



MEETING NOTES

PROJECT:	23982-23929 I-70 West Vail Pass Safety and Operations Improvements
PURPOSE:	Technical Team (TT) Meeting #12
DATE HELD:	January 11, 2021
LOCATION:	Online Google Meet Meeting
ATTENDING:	John Kronholm, Project Manager, CDOT Region 3 Karen Berdoulay, Resident Engineer, CDOT Region 3 Rob Beck, Program Engineer, CDOT Region 3 Matt Figgs, CDOT Region 3 Dave Cesark, CDOT Region 3 Environmental James Proctor, CDOT Bridge Enterprise Patrick Chavez, CDOT I-70 Operations Lisa Schoch, CDOT Historian Captain Jared Rapp, CSP Carole Huey, US Forest Service Cindy Ebbert, US Forest Service Jared Pierce, US Forest Service Tom Fuller, US Forest Service Greg Hall, Town of Vail Chad Salli, Town of Vail Dick Cleveland, Town of Vail Pete Wadden, Town of Vail Larissa Read, Consultant to ERWSD Taylor Elm, DNR Kristin Salamek, CDOT USFWS Liaison Shannon Anderson, Bicycle Colorado Kevin Sharkey, ECO Trails Stephanie Gibson, FHWA Jeff Bellen, FHWA Tracy Sakaguchi, Colorado Motor Carriers Association Jim Thomsen, Kiewit Randal Lapsley, R S & H Jeb Sloan, R S & H Mary Jo Vobejda, Jacobs Jim Clarke, Jacobs Loretta LaRiviere, Jacobs
COPIES:	Attendees

SUMMARY OF DISCUSSION:

1. Introductions & Meeting Purpose

- a. Karen introduced the attendees at today's meeting.
- b. Mary Jo reviewed the purpose and goals for today's meeting:
 - Review status of the INFRA Grant draft scope and schedule for the first construction package
 - Discuss the process for moving forward with design refinements/options and design exceptions
 - Gain input Scope Specific Differentiating Criteria for the Truck Ramp and the MM185.3 Bridge

- Discuss the Design Exception ITF

2. Review of work completed since the Last Technical Team (TT) Meeting

- a. Karen said the FONSI (Finding of no Significant Impact) has been approved by the FHWA and is expected to be signed within the next two weeks.
- b. Mary Jo said that based on the feedback received at the last meeting, the TT meetings will now be monthly and have been scheduled through June. TT meetings will be extended as we get a better idea of the project progress and topics for discussion. The PLT meetings have also been revised to meet quarterly.
- c. The PLT and TT charters have been revised.
- d. As requested at the last TT meeting, the acronym list has been sent out and we will work hard to spell out any unfamiliar acronyms as they come up during the presentations.
- e. Revisions suggested for the PLT, TT & ITF membership have been incorporated.
- f. Finalizing the INFRA CAP #1 scope and schedule
- g. Proceeding with preliminary design on critical items

3. Status of Ongoing Meetings

- a. Mary Jo said the ITF meetings will begin in the next few weeks and you will be briefed on them at the February TT meeting. The process will be very transparent with what is going on behind the scenes on the design and when the ITFs will be able to give input. Karen said the schedules and number of meetings shown in the presentation are draft and will probably be revised as we start to have meetings and the stakeholders provide input on where they would like to give feedback.
- b. Mary Jo reviewed the schedules and topics for the ITF meetings:
 - i. SWEEP: The January 25 meeting will review and give input on the implementation matrix. Wetlands is a separate process but will be held in conjunction with the SWEEP meetings.
 - ii. 106/Aesthetics: At the February 1st meeting the ITF will provide input on the guidance for designers.
 - iii. ALIVE: The February 11th meeting will review and provide input on the methodology for the locations and sizing of the wildlife crossings.
- c. The Design Exception ITF will be needed in February or March. This will be discussed later in today's meeting.
- d. We are proceeding with the preliminary design for the overall project and focusing in on the design of the first construction package.
- e. As discussed in the last TT meeting the recreation trail issues are multi-disciplinary. Based on feedback we heard, we will proceed with discussing the recreation trail issues will be discussed at the TT meetings.

- f. The Emergency Services ITF meeting schedule is still being developed. It is anticipated the first meeting will be in March and second meeting in the fall.

4. Draft Cap #1 Scope and Schedule

- a. Karen said one grant commitment is to start construction this summer of a first construction package which is a very aggressive schedule. Since the SCAP (Sediment Control Action Plan) won't be completed by then, we are evaluating scope that does not include impervious surfaces. The scope we are considering for this first construction package includes the reconstruction of the lower truck ramp and the highway closure system. However, these scope items may change if significant risks are discovered.
- b. We are planning a total of four construction packages to deliver the INFRA project scope: 1) in 2021 as mentioned that may include the lower truck ramp and the highway closure system, 2) in Feb. 2022 Scope to be determined, 3) in May 2022 Scope to be determined and 4) in late Fall 2022 Scope to be determined. We plan to finalize the scope for packages 2-4 in Fall 2021. Construction will continue through 2024. The I-70 CSS process will continue throughout construction.

5. Processes for Moving the Design Forward

- a. Mary Jo said the Context Statement and Core Values graphic was put together as the West Vail Pass EA process began. The Context Statement and Core Values do not change. As the project design becomes more detailed, how to achieve success may change. There could be different questions asked and could be different ways to measure elements.
- b. Design Refinement & Scope Specific Differentiating Criteria evaluation - The Preferred Alternative was laid out in the EA and now we need to refine the design as we move into final design. The original core values and success factors are more broad so we are proposing that the evaluation criteria are adapted to be specific to the scope item that is being refined. We are defining this Scope Specific Differentiating criteria which is unique scope item evaluation criteria, that we will develop based on the core values and bring to the TT for feedback. Some of the core values will not be distinguishers between design options or design refinements but many will. After receiving feedback from the TT on the differentiating criteria, the design team will develop design refinements or design options and bring information back to the TT to show how their feedback was incorporated. We plan to use this process to evaluate design options and design refinements on the more sensitive refinements to the EA design.
- c. How the Design Refinement process feeds into the CSS Engineering Design Exception Process if an Exception is needed – The presentation identified a flowchart showing the relationships of the processes. The Design Refinement Process and CSS Design Exception process are sequential. The Design Refinement Process will be completed for each option. If a CSS Engineering Design Exception is

needed that process would start after the design refinement process is completed. The CSS Engineering Design Exception process will include a written justification which will be brought to the TT for feedback and PLT for endorsement.

- d. Greg said the Preferred Alternative laid out the commitment for the three lanes up and down the pass. The options will require significant walls. What level of changes are we considering at this time? Would we consider a viaduct of any sort for the recreation path?
 - i. Mary Jo said it was evident when the EA design was done there would need to be either walls or cut slopes. How high the walls should be or if they should be terraced are options.
 - ii. Karen said that we do not anticipate significant refinements to the EA design such as changing to a viaduct. We will be following the EA design with slight refinements such as minor alignment adjustments where we can further reduce walls or gain more space between I-70 and the creek. Some examples of design refinements that would follow this process may include:
 - Roadway alignment refinements
 - Overall Project Phasing
 - Recreation Trail alignment refinements
 - Structure Selection items
- e. Greg said the big walls just past the curve by the campground were not addressed in the EA and it will need to be addressed now because it will need a design exception.
 - i. Karen said the Aesthetics ITF will develop guidelines for the entire corridor.
 - ii. Karen said that since we do not have funding for that section of work, we will not be refining the design near the campground at this time.
- f. Greg commented that we could consider leaving the old I-70 EB bridge to be used for future phasing of the building of the sister I-70 WB bridge. The team acknowledged this was a good idea, but we do not currently have funding for the I-70 WB bridge and wouldn't want to leave the existing EB bridge in place too long after construction.

6. Truck Ramp Scope Specific Differentiating Criteria

- a. Karen said the design refinement of the lower truck ramp at MM 182.5 is a great example of how to balance the design with the core values. She explained by showing the photos of the ramp that it's on a curve that needs to be straightened, the hill makes it challenging to straighten it out and because of the terrain it will need big slope cuts and retaining walls.
- b. The design team is evaluating options on the gore location, where the truck ramp leaves I-70 to allow enough site distance from I-70, optimize the lowest wall height



possible but still make safety improvements for the truck ramp. The different departure angle of the entrance to the ramp will have different impacts.

- c. There is a maintenance road next to the ramp which may need to be moved.
- d. Karen said there is no straight forward solution as some of the options have more impacts than others. The draft matrix defining CSS Scope Specific Differentiating Criteria for the truck ramp was shown. Karen explained that more columns will be added for the options to be evaluated against the differentiating criteria. Some examples of differentiating criteria for the truck ramp include analyzing:
 - i. Site distance of truck ramp from roadway
 - ii. Total forested area impacted
 - iii. Total wetland area impacted
 - iv. Construction duration
 - v. Potential design exception – wall heights
- e. Karen asked the group if there was anything that was missing in the differentiating criteria.
 - i. Tracy asked about access for truck recovery once it is in the bed. Is there enough room for the vehicle to get in and out? John explained that what he has seen in the past is for tow trucks to simply back up the truck ramp to pull the truck out. Randal said they plan on having a discussion with the truck recovery company to confirm what they need. This success criteria will not necessarily be a differentiator but will be addressed by all options evaluated so will not be added to the matrix.
 - ii. Tracy inquired about long term maintenance of the ramp. Karen said maintenance is included in Sustainability. Randal said both alternatives have a maintenance road planned, and they are looking at alternatives for having it either on the left or right side. It was agreed to change the differentiating criteria to read ease of maintenance rather than just ease of access to items that need to be maintained.
 - iii. Tracy said catchment basins should be included for potential hazardous waste spills. Karen said that we agree, and this is great feedback. This will be part of the baseline design and will not be a differentiating criteria. Randal said they are looking at alternatives on how to capture the spills to reduce potential environmental impacts.
 - iv. Tracy asked if there will be signage added that the ramp is in use so that freight drivers are aware if a truck ramp ahead is full. Randal said there are existing overhead variable messaging signs (VMS) signs are already in use. Freight drivers also have in-cab electronic messaging, which could be used to convey information. Tracy said that the in-cab messaging is a paid pre-pass verification subscription so not all truckers have it. They are trying to get it to be free for all truckers. John said there



are cameras on the ramp to share information with the CDOT hub who can add information to the VMS signs.

- v. There was discussion about the public using the ramp to access the recreation path or I-70 from the bike path. Tracy asked if the access road on the north side off US 6 is used for recovery trucks to access the ramp. John said there are two potential access points but most recovery trucks back up the ramp and do not come down the ramp via Big Horn Road. The project design will look at the existing access and blending it into the existing topography. Tracy asked if there is public access to the ramp or if there is a barrier to keep them out. John said this is a good comment. There is a gate to the recreation path and a safety barrier at top of the ramp. But people do drive up the ramp and tightening access will be evaluated during design.
- vi. Tom Fuller said he couldn't find any documentation that US 6 was a designated historic road. He said the area was surveyed in 1993 and 2007 and he couldn't find any documentation the road was designated as historic. Lisa said she is pretty sure all of US 6 is considered significant and she remembers discussing this segment with SHPO when the project started. She will confirm if and how this segment has been designated.

7. MM 185.3 Bridge Realignment Scope Specific Differentiating Criteria

- a. Karen said that replacement of the EB bridge at MM 185.3 is in the INFRA scope. This is a very long bridge that will be built adjacent to the existing bridge since we are smoothing this curve. The EA design bridge alignment was almost directly over Black Gore Creek. We know this is not ideal since it's very difficult to control snow cast with sand. During design we are looking at ways to still smooth the curve but shift the bridge further away from the creek. Karen explained that we are evaluating up to three design options for refinements to the bridge alignment.
- b. The draft bridge alignment scope specific differentiating criteria based on the project core values was shown in the presentation. Karen highlighted some of the criteria:
 - i. Improve curve geometry and evaluation of the crash reduction factor
 - ii. Aesthetic considerations
 - iii. Wetlands and forested area impacts
 - iv. Distance to creek centerline
 - v. Anticipated trail user impacts during construction
- c. Carol Huey asked if the bridge will be replaced this summer. If it is, we need to get the word out to recreational event planners and outfitter guides about the trail closure. Karen said no, it will be in 2022-2024 construction packages. We will make every effort to minimize trail closures and impacts and will keep people informed. Kevin Sharkey said thanks for keeping the issues that are important at the center and keeping us informed during the process.

- d. Greg suggested enhanced environment water quality criteria including wetlands, outfalls, sand and sediment will need to be expanded for both the bridge and truck ramp. Karen said she agreed, and water quality improvements will be evaluated as part of the baseline design included in all options for the truck ramp.
- e. Jared inquired what will happen to the landscaping rehab when the old bridge is removed. John explained there is no set landscaping plan yet, but the mitigation will be to revegetate it to look as natural as possible.
- f. There was general discussion on the differentiating criteria. Greg asked if the Differentiating Criteria are general examples or are we asking for specific feedback before the next TT meeting. Mary Jo said we are specifically seeking feedback on these two specific differentiating criteria scope items. These are not generic but are specifically for the truck ramp and bridge replacement design refinements. Other design refinements will have differentiating criteria. She said it probably won't help to send out the criteria in advance if you don't know what the design refinement is. She acknowledged that it is a lot of information to take in during one meeting so if you would like the criteria and design refinement in advance, we can do that. Greg wanted to know how we will educate the TT members who weren't on the call on the expectations for review. Karen said we will send the Differentiating Criteria slides with the meeting notes and encourage the TT to send us feedback if they have any additions or questions.

8. Review Previously Used Considerations for CSS Engineering Design Exceptions

- a. Mary Jo explained the Previously Reviewed Considerations for CSS Engineering Design Exceptions graphic. These elements are part of the I-70 Mountain Corridor CSS Engineering Design Criteria:
 - Design Speed
 - Alignment
 - Slope Cut and Fill
 - Disturbance
 - Rock Cut
 - Bridge structures
 - Sound Attenuation
- b. Mary Jo said there are reasons why a design criterion may not be able to be met and justifications would be needed to be presented for input. Greg noted that Increased Capacity and Cost are not used. John said the TT said in an earlier meeting not to consider cost.

9. CSS Engineering Design Exception ITF

- a. Mary Jo said forming a Design Exception ITF is an EA mitigation commitment. Since the Design Exceptions tend to cross over between different core values and technical backgrounds, CDOT proposed defining the TT members as the members of the Design Exception ITF also. We could define a portion of the monthly TT meetings to address the exceptions, when needed.



- b. The group generally agreed with this approach. Greg and Tracy supported it since they agree that the ITF should be multi-disciplinary and making it part of the TT helps with meeting scheduling efficiency. Greg wanted to ensure the PLT is involved with this process as well. Mary Jo confirmed the PLT will get briefed on the Design Exceptions at their meetings and in the past, they asked for the feedback received from the TT about the exceptions. Larissa also agreed with the approach. She highlighted the importance of well documented decisions that can be shared in the future for this project. Karen said the individual documentation for the CSS Engineering Design Exceptions will be completed as the draft documents were completed during the EA.
- c. Carole Huey requested a copy of the presentation

10. Next Steps

- a. Mary Jo reviewed the next steps:
 - Issue Task Force technical experts are developing their methodologies and finalizing their engagement plans
 - ITF meetings in January and February
 - TT meets in February after first ITF meetings
 - TT meets again in March
 - Meeting with the PLT -March 26, 2020