

GENERAL DESCRIPTION OF PROJECT: THE PURPOSE OF THIS PROJECT IS TO RECONSTRUCT A ONE MILE SECTION OF RIVERSIDE AVENUE (US ROUTE 7) IN BURLINGTON, VERMONT. RIVERSIDE AVENUE IS A HEAVILY TRAVELED URBAN ROADWAY. THE PROJECT CONSISTS OF COLD PLANING THE EXISTING ROADWAY, CONSTRUCTING SIDEWALK ALONG THE SOUTH SIDE AND A PEDESTRIAN / BIKEWAY ALONG THE NORTH SIDE. THE PROJECT ALSO INCLUDES NEW CURBING, LIGHTING, LANDSCAPING AND SIGNALS. GRASS STRIPS ARE DESIGNED INTO THE PROJECT BETWEEN THE ROADWAY AND THE SIDEWALK AND PED./BIKEWAY WHERE POSSIBLE. THE OVERALL FOOTPRINT OF RIVERSIDE AVENUE WILL REMAIN ESSENTIALLY AS IT EXISTS TODAY AS THE WIDTH OF THE ROADWAY IS BEING REDUCED WHICH ALLOWS FOR THE CONSTRUCTION OF ELEMENTS DESCRIBED ABOVE. EXISTING OVERHEAD UTILITIES WILL BE RELOCATED UNDERGROUND. IMPROVING THE CLOSED DRAINAGE SYSTEM IS NOT PART OF THE SCOPE OF THIS PROJECT.

SITE INVENTORY AND ANALYSIS: THE PROFILE OF THE ROAD IS GENERALLY FLAT RANGING BETWEEN 1 AND 4 PERCENT. ALL STORM RUNOFF IS CHANNLED ALONG GRANITE CURB AND COLLECTED IN AN EXISTING CLOSED DRAINAGE SYSTEM THAT DISCHARGES OUTSIDE OF THE PROJECT AREA. THE LIMITS OF WORK FOR THIS PROJECT, AS SHOWN ON THE FOLLOWING PLANS, WILL NOT ENCRACH ON ANY WATER BODIES, THE CLOSEST BEING THE WINOOSKI RIVER. THERE ARE TWO STREAMS WHICH PASS THROUGH THE PROJECT AT REV. 39+30 AND 51+20. BOTH STREAMS ENTER A CLOSED DRAINAGE SYSTEM AT A POINT WELL OFF OF THE PROJECT AND ARE CONVEYED TO THE WINOOSKI RIVER. THE STREAMS ARE NOT AFFECTED BY THE PROJECT. AS SHOWN BY THE CROSS SECTIONS, THE TOPOGRAPHY ADJACENT TO RIVERSIDE AVENUE IS GENERALLY STEEP. THE GRADE SLOPES DOWN AND AWAY FROM THE ROAD TO THE NORTH AND UP AND AWAY ON TO THE SOUTH. IN GENERAL, THE SOILS ARE CLASSIFIED AS FU: FILL LAND. THERE SOILS ON THE EMBANKMENT THAT LEADS DOWN TO THE WINOOSKI RIVER ARE CLASSIFIED AS HIE: HARTLAND VERY FINE SANDY LOAM AND ARE NOTED TO BE HIGHLY ERODIBLE. THESE SOILS ARE OUTSIDE OF THE PROJECT LIMITS. THE VEGETATION SURROUNDING THE ROAD ON BOTH SIDES, AND WITHIN THE PROJECT LIMITS, IS MOSTLY GRASS AND WOODS. THERE ARE TWO GROUPS OF ENDANGERED PLANTS WELL OUTSIDE THE LIMITS OF WORK AT STATIONS 67+00 AND 69+50 LEFT. BOTH OF THESE AREAS WILL BE PROTECTED WITH SNOW AND SILT FENCE AS DEPICTED ON THE PLANS.

GRADING PLAN AND TIMETABLE: THE PROJECT WILL CONSIST OF COLD PLANING AND RESHAPING THE EXISTING ROADWAY TO REMOVE APPROXIMATELY 6-INCHES OF EXISTING ASPHALT. IN DOING SO, APPROXIMATELY 4-INCHES OF THE EXISTING PAVEMENT WILL BE LEFT TO PROVIDE A BASE FOR THE NEW PAVEMENT. NO MAJOR CHANGES IN PROFILE GRADE WILL BE MADE TO THE ROAD AS PART OF THIS PROJECT. ALSO, IT IS NOT THE INTENTION OF THIS PROJECT TO STRIP THE ROADWAY TO BARE GRAVEL AT ANY POINT DURING CONSTRUCTION. AS PART OF THE RECONSTRUCTION HOWEVER, NEW UTILITIES WILL BE PLACED IN THE ROAD, WHICH WILL REQUIRE SHALLOW TRENCH EXCAVATION THROUGHOUT THE PROJECT.

EROSION PREVENTION AND SEDIMENT CONTROL PLAN: VIABLE EROSION PROTECTION STRATEGIES FOR RIVERSIDE AVE. ARE LIMITED DUE TO THE LARGE VOLUME OF TRAFFIC CARRIED BY THIS ROAD ON A DAILY BASIS. NO EROSION PROTECTION MEASURES WILL BE REQUIRED UNTIL WORK BEGINS ON THE NEW UNDERGROUND UTILITIES. PRIOR TO THE START OF THIS WORK CHECK DAMS WILL BE INSTALLED AROUND ALL EXISTING DRAIN STRUCTURES TO PREVENT SEDIMENT FROM ENTERING. AT THIS POINT IN THE PROJECT COLD PLANING OPERATIONS WILL HAVE RESTORED THE CROWN OF THE ROAD AND ALL RUNOFF WILL BE DIRECTED TO THE EXISTING GRANITE CURB. DUE TO THE FLAT SLOPE OF THE ROADWAY, RUNOFF VELOCITIES WILL REMAIN LOW AND WATER WILL BE CHANNLED ALONG THE EXISTING CURB. CHECK DAMS WILL BE INSTALLED ALONG THE CURB EVERY 150-FEET TO SLOW THE RUNOFF AND COLLECT ANY SEDIMENT REMOVED FROM THE EXCAVATED UTILITY TRENCHES. THE ROADWAY IS TO BE SWEEPED AND SEDIMENT REMOVED AT THE END OF EACH CONSTRUCTION DAY. SNOW FENCE WILL BE INSTALLED AT CERTAIN LOCATIONS, AS NOTED ON THE PLANS, PRIOR TO THE START OF THE NEXT PHASE OF CONSTRUCTION TO CLEARLY MARK THE LIMITS OF WORK. ALSO, SILT FENCE WILL BE INSTALLED JUST OUTSIDE OF THE LIMITS OF WORK ON THE DOWN SLOPE SIDE OF MATCH POINTS AS INDICATED ON THE PLANS. DURING THE CONSTRUCTION OF THE SIDEWALK AND PEDESTRIAN BIKEWAY ALL DISTURBED AREAS WILL BE SEEDED AND MULCHED. SLOPES 1:3 OR STEEPER WILL RECEIVE STRAW MATTING. APPLICATION RATES FOR MULCH, FERTILIZER AND SEED ARE SHOWN ON THE ROADWAY TYPICAL.

GENERAL EROSION & SEDIMENT CONTROL GUIDELINES

THE EROSION CONTROL PLANS ARE INTENDED AS A GUIDE FOR PREVENTING SOIL EROSION AND CONTROLLING SEDIMENT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE DURATION OF THE PROJECT TO CONTROL EROSION AND MINIMIZES THE SEDIMENTATION OF THE RECEIVING WATERS.

AN ALTERNATE TEMPORARY EROSION CONTROL PLAN MAY BE SUBMITTED BY THE CONTRACTOR FOR APPROVAL BY THE AGENCY OF TRANSPORTATION.

THE CONTRACTOR WILL USE OTHER TEMPORARY OR PERMANENT EROSION CONTROL DEVICES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION AND AS DIRECTED BY THE RESIDENT ENGINEER. SEE SECTION 105.23 OF THE 2001 VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION, USE, AND REMOVAL OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WITH CONSTRUCTION ACTIVITIES TO ASSURE ECONOMICAL, EFFECTIVE, AND CONTINUOUS EROSION PREVENTION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES AS CONSTRUCTION ACTIVITIES PROCEED.

THE RESIDENT ENGINEER MAY DIRECT THE INSTALLATION OF CERTAIN EROSION CONTROL MEASURES IN ORDER TO FORESTALL OF MITIGATE POTENTIAL OR EXISTING EROSION PROBLEMS, OR TO RESPOND TO STORM EVENTS OR DAMAGE BY CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INSTALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS SEQUENCED ON THE EROSION CONTROL PLAN SHEETS, OR AS DIRECTED BY THE RESIDENT ENGINEER. THE TYPE, SIZE, AND LOCATION OF ANY EROSION CONTROL DEVICE SHALL NOT BE CHANGED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE RESIDENT ENGINEER. ANY APPROVED CHANGES SHALL BE NOTED ON THE EROSION CONTROL PLANS AND DISCUSSED IN THE WEEKLY REPORT. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RAINFALL EVENT. THE CONTRACTOR SHALL REPAIR ALL DAMAGED EROSION CONTROL MEASURES IMMEDIATELY. ALL EROSION CONTROL MEASURES THAT TRAP SEDIMENT, SUCH AS SEDIMENT BASINS AND SILT FENCES, SHALL BE CLEANED OUT WHEN THEIR CAPACITY REACHES 50%.

THE RESIDENT ENGINEER'S APPROVAL SHOULD BE OBTAINED PRIOR TO INSTALLING ANY EROSION CONTROLS NOT SPECIFIED IN THE EROSION CONTROL PLANS. HOWEVER, IN EMERGENCY SITUATIONS WHERE THE RESIDENT ENGINEER IS NOT IMMEDIATELY AVAILABLE, THE CONTRACTOR SHOULD REPAIR OR INSTALL THE EROSION CONTROLS AS HE/SHE DEEMS NECESSARY AND REPORT THE INCIDENT TO THE RESIDENT ENGINEER AS SOON AS PRACTICAL.

THE CONTRACTOR SHALL CONTROL ALL SEDIMENT-LADEN RUNOFF GENERATED WITHIN THE PROJECT SITE. CLEAN RUNOFF FORM OUTSIDE THE PROJECT SITE SHALL BE ROUTED THROUGH THE PROJECT SITE USING DIVERSION BERMS, DIVERSION CHANNELS, AND TEMPORARY OR PERMANENT CULVERTS.

CONSTRUCTION EQUIPMENT WILL NOT BE ALLOWED TO OPERATE ON THE DOWNHILL SIDE OF THE PERIMETER CONTROL MEASURES.

CONSTRUCTION EQUIPMENT WILL NOT BE ALLOWED TO CROSS A FLOWING STREAM, OR DISTURB THE EXISTING STREAM BANKS, UNLESS AUTHORIZED BY THE RESIDENT ENGINEER.

ALL IN-STREAM CONSTRUCTION MUST TAKE PLACE IN A DRY CHANNEL BETWEEN JUNE 1ST AND OCTOBER 1ST.

IN GENERAL, PRESERVE EXISTING VEGETATION, SHRUBS, AND TREES WHENEVER POSSIBLE.

SILT FENCE SHALL BE PLACED AT THE TOES OF ALL FILL SLOPES AND SHALL BE CONSTRUCTED SO THAT FLOWS CANNOT BYPASS THE ENDS. AREAS DIRECTLY BELOW (DOWNHILL) OF THE SILT FENCES MUST BE UN-DISTURBED AND VEGETATED.

STRAW MATTING WILL BE INSTALLED AS SOON AS PRACTICAL ON ALL TEMPORARY DETOUR CUT & FILL SLOPES AND PERMANENT CUT & FILL SLOPES.

AS CONSTRUCTION PROGRESSES, IMPLEMENTATION OF ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE ON-SITE COORDINATOR AND AS APPROVED BY THE RESIDENT ENGINEER.

INFORMATION REQUIRED BY THE CONTRACTOR

MUCH OF THE INFORMATION CONTROL INFORMATION SHOWN ON THE EROSION CONTROL PLANS AND DESCRIBED IN THIS NARRATIVE IS GENERAL IN NATURE. MORE SITE SPECIFIC INFORMATION IS NOT YET AVAILABLE AS A CONTRACTOR HAS NOT YET BEEN SELECTED. THE FOLLOWING LIST OUTLINES SOME OF THE SPECIFIC INFORMATION THAT IS NOT INCLUDED IN THE EROSION CONTROL PLANS AND DESCRIBED IN THIS NARRATIVE;

LOCATION OF WASTE, BORROW AND STAGING AREAS, MATERIAL STOCKPILES, REFUELING AND MAINTENANCE AREAS AND CONCRETE TRUCK WASHOUT LOCATION (ATTACH MAP IF NECESSARY).

DISCUSSION AND ADDITIONAL DETAILS NEEDED FOR PROTECTION AND STABILIZATION OF ABOVE.

PROPOSED MODIFICATIONS AS / IF REQUIRED TO THESE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.

PROPOSED DATES ASSOCIATED WITH JOB MILESTONES AS INDICATED ON THE SEQUENCE CONSISTENT WITH PROJECT CPM SCHEDULE.

NARRATIVE (RE: TEMPORARY SEEDING, MULCHING / STABILIZATION AND STABILIZING METHEDS FOR WINTER (OCTOBER 15TH - MAY 1ST)

NAME, ADDRESS, PHONE NUMBER AND BASIC QUALIFICATIONS OF "ON-SITE COORDINATOR".

MAINTENANCE PLAN FOR EROSION PREVENTION AND SEDIMENT CONTROLS

THE FOLLOWING MAINTENANCE SCHEDULE WILL BE FOLLOWED THROUGHOUT THE DURATION OF THE PROJECT.

1. AN ASSIGNED INDIVIDUAL WHO IS NOT PERMANENTLY ASSOCIATED WITH THE DAY-TO-DAY OPERATIONS OF THE PROJECT SHALL DO MONITORING OF THE CONSTRUCTION SITE. THE INSPECTOR WILL BE FAMILIAR WITH THIS PLAN AND WITH EROSION PREVENTION & SEDIMENT CONTROL PROCEDURES AND WITH ROAD AND BRIDGE CONSTRUCTION TECHNIQUES. SITE INSPECTIONS WILL BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS, AND AFTER EACH RAIN EVENT OF MORE THAN ½" (13MM) IN A TWENTY FOUR HOUR PERIOD.

2. A COPY OF THE MONITORING REPORT PREPARED BY THE SITE REVIEWER SHALL BE GIVEN TO THE RESIDENT ENGINEER AFTER EACH SITE VISIT. THE REPORT WILL BE A WRITTEN REPORT STATING THE DATE OF THE REVIEW, A DESCRIPTION OF THE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES REVIEWED. ALSO INCLUDED WILL BE THE EFFECTIVENESS OF THE EROSION PREVENTION / CONTROL MEASURES, ANY DEFICIENCIES, AND CORRECTIVE ACTIONS TO BE UNDERTAKEN.

3. THE PLAN PREPARER WILL BE AVAILABLE FOR ON-SITE CONSULTATIONS WITH THE RESIDENT ENGINEER WITHIN TWENTY FOUR HOURS OF THE REQUEST.

4. ALL SILT FENCES AND STONE CHECK DAMS WILL BE INSPECTED EACH SITE VISIT BY THE DESIGNATED INSPECTOR, AS DESCRIBED BELOW;

- A. THESE CONTROLS WILL BE MAINTAINED IN GOOD CONDITION. ANY SILT FENCE OF STONE CHECK DAM THAT IS INEFFECTIVE WILL BE REPAIRED OR REPLACED IMMEDIATELY.
- B. SEDIMENT DEPOSITS WILL BE REMOVED WHEN THEY REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL DEVICE.
- C. ALL SEDIMENTS REMOVED WILL BE DEPOSITED IN AN UPLAND PORTION OF THE PROJECT SITE, OR DISPOSED OFF-SITE IN THE DESIGNATED PROJECT WASTE SITE.

5. ALL SLOPES WILL BE CHECKED EACH SITE VISIT AND ANY ERODED AREAS WILL BE IMMEDIATELY REPAIRED. TEMPORARY STABILIZATION METHODS WILL BE USED AS NECESSARY UNTIL FINAL STABILIZATION MEASURES ARE IN PLACE.

6. BOTH TEMPORARY & PERMANENT SEEDING & MULCHING WILL BE CHECKED EACH SITE VISIT FOR VEGETATIVE GROWTH. ANY AREAS REQUIRING RE-VEGETATION WILL BE REPAIRED IMMEDIATELY.

7. DRAINAGE STRUCTURES WILL BE CLEANED AS NECESSARY TO REMOVE ANY SEDIMENT BUILDUP IN THE SUMP OF THE STRUCTURES OR AT THE INLET OF THE STRUCTURE.

- A. ANY INLET CONTROL FOUND TO BE INEFFECTIVE WILL BE REPLACED AS NECESSARY AND WILL BE DONE IMMEDIATELY.
- B. ALL SEDIMENTS REMOVED WILL BE DEPOSITED IN AN UPLAND PORTION OF THE PROJECT SITE, OR DISPOSED OFF-SITE IN THE DESIGNATED PROJECT WASTE SITE.

8. TEMPORARY CONSTRUCTION ACCESSES WILL BE MONITORED EACH SITE VISIT.

- A. ANY CONTROL FOUND TO BE INEFFECTIVE WILL BE PROMPTLY REPLACED.

9. ALL TEMPORARY EROSION CONTROL DEVICES WILL STAY IN PLACE UNTIL FINAL GRASS GROWTH HAS BEEN ESTABLISHED AND COMPLETE STABILIZATION OF THE AREAS HAS OCCURRED.

10. ONCE STABILIZATION HAS OCCURRED, ALL TEMPORARY EROSION CONTROL MEASURES WILL BE REMOVED AND ALL DISTURBED AREAS WILL BE STABILIZED WITH STRAW MATTING AND/OR SEED & MULCH.

EROSION CONTROL NARRATIVE

SURVEYED BY	DATE
DRAWN BY	DSD DATE 02/03
SQUAD LEADER	JAW
DESIGN FILE NO.	89-108
IPARM FILE	DATE PLOTTED
PROJ. NAME	BURLINGTON
PROJ. NO.	MEGC 5000(15)
SHEET	71B OF 252 SHEETS