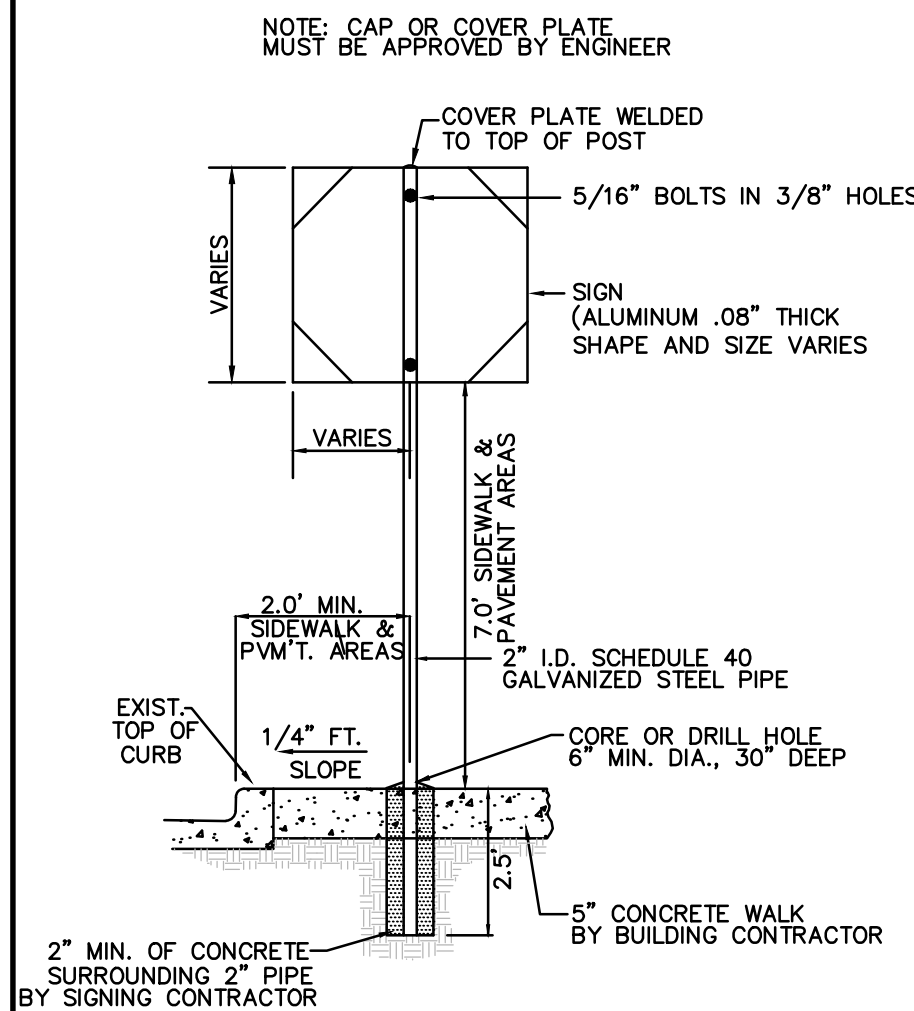


- NOTES:
1. SEE SITE PLAN FOR TOTAL LAYOUT.
 2. THESE DETAILS ARE FOR REFERENCE AND DIMENSION CONTROL ONLY.
 3. ALL DIMENSIONS ARE TO C OF STRIPE UNLESS OTHERWISE INDICATED.
 4. ALL COLORS AS SHOWN OR AS SPECIFIED BY LOCAL CODES.

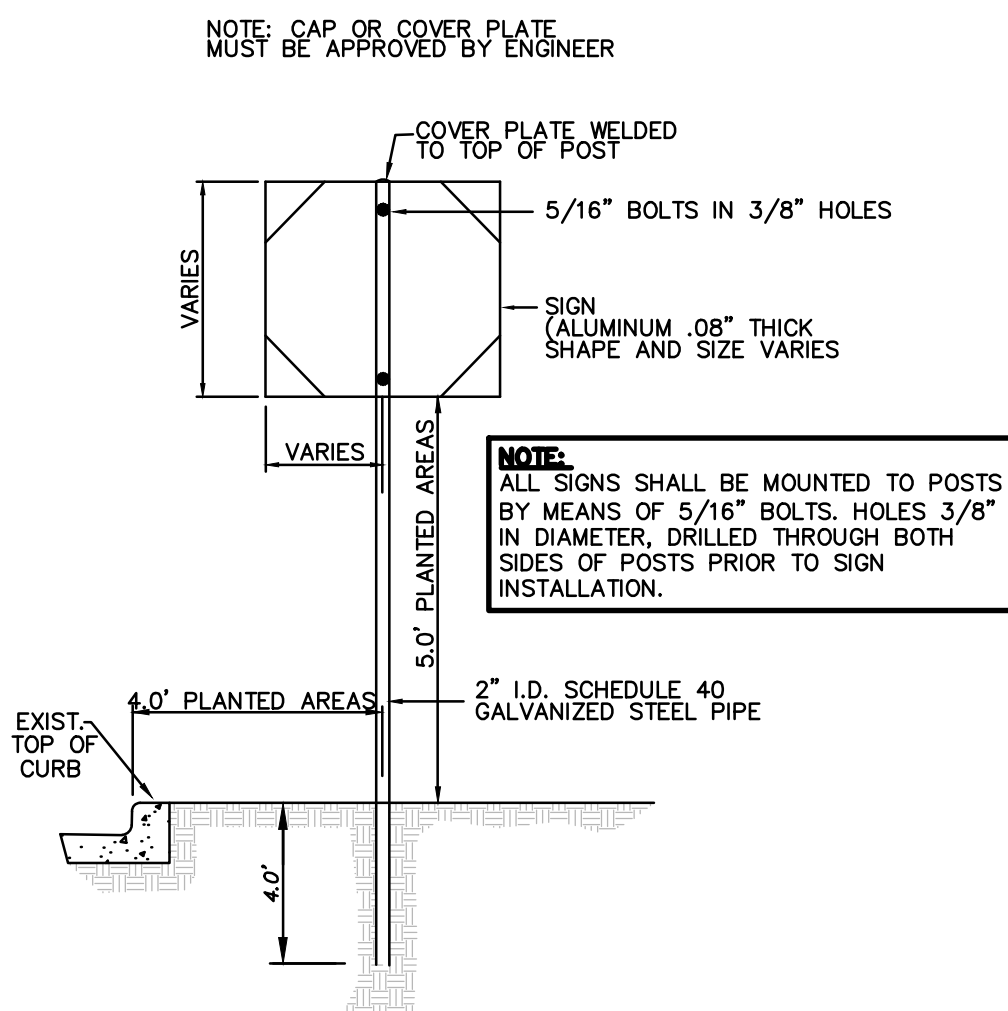


- NOTES:
- A) 3500 PSI CONCRETE SHALL BE USED IN CONSTRUCTION OF THE CURB & GUTTER.
 - B) THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SLOPE OF THE GUTTER PAN.
 - C) FOR DEPRESSED CURB HEAD SLOPE, USE THE SAME SLOPE AS ADJACENT SIDEWALK.
 - D) THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE. AGGREGATE PROVIDE MINIMUM 6\"/>
 - E) 1/2\"/>

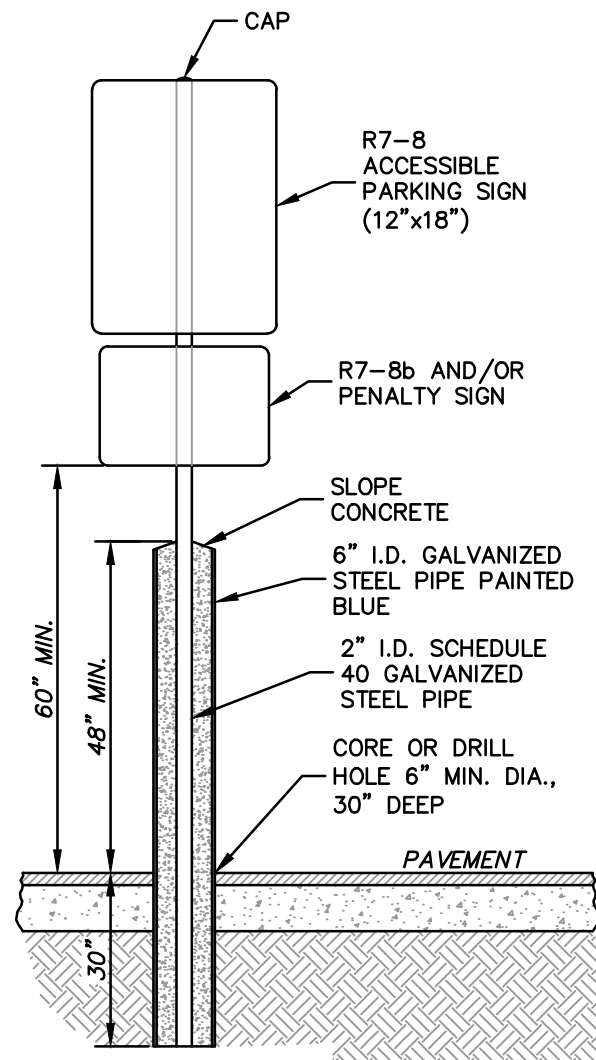
CONCRETE CURB & GUTTER 18"



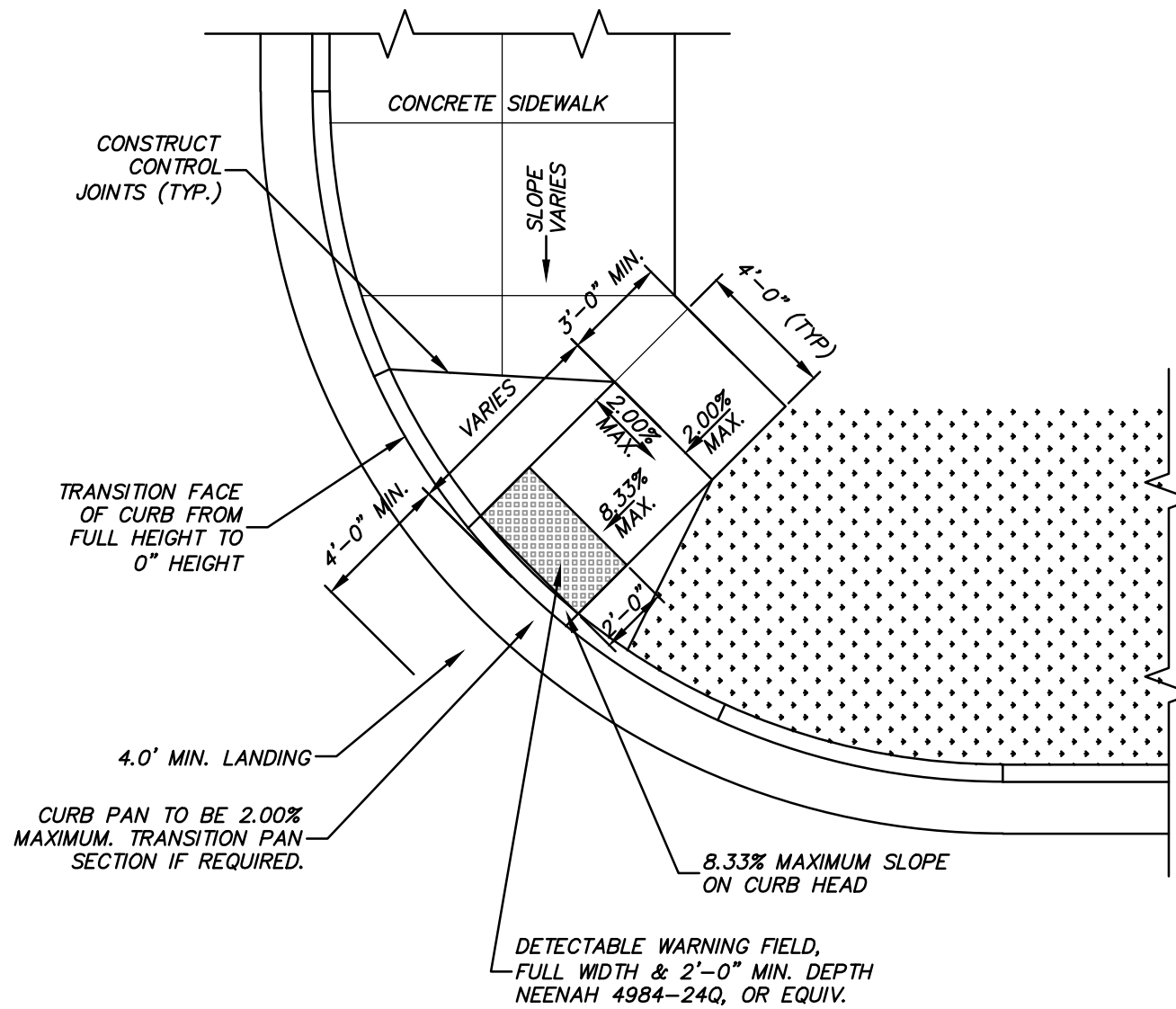
SIGN & POST INSTALLATION
FOR ALL SIGNS WITHIN THE CURB AROUND THE BUILDING
TYPE I



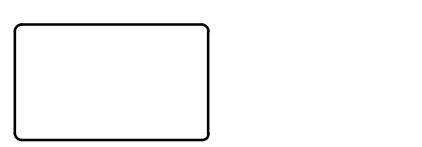
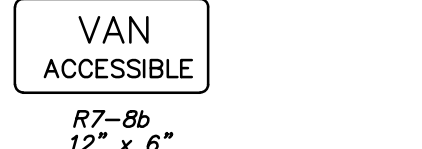
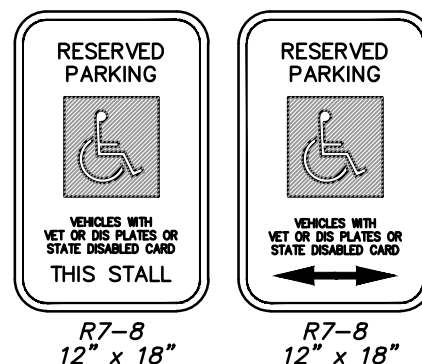
SIGN & POST INSTALLATION
FOR ALL SIGNS ON SITE, OUTSIDE THE BUILDING CURB
TYPE II



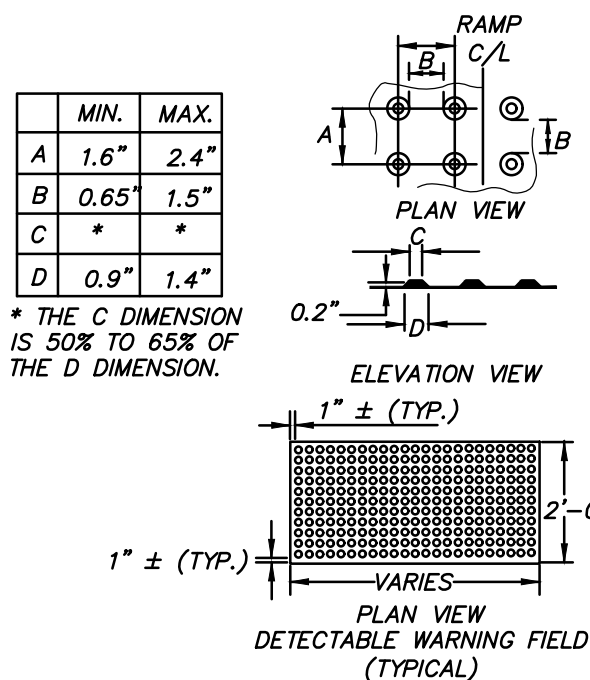
ACCESSIBLE PARKING SIGN AND POST INSTALLATION IN BOLLARD
TYPE III



- NOTES:
1. SURFACE OF CURB RAMP SHALL HAVE A BROOM FINISH OR SIMILAR SLIP RESISTANT SURFACE.

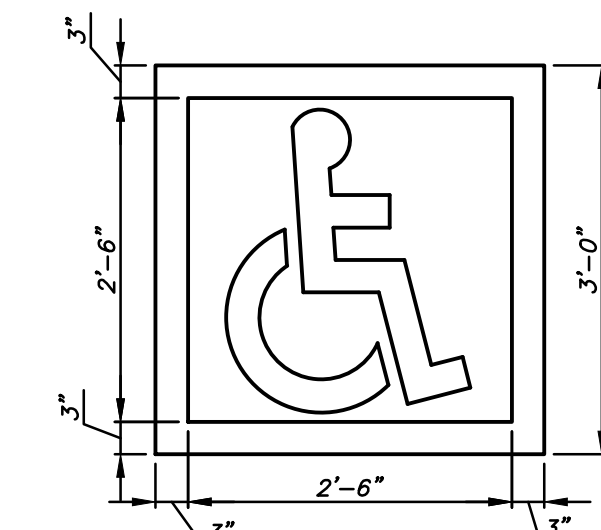
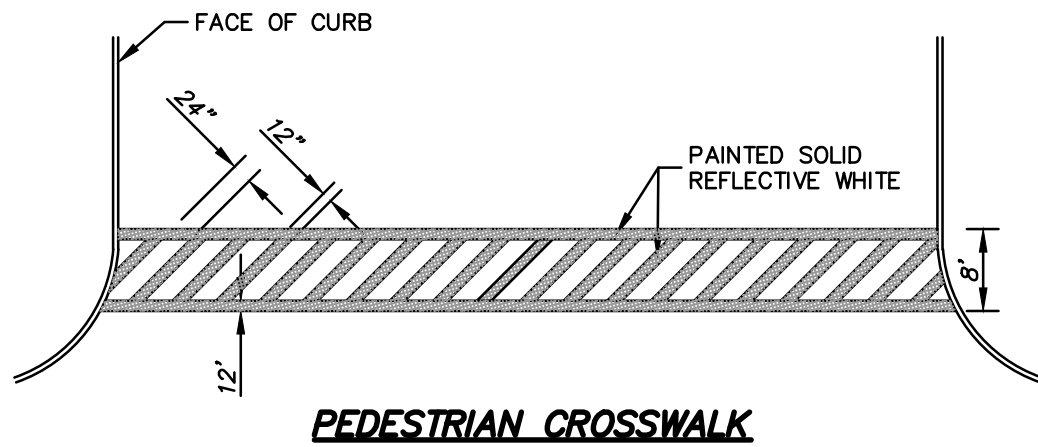
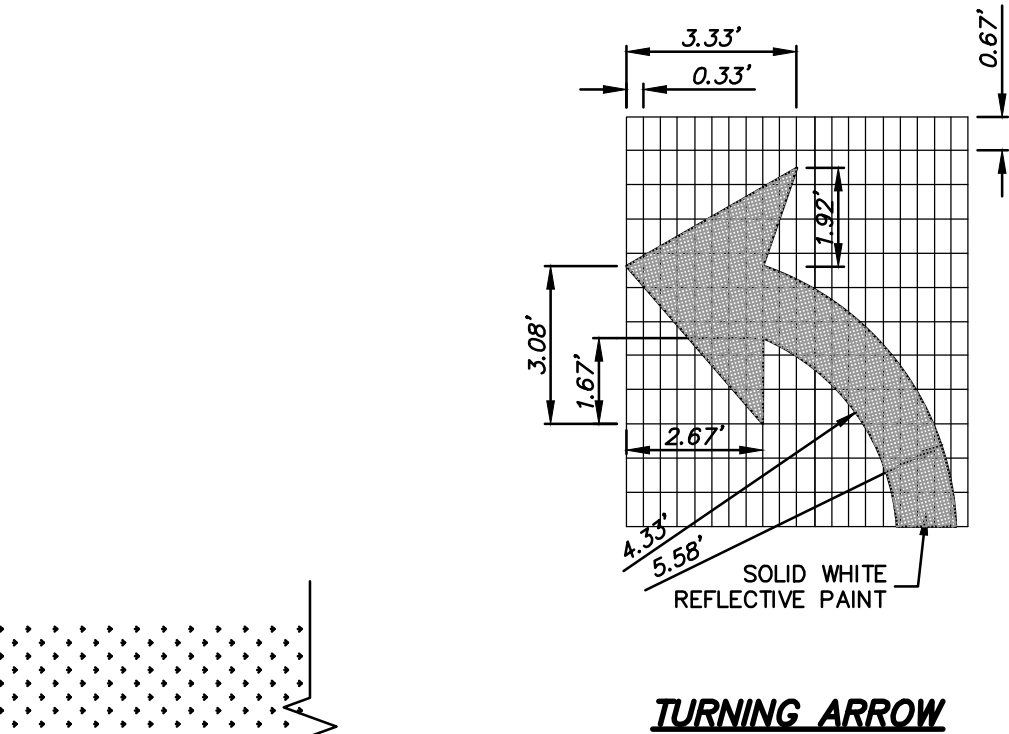


STATE OF WISCONSIN ACCESSIBLE PARKING SIGNS



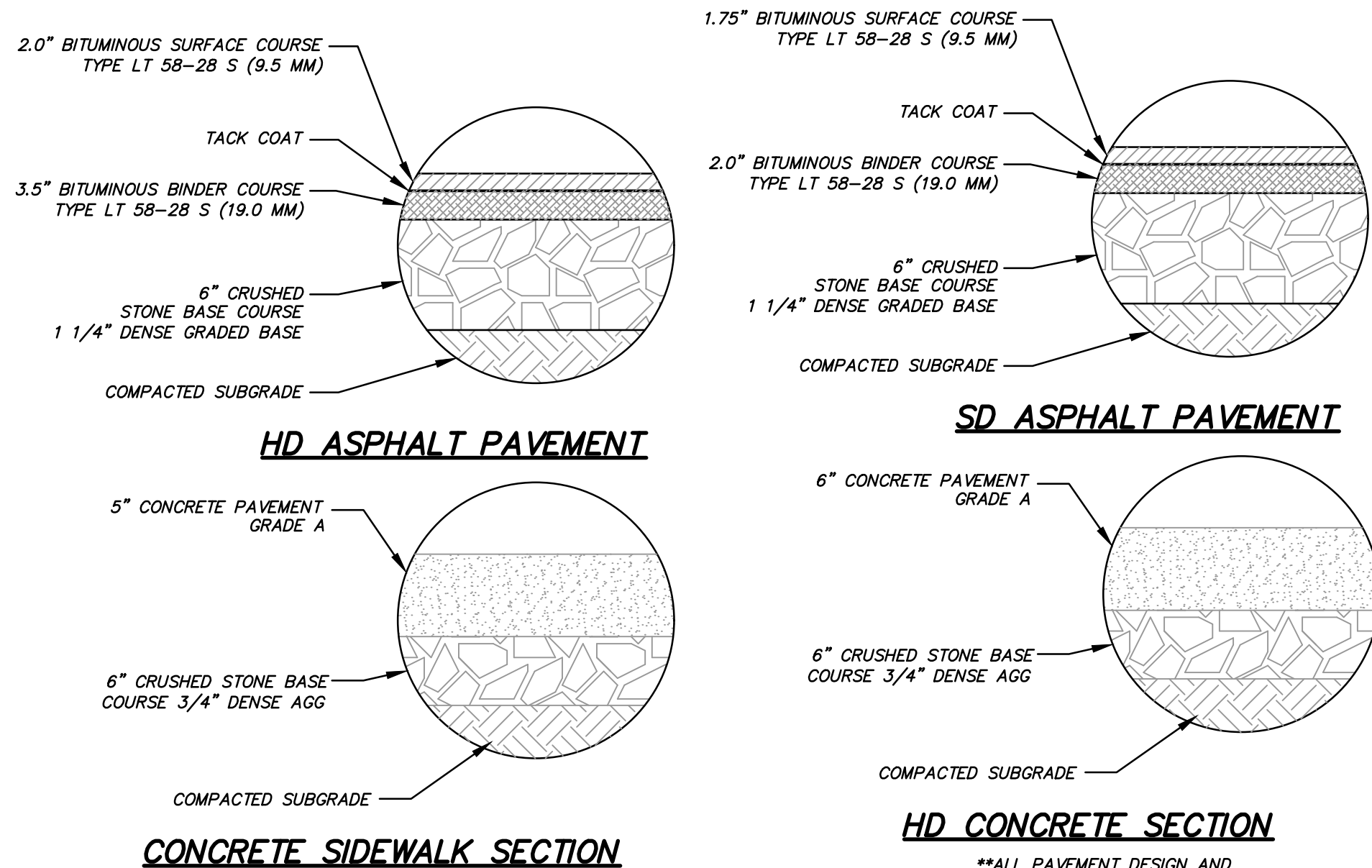
DETECTABLE WARNING FIELD (TRUNCATED DOMES)

- NOTES:
1. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
 2. DETECTABLE WARNING FIELDS SHALL BE "NEENAH DETECTABLE WARNING PLATES" 4984-XXX, OR EQUIV.
 3. CURB RAMP DETECTABLE WARNING FIELDS TO BE INSTALLED 6 TO 8 INCHES FROM THE FACE OF CURB.



- ADA SYMBOL NOTES:
- A. ALL STROKES TO BE 3" WIDE.
 - B. PROVIDE TWO COATS OF PAINT MINIMUM.
 - C. BLUE BACKGROUND WITH WHITE SYMBOL.
 - D. LOCATE SYMBOL AT CENTER OF STALL WHERE SHOWN ON SITE PLAN.
 - E. ONE SYMBOL FOR EACH ADA PARKING SPACE.

PAINTED SYMBOL FOR ALL ACCESSIBLE AND VAN ACCESSIBLE SPACES



HD CONCRETE SECTION

**ALL PAVEMENT DESIGN AND PAVING SHALL BE VERIFIED WITH THE GEOTECHNICAL ENGINEER.

WEST TOWNE MALL REDVELOPMENT CITY OF MADISON, WI

SITE DETAILS

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: N.T.S.

JOB NO. 3190329

PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: DVW

CHECKED BY: RJY

SHEET NUMBER

C501

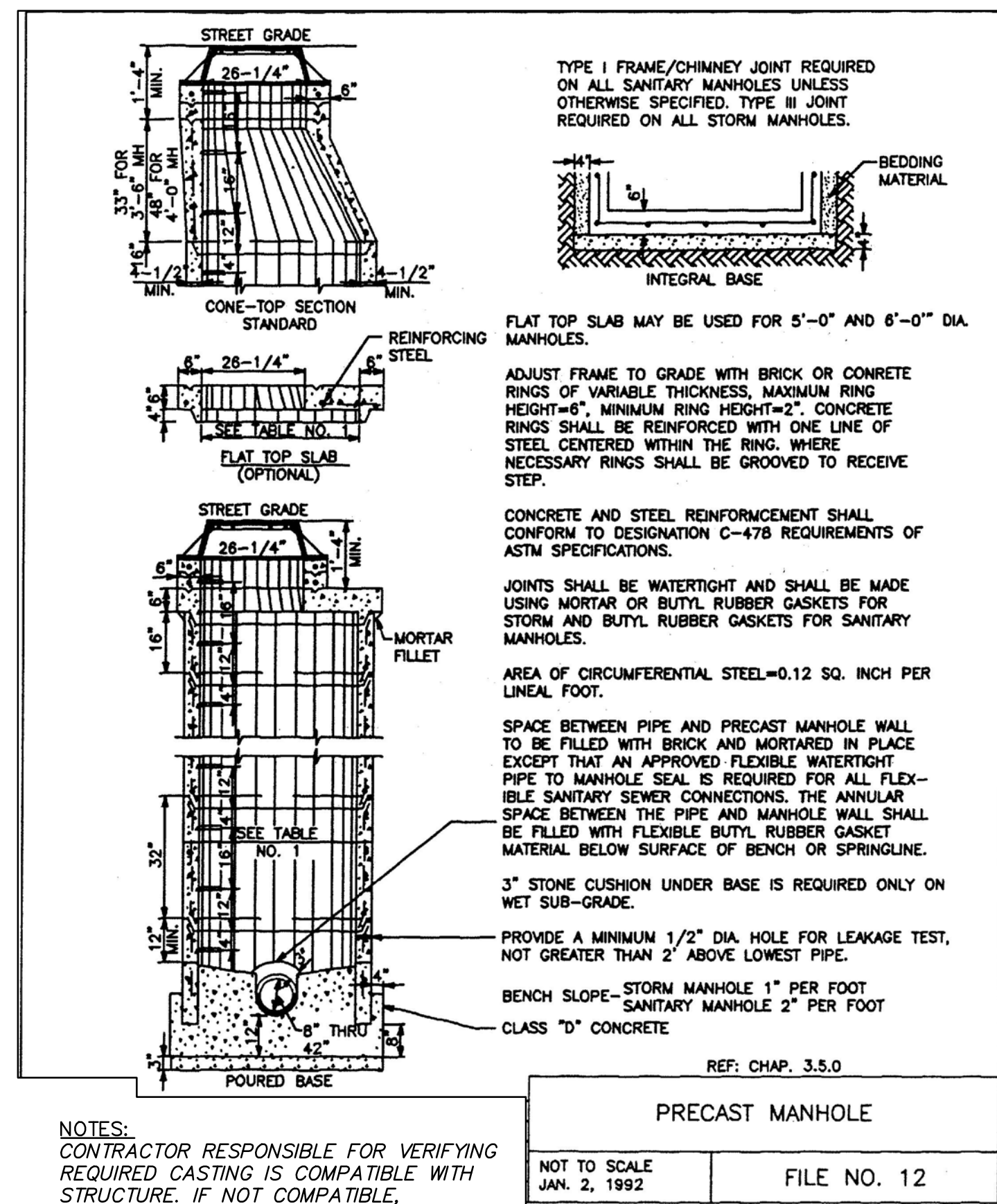
DESCRIPTION

DATE

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Brookfield, WI 53005-5938
(262) 781-1000
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CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA



NOTES:
CONTRACTOR RESPONSIBLE FOR VERIFYING
REQUIRED CASTING IS COMPATIBLE WITH
STRUCTURE. IF NOT COMPATIBLE,
CONTACT ENGINEER IMMEDIATELY FOR
POSSIBLE REDESIGN.

FOR ALL INLETS REFER TO FILE No. 12
(STANDARD SPECIFICATIONS FOR SEWER
AND WATER CONSTRUCTION IN WISCONSIN,
DETAIL ABOVE)

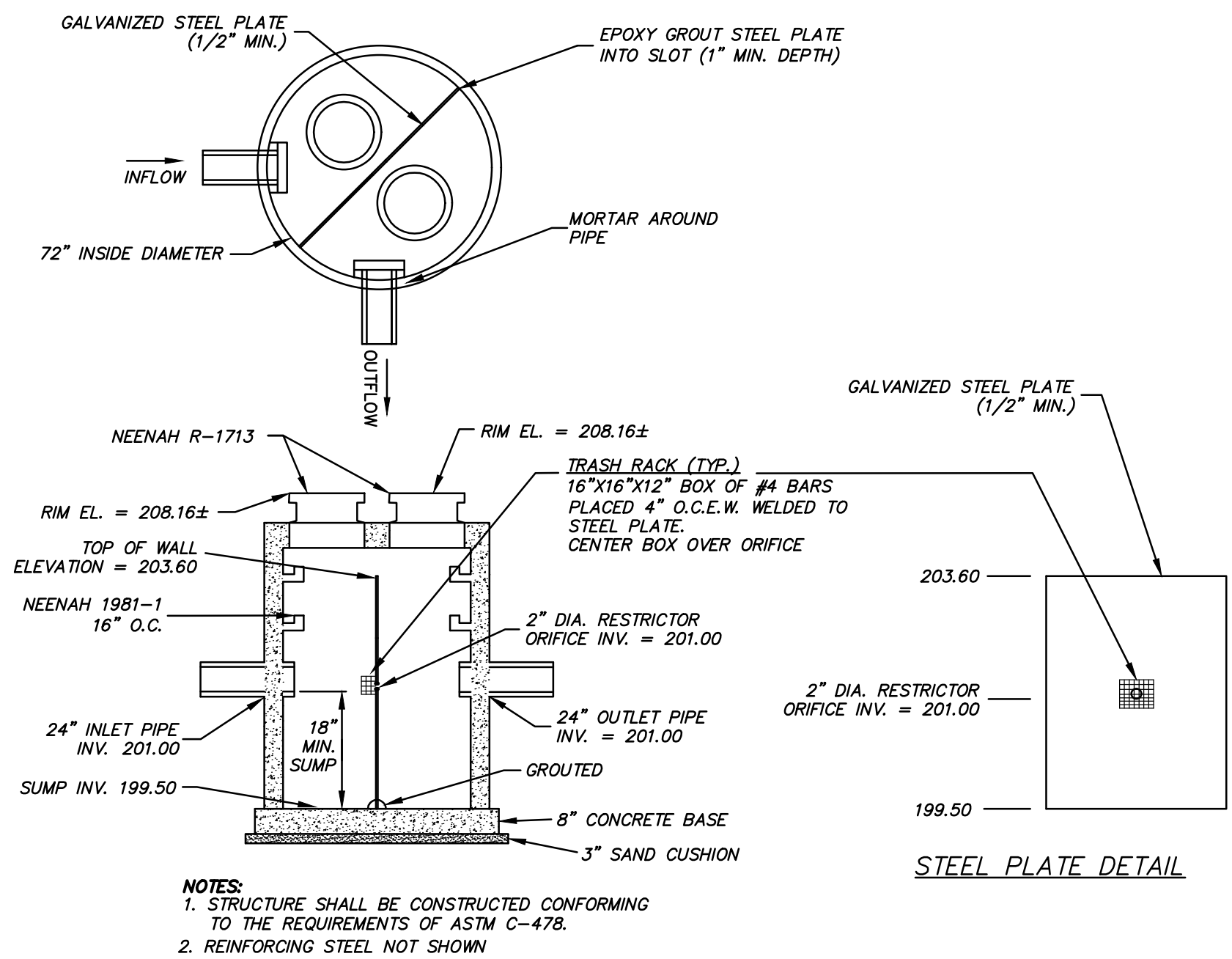
STORM INLET DETAIL

STORM MANHOLE & INLET NOTES:

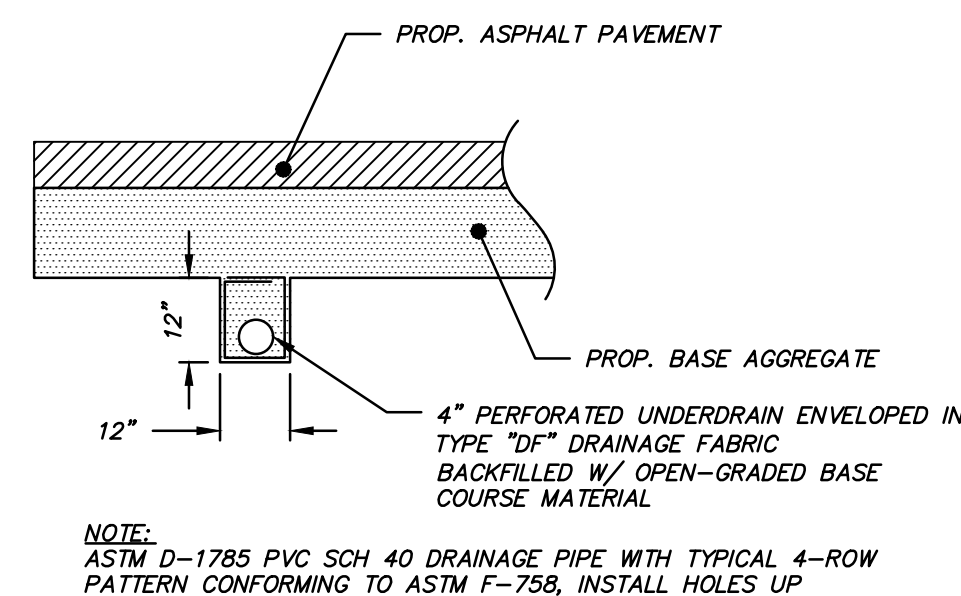
NOTES:

INLET (INL)
REFER TO FILE No. 12 (STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN, DETAIL ON THIS SHEET), EXCEPT:
A. USE CASTING AS INDICATED BELOW:
EXAMPLE - NEENAH R-FRAME (GRATE)
1.) INLETS IN CURB - NEENAH R-3067 (TYPE C)
2.) INLETS IN PAVEMENT - NEENAH R-2556 (TYPE G)
3.) INLETS IN GRASS AREAS - NEENAH R-2556 (TYPE G)
4.) INLETS AS NOTED - NEENAH BEEHIVE R-2650 (TYPE E1)
5.) INLETS IN DEPRESSED CURB - NEENAH R-3067-C (TYPE C)
B. USE 48" MINIMUM DIAMETER UNLESS INDICATED OTHERWISE ON PLAN.
C. CONTRACTOR RESPONSIBLE FOR VERIFYING REQUIRED CASTING IS COMPATIBLE WITH STRUCTURE. IF NOT COMPATIBLE, CONTACT ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.

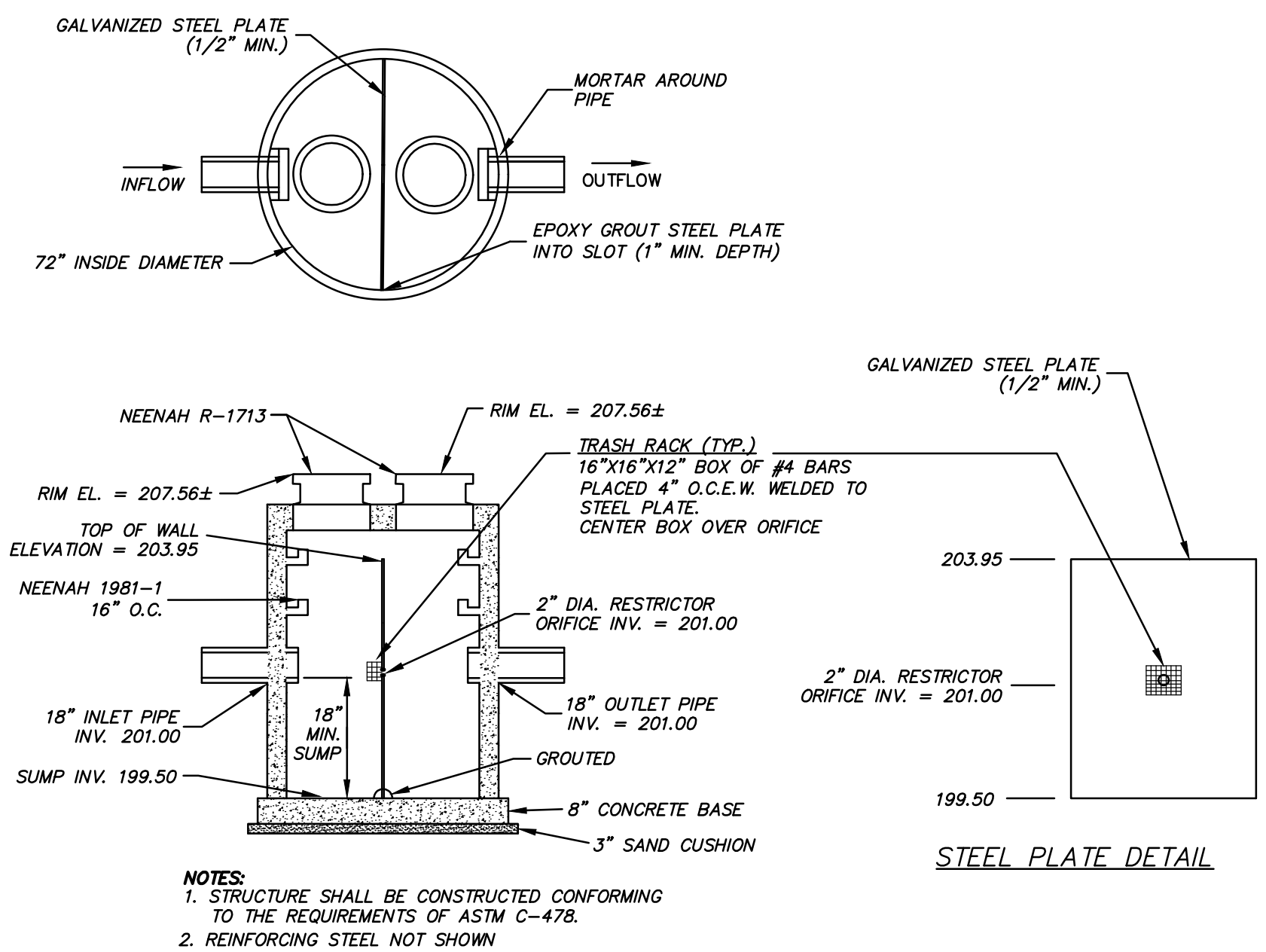
MANHOLE (MH)
REFER TO CITY OF BROOKFIELD DETAIL, EXCEPT:
A. USE CASTING AS INDICATED BELOW:
ALL MANHOLES - NEENAH R-1661
B. USE 48" MINIMUM DIAMETER UNLESS INDICATED OTHERWISE ON PLAN
C. PIPE MATERIAL PER C1000 UNLESS INDICATED OTHERWISE ON PLAN.
D. CONTRACTOR RESPONSIBLE FOR VERIFYING REQUIRED CASTING IS COMPATIBLE WITH STRUCTURE. IF NOT COMPATIBLE,
CONTACT ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.



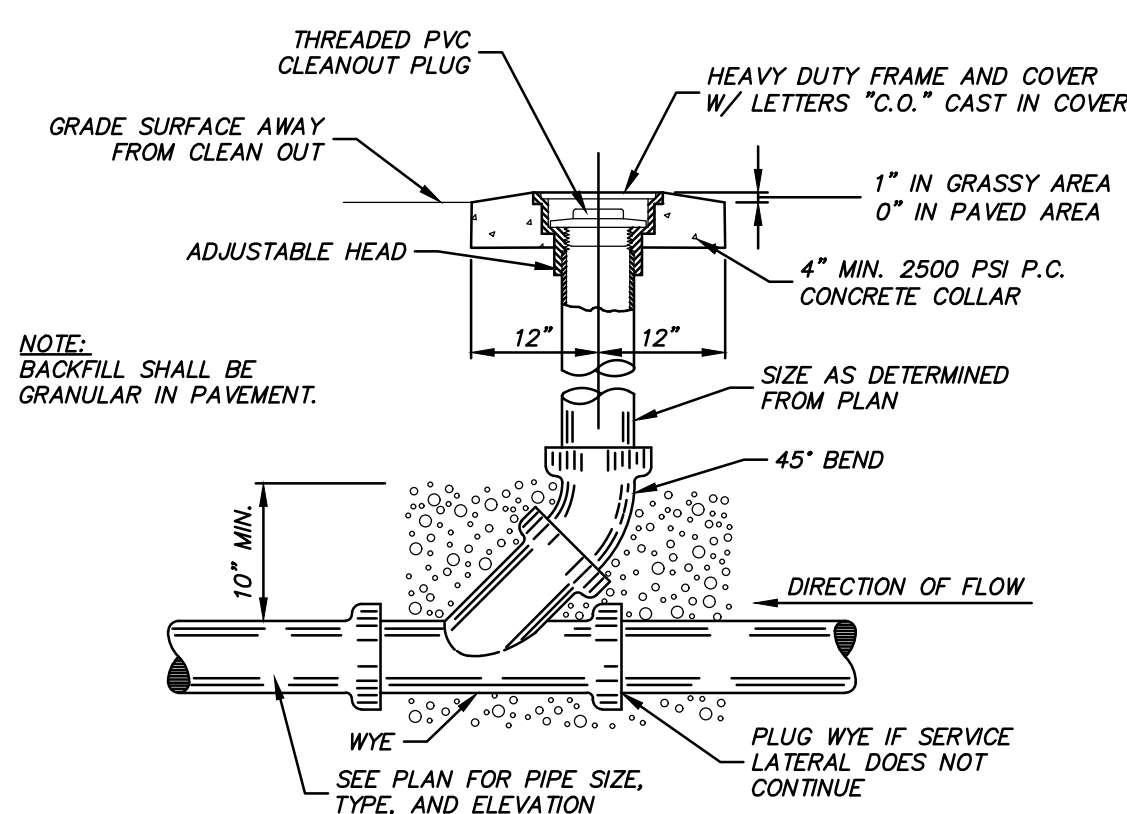
72" DIAMETER OUTLET CONTROL STRUCTURE DETAIL
(NORTH SYSTEM - R-410)



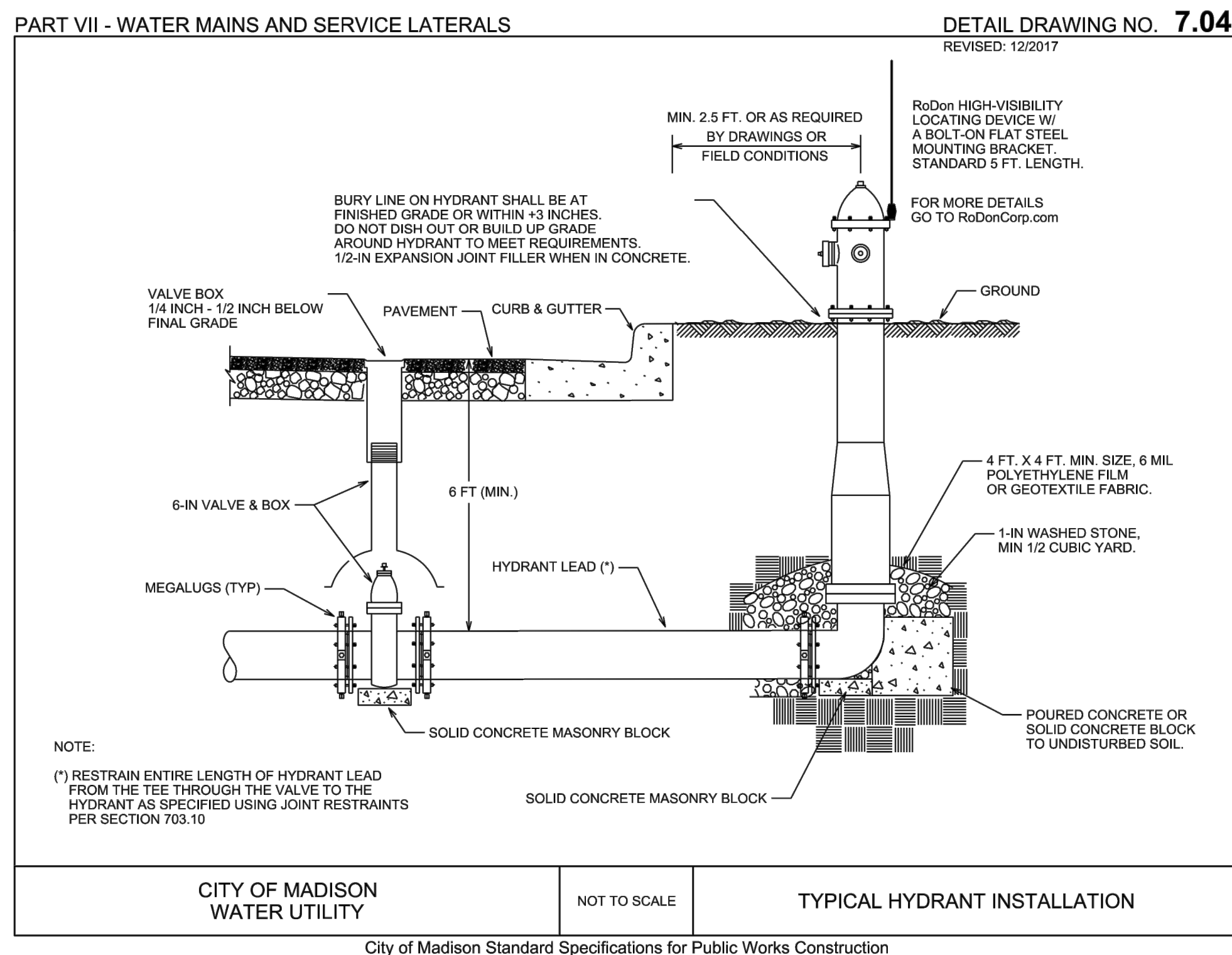
UNDERDRAIN UNDER PAVEMENT



72" DIAMETER OUTLET CONTROL STRUCTURE DETAIL
(SOUTH SYSTEM - R-320)



SEWER CLEAN-OUT DETAIL



DESCRIPTION

DATE _____

16745 W. Bluemound Road
Brookfield, WI 53005-5938

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Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA

**WEST TOWNE MALL REDEVELOPMENT
CITY OF MADISON, WI**

UTILITY DETAILS

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DATE: 01/08/20

SCALE: N.T.S.

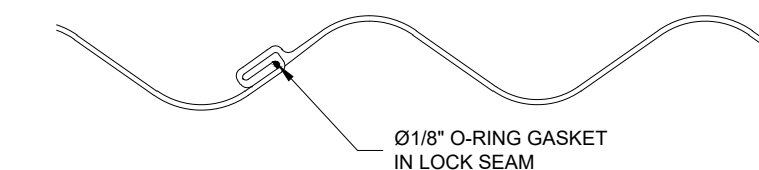
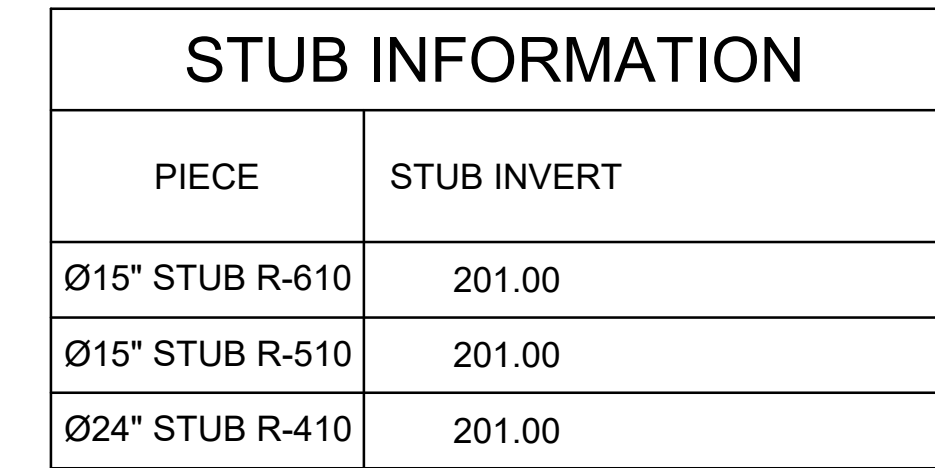
JOB NO. 3190329

PROJECT MANAGER:

DESIGNED BY BVM

SHEET NUMBER

C502

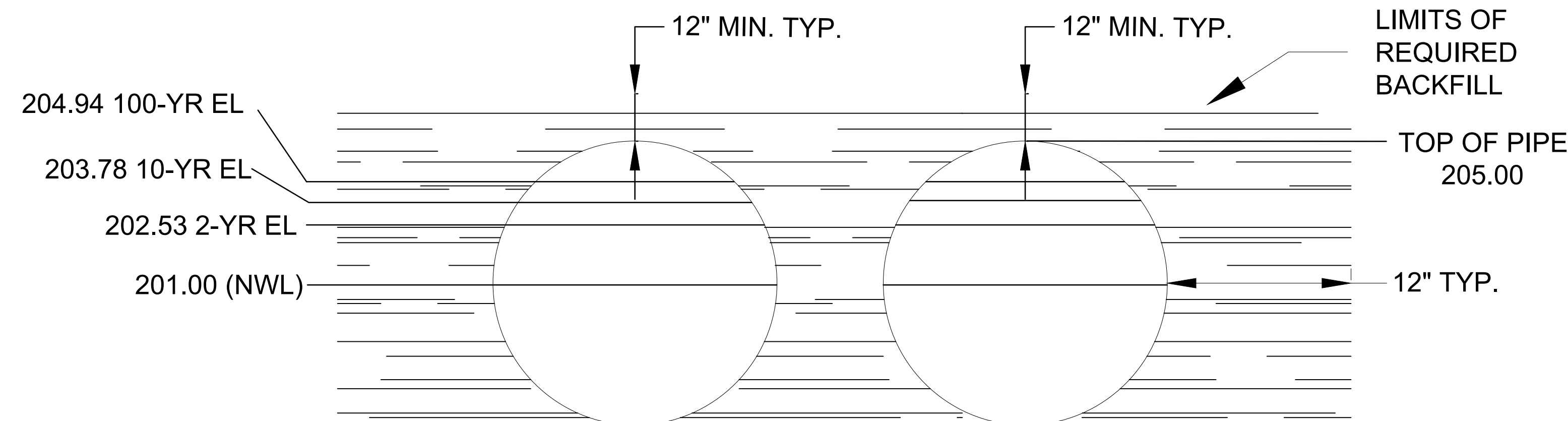


LOCKSEAM GASKET DETAIL

ASSEMBLY
SCALE: N.T.S
VOLUME: 0.74 AC-FT
LOADING: H2O/H25
SYSTEM INV = 197.00

NOTES

- **VOLUME = 0.74 AC-FT**
- **MAINLINE PIPE GAUGE =**
- **WALL TYPE =**
- **DIAMETER =**
- **FINISH =**
- **CORRUGATION =**



TYPICAL SECTION VIEW

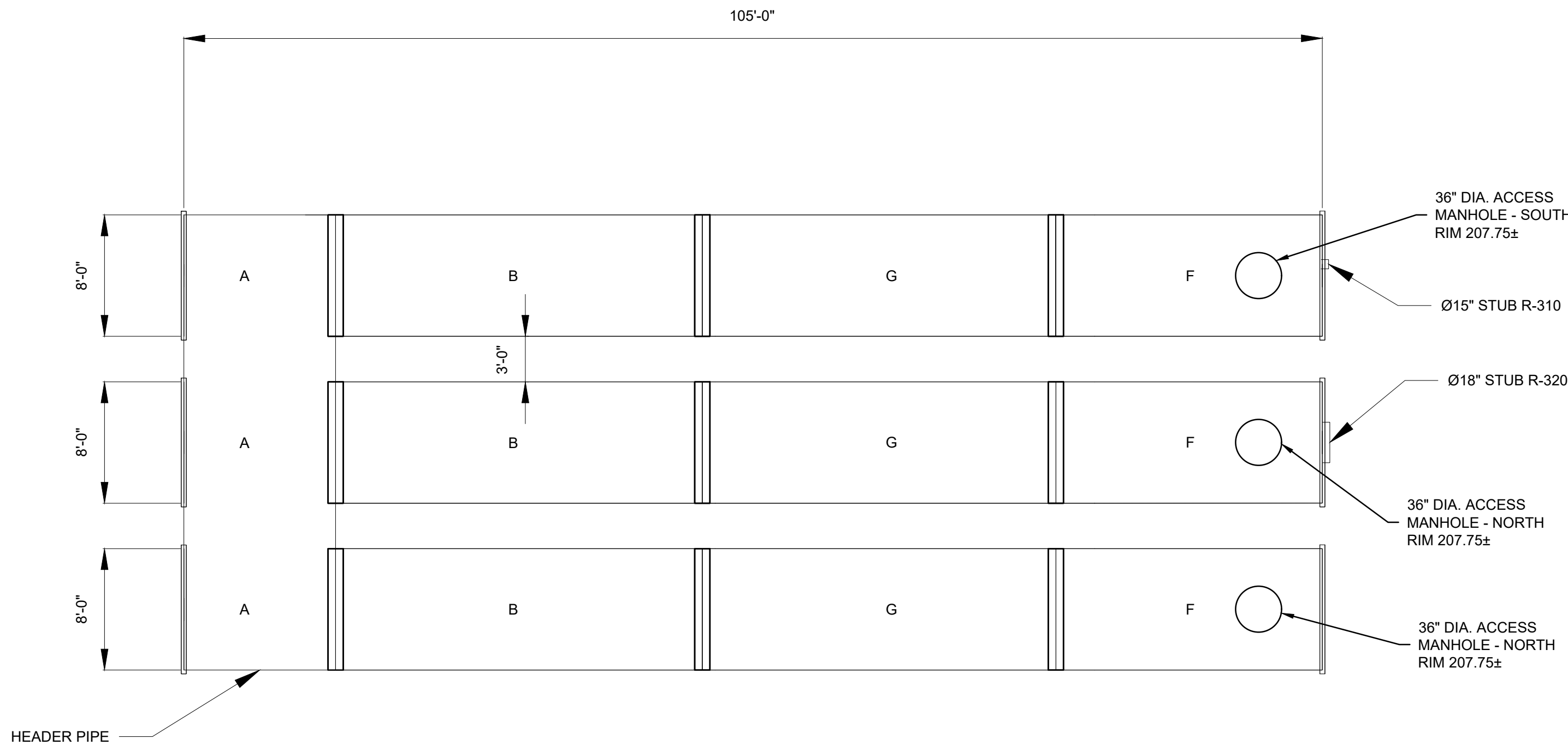
SCALE: N.T.S.

NORTH SYSTEM

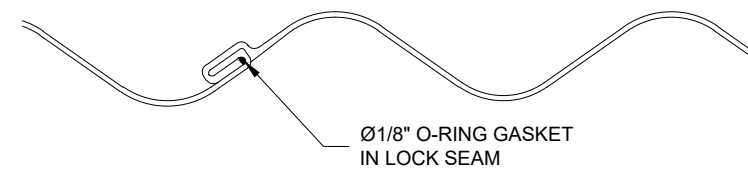
PROJECT No.:	SEQ. No.:	DATE:
DESIGNED:	DRAWN:	
CHECKED:	APPROVED:	
SHEET NO.:		
SHEET NO.		

[illegible]

CUSTOMER _____ DATE _____

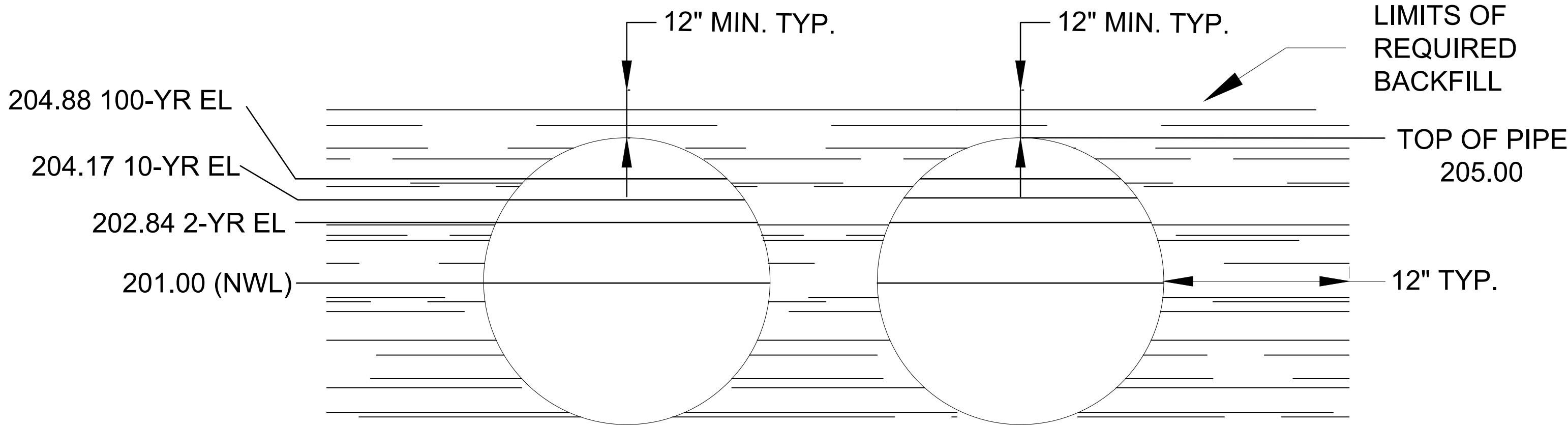


STUB INFORMATION	
PIECE	STUB INVERT
Ø15" STUB R-310	201.00
Ø18" STUB R-320	201.00



LOCKSEAM GASKET DETAIL

ASSEMBLY
SCALE: N.T.S
VOLUME: 0.36 AC-FT
LOADING: H20/H25
SYSTEM INV = 197.00



TYPICAL SECTION VIEW
SCALE: N.T.S.

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
- ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2 $\frac{2}{3}$ " x $\frac{1}{2}$ " CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (#) PAGES INCLUDING THE FOLLOWING:

- VOLUME = 0.36 AC-FT
- MAINLINE PIPE GAUGE =
- WALL TYPE =
- DIAMETER =
- FINISH =
- CORRUGATION =

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MARK	DATE	REVISION DESCRIPTION	BY

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9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH
CMP DETENTION SYSTEMS

CONTECH
PROPOSAL
DRAWING

SOUTH SYSTEM

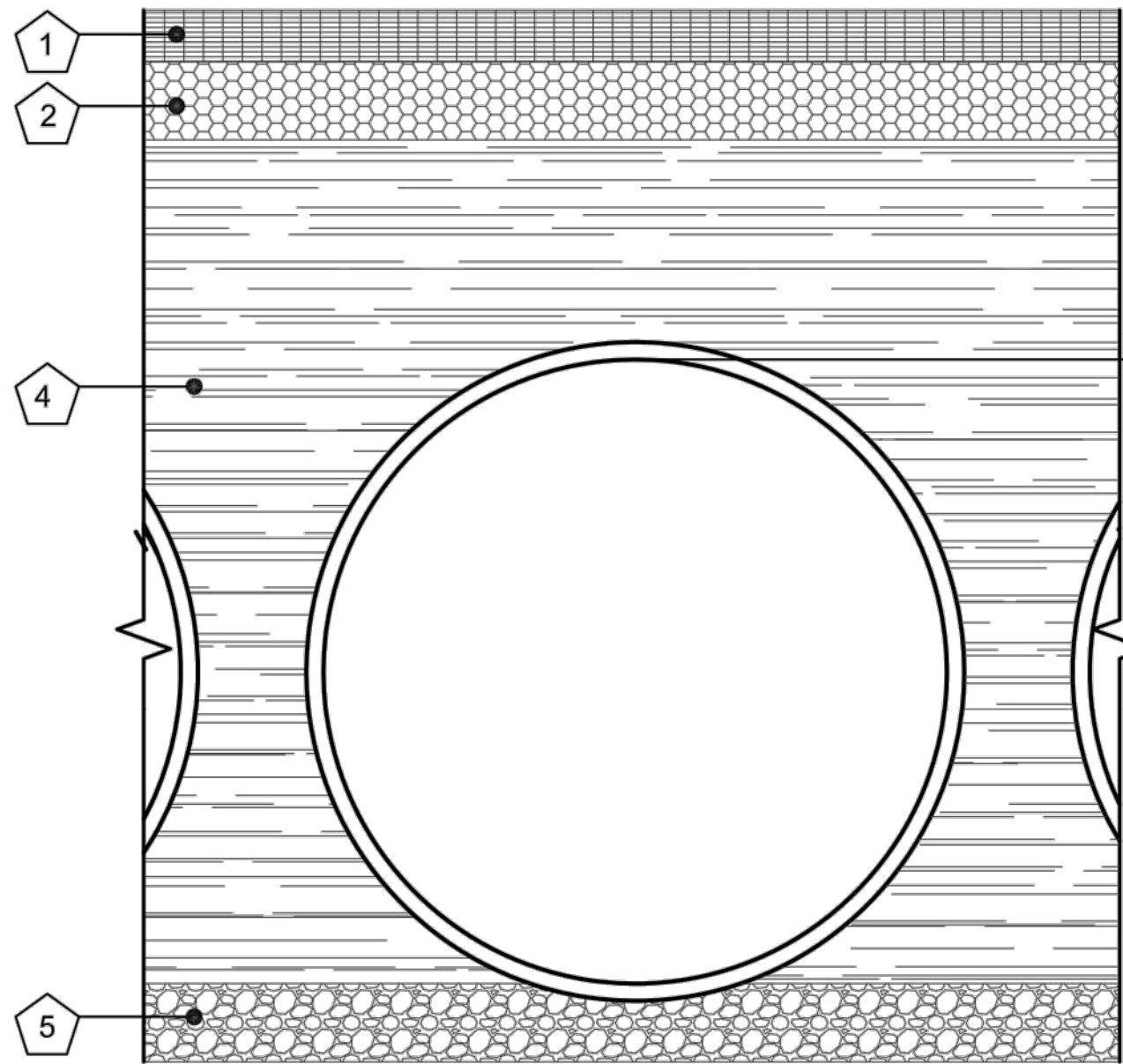
PROJECT No.:	SEQ. No.:	DATE:
DESIGNED:	DRAWN:	
CHECKED:	APPROVED:	
SHEET NO.:	SHEET_NO.	

WEST TOWNE MALL REDVELOPMENT
CITY OF MADISON, WI

CONTECH DETAILS 2

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DATE: 01/08/20
SCALE: N.T.S.
JOB NO. 3190329
PROJECT MANAGER: MATTHEW P. KOCUREK, P.E.
DESIGNED BY: DVW
CHECKED BY: RJY
SHEET NUMBER
C504

I:\MERLIN\PROJECTS\ACTIVE\551801\551813-10-CMP DETENTION\DRAWINGS\PROPOSAL\PRE 551813-10 CMP - PRO-A.DWG 10/21/2016 2:27 PM



- KEY:
1. RIGID OR FLEXIBLE PAVEMENT
 2. GRANULAR ROAD BASE
 3. 12" MIN. FOR DIAMETERS THROUGH 96"
18" MIN. FOR DIAMETERS FROM 102" AND
LARGER MEASURED TO TOP OF RIGID OR
BOTTOM OF FLEXIBLE PAVEMENT.
 4. SELECT GRANULAR FILL PER AASHTO
M145 A1, A2 OR A3, OR APPROVED
EQUAL. PLACED IN 8" LIFTS (COMPACTED
TO MIN. 90% STANDARD DENSITY PER
AASHTO T99.)
 5. GRANULAR BEDDING, ROUGHLY SHAPED
TO FIT THE BOTTOM OF PIPE, 4" TO 6" IN
DEPTH

FOUNDATION/BEDDING PREPARATION

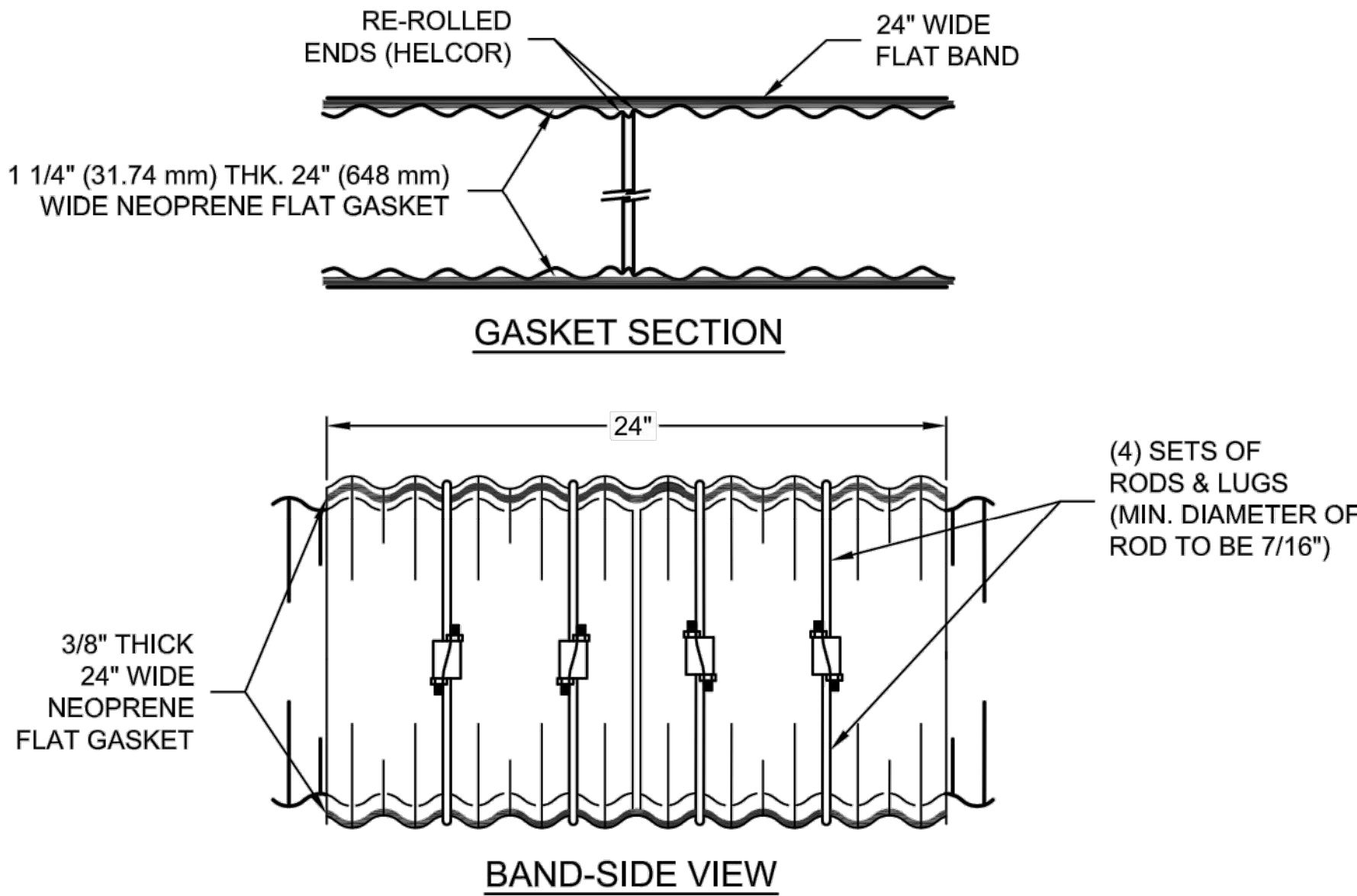
PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION PREPARATION IS COMPLETE, 4" - 6" OF A WELL-GRADED GRANULAR MATERIAL SHALL BE PLACED AS THE BEDDING.

BACKFILL

THE BACKFILL SHALL BE AN A1, A2 OR A3 GRANULAR FILL PER AASHTO M145, OR A WELL-GRADED GRANULAR FILL AS APPROVED BY THE SITE ENGINEER (SEE INSTALLATION GUIDELINES). THE MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 90% AASHTO T99 STANDARD PROCTOR DENSITY. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.

BACKFILL DETAIL
SCALE: N.T.S.



OPEN CELL NEOPRENE GASKET. ASTM SPECIFICATION D-1056, GRADE 2C3,
SKINNED ALL FOUR SIDES OF ONE-PIECE CONSTRUCTION

NEOPRENE GASKET

GENERAL NOTES:

1. SLEEVE GASKET(S) ARE REQUIRED.
2. SLEEVE GASKET MUST BE ONE PIECE; TOTAL WIDTH OF ONE SLEEVE MUST BE EQUAL OR EXCEED 24".
3. MINIMUM OF TWO INDENTATION OF BAND MUST REST IN TWO INDENTATIONS ON EACH END OF PIPE.
4. A MINIMUM OF FOUR RODS AND LUGS RE REQUIRED. TWO RODS AND LUGS ON EACH SIDE OF PIPE.
5. RODS SHALL BE 7/8"Ø. ALL THREAD ROD IS NOT ACCEPTABLE. RODS MUST BE SMOOTH BAR TYPE.
6. GASKET TO BE LUBRICATED ON THE OUTSIDE BEFORE THE BAND IS APPLIED.

10-C BAND DETAIL
SCALE: N.T.S.

Ø96" UNDERGROUND DETENTION SYSTEM
WEST TOWNE MALL
MADISON, WI
SITE DESIGNATION: WQ DETENTION

PROJECT No.:	551813	SEQ. No.:	010	DATE:	10/21/2016
DESIGNED:	DRA	DRAWN:	DRA		
CHECKED:		APPROVED:			
SHEET NO.:	P2	OF	3		

WEST TOWNE MALL REDVELOPMENT
CITY OF MADISON, WI

CONTECH DETAILS 3

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DATE: 01/08/20
SCALE: N.T.S.
JOB NO. 3190329
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.
DESIGNED BY: DVW
CHECKED BY: RJY
SHEET NUMBER
C505

DATE	DESCRIPTION

16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

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CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA

SPECIFICATIONS

DIVISION 1 – GENERAL REQUIREMENTS

01 41 00 – REGULATORY REQUIREMENTS

1. THE LATEST EDITIONS OF THE FOLLOWING DOCUMENTS AND ANY SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS ON THIS PLAN UNLESS OTHERWISE NOTED:
- a. WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) STORM WATER TECHNICAL STANDARDS
 - b. WISCONSIN EROSION CONTROL PRODUCT ACCEPTABILITY LIST
 - c. STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN (SSSWCW)
 - d. WISCONSIN ADMINISTRATIVE CODE, SECTIONS SPS 382–387
 - e. WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION
 - f. FEDERAL HIGHWAY ADMINISTRATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)
 - g. WISCONSIN MANUFACTURER'S TRAFFIC CONTROL DEVICES (WMTUCD)
 - h. UNITED STATES DEPARTMENT OF JUSTICE ADA STANDARDS
 - i. UNITED STATES DEPARTMENT OF TRANSPORTATION ADA STANDARDS FOR TRANSPORTATION FACILITIES
 - j. MUNICIPALITY DEVELOPMENT STANDARDS
 - k. COUNTY DEVELOPMENT STANDARDS
2. THE OWNER, ENGINEER AND MUNICIPALITY SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF PERFORMING ANY CONSTRUCTION ACTIVITIES.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING COPIES OF ALL PERMITS AND FOR ABIDING BY ALL PERMIT REQUIREMENTS AND RESTRICTIONS.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.
5. SHOP DRAWINGS AND/OR MANUFACTURER'S PRODUCT DATA SUBMITTALS ARE REQUIRED ONLY IF THE PRODUCT OR METHOD OF CONSTRUCTION IS DIFFERENT FROM THAT SPECIFIED OR IF REQUIRED BY THE MUNICIPAL ENGINEER.
- a. ALL DOCUMENTS SUBMITTED FOR REVIEW SHALL HAVE THE SPECIFIC MATERIAL, PART, SIZE, ETC. HIGHLIGHTED IN SOME FASHION. EXAMPLE: A FITTING CUT SHEET HAS MULTIPLE PRESSURE RATING FOR DIFFERENT SIZE BENDS. HIGHLIGHT THE PRESSURE CLASS & SIZE TO BE USED ON PROJECT. ALL SUBMITTALS NOT PROPERLY IDENTIFYING THE SPECIFIC MATERIAL BEING USED WILL BE REJECTED.

- b. CONTRACTOR SHALL SUBMIT A PDF COPY AND AN EXPLANATION AS TO HOW THE SUBSTITUTION MEETS THE PROPOSED DESIGN (PRODUCT SPECIFICATION SHEETS WITHOUT EXPLANATION WILL NOT BE ACCEPTED) TO THE OWNER'S REPRESENTATIVE OR ENGINEER FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL NOT PROCEED UNTIL THE OWNER'S APPROVAL IS GIVEN. IN PROJECT SCHEDULING CONTRACTOR SHALL ACCOUNT FOR 5 WORKING DAYS FOR SUBMITTAL REVIEW. IN THE EVENT SUCH SUBSTITUTION IS APPROVED, THE OWNER WILL REQUIRE FROM THE CONTRACTOR A CREDITED DEDUCTION FROM THE CONTRACT AMOUNT EQUAL TO ANY SAVINGS IN MATERIAL COST RESULTING FROM USE OF THE PROPOSED SUBSTITUTE.
 - 6. THE CONTRACTOR SHALL ASSUME COMPLETE AND SOLE RESPONSIBILITY FOR THE QUALITY OF WORK. IF CHANGES OR ADJUSTMENTS ARE RECOMMENDED BY THE CONTRACTOR, THEY MAY BE MADE ONLY UPON WRITTEN APPROVAL OF THE OWNER OR HIS REPRESENTATIVE.
 - a. ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE CONTRACT DOCUMENTS. THE OWNER OR HIS REPRESENTATIVE SHALL DECIDE ALL QUESTIONS WHICH SHALL ARISE AS TO THE QUALITY AND ACCEPTABILITY OF MATERIALS FURNISHED, WORK PERFORMED, AND WORKMANSHIP. INTERPRETATION OF THE PLANS AND SPECIFICATIONS HE SHALL DETERMINE THE AMOUNT OF WORK PERFORMED AND MATERIALS FURNISHED.
 - b. FAILURE OR NEGLIGENCE ON THE PART OF THE OWNER OR HIS REPRESENTATIVE TO CONDEMN OR REJECT SUBSTANDARD OR INFERIOR WORK OR MATERIALS SHALL NOT BE CONSTRUED TO IMPLY AN AGENCY OF SUCH WORK OR MATERIALS. IF IT BECOMES EVIDENT AT ANY TIME PRIOR TO THE COMPLETION OF THE WORK BY THE OWNER, NEITHER SHALL IT BE CONSTRUED AS BARRING THE OWNER, AT ANY SUBSEQUENT TIME, FROM THE RECOVERY OF DAMAGES OR OF SUCH A SUM OF MONEY AS MAY BE NEEDED TO BUILD NEAR ALL PORTIONS OF THE SUBSTANDARD OR INFERIOR WORK OR REPLACEMENT OF INFERIOR MATERIALS WHEREVER FOUND.
 - c. INSPECTORS EMPLOYED BY THE OWNER SHALL BE AUTHORIZED TO INSPECT ALL WORK DONE AND ALL MATERIAL FURNISHED. SUCH INSPECTION MAY EXTEND TO ALL OR ANY PART OF THE WORK AND TO THE PREPARATION, FABRICATION OR MANUFACTURE OF THE MATERIALS TO BE USED. THE INSPECTOR IS NOT AUTHORIZED TO REVOKE, ALTER OR WAIVE ANY REQUIREMENTS OF THE SPECIFICATIONS, NOR IS HE AUTHORIZED TO SUSPEND OR ACCEPT ANY PORTION OF THE WORK. HE SHALL CALL THE ATTENTION OF THE CONTRACTOR TO ANY FAILURE OF THE WORK OR MATERIALS TO CONFORM TO THE SPECIFICATIONS AND CONTRACT, AND SHALL HAVE THE AUTHORITY TO REJECT MATERIALS. ANY DISPUTE BETWEEN THE INSPECTOR AND CONTRACTOR SHALL BE REFERRED TO THE OWNER OR HIS REPRESENTATIVE. ANY ADVICE WHICH THE INSPECTOR MAY GIVE THE CONTRACTOR SHALL IN NO WAY BE CONSTRUED AS BINDING THE ENGINEER IN ANY WAY OR RELASING HIM FROM FULFILLING ANY OF THE TERMS OF THE CONTRACT.
 - d. ALL MATERIALS AND EACH PART OF DETAIL OF THE WORK SHALL BE SUBJECT AT ALL TIMES TO INSPECTION BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE OR THE AUTHORITY HAVING JURISDICTION AND THE CONTRACTOR WILL BE HELD STRICTLY TO THE TRUE INTENT OF THE SPECIFICATIONS, WORKMANSHIP, AND THE DILIGENT EXECUTION OF THE CONTRACT. SUCH INSPECTION MAY INCLUDE MILL, PLANT OR SHOP INSPECTION, AND ANY MATERIAL FURNISHED UNDER THESE SPECIFICATIONS IS SUBJECT TO SUCH INSPECTION. THE OWNER OR HIS REPRESENTATIVES SHALL BE ALLOWED ACCESS TO ALL PART OF THE WORK, AND SHALL BE FURNISHED WITH SUCH INFORMATION AND ASSISTANCE BY THE CONTRACTOR AS IS DETERMINED BY THE OWNER OR HIS REPRESENTATIVE, TO MAKE A COMPLETE AND DETAILED INSPECTION.
 - e. ALL WORKMANSHIP SHALL CONFORM TO THE BEST STANDARD PRACTICE. UNLESS OTHERWISE SPECIFIED, THE SPECIFICATIONS OR RECOGNIZED ASSOCIATION OF MANUFACTURERS AND CONTRACTORS OR INDUSTRIAL MANUFACTURERS SHALL BE USED AS GUIDES FOR THE STANDARDS OF WORKMANSHIP.
 - f. ALL EXPOSED ITEMS OF WORK SHALL PRESENT A NEAT WORKMANLIKE APPEARANCE AND SHALL BE AS TRUE TO SHAPE AND ALIGNMENT AS POSSIBLE TO OBTAIN WITH MEASURING OR LEVELING INSTRUMENTS GENERALLY USED IN THE RESPECTIVE TYPES OF WORK. ITEMS OF WORK SHALL BE SOUND AND FULLY PROTECTED AGAINST DAMAGE AND PREMATURE DEGRADATION. IT IS SPECIFICALLY UNDERSTOOD THAT IN ALL QUESTIONS OF QUALITY AND ACCEPTABILITY OF WORKMANSHIP, THE CONTRACTOR AGREES TO ABIDE BY THE DECISION OF THE OWNER OR HIS REPRESENTATIVE.
 - g. ALL MATERIALS AND WORKMANSHIP NOT CONFORMING TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS SHALL BE CONSIDERED AS DEFECTIVE. SUCH DEFECTIVE MATERIALS, WHETHER IN PLACE OR NOT, SHALL BE REJECTED AND SHALL BE REMOVED FROM THE WORK BY THE CONTRACTOR AT HIS EXPENSE. UPON FAILURE ON THE PART OF THE CONTRACTOR TO COMPLY WITH ANY ORDER OF THE OWNER RELATIVE TO THE PROVISIONS OF THIS ARTICLE, THE OWNER SHALL HAVE THE AUTHORITY TO REMOVE AND REPLACE SUCH DEFECTIVE MATERIAL AND TO DEDUCT THE COST OF REMOVAL AND REPLACEMENT FROM ANY MONIES DUE OR WHICH MAY BECOME DUE TO THE CONTRACTOR.
 - h. THE CONTRACTOR SHALL KEEP A LEGIBLE COPY OF THE PLANS, SPECIFICATIONS, AND ALL PERMITS AT THE SITE OF THE WORK AT ALL TIMES.
 - i. AT THE COMPLETION OF THE WORK AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE THE OWNER OR HIS REPRESENTATIVE WITH A MARKED-UP SET OF DRAWINGS SHOWING ALL CHANGES OR VARIATIONS FROM THE ORIGINAL DRAWINGS. THESE CHANGES SHALL BE MADE ON A SET OF ONE COPY OF EACH DRAWING AND NOT FROM MEMORY WHEN THE WORK IS DONE. THIS SET OF DRAWINGS SHALL BE KEPT CLEAN IN A LOCATION AT THE SITE WHERE THE OWNER OR HIS REPRESENTATIVE MAY EXAMINE THEM.
 - 1. THE MARKED-UP DRAWINGS SHALL BE ACCURATE. ARBITRARY MARKINGS ARE OF NO VALUE. CAREFUL MEASUREMENTS SHALL BE MADE TO LOCATE UNDERGROUND EXTERIOR AND UNDERGROUND INTERIOR SEWERS, GAS LINES, WATER LINES, ELECTRICAL CONDUIT AND MISCELLANEOUS PIPING.
7. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL, TRAFFIC CONTROL PLANS AND PERMITTING FOR ALL WORK TO BE COMPLETED ONSITE OR IN THE PUBLIC RIGHT-OF-WAY.

01 70 00 – EXECUTION & CLOSEOUT REQUIREMENTS

1. THE CONTRACTOR IS RESPONSIBLE FOR EXAMINING ALL EXISTING SITE CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL COMPARE WITH THIS PLAN.
2. EXISTING UTILITY INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY, BASED ON BEST AVAILABLE PUBLIC RECORDS, AS-BUILT DRAWINGS, AND FIELD OBSERVATIONS. NO RESPONSIBILITY IS ASSUMED BY THE OWNER OR ENGINEER FOR ACCURACY OR COMPLETENESS. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND NATURE OF EXISTING UTILITIES, AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
3. THE CONTRACTOR SHALL VERIFY ALL LOCATIONS, ELEVATIONS, AND SIZES OF EXISTING UTILITIES AND SHALL CHECK ALL PROPOSED UTILITY CONNECTIONS AND CROSSINGS PRIOR TO PROCEEDING WITH ANY WORK. ANY CONFLICTS SHALL BE REPORTED TO THE ENGINEER SO REDESIGN MAY OCCUR IF NEEDED. COST OF REPAIRS OR REPAIR OF EXISTING UTILITIES DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING SOIL CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. A GEOTECHNICAL REPORT MAY BE AVAILABLE FROM THE OWNER. THE CONTRACTOR SHALL ABIDE BY THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND SUBSEQUENT RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL FIELD VERIFY ELEVATIONS OF THE BENCHMARKS AND HORIZONTAL CONTROL BY REFERENCING SHOWN COORDINATES TO KNOWN PROPERTY LINES, AND SHALL NOTIFY THE ENGINEER OF DISCREPANCIES IN EITHER VERTICAL OR HORIZONTAL CONTROL PRIOR TO PROCEEDING WITH ANY WORK.
6. SURVEY BENCHMARKS AND CONTROL POINTS SHALL BE MAINTAINED AND PROTECTED FROM DISTURBANCE.
7. PROPERTY CORNERS SHALL BE CAREFULLY PROTECTED AT ALL TIMES. PROPERTY MONUMENTS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
8. ANY ADJACENT PROPERTY OR PUBLIC PLACES OR AREAS WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR. THE COST OF RESTORATION IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED.
9. PUBLIC ROADS SHALL NOT BE FULLY CLOSED TO TRAFFIC AT ANY TIME. ALL INGRESS AND EGRESS TRAFFIC TO THE PROJECT SITE SHALL BE LIMITED TO THE CONSTRUCTION ENTRANCE.
10. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES, SHALL BID ON THEIR OWN ESTIMATE OF THE WORK REQUIRED, AND SHALL NOT RELY ON THE ENGINEER'S ESTIMATE.
11. REQUESTS FOR CLARIFICATION WILL BE INTERPRETED BY THE OWNER/ENGINEER PRIOR TO AWARD OF CONTRACT, AND WHEN NECESSARY, OFFICIAL WRITTEN RESPONSES WILL BE ISSUED. OFFICIAL WRITTEN RESPONSES SHALL BE BINDING TO THE WORK. IN NO WAY SHALL VERBAL DIALOGUE CONSTITUTE OFFICIAL RESPONSE.
12. SHOULD ANY DISCREPANCIES BE DISCOVERED BY THE CONTRACTOR AFTER AWARD OF CONTRACT, NOTIFY OWNER/ENGINEER IN WRITING IMMEDIATELY. CONSTRUCTION OF ITEMS AFFECTED BY THE DISCREPANCIES SHALL NOT COMMENCE OR CONTINUE UNTIL AN OFFICIAL WRITTEN RESPONSE IS ISSUED.
13. ALL WORK SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM PERIOD OF 12 MONTHS FROM THE DATE OF FINAL ACCEPTANCE. THIS GUARANTEE SHALL INCLUDE ALL DEFECTS IN MATERIALS AND WORKMANSHIP.
14. THE CONTRACTOR SHALL INDEMNIFY THE OWNER, THE ENGINEER, AND THE MUNICIPALITY, THEIR AGENTS, ETC., FROM ALL LIABILITY INVOLVED WITH THE CONSTRUCTION, INSTALLATION, AND TESTING OF THE WORK ON THIS PROJECT.

DIVISION 31 – EARTHWORK

31 10 00 – SITE CLEARING & DEMOLITION

1. WORK SHALL CONSIST OF DEMOLITION, ABANDONMENT, AND REMOVAL OF EXISTING FOUNDATIONS, WALLS, SLABS, FENCES, PIPING, PAVEMENTS, AND OTHER MAINTAINABLE ITEMS INTERFERING WITH NEW CONSTRUCTION. WORK SHALL ALSO CONSIST OF CLEARING AND RUBBING OF TREES, SHRUBS, VEGETATION, ROOTS, STUMPS, RUBBISH, AND OTHER PERISHABLE MATTER INTERFERING WITH NEW CONSTRUCTION.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. CALL 811 TO NOTIFY UTILITY PROVIDERS AND REQUEST FIELD LOCATION OF EXISTING UTILITIES WITHIN PROJECT LIMITS PRIOR TO ANY CONSTRUCTION RELATED ACTIVITIES.
4. INSTALL PERIMETER FENCING AS INDICATED PRIOR TO COMMENCING ANY CONSTRUCTION RELATED ACTIVITY.
5. CLEARLY IDENTIFY ALL VEGETATION TO BE PRESERVED AND/OR RELOCATED PRIOR TO CLEARING AND RUBBING.
6. PROTECT EXISTING IMPROVEMENTS TO REMAIN DURING CONSTRUCTION. ANY DAMAGED IMPROVEMENTS SHALL BE RESTORED TO ORIGINAL CONDITION, OR AS OTHERWISE ACCEPTABLE TO THE OWNER.
7. REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS.
8. SAWCUT ALL PAVEMENT TO BE REMOVED IN STRAIGHT LINES TO FULL DEPTH.
9. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS. BREAK UP CONCRETE SLABS THAT ARE 2 FEET OR MORE BELOW PROPOSED SUBGRADE TO PERMIT DRAINAGE.
10. DISCONNECT AND SEAL/CAP EXISTING UTILITIES TO BE REMOVED, RELOCATED, OR ABANDONED IN ACCORDANCE WITH REQUIREMENTS OF UTILITY PROVIDERS.
11. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING OWNERSHIP OF AND COORDINATING NECESSARY REMOVAL AND/OR RELOCATION OF ALL EXISTING UTILITIES WITHIN THE PROJECT LIMITS.
12. DO NOT INTERRUPT UTILITY SERVICE TO EXISTING FACILITIES UNLESS PERMITTED BY THE OWNER.
13. VOIDS LEFT BY REMOVAL SHALL BE FILL WITH MATERIALS TO BE LEVELLED TO PRESENT SURFACE OF WATER.
14. REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, TRASH, AND DEBRIS FROM THE PROJECT SITE. RUBBISH, TRASH, GARBAGE, AND LITTER SHALL BE PLACED IN SEALED CONTAINERS THROUGHOUT CONSTRUCTION.

31 20 00 – EARTH MOVING

1. WORK SHALL CONSIST OF STRIPPING AND STORAGE OF TOPSOIL, EXCAVATION, EMBANKMENT, IMPORTING OR EXPORTING MATERIAL TO ACHIEVE LAND BALANCE, COMPACTION, FINISH GRADING, SUBGRADE PREPARATION, AND REPLACEMENT OF TOPSOIL.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND SUBSEQUENT RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION BASED ON FIELD CONDITIONS, AND THESE REQUIREMENTS. THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER SHALL GOVERN.
4. EXCAVATE TO SUBGRADE REGARDLESS OF THE CHARACTER OF SURFACE AND SUBSURFACE CONDITIONS ENCOUNTERED. EXCAVATED MATERIAL MAY INCLUDE ROCK AND UNCLASSIFIED OBSTRUCTIONS, WHICH IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE WORK.
5. EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE REMOVED FROM WITHIN AND A MINIMUM OF 10 FEET BEYOND BUILDING PAD AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
6. EXISTING FOUNDATIONS, BUILDING REMNANTS, AND UNSATISFACTORY MATERIAL SHALL BE REMOVED TO A MINIMUM OF 2 FEET BELOW PROPOSED SUBGRADE WITHIN GREENSPACE AND PAVEMENT AREAS. ANY RELATED EXCAVATION SHALL BE BACKFILLED WITH COMPACTED ENGINEERED FILL MATERIAL.
7. AREAS SHALL BE GRADED TO WITHIN 1 INCH, MORE OR LESS, OF PROPOSED SUBGRADE. DEVIATIONS SHALL NOT BE CONSISTENT IN ONE DIRECTION.
8. DITCHING, NARROWING, AND AERATION TECHNIQUES SHALL BE USED TO DRY SUBGRADE PRIOR TO PROOF ROLLING.
9. IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER, PROOF ROLL SUBGRADE BELOW BUILDING PAD AND PAVEMENT AREAS DURING DRY WEATHER WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK WHERE COHESIVE SOILS ARE PREDOMINANT, AND WITH A SMOOTH DRUMMED VIBRATORY ROLLER WHERE GRANULAR SOILS ARE PREDOMINANT. SUBGRADE WHICH IS OBSERVED TO RUT OR DEFLECT EXCESSIVELY SHALL BE UNDERCUT IN ACCORDANCE WITH RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER. DO NOT PROOF ROLL WET OR SATURATED SUBGRADE.
10. THE CONTRACTOR SHALL MAINTAIN POSITIVE SITE DRAINAGE THROUGHOUT CONSTRUCTION. THIS MAY INCLUDE EXCAVATION OF TEMPORARY DITCHES OR PUMPING TO ALLEViate WATER PONDING. SURFACE WATER AND GROUNDWATER SHALL BE PREVENTED FROM ENTERING EXCAVATIONS, PONDING OR PREPARED SUBGRADES, AND FLOODING PROJECT SITE AND/OR SURROUNDING AREAS.
11. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ALL EARTHWORK COMPUTATIONS AND FOR ACTUAL LAND BALANCE, INCLUDING UTILITY TRENCH SPOIL. THE CONTRACTOR SHALL IMPORT OR EXPORT MATERIAL AS NECESSARY TO COMPLETE THE PROJECT.
12. TOPSOIL, REPLACEMENT SOIL SHALL BE AS CALLED OUT ON THE CIVIL OR LANDSCAPE PLANS, OR A MINIMUM OF FOUR INCHES IF NOT CALLED OUT ON LANDSCAPE PLAN.

31 25 00 – EROSION & SEDIMENTATION CONTROLS

1. WORK SHALL CONSIST OF INSTALLATION OF TEMPORARY AND PERMANENT PRACTICES FOR SEDIMENTATION CONTROL, EROSION CONTROL, SLOPE PROTECTION, AND REMOVAL OF PRACTICES UPON FINAL SITE STABILIZATION.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. INSTALLATION AND MAINTENANCE OF PRACTICES SHALL BE IN ACCORDANCE WITH THE APPLICABLE WDNR TECHNICAL STANDARD, OR THE WISCONSIN CONSTRUCTION SITE BEST MANAGEMENT PRACTICE HANDBOOK IF A TECHNICAL STANDARD IS NOT AVAILABLE.
4. ALL PRACTICES SHALL BE INSTALLED PRIOR TO COMMENCING ANY LAND DISTURBING CONSTRUCTION RELATED ACTIVITY. EARTHWORK ASSOCIATED WITH INSTALLATION OF PRACTICES MAY OCCUR CONCURRENTLY.
5. ALL PRACTICES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND WARRANTY PERIOD IN CONFORMANCE WITH PERMIT REQUIREMENTS.
6. ALL PRACTICES SHALL BE ROUTINELY INSPECTED EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAN 0.5 INCHES. THE CONTRACTOR IS REQUIRED TO PERFORM INSPECTIONS, KEEP A LOG, AND CONDUCT REPAIRS AS NEEDED.
7. ALL DISTURBED AREAS SHALL DRAIN TO A CONTROL PRACTICE AT ALL TIMES DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. DEPENDING UPON HOW THE CONTRACTOR GRADES THE SITE, IT MAY BE NECESSARY TO INSTALL ADDITIONAL CONTROL PRACTICES IN VARIOUS LOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL PRACTICES NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
8. ALL DISTURBED GROUND LEFT INACTIVE FOR 7 DAYS SHALL BE STABILIZED WITH A TEMPORARY SEED MIXTURE AND MULCH. THE TEMPORARY SEED MIXTURE SHALL BE IN ACCORDANCE WITH SECTION 630 OF WISDOT STANDARD SPECIFICATIONS. WINTER WHEAT OR RYE SHALL BE USED FOR TEMPORARY SEED AFTER SEPTEMBER 1.
9. DISTURBED AREAS THAT CAN NOT BE STABILIZED WITH A DENSE GRASS OF VEGETATION DUE TO TEMPERATURE OR TIMING OF CONSTRUCTION SHALL BE STABILIZED BY APPLYING ANIONIC POLYACRYLAMIDE (PAM).
10. DISTURBED AREAS ON THE PROJECT SITE SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME.
11. DUST GENERATED BY CONSTRUCTION RELATED ACTIVITIES SHALL BE MINIMIZED BY USE OF WATERING, CALCIUM CHLORIDE SURFACE TREATMENT, CONSTRUCTION SCHEDULING, OR OTHER APPROPRIATE MEASURES.
12. THE CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE CONDITIONS BY HAVING APPROPRIATE PUMPS AND FILTER BAGS ONSITE. ALL WATER FROM CONSTRUCTION DETERWATERING SHALL BE TREATED PRIOR TO DISCHARGE FROM THE PROJECT SITE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF THE PROJECT SITE AND PUBLIC ROADS DURING CONSTRUCTION. PUBLIC ROADS SHALL BE KEPT FREE OF SEDIMENT TRACKED FROM AREAS UNDER CONSTRUCTION BY DAILY SWEEPING OR OTHER APPROPRIATE MEASURES.
14. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
15. ALL SEEDED AREAS SHALL BE FERTILIZED, RESEED, AND MULCHED IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN TO MAINTAIN A WOODRUS DENSE VEGETATIVE COVER.

DIVISION 32 – EXTERIOR IMPROVEMENTS

32 12 00 – ASPHALT PAVING

1. WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF HOT-MIX ASPHALT, PAVEMENT MARKING, SIGNAGE, AND CLEANUP.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
4. ASPHALT MIXTURE SHALL BE IN ACCORDANCE WITH SECTION 455 OF WISDOT STANDARD SPECIFICATIONS.
5. AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 460 OF WISDOT STANDARD SPECIFICATIONS.
6. DO NOT CONDUCT ASPHALT PAVING IF ANY OF THE FOLLOWING CONDITIONS EXIST: CRUSHED STONE BASE IS WET OR EXCESSIVELY DAMP. TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT. TEMPERATURE OF HOT MIX BELOW 35 DEGREES FAHRENHEIT. TEMPERATURE OF HOT MIX BELOW 250 DEGREES FAHRENHEIT. TEMPERATURE OF HOT MIX BELOW 250 DEGREES FAHRENHEIT. TEMPERATURE OF HOT MIX BELOW 250 DEGREES FAHRENHEIT. TEMPERATURE OF HOT MIX BELOW 250 DEGREES FAHRENHEIT.
7. COMPACT ASPHALT IN ACCORDANCE WITH SECTION 450 OF WISDOT STANDARD SPECIFICATIONS. COMPACT ASPHALT TO PRODUCE THE THICKNESS INDICATED WITHIN PLUS/MINUS 1/4-INCH FOR BINDER COURSE, AND WITHIN PLUS 1/4-INCH FOR SURFACE COURSE (NO MINUS).
8. APPLY TACK COAT BETWEEN ASPHALT COURSES AT A MINIMUM RATE OF 0.25 GAL/SY.
9. NO TRAFFIC SHALL BE ALLOWED ON ASPHALT AFTER FINAL ROLLING UNTIL IT HAS COOLED AND HARDENED.
10. FINAL ASPHALT SURFACE SHALL BE WITHIN A 1/8-INCH TOLERANCE AS DETERMINED BY USING A 10-FOOT STRAIGHTEDGE APPLIED LONGITUDINALLY TO REMOVE AND REPLACE ALL RAISED AND DEPRESSED AREAS EXCEEDING TOLERANCE.
11. A SLOPE NO GREATER THAN 2% IN ALL DIRECTIONS AT ADA PARKING STALLS AND ADJACENT UNLOADING AREAS IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
12. A SLOPE NO GREATER THAN 2% ALONG THE LENGTH OF THE ACCESSIBLE ROUTE IS REQUIRED. A SLOPE NO GREATER THAN 2% ACROSS THE WIDTH OF THE ACCESSIBLE ROUTE IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.

32 13 00 – CONCRETE PAVING

1. WORK SHALL CONSIST OF FINE GRADING SUBGRADE, EXCAVATION BELOW SUBGRADE (IF NECESSARY), PLACEMENT OF CRUSHED STONE BASE, INSTALLATION OF CONCRETE, AND CLEANUP.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. CRUSHED STONE BASE SHALL BE IN ACCORDANCE WITH SECTION 305 OF WISDOT STANDARD SPECIFICATIONS.
4. CONCRETE SHALL BE GRADE A AIR-ENTRAINED IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS, WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
5. AGGREGATE SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS.
6. WATER SHAL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C94 / C94M.
7. AIR-ENTRAINING SHALL BE IN ACCORDANCE WITH SECTION 501 OF WISDOT STANDARD SPECIFICATIONS AND ASTM C260.
8. LIQUID CURING COMPOUND SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS AND AASHTO M 148.
9. CURBING SHALL BE IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS.
10. SIDEWALK AND PATIO SHALL BE IN ACCORDANCE WITH SECTION 602 OF WISDOT STANDARD SPECIFICATIONS.
11. CONCRETE FORMS SHALL REMAIN IN PLACE AT LEAST 24 HOURS AFTER CONCRETE INSTALLATION AND SHALL BE CLEANED AFTER EACH USE. CONCRETE FORMS SHALL BE COATED WITH RELEASE AGENT TO ALLOW SEPARATION WITHOUT DAMAGE TO CONCRETE.
12. CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS. JOINT PATTERN SHALL FOLLOW ARCHITECTURAL PLANS IF AVAILABLE.
13. ISOLATION JOINTS SHALL CONSIST OF PREFORMED JOINT FILLER STRIPS ABUTTING CURBING, INLETS, CATCH BASINS, MANHOLES, STRUCTURES, AND OTHER FIXED STRUCTURES.
14. EDGES OF CONCRETE PAVEMENT, CURBING, SIDEWALK, PATIOS, AND JOINTS SHALL BE TOOLED IN CONCRETE AFTER INITIAL FLOATING WITH AN EDGING TOOL TO A 1/4-INCH RADIUS. REPEAT TOOLING AFTER APPLYING SURFACE FINISHES AND ELIMINATE TOOL MARKS ON SURFACES.
15. FINISH, CURE, AND PROTECT CURBING IN ACCORDANCE WITH SECTION 601 OF WISDOT STANDARD SPECIFICATIONS.
16. FINISH (LIGHT BROOM), CURE, AND PROTECT SIDEWALK AND PATIOS IN ACCORDANCE WITH SECTION 602 OF WISDOT STANDARD SPECIFICATIONS.
17. FINISH (ARTIFICIAL TURF DRAG), CURE, AND PROTECT VEHICULAR PAVEMENT AND PADS IN ACCORDANCE WITH SECTION 415 OF WISDOT STANDARD SPECIFICATIONS.
18. MAINTAIN CONCRETE FREE OF STAINS, DISCOLORATION, DIRT, AND OTHER FOREIGN MATERIAL. SWEEP CONCRETE PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.
19. MAXIMUM DIFFERENCE BETWEEN CONCRETE SIDEWALKS AND ADJACENT PAVEMENT SURFACES SHALL NOT EXCEED 1/4-INCH VERTICAL.
20. A SLOPE NO GREATER THAN 2% IN ALL DIRECTIONS AT ADA PARKING STALLS AND ADJACENT UNLOADING AREAS IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
21. A SLOPE NO GREATER THAN 2% ALONG THE LENGTH OF THE ACCESSIBLE ROUTE IS REQUIRED. A SLOPE NO GREATER THAN 2% ACROSS THE WIDTH OF THE ACCESSIBLE ROUTE IS REQUIRED. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
22. ALL HANDICAP ACCESSIBLE DOORWAYS REQUIRE AN EXTERIOR LANDING THAT IS A MINIMUM OF 5 FEET BY 5 FEET WITH A SLOPE NO GREATER THAN 2% IN ALL DIRECTIONS. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK.
23. REMOVE AND REPLACE CONCRETE THAT IS BROKEN, DAMAGED, DEFECTIVE, OR DOES NOT COMPLY WITH THE REQUIREMENTS LISTED ABOVE.

32 17 00 – PAVEMENT MARKING & SIGNAGE

1. WORK SHALL CONSIST OF INSTALLATION OF PARKING LOT STRIPING, DIRECTION ARROWS, HANDICAP ACCESSIBLE SYMBOLS AND SITE SIGNAGE.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. PAVEMENT MARKING PAINT SHALL BE IN ACCORDANCE WITH SECTION 646 OF WISDOT STANDARD SPECIFICATIONS AND WISDOT APPROVED PRODUCTS LIST. COLOR SHALL BE WHITE UNLESS NOTED OTHERWISE ON THIS PLAN.
4. ALL PARKING LOT STRIPING SHALL BE 4-INCH WIDTH UNLESS NOTED OTHERWISE ON THIS PLAN.
5. BARRICADE WORK AREA DURING INSTALLATION AND UNTIL PAVEMENT MARKING PAINT IS DRIED. PROTECT ADJACENT AREAS FROM RECEIVING PAINT.
6. APPLY PAINT IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS TO PRODUCE MARKINGS AS INDICATED WITH UNIFORM, STRAIGHT EDGES. TEMPLATES SHALL BE PROFESSIONALLY MADE TO INDUSTRY STANDARDS.
7. APPLY PAINT TO CLEAN AND DRY SURFACE, FREE FROM FROST, TO ENSURE PROPER BONDING.
8. NOTIFY OWNER OF ANY UNSOUND CONDITIONS PRIOR TO COMMENCING WORK. APPLYING PAVEMENT MARKING PAINT CONSTITUTES CONTRACTOR'S ACCEPTANCE OF SURFACE AS SUITABLE FOR INSTALLATION.

32 32 00 – RETAINING WALLS

1. WORK SHALL CONSIST OF FURNISHING DETAILED DESIGN, MATERIALS, LABOR, EQUIPMENT, SUPERVISION, AND DIRECTION TO CONSTRUCT RETAINING WALL SYSTEMS IN REASONABLY CLOSE CONFORMITY TO THE LINES, GRADES, AND DIMENSIONS SHOWN ON THIS PLAN. RETAINING WALLS SHOWN ON THIS PLAN ARE FOR GENERAL LOCATION AND MATERIAL REFERENCE ONLY.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. THE CONTRACTOR SHALL PROCURE DETAILED DESIGN CALCULATIONS AND DRAWINGS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER EXPERIENCED WITH RETAINING WALL DESIGN AND LICENSED IN THE STATE IN WHICH THE RETAINING WALLS ARE TO BE CONSTRUCTED.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SURROUNDING STRUCTURES AND UTILITIES ARE PROTECTED FROM THE EFFECTS OF EXCAVATION AND PROVIDING ANY NECESSARY EXCAVATION SUPPORT.
5. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT CONSTRUCTION ADJACENT TO THE RETAINING WALLS DOES NOT DISTURB OR PLACE TEMPORARY LOADS ON THE RETAINING WALLS THAT EXCEED DESIGN LOADS.

DIVISION 33 – UTILITIES

33 10 00 – WATER DISTRIBUTION

1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE WATER DISTRIBUTION SYSTEM AND ALL APPURTENANCES.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. ALL PUBLIC WATER DISTRIBUTION WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND MUNICIPALITY DEVELOPMENT STANDARDS.
4. ALL PRIVATE WATER DISTRIBUTION WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND MUNICIPALITY DEVELOPMENT STANDARDS.
5. POLYVINYL CHLORIDE (PVC) PIPE SHALL BE SDR 18, CLASS 150 CONFORMING TO AWWA C900 WITH INTEGRAL ELASTOMERIC BELL AND SPIGOT JOINTS IN ACCORDANCE WITH SECTION 8.2.0 OF SSSWCW.
6. DUCTILE IRON PIPE (DIP) SHALL BE CLASS 150 CONFORMING TO AWWA C151 WITH RUBBER GASKETED JOINTS WITH SECTION 8.18.0 OF SSSWCW.
7. POLYETHYLENE TUBING SHALL BE SDR 9 IN ACCORDANCE WITH SECTION 8.24.0 OF SSSWCW AND CONFORM TO AWWA C901.
8. COPPER TUBING SHALL BE TYPE "K" IN ACCORDANCE WITH SECTION 8.24.0 OF SSSWCW AND CONFORM TO ASTM B88.
9. BALL VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.30.0 OF SSSWCW AND CONFORM TO AWWA C800 AND ASTM B62.
10. GATE VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.27.0 OF SSSWCW AND CONFORM TO AWWA C500.
11. BUTTERFLY VALVES SHALL BE IN ACCORDANCE WITH SECTION 8.28.0 OF SSSWCW AND CONFORM TO AWWA C504.
12. VALVE BOXES SHALL BE IN ACCORDANCE WITH SECTION 8.29.0 OF SSSWCW AND CONFORM TO ASTM A48. VALVE BOXES SHALL BE SIZE DD, SCREW TYPE, 3 PIECE ASSEMBLY, WITH COVERS MARKED "WATER". ALL VALVE BOXES SHALL BE SET TO PROPOSED GRADE, TRULY VERTICAL, AND SUPPORTED BY USE OF ADAPTOR.
13. HYDRANTS SHALL BE IN ACCORDANCE WITH SECTION 8.26.0 OF SSSWCW AND CONFORM TO AWWA C502. PUMPER NOZZLE SHALL BE PERPENDICULAR TO AND ORIENTED TOWARDS THE PAVEMENT. HYDRANTS SHALL BE ATTACHED BY MEANS OF TEE AND HAVE A GROUND LINE TO CENTER DISTANCE OF 18 TO 21 INCHES.
14. FITTING SHALL BE CLASS 150 IN ACCORDANCE WITH SECTION 8.22.0 OF SSSWCW, CONFORMING TO AWWA C110, AND PROVIDED WITH MECHANICAL JOINTS.
15. MECHANICAL JOINTS SHALL BE MADE WITH "COR TEN" NUTS AND BOLTS, OR CORROSION-RESISTANT EQUIVALENTS CONFORMING TO AWWA C111.
16. POLYETHYLENE WRAP SHALL BE IN ACCORDANCE WITH SECTION 8.21.0 OF SSSWCW AND PROVIDED FOR ALL METAL PIPES AND FITTINGS.
17. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH SECTION 4.3.13 OF SSSWCW AND PROVIDED FOR ALL BENDS, CAPS, PLUGS, AND TEES.
18. TRENCH SECTION SHALL BE IN ACCORDANCE WITH FILE NO. 36 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
19. PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
20. TRENCH BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS, UNLESS ALTERNATIVE COMPACTION IS RECOMMENDED IN THE GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION, IN WHICH CASE THE CONTRACTOR IS TO FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
21. CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
22. TRACER WIRE SHALL BE BLUE AND INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC WATER MAIN PIPE, PRIVATE WATER MAIN PIPE, AND BUILDING WATER SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 12 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
23. PROPOSED WATER SERVICES SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL.
24. THE CONTRACTOR IS RESPONSIBLE FOR THE SIZE, TYPE AND NUMBER OF BENDS REQUIRED TO COMPLETE CONSTRUCTION, WHICH SHALL BE INCIDENTAL AND INCLUDED IN THE COST OF WORK.
25. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES TO FINISHED SURFACE UPON COMPLETION OF PAVING OPERATIONS.
26. THE CONTRACTOR IS RESPONSIBLE FOR PRESSURE TESTING AND SAFE WATER SAMPLING. HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH SECTION 4.15.0 OF SSSWCW. DISINFECTION SHALL BE IN ACCORDANCE WITH SECTION 4.16.0 OF SSSWCW AND CONFORM TO AWWA C651. WATER MAINS SHALL BE FLUSHED AND TESTED IN THE PRESENCE OF THE WATER UTILITY OPERATOR.

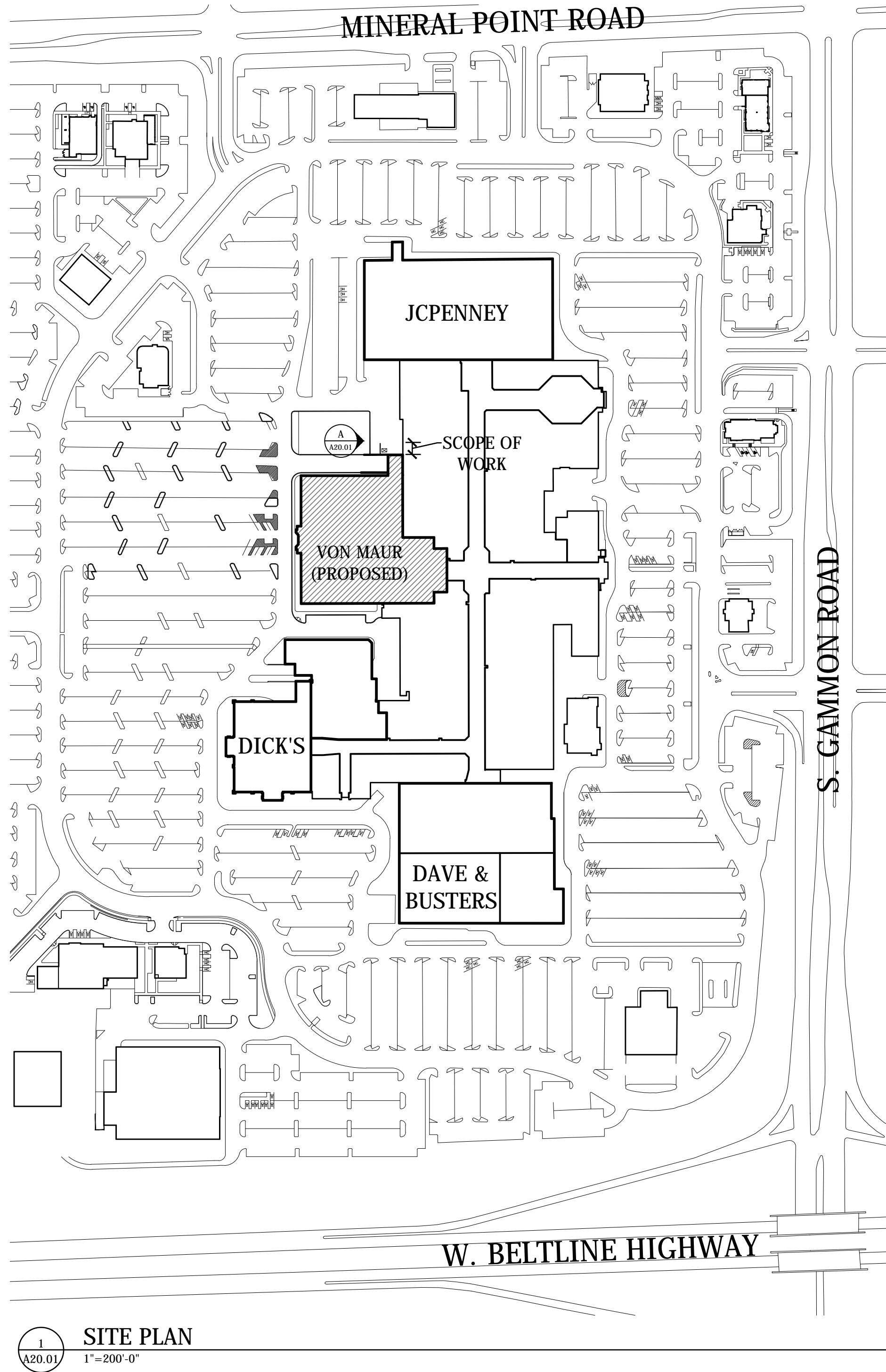
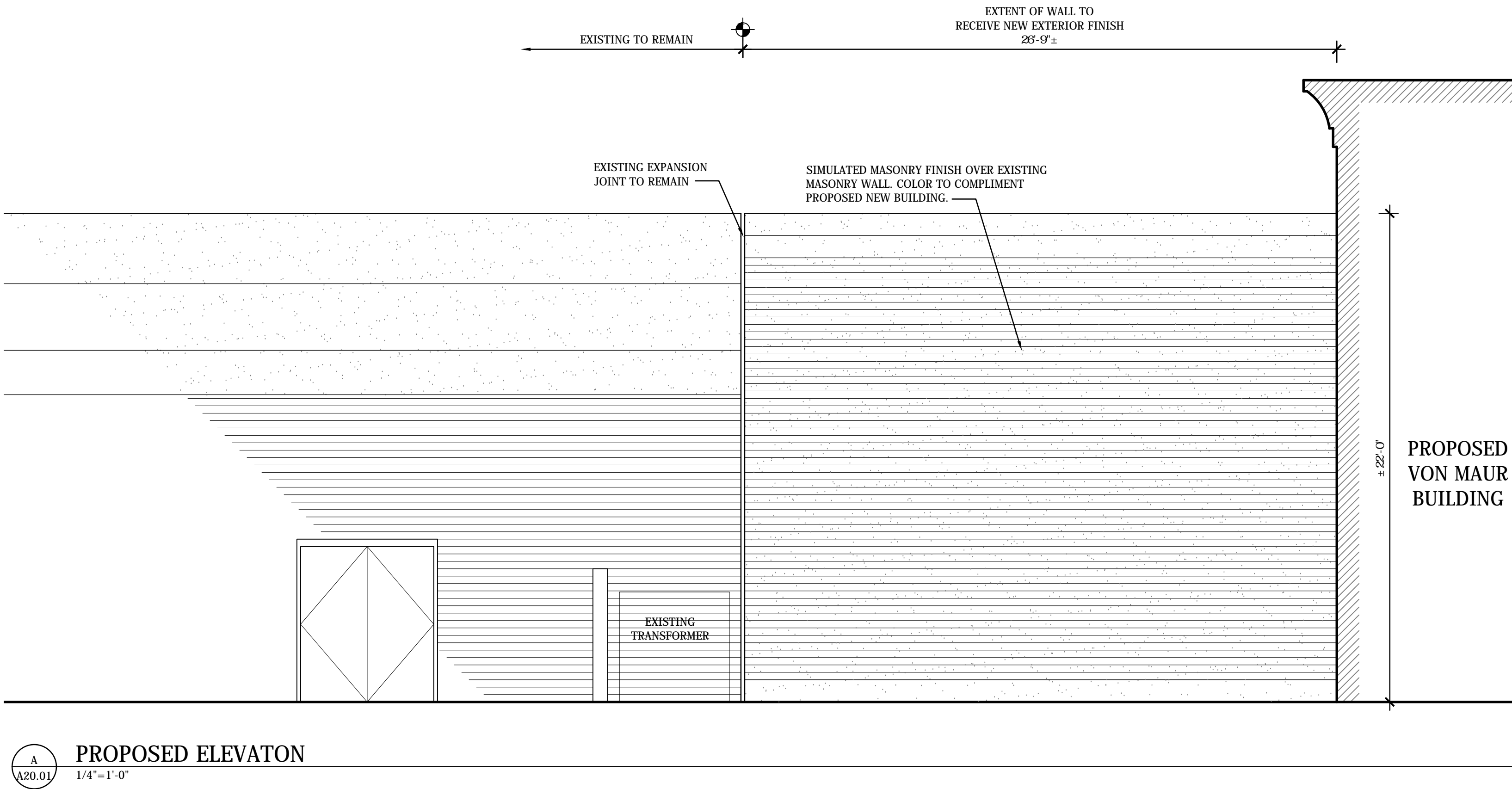
33 30 00 – SANITARY SEWERAGE

1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE SANITARY SEWERAGE SYSTEM AND ALL APPURTENANCES.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. ALL PUBLIC SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND MUNICIPALITY DEVELOPMENT STANDARDS.
4. ALL PRIVATE SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND MUNICIPALITY DEVELOPMENT STANDARDS.
5. POLYVINYL CHLORIDE (PVC) PIPE SHALL BE SDR 35 CONFORMING TO ASTM D3034 WITH PUSH-ON RUBBER GASKETED JOINTS IN ACCORDANCE WITH SECTIONS 8.10.6 AND 8.41.4 OF SSSWCW.
6. MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.39.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
7. TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
8. PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
9. TRENCH BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN 5 FEET OF PAVEMENT AREAS, AND SHALL BE SPOIL BACKFILL IN ACCORDANCE WITH SECTION 8.43.5 OF SSSWCW BENEATH GREENSPACE AREAS, UNLESS ALTERNATIVE COMPACTION IS RECOMMENDED IN THE GEOTECHNICAL REPORT OR BY THE GEOTECHNICAL ENGINEER DURING CONSTRUCTION, IN WHICH CASE THE CONTRACTOR IS TO FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
10. CAUTION MUST BE FOLLOWED REGARDING THE COMPACTION OF ALL UTILITY TRENCHES. FLOODING OF BACKFILL MATERIAL IS NOT ALLOWED.
11. ALL CONNECTIONS TO EXISTING SANITARY SEWER PIPES AND STRUCTURES SHALL BE CORED CONNECTIONS, UNLESS NOTED OTHERWISE. PREFABRICATED FLEXIBLE COMPRESSION COUPLINGS SHALL BE USED IN THE CONNECTION OF DISSIMILAR PIPE MATERIALS.
12. CLEANOUTS AND RISER EXTENSIONS SHALL BE INSTALLED IN ACCORDANCE WITH SPS 382.35 FROM SEWER PIPES TO GROUND SURFACE. LIGHT DUTY LOADING CLASSIFICATION SHALL BE USED IN UNPAVED AREAS. MEDIUM DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED FOOT TRAFFIC AREAS. HEAVY DUTY LOADING CLASSIFICATION SHALL BE USED IN PAVED VEHICULAR TRAFFIC AREAS. FRAMES AND COVERS SHALL BE SET FLUSH WITH SURFACE.
13. TRACER WIRE SHALL BE BROWN AND INSTALLED IN ACCORDANCE WITH SECTION 2.11.2 OF SSSWCW ON ALL BURIED NON-METALLIC PUBLIC SANITARY SEWER PIPE, PRIVATE SANITARY INTERCEPTOR PIPE, AND BUILDING SANITARY SERVICE PIPE. TRACER WIRE SHALL BE INSULATED, SINGLE-CONDUCTOR, 12 GAUGE SOLID COPPER OR COPPER COATED STEEL WIRE, SECURED AT LEAST EVERY 10 FEET AND AT ALL BENDS, WITH ACCESS POINTS AT LEAST EVERY 300 FEET.
14. PROPOSED SANITARY SERVICES SHOWN ON THIS PLAN SHALL TERMINATE AT A POINT FIVE (5) FEET FROM THE EXTERIOR BUILDING WALL.
15. THE CONTRACTOR SHALL ADJUST ALL MANHOLE RIMS TO FINISHED SURFACE UPON COMPLETION OF PAVING OPERATIONS.
16. AFTER INSTALLATION OF SANITARY SEWERAGE SYSTEM, CLEAN ALL DEBRIS FROM SYSTEM AND INSPECT FOR DAMAGE. CONDUCT TESTING OF INSTALLED PIPE IN ACCORDANCE WITH SSSWCW. REPAIR ANY DAMAGE AND REPLACE ANY PIPE NOT PASSING TESTING.

33 40 00 – STORMWATER DRAINAGE

1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE STORMWATER DRAINAGE SYSTEM AND ALL APPURTENANCES.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. ALL PUBLIC STORMWATER DRAINAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND MUNICIPALITY DEVELOPMENT STANDARDS.
4. ALL PRIVATE STORMWATER DRAINAGE WORK SHALL BE IN ACCORDANCE WITH WISCONSIN ADMINISTRATIVE CODE AND MUNICIPALITY DEVELOPMENT STANDARDS.
5. REINFORCED CONCRETE PIPE (RCP) AND END SECTIONS SHALL BE IN ACCORDANCE WITH SECTION 8.6.0 OF SSSWCW AND CONFORM TO ASTM C76 WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM C443. UNLESS NOTED OTHERWISE, 12-INCH DIAMETER PIPE SHALL BE CLASS V, 15-INCH DIAMETER PIPE SHALL BE CLASS IV, AND 18-INCH DIAMETER PIPE AND LARGER SHALL BE CLASS II.
6. CORRUGATED METAL PIPE (CMP) AND END SECTIONS SHALL BE 16 GAUGE CONFORMING TO ASTM A760.
7. HIGH-DENSITY POLYETHYLENE (HDPE) PIPE AND FITTINGS SHALL BE ADS N12 AS APPROVED BY THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCTS REGISTER.
8. POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS SHALL BE SDR 35 CONFORMING TO ASTM D3034 WITH PUSH-ON RUBBER GASKETED JOINTS CONFORMING TO ASTM D3212.
9. MANHOLES SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 8.39.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
10. CATCH BASINS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 3.6.0 OF SSSWCW AND CONFORM TO ASTM C478. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
11. INLETS SHALL BE PRECAST REINFORCED CONCRETE IN ACCORDANCE WITH SECTION 3.6.0 OF SSSWCW AND CONFORM TO ASTM C913. SIZES SHALL BE AS INDICATED AND VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING.
12. AREA DRAINS SHALL BE ADS NYLOPLAST AS APPROVED BY THE WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES PLUMBING PRODUCTS REGISTER.
13. FRAMES AND GRATES SHALL BE AS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FRAMES AND GRATES ARE COMPATIBLE WITH PRECAST STRUCTURES PRIOR TO ORDERING.
14. TRENCH SECTION SHALL BE CLASS B IN ACCORDANCE WITH SECTION 3.2.6 OF SSSWCW. MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE OUTSIDE DIAMETER OF PIPE PLUS 20 INCHES.
15. PIPE BEDDING AND COVER MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 8.43.0 OF SSSWCW. MINIMUM COVER OVER PIPE SHALL BE 12 INCHES.
16. TRENCH BACKFILL MATERIAL SHALL BE MECHANICALLY COMP

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CIVIL ENGINEER

raSmith
16745 WEST BLUEMOUND ROAD
BROOKFIELD, WI 53005

CBL

CBL PROPERTIES
CBL Center, Suite 500 12001 Hamilton Place Boulevard 1 Chatterbox, TN 37421-6000
p. (423) 855-0001 f. (423) 495-8662 t. cblproperties.com 1 NYSE: CBL

WEST TOWNE MALL REDEVELOPMENT
66 W. TOWNE MALL
MADISON, WI 53719

Issue: No: Date:
PLANNING REVIEW 12/16/19

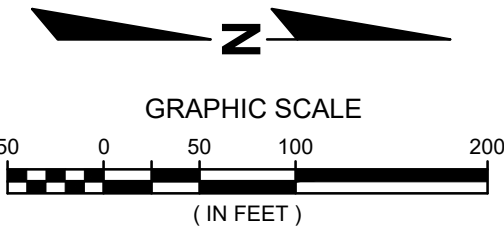
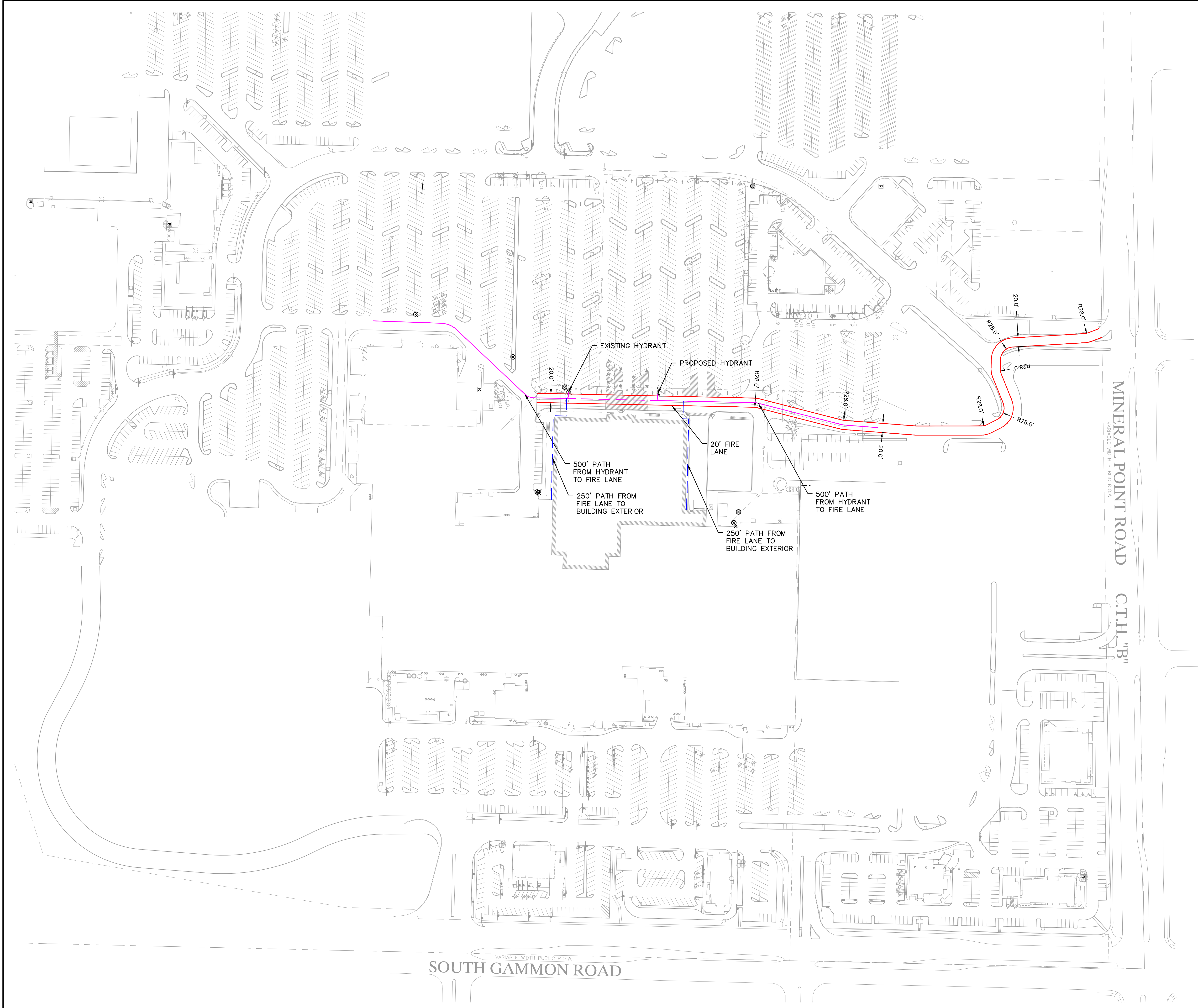
PROPOSED ELEVATIONS

Proj #: Reviewed By:

A20.01




(A7) WOODL
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DESCRIPTION		DATE	<div>16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com</div> <div>CREATIVITY BEYOND ENGINEERING</div> <div>Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA</div>			
DATE						
DESCRIPTION						
DATE						
DESCRIPTION						
WEST TOWNE MALL REDEVELOPMENT		CITY OF MADISON, WI		FIRE DEPARTMENT ACCESS		
CITY OF MADISON, WI		FIRE DEPARTMENT ACCESS		EXHIBIT		
© COPYRIGHT 2020 R.A. Smith, Inc.		DATE: 01/08/20		SCALE: 1" = 100'		
JOB NO. 3190329		PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.		DESIGNED BY: DVW		
CHECKED BY: RJY		SHEET NUMBER		FD100		



City of Madison Fire Department

30 West Mifflin Street, 8th & 9th Floors, Madison, WI 53703-2579

Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: fire@cityofmadison.com

Project Address: 66 West Towne Mall, Madison, WI 53719

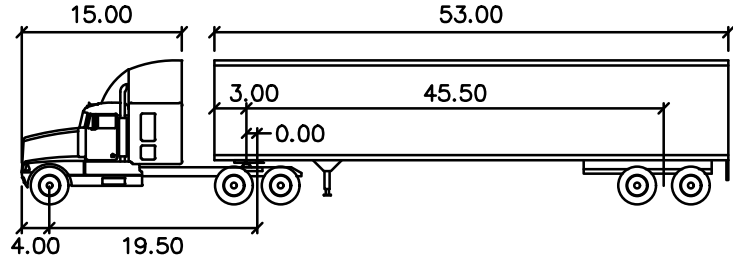
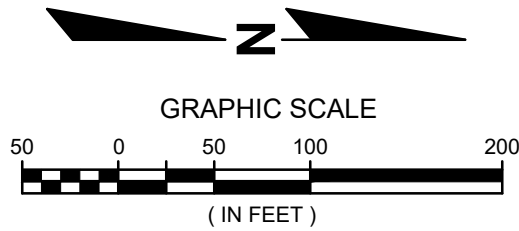
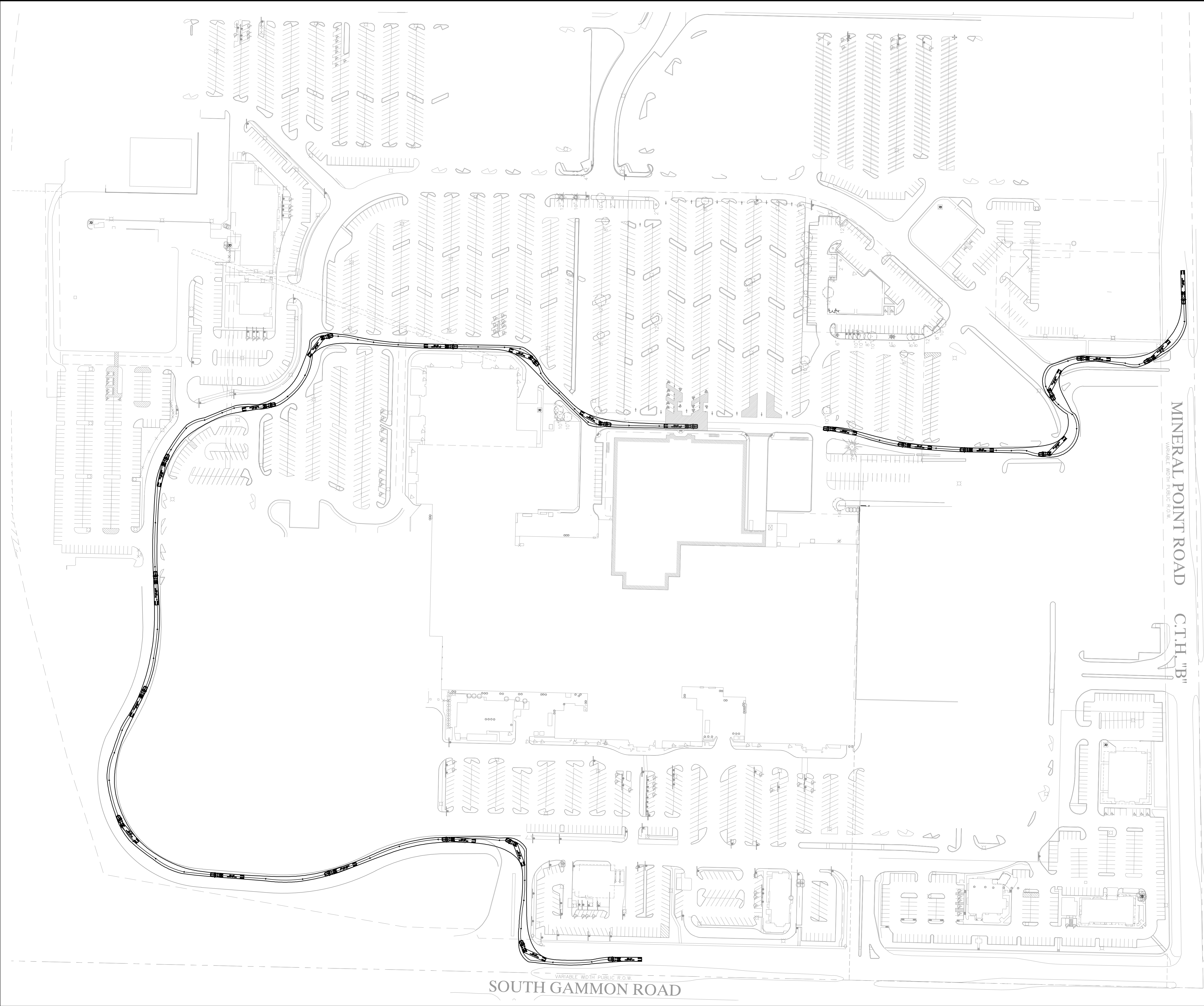
Contact Name & Phone #: Jeff Yersin, P.E., (262) 317-3232

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 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 <u>greater than 30-feet</u> above the grade plane?	<input type="checkbox"/> Yes	<input checked="" 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 type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" 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 type="checkbox"/> No	<input checked="" 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 type="checkbox"/> No	<input checked="" 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 type="checkbox"/> No	<input checked="" type="checkbox"/> N/A
e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" 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 type="checkbox"/> No	<input checked="" 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
<i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i>			
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 type="checkbox"/> Yes	<input checked="" 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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input 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
<i>Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.</i>			

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

This worksheet is based on **MGO 34.503** and **IFC 2012 Edition Chapter 5 and Appendix D**; please see the codes for further information.



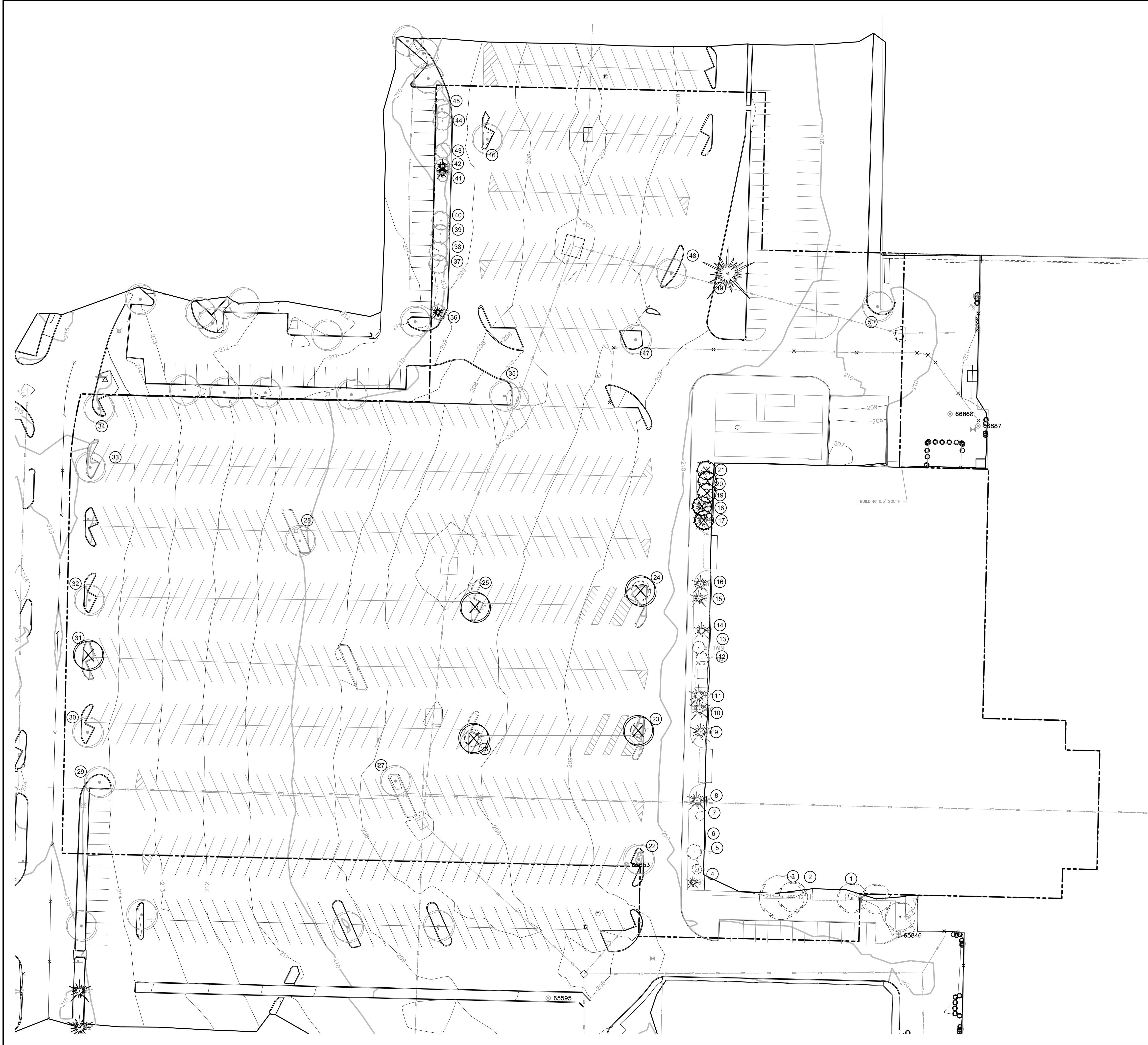
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Trailer Width	: 8.50	Steering Angle	: 28.4
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Trailer Track	: 8.50		



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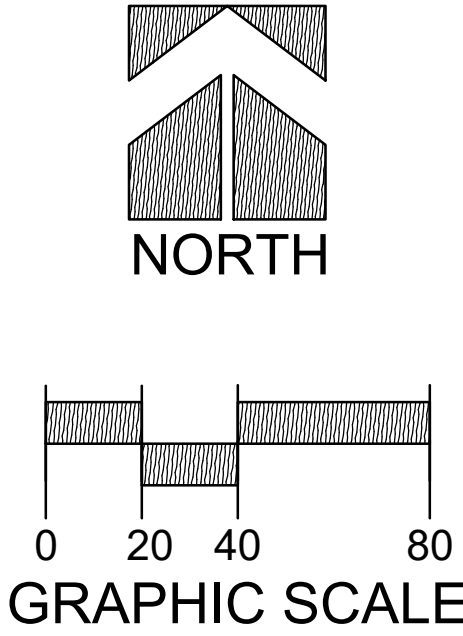
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<div>WEST TOWNE MALL REDVELOPMENT CITY OF MADISON, WI</div> <div>TRUCK MOVEMENT EXHIBIT OVERALL SITE</div>		DATE	DESCRIPTION
<div><div>raSmith</div><div>CREATIVITY BEYOND ENGINEERING</div></div> <div>16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com</div> <div>Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA</div>		© COPYRIGHT 2020 R.A. Smith, Inc. DATE: 01/08/20 SCALE: 1" = 100' JOB NO. 3190329 PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E. DESIGNED BY: DVW CHECKED BY: RJY	
		SHEET NUMBER AT-2	



West Towne Mall - von Maur
Tree Inventory 10-22-2019
Existing Trees and Shrubs

Key	QTY	Size DBH	Tree	Condition
1	1	12" Cal.	Maple	Good
2	1	14" Cal.	Maple	Good
3	1	18" Cal.	Maple	Good
4	1	25'-30' HT	Spruce	Good
5	1	3" CAL	Crabapple	Poor
6	1	5" & 7" Cal.	Birch - Twin	Good
7	1	25' HT	Magnolia - Multistem	Good
8	1	25'-30' HT	Concolor Fir	Good
9	1	25'-30' HT	Concolor Fir	Good
10	1	25'-30' HT	Spruce	Fair
11	1	25'-30' HT	Spruce	Fair
12	1	4", 4" & 4" Cal.	Birch - Multistem	Good
13	1	5" & 3" Cal.	Birch - Twin	Good
14	1	25'-30' HT	Austrian Pine	Good
15	1	25'-30' HT	Spruce	Fair
16	1	25'-30' HT	Spruce	Good
17	1	25'-30' HT	Spruce	Good
18	1	25'-30' HT	Spruce	Good
19	1	20' HT	Crabapple	Fair
20	1	15' HT	Amelanchier	Good
21	1	15' HT	Amelanchier	Good
22	1	7" Cal.	Locust	Good
23	1	5" Cal.	Linden	Good
24	1	8" Cal.	Ash	Good
25	1	2" Cal.	Locust	Good
26	1	6" Cal.	Locust	Poor
27	1	12" Cal.	Locust	Good
28	1	8" Cal.	Locust	Good
29	1	2" Cal.	Maple	Good
30	1	2" Cal.	Maple	Good
31	1	8" Cal.	Locust	Good
32	1	8" Cal.	Locust	Good
33	1	2" Cal.	Maple	Good
34	1	2" Cal.	Maple	Good
35	1	12" Cal.	Locust	Good
36	1	15'-20' HT	Upright Juniper	Good
37	1	20' HT.	Crabapple	Good
38	1	20' HT.	Crabapple - Multistem	Good
39	1	20' HT.	Crabapple - Multistem	Good
40	1	20' HT.	Crabapple - Multistem	Good
41	1	5' HT.	Dwarf Lilac	Good
42	1	15'-20' HT	Upright Juniper	Good
43	1	15'-20' HT	Upright Juniper	Good
44	1	20' HT.	Crabapple - Multistem	Good
45	1	20' HT.	Crabapple - Multistem	Good
46	1	8" CAL	Locust	Good
47	1	11" CAL	Maple	Good
48	1	8" CAL	Hackberry	Good
49	1	25'-30' HT	Austrian Pine (20" CAL	Good
50	1	14" CAL	Linden	Good



Know what's below.
Call before you dig.

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DESCRIPTION

DATE

16745 W. Bluemound Road
Brookfield, WI 53005-5938
(262) 781-1000
rasmith.com

raSmith
CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA

WEST TOWNE MALL REDVELOPMENT
CITY OF MADISON, WI

EXISTING TREE INVENTORY

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: 1" = 40'

JOB NO. 3190329

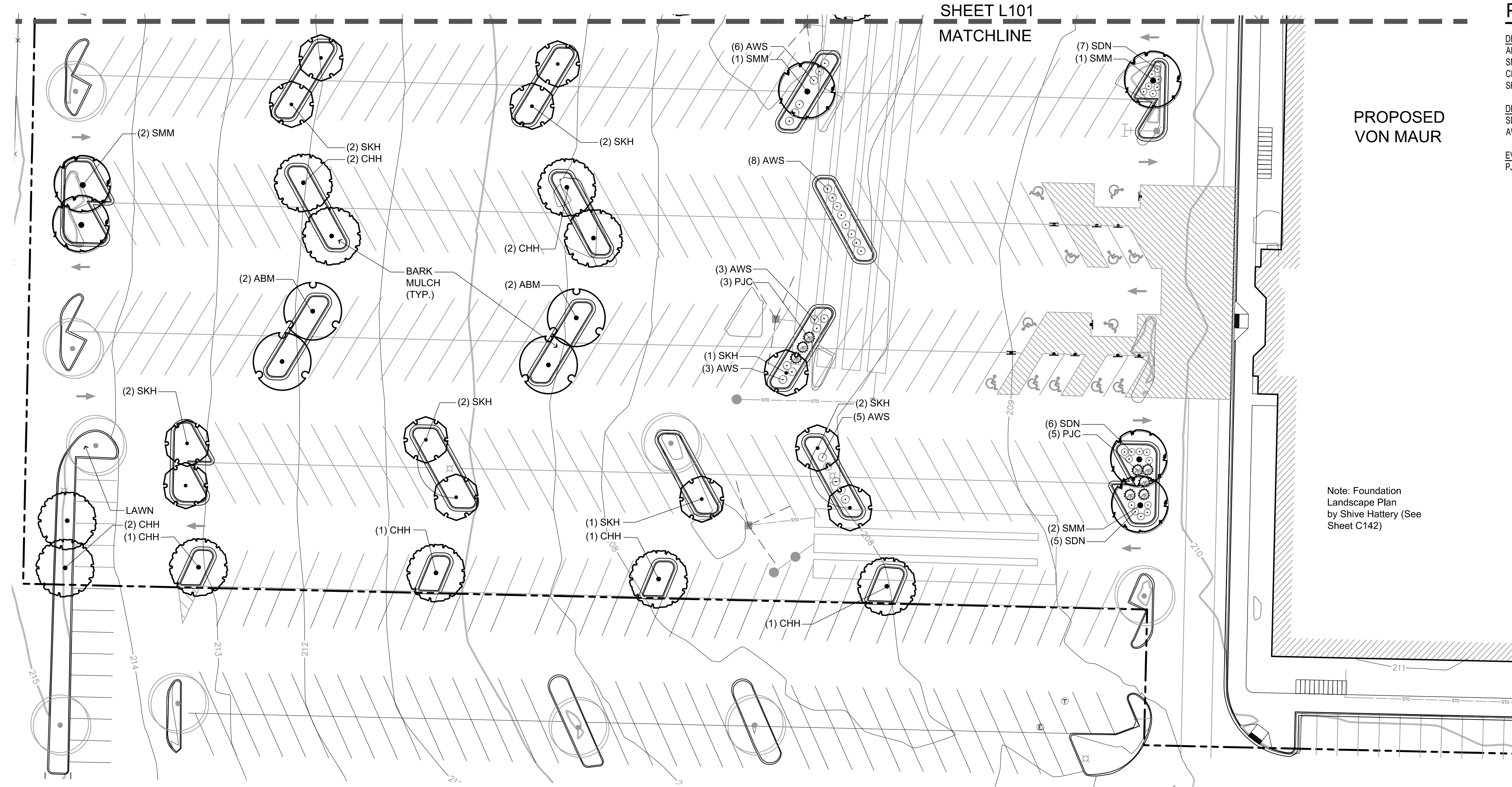
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: NJW/CNS

CHECKED BY: CNS

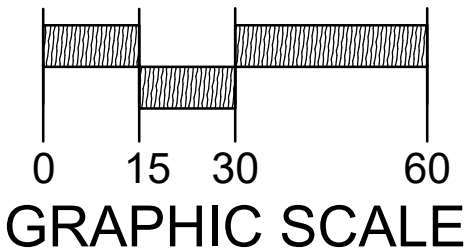
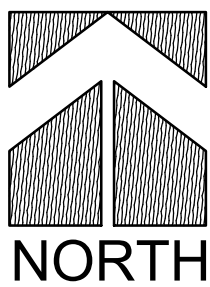
SHEET NUMBER

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PLANT SCHEDULE SOUTH

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
ABM	4	Autumn Blaze Maple	Acer freemanii 'Autumn Blaze'	2 1/2" CAL	B&B	Full, matching heads
SMM	6	State Street Miyabei Maple	Acer miyabei 'Morton' TM	2 1/2" CAL	B&B	Full, matching heads
CHH	10	Chicagoland Hackberry	Celtis occidentalis 'Chicagoland'	2 1/2" CAL	B&B	Full, matching heads
SKH	12	Street Keeper Honey Locust	Gleditsia triacanthos 'Draves'	2 1/2" CAL	B&B	Full, matching heads
DECIDUOUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
SDN	18	Nikko Slender Deutzia	Deutzia gracilis 'Nikko'	15" HT	CONT.	
AWS	25	Anthony Waterer Spiraea	Spiraea x bumalda 'Anthony Waterer'	15" HT	CONT.	
EVERGREEN SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PJC	6	Kallay Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'	18" SPD	CONT.	

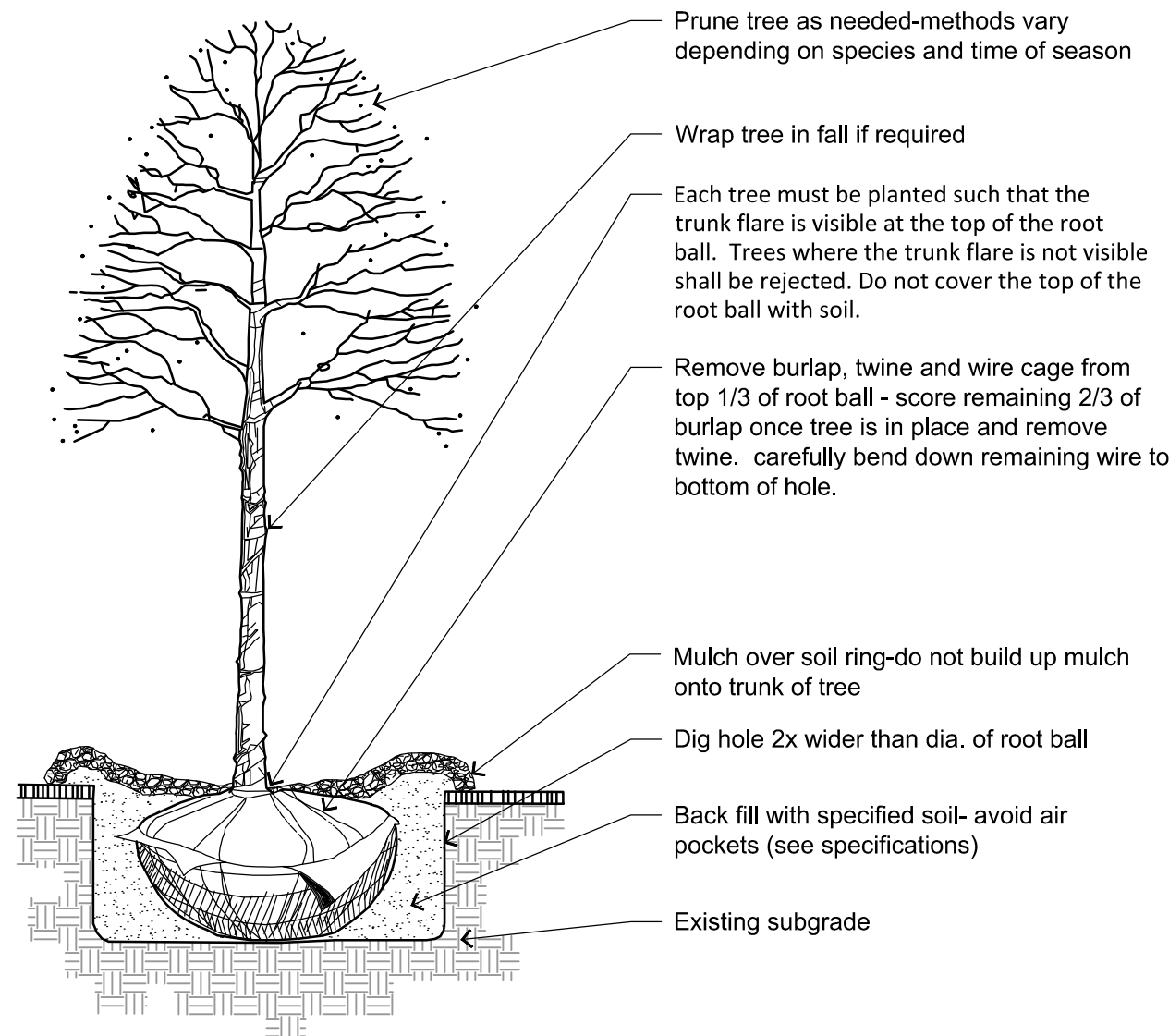


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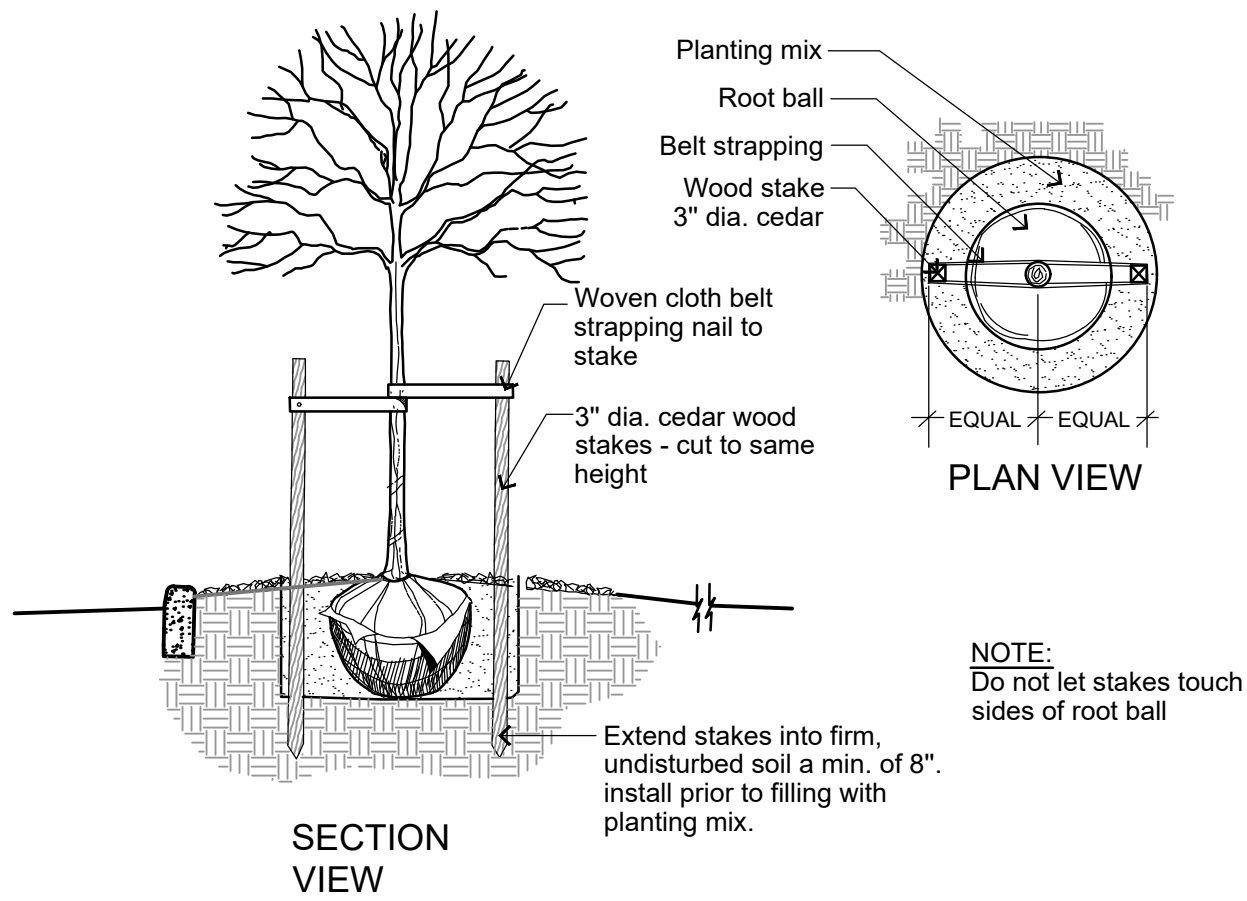
GENERAL LANDSCAPE NOTES

- Contractor responsible for contacting public and private underground utility locating service to have site marked prior to any digging or earthwork.
- Contractor to verify all plant quantities shown on plant list and verify with plan. Report any discrepancies immediately to general contractor.
- All plantings shall comply with standards as described in American Standard of Nursery Stock - ANSI Z60.1 (latest version). General contractor or owner's representative reserves the right to inspect and potentially reject any plants that are inferior, compromised, undersized, diseased, improperly transported, installed incorrectly or damaged.
- Any potential plant substitutions must be submitted in writing and approved by the general contractor or owner's representative prior to installation. All plants must be installed as per sizes shown on plant material schedule, unless approved by general contractor or owner's representative.
- All seeded areas and planting beds require topsoil to be placed within 3" of finish grade during rough grading operations. All parking lot islands require topsoil placed to a minimum depth of 18" to insure long term plant health. These requirements should be coordinated between the general contractor, grading contractor and landscape contractor.
- Tree planting (see planting detail):
Plant all trees slightly higher than finished grade at root flare. Remove excess soil from top of root ball, if needed Scarify side walls of tree pit prior to installation. Remove and discard non-biodegradable ball wrapping and support wire. Remove biodegradable burlap and wire cage (if applicable) from top one-third of rootball. Carefully bend remaining wire down to the bottom of hole once the tree has been placed into the hole and will no longer be moved. Score the remaining two-thirds of burlap and remove twine. Backfill pit with 80% existing soil removed from excavation and 20% plant starter mix blended prior to backfilling holes. Discard any gravel, heavy clay or stones. Avoid any air pockets and do not tamp soil down. When hole is two-thirds full, trees shall be watered thoroughly, and water left to soak in before proceeding.
Provide a 3" deep, 4 ft. diameter shredded hardwood bark mulch ring around all lawn trees. Do not build up any mulch onto trunk of any tree. Trees that are installed incorrectly will be replaced at the time and expense of the landscape contractor. Stake trees according to the staking detail.
- Shrub planting: all shrubs to be pocket planted with a 50/50 mix of plant starter and topsoil. Install topsoil into all plant beds as needed to achieve proper grade and replace undesirable soil (see planting detail). Remove all excessive gravel, clay and stones from plant beds prior to planting. When hole is two-thirds full, shrubs shall be watered thoroughly and water left to soak in before proceeding.
- Mulching: all tree and shrub planting beds to receive a 3" deep layer of high quality shredded hardwood bark mulch (not enviromulch). All perennial planting areas to receive a 2" layer and groundcover areas a 1-2" layer of the same mulch. Do not mulch annual flower beds (if applicable). Do not allow mulch to contact plant stems and tree trunks.
- Edging: edge all planting beds with a 4" deep spaded edge (shovel cut or mechanical). Bedlines are to be cut crisp, as per plan. A clean definition between lawn area and plant bed is required.
- Plant bed preparation: all perennial, ornamental grass, annual and groundcover areas are required to receive a blend of organic soil amendments prior to installation. Rototill the following materials, at the ratio given, into the required 18" of topsoil to a depth of approx. 6":
Per every 100 square feet of bed area add:
2 cu. ft. bale of peat moss
2 lbs. of 5-10-5 slow release fertilizer
1/4 cu. yard of composted manure
- Lawn installation for all seeded turfgrass areas: remove / kill off any existing unwanted vegetation prior to seeding. Prepare the topsoil and seed bed by removing all surface stones 1" or larger and grading lawn areas to finish grade. Apply a starter fertilizer and specified seed uniformly and provide mulch covering suitable to germinate and establish turf. Provide seed and fertilizer mix information to general contractor prior to installation. Erosion control measures are to be used in swales and on steep grades, where applicable. Methods of installation may vary at the discretion of the landscape contractor on his/her responsibility to establish and guarantee a smooth, uniform, quality turf. A minimum depth of 3" of blended, prepared and non-compacted topsoil is required for all lawn areas. If straw mulch is used as a mulch covering, a tackifier may be necessary to avoid wind damage. Marsh hay containing weed canary grass is not acceptable as a mulch covering.
An acceptable quality turf is defined as having no more than 10% of the total area with bare spots larger than 1 square foot and uniform coverage throughout all turf areas.
- Seed mix for lawn areas - use only a premium quality seed mix installed at recommended rates. Premium blend seed mix example (or equivalent): 50% blended bluegrass, 25% creeping red fescue, 25% perennial rye applied at 5 lbs per 1,000 SF. Provide seed specifications to general contractor prior to installation.
- Warranty and replacements: Trees, evergreens, and shrubs to be guaranteed (100% replacement) for a minimum of one (1) year from the date of substantial project completion. Perennials, groundcovers, and ornamental grasses to be guaranteed for a minimum of one growing season from the date of substantial project completion. Perennials, groundcovers, and ornamental grasses planted after September 1st shall be guaranteed through May 31st of the following year. Only one replacement per plant will be required during the warranty period, except for losses or replacements due to failure to comply with specified requirements.
- The landscape contractor is responsible for the watering and maintenance of all landscape areas at time of planting and throughout construction until the substantial completion of the installation and acceptance by the owner. This includes all trees, shrubs, evergreens, perennials, ornamental grasses and turf grass. Work also includes weeding, edging, mulching (only if required), fertilizing, trimming, sweeping up grass clippings, pruning and deadheading.
- Project completion: upon substantial completion of the project, the landscape contractor is responsible to conduct a final review with the owner's representative and the general contractor to answer questions and insure that all specifications have been met. The landscape contractor is to provide watering and general ongoing maintenance instructions (in writing) for the new plantings and lawn to the owner and general contractor.

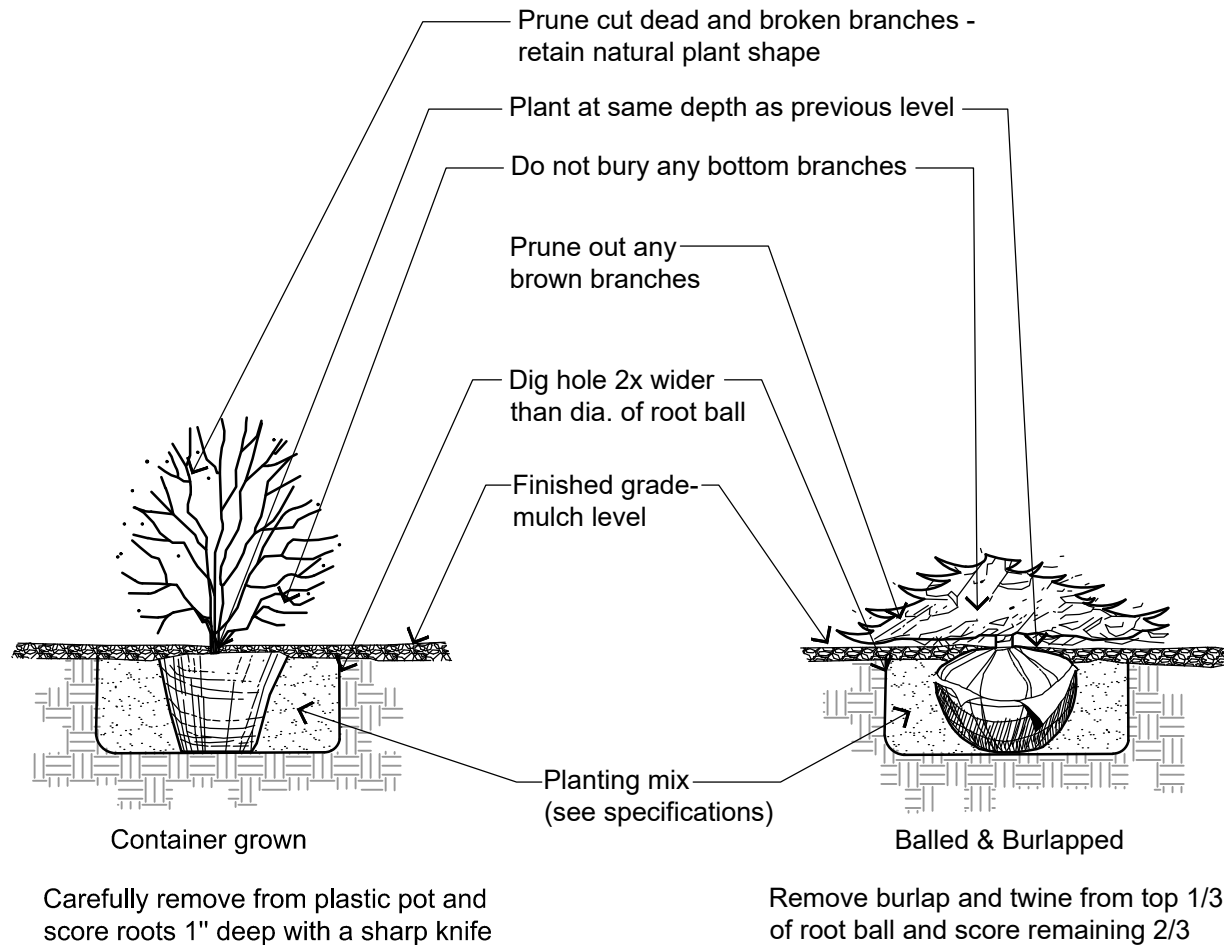
GENERAL LANDSCAPE DETAILS



1 DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



2 DECIDUOUS TREE STAKING FOR RESTRICTED AREAS
NOT TO SCALE P-PL-TREE-DEC-01



3 SHRUB PLANTING DETAIL
NOT TO SCALE

WEST TOWNE MALL REDEVELOPMENT

CITY OF MADISON, WI

LANDSCAPE PLAN
SOUTH

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: 1" = 30'

JOB NO. 3190329

PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: NJW

CHECKED BY: CNS

SHEET NUMBER

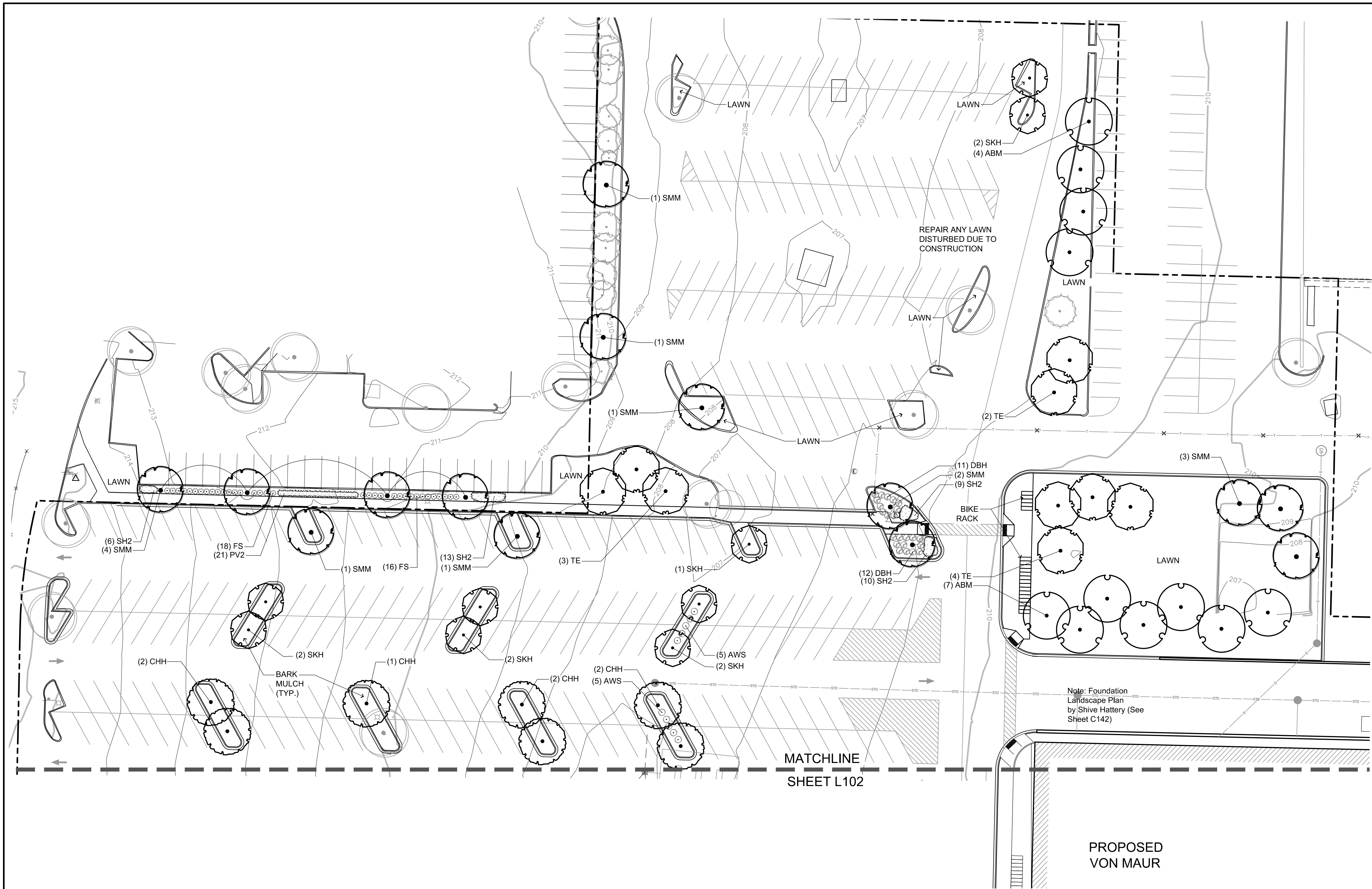
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CITY OF MADISON
LANDSCAPE WORKSHEET
Section 28.142 Madison General Ordinance

Project Location / AddressWest Towne Mall, Madison, WI

Name of ProjectWest Towne Mall Redevelopment

Owner / ContactKen Wittler

Contact Phone423-490-8385

Contact EmailKen.wittler@cblproperties.com

**** Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size MUST be prepared by a registered landscape architect. ****

Applicability
The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless all of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

(a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.

(b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.

(c) No demolition of a principal building is involved.

(d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

Landscape Calculations and Distribution
Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot. There are three methods for calculating landscape points depending on the size of the lot and Zoning District.

(a) For all lots except those described in (b) and (c) below, five (5) landscape points shall be provided for each three hundred (300) square feet of developed area.

Total square footage of developed area _____

Total landscape points required _____

(b) For lots larger than five (5) acres, points shall be provided at five (5) points per three hundred (300) square feet for the first five (5) developed acres, and one (1) point per one hundred (100) square feet for all additional acres.

Total square footage of developed area 308,011 SF

Five (5) acres = 217,800 square feet

First five (5) developed acres = 3,630 points

Remainder of developed area 90,211 SF

Total landscape points required 4533

(c) For the Industrial - Limited (I1) and Industrial - General (IG) districts, one (1) point shall be provided per one hundred (100) square feet of developed area.

Total square footage of developed area _____

Total landscape points required _____

10/2013

1

* Landscape points from building foundation landscape plan (by others)						
Tabulation of Points and Credits						
Use the table to indicate the quantity and points for all existing and proposed landscape elements.						
Plant Type/Element	Minimum Size at Installation	Points	Credits/ Existing Landscaping		New/ Proposed Landscaping	
			Quantity	Points Achieved	Quantity	Points Achieved
Overstory deciduous tree	2½ inch caliper measured diameter at breast height (dbh)	35	13	455	78 * 3	2730 * 105
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35	4	140	* 6	* 210
Ornamental tree	1 1/2 inch caliper	15	6	90	* 2	* 30
Upright evergreen shrub (i.e. arborvitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12"-24"	3	1	3	68 * 64	204 * 192
Shrub, evergreen	#3 gallon container size, Min. 12"-24"	4			8	32
Ornamental grasses/perennials	#1 gallon container size, Min. 8"-18"	2			10 * 232	20 * 464
Ornamental/decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 ½ inch caliper dbh. *Trees must be within developed area and cannot comprise more than 30% of total required points.	14 per caliper inch dbh. Maximum points per tree: 200				
Landscape furniture for public seating and/or transit connections	* Furniture must be within developed area, publicly accessible, and cannot comprise more than 5% of total required points.	5 points per "seat"				
Sub Totals				688		3987
Total Number of Points Provided 4675						
* As determined by ANSI, ANLA- American standards for nursery stock. For each size, minimum plant sizes shall conform to the specifications as stated in the current American Standard for Nursery Stock.						
10/2013			2			

PLANT SCHEDULE NORTH

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
ABM	11	Autumn Blaze Maple	Acer freemanii 'Autumn Blaze'	2 1/2" CAL	B&B	Full, matching heads
SMM	14	State Street Miyabei Maple	Acer miyabei 'Morton' TM	2 1/2" CAL	B&B	Full, matching heads
CHH	7	Chicagoland Hackberry	Celtis occidentalis 'Chicagoland'	2 1/2" CAL	B&B	Full, matching heads
SKH	9	Street Keeper Honey Locust	Gleditsia triacanthos 'Draves'	2 1/2" CAL	B&B	Full, matching heads
TE	9	Triumph Elm	Ulmus x 'Morton Glossy' TM	2 1/2" CAL	B&B	Full, matching heads
DECIDUOUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
DBH	23	Dwarf Bush Honeysuckle	Diervilla lonicera	15" HT	CONT.	
AWS	10	Anthony Waterer Spiraea	Spiraea x bumalda 'Anthony Waterer'	15" HT	CONT.	
FS	34	Froebel Spirea	Spiraea x bumalda 'Froebeli'	15" HT	CONT.	
ORNAMENTAL GRASSES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PV2	21	Cheyenne Sky Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 GAL	POT	18" Spacing
SH2	38	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	1 GAL	POT	18" Spacing

LANDSCAPE CALCULATIONS

Total Site area 308,011 SF

Landscape Calculations and distribution (see Madison worksheet for calculations)

Total Developed Area: 308,011 SF

REQUIRED: 4,533 points

PROVIDED: 4,675 points

5) Development Frontage Landscape

NA

6) Interior Parking Lot Landscaping

for changes to a developed site a minimum of 5% of paving shall be landscape islands & strips & peninsulas

REQUIRED: 5% of 308,011 = 15,401 SF landscape

PROVIDED: 20,174 SF

1 overstory deciduous tree for very 160 SF required landscape area (2 ornamental trees equivalent to 1 overstory tree)

REQUIRED: 15,401 SF / 160SF = 97 trees

PROVIDED: Existing: 13 overstory deciduous trees and 6 ornamental trees (equal to 3 overstory trees)

Proposed: : 78 overstory trees in parking lot & 3 overstory trees in foundation planting

7) Foundation Plantings

Foundation planting by others

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DESCRIPTION

DATE

01/28/2020 BID SET

02/04/2020 SIDEWALK REVISION

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Brookfield, WI 53005-5938
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raSmith
CREATIVITY BEYOND ENGINEERING

Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA

WEST TOWNE MALL REDVELOPMENT

CITY OF MADISON, WI

LANDSCAPE PLAN

NORTH

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: 1" = 30'

JOB NO. 3190329

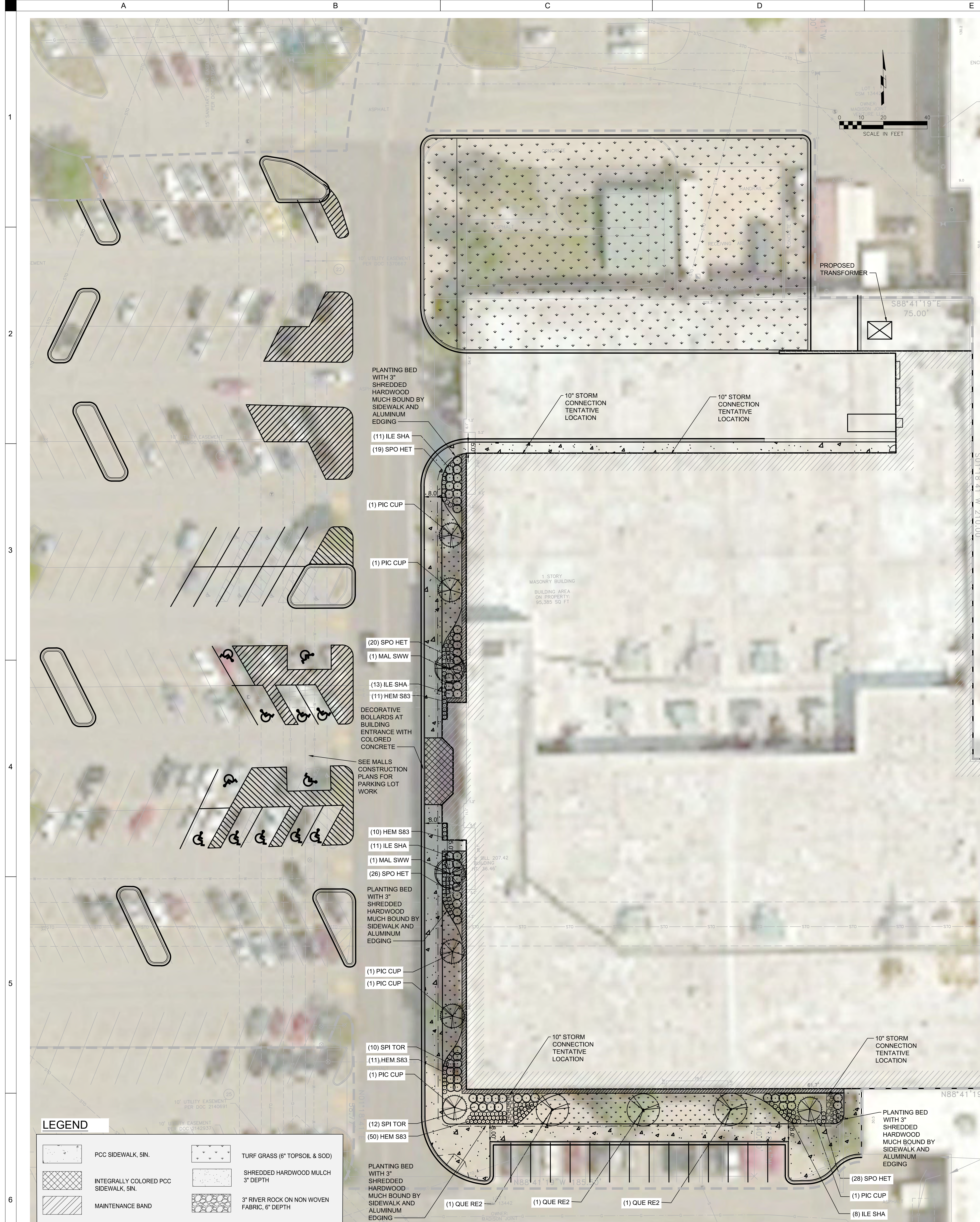
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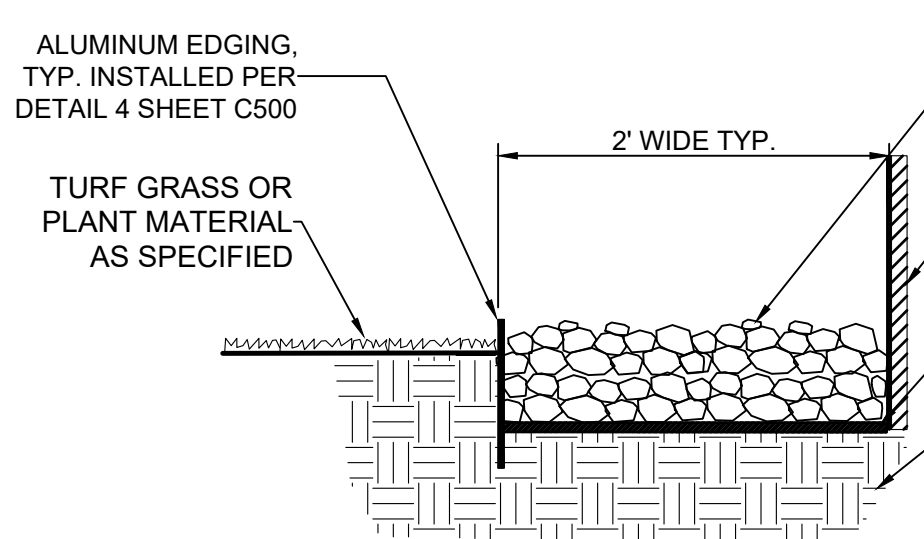
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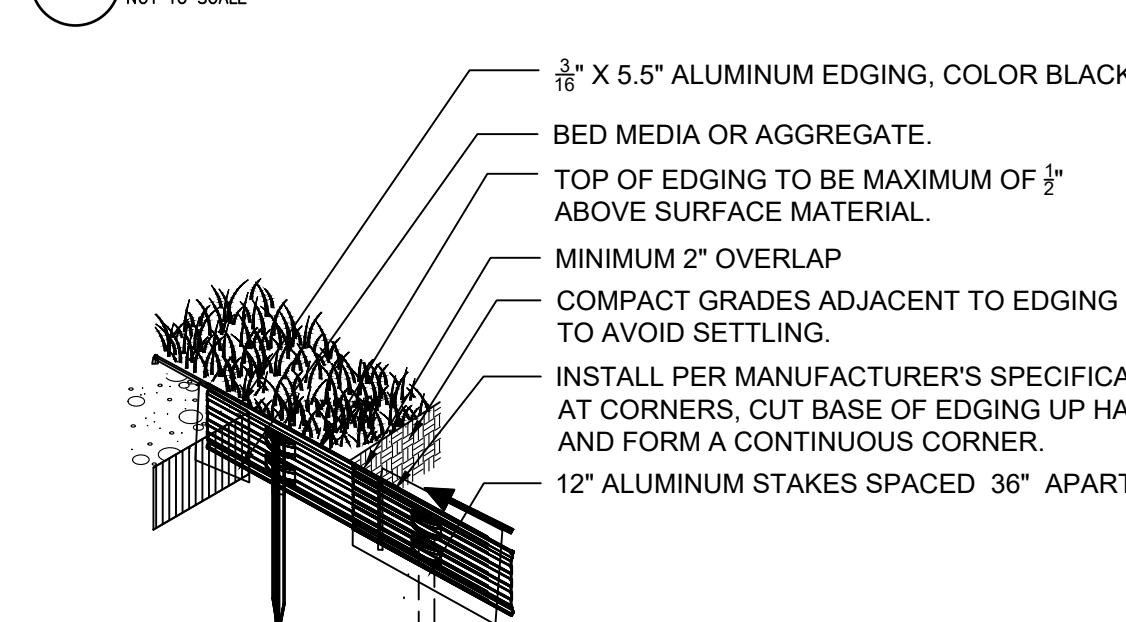
LEGEND				
	PCC SIDEWALK, 5IN.		TURF GRASS (6" TOPSOIL & SOD)	
	INTEGRALLY COLORED PCC SIDEWALK, 5IN.		SHREDDED HARDWOOD MULCH 3" DEPTH	
	MAINTENANCE BAND		3" RIVER ROCK ON NON WOVEN FABRIC, 6" DEPTH	

PLANT SCHEDULE				
DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT SIZE
MAL SSW	2	Malus x 'JFS KW213MM' TM	Raspberry Spire Crabapple	3" Cal
QUE RE2	3	Quercus x warei 'Regal Prince'	Regal Prince Oak	3" Cal
EVERGREEN TREES	QTY	BOTANICAL NAME	COMMON NAME	ROOT SIZE
PIC CUP	6	Picea abies 'Cupressina'	Norway Spruce	8-10" HT
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	ROOT SIZE
ILE SHA	42	Ilex glabra 'Shamrock'	Indeberry	3 gal
SPI TOR	22	Spiraea betulifolia 'Tor'	Birchleaf Spirea	3 gal
ORNAMENTAL GRASSES	QTY	BOTANICAL NAME	COMMON NAME	ROOT SIZE
SPO HET	81	Sporobolus heterolepis	Prairie Dropseed	1 gal
PERENNIALS	QTY	BOTANICAL NAME	COMMON NAME	ROOT SIZE
HEM S83	52	Hemerocallis x 'Stella D' Oro'	Stella D' Oro Daylily	1 gal

C7 MAINTENANCE BAND



E7 TYPICAL SPADE EDGE AND MULCH DETAIL



D7 ALUMINUM EDGING

GENERAL NOTES

- THE LOCATIONS OF UTILITY MAINS, STRUCTURES, AND SERVICE CONNECTIONS PLOTTED ON THIS DRAWING ARE APPROXIMATE ONLY AND WERE OBTAINED FROM RECORDS MADE AVAILABLE TO SHIVE-HATTERY, INC. THERE MAY BE OTHER EXISTING UTILITY MAINS, STRUCTURES, AND SERVICE CONNECTIONS NOT KNOWN TO SHIVE-HATTERY, INC. AND NOT SHOWN ON THIS DRAWING.
- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR LIAISON WITH OWNERS OF EXISTING FACILITIES ENCOUNTERED DURING THE CONSTRUCTION.
- CALL MISS DIG (ONE CALL) AT 811 OR 1-800-482-7171 A MINIMUM OF 3 BUSINESS DAYS PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITIES SHALL BE PROTECTED BY THE CONTRACTOR DURING THE PROGRESS OF THE WORK. SUCH PROTECTION SHALL ALLOW THE UTILITIES TO REMAIN IN CONTINUOUS OPERATION. ANY UTILITY DAMAGED BY THE CONTRACTOR DURING THE COURSE OF THE WORK SHALL BE REPAIRED AT THEIR EXPENSE.
- ANY CONSTRUCTION NOT SPECIFICALLY DETAILED OR SPECIFIED IN THESE CONSTRUCTION DOCUMENTS OR THE CITY OF ROCHESTER HILLS SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.
- NO TOPOGRAPHIC SURVEY HAS BEEN PERFORMED. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL DISTURBED AREAS HAVE POSITIVE DRAINAGE AND ALL PAVEMENT SLOPES ARE IN CONFORMANCE WITH THE AMERICAN WITH DISABILITIES ACT (ADA).
- THE CONTRACTOR SHALL CONDUCT THE WORK IN A MANNER THAT WILL CAUSE A MINIMUM INTERRUPTION TO TRAFFIC. THE CONTRACTOR SHALL POST MUTUAL SIGNAGE INDICATING ANY TEMPORARY STREET CLOSURES OR DETOURS.
- IF IT IS NECESSARY DURING CONSTRUCTION TO INTERRUPT OR OBSTRUCT NATURAL DRAINAGE OF THE SURFACE, OR THE FLOW OF ARTIFICIAL DRAINS, THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE FACILITIES DURING PROGRESS OF THE WORK AT HIS EXPENSE THAT WILL PREVENT DAMAGE TO PUBLIC AND PRIVATE INTERESTS AND SHALL RESTORE THE ORIGINAL DRAINS AT HIS OWN EXPENSE AS THE WORK WILL PERMIT. THE CONTRACTOR SHALL BE LIABLE FOR ALL DAMAGES WHICH MAY RESULT FROM HIS NEGLIGENCE TO PROVIDE FOR EITHER NATURAL OR ARTIFICIAL DRAINAGE WHICH THE WORK MAY HAVE INTERRUPTED.
- CONSTRUCTION NOT SPECIFICALLY DETAILED OR SPECIFIED WITHIN THE PLANS OR IN THE PROJECT MANUAL SHALL CONFORM TO THE CITY OF MADISON, WISCONSIN ENGINEERING DESIGN STANDARDS AND THE RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (TEN STATE STANDARDS), LATEST EDITION.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY SITE/UTILITY PERMITS, INCLUDING ANY FEES.
- CONTRACTOR IS REQUIRED TO MAINTAIN POSITIVE DRAINAGE ON THE SITE THROUGHOUT THE PROJECT DURATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ADJACENT AREAS FREE FROM DEBRIS GENERATED BY THE CONSTRUCTION DURING REMOVAL AND CONSTRUCTION. CONTRACTOR SHALL USE ALL MEANS NECESSARY TO CONTROL DUST SPREADING FROM WORK AND STAGING AREAS.
- ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF OFF-SITE IN FULL COMPLIANCE WITH CURRENT ENVIRONMENTAL REGULATIONS.
- PROTECT ADJACENT PROPERTY DURING CONSTRUCTION. PROTECT EXISTING UTILITIES WHICH ARE TO REMAIN.
- SAWCUT EDGES OF PAVEMENT FULL DEPTH PRIOR TO REMOVAL TO PREVENT DAMAGE TO ADJACENT SLABS AND FUTURE.
- CONTRACTOR SHALL PROVIDE A FINISHING PLAN FOR OWNER APPROVAL PRIOR TO BEGINNING CONCRETE SITE WORK.
- ALL CONCRETE PAVING SHALL RECEIVE A BROOM FINISH.

SITE AND LANDSCAPE PLANTING NOTES

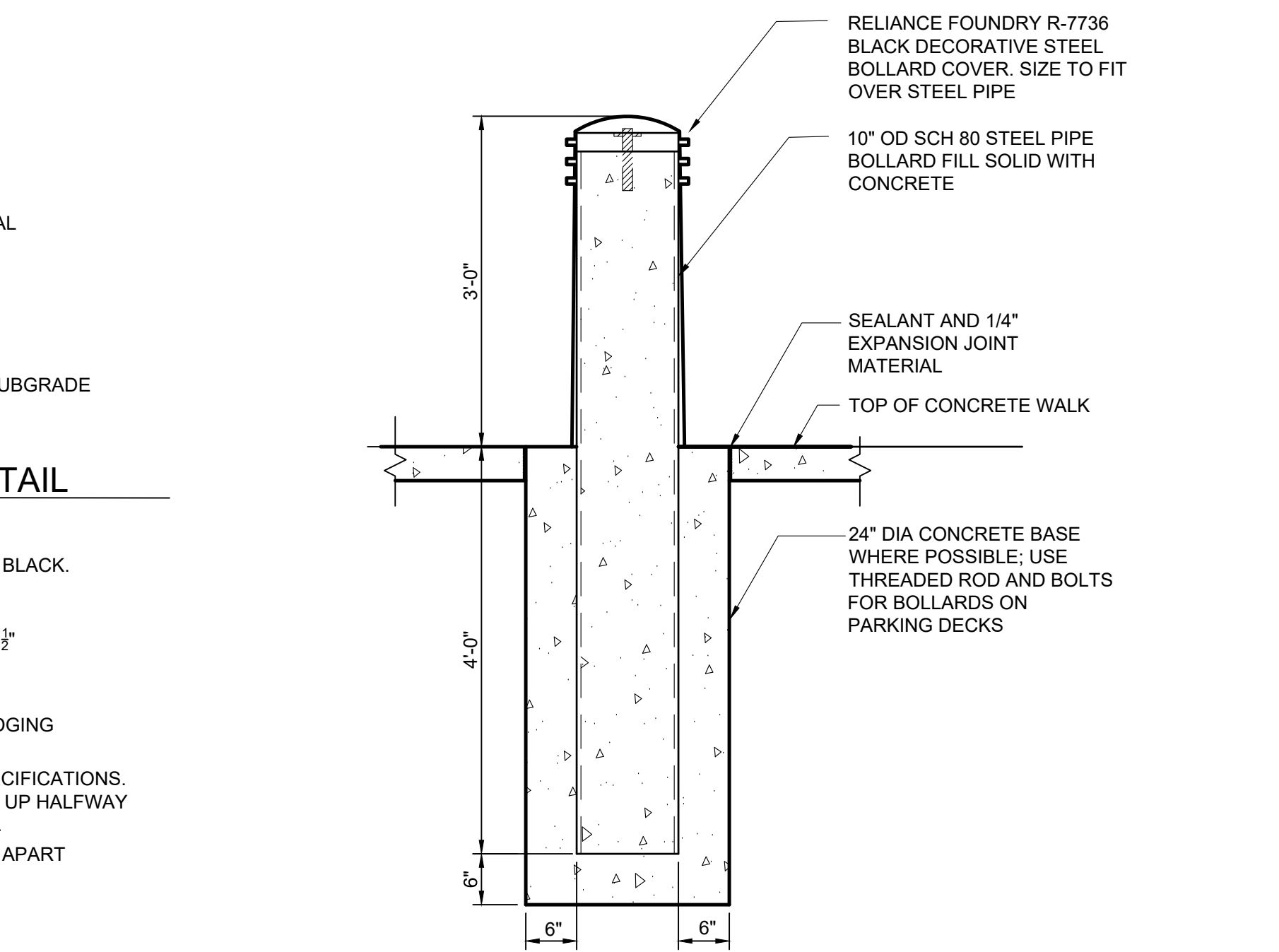
- CONTRACTOR SHALL VERIFY THE LOCATION AND PROTECT UTILITIES AND STRUCTURES PRIOR TO PLANT INSTALLATION. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE IMMEDIATELY REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.
- PLANT MATERIAL SHALL MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1 - LATEST EDITION).
- NO PLANT MATERIAL SHALL BE SUBSTITUTED WITHOUT THE AUTHORIZATION OF OWNER'S REPRESENTATIVE, INCLUDING PLANT TYPE AND SIZE OF INSTALLED PLANT MATERIALS.
- CONTRACTOR TO COORDINATE SELECTION OF PLANTS WITH OWNER PRIOR TO PURCHASE AND INSTALLATION. CONTRACTOR TO ARRANGE FOR OWNER TO VERIFY PLANTS SELECTION PRIOR TO PURCHASE AND INSTALLATION BY IN FIELD NURSERY SUPPLIER VISIT OR PHOTOGRAPHS REQUESTED BY OWNER OR OWNER'S REPRESENTATIVE.
- PRUNE PLANT MATERIAL TO REMOVE DEAD OR DAMAGED BRANCHES. MAKE ALL CUTS AT BRANCH COLLAR. MAINTAIN THE NATURAL HABIT, SHAPE AND SPECIFIED SIZE OF PLANT MATERIAL.
- ALL SINGLE STEM DECIDUOUS TREES SHALL BE WRAPPED FROM THE GROUND LINE UP TO AND INCLUDING THE CROTCH FORMED BY THE FIRST MAJOR BRANCH. WRAPPING SHALL BE DONE AFTER THE PLANT HAS BEEN INSTALLED.
- REMOVE ALL TAGS, LABELS, ETC. ON PLANT MATERIAL AFTER PLANT MATERIALS HAVE BEEN INSTALLED AND APPROVED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LEGAL DISPOSAL OF EXCESS SOIL, PACKING MATERIAL, BURLAP, TRIMMINGS AND OTHER DEBRIS ASSOCIATED WITH THE PLANTING OPERATION. PAVED SURFACES SHALL BE BROOM CLEAN. CLEAN UP WORK SHALL BE CONSIDERED INCIDENTAL TO THE WORK.
- SHOP DRAWINGS AND OR SUBMITTALS SHALL BE RECEIVED FOR ALL PLANT MATERIALS AND LANDSCAPE MATERIALS TO BE VERIFIED AND APPROVED BY OWNER AND OR OWNER'S REPRESENTATIVE PRIOR TO ORDERING AND INSTALLATIONS.
- THE CONTRACTOR SHALL PROVIDE COLOR SAMPLES AND A FIELD SAMPLE 3' x 3' FIELD SAMPLE OF INTEGRALLY COLORED PCC SIDEWALK FOR OWNER APPROVAL PRIOR TO INSTALLATION. COLORED CONCRETE SHALL BE INSTALLED, SEALED, AND COVERED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE LANDSCAPE PLANTING AREAS, AND LANDSCAPE ELEMENTS WITH UTILITIES AND ELECTRICAL AS NECESSARY. ANY DISCREPANCIES SHALL BE MADE AWARE TO THE OWNER FOR OWNER OR OWNER REPRESENTATIVE APPROVAL PRIOR TO ANY ADJUSTMENTS.
- LANDSCAPED AREAS, INCLUDING TURF AREAS, SHALL RECEIVE A MINIMUM OF SIX INCHES OF TOPSOIL.
- LANDSCAPED BEDS SHALL BE TOPPED WITH A MINIMUM OF THREE INCHES OF HARDWOOD MULCH.
- PLANTING WITHIN THE PARKING LOT ISLANDS SHALL REMAIN.
- CONTRACTOR SHALL REMOVE LANDSCAPE AS MINIMUM REQUIRED FOR ROCK CHANNELS AND NEW PCC SIDEWALK CONNECTIONS.
- LANDSCAPE PLANTING AREAS SHALL BE BOUND BY BLACK ALUMINUM EDGING OR BY SIDEWALK PAVEMENT.
- LANDSCAPED AREAS THAT ARE TO REMAIN SHALL BE TOP DRESSED WITH 2" SHREDDED HARDWOOD MULCH AND BE BOUND BY BLACK ALUMINUM EDGING.
- EXISTING TREES THAT ARE TO REMAIN SHALL BE TOP DRESSED WITH 2" SHREDDED HARDWOOD MULCH AND CLEAN SPADE CUT EDGE.
- AREAS INTENDED TO RECEIVE RIVER ROCK SHALL BE ATOP NON WOVEN FABRIC AND BE BOUND BY BLACK ALUMINUM EDGING.

MAINTENANCE NOTES

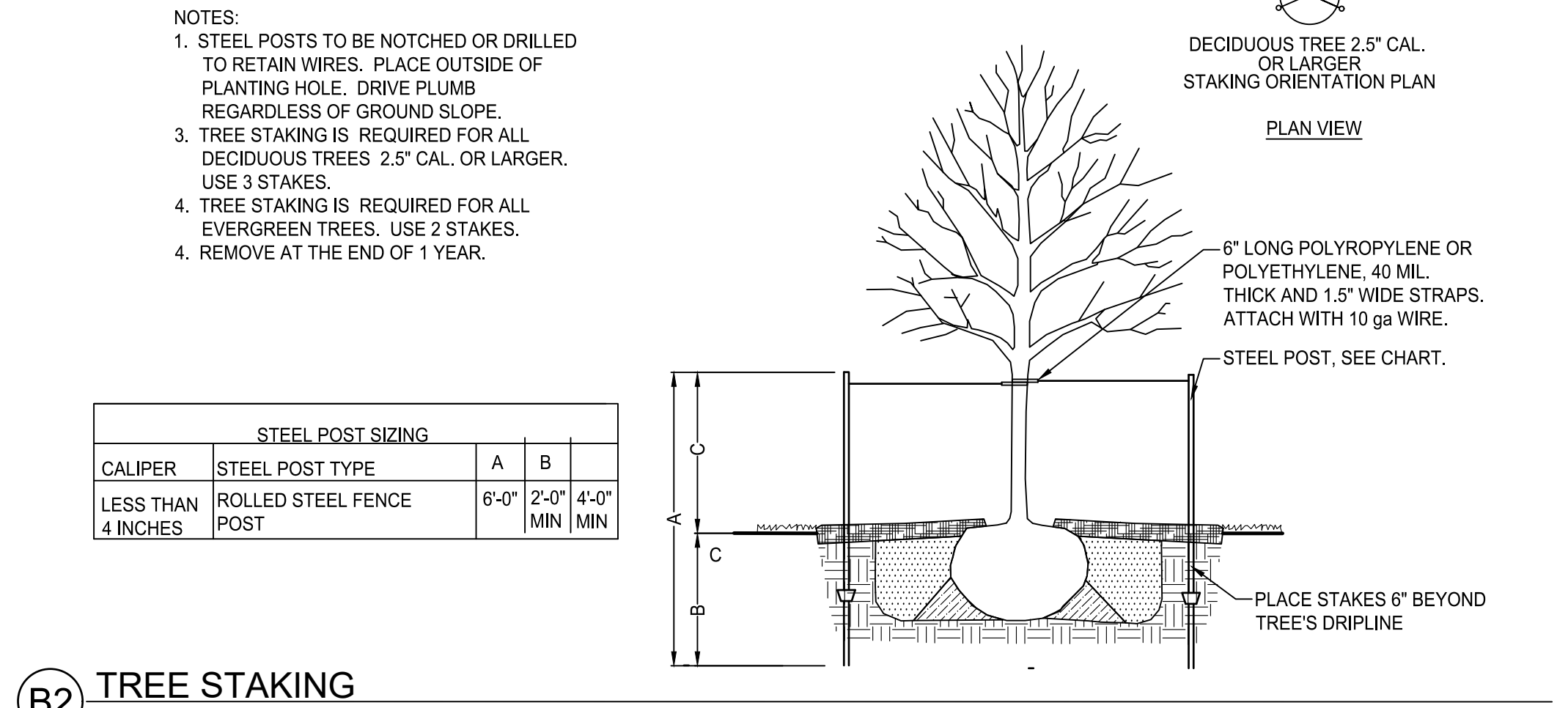
- CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR A PERIOD OF ONE YEAR FROM DATE OF INITIAL ACCEPTANCE.
- MAINTENANCE OF PLANTS SHALL COMMENCE IMMEDIATELY AND CONTINUE UNTIL ACCEPTANCE OF THE WORK. PROVIDE A DETAILED WRITTEN RECOMMENDED MAINTENANCE PROGRAM TO THE OWNER PRIOR TO ACCEPTANCE OF THE WORK. MAINTENANCE PERFORMED BY THE OWNER IN ACCORDANCE WITH THE RECOMMENDED PROGRAM SHALL NOT AFFECT THE CONTRACTOR'S OBLIGATION TO GUARANTEE AND REPLACE DEFECTIVE PLANT MATERIAL.

IRRIGATION NOTES

- CONTRACTOR SHALL PROVIDE A ZONED IRRIGATION SYSTEM CAPABLE OF FULLY IRRIGATING THE LANDSCAPED AREAS ALONG THE WEST AND SOUTH FACE OF THE BUILDING IN ACCORDANCE WITH THE FOLLOWING NOTES, INCLUDING PROVIDING A NEW CONTROLLER MOUNTED TO THE EXTERIOR OF THE BUILDING AT THE IRRIGATION WATER SERVICE CONNECTION. THAT IRRIGATION WATER SERVICE CONNECTION LOCATION TO BE DETERMINED, WILL BE PROVIDED BY OTHERS AND WILL INCLUDE A BACKFLOW PREVENTER WITHIN THE BUILDING AND A 1" SERVICE LINE EXTENDING OUTSIDE OF THE BUILDING APPROXIMATELY 2' BELOW GRADE.
- THIS PERFORMANCE SPECIFICATION IS MEANT TO BE A GUIDE TO FACILITATE THE DESIGN AND INSTALLATION OF AN IRRIGATION SYSTEM THAT ADDRESSES LOCAL NEEDS TO ASSURE QUALITY OF THE IRRIGATION SYSTEM. IT IS THE RESPONSIBILITY OF THE DESIGNER AND/OR INSTALLER TO INCLUDE ONLY THOSE PRACTICES THAT APPLY TO THEIR LOCAL NEEDS AND IN SUCH A WAY AS TO BE ECONOMICAL, PRACTICAL, AND SUSTAINABLE FOR MAINTAINING A HEALTHY AND FUNCTIONAL LANDSCAPE WITHOUT EXCEEDING THE WATER REQUIREMENTS OF THE LANDSCAPE.
- PROVIDE A DRAWING SHOWING PROPOSED IRRIGATION LAYOUT FOR OWNER OR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO CONSTRUCTION AND/OR INSTALLATION OF THE SYSTEM.
- TO ASSURE THAT A HIGH-QUALITY IRRIGATION SYSTEM IS DESIGNED, INSTALLED, MAINTAINED, AND MANAGED:
 - TO ENSURE THAT THE IRRIGATION SYSTEM IS DESIGNED TO EFFICIENTLY AND UNIFORMLY DISTRIBUTE WATER, AND CONSERVE AND PROTECT WATER RESOURCES, THE IRRIGATION DESIGNER SHOULD:
 - OBTAIN DIRECT KNOWLEDGE OF SITE CONDITIONS RATHER THAN RELYING SOLELY ON PLOT PLANS TO GENERATE A DESIGN.
 - MEET ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING PLUMBING AND ELECTRICAL CODES.
 - SPECIFY MANUFACTURER, MODEL, TYPE AND SIZE OF ALL COMPONENTS TO ELIMINATE AMBIGUITY AT CONSTRUCTION AND FACILITATE MANAGEMENT OF THE SYSTEM. COMPONENT SELECTION SHOULD BE BASED ON DESIGN PARAMETERS, ENVIRONMENTAL CONDITIONS AND CODE REQUIREMENTS.
 - DESIGN THE IRRIGATION SYSTEM TO MINIMIZE INSTALLATION AND MAINTENANCE PROBLEMS. SELECTION AND PLACEMENT OF SPRINKLER AND DRIP/IRRI-GATION COMPONENTS SHOULD BE GUIDED BY LARGER PLANTS' EXPECTED SIZE.
 - PROVIDE A COMPLETE IRRIGATION SYSTEM ORIENTATION TO THE OWNER OF THE SYSTEM.
 - APPLY ACCEPTED RULES OF MAXIMUM SAFE FLOW RATE FOR MUNICIPAL WATER SUPPLIERS WITH THE LOWEST SAFE FLOW RATE PREVAILING AS THE DESIGN GUIDELINE.
 - WHERE APPLICABLE, SPECIFY A WATER SOURCE THAT MEETS PEAK DEMANDS FOR LANDSCAPE WATER WITH AN IRRIGATION DURATION OF NO MORE THAN 10 HOURS PER DAY.
 - SPECIFY WATER SOURCE PROTECTION IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. WHERE NO REQUIREMENTS EXIST, ASSESS RISK AND SPECIFY AN APPROPRIATE BACKFLOW PREVENTION DEVICE.
 - SPECIFY A METERING DEVICE THAT MEASURES THE TOTAL LANDSCAPE WATER USE SEPARATE FROM OTHER USE (REQUIRED FOR COMMERCIAL INSTALLATIONS AND RECOMMENDED FOR RESIDENTIAL INSTALLATIONS).
 - FOR SYSTEMS ON A MUNICIPAL SUPPLY, ALLOW FOR A REDUCTION IN STATIC PRESSURE OF UP TO 10 PSI TO ACCOMMODATE POSSIBLE EXPANSION IN THE SUPPLY NETWORK.
 - SPECIFY PRESSURE REGULATION WHERE VARIABLE OR EXCESSIVE STATIC PRESSURE EXISTS.
 - SPECIFY THE RECOMMENDED OPERATING (WORKING) PRESSURE AT THE MAXIMUM DESIGN FLOW RATE OF THE SYSTEM.
 - FOR ZONES WITH DRIP/IRRI-GATION, SPECIFY APPROPRIATE EQUIPMENT AND TECHNIQUES.
 - SELECT COMPONENTS AND DESIGN ZONES TO ACHIEVE THE FOLLOWING MINIMUM OPERATIONAL LOWER QUARTER DISTRIBUTION UNIFORMITY (DULQ) OR EMISSION UNIFORMITY (EU).
 - TYPE OF ZONE TYPE OF UNIFORMITY MINIMUM UNIFORMITY SPRAY/DULQ 55R0TOR/DULQ 70DRIP/IRRI-GATION/EU 800
 - DESIGN THE LAYOUT OF HEADS AND OTHER EMISSION DEVICES FOR ZERO OVERSPRAY ACROSS OR onto A STREET, PUBLIC DRIVEWAY OR SIDEWALK, PARKING AREA, BUILDING, FENCE OR ADJACING PROPERTY.
 - SPECIFY ANY REQUIRED EQUIPMENT CHANGES IN A WAY THAT MEETS OR EXCEEDS THE MINIMUM DULQ, EU AND OVERSPRAY CRITERIA.
 - DESIGN SPRINKLER HEAD SPACING WITH A MINIMUM OF "HEAD-TO-HEAD" COVERAGE UNLESS NEEDED FOR WIND DEGRATING.
 - USE SEPARATE STATION ZONES (HYDROZONES) FOR AREAS WITH DISPARATE WATER OR SCHEDULING REQUIREMENTS.
 - SELECTING SYSTEM COMPONENTS TO AVOID SURFACE RUNOFF.
 - LOCATE SPRINKLER HEADS BASED ON A THOROUGH EVALUATION OF PHYSICAL, ENVIRONMENTAL AND HYDRAULIC SITE CONDITIONS, INCLUDING TYPICAL WIND CONDITIONS DURING THE NORMAL IRRIGATION PERIOD.
 - USE DRIP/IRRI-GATION WHERE APPROPRIATE TO REDUCE EVAPORATION LOSSES AND SURFACE RUNOFF, AND TO AVOID APPLYING WATER ON HARDSCAPES.
 - PROVIDE A MONTHLY IRRIGATION WATER BUDGET.
 - IN REGIONS WHERE A LANDSCAPE WATER ALLOWANCE APPLIES, INCLUDE AN ESTIMATE OF THE FUTURE MONTHLY LANDSCAPE WATER ALLOWANCE.
 - PROVIDE MONTHLY BASE IRRIGATION SCHEDULES WITH OPERATING RECOMMENDATIONS FOR EACH STATION/ZONE BASED ON APPROPRIATE CRITERIA.
 - RECOMMEND APPROPRIATE AND ECONOMICALLY FEASIBLE WATER-SAVING CONCEPTS AND EQUIPMENT.
 - A QUALIFIED IRRIGATION DESIGNER OR IRRIGATION CONSULTANT SHALL DESIGN THE SYSTEM FOR THE EFFICIENT AND UNIFORM DISTRIBUTION OF WATER BASED ON ALL APPLICABLE REGULATIONS. "QUALIFIED" MEANS CERTIFIED, FORMALLY TRAINED, LICENSED OR OTHER SIMILAR QUALIFICATION THAT MEETS STATE AND LOCAL REQUIREMENTS.
 - A QUALIFIED IRRIGATION CONTRACTOR SHALL BE SELECTED TO INSTALL THE IRRIGATION SYSTEM BASED ON VERIFIABLE EXPERIENCE AND KNOWLEDGE WITH THE DESIGNED SYSTEM AND SYSTEM COMPONENTS. THE IRRIGATION CONTRACTOR SHALL TEST THE COMPLETED SYSTEM TO VERIFY THAT THE SYSTEM OPERATES ACCORDING TO THE DESIGN CRITERIA.
 - THE LANDSCAPE ARCHITECT, IRRIGATION DESIGNER, IRRIGATION CONSULTANT, OR LOCAL WATER DISTRICT REPRESENTATIVE SHALL PERFORM ONE OR MORE SITE OBSERVATIONS DURING SYSTEM INSTALLATION TO CHECK FOR ADHERENCE TO THE DESIGN. OBSERVATION SHOULD INSPECT THE INSTALLATION OF THE BACKFLOW PREVENTION ASSEMBLY, MAIN LINE, LATERALS, VALVES, SPRINKLER HEADS, DRIP/IRRI-GATION EQUIPMENT, CONTROL WIRE, CONTROLLER, AND WATER CONSERVING DEVICES AND SHOULD ASSURE THAT THE INTENT OF THE IRRIGATION DESIGNER OR CONSULTANT HAS BEEN PRESERVED.
 - THE IRRIGATION SYSTEM SHALL BE MAINTAINED FOR ONGOING EFFICIENT PERFORMANCE BASED ON THE REQUIREMENTS OF CURRENT INDUSTRY STANDARDS.
 - THE CONTROLLER PROGRAMMING (SCHEDULING) SHALL BE MANAGED TO RESPOND TO THE CHANGING NEED FOR WATER IN THE LANDSCAPE.
 - FOLLOWING INSTALLATION OF A NEW SYSTEM, A FIELD PERFORMANCE AUDIT SHALL BE CONDUCTED USING AN INDUSTRY ACCEPTED PROCEDURE SUCH AS THE IRRIGATION ASSOCIATIONS CERTIFIED LANDSCAPE IRRIGATION AUDIT PROGRAM (OR EQUIVALENT). THE AUDIT SHALL BE SCHEDULED WITHIN A REASONABLE TIME PERIOD FOLLOWING COMPLETION OF THE INSTALLATION AND AS ESTABLISHED BY THE LOCAL WATER PROVIDER OR OTHER GOVERNING AUTHORITY. THE AUDIT SHALL CHECK THE PERFORMANCE OF THE SYSTEM FOR CONFORMANCE WITH STATE AND LOCAL REQUIREMENTS INCLUDING MEETING STANDARDS FOR THE MINIMUM PRECIPITATION RATE, LOWER QUARTER DISTRIBUTION UNIFORMITY (DULQ) AND, WHERE POSSIBLE, EMISSION UNIFORMITY FOR DRIP/IRRI-GATION SYSTEMS). IN ADDITION, THE AUDIT SHALL ALSO VERIFY THE INSTALLATION OF SPECIFIED WATER MANAGEMENT DEVICES SUCH AS A RAIN SHUTOFF DEVICE AND/OR SOIL MOISTURE SENSORS. FINALLY, THE IRRIGATION SCHEDULE SHALL BE EVALUATED TO ASSURE THAT THE IRRIGATION SYSTEM MEETS THE SUPPLEMENTAL WATER NEEDS OF THE PLANTS WITHOUT WASTING WATER.

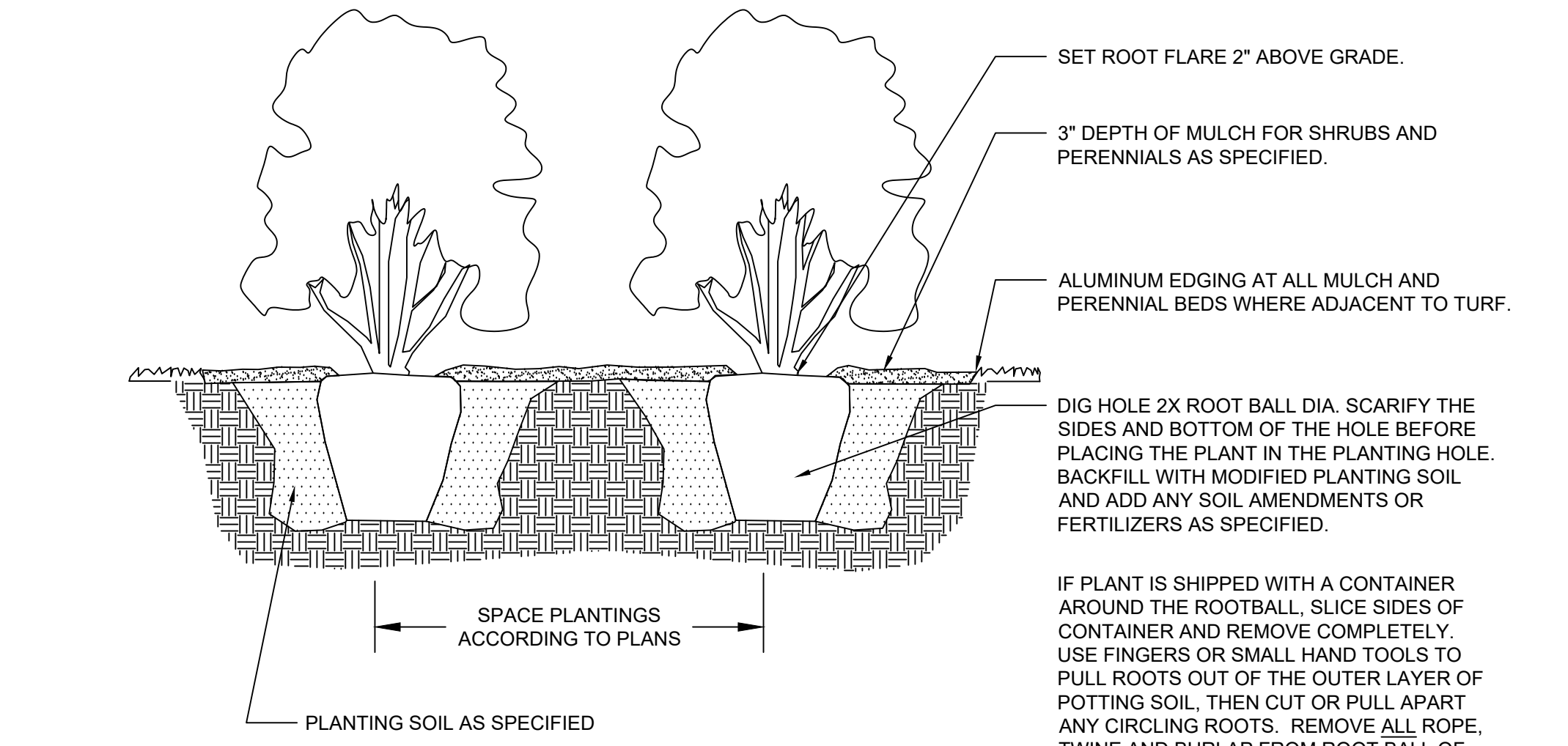


E7 DECORATIVE BOLLARD

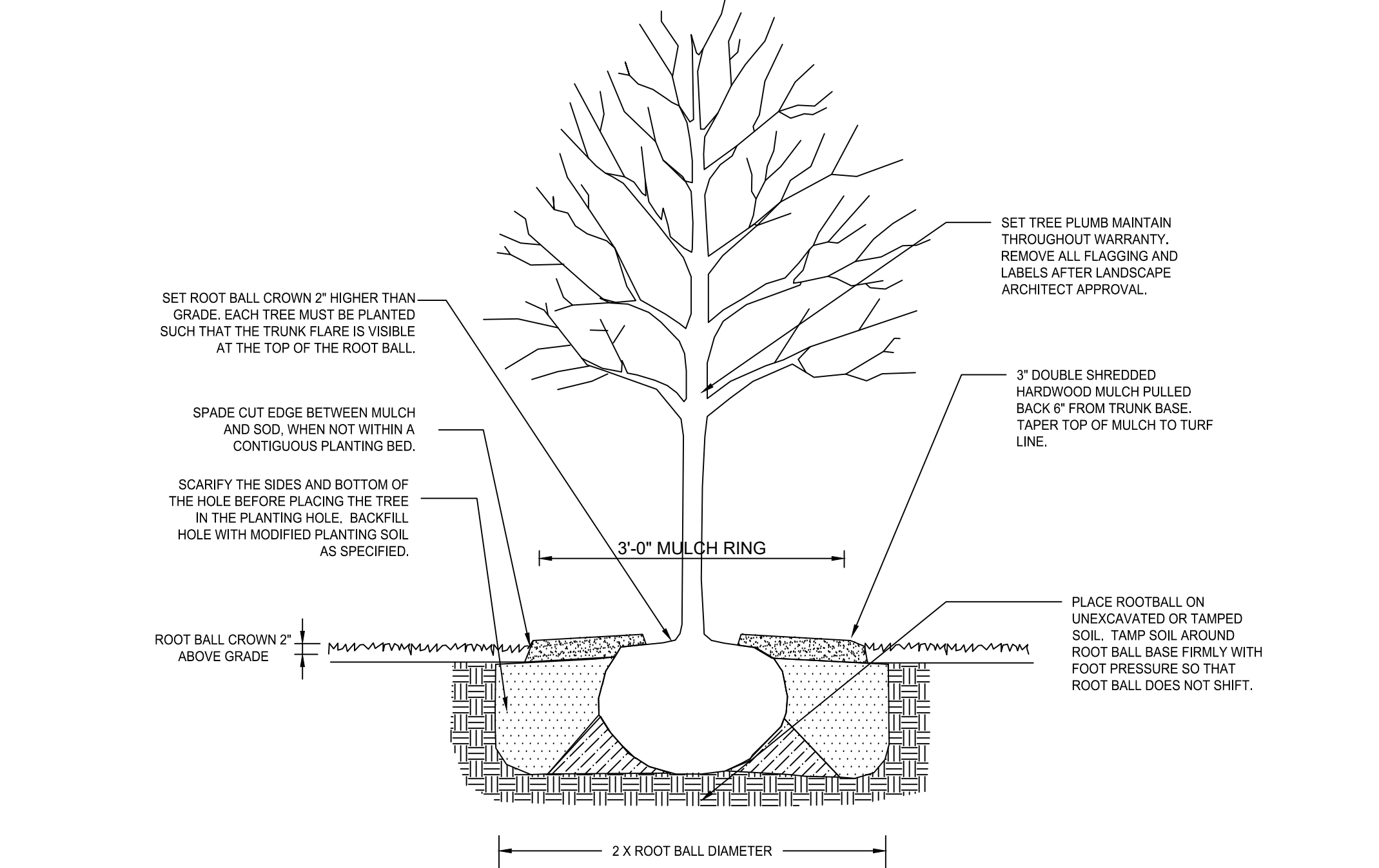


B2 TREE STAKING

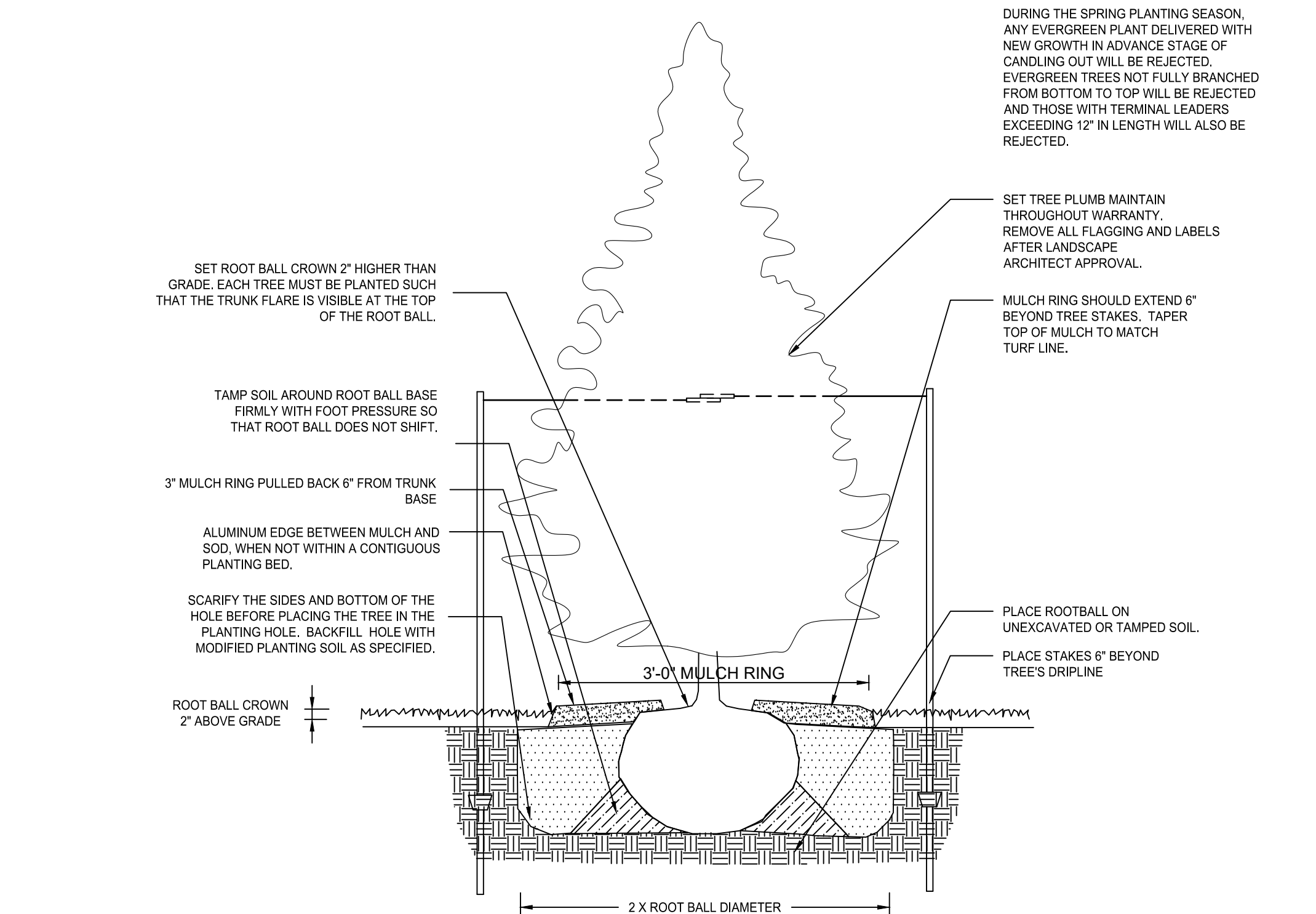
B2 ROOTBALL INSTALLATION



B4 SHRUB, ORNAMENTAL GRASSES, AND PERENNIAL PLANTING



G6 DECIDUOUS TREE PLANTING



G7 CONIFEROUS TREE PLANTING

OSQ Series

OSQ™ High Output LED Area/Flood Luminaire featuring Cree TrueWhite® Technology

Product Description

The OSQ™ High Output Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. The OSQ high output luminaire is a suitable upgrade for HID applications with one or even multiple 1000 Watt luminaires.

Applications: Auto dealerships, parking lots, campuses, facade lighting, high-mast and general site lighting applications

Performance Summary

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

NanoOptic® Precision Delivery Grid™ optic

Assembled in the U.S.A. of U.S. and imported parts

Initial Delivered Lumens: Up to 68,691

Efficacy: Up to 125 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 300K), 5700K (+/- 500K)

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed		
Backlight Shield (One pair) OSQ-HO-BLSF - Front Facing Optics OSQ-HO-BLSR - Rotated Optics	Bird Spikes OSQ-HO-BRDSK	Hand-Held Remote XA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:

Example: **Mount:** OSQ-HO-AA-SV + **Luminaire:** OSQ-HO-A-NM-2ME-40L-40K-UL-SV

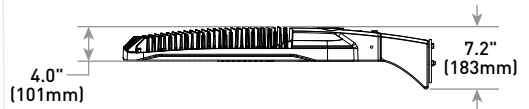
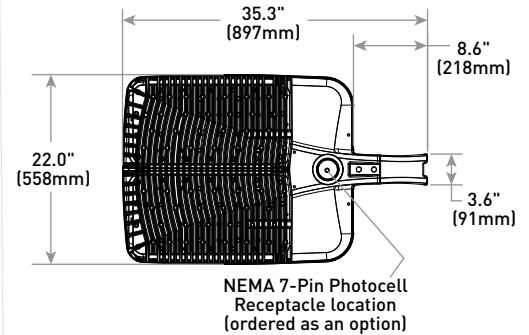
Mount (Luminaire must be ordered separately)	
OSQ-HO-	
OSQ-HO-AA Adjustable Arm OSQ-HO-DA Direct Arm	Color Options: SV Silver BK Black BZ Bronze WH White

Luminaire (Mount must be ordered separately)									
OSQ-HO	A	NM							
Product	Version	Mounting	Optic	Lumen Package**	CCT	Voltage	Color Options	Options	
OSQ-HO	A	NM No Mount	Asymmetric	40L 50L 65L	30K 3000K - 70 CRI 40K 4000K - 70 CRI 50K 5000K - 90 CRI 57K 5700K - 70 CRI	UL Universal 120-277V - All lumen packages UH Universal 347-480V - 40L & 50L lumen packages only UM Universal 208-480V - 65L lumen package only	BK Black BZ Bronze SV Silver WH White	F Fuse - When code dictates fusing, use time delay fuse - Available for U.S. applications only PML Programmable Multi-Level, up to 40° Mounting Height - Refer to PML spec sheet for details - Not available with 65L - Intended for downlight applications at 0° tilt Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output - Must select Q9, Q8, Q7, Q6, Q5, Q4, Q3, Q2, or Q1 - Not available with 65L when ordered w/R option - Offers full range adjustability - Refer to pages 13-15 for power and lumen values R NEMA® 7-Pin Photocell Receptacle - 7-pin receptacle per ANSI C136.41 - Intended for downlight applications with maximum 45° tilt - Factory connected 0-10V dim leads - 12" [305mm] seven-conductor leads exit luminaire - Photocell and shorting cap by others - Not available with 65L when ordered w/Q option RL Rotate Left - LED and optic are rotated to the left - Refer to RR/RL configuration diagram on page 11 for optic directionality RR Rotate Right - LED and optic are rotated to the right - Refer to RR/RL configuration diagram on page 11 for optic directionality	
			Symmetric	2ME* Type II Medium 3ME* Type III Medium 4ME* Type IV Medium AF* Automotive FrontlineOptic™ 5ME Type V Medium 5SH Type V Short 15D 15° Flood 25D 25° Flood 40D 40° Flood 60D 60° Flood 120D 120° Flood WSN Wide Sign					

* Available with Backlight Shield when ordered with field-installed accessory (see table above)

** Lumen Package selection codes identify approximate light output only. Actual lumen output levels vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values

DA Mount



Lumen Package	Voltage	Weight
40/50L	120-480V	70.0 lbs. [31.8kg]
65L	120-480V	72.0 lbs. [32.7kg]



Rev. Date: V6 10/18/2018



US: lighting.cree.com

T (800) 236-6800 F (262) 504-5415

Canada: www.cree.com/canada

T (800) 473-1234 F (800) 890-7507

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- Slim, low profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weathertight LED driver compartment and high-performance heat sink
- Convenient interlocking mounting method on direct arm mount. Mounting adaptor is rugged die cast aluminum and mounts to 3-6" (76-152mm) square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" (51mm) centers
- Adjustable arm that mounts to a horizontal or vertical 2" (51mm) IP, 2.375-2.50" (60-64mm) O.D. steel tenon. Tenon length must be a minimum of 3.75" (95mm)
- Adjustable arm mount can be adjusted 180° in 5.0° increments
- Includes 12" (305mm) 18/5 or 16/5 leads exiting the luminaire. When ordered with R option, 12" (305mm) 18/7 or 16/7 leads are provided
- Designed for uplight and downlight applications
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, bronze, black, and white are available
- **Weight:** See Dimension and Weight Chart on pages 1 and 12

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V, 208-480V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. For 65L SKUs with UL voltage, dimming control lines must be >1V when operated at 277V. Controls by others
- Refer to Dimming spec sheet for details
- **Maximum 10V Source Current:** 0.30mA
- **Operating Temperature Range:** -40°C to 40°C [-40° F to 104° F]

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Consult factory for CE Certified products
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 10kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- DLC and DLC Premium qualified versions available. Some exceptions apply. Please refer to <https://www.designlights.org/search/> for most current information
- OSQ-HO luminaires are enclosure rated IP66 per IEC 60598-1 when ordered without the R option
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and DA mount. Please refer to <http://darksky.org/fsa/fsa-products/> for most current information

CA RESIDENTS WARNING: Cancer and Reproductive Harm – www.p65warnings.ca.gov



Electrical Data*							
Lumen Package	System Watts 120-480V	Total Current (A)					
		120V	208V	240V	277V	347V	480V
40L	341	2.93	1.65	1.43	1.23	1.00	0.71
50L	420	3.61	2.03	1.76	1.51	1.23	0.87
65L	550	4.73	2.66	2.30	1.98	1.59	1.15

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/- 10%

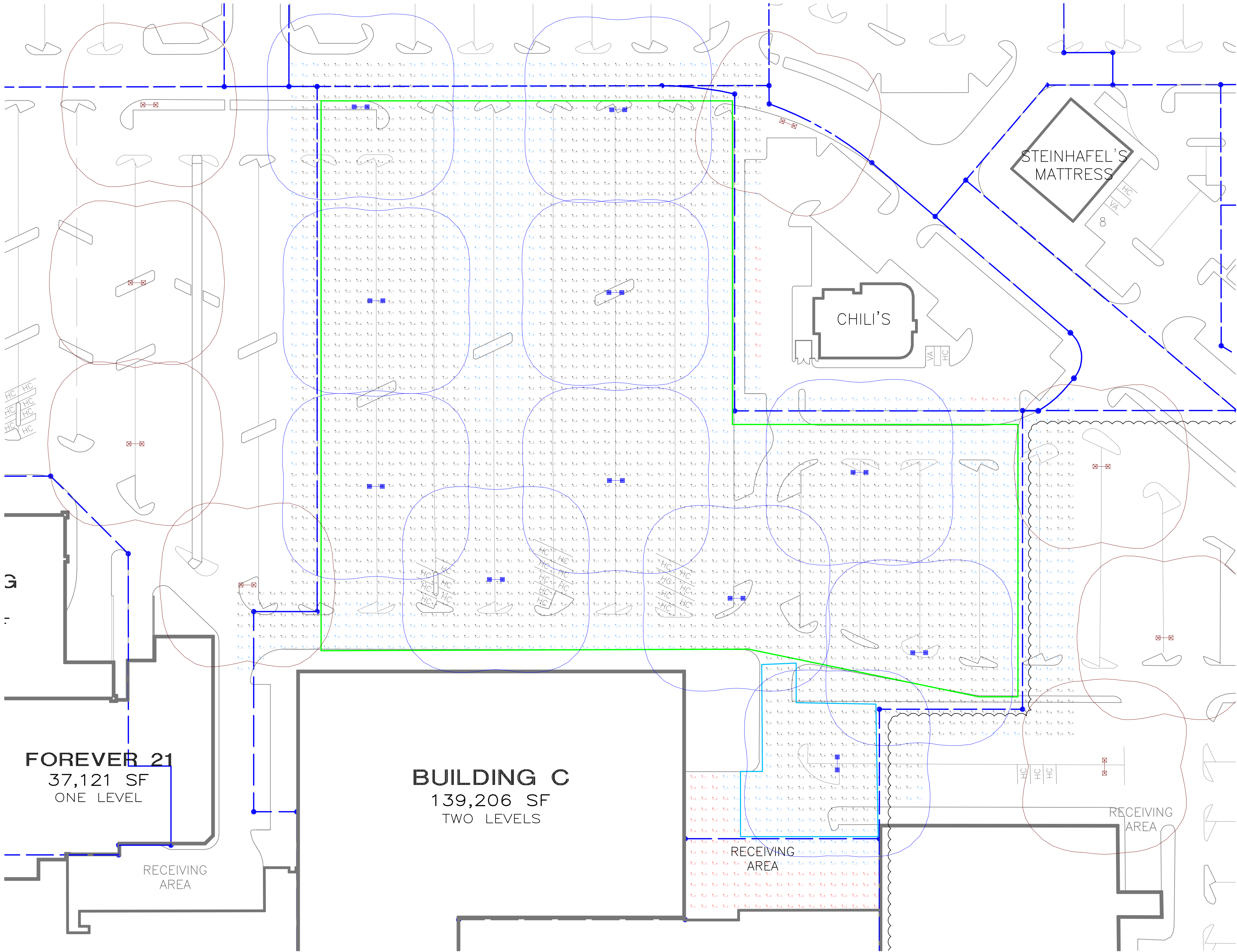
OSQ Series Ambient Adjusted Lumen Maintenance ¹						
Ambient	Optic	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Projected ² / Calculated ³ LMF	100K hr Projected ² / Calculated ³ LMF
5°C (41°F)	Asymmetric	1.04	1.02	1.01	1.00 ³	0.99 ³
	Symmetric	1.05	1.04	1.03	1.03 ²	1.02 ²
10°C (50°F)	Asymmetric	1.03	1.01	1.00	0.99 ³	0.98 ³
	Symmetric	1.04	1.03	1.02	1.01 ²	1.00 ²
15°C (59°F)	Asymmetric	1.02	1.00	0.99	0.98 ³	0.97 ³
	Symmetric	1.02	1.02	1.01	1.00 ²	0.99 ²
20°C (68°F)	Asymmetric	1.01	0.99	0.98	0.97 ³	0.96 ³
	Symmetric	1.01	1.01	1.00	0.99 ²	0.98 ²
25°C (77°F)	Asymmetric	1.00	0.98	0.97	0.96 ³	0.95 ³
	Symmetric	1.00	0.99	0.98	0.98 ²	0.97 ²

¹ Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

² In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

³ In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip

REVISIONS		
REV #	DATE	BY:



BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS AND OTHER VARIABLE FIELD CONDITIONS.

OPTION 1

Calculation Summary							
Label	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
BLDG C SIDE PARKING	2.4	3.5	1.1	2.2	3.2	10	10
BLDG C PARKING	2.4	3.6	1.1	2.1	3.3	10	10

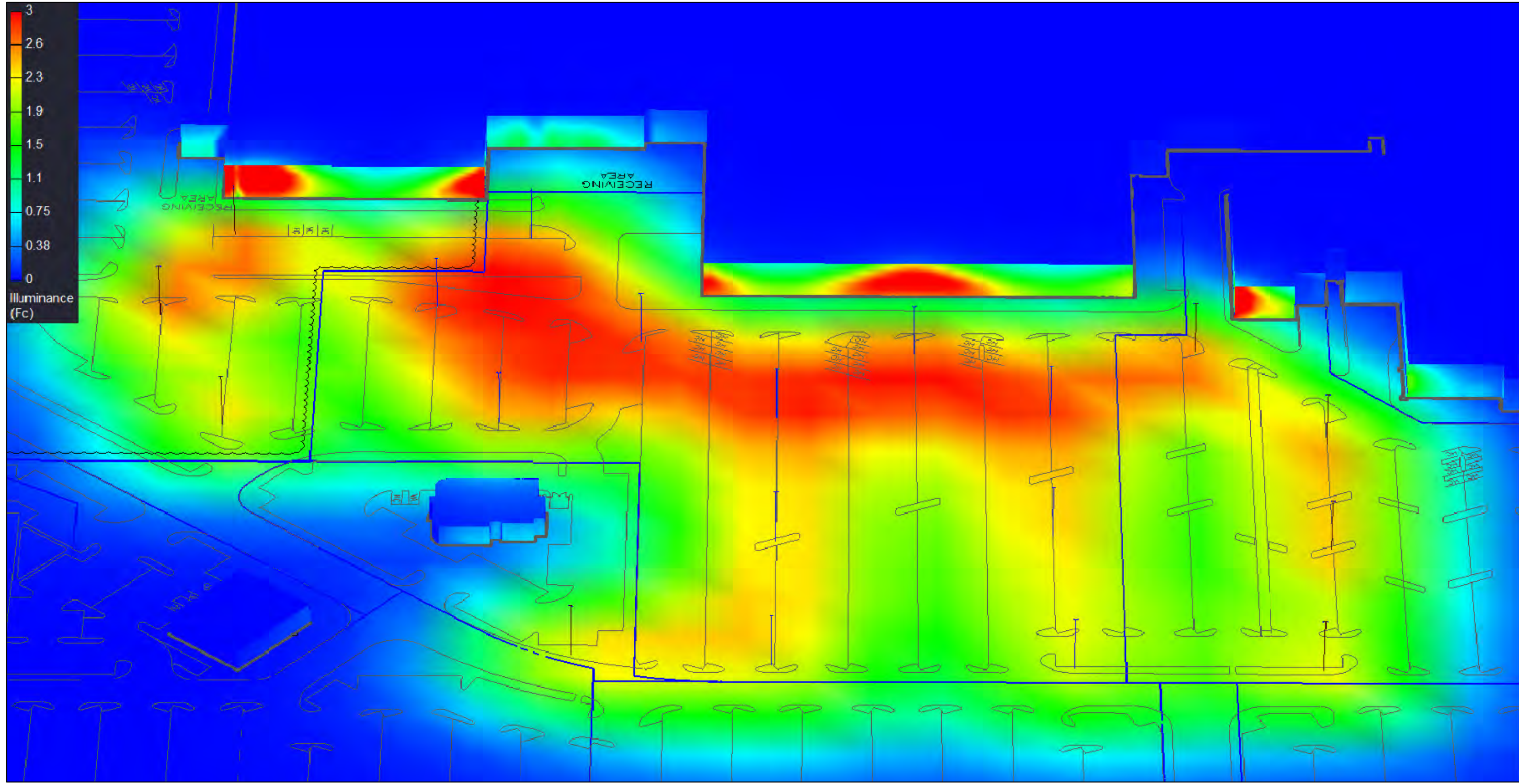
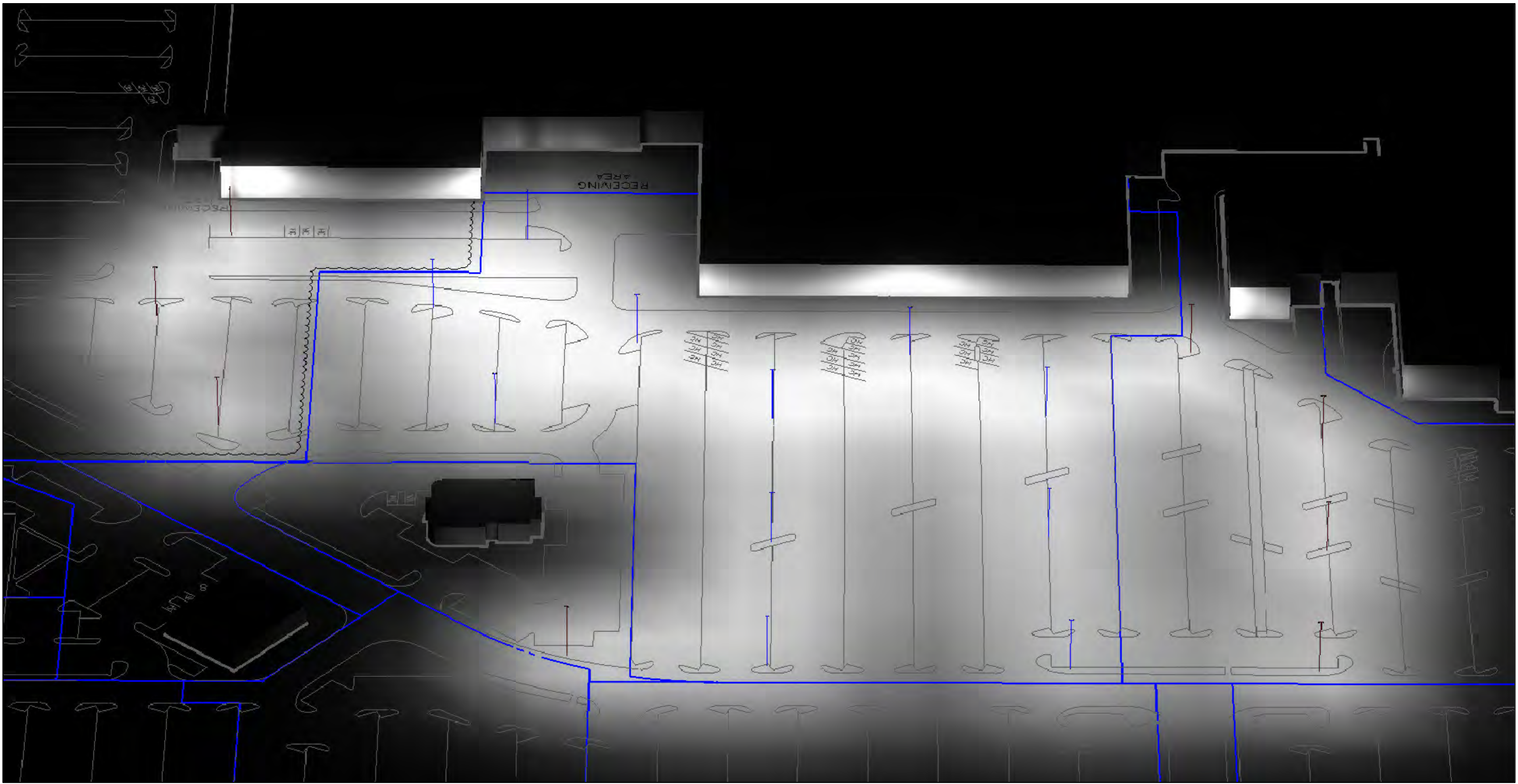
Luminaire Schedule						
WLS14997	WEST TOWNE MALL	MADISON, WI	PM: KEVIN	PLEASE EMAIL KEVIN AT KFLETCHER@WLSLIGHTING.COM FOR PRICING.		
Symbol	Qty	Label	Lumens	LLF	Description	Lum. Watts
	11	A	N.A.	0.980	WLS-OSQ-HO-A-SSH-40L-40K 48' MOUNTING HEIGHT	341
	8	NAP-X1	110000	0.500	HOLO-PT5CP1-1000-MH-5 48' MOUNTING HEIGHT	1070

WEST TOWNE MALL
MADISON, WI

WLS LIGHTING
a WLS company

1919 WINDSOR PLACE
FORT WORTH, TX 76110
WWW.WLSLIGHTING.COM

REVISIONS		
REV #	DATE	BY:



BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

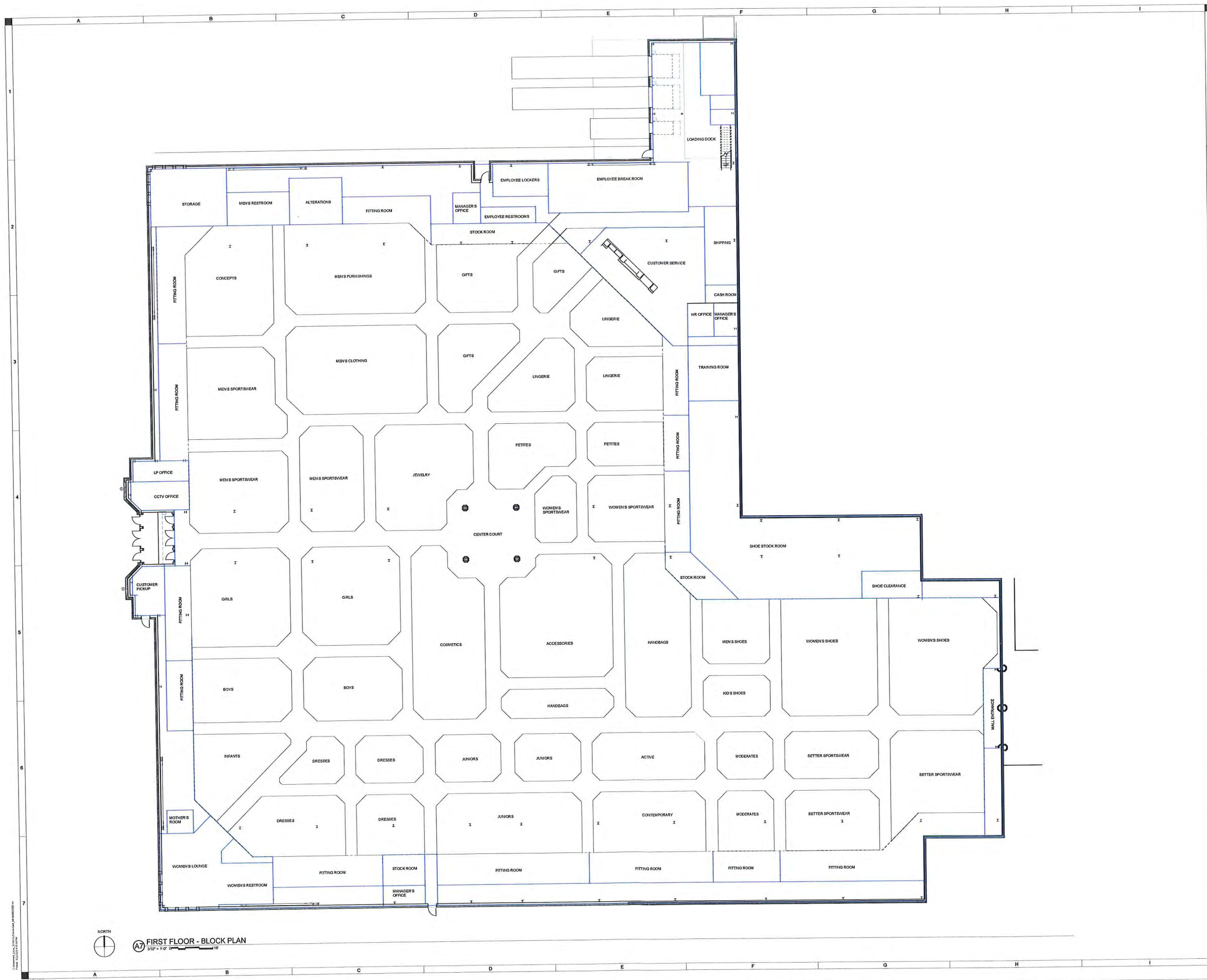
THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS AND OTHER VARIABLE FIELD CONDITIONS.

1919 WINDSOR PLACE
FORT WORTH, TX 76110
WWW.WSLIGHTING.COM

WLSLIGHTING
a WLS company

WEST TOWNE MALL
MADISON, WI

WLS- 14997A	DATE - 1/22/20	SCALE: 1"=50'	800-633-8711	PM: KEVIN	BY: TO	SHEET 2 OF 2
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FIRST FLOOR - BLOCK PLAN
3/32" = 1'-0"

SHIVE-HATTERY
ARCHITECTURE-ENGINEERING
1331 Reed Drive, Suite 200 | Moline, Illinois 61201
309.764.1655 | www.shivehattery.com
Steve | Illinois | Indiana

NEW DEPARTMENT STORE - WEST TOWNE MALL

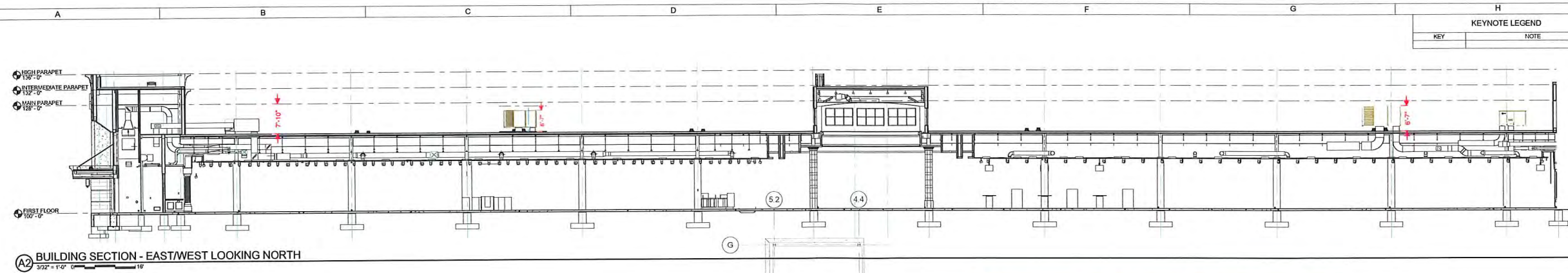
VON MAUR
66 W TOWNE MALL MADISON, WI 53719

**PRELIMINARY
- NOT FOR
CONSTRUCTION**

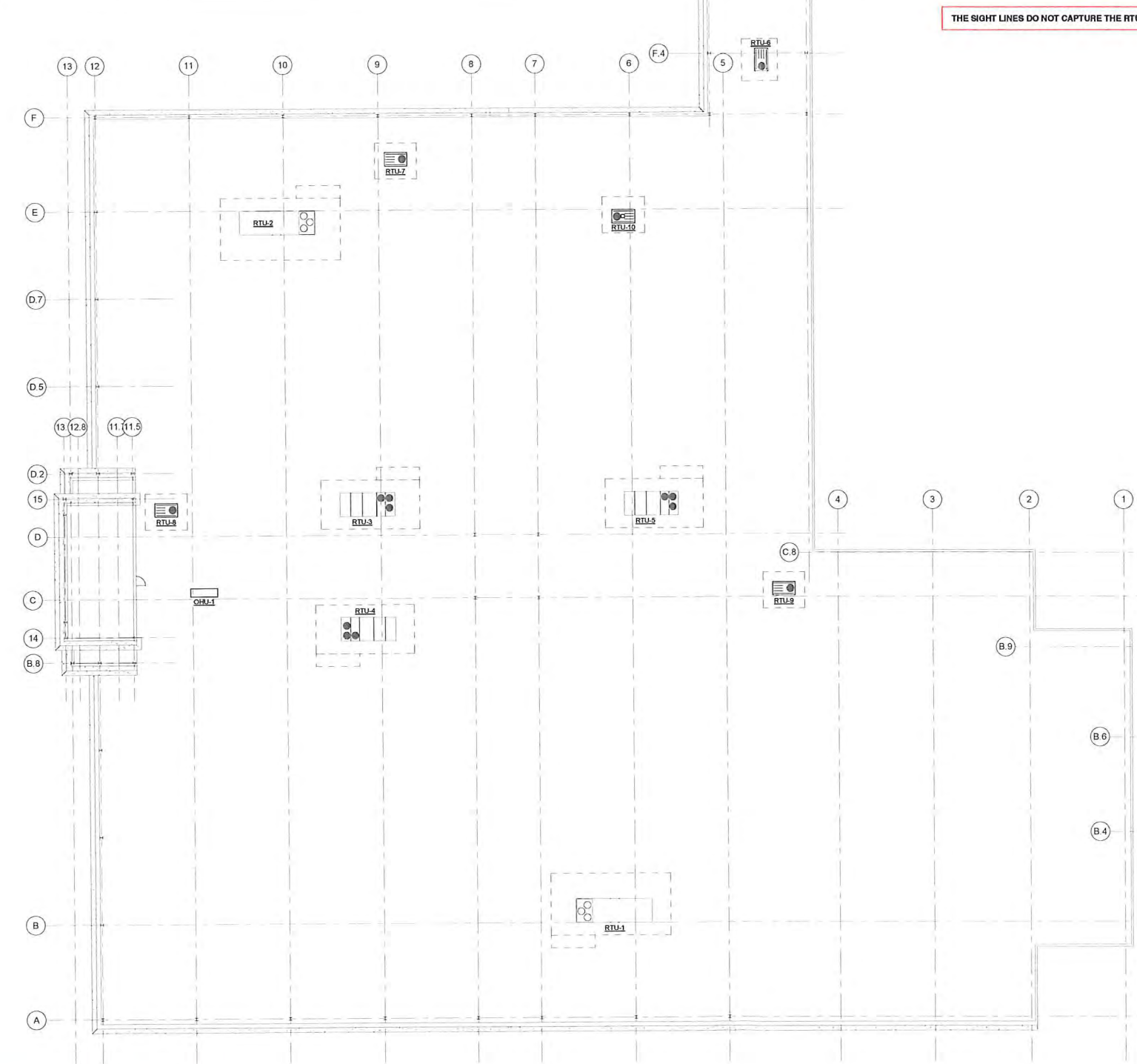
DRAWN	MAP
APPROVED	SRK
DATE	07/10/2020
PROJECT NO	3102040
SHEET NO	1

**FIRST FLOOR
BLOCK PLAN**

A901



A2 BUILDING SECTION - EAST/WEST LOOKING NORTH
3/32" = 1'-0" @ 1/8"



A6 PRELIMINARY ROOF PLAN WITH RTU LOCATIONS
1/16" = 1'-0" @ 24"

SHIVEHATTERY
ARCHITECTURE + ENGINEERING
Enter Office Number in Global Parameters
Phone | www.shivehattery.com
Iowa | Illinois | Indiana

NEW DEPARTMENT STORE - WEST TOWNE MALL
VON MAUR
66 W TOWNE MALL, MADISON, WI 53719

PRELIMINARY
- NOT FOR
CONSTRUCTION

ROOF SIGHT LINE
STUDY

M101

DRAWN	AUTHOR
APPROVED	APPROVER
ISSUED FOR	
DATE	ISSUE DATE
PROJECT NO	PROJECT NUMBER
FIELD BOOK	



EXTERIOR BUILDING UPLIGHTING PROTOTYPE PHOTOS

SHIVE-HATTERY
ARCHITECTURE + ENGINEERING
1701 River Drive, Suite 200 | Moline, Illinois 61265
309.764.7650 | www.shive-hattery.com
Iowa | Illinois | Indiana Illinois Firm Number: 184-000214

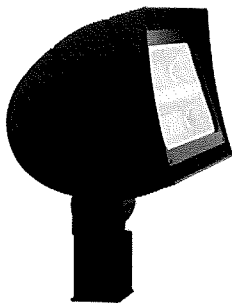
VON MAUR
66 W TOWNE MALL, MADISON WI 53719

DATE	01-22-2020	SCALE	—
DRAWN	SLB	FIELD BOOK	—
APPROVED	SPK	REVISION	—

PROJECT NO.
3192540

SHEET NO.
EX-1

FXLED150SFY



Color: Bronze

Weight: 27.2 lbs

RAB Outdoor

Project: Von Maur REVISED SUBMITTAL 11/9/2018
Type: F20/Heads
Prepared By: LMFETTIS
Date: 9/27/2018

Driver Info
Type: Constant Current
120V: 1.31A
208V: 0.80A
240V: 0.68A
277V: 0.60A
Input Watts: 153W
Efficiency: 98%

LED Info
Watts: 150W
Color Temp: 3000K (Warm)
Color Accuracy: 71 CRI
L70 Lifespan: 100000
Lumens: 18264
Efficacy: 119 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: P00001730

Electrical

Driver:

One Driver, Constant Current, Class 2, 2100mA 100-277V, 50-60Hz, Power Factor 99%

THD:

4.9% at 120V, 13.9% at 277V

Power Factor:

99.5% at 120V, 93.7% at 277V

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Note:

All values are typical (tolerance +/- 10%)

LEDs:

Multip-chip, high-output, long-life LEDs

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures

Effective Projected Area:

EPA = 2

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior thermal management with external "Air-Flow" fins

Lens:

Tempered glass lens

Housing:

Die-cast aluminum housing and door frame

Mounting:

Heavy-duty Slipfitter for 2 3/8" OD pipe

Reflector:

Specular, vacuum-metallized polycarbonate

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high-durability and long lasting color

Green Technology:

Mercury and UV-free. RoHS compliant components.

Optical

NEMA Type:

NEMA Beam Spread of 6H x 6V

Sensor Characteristics

Field & Beam Angles:

Horizontal Beam Angle (50%): 91.8°, Vertical Beam Angle (50%): 73.5° Horizontal Field Angle (10%): 121.0°, Vertical Field Angle (10%): 108.0°

KIMLIGHTING

Compact Floodlight, LED 2.0 kl_cfl_led_spec.pdf

JOB VON MAUR GRAND RAPIDS

TYPE

NOTES CFL/WF/213KUV/CC FH-CFL/CC-P

APPROVALS REVISED SUBMITTAL

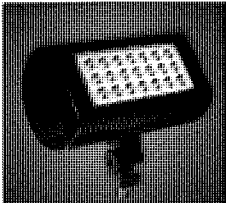
FEATURES

- Second generation LED 2.0
- Three beam patterns, Wide Flood, Vertical Flood, and Narrow Flood distributions generate high efficiencies and outstanding uniformity of illumination
- Die-cast housing with integral cooling ribs promote efficient transfer of heat.
- A variety of mounting options.
- IP66 sealed optical chamber.

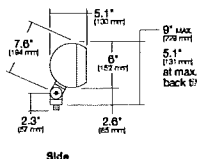
Certifications



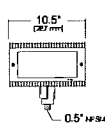
SPECIFICATIONS



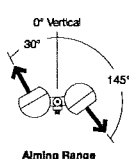
Max Weight = 13 lbs.



Side



Front



Aiming Range

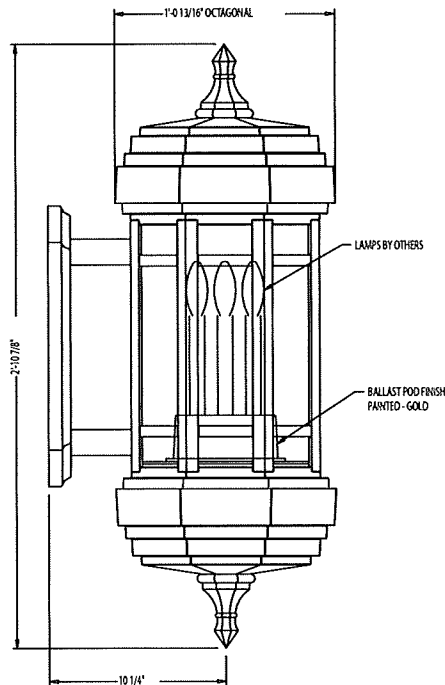
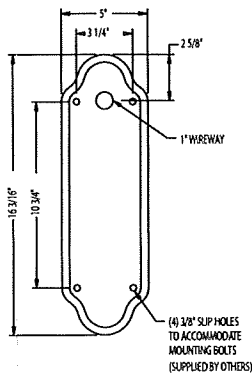
ORDERING CODE

CFL	WF	21	3K	35	UV	CC	
Fixture	Distribution	# LED's	CCT	Drive Current	Voltage	Color	Fuse Options
	WF Wide Flood VF Vertical Flood NF Narrow Flood	21 21 LED's	3K 3000K 4K 4000K 5K 5000K	35 350mA 50 500mA	UV 120-277V	BL Black DB Dark Bronze LG Light Gray PS Platinum Silver TT Titanium WH White CC Custom Color ¹	SF 120, 277 Line Volts DF 208, 240 Line Volts
FH-CFL/CC-P							

Accessories / Mounting Options

BD-CFL Barn Doors	JBR32 Brass In-Grade Staked J-Box with Cord
FH-CFL Fixed Hood	SM18 Surface Mount Tenon
FS-CFL Full Shield	J-27N Surface Mount
JBR2/3/21/24 Brass In-Grade Architectural J-Box	JW Architectural Wall Mount
JBR4/5 Composite In-Grade Architectural J-Box	EP17 PowerPost
JBR30 Brass In-Grade Staked J-Box	JB1 Architectural J-Box
	J-25N Portable Spear Mount

(SEE ADDITIONAL SUBMITTAL PAGE)



WALL BRACKET SPECIFICATIONS:

STYLE:	FORT WORTH (W1) WALL BRACKET
HEIGHT:	2'-10 7/8"
WIDTH:	1'-0 13/16" OCTAGONAL (FLAT TO FLAT)
LUMINAIRE:	10 1/4" FROM WALL TO 8 OF LUMINAIRE
BRACKET:	CAST ALUMINUM ALLOY ANS1 356 PER A.S.T.M. B26-95
MATERIAL:	POWDER COAT: RIVER TEXTURE GLOSS BLACK
FINISH:	(H) 50 WATT INCANDESCENT
LAMPING:	WIRED AT 120 VOLTS
VOLTAGE:	(H) MINI CANDELAURA
SOCKET:	CLEAR POLYCARBONATE
PANELS:	FORT POINT
FINAL:	

CATALOG NO. AWXFTW-W1-15-10-25-10250/SV/MC-PPLO-FNA-CU

△ QUANTITY 6 REQUIRED

*UPDATED JOB INFORMATION AND CHANGED TO QTY 6

REVISED BY: MHG		DATE: 04-06-18	
DESCRIPTION		DATE	
CUSTOMER		DATE	
JOB		DATE	
SCALE		DATE	
NTS		10/2018	
		SB-30005	

EXTERIOR LIGHTING

VON MAUR 68 W TOWNE MALL, MADISON WI 53719

SCALE

FIELD BOOK

REVISION

DATE 01-22-2020

SLB

SPK

PROJECT NO. 3192540

SHEET NO. EX-3