

**SH 82 Grand Avenue Bridge  
Stakeholder Working Group Workshop  
April 10, 2014**

**Background**

This Stakeholder Working Group (SWG) workshop 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 13, 2014, with exhibits, is available on CDOT's project website: [www.coloradodot.info/projects/sh82grandavenuebridge](http://www.coloradodot.info/projects/sh82grandavenuebridge).

The design elements input process endorsed by the Project Leadership Team included the actions needed to make recommendations on specific design details over two scheduled SWG workshops. The first workshops were held on March 13, 2014, where the project team presented initial concepts. At this second meeting held on April 10, 2014, the project team presented refined options based on input from the SWG, Design Elements Issue Task Force (ITF), and City Council; asked for the participants' concurrence with the options presented; and presented some new concepts for consideration.

The discussions held at the April 10 meeting form the basis for the SWG 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 Design Elements ITF meeting on April 9 and the City Council.

A summary of the presentation and discussion points at the workshop follows. Also attached is the presentation given by the project team.

**Next Steps**

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

Recommendations from the SWG, Design Elements ITF, 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.

### **Presentation and Summary of Feedback**

There were 11 participants at the workshop. After a brief overview of the input received at the March meetings, the project team presented updated options and asked for input on each of the design topics below.

#### ***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 on outside of barrier
- Railing in downtown section from north of railroad to 8<sup>th</sup> 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 8<sup>th</sup> Street
- Gateway elements concept with pillars at north abutment and at Pier 6

##### **Feedback**

- Use form liner for piers where not next to people
- Lighting surface of bridge important
- Traffic calming important
  - Would like to see speed-activated radar signs
- Bridge rail - consider horizontal stone type treatments

### ***Pedestrian Space between 7<sup>th</sup> Street and 8<sup>th</sup> 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 7<sup>th</sup> 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 7<sup>th</sup> 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**

- Alley connection is important - add better indication that folks can cross under bridge - like Option 1 with alley access clear
- Under bridge consider alternative paving that highlights the diagonal pedestrian movements
- Consider lowering grade under bridge for more head room
- Lighting – coffer lighting provides better lighting
- 7<sup>th</sup> to 8<sup>th</sup> Street - Option 1 is the better option - allows landscaping in planters and seating on planters
- Transparent noise walls allow pedestrians to use sidewalk – otherwise, space not as useable

### ***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**

- B-a Modified layout works better for aesthetics
- Consult with architect that understands architectural details and historical design
- Adjust the proportions of the roof and tower structure to a more traditional or historic ratio
- Could we move mechanical room and/or generator from under stairs to open up view?
- Provide turning radius for bikes
- Liked idea of having area under mid landing for pedestrian use or sitting 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

- Pedestrian bridge roof has shade and purpose – tall towers don't look good
- Some value in towers and roofs – arches don't add
- Roofs help tie ends together
- Pedestrian bridge needs to be focal point
- Looks too busy – ok with a couple of roofs at both ends
- Make sure kids can look out over river
- Look at larger mesh size over the river
- Consider adding a “bead of lights” so highway users can see the pedestrian bridge and identify it with Glenwood Springs - but done “appropriately”
- Include power for activities on bridge
- Cover (skin) area under bridge surface to hide utilities

### **Landscaping — North Side**

#### **Presentation**

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

- Visibility to West 6<sup>th</sup> Street businesses important
  - Do not use trees or tall shrubs that block visibility from off ramp or roundabout
  - No pines at roundabout
- Start off with larger trees to provide better visibility from driver's view

### **Pedestrian and Bicycle Underpass**

#### **Presentation**

This is the new pedestrian and bicycle underpass connecting the Colorado River Trail to the 6<sup>th</sup> 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**

- Inside underpass not a priority
- Focus here on being well lit
- Think about acoustics
- Consider coffers on top of underpass
- Good to have nice entrance
- Consider cameras in tunnel
- Existing problem with mud swallows in tunnels at right-angle corners

#### **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**

- Glenwood Canyon walls recommend rough form liner (original) when not next to pedestrians
- CDOT standard for Glenwood Canyon walls is not the original walls specification - recommend using the original form liner
- Smooth surface will reflect light

#### **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

- Don't like last set of pedestrian/bike signs (City standard for pedestrian/bicyclist signage) – reconsider
- Needs good signage/wayfinding for West 6<sup>th</sup> Street businesses
- Signs – functional, readable
- No pines at roundabout
- Consider a pedestrian signal north side of roundabout at 6th
- Update CDOT website
  - Have timeline
  - Add dates to graphics
  - Add a way to more easily print from website
- Pedestrian bridge columns should be smaller
- Will be angry if do not get what graphics have shown – need to know now