COPPER ROCKS DEVELOPMENT

LA CROSSE, WISCONSIN — **ISG PROJECT # 21-25290**

ISG

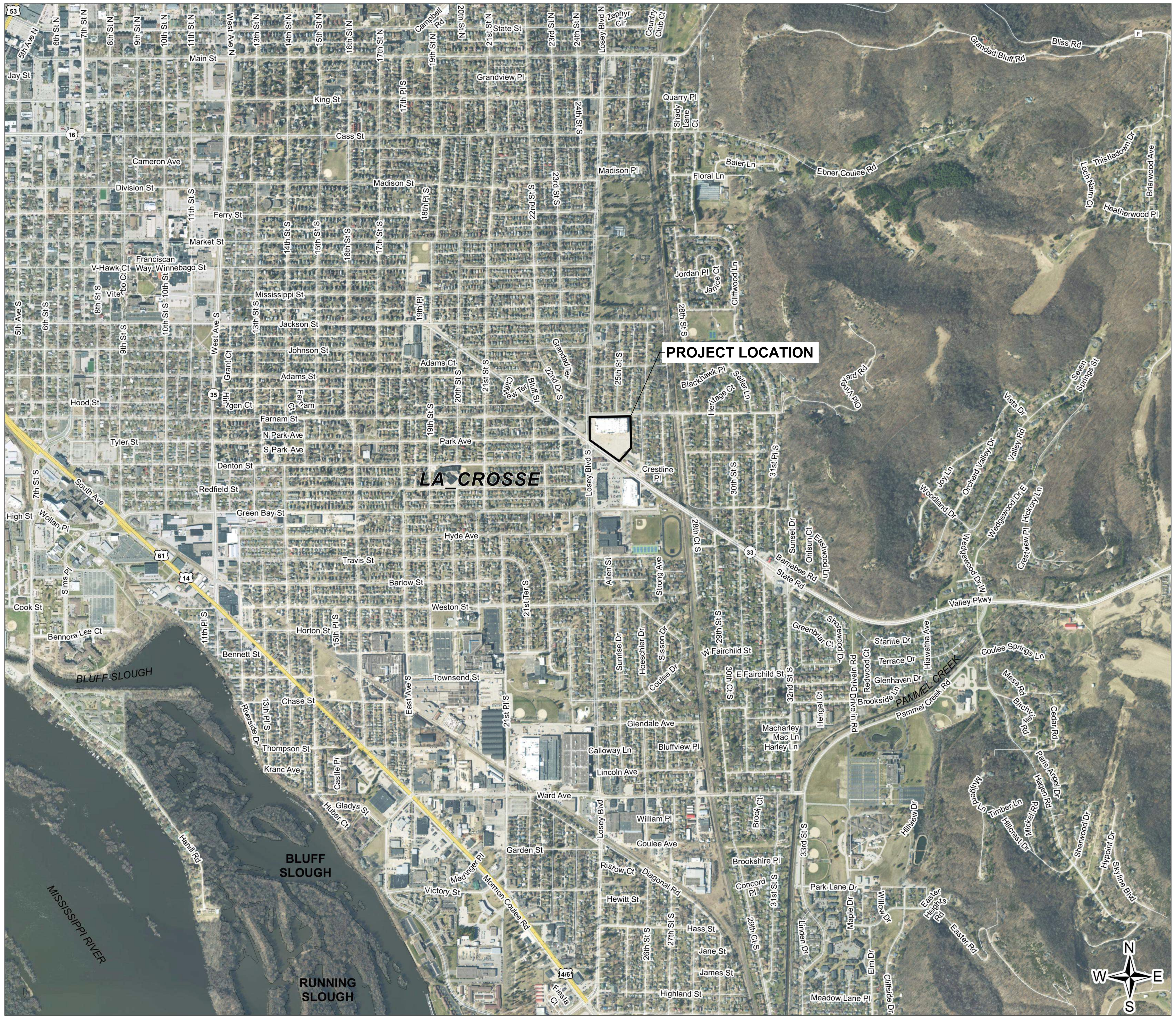
LEGEND

EXISTING

- CITY LIMITS
- SECTION LINE
- QUARTER SECTION LINE
- RIGHT OF WAY LINE
- PROPERTY / LOTLINE
- EASEMENT LINE
- ACCESS CONTROL
- WATER EDGE (W)
- WETLAND BOUNDARY (WET)
- WETLAND / MARSH
- FENCE LINE (X)
- CULVERT (>>)
- STORM SEWER (>>)
- SANITARY SEWER (>)
- SANITARY SEWER FORCEMAIN (II>)
- WATER (I)
- GAS (G)
- OVERHEAD ELECTRIC (OE)
- UNDERGROUND ELECTRIC (UE)
- UNDERGROUND TELEPHONE (UT)
- UNDERGROUND TV (UTV)
- OVERHEAD UTILITY (OHL)
- UNDERGROUND UTILITY (UTL)
- UNDERGROUND FIBER OPTIC (FBO)
- CONTOUR (MAJOR) (990)
- CONTOUR (MINOR) (989)
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE LINE
- MANHOLE/STRUCTURE
- CATCH BASIN
- HYDRANT
- VALVE
- CURB STOP
- POWER POLE
- UTILITY PEDESTAL / CABINET

PROPOSED

- LOT LINE
- RIGHT OF WAY
- EASEMENT
- CULVERT (>>)
- STORM SEWER (>>)
- STORM SEWER (PIPE WIDTH)
- SANITARY SEWER (>)
- SANITARY SEWER (PIPE WIDTH)
- WATER (I)
- GAS (G)
- OVERHEAD ELECTRIC (OE)
- UNDERGROUND ELECTRIC (UE)
- UNDERGROUND TV (UTV)
- CONTOUR (1015)
- MANHOLE (STORM, SANITARY)
- CATCH BASIN
- HYDRANT
- VALVE



0 700 1,400
SCALE IN FEET

SHEET INDEX

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS AND CLARIFICATIONS ISSUED BY THE ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "DIGGER'S HOTLINE" FOR UTILITY LOCATIONS, MINIMUM 3 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (811 OR 1-800-242-8511).

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

ABBREVIATIONS:

AC	ACRE	DEMO	DEMOLITION	GV	GATE VALVE	MH	MANHOLE	ROW	RIGHT OF WAY
ADA	AMERICANS WITH DISABILITIES ACT	DIA	DIAMETER	HDPE	HIGH DENSITY POLYETHYLENE	MIN	MINIMUM	R/W	RIGHT OF WAY
ADD	ADDENDUM	DIM	DIMENSION	HD	HEAVY DUTY	MISC	MISCELLANEOUS	SAN	SANITARY
AFF	ABOVE FINISHED FLOOR	DS	DOWNSPOUT	HH	HANDHOLE	NO	NUMBER	SCH	SCHEDULE
AGG	AGGREGATE	EA	EACH	HORIZ	HORIZONTAL	NTS	NOT TO SCALE	SF	SQUARE FOOT
APPROX	APPROXIMATE	ELEC	ELECTRICAL	HR	HOUR	NWL	NORMAL WATER LEVEL	SPEC	SPECIFICATION
ARCH	ARCHITECT, ARCHITECTURAL	ELEV	ELEVATION	HWL	HIGH WATER LEVEL	OC	ON CENTER	SQ	SQUARE
BFE	BASEMENT FLOOR ELEVATION	EOF	EMERGENCY OVERFLOW	HWY	HIGHWAY	OCEW	ON CENTER EACH WAY	STA	STATION
BIT	BITUMINOUS	EQ	EQUAL	HYD	HYDRANT	OH	OVERHEAD	SY	SQUARE YARD
CAD	COMPUTER-AIDED DESIGN	EX	EXISTING	I	INVERT	OHD	OVERHEAD DOOR	T/C	TOP OF CURB
CB	CATCH BASIN	FDC	FIRE DEPARTMENT CONNECTION	ID	INSIDE DIAMETER	OZ	OUNCE	TEL	TELEPHONE
CFS	CUBIC FEET PER SECOND	FDN	FOUNDATION	IN	INCH	PED	PEDESTAL, PEDESTRIAN	TEMP	TEMPORARY
CF	CUBIC FOOT	FES	FLARED END SECTION	INV	INVERT	PERF	PERFORATED	THRU	THROUGH
CI	CAST IRON	FFE	FINISHED FLOOR ELEVATION	IP	IRON PIPE	PL	PROPERTY LINE	TNFH	TOP NUT OF FIRE HYDRANT
CIP	CAST IRON PIPE	FPM	FEET PER MINUTE	IPS	IRON PIPE SIZE	PP	POLYPROPYLENE	TRANS	TRANSFORMER
CIPC	CAST IN PLACE CONCRETE	FPS	FEET PER SECOND	J-BOX	JUNCTION BOX	PSI	POUNDS PER SQUARE INCH	TV	TELEVISION
CJ	CONTROL JOINT	FT	FOOT, FEET	JT	JOINT	PVC	POLYVINYL CHLORIDE	T/W	TOP OF WALL
CL	CENTERLINE	FTG	FOOTING	LF	LINEAR FEET	PVMT	PAVEMENT	TYP	TYPICAL
CMP	CORRUGATED METAL PIPE	GA	GAUGE	LIN	LINEAR	QTY	QUANTITY	UT	UTILITY, UNDERGROUND TELEPHONE
CO	CLEANOUT	GAL	GALLON	LPS	LOW PRESSURE STEAM	R	RIM		
CONC	CONCRETE	GALV	GALVANIZED	LS	LUMP SUM	RAD	RADIUS	VCP	VITRIFIED CLAY PIPE
CONST	CONSTRUCTION	GC	GENERAL CONTRACTOR	LSO	LOWEST STRUCTURAL OPENING	RCP	REINFORCED CONCRETE PIPE	W/O	WITHOUT
CONT	CONTINUOUS	GFE	GARAGE FLOOR ELEVATION	MAX	MAXIMUM	RD	ROOF DRAIN	W/	WITH
CY	CUBIC YARD	GL	GUTTER LINE	MB	MAIL BOX	REBAR	REINFORCING BAR	YD	YARD
C&G	CURB AND GUTTER	GPM	GALLONS PER MINUTE	MECH	MECHANICAL	REM	REMOVE	YR	YEAR

PLOT DATE: 6/17/2022 10:52 AM

PROJECT INDEX:

OWNER:

MKB COPPER ROCKS, LLC
3800 EMERALD DRIVE EAST
ONALASKA WISCONSIN 54650
PH: 608.779.2702

PROJECT ADDRESS / LOCATION:

2415 STATE ROAD
LA CROSSE WISCONSIN
54601

MANAGING OFFICE:

ISG

LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601
PHONE: 608.789.2034

PROJECT MANAGER: KRIS ROPPE
EMAIL: KRIS.ROPPE@ISGINC.COM

SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF LA CROSSE STANDARD SPECIFICATIONS, CURRENT EDITION, WISDOT STANDARD SPECIFICATIONS, 2022 EDITION, WISDOT CONSTRUCTION AND MATERIALS MANUAL, CURRENT EDITION, WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES STATE PLUMBING CODE, CURRENT EDITION, AND STANDARD SPECIFICATION FOR SEWER & WATER CONSTRUCTION IN WISCONSIN, 6th EDITION, UNLESS DIRECTED OTHERWISE.

PROJECT DATUM

HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), 2011 ADJUSTMENT (NAD83(2011)) ON THE LA CROSSE COUNTY COORDINATE SYSTEM, IN U.S. SURVEY FEET.

B.M. ELEVATION=668.24
TNFH LOCATED AT THE NE QUAD OF FARNAM AND 25TH STREET SOUTH

TOPOGRAPHIC SURVEY

THIS PROJECTS TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN FEBRUARY AND MARCH 2022 BY ISG.

PDD SPECIFIC PLAN SUBMITTAL
06/16/2022

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 G1-TITLE
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

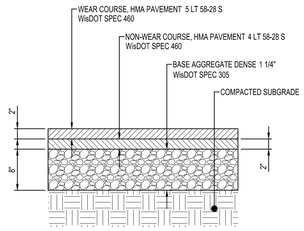
TITLE

TITLE

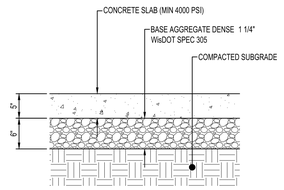
SHEET

G1-10

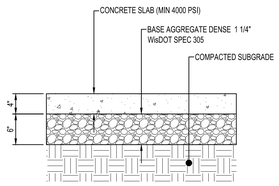
PRELIMINARY NOT FOR CONSTRUCTION PRELIMINARY NOT FOR CONSTRUCTION



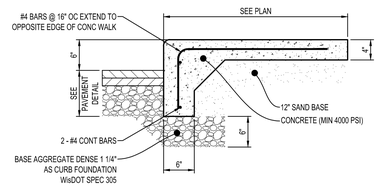
STANDARD
ASPHALT PAVEMENT
NTS



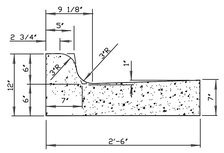
STANDARD
CONCRETE PAVEMENT
NTS



STANDARD
CONCRETE WALK
NTS

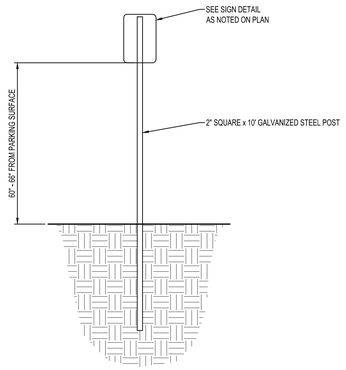


TURN DOWN
CONCRETE WALK
NTS

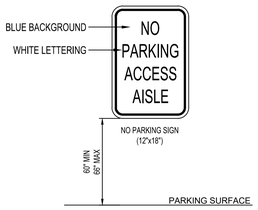


STANDARD CURB & GUTTER SECTION

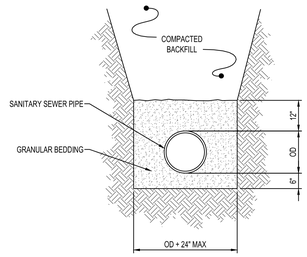
NOTE:
WITH REFERENCE TO SAWING OF CONTRACTION JOINTS ON SLIP FORM CURB & GUTTER, & CURB, PAGE 9.3, STANDARD SPEC'S THE SAW CUT SHALL BE A MINIMUM 1/8" WIDE X 1" DEEP.



SIGN POST
NTS



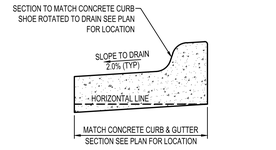
NO PARKING
ACCESS AISLE SIGN
NTS



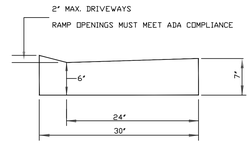
NOTES:

GRANULAR BEDDING AND ENCASEMENT FOR SANITARY SEWER PIPES SHALL BE INCIDENTAL TO CONSTRUCTION

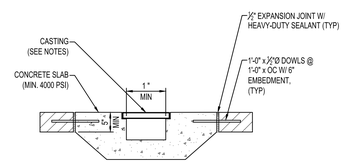
PIPE BEDDING
SANITARY SEWER
NTS



REVERSE PITCH
CONCRETE CURB & GUTTER
NTS



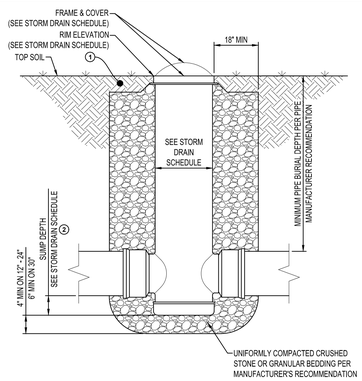
MOUNTABLE CURB SECTION



NOTES:

CASTING	=	NEENAH R-4990-CX
GRATE	=	TYPE C

CONCRETE TRENCH DRAIN
NTS

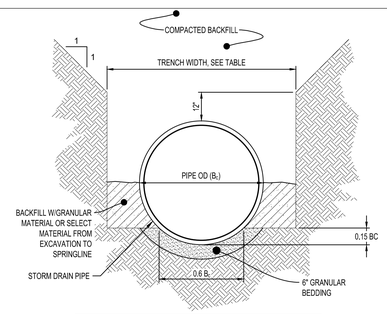


NOTES:

① DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS TO DO NOT FORM

② 6" MIN ON 8" - 24" DRAIN BASIN, 10" MIN ON 30" DRAIN BASIN. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS.

DRAIN BASIN
NTS

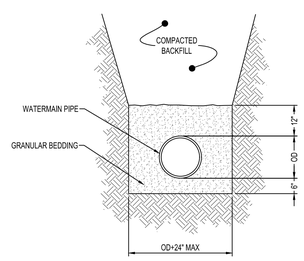


TRENCH WIDTH	
PIPE Ø	TRENCH WIDTH
36" OR LESS	B_1 + 24"
42" TO 54"	1.5 x B_1
60" OR OVER	B_1 + 36"

NOTES:

GRANULAR BEDDING AND BACKFILL FOR STORM DRAIN PIPES SHALL BE INCIDENTAL TO STORM DRAIN CONSTRUCTION

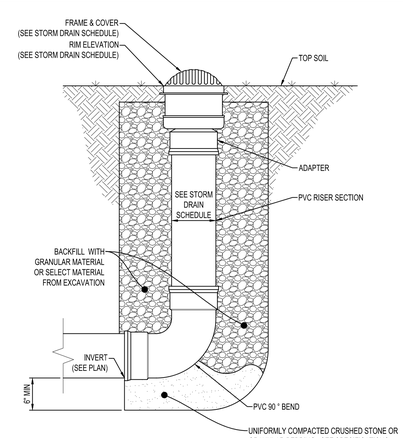
REINFORCED CONCRETE
STORM DRAIN PIPE BEDDING
NTS



NOTE:

GRANULAR BEDDING AND ENCASEMENT FOR WATERMAIN PIPES SHALL BE INCIDENTAL TO CONSTRUCTION

PIPE BEDDING
WATER MAIN
NTS



INLINE DRAIN
NTS

PLOT DATE: 6/17/2022 10:52 AM

PRELIMINARY NOT FOR CONSTRUCTION

PDD SPECIFIC PLAN SUBMITTAL
06/16/2022

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PROJECT

COPPER ROCKS

DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

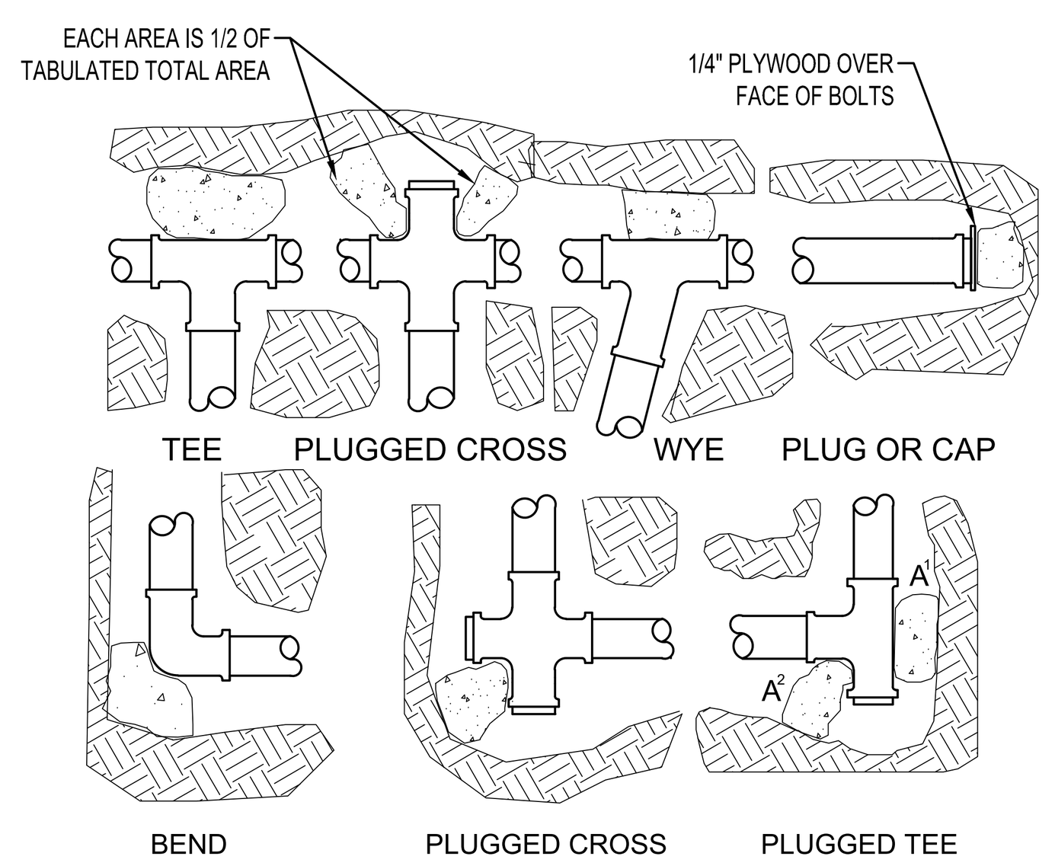
PROJECT NO.	21-25290
FILE NAME	25290 C0-DETAILS
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

SHEET

C0-10

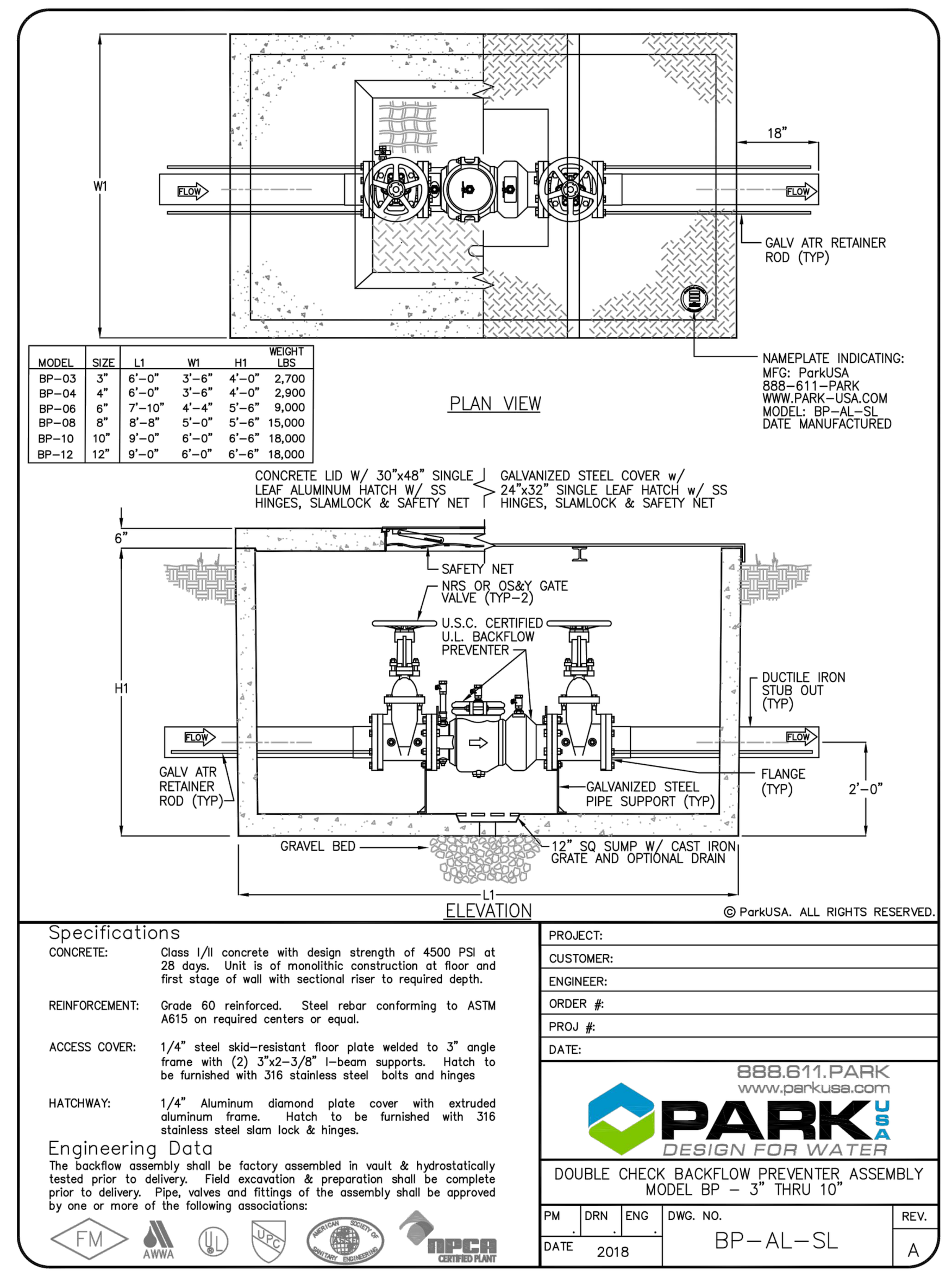


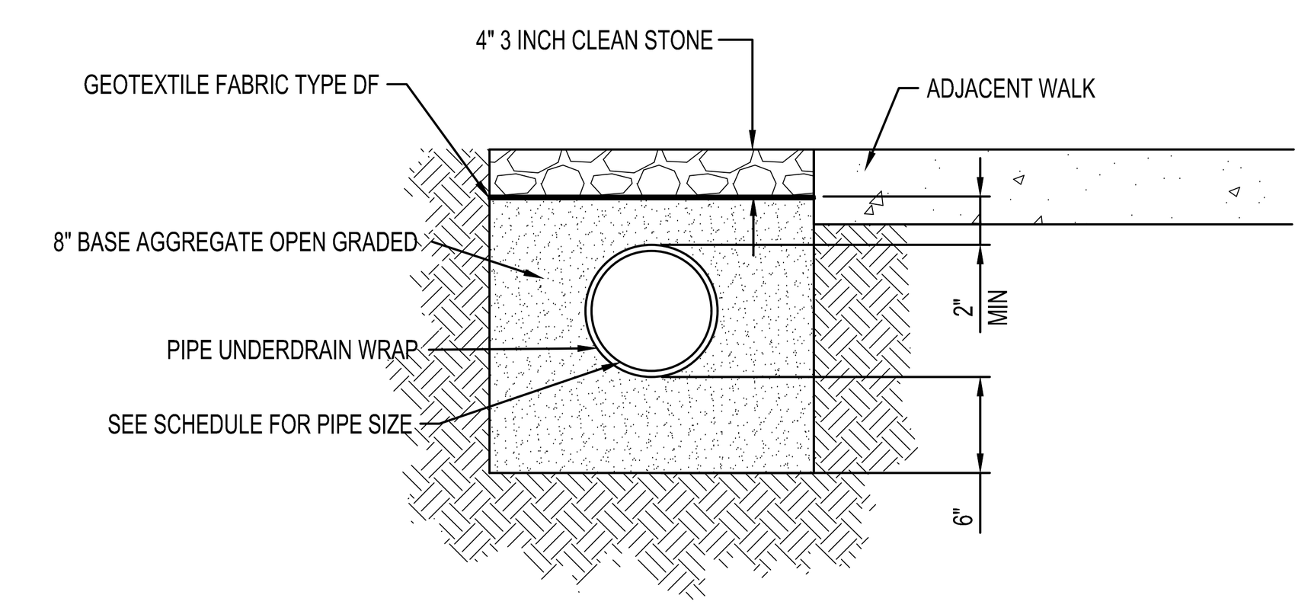
THRUST BLOCK BEARING (SF) TABLE							
NOMINAL FITTING SIZE INCHES	TEE,WYE PLUG OR CAP	90 BEND PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22 ½° BEND	11 ¼° BEND
			A[1]	A[2]			
4	1.0	1.4	1.9	1.4	1.0		
6	2.1	3.0	4.3	3.0	1.6	1.0	
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.6	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8

NOTES

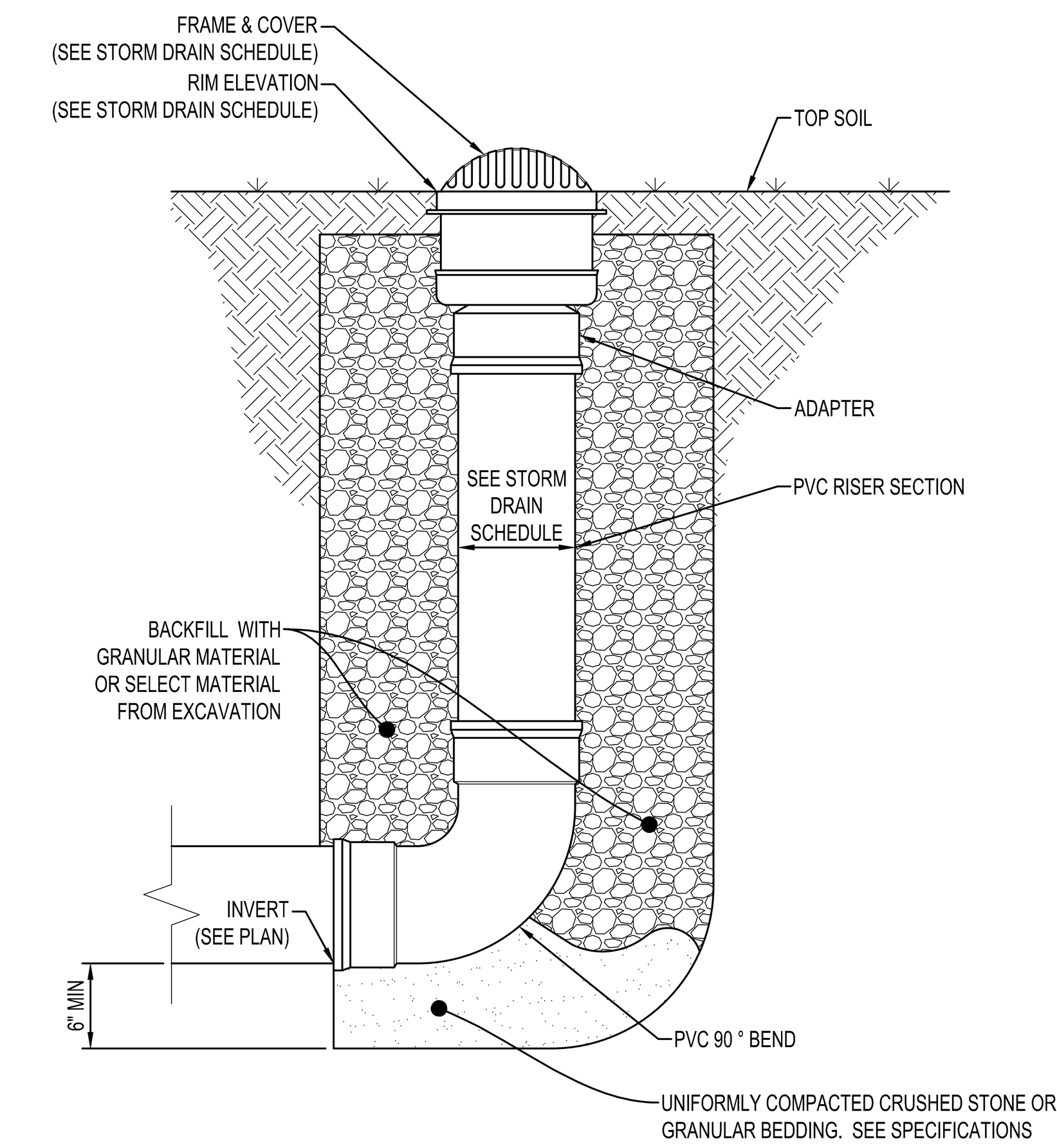
1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH
2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES
3. IF NOT SHOWN ON PLANS, REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED ABOVE, ADJUST IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS (ES)
4. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL
5. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 LBS PER SQ/FT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING USE THE FOLLOWING EQUATION: BEARING AREA=TEST PRESSURE/150x12000/SOIL BEARING STRESS x TABLE VALUE

WATERMAIN
THRUST BLOCKING
NTS

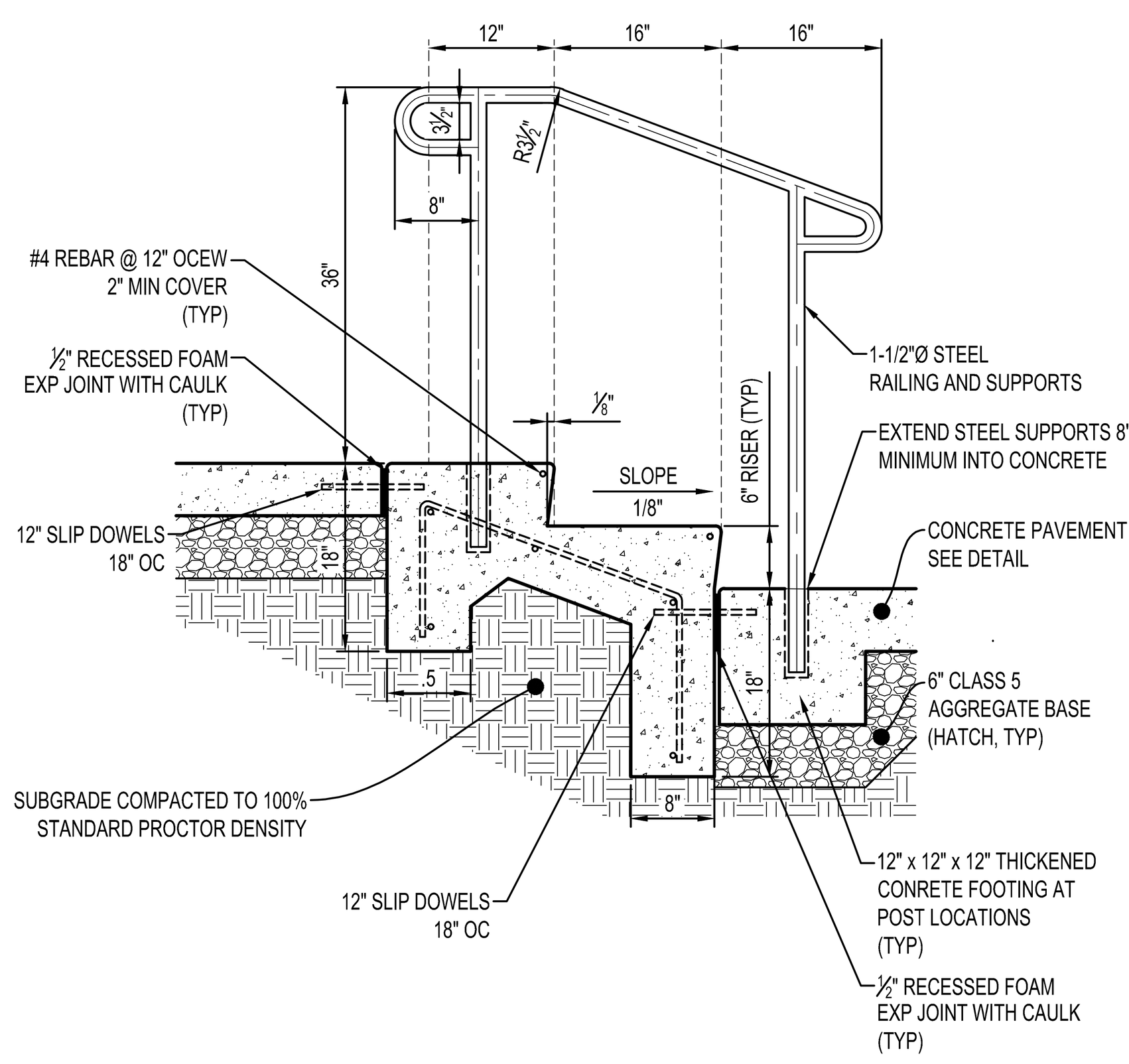




ROCK LANDSCAPING
WITH UNDERDRAIN DETAIL
NTS SD990



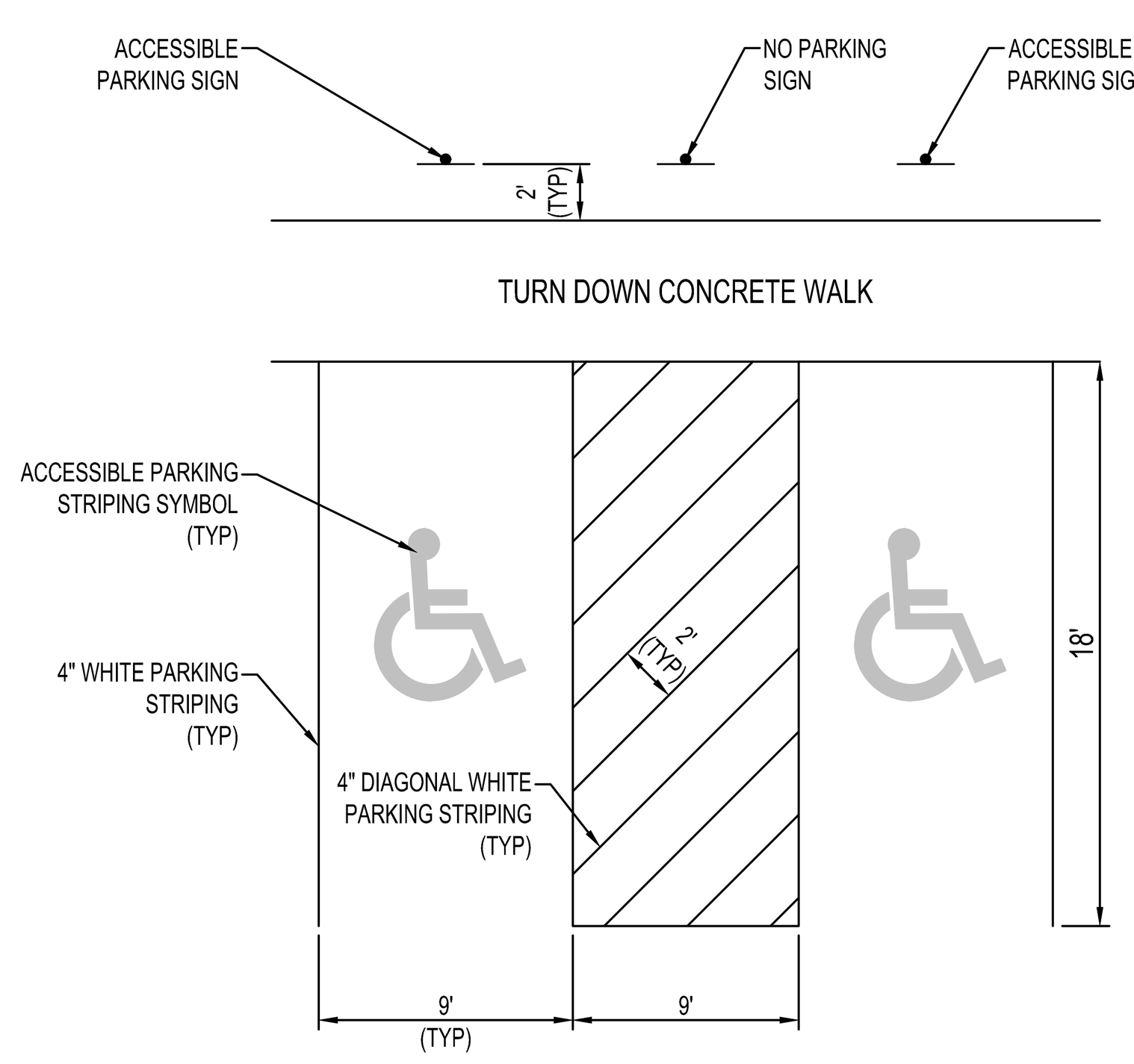
INLINE DRAIN
NTS



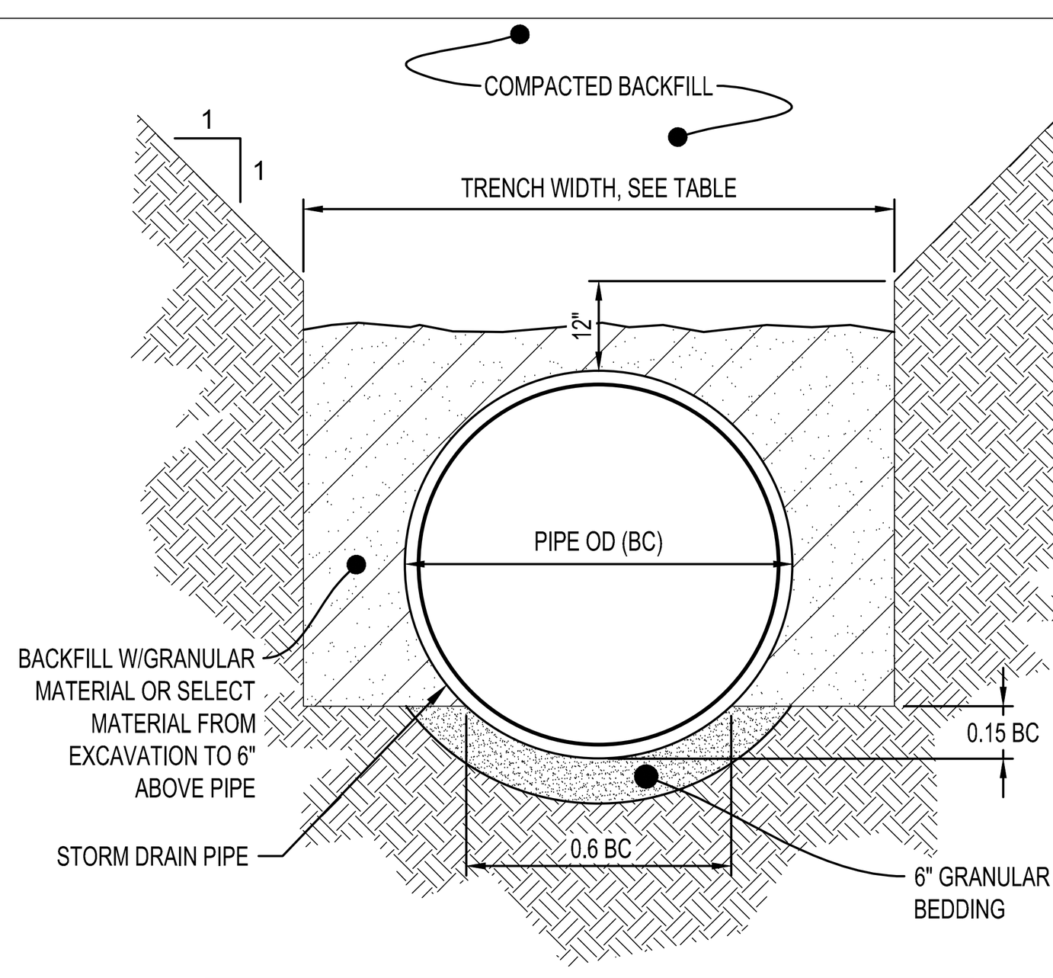
NOTES:

ALL COMPONENTS OF RAILING AND SUPPORTS SHALL BE SHOP PRIMED AND POWDER COATED. COORDINATE COLOR WITH OWNER.

CONCRETE STAIR WITH RAILING
NTS



ACCESSIBLE PARKING AREA
NTS

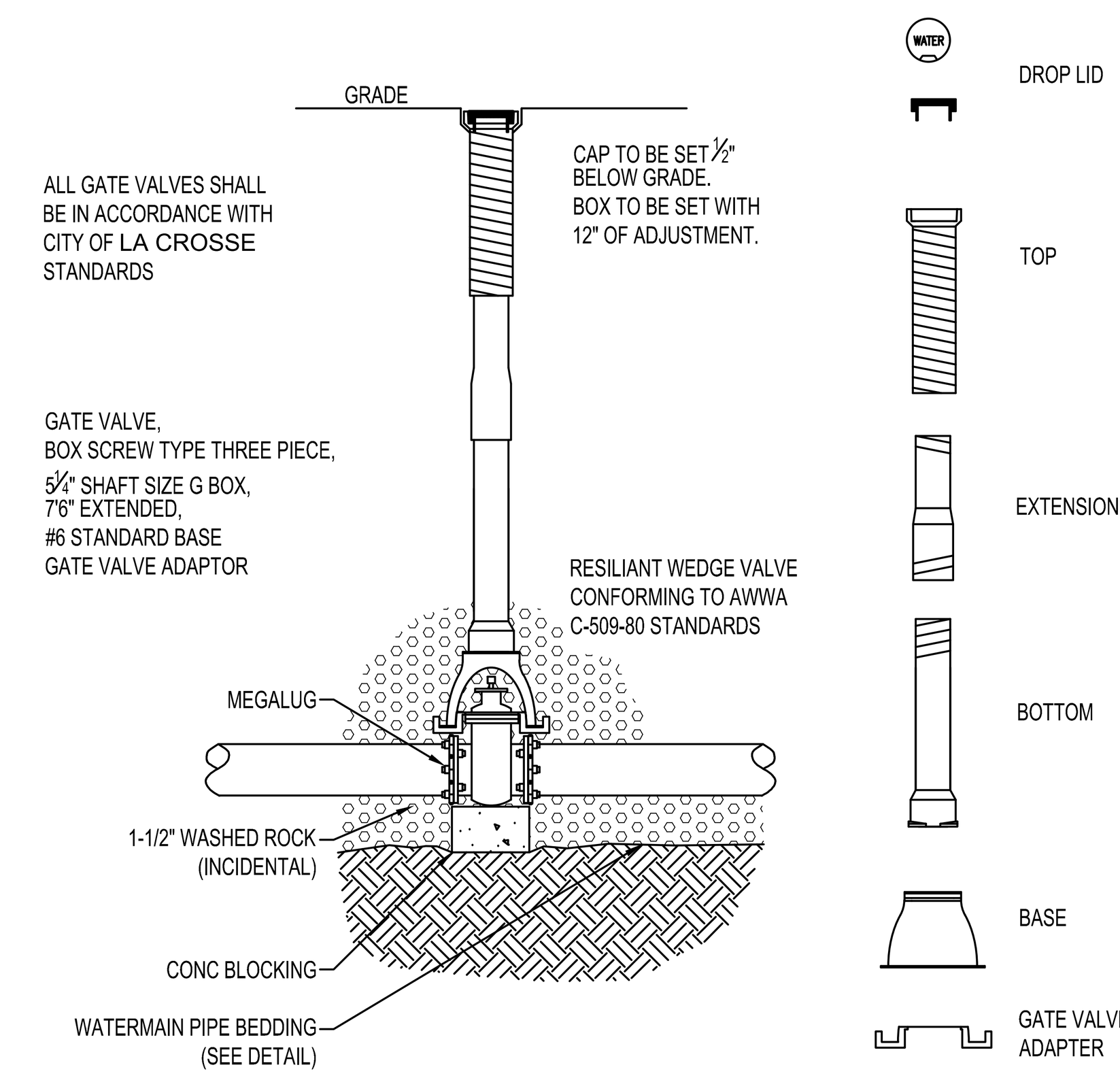


TRENCH WIDTH	
PIPE Ø	TRENCH WIDTH
36" OR LESS	BC + 24"
42" TO 54"	1.5 x BC
60" OR OVER	BC + 36"

NOTES:

GRANULAR BEDDING AND BACKFILL FOR STORM DRAIN PIPES SHALL BE INCIDENTAL TO STORM DRAIN CONSTRUCTION

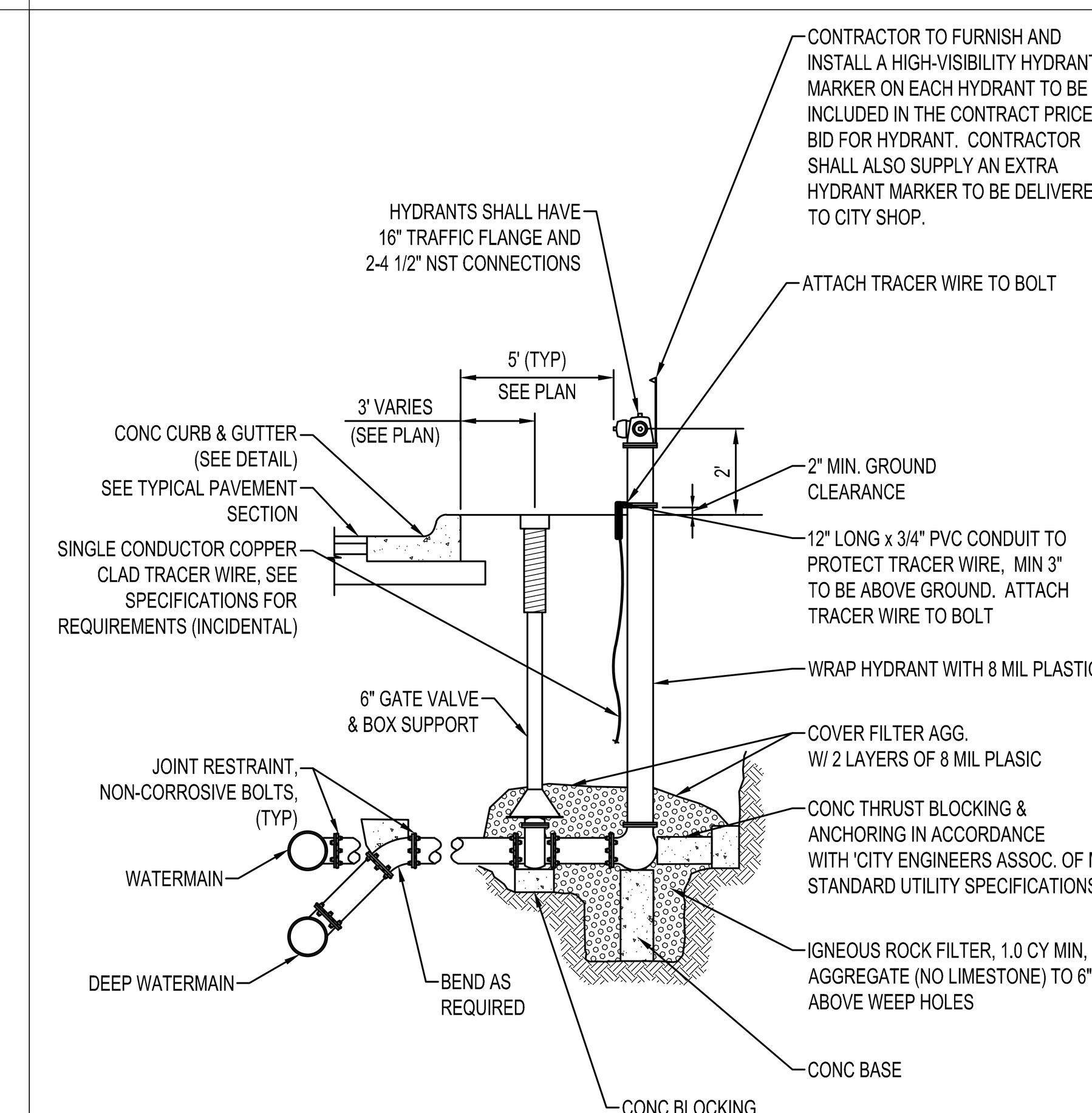
NON-CONCRETE
STORM DRAIN PIPE BEDDING
NTS



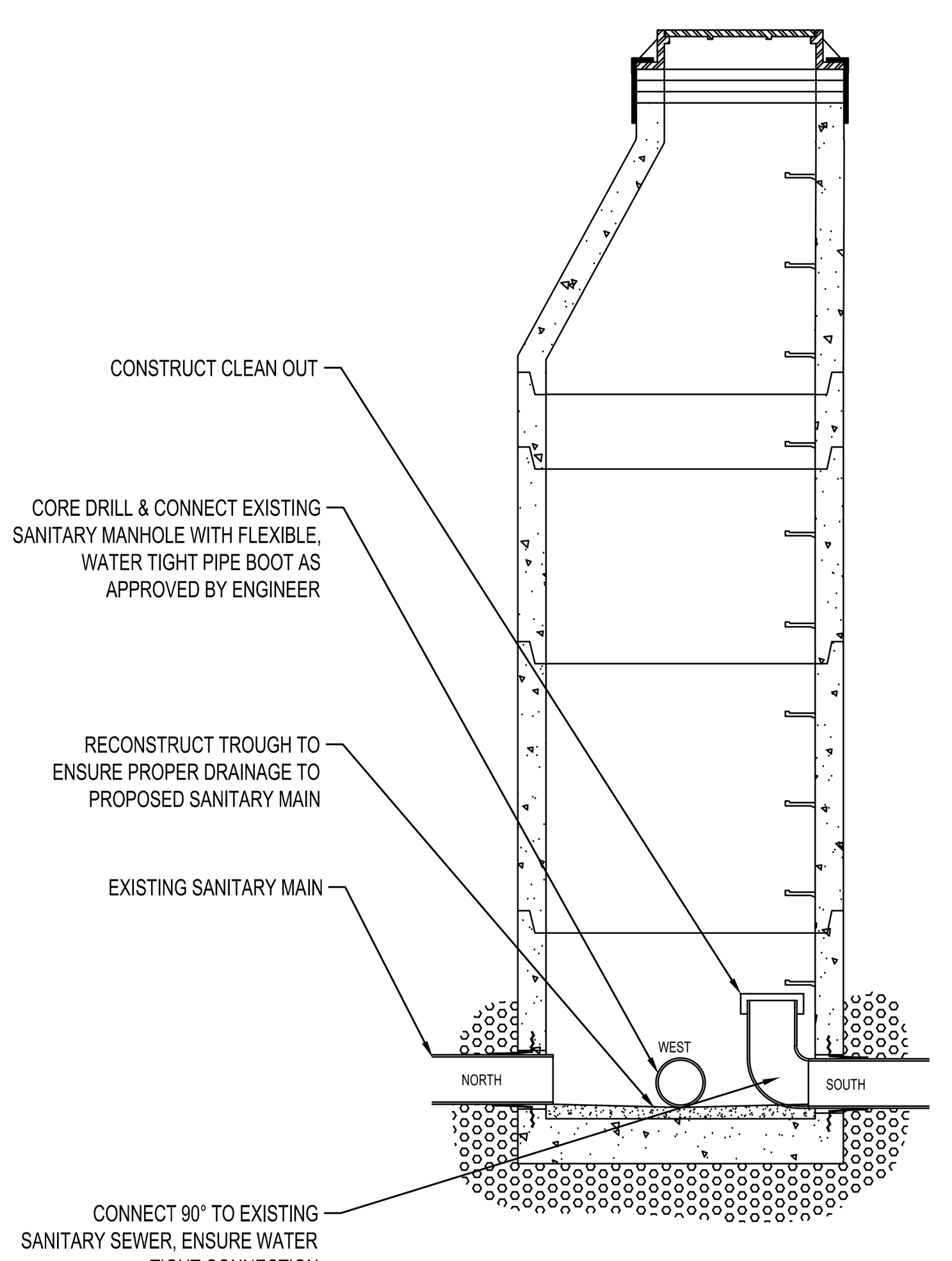
NOTES:

INSTALL TOP NUT EXTENDER TO 7' DEPTH ON ALL VALVES WITH OVER-DEPTH

TYPICAL
GATE VALVE & BOX INSTALLATION
NTS



TYPICAL
HYDRANT INSTALLATION
NTS



EXISTING SANITARY MANHOLE
NTS

PLOT DATE: 6/17/2022 10:52 AM

ISG

PDD SPECIFIC PLAN SUBMITTAL
06/16/2022

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C0-DETAILS
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

TITLE

SITE DETAILS

SHEET

C0-11

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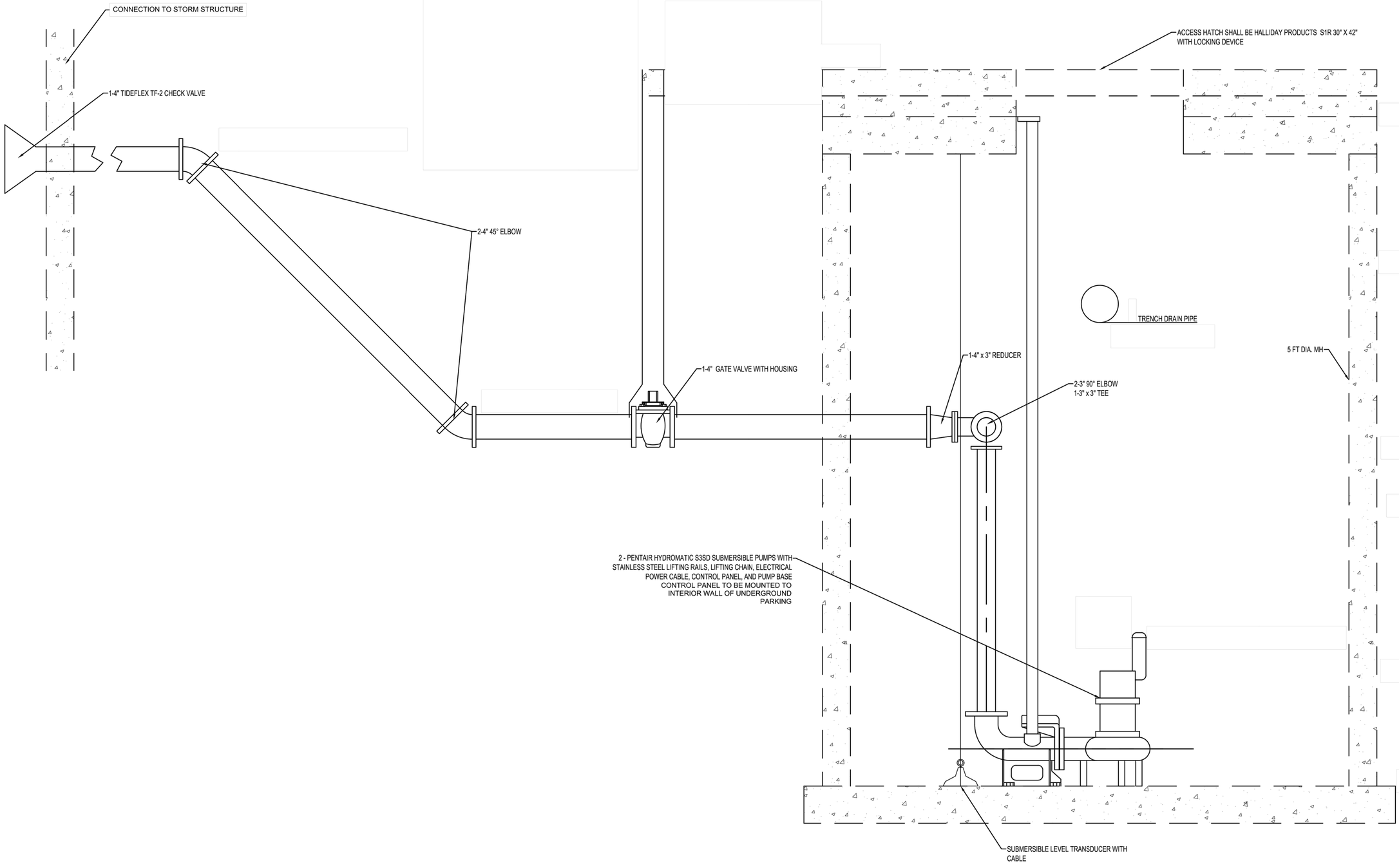

SUBMERSIBLE PUMP

NTS SD450

PLOT DATE: 6/17/2022 10:52 AM

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PDD SPECIFIC PLAN SUBMITTAL
06/16/2022

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ADVANCED DRAINAGE SYSTEMS, INC.

SiteASSIST® StormTech — FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

MC-4500 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-4500.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

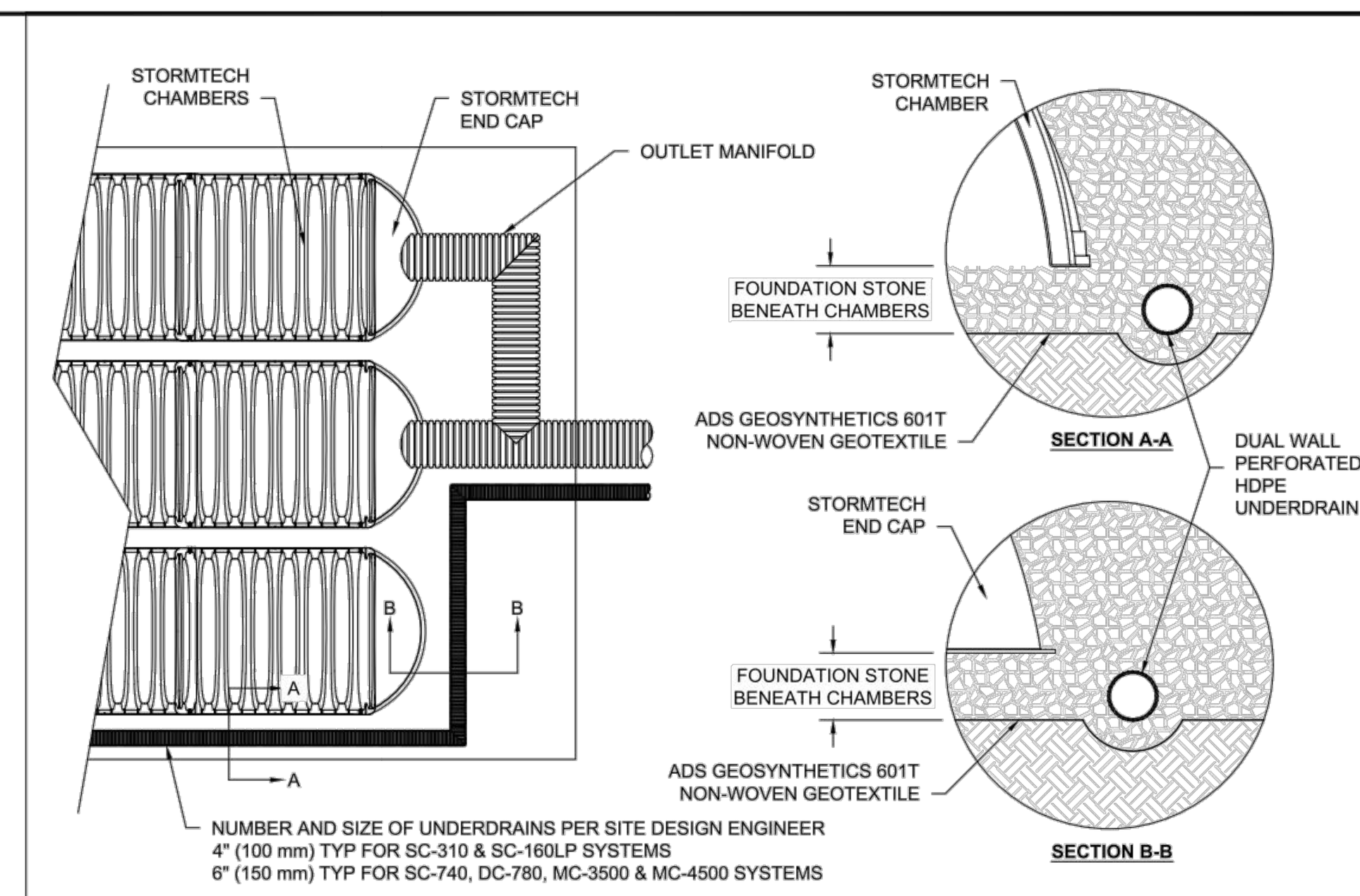
1. STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
9. STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
12. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

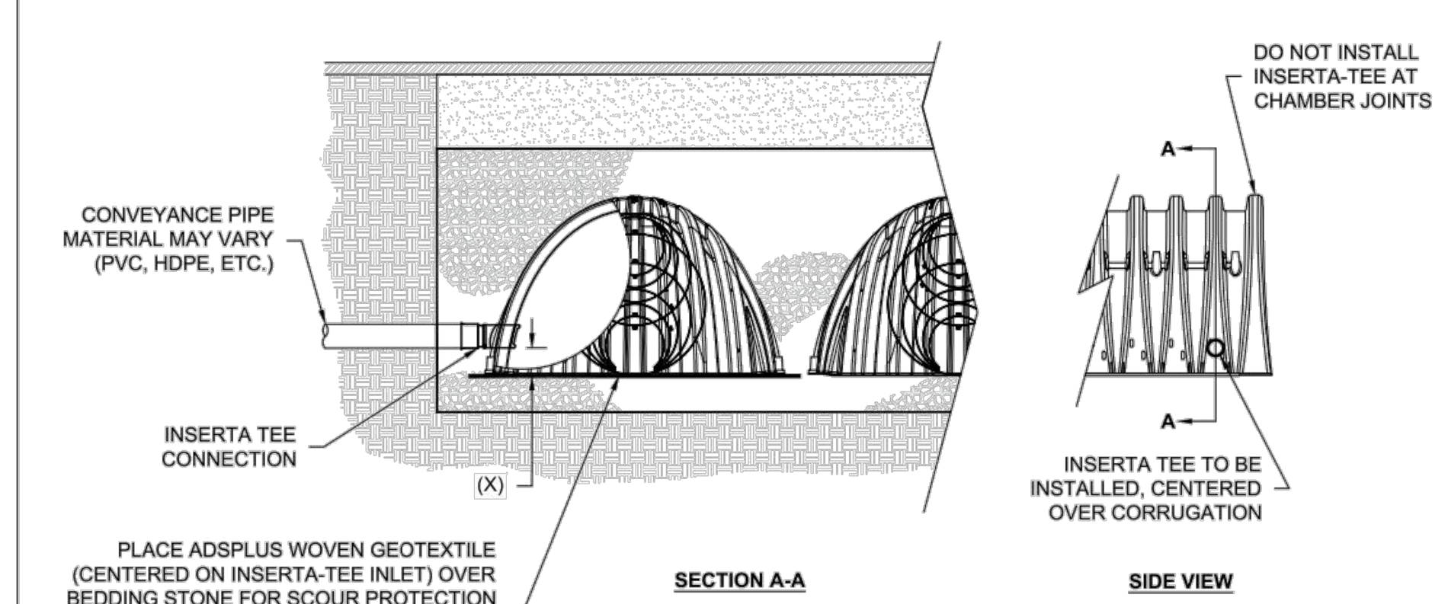
1. STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



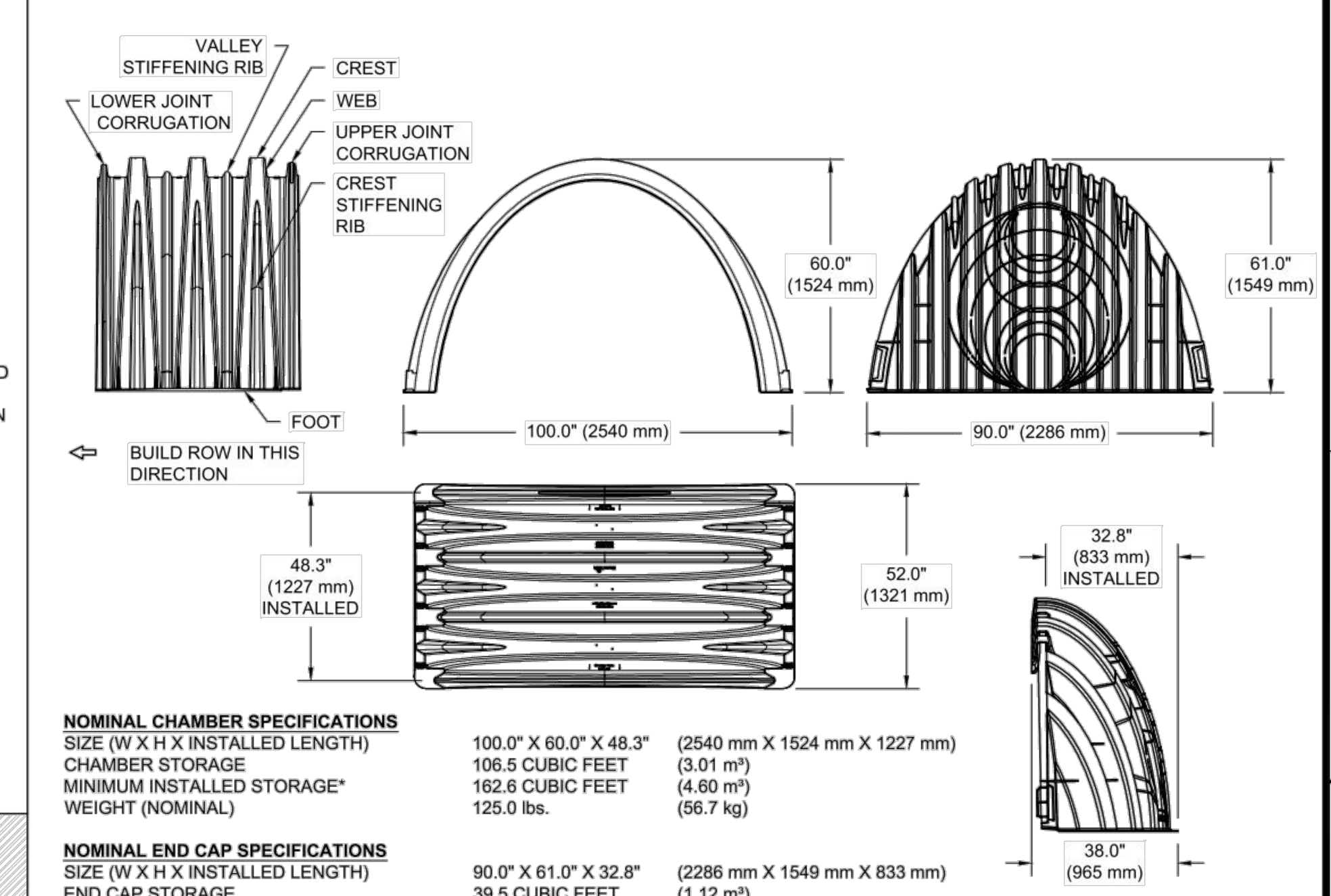
5 UNDERDRAIN DETAIL



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON		

NOTE:
PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 48.3"	(2540 mm X 1524 mm X 1227 mm)
CHAMBER STORAGE	106.5 CUBIC FEET	(3.01 m³)
MINIMUM INSTALLED STORAGE*	162.6 CUBIC FEET	(4.60 m³)
WEIGHT (NOMINAL)	125.0 lbs.	(56.7 kg)

NOMINAL END CAP SPECIFICATIONS

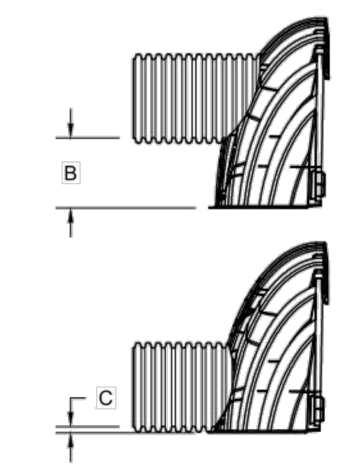
SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m³)
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

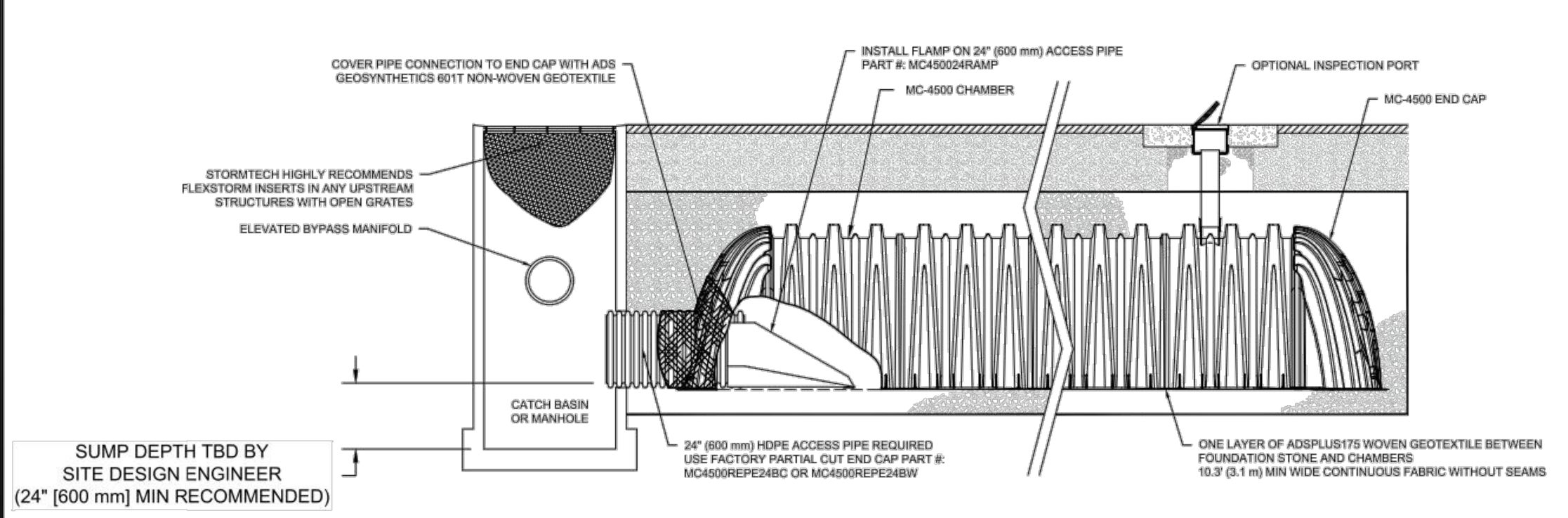
PART #	STUB	B	C
MC4500IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC4500IEPP06B		---	0.86" (22 mm)
MC4500IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC4500IEPP08B		---	1.01" (26 mm)
MC4500IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC4500IEPP10B		---	1.33" (34 mm)
MC4500IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC4500IEPP12B		---	1.55" (39 mm)
MC4500IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC4500IEPP15B		---	1.70" (43 mm)
MC4500IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC4500IEPP18TW			
MC4500IEPP18B		---	1.97" (50 mm)
MC4500IEPP18BW			
MC4500IEPP24T	24" (600 mm)	23.05" (585 mm)	---
MC4500IEPP24TW			
MC4500IEPP24B		---	2.26" (57 mm)
MC4500IEPP24BW			
MC4500IEPP30BW	30" (750 mm)	---	2.95" (75 mm)
MC4500IEPP36BW	36" (900 mm)	---	3.25" (83 mm)
MC4500IEPP42BW	42" (1050 mm)	---	3.55" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL



CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-4500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

2 MC-4500 TECHNICAL SPECIFICATIONS



INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

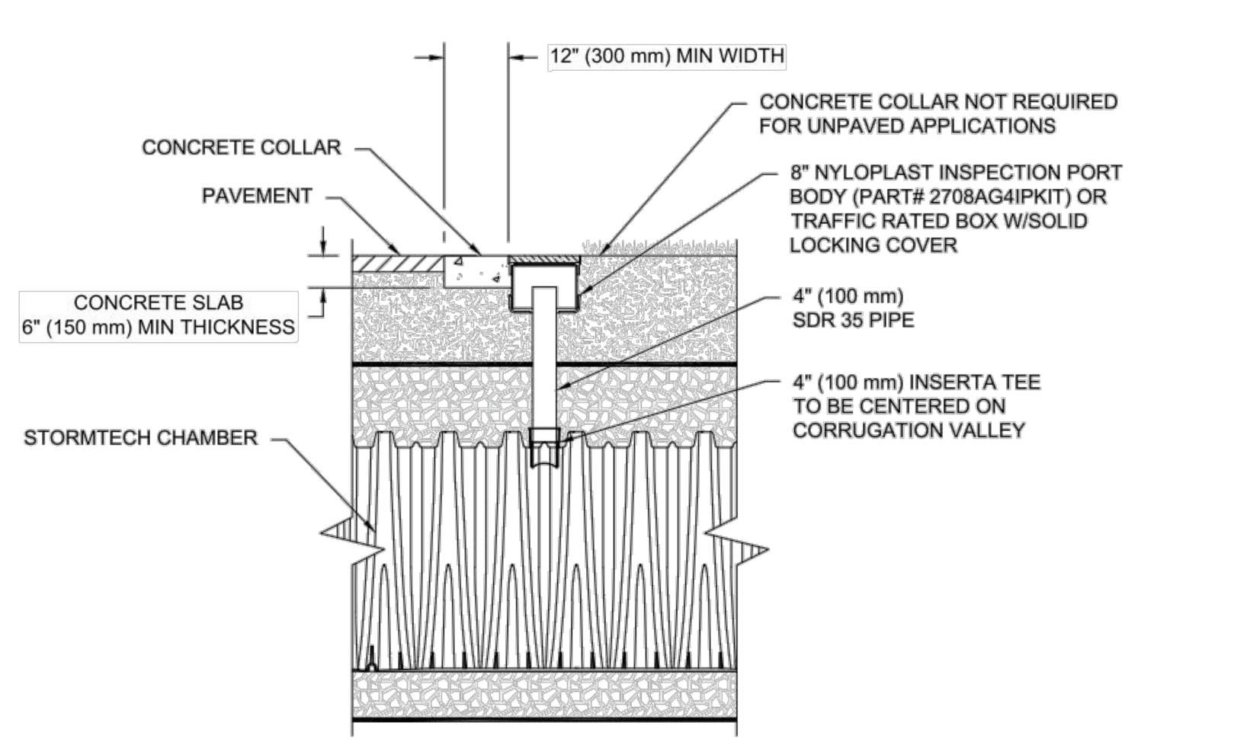
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

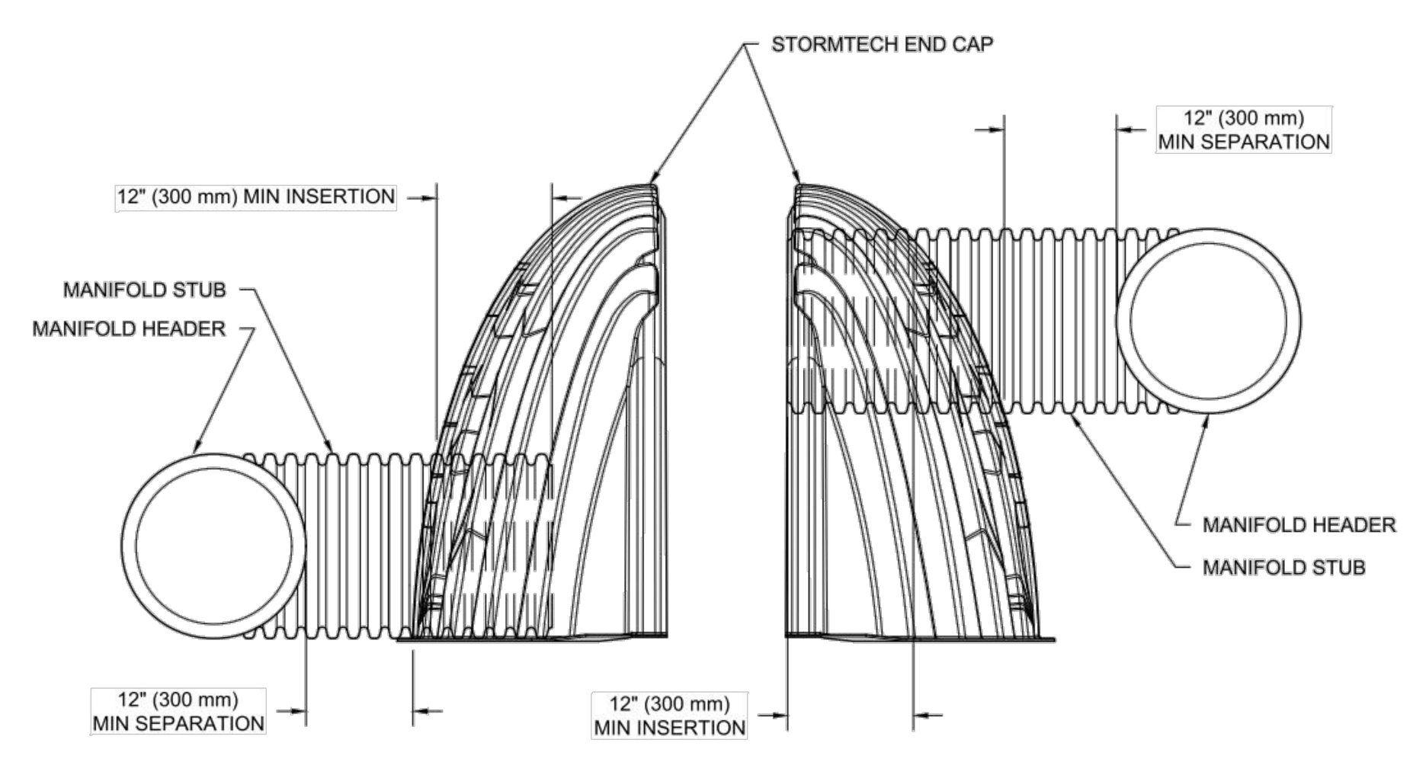
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

3 MC-4500 ISOLATOR ROW PLUS DETAIL



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4 4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)



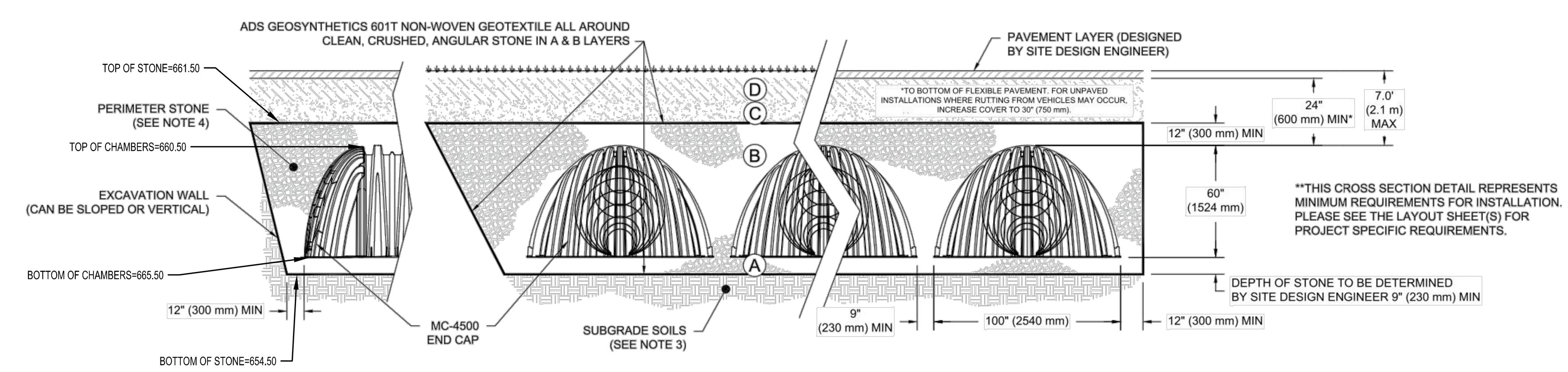
NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

7 MC-SERIES END CAP INSERTION DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



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2. MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
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1 MC-4500 CROSS SECTION DETAIL

DATE:
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NOT TO SCALE

MC-4500 STANDARD DETAILS

4640 TRUEMAN BLVD
HILLIARD, OH 43026

SHEET

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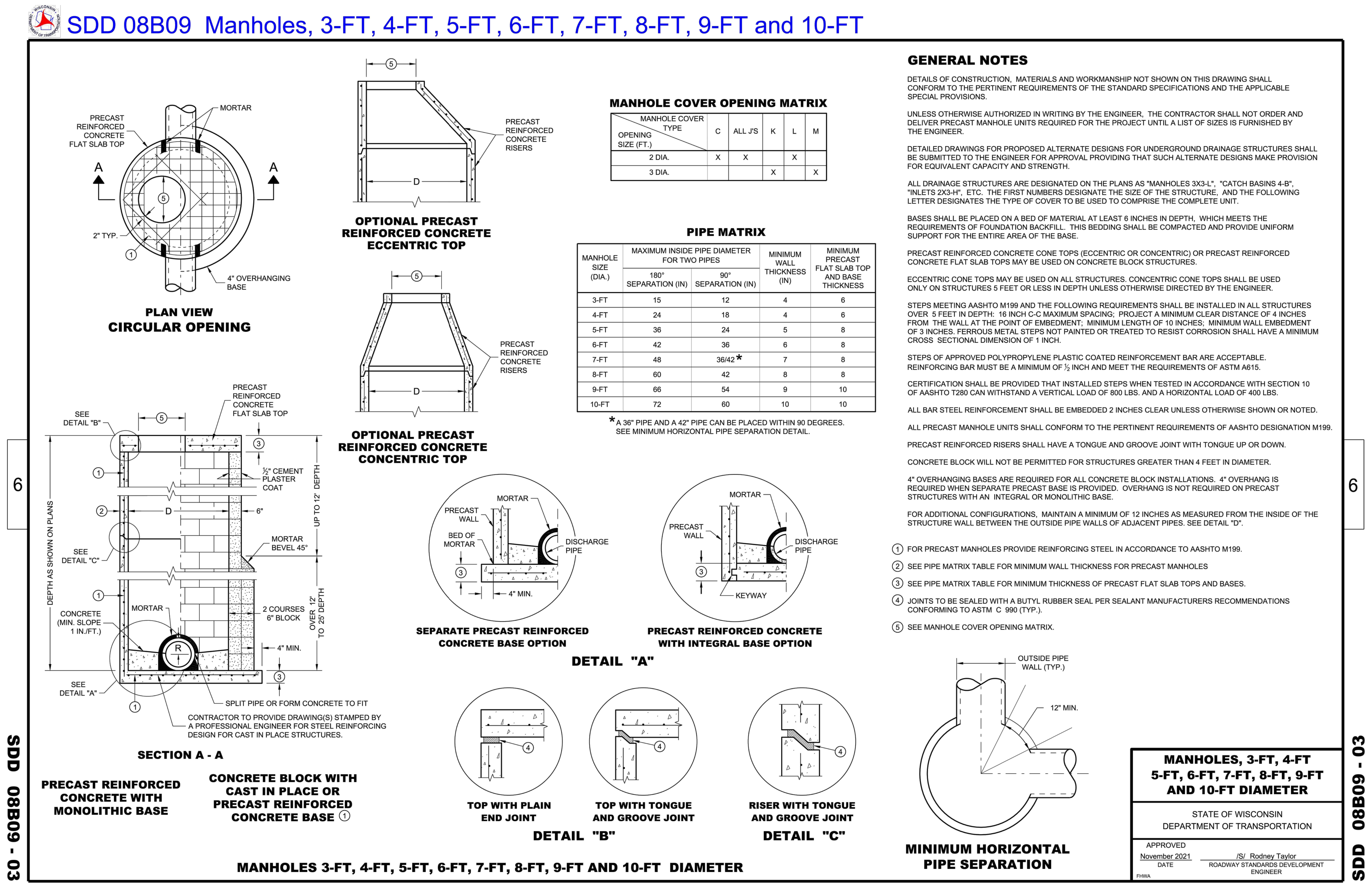

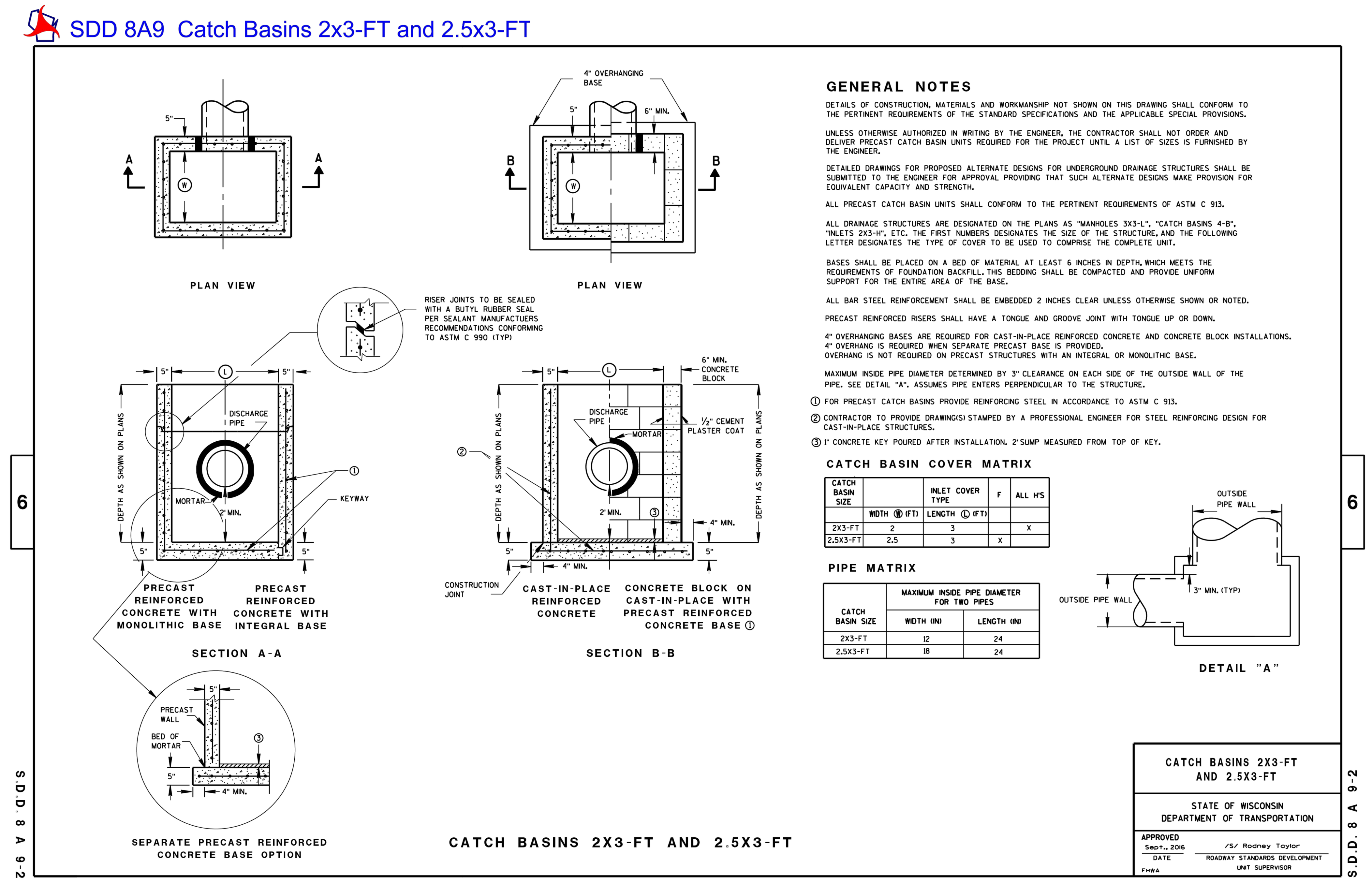

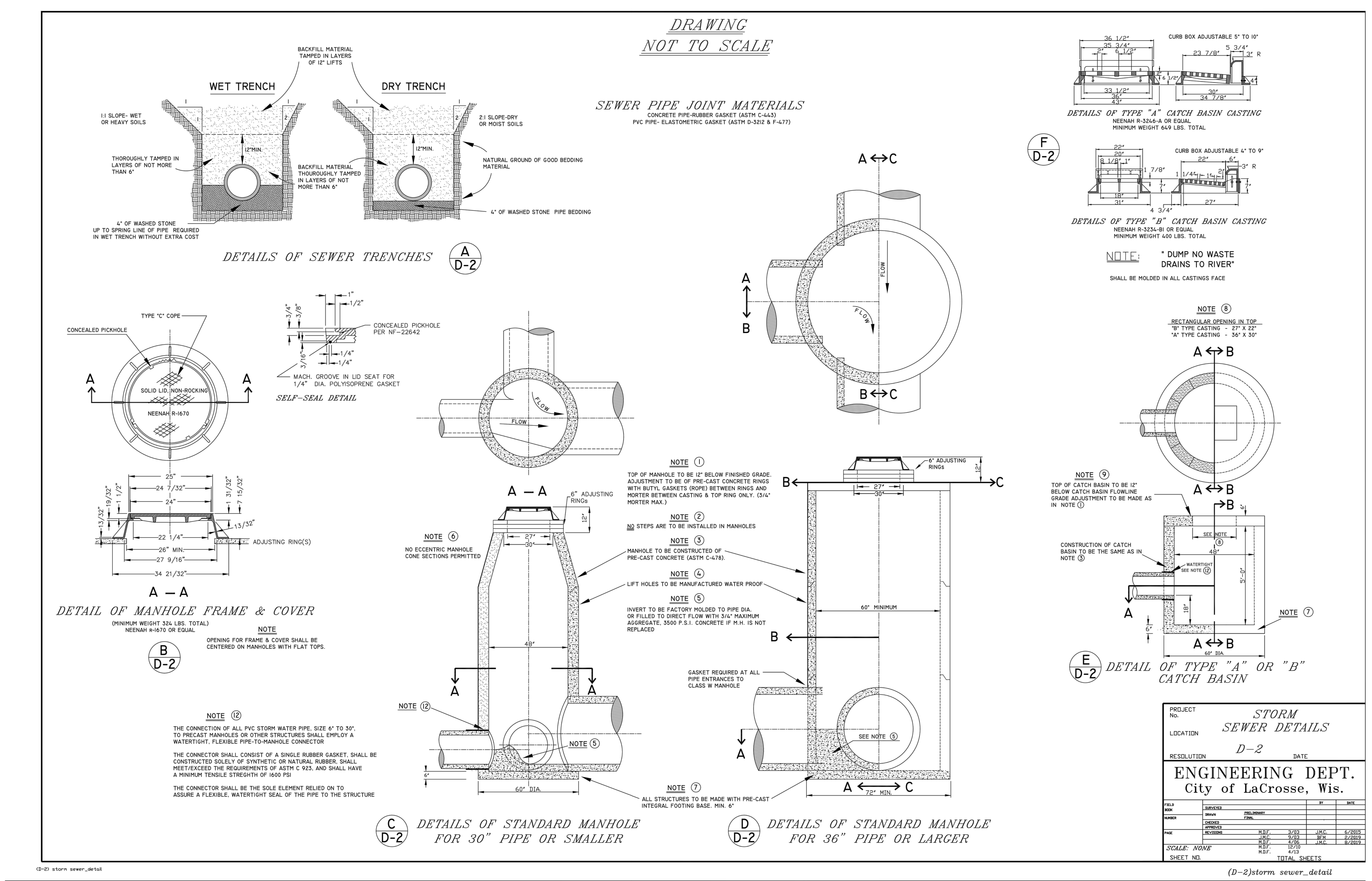

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PLOT DATE: 6/17/2022 10:52 AM

SANITARY SEWER PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
SP-1	S-1	646.65	EX S-1	646.08	8"	PVC	SDR-35	0.40%	143
SP-2	S-2	647.16	S-1	646.75	8"	PVC	SDR-35	0.40%	103
SP-2A	WEST TOWNHOMES	649.21	S-2	648.86	6"	PVC	SDR-26	1.00%	34
SP-2B	45° BEND	648.09	S-2	648.02	8"	PVC	SDR-35	0.40%	18
SP-2C	BUILDING 1	648.91	45° BEND	648.09	8"	PVC	SDR-35	1.00%	82
SP-3	TEE	647.82	S-2	647.26	8"	PVC	SDR-35	0.40%	138
SP-3A	MIDDLE TOWNHOMES	650.27	TEE	649.93	6"	PVC	SDR-26	1.00%	34
SP-4	S-3	648.22	TEE	647.82	8"	PVC	SDR-35	0.40%	101
SP-4A	45° BEND	655.25	S-3	655.13	8"	PVC	SDR-35	0.40%	30
SP-4B	BUILDING 2	655.35	45° BEND	655.25	8"	PVC	SDR-35	0.40%	24
SP-5	S-4	648.72	S-3	648.32	8"	PVC	SDR-35	0.40%	99
SP-5A	EAST TOWNHOMES	651.41	S-4	651.06	6"	PVC	SDR-26	1.00%	34
SP-6	S-5	649.60	S-4	648.74	8"	PVC	SDR-35	0.40%	214
SP-7	BUILDING 3	650.50	S-5	649.70	8"	PVC	SDR-35	0.40%	200

SANITARY SEWER STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
S-1	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	16.88	663.53	646.65	SP-1
S-3	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	15.78	664.00	648.22	SP-4
S-4	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	16.05	664.76	648.72	SP-5
S-5	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	14.64	664.24	649.60	SP-6

STORM DRAIN PIPE SCHEDULE

PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
P-1	ST-1	658.22	ST-2	656.99	18	RCP	CLASS III	0.50%	246
P-2	ST-2	656.99	ST-3	655.86	21	RCP	CLASS III	0.68%	164
P-3	ST-3	655.80	ST-27	655.55	21	RCP	CLASS III	0.58%	43
P-4	ST-4	658.49	ST-6	657.95	12	RCP	CLASS III	0.50%	109
P-4A	ST-5	658.31	ST-6	657.97	12	RCP	CLASS III	0.50%	68
P-5	ST-6	657.96	ST-7	657.20	12	RCP	CLASS III	0.50%	153
P-6	ST-7	657.20	ST-8	656.39	15	RCP	CLASS III	0.50%	164
P-7	ST-11	657.74	TEE	657.55	12	RCP	CLASS III	0.50%	38
P-7A	TEE	657.55	ST-10	657.47	12	RCP	CLASS III	0.50%	17
P-8	ST-10	657.42	ST-8	656.82	15	RCP	CLASS III	0.50%	119
P-9	ST-12	656.77	ST-8	656.23	12	RCP	CLASS III	0.49%	108
P-10	ST-8	656.21	ST-13	655.71	24	RCP	CLASS III	0.50%	100
P-11	ST-13	655.78	ST-15	655.56	24	RCP	CLASS III	0.33%	68
P-11A	ST-15	655.56	ADS STORMTECH MC-4500	655.50	24	RCP	CLASS III	0.75%	8
P-11B	ST-14	656.01	ST-13	655.86	15	RCP	CLASS III	0.50%	30
P-12	ST-16	655.78	ST-15	655.63	12	RCP	CLASS III	0.32%	46
P-13	BOTTOM SOUTH RAMP TRENCH DRAIN	653.47	ST-9	654.32	4	PVC	FORCEMAIN	7.02%	12
P-14	ST-9	654.32	ST-10	657.57	4	PVC	FORCEMAIN	9.60%	34
P-15	NORTH RAMP TRENCH DRAIN	653.25	ST-19	653.25	4	PVC	FORCEMAIN	0.00%	17
P-16	ST-19	653.31	ST-26	657.00	4	PVC	FORCEMAIN	8.78%	42
P-17	TOP SOUTH RAMP TRENCH DRAIN	657.00	TEE	656.70	12	RCP	CLASS III	3.78%	8
P-18	ST-18	654.72	ST-28	654.50	15	RCP	CLASS III	0.50%	45
P-19	ST-17	655.35	ST-18	654.82	15	RCP	CLASS III	0.50%	106
P-20	ADS STORMTECH MC-4500	655.55	ST-17	655.45	15	RCP	CLASS III	2.05%	5
P-21	ST-23	658.29	ST-24	657.95	6	HDPE	CLASS III	0.72%	47
P-22	ST-24	657.95	ST-2	657.39	6	HDPE	CLASS III	1.80%	31
P-23	ST-21	655.34	ST-20	655.25	12	RCP	CLASS III	0.40%	22
P-24	ST-29	659.06	ST-6	658.60	12	RCP	CLASS III	0.53%	87

STORM DRAIN STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	PAY HEIGHT (LN FT)	* TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
ST-1	WisDOT CATCH BASIN	36 x 24	RC	TYPE T	4.98	663.19	658.22	P-1
ST-2	WisDOT CATCH BASIN	36 x 24	RC	TYPE T	6.38	663.18	656.80	P-2
ST-3	WisDOT CATCH BASIN	36 x 24	RC	TYPE T	8.72	664.52	655.80	P-3
ST-4	WisDOT MANHOLE	36 Ø	RC	TYPE C	5.33	663.83	658.49	P-4
ST-5	WisDOT MANHOLE	36 Ø	RC	TYPE C	6.42	664.73	658.31	P-4A
ST-6	WisDOT MANHOLE	36 Ø	RC	TYPE C	7.38	665.10	657.72	P-5
ST-7	WisDOT MANHOLE	36 Ø	RC	TYPE C	7.25	664.45	657.20	P-6
ST-8	WisDOT MANHOLE	48 Ø	RC	TYPE C	6.56	662.77	656.21	P-10
ST-10	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	6.17	663.59	657.42	P-8
ST-11	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	6.06	663.80	657.74	P-7
ST-12	WisDOT MANHOLE	36 Ø	RC	TYPE C	6.45	662.66	656.20	P-9
ST-13	WisDOT MANHOLE	36 Ø	RC	TYPE C	7.35	663.04	655.68	P-11
ST-14	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	6.43	662.44	656.01	P-11B
ST-15	WisDOT MANHOLE	36 Ø	RC	TYPE C	8.38	663.94	655.56	P-11A
ST-16	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	7.31	663.09	655.78	P-12
ST-17	WisDOT MANHOLE	36 Ø	RC	TYPE C	7.44	662.79	655.35	P-19
ST-18	WisDOT MANHOLE	36 Ø	RC	TYPE C	7.06	661.79	654.72	P-18
ST-20	WisDOT MANHOLE	36 Ø	RC	TYPE C	6.41	661.43	655.02	EXISTING
ST-21	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	5.70	660.73	655.03	P-23
ST-22	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	5.64	661.23	655.59	EXISTING
ST-23	INLINE DRAIN	8 Ø	PVC	STANDARD GRATE	6.02	664.32	658.29	P-21
ST-24	DRAIN BASIN	8 Ø	PVC	STANDARD GRATE	6.74	664.68	657.95	P-22
ST-25	WisDOT CATCH BASIN	36 x 24	RC	TYPE H-S	5.85	664.51	658.65	P-1A
ST-26	WisDOT CATCH BASIN	36 Ø	RC	TYPE C	8.02	665.02	657.00	P-1B
ST-27	WisDOT MANHOLE	36 Ø	RC	TYPE C	9.45	665.00	655.55	P-3A
ST-28	WisDOT MANHOLE	48 Ø	RC	TYPE C	9.48	663.63	654.15	EXISTING
ST-29	INLINE DRAIN	8 Ø	PVC	STANDARD GRATE	6.24	665.07	658.83	P-24

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C0-DETAILS
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

TITLE

UTILITY SCHEDULES

SHEET

C0-20

STORM WATER POLLUTION PREVENTION PLAN NOTES:

GENERAL PROJECT INFORMATION:

PROJECT NARRATIVE:
This project consists of the construction of asphaltic pavement, concrete sidewalk, curb & gutter, grading, stormwater management, restoration, erosion control, and any incidental work.

RESPONSIBLE PARTIES:
Contractor and Owner are required to apply for and receive a Wisconsin Pollution Discharge Elimination System (WPDES) Stormwater Construction Permit from the WDNR at least 14 days prior to beginning work.

Contractor and owner shall identify a person knowledgeable and experienced in the application of erosion prevention and sediment control BMP's who will oversee the implementation of the SWPPP.

Company: Contact Person:
Phone:

Company: Contact Person:
Phone:

Owner shall identify the entity responsible for the long term Operation and Maintenance of the storm water management system.

Company: Contact Person:
Phone:

PROJECT AREAS:
Total project size (disturbed area) = 6.96 acres
Minimum area requiring WPDES permit = 1.00 acres
****PROJECT DOES REQUIRE A WPDES PERMIT****
Existing area of impervious surface = 6.277 acres
Post construction area of impervious surface = 4.584 acres

Total new impervious surface area created = (1.698) acres

STORM WATER MANAGEMENT:
Types of permanent storm water management that will be used if more than one acre of new impervious surface is created are checked below:
[] Wet sedimentation basin [] Infiltration / Filtration
[] Regional Pond - Un-Named [] Alternative methods

RECEIVING WATERS:
Surface waters which will receive storm water from the site within 1 mile (aerial radius measurement) of project boundary. Include waters shown on USGS 7.5 minute quad and all special or impaired waters.

Name of Water Body	Type (ditch, pond, lake, etc.)	Special/Impaired Water?

CONSTRUCTION ACTIVITY NOTES:

POLLUTION PREVENTION:

All solid waste collected from the construction site must be disposed in accordance with all applicable regulations.

All hazardous materials (oil, gasoline, fuel, paint, etc) must be properly stored to prevent spills, leaks, or other discharge. Storage areas shall provide secondary containment and a hazardous materials spill kit. Equipment fueling and maintenance shall occur in a designated, contained area. Storage and disposal of hazardous waste must be in compliance with all applicable regulations. All runoff containing any hazardous material must be properly collected and disposed. No engine degreasing shall be allowed on site.

All sanitary wastes must be collected from portable units on site by a licensed sanitary waste management contractor. The units must be secured and shall be maintained on a regular basis as needed to prevent overfilling.

Emergency Spill Plan – The Contractor is responsible for all construction personnel to be informed of the manufacturers' recommended spill cleanup methods, and the location of that information and cleanup supplies. The Contractor shall modify the SWPPP as required within seven calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. Plans must identify measures to prevent the reoccurrence of such releases. If a spill occurs, the following steps shall be followed:

1. Observe the safety precautions associated with the spilled material. Stop the source of the spill, if you can do so safely. Call 911 if fire or public safety hazards are created.
2. Contain the spilled material. Dirt, sand, or any semi-impermeable material may be used to create a containment structure to prevent the material from flowing.
3. Report the spill to Wisconsin's Spill Hotline at (800) 943-0003.
4. Clean up the spilled material and dispose of the wastes properly.

The contractor is responsible for monitoring air pollution and ensuring it does not exceed levels set by local, state, or federal regulations. This includes dust created by work being performed on the site. Air pollution and dust control correction is considered incidental to the unit bid prices for which work is being performed. Additional dust control measures may be required by the Engineer.

Concrete washout onsite: All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

INSPECTION AND MAINTENANCE:

The Permittees must routinely inspect the construction site once every seven (7) days during active construction and within 24 hours of a rainfall event greater than 0.5 inches in a 24 hour period.

All inspections performed during construction must be recorded and records retained with the erosion plan in accordance with the Permit. Contractor is responsible for keeping a record of all rainfall data & erosion control maintenance until final establishment of turf.

Erosion control and other BMP's must be replaced, repaired, or supplemented when they reach 33% design load.

FINAL STABILIZATION:
The Contractor must ensure final stabilization of the site. The Contractor must submit a Notice of Termination when the site has undergone final stabilization and all stormwater discharges associated with the construction site activities that require to have WPDES coverage have ceased.

All temporary erosion control measures and BMP's must be removed as part of the final site stabilization.

The storm water permit further defines final stabilization and its requirements.

CONSTRUCTION ACTIVITY NOTES:

EROSION PREVENTION:
Construction of silt fence and all other erosion control measures shall be complete before other construction activity occurs. Use phased construction wherever practical and establish turf as soon as possible to minimize sediment transport.

Temporary cover during construction is incidental.

Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water.

All disturbed areas shall be seeded and mulched at the earliest possible time to prevent/reduce erosion.

A. Seed for the infiltration basin and swales shall be WisDOT mix #75 with mix #60 as a nurse crop and shall meet Specification Section 630. All other seed shall be WisDOT mix #40 and shall meet Specification Section 630. Mulching shall be applied according to Specification Section 627.

B. Fertilizer shall be WisDOT Type B and shall meet Specification Section 629.

C. Temporary mulching shall be applied at a rate of 2 tons/acre. Mulch shall be disc anchored.

Additional erosion prevention measures may be found at the Wisconsin Department of Natural Resources Best Management Practices.

SEDIMENT CONTROL PRACTICES:

Construction of silt fence and all other erosion control measures shall be complete prior to land disturbing activities occur.

A tracking pad entrance or other approved alternatives must be constructed at the exit point from the project site.

Inlet erosion protection shall be installed and maintained until turf or pavement has been established.

The contractor shall be responsible for controlling erosion and preventing eroded material from leaving the construction zone. All eroded material that leaves the construction zone shall be collected by the contractor and returned to the site at the contractor's expense.

Contractor shall maintain a 50-foot natural buffer or use redundant sediment controls near surface waters if a buffer is not feasible.

Contractor shall take the necessary steps to minimize soil compaction and preserve topsoil on site.

All streets must be swept within 24 hours when any tracking occurs.

Silt fence or other effective erosion control measures must be installed around the perimeter of any soil stockpiled, including temporary stockpiles, at this location or any other on the project site. Stockpiles cannot be placed in surface waters, including storm water conveyances such as curb and gutter systems, or conduits and ditches.

DEWATERING AND BASIN DRAINING:

Dewater sediment-laden water to sedimentation basins if possible, or use other BMP's to prevent erosion when discharging to surface waters. Use appropriate energy dissipation measures on all discharges.

Dewatering practices cannot cause nuisance conditions, erosion or in receiving channels or inundation of wetlands resulting in adverse impacts.

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C1-SWPPP
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

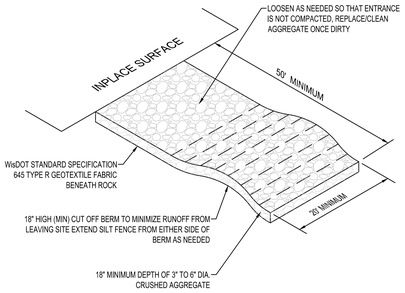
TITLE

STORMWATER POLLUTION PREVENTION PLAN NOTES

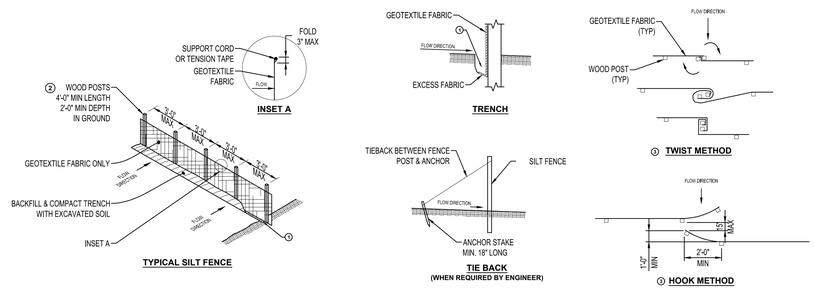
SHEET

C1-10

PLOT DATE: 6/17/2022 10:52 AM



ROCK TRACKING PAD
NTS



NOTES:

ATTACH FABRIC TO THE POSTS WITH WIRE STAPLES OR WOODEN LATH & NAILS.

ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS.

6'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

① FOR MANUAL INSTALLATIONS, TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY & ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH, BACKFILL, & COMPACT TRENCH WITH EXCAVATED SOIL.

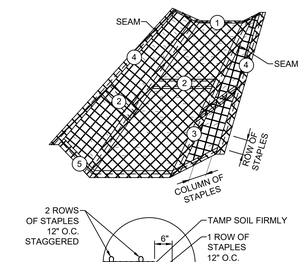
② WOOD POST SHALL BE A MINIMUM SIZE OF 1½" x 1½" OF OAK OR HICKORY.

③ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS.

A. TWIST METHOD - OVERLAP THE END POSTS & TWIST, OR ROTATE AT LEAST 180°.

B. HOOK METHOD - HOOK END OF EACH SILT FENCE LENGTH.

SILT FENCE
NTS



NOTES:

① TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG & THE STRUCTURE MEASURED FROM THE BOTTOM OF THE OVERFLOW OPENINGS TO THE STRUCTURE WALL.

② GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP & BOTTOM OF OUTSIDE OF FILTER BAG. FRONT, BACK, & BOTTOM OF FILTER BAG BEING ONE PIECE.

③ FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING & MAINTAINING FILTER BAG.

④ SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER & REINFORCE WITH MULTIPLE STICHES.

⑤ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE REBAR FLAP & SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

CAN BE INSTALLED IN INLETS WITH OR WITHOUT CURB BOXES

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.

TYPE D
INLET PROTECTION
NTS

NOTES:

INSTALL EROSION MAT (EMAT) OVER WATERWAYS AS SHOWN IN THE EROSION CONTROL PLAN.

THE EMAT SHALL CONFORM TO WisDOT STANDARD SPECIFICATIONS SECTION 628.

PREPARE SOIL PRIOR TO INSTALLING EMAT, INCLUDING SEEDING AND FERTILIZING.

THE EMAT SHALL BE PLACED IN FIRM CONTACT WITH THE SOIL AND NOT BE ALLOWED TO BRIDGE OVER SURFACE IRREGULARITIES. THE MAT SHALL NOT BE STRETCHED.

START LAYING THE MATS BY ROLLING CENTER MAT IN THE DIRECTION OF FLOW, CENTERED ON THE CENTERLINE OF WATERWAY. THERE SHALL NOT BE AN OVERLAP OF MATS AT THE CENTER OF THE WATERWAY.

THE EMAT SHALL BE ANCHORED, OVERLAPPED, AND STAPLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. IF NO MANUFACTURER'S INSTRUCTIONS ARE AVAILABLE, INSTALL THE MAT AS FOLLOWS.

STAPLES SHALL BE "U" SHAPED, 0.12" DIAMETER WIRE OR GREATER (#11 GAUGE). (SEE STAPLE DETAIL FOR DIMENSIONS)

① BURY UPSTREAM END OF MAT IN A TRENCH 6" WIDE BY 6" DEEP AND STAPLED IN STAGGERED ROWS ACROSS THE WIDTH AS SHOWN IN DETAIL 1.

② C. FOR JOINING ENDS OF ROLLS, OVERLAP END OF UP SLOPE MAT A MINIMUM OF 6" OVER DOWN SLOPE MAT (SHINGLE STYLE). USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART, AS SHOWN IN DETAIL 2.

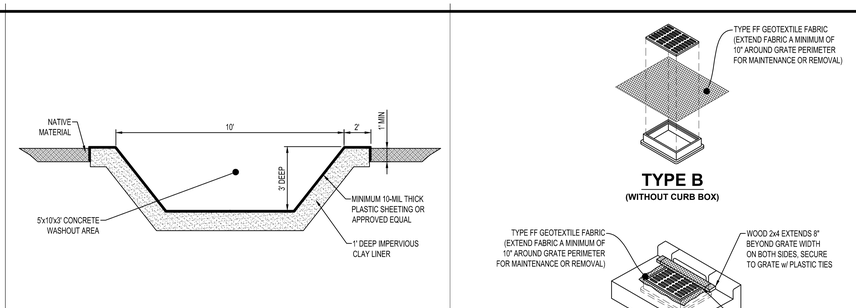
③ D. MATS ON SIDE SLOPES SHALL OVERLAP A MINIMUM OF 6" OVER THE MAT BELOW (SHINGLE STYLE). STAPLE OVERLAP AT 12" INTERVALS. (SEE DETAIL 3)

④ E. THE OUTER EDGE ALONG SIDES OF THE MAT SHALL BE STAPLED EVERY 12". (SEE DETAIL 4)

F. STAPLES ARE TO BE PLACED ALTERNATELY IN COLUMNS (IN THE DIRECTION OF THE WATERWAY) 2' APART AND IN ROWS (ACROSS THE WATERWAY) 3' APART THROUGHOUT THE AREA COVERED BY THE ECB.

⑤ G. DOWNSTREAM (TERMINAL) END OF BLANKET SHALL BE STAPLED WITH A DOUBLE ROW OF STAGGERED STAPLES 12" APART. (SEE DETAIL 5)

EROSION MAT INSTALLATION
NTS



NOTES:

CONTRACTOR SHALL INSTALL A SIGN INDICATING THE CONCRETE WASHOUT AREA.

CONTRACTOR SHALL MAINTAIN WASHOUT AREA TO REMOVE MATERIALS BEYOND 75% CAPACITY.

WASHOUT AREA SHALL NOT BE PLACED WITHIN 50' OF STORM DRAINS, OPEN DITCHES OR BODIES OF WATER.

CONTRACTOR SHALL INSPECT WASHOUT AREA AS NECESSARY TO PREVENT LEAKS AND OVER TOPPING.

WASHOUT AREA SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE.

CONCRETE WASHOUT
NTS

TYPE B
(WITHOUT CURB BOX)

TYPE C
(WITH CURB BOX)

NOTES:

FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN TEH REBAR FLAP AND SHALL NOT BLOCK THE TOP HALF OF THE CURB FACE OPENING.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED IN THE FABRIC DOES NOT FALL INTO THE STRUCTURE. MATERIAL THAT HAS FALLEN INTO THE INLET SHALL BE IMMEDIATELY REMOVED.

TYPES B & C
INLET PROTECTION
NTS

ISG

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06/16/2022

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C1-SWPPP
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

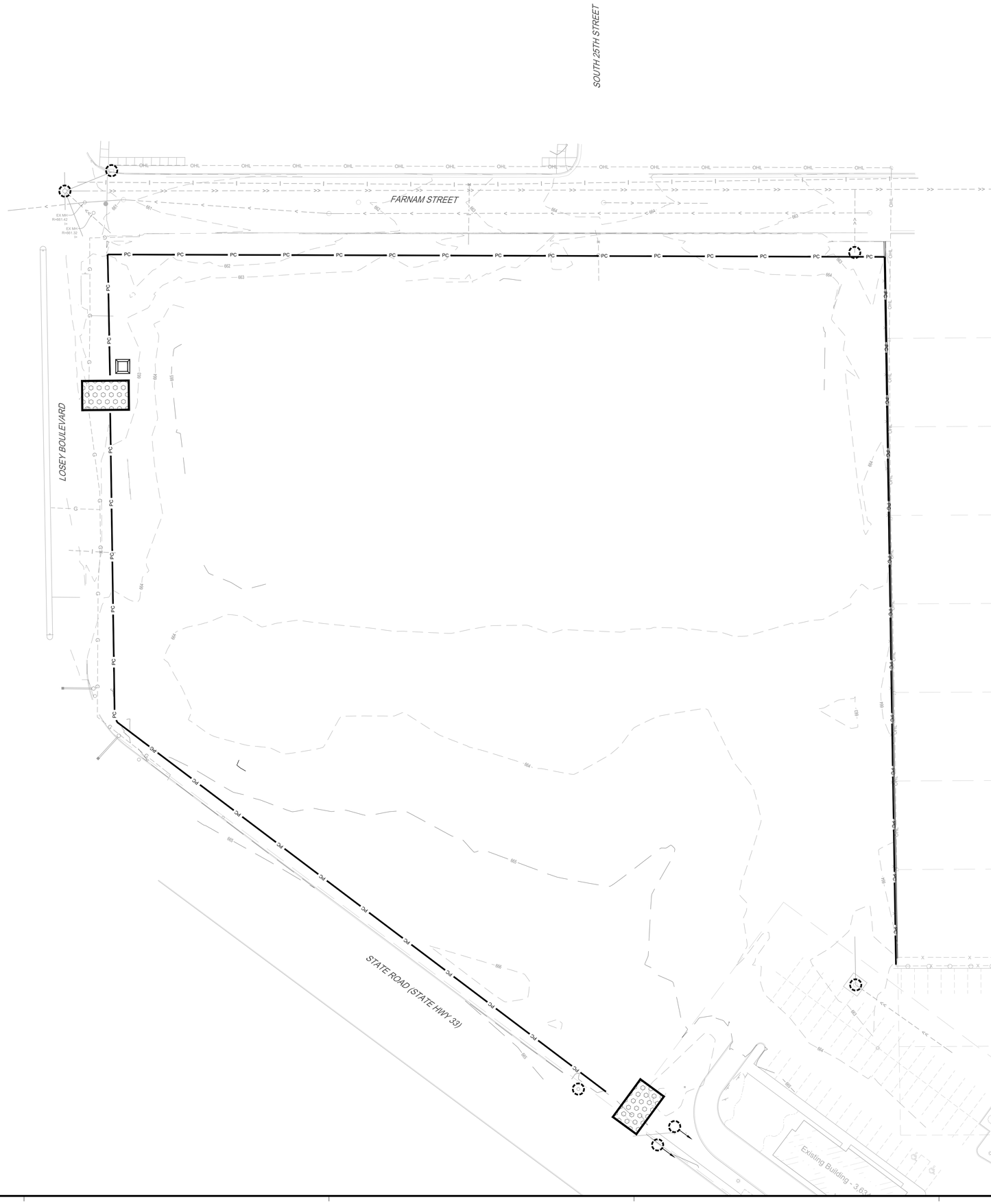
TITLE

STORMWATER POLLUTION PREVENTION PLAN DETAILS

SHEET

C1-20

PLOT DATE: 6/17/2022 10:52 AM



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS __
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	SEDIMENT CONTROL LOG
	ROCK CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY __
	TURF REINFORCEMENT MAT, CATEGORY__
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: EROSION CONTROL PLAN COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS PLAN, INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

ISG

PRELIMINARY NOT FOR CONSTRUCTION

PDD SPECIFIC PLAN SUBMITTAL
06/16/2022

NOTE:
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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C1-SWPPP
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

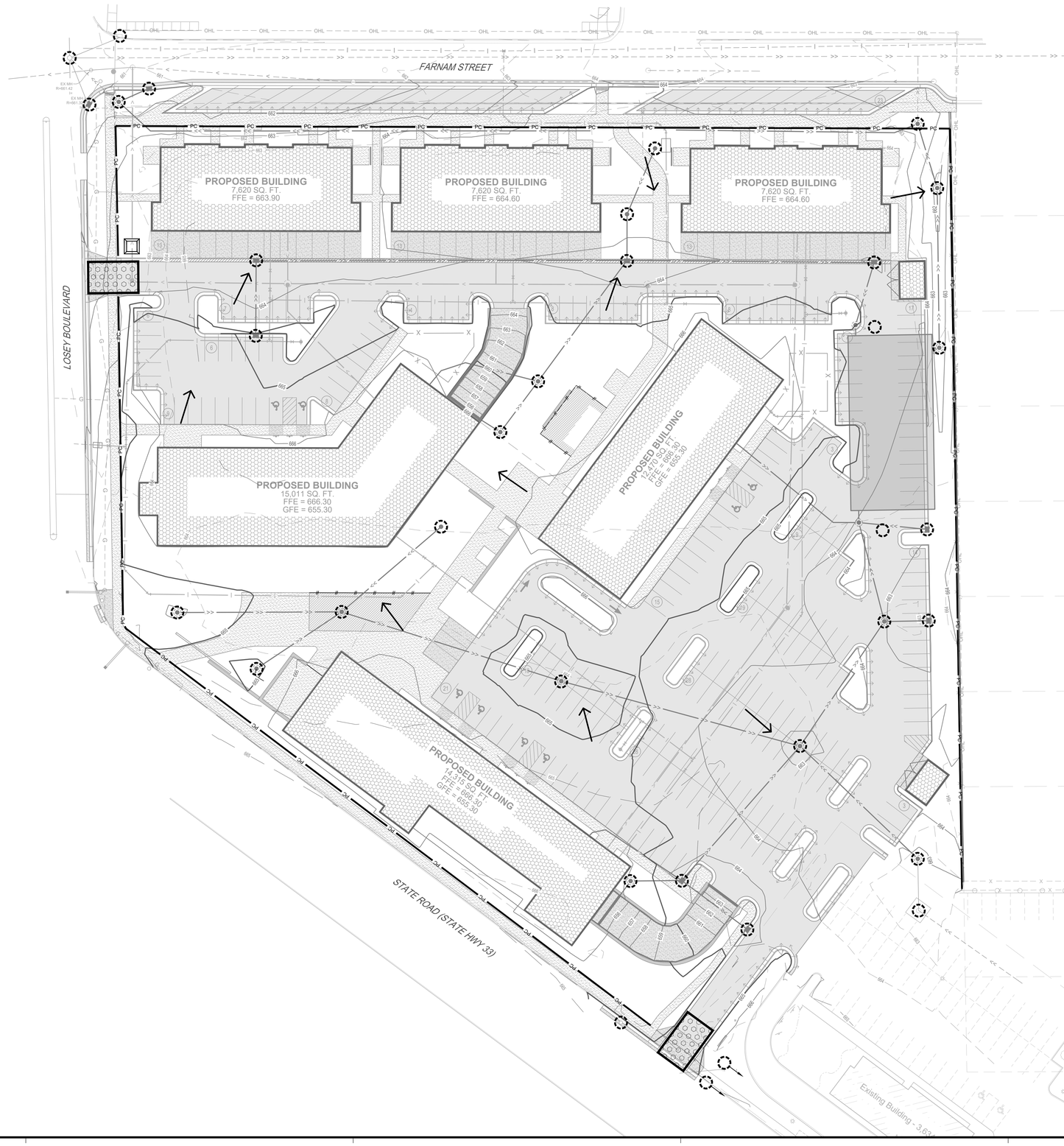
TITLE

PRE CONSTRUCTION POLLUTION PREVENTION PLAN

SHEET

C1-30

PLOT DATE: 6/17/2022 10:52 AM



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS __
PC	PERIMETER CONTROL
SF	SILT FENCE, PREASSEMBLED
	STORM DRAIN INLET PROTECTION
	SEDIMENT CONTROL LOG
	ROCK CONSTRUCTION EXIT
	EROSION CONTROL BLANKET, CATEGORY __
	TURF REINFORCEMENT MAT, CATEGORY__
	CONCRETE WASHOUT AREA
	EXISTING DRAINAGE ARROW
	PROPOSED DRAINAGE ARROW
101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C1-SWPPP
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

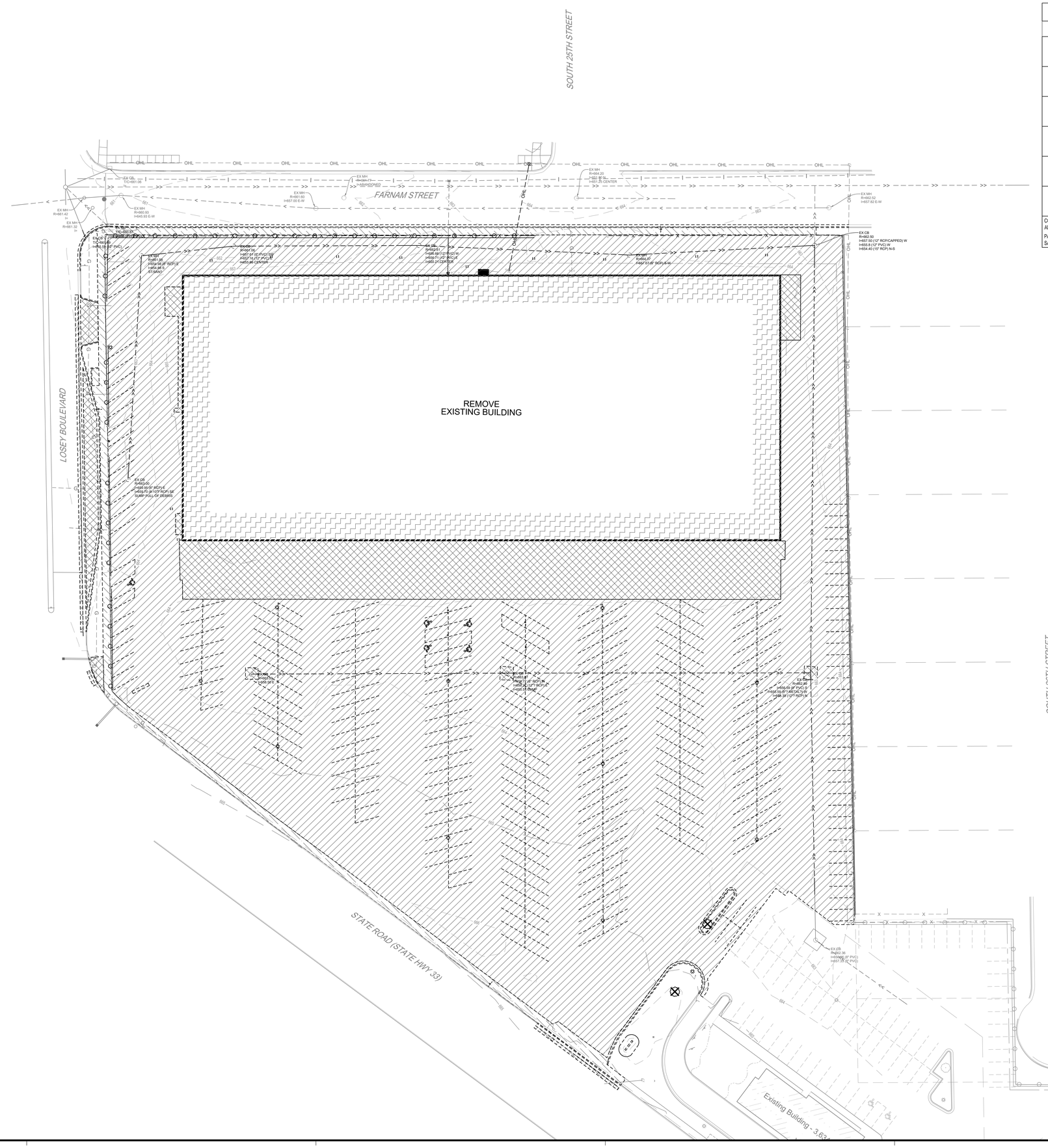
TITLE

STORMWATER POLLUTION PREVENTION PLAN

SHEET

C1-40

PLOT DATE: 6/17/2022 2:58 PM



REMOVAL LEGEND

SYMBOL	DESCRIPTION
	REMOVE BITUMINOUS PAVEMENT
	REMOVE CONCRETE PAVEMENT
	REMOVE CONCRETE WALK
	DEMOLISH BUILDING
	REMOVE LANDSCAPING
	REMOVE DECIDUOUS TREE (CLEAR AND GRUB)

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT SECTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

PAVEMENT REMOVALS SHALL INCLUDE FULL DEPTH SAWCUT AND SECTION REMOVAL.

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C2-REMOVAL
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

TITLE

EXISTING SITE AND REMOVALS PLAN

SHEET

C2-10

PLOT DATE: 6/17/2022 10:53 AM

DENSITY COMPUTATIONS

PROPOSED UNITS	216
SITE AREA (AC)	6.30
DENSITY (UNITS/AC)	35

TOWNHOME PARKING DATA

TYPE	STALLS PROVIDED
TOWNHOME (OUTSIDE)	39
TOWNHOME (GARAGE)	39
TOTAL	78

MIXED-USE PARKING DATA

TYPE	STALLS PROVIDED
PROPOSED STALLS (OUTSIDE)	230
PROPOSED STALLS (UNDERGROUND)	105
ACCESSIBLE STALLS (INCLUDED IN OUTSIDE)	8
TOTAL	340

SITE AREA SUMMARY

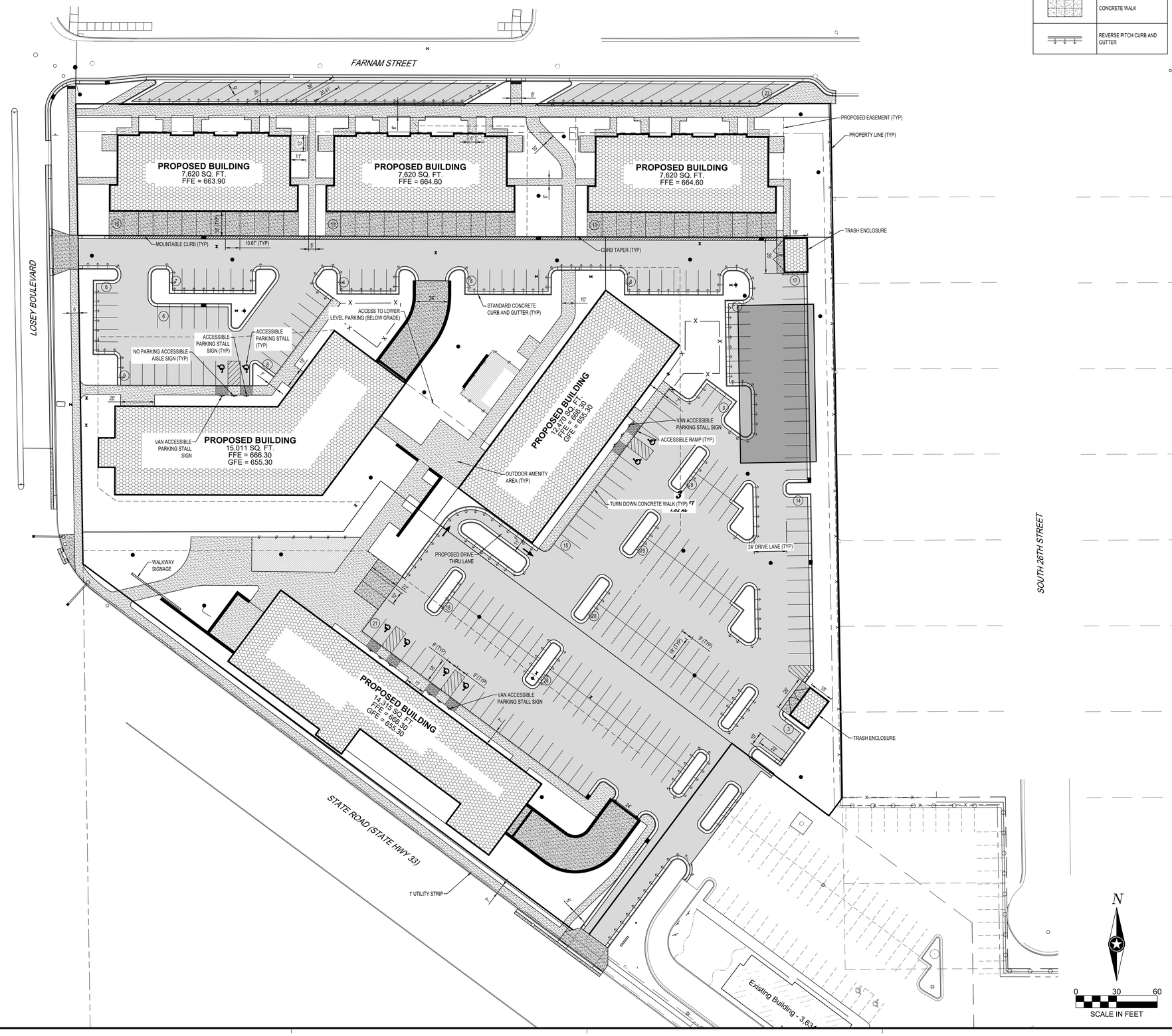
			UNITS		UNITS	PERCENT
PROPOSED BUILDINGS	66,306	SF	1.52	AC	25%
IMPERVIOUS AREA (PARKING/SIDEWALK)	139,705	SF	3.21	AC	51%
OPEN AREA	66,773	SF	1.53	AC	24%
PROPOSED AREA	272,784	SF	6.26	AC	100%
PROPOSED ROW	5,557	SF	0.13	AC	
TOTAL AREA	278,341	SF	6.39	AC	

BICYCLE PARKING DATA

TYPE	SPACES PROVIDED
PROPOSED SPACES (OUTSIDE)	18
TOWNHOME (GARAGE)	60
PROPOSED SPACES (GARAGE)	39
TOTAL	117

PAVEMENT LEGEND

SYMBOL	DESCRIPTION
	BITUMINOUS PAVEMENT
	CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	CONCRETE WALK
	REVERSE PITCH CURB AND GUTTER



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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C3-SITE
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

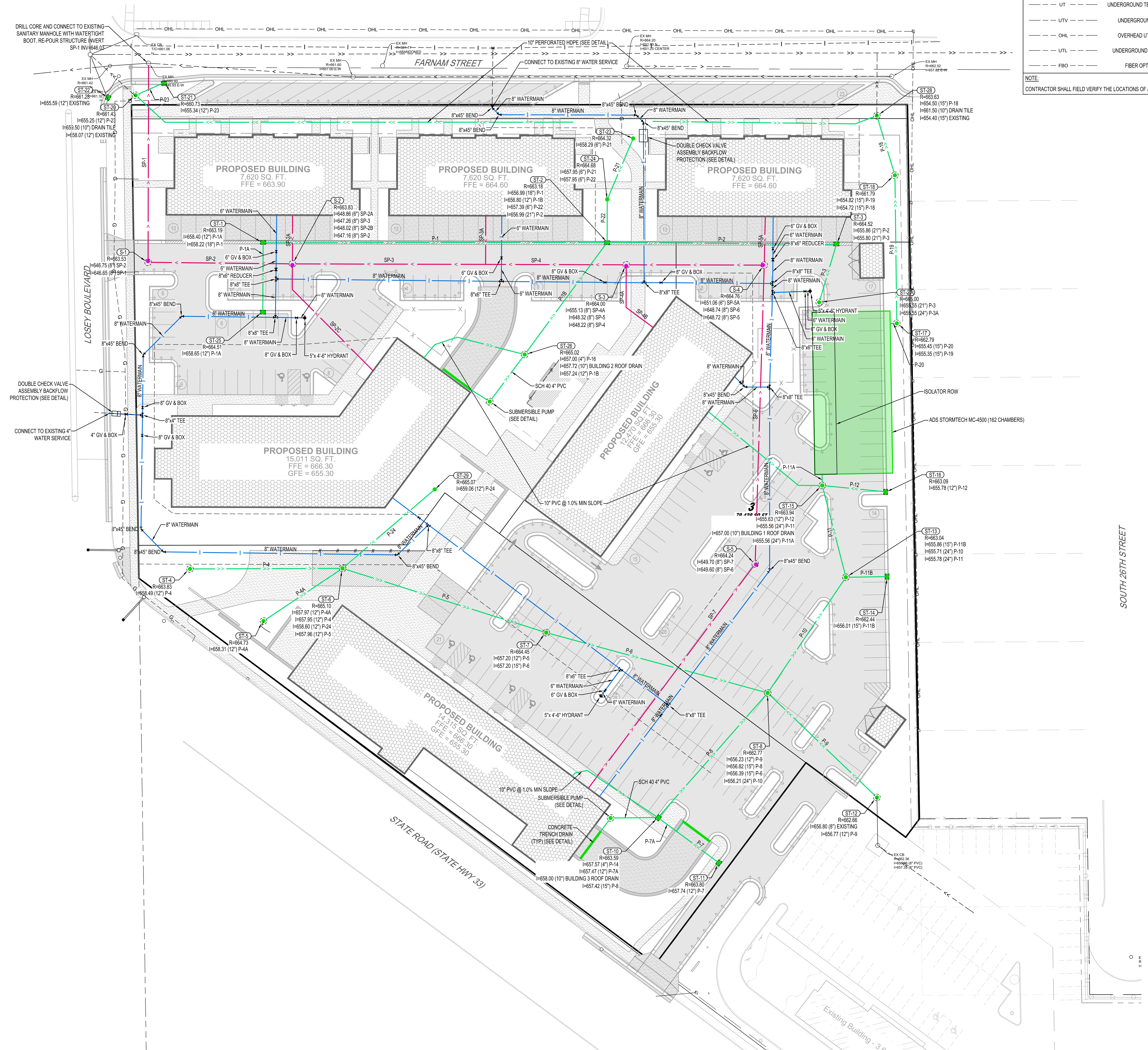
TITLE

SITE PLAN

SHEET

C3-10

PLOT DATE: 6/17/2022 2:58 PM



UTILITY LEGEND

EXISTING		PROPOSED
— — >> — —	STORM DRAIN	—— >> ——
— — > — —	SANITARY SEWER	—— > ——
— — II> — —	SANITARY SEWER FORCEMAIN	—— <II ——
— — I — —	WATER MAIN	—— I ——
— — G — —	GAS	—— G ——
— — OE — —	OVERHEAD ELECTRIC	—— OE ——
— — UE — —	UNDERGROUND ELECTRIC	—— UE ——
— — UT — —	UNDERGROUND TELEPHONE	—— UT ——
— — UTV — —	UNDERGROUND TV	
— — OHL — —	OVERHEAD UTILITY	
— — UTL — —	UNDERGROUND UTILITY	
— — FBO — —	FIBER OPTIC	

NOTE:
CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C3-SITE
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

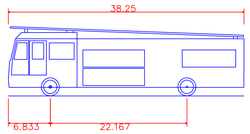
TITLE

SITE UTILITY PLAN

SHEET

C3-11

PLOT DATE: 6/17/2022 3:14 PM



E-ONE Combination Unit

Overall Length	38.250ft
Overall Width	8.333ft
Overall Body Height	11.250ft
Min Body Ground Clearance	1.393ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Max Wheel Angle	45.00°

HYDRANT COVERAGE LEGEND

R150'

EXISTING HYDRANT

R150'

PROPOSED HYDRANT

SOUTH 25TH STREET

FARNAM STREET

LOSEY BOULEVARD

SOUTH 26TH STREET

STATE ROAD (STATE HWY 33)

PROPOSED BUILDING
7,620 SQ. FT.
FFE = 663.90

PROPOSED BUILDING
7,620 SQ. FT.
FFE = 664.60

PROPOSED BUILDING
7,620 SQ. FT.
FFE = 664.60

PROPOSED BUILDING
15,011 SQ. FT.
FFE = 666.30
GFE = 655.30

PROPOSED BUILDING
12,470 SQ. FT.
FFE = 666.30
GFE = 655.30

PROPOSED BUILDING
15,315 SQ. FT.
FFE = 666.30
GFE = 655.30

Existing Building - 3,632 SQ. FT.

N

0 30 60

SCALE IN FEET

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C3-HYDRANT MAP
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

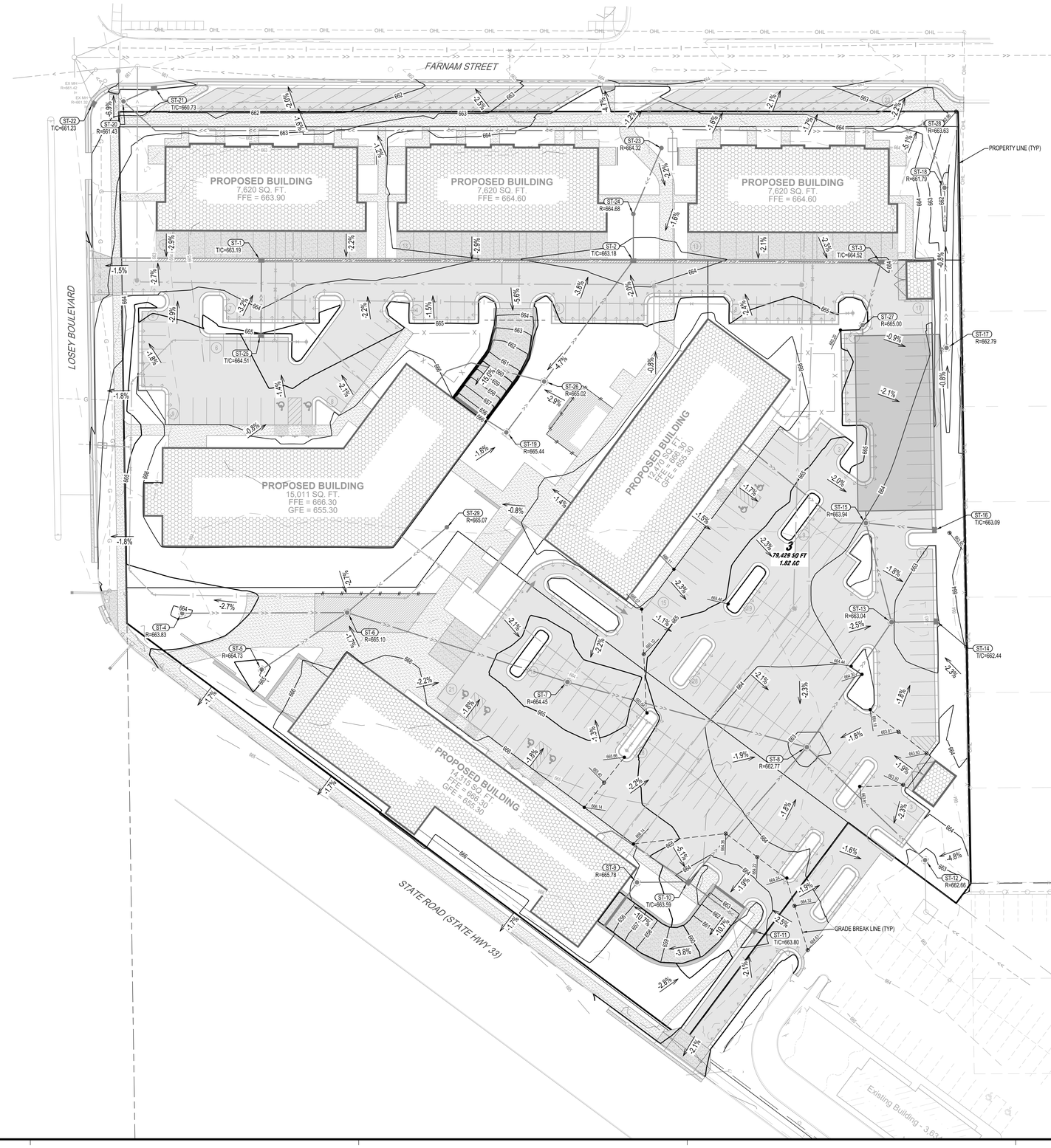
TITLE

HYDRANT COVERAGE MAP

SHEET

C3-12

PLOT DATE: 6/17/2022 2:59 PM



GRADING LEGEND

101	EXISTING CONTOUR (MINOR INTERVAL)
100	EXISTING CONTOUR (MAJOR INTERVAL)
101	PROPOSED CONTOUR (MINOR INTERVAL)
100	PROPOSED CONTOUR (MAJOR INTERVAL)
XX.XX	PROPOSED SPOT ELEVATION
XX.XX	PROPOSED TOP BACK OF CURB SPOT ELEVATION
-X.X%	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

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PROJECT

COPPER ROCKS DEVELOPMENT

LA CROSSE WISCONSIN

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C4-GRADING
DRAWN BY	AAQ/SMW
DESIGNED BY	AAQ/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	--/--/--
CLIENT PROJECT NO.	-

TITLE

GRADING PLAN

SHEET

C4-10

PLOT DATE: 6/17/2022 3:14 PM