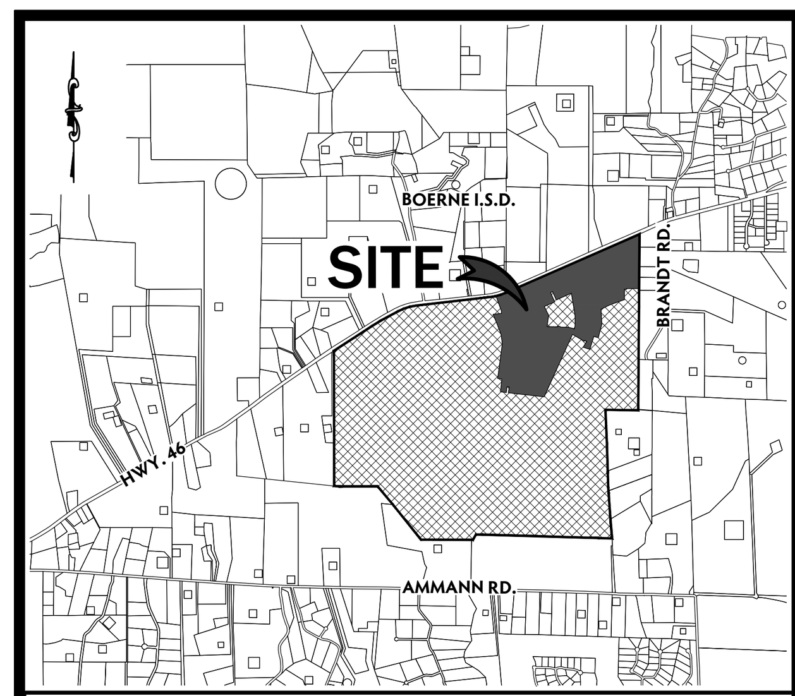


LOCATION MAP
N.T.S.

OWNER/ DEVELOPER:

THE LOOKOUT DEVELOPMENT GROUP
CONTACT: MIKE SIEFERT, P.E. PRESIDENT
1001 CRYSTAL FALLS PARKWAY
LEANDER, TEXAS 78641
TEL: (512) 690-4322

GENERAL NOTES

THE DETENTION POND FACILITY SHALL ALSO BE USED AS A TEMPORARY SEDIMENT TRAP FOR THE PURPOSES OF THE TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM CONSTRUCTION PERMIT FOR THIS SITE. THE CONTRACTOR SHALL CLEAN ALL SEDIMENT OUT OF THE DETENTION FACILITY UPON FINAL STABILIZATION OF THE SITE.

CONTRACTOR TO HYDROMULCH ENTIRE DRAINAGE EASEMENT. 85% OF POND SURFACE MUST HAVE ESTABLISHED VEGETATION PRIOR TO ACCEPTANCE OF THE CHANNEL BY KENDALL COUNTY.

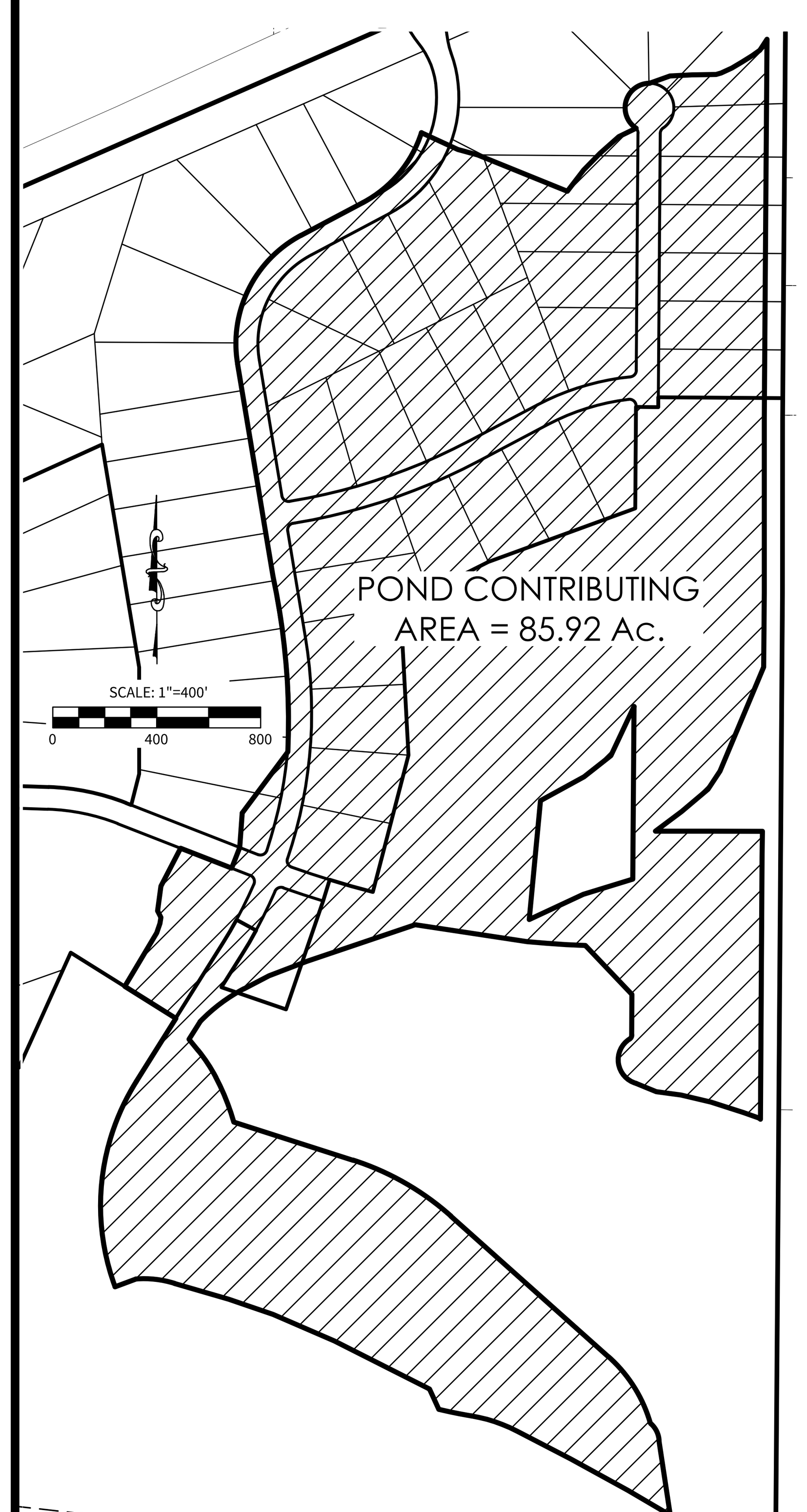
THE CONTRACTOR SHALL NOTIFY A UTILITY LOCATOR AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION ACTIVITY ADJACENT TO THE CONSTRUCTION OF ANY ON-SITE DRAINAGE FACILITIES TO PROTECT ANY UNIDENTIFIED EXISTING UNDERGROUND UTILITY FACILITY FROM DAMAGE OR HARM. THE CONTRACTOR SHALL HAVE THE SOLE RESPONSIBILITY FOR ANY DAMAGES TO UTILITIES AS A RESULT OF NOT LOCATING UNDERGROUND UTILITY RESOURCES.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE KENDALL COUNTY PUBLIC WORKS DEPARTMENT.
ALL CONCRETE SHALL BE A MINIMUM OF 3500 PSI @ 28 DAYS COMPRESSIVE STRENGTH UNLESS OTHERWISE SPECIFIED HEREIN ON THESE DOCUMENTS.

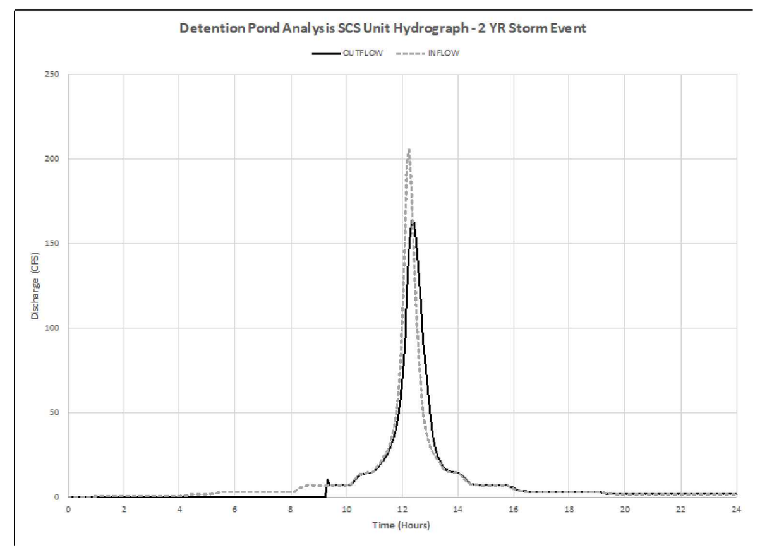
WATER SURFACE ELEVATIONS AND DISCHARGE RATES PRESENTED ON THESE PLANS REPRESENT UNIT 1 DEVELOPMENT CONDITION ONLY. PLEASE REFER TO STORMWATER MANAGEMENT REPORT FOR ANALYSIS OF OTHER DEVELOPED CONDITIONS.

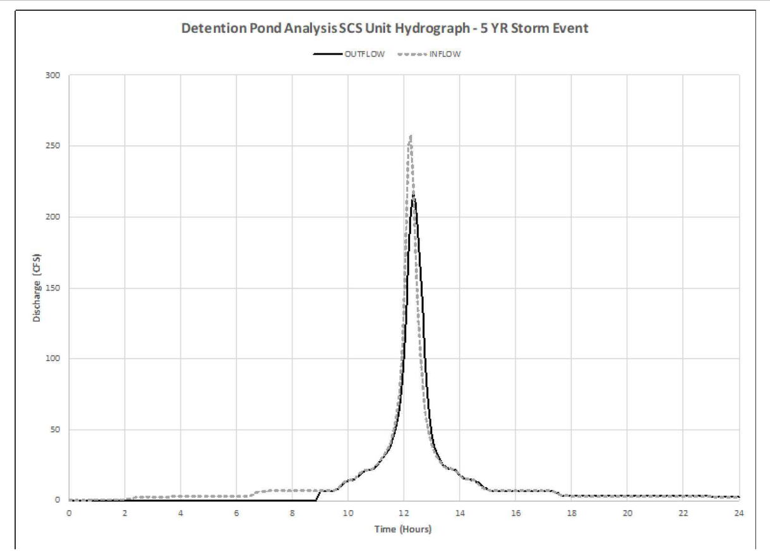
CLAY LINER SPECIFICATIONS:

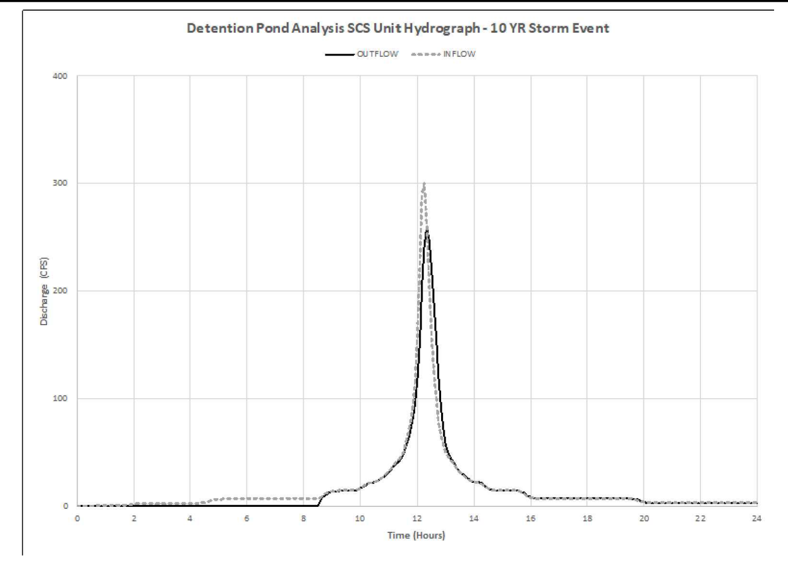
- PERMEABILITY - 0.000001 CM/SEC (PER ASTM D-2434)
- PLASTICITY INDEX - NOT LESS THAN 15% (PER ASTM D-423 AND D-424)
- LIQUID LIMIT OF CLAY - NOT LESS THAN 30% (PER ASTM D-2216)
- CLAY PARTICLE PASSING - NOT LESS THAN 30% (PER ASTM D-422)
- CLAY COMPACTION - 95% OF STANDARD PROCTOR DENSITY (PER ASTM D-2216)

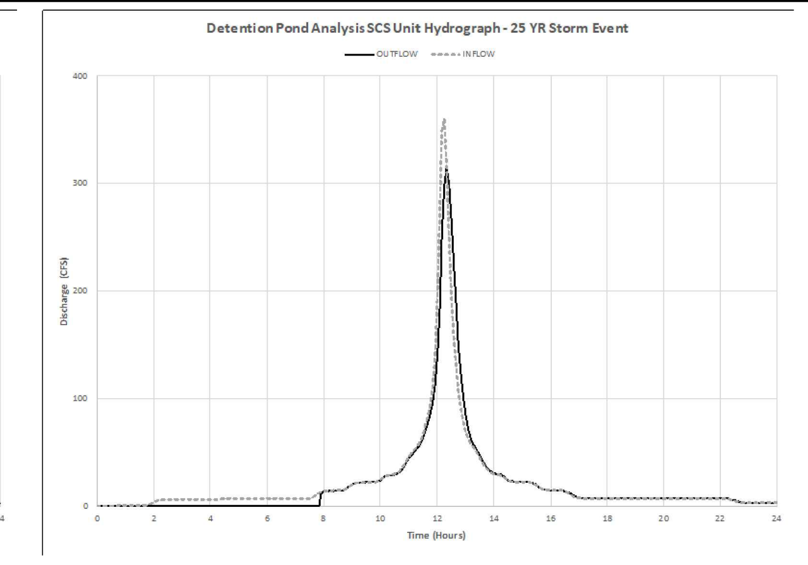


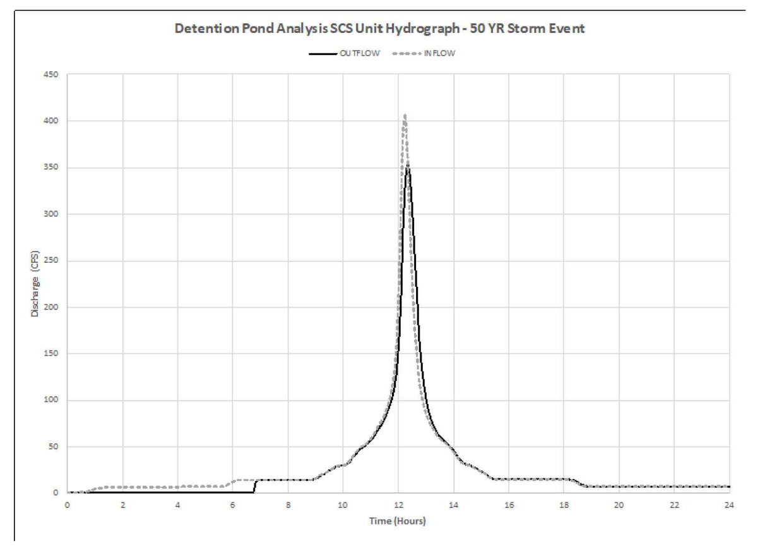
POND CONTRIBUTING DRAINAGE AREA

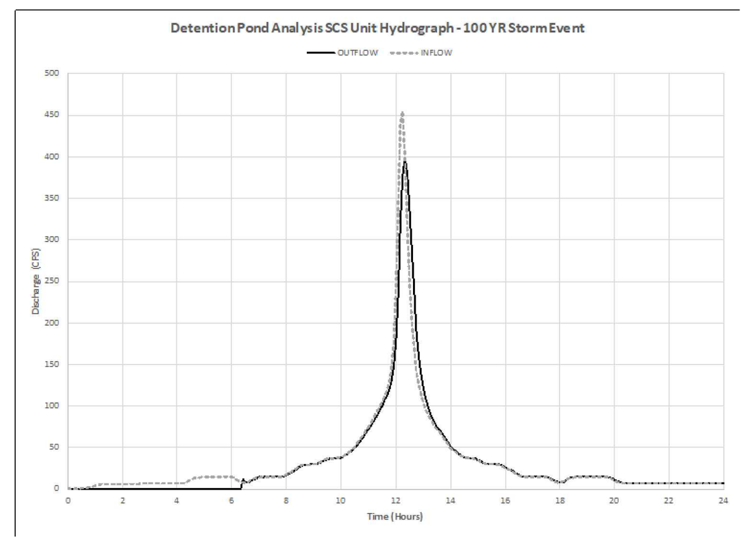


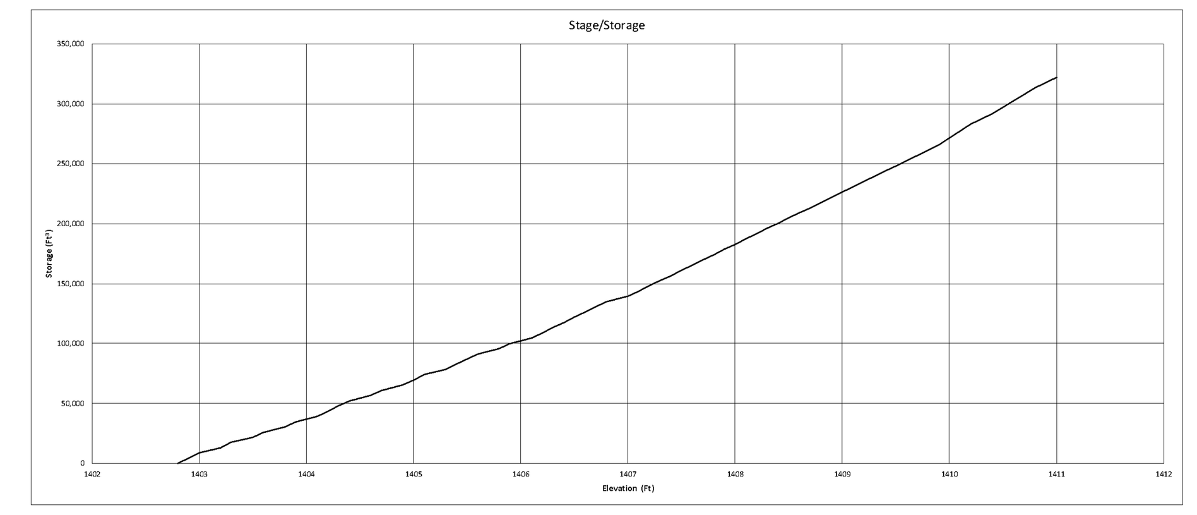


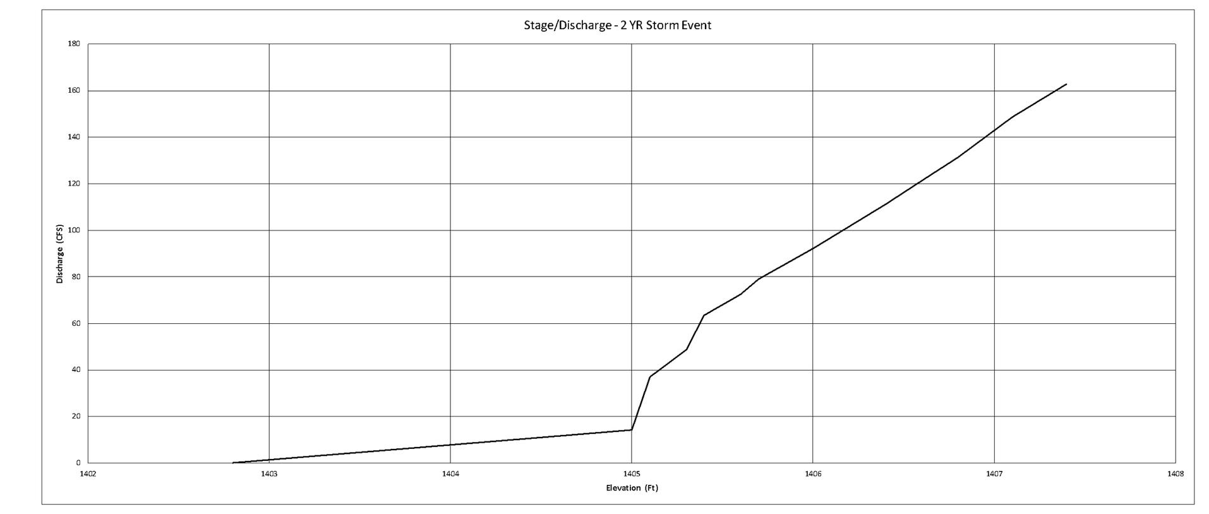


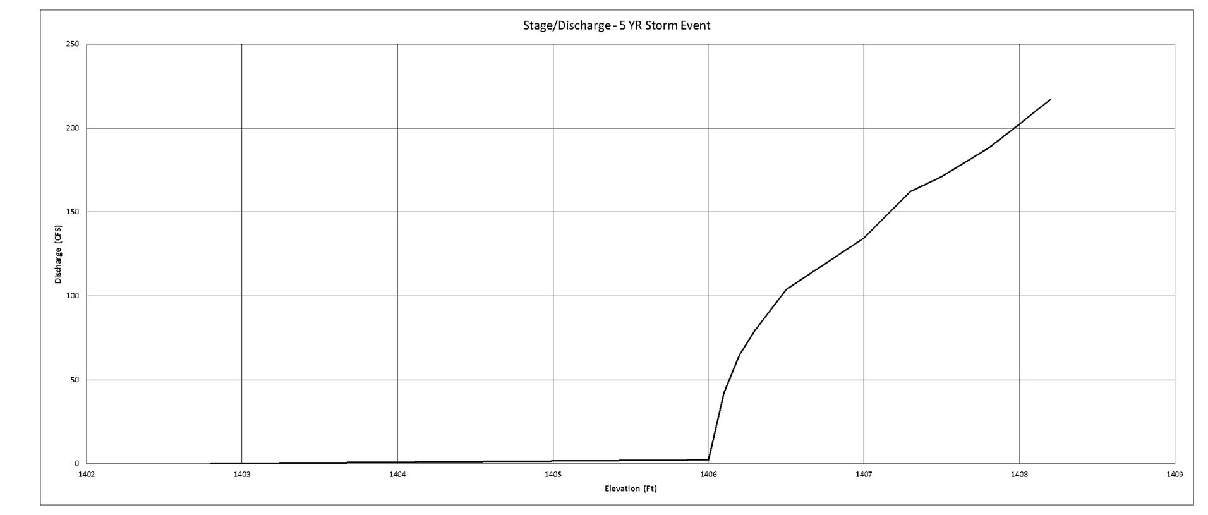


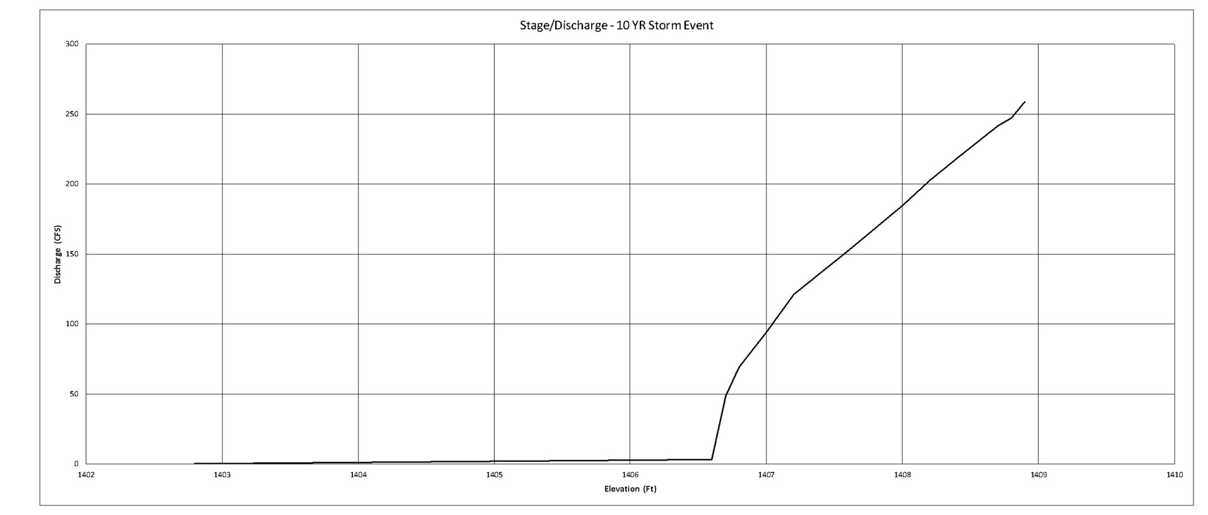


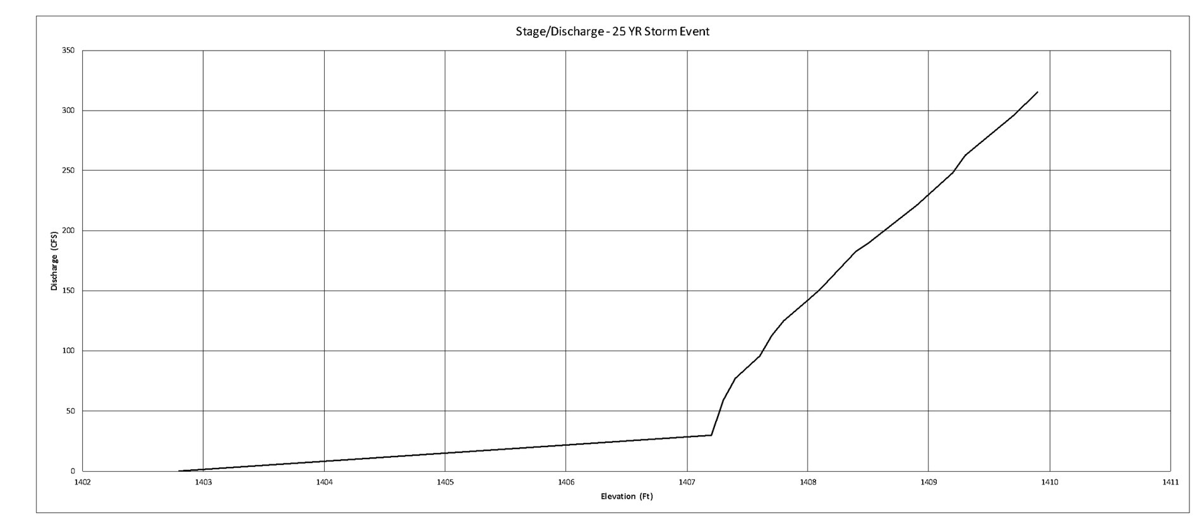


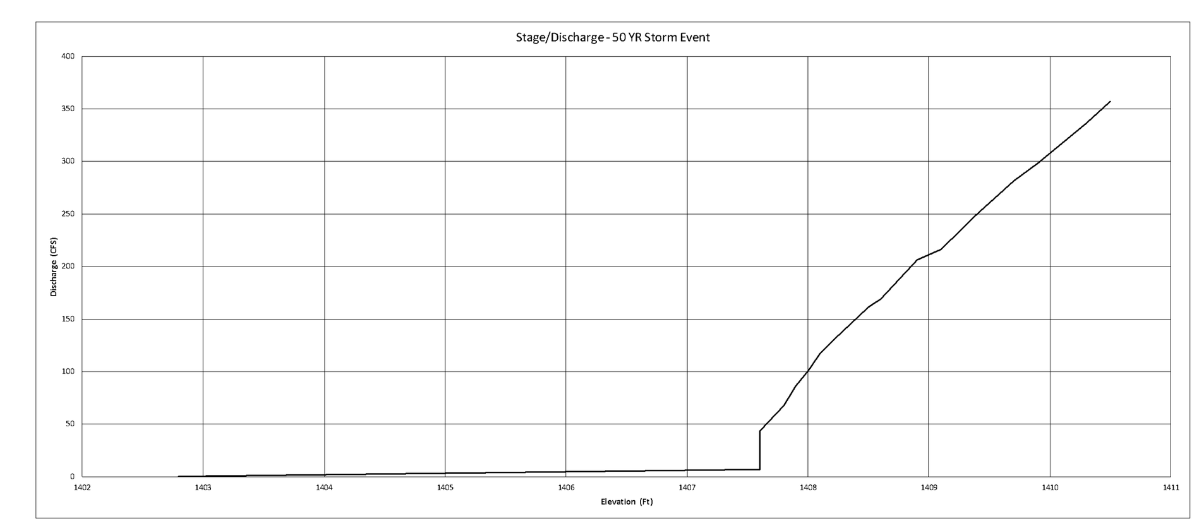


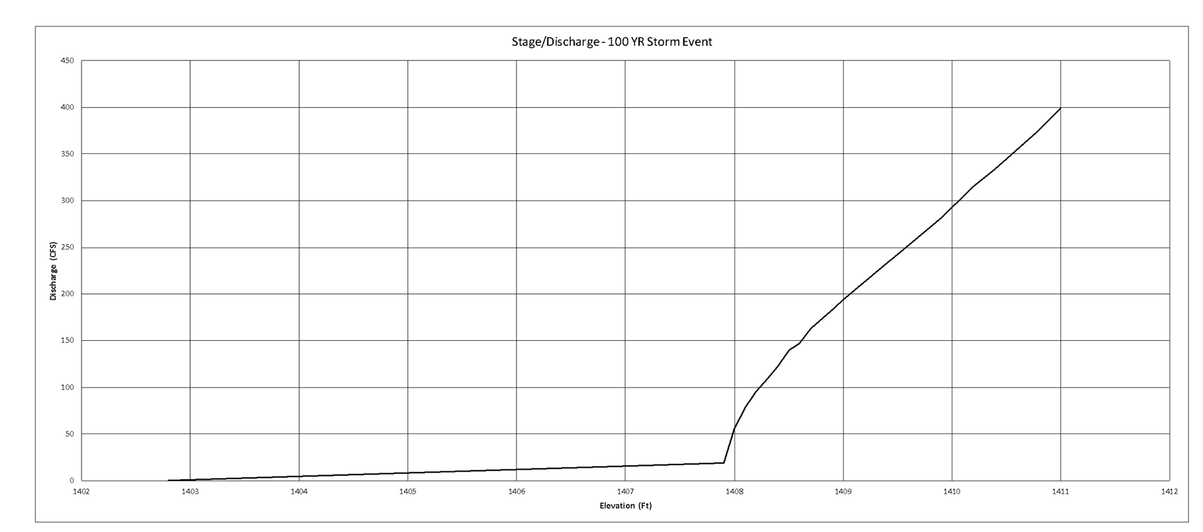












Pond Outfall Structure Details: Pond 2

46.65 LF of 2 - 48" HDPE @ 0.50%	US Invert: 1402.80	DS Invert: 1402.57
30.76 LF of 3 - 36" HDPE @ 0.50%	US Invert: 1407.50	DS Invert: 1407.34

125.00' Emergency Overflow Weir @ 1413.70

Pond 2 Characteristics Table:

2 YR Storm Event		
Pond Inflow:	205.80	CFS
Pond Discharge:	163.50	CFS
Peak WSE	1406.1	FT
Storage Provided:	3.6	AC-FT
5 YR Storm Event		
Pond Inflow:	257.4	CFS
Pond Discharge:	216.70	CFS
Peak WSE	1407.1	FT
Storage Provided:	4.4	AC-FT
10 YR Storm Event		
Pond Inflow:	300.1	CFS
Pond Discharge:	258.8	CFS
Peak WSE	1408.9	FT
Storage Provided:	5.1	AC-FT
25 YR Storm Event		
Pond Inflow:	360.4	CFS
Pond Discharge:	315	CFS
Peak WSE	1409.9	FT
Storage Provided:	6.1	AC-FT
50 YR Storm Event		
Pond Inflow:	407.6	CFS
Pond Discharge:	356.7	CFS
Water Surface Elevation	1410.5	FT
Storage Provided:	6.8	AC-FT
100 YR Storm Event		
Pond Inflow:	455.1	CFS
Pond Discharge:	398.9	CFS
Water Surface Elevation	1411	FT
Storage Provided:	7.4	AC-FT

Overall Discharge Summary (POST PROJECT Unit 1)

Discharge at Confluence of Trib A and Trib 1

2 YR Storm Event				
Pre-Development Rate:	1179.60	CFS		
Post-Development Rate:	1081.90	CFS	97.70	CFS less than allowable
5 YR Storm Event				
Pre-Development Rate:	1614.00	CFS		
Post-Development Rate:	1518.90	CFS	95.10	CFS less than allowable
10 YR Storm Event				
Pre-Development Rate:	1987.70	CFS		
Post-Development Rate:	1902.30	CFS	85.40	CFS less than allowable
25 YR Storm Event				
Pre-Development Rate:	2518.10	CFS		
Post-Development Rate:	2441.30	CFS	76.80	CFS less than allowable
50 YR Storm Event				
Pre-Development Rate:	2934.00	CFS		
Post-Development Rate:	2864.50	CFS	69.50	CFS less than allowable
100 YR Storm Event				
Pre-Development Rate:	3351.10	CFS		
Post-Development Rate:	3292.50	CFS	58.60	CFS less than allowable

Note: *Post-development discharge rates above account for detention pond 1.*

CUDEENGINEERS.COM
EST. 1980 CUDE ENGINEERS
4122 Pond Hill Road, Suite 101
San Antonio, Texas 78231
P:(210) 681.2951 F: (210) 523.7112

GEORGE'S RANCH UNIT 1

POND DETENTION PLAN - POND 2

DATE
04/22/2022

PROJECT NO.
03546.001

DRAWN BY
AB/RR

CHECKED BY
WPM

REVISIONS
1. 07-12-2022 REVISED POND DESIGN
2. 02/28/2023 - DRAINAGE REVISION
3.
4.
5.
6.
7.
8.
9.

STATE OF TEXAS
W. PATRICK MURPHY
111597
LICENSED PROFESSIONAL ENGINEER
3/3/2023

CUDE ENGINEERS
TBPE No. 455

PLAT NO.
N/A

C36