



Floyd Hill - Project Leadership Team and Technical Team

Meeting Summary

July 16, 2020, 1:00 PM to 3:00 PM

Virtual Zoom Meeting

Welcome and Agenda Review

Jonathan Bartsch, CDR, convened the meeting. The combined Project Leadership Team (PLT) and Technical Team (TT) members introduced themselves with a highlight of summer 2020. Attendees are listed at the end of these notes. Jonathan reviewed the agenda; the PLT/TT had no revisions or additions.

Project Updates, Public Meeting Summary and Schedule

Neil Ogden, Colorado Department of Transportation (CDOT), gave an update to the PLT/TT on the Floyd Hill design progress and National Environmental Policy Act (NEPA) effort. The biggest and most recent update is that the project received senior leadership support to continue advancing the design, to look towards finalizing the NEPA alternatives by late 2021, and to continue exploring funding and partnership opportunities to deliver on the full project.

Chat box comment: That's GREAT NEWS!! Congratulations!

I-70 Mountain Corridor Project Updates

West Bound Peak Period Shoulder Lane (Mountain Express Lane [MEXL]): Jeff Hampton, CDOT, gave an update on the construction progress, which is within a few weeks of the original schedule and continuing to make up ground. Current project developments include wall construction, placing barrier, and paving. Currently, CDOT and the contractor are working to develop a schedule and approach for the City of Idaho Springs work between exits 242 and 241, including construction methods and options for night work. A recent project milestone was the complete installation of conduit for the fiber backbone.

Question: When do you anticipate wrapping everything up?

Answer: The current construction will be complete towards the end of the year. Although work may not be completed by contractor's incentive goal, it will be completed before the heavy civil deadline.



CR 314 and Greenway Design: Neil gave an update on the CR 314 and Greenway design. Money for construction is secured. Currently, CDOT is finalizing the right-of-way plans in order to move forward with the acquisition process, which is typically a 6- to 12-month process. The current construction target is Spring 2021. CDOT will be engaging an Issue Task Force (ITF) to review CSS commitments and ensure that the design is fully understood before transitioning to construction.

Silverplume Soundwall: Neil and Jeff confirmed that the soundwall construction is complete and that CDOT is working to complete the project internally.

Question: Is the soundwall at Silver Plume painted?

Answer: Yes, it is painted. The paint was completed in the last week of June.

Public Meeting Summary

Jonathan quickly reviewed the public meeting summary document, which is available on the project website [HERE](#). An overview of the document reveals that the public's top concerns included safety, community impacts, and cost and funding, and that there were preferences for alternatives not represented, including a monorail. Finally, there were several requests for CDOT support along the corridor for projects including roundabouts, frontage roads, Greenway, and a water storage project.

Comment: The public meeting attendees were knowledgeable. Although many did not articulate a stated preference, that does not mean they don't have a preference. The public meeting provided a lot of information that people will need time to consider.

Stream and Wetland Ecological Enhancement Program (SWEEP) / A Landscape Level Inventory of Valued Ecosystem Components (ALIVE) Updates

Mandy Whorton, Peak Consulting, gave an update on the SWEEP ITF and ALIVE ITF progress. Both ITFs met in May 2020.

SWEEP ITF

Mandy provided two highlights from the SWEEP ITF meeting. First, the team has completed the SELDM modeling (Stochastic Empirical Loading and Dilution Model), which looks at impaired waters' metals and chlorides, and is relevant to Clear Creek. The modeling helped inform the best management practice selection and effectiveness, as well as the water quality treatments best suited for the project.

Second, the group examined opportunities to mitigate impacts to and enhance Clear Creek in regard to relocation / realignment, which would require permits from the US Army Corps of Engineers and the US Environmental Protection Agency. Mitigation is being developed in partnership with these agencies and Colorado Parks and Wildlife. These opportunities will be better defined through a fish spawning survey in the Fall.



Comment: In addition, the SWEEP ITF is expecting some follow-up work on data and numbers, to address the action items for the SELDM analysis from that meeting.

Response: Correct. Those action items are captured in the SWEEP notes.

Comment: Please coordinate with the rafting companies, as their input will be important in identifying issues with creek modifications. This action was also captured by the SWEEP ITF. Vanessa Henderson, CDOT, provided information on the sand and deicers used by CDOT on I-70 up until exit 241. Sand has not been used since Fiscal Year 2015. Instead, CDOT has used Ice Slicer, Apex, mag chloride, and Sand Slicer, which has some sand but was not used in FY 20. Vanessa is working to get sand and deicer data for the rest of the corridor.

There was agreement that the complete data will be important in considering sand-loading in Clear Creek. (Data were provided subsequent to the meeting.)

ALIVE ITF

ALIVE, over the last year, has looked at two linkage interference zones for wildlife crossing I-70 in the project area. Mandy Whorton highlighted one at the top of Floyd Hill and the second at the US 6 interchange complex. The ALIVE ITF examined a variety of options for wildlife crossings. The original intent was to develop a wildlife overpass at the top of Floyd Hill, but there were a number of land use challenges that would make those structures less valuable to wildlife migration. Ultimately, the committee concluded that other areas outside the project area would be more valuable for wildlife movement along I-70.

That priority list is, in order:

- Genesee
- US 40/Empire Junction
- Ruby Ranch
- Soda Creek
- Two locations near the Eisenhower-Johnson Memorial Tunnels

Mitigation within the project area includes wildlife fencing on both sides of I-70 with escape ramps to reduce wildlife-vehicle collisions with the large elk herd in the meadow by Clear Creek High School. The fencing would extend east to Soda Creek, which is a low-volume dirt road that wildlife use currently to cross under I-70. In addition, the ALIVE ITF recommended exploring partnerships to conserve the habitat in the elk meadow area. The underpass and wildlife bench under US 6 remain part of the project as well.

Question: If there's no overpass at the top of Floyd Hill, will the funds for the overpass not be spent?

Answer: The funds that would have been used for the overpass will be directed towards the funding of wildlife crossings on the Mountain Corridor east of the Eisenhower-Johnson Memorial Tunnels (in CDOT Region 1) but outside the project area. The ALIVE ITF reviewed



the linkage interference zones in this area and identified places where crossings could be developed and have greater wildlife benefit. The Floyd Hill project would commit to building at least one and maybe up to three wildlife crossings. Vanessa noted that this approach is consistent with the Federal Highway Administration's Eco-Logical approach to wildlife connectivity, which allows (and even encourages) developing crossings where they make the most biological sense within an ecosystem.

Question: Do the recommendations provide an opportunity for the elk to cross at Soda Creek?

Answer: There will be an opportunity. Soda Creek is a low-volume local road that Colorado Parks and Wildlife staff have observed animals—particularly deer and smaller mammals—using. However, the biologists do not believe that the herd at the top of Floyd Hill is likely to use it, as it is nearly two miles away from the meadow.

The group discussed the areas where the ALIVE ITF's priority recommendations focused east of the project (Genesee and Ruby Road), as well as the US 40 crossing's significance for bighorn sheep. Another consideration for prioritizing these crossings east of the project is that CDOT has no improvements planned in these areas, so crossings in these high wildlife-vehicle collision areas likely wouldn't get built.

Design Refinements and Visualizations

Anthony Pisano, Atkins, initiated the group discussion and review of the design refinements and 3D model. The Greenway ITF was held in February 2020, which identified a list of things to address in the design phase. In particular, the group identified:

- Americans with Disabilities Act (ADA) compliance
- Plan for future parking near Hidden Valley and Two Bears, and waste earthwork material that might be used for grading an area for parking to be paved later by the County
- Terminus of the reconstruction of the trail is east of the I-70 westbound off ramp to US 6
- Between Hidden Valley and US 6, Clear Creek County Open Space wants to maintain access from above and below the trail, include multi-use options, and include activity nodes
- Construction impacts, closures, and shuttle buses for bicyclists around the temporarily closed portions of the Greenway need to be determined
- Grant opportunities with funders such as GoCo
- Understanding the Open Space Fund limitations, as there were stipulations imposed on the property from when the Bureau of Land Management sold the land to Clear Creek County Open Space

Question: Can we write a definition of what we consider the Greenway to be? People use the term to describe two different things: one group talks about the Greenway as a 10-foot trail; another group talks about the trail and surrounding landscape and river area that is a holistic approach. What do we mean when we say 'Greenway'?



Working Definition: The Clear Creek County Greenway is a corridor that includes the creek and floodplain, as well as the trail and other recreational improvements (trailheads and river access). The Greenway connects trail-users to other open space and recreational destinations. Additionally, the Greenway provides secondary emergency access routes to/from the interstate and the river.

ACTION: Neil to discuss working definition of the Greenway at next PLT meeting.

Visual Modeling Tool

Kevin Shanks, THK, introduced the visual modeling tool that the team has been using to inform initial design refinements. The tool allows for a 3D rendering to understand the differences and impacts of each alternative to the Greenway, floodplains, and aquatic and terrestrial habitats.

Jon Altschuld, Chinook Landscaping, walked the group through the visualization model. The tool allows for the simulation of each alternative, as well as informed estimates of impacts to the rock faces, Clear Creek, and landscape. He showed each alternative, starting from the base of Floyd Hill and working west, where the alternatives differ. Jon toggled between the alternatives to provide a visualization of the proposed tunnel and the viaduct options.

Question: Can you define Tunnel North and Tunnel South?

Answer: Tunnel North and Tunnel South refer to the location of US 6/Frontage Road in relationship to Clear Creek (north of the creek or south of the creek).

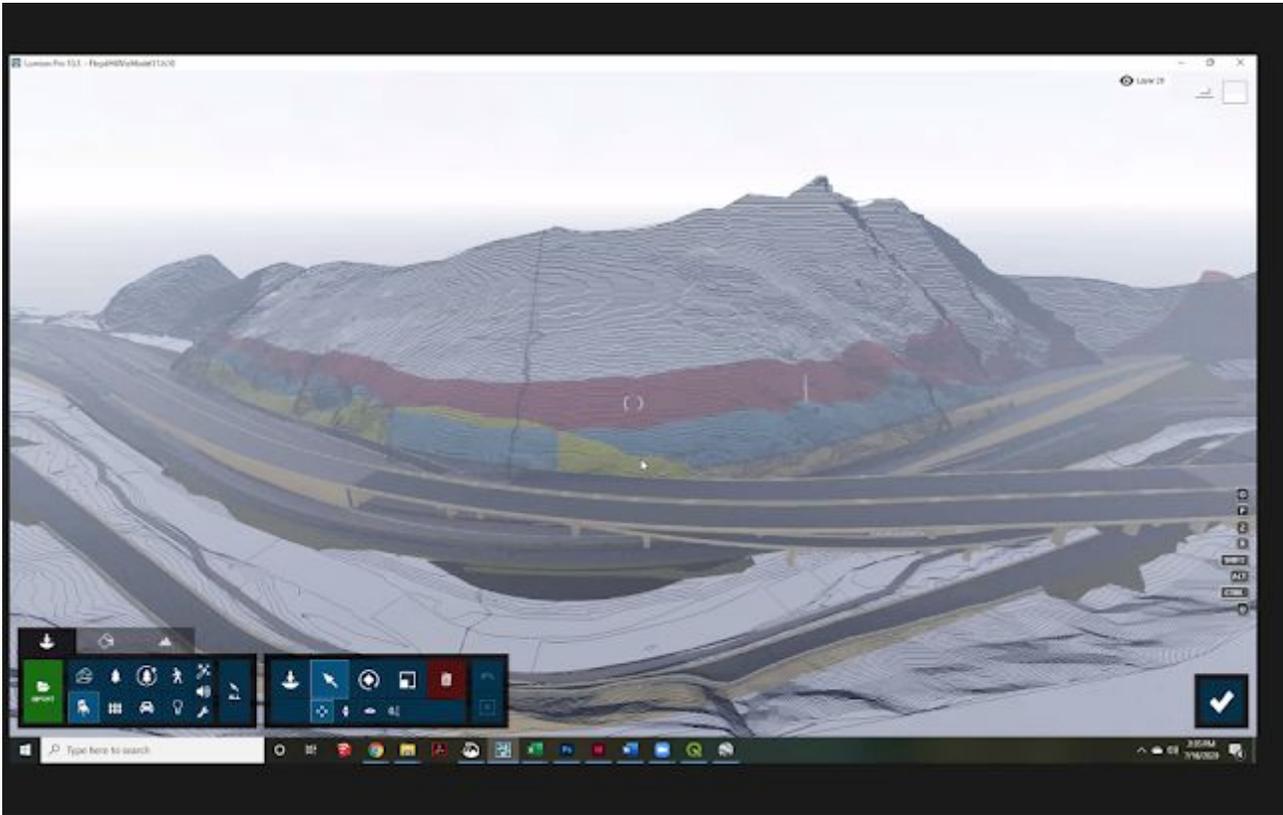
The PLT/TT had lengthy discussion about the rock cuts throughout the project area in each of the modeled alternatives. Rock cuts vary in height and length, with the highest and longest rock cuts for the Tunnel Alternative, North Frontage Road option.

Neil emphasized that the purpose of the models is to provide an understanding of the possible impacts, so that those impacts are fully understood. Then, if and when changes are proposed by a contractor during design, those changes can be evaluated against the previously-defined impacts. The three models show maximum impacts.

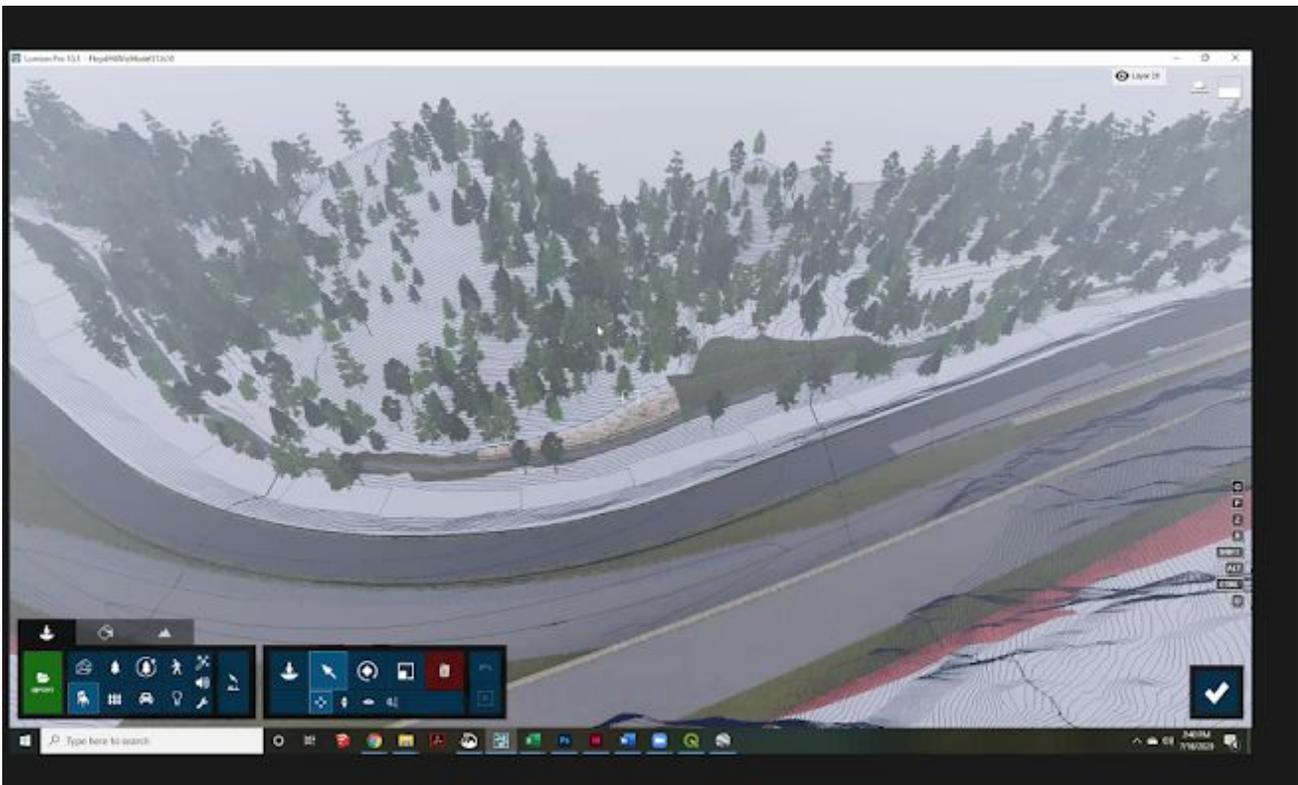
Vanessa told the PLT/TT that the NEPA process has not shown any fatal flaws for the alternatives yet. By including all impacts in the study, a contractor would be able to recommend hybrid approaches.

Comment: Currently, the model looks like it is taking out a large area of Clear Creek. If that's not the case, then we'll want to see that better illustrated.

Comment: We continue to have concerns about the Tunnel South option's impact to the Greenway. That will be a consideration for this PLT in moving forward. Clear Creek County Open Space acquired that land to have a connected piece along the Greenway.



Screenshot of modeling tool illustrating rock cuts.



Screenshot of modeling tool from birds-eye view of one portion of the project corridor.



Next, Jon showed the design options for the Greenway in the Saw Mill Gulch area. Jon illustrated the work and options developed to make the existing trail ADA accessible. The Tunnel North option would reconstruct the Greenway trail in its current location but closer to the creek with gentler grades to meet ADA requirements. The Canyon Viaduct Alternative and Tunnel South option would leave the steeper trail in place and create a bypass on the north side of the creek where a new trail connection could be constructed on the gentler grades north of the creek. This option would require two pedestrian bridges over the creek. There is not enough room on the north side of the creek to relocate the trail in the Tunnel North option.

Comment: The original concept was “save the south side.” Does the Canyon Viaduct Alternative preserve the south as well as the Tunnel Alternative does? I don’t want to drift away from our original intent to preserve the south side.

Comment: The fact that the viaduct is so high does not seem to be the big impact to the south side that the PLT/TT was concerned with constructing the Frontage Road / US 6 on the south side of the creek.

Central Section Alternative Matrix Overview and Approach to Finalization

Jonathan addressed that there will be future conversations about trade-offs, such as how the alternatives impact the south side of the creek. He proposed that the PLT use the CSS central section matrix to document discussions around trade-offs.

ACTION: CDR to send out the matrix to the PLT/TT. (It was noted that this would be an update to the matrix that the TT reviewed and populated last year.)

ACTION: PLT/TT to review matrix prior to the next meeting in August 2020.

Comment: I would like two impacts to be recorded. First: unless you raise the height of the viaduct, you’ll impact the ridgeline; second, to put in the viaduct, because there’s no road access, it’ll impact the Greenway now and in the future. These two impacts move away from the discussion we had two years about not impacting the south side.

Question: Can information showing how high the rock cuts are, and how much material has to be removed from different points along the canyon, be incorporated into these models? How much mountain are we moving? Additionally, could you split the central section into three parts, so we can compare the alternatives that way as well?

Answer: Yes, we can get that information for you. Part of this process is to move from speculation and into the information that has been more carefully evaluated. We’ve all seen different impacts than what we expected with the model. It’s a different story now, trying to figure out what to do with this canyon.

ACTION: Atkins and THK to provide information on rock cuts and material removed to the PLT/TT.



Next Steps and Action Items

Jonathan Bartsch concluded the meeting with a review of next steps and action items. The next PLT/TT meeting will be held on August 18, 2020.

Action items included:

- Neil Ogden to discuss working definition of the Greenway at next PLT meeting.
- CDR to send out the CSS central section matrix to the PLT/TT.
- PLT/TT to review matrix prior to the next meeting in August 2020.
- Atkins and THK to provide information on rock cuts and material removed to the PLT/TT.

Chat box question: Is there a possibility that we will be able to meet in person at our next meeting of August 18?

Answer: The State is following the governor's guidance, so meeting in person is not recommended.

Attendees

Cindy Neely (Clear Creek County); Mike Hillman, Andy Marsh (Idaho Springs); Melinda Urban (FHWA); Neil Ogden, Vanessa Henderson, Mike Keleman, Jeff Hampton, Tyler Brady (CDOT); Anthony Pisano, Tyler Larson (Atkins); Margaret Bowes, Lynnette Hailey (I-70 Coalition); Tracy Sakaguchi (CMCA); Michael Raber (Clear Creek Bikeway User Group); Steve Durian (Jefferson County); Patrick Holinda (Bridge Enterprise); Martha Tableman (Clear Creek Open Space); Holly Huyck (Upper Clear Creek Watershed Association); John Muscatell (community); Stephen Strohming (Gilpin County); Mitch Houston (Clear Creek School District); Steve Cook (DRCOG); Mandy Whorton (Peak Consulting); Kevin Shanks (THK); Jon Altschuld (Chinook Landscaping); Jonathan Bartsch, Emily Zmak (CDR Associates)