SPECIFIC GUIDELINES

Phase I- Establish Perimeter Erosion Controls

Prior to any construction or staging, the contractor will install Stabilized Construction Entrances leading to staging areas and the project site to prevent the tracking of silts and sediments offsite. Coarse stone fill over filter fabric should be utilized where an already established stable entrance does not exist. The crushed stone product used for the construction of the Stabilized Construction Entrances shall be monitored for sediment accumulation and replaced as necessary as directed by the Resident Engineer. Stabilized Construction Entrances shall also be established and maintained at all offsite waste and borrow areas.

After the clearing of trees and shrubs, but prior to any grubbing and excavation, construct perimeter controls to ensure that any sediment does not leave the site. Water treated with Sediment traps/basins, may be directed to nearby streams or swales.

Install perimeter silt barrier in areas of proposed work as shown on the plans prior to grubbing and filling activities. In areas of high exposure, it may be necessary to double up protection with additional silt fencing or placement of hay bales behind the silt fencing. In areas of exposed ledge, stone check dams will be utilized.

During grubbing operations, stone check dam barriers shall be installed at any obvious concentrated flow discharge points, or as directed by the Resident Engineer.

After the grubbing activity all areas of exposed soils shall be temporarily stabilized with mulching & seeding, erosion matting, as soon as practicable and before any predicted rainfall event. These temporary erosion control measures can be placed in any combination in areas of potential erosion as deemed necessary by the Resident Engineer.

After perimeter controls are in place, and prior to grading operations, construct temporary onsite sediment traps and provide inlet protection where necessary . Grade disturbed areas to drain towards sediment trap where possible.

All material stockpiles, including but not limited to, grubbing material, sand borrow, earth borrow, granular borrow, topsoil, subbase, and any excavated waste piles shall also have silt fence installed around the base of the stockpile.

Phase 2 - Establish Bridge Erosion Controls

New slopes steeper than 50% (1-2 slope) will be constructed with stone fill for slope stabilization as the embankment construction progresses.

Abutment # 1 will require the use of a cofferdam. The cofferdam will be used as a barrier to prevent sediments from the substructure excavation from entering the stream. Construction of the abutment may require dewatering of the cofferdam. All water pumped from substructure and other excavation areas will be pumped to either a "dirt bag" silt containment device, a hay bale fabric lined sediment settlement structure, or an excavated sediment basin. The first pumping of the excavations will contain the greatest volume of water with the highest sediment load. It may be necessary to construct additional settling structures, or to control the rate of drawdown.

After completion of the substructures, all collected sediments should be removed from the settling structures and the ground shaped to its final grade and slope. Dispose of the collected sediments in an upland portion of the project, or in a manner approved by the Resident Engineer that will not result in sediments or pollutants entering the stream. The final design of the Cofferdam and Sediment Basin will be provided by the Contractor.

Phase 3 - Establish Roadway Erosion Controls

New drainage culverts that are being constructed in the same location as existing culverts shall be isolated from the new work by means of damming and pumping into a settling basin, or by installing a temporary pipe of sufficient size to handle expected flows.

Stone fill for channel and slope stabilization at the outlet ends of culverts is to be placed prior to installation of the culverts. All work on new culverts should proceed from the outlet towards the inlet. Silt fence and/or crushed stone check dams are to be installed on undisturbed ground and downstream of the stone fill pads at outlets. Stone fill for ditch stabilization shall be placed during the same working day that the ditch excavation was performed, unless directed otherwise by the Resident Engineer.

On any partially completed permanent cut and fill slopes, all exposed soils will be stabilized with erosion matting or seeded and mulched.

The subbase material should be placed as soon as the subgrade has reached its final grade and slope. The traveling surface will be graded to promote sheet flow off the surface onto slopes, or flows will be directed to collection areas and shall be transported down the fill slopes to sediment traps or settling basins.

All graded areas shall be permanently stabilized following final grading activities. All areas that are graded outside of the growing season shall be treated with slope stabilization until seeding & mulching can be performed.

Phase 4 - Final Erosion Controls

Removal of silt fence shall commence only after all upslope areas are stabilized and well established, and the Resident Engineers has approved the removal.

Remove perimeter silt fences, sediment traps, and inlet protection of DI's only after any toe-of-fill ditches have stabilized and vegetation is well established.

Remove all remaining temporary erosion control measures, regrade any areas if necessary, treat all regraded areas with erosion matting and/or mulch & seed, and establishment of any final erosion control devices as deemed necessary by the Resident Engineer.

MAINTENANCE PLAN FOR EROSION AND SEDIMENT CONTROLS

The following maintenance schedule will be followed throughout the duration of the project.

1. An assigned individual who can be 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 & sediment control procedures and with road and bridge construction techniques. Site reviews will be performed at least once every seven calendar days, and after each rain event of more than 0.5 " in a twenty four hour period.

2. A copy of the Erosion Prevention and Sediment Control Weekly Plan Review prepared by the site reviewer shall be given to the Resident Engineer each week. The report will be filled out in accordance with the item 652.20 MONITORING EROSION AND SEDIMENT CONTROL.

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 or 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 erosion matting and/or seed & mulch.

EROSION CONTROL NOTES PAGE 2

PROJECT NAME:	BARRE CITY
PROJECT NUMBER:	HDP 9281(1)

FILE NAME: /str5/92j099/sj099erobdr.d	PLOT DATE: 16-JUN-2004
PROJECT LEADER: C. S. KELLER	DRAWN BY: J. REED
DESIGNED BY: K. RUTTER	CHECKED BY: T. SUMNER
	SHEET 40 OF 58