

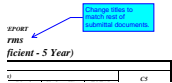
# V1\_Drainage Report - Final\_Comments.pdf Markup Summary

## Callout (29)



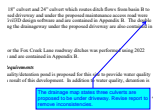
**Subject:** Callout  
**Page Label:** 1  
**Author:** lpackman  
**Date:** 1/4/2023 5:32:24 PM  
**Status:**  
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**Layer:**  
**Space:**

PCD File No. SF-2239



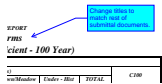
**Subject:** Callout  
**Page Label:** 31  
**Author:** lpackman  
**Date:** 1/5/2023 1:51:17 PM  
**Status:**  
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**Space:**

Change titles to match rest of submittal documents.



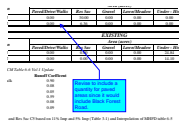
**Subject:** Callout  
**Page Label:** 26  
**Author:** lpackman  
**Date:** 1/5/2023 12:53:29 PM  
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The drainage map states three culverts are proposed to be under driveway. Revise report to remove inconsistencies.



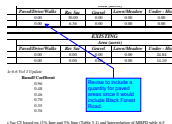
**Subject:** Callout  
**Page Label:** 32  
**Author:** lpackman  
**Date:** 1/5/2023 2:00:48 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Change titles to match rest of submittal documents.



**Subject:** Callout  
**Page Label:** 31  
**Author:** lpackman  
**Date:** 1/5/2023 2:20:19 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Revise to include a quantity for paved areas since it would include Black Forest Road.



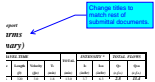
**Subject:** Callout  
**Page Label:** 32  
**Author:** lpackman  
**Date:** 1/5/2023 2:26:55 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Revise to include a quantity for paved areas since it would include Black Forest Road.



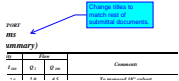
**Subject:** Callout  
**Page Label:** 33  
**Author:** lpackman  
**Date:** 1/5/2023 2:35:24 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Change titles to match rest of submittal documents.



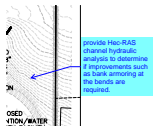
**Subject:** Callout  
**Page Label:** 34  
**Author:** lpackman  
**Date:** 1/5/2023 2:35:28 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Change titles to match rest of submittal documents.



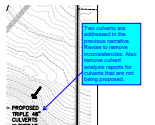
**Subject:** Callout  
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**Author:** lpackman  
**Date:** 1/5/2023 2:35:31 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Change titles to match rest of submittal documents.



**Subject:** Callout  
**Page Label:** [1] developed  
**Author:** dsdlaforce  
**Date:** 1/5/2023 3:16:11 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

provide Hec-RAS channel hydraulic analysis to determine if improvements such as bank armoring at the bends are required.



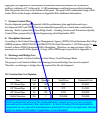
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**Page Label:** [1] developed  
**Author:** lpackman  
**Date:** 1/5/2023 3:30:25 PM  
**Status:**  
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**Layer:**  
**Space:**

Two culverts are addressed in the previous narrative. Revise to remove inconsistencies. Also remove culvert analysis reports for culverts that are not being proposed.



**Subject:** Callout  
**Page Label:** 45  
**Author:** lpackman  
**Date:** 1/5/2023 3:38:10 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Per DCM HW/D should not exceed 1.5. Revise to meet criteria.



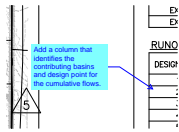
**Subject:** Callout  
**Page Label:** 28  
**Author:** lpackman  
**Date:** 1/5/2023 3:52:29 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Staff recommends removing the predevelopment request since you are no longer processing the preliminary plan application. An Early Grading Permit application is required to do any type of predevelopment grading if the plat is not approved. Revise report to remove information if application is not submitted.



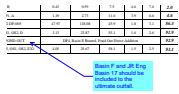
**Subject:** Callout  
**Page Label:** 47  
**Author:** lpackman  
**Date:** 1/5/2023 3:54:35 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Change titles to match rest of submittal documents.



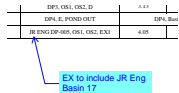
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**Page Label:** [1] developed  
**Author:** dsdlaforce  
**Date:** 1/5/2023 3:58:05 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Add a column that identifies the contributing basins and design point for the cumulative flows.



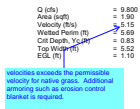
**Subject:** Callout  
**Page Label:** 35  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:03:20 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Basin F and JR Eng Basin 17 should be included to the ultimate outfall.



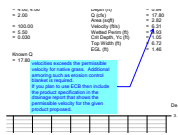
**Subject:** Callout  
**Page Label:** 35  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:03:38 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

EX to include JR Eng Basin 17



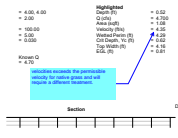
**Subject:** Callout  
**Page Label:** 38  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:09:48 PM  
**Status:**  
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**Layer:**  
**Space:**

velocities exceeds the permissible velocity for native grass. Additional armoring such as erosion control blanket is required.



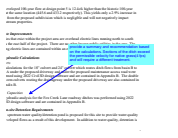
**Subject:** Callout  
**Page Label:** 39  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:13:26 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

velocities exceeds the permissible velocity for native grass. Additional armoring such as erosion control blanket is required. If you plan to use ECB then include the product specification in the drainage report that shows the permissible velocity for the given product proposed.



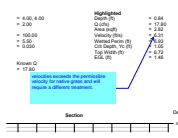
**Subject:** Callout  
**Page Label:** 56  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:23:03 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

velocities exceeds the permissible velocity for native grass and will require a different treatment.



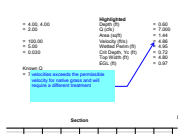
**Subject:** Callout  
**Page Label:** 26  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:23:22 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

provide a summary and recommendation based on the calculations. Sections of the ditch exceed the permissible velocity for native grass(4 fps) and will require a different treatment.



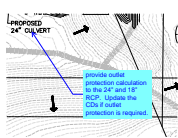
**Subject:** Callout  
**Page Label:** 59  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:24:29 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

velocities exceeds the permissible velocity for native grass and will require a different treatment.



**Subject:** Callout  
**Page Label:** 37  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:26:57 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

velocities exceeds the permissible velocity for native grass and will require a different treatment



**Subject:** Callout  
**Page Label:** [1] developed  
**Author:** dsdlaforce  
**Date:** 1/5/2023 5:12:58 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

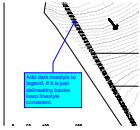
provide outlet protection calculation to the 24" and 18" RCP. Update the CDs if outlet protection is required.



**Subject:** Callout  
**Page Label:** 67  
**Author:** dsdlaforce  
**Date:** 1/5/2023 5:26:02 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

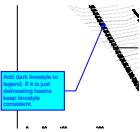
Revise design to a rectangular notch.

UD-BMP provides calculation the required width. This may simplify construction and future maintenance. Per MHFD a notch should be used for walls.



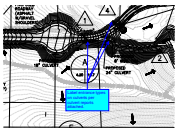
**Subject:** Callout  
**Page Label:** [1] UNdeveloped  
**Author:** lpackman  
**Date:** 1/5/2023 7:17:13 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Add dark linestyle to legend. If it is just delineating basins keep linestyle consistent.



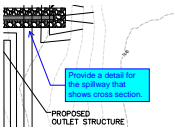
**Subject:** Callout  
**Page Label:** [1] developed  
**Author:** lpackman  
**Date:** 1/5/2023 7:19:02 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Add dark linestyle to legend. If it is just delineating basins keep linestyle consistent.



**Subject:** Callout  
**Page Label:** [1] developed  
**Author:** lpackman  
**Date:** 1/5/2023 7:56:46 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Label entrance types on culverts per culvert reports attached.



**Subject:** Callout  
**Page Label:** [1] developed  
**Author:** lpackman  
**Date:** 1/5/2023 8:35:34 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide a detail for the spillway that shows cross section.

---

## Cloud (1)



**Subject:** Cloud  
**Page Label:** [1] developed  
**Author:** dsdlaforce  
**Date:** 1/5/2023 3:12:21 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

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### Cloud+ (1)

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**Subject:** Cloud+  
**Page Label:** 48  
**Author:** lpackman  
**Date:** 1/5/2023 3:58:29 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Revise to match City DCM Vol. 1 table 6-2 rainfall depths.

---

### Highlight (4)

---

= 7.000  
= 1.44  
= 4.86  
= 4.95  
- 0.72

**Subject:** Highlight  
**Page Label:** 37  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:07:34 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

= 4.700  
= 1.08  
= 4.35  
= 4.29  
= 0.62

**Subject:** Highlight  
**Page Label:** 56  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:23:01 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

= 9.800  
= 1.90  
= 5.15  
= 5.69  
0.00

**Subject:** Highlight  
**Page Label:** 58  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:24:25 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

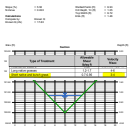
= 17.80  
= 2.82  
= 6.31  
= 6.93  
- 1.05

**Subject:** Highlight  
**Page Label:** 59  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:24:29 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

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### Image (3)

---



**Subject:** Image  
**Page Label:** 39  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:18:19 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**



**Subject:** Image  
**Page Label:** 67  
**Author:** dsdlaforce  
**Date:** 1/5/2023 5:22:58 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**



**Subject:** Image  
**Page Label:** 67  
**Author:** dsdlaforce  
**Date:** 1/5/2023 5:24:59 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

**Text Box (10)**



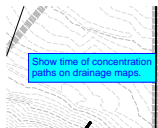
**Subject:** Text Box  
**Page Label:** 2  
**Author:** lpackman  
**Date:** 1/4/2023 5:37:07 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Move Appendix A after report contents per table of contents.



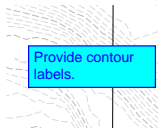
**Subject:** Text Box  
**Page Label:** 18  
**Author:** lpackman  
**Date:** 1/4/2023 5:37:43 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Move Appendix B after report contents per table of contents.



**Subject:** Text Box  
**Page Label:** [1] developed  
**Author:** lpackman  
**Date:** 1/5/2023 3:07:22 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Show time of concentration paths on drainage maps.



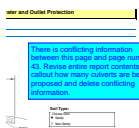
**Subject:** Text Box  
**Page Label:** [1] developed  
**Author:** lpackman  
**Date:** 1/5/2023 3:14:22 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Provide contour labels.

There is conflicting information between this page and page number 45. Revise entire report contents to callout how many culverts are being proposed and delete conflicting information.

**Subject:** Text Box  
**Page Label:** 43  
**Author:** lpackman  
**Date:** 1/5/2023 3:53:59 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

There is conflicting information between this page and page number 45. Revise entire report contents to callout how many culverts are being proposed and delete conflicting information.



**Subject:** Text Box  
**Page Label:** 45  
**Author:** lpackman  
**Date:** 1/5/2023 3:54:03 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

There is conflicting information between this page and page number 43. Revise entire report contents to callout how many culverts are being proposed and delete conflicting information.

Remove any duplicate sheets from report.

**Subject:** Text Box  
**Page Label:** 51  
**Author:** lpackman  
**Date:** 1/5/2023 4:04:11 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Remove any duplicate sheets from report.

Appendix B Calculations  
Remove duplicated calculations in this appendix.

**Subject:** Text Box  
**Page Label:** 30  
**Author:** lpackman  
**Date:** 1/5/2023 4:05:10 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

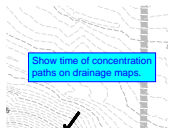
Remove duplicated calculations in this appendix.

This seems to be a duplicate of page 37.  
Check the entire drainage report and remove any duplicate documents.  
Highlighted Depth (ft)

**Subject:** Text Box  
**Page Label:** 57  
**Author:** dsdlaforce  
**Date:** 1/5/2023 4:26:20 PM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

This seems to be a duplicate of page 37.

Check the entire drainage report and remove any duplicate documents.



**Subject:** Text Box  
**Page Label:** [1] UNdeveloped  
**Author:** lpackman  
**Date:** 1/5/2023 8:37:31 AM  
**Status:**  
**Color:** ■  
**Layer:**  
**Space:**

Show time of concentration paths on drainage maps.