

1620 La Jaita Dr., Suite 250  
Cedar Park, Texas 78613  
P:(512) 260.9100

SHEET INDEX

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CITY OF PFLUGERVILLE NOTES:

- 1. This plan lies within the City of Pflugerville full purpose jurisdiction.
2. Water and wastewater shall be provided by the City of Pflugerville.
3. A 10-ft Public Utility Easement (P.U.E.) shall be dedicated along all street frontage(s).
4. Easement(s) dedicated to the public by this plan shall also be subject to the terms and conditions of the Engineering Design Manual, as amended.
15. All electric utility infrastructure, including but not limited to telephone, cable television, electric utility lateral and service lines shall be installed in accordance with the City of Pflugerville Engineering Design Manual, as amended.
16. The owner of this subdivision, and his or her successors and assigns, assumes responsibility for plans for construction of subdivision improvements that comply with applicable codes and requirements of the City of Pflugerville, as amended.

WULTRICH HILL FARMS SECTION 2-A
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

COVER

DATE

5/08/2020

PROJECT NO.

RA0279.000.0

DRAWN BY

RDP

CHECKED BY

AHG

REVISIONS

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CUDE ENGINEERS

TBPE No. 19070

PRELIMINARY PLAN - NOT FOR RECORDATION

PRELIMINARY PLANS FOR WUTHRICH HILL FARMS SECTION TWO IN THE CITY LIMITS OF PFLUGERVILLE, TEXAS SEPTEMBER 28, 2020



VICINITY MAP N.T.S.

PORTIONS OF LAND INCLUDED WITH THIS PRELIMINARY PLAN ARE INUNDATED BY THE 100-YEAR FLOODPLAIN, AS CURRENTLY DELINEATED BY THE FEMA FIRM PANEL NO. 48453C0270J & 48453C0290J, DATED AUGUST 8, 2014. UPDATES INCLUDE LOMR 14-06-4534P, DATED AUGUST 27, 2015 & LOMR 18-06-2107P, DATED MAY 6, 2019.

TEMPORARY BENCHMARKS

- TBM #1 SQUARE CUT ON TOP OF CURB NEAR THE MOST NORTHERLY PROPERTY CORNER.
TBM #2 SQUARE CUT ON THE NORTHEAST CORNER OF A CURB INLET, IN THE NORTHERLY RIGHT-OF-WAY OF WELLS BRANCH PARKWAY, APPROXIMATELY 168' NORTHWEST OF THE MOST SOUTHERLY PROPERTY CORNER.
TBM #3 SQUARE CUT ON THE SOUTHWEST CORNER OF A CURB INLET, AT THE NORTHEAST INTERSECTION OF WELLS BRANCH PARKWAY AND DESSAU ROAD.

PREPARED BY: CUDE ENGINEERS-AUSTIN, LLC
C/O: ANTHONY H. GOODE
1620 LA JAITA DR., STE 250
CEDAR PARK, TEXAS 78613
512-260-9100

LAND USE:

Table with 3 columns: Lot/Block, General Business (GB-1), and Acreage. Includes subtotals for land use and total acreage (48.584 acres).

PREPARED ON: APRIL 6, 2020

SURVEYOR: FRED L. DODD, JR. SURVEYOR, INC.
P.O. BOX 1695
LIBERTY HILL, TEXAS 78642
512-953-5705

OWNER: WUTHRICH HILL FARM LTD.
C/O: OTTO WUTHRICH
PO BOX 768
AUSTIN, TX 78757-1706
512-590-1318

DEVELOPER: WUTHRICH HILL DEVELOPMENT LLC
C/O: DAVID TIEH
1410 E PALM VALLEY BLVD.
ROUND ROCK, TEXAS 78664
CELL: 713-562-5908

ENGINEER/AGENT: CUDE ENGINEERS-AUSTIN, LLC
C/O: ANTHONY H. GOODE
1620 LA JAITA DR., STE 250
CEDAR PARK, TEXAS 78613
972-822-1682

LEGAL DESCRIPTION:

BEING A 48.585 ACRE TRACT OUT OF THE ALEXANDER WALTERS SURVEY 67, ABSTRACT NUMBER 791, SITUATED IN TRAVIS COUNTY, TEXAS AND BEING OUT OF AND PART OF THAT CERTAIN REMAINDER OF 135.00 ACRES CONVEYED TO OTTO WUTHRICH BY DEED RECORDED IN VOLUME 2453, PAGE 312, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.

WATER UTILITY PROVIDER:

CITY OF PFLUGERVILLE

WASTEWATER UTILITY PROVIDER:

CITY OF PFLUGERVILLE

I, ANTHONY H. GOODE, DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE SUBDIVISION AND BUILDING REGULATION ORDINANCES AND STORMWATER DRAINAGE POLICY ADOPTED BY THE CITY OF PFLUGERVILLE, TEXAS

STATE OF TEXAS:

KNOW BY ALL MEN BY THESE PRESENTS:

COUNTY OF TRAVIS:

THAT I, FRED L. DODD, JR., DO HEREBY CERTIFY THAT I PREPARED THIS PLAN FROM AN ACTUAL AND ACCURATE ON-THE-GROUND SURVEY OF THE LAND, AND THAT THE CORNER MONUMENTS SHOWN THEREON MARKING THE BOUNDARY OF THE PROPOSED SUBDIVISION, BUT NOT INTERIOR LOT LINES, WERE PROPERLY PLACED UNDER MY PERSONAL SUPERVISION, IN ACCORDANCE WITH ALL CITY OF PFLUGERVILLE, TEXAS CODES AND ORDINANCES AND THAT ALL KNOWN EASEMENTS WITHIN THE BOUNDARY OF THE PLAT ARE SHOWN HEREON.



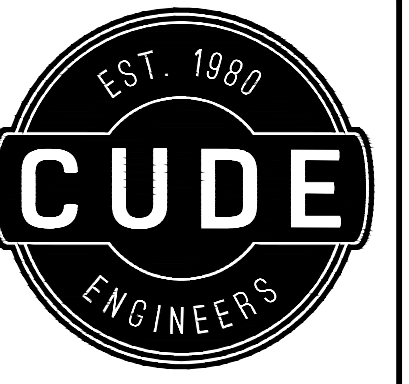
Signature of Anthony H. Goode, dated 9-28-2020.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF PFLUGERVILLE MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

FRED L. DODD, JR., R.P.L.S. DATE

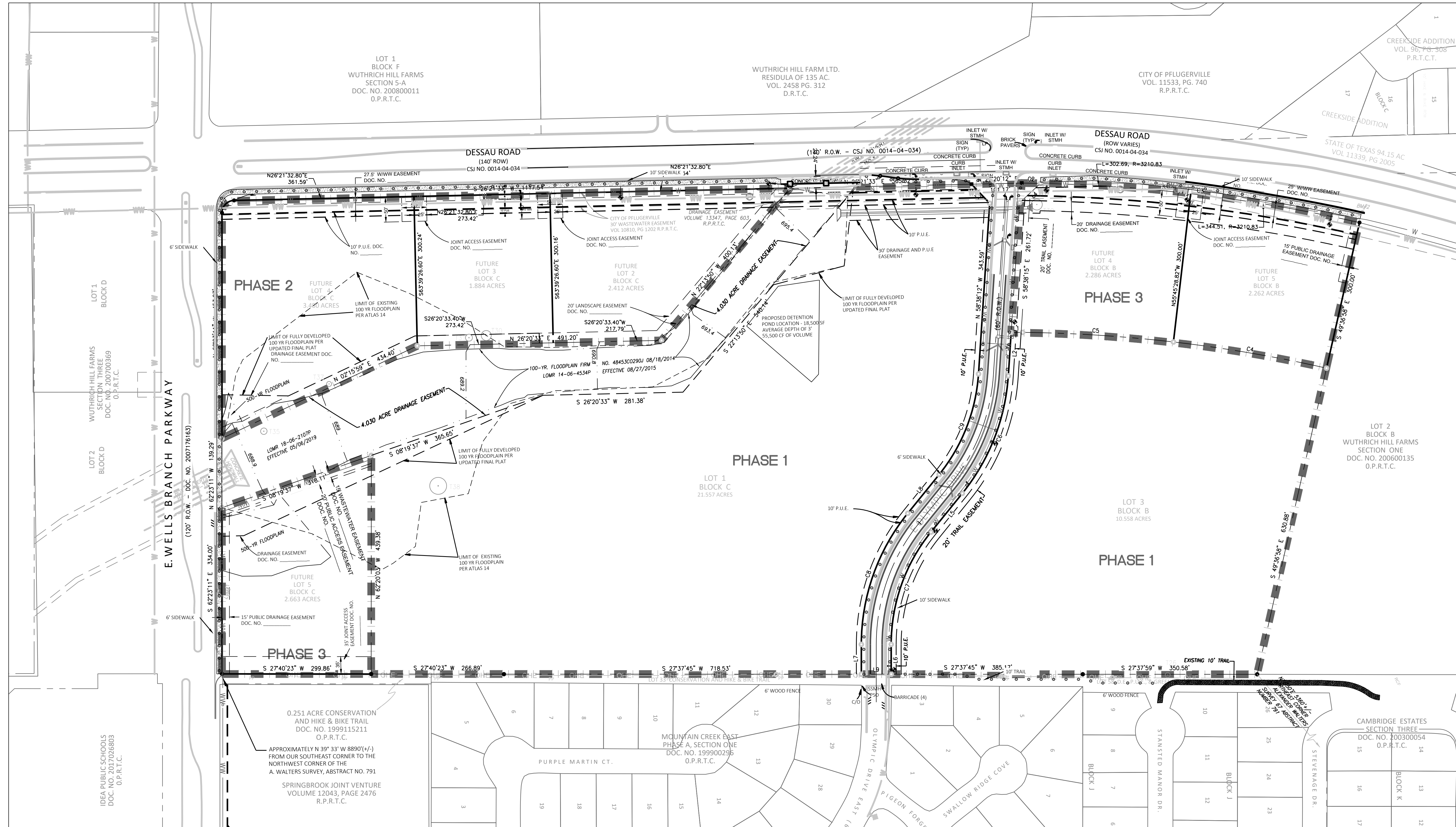
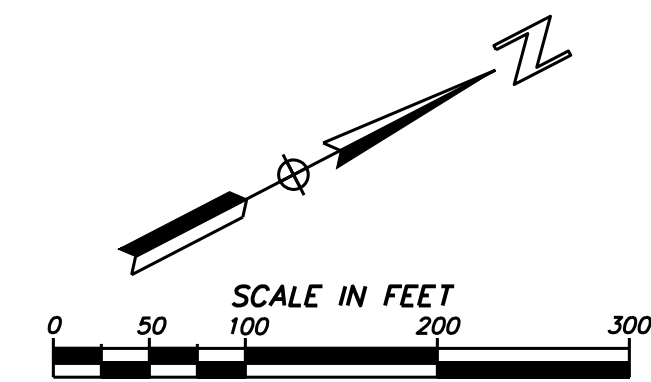
Table with 5 columns: Calculation, Dedication/Improvements Option, Fee in Lieu, Approved, Fee in Lieu. Rows for Parkland Dedication and Parkland Development.

Table with 6 columns: City, Approved Revisions & Corrections, No., Description, Revise (R) Correct (C) Add (A) Void (V) Sheet No's, Design Engineer Signature, City of Pflugerville Approval, Approval Date.



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# WUTHRICH HILL FARMS - SECTION TWO PRELIMINARY PLAN



**WULTRICH HILL FARMS SECTION 2-A**  
 (PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

PRELIMINARY PLAN

**DATE**  
5/08/2020  
**PROJECT NO.**  
RA0279.000.0  
**DRAWN BY**  
RDP  
**CHECKED BY**  
AHG

**REVISIONS**

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**CUDE ENGINEERS**  
 TBPE No. 19070

**TREE TABLE**

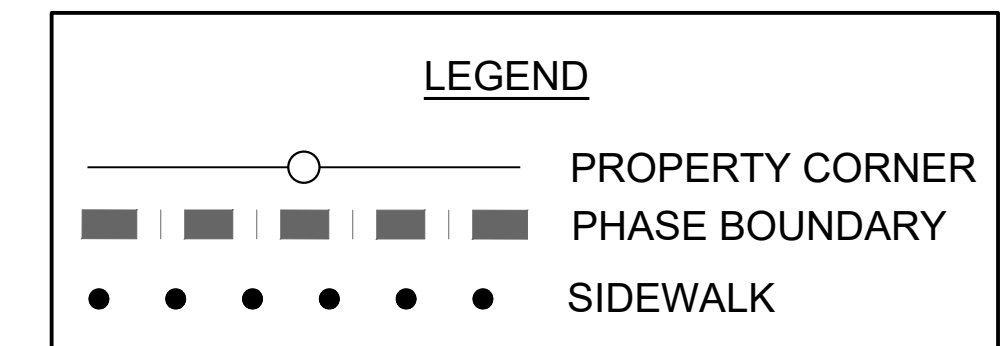
TAG	TYPE	DIAMETER
26	UNKNOWN	10"
30	RED MULBERRY	20"
31	RED MULBERRY	14"
35	RED MULBERRY	13"
37	RED MULBERRY	10"
38	RED MULBERRY	17"
39	AMERICAN ELM	11"

**LINE BEARING DISTANCE**

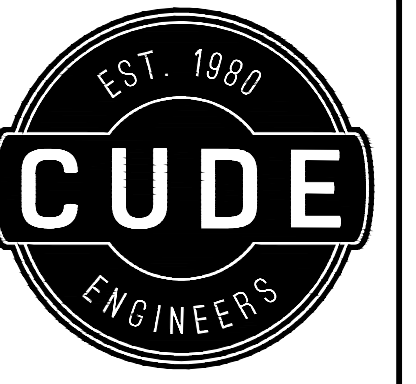
LINE	BEARING	DISTANCE
L1	N 26°30'55" E	23.12'
L2	S 58°38'15" E	87.14'
L3	S 74°06'21" W	52.94'
L4	S 15°06'43" E	57.08'
L5	S 23°22'17" E	100.23'
L6	S 62°22'51" W	59.97'
L7	N 62°22'51" W	59.96'
L8	N 23°22'17" W	100.23'
L9	S 27°37'45" W	60.00'

**CURVE ARC LENGTH RADIUS DELTA ANGLE CHORD BEARING CHORD LENGTH**

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	38.64'	25.00'	88°33'42"	N 17°59'45" W	34.91'
C2	37.45'	3210.83'	0°40'06"	S 28°30'40" W	37.45'
C3	647.19'	3210.83'	11°32'56"	S 34°37'11" W	646.10'
C4	312.35'	2910.83'	6°08'53"	S 37°19'16" W	312.20'
C5	303.91'	2910.83'	5°58'56"	S 31°15'22" W	303.77'
C6	257.59'	418.50'	35°15'59"	N 41°00'16" W	253.54'
C7	244.08'	358.50'	39°00'34"	N 42°52'34" W	239.40'
C8	284.93'	418.50'	39°00'34"	N 42°52'34" W	279.46'
C9	220.66'	358.50'	35°15'59"	N 41°00'16" W	217.19'



REPRODUCTION OF THE ORIGINAL SIGNED AND SEALED PLAN AND/OR ELECTRONIC MEDIA MAY HAVE BEEN INADVERTENTLY ALTERED. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE SCALE OF THE DOCUMENT AND CONTACTING CUDE ENGINEERS TO VERIFY DISCREPANCIES PRIOR TO CONSTRUCTION.



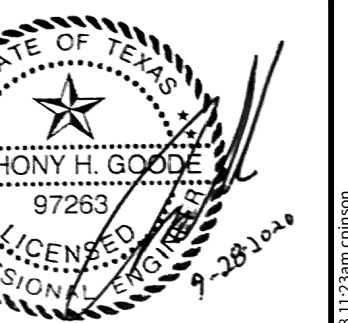
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WULTRICH HILL FARMS SECTION 2-A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

EXISTING CONDITIONS

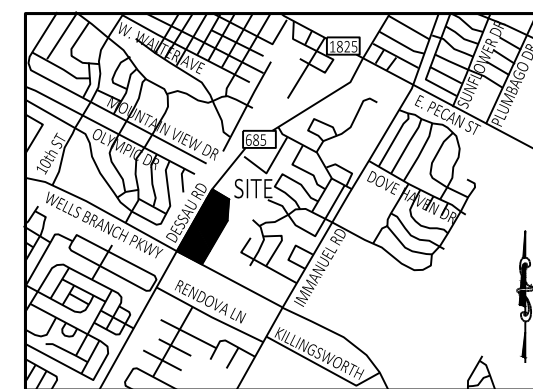
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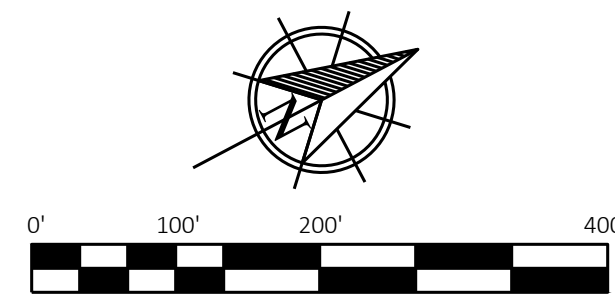


CUDE ENGINEERS  
TBPE No. 19070

# WULTRICH HILL FARMS - SECTION TWO EXISTING CONDITIONS



LOCATION MAP  
NOT TO SCALE



LINK	BEARING	DISTANCE
L1	N 26°30'55" E	231.12
L2	S 58°38'15" E	87.14
L3	S 74°06'21" W	52.94
L4	S 15°06'43" E	157.08
L5	S 23°22'17" E	100.23
L6	S 62°22'51" E	59.97
L7	N 62°22'51" W	59.96
L8	N 23°22'17" W	100.23
L9	S 27°37'45" W	60.00

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	38.64	25.00	88°33'42"	N 17°59'45" W	34.91
C2	37.45	3210.83	0°40'06"	S 28°30'40" W	37.45
C3	647.19	3210.83	11°33'06"	S 34°37'11" W	646.10
C4	512.35	2910.83	6°08'53"	S 37°19'16" W	512.20
C5	303.91	2910.83	5°58'56"	S 31°15'22" W	303.77
C6	257.59	418.50	35°15'59"	N 41°00'16" W	253.54
C7	244.08	358.50	39°00'34"	N 42°52'34" W	239.40
C8	284.93	418.50	39°00'34"	N 42°52'34" W	279.46
C9	220.66	358.50	35°15'59"	N 41°00'16" W	217.19

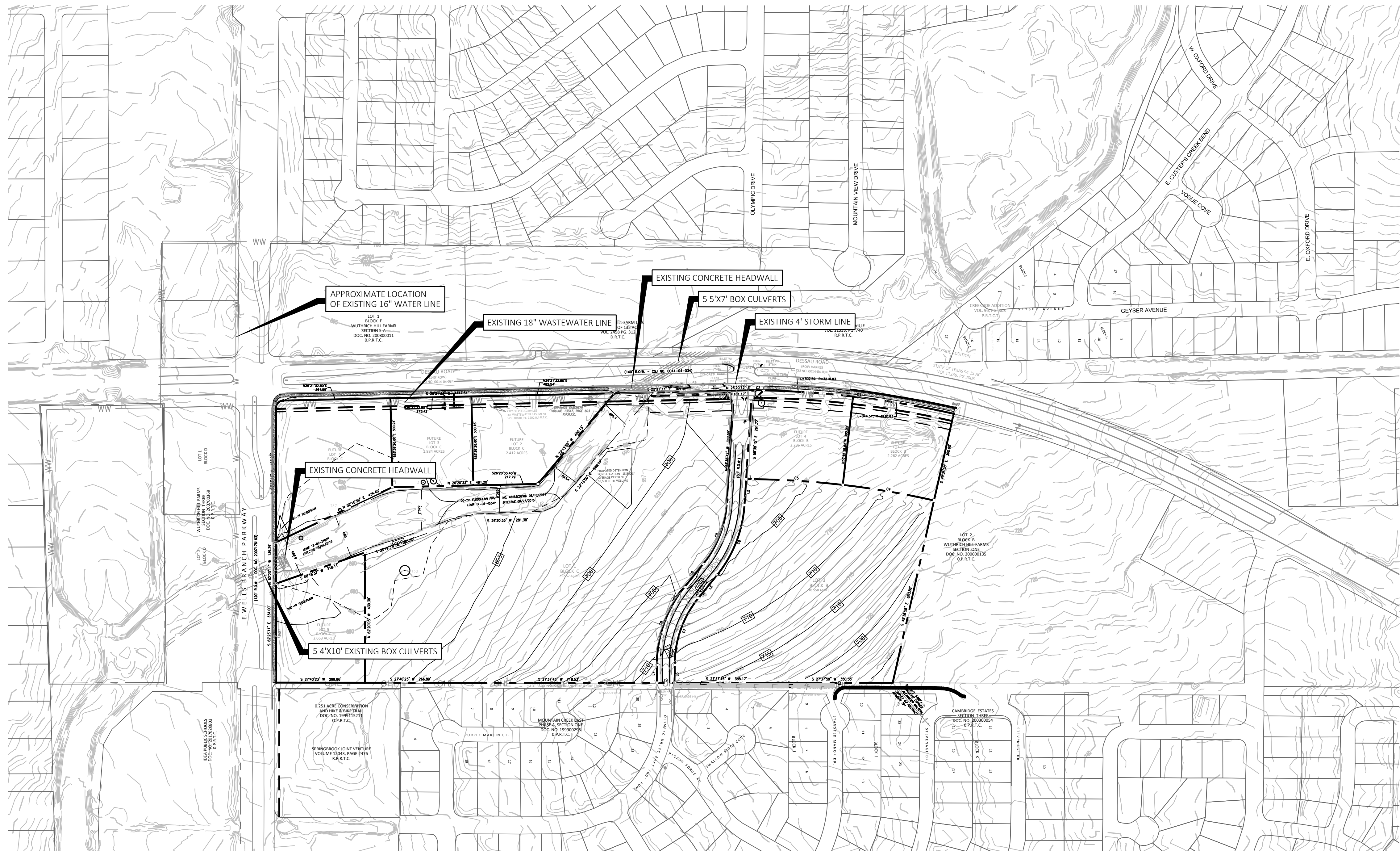
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35	RED MULBERRY	13"
37	RED MULBERRY	10"
38	RED MULBERRY	17"
39	AMERICAN ELM	11"

**LEGEND**

- 1/2" IRON ROD FOUND (UNLESS STATED)
- 1/2" IRON ROD FOUND W/CAP "15L"
- 1/2" IRON ROD FOUND W/CAP SET (UNLESS STATED)
- POB
- POC
- ▭ ASPHALT SURFACING
- ▭ CLEANOUT
- ▭ CURB INLET WITH MANHOLE
- ▭ CURB INLET WITHOUT MANHOLE
- ▭ CABLE RISER
- ▭ ELECTRIC BOX
- ▭ LP
- ▭ P/SO
- ▭ P/P
- ▭ SIGN
- SSMH
- STMH
- ▭ TELEPHONE RISER
- ▭ WOOD FENCE
- ▭ TREE TAG
- ▭ B.L.
- ▭ D.E.
- ▭ RECORD INFORMATION
- ▭ HDPE
- ▭ D.B.T.C.
- ▭ O.P.R.T.C.
- ▭ F.P.R.T.C.
- ▭ P.U.E.

\* SYMBOLS MAY BE EXAGGERATED FOR CLARIFICATION PURPOSES ONLY \*

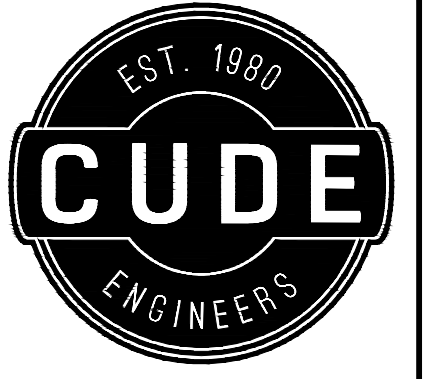
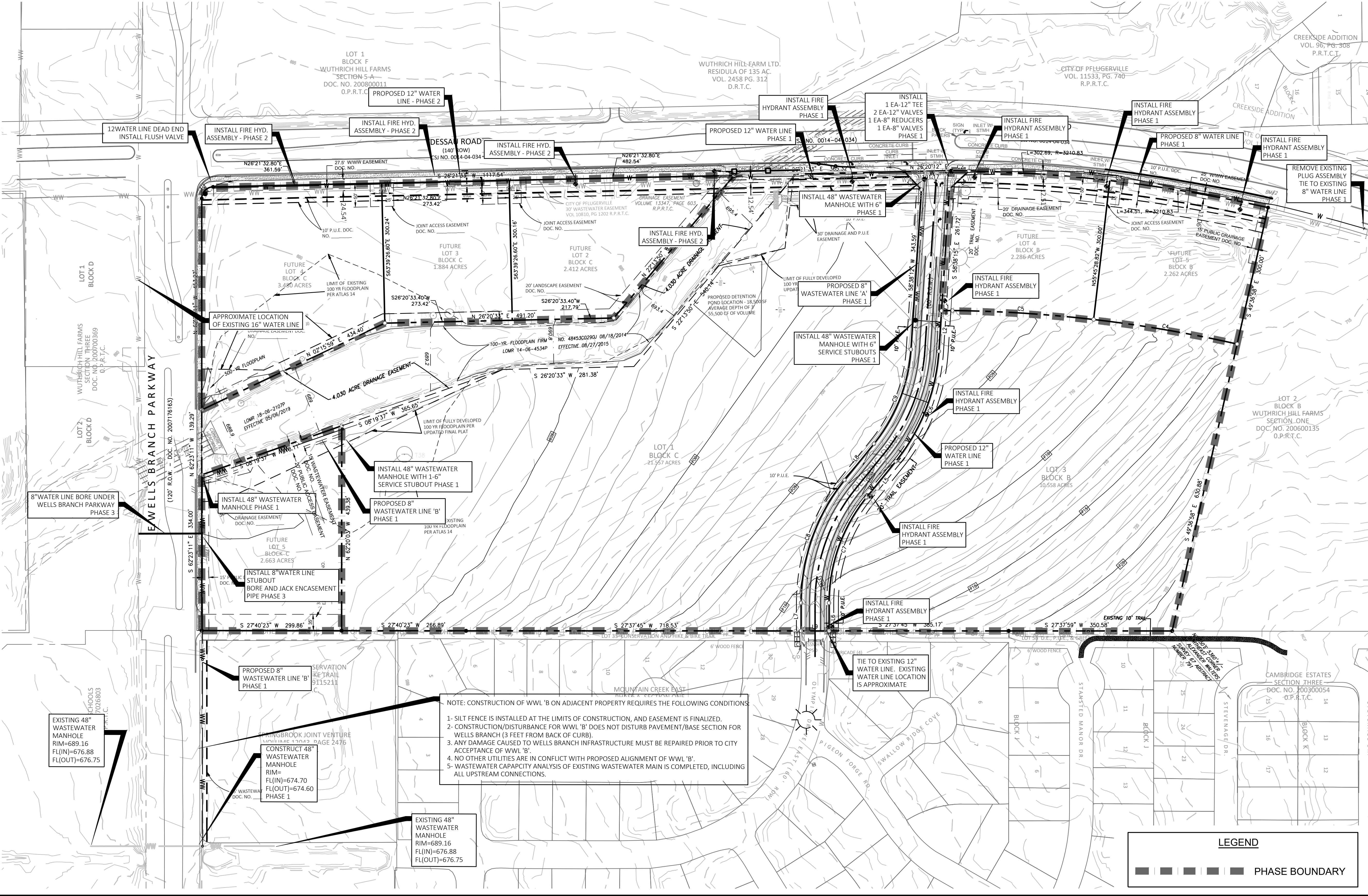
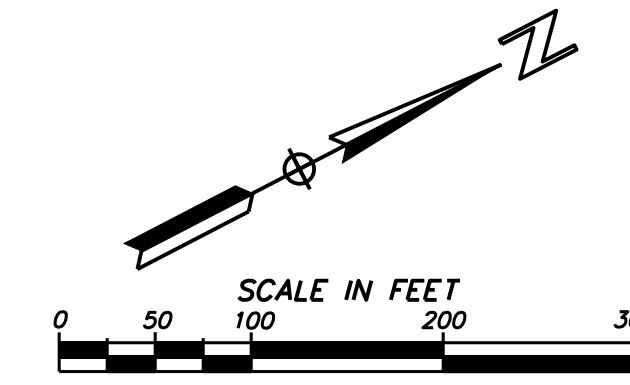
A PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100-YEAR FLOOD PLAIN OR ANY WATERWAY THAT IS WITHIN THE LIMITS OF STUDY OF THE FEDERAL FLOOD INSURANCE ADMINISTRATION, FIRM PANEL NO. 48453C0290H DATED SEPTEMBER 26, 2008 FOR TRAVIS COUNTY, TEXAS, IS SHOWN HEREON.



TOPOGRAPHIC SURVEY  
OVER A PORTION OF THE PROPOSED WULTRICH HILL FARMS-SECTION TWO,  
BEING A PORTION OF THAT CERTAIN REMAINDER OF 1.35.00 ACRES  
CONVEYED IN THE DEED TO OTTO WULTRICH, RECORDED IN  
VOLUME 245B, PAGE 312 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS.  
\*SURVEY COMPLETED IN 2014

NOTE:  
WATER AND WASTEWATER LINES NEED TO MEET ALL  
ENGINEERING DESIGN MANUAL REQUIREMENTS AND  
WILL BE REVIEWED IN FURTHER DETAIL WITH THE  
FUTURE CONSTRUCTION PLAN APPLICATION.

# WUTHRICH HILL FARMS - SECTION TWO UTILITY PLAN



1620 La Jaita Dr., Suite 250  
Cedar Park, Texas 78613  
P:(512) 260-9100

WULTRICH HILL FARMS SECTION 2-A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

UTILITY PLAN

DATE  
5/08/2020

PROJECT NO.  
RA0279.000.0

DRAWN BY  
RDP

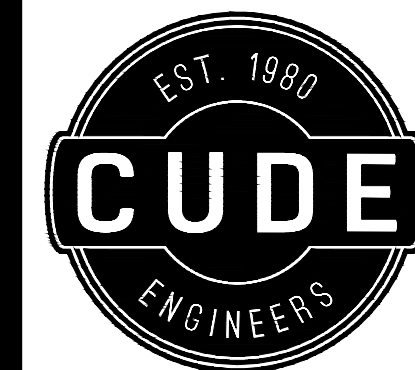
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AHG

**REVISIONS**

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CUDE ENGINEERS  
TBPE No. 19070



1620 La Jaita Dr., Suite 250  
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WULTRICH HILL FARMS SECTION 2 - A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

EXISTING OVERALL DRAINAGE AREA MAP

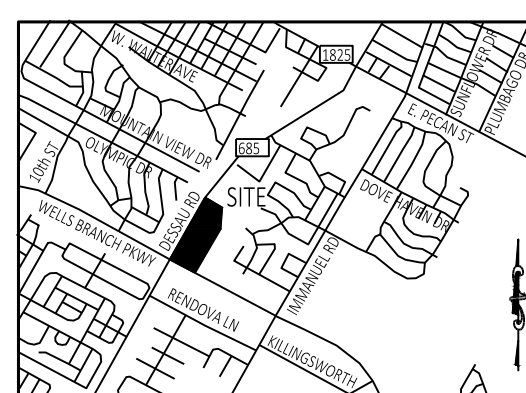
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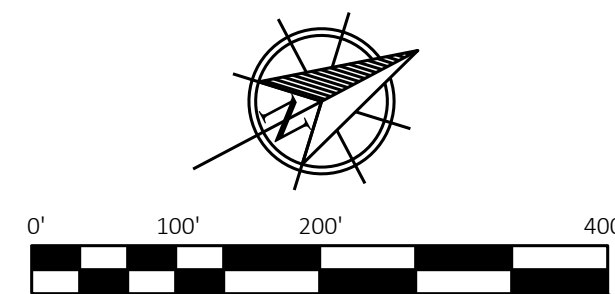


CUDE ENGINEERS  
TBPE No. 19070

# WULTRICH HILL FARMS - SECTION TWO EXISTING OVERALL DRAINAGE AREA MAP



LOCATION MAP  
NOT TO SCALE



## -DRAINAGE LEGEND-

- DRAINAGE BASIN DESIGNATION**
- # - BASIN NUMBER
  - FLOW DIRECTION ARROW
  - DRAINAGE BASIN BOUNDARY
  - Tc- TIME OF CONCENTRATION PATH

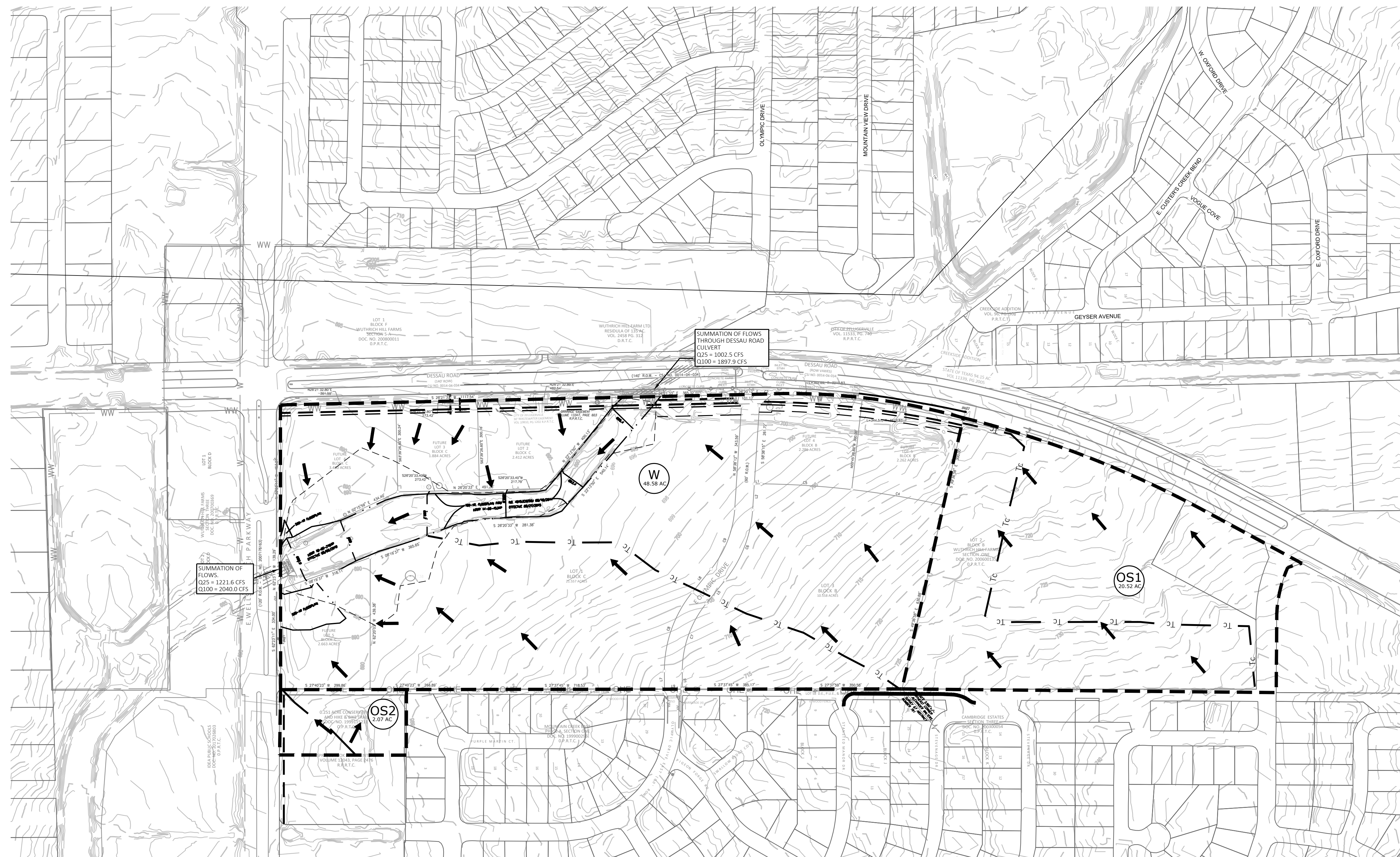
- LEGEND**
- 1/2" IRON ROD FOUND (UNLESS STATED)
  - 1/2" IRON ROD FOUND W/CAP "LS15"
  - 1/2" IRON ROD FOUND W/CAP "ACS"
  - 1/2" IRON ROD W/CAP SET (UNLESS STATED)
  - POB PLACE OF BEGINNING
  - POC PLACE OF COMMENCEMENT
  - ASPHALT SURFACING
  - CLEANOUT
  - CURB INLET WITH MANHOLE
  - CURB INLET WITHOUT MANHOLE
  - CABLE RISER
  - ELECTRIC BOX
  - LAMP POST
  - OPSD PVC PIPE STUBOUT
  - PP POWER POLE
  - PP SIGN
  - OSMH SANITARY SEWER MANHOLE
  - OSMh STORM SEWER MANHOLE
  - TR TELEPHONE RISER
  - WF WOOD FENCE
  - TT TREE TAG
  - B.L. BUILDINGLINE
  - D.E. DRAINAGE EASEMENT
  - ( ) RECORD INFORMATION
  - HDPE HIGH-DENSITY POLYETHYLENE
  - D.B.T.C. DEED RECORDS, TRAVIS COUNTY
  - O.P.R.T.C. OFFICIAL PUBLIC RECORDS, TRAVIS COUNTY
  - R.P.R.T.C. REAL PROPERTY RECORDS, TRAVIS COUNTY
  - P.R.T.C. PLAT RECORDS, TRAVIS COUNTY
  - P.U.E. PUBLIC UTILITY EASEMENT

\*SYMBOLS MAY BE EXAGGERATED FOR CLARIFICATION PURPOSES ONLY\*

CONSTRUCTION IN PROGRESS AT THE TIME OF SURVEY.

THERE IS NO EVIDENCE OF ENCROACHMENT AT THE TIME OF THIS SURVEY.

A PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100-YEAR FLOOD PLAIN OR ANY WATERWAY THAT IS WITHIN THE LIMITS OF STUDY OF THE FEDERAL FLOOD INSURANCE ADMINISTRATION, FIRM PANEL NO. 48453C0390H DATED SEPTEMBER 26, 2008 FOR TRAVIS COUNTY, TEXAS, IS SHOWN HEREON.



WULTRICH HILL FARMS SECTION 2 - PRELIMINARY PLAT  
DRAINAGE CALCULATIONS

Area No.	Area (ac.)	Imperv. Cover (ac.)	Perv. Cover (ac.)	Runoff Curve Numbers <sup>1</sup>			Sheet Flow <sup>2</sup>				Shallow Concentrated Flow <sup>3</sup>				Total Tc <sup>2,3,4</sup> (min)	Runoff			Remarks						
				Imperv. CN	Perv. CN	Comp. CN	Length (ft.)	Mannings "n"	P <sub>2</sub> (in.)	Slope (ft./ft.)	Tc (min)	Length (ft.)	Slope (ft./ft.)	Tc, paved (min)		Tc, unpaved (min)	11.88	q2 (cfs)		q25 (cfs)	q100 (cfs)				
OS1	20.52	15.39	5.13	98	80	94	100	0.015	4.03	0.0116	1.72	1,810	0.0116	13.78	15.50	56.81	124.13	176.69	fully developed conditions						
W	48.58	0.00	48.58	98	80	80	100	0.240	4.03	0.0210	12.47	1,666	0.0210	11.88	24.35	72.74	207.53	316.14	undveloped conditions						
OS2	2.07	1.74	0.33	98	80	95	100	0.015	4.03	0.0330	1.13	234	0.0330	1.06	5.00	6.35	14.77	19.84	fully developed conditions						
Dessau Culvert	520.94														637.30	1002.50	1897.90		fully developed conditions						
Total															702.00	1221.60	2040.00								

(1) NRCS runoff curve numbers for urban watersheds for composite analysis (Table 2-7, DCM)  
 (2) Calculation for sheet (overland) flow based on Equation 2-3, DCM  
 (3) Calculation for shallow concentrated flow based on Equations 2-4 and 2-5, DCM  
 (4) Mannings "n" for sheet (overland) flow and shallow concentrated flow (Table 2-2, DCM)  
 (5) City of Austin Intensity-Duration-Frequency Curve Coefficients (Table 2-5, DCM)

Table 2. City of Pflugerville Atlas 14 Rainfall Depths

Duration	Rainfall Depth (in.) by Average Recurrence Interval									
	1-yr	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	200-yr	500-yr	
5 min	0.44	0.52	0.66	0.77	0.94	1.08	1.23	1.38	1.59	
10 min	0.69	0.83	1.05	1.23	1.51	1.73	1.97	2.21	2.52	
15 min	0.88	1.05	1.31	1.54	1.88	2.15	2.44	2.74	3.16	
30 min	1.25	1.48	1.84	2.16	2.62	3.00	3.39	3.82	4.42	
60 min	1.62	1.94	2.43	2.86	3.49	4.00	4.55	5.16	6.03	
2 hr	1.93	2.38	3.04	3.65	4.55	5.32	6.16	7.12	8.52	
3 hr	2.10	2.64	3.41	4.15	5.25	6.20	7.27	8.49	10.28	
6 hr	2.41	3.09	4.05	4.98	6.40	7.63	9.04	10.66	13.07	
12 hr	2.75	3.55	4.67	5.75	7.40	8.84	10.49	12.41	15.31	
24 hr	3.14	4.03	5.31	6.53	8.38	9.98	11.82	13.97	17.22	

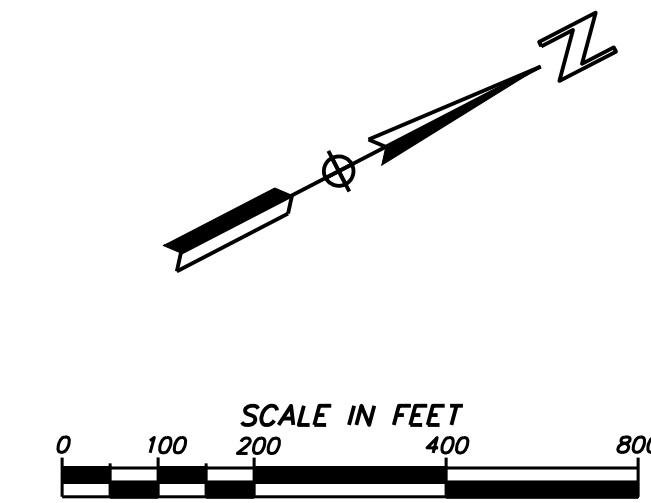
Table 1. City of Pflugerville IDF Curve Parameters

Average Recurrence Interval	a b c		
	1-yr	43.66	10.43
2-yr	45.97	9.37	0.7472
5-yr	51.35	8.44	0.7217
10-yr	60.02	8.44	0.7184
25-yr	67.90	7.88	0.6998
50-yr	75.82	7.79	0.6906
100-yr	78.75	7.05	0.6691
200-yr	79.51	6.36	0.6418
500-yr	80.44	5.57	0.6087

TOPOGRAPHIC SURVEY  
 OVER A PORTION OF THE PROPOSED WULTRICH HILL FARMS-SECTION TWO,  
 BEING A PORTION OF THAT CERTAIN REMAINDER OF 135.00 ACRES  
 CONVEYED IN THE DEED TO OTTO WULTRICH, RECORDED IN  
 VOLUME 2458, PAGE 312 OF THE DEED RECORDS OF TRAVIS COUNTY, TEXAS.  
 \*SURVEY COMPLETED IN 2014

# WUTHRICH HILL FARMS - SECTION TWO DRAINAGE PLAN

WUTHRICH HILL FARMS SECTION 2 - PRELIMINARY PLAT  
DRAINAGE CALCULATIONS



Area No.	Area (ac.)	Imperv. Perv.		Runoff Curve Numbers <sup>1</sup>			Sheet Flow <sup>2</sup>				Shallow Concentrated Flow <sup>3</sup>				Total Tc <sup>4,5</sup> (min)	Runoff			Remarks
		Cover (ac.)	Cover (ac.)	Imperv. CN	Perv. CN	Comp. CN	Length (ft.)	Manning's "n"	P <sub>2</sub> (in.)	Slope (ft./ft.)	Tc (min)	Length (ft.)	Slope (ft./ft.)	Tc, paved (min)		Tc, unpaved (min)	q2 (cfs)	q25 (cfs)	
OS1	20.52	15.39	5.13	98	80	94	100	0.015	4.03	0.0116	1.72	1,810	0.0116	13.78	15.50	56.81	124.13	176.69	fully developed conditions
B3	2.26	1.83	0.43	98	80	95	100	0.015	4.03	0.0220	1.33	351	0.0220	1.94	5.00	6.93	16.13	21.67	fully developed conditions
B4	2.29	1.88	0.41	98	80	95	100	0.015	4.03	0.0160	1.51	337	0.0160	2.18	5.00	7.02	16.34	21.95	fully developed conditions
B5	10.55	6.33	4.22	98	80	91	100	0.015	4.03	0.0270	1.23	784	0.0270	3.91	5.14	35.36	80.57	115.72	fully developed conditions
RW1	0.31	0.27	0.04	98	80	96	100	0.015	4.03	0.0180	1.44	345	0.0180	2.11	5.00	0.97	2.22	2.98	fully developed conditions
RW2	0.32	0.28	0.04	98	80	96	100	0.015	4.03	0.0190	1.41	380	0.0190	2.26	5.00	1.01	2.29	3.07	fully developed conditions
RW3	0.20	0.17	0.03	98	80	96	100	0.015	4.03	0.0099	1.83	204	0.0099	1.68	5.00	0.61	1.43	1.92	fully developed conditions
RW4	0.19	0.17	0.02	98	80	96	100	0.015	4.03	0.0110	1.76	173	0.0110	1.35	5.00	0.59	1.36	1.82	fully developed conditions
RW5	0.22	0.19	0.03	98	80	96	100	0.015	4.03	0.0120	1.70	162	0.0120	1.21	5.00	0.69	1.58	2.11	fully developed conditions
RW6	0.22	0.19	0.03	98	80	96	100	0.015	4.03	0.0078	2.02	157	0.0078	1.46	5.00	0.69	1.58	2.11	fully developed conditions
C1	16.54	9.92	6.62	98	80	91	100	0.015	4.03	0.0220	1.33	778	0.0220	4.30	6.10	55.44	126.32	181.42	fully developed conditions
C2	2.41	1.93	0.48	98	80	94	100	0.015	4.03	0.0140	1.60	483	0.0140	3.35	5.00	8.63	18.80	26.75	fully developed conditions
C3	1.88	1.52	0.36	98	80	95	100	0.015	4.03	0.0083	1.97	309	0.0083	2.78	5.00	5.77	13.41	18.02	fully developed conditions
C4	3.48	2.85	0.63	98	80	95	100	0.015	4.03	0.0074	2.06	626	0.0074	5.97	8.03	11.94	25.71	36.50	fully developed conditions
C5	2.66	2.21	0.45	98	80	95	100	0.015	4.03	0.0088	1.92	353	0.0088	3.09	5.01	9.70	20.87	29.62	fully developed conditions
D1	3.79	2.27	1.52	98	80	91	100	0.015	4.03	0.0250	1.27	412	0.0120	3.08	5.00	18.45	41.82	59.98	fully developed conditions
D2	1.26	0.76	0.50	98	80	91	100	0.015	4.03	0.0150	1.55	273	0.0150	1.83	5.00	6.14	13.90	19.94	fully developed conditions
OS2	2.07	1.74	0.33	98	80	95	100	0.015	4.03	0.0330	1.13	234	0.0330	1.06	5.00	6.35	14.77	19.84	fully developed conditions
Dessau Culvert	520.94	Varies by Sub-basin - See Flood Study Model										637.30	1002.50	1897.90	fully developed conditions				
											<b>Total</b>	<b>696.00</b>	<b>1212.00</b>	<b>2003.10</b>					

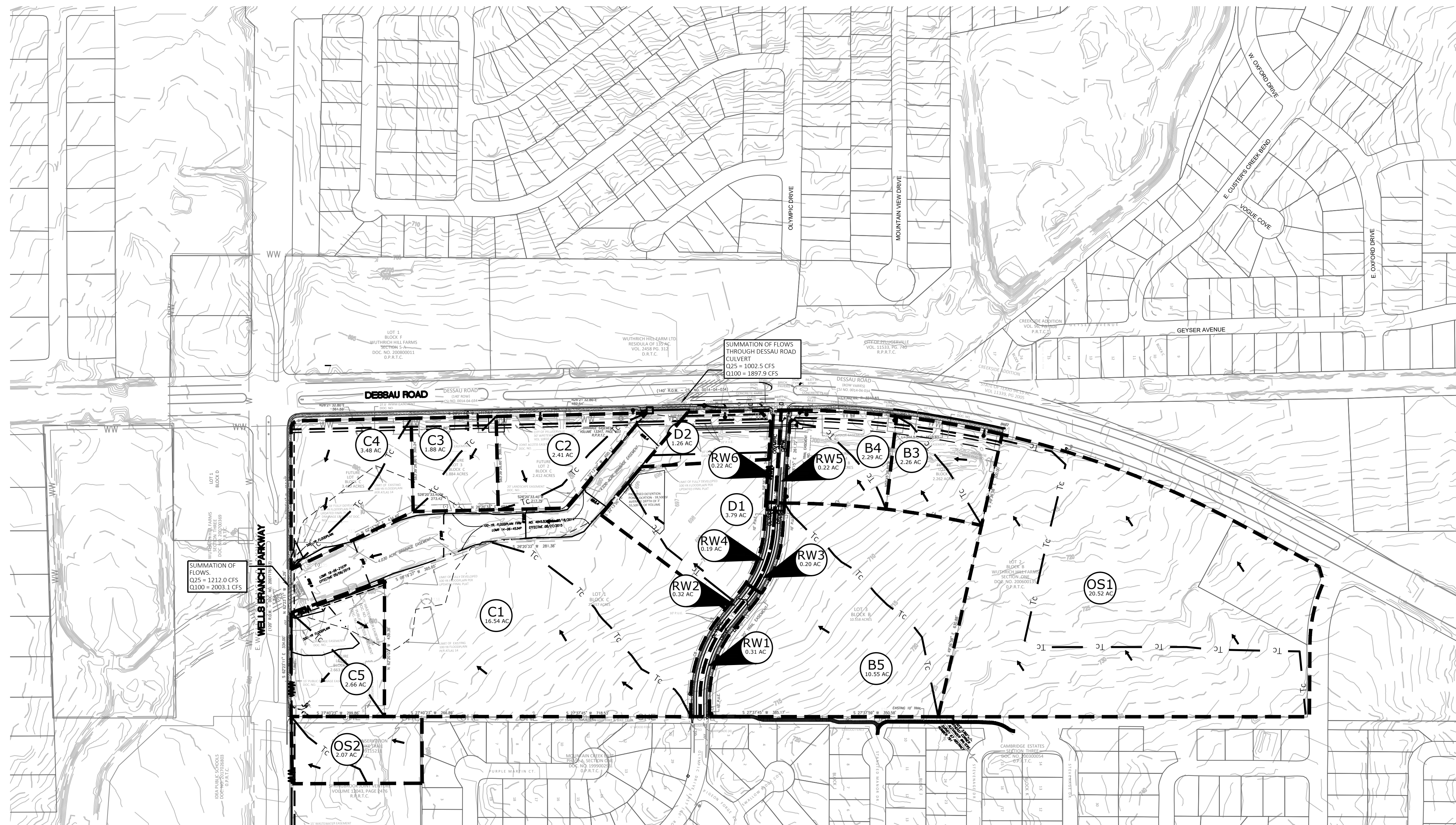
Table 2. City of Pflugerville Atlas 14 Rainfall Depths

Duration	Rainfall Depth (in.) by Average Recurrence Interval									
	1-yr	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr	200-yr	500-yr	
5 min	0.44	0.52	0.66	0.77	0.94	1.08	1.23	1.38	1.59	
10 min	0.69	0.83	1.05	1.23	1.51	1.73	1.97	2.21	2.52	
15 min	0.88	1.05	1.31	1.54	1.88	2.15	2.44	2.74	3.16	
30 min	1.25	1.48	1.84	2.16	2.62	3.00	3.39	3.82	4.42	
60 min	1.62	1.94	2.43	2.86	3.49	4.00	4.55	5.16	6.03	
2 hr	1.93	2.38	3.04	3.65	4.55	5.32	6.16	7.12	8.52	
3 hr	2.10	2.64	3.41	4.15	5.25	6.20	7.27	8.49	10.28	
6 hr	2.41	3.09	4.05	4.98	6.40	7.63	9.04	10.66	13.07	
12 hr	2.75	3.55	4.67	5.75	7.40	8.84	10.49	12.41	15.31	
24 hr	3.14	4.03	5.31	6.53	8.38	9.98	11.82	13.97	17.22	

Table 1. City of Pflugerville IDF Curve Parameters

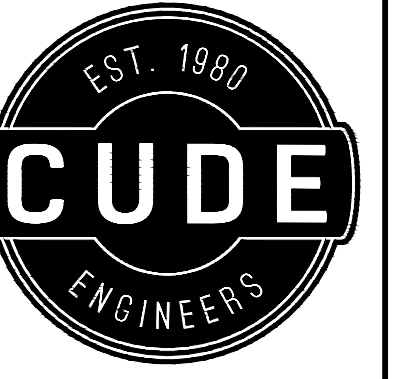
Average Recurrence Interval	a	b	c
1-yr	43.66	10.43	0.7744
2-yr	45.97	9.37	0.7472
5-yr	51.35	8.44	0.7217
10-yr	60.02	8.44	0.7184
25-yr	67.90	7.88	0.6998
50-yr	75.82	7.79	0.6906
100-yr	78.75	7.05	0.6691
200-yr	79.51	6.36	0.6418
500-yr	80.44	5.57	0.6087

- (1) NRCS runoff curve numbers for urban watersheds for composite analysis (Table 2-7, DCM)
- (2) Calculation for sheet (overland) flow based on Equation 2-3, DCM
- (3) Calculation for shallow concentrated flow based on Equations 2-4 and 2-5, DCM
- (4) Manning's "n" for sheet (overland) flow and shallow concentrated flow (Table 2-2, DCM)
- (5) City of Pflugerville Intensity-Duration-Frequency Curve Coefficients



### -DRAINAGE LEGEND-

- # - DRAINAGE BASIN DESIGNATION
- # - BASIN NUMBER
- FLOW DIRECTION ARROW
- DRAINAGE BASIN BOUNDARY
- Tc- TIME OF CONCENTRATION PATH



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WULTRICH HILL FARMS SECTION 2 - A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

PROPOSED OVERALL DRAINAGE AREA MAP

DATE

5/08/2020

PROJECT NO.

RA0279.000.0

DRAWN BY

RDP

CHECKED BY

AHG

REVISIONS

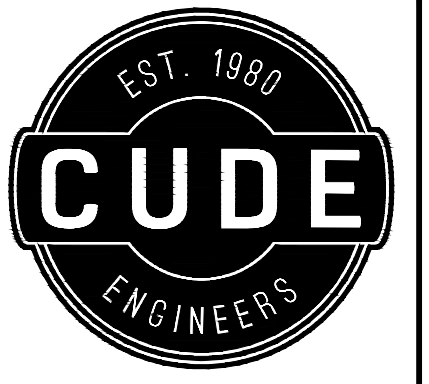
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CUDE ENGINEERS  
TBP# No. 19070

# WUTHRICH HILL FARMS - SECTION TWO

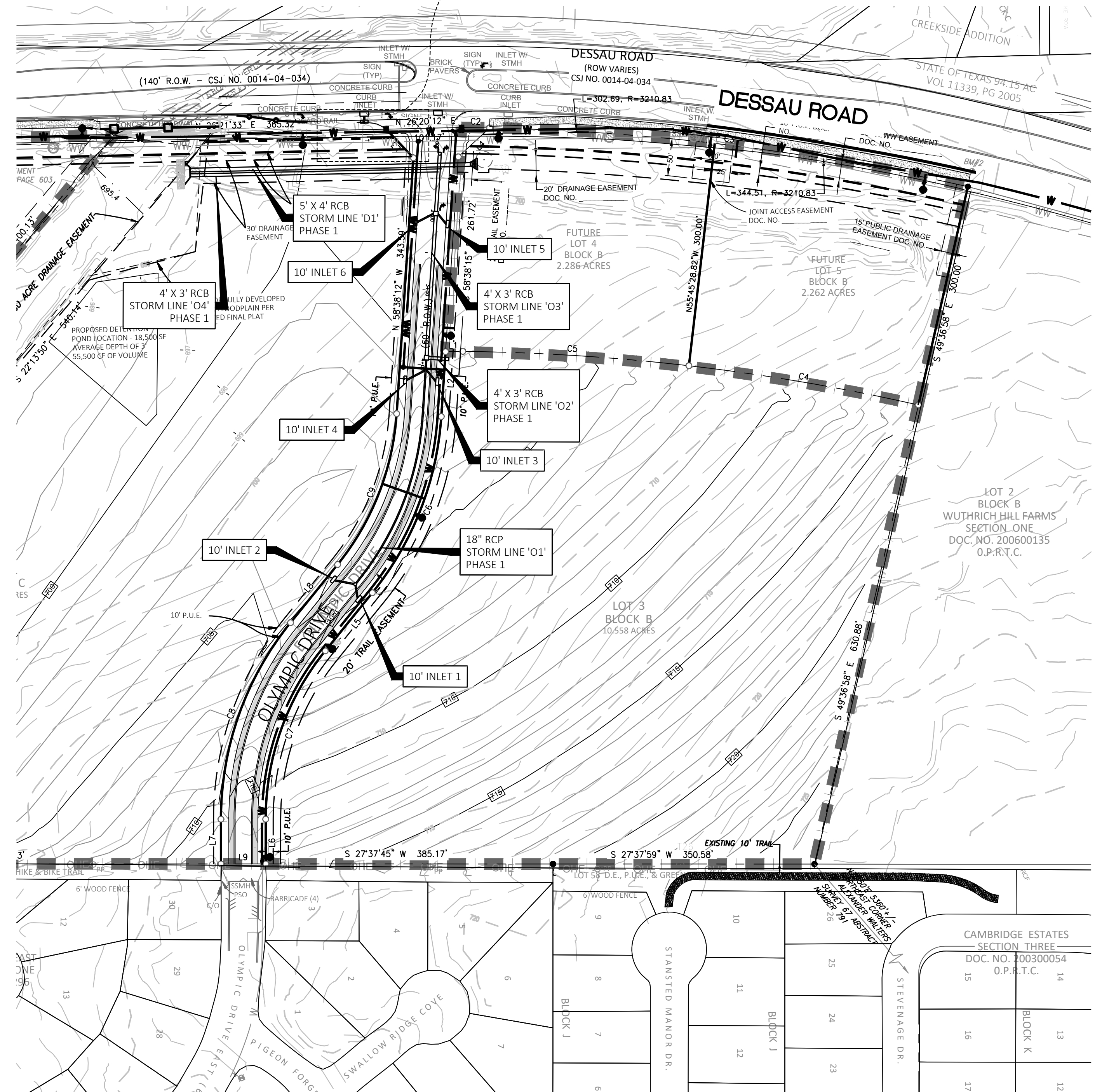
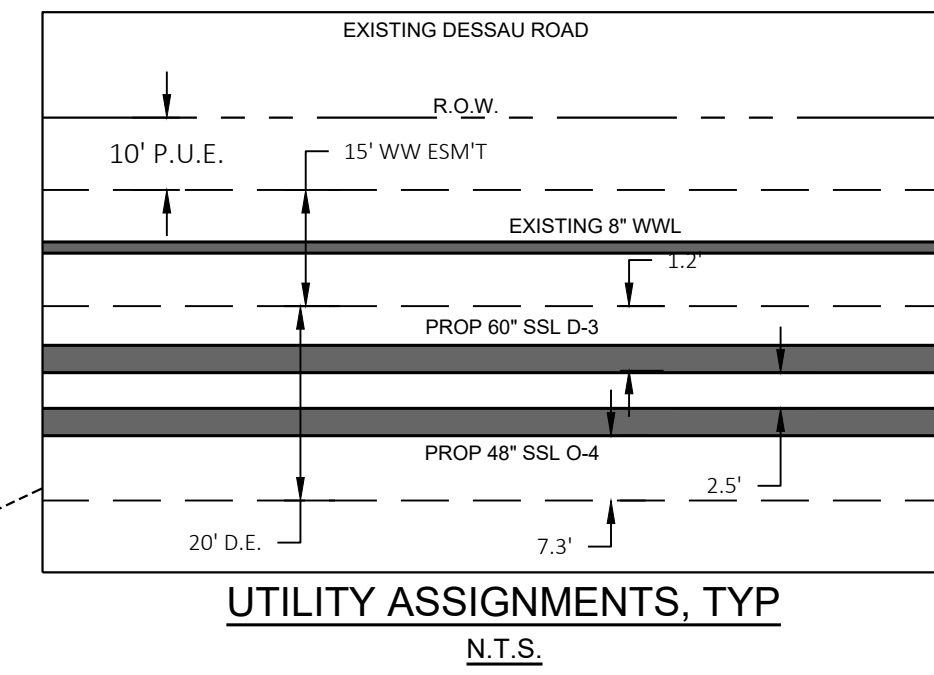
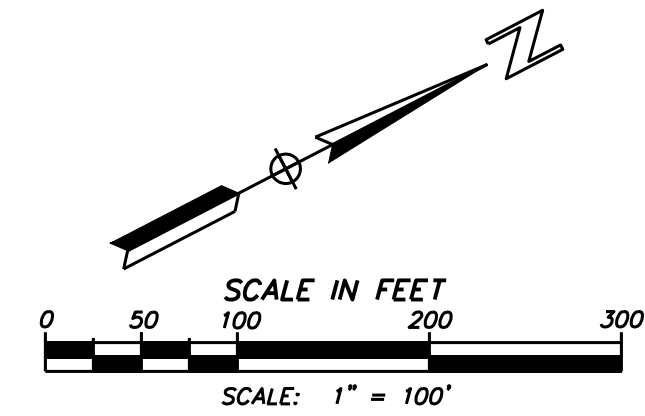
## STORM SEWER PLAN



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WULTRICH HILL FARMS SECTION 2-A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

STORM SEWER PLAN



NOTES:  
1. STORM LINES MUST MEET ALL ENGINEERING DESIGN MANUAL REQUIREMENTS AND WILL BE REVIEWED IN FURTHER DETAIL WITH FUTURE CONSTRUCTION PLAN APPLICATION.

CURB INLET CALCULATIONS

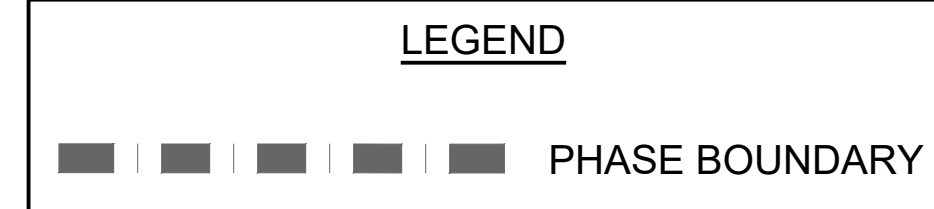
Inlet No.	Contrib Area No.	Drainage Area cfs	Slope (ft/ft)	Gutter Dep. (ft)	Ponded Width (ft)	Reduction Factor	Qa/La	La	L/La	Q/Qa	Curb Inlet Length L (ft)	Curb Width W (ft)	H or Y <sub>o</sub> (ft)	Qcap <sup>1</sup> (cfs)	Q 100 yr (cfs)	Qa (cfs)	100yr Incr. Qpass (cfs)	100yr Cum. Qpass (cfs)	Remarks
1	RW1	2.98	0.05	0.42	8.4	1	0.33	9	1.11	1	10	1.50	0.50	10.33	0.00	2.98	0.00	0.00	
2	RW2	3.07	0.05	0.42	8.4	1	0.34	9	1.11	1	10	1.50	0.50	10.33	0.00	3.07	0.00	0.00	
3	RW3	1.92	0.05	0.42	8.4	1	0.54	9	1.11	0.39	10	1.50	0.50	10.33	0.00	4.90	0.00	0.00	
4	RW4	1.82	0.05	0.42	8.4	1	0.54	9	1.11	0.37	10	1.50	0.50	10.33	0.00	4.89	0.00	0.00	
5	RW5	2.11	0.05	0.42	8.4	1	0.78	9	1.11	0.3	10	1.50	0.50	10.33	0.00	7.01	0.00	0.00	
6	RW6	2.11	0.05	0.42	8.4	1	0.78	9	1.11	0.3	10	1.50	0.50	10.33	0.00	7.00	0.00	0.00	

Note: (1) Capacity of curb inlets based on Section 4.3.1.A, Equation 4-3 City of Austin DCM

STORM SEWER CALCULATIONS

SS Line	Start Station	End Station	Contrib. Area No.	Approx. U/S (MSL)	Approx. D/S (MSL)	RCP Dia. (in)	RCB Span (ft)	RCB Rise (ft)	Friction Grade (ft)	HGL Up (elev)	HGL Down (elev)	Velocity In (fps)	Velocity Out (fps)	v <sub>2</sub> /2g (ft)	v <sub>1</sub> /2g (ft)	Kj (constant)	Mann "n"	K <sub>v</sub> v <sub>1</sub> <sup>2</sup> /2g (ft)	H (ft)	Slope (%)	Pipe Area (sf)	Hyd Rad (ft)	Flow Velocity (fps)	Q (inc) 25yr (cfs)	Q (cum) 25yr (cfs)	Q (inc) 100yr (cfs)	Q (cum) 100yr (cfs)	Q Capacity (cfs)	Design
O1	688.00	1012.00	RW1, RW2	700.50	699.50	18			0.003	700.7	699.7	3.4	3.42	0.2	0.2	0.5	0.012	0.091	0.273	0.31%	1.77	0.38	3.58	4.51	4.51	6.05	6.32	Designed for 25 year	
O2	495.00	688.00	B5	699.50	697.00		4	2	0.026	703.1	700.6	15.2	15.22	3.6	3.6	0.5	0.012	1.799	5.396	1.30%	8.00	0.67	10.76	80.57	85.08	121.77	86.04	Designed for 25 year	
O3	415.00	495.00	RW3, RW4	697.00	696.00		4	3	0.009	698.8	697.8	10.6	10.63	1.8	1.8	0.5	0.012	0.878	2.634	1.25%	12.00	0.86	12.49	4.37	89.45	127.62	149.91	Designed for 25 year	
O4	80.00	415.00	RW5, RW6	696.00	692.00		4	3	0.010	697.9	693.9	11.0	10.99	1.9	1.9	0.5	0.012	0.937	2.811	1.19%	12.00	0.86	12.21	3.16	92.60	131.84	146.52	Designed for 25 year	
D1	0.00	370.00	OS1, B3, B4	696.00	693.00		5	3	0.008	697.8	694.8	10.7	10.73	1.8	1.8	0.5	0.012	0.894	2.681	0.81%	16.47	0.97	10.93	124.13	124.13	176.69	176.69	179.95	Designed for 100 year

### STORM LINES 'D' & 'O'



DATE  
5/08/2020

PROJECT NO.  
RA0279.000.0

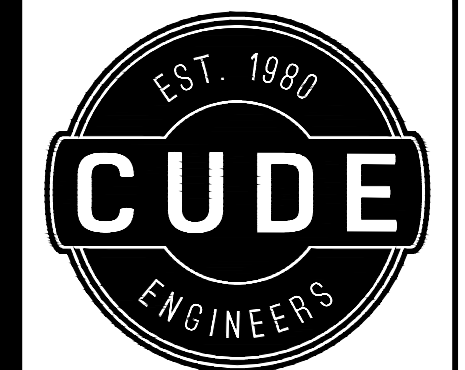
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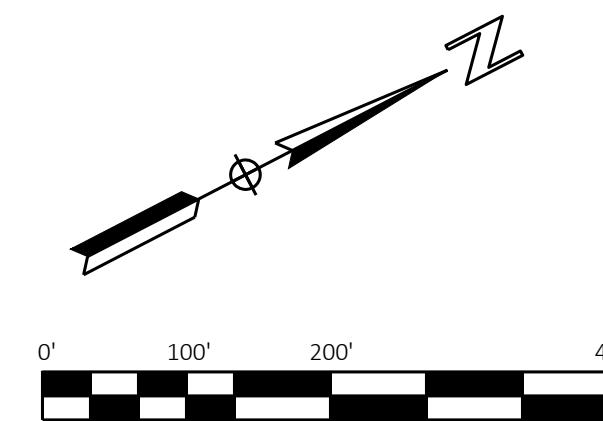


CUDE ENGINEERS  
TBPPE No. 19070



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Cedar Park, Texas 78613  
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# WUTHRICH HILL FARMS - SECTION TWO TREE SURVEY



### City of Pflugerville EROSION AND SEDIMENTATION CONTROL NOTES

1. EROSION CONTROL MEASURES, SITE WORK, AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF PFLUGERVILLE'S SUBDIVISION CODE AND CONSTRUCTION STANDARDS MANUAL, EXCEPT AS NOTED BELOW AND APPROVED BY CITY COUNCIL:
2. SLOPES SHALL BE SODDED OR SEEDED WITH THE APPROPRIATE GRASS, GRASS MIXTURES, OR GROUND COVER SUITABLE TO THE AREA AND SEASON TO WHICH THEY ARE APPLIED.
3. SILT FENCES, ROCK BERMS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF PFLUGERVILLE FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.

**NOTES:**

1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES; SHALL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
  - A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MATERIALS.
  - B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6") CUT OR FILL, OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY.
  - C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT.
  - D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING AND FIRE.
3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
  - A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
  - B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'-0") TO BUILDING.

ISSUE DATE:	FEBRUARY 2005	<b>CITY OF PFLUGERVILLE</b>	DWG. #EC-09
REVISIONS			EC09.DWG
DATE	APPROVED	DRAWN	
SCALE: N.T.S.			CONSTRUCTION STANDARDS AND DETAILS

WULTRICH HILL FARMS SECTION 2-A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

TREE SURVEY

DATE  
5/08/2020

PROJECT NO.  
RA0279.000.0

DRAWN BY  
RDP

CHECKED BY  
AHG

REVISIONS
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**CUDE ENGINEERS**  
TBPE No. 19070

TAG	TYPE	DIAMETER
26	UNKNOWN	10"
30	RED MULBERRY	20"
31	RED MULBERRY	14"
35	RED MULBERRY	13"
37	RED MULBERRY	10"
38	RED MULBERRY	17"
39	AMERICAN ELM	11"

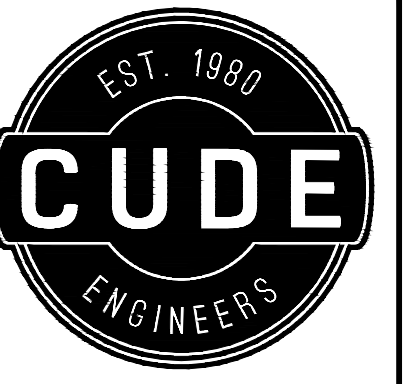
LINE	BEARING	DISTANCE
L1	N 26°30'55" E	23.12'
L2	S 58°38'15" E	87.14'
L3	S 74°06'21" W	52.94'
L4	S 15°06'43" E	57.08'
L5	S 23°22'17" E	100.23'
L6	S 62°22'51" E	59.97'
L7	N 62°22'51" W	59.96'
L8	N 23°22'17" W	100.23'
L9	S 27°37'45" W	60.00'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	38.64'	25.00'	88°33'42"	N 17°59'45" W	34.91'
C2	37.45'	3210.83'	0°40'06"	S 28°30'40" W	37.45'
C3	647.19'	3210.83'	11°32'56"	S 34°37'11" W	646.10'
C4	312.35'	2910.83'	6°08'53"	S 37°19'16" W	312.20'
C5	303.91'	2910.83'	5°58'56"	S 31°15'22" W	303.77'
C6	257.59'	418.50'	35°15'59"	N 41°00'16" W	253.54'
C7	244.08'	358.50'	39°00'34"	N 42°52'34" W	239.40'
C8	284.93'	418.50'	39°00'34"	N 42°52'34" W	279.46'
C9	220.66'	358.50'	35°15'59"	N 41°00'16" W	217.19'

**LEGEND**

- PROPERTY CORNER
- ▬ PHASE BOUNDARY
- - - - - TREE PROTECTION
- TREE



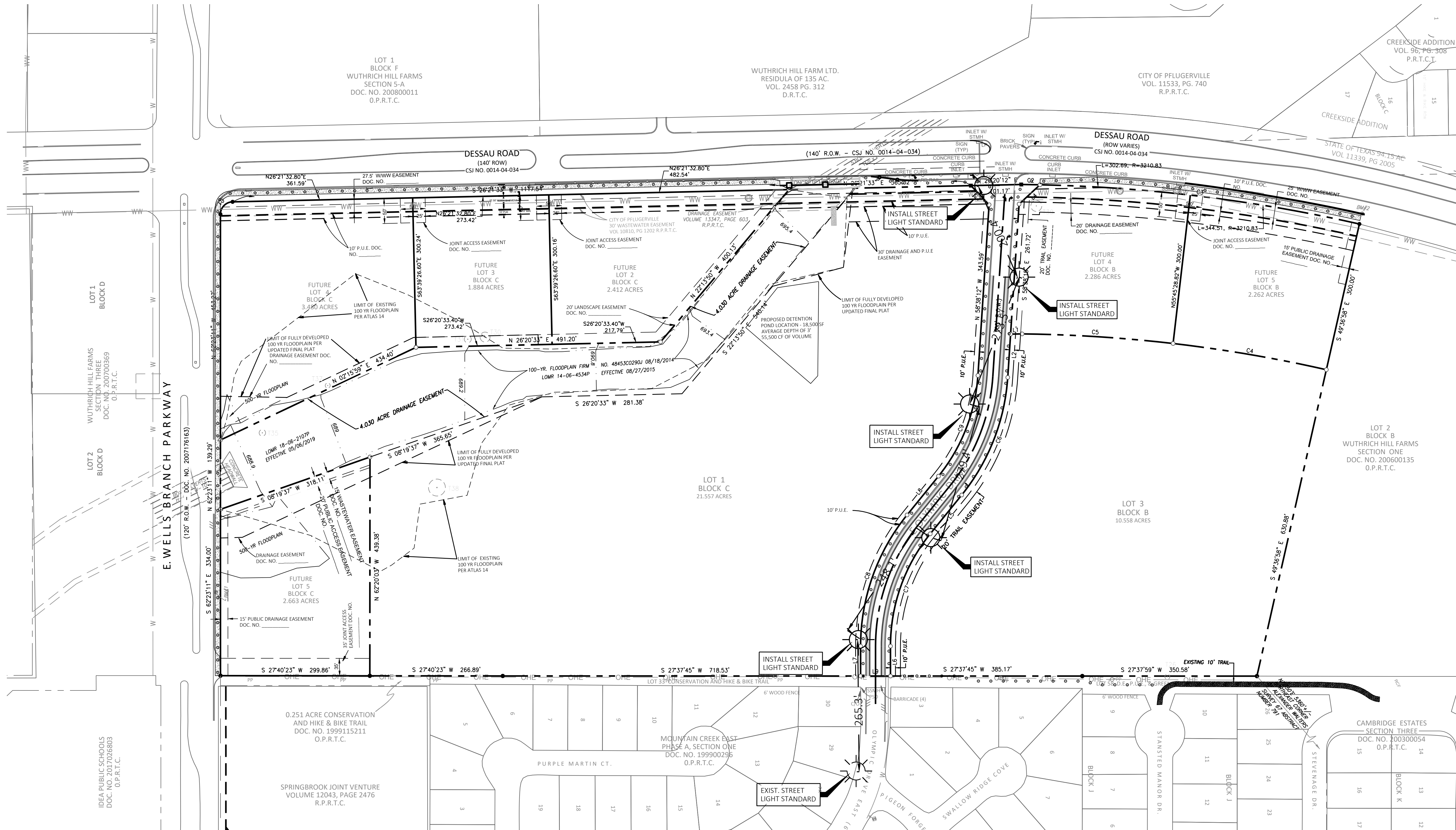


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# WUTHRICH HILL FARMS - SECTION TWO ILLUMINATION PLAN

WULTRICH HILL FARMS SECTION 2-A  
(PRELIMINARY PLAN ONLY - NOT FOR RECORDATION)

ILLUMINATION PLAN



DATE  
5/08/2020  
PROJECT NO.  
RA0279.000.0  
DRAWN BY  
RDP  
CHECKED BY  
AHG

REVISIONS	
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CUDE ENGINEERS  
TBPE No. 19070

NOTE:  
ALL STREETLIGHTS INSTALLED IN PUBLIC RIGHT-OF-WAY SHALL HAVE DOWNCAST, FULL CUT-OFF, HIGH-PRESSURE SODIUM LUMINAIRE. DROP DOWN LENSES ARE PROHIBITED.

**LEGEND**

■ ■ ■ ■ ■ PHASE BOUNDARY