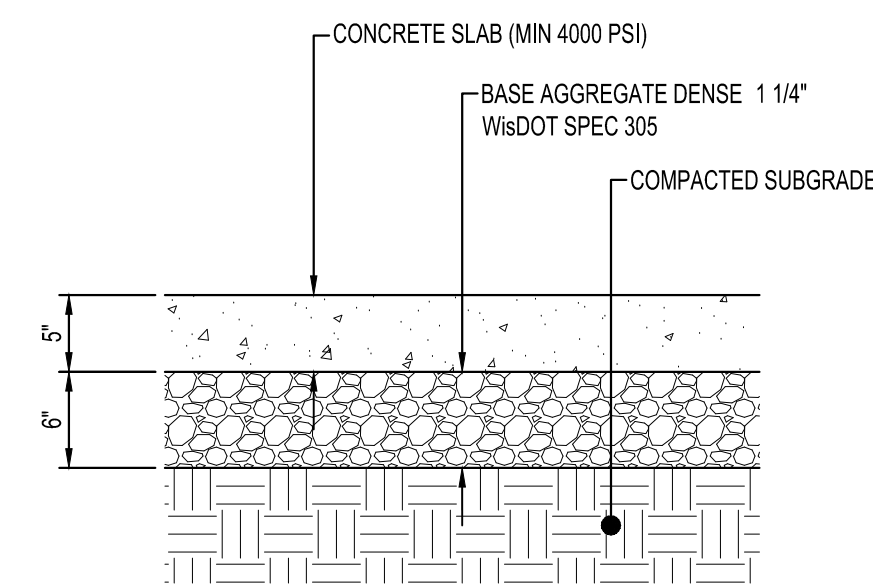
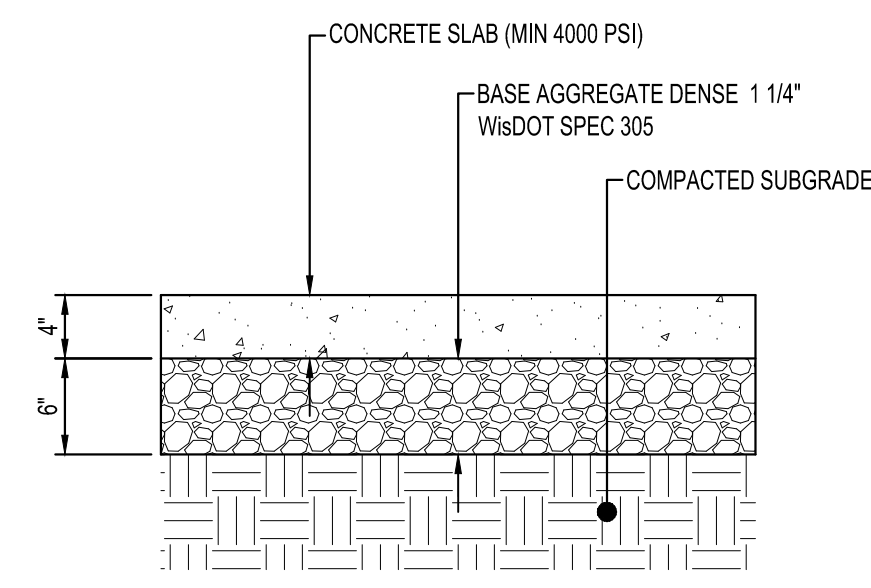


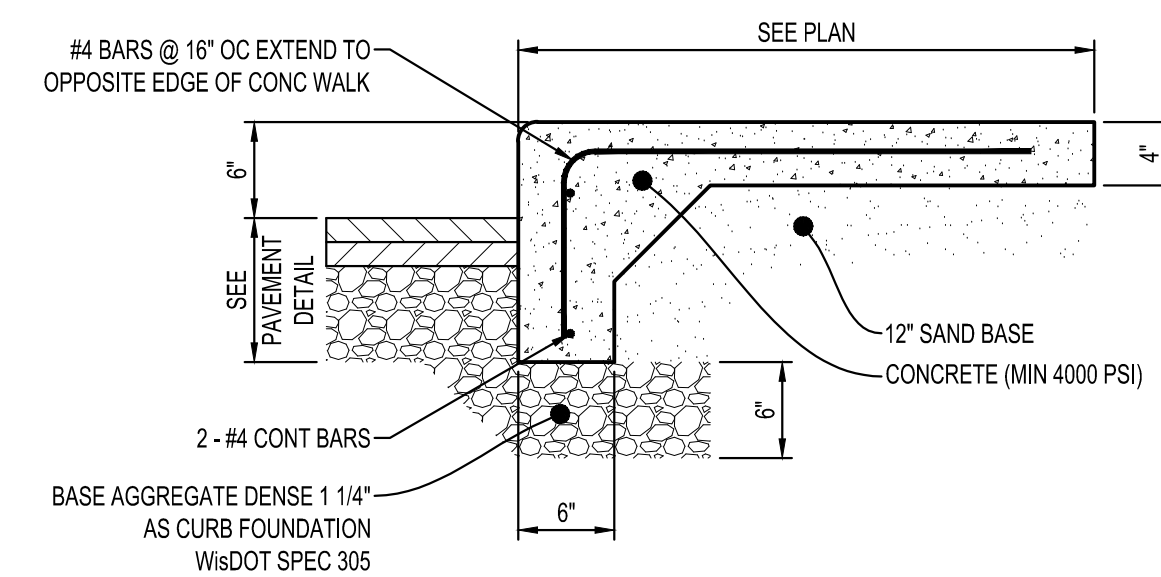
**STANDARD ASPHALT PAVEMENT**  
NTS



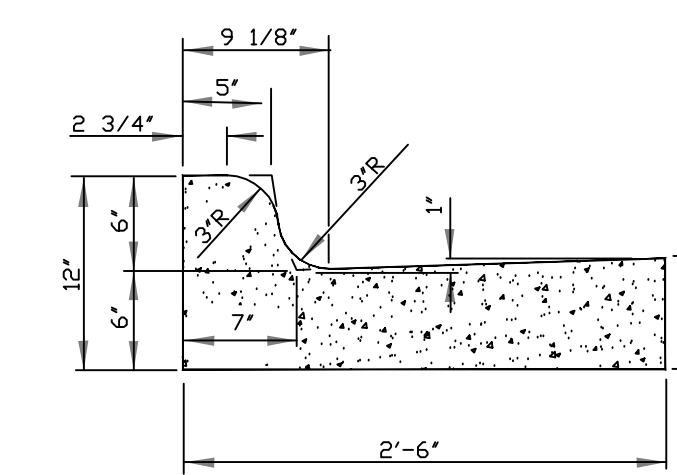
**STANDARD CONCRETE PAVEMENT**  
NTS



**STANDARD CONCRETE WALK**  
NTS

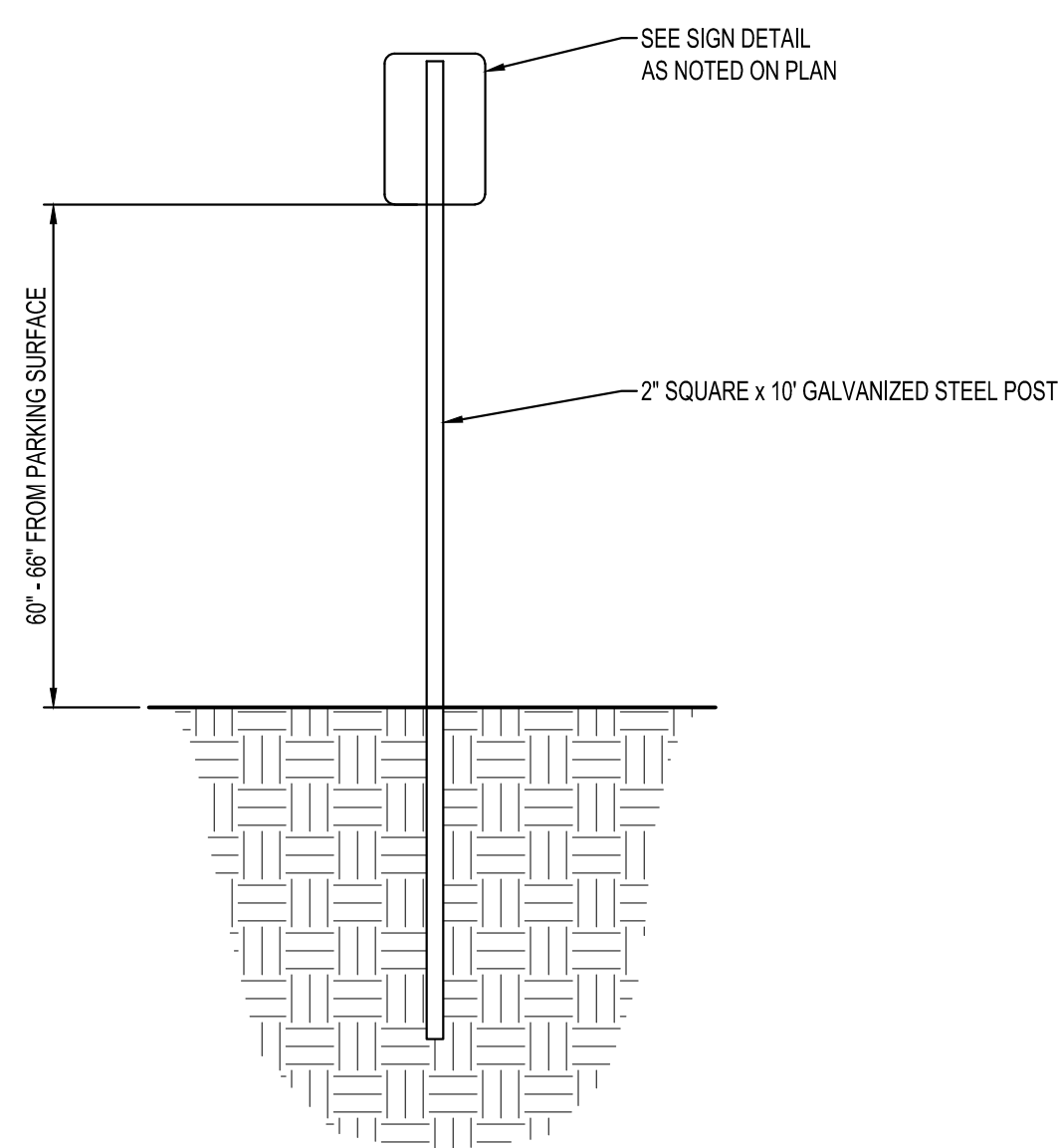


**TURN DOWN CONCRETE WALK**  
NTS

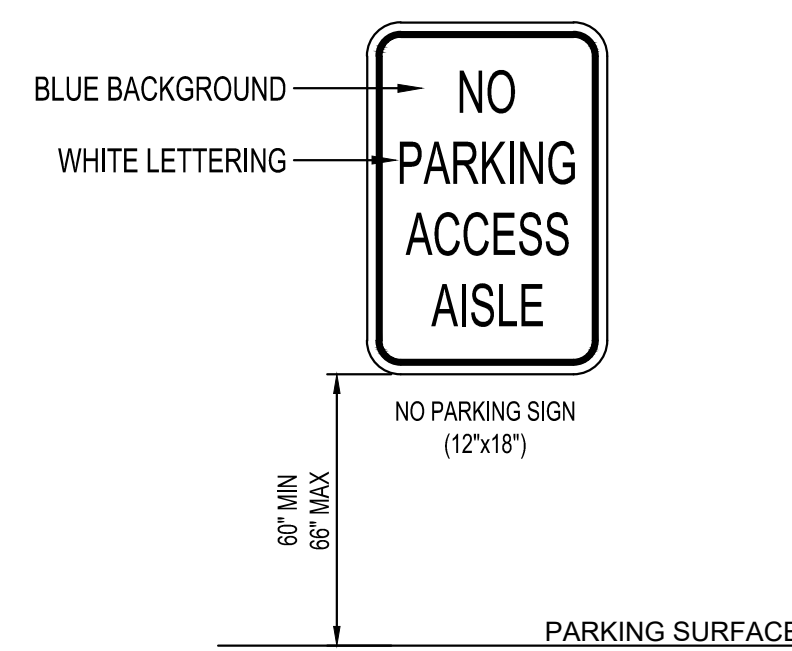


**STANDARD CURB & GUTTER SECTION**

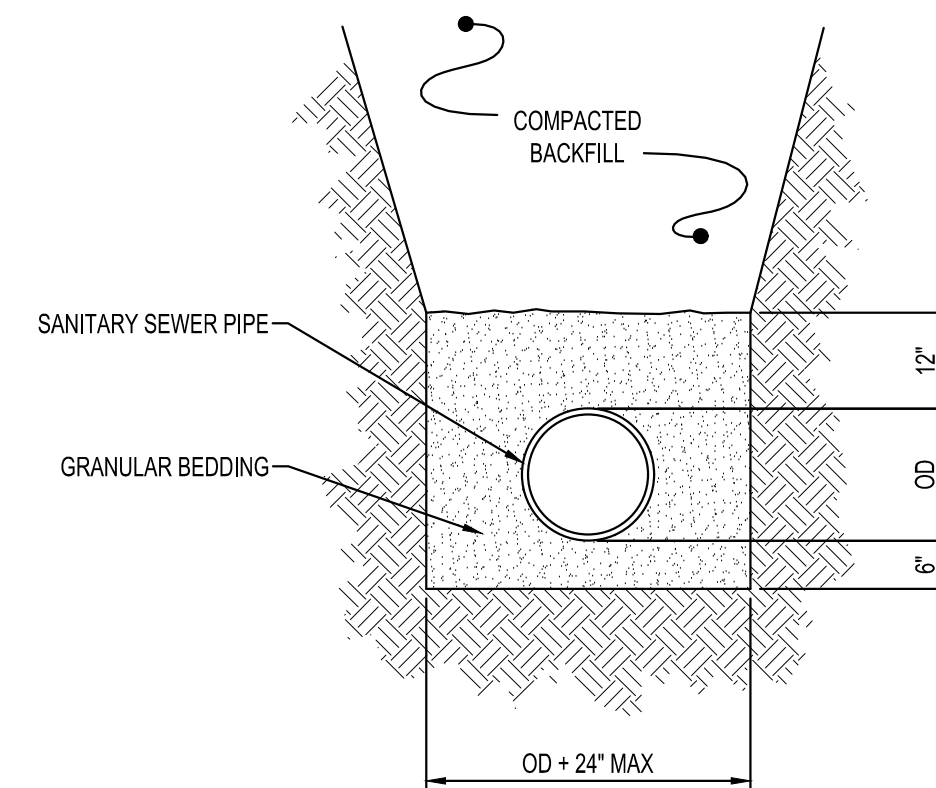
**NOTE:**  
WITH REFERENCE TO SAWING OF CONTRACTION JOINTS ON SLIP FORM CURB & GUTTER & CURB, PAGE 9.3, STANDARD SPEC'S THE SAW CUT SHALL BE A MINIMUM 1/8\"/>



**SIGN POST**  
NTS



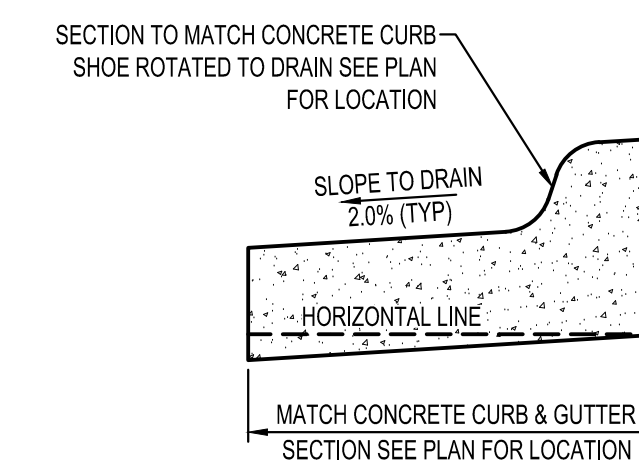
**NO PARKING ACCESS AISLE SIGN**  
NTS



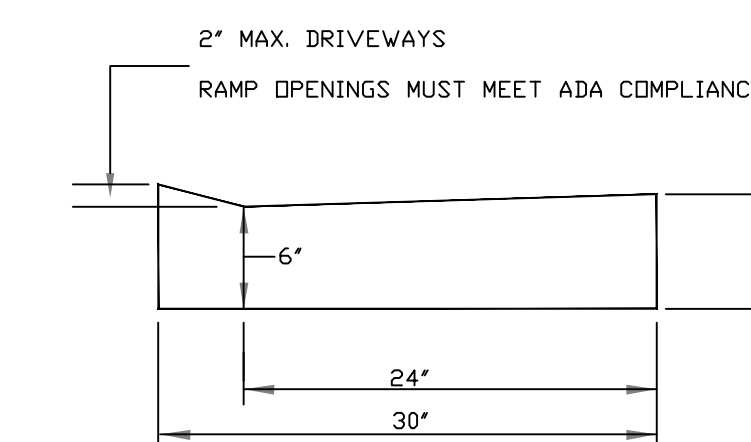
**NOTES:**

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**

PDD SPECIFIC PLAN SUBMITTAL  
06/03/2022

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PROJECT

**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO. 21-25290  
FILE NAME 25290 CO-DETAILS  
DRAWN BY AAG/SMW  
DESIGNED BY AAG/SMW/KBR  
REVIEWED BY KBR  
ORIGINAL ISSUE DATE 06/03/2022

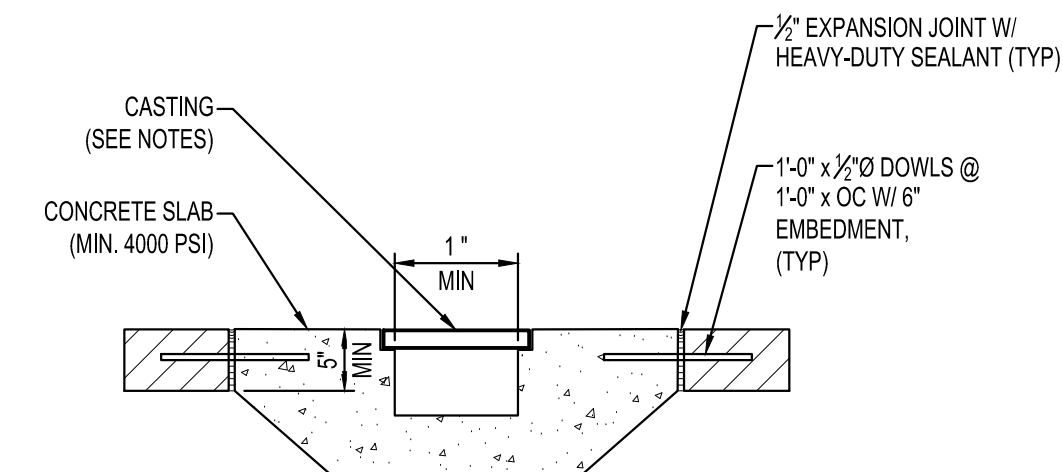
CLIENT PROJECT NO. -

TITLE

**SITE DETAILS**

SHEET

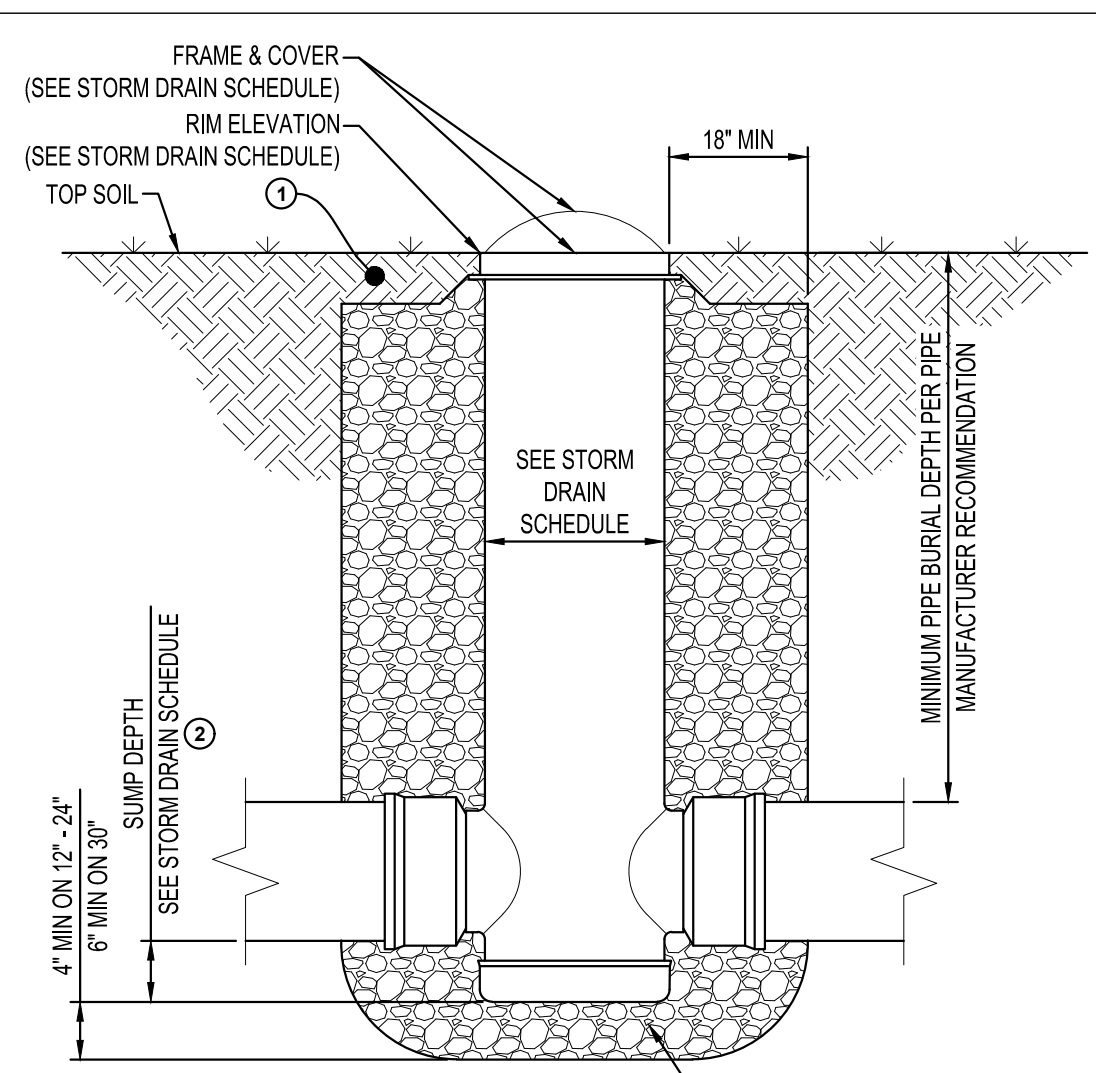
**C0-10**



**NOTES:**

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

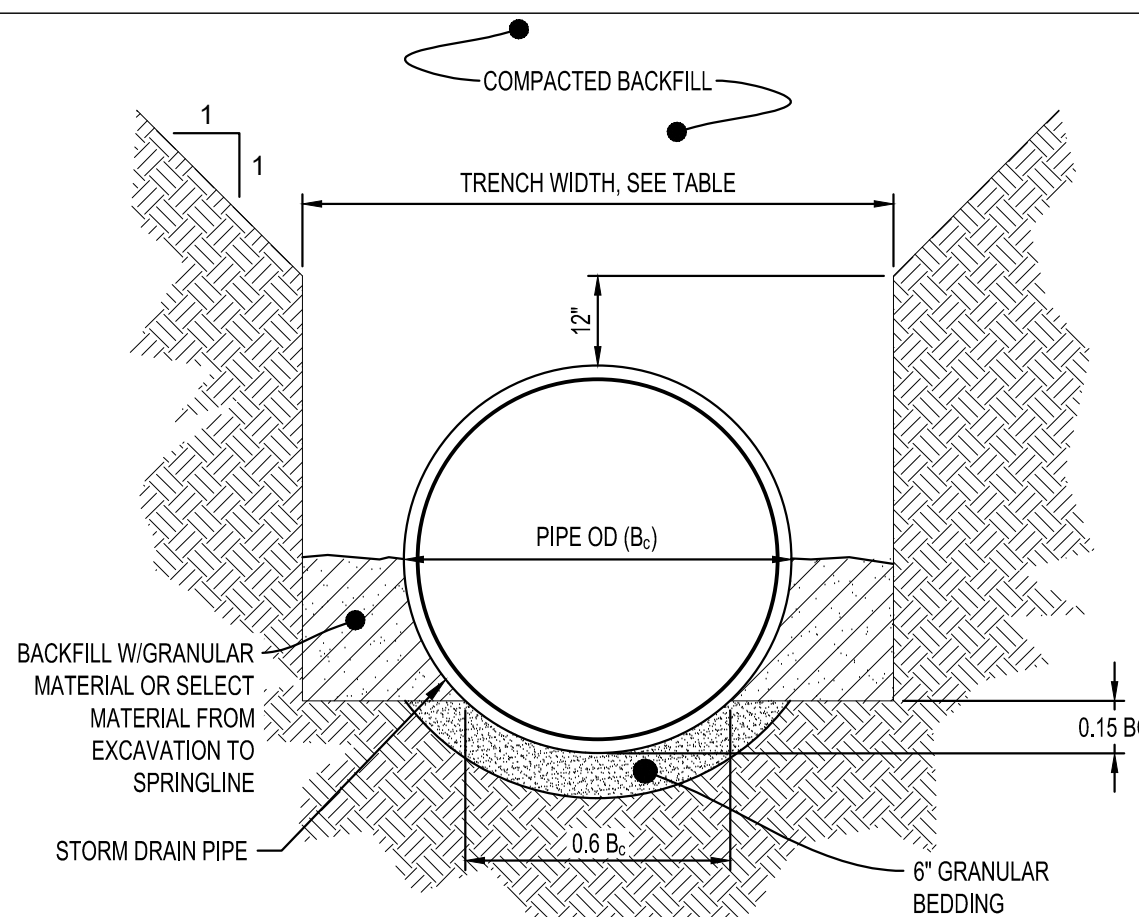
**CONCRETE TRENCH DRAIN**  
NTS



**NOTES:**

- DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS TO DO NOT FORM
- 8\"/>

**DRAIN BASIN**  
NTS

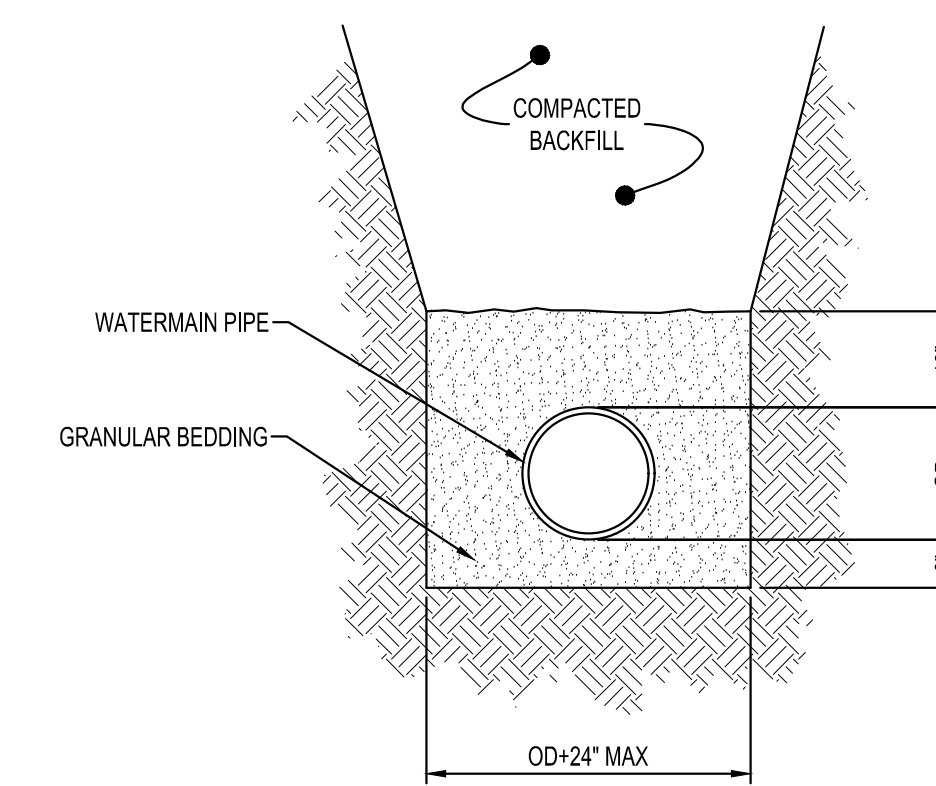


TRENCH WIDTH	
PIPE Ø	TRENCH WIDTH
36\"/>	

**NOTES:**

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

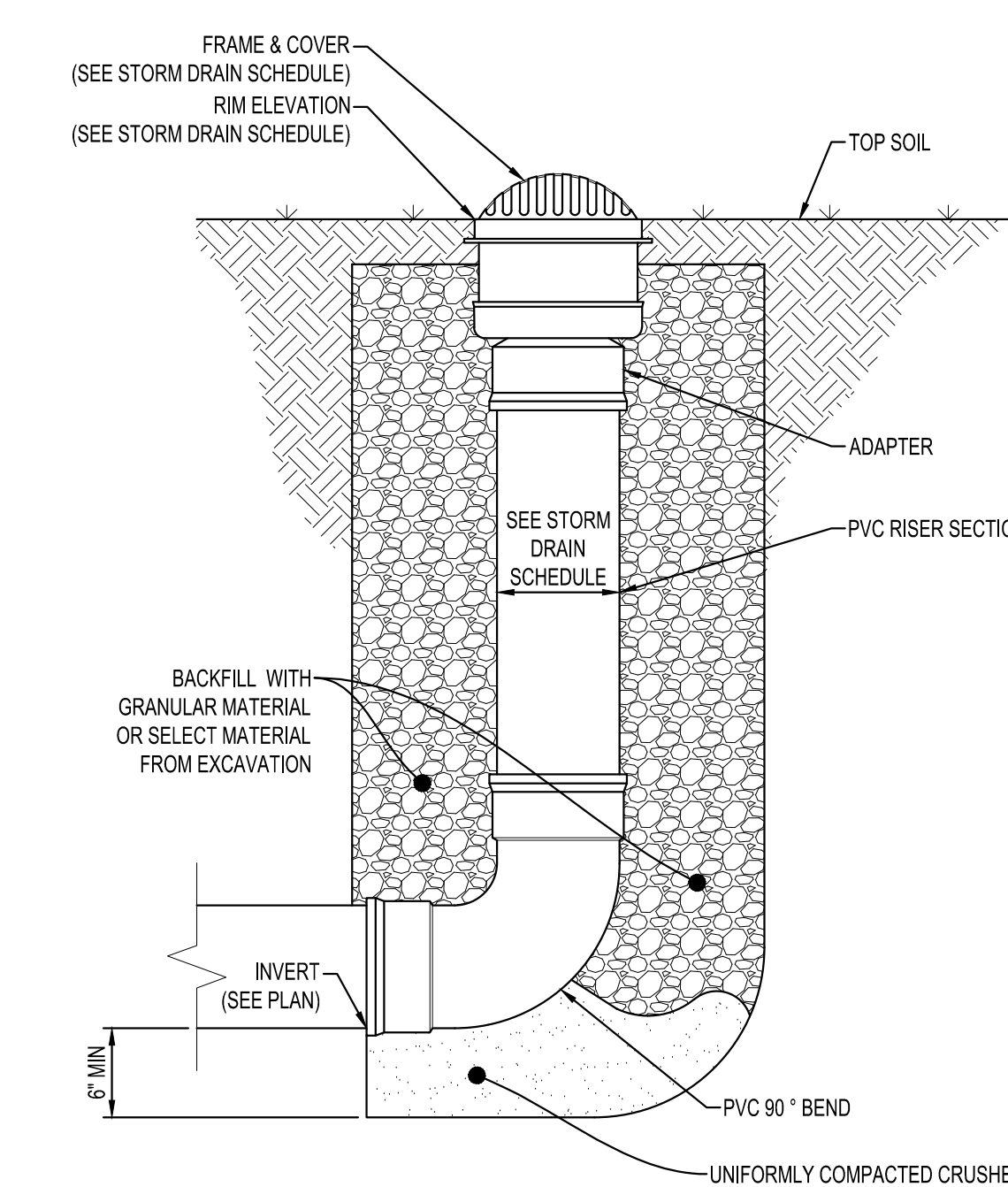
**REINFORCED CONCRETE STORM DRAIN PIPE BEDDING**  
NTS



**NOTE:**

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

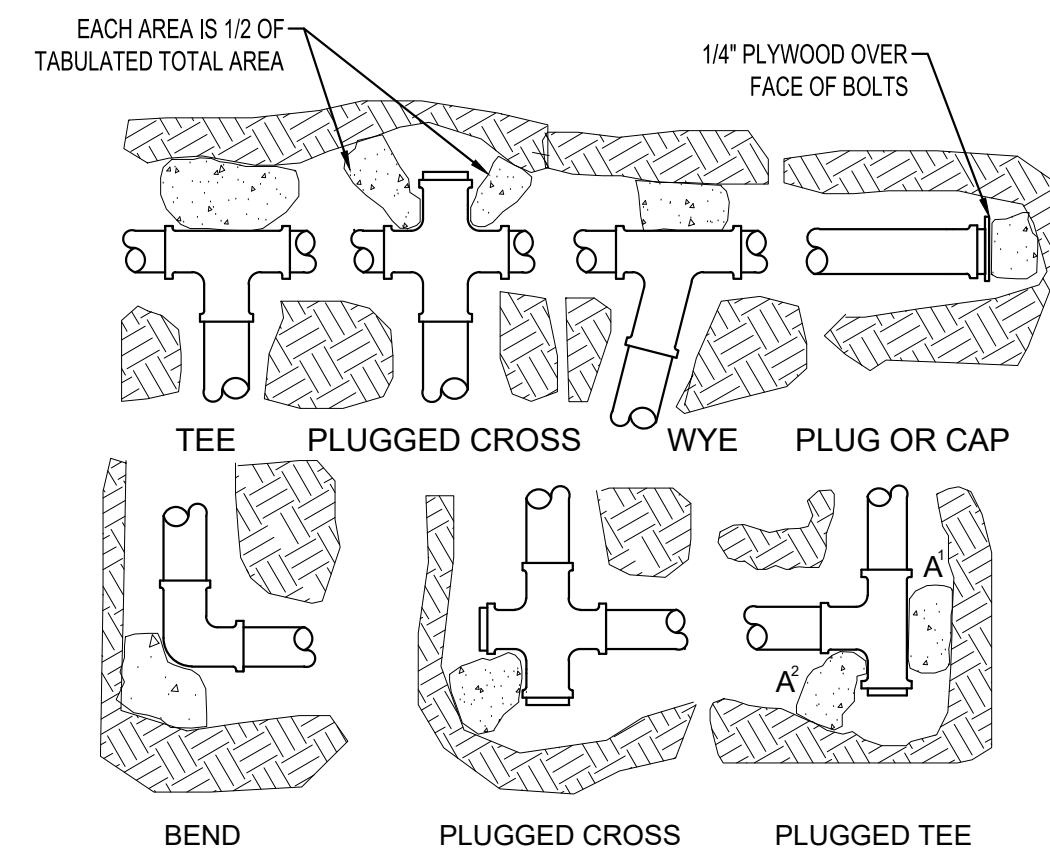
**PIPE BEDDING WATER MAIN**  
NTS



**INLINE DRAIN**  
NTS



PRELIMINARY NOT FOR CONSTRUCTION

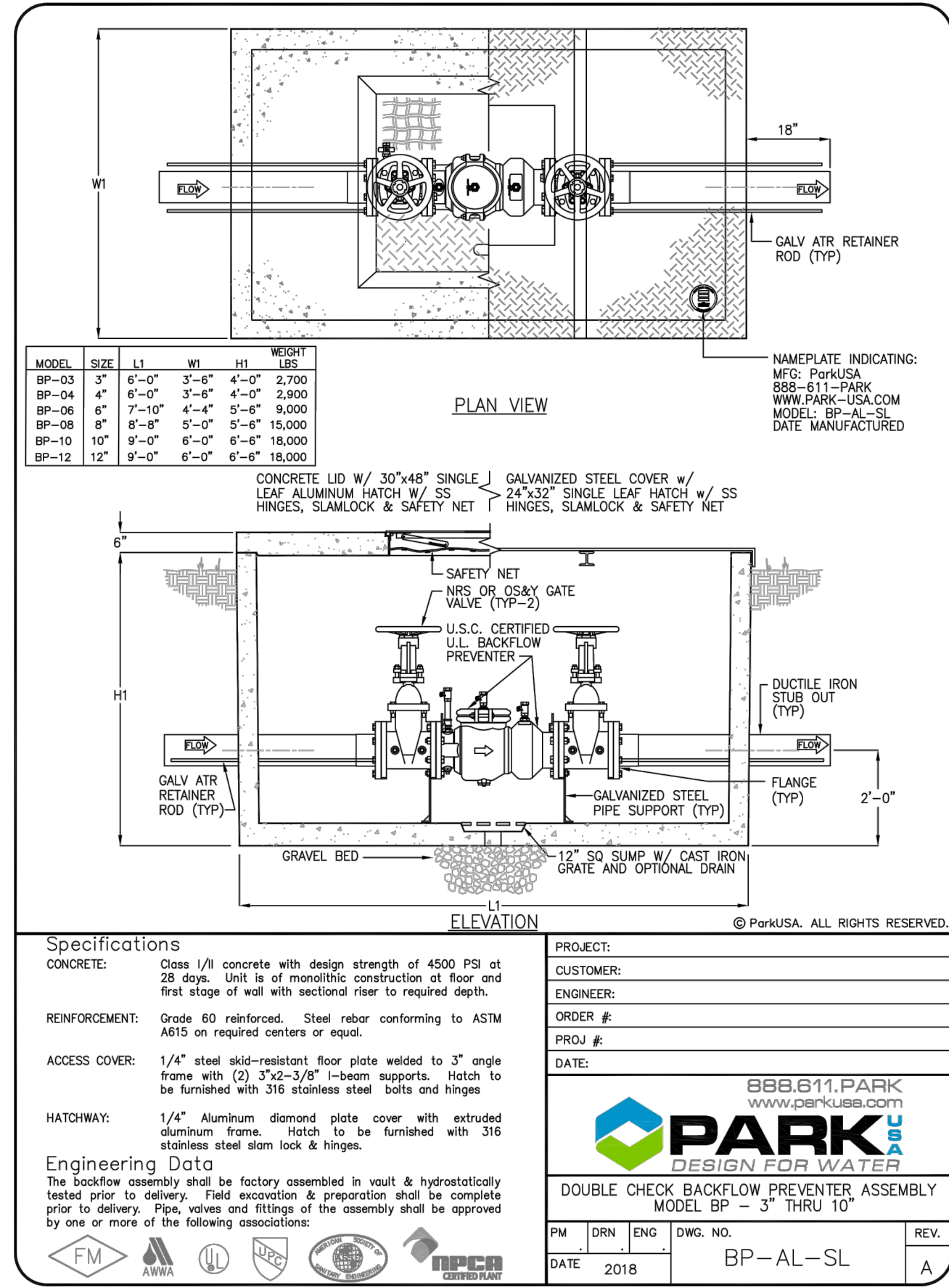


**THRUST BLOCK BEARING (SF) TABLE**

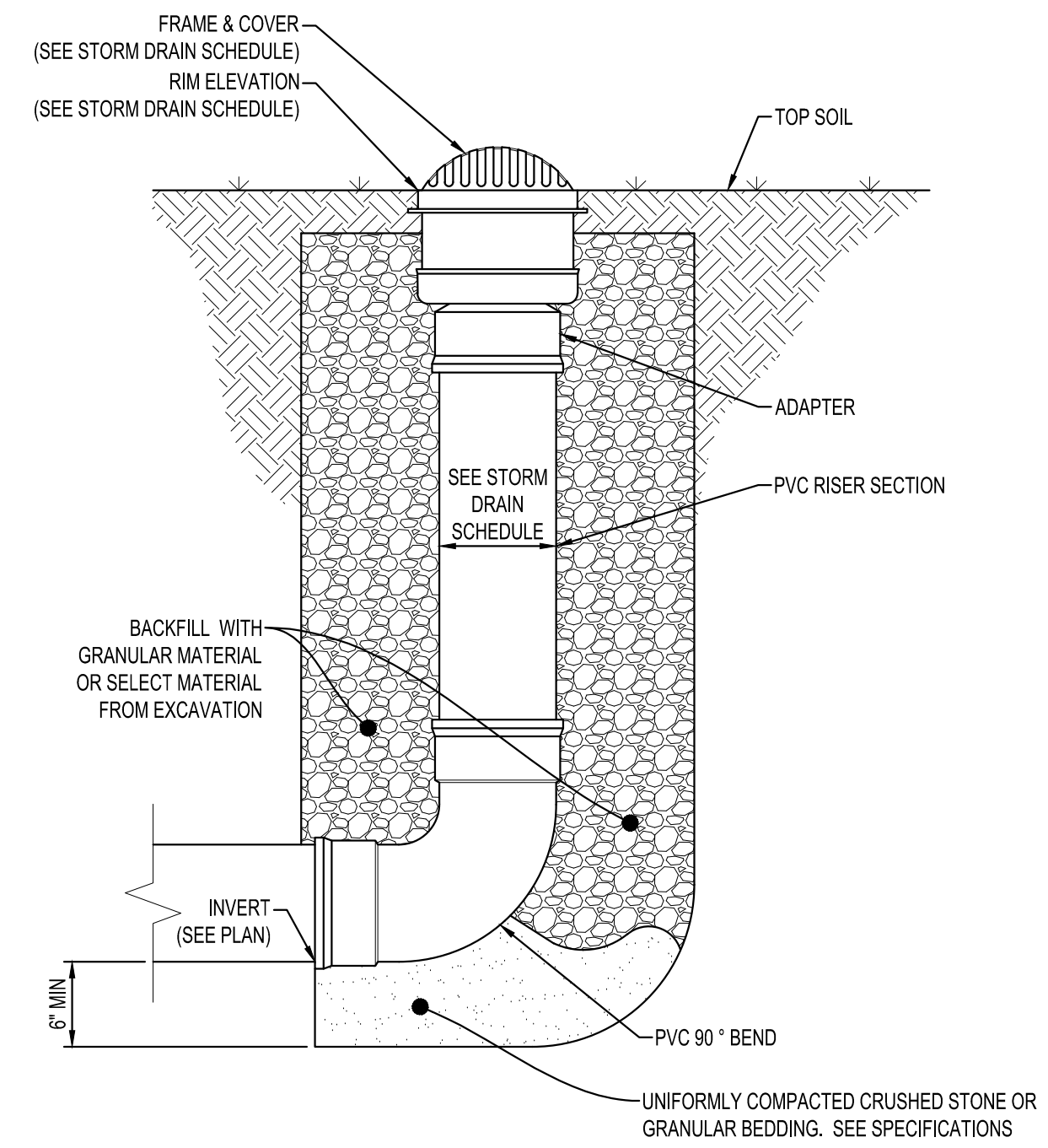
NOMINAL FITTING SIZE INCHES	TEE, WYE PLUG OR CAP	90 BEND PLUGGED CROSS	TEE PLUGGED ON RUN A' A'	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1.0	1.4	1.9	1.4	1.0	
6	2.1	3.0	4.3	3.0	1.6	1.0
8	3.8	5.3	7.6	5.4	2.9	1.5
10	5.9	8.4	11.8	8.4	4.6	2.6
12	8.5	12.0	17.0	12.0	6.6	3.4
14	11.5	16.3	23.0	16.3	8.9	4.6
16	15.0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

- NOTES**
- CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH
  - KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES
  - 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)
  - BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL
  - 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/150XALLOWABLE SOIL BEARING STRESS+TABLE VALUE

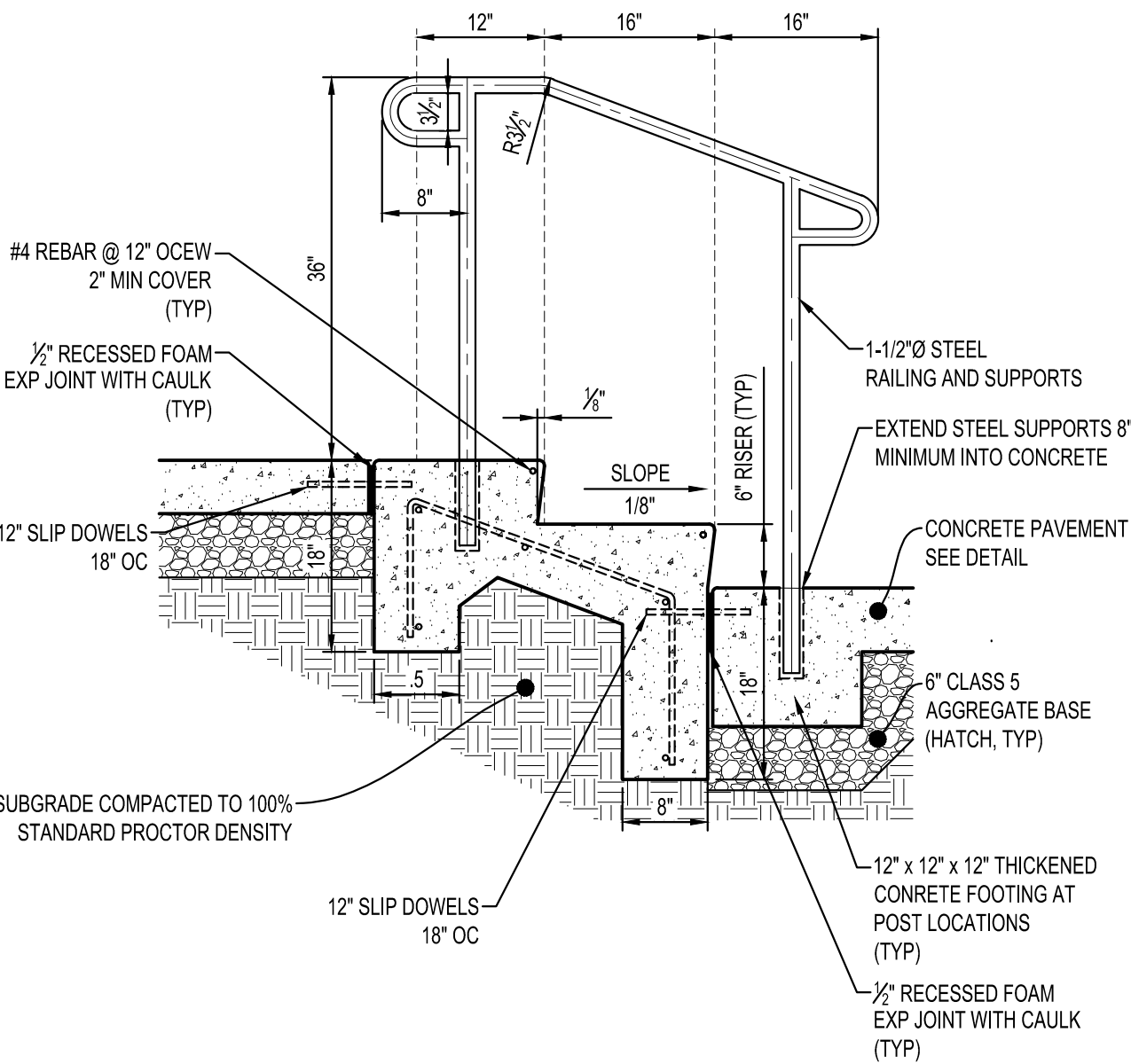
**WATERMAIN THRUST BLOCKING**  
NTS



**ROCK LANDSCAPING WITH UNDERDRAIN DETAIL**  
NTS

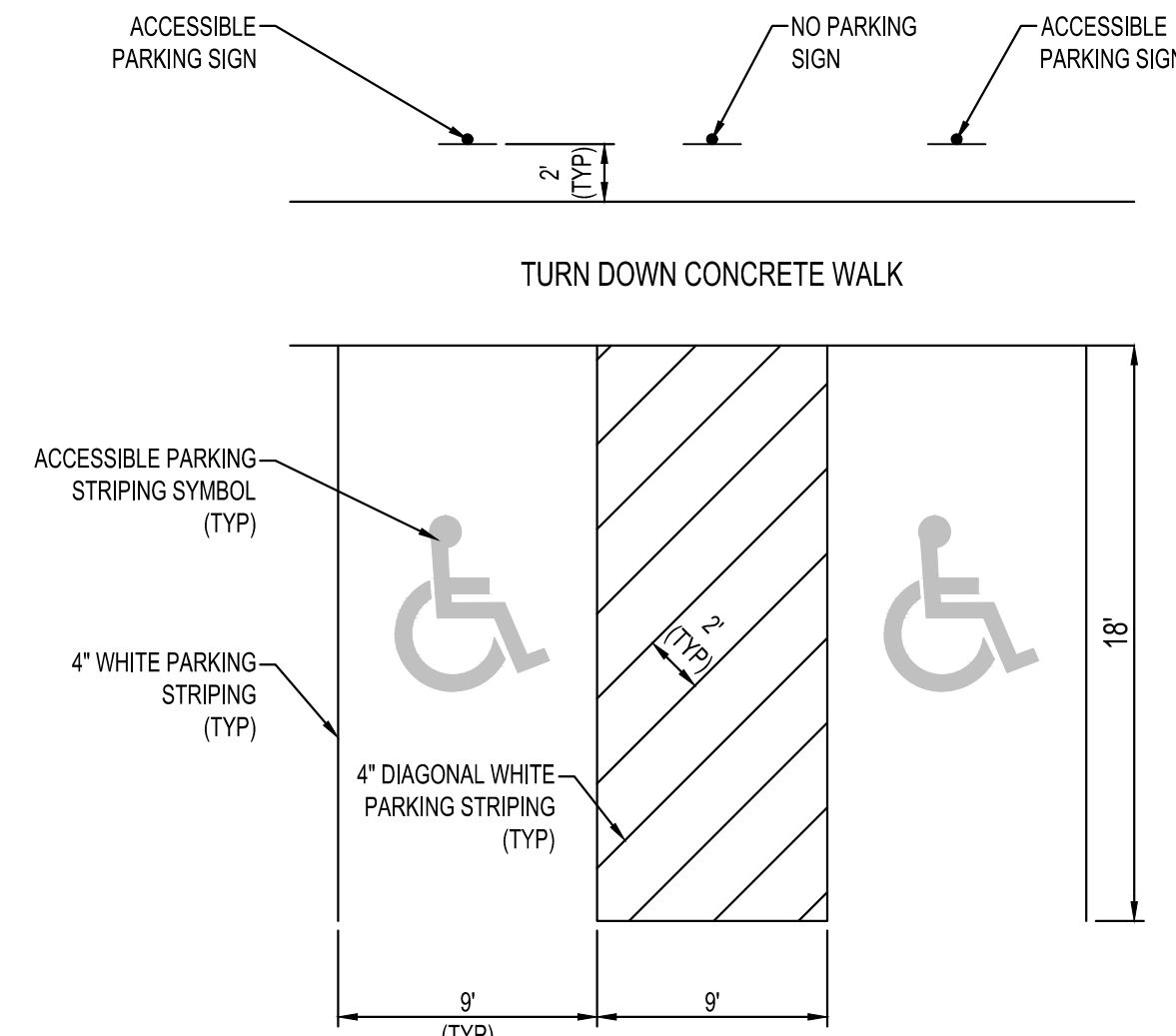


**INLINE DRAIN**  
NTS

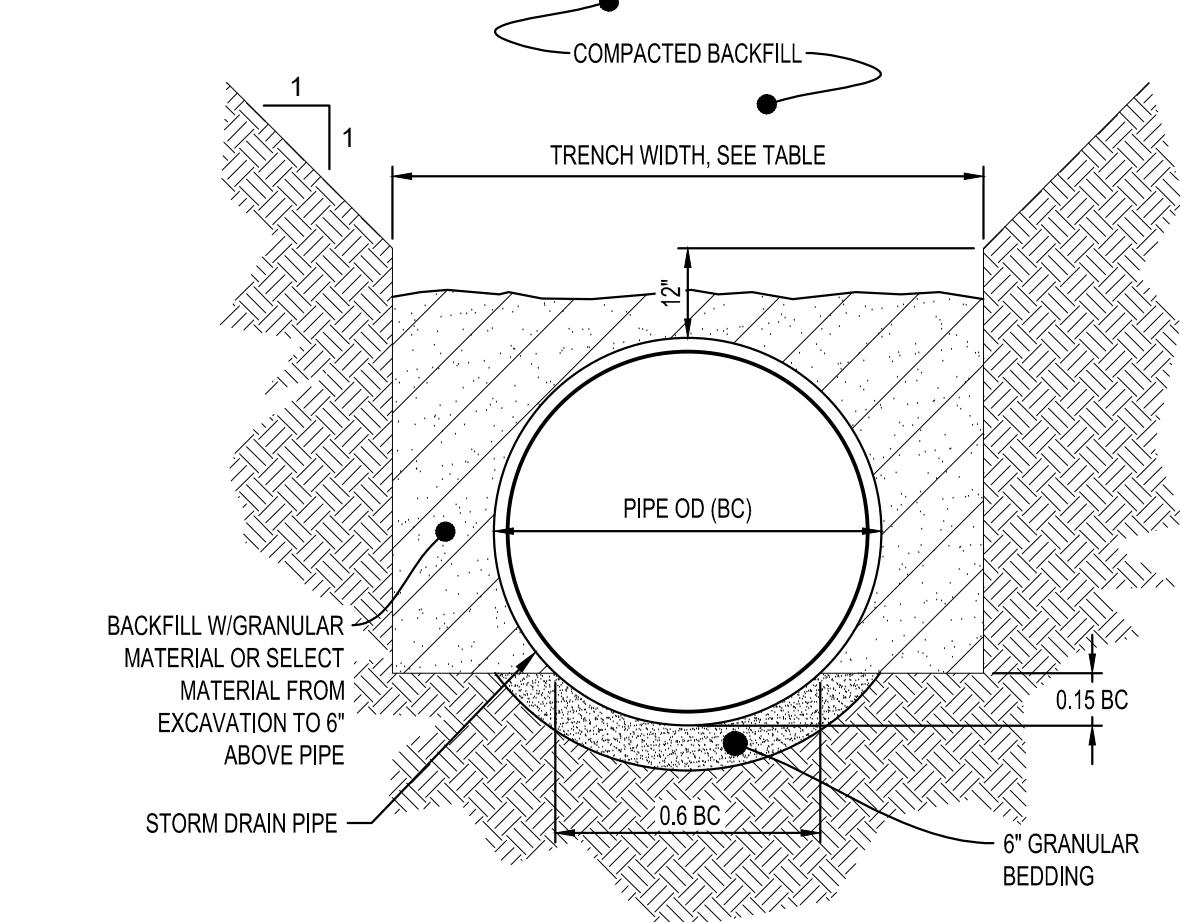


- NOTES:**
- ALL COMPONENTS OF RAILING AND SUPPORTS SHALL BE SHOP PRIMED AND POWDER COATED. COORDINATE COLOR WITH OWNER.

**CONCRETE STAIR WITH RAILING**  
NTS



**ACCESSIBLE PARKING AREA**  
NTS

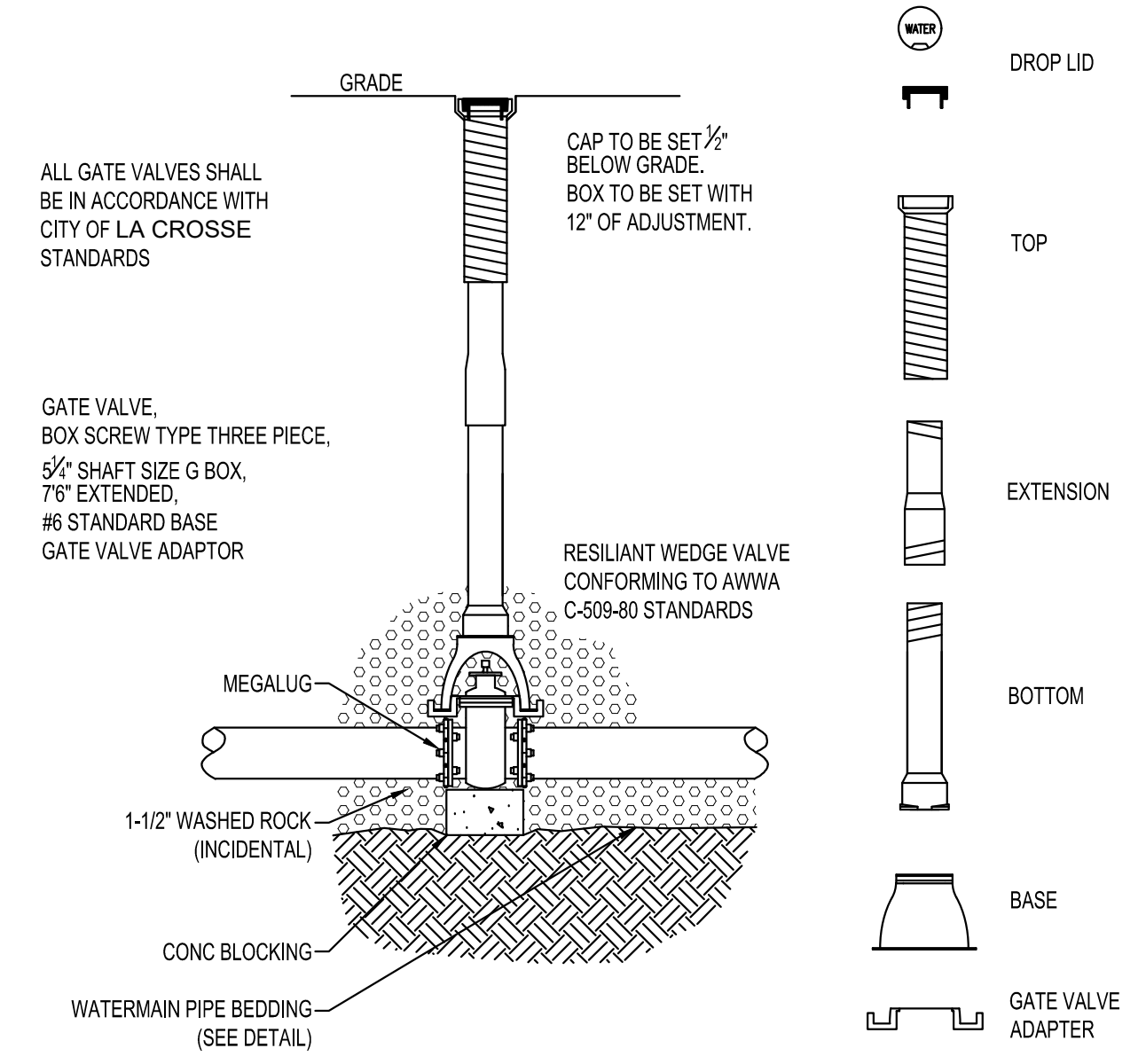


**TRENCH WIDTH**

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

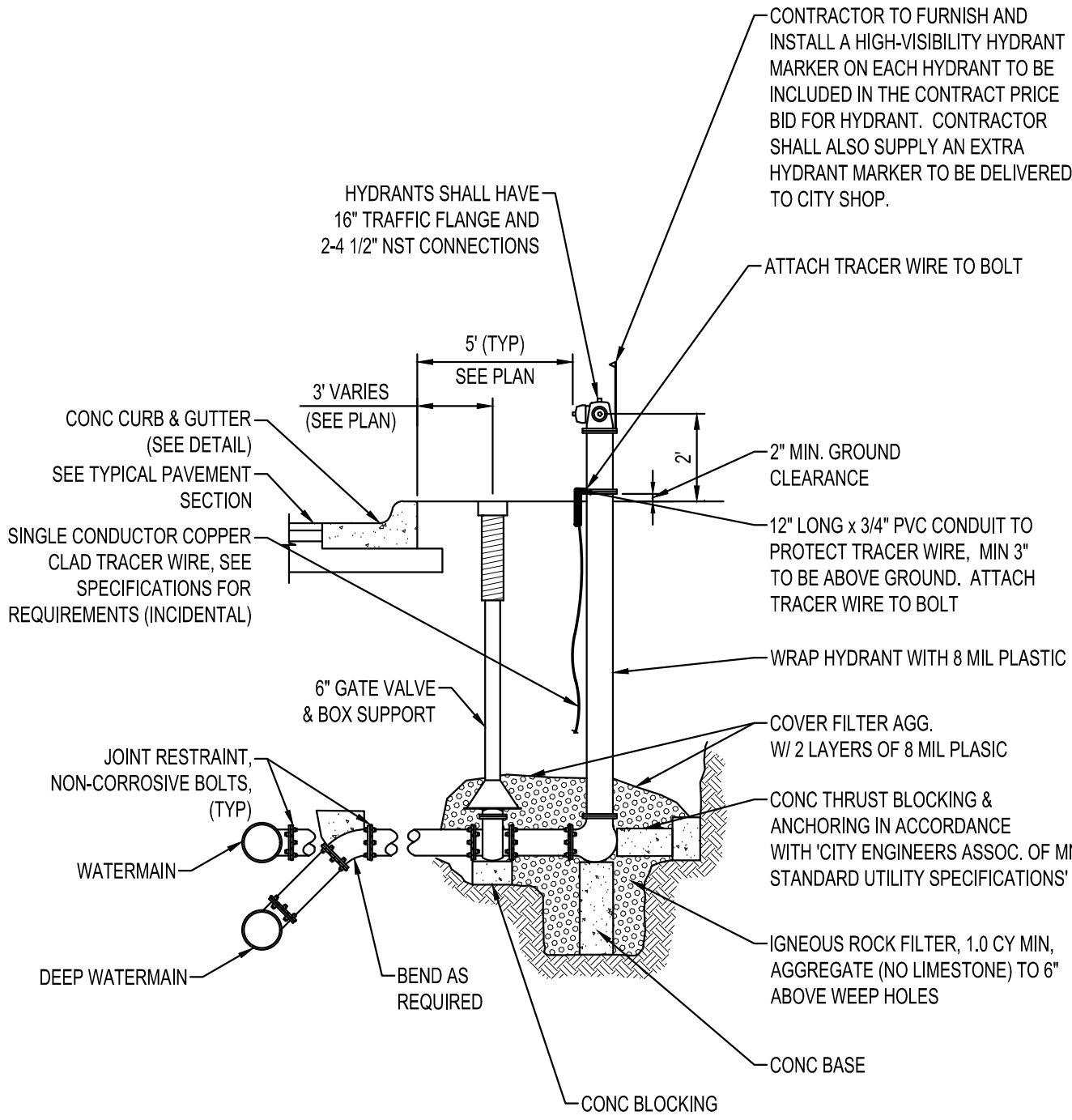
- NOTES:**
- GRANULAR BEDDING AND BACKFILL FOR STORM DRAIN PIPES SHALL BE INCIDENTAL TO STORM DRAIN CONSTRUCTION

**NON-CONCRETE STORM DRAIN PIPE BEDDING**  
NTS

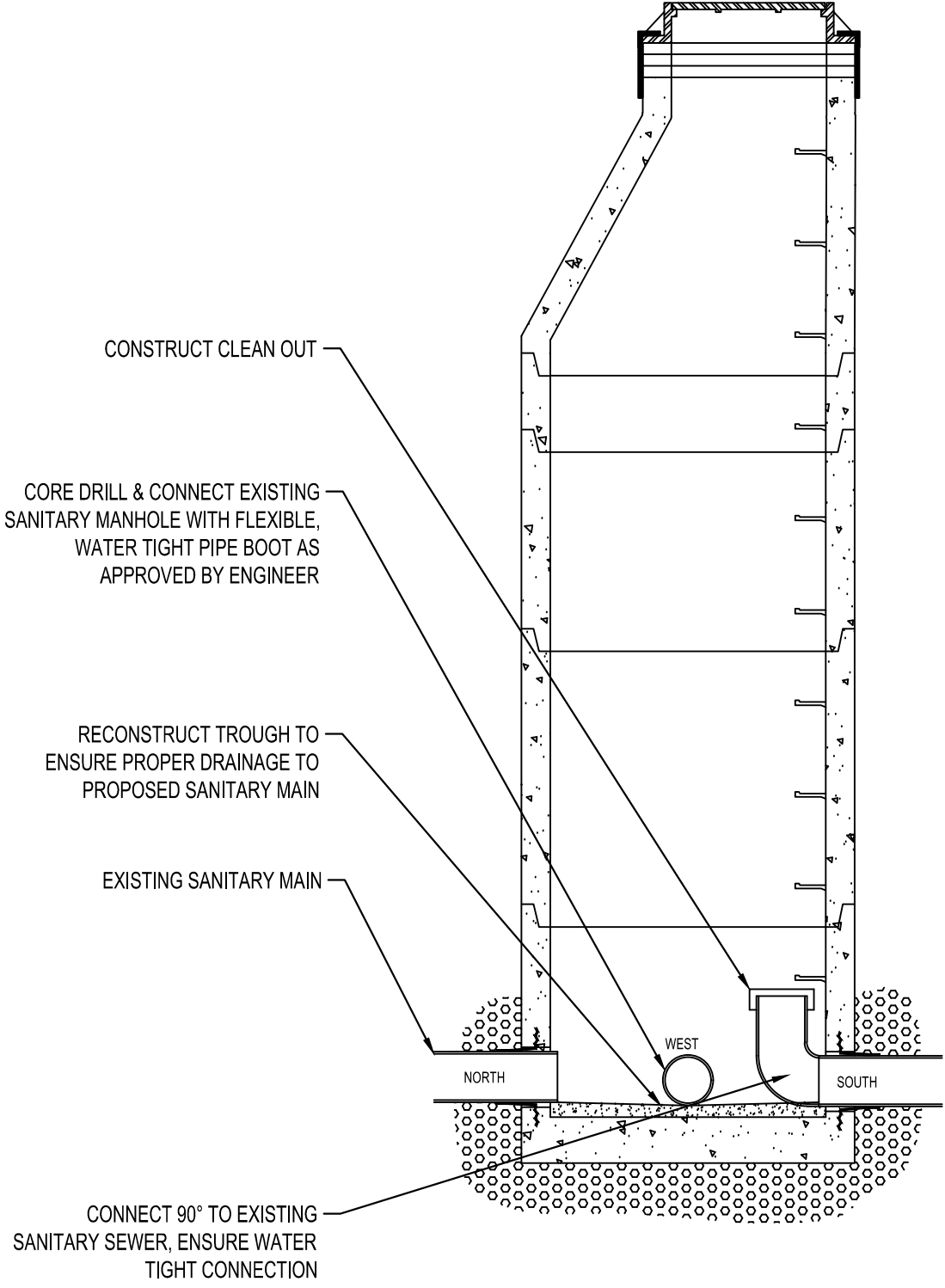


- NOTES:**
- INSTALL TOP NUT EXTENDER TO 7" DEPTH ON ALL VALVES WITH OVER-DEPTH

**TYPICAL GATE VALVE & BOX INSTALLATION**  
NTS



**TYPICAL HYDRANT INSTALLATION**  
NTS



**EXISTING SANITARY MANHOLE**  
NTS

PDD SPECIFIC PLAN SUBMITTAL  
06/03/2022

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PROJECT

**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

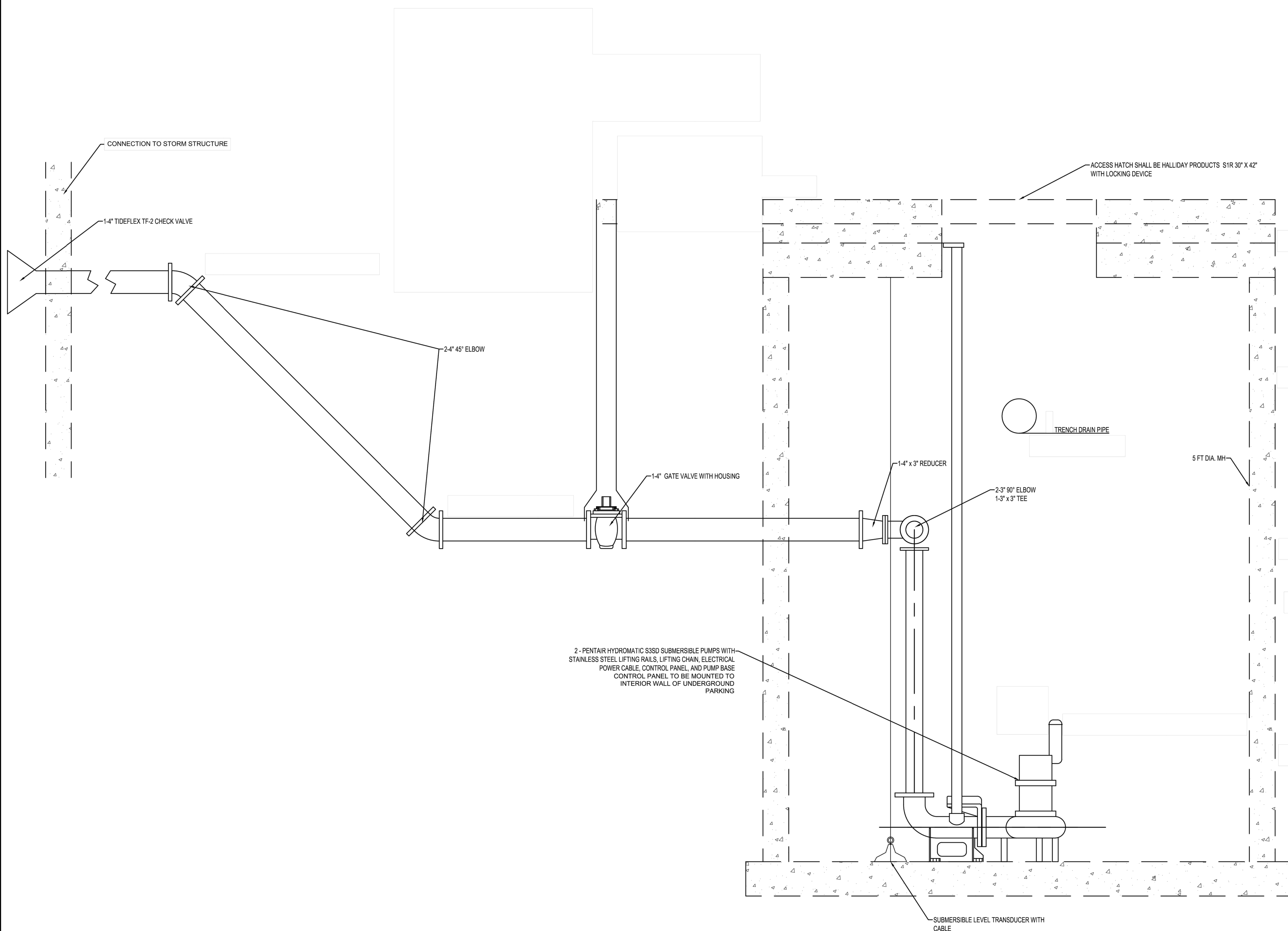
PROJECT NO.	21-25290
FILE NAME	25290 CO-DETAILS
DRAWN BY	AAG/SMW
DESIGNED BY	AAG/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	
CLIENT PROJECT NO.	

TITLE

**SITE DETAILS**

SHEET

**C0-11**



CONNECTION TO STORM STRUCTURE

1-4\" TIDEFLEX TF-2 CHECK VALVE

2-4\" 45\" ELBOW

1-4\" GATE VALVE WITH HOUSING

1-4\" x 3\" REDUCER

2-3\" 90\" ELBOW  
1-3\" x 3\" TEE

TRENCH DRAIN PIPE

5 FT DIA. MH

ACCESS HATCH SHALL BE HALLIDAY PRODUCTS S1R 30\" X 42\" WITH LOCKING DEVICE

2 - PENTAIR HYDRAMATIC S3SD SUBMERSIBLE PUMPS WITH STAINLESS STEEL LIFTING RAILS, LIFTING CHAIN, ELECTRICAL POWER CABLE, CONTROL PANEL, AND PUMP BASE CONTROL PANEL TO BE MOUNTED TO INTERIOR WALL OF UNDERGROUND PARKING

SUBMERSIBLE LEVEL TRANSDUCER WITH CABLE

**SUBMERSIBLE PUMP**  
NTS SD450

PDD SPECIFIC PLAN SUBMITTAL  
06/03/2022

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PROJECT

**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

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

TITLE

**SITE DETAILS**

SHEET

**C0-12**

PRELIMINARY NOT FOR CONSTRUCTION

FILE DATE: 6/29/22 2:58 PM



### MC-4500 STORMTECH CHAMBER SPECIFICATIONS

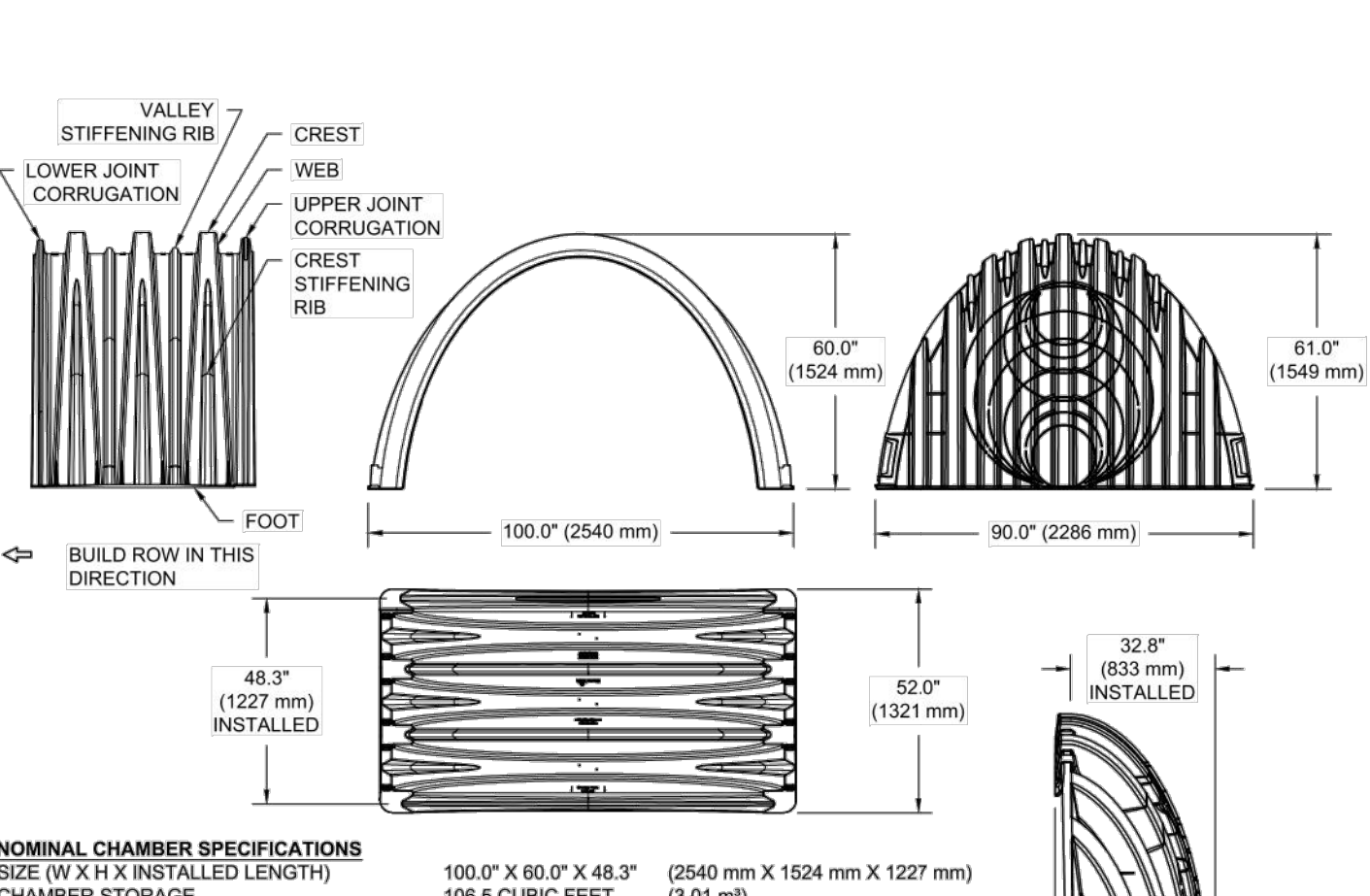
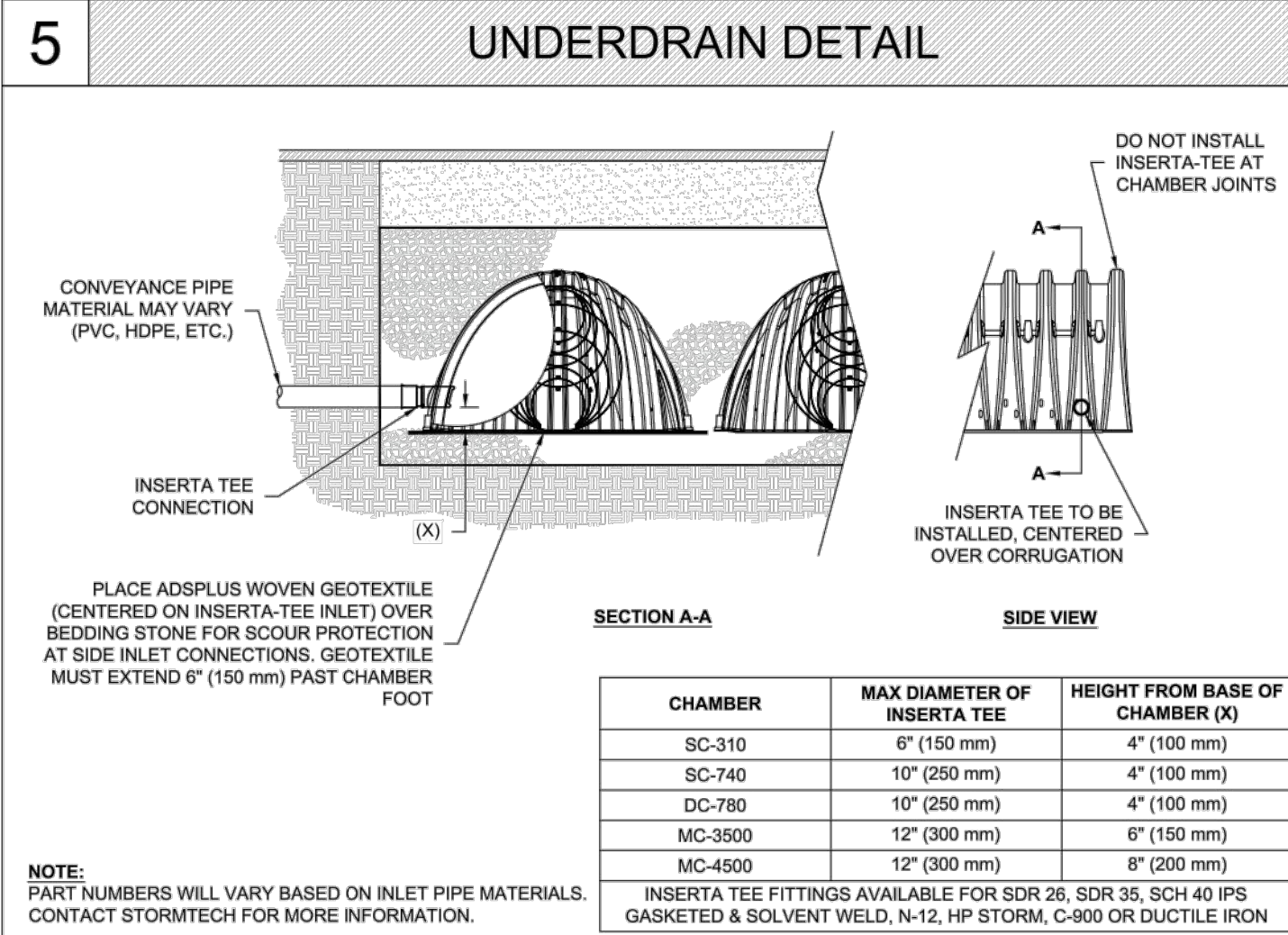
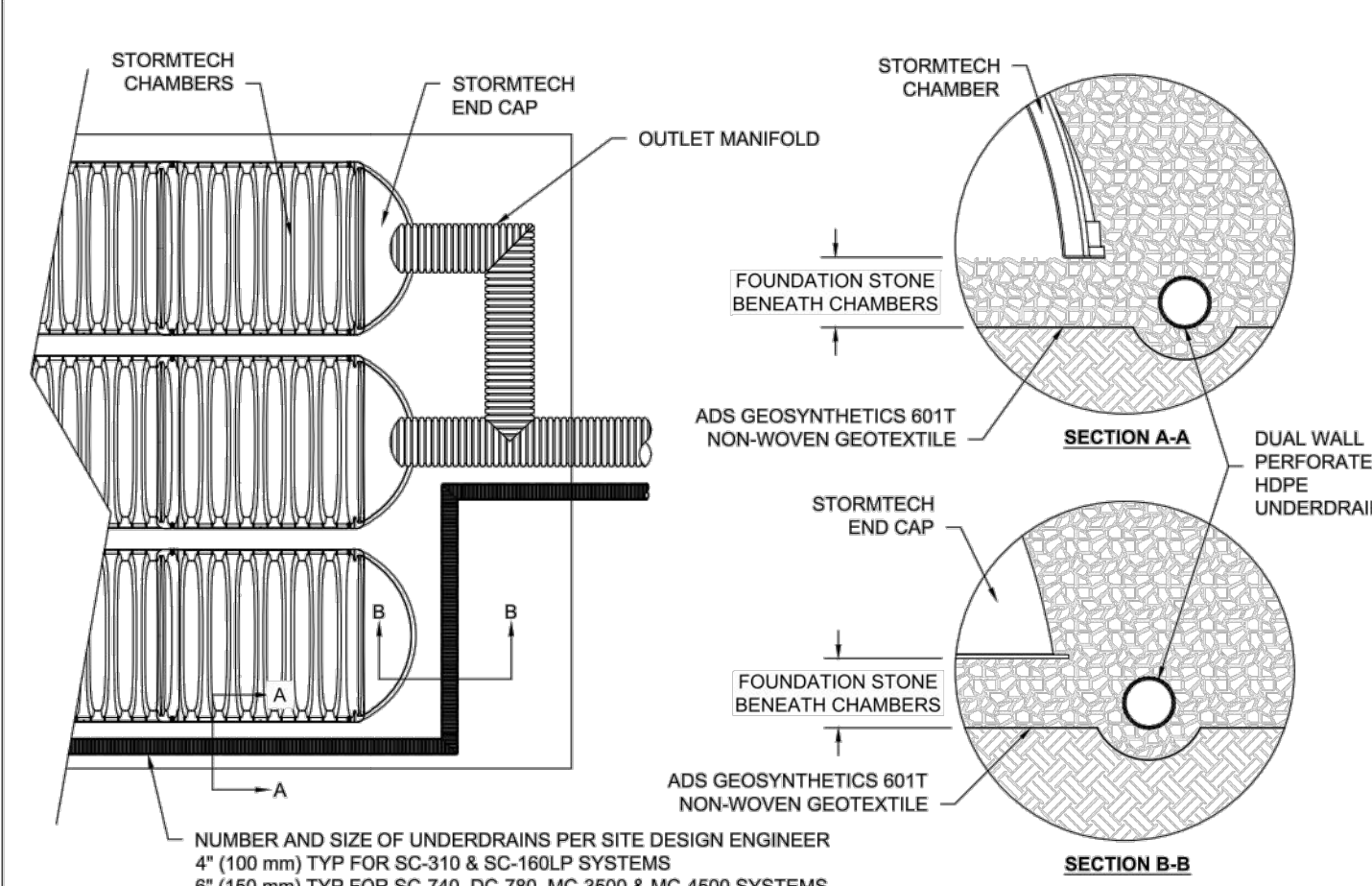
- CHAMBERS SHALL BE STORMTECH MC-4500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE (PP) COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPIDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- 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 12.2, 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.
- 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) ASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75 YRS) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1 WEEK) ASHTO DESIGN TRUCK.
- 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, THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LB/IN<sup>2</sup> AND 1) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCE FROM REFLECTIVE GOLD OR YELLOW COLORS.
- 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 1.56 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.2 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.
- 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

- STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
  - STONEBATCHER 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.
- THE FOUNDATION STONE SHALL BE LEVELLED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM 1" (25mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M3 DESIGNATION OF #3 OR #4.
- 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" (300mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- 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 1-888-882-2698 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

### NOTES FOR CONSTRUCTION EQUIPMENT

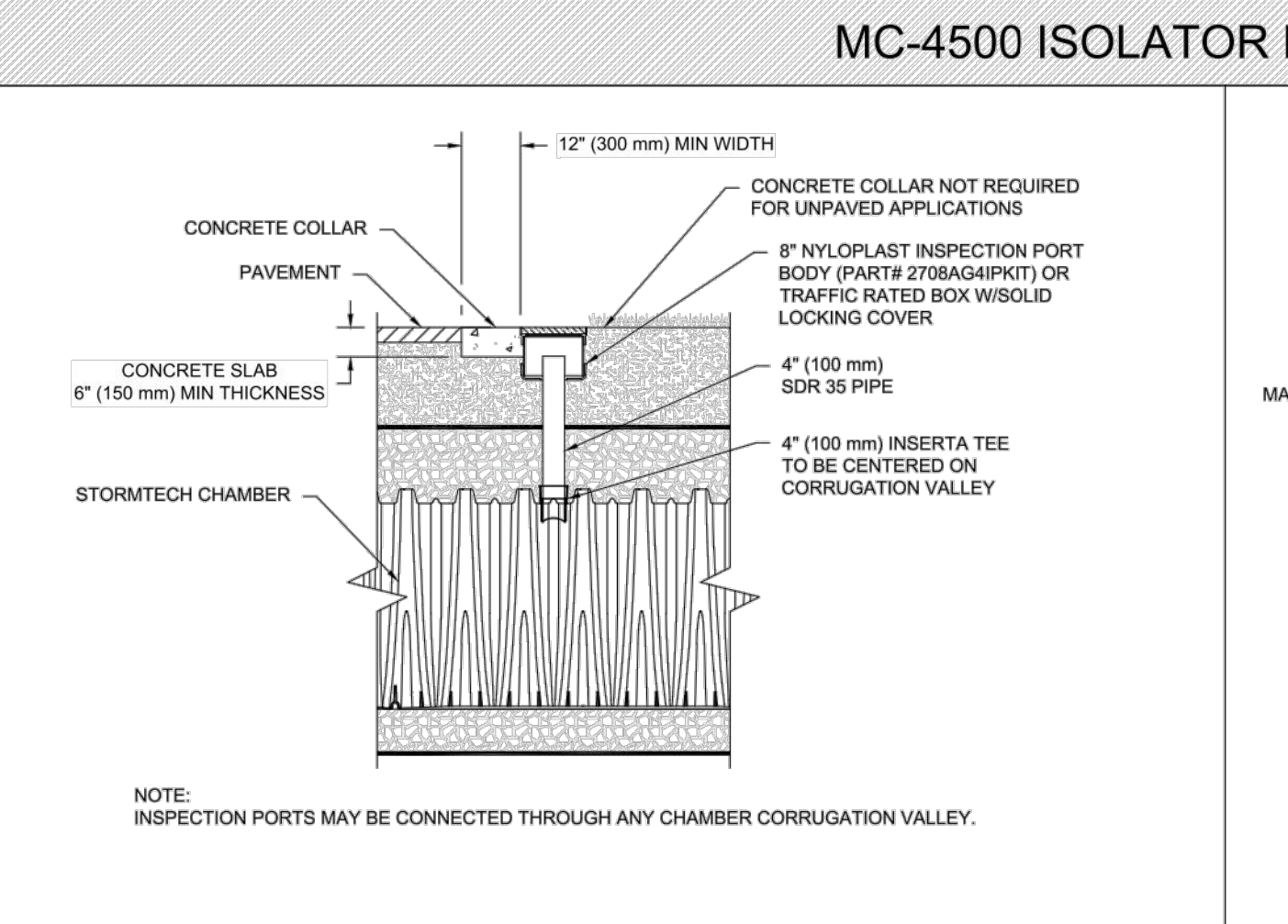
- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-4500 CHAMBERS IS LIMITED:
  - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
  - NO RUBBER Tired LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER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



PART #	STUB	B	C
MC4500EP00T	0" (150 mm)	42.54" (1081 mm)	—
MC4500EP00B	—	—	0.86" (22 mm)
MC4500EP00B	0" (200 mm)	40.50" (1029 mm)	—
MC4500EP10T	10" (250 mm)	38.37" (975 mm)	—
MC4500EP10B	—	—	1.33" (34 mm)
MC4500EP12T	12" (300 mm)	35.69" (907 mm)	—
MC4500EP12B	—	—	1.55" (39 mm)
MC4500EP15B	15" (375 mm)	32.72" (831 mm)	—
MC4500EP15T	—	—	1.70" (43 mm)
MC4500EP18T	18" (450 mm)	29.36" (746 mm)	—
MC4500EP18B	—	—	1.97" (50 mm)
MC4500EP19B	—	—	—
MC4500EP24T	—	23.09" (586 mm)	—
MC4500EP24TW	24" (600 mm)	—	2.26" (57 mm)
MC4500EP30BW	30" (750 mm)	—	2.96" (75 mm)
MC4500EP30BW	36" (900 mm)	—	3.25" (83 mm)
MC4500EP42BW	42" (1050 mm)	—	3.55" (90 mm)

### INSPECTION & MAINTENANCE

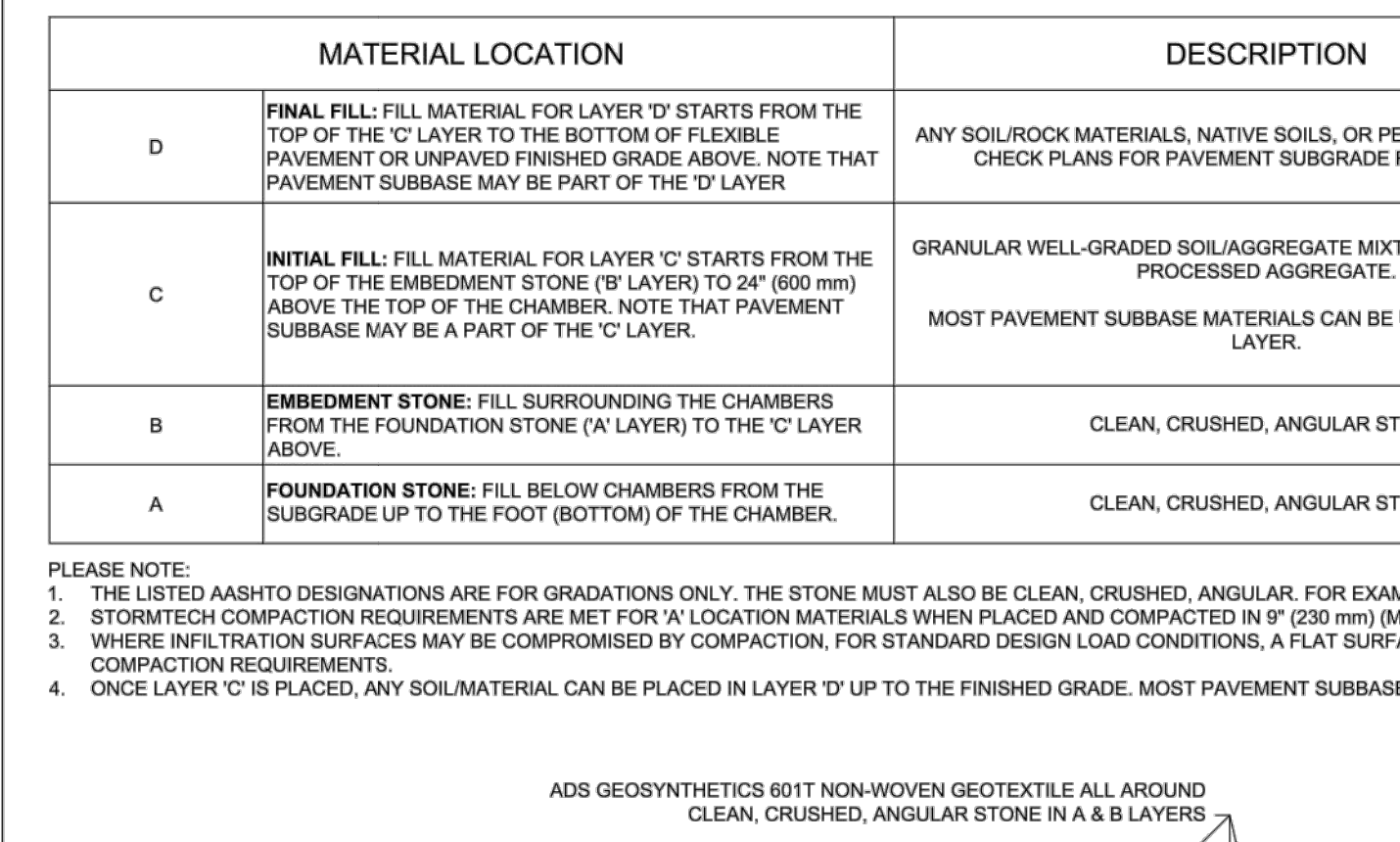
- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
  - REMOVE/OPEN LID ON NYLON/PLASTIC INLINE DRAIN
  - REMOVE AND CLEAN FLESTORM FILTER IF INSTALLED
  - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT (OPTIONAL)
  - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
  - ALL ISOLATOR ROW PLUS ROWS
    - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
    - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - MIRRORS OR HOLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
    - 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 FIXED CURVE CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
  - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
  - VACUUM STRUCTURE SLUMP 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
- 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.
  - CONDUCT SETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



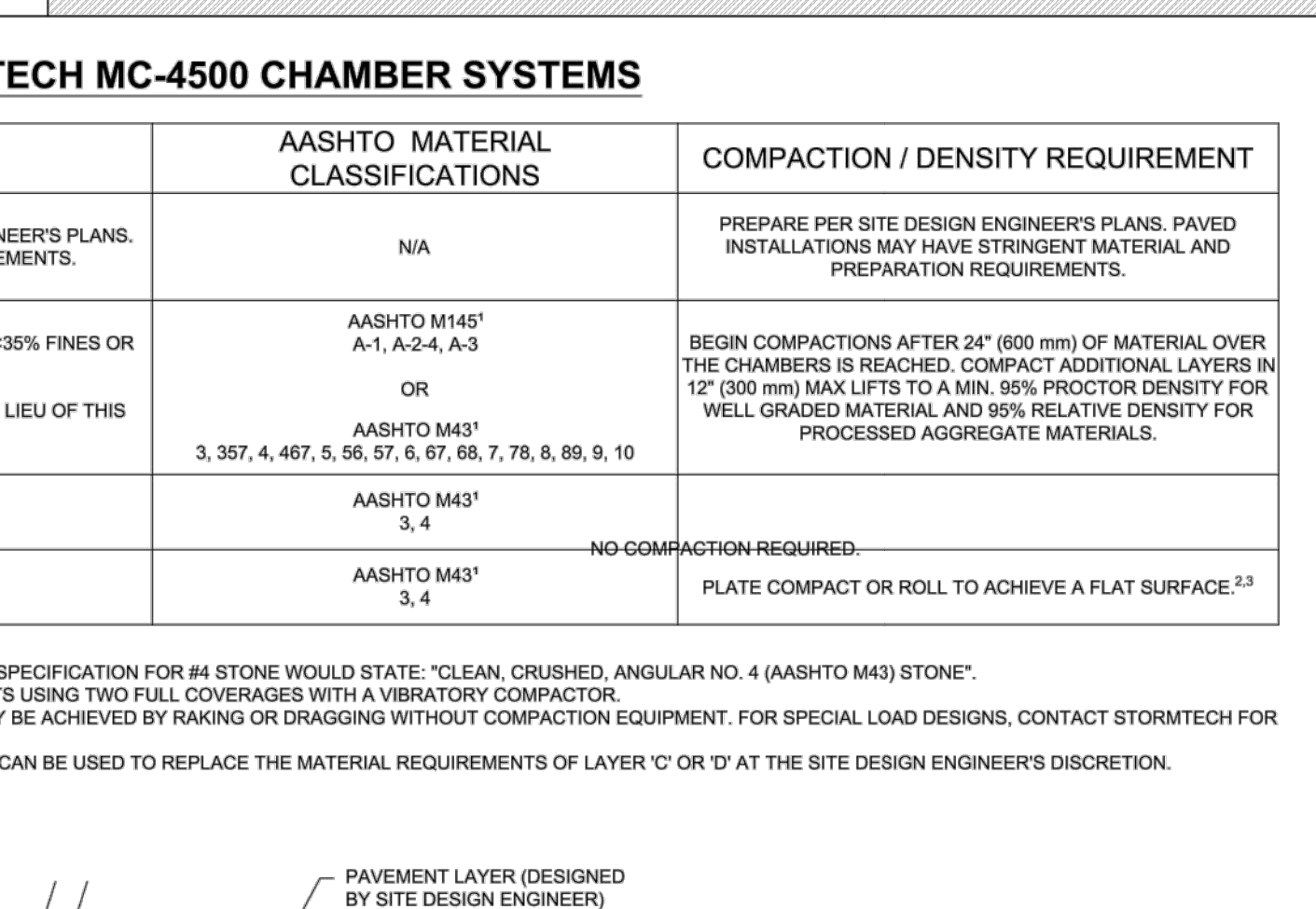
### ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

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.	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 PART OF THE 'C' LAYER.	AASHTO M145 <sup>1</sup> A-1, A-1.5, A-3 OR AASHTO M3 <sup>2</sup> 3, 3.57, 4, 4.67, 5, 5.6, 5.7, 6.7, 6.8, 7, 7.8, 8, 8.6, 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. PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 98% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M3 <sup>2</sup> 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M3 <sup>2</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>3,4</sup>

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



### MC-4500 CROSS SECTION DETAIL



DATE: \_\_\_\_\_ PROJECT NO: \_\_\_\_\_  
 DRAWN: \_\_\_\_\_ REVIEWED: \_\_\_\_\_ REV: \_\_\_\_\_  
 NOT TO SCALE

STANDARD DETAILS  
 MC-4500

Stormtech  
 4640 TRUEMAN BLVD  
 HILLIARD, OH 43026

SHEET

PDD SPECIFIC PLAN SUBMITTAL  
 06/03/2022

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PROJECT  
**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO. 21-25290  
 FILE NAME 25290 CO-DETAILS  
 DRAWN BY AAG/SMW  
 DESIGNED BY AAG/SMW/KBR  
 REVIEWED BY KBR  
 ORIGINAL ISSUE DATE

CLIENT PROJECT NO. -

TITLE  
**SITE DETAILS**

**GENERAL NOTES**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-8", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPLETE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 8 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING ASTM A1918 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH. 16 INCH C-C MAXIMUM SPACING. PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL TO THE POINT OF EMBEDMENT. MINIMUM LENGTH OF 10 INCHES. MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 3/8 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO M198 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M198.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANGING IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANGING IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M198.

SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES.

SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURER'S RECOMMENDATIONS CONFORMING TO ASTM C-190 (TYP).

SEE MANHOLE COVER OPENING MATRIX.

**MANHOLE COVER OPENING MATRIX**

MANHOLE COVER TYPE	C	ALL JS	K	L	M
2 DIA.	X	X	X	X	X
3 DIA.			X	X	X

**PIPE MATRIX**

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES (18" SEPARATION (IN))	MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
3-FT	15	12	4
4-FT	24	18	4
5-FT	36	24	5
6-FT	42	30	6
7-FT	48	36 <sup>1/2</sup>	7
8-FT	60	42	8
9-FT	66	54	9
10-FT	72	60	10

\* 3/8" PIPE AND A 62" PIPE CAN BE PLACED WITHIN 90 DEGREES. SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

**MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

**MANHOLES, 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED: [Signature]  
DATE: [Date]  
ROADWAY STANDARDS DEVELOPMENT ENGINEER

**GENERAL NOTES**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 933.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-8", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPLETE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 8 INCHES IN DEPTH WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANGING IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANGING IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 933.

CONTRACTOR TO PROVIDE DRAWINGS STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

CONCRETE KEY POURED AFTER INSTALLATION. 2" SLUMP MEASURED FROM TOP OF KEY.

**CATCH BASIN COVER MATRIX**

CATCH BASIN SIZE	NET COVER TYPE	F	ALL HS
2X3-FT	2	3	X
2.5X3-FT	2.5	3	X

**PIPE MATRIX**

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	WIDTH (IN)	LENGTH (IN)
2X3-FT	18	24	36
2.5X3-FT	24	30	42

**CATCH BASINS 2X3-FT AND 2.5X3-FT**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED: [Signature]  
DATE: [Date]  
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

**DRAWING NOT TO SCALE**

**SEWER PIPE JOINT MATERIALS**  
CONCRETE PIPE JOINTS: GASKET (ASTM D-1535)  
PVC PIPE: ELASTOMERIC GASKET (ASTM D-3218 & F-4173)

**DETAILS OF SEWER TRENCHES**

**WET TRENCH**: 1/2" OF WETTED STONE UP TO SPRING LINE OF PIPE REQUIRED IN WET TRENCH WITHOUT EXTRA COST.

**DRY TRENCH**: 4" OF WASHED STONE PIPE BEDDING.

**DETAIL OF MANHOLE FRAME & COVER**

**DETAILS OF STANDARD MANHOLE FOR 30" PIPE OR SMALLER**

**DETAILS OF STANDARD MANHOLE FOR 36" PIPE OR LARGER**

**DETAILS OF TYPE "A" CATCH BASIN CASTING**

**DETAILS OF TYPE "B" CATCH BASIN CASTING**

**DETAIL OF TYPE "A" OR "B" CATCH BASIN**

**STORM SEWER DETAILS**

PROJECT No. [Blank]  
LOCATION: [Blank]  
REVISION: D-2  
DATE: [Blank]  
ENGINEERING DEPT.  
City of LaCrosse, Wis.



PRELIMINARY NOT FOR CONSTRUCTION

PDD SPECIFIC PLAN SUBMITTAL  
06/03/2022

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PROJECT  
**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO. 21-25290  
FILE NAME 25290 CO-DETAILS  
DRAWN BY AAG/SMW  
DESIGNED BY AAG/SMW/KBR  
REVIEWED BY KBR  
ORIGINAL ISSUE DATE [Blank]  
CLIENT PROJECT NO. [Blank]

TITLE  
**SITE DETAILS**

SHEET  
**C0-14**



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	646.85	EX-S-1	646.03	8"	PVC	SDR-35	0.40%	155
SP-2	S-2	647.16	S-1	646.75	8"	PVC	SDR-35	0.40%	103
SP-2A	WEST TOWNHOMES	649.16	S-2	648.86	6"	PVC	SDR-26	1.00%	30
SP-2B	45° BEND	648.08	S-2	648.02	8"	PVC	SDR-35	1.00%	7
SP-2C	BUILDING 1	649.00	45° BEND	648.08	8"	PVC	SDR-35	1.00%	91
SP-3	TEE	647.82	S-2	647.26	8"	PVC	SDR-35	0.40%	138
SP-3A	MIDDLE TOWNHOMES	650.23	TEE	649.93	6"	PVC	SDR-26	1.00%	30
SP-4	S-3	648.22	TEE	647.82	8"	PVC	SDR-35	0.40%	101
SP-4A	45° BEND	655.32	S-3	655.13	8"	PVC	SDR-35	1.00%	19
SP-4B	BUILDING 2	655.58	45° BEND	655.32	8"	PVC	SDR-35	1.00%	24
SP-5	S-4	648.69	S-3	648.32	8"	PVC	SDR-35	0.40%	93
SP-5A	EAST TOWNHOMES	651.36	S-4	651.06	6"	PVC	SDR-26	1.00%	30
SP-6	S-5	649.80	S-4	649.79	8"	PVC	SDR-35	0.40%	202
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	17.11	663.76	646.85	SP-1
S-3	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	16.23	664.45	648.22	SP-4
S-4	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	16.19	664.88	648.69	SP-5
S-5	SANITARY MANHOLE	48 Ø	RC	NEENAH R-1670	14.64	664.24	649.80	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	0.92%	27
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	655.81	ST-15	655.56	24	RCP	CLASS III	0.42%	61
P-11A	ST-15	655.56	ADS STORMTECH MC-4500	655.50	24	RCP	CLASS III	0.64%	9
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	0.50%	30
P-13	BOTTOM SOUTH RAMP TRENCH DRAIN	653.47	ST-9	654.32	4	PVC	FORCEMAN	7.02%	12
P-14	ST-9	654.32	ST-10	657.57	4	PVC	FORCEMAN	9.60%	34
P-15	NORTH RAMP TRENCH DRAIN	653.25	ST-19	653.25	4	PVC	FORCEMAN	0.00%	7
P-16	ST-19	653.31	ST-26	657.00	4	PVC	FORCEMAN	7.01%	53
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	1.72%	6
P-21	ST-23	658.29	ST-24	657.95	6	HDPE	CLASS III	1.00%	34
P-22	ST-24	657.95	ST-2	657.39	6	HDPE	CLASS III	1.00%	55
P-23	ST-21	655.34	ST-20	655.25	12	RCP	RCP	0.40%	22

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	WtDOT CATCH BASIN	36 x 24	RC	TYPE T	5.65	663.87	658.22	P-1	
ST-2	WtDOT CATCH BASIN	36 x 24	RC	TYPE T	7.49	664.29	656.80	P-2	
ST-3	WtDOT CATCH BASIN	36 x 24	RC	TYPE T	8.72	664.52	655.80	P-3	
ST-4	WtDOT MANHOLE	36 Ø	RC	TYPE C	5.33	663.83	658.49	P-4	
ST-5	WtDOT MANHOLE	36 Ø	RC	TYPE C	6.42	664.73	658.31	P-4A	
ST-6	WtDOT MANHOLE	36 Ø	RC	TYPE C	7.15	665.10	657.95	P-5	
ST-7	WtDOT MANHOLE	36 Ø	RC	TYPE C	6.96	664.16	657.20	P-6	
ST-8	WtDOT MANHOLE	48 Ø	RC	TYPE C	6.56	662.77	656.21	P-10	
ST-10	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	6.17	663.59	657.42	P-8	
ST-11	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	6.06	663.80	657.74	P-7	
ST-12	WtDOT MANHOLE	36 Ø	RC	TYPE C	6.45	662.66	656.20	P-9	
ST-13	WtDOT MANHOLE	36 Ø	RC	TYPE C	7.35	663.04	655.68	P-11	
ST-14	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	6.43	662.44	656.01	P-11B	
ST-15	WtDOT MANHOLE	36 Ø	RC	TYPE C	8.02	663.58	655.56	P-11A	
ST-16	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	7.31	663.09	655.78	P-12	
ST-17	WtDOT MANHOLE	36 Ø	RC	TYPE C	7.23	662.58	655.35	P-19	
ST-18	WtDOT MANHOLE	36 Ø	RC	TYPE C	7.06	661.79	654.72	P-18	
ST-20	WtDOT MANHOLE	36 Ø	RC	TYPE C	6.41	661.43	655.02	EXISTING	
ST-21	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	5.70	660.73	655.03	P-23	
ST-22	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	1.03	661.77	660.73	EXISTING	
ST-23	INLINE DRAIN	8 Ø	PVC	STANDARD GRATE	6.06	664.35	658.29	P-21	
ST-24	DRAIN BASIN	8 Ø	PVC	STANDARD GRATE	6.38	664.32	657.95	P-22	
ST-25	WtDOT CATCH BASIN	36 x 24	RC	TYPE H-S	5.69	664.34	658.65	P-1A	
ST-26	WtDOT CATCH BASIN	36 Ø	RC	TYPE C	8.02	665.02	657.00	P-1B	
ST-27	WtDOT MANHOLE	36 Ø	RC	TYPE C	9.30	664.85	655.55	P-3A	
ST-28	WtDOT MANHOLE	48 Ø	RC	TYPE C	9.30	663.55	654.25	EXISTING	

PDD SPECIFIC PLAN SUBMITTAL  
06/03/2022

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PROJECT

**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

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

TITLE

**UTILITY SCHEDULES**

SHEET  
**C0-20**

PRELIMINARY NOT FOR CONSTRUCTION

**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 = (1.696) 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 overflowing.

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 recurrence 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.



PDD SPECIFIC PLAN SUBMITTAL  
06/03/2022

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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	AAG/SMW
DESIGNED BY	AAG/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	6/3/2022
CLIENT PROJECT NO.	-

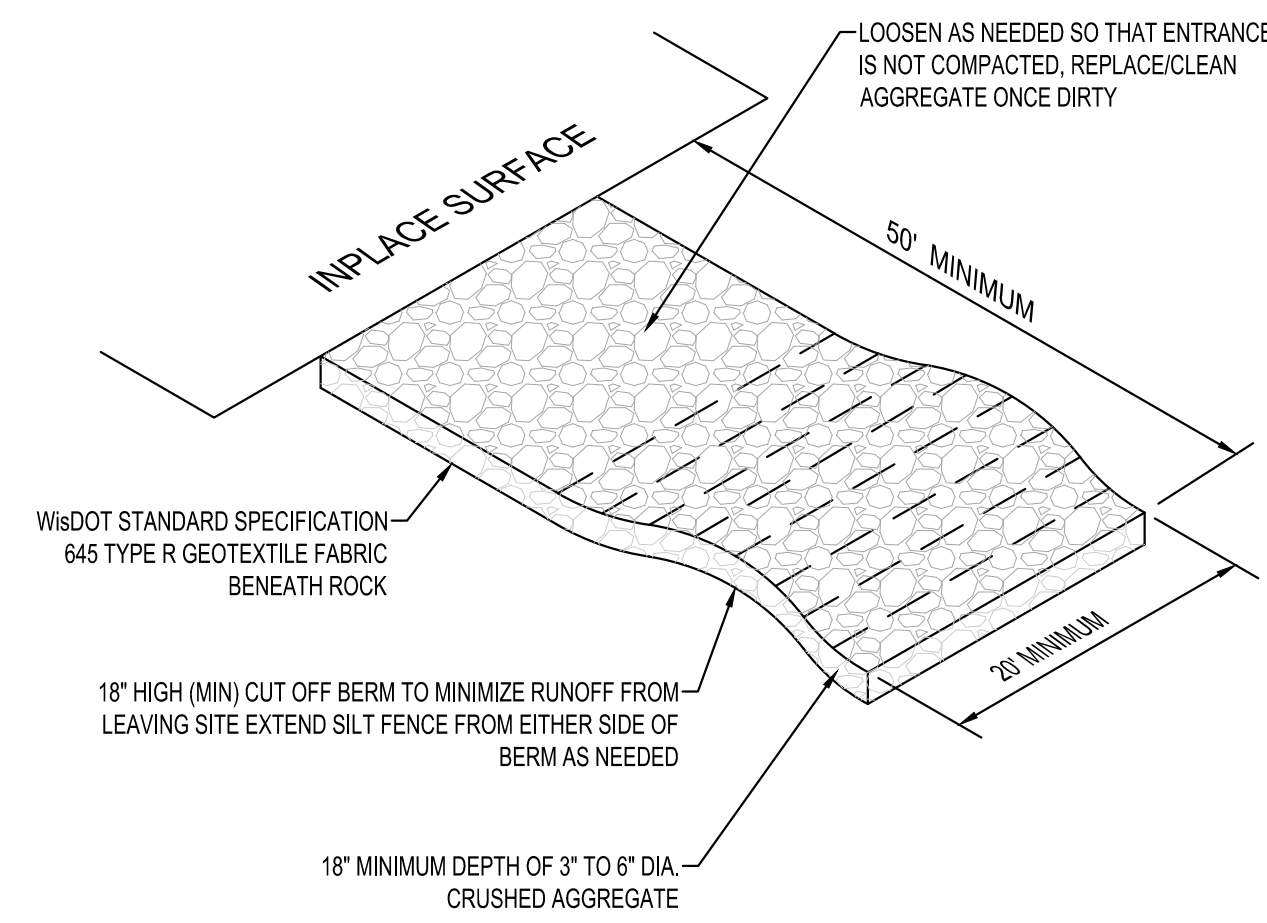
TITLE

**STORMWATER  
POLLUTION  
PREVENTION  
PLAN NOTES**

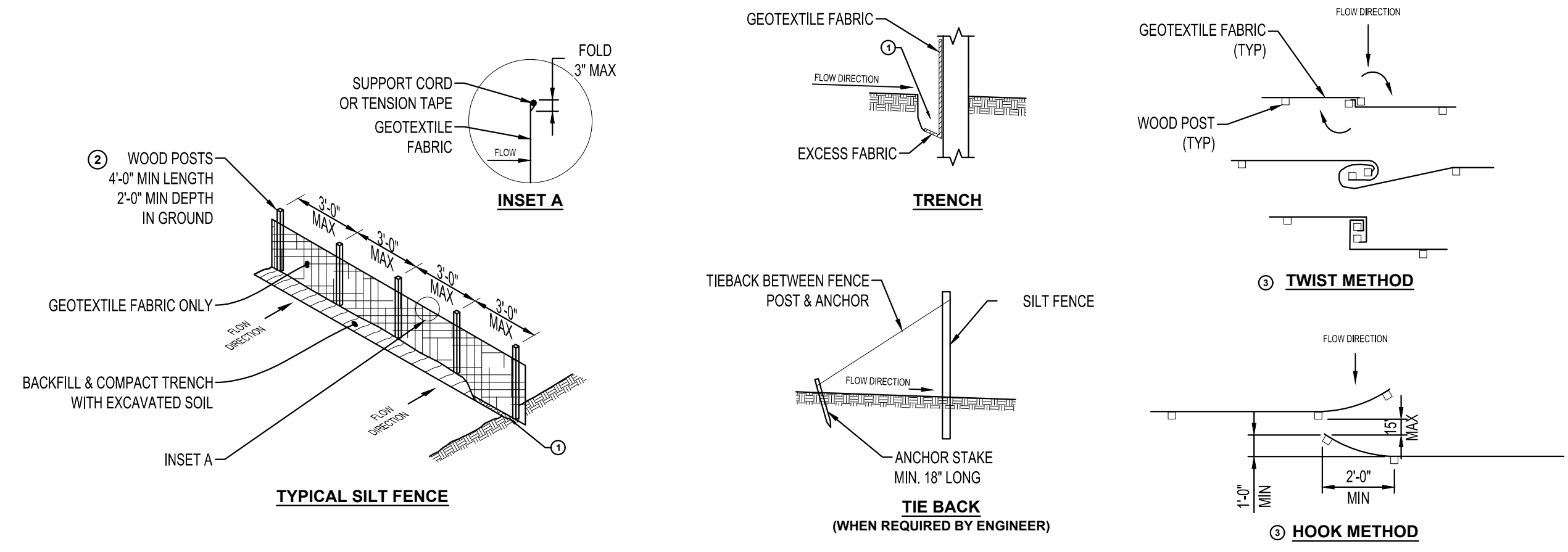
SHEET

**C1-10**





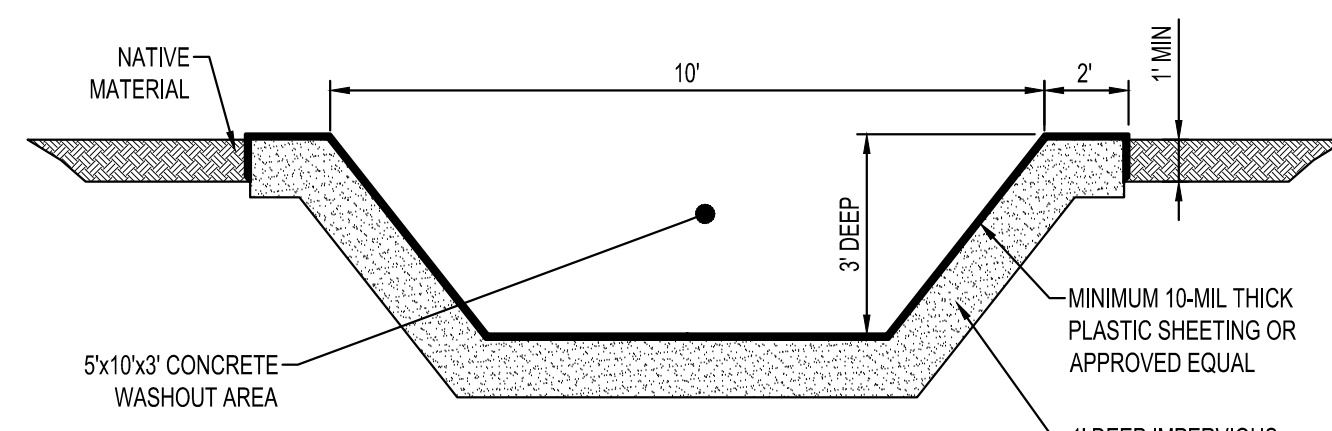
**ROCK TRACKING PAD**  
NTS



**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. 8" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.
- 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.
- WOOD POST SHALL BE A MINIMUM SIZE OF 1 1/2" x 1 1/2" OF OAK OR HICKORY.
- 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:
  - TWIST METHOD - OVERLAP THE END POSTS & TWIST, OR ROTATE AT LEAST 180°.
  - HOOK METHOD - HOOK END OF EACH SILT FENCE LENGTH.

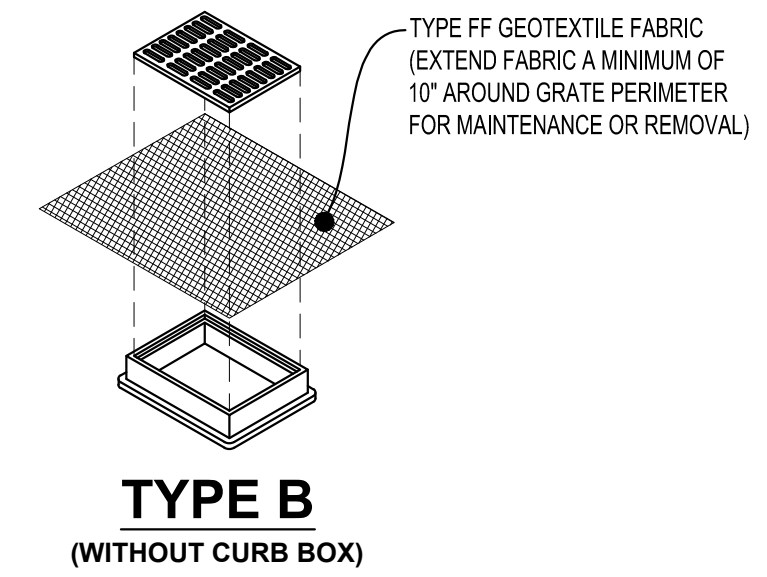
**SILT FENCE**  
NTS



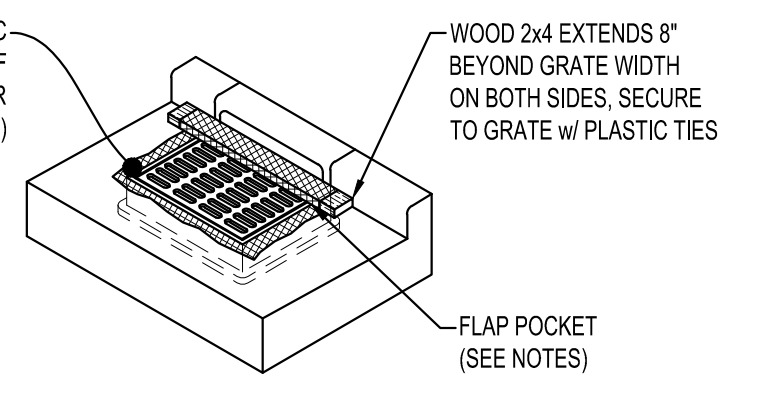
**NOTES:**

- 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)

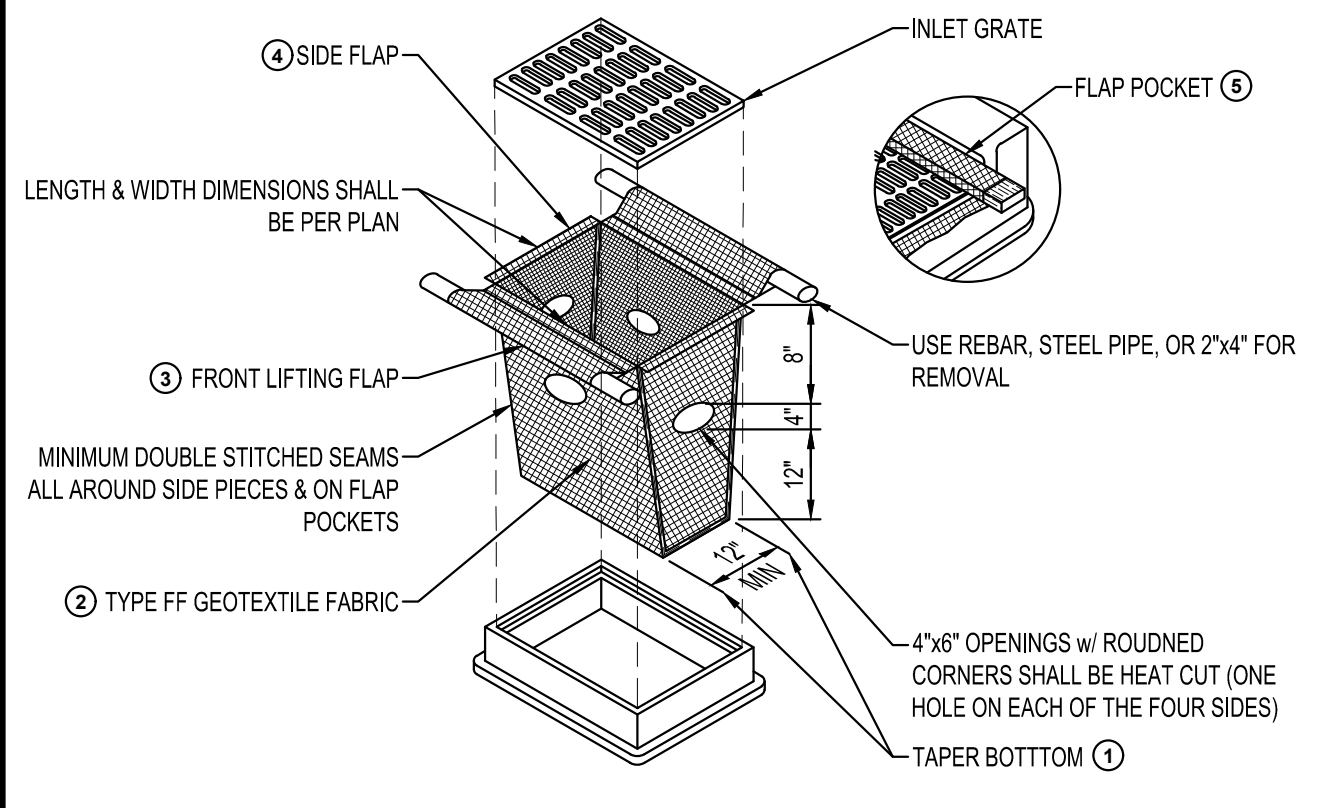


**TYPE C**  
(WITH CURB BOX)

**NOTES:**

- FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2" x 4". THE REBAR, STEEL PIPE, OR WOOD SHALL BE INSTALLED IN THE 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.

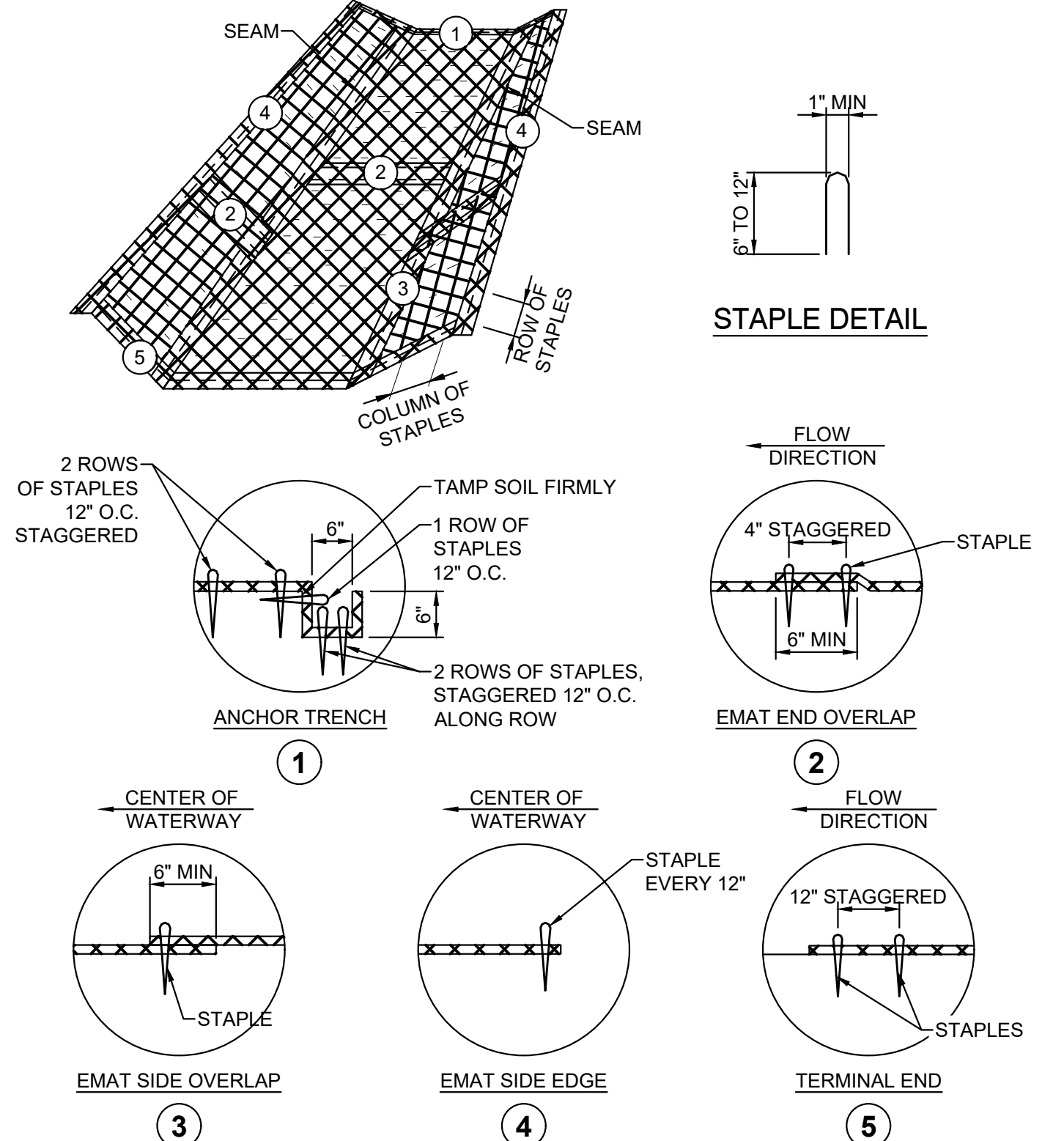
**TYPES B & C**  
**INLET PROTECTION**  
NTS



**NOTES:**

- 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.
- GEOTEXTILE FABRIC TYPE FF FOR FLAPS, TOP & BOTTOM OF OUTSIDE OF FILTER BAG. FRONT, BACK & BOTTOM OF FILTER BAG BEING ONE PIECE.
- FRONT LIFTING FLAP IS TO BE USED WHEN REMOVING & MAINTAINING FILTER BAG.
- SIDE FLAPS SHALL BE A MAXIMUM OF TWO INCHES LONG. FOLD THE FABRIC OVER & REINFORCE WITH MULTIPLE STITCHES.
- 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 W6DOT 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:
  - 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.
  - 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.
  - MATS ON SIDE SLOPES SHALL OVERLAP A MINIMUM OF 6" OVER THE MAT BELOW (SHINGLE STYLE). STAPLE OVERLAP AT 12" INTERVALS. (SEE DETAIL 3)
  - THE OUTER EDGE ALONG SIDES OF THE MAT SHALL BE STAPLED EVERY 12". (SEE DETAIL 4)
  - 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 EMAT.
  - DOWNSTREAM (TERMINAL) END OF BLANKET SHALL BE STAPLED WITH A DOUBLE ROW OF STAGGERED STAPLES 12" APART. (SEE DETAIL 5)

**EROSION MAT INSTALLATION**  
NTS

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06/03/2022

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PROJECT  
**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

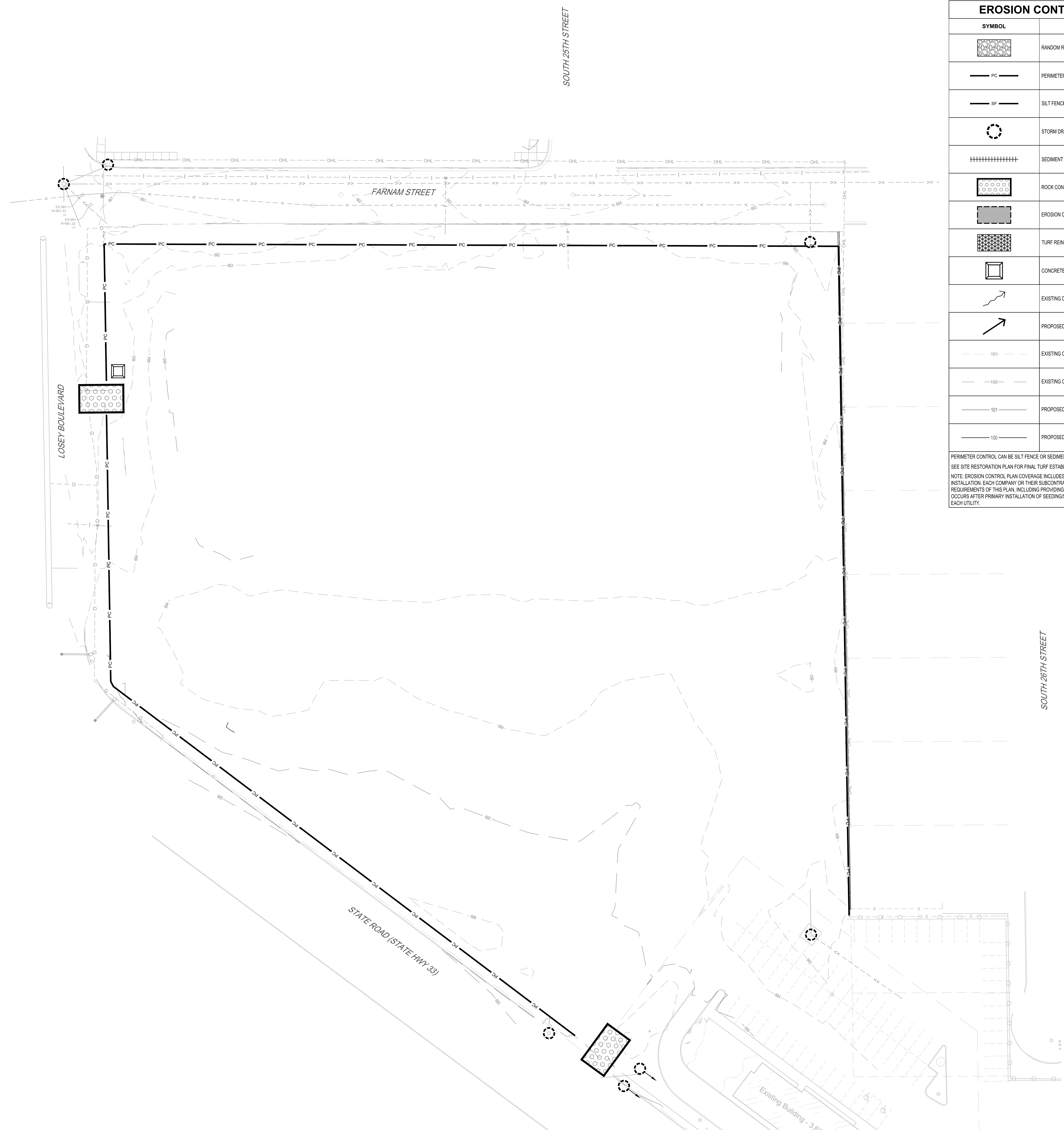
PROJECT NO. 21-25290  
 FILE NAME 25290 C1-SWPPP  
 DRAWN BY AAG/SMW  
 DESIGNED BY AAG/SMW/KBR  
 REVIEWED BY KBR  
 ORIGINAL ISSUE DATE  
 CLIENT PROJECT NO. -

TITLE  
**STORMWATER POLLUTION PREVENTION PLAN DETAILS**

SHEET  
**C1-20**

PRELIMINARY NOT FOR CONSTRUCTION

PLOT DATE: 6/29/22 2:53 PM



EROSION CONTROL LEGEND	
SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS __
	PERIMETER CONTROL
	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
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	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.



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PROJECT  
**COPPER ROCKS DEVELOPMENT**

LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

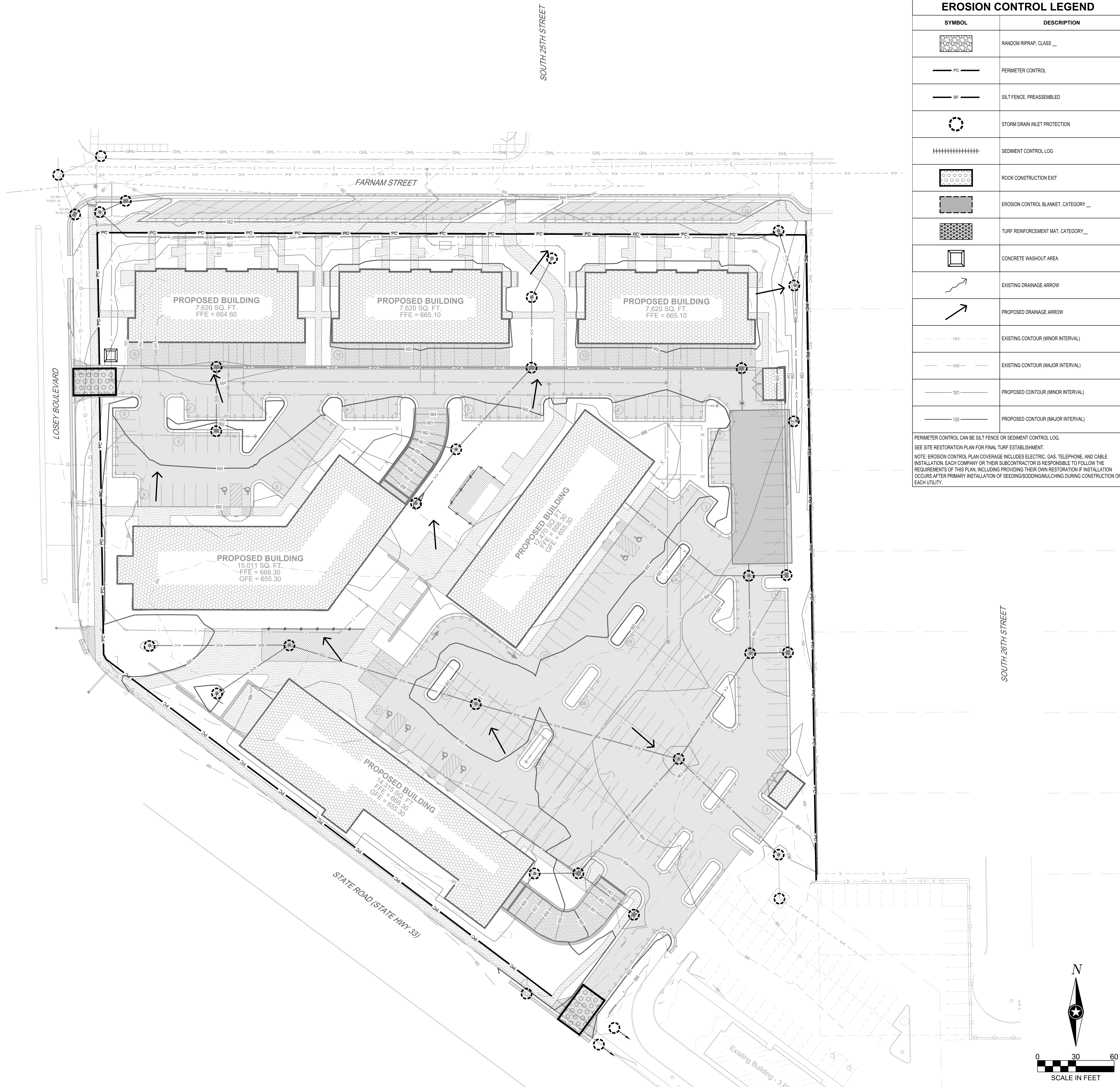
PROJECT NO.	21-25290
FILE NAME	25290 C1-SWPPP
DRAWN BY	AAG/SMW
DESIGNED BY	AAG/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	6/29/22
CLIENT PROJECT NO.	-

TITLE  
**PRE CONSTRUCTION POLLUTION PREVENTION PLAN**

SHEET  
**C1-30**

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PLOT DATE: 02/20/22 1:53 PM



EROSION CONTROL LEGEND	
SYMBOL	DESCRIPTION
	RANDOM RIPRAP, CLASS __
	PERIMETER CONTROL
	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
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	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.



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PROJECT  
**COPPER ROCKS DEVELOPMENT**

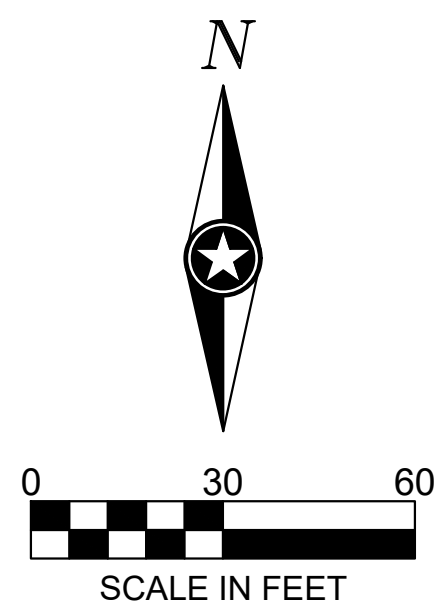
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REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	21-25290
FILE NAME	25290 C1-SWPPP
DRAWN BY	AAG/SMW
DESIGNED BY	AAG/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	02/20/22
CLIENT PROJECT NO.	-

TITLE  
**STORMWATER POLLUTION PREVENTION PLAN**

SHEET  
**C1-40**



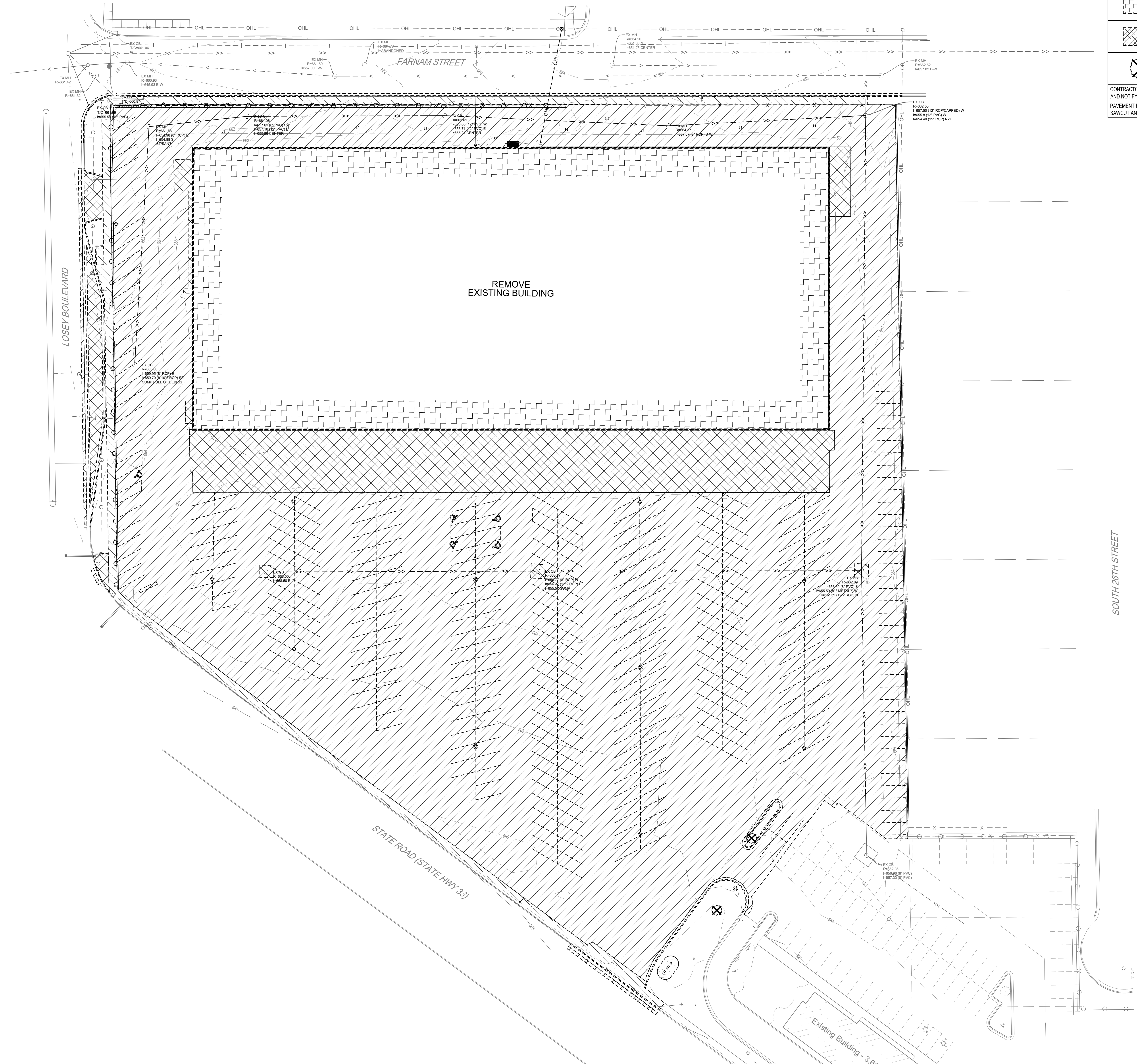
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**REMOVAL LEGEND**

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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06/03/2022

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PROJECT  
**COPPER ROCKS DEVELOPMENT**

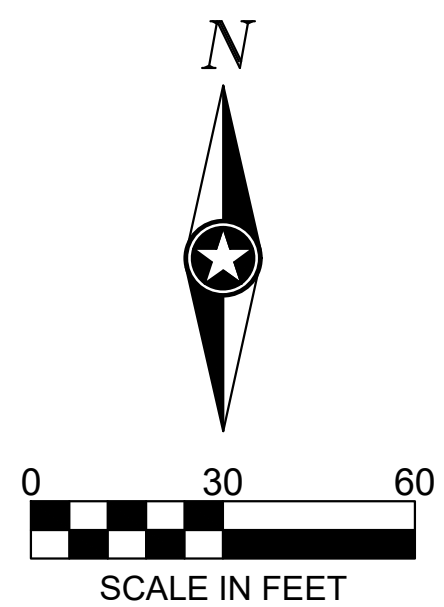
LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

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

TITLE  
**EXISTING SITE AND REMOVALS PLAN**

SHEET  
**C2-10**



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FILE DATE: 6/29/22 2:53 PM

**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
<b>TOTAL</b>	<b>78</b>

**MIXED-USE PARKING DATA**

TYPE	STALLS PROVIDED
PROPOSED STALLS (OUTSIDE)	228
PROPOSED STALLS (UNDERGROUND)	105
ACCESSIBLE STALLS (INCLUDED IN OUTSIDE)	8
<b>TOTAL</b>	<b>338</b>

**SITE AREA SUMMARY**

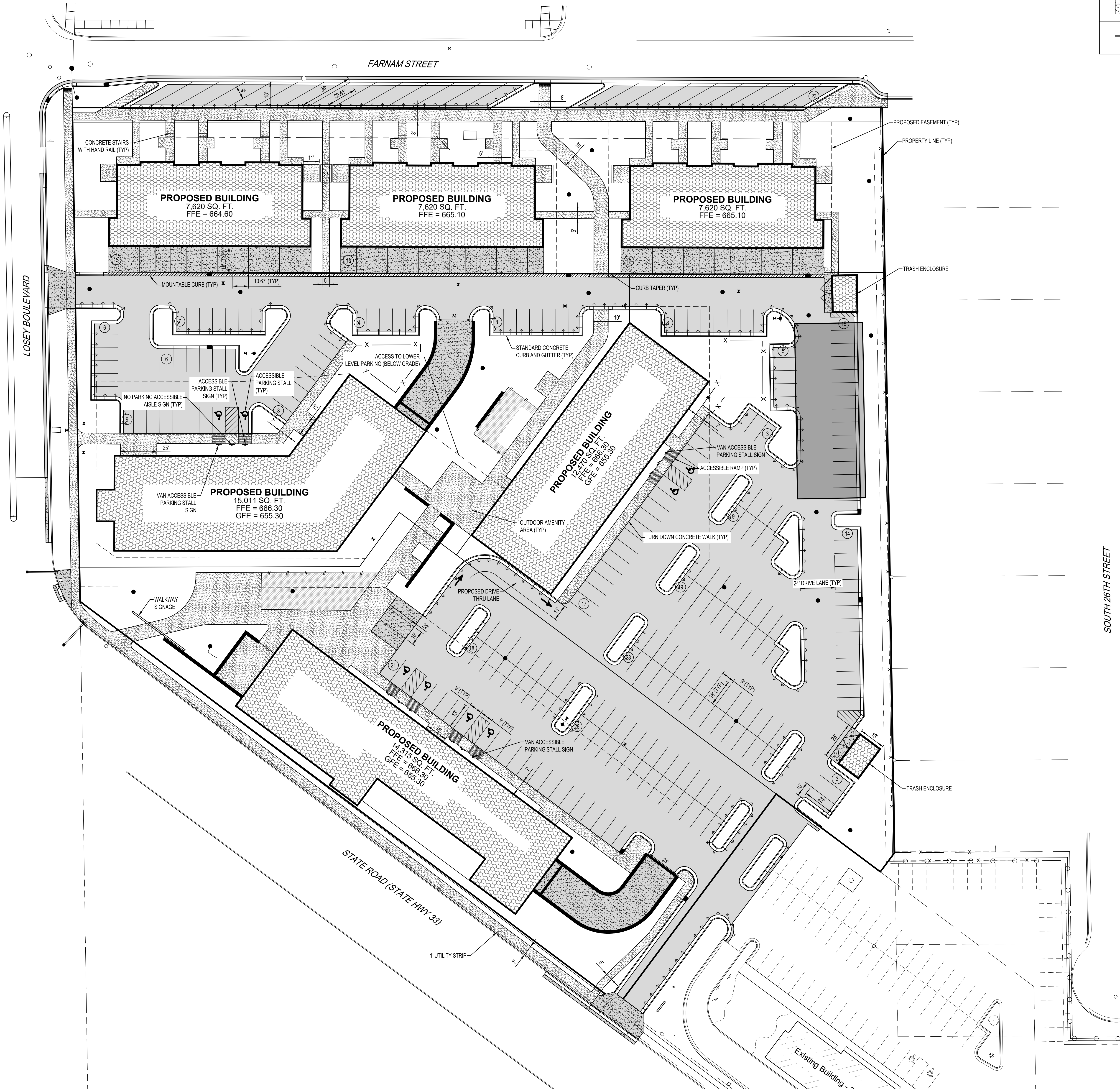
	UNITS	UNITS	PERCENT
PROPOSED BUILDINGS	66,306	SF	1.52 AC 25%
IMPERVIOUS AREA (PARKING/SIDEWALK)	139,705	SF	3.21 AC 51%
OPEN AREA	66,773	SF	1.53 AC 24%
PROPOSED AREA	272,784	SF	6.26 AC 100%
PROPOSED ROW	5,557	SF	0.13 AC
<b>TOTAL AREA</b>	<b>278,341</b>	<b>SF</b>	<b>6.39 AC</b>

**BICYCLE PARKING DATA**

TYPE	SPACES PROVIDED
PROPOSED SPACES (OUTSIDE)	18
TOWNHOME (GARAGE)	60
PROPOSED SPACES (GARAGE)	39
<b>TOTAL</b>	<b>117</b>

**PAVEMENT LEGEND**

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



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06/03/2022

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PROJECT  
**COPPER ROCKS DEVELOPMENT**

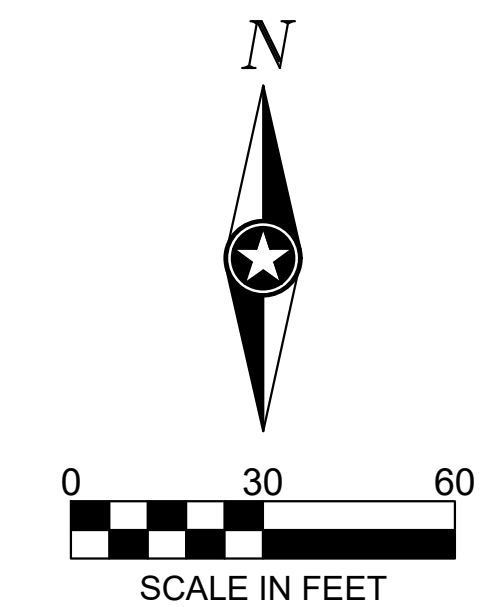
LA CROSSE WISCONSIN

DATE	REVISION SCHEDULE DESCRIPTION	BY

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

TITLE  
**SITE PLAN**

SHEET  
**C3-10**



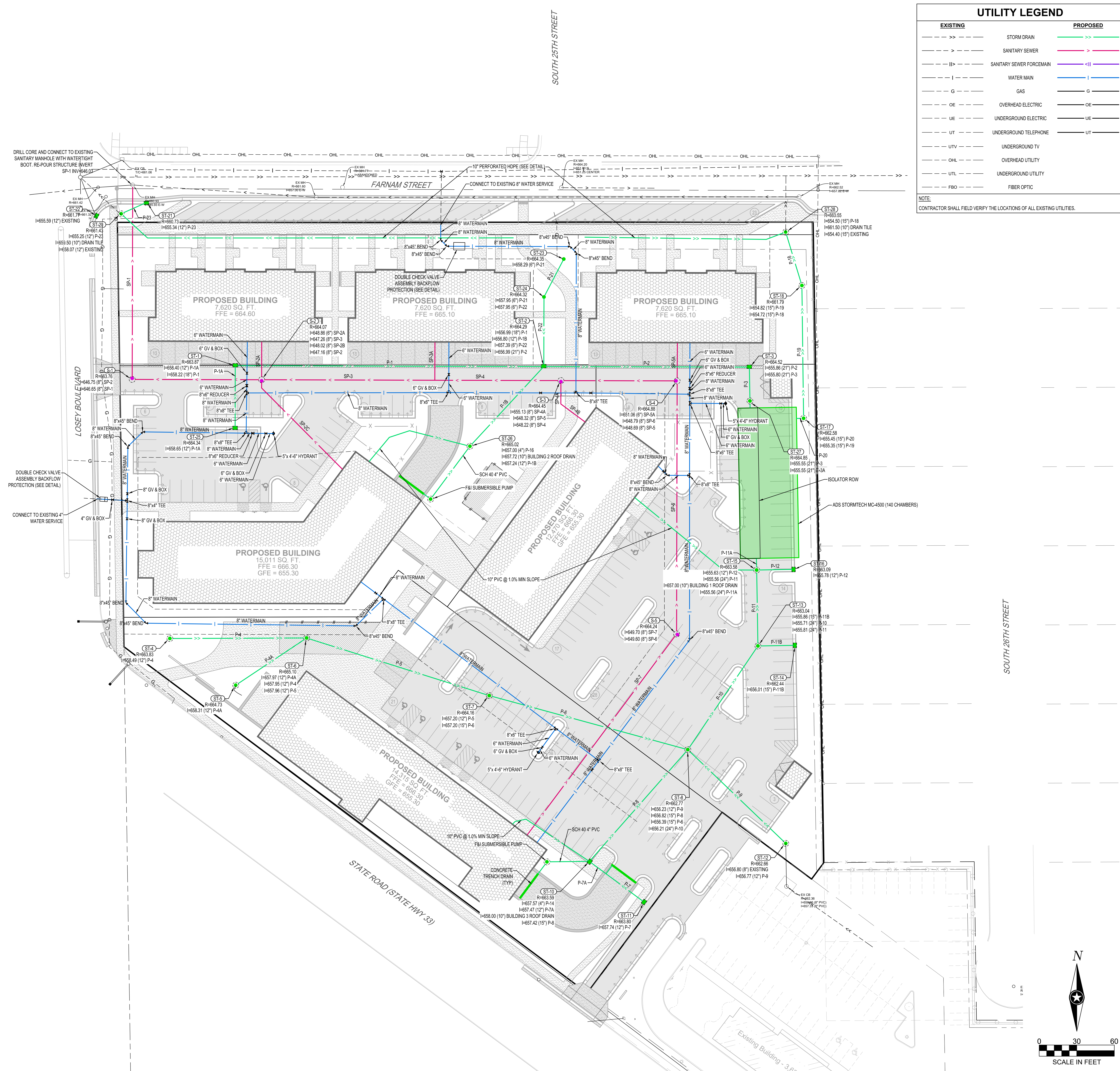
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UTILITY LEGEND	
EXISTING	PROPOSED
--->>---	STORM DRAIN
--->---	SANITARY SEWER
---  ---	SANITARY SEWER FORCEMAIN
---I---	WATER MAIN
---G---	GAS
---OE---	OVERHEAD ELECTRIC
---UE---	UNDERGROUND ELECTRIC
---UT---	UNDERGROUND TELEPHONE
---UTV---	UNDERGROUND 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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06/03/2022

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PROJECT  
**COPPER ROCKS DEVELOPMENT**

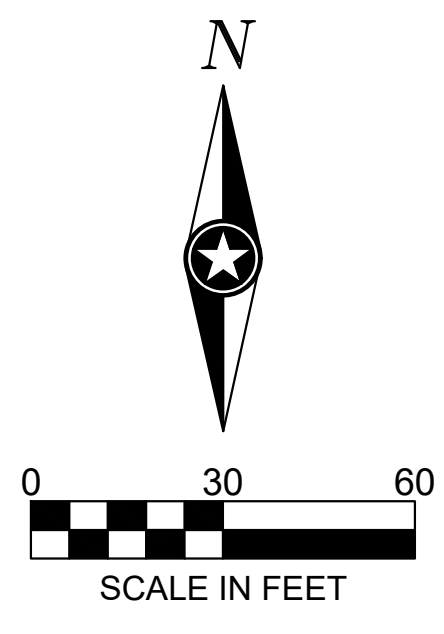
LA CROSSE WISCONSIN

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

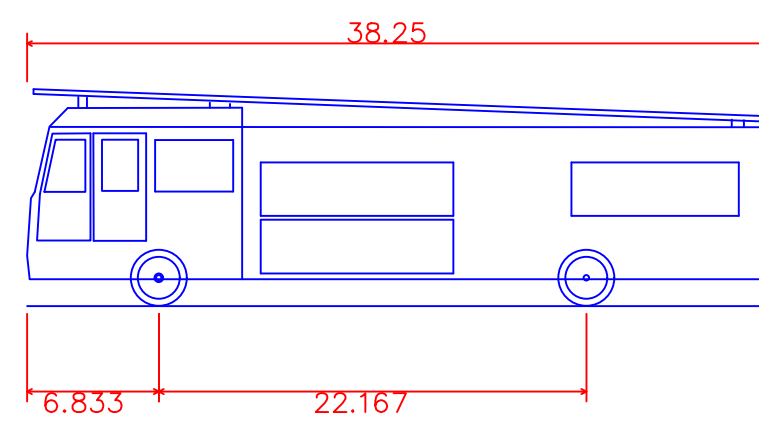
PROJECT NO. 21-25290  
FILE NAME 25290 C3-SITE  
DRAWN BY AAG/SMW  
DESIGNED BY AAG/SMW/KBR  
REVIEWED BY KBR  
ORIGINAL ISSUE DATE  
CLIENT PROJECT NO. -

TITLE  
**SITE UTILITY PLAN**

SHEET  
**C3-11**



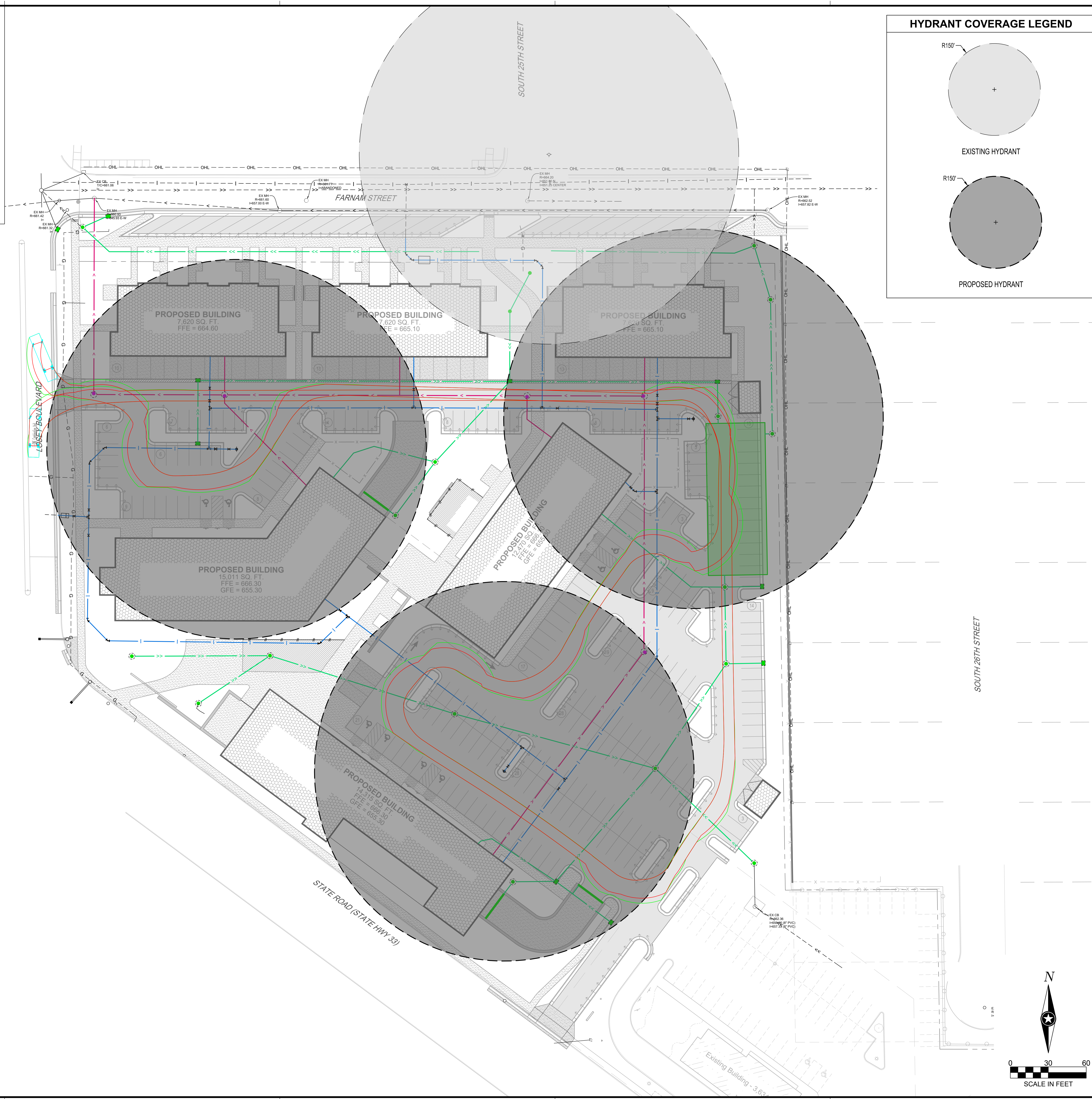
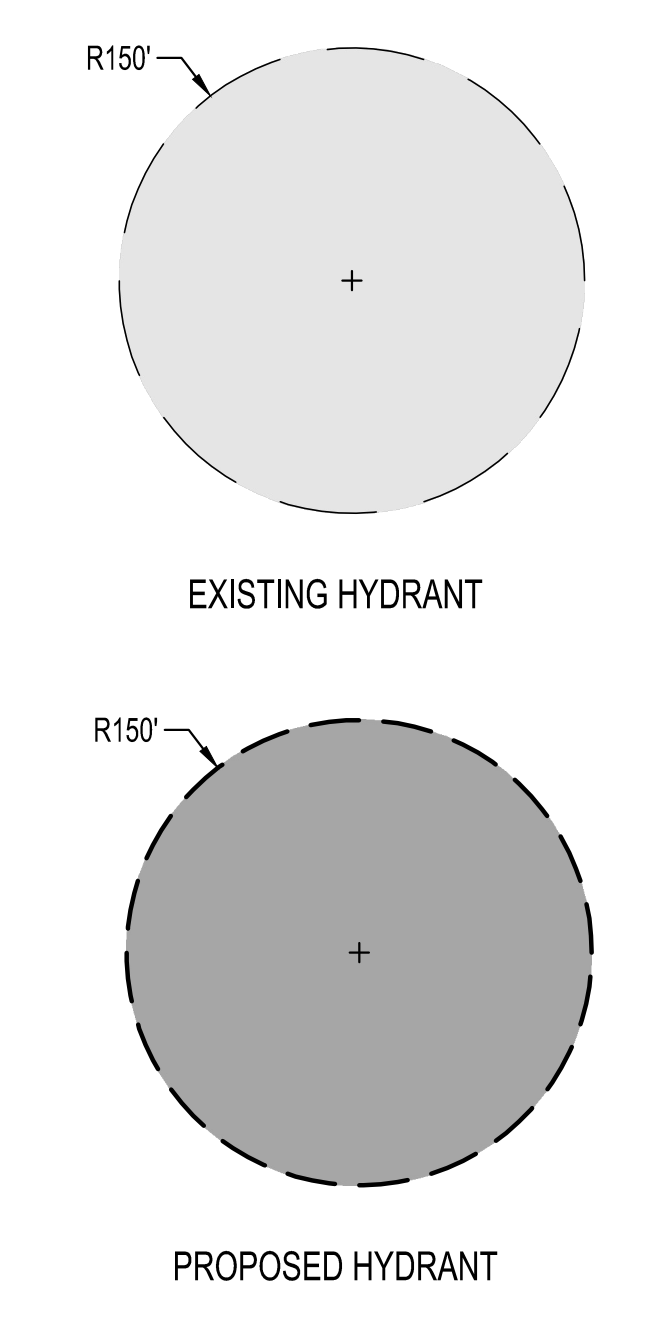
PRELIMINARY NOT FOR CONSTRUCTION



E-ONE Combination Unit  
 Overall Length 38.25ft  
 Overall Width 6.833ft  
 Overall Body Height 22.167ft  
 Min Body Ground Clearance 1.3933ft  
 Track Width 6.833ft  
 Lock-to-lock time 0.00s  
 Max Wheel Angle 45.00°

38.250ft  
 6.833ft  
 22.167ft  
 1.3933ft  
 6.833ft  
 0.00s  
 45.00°

**HYDRANT COVERAGE LEGEND**



PDD SPECIFIC PLAN SUBMITTAL  
 06/03/2022

**NOTE:**  
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PROJECT

**COPPER ROCKS  
 DEVELOPMENT**

LA CROSSE WISCONSIN

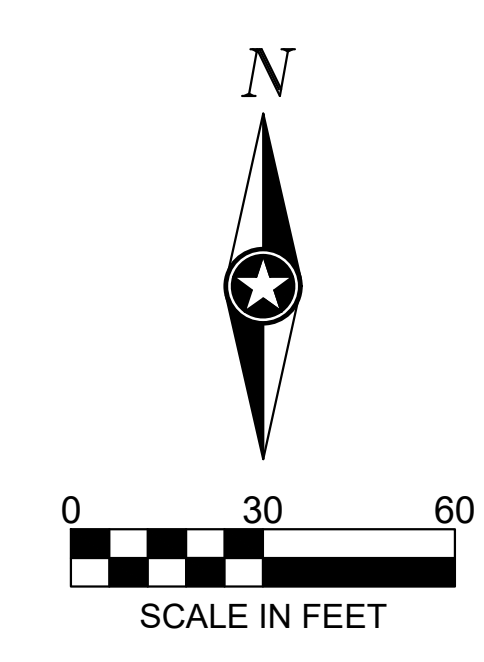
REVISION SCHEDULE		
DATE	DESCRIPTION	BY

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

TITLE

**HYDRANT  
 COVERAGE MAP**

SHEET  
**C3-12**

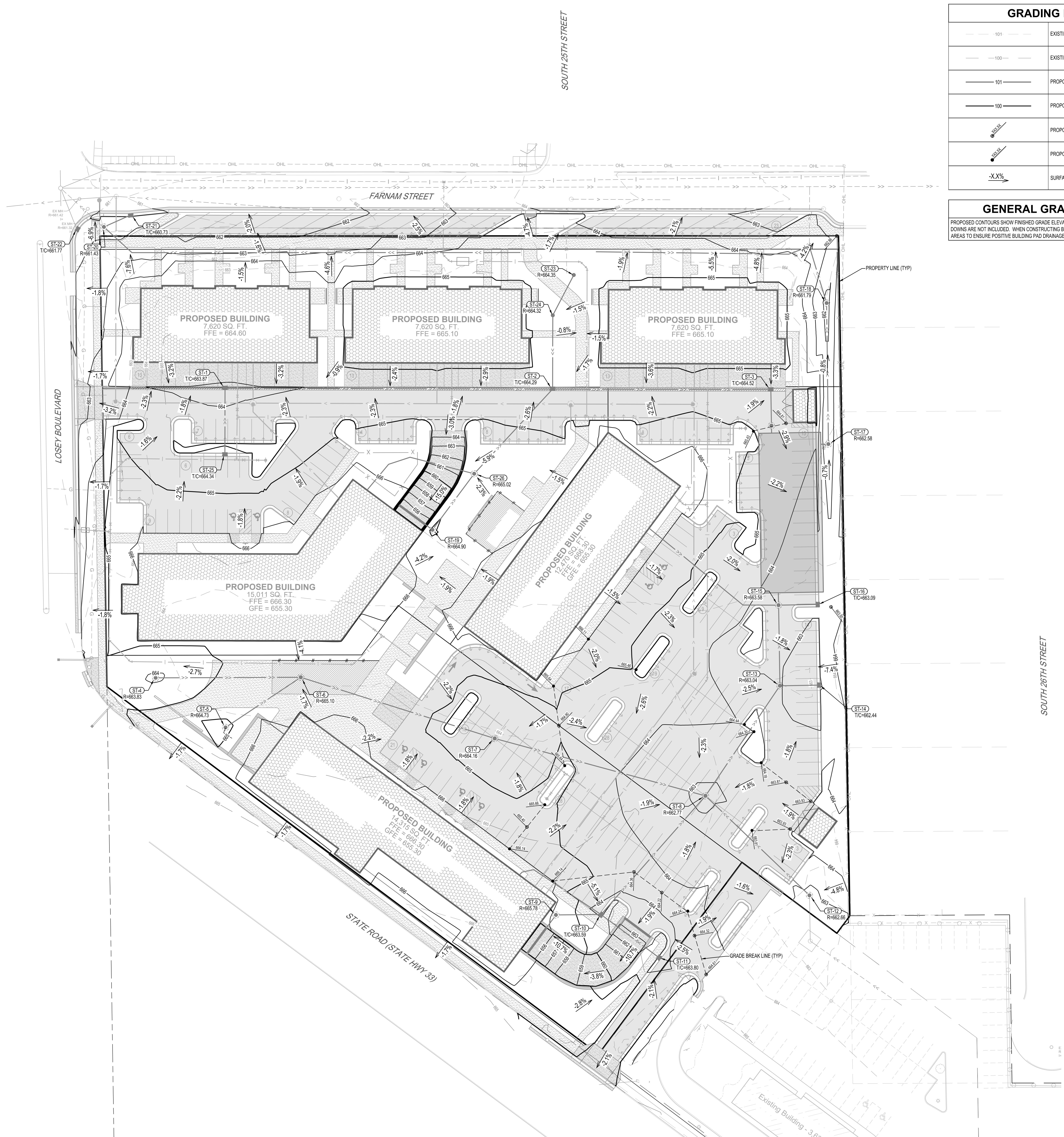


PRELIMINARY NOT FOR CONSTRUCTION



GRADING LEGEND	
--- 101 ---	EXISTING CONTOUR (MINOR INTERVAL)
--- 100 ---	EXISTING CONTOUR (MAJOR INTERVAL)
— 101 —	PROPOSED CONTOUR (MINOR INTERVAL)
— 100 —	PROPOSED CONTOUR (MAJOR INTERVAL)
● 55.0	PROPOSED SPOT ELEVATION
● 55.0	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.



PDD SPECIFIC PLAN SUBMITTAL  
 06/03/2022

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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	AAG/SMW
DESIGNED BY	AAG/SMW/KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	6/3/2022
CLIENT PROJECT NO.	-

TITLE  
**GRADING PLAN**

SHEET  
**C4-10**

PRELIMINARY NOT FOR CONSTRUCTION