

EROSION AND SEDIMENTATION CONTROL PLAN

A. PRE-CONSTRUCTION PHASE

1. 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 TO PREVENT EROSION.

2. PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

3. 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.

4. THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS PROJECT.

B. CONSTRUCTION AND POST-CONSTRUCTION PHASE

1. 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 1000 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 15TH OF THE YEAR OF CONSTRUCTION THEN ALL DISTURBED AREAS SHALL BE SEEDING WITH A WINTER COVER CROP OF RYE AT THE RATE OF 3 LBS/1000 SF. TO PROVIDE WINTER PROTECTION. WINTER SEEDINGS SHALL BE COVERED WITH EROSION CONTROL MESH (MULCH AND NETTING) UNTIL GRADE STABILIZATION. MULCH AND NETTING SHALL BE APPLIED 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 8% SLOPE.

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, SEEDING WITH RYE AT 3 LBS/1000 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.

3. 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.

4. A CONSTRUCTION ENTRANCE SHALL BE BUILT AT THE INTERSECTION OF THE EXISTING ROAD AND THE ACCESS DRIVE. ROADWAY AREAS SHALL BE PERIODICALLY SUPT 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.

5. STONE CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALES ARE ESTABLISHED WITH AT LEAST 85% TO 90% OF VIGOROUS PERENNIAL GROWTH.

6. ALL AREAS SHALL BE SEEDING AND STABILIZED IN ACCORDANCE WITH THE FOLLOWING VEGETATION PLAN.

C. VEGETATION PLAN REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF THE ROADWAY IMPROVEMENTS. DISTURBED AREAS SHALL ALSO BE MULCHED AND ANCHORED PRIOR TO ANY STORM EVENT. SEE MULCHING REQUIREMENTS IN SECTION B(1A) ABOVE. IF FINAL SEEDING CANNOT BE ACCOMPLISHED BY SEPTEMBER 15TH, THEN ALL DISTURBED AREAS SHALL BE SEEDING WITH A WINTER COVER CROP OF RYE AT THE RATE OF 3 LBS/1000 SF. TO PROVIDE WINTER PROTECTION. SEEDING AREAS SHALL BE COVERED WITH EROSION CONTROL MESH. SEE WINTER PROTECTION REQUIREMENTS IN SECTION B (1B) ABOVE.

REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

1. FOUR INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SHOOTED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 1" IN DIAMETER, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

2. SOIL TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOIL 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:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P2O5-K2O OR EQUAL)	10.4 LB/1000 SF
GROUND LIMESTONE (50% CALCIUM + MAGNESIUM OXIDE)	138 LB/1000 SF

3. FOLLOWING SEED BED PREPARATION SWALE AREAS, FILL AREAS AND BACK SLOPES SHALL BE SEEDING AT A RATE OF 3 LBS/1000 SF. 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.

4. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLAN AND COVER ALL FINISH SEEDING AREAS AS SPECIFIED ON THE DESIGN PLANS.

5. ALL HAY BALE AND/OR FILTER FABRIC BARRIERS WILL REMAIN IN PLACE UNTIL SEEDINGS HAVE BEEN 85%-90% ESTABLISHED AND THEN REMOVED WITHIN 10 DAYS.

6. 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 MAINTAINING 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 WILL MOST LIKELY BEGIN IN OCTOBER 2003 DEPENDING UPON FINIAL FUNDING. THE FOLLOWING SCHEDULE IS ANTICIPATED FOR THE CONSTRUCTION OF THE ROADWAY IMPROVEMENTS.

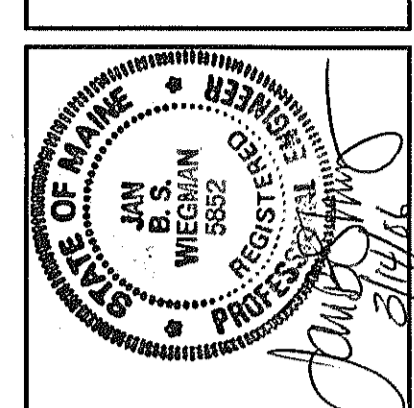
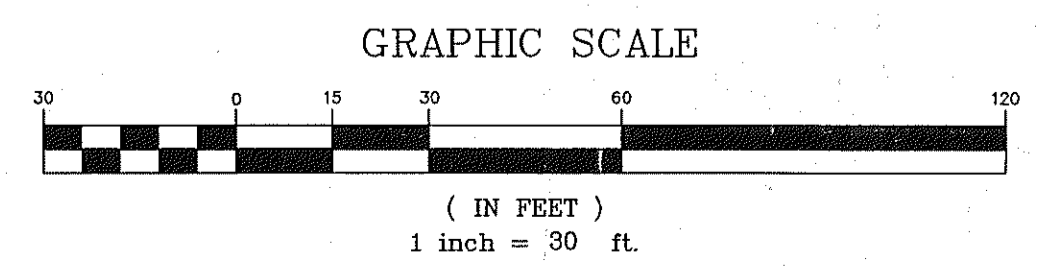
CONSTRUCTION MEASURE	ESTIMATED CONSTRUCTION TIME
1. ESTIMATED CONSTRUCTION TIME:	10 MONTHS
2. EROSION CONTROL MEASURES PLACED:	WEEK 1
3. BUILDING DEMOLITION:	WEEK 2 - WEEK 6
4. UTILITY IMPROVEMENTS:	WEEK 5 - WEEK 10
5. START OF BUILDING CONSTRUCTION:	WEEK 8
6. START FINAL SEEDINGS ON PREPARED AREAS (DURING GROWING SEASON):	WEEK 18
7. BIWEEKLY MONITORING OF VEGETATIVE GROWTH:	WEEK 21
8. RE-SEEDING OF AREAS, IF NEEDED:	FALL 2006
9. REMOVAL OF EROSION CONTROL DEVICES:	UPON FINAL PROJECT COMPLETION

* DATES ARE SUBJECT TO CHANGE AT THE DISCRETION OF THE ENGINEER, DEPENDING ON CONSTRUCTION PROGRESS.

E. 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 MEASURES. 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.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY/ROW	---
	BUILDING	
---	EC BLANKET	---
---	SIGN	---
---	EDGE PAVEMENT	---
---	CURBLINE	---
⊙ B-9	BORING	⊙ B-9
---124---	CONTOURS	---124---
---6"---	GAS	---6"---
---8"W---	WATER	---8"W---
---8"S---	SEWER	---8"S---
---12"SD---	STORM DRAIN	---12"SD---
---OHE---	OVERHEAD ELEC. 4 TEL.	---OHE4T---
---UG6---	UNDERGROUND ELEC. 4 TEL.	---UG64T---
□	TRANSFORMER PAD	□
⊕	GATE VALVE	⊕
⊙	LIGHT POLE	⊙
⊕	UTILITY POLE	⊕
⊕	HYDRANT	⊕
■	CATCH BASIN	■
⊙	MANHOLE	⊙
⊙	SPOT GRADE	30x20
---	CHAIN LINK FENCE	---
---	BARB WIRE FENCE	---
---	INLET PROTECTION	---
---	SILT FENCE	SF
---	CONSTRUCTION ENTRANCE	---



REV.	DATE	BY	STATUS
E	03-14-06	JBSW	ISSUED FOR CONSTRUCTION
D	02-07-06	JBSW	REVISED PER CITY COMMENTS
C	12-16-05	JBSW	RELEASED FOR DEMOLITION AND FOUNDATION
B	2-01-05	JBSW	ISSUED FOR FINAL SITE PLAN APPROVAL
A	11-02-04	NJS	ISSUED FOR SITE PLAN REVIEW

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PROJECT NO. 04187
FIELD BOOK DESIGN CHKD DRAWN
JBSW NJS /SAB

EROSION & SEDIMENTATION CONTROL PLAN

OF: **SOMERSET MARKETPLACE**
FRANKLIN ARTERIAL & FOX STREET
PORTLAND, MAINE

FOR: **FRANKLIN & SOMERSET PORTLAND ME, LLC**
550 BOWIE ST. 6TH FLOOR
AUSTIN, TX 78703

DATE: 10-28-04
SCALE: 1" = 30'

SHEET C-5