

Special Specification 4071

Temporary Swing Bridge Cable Rerouting



1. DESCRIPTION

Furnish and install a temporary rerouting of the cable used for opening the existing barge swing bridge. The existing swing bridge cable will foul the footprint of Bent No. 21 unless temporarily rerouted. Install new reroute supports, sheaves, and control cable as indicated in the plans.

2. MATERIALS

- 2.1. **Reroute Supports.** Provide foundation supports consisting of Steel Pipe Piling and a Concrete Plug as described in the plans and the Special Specification "Steel Pipe Piling".
- 2.2. **Sheaves.** Provide sheaves on the reroute supports to guide the control cable as described in the plans.
- 2.3. **Control Cable.** Provide a new opening control cable with wire rope with the following characteristics:
- 5/8" Nominal Diameter
 - Conforms to ASTM A1035
 - 6x36 Independent Wire Rope Core (IWRC) Stranded Steel
 - Right/Regular Lay
 - Galvanized
 - Minimum Breaking Force of 17.9 Tons Improved Plow Steel (IPS) or better

3. CONSTRUCTION

- 3.1. **Verifications.** Field verify the length of cable needed considering the reroute length and necessary excess length. Field verify the condition and attachment methods of the existing cable and notify the Engineer of any existing damage. Field verify horizontal and vertical alignment of cable, including target elevation of new sheaves on reroute supports.
- 3.2. **Submittals.** Submit material certifications for sheaves and control cable to the Engineer for review and approval. No sooner than 14 days of the proposed work, submit a proposed schedule and duration for the removal of the existing control cable and installation of the new rerouted control cable.
- 3.3. **Reroute Supports.** Install steel pipe piling and concrete plug in accordance with the Special Specification "Steel Pipe Piling". The special coating system is not required on these particular steel pipe piles. Install sheaves and sheave mounts as indicated in the plans.
- 3.4. **Cable Replacement.** Replace existing opening control cable as indicated in the plans and this specification. Perform a series of observed opening and closing operations (prior to in-service use by vehicles) in the presence of the Engineer to verify performance of the rerouted bridge cabling.

4. MEASUREMENT

The temporary swing bridge cable rerouting constructed under this Item will be measured by the lump sum.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid at the unit price bid for "Temporary Swing Bridge Cable Rerouting." This price is full compensation for reroute supports, sheaves, sheave mounting and attachment, new control cable, labor, tools, and equipment and for all materials.