

**SH 82 Grand Avenue Bridge  
Design Elements Issue Task Force Meeting  
November 19, 2014**

**Background**

The November 19, 2014 Design Elements Issue Task Force (ITF) meeting was held to review how previous ITF input was used to make design decisions, and to obtain input on outstanding design elements related to aesthetics and urban design to inform the final design. Summaries of previous ITF meetings held, with exhibits, are available on CDOT's project website: [www.coloradodot.info/projects/sh82grandavenuebridge](http://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. At the first meeting held on March 12, 2014, the project team presented initial concepts. At the second meeting held on April 9, 2014, the project team presented refined options based on input from the previous Design Elements ITF meeting, Stakeholder Working Group workshops, and the City Council. At the second meeting, participant concurrence on the options presented was requested and new concepts were presented for consideration.

Participants in the Design Elements ITF included 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.

At this November 19, 2014 Design Elements ITF meeting, the study team summarized design decisions made based on previous input from the ITF, and presented options for materials and design of remaining project elements, including the following:

- Bridge piers
- Retaining walls and seat walls
- Pedestrian bridge and stairs handrails
- Bridge barriers and fencing
- South utility room/vault
- Elevator tower
- Pedestrian bridge overlooks
- Monumentation

**Presentation and Summary of Feedback**

The Design Elements ITF met from 9:30 a.m. to 1:00 p.m. on November 19, 2014. The presentation made at the meeting is attached. At the meeting, the design team presented the changes they had made to develop refined options based on stakeholder feedback received, primarily from the April 9, 2014 meeting.

Craig Gaskill (Consultant Project Manager) began the meeting by presenting decisions made on the following design elements that reflect previous ITF input received:

- No transparent barrier along the highway bridge downtown or over the river. This decision was made primarily because of inconsistency with historic character. A solid Type 7 barrier will be used.
- No lighting in coffers. This is due to bridge constructability issues and costs.
- Same pier types and shapes for both bridges (diamond shape). This is consistent with stakeholder input.
- Design of the pedestrian bridge overlooks, rail monumentation and roof structures that reflect previous ITF input.
- Elevator tower/stair layout, reflecting ITF input.
- Real stone/brick for walls and piers instead of stone form liners. This was the desired treatment from the previous ITF meetings.
- Design of the hardscape under the downtown bridge. The design is the concept preferred at the previous ITF meeting. Donor bricks will be removed and reset in a similar location.
- Design of the pedestrian/bicycle underpass, consistent with ITF input.
- Landscaping will be installed and maintained by the City of Glenwood Springs. Irrigation sleeves will be provided by the project. This design has not yet been started by the City but the City has been provided the landscaping input from the ITF and other stakeholders. CDOT will continue to coordinate with the City of Glenwood Springs to determine the methods and responsibilities for designing the final landscape plan, and landscaping responsibilities will be included in an Intergovernmental Agreement between the City and CDOT.

The design decisions listed above were discussed, and attendees found them to be acceptable.

Feedback received from the Design Elements ITF on each of the design topic areas is summarized below.

### **Presentation**

The presentation provided options for materials for use on project elements, including bridge piers; elevator tower; stairs; railings and mesh for both bridges, stairway, and elevator tower; pedestrian bridge overlooks; south side utility room/vault; bridge barriers; monumentation; lighting; flower pots and banners; 7<sup>th</sup> and 8<sup>th</sup> Streets sidewalk; walls and seat walls; fascia (façade); and gutters.

### **Feedback**

#### **Bridges:**

- Longevity of bridge elements was discussed.
  - Staining of form liners – stain does not last as long as stone; natural stone lasts much longer.
- Materials
  - Concrete finish would be used at the bottom of bridge piers (below stone) where the high water line would occur because concrete would withstand water inundation better than a stone facade.
  - Standard concrete finish would not be used on walls.
  - Wing street area would match 7th Street streetscape/hardscape details.

### **Elevator Tower:**

- Gray concrete vs. stained or colored concrete was discussed.
  - Some attendees noted that they would prefer a tan or adobe concrete color.
  - Others noted that unstained/gray concrete would be a better historic fit and better meet historic guidelines.
- There would be more than six feet provided between tower and street sidewalk under the current plan, which was acceptable to attendees.
- Concern was raised about how bicyclists would maneuver through the elevator. The elevator will be a ride-through elevator. The elevator would open on the east side at the top, and open on the west side at the bottom, eliminating the need for bicyclists and strollers to turn around inside the elevator car.
- It was suggested that the study team consider using the tumbled brick used on the new parking structure for the southern pedestrian bridge area. The study team will consider this type of brick in the design.
- Concern was raised about the use of copper on facades and gutters, including the cost of copper, maintenance, potential to be stolen, and its appearance as it oxidizes over time.
- Would it be possible to use a material that looks like copper but is not copper? Also, a weathered steel appearance is desired; not a shiny appearance.
- It was noted that weathered steel elements “bleed,” which is undesirable.
- Textured concrete would be preferred.
- Attendees were fine with removing the clock option previously considered for the tower.
- Attendees liked the idea of a “7<sup>th</sup> Street Station” sign as a landmark.
- Attendees also liked the option of a sign on the concrete band – either a painted sign or a sign with back-lit steel lettering.

### **Stairs:**

- The stair layout is acceptable; like how the stairs slightly flare at the bottom of the stairway.

### **Railing/Mesh:**

- Consider tapering the ends of the tall mesh segments to soften the transition to shorter mesh segments. Could it look like a truss?
- Black cast iron railing is preferred over steel. It has a more historic appearance.
- Do not like the mesh with the vertical wave/curve pattern.
- One attendee liked the curve option shown on the mesh.
- Several attendees preferred the railing design shown in the photo of a black railing with vertical rails and small circular accent along the top. It was thought this has an historic appearance.
- Use of vertical stone separators in the railing is preferred.

### **Pedestrian Bridge Overlooks:**

- There will be two center overlooks on the pedestrian bridge.
- Attendees preferred use of stone/brick elements at overlooks.

### Utility Room/Vault on South Side:

- Can the vault door be placed on the north, east, or west side? The answer was no because the north side is above a retaining wall adjacent to the depot platform, and the east and west sides do not have enough horizontal clearance.
- Can the vault door be made to look like the windows? The answer was that this could be done.
- Hide doors for utility vault area as much as possible.
- Some attendees liked the glass, but would like to keep it simple to avoid too many conflicting elements.
- Other attendees noted they would like a variety of materials used - maybe consider steel?
- Perhaps use solid brick and use a regular door and paint it the color of the brick. Perhaps put opaque glass above door and back light/glow?
- Open back/railroad side of the vault to allow light to come through to the front.
- Perhaps use backlit glass blocks?
- Some attendees liked the idea of backlighting, but it should be low maintenance.
- Remove easy access to area behind elevator and stair structures.
- Maintenance/graffiti/loitering are a concern.
- Provide sufficient lighting to discourage loitering/graffiti.
- Consider opportunity to display historic pictures in this area.
- Perhaps put brick on both sides of door, then disguise door as much as possible, with backlit lighting above the door. This suggestion received support.

### Bridge Barriers:

The Grand Avenue Bridge is broken into two main areas for barrier treatments: The Primary Barrier area is located between 7<sup>th</sup> Street and the northern abutment, and the Downtown Barrier area is located between 7<sup>th</sup> Street and the southern bridge touchdown point.

- Primary Barrier area:
  - A solid concrete barrier was proposed to be used along the entire length of the bridge.
  - The inside of the barrier cannot be altered for safety reasons. Aesthetic treatments can be considered for the outside of the barrier.
  - It was asked if the reveals included with some of the barrier options would provide a perch for pigeons or area for dirt to accumulate. The reveals would not present a pigeon problem, and they could be angled to minimize dirt accumulation.
  - Can stone pattern in downtown section be extended onto primary barrier area?
  - The barriers consist of separate panels/segments, so the break between panels would be visible.
  - The Downtown Option 2 (banded sandstone panels) is preferred because it integrates the barrier panel segments into the design; the segments would not stand out as much as the other options.
  - Want consistent look for both bridges. Want sandstone detail on entire length of barrier, like the downtown area options shown.

- It was suggested that some type of pilaster be used every 15 or 20 panels or so to break up the repetitive pattern of the panels.
  - Perhaps use light poles in line with bridge piers.
  - Want lighting included on bridge rail.
  - Lighting options must meet CDOT requirements.
  - Can the height of the barrier panels be raised? The height of the barriers is a standard height, it can be raised but it is an add on and not aesthetically pleasing.
  - Can the look of the panel be heightened by extending the barrier façade down over the bridge deck?
  - Concerns were voiced about maintenance/replacing stone that falls off the barrier, especially over the river where access would be an issue.
- Bridge railing/mesh fence:
    - A 2-foot 1-inch tall 3/8" rail mesh fence is required on top of the solid side barrier along entire length of bridge.
    - Move forward with same elements as pedestrian bridge.
    - Can pickets be included?
    - Consider using same mesh as that used on parking structure (Banker wire); although one attendee was concerned that this mesh is not very transparent.
    - A 7-foot 1-inch fence is required on top of the solid side barrier along the portion of the bridge that crosses the railroad tracks.
    - The mesh/fence on top of the solid barrier should be a simple design.

**Monumentation:**

- Monumentation at 8th Street:
  - Consider incorporating lighting into the monuments.
  - Consider placing large planters near monuments to provide for landscaping opportunities.
  - Look for opportunities to incorporate color.
  - There is concern that the monument areas would provide enough space for large planters, considering that traffic signal poles and other street elements will also be located in this area.
  - Concerned that the flat-top monument option would create opportunity for people to climb/sit on.
  - A participant noted that they are against the part of the project along Grand Avenue.
  - The \$3M City contribution to the project should be earmarked for aesthetic treatments at 7<sup>th</sup> and 8<sup>th</sup>.
  - Providing monumentation at entry points is critical.
  - Monuments would be an extension of the bridge barrier, and not a substitute for the barrier length.
  - Consider placing monuments on top of barrier to allow for larger area behind the barrier/on the sidewalk.
  - Emergency access to businesses between 7<sup>th</sup> and 8<sup>th</sup> Streets is a concern (due to barrier).
  - Consider adding one monument on both sides of bridge mid-block between 7<sup>th</sup> and 8<sup>th</sup> Streets.

- Monument Option 1 is preferred.
- Consider repeating diamond shape of bridge piers into monuments.
- Consider providing planters with seating area along sidewalk on both sides of bridge to break up and soften appearance of bridge wall.
- Monumentation on North Side:
  - Taller monuments would be appropriate on the north side because the area has a more open scale than area along Grand Avenue.
  - Identifying locations for monuments in this area is challenging because of the grades.
  - Cost of monuments could be an issue.
  - Options for relocating the existing “Welcome to Glenwood” rock slabs were discussed, including placing them within the roundabout, in the island to North River Road, at westbound off-ramp, at end of north bridge touchdown, or in areas where speeds are slower.
  - It was discussed to possibly wait until the project is completed to decide where the slabs should be placed. However, the location of new monumentation needs to be determined during final design to accommodate electrical service to monuments.
  - Consider including street signage/wayfinding on monuments.

**Lighting:**

- Existing light poles on Grand Avenue Bridge look good at night. It was noted that existing lights do not meet CDOT standards (dark sky, communications).
- A lighting study will be conducted to ensure that the correct amount of light is provided on the bridge.
- What about new Providence lighting? Does not meet CDOT standards.
- Concerned about Type K light over bridge.
- Type M provides some aesthetic benefit for bridge.
- Consider using a combination of Type K and Type M lights on the bridge. This is possible, using the Type M lighting at a 15-foot height.
- Consider obtaining a variance for Type M lighting on bridge.
- For roundabout Type L lighting, why not consider other light types? They are more pedestrian fixtures.
- Vote for looking at variance for Type M. Providence (Type P allows LED, Type M does not).
- Potential for lighting under Grand Avenue Bridge over river, but maintenance/access is a problem.
- Option for under bridge lighting – City Council said they do not want colored lights provided under bridge; they want to keep it simple.
- For lighting under the bridge at 7th Street – like the combination lighting option. Can lighting be adjustable/use dimmers? If possible, this would be preferred to accommodate various activities in this area.

**Lighting, Hanging Flower Pots and Banners:**

- Attendees like what is proposed.
- Irrigation would be provided to flower pots.

### 7th-8th Sidewalk:

- Installing street trees is not possible because of conflicts with underground utilities – there is not enough room.
- Changing underground utility configuration to accommodate trees is not considered feasible given the constrained area and utilities connecting to adjacent buildings.
- Could a root structure vault be used? Yes, but it would add an additional challenge for growth in an already difficult environment. It would also add substantial cost to the project.
- Distance between the highway bridge and buildings along Grand Avenue is an average of 15 feet.
- Is there an option to remove the southbound left-turn lane at 8<sup>th</sup> to allow more sidewalk room? No, that design decision was the result of an extensive public process on access control and has already been made.
- The Historic Commission proposed mitigating loss of existing street trees by installing a green planting wall. Are there columnar shrubs to create vertical green appearance? Yes, the study team will look at options. It was noted that use of vine-type plants should be avoided.
- The option of planters interspersed with benches along the wall is acceptable. Consider options to break up pattern with different widths of planters and benches.

### Walls:

- Is it possible to put more of the Forest Blend rock on the bridge?
- Attendees preferred use of Colorado Rose rock on the north side.
- Introducing the Forest Blend on the north side is acceptable.
- No clear direction was received on mixing stone types, but stone types proposed were acceptable.

### General Discussion:

- Is the 90-day full bridge closure set in stone? No, but it is still currently anticipated to last approximately 90 days.
- Will there be future opportunities for the ITF to provide input as the design proceeds? There will likely be no additional ITF meetings. The 90% plans will be provided to City staff for review.
- Will the bathrooms be replaced? Replacement of the bathrooms will not be part of this project. The City is responsible for determining whether the bathrooms will be replaced and where they will be located.

### Next Steps

The project team will complete the final design of the urban design and aesthetic elements based on input provided by the Design Elements ITF.

A public hearing is being held the evening of November 19, 2014 at the Glenwood Springs Elementary School to present findings of the EA and obtain public comments. Current aesthetic and urban designs will also be presented at the hearing.

A Decision Document will be prepared that addresses public comments received on the EA, which will complete the National Environmental Policy Act (NEPA) process for this project. The Decision Document and final design are scheduled to be completed by early spring 2015, with construction anticipated to begin in late 2015.

### **Participants and Organizations/Roles Represented**

#### **Design Elements ITF Members**

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

#### **Other Attendees**

Terri Partch	City of Glenwood Springs
Al Laurette	City of Glenwood Springs

#### **Project Team Members**

Joe Elsen	CDOT - Program Engineer
Mike Vanderhoof	CDOT - Planning and Environmental Manager
Craig Gaskill	Project Team - Project Engineer & Planner
Jennifer Forbes	Project Team - Pedestrian Bridge/Elevator/Stairs
Jennifer Merer	Project Team - Aesthetics
Randal Lapsley	Project Team - Bridge Designer
Misty Swan	Project Team - Environmental Planner/Public Involvement
Pat Noyes	Project Team - Facilitator