ENG-SP20008-R2-PDR-redlines.pdf Markup Summary

1 (2)



Subject: EPC ENG Review

Page Index: 1

Date: 4/23/2021 5:50:04 PM

Author: dsdrice Color: Layer:

Space: Page Label: 1

Subject: Text Box Page Index: 1

Date: 4/23/2021 5:50:24 PM

Author: dsdrice
Color: Layer:
Space:

Page Label: 1

See comment memo also.

2

7 (4)

n portion

into 2 bas

Subject:

Page Index: 7

Date: 4/23/2021 1:39:34 PM

Author: dsdrice Color:

Layer: Space: Page Label: 7

Subject:

asin D is 2% impervious and 17.25 Acres. This b meh Road. Runoff from this basin will drain into armwater requirements for Briargate parkway and ainase recort for Sterling Ranch Phase 3, and will b Page Index: 7

Date: 4/23/2021 1:50:05 PM

Author: dsdrice
Color: Layer:
Space:
Page Label: 7

s 2% impervious and 17.25 Acres

Control to Management and Control to Management and Control and Control to Management from the Bender State of Management and Control to Management

Subject: Callout Page Index: 7

Date: 4/23/2021 1:50:19 PM

Author: dsdrice
Color: Layer:
Space:
Page Label: 7

If Briargate Pkwy and Sterling Ranch Road are included in early grading, details to the FDR level

will be required. See comment letter.

city is 10 month absoluted had consult a unit or particular city. The book is to the outhor set of Voltaes and The city 12 months is the south near of Voltaes and The city 12 months are the continued a color particular city 12 months and particular city 12 months are the continued of Voltaes and and following the city 12 months and particular city 12 months are for large particular following the following

Subject: Text Box Page Index: 7

Date: 4/23/2021 12:55:11 PM

Author: dsdrice
Color: Layer:
Space:
Page Label: 7

Address the existing basins around proposed Sterling Ranch Road and Briargate Pkwy.

9 (2) Subject: Callout address the overflow conveyance Page Index: 9 Date: 4/23/2021 2:23:52 PM Author: dsdrice Color: Layer: Space: Page Label: 9 Subject: Text Box Address the Vollmer Road basins, DPs and inlets Page Index: 9 Date: 4/23/2021 2:25:18 PM Author: dsdrice Color: Layer: Space: Page Label: 9 10 (3) $\sqrt{5}=2.3$ CI: Subject: 1B Page Index: 10 sin 1B. Date: 4/23/2021 2:29:07 PM Author: dsdrice Color: Layer: Space: Page Label: 10 Subject: ket Drive ar nt B9 Page Index: 10 Date: 4/23/2021 2:58:17 PM point B9 in Author: dsdrice 1s B1, B2, B Color: Layer: Space: Page Label: 10 ns to design point B1U a 1U type I Subject: Callout and B5? Page Index: 10 Date: 4/23/2021 3:01:31 PM and B5? Author: dsdrice Color: Layer: Space: Page Label: 10 11 (4) Subject: 2.455 Page Index: 11 Date: 4/23/2021 3:04:18 PM 2.455 Author: dsdrice Color: Layer: Space: Page Label: 11

Subject: 5.09 Page Index: 11 5.09 Date: 4/23/2021 3:04:21 PM Author: dsdrice Color: Layer: Space: Page Label: 11 Subject: 31.2 Page Index: 11 Date: 4/23/2021 3:04:31 PM 31.2 Author: dsdrice Color: Layer: Space: Page Label: 11 Subject: Callout spreadsheet has different values Page Index: 11 Date: 4/23/2021 3:14:39 PM Author: dsdrice Color: Layer: Space: Page Label: 11 13 (1) Subject: Highlight Page Index: 13 Date: 4/23/2021 3:22:08 PM Author: dsdrice Color: Layer: Space: Page Label: 13 14 (2) Subject: discharge directly into the open drainageway of Page Index: 14 Sand Creek: Date: 4/23/2021 3:29:18 PM therefore no downstream stabilization will be Author: dsdrice accomplished with this project Color: Layer: Space: Page Label: 14 Subject: Callout This needs to be clarified. Also state the Page Index: 14 requirements of the Sterling Ranch Filing 1 SIA for Date: 4/23/2021 3:31:00 PM Sand Creek channel construction. Author: dsdrice

Color: Layer: Space: Page Label: 14

15 (2)

1 the extended urban runoff volume (reduced to less than historic rates.

:p 4 — Pollution Control BMPs: BM steet the downstream receiving water plemented include, but are not lin turbance, construction vehicle tracki Subject: Line Page Index: 15

Date: 4/5/2021 10:09:01 AM

Author: GReese

Color: Layer: Space:

Page Label: 15

Radional services (Ash Mare Assertives in the Steway (MI) MATA STEMALANCE (Ash Mare Assertives in the page of the Asternatives in the Control of the Steway (MI) and the Control of the Steway (MI) and the page of the later of the Control of the Steway (MI) and the control of the steward (MI) and the control of the Steward (MI) and Subject: SW - Comment

Page Index: 15

Date: 4/5/2021 10:12:21 AM

Author: GReese

Color:
Layer:
Space:

Page Label: 15

See my comment from Review 1. And per ECM Appendix I.7.2, the heading for Step 4 still needs to be "Consider Need for Industrial and Commercial BMPs" and the following text can just state that the site is a residential subdivision (ie: not a high-risk site per Figure I-1 in ECM Appendix I), therefore specialized BMPs do not need to be considered.

17 (1)



Subject: Callout Page Index: 17

Date: 4/23/2021 3:36:57 PM

Author: dsdrice Color: Layer:

Space: Page Label: 17 (This will be required prior to approval or conditions of approval restricting road and lot platting and construction east of Wheatland Drive

will be needed.)

27 (1)



Subject: Text Box Page Index: 27

Date: 4/23/2021 3:38:30 PM

Author: dsdrice Color: Layer: Space:

Page Label: 27

Provide for the area east of Sand Creek that the proposed roads are in.

41 (1)



Subject: Callout Page Index: 41

Date: 4/23/2021 2:13:49 PM

Author: dsdrice
Color: Layer:
Space:
Page Label: 41

These need to be 72 or less

55 (1)

(Only the sump inlets were checked)

Subject: Text Box Page Index: 55

Date: 4/23/2021 3:43:14 PM

Author: dsdrice Color:

Layer: Space:

Page Label: 55

(Only the sump inlets were checked)

80 (1)

Subject: Page Index: 80

Date: 4/23/2021 3:09:29 PM

Author: dsdrice Color: Layer: Space: Page Label: 80

Capacity less than Q Peak for Minor Storm

98 (10)



Subject: Text Box Page Index: 98

Date: 4/23/2021 10:30:06 AM

Author: dsdrice Color: Layer: Space: Page Label: 98

Retreat at Timber Ridge

Subject: Text Box Page Index: 98

Date: 4/23/2021 10:31:05 AM

Author: dsdrice Color: Layer: Space:

Page Label: 98

Provide FEMA flows also



Subject: Page Index: 98

Date: 4/23/2021 10:32:04 AM

Author: dsdrice Color: Layer: Space:

Page Label: 98



Subject: Arrow Page Index: 98

Date: 4/23/2021 11:22:05 AM

Author: dsdrice Color: Layer: Space:

Page Label: 98



Subject: Arrow Page Index: 98

Date: 4/23/2021 11:22:17 AM

Author: dsdrice Color: Layer: Space:



Subject: Arrow Page Index: 98

Date: 4/23/2021 11:22:44 AM

Author: dsdrice

Color: Layer:
Space:
Page Label: 98



Subject: Arrow Page Index: 98

Date: 4/23/2021 11:23:55 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 98



Subject: Callout Page Index: 98

Date: 4/23/2021 11:33:46 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 98

label culvert and sub-basin details



Subject:

Page Index: 98

Date: 4/23/2021 11:36:03 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 98



Subject: Callout Page Index: 98

Date: 4/23/2021 11:56:10 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 98

Include the area with the proposed roads or provide a separate existing plan for that area.

99 (10)



Subject: Callout Page Index: 99

Date: 4/23/2021 1:20:41 PM

Author: dsdrice Color:

Layer: Space:

Page Label: 99

If the existing swale is proposed to be filled in, a pipe system will be required and a way to separate Vollmer Road flows addressed..



Subject: Page Index: 99

Date: 4/23/2021 1:33:20 PM

Author: dsdrice

Color: Layer: Space: Page Label: 99

24.27 17.29 Subject: Page Index: 99

Date: 4/23/2021 1:51:24 PM

Author: dsdrice

Color: Layer: Space: Page Label: 99

Subject: Callout Page Index: 99

Date: 4/23/2021 11:16:58 AM

Author: dsdrice Color:

Layer: Space: Page Label: 99

Provide DPs and interim conveyance away from the lots



Subject: Arrow Page Index: 99

Date: 4/23/2021 11:17:58 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 99



Subject: Callout Page Index: 99

Date: 4/23/2021 11:20:20 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 99

Provide DP and conveyance to keep roadside ditch and culvert flows out of the lots or show the

conveyance through the lots



Subject: Callout Page Index: 99

Date: 4/23/2021 11:21:11 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 99

provide temporary cul-de-sac

Subject: Text Box Page Index: 99

Date: 4/23/2021 11:54:45 AM

Author: dsdrice Color:

Layer: Space: Page Label: 99

.....



Subject: Arrow Page Index: 99

Date: 4/23/2021 11:57:23 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 99

.....

Provide DP



Subject: Arrow Page Index: 99

Date: 4/23/2021 11:57:29 AM

Author: dsdrice Color:

Layer: Space:

Page Label: 99

100 (8)



Subject: Callout Page Index: 100

Date: 4/23/2021 1:52:27 PM

Author: dsdrice Color: Layer: Space:

Page Label: 100

Provide basin and DP summary tables



Subject: Text Box Page Index: 100

Date: 4/23/2021 11:03:35 AM

Author: dsdrice Color: Layer: Space:

Page Label: 100

Label offsite basin. The proposed diversion in the MDDP flows to the north side of Briargate Pkwy



Subject:

Page Index: 100

Date: 4/23/2021 11:04:14 AM

Author: dsdrice Color: Layer: Space:



Subject:

Page Index: 100

Date: 4/23/2021 11:04:56 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 100



Subject: Arrow Page Index: 100

Date: 4/23/2021 11:05:28 AM

Author: dsdrice Color:

Layer: Space:

Page Label: 100



Subject: Callout Page Index: 100

Date: 4/23/2021 11:06:02 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 100



Subject: Arrow Page Index: 100

Date: 4/23/2021 11:07:10 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 100

Provide basin and DP summary tables

Subject: Text Box Page Index: 100

Date: 4/23/2021 11:54:39 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: 100

Provide basin and DP summary tables

Will there be a culvert here?

101 (3)



Subject: Callout Page Index: 101

Date: 4/23/2021 11:38:19 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: 101

Show grading necessary to drain these areas



Date: 4/23/2021 11:41:46 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 101

What is the flow in the road? it seems like a separate channel is necessary with rundowns from the road where appropriate and ditchouts on the

south.

Subject: Text Box Page Index: 101

Space:

Date: 4/23/2021 11:54:31 AM

Author: dsdrice
Color: Layer:

Page Label: 101

Provide basin and DP summary tables

102 (5)



Subject: Callout Page Index: 102

Date: 4/23/2021 11:42:12 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 102

Label sizing



Subject: Text Box Page Index: 102

Date: 4/23/2021 11:46:47 AM

Author: dsdrice Color:

Layer: Space:

Page Label: 102

7020



Subject: Callout Page Index: 102

Date: 4/23/2021 11:47:48 AM

Author: dsdrice

Color: Layer: Space:

Page Label: 102

show wetlands



Subject: Text Box Page Index: 102

Date: 4/23/2021 11:50:35 AM

Author: dsdrice
Color: Layer:
Space:

Page Label: 102

Provide basin and DP summary tables



Date: 4/23/2021 6:01:06 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 102

Provide DP. Show a channel or pipe system

103 (19)



Subject: Callout Page Index: 103

Date: 4/23/2021 1:08:22 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Show outfall



Subject: Callout Page Index: 103

Date: 4/23/2021 1:09:04 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Show proposed conveyance



Subject: Callout Page Index: 103

Date: 4/23/2021 1:57:43 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Wetland boundary is not correct, should be in

channel.



Subject: Callout Page Index: 103

Date: 4/23/2021 2:02:54 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Show proposed contours for Poco Road (under

construction)

https://epcdevplanreview.com/Public/ProjectDetails

/111186



Subject: Callout Page Index: 103

Date: 4/23/2021 2:20:13 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

low point is here - ensure that overflow path and conveyance is at the low point.



Date: 4/23/2021 2:26:37 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

adjust text



Subject:

Page Index: 103

Date: 4/23/2021 2:40:46 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103



Subject: Arrow Page Index: 103

Date: 4/23/2021 2:41:21 PM

Author: dsdrice Color:

Layer: Space:

Page Label: 103



Subject:

Page Index: 103

Date: 4/23/2021 2:42:46 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103



Subject: Callout Page Index: 103

Date: 4/23/2021 4:05:30 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103





Subject: Callout Page Index: 103

Date: 4/23/2021 4:05:54 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

provide DPs for all inlets



Date: 4/23/2021 4:06:48 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

adjust text



Subject: Callout Page Index: 103

Date: 4/23/2021 4:08:52 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Label channel flows - MDDP/DPBS/FEMA



Subject: Cloud+ Page Index: 103

Date: 4/23/2021 4:09:51 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

contours don't match / missing?



Subject: Callout Page Index: 103

Date: 4/23/2021 4:12:03 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Show the access road grading all the way to the north property line.



Subject: Callout Page Index: 103

Date: 4/23/2021 4:13:02 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Access road won't work on this slope.



Subject: Callout Page Index: 103

Date: 4/23/2021 4:14:48 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 103

Label proposed retaining walls



Date: 4/23/2021 4:16:13 PM

Author: dsdrice
Color: Layer:
Space:

Page Label: 103

Channel improvements need to be within a tract



Subject: Callout Page Index: 103

Date: 4/23/2021 4:35:23 PM

Author: dsdrice Color:

Layer: Space:

Page Label: 103

show pond overflow spillway

104 (11)



Subject:

Page Index: 104

Date: 4/23/2021 1:06:33 PM

Author: dsdrice Color: Layer: Space:

Page Label: 104



Subject: Text Box Page Index: 104

Date: 4/23/2021 1:07:17 PM

Author: dsdrice Color: Layer:

Space:

Page Label: 104

Provide FSD for Vollmer Road runoff



Subject: Callout Page Index: 104

Date: 4/23/2021 11:53:43 AM

Author: dsdrice Color: Layer:

Space: Page Label: 104 Label basin and DP



Subject: Arrow Page Index: 104

Date: 4/23/2021 2:35:15 PM

Author: dsdrice
Color: Layer:
Space:



Subject:

Page Index: 104

Date: 4/23/2021 2:35:50 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 104



Subject: Callout Page Index: 104

Date: 4/23/2021 2:36:01 PM

Author: dsdrice Color: Layer:

Page Label: 104

basin line?



Subject:

Space:

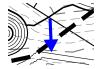
Page Index: 104

Date: 4/23/2021 2:36:54 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 104



Subject: Arrow Page Index: 104

Date: 4/23/2021 2:37:48 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 104



Subject: Arrow Page Index: 104

Date: 4/23/2021 3:13:05 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 104



Subject: Callout Page Index: 104

Date: 4/23/2021 3:13:39 PM

Author: dsdrice Color:

Color: Layer: Space:

Page Label: 104

is flow direction correct?



Date: 4/23/2021 4:32:07 PM

Author: dsdrice

Color: Layer: Space:

Page Label: 104

Show maintenance access to the inlet forebay

105 (5)



Subject: Callout Page Index: 105

Date: 4/23/2021 1:05:06 PM

Author: dsdrice Color: Layer: Space:

Page Label: 105

Show downstream system

Subject: Area Measurement

Page Index: 105

Date: 4/23/2021 2:48:27 PM

Author: dsdrice
Color: Layer:
Space:

Page Label: 105

8,818 sf



Subject: Area Measurement

Page Index: 105

Date: 4/23/2021 2:51:21 PM

Author: dsdrice
Color:

Layer: Space:

Page Label: 105

69,140 sf



Subject: Callout Page Index: 105

Date: 4/23/2021 2:56:41 PM

Author: dsdrice Color: Layer: Space:

Page Label: 105

Include Vollmer Road in the appropriate areas



Subject: Callout Page Index: 105

Date: 4/23/2021 2:57:24 PM

Author: dsdrice Color: Layer:

Space:

Page Label: 105

Untreated developed areas also need to be shown, with acres. Can't be over 1 acre left untreated.

108 (1)



Subject: Rectangle Page Index: 108

Date: 11/20/2019 10:43:58 AM

Author: CS
Color: Layer:
Space:

Page Label: 108

109 (2)



Subject: Rectangle Page Index: 109

Date: 4/21/2020 10:55:16 AM

Author: CS
Color: Layer:
Space:

Page Label: 109



Subject: Callout Page Index: 109

Date: 4/21/2020 10:55:41 AM

Author: CS Color: ■ Layer: Space:

Page Label: 109

SITE

110 (13)



Subject: Rectangle Page Index: 110

Date: 1/27/2021 11:33:16 AM

Author: FC Color: Layer: Space:

Page Label: 110



Subject: Callout Page Index: 110

Date: 1/27/2021 11:35:00 AM

Author: FC Color: ■ Layer: Space:

Page Label: 110

Runoff in attenuated in an existing pond. The existing release rate across the site is 16 cfs



Subject: Text Box Page Index: 110

Date: 1/27/2021 11:38:53 AM

Author: FC Color: ■ Layer: Space:

Page Label: 110

SITE



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:20 PM

Author: FC Color: Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:26 PM

Author: FC Color: Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:31 PM

Author: FC Color: ■ Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:42 PM

Author: FC Color: ■ Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:47 PM

Author: FC Color: Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:53 PM

Author: FC Color: Layer: Space:



Subject: Line Page Index: 110

Date: 1/27/2021 12:38:59 PM

Author: FC Color: Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:39:04 PM

Author: FC Color: Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:39:10 PM

Author: FC Color: ■ Layer: Space:

Page Label: 110



Subject: Line Page Index: 110

Date: 1/27/2021 12:39:17 PM

Author: FC Color: ■ Layer: Space:

Page Label: 110

111 (13)



Subject: Rectangle Page Index: 111

Date: 1/27/2021 11:33:16 AM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Callout Page Index: 111

Date: 1/27/2021 11:35:00 AM

Author: FC Color: ■ Layer: Space:

Page Label: 111

Runoff in attenuated in an existing pond. The existing release rate across the site is 16 cfs



Subject: Line Page Index: 111

Date: 1/27/2021 12:38:20 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 12:38:31 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 12:38:42 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 12:38:47 PM

Author: FC Color: ■ Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 12:38:53 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 12:38:59 PM

Author: FC Color: Layer: Space:



Subject: Line Page Index: 111

Date: 1/27/2021 12:39:04 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line

Page Index: 111 Date: 1/27/2021 12:39:10 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 12:39:17 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Text Box Page Index: 111

Date: 1/27/2021 2:16:02 PM

Author: FC Color: Layer: Space:

Page Label: 111



Subject: Line Page Index: 111

Date: 1/27/2021 2:27:56 PM

Author: FC Color: Layer: Space:

Page Label: 111

SITE