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(August 1, 2005)

The Contractor may use explosives in the demolition of *** \$\$1\$\$ ***.

If explosives are used for any removal operation, the Contractor shall:

1. Conform with Section 1-07.22, including providing notice of the time and duration of the blasting operation to all residents and property owners within the safety zone.
2. Submit a detailed blasting plan to the Engineer for approval.
3. Perform a pre-blast survey to document the pre-blast condition of all structures within the safety zone, and provide copies of the pre-blast survey to the Engineer.
4. Obtain permits and approvals from all applicable governmental agencies.

The blasting plan shall include, but not be limited to, the following:

1. Show all stages of the demolition work.
2. Show details of all "pre-weakening" of the bridge, including locations and extent of the structure modifications.
3. Specify the explosive and charge type and quantity.
4. Specify the firing sequence.
5. Specify the fall direction and fall sequence of the bridge, and show locations and details of all cables and structure attachments used for control.
6. Show details of drill holes and explosive placement.
7. Specify types of ground vibration monitoring equipment and show the locations of such equipment.
8. Specify how noise and shock waves are kept to a minimum.
9. Specify fragment, dust, and debris control.
10. Name, address, and phone number(s) of the licensed explosives expert supervising the operation.
11. Specify safety and security procedures, including, but not limited to, the following:
 - a. Methods of storage and transportation.
 - b. Measures taken to secure the blasting materials at all times, including all non-working hours.

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- c. Measures taken to secure the bridge site at all times during and after installation of all charges and after blasting.
- d. Safeguards against accidental discharge.
- e. Safety zone limits.
- f. Barricade locations.
- g. Location of firing device, warning signals, warning signs.
- h. Communication procedures for notifying the Engineer, nearby residents, and all personnel of impending blasting.

The Contractor shall submit the blasting plan to the Engineer for approval in accordance with Section 1-05.3.

The Contractor shall enlist a licensed, experienced explosives expert to supervise all stages of explosive work, including hole drilling and explosive placement, safety procedures, and blasting operations.

At least five to ten working days prior to the scheduled blast, a pre-blast conference shall be held to discuss the blasting plan, all pre-blast preparations of the bridge, the pre-blast, blast, and post-blast procedures, and the responsibilities and activities of the personnel and equipment involved. Those attending shall include, but not be limited to, the following:

1. (representing the Contractor): The project superintendent, the licensed explosives expert specified to supervise the work, and the work crew leaders responsible for performing the pre-blast and post-blast activities.
2. (representing the Contracting Agency): The Project Engineer, key inspection assistants, and representatives of the WSDOT Construction Office.

Traffic shall not be allowed in the vicinity during blasting operations.

All damage as a result of the Contractor's blasting operations shall be repaired by the Contractor at no additional expense to the Contracting Agency in accordance with Sections 1-07.13 and 1-07.14.