

TEMPORARY RELOCATION OF STREAM

**** These provisions are for use in conjunction with erosion prevention and sediment control performed under the requirements of Section 652 of the Special Provisions. A pay item supplemental description would be required for projects with multiple entries of this pay item.**

****From Jamaica ER STP 013-2(12)**

xx. DESCRIPTION. This work shall consist of temporary stream relocation including erosion prevention and sediment control, channel maintenance, and debris removal in accordance with these specifications.

xx. MATERIALS. Materials shall meet the requirements of the following Subsections:

Geotextile Fabrics.....649.02
Stone Fill, Type II.....706.04(b)

Other materials may be used. These shall be detailed on the EPSC Plan and are subject to approval.

xx. GENERAL. Prior to their construction, the Contractor shall submit to the Engineer site-specific plans, including all construction, erosion prevention and sediment control, and maintenance details, for providing temporary stream relocations at stream crossings specified in the Plans. These details shall be developed in accordance with the requirements of Section 652 and will be considered a component of the overall project EPSC Plan.

All relocation plans must be approved by the Agency of Natural Resources prior to being submitted to the Engineer. These plans shall provide for a flow equal to twice the average daily flow, as a minimum, and shall be designed and stamped by a Professional Engineer registered in the State of Vermont. The plans shall address erosion prevention and sediment control, channel maintenance, debris removal, removing equipment from the stream and preparing the site if a significant rain event occurs while working in the stream, and the materials and methods of creating the upstream diversion from the existing stream channel. These plans shall conform to any permits, both State and Federal, which have been issued for this project.

The Contractor shall provide for crossing the relocated stream channel for the duration of its existence so as not to impact the free flow of the stream or to increase any flood levels or potential for property damage upstream or downstream of the project site.

It shall be incumbent upon the Contractor to determine the level of protection required to protect the work. However, the protection of existing facilities, structures, and property must also be undertaken and any damage thereto shall be repaired by the Contractor at no additional expense to the State. In

addition, the temporary diversion shall not increase in any way flood levels or property damage upstream or downstream of the project site.

In-stream construction shall be undertaken during the period from July 1st through October 1st. Any changes to this period shall be approved in writing by the Vermont Agency of Natural Resources. It shall be the responsibility of the Contractor to obtain any variances to the in-stream construction period.

Excavation for the relocated stream channel shall be made in conformance with the requirements for channel excavation as specified in Subsection 203.06.

Furnishing and installing Geotextile Fabrics and Stone Fill shall be in conformance with the requirements of Sections 649 and 613, respectively.

Furnishing and installing pipes shall be in conformance with Section 601.

The upstream diversion shall be done in such a manner as to minimize erosion and sedimentation. Upstream diversion shall not be done when stream conditions are such that the possibility of excessive erosion and sedimentation will occur.

The relocation shall be maintained, throughout the time it is in place, free from debris, logs, stumps, and other obstructions which might impair the free-flow of water through the diversion.

After completion of the new culvert and permanent channel improvements and the redirection of channel flow through the new permanent channel, the entire length of the temporary channel shall be excavated to remove all muck, sediment, debris, and foreign matter.

Any portion of the temporary channel which falls outside of the embankment limits shall be restored to match the existing ground and shall be included in the unit price bid for Temporary Relocation of Stream.

Any turf establishment required outside of the embankment limits shall be paid for under the appropriate Contract items.

- xx. METHOD OF MEASUREMENT. The quantity of Special Provision (Temporary Relocation of Stream) to be measured for payment shall be on a unit basis for each temporary stream location specified, installed, maintained, and removed in the complete and accepted work.

Where a temporary relocation of stream is constructed for the convenience of the Contractor and is not specified in the Plans or ordered by the Engineer, the costs for the temporary relocation shall be considered incidental to all other Contract items.

xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (Temporary Relocation of Stream) will be paid for at the Contract lump sum price for each temporary stream relocation. Payment will be full compensation for designing, as necessary, constructing, including all required materials, maintaining, and removing each temporary stream relocation.

Payment for the design and detailing of erosion prevention and sediment control measures for Temporary Relocation of Stream will be considered incidental to Contract item 652.10.

Payment for the monitoring and maintenance of erosion prevention and sediment control measures for Temporary Relocation of Stream will be considered incidental to Contract items 652.20 and 652.30, respectively.

Payment for erosion prevention and sediment control measures for Temporary Relocation of Stream will be made under the appropriate items in the Contract.

When the construction of the temporary stream relocation is completed, operational, and accepted, a payment of 75 percent of the Contract lump sum price will be allowed. The remaining 25 percent of the Contract lump sum price will be paid when the temporary stream relocation has been removed and the site restored and stabilized to the satisfaction of the Engineer.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.645 Special Provision (Temporary Relocation of Stream)	Lump Sum
For multiple site projects:	
900.645 Special Provision (Temporary Relocation of Stream)(I89 - Br. No. 59-2)	Lump Sum