



MEETING NOTES

PROJECT:	23982-23929 I-70 West Vail Pass Safety and Operations Improvements
PURPOSE:	Project Leadership Team (PLT) Meeting #9
DATE HELD:	August 6, 2021
LOCATION:	Online Google Meet Meeting
ATTENDING:	John Kronholm, Project Manager, CDOT Region 3 Karen Berdoulay, Resident Engineer, CDOT Region 3 David Cesark, CDOT Region 3 Environmental Manager Zane Znamenacek, CDOT Region 3 Traffic Program Engineer Matt Figgs, CDOT Region 3 Greg Hall, Town of Vail Pete Wadden, Town of Vail Dick Cleveland, Town of Vail Ben Gerdes, Eagle County Robert Jacobs, Summit County Tracy Sakaguchi, Colorado Motor Carriers Randal Lapsley, R S & H Jim Clarke, Jacobs Mary Jo Vobejda, Jacobs Loretta LaRiviere, Jacobs
COPIES:	Attendees

SUMMARY OF DISCUSSION:

1. Introductions & Meeting Purpose

- a. Karen began the meeting by introducing the PLT attendees' names and organizations.

2. Agenda Review and Meeting Goal

- a. Mary Jo said we had planned to have these meetings quarterly but this one got pushed off a little bit because we wanted to have more of the design exception information to present to you. Today we are going to go through the work that has been completed since our last meeting; the work that is in progress and give you an update on what we will be doing going forward.
- b. Mary Jo said the goal of today's meeting is to review our progress to ensure we are being consistent with Context Sensitive Solutions guidance.

3. Work Completed Since the Last PLT Meeting

Mary Jo said there has been a lot of work and meetings since we last met in March.

- a. The Emergency Services ITF Meeting #3 was held on March 29th. Discussion topics included project status, remaining INFRA Grant projects, construction considerations; and procedural items to support emergency response. At that meeting, the decision was made to move this from a team coordinated by the design team to Emergency Services Coordination coordinated by the construction team because their input is needed to continue beyond design into construction. This is

now being handled by the contractor and they had had another meeting on July 15th to ensure as the construction package is going together, they develop a solid plan to redirect emergency traffic even if it is just for an hour or a day.

1. Greg said meeting with the contractor to discuss construction issues makes a lot of sense, but as the design packages for CAP 2,3 & 4 progress, will you have a check in with the Emergency Services Group as an IFT? It is easier to change things on paper while the design is being done instead of afterwards.

Karen said we will probably have one or two more larger group meetings as we go through design for the other packages. As each package breaks out and we are getting into construction we will have more consistent meetings like we had for Construction Package 1.

Matt said the biggest thing that came out of the Emergency Services Coordination meeting in March was construction phasing and what our plan is to make sure there is emergency access and wide breakdown shoulders. Once we are to that point in the design of other packages, we will take it to the Emergency Services Coordination group to get some feedback before we finalize the plans.

- b. ALIVE ITF Meeting #4 held on May 3rd. Topics of discussion were: methodology, wildlife crossing locations and sizes. There has been a lot of coordination with other design elements to determine the best locations for the wildlife crossings. For example, not impacting forested areas by putting the crossings where we would have to cut down a lot of trees to get the grading to work, and we've refined the length of the crossings because that impacts their success. We talked about whether they should be bridges or culverts. The ALIVE methodology is being finalized and will be discussed at the ALIVE meeting on September 13th.

1. Greg asked if there will be culvert grate openings in the crossings. They let light in but also water and sediment that will block the crossings.

John said the crossings will be dedicated wildlife passages meaning that they are not meant to convey stormwater, so there would not be any kind of opening in the median.

- c. SWEEP ITF meeting #4 held on May 24th and the next meeting is on September 16th. Sections of the SCAP and Maintenance Manual have been reviewed by the IFT and the remaining sections are now being finalized so that they can be presented and reviewed by the ITF at a later meeting.

The project team proposed some new treatment control measures and the ITF have agreed they should be included. They did request a site visit so they can get a feeling of what is a good location for different types of control measures, how we may be able to fit them in and how they can be maintained. The field trip is planned for September 27th. This ITF does not finish until December and that is because the design has to progress far enough for the SCAP and maintenance manual be reflected in the design.

- d. TT meeting #15 held on April 12th discussed Construction Package 1 Update and had a Traffic Control Phasing and how that played into some of our decisions on alternatives.

TT Meeting #16 held on May 17th discussed Construction Packages details, Website Update, how the updated website and public engagement will be rolled out & the plans for the groundbreaking.

TT meeting #17 held on June 21st. We discussed Construction Package 1 refinements which has been released and Kiewit has been awarded that contract.

TT meeting #18 held on August 2nd. We discussed the cut wall at MP 188, how that design and the alternatives work, what the impacts were of the different options. The TT has not yet been briefed on the recreation trail refinements and this will be an agenda item at the TT meeting later this month.

- e. The Design Exception ITF is the same group of people as the Technical Team, so we have piggybacked those meetings with the TT meeting. We have had two design exception meetings since we met with you and will discuss them in detail further in our presentation.
- f. In addition to all the meetings, coordination with other design elements continues recreational trail alignment and sediment pond locations.
- g. 106/Aesthetics ITF meeting #5 held on August 5th. We have previously presented the Aesthetic Guidelines for Construction Package 1. The remaining sections were distributed a few weeks ago and we talked through them with the ITF at our meeting. We are waiting for their comments which will be addressed. The Aesthetic Guidelines will then be finalized with the caveat that as the design moves forward and we have more design details we might want to capture those in the Guidelines.
 - 1. Greg asked if there is an opportunity to go out to do have site visits besides SWEEP. It seems like it would be good to get out there before the snow flies or we get locked down again to look at some of the important SWEEP, ALIVE or Aesthetics locations.

Karen said it didn't come up in the Aesthetics Meeting, but if you would like to go up with the team, we can organize that.

4. Update on Construction Package #1

- a. Mary Jo said Kiewit has been awarded Construction Package 1. This package includes the truck escape ramp and the highway closure system. Construction starts August 9th and will continue through November and then there will be a winter shutdown. Minor traffic impacts are expected, and the lower truck ramp will be closed. Two hot brake areas that have been identified.
- b. Matt said we investigated putting in a temporary truck ramp beyond the lower truck ramp that will be closed. But we found out that we would have to build a full-blown



truck ramp to act as the temporary truck ramp and we can't spend millions of dollars to do that. We have been working to get the word out to the motor carriers on the closure. Tracy Sakaguchi had a great idea to have our freight office do geofencing to provide notification of the closure. We have reached out to the freight office to set that up and it will go in place on Monday, August 9th when we shut the ramp down. It will alert the truck drivers and let them know where the hot brake areas are.

1. Tracy said she hasn't seen any communications sent out about the ramp being closed on August 9th and will be for the next three months.

Matt said the public information firm sent out an email blast a few weeks ago and he will confirm she was on the email list.

2. Dick inquired if the construction that is beginning next week, will there be impacts to the recreation trail usage in the next few months.

Matt said there will not be major impacts to the recreation trail. It will stay open the entire time. There may be times when we might have some flaggers out there making sure that as construction vehicles access in and out of the top of the ramp there won't be interactions between riders coming down the path and construction vehicles.

John said there will some minor impacts to the recreation trail in the next few weeks. We are going to be up around the bike path to do utility locates for the Comcast line that is underneath the trail and the length of the Pass.

We're also going to be up there August 10 – September 10 performing some geotechnical borings. They are going to cease work at noon on Friday, August 13th to allow for setup of the Copper Triangle Bike Race and will resume when the race is over on Monday, August 16th. There will be flaggers on the trail as they go back and forth across the trail, therefore the impacts will be minimal.

3. Dick asked if the geotechnical work has anything to do with the area on the recreation trail around MP 185 that has been sloughing for a few years and has caused the trail to drop another inch this year. The pavement is split and starting to slide down the hill and every time it rains the water flows directly down into the crack and down the side of the hill.

John said the geotechnical work is not for that part of the trail. He will be up there today and will take a look at it.

Karen if it's in an area that we are relocating the trail, that would be a win for us. If there is a short term need we can work with maintenance to see if there is anything we can do to keep it together until we get there, or if it's not part of our project, help them find a solution.

4. Dick asked if they will primarily stage the truck escape ramp construction from below?

Matt said it will be a bit of both depending on what the work is and where it is on the ramp. Some of it will come from Big Horn and some from I-70.

5. Work in Progress

- a. We are working on the recreation trail and optimizing the alignment and finding balances where we can. There are some design exceptions needed for the recreation trail and we will be presenting those at the next Design Exception meeting in August.
- b. We're also working on bridge and wall designs, sediment control, and fencing details. All the work is coming together to balance all of these issues now as the design team approaches the 30% design review for the entire INFRA project.
- c. As the construction is broken into packages, the design will go to the next level. This prevents one part of the design getting backed into a corner because other design elements went further ahead without looking at the entire project as a whole. This follows the Context Sensitive Solutions process.

6. Design Exception Review of CAP 1 Design Refinement Process

Mary Jo said there is design criteria specific to the I-70 Mountain Corridor. Design Exceptions are allowed in areas where you can't meet the design criteria. There is a process a designer needs to go through that requires they look at a balance between all the different core values: scenic, historic, cultural, environment. All design exceptions must provide safety and mobility.

We have been looking at complementing the physical characteristics. Most of the slopes in the valley are at 2:1. This is a physical characteristic and it is just about impossible to chase it with a shallower slope and to make it work, we have to do something different. Sometimes it's a wall but we don't want to build walls everywhere.

The other factor is protecting the environment. As you chase these slopes or realign the recreation trail we would impact forested areas, wetlands, and other sensitive environmental areas.

- a. We asked for support for a design exception at the lower truck ramp. The design criteria requires a 2.5:1 slope and in this area the existing slope is 2:1. If you try to put a slope at 2.5:1, the two never meet and you just push this higher up the slope or you end up with a big wall that perhaps you could avoid. In this particular case, we do have a wall on the uphill side of the truck ramp in some locations. One of our other goals with the truck ramp was to cover up this concrete barrier with slope so that it wouldn't be seen from the interstate. We presented options:
 - i. Use boulders with a 2.5:1 to 2:1 slope to limit exposed barriers. Some of the barrier would be expose.
 - ii. Use a 2.5:1 slope and leave up to 3' of exposed barrier
 - iii. Use varying slopes as steep as 1.3:1 to eliminate exposed barriers which is pretty steep and difficult to keep vegetation growing, keep it from sluffing.



Any time you could see the barrier, it could be screened with boulders and vegetation.

The Design Exception ITF agreed that we should be able to use slopes greater than 2.5:1. We talked about how that would happen with the input of the landscape architect and landscape plan at locations where boulders and other techniques can be used to achieve revegetation.

- b. The second Design Exception meeting was earlier this week and we asked for support for median reductions. The design criteria state you cannot reduce the width of the median. When we looked at trying to balance of all of the issues such as disturbance area, impacts to wetlands and impacts to the trail, we found that narrowing the median in certain locations is really the optimal option for the roadway design.

- i. The first area for an exception is between MP 184.8 & MP 185.3 where our designers came up with a great idea to completely move the bridges to the north and rebuild both east and westbound. It provides a much better traffic solution and saves money on the corridor, but it does reduce the median.

Karen said this is in an area where there is a section of I-70 that the east and westbound is at the same level with very little median so we're just extending the section of highway that will have very little median.

What drove this design was really to pull the eastbound bridge away from Black Gore Creek and also to be able to build much shorter bridges we're moving everything to the north. The reason they're closer together is the way the phasing works. We would build the new westbound bridge first before moving it to its new configuration and that required the eastbound bridge to be really tight up against the westbound bridge. We also had to meet design standards for the radius of the roadway. Our justification for this is we are much further away from the creek so we're protecting those environmentally sensitive areas in the Corridor.

- ii. Karen said the second median reduction exception is between MP 186.9 and MP 187.4 Karen said one of the drivers in this location is we have a larger wildlife crossing on the east end and it's really important to keep those as short as possible. In this platform it was tricky trying to feather it in so there aren't impacts to the recreation trail on the south side. It just makes sense to widen into the median.

John said because we are adding a third lane and the designers held the edge of asphalt on the southern side there is less disturbance overall and fewer walls. It ties into the wildlife crossing which we have reduced the length by about 10' from the EA concept. Having no median here helps keep it shorter and that's true in a couple of the other wildlife crossings as well.

- iii. The third design exception is from MP 188.0 to MP 190.1. In this area we are holding the southern edge of pavement and widening into the median. It protects the slope, and the forested areas and we didn't want to get any



closer to Black Lake. John said it will leave room for water quality features on the south side in those areas where we are still refining and designing right now. There is also another wildlife crossing that is in the area.

As we move farther long, if we push the roadway further south it generates larger and larger walls for the future truck parking expansion and push it farther into the forested area. Widening into the median helps to reduce that. John said they met with the Forest Service extensively throughout this process and they don't want us to encroach onto Black Lakes Road because that's currently where they have all their winter recreation parking. They park there for the summer as well, but it doesn't fill up as much. They wanted us to stay away from there for snow storage and to make sure they don't lose any parking.

7. Design Exception Recommendations

- a. Mary Jo said the Design Exception ITF has agreed to and they are making recommendation going forward that for the Truck Ramp:

Use slopes ranging from 2.5:1 to 1.8:1 as directed by the project Landscape Architect to create a slope that fits into the adjacent landform, looks natural, sustains vegetation and is maintainable.

We did put this in the hands of the project landscape architect because it is a requirement for all of these projects to have a landscape plan. Obviously the landscape architect is not making these decisions alone, but they are the ultimate producer and designer of the landscape plan. They are working with everybody to see if there are other ways to minimize these impacts before we go to a steeper slope. But ultimately it is captured and codified on the landscape plan.

- b. The second recommendation the ITF gave us and agreed to (with the amended orange text) for the Roadway Median Width Reductions.

Reduce the median width from MP 184.8 to 185.3, MP 186.9 to 187.4, and MP 188.9 to 190.1 to improve safety, to reduce wall area, to lessen impacts to the trail, forested areas, Black Gore Creek, Black Lake No. 1, to maintain effective wildlife crossing lengths, and to minimize disturbance areas.

We looked at the existing conditions and the environment. We balanced all the pieces of it so there were options and we planned for the future by seeing what the future widening would look like and brought that into consideration along with all the pieces of the design and everything that represents a core value and came up with this as the best balance possible.

One request from the group was to consider widening the median in one of the stretches between MP 184.8 & MP 185.3. We looked at it and it's just not feasible because this is where bridges are being moved and they have to stay together.

We were asked to incorporate glare protection and that is being incorporated into the design, this is a part of the design considerations.

We have been asked to check where the AGS alignment will be constructed to be certain where are proposing narrowing the medians is not precluding or impacting the AGS alignment. That check is underway right now.

Mary Jo said the PLT's job is to help us ensure and weigh in on if we followed the CSS guidelines. We really want to be sure we have followed the Context Sensitive Solutions systems and guidelines and that these recommendation are valid in the process that we have all agreed upon. Not that these are the best solutions. Let us know if we have followed the process.

1. Greg said we have followed the process and we've balanced all of the issues. I'll probably go offline on the bridge portion to understand why it is not feasible and maybe I was not explaining myself.
2. Greg said he thinks the other bigger issue is if you just add up the median reductions using the mileposts, that's 2.3 miles which is 23% of 10 miles. It's a $\frac{1}{4}$ mile here and a $\frac{1}{2}$ mile there and now we will have 7 miles of continuous median and that starts to take away from the Pass. There is a reason why this design criteria was put in. I think the design team has done a great job of really balancing but just be cautious this is just the uphill eastbound only design and we have a lot of design to go over the years. I think when there is widened medians, we have the ability to go 10' but when we're going down and reducing any kind of green space and extending the barrier that is already there we have to be cautious.

Mary Jo said she agrees, that is one of the real challenges of this Corridor and many other designs. It is easy to say, oh well, this is just a little bit here and there and then in the end you have a cumulative impact. I have watched this design team and they have balanced all the issues. They have also considered the future so that when the additional widening of east or westbound happens, there won't be additional design exceptions. That's already been considered into these exceptions and I really applaud them for that.

There were no objections to either design exception.

8. Public Outreach

- a. Mary Jo said we have been moving forward with the public outreach. The website URL is the same: <https://www.codot.gov/projects/i70westvailauxiliarylanes>. It has been updated and you can now search on what you're interested in such as the environmental work, design work that is currently going on and the construction.
- b. We are planning a public engagement that will show the work being done as well as focus towards the construction and what to expect as it begins. This will be launching in the next week.



- c. There is a groundbreaking on August 25th to raise awareness and let people know the work is beginning on the West Vail Pass projects.

1. Greg asked where the groundbreaking will be.

Karen said the groundbreaking on August 25th at noon. The location is at the top of the Pass at the maintenance yard. We are a little behind because of the Glenwood Canyon mudslides and are still working out the final details but invitations will go out soon. We are a little limited with parking but certainly want to invite stakeholders and everyone who has helped us get to this point.

2. Greg said he saw the incident command center has been set up for Glenwood Canyon for cleanup and doing rapid design and was wondering if that will impact our schedule?

Karen said as of now our office is not involved and we continue to be full steam ahead on our project.

3. Greg asked if the September 28th FIR meeting will be a real FIR meeting in the field or will it be virtual?

John said the meeting is virtual right now. It is called the “field” meeting, but they don’t intend to go into the field for the meeting.

1. Next Steps

- Design Exception review and analysis for recreation trail. There are some small alignment changes which will be presented to the TT at the next meeting.
- You will receive emails about the public update, virtual engagement, and groundbreaking event August 25th
- Final ALIVE ITF meeting is on September 13th
- SWEEP ITF meeting is September 16th and the field trip in September 27th
- Design FIR Review Meeting is September 28th
- On our original schedule we had the next PLT meeting on September 24th. To give you the best review of what is going on, unless there are objections we will reschedule that meeting to November 12th.

1. Greg said it makes sense to have the next meeting after the FIR meeting.
2. Greg said he feels as part of the CSS process it is important to offer a field visit perhaps prior to a TT meeting. We’ve been such a virtual world for over a year and it’s important to offer the chance to get out together as a group. The wildlife fencing placement is a good example of something we could understand better if we saw it in person.



3. Dick said he agrees with Greg. A lot of people have not been in the project area. We've lost context with what we are doing up there and with a specific direction in mind, it might be worthwhile to refresh everyone on where we will be working, where the highway is going to move, where the rec trail intersects.

Mary Jo said we will discuss this with the team and see if it is feasible and when would be a good time to do it.

Mary Jo thanked everyone for their support and keeping us on track and moving forward. I feel the design team has done an excellent job as they moved forward and looked for options and they never give up, they always keep trying to find the best solution.