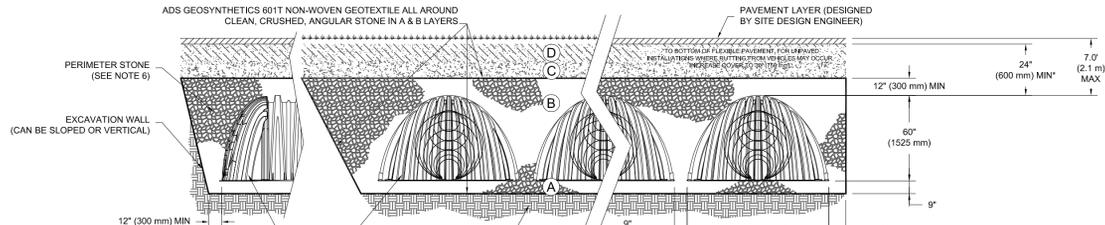


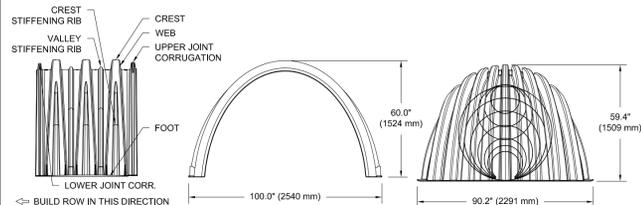
ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

| 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 A PART OF THE 'C' 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 90% 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 M43 ¹ 3, 4 | NO COMPACTION REQUIRED. |
| A | FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | AASHTO M43 ¹ 3, 4 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ** |

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



- NOTES:**
- MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
 - "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT.
 - 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.
 - 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.



STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
 STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

| PART # | STUB | B | C |
|---------------|---------------|-------------------|---------------|
| MC4500REPE06T | 6" (150 mm) | 42.54" (1,081 mm) | --- |
| MC4500REPE06B | --- | 40.50" (1,029 mm) | 0.86" (22 mm) |
| MC4500REPE08T | 8" (200 mm) | 38.37" (975 mm) | 1.01" (26 mm) |
| MC4500REPE10T | 10" (250 mm) | 35.69" (907 mm) | 1.33" (34 mm) |
| MC4500REPE12T | 12" (300 mm) | 32.72" (831 mm) | 1.55" (39 mm) |
| MC4500REPE15T | 15" (375 mm) | 29.30" (746 mm) | 1.97" (50 mm) |
| MC4500REPE18T | 18" (450 mm) | 23.06" (585 mm) | 2.26" (57 mm) |
| MC4500REPE24T | 24" (600 mm) | 30" (760 mm) | 2.95" (75 mm) |
| MC4500REPE30T | 30" (750 mm) | --- | 3.25" (83 mm) |
| MC4500REPE42T | 42" (1050 mm) | --- | 3.55" (90 mm) |

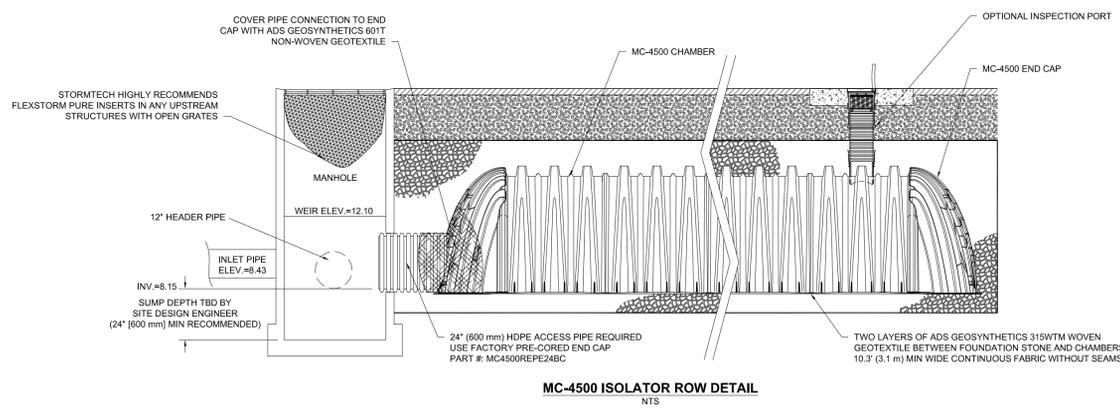
NOMINAL CHAMBER SPECIFICATIONS

| SIZE (W X H X INSTALLED LENGTH) | CHAMBER STORAGE | MINIMUM INSTALLED STORAGE* | WEIGHT |
|--|--|--|----------------------|
| 100.0" X 60.0" X 48.3" (2540 mm X 1524 mm X 1227 mm) | 105.5 CUBIC FEET (3,011 m ³) | 162.6 CUBIC FEET (4,600 m ³) | 130.0 lbs. (59.0 kg) |

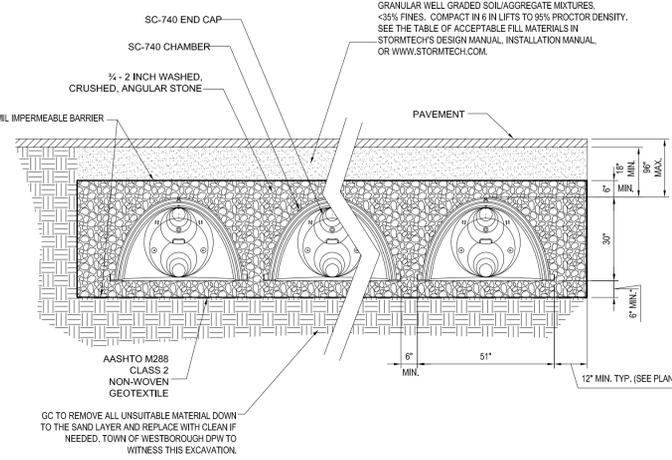
NOMINAL END CAP SPECIFICATIONS

| SIZE (W X H X INSTALLED LENGTH) | END CAP STORAGE | MINIMUM INSTALLED STORAGE* | WEIGHT |
|--|---|--|----------------------|
| 90.2" X 59.4" X 30.7" (2291 mm X 1509 mm X 781 mm) | 35.7 CUBIC FEET (1,011 m ³) | 108.7 CUBIC FEET (3,080 m ³) | 135.0 lbs. (61.2 kg) |

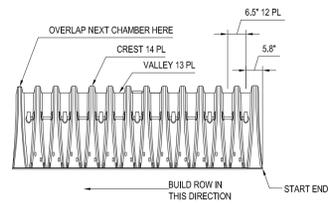
*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.



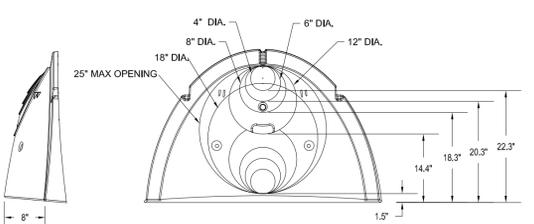
MC-4500 ISOLATOR ROW DETAIL



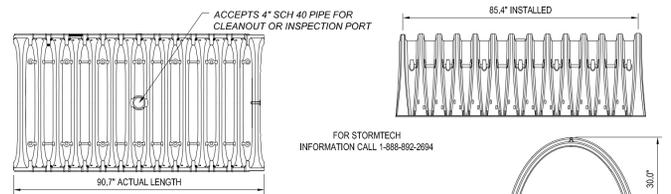
STORMTECH SC-740 CHAMBER SYSTEM TYPICAL CROSS SECTION DETAIL



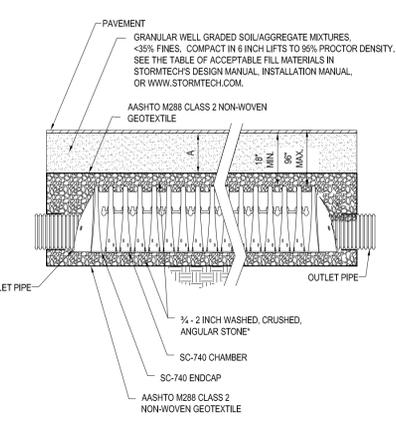
STORMTECH SC-740 CHAMBER END CAP DETAIL



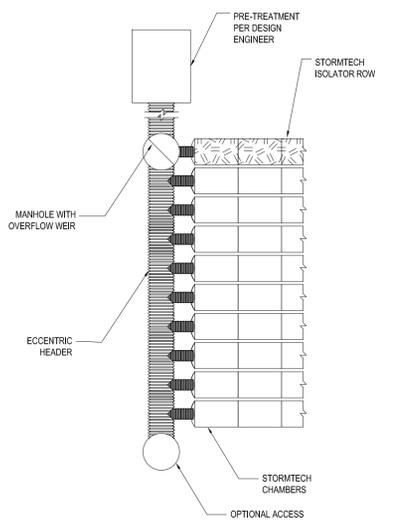
STORMTECH SC-740 CHAMBER INLET MANIFOLD WITH ISOLATOR ROW DETAIL



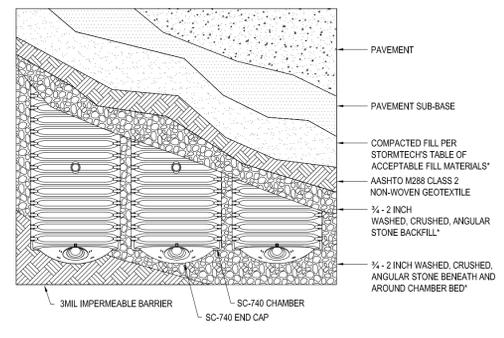
STORMTECH SC-740 CHAMBER OPTIONAL INSPECTION PORT DETAIL



STORMTECH SC-740 CHAMBER SYSTEM INLET / OUTLET DETAIL



STORMTECH CHAMBER SYSTEM INLET MANIFOLD WITH ISOLATOR ROW



STORMTECH SC-740 CHAMBER SYSTEM PLAN VIEW DETAIL

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REVISIONS

| REV | DATE | COMMENT | BY |
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PROJECT No.: W131097
 DRAWN BY: KBS
 CHECKED BY: RMM
 DATE: 06/13/2017
 SCALE: AS NOTED
 CAD I.D.: W131097_SSO_2_DETAILS

PROJECT: **PRELIMINARY PLAN FOR COMPREHENSIVE PERMIT "THE ENCLAVE AT NORFOLK"**
 A SUBDIVISION IN NORFOLK, MASS.
 OWNER: NORFOLK HOLDINGS, LLC
 VILLAGE GREEN TOWN OF NORFOLK NORFOLK COUNTY, MASS.
 MAP #15, LOT 54-87

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SHEET TITLE:

DETAILS

SHEET NUMBER:
C-33

REV - 06/13/2017