MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**TEMPORARY CAUSEWAYS AND ACCESS ROADS**

BRG:AJM 1 of 4 APPR:DMG:DBP:07-20-22

**a. Description.** This work consists of providing, constructing, maintaining, removing temporary causeways and temporary access roads, and restoring disturbed areas to the preconstruction condition. Perform this work in accordance with the plans, the standard specifications, and as specified herein.

The following definitions apply to this work:

**Temporary Causeway.** A road or work pad constructed within the watercourse for temporary access of construction personnel, materials and equipment to facilitate the proposed work.

**Temporary Access Road.** A road or work pad constructed on existing ground outside of the watercourse for temporary access of construction personnel, materials and equipment to facilitate the proposed work.

**b. Materials.** Furnish the following materials.

1. Aggregate. Furnish Class 46G open-graded aggregate in accordance with section 902 of the Standard Specifications for Construction. Ensure the aggregate is clean and washed when used to construct the temporary causeways and the temporary access roads in or within 100 feet of the watercourse.

2. Heavy Riprap. Furnish heavy riprap in accordance with section 916 of the Standard Specifications for Construction. Do not use crushed concrete within 100 feet of the watercourse.

3. Timber Lags. Use structural grade timber meeting the following specifications:

A. Fb = 1200 psi.

B. Fv (horiz.) = 100 psi.

4. Geotextile. Furnish heavy geotextile liner and stabilization geotextile in accordance with section 910 of the Standard Specifications for Construction.

5. Silt Fence. Furnish silt fence in accordance with section 916 of the Standard Specifications for Construction.

6. Turbidity Curtain. Furnish turbidity curtain, shallow or deep as appropriate, in accordance with section 916 of the Standard Specifications for Construction.

7. Embankment. Furnish granular material Class II in accordance with section 902 of the Standard Specifications for Construction. Do not use for the temporary causeway or the temporary access road within 100 feet of the watercourse.

8. Temporary Steel Sheet Piling. Furnish temporary steel sheet piling in accordance with section 704 of the Standard Specifications for Construction.

9. Well Graded Riprap. Furnish quarried aggregate or waste mine rock stone for riprap that is free from shale, spoil, and organic material. Ensure the stone is hard, angular, durable, and resistant to weathering and water action, having a specific gravity not less than 2.5 and a maximum absorption of 2.5 percent in accordance with *ASTM C127*. Ensure the ratio of greatest to least dimension does not exceed 3:1 for any individual stone. Do not use crushed concrete within 100 feet of the watercourse.

The gradation must meet the requirements specified in Table 1. Acceptance of the gradation will be based on visual inspection of riprap in-place by the Engineer. Sampling for laboratory testing will be at the discretion of the Engineer.

**Table 1: Well Graded Riprap Gradation**

|  |  |
| --- | --- |
| Least Dimension, inch | Percent Smaller Than |
| 24 | 100 |
| 20 | 85 |
| 16 | 50 |
| 8 | 15 |

**c. Construction.**

1. Submittals. Submit a plan to the Engineer for review and approval at least 21 calendar days before beginning the work of constructing the temporary causeway and temporary access road. The plan must include the following:

A. A plan view layout showing the limits of the work,

B. Cross-sections through the causeways and access roads, detailing the geometry, each component and change in materials,

C. Planned excavations,

D. Placement of geotextiles,

E. A sequential description of each step necessary to construct the work,

F. A sequential description of each step necessary to remove the work,

G. Material certifications,

H. Contingency plan for removing equipment from the causeways in the event of high water,

I. Description of methods used to maintain and repair the temporary causeways and access roads, and

J. A plan outlining proposed methods and materials to restore the site upon completion of the work. Complete restoration work in accordance with the time frame specified in section 208 of the Standard Specifications for Construction.

Deviations from the contract are subject to the approval of the Engineer, EGLE, and the United States Army Corps of Engineers (USACE). Submit proposed deviations from the contract to the Engineer for review. If the proposed deviations are acceptable to the Engineer, the Engineer will submit the proposed deviations to EGLE and the USACE for review. Do not deviate from the contract unless written approval has been received from the Engineer, EGLE, and the USACE. No additional compensation or time will be granted in securing, or attempting to secure, approvals.

2. Installation. Adhere to all restrictions in the contract. Perform excavations as shown on the plans and in accordance with section 205 of the Standard Specifications for Construction.

Construct the temporary causeways in accordance with the limits and staging shown on the plans.

Place timber lagging on the temporary causeways.

Construct the temporary access roads in accordance with the details, limits, and staging shown on the plans.

Install silt fence around the perimeter of the temporary access roads in accordance with subsection 208.03 of the Standard Specifications for Construction. Place heavy geotextile liner on top of the riprap or embankment prior to placing aggregate. Place stabilization geotextile, in accordance with section 308 of the Standard Specifications for Construction, on the existing ground prior to placing aggregate. Ensure the installed geotextile is free of wrinkles, tears, or other deficiencies. Remove and replace damaged geotextile at no cost to the contract.

3. Maintenance. Maintain the temporary causeways and access roads in a safe working condition to the satisfaction of the Engineer. Water levels are subject to change. Remove equipment from temporary causeways when water levels are expected to rise.

4. Removal. Adhere to restrictions in the contract. Temporarily remove the temporary causeway when the water level is expected to rise above the elevation stated in the contract. Remove all portions of the work when no longer needed. Do not dispose of any material in the watercourse or floodplain.

5. Restoration. Restore the areas disturbed by the construction, maintenance, and removal of the temporary causeways and temporary access roads to the original preconstruction condition.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay items:

**Pay Item Pay Unit**

Temp Causeways and Access Roads (Structure Identification) Lump Sum

Temp Causeway Emergency Rem Each

1. The Engineer will group and measure temporary causeways and temporary access roads for the structure as a unit. **Temp Causeways and Access Roads (Structure Identification)** includes furnishing, installing, maintaining, intermittent removal and installation as required for the project, final removal of all materials, and restoration.

Any barges or personnel transport to enable workers and inspectors to access work areas safely are also included in the pay item **Temp Causeways and Access Roads (Structure Identification)**.

Excavation necessary to construct the temporary causeways and temporary access roads is included in the pay item **Temp Causeways and Access Roads (Structure Identification)**.

2. **Temp Causeway Emergency** **Rem** includes temporarily removing the temporary causeway, stockpiling the causeway material, and reconstructing the temporary causeway.

Cofferdams, clearing, tree removal, and tree replacements will be paid for separately in accordance with the contract.