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Subject: Public Meeting—Exit 241 Interchange

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Client: CDOT Region 1

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Project: I-70 Peak Period Shoulder Lane

Project No: 215164

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Meeting Date: January 21, 2014

Meeting Location: Idaho Springs City Hall

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Notes by: Tammy Heffron

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**ATTENDEES:** See attached sign-in sheet

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**DISTRIBUTION:** Neil Ogden (CDOT), Mike Hillman (Idaho Springs Mayor), Steve Long (HDR), Tammy Heffron (HDR), Gina McAfee (HDR), Kevin Shanks (THK), Project File

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## SUMMARY OF DISCUSSION

### Opening

The Mayor welcomed everyone and thanked everyone for coming. He asked for everyone's input and gave a brief introduction of the challenges at the Exit 241.

The project team and representatives from the community introduced themselves.

### Project Overview

Steve gave an overview of the CDOT I-70 PPSL project and an update on the project schedule.

- Steve described the PLT and the Technical Team.
- The Peak Period Shoulder Lane (PPSL) will operate as a managed lane during peak periods by striping a third, shoulder lane. Infrastructure improvements are being kept at a minimum minimal widening and retaining walls.
- There are two bridges that will need to be replaced as part of the project due to horizontal and vertical clearances.

### Need & Requirements for replacement of the bridge over I-70

- The bridge at Exit 241 needs to be replaced because there will not be adequate vertical clearance for the third lane.
- The existing bridge is structurally deficient with a sufficiency rating of ~34 out of 100.
- The bridge replacement is estimated to cost about \$3M to raise the vertical clearance by about 2-3 feet. This therefore requires approach roadway revisions in order to tie in to the new bridge.
- Existing interchange roadways are a bit awkward.
- The team is also considering the construction phasing for the bridge replacement. Detour opportunities are a challenge.
- The new bridge could either go in the same place as the existing bridge. Another option is to build it off to the side.
- There are also challenges in phasing due to the fact that the SH 103 bridge will also be built with this project.

- The design team is considering options to improve this interchange
- CDOT has not made any commitments for improvements to the interchange as a whole. The CDOT commitment is currently just to replace the bridge.
- We would like to get this community's input regarding whether or not improvements to the interchange should and can be added to the bridge replacement. Unfortunately our biggest challenge is doing this on such a tight timeframe. We cannot miss our planned ad date of July 2014.

### **Existing Interchange**

- The EB off ramp is a button hook that is a very tight curve. Highway speeds exiting have to slow down very significantly to make this curve. As designers, we see that it needs to be improved for safety reasons. Existing condition is dangerous.
- At the end of this EB off ramp, the intersection at this location is a "free-for-all". Although traffic volumes are not high here, it is still a dangerous intersection. Out of town visitors are not familiar with this layout.
- Kevin stated that the community has been making huge strides with pedestrian movements in this community – along this corridor. Kevin stated that he believes there will be a lot more pedestrian and bicycle traffic happening due to these improvements – linking communities.
- The existing trail system comes into this intersection from the east. Also, people trying to get to the ball fields, there is no safe pedestrian way to get there from the east.
- There are opportunities for making this interchange much more pedestrian friendly.
- The existing bridge has a narrow sidewalk, but there are no approach sidewalks on either side of the bridge.
- At the northern, WB ramps, these exits are confusing to drivers. There are two exits A & B. Most exit at the first ramp to WB Colorado Blvd. There are businesses at the end of this off ramp and transitions quickly into 2-way traffic on Colorado Blvd.
- At this intersection, the pedestrian movements are not safe at this location either. Traffic is coming off the highway at fast speeds and it's tough to tell where the driver is to slow down going into town.
- The accident rate at this location is not exceptionally high, but that may be because of the familiarity of the local population.
- Dave stated that is interchange is awful – it doesn't meet driver expectation. Any opportunity would provide a much safer alternative. If you are on the south side of the interchange and want to get on to I-70 WB, there is no safe, direct way to do this movement.
- It was stated that the drivers should be paying more attention. Many other residents state that there is a problem with the interchange – there was a large majority agreement.
- Another resident stated that it's hard to get onto Colorado Blvd. because WB traffic is coming off at a high speed and those coming over the bridge don't yield - dangerous

### **Proposed Interchange Improvements**

- Steve stated that any solution would have to be context sensitive and address what the problems are.
- How do we make the design so that the driver knows what the terminus is? The angle of the interchange presents some challenges.

- The EB off ramp needs to have a longer deceleration lane. The existing button hook movement is very substandard and dangerous.
- The WB off ramp B hardly ever gets used, but could be used more if the A ramp is eliminated – one idea.
- The EB off ramp is constrained by ROW limits – fitting it into the existing foot print might be better – less environmental constraints.
- We also considered what might be good for pedestrian movements.
- We also considered, what does this community need – signals, stop signs, roundabouts. We heard that signals were not highly favored. Each solution has its place.
- Roundabouts can work well at the end of ramp termini because traffic keeps moving; unlike a signal.
- The first alternative shows a roundabout at the southern side of the interchange and a “T” intersection at the north interchange.
- The second alternative shows the same roundabout at the southern side and a roundabout at the north side.
- The WB off ramp would have an “S” curve prior to getting to the southern roundabout so that drivers would slow down enough.
- Steve asked for other ideas.
- Steve walked through the EB off movements.
- There was a concern that the roundabout would be more dangerous than existing- the EB off movement with those coming across the bridge – two lanes coming into one. Response: This is a standard design with a yield or merge condition where the two come together.
- The skier traffic backs up along the bridge back to Safeway.
- Dave stated that the PPSL will add a lane to I-70 EB during peak periods. Therefore the through volumes through town will be reduced dramatically.
- The southern roundabout would be one-lane.
- Dave stated that it is common to be confused about how roundabouts work.
- We want to make sure that the solution will work in the future as well.
- Steve stated that off peak is a bigger safety concern as the speeds are higher.
- Steve finished walking through all of the movements through the interchange comparing existing to proposed options. There are a lot of movements and that’s part of the challenge.
- Is the roundabout big enough for truck traffic? Yes, they accommodate trucks – plus there are additions ramps for these movements.
- In general, pedestrian movements are safer in roundabouts. The roundabouts slow down traffic to make it safer for pedestrians and since only one movement is occurring on one leg of the roundabout, it is safer for pedestrians to cross. The larger roundabouts allow traffic to travel faster – less safe.
- The sizes of the roundabouts are similar to the new ones in Edwards. The roundabouts have a truck apron to accommodate the larger size.
- The roundabouts were also sized according to FHWA and AASHTO standards for highway interchanges.
- They will be about the same size as the one in Georgetown and trucks are able to make it through that one easily.

- Art Ballah from the Motor Carriers Association stated that they are looking safety and mobility. Likely anything we do here will be an improvement. The trucking industry has two challenges with roundabouts. Size – they need to be large enough. The Frisco roundabout is too small for trucks. The second issue is that they are challenging to navigate in heavy traffic. The trucks have a hard time accelerating into the circle from a stop. This location does not have high traffic volumes. During special events, the police might be needed to help navigate these roundabouts. Art stated that the trucks going through the Georgetown roundabout are not as long as those that will travel through these roundabouts due to limitations set by Georgetown for truck size.
- At the south intersection, there are so many movements coming together that finding a solution that was safe is a challenge.
- Darren described how pedestrian movements would work. The pedestrians only have to cross one lane of traffic at a time– making it safer.
- There is a trail that passes through a box culvert west of this interchange that crosses under I-70 going to the ball field.
- Residents expressed concern for a clear and safe path for pedestrians from Colorado Blvd. to the ball field.
- The southern roundabouts will get a lot of ice and snow.
- Kevin stated that the southern roundabouts are all free-flow / yield movements. Controlled movements.
- What if the roundabout was brought closer to the bridge? The vertical profile would not match in. We are trying to stay within the existing footprint.
- The locations where traffic comes together will be signed for who has right of way. Those in the roundabout have the right of way.
- At the WB movements on the northern side, the “A” off ramp would be eliminated.
- Dave walked through how the traffic would flow through the northern side of the interchange – both the roundabouts and the “T” intersection.
- Both alternatives will work.
- When traffic is backed up through town on Sundays, how does one exit I-70 WB and get onto Colorado?
- The I-70 WB on ramp acceleration lane will be lengthened.
- At the northern side of the interchange, the existing condition doesn’t have traffic crossing. Both proposed alternatives have traffic crossing. I-70 WB off ramp into town and the Colorado EB, across the bridge, onto I-70 EB.
- Residents stated that traffic through town will not improve even with the PPSL project.
- Property owner near this interchange stated that the roundabout is a good idea – better than existing.
- One idea was to keep the WB “A” off ramp and go into the roundabout. Darren stated that he looked at this one, but the access to the eastern property on the north side of Colorado may be cut off. The design team will continue to look at this alternative.
- Art would like to keep the existing WB off ramp “A”. He is concerned; however, that traffic will back up onto I-70 with the elimination of the “A” ramp.
- If we keep the “A” ramp, could we eliminate the “B” ramp. The largest design concern is access to the north side of Colorado. The design team will look at this option.
- The two WB off ramps may confuse drivers trying to get into Idaho Springs.

- Could the pedestrian movement that crosses Colorado be moved to the west?
- There was concern that I-70 WB exit needs to be kept opened during construction for the business community. There will be construction impacts while the interchange is reconfigured.
- Mary Jane stated that this may be going too fast. Since this is a gateway for the City, we need to slow down and consider the City's values and goals for this area.

#### **Where do we go from here**

- This project will not be able to buy right-of-way (ROW).
- This PPSL project is within the ROD for the PEIS. It does not impact the plans for mass transit.
- One option is that the PPSL project could just replace the bridge and the interchange could be done at a later date. This is an opportunity that could work only if the schedule for the overall project can still be maintained.
- Steve closed the meeting saying that he and the Mayor would work together to understand what direction this interchange idea will take moving forward. This needs to include the Mayor championing local input. We may need to regroup to figure out what are the Idaho Springs values and how do those get incorporated.
- The Mayor stated that it seems that the majority seemed in support of the interchange improvements.
- The majority of the people did not like the stop intersection at the north side of the project.
- We need the interchange improvements to slow WB off ramp traffic into town.