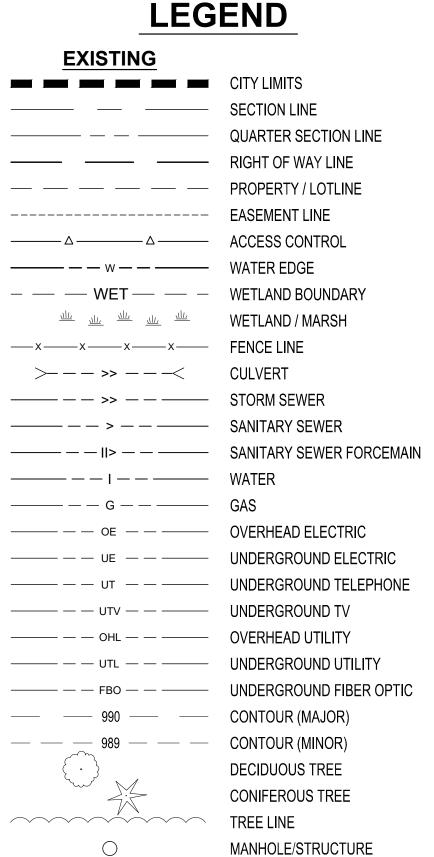
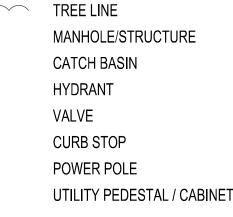
5TH WARD RESIDENCES

DESIGN REVIEW SET

ISG PROJECT # 20-24403

LA CROSSE, WISCONSIN





PROPOSED	
	LOT LINE
	RIGHT OF WAY
	EASEMENT
>>	CULVERT
	STORM SEWER
	STORM SEWER (PIPE WIDTH
	SANITARY SEWER
	SANITARY SEWER (PIPE WID
	WATER
G	GAS
OE	OVERHEAD ELECTRIC
———— UE ————	UNDERGROUND ELECTRIC
UTV	UNDERGROUND TV
1015	CONTOUR
•	MANHOLE
=	CATCH BASIN

HYDRAN1

VALVE



LOCATION MAP

	SCALE IN FEET	
0	1000	2000

High Water Level

HWL

HWY Highway

MAX Maximum

C CTRIC	l	IRE 43
	OV	VN
WIDTH)	P	R
: \MIDTU\	CL	Center
	CIPC CJ	Cast In Contro
	CIP	Cast Iro
	CF CI	Cubic F
	CB CFS	Catch E Cubic F
	CAD	Compu
	BFE BIT	Basem Bitumii
CABINET	ARCH	Archite
	APPROX	

ABBREVIATIONS: Americans with Disabilities Act

,	/ III I CO I CO I I CO I CO I CO I CO I	~~	Cicarioat		•
ADD	Addendum	CONC	Concrete	FPM	F
AFF	Above Finished Floor	CONST	Construction	FPS	F
AGG	Aggregate	CONT	Continuous	FT	F
APPROX	Approximate	CY	Cubic Yard	FTG	F
ARCH	Architect, Architectural	C&G	Curb and Gutter	GA	G
BFE	Basement Floor Elevation	DEMO	Demolition	GAL	G
BIT	Bituminous	DIA	Diameter	GALV	G
CAD	Computer-Aided Design	DIM	Dimension	GC	G
CB	Catch Basin	DS	Downspout	GFE	G
CFS	Cubic Feet per Second	EA	Each	GL	G
CF	Cubic Foot	ELEC	Electrical	GPM	G
CI	Cast Iron	ELEV	Elevation	GV	G
CIP	Cast Iron Pipe	EOF	Emergency Overflow	HDPE	Н
CIPC	Cast In Place Concrete	EQ	Equal	HD	Н
CJ	Control Joint	EX	Existing	HH	Н
CL	Centerline	FDC	Fire Department Connection	HORIZ	Н

Corrugated Metal Pipe FFE Finished Floor Elevation Feet per Second

rro	reet per second	טוח	riyuranı
FT	Foot, Feet		Invert
FTG	Footing	ID	Inside Diameter
GA	Gauge	IN	Inch
GAL	Gallon	INV	Invert
GALV	Galvanized	IP	Iron Pipe
GC	General Contractor	IPS	Iron Pipe Size
GFE	Garage Floor Elevation	J-BOX	Junction Box
GL	Gutter Line	JT	Joint
GPM	Gallons Per Minute	LF	Linear Feet
GV	Gate Valve	LIN	Linear
HDPE	High Density Polyethylene	LPS	Low Pressure Steam
HD	Heavy Duty	LS	Lump Sum
HH	Handhole	LSO	Lowest Structural Opening

MIN Minimum MISC Miscellaneous Number Not To Scale Normal Water Level On Center pe Size OCEW On Center Each Way Overhead Overhead Door Pedestal, Pedestrian PERF Perforated Property Line

MECH Mechanical

Manhole

Polypropylene

Pounds per square inch

ROW Right of Way R/W Right of Way SPEC Specification Square STA Station

PVC Polyvinyl Chloride TEMP Temporary QTY Quantity RAD Radius RCP Reinforced Concrete Pipe REBAR Reinforcing Ba VCP W/0

THRU Through TNFH Top Nut of Fire Hydrant TRANS Transformer Top of Wall Typical Utility, Underground Telephone Vitrified Clay Pipe YD Yard

ISG

Telephone

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

SHEET INDEX

G1-10 TITLE SHEET C0-10 SITE DETAILS

C0-11 SITE DETAILS C0-12 SITE DETAILS C0-13 SITE DETAILS

C0-14 SITE DETAILS C0-15 SITE DETAILS C0-20 UTILITY SCHEDULES

C1-10 EROSION CONTROL NOTES C1-11 EROSION CONTROL DETAILS

C1-20 PRE- CONSTRUCTION EC PLAN

C1-30 PROPOSED EC PLAN C2-10 EXISTING SITE & REMOVAL PLAN

C3-10 PROPOSED SITE PLAN C3-20 PROPOSED UTILITY PLAN

C3-30 UTILITY PLAN & PROFILE C3-31 UTILITY PLAN & PROFILE

C3-32 UTILITY PLAN & PROFILE

C3-33 UTILITY PLAN & PROFILE C4-10 PROPOSED GRADING PLAN

C4-20 DETAILED GRADING PLAN

PROJECT GENERAL NOTES

DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE ISOLATED FROM EACH OTHER TO AVOID GALVANIC

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

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.

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.

THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY 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



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PROJECT

LA CROSSE

5TH WARD

RESIDENCES

REVISION SCHEDULE DATE DESCRIPTION

WISCONSIN

20-24403 PROJECT NO. FILE NAME 24403 G1-TITLE DRAWN BY CLF, SMD **DESIGNED BY REVIEWED BY**

ROJECT INDEX:

NER:

EE SIXTY REAL ESTATE, LLC BADGER STREET LA CROSSE, WI 54601

PROJECT ADDRESS / LOCATION:

1325 SAINT ANDREW ST LA CROSSE, WI 54603

SEC 29 / TWP 16N / R 07W

MANAGING OFFICE:

Square Yard T/C Top of Curb

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

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

SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF LA CROSSE STANDARD SPECIFICATIONS, CURRENT EDITION, WISDOT STANDARD SPECIFICATIONS, 2021 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 = 646.08

TNH NE OF INTERSECTION OF

ST. ANDREWS AND GEORGE STREET.

TOPOGRAPHIC SURVEY

THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN 09 / 2020 BY ISG.

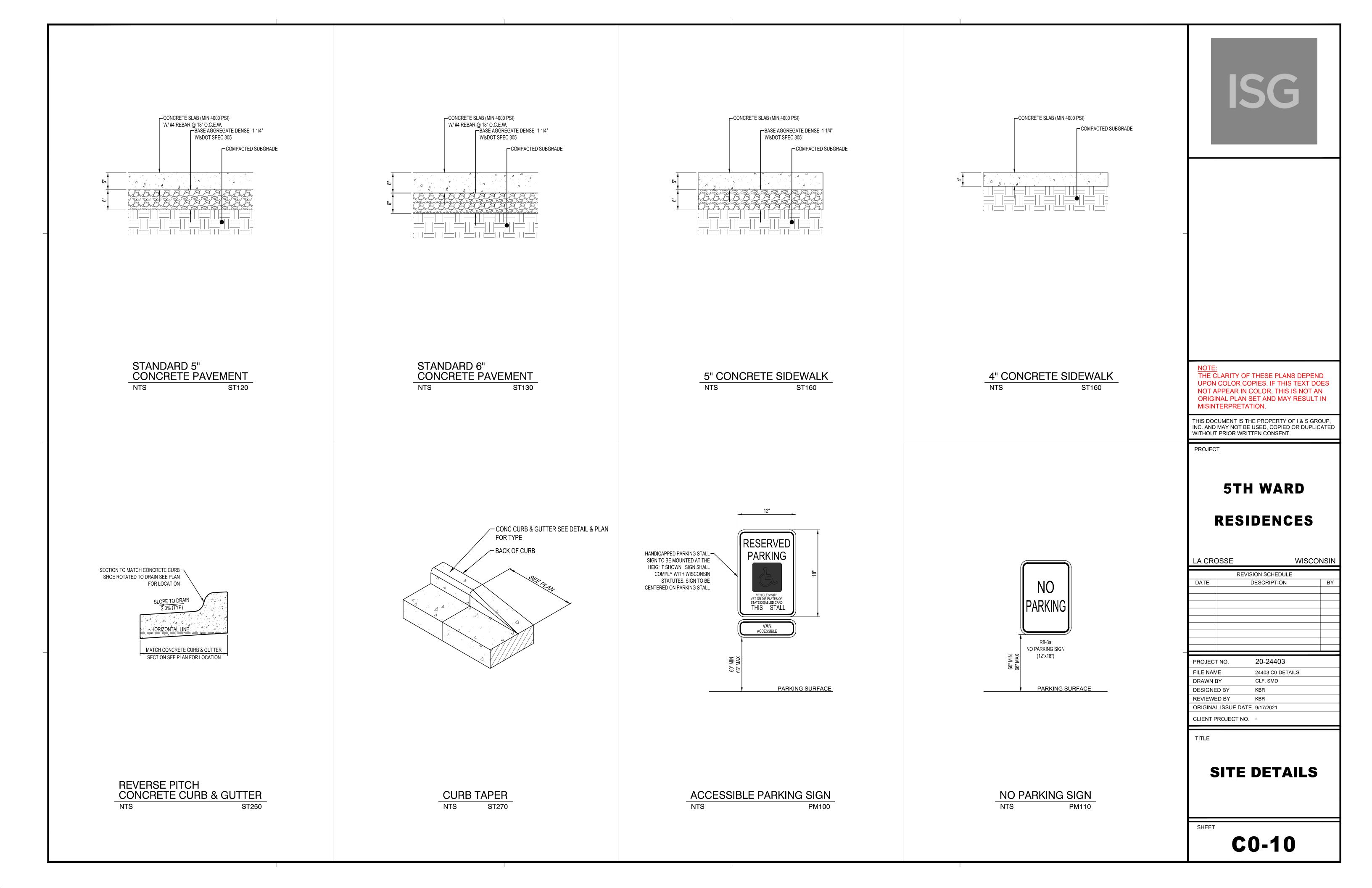
TITLE SHEET

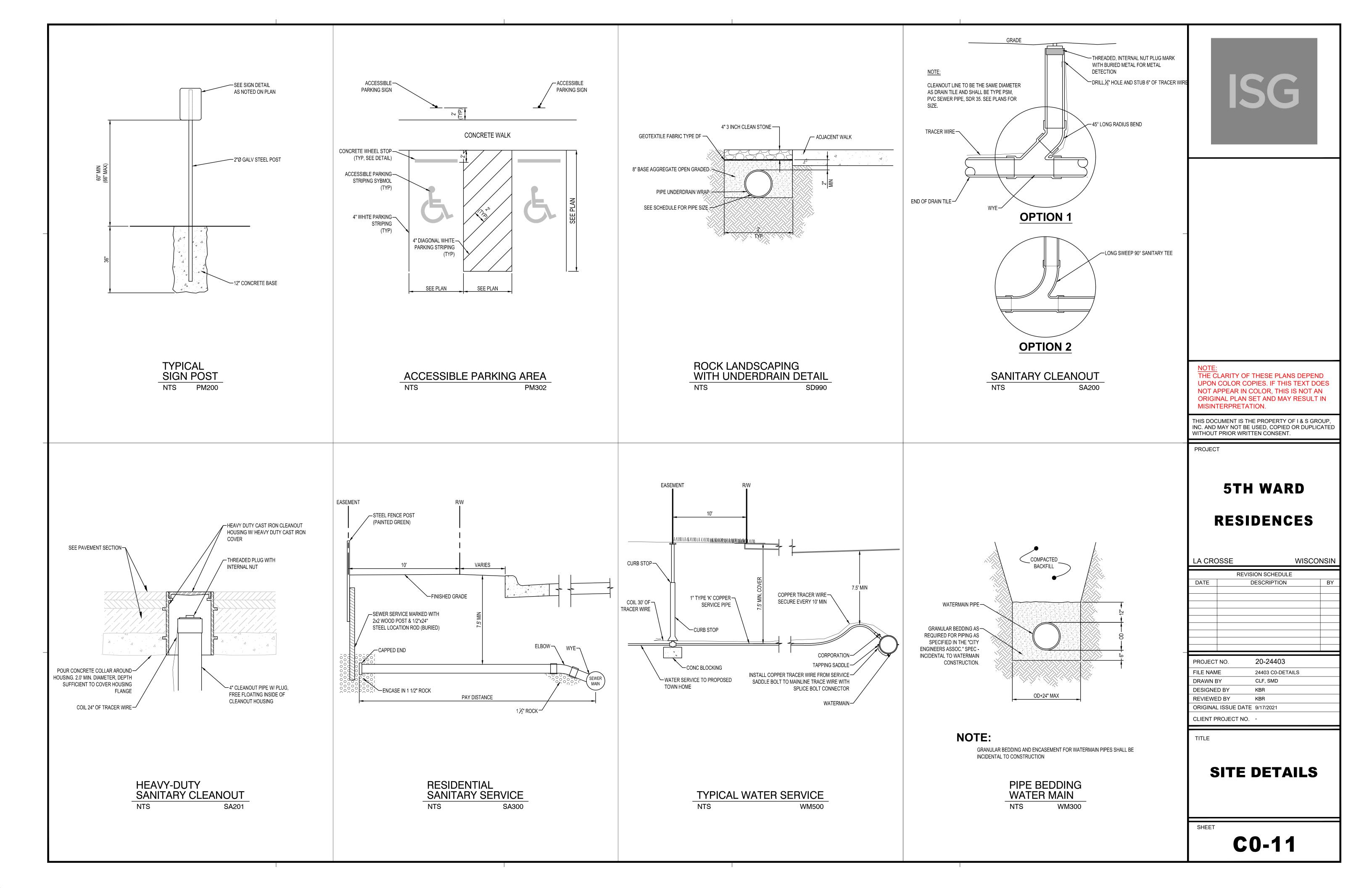
ORIGINAL ISSUE DATE 9/17/2021

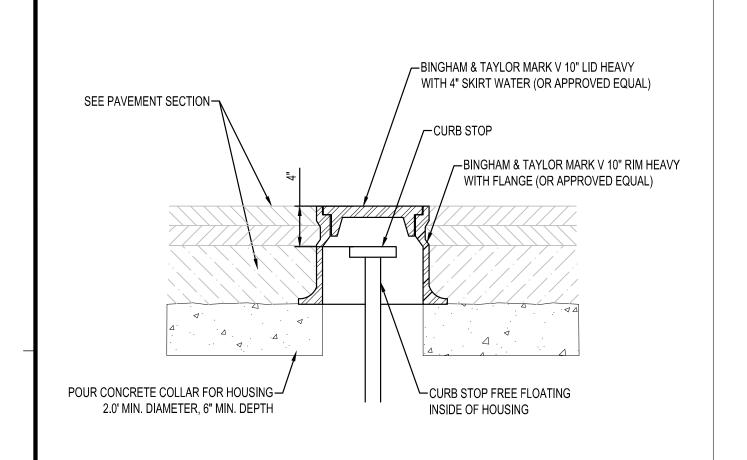
CLIENT PROJECT NO.

TITLE

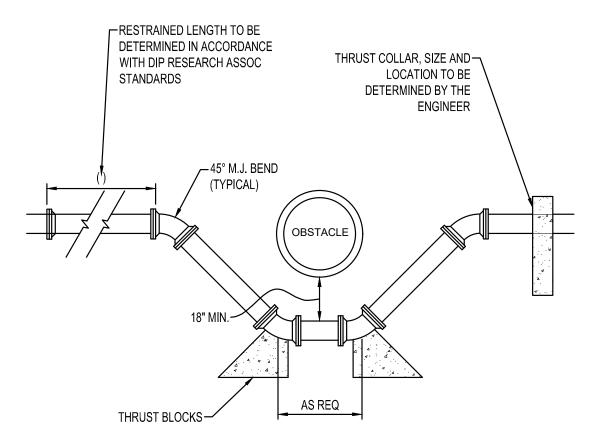
G1-10







HEAVY-DUTY
CURB STOP HOUSING
NTS WM550

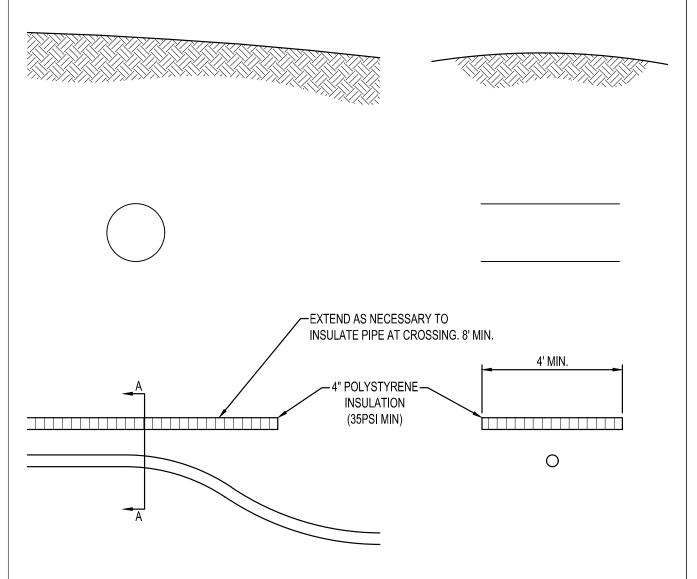


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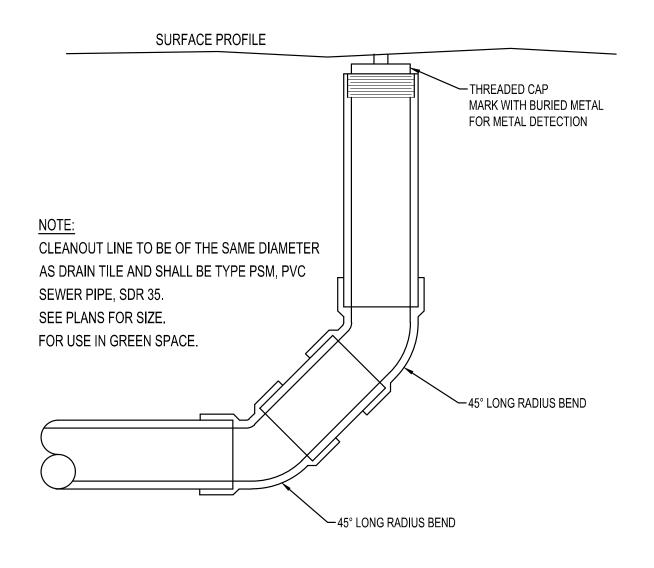
FITTINGS SHALL BE RESTRAINED WITH THE USE OF APPROVED MECHANICAL JOINT RESTRAINING GLANDS

WATERMAIN CONSTRUCTION AROUND OBSTACLES

NTS WM600



WATER PIPE INSULATION
NTS WM400

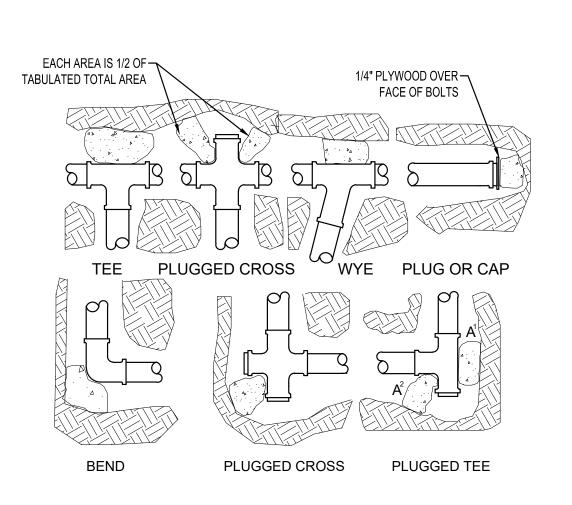


SUBDRAIN TERMINAL CLEANOUT/END NTS SD451

PROJECT

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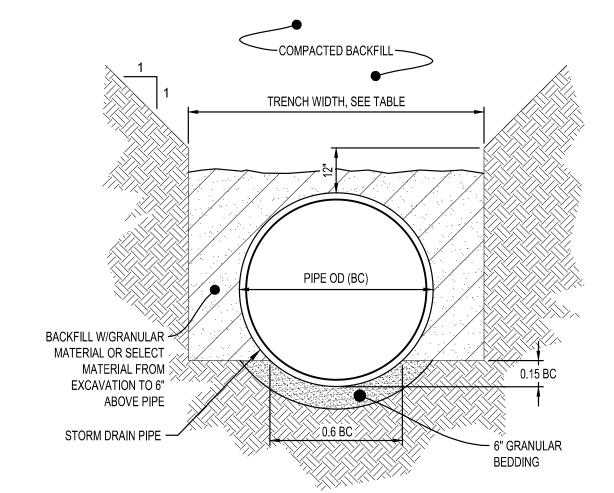


THRUST BLOCKING TABLE							
NOMINAL FITTING SIZE	TEE,WYE PLUG OR	90 BEND PLUGGED	GED ON R		45° BEND	22 ½° BEND	11 ½° BEND
INCHES	CAP	CROSS	A ¹	A ²			
4	1.0	1.4	1.9	1.4	1.0		
6	2.1	3.0	4.3	3.0	1.6	1.0	
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.6	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	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 BASE ON TEST PRESSURE OF 150 PSI AND AN ALLOWABLE SOIL BEAERING 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



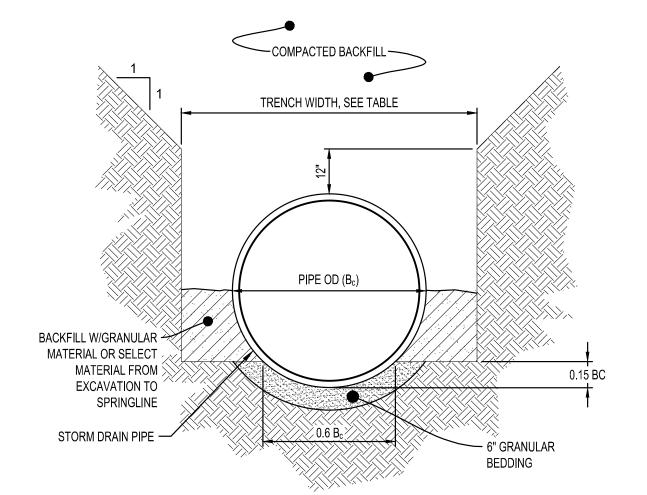


	TRENCH WIDTH			
PIPE Ø		TRENCH WIDTH		
	36" OR LESS	BC + 24"		
	42" TO 54"	1.5 x BC		
	60" OR OVER	BC + 36"		

NOTES:

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

NON-CONCRETE STORM DRAIN PIPE BEDDING NTS SD600



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

NOTES:

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

REINFORCED CONCRETE STORM DRAIN PIPE BEDDING

NTS SD601

5TH WARD RESIDENCES

	LA CRO	SSE		WISCO	NSIN
		· // 0.0			
		REVISIO	N SCHEDULE		
	DATE	DE	SCRIPTION		BY
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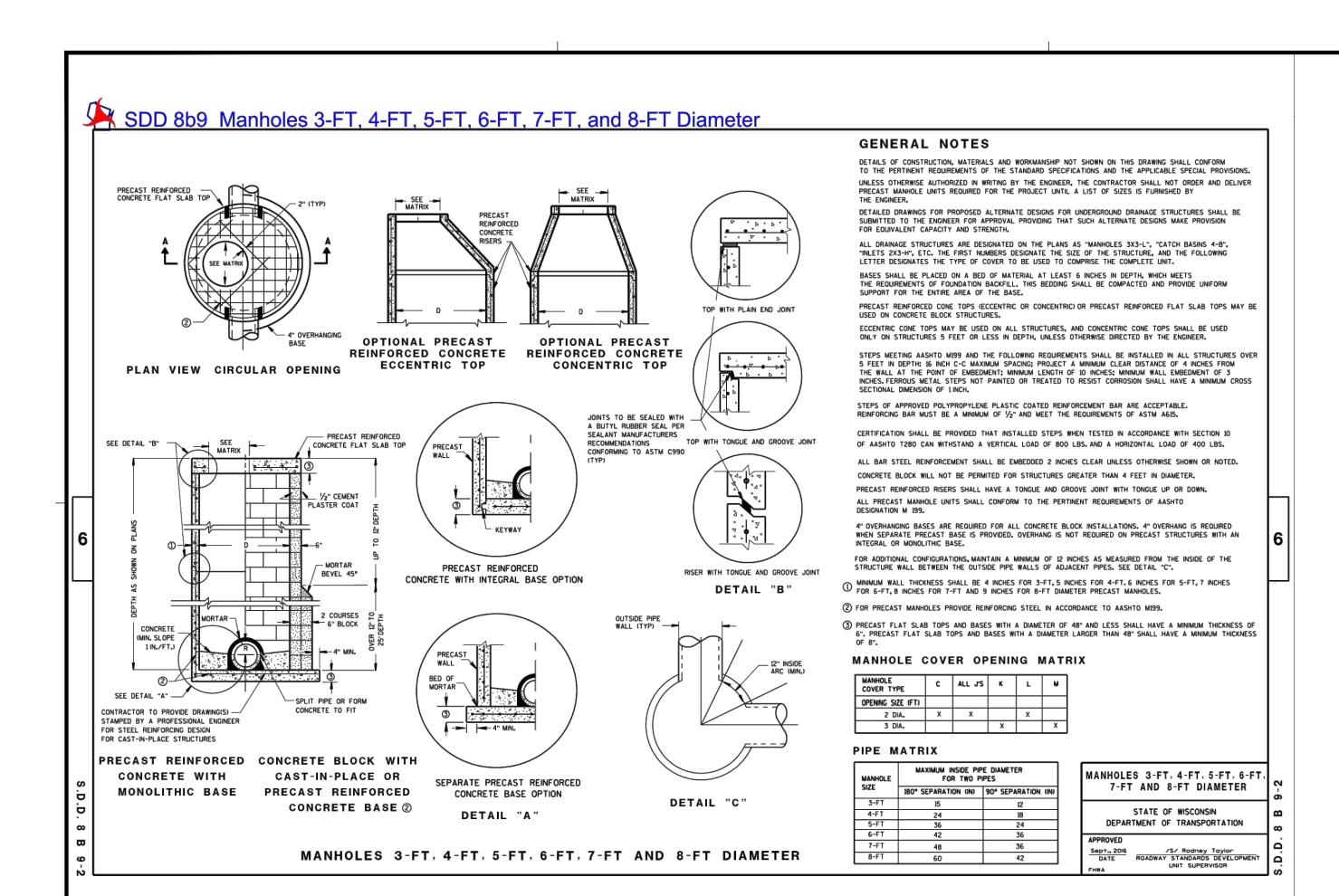
PROJECT NO.	20-24403
FILE NAME	24403 C0-DETAILS
DRAWN BY	CLF, SMD
DESIGNED BY	KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	9/17/2021
CLIENT PROJECT NO	_

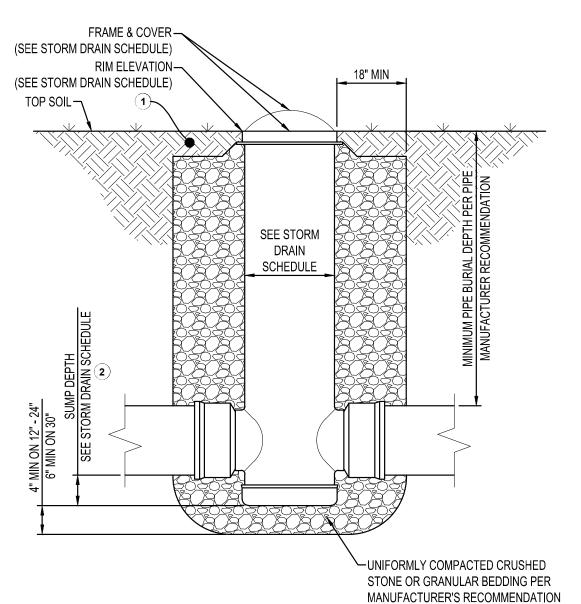
TITLE

SITE DETAILS

CLIEE

C0-12

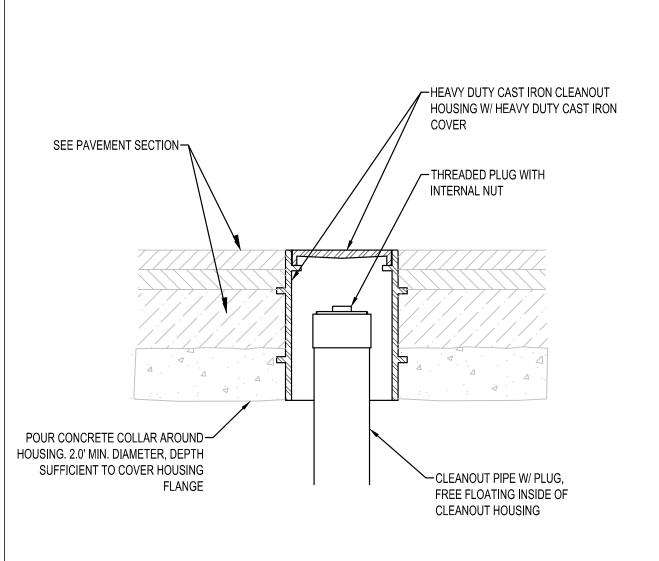




NOTES:

- DESIGN SHOULD ACCOUNT FOR ROOT DEPTH TO ALLOW TURF TO GROW AND PREVENT EROSION AROUND GRATE SO THAT HAZARDS TO DO NOT FORM
- 6" MIN ON 8" 24" DRAIN BASIN, 10" MIN ON 30" DRAIN BASIN. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS.

DRAIN BASIN SD320



HEAVY DUTY

NTS

SUBDRAIN CLEANOUT

SD455

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PROJECT

LA CROSSE

5TH WARD

WISCONSIN

RESIDENCES

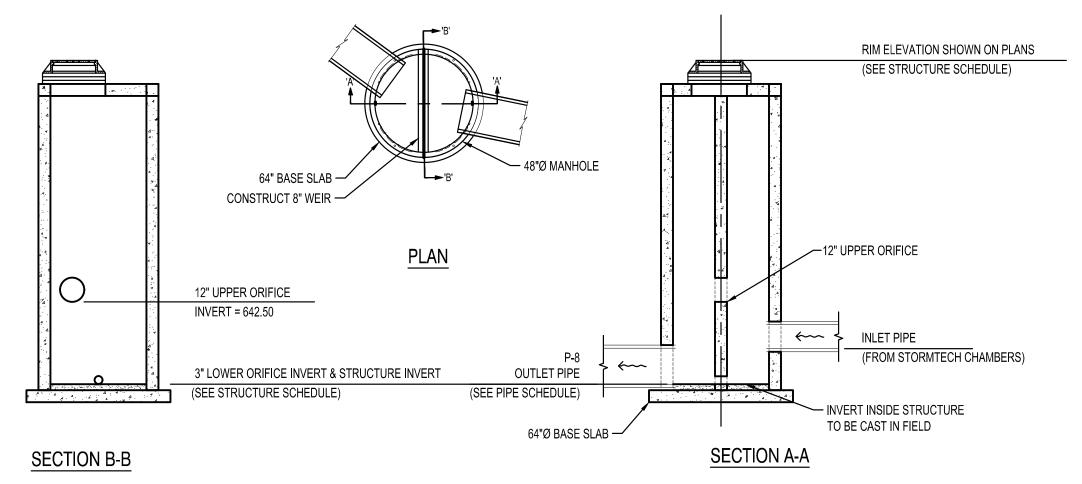
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PROJECT NO.	20-24403	
FILE NAME	24403 C0-DETAILS	
DRAWN BY	CLF, SMD	
DESIGNED BY	KBR	
REVIEWED BY	KBR	
ORIGINAL ISSUE DATE	9/17/2021	
CLIENT PROJECT NO.	-	
TITI F		

SITE DETAILS

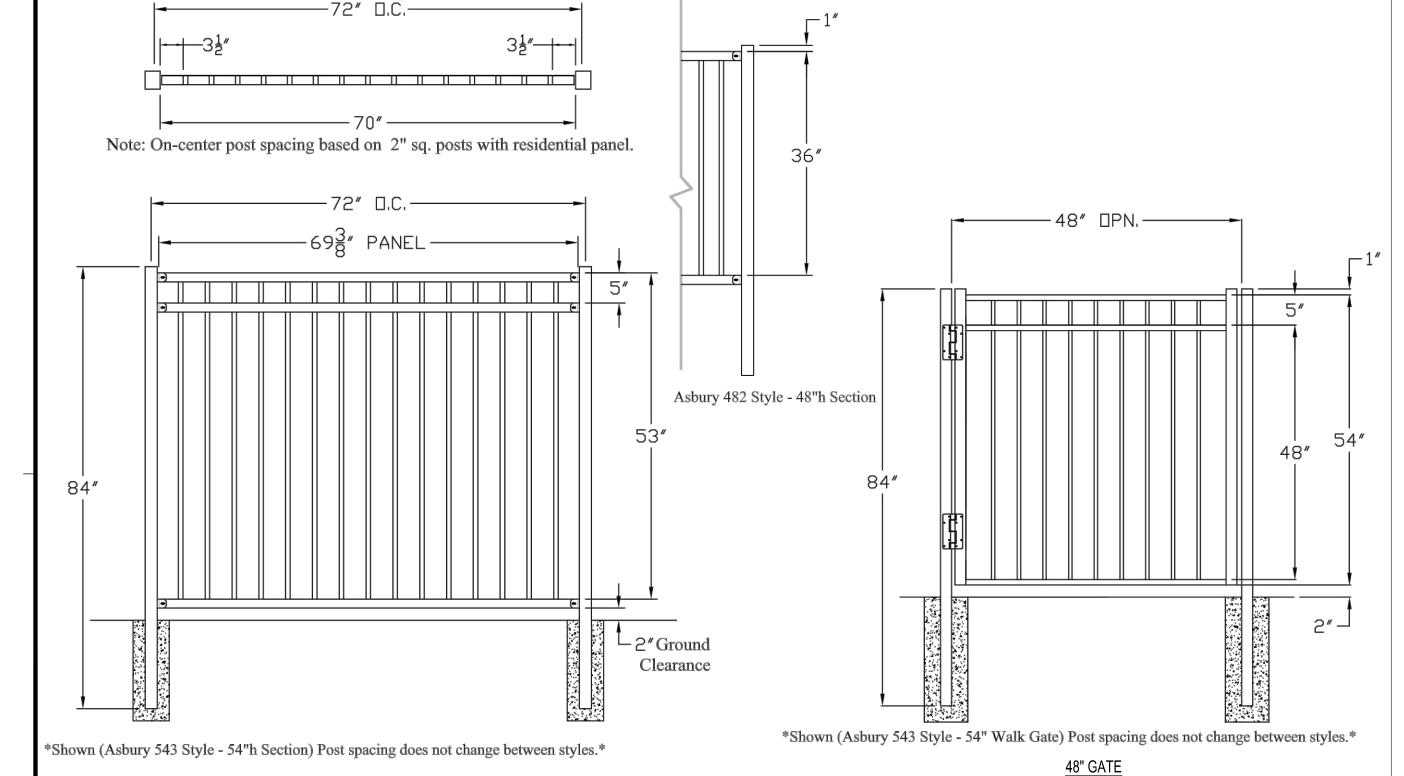
C0-13

NOTES:

GROUT AROUND ALL PIPES ON INSIDE AND OUTSIDE OF MANHOLE



STORMTECH CHAMBERS OUTLET STRUCTURE SD700 NTS



AUSBURY 482 STYLE EZ ALUMINUM FENCE





MC-3500 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-3500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE 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 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT
- 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) NSTANTANEOUS (<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
- REQUIREMENTS FOR HANDLING AND INSTALLATION:

CONCRETE SLAB

6" (150 mm) MIN THICKNESS

- 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.
- 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
- 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
- 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-3500 CHAMBER SYSTEM

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH C-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE
- 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.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE. SPACING BETWEEN THE CHAMBER ROWS. 6 MAINTAIN MINIMI M -
- 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE
- 10. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- 11. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".

- 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
- WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH
- 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 HAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP

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

REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED

A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON

REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY

A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS

APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN

A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

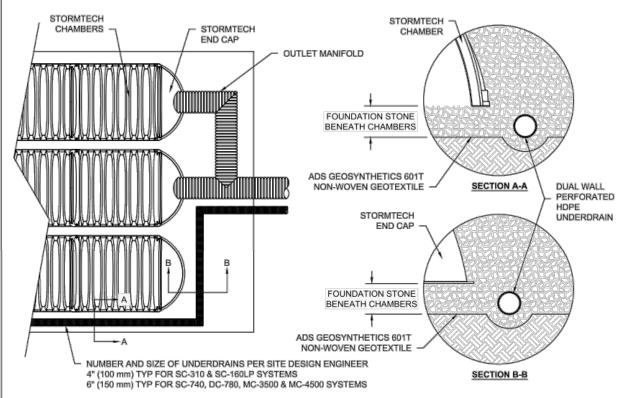
) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

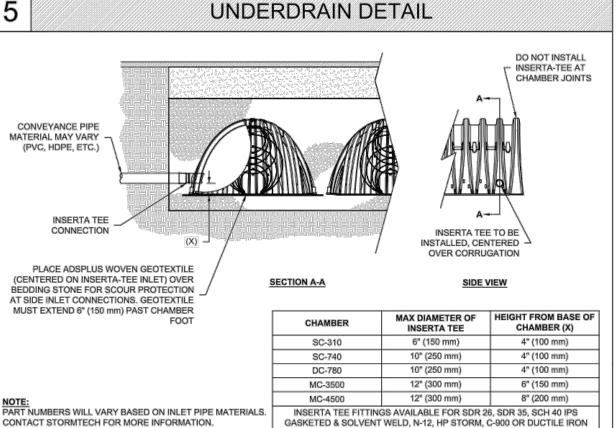
AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

A. INSPECTION PORTS (IF PRESENT)

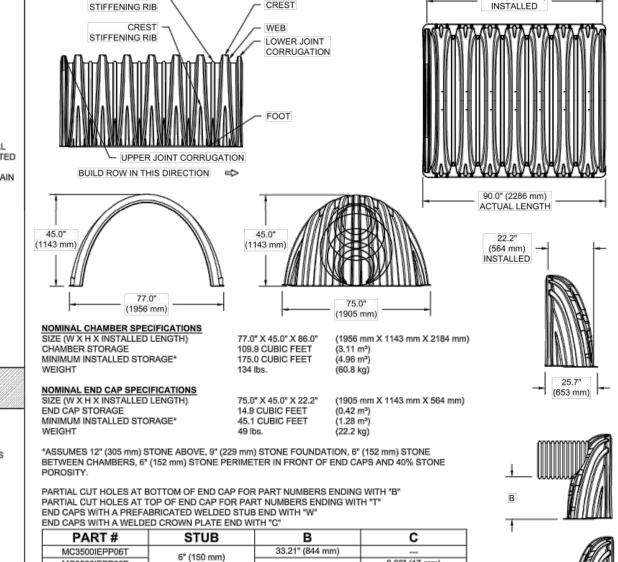
B. ALL ISOLATOR PLUS ROWS

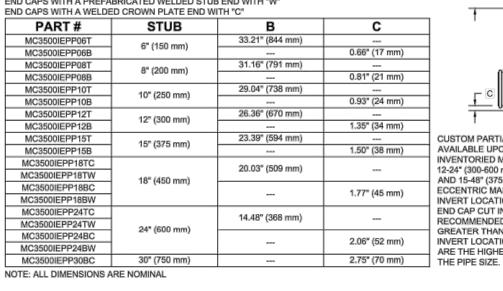
VACUUM STRUCTURE SUMP AS REQUIRED





INSERTA-TEE SIDE INLET DETAIL





MC-3500 TECHNICAL SPECIFICATIONS

CUSTOM PARTIAL CUT INVERTS ARE AVAILABLE UPON REQUEST. NVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE ECCENTRIC MANIFOLDS, CUSTOM INVERT LOCATIONS ON THE MC-3500 RD 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 \Box

86.0" (2184 mm)

0

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PROJECT

5TH WARD RESIDENCES

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WISCONSIN LA CROSSE **REVISION SCHEDULE** DATE DESCRIPTION 20-24403 PROJECT NO.

FILE NAME 24403 C0-DETAILS DRAWN BY CLF, SMD **DESIGNED BY** KBR **REVIEWED BY** KBR

CLIENT PROJECT NO.

ORIGINAL ISSUE DATE 9/17/2021

TITLE

SHEET

SITE DETAILS

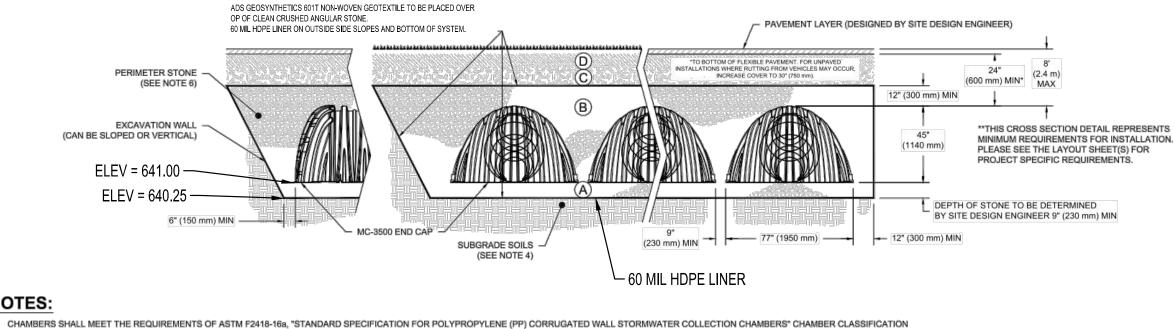
INSPECTION & MAINTENANCE ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS INSPECT ISOLATOR ROW PLUS FOR SEDIMENT

	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.
С	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.
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43¹ 3, 4	ACTION REQUIRED.
А	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:				

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" 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.

WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGNS, CONTACT STORMTECH FOR

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.



NOTES:

45x76 DESIGNATION SS

- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
- 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.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS. 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.

4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)

MC-SERIES END CAP INSERTION DETAIL

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS SUMP DEPTH TBD BY SITE DESIGN ENGINEER 24" [600 mm] MIN RECOMMENDED

INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

STORMTECH END CAP 12" (300 mm) MIN INSERTION -MANIFOLD STUB MANIFOLD HEADER -

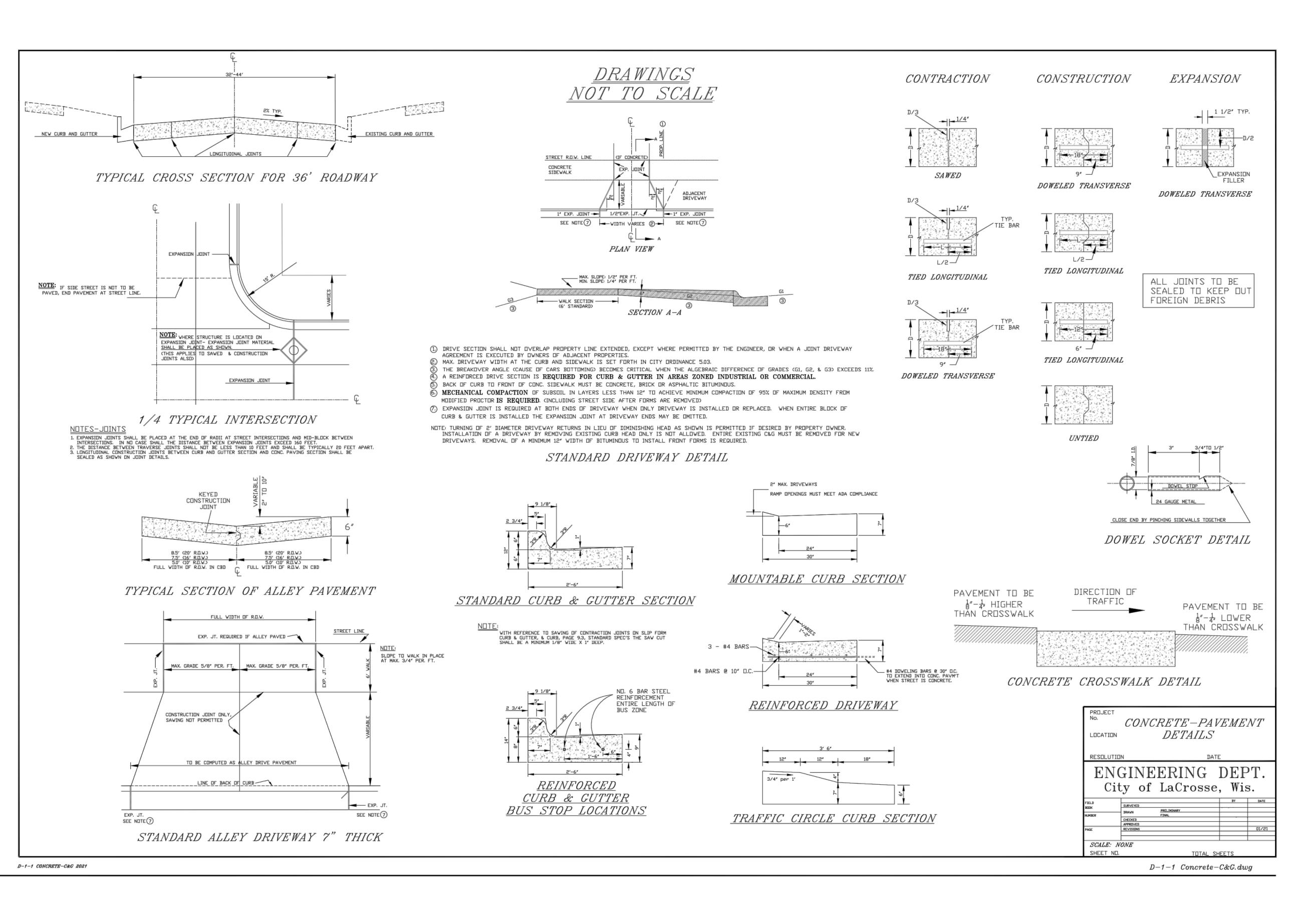
> NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING

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. 1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL 2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS MC-3500 ISOLATOR ROW PLUS DETAIL 12" (300 mm) MIN WIDTH CONCRETE COLLAR NOT REQUIRED CONCRETE COLLAR NYLOPLAST INSPECTION PORT PAVEMENT BODY (PART# 2708AG4IPKIT) OR RAFFIC RATED BOX W/SOLID LOCKING COVER

MIN SEPARATION MANIFOLD HEADER - MANIFOLD STUB

SDR 35 PIPE " (100 mm) INSERTA TEE CORRUGATION VALLEY MIN SEPARATION

MC-3500 CROSS SECTION DETAIL





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PROJECT

5TH WARD
RESIDENCES

LA CRO	LA CROSSE		WISCONSIN		
	REVISI	ON SCHEDULE			
DATE	D	ESCRIPTION		BY	
PROJECT	PROJECT NO.				
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TITLE

CLIENT PROJECT NO.

SITE DETAILS

CLIEET

C0-15

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
A-7	WisDOT MANHOLE	48 Ø	RC	NEENAH R-1670	7.03	644.64	637.61	P-46
A-8	OUTLET STRUCTURE	48 Ø	RC	NEENAH R-1670	6.60	646.85	640.25	P-8
A-9	WisDOT MANHOLE	48 Ø	RC	NEENAH R-2502 GRATE TYPE D	5.76	646.76	641.00	
A-10	WisDOT MANHOLE	48 Ø	RC	NEENAH R-2502 GRATE TYPE D	5.60	647.01	641.41	P-10
A-11	WisDOT MANHOLE	48 Ø	RC	NEENAH R-2502 GRATE TYPE D	5.03	647.00	641.97	P-11
A-12	DRAIN BASIN	12 Ø	PVC	12" PEDESTRIAN GRATE	5.35	646.91	641.55	P-12
A-13	DRAIN BASIN	12 Ø	PVC	12" PEDESTRIAN GRATE	4.02	646.83	642.81	P-13
A-15	WisDOT MANHOLE	48 Ø	RC	NEENAH R-2502 GRATE TYPE D	6.25	647.25	641.00	
A-16	WisDOT MANHOLE	48 Ø	RC	NEENAH R-2502 GRATE TYPE D	5.43	646.74	641.31	P-16
A-17	WisDOT MANHOLE	48 Ø	RC	NEENAH R-2502 GRATE TYPE D	4.61	646.91	642.30	P-17
A-18	DRAIN BASIN	15 Ø	PVC	15" PEDESTRIAN GRATE	5.32	647.35	642.02	P-18
A-19	DRAIN BASIN	12 Ø	PVC	12" PEDESTRIAN GRATE	5.01	647.45	642.44	P-19
A-20	CLEANOUT	10 Ø	HDPE	N/A	1.68	645.54	643.86	P-20
A-21	DRAIN BASIN	12 Ø	PVC	12" PEDESTRIAN GRATE	4.50	648.02	643.52	P-21
A-22	CLEANOUT	10 Ø	HDPE	N/A	1.67	648.68	647.00	P-22
A-23	DRAIN BASIN	12 Ø	PVC	12" PEDESTRIAN GRATE	3.92	647.52	643.60	P-23
A-24	CLEANOUT	8 Ø	HDPE	N/A	1.51	647.60	646.09	P-24

	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-8	A-8	640.25	A-7	639.77	12	RCP	III	0.52%	92
P-10	A-10	641.41	A-9	641.00	12	RCP	III	0.50%	82
P-11	A-11	641.97	A-10	641.61	12	RCP	III	0.50%	72
P-12	A-12	641.55		641.00	12	HDPE	HDPE	1.00%	55
P-13	A-13	642.81	A-12	641.75	12	HDPE	HDPE	1.00%	105
P-16	A-16	641.31	A-15	641.00	18	RCP	III	0.50%	61
P-17	A-17	642.30	A-16	641.51	12	RCP	III	0.50%	159
P-18	A-18	642.02	A-16	641.51	12	HDPE	HDPE	0.50%	104
P-19	A-19	642.44	A-18	642.22	10	HDPE	HDPE	0.50%	44
P-20	A-20	643.86	A-19	643.26	10	HDPE	PERFORATED HDPE	0.25%	240
P-21	A-21	643.52	A-18	642.22	10	HDPE	HDPE	1.00%	130
P-22	A-22	647.00	A-21	646.35	10	HDPE	HDPE	0.25%	261
P-23	A-23	643.60	A-9	643.00	8	HDPE	HDPE	0.60%	100
P-24	A-24	646.09	A-23	645.66	8	HDPE	PERFORATED HDPE	0.25%	172



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PROJECT

5TH WARD RESIDENCES

WISCONSIN LA CROSSE REVISION SCHEDULE DATE DESCRIPTION

20-24403 PROJECT NO. FILE NAME 24403 C3-SITE DRAWN BY CLF, SMD DESIGNED BY REVIEWED BY ORIGINAL ISSUE DATE 9/17/2021 CLIENT PROJECT NO. -

TITLE

UTILITY **SCHEDULES**

CO-20

STORM WATER POLLUTION PREVENTION PLAN NOTES:

GENERAL PROJECT INFORMATION:

PROJECT NARRATIVE:

This project consists of the construction of a 2 72-unit apartment buildings, 14 townhomes,1 mixed use building, concrete pavement, asphalt pavement, curb & gutter, and concrete walk, along with all the necessary grading, utilities, storm water management, erosion control, and any additional components.

RESPONSIBLE PARTIES:

Owner are required to apply for and receive a Wisconsin Pollution Discharge Elimination System (WPDES) Stormwater Construction Permit from the WDNR at least 14 working 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 erosion control plan.

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) = 3.95 acres

Minimum area requiring WDNR permit = 1.00 acres **PROJECT DOES REQUIRE A WPDES PERMIT**

Existing area of impervious surface = 0.00 acres

Post construction area of impervious surface = 2.67 acres

Total new impervious surface area created = 2.67 acres

SOIL TYPE:

Poorly graded sand with silt.

Poorly graded sand.

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 biofiltratoin basins 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 #20 and shall meet Specification Section 630. Mulching shall be appliced 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 to control erosion 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.

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.

CONSTRUCTION ACTIVITY NOTES (CONTINURED):

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

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.



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PROJECT

LA CROSSE

5TH WARD RESIDENCES

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	REVISION SCHEDULE	
DATE	DESCRIPTION	BY

WISCONSIN

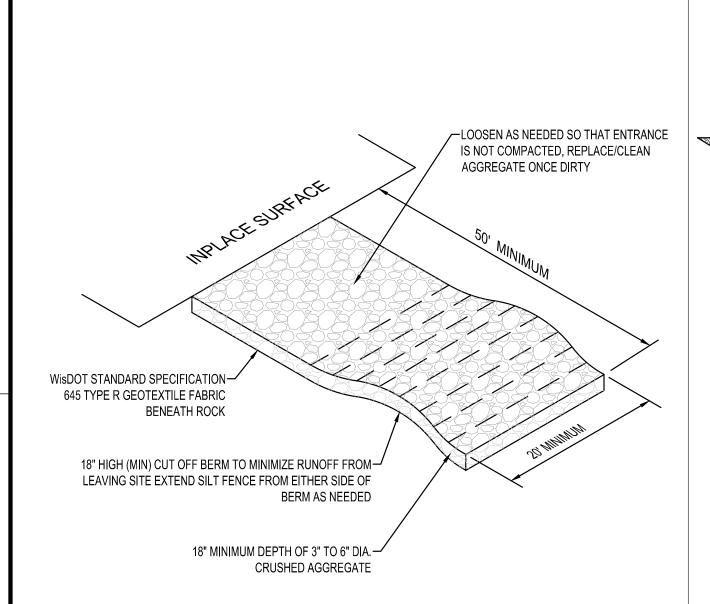
PROJECT NO.	20-24403
FILE NAME	24403 C0-DETAILS
DRAWN BY	CLF, SMD
DESIGNED BY	KBR
REVIEWED BY	KBR
ORIGINAL ISSUE DATE	9/17/2021
CLIENT PROJECT NO.	-

TITLE

EROSION CONTROL NOTES

CLIEFT

C1-10



MATERIAL SHEETING OR APPROVED EQUAL 5'x10'x3' CONCRETE-WASHOUT AREA -1' DEEP IMPERVIOUS CLAY LINER

CONTRACTOR SHALL INSTALL A SIGN INDICATING THE CONCRETE WASHOUT AREA.

WASHOUT AREA SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE.

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.

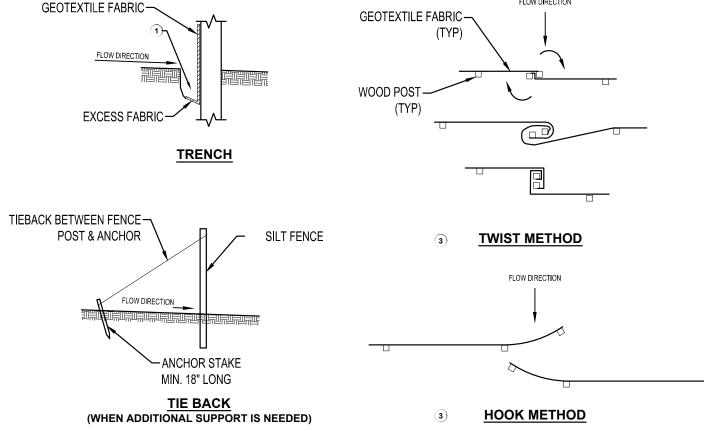
CONTRACTOR SHALL INSPECT WASHOUT AREA AS NECESSARY TO PREVENT LEAKS AND OVER TOPPING.

CONCRETE WASHOUT

EC500

INIMUM 10-MIL THICK PLAST C

SUPPORT CORE GEOTEXTILE-(2) WOOD POSTS LENGTH 3'-4" 20"-DEPTH IN GROUND GEOTEXTILE FABRIC ONLY-BACKFILL & COMPACT TRENCH-WITH EXCAVATED SOIL INSET A **TYPICAL SILT FENCE**





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

- 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 $1\frac{1}{8}$ " x $1\frac{1}{8}$ " 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.
- 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 EC100

PROJECT

LA CROSSE

PROJECT NO.

FILE NAME

DRAWN BY

TITLE

DESIGNED BY

REVIEWED BY

ORIGINAL ISSUE DATE 9/17/2021

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5TH WARD

RESIDENCES

REVISION SCHEDULE

DESCRIPTION

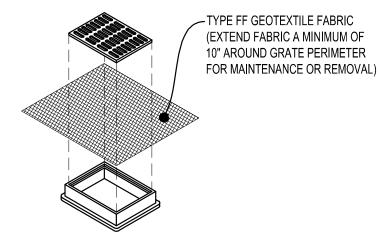
20-24403

CLF, SMD

KBR

24403 C0-DETAILS

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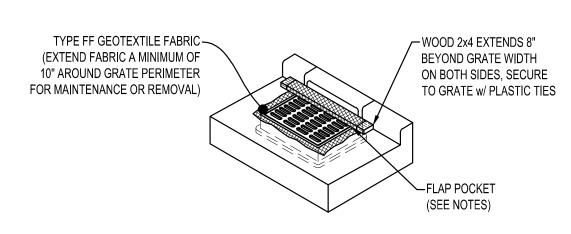


ROCK TRACKING PAD

EC600

TYPE FF GEOTEXTILE FABRIC

TYPE B (WITHOUT CURB BOX)



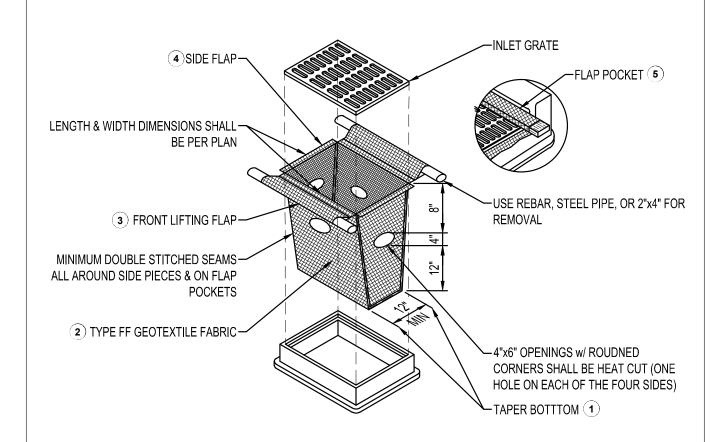
TYPE C (WITH CURB BOX)

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

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** EC221

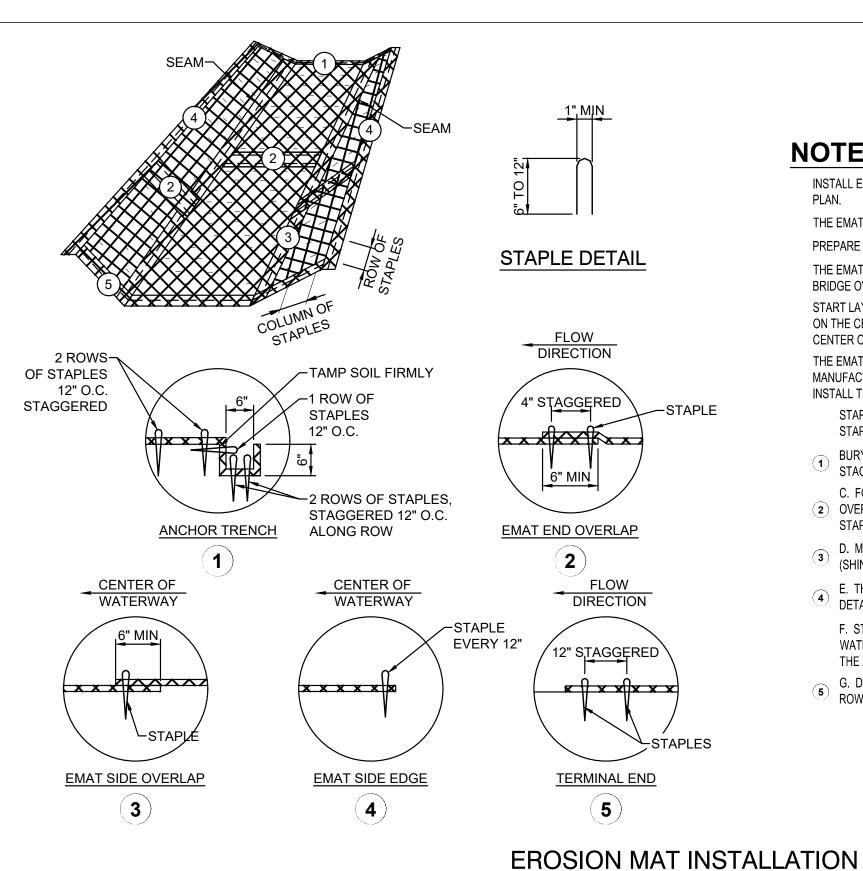


NOTES:

NOTES:

- TAPER BOTTOM OF BAG TO MAINTAIN THREE INCHES OF CLEARANCE BETWEEN THE BAG & THE STRUCTURE $^{ extstyle 1)}$ 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.
- (3) 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 STICHES.
- 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** EC222



NOTES:

EC700

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

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)
- 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.
- C. FOR JOINING ENDS OF ROLLS, OVERLAP END OF UP SLOPE MAT A MINIMUM OF 6" 2 OVER DOWN SLOPE MAT (SHINGLE STYLE), USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART, AS SHOWN IN DETAIL 2.
- 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)
- 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. G. DOWNSTREAM (TERMINAL) END OF BLANKET SHALL BE STAPLED WITH A DOUBLE
- ROW OF STAGGERED STAPLES 12" APART. (SEE DETAIL 5)

EROSION CONTROL DETAILS

C1-11

