

UNDERDRAINED SOIL FILTER CONSTRUCTION NOTES

1. PRIOR TO CONSTRUCTION OF UNDERDRAINED SOIL FILTER STABILIZE AREAS THAT DRAIN TO THEM WITH EITHER TEMPORARY OR PERMANENT EROSION CONTROL MEASURES IN ACCORDANCE WITH THE EROSION & SEDIMENT CONTROL PLAN, NOTES & DETAILS.
2. DO NOT PLACE THE FILTER MEDIA UNTIL AFTER THE SOIL FILTER AREA IS USED FOR A SETTLING BASIN DURING CONSTRUCTION AND ALL AREAS THAT DRAIN TO THE BASIN HAVE BEEN STABILIZED. PRIOR TO PLACEMENT OF THE FILTER MEDIA ALL SEDIMENT RESULTING FROM CONSTRUCTION ACTIVITIES MUST BE REMOVED.
3. EXCAVATE UNDERDRAINED SOIL FILTER IN A MANNER THAT WILL NOT COMPACT THE SUBGRADE. DO NOT OPERATE HEAVY MACHINERY INSIDE THE UNDERDRAINED SOIL FILTER.
4. PLACE UNDERDRAIN BEDDING, UNDERDRAIN PIPE AND BACKFILL MATERIAL IN A MANNER THAT DOES NOT COMPACT THE SUBGRADE, BEDDING OR BACKFILL.
5. PLACE SOIL FILTER BED OVER THE PREPARED SURFACES WITH AN EXCAVATOR WORKING FROM OUTSIDE THE SYSTEM.

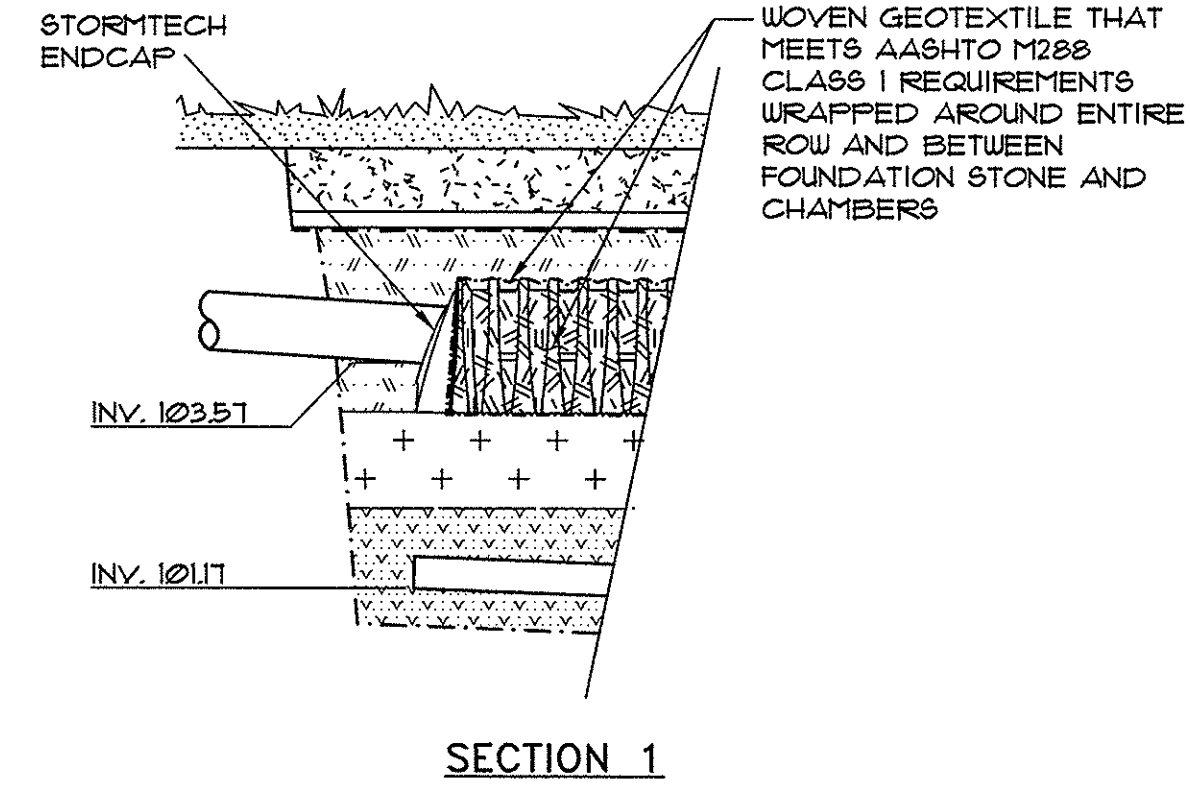
SOIL FILTER MEDIA NOTES

1. THE SOIL FILTER MUST BE AT LEAST 12 INCHES DEEP AND MUST EXTEND ACROSS THE BOTTOM OF THE ENTIRE FILTER AREA AND UP THE SIDES TO THE DEPTH OR ELEVATION SPECIFIED. THIS SOIL MIXTURE SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS CAN BE MIXED WITHIN THE FILTER. THE RESULTANT MIXTURE SHOULD HAVE MINIMAL CLAY CONTENT WITH NO LESS THAN 8% FINES PASSING THE #200 SIEVE. DURING CONSTRUCTION, CARE SHOULD BE TAKEN TO AVOID COMPACTION OF BOTH THE GRAVEL AND SOIL FILTER. COMPACTION SHOULD BE BY SATURATION ONLY, UNLESS SPECIAL LOW COMPACTION EQUIPMENT IS AVAILABLE.
2. CARE SHOULD BE TAKEN, ESPECIALLY IN AREAS WHERE THE PREDOMINANT SOIL AND OVERBURDEN CONTAINS MARINE CLAY, TO BE SURE THAT THE SAND AND TOPSOIL USED IN THE MIXTURE HAVE VERY LITTLE OR NO CLAY CONTENT. USE OF SOILS WITH MORE THAN 2% CLAY CONTENT COULD CAUSE FAILURE OF THE SYSTEM.
3. THE SOIL FILTER MEDIA MUST BE COMPOSED OF A THOROUGHLY BLENDED MIXTURE OF MATERIALS MEETING THE SPECIFICATIONS IN TABLE B. ADJUST THE PROPORTIONS BASED ON THE ORGANIC CONTENT AND AMOUNT OF FINES OF EACH COMPONENT. IF THE SAND IS VERY CLEAN OR THE MULCH IS RELATIVELY COARSE, USE MORE MULCH AND LESS SAND WHILE STAYING WITHIN THE ESTABLISHED RANGES. IF THE SAND IS SILTY OR THE MULCH LOAMY, USE MORE SAND AND LESS MULCH.

TABLE A		TABLE B		TABLE C		
ME DOT SPECIFICATIONS FOR UNDERDRAINS (MDOT #103.22)		SOIL FILTER MEDIA		ME DOT SPECIFICATIONS FOR UNDERDRAINS (MDOT #103.01)		
SIEVE SIZE	% BY WEIGHT	FILTER MEDIA	MIXTURE BY VOLUME	SIEVE SIZE	% BY WEIGHT	
UNDERDRAIN TYPE C		SAND	70%-80%	MEDOT SPECIFICATION #103.01 FINE AGGREGATE FOR CONCRETE (SEE TABLE C)	#4	95-100
1"	100				#8	80-100
3/4"	90-100				#16	50-85
3/8"	0-15	MULCH	20%-30%	MODERATELY FINE, SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 8%-10% PASSING THE 200 SIEVE	#30	25-60
#4	0-25				#60	10-30
#10	0-5				#100	2-10
					#200	0-5

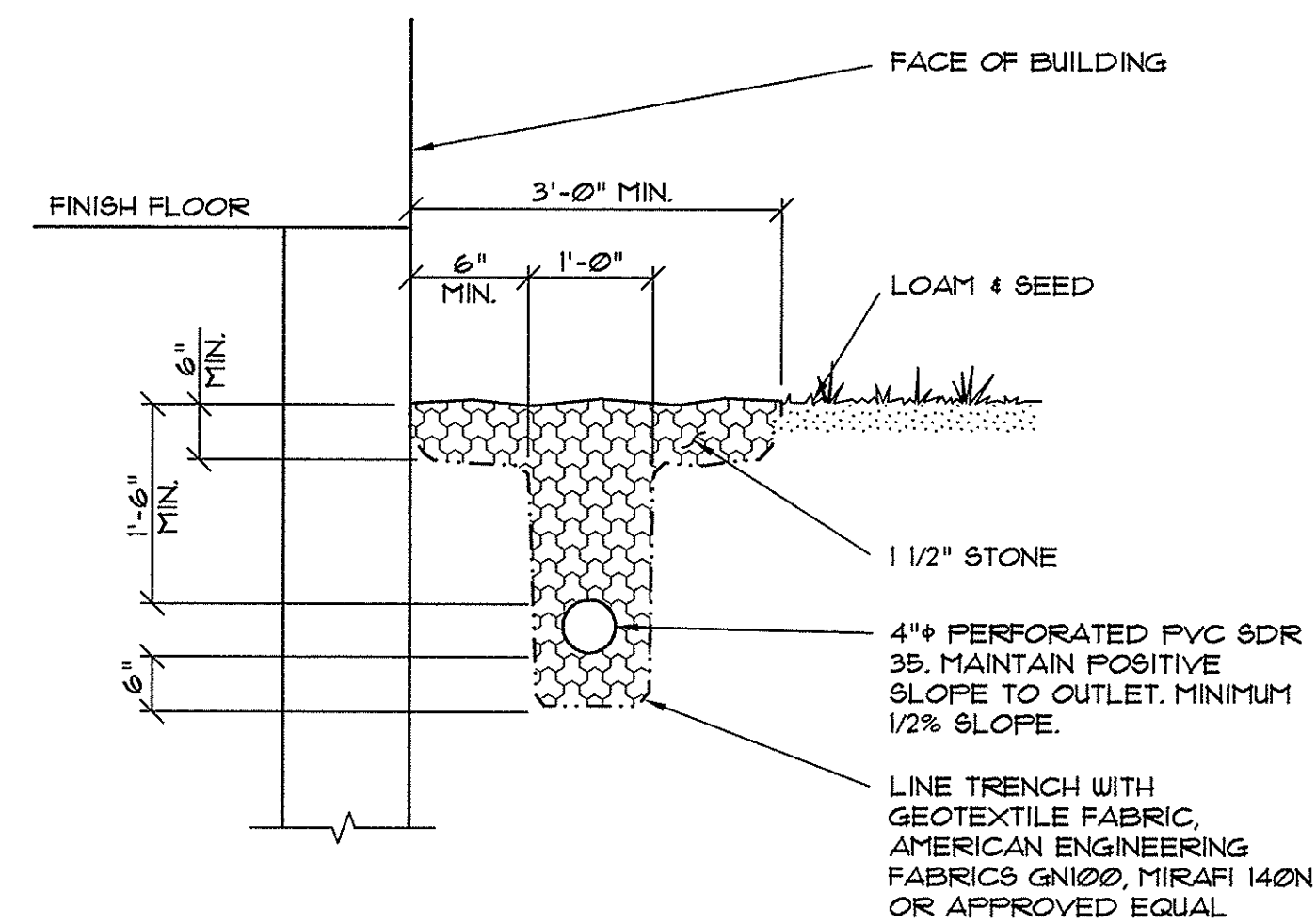
4 UNDERDRAINED SOIL FILTER NOTES

NOT TO SCALE



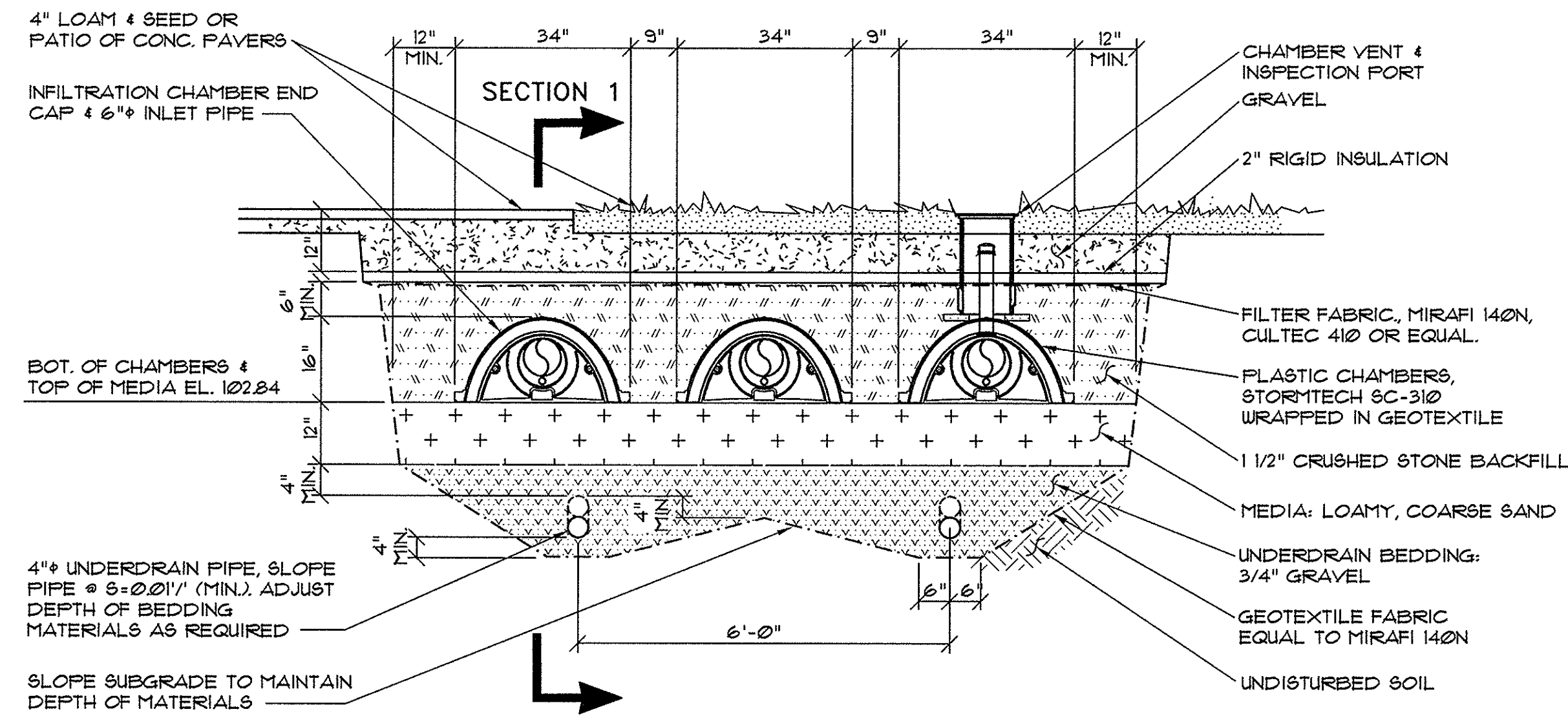
1 STORMDRAIN INFILTRATION & UNDERDRAINED SOIL FILTER SYSTEM

NOT TO SCALE



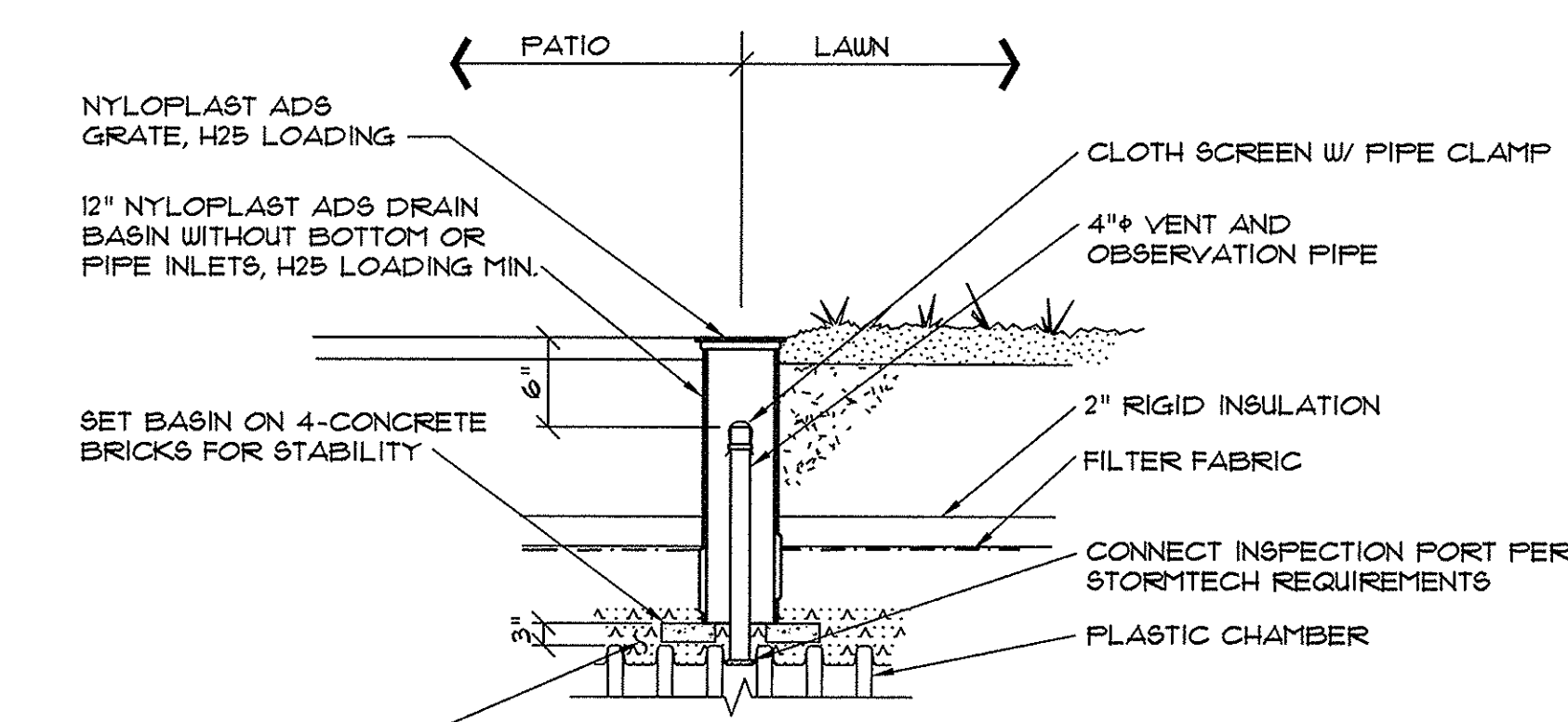
3 STONE DRIPSTRIP SECTION

NOT TO SCALE



2 CHAMBER VENT & INSPECTION PORT SECTION

NOT TO SCALE



- NOTES:
1. INSPECTION PORT TO BE USED TO VENT CHAMBERS.
 2. INSPECTION PORT TO BE LOCATED IN THE CENTER OF THE CHAMBER WHERE SHOWN ON THE SITE PLAN.

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THOMAS GREER
NO. 4295
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE
5/20/15

REV.	DATE	DESCRIPTION
1	5/20/15	FOR CITY SUBMITTAL

BRIGGS STREET PROPERTY, LLC
55 SALEM ST #B
PORTLAND, ME. 04102

SCALE: AS SHOWN
DATE: MAY 7, 2015
PROJECT: 14164

DRN BY: JDC/RJS
DESIGN BY: TSG
CHK BY: TSG

5 BRIGGS STREET
PORTLAND, MAINE

DETAILS

C2.4

MAP/LOT 57/J/29 & 57/J/31