ENG-SF21021-R3-FDR.pdf Markup Summary

---

9 (1)

Subject: Text Box
Page Index: 9
Date: 3/3/2022 1:26:46 PM
Author: CDurham
Color: ▪
Layer:
Space:
Page Label: 9

Approximately 6.6 acres not accounted for from total site area of 75.83 acres.

---

13 (1)

Subject: Callout
Page Index: 13
Date: 3/8/2022 5:31:59 PM
Author: CDurham
Color: ▪
Layer:
Space:
Page Label: 13

How will this flow get to the curb and inlet? it appears that a pipe is needed due to the basin elevation. From drainage map, it appears c&g is higher than outlet pipe

---

14 (1)

Subject: Text Box
Page Index: 14
Date: 3/3/2022 2:10:29 PM
Author: CDurham
Color: ▪
Layer:
Space:
Page Label: 14

Maintenance Agreement, O&M Manual and MS4/SDI sheets will need to be provided for sediment basins which are becoming permanent facilities

---

19 (2)

Subject:
Page Index: 19
Date: 3/8/2022 5:58:12 PM
Author: dsdrice
Color: ▪
Layer:
Space:
Page Label: 19

Subject: Callout
Page Index: 19
Date: 3/8/2022 6:48:21 PM
Author: dsdrice
Color: ▪
Layer:
Space:
Page Label: 19

Add a note to see below regarding high shear stresses.

20 (1)
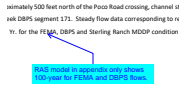
Subject: Callout
Page Index: 20
Date: 3/7/2022 12:33:25 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 20

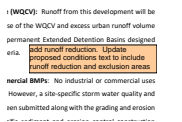RAS model in appendix only shows 100-year for FEMA and DBPS flows.

22 (1)
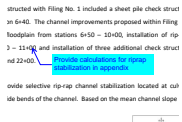
Subject: Callout
Page Index: 22
Date: 3/7/2022 12:35:42 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 22
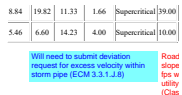
Provide calculations for riprap stabilization in appendix

25 (1)

Subject: Engineer
Page Index: 25
Date: 2/16/2022 4:13:02 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 25

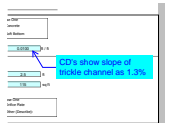add runoff reduction. Update proposed conditions text to include runoff reduction and exclusion areas

112 (1)

Subject: Text Box
Page Index: 112
Date: 3/7/2022 12:45:20 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 112

Will need to submit deviation request for excess velocity within storm pipe (ECM 3.3.1.J.8)

133 (1)

Subject: Callout
Page Index: 133
Date: 3/3/2022 5:21:30 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 133

CD's show slope of trickle channel as 1.3%

135 (24)

Subject: Polygon
Page Index: 135
Date: 2/16/2022 9:34:40 AM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Polygon
Page Index: 135
Date: 2/16/2022 9:34:21 AM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Polygon
Page Index: 135
Date: 2/16/2022 9:34:35 AM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model
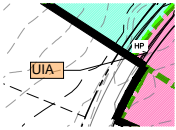
Subject: Engineer
Page Index: 135
Date: 2/16/2022 9:35:39 AM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

UIA

Subject: Engineer
Page Index: 135
Date: 2/16/2022 10:13:37 AM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

RPA
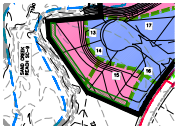
Subject: Polygon
Page Index: 135
Date: 2/16/2022 10:12:06 AM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model
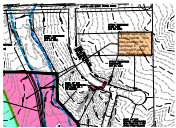
Subject: Engineer
Page Index: 135
Date: 2/16/2022 3:38:39 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Change color and add to legend. This area
qualifies for Exclusion E - Large Lot Single Family
(see PBMP Form)

Subject: Engineer
Page Index: 135
Date: 2/16/2022 3:37:43 PM
Author: dotprete
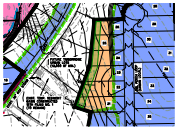**Color:** ■
Layer:
Space:
Page Label: [1] Model

Change color and add to legend. This area qualifies for Exclusion H - Stream Stabilization (see PBMP Form)

Subject: Polygon
Page Index: 135
Date: 2/16/2022 3:36:00 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Polygon
Page Index: 135
Date: 2/16/2022 3:38:24 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Polygon
Page Index: 135
Date: 2/16/2022 3:39:57 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Engineer
Page Index: 135
Date: 2/16/2022 4:05:57 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

These areas should be pink for runoff reduction. Provide calculations
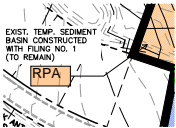
Subject: Engineer
Page Index: 135
Date: 2/16/2022 3:40:48 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

RPA
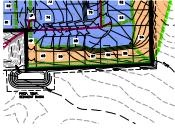
Subject: Polygon
Page Index: 135
Date: 2/16/2022 3:43:00 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Engineer
Page Index: 135
Date: 2/16/2022 3:41:26 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

RPA
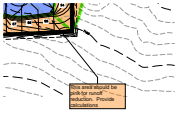
Subject: Engineer
Page Index: 135
Date: 2/16/2022 3:43:44 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

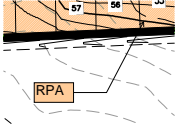This area should be pink for runoff reduction.
Provide calculations
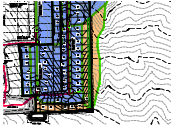
Subject: Polygon
Page Index: 135
Date: 2/16/2022 3:43:09 PM
Author: dotprete
Color: ■
Layer:
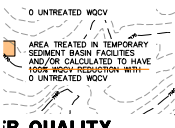**Space:**
Page Label: [1] Model
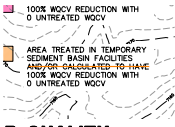
Subject: Line
Page Index: 135
Date: 2/16/2022 4:01:35 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Line
Page Index: 135
Date: 2/16/2022 4:01:49 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: [1] Model

Subject: Line
Page Index: 135
Date: 2/16/2022 4:01:54 PM
Author: dotprete
Color: 🟧
Layer:
Space:
Page Label: [1] Model
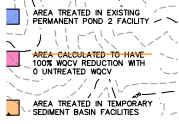
Subject: Line
Page Index: 135
Date: 2/16/2022 4:02:14 PM
Author: dotprete
Color: 🟧
Layer:
Space:
Page Label: [1] Model
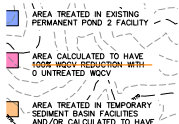
Subject: Line
Page Index: 135
Date: 2/16/2022 4:02:17 PM
Author: dotprete
Color: 🟧
Layer:
Space:
Page Label: [1] Model
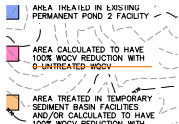
Subject: Line
Page Index: 135
Date: 2/16/2022 4:02:21 PM
Author: dotprete
Color: 🟧
Layer:
Space:
Page Label: [1] Model
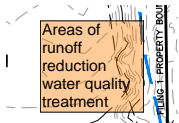
Subject: Engineer
Page Index: 135
Date: 2/16/2022 4:03:52 PM
Author: dotprete
Color: ⬛
Layer:
Space:
Page Label: [1] Model

Areas of runoff reduction water quality treatment

---

136 (8)

Subject: Engineer
Page Index: 136
Date: 2/16/2022 9:15:22 AM
Author: dotprete
Color: ⬛
Layer:
Space:
Page Label: 136

provide a figure showing all proposed UIA and RPA areas to be utilized for runoff reduction. All RPA areas will need to be within a no build/drainage easement and discussed in the maintenance agreement and O&M Manual. Unresolved.

Subject: Engineer
Page Index: 136
Date: 2/16/2022 3:45:40 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 136

Please show on figure 60' interface (i.e. drainage way)
See WQ Treatment Plan markups

Subject: Engineer
Page Index: 136
Date: 2/16/2022 3:46:31 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 136

houses (for large lots >2.5ac) and yards do not need to be included in calculations

---

Subject: Engineer
Page Index: 136
Date: 2/16/2022 3:31:45 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 136

break up into two roadway sections

Subject: Engineer
Page Index: 136
Date: 2/16/2022 3:52:34 PM
Author: dotprete
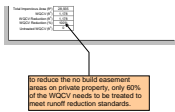**Color:** ■
Layer:
Space:
Page Label: 136

Note. all RPA areas should be within a drainage or no build easement.

Subject: Line
Page Index: 136
Date: 2/16/2022 3:47:17 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 136

Subject: Line
Page Index: 136
Date: 2/16/2022 3:47:21 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 136

Subject: Engineer
Page Index: 136
Date: 2/16/2022 3:52:20 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 136

to reduce the no build easement areas on private property, only 60% of the WQCV needs to be treated to meet runoff reduction standards.

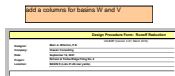
137 (2)
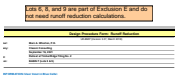
Subject: Engineer
Page Index: 137
Date: 2/16/2022 3:48:31 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 137

Lots 6, 8, and 9 are part of Exclusion E and do not need runoff reduction calculations.
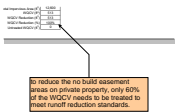

Subject: Line
Page Index: 137
Date: 2/16/2022 3:50:26 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 137

---

138 (2)

Subject: Engineer
Page Index: 138
Date: 2/16/2022 3:50:12 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 138

add a columns for basins W and V

Subject: Engineer
Page Index: 138
Date: 2/16/2022 3:51:57 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 138

to reduce the no build easement areas on private property, only 60% of the WQCV needs to be treated to meet runoff reduction standards.
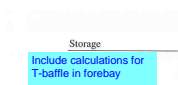
---

139 (1)
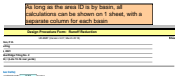
Subject: Engineer
Page Index: 139
Date: 2/16/2022 3:55:04 PM
Author: dotprete
Color: ■
Layer:
Space:
Page Label: 139

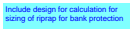As long as the area ID is by basin, all calculations can be shown on 1 sheet, with a separate column for each basin

154 (1)

Subject: Text Box
Page Index: 154
Date: 3/3/2022 5:23:04 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 154

Include calculations for T-baffle in forebay

160 (2)

Subject: Text Box
Page Index: 160
Date: 3/7/2022 8:32:27 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 160

Include design for calculation for sizing of riprap for bank protection

---

Subject: Text Box
Page Index: 160
Date: 3/7/2022 8:32:34 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 160

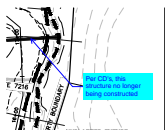Include design for secondary bypass channel for wetlands and discuss in report

161 (6)

Subject: Highlight
Page Index: 161
Date: 3/8/2022 5:41:52 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] CHANNEL STATIONS

Subject: Callout
Page Index: 161
Date: 3/7/2022 8:56:01 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] CHANNEL STATIONS

Missing proposed check structure

Subject: Callout
Page Index: 161
Date: 3/7/2022 9:43:03 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] CHANNEL STATIONS

Per CD's, this structure no longer being constructed

Subject: Highlight
Page Index: 161
Date: 3/8/2022 5:41:52 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] CHANNEL STATIONS
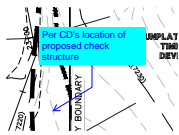
Subject: Callout
Page Index: 161
Date: 3/7/2022 9:44:24 AM
Author: CDurham
Color: ■
Layer:
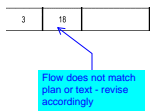**Space:**
Page Label: [1] CHANNEL STATIONS

Per CD's location of proposed check structure
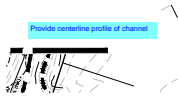
Subject: Text Box
Page Index: 161
Date: 3/7/2022 9:47:22 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] CHANNEL STATIONS

Provide centerline profile of channel

---

203 (1)

Subject: Callout
Page Index: 203
Date: 3/7/2022 10:23:06 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] Layout1

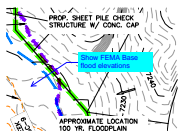Flow does not match plan or text - revise accordingly

---

204 (4)

Subject: Callout
Page Index: 204
Date: 3/7/2022 10:35:40 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] Layout1

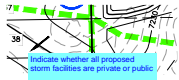Provide calculations in appendix for sizing rocks/riprap in check dams

---

Subject: Callout
Page Index: 204
Date: 3/7/2022 10:36:19 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] Layout1

Label riprap protection

Subject: Callout
Page Index: 204
Date: 3/7/2022 10:45:13 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] Layout1

Show FEMA Base flood elevations

Subject: Text Box
Page Index: 204
Date: 3/7/2022 10:47:12 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] Layout1

Indicate whether all proposed storm facilities are private or public

205 (1)
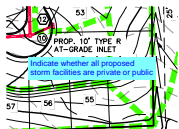
Subject: Text Box
Page Index: 205
Date: 3/7/2022 10:48:55 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] Layout2

Indicate whether all proposed storm facilities are private or public