

PRELIMINARY - NOT FOR CONSTRUCTION

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCES, SILTATION FENCE, CATCH BASIN INLET BARRIERS, CATCH BASIN SEDIMENT COLLECTION BAGS, EROSION CONTROL BLANKET, AND TEMPORARY SEEDING AND MULCHING AS REQUIRED. PERMANENT DEVICES INCLUDE PAVEMENT AND PERMANENT VEGETATION.

GENERAL

- A. IT IS ANTICIPATED THAT CONSTRUCTION MAY BEGIN AS SOON AS POSSIBLE FOLLOWING RECEIPT OF NECESSARY PERMITS.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2003, OR AS CURRENTLY REVISED OR U.S. ENVIRONMENTAL PROTECTION AGENCY PUBLICATION 832/R-92-005 (SEPTEMBER, 1992) STORM WATER MANAGEMENT FOR CONSTRUCTION, CHAPTER 3, WHICHEVER IS MORE STRINGENT.

- ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERSONNEL AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.

- ANY SOIL OR DEBRIS TRACKED ONTO US ROUTE 1 SHALL BE REMOVED IMMEDIATELY
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/ REPLACEMENT/ MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF ACCEPTABLE PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:

- FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
- FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
- FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
- PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

B. EROSION AND SEDIMENTATION CONTROL MEASURES

- PRIOR TO THE BEGINNING OF CONSTRUCTION, THE STABILIZED CONSTRUCTION ENTRANCE AND TEMPORARY SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IT IS THE INTENT THAT SILT FENCE BE INSTALLED DOWN GRADIENT OF ALL DISTURBED AREAS OF THE SITE. SILT FENCE SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS WILL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE SILT BARRIERS. THIS SEDIMENT WILL BE SPREAD AND STABILIZED IN AREAS OF THE SITE NOT SUBJECT TO EROSION. SILT FENCE SHALL BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, THEY WILL BE REPLACED WITH A TEMPORARY CRUSHED STONE CHECK DAM.
- ALL CATCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED DURING CONSTRUCTION.
- REMOVAL OF SOD, TREES, BUSHES AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT.
- GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN APPROVED MANNER.
- ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STOCKPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE WILL RESULT.
- TEMPORARY STABILIZATION SHALL BE CONDUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, PRIOR TO ANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN LASTING MORE THAN ONE DAY. TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-ERODABLE COVER.
- PERMANENT SEEDING SPECIFICATION SHALL BE AS SHOWN ON THE LANDSCAPE PLAN. LATE SEASON SEEDING SHALL BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 15 SHALL BE SEEDED WITH AROOSTOOK RYE OR MULCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1.

- APPLY TOPSOIL TO A MINIMUM DEPTH OF 4 INCHES. MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 6 INCHES.
- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND GRANULAR, COMMERCIAL-GRADE, 10-10-10 (N-P2O5-K2O) FERTILIZER AT A RATE OF 800 LBS PER ACRE (18.4 LBS PER 1,000 SQUARE FEET).
- UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES, APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRES, AND ANCHOR AS NECESSARY.

- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 15%. EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.
- WINTER CONDITIONS - NO WINTER SITE CONSTRUCTION IS PROPOSED ON THIS PROJECT.

D.HOUSEKEEPING

- SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON-SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORM WATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
- GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.
- FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.
- DEBRIS AND OTHER MATERIAL. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER, MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- COMPLY WITH THE REQUIREMENTS OF SECTION 01570, CONSTRUCTION WASTE MANAGEMENT, FOR REMOVAL AND DISPOSAL OF CONSTRUCTION DEBRIS AND WASTE.
- TRENCH OR FOUNDATION DE-WATERING. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED AREAS THAT ARE SPECIFICALLY DESIGNATED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFER DAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE.

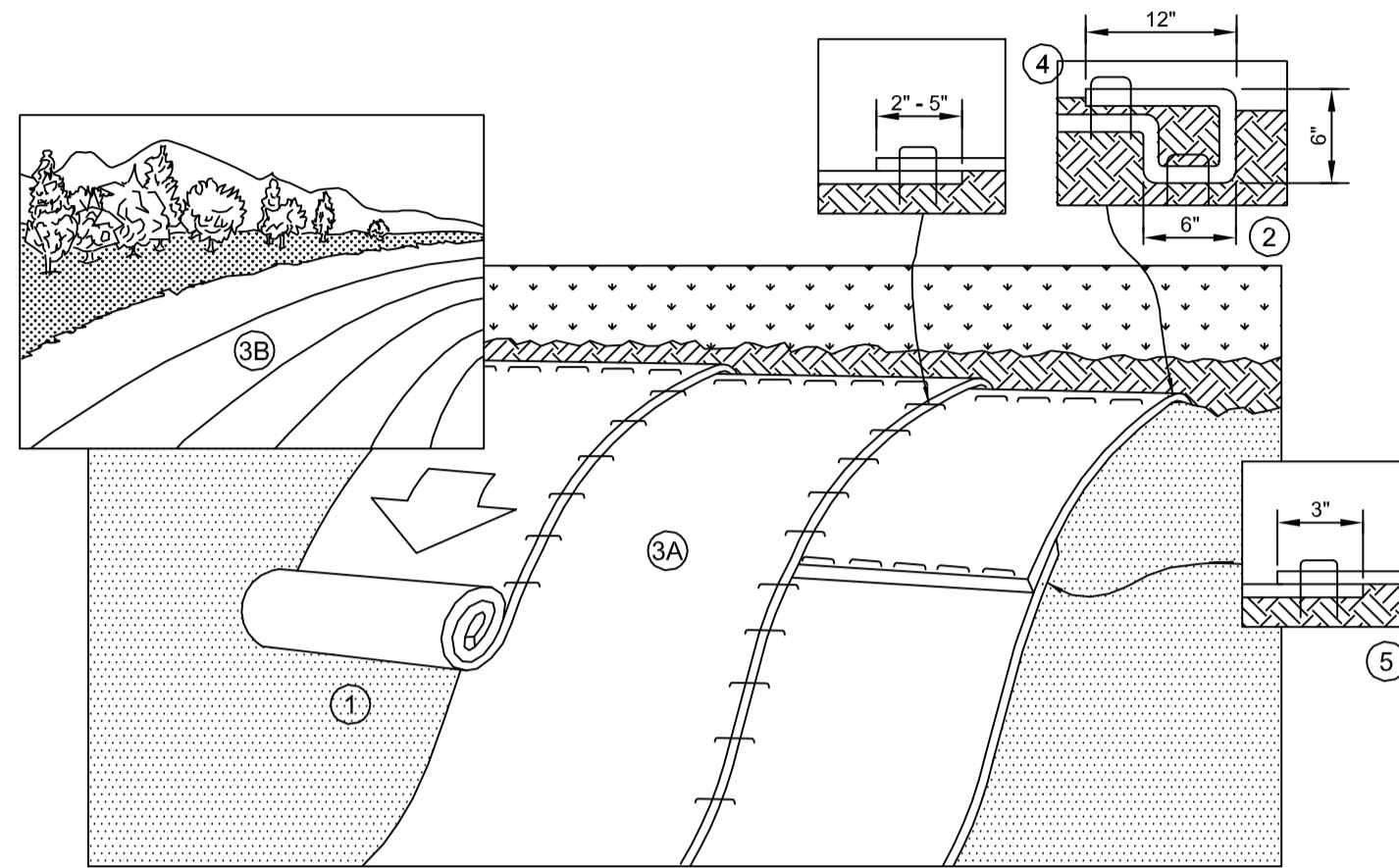
E. INSPECTION AND MAINTENANCE

- INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORM WATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK BEFORE AND AFTER A STORM EVENT, PRIOR TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORM WATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT AND ANY DEP OR MUNICIPAL COMPANION DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.
- AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPs THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.

F. CONSTRUCTION SCHEDULE & SEQUENCE

- INSTALL TEMPORARY EROSION CONTROL MEASURES IN THE VICINITY OF THE CONSTRUCTION AREA, INCLUDING A STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, SEDIMENT BARRIERS, AND SILT FENCE.
- REMOVE EXISTING PAVEMENT AND STRUCTURES AS SHOWN, STOCKPILE REUSABLE MATERIAL, AND DISPOSE OF UNUSABLE AND/OR SURPLUS MATERIAL. INSTALL UNDERGROUND UTILITIES AND INSTALL NEW BASE GRAVEL IN PARKING AREAS AND DRIVES.
- EXCAVATE FOUNDATIONS FOR BUILDING ADDITION.
- BEGIN CONSTRUCTION OF BUILDING ADDITION.
- CONSTRUCT OTHER SITE IMPROVEMENTS, INCLUDING PAVEMENT, SIDEWALKS.
- INSTALL LANDSCAPING AND HARDSCAPE AROUND BUILDINGS.
- FOLLOWING PERMANENT STABILIZATION OF THE SITE, REMOVE TEMPORARY EROSION CONTROL MEASURES.

EROSIONAL CONTROL BLANKET DETAIL FOR SLOPE INSTALLATION



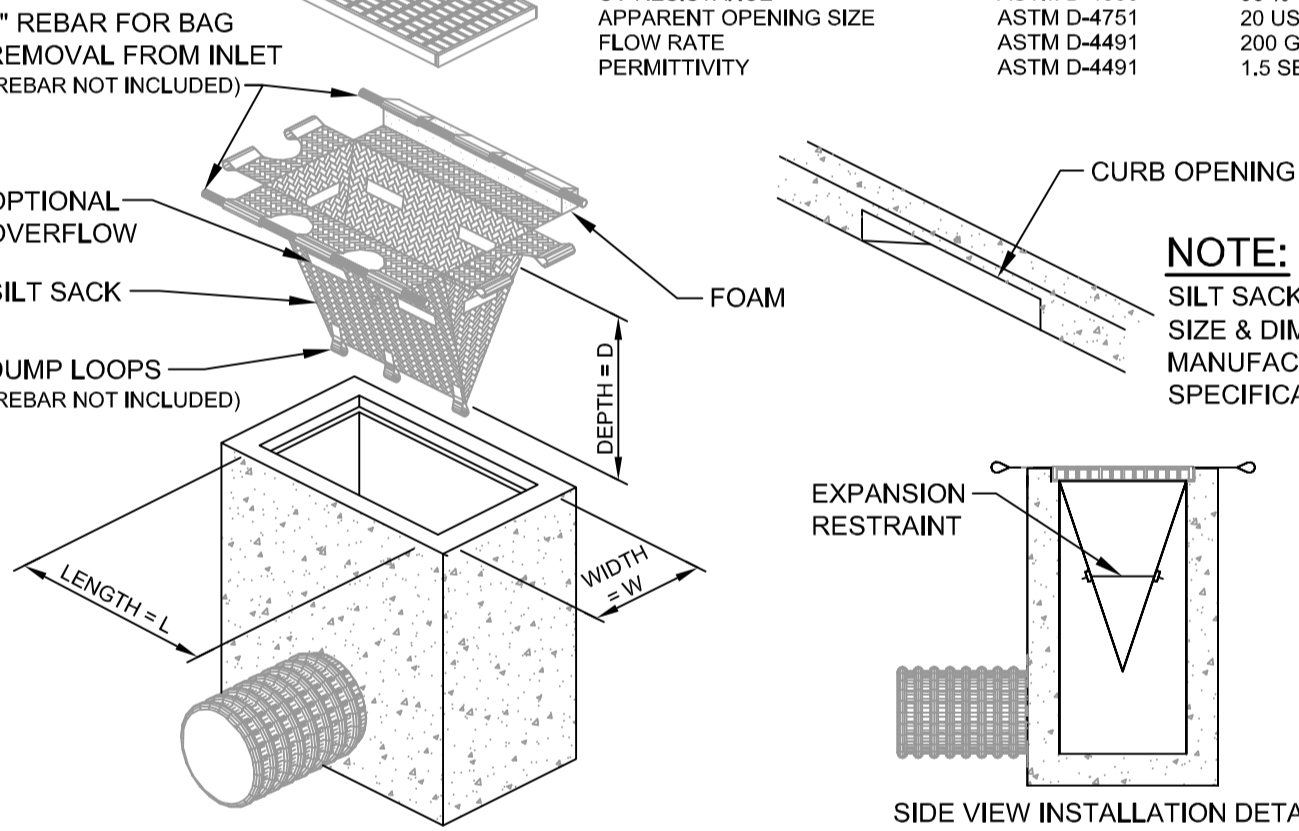
NOTES:

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF THE BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH THE APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2'-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

A. EROSION CONTROL BLANKET DETAIL N.T.S.

NOTE: THE SILT SACK WILL BE MANUFACTURED FROM A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS THE FOLLOWING SPECIFICATIONS:

PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	28%
PUNCTURE	ASTM D-4833	135 LBS
MILLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90%
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/50 FT
PERMITTIVITY	ASTM D-4491	1.5 SEC-1



B. SILT SACK DETAIL & SPECIFICATIONS N.T.S.

SPECIFICATIONS AND REQUIREMENTS FOR DEWATERING

THIS PROJECT WILL REQUIRE THE DISCHARGE OF CONSTRUCTION DEWATERING AND TURBID LOADEN RUNOFF, FROM THE REMEDIAL CONSTRUCTION OF THE EXISTING STORMWATER BASIN, TO BE DIRECTED AND DISCHARGED THROUGH A DIRTBAG, WITHIN A DEWATERING SUMP. THIS DESCRIPTION ALSO CONTAINS APPENDED MATERIALS DESCRIBING THE DIRTBAGS REFERRED TO IN THIS NARRATIVE.

DEWATERING OF THE REMEDIAL CONSTRUCTION OF THE EXISTING BASIN SHALL BE ACCOMPLISHED USING THE FOLLOWING MEASURES:

- THE PUMPING OF WATER WITHIN THE POND TO A DIRTBAG (PATENTED PRODUCT BY ACF ENVIRONMENTAL PRODUCTS) WITH RELEASE THROUGH A VEGETATED BUFFER AT LEAST 100 FEET UPGRADIENT OF A WETLAND DURING THE REMEDIAL CONSTRUCTION OF THE EXISTING BASIN.

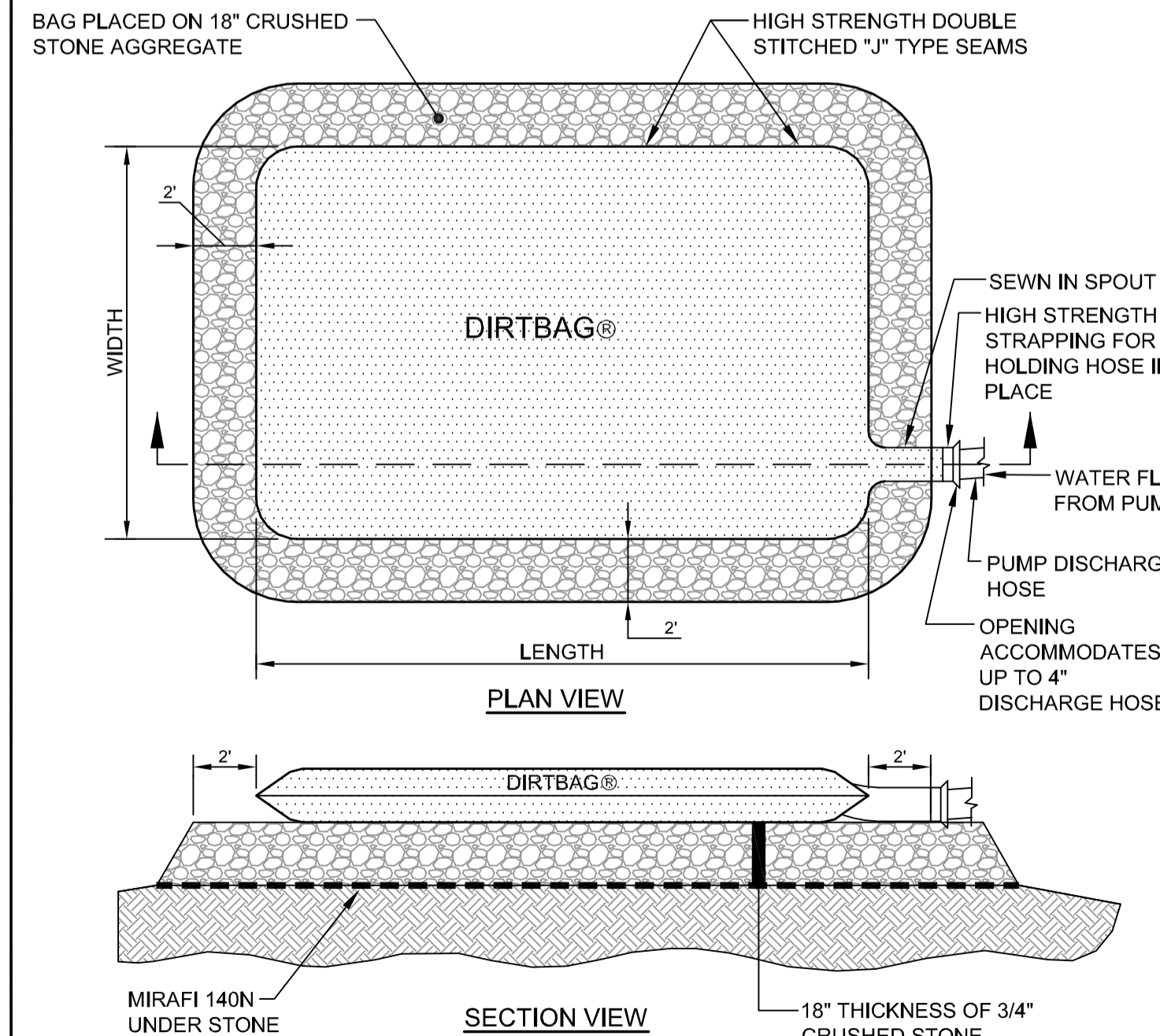
REQUIREMENTS FOR DIRTBAGS

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

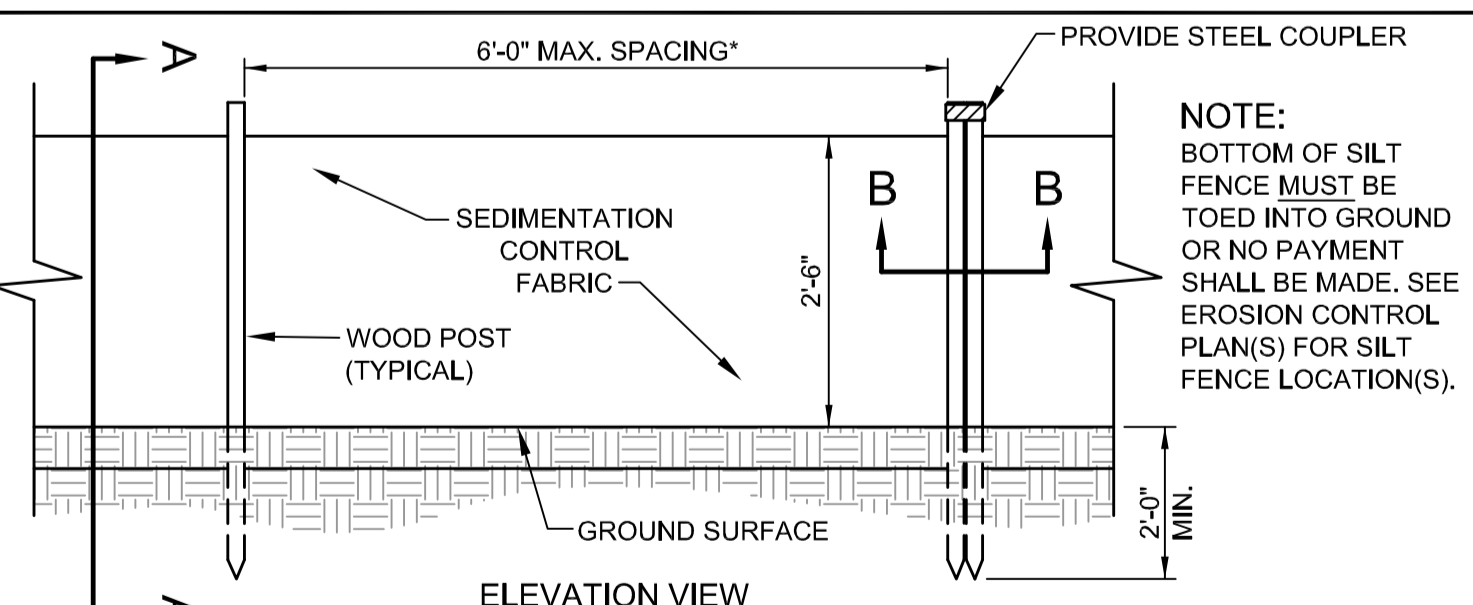
AT ALL TIMES (AFTER INITIAL SITE PREPARATION), THE CONTRACTOR SHALL HAVE ONE DIRTBAG ACTIVE OR READY FOR USE. THE DIRTBAGS SHALL BE FIELD LOCATED BY THE CONTRACTOR BUT ARE NOT TO BE INSTALLED WITHIN 100 FEET OF THE WETLANDS. THE DIRTBAG SHALL BE INSTALLED ON A PREPARED SUBGRADE. THIS SUBGRADE SHALL CONSIST OF THE INSTALLATION OF A LAYER OF MIRAFI 140N, AND 18 INCHES OF 3/4" 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:

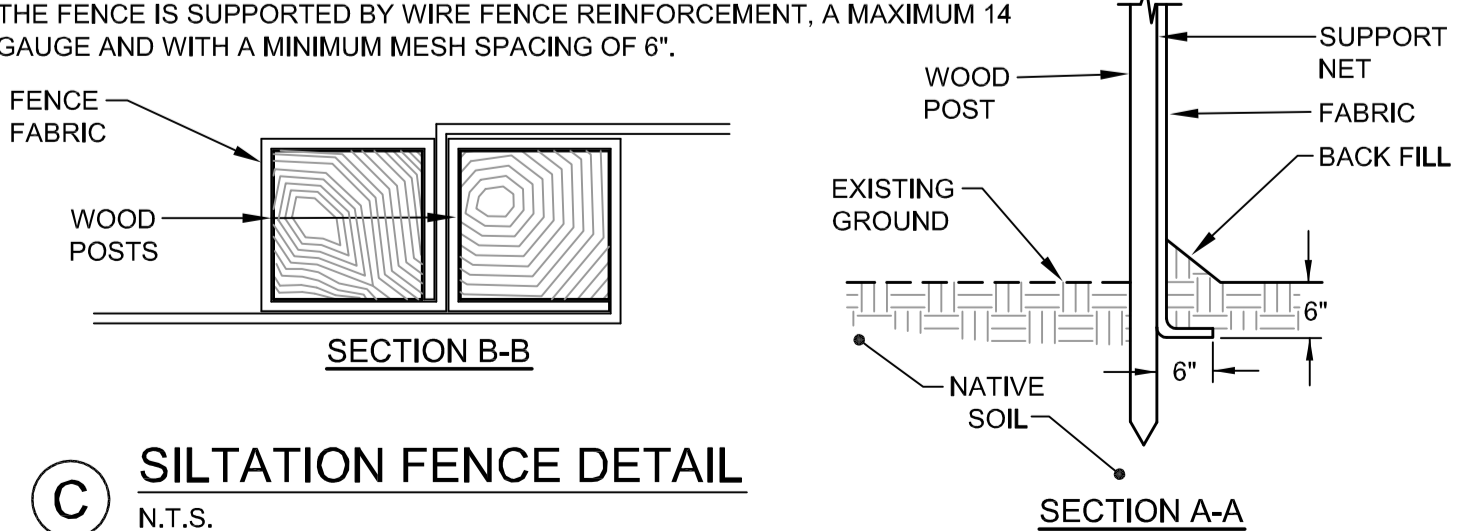
ALL CONSTRUCTION-DEWATERING OPERATIONS ARE THE RESPONSIBILITY OF THE SITE CONTRACTOR. IT SHALL BE THE SITE CONTRACTOR WHO IS RESPONSIBLE FOR SELECTING THE SITE FOR THE DIRTBAG. THE SELECTION OF THE USE OF THE DIRTBAG OR THE SEDIMENTATION BASIN FOR DIRECTING DEWATERING, EXCEPT THAT THE OWNER MAY DIRECT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



D. DIRTBAG DETAIL AND SPECIFICATIONS N.T.S.



NOTE: THE SILT FENCE SHOULD HAVE A MAXIMUM STAKING DISTANCE OF 6'. UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT, A MAXIMUM 14 GAUGE AND WITH A MINIMUM MESH SPACING OF 6".



C. SILTATION FENCE DETAIL N.T.S.

			PROJECT	CENTURY TIRE PLAZA		FAY, SPOFFORD & THORNDIKE ENGINEERS · PLANNERS · SCIENTISTS 778 MAIN ST., SUITE B, SOUTH PORTLAND, ME 04106									
			SHEET TITLE	EROSION CONTROL DETAILS		DRAWN: KGS DESIGNED: ADJ CHECKED: ADJ FILE NAME: SP-1									
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2	03.30.15	REVISED PER CITY COMMENTS													
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