ENG-SF19014-R4-MDDP-Redlines.pdf Markup Summary

1 (1)



Subject: EPC ENG Review

Page Index: 1

Date: 4/6/2020 5:27:46 PM

Author: dsdrice

Color: Layer: Space: Page Label: 1

2 (1)



Subject: Text Box Page Index: 2

Date: 4/6/2020 5:28:22 PM

Author: dsdrice Color: Layer: Space: Page Label: 2 Sign

6 (1)



Subject: Cloud+ Page Index: 6

Date: 4/6/2020 8:24:50 PM

Author: dsdrice Color:

Layer: Space: Page Label: 6 This needs to be clarified.

11 (1)

אוו וס מוווטון Subject:

ong 🛑

Subject: Page Index: 11

Date: 4/6/2020 8:43:51 PM

Author: dsdrice
Color: Layer:

Space: Page Label: 11

46 (3)



Subject:

Page Index: 46

Date: 4/7/2020 10:37:03 PM

Author: dsdrice Color: Layer: Space: Page Label: 46).99).95 Subject:

Page Index: 46

Date: 4/7/2020 10:37:10 PM

Author: dsdrice
Color:

Layer: Space:

Page Label: 46

Concerns in these areas as related to channel disturbance. See last pages of FDR (Sheets DR2.2 and 3).

r Models (Existing vs. Proposed)

v Vst Ceel Frauder Right

Subject: Callout Page Index: 46

Date: 4/7/2020 11:03:32 PM

Author: dsdrice Color: Layer:

Page Label: 46

Space:

Concerns in these areas as related to channel disturbance. See last pages of FDR (Sheets

DR2.2 and 3).

241 (1)



Subject: Highlight Page Index: 241

Date: 4/7/2020 9:01:25 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: 241

Castle Pines - City Offic

242 (2)



Subject: Highlight Page Index: 242

Date: 4/6/2020 9:41:50 PM

Author: dsdrice
Color: Layer:
Space:

Page Label: 242



Subject:

Page Index: 242

Date: 4/7/2020 11:30:32 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: 242

(Retention Pond

245 (1)



Subject:

Page Index: 245

Date: 4/6/2020 9:45:52 PM

Author: dsdrice
Color: Layer:
Space:

Page Label: 245

ENG-SF19014-R4-FDR-Redlines.pdf Markup Summary

1 (1)



Subject: EPC ENG Review

Page Index: 1

Date: 4/7/2020 6:07:22 PM

Author: dsdrice

Color: Layer: Space: Page Label: 1

2(1)



Subject: Text Box Page Index: 2

Date: 4/7/2020 10:36:44 AM

Author: dsdrice Color: Layer:

Space:
Page Label: 2

Sign

11 (2)



Subject: Page Index: 11

Date: 4/7/2020 10:45:29 AM

Author: dsdrice

Color: Layer:
Space:
Page Label: 11

Il sheet flow across the temporary gravel

turnaround area



Subject:

Page Index: 11

Date: 4/7/2020 10:47:25 AM

Author: dsdrice Color: Layer:

Space: Page Label: 11 will sheet flow

across the temporary gravel turnaround area

17 (1)



Subject: Page Index: 17

Date: 4/7/2020 11:02:28 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 17

n. A portion of

the top of the outlet opening will be covered, to ensure flows exiting the pond meet the DBPS

flows.

380 (2)



Subject: Highlight Page Index: 380

Date: 4/7/2020 11:20:50 PM

Author: dsdrice Color: Layer: Space:

Page Label: 380

Needs pipes?

4741.64 | 3645.30 | 0.00 **Subject:** Text Box Page Index: 380

Date: 4/7/2020 11:21:50 PM

Author: dsdrice Color: Layer: Space:

Page Label: 380

Needs pipes?

392 (2)



Subject: Callout Page Index: 392

Date: 4/7/2020 11:50:56 PM

Author: dsdrice Color: Layer: Space:

Page Label: 392

Do check structures need to be provided based on modeling?

Subject: Callout Page Index: 392

Date: 4/7/2020 11:51:40 PM

Author: dsdrice Color: Layer: Space:

Page Label: 392

Address how street flows go around cul-de-sacs

393 (5)



Subject: Cloud+ Page Index: 393

Date: 4/7/2020 10:47:46 PM

Author: dsdrice Color: Layer: Space:

Page Label: 393

It appears that additional stabilization is required.

Subject: Callout Page Index: 393

Date: 4/7/2020 10:53:09 PM

Author: dsdrice Color: Layer: Space:

Page Label: 393

Is it possible to spread flow out as it enters the channel and provide better angles of confluence?



Subject:

Page Index: 393

Date: 4/8/2020 1:44:04 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 393

smooth grading out



Subject:

Page Index: 393

Date: 4/8/2020 1:44:04 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 393

smooth grading out



Subject:

Page Index: 393

Date: 4/8/2020 1:44:04 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 393

smooth grading out





Subject: Callout

Page Index: 394 Date: 4/7/2020 11:02:55 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 394

It appears that a check structure or other grade control should be placed in this area and channel/bank stabilization provided based on

modeling.



Subject:

Page Index: 394

Date: 4/8/2020 1:43:32 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 394

fix overlap

395 (1)



Subject: Callout

Page Index: 395

Date: 4/7/2020 10:57:43 PM

Author: dsdrice Color:

Layer: Space:

Page Label: 395

It appears that a check structure or other grade control should be placed in this area.

ENG-SF19014-R4-CD-Redlines.pdf Markup Summary

1 (3)



Subject: EPC ENG Review

Page Index: 1

Date: 4/7/2020 4:51:41 PM

Author: dsdrice Color:

Layer: Space:

Page Label: [1] 1 COVER SHEET

Subject:

Page Index: 1

Date: 4/7/2020 4:51:54 PM

Author: dsdrice

Color: Layer: Space:

Page Label: [1] 1 COVER SHEET

• . .

Subject: Page Index: 1

Date: 4/7/2020 4:52:09 PM

Author: dsdrice Color: Layer: Space:

Page Label: [1] 1 COVER SHEET

19 (1)



Subject: Callout Page Index: 19

Date: 4/7/2020 5:59:06 PM

Author: dsdrice Color: Layer: Space:

Page Label: [19] 19 CROSS PAN & CURB RETURN

PROFILES

27 (12)

TYPE C INLET

(PUBLIC)

Subject: Page Index: 27

Date: 4/8/2020 8:53:32 AM **Author:** dsdrice

-03.86, 0.01' | Author: Color: Layer:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

Provide a low point matching the crosspan



Subject: Page Index: 27

Date: 4/8/2020 8:54:54 AM

Author: dsdrice Color:

Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

- B - 0F01 ES (PUBLIC) A: 1+49.19 Subject: Page Index: 27

Date: 4/8/2020 8:55:21 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

)P (PUBLIC)

Subject: Page Index: 27

Date: 4/8/2020 8:55:54 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

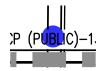
PROP. CDO (P<mark>UB</mark>LIC) STA: 1+00 Subject: Page Index: 27

Date: 4/8/2020 8:57:32 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE



Subject: Page Index: 27

Date: 4/8/2020 8:57:54 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

F01 S (PUBLIC) Subject: Page Index: 27

Date: 4/8/2020 8:58:02 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

CP (PUBLIC) @ 0.50% Subject: Page Index: 27

Date: 4/8/2020 9:02:47 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

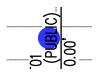
POND (NC PROP. MC (PUBIC) STA: 2+(RIM= 694 Subject: Page Index: 27

Date: 4/8/2020 9:03:16 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE



Subject: Page Index: 27

Date: 4/8/2020 9:03:41 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

(District)(?)

STORM PLAN & PROFILE

<u>B</u> (District)(?) 1"=20, V: 1" = 10') Subject: Text Box Page Index: 27

Date: 4/8/2020 9:04:08 AM

Author: dsdrice Color: Layer: Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE



Subject: Page Index: 27

Date: 4/8/2020 9:07:34 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: [27] 27 BENT GRASS MEADOWS DRIVE

STORM PLAN & PROFILE

28 (7)

E C INLET (PUBLIC) 3.13, 0.00'

Subject: Page Index: 28

Date: 4/8/2020 8:39:03 AM

Author: dsdrice

Color: Layer: Space:

Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE



Subject: Page Index: 28

Date: 4/8/2020 9:09:53 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE

- E - 0F01 A: 1+07.33

Subject: Page Index: 28

Date: 4/8/2020 9:09:55 AM

Author: dsdrice Color: Layer: Space:

Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE



Subject: Page Index: 28

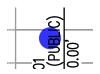
Date: 4/8/2020 9:10:45 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE



Subject: Page Index: 28

Date: 4/8/2020 9:12:13 AM

Author: dsdrice Color: Layer: Space:

Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE



Subject:

Page Index: 28 Date: 4/8/2020 9:12:16 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE

1+75. <u>E</u> (District)(?) 1"=20, V: 1" = 10')

Subject: Text Box Page Index: 28

Date: 4/8/2020 9:13:13 AM

Author: dsdrice Color: Layer:

Space: Page Label: [28] 28 BERWYN LOOP STORM PLAN &

PROFILE

(District)(?)

PE C INLET (PUBLIC)
58.13, 0.00'

Subject: Page Index: 29

Date: 4/8/2020 9:26:17 AM

Author: dsdrice

Color: Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE

- E - 0F01 - S (PUBLIC) - 07.33, 0.00' Subject: Page Index: 29

Date: 4/8/2020 9:26:23 AM

O'— Author: dsdrice Color:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE

P (PUBLIC)-4

Subject: Page Index: 29

Date: 4/8/2020 9:26:31 AM

Author: dsdrice Color: Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE

- 'H - IN01/ ES (PUBLIC) 93.59, 0.00' Subject: Page Index: 29

Date: 4/8/2020 9:39:41 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE

(District)(?)

6+00 <u>H</u> (District)(?) 1"=20, V: 1" = 10') Subject: Text Box Page Index: 29

Date: 4/8/2020 9:41:01 AM

Author: dsdrice Color: Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE

P (P<mark>UBL</mark>IC) 9 -0.50% Subject: Page Index: 29

Date: 4/8/2020 9:41:10 AM

Author: dsdrice
Color:
l aver:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE



Subject: Page Index: 29

Date: 4/8/2020 9:41:22 AM

Author: dsdrice

Color: Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE



Subject:

Page Index: 29

Date: 4/8/2020 9:43:09 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE



Subject:

Page Index: 29

Date: 4/8/2020 9:43:17 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE



Subject:

Page Index: 29

Date: 4/8/2020 9:43:20 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE



Subject:

Page Index: 29

Date: 4/8/2020 9:43:33 AM

Author: dsdrice Color: Laver:

Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE



Subject: Callout

Page Index: 29

Date: 4/8/2020 9:45:25 AM

Author: dsdrice Color:

Layer: Space:

Page Label: [29] 29 STORM H - PLAN & PROFILE

It appears that a berm is needed. Verify culvert headwater depth calculation.

1432.01

Subject: Page Index: 30

Date: 4/7/2020 11:58:36 PM

Author: dsdrice Color: Layer: Space:

Page Label: [30] 30 BOX CULVERT PLAN & PROFILE



Subject: Callout Page Index: 30

Date: 4/7/2020 2:16:32 PM

Author: dsdrice Color: Layer: Space:

Page Label: [30] 30 BOX CULVERT PLAN & PROFILE

What is the grade, velocity, etc.? It appears that a check structure is necessary.

31 (5)



Subject: Cloud+ Page Index: 31

Date: 4/7/2020 10:33:35 PM

Author: dsdrice Color: Layer: Space:

Page Label: [31] 31 CULVERT & WINGWALL PLAN &

It appears that additional channel stabilization is required here. (4400 in model)

PROFILE



Subject: Callout Page Index: 31

Date: 4/7/2020 2:18:50 PM

Author: dsdrice Color: Layer: Space:

Page Label: [31] 31 CULVERT & WINGWALL PLAN &

PROFILE

What is the grade, velocity, etc.? It appears that a check structure is necessary.

Subject: Cloud+ Page Index: 31

Date: 4/7/2020 4:10:43 PM

Author: dsdrice Color: Layer: Space:

Page Label: [31] 31 CULVERT & WINGWALL PLAN &

PROFILE

erosion protection?

Subject: Callout Page Index: 31

Date: 4/7/2020 4:10:49 PM

Author: dsdrice

Color: Layer: Space:

Page Label: [31] 31 CULVERT & WINGWALL PLAN &

PROFILE

Label grade.

See comment letter

Subject: Text Box

Subject: Text Box
Page Index: 31
Date: 4/7/2020 4:11:16 PM
Author: dsdrice
Color: Layer:
Space:
Page Label: [31] 31 CULVERT & WINGWALL PLAN & PROFILE

ENG-SF19014-R4-GEC-Redlines.pdf Markup Summary

[1] 1 COVER SHEET (1)



Subject: EPC ENG Review Date: 4/8/2020 2:05:28 PM

Author: dsdrice Color: Layer: Space:

Page Label: [1] 1 COVER SHEET

[20] 20 POND WU DETAILS (7)



Subject:

Date: 4/7/2020 11:08:10 AM

Author: dsdrice Color: Layer: Space:

Page Label: [20] 20 POND WU DETAILS



Subject:

Date: 4/7/2020 11:08:13 AM

Author: dsdrice
Color: Layer:

Page Label: [20] 20 POND WU DETAILS



Subject:

Space:

Date: 4/7/2020 12:32:26 PM

Author: dsdrice
Color: Layer:
Space:

Page Label: [20] 20 POND WU DETAILS

60" RCP (PUB 16.75 Subject:

Date: 4/7/2020 12:32:27 PM

Author: dsdrice Color:

Layer: Space:

Page Label: [20] 20 POND WU DETAILS

50" RCP (PUBI 16.75 Subject:

Date: 4/7/2020 12:32:28 PM

Author: dsdrice Color: Layer: Space:

Page Label: [20] 20 POND WU DETAILS

60" RCP (PU Date: 4/7/2020 12:32:29 PM 816.54

Subject:

Author: dsdrice
Color:

Layer: Space:

Page Label: [20] 20 POND WU DETAILS

Subject: Callout

Date: 4/8/2020 2:06:31 PM

Author: dsdrice

Color: Layer: Space:

Page Label: [20] 20 POND WU DETAILS

Are these really higher than inverts in?

[21] 21 GRADING & EROSION CONTROL DETAILS (1)



Subject: Cloud+

Date: 4/8/2020 2:03:59 PM

Author: dsdrice

Color: Layer:

Space:

Page Label: [21] 21 GRADING & EROSION CONTROL

DETAILS

Should opening be extended into micropool?

Please discuss.