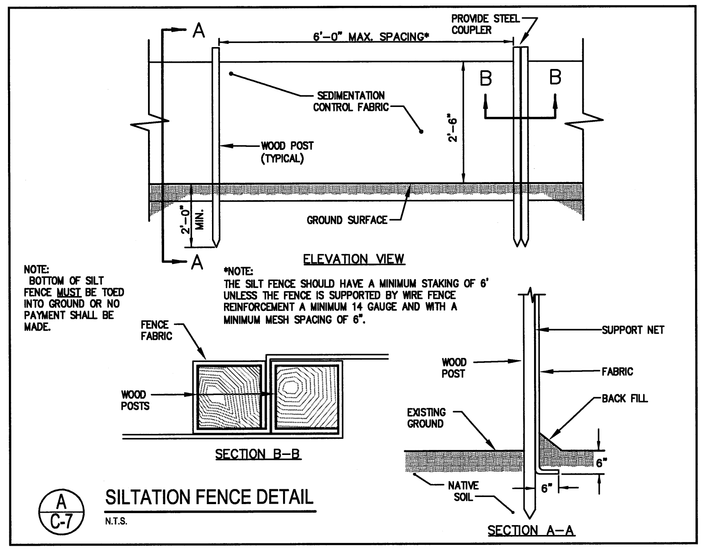
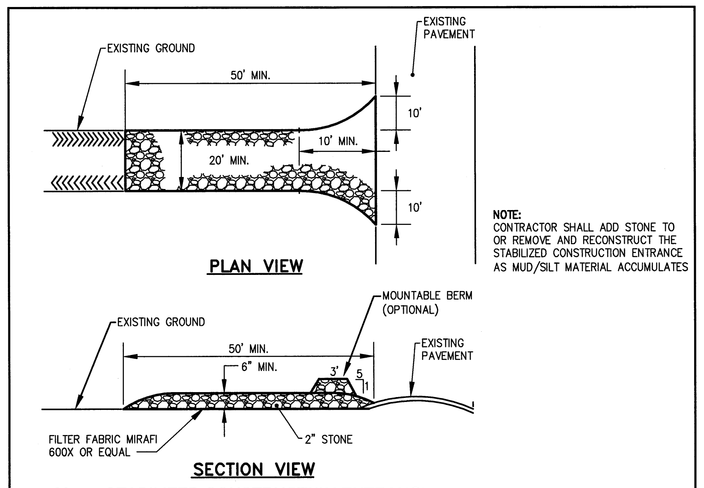
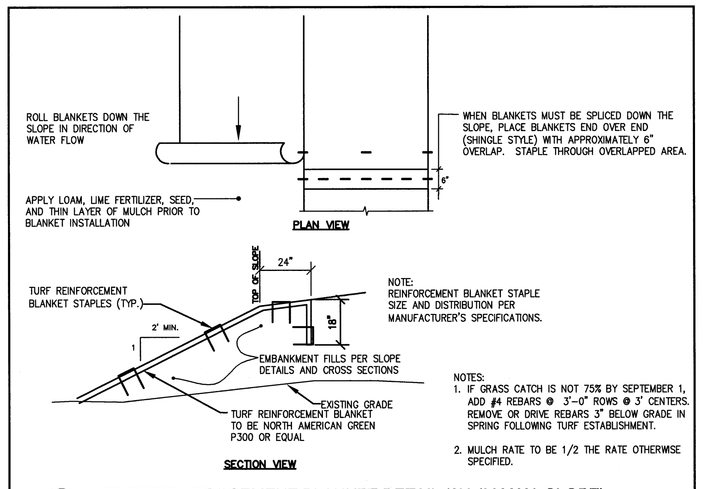


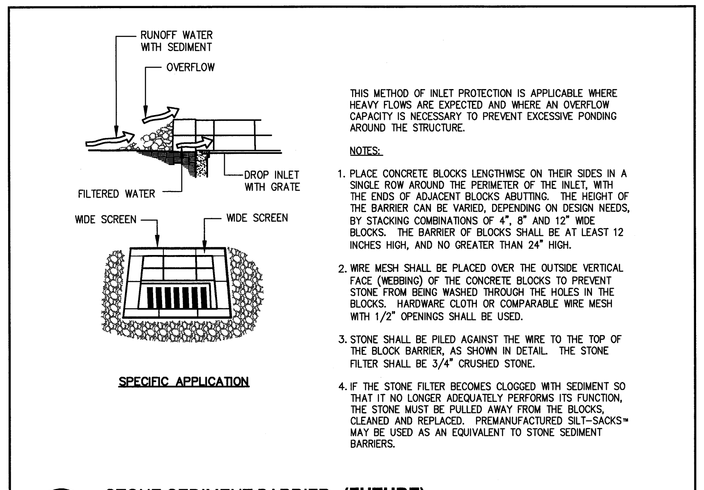
A C-7 SILTATION FENCE DETAIL
N.T.S.



B C-7 STABILIZED CONSTRUCTION ENTRANCE
N.T.S.



C C-7 TURF REINFORCEMENT BLANKET DETAIL (2H:1V MAX. SLOPE)
N.T.S.



D C-7 STONE SEDIMENT BARRIER **(FUTURE)**
N.T.S.

SPECIFICATIONS AND REQUIREMENTS FOR DEWATERING

THIS PROJECT WILL REQUIRE THE DISCHARGE OF CONSTRUCTION DEWATERING AND TURBID LADEN RUNOFF FROM THE SITE TO BE DIRECTED AND DISCHARGED THROUGH A DIRTBAG. THIS DESCRIPTION ALSO CONTAINS APPENDED MATERIALS DESCRIBING THE DIRTBAGS REFERRED TO IN THIS NARRATIVE.

OVERVIEW:

TRADITIONALLY, MEDEP PERMITS HAVE HAD A STANDARD CONDITION WHICH STATES:

"THE APPLICANT SHALL TAKE ALL NECESSARY ACTIONS TO ENSURE THAT ITS ACTIVITIES OR THOSE OF ITS AGENTS DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS ON THE SITE DURING THE CONSTRUCTION AND OPERATION OF THE PROJECT COVERED BY THIS APPROVAL."

THESE SPECIFICATIONS HAVE BEEN DEVELOPED FOR THE PURPOSE OF ADDRESSING CONSTRUCTION-DEWATERING ACTIVITIES WITH THE CONTINGENCY THAT UNPREDICTABLE WEATHER CAN CREATE. THE SPECIFICATION IS INTENDED TO "SHARE THE RISK" BETWEEN THE CONTRACTOR AND OWNER. IT IS ANTICIPATED THAT THIS METHOD WILL ALLOW THE BASE BID FOR THE PROJECT TO HAVE A REDUCED BUILT-IN CONTINGENCY COST FOR CERTAIN WEATHER-RELATED FACTORS.

THIS SPECIFICATION IS NOT INTENDED TO DIMINISH THE RECOGNIZED AND POTENTIAL AID OF THE PROPOSED SEDIMENT PONDS TO ACT AS THE PRIMARY DEVICE TO CAPTURE AND RETAIN SUSPENDED SEDIMENT. THIS BENEFIT IS A PRINCIPAL REASON WHY THE CONSTRUCTION OF THE PONDS EARLY IN THE PROJECT IS SO IMPORTANT.

ACCEPTABLE METHODS OF DISCHARGING CONSTRUCTION SITE RUNOFF:

DEWATERING OF THE CONSTRUCTION SITE SHALL BE ACCOMPLISHED USING ONE OF THE FOLLOWING MEASURES:

- THE PUMPING OF DIRTBAGS WITH A DISCHARGE TO THE POND.
- THE PUMPING OF CONSTRUCTION SITE WATER AND COLLECTED RUNOFF TO A DIRTBAG (PATENTED PRODUCT BY ACF ENVIRONMENTAL PRODUCTS) WITH RELEASE THROUGH A VEGETATED BUFFER AT LEAST 50 FEET UPGRADIENT OF A NATURAL RESOURCE.

REQUIREMENTS FOR DIRTBAGS:

THE SITE CONTRACTOR SHALL INCLUDE THE PRICE OF INSTALLING, OPERATING, AND REMOVAL AND DISPOSAL OF FOUR **DIRTBAG 975** AS PART OF THE BASE BID. A UNIT PRICE SHALL BE PROVIDED FOR ADDITIONAL **DIRTBAGS.**

AT ALL TIMES THERE MUST BE AN UNUSED DIRTBAG AVAILABLE FOR EMERGENCY USE.

AT ALL TIMES (AFTER INITIAL SITE PREPARATION), THE CONTRACTOR SHALL HAVE ONE **DIRTBAG** ACTIVE OR READY FOR USE. THE **DIRTBAGS** SHALL BE FIELD LOCATED BY THE CONTRACTOR BUT ARE NOT TO BE INSTALLED IN ANY **"CRITICAL"** AREA. (THE SITE CRITICAL AREAS ARE SHOWN ON THE EROSION-SEDIMENT CONTROL PLAN.) THE **DIRTBAG** SHALL BE INSTALLED ON A PREPARED SUBGRADE. THIS SUBGRADE SHALL CONSIST OF THE INSTALLATION OF A LAYER OF MIRAFI 600X, AND 18 INCHES OF ¾ INCH CRUSHED STONE. THE PLAN DIMENSION OF THE CRUSHED STONE PAD SHALL EXCEED THE PLAN AREA OF THE **DIRTBAG** BY AT LEAST TWO FEET IN ALL DIRECTIONS. THE **DIRTBAG** SHALL NOT BE INSTALLED ON AN UNDERLYING SLOPE OF GREATER THAN 15 PERCENT.

CONSTRUCTION DEWATERING OPERATIONS:

ALL CONSTRUCTION-DEWATERING OPERATIONS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. IT SHALL BE THE SITE CONTRACTOR WHO IS RESPONSIBLE FOR SELECTING THE SITE FOR THE **DIRTBAG.** THE SELECTION OF THE USE OF THE **DIRTBAG** OR THE SEDIMENTATION BASIN FOR DIRECTING DEWATERING, EXCEPT THAT THE OWNER MAY DIRECT THE SITE CONTRACTOR TO ALTER THE SELECTED OPERATION IF TURBID DISCHARGE TO A WETLAND OR WATERCOURSE, OR DRAINAGE SYSTEM LEAVING THE SITE IS OBSERVED.

WINTER OPERATIONS:

IN THE EVENT THAT WINTER OPERATIONS ARE REQUIRED, THE CONTRACTOR SHALL "POLY", ENCLOSE, AND PROVIDE TEMPORARY HEAT TO PREVENT THE **DIRTBAG** FROM SUBSTANTIAL FREEZING.

RECORD KEEPING:

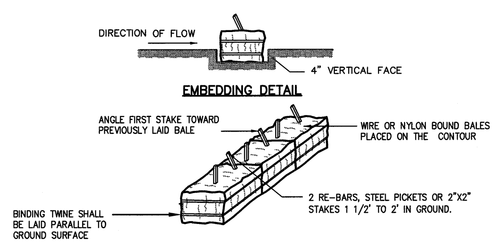
THE WEEKLY EROSION-SEDIMENT CONTROL REPORTS PREPARED IN ACCORDANCE WITH THE MPDES PERMIT SHALL MAINTAIN A LOG OF THE LOCATION, USE, AND REMOVAL OF **DIRTBAGS.** IN THE EVENT THAT THE STONE UNDER THE **DIRTBAG** BECOMES HIGHLY CONTAMINATED WITH FINES, THE NEXT **DIRTBAG** SHALL BE INSTALLED IN A DIFFERENT LOCATION.

H C-7 DIRTBAG AND SPECIFICATIONS FOR DEWATERING DETAIL
N.T.S.

PLAN VIEW LOOKING INTO CATCH BASIN

NOTES:
1. REQUIRED FOR ALL CATCH BASINS WHICH RECEIVE RUNOFF FROM PAVED AREAS.
2. REFER TO EROSION CONTROL REPORT FOR ADDITIONAL INFORMATION.
3. CONTRACTOR MAY SELECT OTHER TYPE OF EQUIVALENT OIL ABSORBENT PRODUCTS.
4. SUBMITTALS ARE REQUIRED FOR THESE ITEMS.

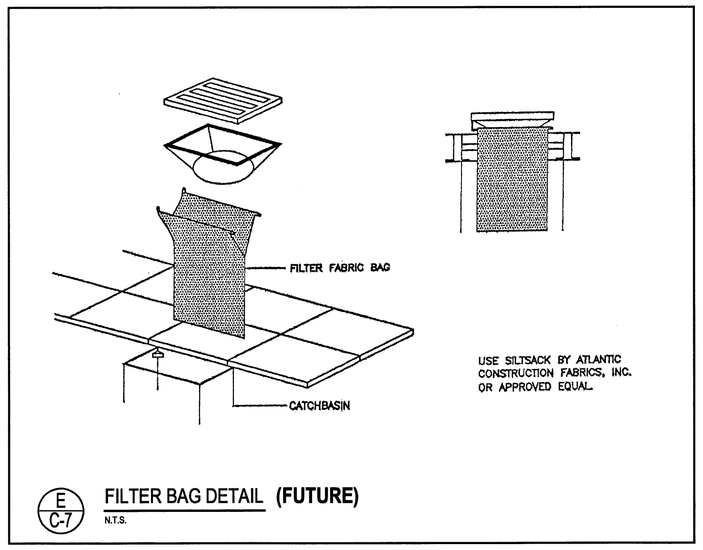
G C-7 **(FUTURE)** TEMPORARY WATER QUALITY MEASURE INSIDE OF CATCH BASINS
N.T.S.



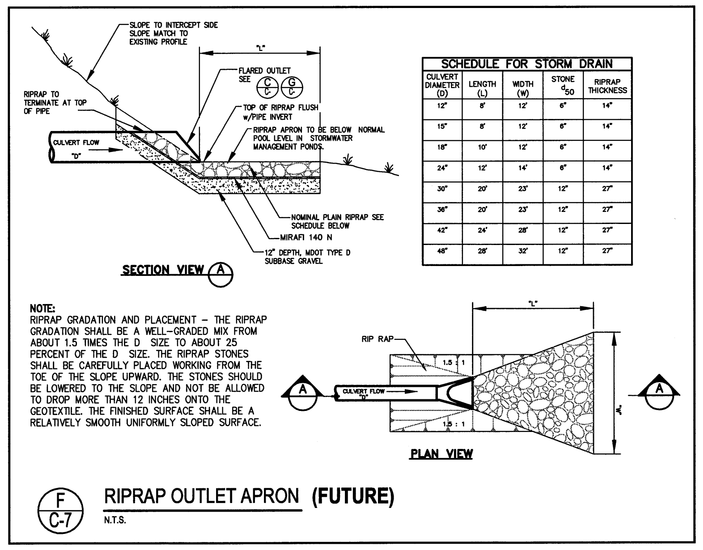
CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

I C-7 STRAW OR HAY BALE BARRIER
N.T.S.



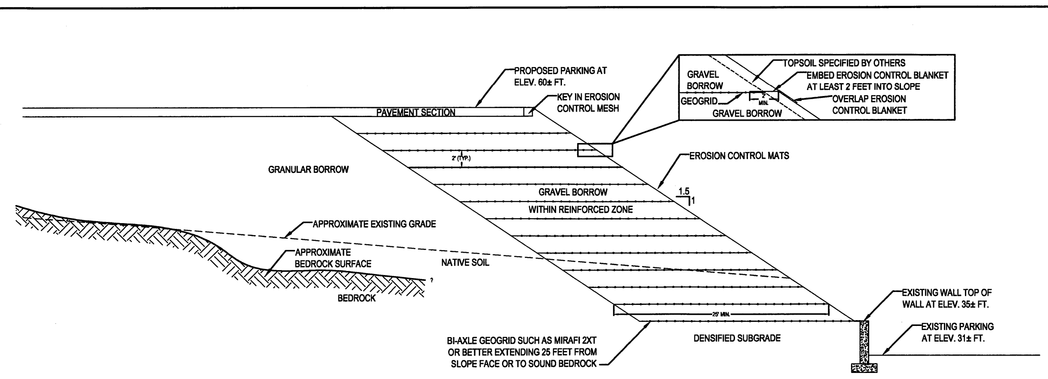
E C-7 FILTER BAG DETAIL **(FUTURE)**
N.T.S.

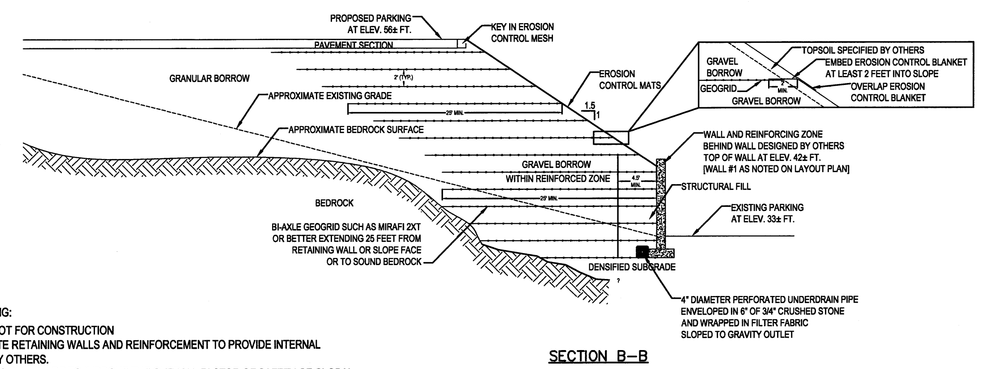


SCHEDULE FOR STORM DRAIN				
CULVERT DIAMETER (D)	LENGTH (L)	WIDTH (W)	STONE D50	RIPRAP THICKNESS
12"	8'	12'	6"	14"
15"	8'	12'	6"	14"
18"	10'	12'	6"	14"
24"	12'	14'	6"	14"
30"	20'	23'	12"	27"
36"	20'	23'	12"	27"
42"	24'	28'	12"	27"
48"	28'	33'	12"	27"

NOTE:
RIPRAP GRADATION AND PLACEMENT – THE RIPRAP GRADATION SHALL BE A WELL-GRADED MIX FROM ABOUT 1.5 TIMES THE D SIZE TO ABOUT 25 PERCENT OF THE D SIZE. THE RIPRAP STONES SHALL BE CAREFULLY PLACED WORKING FROM THE TOE OF THE SLOPE UPWARD. THE STONES SHOULD BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12 INCHES ONTO THE GEOTEXTILE. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH UNIFORMLY SLOPED SURFACE.

F C-7 RIPRAP OUTLET APRON **(FUTURE)**
N.T.S.





NOTES BY S.W. COLE ENGINEERING:
1.) CONCEPTUAL DETAIL ONLY - NOT FOR CONSTRUCTION
2.) WE UNDERSTAND THAT ALL SITE RETAINING WALLS AND REINFORCEMENT TO PROVIDE INTERNAL STABILITY WILL BE DESIGNED BY OTHERS.
3.) THE GEOGRIDS SHOWN ON THIS DETAIL ARE TO IMPROVE THE OVERALL FACTOR OF SAFETY OF GLOBAL STABILITY OF THE WALL AND EMBANKMENT. WE RECOMMEND THAT THE WALL DESIGNER PROVIDE S.W. COLE ENGINEERING, INC. WITH THE PROPOSED REINFORCED WALL SECTIONS SUCH THAT THE RECOMMENDED SOIL REINFORCING SHOWN HERE IN CAN BE DESIGNED TO AVOID CONFLICTS AND IMPROVE BUILDABILITY.
4.) MATERIAL GRADATION, COMPACTION, BACKFILL AND WALL SUBGRADE PREPARATION REQUIREMENTS ARE INCLUDED IN OUR GEOTECHNICAL REPORT DATED JANUARY 12, 2006.
5.) EROSION CONTROL MAT, TOPSOIL AND SEEDING DESIGNED BY OTHERS.
6.) ALL GEOGRID INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

J C-7 MECHANICALLY STABILIZED TURF SLOPE DETAIL **(FUTURE)** (1.5H:1V MAX. SLOPE)
N.T.S.

S.W. COLE ENGINEERING, INC.

MARTIN'S POINT HEALTHCARE

CONCEPTUAL EMBANKMENT DETAILS

Proposed Facility Expansion
130 Veranda Street
Portland, Maine

Job No. 05-0927.1 S | Scale 1" = 10'
Date : 03/28/06 | Sheet 1

REV	DATE	DESCRIPTION
6	04.24.06	PHASE I – RELEASED FOR BID
5	04.14.06	100% REVIEW SET – PHASE I
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

STATE OF MAINE — DWIGHT D ANDERSON No. 9275 — REGISTERED PROFESSIONAL ENGINEER

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

PROJECT
MARTIN'S POINT REDEVELOPMENT PROJECT

SHEET TITLE
EROSION CONTROL 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:	NOV. 2005
DESIGNED:	DDA	SCALE:	AS SHOWN
CHECKED:	DDA	JOB NO.	2344.01
FILE NAME:	234401-DET		
SHEET	C-12		

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