

COMMENT REVIEW FORM

Project Name: 11-Mile Canyon Diversion Dam Removal Project
Package Description: 70% Design Submittal
Project Number: WXXY3000
Date: 10/13/2020



No.	Reviewer	Dwg. No.	Review Comment	Response	Response by: (Initials)	Track for Final Design
1	USFS - Group Meeting	Multiple	1 (part 1). Need to verify fill areas.	Per discussion with CUSP, in case the parking area and restroom need to remain, Fill Area 2 has been expanded to provide additional fill area if needed.	KH	Yes
2	USFS - Group Meeting	Multiple	1 (part 2). There is inconsistency with the road labeling and roads are labeled incorrectly on pages 4, 5, 11, and likely others.	Comment incorporated.	KH	
3	USFS - Group Meeting	Multiple	a. "11 Mile Canyon Road – County Road 96" should read "11 Mile Canyon Road – National Forest System Road 96".	Comment incorporated.	KH	
4	USFS - Group Meeting	Multiple	b. "Blue Mountain Road - Forest Road 244" should read "County Road 61".	Comment incorporated.	KH	
5	USFS - Group Meeting	C-2001	c. Leader at bottom of page 4 reading "to Forest Road 98" should read "to County Road 98".	Reference removed since County Road 98 is not a major or well known road, and the contractor would not access the site from that direction.	KH	
6	USFS - Group Meeting	Multiple	d. "Colorado Road 423" should read "County Road 298".	USFS confirmed that "County Road 423" should be used.	KH	
7	USFS - Group Meeting	Multiple	e. "Colorado Road 61" should read "National Forest System Road 875"	Comment incorporated.	KH	
8	USFS - Group Meeting	Multiple	2. Temporary road access for the project is shown directly off of Forest Service Road 96, near the entrance station. The original discussion was to access the site from the lower parking area along the existing trail/road.	Access is being shown from the parking lot on C-2001 and C-2002. An additional callout is added to C-2001.	KH	
9	USFS - Group Meeting	Multiple	3. Pete has developed a design plan for above the structure, but we will need a design plan with structures below the stream to stabilize the area below.	The original plan was that Pete Gallagher would perform the final channel design. This can be confirmed for final design.	KH	Yes
10	USFS - Group Meeting	Multiple	4. We need to incorporate more details on the tree removal and hydrologic features. There is quite a bit of detail in the civil features, but we need more details in how the hydrologic and environmental structures are completed. Concern that when we go to bid, this is going to be a limiting factor. Is there a way to include more details regarding pools, features, etc.?	The original plan was that Pete Gallagher would perform the final channel design. This can be confirmed for final design.	KH	Yes
11	USFS - Group Meeting	n/a	5. As an FYI...an onsite plan-in-hand review at the 90% design complete mark is requested (COVID situation allowing).	We agree with this approach.	KH	Yes
12	USFS - Group Meeting	n/a	6. Once the 70% design is in its final stages, a review by the FS Regional Office is required. However as discussed, the complete decommissioning of the Lake George Diversion Dam, as a low hazard class and non-jurisdictional dam, is a low risk project which reduces Forest Service dam safety liability. Therefore the RO specialist will recommend that the dams safety aspect of the RO engineering review will be appropriate for the low risk and low complexity of the project.	We assume all 70% comments have been received and the referenced review will occur with the final design drawings.	KH	Yes
13	USFS - Group Meeting	n/a	1. It will be important that the Forest Service be involved to ensure that there is a well-defined contract with identified stations that will go out to bid. The FS will need to review the bid for contract before CUSP sends it out. Due to changed conditions, there is a potential for this project to be completed as a government project. We need to due our best to make sure the 70% design will work as a private or public project.	It is assumed that final design will include bid documents as needed for either a design-build or public bid approach.	KH	Yes
14	USFS - Group Meeting	n/a	2. Mike Chen – The project appears to be very low risk and the estimate of \$1.9 million is within the ballpark of expected expense.	Noted.	KH	

COMMENT REVIEW FORM

Project Name: 11-Mile Canyon Diversion Dam Removal Project
Package Description: 70% Design Submittal
Project Number: WXXY3000
Date: 10/13/2020



No.	Reviewer	Dwg. No.	Review Comment	Response	Response by: (Initials)	Track for Final Design
15	USFS - Group Meeting	n/a	a. Sediment material properties are unknown. Sediment material will be saturated and may be difficult to build up into the desired contours without draining, drying, or other treatment.	Agreed, we recommend that fill areas be relatively flat and integrated with the surrounding topography to support vegetation and soil stability. Final design will confirm the selected fill area(s) to be used. Fill Area 3 is less preferred due to the steep slopes, erosion concerns, and expected revegetation difficulty.	KH	Yes
16	USFS - Group Meeting	n/a	b. The proposed construction phases include a cofferdam installed in the river sediment in order to divert the water flow to the north half the river while the south half of the river is excavated to remove sediment. Sediment material properties are unknown but likely to be loose and saturated and may become unstable during construction. It is recommended to have a closer discussion on constructability and excavation safety as the design effort proceeds. Possible considerations are the cofferdam may need to be installed deeper than expected or the excavation limits may need to be set back from the cofferdam.	Agreed, however, we recommend that water control be the contractor's responsibility based on their selected means and methods. This is the typical approach for water control. Final design will include specifications related to safety, soil slopes, water control, meeting OSHA and other standards, etc.	KH	Yes
17	USFS - Group Meeting	n/a	c. Will change the INFRA status if the OGC opinion document is available to be added to the dam file.	We believe this is an internal USFS comment.	KH	
18	USFS - Group Meeting	n/a	3. Bill Janowsky – The project is a good candidate for stimulus money. Mike did not see the project on the list of projects requesting stimulus. Josh and Kristen will need to get the request to Bill and he will incorporate it. As of Friday, June 5 th , 2020, the project has been added to the stimulus list.	We believe this is an internal USFS comment.	KH	
19	USFS - Group Meeting	n/a	4. Leah – There is a gage at the dam and the current discharge is 89 CFS. Mike stated that it appears that the proposed channel is sized qualitatively based on the existing channel upstream. It may be useful long-term to have flow numbers for a 100-year flood or whichever design criteria is determined. Of course the upstream dam plays a significant role in the design flow.	The new channel is currently sized based on coordination with Pete Gallagher regarding the desired channel average width, average depth, and width-to-depth ratio. Final channel design is to be provided by Pete Gallagher during final design.	KH	
20	USFS - Davilan	Multiple	1. Consider adding labels to attachment files for "attachment" etc., so that when you are looking at those files it is obvious which attachment you are in.	Fly sheets have been added to separate the attachments.	KH	
21	USFS - Davilan	Multiple	2. Consider marking Attachment 2 and 3 "For Information Only" since these are no guarantee of current conditions.	Comment incorporated.	KH	
22	USFS - Davilan	G-0002	3. G-0002, note 7, consider adding 'visitor parking' to staging area so partners can also park.	Comment incorporated.	KH	
23	USFS - Davilan	G-0002	4. G-0002, note 7, I am a little concerned that this is too vague of a requirement for fencing.	This will be discussed in final design. We can state that chain link or other fencing is required around the staging area, but this will come at a cost. Site security is often left to the contractor based on their desired means and methods.	KH	Yes
24	USFS - Davilan	G-0002	5. G-0002, Note 12, will the design firm review the contractors plans at all? Will a submittal will be provided for quality assurance purposes?	Yes, the final design specifications would typically list required submittals from the contractor, including a water control plan.	KH	Yes
25	USFS - Davilan	G-0002	6. G-0002, acronyms not defined BUMPS (shown on G-003), CDPHE (shown on G-003)	The acronyms have been added to the abbreviations list.	KH	

COMMENT REVIEW FORM

Project Name: 11-Mile Canyon Diversion Dam Removal Project
Package Description: 70% Design Submittal
Project Number: WXXY3000
Date: 10/13/2020



No.	Reviewer	Dwg. No.	Review Comment	Response	Response by: (Initials)	Track for Final Design
26	USFS - Davilan	G-0002	7. G-0002, Civil Legend, there should be two fence line weights/designations, one for temporary/construction and one for the post-and cable.	Comment incorporated.	KH	
27	USFS - Davilan	G-0003	8. G-0003, water control and impound sediment, note 3, (internal)The FS should identify the positions that will need to remove/approve this now.	It is assumed this is a USFS internal comment.	KH	
28	USFS - Davilan	Multiple	9. G-0003, water control and impound sediment, Note 6, I feel like the dam demolition concept phasing is shown in C-2101-2103 more so than the referenced C-2004. If C-2004 is the correctly intentioned reference, then I believe the reference then should also include C-2003 which is a continuation of C-2004 and has title. Maybe both sections are appropriate for reference here?	References have been updated to include the noted sheets.	KH	
29	USFS - Davilan	Multiple	10. G-0003, Mobilization, note 5, references C-2003 ad C-2004. Tree removal is also shown on C-2201.	Comment incorporated, and a reference is added for tree protection shown on C-2201. Tree protection fencing will be revised in final design as needed based on the final selected fill areas.	KH	Yes
30	USFS - Davilan	G-0003	11. G-0003 Proposed Phasing Plan, Phase II, note 3, should "training walls" be "Retaining walls"	Training wall is a correct term, but we have replaced it with retaining walls.	KH	
31	USFS - Davilan	G-0003	12. G-0003, phasing plan, phase 4, do any temporary BMPs need to be removed in this phase?	The Phase 4 notes include removal of temporary BMPs. During final design, we can discuss which permanent BMPs should remain after construction during the revegetation period.	KH	Yes
32	USFS - Davilan	G-0003	13. G-0003, since the detail for the fence is called "post and cable fence" can we refer to the fence as "Post and Cable Fence" as opposed to "Permanent Fence" here for consistency? Or relabel the detail on C-5001 as "permanent Fence – Post and Cable"	Phase 4 Note 6 has been revised to use post and cable fence.	KH	
33	USFS - Davilan	G-0003	14. G-0003, Construction Constraints, are there any concerns about people or boaters in the river itself? Do we have a plan or mitigation for that risk?	G-0003 construction constraints Note 1 was revised to reference boaters. Site safety is the contractor's responsibility and will be further defined in the final design specifications.	KH	
34	USFS - Davilan	Multiple	15. G-0003, Survey data notes are also shown on G-0002. Consider consolidating?	Survey related notes have been consolidated on G-0003. Additional survey information will be provided in final design.	KH	
35	USFS - Davilan	C-2101	16. C-2101, I do not feel the limits of removal for the 24" pipe is clear.	The callout at the top right of C-2101 has been revised to say "Remove 24" steel pipe south and west of this location", and the location northing and easting are provided.	KH	
36	USFS - Davilan	C-2003	17. C-2003, Note to remove or savage outhouse is concerning. This is a CXT, right?	We'll need USFS' help in determining the exact type, if needed. Removal of this restroom was requested by USFS. In final design we would define if it needs to be cleaned then salvaged or demolished.	KH	Yes
37	USFS - Davilan	C-2004	18. C-2004, post and cable fence location, was this requested here by the district? I am concerned that this appears to be along a road and post can cable fencing is not allowable as a traffic control device. Also, is the location and length shown on the drawings for the fence correct? How will fence function as a barrier?	Yes, we were asked to include post and cable fence in this area to prevent vehicles from accessing the old parking lot. Revisions can be made in final design as needed.	KH	Yes

COMMENT REVIEW FORM

Project Name: 11-Mile Canyon Diversion Dam Removal Project
Package Description: 70% Design Submittal
Project Number: WXXY3000
Date: 10/13/2020



No.	Reviewer	Dwg. No.	Review Comment	Response	Response by: (Initials)	Track for Final Design
38	USFS - Davilan	C-2004	19. C-2004, what is the fenced area along FS 244? Where does it end? Looking at Page C-2201 I see this is a filled area, but it is not shown on the "Water Erosion Control and Site Access Plan" I think this needs to be clarified on C-2004 and/or another sheet added to show the other half of this area, particularly Fill Area 2 Site Access, on the site access plan sheets.	The fence along FS 244 is for Fill Area 2, also shown on C-2201. A callout has been added to reference Fill Area 2 on C-2201. Callouts for access to each fill area are shown on C-2201.	KH	
39	USFS - Davilan	Multiple	20. C-2004 & C-2201, I feel like tree removal allowances and protection requirements are unclear between these two drawings. C-2004 says "remove trees per Dwg C-2201" "Remove Trees" in staging area and also shows an area for "Limits of Construction and tree removal to accommodate fill area see dwg C-2201". Then C-2201 shows two specific trees inside of the limit of construction that can be removed, and then three others than require protection. I think it would be best if C-2201 be the primary place where tree removal ad protection is communicated since it seems most clear and specific to trees within the limits of construction that either require removal or protection specifically. I would add a note to C-2003 and C-2004 to refer to C-2201 for tree removal and protection within limits of construction. I would remove the call out for "remove existing trees per C-2201"	Callouts on C-2004 have been revised to reference C-2201. We agree that tree protection and removal will be shown on C-2201. Tree protection fencing will be revised in final design as needed based on the final selected fill areas.	KH	Yes
40	USFS - Davilan	C-2101	a. C-2101 also permits tree removal for access road. This is not shown on C-2201 where other tree removal info is...	Please see response to Comment 39.	KH	
41	USFS - Davilan	C-2201	b. Tree removal ability in fill areas is unclear, see note on C-2201	Please see response to Comment 39.	KH	
42	USFS - Davilan	G-0002	c. I do think it is pretty clear that no trees outside of the limits of construction should be removed. Its whether or not all within can be removed and do all without and within require protection. That said, a note to stress that all trees outside of the limit of construction do not require protection specifically but shall not be disturbed and shall be replaced if damaged, etc.	An additional note has been added to General Site Notes on G-0002.	KH	
43	USFS - Davilan	C-2004	21. C-2004, Where is fill area 3 shown on the "Water Erosion Control and Site Access Plan" and how does one access it? Is there a vehicle tracking control required at site entrance (not shown currently on C-2201 either?	Fill Area 3 and access is shown on C-2201.	KH	
44	USFS - Davilan	C-2101	22. C-2101, Plan view, "remove exst concrete pier including foundation, see attachment 3" but this removal is on the non-demo side of the limit between phase 1 and phase 2. Is this intended for removal in phase 1? Perhaps clarify that the limit shown does not apply to this area or show the line to include this area?	The callout has been clarified that this work is in Phase 1 and the Phase 1/2 limit line has been shortened.	KH	
45	USFS - Davilan	C-2102	23. C-2102, section view, call out says "Construction diversion channel after phase 1 dam components are removed. Would this also be before the flow is diverted to this area or after? How do you construction the channel while diverting flow to the channel?"	The note has been revised to say "Constructed diversion channel", since construction of the diversion channel is in Phase 1.	KH	

COMMENT REVIEW FORM

Project Name: 11-Mile Canyon Diversion Dam Removal Project
Package Description: 70% Design Submittal
Project Number: WXXY3000
Date: 10/13/2020



No.	Reviewer	Dwg. No.	Review Comment	Response	Response by: (Initials)	Track for Final Design
46	CSU	C-2101	Utilities notes the sole construction specification directly affecting its system is the plugging of Utilities' water pipeline and agrees with the location identified for plugging. However, Utilities requires that the final plugging specifications and plans be submitted to and approved by Utilities prior to plugging to ensure that specifications meet Utilities' standards. Utilities therefore requests that Jacobs direct the future contractor to obtain Utilities' approval in advance of specific plans to enter its easement and plug the pipe.	Added to Note 5 on C-2101.	KH	Yes
47	CSU	Multiple	Further, Utilities is concerned that sedimentation controls, dewatering BMPs and wetland/revegetation plans have not been addressed to the extent necessary and would like to see more thorough BMPs developed instead of relying on the contractor's discretion.	It is noted that this 70% set is for NEPA permitting. Additional details will be added in final design. Pete Gallagher is providing the final channel design.	KH	Yes
48	CSU	n/a	Lastly, Utilities suggests coordinating with the Division 1 Engineer's Office through the State Engineer's Office regarding timing of flows and the proposed flow reduction through the stream reach.	Flow coordination will include SEO, Denver Water, CPW, and other needed stakeholders.	KH	Yes
49	CSU	G-0001	Utilities appreciates receiving notice of this Submittal as an interested party. However, it is not necessary for the Colorado Springs Utilities signature block or logo to be included at this time. As such, Utilities would ask for those to be removed.	The CSU signature block has been removed.	KH	