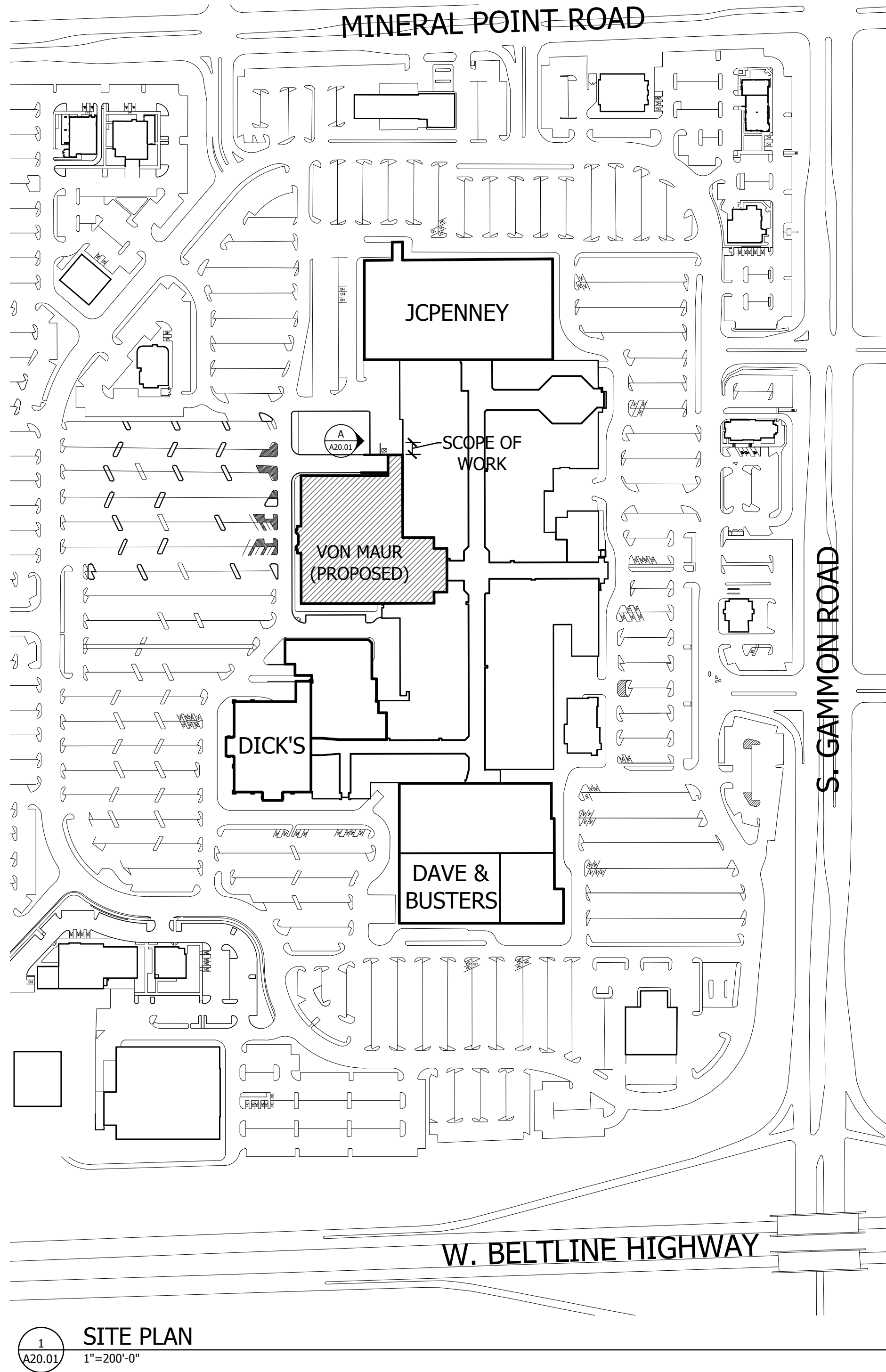
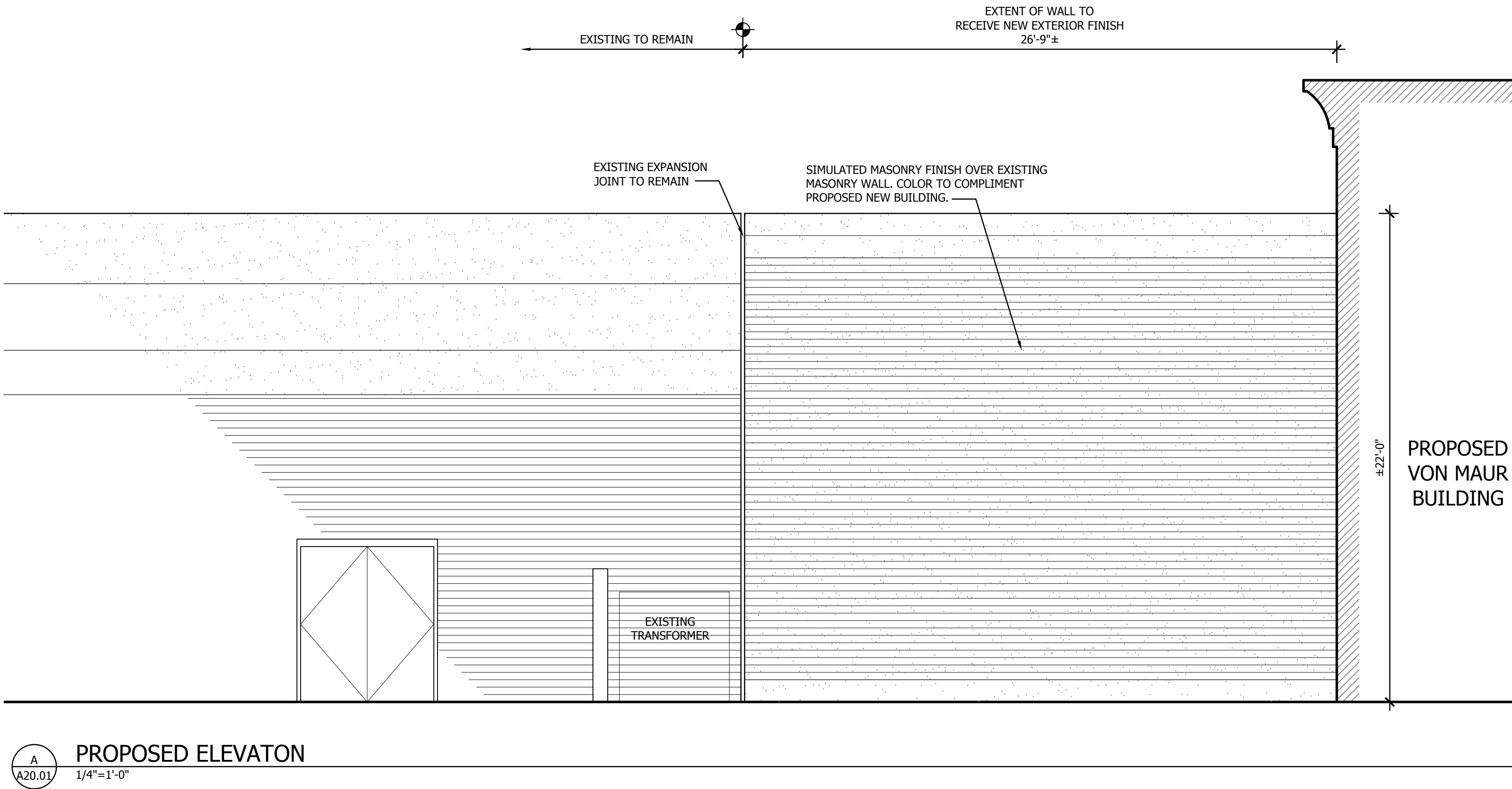


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NELSON

Nelco Architecture, Inc.

6000 Lombardo Center
Suite 500
Cleveland, OH 44131
Phone: (216) 781-9144
WWW.NELSONWORLDWIDE.COM

CIVIL ENGINEER

raSmith
16745 WEST BLUEMOUND ROAD
BROOKFIELD, WI 53005

CBL

CBL PROPERTIES
CBL Center, Suite 500 12001 Hamilton Place Boulevard 1 Chattanooga, TN 37421-6000
p. (423) 850-0001 f. (423) 490-8662 t. cblproperties.com 1 NYSE: CBL

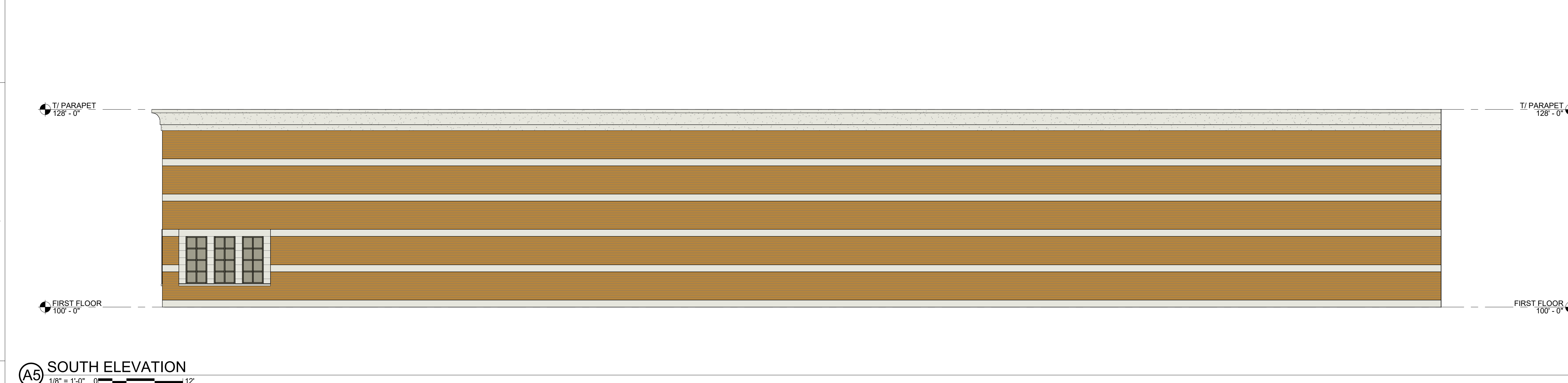
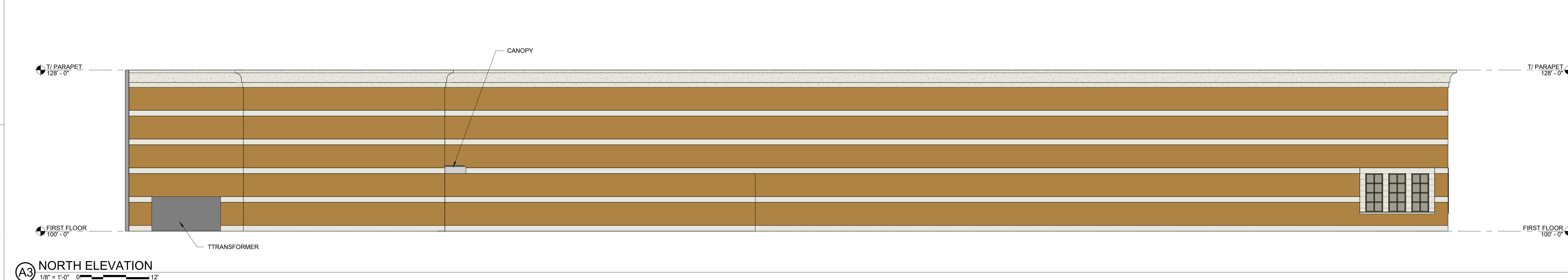
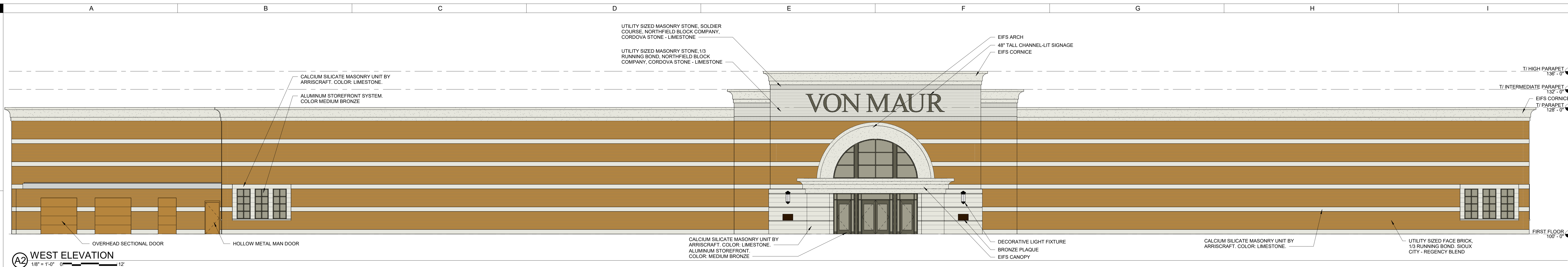
WEST TOWNE MALL REDEVELOPMENT
66 W. TOWNE MALL
MADISON, WI 53719

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

PROPOSED ELEVATIONS

Proj #: Reviewed By:

A20.01



(A7) WOODLAND MALL - EXAMPLE PHOTOS
NOT TO SCALE

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.

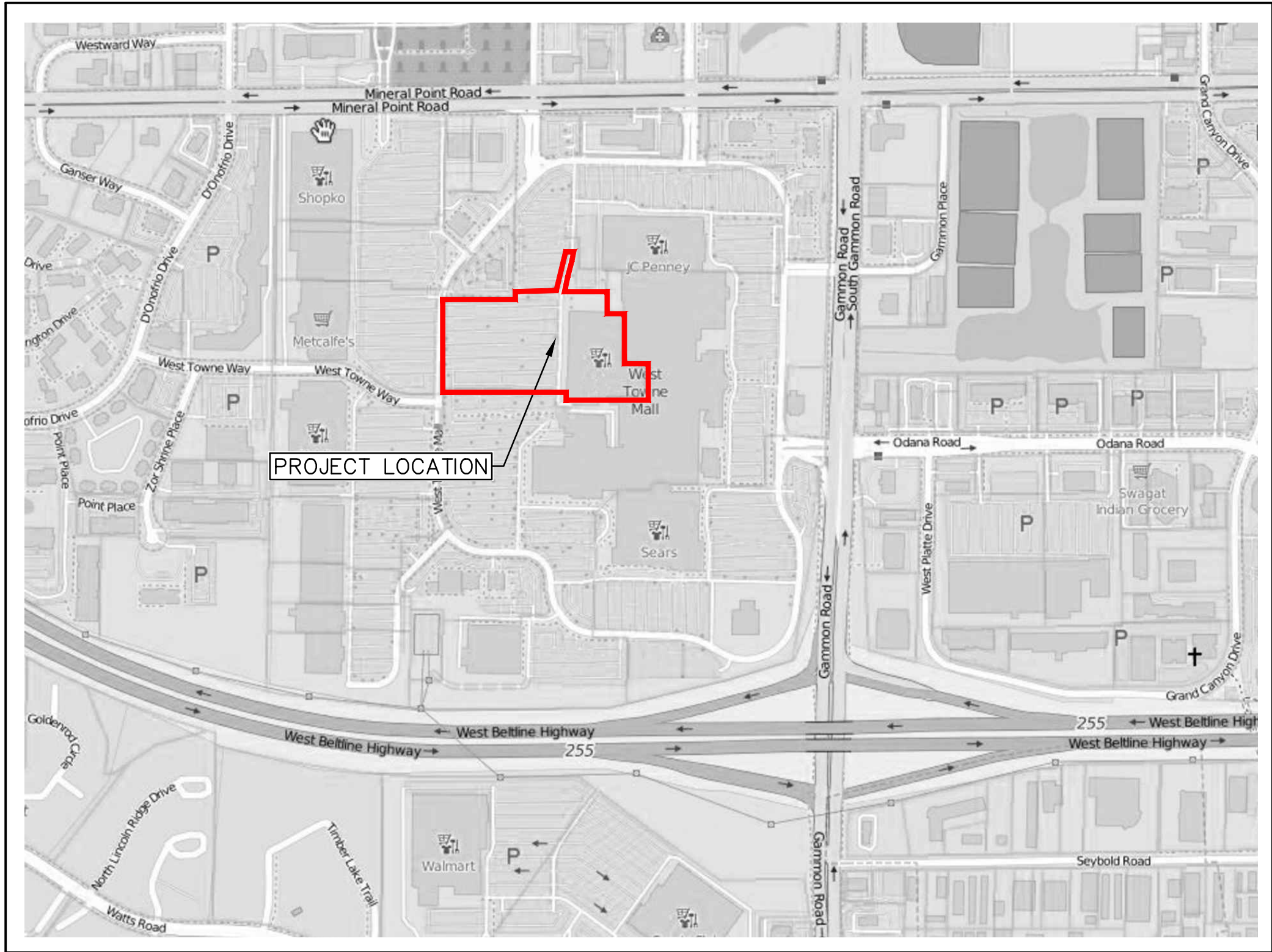
TOGETHER WITH THE NON-EXCLUSIVE EASEMENTS FOR INGRESS-EGRESS, PARKING, AND UTILITIES AS SET OUT IN THE EASEMENT, RESTRICTION AND OPERATING AGREEMENT, RECORDED IN VOLUME 100 OF RECORDS, PAGE 396, AS DOCUMENT NO. 1239177; AS AMENDED BY THE FOLLOWING;FIRST AMENDMENT TO EASEMENT, RESTRICTION AND OPERATING 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:

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

STORM SEWER UTILITY:
CITY OF MADISON
GREG FRIES, P.E.
ASSISTANT CITY ENGINEER
CITY-COUNTY BUILDING
210 MARTIN LUTHER KING, JR. BLVD.
MADISON, WI 53703
PH: (608) 266-4751
EMAIL: GFRIES@CITYOFMADISON.COM

ELECTRIC UTILITY:
ALLIANT ENERGY
DENISE GEVELINGER
PH: (608) 845-1129
(608) 575-7833

SANITARY SEWER UTILITY:
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GREG FRIES, P.E.
ASSISTANT CITY ENGINEER
CITY-COUNTY BUILDING
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MADISON FIRE DEPARTMENT:
BILL SULLIVAN
FIRE PROTECTION ENGINEER
CITY OF MADISON FIRE DEPARTMENT
314 WEST DAYTON STREET
MADISON, WI 53703
PH: (608) 261-9658
EMAIL: WSULLIVAN@CITYOFMADISON.COM

WATER UTILITY:
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ADAM WIEDERHOEFT
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MADISON, WI 53713
PH: (608) 266-9121
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

PLAN DATE: JANUARY 8, 2020

REVISION	ISSUE DATE	ISSUED SHEETS	ISSUED FOR



Know what's below.
Call before you dig.

WEST TOWNE MALL REDEVELOPMENT
CITY OF MADISON, WI

PROJECT INFORMATION

raSmith
CREATIVITY BEYOND ENGINEERING

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

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

DESCRIPTION

DATE

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: N.T.S.

JOB NO. 3190329

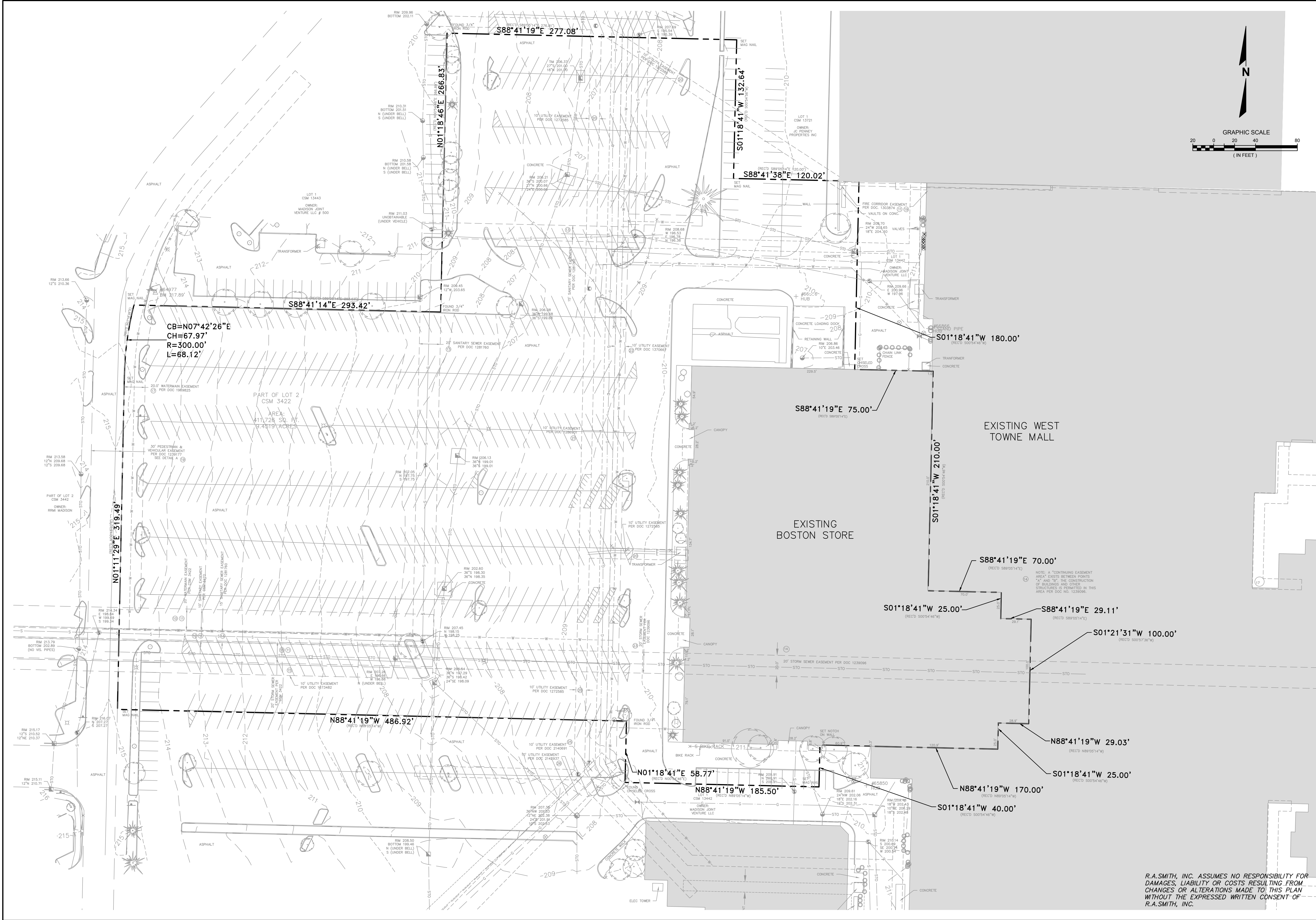
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: DVW

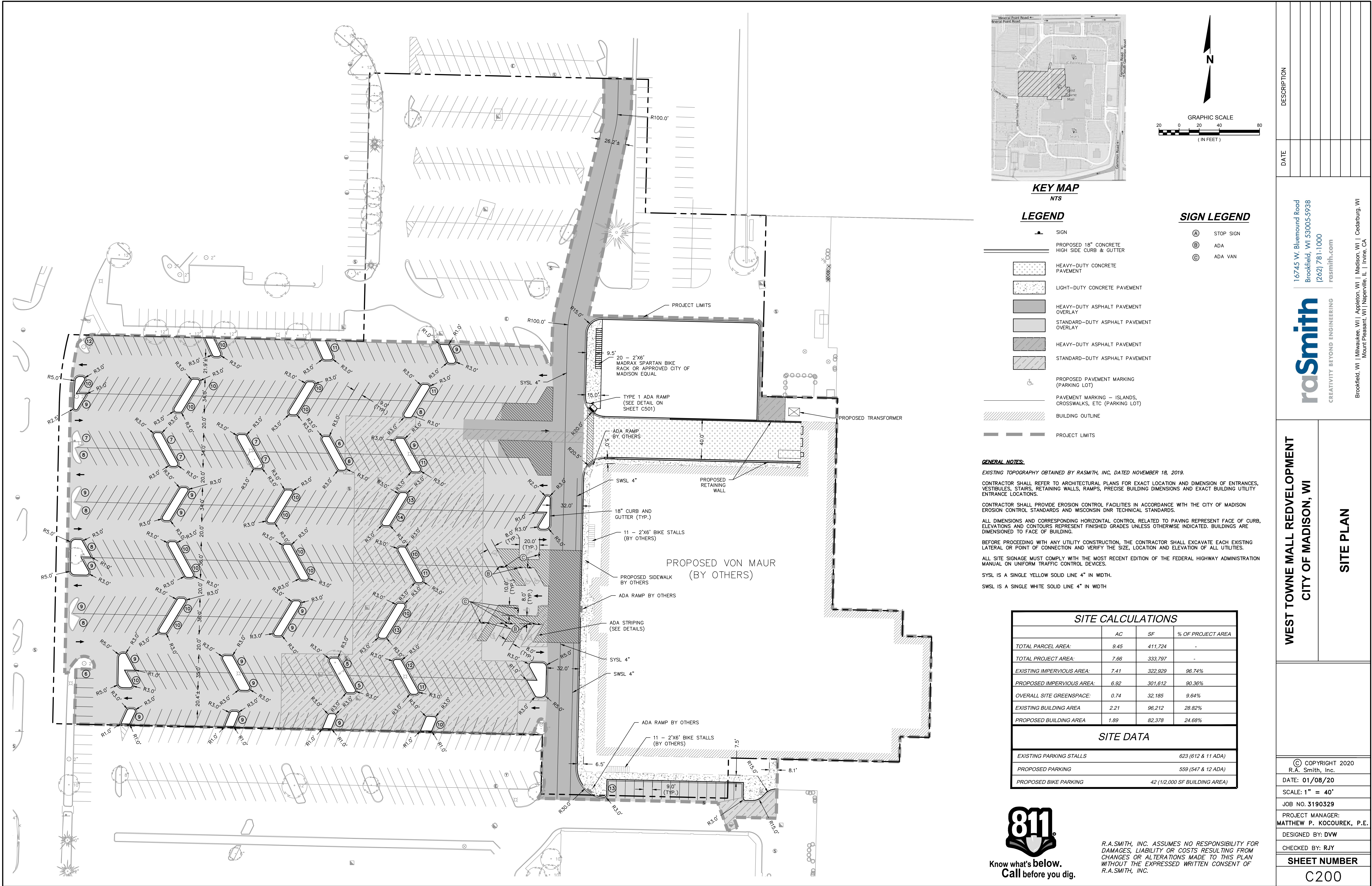
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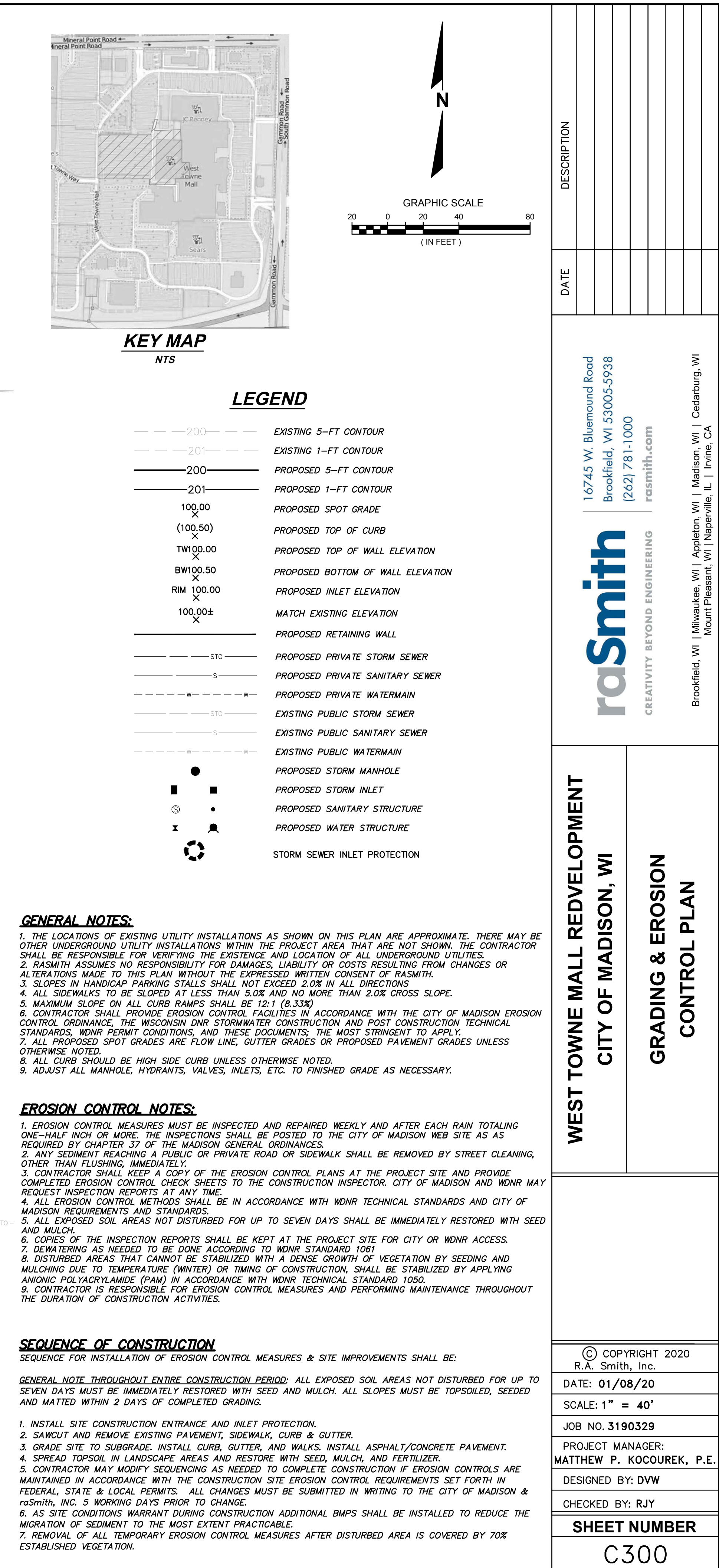
SHEET NUMBER

C000



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	
© COPYRIGHT 2020 R.A. Smith, Inc.	
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	







GRAPHIC SCALE

(IN FEET)



	EXISTING 5-FT CONTOUR
	EXISTING 1-FT CONTOUR
	PROPOSED 5-FT CONTOUR
	PROPOSED 1-FT CONTOUR
	PROPOSED SPOT GRADE
	PROPOSED TOP OF CURB
	PROPOSED TOP OF WALL ELEVATION
	PROPOSED BOTTOM OF WALL ELEVATION
	PROPOSED INLET ELEVATION
	MATCH EXISTING ELEVATION
	PROPOSED RETAINING WALL
	PROPOSED PRIVATE STORM SEWER
	PROPOSED PRIVATE SANITARY SEWER
	PROPOSED PRIVATE WATERMAIN
	EXISTING PUBLIC STORM SEWER
	EXISTING PUBLIC SANITARY SEWER
	EXISTING PUBLIC WATERMAIN
	PROPOSED STORM MANHOLE
	PROPOSED STORM INLET
	PROPOSED SANITARY STRUCTURE
	PROPOSED WATER STRUCTURE
	STORM SEWER INLET PROTECTION


1. 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 LOCATING ALL UTILITIES PRIOR TO CONSTRUCTION.
2. RASMTM ASSUMES NO RESPONSIBILITY FOR DAMAGES, LIABILITY OR COSTS RESULTING FROM CHANGES OR ALTERATIONS MADE TO THIS PLAN WITHOUT THE EXPRESSED WRITTEN CONSENT OF RASMTM.
3. SLOPED AREAS OF MANHOLE HANDCAUPS SHALL BE SLOPED AT LEAST 5%.
4. ALL SIDEWALKS TO BE SLOPED AT LESS THAN 5.0% AND 10% MORE THAN 2.0% CROSS SLOPE.
5. MAXIMUM SLOPE ON ALL CURB RUMPS SHALL BE 12:1 (8.33%).
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS IN ACCORDANCE WITH THE CITY OF MADISON EROSION CONTROL ORDINANCE, THE WISCONSIN DNR STORMWATER CONSTRUCTION AND POST CONSTRUCTION TECHNICAL STANDARDS, WMDNR PERMIT CONDITIONS, AND THE FOLLOWING DOCUMENTS, THE MOST STRINGENT TO APPLY.
7. ALL PAVED DRIVE SPREADS SHALL BE CONSTRUCTED TO MATCH THE PROPOSED PAVEMENT GRADUES UNLESS OTHERWISE NOTED.
8. ALL CURB SLOPED SHOULD BE HIGH CURB UNLESS OTHERWISE NOTED.
9. ADJUST ALL MANHOLE HYDRANTS, VALVES, INLETS, ETC. TO FINISHED GRADE AS NECESSARY.

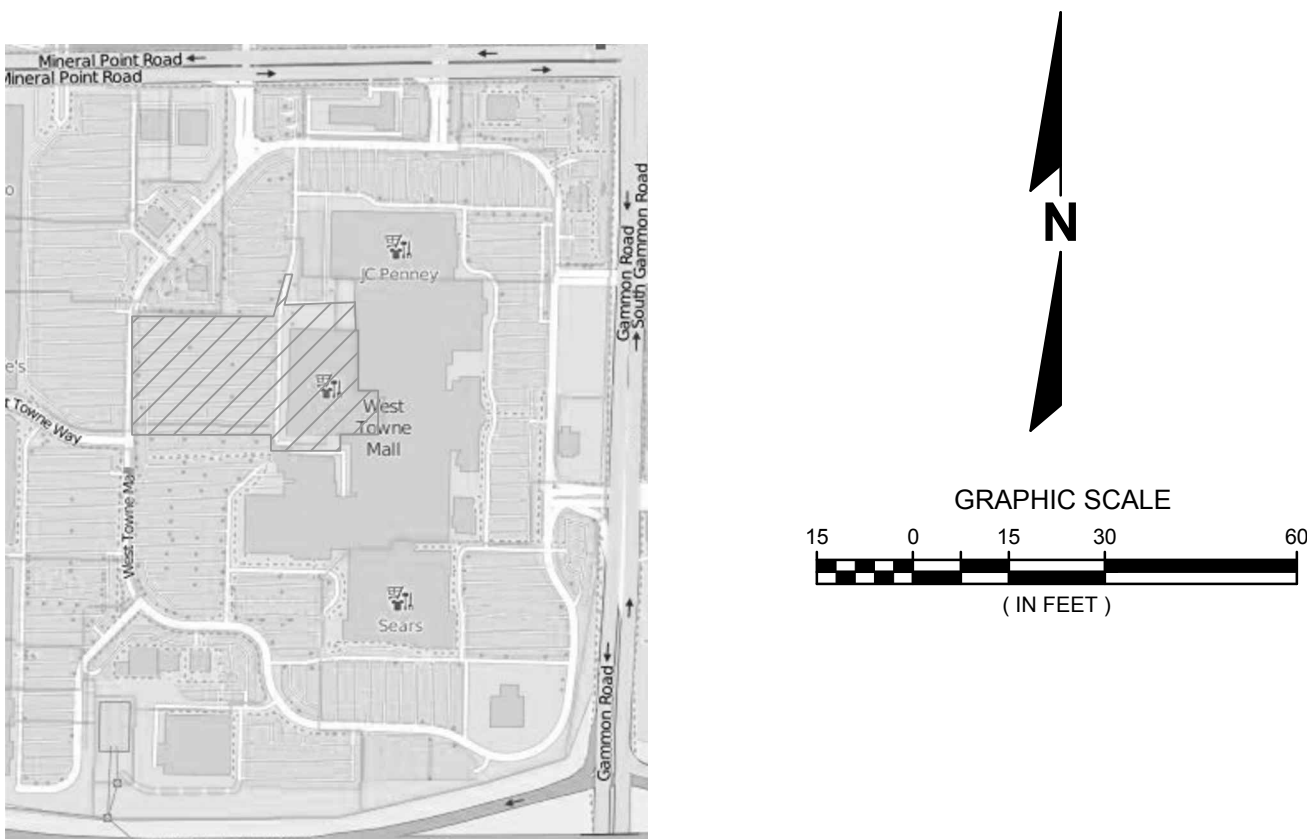
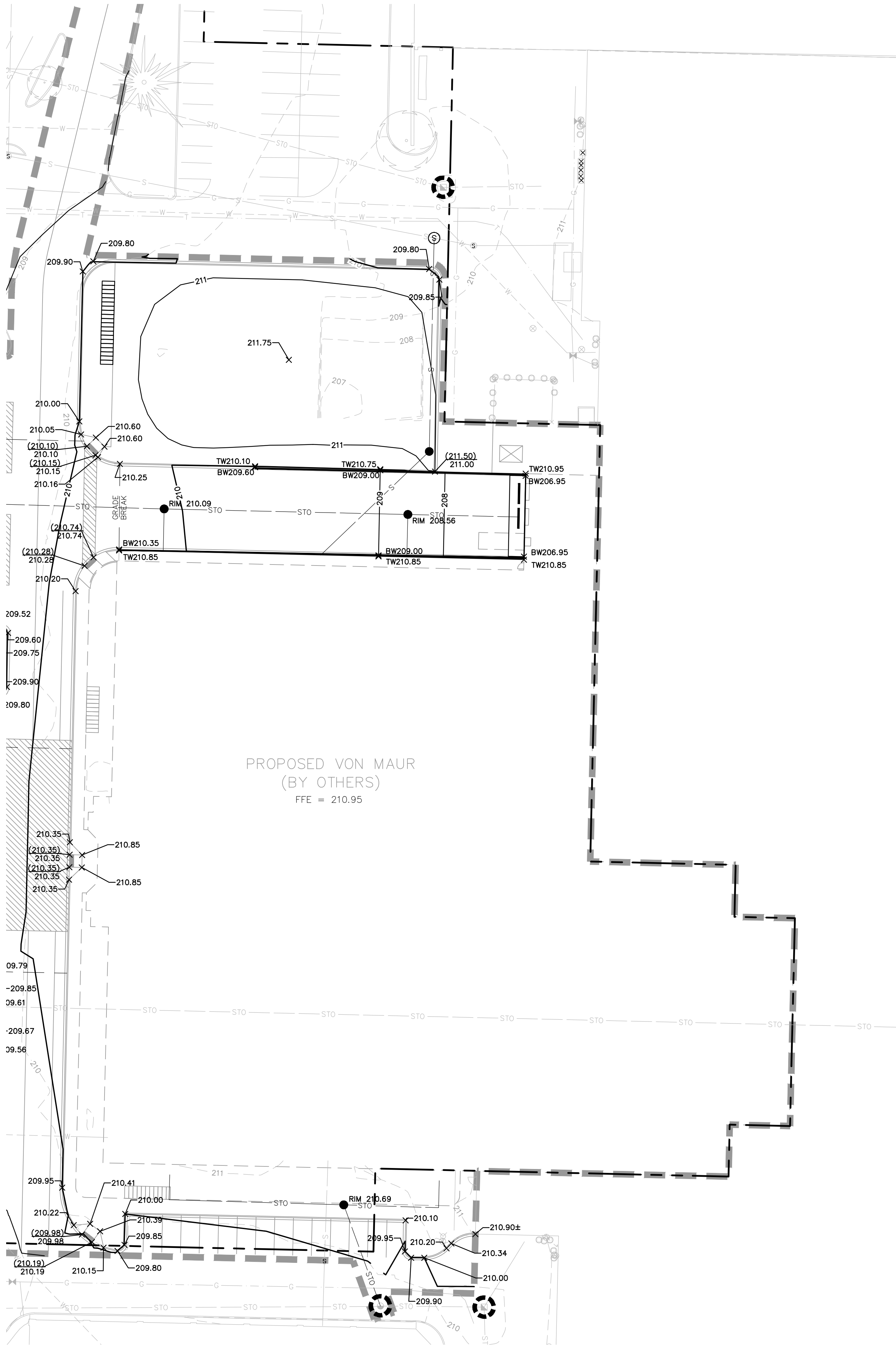
1. EROSION CONTROL MEASURES MUST BE INSPECTED AND REPAIRED WEEKLY AND AFTER EACH RAIN TOTALING ONE-HALF INCH OR MORE. THE INSPECTIONS SHALL BE POSTED TO THE CITY OF MADISON WEBSITE AS A PUBLIC NOTICE.
2. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD OR SIDEWALK SHALL BE REMOVED BY STREET CLEANING, OTHER THAN FLUSHING, IMMEDIATELY.
3. CONTRACTOR SHALL KEEP A COPY OF THE EROSION CONTROL PLANS AT THE PROJECT SITE AND PROVIDE A COMPLETED EROSION CONTROL CHECK SHEETS TO THE CONSTRUCTION INSPECTOR, CITY OF MADISON AND MNWR MAY REQUEST INSPECTION REPORTS AT ANY TIME.
4. ALL EROSION CONTROL METHODS SHALL BE IN ACCORDANCE WITH MNWR TECHNICAL STANDARDS AND CITY OF MADISON EROSION CONTROL STANDARDS.
5. ALL EXPOSED SOIL AREAS NOT DISTURBED FOR UP TO SEVEN DAYS SHALL BE IMMEDIATELY RESTORED WITH SEED AND MULCH.
6. COPIES OF THE INSPECTION REPORTS SHALL BE KEPT AT THE PROJECT SITE FOR CITY OR MNWR ACCESS.
7. DISTURBED AREAS AS NEEDED BE OBTAINED ACCORDING TO MNWR STANDARD 1001.
8. 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 AMONIC POLYACRYLAMIDE (PAM) IN ACCORDANCE WITH MNWR TECHNICAL STANDARD 1050.
9. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES.

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, SEEDED AND MATTED WITHIN 2 DAYS OF COMPLETED GRADING.

1. INSTALL SITE CONSTRUCTION ENTRANCE AND INLET PROTECTION.
2. SAWCUT AND REMOVE EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER.
3. GRADE SITE TO SUBGRADE. INSTALL CURB, GUTTER, AND WALKS. INSTALL ASPHALT/CONCRETE PAVEMENT.
4. SPREAD TOPSOIL IN WINDSCALED AREAS AND RESTORE W/ SEED, MULCH, AND FERTILIZER.
5. CONTRACTOR MAY ONLY ADD OTHER EROSION CONTROL MEASURES TO COMPLIANCE WITH 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 & rSmith, INC. 5 WORKING DAYS PRIOR TO CHANGE.
6. AS, SITE CONDITIONS WARRANT DURING CONSTRUCTION ADDITIONAL BMPs SHALL BE INSTALLED TO REDUCE THE MIGRATION OF SEDIMENT TO THE ADJACENT PRACTICABLE.
7. REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AFTER DISTURBED AREA IS COVERED BY 70% ESTABLISHED VEGETATION.

WEST TOWNE MALL REDVELOPMENT		 CREATIVITY BEYOND ENGINEERING	16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com	DATE	DESCRIPTION
CITY OF MADISON, WI					
PAVING PLAN - WEST		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" = 30' JOB NO. 3190329 PROJECT MANAGER: MATTHEW P. KOCOCUREK, P.E. DESIGNED BY: DWV CHECKED BY: RJY</div>					
SHEET NUMBER					
C301					



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
- S TO --- PROPOSED PRIVATE STORM SEWER
- S --- PROPOSED PRIVATE SANITARY SEWER
- W --- PROPOSED PRIVATE WATERMAIN
- S TO --- 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 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.

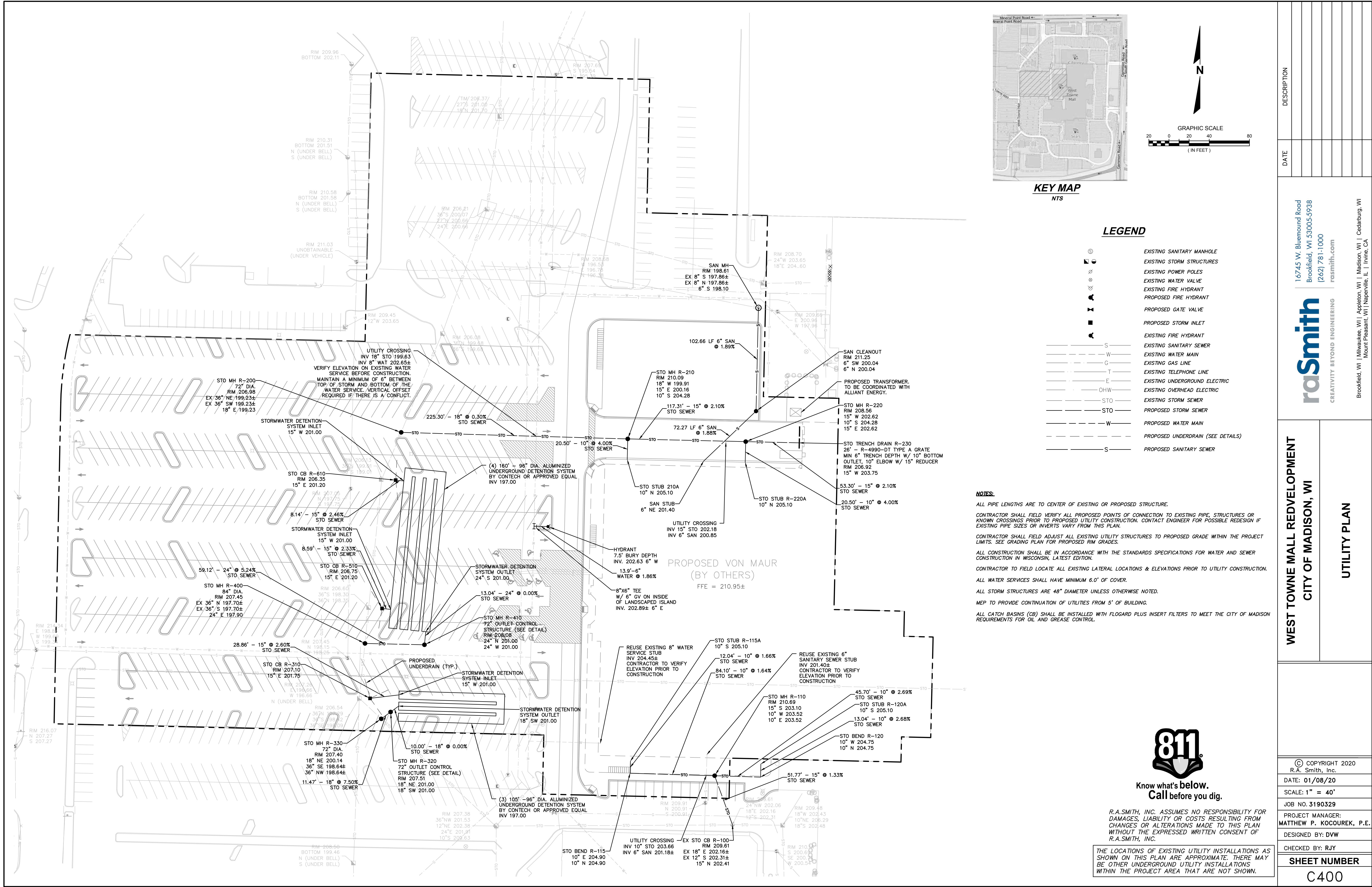
SEQUENCE OF CONSTRUCTION

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 SEQUENCE 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.

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		PAVING PLAN - EAST		
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SCALE: 1" = 30'		JOB NO. 3190329		
PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.		DESIGNED BY: DVW		
CHECKED BY: RJY		SHEET NUMBER		
C302				



KEY MAP
NTS

LEGEND

- EXISTING SANITARY MANHOLE
- EXISTING STORM STRUCTURES
- EXISTING POWER POLES
- EXISTING WATER VALVE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- PROPOSED GATE VALVE
- PROPOSED STORM INLET
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER
- EXISTING WATER MAIN
- EXISTING GAS LINE
- EXISTING TELEPHONE LINE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- PROPOSED WATER MAIN
- PROPOSED UNDERDRAIN (SEE DETAILS)
- PROPOSED SANITARY SEWER

NOTES:

ALL PIPE LENGTHS ARE TO CENTER OF EXISTING OR PROPOSED STRUCTURE.

CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED POINTS OF CONNECTION TO EXISTING PIPE, STRUCTURES OR KNOWN CROSSINGS PRIOR TO PROPOSED UTILITY CONSTRUCTION. CONTACT ENGINEER FOR POSSIBLE REDESIGN IF EXISTING PIPE SIZES OR INVERTS VARY FROM THIS PLAN.

CONTRACTOR SHALL FIELD ADJUST ALL EXISTING UTILITY STRUCTURES TO PROPOSED GRADE WITHIN THE PROJECT LIMITS. SEE GRADING PLAN FOR PROPOSED RIM GRADES.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION IN WISCONSIN, LATEST EDITION.

CONTRACTOR TO FIELD LOCATE ALL EXISTING LATERAL LOCATIONS & ELEVATIONS PRIOR TO UTILITY CONSTRUCTION.

ALL WATER SERVICES SHALL HAVE MINIMUM 6.0' OF COVER.

ALL STORM STRUCTURES ARE 48" DIAMETER UNLESS OTHERWISE NOTED.

MEP TO PROVIDE CONTINUATION OF UTILITIES FROM 5' OF BUILDING.

ALL CATCH BASINS (CB) SHALL BE INSTALLED WITH FLOGARD PLUS INSERT FILTERS TO MEET THE CITY OF MADISON REQUIREMENTS FOR OIL AND GREASE CONTROL.

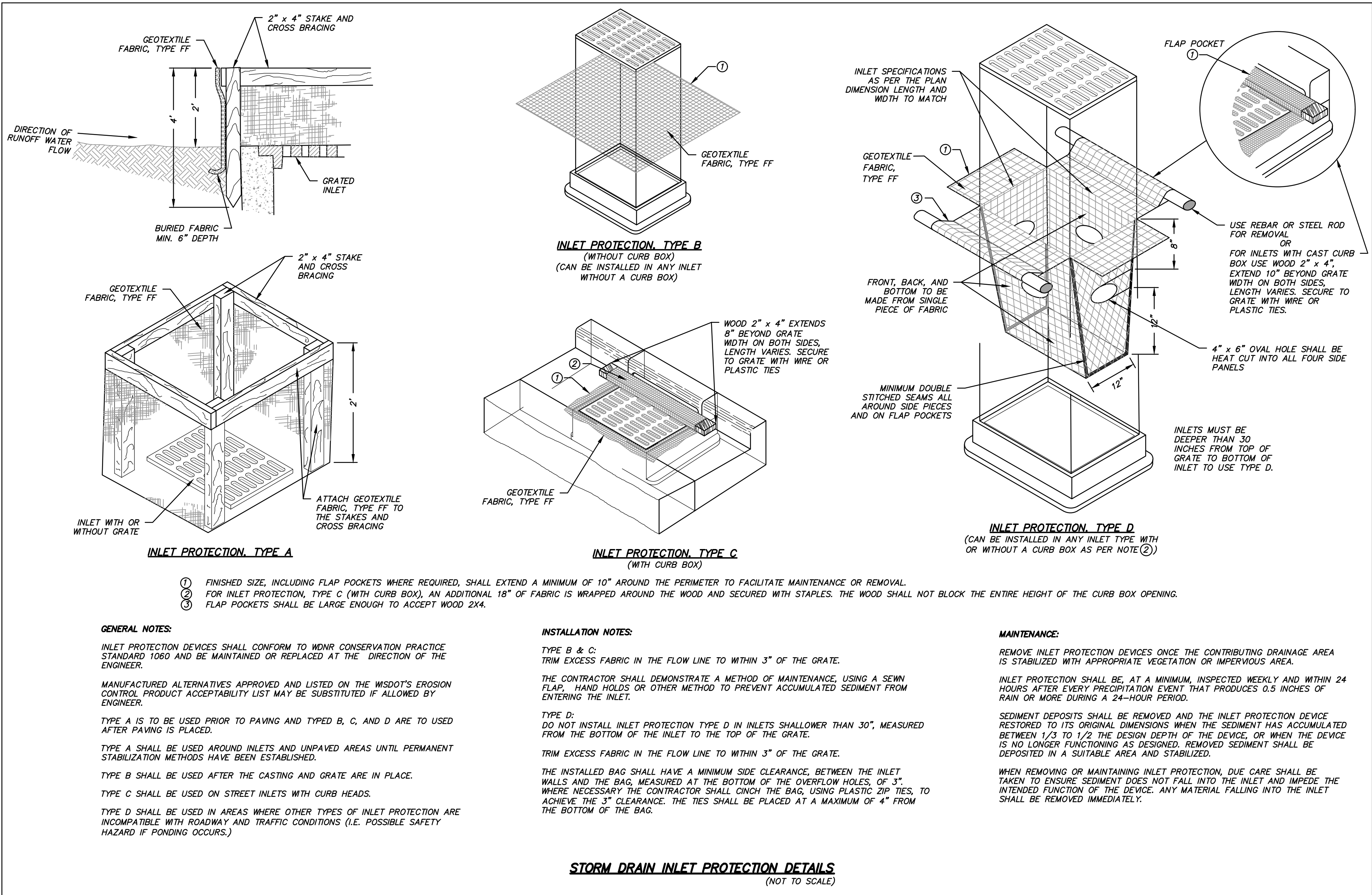
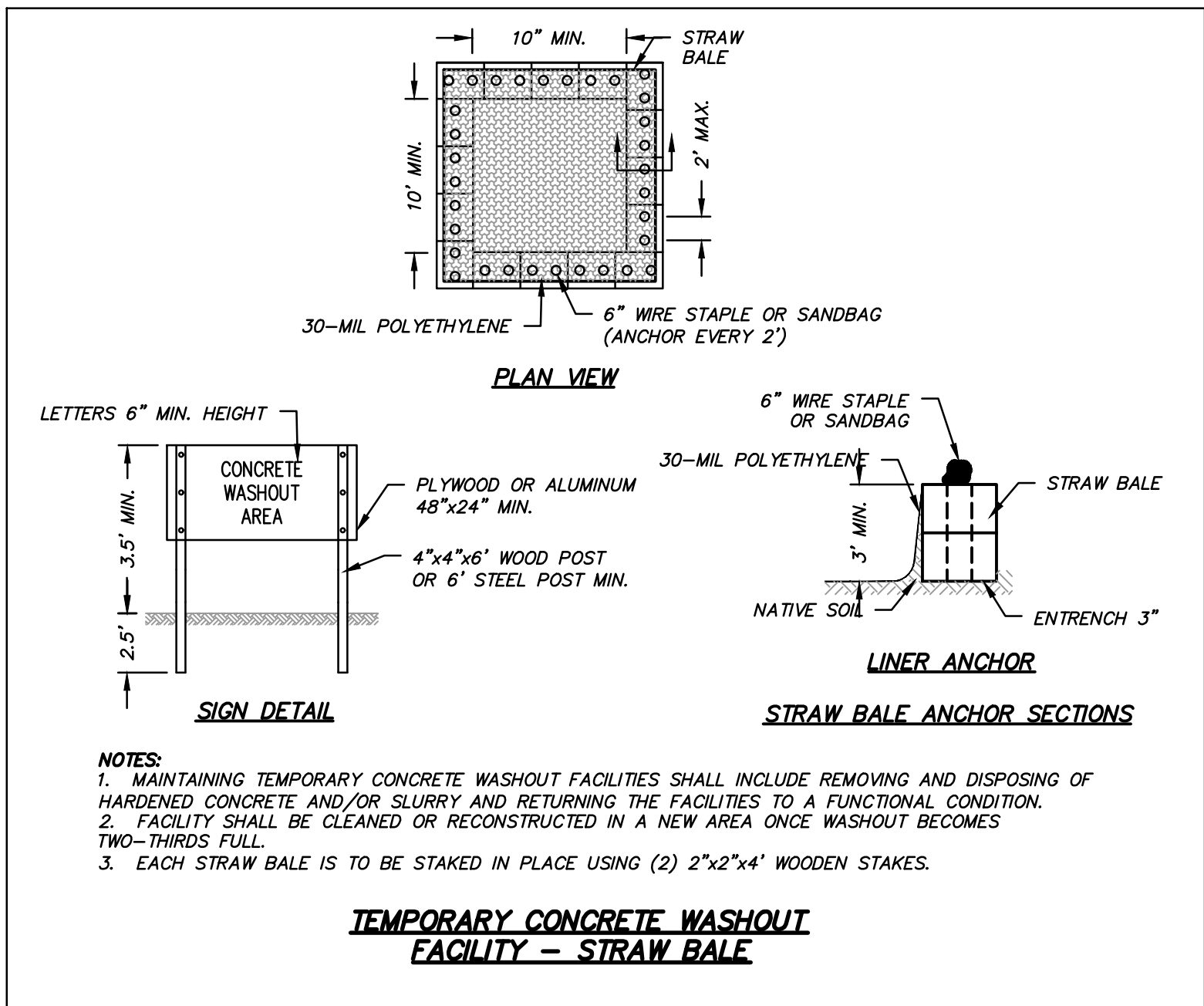
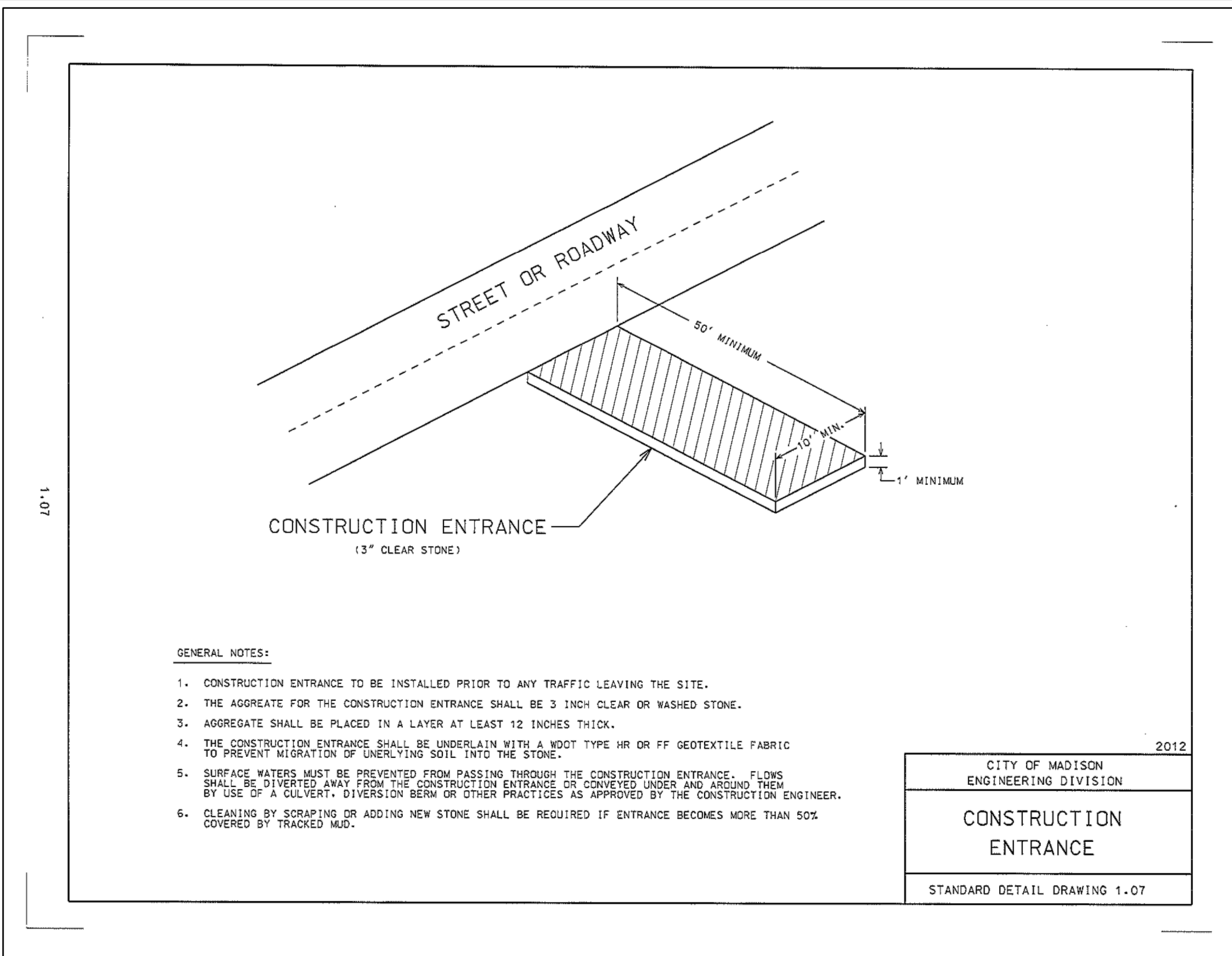


Know what's below.
Call before you dig.

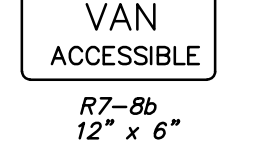
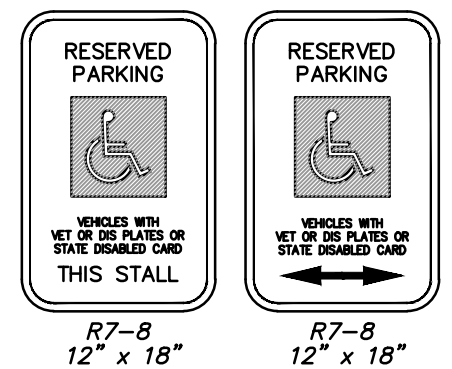
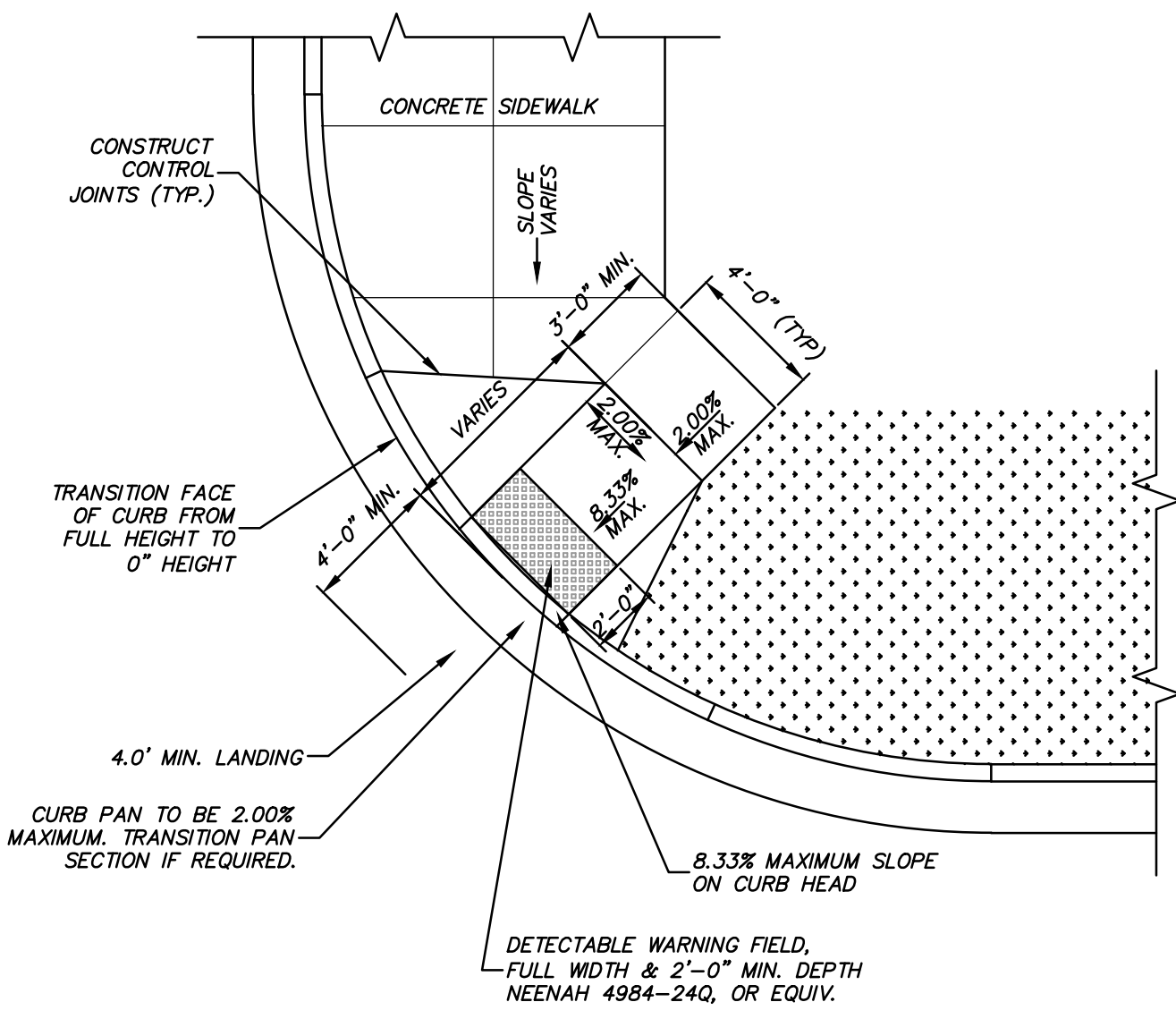
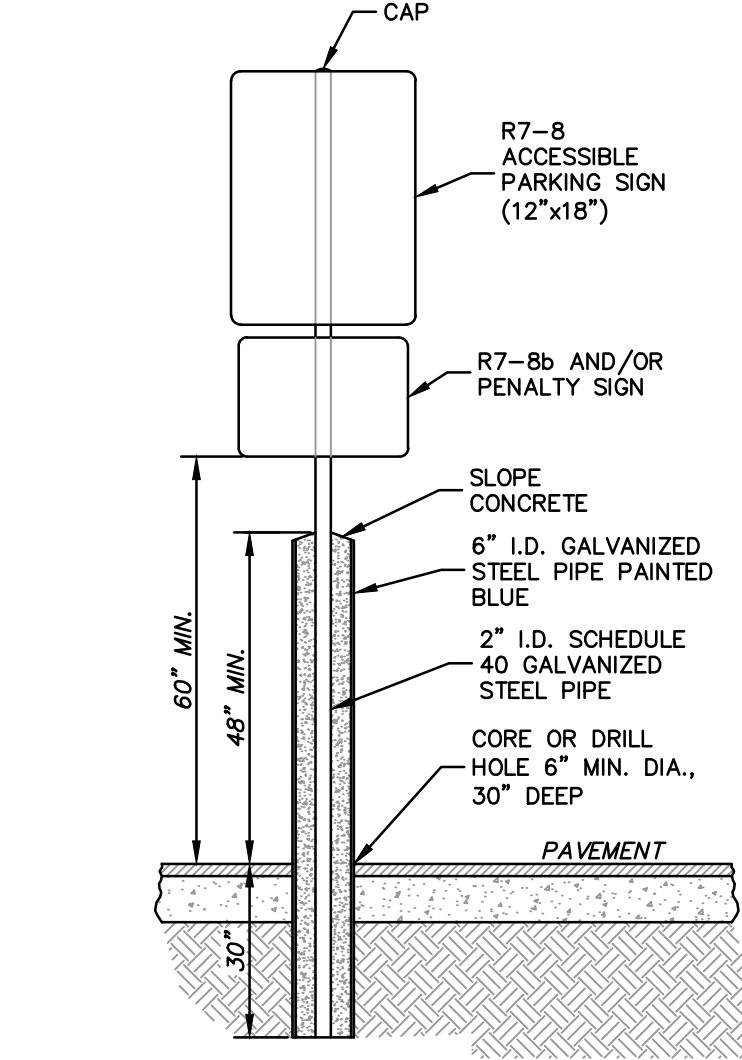
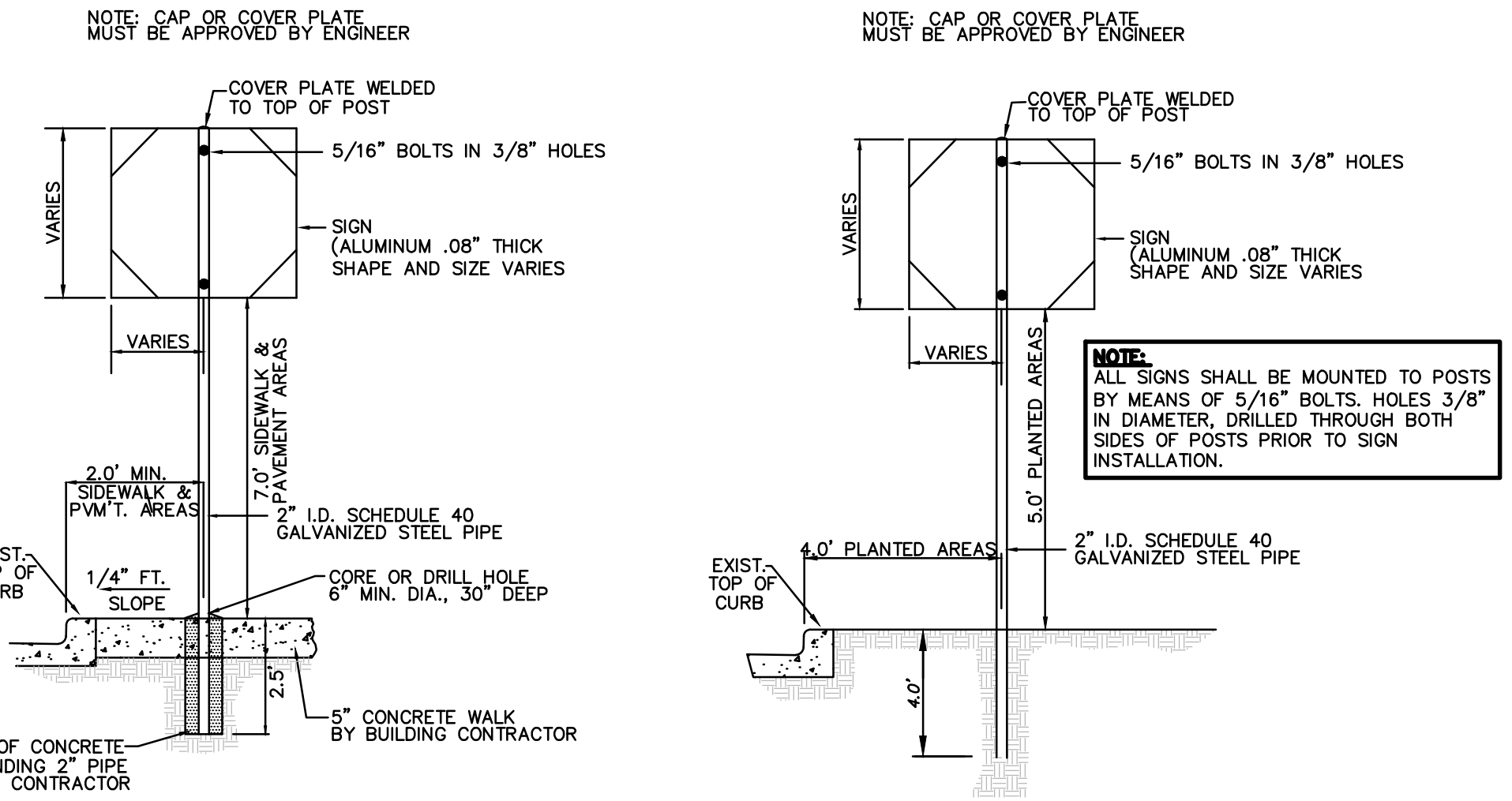
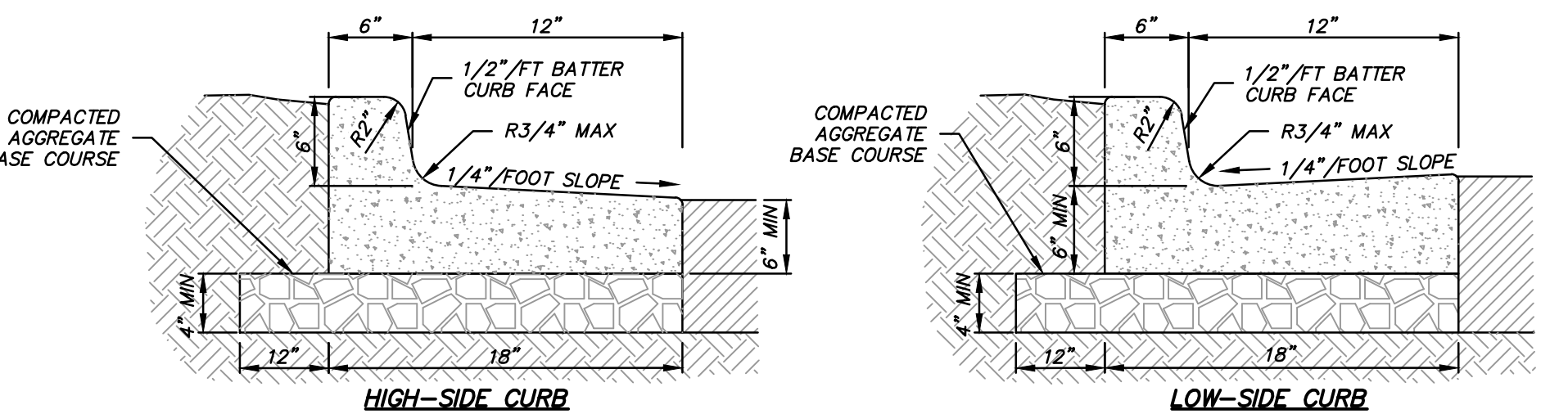
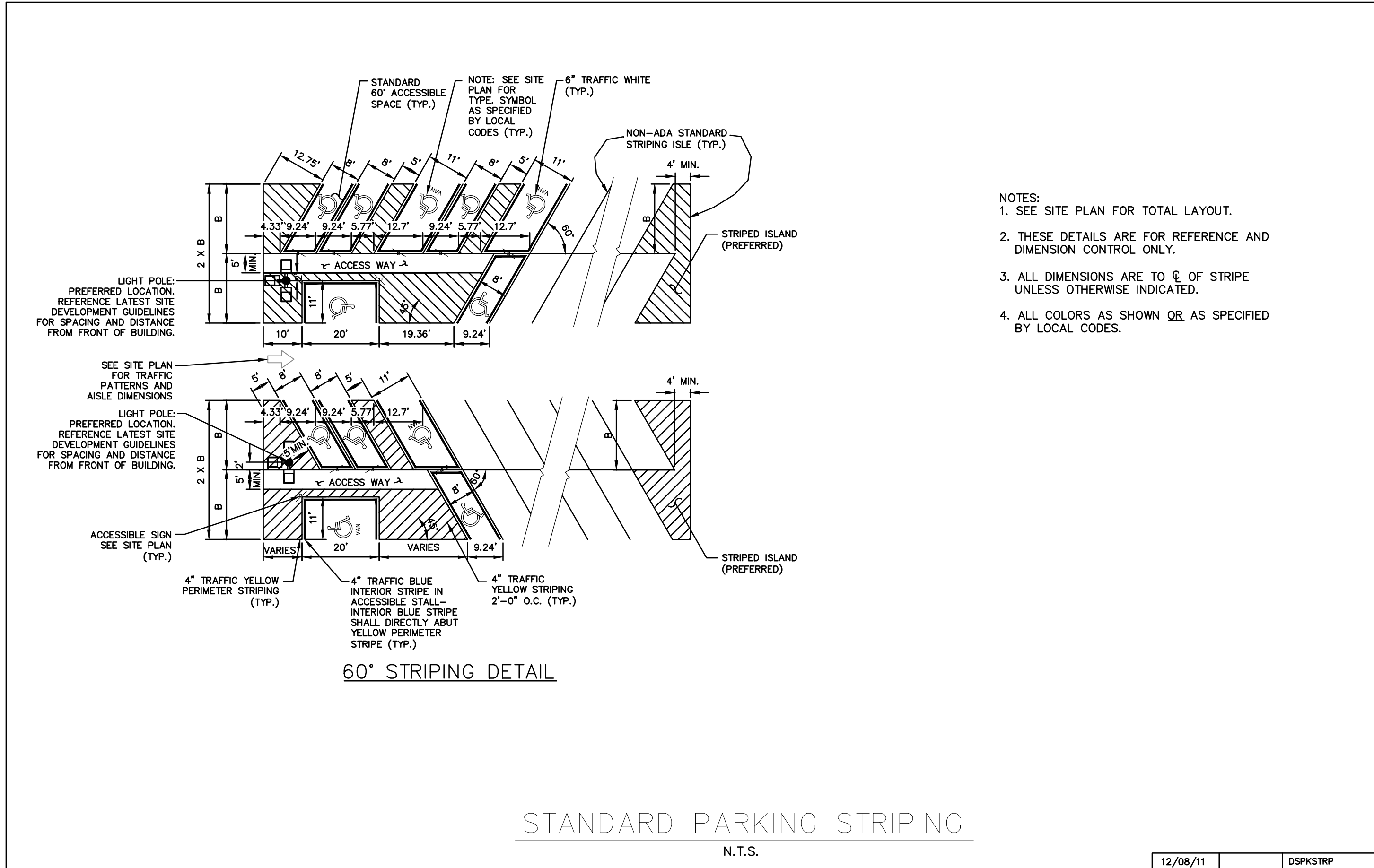
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THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS AS SHOWN ON THIS PLAN ARE APPROXIMATE. THERE MAY BE OTHER UNDERGROUND UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

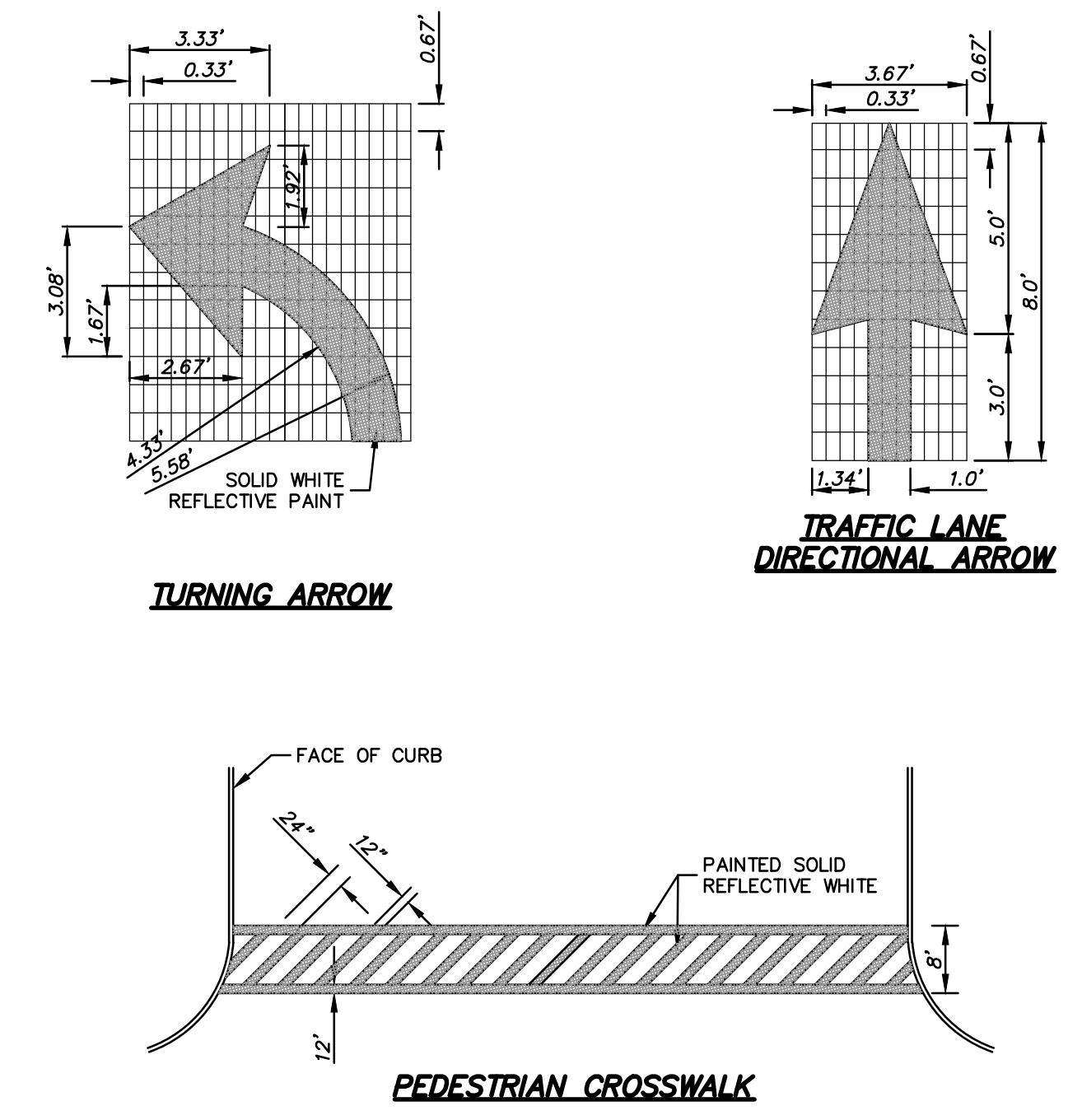
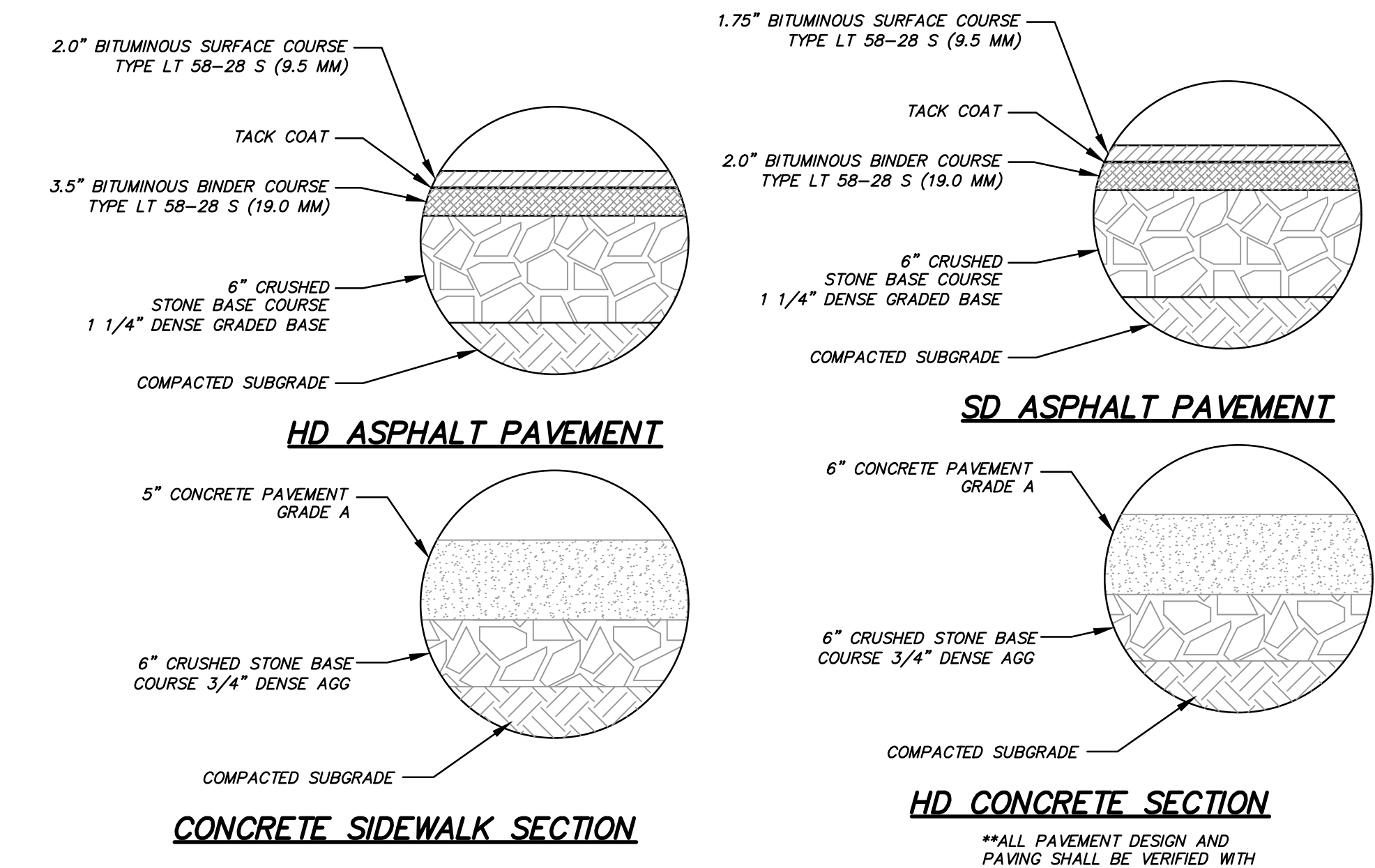
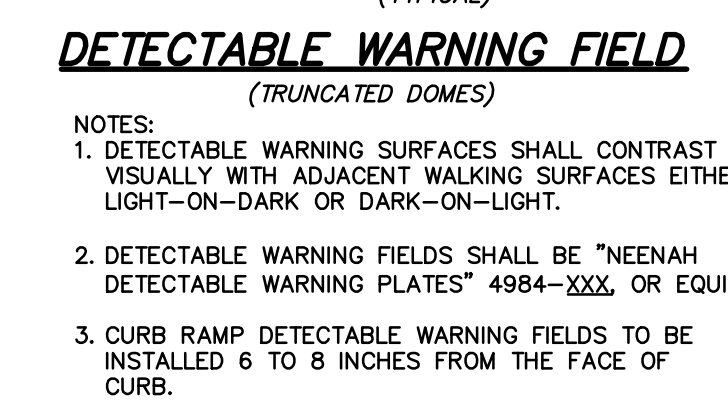
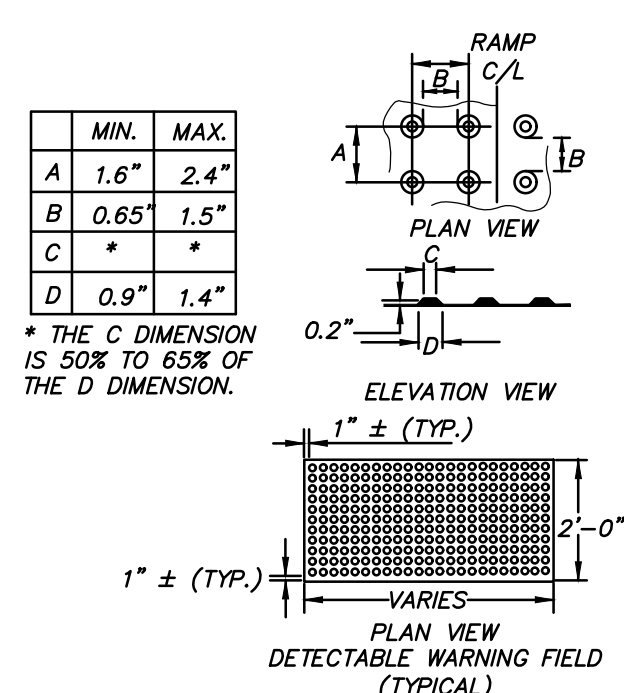
DESCRIPTION	
DATE	
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com	
raSmith CREATIVITY BEYOND ENGINEERING	
Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA	
WEST TOWNE MALL REDEVELOPMENT CITY OF MADISON, WI	UTILITY 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	
C400	



DESCRIPTION	
DATE	
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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	EROSION CONTROL DETAILS
© COPYRIGHT 2020 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	
C500	

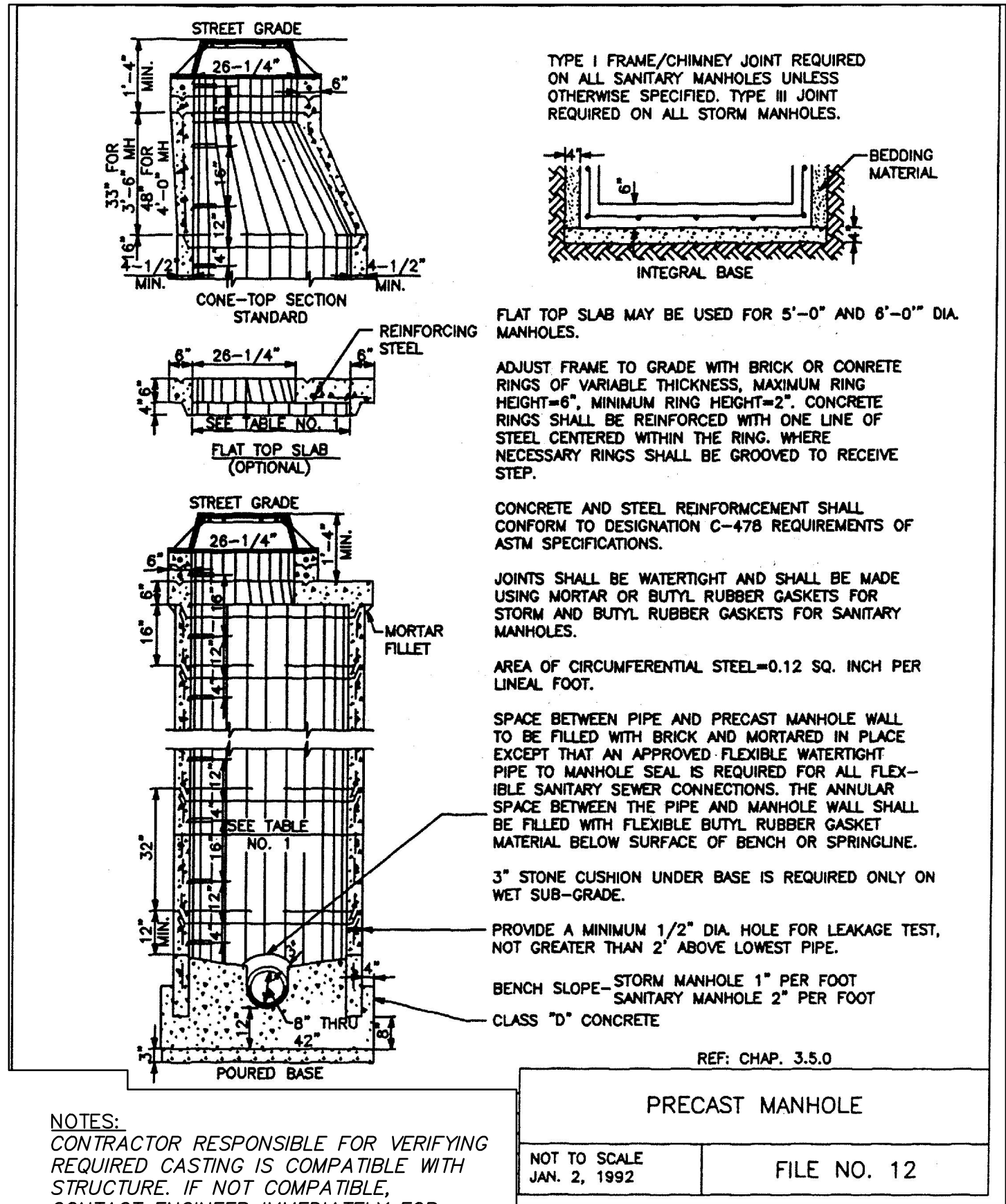


**STATE OF WISCONSIN
ACCESSIBLE PARKING SIGNS**



DESCRIPTION	DATE
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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	SITE DETAILS
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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	
C501	



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)

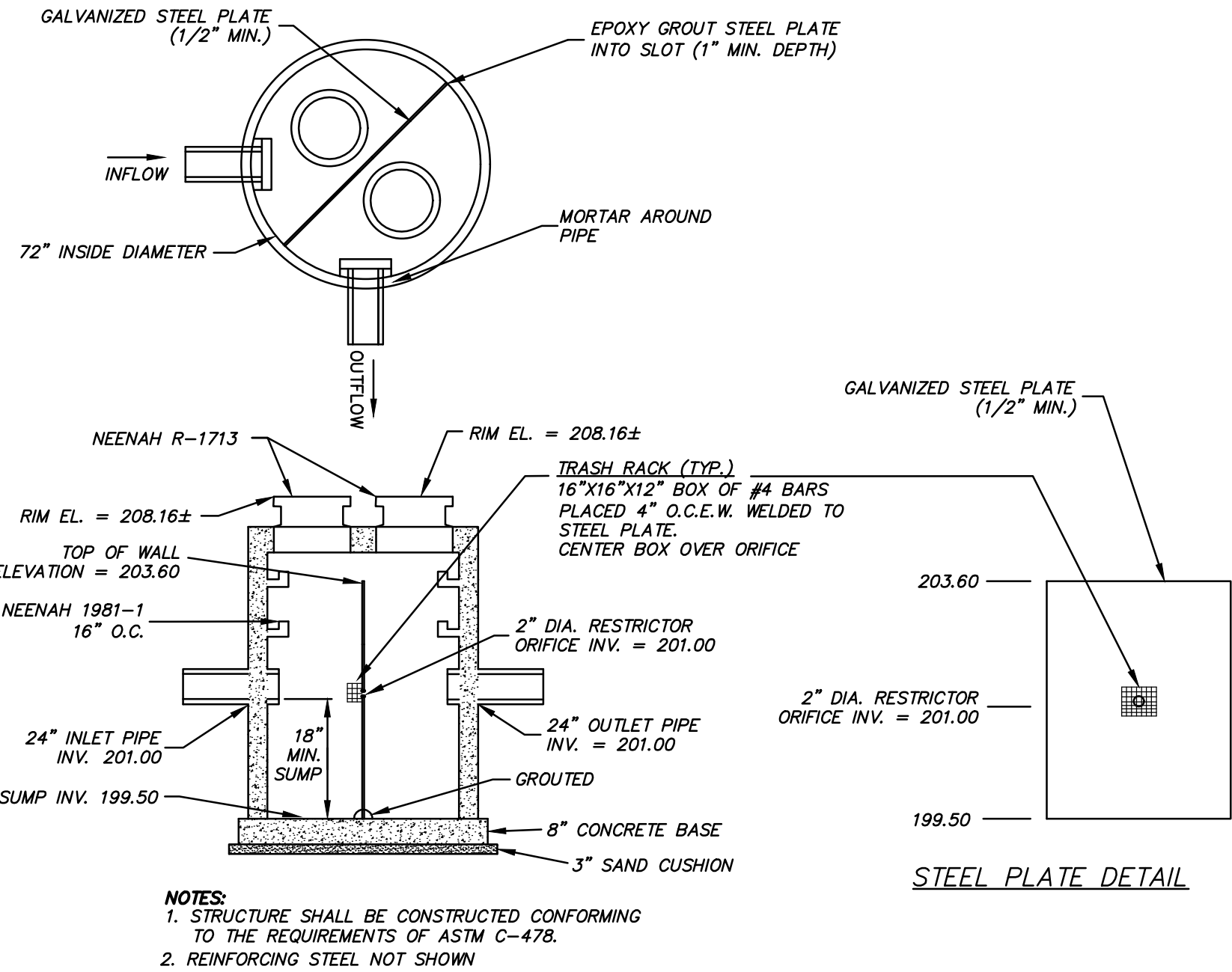
STORM INLET DETAIL

STORM MANHOLE & INLET NOTES:

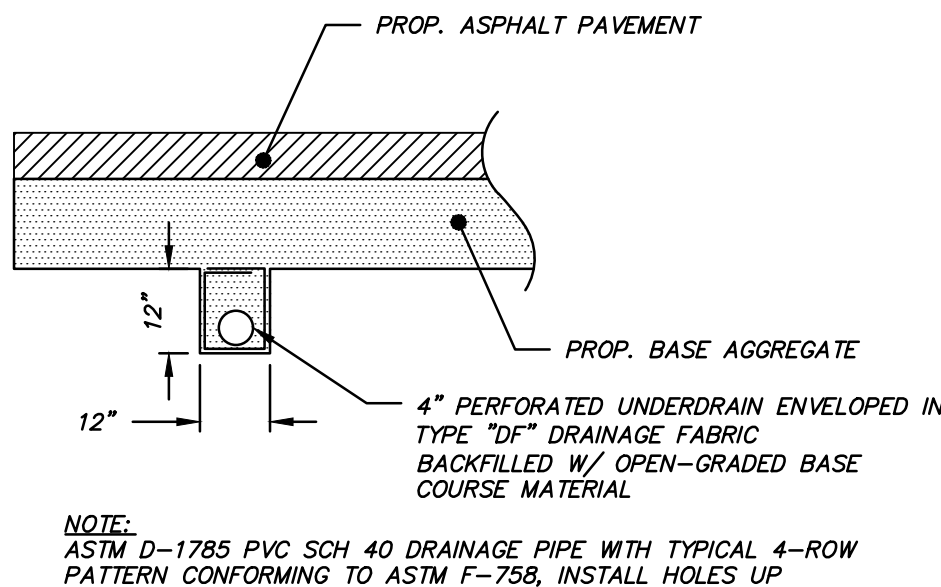
NOTES:

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-2560 (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.

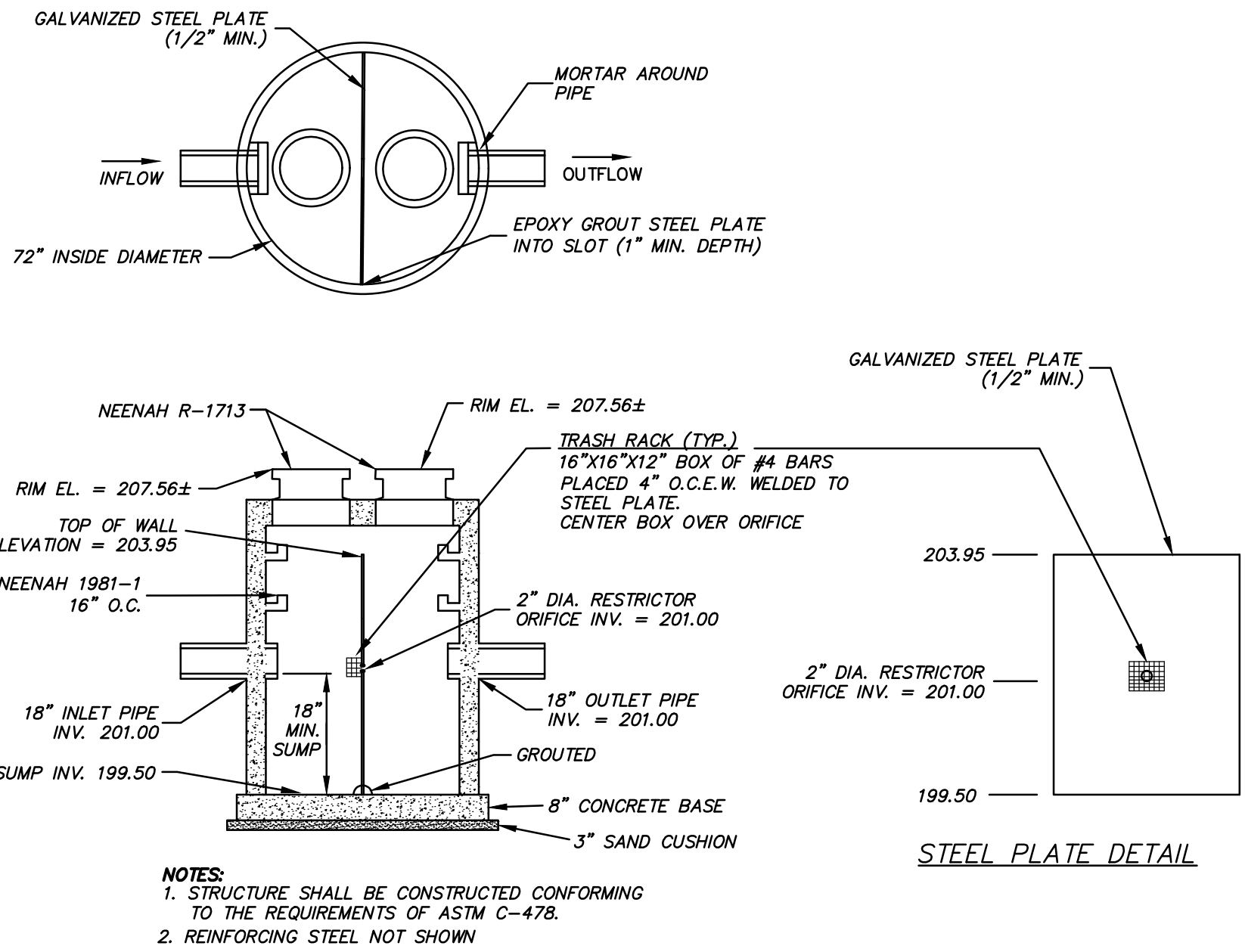
MANHOLE (MH)
REFER TO CITY OF BROOKFIELD DETAIL, EXCEPT:
A. USE CASTING AS INDICATED BELOW:
ALL MANHOLES - NEENAH R-1661
B. USE 48" MINIMUM DIAMETER UNLESS INDICATED OTHERWISE ON PLAN
C. PIPE MATERIAL PER C1000 UNLESS INDICATED OTHERWISE ON PLAN
D. CONTRACTOR RESPONSIBLE FOR VERIFYING REQUIRED CASTING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



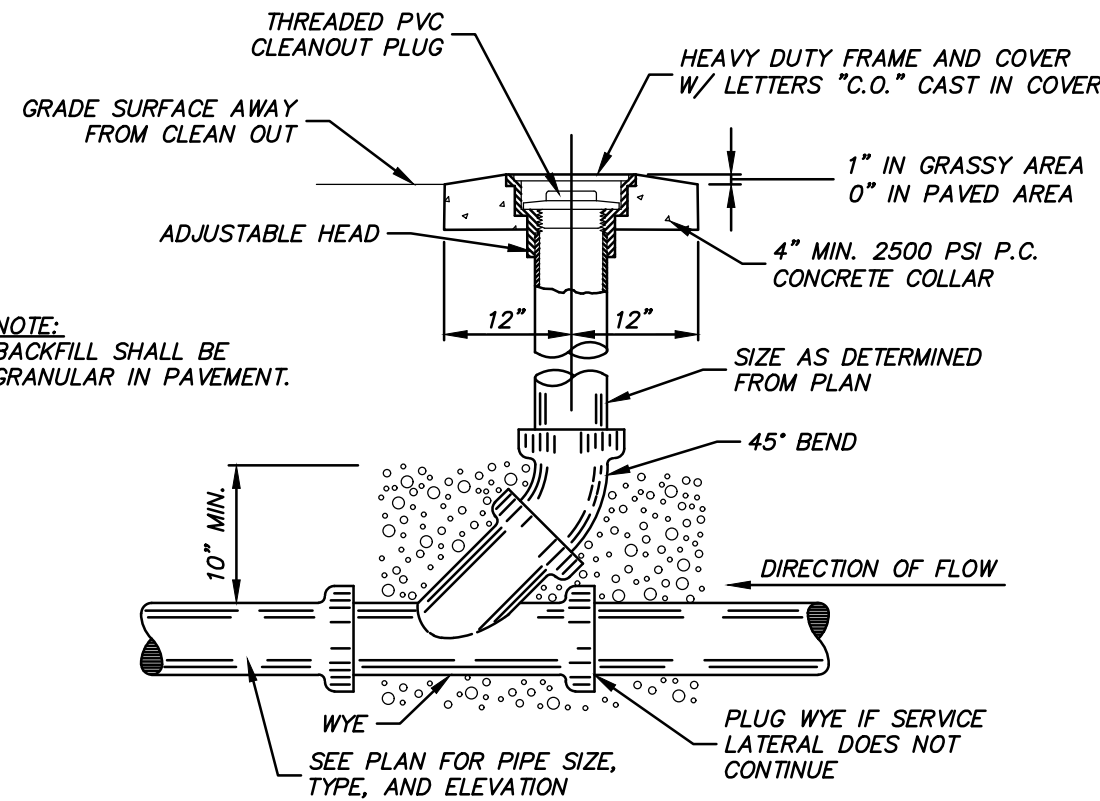
**72" DIAMETER OUTLET CONTROL STRUCTURE DETAIL
(NORTH SYSTEM - R-410)**



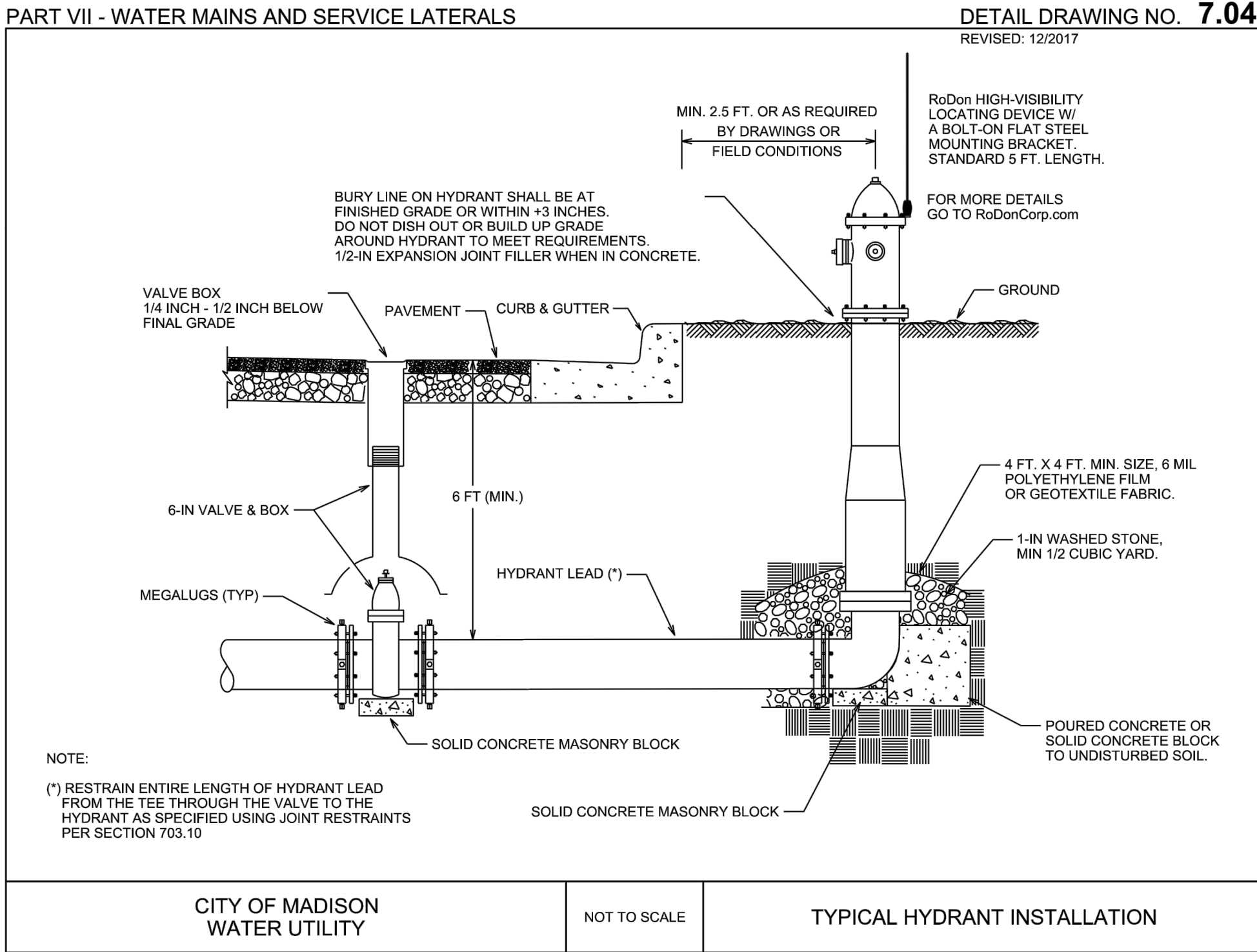
UNDERDRAIN UNDER PAVEMENT



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



SEWER CLEAN-OUT DETAIL



CITY OF MADISON
WATER UTILITY

NOT TO SCALE

TYPICAL HYDRANT INSTALLATION

City of Madison Standard Specifications for Public Works Construction

WEST TOWNE MALL REDVELOPMENT

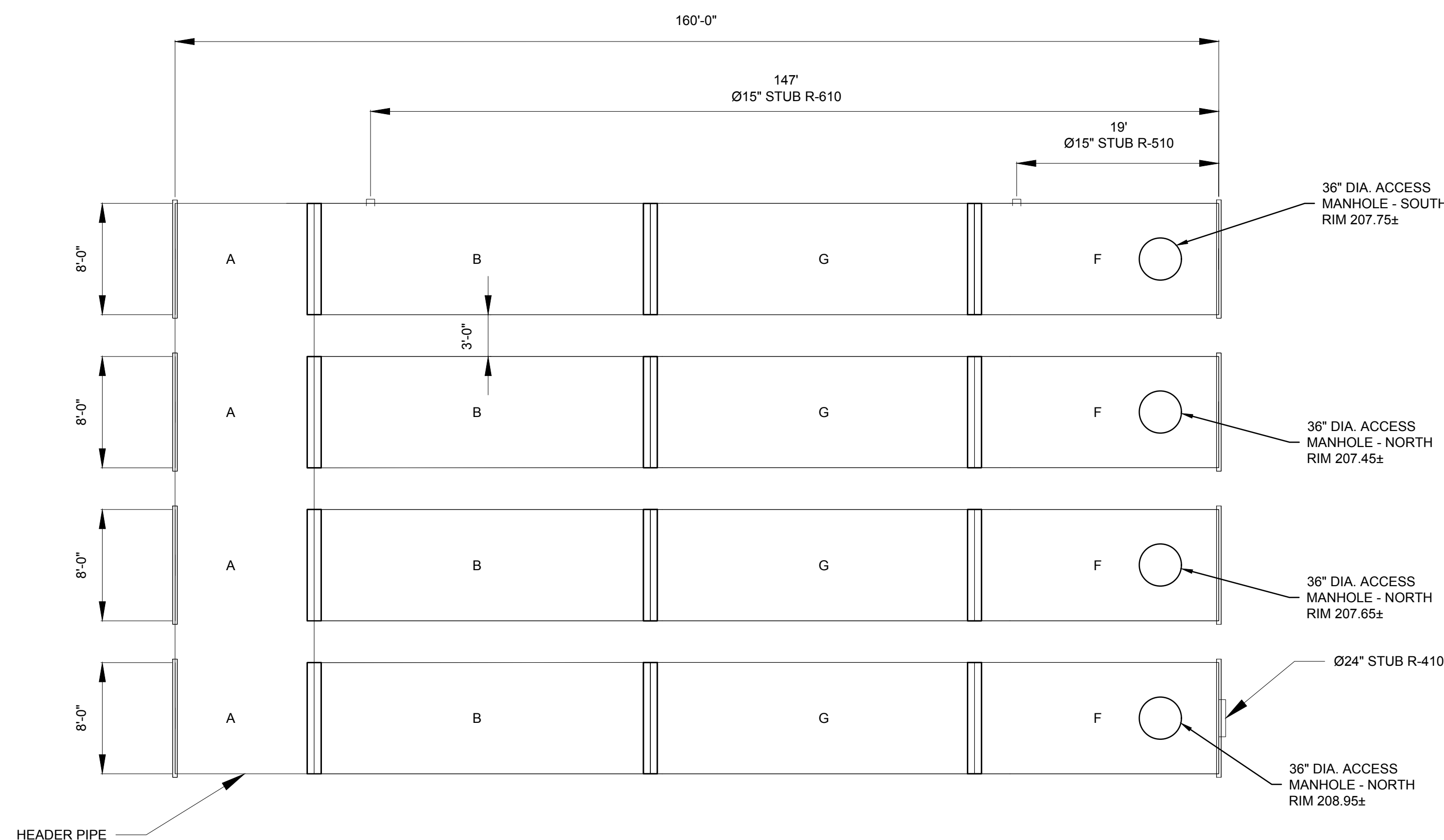
CITY OF MADISON, WI

UTILITY DETAILS

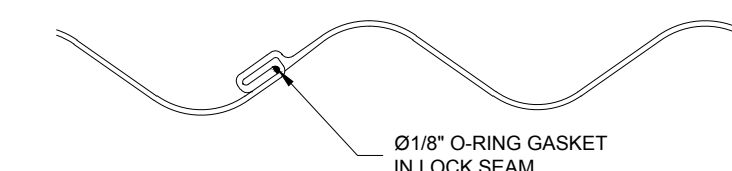
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DATE: 01/08/20
SCALE: N.T.S.
JOB NO. 3190329
PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.
DESIGNED BY: DVW
CHECKED BY: RJY
SHEET NUMBER
C502

 CUSTOMER

 DATE

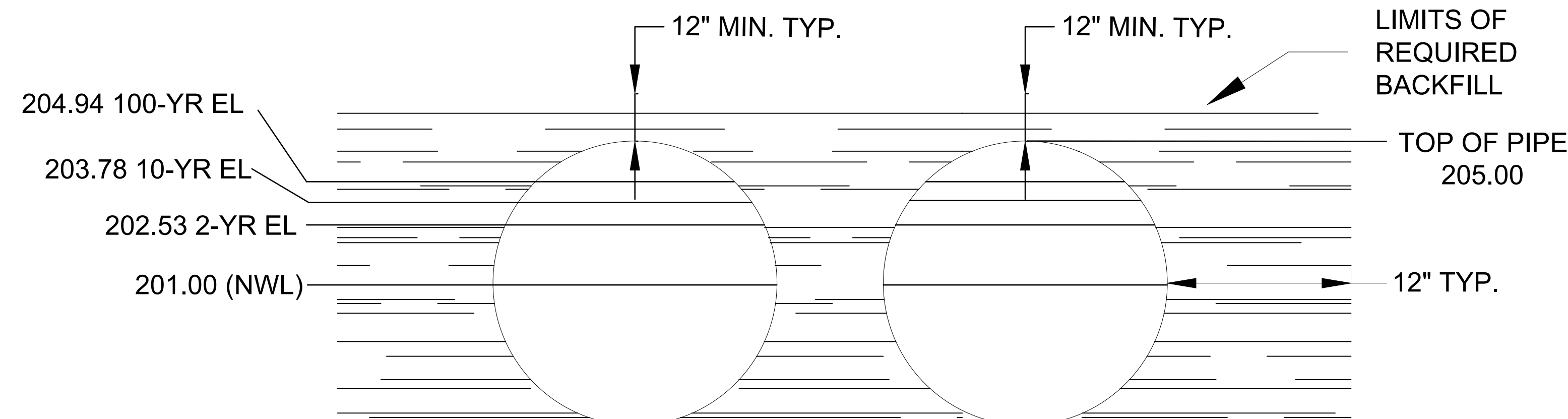


STUB INFORMATION	
PIECE	STUB INVERT
Ø15" STUB R-610	201.00
Ø15" STUB R-510	201.00
Ø24" STUB R-410	201.00



LOCKSEAM GASKET DETAIL

ASSEMBLY
SCALE: N.T.S
VOLUME: 0.74 AC-FT
LOADING: H2O/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 $\frac{3}{4}$ " 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 = 0.74 AC-FT**
- **MAINLINE PIPE GAUGE =**
- **WALL TYPE =**
- **DIAMETER =**
- **FINISH =**
- **CORRUGATION =**

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 800-338-1122 513-645-7000 513-645-7993 FAX



CONTECH
CMP DETENTION SYSTEMS

CONTECH
PROPOSAL
DRAWING

NORTH SYSTEM

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

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

CONTECH DETAILS 1

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DATE: 01/08/20

SCALE: N.T.S.

JOB NO. 3190329

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

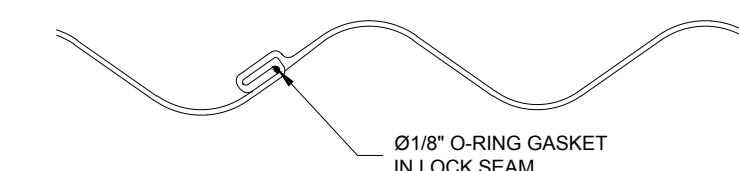
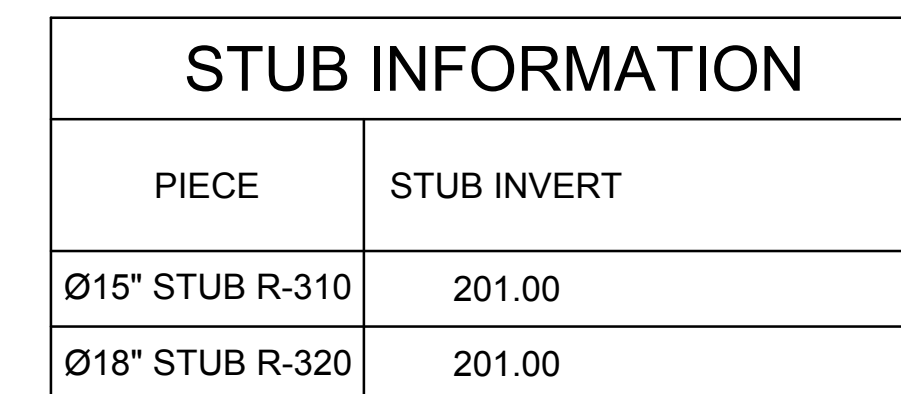
DESIGNED BY: DVW

CHECKED BY: P.IV

SHEET NUMBER

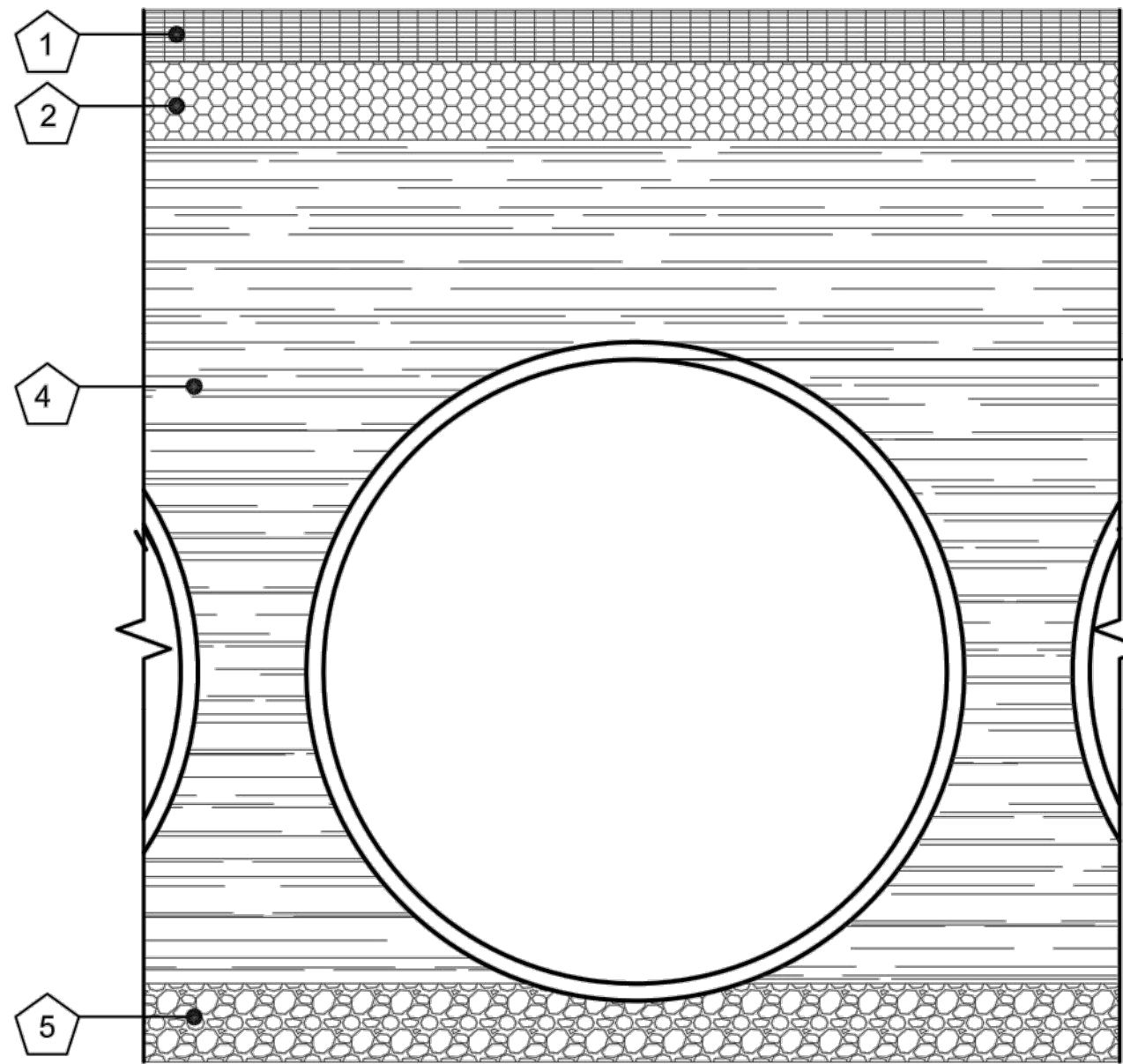
C503

DATE _____



C504

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- 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

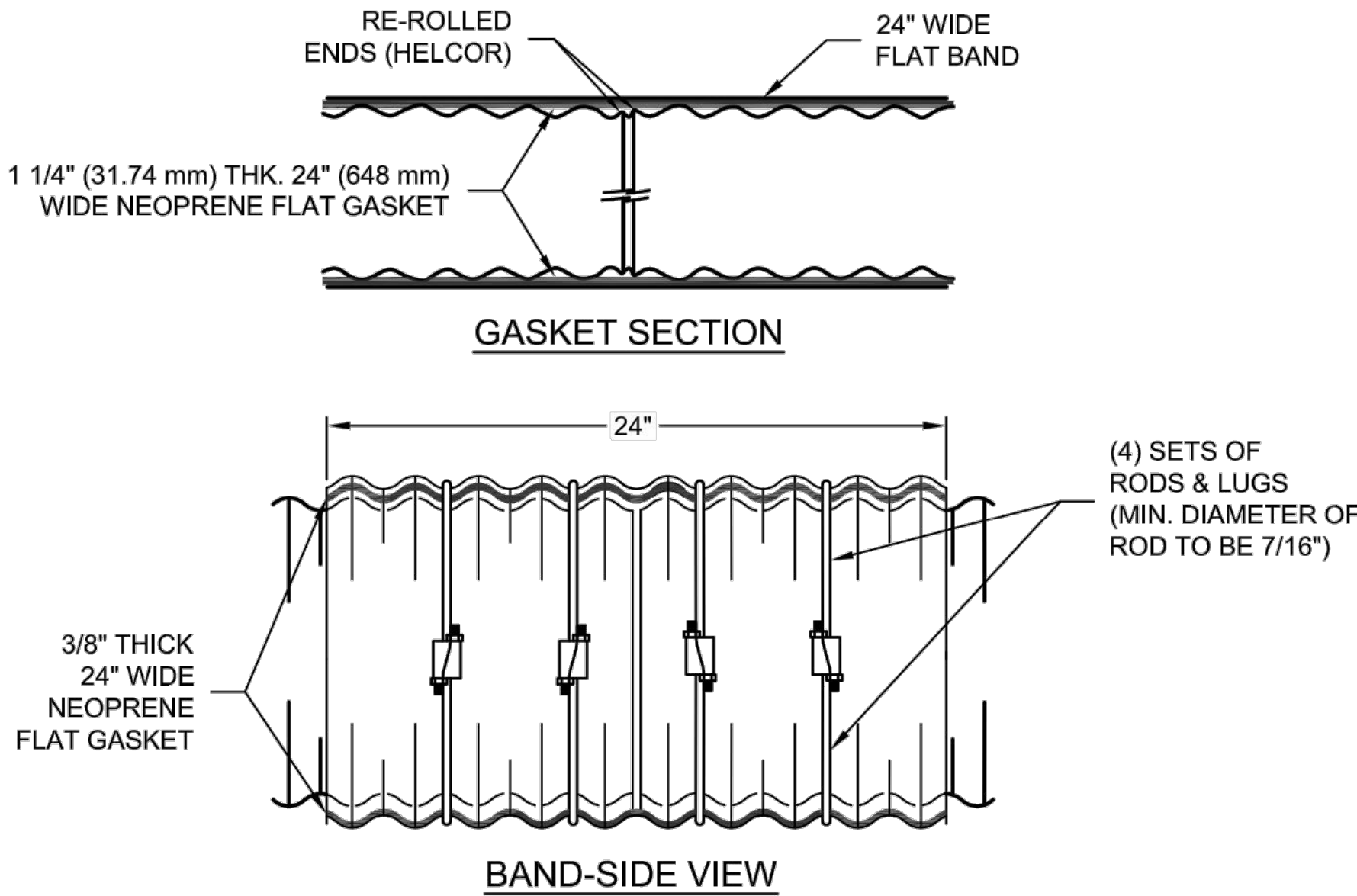
PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION 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	

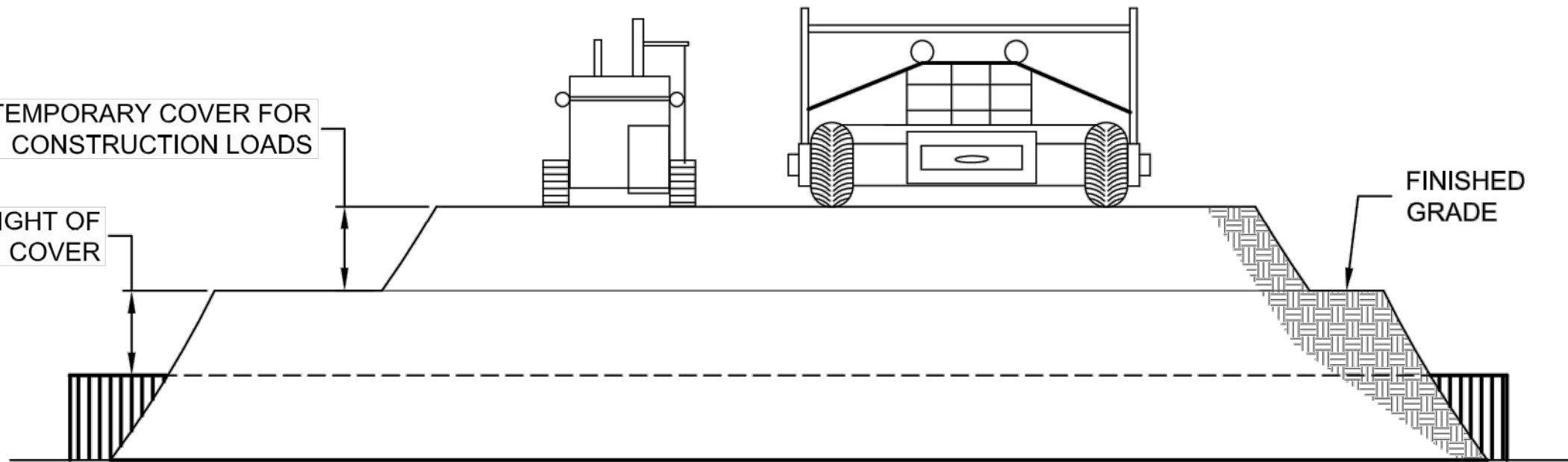
WEST TOWNE MALL REDVELOPMENT

CITY OF MADISON, WI

CONTECH DETAILS 3

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

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CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
MINIMUM COVER (FT)				
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
SCALE: N.T.S.

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

MATERIAL SPECIFICATION
SCALE: N.T.S.

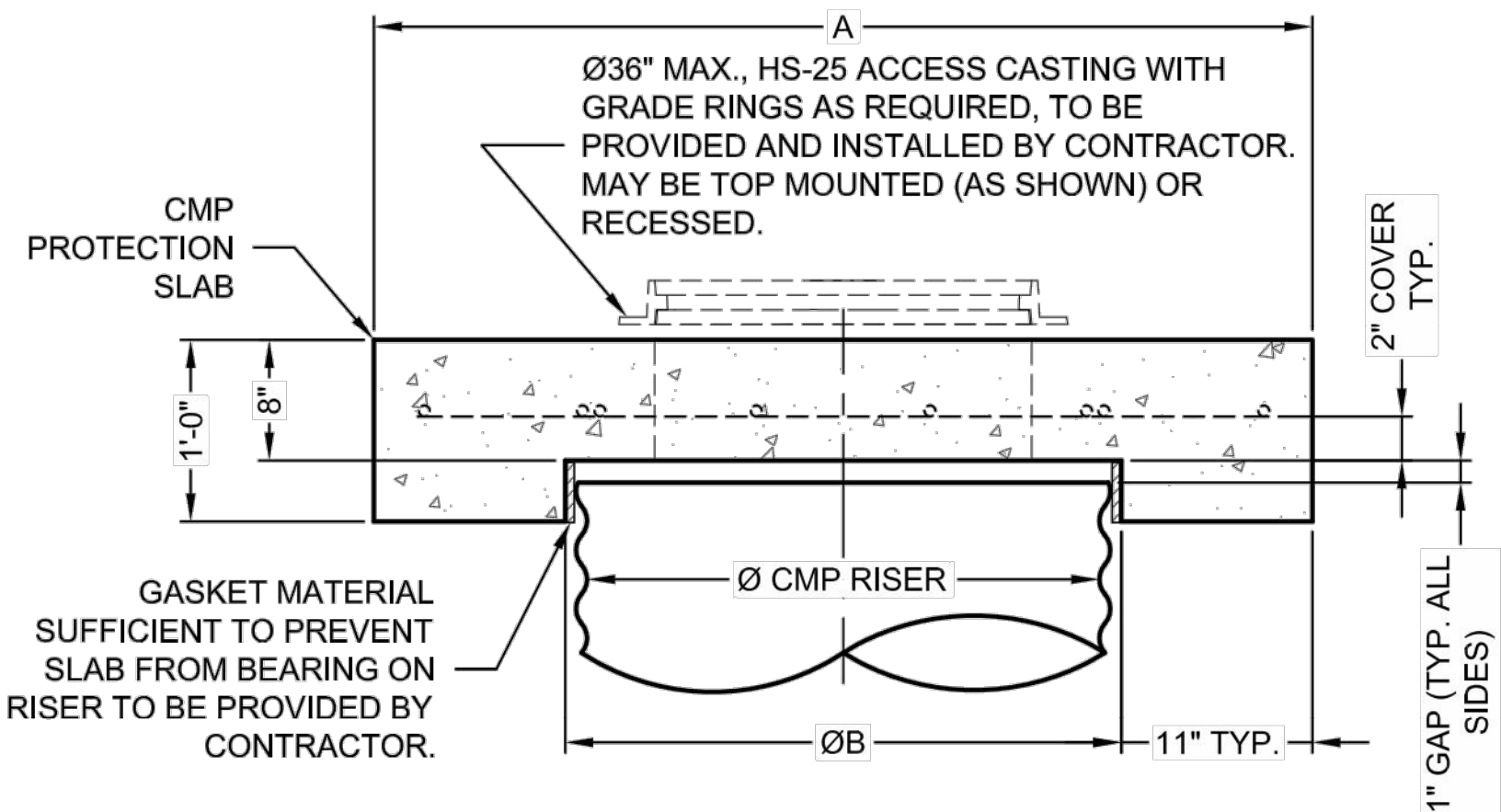
HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

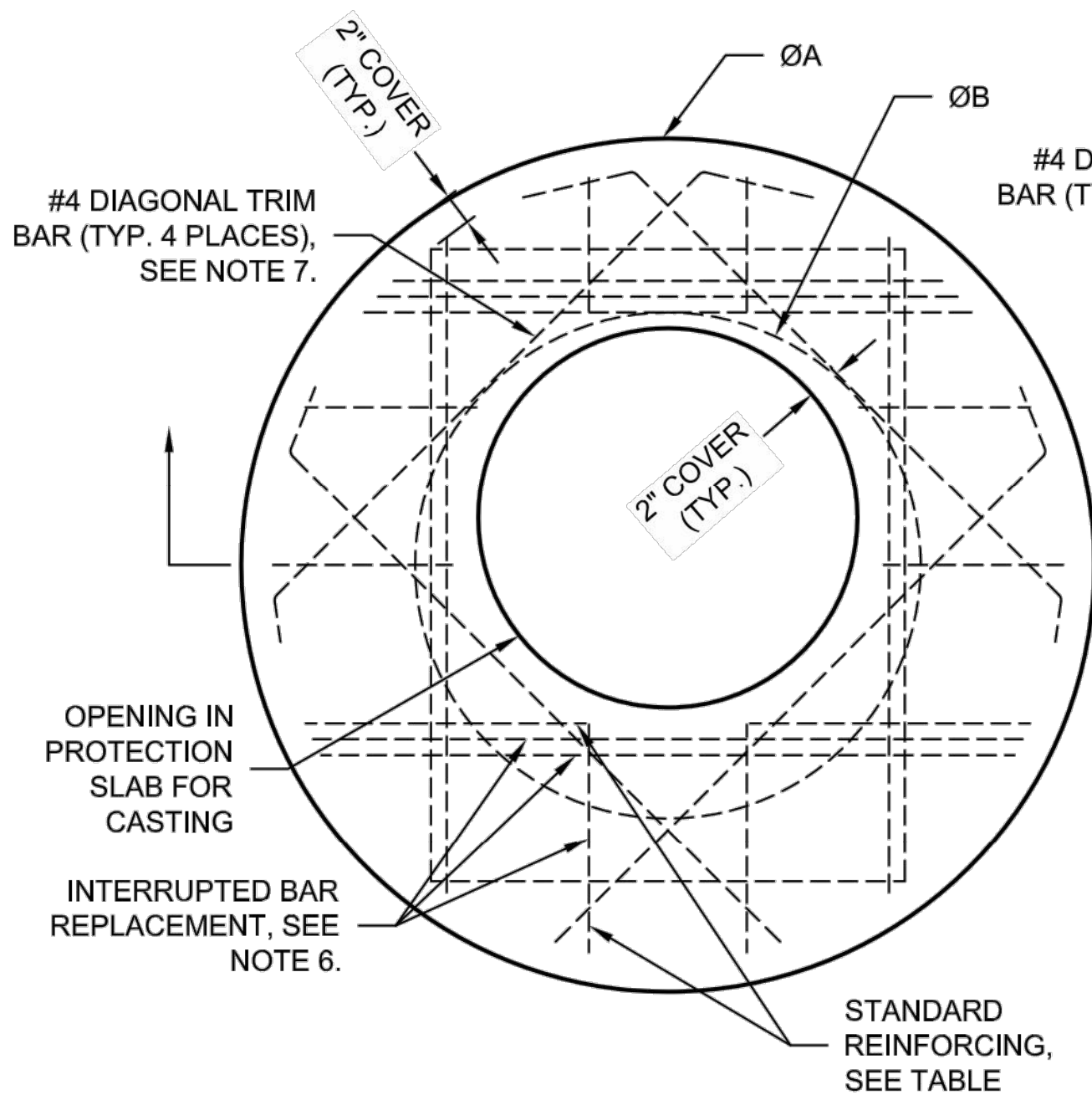
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.



SECTION VIEW



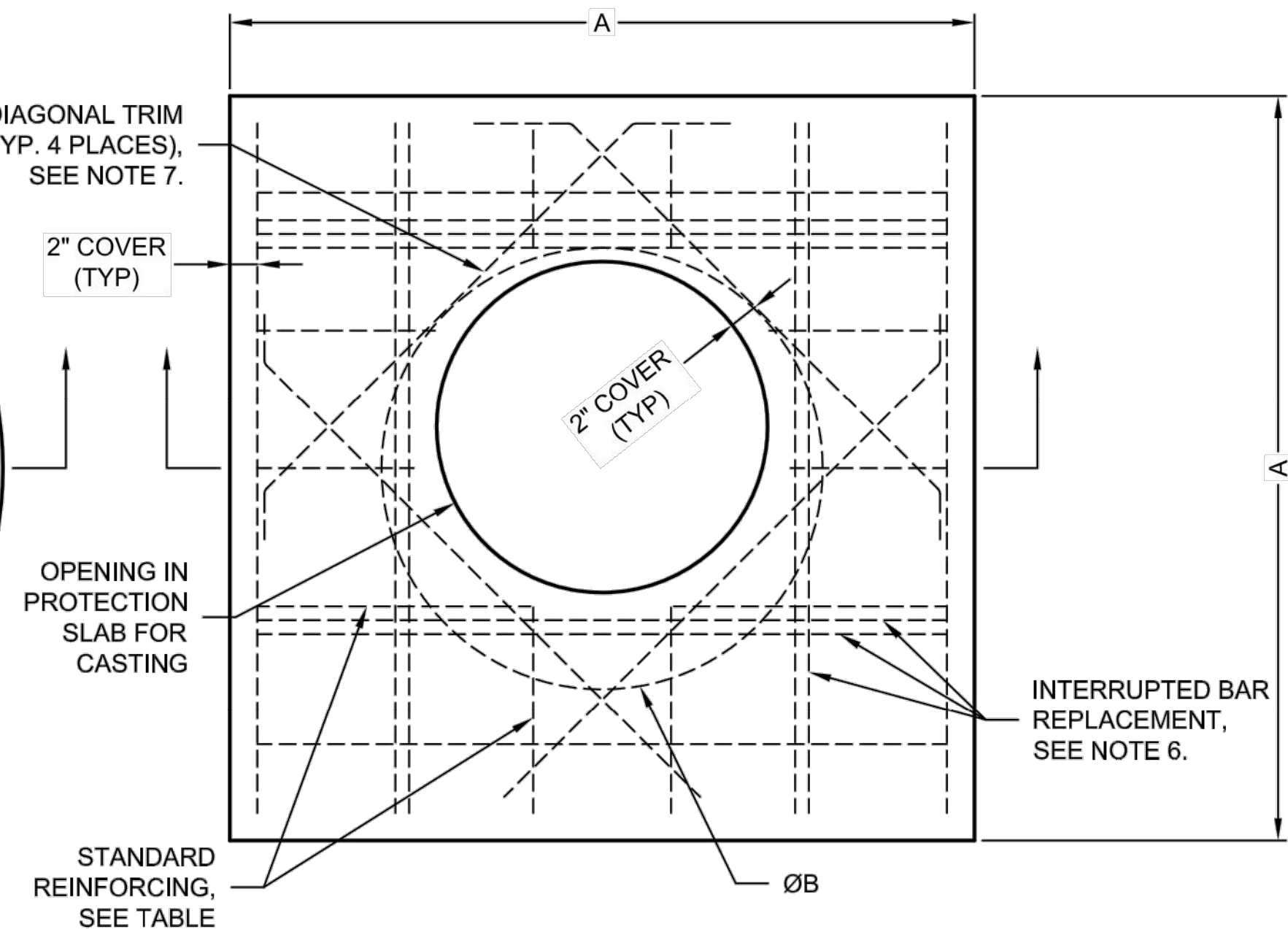
ROUND OPTION PLAN VIEW

NOTES:

- DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
- DESIGN LOAD HS25.
- EARTH COVER = 1' MAX.
- CONCRETE STRENGTH = 4,000 psi
- REINFORCING STEEL = ASTM A615, GRADE 60.
- PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

REINFORCING TABLE				
Ø CMP RISER	A	Ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	Ø 4' 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	Ø 4'-6" 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	Ø 5' 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	Ø 5'-6" 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	Ø 6' 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY



SQUARE OPTION PLAN VIEW

- TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
SCALE: N.T.S.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH
ENGINEERED SOLUTIONS LLC
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CONTECH
CMP DETENTION SYSTEMS
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PROPOSAL
DRAWING

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.: P3	OF 3	

DESCRIPTION

DATE

16745 W. Bluemound Road
Brookfield, WI 53005-5938
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CREATIVITY BEYOND ENGINEERING

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WEST TOWNE MALL REDVELOPMENT
CITY OF MADISON, WI

CONTECH DETAILS 4

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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

C506

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 TRAFFIC CONTROL DEVICES (WMUTCD)
 - 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 REGARDING 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 NEW ALL PORTIONS OF THE SUBSTANDARD OR INFERIOR WORK OR REPLACEMENT OF IMPROPER 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 PROJECT. 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. ALL SUCH DEFECTS, 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 ALL DRAWINGS AND 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.
 - j. 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 PREVENT PONDING OF WATER.
14. REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, TRASH, AND DEBRIS FROM THE PROJECT SITE. RUBBISH, TRASH, 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 COVER 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 AS NECESSARY, 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 WITHIN 12 HOURS PRIOR TO TACK COAT APPLICATION: TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AT TIME OF SURFACE COURSE INSTALLATION.
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. DEPRESSIONS, RISES, AND REPAIRS OF ALL RAISED AND DEPRESSIONS 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 AND ASTM C94 / C94M.
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 WORK.
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

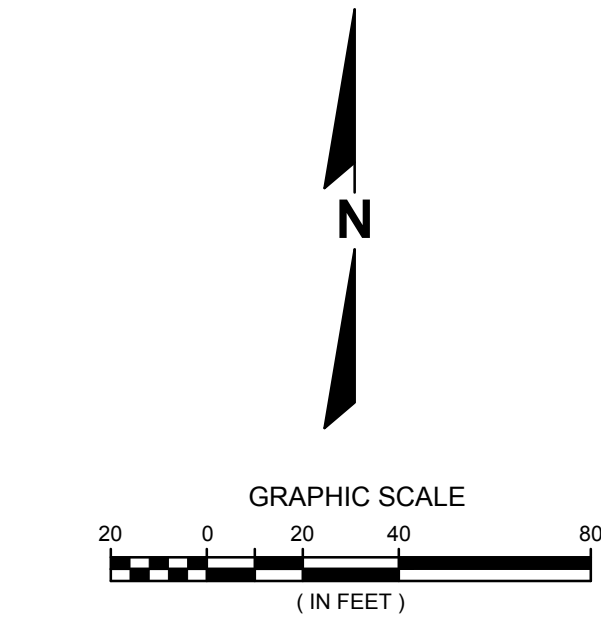
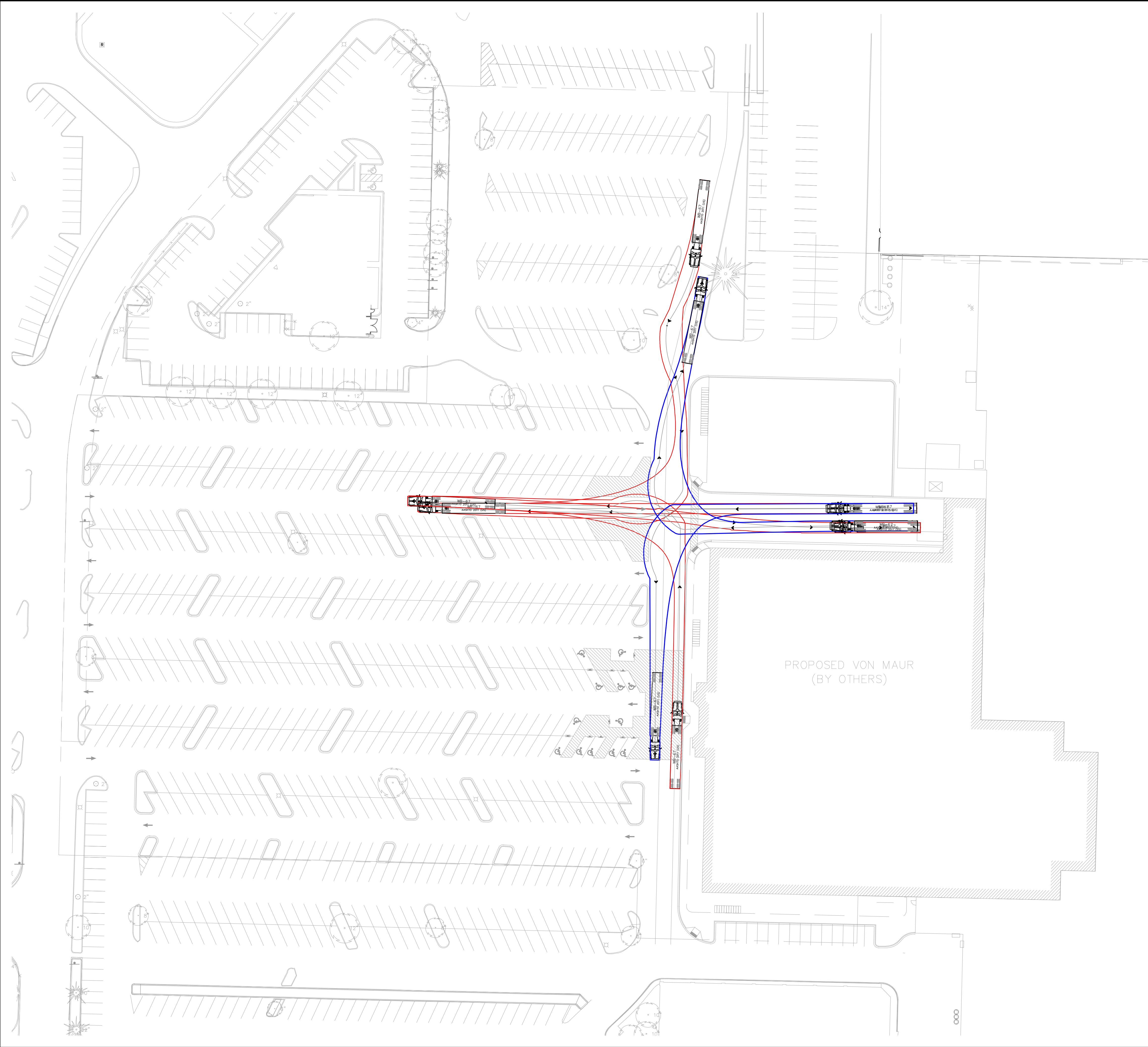
1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE WATER DISTRIBUTION SYSTEM AND ALL APPURTENANCES.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. ALL PUBLIC WATER DISTRIBUTION WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND MUNICIPALITY DEVELOPMENT STANDARDS.
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 448. 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. THURST 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 100 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

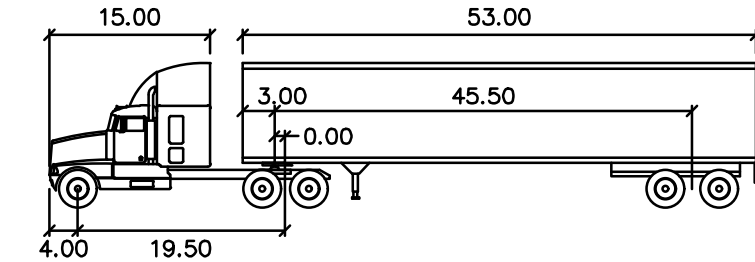
1. WORK SHALL CONSIST OF INSTALLATION AND TESTING OF THE SANITARY SEWERAGE SYSTEM AND ALL APPURTENANCES.
2. ALL ITEMS SHALL INCLUDE ALL NECESSARY MATERIALS AND LABOR TO COMPLETE THE ITEM IN PLACE.
3. ALL PUBLIC SANITARY SEWERAGE WORK SHALL BE IN ACCORDANCE WITH SSSWCW AND MUNICIPALITY DEVELOPMENT STANDARDS.
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 SECTION 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 ELBOW CONNECTIONS ARE REQUIRED FOR ALL BUILDING SANITARY SERVICE PIPES, UNLESS NOTED OTHERWISE.
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 8.36.0 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 COMPACTED GRANULAR BACKFILL IN ACCORDANCE WITH SECTION 8.43.4 OF SSSWCW BENEATH AND WITHIN



KEY MAP
NTS



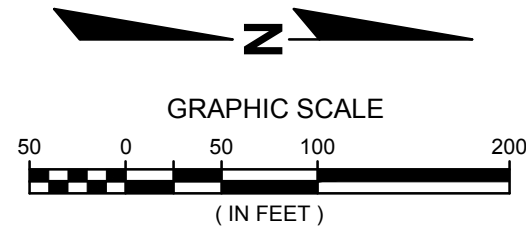
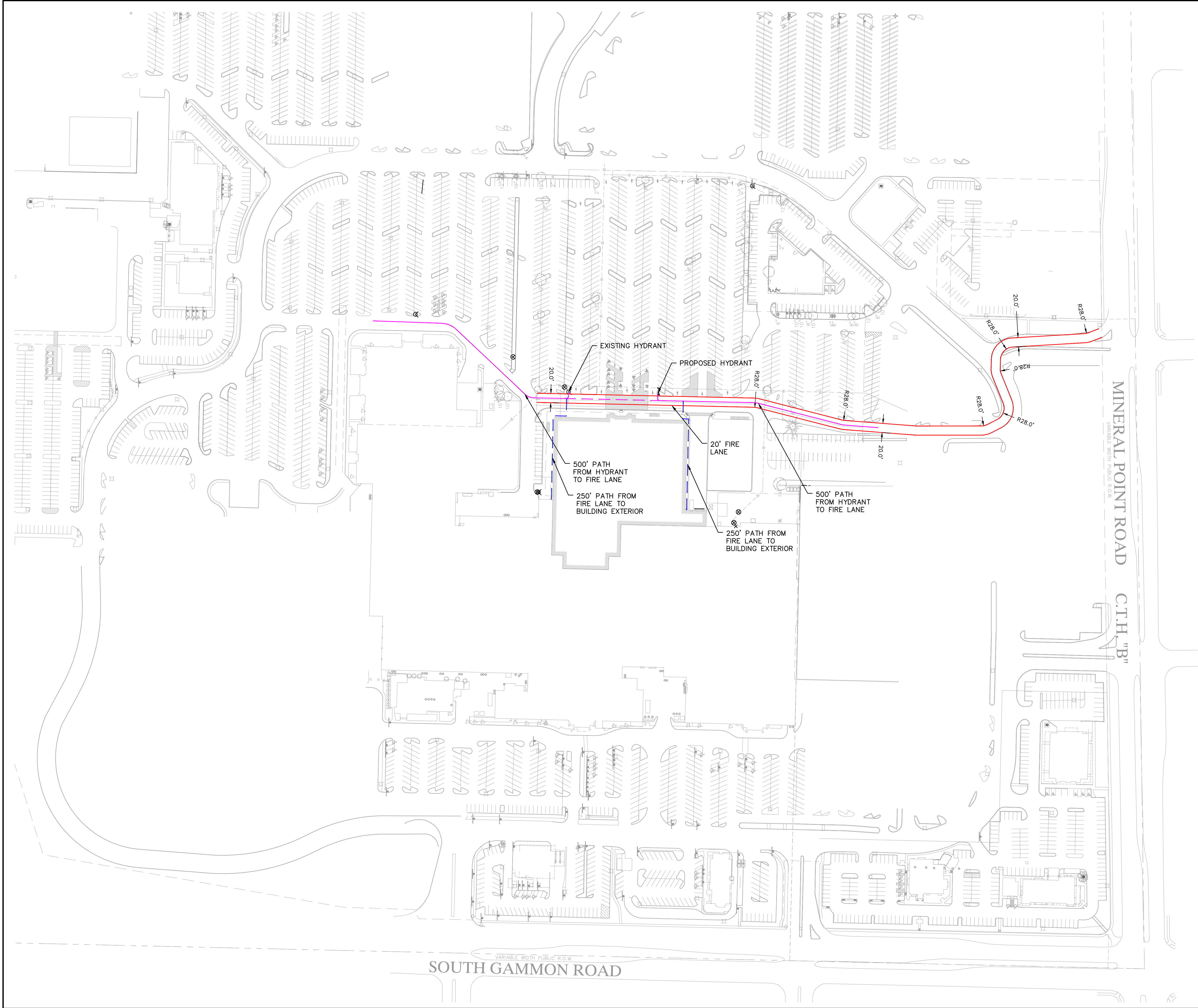
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Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



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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	
TRUCK MOVEMENT EXHIBIT TRUCK DOCK AREA	
© 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	
AT-1	



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

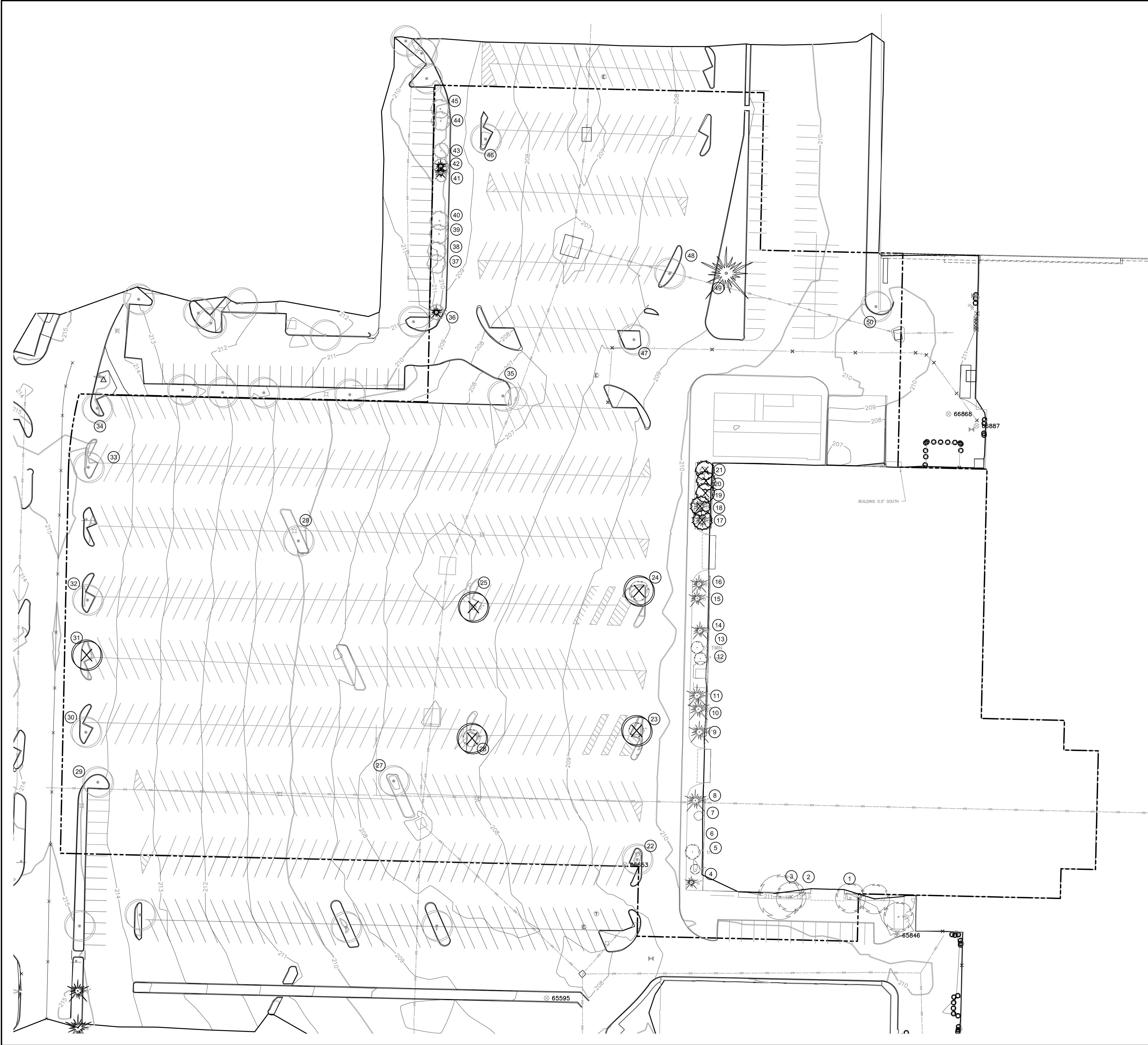
Contact Name & Phone #: Jeff Yersin, P.E., (262) 317-3232

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>			

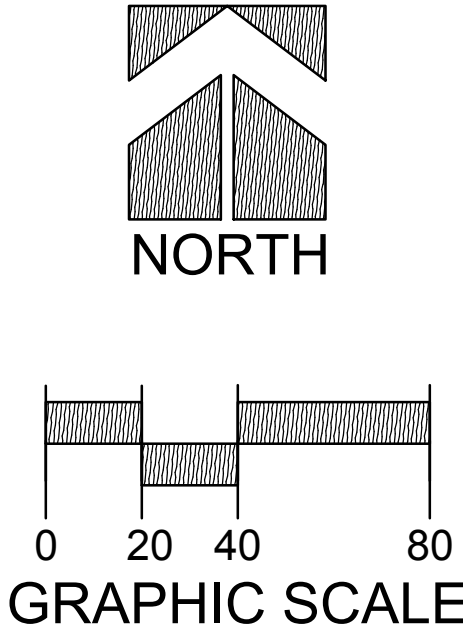
Attach an additional sheet if further explanation is required for any answers.

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



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



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DESCRIPTION

DATE

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

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CREATIVITY BEYOND ENGINEERING

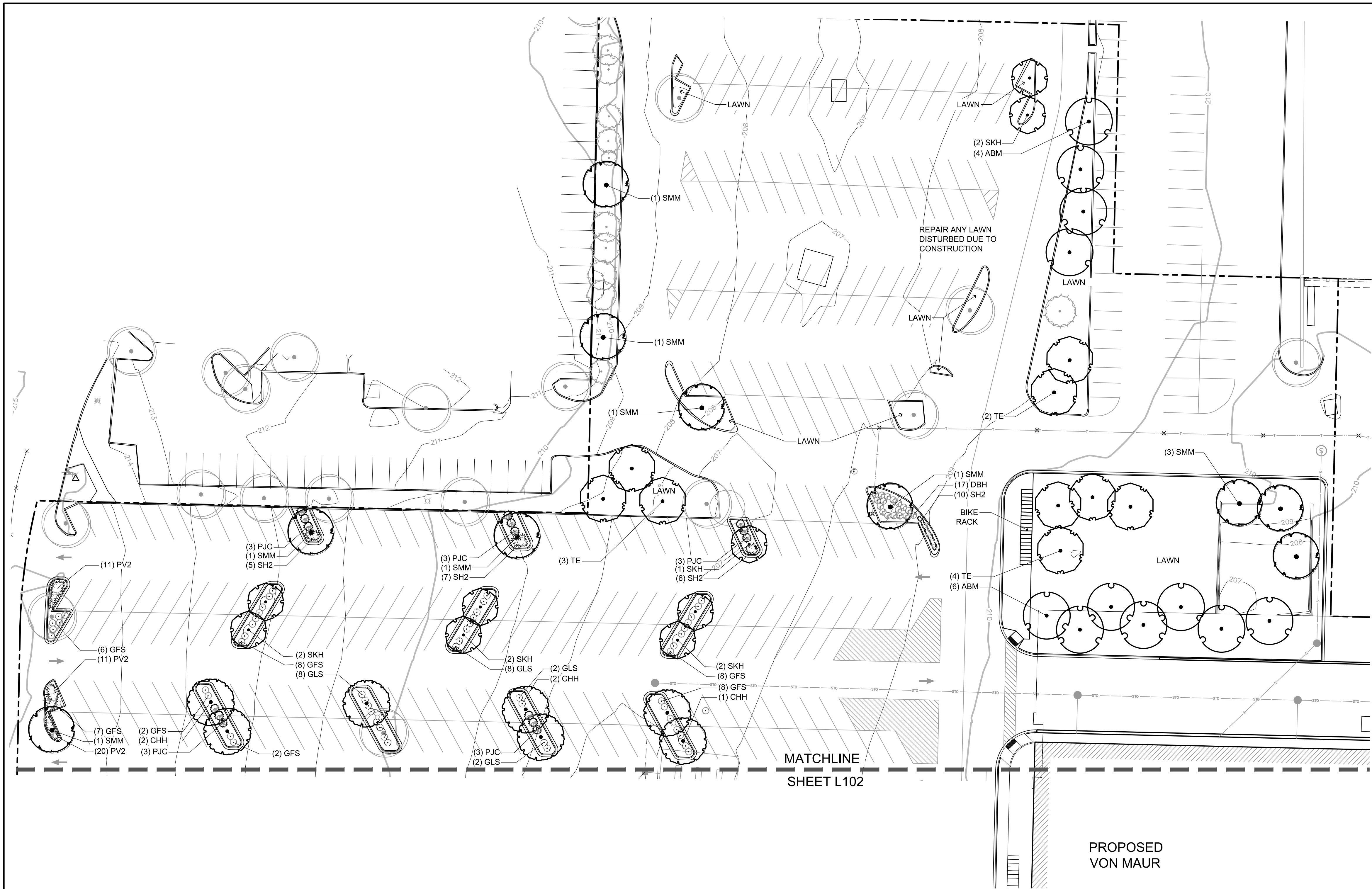
Brookfield, WI | Milwaukee, WI | Appleton, WI | Madison, WI | Cedarburg, WI
Mount Pleasant, WI | Naperville, IL | Irvine, CA

WEST TOWNE MALL REDVELOPMENT
CITY OF MADISON, WI

EXISTING TREE INVENTORY

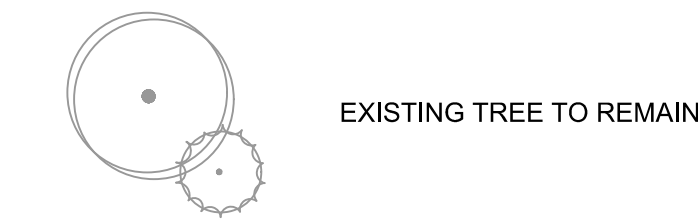
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R.A. Smith, Inc.
DATE: 01/08/20
SCALE: 1" = 40'
JOB NO. 3190329
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.
DESIGNED BY: NJW/CNS
CHECKED BY: CNS

SHEET NUMBER
L100



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	13	State Street Miyabe Maple	Acer miyabei 'Morton' TM	2 1/2" CAL	B&B	Full, matching heads
CHH	5	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	17	Dwarf Bush Honeysuckle	Diervilla lonicera	15" HT	CONT.	
GFS	54	Goldflame Spirea	Spiraea x bumalda 'Goldflame'	15" HT	CONT.	
EVERGREEN SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PJC	15	Kalloy Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'	18" SPD	CONT.	
ORNAMENTAL GRASSES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PV2	29	Cheyenne Sky Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 GAL	POT	18" Spacing
SH2	28	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	1 GAL	POT	18" Spacing



EXISTING TREE TO REMAIN

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: 4,558 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 deciduous tree for very 160 SF required landscape area

REQUIRED: 15,401 SF / 160SF = 97 trees
PROVIDED: 19 existing trees to remain & 74 proposed trees

7) Foundation Plantings
Foundation planting by others



CITY OF MADISON
LANDSCAPE WORKSHEET
Section 28.142 Madison General Ordinance

Project Location / Address West Towne Mall, Madison, WI
Name of Project West Towne Mall Redevelopment
Owner / Contact Ken Wittler
Contact Phone 423-490-8385 Contact Email Ken.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:

- The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- No demolition of a principal building is involved.
- 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.

- 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 _____

- 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 4,533

- For the Industrial - Limited (IL) 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

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	2 1/2 inch caliper measured diameter at breast height (dbh)	35	13	455	79	2765
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35	4	140		
Ornamental tree	1 1/2 inch caliper	15	6	90		
Upright evergreen shrub (i.e. arbovitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12"-24"	3	1	3	221	663
Shrub, evergreen	#3 gallon container size, Min. 12"-24"	4			44	176
Ornamental grasses/ perennials	#1 gallon container size, Min. 8"-18"	2			133	266
Ornamental/ decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 1/2 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		3870

Total Number of Points Provided 4558

* 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



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DESCRIPTION

DATE

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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

LANDSCAPE PLAN
NORTH

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: 1" = 30'

JOB NO. 3190329

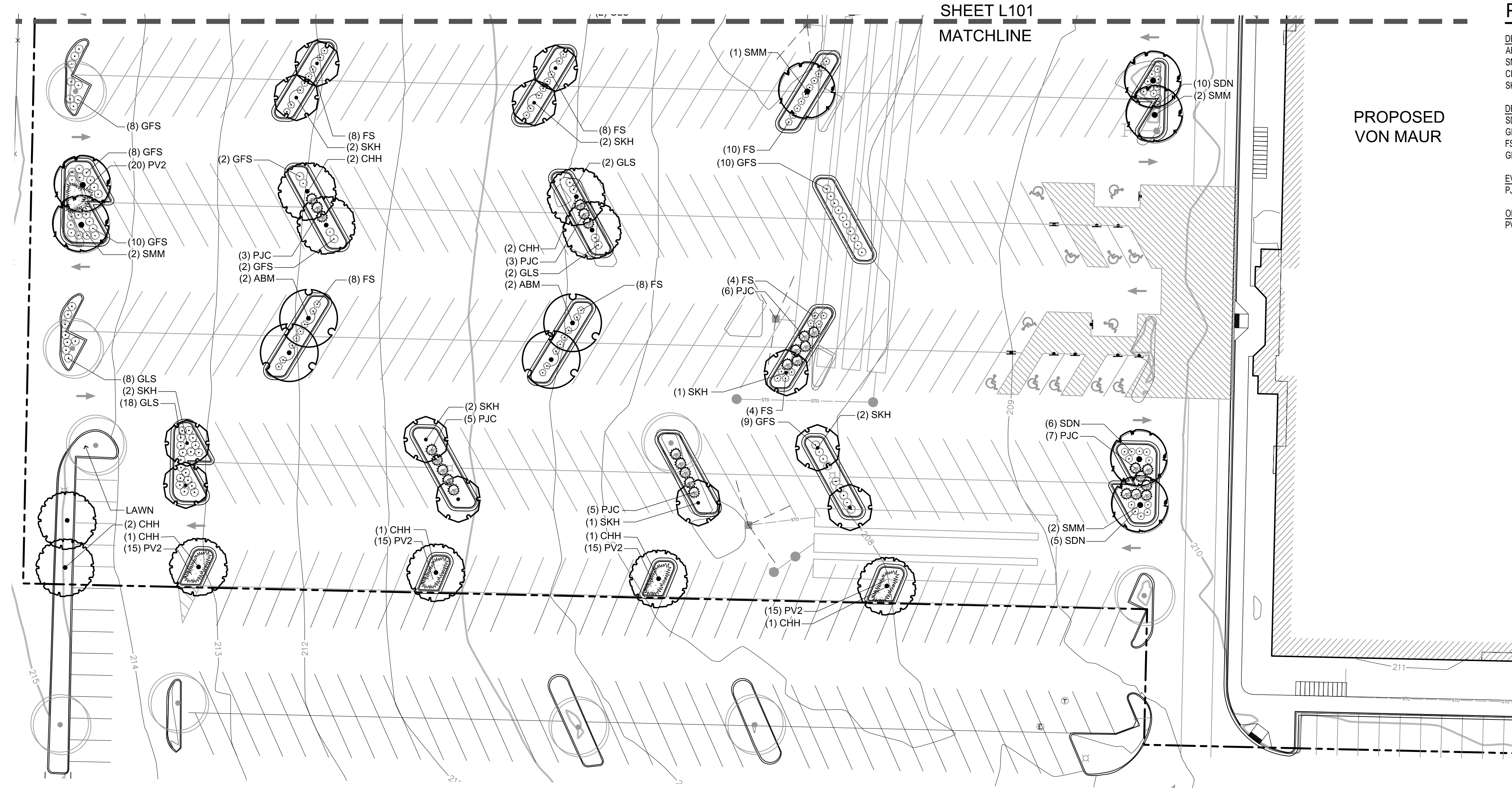
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: NJW

CHECKED BY: CNS

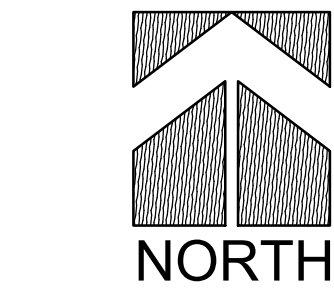
SHEET NUMBER

L101



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	10	State Street Miyabel Maple	Acer miyabei 'Morton' TM	2 1/2" CAL	B&B	Full, matching heads
CHH	11	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
DECIDUOUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
SDN	21	Nikko Slender Deutzia	Deutzia gracilis 'Nikko'	15" HT	CONT.	
GLS	26	Gro-Low Fragrant Sumac	Rhus aromatica 'Gro-Low'	15" HT	CONT.	
FS	50	Froebel Spirea	Spiraea x bumalda 'Froebel'	15" HT	CONT.	
GFS	53	Goldflame Spirea	Spiraea x bumalda 'Goldflame'	15" HT	CONT.	
EVERGREEN SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PJC	29	Kallay Compact Pfizer Juniper	Juniperus chinensis 'Kallays Compact'	18" SPD	CONT.	
ORNAMENTAL GRASSES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PV2	82	Cheyenne Sky Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 GAL	POT	18" Spacing



GRAPHIC SCALE

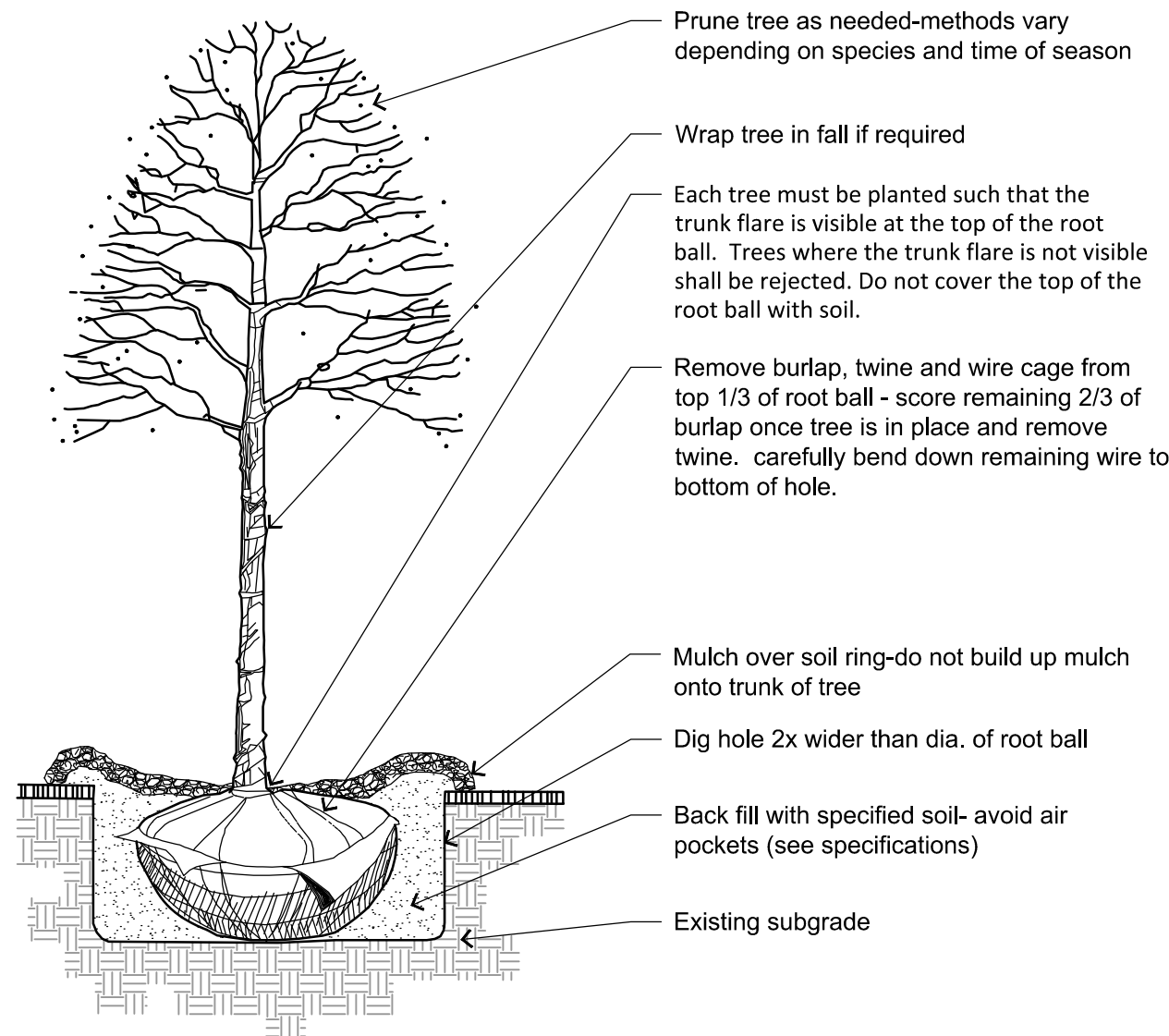


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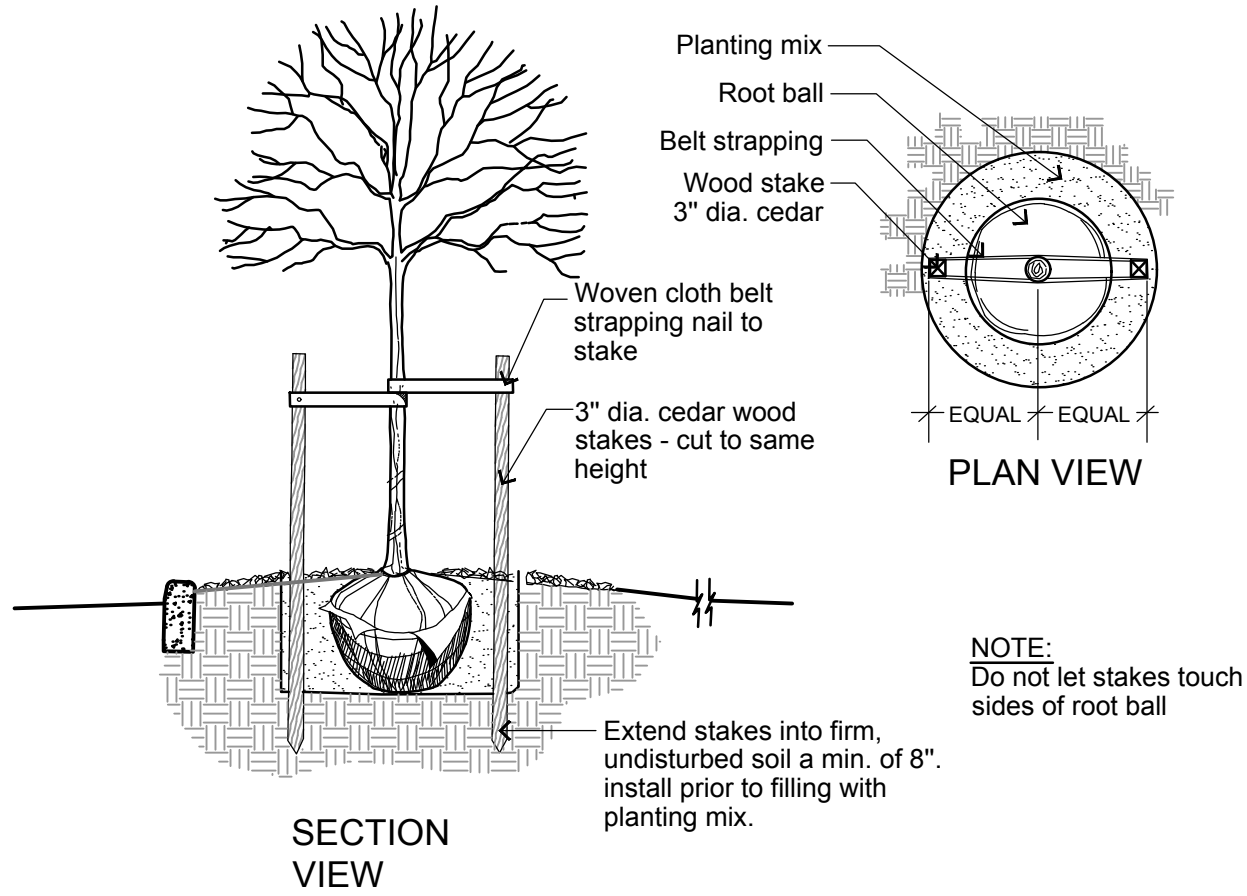
GENERAL LANDSCAPE NOTES

- 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 seed 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.

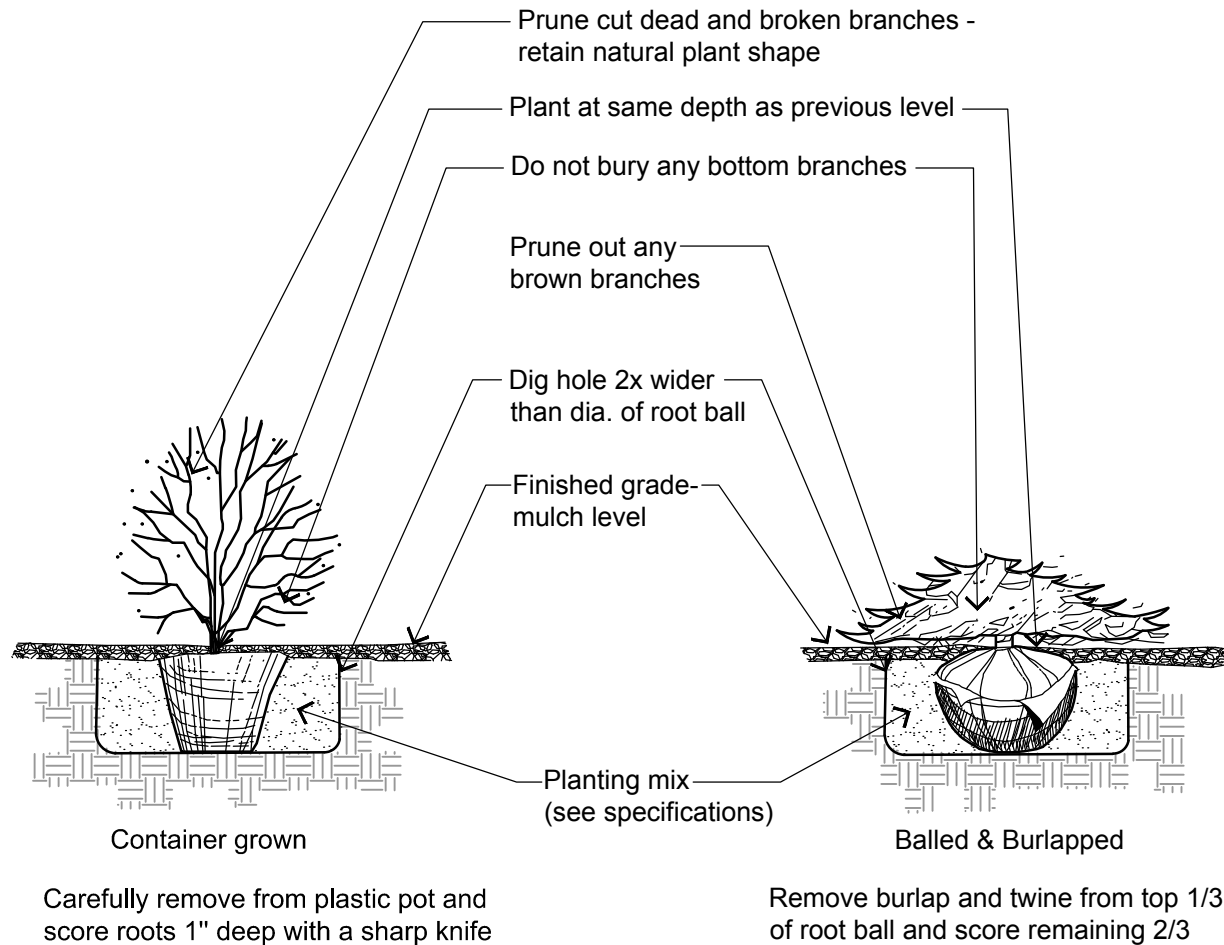
GENERAL LANDSCAPE DETAILS



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

L102

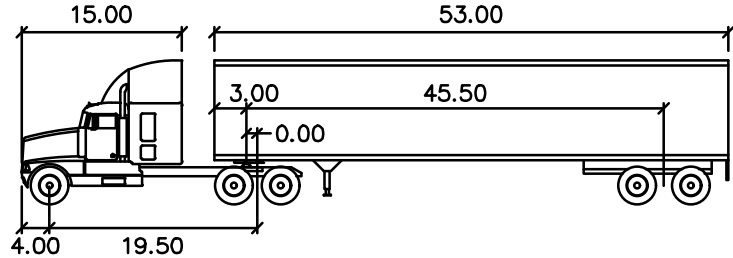
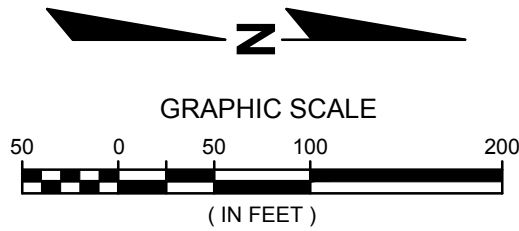
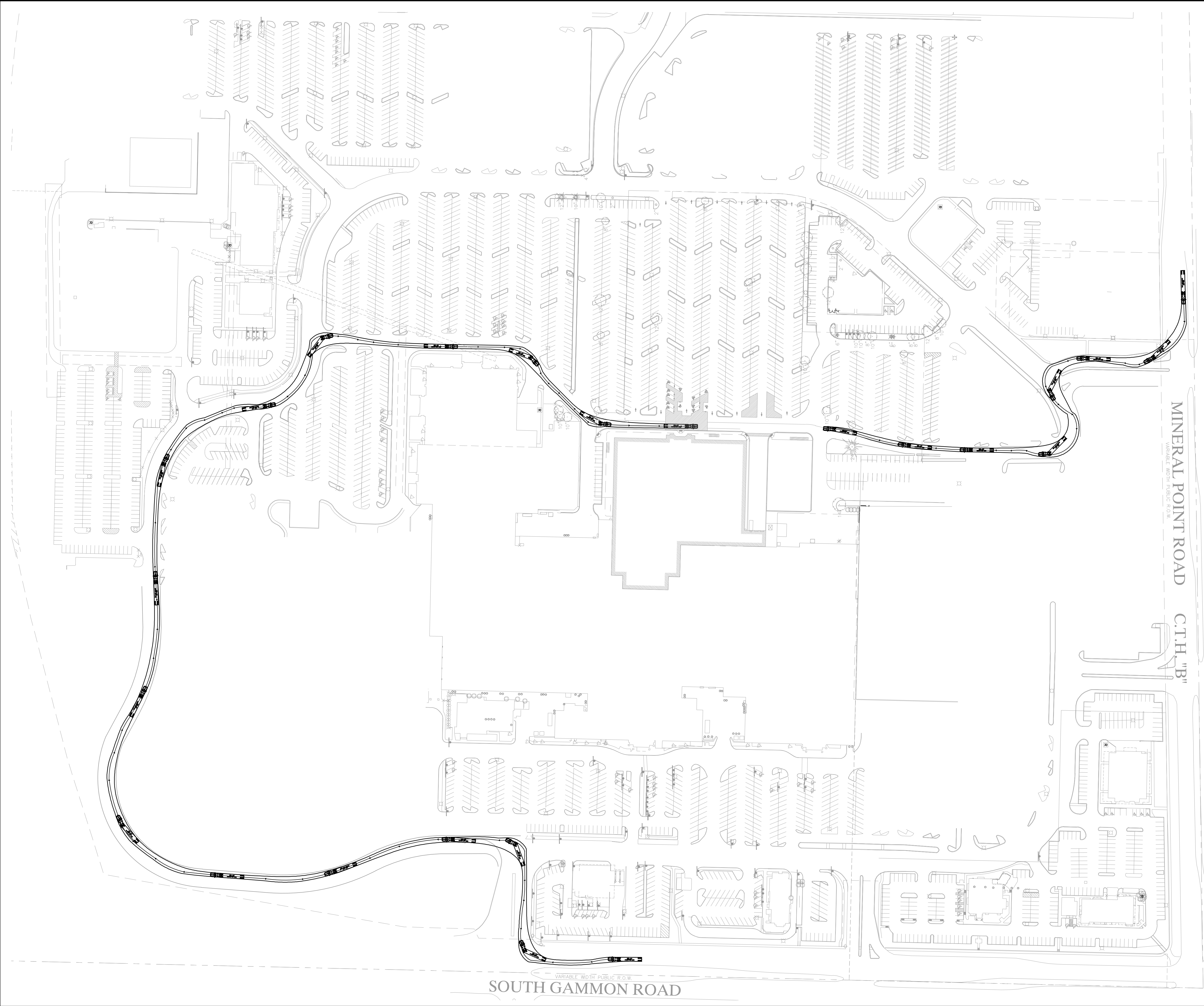
DESCRIPTION

DATE

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



WB-67			
feet			
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



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WEST TOWNE MALL REDVELOPMENT
CITY OF MADISON, WI

TRUCK MOVEMENT EXHIBIT
OVERALL SITE

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CREATIVITY BEYOND ENGINEERING

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Brookfield, WI 53005-5938
(262) 781-1000
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DATE	DESCRIPTION

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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
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.

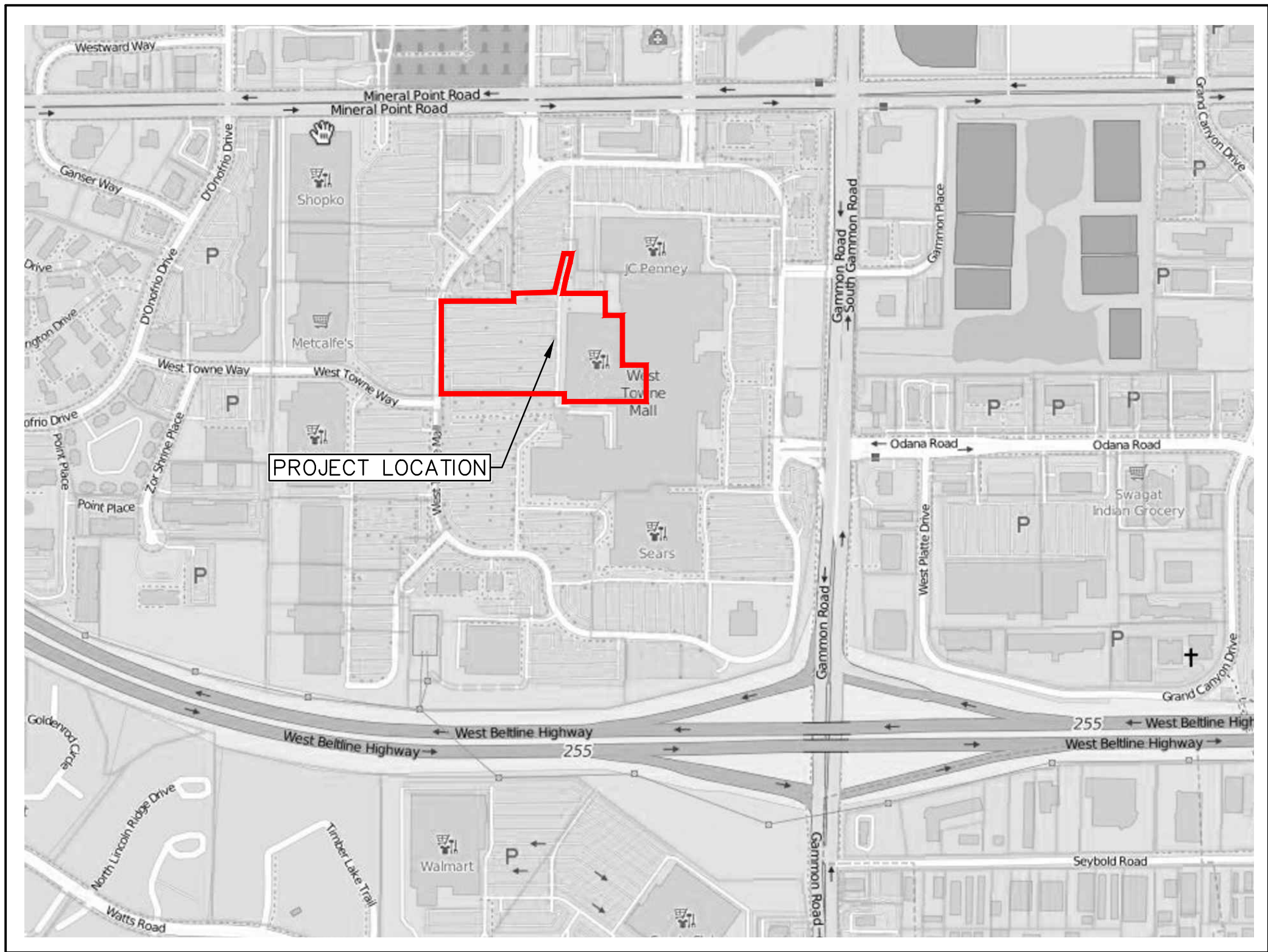
TOGETHER WITH THE NON-EXCLUSIVE EASEMENTS FOR INGRESS-EGRESS, PARKING, AND UTILITIES AS SET OUT IN THE EASEMENT, RESTRICTION AND OPERATING AGREEMENT, RECORDED IN VOLUME 100 OF RECORDS, PAGE 396, AS DOCUMENT NO. 1239177; AS AMENDED BY THE FOLLOWING;FIRST AMENDMENT TO EASEMENT, RESTRICTION AND OPERATING 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:

CIVIL ENGINEER:

raSmith

CREATIVITY BEYOND ENGINEERING

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

OWNER/DEVELOPER:

CBL®

CBL PROPERTIES

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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

STORM SEWER UTILITY:
CITY OF MADISON
GREG FRIES, P.E.
ASSISTANT CITY ENGINEER
CITY-COUNTY BUILDING
210 MARTIN LUTHER KING, JR. BLVD.
MADISON, WI 53703
PH: (608) 266-4751
EMAIL: GFRIES@CITYOFMADISON.COM

ELECTRIC UTILITY:
ALLIANT ENERGY
DENISE GEVELINGER
PH: (608) 845-1129
(608) 575-7833

SANITARY SEWER UTILITY:
CITY OF MADISON
GREG FRIES, P.E.
ASSISTANT CITY ENGINEER
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EMAIL: GFRIES@CITYOFMADISON.COM

MADISON FIRE DEPARTMENT:
BILL SULLIVAN
FIRE PROTECTION ENGINEER
CITY OF MADISON FIRE DEPARTMENT
314 WEST DAYTON STREET
MADISON, WI 53703
PH: (608) 261-9658
EMAIL: WSULLIVAN@CITYOFMADISON.COM

WATER UTILITY:
MADISON WATER UTILITY
ADAM WIEDERHOEFT
119 EAST OLIN AVE.
MADISON, WI 53713
PH: (608) 266-9121
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

PLAN DATE: JANUARY 8, 2020

REVISION	ISSUE DATE	ISSUED SHEETS	ISSUED FOR



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CREATIVITY BEYOND ENGINEERING

WEST TOWNE MALL REDEVELOPMENT
CITY OF MADISON, WI

PROJECT INFORMATION

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R.A. Smith, Inc.

DATE: 01/08/20

SCALE: N.T.S.

JOB NO. 3190329

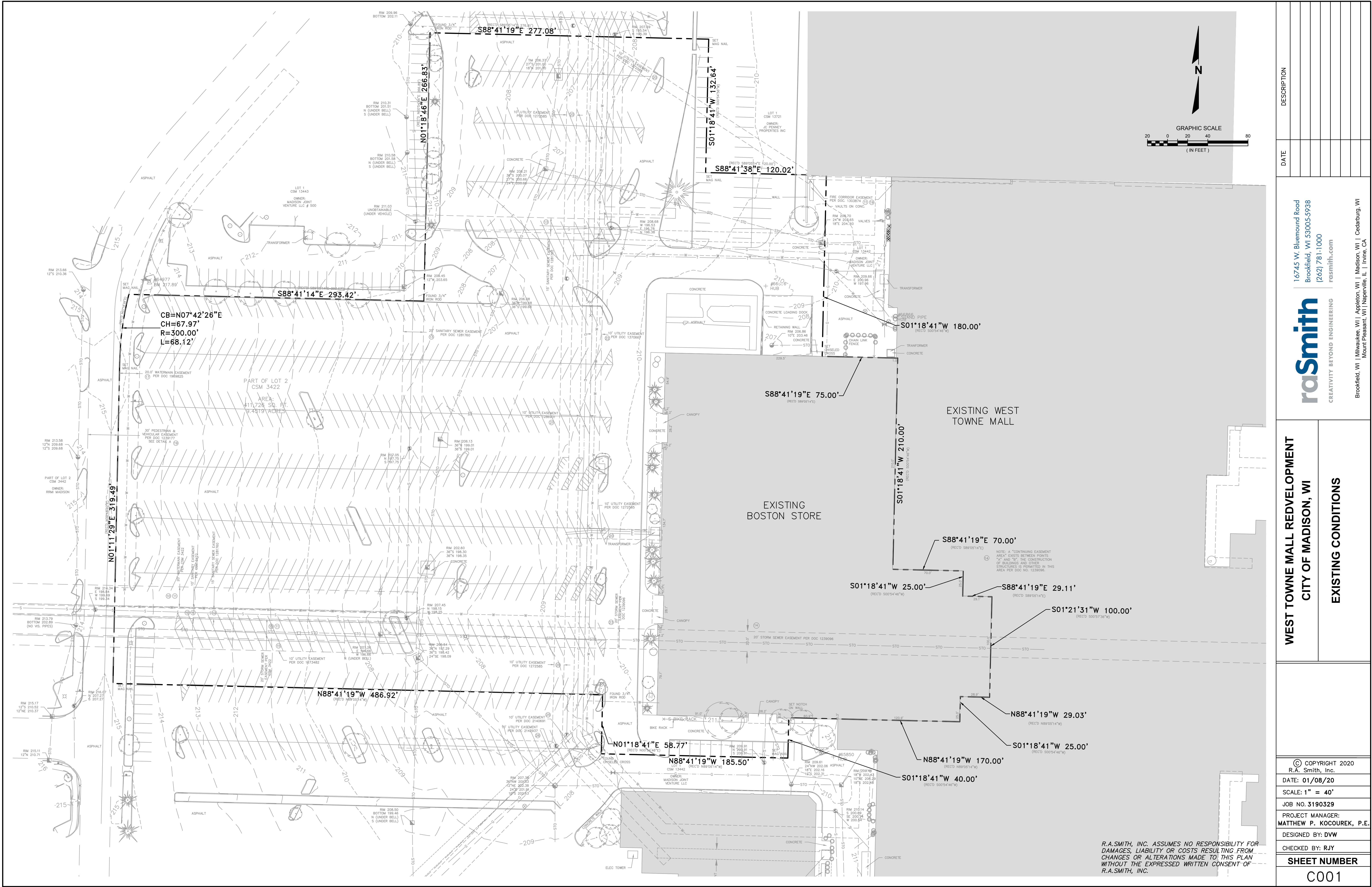
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: DVW

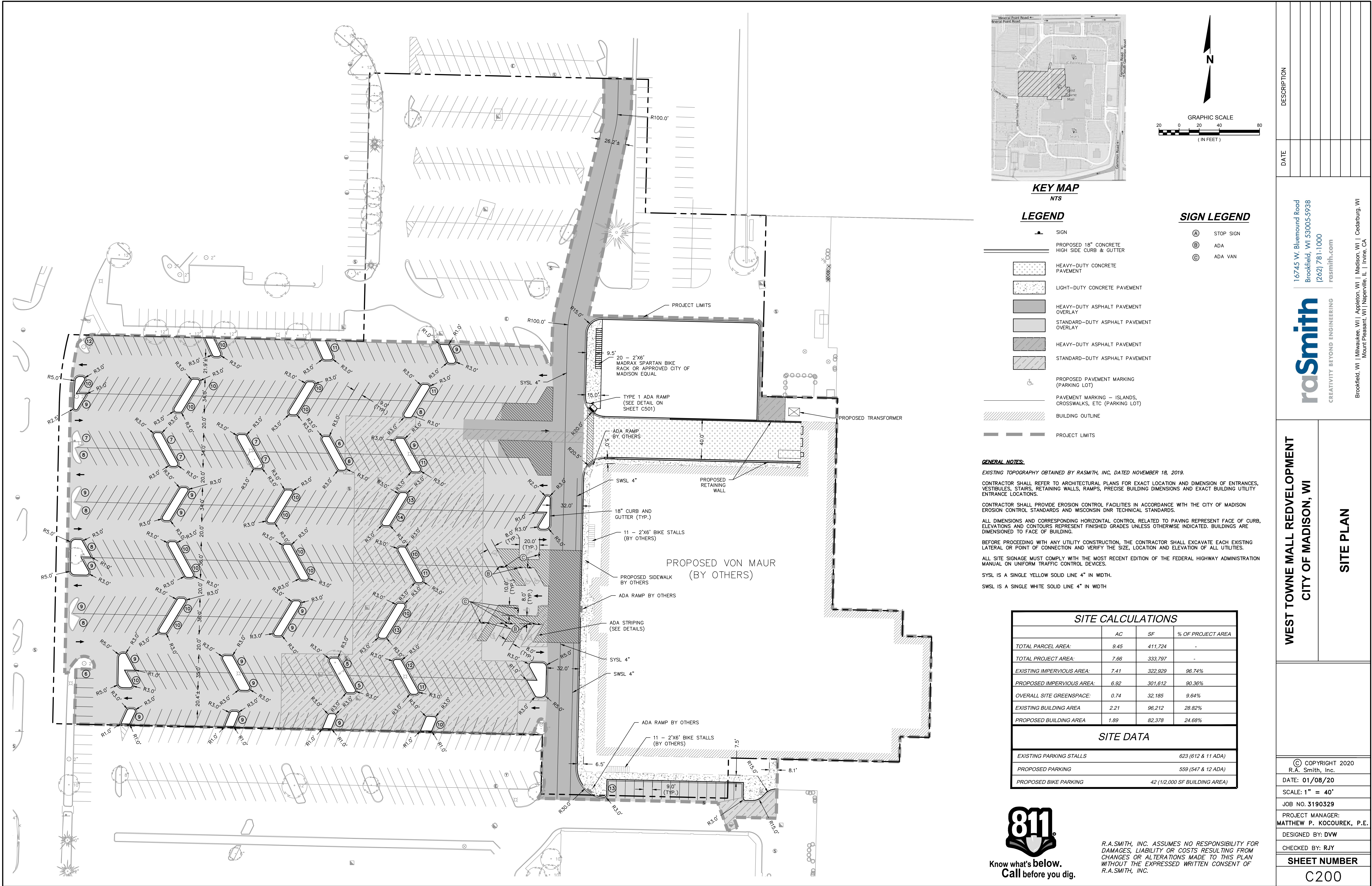
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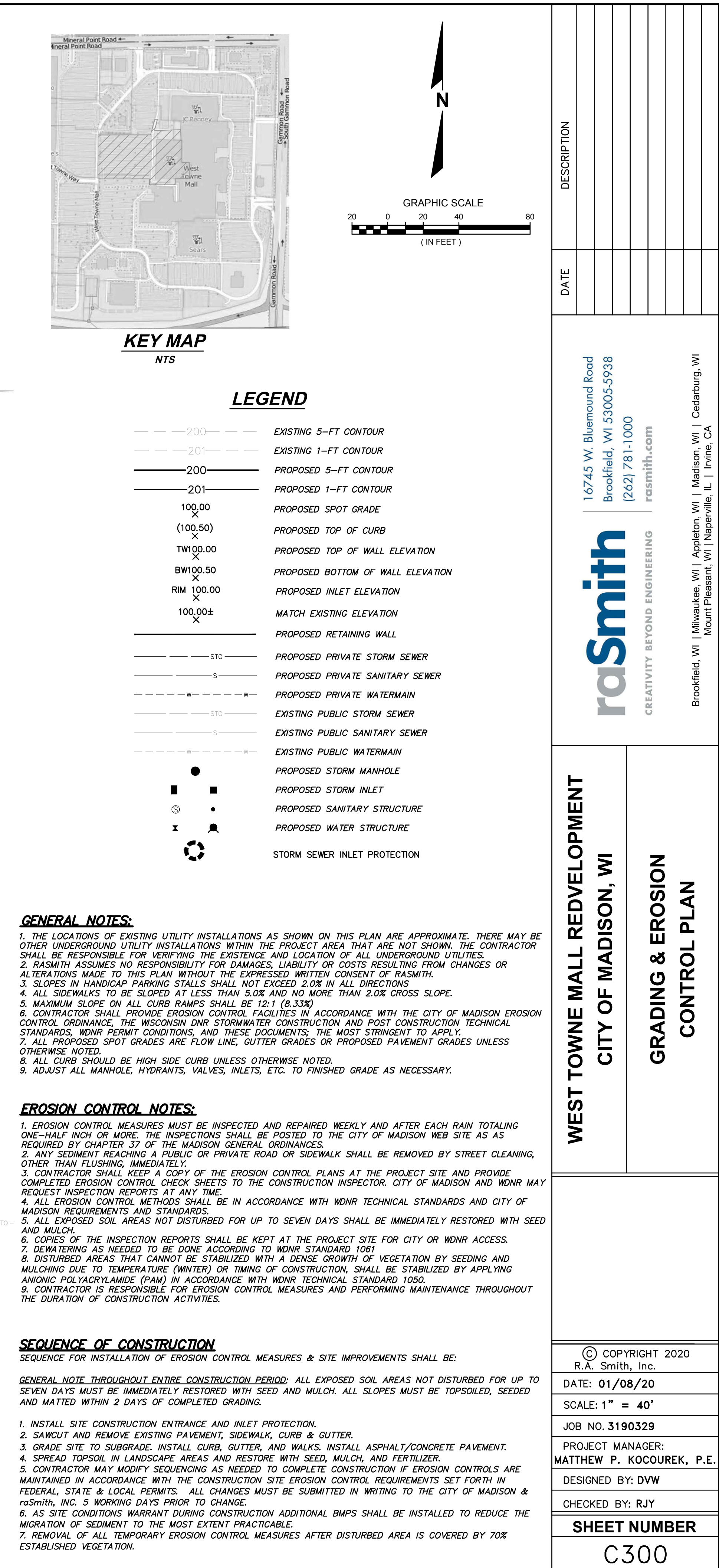
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C000



DESCRIPTION	
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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	








1. INSTALL SITE CONSTRUCTION ENTRANCE AND INLET PROTECTION.
2. SAWCUT AND REMOVE EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER.
3. GRADE SITE TO SUBGRADE. INSTALL CURB, GUTTER, AND WALKS. INSTALL ASPHALT/CONCRETE PAVEMENT.
4. SPREAD TOPSOIL IN LANDSCAPE AREAS AND RESTORE WITH SEED, MULCH, AND FERTILIZER.
5. ALLOW 12 TO 18 MONTHS 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 & roSmith, INC 5 WORKING DAYS PRIOR TO CHANGE.
6. AS, IN CASE SITUATIONS WARRANT DURING CONSTRUCTION ADDITIONAL BMPs SHALL BE INSTALLED TO REDUCE THE MIGRATION OF SEDIMENT TO THE MOST EXTENT PRACTICABLE.
7. ALL TEMPORARY EROSION CONTROL MEASURES AFTER DISTURBED AREA IS COVERED BY 70% ESTABLISHED VEGETATION.



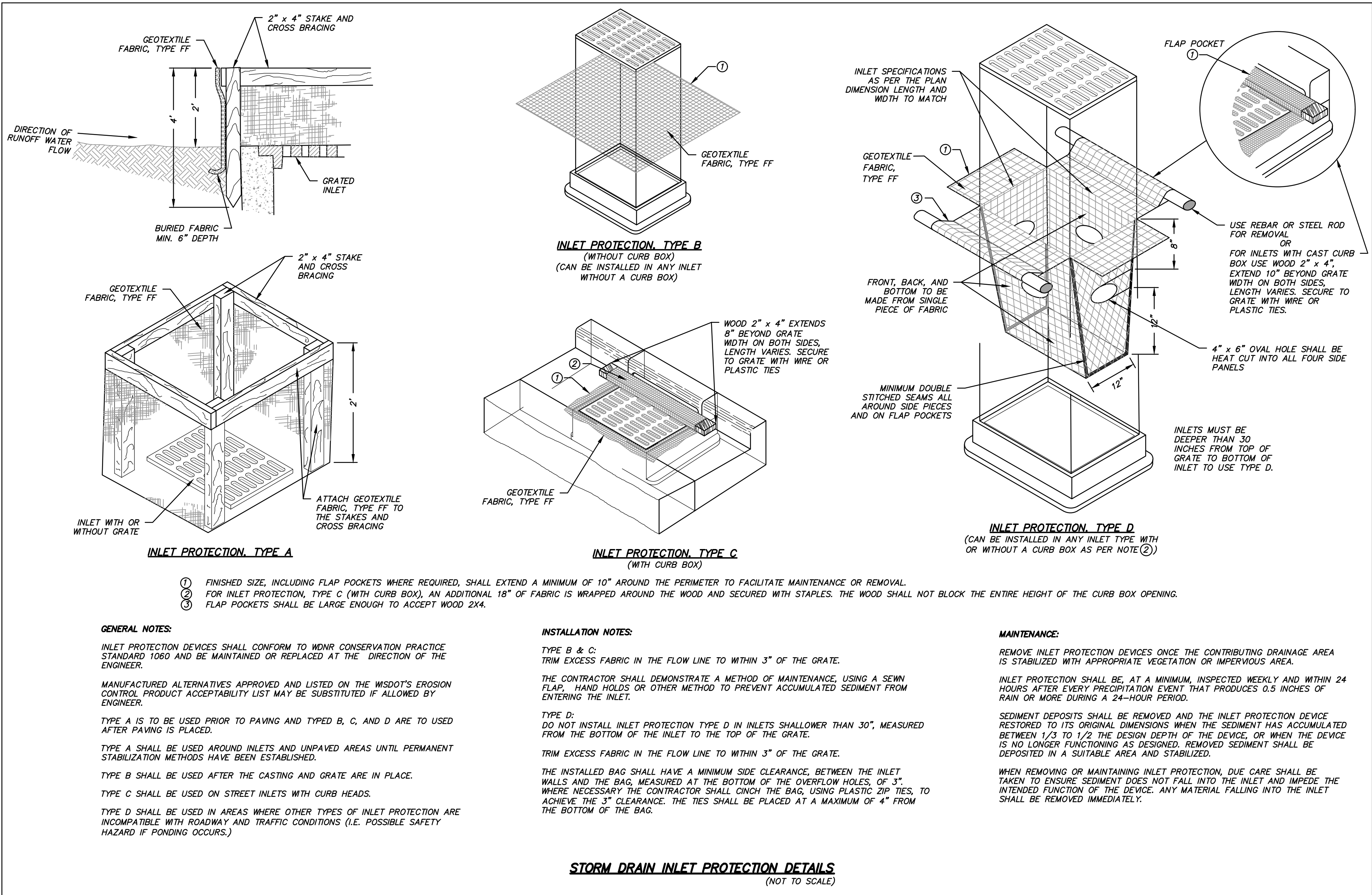
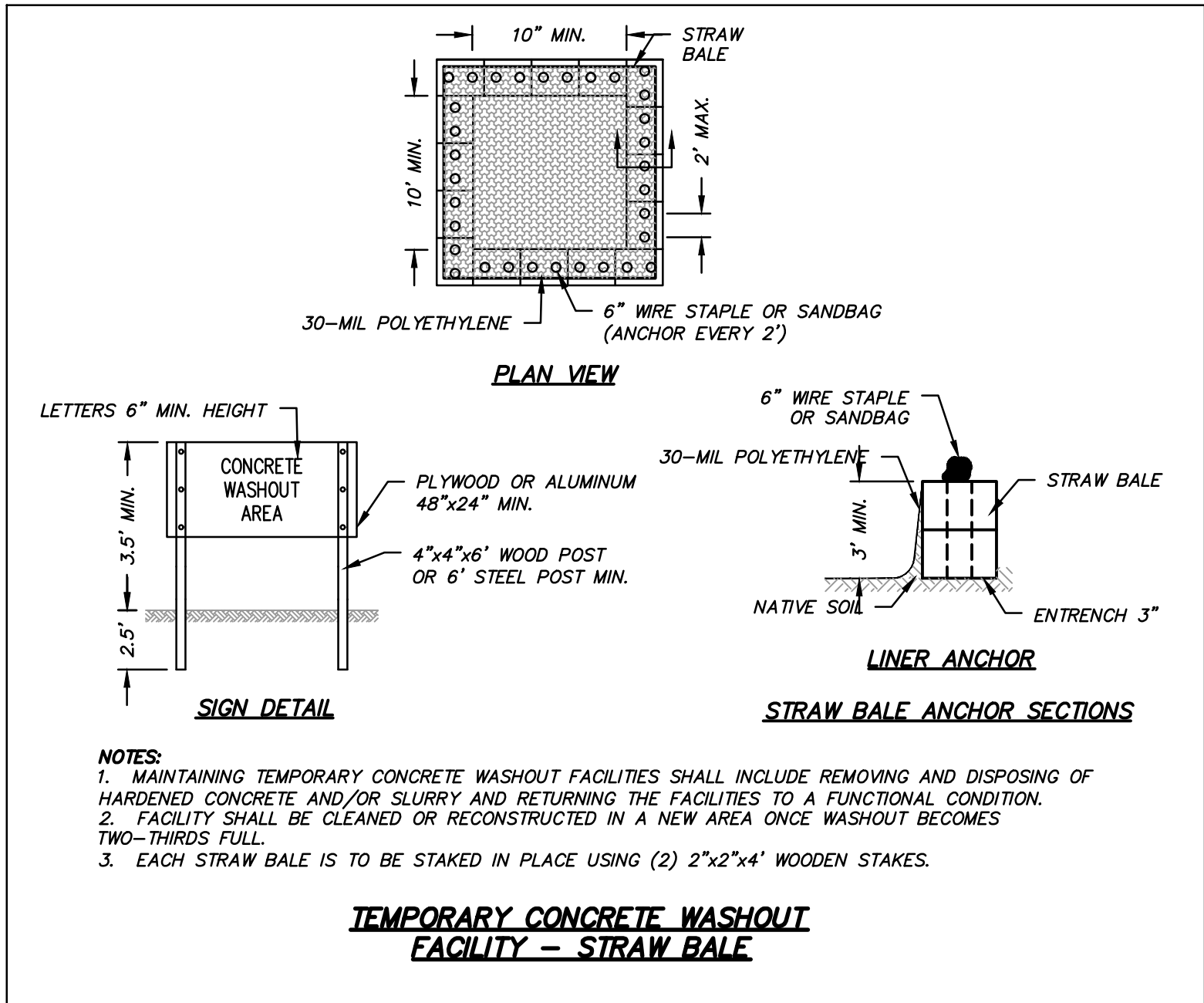
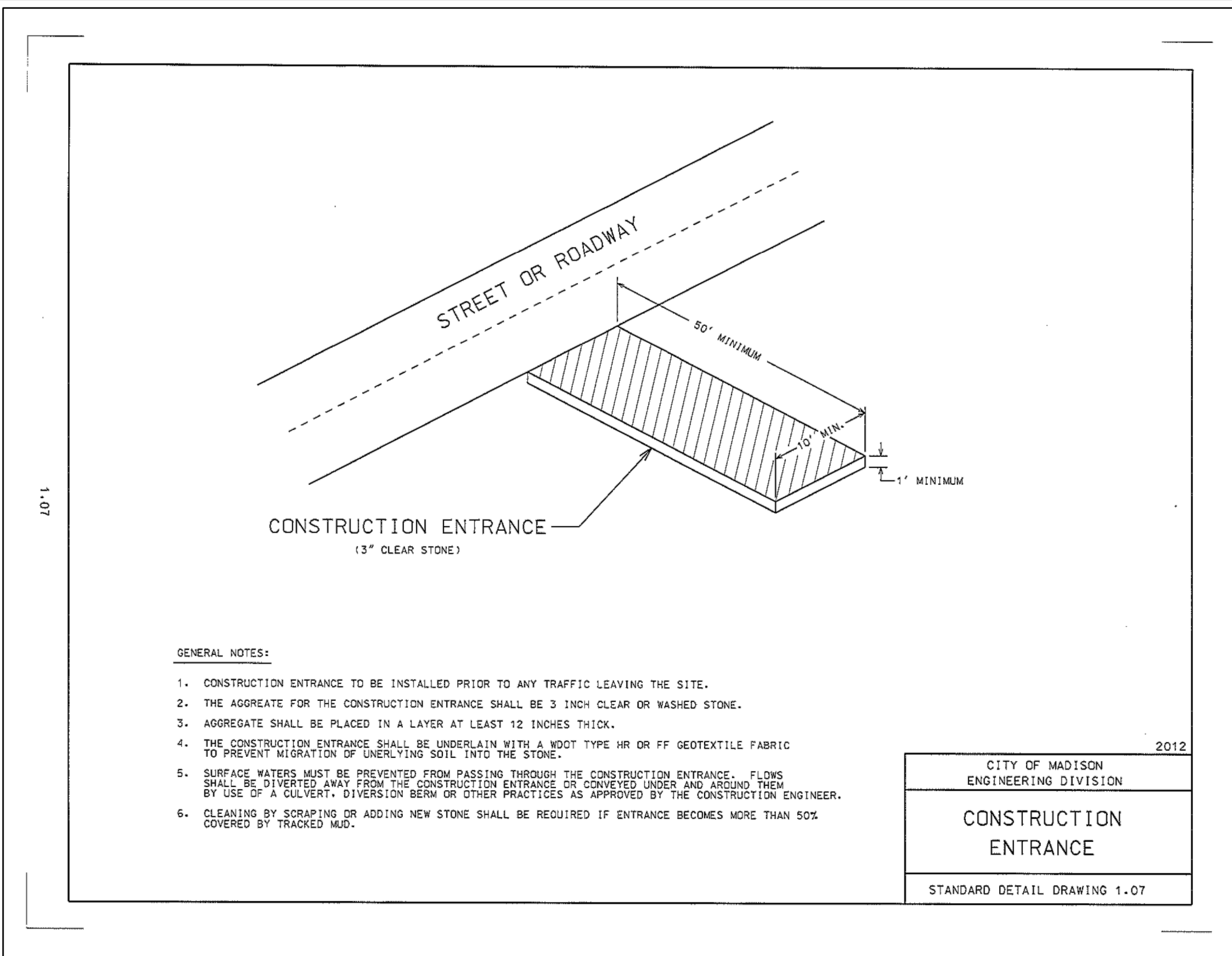
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WEST TOWNE MALL REDVELOPMENT		 CREATIVITY BEYOND ENGINEERING	16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com	DATE	DESCRIPTION
CITY OF MADISON, WI					
PAVING PLAN - WEST		Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA			
<div>© COPYRIGHT 2020 R.A. Smith, Inc. DATE: 01/08/20 SCALE: 1" = 30' JOB NO. 3190329 PROJECT MANAGER: MATTHEW P. KOCOCUREK, P.E. DESIGNED BY: DWV CHECKED BY: RJY</div>					
SHEET NUMBER					
C301					

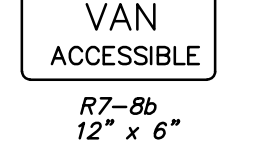
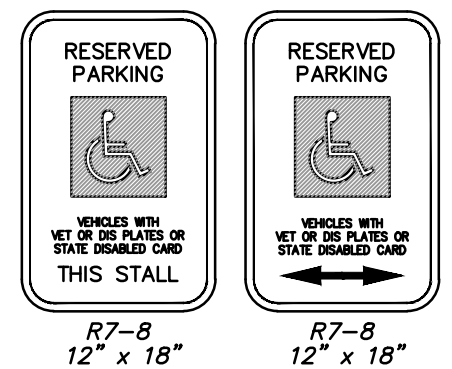
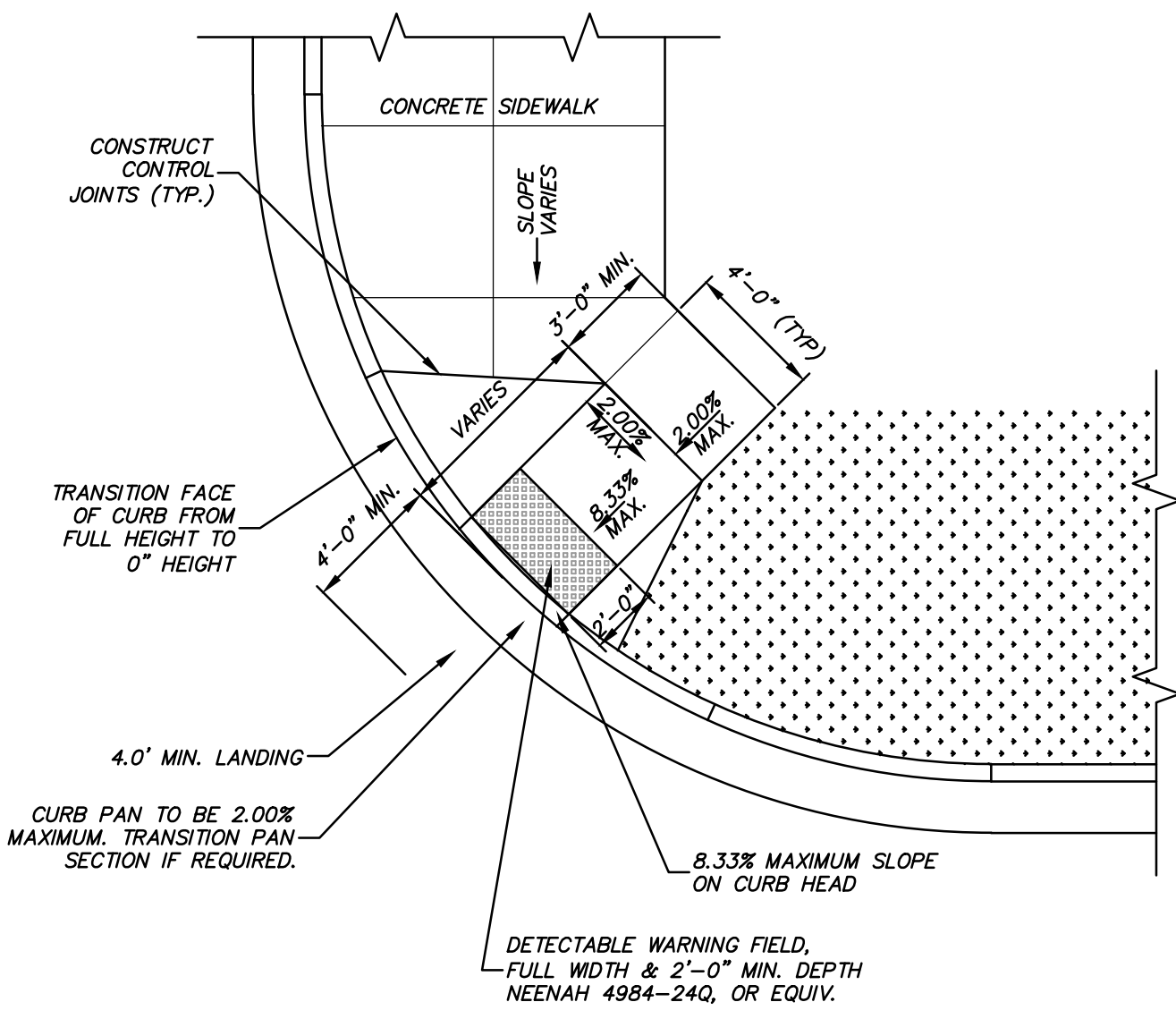
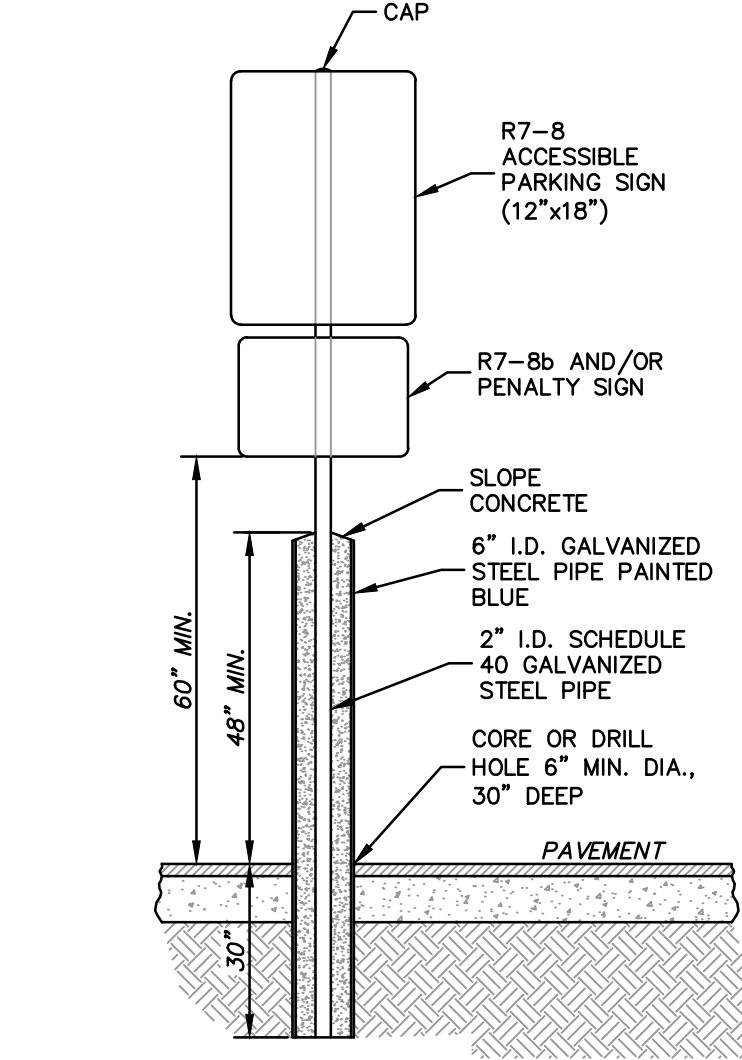
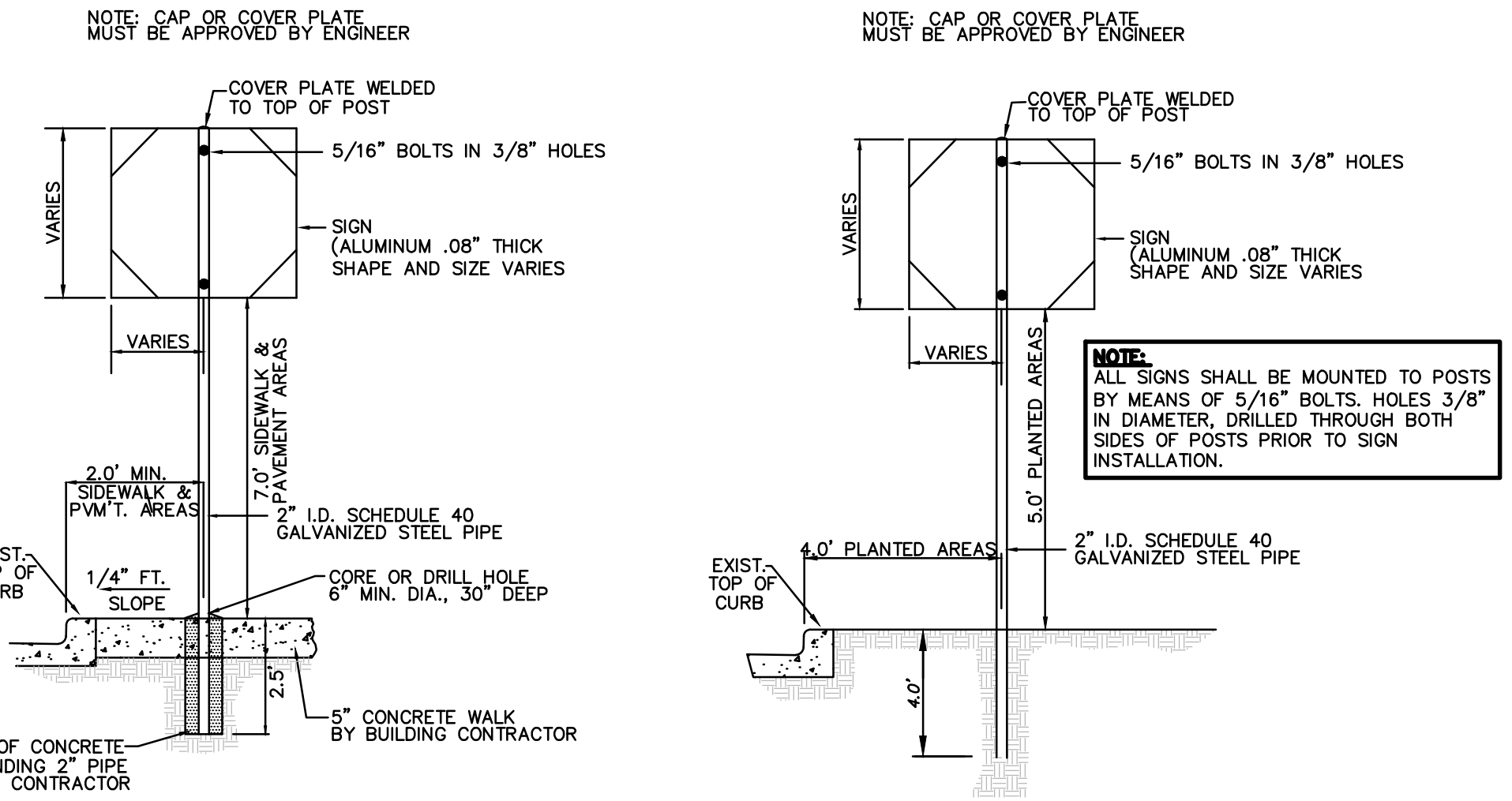
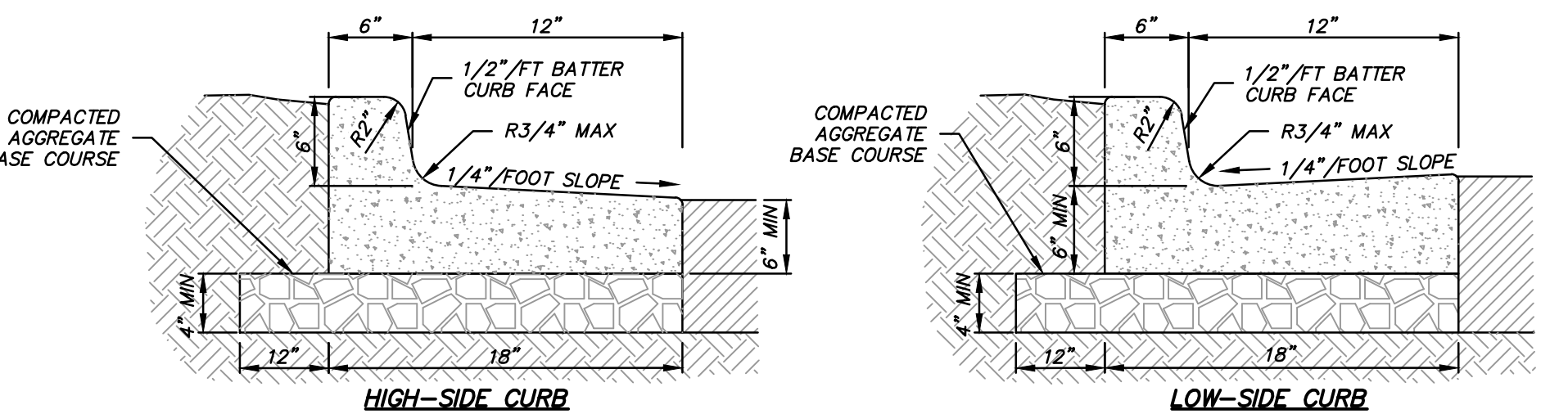
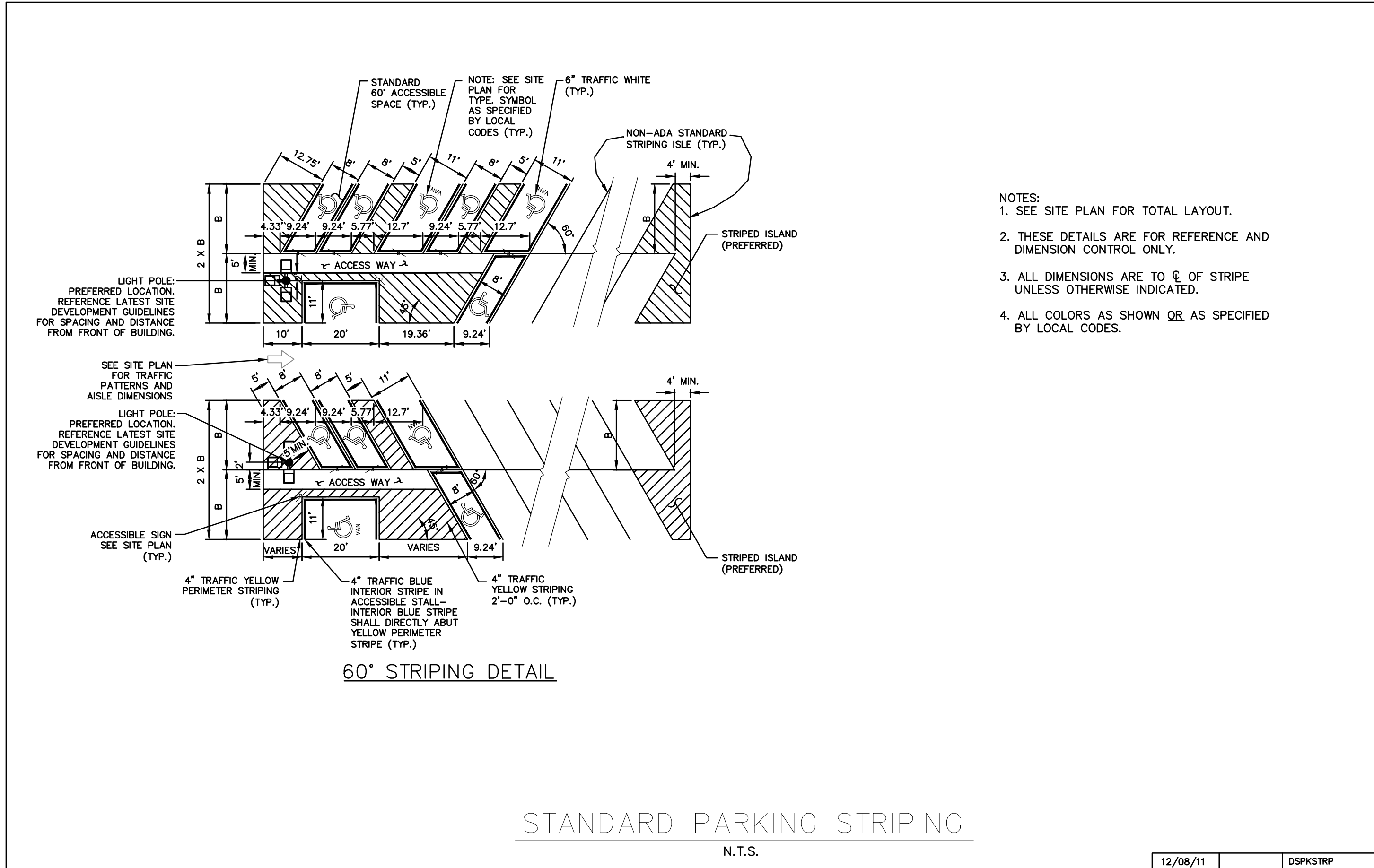


1. INSTALL SITE CONSTRUCTION ENTRANCE AND INLET PROTECTION.
2. SAWCUT AND REMOVE EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER.
3. GRADE SITE TO SUBGRADE. INSTALL CURB, GUTTER, AND WALKS. INSTALL ASPHALT/CONCRETE PAVEMENT.
4. SPREAD TOPSOIL IN LANDSCAPE AREAS AND RESTORE WITH SEED, MULCH, AND FERTILIZER.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

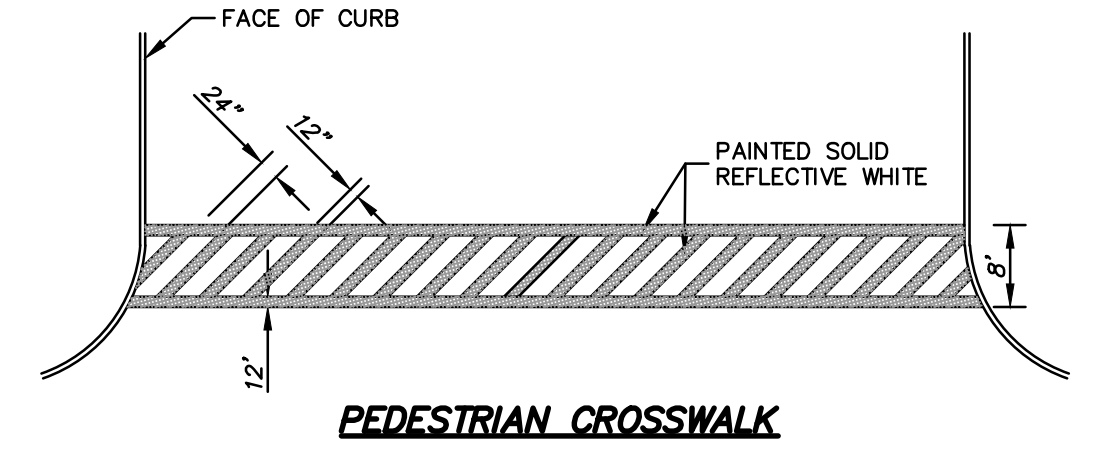
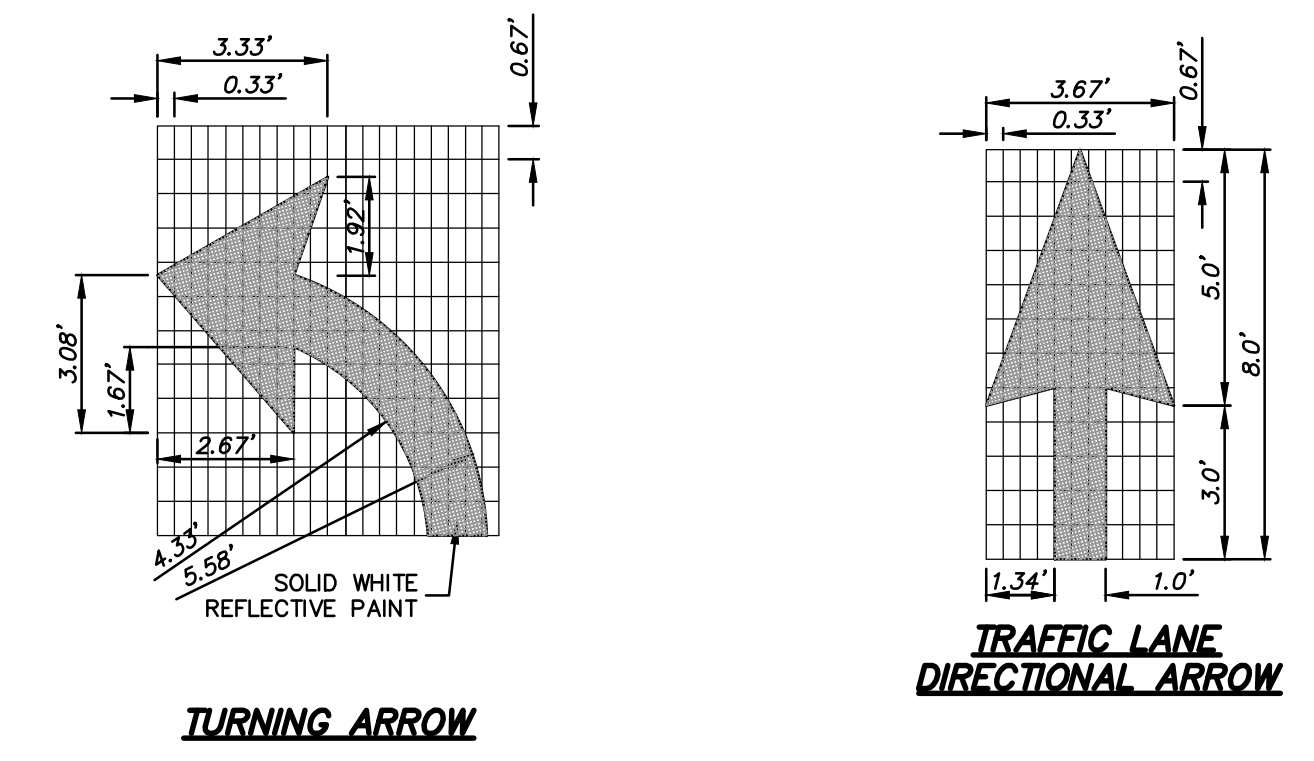
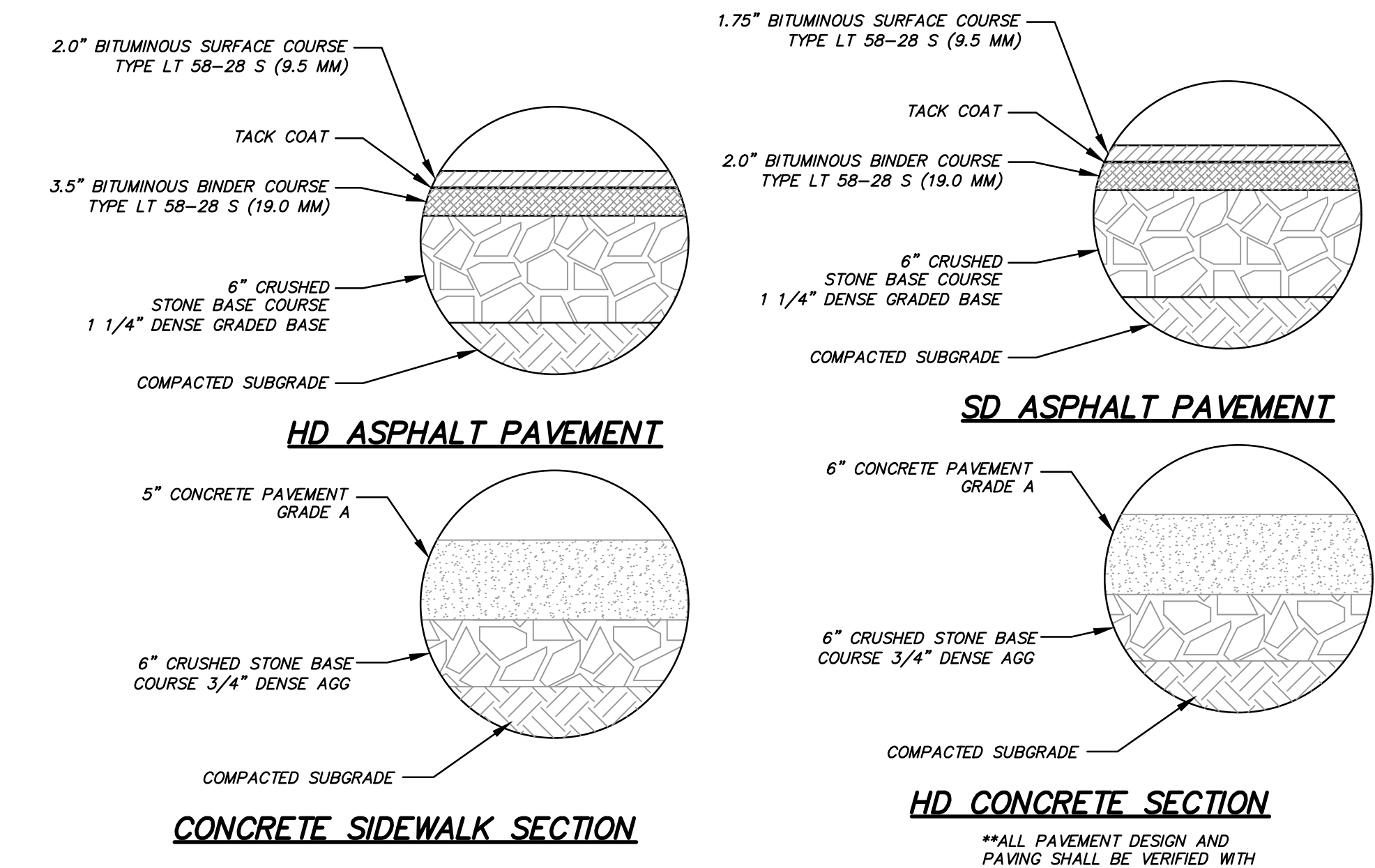
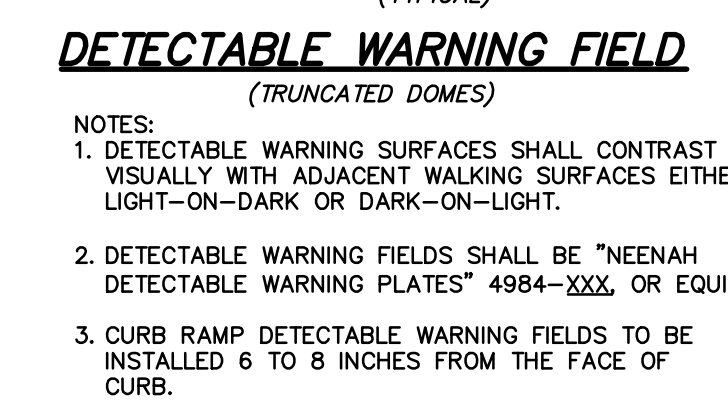
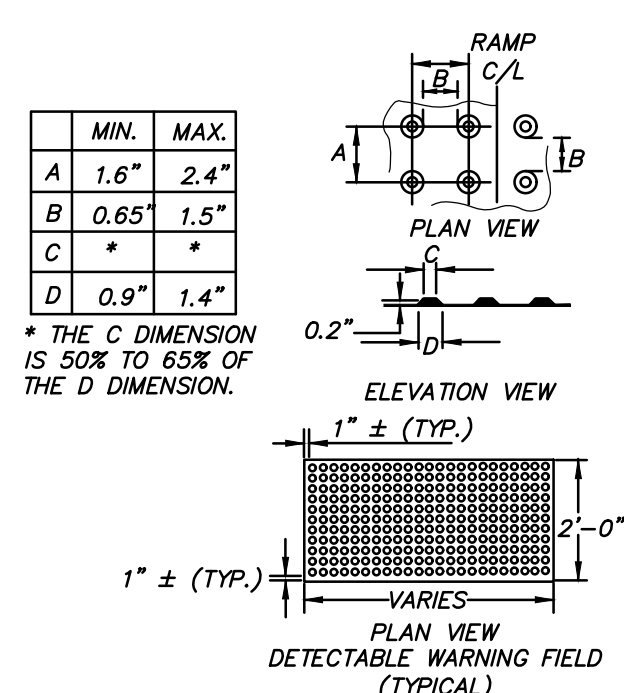
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DESCRIPTION	
DATE	
16745 W. Bluemound Road Brookfield, WI 53005-5938 (262) 781-1000 rasmith.com	
raSmith CREATIVITY BEYOND ENGINEERING	
Brookfield, WI Milwaukee, WI Appleton, WI Madison, WI Cedarburg, WI Mount Pleasant, WI Naperville, IL Irvine, CA	
WEST TOWNE MALL REDVELOPMENT CITY OF MADISON, WI	EROSION CONTROL DETAILS
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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	
C500	

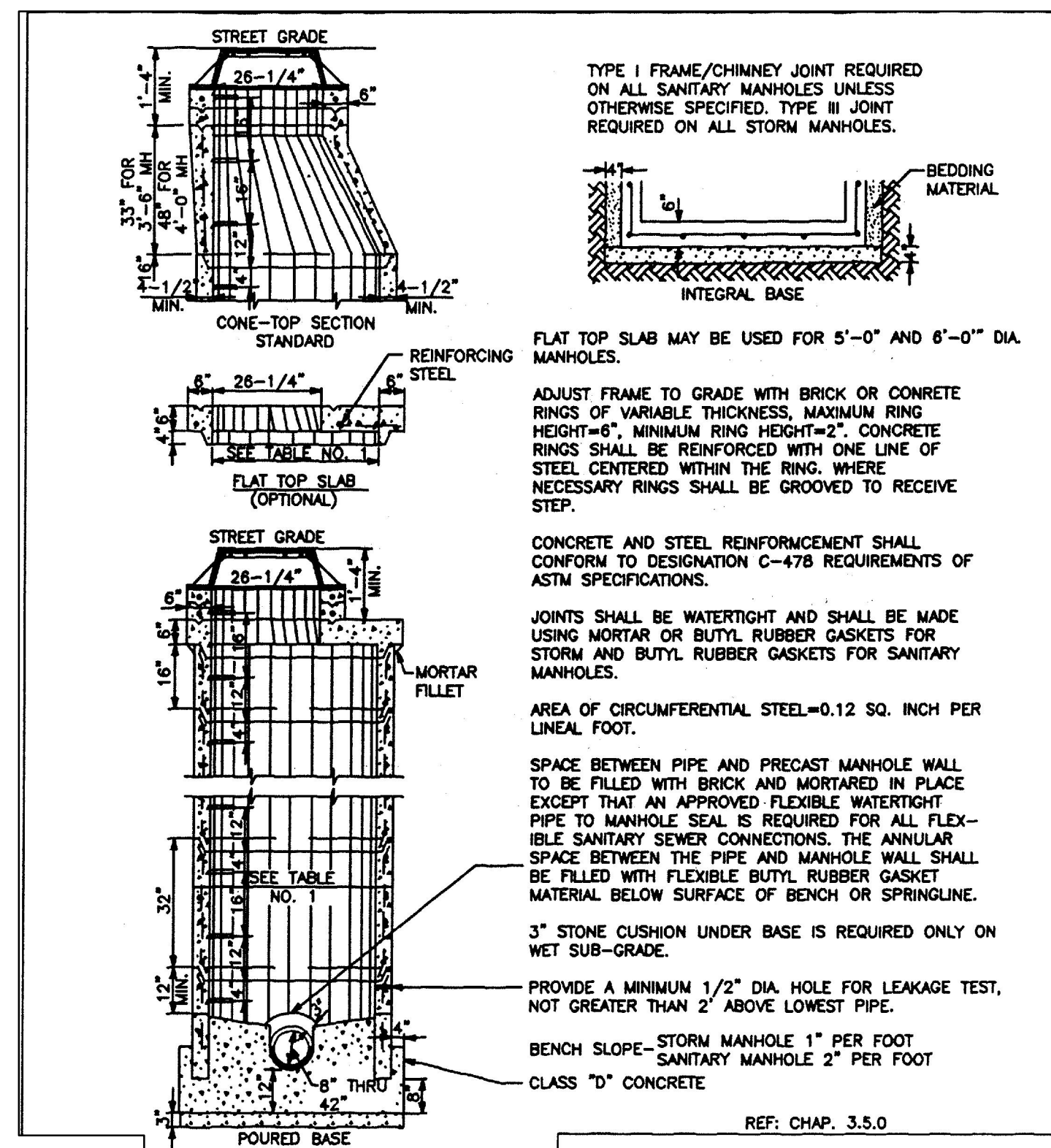


**STATE OF WISCONSIN
ACCESSIBLE PARKING SIGNS**



DESCRIPTION	DATE
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WEST TOWNE MALL REDVELOPMENT CITY OF MADISON, WI	SITE DETAILS
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JOB NO. 3190329	
PROJECT MANAGER: MATTHEW P. KOCOUREK, P.E.	
DESIGNED BY: DVW	
CHECKED BY: RJY	
SHEET NUMBER	
C501	



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-2560 (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:

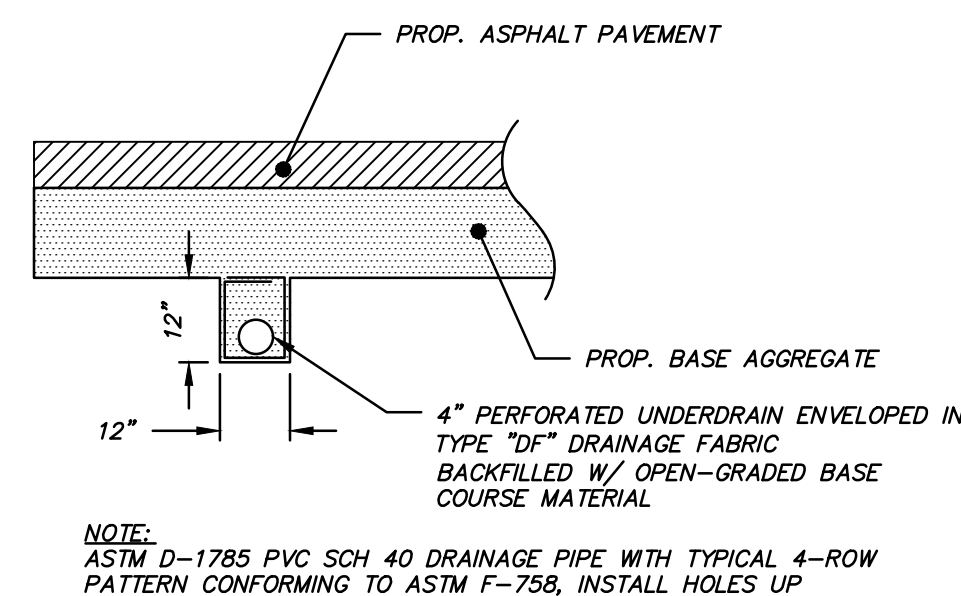
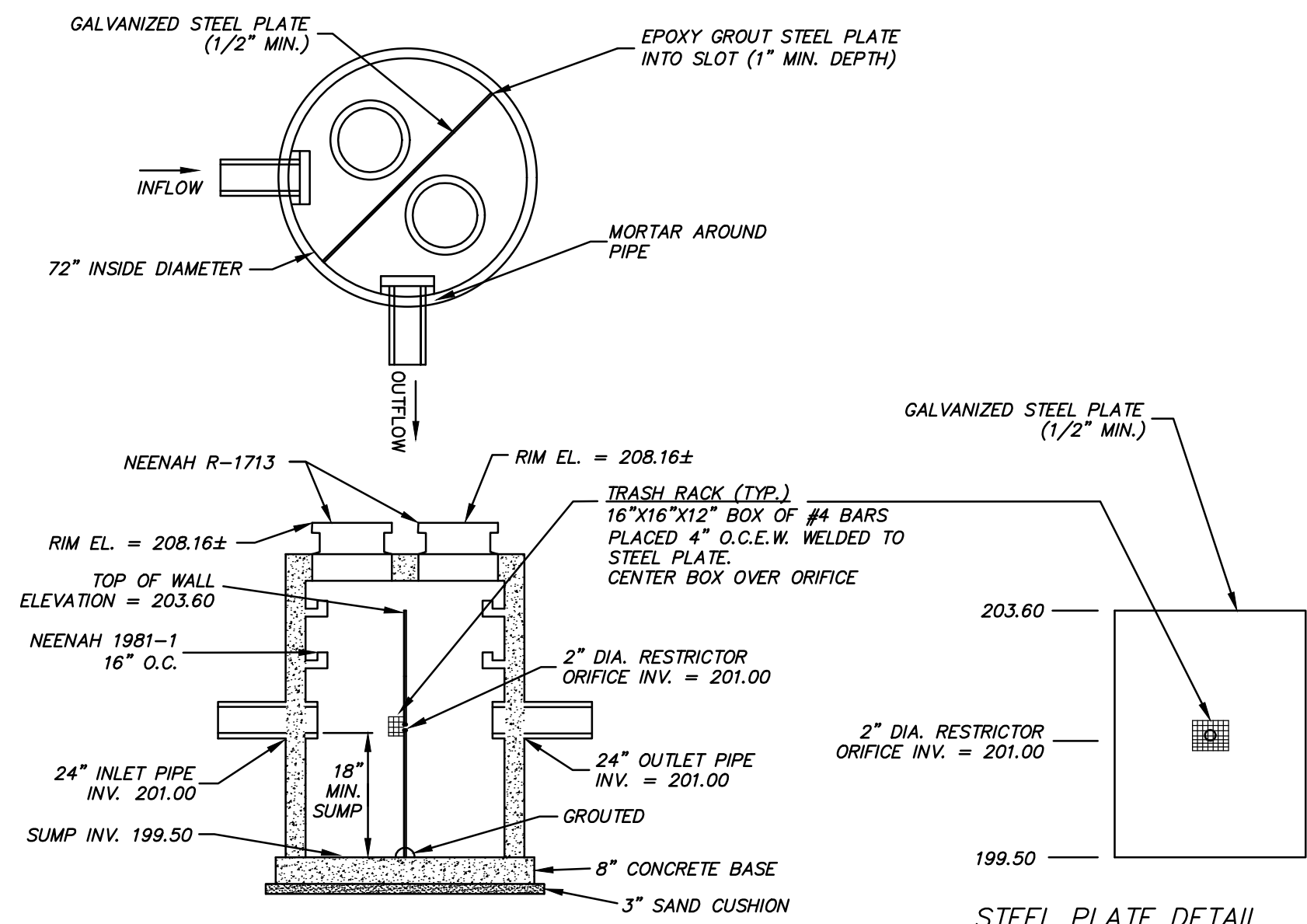
A. USE CASTING AS INDICATED BELOW:

ALL MANHOLES - NEENAH R-166

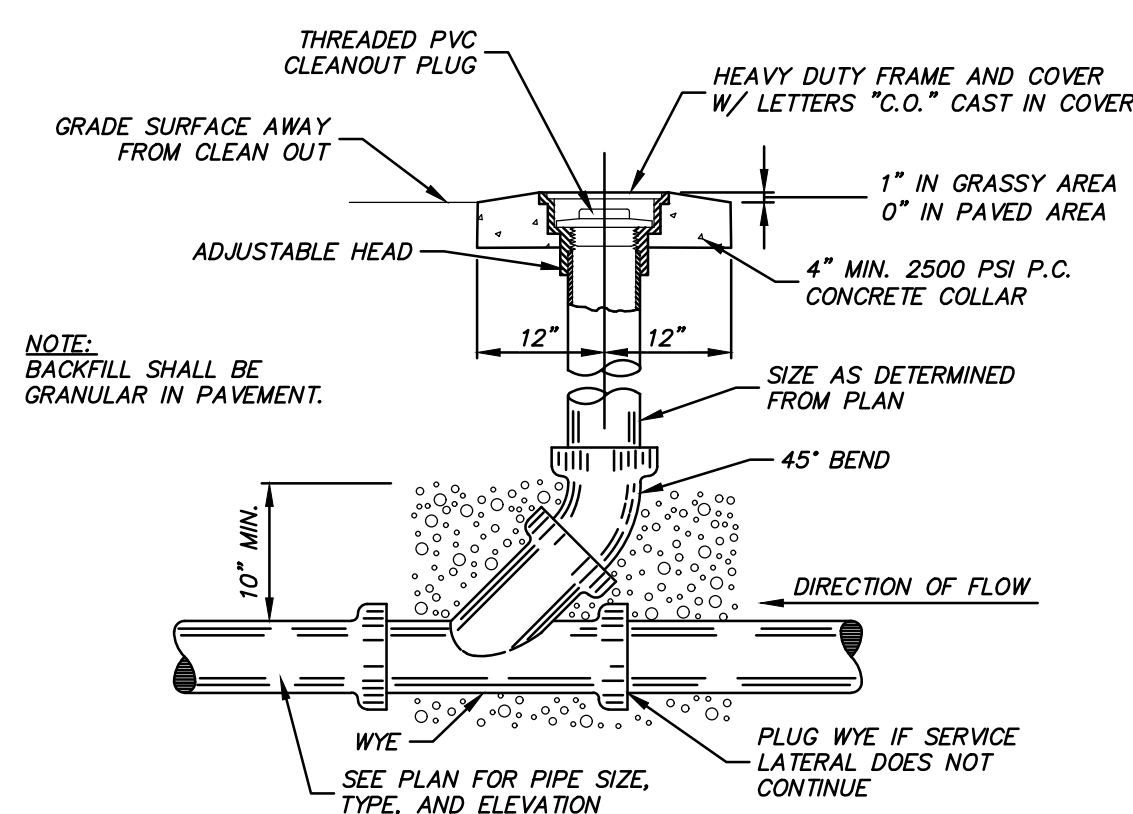
B. USE 48" MINIMUM DIAMETER UNLESS INDICATED OTHERWISE ON PLAN

C. PIPE MATERIAL PER C1000 UNLESS INDICATED OTHERWISE ON PLAN.

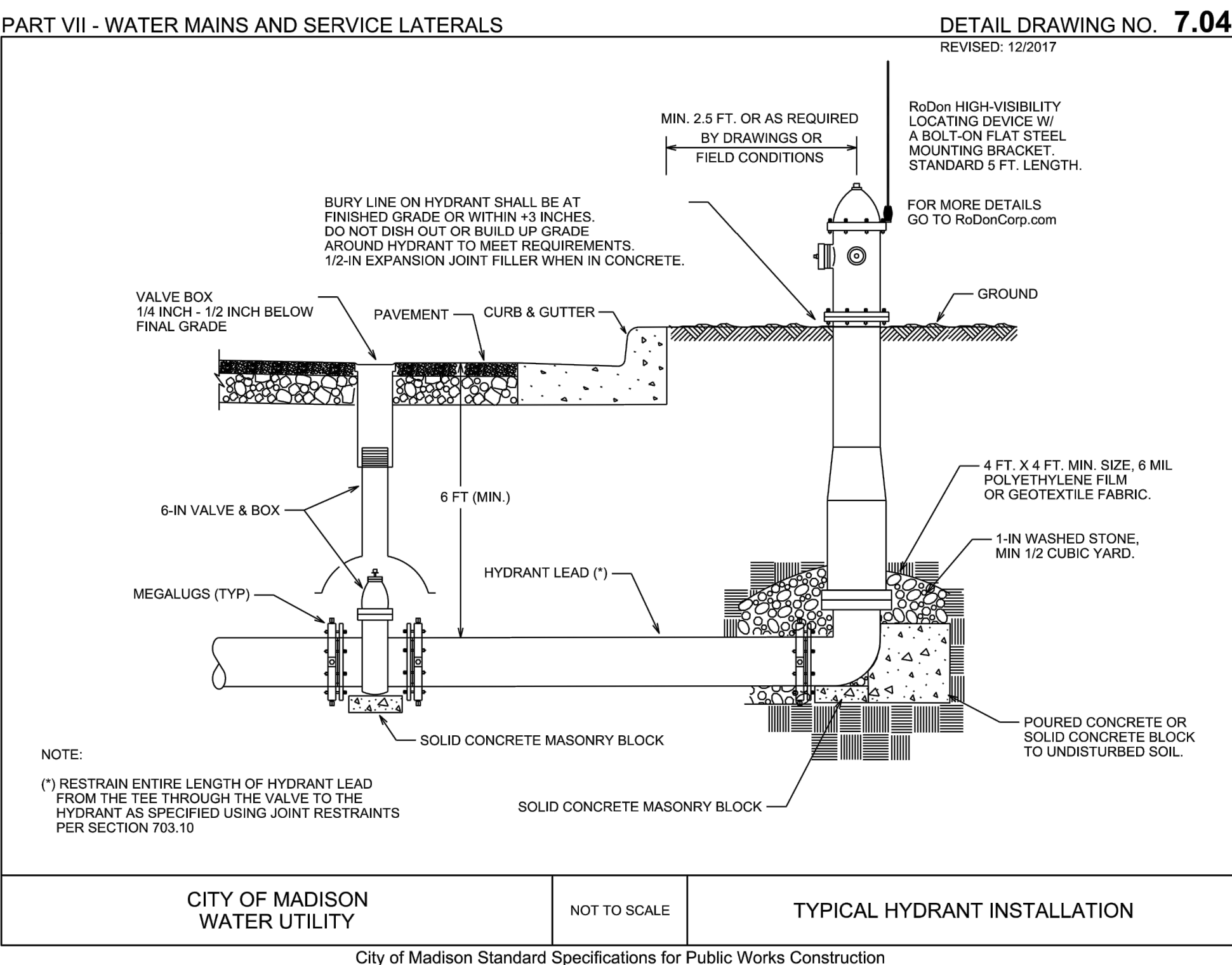
D. CONTRACTOR RESPONSIBLE FOR VERIFYING REQUIRED CASTING IS COMPATIBLE WITH STRUCTURE. IF NOT COMPATIBLE, CONTACT ENGINEER IMMEDIATELY FOR POSSIBLE REDESIGN.



UNDERDRAIN UNDER PAVEMENT



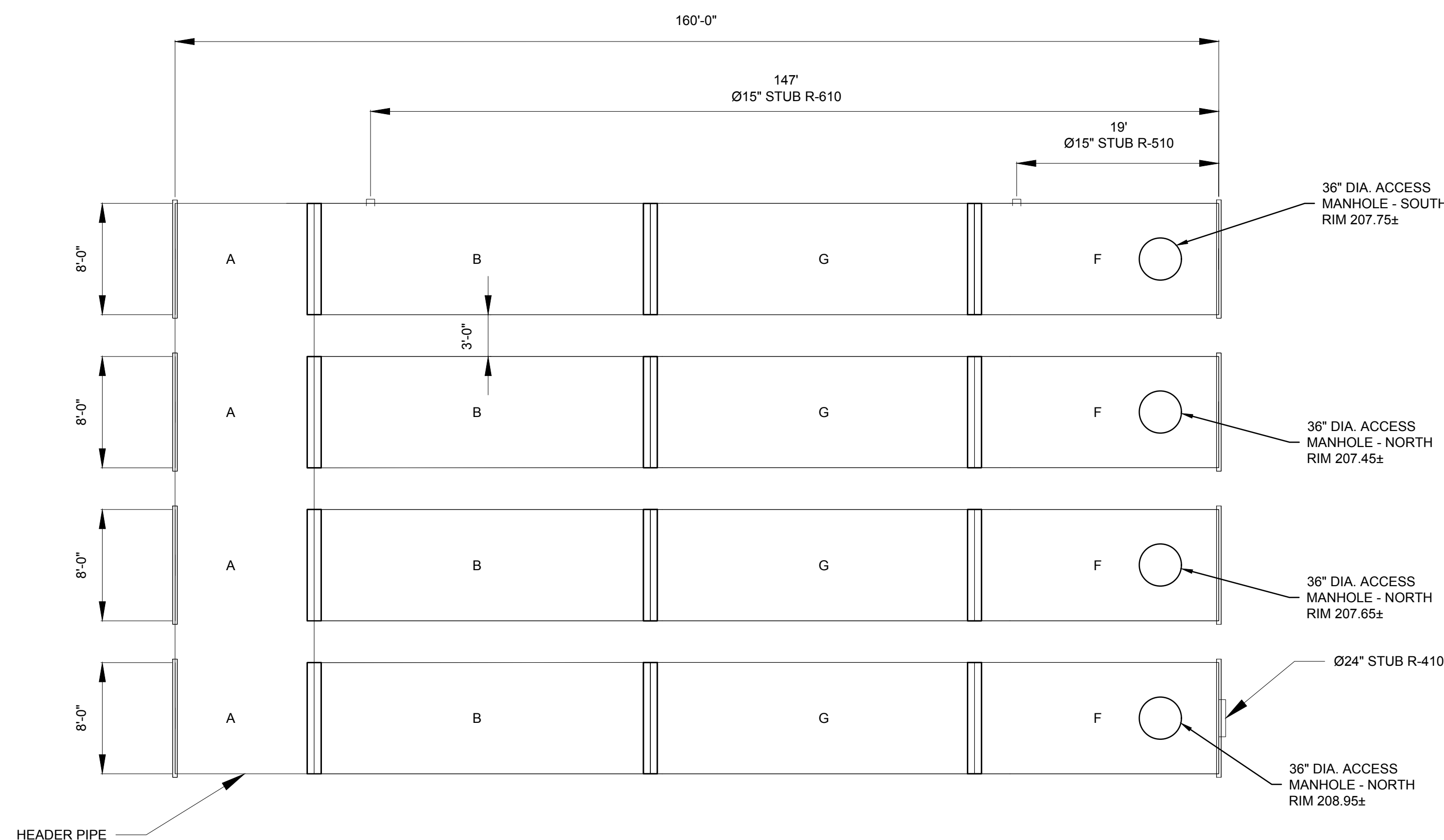
SEWER CLEAN-OUT DETAIL



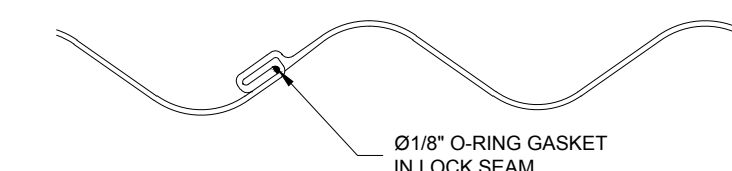
City of Madison Standard Specifications for Public Works Construction

 CUSTOMER

 DATE

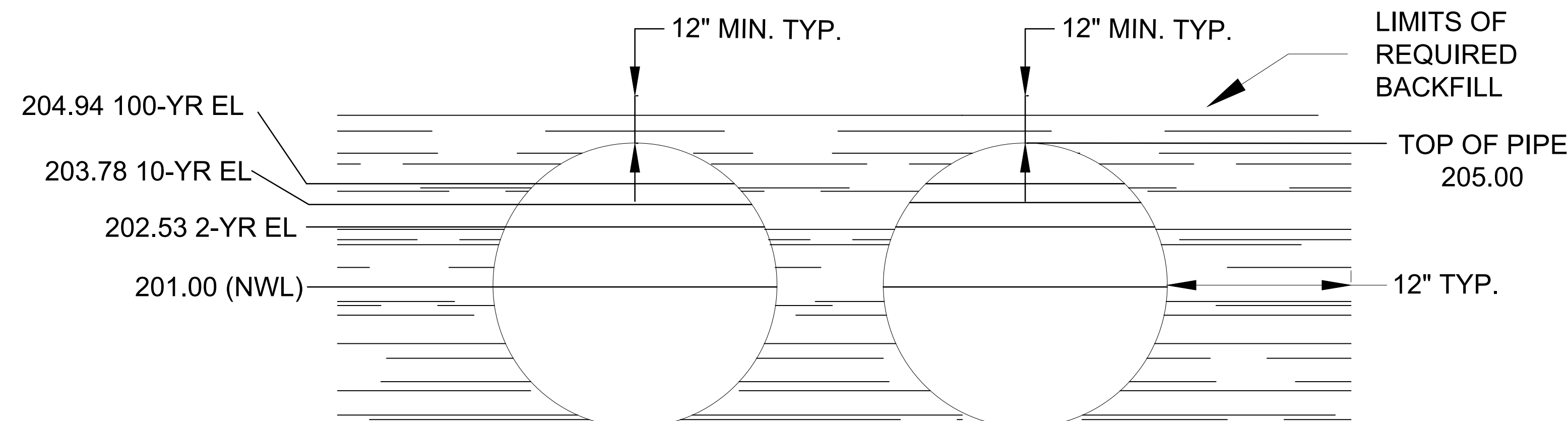


STUB INFORMATION	
PIECE	STUB INVERT
Ø15" STUB R-610	201.00
Ø15" STUB R-510	201.00
Ø24" STUB R-410	201.00



LOCKSEAM GASKET DETAIL

ASSEMBLY
SCALE: N.T.S
VOLUME: 0.74 AC-FT
LOADING: H2O/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 2¼" x ½" 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 = 0.74 AC-FT**
- **MAINLINE PIPE GAUGE =**
- **WALL TYPE =**
- **DIAMETER =**
- **FINISH =**
- **CORRUGATION =**

p:\3190329\DWG\SHEETS\3190329-DT01.DWG 1/10/2020 9:48 AM

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ENGINEERED SOLUTIONS LLC

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

NORTH SYSTEM

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

11

16745 W. Bluemound Road
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 | Nanaville, WI | Irvine, CA

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

CONTECH DETAILS 1

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DATE: 01/08/20

SCALE: N.T.S.

JOB NO. 3190329

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

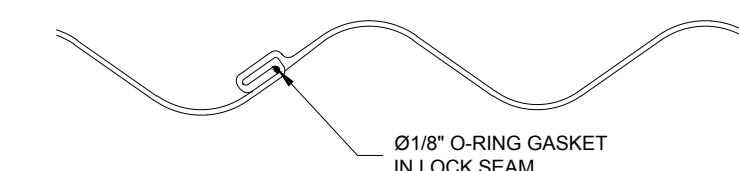
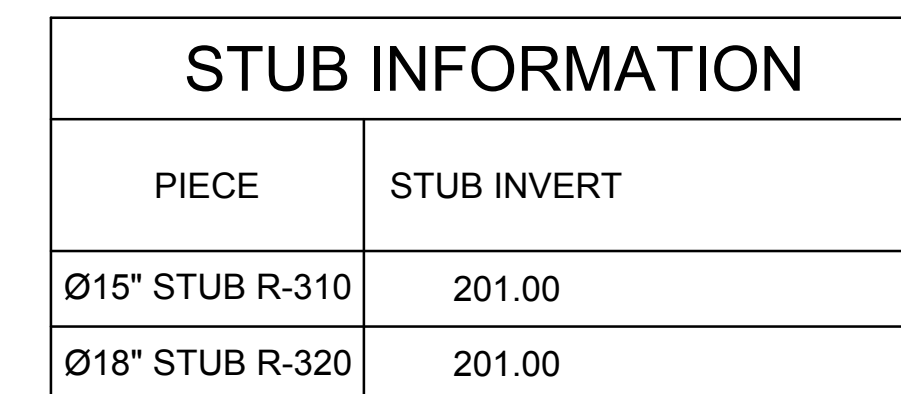
DESIGNED BY: DVW

CHECKED BY: P.I.V.

SHEET NUMBER

C503

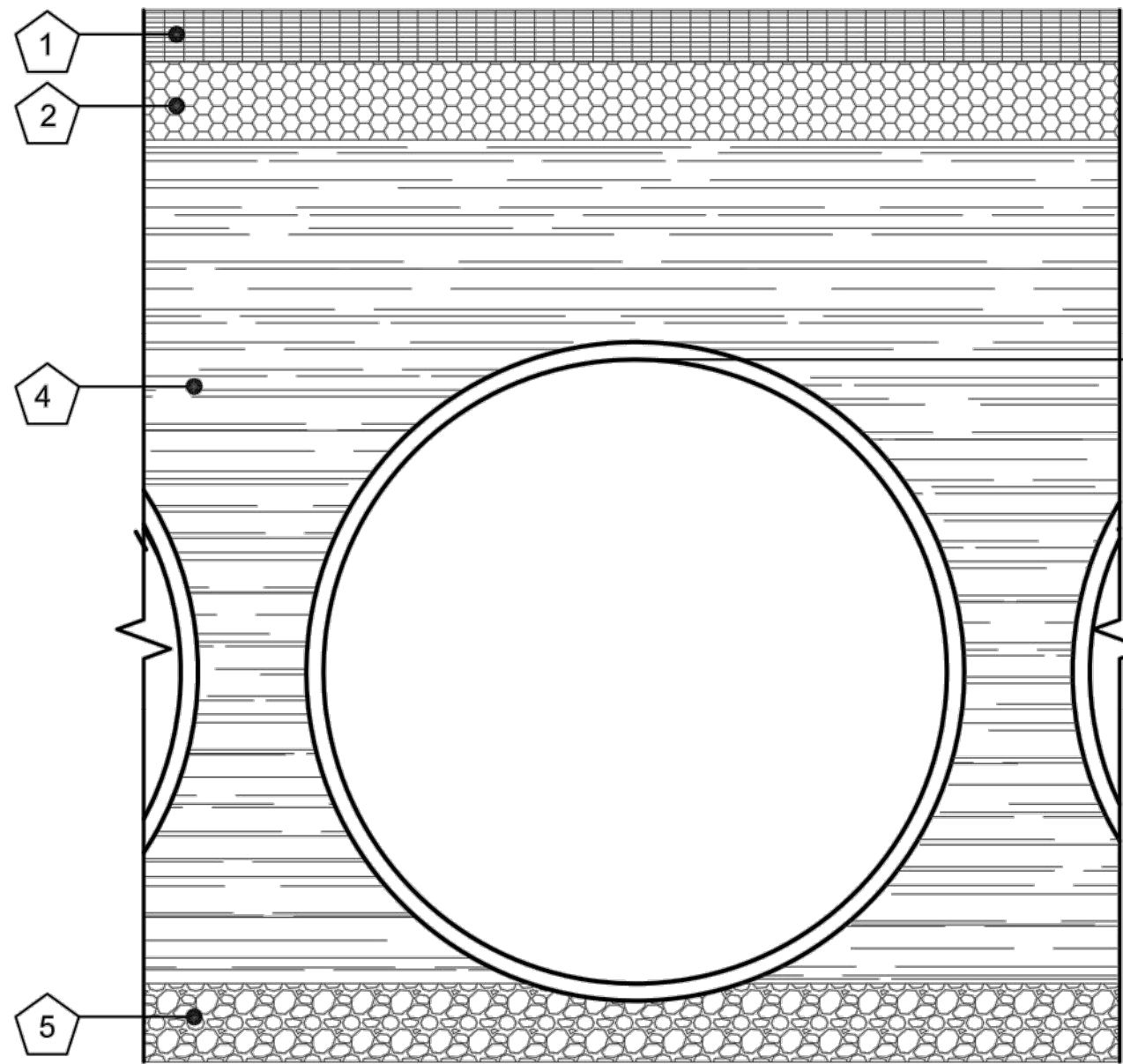
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C504

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- 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

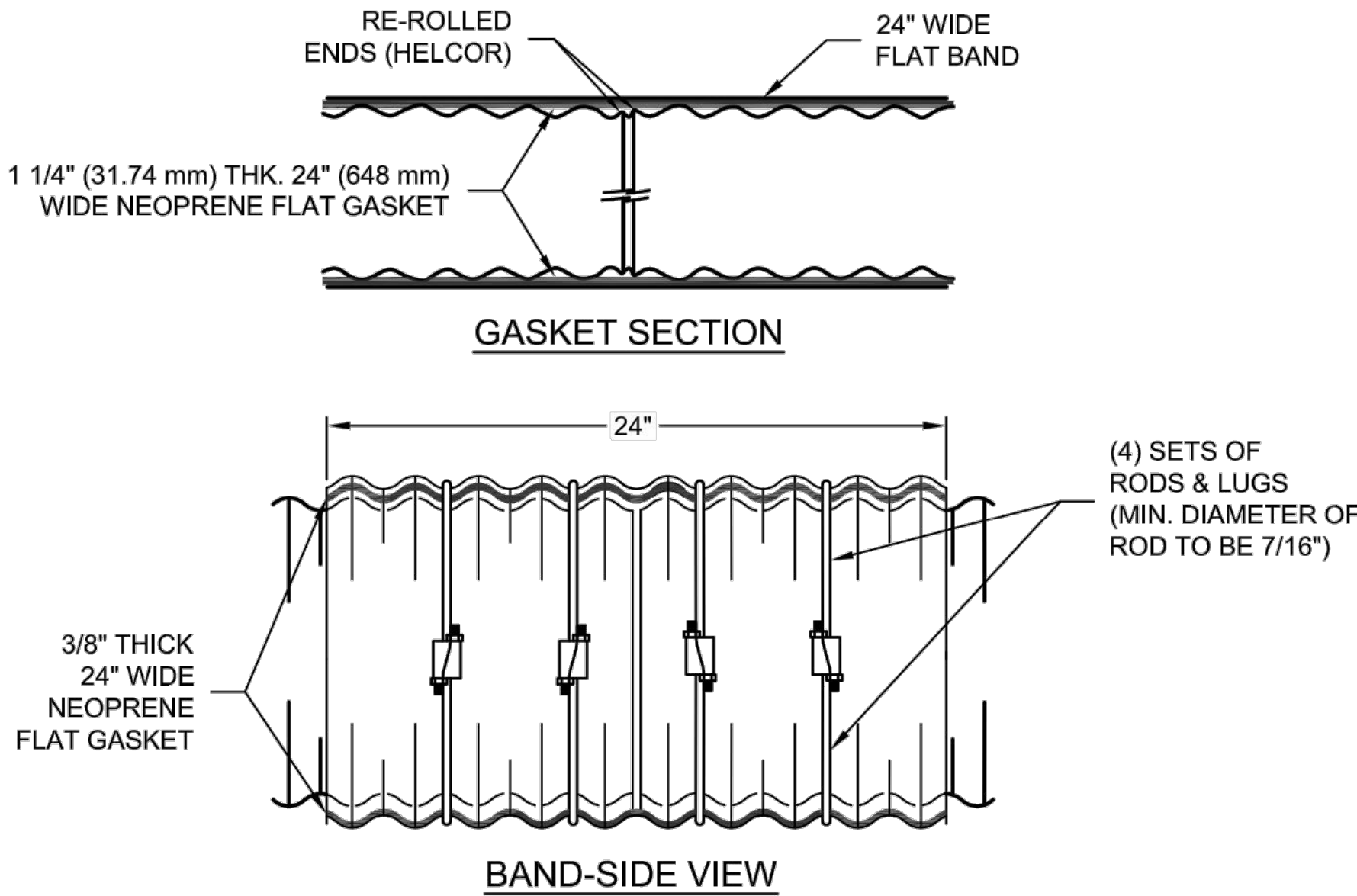
PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER. ONCE THE FOUNDATION 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	

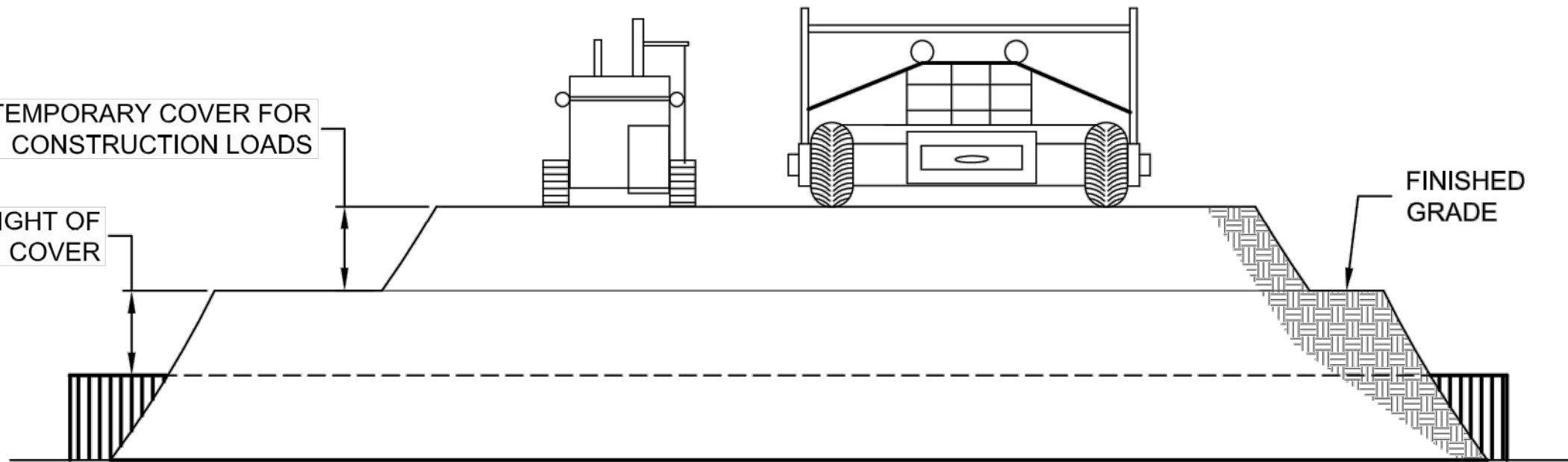
WEST TOWNE MALL REDVELOPMENT

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

\\MERLIN\PROJECTS\ACTIVES\551800551813\551813-10-CMP DETENTION\DRAWINGS\PROPOSAL\PIRE 551813-010 CMP - PROA.DWG 10/21/2016 2:27 PM



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
MINIMUM COVER (FT)				
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM

SCALE: N.T.S.

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

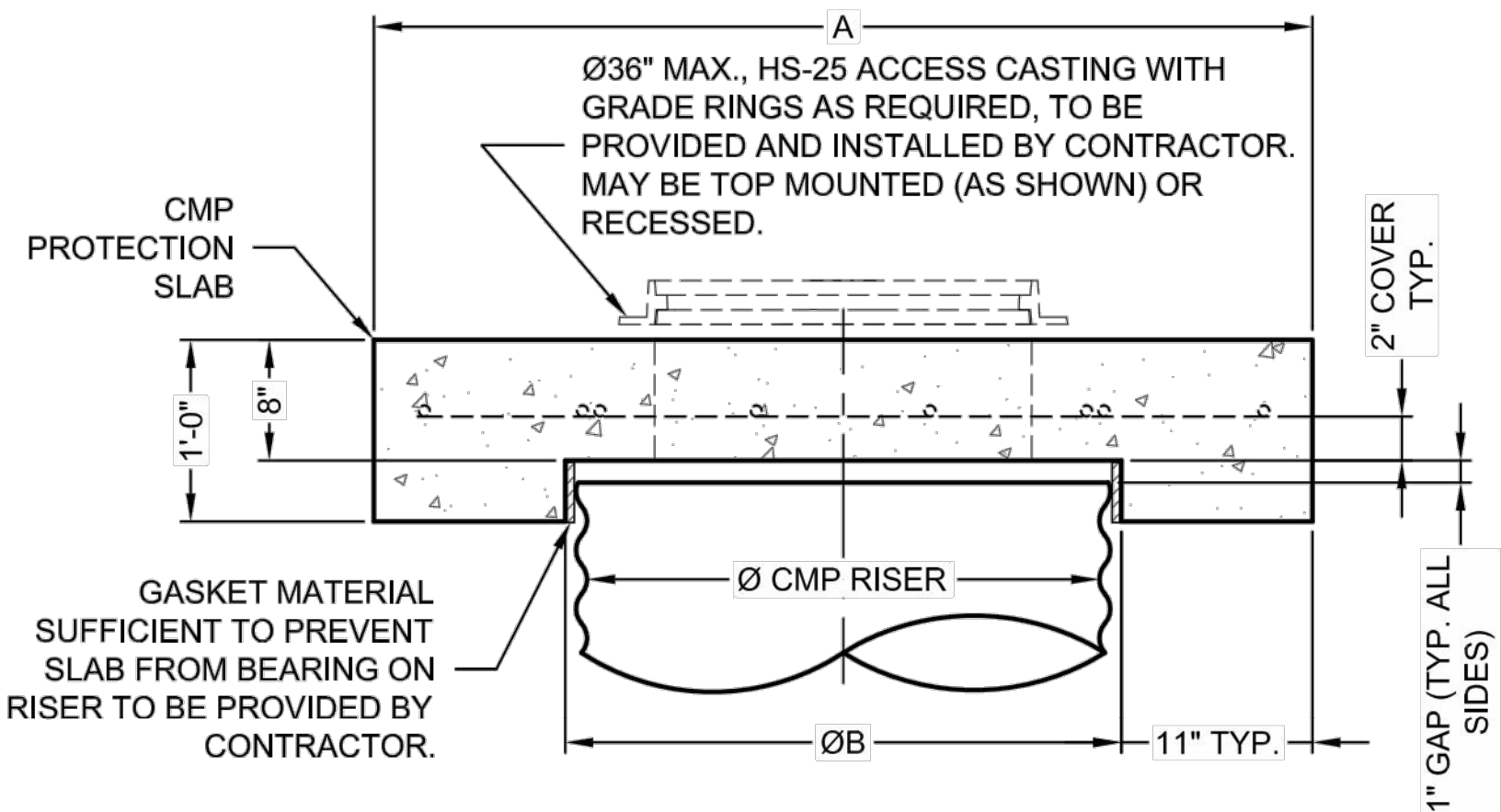
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

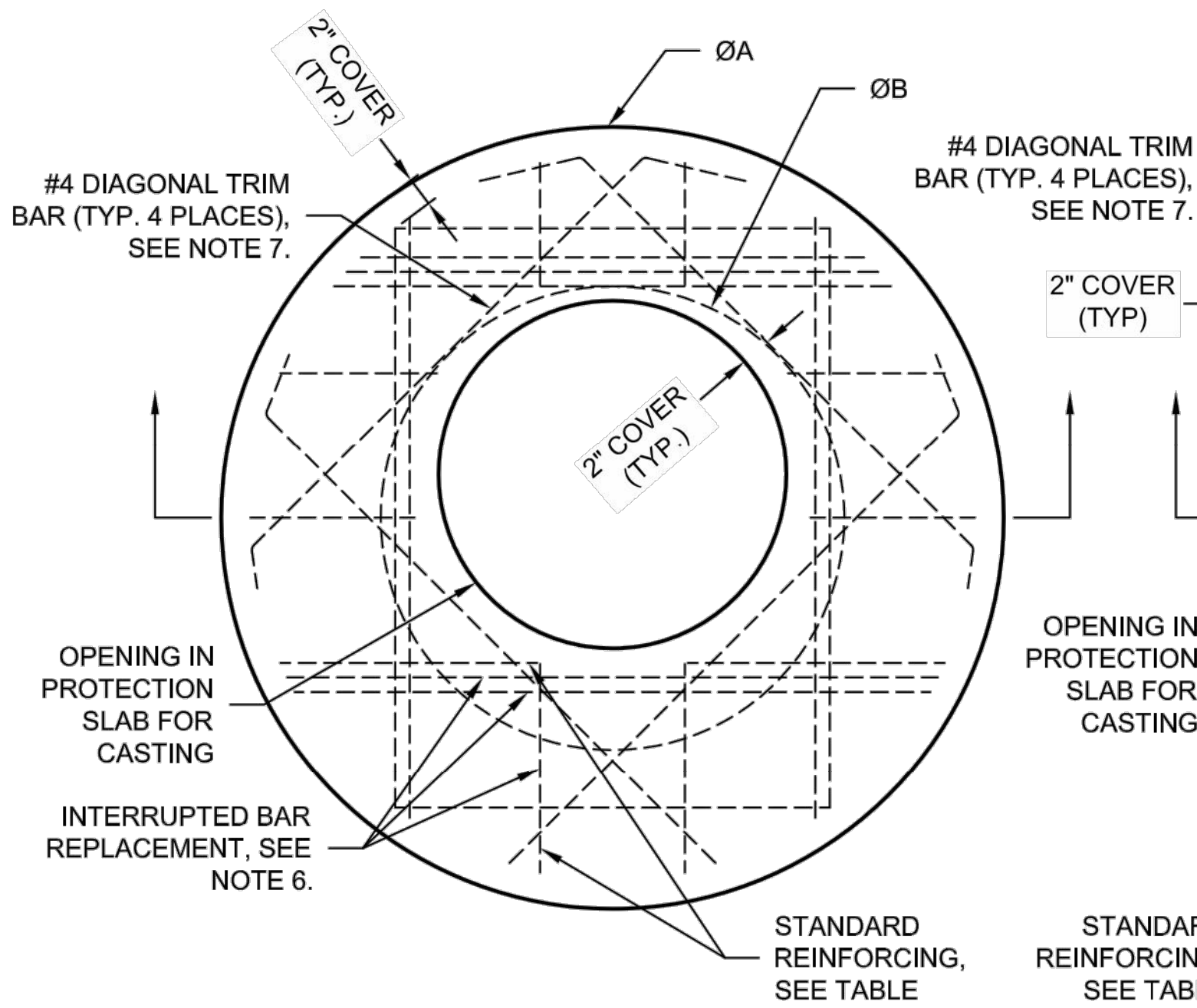
IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

MATERIAL SPECIFICATION

SCALE: N.T.S.



SECTION VIEW



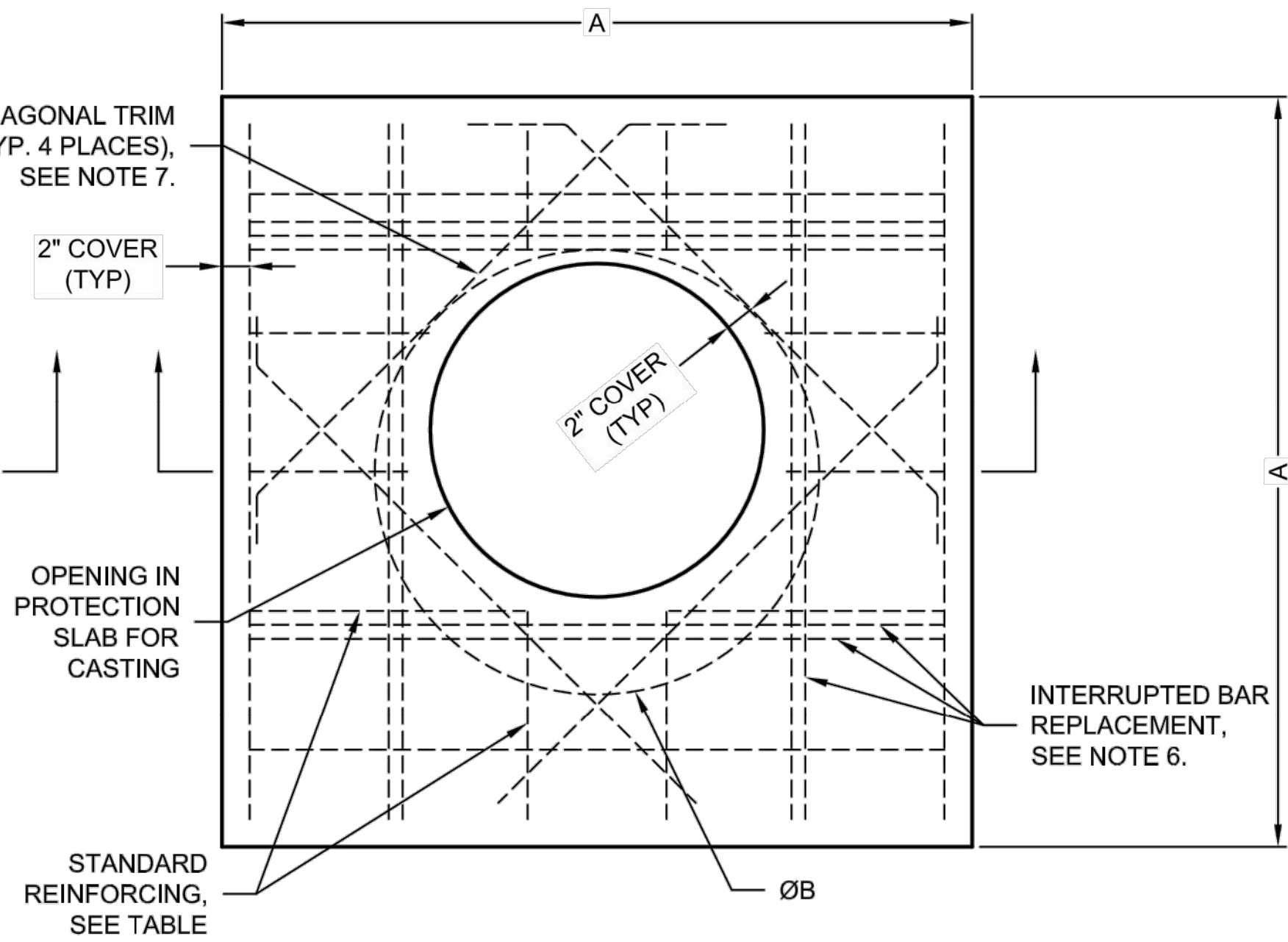
ROUND OPTION PLAN VIEW

NOTES:

- DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
- DESIGN LOAD HS25.
- EARTH COVER = 1' MAX.
- CONCRETE STRENGTH = 4,000 psi
- REINFORCING STEEL = ASTM A615, GRADE 60.
- PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

REINFORCING TABLE				
Ø CMP RISER	A	Ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	Ø 4' 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	Ø 4'-6" 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	Ø 5' 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	Ø 5'-6" 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	Ø 6' 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY



SQUARE OPTION PLAN VIEW

- TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL

SCALE: N.T.S.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
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

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

PROJECT No.: 551813	SEQ. No.: 010	DATE: 10/21/2016
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SHEET NO.: P3	OF 3	

WEST TOWNE MALL REDVELOPMENT

CITY OF MADISON, WI

CONTECH DETAILS 4

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PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.
DESIGNED BY: DVW
CHECKED BY: RJY
SHEET NUMBER
C506

DESCRIPTION	DATE

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Brookfield, WI 53005-5938
(262) 781-1000
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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

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 TRAFFIC CONTROL DEVICES (WMUTCD)
 - 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 REGARDING 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 NEW ALL PORTIONS OF THE SUBSTANDARD OR INFERIOR WORK OR REPLACEMENT OF IMPROPER 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. ALL SUCH DEFECTS, WHETHER IN PLACE OR NOT, SHALL BE REJECTED AND SHALL BE REPAIRED 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 ALL DRAWINGS AND 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 COPIES OF THE DRAWINGS, 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 RIGHTS-OF-WAYS 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 OF EQUIVALENT STRENGTH TO EXISTING MATERIALS.
14. REMOVE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS, TRASH, AND DEBRIS FROM THE PROJECT SITE. RUBBISH, TRASH, 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.

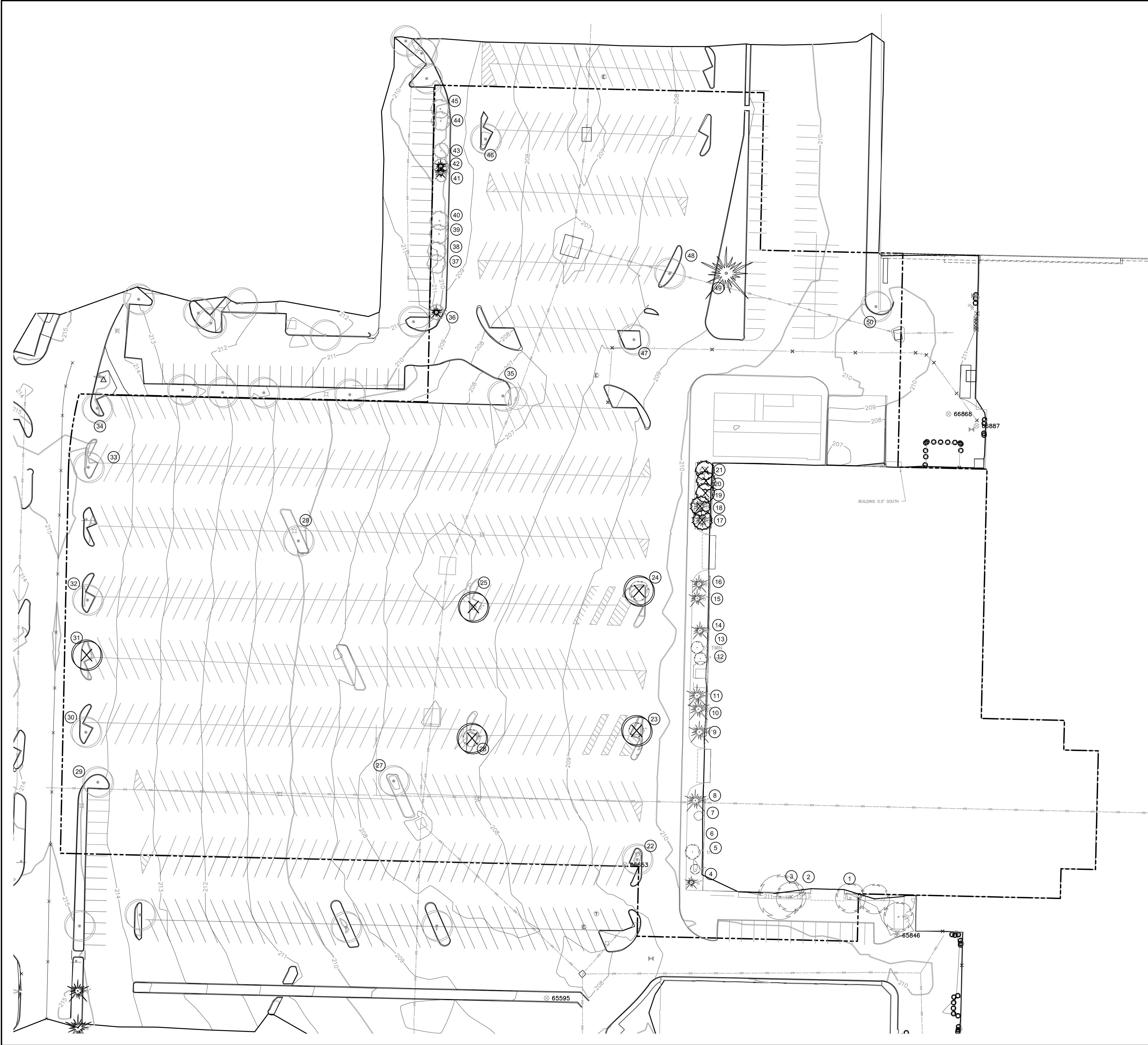
31 25 00 – EROSION & SEDIMENTATION CONTROLS

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 COVER 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 AS NECESSARY, AND MULCHED IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN TO MAINTAIN A WOODRUS DENSE VEGETATIVE COVER.

DIVISION 32 – EXTERIOR IMPROVEMENTS

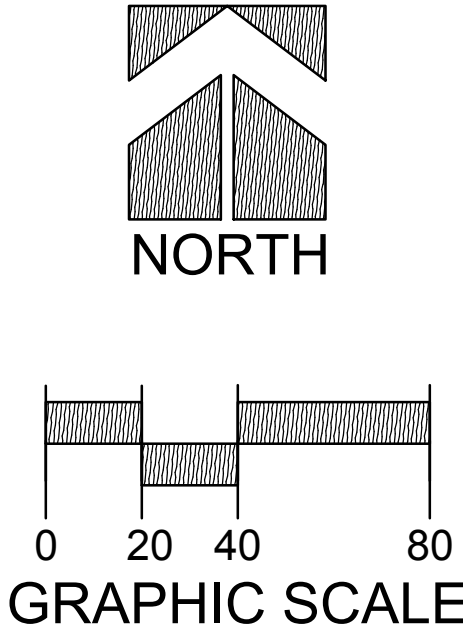
32 12 00 – ASPHALT PAVING

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 IS BELOW 35 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 30 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 25 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 20 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 15 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 10 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 5 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW 0 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -5 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -10 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -15 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -20 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -25 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -30 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -35 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -40 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -45 DEGREES FAHRENHEIT. TEMPERATURE IS BELOW -50 DEGREES FAHRENHEIT. 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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



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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

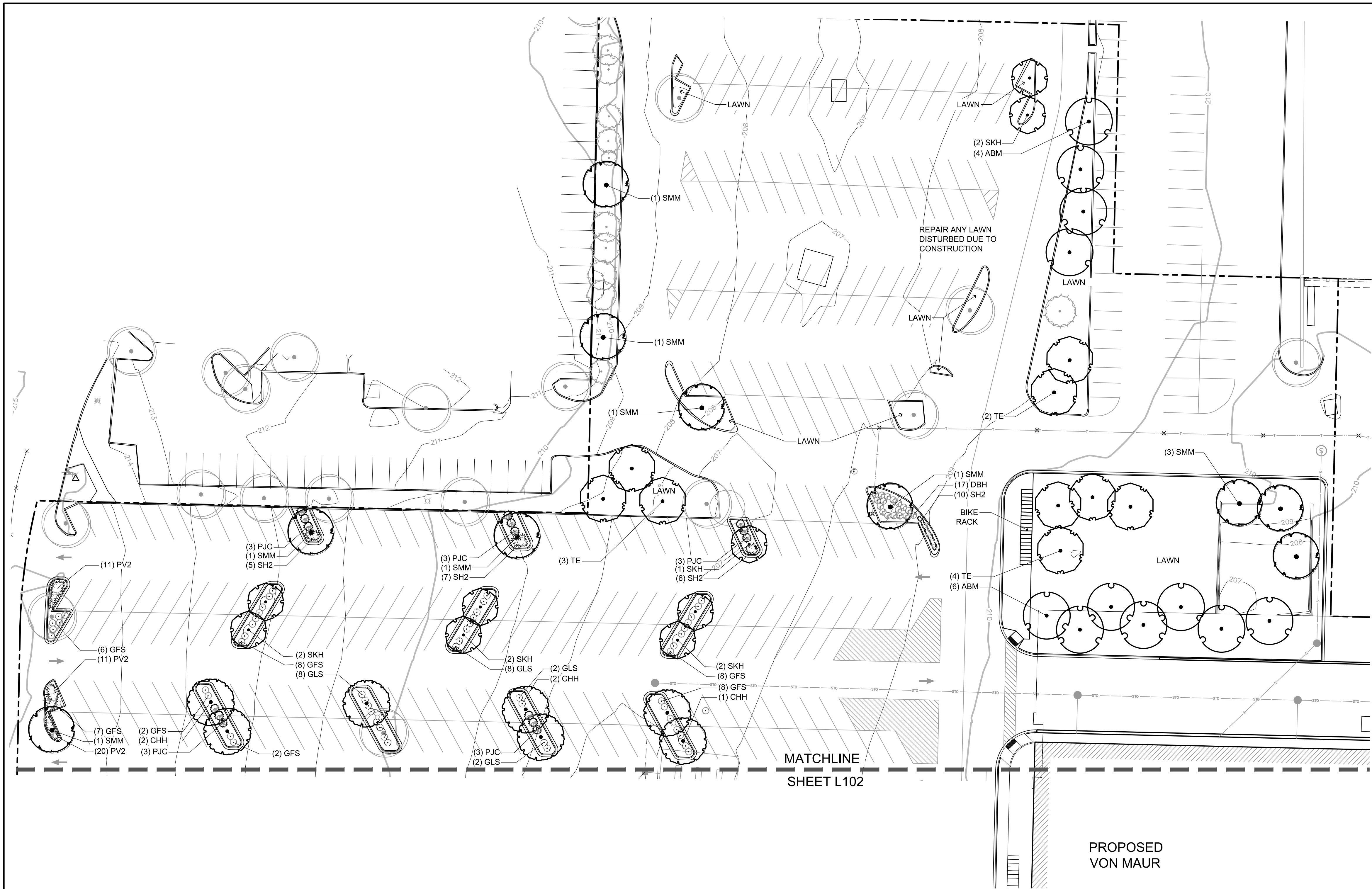
PROJECT MANAGER:
MATTHEW P. KOCOUREK, P.E.

DESIGNED BY: NJW/CNS

CHECKED BY: CNS

SHEET NUMBER

L100



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	13	State Street Miyabe Maple	Acer miyabei 'Morton' TM	2 1/2" CAL	B&B	Full, matching heads
CHH	5	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	17	Dwarf Bush Honeysuckle	Diervilla lonicera	15" HT	CONT.	
GFS	54	Goldflame Spirea	Spiraea x bumalda 'Goldflame'	15" HT	CONT.	
EVERGREEN SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PJC	15	Kallay Compact Pfitzer Juniper	Juniperus chinensis 'Kallays Compact'	18" SPD	CONT.	
ORNAMENTAL GRASSES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PV2	29	Cheyenne Sky Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 GAL	POT	18" Spacing
SH2	28	Tara Prairie Dropseed	Sporobolus heterolepis 'Tara'	1 GAL	POT	18" Spacing



EXISTING TREE TO REMAIN

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: 4,558 points

5) Development Frontage Landscape
NA

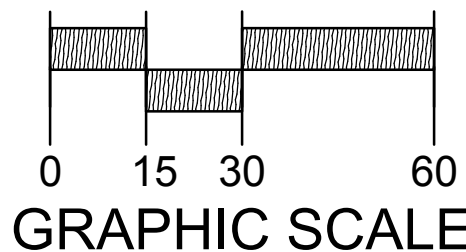
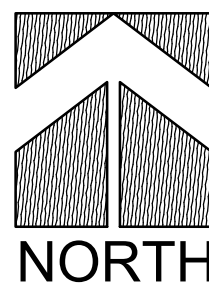
6) Interior Parking Lot Landscaping
for changes to a developed site a minimum of 5% of paving shall be
landscape islands & strips & peninsulas

REQUIRED: 5% of 308,011 = 15,401 SF landscape
PROVIDED: 20,174 SF

1 deciduous tree for very 160 SF required landscape area

REQUIRED: 15,401 SF / 160SF = 97 trees
PROVIDED: 19 existing trees to remain & 74 proposed trees

7) Foundation Plantings
Foundation planting by others



CITY OF MADISON
LANDSCAPE WORKSHEET
Section 28.142 Madison General Ordinance

Project Location / Address West Towne Mall, Madison, WI
Name of Project West Towne Mall Redevelopment
Owner / Contact Ken Wittler
Contact Phone 423-490-8385 Contact Email Ken.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:

- The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- No demolition of a principal building is involved.
- 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.

- 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 _____

- 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 4,533

- For the Industrial - Limited (IL) 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

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	2 1/2 inch caliper measured diameter at breast height (dbh)	35	13	455	79	2765
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35	4	140		
Ornamental tree	1 1/2 inch caliper	15	6	90		
Upright evergreen shrub (i.e. arbovitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12"-24"	3	1	3	221	663
Shrub, evergreen	#3 gallon container size, Min. 12"-24"	4			44	176
Ornamental grasses/ perennials	#1 gallon container size, Min. 8"-18"	2			133	266
Ornamental/ decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 1/2 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		3870

Total Number of Points Provided 4558

* 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

WEST TOWNE MALL REDEVELOPMENT
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

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

DESIGNED BY: NJW

CHECKED BY: CNS

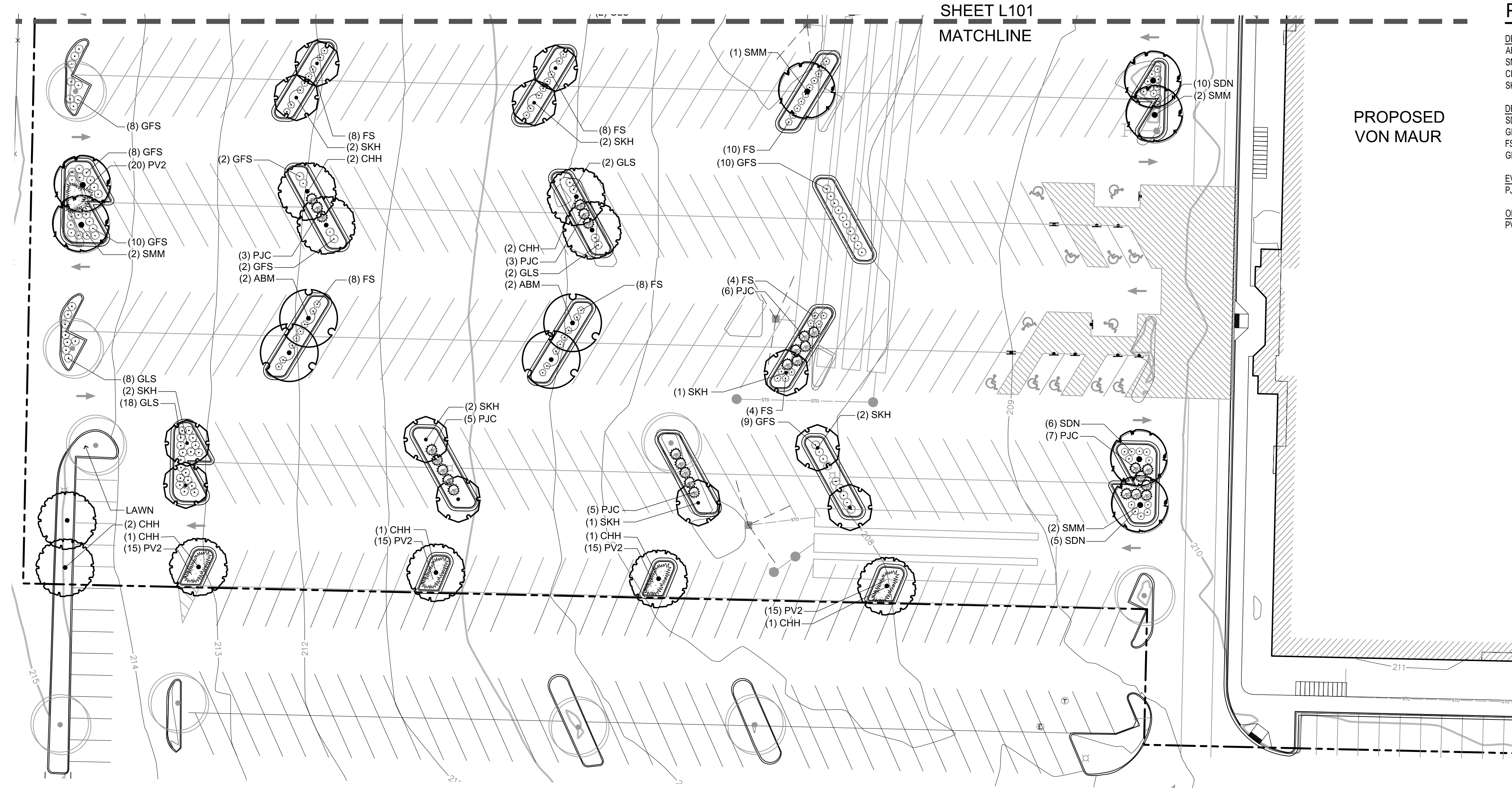
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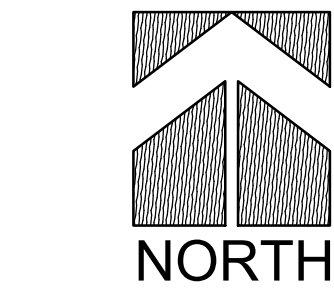
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PLANT SCHEDULE SOUTH

DECIDUOUS TREES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
ABM	4	Autumn Blaze Maple	Acer freemansi 'Autumn Blaze'	2 1/2" CAL	B&B	Full, matching heads
SMM	10	State Street Miyabel Maple	Acer miyabei 'Morton' TM	2 1/2" CAL	B&B	Full, matching heads
CHH	11	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
DECIDUOUS SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
SDN	21	Nikko Slender Deutzia	Deutzia gracilis 'Nikko'	15" HT	CONT.	
GLS	26	Gro-Low Fragrant Sumac	Rhus aromatica 'Gro-Low'	15" HT	CONT.	
FS	50	Froebel Spirea	Spiraea x bumalda 'Froebel'	15" HT	CONT.	
GFS	53	Goldflame Spirea	Spiraea x bumalda 'Goldflame'	15" HT	CONT.	
EVERGREEN SHRUBS	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PJC	29	Kallay Compact Pfizer Juniper	Juniperus chinensis 'Kallays Compact'	18" SPD	CONT.	
ORNAMENTAL GRASSES	QTY	COMMON NAME	BOTANICAL NAME	SIZE	ROOT	REMARKS
PV2	82	Cheyenne Sky Switch Grass	Panicum virgatum 'Cheyenne Sky'	1 GAL	POT	18" Spacing



GRAPHIC SCALE

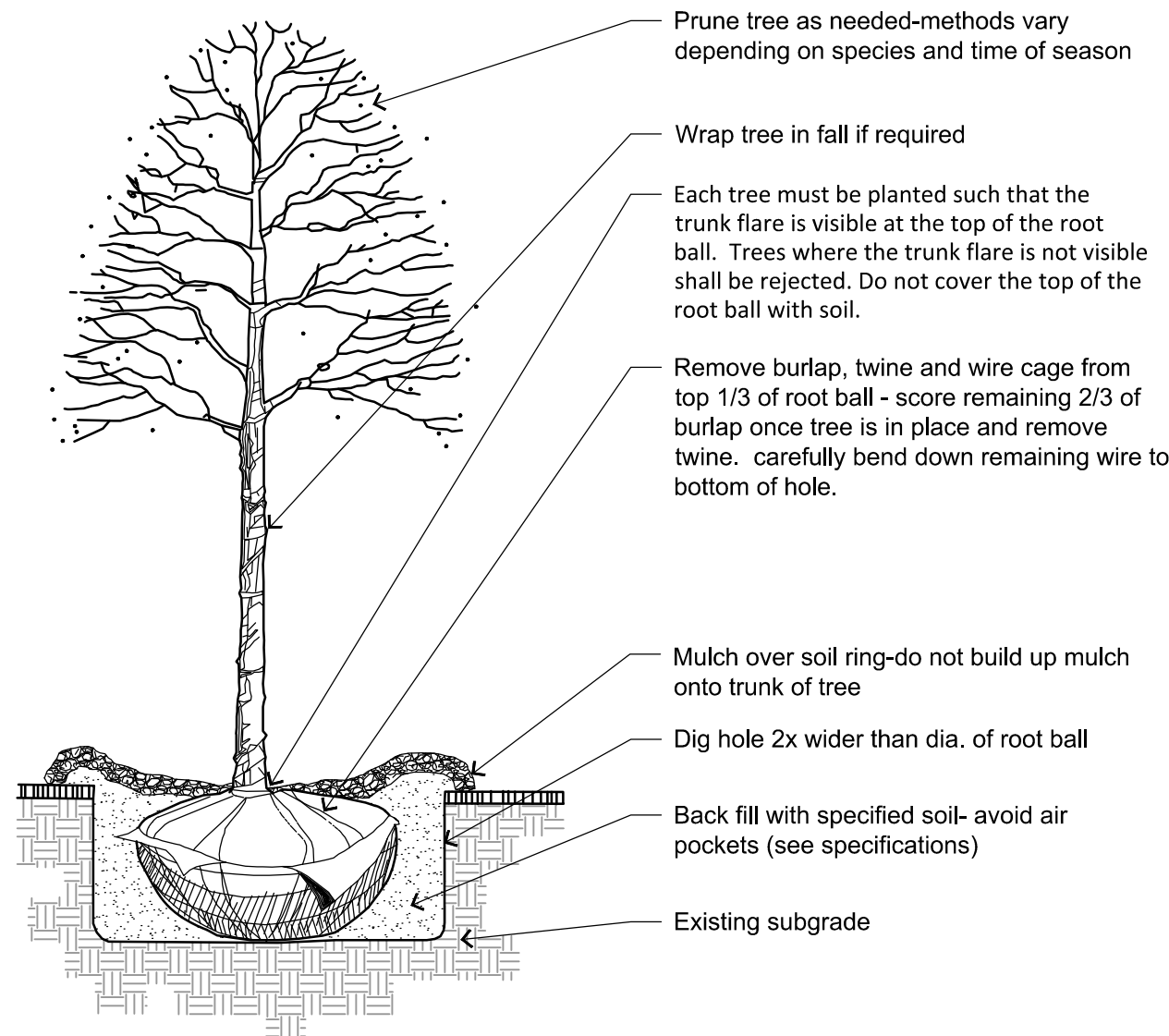


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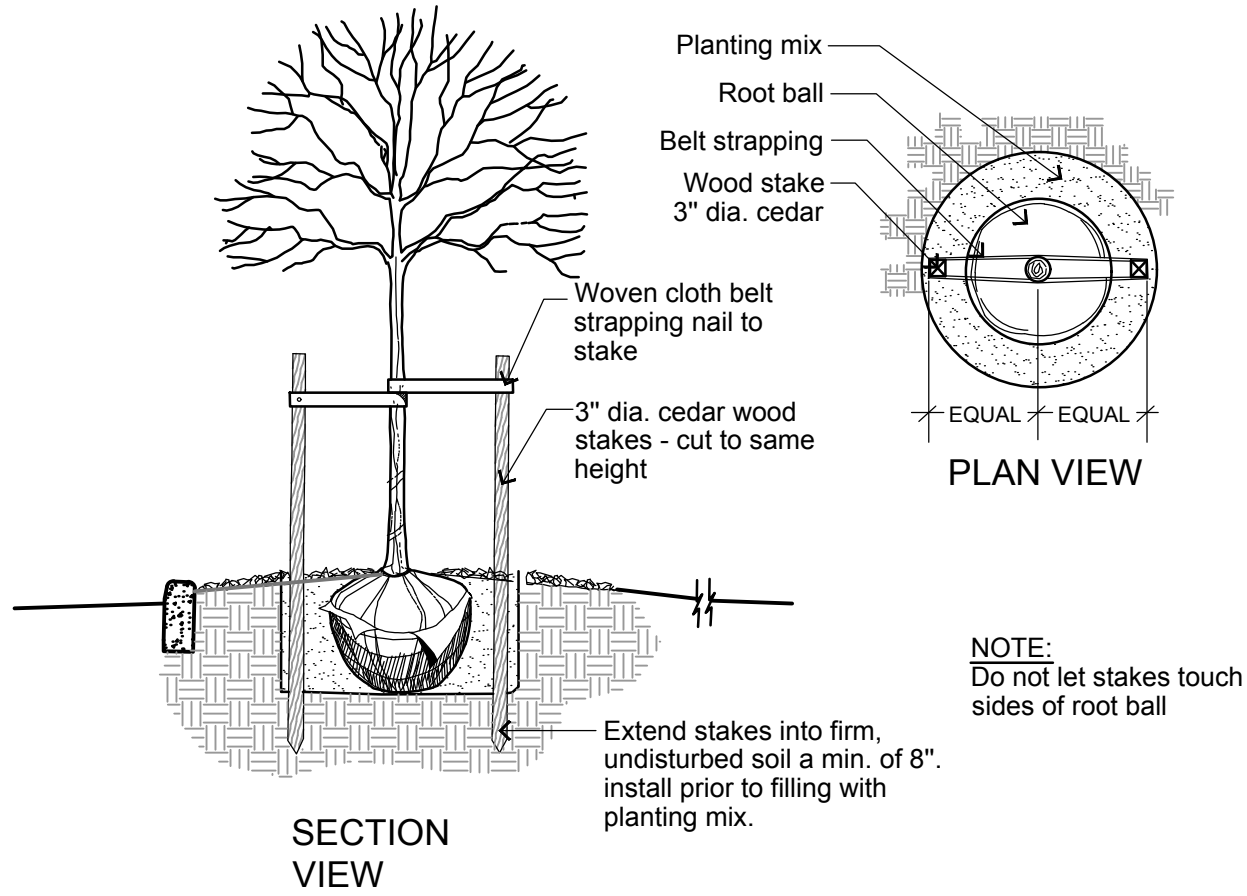
GENERAL LANDSCAPE NOTES

- 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 seed 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.

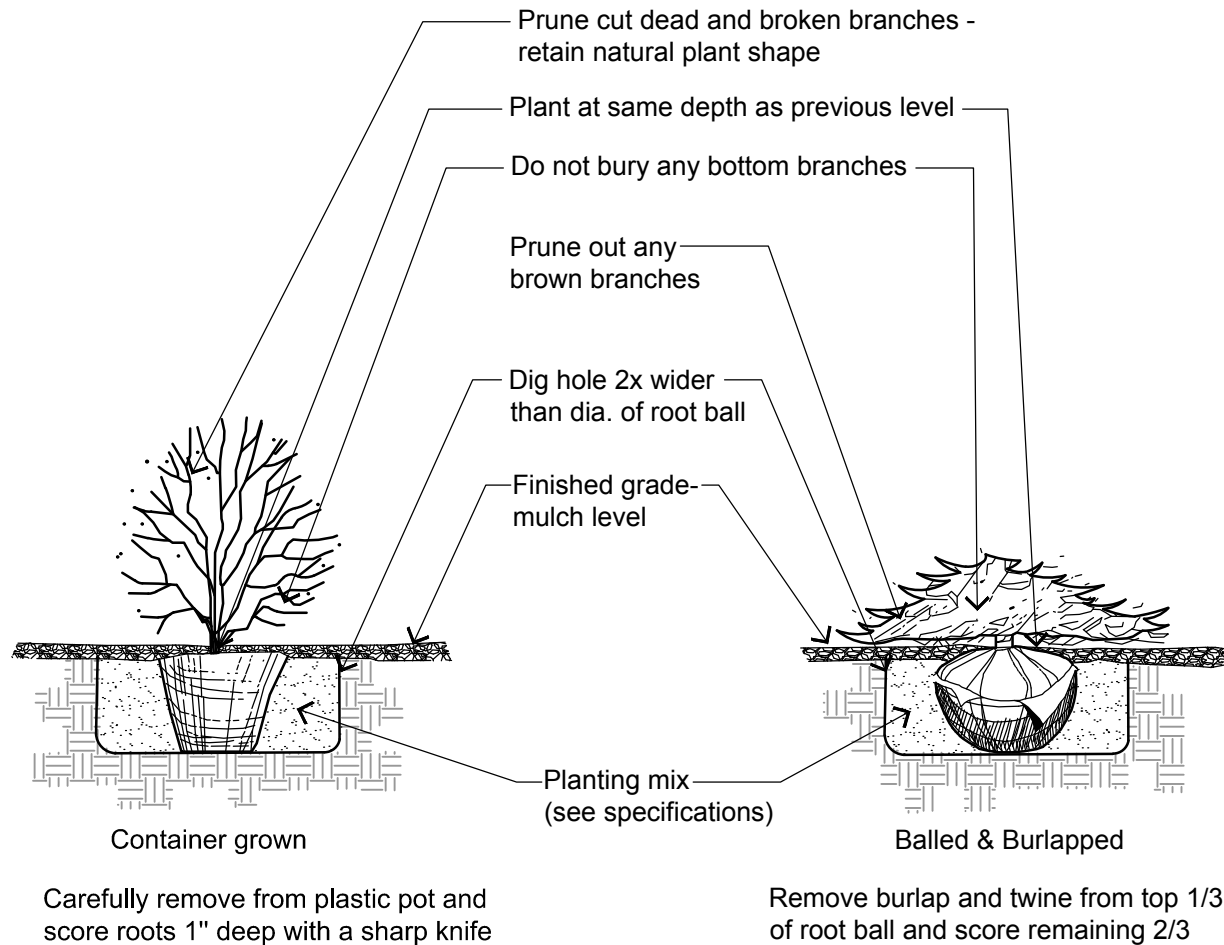
GENERAL LANDSCAPE DETAILS



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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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

L102

DESCRIPTION

DATE

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