
From: Grotefendt, Amy (Consultant)
Sent: Friday, March 13, 2009 11:43 AM
To: Dye, Dave; Hammond, Paula
Cc: McLemore, Susanne; Paananen, Ron
Subject: RE: Tunnel System

We did receive it and the response should be going out today. We'll include you so you know it has been sent.

Amy

From: Dye, Dave
Sent: Fri 3/13/2009 10:39 AM
To: Hammond, Paula
Cc: McLemore, Susanne; Grotefendt, Amy (Consultant); Paananen, Ron
Subject: RE: Tunnel System

Jo - I think we did but will ask Amy and Ron to verify -- if not, we will...thanks.

-dave

From: Aldridge, Jo **On Behalf Of** Hammond, Paula
Sent: Friday, March 13, 2009 10:31 AM
To: Dye, Dave
Cc: McLemore, Susanne
Subject: FW: Tunnel System

Dave:
This is Jodid Paula already forward this to you to respond?

From: Nelson Still [mailto:stillknotty@yahoo.com]
Sent: Thursday, February 19, 2009 7:14 PM
To: Hammond, Paula
Subject: Fw: Tunnel System

Dear Madam,
I am forwarding this correspondence in case you did not receive the previous email.
Kind regards
Nelson R Still

--- On **Mon, 2/9/09**, **Nelson Still** <stillknotty@yahoo.com> wrote:

From: Nelson Still <stillknotty@yahoo.com>
Subject: Tunnel System
To: "Paula Hammon (DOT)" <hammonp@wsdot.wa.gov>
Date: Monday, February 9, 2009, 1:22 AM

February 8, 2009

Paula Hammond

Dear Madam:

Further to my previous letter dated 16 January 2009 regarding the building of a tunnel system to replace the Alaskan Way viaduct I wish to make some further points as follows:

- 1) A tunnel boring machine of 36' diameter would be + - 40% cheaper than the 54' machine. The smaller machine is probably available second hand and also has a better re-sale value.
- 2) Even if one tunnel was closed for some reason the other tunnel could still service traffic flow north and south.
- 3) The smaller bore tunnel would be structurally stronger and could withstand seismic disturbance better than the larger tunnel.. Whichever design is used a gel should be pumped into the surrounding strata for added protection from water penetration or seismic disturbance.
- 4) The tunnels would have an incline that would allow any water (example flooding) to flow in the desired direction and then pumped out. The highest elevation would face the prevailing winds and this would allow exhaust gases in the tunnel dissipate quicker.
- 5) In the twin tunnel system, only the road deck would require concrete and this would be a substantial saving. The sidewalls and the headwall would only require fireproofing.
- 6) A good audio system and video system would be required so that drivers and passengers could be advised on any problem and what to do.
- 7) Drivers would have to know in the event of an evacuation that they must switch off, leave the keys in the ignition, doors unlocked and move quickly to the safety area (probably the adjacent tunnel).
- 8) Fire protection of the actual tunnel lining (concrete segments) must be very carefully considered. Damage control from terrorist action must also be considered.
- 9) Traffic flow would be both lanes going south in tunnel #1 and both lanes going north in tunnel #2. Alternatively traffic in both tunnels could have one lane going north and one lane going south which means that in the event of an emergency (example fire) the tunnel could be cleared very quickly,
- 10) The alternative method as described in 9) would allow traffic in one lane to do a u-turn and exit the tunnel quickly.
- 11) Fire hoses and phones every 200 yards which could be used by drivers in an emergency.
- 12) The twin tunnel system would allow drivers and passengers to exit from one tunnel to the other for safety reasons. The safety of persons using the tunnels is of the utmost importance. It has to be top priority.

Sincerely,
Nelson R Still
23800 S E Tiger Mountain Road #29
Issaquah
WA 98027
Tel: 425 635 8715