

# ENG-PUDSP20005-R3-PDR-redlines.pdf Markup Summary

1 (3)

**Subject:** Text Box

Also see comment letter.

**Page Index:** 1

[Also see comment letter.](#)

**Date:** 4/12/2021 8:03:35 AM

**Author:** dsdrice

**Color:** ■

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**Page Label:** 1

**Subject:** EPC ENG Review

**Page Index:** 1

**Date:** 4/12/2021 8:03:50 AM

**Author:** dsdrice

**Color:** ■

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**Page Label:** 1



**Subject:** Text Box

PUDSP-20-005

**Page Index:** 1

[PUDSP-20-005](#)

**Date:** 4/12/2021 8:05:29 AM

**Author:** dsdrice

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**Page Label:** 1

8 (3)

3 offsite flows  
are 1336.7 cfs

**Subject:**

1336.

**Page Index:** 8

**Date:** 4/11/2021 3:29:43 PM

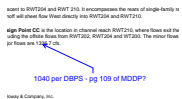
**Author:** dsdrice

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**Page Label:** 8



**Subject:** Callout

1040 per DBPS - pg 109 of MDDP?

**Page Index:** 8

**Date:** 4/11/2021 3:32:47 PM

**Author:** dsdrice

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All the Bent Cross Site,  
flows are 302.4 cfs and th

**Subject:** Callout

269?

**Page Index:** 8

**Date:** 4/11/2021 3:45:16 PM

**Author:** dsdrice

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269?

If grass buffers are proposed they need to meet criteria, be within a PBMP easement and be shown on the WQCV Plan  
to address impacts of urbanization and a vital component of the four-step process.  
Bioscience Resource Project  
Basin OS-1 (32.28 AC, Q5 = 15.1 cfs, Q100 = 65.1 cfs)  
Basin OS-2 (4.46 AC, Q5 = 1.1 cfs, Q100 = 2.3 cfs) is associated with The Bent Grass Resid

**Subject:** Callout  
**Page Index:** 9  
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**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 9

If grass buffers are proposed they need to meet criteria, be within a PBMP easement and be shown on the WQCV Plan

VI - Final Step Process  
VI - Proposed Storage Conditions

**Subject:**  
**Page Index:** 9  
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**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 9

nt for all but 0.86 acres of the developed areas

Basin OS-1 (32.28 AC, Q5 = 15.1 cfs, Q100 = 65.1 cfs)  
Basin OS-2 (4.46 AC, Q5 = 1.1 cfs, Q100 = 2.3 cfs) is associated with The Bent Grass Resid

**Subject:** Callout  
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**Author:** dsdrice  
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see redlines; any areas net treated need to be justifiable

flows, via a  
**DP 21.**  
Basin OS-1

**Subject:**  
**Page Index:** 10  
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**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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address OS-2 and OS-3

address OS-2 and OS-3  
Basin OS-1 (32.28 AC, Q5 = 15.1 cfs, Q100 = 65.1 cfs)  
Basin OS-2 (4.46 AC, Q5 = 1.1 cfs, Q100 = 2.3 cfs) is associated with The Bent Grass Resid

**Subject:** Callout  
**Page Index:** 10  
**Date:** 4/11/2021 4:23:47 PM  
**Author:** dsdrice  
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flows don't match plan

Falcon Meadows at Bent Grass PDR  
Basin OS-1 (32.28 AC, Q5 = 15.1 cfs, Q100 = 65.1 cfs)  
Basin OS-2 (4.46 AC, Q5 = 1.1 cfs, Q100 = 2.3 cfs) is associated with The Bent Grass Resid

**Subject:** Callout  
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**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
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Subject: Callout  
Page Index: 10  
Date: 4/11/2021 4:28:59 PM  
Author: dsdrice  
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These flows will not be detained but are less than 1.0 acre max allowed per criteria.

Subject: Callout  
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Author: dsdrice  
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justification is required and MDDP says all areas will be treated

Subject: Callout  
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Author: dsdrice  
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north-

### 11 (9)

Subject: Callout  
Page Index: 11  
Date: 4/11/2021 4:41:12 PM  
Author: dsdrice  
Color: ■  
Layer:  
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provide size

Subject: Callout  
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Date: 4/11/2021 4:47:38 PM  
Author: dsdrice  
Color: ■  
Layer:  
Space:  
Page Label: 11

DP 8

Subject: Callout  
Page Index: 11  
Date: 4/11/2021 4:48:22 PM  
Author: dsdrice  
Color: ■  
Layer:  
Space:  
Page Label: 11

DP15?

Basin C-3 (1.52 AC, Q5 = 5.3 cfs, Q100 = 9.9 cfs) is encircling Chain Drive, as well as single-family residential lots. Runoff from R.O.W. where proposed mountable curb and gutter will be installed. CDOT Type 'R' inlet on the north side of Bent Grass Meads into the existing Filing No. 2 North WCCV Pond.

**Subject:**  
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**Author:** dsdrice  
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. Flows will then enter an existing CDOT Type 'R' inlet on the north side of Bent Grass Meadows Drive,

Basin C-4 (4.70 AC, Q5 = 8.0 cfs, Q100 = 21.0 cfs) is encircling western Herald Place & Bent Grass Meadows Drive. Rural open space, eventually releasing into the public R.O.W. of Bent Grass Meadows Drive. Runoff from this basin sheet will be conveyed via a pipe to DP 9 and then into the existing drainage system. A new flowing inlet before entering an existing area at DP 31.

**Subject:**  
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**Author:** dsdrice  
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(4.70 AC, Q5 = 8.0 cfs, Q100 = 21.0 cfs)

Basin C-5 (0.51 AC, Q5 = 0.3 cfs, Q100 = 1.6 cfs) is encircling the driveway within the residential north WCCV pond.

**Subject:** Callout  
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**Date:** 4/11/2021 4:59:49 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
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DP9?

Basin C-6 (0.51 AC, Q5 = 0.3 cfs, Q100 = 1.6 cfs) is encircling the driveway within the residential north WCCV pond.

**Subject:**  
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**Date:** 4/11/2021 5:01:20 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 11

t DP 31.

Basin C-7 (0.51 AC, Q5 = 0.3 cfs, Q100 = 1.6 cfs) is encircling the driveway within the residential north WCCV pond.

**Subject:** Callout  
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**Date:** 4/11/2021 5:01:37 PM  
**Author:** dsdrice  
**Color:**   
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30?

Basin C-8 (0.51 AC, Q5 = 0.3 cfs, Q100 = 1.6 cfs) is encircling the driveway within the residential north WCCV pond.


**Subject:**  
**Page Index:** 11  
**Date:** 4/11/2021 5:02:32 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
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**Page Label:** 11


DP 31.

with Meadows at Best Creek PDR  
asin D-2 (6.72 AC, Q5 = 14.3 cfs, Q100 = 29.6 cfs) a basin  
by residential lots, Swale D, Swale E, Swale F, and  
will convey flow to DP 14. Flow will then enter a prop  
posed flow will then be piped and ultimately outfall to the  
pass flow from the inlet would overlap Rowena Way to DP

**Subject:**  
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**Author:** dsdrice  
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(6.72 AC, Q5 = 14.3 cfs, Q100 = 29.6 cfs)


the storm area into Swale D, and Swale E, where proposed mountable curb  
posed at grade CDOT Type 'R' inlet proposed south WOCV pond at D  
P 16.  DP24?

**Subject:** Callout  
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**Date:** 4/11/2021 5:07:19 PM  
**Author:** dsdrice  
**Color:**   
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DP24?


that is in the southwest corner of th  
posed residential lots as well as ar  
basin OS-2 and OS-3 into Swale D

the curb and  
'R' inlet where  
nd at DP 31.


**Subject:**  
**Page Index:** 12  
**Date:** 4/11/2021 5:07:48 PM  
**Author:** dsdrice  
**Color:**   
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t DP 31.

ing area inlet c  
l at DP 31.

**Subject:**  
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**Date:** 4/11/2021 5:08:33 PM  
**Author:** dsdrice  
**Color:**   
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DP 31.


to Swale D, and  
sa inlet at DP 11.  
' 31.  30?

**Subject:** Callout  
**Page Index:** 12  
**Date:** 4/11/2021 5:09:21 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 12

30?

ss Meadows Drive. It  
aula Trail and

DO I type  
DP 31.

**Subject:** Highlight  
**Page Index:** 12  
**Date:** 4/11/2021 5:11:04 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 12



of all projects and funding levels. There will be a maximum of 3 proposed projects. The cost of the project shall be less than \$500,000. All projects shall be included in the State Capital Construction Fund. The projects shall be included in the State Capital Construction Fund. The projects shall be included in the State Capital Construction Fund. The projects shall be included in the State Capital Construction Fund.

**Subject:** Callout  
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**Author:** dsdrice  
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or existing Filing 2 pond?

will release in 48 hours. Other structures, including, but not limited to, tanks, sumps, and final clarifiers, shall be designed to meet the required TSS and turbidity requirements. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond.

**Subject:** Callout  
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**Author:** dsdrice  
**Color:** ■  
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state the proposed materials (RCP, CDOT type R inlets)

will release in 48 hours. Other structures, including, but not limited to, tanks, sumps, and final clarifiers, shall be designed to meet the required TSS and turbidity requirements. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond.

**Subject:** Callout  
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**Date:** 4/11/2021 5:36:21 PM  
**Author:** dsdrice  
**Color:** ■  
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Address revisions to the existing F2 north pond

will release in 48 hours. Other structures, including, but not limited to, tanks, sumps, and final clarifiers, shall be designed to meet the required TSS and turbidity requirements. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond.

**Subject:** Callout  
**Page Index:** 13  
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**Author:** dsdrice  
**Color:** ■  
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The south pond will be constructed in conformance with water quality requirements with the early grading.

14 (5)

will release in 48 hours. Other structures, including, but not limited to, tanks, sumps, and final clarifiers, shall be designed to meet the required TSS and turbidity requirements. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond.

**Subject:** Callout  
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**Author:** dsdrice  
**Color:** ■  
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You need to address whether the DBPS improvements will be adequate for the increased flows (~1300 vs ~900 cfs? and what the proposed revisions are.

will release in 48 hours. Other structures, including, but not limited to, tanks, sumps, and final clarifiers, shall be designed to meet the required TSS and turbidity requirements. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond. The north water quality pond is a 100,000-gallon pond. The south water quality pond is a 100,000-gallon pond.

**Subject:** Callout  
**Page Index:** 14  
**Date:** 4/11/2021 5:41:16 PM  
**Author:** dsdrice  
**Color:** ■  
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proposed tract

...to be in the public interest. A study has been provided along the north boundary of ...  
 ...to be in the public interest. A study has been provided along the north boundary of ...  
 ...to be in the public interest. A study has been provided along the north boundary of ...

**Subject:** Callout  
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**Date:** 4/11/2021 5:42:02 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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to be maintained by the district?

...to be in the public interest. A study has been provided along the north boundary of ...  
 ...to be in the public interest. A study has been provided along the north boundary of ...  
 ...to be in the public interest. A study has been provided along the north boundary of ...

**Subject:** Callout  
**Page Index:** 14  
**Date:** 4/11/2021 5:45:55 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 14

Also address the swale from the northwest corner in Tract G

...Models have been obtained from F...  
 ...Models have been obtained from F...  
 ...Models have been obtained from F...

**Subject:**  
**Page Index:** 14  
**Date:** 4/12/2021 8:50:08 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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& Maintenance

15 (1)

...where this report is for evaluation and...  
 ...where this report is for evaluation and...  
 ...where this report is for evaluation and...

**Subject:** Callout  
**Page Index:** 15  
**Date:** 4/11/2021 5:47:52 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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upon completion of the required improvements

46 (2)

SSMERIDIAN ROAD - PDR  
 TING - CURRENT CONDITIONS

STATION	EXISTING		PROPOSED	
	DATE	TIME	DATE	TIME
1+00	1:00	1:00	1:00	1:00
1+10	1:10	1:10	1:10	1:10
1+20	1:20	1:20	1:20	1:20
1+30	1:30	1:30	1:30	1:30
1+40	1:40	1:40	1:40	1:40
1+50	1:50	1:50	1:50	1:50
1+60	2:00	2:00	2:00	2:00
1+70	2:10	2:10	2:10	2:10
1+80	2:20	2:20	2:20	2:20
1+90	2:30	2:30	2:30	2:30
2+00	2:40	2:40	2:40	2:40
2+10	2:50	2:50	2:50	2:50
2+20	3:00	3:00	3:00	3:00
2+30	3:10	3:10	3:10	3:10
2+40	3:20	3:20	3:20	3:20
2+50	3:30	3:30	3:30	3:30
2+60	3:40	3:40	3:40	3:40
2+70	3:50	3:50	3:50	3:50
2+80	4:00	4:00	4:00	4:00
2+90	4:10	4:10	4:10	4:10
3+00	4:20	4:20	4:20	4:20
3+10	4:30	4:30	4:30	4:30
3+20	4:40	4:40	4:40	4:40
3+30	4:50	4:50	4:50	4:50
3+40	5:00	5:00	5:00	5:00
3+50	5:10	5:10	5:10	5:10
3+60	5:20	5:20	5:20	5:20
3+70	5:30	5:30	5:30	5:30
3+80	5:40	5:40	5:40	5:40
3+90	5:50	5:50	5:50	5:50
4+00	6:00	6:00	6:00	6:00

**Subject:**  
**Page Index:** 46  
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**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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CURRENT CONDITIONS

provide current and proposed  
 BENT GRASSMERIDIAN ROAD  
 SURFACE ROUTING - CURRENT C

STATION	EXISTING		PROPOSED	
	DATE	TIME	DATE	TIME
1+00	1:00	1:00	1:00	1:00
1+10	1:10	1:10	1:10	1:10
1+20	1:20	1:20	1:20	1:20
1+30	1:30	1:30	1:30	1:30
1+40	1:40	1:40	1:40	1:40
1+50	1:50	1:50	1:50	1:50
1+60	2:00	2:00	2:00	2:00
1+70	2:10	2:10	2:10	2:10
1+80	2:20	2:20	2:20	2:20
1+90	2:30	2:30	2:30	2:30
2+00	2:40	2:40	2:40	2:40
2+10	2:50	2:50	2:50	2:50
2+20	3:00	3:00	3:00	3:00
2+30	3:10	3:10	3:10	3:10
2+40	3:20	3:20	3:20	3:20
2+50	3:30	3:30	3:30	3:30
2+60	3:40	3:40	3:40	3:40
2+70	3:50	3:50	3:50	3:50
2+80	4:00	4:00	4:00	4:00
2+90	4:10	4:10	4:10	4:10
3+00	4:20	4:20	4:20	4:20
3+10	4:30	4:30	4:30	4:30
3+20	4:40	4:40	4:40	4:40
3+30	4:50	4:50	4:50	4:50
3+40	5:00	5:00	5:00	5:00
3+50	5:10	5:10	5:10	5:10
3+60	5:20	5:20	5:20	5:20
3+70	5:30	5:30	5:30	5:30
3+80	5:40	5:40	5:40	5:40
3+90	5:50	5:50	5:50	5:50
4+00	6:00	6:00	6:00	6:00

**Subject:** Callout  
**Page Index:** 46  
**Date:** 4/11/2021 6:14:03 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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provide current and proposed



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49 (1)

5.0  
1137.6 FLC  
CH

**Subject:**  
**Page Index:** 49  
**Date:** 4/11/2021 6:13:07 PM  
**Author:** dsdrice  
**Color:** ■  
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1137.6

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51 (1)

Swales with supercritical designs highlighted.

**Subject:** Text Box  
**Page Index:** 51  
**Date:** 4/11/2021 6:21:35 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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Swales with supercritical designs highlighted.

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52 (1)

0.00  
1.13

**Subject:**  
**Page Index:** 52  
**Date:** 4/11/2021 6:17:23 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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**Page Label:** 52

1.13

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53 (1)

0.04  
1.08

**Subject:**  
**Page Index:** 53  
**Date:** 4/11/2021 6:17:18 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
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1.08

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54 (1)

1.70  
1.15

**Subject:**  
**Page Index:** 54  
**Date:** 4/11/2021 6:17:35 PM  
**Author:** dsdrice  
**Color:** ■  
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1.15

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57 (1)

Inlet calculations not checked with this review.

**Subject:** Text Box  
**Page Index:** 57  
**Date:** 4/11/2021 6:20:57 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
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Inlet calculations not checked with this review.

84 (2)

Scenario: 100 YR

Manning's n	Flow (cfs)	Vel (ft/s)	Capacity (Full Flow) (cfs)	Hydr. Grade (ft)
0	0.013	128.81	10.24	101.57
0	0.013	36.02	10.50	97.69
0	0.013	86.57	9.95	100.60
0	0.013	24.85	15.52	48.44
0	0.013	106.07	12.45	142.80
0	0.013	100.27	12.45	142.59

**Subject:**

**Page Index:** 84

**Date:** 4/11/2021 6:24:49 PM

**Author:** dsdrice

**Color:** ■

**Layer:**

**Space:**

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101.57

10.25

128.81

0.013

ig No. 3 Storm  
= Consider Table  
Scenario: 100 YR

Flow (cfs)	Vel (ft/s)	Capacity (Full Flow) (cfs)	Hydr. Grade (ft)
101.57	10.25	10.24	101.57

**Subject:** Callout

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**Date:** 4/11/2021 6:36:24 PM

**Author:** dsdrice

**Color:** ■

**Layer:**

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flow is higher than capacity - are watertight gasket joints proposed?

97 (1)

Provide update for Filing 2 North pond

**Subject:** Text Box

**Page Index:** 97

**Date:** 4/11/2021 4:02:37 PM

**Author:** dsdrice

**Color:** ■

**Layer:**

**Space:**

**Page Label:** 97

Provide update for Filing 2 North pond

105 (2)

Flow (cfs)	Vel (ft/s)	Capacity (Full Flow) (cfs)	Hydr. Grade (ft)
101.57	10.25	10.24	101.57

**Subject:** Callout

**Page Index:** 105

**Date:** 4/11/2021 6:39:25 PM

**Author:** dsdrice

**Color:** ■

**Layer:**

**Space:**

**Page Label:** 105

grate velocity is dangerous - larger box size is recommended



**Subject:**

**Page Index:** 105

**Date:** 4/11/2021 6:39:55 PM

**Author:** dsdrice

**Color:** ■

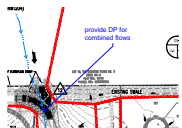
**Layer:**

**Space:**

**Page Label:** 105

6.00 feet Overflow Weir Slope Length = 3.00 feet  
Overflow Weir Grate Slope = 0.00 H:V Grate Open Area / 100-yr Orifice Area = 2.57  
Horiz. Length of Weir Sides = 3.00

107 (4)



**Subject:** Callout

**Page Index:** 107

**Date:** 4/11/2021 4:08:01 PM

**Author:** dsdrice

**Color:** ■

**Layer:**

**Space:**

**Page Label:** 107

provide DP for combined flows

**Subject:** Callout  
**Page Index:** 107  
**Date:** 4/11/2021 6:41:05 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 107

Add combined DP at N channel

**Subject:** Callout  
**Page Index:** 107  
**Date:** 4/11/2021 6:41:07 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 107

also label pre-development flows for CC

**Subject:** Callout  
**Page Index:** 107  
**Date:** 4/11/2021 6:41:58 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 107

Label if these are FEMA / DBPS / calculated flows.

109 (3)

17	7.5	16.5
18	10.0	21.8
19	2.0	5.2
15A	12.2	27.0
25	20.0	44.2
21	22.8	50.1
20	15.5	33.9
11	10.8	23.7
22	1.5	3.1
24	5.0	11.0
23	1.3	2.9
26	5.7	12.4
28	0.2	0.4

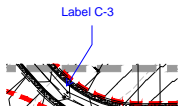
**Subject:**  
**Page Index:** 109  
**Date:** 4/11/2021 4:19:42 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 109

1	43.2	126.1
2	9.6	47.1
3	21.3	66.0
4	260.1	1137.6

**Subject:**  
**Page Index:** 109  
**Date:** 4/11/2021 4:20:32 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 109

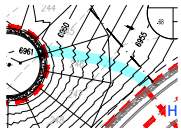
**Subject:** Callout  
**Page Index:** 109  
**Date:** 4/11/2021 4:35:49 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 109

Provide DP 22



**Subject:** Callout  
**Page Index:** 110  
**Date:** 4/11/2021 4:48:10 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

Label C-3



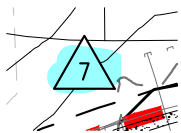
**Subject:**  
**Page Index:** 110  
**Date:** 4/11/2021 4:49:18 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

Basin line?

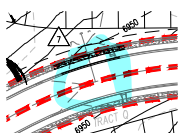


**Subject:** Callout  
**Page Index:** 110  
**Date:** 4/11/2021 4:49:28 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

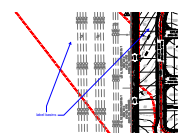
Basin line?



**Subject:**  
**Page Index:** 110  
**Date:** 4/11/2021 4:50:53 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

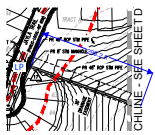


**Subject:**  
**Page Index:** 110  
**Date:** 4/11/2021 4:51:05 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110



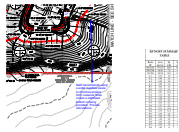
**Subject:** Callout  
**Page Index:** 110  
**Date:** 4/11/2021 5:03:35 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

label basins



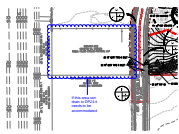
**Subject:** Length Measurement  
**Page Index:** 110  
**Date:** 4/11/2021 6:36:51 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

296.2 ft



**Subject:** Callout  
**Page Index:** 110  
**Date:** 4/11/2021 6:37:23 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

Staff recommends using a wider overflow swale to minimize erosion from nuisance flows unless a stabilized bottom is being provided. Provide calculations.



**Subject:** Cloud+  
**Page Index:** 110  
**Date:** 4/11/2021 6:46:28 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

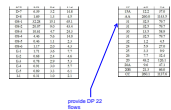
If this area can drain to DP24 it needs to be accommodated

111 (4)

**SUMMARY TABLE**

Design Point	Q <sub>10</sub> (cfs)	Q <sub>100</sub> (cfs)
21	14.2	63.6
1	5.8	15.0
2	5.3	13.9
3	7.5	18.7
4	11.1	27.7

**Subject:**  
**Page Index:** 111  
**Date:** 4/11/2021 4:21:38 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 111



**Subject:** Callout  
**Page Index:** 111  
**Date:** 4/11/2021 4:34:59 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 111

provide DP 22 flows

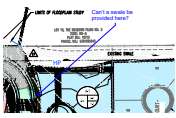
	10.0	21.8
	2.0	5.2
	12.2	37.0
	260.0	1143.5
	32.5	79.7
	32.5	79.7
	13.5	58.9

**Subject:**  
**Page Index:** 111  
**Date:** 4/11/2021 4:36:57 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 111

D	1.1	3.2-4
D	43.2	126.1
A	9.6	47.1
B	21.3	66.0
C	260.1	1137.0

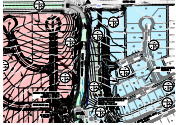
**Subject:**  
**Page Index:** 111  
**Date:** 4/11/2021 4:37:01 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 111

112 (3)



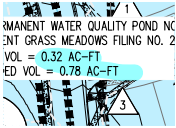
**Subject:** Callout  
**Page Index:** 112  
**Date:** 4/11/2021 3:54:54 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 112

Can't a swale be provided here?



**Subject:**  
**Page Index:** 112  
**Date:** 4/11/2021 3:55:20 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 112

swale?



**Subject:**  
**Page Index:** 112  
**Date:** 4/11/2021 4:01:26 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 112

swale?