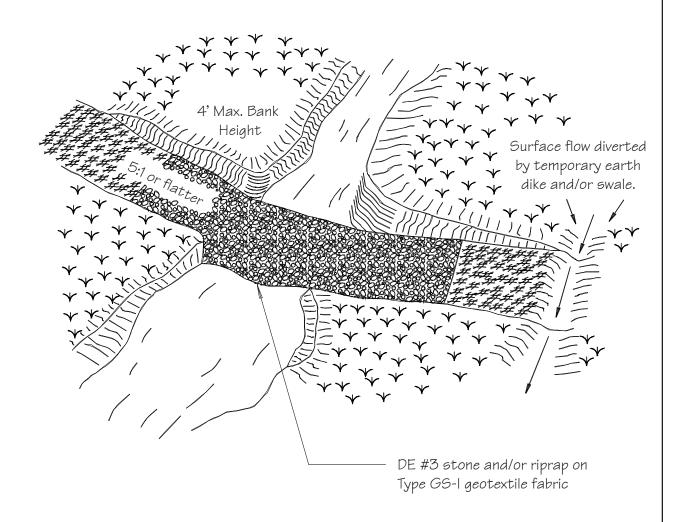
## **Standard Detail & Specifications**

# **Temporary Crossing - Stone Ford**



## <u>Perspective</u>

DATA

Median stone size  $(d_{50})$ 

Source:

Adapted from MD Stds. & Specs. for ESC

Symbol:

TC-F

Detail No.

**DE-ESC-3.5.1.4** Sheet 1 of 3

Effective July 2023

## **Standard Detail & Specifications**

## **Temporary Crossing - Stone Ford**

### **Construction Notes:**

1. **Restrictions** - No construction or removal of a temporary access ford will be permitted from March 15 through June 15 to minimize interference with fish spawning and migration. Further restrictions may apply in accordance with other State and/or Federal permits.

#### 2. Installation

- a. The approaches, bedding, and ford shall be constructed of DE #3 stone as a minimum. Larger riprap may be placed as a surface layer, as needed, where higher flows are anticipated.
- b. The entire ford approach (where banks were cut) shall be covered with filter cloth and have four (4) inches of aggregate placed on top of the filter cloth.
- c. Fords shall not be installed when the streambanks are 4 feet or more in height above the invert of the stream.
- d. The approach roads at the cut banks shall be no steeper than 5:1. Spoil material from the banks shall be stored out of the floodplain and stabilized.
- e. One layer of Type GS-I geotextile fabric shall be placed on the streambed, streambanks and the road approaches prior to placing the bedding material on the streambed or approaches. The filter cloth shall extend a minimum of 6 inches and a maximum 1 foot beyond bedding material.
- f. If needed, temporary dikes and/or swales shall be constructed in accordance with the appropriate Standard Detail and Specifications to divert surface flow away from the ford and its approaches.
- g. Stone used in ford construction shall meet the minimum requirements of the Del-DOT.
- h. All fords shall be constructed to minimize the blockage of stream flow and shallow flow over the ford. The placing of any material in the waterway bed will cause some upstream ponding. The depth of this ponding will be equivalent to the depth of the material placed within the stream and therefore should be kept to a minimum height. However, in no case will the bedding material be placed deeper than 12 inches or one-half (1/2) the height of the existing banks, whichever is smaller.

Source:

Adapted from MD Stds. & Specs. for ESC

Symbol:

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### **Standard Detail & Specifications**

## **Temporary Crossing - Stone Ford**

### **Construction Notes (cont.)**

 All areas disturbed during ford installation shall be stabilized within 14 calendar days of the disturbance in accordance with the Standard and Specifications for Temporary Vegetative Stabilization.

#### 3. Maintenance

- a. Inspection Periodic inspection shall be performed to ensure that the ford, streambed, and streambanks are not damaged, and that sediment is not entering the stream or blocking fish passage or migration.
- b. Maintenance Maintenance shall be performed as needed, in a timely manner to ensure that structures are in compliance with this standard and specification. This shall include removal and disposal of any trapped sediment or debris. Sediment shall be disposed of and stabilized outside the waterway floodplain.

#### 4. Restoration

- a. Removal When the temporary structure has served its purpose, excess material used for this structure need not be removed. Care should be taken so that any aggregate left does not create an impoundment or impede fish passage.
- b. Final Clean-up Final clean-up shall consist of removal of excess temporary ford materials from the waterway. All materials shall be stored outside the waterway floodplain.
- c. Method Clean up shall be accomplished without construction equipment working in the stream channel.
- d. Approach Disposition The approach slopes of the cut banks shall not be backfilled.
- e. Final Stabilization All areas disturbed during ford removal shall be stabilized within 14 calendar days of that disturbance in accordance with the Standard and Specifications for Permanent Vegetative Stabilization.

Source:

Adapted from MD Stds. & Specs. for ESC

Symbol:

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Detail No.

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