# ENG-SP22004-R2-PDR-MDDP.pdf Markup Summary

1 (1)		
Refer to comments also made on SKP-22-004	Subject: Text Box Page Index: 1 Date: 12/29/2022 3:25:44 PM Author: CDurham Color: Layer: Space: Page Label: 1	Refer to comments also made on SKP-22-004
4 (3)		
32 <mark>1.37</mark> ac	Subject: Page Index: 4 Date: 1/5/2023 3:17:48 PM Author: dsdrice Color: Layer: Space: Page Label: 4	1.37
84 <mark>.74</mark> ac	Subject: Page Index: 4 Date: 1/5/2023 3:18:17 PM Author: dsdrice Color: Layer: Space: Page Label: 4	74
61 <mark>.90</mark> ac	Subject: Page Index: 4 Date: 1/5/2023 3:18:43 PM Author: dsdrice Color: Layer: Space: Page Label: 4	90
11 (2)		
were jeden Weld Subt. Hing 1: The first from the large large distance merces the endower and the second sec	Subject: Callout Page Index: 11 Date: 1/3/2023 4:22:01 PM Author: CDurham Color: Layer: Space: Page Label: 11	Include discussion why flows have almost doubled for 5-year scenario. What is the impact to downstream facilities during this interim condition
The constraints of the state o	Subject: Callout Page Index: 11 Date: 1/3/2023 4:23:03 PM Author: CDurham Color: Layer: Space: Page Label: 11	Include discussion why flows have increased for 5-year scenario. What is the impact to downstream facilities during this interim condition

## 13 (1)

the Holt's in the intersection wer represent the revised total area tribu- How Reheated a Timber/Rago Fling No. 2 at design poort 15 been accounted for?	Subject: Text Box Page Index: 13 Date: 1/3/2023 4:27:03 PM Author: CDurham Color: Layer: Space: Page Label: 13 Subject: Text Box Page Index: 14 Date: 1/4/2023 7:13:39 AM Author: CDurham Color: Layer: Space: Page Label: 14	Have the areas and flows from Retreat at TimberRidge Filing No. 2 at design point 15 been accounted for? Location of future potential level spreader (Basin EX10A) was not shown on sheet 6. Please add to map.
these proposed level spreaders will be present developments. However, the general location v boundary lare for Starling Rachard, Reference De Location of House potential level spreader (Basica EXCRA) was not allower on sheet 6. Please add to map.	Page Index: 14 Date: 1/4/2023 7:13:39 AM Author: CDurham Color: Layer: Space:	EX10A) was not shown on sheet 6. Please add to
developments. However, the general location ve boundary live for targing banch (Irelevance to Location or discuss potential level effects and the second second second second shown on shere 6. Please add to map.	Page Index: 14 Date: 1/4/2023 7:13:39 AM Author: CDurham Color: Layer: Space:	EX10A) was not shown on sheet 6. Please add to
20 (5)		
eat at TimberF	Subject: Page Index: 20	natural
n a <mark>natural</mark> swa		
rarv sediment		
An of the ensemble of barrier that the second secon	Subject: Callout Page Index: 20 Date: 1/6/2023 10:05:42 AM Author: dsdrice Color: Layer: Space: Page Label: 20	Verify - address areas to the east if being diverted
ng nann Lait – House I, mees temporary taones v exty into Bain P I E, Basin P I E (B, I Bord, Q, L pade urban mislemb at the north end of this Prei xaray to apropood deviatram storm system with How will They bis captured? Provide total flows.	Subject: Callout Page Index: 20 Date: 1/6/2023 10:07:03 AM Author: dsdrice Color: Layer: Space: Page Label: 20	How will they be captured? Provide total flows.
ljacent Retreat	Subject:	natural
	Page Index: 20 Date: 1/6/2023 10:06:32 AM Author: dsdrice	
temporarv	Color: Co	

Subject: Callout Page Index: 20 Date: 1/6/2023 10:08:01 AM Author: dsdrice Color: Layer: Space: Page Label: 20

Date: 1/6/2023 8:28:19 AM

Subject: Callout

Page Index: 22

Author: dsdrice Color: Laver: Space:

Page Label: 22

Address how flows will be conveyed along the east side and to the TSB

"stage" or "zone" should be added to clarify that these are not totals

Provide SWMM modeled release rates also

"stage" or "zone" should be added to clarify that these are not totals

17.78 Ac. ft proposed

Subject: Callout Page Index: 23 Date: 1/6/2023 8:30:52 AM Author: dsdrice Color: Layer: Space: Page Label: 23

21.56 Ac. ft proposed

22 (1)

23 (5)

Subject: Callout Page Index: 23 Date: 1/6/2023 8:29:44 AM Author: dsdrice Color: Layer: Space: Page Label: 23

Subject: Callout Page Index: 23 Date: 1/6/2023 8:28:47 AM Author: dsdrice Color: Layer: Space:

Date: 1/6/2023 8:40:48 AM

Page Label: 23

Subject: Callout

Page Index: 23

Author: dsdrice Color: Layer: Space: Page Label: 23

Subject: Callout Provide SWMM modeled release rates also Page Index: 23 Date: 1/6/2023 8:29:57 AM Author: dsdrice Color: Layer: Space: Page Label: 23 24 (1) Subject: Callout outheasterly direction within the southwesterly? Page Index: 24 eek. At this location, the pipe system nce the "Final Design Report for Sand Date: 1/6/2023 8:34:14 AM ed September 2022 for these design Author: dsdrice southwesterly? Color: Layer: Space: Page Label: 24 27 (2) Subject: Text Box m EDB] (Same comments as above) Page Index: 27 Date: 1/6/2023 8:39:58 AM Author: dsdrice Q<sub>5</sub> = 234 cfs, Q<sub>100</sub> = 486 cfs Color: Layer: Space: Page Label: 27 Subject: Callout 14.33 Ac. ft proposed Page Index: 27 Date: 1/6/2023 8:42:41 AM Author: dsdrice Color: 📘 Layer: Space: Page Label: 27 29 (2) Subject: Text Box trum EDB (Same comments as above) Page Index: 29 Date: 1/6/2023 8:40:24 AM Author: dsdrice Q<sub>5</sub> = 97 cfs, Q<sub>100</sub> = 189 cfs Color: 📘 Oc = 2.0 cfs. Out = 48.9 cfs Layer: Space: Page Label: 29 ..... ..... Subject: Callout 6.44 Ac. ft proposed Page Index: 29 Date: 1/6/2023 8:46:13 AM Author: dsdrice Color: Layer: Space: Page Label: 29

31 (4)		
	Subject: Page Index: 31 Date: 1/6/2023 8:54:11 AM Author: dsdrice Color: Layer: Space: Page Label: 31	Prior to the school development, these flows will be handled by a temporary sediment basin.
See comment memo. prepared by JR Engineering, LLC, dated uted northeast into Pond FSD-14A. Hov	Subject: Text Box Page Index: 31 Date: 1/6/2023 8:56:18 AM Author: dsdrice Color: Layer: Space: Page Label: 31	See comment memo.
m ED8) (Same comments as above) $Q_{0} = 115 \text{ cfs}, Q_{00} = 227 \text{ cfs}$ et: $Q_{1} = 1.9 \text{ cfs}, Q_{00} = 242 \text{ cfs}$	Subject: Text Box Page Index: 31 Date: 1/6/2023 9:55:35 AM Author: dsdrice Color: Layer: Space: Page Label: 31	(Same comments as above)
The structures of the equation of the the structures are structures at the structure of th	Subject: Callout Page Index: 31 Date: 1/6/2023 10:03:05 AM Author: dsdrice Color: Layer: Space: Page Label: 31	8.03 Ac. ft proposed
32 (2)		
, = <mark>8</mark> fs)	Subject: Text Box Page Index: 32 Date: 12/29/2022 2:42:02 PM Author: CDurham Color: Layer: Space: Page Label: 32	8
<mark>= 16</mark> fs	Subject: Text Box Page Index: 32 Date: 12/29/2022 2:42:18 PM Author: CDurham Color: Layer: Space: Page Label: 32	16

35	(1	)
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35 (1)		
And were a Planting and the a standing through the structure with a standing through a structure with a structure through a structure through a structure through a structure structure and a structure structure and a structure	Subject: Callout Page Index: 35 Date: 1/6/2023 10:29:34 AM Author: dsdrice Color: Layer: Space: Page Label: 35	State that the manner of discharge will match existing conditions or easements will be obtained for any changes.
36 (1)		
Image: state in the s	Subject: Callout Page Index: 36 Date: 12/29/2022 2:44:08 PM Author: CDurham Color: Layer: Space: Page Label: 36	Include discussion on DP's where developed 5-year flow is larger than 2018 MDDP 5-year flows
78 (1)		
EXISTING ( Include hold used to Shift model, Alto Include actual SWMM model in net submittal	Subject: Text Box Page Index: 78 Date: 1/3/2023 3:04:54 PM Author: CDurham Color: Layer: Space: Page Label: 68	Include input and output information within SWMM model. Also include actual SWMM model in next submittal.
81 (1)		
DEVELOPED COM Includes input and output from this which be actual source. Was also be actual SWMM model in next submittal.	Subject: Text Box Page Index: 81 Date: 1/3/2023 3:06:45 PM Author: CDurham Color: Layer: Space: Page Label: 71	Include input and output information within SWMM model. Also include actual SWMM model in next submittal.
32 (1)		
ations See drainage map for comments on summary table.	Subject: Text Box Page Index: 82 Date: 1/3/2023 3:07:24 PM Author: CDurham Color: Layer: Space: Page Label: 72	See drainage map for comments on summary table.
85 (1)		
N impervious per basins on these spreachaets are different than N impervious alwans on basin maps). Peake provide spreachaeterprojet alwans how N impervious is calculated and the impervious is calculated and calculations.	Subject: Text Box Page Index: 85 Date: 1/3/2023 3:52:14 PM Author: CDurham Color: Layer: Space: Page Label: 75	% impervious per basins on these spreadsheets are different than % impervious shown on basin spreadsheets (appendix and maps). Please provide spreadsheet/input showing how % impervious is calculated and update %'s to match throughout calculations.

Page Label: 75

#### 86 (1)



Subject: Callout Page Index: 86 Date: 1/3/2023 3:29:09 PM Author: CDurham Color: Layer: Space: Page Label: 76

### 100 (1)



Subject: Callout Page Index: 100 Date: 1/6/2023 10:44:30 AM Author: dsdrice Color: Layer: Space: Page Label: [1] Model

105 (1)



Subject: Callout Page Index: 105 Date: 1/6/2023 10:02:35 AM Author: dsdrice Color: Layer: Space: Page Label: 134

#### 111 (1)



Subject: Callout Page Index: 111 Date: 1/6/2023 8:42:18 AM Author: dsdrice Color: L Layer: Space: Page Label: 140

117 (2)



Subject: Callout Page Index: 117 Date: 12/29/2022 2:45:57 PM Author: CDurham Color: Layer: Space: Page Label: 146

Subject: Callout Page Index: 117 Date: 1/6/2023 8:45:05 AM Author: dsdrice Color: Layer: Space: Page Label: 146 Include explanation of why these flows are larger than MDDP flows.

Where is this area treated?

Hydrograph from SWMM model should be copied in to this spreadsheet to get the correct inflows.

Hydrograph from SWMM model should be copied in to this spreadsheet to get the correct inflows.

Outflow ratio needs to be closer to 1 or fill in "Override Predev Peak Q" based on 139 acre historic contributing area. Add a note to this sheet either way

Hydrograph from SWMM model should be copied in to this spreadsheet to get the correct inflows.

## 123 (2)

1 <th>Subject: Callout Page Index: 123 Date: 1/6/2023 8:32:38 AM Author: dsdrice Color: Layer: Space: Page Label: 152</th> <th>Hydrograph from SWMM model should be copied in to this spreadsheet.</th>	Subject: Callout Page Index: 123 Date: 1/6/2023 8:32:38 AM Author: dsdrice Color: Layer: Space: Page Label: 152	Hydrograph from SWMM model should be copied in to this spreadsheet.
	Subject: Page Index: 123 Date: 1/6/2023 8:24:50 AM Author: dsdrice Color: Layer: Space: Page Label: 152	The user can override the default CUHP hydrographs and runoff volumes by entering new values in the Inflow Hydrographs table (Columns W through AF).
129 (3)		
0.02 71.1 2.5	Subject: Page Index: 129 Date: 1/6/2023 8:31:43 AM Author: dsdrice Color: Layer: Space: Page Label: 158	71.1
0.92 294.1 66.0	Subject: Page Index: 129 Date: 1/6/2023 8:31:56 AM Author: dsdrice Color: Layer: Space: Page Label: 158	294.1
	Subject: Callout Page Index: 129 Date: 1/6/2023 8:42:04 AM Author: dsdrice Color: Layer: Space: Page Label: 158	Hydrograph from SWMM model should be copied in to this spreadsheet to get the correct inflows.

134 (2)



Subject: Page Index: 134 Date: 1/6/2023 9:41:05 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 1



Subject: Callout Page Index: 134 Date: 1/6/2023 9:41:47 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 1

#### 136 (1)

List the DP's which correspond to MODP DPy wing LABELS AS SHOWN SOUTH BOUNDARY PRE-DEVELOPED Subject: Callout Page Index: 136 Date: 1/3/2023 3:44:19 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 3

137 (2)

Ramote de charge tamel Accesse charge tamel des not match labels on rep Subject: Callout Page Index: 137 Date: 1/3/2023 3:45:37 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 1 List the DP's which correspond to MDDP DP's

Show basin contributing flows to SR

Basins do change (area). Acreage shown in table does not match labels on map

The second

Subject: Callout Page Index: 137 Date: 1/6/2023 9:58:20 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 1

138 (18)



Subject: Callout Page Index: 138 Date: 1/3/2023 3:48:39 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 2

Subject: Callout Page Index: 138 Date: 12/29/2022 2:49:00 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 2 Could not determine how 5-year flow was determined. DP 4(218 cfs), DP 5 (53 cfs), DP 6 (55 cfs) & Basin P1-a (6 cfs) is 332 cfs.

Provide flow arrow

does not match labels on map

Label this basin if it's contributing to the swale



Subject: Text Box Page Index: 138 Date: 12/29/2022 2:50:24 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 2

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Show all storm drains and inlets upstream of this

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Label this sub-basin. Is this in the model?



Subject: Callout Page Index: 138 Date: 1/6/2023 9:58:44 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

Provide DP and flows



Subject: Callout Page Index: 138 Date: 1/6/2023 9:43:26 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

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Call out swale in lots or tract



Subject: Callout Page Index: 138 Date: 1/6/2023 9:43:52 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

Subject: Callout

Page Index: 138

Author: dsdrice

How will swale flows be captured?

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Color: Color: Space: Space: Page Label: [1] SHEET 2 Subject: Page Index: 138 Date: 1/6/2023 9:47:12 AM Author: dsdrice

Date: 1/6/2023 9:46:29 AM

Author: dsdrice Color: Color: Space: Space: Page Label: [1] SHEET 2



Subject: Callout Page Index: 138 Date: 1/6/2023 9:47:57 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

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Address conveyance, flows and outfall



..... Subject: Callout Page Index: 138 Date: 1/6/2023 9:49:57 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

Too many proposed contours



. . . . . . . . . . . . . . . . -----Subject: Callout Page Index: 138 Date: 1/6/2023 9:57:08 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

Provide DPs for swale and road flows

Subject: Callout Page Index: 138 Date: 1/6/2023 9:59:33 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

Show storm drains and inlets for this area

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Subject: Callout Page Index: 138 Date: 1/6/2023 10:00:09 AM Author: dsdrice Color: Laver: Space: Page Label: [1] SHEET 2

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Show storm drains and inlets for this area



Subject: Page Index: 138 Date: 1/6/2023 10:51:31 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2



Subject: Page Index: 138 Date: 1/6/2023 10:51:31 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

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Subject: Callout Page Index: 138 Date: 1/6/2023 10:52:57 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

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Too many contours



Subject: Callout Page Index: 138 Date: 1/6/2023 10:54:03 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

Areas of concern for cross-lot drainage. Provide flow arrows for swales



Subject: Callout Page Index: 138 Date: 1/6/2023 10:55:29 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 2

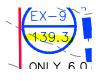
Label all stubs

139 (8)



Subject: Callout Page Index: 139 Date: 1/3/2023 3:49:29 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 3

Areas appear to be switched for these 2 basins



Subject: Highlight Page Index: 139 Date: 1/3/2023 3:49:54 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 3



Subject: Highlight Page Index: 139 Date: 1/3/2023 3:49:56 PM Author: CDurham Color: Layer: Space: Page Label: [1] SHEET 3 Subject: Highlight '10 Page Index: 139 Date: 1/3/2023 3:49:58 PM Author: CDurham Color: 1-Layer: Space: Page Label: [1] SHEET 3 Subject: Callout Areas shown for these basins do not match map Page Index: 139 labels. Date: 1/3/2023 3:50:34 PM Author: CDurham P1-A1 P1-A2 Avg. Effective Color: Layer: Space: Page Label: [1] SHEET 3 Subject: Cloud+ See comment memo Page Index: 139 Date: 1/6/2023 9:31:42 AM Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 3 Subject: Callout Show all storm drains and inlets upstream of this Page Index: 139 Date: 1/6/2023 9:37:05 AM Author: dsdrice Color: Laver: Space: Page Label: [1] SHEET 3 Subject: Callout Show storm drains and inlets for this area Page Index: 139 Date: 1/6/2023 10:00:34 AM

Author: dsdrice Color: Layer: Space: Page Label: [1] SHEET 3