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**Sent:** Monday, April 06, 2009 11:16 AM

To: Williamson, Alec Cc: Everett, Susan

Subject: Ramps at South end BST.doc

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I would like to start this discussion.

### Ramps at South end of the BST

### **Background**

For the last few years the intention has been to close the Ramps at the south end of the Battery Street Tunnel during the Alaskan Way Viaduct project. This was based on the assumption that the Battery Street Tunnel would be part of the future alignment for SR 99

With the advent of the bored tunnel, the BST is scheduled to be decommissioned. At that point, the south end ramps will be a moot point.

During the construction phase for the bored tunnel, we may want to consider leaving the traveling public as many options as possible, and this may include leaving the ramps open, and even making some modifications to make them function safer.

#### **Discussion**

The emergency repair contract did not close the ramps at the south end of the battery street tunnel. The BST Stage 1 contract included closing the ramps, and installing gates so they could be used for emergency vehicle access to the BST. The recommendation from traffic is that the ramps are to be closed for safety reasons, and this has been the intent of the project for at least the past 4 years.

With the assumed decommissioning of the tunnel in 2015, the ramps will ultimately be closed. There is no need for long term gates or special treatments at that time, because the tunnel will be closed and the ramps will not be needed for emergency access. The modifications to change the ramps to emergency vehicle use only should be reconsidered.

The southbound off ramp can be closed by re striping the white lane edge stripe to a solid stripe through the ramp, and installing a row of 3' candlestick type cones attached to the pavement. The cones will prevent vehicles exiting the tunnel from using the ramps, but emergency vehicles would be able to simply drive over the cones. The bull nose at the end of the existing guard rail needs to be replaced with an arc or an impact attenuator.

The same is true for the on ramp from Bell street. This ramp can be closed off using the light cones, but the large barrel sized cones would be better for blocking the low speed traffic from using the ramp. The barrels could be moved to allow use of the ramp by emergency vehicles.

## What about leaving the ramps open?

We need to consider leaving the ramps open as an option for traffic during construction. If the ramps are to remain open to provide options, we should consider making improvements so they can be safer than they are now.

- For the on ramp, some modifications could be made to provide better visibility for the merging traffic and a merge area that is before the tunnel. The merge area should be marked and striped with better signage.
- For the off ramp, some modifications could be made to provide better flow on to Western and eliminate the confusion or back up of traffic on the ramp. The Battery-Western intersection could be changed to have a free right turn onto Western Avenue.

This question should be resolved early on to give direction to the design team.

How do we start the discussion?

Paul