

**SH 82 Grand Avenue Bridge
Design Elements Issue Task Force Meeting
April 9, 2014**

Background

This Design Elements Issue Task Force (ITF) meeting was the second meeting held to discuss more detailed design for the Grand Avenue Bridge project on the proposed Grand Avenue Bridge; new pedestrian bridge; and supporting changes to Grand Avenue, 7th Street, 8th Street, and the area on the north side of I-70. A summary of the first meeting held on March 12, 2014, with exhibits, is available on CDOT's project website: www.coloradodot.info/projects/sh82grandavenuebridge.

The Design Elements ITF process endorsed by the Project Leadership Team included the actions needed to make recommendations on specific design details over two scheduled Design Elements ITF meetings. The first meeting was held on March 12, 2014, where the project team presented initial concepts. At this second meeting held on April 9, 2014, the project team presented refined options based on input from the prior Design Elements ITF, Stakeholder Working Group workshops, and the City Council; asked for the participants' concurrence with the options presented; and presented some new concepts for consideration.

Individuals who participated in the Design Elements ITF were citizens, officials, and/or business owners who have demonstrated a high level of interest in the Grand Avenue Bridge project or represent an interest group; and who were expected to provide relevant input and report back to the community and others they represent. They were asked to commit to participate in both meetings.

The discussions held at the April 9 meeting form the basis for the Design Elements ITF recommendations for the project design elements that will be presented to the Project Working Group (PWG) on April 21, along with additional input from the Stakeholder Working Group (SWG) workshop on April 10 and the City Council.

Presentation and Summary of Feedback

The Design Elements ITF met from 9:00 a.m. to 4:30 p.m. on April 9, 2014. The presentation given at the meeting is attached. At the meeting, the design team presented the changes they had made to develop refined options based on the feedback received at the March 12 Design Elements meeting, the March 13 SWG workshops, and the April 3 City Council workshop.

To start the meeting, Craig Gaskill (Consultant Project Manager) gave an overview of the input received since the last meeting. During the presentation, funding for the project and the options shown were discussed at length. The Colorado Bridge Enterprise (CBE), which is providing the funding for the project, is reviewing the proposed design and will decide which aesthetic elements will be funded above the project's base level. While the project's base level and the amount the CBE will fund are still under discussion, it was stressed that the Design Elements ITF recommendations would contribute to developing the design vision for the project. Funding sources, other than the CBE, may be necessary to implement some of the desired design elements.

The following summary provides some of the key responses and feedback received from the Design Elements ITF on each of the design topic areas listed.

Grand Avenue Bridge

Presentation

Design elements include the bridge itself, bridge piers, railing, lighting, and gateway elements.

Design details based on prior input that were incorporated into the options:

- Constant depth girders, rather than variable depth
- Square, stepped piers square on a 45-degree angle to the street bridge both as unifying feature for the Grand Avenue Bridge and as a unifying treatment with the pedestrian bridge
- Weathering steel for bridge
- Simple treatment on side of bridge

The presentation included updated computer model views from North Glenwood, 7th Street, and I-70 eastbound; and updated details on the following elements:

- Pier finishes as coated concrete at wider base and top and stone, brick, or form liner in narrower midsection; transition from wide base to narrower shaft occurs at the same elevation on all piers to create consistent proportions across all pier heights
- Type 7 concrete edge barrier extended from north edge of the railroad to north abutment replacing two-rail see-through barrier over the river and Glenwood Hot Springs parking lot
- Type 7 barrier with simple motif and color
- Railing in downtown section from north of railroad to 8th Street with transparent noise/spray/debris barrier 10 feet above deck over railroad and up to 8 feet above deck elsewhere
- LED lighting in white only on 30-foot poles from north abutment to north edge of railroad; downtown standard fixtures on 15-foot poles from there to 8th Street
- Gateway elements concept with pillars at north abutment and at Pier 6

Feedback

- Views
 - Views are taken too far from the bridge; closer views would be helpful
 - Rails are important visual component
 - Texture and color are appropriate; keep simple and timeless
- Materials
 - Piers are appropriate and attractive - prefer form liner stone on piers over natural stone on most piers; form liner offers many choices and may have a cost advantage
 - Piers that are farther away from people should use form liner
 - Use natural stone downtown where people are in close proximity

- Bridge rail
 - Important detail that defines look of bridge
 - Investigate breaking up the continuity with a pilaster or something that protrudes from the outside of bridge, every 25 to 50 feet? Also consider breaks in the railing panels and using shadows to create the appearance of depth in the panels
 - Consider views from driver height
 - Transparent noise barrier provides safety and mitigates impacts to sidewalk spaces
- Gateway element (pillar)
 - Supports traffic calming
 - Could be used for directional signage
 - Pillar needs more “grounded” top
 - Consider moving the gateway element on the south side of the bridge farther back (north) to give more space for downtown area
 - Concern that the gateway element near the elevator tower may detract from elevator structure
 - Lighting of element would be appropriate
- Roadway lighting
 - General support for luminaires – used at new Dotsero interchange roundabout

7th Street Vision

Presentation

Overview of the Downtown Development Authority’s (DDA) 7th Street vision as presented to the City Council on April 3. It illustrates how the two new bridges fit into a greater vision of the 7th Street in terms of paving materials and design.

Feedback

- Concern about use of 7th Street space – who will use it?
 - Is there enough space on the north side? Not sure there’s as much space as shown
- Do the DDA plans somewhat pre-determine what the paving should look like
 - Answer: We’re trying to keep that connection
- Really like idea of stone garden – activity area for kids to play around on
- Make sure future renderings include the Amtrak station on the west side
- Likes the grand staircase idea as shown
- Is there conversation of developing alleyway on east side?
 - Sonoran Institute has discussed this
 - There could also be a new building in the old shoe shore area
- Would like all the alleys being improved, but will not happen as part of this project

Stairs and Elevators

Presentation

This includes the layout of the elevators, stairs, and elevator tower. The discussion included the east-west layout option selected by the PWG and the modified option based on input obtained at the City Council meeting on April 3.

Design details based on prior input that were incorporated into the options:

- Layout of elevators (east-west entry/exit)
- Staircase modified - reduced width on bike channel and skateboard deterrents
- Restroom location - probably not in tower footprint
- Modified tower aesthetics (roof more closely representing Amtrak tower, rounding of glass in elevator tower)

The presentation included updated details on the following elements:

- Use of area under the staircase - back-up generator located here
- Mechanical room located under top staircase structure
- Material preferences for walls under stairs
- Landing edge treatments
- Tower roof shape

Feedback

- Elevator east-west layout
 - Add more space to minimize conflicts between stairs and elevators entrance at top of stairs
 - Make sure bikes/trailers can navigate entries and exits
 - East-west elevator entrances reduce width of view being blocked
 - Consider wider sidewalk at base of stairs by removing one to two parking spaces
- Tower
 - Consider higher roofline on elevator tower
 - Can spaces east and west of tower be the same width and structure thickness? Answer: structure at end of bridge needs to support bridge girders, so it's thicker; the platform to the east was designed to maximize visibility so is thinner
 - Need to add trees and vegetation
- Roof and tower aesthetics
 - Support for new roof structure
 - Eliminate columns going through top of structure
 - General support for arched windows
- Generator
 - Concern about generator noise
 - Are there benefits to non-natural gas generators?
- Restrooms
 - General support for not including restrooms in the tower footprint
 - Use \$\$\$ to locate them elsewhere, but "elsewhere" not defined

Pedestrian Space between 7th Street and 8th Street

Presentation

This includes options for the layout and materials used in the area under the new Grand Avenue Bridge and the connections to the pedestrian bridge on the north side of 7th Street.

Design details based on prior input that were incorporated into the options:

- Maximize flexibility of space
- Limited greenery under the bridge
- Keep space open between alleyways
- No artwork on abutment wall
- Conduit, outlets, and hose bibs to be provided for concerts, markets, etc.
- Per the City, donor bricks will not be reused – other options include plaques on walls, piers, other monumentation
- Lighting – LED lights, white only
- Visual connections to 7th Street and to elevator towers

The presentation included updated details on the following elements:

- Modified plaza area use/layout
- Lighting options – down lights only or down lights and on coffers
- Sidewalk connection from 7th Street to 8th Street – two options (one with colored pavers and planter boxes, the other with pavers only on east side and moveable planters)

Feedback

- Plaza under the bridge
 - Most people prefer Option 1
 - Water feature good for drowning out noise, but concerns – high maintenance, keeping clean
 - Suggest a water feature without a pool at bottom (reduced maintenance)
 - Maintain flexibility – allow for future improvements and provide options for utilities
 - Concern that moveable café furniture could be carried off
 - Restaurants will bring their own furniture into the space
 - For connection between alleys, keep in mind drainage that prevents icing
 - Area as a children’s play area?
 - How to delineate stage area? Step up (not enough clearance) or with pavers
 - Not sure the alleyways need to be connected
 - Angled features of Option 2 are consistent with pier shapes
 - Option 2 doesn’t match what is planned for 7th Street
- Lighting under the bridge
 - Support for lighting coffers
 - Make sure lighting doesn’t allow pigeons
 - Consider dimmers for lights

- Ceiling color treatments - maybe make coffers lighter?
- Sidewalk connection from 7th Street alley to 8th Street
 - Space between planters and buildings would not allow a space for smokers because they would be in violation of City smoking ordinance
 - Plants could become ashtrays
 - Can bridge walls be pushed inward to provide more space?
 - Hanging planters better than planter boxes - easier to maintain, water in this area

Pedestrian Bridge

Presentation

The design details include girders, piers, overlooks, railing, and lighting.

Design details based on prior input that were incorporated into the options:

- Constant depth girders vs. variable depth
- Snow removal system - plowing; all drainage will be captured and conveyed to ends of bridge
- Square, stepped piers at 45-degree angle to street grid as unifying feature with Grand Avenue Bridge
- Traditional materials and/or colors on piers

The presentation included options and updated details on the following elements:

- Overlook locations and number
- Roofs vs. arches at overlooks
- Roof and arch design
- Railing
- Lighting

Feedback

- Bridge
 - Choice of constant depth over variable depth girder needs further explanation - reasons should extend beyond financial
 - Deck surface - concerned that we seal it - CDOT has a standard - polyester concrete
- Overlook locations
 - Do we need overlooks on both sides of the bridge?
 - Can the two halves of the overlooks be connected?
 - Why would we have an overlook at the parking lot?
 - Consider overlook locations looking east and west
 - Apparent consensus: overlooks at all piers, on both east and west for symmetry and because curve of Grand Avenue Bridge will make views to west more accessible
- Much discussion on number of roofs and whether a feature should be provided at overlooks without roofs; eventual consensus appeared to be:

- Two overlooks– at Pier 5 between railroad and river and at Pier 2 at Glenwood Hot Springs pool
- No roofs in the middle at Piers 3 and 4; do not provide an overhead feature at these overlooks (arch or other)
- Agreement to not run columns through the roofs
- Columns okay to rail height – maybe smaller and fewer than shown
- Railing
 - Concern that railing is easy to climb with horizontal rails
 - Horizontal railing could be on outside of mesh so kids can't step on railing to climb up
 - Too urban and industrial
 - A railing with mostly vertical elements more compatible with Glenwood Springs
 - Rail color – black or dark green in downtown; consider black painted metal – consistent with DDA palette
 - Galvanize any steel used
 - What effect do vertical pickets have on views? (is it more historical?):
 - Answer: Vertical pickets line up behind each other as users look down the bridge and making it more difficult to look out from the bridge
 - Like the railing in Glenwood Canyon (horizontal)
 - There is a picket fence type rail on the existing road bridge
 - How high is the railing? Answer: 4.5 feet; Rub rail/ hand rail at 3.5 feet or; fences required 7 feet 10 inches high over I-70; 10 feet high over railroad
 - Is there a way to go horizontal without looking so industrial?
 - Like some of the design elements/details on the existing pedestrian bridge, including the existing screen; perhaps consider pickets that are spaced further apart with the screen
 - Rusty steel look seems to have lower maintenance
 - Consider if 2-inch mesh over railroad is the same over the rest of the bridge or could go to 4 inches.
- Lighting
 - General acceptance of proposed fixtures – lighting on 15-foot posts at 75-foot spacing to light pedestrians; low-level lighting on railing posts for surface of bridge
 - Where is lighting?
 - Lighting on posts suggested on one side only (west side); low-level light fixtures would be on both sides

Landscaping — North Side

Presentation

This presentation focused on landscaping in the entrance to Glenwood Springs in the area of off-ramp, Laurel Street, and 6th Street.

Design details based on prior input that were incorporated into the options:

- Preference for native concept
- Incorporate existing "Welcome to Glenwood Springs" sign
- Maintain visibility across roundabout
- Maintain visibility of West 6th Street hotels and businesses

The presentation included updated details on the following elements:

- Native concept further developed in a lower-maintenance option and a higher-maintenance option
- Considerations: appearance, level of maintenance

Feedback

- Perennials not too much maintenance
- Will chemicals (like mag chloride) coming off road affect viability of plantings?
- Consider lighting as part of treatment
- Entrance needs to be attractive in the winter time (gateway to ski areas)
- Aspen trees may not work at this elevation
- Concern about ability to conduct maintenance activities with the traffic in the area
- Glenwood Springs sign needs to face the windshields of vehicles
- Check clear zone for signs

Pedestrian and Bicycle Underpass

Presentation

This is the new pedestrian and bicycle underpass connecting the Colorado River Trail to the 6th Street area.

Design details based on prior input that were incorporated into the options:

- Inside of underpass - low priority for aesthetic treatment

The presentation included updated details on the following elements:

- Historic Influence option for gateway
- Options for inside the underpass - form liner or Lithichrome Chemstain
- Options for LED lighting - located at base of ceiling or at eye level

Feedback

- Combine form liner with Chemstain to make it more interesting
- High seams
- Some people do not like wood plank form liner, others liked a lot and suggested using in other places
- Preference for light at base of ceiling - less risk of vandalizing
- Wall texture can't be too rough

- Construct walls of underpass to allow for future upgrade
- Are these surfaces considered base line or aesthetics?

Walls

Presentation

This project will include at least 21 retaining walls, ranging in height from about 2 feet to about 10 feet with differing design treatments, colors, and materials.

Design details based on prior input that were incorporated into the options:

- Provide quality materials where walls can be touched and basic form liner where walls are further away

The presentation included updated details on the following elements:

- Recommendations for types of walls at specific locations

Feedback

- General agreement with recommendations as shown
- Suggestion for a stone form liner for wall F (behind water quality pond) because it is more visible

Wayfinding

Presentation

This includes wayfinding concepts for traffic guide signs, City vehicular signage, and pedestrian/bicyclist signage.

There had been minimal discussion about wayfinding prior to this meeting. The presentation included details on the following elements:

- Wayfinding concepts based on the U.S. Department of Transportation, Federal Highway Administration's *Manual on Uniform Traffic Control Devices* (MUTCD) and City standards
- Proposed locations for each type of signage

Feedback

- General acceptance of proposed plan
- Concern about how the City standards look

Other

- "Timeless" should be our over-arching term to measure everything we do

Next Steps

The project team will use the information provided by the Design Elements ITF, the SWG, other public input, and the City Council to further develop and refine the design elements for the project. The project team will review the input and incorporate the ideas as possible, developing options that more closely align with the suggestions.

Recommendations from the ITF, SWG, and City Council will be presented to the PWG on April 21 to help develop the best design that meets the community's interests in a cost-effective package of design elements.

Participants and Organizations/Roles Represented

Design Elements ITF Members

Bob Andre	Downtown business owner
Tom Barnes	City of Glenwood Springs Staff
Dave Betley	City of Glenwood Springs Staff
Ron Carsten	Historic Preservation Commission
Jodie Collins	Downtown Development Authority
Tom Fleming	Downtown Partnership
Mike Gamba	Glenwood Springs City Council
David Hauter	Architect / designer
Jeremy Heiman	Glenwood Springs River Commission
Lisa Newman	Architect / designer
Bob Patillo	Engineer
Suzanne Stewart	Glenwood Springs Chamber
Dave Sturges	Glenwood Springs City Council
Kathy Trauger	Glenwood Springs Planning and Zoning Commission
Terry Wilson	City Glenwood Springs Staff

Project Team Members

Jennifer Forbes	Project Team - Elevator/Stairs
Craig Gaskill	Project Team - Project Engineer & Planner
Fred Gottemoeller	Project Team - Bridge Architect Grand Avenue Bridge
Julia Jung	Project Team - Pedestrian Bridge
Jim Leggitt	Project Team - Designer
Jennifer Merer	Project Team - Landscape Architect
Pat Noyes	Project Team - Facilitator
Mary Speck	Project Team - Coordinator
Dan Roussin	CDOT - Region 3, Traffic - Access Control