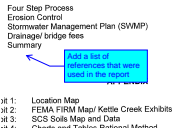


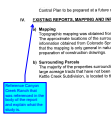
**Subject:** Callout  
**Page Label:** 17  
**Author:** lpackman  
**Date:** 2/23/2023 8:17:51 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Revise total project area to only include residential lots and exclude tracts a and b since drainage fees are not paid for tracts.



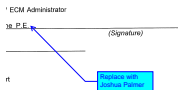
**Subject:** Callout  
**Page Label:** 2  
**Author:** lpackman  
**Date:** 2/27/2023 10:45:21 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Add a list of references that were used in the report



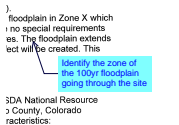
**Subject:** Callout  
**Page Label:** 7  
**Author:** lpackman  
**Date:** 2/27/2023 11:00:48 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Reference Canyon Creek Ranch that was referenced in the body of the report and explain what the study is.



**Subject:** Callout  
**Page Label:** 3  
**Author:** lpackman  
**Date:** 2/27/2023 4:38:45 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Replace with Joshua Palmer



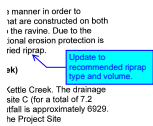
**Subject:** Callout  
**Page Label:** 8  
**Author:** dsdlaforce  
**Date:** 2/27/2023 5:29:04 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Identify the zone of the 100yr floodplain going through the site



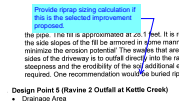
**Subject:** Callout  
**Page Label:** 83  
**Author:** lpackman  
**Date:** 2/27/2023 9:58:15 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Per ECM 3.3.4.A any drainage channels that convey more than 15 cfs need to be assigned drainage easements. Revise to show drainage easement dimensions. for ravines that have more than 15 cfs.



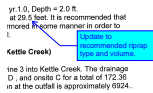
**Subject:** Callout  
**Page Label:** 12  
**Author:** lpackman  
**Date:** 2/28/2023 8:44:19 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Update to recommended riprap type and volume.



**Subject:** Callout  
**Page Label:** 12  
**Author:** dsdlaforce  
**Date:** 2/28/2023 8:45:46 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide riprap sizing calculation if this is the selected improvement proposed.



**Subject:** Callout  
**Page Label:** 12  
**Author:** lpackman  
**Date:** 2/28/2023 8:47:28 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

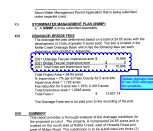
Update to recommended riprap type and volume.

Cloud+ (4)



**Subject:** Cloud+  
**Page Label:** 15  
**Author:** lpackman  
**Date:** 2/23/2023 4:03:59 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Remove. These exclusions do not apply.



**Subject:** Cloud+  
**Page Label:** 17  
**Author:** lpackman  
**Date:** 2/23/2023 8:13:54 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Update drainage fees to use 2023 drainage fee schedule.



**Subject:** Cloud+  
**Page Label:** 83  
**Author:** lpackman  
**Date:** 2/27/2023 9:58:15 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

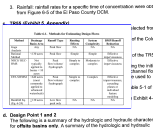
Note: you cannot modify a FEMA floodplain without a CLOMR/LOMR. Revise design to prevent modifications to the floodplain.



**Subject:** Cloud+  
**Page Label:** 10  
**Author:** lpackman  
**Date:** 2/28/2023 8:43:55 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

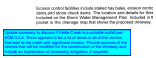
Revise runoff calculations to use HEC-HMS for analysis of larger areas that rational method cannot be used. Remove all references to TR-55 and provide new runoff calculations for the site. See snippet that was provided over the narrative for what methods are allowed.

Image (1)



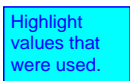
**Subject:** Image  
**Page Label:** 10  
**Author:** lpackman  
**Date:** 2/23/2023 1:06:52 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Text Box (7)



**Subject:** Text Box  
**Page Label:** 18  
**Author:** lpackman  
**Date:** 2/23/2023 4:06:00 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Update summary to discuss if Kettle Creek is a suitable outfall per ECM 3.2.4. There appears to be a lot of areas in all of the ravines that lead to the creek with significant erosion. Provide pictures of the ravines that will be modified for the construction of the driveway and include an explanation of necessary mitigation, if required.



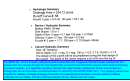
**Subject:** Text Box  
**Page Label:** 35  
**Author:** lpackman  
**Date:** 2/23/2023 4:06:56 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Highlight values that were used.



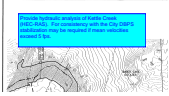
**Subject:** Text Box  
**Page Label:** 40  
**Author:** lpackman  
**Date:** 2/23/2023 4:07:24 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Remove all references to TR55 since that method is not allowed to be used by the County.



**Subject:** Text Box  
**Page Label:** 11  
**Author:** lpackman  
**Date:** 2/23/2023 4:26:43 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Per DCM Vol. 1 6.5.2 Froude numbers should be less than 0.9. It appears that all Froude numbers for the ravines that are running through the site significantly exceed 0.9 and therefore require some kind of armoring to prevent erosion. In a separate narrative, address the high Froude numbers for all the ravines that run through the site and provide a recommendation for armoring. Per EPCD DCM Vol.1 1.4.2 property owners are required to stabilize unstable drainage channels if increasing historical flows. Froude numbers indicate channels are not stable. Provide channel analyses for the ravines and the creek.



**Subject:** Text Box  
**Page Label:** 83  
**Author:** dsdlaforce  
**Date:** 2/28/2023 10:31:44 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide hydraulic analysis of Kettle Creek (HEC-RAS). For consistency with the City DBPS stabilization may be required if mean velocities exceed 5 fps.

Provide Froude and velocity calculations for all the ravines that are in the report. Submit those calculations in an appendix.

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**Subject:** Text Box  
**Page Label:** 11  
**Author:** lpackman  
**Date:** 2/28/2023 11:04:36 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide Froude and velocity calculations for all the ravines that are in the report. Submit those calculations in an appendix.

Submit construction drawings for proposed channel improvements and for the proposed culvert/driveway improvement. These will be developer responsibilities associated with the subdivision.

2 acres  
 30 year = 53.1 cfs  
 1 foot 100 year = 0.3 feet

**Subject:** Text Box  
**Page Label:** 11  
**Author:** dsdlaforce  
**Date:** 2/28/2023 8:35:04 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Submit construction drawings for proposed channel improvements and for the proposed culvert/driveway improvement. These will be developer responsibilities associated with the subdivision.