



MEETING NOTES

PROJECT:	21685 I-70 West Vail Pass Auxiliary Lanes
PURPOSE:	Technical Team Meeting #5
DATE HELD:	June 26, 2018
LOCATION:	Miller Ranch Community Center, 25 Mill Loft Road, Edwards, CO
ATTENDING:	<p>Joel Barnett, FHWA Martha Miller, Program Engineer, CDOT Region 3 John Kronholm, Project Manager, CDOT Region 3 Karen Berdoulay, Resident Engineer, CDOT Region 3 David Cesark, Environmental Manager, CDOT Region 3 Matt Klein, US Forest Service Ben Gerdes, Eagle County Greg Hall, Town of Vail Dick Cleveland, Representing Vail Town Council Tracy Sakaguchi, Colorado Motor Carriers Association Kevin Sharkey, ECO Trails Jon Stavney, NWCOG Michelle Cowardin, Colorado Parks & Wildlife Shannon Anderson, Bicycle Colorado Pete Wadden, Town of Vail Bill Andre, Colorado Parks & Wildlife Diane Johnson, Eagle River Water & Sanitation District (ERWSD) Bob Weaver, Leonard Rice Engineers (on behalf of ERWSD) Richard Duran, Colorado State Patrol Kristen Bertuglia, Town of Vail Environmental Sustainability Manager Emmalee Blender, CDOT Region 3 Traffic David Singer, CDOT Environmental Section Manager Scott Jones, Colorado Snowmobile Association Don Connors, Wood Stacy Tschuor, David Evans and Associates Leah Langerman, David Evans and Associates Kara Swanson, Consultant Environmental Task Lead, David Evans and Associates Matt Figgs, CDOT Region 3 JJ Wierema, Consultant Roadway Designer, Wood</p>
COPIES:	Attendees, TT Members

SUMMARY OF DISCUSSION:

1. Introductions & Agenda

- a. John Kronholm did introductions, covered the agenda, and described actions taken since the last Technical Team (TT) meeting
 - i. 4/12/18 – I-70 Coalition meeting
 1. Martha stated that she gave the Coalition an update on the status of the project and the CSS process that was taking place
 - ii. 4.14.18 – ALIVE Issue Task Force (ITF) which sets the foundation for wildlife permeability mitigation
 - iii. 5/16/18 – SWEEP ITF which sets the foundation for mitigation efforts for sediment management and aquatic species



- iv. 6/2/18 – Historic 106 ITF discussed process for Section 106 per the PA
- b. Leah talked about the goals of today’s meeting which is to review and finalize Level 1 and Level 2 screening criteria, and to present and gather feedback on the draft alternatives. She pointed out that the TT would not be screening alternatives at the meeting.

2. Review Purpose & Need and Core Values

- a. Leah highlighted the Purpose & Need of this project, which is to improve safety and traffic operations on West Vail Pass due to the needs presented on the pass
 - i. She spoke to several of the specific safety and traffic operation concerns along the corridor including a high number of crashes, severe speed differentials, steep grades, and tight curves
 - ii. She pointed the group to the Success Factors flow chart which includes the Core Values that were established earlier on in the project. The Core Values are being considered in each of the 6 steps along this Context Sensitive Solutions (CSS) process.
 - 1. The project is currently in Step #4 where alternatives are being developed and eventually screened

3. Alternatives Screening Process and Criteria

- a. Kara pointed the group to the Draft Alternative Screening Process memo that was handed out to the group, as well as two Alternatives Screening and NEPA Process graphics that have been presented to the public at meetings for this project.
- b. Kara spoke to the overall process of the alternative screening
 - i. The Project Team developed Level 1 criteria based on Purpose & Need and fatal flaw
 - ii. Level 2 is a comparative analysis between alternatives that pass through Level 1 screening
 - iii. She highlighted that initially the Project Team had more criteria listed but removed some of them as they either could not distinguish between alternatives, were better covered as a design option, or would be included in the project no matter what alternative was selected
 - iv. The Project Team had to pick out a reasonable range of alternatives
 - 1. The guideline for a “reasonable range” is projects that could be implemented and are feasible. The I-70 Mountain Corridor Programmatic Environmental Impact Statement (PEIS) also serves as guidance for developing the reasonable range of alternatives. While the guidance is typically for EISs, this project is conducting a thorough analysis of potential alternatives based on feedback from stakeholders.
 - v. Once the alternatives are determined and the screening criteria finalized, alternatives are screened through Level 1 to Level 2
 - 1. The next TT meeting will talk about results of the Level 1 screening
 - vi. Level 2 screening will then take place and a public meeting will occur to give the public a chance to look at the alternatives being screened before the draft preferred alternative is revealed
 - vii. Design option considerations will then be reviewed prior to the release of the draft recommended alternative as those decisions need to be made before that draft recommended alternative is released



1. The Project Team will go back to the ITF groups to talk about specific design options that pertain to them during this process
- viii. Greg asked if the original Vail Pass design could be considered reasonable when it was originally done. The cost for the current project needs to be considered, but there is a unique character to the West side of Vail Pass that was accomplished during the original construction project
 1. Dick added that to the same point in Glenwood Canyon, by constraining an overall price, that project would never have been built. It is more important to build a context sensitive solution to the corridor rather than making reasonableness and cost the ultimate decider. He would like to see the same level of care for the environment and setting that went into the Glenwood Canyon Project for this project
 2. Kara replied that Level 2 screening has a concept cost estimate criteria, but that is not the sole determining factor
 3. Joel added that there is a balance to this as there could be a solution that is so expensive that it will never get built
 4. Martha added that CDOT has a good track record of recent projects in the area that balance the different Core Values and utilize the CSS process to build the best project for the setting. At the same time, the solution cannot be so expensive as it will never be built
- ix. Bob asked how the comments that were provided by ERWSD on both the screening and Core Values will be incorporated into today's meeting
 1. Kara responded that today's meeting will focus on the screening criteria comments (from ERWSD as well as from the rest of the group) and that the Core Values will be covered at the next TT/Project Leadership Team (PLT) meeting as those should be addressed separately. The Project Team felt that none of the screening criteria would be substantially adjusted by the comments on the Core Values
 2. Bob asked to clarify if the screening would still take place based upon the draft screening criteria that was sent out prior to comments being received
 - a. Karen replied that the Project Team will not move forward with screening alternatives until after today's meeting where the criteria will be discussed
 - b. Kara pointed the TT to the screening criteria comment matrix handout
- c. Kara then walked the TT group through the Level 1 screening criteria. These items are based on Purpose & Need and are fatal flaws.
 - i. She added that some of the Core Values and Success Factors were more appropriate for the design option screening as the Level 1 & Level 2 are more high level criteria
 - ii. Based on ERWSD's comments, one Level 1 criteria for implementability could be added to the criteria that will be screened
 - iii. She highlighted that after the Project Team screens the alternatives through Level 1, the Project Team will go back to the TT to present the results before moving to Level 2



- iv. Martha clarified that the first level of screening is big picture fatal flaw screening to look at alternatives that have big enough differences between alternatives
- v. David Singer stated that he felt the updates to the Level 1 screening were good for the evolution of the project to help make the alternative the best it can be
- vi. JJ asked if alternatives will be eliminated from consideration if they receive a “No” answer to any of the Level 1 criteria
 - 1. Stacy replied that for the operations category, if one answers no, it may not be screened out, but for many of the other ones as they are fatal flaw, they would probably be screened out (as that alternative wouldn’t meet Purpose & Need)
 - 2. Kara added that there are refinements that could be made to the alternatives to pass them along, and some alternatives may get passed down as design options within a bigger alternative
- vii. Bob stated that the way ERWSD sees phased implementation may be different than how the Project Team views it. No matter what alternative is selected, it probably will be constructed in phases as it would be too expensive to build at once. But ERWSD sees this criteria as the Project Team would only address the most serious safety and operation issues first, then have a period of time to evaluate the effectiveness of how that phase of construction meets the Purpose & Need (an adaptive management approach). Refinements and modifications to the preferred alternative can then be made on the subsequent phases
 - 1. Kara stated that depending on how the funding is determined, the Project Team wants to have an alternative that can be built in phases and hits the needs that are highest in the earlier phases of construction
 - 2. Martha added that for instance there are areas that could be addressed in a first phase of construction where two curves have high crash rates and where there are high spin out rates, but CDOT needs to follow the CSS process to not pre-determine the solution
 - 3. Karen interjected that she didn’t feel the TT was on the same page regarding this criteria and wanted to makes sure the TT was on the same page leaving the meeting. The group agreed that not everyone was on the same page and to discuss this issue further.
 - 4. Martha stated that as money is phased and the project will be too, after a first phase was constructed if there was a huge increase in safety and operations on the Pass, further improvements may not be done as there would be no momentum for them, but no formal Memorandum of Understanding (MOU) would be written that would bind CDOT to stop building further phases of the preferred alternative until re-evaluations are conducted
 - 5. Stacy stated that there is a gap in the consensus on adaptive management vs phased projects. The Project Team has talked about still building the full alternative, but building them in separate phases as funding is available vs not proceeding with further phases depending on the outcome of initial phases as in an adaptive management approach.



6. Diane stated that as funding and phasing is an issue, there be a natural pause between phases to evaluate if the first improvements have worked to improve safety and operations and if any negatives have resulted (i.e. water quality has decreased). Does the full alternative need to be construction simply because all of the funding is identified?
7. Karen asked if this question needs to be answered today, or should the alternative be selected and then this discussion takes place
8. Greg added that the PEIS was a 50-year vision, so the term “adaptive management” was put in as conditions will change over those 50 years. There were checkpoints put into PEIS to perform status checks and there are collaborative efforts right now to look at that, especially with changes in technology, population, the economy, as well as CDOT’s operational improvements since the original PEIS was written. The I-70 Peak Period Shoulder Lane (PPSL) project is a good example of adaptive management
 - a. Kara added that the PPSL project was a capacity project (meant to be a temporary capacity solution) until the ultimate solution is built
 - b. David S concurred that PPSL is the example of adaptive mitigation management, has proved to be effective so far, and has given CDOT and stakeholders confidence to do a PPSL in the westbound (WB) direction and improve upon what was designed eastbound (EB). But for the Project Team, if the actual build was less than the preferred alternative, that is a more difficult question to answer at this time
 - c. Bill stated that so far, environmental and wildlife issues will be addressed as money comes up, so he is concerned that if this approach is taken that if one section is improved and wildlife is in a second phase that never gets done, those specific issues wouldn’t be improved. He highlighted that they need to be considered for each phase and not done later as they would never take place with no future funding
 - i. Bob agreed with Bill’s statement
 - d. John stated that the project will be naturally phased, and once money is determined, the most logical first phase needs to be implemented, and per the ALIVE and SWEEP MOUs, the Project Team will need to mitigate as it goes and not come back later and do it
 - e. Kara added that the preferred alternative will be committed to the CSS process and many of these questions will be ironed out as it progresses along the process
9. Stacy asked if all the construction money was found at once, would the TT want to see the whole alternative built or for just phases with reevaluations conducted (i.e. will the preferred alternative have to be implemented with adaptive management in mind, or if we got all money would we build the whole thing?)?



- a. Jon stated that the Project Team isn't talking about listing metrics and then reevaluating alternatives after a period of time
 - b. Stacy stated that so far that has been the approach the Project Team has taken, but if the TT feels this needs to be changed that should be stated now before the screening takes place
 - c. Greg stated that if the TT does its job right, it will have selected an alternative that addresses all of the concerns to the best intent and not have to go back and redo alternative selection or refinement
 - i. Martha gave an example of another project that did go through a reevaluation as conditions changed between NEPA and construction, and it became pertinent that the reevaluation should take place
 - d. Don added that while the Project Team may have not looked at the phasing in the same way as Bob, the Project Team will still need to determine how to get most bang for its buck and will naturally reevaluate subsequent phases
 - e. Stacy stated that the difference is "can" the alternative be built in phases or does the alternative "have to" be built in phases
10. Scott added that he felt phases would be determined by geography, but as the project progresses phase to phase, design options such as water quality or recreation could be readdressed and corrections could be made as money for the next phase is available
- a. Kara stated that there is an opportunity in the ITFs to focus in on this
 - b. Scott felt that from his perspective, he was nervous if the construction funding all came at once
- viii. Kara asked for other comments on the Level 1 screening criteria
1. Greg stated that there should be a criteria for water quality in Level 1 as it is just as important as wildlife
 - a. Kara replied that she didn't feel that the alternatives were developed enough to use this criteria in Level 1, it fits much better as a design option
 2. Bill added that wildlife should be broken out into multiple sections to highlight aquatic wildlife and terrestrial wildlife
 - a. Kara asked for good criteria language that could help evaluate these different issues
 - b. Bill stated that he wasn't exactly sure how to phrase it, but any criteria should maintain or enhance habitat for these multiple categories (terrestrial and aquatic habitat)
 - c. Kara stated the enhancement is hard to determine at this point and the designs have to be further vetted to determine enhancements. That evaluation would fit better in a Level 2 or design option criteria
 - d. Don added that the Level 1 criteria was only major fatal flaws



- e. Martha added that the Project Team could add another criteria that would consider those other criteria being discussed
 - f. Bill stated that there are three Level 1 criteria on operations, there should be more on enhanced environment
 - g. John said that those could be added to meet water quality, wildlife habitat, and aquatic resources
 - 3. Scott stated its important to add more detail to the Collaborative Decision Making Criteria that adds more meat than was shown on the Success Factors flow chart
 - a. David Singer stated that collaborative decision making Core Value is captured in the CSS charter agreement
 - b. Kara asked for ideas on how this criteria could have more detail
 - c. Scott wasn't sure, but wanted to have more meat on this criteria to make sure what the stakeholders are bringing to the table is being discussed in evaluating the alternatives
 - d. Greg suggested "is project consistent with Record of Decision (ROD) and project Core Values?"
 - e. Don added that this bullet for the ROD is for the I-70 Mountain Corridor PEIS ROD, but a second criteria of is it consistent with Core Values could be added
 - f. Dave Cesark suggested that the TT should look at the Level 2 and Design Options criteria to see the bigger picture without getting bogged down into the details of the Level 1 criteria
 - d. Kara pointed to the TT to the handout on AASHTO's alternative screening recommendation and discussed how that will play into alternative screening. The document states that the project shouldn't have criteria so detailed that it could screen out good alternatives
 - i. Dave C added that the project is only at 5% design, and as the TT members are all experts in their field, the Project Team doesn't have as much detail yet as many of the TT members would want to see. The Project Team can't answer a lot of detailed questions at this point with the current design
 - ii. Kara pointed the group to the ERWSD comments on the Level 2 screening criteria. The Project Team felt there wasn't enough details at the Level 2 screening design to include their comments in Level 2 and would be better addressed in a future SWEEP ITF after the preferred recommended alternative is known. A Level 2 criteria on impacts to waters of the US can be added (for acreage or linear foot of impact) as that can be better evaluated at Level 2
 - iii. John added that he didn't see wildlife mentioned at the Level 2 and asked if there was a comparative analysis could be added for wildlife
 - 1. Bill added it should be wildlife and habitat impacts and mitigation opportunities
 - 2. John asked if there was a balance between performance measures and mitigation measures laid out in ALIVE and SWEEP – i.e. how much do you get into the mitigation laid out in those MOUs versus including it in the screening criteria.



3. Kara stated that the Project Team will have specific details for the ALIVE and SWEEP ITFs as the alternatives progress
4. John felt Level 2 was light on environmental criteria and asked if a criterion could be an opportunity to improve habitat
- iv. Greg asked why safety & operations are not called out as Core Values as those are Core Values too
 1. Kara replied those should be listed as Purpose & Need and then Additional Core Values should be the heading for the remaining criteria
 2. Pete asked how the Project Team determined which one of the Core Values were added to the Level 2 criteria
 3. Kara responded that it was based on what could be compared to one another as well as ones that were heard a lot from the public
- v. Greg added that there should be one on character and aesthetics as some alternatives will be more impactful than others
- vi. Kristen asked if habitat and wildlife will be added back in
 1. Kara replied that criteria for wildlife, habitat, and aesthetics can be added
 2. JJ asked how the Project Team could compare the aesthetic question
 - a. Kara replied that it could be a qualitative analysis rather than a quantitative
 - b. The group discussed how this criteria speaks to the view shed of corridor and not the Crest of the Rockies aesthetic guidelines (as those guidelines aren't even followed today and may not be able to be followed as the design progresses). The design wouldn't be far enough along at Level 2 to determine all of the aesthetics and if it follows CSS guidelines
 3. Bill asked if some of the additional criteria being discussed today should be added for the benefit of the public process. During the screening, the Project Team can state that not enough information is available to answer the question, so at least the public knows the Project Team is considering it
 4. Jon stated the Success Factors lays many of those things out and could be presented to the public
 5. Stacy added that the Project Team could come up with good criteria that would have some information to present to the public. It may not be very detailed at this point, but could at least have more information than "unknown"
 6. Kara stated that the Project Team could work on not just presenting the screening criteria to the public, but showing the Success Factors and explaining that not being in the screening criteria doesn't mean the Project Team won't address that issue
 - a. Leah added this could help so people don't look at a list and forget that other important issues are captured in the Success Factors
 - b. Kevin added that adhering to the Success Factors flow chart could be added to the screening memo
 - c. Joel pointed out it was already in there



- d. Kara added it could be further highlighted and discussed in the memo
- e. Kara then presented the design option considerations criteria to the group. She stated that the project will be at a 10-15% design level at the end of the Environmental Assessment (EA) process, so many of the specific issues need to be captured at the ITFs as they will be dealt with after the EA in the design and permitting process
 - i. Diane stated for consistency's sake, the enhanced environment criteria should be expanded in the same way as the Level 1 and Level 2 screening
 - ii. The Project Team did receive some comments on this from both ERWSD and Dick which are captured in the comment matrix
 - iii. Greg suggested that the aesthetic criteria should hone more in on the specific aesthetics of the West Vail Pass corridor rather than the broader I-70 Mountain Corridor Aesthetic Guidance
 - iv. Leah stated the Project Team will add all of the comments from today's meeting into the response matrix and sent out to the TT for review

4. Draft Alternatives Review

- a. Leah pointed the TT group to the draft alternative handout which describes the 6 draft alternatives that the Project Team developed
- b. JJ presented the titles of the 6 different alternatives, then dove into more detail for each of alternative
 - i. **No Action**
 - 1. The baseline alternative which is a part of all NEPA processes to compare the action alternatives to
 - ii. **Curve Modifications & ITS Improvements**
 - 1. JJ presented this alternative to the group, which includes correcting substandard curves with high crash rates and installing ITS equipment along the corridor. The Project Team felt that the substandard curves with bad geometry and high crashes that have been presented to the TT in the past need to be addressed. The cross section of the road would match the existing section. The realigned curves would be designed to meet current standards and the ITS improvements along corridor would be installed to address safety and traffic operation issues
 - a. Commander Duran asked what ITS improvements meant
 - i. JJ replied that ITS stands for Intelligent Transportation System and it includes items such as Variable Speed Limit signs, overhead VMS boards, and more closure points using technology
 - b. Jon stated that this may address safety issues but not operations as the roadway will be the same width as it is today
 - c. JJ pointed out that this option is included in the other alternatives as each one of them would improve geometry and install ITS equipment
 - iii. **Auxiliary Lanes with Reduced Shoulders**
 - 1. JJ presented this alternative which includes 3 lanes in each direction of I-70 and narrow shoulders. The reason the Project Team is



considering it as its own alternative is that it could allow the Project Team to widen 5 of the 8 sets of sister bridges (the other 3 sets would need to be replaced as they are on curves that would be realigned). This alternative would only add 6' to the existing cross section

iv. **Auxiliary Lanes width Full Shoulders**

1. JJ presented this alternative, which includes 3 lanes in each direction with a 6' wide inside shoulder and a 10' wide outside shoulder. This would add 14' to the existing cross section. All of the existing bridges would likely be replaced in this option

v. **Operational Lanes with Reduced Shoulders**

1. JJ presented this alternative, which would add the 3rd lane in each direction and one of the lanes would be considered operational (not tolled). This alternative would match the cross section of alternative #3 (Auxiliary Lanes with Reduced Shoulders). The operational lane would only be open when needed and be used as a shoulder at all other times.
 - a. Shannon asked what the crash rate on the EB PPSL was as that is a very narrow section as a comparison
 - i. Stacy replied that the requested data is unknown at this time, but this alternative would operate different than PPSL as the 3rd lane plus shoulder would be 16' wide total (12' lane with 4' shoulder) as compared to a narrower cross-section on PPSL
 - b. Greg asked if the operational lane is for slow moving vehicles at non peak times or fast moving at peak times
 - i. Stacy stated that is still yet to be determined. It would be not for capacity issues though, but open when it is needed for safety and operations
 - c. Comm. Duran asked where the lane would be located
 - i. Stacy stated that it would be in the far right lane and not on the left like EB PPSL
 - ii. Karen added that this alternative was developed as the Project Team looked at the narrow shoulder alternative and saw that it was a substandard cross section. This alternative was birthed out of that narrow width in order to increase the shoulder width at times the operational lane is not needed.
 - d. Dick asked if this alternative would save the bridges like the narrow alternative
 - i. The Project Team replied it would be same cross section as narrow shoulder alternative
 - ii. John added that there is still no guarantee that all of the bridges could be saved even with the narrow template due to existing conditions of bridges
 - e. Jon added that the overhead ITS system with overhead arrows would be a good thing to have no matter what alternative was selected as preferred
 - i. Stacy added it could be added to any alternative



- ii. Comm. Duran stated that would be a benefit in his viewpoint
 - iii. Dick stated it may not be an acceptable aesthetic option though
 - f. Greg asked if this alternative would help with the 50 year vision of the corridor or if another project would have to come back and further build upon this (so as to not have another EB PPSL situation that would need to be revisited in the near future)
 - i. He also pointed other areas of auxiliary lanes where he has noticed that not much traffic is in the far right lane
 - g. Tracy asked how often it would be operational
 - i. Stacy replied that if it makes it past the Level 1 screening, the Project Team could start to work some of the details out
 - 2. Pete stated that he was concerned about any option that had a narrow shoulder as so many vehicles use the shoulder to pull over and a narrow shoulder would be unsafe
 - 3. Comm. Duran stated that there are many design options that would be a negative from his opinion and asked if the Project Team wanted feedback on those now
 - a. Karen replied that the Project Team was going to do the initial Level 1 screening and present the results to the TT at the next meeting for their feedback
 - b. Stacy added that the Project Team does want to hear initial reactions or comments though at this point
 - c. Greg added that the PPSL project was never part of the PEIS, and this similar option may not meet the Purpose & Need for West Vail Pass. There could be shorter segments of the Pass that this would be good, but not for entire corridor.
 - d. Joel stated that since this operational alternative is the same width as the narrow shoulder alternative, how is it different or a benefit from that narrow shoulder alternative?
 - i. Martha replied that since the operational lane is only open part time, it balances width added to road and impacts from the added width with providing a wider shoulder during times the operational lane is not needed
 - ii. Dave C added that since this isn't a capacity project, while many on the Project Team don't agree with the alternative, it was presented as an option to keep at least two lanes open during crashes or times of need. The Project Team did need to consider it as it is a reasonable alternative that could be done for a cheaper cost than a wider alternative
 - iii. Joel asked if CDOT was going to take the stance of not determining how this was operated during the EA process



1. Stacy replied that some ideas on how it would be operated would be considered during the Level 2 screening, but it is too soon to fully determine that at Level 1
 2. John stated that the Project Team would only use the basic cross section of the road to do the Level 1 screening and not consider how that lane would be operated during Level 1
 - iv. Jon clarified that this alternative could help save bridges and reduce impacts to the environment. He asked that this alternative have more description and a cross section with it in the screen memo
 1. Stacy replied that this can be further described and presented to TT at next meeting
 - e. Duran added that he feels this option is incident driven and not safety and operations driven
 - f. Bill added that he felt this would be unsafe for so many people that need to use the shoulder
 - g. Don added the best way to look at this option is to think of this as a 16' outside shoulder on the existing two lane interstate that is only open when needed
 - h. Tracy felt if the project would spend the large amounts of money to build that width, why wouldn't it be open all the time
 - i. Dick added the 3rd lane could be open all the time and just reserved for slow moving vehicles
 - i. Tracy replied that the Colorado Motor Carriers may have an issue with that approach
- vi. **Westbound I-70 Realignment**
 1. JJ presented this alternative, which would realign the bottom half of WB I-70 onto the old US 6/current bike path. It would be the full cross section presented in alternative #4 (Auxiliary Lanes with Full Shoulders). The old US 6 was designed for 30 mph and the new alignment would have to be for 65 mph, which would require that many of the curves be straightened out. This alternative could be a benefit from a traffic impact perspective as it allows for almost five miles of roadway to be built with very minimal impacts to existing traffic. Although bridges are not needed for this WB re-alignment, the project could put in bridges to match the existing bridge locations to maintain wildlife connectivity (those structures could be shorter though)
 - a. Dick added that from an aesthetic standpoint, this would be highly impactful and the Project Team would need to figure out how to reclaim the lanes that would be abandoned, as well as balance how environmental impacts would be mitigated



- i. Kara replied that if it makes it through the Level 1 screening process, those questions would need to be answered for Level 2
 - b. Jon stated that the Project Team would need to weigh impacts versus time and cost. If it could significantly reduce the time of construction and impacts to the public, does that outweigh the impacts presented by it. He wasn't sure how to do that but the Project Team will need to look at
 - c. Greg asked if there was any opportunity past the narrows to do this
 - i. JJ replied there may be opportunities but not as obvious as this alternative to do a virgin alignment
 - ii. Greg also asked if some of the EB lanes could be realigned or smoothed out with this alternative
 - 1. JJ replied that this would be possible
- vii. **Questions/Comments**
 - 1. JJ asked for questions or comments on the proposed draft alternatives or if there was an alternative that was missed by the Project Team for consideration
 - a. Greg asked if the curve modification locations that were presented at previous TT meetings are all incorporated into these alternatives
 - i. Stacy stated that those discussions were used as a basis to help develop the alternatives presented. Pieces of each alternative had options that the TT had discussed at previous meetings in some sort or fashion
 - ii. JJ commented that there are four locations that were presented at previous meetings that would be looked at with each alternative that is brought forward past Level 1. The design still needs to progress to be able to properly look at this
 - b. Joel asked if specific ITS improvements have been identified for the West Vail Pass corridor
 - i. Stacy replied that Apex did a study on the ITS improvements needed for West Vail Pass a few years ago, there is a study on remote closures along the I-70 corridor, and a report on Variable Speed Limits that can be pulled in to the analysis
 - ii. Joel asked how this would be evaluated in the screening process as it is difficult to evaluate
 - iii. Stacy replied that the reports she mentioned talked about the safety and operational benefits of the improvements that will be considered in the evaluation of the Level 1 screening
 - iv. Joel expressed his concern that the Project Team may be pushing alternatives forward that CDOT Region 3 Staff Traffic may not be supportive of



1. John replied that Region 3 Staff Traffic has been involved on the project so far and that the Project Team can continue to run these alternatives past them
- c. Pete asked if there was a way to combine alternatives 3 & 4 (Full verses Reduced Shoulders) and consider them for different sections of the road
 - i. Kara replied there is an opportunity to carry some alternatives through as options (not as the recommended alternative)
 - ii. Stacy elaborated that after Level 1 there is a chance to refine alternatives and change how they are presented (i.e. full shoulders for the corridor except at bridges)
- d. Jon asked where the water impacts for each option come into this process as the alternatives look at the cross section and not necessarily outside of it
 - i. John replied that he didn't feel any of the alternatives precluded the ability to meet the ALIVE or SWEEP MOUs
 - ii. Kara added that during the design refinement process, there is more opportunity to look further at these issues to help enhance the environment
 - iii. Bob added that avoidance, not mitigation, should be the first consideration. Minimization of impacts should be the next effort, then mitigation should be the final attempt taken. For water quality, he felt there is enough information on where best management practices could be implemented for the current roadway template, and for the proposed alternatives, there may not be room to put in water quality improvements and the forest may be impacted. Design and alignment tweaks may be needed early on (even during screening) to have an alternative avoid and minimize adverse impacts
 1. John responded that this level of design is not done at the Level 1 & Level 2 screening stage. There will be opportunities once the preferred recommended alternative is selected to make those tweaks and ensure those water quality considerations are incorporated into the project rather than designed as an afterthought
 2. Karen added that the alternative selection process is very high level for 10 miles, and the design refinement process is the opportunity to hone in more specifically on these design options



3. Kara added that is why the Project Team has pushed some of the comments to the design option level as the Project Team wouldn't be able to evaluate them at the higher levels of design utilized for Level 1 and Level 2 screening
 4. Bob replied that there will have to be a certain level of design needed for the evaluation to help with the responses.
- e. Bill asked how the alternative with the new WB alignment considers the previous meetings and agreements on the ALIVE MOU
 - i. Kara replied that's the problem the Project Team faces currently. The design needs to be further along to help answer many of the specific questions being raised
- f. Joel asked if all of the modifications (curve modifications, ITS improvements, etc.) are fully identified
 - i. John replied that they are not fully presented at this time and as the Level 1 screening takes place, more detail can be added
 - ii. Stacy also added that the Project Team wanted to gather input from the TT and left some of the design details vague so the TT could comment
 - iii. Joel expressed his concern that if the alternatives are vetted and all the improvements aren't identified, the Project Team wouldn't be able to properly screen them as what is being built isn't fully known
 1. The group discussed the level of improvements that the Project Team has already identified and how the Project Team wanted to gather more feedback at this meeting rather than provide details
 2. Joel felt the Project Team needs to be transparent in the alternative details
 3. Karen replied that on previous projects, the Level 1 screening was very high level and not much detail was known about the alternatives at that screening level. The Level 2 screening is where the detail will start to come in
 4. Joel stated that the "why" and the "how" needs to be documented from FHWA's standpoint
 5. Karen added that the next TT will be a presentation of the draft screening and is not final. If the TT feels the Project Team didn't consider certain options or evaluate enough,



the Project Team can go back and add more information to that screening

- g. Matt Klein asked how many alternatives would be standing at the end of the Level 2 screening
 - i. Kara replied the No Action and the preferred recommended alternative will make it through Level 2 screening
 - ii. Matt K clarified that the screening isn't the full detailed analysis of the alternative, but that detailed analysis will only be applied to the no action and preferred alternative
 - iii. John added that Matt had a good point on this as there will be a lot of design refinements that take place after the preferred alternative is identified.

5. Next Steps and Wrap Up

- a. Kara presented the next steps for the project
 - i. The Project Team will meet and finalize the Level 1 draft screening criteria, then send to the group in advance of the TT #6 meeting scheduled for July 18. Once the criteria are final, the Project Team will screen the Level 1 alternatives, also to be presented at the next TT meeting.