

I-275-001

Comment noted.

From: rpattenaia@comcast.net [mailto:rpattenaia@comcast.net]
Sent: Wednesday, April 14, 2010 10:45 AM
To: SR 520 Bridge SDEIS; Richard Conlin; sally bagshaw; Burgess Tim; Clark Sally; Jean Godden; Harrell Bruce; Licata Nick; Rasmussen Tom
Cc: Blair Walt; Paananen, Ron; Roger Patten AIA
Subject: It would appear wsdot has missed the boat

I-275-002

Comment noted.

I-275-001 |

Let's put the government (wsdot) 520 floating bridge idea back in the box and start a new enterprise. Roger

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I-275-003

Comment noted.

From: rpattenaia@comcast.net [mailto:rpattenaia@comcast.net]
Sent: Wednesday, April 14, 2010 10:55 AM
To: SR 520 Bridge SDEIS; Richard Conlin; sally bagshaw; Burgess Tim; Clark Sally; Jean Godden; Harrell Bruce; Licata Nick; Rasmussen Tom
Cc: Blair Walt; Paananen, Ron; Roger Patten AIA
Subject: missing the boat

I-275-002 |

Put (wsdot) 520 floating bridge idea back in the box!

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From: rpattenaia@comcast.net [mailto:rpattenaia@comcast.net]
Sent: Wednesday, April 14, 2010 11:34 AM
To: SR 520 Bridge SDEIS; Richard Conlin; sally bagshaw; Burgess Tim; Jean Godden; Harrell Bruce; Licata Nick; Rasmussen Tom
Cc: Blair Walt; Paananen, Ron; Roger Patten AIA
Subject: wsdot has missed the boat. how about adding marine traffic to Seattle waterfront too

I-275-003 |

See Elliott Bay Bridge for possible marine ferry boats to Seattle Central Waterfront (attached)

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Proposed 520 Lake Washington (cable-stayed) Bridge & New Ferry Landings

I have devised a new concept in bridge foundation design with a "Monumental Stabilized Pier". This new technology will allow the construction of a cable-stayed suspension bridge across Lake Washington. A new and inventive cable-stayed structure that will out perform a floating concrete pontoon bridge for life of the structure, cost, and seafairness, and its beauty.

This new technology will open many doors, but one I am interested in is how this will affect the development of Lake Washington and the cities on its shores. The proposed new 520 cable-stayed bridge across Lake Washington will open a new corridor for mass transportation, bus and high rail into the new bridge and will make a ferry landing connection on the North Shore of the Abbotonue with direct connection to the I-5 and the Seattle bus tunnel and all of downtown Seattle. See proposed new ferry landings and marine facilities above.

Roger Farnen AIA (American Institute of Architects)

SmartZone Communications Center Collaboration Suite

rpattenaia@comcast.net

How can we pay for the 520 Cable Stayed Bridge by
Roger Patten

Tuesday, April 13, 2010
10:44:26 AM

From: rpattenaia@comcast.net

Cc: blairhall33@excite.com

Attachments: AcroRd32.exe (344.2KB)
scan0001.pdf (1385.8KB)

Proposed 520 Cable-Stayed Bridge

I-275-004

What if we show some imagination, initiative, and venture forward on a design concept that has some community push, punch, bang! let's say backing. If you don't like it ...don't buy it attitude. A project that we can afford! One that is a complete solution, not a complete compromise. Rewrite the program, get it straight, then open the door to a free, enterprising, amazing project for Seattle

A big question is "how can we pay for the 520 bridge and how can we keep the noise out of the community, our homes, business, parks and streets"? The Architects plan call for a free enterprise solution. Take a second look at Architect's model (see attached).

See how small the footprint is under the cable-stayed bridge. Do you see any money making ideas shown under the bridge that might be built besides just building a roadway across Lake Washington. Do you think it will pay for us to consider increasing the enjoyment and use of the Lake, and this estuary, the 520 corridor with connections to summertime small boat marinas between Seattle and Medina, all connected to bus and light rail services and what is this ...look closely and you will see docks with ferry terminals. Why would someone encourage the use of water transportation in the grand scheme of things? Why, you would you build new ferry docks at Madison Park like it use to be and perhaps put back the old street car tracks from Seattles waterfront to Madison Park and connect Seattle downtown Residences to a five minuet ferry boat ridge to the 520 corridor and ferry boat landing. A light rail corridor connected to U of W,

I think you get the point (idea). It's to help pay for the bridge. Lets not toll the bridge, let private enterprise in, make some money, pay some taxes, help pay for the new bridge and provide a better world. Think of it as our life style. Think of it as our survival!

Roger Patten AIA

<http://sz0157.ev.mail.comcast.net/zimbra/mail>

4/13/2010

I-275-004

WSDOT considered a wide range of alternatives before narrowing them down to those evaluated in the Draft EIS. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. What constitutes a reasonable range of alternatives depends on the nature of the proposal and the facts in each case. FHWA guidance provides additional discussion of the relationship between purpose and need and alternatives consideration, analysis and selection, and states that "alternatives which meet the purpose and need for the project at an acceptable cost and level of environmental impact relative to the benefits which will be derived from the project" should be considered. (<http://www.environment.fhwa.dot.gov/projdev/tdmneed.asp>)

The Range of Alternatives and Options Evaluated Report, included as Attachment 7 in the SDEIS describes the history of alternatives development for the SR 520 corridor and provides the framework, context, and supporting details for understanding how the project has evolved. It also explains the screening that has occurred to narrow and define the scope of the alternatives and the legislative actions that have influenced the project. The information contained in this report was summarized in pages 1-9 through 1-22 of the SDEIS.

In the Trans-Lake Washington Study, a 47-member stakeholder group evaluated a broad range of potential modes and routes for crossing Lake Washington. The concepts the group considered included new project corridors (for example, a crossing from Sand Point to Kirkland); different crossing methods, such as tubes and tunnels; new travel modes, such as ferries or rail; and the management of travel demand through tolling or land use changes. One of options considered was a bus only configuration. That option was evaluated and screened early in the process because it would cause substantial diversion to other

520 Lake Washington Bridge

Dear Mayor James Lauinger:

I-275-005

Thank you for your prompt reply. If I might take this opportunity to describe my interest in Kirkland and Lake Washington. With respect to my proposed 520 Cable-Stayed Bridge design.

We need a new bridge over Lake Washington. The 60th Legislature has set the Laws of 2007 Chapter 517 that requires a new bridge be built...and now we are in the planning phase of just how we do this.

The different types of construction available for WSDOT to build a bridge across Lake Washington is very limited. The lake is 200 feet deep (in the bridge location) and the lake bottom is a mixture of clay and sand (mud) with poor bearing qualities for a conventional bridge foundation. WSDOT has no other option than a concrete floating pontoon bridge.

The Lacey V. Murrow Floating bridge, 1940 was an engineering marvel. At 200 feet deep. Lake Washington could not be bridge with pilings, and the shores lack good anchoring for suspension bridge.

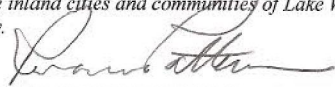
I have devised a new concept in bridge foundation design with a "Buoyancy Stabilized Pier". This new technology will allow the construction of a cable-stayed suspension bridge across Lake Washington. A new and inventive cable-stayed structure, that will out perform a floating concrete pontoon bridge for life of the structure, cost, and usefulness, not to mention its beauty.

I-275-006

This new technology will open many doors, but one I am interested in is how this will affect the development of Lake Washington and the cities on its shores. The proposed new 520 Cable-Stayed Bridge across Lake Washington will open a new corridor for mass transportation, bus and light rail built into the new bridge and will make a ferry landing connection on the North Shore of the Arboretum with direct connection to the U of W and the Seattle bus tunnel and all of downtown Seattle. The new bridge will revive a ferry system along the shores of Lake Washington. Effective, economical, safe, and some what romantic. Can you imagine the possibilities with water transportation from Kirkland to Union Bay with connections to Seattle waterfront and U of W.

Now imagine a new Port of Kirkland with a new ferry landing and a marine development of Lake Washington with expanded facilities for boats, swimmers (summer time) and travelers for the enjoyment of Lake Washington with connections to Meydenbauer Bay, Medina, Mercer Island, Renton, Luschi, Sand Point, Kenmore and Juanita Bay all by an inland water ferry system (private or state operated)

I would suggest that the inland cities and communities of Lake Washington get together and provide this facility.



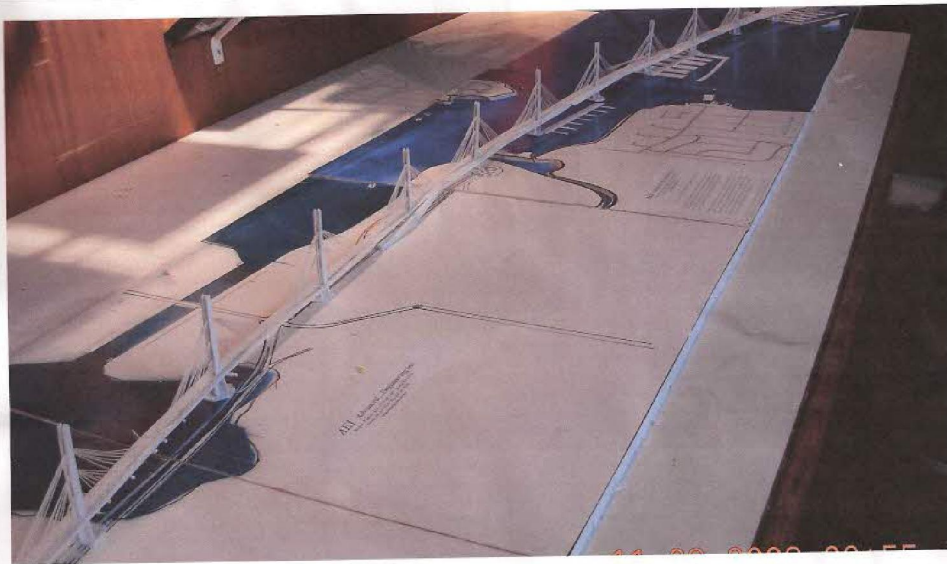
Roger Patten AIA (American Institute of Architects)

corridors thus increasing congestion throughout the remainder of the freeway system. After all the concepts were screened, the most promising were combined into "solution sets," which ultimately formed the basis for the alternatives evaluated in the Draft EIS (page 1-10 in the SDEIS).

Fixed bridges, as designed and discussed in this comment, were among those options evaluated in the initial screening phases of project development. Early in the scoping phase for this project, WSDOT screened out the cable-stayed bridge and a stacked bridge on the basis of costs and environmental effects. A cable-stayed bridge would have very tall towers and would be a dominating feature on the landscape. With such high bridges (either cable-stayed or stacked), noise would reach a larger group of neighborhoods in the area than the currently planned structure. Noise walls could likely not be installed on these types of structures due to instability that would be created with wind. Without noise walls, it could be difficult to mitigate noise issues. The size and scale of the cable-stayed support towers and stacking the freeway would create a much larger project footprint horizontally and vertically for the connections with the interchanges, compared with other feasible alternatives evaluated for this project.

Section 2.4 in the Final EIS explains why initial implementation of light rail transit on SR 520 is not planned. The decision to locate Sound Transit's initial east-west light rail transit corridor on I-90 rather than SR 520 has been made through extensive regional deliberation (see Table 2-2 of the Final EIS). Section 2.4 also explains how the SR 520, I-5 to Medina project can accommodate future high capacity transit, such as proposed bus rapid transit or potential future light rail.

The Preferred Alternative includes a number of design elements that would reduce noise compared to the No Build Alternative. See Chapter 2 and Section 5.7 of the Final for more information.



Seattle WA, "520 Bridge Patent Allowed" 3.31.2010

A Seattle Architect's plan for the 520 bridge replacement with a Cable-Stayed six lane bridge supported by "Buoyancy Stabilized Piers" has been notified by the United State Patent and Trademark Office of Notice of Allowance for issuance as a patent. The Architect, Roger Patten AIA, said this new technology has the potential of saving Seattle and Washington State citizens billions of dollars in the construction costs of the state proposed "520 Floating Bridge" and brings with it a solution to the West Side/Montlake Corridor.

The Architects plan calls for a six lane cable-Stayed bridge across Lake Washington between Medina and Seattle connecting directly to I-5, with on and off ramps connecting at Montlake, and the University of Washington allowing for the major portion of traffic to pass over Montlake and go straight to I-5 and light rail to the Seattle bus tunnel. The bridge design will support future light rail and bus service on a lower deck as well as a bike and pedestrian walkway and bike way each side of the structure. The bridge structure is composed of 12 identical bridge spans with buoyant piers placed into Lake Washington sea floor that support the bridge structure and foundations. See Architect's model above

Also Included in his plan is the development of the North Shore of the Arboretum. It will include a marine entrance to the Arboretum for small boats with canoe canals and walkway/bike-way trails. This entrance will also include a new ferry landing for commuters from Lake Washington to connect to the new 520 bridge deck for bus and light rail. At Montlake, the bridge tower will have a light rail Station that connects to ground transportation and the University of Washington.

Chapter 1 of the Final EIS includes updated information about cost and funding.

I-275-005

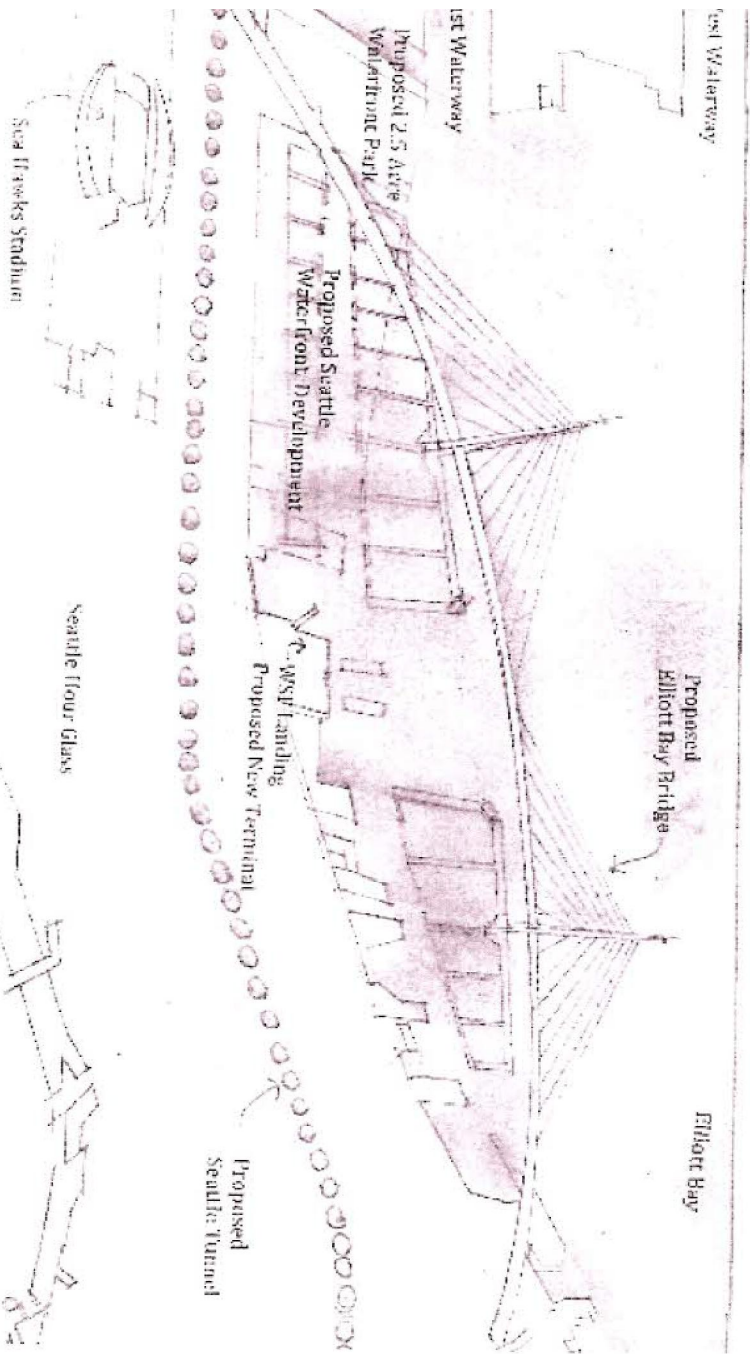
Early in the scoping phase for this project, WSDOT screened out the cable-stayed bridge and a stacked bridge on the basis of costs and environmental effects. A cable-stayed bridge would have very tall towers and would be a dominating feature on the landscape. With such high bridges (either cable-stayed or stacked), noise would reach a larger group of neighborhoods in the area than the currently planned structure. Noise walls could likely not be installed on these types of structures due to instability that would be created with wind. Without noise walls, it could be difficult to mitigate noise issues. The size and scale of the cable-stayed support towers and stacking the freeway would create a much larger project footprint horizontally and vertically for the connections with the interchanges, compared with other feasible alternatives evaluated for this project.

I-275-006

See the response to Comment I-275-005 regarding a cable-stayed bridge design.

As described in Chapter 1 of the SDEIS and in the Range of Alternatives and Options Evaluated Report (Attachment 8 to the SDEIS), an extensive range of alternatives has been evaluated for this project. Alternative corridors, technologies (e.g. tubes and tunnels), and travel modes, as well as many design variations within the existing corridor, were evaluated as part of the Trans-Lake Washington Study and again after the initiation of NEPA review in 2000. Chapter 2 of the Final EIS provides additional information on how alternatives were developed and evaluated, and why some solutions were determined not to be reasonable alternatives.

The Trans-Lake Washington Committee examined the possibility of a ferries on Lake Washington and The Trans-Lake Study Findings and Recommendations showed that passenger ferries would not “substantially enhance people-moving capacity” across the lake.



How would you like to view Seattle... A trip through the Seattle Tunnel or A trip over the Elliott Bay Bridge.

Proposed Elliott Bay Bridge
Roger Patten Sr. AIA Architect
121 S.W. 149th Burien WA