

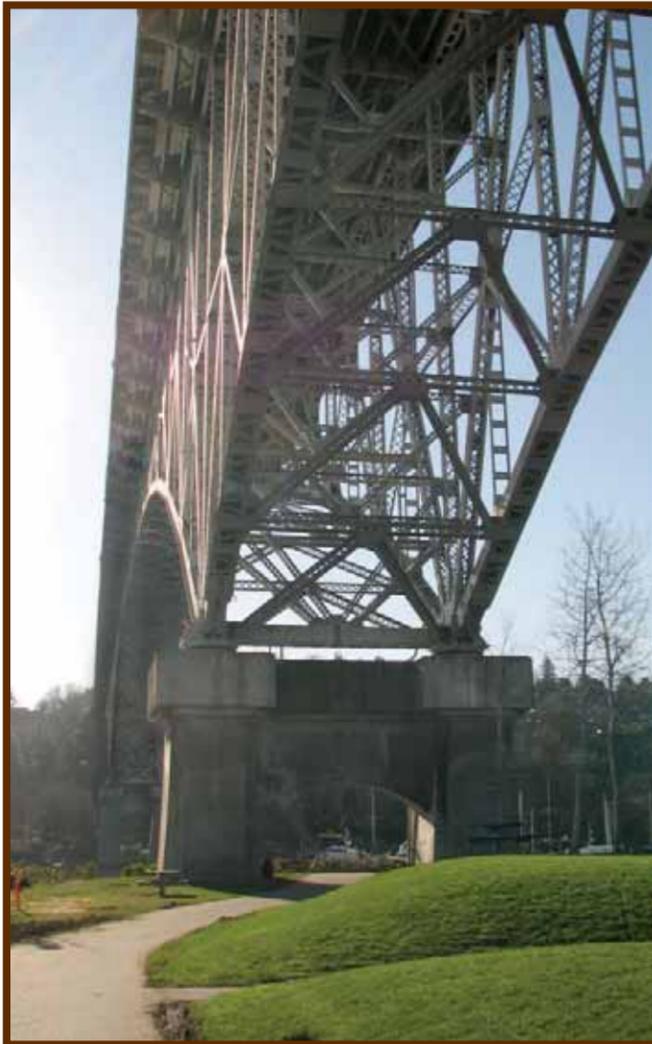


SR 99
Aurora Bridge

S U I C I D E
P R E V E N T I O N
F E N C E

Community Conceptual Design Report

Acknowledgements



Seattle City Council

Washington State Department of Transportation

Steering Committee

- Architects with Borders
- Seattle Fremont Individuals and Employees Nonprofit to Decrease Suicides (FRIENDS)

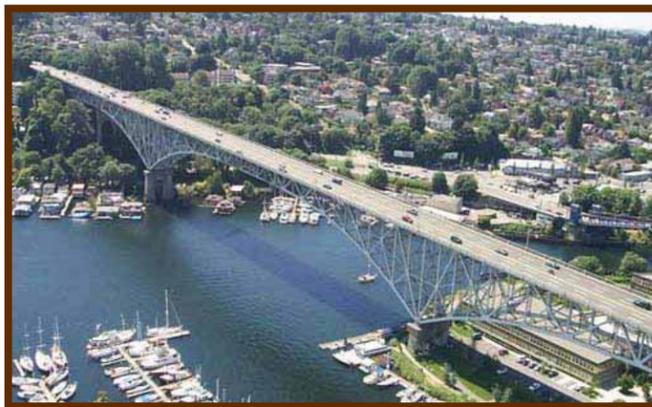
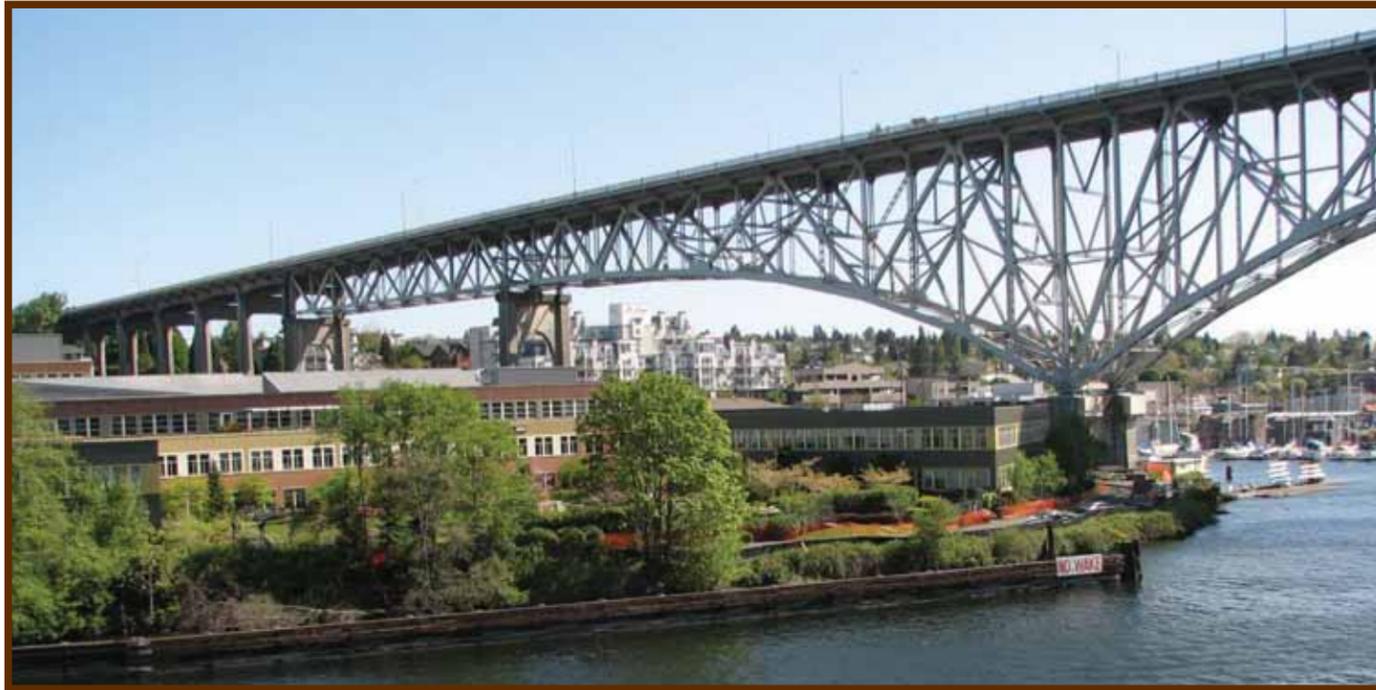
Many people were instrumental stakeholders in this process. We are grateful for the participation and help of the following organizations:

- Seattle Department of Transportation
- Seattle Police Department
- King County Crisis Clinic
- Washington State Department of Archaeology and Historic Preservation
- Seattle Landmarks Preservation Board
- Historic Seattle
- Lake Union District Council
- Queen Anne Community Council
- Fremont Neighborhood Council
- Fremont Chamber of Commerce
- CB Richard Ellis

Thanks to the following architectural firms for their expertise and participation:

- Clinkston-Brunner
- Johnston Architects
- Miller Hull
- Mithun
- Schacht Aslani Architects

Project Background



History

The Aurora Bridge, officially known as the George Washington Memorial Bridge, was built in 1931. This cantilevered steel truss bridge is 167 feet high and 2,945 feet long, carrying State Route 99 across the Lake Washington Ship Canal and connecting Seattle's Queen Anne and Fremont neighborhoods.

Today, the Aurora Bridge is a National Historic Landmark. In 1982, it was listed in the National Register of Historic Places and the Washington Heritage Register, and was also designated a Landmark by the Seattle Landmarks Preservation Board.

The area below the bridge is a vibrant part of the Seattle community and has changed significantly in recent years. Growing density on both sides of the Ship Canal has increased the number of people who live and work below the bridge. The waterway and Burke-Gilman trail attract a variety of recreational users.

Since it was constructed, more than 230 people are known to have jumped from the bridge, presenting significant safety risks for those who work, play and live below the bridge. Emergency response staff also put themselves at risk attempting to rescue people in the hazardous Ship Canal waterway. Public safety is the highest priority for both the City of Seattle and the Washington State Department of Transportation (WSDOT). To fulfill this responsibility at the Aurora Bridge, WSDOT is planning to construct a barrier on both sides of the bridge that will prevent people from jumping.

Project Purpose

The City of Seattle sponsored a conceptual design process to provide the Washington State Legislature and WSDOT with the community's thoughts, ideas and values regarding a barrier on the SR 99 Aurora Bridge. The purpose of this process was to work with community members and stakeholders to develop design ideas for the barrier that reflect community values and the historic character of the bridge.

Some members of the community disagreed that a barrier is the best solution. These and all comments received through this process are summarized within this report and can be found in Appendix X. However, it is important to remember that the purpose of this process was to identify community values regarding a barrier on the Aurora Bridge and translate those values into conceptual designs.

Who is involved?

The Seattle City Council, a project Steering Committee, and WSDOT provided guidance during the community outreach and conceptual design process. The Steering Committee includes representatives of the Seattle Chapter of Architects without Borders, Seattle Fremont Individuals and Employees Nonprofit to Decrease Suicides (FRIENDS), and the Fremont Chamber of Commerce.

Funding

WSDOT estimates it will cost \$4.3 million to design and construct a barrier on the bridge. WSDOT also estimates it will cost an additional \$3.2 million to replace the lighting

on the bridge. The governor's 2008 budget request includes \$1.4 million for barrier design. The Washington State Legislature must approve any funding for the barrier.

Other Options Considered

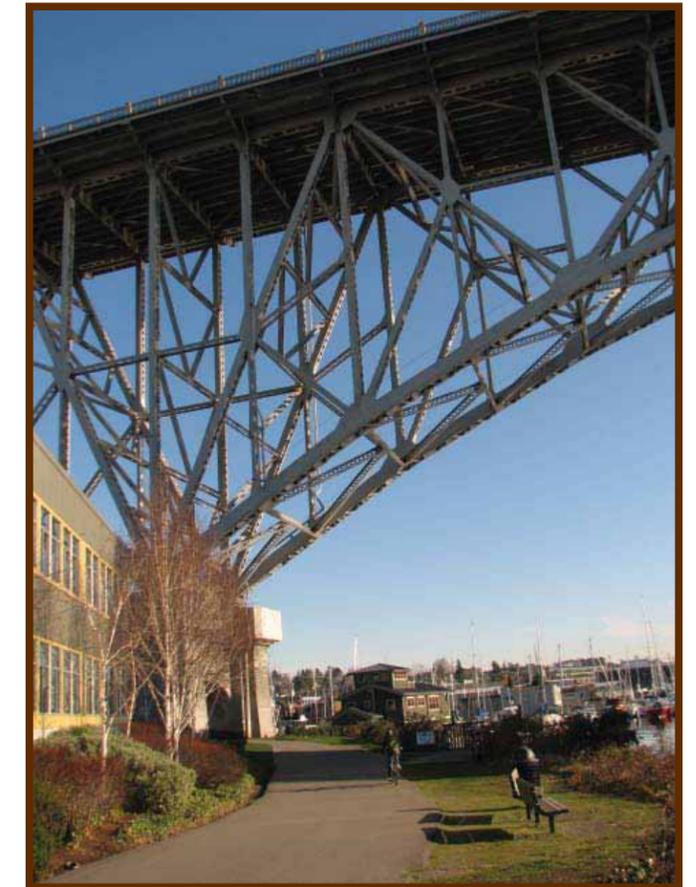
As it developed its cost estimate, WSDOT considered other solutions to solve the Aurora Bridge public safety problem. Other suggested solutions included installing netting under the bridge, closing pedestrian and bicycle access across the bridge, and constructing an enclosed bicycle and pedestrian structure under the bridge deck.

While the initial cost of installing netting would be similar to fencing, the life-cycle cost would be substantially higher because netting would need to be replaced every few years. Netting also makes typical maintenance and inspections much more difficult.

Closing bicycle and pedestrian access is inconsistent with state and city policies regarding multi-modal transportation. Both agencies are committed to preserving existing transportation corridors and to making bicycling and walking more convenient and attractive for our growing population.

The option of constructing an enclosed bicycle and pedestrian structure under the bridge deck was recommended in WSDOT's 2002 Route Development Plan for the SR 99 Corridor. This type of structure presents challenging safety and funding issues. In addition to significantly changing the look of the bridge, crime prevention would be difficult because people would travel

over half a mile in a secluded enclosed path high above the water. The structure would require a sophisticated security and surveillance system. A bicycle and pedestrian structure would be part of a larger project to widen lanes and install a median barrier on the bridge. Funding this project would be very difficult, requiring a significant investment of at least \$60 million from the Legislature.



The Process



The conceptual design process consisted of stakeholder interviews, a community values workshop, a design charrette and a community open house. These four main outreach events took place from early January to mid-February. A variety of communication tools were used simultaneously with each event.

Communication Tools

At the outset of the project, several avenues of communication with the community were established to engage people in the conceptual barrier design process and to provide ample opportunity for two-way communication.

Postcards

Postcards were used to notify people in the vicinity of the bridge of project events (see Appendix A). Postcard notification was sent to 15,971 addresses, including 4,384 homes, 9,562 apartments and 2,025 businesses. Postcards were also sent to the project contact list, which grew to 230 people and included members of the public, stakeholders, and elected officials.

Electronic versions of the postcards, with and without graphics, were also emailed to the contact list.

Phone and Email

A dedicated project phone and email list was developed to establish two-way communication with the public. A contact name, phone number and email were included

on all project materials to provide contact information for people who had questions or who wanted to share their comments. As of March 4, the project received and responded to 19 phone calls and 29 emails. People could request to be added to the email list by emailing, calling, or attending an event. The email list was also used to provide project event notification.

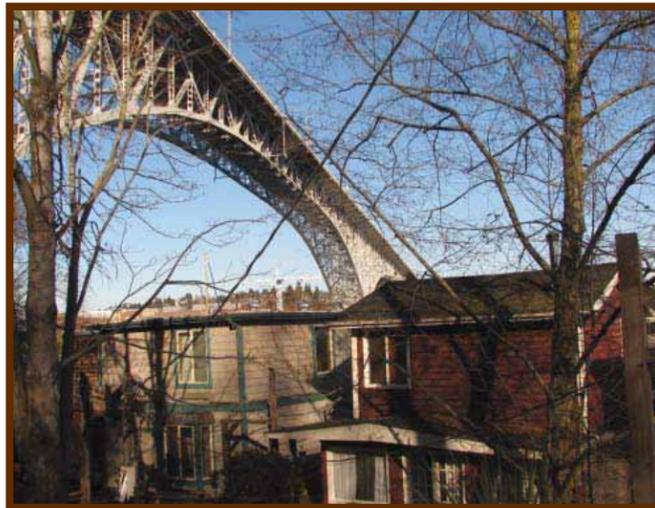
Website

A project website (www.aurorabridgefence.com) was created to share information and to provide contact information for people who wanted to share their comments or ask questions. Links to the Seattle City Council homepage, the WSDOT SR 99 Aurora Bridge Suicide Prevention Project webpage, and the Seattle FRIENDS website were available. Project materials were provided as well as information about funding, the need for a barrier, how to get involved, and project updates.

Notification of all project events was also provided on the website.

Media

Press releases were distributed to local media to advertise the workshop, design charrette and open house.

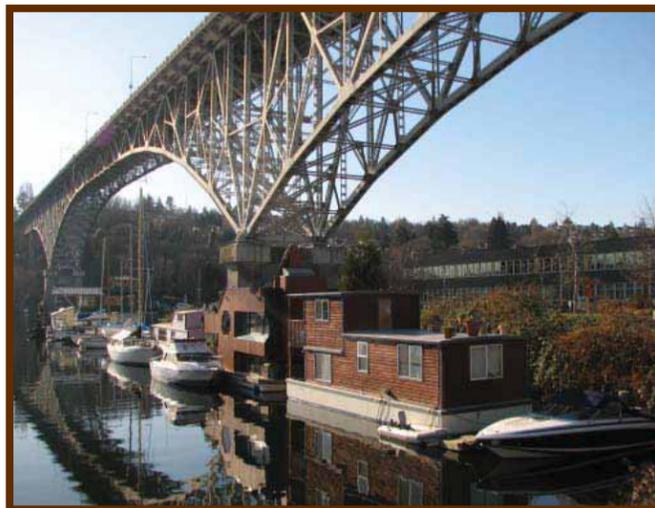


Purpose

Stakeholder interviews were conducted to determine community issues and concerns that should be addressed during the conceptual design process, identify additional stakeholders to be involved in the process, and inform development of the community workshop and design charette.

Before conducting the interviews, nearly 50 organizations and individuals with an interest in the Aurora Bridge and a potential suicide prevention fence were identified by the City, the Steering Committee, and the Consultant. From this list, 20 individuals representing a variety of Seattle and Aurora Bridge stakeholders were interviewed between January 15 and 23, 2008. The following stakeholders were selected for interviews:

- WSDOT
- Seattle Department of Transportation (SDOT)
- Seattle Police Department
- King County Crisis Clinic
- WA Department of Archaeology and Historic Preservation
- Seattle Landmarks Preservation Board
- Historic Seattle
- Lake Union District Council
- Queen Anne Community Council
- Fremont Neighborhood Council
- Fremont Chamber of Commerce



- Property managers of businesses below the bridge (CB Richard Ellis)
- Seattle FRIENDS

At the interviews, stakeholders were asked to share some information about themselves and if they were aware of the suicide problem and barrier discussions. Some of the questions stakeholders were asked include:

- How concerned are you about suicides on the Aurora Bridge?
- What types of concern do you have?
- Do you have concerns about the conceptual design process?
- What issues or information do you think the City should provide and/or discuss at a public workshop?
- Which issues do you think are likely to interfere with the project’s success?
- Where do you receive local/community information?
- How would you like to receive information? (word of mouth, newspaper, mailing, internet, etc.)
- Would you like to be on a mailing list to receive updates?
- Are there other interested parties we should talk with?

Interview Results

Although all of the interviewees were familiar with the SR 99 Aurora Bridge Suicide Prevention Fence project, the level of familiarity varied: most were aware of the issues, but not all were aware of the stakeholder consultation

process currently ongoing, or that the City and the State were pursuing barrier design. As a result of this variation, many of the concerns and questions expressed have as much to do with the need for the project itself as with the barrier conceptual design stakeholder process.

Concerns about the project fall primarily into the following categories:

- **Right solution** – consideration of other solutions
- **Economic** – is the cost of the project excessive for the gain, or the best choice of where to invest dollars
- **Political** – concerns about the lack of public process to select the barrier option and the impression that a select group of stakeholders are driving the project
- **Safety** – what safety priorities does this project follow
- **Historic and aesthetic impacts** – the project threatens the historic and aesthetic integrity of the bridge

A full list of identified stakeholders, interview questions and the interview summary can be found in Appendix B.



Purpose

More than 75 people attended the evening community workshop held on January 30, 2008 at B.F. Day Elementary School in the Fremont neighborhood. The overall purpose of the workshop was to solicit the community's thoughts, ideas and values regarding a barrier on the SR 99 Aurora Bridge. Specific workshop objectives were to:

- Educate the community about the SR 99 Aurora Bridge suicide barrier – background, need, proposed solution, historic landmark status and other constraints, and process
- Define how community input will be used
- Identify and prioritize community perspectives and issues that should be incorporated into the conceptual design process as appropriate
- Identify any additional stakeholders and interested community members
- Demonstrate the City's and WSDOT's commitment to working with the community

Format

At the beginning of the workshop, attendees were provided with several resource materials including a project fact sheet and a one-page summary of the use of barriers on other bridges. Workshop attendees were shown a video presentation to educate them about project background, the need for the suicide barrier, other proposed solutions considered but rejected, why a barrier is being carried forward, and the structure and

focus of the workshop. They were then broken into four facilitated small-groups to identify community issues and perspectives. Each small group then chose their priority issues to report back to the rest of the workshop attendees. Facilitators for each group documented the groups' discussions and summary of community issues was developed for use at a conceptual design charette.

Outcomes

The following list is a compilation of the priority issues and considerations identified by each of the small groups at the January 30 community values public workshop. Recognizing that all attendees may not think a barrier is the best solution, they were asked to participate anyway by providing values and identifying issues about a barrier with the assumption that WSDOT will construct a barrier on the Aurora Bridge.

- Create a safe environment: ensure effectiveness
- Ensure functionality and structural integrity
- Aesthetics are important (e.g. materials used)
- Maintain the historic character of the bridge
- Aesthetics of the barrier are more important than historic character
- Preserve views of the bridge and from the bridge
- Consider the psychology of the space
 - A barrier should deter someone from feeling lonely and vulnerable
 - A barrier should connect with a neighborhood feel
- Constructible in a timely manner

- Low maintenance
 - Use long-lasting materials and maintain access to maintenance crews
- Consider different lighting options
- Enhance the pedestrian experience
- Creative design solutions
 - Utilize a variety of designers to ensure the best design
 - Investigate artistic designs
 - Consider non-vertical barriers or alternative designs
- Continue to involve the community and stakeholders, and deliver what is promised

stakeholder Interviews

community workshop

community design charette

public open house



Purpose

The community design charette was held on February 13, 2008 at the Phinney Neighborhood Center, two weeks after the community values workshop. The purpose of the charette was to engage stakeholders, local design professionals and the community to help apply and translate the issues and values criteria developed at the workshop into barrier design concepts. Other objectives included:

- Creating barrier design concepts to share with the community at the open house following the charette.
- Creating barrier designs to include in the report to the Washington State Legislature.
- Demonstrating the City's and WSDOT's commitment to investigating creative designs and working with the community and stakeholders.

Format

Approximately 40 people participated in the design charette. Participants were broken into three groups comprised of community members, local design professionals, and stakeholders representing interests such as historic preservation, suicide prevention, and pedestrian and bicycle travel. Each group was also assigned a design facilitator, responsible for helping their group turn ideas into conceptual drawings. Additionally, representatives from WSDOT bridge engineering and architecture departments, Seattle Police Department, and the King County Crisis Clinic were available as resources.



At the beginning of the charette, participants viewed the same presentation shown at the January 30 community workshop so they could gain an understanding of project background and issues that could be addressed through design. To set parameters for the groups' work, participants were also provided with several resource documents and design tools including:

- American Association of State Highway Transportation Officials (AASHTO) design load guidelines
- WSDOT's SR 99 Aurora Bridge Suicide Prevention Fence Requirements
- Community issues identified at the January 30 community workshop
- As-built drawings of the bridge
- Historic and modern photos of the bridge

Copies of the guiding documents are provided in Appendix C.

Outcomes

Each group took a slightly different approach to collaboratively creating conceptual designs. For the first half of the charette, Group 2 focused on verbally discussing community issues, visions and design themes before the design facilitator began to shape those values into sketches. Group 3 developed many sketches and strategies that the design facilitator summarized. Group 1 discussed many design options and arrived at one comprehensive concept.

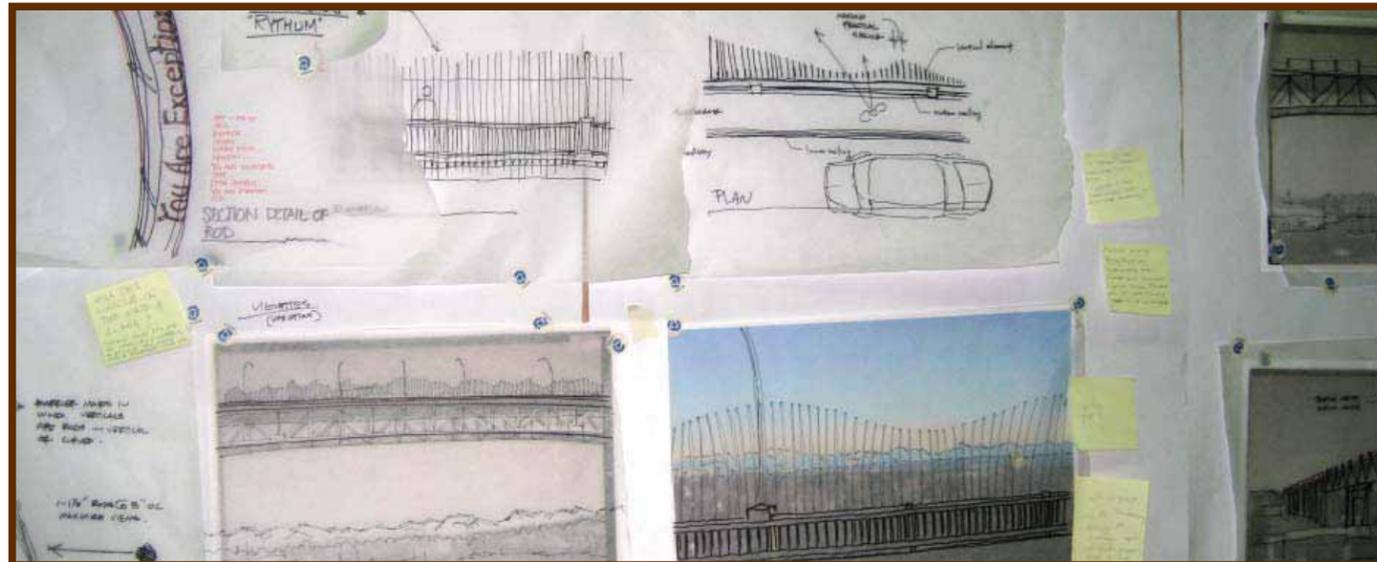
The design charette produced eleven concepts with accompanying narratives to explain the designers' thought processes and to show how community values and comments were incorporated.

stakeholder Interviews

community workshop

community design charette

public open house



Purpose

A public open house was held the evening of the design charette to share the early results of the design charette with the public. Additionally, the open house was used to gather and incorporate the community's feedback and comments about the concepts.

Format

The open house was held from 6:30 to 8:30 at B.F. Day Elementary School in the Fremont neighborhood. Eleven concepts created at the charette were posted for the public to view and provide comment on, via comment form or sticky notes attached directly to specific drawings. Design facilitators from each group were available to answer questions and discuss their group's drawings.

Outcomes

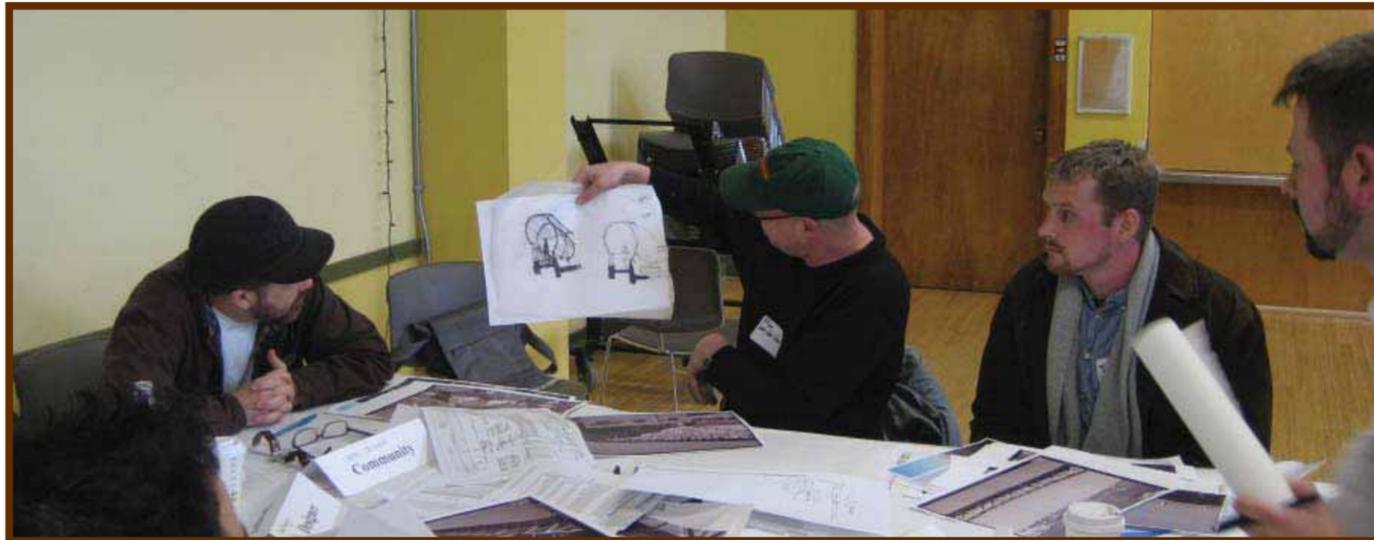
Comments about the barrier concepts were submitted at the February 13 public open house and were compiled for review by lead table designers. Examples of comments include:

- All are very creative. I am most attracted to the simple, least obstructive designs. The less noticeable the barrier, the better! Sure, something would be cool if it were artsy – but for how long? I don't want to get tired of a design that calls my attention to it every time I cross the bridge. Keep it simple!
- What about any of these ideas is historical? Looks like the 1930's era? Nothing looks like it might have been built within 50 years of 1931.

- I do not like the designs where the fence curves in over the sidewalks – that reminds me of an overpass in the projects. The fence should be minimally obstructive to the views of the riders, walkers (and drivers) crossing the bridge. The fence line should be symmetrical and not too modern to keep with the historical design of the bridge.
- Anything making the pedestrian walkway more tunnel-like should be avoided.
- Each concept had the idea of suicide prevention incorporated. Each tried to stay true to its historic origin and maintain its stunning views.
- Seattle has the highest per capita public art pieces. Let this new structure reflect that. No horizontal bars, or keep them very low.
- Make it a memorial for those who have died.
- What happened to the idea of building out so a fence is not so visible? All but one seems very severe and invasive.

A separate summary including all comments is available in Appendix D.

Potential Barrier Design Concepts



Comments received throughout the project and comments specifically received at the open house on February 13 were reviewed and incorporated into the concepts by the design facilitators as they refined the concepts. Public comments related to specific designs are included in the final concept packages on the following pages. Designers also refined the narratives to ensure they comprehensively reflect the designs, discussions and community values.

Thanks to all the designers, stakeholders and members of the community who participated in the design charette. This process would not have been possible without the help of those who participated in the charette. Most of the participants are listed below; however, not all participants signed in.

- | | | | |
|------------------|------------------|----------------|-------------------|
| Phil Bannon | Sue Eastgard | Paul Kinderman | Jana Rekosh |
| Jennifer Barron | Liz Eddy | Don Kuch | Skip Satterwhite |
| Krishna Bharathi | Char Eggleston | Rachel Minnery | Julie Siple |
| Evan Bourquard | Pat Gallagher | John Novak | Katsuya Suyamatsu |
| Suzie Burke | Daniel Gero | Ned Olson | Matt Swope |
| Scheer Chan | Sheridan Hammond | Marilyn Perry | Ryan Thurston |
| Beth Chave | Dave Helton | Marc Pevoto | Amity Trowbridge |
| David Clinkston | Rob Hendrickson | Greg Phipps | Ron van der Veen |
| Lee Copeland | Gregory Hill | Alex Pulver | |
| Erin Doherty | Bernie Kay | Autumn Pulver | |

Concept Narrative

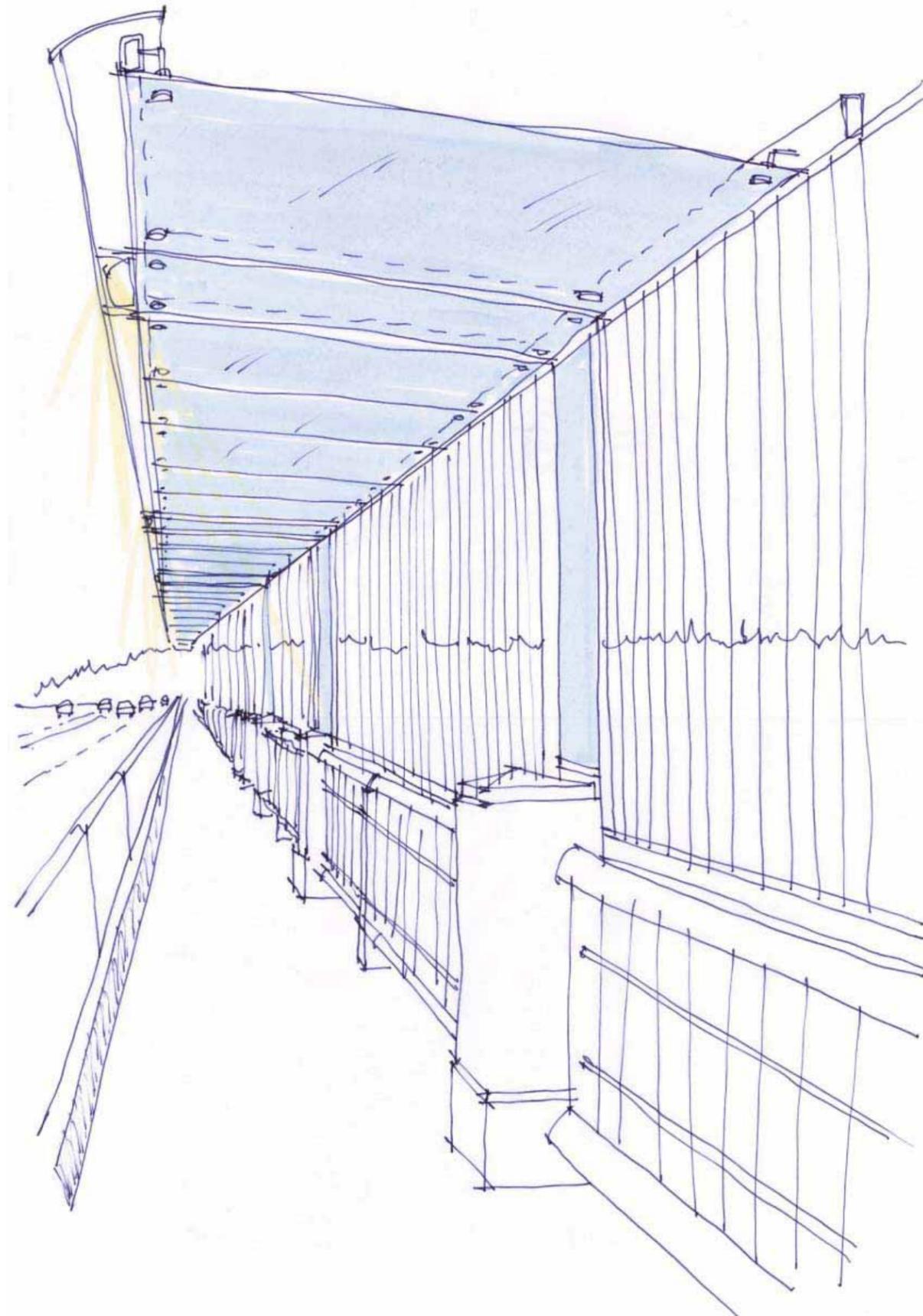
The design works with the historic criteria for the barrier to be reversible, and honor the goal to be as transparent as its function will allow.

The barrier is designed to be added to the exterior side of the bridge, not narrowing the pedestrian/bike path, and adding shelter and lighting.

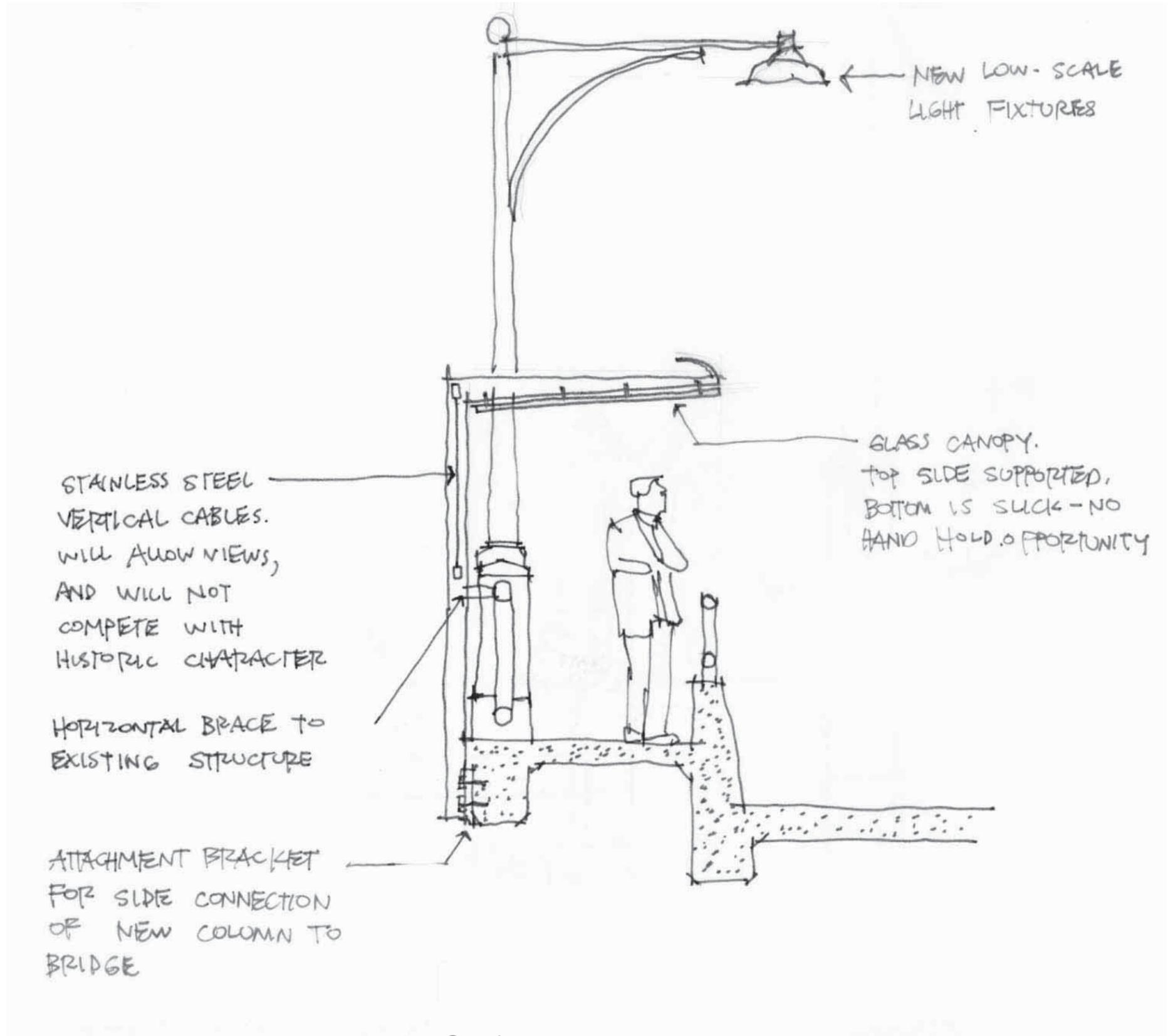
To defeat climbability, a slick surface overhead is made of laminated, translucent glass panels supported from above. The glass panels are modular, durable, easy to maintain, and easy to replace. Thin, vertical cables are used between the uprights.

The upright supports respect the rhythm of the current structure without trying to mimic it. Lights can be incorporated into the curved edge of the canopy, adding pedestrian level lighting.

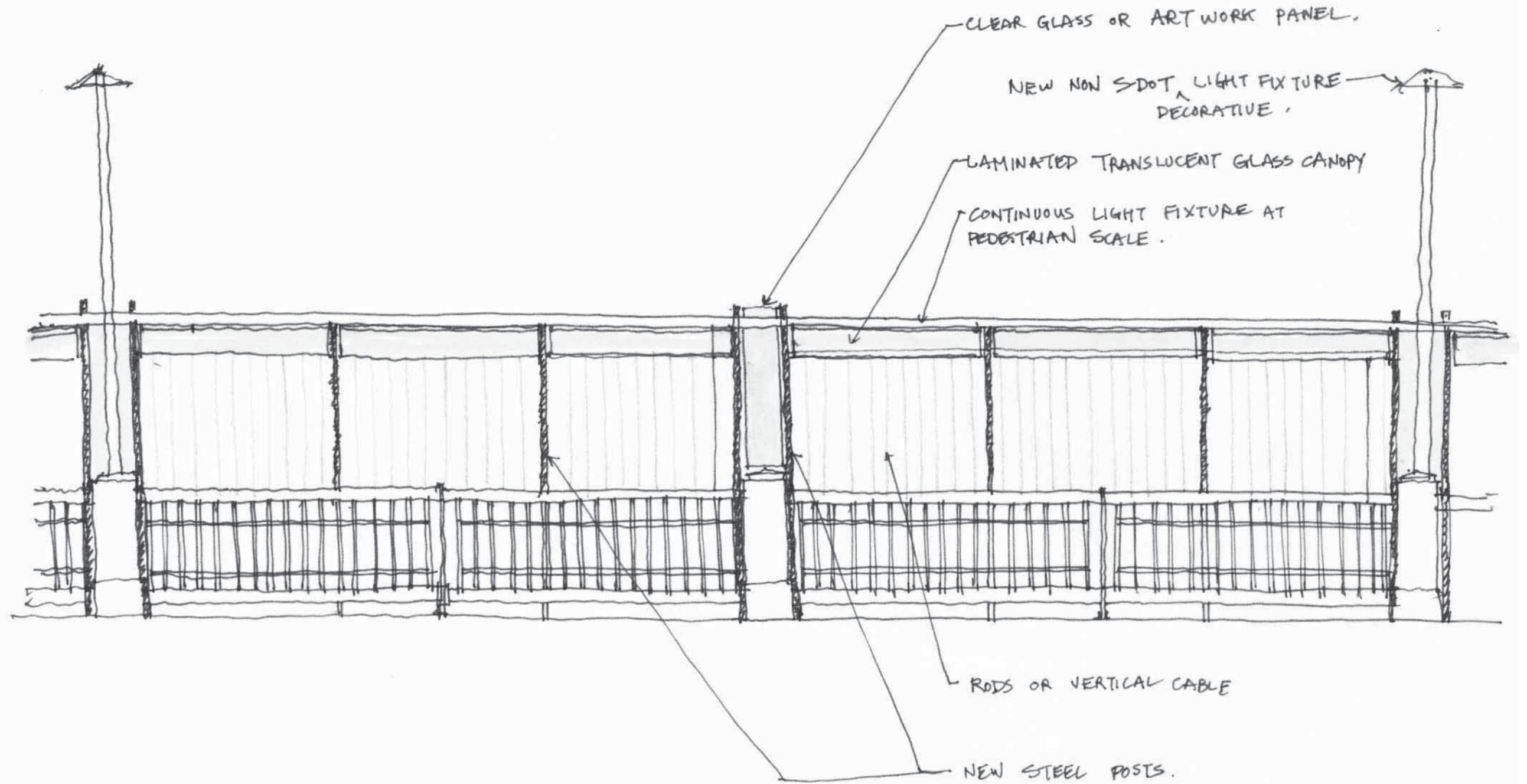
The primary light poles should be more respectful of the scale of the new barrier design, and made lower than the existing fixtures.



Pedestrian Perspective



Section



1

Elevation

Public Comments

Is it prone to graffiti? Blue Glass Concept could create some issues if glass is used with vandals and graffiti. Glass would need to be cleaned annually at least.

Lovely and subtle.

Best design.

I like the lighting concept – try that first before any fence [construction].

Will the glass get grubby with exhaust, rain, and bird dropping accumulation?

I like the cable aspect but not the glass cover – it is too modern and not in keeping with the design of the bridge. It will also get scratched and dirty.

I also liked the design which featured the glass overhang – perhaps it would disappear more when looking at the bridge? There would be more options to feature greenery/plants in this design.

Will people be able to take photographs from the bridge and not have beautiful views blocked by mesh/wire/net etc? Will garbage/debris accumulate in this protective barrier and who will clean? Has glare from vehicles, bridge lighting and sun light been accounted for?

I don't like the glass cover as I think it is too modern and will get dirty and scratched. Trash will end up on top of it.

“Blue Glass Concept” looks great and adds a simple yet functional looking design. It seems to add character to the bridge design and ensures maximum safety. Blue Glass Concept adds tasteful lighting options.

The first design (w/ glass roof) is very light and airy, and I like the shelter it provides from the rain. The potential for cool lighting is also great. I'd actually walk across it just for the experience. The idea of colored glass is nice, especially on the grey gloomy days.

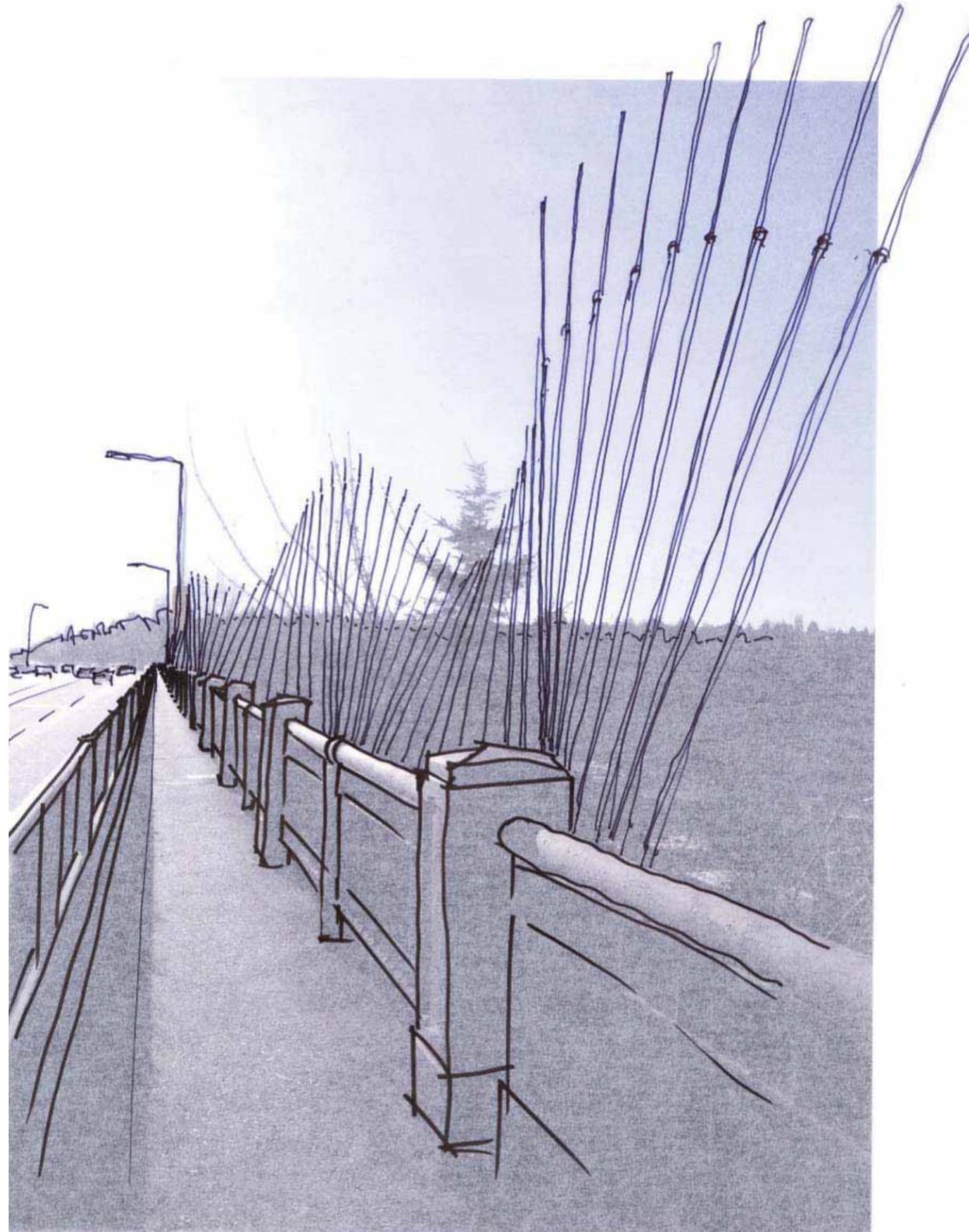
LED!! They are too costly! They produce unfavorable glares!

Concept Narrative

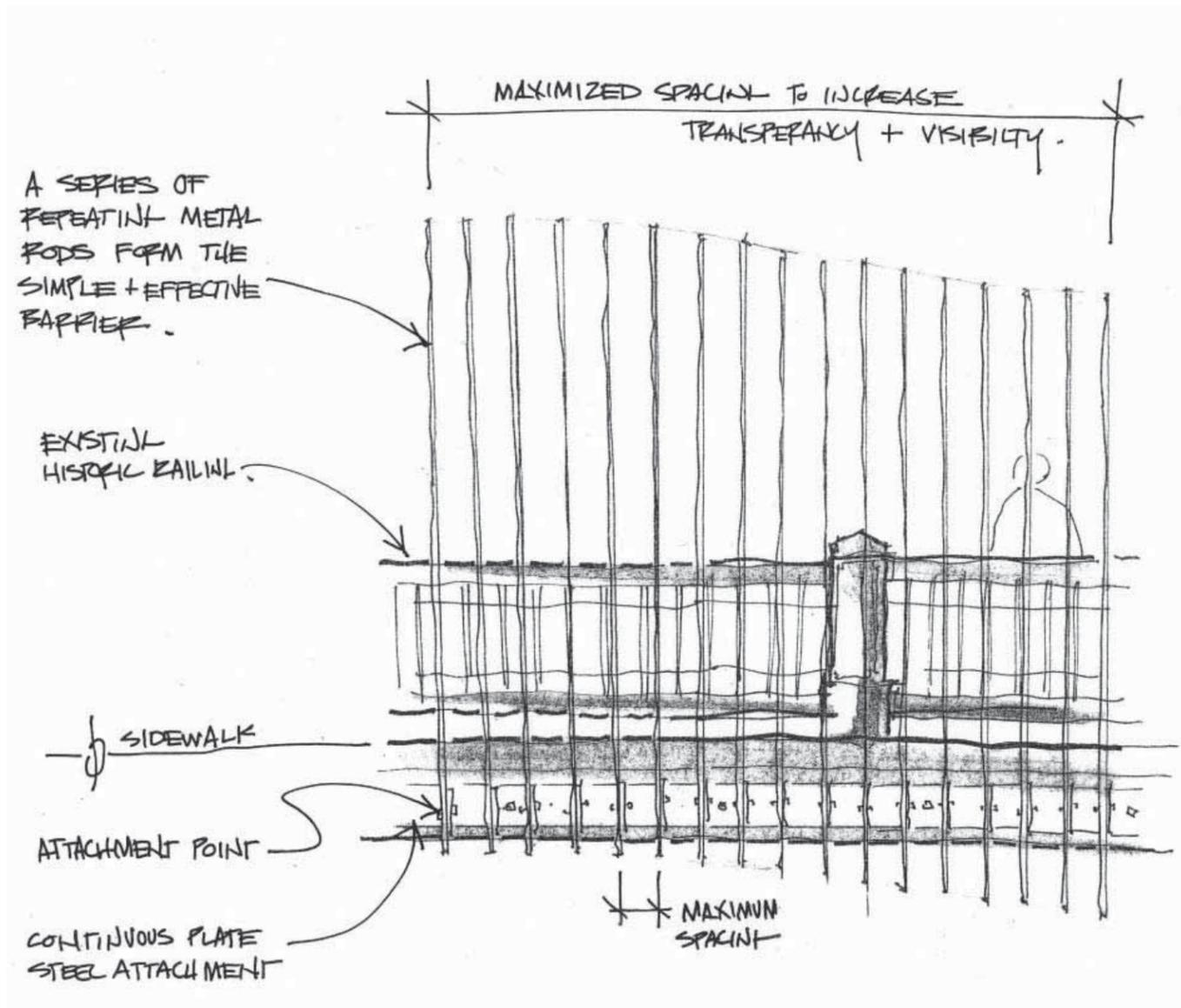
Comprised of delicately undulating rods, this screen takes on a rising and falling profile, echoing the peaks and valleys of Washington's mountain ranges on the horizon. Because of their slenderness and spacing, the effect of travelling at any speed will cause the rods to blur and fade. They disappear to reveal the city skyline and regional mountains, as well as the hills and trees of the surrounding neighborhoods. By constructing this barrier as a delicate curtain, a visual connection to the sky and water is given to the pedestrian crossing the bridge. This creates a sense of openness while still providing effective safety.

The screen's waving form and lack of horizontal members do not allow for climbing over the barrier. As a visitor approaches they will find a personal message etched into the rod at eye-level. Inspired by a sticker found during our site visit that said simply, "you are extraordinary," the message is meant as an expression of warmth and hope for the person who has come to the bridge in despair. For the passing individual, the inscriptions offer another connection to their community.

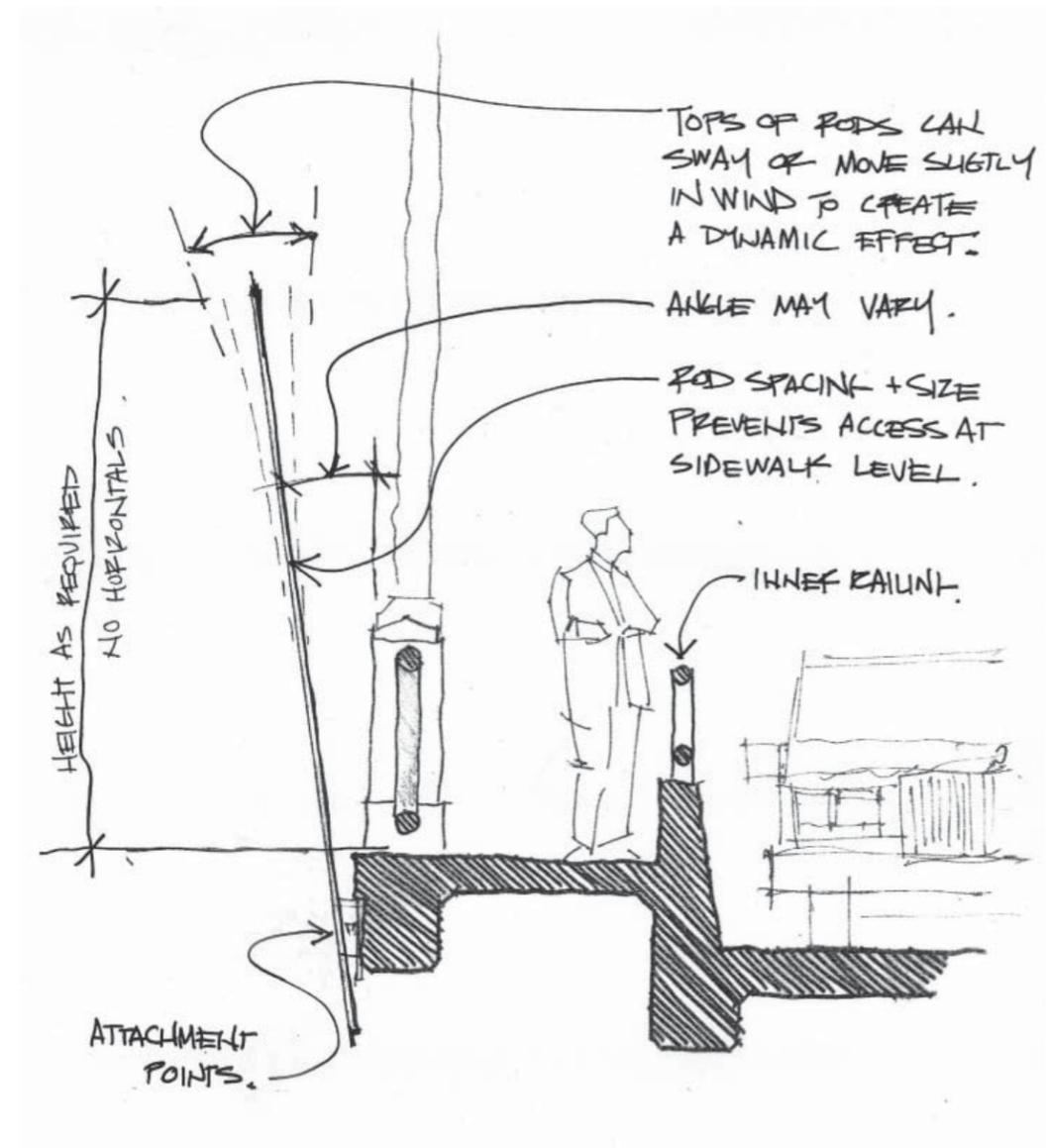
Our intent in offering this proposal is to provide a simple solution that respects the historic significance of the bridge while detaching from its form. The new barrier's framework will match the rhythm of the bridge's structure, while the screen's form departs in a gesture of lightness and transparency.



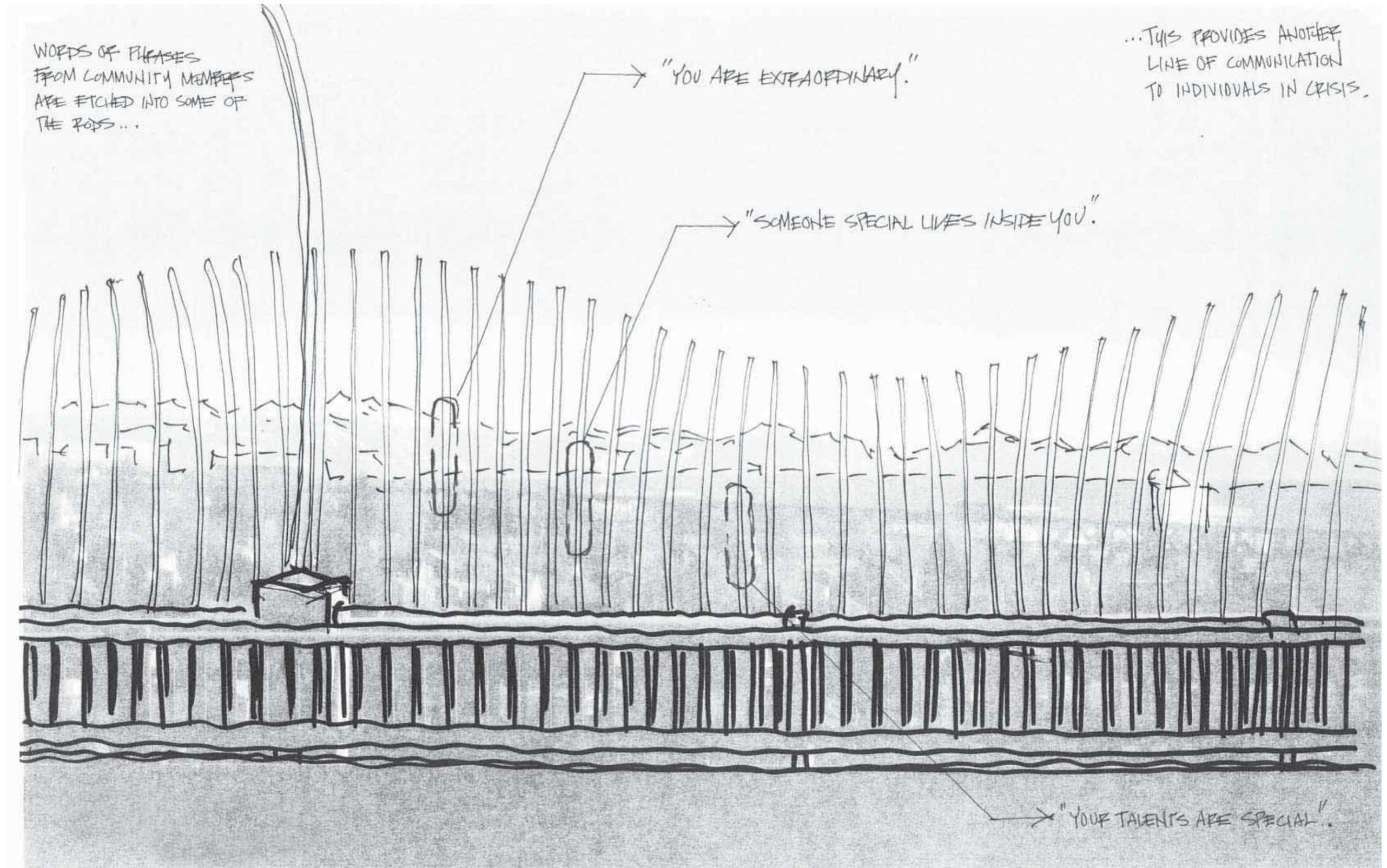
Pedestrian Perspective



Typical Elevation

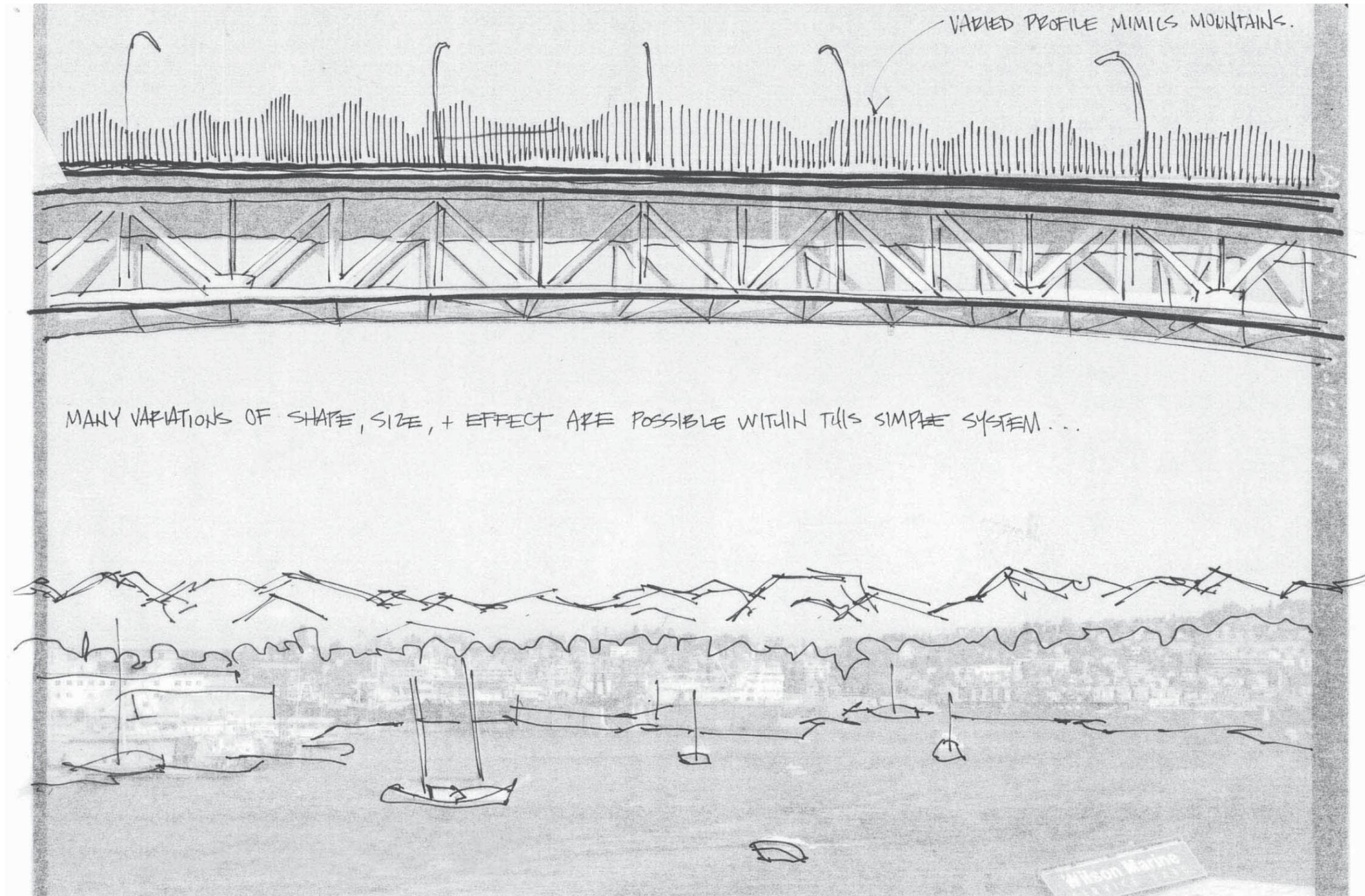


Section

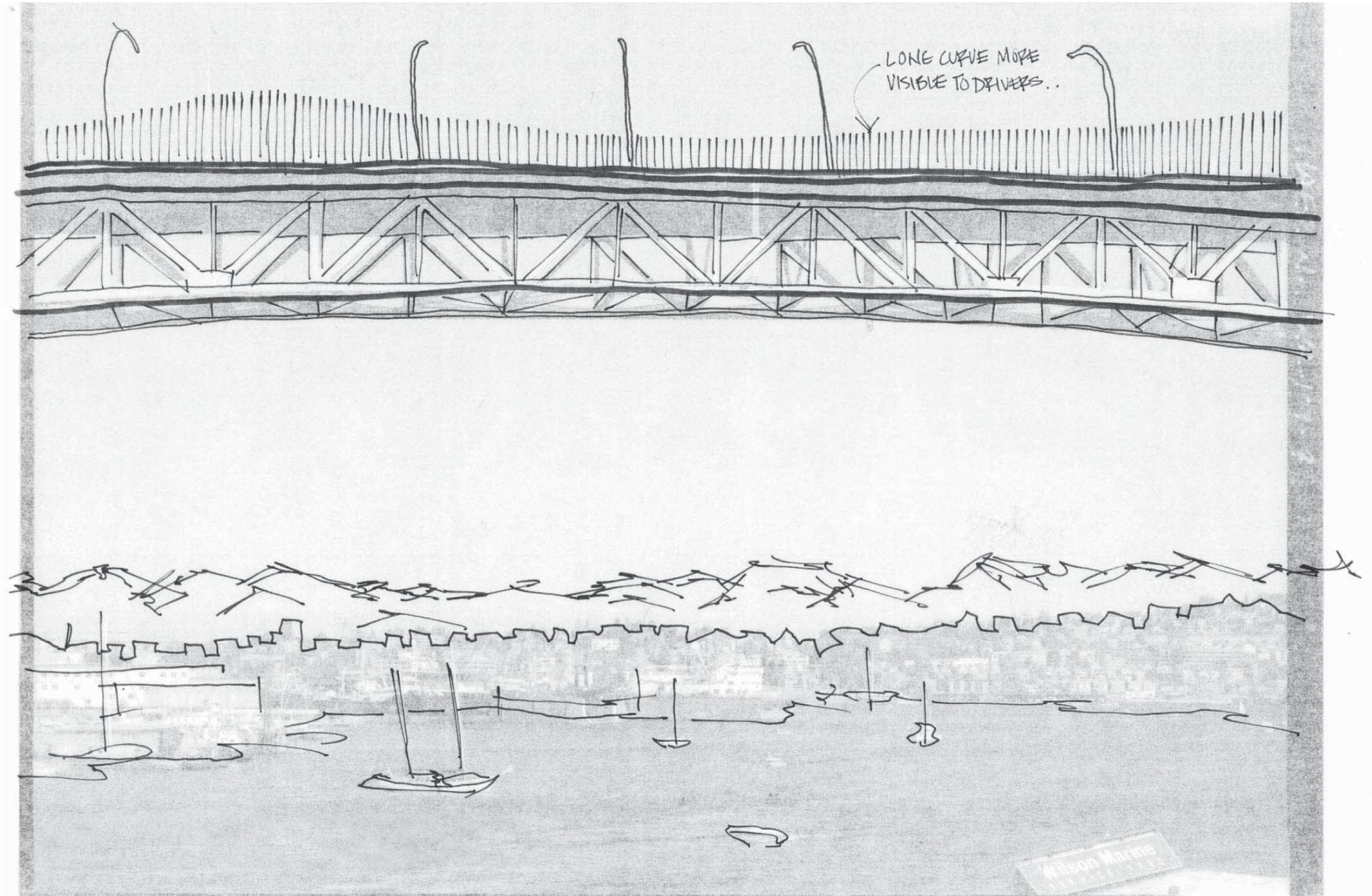


2

View From Sidewalk



Distant View / Option A



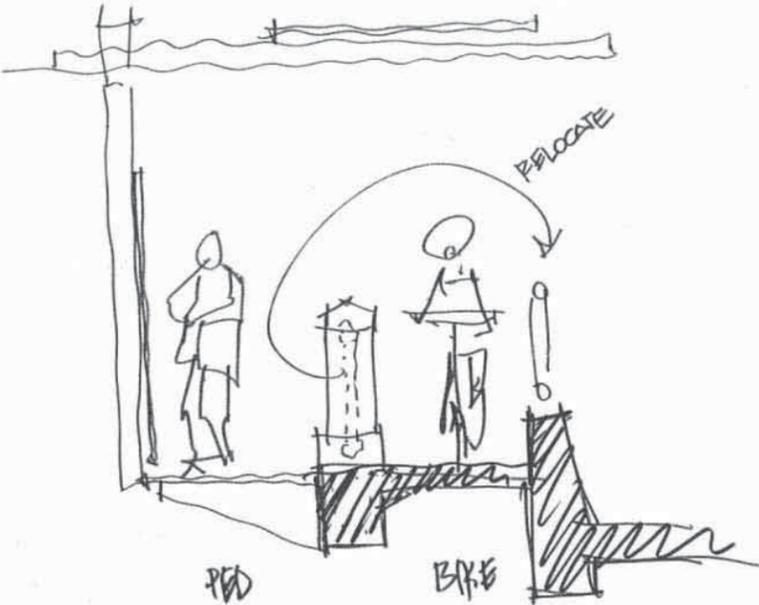
2

Distant View / Option B

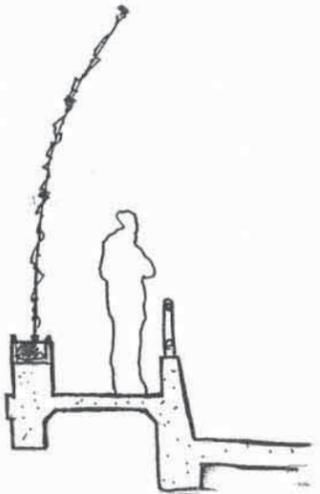


Distant View / Option C

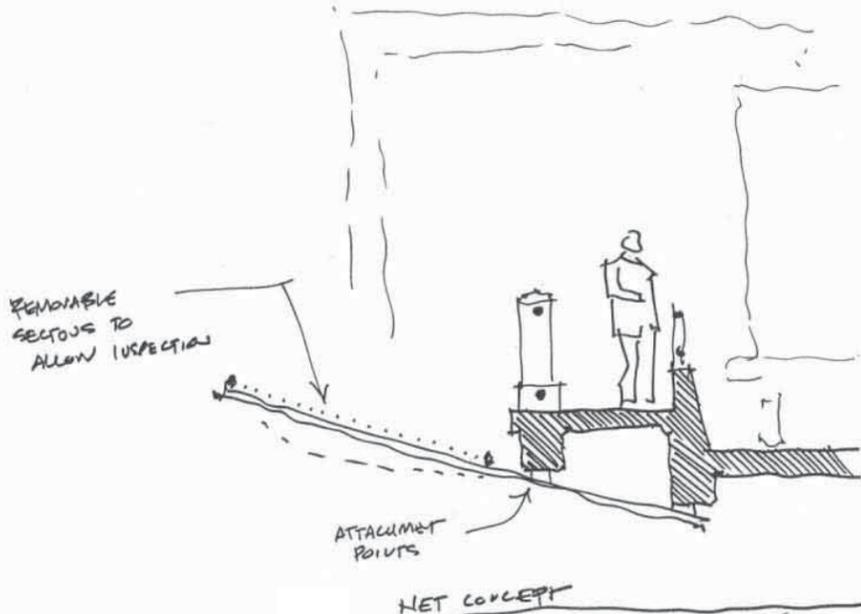
Secondary Schemes



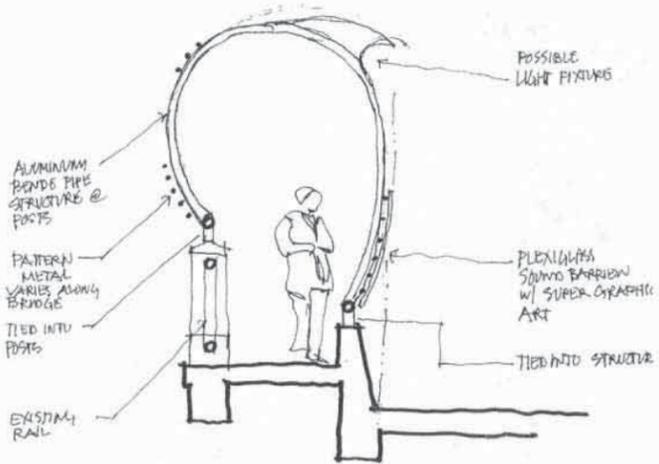
1. BIKEWAY + CANOPY



2. GREENSCREEN



3. HORIZONTAL NET



4. TUBE



5. RAIL INL ATTACHED RODS.

Public Comments

“Blades of Grass/Graceful Undulation”

Needs more perspective drawings to flesh out concept. Could look tacked on if not truly mocked-up in advance.

This is the best by far of “vertical” schemes. The horizontal “net” is better. I wonder if this “Blades of Grass” idea could work horizontally.

I love this one!

I prefer undulating or vertical [design] to box panels.

This is great! I love the transparency and how it echoes the mountain aspect. Art makes people want to live.

This turns a problem into an asset! Terrific!

The wave type verticals look much better than the straight verticals.

Love the curve idea – it ensures that the barrier doesn’t create a constant view blockage or any one part of the view. The curve also mirrors the mountains and is easy on the eyes. It is attractive from on the bridge and from far away.

Will this whistle in the wind and clang? [Consider that] things that fly off of vehicles (wheels). A bicycle fell onto a houseboat once.

Would it possible, as with the floor tiles in the Market, for people to purchase bars and submit a saying or memorial to someone? It would be a way to involve the community and create a sense of community ownership. It could reduce costs and/or help fund the project. The organic, unique design of this one is exciting and interesting to look at. I think this is my favorite design overall. It incorporates the vertical emphasis, compliments the

view, and brings a personal and inspirational touch with the sayings while remaining subtle. Perhaps placing the emphasis on simply inspirational saying rather than directing them to potential jumpers would be less morbid?

Both ideas are really artistic. I like the idea of wind moving rods. Two issues: glare and heavy winds?

This design has incorporate a design element into the functional aspect which I feel best represents the style of Fremont art within architecture. Tasteful.

The “Blades of Grass” design is a simple yet elegant design. It has many possibilities. It seems that it could have elements of the “old” and “new.” Old as in European soft lights added to the lamp posts. “New” as in the undulating rhythm of long and short blades of grass.

It would be interesting to add architectural elements from nearby communities (Queen Anne, Belltown, downtown, Magnolia) as well as Fremont and Ballard. Using metals which change color as the temperature changed, such as Gehry’s EMP, would add an additional “living” effect. Because preventing suicide is about saving lives.

The “Blades of Grass” can be an eclectic design much like quirky Fremont.

Question: Does cantilevered design work with historical nature of the bridge? I hope so!

If “blades” are moveable, will people mess with them? Will it attract attention to the edge of the bridge?

“Blades of Grass” captured my interest most – it’s organic,

lyrical design was very nice to look at while emulating the movement of the view beyond. It also was the design which offered the most opportunity for “community ownership” as the saying on each bar could provide a source of funding if folks could donate to have a saying of their choice etched on the rods.

What about any of these ideas is historical? Looks like the 1930’s era? Etc. Nothing looks like it might have been built within 50 years of 1931.

“Blades of Grass” is the best from a pure individualistic standpoint. It is distinctively “Fremont” and Seattle-ish in being whimsical and effective.

I am definitely in favor of the designs incorporating more artistic approach (for instance “Blades of Grass”

Same with the Blades of Grass, it would be nice to walk across and look at the individual “reeds” and inscriptions. I like the idea of the archway entering the sidewalk onto the bridge.

I like the “blades of grass” design for the artistic element which I think is important to connect with Fremont’s unique style.

I like the idea of phrases being etched along the bridge.

“Blades of Grass” living breathing concept

If the net concept is not feasible, then the one that keeps the views from the bridge in the cleanest, simplest way is the best. The Blades of Grass, without adding any horizontal elements actually ads a beautiful sculptural echoing of the mountain ranges in the distance. Brilliant approach.

Aluminum bend pipe structure

Could be unsafe for pedestrians. There is no secure escape if passing another pedestrian or unsavory character (mugger, aggressive, pan-handler, etc.)

Net scheme

Net scheme is the least visually troublesome. It is the only attractive concept.

It is good the net is being considered. If it’s good enough for the Space Needle, why not the Aurora Bridge?

Net scheme should be given serious consideration. This is the only solution that doesn’t degrade the view enjoyed by thousands of commuters on the bridge. It is also the least conspicuous from most other vantage points.

The only likeable concept is the “nets” concept which was not fully developed. Suggest starting with improved illumination only to achieve some added deterrent effect. The other concepts were too disruptive of views – both from the bridge and of the bridge.

Concept Narrative / Planning Guidelines

Approach

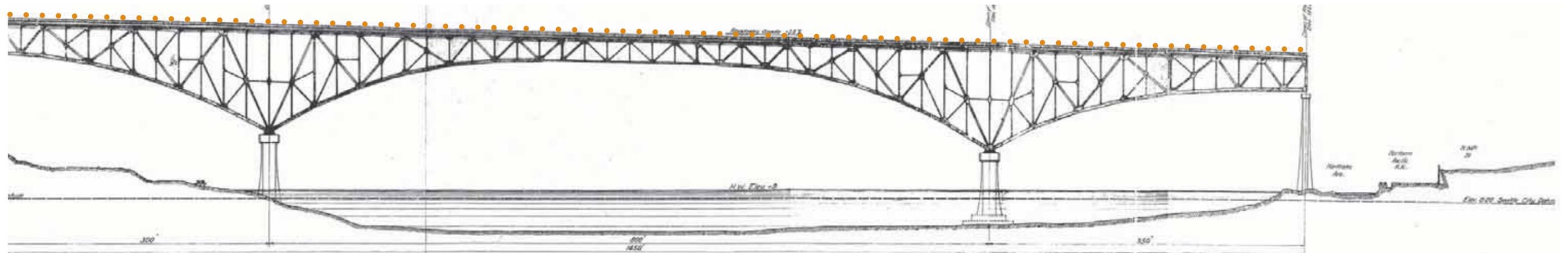
Our charette team consisted of Fremont residents, artists, as well as, mental health and design professionals.

The approach of this document is to summarize strategies raised by our team's thoughts, ideas and values regarding a suicide prevention barrier on the Aurora Bridge.

Elevation

The orange dotted line below indicates that even a 10 foot high barrier would not effect the overall historic character of the bridge when viewed from vantage points throughout the city.

Our charette team encouraged the use of integrated colored lighting in the design of the barrier.

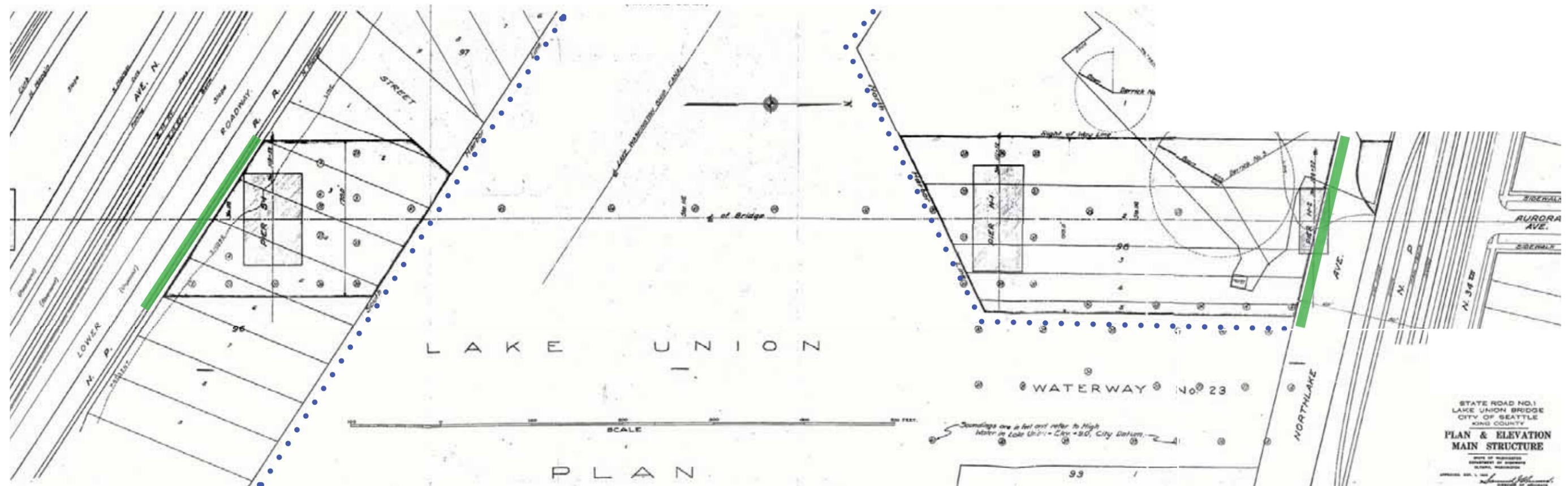


Planning Guidelines

Plan

The blue dotted lines below indicate the extent of the waterway. Varying the barrier strategy over residential and commercial properties to include stronger safety measures was recommended by our charette team.

The green bars above represent the north and south access points of the bridge and were identified by our charette team as locations for plaques, sculpture or other potential free standing works of art and memorials.



Community Charette

The biker/pedestrian experience

Our charette team's drawings focused on the experience of bicyclists and pedestrians crossing the Aurora Bridge. We felt strongly that the quality of bridge visitors' experience should not be compromised.

Team process

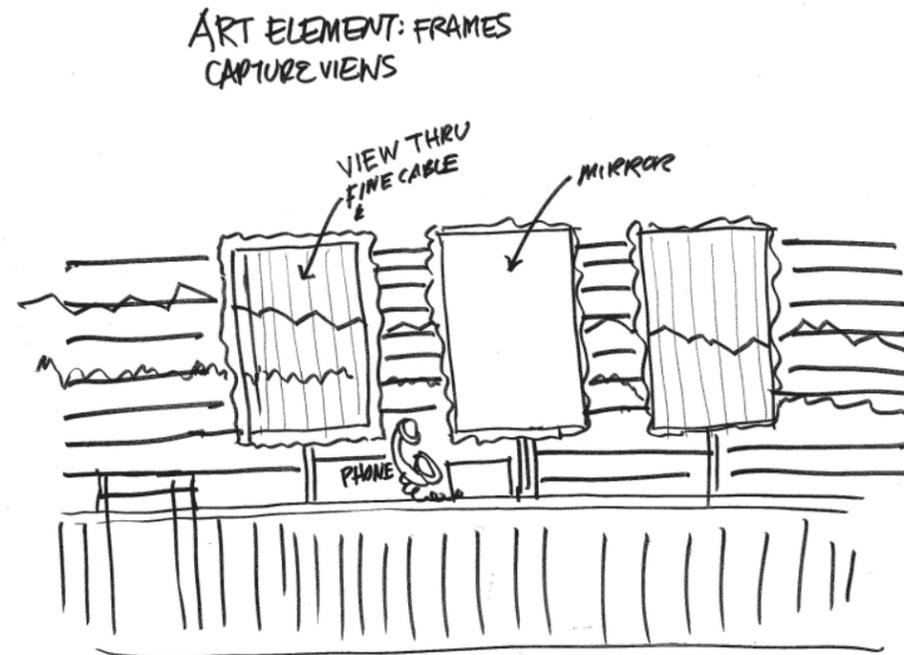
Our charette team decided to produce drawings illustrating physical relationships and design elements that were critical to their barrier designs. Drawings were posted and each team member presented their design concepts and group discussion followed.

Each of the schemes suggests a potential element of the barrier design to be considered.

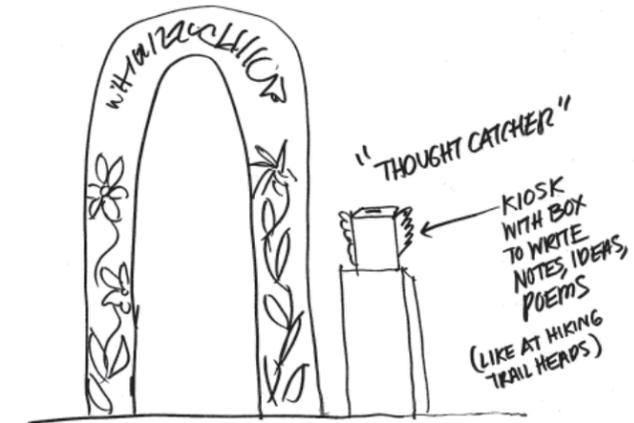
Some drawing text has been removed for clarity.

Elevations

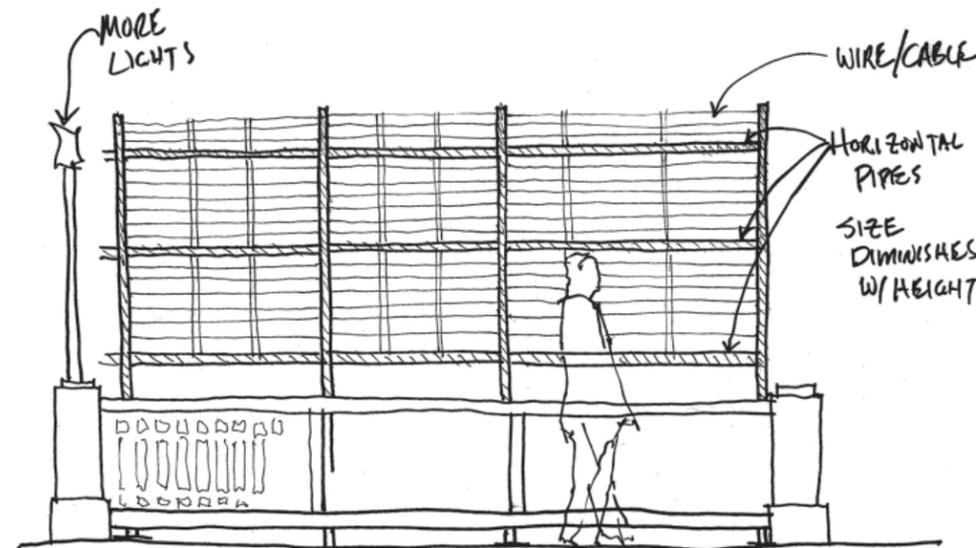
- (A) Indicates the possibility of creating framed views along the bridge.
- (B) Suggests the inclusion of freestanding art elements at bridge entry points.
- (C) Although climbable horizontal elements are not advised, this image suggests careful study of the barrier component sizing relative to the pedestrian.
- (D) Indicates the possible use of accent color along the existing balustrade and the triangular form above suggests opportunities for unobstructed, framed views.



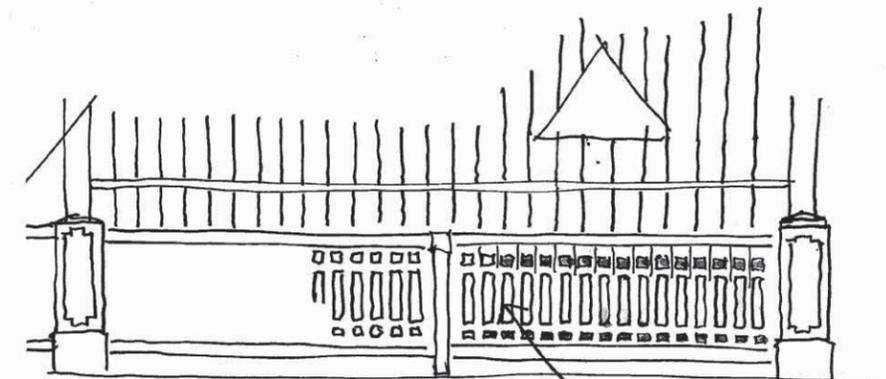
A



B



C



D

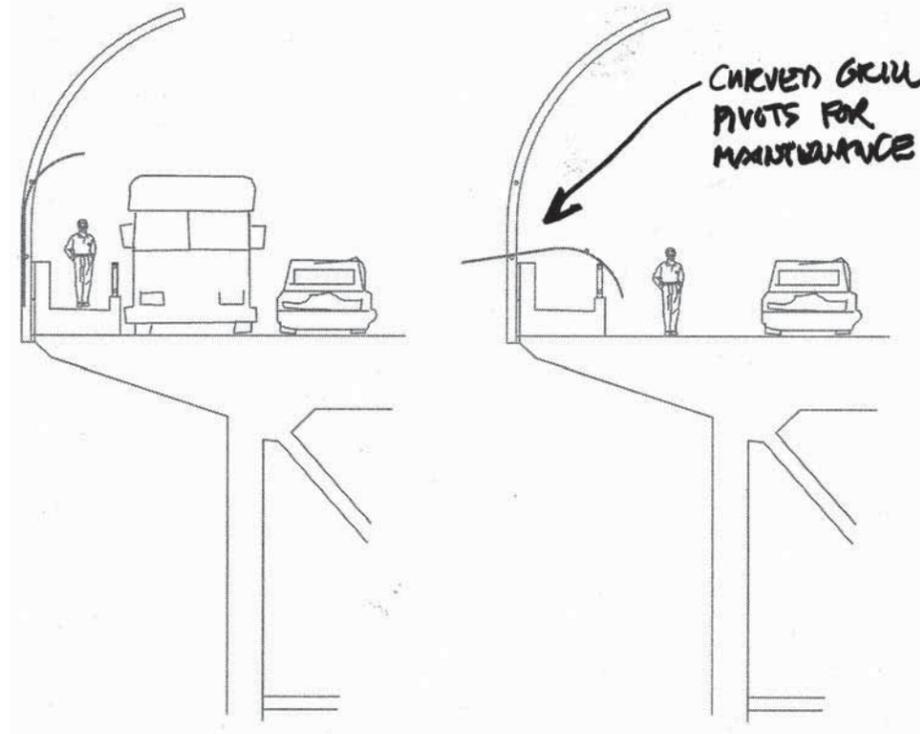
Community Charette

Sections

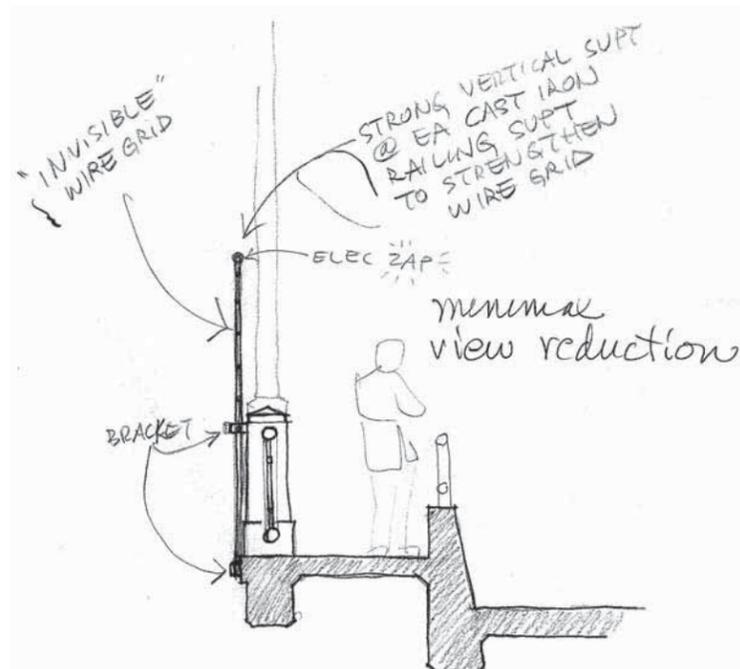
- Ⓐ Although climable horizontal elements are not advised, this image suggests an inwardly curved barrier which allows clearance for bicyclists. The drawing also indicates that the current width of the walkway does not comfortably accommodate both bikers and pedestrians.
- Ⓑ Indicates lighting elements which are shielded by the bridge and a pivoting barrier section for maintenance ease.
- Ⓒ Suggests the incorporation of subtle, but stronger deterrents to climbing the barrier.
- Ⓓ Suggests an integrated lighting strategy.
- Ⓔ Indicates an outwardly curved barrier and a non linear plan.



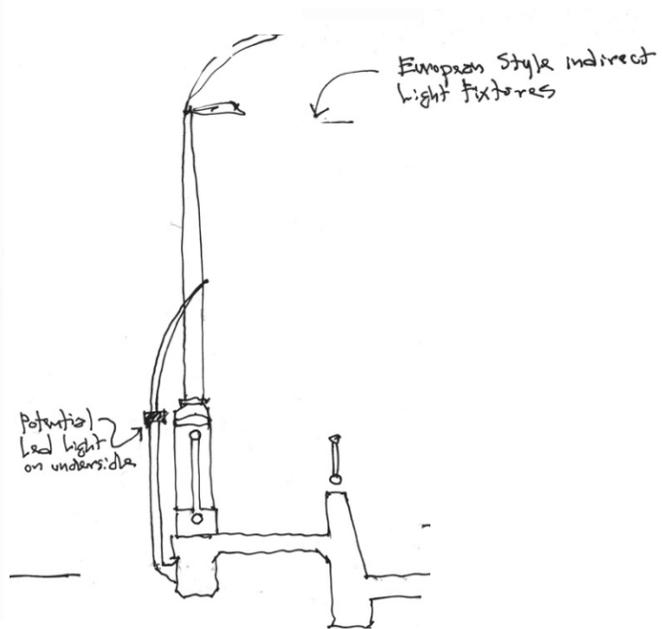
Ⓐ



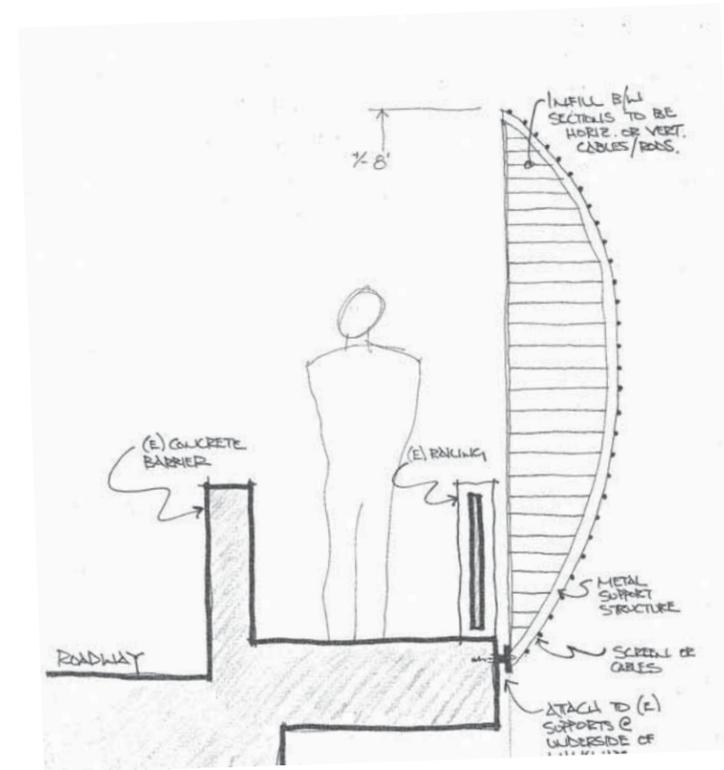
Ⓑ



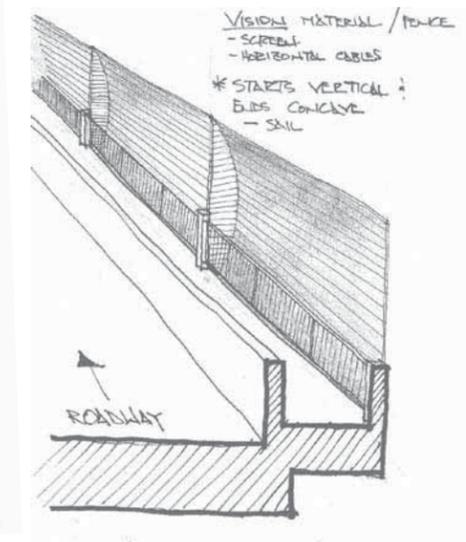
Ⓒ



Ⓓ



Ⓔ



Public Comments

An Artistic View

Put historic plaques (National Register and City Landmark) on bridge so people are aware of its history!

Too silly.

Could this be incorporated in any of the ideas? Some sort of gateway at the end of each pedestrian access?

Yuck – trying to be too cute. It's not appropriate.

These frames won't help the drivers see views at all. Way too busy and cluttered looking.

I really like this design – very creative! Nice kiosk touch.

I also really like the archway concept as entrances to the sidewalks.

I am definitely in favor of the designs incorporating more artistic approach (for instance "Blades of Grass" "An artistic view" – though you may have difficulty with a kiosk box – who collects them? Suicide notes?

I think the one with the frames is too non-uniform, and might look "cluttered" and more obstructive.

Minimalist Approach with a "Zap"

If the zap puts you off, that is the whole point – it will deter jumpers too.

What about the liability of the "zap?"

Uh oh! We can't be sapping people like cattle! I can see the liability with triggering heart attacks, seizures and anxiety attacks.

How strong of a zap are we talking about? People could possibly still get around this.

No zapping! I do not think it sends the right message to potential suicide victims.

I like the mesh on the veil (like Toronto). No zap, though.

I don't like the "zap" concept – I think it is a little too prison-like. With design there ought to be ways to ensure that the barrier cannot be reached without this aggressive touch.

I like most of the designs but there are 2 I don't like – the first being entitled "minimalist with a zap". I don't like the idea of people being zapped by touching the fence. It treats people – possible jumpers – like they are criminals and this is not the message I think we should send.

Electrical fence is distasteful.

The ZAP fence is interesting, but I don't think people would be happy. I could see some kids up to no good trying to mess with it.

I like the veil idea of the Toronto bridge. Perhaps that is what the zap-less mesh fence could be.

Curved Barrier "lights over the roadway will spill less into the neighborhoods"

The amount of curvature starts to remind me of a tunnel (which is bad). If you go with a curve, there needs to be lots of openness for views.

Please avoid curving over. it is very confining and oppressive.

The Comb

Looks nice in section but imposing in elevation view.

The comb seemed in keeping with the bridge's style and I liked the European style lighting which gives a more pleasurable pedestrian experience.

Sails

A bit busy and cluttered for this bridge. However, this would look great on a different, cleaner lined and more modern bridge.

Sails obstruct the view.

Severe and cage-like.

These seem to highly impact the pre-existing character of the bridge. I would prefer a less noticeable design. The view of the bridge from the ground would greatly differ with the "sails."

The "sails" are perhaps too contemporary, sort of Japanese-modern.

Do not like "sail" effect nor the more "artistic/creative" designs. The extra cost and effort for those details are at too great a distance to be fully appreciated and valued.

"Sails" is another good design and kind of goes with theme of bridge i.e. passageway for boats).

Sails is too heavy and doesn't fit the bridge – it looks like an add-on.

The sails wouldn't match the bridge, would look foreboding and heavy.

The sail design is too modern and not in keeping with the bridges historic design. It shouldn't look like a prison fence – should enhance the bridge as well as being functional.

Pedestrian-Experience Along the Bridge

The outward slope infringes less on pedestrians (a big positive!). I like it and its open feeling.

I like the open feeling as long as horizontal view-blocking elements are minimized.

This doesn't "match" the bridge.

It seems to be modeled after the 'luminous veil' barrier on the Prince Edward/Bloor Street Viaduct in Toronto.

Bicycle Zone Emphasis

"Blade" is too close to cyclists and pedestrians.

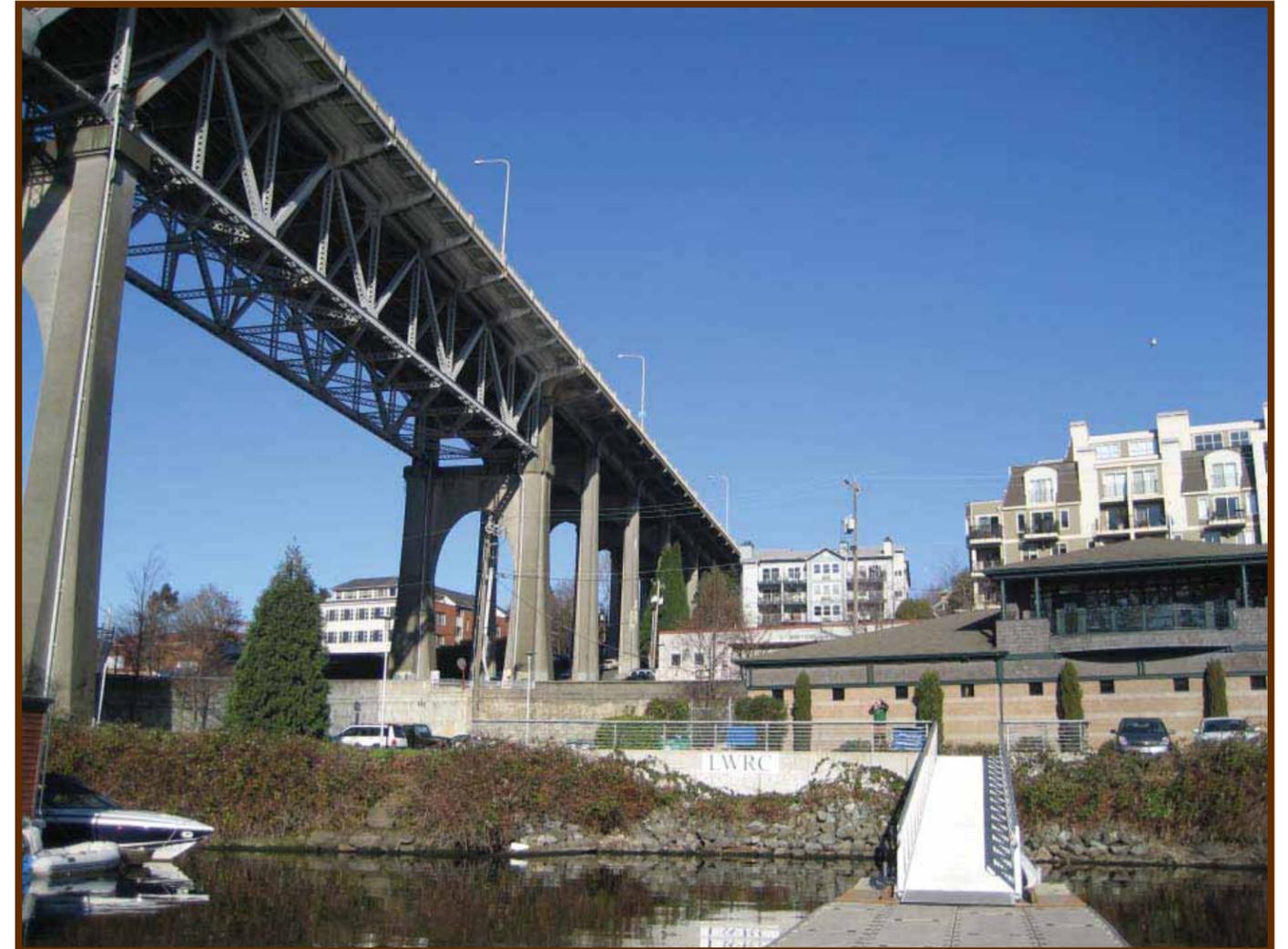
Yes! Wire cable seems the least obtrusive of what is here. However, vertical cable could be climbed like a ladder.

Rather boring design; the curve is oppressive. Please avoid the tunnel feel.

I like the cable concept which allows for less interrupted views when driving.

Next Steps

If the project receives funding, WSDOT will begin designing the barrier in spring 2008. WSDOT will use the comments from the workshop and concepts generated in the charette to inform barrier design. As WSDOT proceeds toward construction, the design team will continue to involve the public and will consider their input while working within the constraints of budget, scope, maintenance, constructability, effectiveness in deterring suicides, and national design codes. Since the Aurora Bridge is listed on the National Historic Register, WSDOT's design must also be approved by the City of Seattle Landmarks Preservation Board and the Washington State Department of Archaeology and Historic Preservation.



Appendix

- Appendix A: Communications Tools
- Appendix B: Stakeholders
- Appendix C: Community Design Charette
- Appendix D: Community Comments

Appendix A: Communication Tools

- Project fact sheet
- Workshop notification postcard
- Open house notification postcard

Project fact sheet

front



Project Purpose

The City of Seattle, the Washington State Department of Transportation and the community are working together to identify potential design concepts for a barrier to prevent people from jumping from the State Route (SR) 99 Aurora Bridge.

The goal of the barrier is to improve public safety. Each time someone jumps from the SR 99 Aurora Bridge it presents serious safety risks for those who work, play and live below the bridge. Emergency response staff also put themselves at risk attempting to rescue people in the hazardous Ship Canal waterway. The effects of people jumping from the bridge reach beyond those who commit or attempt suicide and their loved ones.

A Growing Need

Constructed in 1931, the SR 99 Aurora Bridge is a registered national historic landmark connecting Seattle's Queen Anne and Fremont neighborhoods across the Ship Canal. The area below the bridge is a vibrant part of the Seattle community and has changed significantly in recent years. The waterway and Burke-Gilman Trail attract a variety of recreational users and the number of people who live and work below the bridge has increased on both sides of the Ship Canal.

Proven Effectiveness

Physical barriers have proven to be an effective solution and have reduced jumping rates to near zero where installed on other bridges. A study supported by a grant from the American Foundation for Suicide Prevention examined the effectiveness of a suicide barrier on a bridge in England known for suicides. According to this study, barriers worked at reducing suicide. The research shows that jumps did not increase from other nearby bridges – another common misconception. Additional studies regarding suicide prevention barriers on bridges throughout the world continue to show that barriers can help save lives.



Statistics

- More than 230 people are known to have jumped from the Aurora Bridge since it was built in 1931, and the first known suicide occurred at the bridge in 1932.
- More than 50 of the known suicides have occurred since 1995.
- In 2007, six people are known to have jumped from the bridge.
- Over half of the jumpers fall on land.
- Approximately 1,000 people currently work under or near the bridge. This number is expected to grow.

back



Other Ideas Considered

WSDOT reviewed several options to address this public safety issue before selecting the barrier as the solution. These included:

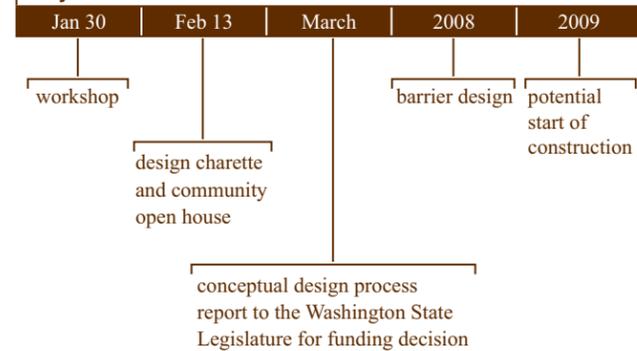
- Netting (high maintenance cost)
- Closing bicycle and pedestrian access to the bridge (conflicts with City and WSDOT policies)
- Constructing an enclosed pedestrian and bicycle structure below the bridge deck (high cost and public safety concerns)

Ways to Be Involved

The City of Seattle is leading an outreach process to identify community issues and ideas that should be considered as WSDOT moves forward with the design and construction of the barrier. The result of this community involvement process will be a report to the Washington State Legislature to help inform their funding decision. The report is expected to be complete in early March 2008 and will provide information about community issues and conceptual design ideas developed in collaboration with the community.

This process will provide several ways for interested community members to share their ideas, including a community workshop to identify issues that should be considered prior to design, and a follow-up open house to showcase how community input has been incorporated into conceptual barrier designs.

Project Schedule



For More Information

For more information or to learn about ways to get involved, call Hillary Johnson at EnviroIssues (206-269-5041), email aurorabridge@enviroissues.com, or visit the project Web site at www.aurorabridgefence.com.

Open House

February 13
7:00 - 8:30 p.m.
B.F. Day Elementary
3921 Linden Ave. N., Seattle



Funding

The total cost of designing and constructing a suicide barrier to the SR 99 Aurora Bridge is estimated to be \$4.3 million. An additional \$3.2 million has been requested to replace the lighting on the bridge if needed. While funding for the barrier will ultimately be decided by the Washington State Legislature, Governor Gregoire has included \$1.4 million for the barrier in her 2008 supplemental budget request.

Postcard invitation to public workshop

front



SR 99 - Aurora Bridge Suicide Prevention Fence

The City of Seattle, Washington State Department of Transportation, and the community are working to develop potential design concepts for a suicide barrier on the Aurora Bridge.

The first step will be a community workshop to identify issues that should be considered.

Please join us at this workshop to learn more and to share your thoughts:

Wednesday, January 30, 2008

6:30 to 8:30 p.m.

B.F. Day Elementary School Gymnasium

3921 Linden Ave. N, Seattle

Visit the project Web site at www.aurorabridgefence.com for more information. A follow-up open house will be held on Wednesday, February 13, 2008 to show how community input has been incorporated into potential design concepts.



For more information:

Contact Hillary Johnson at EnviroIssues

Call (206) 269-5041

Email aurorabridge@enviroissues.com

Visit www.aurorabridgefence.com



City of Seattle



Washington State
Department of Transportation

back

SR 99-Aurora Bridge Suicide Prevention Fence

c/o EnviroIssues
101 Stewart Street, Suite 1101
Seattle, WA 98101



Please join us!

Workshop

Wednesday, January 30

6:30 to 8:30 p.m.

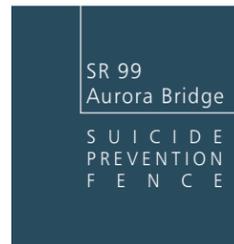
B.F. Day Elementary School

Gymnasium

3921 Linden Ave. N, Seattle

Postcard invitation to open house

front



Please join us See how community input from the January 30 workshop is being incorporated into potential conceptual fence designs.

Wednesday, February 13, 2008
7:00 to 8:30 p.m.
B.F. Day Elementary School Gymnasium
3921 Linden Ave. N, Seattle 98103

For more information: Visit www.aurorabridgefence.com
Email aurorabridge@enviroissues.com
Call Hillary Johnson at EnviroIssues: (206) 269-5041

SR 99 – Aurora Bridge Suicide Prevention Fence

The City of Seattle, Washington State Department of Transportation (WSDOT), and the community are working to develop potential design concepts for a suicide barrier on the historic landmark Aurora Bridge.

The first step in this process was a community workshop that identified values and issues that should be considered.

The next step is to translate those values into conceptual designs at a design charette with key stakeholders and design professionals. Come see the results of the charette and share your thoughts.



back

SR 99-Aurora Bridge Suicide Prevention Fence
c/o EnviroIssues
101 Stewart Street, Suite 1101
Seattle, WA 98101



Please join us!

Wednesday, February 13 • 7:00 to 8:30 p.m.
B.F. Day Elementary School Gymnasium
3921 Linden Ave. N, Seattle 98103

Appendix B: Stakeholders

- List of stakeholders
- Stakeholder interview questions
- Stakeholder interview summary

Stakeholder List

Aurora Bridge Suicide Barrier

Last updated January 7, 2008

✓ = proposed interview candidates

Community

- ✓ Seattle FRIENDS
- ✓ Lake Union District Council
- ✓ Fremont Chamber of Commerce
 - Fremont businesses not associated with the Chamber
- ✓ Businesses below the Aurora Bridge/property managers
 - Adobe
 - Impinj
 - Getty Images
 - Google
 - Net Motion
 - Cutter and Buck
 - CB Richard Ellis and other property management
- ✓ Historic Seattle
 - Queen Anne Historic Society
 - Bike and pedestrian organizations (Cascade Bicycle Club and Feet First)
- ✓ Houseboat owners (Floating Homes Association)
- Queen Anne Magnolia District Council
- ✓ Queen Anne Community Council
 - Greater Queen Anne Chamber of Commerce
- ✓ Fremont Neighborhood Council
 - Eastlake Community Council
 - Wallingford Community Council
 - Wallingford Chamber of Commerce
 - SLUFAN (South Lake Union Friends and Neighbors Community Council)
 - North Capitol Hill Community Council
 - Moorage leasers
 - Recreational users
 - Lake Washington Rowers Club
 - Sailing community
 - Lake Union Crew
 - Pocock Rowing Center
- Families of jumpers
- American Association of Architects (AIA)

Emergency Response

- ✓ King County Crisis Clinic
- Youth Suicide Prevention Program
- ✓ Seattle Police Department (SPD)
 - SPD Harbor Patrol
- Seattle Fire Department (SFD)
- SPD Guild
- Seattle Office of Emergency Management

- Other emergency responders
- American Association of Suicidology

Local Government

- ✓ WSDOT
- ✓ SDOT
- ✓ Seattle Landmarks Preservation Board
- ✓ Washington State Archaeology and Historic Preservation
- City Council
- Governor's office
- King County Council
- Ron Sims' office
- 43rd District elected officials
 - Senator Ed Murray (D)
 - Rep. Frank Chopp (D, Speaker of the House)
 - Rep. Jamie Pedersen (D)
- 36th District elected officials
 - Senator Jeanne Kohl-Welles (D)
 - Rep. Helen Sommers (D)
 - Rep. Mary Lou Dickerson (D)
- Seattle Department of Neighborhoods (DON)
- Seattle Department of Planning and Development (DPD)
- Seattle Parks and Recreation
- Pedestrian/bicycle advisory boards
- Seattle Design Review Board

Stakeholder Interview Questions

Aurora Bridge Suicide Barrier

Last updated January 4, 2008

Purpose

- To determine the community issues and concerns that should be addressed during the conceptual design process.
- To determine who needs to be involved in the process.
- To inform development of the community workshop and design charette.

Outcome

The interviews will be summarized with findings and recommendations to be incorporated into the workshop and charette.

Proposed Strategy

Approximately 12 interviews will be scheduled and conducted during the second and third weeks of January 2008. Persons to be interviewed will include representatives from Fremont Chamber of Commerce, community organizations (including FRIENDS, Queen Anne Historic Society, Floating Homes Association), and emergency responders including Seattle Police Department and Seattle Crisis Clinic. The interview list will be developed in consultation with the City of Seattle, the Steering Committee and WSDOT.

EnviroIssues will take the lead in scheduling and conducting the interviews. Detailed notes will be taken and a summary with key findings and recommendations will be prepared.

Potential Interview Questions

1. Introduction
 - a. Description of the project, including the goals and objectives, planned community process and key stakeholders
 - b. Purpose of the interview and how input will be used
2. Individual's Background
 - a. Provide a little information about yourself
 - b. Are you aware of the suicide issues and the barrier discussions?
3. Concerns and issues
 - a. How concerned are you about suicides on the Aurora Bridge?
 - Very, somewhat, interested but not concerned, not interested and not concerned
 - b. What types of concern do you have?
 - Preventing suicide
 - Impacts of suicides and suicide attempts
 - Cost of proposed solution
 - Historic and aesthetic impacts of proposed solution
 - Maintenance implications of proposed solution
 - Safety

- Bicycle / pedestrian access
 - Other?
- c. Do you have concerns about the conceptual design process?
 - d. What issues or information do you think the City should provide and/or discuss at a public workshop?
 - e. Which issues do you think are likely to interfere with the project's success?

4. Outreach

- a. Where do you receive local/community information?
 - Word of mouth
 - Newspaper (name?)
 - Mail
 - Posted notices at post office, City hall, Library, grocery store
 - Internet/email
 - School programs
 - Community forums or events
 - Advocacy groups
 - Other?
- b. How would you like to receive information? (word of mouth, newspaper, mailing, internet, etc.)
- c. Would you like to be on a mailing list to receive updates?

5. Other stakeholders

- a. Are there other interested parties we should talk with?

**City of Seattle
SR 99 Aurora Bridge Suicide Prevention Fence
Community Interviews Summary**

January 2008

Prepared by

 **EnviroIssues**

101 Stewart Street – Suite 1101
Seattle, WA 98101
(206) 269-5041

Scope of Interviews

Twenty individuals representing a variety of Seattle and Aurora Bridge stakeholders were interviewed over a period of two weeks. The interviews were conducted in person.

Familiarity with the Project

The City and the steering committee identified the list of potential interviewees, all of whom were familiar with the SR 99 Aurora Bridge Suicide Prevention Fence project. Although everyone was aware of the project, the level of familiarity varied: most were aware of the issues, but not all were aware the current status of the stakeholder consultation process currently ongoing, or that the City and the State were pursuing barrier design. As a result of this variation, many of the concerns and questions expressed have as much to do with the need for the project itself as with the barrier conceptual design stakeholder process.

Concerns

Concerns about the project fall primarily into the following categories:

- Right solution – consideration of other solutions
- Economic – is the cost of the project excessive for the gain, or the best choice of where to invest dollars
- Political – concerns with lack of public process to select this path forward and the impression that a select group of stakeholders are driving the project
- Safety – what safety priorities does this project follow
- Historic and aesthetic impacts – the project threatens the historic and aesthetic integrity of the bridge

Right Solution

A frequently expressed concern was about the solution selected. Many respondents asked if other alternatives had been thoroughly considered and studied and several different alternatives were suggested:

- A couple of respondents suggested developing the concept that was included in the Washington State Department of Transportation's 2003 Route Development Plan. This included removing pedestrian/bicycle access from the bridge deck, widening the lane width, placing a solid barrier in the middle of the bridge, and building a bike/pedestrian corridor under the bridge deck.
- Three respondents suggested closing the bridge to pedestrian/bicycle traffic completely. Some observations were that very few bicyclists or pedestrians use the bridge; there isn't enough data to know how many

bicycles or pedestrians use the bridge; and it is an unfriendly bridge to cross on bicycle or on foot due to the high speeds of vehicular traffic. One respondent believed suicide barriers are not at all effective in preventing suicide.

- One respondent said the proposal was based on a flawed premise – suicide barriers don't actually prevent suicides.
- Several respondents, who were in favor of the barriers, were most concerned with how quickly the barriers could be installed so as to address the significant risk to public safety

Additional Comments:

- “This bridge should be one exception to the city’s multi-modal policies.”

Economic

Several respondents had concerns with the proposed cost of the suicide barrier installation, thinking it was too high. Many respondents erroneously believed the \$7.5 million dollar price tag referred to in a Seattle Times article was all for the barrier and did not know that \$3.2 million was intended for light replacement on the bridge.

Others questioned spending this money on the barrier instead of applying it to more comprehensive improvements since it only addresses one component of what they saw were several safety problems with the bridge.

Two respondents expressed concern that the cost of the barrier would be driven inordinately high due to aesthetic or historic demands of certain stakeholder.

Additional Comments

- “If a barrier is built, do the most economical barrier possible and do it quickly.”
- “If something isn’t done, we stand to have negative economic impacts from jobs and/or employees leaving the area due to the impact of jumping incidents”

Social Concerns

Two respondents suggested that the money for the suicide prevention barrier would be more effective in suicide prevention if it were applied to broader suicide prevention or mental health services. Other respondents offered their belief that a barrier was the right solution and had been proven in other locations to be effective. Some respondents mentioned the corollary negative impacts of suicides off the Aurora Bridge – to employees, residents and people recreating under the bridge.

Additional Comments

- “It’s a valid question, to ask if the money wouldn’t be more effective if applied more broadly to social services, but the reality is, this money wouldn’t go there – it would be spent on some other transportation issue.”
- “The data does support a barrier as an effective way to prevent suicides off the bridge.”
- “If WSDOT is so concerned about the impacts of suicide attempts, they should close the pedestrian/bicycle access right away – even if they do install barriers later or pick some other solution.”
- “There’s no question in my mind that if this bridge was built today it would have higher railings to prevent this problem.”
- “It’s hard having to think about being prepared for the impacts of suicides. We have a screen we keep on hand to bring out to block the view when necessary while waiting for emergency response.”

Political / Public Process Concerns

Several respondents expressed concern with how the city or the state determined that the suicide barrier was the solution to pursue. Comments included questions about what public process has contributed to the barrier decision. Several respondents expressed concern that one specific interest group seemed to be driving the decision. Two respondents mentioned that this process had the potential to become a political issue. They expressed their belief that elected officials were under the erroneous impression that there is community unanimity in the desire for a suicide barrier.

Specific to the conceptual design process, several respondents said the process needs to be inclusive and that all interests need to be able to express their opinions without feeling like their issues were of less significance than preventing suicides. When those who expressed dislike for the suicide barrier option were asked if they would participate in the conceptual design process, they answered in the affirmative.

Additional Comments

- “People like to process things to death, but in this case, it’s not in our best interest take time a lot of time over the process.”
- “This [decision] isn’t the Seattle process we’re used to.”
- “It feels like a real railroad process.”
- “I’m very glad you’re making this [conceptual design process] very inclusive.”
- “This could become a powder keg for elected officials.”

Safety Concerns

Several respondents mentioned that the issue of safety on and near the bridge was much larger than just with suicide attempts. Issues cited were head-on collisions, speed on the bridge, and queuing at bridge approaches. Others said the safety of those under the bridge was of paramount concern, as it was only a matter of time before someone was hurt by a jumper. One respondent questioned WSDOT's safety priorities and where the suicide barrier issue falls within the order of priorities.

Historic and Aesthetic Concerns

Reaction to historic preservation concerns with the bridge was mixed. Several respondents felt very strongly that it would be difficult to design a barrier that does not threaten the historic integrity of the landmark bridge. Others were equally concerned that historic preservation concerns not cause the project to be delayed, the cost to climb, or design concepts to be put forward that were too elaborate or complicated to be practical. Several respondents expressed disappointment or mistrust with WSDOT and how it constructed a recent pedestrian rail on the bridge. Concerns revolved around whether WSDOT installed the exact rail design that was approved by the Landmark Preservation Board.

Additional Comments

- "I don't want to have preservationists punished by the legislators or anti-suicide folks when we oppose the barrier or express our concerns."

Information or Issues to Discuss at the Workshop

Respondents were asked specifically about the January 30 workshop. Suggestions include:

- Have all voices represented at the table
- Provide good visuals
- Discuss alternatives considered - show how the city/WSDOT is making a good faith effort to look at alternatives
- Avoid emotionalism and rhetoric
- State right up front the acknowledgement of the bridge's historic status and the need to preserve the historic integrity of the bridge
- Use clear visuals, including historic pictures of the bridge
- Think about how to structure the workshop so passionate interest groups don't dominate the discussion
- Have experts talk about the data – not advocacy groups

Interviewees

<u>Name</u>	<u>Date Interviewed</u>
Ryan Thurston, Seattle FRIENDS	1/15/08
Michael Jerret, Fremont Chamber of Commerce	1/15/08
Casey Hanewell, SDOT	1/16/08
Beth Chave, City of Seattle, Seattle Landmarks Preservation Board	1/16/08
Leann Olson, Queen Anne Historical Society	1/16/08
Matthew Sterner, WA.Dept. of Archeology and Historic Preservation	1/16/08
John Coney, Queen Anne Comm. Council	1/17/08
Mike Warren, Queen Anne Comm. Council	1/17/08
Christine Palmer, Historic Seattle	1/17/08
John Maas, WSDOT	1/17/08
Steve Shipe, WSDOT	1/17/08
Archie Allen, WSDOT (phone)	1/17/08
Paul Kinderman, WSDOT (phone)	1/17/08
Gregg Phipps, WSDOT	1/17/08
Sgt. E.J. Eddy, Seattle Police Department	1/18/08
Don Kuch, King County Crisis Clinic	1/18/08
Vafa Ghazi, Fremont Neighborhood Council	1/18/08
Erik Pihl, Fremont Neighborhood Council	1/18/08
Susie Burke, Lake Union District Council	1/23/08
Doug Hixson, CB Richard Ellis	1/23/08

Appendix C: Community Design Charette

Community issues as identified at the January 30 workshop
AASHTO design load guidelines
WSDOT's SR 99 Aurora Bridge fence requirements



Community Values and Ideas

As identified at the January 30th public workshop

Last updated: February 13, 2008

Top Priorities

The following list is a compilation of the priority issues and considerations identified by each of the small groups at the January 30 community workshop:

- Create a safe environment: ensure effectiveness
- Ensure functionality and structural integrity
- Aesthetics are important (e.g. materials used)
- Maintain the historic character of the bridge
- Aesthetics of the barrier are more important than historic character
- Preserve views of the bridge and from the bridge
- Consider the psychology of the space
 - A barrier should deter someone from feeling lonely and vulnerable
 - A barrier should connect with a neighborhood feel
- Constructible in a timely manner
- Low maintenance
 - Use long-lasting materials and maintain access to maintenance crews
- Consider different lighting options
- Enhance the pedestrian experience
- Creative design solutions
 - Utilize a variety of designers to ensure the best design
 - Investigate artistic designs
 - Consider non-vertical barriers or alternative designs
- Continue to involve the community and stakeholders, and deliver what is promised

General Themes

Flip chart notes from each of the small groups have been grouped according to the following general discussion themes:

Effectiveness and Safety

- This is a public safety issue; in addition to suicide prevention, a barrier is for neighborhood protection
- Barriers should be effective and functional
 - Should be impossible or difficult to climb
 - Should be most effective over land
 - Minimize the impulse to jump
- Barriers should be built quickly
- Continue to provide the hotline phones
- Consider building a barrier to the lowest effective height
- Look at "return on investment" (e.g. a six foot tall barrier produces an 80% suicide reduction)
- The barrier should be 100% effective; the population is growing and 100% effectiveness is necessary



Community Values and Ideas

As identified at the January 30th public workshop

Last updated: February 13, 2008

- Utilize the barrier as a way to provide time for intervention and/or reflection (e.g. different construction materials)
- Should be high enough to discourage jumpers (something curved, not straight up)
- Could use warning system technology; maybe when people get to close or touch the outer railing, the crisis clinic or 911 is called directly
- Use electric fencing
- A barrier should prevent all objects from falling off the bridge (e.g. car bumpers)
- Reduce debris that can be thrown from or fall off bridge
- When below bridge, make sure people can't take that first step to climb up

General aesthetics ("look and feel")

- Be creative!
- Think beyond existing structure
- Make the barrier as attractive as possible
- Use an elegant design
- Fit style and structure of existing bridge – should not look like an add-on or "bad remodel"
- A barrier should be unobtrusive
- Encourage connection to place
- A barrier should not look like a prison or induce an enclosed feeling
 - Don't make the roadway feel too enclosed
 - Should not look like a "suicide barrier"
- A barrier should not be hostile or negative, and should not resemble a fence or a barricade
- Consider the "psychology of the space"
- Make the barrier a design model/showcase
- Make the barrier beautiful
- Consider user/visual perspectives/vantage points
- Think beyond function (potential as an art installation rather than simply an architectural solution)
- Aesthetically pleasing design is more important than simply keeping with the historic character
- Minimize visibility of the barrier ("invisible" to drivers and pedestrians)
- Reflect the character of the communities
- Utilize attractive lighting
- Create a memorial for those who died
- A barrier should have an organic feel (e.g. plantings)
- Induce a sense of calm and peace when looking at the bridge (Currently, when walking below you feel a sense of dread and worry looking up)
- Should not encourage sign posting

Specific design ideas

- Should not create more wind noise
- Consider using recycled/reused materials
- Construct a taller rather than wider barrier



Community Values and Ideas

As identified at the January 30th public workshop

Last updated: February 13, 2008

- Construct a fence that goes out from the bridge, not up
- Utilize a barrier a person can see through
 - Use a transparent barrier
 - Consider low-angle transparency
- Lighting
 - Lights should not be too bright
 - Don't use glaring lights (for drivers and pedestrians)
 - Lighting should be historic
 - Don't make lighting on the bridge any brighter than it already is
 - Use L.E.D. lighting for people looking at the bridge from afar or below (color coded to indicate weather or traffic conditions)
- Explore a nautical theme
- Incorporate art in the design
 - Consider an artistic perspective (don't design like a pedestrian barrier)
 - Incorporate sculpture elements

Historic character

- Maintain the bridge's historic integrity
 - A barrier should "match" the bridge
- Keeping with the historic character of the bridge is important, but there have already been many changes to the bridge that have already changed it's historic character
- Utilize an elegant design with the bridge's historic character in mind
- Meet historic landmark process requirements
- Historic character includes the consistent use of materials
- Use historic lighting

Views

- Consider views of the bridge from all perspectives (e.g. boaters)
- Maintains picturesque view for tourist and pedestrians
- Don't negatively impact houseboat owners views of the bridge
- Don't inhibit the enjoyment of views by drivers and pedestrians
- Maintain views of/from bridge
 - No solid barrier
- Limit noise, but keep view

Construction

- Build them soon!
- Ensure structural integrity
- Ensure durability
- Fast construction is not essential if it means a better design is carefully built
- Minimize maintenance costs
- Ensure security of construction materials
- Paint the fence before installation

Maintenance



Community Values and Ideas

As identified at the January 30th public workshop

Last updated: February 13, 2008

- Build a barrier should not impact normal bridge maintenance; it should accommodate existing maintenance work
- Build a barrier that requires low maintenance
 - Have to be able to clean it
- Build a barrier that is practical to repair
- Structurally accessible for maintenance crews
- Design should not encourage vandalism or attract nuisances or invite mischief (e.g. removing and throwing bolts over the bridge, graffiti)
- Design should be tamper-proof
- Allow maintenance
- Use materials that
 - Do not require frequent re-painting
 - Do not require lots of work
 - Do not create a glare
 - Are not "cheap"
- Think about how far the barriers will go to the ends of the bridge

Bridge use

- Maintain multimodal use of/access to bridge (e.g., cars, bikes, and pedestrians)
- Consider context (views, historical structure, community, etc.)
- Effect on drivers
 - A barrier should not be distracting for drivers
 - Make sure the ends of a fence do not further limit site distance
 - Drivers have limited sight distance merging on to freeway when driving south on SR 99
 - Bridge currently has traffic issues; new barriers will create a tunnel effect causing people to drive inwards and on the center line

Design process and public involvement

- Involve community and stakeholders in design
- Install temporary fixture to reduce access immediately
- WSDOT needs to be true to the design that is selected
- Explore many types of designs and look at all points of view
- Look at other cities/designs
- Be creative and use competition to ensure a high-quality design
- Involve the public by sharing design examples
 - Mock up a portion of the design to full size for people to see
- Make the design process efficient
- Include stakeholders in lighting design

Cost

- Barrier should be economically feasible
- Project should come in at or under budget
- Barrier should be constructed on time

Other considerations



Community Values and Ideas

As identified at the January 30th public workshop

Last updated: February 13, 2008

- Wildlife-friendly
- Improve sight lines on exits
- Limit noise for pedestrians and residents
- Explore netting
- Steer in another direction

BRIDGE # 99/560 AURORA AVENUE OVER THE SHIP CANAL ~ SEATTLE

Gallagher & Kinderman 2 12
WSDOT Bridge Office

BRIDGE GEOMETRY ~ Bridge # 99/560

Width	60'
Length	1450' along main truss (three spans), 2953' entire length
Height	175' at South main Pier (Pier S1) 165' at North main Pier (Pier N1)

DESIGN LOADS

Live Loads ~ AASHTO 13.8.2, AASHTO 13.9.1

All Elements:

Live loads act at a max height of 5'.

50 klf for vertical and horizontal elements, acting vertically and horizontally.

200 lbs in any direction any location simultaneously with 50 klf load.

Additional point load in any direction at top of posts simultaneously with 50 klf load.

This load = 200 lbs + 0.05 * Post Spacing.

Mesh type fence has a 15 psf uniform pressure perpendicular to the surface.

Bicycle loads are inclusive of pedestrian loads. Bicycle specifications are geometric restrictions to the pedestrian loads.

Engineer's preliminary suggested load of 200 lbs anywhere on the fence regardless of height.

Wind Loads ~ AASHTO 3.8

At this site:

Wind velocity: 136 mph ~ at 175 ft height

Site specific factors:

Wind condition = "Open Country" per AASHTO Table 3.8.1.1-1

This is due to the height above the city and proximity to the open water.

This is the engineering judgement call I made.

Base wind speed = 100 mph. WSDOT standards.

Wind pressure: 44 psf ~ 60% coverage of screen (60% of wind pressure for solid fence).

60% coverage (44 psf wind pressure) is a judgement call. This could be modified.

Allowances for the curved overhang not deemed significant at this stage. It will add some moment to the poles, but reduce the horizontal component of wind load.

Engineering judgement will resolve this small area.

Design memo dated January 18, 2007 does not apply to this structure due to its height and type.

Pedestrian Railing Geometry ~ AASHTO 13.8.4

Minimum height = 42 inches. Note that project specific overall height is 10 ft.

Clear opening minimum 6 inches below 27 inch height when both horizontal and vertical elements are used.

Clear opening minimum 8 inches above 27 inch height when both horizontal and vertical elements are used.

The above rail spacing should not apply to chain link or metal fabric.

Openings no larger than 2 inches for chain link or metal fabric.

SR 99 Aurora Bridge Suicide Prevention Fence Requirements

The city of Seattle and WSDOT are hosting a community workshop and design charrette to develop potential design concepts for a suicide barrier on the Aurora Bridge. The following elements must be considered for the workshop and charrette to succeed.

Cost

This project is not yet funded. The estimated total budget for the proposed suicide prevention fence is \$7.5 million with new lighting and \$4.3 million without new lighting (2007 dollars). This is based on the cost estimates WSDOT provided to the Washington State Legislature. We do not anticipate the Legislature will provide additional funds for the project. Additional funding sources should be considered if design concepts exceed current the proposed estimate.

Effectiveness

We cannot lose sight of the chief goal of this project – preventing suicides. Fence design options must have features that are proven effective in preventing suicides.

Design requirements

Workshop facilitators and participants should work with WSDOT Program Management staff as design concepts are developed.

Height

The height of the fence design cannot exceed 10 feet above the bridge driving surface. This is to ensure that WSDOT Under Bridge Inspection Trucks (UBIT) can be extended over the fence and underneath the bridge to allow inspections.

Width

Current sidewalk widths and location must be maintained.

Removable panels

Bridge inspectors, maintenance personnel, and contractors must be able to remove fence panels to allow more detailed maintenance and preservation activities.

Historic significance

The Aurora Bridge is a designated National Historic Landmark. Any suicide prevention measure that will affect bridge aesthetics will require regulatory review and approval from the city of Seattle Landmarks Preservation Board and the Washington State Department of Archaeology and Historic Preservation.

Structural issues

Fencing must be structurally sound in the event of a windstorm or earthquake and must be able to withstand the weight of those who might attempt to climb it.

A fence must be independent of the existing outer railing and must be attached to the bridge deck.

Any design concept will require engineering review and approval from WSDOT Bridge and Structures Office and must comply with American Association of State Highway and Transportation Officials (AASHTO) bridges codes

Appendix D: Community Comments

Complete list of community comments



Community comments

Community values and ideas

Top Priorities

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 - A barrier should deter someone from feeling lonely and vulnerable
 - A barrier should connect with a neighborhood feel
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- Low maintenance
 - Use long-lasting materials and maintain access to maintenance crews
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 - Minimize the impulse to jump
- Barriers should be built quickly
- Continue to provide the hotline phones
- Consider building a barrier to the lowest effective height
- Look at "return on investment" (e.g. a six foot tall barrier produces an 80% suicide reduction)



Community comments

- The barrier should be 100% effective; the population is growing and 100% effectiveness is necessary
- Utilize the barrier as a way to provide time for intervention and/or reflection (e.g. different construction materials)
- Should be high enough to discourage jumpers (something curved, not straight up)
- Could use warning system technology; maybe when people get too close or touch the outer railing, the crisis clinic or 911 is called directly
- Use electric fencing
- A barrier should prevent all objects from falling off the bridge (e.g. car bumpers)
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- When below bridge, make sure people can't take that first step to climb up

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- Be creative!
- Think beyond existing structure
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- Use an elegant design
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- Encourage connection to place
- A barrier should not look like a prison or induce an enclosed feeling
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- Consider the "psychology of the space"
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- Minimize visibility of the barrier ("invisible" to drivers and pedestrians)
- Reflect the character of the communities
- Utilize attractive lighting
- Create a memorial for those who died
- A barrier should have an organic feel (e.g. plantings)
- Induce a sense of calm and peace when looking at the bridge (Currently, when walking below you feel a sense of dread and worry looking up)
- Should not encourage sign posting

Specific design ideas

- Should not create more wind noise



Community comments

- Consider using recycled/reused materials
- Construct a taller rather than wider barrier
- Construct a fence that goes out from the bridge, not up
- Utilize a barrier a person can see through
 - Use a transparent barrier
 - Consider low-angle transparency
- Lighting
 - Lights should not be too bright
 - Don't use glaring lights (for drivers and pedestrians)
 - Lighting should be historic
 - Don't make lighting on the bridge any brighter than it already is
 - Use L.E.D. lighting for people looking at the bridge from afar or below (color coded to indicate weather or traffic conditions)
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- Consider views of the bridge from all perspectives (e.g. boaters)
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- Don't negatively impact houseboat owners views of the bridge
- Don't inhibit the enjoyment of views by drivers and pedestrians
- Maintain views of/from bridge
 - No solid barrier
- Limit noise, but keep view

Construction

- Build them soon!
- Ensure structural integrity
- Ensure durability
- Fast construction is not essential if it means a better design is carefully built
- Minimize maintenance costs
- Ensure security of construction materials
- Paint the fence before installation



Community comments

Maintenance

- Build a barrier should not impact normal bridge maintenance; it should accommodate existing maintenance work
- Build a barrier that requires low maintenance
 - Have to be able to clean it
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- Structurally accessible for maintenance crews
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- Design should be tamper-proof
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- Barrier should be economically feasible
- Project should come in at or under budget
- Barrier should be constructed on time



Community comments

Other considerations

- Wildlife-friendly
- Improve sight lines on exits
- Limit noise for pedestrians and residents
- Explore netting
- Steer in another direction

Email

29 comments were emailed to aurorabridge@enviroissues.com

1/16/08

I think that this project is ill-conceived and is bound to be costly and unsightly. If a person chooses to attempt suicide and is prevented by a suicide fence, then he/she will find a different location or a different method. So what is really being accomplished?

Moreover, why should the city get involved in an individual's right to take his/her own life anyway? I personally feel that each individual has that right. As physician-assisted suicide is not (yet) an option, why place impose other impediments.

To whom may I voice my objection to this project?

Thank you.

1/17/08

Thank you so very much for taking on the entire population of people with mental health problem. Building a disgusting fence along the aurora bridge will only cause the mentally ill to seek another bridge or building. Then you can move on to building another fence, and then another, and then another. The way I figure it, you will have job security for quite some time. Then after you build 80,000 miles of fence, maybe you can work on making razor blades illegal to prevent people from slashing their wrists. Then you can move on to removing all medication from the market.

Shame on you for pouring ugly all over our city. You are pathetic! Perhaps your effort would be more appreciated in a city that already looks like a ghetto retreat. Let us help you pack your bags and buy you a one way ticket to Jersey.

1/18/08

We STRONGLY support this suicide barrier.

We are a family of four (two daughters, ages 4 and 6) who live on a houseboat almost directly under the bridge. Our concern became intense after we walked with



Community comments

our girls within 20 feet of the body of a 15 year old girl who had jumped moments before. Shortly thereafter, we had two jumpers in one day. On another occasion, [my wife] was picking blackberries on a summer evening with our girls when someone landed about 50 feet away. (So far, the girls haven't figured out what is going on. But they're smart and it won't take long.)

1/19/08

How much weight will be added to the bridge structure from its original design? How much will the safety margin be reduced by this added weight? The bridge in Minnesota collapsed after 300 tones were added and they say it was a design failure? NO. They added more weight than it was designed to carry and are passing the buck. The aurora bridge will never be as strong as it was when it was first built. I want to know how slim the margin is today and how much smaller it will be with the additional weight that has been added over the years?

1/21/08

I have lived for thirty-one years in Fremont with an unrestricted view of the entire east side of the George Washington Memorial Bridge [GWMB] (SR 99). In that time I have never witnessed a jump or an attempted jump, though I have read about them in the newspapers. My friends who live on houseboats below the bridge have also filled me in on the gruesome aftermath of the suicide jumps.

As bad as all this is spending \$7.5 million to build a suicide prevention fence is an utter waste of public resources. It will not stop the self destruction, it will only move it to another bridge or another venue.

Two blocks from the south end of the GWMB on Queen Anne Dr. is another bridge with sufficient height to kill oneself by leaping. Two blocks south of that is the McGraw St Bridge which also is high enough to achieve terminal velocity. Ten blocks south of that are towers that are easily climbed...etc.

No amount of brandreth building will end some people's need to hurl themselves into the well of Death. If I may make a modest suggestion it would involve a very different approach. Eliminate the sidewalks on top of the GWMB, widen the traffic lanes, and install a Jersey barrier in the middle. The carnage of traffic drifting across the center lane is far worse than the few suicides.

Then take the \$7.5 million and build a pedestrian/bicycle path in the superstructure underneath GWMB. This would improve traffic up above and separate human powered movement from fossil fuel powered movement, make everyone safer and prevent the deaths of those still fired with the joys of life.

1/24/08

I was unable to attend the meeting. I did have an idea to propose to the project.

A public art installation at the entry points to the bridge.

-It would be a zigzag pathway (created with a fence type structure) with a series of life affirming quotes incorporated into it.



Community comments

- Part of the installation would have a phone with a direct link to a suicide hotline.
- There also would be a small kiosk with note cards to record thoughts and messages.

The whole purpose of this installation would be to slow down the person walking on to the bridge, give them several opportunities to revisit their thoughts, introduce ideas that there might be some hope in this world.

1/24/08

It sounds like there are many who have the best of intentions but it is ludicrous to think that 7.5 million dollars of our tax money is a reasonable expenditure for this project. Where do we draw the line for those who are pushing the limits of sanity. Should we also run cables up the mountains so those who use poor judgement and are lured up the mountains in inclement weather can find their way home, put safety nets out for the snowmobilers whose loud engines cause them to be caught up in avalanches, have free life jackets at each boat launch for those who choose not to wear a life jacket out on the lake? The list can go on and on. Why all the attention to the bridge now if it has been going on since the 1930's. The builders of the Adobe building knew it was a fact of life under the bridge but built the building anyway. Those working at Adobe didn't have to choose to work there if the conditions were too unbearable. There is something terribly wrong with this picture. I live in an apartment that looks directly at the bridge, the water, and the parking lots. I don't feel I am callused in any way toward mankind but I am stable enough to be able to understand why people may jump, climb mountains, run snowmobiles in the mountains and so forth. I have seen the responders caring for the bodies as well. They have been very professional and respectful of the privacy needed in doing their work. I would really wonder how many lives have been turned around because their suicide attempts were averted. I don't mean just that they didn't do it that day, week or month, but at all, ever! Please, do not spend my tax money on such a thoughtful and caring but frivolous project!

1/28/08

I am responding to a postcard I received in the mail about the Aurora Bridge Suicide Prevention Fence. As a resident of Fremont and a resident of St. James Tower Apartments at 920 N 34th Street, I strongly support the construction of a suicide prevention fence. I have lived at St. James for 3 years and I have a top floor apartment with a full view of the bridge. Despite the fact that I have fortunately never been looking out my window when someone takes their life off of the bridge, I still feel impacted by these tragic events because more suicides have occurred in the last 3 years while I have been home then I can count. I know when someone has killed themselves because of the immediate police and fire presence on the ground and in the water. There children who live in my apartment building- imagine the horror if a child witnessed a suicide. People who live in this building and below the bridge and those who work below the bridge need not be further traumatized. While the bridge is beautiful to look at the way it currently is, I am in favor of saving lives. The city has to do something about the bridge- we cannot let this problem continue.



Community comments

Thank you.

1/28/08

I'm interested in knowing more about the design approach for this project. Has a design team been selected? Will there be a public art component to the project? Has a feasibility study already been done? (It seems that way from the cost estimate) In addition to these there is a recently completed highway bridge in Salina, Kansas that has safety and security fencing that is not yet on the website. I'm sure we could send you some views of that as it would be directly applicable.

This would be an interesting project to us for its design potential as well as for the potential to do something attractive that prevented suicide attempts without necessarily calling attention to that part of its purpose. We also have experience with incorporating roadway lighting. I see that is a potential component of the design.

I would appreciate whatever information you can send.
Thank you.

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Thank you.

1/29/08

You are spending how much to appease a few houseboat owners?!? I'm sorry for the very few who've had to directly suffer from jumpers but wonder if you've heard of eminent domain. They should move, because that's what the suicidal are going to do — just move to another high place. This fencing is as farcical as the fence between us and Mexico.



Community comments

Put that money into a fund for the police and fire department personnel to get a well-deserved, relaxing vacation after cleaning up the mess.

If the legislature can tell parents they can't smoke in a vehicle with their kids, why can't they make a law fining the estates and/or relatives of those who commit suicide? Something substantial. It wouldn't be the most ridiculous law by far and it makes a whole lot more sense than a straw to stop a pinhole leak in the Hoover Dam.

1/29/08

I really appreciate that this is moving forward. I won't be able to attend the workshop but wanted to at least give some feedback in case public comments are being noted. It would be great if the fence looked "nice" and preserved the beauty of the bridge but I am less concerned about that than the real issues. So whatever is decided is great in my book.

1/30/08

I am the park manager at Deception Pass State Park. As you may know, we have similar issues of suicide prevention on the bridge across Deception Pass (SR 20) as you are studying for the Aurora Bridge.

I was wondering if I could be added to any email list generated by this study to be kept abreast of the results of meetings and studies undertaken in this regard. The two bridges have many similarities, and our local community is interested in finding solutions as well.

1/30/08

I shall begin by telling you that we are unalterably opposed to this project! On the surface it appears to protect a segment of our population from itself and its actions but, does it really?

If this fence and lighting are installed at a cost of some \$8 million does this preclude a "jumper" from taking his/her own life? No. It only removes one available means to accomplishing what the individual feels the need to accomplish. The Aurora bridge will no longer be a means to the bitter end BUT that person will seek other bridges (Ballard, I-5 or Montlake) from which to jump or other avenues to end a life. Will we then fund projects to provide fences and lighting on other bridges?

Why not use these millions of dollars to shore up those community-based mental health programs that seek to help the suicidal members of our society? I can tell you that all of the existing programs are short funded today and could use the additional monies to help them do their jobs more efficiently and thus reach more of those in need.



Community comments

The recently installed signs and telephones didn't provide a solution and neither will fences and lights. I hope that our legislature comes to its senses before Governor Gregoire begins spending funds on this inane solution. Mental health is a serious problem that deserves better solutions than this one!!

1/30/08

I am unable to attend tonight's meeting on the Aurora Bridge Suicide Prevention project but would like:
1) to be added to the distribution list for future information
2) receive copies of information from tonight's meeting.

Thank you.

1/30/08

I am sending comments because I will be unable to attend tonight's public workshop regarding the proposed Aurora Bridge barrier. I am strongly opposed to the construction of such a barrier on the historic Aurora Bridge, which is a designated City of Seattle landmark, and one of the most significant historic bridges in Seattle. I understand that the City of Seattle and Washington State Department of Transportation are not considering any alternatives to constructing a barrier or suicide-prevention fence along the bridge, and I urge the city and WSDOT to consider alternatives to such a barrier that would have less visual impact on the bridge. This would include possible closure of the sidewalks, construction of a net or under-bridge passageway, and other alternatives.

I am a Fremont resident, member of the Fremont Neighborhood Council, the Fremont Historical Society and Historic Seattle, and a past member of the Seattle Landmarks Preservation Board. I also served on Seattle's Northwest Design Review Board in the past.

I understand that a design charrette regarding the Aurora Bridge barrier is scheduled for February 13, and I would like to participate in the charrette. By profession, I am a planner and historic preservation consultant.

Please reconsider the Aurora Bridge barrier proposal and evaluate other alternatives that would preserve the historic character of this important landmark bridge structure.

Thank you for the opportunity to express my concerns.

1/30/08

BTW, you (or someone) did a good job of publicizing this evening's meeting. However, I would suggest the addition, at some point, of signs at the ends of the



Community comments

bridge providing notice of this effort. Signage is a bit challenging given vandalism, I know, but pedestrians and bicyclists are the people most likely to be affected.

2/1/08

I just wanted to let you know that I think this isn't a good idea. If people want to kill themselves, they will find a way and climb the fence – and this will just make the bridge ugly.

If you are worried about the people below, maybe you could provide alternative suicide options for them on the bridge where they could leave their body on the sidewalk.

Sorry to be crass, but this seems to be a poor solution to the problem.

2/2/08

I will be unable to attend the community workshop on February 13th at the B.F. Day gymnasium concerning the Aurora Bridge Suicide Prevention Fence Plan.

I live near the Aurora Bridge, and in fact I can see it from the windows of my home. I also drive on the bridge regularly.

The Aurora Bridge provides perhaps the only view of both the Cascade and Olympic mountains from a major Seattle road, and as such it provides a unique view for passengers. I am concerned that a fence would ruin the unique and beautiful vistas that the city currently provides from the Aurora Bridge. Would it be possible to install a horizontal net instead of a fence? A net would deter jumpers while still maintaining the views that we all enjoy today.

Thank you for your consideration.

2/2/08

It seems that if we're talking about using public funds to save lives and suffering there might be better ways to direct the money.

2/2/08

I feel great sadness that we have disturbed people who decide to take their own lives and I believe we should try to help these people, however I believe that the proposed fence is a poor way to help them and a poor use of our tax dollars. Six million dollars used on Mental Health Care and Outreach for these troubled ones would be a much better use of the funds. Thank you for reconsidering this idea. As for those who live below, we have no obligation to them. The bridge and its attraction to jumpers was there long before the current residents came along.



Community comments

SIX MILLION DOLLARS IS A LOT OF MONEY!!!! YOU ARE NOT SAVING THE LIVES OF THE JUMPERS. THEY WILL DO THEIR SUICIDE ELSEWHERE. A fence will mar the beauty of the bridge and our ability to enjoy the view when walking across. I cannot attend the upcoming meeting.

Thank you for presenting my opinion.

2/4/08

Thank you for the mailer we received at home; I'm so glad to hear the City of Seattle and WSDOT are finally working together to solve the problem of suicide on the bridge. We can't make it to the open house meeting you're having on the 13th so I'd like to add a couple comments.

In the big picture, it's not as important what the fence looks like than its function, so please just make sure it's tall enough, long enough and unscalable.

If there's room for efficient, inexpensive aesthetic improvement, please design to keep in context with the colors and materials that are nearby. If it's possible to have a consistent, abstract design on the fencing that defines the whole bridge area, that'd be great. I think the goal would not be to have anything that distracts drivers as the lanes are so bloody narrow it takes all one's attention just to drive it safely. But perhaps a geometric or set of flowing lines affixed along the fencing could provide a reasonably cheap and nice fence.

Good luck! And in all cases, just stop the suicides.

2/4/08

The last jumper landed twenty feet from my office (I'm a chiropractor) while my massage therapist was working on a new client. Both of them were traumatized when they were finished and found a police car and a yellow tarp out in front afterwards. Once, a patient had to walk up to 35th St and back down because 34th St was closed off due to another jumper. She also was traumatized.

While I appreciate the concern for the suicides and how the barrier looks, I'm concerned that the attention is being paid to the wrong issues. It's a matter of time before one of them actually hits a pedestrian or a bicyclist or a moving vehicle and causes additional death. In the meantime, there are more than a few of us walking around with adjustment disorder or even post-traumatic stress syndrome. The employees at Adobe have access to counselors, but the rest of us don't. Maybe the city of Seattle and the state of Washington ought to be considering community counseling for us. The barrier is for our protection from the terror of being assaulted by a selfish individual killing themselves at the expense of so many others. I don't see how this is much different than the suicide bombers in the middle east that we read about in the newspapers. We're horrified by that, but this issue is hushed up so that the general public doesn't know the suffering that's going on in this neighborhood.



Community comments

This is not a suicide prevention barrier--it's an urban terrorist barrier. I hope that any jumpers that live are prosecuted for attempted murder.

2/4/08

I received your well presented flyer in the mail recently. My response to you is; Please DO NOT WASTE MY TAX DOLLARS ON AN OVERPRICED PROJECT WHOSE SUCCESS, IF COMPLETED WILL BE LAUGHABLE. Do you really think that by spending 7.5 million dollars you will deter people from ending their lives in our neighborhood??? That is a laughable thought ... I realize that the bodies be may hard to take for those living/working in the area, but they can move if it's too much to bear. I think the money would be better spent trying to keep people from wanting to end their lives rather than building a fence. They will just go somewhere else. Did that ever occur to you?? Besides, if a person chooses to end his/her life, why should that option not be available??? It's incredibly self righteous of you to impose your values on the rest of us. I for one (of many) love riding my bicycle over the aurora bridge, the view is fantastic. A fence will make us all feel like prisoners, caged in and cut off. The thought of you building a fence is completely UNACCEPTABLE to me. PLEASE, do not waste any more money on a project that is doomed to FAIL.

2/4/08

Hello,

I live near the Aurora Bridge and I'm appalled that the city is considering spending money on this fence when we have many other issues in Seattle that require attention: schools/education/teachers, the roads themselves, the Viaduct, public transportation, etc. How can we properly reallocate the \$1.4M already promised by the governor to more appropriate use of those funds?

2/9/08

Thank you for your reply.

Fremont has a long history of providing volunteers for community efforts. Could a group of volunteers potentially help bring the maintenance costs of a net down to an acceptable range?

Thank you.

2/9/08

Hello!

I'm forwarding you a copy of an editorial letter I've sent to the PI. I've been in contact with my neighbor Pat and we've agreed that a fence is a bad idea and worth putting energy in fighting. Sadly, I have been unable to addend meetings as I've



Community comments

been called away to care for my mother who is recovering from hip surgery. I will, however, be back on the 14th and will meet with neighbors to explore options to put a stop to this ill considered idea.

Thank You.

2/11/08

What's next?

A fence across the I-5 bridge where it cross' the ship canal,
A fence spanning the west Seattle freeway,
A fence spanning the Tacoma Narrows Bridge,
A fence surrounding every bike lane entering the city.
Something to think about before you start spending MILLIONS of dollars.
Do we need to review how many MILLIONS of dollars the city of Seattle has squandered trying to address the question of rapid mass transit???
I'm still taking the same bus to the airport that I did when I first came to Seattle over 25 years ago... something to think about.
Feel free to share this correspondence with the mayor.
Thank-you for letting me express my opinion.
I'm sure that I'm in good company with this...

2/21/08

It's important to allow the community to see the designs if you expect them to advocate FOR the barrier with the Legislature in March.

For example - without a chance to review - I won't be calling the Legislative hotline.

Phone

Comments received January 14 – March 5. Comments made by phone are summarized (19).

Comment

Sympathetic to the issue, but against using tax payer dollars for suicide barrier; put the money into mental health programs. Concerned about aesthetic impacts to the historic bridge.

Comment

Can't attend the January 30th workshop or February 13 open house; concerned about impacts to views of and from the bridge; the solution should be invisible. Understands the emotional impacts of the issue but would like to look at alternative solutions. Suggested a catch net on horizontal outriggers that could be equipped with sensors that would alert emergency response.



Community comments

Comment

Would like to be updated as the project moves forward [added to email contact list].

Comment

Solution should reduce all hazards on the bridge and look comprehensively at bridge safety, including jumpers and car collisions. Look at the 2003 plan to install a middle barrier and utilize an enclosed walkway under the bridge.

Comment

Use money for mental health programs to reach people before they get to the bridge; help those who want to be helped; a lot of crazy/violent people on the streets. Concerned about impacts to views of and from the bridge.

Comment

Sympathetic to the issue, but questioned whether this should be a high priority. Does not want the view from the bridge altered. Suggested creating a green space under the bridge.

Comment

Don't make the bridge lanes any narrower; they are far too narrow as it is.

Comment

The cost is too high.

Comment

Provide a zipcode for the workshop location and a direct line to the contact person to avoid using the EnviroIssues weekend phone menu.

Comment

Provided information on Roll Guard, Inc "the Coyote Roller," a device that could be incorporated into the barrier design [in-person comment].

Comment

Send draft design concepts as soon as they are available.

Comment

Money should be spent on mental health programs (friend killed himself by jumping off the bridge 15 years ago). [At first, the caller did not want a fence built. After discussion, the caller understood the public safety issue and was somewhat supportive of a barrier]. A fence should look nice and fit the historic character of the bridge.

Comment

Pedestrian walkway is too narrow, claustrophobic-feeling, and too close to vehicles. Try to make it better. Good project, thanks for doing it.



Community comments

Comment

Requested information on the project

Comment

Just build it! Glad this project is happening, need to slow down the trauma. Proud of the City for moving forward with a barrier.

Comment

Suggested using plain language in notification. Did not like the use of the word "charette."

Comment

Sloan Security Fencing - wanted contract information. Added to email list for WSDOT.

Comment

The cost is too high. Questioned priorities. Asked for information about the legislative session so he can lobby against a fence

Comment

Wants to see the concepts. The pedestrian/bike path is too narrow, hard to bike through. Do not make the sidewalk enclosed or feel enclosed. Questioned priorities - is this necessary? Developers get what they want.

Comment forms

*Comments submitted via comment form at the **January 30 public workshop.***

Comment

What should be considered when WSDOT develops conceptual design ideas for a fence on the Aurora Bridge?

Public safety for those on the bridge and under the bridge. Need for a good looking safety fence, durable and easy to maintain.

Please share any additional questions, concerns or ideas you may have.

This has been needed for a long time and the bridge has been retrofit to support such an improvement. Do it now before someone is killed under the bridge by a falling body.

Comment

What should be considered when WSDOT develops conceptual design ideas for a fence on the Aurora Bridge?

It would be wonderful to integrate a visual pleasing element. For example LED [lights] on the exterior to provide an interesting visual appeal from a



Community comments

distance. For example, traffic flow would be reflected by colors one could see from a distance. Or temperature, light blue hues reflect the cold, red tones means it's hot. Change in color reflect wind. Again not to distract driver, but those from a distance see colors that reflect a bridge that is alive.

Please share any additional questions, concerns or ideas you may have.

I simply cannot express how happy I am this issue is being addressed. My daughter, now a senior at Ballard High School, lost a classmate to suicide off the bridge her freshman year. So many studies show why this is so important.

Please complete this project as soon as possible.

Comment

What should be considered when WSDOT develops conceptual design ideas for a fence on the Aurora Bridge?

Stay with the character of bridge. I would like the barrier to "match" and stand out as little as possible (at least from the perspective of being off the bridge).

Please share any additional questions, concerns or ideas you may have.

Will WSDOT deliver what it promises? Trust in community – we need assurance.

Comment

What should be considered when WSDOT develops conceptual design ideas for a fence on the Aurora Bridge?

Making the bridge more inviting to pedestrians.

Comments submitted via comment form at the February 13 public open house.

Comment

What do you like about each concept?

"Blades of Grass" captured my interest most – it's organic, lyrical design was very nice to look at while emulating the movement of the view beyond. It also was the design which offered the most opportunity for "community ownership" as the saying on each bar could provide a source of funding if folks could donate to have a saying of their choice etched on the rods. I also liked the design which featured the glass overhang – perhaps it would disappear more when looking at the bridge? There would be more options to feature greenery/plants in this design. I also really like the archway concept as entrances to the sidewalks.

What don't you like about each concept?



Community comments

I don't like the "zap" concept – I think it is a little too prison-like. With design there ought to be ways to ensure that the barrier cannot be reached without this aggressive touch.

Comment

What do you like about each concept?

Other issue: The current pedestrian barrier on the southwest end of the bridge extends too far south. The roadway begins to curve slightly east. At the end of the bridge traffic is trying to enter the southbound lanes and your view of oncoming traffic is limited. You can't see oncoming vehicles turn signals. At night all you can see is glare of headlights. Traffic is backing up further into Raye Street on Queen Anne because drivers are unsure if it is safe to turn right onto southbound 99. Please be sure additional pedestrian safety measures won't adversely affect the more voluminous vehicle traffic.

Comment

What do you like about each concept?

The one with glass covering – how will it be kept clean of bird droppings and road grime/dust? Will people be able to take photographs from the bridge and not have beautiful views blocked by mesh/wire/net etc? Will garbage/debris accumulate in this protective barrier and who will clean? Has glare from vehicles, bridge lighting and sun light been accounted for?

Comment

What do you like about each concept?

Would like as minimal and invisible as possible.

What don't you like about each concept?

Do not like "sail" effect nor the more "artistic/creative" designs. The extra cost and effort for those details are at too great a distance to be fully appreciated and valued. Has the jump rate increased since the current barrier [interior pedestrian railing] was installed? It seems that pedestrians are more isolated and it would be easier to jump and have no one notice or intervene.

Comment

What do you like about each concept?

Remove the historical requirement and they are all excellent.

What don't you like about each concept?

What about any of these ideas is historical? Looks like the 1930's era? Etc. Nothing looks like it might have been built within 50 years of 1931.



Community comments

Comment

What do you like about each concept?

Well, it is hard to group all of the designs together as some of them are very different. I am definitely in favor of the designs incorporating more artistic approach (for instance "Blades of Grass" and "An Artistic View" – though you may have difficulty with a kiosk box – who collects them? Suicide notes? "Sails" is another good design and kind of goes with theme of bridge i.e. passageway for boats). Overall, I am very grateful for the opportunity to participate in both of these meetings as I believe involving stakeholders, community in the process is important.

What don't you like about each concept?

I like most of the designs but there are two I don't like – the first being entitled "Minimalist with a Zap." I don't like the idea of people being zapped by touching the fence. It treats people – possible jumpers – like they are criminals and this is not the message I think we should send. I also don't like the one at the far left (under the flag) – it seems to be modeled after the 'luminous veil' barrier on the Prince Edward/Bloor Street Viaduct in Toronto.

Comment

What do you like about each concept?

"Blades of Grass" is the best from a pure individualistic standpoint. It is distinctively "Fremont" and Seattle-ish in being whimsical and effective. "Blue Glass Concept" looks great and adds a simple yet functional looking design. It seems to add character to the bridge design and ensures maximum safety. Blue Glass Concept adds tasteful lighting options.

What don't you like about each concept?

Electrical fence is distasteful. "Sails" is too heavy and doesn't fit the bridge – it looks like an add-on. "Blue Glass Concept" could create some issues if glass is used with vandals and graffiti. Glass would need to be cleaned annually at least. "Blades of Grass" may look odd without truly looking at a mock-up; it has the potential to look added on.

Comment

What do you like about each concept?

The first design (w/ glass roof) is very light and airy, and I like the shelter it provides from the rain. The potential for cool lighting is also great. I'd actually walk across just for the experience. Same with the Blades of Grass, it would be nice to walk across and look at the individual "reeds" and inscriptions. I like the idea of the archway entering the sidewalk onto the



Community comments

bridge. The idea of colored glass is nice, especially on the grey gloomy days.

What don't you like about each concept?

I think the one with the frames is too non-uniform, and might look "cluttered" and more obstructive. The sails wouldn't match the bridge, would look foreboding and heavy. The Zap fence is interesting, but I don't think people would be happy. I could see some kids up to no good trying to mess with it.

Comment

What do you like about each concept?

I like the cable concept which allows for less interrupted views when driving. I like the "blades of grass" design for the artistic element which I think is important to connect with Fremont's unique style. "The Comb" seemed in keeping with the bridge's style and I liked the European style lighting which gives a more pleasurable pedestrian experience. I like the idea of phrases being etched along the bridge.

What don't you like about each concept?

I don't like the glass cover as I think it is too modern and will get dirty and scratched. Trash will end up on top of it. The sail design is too modern and not in keeping with the bridges historic design. It shouldn't look like a prison fence – should enhance the bridge as well as being functional.

Comment

What do you like about each concept?

"Blades of Grass" living and breathing concept.

What don't you like about each concept?

LED!! They are too costly! They produce unfavorable glares!

Comment

What do you like about each concept?

[Illegible]...we need to spend money to implement the 2002 plan. We spent two years developing it. It would make the bridge safer and prevent suicides. I understand this solution was taken off the table.

What don't you like about each concept?

It needs to come back on so we can make the bridge safer. Why does there have to be pedestrian/bicycle traffic on what has become a freeway?

Comment



Community comments

What don't you like about each concept?
NO BARRIER! Too expensive.
Golden Gate is #1 they have NO BARRIER.

Comment

What do you like about each concept?
All fall short of the real prevention, to fund mental health centers.

What don't you like about each concept?
The presumption that any can really stop jumpers! I question the expertise of the proposals. Why not use funds to pre-create mental health centers. The handout implies "community values." I question that statement!!

Comment

What do you like about each concept?
I do not like the designs where the fence curves in over the sidewalks – that reminds me of an overpass in the projects. The fence should be minimally obstructive to the views of the riders, walkers (and drivers) crossing the bridge. The fence line should be symmetrical and not too modern to keep with the historical design of the bridge.

What don't you like about each concept?
I would prefer no fence. I believe the money could be better spent in the community addressing the root causes of suicide (drug use, domestic issues, etc.).

Comment

What do you like about each concept?
I like the veil idea of the Toronto Bridge. Perhaps that is what the zap-less mesh fence could be.

Comment

What do you like about each concept?
The only likeable concept is the "nets" concept which was not fully developed.
Suggest starting with improved illumination only to achieve some added deterrent effect.

What don't you like about each concept?
The other concepts were too disruptive of views – both from the bridge and of the bridge. Very expensive project. Would more lives be saved if that money were spent on counseling or drunk driving prevention? How many people jump from other bridges in WA State? This project would set



Community comments

precedent for SP Fences statewide. Can we afford that in light of other needs?

Comment

What do you like about each concept?
This project to convert the Aurora Bridge into an enormous hamster tube is a bad idea made worse by failure to consider two of the most promising fixes.
1. Close the walks. Save money and don't wreck the old bridge. "Cry policy" in this regard is simply misguided; the walks are rarely used and could be kept in reserve for those rare occasions when the low bridge is closed for maintenance.
2. Horizontal netting should be put back on the table. At least that wouldn't wreck the view for people using the bridge. Removing this idea without study of the possibilities is irresponsible. Netting could be stainless steel or galvanized cable, doesn't need to be fabric. How can you assign a "maintenance" cost before you identify the material? And why should we spend just enough to wreck the bridge but not enough to minimize the damage?

Comment

What do you like about each concept?
All are very creative. I am most attracted to the simple, least obstructive designs. The less noticeable the barrier – the better! Sure, something would be cool if it were artsy – but for how long? I don't want to get tired of a design that calls my attention to it every time I cross the bridge. KEEP IT SIMPLE!!!

What don't you like about each concept?
Complication. Some will actually draw attention to the bridge's edge. Bad idea!

Comment

What do you like about each concept?
If the net concept is not feasible, then the one that keeps the views from the bridge in the cleanest, simplest way is the best. The Blades of Grass, without adding any horizontal elements actually adds a beautiful sculptural echoing of the mountain ranges in the distance. Brilliant approach.

What don't you like about each concept?
Anything making the pedestrian walkway more tunnel-like should be avoided.



Community comments

Comment

What do you like about each concept?

Each concept had the idea of suicide prevention incorporated. Each tried to stay true to its historic origin and maintain its stunning views.

Comment

What do you like about each concept?

Seattle has the highest per capita public art pieces. Let this new structure reflect that. No horizontal bars, or kept them very low.

Comment

What do you like about each concept?

[Create a] memorial for those who have died.

Comment

What don't you like about each concept?

What happened to the idea of building out so not so visible? All but one seem very severe and invasive.

Design specific comments

The following comments are specifically related to designs. They were submitted via comment form or by placing a comment directly on a design at the February 13 public open house.

General comments relating to all designs

- What about any of these ideas is historical? Looks like the 1930's era? Nothing looks like it might have been built within 50 years of 1931.
- I do not like the designs where the fence curves in over the sidewalks – that reminds me of an overpass in the projects. The fence should be minimally obstructive to the views of the riders, walkers (and drivers) crossing the bridge. The fence line should be symmetrical and not too modern to keep with the historical design of the bridge.
- All are very creative. I am most attracted to the simple, least obstructive designs. The less noticeable the barrier, the better! Sure, something would be cool if it were artsy – but for how long? I don't want to get tired of a design that calls my attention to it every time I cross the bridge. Keep it simple!
- Anything making the pedestrian walkway more tunnel-like should be avoided.
- Each concept had the idea of suicide prevention incorporated. Each tried to stay true to its historic origin and maintain its stunning views.
- Seattle has the highest per capita public art pieces. Let this new structure reflect that. No horizontal bars, or kept them very low.



Community comments

- Make it a memorial for those who have died.
- What happened to the idea of building out so a fence is not so visible? All but one seem very severe and invasive.

Comments specific to each group's design(s)

Group 1

- Is it prone to graffiti? Blue Glass Concept could create some issues if glass is used with vandals and graffiti. Glass would need to be cleaned annually at least.
- Lovely and subtle.
- Best design.
- I like the lighting concept – try that first before any fence [construction].
- Will the glass get grubby with exhaust, rain, and bird dropping accumulation?
- I like the cable aspect but not the glass cover – it is too modern and not in keeping with the design of the bridge. It will also get scratched and dirty.
- I also liked the design which featured the glass overhang – perhaps it would disappear more when looking at the bridge? There would be more options to feature greenery/plants in this design.
- Will people be able to take photographs from the bridge and not have beautiful views blocked by mesh/wire/net etc? Will garbage/debris accumulate in this protective barrier and who will clean? Has glare from vehicles, bridge lighting and sun light been accounted for?
- I don't like the glass cover as I think it is too modern and will get dirty and scratched. Trash will end up on top of it.
- "Blue Glass Concept" looks great and adds a simple yet functional looking design. It seems to add character to the bridge design and ensures maximum safety. Blue Glass Concept adds tasteful lighting options.
- The first design (w/ glass roof) is very light and airy, and I like the shelter it provides from the rain. The potential for cool lighting is also great. I'd actually walk across it just for the experience. The idea of colored glass is nice, especially on the grey gloomy days.
- LED!! They are too costly! The produce unfavorable glares!

Group 2

- Needs more perspective drawings to flesh out concept. Could look tacked on if not truly mocked-up in advance.
- This is the best by far of "vertical" schemes. The horizontal "net" is better. I wonder if this "Blades of Grass" idea could work horizontally.
- I love this one!
- I prefer undulating or vertical [design] to box panels.
- This is great! I love the transparency and how it echoes the mountain aspect. Art makes people want to live.
- This turns a problem into an asset! Terrific!
- The wave type verticals look much better than the straight verticals.



Community comments

- Love the curve idea – it ensures that the barrier doesn't create a constant view blockage or any one part of the view. The curve also mirrors the mountains and is easy on the eyes. It is attractive from on the bridge and from far away.
- Will this whistle in the wind and clang? [Consider that] things that fly off of vehicles (wheels). A bicycle fell onto a houseboat once.
- Would it possible, as with the floor tiles in the Market, for people to purchase bars and submit a saying or memorial to someone? It would be a way to involve the community and create a sense of community ownership. It could reduce costs and/or help fund the project. The organic, unique design of this one is exciting and interesting to look at. I think this is my favorite design overall. It incorporates the vertical emphasis, compliments the view, and brings a personal and inspirational touch with the sayings while remaining subtle. Perhaps placing the emphasis on simply inspirational saying rather than directing them to potential jumpers would be less morbid?
- Both ideas are really artistic. I like the idea of wind moving rods. Two issues: glare and heavy winds?
- This design has incorporate a design element into the functional aspect which I feel best represents the style of Fremont art within architecture. Tasteful.
- The "Blades of Grass" design is a simple yet elegant design. It has many possibilities. It seems that it could have elements of the "old" and "new." Old as in European soft lights added to the lamp posts. "New" as in the undulating rhythm of long and short blades of grass.
- It would be interesting to add architectural elements from nearby communities (Queen Anne, Belltown, downtown, Magnolia) as well as Fremont and Ballard. Using metals which change color as the temperature changed, such as Gehry's EMP, would add an additional "living" effect. Because preventing suicide is about saving lives.
- The "Blades of Grass" can be an eclectic design much like quirky Fremont.
- Question: Does cantilevered design work with historical nature of the bridge? I hope so!
- If "blades" are moveable, will people mess with them? Will it attract attention to the edge of the bridge?
- "Blades of Grass" captured my interest most – it's organic, lyrical design was very nice to look at while emulating the movement of the view beyond. It also was the design which offered the most opportunity for "community ownership" as the saying on each bar could provide a source of funding if folks could donate to have a saying of their choice etched on the rods.
- What about any of these ideas is historical? Looks like the 1930's era? Etc. Nothing looks like it might have been built within 50 years of 1931.
- "Blades of Grass" is the best from a pure individualistic standpoint. It is distinctively "Fremont" and Seattle-ish in being whimsical and effective.
- I am definitely in favor of the designs incorporating more artistic approach (for instance "Blades of Grass"
- Same with the Blades of Grass, it would be nice to walk across and look at the individual "reeds" and inscriptions. I like the idea of the archway entering the sidewalk onto the bridge.



Community comments

- I like the "blades of grass" design for the artistic element which I think is important to connect with Fremont's unique style.
- I like the idea of phrases being etched along the bridge.
- "Blades of Grass" living breathing concept
- If the net concept is not feasible, then the one that keeps the views from the bridge in the cleanest, simplest way is the best. The Blades of Grass, without adding any horizontal elements actually ads a beautiful sculptural echoing of the mountain ranges in the distance. Brilliant approach.

Tube

- Could be unsafe for pedestrians. There is no secure escape if passing another pedestrian or unsavory character (mugger, aggressive, pan-handler, etc.)

Horizontal net scheme

- Net scheme is the least visually troublesome. It is the only attractive concept.
- It is good the net is being considered. If it's good enough for the Space Needle, why not the Aurora Bridge?
- Net scheme should be given serious consideration. This is the only solution that doesn't degrade the view enjoyed by thousands of commuters on the bridge. It is also the least conspicuous from most other vantage points.
- The only likeable concept is the "nets" concept which was not fully developed. Suggest starting with improved illumination only to achieve some added deterrent effect. The other concepts were too disruptive of views – both from the bridge and of the bridge.

Group 3

An Artistic View

- Put historic plaques (National Register and City Landmark) on bridge so people are aware of its history!
- Too silly.
- Could this be incorporated in any of the ideas? Some sort of gateway at the end of each pedestrian access?
- Yuck – trying to be too cute. It's not appropriate.
- These frames won't help the drivers see views at all. Way too busy and cluttered looking.
- I really like this design – very creative! Nice kiosk touch.
- I also really like the archway concept as entrances to the sidewalks.
- I am definitely in favor of the designs incorporating more artistic approach (for instance "Blades of Grass" "An artistic view" – though you may have difficulty with a kiosk box – who collects them? Suicide notes?
- I think the one with the frames is too non-uniform, and might look "cluttered" and more obstructive.

Minimalist Approach with a "Zap"

- If the zap puts you off, that is the whole point – it will deter jumpers too.
- What about the liability of the "zap?"
- Uh oh! We can't be sapping people like cattle! I can see the liability with triggering heart attacks, seizures and anxiety attacks.



Community comments

- How strong of a zap are we talking about? People could possibly still get around this.
- No zapping! I do not think it sends the right message to potential suicide victims.
- I like the mesh on the veil (like Toronto). No zap, though.
- I don't like the "zap" concept – I think it is a little too prison-like. With design there ought to be ways to ensure that the barrier cannot be reached without this aggressive touch.
- I like most of the designs but there are 2 I don't like – the first being entitled "minimalist with a zap". I don't like the idea of people being zapped by touching the fence. It treats people – possible jumpers – like they are criminals and this is not the message I think we should send.
- Electrical fence is distasteful.
- The ZAP fence is interesting, but I don't think people would be happy. I could see some kids up to no good trying to mess with it.
- I like the veil idea of the Toronto bridge. Perhaps that is what the zap-less mesh fence could be.
- The amount of curvature starts to remind me of a tunnel (which is bad). If you go with a curve, there needs to be lots of openness for views.
- Please avoid curving over. It is very confining and oppressive.

The Comb

- Looks nice in section but imposing in elevation view.
- The comb seemed in keeping with the bridge's style and I liked the European style lighting which gives a more pleasurable pedestrian experience.

Sails

- A bit busy and cluttered for this bridge. However, this would look great on a different, cleaner lined and more modern bridge.
- Sails obstruct the view.
- Severe and cage-like.
- These seem to highly impact the pre-existing character of the bridge. I would prefer a less noticeable design. The view of the bridge from the ground would greatly differ with the "sails."
- The "sails" are perhaps too contemporary, sort of Japanese-modern.
- Do not like "sail" effect nor the more "artistic/creative" designs. The extra cost and effort for those details are at too great a distance to be fully appreciated and valued.
- "Sails" is another good design and kind of goes with theme of bridge i.e. passageway for boats).
- Sails is too heavy and doesn't fit the bridge – it looks like an add-on.
- The sails wouldn't match the bridge, would look foreboding and heavy.
- The sail design is too modern and not in keeping with the bridges historic design. It shouldn't look like a prison fence – should enhance the bridge as well as being functional.

Pedestrian-Experience Along the Bridge

- The outward slope infringes less on pedestrians (a big positive!). I like it and its open feeling.



Community comments

- I like the open feeling as long as horizontal view-blocking elements are minimized.
- This doesn't "match" the bridge.
- It seems to be modeled after the 'luminous veil' barrier on the Prince Edward/Bloor Street Viaduct in Toronto.

Bicycle Zone Emphasis

- "Blade" is too close to cyclists and pedestrians.
- Yes! Wire cable seems the least obtrusive of what is here. However, vertical cable could be climbed like a ladder.
- Rather boring design; the curve is oppressive. Please avoid the tunnel feel.
- I like the cable concept which allows for less interrupted views when driving.



For More Information

Text