

Concept Plan

Zoning Case #Z-19-0003 Keller-Smithfield

4.10 ac.

0.623 ac.

0.45 ac.

5.173 ac.

5.173 ac.

4.10 ac.

1.36 du/ac.

25,033 s.f.

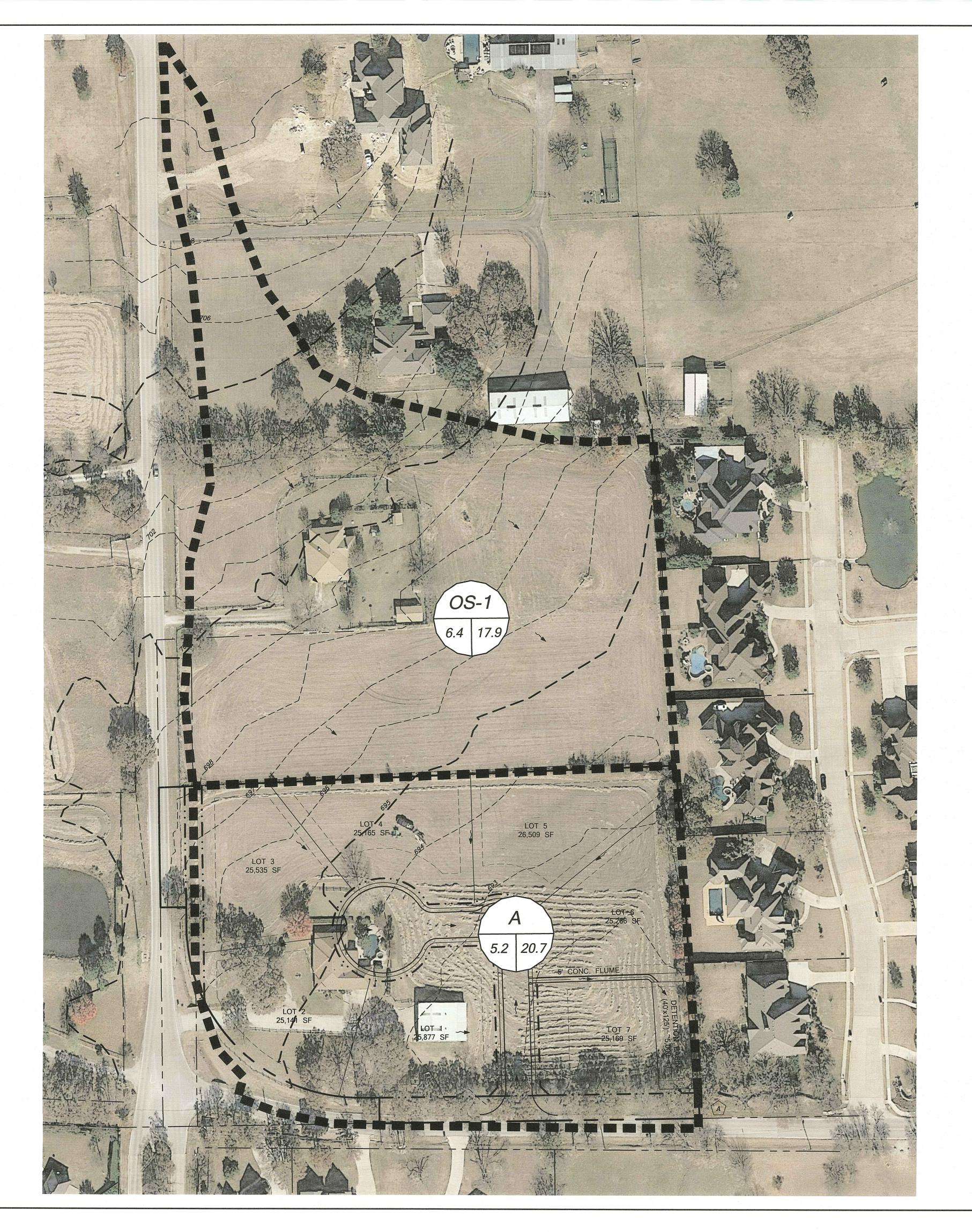
25,518 s.f.

Single Family Low Density

Single Family Low Density

SF-LD

SF-25





DESIGN	AREA	AREA	RUNOFF	Tc	I(1)	Q1	I(10)	Q10	I(100)	Q100
POINT	DESIGNATION	(ACRES)	COEFF	(MIN)	(IN/HR)	(CFS)	(IN/HR)	(CFS)	(IN/HR)	(CFS)
	OS-1	6.4	0.35	15	3.32	7.4	5.53	12.4	7.98	17.9
	Α	5.2	0.35	15	3.32	6.0	5.53	10.1	7.98	14.5
Α	OS-1 & A	11.6	0.35	15	3.32	13.5	5.53	22.5	7.98	32.4

Rational Method Runoff Calculations - PROPOSED

34.04.00.00										
DESIGN	AREA	AREA	RUNOFF	Tc	I(1)	Q1	I(10)	Q10	I(100)	Q100
POINT	DESIGNATION	(ACRES)	COEFF	(MIN)	(IN/HR)	(CFS)	(IN/HR)	(CFS)	(IN/HR)	(CFS)
	OS-1	6.4	0.35	15	3.32	7.4	5.53	12.4	7.98	17.9
şı ar la	A	5.2	0.50	15	3.32	8.6	5.53	14.4	7.98	20.7
A	OS-1 & A	11.6	0.42	15	3.32	16.1	5.53	26.8	7.98	38.6

MODIFIED RATIONAL METHOD DETENTION CALCULATIONS										
MOD					CULATIONS					
	<u> </u>	Per iSWM 2.1.7 2 - YEAR	оп радеs 2.1-3 10 - YEAR	100 - YEAR	COMMENTS					
County		Tarrant	Tarrant	Tarrant	- Comments					
Rainfall Coeff. "e"	0.81144	0.79952	0.77982	Rainfall Coefficients from ISWM Rainfal						
Rainfall Coeff. "b"	51.393	77.103	110.202	Tables; Appendix A						
Rainfall Coeff. "d"		9	12	14						
EXISTING										
Area	acres	11.6	11.6	11.6						
C		0.35	0.35	0.35						
Tc	min	15	15	15						
I and the second second	in/hr	3.90	5.53	7.98						
Q(allowable) (EQ. 2.1.28)	cfs	16	22	32						
Area c	acres	11.6 0.42	11.6 0.42	11.6 0.42						
Tc	тіп	15	15	15						
	in/hr	3.90	5.53	7.98						
Q(allowable) (EQ. 2.1.26)	cfs	16	. 22	32						
Q(developed) (EQ. 2.1.26)	cfs	19	27	39						
a		121.960	203.930	322.070	Modified Rational Rainfall Factors From					
b		15.704	21.090	24.388	iSWM page 2.1-40, Table 2.1.7-1					
V(pre) (EQ 2.1.28a)	cf	3374	5518	8810						
l(180)	in/hr	0.73	1.15	1.81						
P(180) (Fr. Rainfall Table)	inches	2.19	3.46	5,44						
Td (EQ. 2.1.27)	min	19	22	24						
l(td)	in/hr	3.44	4.60	6.46						
P(td) (Fr. Rainfall Table)	inches	1.09	1.69	2.58						
V(max) EQ. 2.1.28b)	cf	6,788	11,312	18,531						
V(max)	ac*ft	0.16	0.26	0.43						

0 30 60 12
(IN FEET)
1 INCH = 60 FT

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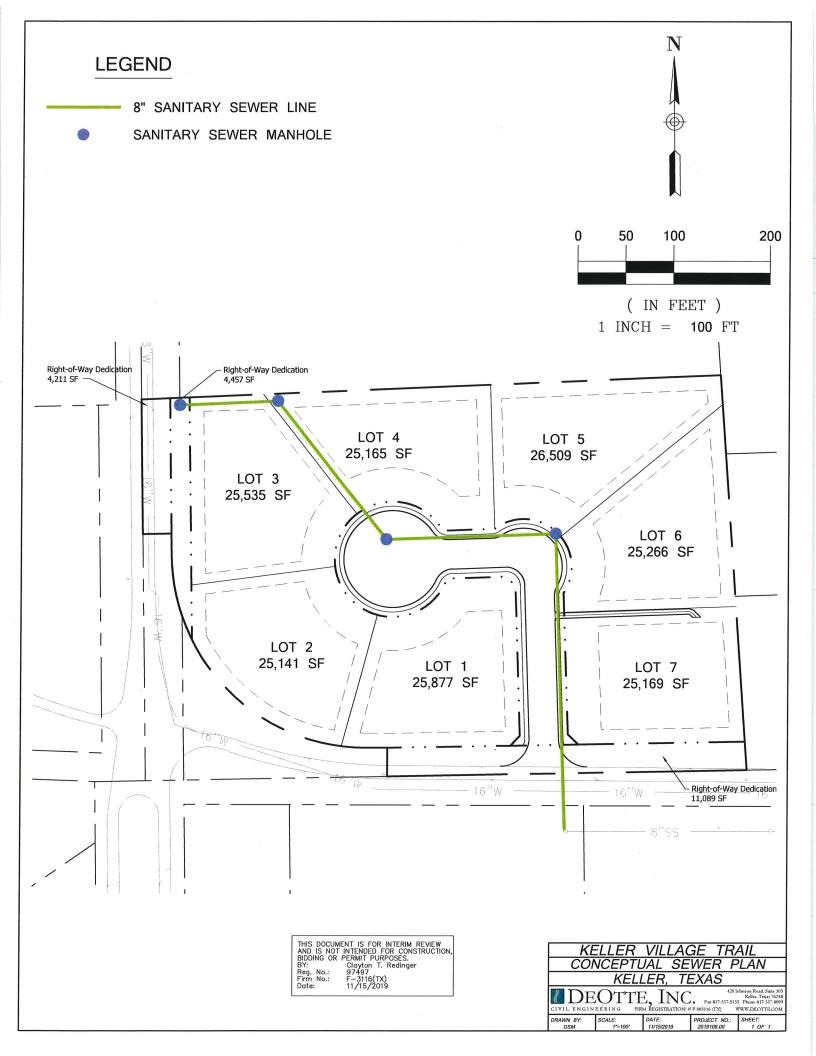
BY: Clayton T. Redinger
Reg. No.: 97497
Firm No.: F-3116(TX)
Date: 11/15/2019

KELLER VILLAGE TRAILS
CONCEPTUAL DRAINAGE PLAN
KELLER, TEXAS

DEOTTE, INC. 420 Johnson Road, Suite 303 Keller, Texas 76248
Fax 817-337-5133 Phone 817-337-8899
CIVIL ENGINEERING FIRM REGISTRATION: # F-003116 (TX) WWW.DEOTTE.COM

 PRAWN BY:
 SCALE:
 DATE:
 PROJECT NO.:
 SHEET:

 CTR
 1"=60'
 11/15/2019
 2019106-00
 1 OF 1



南 NICHARD C. MAKI

4587 SUBVE 00

Richard C. Maki Registered Professional Land Surveyor No. 1587 Date: 8/18/13

30 No. 67540