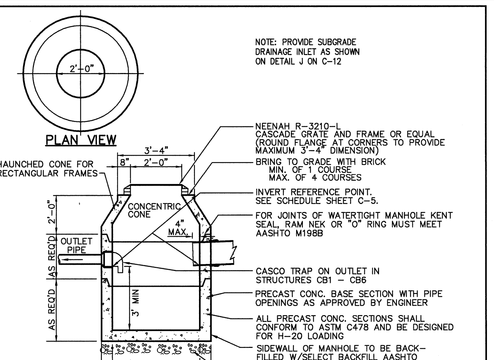
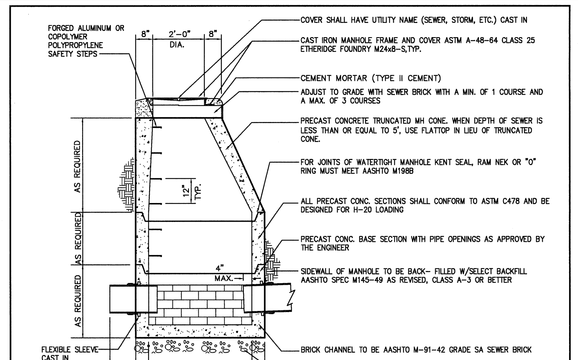


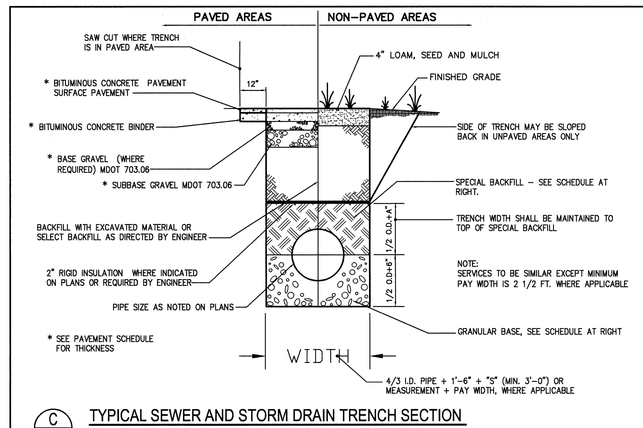
A — 4'-0" DIA. PRECAST CATCH BASIN

N.T.S.



B — 4'-0" DIA. PRECAST MANHOLE

N.T.S.



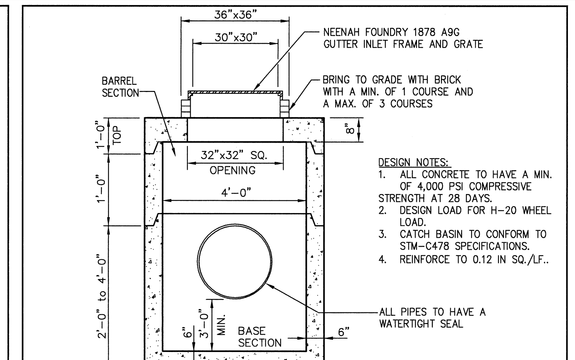
NOTE:
BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.

C — TYPICAL SEWER AND STORM DRAIN TRENCH SECTION

N.T.S.

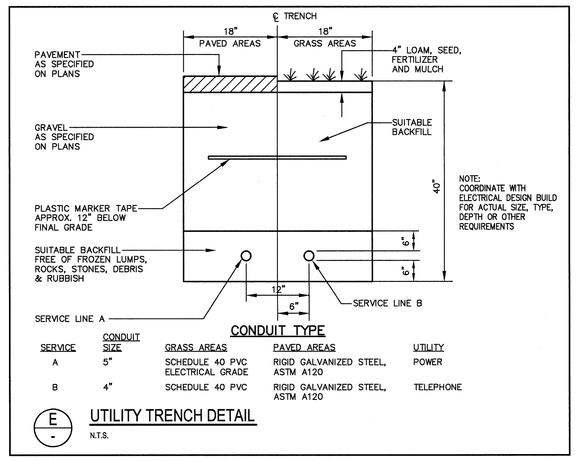
SCHEDULE OF BASE BACKFILL

TYPE OF PIPE	BEDDING MATERIAL	SPECIAL BACKFILL	SPECIAL BACKFILL COVER "A" (IN)	SELECT BACKFILL
CONCRETE	GRANULAR AASHTO M145-49 A-3 OR BETTER	GRANULAR AASHTO M145-49 A-3 OR BETTER	12	GRANULAR AASHTO M145-49 A-3 OR BETTER
PVC	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	6	GRANULAR AASHTO M145-49 A-3 OR BETTER
CMP	3/4" CRUSHED STONE	GRANULAR AASHTO M145-49 A-3 OR BETTER	6	GRANULAR AASHTO M145-49 A-3 OR BETTER



D — 4'-0" PRECAST CATCH BASIN DOUBLE CAPACITY INLET

N.T.S.

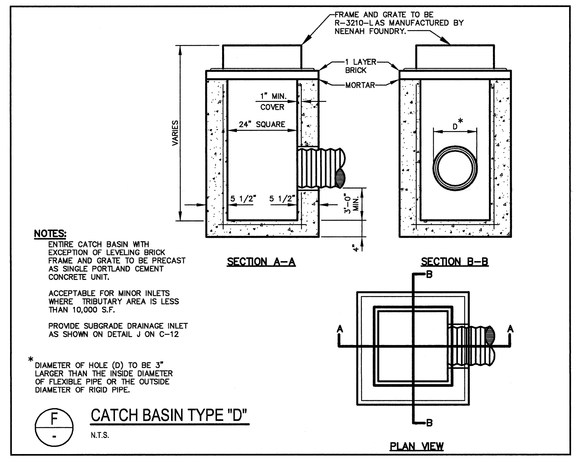


CONDUIT TYPE

SERVICE	CONDUIT SIZE	GRASS AREAS	PAVED AREAS	UTILITY
A	5"	SCHEDULE 40 PVC ELECTRICAL GRADE	RIGID GALVANIZED STEEL, ASTM A120	POWER
B	4"	SCHEDULE 40 PVC	RIGID GALVANIZED STEEL, ASTM A120	TELEPHONE

E — UTILITY TRENCH DETAIL

N.T.S.



NOTES:
ENTIRE CATCH BASIN WITH EXCEPTION OF LEVELING BRICK FRAME AND GRATE TO BE PRECAST AS SINGLE PORTLAND CEMENT CONCRETE UNIT.

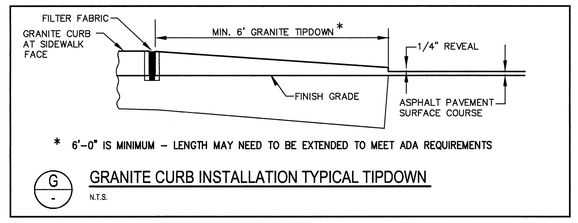
ACCEPTABLE FOR MINOR INLETS WHERE TRIBUTARY AREA IS LESS THAN 10,000 S.F.

PROVIDE SUBGRADE DRAINAGE INLET AS SHOWN ON DETAIL J ON C-12

* DIAMETER OF HOLE (D) TO BE 3" LARGER THAN THE INSIDE DIAMETER OF FLEXIBLE PIPE OR THE OUTSIDE DIAMETER OF RIGID PIPE.

F — CATCH BASIN TYPE "D"

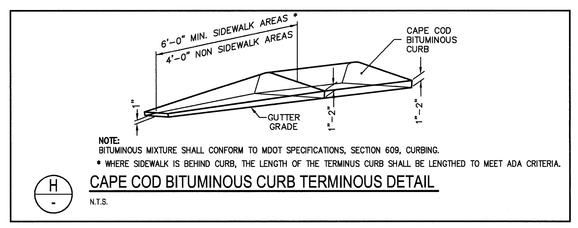
N.T.S.



* 6'-0" IS MINIMUM – LENGTH MAY NEED TO BE EXTENDED TO MEET ADA REQUIREMENTS

G — GRANITE CURB INSTALLATION TYPICAL TIPDOWN

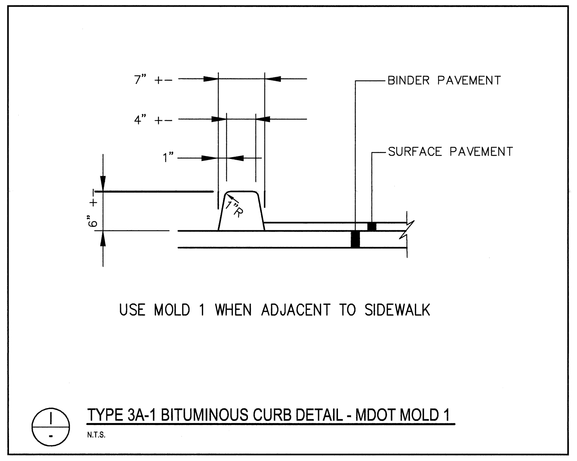
N.T.S.



NOTE:
BITUMINOUS MIXTURE SHALL CONFORM TO MDOT SPECIFICATIONS, SECTION 609, CURBING.
* WHERE SIDEWALK IS BEHIND CURB, THE LENGTH OF THE TERMINUS CURB SHALL BE LENGTHED TO MEET ADA CRITERIA.

H — CAPE COD BITUMINOUS CURB TERMINOUS DETAIL

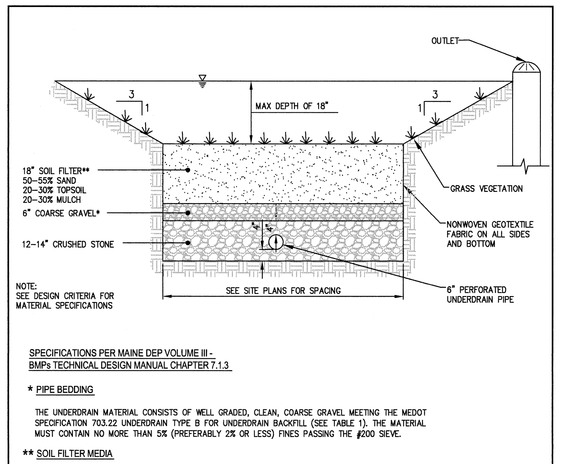
N.T.S.



USE MOLD 1 WHEN ADJACENT TO SIDEWALK

I — TYPE 3A-1 BITUMINOUS CURB DETAIL - MDOT MOLD 1

N.T.S.



SPECIFICATIONS PER MAINE DEP VOLUME III - BMPs TECHNICAL DESIGN MANUAL CHAPTER 7.1.3

* PIPE BEDDING

THE UNDERDRAIN MATERIAL CONSISTS OF WELL GRADED, CLEAN, COARSE GRAVEL MEETING THE MEDOT SPECIFICATION 703.22 UNDERDRAIN TYPE B FOR UNDERDRAIN BACKFILL (SEE TABLE 1). THE MATERIAL MUST CONTAIN NO MORE THAN 5% (PREFERABLY 2% OR LESS) FINES PASSING THE #200 SIEVE.

** SOIL FILTER MEDIA

SOIL MEDIA MUST CONSIST OF A SILTY SAND SOIL OR SOIL MIXTURE COMBINED WITH 20% TO 25% BY VOLUME OF A MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH OR OTHER ORGANIC SOURCE APPROVED BY THE DEPARTMENT. THE RESULTING MIXTURE MUST HAVE NO LESS THAN 8% PASSING THE #200 SIEVE. THE SOIL MEDIA SHOULD ONLY BE COMPACTED TO (90% TO 92% STANDARD PROCTOR).

THE SAND TOPSOIL USED IN THE MIXTURE MUST HAVE NO MORE THAN 2% CLAY CONTENT. THE SAND GRADATION PROVIDED IN TABLE 2 IS AN EXAMPLE OF AN APPROPRIATE SAND TO USE IN THE MIXTURE.

TABLE 1 MDOT SPECIFICATIONS FOR (MDOT 703.22)

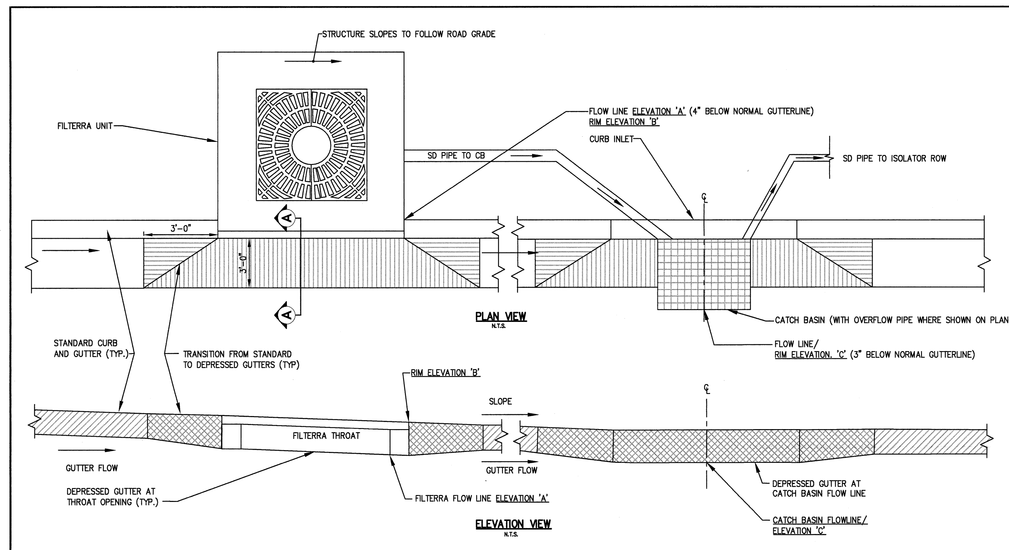
SIEVE SIZE	% BY WEIGHT
UNDERDRAIN TYPE B	
1"	90–100
1/2"	75–100
#4	50–100
#20	15–80
#50	0–15
#200	0–5
UNDERDRAIN TYPE C	
1"	100
3/4"	90–100
3/8"	0–75
#4	0–25
#10	0–5

TABLE 2 MDOT SPECIFICATIONS FOR AGGREGATE (MDOT #703.01)

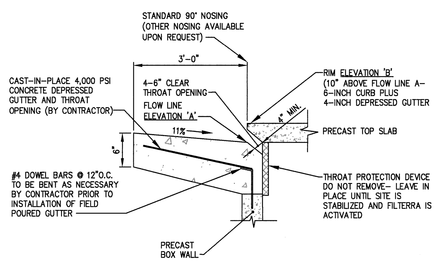
SIEVE SIZE	% BY WEIGHT
UNDERDRAIN TYPE B	
3/8"	100
#4	95–100
#8	80–100
#16	50–85
#30	25–60
#60	10–30
#100	2–10
#200	0–5

M — VEGETATED UNDERDRAIN SOIL FILTER FIELD

N.T.S.

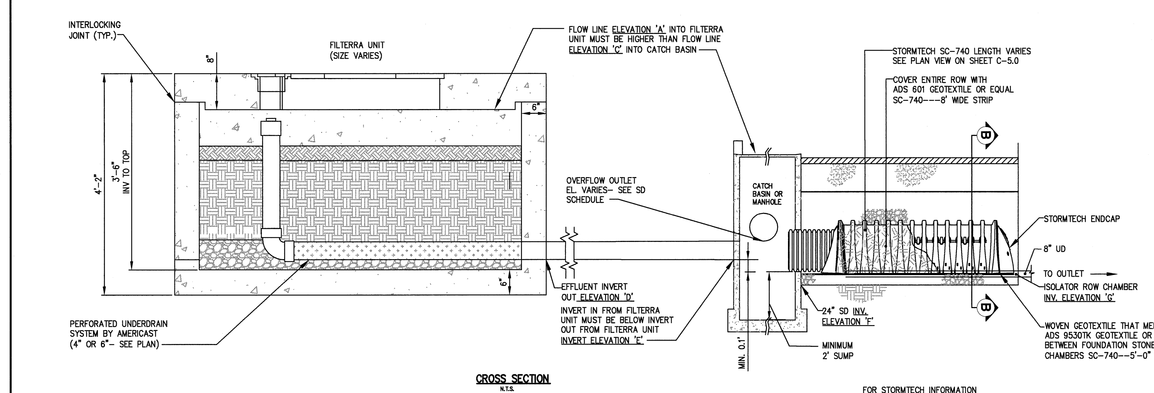


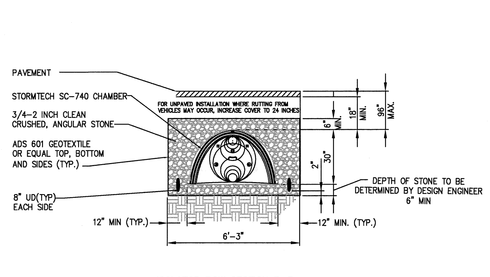
NOTE: REFER TO SHEET C-5.0 FOR SIZE AND QUANTITY. ALL UNITS ARE TO BE PROVIDED WITH THREE GRATE CASTINGS PER MANUFACTURER'S DETAIL. SHOP DRAWING SUBMITTALS REQUIRED. REFER TO LANDSCAPE PLANS FOR PLANTINGS IN FILTERRA UNITS. MEDIA WITHIN FILTERRA UNITS TO BE PER MANUFACTURER'S SPECIFICATIONS.



STANDARD FILTERRA THROAT OPENING SECTION A–A

N.T.S.



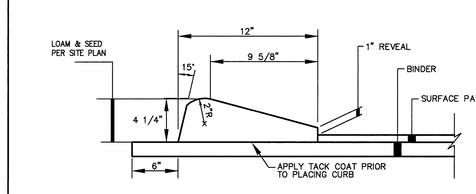


ISOLATOR ROW SECTION B–B

N.T.S.

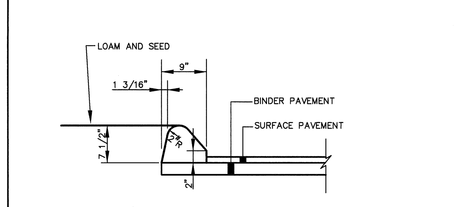
J — FILTERRA® / STORMTECH® ISOLATOR ROW TREATMENT TRAIN DETAIL

N.T.S.



K — TYPE 3B CAPE COD BITUMINOUS CURB DETAIL

N.T.S.

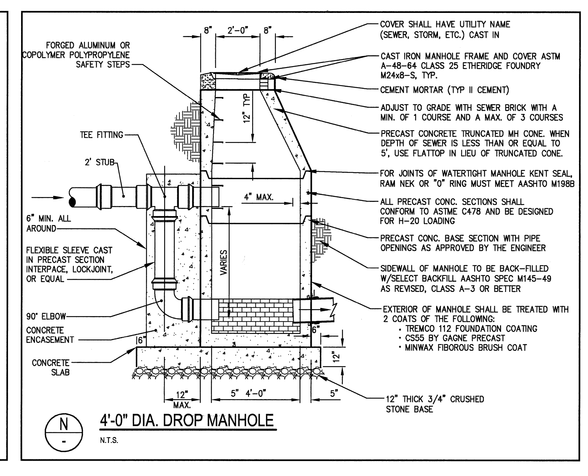


* REFER TO PAVEMENT DETAILS ON C–9

NOTE: MOLD 2 IS NOT PERMITTED ADJACENT TO SIDEWALK.

L — TYPE 3A-2 BITUMINOUS CURB DETAIL MOLD 2

N.T.S.



N — 4'-0" DIA. DROP MANHOLE

N.T.S.

REV	DATE	DESCRIPTION
15	04.03.09	ISSUED FOR G.M.P. AND PERMITTING
14	03.23.09	SUBMITTED TO CITY TO MEET CONDITION OF APPROVAL
13	03.20.09	PROGRESS SET
12	03.06.09	PROGRESS SET
11	02.03.09	FINAL SITE PLAN SUBMISSION TO CITY
10	01.09.09	DESIGN DEVELOPMENT SUBMISSION
9	11.18.08	SUBMITTED SKETCH PLAN TO CITY
8	11.17.06	CORRECTED TYPO AND RESUBMITTED TO MEDEP
7	06.09.06	SUBMITTED TO MEDEP
6	05.26.06	SITE PLANS REVISED PER CONDITIONS OF CITY APPROVAL
5	04.24.06	PHASE I – RELEASED FOR BID
4	04.11.06	FINAL SITE PLAN SUBMISSION TO CITY
3	02.28.06	SECOND SKETCH PLAN SUBMISSION TO CITY
2	01.03.05	SKETCH PLAN SUBMISSION TO CITY
1	12.22.05	ISSUED TO CLIENT FOR REVIEW

REVISIONS

P.E. DWIGHT D. ANDERSON
LIC. #9275

PROJECT
MARTIN'S POINT REDEVELOPMENT
PROJECT PHASE 2

SHEET TITLE
UTILITY DETAILS

CLIENT
MARTINS POINT HEALTH CARE

DeLUCA–HOFFMAN ASSOCIATES, INC.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207.775.1121
WWW.DELUCAHOFFMAN.COM

DRAWN:	LECJ	DATE:	JAN. 2009
DESIGNED:	DDA	SCALE:	AS SHOWN
CHECKED:	DDA	JOB NO.	2344.06
FILE NAME:	234406-DET		
SHEET	C-10.0		