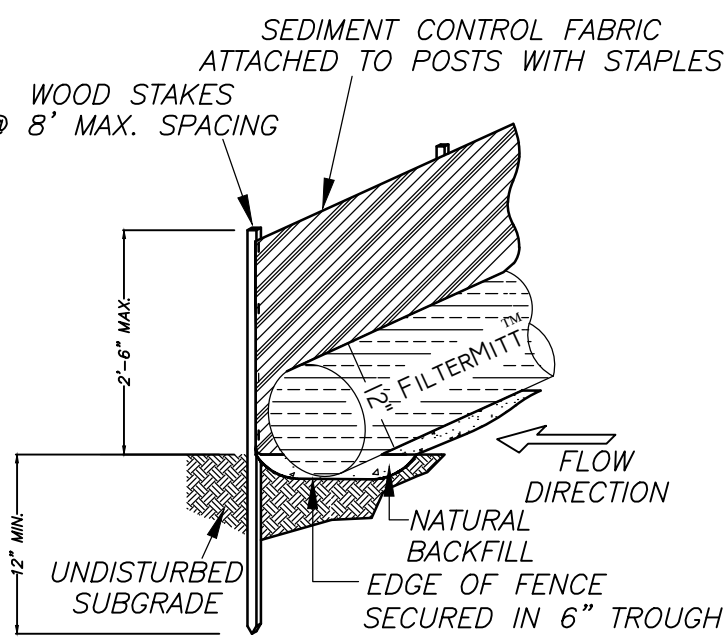


DATE OF TESTING: 9/18/2025
TEST BY: STAMSKI AND McNARY, INC.
CERT. SOIL EVAL.: DANIEL CARR, SE 13801

The diagram is a hand-drawn soil profile. On the left, a vertical axis is marked with elevations: 0, 3'-2", 3'-8", 4'-2", and 10'-0". To the right of this axis, a rectangular box represents the soil profile. The top of the box is labeled 'TP-1' and '144.3'. Inside the box, the top layer is labeled 'FILL'. Below this, there are several layers indicated by horizontal lines and arrows pointing to descriptive text on the right. The layers are: 'SANDY LOAM' (between 3'-2" and 3'-8"), 'MASSIVE/FRABLE' (between 3'-8" and 4'-2"), 'LOAMY SAND' (between 4'-2" and 10'-0"), '10% G.S.' (at 4'-2"), 'MASSIVE/FRABLE' (between 4'-2" and 10'-0"), and 'LOAMY SAND' (at 10'-0"). To the right of the box, there is a legend: '2.0% 5/4' SINGLE GRAINED, LOOSE'. At the bottom left, there is a note: 'NO REFUSAL MOTTLED @ 5'-8" C.W. OBS. @ 8'-9" E.S.W.T. @ 10'-8" (138.6)'. In the top right corner, there is a small square with a cross inside.

0 TP-1 144.3
FILL
3'-2" SANDY LOAM
3'-8" MASSIVE/FRABLE
4'-2" LOAMY SAND
10% G.S.
MASSIVE/FRABLE
LOAMY SAND
2.0% 5/4
SINGLE GRAINED, LOOSE
10'-0"

NO REFUSAL
MOTTLED @ 5'-8"
C.W. OBS. @ 8'-9"
E.S.W.T. @ 10'-8" (138.6)



SILTATION BARRIER DETAIL
N.T.S.

1. ALL UNDERGROUND UTILITIES SHOWN HEREIN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS FROM AIRCRAFT UTILITY COMPANIES AND PUBLIC AGENCIES AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REMOVAL. ALL UTILITIES COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED PRIOR TO EXCAVATION. LOCATIONS OF UTILITIES NOT SHOWN ON THIS PLAN, SEE CHAPTER 370, ACTS OF 1963 MASS. WE ASSUME NO RESPONSIBILITY FOR DAMAGE INCURRED A RESULT OF UTILITIES NOT SHOWN ON THIS PLAN. CONTRACTOR MUST BE RESPONSIBLE FOR CONNECTIONS. THE APPROPRIATE PUBLIC UTILITY ENGINEERING DEPARTMENT MUST BE CONSULTED. DIG-SAFE TELE. NO. (888) 344-7233. NOTE THAT THE TOWN OF NEEDHAM WATER AND SEWER DIVISION IS NOT A MEMBER OF DIG-SAFE. FOR LOCATION OF WATER AND SEWER SERVICE, CONTACT THE WATER AND SEWER DIVISION SEPARATELY AT 781-455-7550 A MINIMUM OF 72-HOURS IN ADVANCE OF ANY EXCAVATION.
2. UNLESS OTHERWISE SPECIFIED ON THESE PLANS, ALL CONSTRUCTION METHODS AND MATERIALS SHALL COMPLY WITH SPECIFICATIONS OUTLINED IN NEEDHAM'S STORMWATER MANAGEMENT STANDARDS.
3. ALL STUMPS AND OTHER CONSTRUCTION DEBRIS SHALL BE PROPERLY REMOVED ANY FILL MATERIAL USED SHALL BE FREE OF HAZARDOUS MATERIALS OR WASTE.
4. ALL LEAKS SHALL BE DIRECTED TO THE SUBSURFACE ROOF DRAIN INFILTRATION BED, GRADING AND DOWNSLOP OVERFLOWS SHALL NOT DIRECT RUNOFF ACROSS ADJACENT PROPERTY LINES.
5. UPON COMPLETION OF AS-BUILT PLAN OF INFILTRATION STRUCTURES AND IMPERVIOUS AREAS, STAMPED BY A MASSACHUSETTS REGISTERED PROFESSIONAL ENGINEER SHOWING ALL STORMWATER MANAGEMENT SYSTEMS SHALL ACCOMPANY THE AS-BUILT PLOT PLAN STAMPED BY A MASSACHUSETTS REGISTERED LAND SURVEY AT COMPLETION OF THE PROJECT.
6. CONNECTION OF ANY PROPOSED OR FUTURE SUMP PUMP TO THE INFILTRATION STRUCTURES IS PROHIBITED.
7. EXCAVATION SHALL BE CONTACT DESIGN ENGINEER AFTER EXCAVATION OF INFILTRATION BED AND TRENCH PRIOR TO PLACING STONE, AND PRIOR TO BACKFILL.
8. ROOF RUNOFF FROM ALL DOWNSLOUPS FROM THE EXISTING DWELLING, PROPOSED DWELLING AND GARAGE SHALL BE DIRECTED TO ROOF DRAIN DRYWELL.
9. DRAINAGE CALCULATIONS-----
PROPOSED ADDITION FOOT PRINT: 848 SF
EXISTING AREA: 1,089 SF
PROPOSED ROOF AREA: 1,089 SF
PROPOSED ROOF DRYWELL: TOTAL STORMWATER SC-310 CHAMBERS CAPACITY IS 203 CF PER STORMWATER REPORT.
- 1" RUNOFF ACROSS IMPROVEMENTS:
 $1,937 \text{ SF} \times \frac{1}{2} \text{ FT} = 161.4 \text{ CF}$
 $203.0 \text{ CF} > 161.4$

1. THE LIMITS OF WORK SHALL BE MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION OR SITE CLEARING. THE SILTATION BARRIER SHALL SERVE AT THE LIMIT OF WORK LINE.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY STRUCTURE ON THE SITE. THE SILTATION BARRIER SHALL BE PLACED IN ALL AREAS AS SHOWN ON ALL THE PLANS AND IN ANY OTHER AREAS AS DETERMINED NECESSARY DURING CONSTRUCTION.
3. ALL EXPOSED SOIL SHALL HAVE EROSION CONTROL MEASURES AROUND THEIR EDGES AT ALL TIMES. SOIL STOCKPILES SHALL BE COVERED WITH TEMPORARY VEGETATION OR FASTENED TAUPAULPIN SHEETS.
4. ALL CUT AND FILL SLOPES SHALL BE IMMEDIATELY COVERED WITH 6" OF LOAM AND SEED DURING THE GROWING SEASON (APRIL 1 TO NOVEMBER 1) OR COVERED WITH HAYMULCH DURING THE NON-GROWING SEASON (NOVEMBER 1 TO APRIL 1). IN AREAS SUBJECT TO THE WETLANDS PROTECTION ACT, THE HAYMULCH AND/OR REQUIRED MEASURES SHALL REMAIN IN PLACE UNTIL PERMANENT VEGETATION IS ESTABLISHED. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL REMAIN 8" OF SOIL COVER.
5. THE SILTATION BARRIER SHALL BE MAINTAINED UNTIL VEGETATIVE COVER HAS BEEN ESTABLISHED AND GRADED SLOPES ARE STABLE.
6. THE SITE CONTRACTOR IS RESPONSIBLE TO CLEAN UP ANY SEDIMENT WHICH ERODES FROM THE SITE INTO THE STREET OR ABUTTING PROPERTY IMMEDIATELY UPON DISCOVERY.
7. THE CONTRACTOR SHALL FOLLOW STANDARD PRACTICE AND LOAM AND SEED ALL DISTURBED AREAS.
8. OPERATOR PERSONNEL MUST INSPECT THE CONSTRUCTION SITE AT LEAST EVERY 7 DAYS AND WITHIN 24 HOURS OF A RAINFALL OF 0.5 INCHES OR MORE. DISTURBED AREAS THAT HAVE BEEN STABILIZED MUST BE INSPECTED AT LEAST EVERY MONTH.
9. DURING CONSTRUCTION, THE CONTRACTOR SHALL SPRAY DOWN THE SITE WITH WATER AS NEEDED FOR DUST CONTROL.
10. DURING CONSTRUCTION THE CONTRACTOR SHALL INSPECT THE ROAD AND SWEEP AS NECESSARY.
11. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL STRUCTURES AND DEVICES THROUGHOUT CONSTRUCTION. ANY EROSION CONTROL DEVICES FOUND TO BE INOPERATIVE SHALL BE REPAIRED IMMEDIATELY.
12. ALL ACCUMULATED SEDIMENTS MUST BE REMOVED WHEN DEPOSITS REACH NO MORE THAN ONE HALF THE HEIGHT OF THE SILTATION BARRIER.
13. AREAS SUBJECT TO THE WETLANDS PROTECTION ACT SHALL BE LEFT IN UNTREATED OR UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING (7 DAYS IF WITH 100 FEET OF A STREAM, POND OR WETLAND) AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF FINAL GRADING.
14. TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL PLANTING SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT THE SITE FROM SPRING RUNOFF PROBLEMS. IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, TEMPORARY MULCH OR OTHER METHODS APPROVED BY THE ENGINEER SHALL BE EMPLOYED TO PROTECT THE SITE.

ZONING DISTRICT: SRB
SCALE: 1"=10'

LEGEND:

N/F NOW OR FORMERLY

 TREE

 PROPOSED PLANTINGS

 PROPOSED WATER SERVICE

 PROPOSED SEWER SERVICE

 PROPOSED DRAINAGE PIPE

 PROPOSED SILTATION BARRIER

 EXISTING CONTOUR

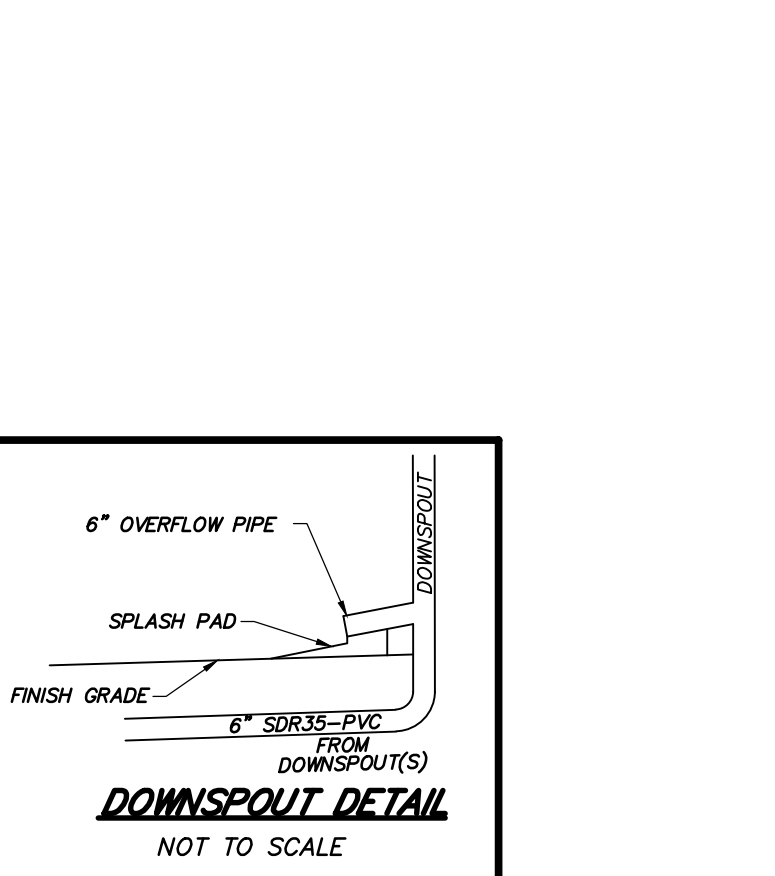
 PROPOSED CONTOUR

 PROPOSED AREA DRAIN

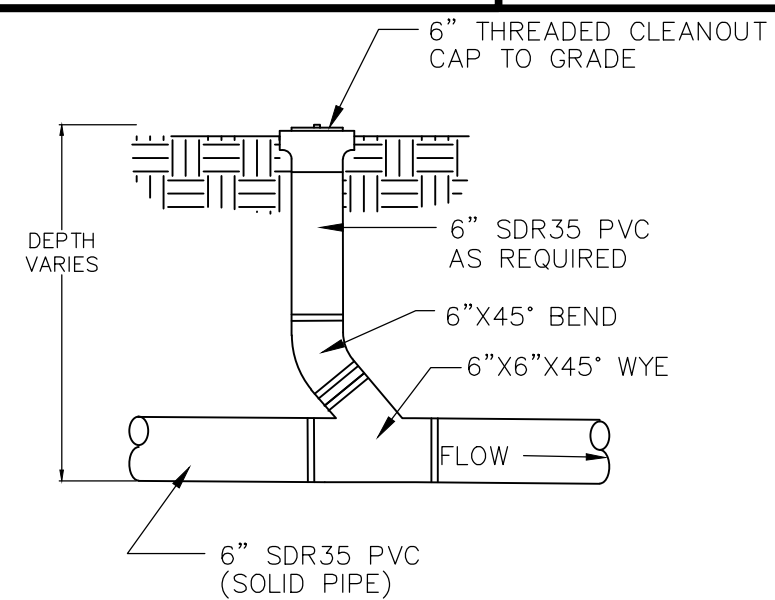
 PROPOSED DRAIN BASIN

 PROPOSED ROOF DRAIN LEADER

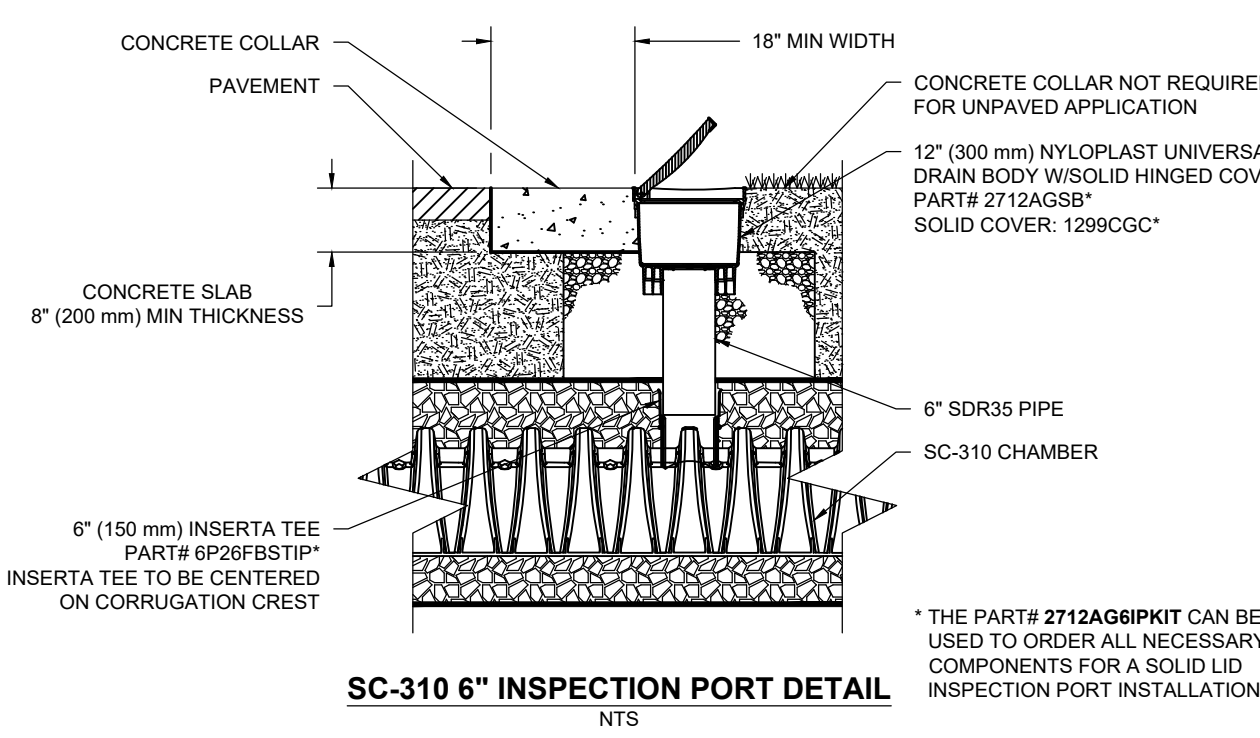
TBR TO BE REMOVED



DOWNSPOUT DETAIL



CLEANOUT DETAIL
NOT TO SCALE



SC-310 6" INSPECTION PORT DETAIL
NTS

1. THERE SHALL BE NO ILLEGAL DISCHARGES TO ANY PART OF THE STORM DRAIN SYSTEM. THE IMPLEMENTATION, INSPECTION, AND REPAIR OF THE EROSION CONTROLS IS THE RESPONSIBILITY OF THE SITE CONTRACTOR DURING CONSTRUCTION.

THE INSPECTION AND OPERATION OF THE STORM WATER MANAGEMENT SYSTEM UPON COMPLETION OF CONSTRUCTION IS THE RESPONSIBILITY OF:

PARTIES RESPONSIBLE FOR LONG TERM OPERATION/MAINTENANCE:

HOMEOWNER

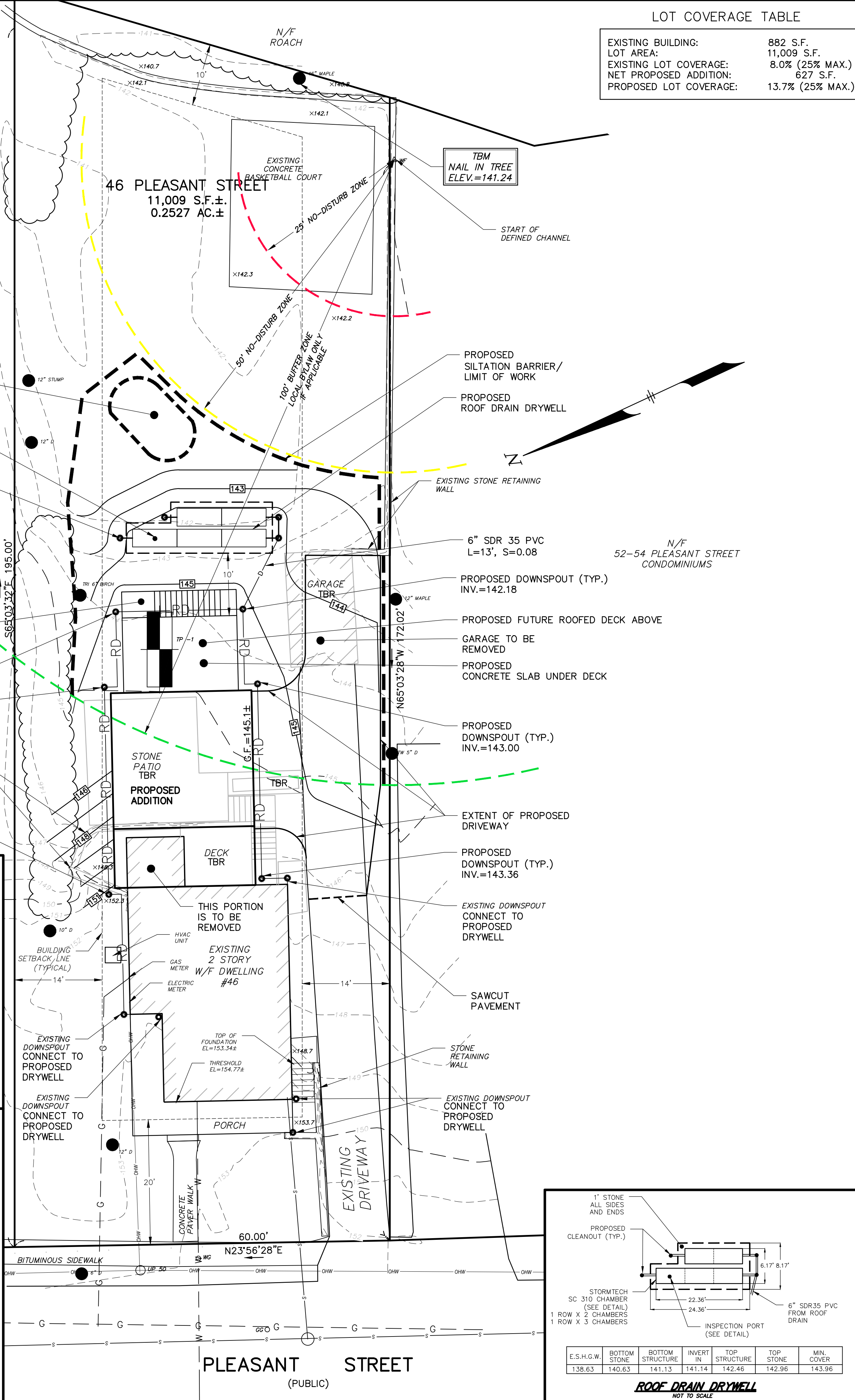
SCHEDULE FOR INSPECTION AND MAINTENANCE:

ROOF DRYWELL:

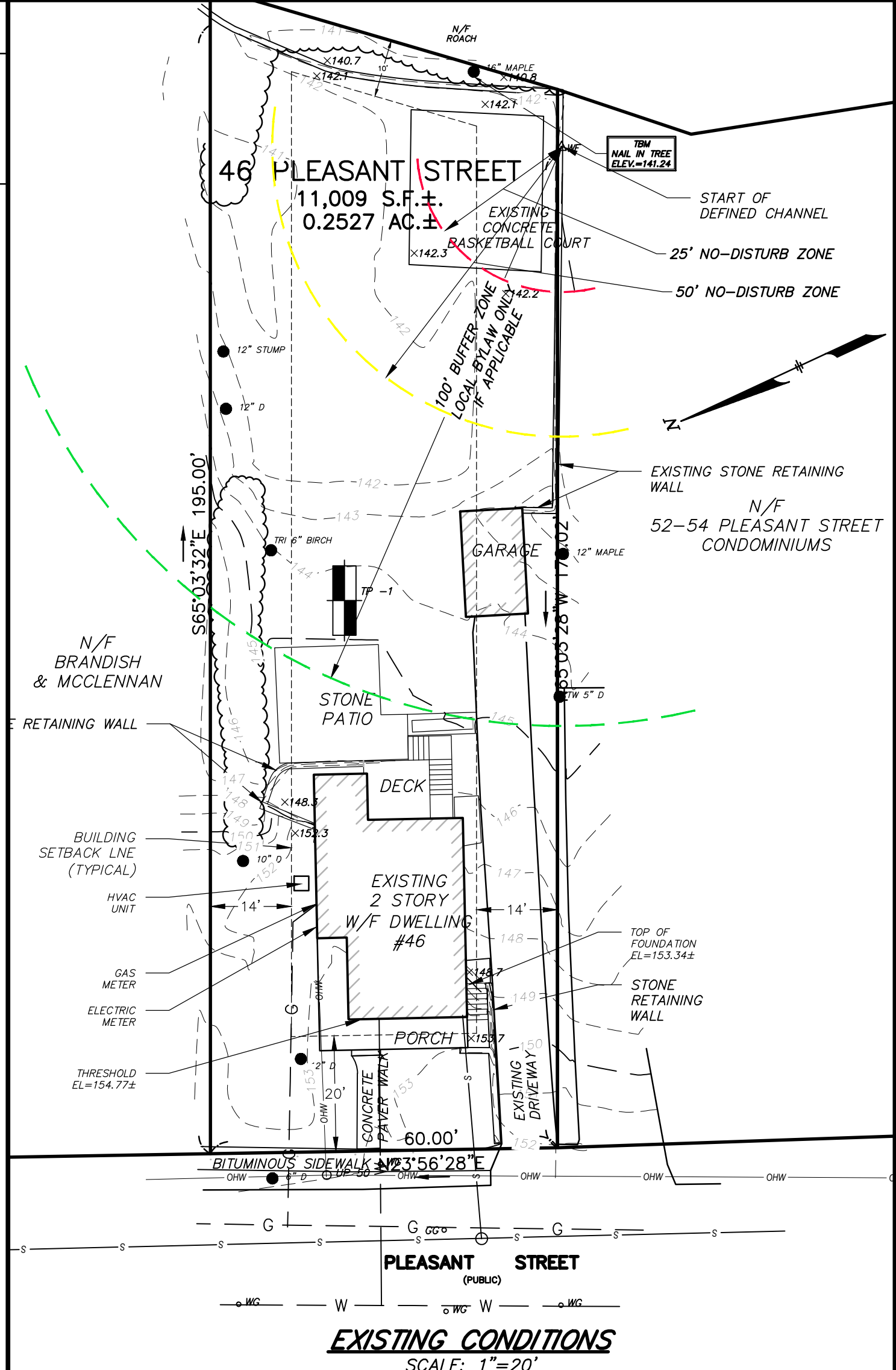
INSPECT THE ROOF DRYWELL AFTER EVERY MAJOR STORM FOR THE FIRST FIVE MONTHS TO ENSURE PROPER STABILIZATION AND FUNCTION. THEREAFTER, INSPECT AND CLEAN IT AT LEAST TWICE PER YEAR. WATER LEVELS SHOULD BE RECORDED OVER SEVERAL DAYS TO CHECK THE WATER DRAINAGE. ALSO, MOSQUITO CONTROLS MAY BE NECESSARY. ROOF GUTTERS SHALL BE CLEANED AT LEAST TWICE PER YEAR TO ENSURE THAT FLOW TO THE SUBSURFACE CHAMBER IS NOT OBSTRUCTED. GUTTERS AND DOWNSPOUTS SHALL BE INSPECTED AT LEAST TWICE PER YEAR TO ENSURE THAT THERE ARE NO LEAKS OR OBSTRUCTIONS THAT IMPAIR THE ABILITY OF THESE STRUCTURES TO EFFECTIVELY CONVEY ROOF RUNOFF. IF DAMAGE OF GUTTERS OR DOWNSPOUTS IS OBSERVED, THEY SHALL BE REPAIRED OR REPLACED. IF WATER IS PRESENT IN THE SYSTEM MORE THAN 72 HOURS AFTER A RAIN EVENT, THE SYSTEM IS CONSIDERED CLOGGED AND MUST BE SERVICED, REPAIRED, OR REPLACED.

EMERGENCY CONTACTS:

IN THE EVENT OF A HAZARDOUS MATERIALS SPILL ON THE SITE THE FOLLOWING PARTIES SHALL BE CONTACTED: FIRE DEPARTMENT: PH. (781) 444-0142



LOT COVERAGE TABLE	
EXISTING BUILDING:	882 S.F.
LOT AREA:	11,009 S.F.
EXISTING LOT COVERAGE:	8.0% (25% MAX.)
NET PROPOSED ADDITION:	627 S.F.
PROPOSED LOT COVERAGE:	13.7% (25% MAX.)



NOTE:
FILTER FABRIC SHALL BE PLACED ON SIDES AND TOP ONLY.

CHAMBERS SHALL MEET ASTM F2922
"STANDARD SPECIFICATION FOR
POLYETHYLENE (PE) CORRUGATED WALL
STORMWATER COLLECTION CHAMBERS".

NOMINAL 3/4" - 2"
DOUBLE WASHED, CRUSHED
ANGULAR STONE
(AASHTO M43 #3 THROUGH #57
STONE SIZES ALLOWED)

CHAMBERS SHALL BE DESIGNED IN
ACCORDANCE WITH ASTM F2787
"STANDARD PRACTICE FOR STRUCTURAL
DESIGN OF THERMOPLASTIC CORRUGATED
WALL, STORMWATER COLLECTION
CHAMBERS".

GRANULAR, WELL GRADED SOIL/AGGREGATE
MIXTURES, <35% FINES, COMPACT IN 6" LIFTS
TO 95% STANDARD PROCTOR DENSITY.

ADS 601
NON-WOVEN
GEOTEXTILE (OR
EQUAL) ON SIDES
AND TOP

SC-310 END CAP

USE SCARFPLY SUBGRADE
REMOVE TOP AND SUB SOILS—
REPLACE WITH TITLE 5 SAND

6"
16"
6"
24" MIN
TO ESHGW

6" 34" 12"

THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12 FOR EARTH AND LIVE LOADS WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.

SC-310 TYPICAL CROSS-SECTION

NOT TO SCALE

SITE PLAN FOR 46 PLEASANT STREET IN NEEDHAM, MA		
GRADING AND DRAINAGE PLAN		
FOR: SCALE: 1"=10'	KANTOR OCTOBER 9, 2025 REVISED: OCTOBER 22, 2025	
STAMSKI AND McNARY, INC. 1000 MAIN STREET ACTON, MASS. <i>ENGINEERING – PLANNING – SURVEYING</i> 0 5 10 20 30 40 FT		
SM-6696		(6696.DRAINAGE.J.2.dwg)