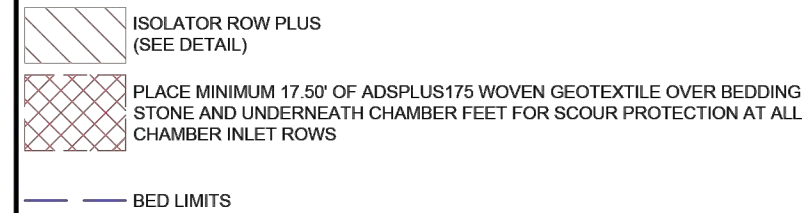
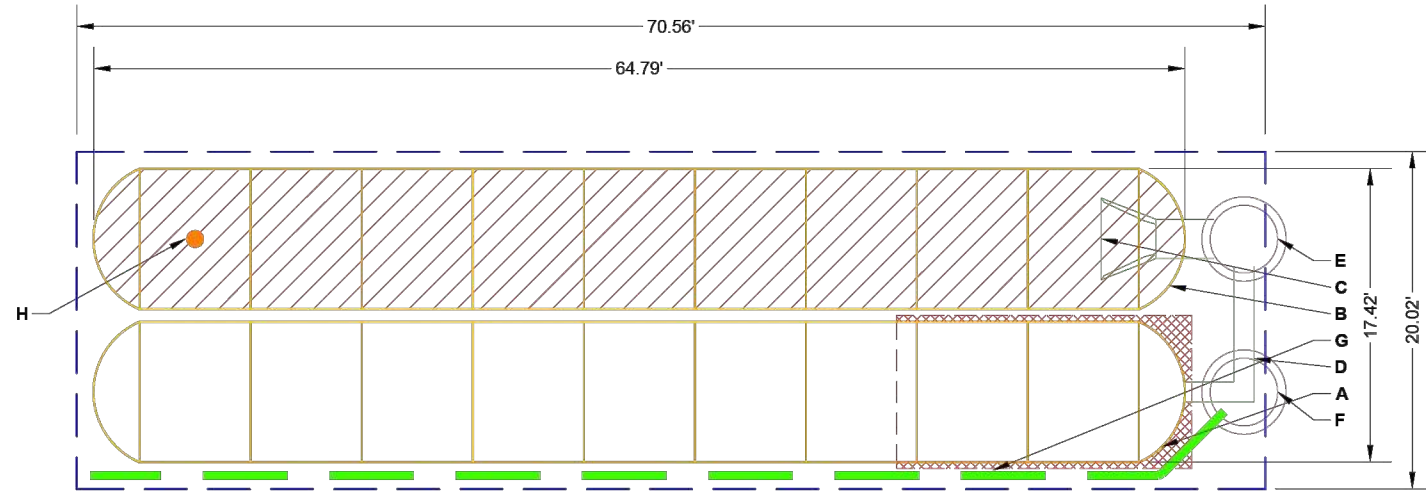
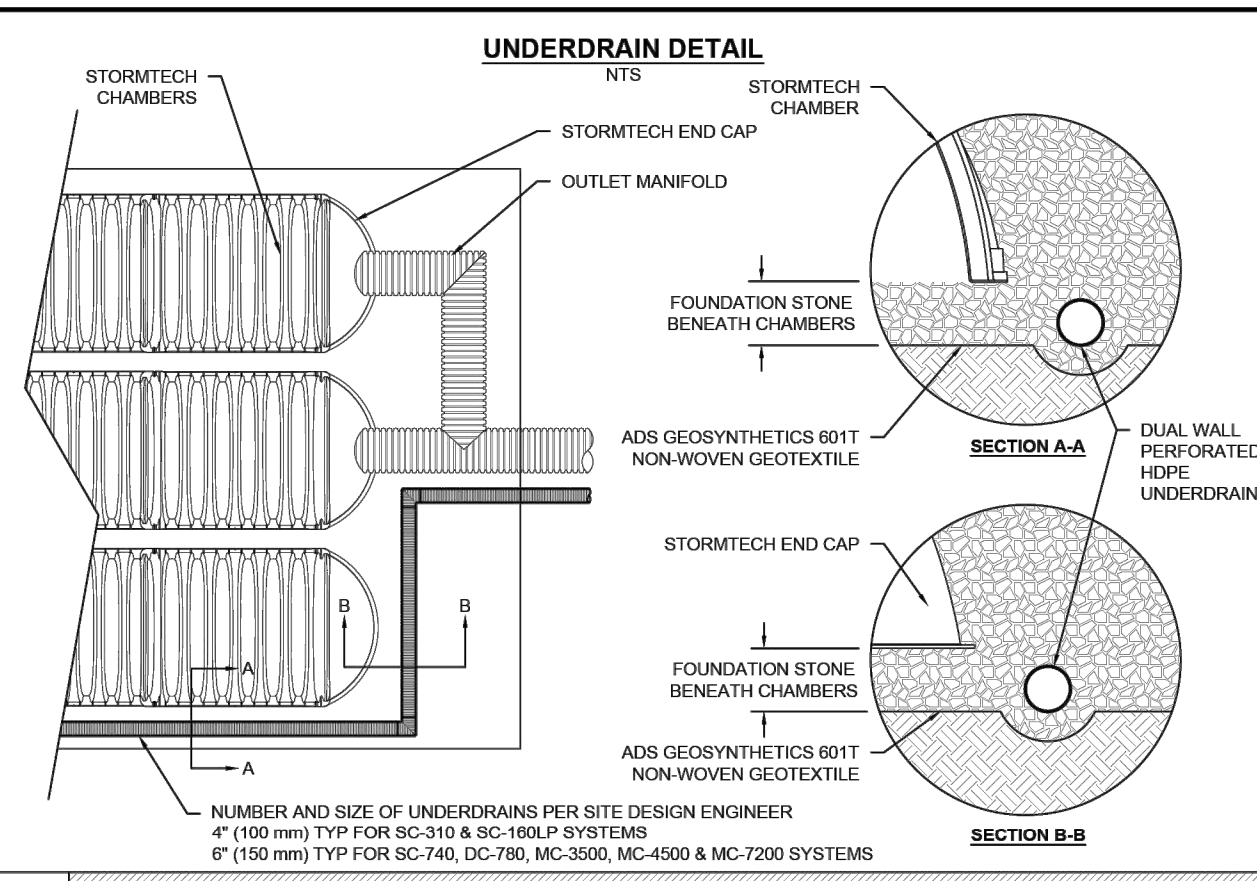


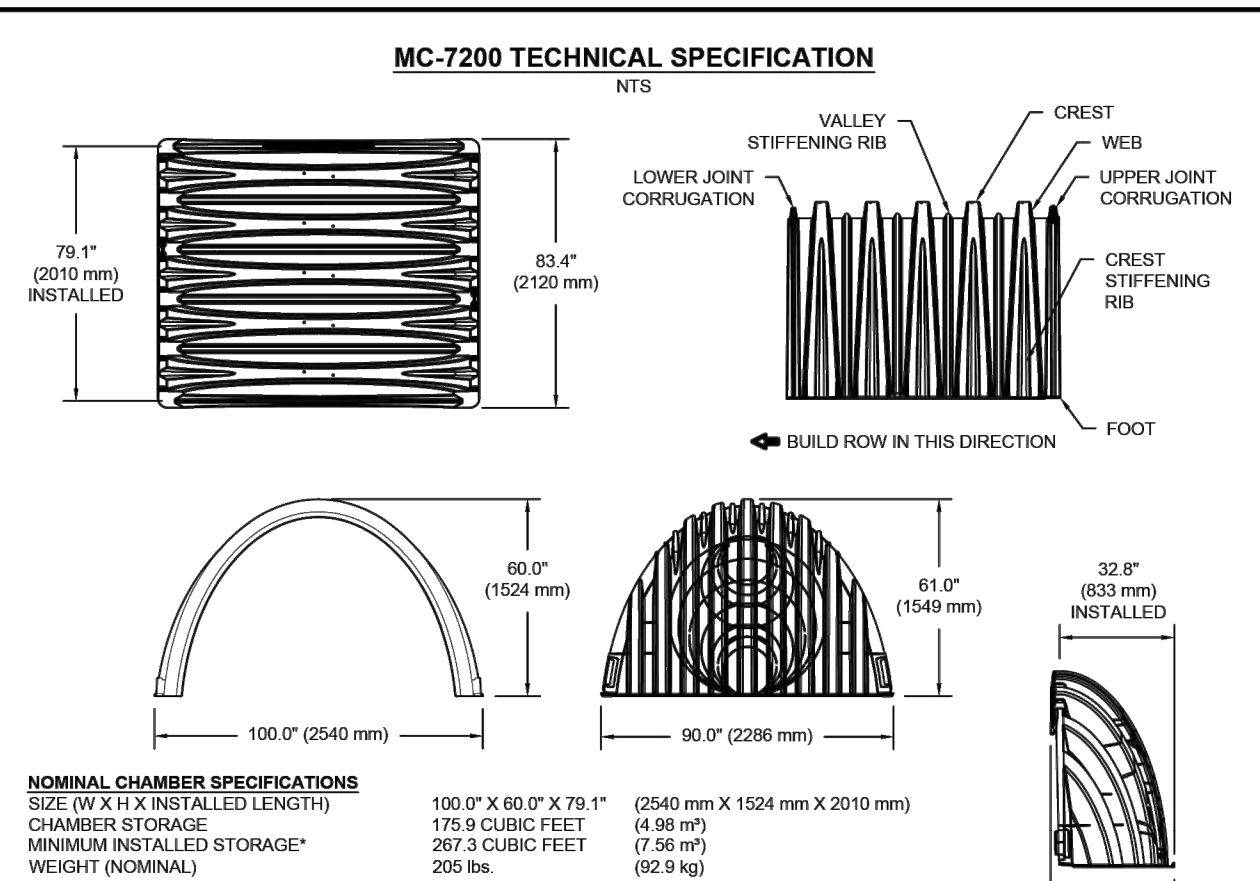
PROPOSED LAYOUT	PROPOSED ELEVATIONS:	PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT	MAX FLOW
18 STORMTECH MC-7200 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)	297.70				
4 STORMTECH MC-7200 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)	292.99	A	12" TOP PARTIAL CUT END CAP, PART # MC7200EPP1T1 / TYP OF ALL 12" TOP CONNECTIONS	35.69'	
12 STONE ABOVE (D)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)	292.99	B	24" BOTTOM PARTIAL CUT END CAP, PART # MC7200EPP2B1 / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR ROW PLUS ROWS	2.28'	
9 STONE BELOW (D)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT)	292.99				
40 STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	292.99				
INSTALLED SYSTEM VOLUME (V)	TOP OF STONE	54.19'				
5808 (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED)	TOP OF MC-7200 CHAMBER	50.00'	C	INSTALL FLAMMABLE ACCESS PIPE (PART # MCFLAMP)		
(BASE STONE INCLUDED)	12" x 12" TOP MANIFOLD INVERT	51.70'	D	12" x 12" TOP MANIFOLD, ADS N-12	35.69'	
1412 SYSTEM AREA (SFT)	24" ISOLATOR ROW PLUS INVERT	51.50'	E	CONCRETE STRUCTURE		2.5 CFS IN
101.2 SYSTEM PERIMETER (R)	12" BOTTOM CONNECTION INVERT	51.50'	F	CONCRETE STRUCTURE		2.0 CFS OUT
	UNDERDRAIN INVERT	51.50'	G	DESIGN BY ENGINEER (PROVIDED BY OTHERS)		
	FOUNDATION INVERT	51.50'	H	DESIGN BY ENGINEER (PROVIDED BY OTHERS)		
	FOUNDATION INVERT	51.50'				
	FOUNDATION INVERT	51.50'				



NOTES
 1. MANHOLE SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #32 FOR MANHOLE SIZING GUIDANCE.
 2. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANHOLE COMPONENTS IN THE FIELD.
 3. THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
 4. THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
 5. **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.



5 UNDERDRAIN DETAIL
 NUMBER AND SIZE OF UNDERDRAINS PER SITE DESIGN ENGINEER
 6" (150 mm) TYP FOR SC-310 & SC-1000 SYSTEMS
 6" (150 mm) TYP FOR SC-740, DC-700, MC-3000, MC-4000 & MC-7200 SYSTEMS



MC-7200 TECHNICAL SPECIFICATION

NOMINAL CHAMBER SPECIFICATIONS
 SIZE (W X H X INSTALLED LENGTH)
 CHAMBER STORAGE
 MINIMUM INSTALLED STORAGE*
 WEIGHT (NOMINAL)

100 0" X 60 0" X 79 1" (2540 mm X 1524 mm X 2010 mm)	175.9 CUBIC FEET (4.98 m³)	287.3 CUBIC FEET (8.14 m³)	295 lbs. (134 kg)
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NOMINAL END CAP SPECIFICATIONS
 SIZE (W X H X INSTALLED LENGTH)
 END CAP STORAGE
 MINIMUM INSTALLED STORAGE*
 WEIGHT (NOMINAL)

90 0" X 61 0" X 32 8" (2286 mm X 1549 mm X 833 mm)	38.5 CUBIC FEET (1.12 m³)	115.3 CUBIC FEET (3.26 m³)	90 lbs. (40.8 kg)
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ASSUMES: 12" (305 mm) STONE ABOVE, 6" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "0"
 PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "1"
 END CAPS WITH A PREFABRICATED WELDED STUB END WITH "V"

PART #	STUB	B	C
MC7200EPP08T	6" (150 mm)	42.54" (1081 mm)	0.96" (22 mm)
MC7200EPP08B	8" (200 mm)	40.50" (1029 mm)	1.01" (26 mm)
MC7200EPP10T	10" (250 mm)	38.37" (975 mm)	1.33" (34 mm)
MC7200EPP10B	12" (300 mm)	35.69" (907 mm)	1.55" (39 mm)
MC7200EPP12T	12" (300 mm)	32.72" (831 mm)	1.70" (43 mm)
MC7200EPP12B	12" (300 mm)	29.36" (746 mm)	1.97" (50 mm)
MC7200EPP15T	15" (375 mm)	23.05" (585 mm)	2.26" (57 mm)
MC7200EPP15B	15" (375 mm)	20.00" (508 mm)	2.50" (64 mm)
MC7200EPP18TW	18" (450 mm)	19.17" (487 mm)	3.25" (83 mm)
MC7200EPP18B	18" (450 mm)	16.83" (427 mm)	3.55" (90 mm)
MC7200EPP18TW	24" (600 mm)	15.00" (381 mm)	3.55" (90 mm)
MC7200EPP24TW	24" (600 mm)	13.00" (330 mm)	3.55" (90 mm)
MC7200EPP24B	24" (600 mm)	11.00" (279 mm)	3.55" (90 mm)
MC7200EPP30TW	30" (750 mm)	10.00" (254 mm)	3.55" (90 mm)
MC7200EPP30B	30" (750 mm)	8.00" (203 mm)	3.55" (90 mm)
MC7200EPP36TW	36" (900 mm)	7.00" (178 mm)	3.55" (90 mm)
MC7200EPP36B	36" (900 mm)	5.00" (127 mm)	3.55" (90 mm)
MC7200EPP42TW	42" (1050 mm)	6.00" (152 mm)	3.55" (90 mm)
MC7200EPP42B	42" (1050 mm)	4.00" (102 mm)	3.55" (90 mm)

CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVERTED MANIFOLDS INCLUDE 12" (305 mm) MAX LIFTS TO A MIN. 90% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.

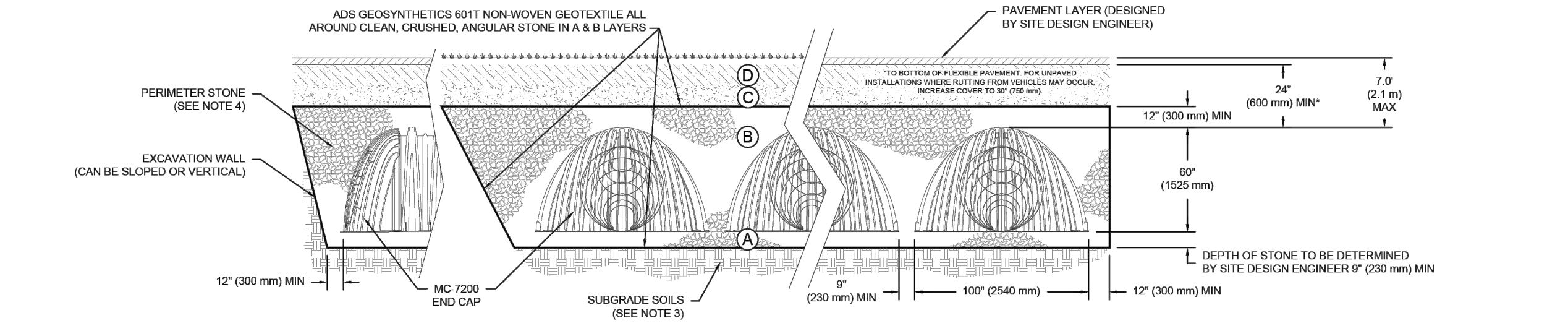
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2 MC-7200 TECHNICAL SPECIFICATION

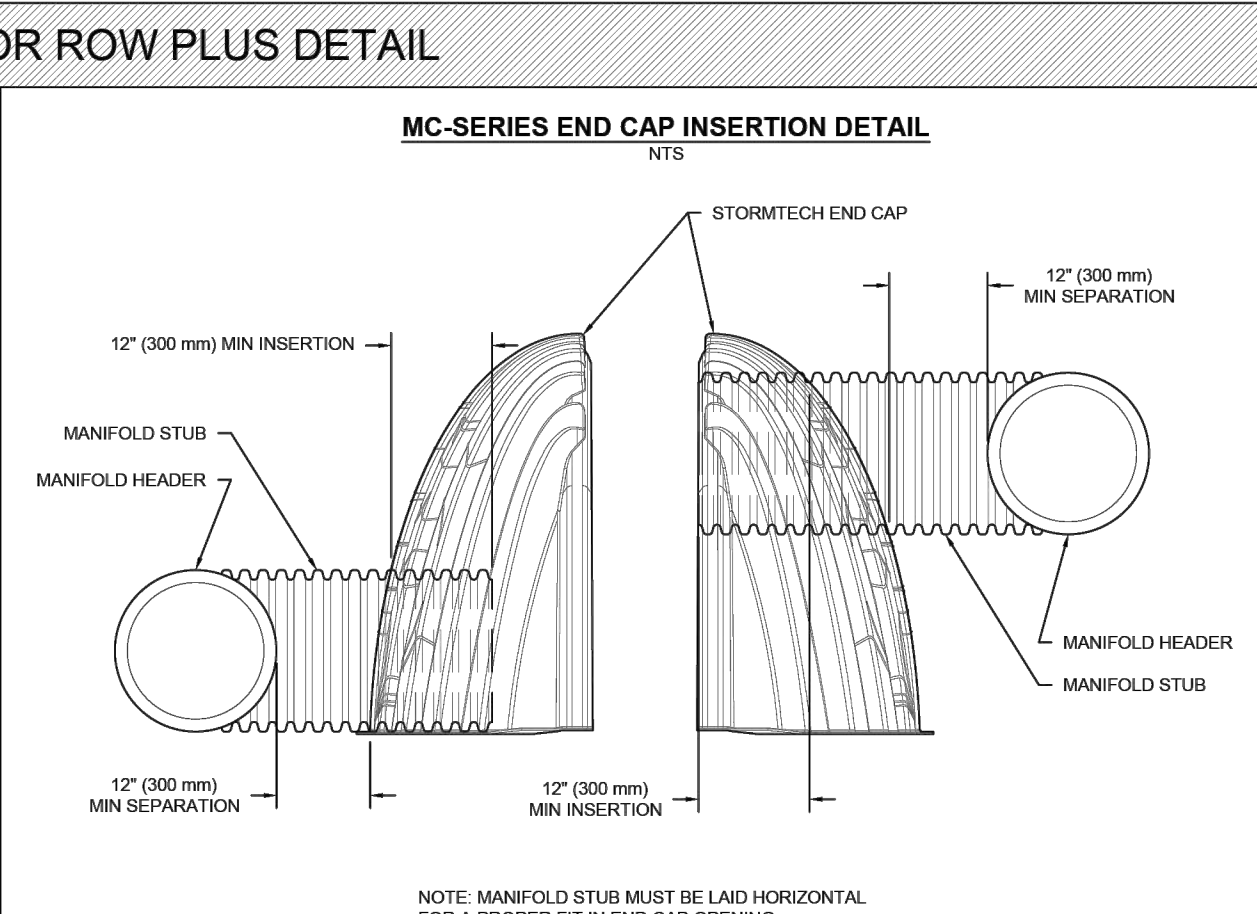
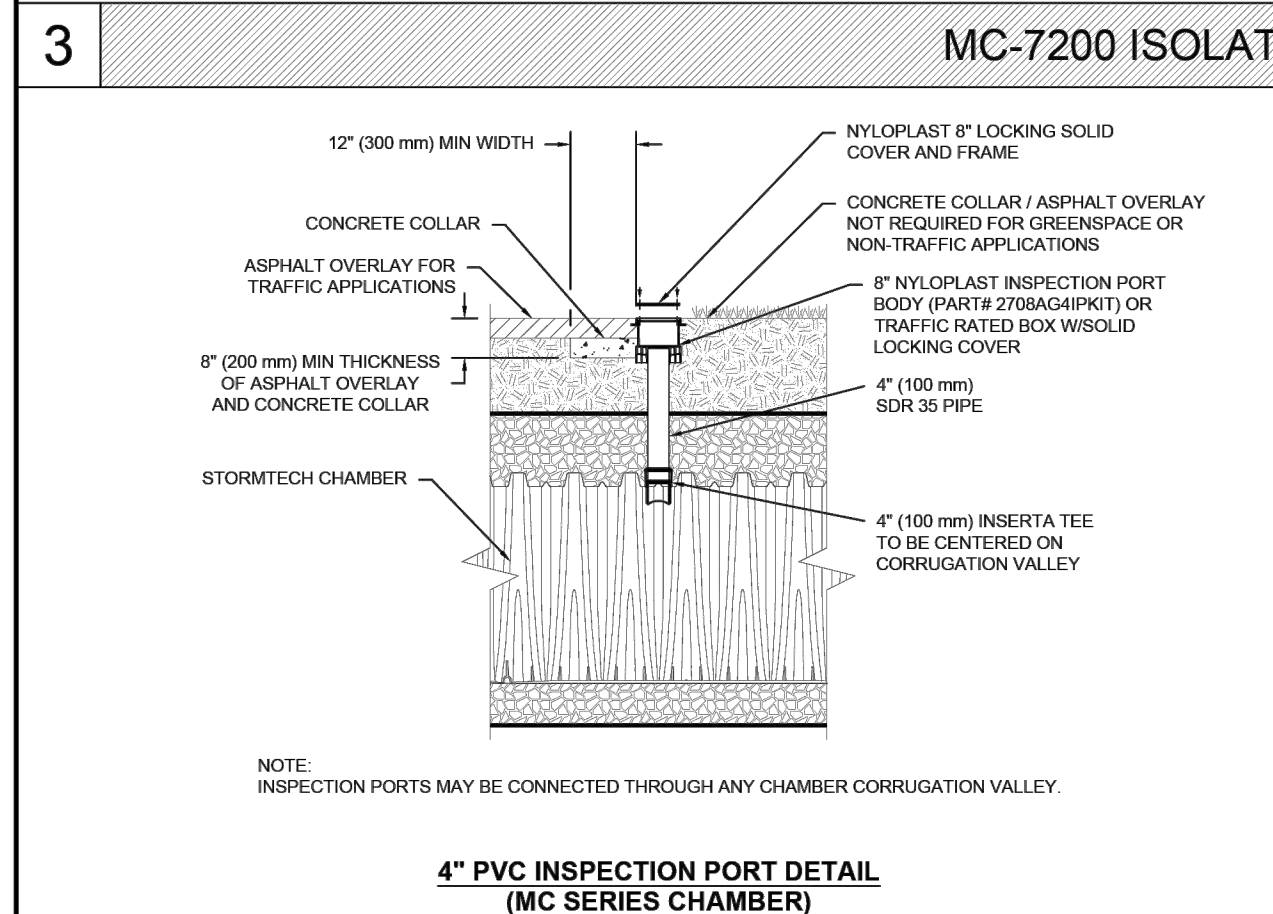
ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

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. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE "D" LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER "C" STARTS FROM THE TOP OF THE EMBEDED 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, <5% FINES OR PROCESSED AGGREGATE. OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 97, 6, 67, 68, 7, 78, 8, 89, 9, 10	AASHTO M145 ¹ A-1, A-2, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 97, 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. 90% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDDED STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A) LAYER TO THE "C" LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 4	NO COMPACTION REQUIRED.	
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE AASHTO M43 ¹ 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}	

- PLEASE NOTE:**
- 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".
 - MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM 12739 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THENOPOLYESTER 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, THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT². THE ABC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418.
 - 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.



- NOTES:**
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
 - MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM 12739 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THENOPOLYESTER CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
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DATE: _____ PROJECT #: _____ NOT TO SCALE

DRAWN: SU CHECKED: N/A REV: _____

2892 HWY K O'FALLON, MO, USA

StormTech Chamber System
 888-892-2894 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
 HILLIARD, OH 43026
 1-800-733-7473

SHEET 1 OF 1



ENGINEERS AUTHENTICATION
 The responsibility for professional engineering liability on this project is hereby limited to the set of plans authorized by the seal, signature, and date hereon attached. Responsibility is documented for all other engineering plans involved in this project and specifically excludes revisions after the date stated hereon.

SCOTT FELDT
 PROFESSIONAL ENGINEER
 PE 2021009371

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 2892 HIGHWAY K
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 RCP-N L L C
 660 OFFICE PARKWAY
 CREVE COEUR, MO 63141

Project: _____
 Date: 4/19/2024

UNDERGROUND DETENTION DETAILS

C-401

Project No. 2214120
 Drawn By D. STOSZ
 Checked By S. FELDT

NOT RELEASED FOR CONSTRUCTION