

REVISIONS

No.	DESCRIPTION	REVISE (R) DELETE (D) ADD (A)	TOTAL SHEETS IN PLAN	NET CHANGE IMPERV. COVER	SITE IMPERV. COVER	% IMP COVER	APPROVAL DATE

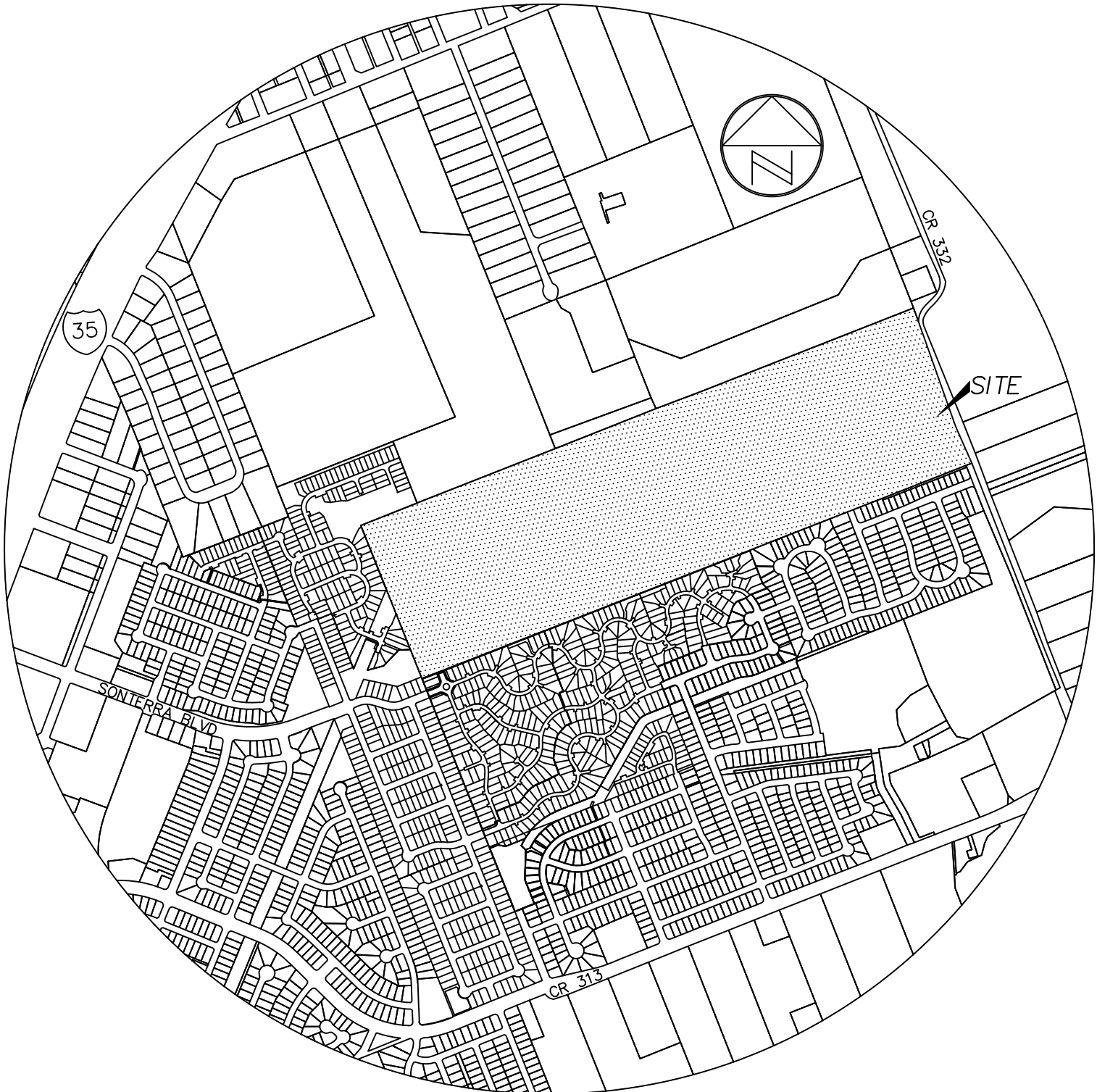
OWNERS NAME AND ADDRESS

M. HOWARD & MARTHA FASKE
221 WINDRIDGE COVE
GEORGETOWN, TEXAS 78628

DEVELOPER NAME AND ADDRESS

SONWEST CO.
3939 BEE CAVE ROAD
BLDG. C-100
AUSTIN, TEXAS 78746
TEL.NO. (512) 738-1411

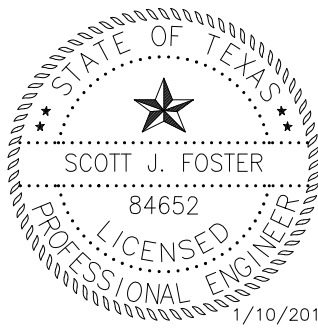
PRELIMINARY PLAT FOR
BAILEY PARK SUBDIVISION
(FORMERLY SONTERRA NORTH)
SONTERRA MUNICIPAL UTILITY
DISTRICT



IN
JARRELL, TEXAS
WILLIAMSON COUNTY

AUGUST 2018

ENGINEER'S CERTIFICATION:



[Signature]

LICENSED PROFESSIONAL ENGINEER
REGISTRATION NO. 84652
360 PROFESSIONAL SERVICES, INC.
P.O. BOX 3639
CEDAR PARK, TEXAS 78630

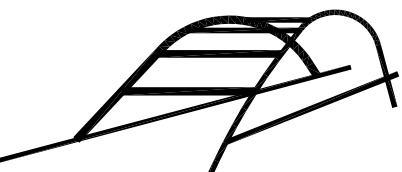
Sheet List Table	
Sheet Number	Sheet Title
01	COVER SHEET AND LOCATION MAP
02	OVERALL PRELIMINARY PLAT
03	PRELIMINARY PLAT (SHEET 1 OF 3)
04	PRELIMINARY PLAT (SHEET 2 OF 3)
05	PRELIMINARY PLAT (SHEET 3 OF 3)
06	PRELIMINARY PLAT CURVE AND LINE TABLES
07	OVERALL EXISTING DRAINAGE AREA MAP
08	OVERALL PROPOSED DRAINAGE AREA MAP
09	DETENTION POND SCHEMATICS (SHEET 1 OF 2)
10	DETENTION POND SCHEMATICS (SHEET 2 OF 2)
11	CHANNEL HEC-RAS SCHEMATIC (SHEET 1 OF 2)
12	CHANNEL HEC-RAS SCHEMATIC (SHEET 2 OF 2)
13	OVERALL UTILITY LAYOUT
14	UTILITY LAYOUT (SHEET 1 OF 3)
15	UTILITY LAYOUT (SHEET 2 OF 3)
16	UTILITY LAYOUT (SHEET 3 OF 3)

REVIEWED FOR COMPLIANCE WITH WILLIAMSON COUNTY REQUIREMENTS:

WILLIAMSON COUNTY ENGINEER _____ DATE _____

WILLIAMSON COUNTY ESD NO. 5 _____ DATE _____

ENGINEER:

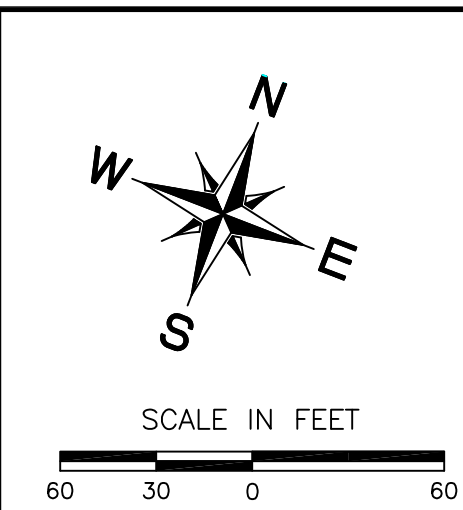
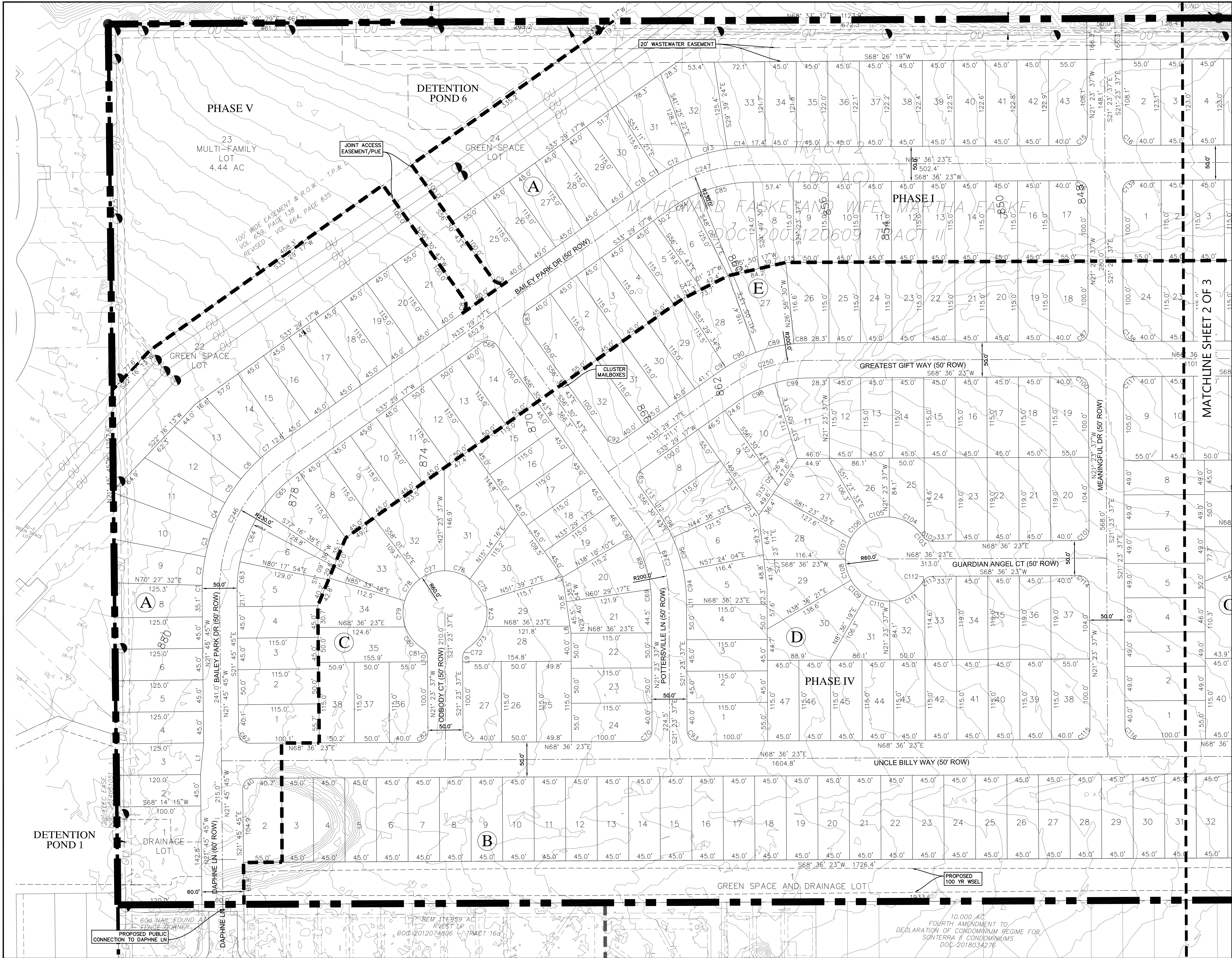


360 PROFESSIONAL SERVICES, INC.

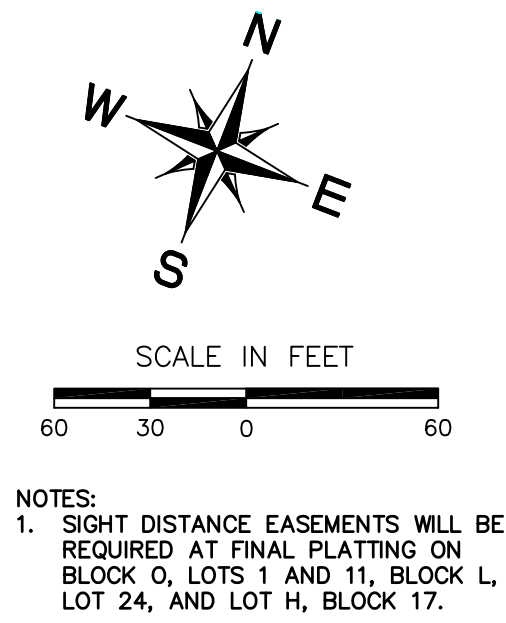
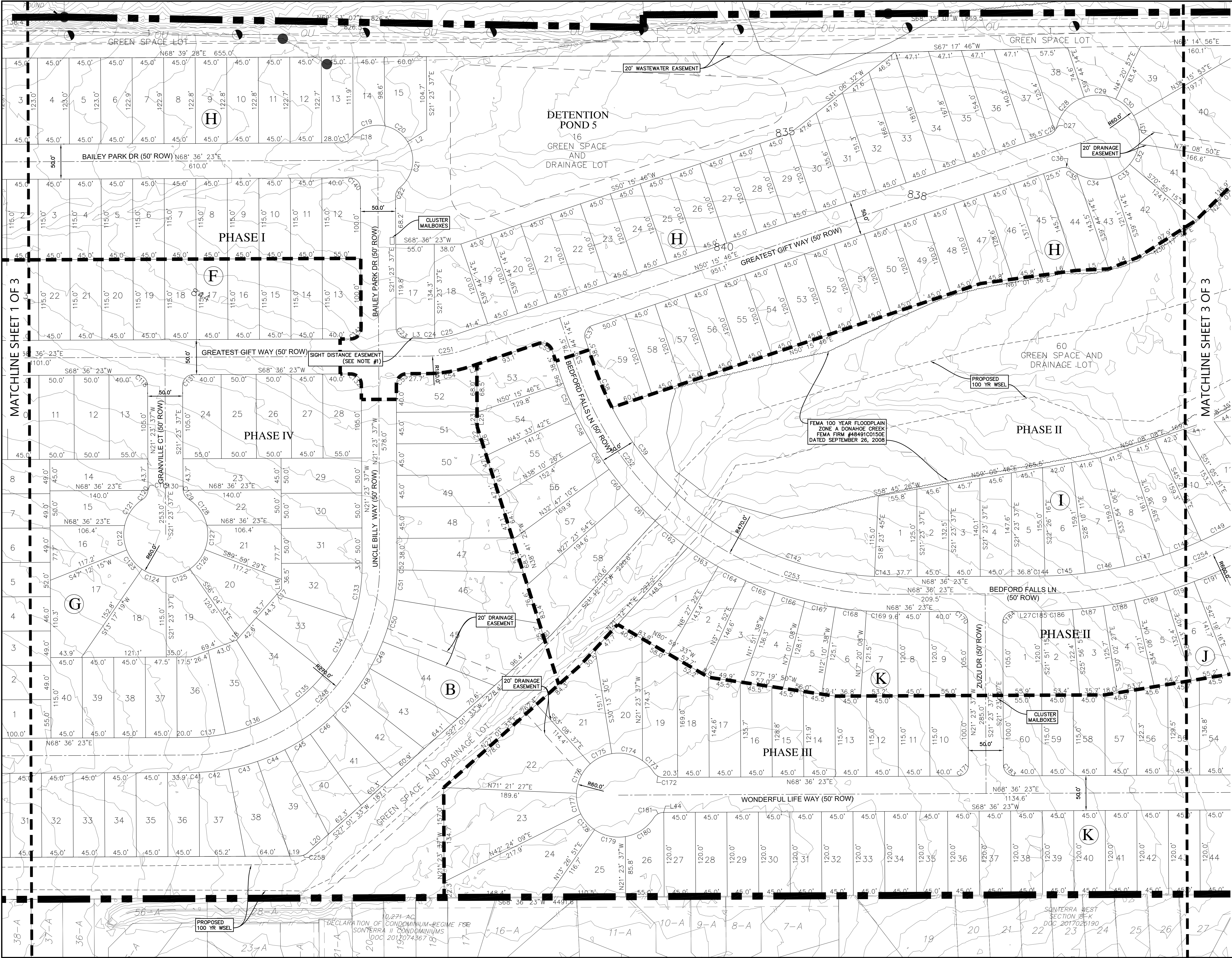
TEXAS REGISTRATION F4932
P.O. BOX 3639
CEDAR PARK, TEXAS 78630
PHONE (512) 354-4682
CONTACT: SCOTT J. FOSTER, P.E.

SURVEYOR:

LENZ & ASSOCIATES, INC.
4303 RUSSELL DRIVE
AUSTIN, TEXAS 78704
PHONE (512) 443-1174
CONTACT: TIMOTHY A. LENZ, RPLS



TEXAS FIRM REGISTRATION 14932 P.O. BOX 3639 CEDAR PARK, TEXAS 78630 PHONE (512) 354-4682 360° PROFESSIONAL SERVICES, INC.	
SCOTT J. FOSTER 84652 LICENSED PROFESSIONAL ENGINEER 1/19/2019	
BAILEY PARK SUBDIVISION (FORMERLY SONTERRA NORTH) JARRELL, TEXAS	
PRELIMINARY PLAT (SHEET 1 OF 3)	
Scale: AS SHOWN	Designed by:
Drawn by:	Checked by:
Date: JANUARY 2019	Project No:
SHEET 03	



NOTES:
1. SIGHT DISTANCE EASEMENTS WILL BE REQUIRED AT FINAL PLATTING ON BLOCK O, LOTS 1 AND 11, BLOCK L, LOT 24, AND LOT H, BLOCK 17.

Scale: AS SHOWN

Designed by:
Drawn by:
Checked by:
Date: JANUARY 2019
Project No:

SHEET
04

BAILEY PARK SUBDIVISION
(FORMERLY SONTERRA NORTH)
JARRELL, TEXAS

PRELIMINARY PLAT
(SHEET 2 OF 3)

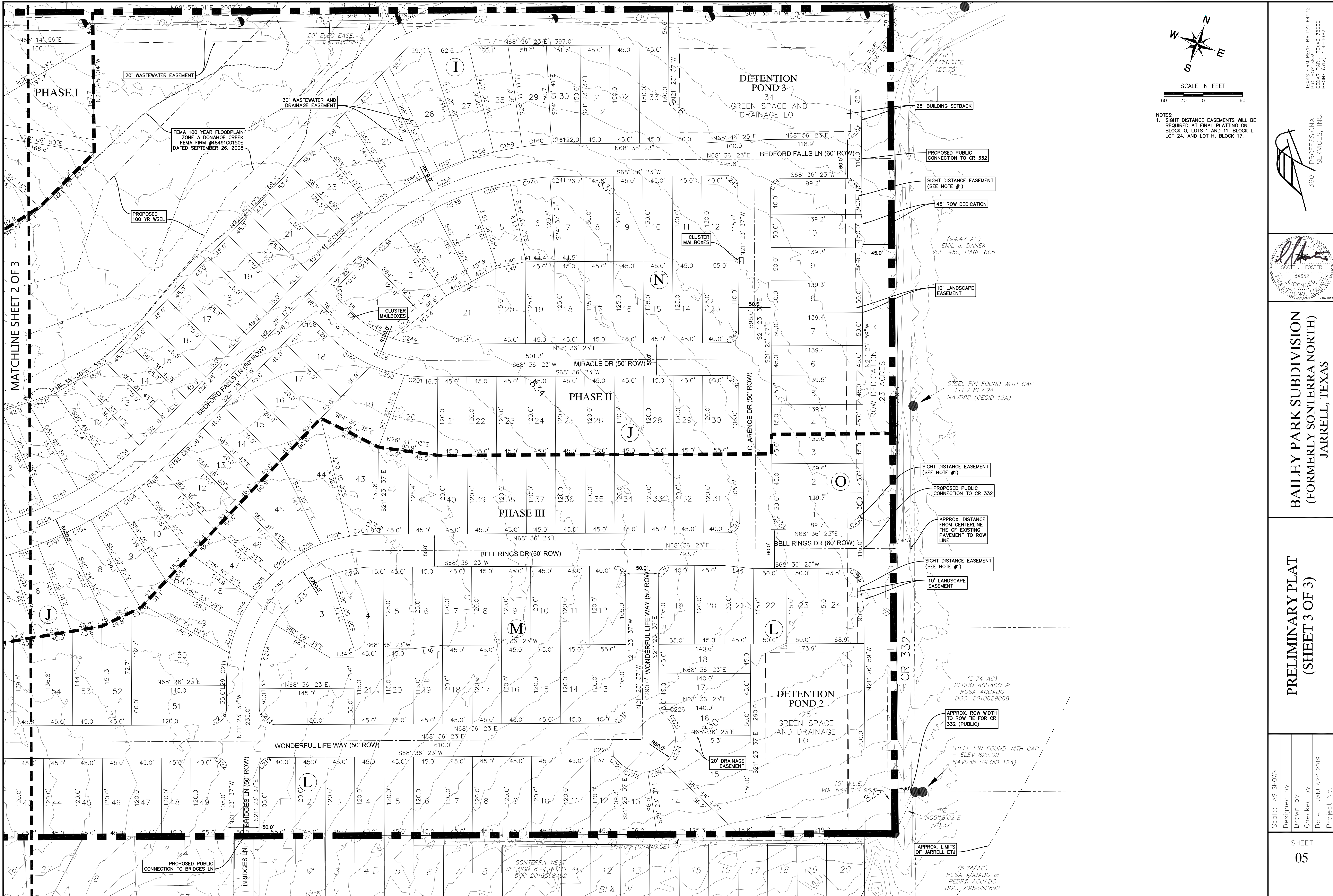
TEXAS FIRM REGISTRATION 14932
P.O. BOX 3639 JARRELL, TEXAS 78630
CEDAR PARK, TEXAS 78613
PHONE (512) 354-4682

SCOTT J. FOSTER
84652
LICENSED PROFESSIONAL ENGINEER
12/31/2019

360 PROFESSIONAL SERVICES, INC.

PLATTING BY: JEFFREY L. FOSTER, P.E.
DATE: 1/13/2019
PROJECT: 20170215_092500088_1_Hydrologic-Sol_Group.HW_Sol_Sign.HW

FILES: 42128 aerial_topographic_survey2_360501.sxd
SECTION 8M 1000 Vector_topographic_survey2_360501.sxd
SECTION 8M 1000 Vector_topographic_survey2_360501.sxd



Scale: AS SHOWN

Designed by:

Drawn by:

Checked by:

Date: JANUARY 2019

Project No:

SHEET

05

BAILEY PARK SUBDIVISION
(FORMERLY SONTERRA NORTH)
JARRELL, TEXAS

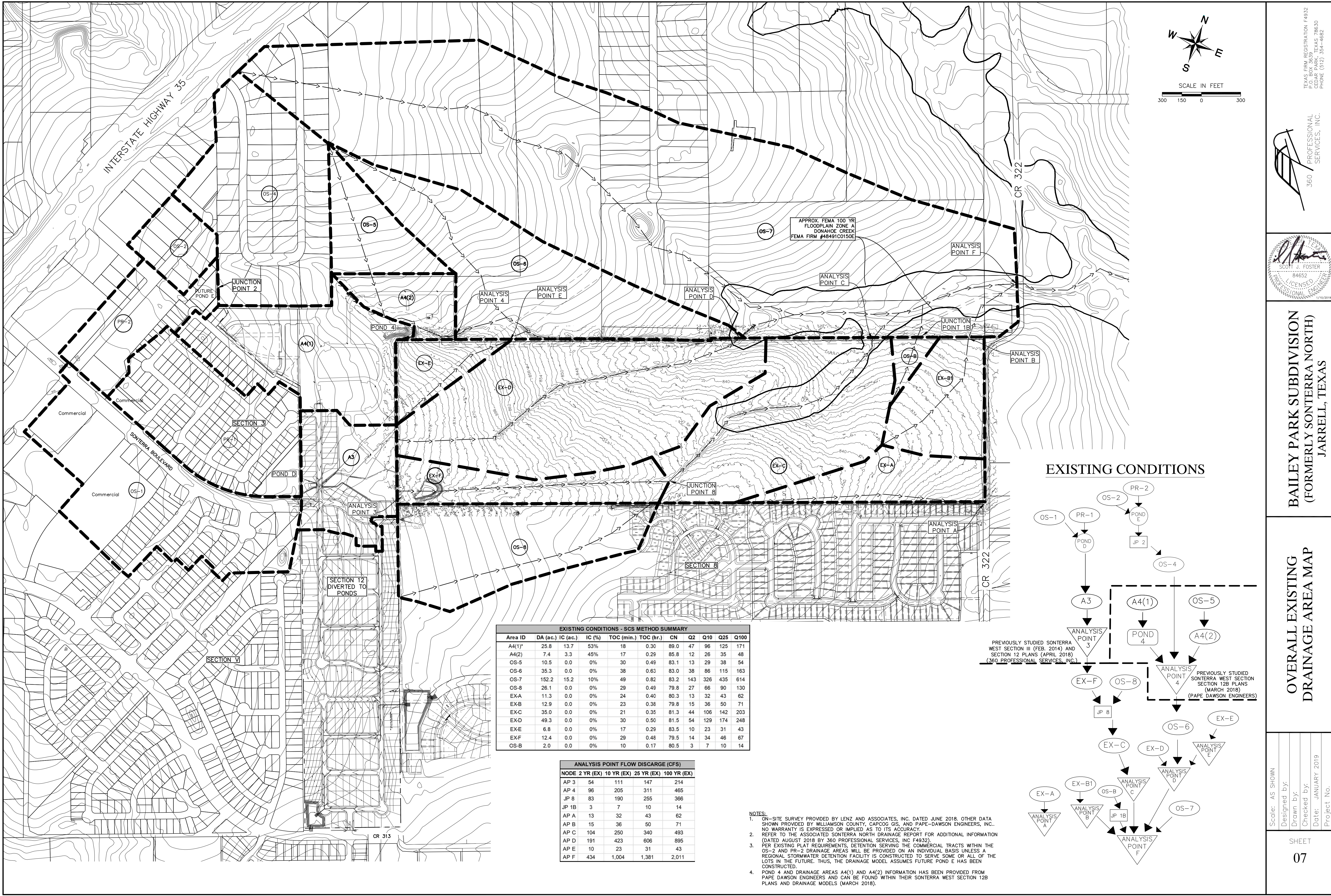
SCOTT J. FOSTER
84652
LICENSED PROFESSIONAL ENGINEER
1/16/2019

TEXAS FIRM REGISTRATION #4932
P.O. BOX 3639
CEDAR PARK, TEXAS 78630
PHONE (512) 354-4682
360 PROFESSIONAL SERVICES, INC.

Curve Table						
Curve #	Length	Radius	Delta	Tangent	Chord Direction	Chord Length
C1	9.89	255.00	2.22	4.94	N20° 39' 07"W	9.89
C2	41.12	255.00	9.24	20.60	N14° 55' 19"W	41.07
C3	41.12	255.00	9.24	20.60	N5° 40' 59"W	41.07
C4	41.12	255.00	9.24	20.60	N3° 33' 20"E	41.07
C5	41.12	255.00	9.24	20.60	N12° 47' 40"E	41.07
C6	41.12	255.00	9.24	20.60	N22° 01' 59"E	41.07
C7	30.42	255.00	6.84	15.23	N30° 04' 13"E	30.40
C8	23.56	15.00	90.00	15.00	N11° 30' 43"W	21.21
C9	23.56	15.00	90.00	15.00	N78° 29' 17"E	21.21
C10	34.65	1362.06	1.46	17.32	N33° 33' 06"E	34.65
C11	10.36	255.00	2.33	5.18	N35° 38' 47"E	10.36
C12	52.37	255.00	11.77	26.28	N42° 41' 38"E	52.28
C13	52.37	255.00	11.77	26.28	N54° 27' 37"E	52.28
C14	36.77	255.00	8.26	18.42	N64° 28' 30"E	36.74
C15	23.56	15.00	90.00	15.00	N23° 36' 23"E	21.21
C16	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21
C17	14.80	16.50	51.39	7.94	N42° 54' 47"E	14.31
C18	6.07	50.00	6.96	3.04	N20° 41' 58"E	6.07
C19	48.84	50.00	55.96	26.57	N52° 09' 41"E	46.92
C20	40.95	50.00	46.92	21.70	S76° 23' 44"E	39.81
C21	72.37	50.00	82.93	44.18	S11° 28' 14"E	66.21
C22	14.80	16.50	51.39	7.94	S4° 17' 59"W	14.31
C23	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21
C24	12.33	155.00	4.56	6.17	N66° 19' 41"E	12.32
C25	37.30	155.00	13.79	18.74	N57° 09' 22"E	37.21
C26	10.11	16.50	35.11	5.22	N32° 42' 23"E	9.95
C27	6.35	16.50	22.03	3.21	N4° 07' 58"E	6.31
C28	60.07	60.00	57.36	32.82	N21° 47' 48"E	57.59
C29	45.94	60.00	43.87	24.16	N72° 24' 49"E	44.83
C30	35.52	60.00	33.92	18.30	S68° 41' 35"E	35.00
C31	41.76	60.00	39.88	21.77	S31° 47' 39"E	40.93
C32	32.39	60.00	30.93	16.60	S3° 36' 47"W	32.00
C33	32.39	60.00	30.93	16.60	S34° 32' 43"W	32.00
C34	50.75	60.00	48.46	27.00	S74° 14' 34"W	49.25
C35	9.36	60.00	8.94	4.69	N77° 03' 29"W	9.35
C36	16.46	16.50	57.15	8.99	S78° 50' 10"W	15.78
C37	23.56	15.00	90.00	15.00	S5° 15' 46"W	21.21
C38	66.71	445.00	8.59	33.42	S44° 01' 55"E	66.65
C39	281.44	445.00	36.24	145.61	N57° 51' 21"W	276.77
C40	23.66	15.00	90.37	15.10	S23° 25' 19"W	21.28
C41	11.09	295.00	2.15	5.54	S67° 31' 47"W	11.09
C42	42.51	295.00	8.26	21.29	S62° 19' 28"W	42.48
C43	42.54	295.00	8.26	21.31	S54° 03' 54"W	42.50
C44	42.54	295.00	8.26	21.31	S45° 48' 12"W	42.50
C45	42.54	295.00	8.26	21.31	S37° 32' 30"W	42.50
C46	42.54	295.00	8.26	21.31	S29° 16' 48"W	42.50
C47	42.54	295.00	8.26	21.31	S21° 01' 06"W	42.50
C48	42.54	295.00	8.26	21.31	S12° 45' 25"W	42.50
C49	42.54	295.00	8.26	21.31	S4° 29' 43"W	42.50
C50	62.49	295.00	12.14	31.36	S5° 42' 14"E	62.37
C51	42.54	295.00	8.26	21.31	S15° 54' 11"E	42.50
C52	7.00	295.00	1.36	3.50	S20° 42' 50"E	7.00
C53	23.56	15.00	90.00	15.00	S23° 36' 23"W	21.21
C54	65.63	205.00	18.34	33.10	S59° 26' 04"W	65.35
C55	23.56	15.00	90.00	15.00	N84° 44' 14"W	21.21
C56	11.46	495.00	1.33	5.73	N40° 24' 02"W	11.46
C57	46.43	495.00	5.37	23.23	N43° 45' 04"W	46.42
C58	46.55	495.00	5.39	23.29	N49° 07' 56"W	46.53
C59	46.55	495.00	5.39	23.29	N54° 31' 12"W	46.53
C60	46.55	495.00	5.39	23.29	N59° 54' 28"W	46.53
C61	52.42	495.00	6.07	26.23	N65° 38' 07"W	52.39
C62	23.47	15.00	89.63	14.90	S66° 34' 41"E	21.14
C63	43.15	205.00	12.06	21.66	S15° 43' 56"E	43.07
C64	80.23	205.00	22.42	40.64	S1° 30' 38"W	79.72
C65	74.30	205.00	20.77	37.56	S23° 06' 20"W	73.89

Curve Table							
Curve #	Length	Radius	Delta	Tangent	Chord Direction	Chord Length	
C66	23.56	15.00	90.00	15.00	S78° 29' 17"W	21.21	
C67	8.11	175.00	2.66	4.06	N55° 11' 02"W	8.11	
C68	81.42	175.00	26.66	41.46	N40° 31' 39"W	80.69	
C69	17.73	175.00	5.81	8.87	N24° 17' 47"W	17.72	
C70	23.56	15.00	90.00	15.00	N23° 36' 23"E	21.21	
C71	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21	
C72	16.46	16.50	57.15	8.99	S7° 10' 48"W	15.78	
C73	39.45	60.00	37.68	20.47	S16° 54' 56"W	38.75	
C74	38.14	60.00	36.42	19.74	S20° 07' 57"E	37.50	
C75	38.14	60.00	36.42	19.74	S56° 33' 08"E	37.50	
C76	38.36	60.00	36.63	19.86	N86° 55' 19"E	37.71	
C77	38.36	60.00	36.63	19.86	N50° 17' 26"E	37.71	
C78	38.14	60.00	36.42	19.74	N13° 45' 54"E	37.50	
C79	38.14	60.00	36.42	19.74	N22° 39' 18"W	37.50	
C80	39.45	60.00	37.68	20.47	N59° 42' 10"W	38.75	
C81	16.46	16.50	57.15	8.99	N49° 58' 02"W	15.78	
C82	23.56	15.00	90.00	15.00	N23° 36' 23"E	21.21	
C83	23.56	15.00	90.00	15.00	S11° 30' 43"E	21.21	
C84	30.08	205.00	8.41	15.07	S37° 41' 30"W	30.05	
C85	95.57	205.00	26.71	48.67	S55° 15' 03"W	94.71	
C86	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21	
C87	23.56	15.00	90.00	15.00	N23° 36' 22"E	21.21	
C88	21.72	225.00	5.53	10.87	N65° 50' 26"E	21.71	
C89	55.61	225.00	14.16	27.95	N55° 59' 38"E	55.47	
C90	48.72	225.00	12.41	24.45	N42° 42' 37"E	48.62	
C91	11.86	225.00	3.02	5.93	N34° 59' 52"E	11.86	
C92	23.56	15.00	90.00	15.00	N78° 29' 17"E	21.21	
C93	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21	
C94	44.00	225.00	11.21	22.07	S26° 59' 47"E	43.93	
C95	50.10	225.00	12.76	25.16	S38° 58' 42"E	50.00	
C96	43.80	225.00	11.15	21.97	S50° 56' 05"E	43.73	
C97	23.56	15.00	90.00	15.00	S11° 30' 43"E	21.21	
C98	57.01	175.00	18.66	28.76	S42° 49' 13"W	56.76	
C99	50.26	175.00	16.45	25.30	S60° 22' 46"W	50.08	
C100	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21	
C101	23.56	15.00	90.00	15.00	N23° 36' 23"E	21.21	
C102	16.46	16.50	57.15	8.99	S82° 49' 12"E	15.78	
C103	3.25	16.50	11.28	1.63	N62° 41' 14"W	3.24	
C104	56.84	60.00	54.28	30.76	S81° 23' 17"E	54.74	
C105	34.41	60.00	32.86	17.69	N55° 02' 20"E	33.94	
C106	31.42	60.00	30.00	16.08	N23° 36' 26"E	31.06	
C107	31.42	60.00	30.00	16.08	N6° 23' 36"W	31.06	
C108	31.42	60.00	30.00	16.08	N36° 23' 38"W	31.06	
C109	31.42	60.00	30.00	16.08	N66° 23' 40"W	31.06	
C110	34.41	60.00	32.86	17.69	S82° 10' 25"W	33.94	
C111	56.84	60.00	54.28	30.76	S38° 36' 02"W	54.74	
C112	3.90	16.50	13.53	1.96	N18° 46' 39"E	3.89	
C113	16.46	16.50	57.15	8.99	S40° 01' 58"W	15.78	
C114	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21	
C115	23.56	15.00	90.00	15.00	N23° 36' 23"E	21.21	
C116	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21	
C117	23.56	15.00	90.00	15.00	S23° 36' 23"W	21.21	
C118	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21	
C119	1.27	16.50	4.40	0.63	N19° 11' 42"W	1.27	
C120	15.19	16.50	52.75	8.18	N9° 22' 43"E	14.66	
C121	46.74	60.00	44.63	24.63	N13° 26' 12"E	45.57	
C122	35.52	60.00	33.92	18.30	N25° 50' 17"W	35.00	
C123	35.52	60.00	33.92	18.30	N59° 45' 13"W	35.00	
C124	36.32	60.00	34.68	18.74	S85° 56' 51"W	35.77	
C125	36.32	60.00	34.68	18.74	S51° 15' 55"W	35.77	
C126	35.52	60.00	33.92	18.30	S16° 57' 59"W	35.00	
C127	35.52	60.00	33.92	18.30	S16° 56' 57"E	35.00	
C128	46.74	60.00	44.63	24.63	S56° 13' 26"E	45.57	
C129	15.19	16.50	52.75	8.18	S52° 09' 57"E	14.66	
C130	1.27	16.50	4.40	0.63	S23° 35' 32"E	1.27	

Curve Table						
Curve #	Length	Radius	Delta	Tangent	Chord Direction	Chord Length
C131	23.56	15.00	90.00	15.00	S23° 36' 23"W	21.21
C132	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21
C133	79.57	245.00	18.61	40.14	N12° 05' 21"W	79.22
C134	85.24	245.00	19.93	43.05	N7° 10' 55"E	84.81
C135	85.24	245.00	19.93	43.05	N27° 06' 56"E	84.81
C136	85.24	245.00	19.93	43.05	N47° 02' 56"E	84.81
C137	49.56	245.00	11.59	24.87	N62° 48' 40"E	49.48
C138	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21
C139	23.56	15.00	90.00	15.00	S23° 36' 23"W	21.21
C140	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21
C141	23.56	15.00	90.00	15.00	N23° 36' 23"E	21.21
C142	275.09	445.00	35.42	142.10	S86° 18' 58"W	270.73
C143	23.28	445.00	3.00	11.64	N70° 06' 19"E	23.28
C144	10.48	575.00	1.04	5.24	N68° 05' 04"E	10.48
C145	57.52	575.00	5.73	28.79	N64° 41' 47"E	57.50
C146	57.52	575.00	5.73	28.79	N58° 57' 52"E	57.50
C147	57.52	575.00	5.73	28.79	N53° 13' 57"E	57.50
C148	57.52	575.00	5.73	28.79	N47° 30' 02"E	57.50
C149	57.52	575.00	5.73	28.79	N41° 46' 07"E	57.50
C150	57.52	575.00	5.73	28.79	N36° 02' 11"E	57.50
C151	57.52	575.00	5.73	28.79	N30° 18' 16"E	57.50
C152	49.85	575.00	4.97	24.94	N24° 57' 18"E	49.83
C153	34.12	495.00	3.95	17.07	N24° 26' 46"E	34.12
C154	44.57	495.00	5.16	22.30	N29° 00' 00"E	44.55
C155	44.57	495.00	5.16	22.30	N34° 09' 30"E	44.55
C156	59.44	495.00	6.88	29.75	N40° 10' 39"E	59.40
C157	59.44	495.00	6.88	29.75	N47° 03' 25"E	59.40
C158	44.57	495.00	5.16	22.30	N53° 04' 34"E	44.55
C159	44.57	495.00	5.16	22.30	N58° 14' 04"E	44.55
C160	44.57	495.00	5.16	22.30	N63° 23' 34"E	44.55
C161	22.76	495.00	2.63	11.38	N67° 17' 21"E	22.76
C162	60.14	495.00	6.96	30.11	N72° 08' 59"W	60.10
C163	51.09	495.00	5.91	25.57	N78° 35' 13"W	51.07
C164	44.57	495.00	5.16	22.30	N84° 07' 23"W	44.55
C165	44.57	495.00	5.16	22.30	N89° 16' 53"W	44.55
C166	44.57	495.00	5.16	22.30	S85° 33' 37"W	44.55
C167	44.57	495.00	5.16	22.30	S80° 24' 07"W	44.55
C168	44.57	495.00	5.16	22.30	S75° 14' 37"W	44.55
C169	35.06	495.00	4.06	17.54	S70° 38' 07"W	35.05
C170	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21
C171	23.56	15.00	90.00	15.00	S23° 36' 23"E	21.21
C172	16.46	16.50	57.15	8.99	S82° 49' 12"E	15.78
C173	22.97	60.00	21.93	11.62	S65° 12' 41"E	22.83
C174	46.13	60.00	44.05	24.27	N81° 47' 57"E	45.00
C175	34.47	60.00	32.92	17.73	N43° 18' 56"E	34.00
C176	47.65	60.00	45.50	25.16	N4° 06' 25"E	46.40
C177	30.32	60.00	28.96	15.49	N33° 07' 12"W	30.00
C178	30.32	60.00	28.96	15.49	N62° 04' 30"W	30.00
C179	46.13	60.00	44.05	24.27	S81° 25' 23"W	45.00
C180	50.20	60.00	47.94	26.68	S35° 25' 44"W	48.75
C181	16.46	16.50	57.15	8.99	S40° 01' 58"W	15.78
C182	23.56	15.00	90.00	15.00	N66° 23' 37"W	21.21
C183	23.56	15.00	90.00	15.00	S66° 23' 37"E	21.21
C184	23.56	15.00	90.00	15.00	S23° 36' 23"W	21.21
C185	5.02	625.00	0.46	2.51	S68° 22' 34"W	5.02
C186	44.65	625.00	4.09	22.34	S66° 05' 57"W	44.64
C187	44.65	625.00	4.09	22.34	S62° 00' 21"W	44.64
C188	44.65	625.00	4.09	22.34	S57° 54' 44"W	44.64
C189	44.65	625.00	4.09	22.34	S53° 49' 08"W	44.64
C190	44.65	625.00	4.09	22.34	S49° 43' 32"W	44.64
C191	44.65	625.00	4.09	22.34	S45° 37' 55"W	44.64
C192	44.65	625.00	4.09	22.34	S41° 32' 19"W	44.64
C193	44.65	625.00	4.09	22.34	S37° 26' 43"W	44.64
C194	44.65	625.00	4.09	22.34	S33° 21' 06"W	44.64
C195	43.31	625.00	3.97	21.66	S29° 19' 12"W	43.30

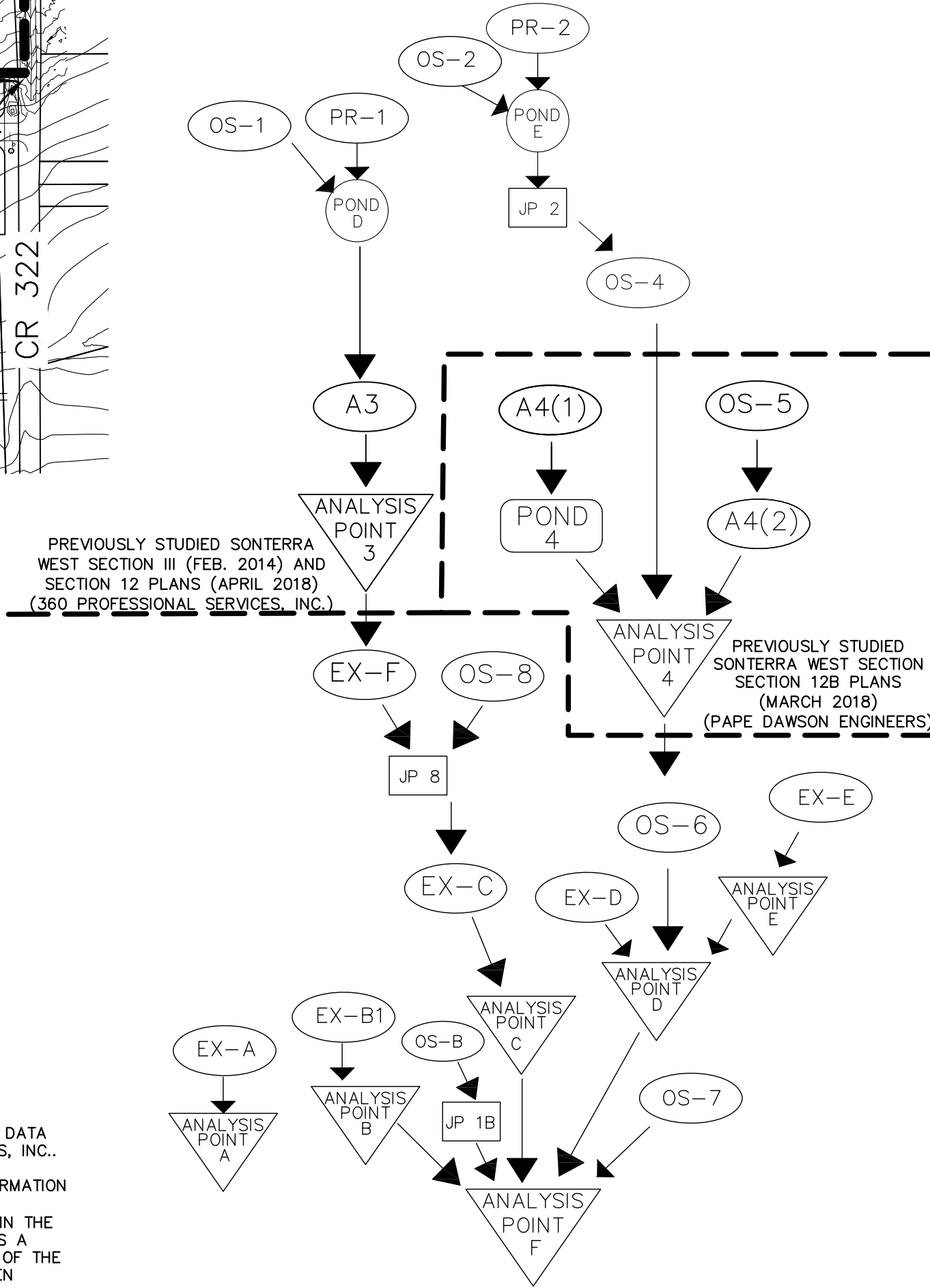


EXISTING CONDITIONS - SCS METHOD SUMMARY										
Area ID	DA (ac.)	IC (ac.)	IC (%)	TOC (min.)	TOC (hr.)	CN	Q2	Q10	Q25	Q100
A4(1)*	25.8	13.7	53%	18	0.30	89.0	47	96	125	171
A4(2)	7.4	3.3	45%	17	0.29	85.8	12	26	35	48
OS-5	10.5	0.0	0%	30	0.49	83.1	13	29	38	54
OS-6	35.3	0.0	0%	38	0.63	83.0	38	86	115	163
OS-7	152.2	15.2	10%	49	0.82	83.2	143	326	435	614
OS-8	26.1	0.0	0%	29	0.49	79.8	27	66	90	130
EX-A	11.3	0.0	0%	24	0.40	80.3	13	32	43	62
EX-B	12.9	0.0	0%	23	0.38	79.8	15	36	50	71
EX-C	35.0	0.0	0%	21	0.35	81.3	44	106	142	203
EX-D	49.3	0.0	0%	30	0.50	81.5	54	129	174	248
EX-E	6.8	0.0	0%	17	0.29	83.5	10	23	31	43
EX-F	12.4	0.0	0%	29	0.46	79.5	14	34	46	67
OS-B	2.0	0.0	0%	10	0.17	80.5	3	7	10	14

ANALYSIS POINT FLOW DISCHARGE (CFS)				
NODE	2 YR (EX)	10 YR (EX)	25 YR (EX)	100 YR (EX)
AP 3	54	111	147	214
AP 4	96	205	311	465
JP 8	83	190	255	366
JP 1B	3	7	10	14
AP A	13	32	43	62
AP B	15	36	50	71
AP C	104	250	340	493
AP D	191	423	606	895
AP E	10	23	31	43
AP F	434	1,004	1,381	2,011

- NOTES:
- ON-SITE SURVEY PROVIDED BY LENZ AND ASSOCIATES, INC. DATED JUNE 2018. OTHER DATA SHOWN PROVIDED BY WILLIAMSON COUNTY, CAPCOG GIS, AND PAPE-DAWSON ENGINEERS, INC. NO WARRANTY IS EXPRESSED OR IMPLIED AS TO ITS ACCURACY.
 - REFER TO THE ASSOCIATED SONTERRA NORTH DRAINAGE REPORT FOR ADDITIONAL INFORMATION (DATED AUGUST 2018 BY 360 PROFESSIONAL SERVICES, INC F4932).
 - PER EXISTING PLAT REQUIREMENTS, DETENTION SERVING THE COMMERCIAL TRACTS WITHIN THE OS-2 AND PR-2 DRAINAGE AREAS WILL BE PROVIDED ON AN INDIVIDUAL BASIS UNLESS A REGIONAL STORMWATER DETENTION FACILITY IS CONSTRUCTED TO SERVE SOME OR ALL OF THE LOTS IN THE FUTURE. THUS, THE DRAINAGE MODEL ASSUMES FUTURE POND E HAS BEEN CONSTRUCTED.
 - POND 4 AND DRAINAGE AREAS A4(1) AND A4(2) INFORMATION HAS BEEN PROVIDED FROM PAPE DAWSON ENGINEERS AND CAN BE FOUND WITHIN THEIR SONTERRA WEST SECTION 12B PLANS AND DRAINAGE MODELS (MARCH 2018).

EXISTING CONDITIONS



TEXAS FIRM REGISTRATION F4932
P.O. BOX 3639 CEDAR PARK, TEXAS 78630
PHONE (512) 354-4652

360 PROFESSIONAL SERVICES, INC.

SCOTT J. FOSTER
84652
LICENSED PROFESSIONAL ENGINEER
12/31/2019

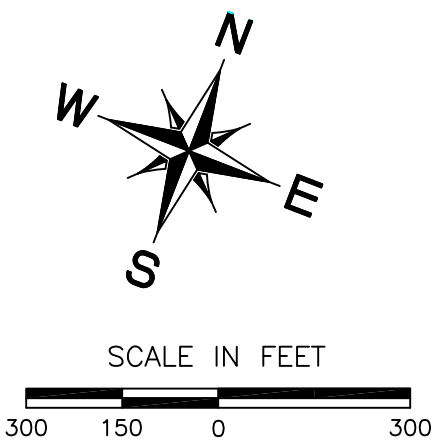
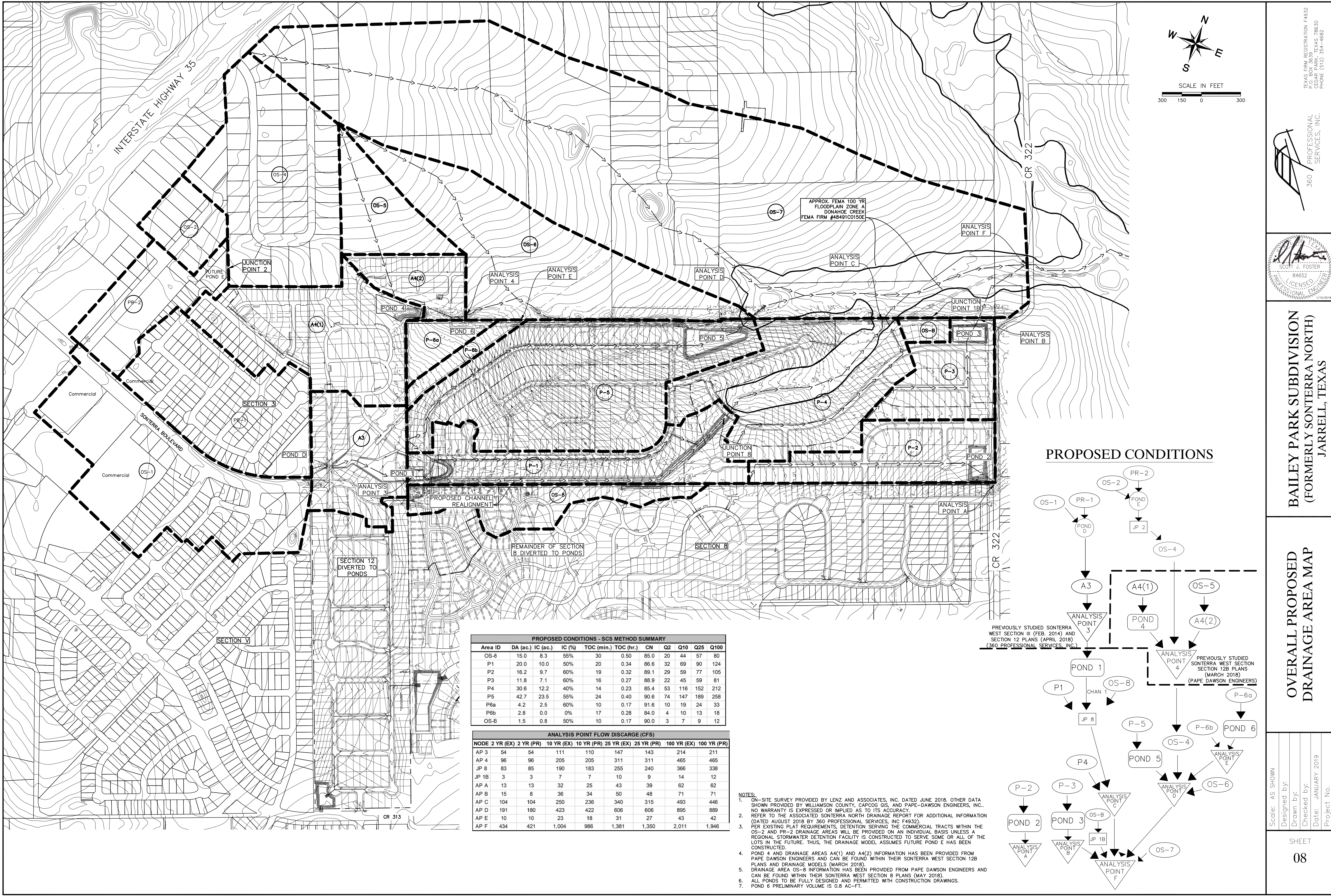
BAILEY PARK SUBDIVISION
(FORMERLY SONTERRA NORTH)
JARRELL, TEXAS

OVERALL EXISTING
DRAINAGE AREA MAP

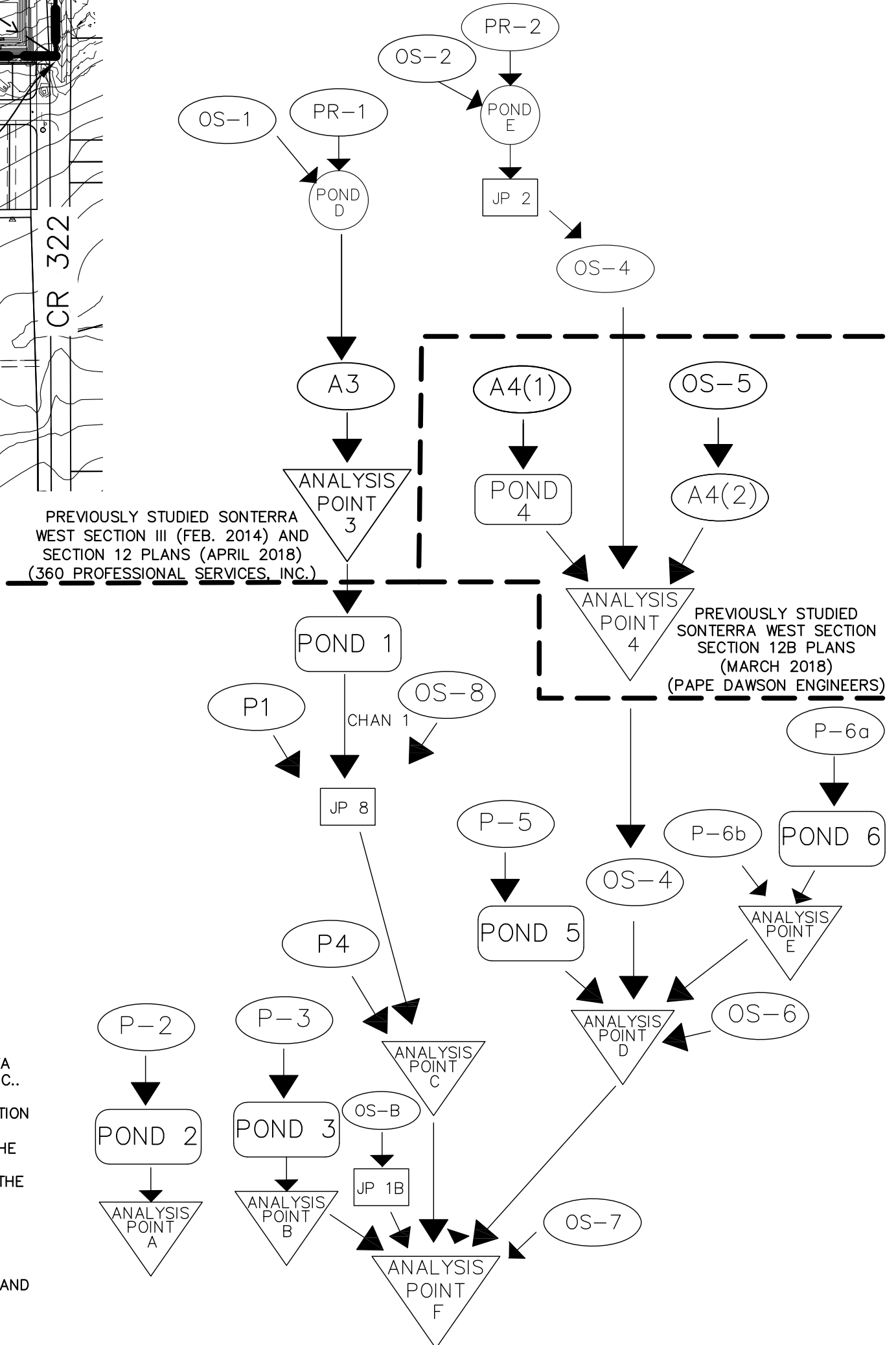
Scale: AS SHOWN
Designed by:
Drawn by:
Checked by:
Date: JANUARY 2019
Project No:

SHEET
07

PROJECT: 20170215_0925050086_1_Hydrologic_Sol_Drains_Hill_Sign.tif
FILES: 20170215_Hill_Sign.tif
MASES: Pages from 20170215_0925050086_1_Hydrologic_Sol_Drains_Hill_Sign.tif 10-30mm



PROPOSED CONDITIONS



PROPOSED CONDITIONS - SCS METHOD SUMMARY										
Area ID	DA (ac.)	IC (ac.)	IC (%)	TOC (min.)	TOC (hr.)	CN	Q2	Q10	Q25	Q100
OS-8	15.0	8.3	55%	30	0.50	85.0	20	44	57	80
P1	20.0	10.0	50%	20	0.34	86.6	32	69	90	124
P2	16.2	9.7	60%	19	0.32	89.1	29	59	77	105
P3	11.8	7.1	60%	16	0.27	88.9	22	45	59	81
P4	30.6	12.2	40%	14	0.23	85.4	53	116	152	212
P5	42.7	23.5	55%	24	0.40	90.6	74	147	189	258
P6a	4.2	2.5	60%	10	0.17	91.6	10	19	24	33
P6b	2.8	0.0	0%	17	0.28	84.0	4	10	13	18
OS-B	1.5	0.8	50%	10	0.17	90.0	3	7	9	12

ANALYSIS POINT FLOW DISCHARGE (CFS)								
NODE	2 YR (EX)	2 YR (PR)	10 YR (EX)	10 YR (PR)	25 YR (EX)	25 YR (PR)	100 YR (EX)	100 YR (PR)
AP 3	54	54	111	110	147	143	214	211
AP 4	96	96	205	205	311	311	465	465
JP 8	83	85	190	183	255	240	366	338
JP 1B	3	3	7	7	10	9	14	12
AP A	13	13	32	25	43	39	62	62
AP B	15	8	36	34	50	48	71	71
AP C	104	104	250	236	340	315	493	446
AP D	191	180	423	422	606	606	895	889
AP E	10	10	23	18	31	27	43	42
AP F	434	421	1,004	986	1,381	1,350	2,011	1,946

- NOTES:
- ON-SITE SURVEY PROVIDED BY LENZ AND ASSOCIATES, INC. DATED JUNE 2018. OTHER DATA SHOWN PROVIDED BY WILLIAMSON COUNTY, CAPCOG GIS, AND PAPE-DAWSON ENGINEERS, INC. NO WARRANTY IS EXPRESSED OR IMPLIED AS TO ITS ACCURACY.
 - REFER TO THE ASSOCIATED SONTERRA NORTH DRAINAGE REPORT FOR ADDITIONAL INFORMATION (DATED AUGUST 2018 BY 360 PROFESSIONAL SERVICES, INC F4932).
 - PER EXISTING PLAT REQUIREMENTS, DETENTION SERVING THE COMMERCIAL TRACTS WITHIN THE OS-2 AND PR-2 DRAINAGE AREAS WILL BE PROVIDED ON AN INDIVIDUAL BASIS UNLESS A REGIONAL STORMWATER DETENTION FACILITY IS CONSTRUCTED TO SERVE SOME OR ALL OF THE LOTS IN THE FUTURE. THUS, THE DRAINAGE MODEL ASSUMES FUTURE POND E HAS BEEN CONSTRUCTED.
 - POND 4 AND DRAINAGE AREAS A4(1) AND A4(2) INFORMATION HAS BEEN PROVIDED FROM PAPE DAWSON ENGINEERS AND CAN BE FOUND WITHIN THEIR SONTERRA WEST SECTION 12B PLANS AND DRAINAGE MODELS (MARCH 2018).
 - DRAINAGE AREA OS-8 INFORMATION HAS BEEN PROVIDED FROM PAPE DAWSON ENGINEERS AND CAN BE FOUND WITHIN THEIR SONTERRA WEST SECTION 8 PLANS (MAY 2018).
 - ALL PONDS TO BE FULLY DESIGNED AND PERMITTED WITH CONSTRUCTION DRAWINGS.
 - POND 6 PRELIMINARY VOLUME IS 0.8 AC-FT.

TEXAS FIRM REGISTRATION F4932
P.O. BOX 3639
CEDAR PARK, TEXAS 78630
PHONE (512) 354-4682

360 PROFESSIONAL SERVICES, INC.

SCOTT J. FOSTER
84652
LICENSED PROFESSIONAL ENGINEER
12/31/2019

BAILEY PARK SUBDIVISION
(FORMERLY SONTERRA NORTH)
JARRELL, TEXAS

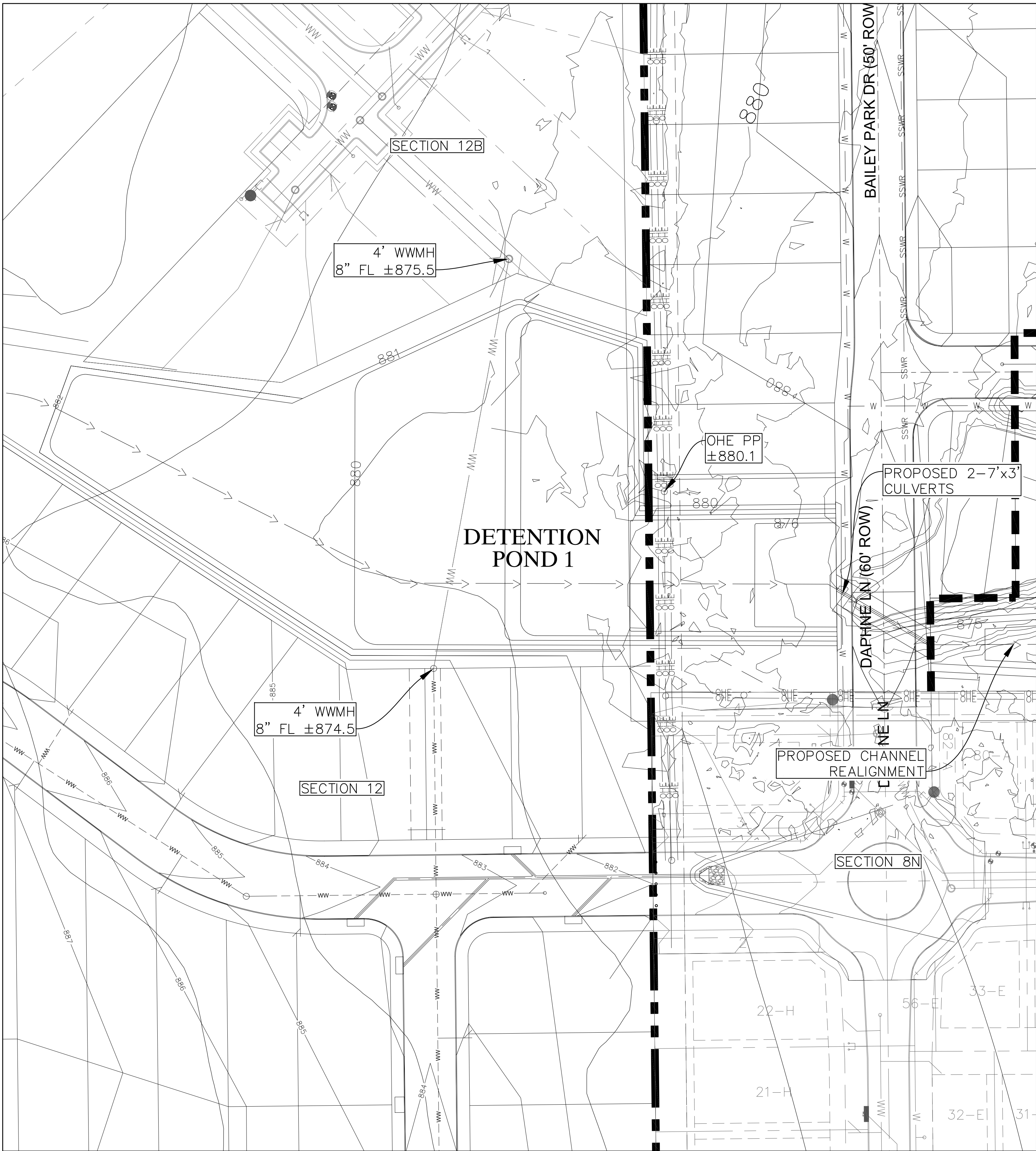
OVERALL PROPOSED
DRAINAGE AREA MAP

Scale: AS SHOWN
Designed by:
Drawn by:
Checked by:
Date: JANUARY 2019
Project No:

SHEET
08

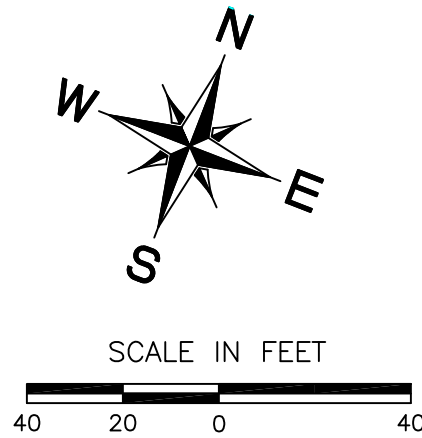
PROJECT: Bailey Park Subdivision (Formerly Sonterra North) Jarrell, Texas
DATE: 01/20/2019
DRAWN BY: [Redacted]
CHECKED BY: [Redacted]
DATE: 01/20/2019
PROJECT NO: [Redacted]
SHEET: 08 OF 10
SCALE: AS SHOWN
DESIGNED BY: [Redacted]
DRAWN BY: [Redacted]
CHECKED BY: [Redacted]
DATE: 01/20/2019
PROJECT NO: [Redacted]

POND 1

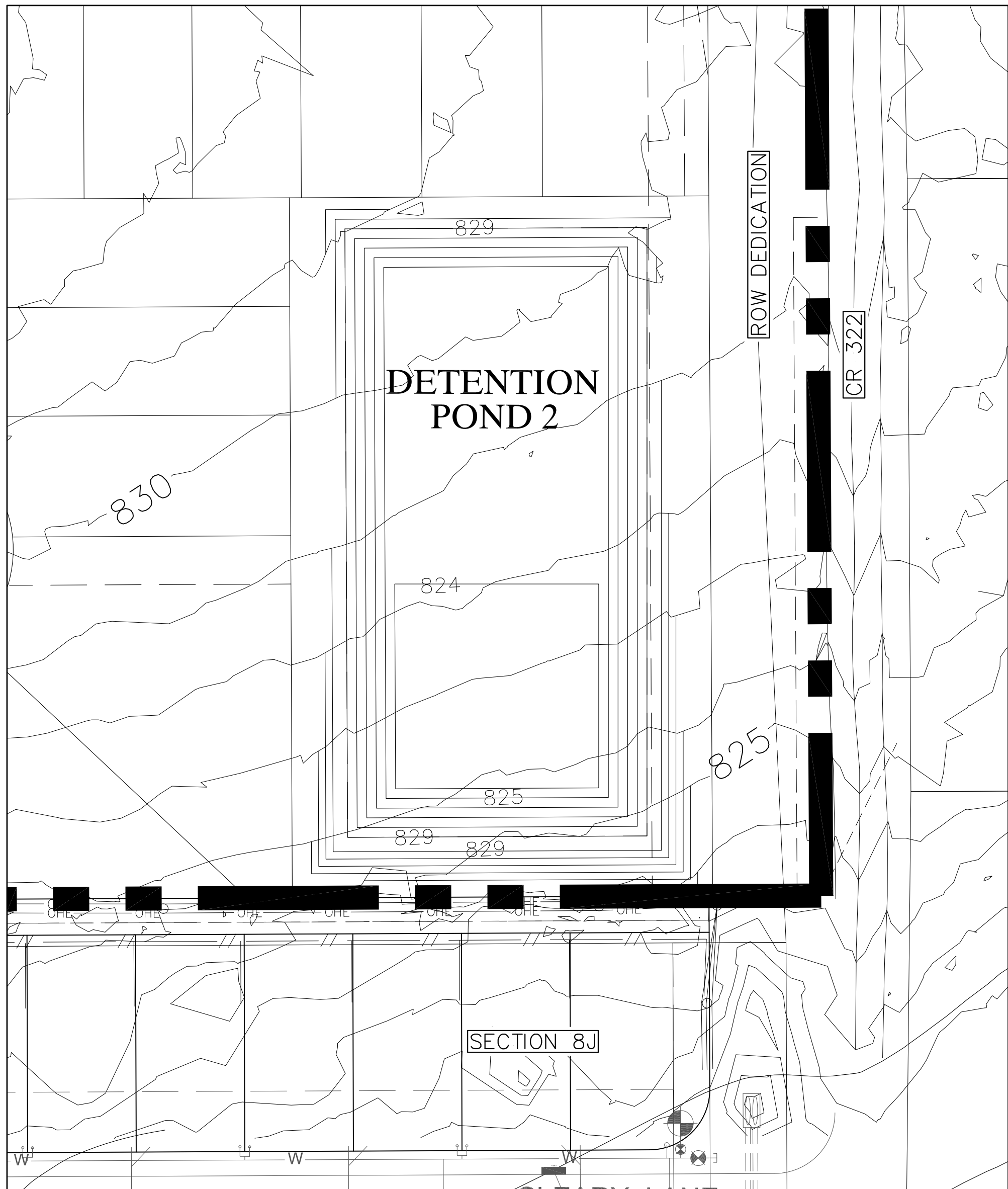


Detention Pond 1 Stage/Volume/Discharge										
STAGE	CONTOUR AREA	CONICAL AREA	INCREMENTAL VOLUME	CUMULATIVE VOLUME	CUMULATIVE VOLUME	Orifice area (sf)	Culvert widthxheight (ft)			TOTAL Q
(FT5)	(AC)	(SF)	(ac-ft)	(ac-ft)	(CF)	2 @ 875.5 Q (cfs)	7'x2' @ 876.5 Q (cfs)			Q (cfs)
875.5	0.000	0	0.000	0.000	0	0.0	0.0	0.0		0.0
876.0	0.095	4127	0.016	0.016	687	13.6	0.0			13.6
877.0	0.215	19719	0.151	0.167	7254	23.6	13.9	37.5		
878.0	0.580	50051	0.383	0.549	23921	30.4	72.0	102.5		
879.0	0.647	80182	0.613	1.162	50621	36.0	155.1	191.1		
880.0	1.119	114015	0.872	2.034	88588	40.8	230.6	271.4		
881.0	1.684	181889	1.390	3.424	149158	45.2	279.1	324.3		

DETENTION POND 1 ROUTING SUMMARY			
STORM EVENT	IN (CFS)	OUT (CFS)	WSEL
2-YEAR	55	54	877.3
10-YEAR	111	110	878.1
25-YEAR	147	145	878.5
100-YEAR	214	211	879.2



POND 2



Detention Pond 2 Stage/Volume/Discharge								Orifice #1		Rect. Weir #1		Orifice TOTAL Q (cfs)
STAGE (FT)	AREA (AC)	CONICAL AREA (SF)	INCREMENTAL VOLUME (ac-ft)	CUMULATIVE VOLUME (ac-ft)	CUMULATIVE VOLUME (CF)			size (in) 20" @ 823.5 Q (cfs)		length (ft) @ 827.0 Q (cfs)		
823.5	0.000	0	0.000	0.000	0			0.0		0.0		0.0
824.0	0.176	7668	0.059	0.059	2553			1.0		0.0		1.0
825.0	0.498	42259	0.323	0.382	16625			7.8		0.0		7.8
826.0	0.558	68964	0.527	0.909	39590			13.6		0.0		13.6
827.0	0.621	76995	0.589	1.497	65230			17.2		0.0		17.2
828.0	0.687	85410	0.653	2.150	93671			20.1		12.0		32.1
829.0	0.756	94209	0.720	2.871	125043			22.7		33.9		56.6
830.0	0.791	101051	0.772	3.643	158693			23.9		62.4		86.2

DETENTION POND 2 ROUTING SUMMARY			
STORM EVENT	IN (CFS)	OUT (CFS)	WSEL
2-YEAR	29	13	825.9
10-YEAR	59	25	827.6
25-YEAR	77	39	828.3
100-YEAR	105	62	829.2

DETENTION POND 3

826 826

ROW DEDICATION

CR 322

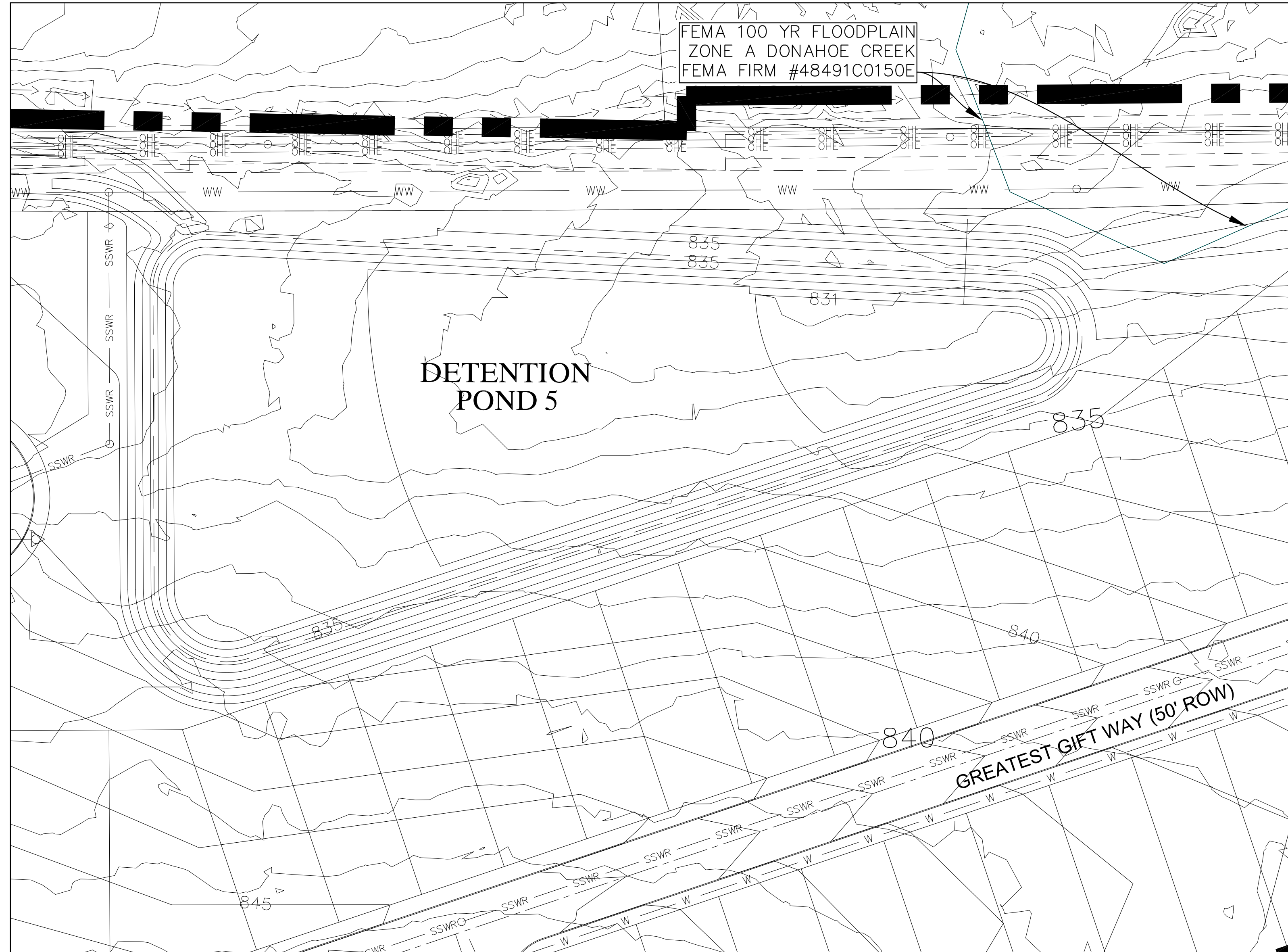
SSWR SSWR SSWR SSWR

W W W W

SSWR SSWR

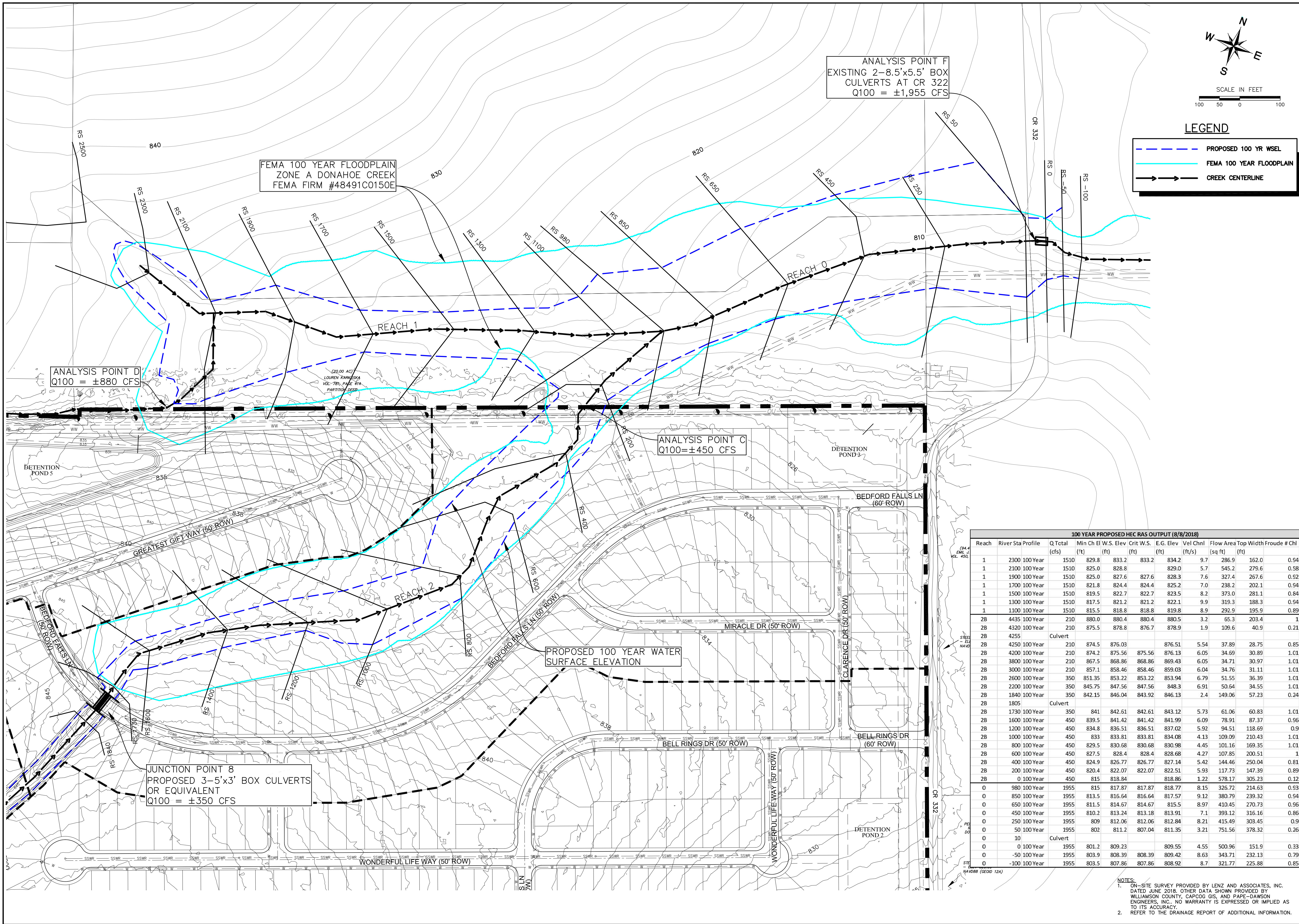
W R M M

BEDFORD FALLS LN (60' ROW)



DETENTION POND 3 ROUTING SUMMARY			
STORM EVENT	IN (CFS)	OUT (CFS)	WSEL
2-YEAR	22	8	824.2
10-YEAR	45	34	824.8
25-YEAR	59	48	825.1
100-YEAR	81	71	825.3

DETENTION POND 5 ROUTING SUMMARY			
STORM EVENT	IN (CFS)	OUT (CFS)	WSEL
2-YEAR	74	42	833.1
10-YEAR	147	123	833.8
25-YEAR	189	168	834.1
100-YEAR	258	239	834.5



TEXAS FIRM REGISTRATION #4932
P.O. BOX 3639
CEDAR PARK, TEXAS 78630
PHONE (512) 354-4652

360 PROFESSIONAL SERVICES, INC.

SCOTT J. FOSTER
84652
LICENSED PROFESSIONAL ENGINEER
1/16/2019

BAILEY PARK SUBDIVISION
(FORMERLY SONTERRA NORTH)
JARRELL, TEXAS

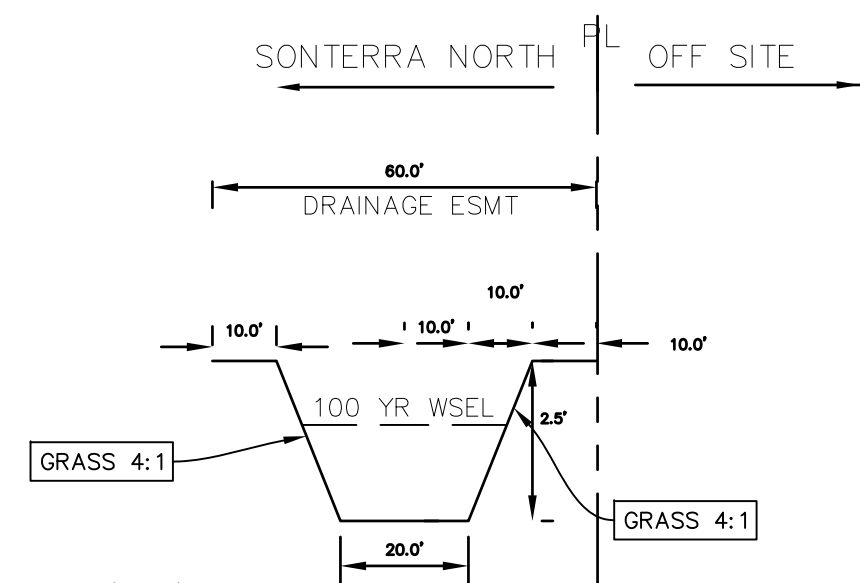
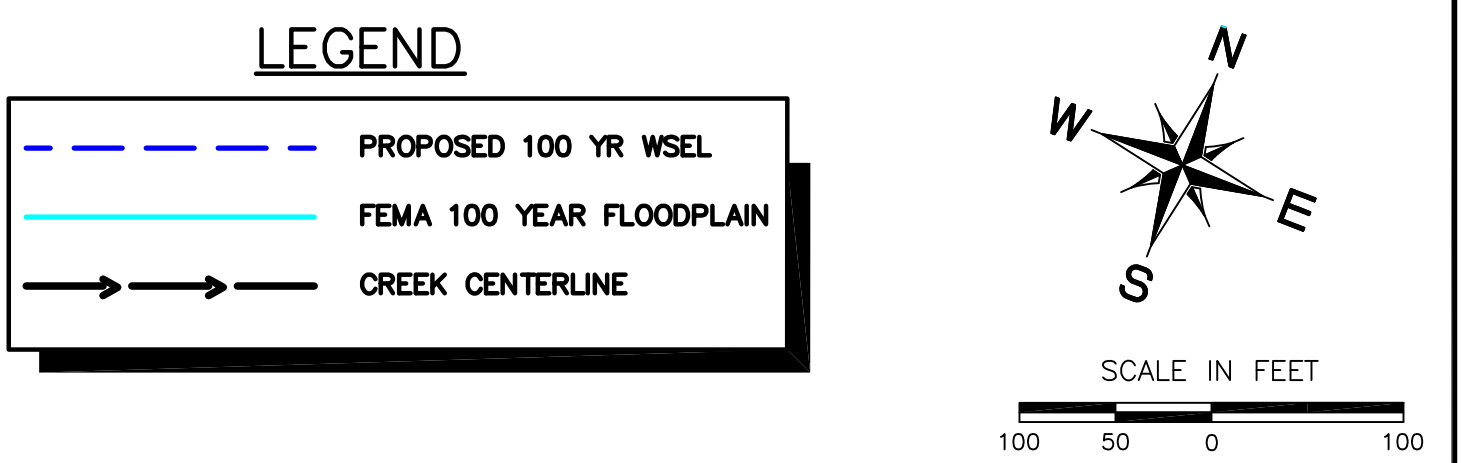
CHANNEL HEC-RAS
SCHEMATIC
(SHEET 1 OF 2)

Scale: AS SHOWN

Designed by:
Drawn by:
Checked by:
Date: JANUARY 2019
Project No.

SHEET
11

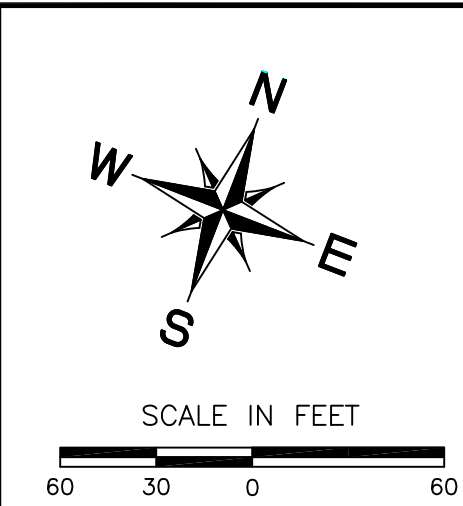
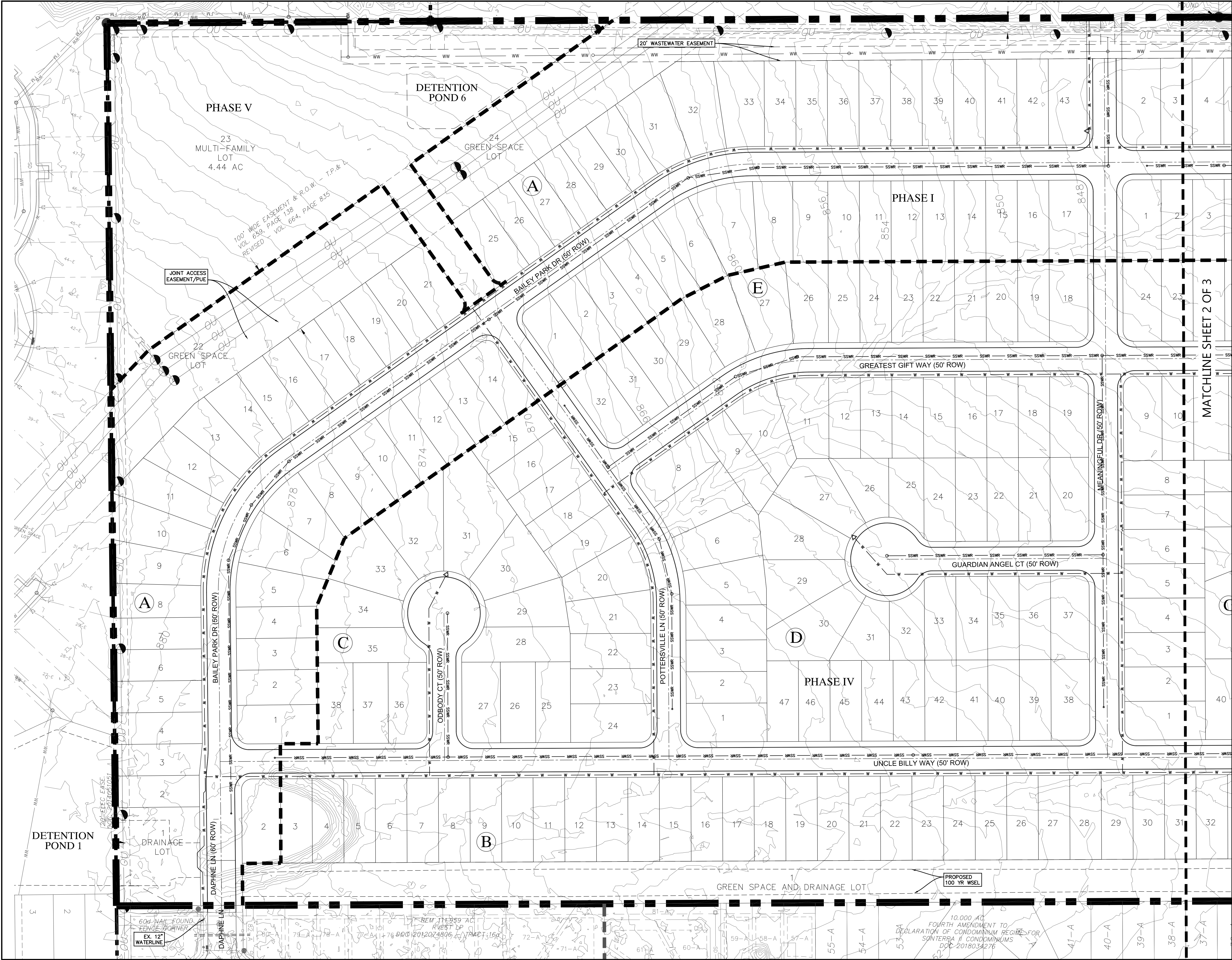
NOTES:
1. ON-SITE SURVEY PROVIDED BY LENZ AND ASSOCIATES, INC. DATED JUNE 2018. OTHER DATA SHOWN PROVIDED BY WILLIAMSON COUNTY, CAPCOG GIS, AND PAPE-DAWSON ENGINEERS, INC. NO WARRANTY IS EXPRESSED OR IMPLIED AS TO ITS ACCURACY.
2. REFER TO THE DRAINAGE REPORT OF ADDITIONAL INFORMATION.



NOTES:

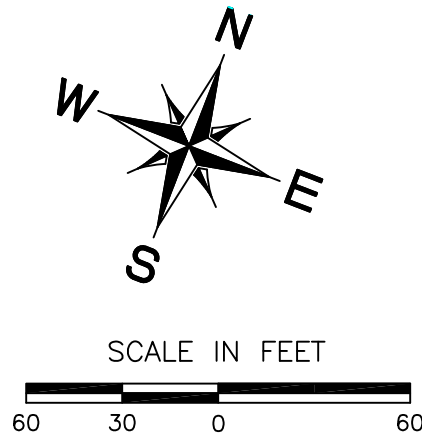
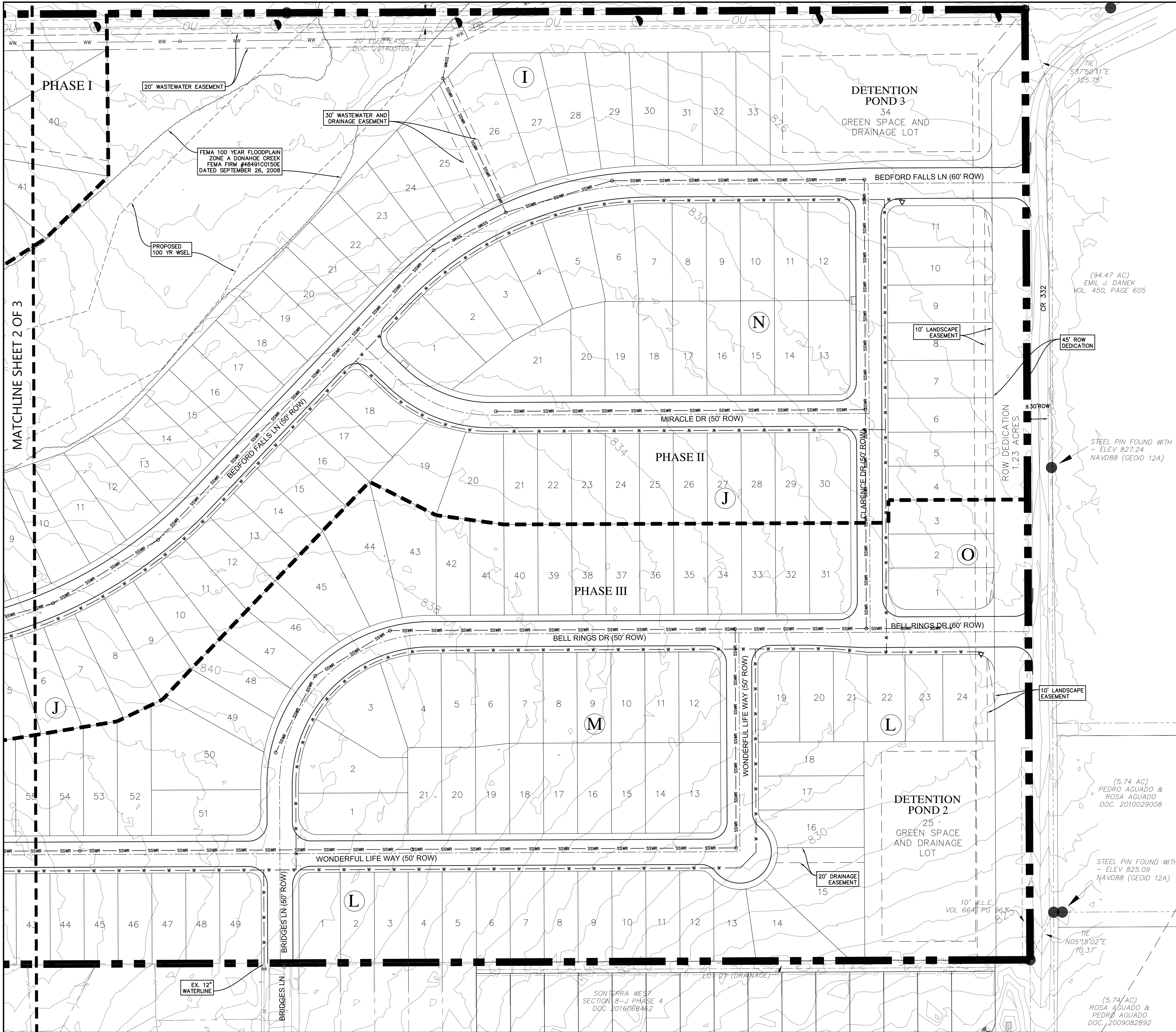
1. ON-SITE SURVEY PROVIDED BY LENZ AND ASSOCIATES, INC. DATED JUNE 2018. OTHER DATA SHOWN PROVIDED BY WILLIAMSON COUNTY, CAPCOG GIS, AND PAPE-DAWSON ENGINEERS, INC.. NO WARRANTY IS EXPRESSED OR IMPLIED AS TO ITS ACCURACY.
2. REFER TO THE DRAINAGE REPORT OF ADDITIONAL INFORMATION.

100 YEAR PROPOSED HEC RAS OUTPUT (8/8/2018)											
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	Vel Chnl (ft/s)	Flow Area Top (sq ft)	Width Froude # Chl	
1	2300	100 Year	1510	829.8	833.2	833.2	834.2	9.7	286.9	162.0	0.94
1	2100	100 Year	1510	825.0	828.8		829.0	5.7	545.2	279.6	0.58
1	1900	100 Year	1510	825.0	827.6	827.6	828.3	7.6	327.4	267.6	0.52
1	1700	100 Year	1510	821.8	824.4	824.4	825.2	7.0	238.2	202.1	0.94
1	1500	100 Year	1510	819.5	822.7	822.7	823.5	8.2	373.0	281.1	0.84
1	1300	100 Year	1510	817.5	821.2	821.2	822.1	9.9	319.3	188.3	0.94
1	1100	100 Year	1510	815.5	818.8	818.8	819.8	8.9	292.9	195.9	0.59
2B	4435	100 Year	210	880.0	880.4	880.4	880.5	3.2	65.3	203.4	0.21
2B	4320	100 Year	210	875.5	878.8		878.9	1.9	109.6	40.9	1.1
2B	4255	Culvert									
2B	4250	100 Year	210	874.5	875.03		876.51	5.54	37.89	28.75	0.85
2B	4200	100 Year	210	874.2	875.56	875.56	876.13	6.05	34.69	30.89	1.01
2B	3800	100 Year	210	867.5	868.86	868.86	869.43	6.05	34.71	30.97	1.01
2B	3000	100 Year	210	857.1	858.46	858.46	859.03	6.04	34.76	31.11	1.01
2B	2600	100 Year	350	851.35	853.22	853.22	853.94	6.79	51.55	36.39	1.01
2B	2200	100 Year	350	845.75	847.56	847.56	848.3	6.91	50.64	34.55	1.01
2B	1840	100 Year	350	842.15	846.04	843.92	846.13	2.4	149.06	57.23	0.24
2B	1805	Culvert									
2B	1730	100 Year	350	841	842.61	842.61	843.12	5.73	61.06	60.83	1.01
2B	1600	100 Year	450	839.5	841.42	841.42	841.99	6.09	78.91	87.37	0.96
2B	1200	100 Year	450	834.8	836.51	836.51	837.02	5.92	94.51	118.69	0.59
2B	1000	100 Year	450	833	833.81	833.81	834.08	4.13	109.09	210.43	1.01
2B	800	100 Year	450	829.5	830.68	830.68	830.98	4.45	101.16	169.35	1.01
2B	600	100 Year	450	827.5	828.4	828.4	828.68	4.27	107.85	200.51	1.1
2B	400	100 Year	450	824.9	826.77	826.77	827.14	5.42	144.46	250.04	0.81
2B	200	100 Year	450	820.4	822.07	822.07	822.51	5.93	117.73	147.39	0.89
2B	0	100 Year	450	815	818.84		818.86	1.22	578.17	305.23	0.12
0	980	100 Year	1955	815	817.87	817.87	818.77	8.15	326.72	214.63	0.93
0	850	100 Year	1955	813.5	816.64	816.64	817.57	9.12	380.79	239.32	0.94
0	650	100 Year	1955	811.5	814.67	814.67	815.5	8.97	410.45	270.73	0.96
0	450	100 Year	1955	810.2	813.24	813.18	813.91	7.1	393.12	316.16	0.86
0	250	100 Year	1955	809	812.06	812.06	812.84	8.21	415.49	303.45	0.9
0	50	100 Year	1955	802	811.2	807.04	811.35	3.21	751.56	378.32	0.26
0	10	Culvert									
0	0	100 Year	1955	801.5	809.23		809.55	4.55	500.96	151.9	0.33
0	-50	100 Year	1955	803.9	808.39	808.39	809.42	8.63	343.71	232.13	0.79
0	-100	100 Year	1955	803.5	807.86	807.86	808.92	8.7	321.77	225.88	0.85



TEXAS FIRM REGISTRATION #4932 P.O. BOX 3639 JARRELL, TEXAS 78630 PHONE (512) 354-4652 360 PROFESSIONAL SERVICES, INC.	
SCOTT J. FOSTER 84652 LICENSED PROFESSIONAL ENGINEER 1/16/2019	
BAILEY PARK SUBDIVISION (FORMERLY SONTERRA NORTH) JARRELL, TEXAS	
UTILITY LAYOUT (SHEET 1 OF 3)	
Scale: AS SHOWN Designed by: Drawn by: Checked by: Date: JANUARY 2019 Project No.	SHEET 14

10.000 AC FOURTH AMENDMENT TO DECLARATION OF CONDOMINIUM REGIME FOR SONTERRA II CONDOMINIUMS DEC 2018034276



Scale: AS SHOWN		DESIGNED BY: DRAWN BY: CHECKED BY: DATE: JANUARY 2019 PROJECT NO.	
SHEET 16		BAILEY PARK SUBDIVISION (FORMERLY SONTERRA NORTH) JARRELL, TEXAS	
UTILITY LAYOUT (SHEET 3 OF 3)		360 PROFESSIONAL SERVICES, INC. P.O. BOX 3639 CEDAR PARK, TEXAS 78630 PHONE (512) 354-4652	