

EROSION AND SEDIMENT CONTROL REQUIREMENTS

PART 1 - GENERAL

1.01 SUMMARY
A. FURNISH, INSTALL, AND MAINTAIN TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES, SUCH AS, BUT NOT NECESSARILY LIMITED TO, HAY BALES AND SILT FENCE BARRIERS, RIPRAP, DIVERSION CHANNELS AND BEAMS, CHECK LEADS, SLOPE STABILIZATION, ETC. WHICH ARE APPROPRIATE FOR THE CONVEYANCE OF EROSION PRODUCTS (E.G. SOIL, MUD, SEDIMENT) OR THE TRANSPORT OF EXISTING VEGETATION COVER.

1.02 REFER TO DRAWINGS FOR LOCATION AND DETAILS OF CONTROL MEASURES REQUIRED TO COMMENCE WORK. THESE CONTROL MEASURES WILL BE ADDED ONLY AS NECESSARY. ADDITIONAL DRAWINGS AND NOTES ADDED TO DRAWINGS OR APPENDIXES SHALL CONTAIN ALL CONTROL MEASURES THAT WILL BE REQUIRED TO MEET THE REQUIREMENTS DESCRIBED IN 1.01A.

1.03 ENSURE THAT ALL CONTROL MEASURES THROUGHOUT THE DURATION OF PROJECT, UNLESS ALL AREAS DISTURBED OR UNDISTURBED BY CONSTRUCTION AS NECESSARY, MEET THE STANDARDS FOR EROSION CONTROL.

1.04 ENSURE THAT TEMPORARY CONTROL MEASURES AS NECESSARY TO MEET THE REQUIREMENTS DESCRIBED IN 1.01A, WHILE ALLOWING TIME TO PREPARE FOR PERMANENT EROSION AND SEDIMENT CONTROL MEASURES, UNLESS AS TIME AS THE ENTIRE SITE IS PERMANENTLY STABILIZED BY ESTABLISHED VEGETATION, FRESH LAMINAR MATERIALS, OR EQUIVALENT MEASURES.

1.05 ENSEURE THAT PERMANENTLY STABILIZED AREAS ARE MAINTAINED AS SUCH BY ENGINEER, REMOVE TEMPORARY CONTROL MEASURES WHILE PROTECTING STABILIZED SURFACES.

1.07 AGREEMENTS

A. COMPLY WITH GOVERNING CODES AND REGULATIONS. PROVIDE PRODUCTS FROM ACCEPTABLE MANUFACTURERS. USE EQUIPMENT INSTALLED, UNLAW, HANDLING, AND STORE MATERIALS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

B. CONCERN TO OBTAIN APPROVAL OF EROSION CONTROL PLANS FROM LOCAL PLANNING BOARD, CONSERVATION COMMISSION, BOARD OF SELECTED, BOARD OF PUBLIC WORKS, HIGHWAY DEPARTMENT, STATE ENVIRONMENTAL PROTECTION DEPARTMENT, AND OTHER APPROPRIATE STATE AND LOCAL EROSION CONTROL PROGRAMS. WHERE CONDITIONS OF REGULATORY APPROVAL DIFFER FROM REQUIREMENTS CONTAINED HEREIN OR ON THE DRAWINGS, COMPLY WITH THE MORE STRINGENT REQUIREMENT.

PART 2 - PRODUCTS

2.01 MATERIALS
A. STRAW DALES: DRY GRASS OR STRAW, MACHINE BOUND WITH JUTE OR WIRE, APPROXIMATE SIZE: 12' X 1' X 6'.

B. SILT FENCE: NON-WOVEN, HYDRO-RESISTANT, POLYPROPYLENE FABRIC FLOW RATED AT 10 GPM/FT. MAX. GRAD. TENSILE STRENGTH AT 125 POUNDS MINIMUM, WITH APPROVED EQUAL. USE 100% POLYPROPYLENE STAPLES. USE NO. 2130 BY AMCO FABRICS OR FIBERS, OR APPROVED EQUAL.

C. SAWDUST: WILLOW, TOSS, WHEAT, STRAW WITH NATURAL PRO-DRAGGER, 1/2" NETTING, MINIMUM 0.5 INCH DIAMETER AND 10 FEET LONG. USE DIAMETER 1/2-INCH OR 2-INCH DIAMETER WATERS TO PROTECT LARGER UNSTABILIZED AREAS.

D. MULCH: ORGANICS INCLUDING HAY, PROCESSED PINE / HEMLOCK TWIGS AND NEEDLES.

E. SEED: MIXES, PERENNIAL RYGRASS, KENTUCKY BLUEGRASS, AND / OR KINE FROGE, DISEASE RESISTANT. NOT MAINTAINED AREA OPTION: ANNUAL KENTUCKY BLUEGRASS.

F. FABRIC: SILT FENCE: CURVED WICK FABRIC ON PHOTOGRAPHIC ENRICO PLASTIC MATRIX. NOT ON 100% SISAL. 6-INCHES LONG, 100' LINEAR FEET, 150 POUNDS / ST. CONTAINING NO CHEMICAL ADDITIVES. USE CURVED 1 BLANKET BY AMERICAN EXCAVATION COMPANY, OR APPROVED EQUAL.

G. ROCK: RIPRAP, SCOUR, ANGULAR, 6-INCH MINUS PROFESSIONAL CRUSHED ROCK, OR TALUS.

H. CROPPED STONE: SAND, ANGULAR, 2-INCH MINUS PROFESSIONAL CRUSHED STONE.

PART 3 - EXECUTION

3.01 WORK AREA RESTRICTION
A. DO NOT WORK SO AS TO LIMIT DRAINAGE AREA THAT IS TRIBUTARY TO DISTURBED AREAS. DESEVE, EMPLOY, AND MAINTAIN CONTROL MEASURES SUCH AS DIVERSION CHANNELS AND BARRIERS, SPECIFICALLY LOCATED TO PREVENT CONVEYANCE OF EROSION PRODUCTS FROM SMALL, MANAGEABLE SUBSOILS, THEREBY MINIMIZING RUNOFF AND THE POTENTIAL FOR FROZEN.

B. MAINTAIN BARRIER AT LIMIT OF WORK AND PROTECT EXISTING VEGETATION / FACILITIES OUTSIDE OF LIMIT OF WORK.

C. MAINTAIN SPARE MATERIALS FOR IMMEDIATE EQUIPMENT / REPAIR / REPAIR / EXPANSION OF CONTROL MEASURES, AT A MINIMUM, SUCH MATERIALS SHALL INCLUDE HAY WALLETS, SILT FENCE, AND SAWDUST, AND APPROXIMATELY 100' LINEAR FEET.

D. IMPACT AND MAINTAIN EFFECTIVENESS OF CONTROL MEASURES BY REPAIRING AS NECESSARY, AND BY MAINTAINING AND EXPANDING, SUPPLEMENTING AS NECESSARY, TO ADEQUATE EXTENT, BY REMOVING TRAPPED PRODUCTS OF EROSION AS NECESSARY IN THE PRACTICAL WORK AREA.

E. LIMIT EXTENT OF WORK AREA SO THAT ALL DISTURBED AREAS CAN BE STABILIZED WITH CONTROL MEASURES WITHIN A 24-HOUR PERIOD.

F. INSTALL CONTROL MEASURES AS SOON AS PRACTICABLE AFTER EACH MANAGEABLE PORTION OF EARTHWORK IS COMPLETE, EMPLOY TEMPORARY MEASURES AS NECESSARY TO STABILIZE AREAS TO COUNTERACT POTENTIAL SEDIMENT TRANSPORT DURING INTENSE RAINFALL.

G. WHEN VEHICLE REFUELING IS REQUIRED ON SITE, CONDUCT REFUELING OPERATIONS OUTSIDE OF ENVIRONMENTALLY SENSITIVE AREAS.

H. PROPER DISPOSE OF DEBRIS, SOLID WASTE, TRASH, AND CONSTRUCTION WASTE / HYDROCARBON ON SITE.

I. SWEEP ON-SITE, PAVED, AREAS AND OFF-SITE STREETS AS NECESSARY TO PREVENT SILT AND DEBRIS ORIGINATING ON SITE FROM ENTERING CLOSER DRAINAGE SYSTEMS AND / OR ENVIRONMENTALLY SENSITIVE AREAS.

3.02 SITE PREPARATION AND ACCESS

A. WALK SITE AND IDENTIFY LOCATIONS OF LIMIT OF WORK AND ENVIRONMENTALLY SENSITIVE AREAS. LOCATE EROSION CONTROL STRUCTURE, STOCKPILE AREA, LOCATED ALONG LONGITUDINAL SENSITIVE AREA.

D. INSTALL CONTROL MEASURES AS SHOWN ON THE DRAWINGS, INCLUDING THOSE DELINEATING THE LIMIT OF WORK.

C. LIMIT VEHICULAR TRAFFIC TO AND FROM SITE TO MINIMIZE TRANSPORT OF EXISTING VEGETATION COVER.

3.03 CLEARING, GRADING, AND SITING

A. SCHEDULE GRADING AND SITING TO OCCUR IMMEDIATELY PRIOR TO EARTH WORK. EROSION CONTROL MEASURES SHALL BE PLACED ON SLOPES AND SITES AS SOON AS POSSIBLE TO ADVANTAGE OF THE EROSION PREVENTION POTENTIAL OF EXISTING VEGETATION COVER.

B. MINIMIZE THE AREA OF EXISTING VEGETATION REMOVED WHEREVER POSSIBLE.

C. LOCATE AND PROTECT STOCKPILES TO MINIMIZE EROSION POTENTIAL, TAKING ADVANTAGE OF SLOPE SWEEP AND ASPECT, WHERE APPROPRIATE.

D. PROTECT VEGETATION, INCLUDING SENSITIVE AREAS, BEYOND LIMIT OF CLEARING.

E. MAINTAIN EARTHWORK AREAS AND INSTALLER CONTROL MEASURES, PROVIDED HAVING A MAXIMUM OF 12 FEET OF STUMP ON SITE IS NOT REQUIRED.

3.04 EROSION BOUNDARY SEDIMENTATION AND MITIGATION

A. ULTRAS AND INSTALL CONTROL MEASURES ADEQUATE TO HANDLE RUSHFLOWS AND MITIGATE EROSION FROM HOLLOW SUMP AND WITH PUMP PUMPS PRIOR TO LOCATING.

B. ARMOR SLOPES, DITCHES, LOCATIONS TO PREVENT EROSION AT POINT OF DISCHARGE AND AREAS DOWNSTREAM.

C. IF EXCAVATION EXCAVATIONS GRADE 10 DAYLIGHT ON THE LOW SIDE, ULTRAS AND HOLLOW SUMP ARE REQUIRED TO HANDLE SURFACE AND GROUNDWATER FLOW FROM EXCAVATION LOW POINT.

D. GROUNDFLOOR EXCAVATION MATERIALS TO BATTLE OVERLAND RUNOFF, AVOIDING THE CREATION OF LONGITUDINAL PATHS OF CONCENTRATED RUNOFF.

E. DITCHFILL UTILITY TRENCHES AS SOON AS PRACTICABLE TO PREVENT FLOODING, OVERLAND FLOW, AND RETENTIVE EARTH REQUIREMENT.

3.05 SITE GRADING

A. WHERE APPLICABLE, FOLLOW EXCAVATION AND FILL PRACTICES SHOWN ON DRAWINGS TO LOCALIZE AND MINIMIZE EROSION.

B. MONITOR SEDIMENTATION IN TEMPORAL SITES, EROSION, SEDIMENT BANDING, AND OVERLAPPING CHECK DAMS IN SENSITIVE AREAS EXCEPT THOSE THAT DO NOT PRESENT POTENTIAL PROBLEMS WITH REGARD TO FUTURE SOIL STABILITY, DRAINAGE, OR RETENTION. RECORD PROBLEMS AND IMMEDIATELY DISPOSE OF TRAPPED SEDIMENT.

C. USE APPROXIMATELY 10' HOLLOW SUMP DITCHES TO PROTECT SITES FROM EROSION.

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