

Seawall, Waterfront Utilities, Armory Way connector, Alaskan Way restoration, waterfront street car and waterfront urban design	\$600 million		
Escalation, Risk, and Contingencies for above items	\$400 million		
		Waterfront LID	???
		Utility Rate Increase	???
		Corps of Engineers Seawall Funding	???

Decoupling seawall and waterfront reconstruction from the SR 99 bored tunnel construction could have financing advantages due to the flexibility it provides in the timing of projects and the timing of potential revenues.

Q: Why does the bored tunnel option take so long to construct? Could it be constructed faster?

9.5 yrs Time

A: While the overall project might take up to 9 ½ years, traffic would be operating in the new tunnel about 7 ½ years after the start of construction. Several factors could reduce that duration even further: using two boring machines instead of one- this could save 18 months; increased production rates- if the tunnel machines progress more quickly than our more conservative assumptions, additional time could be saved.

An important consideration is that while the overall duration is longer than the other options, construction and traffic impacts could be reduced dramatically if the viaduct were to remain open during tunnel construction.

Time Story

Page 2 Cost Estimate Q + A Early Dec 2008

VandenBerghe, Alissa (Consultant)

From: Waters, Mia
Sent: Wednesday, December 10, 2008 5:23 PM
To: (LoAn@pbworld.com); Williamson, Alec; Helmann, Craig; Pope, David; Palmer, Brian
Cc: (Baker@pbworld.com); (Ladner@pbworld.com); Smith, Helena Kennedy
Subject: RE: Friday's AWW Meeting -- Prep
Follow Up Flag: Follow up
Flag Status: Red

Hi everyone.

I had a tickler on my desk about the agenda as well.

Here's a proposed first draft for Friday's agenda. Thoughts?

AWW Bored Tunnel Financial Feasibility Analysis Group
Friday, December 12, 2008 – 10 am to 11 am
Wells Fargo Building (Location? Alec?)
Call in number – xxx – xxx- xxxx

→ PDR = Results, Mtg Info *

1. Review agenda – any changes needed? – Alec, Tony, or Mia
2. Final traffic modeling results – Craig H.
3. Toll rate review - Brent
4. Review O&M Estimates, confirm/fatal flaws? – David Pope?
5. Project Capital Cost Distribution – Brent
6. Example financial model results w/Gordon's numbers – Brent
7. Report needs and reporting methods - ??
8. Next steps?

Thanks,
Mia
206/464-1209

From: Baker, T Brent [mailto:Baker@pbworld.com]
Sent: Wednesday, December 10, 2008 4:47 PM
To: Waters, Mia
Subject: FW: Friday's AWW Meeting -- Prep
Importance: High

FYI

– Brent

From: Baker, T Brent
Sent: Wednesday, December 10, 2008 3:03 PM
To: 'Helmann, Craig'; Lo, Anthony K.; Smith, Helena Kennedy; Ladner, Scott; Palmer, Brian
Cc: Beach, Tracy; 160067; Pope, David
Subject: Friday's AWW Meeting -- Prep
Importance: High

All --

→ PDR → We expect to have preliminary financial results for the AWW bored tunnel toll analysis this Friday for the meeting. This will include daily traffic data; a toll traffic and revenue table (annualized) with gross tolls, O&M costs and net tolls; a toll schedule chart showing the tolls in current and future dollars; information on the unfunded capital cost need, and a simple depiction of the toll funding contribution to the central waterfront tunnel, including toll dollar amount contributed.

* → **Tony**, please assemble an agenda and make sure that we have materials available at the meeting and distributed to anyone not attending in person (we've created a folder on the server for meeting materials in PDF). Also, please work with Scott to share our capital cost assumptions and check with Alec on any agenda items he may have.

Craig, can you please bring whatever summary level modeling results we should share with the group. Since it won't be new information, I'd suggest making it newly consolidated to just show the toll scenario we are analyzing. Suggest not showing daily

6/25/2009

revenue calcs -- we'll be showing our annual revenue amounts.

Scott / Brian, please share with David Pope our O&M estimates for his upfront review if he has not already seen these.

Helena, please let us know ASAP if you decide to change the current five year uniform capital needs assumption as we discussed this morning, and point us to who can provide those numbers if so.

Thanks!

Brent

T. Brent Baker

Principal Consultant

PB Consult

999 Third Avenue | Suite 2200 | Seattle, WA 98104-4020

206.382.5284 | cell: 206.310.3291 | fax: 206.382.5222 | baker@pbworld.com

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6/25/2009

cost
enviro
strategies

From: White, John
Sent: Tuesday, December 23, 2008 7:57 AM
To: Dye, Dave; Paananen, Ron; Grotefendt, Amy (Consultant)
Subject: Re: Bored tunnel

Thanks Dave. PB has been looking at revised mark-ups, we will update the costs as appropriate and get them out to you, Ron and John Reilly for a reality check.

I assume we stick with the single bore for now (at least at the low end), assuming we can make the cross-section work without significant upsizing?

John

From: Dye, Dave
To: Paananen, Ron; White, John; Grotefendt, Amy (Consultant)
Sent: Tue Dec 23 07:39:16 2008
Subject: Re: Bored tunnel

John - please check with mike r and gordon because they were getting vibes from new york the estimate was too conservative - I suggest whatever lower number is developed become the lower end of the range with current estimate the high end...thanks.

-dave

From: Paananen, Ron
To: White, John; Grotefendt, Amy (Consultant)
Cc: Dye, Dave
Sent: Tue Dec 23 06:51:26 2008
Subject: Bored tunnel

The Governor asked a few questions about the bored tunnel. We need some material that clearly shows how much the tunnel will cost, what is included in the basic cost, and how it would be funded. We need to tell the story about what it does for capacity (compared to the existing viaduct) and what are the disruptions associated with building a bored tunnel. A good schedule should be assembled to show when the tunnel would be open to traffic. John, the team should put together the most aggressive schedule they can conceive, like doing an EA for environmental, purchasing the machine in advance, using design-build - all the usual stuff

The project would be the SR 99 components only. Minimal work on the waterfront: no seawall. Tear down and basic connection back to Battery Street Tunnel.

Has anyone heard back from Cascadia? We need their feedback to help in reconsideration of the risk and contingency numbers.

Dave may want to add a few comments.

VandenBerghe, Alissa (Consultant)

From: John Reilly [jreils@attglobal.net] - *wsdot consultant*
Sent: Wednesday, December 24, 2008 7:57 AM
To: White, John
Cc: Grotefendt, Amy; Paananen, Ron
Subject: AWW, Governor, decision, SAC initiatives, Happy Holidays

John - good to talk to you last night about the AWW tunnel alternative and the Cascadia / SAC efforts.

I'll be interested in seeing the Richard Prust / Cascadia Center memo - please forward it when rec'd. Basically, from the communications I've seen, Cascadia and the SAC members are trying to get and understand (and then perhaps challenge - Note 1) the costs of the tunnel - relative to the WSDOT numbers - and in particular understand and challenge the add-ons and markups - the thought is that these are too high and then the markups compound leading to a much too high result (Note 2). They are also thinking about the NEPA requirements with the thought that the tunnel alternative is simpler with better performance, less impact and therefore less liable to be challenged by a lot of stakeholders.

I've heard that there is an idea (Governor, SAC?) to fund the other elements (transit, streets, I-5) separately. And, that the Governor has been talking to the stakeholders, has acknowledged support for the deep bore, would like more information but needs to make a decision now.

If Cascadia / Stakeholders were to call me (they have my contact info but none has called), I'd tell them:

Note 1 - I think that the PB/Ken Fiorentine [sp?] - Arup - HMM/Phelps tunnel cost numbers are all comparable and we could easily come to agreement (see Note 3)

Note 2 - this is also a concern of mine (that the add-on line items are high and they may compound unreasonably) but, see Note 3

Note 3 - as I stated at the Tuesday Dec 16 SAC evening presentation/questions, and informally after last Thursday's SAC final meeting, if we ran even a quick CEVP-type analysis on the tunnel we could have better construction cost numbers and the uncertainty could be quantified to give a reasonable "range of probable cost" - then WSDOT might determine a budget number less than the 90% range number as was done after the 2006 ERP. At this point, without that data and analysis, we have to use a "high" number (see Note 4) to account for the current uncertainties.

Note 4 - the high number could be reduced, as Mike R has already done internally, with some better analysis of the add-on costs and their uncertainty. this would not necessarily take a CEVP workshop - it could be done more simply with a small number of knowledgeable people (the usual characters we all know and love).

And, to be clear, the major uncertainty here is the political process (including the reliability of a preferred decision), the NEPA/Environmental process (impact, time) the appropriate "design allowance" and funding/cashflow.

Let me know how this evolves, have a great Christmas and happy holidays - talk to you soon (we have our office kid's party starting at noon, EST, but I'm available by email and cell phone).

Regards, John Reilly

Web: www.JohnReilly.us

Email: JJReils@ATTGlobal.net

Cell: +1-508-904-3434

----- Original Message -----

From: Renee Roline

To: White, John ; Bruce Agnew ; Richard Prust ; Rita Brogan ; Bob Donegan

Cc: Paananen, Ron ; Reilly, John

Sent: Tuesday, December 23, 2008 6:31 PM

Subject: Re: Meeting with tunneling experts

Thank you John for your follow up.

We have been working on this all day today and should have a memo in your hands by tomorrow morning. Richard at Arup, will be finishing up tonight.

Thank you again for the opportunity to provide this to you.

Renée Roline
Projects Coordinator
Cascadia Center for Regional Development
208 Columbia Street | Seattle, WA 98104
Direct 206-292-0401 ext 120 | Fax 206-682-5320
reneer@discovery.org

On 12/23/08 3:16 PM, "White, John" <WhiteJH@wsdot.wa.gov> wrote:

Hi Bruce and Renée,

Hope all is well and you are both looking forward to some nice holiday relaxation time. That said, I did want to check in regarding the status of follow-up thoughts from Arup based on the SAC discussion last week. As time is getting very short ahead of a Gov's recommendation, and we are responding to the many bored tunnel questions being asked of us, the opportunity to chime in with any additional thoughts ahead of a decision is right now.

If Arup has formulated so thoughts based on the SAC discussion and cost information we provided. please forward them to us so that they can be factored into the work the agency is doing to support and inform the decision-making process. If a bored tunnel is to advance, there will be plenty of opportunity for Arup and others to further engage in the design process and potentially construction, but ahead of that we need to pull together the best tunnel thinking available related to thoughts on costs and construction options.

←
quid
pro
quo

Feel free to respond by e-mail or to give me a call on my cell, 206-310-4838.

Happy holidays,

John

John H. White, P.E.
Program Director
Alaskan Way Viaduct and Seawall Replacement Program
WSDOT Urban Corridors Office
Business: (206) 382 - 5270
Cell: (206) 450 - 2975

From: Bruce Agnew [<mailto:bagnew@discovery.org>]

Sent: Monday, December 15, 2008 9:42 AM

To: Agnew, Bruce; White, John

Cc: Renée Roline

Subject: Re: Meeting with tunneling experts

John

7/13/2009

Lets go ahead with the phone call today at 11 to review how to proceed.
Bruce

On 12/15/08 9:36 AM, "Bruce Agnew" <bagnew@discovery.org> wrote:

John,

It looks as though our local tunnel experts will be out of town this week. I've asked if they are reachable by phone but as of now it doesn't appear so. Is there a way you could provide us with your detailed cost estimate report on the bored tunnel? They could then review and give feedback which may actually be a rather effective way to compare notes.

Thanks,

Renée Roline
Projects Coordinator
Cascadia Center for Regional Development
208 Columbia Street | Seattle, WA 98104
Direct 206-292-0401 ext 120 | Fax 206-682-5320
reneer@discovery.org

VandenBerghe, Alissa (Consultant)

From: Wellander, Chris A. [WellanderC@pbworld.com]
Sent: Monday, December 29, 2008 1:47 PM
To: Grotefendt, Amy (Consultant); White, John; Rigsby, Mike (Consultant); Williamson, Alec; Clark, Gordon T. (Consultant); Van Ness, Kristy (Consultant); Mattern, Dave (Consultant)
Subject: RE: Bored Tunnel Briefing Paper

Follow Up Flag: Follow up
Flag Status: Red

Attachments: Bored_Tunnel_Briefing_Paperv2-caw.doc



Bored_Tunnel_Briefing_Paperv2-...

Added one clarification based on a message from John.... That the 11% traffic growth is from 2015 to 2030.... John may have already put that in the version he's working on...

-Chris

-----Original Message-----

From: Grotefendt, Amy (Consultant)
[mailto:GrotefA@consultant.wsdot.wa.gov]
Sent: Monday, December 29, 2008 1:13 PM
To: White, John; Rigsby, Mike (Consultant); Williamson, Alec; Wellander, Chris A.; Clark, Gordon T. (Consultant); Van Ness, Kristy (Consultant); Mattern, Dave (Consultant)
Subject: RE: Bored Tunnel Briefing Paper

Here is a revised draft with all the comments incorporated.

From: White, John
Sent: Mon 12/29/2008 12:33 PM
To: Rigsby, Mike (Consultant); Grotefendt, Amy (Consultant); Williamson, Alec; Wellander, Chris; Clark, Gordon T. (Consultant); Van Ness, Kristy (Consultant); Mattern, Dave (Consultant)
Subject: RE: Bored Tunnel Briefing Paper

I am currently assembling a final draft to be forwarded shortly, will cc all of you.

Thanks,

John

From: Rigsby, Mike (Consultant)
Sent: Monday, December 29, 2008 12:30 PM
To: Grotefendt, Amy (Consultant); White, John; Williamson, Alec; Wellander, Chris; Clark, Gordon T. (Consultant); Van Ness, Kristy (Consultant); Mattern, Dave (Consultant)
Subject: RE: Bored Tunnel Briefing Paper

My comments attached. Let me know if you have questions.

Mike Rigsby
Parsons Brinckerhoff
Alaskan Way Viaduct and Seawall Replacement Program
06-382-6352

From: Grotefendt, Amy (Consultant)
Sent: Monday, December 29, 2008 9:29 AM
To: White, John; Williamson, Alec; Wellander, Chris; Rigsby, Mike (Consultant); Clark, Gordon T. (Consultant); Van Ness, Kristy (Consultant); Mattern, Dave (Consultant)
Subject: Bored Tunnel Briefing Paper

Attached is the draft briefing paper on the single deep bored tunnel based on the information I've received from all of you -- sorry for the delay in getting it out for review. I've also attached all the source material so you can review that if something is missing or you want to check facts.

} PPR

Please send any comments back to me by noon so we can finalize it this afternoon.

Thanks
AJG

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DATE: December 29, 2008

TO: Dave Dye
Ron Paananen

FROM: John White

CC: Craig Stone
Matt Preedy
Theresa Greco

SUBJECT: SR 99 Deep Bored Tunnel

BACKGROUND

In response to your request for additional information on a single deep bored tunnel under downtown Seattle as a replacement for the Alaskan Way Viaduct, the program team has prepared this briefing paper. Based on the preliminary analysis completed to date, the team believes that a single bored tunnel is likely the more effective tunnel option from both a cost and schedule perspective (compared to a twin bored tunnel) and was the main focus of this review. More investigation is required to confirm this preliminary finding. The briefing paper covers the following topics:

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- 1) Transportation function provided by a four-lane deep bored tunnel
- 2) Cost estimate for a deep single-bored tunnel
- 3) Schedule for opening a deep bored tunnel to traffic
- 4) Potential options for funding a deep bored tunnel

CONCLUSIONS

- Constructing a deep bored tunnel will maintain capacity for trips through downtown Seattle and provide room for growth in those vehicle trips expected to occur by 2030.
- A deep bored tunnel could be open to traffic by early 2017 if a decision is made to proceed in early January 2009. The existing viaduct can be taken down by 2012 as currently planned or remain in place to provide capacity during construction.
- Preliminary cost estimates for a single bored tunnel shows the possibility of achieving cost savings compared to a twin bored tunnel. More work is needed in early 2009 to confirm this finding.

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Note: shaved off
2 years to 2015
see Jan 7th
version of this

"2015" is part of
story to sell

DISCUSSION

Proposed deep bored tunnel. A deep single bored tunnel would connect to the new south mile of SR 99 (from Holgate St. to King St.). It would connect to Aurora Avenue at the north end of the Battery Street Tunnel. The alignment of the tunnel would primarily be under First Avenue to avoid other tunnels (bus, rail, sewer, water) under downtown Seattle.

The tunnel would be approximately 9,000 feet in length and would be a single bore that is approximately 54 feet in diameter. The tunnel would accommodate four lanes of traffic (two lanes in each direction) plus shoulders and tunnel systems (ventilation, emergency access).

In the current location of the viaduct, a four-lane surface street would be constructed with a surface street connection to the Battery Street Tunnel and Elliott and Western avenues. The connection to Elliott and Western avenues will replace an essential link to the Ballard, Interbay and Magnolia neighborhoods of northwest Seattle. It is assumed that the seawall replacement, utilities relocation, and investments in I-5, transit, city streets, and demand management strategies will be implemented independently by other programs or agencies. Previously these other improvements have been included as part of the project and their removal will need to be explained.

Deleted: the existing Battery Street Tunnel

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Through traffic on SR 99 would be on a limited access road from Denny Way to Spokane Street. Traffic from Ballard, Interbay, and Magnolia that use the existing viaduct via the Elliott/Western ramps would move through downtown Seattle on surface streets. Those drivers would either take Alaskan Way to travel through downtown, or access the deep bored tunnel via Mercer Street (east to southbound direction only) or use I-5. Access from the south into downtown Seattle would be served by new ramps near the sports stadium (removal of the mid-town ramps at Columbia and Seneca have been assumed in all scenarios evaluated to date).

Transportation performance of a bored tunnel. Public safety would be improved compared to the existing viaduct.

- The Battery Street Tunnel, which has limited sight distance, short ramps, narrow lanes, and no shoulders, would no longer serve high volumes of traffic.
- The existing viaduct also has narrow lanes and shoulders. The deep bored tunnel would have lane and shoulder widths that more closely match today's safety standards.
- Generally grades in and out of the tunnel would be six percent or less, which would meet state and federal design guidelines.
- The tunnel would be designed with modern safety features that comply with national fire protection safety standards.

Capacity for trips through downtown Seattle would be maintained and their travel times would increase by up to two minutes due to population growth expected by 2030.

- Approximately 65 percent of traffic using the viaduct today is through trips (trips that do not begin or end inside the downtown area). The bored tunnel would carry a higher percentage of through trips (75 percent) when open to traffic.
- Trips that use the viaduct today to travel through downtown Seattle take between five and a half and seven minutes during peak travel times between South Lake Union and the Spokane Street Viaduct. In a deep bored tunnel, these trips would take between five and six minutes when open to traffic.
- Predicted population growth is expected to increase traffic by up to 11 percent from 2015 to 2030. This could add up to two minutes to travel times for through trips during the peak periods.

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★ Jan 7th Version of this document uses 2030 as focal point in order to avoid being held accountable for what cannot be delivered

Here + elsewhere — WSPOT + Co. Execs et al
Emphasis placed on through trips contract access trip #'s
expand through trip #'s

- Today there are approximately 91,000 vehicles each day on the viaduct (measured north of Seneca Street); a deep bored tunnel will carry approximately 80,000 to 85,000 vehicles at the same location. The lower volumes are due to the removal of the Elliott/Western ramps.
- However, the bored tunnel will serve more trips through downtown Seattle when volumes through the Battery Street Tunnel (before traffic from Elliott/Western ramps enters SR 99) are considered. Today, there are 63,000 vehicles using the Battery Street Tunnel. At that same location in a bored tunnel, the daily volume will be 80,000 to 85,000 vehicles.
- The bored tunnel would provide an important redundancy to I-5 for north-south travel through downtown Seattle.

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Trips from Ballard, Magnolia, and Interbay would no longer have direct access to SR 99 with a deep bored tunnel; this would lengthen the time it takes to make trips from those neighborhoods through downtown Seattle.

- Those trips take between two and three minutes today; they would take between seven and eight minutes in 2015 if they took a four-lane surface street on the waterfront. Trips times could increase by up to another three minutes by 2030 due to population growth.

Deleted: <#>Trips from northwest Seattle neighborhoods (Ballard, Interbay, Magnolia) that would no longer have direct access to SR 99 would experience longer trip times. ↓

Trips from West Seattle could experience longer travel times to some locations within downtown Seattle, due to the removal of the mid-town ramps at Columbia and Seneca (assumed in all scenarios evaluated). Travel times for West Seattle trips through downtown to the north would be slightly shorter than today.

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The travel demand modeling results for the deep bored tunnel assumed minimal investments in I-5 and city streets, a baseline level of demand management strategies and transit service enhancements. These investments have little effect on through trips that would choose to stay on SR 99 if it is maintained as a deep bored tunnel. Therefore if those investments are not made there is expected to be little effect on the transportation performance of the bored tunnel.

Building a deep bored tunnel. Completion of an environmental impact statement is required before construction of a deep bored tunnel can begin. Work on the environmental review process began in July 2008 with the issuance of a notice of intent and purpose and need statement. Scoping comments have already been solicited from the public and agencies.

E IS STORY
←

We believe this earlier work can be used as the initiation of the environmental review of a deep bored tunnel. The next step will be revising the purpose and need statement and issuing a new notice of intent. This provides an opportunity to focus on SR 99 replacement and explain why seawall replacement, surface streets, and transit improvements have independent utility and will be implemented separately. With a narrowed focus the status of co-lead (Seattle and King County) and cooperating (Federal Transit Administration and U.S. Army Corps of Engineers) agencies can be re-visited. As required by the National Environmental Policy Act, all reasonable alternatives must be evaluated in the environmental impact statement. We propose that a new independent elevated structure on the waterfront be a second alternative. Other options evaluated, such as a surface and transit option and cut and cover tunnel, could be dropped from further consideration based on future transportation performance and construction impacts. The integrated elevated scenario evaluated in 2008 is fatally flawed due to federal historic regulations and public safety and should also be dropped.

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If work begins in early January on the environmental review of a bored tunnel, then the draft environmental impact statement could be published in December 2009 for public review; a final impact statement released in September 2010; and a Record of Decision signed in December 2010. There is an opportunity to shorten this schedule if a decision is made to not accept federal funding for the central waterfront replacement of the viaduct. This would create a situation where the State Environmental Policy Act would guide the environmental review process.

Important info



A single bored tunnel could be open to traffic by early 2017 assuming an aggressive schedule and funding is available as needed. No assumption has been made about the existing viaduct. It could be removed by 2012 as currently planned or remain standing until the bored tunnel is open to maintain traffic in the SR 99 corridor.

Deleted: Maintaining traffic on SR 99 during construction would create higher construction risks at the portal locations and may increase the preliminary cost estimates below.

The cost estimates provided below are preliminary and have not been through a Cost Estimate Validation Process (CEVP), which is a standard procedure for all large projects managed by WSDOT. The methodology for preparing these estimates has generally followed the methodology of CEVP by establishing a base estimate for construction costs and adding factors for risks, contingency, and inflation that are likely to occur. These numbers are also based on conceptual designs; preliminary design and a complete CEVP are needed to confirm these costs.

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Essential Elements – SR 99 Single Bored Tunnel	Planning Level Estimate
Construction Costs	\$850 to \$961 million
Contract and Construction Management; Final Design	\$162 to \$300 million
Contingency and Risk	\$325 to \$547 million
Inflation	\$208 to \$281 million
Right-of-Way Costs	\$40 million
Total Tunnel Costs	\$1,585 to 2,130 million
Viaduct Demolition, Construction Traffic Mitigation, Alaskan Way Restoration (Four-Lane Surface Street)	\$98 to \$125 million
Total Program Costs	\$1,683 to \$2,255 million

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These costs do not include the costs of the following items:

Other Elements	Planning Level Estimate
Seawall Replacement	\$189 to \$256 million
Waterfront Utility Relocation	\$41 to \$56 million
Waterfront Streetcar	\$9 to \$12 million
Other City Street Work	\$49 to \$66 million
Other	\$83 to \$112 million
Other Costs	\$503 to \$682 million

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Comment [MR2]: Can we add examples here?

Paying for a Deep Bored Tunnel. The state has committed \$2.8 billion to pay for a viaduct replacement. Currently \$1.1 billion has been committed or spent for the Moving Forward

Projects, which replace or repair over half of the viaduct. This leaves approximately \$1.7 billion in state investment.

Charging tolls to drivers in a four-lane bored tunnel through downtown Seattle would support an additional \$410 million in project funding between 2014 and 2018. Tolling the existing viaduct during construction would raise another \$140 million in pay-as-you go project funding. This would bring the total funding contribution of tolling SR 99 to \$550 million.

Tolling SR 99 during and after construction would increase the total possible state funding available for a deep bored tunnel to \$2.25 billion. Tolling is expected to divert some trips to other routes such as the downtown street grid or I-5. Preliminary studies have indicated the diversion rate could be from 35 to 40 percent depending on the toll rate.

What should we say about federal funding? Stimulus package?

Other potential funding sources have been identified, including a local improvement district for property owners who would benefit from new open space on the central waterfront; local public utilities paying for utility relocation; open space funds; and Port of Seattle funding. The amount and likelihood of these funding sources have not been explored recently, although the Port of Seattle has expressed interest in discussing the funding plan for a capacity replacement.

NEXT STEPS

If a decision is made to pursue a deep bored tunnel as a replacement for the Alaskan Way Viaduct, we recommend the following steps be taken by the program team:

- Complete a three-month tunnel feasibility study to confirm preliminary findings about the cost, schedule, and alignment of a single bored tunnel.
- Expedite the environmental review process with a revised purpose and needs statement and notice of intent, and continued public and agency scoping.
- What else?

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ATTACHMENTS

1. Single bored tunnel alignment and profile

Page 4: [1] Deleted	Matt Roewe	12/29/2008 1:10:00 PM
Viaduct Demolition and Traffic Mitigation		

Page 4: [2] Deleted	Matt Roewe	12/29/2008 1:04:00 PM
Transit		\$9 to \$12 million

Multiple
Enviro

VandenBerghe, Alissa (Consultant)

From: White, John
Sent: Monday, December 29, 2008 4:51 PM
To: Dye, Dave; Paananen, Ron
Cc: Grotefeldt, Amy (Consultant); Reilly, John; Stone, Craig; Greco, Theresa; Preedy, Matt
Subject: Draft Bored Tunnel Briefing Paper
Attachments: Draft Bored Tunnel Briefing Paper 122908.doc

Dave & Ron,

Here is a draft paper that we hope addresses the request to provide thoughts on a mostly stand-alone bored tunnel option, based on the transportation benefits achieved by the bored tunnel. As I am sure you will understand, much of what is presented is based on the opinions of the project team, and will require further assessment in order to confirm and validate those opinions.

There are a couple of things to mention in particular:

- The cost estimate numbers and ranges are a bit generalized, and assume that with further assessment, we will find consensus in making reductions to some of the mark-ups that have come into question. I believe we may be discussing an early January workshop to address these questions. That said, the numbers here are solely based on professional opinion within the team, so care should be taken in how they are used. As stated before, the upper end of the range is our previously presented 'probable' cost, with the lower end of the range being the team opinion part.
- There is a variety of opinion and debate regarding how the environmental planning process would proceed, though it is clear that based on the work we have done to date, there is very strong opinion (within UCO, AGO and FHWA) as to the need to retain multiple options within the next draft or supplemental draft EIS. Based on continued analysis, one or more of the other options may not be warranted to continue on beyond the next draft document for reasons stated in the paper.
- We have presented some professional opinion related to 2030 transportation operation that will take further work to validate.

Hope this is along the lines of what you were hoping for. Some sections may have more detail than is desired at this point, please inform if there are any areas you think a more summarized or generalized discussion is appropriate. See you tomorrow.

John

John H. White, P.E.
Program Director
Alaskan Way Viaduct and Seawall Replacement Program
WSDOT Urban Corridors Office
Business: (206) 382 - 5270
Cell: (206) 450 - 2975

DATE: December 29, 2008

TO: Dave Dye
Ron Paananen

FROM: John White

CC: Craig Stone
Matt Preedy
Theresa Greco
Mike Rigsby
Amy Grotefendt

SUBJECT: SR 99 Deep Bored Tunnel

BACKGROUND

In response to your request for additional information on a deep bored tunnel under downtown Seattle as a replacement for the Alaskan Way Viaduct, the program team has prepared this briefing paper. Based on the preliminary analysis to date, the team believes that a single bored tunnel is likely the more effective tunnel option from both a cost and schedule perspective (as compared to a twin bored tunnel), and thus was the main focus of this review. More investigation of the cost and constructability trade-offs of both the single and twin bore options is required to confirm this preliminary finding. The briefing paper covers the following topics:

- 1) Transportation function provided by a four-lane deep bored tunnel
- 2) Cost estimate for a deep single-bored tunnel
- 3) Schedule for opening a deep bored tunnel to traffic
- 4) Potential options for funding a deep bored tunnel

CONCLUSIONS

- Constructing a deep bored tunnel will maintain capacity for trips through downtown Seattle and provide room for growth in those vehicle trips expected to occur by 2030.
- A deep bored tunnel could be open to traffic by early 2017 if a decision is made to proceed in early January 2009. The existing viaduct can be taken down by 2012 as currently planned or remain in place to provide capacity during construction.
- Preliminary cost estimates for a single bored tunnel shows the possibility of achieving cost savings compared to a twin bored tunnel. More work is needed in early 2009 to confirm this finding.

DISCUSSION

Proposed deep bored tunnel. A deep single bore tunnel would connect to the new south mile of SR 99 (from Holgate Street to King Street). It would connect to Aurora Avenue north of the

Battery Street Tunnel, in the vicinity of Harrison Street. The alignment of the tunnel would be primarily under First Avenue at a depth necessary to avoid other existing tunnels (bus, rail, sewer, water) under downtown Seattle.

The tunnel would be approximately 9,000 feet in length and would be a single bore that is currently approximately 54 feet in diameter. The tunnel would accommodate four lanes of traffic (two lanes in each direction) plus shoulders and tunnel systems (ventilation, emergency access).

In the current location of the viaduct, a four-lane surface street would be constructed with a surface street connection to Elliott and Western Avenues, replacing an essential link to the Ballard, Interbay and Magnolia areas of northwest Seattle. This summary assumes that the seawall replacement, utilities relocation, and investments in I-5, transit, city streets, and demand management strategies will be implemented independently by other programs or agencies. Previously these other improvements have been specifically included as part of the project planning, and their removal will need to be explained through the continued planning process.

Through traffic on SR 99 would be on a limited access roadway from Denny Way to Spokane Street. Traffic from Ballard, Interbay, and Magnolia that use the existing viaduct via the Elliott/Western ramps would no longer have that option. Those drivers would either take Alaskan Way to travel through downtown, access the deep bored tunnel via Mercer Street (east to southbound direction only), or use I-5. Access from the south into downtown Seattle would be served by the new King Street ramps in the vicinity of the sports stadiums (removal of the mid-town ramps at Columbia and Seneca have been assumed in all scenarios evaluated to date).

Transportation performance of a bored tunnel. Public safety would be improved compared to the existing viaduct.

- The Battery Street Tunnel, which has limited sight distance, short ramps, narrow lanes, and no shoulders, would no longer serve high volumes of traffic as it's sole function would be to provide enhanced local grid connectivity
- The existing viaduct also has narrow lanes and shoulders. The deep bored tunnel would have lane and shoulder widths that meet today's safety standards. *- Not True*
- Generally grades in and out of the tunnel would be six percent or less, which would meet state and federal design guidelines while being conducive to freight movement.
- The tunnel would be designed with modern safety features that comply with national fire protection safety standards.

Capacity for trips through downtown Seattle would be maintained and their travel times would increase by up to two minutes due to population growth expected by 2030.

- Approximately 65 percent of traffic using the viaduct today is through trips (trips that do not begin or end inside the downtown area). The bored tunnel would carry a higher percentage of through trips (75 percent) when open to traffic. *ck*
- Trips that use the viaduct today to travel through downtown Seattle take between five and a half and seven minutes between Aloha Street and Spokane Street during peak travel times. In a deep bored tunnel, these trips would take between five and six minutes at year of opening.

- Predicted population growth is expected to increase traffic by up to 11 percent between 2015 and 2030. This could add up to two minutes to travel times for through trips during the peak periods.
- Today there are approximately 91,000 vehicles each day on the viaduct (measured north of Seneca Street); a deep bored tunnel will carry approximately 80,000 to 85,000 vehicles at the same location. The lower volumes are due to the removal of the Elliott/Western ramps.
- However, with a daily volume of 80,000 to 85,000, the new bored tunnel would carry more traffic than the existing Battery Street Tunnel, which currently serves about 63,000 vehicles per day.
- The bored tunnel would provide an important redundancy to I-5 for the north to south link through downtown Seattle.

Trips from Ballard, Magnolia, and Interbay would no longer have direct access to SR 99 with a deep bored tunnel; this would lengthen the time it takes to make trips from those neighborhoods through downtown Seattle.

- Trips from northwest Seattle neighborhoods (Ballard, Interbay, Magnolia) that would no longer have direct access to SR 99 would experience longer trip times.
- Those trips take between two and three minutes today; they would take between seven and eight minutes in 2015 if they took a four-lane surface street on the waterfront. Trip times could increase by up to another three minutes by 2030 due to population growth beyond 2015. *- impact however of POS operations and use of AWAY as Freight corridor + Waterfront users*

Trips from West Seattle would experience longer travel times to downtown Seattle, due to the combination of growth and the removal of the mid-town ramps at Columbia and Seneca (assumed in all scenarios evaluated). Travel times for West Seattle trips through downtown to the north would likely be slightly shorter than today.

The travel demand modeling results for the deep bored tunnel assumed minimal investments in I-5 and city streets, and a baseline level of demand management strategies and transit service enhancements. These investments have little effect on through trips that would choose to stay on SR 99 if it is maintained as a deep bored tunnel. Therefore if those investments are not made there is expected to be little effect on the transportation performance of the bored tunnel.

Building a deep bored tunnel. Completion of an environmental impact statement (EIS) is required before construction of a deep bored tunnel can begin. Work on the environmental review process began in July 2008 with the issuance of a notice of intent and purpose and need statement. Scoping comments have already been solicited from the public and agencies

We believe this earlier work can be used as the initiation of the environmental review of a deep bored tunnel. Under this bored tunnel proposal, the next step would be to revise the purpose and need statement and issue a new notice of intent. This provides an opportunity to focus on SR 99 replacement and explain why seawall replacement, surface streets, and transit improvements have independent utility and will be implemented separately. With a narrowed focus the status of co-lead (Seattle and King County) and cooperating (Federal Transit Administration and Corps of Engineers) agencies can be re-visited. As required by the National Environmental Policy Act, all reasonable alternatives must be evaluated in the EIS. Based on the outcomes of the last year

* Key - no discussion about expanded use along AWAY - no info - AWAY becomes less functional over time Page 3

of scoping-level analysis, it seems likely that a new independent elevated structure and a surface and transit option would be carried as additional alternatives. Other options evaluated, such as a cut and cover tunnel, could be dropped from further consideration based on future transportation performance and construction impacts. In addition, it is unclear whether the surface and transit option meets the 2030 transportation needs, which could potentially result in it being dropped upon further evaluation. The integrated elevated scenario evaluated in 2008 carries significant concerns due to Section 4(f) impacts and public safety issues, and could also be dropped.

If work begins in early January on the environmental review of a bored tunnel, then the draft EIS could be published in December 2009 for public review; a final EIS released in September 2010; and a federal Record of Decision signed in December 2010. There is an opportunity to shorten this schedule if a decision is made to not apply current federal funding and not solicit new federal funding to the central waterfront replacement of the viaduct. This would create a situation where the State Environmental Policy Act would guide the environmental review process.

A single bored tunnel could be open to traffic by early 2017 assuming an aggressive schedule and funds being available when needed. No assumption has been made about the existing viaduct. It could be removed by 2012 as currently planned, or remain standing until the bored tunnel is open, in order to maintain traffic in the SR 99 corridor. Maintaining traffic on SR 99 during construction would create higher construction risks at the portal locations and may cause slight increases to the cost estimates below.

The cost estimates provided below are preliminary and have not been through a Cost Estimate Validation Process (CEVP), which is a standard procedure for all large projects managed by WSDOT. The methodology for preparing these estimates has generally followed the methodology of CEVP by establishing a base estimate for construction costs and adding factors for risks, contingency, and inflation that are likely to occur. These numbers are also based on conceptual designs; additional preliminary design and a complete CEVP are needed to confirm these costs.

Essential Elements – SR 99 Single Bored Tunnel	Planning Level Estimate
Construction Costs	\$850 to \$961 million
Contract and Construction Management; Final Design	\$162 to \$300 million
Contingency and Risk	\$325 to \$547 million
Inflation	\$208 to \$281 million
Right-of-Way Costs	\$40 million
Total Tunnel Costs	\$1,585 to 2,130 million
Viaduct Demolition and Alaskan Way Restoration (Four-Lane Surface Street)	\$98 to \$125 million
Total Program Costs	\$1,683 to \$2,255 million

These costs *do not* include the costs of the following items.

Other Elements	Planning Level Estimate
Seawall Replacement	\$189 to \$256 million
Waterfront Utility Relocation	\$41 to \$56 million
Waterfront Streetcar	\$9 to \$12 million
City Street Work	\$49 to \$66 million
Other	\$83 to \$112 million
Other Costs	\$503 to \$682 million

Paying for a Deep Bored Tunnel. The state has committed \$2.8 billion to pay for a viaduct replacement. Currently \$1.1 billion has been committed or spent for the Moving Forward Projects, which replace or repair over half of the viaduct. This leaves approximately \$1.7 billion in state investment. Given that some portions of the Moving Forward Program would either not be required or require less investment under a bored tunnel option, there is potential for savings that could be transferred to help pay for the bored tunnel. This would involve decisions regarding the latter phase of Battery Street Tunnel retrofit work, retrofitting the existing viaduct between Lenora Street and the Battery Street Tunnel, and the scope and cost of the northern transition section of the Holgate to King viaduct replacement project. Current estimates would indicate between \$100 million and \$150 million could be available, further work would be required to confirm a more specific estimate.

Charging tolls to drivers in a four-lane bored tunnel through downtown Seattle would support up to \$410 million in additional project funding between 2014 and 2018. Tolling the existing viaduct during construction could raise up to another \$140 million in pay-as-you go project funding, for a total SR 99 tolling contribution of approximately \$550 million.

Tolling SR 99 during and after construction would increase the total possible state funding available for a deep bored tunnel to \$2.25 billion. Tolling is expected to divert some trips to other routes such as the downtown street grid or I-5. Preliminary studies have indicated the diversion rate could be from 35 to 40 percent, which is assumed within the above tolling assessment.

At this point in time there are no proposals for additional federal funds within the program, though there are ongoing questions related to stimulus package opportunities. As previously mentioned, there is some schedule advantage to pursuing the central waterfront environmental planning work based solely on state funding.

Other potential funding sources have been discussed, including a local improvement district for property owners who would benefit from new open space on the central waterfront; local public utilities paying for utility relocation; open space funds; and Port of Seattle funding. The amount and likelihood of these funding sources have not been explored related to the current bored tunnel proposal, although the Port of Seattle has expressed interest in discussing the funding plan for a capacity replacement.

NEXT STEPS

If a decision is made to pursue a deep bored tunnel as a replacement option for the Alaskan Way Viaduct, we recommend the following steps be taken by the program team:

- Convene an early January work shop to further review the base estimates, findings of the recent independent estimate review, and the program mark-ups that have come into question. It is assumed we would engage a variety of independent tunnel experts in order to ensure findings that have broad industry support.
- Complete a two to three month tunnel feasibility study to confirm preliminary findings about the cost, schedule and alignment of a single bored tunnel as compared to a dual bored tunnel.
- Continue the environmental review process.

ATTACHMENTS

- 1 Single bored tunnel alignment and profile

cost
enviro
strategies

From: White, John
Sent: Tuesday, December 23, 2008 7:57 AM
To: Dye, Dave; Paananen, Ron; Grotefendt, Amy (Consultant);
Subject: Re: Bored tunnel

Thanks Dave. PB has been looking at revised mark-ups, we will update the costs as appropriate and get them out to you, Ron and John Reilly for a reality check.

I assume we stick with the single bore for now (at least at the low end), assuming we can make the cross-section work without significant upsizing?

John

From: Dye, Dave
To: Paananen, Ron; White, John; Grotefendt, Amy (Consultant)
Sent: Tue Dec 23 07:39:16 2008
Subject: Re: Bored tunnel

John - please check with mike r and gordon because they were getting vibes from new york the estimate was too conservative - I suggest whatever lower number is developed become the lower end of the range with current estimate the high end...thanks.

-dave

From: Paananen, Ron
To: White, John; Grotefendt, Amy (Consultant)
Cc: Dye, Dave
Sent: Tue Dec 23 06:51:26 2008
Subject: Bored tunnel

The Governor asked a few questions about the bored tunnel. We need some material that clearly shows how much the tunnel will cost, what is included in the basic cost, and how it would be funded. We need to tell the story about what it does for capacity (compared to the existing viaduct) and what are the disruptions associated with building a bored tunnel. A good schedule should be assembled to show when the tunnel would be open to traffic. John, the team should put together the most aggressive schedule they can conceive, like doing an EA for environmental, purchasing the machine in advance, using design-build - all the usual stuff.

The project would be the SR 99 components only. Minimal work on the waterfront: no seawall. Tear down and basic connection back to Battery Street Tunnel!

Has anyone heard back from Cascadia? We need their feedback to help in reconsideration of the risk and contingency numbers.

Dave may want to add a few comments.

From: White, John
Sent: Wednesday, January 07, 2009 9:55 AM
To: Bandy, Mark; Parsons, Jim (Consultant)
Subject: FW: Draft Bored Tunnel Briefing Paper

Not sure if Randy forwarded his comments to yourselves, otherwise FYI.

From: Randy McCourt [mailto:rsm@dkspdx.com]
Sent: Monday, January 05, 2009 7:51 PM
To: White, John
Subject: RE: Draft Bored Tunnel Briefing Paper

Second bullet on page 2 – you may want to mention that part of why the future is faster is the removal of the Elliott/Western ramps and the removal of the 1st Ave/Seneca weave which slow peak traffic today.

Page 3 – 2030 crops up a few times – I am sure you all used resources from other works for this.

Page 3 - . Therefore if those investments are not made there is expected to be little effect on the transportation performance of the bored tunnel.

I think you need to be careful here – the TDM investments do help reduce travel and the I-5 helps operation – which would make the bored tunnel even more productive – but the way this is worded sounds like they don't do anything.

Page 4 – top paragraph – be careful with your language for NEPA (dropping). Remember there are also the prior EIS options of 6 lane tunnels and others scenarios which were not part of the scenarios (to avoid redundant analysis) but are not necessarily being pursued either.

Page 5 – I know the costs are being work – just remember that tunnel risks are such that someone will likely need to be willing to accept the cost risk of uncertainty and that should not be lost in the decision to proceed process. Don't need folks saying they did not know.

Page 5 – last paragraph – a real estate transfer fee/tax should be considered for properties in the waterfront that would benefit from the removal of AWW – this would work as follows. Current assessed value - \$5M, AWW goes away, property owner sells property for \$10M in five years. At 5% property value increase per year (not recently!) in five years the value should have increased about 28% or to about \$6.4 M. The increment between the sale value and the normal annual increase in property value ($10 - 6.4 = 3.6M$) would be taxed at 20/30/40% on presumption that the public investment generated the private property value gain and the public should be proportionally reimbursed for its share of the value gain. The 5% and the 20/30/40% would be subject to research to determine the appropriate values in reality. But in the end – a one time transfer fee would be paid if the rate of property value gain was disproportionate to the rest of the market. In that case the public would recover its share of the cost to improve the waterfront.

Page 6 – NEPA SEPA – seems like an important decision to make given its schedule and cost implications.

Randy

Ransford S. McCourt, PE, PTOE
DKS Associates
1400 SW Fifth Avenue, Suite 500
Portland, OR 97201
503/243-3500
FAX 503/243-1934
rsm@dksassociates.com

6/19/2009

From: White, John [mailto:WhiteJH@wsdot.wa.gov]
Sent: Monday, January 05, 2009 6:07 PM
To: Parsons, Jim (Consultant); McCourt, Randy (Consultant); Parsons, Jim; Bandy, Mark
Subject: FW: Draft Bored Tunnel Briefing Paper

Jim, Randy, Mark,

Attached is a draft bored tunnel briefing paper we had been working on last week. We would like your thoughts related to the transportation performance piece of this, which we pieced together from existing materials with some additional opinion added from Chris Wellander. Please ignore the other portions, since the cost estimate and financing information has been superseded and is out of date now. We want to make sure we capture all relevant thoughts related to bored tunnel transportation performance, with key focal points being how it works for through-city and regional trips, along with the travel time differences for those making the Ballard/Interbay/Magnolia to SODO (and other places SW) trips.

There is going to be a Gov's briefing paper that captures some of this that is due on Wed, so quick response is appreciated.

John

From: White, John
Sent: Monday, December 29, 2008 4:51 PM
To: Dye, Dave; Paananen, Ron
Cc: Grotefendt, Amy (Consultant); Reilly, John; Stone, Craig; Greco, Theresa; Preedy, Matt
Subject: Draft Bored Tunnel Briefing Paper

Dave & Ron,

Here is a draft paper that we hope addresses the request to provide thoughts on a mostly stand-alone bored tunnel option, based on the transportation benefits achieved by the bored tunnel. As I am sure you will understand, much of what is presented is based on the opinions of the project team, and will require further assessment in order to confirm and validate those opinions.

There are a couple of things to mention in particular:

- The cost estimate numbers and ranges are a bit generalized, and assume that with further assessment, we will find consensus in making reductions to some of the mark-ups that have come into question. I believe we may be discussing an early January workshop to address these questions. That said, the numbers here are solely based on professional opinion within the team, so care should be taken in how they are used. As stated before, the upper end of the range is our previously presented 'probable' cost, with the lower end of the range being the team opinion part.
- There is a variety of opinion and debate regarding how the environmental planning process would proceed, though it is clear that based on the work we have done to date, there is very strong opinion (within UCO, AGO and FHWA) as to the need to retain multiple options within the next draft or supplemental draft EIS. Based on continued analysis, one or more of the other options may not be warranted to continue on beyond the next draft document for reasons stated in the paper.
- We have presented some professional opinion related to 2030 transportation operation that will take further work to validate.

Hope this is along the lines of what you were hoping for. Some sections may have more detail than is desired at this point, please inform if there are any areas you think a more summarized or generalized discussion is appropriate. See you tomorrow.

John

John H. White, P.E.
Program Director
Alaskan Way Viaduct and Seawall Replacement Program
WSDOT Urban Corridors Office
Business: (206) 382 - 5270
Cell: (206) 450 - 2975

DATE: January 7, 2009

TO: Dave Dye
Ron Paananen
Jennifer Ziegler

FROM: John White

CC: Craig Stone Matt Preedy Theresa Greco
Mike Rigsby Amy Grotefendt Mark Bandy

SUBJECT: SR 99 Deep Bored Tunnel Transportation Performance

BACKGROUND

In response to your request for additional information on a deep bored tunnel under downtown Seattle as a replacement for the Alaskan Way Viaduct, the program team has prepared this briefing paper related to transportation performance.

CONCLUSIONS

- Public safety would be improved compared to the existing viaduct.
- Constructing a deep bored tunnel will maintain SR 99's capacity for trips through downtown Seattle.
- Provides the travel time and reliability for freight and other longer distance trips, accommodating growth in the port, manufacturing/industrial and most commerce functions that rely on the corridor.
- In-city trips
- A deep bored tunnel could be open to traffic in 2015, if a decision is made to proceed in early 2009. The existing viaduct can be taken down by 2012 as currently planned or remain in place to maintain capacity during construction.

DISCUSSION

Proposed deep bored tunnel. A deep single bore tunnel would connect to the new south mile of SR 99 (from Holgate Street to King Street). It would connect to Aurora Avenue north of the Battery Street Tunnel, in the vicinity of Harrison Street. The alignment of the tunnel would be primarily under First Avenue at a depth necessary to avoid other existing tunnels (bus, rail, sewer, water) under downtown Seattle.

The tunnel would be approximately 9,000 feet in length and would be a single bore that is currently approximately 54 feet in diameter. The tunnel would accommodate four lanes of traffic (two lanes in each direction) plus shoulders and tunnel systems (ventilation, emergency access).

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Deleted: <#> Transportation function provided by a four-lane deep bored tunnel ¶
<#> Cost estimate for a deep single-bored tunnel ¶
<#> Schedule for opening a deep bored tunnel to traffic ¶
<#> Potential options for funding a deep bored tunnel ¶

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Comment [JP1]: None of the work the IPM did provides a basis for this conclusion.

Comment [A2]: The capacity would be generally the same for trips on SR 99 through downtown, but that have a trip end north of Denny. The subtle distinction is that the Elliott-Western capacity is not the same. If EW capacity is handled through couplet, then that needs to be part of definition. Also, configuration north of Denny is important.

Deleted: and provide room for growth in these vehicle trips expected to occur by 2030.

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A four-lane street would be constructed along the waterfront and up the hill to Elliott and Western Avenues, preserving a grade-separated link to the Ballard, Interbay and Magnolia areas of northwest Seattle.

Through traffic on SR 99 would be on a limited access roadway from Denny Way to Spokane Street. Traffic from Ballard, Interbay, and Magnolia that use the existing viaduct via the Elliott/Western ramps would no longer have that option. Those drivers would either take Alaskan Way to travel through downtown, access the deep bored tunnel via Mercer Street (east to southbound direction only), or use I-5. Access from the south into downtown Seattle would be served by the new King Street ramps in the vicinity of the sports stadiums.

Transportation performance of a bored tunnel. Public safety would be improved compared to the existing viaduct.

- The Battery Street Tunnel, which has limited sight distance, short ramps, narrow lanes, and no shoulders, would no longer serve high volumes of traffic and likely not be required.
- The existing viaduct also has narrow lanes and shoulders and substandard ramp connections. The deep bored tunnel would have lane and shoulder widths that meet today's safety standards.
- Generally grades in and out of the tunnel would be six percent or less, which would meet state and federal design guidelines while remaining conducive to freight movement.
- The tunnel would be designed with modern safety features that comply with national fire protection safety standards.
- Limited access roadways, such as a bored tunnel, typically have a lower crash rate than arterial roadways.

Capacity for trips through downtown Seattle would be maintained and their travel times would potentially increase by up to two minutes due to population growth expected by 2030.

- Approximately 65 percent of traffic using the viaduct today is through trips (trips that do not begin or end inside the downtown area). The bored tunnel would carry a higher percentage of through trips (75 percent) when open to traffic. This is primarily due to the change in access for the trips to/from Ballard-Interbay.
- Trips that use the viaduct today to travel through downtown Seattle take between five and a half and seven minutes between Aloha Street and Spokane Street during peak travel times. In a deep bored tunnel, these trips would take between five and six minutes at year of opening.
- Predicted population growth is expected to increase traffic by up to 11 percent between 2015 and 2030. This could add up to two minutes to travel times for through trips during the peak periods.
- Today there are approximately 91,000 vehicles each day on the viaduct (measured north of Seneca Street); a deep bored tunnel will carry approximately 80,000 to 85,000 vehicles at the same location. The lower volumes are due to the removal of the Elliott/Western ramps.

* Please note that all current travel time analysis is based on 2015 projections, and that the 2030 travel times shown are extrapolated based on additional growth projected between 2015 and 2030. Additional analysis would be required to confirm 2030 travel times.

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Comment [A3]: Scenario F, bored tunnel, had the couplet but was low on TDM, transit, and I-5. Probably worth mentioning.

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Comment [A4]: Whether BST remains or not is a function of how ... [4]

Comment [JP5]: So is the tunnel rehabilitated as a one lane facility ... [5]

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Comment [A6]: I think the performance discussion should be ... [7]

Comment [JP7]: Note that the IPM work did not do any type of 2030 ... [8]

Comment [A8]: Travel time and reliability of that travel time are ... [9]

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Approximately 65 percent of traf ... [10]

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Comment [JP9]: Again: No 2030 analysis has been done to support ... [11]

Comment [JP10]: Note that the IPM work did not do any type of 2030 ... [12]

Comment [A11]: Travel time and reliability of that travel time are ... [13]

- However, with a daily volume of 80,000 to 85,000, the new bored tunnel would carry more traffic than the existing Battery Street Tunnel, which currently serves about 63,000 vehicles per day.
- The bored tunnel would provide an important redundancy to I-5 for the north to south link through downtown Seattle, including the ability to absorb additional through trips due to I-5 closures related to accidents or construction.

Trips from Ballard, Magnolia, and Interbay would no longer have direct access to SR 99 with a deep bored tunnel; this would lengthen the time it takes to make trips from those neighborhoods through downtown Seattle.

- Trips from northwest Seattle neighborhoods (Ballard, Interbay, Magnolia) that would no longer have direct access to SR 99 would experience longer trip times.
- Those trips take between two and three minutes today; they would take between seven and eight minutes in 2015 if they took a four-lane surface street on the waterfront. Trip times could increase by up to another three minutes by 2030 due to population growth beyond 2015.
- Other options would exist for Ballard-Interbay connectivity assuming the advancement of the two-way Mercer improvements from Elliott to Dexter (travel times for these routes have not yet been modeled)

Trips from West Seattle would experience longer travel times to downtown Seattle, due to the combination of growth and the removal of the mid-town ramps at Columbia and Seneca (a result common to all scenarios evaluated). Travel times for West Seattle trips through downtown to the north would likely be slightly shorter than today.

The modeling analysis for the deep bored tunnel assumed minimal investments in I-5 and city streets, and a moderate baseline level of demand management strategies and transit service enhancements. These investments have little effect on through trips that would choose to stay on SR 99 if it is maintained as a deep bored tunnel. Therefore if those investments are not made there is expected to be little effect on the transportation performance of the bored tunnel.

North Aurora area – what’s the plan here? Previously Republican was added, but the idea of moving the portal south was brought up. Is the Republican connection still possible? If not, is something else? East-west connectivity in this area is important so we need to talk about it.

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Comment [A12]: I think more context is needed here – the difference I see is that a bored tunnel and elevated have more ability to absorb traffic that shifts due to an incident.

Comment [JP13]: No analysis has been done by the IPM to support this.

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Comment [A14]: True for any future scenario so I'd re-state to say that the bored tunnel (and elevated) can keep demand on the West Seattle to CBD routes from growing further.

Comment [A15]: Previous work did not assume any level of tolling on a bored tunnel – should that be necessary to pay for it, there would likely be some shift to surface streets and I-5. And it could affect one's view of how much capacity and redundancy is provided – I think a paragraph about tolling may be in order

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Route to Ballard-Interbay – I don't think the waterfront route is the only choice. We should describe how someone might use the bored tunnel and either Mercer or Dexter/Nickerson.¶

Comment [JP16]: Need to be careful with this since it all depends on what you decide to model for 2030.

Comment [JP17]: I'd be careful with this.

Deleted: Building a deep bored tunnel. Completion of an environmental impact statement (EIS) is required before construction of a deep bored tunnel can begin. Work on the environmental review process began in July 2008 with the issuance of a notice of intent and purpose and need statement. Scoping comments have already been solicited from the public and agencies.¶

¶ We believe this earlier work can be used as the initiation of the environmental review of a deep bored tunnel. Under this bored tunnel proposal, the next step would be to revise the purpose and need statement and issue a new notice of intent. This provides an opportunity to focus on SR 99 replacement and ... [14]

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¶ I Single bored tunnel alignment and profile

Page 1: [1] Deleted **WSDOT** **1/7/2009 9:58:00 AM**
Preliminary cost estimates for a single bored tunnel shows the possibility of achieving cost savings compared to a twin bored tunnel. More work is needed in early 2009 to confirm this finding.

Page 2: [2] Deleted **WSDOT** **1/7/2009 9:41:00 AM**
This summary assumes that the seawall replacement, utilities relocation, and investments in I-5, transit, city streets, and demand management strategies will be implemented independently by other programs or agencies. Previously these other improvements have been specifically included as part of the project planning, and their removal will need to be explained through the continued planning process. [A1]

Page 2: [3] Deleted **WSDOT** **1/7/2009 9:42:00 AM**
(removal of the mid-town ramps at Columbia and Seneca have been assumed in all scenarios evaluated to date).

Page 2: [4] Comment [A4] **Administrator** **1/6/2009 11:46:00 AM**
Whether BST remains or not is a function of how long and what portion of SR 99 you keep open during bored tunnel construction. If the viaduct is torn down in 2012, prior to the new tunnel being open, I don't see a need to modify BST at all, just close it and fill it in.

Page 2: [5] Comment [JP5] **James Parsons** **1/6/2009 8:34:00 AM**
So is the tunnel rehabilitated as a one lane facility in each direction. I thought it was going to be closed and abandoned/filled in???

Page 2: [6] Deleted **WSDOT** **1/7/2009 9:50:00 AM**
as it's sole function would be to provide enhanced local grid connectivity[A2],[JP3]

Page 2: [7] Comment [A6] **Administrator** **1/6/2009 1:44:00 PM**
I think the performance discussion should be split into today/opening year and 2030. For 2030, what I would make sure we state is that a BT provides the travel time and reliability for freight and other longer distance trips that keep the port, manufacturing/industrial and commerce functions near the 99 corridor growing.

Page 2: [8] Comment [JP7] **James Parsons** **1/6/2009 9:41:00 AM**
Note that the IPM work did not do any type of 2030 analysis to come to this conclusion.

Page 2: [9] Comment [A8] **Administrator** **1/6/2009 1:40:00 PM**
Travel time and reliability of that travel time are important features of a limited access facility such as a bored tunnel – that's what would distinguish it from surface streets.

Page 2: [10] Deleted **WSDOT** **1/7/2009 11:47:00 AM**
[JP4][A5]

Approximately 65 percent of traffic using the viaduct today is through trips (trips that do not begin or end inside the downtown area). The bored tunnel would carry a higher percentage of through trips (75 percent) when open to traffic. This is primarily due to the change in access for the trips to/from Ballard-Interbay

Page 2: [11] Comment [JP9] **James Parsons** **1/6/2009 8:37:00 AM**
Again: No 2030 analysis has been done to support this conclusion.

Page 2: [12] Comment [JP10] **James Parsons** **1/7/2009 10:12:00 AM**
Note that the IPM work did not do any type of 2030 analysis to come to this conclusion.

Page 2: [13] Comment [A11] **Administrator** **1/7/2009 10:12:00 AM**
Travel time and reliability of that travel time are important features of a limited access facility such as a bored tunnel – that's what would distinguish it from surface streets.

Used 2008 NOI Not NOI for 2004/06 DEIS |^S DEIS

Building a deep bored tunnel. Completion of an environmental impact statement (EIS) is required before construction of a deep bored tunnel can begin. Work on the environmental review process began in July 2008 with the issuance of a notice of intent and purpose and need statement. Scoping comments have already been solicited from the public and agencies

We believe this earlier work can be used as the initiation of the environmental review of a deep bored tunnel. Under this bored tunnel proposal, the next step would be to revise the purpose and need statement and issue a new notice of intent. This provides an opportunity to focus on SR 99 replacement and explain why seawall replacement, surface streets, and transit improvements have independent utility and will be implemented separately. With a narrowed focus the status of co-lead (Seattle and King County) and cooperating (Federal Transit Administration and Corps of Engineers) agencies can be re-visited. As required by the National Environmental Policy Act, all reasonable alternatives must be evaluated in the EIS. Based on the outcomes of the last year of scoping-level analysis, it seems likely that a new independent elevated structure and a surface and transit option would be carried as additional alternatives. Other options evaluated, such as a cut and cover tunnel, could be dropped from further consideration based on future transportation performance and construction impacts. In addition, it is unclear whether the surface and transit option meets the 2030 transportation needs, which could potentially result in it being dropped upon further evaluation. [JP6] The integrated elevated scenario evaluated in 2008 carries significant concerns due to Section 4(f) impacts and public safety issues, and could also be dropped.

If work begins in early January on the environmental review of a bored tunnel, then the draft EIS could be published in December 2009 for public review; a final EIS released in September 2010; and a federal Record of Decision signed in December 2010. There is an opportunity to shorten this schedule if a decision is made to not apply current federal funding and not solicit new federal funding to the central waterfront replacement of the viaduct. This would create a situation where the State Environmental Policy Act would guide the environmental review process. [JP7]

A single bored tunnel could be open to traffic by early 2017 assuming an aggressive schedule and funds being available when needed. No assumption has been made about the existing viaduct. It could be removed by 2012 as currently planned, or remain standing until the bored tunnel is open, in order to maintain traffic in the SR 99 corridor. Maintaining traffic on SR 99 during construction would create higher construction risks at the portal locations and may cause slight increases to the cost estimates below.

Note
Traffic
'Story'

The cost estimates provided below are preliminary and have not been through a Cost Estimate Validation Process (CEVP), which is a standard procedure for all large projects managed by WSDOT. The methodology for preparing these estimates has generally followed the methodology of CEVP by establishing a base estimate for construction costs and adding factors for risks, contingency, and inflation that are likely to occur. These numbers are also based on conceptual designs; additional preliminary design and a complete CEVP are needed to confirm these costs.

Essential Elements – SR 99 Single Bored Tunnel	Planning Level Estimate
Construction Costs	\$850 to \$961 million
Contract and Construction Management; Final Design	\$162 to \$300 million
Contingency and Risk	\$325 to \$547 million
Inflation	\$208 to \$281 million
Right-of-Way Costs	\$40 million
Total Tunnel Costs	\$1,585 to 2,130 million
Viaduct Demolition and Alaskan Way Restoration (Four-Lane Surface Street)	\$98 to \$125 million
Total Program Costs	\$1,683 to \$2,255 million

These costs *do not* include the costs of the following items:

Other Elements	Planning Level Estimate
Seawall Replacement	\$189 to \$256 million
Waterfront Utility Relocation	\$41 to \$56 million
Waterfront Streetcar	\$9 to \$12 million
City Street Work	\$49 to \$66 million
Other	\$83 to \$112 million
Other Costs	\$503 to \$682 million

Paying for a Deep Bored Tunnel. The state has committed \$2.8 billion to pay for a viaduct replacement. Currently \$1.1 billion has been committed or spent for the Moving Forward Projects, which replace or repair over half of the viaduct. This leaves approximately \$1.7 billion in state investment. Given that some portions of the Moving Forward Program would either not be required or require less investment under a bored tunnel option, there is potential for savings that could be transferred to help pay for the bored tunnel. This would involve decisions regarding the latter phase of Battery Street Tunnel retrofit work, retrofitting the existing viaduct between Lenora Street and the Battery Street Tunnel, and the scope and cost of the northern transition section of the Holgate to King viaduct replacement project. Current estimates would indicate between \$100 million and \$150 million could be available, further work would be required to confirm a more specific estimate.

Charging tolls to drivers in a four-lane bored tunnel through downtown Seattle would support up to \$410 million in additional project funding between 2014 and 2018. Tolling the existing viaduct during construction could raise up to another \$140 million in pay-as-you-go project funding, for a total SR 99 tolling contribution of approximately \$550 million.

Tolling SR 99 during and after construction would increase the total possible state funding available for a deep bored tunnel to \$2.25 billion. Tolling is expected to divert some trips to other routes such as the downtown street grid or I-5. Preliminary studies have indicated the diversion rate could be from 35 to 40 percent, which is assumed within the above tolling assessment.

At this point in time there are no proposals for additional federal funds within the program, though there are ongoing questions related to stimulus package opportunities. As previously mentioned, there is some schedule advantage to pursuing the central waterfront environmental planning work based solely on state funding.

Other potential funding sources have been discussed, including a local improvement district for property owners who would benefit from new open space on the central waterfront; local public utilities paying for utility relocation; open space funds; and Port of Seattle funding. The amount and likelihood of these funding sources have not been explored related to the current bored tunnel proposal, although the Port of Seattle has expressed interest in discussing the funding plan for a capacity replacement.

NEXT STEPS

If a decision is made to pursue a deep bored tunnel as a replacement option for the Alaskan Way Viaduct, we recommend the following steps be taken by the program team:

Convene an early January work shop to further review the base estimates, findings of the recent independent estimate review, and the program mark-ups that have come into question. It is assumed we would engage a variety of independent tunnel experts in order to ensure findings that have broad industry support.

Complete a two to three month tunnel feasibility study to confirm preliminary findings about the cost, schedule and alignment of a single bored tunnel as compared to a dual bored tunnel.

Continue the environmental review process.

From: White, John
Sent: Wednesday, January 07, 2009 4:02 PM
To: Bandy, Mark
Subject: Fw: Bored Tunnel Information

You'll appreciate this.

From: Dye, Dave
To: Grotefendt, Amy (Consultant); Ziegler, Jennifer; Paananen, Ron
Cc: White, John; Brown, Lloyd
Sent: Wed Jan 07 15:59:47 2009
Subject: RE: Bored Tunnel Information

Dye is Asst Sec of
WSDOT

Amy - a couple of comments (and great job getting this together):

1. funding table looks great
2. traffic memo is missing "the three key takeaways"...like: SR 99 bored tunnel moves more vehicles north south through town than the existing viaduct and battery street tunnel (like 20 plus thousand) which is good for our regional economy; The SR 99 bored tunnel maintains today's travel times for regional through trips in 2030! (drop all the 2 minute add stuff due to growth - polishing the turd stuff - who really knows?); Revised schedule is great but drop the reference to "environmental impact statement" in the note and say "environmental document" - keep our options open.

other than that, all good...



dave

From: Grotefendt, Amy (Consultant)
Sent: Wednesday, January 07, 2009 3:07 PM
To: Ziegler, Jennifer; Dye, Dave; Paananen, Ron
Cc: White, John; Brown, Lloyd
Subject: Bored Tunnel Information

Sorry for the delay...

Attached are three things:

- PDR [
1. Updated cost and funding sources table
 2. Traffic performance memo
 3. Revised schedule

Please let us know if you see any changes needed in these materials or you have questions.

Thanks
AJG

From: White, John
Sent: Wednesday, January 07, 2009 4:04 PM
To: Visconty, Sasha (Consultant); Paananen, Ron
Subject: RE: Environmental strategy



see below

If we want someone there for tunnel constructability, we can bring John Reilly or Don Phelps.

From: Visconty, Sasha (Consultant)
Sent: Tuesday, January 06, 2009 3:11 PM
To: White, John; Paananen, Ron
Subject: RE: Environmental strategy

Thanks Ron,

This sounds like a great plan. I am in total support of asking Kimberly to participate- I actually think having her there is critical. Bryce will be very helpful to have there as well.

There may be some questions related to tunnel constructability that would be helpful to have the answers to for this conversation (from the environmental side). I don't have a list now but will soon and will let you know what they are before we meet.

Thanks!
Sasha

From: White, John
Sent: Tuesday, January 06, 2009 2:16 PM
To: Paananen, Ron; Visconty, Sasha (Consultant)
Subject: RE: Environmental strategy

Agreed. Me and Sasha had a lengthy conversation about this yesterday. I would say the AGO invite has to include Bryce. Part of the discussion we had yesterday was that we really should have an external NEPA policy legal expert in our court, which I was going to discuss with Bryce later this week. It would be nice if we could bring in someone who we have convenient access to, assuming Bryce OK's it.

John

From: Paananen, Ron
Sent: Tuesday, January 06, 2009 2:06 PM
To: White, John; Visconty, Sasha (Consultant)
Subject: Environmental strategy

Talked to Dave about NEPA / SEPA Strategy for a potential bored tunnel. We decided there needs to be a strategy meeting. I would suggest the following as a start for attendees.

Dave
Ron
John
Sasha
Deborah Cade ←
Steve Reinmuth
Megan White

7/1/2009

Kimberly Farley could participate if she is willing to do it for free (I'll talk to Kimberly).

Others you can think of?

We need to develop a strategy that allows a DB RFP by September 2010.

The goal is to have an environmental process with one alternative, like we did with the South End. Should we consider picking up the old EIS and doing a new supplement? Are we better off doing SEPA only (no federal funds). Who should be the lead agencies (WSDOT / FHWA only?). Lets put together the list of issues over the next couple of days. Other baseline assumptions include no seawall work, viaduct demolition, minimal work on Alaskan Way, This effort is really to define the minimum scope involved in building a bored tunnel. The no-build will be viaduct closed.

I would shoot for the 22nd or 23rd as potential dates.



From: White, John
Sent: Tuesday, January 13, 2009 8:08 AM
To: WSDOT UCO Alaskan Way Viaduct Project
Subject: Viaduct Announcement

DONE DEAL EVIDENCE

As all or most of you have surmised from the bits and pieces that have leaked over the past few days, this morning Governor Gregoire, Mayor Nickels and KC Exec Sims are making a joint recommendation to replace the existing central waterfront viaduct with a 4-lane single bore tunnel. This announcement comes with a financial plan that includes major financial contributions from the City, County and Port of Seattle, supporting a total package of appr. \$4.25B in improvements. Important to us is the detail that the three agencies now take ownership of their respective projects within the package. Thus the City moves forward on the financing and planning for the seawall replacement, the First Ave streetcar, the waterfront promenade, and utility relocation, while the County moves forward with the financing and programming of supplemental bus service, some park and rides, and a new bus base.

CO

So what is the State's responsibility? Delivering the bored tunnel, the surface connections at the north end, restoring Alaskan Way, and the Moving Forward program. Those of you intimate with the Moving Forward projects will realize that we will need to make a few adjustments to match the north and south end projects up with a single bore tunnel. After some alignment planning this week, we will promptly commence those efforts, as well as the strategy development for delivering the bored tunnel on an accelerated schedule utilizing design-build. All in all we are in for quite a ride...it is important to remember that this is not a done deal until the State legislature has concurred with our plan, our efforts over the next couple weeks will be focused on outlining the plan that we will present to the legislature.

As always, thanks for all of your dedicated efforts in support of this program.

John

as you know leg.
did agree

Fast tracking
EIS

AWV Bored Tunnel Project Strategic Advisory Team for Project Delivery



On January 13, 2009, Washington State Governor Christine Gregoire announced her decision to replace the aging Alaskan Way Viaduct with a bored tunnel by 2015. She directed WSDOT to deliver the Bored Tunnel Project following key priorities:

- Improve safety by removing the existing unsafe viaduct
- Deliver an affordable solution with the state's contribution not over \$2.8 Billion (past and future contributions)
- Minimize construction disruption to maritime and central waterfront business
- Provide capacity and mobility both now and in the future for all users
- Contribute to the health of our environment and open up Seattle's waterfront

WSDOT will direct the Bored Tunnel Project as a strong owner and will closely coordinate with the departments of transportation for the City of Seattle, King County, and the Port of Seattle throughout project implementation. WSDOT will be supported with in-house expertise and owner consultant representation for the duration of the project.

Executive Committee

With the conclusion of the Tri-Agency group, WSDOT Executive Leadership would be supported through an executive committee comprised of the tri-agency members as well as FHWA, Port of Seattle, and a tunnel expert. They would meet at periodic milestones throughout the course of the project, or as needed as issues arise.

Strategic Advisory Team

The 2006 Expert Review Panel (ERP) recommended the AWV Program form a committee to provide support and advice for project implementation. The ERP suggested the group include experts in construction and experience with implementing mega projects.

Role and Function:

Heeding ERP advice, the SR 99 Bored Tunnel Project will be supported by a formal collection of experts and key department heads to provide strategic recommendations to WSDOT for successful delivery of the project.

This team will focus on delivery challenges at the management level and provide strategic recommendations to WSDOT project leadership. The Strategic

Advisory Team will include tunnel expertise including individuals with successful tunnel implementation experience, geotechnical experience, mega project environmental impact statement expertise, and mega project budget, risk and schedule management expertise.

The team will also include representation from the departments of transportation for the City of Seattle and King County.

The role of the Strategic Advisory Team will be advisory and participants with specialized experience will be brought in as needed for advice. WSDOT will establish focus areas for the team for monthly meetings.

Independent Technical Advisors

The goal is to provide independent review that the technical implementation is appropriate and technically sound.

The Independent Technical Advisors should be comprised of independent experts who do not have a vested interest in the outcome of the technical decisions. These individuals will provide independent insight and expertise to WSDOT at key milestones throughout the project life. The intention is that project and design teams present a snapshot of the project at periodic technical meetings. The panel of advisors will then render recommendations on key issues to give WSDOT assurance that the project issues are appropriately addressed.

The Independent Technical Advisors should be represented by experts in the following fields: highway engineering, environmental, TBM, tunnel design, geotechnical, fire life safety, and former tunnel contractor.

In this role this group functions as a classic peer review function on this project.

Functional Resource Group

WSDOT must make numerous decisions that will influence project scope, schedule and budget in the delivery of the Bored Tunnel Project.

Role and Function

To garner additional expertise for the technical aspects of project delivery, WSDOT will look to advice from a Functional Resource Group. The Functional Resource Group will be comprised of agency and industry experts, to provide the necessary advice needed for appropriate and informed decisions.

This team will evolve as the project advances. It will initially consist of representatives from the relevant sections of WSDOT HQ, UCO and NW Region,

Handwritten notes on a sticky note:

- PDR
- Formation
- Members
- Meetings
- Info
- 2 groups

WSDOT's

as well as the owner's consultant reps (Hatch Mott MacDonald) along with the GEC and industry resources. As project definition occurs, subgroups will be formed to target specific technical needs such as contracting procurement and specialized technical issues.

The Functional Resource Group should have representatives from the following groups and would be facilitated by AWW Leadership Team:

- WSDOT HQ – Construction
- WSDOT HQ – Contracting Strategy
- WSDOT HQ – Design
- WSDOT HQ – Structures
- WSDOT HQ – Materials and Geotechnical
- WSDOT HQ – Environmental
- WSDOT HQ – Risk Management
- NW Region – Maintenance and Operations
- AWW GEC – Design
- AWW PMAC – Strategy
- AWW PMAC – Tunneling
- AWW PMAC – Risk, Schedule, Estimates & Budget
- FHWA
- City of Seattle
- Industry – Contractor Representatives

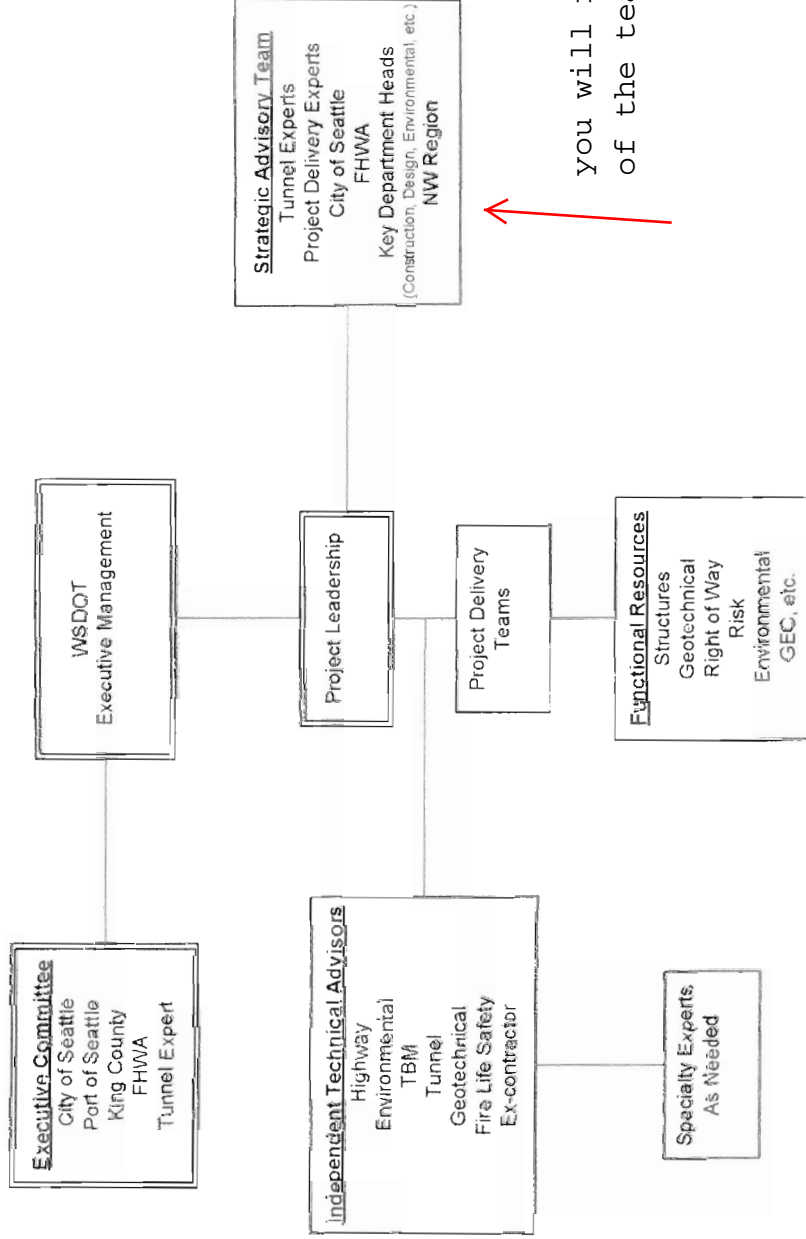
Several members of the Functional Resource Group will have day-to-day responsibilities in working with the project team. The group will also meet on a prescribed schedule to keep the team aligned and on track with project delivery. WSDOT will prepare a list of topic areas for the Functional Resource Group to focus on initially.

Key Areas of Focus for All Teams

The key areas of expertise to support successful project delivery include:

- General risk identification and risk sharing/management
- Contracting strategy, packaging and legislation changes
- Contract bonding & insurance requirements
- Contractor/manufacturer pre-qualifications
- Fire/Life/Safety system baseline requirements
- Geotechnical investigation and risk management
- Structural criteria
- Geometric criteria
- Portal interfaces
- Schedule, estimating and budgeting strategy
- Transition strategy from existing to new corridor
- Environmental baseline elements needed for EIS
- Quality control

**Alaskan Way Viaduct Replacement Program
Bored Tunnel Project
Draft Organizational Structure
January 2009**



You will note FHWA is part of the team



From: White, John
Sent: Tuesday, January 20, 2009 7:48 PM
To: Dye, Dave; Paananen, Ron; Stone, Craig
Cc: Reilly, John; Grotfendt, Amy (Consultant)
Subject: Re: Update items

Oh yeah, so as you know, the 'want to build a bored tunnel' crowd are coming out of the woodwork, with briefings starting this week. Would like to limit who engages the interested industry parties at the front end to ensure consistency in message prior to having a more evolved plan that has some executive concurrence.

Herrenknecht, who potentially could be the only firm playing in the 50+ TBM game, want to visit next Thurs the 29th as they swing through town. Please let me know if you would like to attend, this is strictly an initial introduction that they requested. My hope is to establish basic communication lines while at the Underground Construction Association conference next week, where many key players will be present.

John

From: White, John
To: Dye, Dave; Paananen, Ron; Stone, Craig
Cc: Reilly, John; Grotfendt, Amy (Consultant)
Sent: Tue Jan 20 19:32:52 2009
Subject: Update items

Just wanted to provide a status report on various activities. First, attached are a couple summary documents capturing initial thoughts on oversight and advisory structure. There is an accompanying list of candidates for roles on the technical and strategic advisory committees, we hope to have that to you tomorrow (John R is doing some final vetting).

We are working on a new boiler plate PPT, including some slides specific to leg hearing needs. I will call to discuss expectations to make sure we are aligned, so far we are keeping it lean and focused on messages from the folio along with some additional cost info and key points from the tunnel one pagers we are working on.

Speaking of those, the tunnel ones and most others are in motion, but needing more work still. Transportation performance remains a challenge, as we did not model a scenario that matches the current proposal, which begs getting modeling going at the front end of this effort, once we figure out the northend configuration.

Speaking of the northend, and other areas of City interest, we had an enlightening meeting with Chandler and Brown where they decrived their view of what is 'in' the EIS, and needless to say we aren't exactly on the same page. This should be item number 1 for next Monday's enviro strategy meeting.

Speaking of that meeting, we will have draft materials to you by COB Thurs, along with some key points from the City discussion. Well attended brown bag today, Linea and Bob made it and are now engaged in the 'what it will take' discussion. AGO discussion tomorrow.

John

From: Greco, Theresa
To: White, John; Preedy, Matt
Sent: Tue Jan 20 17:42:43 2009
Subject: Description of the Bored Tunnel Advisory Teams 1-20-09.doc

Attached is the last revision of the Bored Tunnel Advisory Teams for your review and distribution to Ron, Craig and Dave.

Take care.

Theresa

P R Info
Mislead
Process Enviro
contractor

From: White, John
Sent: Tuesday, January 20, 2009 7:48 PM
To: Dye, Dave; Paananen, Ron; Stone, Craig
Cc: Reilly, John; Grotefendt, Amy (Consultant)
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PDR

John

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PDR

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Making unsubstantiated claims

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John

? Chandler - Bob Chandler SPOT

Lisa Brown Senate Majority Leader?

From: Greco, Theresa
To: White, John; Preedy, Matt
Sent: Tue Jan 20 17:42:43 2009
Subject: Description of the Bored Tunnel Advisory Teams 1-20-09.doc

PDR

From: Dye, Dave
Sent: Monday, February 02, 2009 12:02 PM
To: Hammond, Paula; Paananen, Ron; White, John
Cc: Grotefendt, Amy (Consultant); Reilly, John; McLemore, Susanne
Subject: FW: Cost Estimating Manual

hey all - could you take a look at my draft response below and help clean it up, sharpen it, embellish on it etc. I think calling out some of the experts who helped us in our estimate and risk workshop and who will keep working with us in their unbiased roles will be helpful. Let's shoot for getting something back mid-week...obviously, cost, traffic performance, freight routing continue to come up so getting all those facts gathered will help...status on the overall package?

-dave

From: Simpson, Rep. Geoff [mailto:Simpson.Geoff@leg.wa.gov]
Sent: Monday, February 02, 2009 10:06 AM
To: Hammond, Paula; Dye, Dave
Subject: Cost Estimating Manual

Paula & David –

It is extraordinary to me that the estimate you have provided the legislature for the SR 99 tunnel comes in exactly at the amount of money that the state currently has available for the project. In your own **"Cost Estimating Manual for WSDOT Projects"** published this past November I find several interesting passages, starting with the intro: "Estimators should be shielded from pressures to keep estimates within programmed or desired amounts

based on funding availability."

Your comments imply that the estimate was adjusted to fit available funding - nothing could be further from the truth. The \$2.82 billion was (and is) the established cap of state investment in the overall project based on a "replacement in kind" project estimate updated in November 2006 consistent with previous legislative intent (expressed in several budget provisos). That amount does not represent the cost of the tunnel or the entire AWW improvement program, but rather, continues the commitment of that level of funding into the overall viaduct program.

During discussions with the Stakeholder Advisory Committee, the City, County, State and others, the limitations of state funding at this amount was discussed often. Options were developed and screened keeping this limitation in mind but without letting it completely limit our thinking...there was a strong desire to develop a multi-modal, systems solution around the SAC table. That is why all of the three final options - simple elevated replacement (all inclusive @ \$3.5 billion), surface-transit (@\$3.3 billion), and the deep bored tunnel (@ \$4.25 billion) exceeded the \$2.8 billion state funding level. The specifics of each option varied in how the state's funding was expended, but all realized that additional funding from the City and County would be necessary to fund the viaduct program.

The south end completion (moving forward projects) are about \$900 million, along with the SR 99 tunnel (about \$1.9 billion), removal of the existing viaduct (\$80 million), and construction of a replacement four-lane Alaskan Way with a direct connection to Elliott and Western Ave (about \$200 million) is about \$3.1 billion, which exceeds the states funding. When transit improvements, seawall replacement, other city street improvements, and utility relocations are added, the entire program cost is about \$4.25 billion. Thus, a funding partnership is required to complete the program - even the basic "state" project needs the \$300 million contribution from the port to work.

6/22/2009

The manual indicates that when projects are at a 0%-2% maturity, the estimates can vary by as much as +200%, and even when using CEVP on a project that is at between 1%-15% design – as your agency claims to have used for the tunnel – the estimates can vary by as much as +100%. Did WSDOT actually conduct a formal CEVP for the tunnel as indicated should be done during the design phase, or has the Department arrived at its estimate based on the self-modeling spreadsheet? What percentage of design has been completed for the tunnel and for the project as a whole?

The overall engineering level on the tunnel is near the 1% level, so your recitation of the variable nature of the project costs are well stated. And, while it is accurate to say WSDOT has not completed a full CEVP for the tunnel option, we have conducted an actual quantity-based estimate to which risk factors and inflation variation were applied. The range of cost presented (\$1.2 to \$2.2 billion) reflects the degree of variability given our level of design work, and is consistent with our cost estimating manual guidance. I should note that this estimate has been heavily influenced by our own experts and outside tunneling experts. The irony is most of the outside tunneling experts believe we have overestimated the price of the tunnel. However, given where we are in the process, we feel confident in our \$1.9 billion most likely estimate as presented last week.

Regarding the funding spreadsheet, as noted above, the \$2.8 billion state cap is a reality the project faces. All three of the final options (elevated replacement, surface-transit, bored tunnel) exceeded that amount. During negotiations with the principals involved, it became clear that the level of interest in "adding money to the project pot" depended a great deal on the option selected. None of our partners were interested in financially participating in any of the elevated options. In the end, the City of Seattle was willing to exercise a number of taxing options to allow the State to concentrate its funding on the SR 99 component (aka tunnel) and agreed to pick up the rest (less KC-Metro infrastructure and service) because they believed they benefitted most from the tunnel solution.

The manual indicates that "When a utility is located on an easement and WSDOT acquires the property through ROW acquisitions, WSDOT must pay all relocation costs in addition to providing the affected utility with a new easement." How does this relate to the agreement that Seattle provide the utility relocation costs? Would that typically be the responsibility of the state? The same question applies to the seawall replacement. As I recall, the seawall replacement has always been considered to be within the scope of the projects.

The issues regarding funding liability for the seawall and utility relocation are complex and subject to legal opinion. In general, financial responsibility for utility relocation depends on the specific rights the utility has acquired from the department. In this case, the City of Seattle owns the property upon which the viaduct rests, and the state owns the structure. Without going too far into this because of potential litigation down the road, suffice it to say it can be argued either way. (We included it in the "all inclusive" estimate of \$2.8 billion but certain legislative leaders never agreed the state would cover those expenses.) The seawall is similar, in that as far as it is an integral part of maintaining the on-going performance of the state highway, it could be argued it would be the state's responsibility. However, it could also be argued that the foundations of the viaduct could be designed to obviate the need for the structural support of the seawall and then it would not be needed. (We included it in the "all inclusive" estimate of \$2.8 billion but certain legislative leaders never agreed the state would cover those expenses either.)

And finally, (for now) what level of independent review has been conducted of the estimate you have provided to the legislature?

Cascadia and other tunnel experts have been very active in reviewing the tunnel estimate work to date. As noted earlier, their consultants (and others) still feel our tunnel estimates are too high, but our change of scope from twin bores to a single larger-bore tunnel brought the two estimates much closer in line. WSDOT has also engaged a panel of tunneling experts separate from the project design consultant that have reviewed the base estimate and contributed to the sizing of risk and contingency add ons. They have stated their support for the cost ranges

shared last week.

Thanks,

Geoff

VandenBerghe, Alissa (Consultant)

From: Ellington, Larry (Consultant)
Sent: Monday, February 23, 2009 4:50 PM
To: Lacy, Paul; Freudenstein, Angela
Cc: Salter, Jim; Williamson, Alec
Subject: RE: Schedule for Right of Way
Follow Up Flag: Follow up
Flag Status: Red

attn - but on a funny note - do you think buying subterranean land rights prejudices the outcome?

Paul,
If there is no federal money in any property transaction, WSDOT could proceed with acquisition prior to the ROD, provided property acquisition does not prejudice the outcome of the environmental process. WSDOT would probably prefer not to file a condemnation until the ROD was issued, but that would depend on the parcel and the circumstances.

Larry

From: Lacy, Paul
Sent: Monday, February 23, 2009 4:36 PM
To: Freudenstein, Angela; Ellington, Larry (Consultant)
Cc: Salter, Jim; Williamson, Alec
Subject: Schedule for Right of Way

Angela and Larry,

I am preparing a schedule for Right of Way plans for the bored tunnel.

Do we need to wait for the ROD before we condemn properties if necessary, or can we go to condemnation before the ROD?

What is the current best guess for the ROD?

Paul

From: White, John
Sent: Friday, March 20, 2009 1:57 PM
To: Mary Fleckenstein (fleckenstein.mary@leg.wa.gov)
Cc: Hicks, Elissa; Leiste, Willy; Paananen, Ron; Hopkins, David A.
Subject: FW: TBM Costs

Mary,

As discussed, a bit more detail on the tunnel boring machine procurement, costs and schedule.

John

John H. White, P.E.
Program Director
Alaskan Way Viaduct and Seawall Replacement Program
WSDOT Urban Corridors Office
Business: (206) 382 - 5270
Cell: (206) 450 - 2975

From: Greco, Theresa
Sent: Wednesday, March 18, 2009 1:09 PM
To: Leathers, Kathryn
Cc: Smith, Helena Kennedy; White, John
Subject: TBM Costs

Good afternoon, Kathryn

What we recently learned from credible tunneling sources (including tunnel contractors and boring machine manufacturers) is the cost of the tunnel boring machine (TBM) can range from \$60-85 million depending on the type of machine -- slurry or earth pressure balance (EPB). We anticipate that a design/build contractor would purchase the TBM as part of a larger fixed price contract to build the main tunnel structure. Given that the experienced tunnel contractors have established relationships with the TBM manufacturers worldwide, they would negotiate the final price and design terms with the manufacturer, based on performance requirements stipulated by WSDOT

We anticipate bringing the tunneling contractor on early to work with us as they would determine the type of machine (based on soil conditions from core samples), and would work directly with the TBM manufacturer on the design and construction of the machine. In recent weeks, we have spoken and met with several TBM manufacturers and tunnel contractors that have the ability to construct and operate a 54" TBM. There appear to be four companies worldwide that have the proven ability to construct this large of a TBM, and two of them have said that we should expect 16 – 18 months total for design, construction, shipping and on-site assembly of the machine. Per our current draft scheduling efforts, this would have the TBM on-site and operating in 2012.

Take care and have a good afternoon.

Theresa Greco
Deputy Director
Programs and Services
Alaskan Way Viaduct & Seawall Replacement Program
(W) 206-267-3785
(C) 206-713-0298
Email: greco@wsdot.wa.gov

6/25/2009

VandenBerghe, Alissa (Consultant)

From: White, John
Sent: Wednesday, March 11, 2009 12:28 PM
To: Preedy, Matt; Greco, Theresa; Williamson, Alec; Amiri, Ali
Cc: Rigsby, Mike (Consultant); Grotefendt, Amy (Consultant)
Subject: North/south materials development and communication needs
Follow Up Flag: Follow up
Flag Status: Red

Just wanted to touch base quickly on some things that came out of today's RP meeting, and some follow up discussion I had with Mike Rigsby.

As I think everyone knows, we are moving very quickly to try and get to a consensus between ourselves and the City over preferred north and south portal configurations and basic staging assumptions and associated traffic impacts. We are also headed quite quickly towards three Stakeholder Work Groups, whom we will work with over the next few months to vet the ideas we have considered and how landed on our preferred approaches.

Because we don't have much time, I have asked Mike for the following to get it on people's radar as near term needs:

- A roll plot that shows our evolving preferred final configuration at the north and south portals. My first comments was that the south portal needed aesthetic work to show all new connections, differentiating between the SR 99 bored tunnel connection and the surface connections. Right now you can barely see the surface connections, which need to stand out more clearly. Second comment/question was where are we at with the Republican NB off, and if we are close or have a workable concept, the roll plot I am asking for needs to show the final configuration without the detour connection. Ultimately we'll need separate materials showing staging and detours for both north and south portals.
- I have asked Mike to start thinking about renderings for the final south end configuration, which will be critical to communications, as well as having the team start to work with Communications over public friendly layout graphics for the preferred south portal final configuration. Once the north portal work shop occurs and we have the connectivity issues worked out, we very quickly need to do the same for the north end.

We are going to have to make the big push to get the north end concept nailed down and the south end staging nailed down, because our timelines are getting short ahead of starting public communication efforts.

Thanks for all the great work thus far,

John

VandenBerghe, Alissa (Consultant)

From: White, John
Sent: Tuesday, March 24, 2009 2:50 PM
To: 'Brenda Bohlke'; Greco, Theresa; Reilly, John; Preedy, Matt
Cc: Arany, Sally (Consultant)
Subject: RE: Summary Report out of Construction Strategies panel

FYI, at last Friday's SR 99 Corridor Coalition event in Olympia (the tunnel lobbying event where Peter Chamley, Jack Brockway and Jurgen Laubbichler spoke), I chatted with Tyler Sandell who is Robbins' Sales Manager. I told him that I would be in touch to set up a meeting sometime soon (thus the cc to Sally - thanks!). While he said that as a Ballard resident he was interested in the dual bore for future increased capacity, he said they understand the reasoning for the single bore decision.

As we touch base to set up a meeting with Robbins, will probably put in a call to Lovat and possibly NFM to hear their thoughts as well.

John

From: Brenda Bohlke [mailto:bmbohlke@hotmail.com]
Sent: Tuesday, March 24, 2009 5:40 AM
To: White, John; Greco, Theresa; Reilly, John; Preedy, Matt
Subject: Summary Report out of Construction Strategies panel

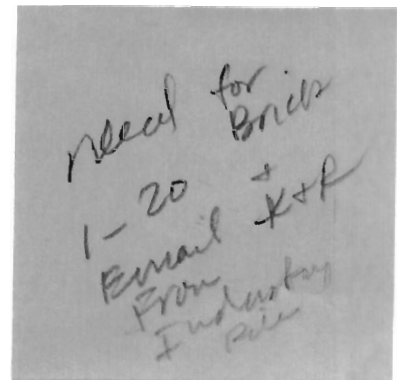
John,

the panel didn't have time to look at the cost nor the cash flow, so don't think we can weigh in on this at the moment. I mentioned the schedule is extended according to our realistic estimates beyond the 2015 date so the extension of that may impact costs. The CEVP process should take that into account.

Attached is the summary report out. We are working on the final report and will have that next week, but it shouldn't have any surprises in it. Mostly schedule needs aggressive, accelerated and compression of many a dozen or more key activities. DB is the only workable solution for the tunnel, but how do we get the competition.

I will forward the latest program for the Seattle conference--we are moving lunch out a bit. Take a look at where we have put AWRP--I have Dave Dye and Ron in the morning for their "The large bore and how we got here" then the afternoon session after lunch with the description of the project and your outreach to the industry. Let me know what you think. WE can change it. This is to give a flavor of the program to attendees. We are trying to get the international folks here, including Dragados, Vinci, but it would be good to get Bouygues, Impregilio, and others here as well. We've got the TBM guys coming. Robbins appears to be teaming up with Mitsubishi-- Lok Home will be on our panel, not Dick.

Brenda M. Bohlke
Myers Bohlke Enterprise, LLC
703 389 3679
bbohlke@myersbohlke.com



Subject. Re March 23, 2009 - World Trade Center developer seeks financing aid

6/30/2009

Date: Mon, 23 Mar 2009 11:37:30 -0700

From: WhiteJH@wsdot.wa.gov

To: bmbohlke@hotmail.com; GrecoT@WSDOT.WA.GOV; jjreils@attglobal.net; PreedyM@WSDOT.WA.GOV

Thanks Brenda, had seen this earlier. Caught up with Peter and Richard at the SR99 Corridor Coalition event in Olympia on Friday. I asked Arup if they would mind sending us a summary of the input they have provided regarding opinion related to adequate budget to build the project, they said they would send something today.

Tomorrow we will be working up the draft document that summarizes the independent reviews of the budget and scope of the project. My hope is to capture the Arup/Cascadia contribution, John R and Harvey P's independent review, and any opinion from yourself and the expert panel that you felt comfortable sharing.

Dave Dye wants something tomorrow, as a summary that can be used to support ongoing legislative discussion. Let me know your thoughts on providing input...

John

From: Brenda Bohlke

To: White, John; Greco, Theresa; Reilly, John; Preedy, Matt

Sent: Mon Mar 23 11:26:17 2009

Subject: FW: March 23, 2009 - World Trade Center developer seeks financing aid

See links below to article from Friday forum. Chamley quoted in support of large bore...

Brenda M. Bohlke
Myers Bohlke Enterprise, LLC
703 389 3679
bbohlke@myersbohlke.com

Subject: Fw: March 23, 2009 - World Trade Center developer seeks financing aid

Date: Mon, 23 Mar 2009 14:18:53 -0400

From: cdinges@asce.org

To: bmbohlke@hotmail.com

Brenda,

See Seattle tunnel story below...good news for you

Casey

From: ASCE SmartBrief

To: Dinges, Casey

Sent: Mon Mar 23 12:26:46 2009

Subject: March 23, 2009 - World Trade Center developer seeks financing aid

View wireless version here: <http://r.smartbrief.com/resp/pdhQredrBqeGcWCicedzCicNdDtD>

MARCH 23, 2009

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6/30/2009

- cost
- cost portion

VandenBerghe, Alissa (Consultant)

From: Leathers, Kathryn [Leathers.Kathryn@leg.wa.gov]
Sent: Tuesday, March 31, 2009 10:30 AM
To: Paananen, Ron
Subject: RE: When Elliott/Western ramps close down

Thank you, Ron.

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]
Sent: Tuesday, March 31, 2009 10:05 AM
To: Leathers, Kathryn
Subject: FW: When Elliott/Western ramps close down

Kathryn, John White told me you had a question about when the Elliot / Western Ramps will close. Mary Fleckenstein had a similar question. The e-mail string below contains the answer, along with some funding discussion.

From: Fleckenstein, Mary [mailto:Fleckenstein.Mary@leg.wa.gov]
Sent: Tuesday, March 31, 2009 8:18 AM
To: Dye, Dave; Paananen, Ron
Subject: RE: When Elliott/Western ramps close down

Thank you. That's an answer I can clearly understand.

From: Dye, Dave [mailto:DyeD@wsdot.wa.gov]
Sent: Tuesday, March 31, 2009 8:14 AM
To: Fleckenstein, Mary; Paananen, Ron
Subject: Re: When Elliott/Western ramps close down

Yes

From: Fleckenstein, Mary
To: Paananen, Ron
Cc: Dye, Dave
Sent: Tue Mar 31 08:06:23 2009
Subject: RE: When Elliott/Western ramps close down
So does that mean the state is responsible for the bridge over the RR mainline?

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]
Sent: Tuesday, March 31, 2009 8:03 AM
To: Fleckenstein, Mary
Cc: Dye, Dave
Subject: RE: When Elliott/Western ramps close down

Who is the contracting agency is yet to be determined, but the agreement between the Governor, Mayor and County Executive clearly shows the state financially responsible for tearing down the viaduct, constructing the 4 lane surface Alaskan Way with connections to Elliot and Western. The agreement also shows the City financially responsible for the promenade (\$100 million) and seawall replacement (\$250 million). While the bill specifically calls

7/14/2009

out the seawall and promenade as not eligible for state funding (along with city utility relocation), it is silent on the viaduct demo, surface street construction and connection to Elliot / Western.

From: Fleckenstein, Mary [mailto:Fleckenstein.Mary@leg.wa.gov]
Sent: Tuesday, March 31, 2009 7:49 AM
To: Paananen, Ron
Subject: RE: When Elliott/Western ramps close down

Who's building the bridge over the RR mainline? The City?

Did you read the language in our bill directing the city to do these various pieces of the project? Is there anything on the list that's not the city's responsibility as you understand it?

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]
Sent: Tuesday, March 31, 2009 7:42 AM
To: Dye, Dave; Fleckenstein, Mary
Cc: Ziegler, Jennifer
Subject: RE: When Elliott/Western ramps close down

\$290 million is the estimate we have included for the items Dave mentioned. We are finalizing some visuals that show how the connection of Elliot and Western to the waterfront will work. The connection sits in the footprint of the existing viaduct where today it is a side by side roadway over the BNSF RR mainline tracks. There will be some period of disruption in 2016 while the viaduct is removed and the Elliot / Western connection is built. One other detour that will be available is the Broad Street connection to the waterfront. By 2016, the City is scheduled to be done with repairs to the seawall, and there will be room to keep surface Alaskan Way open as the viaduct is torn down. Maybe not a great detour, but one that will be available. There are other mitigation strategies that will be developed specific to that closure. PDR

From: Dye, Dave
Sent: Monday, March 30, 2009 10:36 PM
To: 'Fleckenstein.Mary@leg.wa.gov'; Paananen, Ron
Cc: Ziegler, Jennifer
Subject: Re: When Elliott/Western ramps close down

Mary - the project budget for the bored tunnel includes 290 million (ron, check my number) to pay for removal of the viaduct and construction of a 4-lane replacement alaskan way with a direct connector up the hill from about pike (where the viaduct is today) to elliot and western - the budget also includes the moving forward projects and the bored tunnel itself - total funding for these elements is 3.1 billion - 2.4 billion state, 400 million tolls and 300 million port - no city money -- their responsibility is for city streets (other than alaskan way) and utilities and seawall...

We're working hard on the construction sequencing and phasing, and we will do everything we can to minimize the time the direct alaskan way connection up the hill is under construction - my guess right now were probably looking at 6 months minimum and likely longer - during this time traffic will have to go thru the tunnel to mercer, thru town or on I-5...not perfect but way less disruptive than our earlier construction plans...let me know if you have any questions...

-dave

From: Fleckenstein, Mary
To: Paananen, Ron; Dye, Dave
Cc: Ziegler, Jennifer
Sent: Mon Mar 30 20:16:18 2009

7/14/2009

Subject: RE: When Elliott/Western ramps close down

So, let's see if I have this right. The ramps at Elliot and Western stay open until the bored tunnel is completed, and then they'd close and you'd start tearing down the viaduct. The projects in my previous sentence are all state projects. You haven't quite figured out how you will move traffic from Elliot and Western to surface street Alaskan Way - and this is a city project. So what's the assurance the city will have this figured out, funded and constructed in the time frame necessary to make this work?

Thanks.

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]

Sent: Monday, March 30, 2009 5:17 PM

To: Dye, Dave; Fleckenstein, Mary

Cc: Ziegler, Jennifer

Subject: RE: When Elliott/Western ramps close down

Dave is correct. When the bored tunnel opens in late 2015, the ramps at Elliot and Western would close with the viaduct. The exact staging of a connection from Elliot and Western to the surface street Alaskan Way have not been worked out, but given the large volume of traffic that uses the ramps, detour staging will be critical to minimizing disruption when the viaduct closes. Our focus since the decision to go with the bored tunnel has been on maintaining viaduct traffic as the tunnel portals are constructed.

From: Dye, Dave

Sent: Monday, March 30, 2009 4:53 PM

To: 'Fleckenstein.Mary@leg.wa.gov'; Paananen, Ron

Cc: Ziegler, Jennifer

Subject: Re: When Elliott/Western ramps close down

Mary - as we just discussed, the ramps to Elliott/Western can stay open until 99 traffic is moved to the tunnel - then, removal of the viaduct commences and the viaduct's north end would be on the critical path to get it down and clear it out (including ramps) - I'll ask Ron his best guesstimate of the time between ramp removal connector opening...stay tuned...

-dave

From: Fleckenstein, Mary

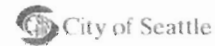
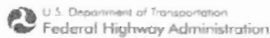
To: Dye, Dave; Paananen, Ron

Sent: Mon Mar 30 15:24:07 2009

Subject: When Elliott/Western ramps close down

When are the Elliott and Western ramps scheduled to close down? I recall their closure would be almost the last thing that happens before the bored tunnel opens to traffic. Can the grade separation over the railroad tracks be built with the E/W ramps open?

Alaskan Way Viaduct & Seawall Replacement Program



Monthly Internal Newsletter

Welcome to the internal newsletter for the Alaskan Way Viaduct and Seawall Replacement Program.

This is a general message to the team members at the program office, so please designate a person to share this newsletter with any off-site team members who may not be included in this distribution list.

Program update

- The Engineering Team has the following updates:
 - The S. Holgate Street to S. King Street project team has received approval to move forward with a Stage 2 design that is compatible with the bored tunnel concept. They continue to work toward delivery of the 90% PS&E milestone.
 - The North and South SR 99 ITS projects are in the process of completing 60 percent PS&E packages and are scheduled to deliver them in late April.
 - The Central Waterfront team now has an end-to-end concept developed for use by the Environmental team in the EIS. Work has begun to turn the concept into a snapshot plan set to be delivered in June. Conceptual design of the north and south portal configurations and tunnel cross-section is continuing. A contract packaging workshop was completed in early March, with results to be released in early April.
- The Environmental Team has the following updates:
 - The Finding of No Significant Impact (FONSI) for the Holgate to King Street Viaduct Replacement Project is complete. It was officially published on Feb. 25!
 - Permits for the S. Holgate Street to S. King Street project are mostly in hand and continue on schedule.
 - Permits for the SR 99 ITS improvements are progressing well and on track.
 - The bored tunnel methodology reports are being prepared. The reports will describe how we will evaluate potential impacts.
- The Utilities Team has the following updates:
 - For the S. Holgate Street to S. King Street Stage 1 project, the final PS&E ad-ready copy was submitted on Feb. 24. One addendum is anticipated to be prepared to address outstanding issues that could not be included in the ad-ready set.
 - The S. Holgate Street to S. King Street Stage 2 team completed the 90% design on March 13.
 - Design issues have been addressed such that construction agreements with the private communications utilities were completed in time for the March 9 ad date for the S. Holgate Street to S. King Street Stage 1 project.
- The Program Management team has the following updates:
 - The Business Group has prepared and submitted to WSDOT management for approval a revised program budget based on the bored tunnel alternative.
 - Project Controls is working to validate the data in the PRISM cost system and is also preparing a Master Program Schedule based on the bored tunnel alternative.
 - Document Management continues to implement Livelink for the remaining business units and is also preparing to use that system to hold a program master action item list.
 - Local Agreements continues to work with SDOT, SPU, and SCL to execute agreements for the first contract on the S. Holgate Street to S. King Street project.



no other alternatives

POR
POR

- The Right-of-Way Group is conducting studies to identify parcels needed to support a bored tunnel along its likely alignment.

Note from Deputy Program Director Matt Preedy

These past several months have been an exciting ride for all agencies associated with the AWW program. We have seen unprecedented tri-agency cooperation that has led to the bored tunnel recommendation. Without that cooperation, the public and political support for our program would rapidly dissolve, and we would most likely end up in a climate similar to the one that led to the famous 2007 “no-no” vote. In order for this program to be successful, it is vital that we maintain this spirit of working together at every level of the organization.

During the next few weeks a lot will be happening within the program. We have already seen the bored tunnel recommendation pass through the Senate with an overwhelming majority, and we are very optimistic that it will soon pass through the House of Representatives. Once we have the environmental strategy and the evaluation results from the bored tunnel workshop panel, we will be able to start working in a focused manner on the many necessary tasks to deliver the total program. Thank you for your patience during the past few weeks while we planned the work flow necessary to deliver on the 2015 corridor opening date commitment.

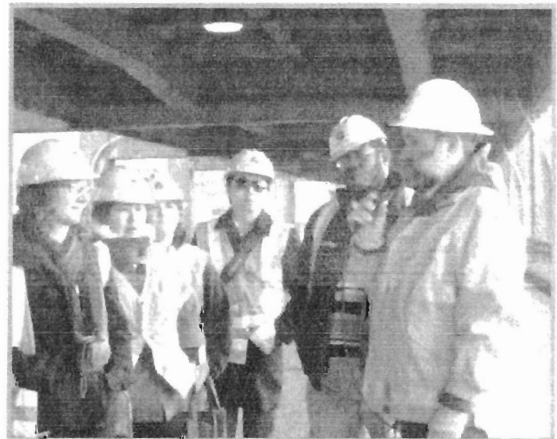
Recognition should also be given to the staff currently working on the Moving Forward project elements, since those pieces will set the tone for proving our ability to deliver on our promises. We have successfully advertised the S. Holgate Street to S. King Street Stage 1 project, and are working rapidly to deliver the S. Holgate Street to S. King Street Stage 2 project on time. It is critical that we maintain these successful efforts to gain public confidence.

Within another few weeks, all of the planning, strategy, and funding pieces should fall into place at about the same time. This is an extraordinary program with very challenging delivery commitments, so thank you in advance for your upcoming hard work.

Small amount of settlement found on the viaduct

No structural damage or new cracks were found during the March 21-22 inspection closure of the Alaskan Way Viaduct, but WSDOT bridge inspection crews reported a small amount of settlement of the viaduct near Seneca Street. New settlement in this area was approximately ¼ of an inch, bringing total settlement near Seneca Street to 1-5/8 inches since the Nisqually earthquake in 2001. Tests of the fire detection and suppression systems in the Battery Street Tunnel during the closure were successful. All sprinklers in the tunnel are functioning properly, and only a few of the heat detection devices need repairs.

In April 2008, four column foundations between Columbia Street and Yesler Way were strengthened after the columns had settled approximately 5-1/2 inches since the 2001 Nisqually earthquake. One year later, the columns are more stable, and no new settlement was detected in this area.



While crews were inspecting the viaduct, more than 110 members of the public took short walking tours of the viaduct and learned more about the program. Pictures of the tours can be found [online](#).

Environmental team celebrates Finding of No Significant Impact

At a recognition ceremony on March 6, Deputy Urban Corridors Administrator Ron Paananen awarded Sasha Visconti, Angela Freudenstein and Allison Hanson certificates recognizing their excellence in

creating and publishing the Finding of No Significant Impact for the S. Holgate Street to S. King Street project.

David Mattern, Kathy Rossi, Lorena Dinger, Jill Czarnecki, Jean Schwinberg, Heather Page, Gwen McCullough, Sasha Visconty, Ann Costanza, Margaret Kucharski, Ken Juell and Connie Gray all received "Pats on the Back" awards for their valuable contributions to the project.

Electrical Line Relocation project making progress

Crews are currently relocating high voltage electrical lines attached to the viaduct to an underground location just east of the structure. This project helps us prepare for S. Holgate Street to S. King Street project construction. It will also protect downtown's power supply in the event of an earthquake. Construction on this project is expected to be complete in winter 2009.

This month crews are installing transmission and distribution duct banks and utility vaults between S Royal Brougham Way and Railroad Way S.

You can see pictures of the construction work [online](#).

February open houses held in West Seattle and Ballard

Approximately 220 members of the public attended the Feb. 23 and 24 public scoping open houses in Ballard and West Seattle. These meetings were the first opportunities for members of the public to view information about the bored tunnel hybrid and make comments on it.

We presented information about all aspects of the hybrid recommendation, including funding sources, design, transit improvements, and driving connections.

Attendees were encouraged to comment on written comment forms or verbally to a court reporter. More than 40 written comments and 17 verbal comments were received. The comments were about a wide spectrum of topics, ranging from concerns about accessing the bored tunnel from the northwest to congratulating the agencies on the recommendation.

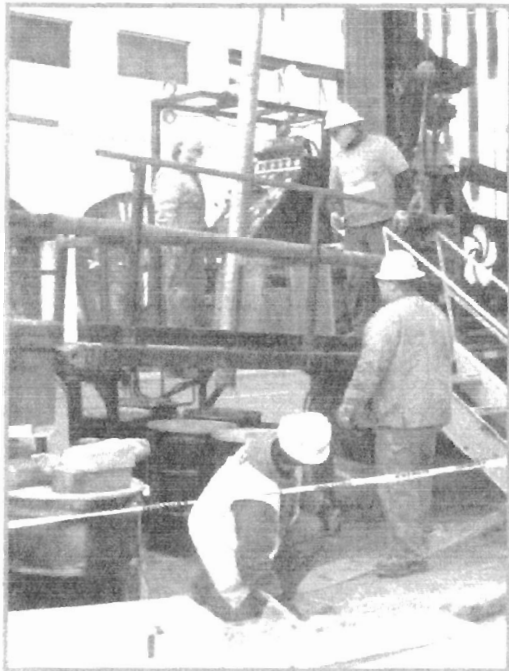


Members of the public review information about the bored tunnel recommendation during the West Seattle open house at Madison Middle School.



Program Director John White speaks with members of the public at the West Seattle open house

Geotechnical drilling begins for bored tunnel



In March crews began geotechnical drilling along the proposed alignment for the bored tunnel. The pictures above are from the first drilling location at Second Avenue and Lenora Street. Crews are also drilling holes along First Avenue between Virginia Street and S. King Street. This work will help engineers gather subsurface information that will better prepare us for construction of the bored tunnel.

Happy Birthday, Viaduct!

Saturday, April 4 marks the 56th anniversary of the opening of Alaskan Way Viaduct. A lot was going on in 1953. To give you an idea:

- Dwight Eisenhower had just succeeded Harry Truman as President of the United States.
- A nuclear test was conducted in Nevada.

- The Academy Awards were broadcast on television for the first time.
- Ian Fleming published his first James Bond novel, "Casino Royale."
- Sir Edmund Hillary and Tenzing Norgay became the first people to successfully summit Mount Everest.
- The coronation of Queen Elizabeth II took place at Westminster Abbey.
- The FCC approved color television.



Cutting the ribbon to open the Alaskan Way Viaduct on April 4, 1953. are, from left, Iris Adams, Mayor Allan Pomeroy and D.K. MacDonald, president of the Automobile Club of Washington. (Seattle P-I photo)



Three lanes of northbound traffic jam up at the north end of the Alaskan Way Viaduct on April 5, 1953. (Seattle P-I photo by Ed Watton)

AWV team volunteers for Habitat for Humanity

On Jan. 31, a sunny winter Saturday, a group of team members volunteered at the Habitat for Humanity site in Everett.

The site in Everett contains four future home sites. The volunteer crew helped with site grading and framing. The grading was done the old-fashioned way – with shovels – because Habitat for Humanity prefers to save their donations for materials instead of equipment rental.

The volunteer crew worked alongside one of the future homeowners, since Habitat for Humanity requires future homeowners to put in more than 200 hours of “sweat equity.” The homeowner said that the viaduct program crew was one of the hardest working groups she had seen.

Another volunteer opportunity is scheduled for Saturday, April 25. If you are interested in helping out, please contact Monique Nykamp at nykampm@wsdot.wa.gov.



The viaduct crew takes a break to pose with some of the Habitat for Humanity's future homeowners.

Team member spotlight: Mike Colyn



Name: Mike Colyn

Job Titles: Package Manager for the S. Holgate Street to S. King Street Viaduct Replacement Project - Stage 2 and Civil Lead - S. Holgate Street to S. King Street Viaduct Replacement Project - Stage 1

Favorite thing about working on program: The people I work with and interact with. The design team members are fantastic and I really enjoy interacting with so many different people from the various stakeholders: BNSF, Coast Guard, Port, City, County, and various property owners and tenants. Of course, working on a project that is so complex and challenging is also fun.

Most interesting thing I did at work this week: The last couple weeks we've been working on modifying the scope and maintenance of traffic strategy for the S. Holgate Street to S. King Street - Stage 2 to accommodate the bored tunnel alternative.

Hobbies: I love running and participating in relays, marathons, and half-marathons.

TV Show: It's a toss up - I love "The Office," and right now my wife and I are watching "Lost" on DVD.

Favorite book: I like just about everything I've read by John Irving - maybe the favorite being "Prayer for Owen Meany"

AWV team member passes CDFA certification exam

Congratulations to Lois Diemert (Jacobs) on passing the Certified Design Firm Administrator (CDFA) exam! The Society for Design Administration (SDA, www.sdadmin.org) offers CDFA certification to administrative staff working in the architecture, engineering and construction industry. Lois has worked in the engineering field for more than 20 years and became a member of SDA last year.

AWV around town



(From left to right) Rick Conte, Mike Rigsby and Ralph Petereit at the High Hut near Mount Rainier on Feb. 21 Contact Mike or Rick to sign up for the next adventure



Jay Mezher, Eric Peiffer, Gordon Clark, David Mattern, Ralph Graves, Mike Rigsby, Rick Conte, Ralph Petereit, and Steve Gleaton's dog, Mars, visit Nordic Pass on Mar. 28.

Safety: Earthquakes

Earthquakes are always a risk living in western Washington. Many go without notice to the general public, but preparedness in the event a large earthquake occurs could make a huge difference in how you make it through.

- Establish an "out-of-area" contact and keep the phone numbers handy. This is the person family members will call if you are separated.
- Prepare an emergency kit for yourself that includes sturdy shoes, a battery powered radio, food and water for three days, and some basic first-aid supplies. Try to keep one kit at work, home and in your car
- When you feel an earthquake, DROP and COVER under a desk or sturdy table. Stay away from windows and objects like bookcases that could fall. HOLD on to the desk or table. If it moves, move with it. Do not run - stay where you are. "Drop, Cover and Hold."
- Immediately after the earthquake, use the phone ONLY to report a life threatening emergency.
- After the earthquake, listen to a radio to find out if there are evacuation advisories or other steps you should take to ensure your safety.

For more information about earthquake preparedness, visit:
www.emd.wa.gov/hazards/haz_earthquakes.shtml.

Volunteer this Earth Day

Since 1970, people across the world have been celebrating Earth Day by planting trees, cleaning up parks and restoring local habitats. This year, Earth Day is celebrated on April 22, but many groups organize activities on the weekends before and after that day. There are many different ways for you to get involved in and around Seattle. For more information on activities near you, visit www.earthday.net/search/node.

If gardening or the outdoors aren't your specialty, National Volunteer Week is April 19-25. Monique Nycamp has a great opportunity to volunteer on April 25; e-mail her at nykampm@wsdot.wa.gov for more information. There are also lots of opportunities for you to get involved with nonprofit organizations near the office. Seattle's Union Gospel Mission and the Bread of Life Mission are both homeless shelters in Pioneer Square.

Newsletter survey

Thank you to everyone who replied to the newsletter survey with their comments and suggestions. The communications team reviewed the responses, and you should start to see some minor additions in the coming months. Your input is important to us, so if you didn't fill out a survey but would like to make a suggestion, please e-mail Alissa VandenBerghe at vandena@consultant.wsdot.wa.gov.

Thanks again!

New staff merging

Welcome to the newest additions to our team!

Pete Bassford, HMM, Project Controls
Dana Bellows, Jacobs, Structural
Bill Conner, PB, Structural
Jeff Donahue, WSDOT, Civil
Randy Everett, FHWA
Chris Hawkins, PB, Tunnel Design
John Leibe, Hill International, Program Management
Lee MacClellan, WSDOT, Design
Casey Nelson, Jacobs, MOT

Don Phelps, HMM, Design
Matt Ringstad, Jacobs, Civil
Amy Turner, EnviroIssues, Communications
Tom Woodworth, Hill International, Program Management
Steve Wu, WSDOT, Design

Upcoming Events

April 4: 5th Annual Gathering of Neighbors
April 15: Parkshore Retirement Home
April 15: Morgan Community Association
April 30: Pike Place Market PDA
April 30: The Blue Book GC

Alaskan Way Viaduct and Seawall Replacement Program Web site

www.alaskanwayviaduct.org

From: Leathers, Kathryn [Leathers.Kathryn@leg.wa.gov]
Sent: Tuesday, April 07, 2009 8:27 AM
To: Paananen, Ron; Hammond, Paula
Subject: RE: AWW - Rep. Dickerson Amd

Thank you, Ron. I'll try to incorporate those comments. Kathryn

-----Original Message-----

From: Paananen, Ron [mailto:PaananR@wsdot.wa.gov]
Sent: Monday, April 06, 2009 9:23 PM
To: Hammond, Paula; Leathers, Kathryn
Subject: RE: AWW - Rep. Dickerson Amd

I will add a little more to the Aurora Bridge discussion.

There are backups on SR 99 at the south end of the Aurora Bridge due to the ramps that access north Queen Anne. The local street intersections near the bridge at these ramps can be managed better to prevent backups onto SR 99. To a lesser degree, the same is true for the northbound off ramp to Bridge Way at the north end of the bridge.

From: Hammond, Paula
Sent: Mon 4/6/2009 4:22 PM
To: 'Leathers, Kathryn'; Paananen, Ron
Subject: RE: AWW - Rep. Dickerson Amd

Kathryn,

Ron is driving, so I'm reading this to him, and I'll type our response in blue below:
Paula

From: Leathers, Kathryn [mailto:Leathers.Kathryn@leg.wa.gov]
Sent: Monday, April 06, 2009 3:55 PM
To: Paananen, Ron
Cc: Hammond, Paula
Subject: AWW - Rep. Dickerson Amd
Importance: High

Hi Ron,

At Rep. Dickerson's request, I asked the City to identify specific language in the amendment that they believed addressed state responsibilities. Below is their initial response. Rep. Dickerson has asked me to work with you/WSDOT for the purpose of getting this amendment right - that is, it is her intent to exclude work that is the state's responsibility.

In other words, I will be re-drafting her amendment, as needed, and I need some help in getting it right. Can you please review the City's responses, including the comment made by David, and let me know whether the City's comments accurately reflect WSDOT's understanding of the state's responsibilities?

Thank you,

Kathryn - 786-7114

From: davidfoster9@gmail.com [mailto:davidfoster9@gmail.com]

Sent: Monday, April 06, 2009 3:06 PM
To: Leathers, Kathryn
Subject: Fw: Amendment

Kathryn - Here's a quick response. We also believe this puts the federal funding for Spokane St at risk due to the timing of the legislation/bids and federal requirements.

Sent via BlackBerry by AT&T

From: "Robert Powers"
Date: Mon, 06 Apr 2009 13:19:51 -0700
To: <davidfoster9@gmail.com>; Andrew Glass Hastings<andrew.glasshastings@Seattle.Gov>; Bob Chandler<Bob.Chandler@Seattle.Gov>; Tracie Sunday<Tracie.Sunday@Seattle.Gov>; Tracy Burrows<Tracy.Burrows@Seattle.Gov>
Subject: Amendment

hey David - give me a call when you get this

Powers

Page 1, Section B, lines 20-23:

* There are no traffic lights on SR 99 between Spokane Street and the Aurora Bridge, nor are there any planned as part of this project. True, and SR 99 will become the tunnel.

Page 1, Section C, lines 24-27 through page 2, lines 1-2:

* The State is responsible for the design and construction of the SR 99 South End Replacement (from Holgate to King streets). True

* The State is responsible for the design and construction of the SR 519 Project True

Page 2, Section D, lines 3-5:

* The city is working with the state on the design of the north portal to the bored tunnel, which will play an important role in providing access. The state is responsible for construction, and associated costs, of the north portal as part of the agreement. This is a true statement

Page 2, Section B, lines 16-17:

* Policies related to the Aurora Bridge are a state responsibility. The city operates the Aurora Bridge by state law, and operates city streets that are adjacent to the Aurora Bridge. I'm assuming "Policies" means operational policies, so these are the city's responsibility. I don't know what the issue is with on-street parking, but the city controls that.

Page 2, Section B(iii), lines 22-23:

* The city is working with the state on the design of the north portal to the bored tunnel, which will play an important role in providing access. The state is responsible for construction, and associated costs, of the north portal as part of the agreement. This is a true statement

Page 2, section C, lines 32-34 through Page 3, lines 1-2:

* The city is not responsible for the costs associated with construction of the new Alaskan Way, the SR 99 South End replacement and the SR 519 projects. This section should be clarified to reflect that. (For example - the city is responsible for the efficient operation of Alaskan Way, but not for building it.) This is a true statement and a good clarification.

This whole thread below - proceeding with building the tunnel

From: White, John
Sent: Wednesday, April 15, 2009 3:51 PM
To: 'Brenda Bohlke'; Reilly, John
Cc: Preedy, Matt
Subject: FW: Bored Tunnel Contracting Options Schedules: Issues that have Arisen Since Meeting Yesterday
Attachments: Meeting Minutes and White Board Photos from Tunnel Contract Discussion of 4/14/09

Just thought I'd send a couple things your way that describe the discussions we have had this week over contracting approach. Within the attached e-mail is a Word document that captures the different packaging/delivery options the team was going to further assess. On top of that you can follow the e-mail chain below over some dialogue that followed the meeting and a reminder I sent our managers.

The goal is to work through this exercise and have it inform/justify our decision-making related to packaging. The team is going to present draft schedules for the different options by COB Monday 4/20, then we hope to meet as a group on Friday 4/24 to review the pros/cons/issues of the different approaches. We're hoping to meet with yourselves early the week of the 4/27, since we need to brief Ron and others later in the week, ahead of the conference and forum on 5/4 and 5/5.

I'll be honest that and say that at this point I do not concur with a couple of the options/sub-options at this point in time, but I am keeping an open mind and letting people to their work and see if any of it changes my mind. Please feel free to share any preliminary thoughts by e-mail.

John

From: White, John
Sent: Wednesday, April 15, 2009 9:06 AM
To: Preedy, Matt; Everett, Susan; Greco, Theresa
Subject: RE: Bored Tunnel Contracting Options Schedules: Issues that have Arisen Since Meeting Yesterday

I just wanted to share a few thoughts between us.

I see this as a necessary exercise to both inform and help document our recommendation to Ron and Jerry. That said, I want to make sure we are all clear that this is not a democratic vote by any means, we (meaning the 4 of us) will be solely responsible for the ultimate recommendation, which is highly unlikely to have 100% consensus. Remember, our recommendation will need to meet our execs expectations, and that is meeting a very aggressive schedule. I have significant reservations on some of the approaches advocates for in the discussion, but will be patient and wait to see the outcome of the scheduling effort first. Some of the approaches advocated for will almost certainly push us beyond open in 2015 (which we are expected to come as close as possible to meeting), others will likely create too much risk due to too many overlapping contracts within the tunnel.

Ultimately there is probably quite a bit of risk any which way we go with this (right?), but we know that and are thus responsible for managing and allocating risk strategically as we move forward, to ensure we achieve successful bids. There are plenty of national/international joint ventures delivering \$800M +/- projects, so it's not like there is not precedent. The problems primarily center around risk management/allocation, bonding, and insurance.

John

From: Jamagan, Harry (Consultant)

6/19/2009

Sent: Wednesday, April 15, 2009 5:56 AM

To: Preedy, Matt; Everett, Susan

Cc: White, John; Greco, Theresa; Phelps, Don (Consultant); Oblas, Vic (Consultant); Ludington, Chris (Consultant); Smith, Brian (Consultant)

Subject: Bored Tunnel Contracting Options Schedules: Issues that have Arisen Since Meeting Yesterday

Importance: High

Matt and Susan,

Shortly after our group meeting yesterday, Don Phelps, Vic Oblas, Chris Ludington, Brian Smith, and I met to commence work on the various contracting options schedules that are required to be reviewed early next week. Per your direction, we are making you aware of the following issues. I would have preferred to meet with you personally, but your schedules for the next few days did not show any available time for this, so I am sending these to you via this email:

1. UTILITIES:

- There may be a case to be made for including utilities relocation scope into the South Portal TBM Launch contract. This is because:
 - We won't know the definite scope of utilities relocation required until an appropriate level of design is completed by the DB Contractor.
 - It's possible that utilities will not require relocation per se, but only will need to be supported in-place.
- One possible method of managing utilities relocation would be to:
 - Complete a higher level of design for the utilities than for other portions of the tunnel to ensure a more complete knowledge of the required utilities relocation scope.
 - Plan to relocate the utilities in the field in advance.
 - In the RFP documents to the short-listed DB Contractors, strictly define the South Portal limits and indicate that utility interferences will be cleared within that envelope.
 - Associated with the bullet immediately above, tell the short-listed DB Contractors in the RFP document that they proceed at their own risk if they choose to work outside of the defined South Portal limits.
- In addition to the utilities in the immediate area of the TBM launch site, it's likely that the City will require the relocation of utilities in that area where the tunnel is vertically close (i.e., from King to vicinity Cherry Street). These utilities could be affected by the tunnel settlement trough, and soil grouting could infiltrate the utility lines. Vic Oblas' experience on the Bus Tunnel was that the City required utility relocation along Third Avenue for similar reasons then, and it's likely that this will be repeated on our tunnel project.

2. TBM EXTRACTION PIT: It makes no sense to include the TBM Extraction Pit scope anywhere but in the North Portal scope. Options 1A and 1B envision that the Extraction Pit scope be included with the tunnel bore contract, and this is not advisable.

3. NORTH-TO-SOUTH TUNNEL BORE: One option not fully investigated, but which might have advantages, is to launch the TBM at the North Portal, and then drive southward. One advantage to consider is that there are no utilities to relocate in advance in that area, allowing more time to deal with the utilities in the South Portal footprint. There may be right-of-way acquisition disadvantages. The team suggests that this option be investigated along with the other options.

4. NO SEPARATE SCHEDULE FOR OPTION 1C: Option 1C is very similar in concept to Option 1B, so the schedule development team is not planning to present a separate schedule for 1C.

5. TIME FOR NEXT REVIEW MEETING: Don Phelps and Vic Oblas will both be fully engaged in a tunnel workshop on Wednesday and Thursday of this week, and both of them have unavoidable conflicts on Friday. They request that the timing of the next schedule review meeting be moved to the afternoon of Tuesday, April

21st, instead of Monday, April 20th.

Please let us know if you have any comments on the above. Thanks.

Harry Jarnagan
Deputy Program Manager

**Alaskan Way Viaduct &
Seawall Replacement Program**
Seattle, WA

Office: 206-267-6893
Cell: 209-327-8577

BORED TUNNEL CONTRACT PACKAGING OPTIONS

Summary of Options and Meeting Minutes April 14, 2009

Option 1A:

<u>Contract</u>	<u>Method of Delivery</u>
1. South Portal TBM Launch	Design Bid Build (DBB) or General Contractor / Construction Manager (GCCM)
2. Tunnel Bore / Extraction Pit	Design Build (DB)
3. Tunnel Interior Structure / Systems	DB
4. South Portal Transition + South Vent. Structure	DBB
5. North Portal Build-out + North Vent. Structure	DBB
6. Early Utilities	DBB

Option 1B:

<u>Contract</u>	<u>Method of Delivery</u>
1. South Portal TBM Launch + Tunnel Bore / Extraction Pit	DB
2. Tunnel Interior Structure / Systems	DB
3. South Portal Transition + South Vent. Structure	DBB
4. North Portal Build-out + North Vent. Structure	DBB
5. Early Utilities	DBB

Option 1C:

<u>Contract</u>	<u>Method of Delivery</u>
1. South Portal TBM Launch / Tunnel Bore	DB
2. Tunnel Interior Structure / Systems	DB
3. South Portal Transition + South Vent. Structure	DBB
4. North Portal Build-out + North Vent. Structure + North TBM Extraction Pit	DBB
5. Early Utilities	DBB

Option 2 (Construction Strategies Workshop Report Recommendation):

Contract	Method of Delivery
1. Tunnel Bore / Interior Structure / Systems (Excl. System Runs to Vent. Structures)	DB
2. North TBM Extraction Pit / North Build-out / North Detours	DBB
3. Vent. Structures (North and South)	DBB
4. South Portal TBM Launch	DBB or GCCM
5. South Portal Transition	DBB
6. Early Utilities	DBB

Option 3:

Contract	Method of Delivery
1. Early Utilities	DBB
2. South Portal TBM Launch / Tunnel Bore / Interior Structure	DB
3. Tunnel Systems	DBB
4. North Detour / North TBM Extraction Pit / North Portal Build-out / North Vent. Structure	DBB
5. South Portal Transition / South Vent. Structure	DBB

Note 1: "Vent. Structure" = Structure + System Runs to and Tie-in's with Tunnel Systems (typical for all Options).

Meeting Minutes:

1. Open Questions from the Single Bore Tunnel Project Construction Strategies Workshop Report:
 - A. Should the tunnel systems be included into one large DB contract, or kept separate?
 - B. Should the South Portal TBM Launch contract be in the tunnel contract, or be held separate?
 - C. For a large tunnel contract including the tunnel bore, interior structure, and systems, what will be the expected level of bid competition? What will be the legislative changes relevant to bonding that could affect competition?
2. Recommendation from Alec Williamson:
 - A. Have one contract to build the structure envelope (no interior structure or systems included) for the South Portal, tunnel, and the North Portal including TBM extraction. This is closest to an "Option 2" developed separately by Vic Oblas. This approach would involve:
 - 1) Completing the work under the contract mentioned above.

- 2) After this is complete, commence with the build-out of the interior structure and tunnel systems. Start this work in the middle of the tunnel, and then work simultaneously to the south and north ends.
 - 3) In parallel, build-out the South and North Portals.
3. Decisions that WSDOT will control (i.e., will not leave to a DB Contractor):
- A. Fundamental tunnel geometrics (cross section and vertical / horizontal alignment).
 - B. Maintenance of traffic.
 - C. Roadway configuration at North and South Portals.
 - D. Fire Life Safety system performance requirements.
4. Discussion about the contract packaging options:
- A. An advantage of Option 1A is that it limits the scope of the tunnel contract to the bore and extraction pit only. This is more limited in scope than the other options, so would not require as much time to develop the RFP.
 - B. Disadvantage to executing a large-scale turnkey tunnel bore / interior structure / systems contract is that a single contractor with all of that scope could severely jeopardize the project in the event of a claim.
 - C. Is there any advantage in separating the tunnel interior structure from the tunnel systems?
 - D. Would the tunnel "squat" into an oval cross section if the interior structure was not immediately placed into it as the TBM advances? Discussion about this was to the effect that deformation should be minimal. The interior structure should be pre-cast, but include cast-in-place connections to the segment walls that could "take up" any variations in the tunnel cross section that might occur during the tunnel bore.
 - E. Bob Dyer discussed the status of legislative discussion concerning lowering bonding requirements to less than 100% of contract value.
5. Guidance from Susan Everett about RFP schedule activities:

<u>Activity</u>	<u>RFP that Includes Tunnel Systems</u>	<u>RFP that Excludes Tunnel Systems</u>
Kick Off the RFP Development Process	2 months	2 months
Develop / Complete the Technical Content	6 months	4 months
Finalize Content and Review	4 months	3 months
TOTAL	12 months	9 months

6. Direction from Matt Preedy and Susan Everett about next steps:
- A. Hold a meeting on the afternoon of Monday, April 20th, where the following will be presented and reviewed.
 - 1) One "rough cut" schedule and one pro / con matrix each for contract package options:
 - a) 1A
 - b) 1B
 - c) 1C
 - d) 2
 - e) 3
 - 2) Individuals given the action to develop the schedules and pro / con matrices were:
 - a) Don Phelps.
 - b) Vic Oblas.
 - c) Rick Conte.
 - d) Chris Ludington.
 - e) Mike Brunner is available to assist Chris Ludington in developing schedules.
 - B. The above schedule / matrix development team is to let Matt and Susan know immediately if any concerns or cautionary issues arise that were not already discussed in today's meeting.

From: Dye, Dave
Sent: Friday, April 17, 2009 12:48 PM
To: Parker, Christie
Subject: RE: Viaduct Amendment

Christie - as I read the amendment, it would allow us to proceed with the south end contract work planned to be advertised this fall (the big job) - which is the critical path - and then require us to update the legislature on the total project cost and the cost of the bored tunnel section (including a review of the tunnel estimate by independent experts) in the 2010 leg session - and then the leg effectively has to give us the final "green light" -- if that happens, we'll be fine for our overall schedule - we would issue an RFP for the tunnel right after the 2010 session -- it all works...as long as my interpretation is right..

-dave

From: Parker, Christie [mailto:Parker.Christie@leg.wa.gov]
Sent: Friday, April 17, 2009 11:50 AM
To: Dye, Dave
Subject: Viaduct Amendment
Importance: High

Hi, there is an amendment in play on the viaduct bill that I need to ask you about (language is below). Does the department plan to enter into the contract for construction of the bored tunnel before next year? Does the requirement for "updated cost estimates" pose any problems or concerns for the department, and do you have any thoughts about the convening of experts to review the estimates?

We are struggling to figure out the critical path for this project to make sure that the legislators are aware of any language changes that could cause a project delay. If you have any scheduling information to share about the project, now would be a great time to send it. I recognize the department has not issued a formal project schedule; I'm suggesting that information be provided, if possible, for informational and illustrative purposes only.

Thanks,
 Christie

(3) The department shall provide updated cost estimates for construction of the bored tunnel and also for the full Alaskan Way viaduct replacement project to the legislature and governor by January 1, 2010. The department must also consult with independent tunnel engineering experts to review the estimates and risk assumptions. The department shall not enter into a design-build contract for construction of the bored tunnel until the report in this section has been submitted.

Strategy
 RAISE
 ISSUES

7/13/2009

From: Dye, Dave
Sent: Monday, April 20, 2009 12:48 PM
To: 'Clibborn, Rep. Judy'
Cc: 'Fleckenstein, Mary'; Ziegler, Jennifer; Paananen, Ron
Subject: RE: Dickerson AWW Amendment

Representative Clibborn - Mary asked me to review the proposed amendment and comment on two points, the first being the selection of the three likely bidders, and the second being the requirement for a fixed price contract for the bored tunnel...here are my initial thoughts...

With regard to the "pre-determination" of the three likely bidders, we believe that WSDOT cannot legally make such a selection because we would be circumventing the legally mandated requirements under our design-build law. We would need to go through a formal selection process, first through a Request for Qualifications step where we would short list the bidders, and then proceed with the formal issuance of a Request for Proposal, where we would then review the specific proposals from the short-listed teams. It is worth noting that our experience indicates a high level of proprietary information comes in these proposals and firms are not anxious to share specifics for fear of losing the competitive edge. I suggest we keep the tunnel expert panel review currently included.

With regard to the fixed price contract requirement, we believe that the best contracting tool should be used for the right reasons...obviously, cost certainly is a high priority, but best value for the taxpayers remains the overarching goal -- it may be other types of contracts for the various portions of the tunnel project are better suited to meet that purpose, while providing the protection we want. I would suggest we could include some language that requires the department to prepare a construction management and contracting plan and present it to the leg next session as a way to help move this along - alternatively, we could add it to the JTC things to do list for this summer.

-dave

From: Fleckenstein, Mary [mailto:Fleckenstein.Mary@leg.wa.gov]
Sent: Monday, April 20, 2009 12:21 PM
To: Dye, Dave
Subject: Dickerson

*** eSafe2 scanned this email for malicious content ***
*** IMPORTANT: Do not open attachments from unrecognized senders ***

VandenBerghe, Alissa (Consultant)

From: Struthers, James
Sent: Thursday, April 23, 2009 11:37 AM
To: Tobin, Thomas
Cc: Williamson, Alec
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594
Follow Up Flag: Follow up
Flag Status: Red

The decision to supplement the Shannon & Wilson on-call agreement is based on the following considerations. The primary concern hinges on the accelerated schedule for delivery of the RFP package for the AWW bored tunnel. Shannon and Wilson has been heavily involved in this project since 2001. This long term familiarity with the project, project team operations, and the specific geotechnical constraints within the project corridor provides a significant advantage the project team in terms of meeting project delivery timelines. In addition, we are currently executing a phase geotechnical program to deliver design information for the proposed tunnel. I have significant concerns that switching consultants at this stage in the program would result in unacceptable delays in the timely delivery of geotechnical data and design recommendations that will be needed by the project team during development of the RFQ and RFP. As the RFQ is scheduled to go out in fall of 2009 and the RFP is scheduled for delivery in December 2009, I am concerned that a change-over of the program at this point would result in the project team not being able to hold these delivery dates.

Timeline
RFP
RFQ

I would however, like to get access to qualification and capability information for the other UCO on-call geotechnical consultants. There are several design issues that will unfold during the course of design that it will likely be appropriate use consultants on the list with good capability in specific areas of expertise. Any information that I could get on the capabilities of the other on-calls would be quite useful to me in the planning of future work

Thank you.

James R. Struthers, C.E.G
Assistant Chief Foundation Engineer
Special Projects Manager
WSDOT Engineering and Environmental Programs
(360) 791-2847

From: Tobin, Thomas
Sent: Thursday, April 23, 2009 8:52 AM
To: Struthers, James
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594

Any thoughts? Too bad S&W won't bring on any support subs?

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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From: Tobin, Thomas
Sent: Wednesday, April 22, 2009 12:10 PM
To: Struthers, James
Subject: FW: Supplemental 3 for Shannon & Wilson Agreement Y-9594
Importance: High

Jim, you'd better read this as it comes up all the time?

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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From: Kirsch, Carol
Sent: Wednesday, April 22, 2009 12:08 PM
To: Tobin, Thomas
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594

Hi Tom,

Hey, in reviewing the agreement and the others on the On-Call list for that same category, we have found that Shannon & Wilson is the only firm that is being used. There are 7 other firms that have agreements currently in place that have not been used to date. Have you or your project team consider using some of the other firms. Please let me know if this is a possibility.

Thanks
Carol Kirsch
Contract Specialist 1
Consultant Service Offices
Phone (360)705-6962

"A life lived for others is a life worthwhile. We cannot live a full life unless we have a purpose bigger than ourselves."
Albert Einstein

From: Tobin, Thomas
Sent: Wednesday, April 22, 2009 12:00 PM
To: Kirsch, Carol
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594

Status Update please?

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

6/22/2009

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From: Tobin, Thomas
Sent: Thursday, April 16, 2009 12:09 PM
To: Kirsch, Carol
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594

Thanks for the update, Carol.

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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From: Kirsch, Carol
Sent: Thursday, April 16, 2009 11:15 AM
To: Tobin, Thomas
Cc: Scott, Stacy
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594

Tom,

It has been sent for approval. I'm just waiting. I did ask that this be rushed if possible.

I'll let you know as soon as I hear.

Carol Kirsch
Contract Specialist 1
Consultant Service Offices
Phone (360)705-6962

Only a life lived for others is a life worthwhile. We cannot live a full life unless we have a purpose bigger than ourselves.
Albert Einstein

From: Tobin, Thomas
Sent: Thursday, April 16, 2009 11:10 AM
To: Kirsch, Carol
Cc: Scott, Stacy
Subject: RE: Supplemental 3 for Shannon & Wilson Agreement Y-9594

Any news on our request?

Thomas Tobin
Urban Corridor Office WSDOT

6/22/2009

999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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From: Tobin, Thomas
Sent: Tuesday, April 14, 2009 10:51 AM
To: Kirsch, Carol
Cc: Scott, Stacy
Subject: Supplemental 3 for Shannon & Wilson Agreement Y-9594
Importance: High

Hi Carol. As requested, the back up cost for our Shannon and Wilson supplemental request.

Please contact me if you need anything else, and thanks very much for doing this for us.

Tom

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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From: Struthers, James
Sent: Tuesday, April 14, 2009 10:48 AM
To: Tobin, Thomas
Subject:

Tom,

As requested, attached is a table of revised estimate of funds that will be required to continue geotechnical efforts for the bored tunnel and associated portals. This revised estimate is based on further review of the project as it has developed since our initial estimate. Based on this review, it is my opinion that our previous estimate was both under-conservative with respect to the required design effort and allows little latitude for ongoing design changes and changes that will likely occur as the project develops. Accordingly, it is my opinion that the attached revised costs should be used as a target value for the proposed fund supplement to Contract Y-9594.

Thank you.

James R. Struthers, C.E.G.
Assistant Chief Foundation Engineer
Special Projects Manager
WSDOT Engineering and Environmental Programs
(360) 791-2847

6/22/2009

From: Turner, Amy (Consultant)
Sent: Wednesday, April 29, 2009 5:24 PM
To: Paananen, Ron
Cc: Larsen, Chad; Van Ness, Kristy (Consultant); Grotefendt, Amy (Consultant)
Subject: Edits by noon Thurs. - Committee of the Whole PPT
Attachments: 5-4 COW TP's.pdf

Hi Ron,

Here's the draft May 4 Committee of the Whole presentation for your review. We need to provide edits to the City by noon Thursday.

Here are proposed edits from communications:

Slide 2

Bullet: Clibborn amendment... Add at end "who benefit from the bored tunnel"

Slide 3

Change title to "Bored Tunnel Hybrid Alternative"

Slide 4

Add this to talking points: By completing a Supplemental Draft EIS, we will build on the existing environmental studies. We will also respond in the Final EIS to all of the public comments received on the previously released Environmental Impact Statements and alternatives considered.

King County will not be a co-lead for the environmental process.

Combine slides 4 and 5.

Slide 5

"The SDEIS will" should not be a bullet

Slide 6

Delete first column header "Items included in the Program Level analysis," change third column header to "Program Level Analysis/Future Project Level Analysis"

Slide 8

Add to first bullet "The City will lead..." "and coordinate with WSDOT on operations to ensure efficient through movement"

Change first bullet to - The City of Seattle will adopt the SDEIS with the understanding that additional environmental analysis will be required to move forward with these projects - the Alaskan Way surface street and promenade and the seawall repair or replacement.

Slide 9

Demolish the viaduct in 2016.

Slide 12, 13, and 14

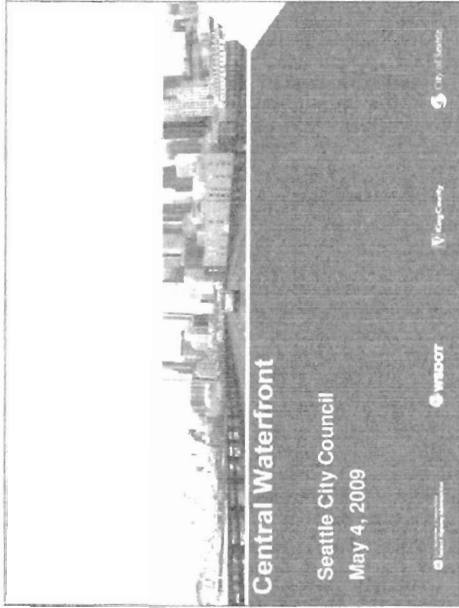
"Process" shouldn't be capitalized

Thank you

Amy Turner

Communications and Public Involvement
 Alaskan Way Viaduct and Seawall Replacement Program
 206.267.6821
turnera@consultant.wsdot.wa.gov

6/22/2009



Central Waterfront

Legislative Update

ESHB 5768:

- Identifies the bored tunnel as the final design for replacing the Alaskan Way Viaduct
- States that state funding is not to exceed \$2.4 billion and could not include more than \$400 million in tolling revenue.
- Establishes a single source of accountability for multiple components of the replacement project
- Requires updated cost estimates and tolling revenue estimates to the legislature and governor by January 2010
- Clibborn Amendment, included in final passage: Any costs over the \$2.8 billion committed by the state must be paid by Seattle property owners
- Passed the Washington State Legislature on April 24, 2009

Speaker - POWERS

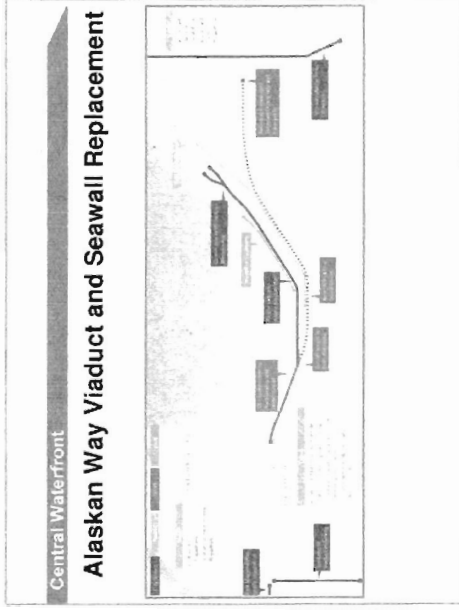
- Thank you for inviting us here today to provide information about the environmental process for the Alaskan Way Viaduct replacement.

SPEAKER - PAANANEN

As you know, the Washington State Legislature recently passed legislation identifying the bored tunnel as the replacement of the Alaskan Way Viaduct.

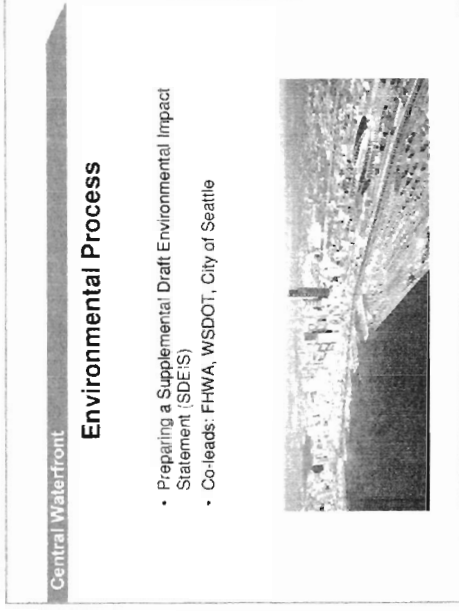
A few key points of the legislation are:

- Identifies the bored tunnel as the final design for replacing the Alaskan Way Viaduct
- States that state funding is not to exceed \$2.4 billion and could not include more than \$400 million in tolling revenue.
- Establishes a single source of accountability for multiple components of the replacement project
- Requires updated cost estimates and tolling revenue estimates to the legislature and governor by January 2010
- Clibborn Amendment, included in final passage: Any costs over the \$2.8 billion committed by the state must be paid by Seattle property owners
- Passed the Washington State Legislature on April 24, 2009



Speaker - PAANANEN

- This map shows the different components of the bored tunnel hybrid alternative which work hand in hand with the deep bored tunnel to move people and goods.
- The state, county and city departments of transportation will closely coordinate implementation of the bored tunnel hybrid alternative. Each agency will:
 - Complete required design and environmental work.
 - Secure funding.
 - Start construction.
- The environmental analysis will take a comprehensive look at the bored tunnel hybrid alternative as a whole and how the transportation system – including the components of the bored tunnel hybrid alternative - functions.
- Some of the components of the alternative will require further, more detailed analysis in the future.




Speaker - PAANANEN

- The environmental process is being streamlined in order to begin construction in 2011 and open the tunnel to drivers in 2015.
- A second SDEIS will be prepared to analyze the environmental effects of the bored tunnel hybrid alternative.
- King County is committed to the bored tunnel hybrid alternative and the tri-agency process, however it is unclear at this time what level of involvement they will have with the SDEIS.

Central Waterfront

Environmental Process



- The SDEIS will:
- Build on previous environmental analysis
- include an updated purpose and need statement that reflects guiding principles
- Comply with National Environmental Policy Act and State Environmental Policy Act
- Evaluate the bored tunnel and other program elements

Speaker - PAANANEN

- The second SDEIS builds on previous environmental analysis and complies with the National Environmental Policy Act.
- The purpose and need statement will be updated to reflect the guiding principles and the collaborative process that led to the bored tunnel hybrid alternative recommendation.

Central Waterfront

Bored Tunnel SDEIS Approach

Items Included in the Program Level Analysis	SDEIS Project Level Analysis	POST EIS Project Level Analysis
Bored tunnel and portals	X	
Viaduct removal	X	
Battery Street Tunnel	X	
Alaskan Way surface street		X
Transit		X
Mercer Underpass and 6 th Avenue	X	
Other surface street improvements		X
Waterfront promenade		X
Seawall		X

Speaker - PAANANEN


- A thorough environmental analysis will be conducted for each element included in the SDEIS, listed in the left hand column.
- The middle column identifies those projects that will receive a project level analysis as part of the SDEIS which will allow the Federal Highway Administration to issue a record of decision for those elements and allow us to meet our delivery schedule.
- The rest of the bored tunnel hybrid alternative, identified in column three with an "x" will be studied at a more general degree in the SDEIS. These elements will require separate project level analysis that would be finalized after the EIS and ROD for the bored tunnel are final.
- All comments from the previous draft and supplemental draft environmental impact statements will be included and responded to in the final EIS as part of the environmental record.

NOTE: The Mercer project level boundaries are Dexter to 5th. The 6th Avenue boundaries are Mercer to Harrison

Central Waterfront

Environmental Analysis

- Air quality
- Traffic
- Aquatic Resources
- Water Quality/Stormwater
- Economics
- Noise and vibration
- Historic/archaeological
- Land use
- Visual quality
- Construction effects



Speaker - PAANANEN

- This is a short list of the types of analysis and the various environmental effects that will be studied in the second supplemental draft EIS.

NOTE: Project level = detailed analysis for all disciplines. Program level = will require further analysis once the bored tunnel EIS is complete

Central Waterfront

City of Seattle Environmental Process

Alaskan Way surface street and promenade

- The City will lead waterfront planning, design and environmental review:
 - Roadway design, including Elliott/Western Connection
 - Parking
 - Waterfront promenade and open space
 - Utility relocation

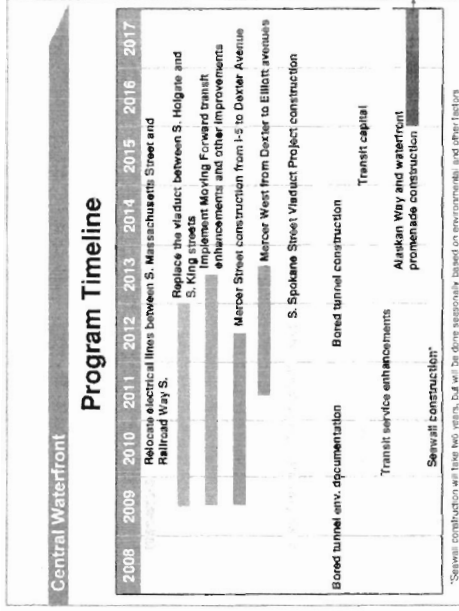
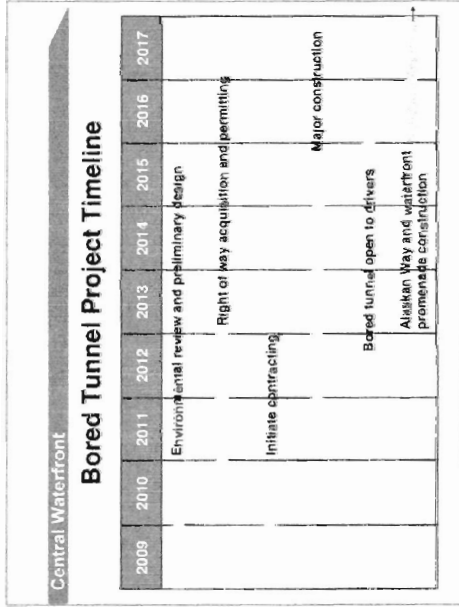
Seawall repair or replacement

- The City and Corps of Engineers will lead planning, design and environmental review:
 - Habitat enhancement

Speaker - POWERS

- The City of Seattle will adopt the SDEIS with the understanding that additional environmental analysis would be required to move forward with construction.
- Based on conversations we've had with City staff, these are the areas where the City will lead the environmental process.
- The Alaskan Way Surface Street and Promenade work extends from King to Battery.

NOTE: Mercer West is a city project between 5th and Elliott that the city will lead in planning, design and environmental review.



Speaker - PAANANEN

- For the bored tunnel, we expect to complete the environmental review and preliminary design by the end of 2010.
- Major construction will begin in 2011 and we will be able to open the bored tunnel to drivers in 2015.
- Some of the major sequences of events include:
 - Begin boring the tunnel in 2011
 - Demolition of the existing viaduct in XXXX
 - Construction of the new Alaskan Way and promenade beginning in 2016

Speaker - POWERS

- Construction will start this year on the south mile of the viaduct, and transit and city street investments to keep people and goods moving during the work.
- The Mercer Street to Dexter and Spokane Street projects will be completed in 2012.

Central Waterfront

Stakeholder Working Groups

- Three working groups, representing geographical areas of the project:
 - North Portal Working Group
 - Central Waterfront Working Group
 - South Portal Working Group
- Approximately 22-25 members in each working group
- Members represent freight, business, neighborhood, environmental and special interests.
- Will provide comment and feedback related to specific project elements

Central Waterfront

North Portal Working Group

Potential Topic Areas:

- Access and connections, including freight movement
- Urban design
- Bicycle, pedestrian and transit enhancements
- Portal location
- Construction
- Environmental Process
- Mercer Street improvements

Insert graphic

Speaker – POWERS

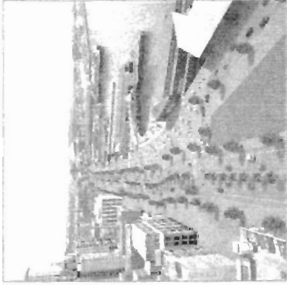
- Modeled on the positive work from the Alaskan Way Viaduct Stakeholder Advisory Committee that met throughout 2008, we've developed three stakeholder working groups to continue to provide comments and feedback to the agencies as we move forward with the program.
- The three working groups, represent geographical areas of the project:
 - North Portal Working Group
 - Central Waterfront Working Group
 - South Portal Working Group
- There will be approximately 22-25 members in each working group
- The working group members represent freight, business, neighborhood, environmental and special interests.
- Will provide comment and feedback related to specific project elements, we will be giving some examples of those elements in the following slides.
- It is important to note that the three working groups are in addition to an ongoing and robust public outreach and involvement process.
- In 2009, the team has already attended over 50 public meetings, held over 20 briefings with elected officials/agencies, held a viaduct site tour and has continued with quarterly community open houses.
- We will continue to reach out to groups to provide updates as well as plan and attend community events.

Speaker – POWERS

- The north portal working group will hold the first of their meetings later this week.
- The first meeting will begin discussions on the environmental process and context issues regarding design of the north portal.
- Members will also be given an opportunity to provide feedback on what components and aspects are important to them and the group they represent.
- Other potential topic areas the group might cover are:
 - Access and connections, including freight movement
 - Urban design
 - Bicycle, pedestrian and transit enhancements
 - Portal location
 - Construction
 - Environmental Process
 - Mercer Street improvements

Central Waterfront

Central Waterfront Working Group



Potential Topic Areas:


- Access and connections
- Elliott and Western connection
- Alaskan Way configuration
- Bicycle, pedestrian and transit enhancements
- Seawall replacement
- Construction
- Environmental Process

Speaker – POWERS

- The central waterfront working group will hold the first of their meetings later in May.
- The first meeting will begin discussions on the environmental process and initial conversations on the configuration of the new Alaskan Way.
- Members will also be given an opportunity to provide feedback on what components and aspects are important to them and the group they represent.
- This group will discuss many potential topics, but it will not get into discussions regarding how to use the new open space that will be created when the viaduct is taken down. Planning and design of the waterfront promenade will be part of a later design phase and the details of how that will move forward are still being worked out. They will discuss:
 - Access and connections
 - Elliott and Western connection
 - Alaskan Way configuration
 - Bicycle, pedestrian and transit enhancements
 - Seawall replacement
 - Construction
 - Environmental Process

Central Waterfront

South Portal Working Group



Potential Topic Areas:

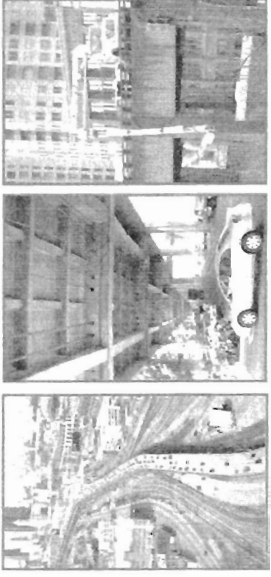
- Access and connections, including freight movement
- Portal location
- Urban design
- Bicycle, pedestrian and transit enhancements
- Construction
- Environmental Process
- Spokane Street Viaduct improvements

Speaker – POWERS

- The south portal working group will hold the first of their meetings later this week.
- The first meeting will begin discussions on the environmental process and context issues regarding design of the portal.
- Members will also be given an opportunity to provide feedback on what components and aspects are important to them and the group they represent.
- Other potential topic areas the group might cover are:
 - Access and connections, including freight movement
 - Portal location
 - Urban design
 - Bicycle, pedestrian and transit enhancements
 - Construction
 - Environmental Process
 - Spokane Street Viaduct improvements

Central Waterfront

Alaskan Way Viaduct and Seawall Replacement Program



Follow our progress: www.alaskanwayviaduct.org

Speaker - POWERS

- Thank you for your time today. Are there any questions?

VandenBerghe, Alissa (Consultant)

From: Tobin, Thomas
Sent: Friday, May 01, 2009 8:09 AM
To: Williamson, Alec
Subject: FW: PB Submittal - Agreement No. Y-9715 / Task No. CL
Follow Up Flag: Follow up
Flag Status: Red
Attachments: CL ScanDoc Scope&Estimate 30Apr09.pdf

Alec, FYI.

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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From: Feikema, Debra (Consultant)
Sent: Thursday, April 30, 2009 5:19 PM
To: Tobin, Thomas
Subject: RE: PB Submittal - Agreement No. Y-9715 / Task No. CL

Debra Feikema
Parsons Brinckerhoff
The Alaskan Way Viaduct & Seawall Replacement Program
(206) 382-5295
feikemd@consultant.wsdot.wa.gov

From: Tobin, Thomas
Sent: Thursday, April 30, 2009 4:53 PM
To: Feikema, Debra (Consultant)
Subject: RE: PB Submittal - Agreement No. Y-9715 / Task No. CL

.Pdf?

Thomas Tobin
Urban Corridor Office WSDOT
999 Third Avenue, #2400
Seattle, WA 98104
206-267-3775

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6/22/2009

error please permanently delete it and destroy all copies. Thank you.

From: Feikema, Debra (Consultant)

Sent: Thursday, April 30, 2009 4:34 PM

To: Anderson, Ward

Cc: Rigsby, Mike (Consultant); Petereit, Ralph (Consultant); Conte, Rick (Consultant); Sanderson, Margaret (Consultant); Greengard, Mark (Consultant); Mohanty, Sameer (Consultant); Tobin, Thomas; Martin, Pamela (Consultant); Macey, Laurie

Subject: PB Submittal - Agreement No. Y-9715 / Task No. CL

Ward,

On April 30, 2009, PB transmitted an electronic copy of the Scope of Work (Exhibit A) and Prime Consultant's Cost Computations (Exhibit D) for Task No. CL, Technical Assistance in Developing the Work Program for Design-Build RFP Documents for the Bored Tunnel, for review and approval.

Thank you,

Debra Feikema

Parsons Brinckerhoff

The Alaskan Way Viaduct & Seawall Replacement Program

(206) 382-5295

feikemd@consultant.wsdot.wa.gov

6/22/2009

1 THE ALASKAN WAY VIADUCT &
2 SEAWALL REPLACEMENT PROGRAM
3 AGREEMENT Y-9715

4
5 TASK NO. CL
6 TECHNICAL ASSISTANCE IN DEVELOPING THE WORK
7 PROGRAM FOR DESIGN-BUILD RFP DOCUMENTS
8 FOR THE BORED TUNNEL
9

10 SCOPE OF WORK
11 (EXHIBIT A)

12
13
14 **Summary:**

15
16 Agreement has been reached between the STATE, King County, and City of Seattle on how to
17 replace the two-and-a-half mile Alaskan Way Viaduct (PROJECT) with a bored tunnel. The
18 STATE wants construction to commence on the bored tunnel program in 2011.

19 The STATE has directed the CONSULTANT to assist in the development of the bored tunnel
20 design criteria package and assist the STATE in preparation of the Requests for Qualifications/
21 Requests for Proposals (RFQ/RFP) for the acquisition of the Design-Build firm or firms. The
22 STATE will advertise the Design-Build contract and select the firms.

23 This Task Order duration is from May 4, 2009 through October 15, 2009. Activities in this task
24 are focused on completing the work by July 15, 2009.

25 **Objective:**

26
27 The CONSULTANT shall assist in the development of the bored tunnel design criteria package
28 and assist the STATE in preparation of the RFQ/RFP for the acquisition of the Design-Build firm
29 or firms.

1 **Approach:**

2
3 The CONSULTANT shall assist the STATE in developing a scope of work along with the work
4 products necessary to meet the critical construction commencement schedule stated above.
5 The CONSULTANT shall provide the technical staff experienced in bored tunnel design-build
6 procurements to assist the STATE in the development of the approach for the RFQ/RFP.
7 The CONSULTANT approach will be to:

- 8 1. Identify a list of deliverable work products necessary for the RFQ/RFP;
- 9 2. Develop a schedule for production of these deliverable work products, and
- 10 3. Develop a staffing plan and budgets necessary to accomplish the work so that the
11 STATE can commit the necessary funds and supplement the CONSULTANT's
12 agreement for performing the work.

13
14 As time permits, the CONSULTANT shall also assist the Alaskan Way Viaduct Project Team in:

- 15
16 1. Developing, refining, and finalizing Project program requirements, and
- 17
18 2. Development and refinement of Project design requirements.

19
20 **Assumptions:**

- 21
22 • The STATE will advertise the Design Build contract and select the firms.
23 • The CONSULTANT shall perform this work on the development of the RFP Technical
24 Documents within the Alaskan Way Viaduct & Seawall Replacement Program office.

25
26 **Deliverables:**

- 27
28 • No formal deliverable submissions are anticipated. Work products will be memoranda and
29 technical briefings.

30

<u>WSDOT MDL No.</u>	<u>PB No.</u>	<u>Description</u>
PE.PM.02	CL.01	Project Management
Not applicable	CL.99	Other Direct Costs

31
32 **Anticipated Deliverable Schedule:**

33
34 It is anticipated that this work will be completed by July 15, 2009 at which time this task order
35 may be further amended or supplemented.

36
37 **Consultant's Cost Computations (Cost Estimate):**

38
39 The Consultant's Cost Computations (Cost Estimate) are included as Exhibits D and E and by
40 reference are made part of this Task Order.

1 **Progress Reporting:**

2

3 This task is a level of effort task. Progress will be reported based on actual costs.

4

5 The CONSULTANT shall adhere to the cost management system established in Task No. AA –
6 Project Management, Alaskan Way Viaduct & Seawall Replacement Program. Progress will be
7 updated monthly.

8

9 **List of Exhibits**

10

11 Exhibit D – Prime Consultant's Cost Computations (Cost Estimate)

Alaskan Way Viaduct Phase 2

AWV PHASE 2 - Y-9715						
Totals	PB	Total Hours	Total Labor	Direct Expenses	Total Task	
PB No.						
CL	408	408	101,859	23,491	125,350	
TECHNICAL ASSISTANCE IN DEVELOPING THE WORK PROGRAM FOR DESIGN-BUILD RFP DOCUMENTS FOR THE BORED TUNNEL						
CL.01	408	408	101,859		101,859	
CL.99	0	0	0	23,491	23,491	
	408	408	\$101,859	\$23,491	\$125,350	
Hours / Cost excl. Escalation						
Total Labor Estimate By Firm (Incl. Escalation)						
ODCs Estimate By Firm						
Subtotal before Markup>						
Prime Consultant's Markup on Subconsultants at 4.0 %						
Grand Totals By Firm						
	0		\$0	<Markup	<Grand Total Estimate	
	125,350		\$125,350			

Alaskan Way Viaduct Phase 2

PB	No.	Work Element Description	Sr Engineering Manager	Total Hours
CL		TECHNICAL ASSISTANCE IN DEVELOPING THE WORK PROGRAM FOR DESIGN-BUILD RFP DOCUMENTS FOR THE BORED TUNNEL	408	408
CL.01		Project Management	408	408
CL.99		Other Direct Costs		0
		Hours Totals	408	408

Alaskan Way Viaduct Phase 2 EA

Consultant Fee Estimate - PB

Technical Assistance in Developing the Work Program for Design-Build RFP Documents for the Bored Tunnel

Classification	Grade	Hours	x	Rate	=	Cost
Sr Engineering Manager	P-14	408		\$249.66		\$ 101,859

	Subtotal	408		\$	101,859
--	----------	-----	--	----	---------

Subtotal	TOTAL: LABOR		\$	101,859
-----------------	---------------------	--	-----------	----------------

Direct Non-Salary Costs		Cost
See Attached		\$ 23,491

Prime Consultant Markup on Subconsultants at 4.0 percent: Not Applicable	\$ -
--	------

SUBTOTAL: Prime Consultant Amount	\$ 125,350
--	-------------------

Subconsultant Costs		Cost
----------------------------	--	-------------

NONE	
------	--

	Subconsultant Costs Total	\$ -
--	----------------------------------	-------------

TOTAL	\$ 125,350
--------------	-------------------

Alaskan Way Viaduct Phase 2 EA

DIRECT EXPENSE Estimate for Task CL PB

Technical Assistance in Developing the Work Program for Design-Build RFP Documents for the Bored Tunnel

Travel Quantities and Rates:

Number of Trips	Origin	Round Trip Rate Airfare	Avg length in days of each trip	Number of travel days, all trips combined	Food + Lodging Per Diem Rate
5	Boston, MA	\$1,145	14	70	\$246.65

Transportation to and from Airports at \$25.00 per occurrence

For each trip, allow one residence-to-airport occurrence outbound and one airport-to-residence occurrence upon return

For each trip, allow one airport-to-office occurrence in Seattle and one office-to-airport occurrence upon departure from Seattle

Total Transportation per trip = **\$100.00**

Travel Cost Computations:

Quantity and Descrip.	Item and Rate	Amount
Trip 5	Airfare \$1,145.00	\$5,725
Trip 5	Transportation \$100.00	\$500
Travel Days 70	Per Diem \$246.65	\$17,266

Total: \$23,491

Travel Assumption: From Boston to Seattle: Provision for an estimated 5 trips

Whenever possible, the Consultant shall seek alternatives to normal hotel lodging where cost-savings would be realized.

-----Original Message-----

From: Preedy, Matt
Sent: Monday, May 11, 2009 11:03 AM
To: Benito, Roland
Subject: FW: DRAFT Work Plan Outline for Bored Tunnel RFP (ELA Cmnts) 5_7_09
Importance: High

Take a look at the attachment, any sections missing? Thoughts on responsibility for sections? Would like to have your thoughts by Wednesday if possible....

Matt.

-----Original Message-----

From: Rigsby, Mike (Consultant)
Sent: Friday, May 08, 2009 8:06 AM
To: White, John; Everett, Susan; Preedy, Matt; Greco, Theresa; Bohlke, Brenda (Consultant); Reilly, John; Reilly, John; Jarnagan, Harry (Consultant); Phelps, Don (Consultant)
Cc: 'abbott@pbworld.com'; Conte, Rick (Consultant); Clark, Gordon T. (Consultant)
Subject: FW: DRAFT Work Plan Outline for Bored Tunnel RFP (ELA Cmnts) 5_7_09
Importance: High

Attached is the spreadsheet Eldon discussed yesterday showing our work plan outline and a column to designate lead and support responsibilities. Please let me know if you have any questions or comments. Thanks.

Mike Rigsby
Parsons Brinckerhoff
Taskan Way Viaduct and Seawall Replacement Program
36-382-6352

From: Abbott, Eldon L.
Sent: Thu 5/7/2009 1:10 PM
To: Rigsby, Mike; Conte, Rick
Subject: DRAFT Work Plan Outline for Bored Tunnel RFP (ELA Cmnts) 5_7_09

As requested, here is the "Look Ahead Schedule" spreadsheet for AWV RFQ/P production. Mike or Rick, since I do not have the WSDOT email address, please forward this spreadsheet on the all of the WSDOT staff at this mornings meeting.

Thanks,

Eldon

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From: Benito, Roland
Sent: Tuesday, May 12, 2009 2:50 PM
To: Preedy, Matt
Subject: RE: DRAFT Work Plan Outline for Bored Tunnel RFP (ELA Cmnts) 5_7_09

Matt -

Below are my comments to the PB prepared RFQ/RFP Development outline. In general, the outline provided do not conform to the WSDOT structure of DB contracts. It is evident that PB just pulled the outline from a different project and submitted it to WSDOT. Had PB invested a couple of hours in reviewing past WSDOT DB contracts, the effort developing the outline would have been worthwhile.

If you print the Outline, you get 9 pages of which only 2 are useful, the rest a rehash and relabeling of the first 2 pages.

Comments: PAGE 1

1. The RFQ outline consist of 2 lines and implies for PD to draft it for WSDOT review. Is this the intent?
2. For an RFQ development outline, it would be nice to outline all of the things that have to be developed for the whole RFQ process - RFQ Evaluation Plan, Draft RFQ, Scheduling Evaluators, Supporting Documents and references etc.
3. Volume 1 - Agreement - Draft DB Contract Agreement - What is this document?
4. For the RFP, WSDOT basic documents are the Instructions to Proposers (ITP), Chapter 1 - General Provisions, Chapter 2 - Technical Requirements, and Reference Documents. The provided outline "Technical Requirements" is actually the General Provisions.
5. Volume II Division 1, Section 10 needs to be removed from this section since it is covered explicitly and in detail on the Technical Requirements Sections.
6. Volume III and Reference Documents are all the same type of documents - Reference Documents. The Title of Additional Mandatory Requirements is misleading.

Comments: PAGE 2

1. Why is the CM procurement in this outline at all?
2. Same with Right of Way
3. UTILITIES - Why are we defining the scope of work for the DB Contractor at all? IT is the DB's scope of work to address in order to deliver the project, it could be a lot or it could be minimal depending on the DB's method and strategy in delivering the project.
4. The Fire/Life Safety and Tunnel Vulnerability Assessment are Technical Requirements and should be in Chapter 2.

Matt - What you BP has provided is not an outline at all but a listing of things that they think should be done. Not in any order or priority nor how you final document will be ordered.

If we want to keep moving forward, we need to start getting quality work from our consultants that gets us to our goals. The outline is reminiscent of the one meeting we had to look at project packaging options where schedule and options did not make much sense and we kept just getting tol that there was an error and they will give us the "right one". Whatever happened to quality processes that are supposed to be in place?

Roland