Drainage Report - Final_V2_Comments.pdf Markup Summary

Callout (21)



Subject: Callout Page Label: 24 Author: dotprete

Date: 1/10/2023 1:42:56 PM

Status: Color: ■ Layer: Space: geotech report identified clay (Type D) soils.

and Filing 12

runoff reduction

south east

aced form from previous repor m conveyances associated wi and Filing 12 o 11. This basin abuts existing the for the roadway. The overSubject: Callout Page Label: 8

Author: dotprete

Date: 1/10/2023 10:53:21 AM

Status: Color: ■ Layer: Space:

rough best practices of bioinfiltrathe site are shown on Drainage Planunoff reduction

Subject: Callout Page Label: 3

Author: dotprete

Date: 1/10/2023 12:51:59 PM

Status: Color: ■ Layer: Space:

conto to as existing grass seats, and then travel south seats and then travel south seats contour seats.

characteristics of these basins is us margin descharges muisance flower of water quality treatment, that po Boundary was analyzed using the Bookeely (IU-BMPy 3607 xis) pare provided to the existing road new box culvert crossing at Poa An even box culvert crossing at Poa An

Subject: Callout Page Label: 9

Author: dotprete

Date: 1/10/2023 12:53:20 PM

Status: Color: ■ Layer: Space:

Section of the control of the contro

Subject: Callout Page Label: 3

Author: Daniel Torres
Date: 1/10/2023 5:12:40 PM

Status: Color: Layer: Space: This is not an accurate statement. Basin B's within this filing contain lots that are tributary to pond B, Similarly Basins A-6, A7, A-8 are tributary to pond A per the Glen 9 FDR. The only basin that does not appear to be captured by a pond is Basin E1.

north to an existing grass swale, and then travel

Please revise the text accordingly.

21 (Sun in 1) a designate brain and softle construend to sore Titag and the Grant Windows Same plasmed row.

*Amous on Findo Insurance Data Nago (FISMa) (SIMA) (SI

Subject: Callout Page Label: 4

Author: Daniel Torres Date: 1/10/2023 5:13:44 PM

Status: Color: Layer: Space: see comment above regarding basins A and B and revise accordingly

The second of th

Subject: Callout Page Label: 7

Author: Daniel Torres Date: 1/10/2023 6:00:33 PM

Status: Color: Layer: Space: basin D19.1 is listed above

for the 5-year event, and 179-cis for the 100-year event.
The Essings Report for Markendridis Result Tail Essings Report for Markendridis Resultant Essings Report for Markendridis Resultant Essings Resultant teleprotection of the Markendridis Resultant Parkendridis Resultant

Subject: Callout Page Label: 7 Author: Daniel Torres Date: 1/10/2023 6:13:03 PM

Status: Color: Layer: Space: This paragraph is oddly placed and appears to be a part of a previous report as there is no appendix B provided in the report. Revise accordingly

A similar data and a management of claims in Mark how and within an extended and a second management of claims in Mark how and within a management of the contraction of the confidence of the contraction of the confidence of the contraction of the confidence of the contraction of

Subject: Callout Page Label: 7

Author: Daniel Torres Date: 1/10/2023 6:13:55 PM

Status: Color: Layer: Space: these basins were captured by the pond in filing 11. Revise the text accordingly.



Subject: Callout Page Label: 8

Author: Daniel Torres Date: 1/10/2023 6:15:12 PM

Status: Color: Layer: Space: basin 20a is no longer captured by pond D per the drainage report amendment for filing 10. Revise.

The time of the control and approved with The files Hilling In I of all the control and the co

Subject: Callout Page Label: 4

Author: Daniel Torres Date: 1/10/2023 6:19:49 PM

Status: Color: Layer: Space: Basin E within filing 12 was not analyzed in the filing 11 runoff reduction calculation. revise.

stely 9.72 acres in area and is adjacent to and along is sub-babb encompasses all of the planned detention in the week which inverse the Colorado Interstante Gares will replant unchanged from historic condition reyed along halulous dones with mitimal velocity.

10.18 acres is shown on the draining accordingly. Revise accordingly.

Interest along the existency edge of the sib-letives when the control of the colorador and th

Subject: Callout Page Label: 8

Author: Daniel Torres
Date: 1/10/2023 6:31:15 PM

Status: Color: Layer: Space: 10.18 acres is shown on the drainage plan. Revise accordingly.



Subject: Callout Page Label: 40 **Author:** Daniel Torres Date: 1/11/2023 10:11:36 AM

Status: Color: Layer: Space:

revise the title of the calculation to reflect the

contents provided (pipe calcs)



Subject: Callout Page Label: 41 Author: Daniel Torres Date: 1/11/2023 10:14:05 AM

Status: Color: Layer: Space:

revise title. these are inlet calcs.



Subject: Callout Page Label: [1] D-1 Author: Daniel Torres Date: 1/11/2023 11:12:42 AM

Status: Color: Layer: Space:

Also Provide total flow with filing 12



Subject: Callout Page Label: [1] D-1 Author: Daniel Torres

Date: 1/11/2023 11:13:58 AM

Status: Color: Layer: Space:

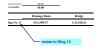
Please also provide flows inclusive of filing 12



Subject: Callout Page Label: [1] D-1 Author: Daniel Torres Date: 1/11/2023 11:18:20 AM

Status: Color: Layer: Space:

flows shown do not match



Subject: Callout Page Label: 18 Author: Daniel Torres Date: 1/11/2023 7:58:24 AM

Status: Color: Layer: Space:

revise to filing 12

Subject: Callout Page Label: 18 Author: Daniel Torres Date: 1/11/2023 8:28:56 AM

Status: Color: Layer: Space:

Please verify the undeveloped area calculated as the total tract acreage is only +5.5 acres (per plat).

Subject: Callout Page Label: 18 **Author:** Daniel Torres Date: 1/11/2023 8:29:47 AM

Status: Color: Layer: Space:

Please explain why the square footage changed from the other filings (2500s.f.) when the average lot size is similar to filings 10 and 11. revise

accordingly.

ill also combine with cor t 'E-1' at DP71. off cated west of the subject is on-site. Interim Inlet evelopment of Filing No

:n is oп-site. кипоп гго Subject: Callout Page Label: 5 Author: dotprete

Date: 1/9/2023 5:36:24 PM

Status: Color: Layer: Space:

off

Cloud+ (1)



Subject: Cloud+ Page Label: 7 Author: Daniel Torres

Date: 1/10/2023 6:04:23 PM

Status: Color: Layer: Space:

This appears to be text from a previous report that no longer applies. Revise accordingly.

Engineer (22



Subject: Engineer Page Label: 1 Author: dotprete

Date: 1/10/2023 1:27:29 PM

Status: Color: Layer: Space:

and Geotech Report



Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/10/2023 1:45:51 PM

Status: Color: Layer: Space:

flows do not match D-8 basin flows. should be considered part of D-2 and D-9



Subject: Engineer
Page Label: [1] D-2 (2)
Author: dotprete

Date: 1/10/2023 10:30:53 AM

Status: Color: ■ Layer: Space: Flows do not match D-10 basin flows. Should be

considered part of D-9



Subject: Engineer
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 12:40:29 PM

Status: Color: ■ Layer: Space: Basins A-6 and A-7 need to be discussed in the text and will need some type of WQCV treatment



Subject: Engineer
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 12:41:45 PM

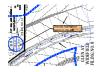
Status: Color: ■ Layer: Space: Drainage Basin Map shows the basin delineation like this, please confirm.



Subject: Engineer Page Label: [1] IRF-1 Author: dotprete

Date: 1/10/2023 12:42:30 PM

Status: Color: ■ Layer: Space: EDB 'D'



Subject: Engineer
Page Label: [1] D-2 (2)
Author: dotprete

Date: 1/10/2023 12:49:01 PM

Status: Color: ■ Layer: Space: Discuss highlighted basins in the text



Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/10/2023 12:49:10 PM



Subject: Engineer Page Label: [1] IRF-1 Author: dotprete

Date: 1/11/2023 4:19:53 PM

Status: Color: ■ Layer: Space: in accordance with the MHFD, runoff reduction has vegetation requirements that have been overlooked in the past. Going forward the following will be required for runoff reduction:

- All RPA/SPA areas will need to be within a no build/drainage easement (or tract) and discussed in the maintenance agreement and O&M manual.
- RPA/SPA vegetation should be turf grass (from seed [provide appropriate seed mix] or sod).
- Turf grass vegetation should have a uniform density of at least 80%.
- Irrigation (temp or permanent) is necessary to establish sufficient vegetation and not just weeds.
- Show suitability of topsoil of RPA/SPA and steps for proper preparation of topsoil per recommendations in MHFD detail T-0 Table RR-3
- RPA/SPA limits must be shown on GEC Plans (not just FDR) so our SW inspectors and the QSM know that these areas are to remain pervious, vegetated (80%), and irrigated post-construction.

Other requirements that have either been done or do not pertain to this project but I wanted to note for all future projects:

- Provide a figure showing all proposed UIA, RPA and SPA areas to be utilized for runoff reduction.
- Provide a detail for the UIA:RPA interface that shows the recommended vertical drop of 4".



Subject: Engineer Page Label: [1] IRF-1 Author: dotprete

Date: 1/11/2023 4:35:37 PM

Status: Color: Layer: Space: You can only use the slope down and any flat bottom of the swale for RPA, you cannot use the sloped area on the far side of the swale.



Subject: Engineer Page Label: [1] IRF-1 Author: dotprete

Date: 1/11/2023 4:35:58 PM

Status: Color: ■ Layer: Space: Since adding a Plat note that states there are to be no impervious areas in set backs has not been an option on past projects, consider the orange areas to be UIA and the green areas to be RPA. Note: you only need to achieve 60% WQCV, so the less RPA you have, the less sod, watering and maintenance of the RPA will be required.

Detention Basin IV which was constructed with The property is currently evolvely-graded use conditions. Extended Detention Basin IV lies 1 shows to Figure 1 included in Jupermite A. White Filing No. 11. Detention Basin IV receive low-flow trickle channel. Sight modification expected within Beneder Sentence. With Filing No. 12, the orifice plate at the detent which represents and fluid-down condition, and trabutary areas impacted by new development. The existing expertative cover within the deve. Subject: Engineer Page Label: 3 Author: dotprete

Date: 1/9/2023 3:01:23 PM



Subject: Engineer Page Label: 3 Author: dotprete

Date: 1/9/2023 3:01:28 PM

Status: Color: Layer: Space:



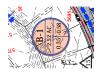


Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:23:27 PM

Status: Color: Layer: Space:

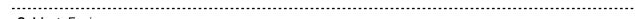




Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:23:39 PM

Status: Color: Layer: Space:





Subject: Engineer
Page Label: [1] D-2 (2)
Author: dotprete

Date: 1/9/2023 3:23:41 PM

Status: Color: Layer: Space:

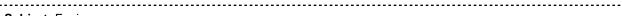
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Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:23:47 PM

Status: Color: Layer: Space:





Subject: Engineer
Page Label: [1] D-2 (2)
Author: dotpree

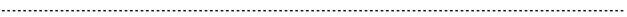
Date: 1/9/2023 3:23:50 PM



Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:23:52 PM

Status: Color: Layer: Space:





Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:23:55 PM

Status: Color: Layer: Space:



Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:23:57 PM

Status: Color: Layer: Space:



Subject: Engineer Page Label: [1] D-2 (2) Author: dotprete

Date: 1/9/2023 3:24:02 PM

Status: Color: Layer: Space:

Highlight (9)

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Subject: Highlight **Page Label:** 9 oup B, bas Author: Daniel Torres

Date: 1/10/2023 10:37:10 PM s, runoff co Status:

Color: Layer: Space:

For the pu Subject. Figure Page Label: 3 Subject: Highlight oups B and Author: Daniel Torres

Date: 1/10/2023 4:24:10 PM

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e purpose Subject: Highlight Page Label: 3

and Cwer Author: Daniel Torres Date: 1/10/2023 4:24:11 PM

Status: Color: Layer: Space:

Subject: Highlight Page Label: 3 Author: Daniel Torres

Date: 1/10/2023 5:07:13 PM

Status: Color: Layer: Space:

topography. The substantially ma treatment throu natterns for the

tributary pasins Subject: Highlight The remaining | Page Label: 3

Author: Daniel Torres Date: 1/10/2023 5:07:16 PM

Status: Color: Layer: Space:

ry to Detention ised undetained ussed in earlier are unchanged Subject: Highlight Page Label: 4

Author: Daniel Torres Date: 1/10/2023 5:13:59 PM

Status: Color: Layer: Space:

lefield Sub

TISE approx Subject: Highlight the A-Seric Page Label: 4
Author: Daniel Torres Date: 1/10/2023 5:14:00 PM

Status: Color: Layer: Space:

bdivision l

)ximately (Subject: Highlight Page Label: 4

ies, B-Seri Author: Daniel Torres Date: 1/10/2023 5:14:02 PM

วนบ-บสรมมร ม4.1 for the 5-year ev

The Existing Rep Road to US-24, 1 trapezoidal char

Subject: Highlight Page Label: 7

Author: Daniel Torres Date: 1/10/2023 6:12:46 PM

Status: Color: Layer: Space:

Image (1)



Subject: Image Page Label: [1] IRF-1 Author: dotprete

Date: 1/11/2023 4:35:05 PM

Status: Color: Layer: Space:

Line (2)

slope area

Subject: Line Page Label: 3 ve 60% W Author: dotprete

Date: 1/10/2023 12:51:32 PM The exist Status:

Color: Layer: Space:

Subject: Line Page Label: 3 Author: dotprete

Date: 1/10/2023 12:51:42 PM

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Pen (1)

d east and co

Subject: Pen easterly mar Page Label: 5

in Future Fi] Author: Daniel Torres Date: 1/10/2023 5:30:28 PM

Status: Color: Layer: Space:

Polygon (5)



Subject: Polygon Page Label: [1] D-2 (2) Author: dotprete

Date: 1/10/2023 10:33:00 AM



Subject: Polygon
Page Label: [1] D-2 (2)
Author: dotprete

Date: 1/10/2023 10:33:20 AM

Status: Color: Layer: Space:



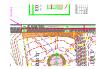


Subject: Polygon
Page Label: [1] IRF-1
Author: dotprete

Date: 1/11/2023 4:21:13 PM

Status: Color: Layer: Space:

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Subject: Polygon
Page Label: [1] IRF-1
Author: dotprete

Date: 1/11/2023 4:24:17 PM

Status: Color: Layer: Space:



Subject: Polygon
Page Label: [1] IRF-1
Author: dotprete

Date: 1/11/2023 4:33:15 PM

Status: Color: Layer: Space:

PolyLine (5)



Subject: PolyLine
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 11:07:20 AM

Status: Color: Layer: Space:

Subject: PolyLine



Subject: PolyLine
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 12:37:57 PM

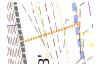


Subject: PolyLine
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 12:39:21 PM

Status: Color: Layer: Space:





Subject: PolyLine
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 12:39:39 PM

Status: Color: Layer: Space:



Subject: PolyLine
Page Label: [1] IRF-1
Author: dotprete

Date: 1/10/2023 12:41:37 PM

Status: Color: Layer: Space:

Stormwater Comments Color (1)

Subject: Stormwater Comments Color

EPC STORMWATER REVIEW COMMENTS IN ORANGE BOXES WITH BLACK TEXT

Page Label: 1 Author: dotprete

Date: 1/10/2023 1:26:48 PM

Status: Color: Layer: Space:

Text Box (7)

convey captured flow to 100-year capacity curl DP 93a, and 93b, and ultimately convey those t the Outlet Structure). Runoff from Sub-basins Subject: Text Box Page Label: 10 Author: dotprete

Date: 1/10/2023 1:01:09 PM

Status: Color: ■ Layer: Space: Engineer must confirm in the Drainage Report that the existing ponds are functioning as intended.



Subject: Text Box Page Label: 83 Author: dotprete

Date: 1/10/2023 1:07:18 PM

Status: Color: ■ Layer: Space: based on the geotech report soil cross sections, this area is all Soil Type D



Subject: Text Box Page Label: 10 Author: dotprete

Date: 1/10/2023 10:59:51 AM

Status: Color: ■ Layer: Space: Will flows that aren't going to Pond D (Basins A

and B) be treated at a different pond?

withed for the site with the extended detention basis, referred to a structed with The Glen at Widefield Illing No. 11. ot-graded under grading permit to approximate finished grad Basin 'I' lies to the south of the site. A vicinity map of the site pendix A.

to decrease the gaining, perimeter minercander roats, and not officerate in the routed plane is planted with Filing. 11 and 56. We have been promoted using transfers and the detention pond outlet structure rofferst. Williams the Londition indicition, and which accommodates that clackated values for the velopment including Piling 11 and Williams 12. White the control of the property range from 0.2 to 2.

Subject: Text Box Page Label: 3 Author: dotprete

Date: 1/10/2023 12:52:39 PM

Status: Color: ■ Layer: Space: has this been completed? provide pond design

spreadsheets

CO957G (both with effective dates of December 7, 2011 RMs also show that the property to be developed with t resultanted floodplain in an unshaded Zone X area, which i 1."

D States Typicome disease in these C. Rechting A.A.

D States 12-12-24 are not all forced within Filing No.

Ob. Basins 12-12-24 comprise approximately 60 acres. Son

sea are accounted for in the A-Series, B-Series and E-Ser

set various Gleen at Widefield Subdivision Filings No.

the its reporting in terms of physical boundary and Flow Pre
include, A.-6, A.-7, A.B. Bl. Bl. 11, B.2, B.3, B.8, B.9 & E

middle A.-6, A.-7, A.B. Bl. Bl. 11, B.2, B.3, B.9 & E

Subject: Text Box Page Label: 4 Author: dotprete

Date: 1/10/2023 12:53:51 PM

Status: Color: ■ Layer: Space: Please discuss all basins in filing 12, including A-6, A-7, A-8, B-1, B-1.1, B-2, B-3, B-8, B-9 and B-9.1

odivision covering ince <u>elements such</u> 'D'. and B? what about Basin A

ng 12 (see maps). k. With detention opment of the Glen Subject: Text Box Page Label: 12 Author: dotprete

Date: 1/10/2023 12:54:20 PM

Status: Color: ■ Layer: Space: and B? what about Basin A?

Clarify the discrepancy

Subject: Text Box Page Label: 24 Author: Daniel Torres Date: 1/11/2023 11:27:09 AM

Status: Color: Layer: Space: Clarify the discrepancy