CONSTRUCTION AND EROSION/SEDIMENTATION CONTROL NOTES

- ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK
- CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
- CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
- CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN
- 8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 1991 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
- 10. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (I-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
- IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
- PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL CONFIRM SETBACKS AND BUILDING DIMENSIONS WITH ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER OF ANY DIFFERENCES AFFECTING BUILDING OR SITE CONSTRUCTION.
- 13. REMOVE TOPSOIL AND ROUGHEN SUBGRADE TO ESTABLISH SUITABLE INTERFACE FOR ALL FILLS.
- A. PRE-CONSTRUCTION PHASE:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, FILTER FABRIC FENCING WILL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR, AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SILT FENCES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN & DETAILS IN THE PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER AND CONSTRUCTION

ACTIVITY IN THE AREA HAS BEEN COMPLETED. PRIOR TO ANY CLEARING, GRUBBING, STRIPPING OR PULVERIZING CONSTRUCTION ENTRANCE(S) SHALL BE CONSTRUCTED AT THE APPROVED ACCESS POINTS TO THE PROJECT SITE FROM THE EXISTING PUBLIC ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING, SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

- B. CONSTRUCTION AND POST-CONSTRUCTION PHASE:
- I. a) AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION AND SHALL NOT EXCEED 14 DAYS. AREAS THAT WILL NOT BE COMPLETED (COVERED AND/OR FINISH GRADED) WITHIN FOURTEEN (14) DAYS OF DISTURBANCE SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL MEASURES WITHIN FOURTEEN (14) DAYS OF DISTURBANCE. TEMPORARY EROSION CONTROL SHALL INCLUDE EROSION CONTROL MESH, NETTING OR MULCH AS DIRECTED BY THE INSPECTING ENGINEER AND AS SHOWN ON THE DESIGN PLANS, IF MULCH IS USED, HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATE OF 2 BALES PER 1,000 SQUARE FEET, APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE, MULCH SHALL BE KEPT MOIST TO AVOID LOSS DUE TO WIND, MULCH AND NETTING SHALL BE APPLIED IN THE BASE OF ALL GRASSED WATERWAYS (I.E., ROADWAY DITCHES) AND IN SLOPES WHICH EXCEED 15% AND ANY DISTURBED AREAS WITHIN 100' OF WETLANDS OR STREAMS.
- b) IF DISTURBED AREAS DO NOT RECEIVE FINAL SEEDING BY SEPTEMBER ISTH OF THE YEAR OF CONSTRUCTION, THEN ALL DISTURBED AREAS SHALL BE SEEDED WITH A WINTER COVER CROP OF RYE AT THE RATE OF 3 LBS/1,000 SF. TO PROVIDE WINTER PROTECTION, WINTER SEEDINGS SHALL BE COVERED WITH EROSION CONTROL MESH (MULCH AND NETTING), HEAVY GRADE MATS SHALL BE USED IN THE BASE OF ALL GRASSED WATERWAYS, ON SLOPES EQUAL TO OR GREATER THAN 15%, AND ANY DISTURBED AREAS WITHIN 100' OF WETLANDS OR STREAMS. MULCH AND NETTING SHALL ALSO BE APPLIED FOR ADDITIONAL WINTER PROTECTION ALONG SIDE SLOPES OF GRASSED WATERWAYS AND IN ALL AREAS EQUAL TO OR GREATER THAN
- C) DURING WINTER CONDITIONS, AREAS THAT WILL NOT BE COMPLETED (COVERED AND/OR FINISH GRADED) WITHIN SEVEN (7) DAYS OF DISTURBANCE SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL MEASURES WITHIN SEVEN (7) DAYS OF DISTURBANCE, TEMPORARY EROSION CONTROL SHALL INCLUDE EROSION CONTROL MESH, NETTING OR MULCH AS DIRECTED BY THE INSPECTING ENGINEER AND AS SHOWN ON THE DESIGN PLANS. IF MULCH IS USED, HAY OR STRAW MULCH SHALL BE APPLIED TO PROVIDE A MINIMUM UNIFORM MULCH DEPTH OF 4". THE APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE.
- 2. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDED WITH RYE AT 3 LBS/1/000 SF. AND MULCHED, AND RE-USED AS REQUIRED. SILTATION FENCING SHALL BE PLACED DOWN GRADIENT FROM STOCKPILED LOAM, LOAM SHALL BE STOCKPILED AT LOCATIONS DESIGNATED BY THE OWNER AND INSPECTING ENGINEER.
- ALL SILT FENCES AND EROSION CONTROL MEASURES SHALL BE INSTALLED ACCORDING TO THIS PLAN. THESE SHALL BE MAINTAINED DURING DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER ALL THE SILT FENCES AND EROSION CONTROL MEASURES SHALL BE INSPECTED BEFORE AND AFTER ANY RAINFALL OR RUNOFF EVENT, MAINTAINED AND CLEANED UNTIL ALL AREAS HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER OF GRASSES.
- A CONSTRUCTION ENTRANCE SHALL BE BUILT AT THE INTERSECTION OF THE EXISTING ROAD AND THE ACCESS DRIVE. ROADWAY AREAS SHALL BE PERIODICALLY SWEPT OR WASHED TO AVOID TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS.
- CATCH BASIN INLET PROTECTION SHALL BE PLACED WITHIN EXISITING CATCH BASINS IN THE CONSTRUCTION AREA PRIOR TO CONSTRUCTION. INLET PROTECTION FOR PROPOSED CATCH BASING SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE INSTALLATION OF THE
- ALL AREAS SHALL BE SEEDED AND STABILIZED IN ACCORDANCE WITH THE FOLLOWING
- VEGETATION PLAN.

C. VEGETATION PLAN: REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF THE ROADWAY IMPROVEHENTS. DISTURBED AREAS SHALL ALSO BE MULCHED AND ANCHORED PRIOR TO ANY STORM EVENT, SEE MULCHING REQUIREMENTS IN SECTION B(IA) ABOVE. IF FINAL SEEDING CANNOT BE ACCOMPLISHED BY SEPTEMBER 15TH, THEN ALL DISTURBED AREAS SHALL BE SEEDED WITH A WINTER COVER CROP OF RYE AT THE RATE OF 3 LBS./1,000 SQ. FT. TO PROVIDE WINTER PROTECTION, SEEDED AREAS SHALL BE COVERED WITH EROSION CONTROL MESH. SEE WINTER PROTECTION REQUIREMENTS IN SECTION B (IB) ABOVE.

REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

- FOUR INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE, LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER I" IN DIAMETER, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE
- SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TEST SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14 DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

10-20-20 FERTILIZER (N-P205-K20 OR EQUAL) APPLICATION RATE 18.4 LB/1000 SF.

138 LB/1,000 SF.

GROUND LIMESTONE (50% CALCIUM + MAGNESIUM OXIDE)

- FOLLOWING SEED BED PREPARATION, SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS/1000 S.F. WITH A MIXTURE OF 35% CREEPING RED FESCUE, 6% RED TOP, 24% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER
- EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.
- 5. ALL HAY BALE AND/OR FILTER FABRIC BARRIERS WILL REMAIN IN PLACE UNTIL SEEDINGS HAVE BECOME 85%-90% ESTABLISHED AND THEN REMOVED WITHIN 10 DAYS.
- THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.
- D. CONSTRUCTION SCHEDULE: SITE IMPROVEMENTS ARE SCHEDULED TO BEGIN IN SUMMER 2013, CONSTRUCTION DURATION IS ANTICIPATED TO BE 36 MONTHS TO TIME OF SUBSTANTIAL COMPLETION.

SCHEDULE:

EROSION CONTROL MEASURES PLACED: WEEK 1- WEEK 2 2. SITE CLEARING AND GRUBBING: MONTH I-ONGOING

3. CONSTRUCTION OF SITE IMPROVEMENTS: MONTH I-ONGOING

MULCH SPREAD FOR WINTER EROSION CONTROL: OCT. 15 OF CONSTRUCTION YEAR

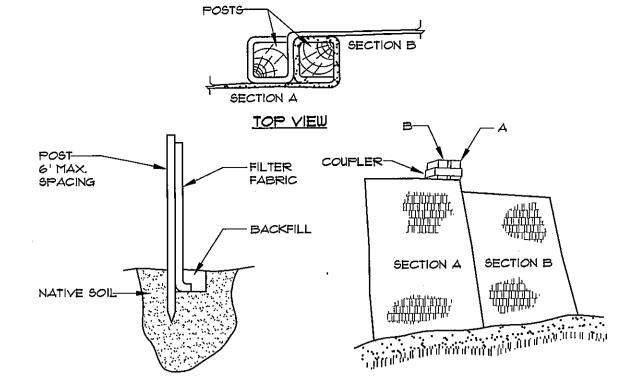
START FINAL SEEDINGS ON PREPARED AREAS (DURING GROWTH SEASON): MONTH 15

6. BIWEEKLY MONITORING OF VEGETATIVE GROWTH: MONTH 15

•7. RESEEDING OF AREAS, IF NEEDED: MONTH 15

18. REMOVAL OF EROSION CONTROL DEVICES: UPON FINAL PROJECT COMPLETION · DATES ARE SUBJECT TO CHANGE AT THE DISCRETION OF THE ENGINEER, DEPENDING ON CONSTRUCTION PROGRESS.

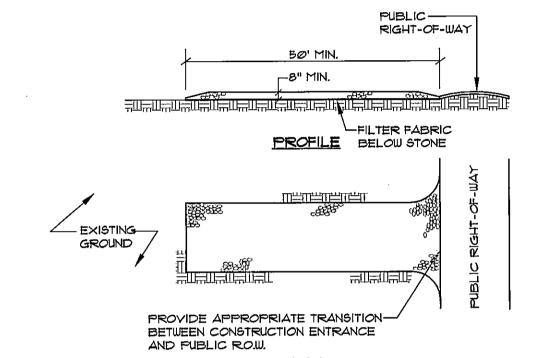
INSPECTIONS MONITORING MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE MUNICIPALITY WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 85%-90% OF AREAS VEGETATED WITH VIGOROUS GROWTH, RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.



<u>INSTALLATION:</u>

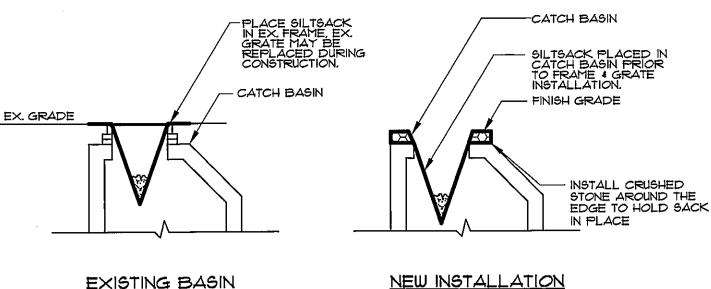
- I. EXCAVATE A 6"X 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
- 2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
- 3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
- 4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
- 5. JOIN SECTION AS SHOWN ABOVE.
- 6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

FILTER BARRIER



- STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE
- LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET
- THICKNESS- NOT LESS THAN EIGHT (8) INCHES. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
- MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY, THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE



EXISTING BASIN

PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG II) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURES INSTRUCTIONS, HAY BALES

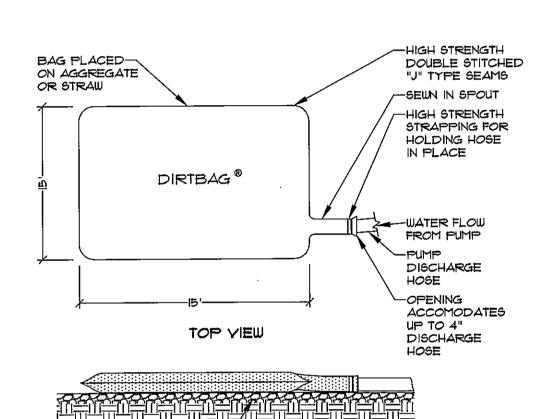
SHOULD BE REMOVED ONCE

INSERTS ARE INSTALLED.



CATCH BASIN PROTECTION DETAIL (FOR PAVED AREAS)

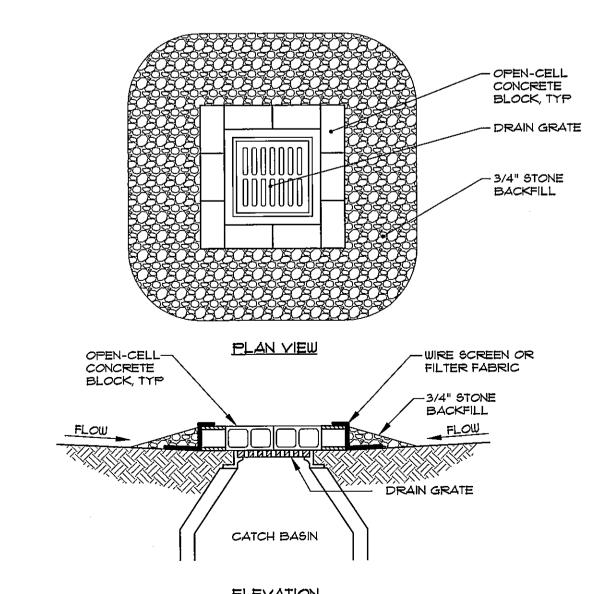
NOT TO SCALE



DIRTBAG PUMPED SILT CONTROL SYSTEM

AGGREGATE OR STRAW-

UNDERLAYMENT



ELEVATION BLOCK SEDIMENT BARRIER NOT TO SCALE

S

SCALE

07-26-13 | AS SHOWN **SHEET 10 OF 14**