

Twin Tunnels Design/Construction Technical Team Meeting #12

**January 24, 2013
9:00AM – 12:00AM**

**Elks Lodge
Idaho Springs, Colorado**

Agenda

1. Agenda Review
2. Process Updates
3. CR 314 Wall Fascia Recommendation
4. Minor Project Updates
 - » Trailhead, haul road, median guardrail, lighting, water quality, CSS document and environment mitigation
5. Rafting
6. Public Involvement
7. Future Process

Step 1

Define Desired Outcomes and Actions

Step 2

Endorse the Process

Step 3

Establish Criteria

Step 4

Develop Alternatives and Options

Step 5

Evaluate, Select, and Refine Alternatives and Options

Step 6

Finalize Documentation and Evaluation Process

Other Corridor Updates

- Frontage Road
- I-70 Expansion Joint Projects
- Master I-70 Schedule
- AGS Study
- Peak Period Shoulder Lanes
- Trailhead Partnership
- Co-Development RFP
- Smart Work Zone



Core Values

- **Safety**
- **Mobility**
- **Gateway**
- **Wildlife**
- **The Creek**
- **Destination**
- **History**
- **Constructability**
- **Inclusivity**
- **Schedule**
- **Schedule**
 - all activities to achieve the goal of opening the EB tunnel and 3rd eastbound lanes by **late** 2013.



Twin Tunnels Design/Construction
Idaho Springs/Clear Creek County



DEPARTMENT OF TRANSPORTATION

Twin Tunnels Schedule

Package 1A and 1B

- Under Construction

Package 2 (Tunnel construction)

- NTP: Anticipated March 1, 2013
- Detour begins April 1, 2013

Tentative Timelines for Package 3

Package 3

- Finalize concept to begin design: January 2013
- FIR Meeting: Spring 2013
- FOR Meeting: Summer 2013
- NTP: Fall 2013



CR 314 Cut Wall Fascia

Frontage Road recommendation

- January 2012: PLT reviewed cut wall options: rockery, shotcrete, formliner
- March 2012: PLT indicated preference for rock masonry aesthetic but deferred details of wall fascia construction to Twin Tunnels (Recent research indicates this is a stone veneer wall)



Cut stone masonry wall example from Yellowstone NP

CR 314 Cut Wall Fascia

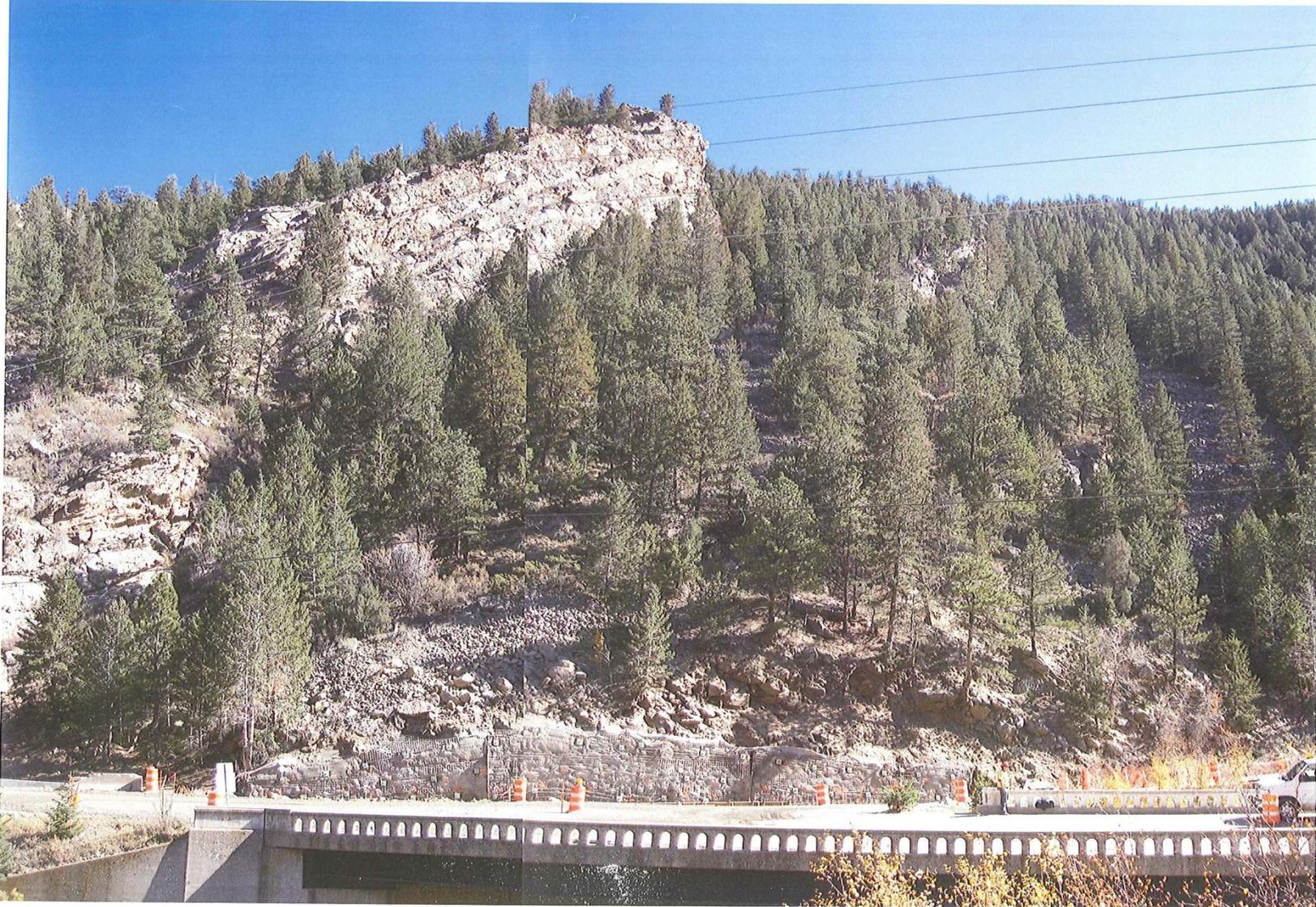
Twin Tunnels Tech Team Process

- July 2012 Twin Tunnels Tech Team revised 314 wall criteria
- October 2012 Tech Team reviewed criteria, wall images with 3 wall types
- November 2012 Tech Team walked the corridor and reviewed criteria matrix. Two reps appointed from Idaho Springs and two reps from Clear Creek County.
- December 2012 CDOT and four reps unanimously supported using rock from Frei's Quarry and constructing as stone masonry veneer similar to this image.



Cut stone masonry wall recommendation

CR 314 Wall Fascia – Aesthetics & Context



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CR 314 Wall Fascia – Aesthetics & Context



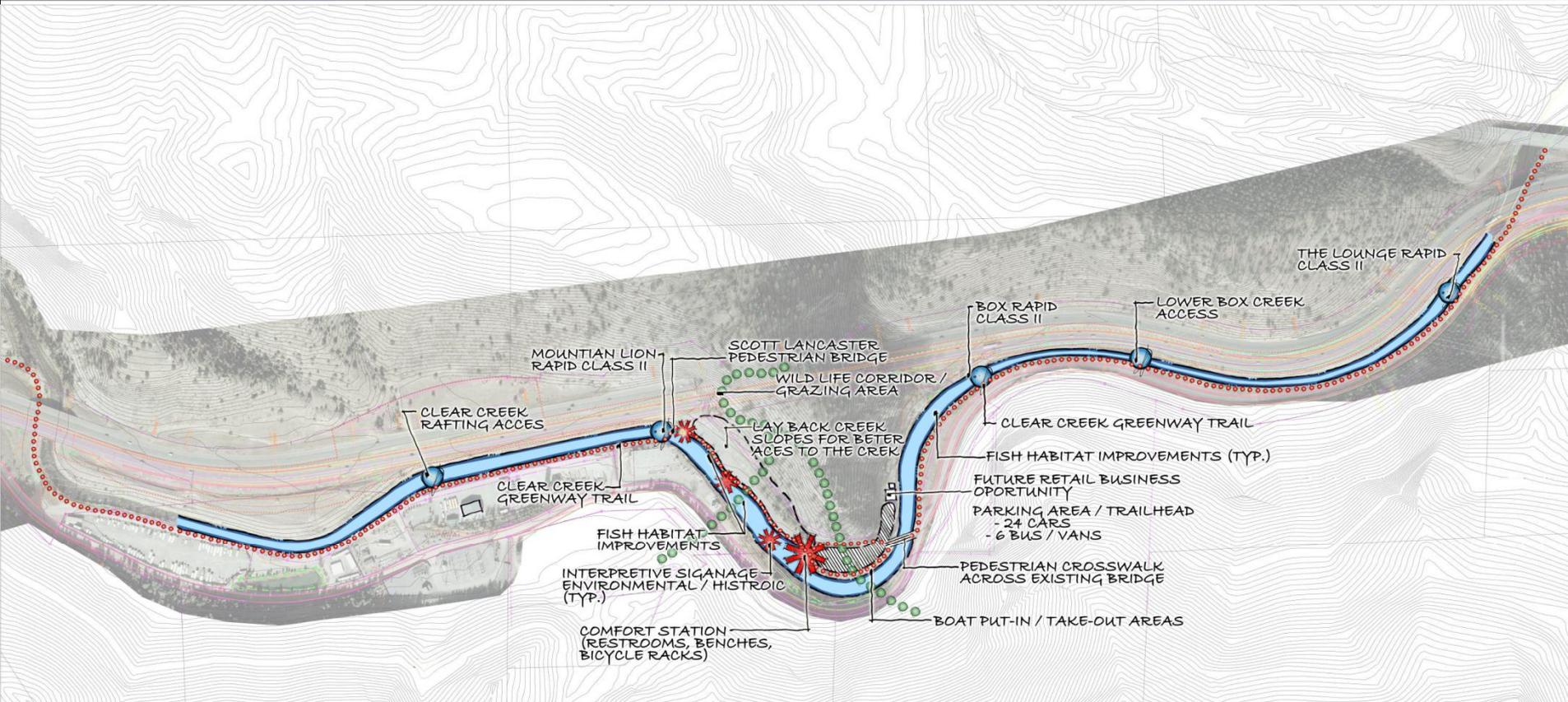
CR 314 Wall Fascia – Aesthetics & Context



CR 314 Wall Fascia – Aesthetics & Context



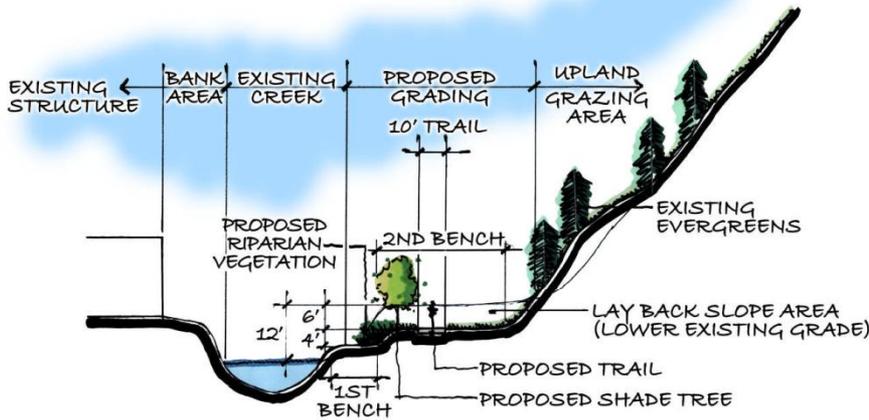
Trailhead Project Limits



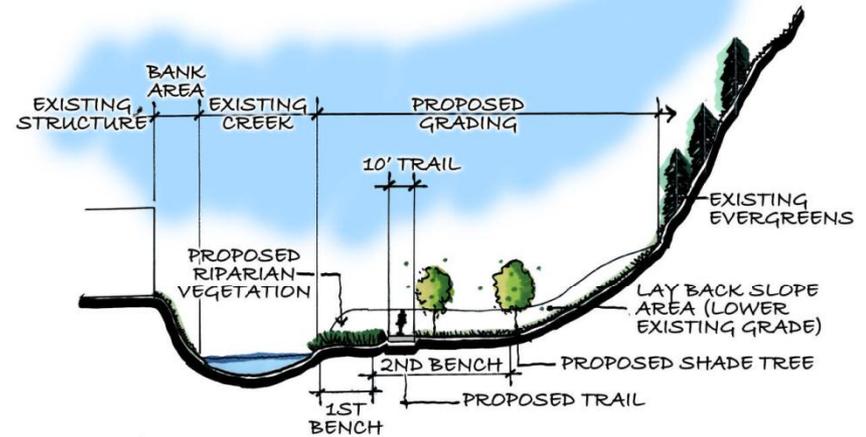
OLD GAME CHECK STATION TRAILHEAD - CONCEPTUAL PLAN

Clear Creek County, Colorado

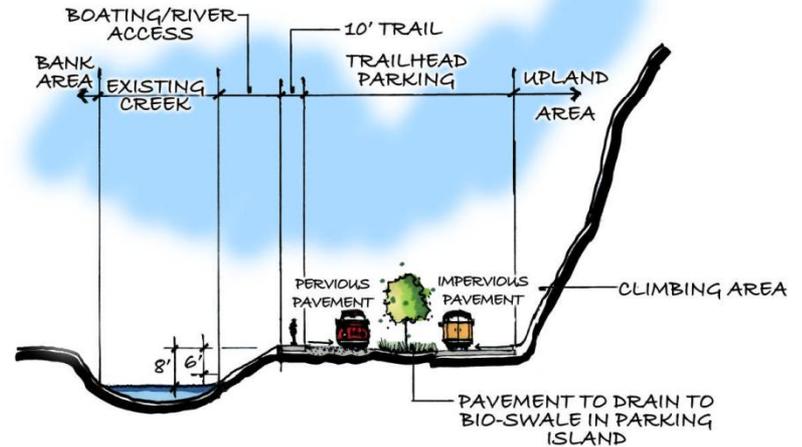
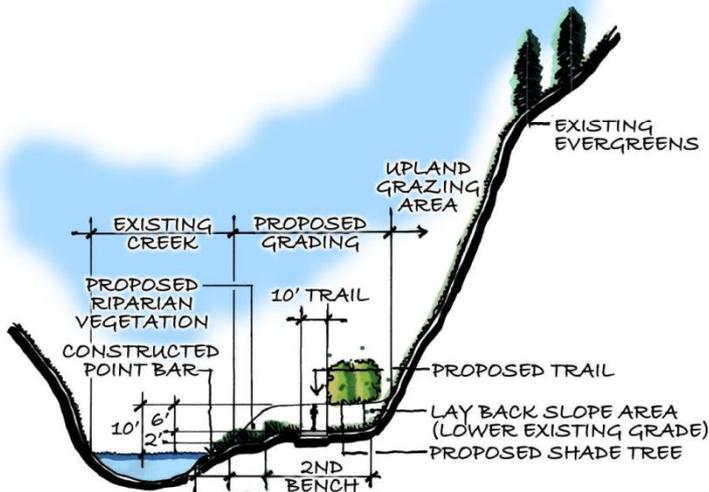
Trailhead Cross Sections



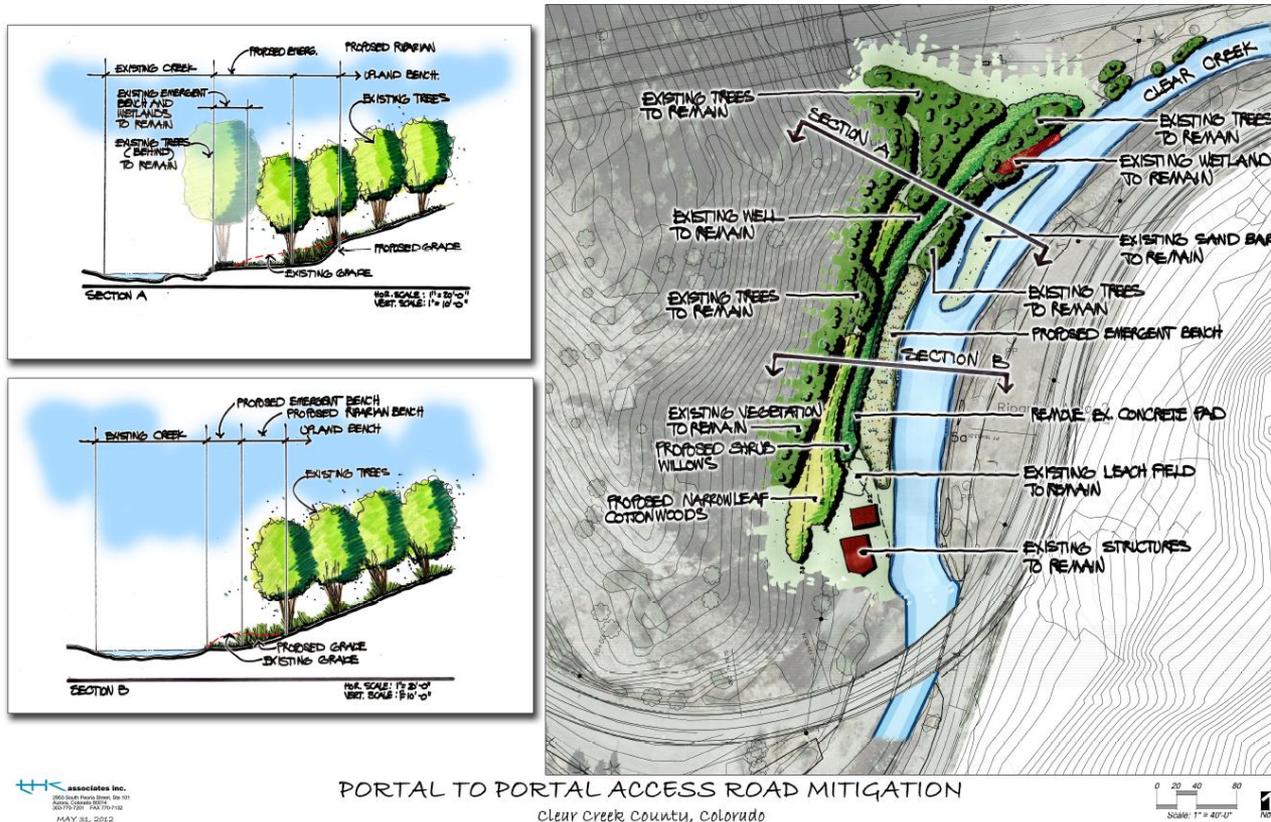
SECTION A
H. SCALE: 1"=20'-0" V. SCALE: 1"=10'-0"



SECTION B
H. SCALE: 1"=20'-0" V. SCALE: 1"=10'-0"



Portal Access Road: Mitigation Proposal



associates inc.
 2000 South Main Street, Ste. 101
 80076-2200 • 303.733.1100
 MAY 31, 2012

Potential Additional Funding Partners

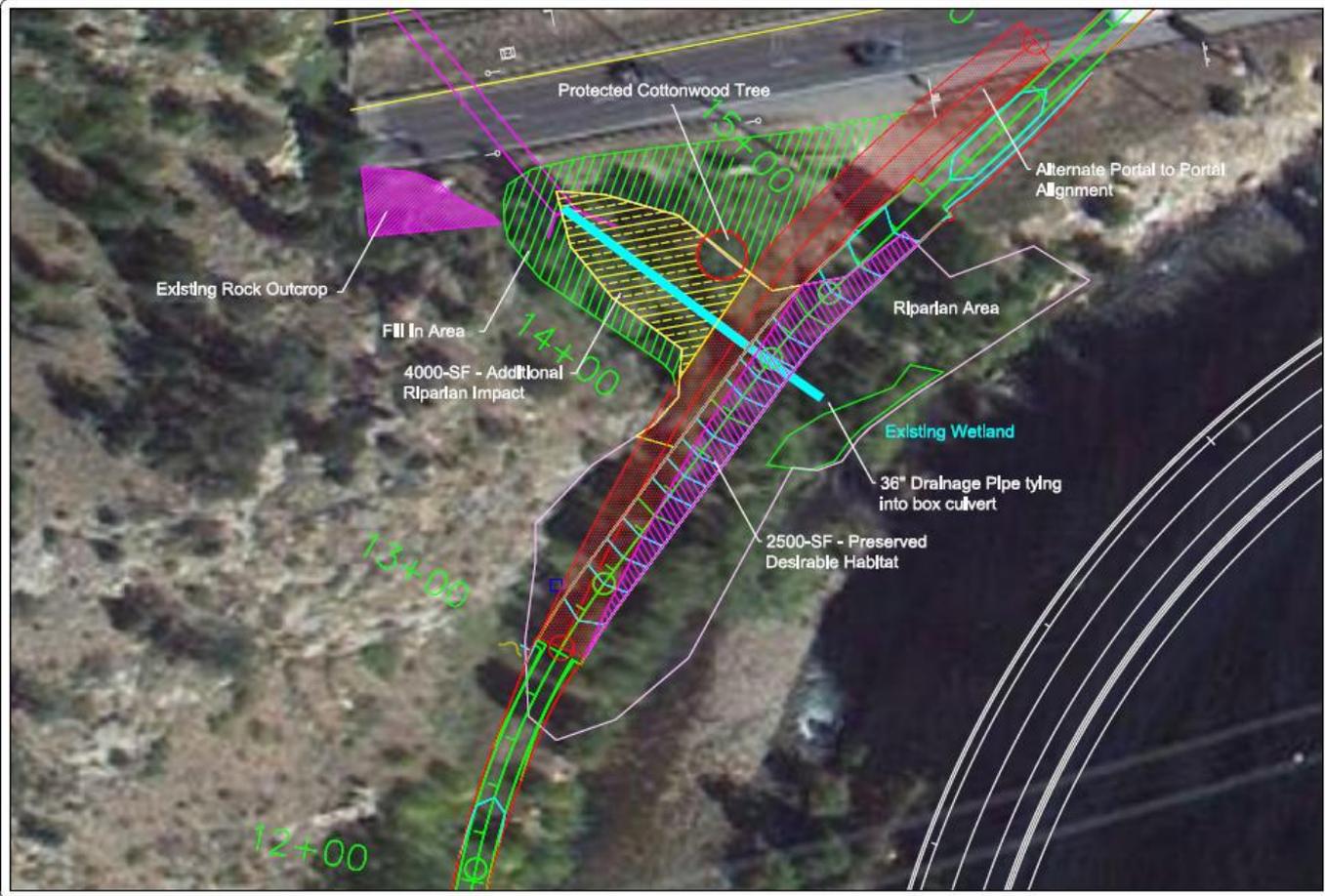
- Colorado Trout Unlimited
- Colorado Parks and Wildlife
- Clear Creek Watershed Foundation
- Xcel Energy
- Other utilities - Comcast, Century Link, etc.
- Rafting Community
- Historic Community
- Mountain Area Land Trust
- Idaho Springs
- Great Outdoors Colorado
- Colorado Department of Local Affairs
- US Forest Service
- US Army Corps of Engineers
- Clear Creek Economic Dev Corp.
- CDOT R1 Enhancement Funds
- Bicycling Community
- Clear Creek Open Space
- Clear Creek Metro Recreation District
- Colorado Division of Reclamation
- EPA via CCWF
- Other non-profits

US Fish and Wildlife Service

Colorado Water Conservation Board



Haul Road Alignment Modification

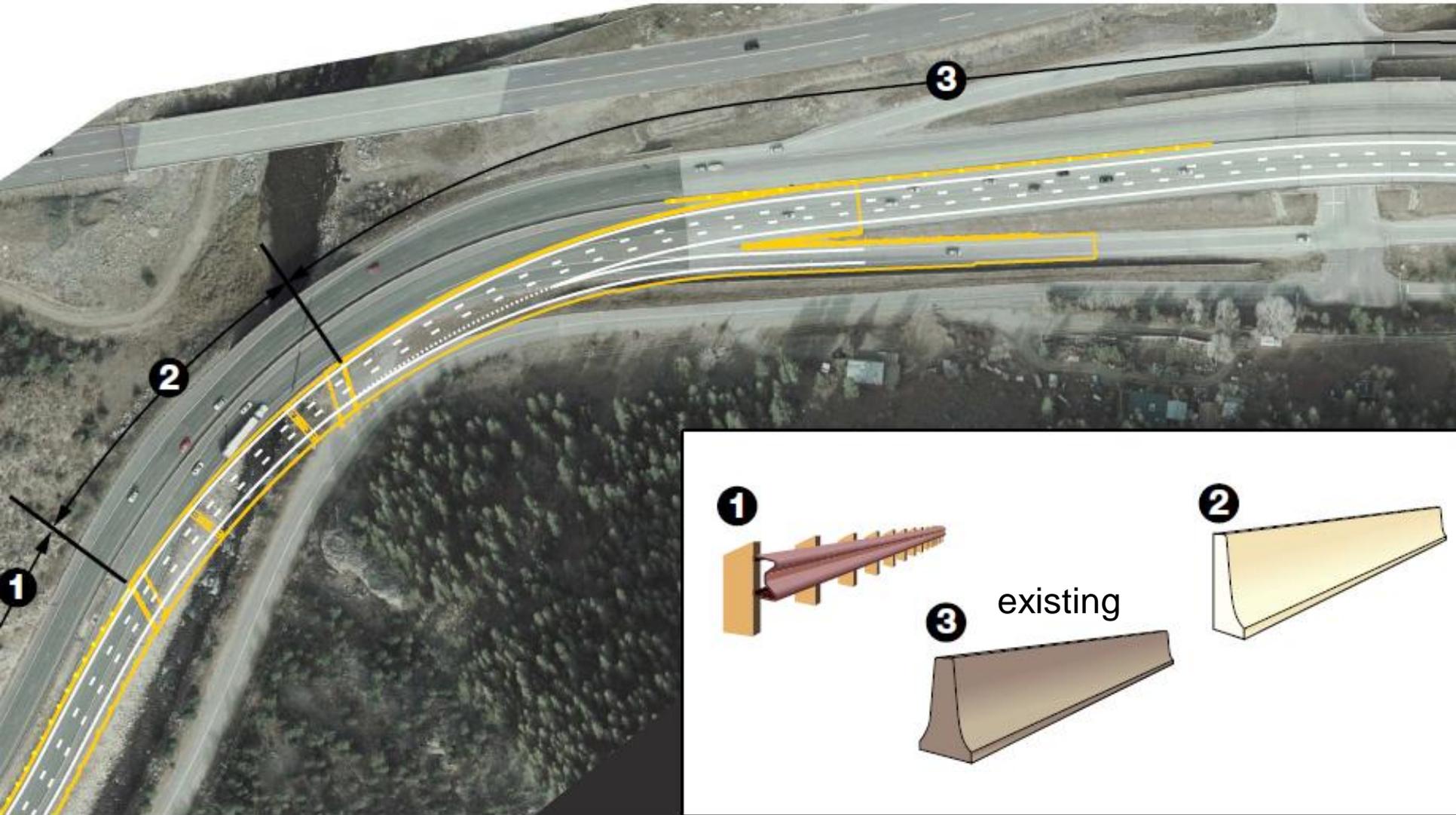


Bridge Area Median

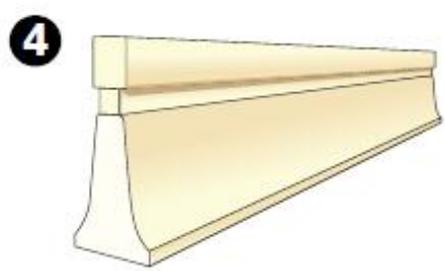
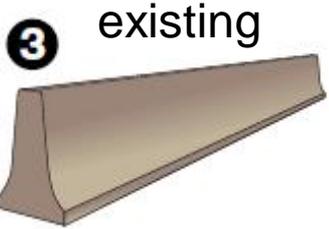
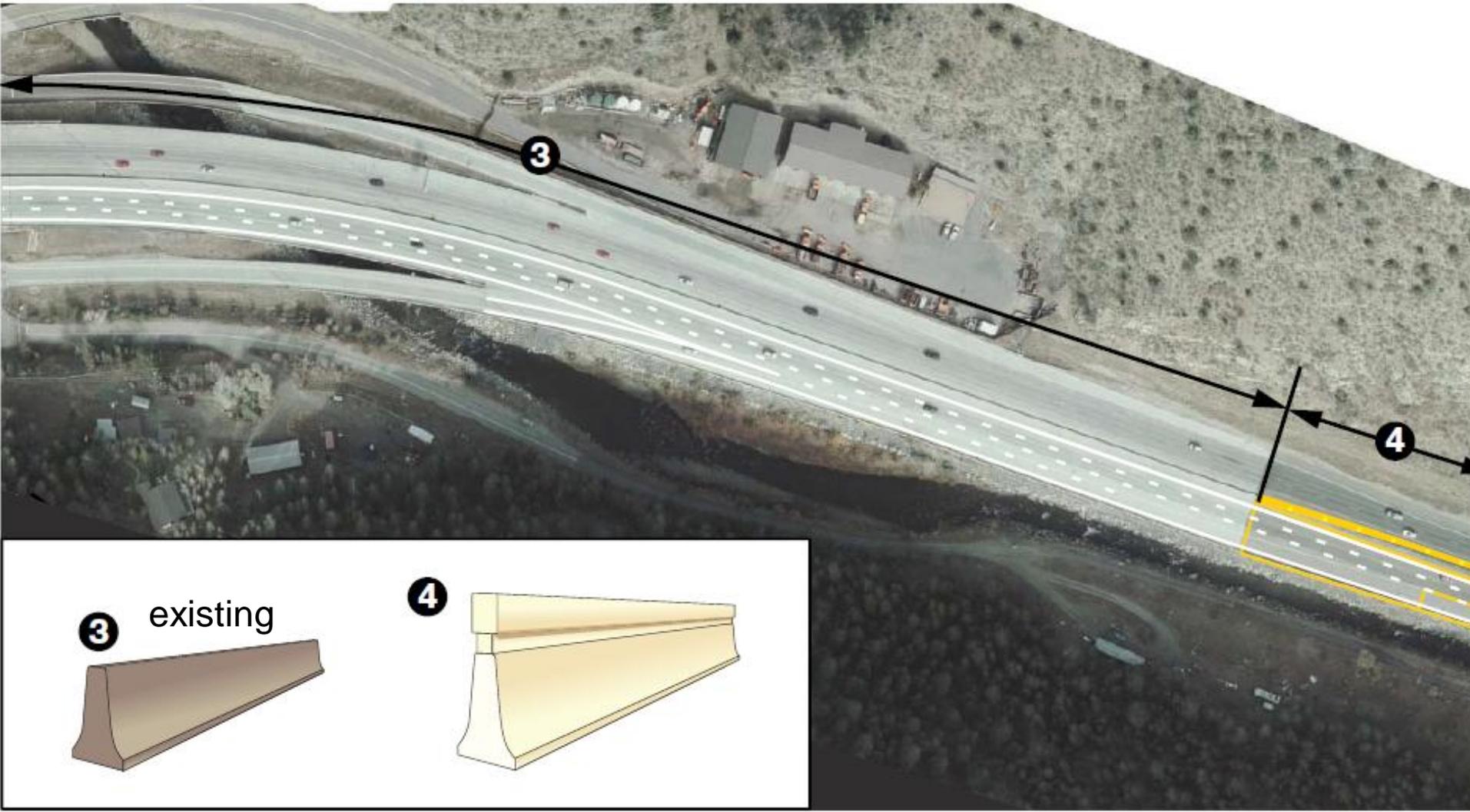
- Hidden Valley Interchange median will be uniform with grey concrete Type 7
- Only the new bridge (left side rail) and the median shift barrier would be coated. The reconstructed and existing barrier in the Hidden Valley interchange area between those two elements would remain grey concrete.



Median Guardrail

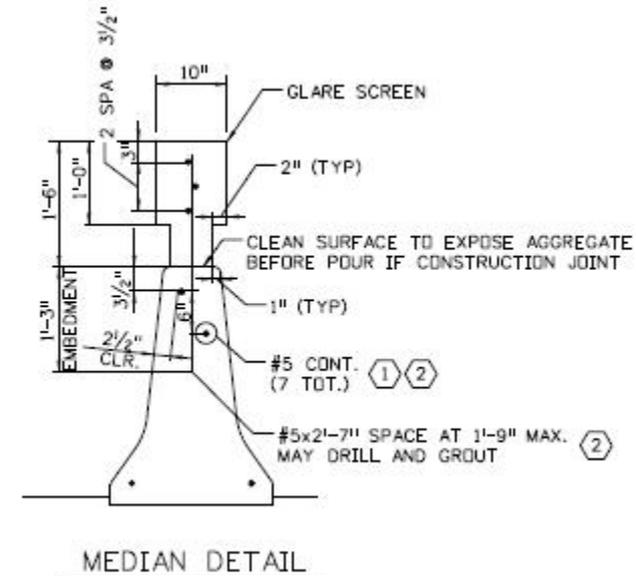


Median Guardrail



Median Glare Screen

- Glare screen:
 - » Top 1'6" of custom median barrier
 - » Also replacing paddle-type glare screens west of the tunnel



Lighting

- Tunnel is LED
- Review plan for roadway
 - » All lights on the mainline in the entire project area will be LED. Interchange lights off the main line may remain high pressure sodium.
 - » Some existing lights on the mainline will remain. High pressure sodium will be replaced with LED. Existing poles will not be coated brown.
 - » All new lights will be LED and poles will be coated brown.

Water Quality



Legend

- SCAP Basin/Pond
- Concrete Structure
- Concrete Structure
- Sediment Inlet
- Spill Control Structure
- Sediment Capture Area
- Rock Structure
- Rock Structure

Twin Tunnels Water Quality Mitigation



Figure 1

Water Quality

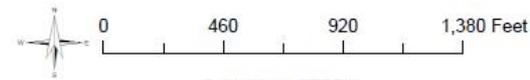


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Twin Tunnels Water Quality Mitigation

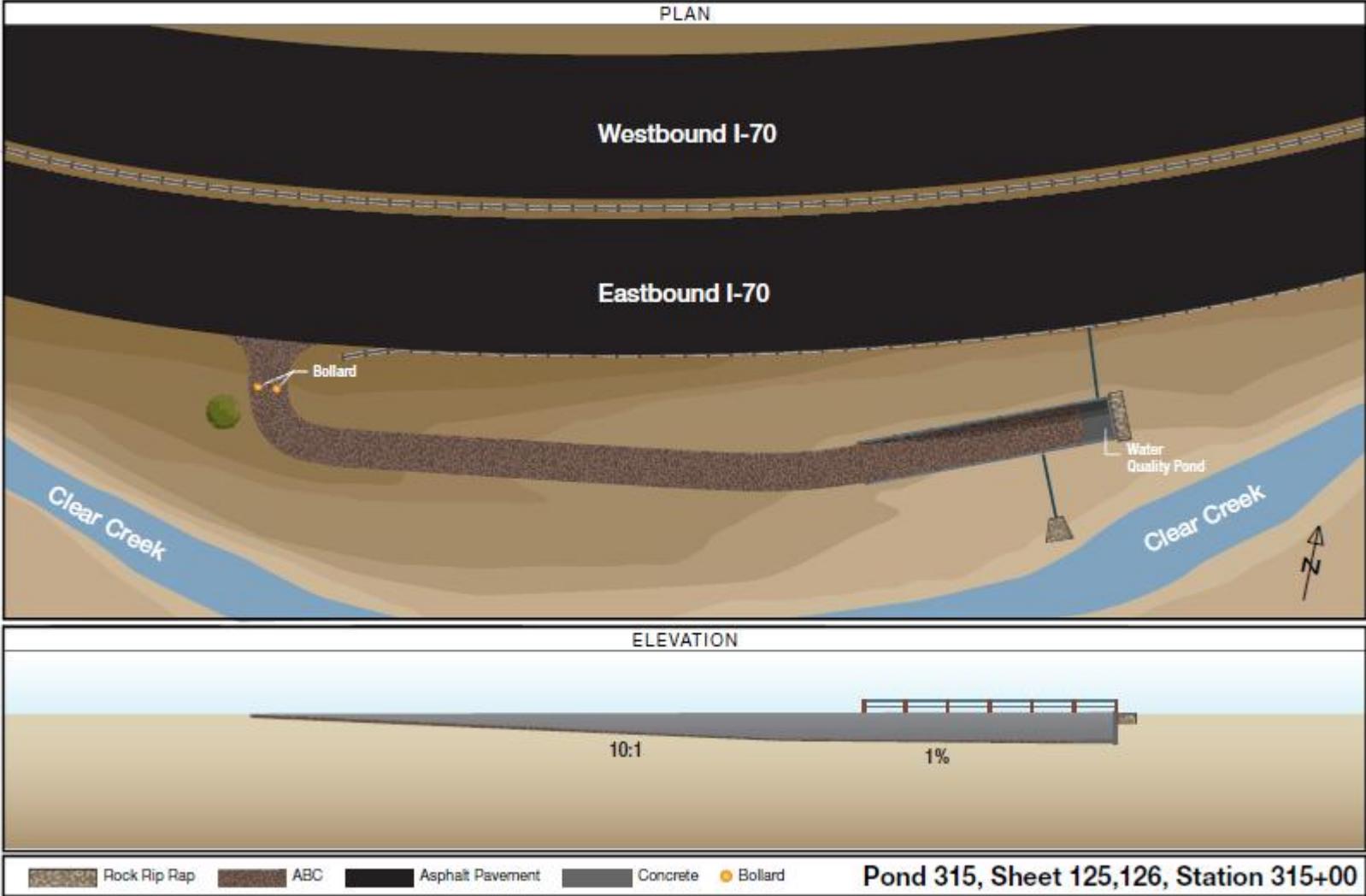
Figure 2



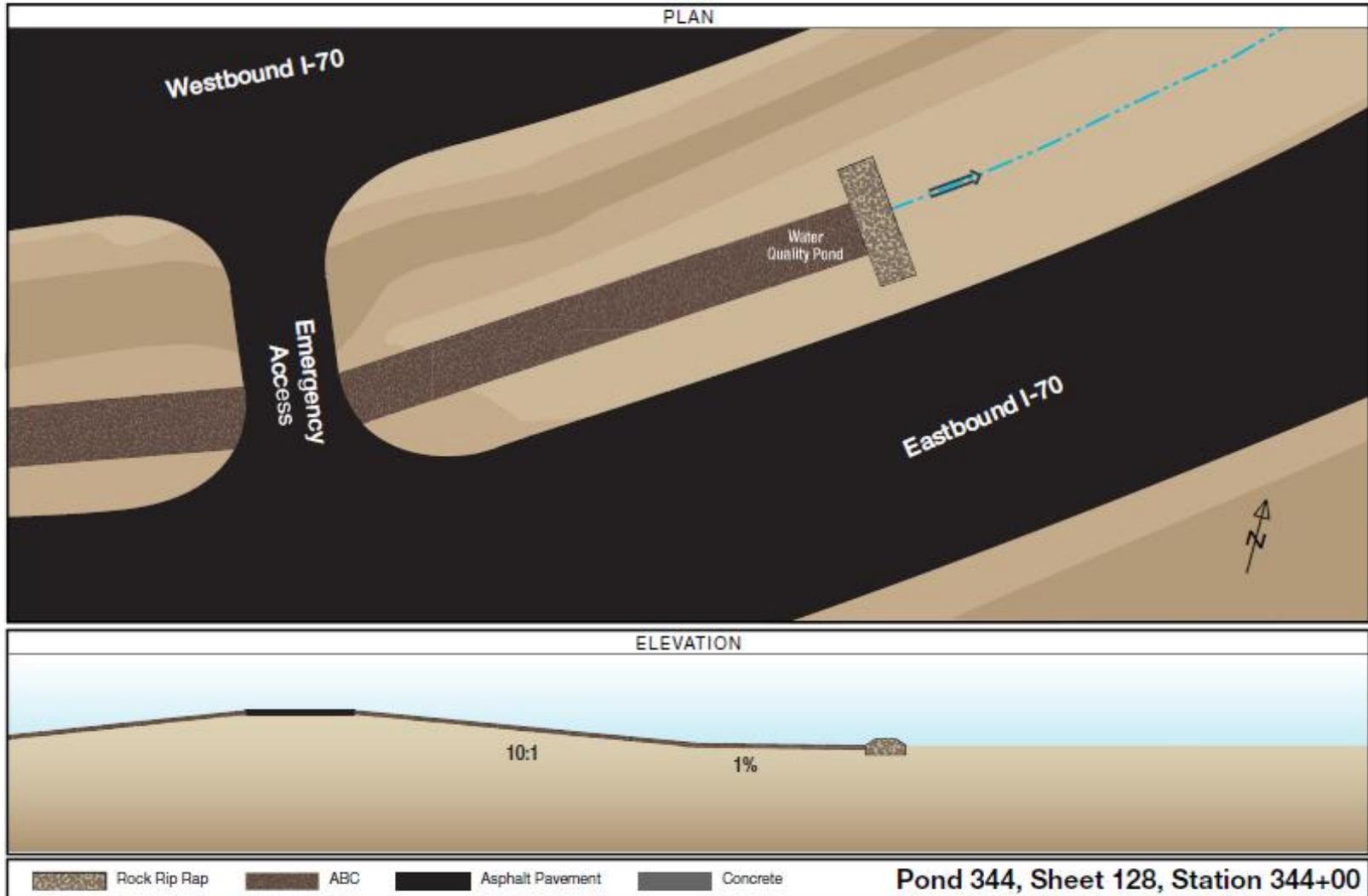
Scale: 1 Inch = 1000 Feet

Base Data Source: Clear Creek County 2011
Base Imagery Source: Clear Creek County NAIP 2011

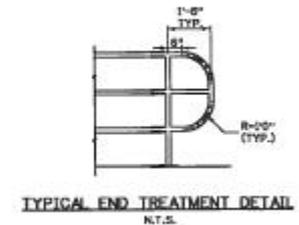
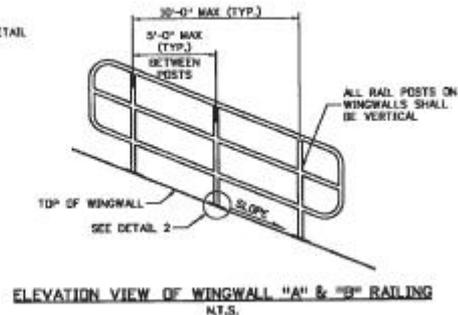
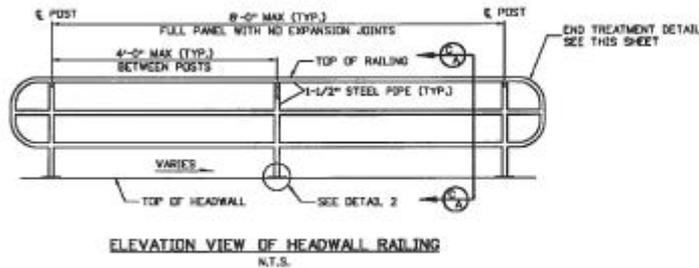
Water Quality



Water Quality

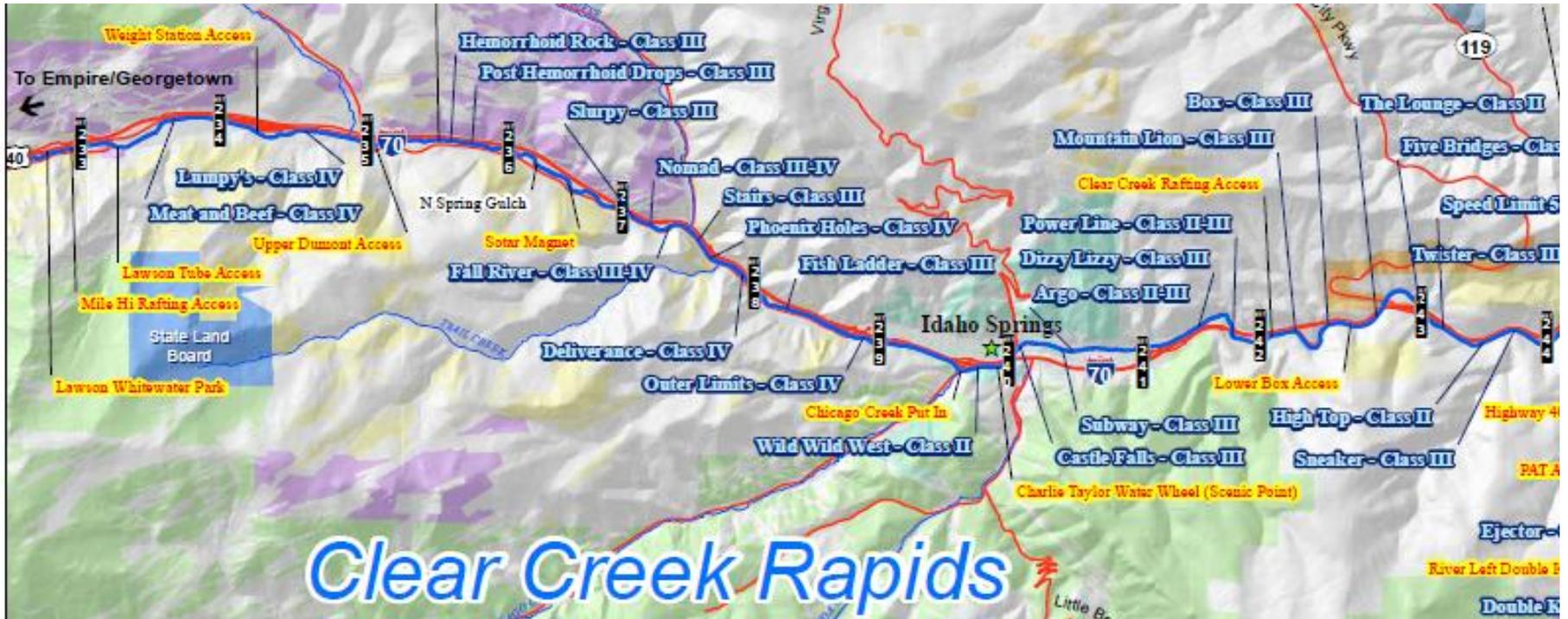


Water Quality Pond Railings



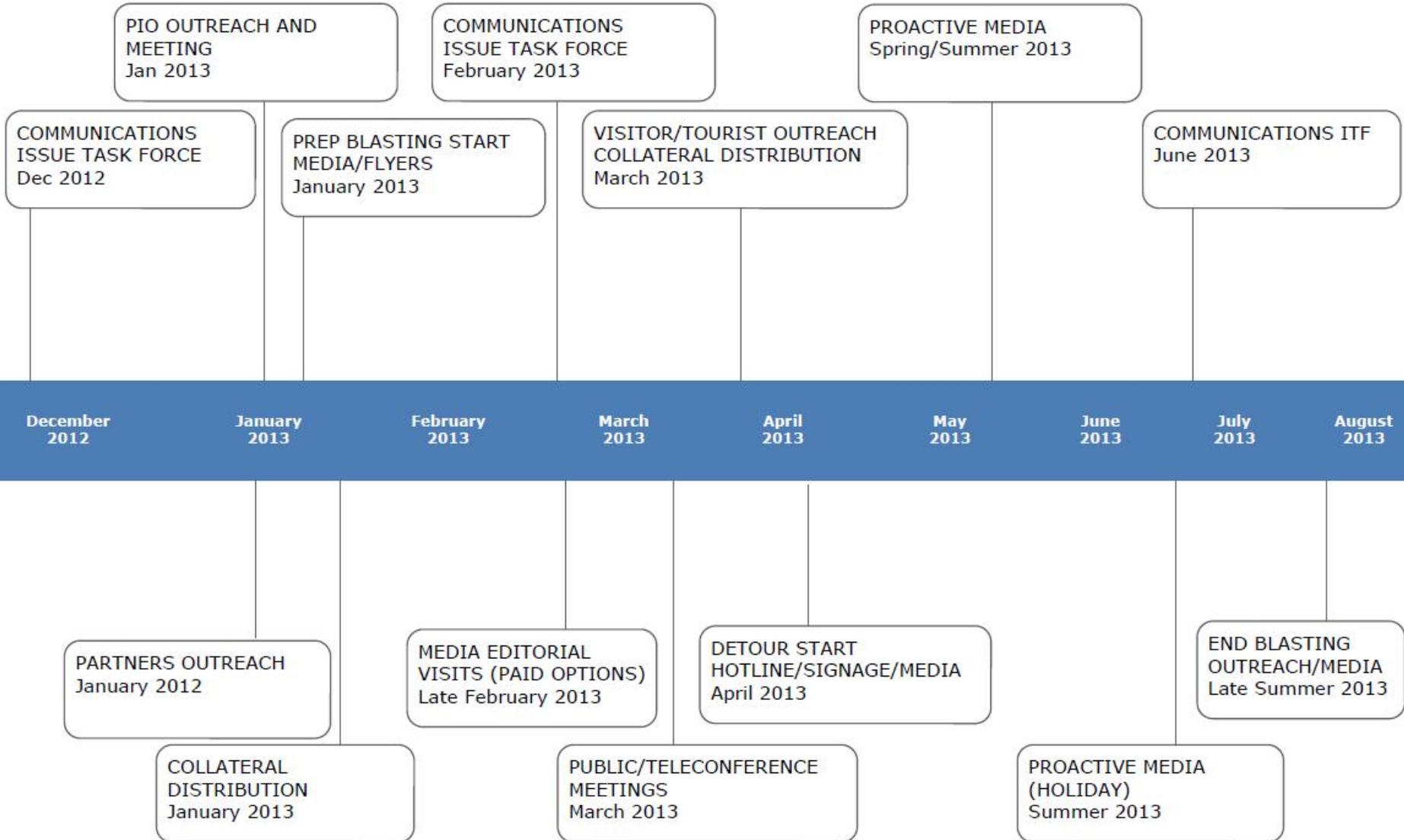
RAILING POST

Rafting Update



I-70 TWIN TUNNELS *eastbound*

COMMUNICATIONS MILESTONES DECEMBER 2012 – AUGUST 2013



Environment Mitigation

- Tracking process includes:
 - » PS&E packages reviews by CDOT environmental staff
 - » Site visits and weekly progress meetings with the PE and KOJV
 - » All commitments are being tracked even if not in plans/specs
 - » Periodic meetings with County (Fred Rollenhagen) – per County's 1041 permit . Email ben.combs@dot.gov for meeting details.
- Progress
 - » Pre-construction commitments have been satisfied
 - » Package 1 commitments are underway in the field
 - » Package 2 commitments are being tracked through the FOR and will be checked again during the QC review.



CSS Documentation

- CSS Document from EA is being updated with Design and Construction progress.
 - » Core values
 - » Design Elements
 - » Design Criterion
 - » Enhancements
- Project Team will distribute a working draft for TT review before the next meeting.

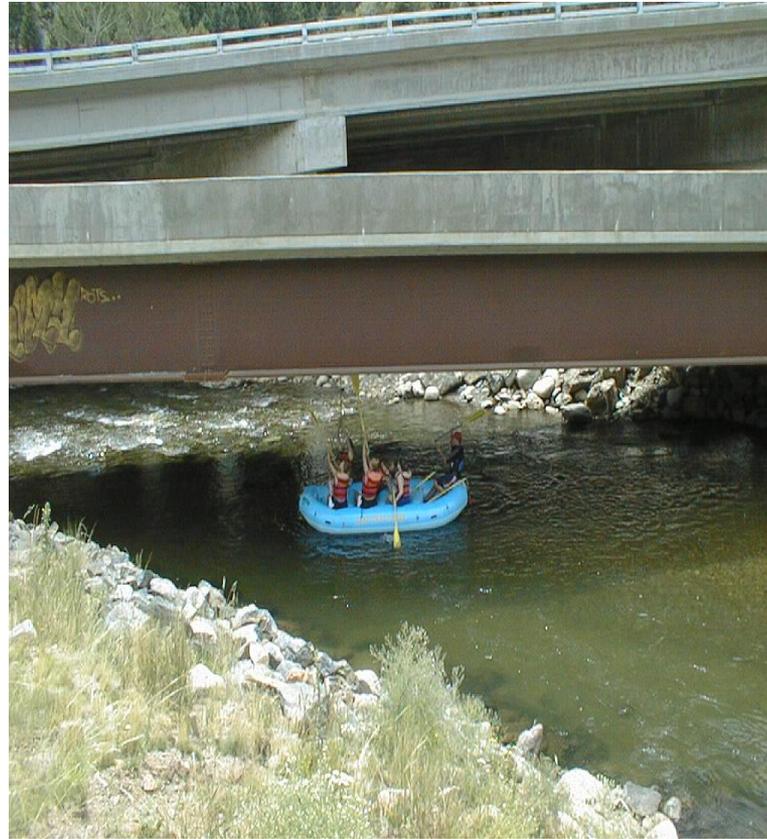


Next Steps

- Recap Action Items from Today's Discussion
- Upcoming project meetings
 - » TT will meet as needed in 2013 – March, May and July and as needed .
 - Hold the fourth Thursdays – we will cancel or confirm.
 - » Monthly newsletters
 - » Public Teleconference Town Hall Meeting
 - » Package 3 FOR
 - » Communications ITF
 - » Rafting coordination meeting – February /March 2013



END OF PRESENTATION



Variable Speed Limit (VSL) signs

- The project will install two new VSL's - one at the west Idaho Springs interchange and one at the Soda Creek Road overpass. The existing VSL will be replaced with a new scrolling VSL