

WATERWAY PASSAGE AND SIGNING

A. General. Provide and sign at all times during the bridge work a passable waterway channel for waterway users. When a clear and present risk to public safety is anticipated, follow the temporary river and/or Varney Fishing Access Site (FAS) closure process of notification and signing.

B. Construction Requirements

1) Construct falsework and work bridges to provide a clear waterway opening of a minimum 40 ft-wide perpendicular to the flow by 6 ft-high, or as directed by the Project Manager. Review the site with the Project Manager and Fish, Wildlife and Parks (FWP) contact to determine the best placement(s) of the opening considering channel depth and current. The minimum specified waterway opening must be provided through all instream structures including but not limited to the falsework, work bridges, existing, and new structures in combination with each other. Establish the vertical clearance using hydrological data for the month having the highest flows that the falsework will be in place. Monitor the 6-foot clearance daily and immediately remove the structure over the waterway opening if rising water reduces the vertical clearance to less than 6-feet. Provide a 24-hour contact phone number for the person monitoring the river in case of an emergency.

2) If using a barge, submit a work barge plan to the Project Manager for approval prior to beginning barge work. Detail in the plan the barge mooring, barge dimensions, operations to be performed from the barge, and the period of use including the estimated calendar dates. Do not permit the barge or its moorings to encroach into the waterway channel marked by the buoys as described in this provision.

3) If blasting to remove the existing substructures, submit a river access closure plan meeting the following requirements:

a. Develop the river closure plan in cooperation with the Project Manager, FWP Contact, the Blasting Consultant, and US Army Corps of Engineers Montana Program Manager (406) 441-1376. Obtain approval of signing and the river closure plan 14 calendar days before blasting/demolition operations.

b. Close the Madison River in the vicinity of the existing structure to all access before daily blasting/demolition activities commence.

c. Warn the public in advance of temporary river or Varney FAS closures by means such as radio/TV announcements, articles in local and state newspapers, and via the internet.

d. Install signs and other traffic control devices on the Madison River upstream of the closure, and at the fishing access sites specified in this provision.

4) Notify FWP at least 48 hours prior to commencing any work which creates a clear and present risk to the safety of floaters traveling through the work site or users of the Varney FAS in order to activate the temporary river closure process. Include in the notification the activity necessitating the closure, the risk to safety of the floating public, specific dates, times and anticipated duration of closure required.

a. FWP Contact Information:

Travis Horton, Region 3 Fisheries Manager
1400 South 19th
Bozeman, MT 59718
(o) 406-994-3155
(c) 406-581-5557
thorton@mt.gov

b. If Travis Horton is unavailable, contact:

Lorenzo Aguilar, Office Manager
(o) 406-994-4042

(c) 406-558-9180
Lorenzo.Aguilar@mt.gov

5) Notify the following entities of temporary river or Varney FAS access closures at least 48 hours in advance of the temporary closure:

- a. The Montana Board of Outfitters
301 S. Park, Room 428, Helena, MT 59620, (406) 841-2370
dlibsout@mt.gov
- b. Fishing Outfitters Association of Montana (FOAM)
PO Box 67, Gallatin Gateway, MT 59730, (406) 684-5564
foam@gmail.com
- c. Montana Outfitters and Guides Association (MOGA)
PO Box 1248, Helena, MT 59624, (406) 449-3578
moga@mt.net
- d. Madison River Foundation
PO Box 1527, Ennis, MT 59729, (406) 682-3148
info@madisonriverfoundation.org

6) Contact FWP immediately upon completion of this work to lift the temporary river closure.

7) The maximum time allowed for each instance of work requiring temporary river closure is 48 hours. Expedite this work to minimize the temporary river closure period necessary.

C. Signing. Sign the waterway for the bridge work as follows:

1) Install "6 FOOT MAXIMUM CLEARANCE AT MADISON RIVER - VARNEY BRIDGE" signs at locations approved by the FWP Contact and the Project Manager at the following waterway access sites:

| UPSTREAM | | | |
|----------------------------------|---------------------------|---------|---------------------------------|
| Site(s) | Controlling Entity | Town | Phone |
| Varney FAS | Fish Wildlife and Parks | Bozeman | Travis Horton (406) 944-3155 |
| Story Ditch (upstream) | Bureau of Land Management | Ennis | Chris McGrath (406) 682-4082 |
| McAtee FAS (upstream) | Fish, Wildlife and Parks | Bozeman | Travis Horton (406) 994-3155 |
| Eight Mile Ford FAS (downstream) | Fish, Wildlife and Parks | Bozeman | Travis Horton (406) 994-3155 |
| Burnt Tree FAS (downstream) | Fish, Wildlife and Parks | Bozeman | Travis Horton (406) 994-3155 |
| Ennis FAS (downstream) | Fish, Wildlife and Parks | Bozeman | Travis Horton (406) 994-3155 |

2) Install 5 ½ ft x 3 ft "HAZARD: INSTREAM CONSTRUCTION AHEAD" static signs on both banks above the high-water level 500 feet downstream of the structure.

3) Install signs and other traffic control devices on the Madison River as follows:

a. Install 5 ½ ft x 3 ft "NAVIGATION RESTRICTION AHEAD" signs on both banks at approximately 500 feet and 1500 feet upstream of the structure. Attach two Type C Steady burn lights to the top corners of each sign. Place the signs at a point above the high-water level, or as

directed by the Project Manager, facing oncoming waterway users. See Section II of this contract for sign design.

b. Channel Marker Buoys. Furnish and install hanging can or anchor buoys to delineate a channel to the falsework opening. Use buoys having the hazard-warning symbol with the "HAZARD AREA" message.

c. Hanging Can Buoys. Use an aerial cable to suspend the hanging can buoys approximately two feet from the water's surface. Flare the cables out from both sides of the falsework/bridge opening to both shorelines.

d. Surface Buoys. Lay and anchor the cables to the river/stream bottom for attaching the buoy mooring lines. Ensure the anchor cable is ballasted to prevent it from rising from the river/stream bottom. Flare the cable out from both sides of the falsework/bridge opening to both shorelines.

e. Falsework and Bridge Opening Lighting. Install Type C Steady burn lights, spaced on maximum 3 ft centers, on the top and sides of the false work opening or bridge opening to be used by waterway users.

f. During temporary river closure periods, cover or replace "NAVIGATION RESTRICTION AHEAD" signs with the same size and type signs in the same location reading "RIVER CLOSED AHEAD".

g. During temporary river closure periods, cover or replace "6 FOOT MAXIMUM CLEARANCE AT MADISON RIVER - VARNEY BRIDGE" signs with the same size and type signs in the same location reading "RIVER CLOSED AHEAD".

D. Basis of Payment. Include all costs of materials, handling, tools, equipment and labor necessary to accomplish this work under Miscellaneous Items – Lump Sum.