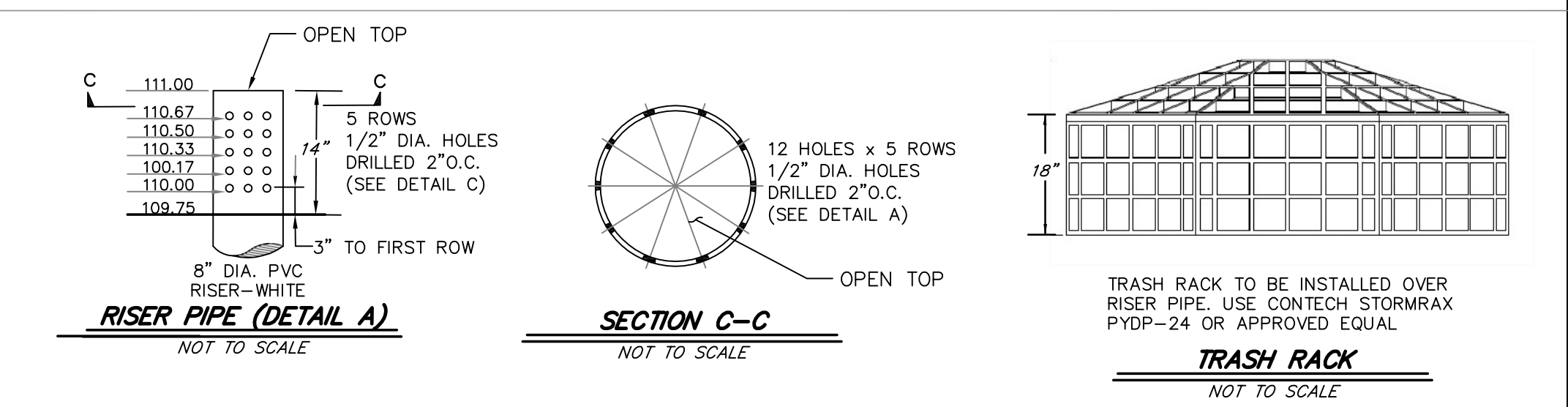
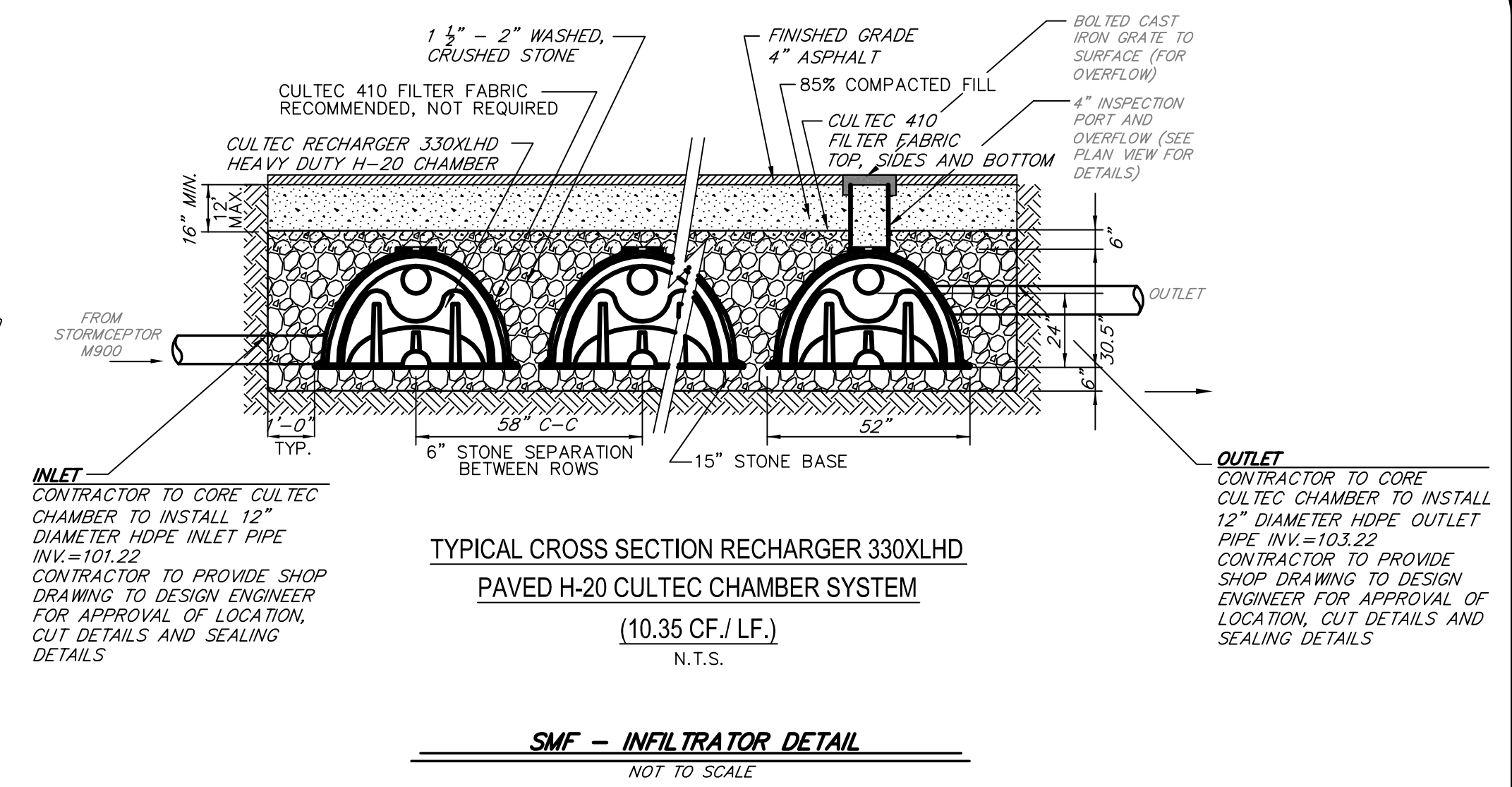


BIORETENTION SOIL MIX & RAIN GARDEN SOIL MIX

SOIL	SPECIFICATION
40% SAND	SIEVE 8 100 70-100 50 15-35 100 2-15 200 0
20-30% TOPSOIL	
30-40% STABLE COMPOST	

**** SEED MIXTURE FOR SLOPES**
 40% PERENNIAL RYE
 30% CREEPING RED FESCUE
 15% BIGHORN FESCUE
 15% ANNUAL RYE
 RATE: 3lbs / 1000 SF



BIORETENTION PLANTING SCHEDULE

SYMBOL	COMMON NAME	SCIENTIFIC NAME	DELIVERED AS	NUMBER OF PLANTS
☘	RIVER BIRCH	BETULA NEGRA	2" CALIPER	3
●	NORTHERN ARROWWOOD VIBURNUM	VIBURNUM RECOGNITUM	18" CONTAINER	6
●	NINEBARK	PHYSCORPUS OPULIFOLUS	12" CONTAINER	4
●	BIRDSFOOT-TREFOIL	LOTUS-CORNICALATAS	12" CONTAINER	12
■	FINE-SHREDDED HARDWOOD MULCH		6 CUBIC YARDS	2-3" DEEP

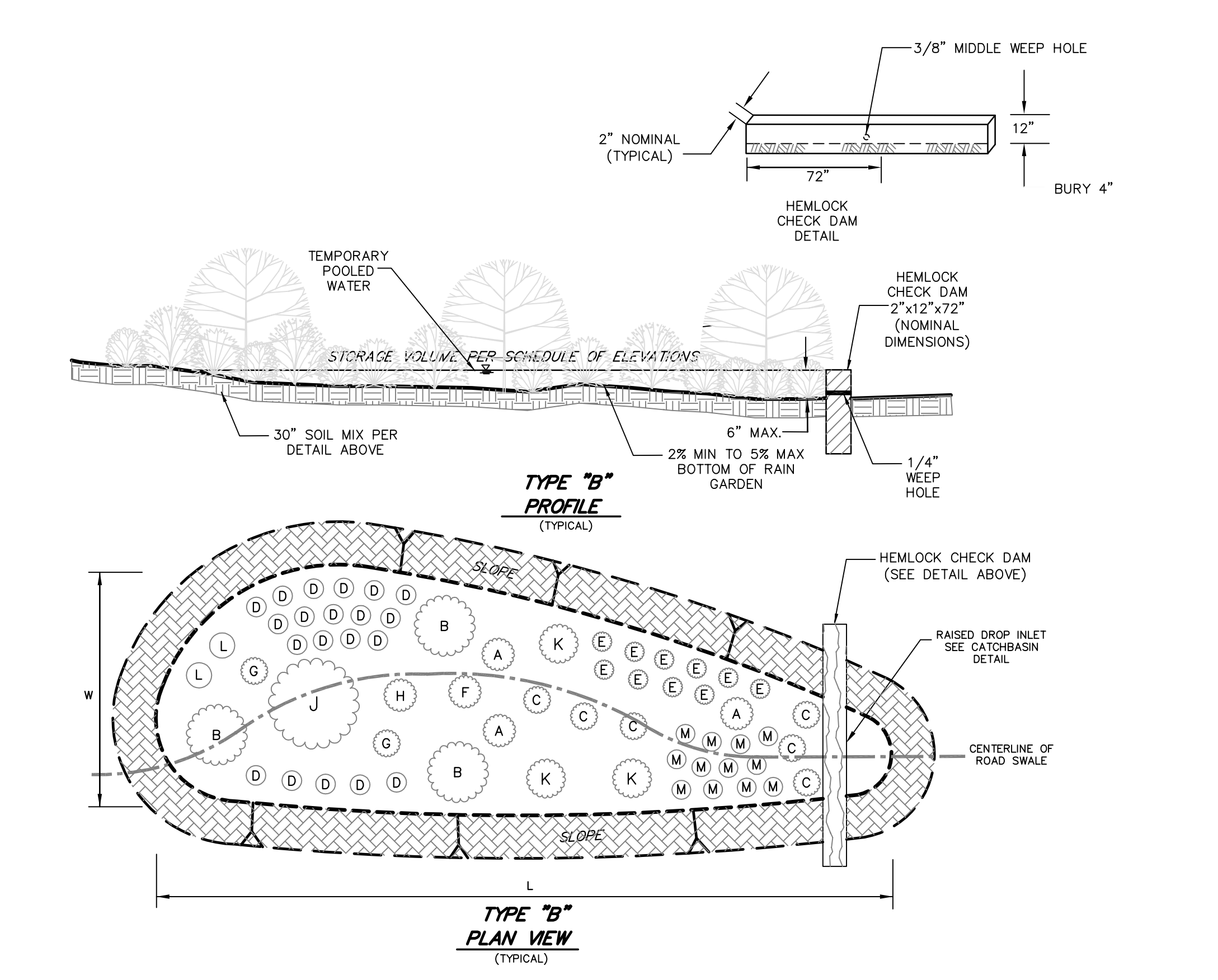
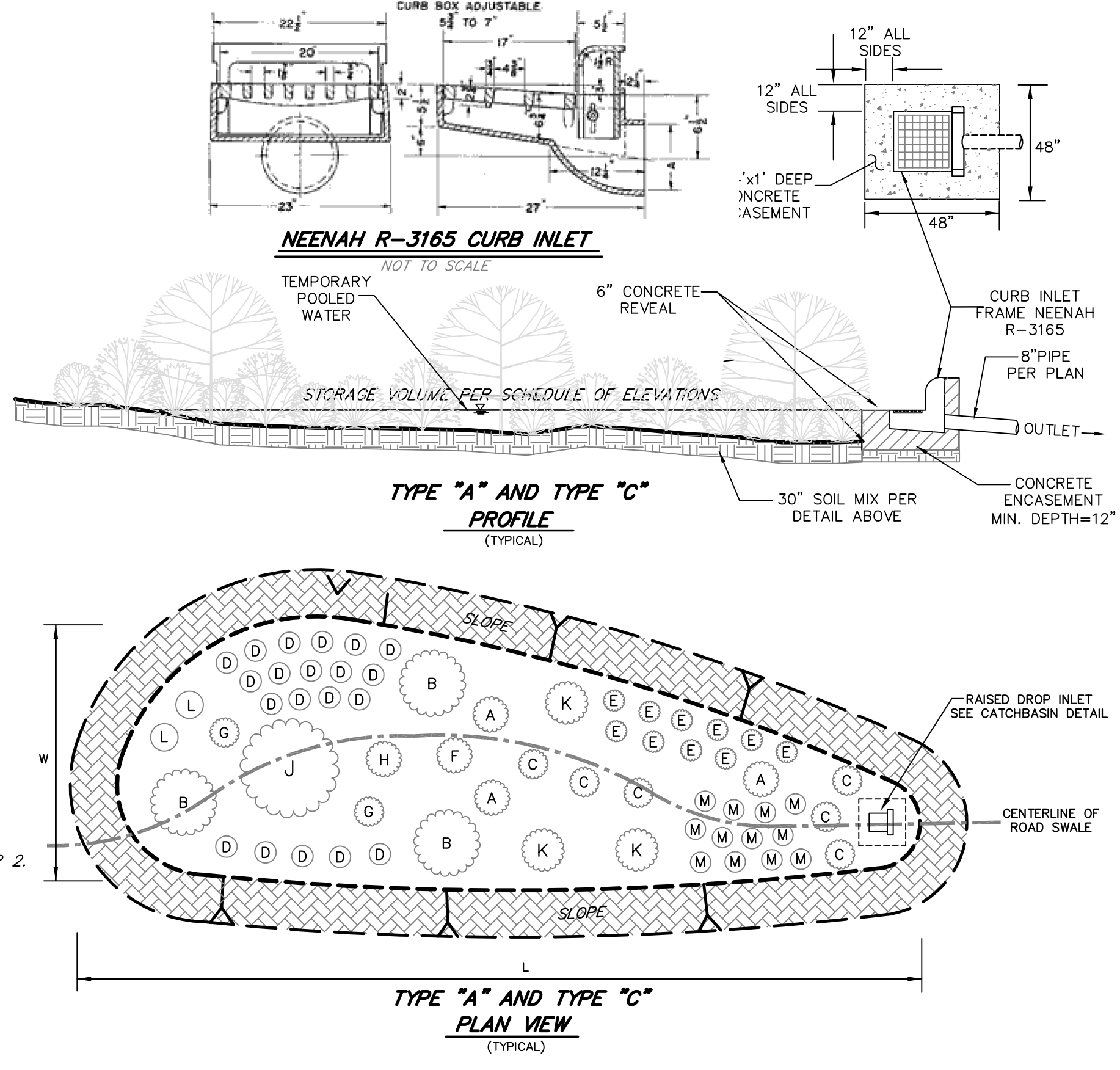
RAIN GARDEN SCHEDULE OF ELEVATIONS
 INFLOW ELEVATIONS PER LETTER ON SHEET 5

RAIN GARDEN #	TYPE	VOLUME (± C.F.)	AREA (± S.F.)	TOP OF BERM	SPILLWAY	BOTTOM	DROP INLET RIM	INFLOW ELEV.
1	A	98	126	111.00	110.90	109.51	a: 110.00	
2	A	98	126	113.50	113.40	112.51	b: 113.20	
3	B	98	126	114.75	114.65	114.25	c: 114.92	
4	C	279	360	117.35	117.25	116.35	d: 116.85	
5	A	98	126	110.00	109.90	108.50	e: 110.07	
6	A	98	126	113.12	113.02	111.62	f: 113.00	
7	A	98	126	115.85	115.75	114.85	g: 115.35	
9	A	279	360	108.08	107.98	107.08	h: 109.97	
10	A	279	360	105.15	105.05	104.15	i: 105.88	

RAIN GARDEN DETAIL
 RAIN GARDEN PLANT LIST TAKEN FROM MASSACHUSETTS STORMWATER MANAGEMENT GUIDELINES, VOLUME 2, CHAPTER 2.

SYMBOL	SPECIES *	COMMON NAME	QUANTITY			HEIGHT	SPACING MINIMUM
			TYPE "A"	TYPE "B"	TYPE "C"		
A	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	6	6	10	1'-2'	1'
B	HYPENICUM DENSIFLORUM	COMMON ST. JOHNSWORT	3	3	5	1'-2'	2'
C	IRIS VERSICOLOR	BLUE FLAG IRIS	7	7	14	1'-2'	1'
D	JUNIPERUS HORIZONTALIS	CREEPING JUNIPER	12	12	24	0'-3'	1'
E	HEDERA HELIX	ENGLISH IVY	36	36	64	1'-2'	6"
F	PHYSCORPUS OPULIFOLIUS	NINEBARK	4	4	8	2'-4'	1'
G	LINDERA BENZON	SPICEBUSH	10	10	20	2'-4'	1'
H	ILEX VERTICILLATA	WINTERBERRY	2	2	6	2'-5'	1'
J	FRAXINUS PENNSYLVANICA	GREEN ASH	1	1	2	8'-12'	8'
K	VIBURNUM DENTATUM	ARROW-WOOD	9	9	20	2'-4'	4'
L	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	8	8	16	3'-6"	1'
M	SCHIZACHYRIUM SCOPAIURUM	LITTLE BLUESTEM	15	15	30	1'-2'	4'

* IF LISTED SPECIES IS NOT AVAILABLE, SIMILAR SPECIES MAY BE SUBSTITUTED AS APPROVED BY ENGINEER



APPROVAL: CARLISLE BOARD OF APPEALS

REV. 6	
REV. 5	
REV. 4	
REV. 3	
REV. 2	2/25/2015 BY: WJ/B PER NITSCH COMMENTS
REV. 1	2/6/2015 BY: WJ/B PER NITSCH COMMENTS

DETAIL SHEET - LOW IMPACT DEVELOPMENT
"The Birches"
 100 LONG RIDGE ROAD
 CARLISLE, MASSACHUSETTS
 PREPARED FOR:
 LIFETIME GREEN HOMES, LLC
 142 LITTLETON ROAD
 WESTFORD, MA 01886
 NOVEMBER 4, 2014 AS SHOWN