## ENG-PUDSP20007-R2-PDRFDR.pdf Markup Summary

| 1(1) |  |  |
| :---: | :---: | :---: |
| Sse commentiletera aso | Subject: Text Box <br> Page Index: 1 <br> Date: 12/3/2021 1:10:02 PM <br> Author: dsdrice <br> Color: <br> Layer: <br> Space: <br> Page Label: 1 | See comment letter also |
| 2 (2) |  |  |
| R. Campbell, ( | Subject: <br> Page Index: 2 <br> Date: 12/3/2021 12:43:54 PM <br> Author: dsdrice <br> Color: <br> Layer: <br> Space: <br> Page Label: 2 |  |
|  | Subject: <br> Page Index: 2 <br> Date: 12/3/2021 12:44:08 PM <br> Author: dsdrice <br> Color: <br> Layer: <br> Space: <br> Page Label: 2 |  |
| 6 (2) |  |  |
| !a intersection at tquin <br> in B along the east side <br> Point $2\left(Q_{5}=4.3 \mathrm{cfs}\right.$ an | Subject: Callout <br> Page Index: 6 <br> Date: 11/22/2021 11:05:21 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 6 | B-1? |
|  | Subject: Callout <br> Page Index: 6 <br> Date: 11/22/2021 11:05:33 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 6 | 1.7 cfs per Surface routing spreadsheet. |


| 7 (9) |  |  |
| :---: | :---: | :---: |
|  | Subject: Callout <br> Page Index: 7 <br> Date: 11/22/2021 11:05:50 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | Pipe routing spreadsheet shows DP 5 |
|  | Subject: Callout <br> Page Index: 7 <br> Date: 11/22/2021 11:06:05 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | Basin B-2 does not show a design point on the drainage map. |
|  | Subject: Callout <br> Page Index: 7 <br> Date: 11/22/2021 11:06:19 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | At Tract $A$, leading into the pond, there is a ridge line, so how does any overflow cross over the ridge and into the pond? From grading, looks like area is more likely to end up in drainage ditch along Constitution. |
| $100=1.7$ cfs). The <br> id. <br> Discussion of DP's 5 \& 6? <br> गposed expanded | Subject: Text Box <br> Page Index: 7 <br> Date: 11/22/2021 11:06:26 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | Discussion of DP's 5 \& 6? |
| $n$ is via Tract A directly into the proposed pc <br> ${ }_{3} \sin$ G (1.87 Acres) flow directly into the p <br> nel. What are the flows generated by these basins? $\qquad$ <br> , Akers Drive and Constitution Avenue | Subject: Text Box <br> Page Index: 7 <br> Date: 11/22/2021 11:06:34 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | What are the flows generated by these basins? |
| t street flows directl <br> sheet? | Subject: Callout <br> Page Index: 7 <br> Date: 11/22/2021 11:06:44 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | sheet? |


|  | Subject: Callout <br> Page Index: 7 <br> Date: 11/22/2021 11:06:55 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | Include discussion of all basins offsite that contribute and acreage \& \% impervious they are. |
| :---: | :---: | :---: |
| 2 at this iocation is given by <br> e at this location is via Tract / $\qquad$ $E$ ? <br> 3 Acres) and Basin G (1.87 f y drainage channel. | Subject: Callout <br> Page Index: 7 <br> Date: 12/3/2021 12:54:33 PM <br> Author: dsdrice <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | $E$ ? |
|  | Subject: Callout <br> Page Index: 7 <br> Date: 12/3/2021 12:58:59 PM <br> Author: dsdrice <br> Color: <br> Layer: <br> Space: <br> Page Label: 7 | Explain what is being done with the re-routing and the old pipe (needs to be filled or at least plugged) |


| 8 (4) |  |  |
| :---: | :---: | :---: |
| $\sqrt{2=2}$ | Subject: Callout <br> Page Index: 8 <br> Date: 11/22/2021 11:07:13 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 8 | UD detention Spreadsheet shows 2.5' depth at micro-pool. Revise accordingly. |
|  | Subject: Text Box <br> Page Index: 8 <br> Date: 11/22/2021 11:07:21 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 8 | Add discussion on emergency spillway, including riprap sizing calculation. |
| $=\square=$ $\square=$ | Subject: Cloud+ <br> Page Index: 8 <br> Date: 11/22/2021 11:08:29 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 8 | Update volumes per US Detention spreadsheet in appendix |


| Subject: Cloud+ | Update to match flow shown in UD detention <br> Page Index: 8 <br> Date: 11/22/2021 11:09:18 AM <br> Author: CDurham <br> Color: <br> Layer: |
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| 11(2) |  |  |
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|  | Page Index: 11 | (the fe |
|  | Date: 12/3/2021 1:01:37 PM |  |
|  | Author: dsdrice |  |
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|  | Page Label: 11 |  |
| the 2020 dra |  |  |
|  | Subject: | 2020 |
|  | Page Index: 11 |  |
|  | Date: 12/3/2021 1:01:53 PM |  |
|  | Author: dsdrice |  |
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|  | Spage: ${ }^{\text {Sabel: }} 11$ |  |


| 27 (1) |  |  |
| :---: | :---: | :---: |
| $\pm$ | Subject: Text Box |  |
|  | Page Index: 27 | Include copies of calculation sheets that |
|  | Date: 11/22/2021 11:09:53 AM |  |
|  | Author: CDurham |  |
|  | Color: |  |
|  | Space: |  |
|  | Page Label: 14 |  |


| 33 (2) |  |  |
| :---: | :---: | :---: |
|  | Subject: Callout <br> Page Index: 33 <br> Date: 11/22/2021 11:10:18 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 20 | What about storm flow from existing system that releases into pond? |
|  | Subject: Text Box <br> Page Index: 33 <br> Date: 11/22/2021 11:10:25 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 20 | Include separate design points where 48" pipe enters pond and 24 " pipe enters pond |


| 34 (2) |  |  |
| :---: | :---: | :---: |
|  | Subject: Callout <br> Page Index: 34 <br> Date: 11/22/2021 11:10:44 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 21 | 18" |
|  | Subject: Callout <br> Page Index: 34 <br> Date: 11/22/2021 11:10:53 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 21 | Oversizes pipe as DP 5 includes DP 2, which does not run through this segment of storm (opposite side of pond) and Basin F, which is Pond itself. |
| 37 (1) |  |  |
|  | Subject: Callout <br> Page Index: 37 <br> Date: 11/22/2021 11:11:22 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 24 | Grading shows street as crowned section, distance to crown of road can't be greater than 15', please update width accordingly. |
| 40 (1) |  |  |
|  | Subject: Text Box <br> Page Index: 40 <br> Date: 11/22/2021 11:11:41 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 27 | How are you addressing high FR \#? |
| 44 (1) |  |  |
|  | Subject: Text Box <br> Page Index: 44 <br> Date: 11/22/2021 11:12:01 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 31 | On drainage map Pipe Run 5 is outlet culvert for pond which is $24 "$ pipe. Please update to whichever is correct location/structure for Pipe Run 5. |
| 48 (1) |  |  |
|  | Subject: Callout <br> Page Index: 48 <br> Date: 11/22/2021 11:12:27 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 35 | Include discussion/table something to show how total contributing area \& \% impervious were calculated. |


| 54 (1) |  |  |
| :---: | :---: | :---: |
|  | Subject: Text Box <br> Page Index: 54 <br> Date: 11/22/2021 11:12:54 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 41 | Forebay sizing only needs to account for area reaching that forebay not whole pond. |
| 60 (1) |  |  |
| drainage map <br>  | Subject: Text Box <br> Page Index: 60 <br> Date: 11/22/2021 11:13:16 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: 47 | Provide Existing or overall Drainage Plan showing the entire drainage area to the FSD. This can be combined with the MS4 map requested in the comments. |
| 61 (11) |  |  |
|  | Subject: Callout <br> Page Index: 61 <br> Date: 11/22/2021 11:13:49 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: [1] Layout1 | What is GAP? |
| $\frac{\frac{\text { ROP'OSED }}{48^{\prime \prime} \text { GAP }}}{(6454)}$ | Subject: Highlight <br> Page Index: 61 <br> Date: 11/22/2021 11:13:45 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: [1] Layout1 |  |
|  | Subject: Callout <br> Page Index: 61 <br> Date: 11/22/2021 11:14:05 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: [1] Layout1 | outlet protection? |
|  | Subject: Callout <br> Page Index: 61 <br> Date: 11/22/2021 11:14:21 AM <br> Author: CDurham <br> Color: <br> Layer: <br> Space: <br> Page Label: [1] Layout1 | Per surface routing spreadsheet, DP 4 is in Basin B-2 |



Subject: Callout
Page Index: 61
Date: 11/22/2021 11:14:36 AM
Author: CDurham
Color:
Layer:
Space:
Page Label: [1] Layout1
Pipe Run 5 shown as $48 "$ pipe in appendix. Update so appendix and map match.


Subject: Callout
Page Index: 61
Same design Point Label - Please revise
Date: 11/22/2021 11:14:58 AM
Author: CDurham
Color:
Layer:
Space:
Page Label: [1] Layout1


Subject: Cloud+
Page Index: 61
Clarify flow direction
Date: 11/22/2021 11:15:34 AM
Author: CDurham
Color:
Layer:
Space:
Page Label: [1] Layout1


Subject: Callout
Page Index: 61
Date: 11/22/2021 11:15:51 AM
Author: CDurham
Color:
Layer:
Space:
Page Label: [1] Layout1


Subject: Callout
Page Index: 61
Label all inlets as private or public
Date: 11/22/2021 11:16:03 AM
Author: CDurham
Color:
Layer:
Space:
Page Label: [1] Layout1


Subject: Callout
Page Index: 61
Pipe material \& slope? Include material type \& slope on all proposed storm pipes

Date: 11/22/2021 11:16:14 AM
Author: CDurham
Color:
Layer:
Space:
Page Label: [1] Layout1

| Subject: Callout | Design Point 4 per surface routing summary |
| :--- | :--- |
| spreadsheet |  |

