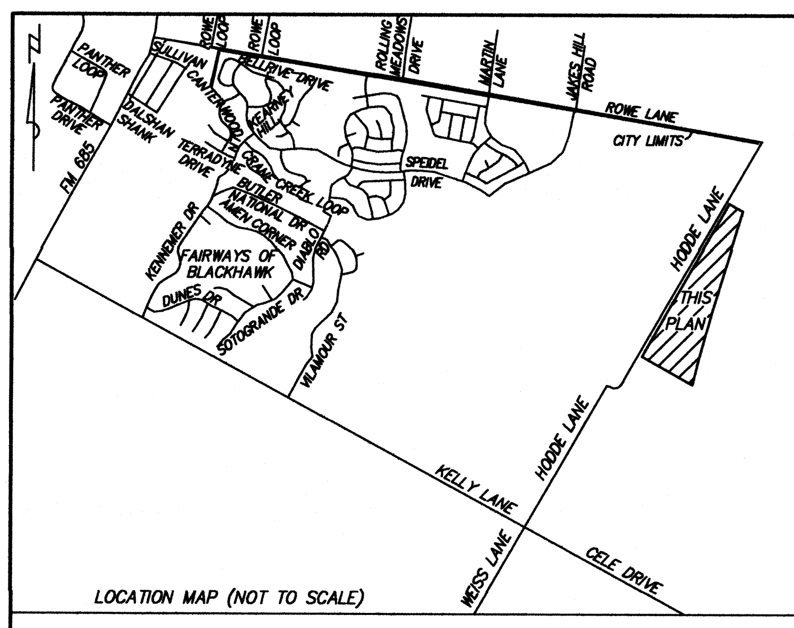
THE RIDGE AT BLACKHAWK PHASE 1

PRELIMINARY PLAN ONLY–NOT FOR RECORDATION



LOCATION MAP (NOT TO SCALE)

LEGAL DESCRIPTION:

76.317 ACRES BEING THAT PART OF THE BENJAMIN ALLEN SURVEY NO. 73, ABSTRACT NO. 36, THE JUAN ZAMBRANO SURVEY NO. 38, ABSTRACT NO. 844 AND THE DANIEL & GRACY BERGEN SURVEY NO. 79, ABSTRACT NO. 2599 IN TRAVIS COUNTY, TEXAS, BEING A PART OF THAT 123.219 ACRE TRACT OF LAND CONVEYED TO ROBERT M. TIEMANN AND CARRIE PARKER TIEMANN BY DEED RECORDED IN DOCUMENT NUMBER 2017155257 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS (OPRTC) AND ALSO BEING A PART OF THAT 37.845 ACRE TRACT OF LAND CONVEYED TO ROBERT M. TIEMANN BY DEED RECORDED IN DOCUMENT NUMBER 2016158649 OPRTC.

MUD 5 PARKLAND DEDICATION TABLE:

PROJECT	AREA	PARKLAND REQUIRED–ACREAGE	PARKLAND DEDICATED–LOCATION
THE RIDGE AT BLACKHAWK PHASE 1	76.317	10% OF TOTAL ACREAGE–7.63 AC	
SECTION 1	43.655	10% OF TOTAL ACREAGE–4.37 AC	6.12 AC–LOT 56, BLOCK A (OS/PARKLAND)
SECTION 2	32.661	10% OF TOTAL ACREAGE–3.27 AC	6.01 AC–LOT 30, BLOCK H (OS/PARKLAND)

THE RIDGE AT BLACKHAWK IS DEDICATING 12.13 ACRES OF PARKLAND. THIS IS 4.50 ACRES MORE THAN IS REQUIRED (7.63 ACRES). THIS 4.50 ACRE EXCESS MAY BE USED TO FULFILL PARKLAND REQUIREMENTS FOR OTHER PROJECTS.

1. THIS PLAT LIES WITHIN THE CITY OF PFLUGERVILLE ETJ.
2. RETAIL WATER AND WASTEWATER SHALL BE PROVIDED BY LAKESIDE MUD #5. NO LOT IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO WATER AND WASTEWATER FACILITIES.
3. A 10–FT. PUBLIC UTILITY EASEMENT (P.U.E.) SHALL BE DEDICATED ALONG ALL STREET FRONTAGES.
4. EASEMENTS DEDICATED TO THE PUBLIC BY THIS PLAT SHALL ALSO BE SUBJECT TO THE TERMS AND CONDITIONS OF THE ENGINEERING DESIGN MANUAL PER CITY OF PFLUGERVILLE ORDINANCE NO. 1206–15–02–24. THE GRANTOR, HEIRS, SUCCESSORS AND ASSIGNS SHALL RETAIN THE OBLIGATION TO MAINTAIN THE SURFACE OF THE EASEMENT PROPERTY, INCLUDING THE OBLIGATION TO REGULARLY MOW OR CUT BACK VEGETATION AND TO KEEP THE SURFACE OF THE EASEMENT PROPERTY FREE OF LITTER, DEBRIS, AND TRASH.
5. NO IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, STRUCTURES, FENCES OR LANDSCAPING SHALL BE ALLOWED IN A PUBLIC EASEMENT, EXCEPT AS APPROVED BY THE CITY OF PFLUGERVILLE AND TRAVIS COUNTY.
6. THE PROPERTY OWNER SHALL PROVIDE ACCESS TO THE DRAINAGE AND UTILITY EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY TRAVIS COUNTY AND/OR THE CITY OF PFLUGERVILLE FOR THE PLACEMENT, CONSTRUCTION, INSTALLATION, REPAIR, MAINTENANCE, RELOCATION, REMOVAL, OPERATION AND INSPECTION OF SUCH DRAINAGE AND UTILITY FACILITIES, AND RELATED APPURTENANCES.
7. SIDEWALKS SHALL BE CONSTRUCTED ALONG BOTH SIDES OF ALL STREETS AND IN THE LANDSCAPE/PUBLIC ACCESS EASEMENTS (SHOWN BY A DOTTED LINE DEPICTING THE SIDEWALK WIDTH) AS SHOWN ON THE FACE OF THIS PLAT. A MINIMUM OF SIX (6) FOOT WIDE SIDEWALK SHALL BE CONSTRUCTED WITHIN LOT 57, BLOCK A; LOT 21, BLOCK F; LOT 24, BLOCK G; LOT 25, BLOCK G, LOT 16, BLOCK I AND ON BOTH SIDES OF SPEIDEL DRIVE. THE SIDEWALKS SHALL BE CONSTRUCTED WITH THE PUBLIC INFRASTRUCTURE PLANS ASSOCIATED WITH EACH SECTION. ALL OTHER SIDEWALKS SHALL BE FOUR (4) FEET WIDE AS SHOWN ON THE PLAT.
8. STREETLIGHTS SHALL BE INSTALLED AND IN FULL WORKING ORDER WITH THE PUBLIC IMPROVEMENTS. ALL STREETLIGHTS SHALL BE IN CONFORMANCE WITH ALL CITY OF PFLUGERVILLE ORDINANCES INCLUDING BUT NOT LIMITED TO BEING DOWNCAST AND FULL CUT OFF TYPE.
9. THIS SUBDIVISION IS SUBJECT TO ALL CITY OF PFLUGERVILLE ORDINANCES OR TECHNICAL MANUALS RELATED TO TREE PRESERVATION PER CITY ORDINANCE #1203–15–02–24 AND CITY RESOLUTION #1224–09–08–25–SA.
10. THE COMMUNITY IMPACT RATE FOR WASTEWATER WILL BE ASSESSED AT THE TIME OF FINAL PLAT.
11. THE SUBDIVISION SHALL MITIGATE THE POST–DEVELOPMENT PEAK RUNOFF RATES FOR THE 2 YEAR, 25 YEAR AND 100 YEAR STORM EVENTS.
12. 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.
13. THE OWNER OF THIS SUBDIVISION, AND HIS OR HER SUCCESSORS AND ASSIGNS, ASSUMES RESPONSIBILITY FOR PLANS FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS WHICH COMPLY WITH THE APPLICABLE CODES AND REQUIREMENTS OF THE CITY OF PFLUGERVILLE AND THE DEVELOPMENT AGREEMENT.
14. CONSTRUCTION PLANS AND SPECIFICATIONS FOR ALL SUBDIVISION IMPROVEMENTS SHALL BE REVIEWED AND APPROVED BY THE CITY OF PFLUGERVILLE AND TRAVIS COUNTY PRIOR TO ANY CONSTRUCTION WITHIN THE SUBDIVISION.
15. SITE DEVELOPMENT CONSTRUCTION PLANS SHALL BE REVIEWED AND APPROVED BY THE CITY OF PFLUGERVILLE AND TRAVIS COUNTY PRIOR TO ANY CONSTRUCTION.
16. NO PORTION OF THIS TRACT IS WITHIN A FLOOD HAZARD AREA AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP PANEL# 48453C0285H FOR TRAVIS COUNTY, EFFECTIVE SEPTEMBER 26, 2008.
17. ALL PROPOSED FENCES, WALLS AND LANDSCAPING ADJACENT TO INTERSECTING PUBLIC ROADWAY RIGHT–OF–WAY OR ADJACENT TO PRIVATE ACCESS DRIVES SHALL BE IN COMPLIANCE WITH THE SIGHT DISTANCE REQUIREMENTS OF THE CITY OF PFLUGERVILLE ENGINEERING DESIGN MANUAL, AS AMENDED.
18. WASTEWATER AND WATER SYSTEMS SHALL CONFORM TO TCEQ (TEXAS COMMISSION ON ENVIRONMENTAL QUALITY) AND STATE BOARD OF INSURANCE REQUIREMENTS. THE OWNER UNDERSTANDS AND ACKNOWLEDGES THAT PLAT VACATION OR RE–PLATTING MAY BE REQUIRED AT THE OWNER'S SOLE EXPENSE IF PLANS TO DEVELOP THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.
19. 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 ON THE ADEQUACY OF THE WORK OF THE ENGINEER.
20. ALL OPEN SPACE AND DRAINAGE LOTS ARE RESTRICTED TO NON–RESIDENTIAL USES AND SHALL BE OWNED AND MAINTAINED BY THE M.U.D. #5 PER THE AMENDED AND RESTATED COMPREHENSIVE DEVELOPMENT AGREEMENT (LAKESIDE MUD NO. 5) RECORDED IN DOCUMENT NO. 2019089789 OPRTC. THE FOLLOWING LOTS WILL BE THE RESPONSIBILITY OF M.U.D. #5: LOT 10, BLOCK A; LOT 45, BLOCK A; LOT 56, BLOCK A; LOT 18, BLOCK H; LOT 15, BLOCK I; LOT 30, BLOCK H.
21. ALL OPEN SPACE, PARKLAND, LANDSCAPE AND SIDEWALK LOTS ARE RESTRICTED TO NON–RESIDENTIAL USES AND SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. THE FOLLOWING LOTS WILL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION: LOT 28, BLOCK A; LOT 55, BLOCK A; LOT 57, BLOCK A; LOT 20, BLOCK F; LOT 21, BLOCK F; LOT 24, BLOCK G; LOT 26, BLOCK G; LOT 29, BLOCK H; LOT 31, BLOCK H; LOT 16, BLOCK I.
22. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE OWNER OR HIS/HER ASSIGNS.
23. ALL 15' DRAINAGE EASEMENTS WILL BE ENCLOSED CONDUIT.
24. NO DRIVEWAY SHALL BE CONSTRUCTED CLOSER THAN 150 FEET TO THE EDGE OF PAVEMENT OF AN INTERSECTION ARTERIAL STREET. NO DRIVEWAY SHALL BE CONSTRUCTED CLOSER THAN 50 FEET TO THE EDGE OF PAVEMENT OF AND INTERSECTING LOCAL OR COLLECTOR STREET.
25. ALL STREETS WILL BE PUBLIC.
26. WITHIN A SIGHT LINE EASEMENT, ANY OBSTRUCTION OF SIGHT LINE BY VEGETATION, FENCING, EARTHWORK, BUILDINGS, SIGNS OR OTHER OBJECT WHICH IS DETERMINED TO CAUSE A TRAFFIC HAZARD IS PROHIBITED AND MAY BE REMOVED BY ORDER OF THE TRAVIS COUNTY COMMISSIONERS' COURT OR THE CITY OF PFLUGERVILLE AT THE OWNER'S EXPENSE. THE PROPERTY OWNER IS TO MAINTAIN AN UNOBSTRUCTED VIEW CORRIDOR WITHIN THE BOUNDS OF SUCH EASEMENT AT ALL TIMES.
27. ONCOR ELECTRIC DELIVERY COMPANY WILL BE PROVIDING ELECTRIC UTILITIES, SI ENERGY WILL BE PROVIDING GAS UTILITIES, AT&T WILL BE PROVIDING CABLE UTILITIES, AND LAKESIDE MUD #5 WILL BE PROVIDING WATER AND WASTEWATER UTILITIES.
28. THE SUBDIVISION PERIMETER FENCE SHALL BE MASONRY AND CONSTRUCTED WITH THE PUBLIC IMPROVEMENTS AND SHALL BE PLACED SUCH THAT IT DOES NOT INTERFERE WITH SIGHTLINES AS REFERENCED IN AASHTO.
29. THIS PROPERTY IS SUBJECT TO THE TIA DATED JUNE 7, 2019 AND THE PHASING AGREEMENT APPROVED WITH THIS PRELIMINARY PLAN.
30. HIKE AND BIKE TRAIL IS TO BE CONSTRUCTED WITH THE FIRST PUBLIC INFRASTRUCTURE SET FOR EACH SECTION.
31. THE PUBLIC PARKLAND DEDICATION AND PARK DEVELOPMENT FEE SHALL BE IN ACCORDANCE WITH THE AMENDED AND RESTATED COMPREHENSIVE DEVELOPMENT AGREEMENT (LAKESIDE MUD NO. 5) RECORDED IN DOCUMENT NO. 2019089789 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.
32. NO MANHOLES SHALL BE INSTALLED WITHIN THE SIDEWALK AREA.
33. ACCESS TO TRAVIS COUNTY ROADWAYS WILL REQUIRE A PERMIT FROM TRAVIS COUNTY.
34. A TRAVIS COUNTY DEVELOPMENT PERMIT IS REQUIRED PRIOR TO SITE DEVELOPMENT.
35. NO CUT OR FILL ON ANY LOT MAY EXCEED EIGHT FEET, EXCLUDING DRIVEWAYS, A BUILDING STRUCTURE'S FOOTPRINT, OR A PARKING AREA FOOTPRINT, IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
36. AS DEPICTED ON THE PLAT, EACH PROTECTIVE EASEMENT FROM A CRITICAL ENVIRONMENTAL FEATURE, INCLUDING A CAVE, SINKHOLE, POINT RECHARGE FEATURE, BLUFF, CANYON RIMROCK FEATURE, WETLAND, AND SPRING MUST REMAIN IN ITS EXISTING, UNDEVELOPED, NATURAL STATE. NATURAL VEGETATIVE COVER MUST BE RETAINED. CONSTRUCTION ACTIVITIES, WASTEWATER DISPOSAL, AND WASTEWATER IRRIGATION ARE PROHIBITED WITHIN A PROTECTIVE EASEMENT. A RESIDENTIAL LAWN OR TRAIL IS ALLOWED IF IT IS LOCATED AT LEAST 50 FEET FROM THE EDGE OF A CRITICAL ENVIRONMENTAL FEATURE IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
37. AS DEPICTED ON THE PLAT, THE SETBACK AREA IDENTIFIED FOR EACH WATERWAY IS A PROTECTIVE EASEMENT THAT MUST REMAIN UNDEVELOPED AND ACTIVITIES MUST BE LIMITED WITHIN THE EASEMENT. THE PROTECTIVE EASEMENT MUST REMAIN FREE OF CONSTRUCTION, DEVELOPMENT, AND OTHER ALTERATIONS EXCEPT WHEN SPECIFICALLY APPROVED IN A TRAVIS COUNTY DEVELOPMENT PERMIT.
38. BEFORE BEGINNING CONSTRUCTION ACTIVITIES ON A SUBDIVISION LOT, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND, WHEN APPLICABLE, OBTAIN AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE SWP3 REQUIRES IMPLEMENTATION OF TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES, INCLUDING EROSION AND SEDIMENT CONTROLS, FOR PROTECTION OF STORM WATER RUNOFF QUALITY, IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
39. THE OWNER IS RESPONSIBLE FOR MAINTAINING AND OPERATING ALL PERMANENT WATER QUALITY CONTROLS IN COMPLIANCE WITH ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE TRAVIS COUNTY CODE.
40. AN ACTIVITY THAT MAY ADVERSELY AFFECT A TREE OF EIGHT INCHES OR MORE IN TRUNK DIAMETER (MEASURED AT FOUR FEET HEIGHT ABOVE THE GROUND) IN A RIGHT–OF–WAY ACCEPTED FOR MAINTENANCE BY TRAVIS COUNTY MUST COMPLY WITH ALL STANDARDS AND REQUIREMENTS IN THE TRAVIS COUNTY CODE.
41. THE WALL, FENCE AND LANDSCAPE EASEMENTS (WF&L) ARE FOR WALLS, FENCE AND LANDSCAPE PURPOSES. THE HOA WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE WALL, FENCE AND LANDSCAPE EASEMENTS (WF&L) ON LOTS 1–11 AND 54, BLOCK A; LOTS 1–19, BLOCK F; LOTS 1–9, 12–15, AND 23 BLOCK G; LOTS 1 AND 4–12 BLOCK I AND LOT 1 BLOCK H.
42. LOT 25, BLOCK G WILL HAVE NON–RESIDENTIAL USES ONLY.
43. PER CITY OF PFLUGERVILLE DEVELOPMENT AGREEMENT, SECTION 5.7 OF THE AMENDED AND RESTATED COMPREHENSIVE DEVELOPMENT AGREEMENT DATED JUNE 7, 2019, DEVELOPER SHALL PAY A BOUNDARY ROAD CONSTRUCTION PAYMENT (5.7C) AND A ROAD INFRASTRUCTURE PAYMENT (5.7D) AT THE TIME OF FINAL PLAT RECORDATION.

STATE OF TEXAS:

KNOW ALL MEN BY THESE PRESENTS:

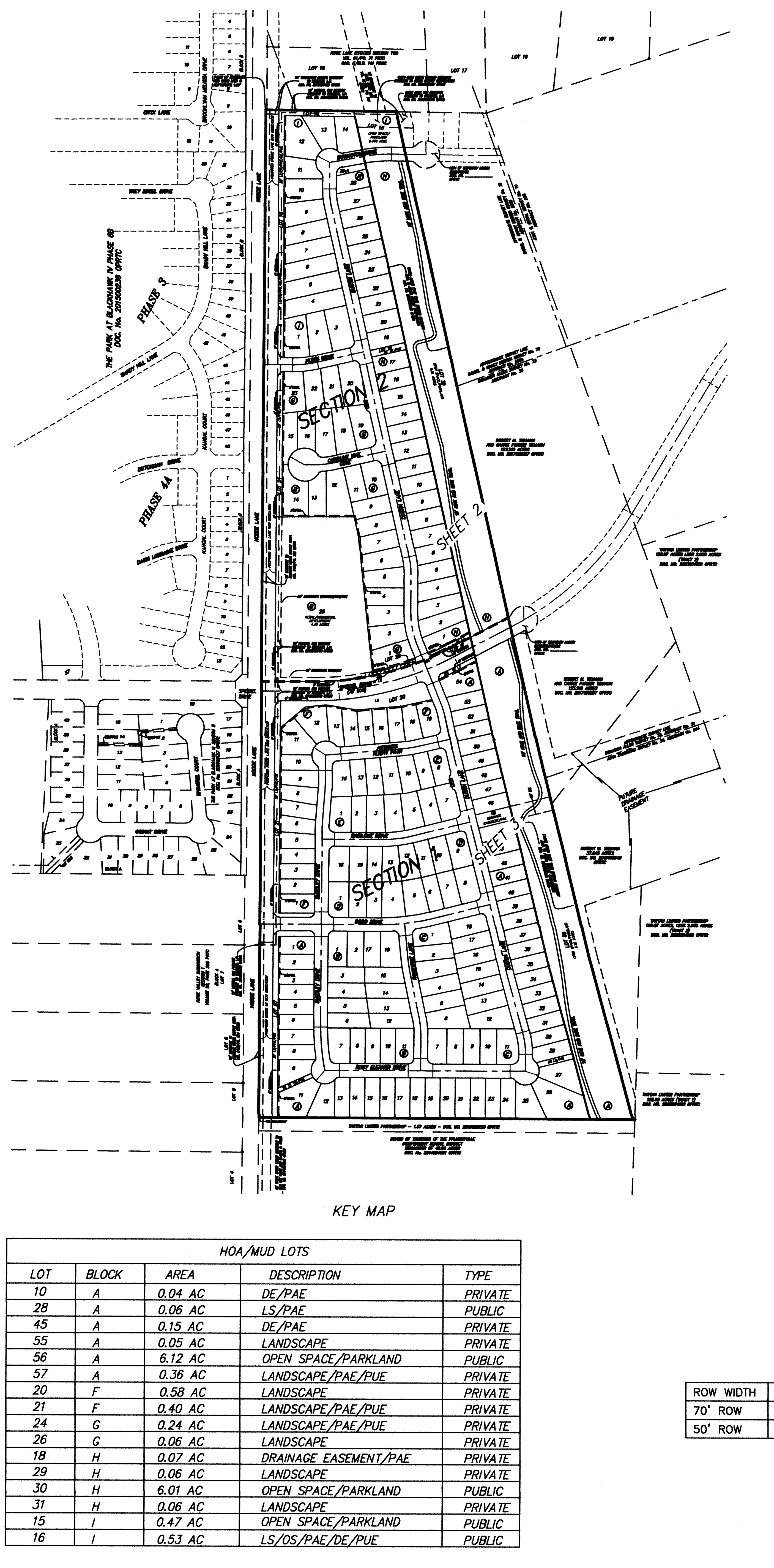
COUNTY OF TRAVIS:

THAT I, STEPHEN R. LAWRENCE, 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 THE SUBDIVISION CODE OF THE CITY OF PFLUGERVILLE, TEXAS AND IN COMPLIANCE WITH CHAPTER 482 OF THE TRAVIS COUNTY CODE, AND THAT ALL KNOWN EASEMENTS WITHIN THE BOUNDARY OF THE PLAN ARE SHOWN HEREON.

STEPHEN R. LAWRENCE DATE
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 6352
STATE OF TEXAS

City Approved Revision & Correction							
No	Description	Revise (R) Correct (C) Add (A) Void (V) Sheet No's	Net Change Impervious Cover (sq.ft.)/%	Total Impervious Cover (sq.ft.)/%	Design Engineer Signature	City of Pflugerville Approval	Approval Date

STREET NAME	LENGTH	ROW WIDTH	ACRES	CLASSIFICATION	PAVEMENT WIDTH
CAROLINE MAE COVE	300	50	0.3	LOCAL	30' F/F
BASILONE DRIVE	547	50	0.6	LOCAL	30' F/F
BOBO DRIVE	847	50	1.0	LOCAL	30' F/F
BOYINGTON DRIVE	279	50	0.3	LOCAL	30' F/F
ARTHURS FLIGHT PATH	458	50	0.5	LOCAL	30' F/F
DUSTIN LANE	3410	50	3.9	LOCAL	30' F/F
RUBY ELEANOR DRIVE	732	50	0.8	LOCAL	30' F/F
PLESS DRIVE	369	50	0.4	LOCAL	30' F/F
ROANTREE LANE	543	50	0.6	LOCAL	30' F/F
SMEDLEY DRIVE	1153	50	1.3	LOCAL	30' F/F
SPEIDEL DRIVE	955	70	1.5	COLLECTOR	
	9594		11.5		



KEY MAP

HOA/MUD LOTS				
LOT	BLOCK	AREA	DESCRIPTION	TYPE
10	A	0.04 AC	DE/PAE	PRIVATE
28	A	0.06 AC	LS/PAE	PUBLIC
45	A	0.15 AC	DE/PAE	PRIVATE
55	A	0.05 AC	LANDSCAPE	PRIVATE
56	A	6.12 AC	OPEN SPACE/PARKLAND	PUBLIC
57	A	0.36 AC	LANDSCAPE/PAE/PUE	PRIVATE
20	F	0.58 AC	LANDSCAPE	PRIVATE
21	F	0.40 AC	LANDSCAPE/PAE/PUE	PRIVATE
24	G	0.24 AC	LANDSCAPE/PAE/PUE	PRIVATE
26	G	0.06 AC	LANDSCAPE	PRIVATE
18	H	0.07 AC	DRAINAGE EASEMENT/PAE	PRIVATE
29	H	0.06 AC	LANDSCAPE	PRIVATE
30	H	6.01 AC	OPEN SPACE/PARKLAND	PUBLIC
31	H	0.06 AC	LANDSCAPE	PRIVATE
15	I	0.47 AC	OPEN SPACE/PARKLAND	PUBLIC
16	I	0.53 AC	LS/OS/PAE/DE/PUE	PUBLIC

NON SINGLE–FAMILY PUBLIC LOTS				
LOT	BLOCK	AREA	DESCRIPTION	TYPE
25	G	4.45 AC	RETAIL/COMMERCIAL	PUBLIC

INDEX

SHEET 1 COVER SHEET
SHEET 2 PRELIMINARY PLAN
SHEET 3 PRELIMINARY PLAN
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SHEET 5 ILLUMINATION PLAN SHEET
SHEET 6 WATER & WASTEWATER PLAN (1 OF 2)
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SHEET 8 TREE SURVEY
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SHEET 10 PRELIMINARY DRAINAGE PLAN (2 OF 2)
SHEET 11 PRELIMINARY DRAINAGE PLAN AREA AND INLET CALCULATIONS

PHONE LIST

CITY OF PFLUGERVILLE	(512)990–6400
CITY OF PFLUGERVILLE W&WW	(512)990–6418
ONE CALL	(811) OR (800)344–8377
ATMOS ENERGY	(512)415–8426
ONCOR ENERGY	(512)244–5606
A.T.&T. CONSTRUCTION	(254)757–7810
MANVILLE WSC	(512)844–0762
LCRA	(512)304–5531

ENGINEER'S FLOOD PLAIN CERTIFICATION

NO PORTION OF THIS TRACT IS WITHIN THE BOUNDAIRES OF THE 100–YEAR FLOOD PLAIN OF ANY WATERWAY THAT IS WITHIN THE LIMITS OF STUDY OF THE FEDERAL FLOOD INSURANCE ADMINISTRATION, FIRM PANEL NO. 48453C0285H, EFFECTIVE DATE SEPTEMBER 26, 2008 FOR TRAVIS COUNTY, TEXAS. THIS PLAT IS IN COMPLIANCE WITH CHAPTER 482 OF THE TRAVIS COUNTY CODE.

J. KEITH COLLINS DATE
LICENSED PROFESSIONAL ENGINEER NO. 80579
STATE OF TEXAS

SINGLE FAMILY LOTS
NON–SINGLE FAMILY LOTS (OPEN SPACE & LANDSCAPE)
LOTS BY SECTION:

SECTION 1
135 SINGLE FAMILY LOTS
1 OPEN SPACE/PARKLAND LOT
2 LANDSCAPE/PAE/PUE LOTS
2 DRAINAGE EASEMENT/PAE LOTS
1 LS/PAE LOT
2 LS LOTS

SECTION 2
64 SINGLE FAMILY LOTS
2 OPEN SPACE/PARKLAND LOTS
3 LANDSCAPE LOTS
1 RETAIL/COMMERCIAL LOT
1 LS/OS/PAE/DE/PUE LOT
1 LS/PAE/PUE LOT
1 DE/PAE LOT

LOT AREA CALCULATIONS TABLE

SECTION 1

LOT	BLOCK	AREA (SF)
1	A	8450
2	A	7150
3	A	7150
4	A	7150
5	A	7150
6	A	7150
7	A	7205
8	A	7444
9	A	9622
10 (DE/PAE)	A	2061
11	A	15767
12	A	9662
13	A	8065
14	A	8114
15	A	8117
16	A	8121
17	A	8124
18	A	8128
19	A	8132
20	A	8135
21	A	8139
22	A	8142
23	A	8146
24	A	8080
25	A	10897
26	A	20665
27	A	12119
28 (LS/PAE)	A	2680
29	A	7755
30	A	7151
31	A	7151
32	A	7150
33	A	7150
34	A	7344
35	A	7150
36	A	7150
37	A	7150
38	A	7150
39	A	7150
40	A	7150
41	A	7150
42	A	7150
43	A	7150
44	A	7150
45 (DE/PAE)	A	6500
46	A	7150
47	A	7150
48	A	7150
49	A	7150
50	A	7319
51	A	7150
52	A	7150
53	A	7287
54	A	12513
55 (LS)	A	2224
56 (OS/PARKLAND)	A	266803
57 (LS/PAE/PUE)	A	15992
1	B	8957
2	B	7857
3	B	7875
4	B	7636
5	B	8047
6	B	8462
7	B	10199
8	B	7150
9	B	7150
10	B	7150
11	B	8705
12	B	8607
13	B	8421
14	B	8188
15	B	8198
16	B	9293
17	B	7956
1	C	9538
2	C	7870
3	C	9258
4	C	8772
5	C	8853
6	C	10962
7	C	9085
8	C	7865
9	C	7865
10	C	7865
11	C	9836
12	C	10703
13	C	9144
14	C	8870
15	C	8196
16	C	8069
17	C	7898
18	C	9029
1	D	9664
2	D	8450
3	D	7150
4	D	10485
5	D	10539
6	D	7150
7	D	8450
8	D	9664
9	D	9664
10	D	8450
11	D	7150
12	D	8330
13	D	8313
14	D	7150
15	D	8450
16	D	9664
1	E	10207
2	E	7418
3	E	9017
4	E	9091
5	E	9123
6	E	8245
7	E	9504
8	E	8194
9	E	7250
10	E	8690
11	E	8785
12	E	7855
13	E	7347
14	E	8968
1	F	9099
2	F	7150
3	F	7150
4	F	7163
5	F	7428
6	F	7525
7	F	7544
8	F	8041
9	F	8218
10	F	7172
11	F	12565
12	F	12074
13	F	7913
14	F	7533
15	F	7150
16	F	7151
17	F	7258
18	F	7805
19	F	8660
20 (LS)	F	25346
21 (LS/PAE/PUE)	F	17406

ROW WIDTH	STREET CLASSIFICATION	PAVEMENT WIDTH	CROSS SECTION	SIDEWALK
70' ROW	MAJOR COLLECTOR	45' PAVEMENT	CURB & GUTTER	SIX FOOT BOTH SIDES
50' ROW	LOCAL STREET	27' PAVEMENT	CURB & GUTTER	FOUR FOOT BOTH SIDES

SITE DATA					
	BLOCKS	LOTS	ACRES	LINEAR FEET	MAINTAINED BY
SITE:			76.32		
NEW STREETS			11.50	9,594	
	7				
SINGLE FAMILY LOTS		199	45.11		
DEVELOPMENT RESERVE		1	4.45		
DE/OPEN SPACE		3	0.72		M.U.D.
OPEN SPACE/PARKLAND		3	12.60		M.U.D.
LANDSCAPE & SW		10	1.94		H.O.A
TOTAL LOTS		216			

STUDIES AND MODELS:

HYDROLIGIC IMPACT & DETENTION FACILITY REPORT
OCTOBER 2018 AND AMENDED JULY 2018
BY: KEITH A. MOODY, P.E.
MOODY ENGINEERING, INC.

THE RIDGE AT BLACKHAWK PHASE 1 MODEL & FIRE FLOW ANALYSIS
LAKESIDE MUD #5
JUNE 22, 2018
BY: J. KEITH COLLINS, P.E.
RANDALL JONES & ASSOCIATES

THE RIDGE AT BLACKHAWK PHASE 1, TRAFFIC IMPACT ANALYSIS
JUNE 7, 2019
BY: MARKUS J. HILLJE, P.E.
TRAFFIC IMPACT GROUP, LLC

WASTEWATER ANALYSIS
SEPTEMBER 04, 2018
BY: J. KEITH COLLINS, P.E.
RANDALL JONES & ASSOCIATES ENGINEERING, INC.

ENGINEERING REPORT
SEPTEMBER 11, 2018
BY: J. KEITH COLLINS, P.E.
RANDALL JONES & ASSOCIATES ENGINEERING, INC.

WATER QUALITY ENGINEERING REPORT
FOR RIDGE AT BLACKHAWK PHASE 1
FEBRUARY 2018
BY: J. KEITH COLLINS, P.E.
RANDALL JONES & ASSOCIATES ENGINEERING, INC.

BENCHMARKS:

BENCHMARK NO. 1:
BRASS DISK SET IN CONCRETE
N = 10145497.59'
E = 3173522.48'
ELEV = 626.92' NAVD '88

BENCHMARK NO. 2
SQUARE CUT IN TOP OF CURB
N = 10145903.990'
E = 3174082.672'
ELEV = 636.53' NAVD '88

THE DATUM FOR ALL ELEVATIONS AND CONTOURS SHOWN ON THIS PRELIMINARY PLAT IS NAVD '88.

PROPERTY OWNERS AND SUBDIVIDER:

ROBERT M. TIEMANN AND CARRIE PARKER TIEMANN
P.O. BOX 1190
PFLUGERVILLE, TEXAS 78691
PHONE: (512) 990–1933
FAX: (512) 990–1938

SCALE: 1" = 300'

0 300' 600' 900' 1200'

LEGEND:

PRWC	PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS
PRTC	PLAT RECORDS OF TRAVIS COUNTY, TEXAS
DRTC	DEED RECORDS OF TRAVIS COUNTY, TEXAS
RPRTC	REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS
OPRTC	OFFICIAL PUBLIC RECORDS TRAVIS COUNTY, TEXAS
SDE	SIGHT DISTANCE EASEMENT
ROW	RIGHT–OF–WAY
PUE	PUBLIC UTILITY EASEMENT
PAE	PUBLIC ACCESS EASEMENT
DE	DRAINAGE EASEMENT
SDE	SIGHT DISTANCE EASEMENT
OS	OPEN SPACE
WWE	WASTEWATER LINE EASEMENT
SW	SIDEWALK
LS	LANDSCAPE
WF&L	WALL, FENCE, AND LANDSCAPE EASEMENT
(A)	BLOCK NAME
○	1/2" IRON ROD SET WITH "RJ SURVEYING" CAP
●	1/2" IRON ROD FOUND
■	CONCRETE MONUMENT SET
·····	4' SIDEWALK REQUIRED
·····	6' SIDEWALK REQUIRED
⊠	MAILBOX CLUSTER
– – –	PHASE LINE

SIDEWALK NOTE:

THE TRAIL IS TO BE CONSTRUCTED WITH THE FIRST PUBLIC INFRASTRUCTURE SET FOR EACH SECTION.

LOT AREA CALCULATIONS TABLE CONTINUED

SECTION 2

LOT	BLOCK	AREA (SF)
1	G	11989
2	G	10248
3	G	9640
4	G	9333
5	G	10348
6	G	10192
7	G	9276
8	G	9024
9	G	9024
10	G	9624
11	G	8305
12	G	14204
13	G	9851
14	G	14617
15	G	9122
16	G	9141
17	G	11854
18	G	11455
19	G	11738
20	G	12654
21	G	10234
22	G	9768
23	G	11740
24 (LS/PAE/PUE)	G	10472
25 (RETAIL/COMM)	G	193796
26 (LS)	G	2403
1	H	9945
2	H	10081
3	H	9713
4	H	9932
5	H	8985
6	H	8480
7	H	8450
8	H	8450
9	H	8450
10	H	8450
11	H	8450
12	H	8450
13	H	8450
14	H	8450
15	H	8450
16	H	8450
17	H	8450
18 (DE/PAE)	H	3250
19	H	8450
20	H	8450
21	H	8450
22	H	8450
23	H	8450
24	H	8450
25	H	8450
26	H	8450
27	H	8403
28	H	7797
29 (LS)	H	2643
30 (OS/PARKLAND)	H	261654
31 (LS)	H	2427
1	I	13433
2	I	11757
3	I	12977
4	I	14702
5	I	13747
6	I	12796
7	I	11844
8	I	10893
9	I	12180
10	I	11407
11	I	9511
12	I	16285
13	I	10710
14	I	10843
15 (OS/PARKLAND)	I	20446
16 (LS/OS/PAE/DE/PUE)	I	23080

SUMMARY OF LOT SIZES AND QUANTITIES DEMONSTRATING COMPLIANCE WITH SF–R ZONING:

SECTION 1

135 LOTS IN THE SF–R ZONED AREA
31 LOTS GREATER THAN OR EQUAL TO 9000 SF (23%)
56 LOTS GREATER THAN OR EQUAL TO 7500 SF (41%)
48 LOTS GREATER THAN OR EQUAL TO 6250 SF (36%)

SECTION 2

64 LOTS IN THE SF–R ZONED AREA
40 LOTS GREATER THAN OR EQUAL TO 9000 SF (63%)
24 LOTS GREATER THAN OR EQUAL TO 7500 SF (37%)
00 LOTS GREATER THAN OR EQUAL TO 6250 SF (00%)

CUMULATIVE TOTALS

199 LOTS TOTAL IN THE SF–R ZONED AREA SECTION 1 AND SECTION 2
71 LOTS GREATER THAN OR EQUAL TO 9000 SF (36%)
80 LOTS GREATER THAN OR EQUAL TO 7500 SF (40%)
48 LOTS GREATER THAN OR EQUAL TO 6250 SF (24%)

SCALE: 1" = 300' SHEET 1 OF 11

REVISIONS			
NO	DATE	DESCRIPTION	BY

APPLICATION SUBMITTAL DATE: NOVEMBER 20, 2018

PRELIMINARY PLAN ONLY–NOT FOR RECORDATION

DATE: AUGUST 1, 2018 SCALE: 1" = 100'

RANDALL JONES & ASSOCIATES ENGINEERING, INC.
2900 JAZZ STREET, ROUND ROCK, TEXAS, 78664
(512) 836–4793 FAX: (512) 836–4817
F–9784

RJ SURVEYING & ASSOCIATES, INC.
2900 JAZZ STREET, ROUND ROCK, TEXAS, 78664
(512) 836–4793 FAX: (512) 836–4817
F–10015400

THE RIDGE AT BLACKHAWK PHASE 1

PRELIMINARY PLAN ONLY–NOT FOR RECORDATION

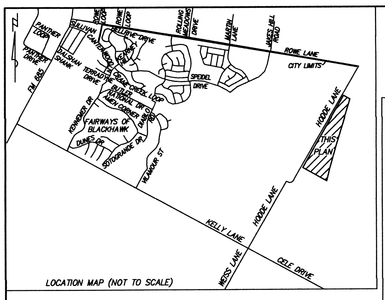
SCALE: 1"=100'

0 100' 200' 300' 400'

LOT 16
LOT 17
LOT 18
LOT 15
LOT 30
OPEN SPACE/PARKLAND
6.01 ACRES
ROME LANE ESTATES SECTION TWO
VOL. 91/PG. 71 PRTC
CAB. K/SLD. 141 PRMC
75' EASEMENT TO LONE STAR GAS
VOL. 11780, PG. 101
RPRTC
0.276 ACRE ABOVE GROUND FACILITIES EASEMENT TO ATMOS ENERGY CORPORATION
DOC. NO. 2018051017 OPRTC
0.089 ACRE GAS FACILITIES EASEMENT TO SENDERO, LP.
DOC. NO. 2018055779 OPRTC
S62°17'02"E 209.72'
S62°17'02"E 118.92'
S62°17'02"E 475.07'
R=50'
X 3176033.748
Y 10147345.166
APPROXIMATELY S59°10'21"E 1081' TO THE SOUTHEAST CORNER OF THE DANIEL & GRACY BERGEN SURVEY No. 79 ABSTRACT No. 2599
9254 SF TEMPORARY ACCESS EMT/PAE/DE
DOC. NO.
OPRTC
APPROXIMATE SURVEY LINE
DANIEL & GRACY BERGEN SURVEY No. 79
ABSTRACT No. 2599
APPROXIMATE SURVEY LINE
DANIEL & GRACY BERGEN SURVEY No. 79
ABSTRACT No. 2599
APPROXIMATE SURVEY LINE
JOHN C. DUVAL SURVEY No. 14
ABSTRACT No. 235
ROBERT M. TIEMANN
AND CARRIE PARKER TIEMANN
123.219 ACRES
DOC. NO. 2017152637 OPRTC
S14°10'16"W 2,316.87'
10' HIKE AND BIKE TRAIL
13.026 ACRES (150' WIDE) DEFINED EASEMENT AREA TO ATMOS ENERGY CORPORATION
DOC. NO. 2018051816 OPRTC
150'
1775'
1706'
R=300'
L=68'
R=300'
L=117'
R=300'
L=139'
R=300'
L=42'
R=100'
L=15'
R=50'
L=15'
R=50'
L=15'
R=50

THE RIDGE AT BLACKHAWK PHASE 1

PRELIMINARY PLAN ONLY–NOT FOR RECORDATION



SCALE: 1"=100'

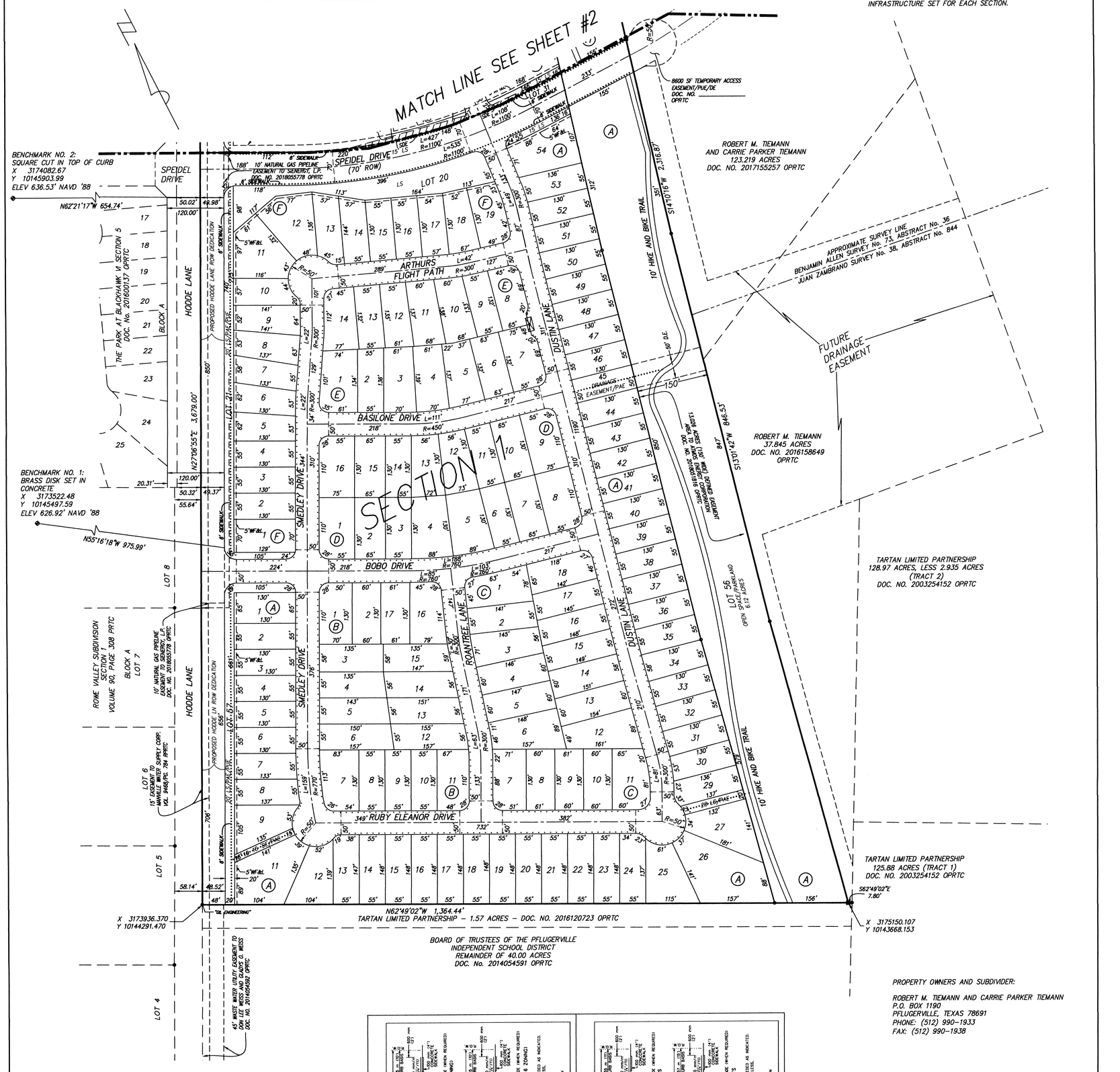
0 100' 200' 300' 400'

LEGEND:

PRWC	PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS
PRTC	PLAT RECORDS OF TRAVIS COUNTY, TEXAS
DRTC	DEED RECORDS OF TRAVIS COUNTY, TEXAS
RPRTC	REAL PROPERTY RECORDS OF TRAVIS COUNTY, TEXAS
OPRTC	OFFICIAL PUBLIC RECORDS TRAVIS COUNTY, TEXAS
SDE	SIGHT DISTANCE EASEMENT
ROW	RIGHT–OF–WAY
PUE	PUBLIC UTILITY EASEMENT
PAE	PUBLIC ACCESS EASEMENT
DE	DRAINAGE EASEMENT
SDE	SIGHT DISTANCE EASEMENT
OS	OPEN SPACE
WWE	WASTEWATER LINE EASEMENT
SW	SIDEWALK
LS	LANDSCAPE
WF&L	WALL, FENCE, AND LANDSCAPE EASEMENT
(A)	BLOCK NAME
○	1/2" IRON ROD SET WITH "RJ SURVEYING" CAP
●	1/2" IRON ROD FOUND
■	CONCRETE MONUMENT SET
· · · · ·	4' SIDEWALK REQUIRED
·····	6' SIDEWALK REQUIRED
⊠	MAILBOX CLUSTER
— — —	PHASE LINE

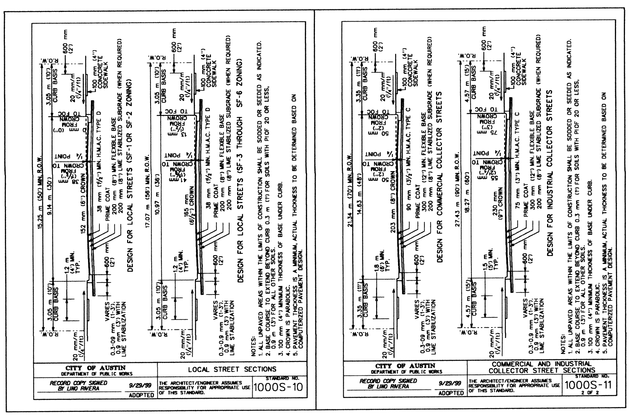
SIDEWALK NOTE:

THE TRAIL IS TO BE CONSTRUCTED WITH THE FIRST PUBLIC INFRASTRUCTURE SET FOR EACH SECTION.



PROPERTY OWNERS AND SUBDIVIDER:

ROBERT M. TIEMANN AND CARRIE PARKER TIEMANN
P.O. BOX 1190
PFLUGERVILLE, TEXAS 78691
PHONE: (512) 990–1933
FAX: (512) 990–1938



City Approved Revision & Correction							
No	Description	Revise (R) Correct (C) Add (A) Void (V) Sheet No's	Net Change Impervious Cover (sq.ft.)/%	Total Impervious Cover (sq.ft.)/%	Design Engineer Signature	City of Pflugerville Approval	Approval Date

ROW WIDTH	STREET CLASSIFICATION	PAVEMENT WIDTH	CROSS SECTION	SIDEWALK
70' ROW	MAJOR COLLECTOR	45' PAVEMENT	CURB & GUTTER	SIX FOOT BOTH SIDES
50' ROW	LOCAL STREET	27' PAVEMENT	CURB & GUTTER	FOUR FOOT BOTH SIDES

SCALE: 1" = 100' SHEET 3 OF 11

APPLICATION SUBMITTAL DATE: NOVEMBER 20, 2018

REVISIONS

NO	DATE	DESCRIPTION	BY

DATE: AUGUST 1, 2018 SCALE: 1" = 100'

RANDALL JONES & ASSOCIATES ENGINEERING, INC.
2900 JAZZ STREET, ROUND ROCK, TEXAS, 78664
(512) 836–4793 FAX: (512) 836–4817 F-9784

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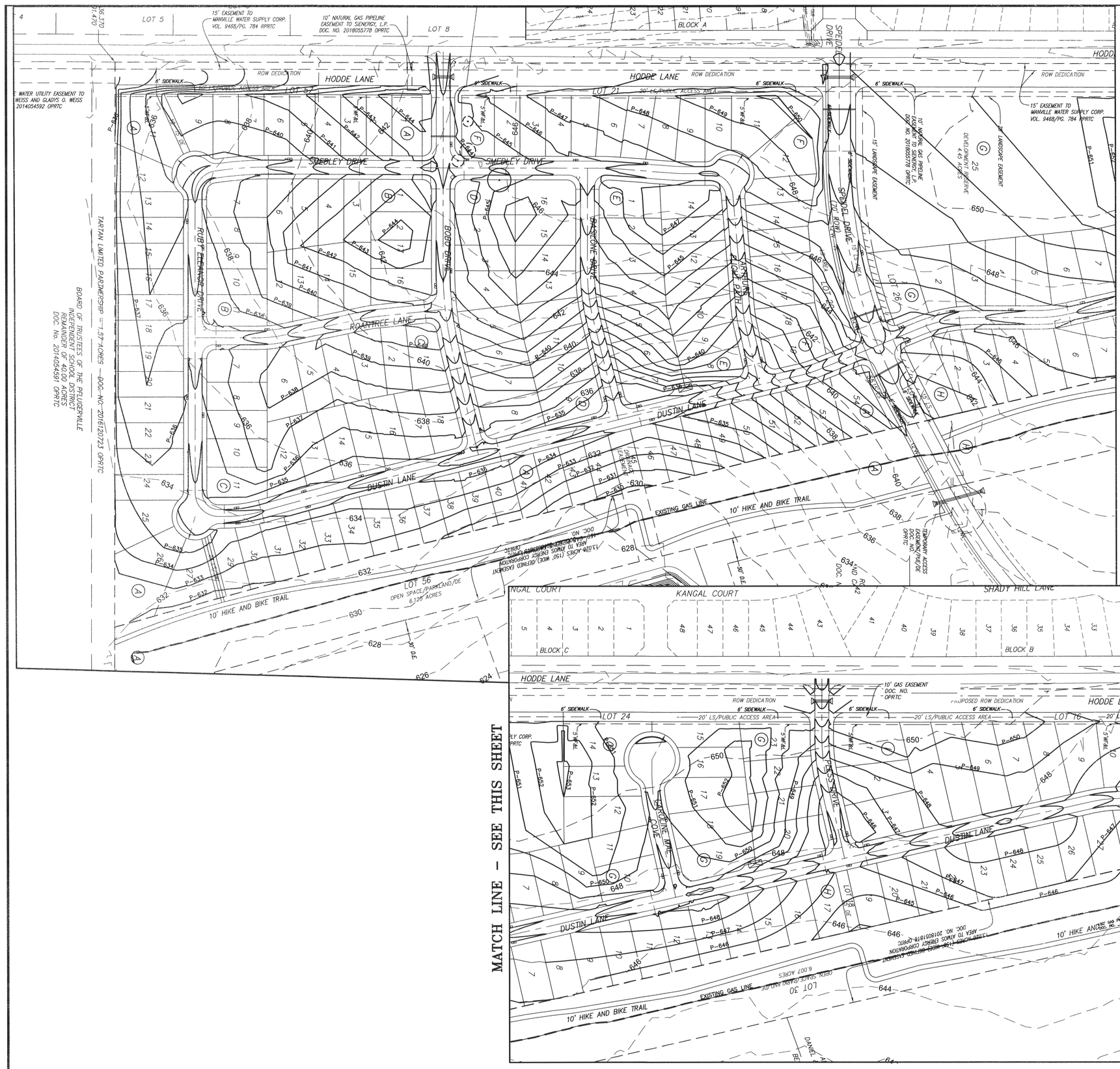


LEGEND

P635	= PROPOSED MJR CONTOUR
P632	= PROPOSED MNR CONTOUR
620	= EXISTING MJR CONTOUR
614	= EXISTING MNR CONTOUR

N

SCALE: 1"=100'

0 100' 200' 300' 400'

NOTES:
1. THERE ARE NO EXISTING STRUCTURES WITHIN PROJECT BOUNDARY.
2. EXISTING GAS LINE EASEMENTS EXIST ON AND AROUND THIS PROJECT.
3. THERE WILL BE NO DEMOLITION ON THIS SITE AS THERE ARE NO EXISTING STRUCTURES.

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

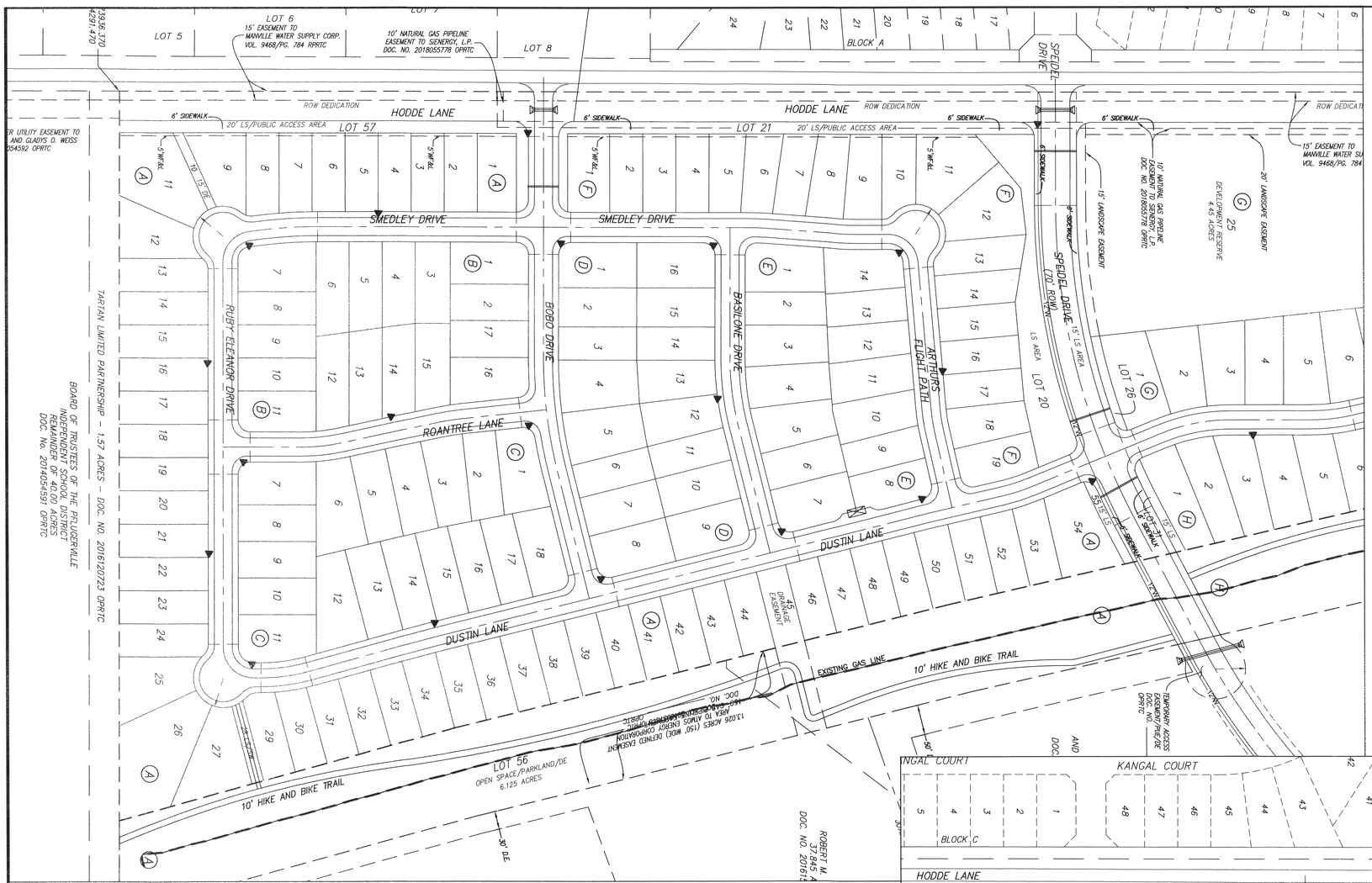
PROJECT: THE RIDGE AT BLACKHAWK PHASE 1

SHEET: EXISTING CONDITIONS & PROPOSED GRADING PLAN SHEET

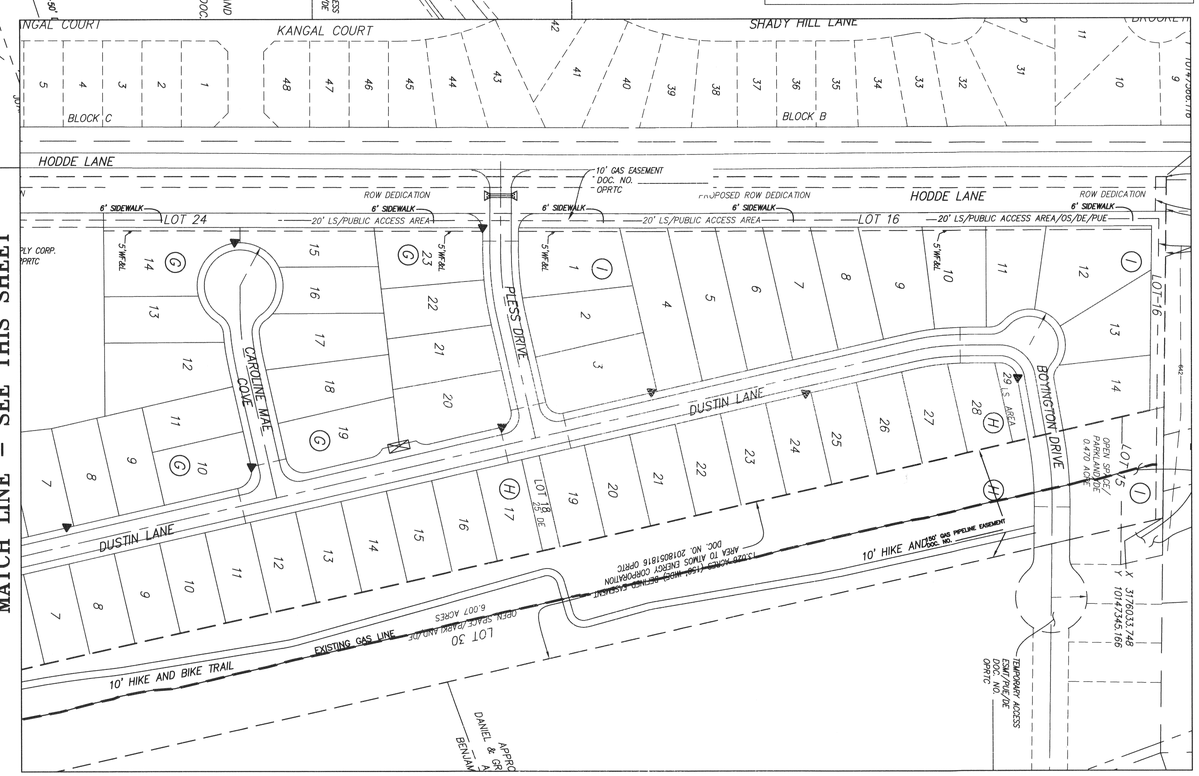
STATE OF TEXAS
J. KEITH COLLINS
80579
REGISTERED PROFESSIONAL ENGINEER
2/20/19

DATE:	JAN. 2019
DRAWN:	
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 04



MATCH LINE - SEE THIS SHEET



MATCH LINE - SEE THIS SHEET

LEGEND

- = STORM SEWER MANHOLE
- = CURB INLET
- = WASTEWATER MANHOLE
- = WATER VALVE
- = FIRE HYDRANT
- = STREET LIGHT
- = SINGLE WASTEWATER SERVICE
- = DOUBLE WASTEWATER SERVICE
- = SINGLE WATER SERVICE
- = DOUBLE WATER SERVICE
- 12"W = 12" WATER LINE
- = 8" WATER LINE
- = WW LINE

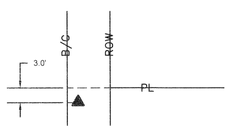
SCALE: 1"=100'

0 100' 200' 300' 400'

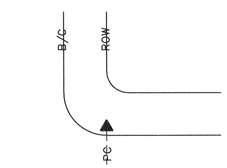
NOTES:

1) ALL STREET LIGHT LUMINARIES TO BE DOWNCAST AND FULL CUT-OFF TYPE. LUMINAIRE TO BE LED. DROP DOWN LENS IS PROHIBITED. STREETLIGHTS TO BE INSTALLED AND OPERATIONAL PRIOR TO CONSTRUCTION ACCEPTANCE.

STREET LIGHTS AT PROPERTY LINES SHALL BE LOCATED 3.0' FROM EXTENSIONS OF PROPERTY LINE ALONG CURB LINE. SEE DETAIL BELOW.



STREET LIGHTS AT INTERSECTIONS SHALL BE LOCATED AT THE P.C. OF THE CURB RETURN. STREET LIGHT LOCATION SHALL NOT CONFLICT OR BLOCK STREET SIGNAGE OR SIDEWALK RAMPS. SEE DETAIL BELOW.



NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: THE RIDGE AT BLACKHAWK PHASE 1

SHEET: ILLUMINATION PLAN SHEET

STATE OF TEXAS
J. KEITH COLLINS
80579
REGISTERED PROFESSIONAL ENGINEER
2/16/19

DATE:	JAN. 2019
DRAWN:	
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 05

Notes:

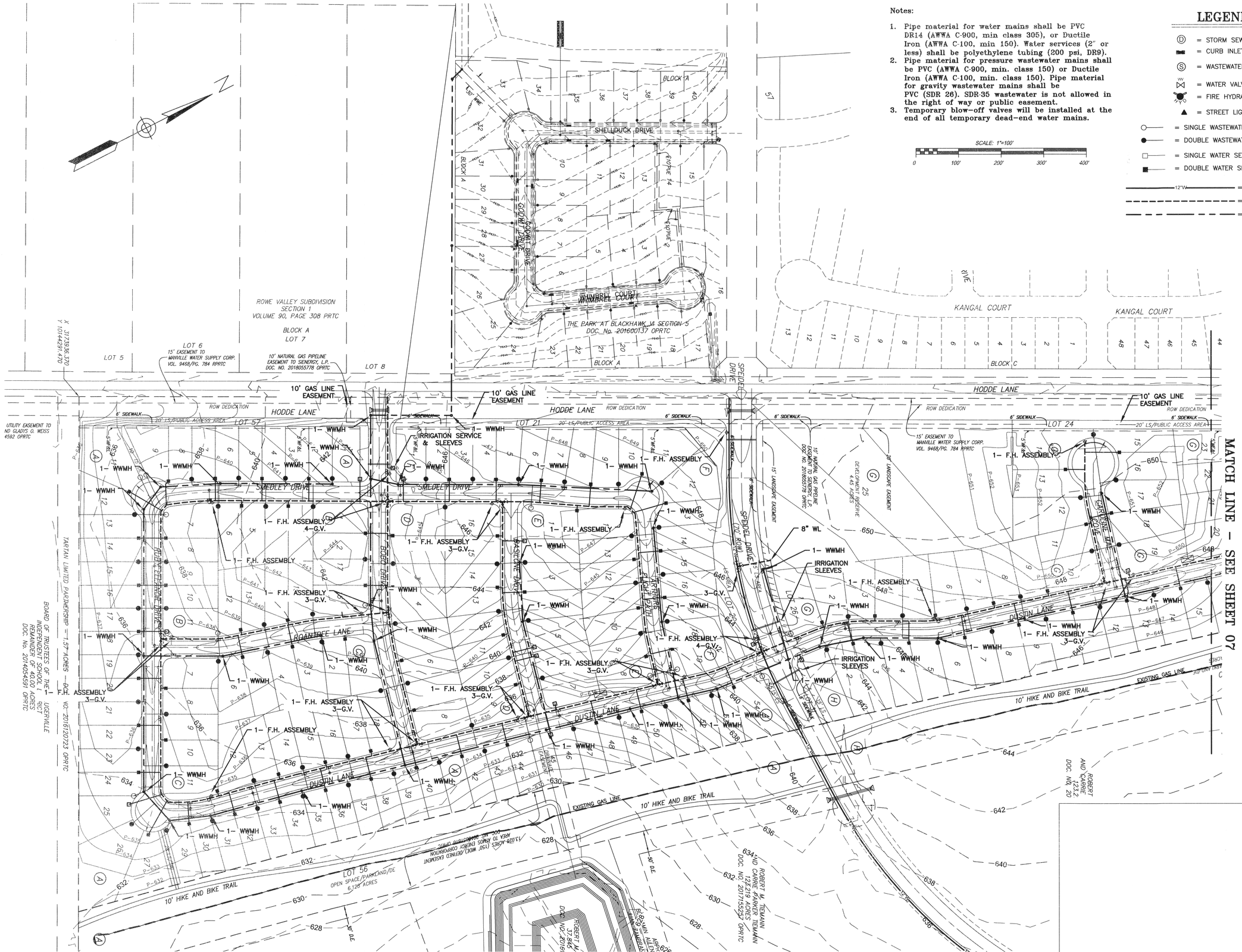
1. Pipe material for water mains shall be PVC DR14 (AWWA C-900, min class 305), or Ductile Iron (AWWA C-100, min 150). Water services (2" or less) shall be polyethylene tubing (200 psi, DR9).
2. Pipe material for pressure wastewater mains shall be PVC (AWWA C-900, min. class 150) or Ductile Iron (AWWA C-100, min. class 150). Pipe material for gravity wastewater mains shall be PVC (SDR 26). SDR-35 wastewater is not allowed in the right of way or public easement.
3. Temporary blow-off valves will be installed at the end of all temporary dead-end water mains.

SCALE: 1"=100'

0 100' 200' 300' 400'

LEGEND

- (D) = STORM SEWER MANHOLE
- = CURB INLET
- (S) = WASTEWATER MANHOLE
- WV = WATER VALVE
- = FIRE HYDRANT
- ▲ = STREET LIGHT
- = SINGLE WASTEWATER SERVICE
- = DOUBLE WASTEWATER SERVICE
- = SINGLE WATER SERVICE
- = DOUBLE WATER SERVICE
- 12"W = 12" WATER LINE
- = 8" WATER LINE
- = WW LINE



NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

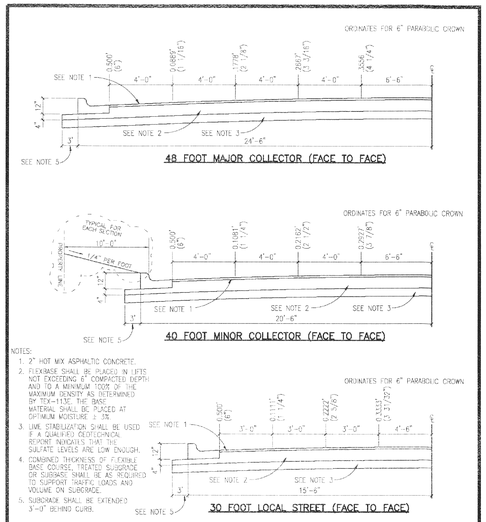
PROJECT: THE RIDGE AT BLACKHAWK PHASE 1

SHEET: WATER & WASTEWATER PLAN (SHEET 1 OF 2)

STATE OF TEXAS — J. KEITH COLLINS — 80579 — REGISTERED PROFESSIONAL ENGINEER — 2/20/19

DATE:	JAN. 2019
DRAWN:	
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 06



NOTES:

1. 2" HOT MIX ASPHALTIC CONCRETE.
2. FLEXBASE SHALL BE PLACED IN LIFTS NOT EXCEEDING 6" COMPACTED DEPTH AND TO A MINIMUM 100% OF THE MAXIMUM DENSITY AS DETERMINED BY TEX-113E. THE BASE MATERIAL SHALL BE PLACED AT OPTIMUM MOISTURE ± 1%.
3. LIME STABILIZATION SHALL BE USED IF A QUALIFIED GEOTECHNICAL REPORT INDICATES THAT THE SULFATE LEVELS ARE LOW ENOUGH.
4. COMBINED THICKNESS OF FLEXIBLE BASE COURSE, TREATED SUBGRADE OR SUBBASE SHALL BE AS REQUIRED TO SUPPORT TRAFFIC LOADS AND VOLUME ON SUBGRADE.
5. SUBGRADE SHALL BE EXTENDED 3'-0" BEHIND CURB.

ISSUE DATE: FEBRUARY 2005	CITY OF PFLUGERVILLE	DWG. # SD-01
REVISIONS		SD01.DWG
DATE / APPROVED / DRAWN	TYPICAL HALF CROSS-SECTIONS FOR H.M.A.C. SURFACED STREETS	
SCALE: N.T.S.	CONSTRUCTION STANDARDS AND DETAILS	

Notes:

1. Pipe material for water mains shall be PVC DR14 (AWWA C-900, min class 305), or Ductile Iron (AWWA C-100, min 150). Water services (2" or less) shall be polyethylene tubing (200 psi, DR9).
2. Pipe material for pressure wastewater mains shall be PVC (AWWA C-900, min. class 150) or Ductile Iron (AWWA C-100, min. class 150). Pipe material for gravity wastewater mains shall be PVC (SDR 26). SDR-35 wastewater is not allowed in the right of way or public easement.
3. Temporary blow-off valves will be installed at the end of all temporary dead-end water mains.

SCALE: 1"=100'

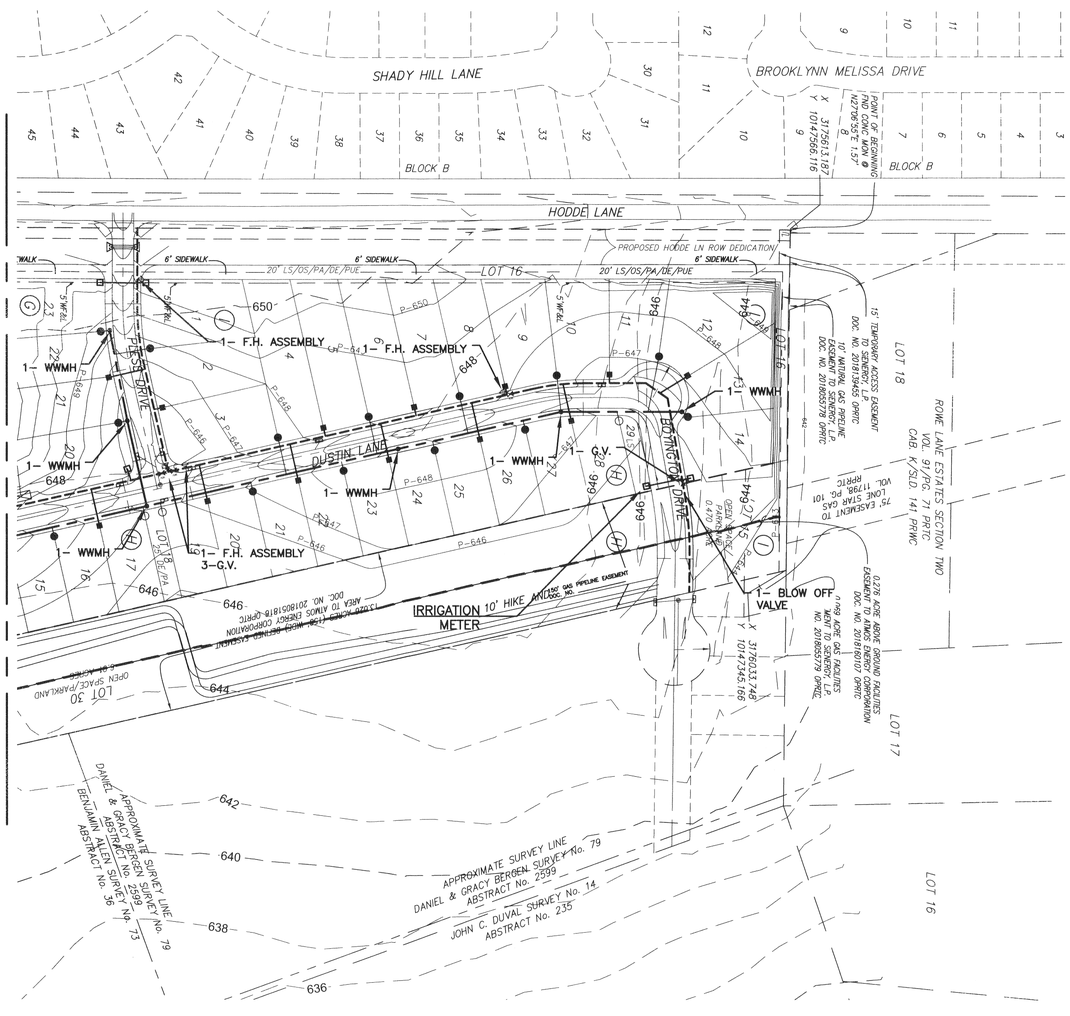
0 100' 200' 300' 400'

N

LEGEND

- (D) = STORM SEWER MANHOLE
- = CURB INLET
- (S) = WASTEWATER MANHOLE
- WV = WATER VALVE
- = FIRE HYDRANT
- = STREET LIGHT
- = SINGLE WASTEWATER SERVICE
- = DOUBLE WASTEWATER SERVICE
- = SINGLE WATER SERVICE
- = DOUBLE WATER SERVICE
- 12"W = 12" WATER LINE
- = 8" WATER LINE
- = WW LINE

MATCH LINE - SEE SHEET 06



NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

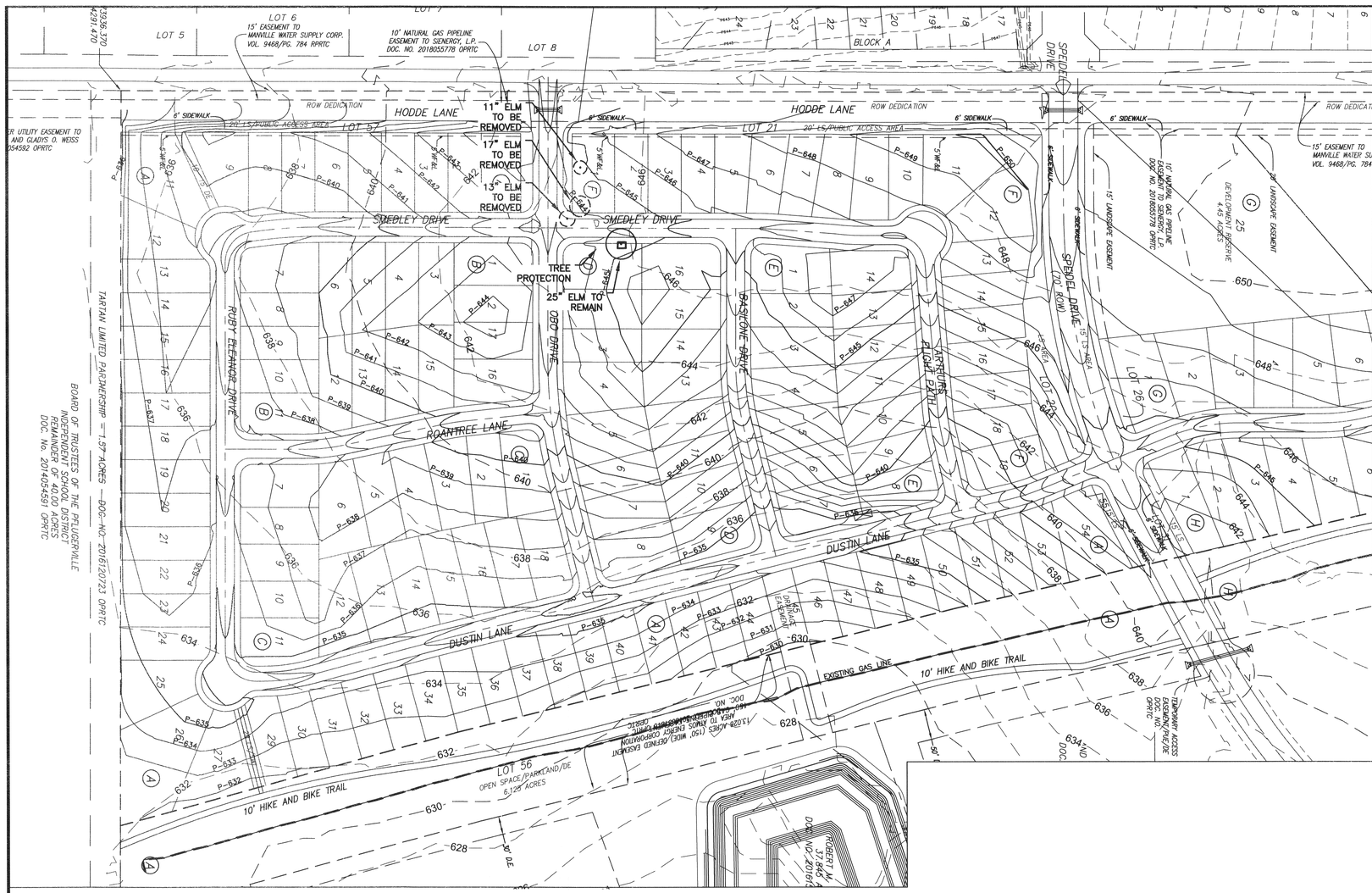
PROJECT: THE RIDGE AT BLACKHAWK PHASE 1

SHEET: WATER & WASTEWATER PLAN (SHEET 2 OF 2)

STATE OF TEXAS — J. KEITH COLLINS — 80579 — REGISTERED PROFESSIONAL ENGINEER — 7/24/19

DATE:	JAN. 2019
DRAWN:	
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 07



LEGEND

= REMOVE TREE

= SAVE TREE

SCALE: 1"=100'

0 100' 200' 300' 400'

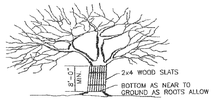
larger, of the tree(s) to be saved throughout the life of the project, or until final improvement work within the area is required, typically near the end of the project.

Parking Areas: If the fencing must be located on paving or sidewalk that will not be demolished, the posts may be supported by an appropriate grade level concrete base.

2. **Type II Tree Protection**
For trees situated within a **narrow planting strip**, only the planting strip shall be enclosed with the required chain link or wood protective fencing in order to keep the sidewalk and street open for public use. For trees **situated near buildings**, partial fencing may be necessary. See illustrations 2-4 and 2-5 for examples and specifications for partial wood and chain link fencing.

3. **Type III Tree Protection**
Trees situated in a small tree well or **sidewalk planter pit**, or when construction will come within five (5) feet of a trunk, shall have the trunk protected with strapped-on planking to a height of eight (8) feet or to the limits of lower branches. During installation of the wood slats, caution shall be used to avoid damaging any bark or branches. Major scaffold limbs may also need protection as directed by the City Arborist.

Illustration 2-6: Example of bark protection—done when CRZ is less than an 8 foot diameter, upon approval by the City Arborist.



d. **Duration**
Tree fencing shall be erected before demolition, grading, or construction begins and remain in place until the certificate of occupancy has been granted. Removal of the fence during construction must be approved by the City Arborist. ***Fence removal without the approval of the City Arborist or Administrator will result in a stop work order.***

e. **Warning' sign**
A warning sign shall be prominently displayed on each fence. The sign shall be a minimum of 16 x 24 inches and clearly state:
WARNING - Critical Root Zone - Encroachment may result in permanent tree damage, resulting in tree replacement.

2.3.2. *Tree Protection Notes-*

1. All trees not located within the limits of construction and outside of disturbed areas shall be preserved.
2. All trees shown on this plan to be retained shall be protected during construction with fencing.
3. Tree protection fences shall be erected according to city standards for tree protection, including types of fencing and signage.
4. Tree protection fences shall be installed prior to the commencement of any site preparation work (clearing, grubbing, or grading) and shall be maintained throughout all phases of the construction pro-ject.
5. Erosion and sedimentation control barriers shall be installed or maintained in a manner which does not result in trenching or soil build-up within tree CRZ's or driplines.
6. Tree protection fences shall completely surround the tree or clusters of trees and be placed at the outermost limits of the tree branches (dripline) or CRZ, whichever is greater; and shall be maintained throughout the construction project in order to prevent the following:

a. Soil compaction in root zone area resulting from vehicular traffic or storage of equipment or ma-terial.
b. Root zone disturbances due to grade changes (greater than 6 inches cut or fill) or trenching not reviewed and authorized by the City Arborist or Administrator.
c. Wounds to exposed roots, trunk, or limbs by mechanical equipment
d. Other activities detrimental to trees, such as chemical storage, concrete truck cleaning and fires.

7. Exceptions to installing tree fences at the tree driplines or CRZ, whichever is greater, may be permitted in the following cases:

a. Where there is to be an approved grade change, impermeable paving surface, or tree well.
b. Where permeable paving is to be installed, erect the fence at the outer limits of the permeable paving area.
c. Where trees are close to proposed buildings, erect the fence no closer than 6 feet to the build-ing.
d. Where there are severe space constraints due to tract size, or other special requirements, con-tact the City Arborist to discuss alternatives.

8. Where any of the above exceptions result in a fence that is closer than 5 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 feet (or to the limits of lower branching) in addi-tion to the reduced fencing provided.
9. Where any of the above exceptions result in areas of unprotected root zones under the dripline or CRZ, whichever is greater, those areas should be covered with 6 inches of organic mulch to minimize soil compaction.

10. Where any of the above exceptions result in damage to the fine, water absorbing roots, supple-mental watering shall be required:

a. Trees shall be watered once every two weeks during periods of hot, dry weather.
b. Tree crowns are to be sprayed with water periodically to reduce dust accumulation on leaves.
c. A signed watering contract shall be required.

11. Prior to excavation or grade cutting within tree driplines, a clean cut shall be made between the dis-turbed and undisturbed root zones with a rock saw or similar equipment to minimize damage to remain-ing roots.
12. All grading within protected root zone areas shall be done by hand or with small equipment to minimize root damage. Prior to grading, relocate protective fencing to 2 feet behind the grade change area.
13. Any roots exposed by construction activity shall be pruned flush with the soil. Backfill root areas with good quality top soil. If exposed root areas are not backfilled within 2 days, cover them with organic ma-terial in a manner which reduces soil temperature and minimizes water loss due to evaporation.
14. When installing concrete adjacent to the root zone of a tree, use a plastic vapor barrier behind the con-crete to prohibit leaching of lime into the root zone.
15. Any trenching shall be as far from existing tree trunks as possible. Trench lines shall not run within the CRZ. Boring, tunneling or other techniques may be approved by the City Arborist or Administrator if there is no alternative available.
16. No landscape topsoil dressing greater than four (4) inches shall be permitted within the dripline or CRZ, whichever is greater, of trees. No topsoil is permitted on root flares or within 6 inches of tree trunks.
17. Pruning to provide clearance for structures, vehicular traffic and construction equipment shall take place before construction begins. All pruning must be done according to City standards and as outlined in liter-ature provided by the International Society of Arboriculture (ISA pruning techniques).
18. All oak tree cuts, intentional or unintentional, shall be painted immediately (within 10 minutes). Tree paint must be kept on site at all times. All pruning or cutting tools must be sterilized between trees to prevent the spread of disease.
19. Trees approved for removal shall be removed in a manner which does not impact trees to be preserved. Refer to the City of Pflugerville *Tree Technical Manual* for appropriate removal methods.
20. Deviations from the above notes may be considered ordinance violations if there is substantial noncom-pliance or if a tree sustains damage as a result.

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

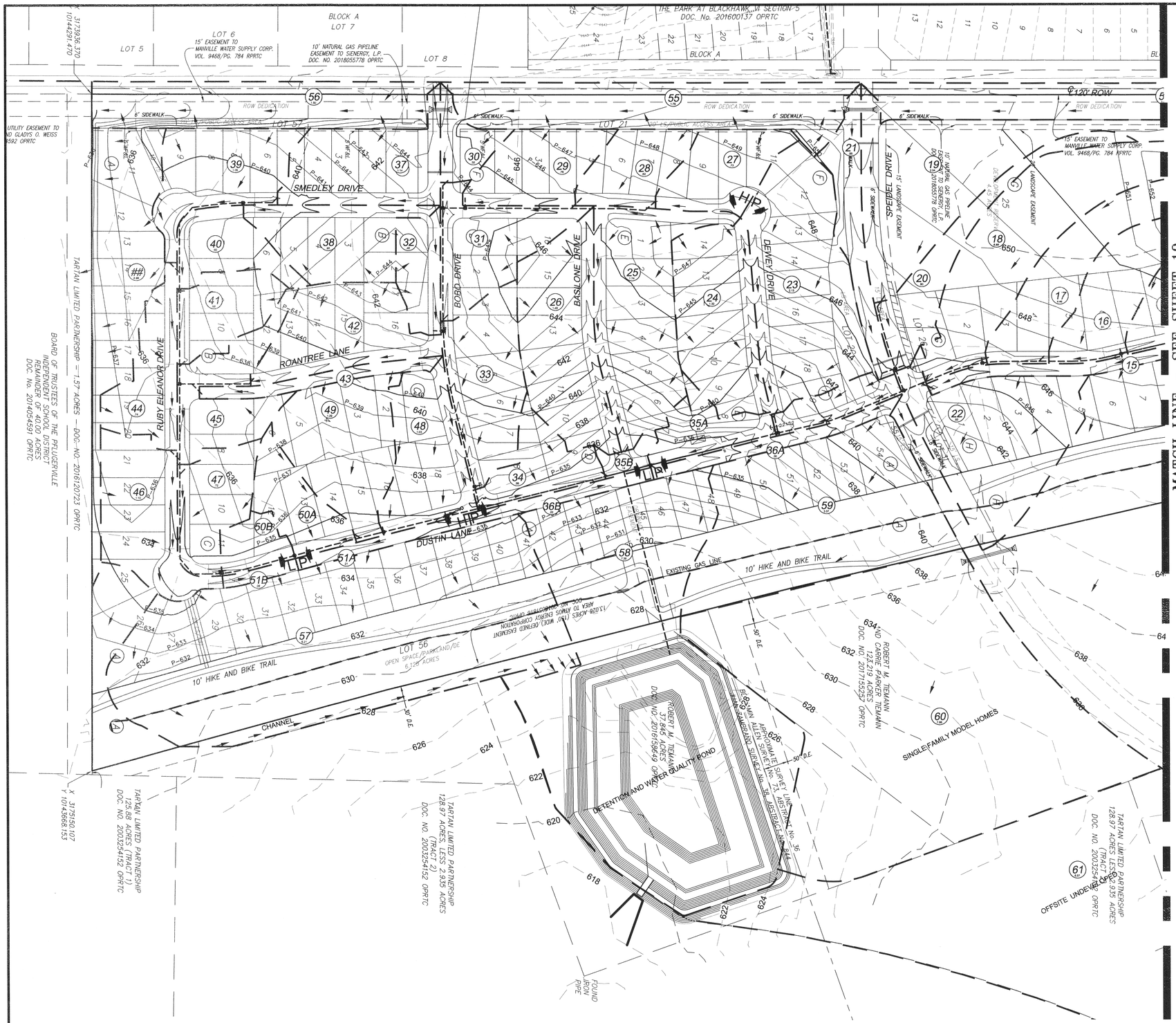
PROJECT: THE RIDGE AT BLACKHAWK PHASE 1

SHEET: TREE SURVEY

STATE OF TEXAS
J. KEITH COLLINS
80579
REGISTERED PROFESSIONAL ENGINEER
2/20/19

DATE:	JAN. 2019
DRAWN:	
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 08



LEGEND

P635	= PROPOSED MJR CONTOUR
P632	= PROPOSED MNR CONTOUR
620	= EXISTING MJR CONTOUR
614	= EXISTING MNR CONTOUR
##	DRAINAGE BASIN NUMBER — DRAINAGE BASIN ACEREAGE
HP	HIGH POINT
LP	LOW POINT
→	DIRECTION OF FLOW ARROWS
— — —	DRAINAGE BASIN BOUNDARY

REFER TO MOODY ENGINEERING DRAINAGE REPORT THE RIDGE AT BLACKHAWK, PHASE 1 DATED OCT. 2018 (AMENDED JULY 2018) FOR EXISTING DRAINAGE CONDITIONS.

N

SCALE: 1"=100'

0 100' 200' 300' 400'

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784

2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

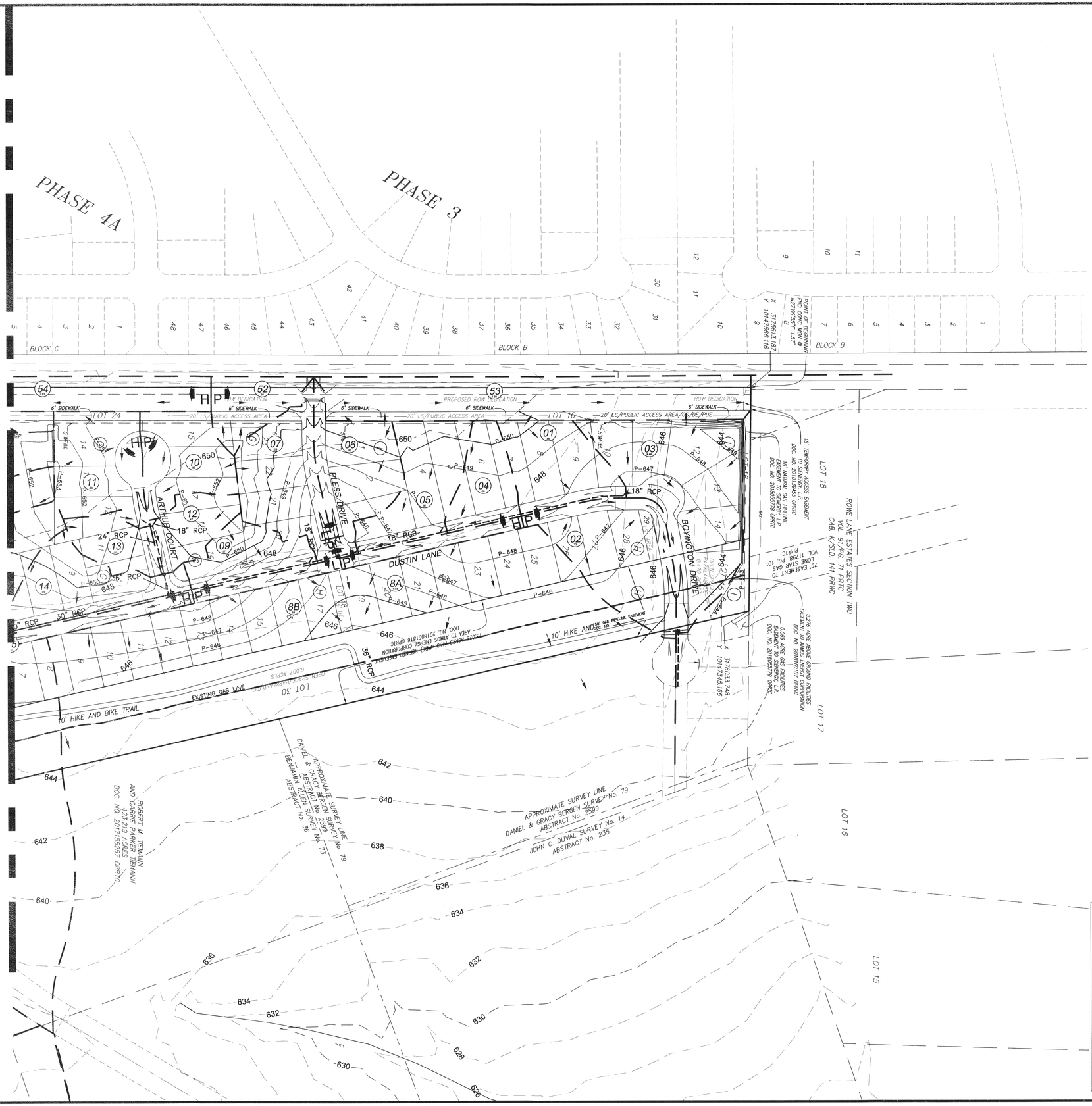
PROJECT: THE RIDGE AT BLACKHAWK, PHASE 1

SHEET: PRELIMINARY DRAINAGE PLAN (SHEET 1 OF 2)

STATE OF TEXAS
J. KEITH COLLINS
80579
REGISTERED PROFESSIONAL ENGINEER
2/26/19

DATE:	JAN. 2019
DRAWN:	MAS/EK
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 09



LEGEND

P635	= PROPOSED MJR CONTOUR
P632	= PROPOSED MNR CONTOUR
620	= EXISTING MJR CONTOUR
614	= EXISTING MNR CONTOUR
##	DRAINAGE BASIN NUMBER / DRAINAGE BASIN ACERAGE
HP	HIGH POINT
LP	LOW POINT
→	DIRECTION OF FLOW ARROWS
— — — —	DRAINAGE BASIN BOUNDARY

REFER TO MOODY ENGINEERING DRAINAGE REPORT THE RIDGE AT BLACKHAWK, PHASE 1 DATED OCT. 2018 (AMENDED JULY 2018) FOR EXISTING DRAINAGE CONDITIONS.

N

SCALE: 1"=100'

0 100' 200' 300' 400'

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC.
#9784
2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: THE RIDGE AT BLACKHAWK, PHASE 1

SHEET: PRELIMINARY DRAINAGE PLAN (SHEET 2 OF 2)

STATE OF TEXAS
KEITH COLLINS
80579
REGISTERED PROFESSIONAL ENGINEER
2/2/11

DATE:	JAN. 2019
DRAWN:	MAS/EK
CHECKED:	JKC
FILE:	2500
SCALE	1"=100'

SHEET 10

Drainage Sub-Basin (#)	Drainage Area Size (ac)	Sheet Flow Over Land Surfaces Length	Sheet Flow Slope	Concentrated Flow Over Land Surfaces Length	Concentrated Flow Over Land Surfaces Slope	Concentrated Flow Street Length	Concentrated Flow Street Slope	Concentrated Flow Channels Length	Concentrated Flow Channels Velocity	Manning's n Sheet	Manning's n SCF Unpaved	Manning's n SCF Paved	Time of Concen. (min)	Intensity, I Inches/ hour (10 Yr)	Intensity (25 Yr)	Intensity (100 Yr)	Impervious Cover %	Composite "C" (10 Yr)	Composite "C" (25 Yr)	Composite "C" (100 Yr)	Total Runoff (cfs) (10 Yr)	Total Runoff (25 Yr)	Total Runoff (100 Yr)	Drainage Sub-Basin (#)	REMARKS
1	0.84	85	1.4%	105	1.1%	163	0.7%			0.15	0.15	0.015	12	6.59	7.85	10.11	33%	0.47	0.52	0.59	2.61	3.39	5.02	1	
2	1.29	100	1.5%	100	1.0%	42	0.5%			0.15	0.15	0.015	12	6.59	7.85	10.11	33%	0.48	0.52	0.60	4.04	5.26	7.77	2	Possible Future Inlet Location
3	1.95	59	1.4%	90	1.5%	428	0.5%			0.15	0.15	0.015	12	6.59	7.85	10.11	24%	0.43	0.47	0.54	5.48	7.18	10.72	3	Possible Future Inlet Location
4	0.55	100	1.6%	112	1.6%	39	0.6%			0.15	0.15	0.015	11	6.81	8.11	10.42	34%	0.48	0.52	0.60	1.80	2.34	3.44	4	
5	0.91	100	2.0%	142	2.0%	165	0.6%			0.15	0.15	0.015	12	6.59	7.85	10.11	22%	0.48	0.52	0.60	2.87	3.72	5.47	5	
6	0.93	93	3.7%	95	2.3%	111	0.7%			0.15	0.15	0.015	8	7.58	8.99	11.47	35%	0.54	0.58	0.66	3.80	4.87	7.03	6	SUMP INLET #6
7	1.04	60	2.9%	111	3.1%	141	0.8%			0.15	0.15	0.015	7	7.88	9.34	11.87	37%	0.55	0.59	0.67	4.46	5.71	8.21	7	SUMP INLET #7
8A	0.23	12	2.0%			321	0.6%			0.15	0.15	0.015	5	8.57	10.13	12.79	78%	0.73	0.78	0.87	1.43	1.80	2.53	8A	COMBINED WITH 8B TO SUMP INLET #8
8B	0.19	12	2.0%			233	0.8%			0.15	0.15	0.015	5	8.57	10.13	12.79	77%	0.73	0.77	0.86	1.18	1.49	2.08	8B	COMBINED WITH 8A TO SUMP INLET #8
9	0.57	87	5.6%			112	0.9%			0.15	0.15	0.015	6	8.21	9.72	12.31	32%	0.52	0.57	0.64	2.45	3.14	4.52	9	
10	0.80	64	1.1%	121	1.1%	58	0.8%			0.15	0.15	0.015	10	7.05	8.38	10.74	31%	0.47	0.51	0.59	2.61	3.40	5.01	10	
11	0.98	77	2.0%	66	2.0%	170	0.8%			0.15	0.15	0.015	9	7.30	8.67	11.09	26%	0.50	0.54	0.62	3.56	4.59	6.69	11	
12	0.47	62	1.8%	134	1.7%	36	0.8%			0.15	0.15	0.015	8	7.58	8.99	11.47	36%	0.49	0.53	0.61	1.75	2.26	3.30	12	
13	0.43	58	1.6%	112	1.6%	90	0.8%			0.15	0.15	0.015	8	7.58	8.99	11.47	38%	0.50	0.54	0.62	1.64	2.11	3.08	13	
14	0.93	74	2.8%	135	1.8%	46	0.5%			0.15	0.15	0.015	8	7.58	8.99	11.47	41%	0.57	0.61	0.69	3.99	5.11	7.35	14	
15	0.47	15	2.0%			765	0.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	78%	0.73	0.78	0.86	2.43	3.08	4.38	15	
16	0.91	100	2.5%	180	1.4%	144	0.5%			0.15	0.15	0.015	11	6.81	8.11	10.42	24%	0.43	0.47	0.55	2.65	3.47	5.16	16	
17	1.06	100	2.1%	356	1.4%	91	1.0%			0.15	0.15	0.015	13	6.39	7.61	9.82	16%	0.39	0.43	0.50	2.61	3.45	5.21	17	
18	1.98	100	2.2%	590	1.4%	67	1.0%			0.15	0.15	0.015	14	6.20	7.39	9.55	9%	0.35	0.39	0.46	4.25	5.67	8.68	18	
19	2.04	100	0.7%	357	0.8%	40	0.7%			0.15	0.15	0.015	15	6.02	7.18	9.30	15%	0.38	0.42	0.49	4.63	6.14	9.33	19	
20	0.80	100	0.8%	387	1.4%	10	1.4%			0.15	0.15	0.015	15	6.02	7.18	9.30	16%	0.39	0.43	0.50	1.85	2.44	3.71	20	
21	0.61	60	2.0%			420	0.9%			0.15	0.15	0.015	9	7.30	8.67	11.09	67%	0.68	0.73	0.81	3.04	3.86	5.51	21	
22	1.86	100	1.6%	118	2.7%	103	1.4%			0.15	0.15	0.015	11	6.81	8.11	10.42	80%	0.74	0.79	0.87	9.38	11.89	16.94	22	Possible Future Inlet Location
23	2.13	63	1.5%	76	1.6%	427	2.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	31%	0.47	0.51	0.59	7.00	9.10	13.41	23	
24	1.32	59	2.9%	134	2.2%	250	2.4%			0.15	0.15	0.015	7	7.88	9.34	11.87	42%	0.57	0.61	0.69	5.90	7.53	10.80	24	
25	1.74	41	2.4%	107	2.2%	382	2.4%			0.15	0.15	0.015	7	7.88	9.34	11.87	41%	0.57	0.61	0.69	7.76	9.91	14.22	25	
26	1.49	58	1.9%	98	1.7%	318	2.4%			0.15	0.15	0.015	8	7.58	8.99	11.47	42%	0.52	0.57	0.64	5.88	7.57	10.99	26	
27	0.73	57	1.5%	122	1.4%	148	0.5%			0.15	0.15	0.015	9	7.30	8.67	11.09	38%	0.50	0.54	0.62	2.68	3.46	5.05	27	
28	0.62	48	1.5%	133	1.4%	88	0.5%			0.15	0.15	0.015	8	7.58	8.99	11.47	40%	0.51	0.55	0.63	2.39	3.07	4.47	28	
29	0.78	49	1.6%	121	1.5%	205	0.5%			0.15	0.15	0.015	9	7.30	8.67	11.09	43%	0.53	0.57	0.65	2.99	3.85	5.60	29	
30	0.32	66	2.7%			61	0.7%			0.15	0.15	0.015	6	8.21	9.72	12.31	36%	0.54	0.58	0.66	1.42	1.82	2.61	30	
31	0.95	87	2.6%			300	0.5%			0.15	0.15	0.015	11	6.81	8.11	10.42	42%	0.57	0.61	0.69	3.70	4.74	6.88	31	
32	0.46	74	2.3%			133	0.6%			0.15	0.15	0.015	8	7.58	8.99	11.47	43%	0.57	0.62	0.70	2.00	2.55	3.67	32	
33	1.14	47	2.6%	119	1.8%	325	1.9%			0.15	0.15	0.015	7	7.88	9.34	11.87	39%	0.55	0.60	0.68	4.96	6.35	9.12	33	
34	0.59	100	3.6%	47	4.3%	97	0.5%			0.15	0.15	0.015	8	7.58	8.99	11.47	32%	0.52	0.57	0.64	2.33	3.00	4.33	34	
35A	0.83	94	3.7%	51	2.6%	337	2.7%			0.15	0.15	0.015	9	7.30	8.67	11.09	44%	0.58	0.62	0.70	3.52	4.50	6.48	35A	At Road Crossing Q:2.1 / 3.0
35B	0.14	37	2.0%			70	0.5%			0.15	0.15	0.015	5	8.57	10.13	12.79	56%	0.63	0.68	0.76	0.74	0.93	1.32	35B	COMBINED WITH 35A TO SUMP INLET #35
36A	0.30	18	2.0%			461	1.6%			0.15	0.15	0.015	5	8.57	10.13	12.79	78%	0.73	0.78	0.87	1.86	2.34	3.28	36A	COMBINED WITH 36B TO SUMP INLET #36
36B	0.22	15	2.0%			357	0.5%			0.15	0.15	0.015	6	8.21	9.72	12.31	76%	0.72	0.77	0.85	1.33	1.68	2.36	36B	COMBINED WITH 36A TO SUMP INLET #36
37	1.14	54	1.9%	137	1.7%	188	1.3%			0.15	0.15	0.015	8	7.58	8.99	11.47	45%	0.54	0.58	0.66	4.62	5.93	8.59	37	
38	0.95	60	2.0%	113	1.6%	209	1.2%			0.15	0.15	0.015	8	7.58	8.99	11.47	45%	0.54	0.58	0.66	3.90	5.01	7.26	38	
39	1.05	45	1.7%	138	1.3%	299	0.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	41%	0.52	0.56	0.64	3.83	4.94	7.21	39	
40	0.60	63	1.3%	95	1.0%	155	0.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	38%	0.50	0.55	0.63	2.14	2.76	4.04	40	
41	0.65	100	2.6%	126	2.3%	74	0.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	37%	0.55	0.59	0.67	2.52	3.23	4.69	41	
42	1.14	51	2.9%	122	2.1%	224	1.3%			0.15	0.15	0.015	7	7.88	9.34	11.87	42%	0.57	0.61	0.69	5.09	6.50	9.32	42	
43	0.28	18	2.0%			434	1.2%			0.15	0.15	0.015	5	8.57	10.13	12.79	77%	0.73	0.78	0.86	1.76	2.21	3.10	43	
44	0.74	42	2.0%			287	0.5%			0.15	0.15	0.015	8	7.58	8.99	11.47	50%	0.60	0.65	0.73	3.39	4.33	6.19	44	
45	0.86	86	3.5%			266	0.5%			0.15	0.15	0.015	9	7.30	8.67	11.09	39%	0.55	0.60	0.68	3.50	4.48	6.48	45	
46	1.10	47	1.1%	103	1.0%	392	0.5%			0.15	0.15	0.015	12	6.59	7.85	10.11	41%	0.52	0.56	0.64	3.76	4.86	7.12	46	
47	0.72	55	1.6%	105	1.5%	240	0.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	41%	0.52	0.56	0.64	2.64	3.40	4.97	47	
48	1.03	100	2.1%	119	1.7%	96	0.5%			0.15	0.15	0.015	11	6.81	8.11	10.42	44%	0.53	0.58	0.66	3.74	4.82	7.05	48	
49	1.29	100	2.1%	167	1.4%	0	0.5%			0.15	0.15	0.015	10	7.05	8.38	10.74	29%	0.45	0.49	0.57	4.11	5.35	7.91	49	
50A	0.58	100	1.7%	141	1.4%	73	0.5%			0.15	0.15	0.015	12	6.59	7.85	10.11	29%	0.46	0.50	0.58	1.76	2.29	3.40	50A	COMBINED WITH 50B TO SUMP INLET #50
50B	0.31	90	3.2%			118	0.5%			0.15	0.15	0.015	8	7.58	8.99	11.47	40%	0.56	0.60	0.68	1.32	1.69	2.43	50B	COMBINED WITH 50A TO SUMP INLET #50
51A	0.21	14	2.0%			335	0.5%			0.15	0.15	0.015	5	8.57	10.13	12.79	75%	0.72	0.77	0.85	1.32	1.67	2.34	51A	COMBINED WITH 51B TO SUMP INLET #51
51B	0.09	14	2.0%			140	0.5%			0.15	0.15	0.015	5	8.57	10.13	12.79	79%	0.74	0.78	0.87	0.55	0.69	0.97	51B	COMBINED WITH 51A TO SUMP INLET #51
52	0.50	88	2.0%					144	350.0%	0.15	0.15	0.015	9	7.30	8.67	11.09	19%	0.47	0.51	0.58	1.71	2.21	3.24	52	EX. RUNOFF TO ROADSIDE SWALE
53	1.93	43	2.0%					861	400.0%	0.15	0.15	0.015	8	7.58	8.99	11.47	13%	0.44	0.48	0.55	6.43	8.34	12.25	53	EX. RUNOFF TO ROADSIDE SWALE
54	1.63	25	2.0%					879	400.0%	0.15	0.15	0.015	6	8.21	9.72	12.31	16%	0.45	0.49	0.57	6.08	7.85	11.43	54	EX. RUNOFF TO ROADSIDE SWALE
55	1.78	68	4.0%					728	450.0%	0.15	0.15	0.015	7	7.88	9.34	11.87	13%	0.44	0.48	0.55	6.13	7.95	11.64	55	EX. RUNOFF TO ROADSIDE SWALE
56	1.50	38	4.0%					626	500.0%	0.15	0.15	0.015	5	8.57	10.13	12.79	13%	0.44	0.48	0.55	5.63	7.28	10.59	56	EX. RUNOFF TO ROADSIDE SWALE
57	6.21	100	2.5%	146	1.7%			667	350.0%	0.15	0.15	0.015	12	6.59	7.85	10.11	13%	0.44	0.48	0.55	17.94	23.38	34.67	57	
58	7.39	100	2.0%	135	2.0%					0.15	0.15	0.015	10	7.05	8.38	10.74	66%	0.68	0.72	0.81	35.25	44.78	64.02	58	INCLUDES POND AS 100% IMPERVIOUS
59	3.07	100	4.9%	406	2.7%					0.15	0.15	0.015	9	7.30	8.67	11.09	12%	0.43	0.48	0.55	9.74	12.66	18.65	59	
60	7.88	60	1.3%	135	1.9%	52	1.0%			0.15	0.15	0.015	8	7.58	8.99	11.47	55%	0.59	0.64	0.72	35.36	45.17	64.93	60	FUTURE SINGLE FAMILY ASSUMED 55% IMPERVIOUS
61	6.57	100	1.6%	796	2.0%					0.15	0.15	0.015	15	6.02	7.18	9.30		0.30	0.34	0.41	11.86	16.05	25.06	61	OFFSITE UNDEVELOPED FOLOWS

NOTES:

1. THE CALCULATIONS PROVIDED HERE HAVE BEEN UPDATED TO COMPLY WITH NOAA ATLAS 14 DATA. THE IDF CURVE COEFFICIENT NUMBERS HAVE YET TO BE RELEASED BY THE CITY OF AUSTIN AT THIS TIME. THE COEFFICIENT CURVE NUMBERS USED HERE WERE TAKEN FROM A THESIS WRITTEN BY CRISTAL TAY, B.S.C.E. AT TEXAS TECH UNIVERSITY TITLED, *DEVELOPING PRECIPITATION INTENSITY-DURATION-FREQUENCY (IDF) MODELS USING NONLINEAR MINIMIZATION IN R*, DATED DECEMBER 2015.

25-YEAR SUMP INLET CALCULATIONS

INLET NO.	AREA NO(s).	FLOW (CFS)	INLET LENGTH (FEET	REDUCTION PERCENTAGE	WIER CALCULATION LENGTH (FEET)	WIER CALCULATION Q/L (CFS/LF)	WIER CALCULATION "h" (FEET)	ORIFICE CALCULATIONS AREA	ORIFICE Coeff.	ORIFICE "h1"	ORIFICE "h" (FEET)
6	6	4.87	10	10%	9.0	0.54	0.32	4.5	0.6	0.01	0.26
7	7	5.71	10	10%	9.0	0.63	0.35	4.5	0.6	0.01	0.26
8	8A & 8B	3.29	10	10%	9.0	0.37	0.25	4.5	0.6	0.00	0.25
35	35A & 35B	5.75	10	10%	9.0	0.64	0.36	4.5	0.6	0.01	0.26
36	36A & 36B	4.02	10	10%	9.0	0.45	0.28	4.5	0.6	0.00	0.25
50	50A & 50B	3.98	10	10%	9.0	0.44	0.28	4.5	0.6	0.00	0.25
51	51A & 51B	2.36	10	10%	9.0	0.26	0.20	4.5	0.6	0.00	0.25

100-YEAR SUMP INLET CALCULATIONS

INLET NO.	AREA NO(s).	FLOW (CFS)	INLET LENGTH (FEET	REDUCTION PERCENTAGE	WIER LENGTH (FEET)	Q/L (CFS/LF)	WIER "h" (FEET)	ORIFICE CALCULATIONS AREA	ORIFICE Coeff.	ORIFICE "h1"	ORIFICE "h" (FEET)
6	6	7.03	10	10%	9.0	0.78	0.41	4.5	0.6	0.01	0.26
7	7	8.21	10	10%	9.0	0.91	0.45	4.5	0.6	0.02	0.27
8	8A & 8B	4.61	10	10%	9.0	0.51	0.31	4.5	0.6	0.01	0.26
35	35A & 35B	11.12	10	10%	9.0	1.24	0.55	4.5	0.6	0.03	0.28
36	36A & 36B	7.32	10	10%	9.0	0.81	0.42	4.5	0.6	0.01	0.26
50	50A & 50B	5.83	10	10%	9.0	0.65	0.36	4.5	0.6	0.01	0.26
51	51A & 51B	6.37	10	10%	9.0	0.71	0.38	4.5	0.6	0.01	0.26

25-YEAR STORM
CURB INLETS ON GRADE - PARABOLIC CROWN

STREET WIDTH (FT)	INLET	DRNG AREA NO.	Q (CFS)	Q-Catch (+CFS)	Q TOTAL (CFS)	SLOPE (%)	a (IN)	Yo (FT)	PONDED WIDTH (FT)	R.F. (%)	Qa/La	La (FT)	LENGTH (FT)	L/La	a/Yo	Q/Qa	Q (CFS)	Q PASS	REMARK	INLET
30	1	1	3.39		3.39	0.87%	5	0.38	7.51		0.83	4.08	10	2.45	1.11	1.00	3.39			1
30	2	2	5.26		5.26	0.65%	5	0.46	10.51		0.92	5.72	10	1.75	0.92	1.00	5.26		Possible Future Inlet Location	2
30	3	3	7.18		7.18	0.65%	5	0.50	15.22		0.97	7.37	10	1.36	0.83	1.00	7.18		Possible Future Inlet Location	3
30	4	4	2.34		2.34	1.06%	5	0.32	6.03		0.78	3.01	10	3.32	1.30	1.00	2.34			4
30	5	5	3.72		3.72	1.06%	5	0.37	7.48		0.83	4.47	10	2.24	1.11	1.00	3.72			5
30	6	6	4.87		4.87	0.50%	5	0.46	10.94	10	SEE SUMP INLET CALCULATIONS INLET #6						4.87			6
30	7	7	5.71		5.71	0.50%	5	0.49	12.71	10	SEE SUMP INLET CALCULATIONS INLET #7						5.71			7
30	8	8A	1.80		1.80	0.60%	5	0.32	6.10	10	SEE SUMP INLET CALCULATIONS INLET #8						3.29			8
30		8B	1.49		1.49	0.50%	5	0.31	5.83	10										
30	9	9	3.14		3.14	1.37%	5	0.34	6.50		0.79	3.96	10	2.53	1.23	1.00	3.14			9
30	10	10	3.40		3.40	0.78%	5	0.38	7.72		0.84	4.04	10	2.47	1.09	1.00	3.40			10
30	11	11	4.59		4.59	0.78%	5	0.42	9.09		0.88	5.20	10	1.92	0.99	1.00	4.59			11
30	12	12	2.26		2.26	0.78%	5	0.33	6.37		0.79	2.87	10	3.49	1.25	1.00	2.26			12
30	13	13	2.11		2.11	0.78%	5	0.33	6.18		0.78	2.71	10	3.70	1.27	1.00	2.11			13
30	14	14	5.11		5.11	0.50%	5	0.47	11.37		0.94	5.45	10	1.83	0.89	1.00	5.11			14
30	15	15	3.08		3.08	1.00%	5	0.36	6.93		0.81	3.80	10	2.63	1.17	1.00	3.08			15
30	16	16	3.47		3.47	0.50%	5	0.41	8.79		0.87	3.97	10	2.52	1.01	1.00	3.47			16
30	17	17	3.45		3.45	1.00%	5	0.37	7.32		0.83	4.18	10	2.39	1.13	1.00	3.45			17
30	18	18	5.67		5.67	1.00%	5	0.43	9.57		0.90	6.32	10	1.58	0.96	1.00	5.67			18
48	19	19	6.14		6.14	0.67%	5	0.45	10.80		0.92	6.69	10	1.49	0.92	1.00	6.14			19
48	20	20	2.44		2.44	1.40%	5	0.29	6.02		0.74	3.31	10	3.02	1.46	1.00	2.44			20
48	21	21	3.86		3.86	1.40%	5	0.34	7.32		0.79	4.89	10	2.05	1.24	1.00	3.86			21
48	22	22	11.89		11.89	1.00%	5	0.54	13.91		1.01	11.78	**15**	1.27	0.78	1.00	11.89		Possible Future Inlet Location	22
30	23	23	9.10		9.10	2.00%	5	0.45	10.41		0.92	9.92	**15**	1.51	0.92	1.00	9.10			23
30	24	24	7.53		7.53	2.00%	5	0.43	9.22		0.89	8.50	10	1.18	0.98	1.00	7.53			24
30	25	25	9.91		9.91	2.00%	5	0.47	11.10		0.93	10.64	10	0.94	0.89	0.97	9.59	0.32	Qpass to #35b	25
30	26	26	7.57		7.57	2.00%	5	0.43	9.25		0.89	8.53	10	1.17	0.98	1.00	7.57			26
30	27	27	3.46		3.46	0.50%	5	0.41	8.78		0.87	3.96	10	2.53	1.01	1.00	3.46			27
30	28	28	3.07		3.07	0.50%	5	0.40	8.23		0.86	3.59	10	2.79	1.05	1.00	3.07			28
30	29	29	3.85		3.85	0.50%	5	0.43	9.34		0.89	4.32	10	2.31	0.97	1.00	3.85			29
30	30	30	1.82		1.82	0.50%	5	0.33	6.38		0.79	2.30	10	4.34	1.24	1.00	1.82			30
30	31	31	4.74		4.74	0.50%	5	0.46	10.73		0.92	5.14	10	1.95	0.91	1.00	4.74			31
30	32	32	2.55		2.55	0.50%	5	0.37	7.48		0.83	3.07	10	3.26	1.11	1.00	2.55			32
30	33	33	6.35		6.35	2.19%	5	0.40	8.17		0.85	7.42	10	1.35	1.05	1.00	6.35			33
30	34	34	3.00		3.00	0.50%	5	0.39	8.12		0.85	3.51	10	2.85	1.06	1.00	3.00			34
30	35	35A	4.50		4.50	0.50%	5	0.45	10.33	10	SEE SUMP INLET CALCULATIONS						5.75			35
30		35B	0.93	0.32	1.25	0.50%	5	0.30	5.42	10										
30	36	36A	2.34		2.34	0.50%	5	0.36	7.18	10	SEE SUMP INLET CALCULATIONS						4.02			36
30		36B	1.68		1.68	0.50%	5	0.33	6.15	10										
30	37	37	5.93		5.93	1.30%	5	0.42	9.09		0.88	6.71	10	1.49	0.99	1.00	5.93			37
30	38	38	5.01		5.01	0.50%	5	0.47	11.20		0.93	5.37	10	1.86	0.89	1.00	5.01			38
30	39	39	4.94		4.94	0.50%	5	0.47	11.07		0.93	5.31	10	1.88	0.89	1.00	4.94			39
30	40	40	2.76		2.76	0.50%	5	0.38	7.78		0.84	3.28	10	3.05	1.08	1.00	2.76			40
30	41	41	3.23		3.23	0.50%	5	0.40	8.45		0.86	3.74	10	2.67	1.03	1.00	3.23			41
30	42	42	6.50		6.50	1.25%	5	0.44	9.73		0.90	7.22	10	1.39	0.95	1.00	6.50			42
30	43	43	2.21		2.21	0.50%	5	0.36	6.98		0.81	2.72	10	3.67	1.17	1.00	2.21			43
30	44	44	4.33		4.33	0.50%	5	0.45	10.06		0.91	4.76	10	2.10	0.93	1.00	4.33			44
30	45	45	4.48		4.48	0.50%	5	0.45	10.30		0.91	4.90	10	2.04	0.92	1.00	4.48			45
30	46	46	4.86		4.86	0.50%	5	0.46	10.92		0.93	5.23	10	1.91	0.90	1.00	4.86			46
30	47	47	3.40		3.40	0.50%	5	0.41	8.70		0.87	3.91	10	2.56	1.01	1.00	3.40			47
30	48	48	4.82		4.82	0.50%	5	0.46	10.87		0.93	5.21	10	1.92	0.90	1.00	4.82			48
30	49	49	5.35		5.35	0.50%	5	0.48	11.85		0.94	5.66	10	1.77	0.87	1.00	5.35			49
30	50	50A	2.29		2.29	0.50%	5	0.36	7.10	10	SEE SUMP INLET CALCULATIONS						3.98			50
30		50B	1.69		1.69	0.50%	5	0.33	6.17	10										
30	51	51A	1.67		1.67	0.50%	5	0.33	6.14	10	SEE SUMP INLET CALCULATIONS						2.36			51
30		51B	0.69		0.69	0.50%	5	0.24	4.26	10										

100-YEAR STORM
CURB INLETS ON GRADE - PARABOLIC CROWN

STREET WIDTH (FT)	INLET	DRNG AREA NO.	Q (CFS)	Q-Spill Plus (+CFS)	Q-Spill Minus (-CFS)	Q-Catch (+CFS)	Q TOTAL (CFS)	SLOPE (%)	a (IN)	Yo (FT)	PONDED WIDTH (FT)	R.F. (%)	Qa/La	La (FT)	LENGTH (FT)	L/La	a/Yo	Q/Qa	Q (CFS)	Q PASS	REMARK	INLET
30	1	1	5.02				5.02	0.87%	5	0.43	9.27		0.89	5.65	10	1.77	0.98	1.00	5.02			1
30	2	2	7.77		0.78		6.99	0.65%	5	0.50	15.00		0.97	7.21	10	1.39	0.83	1.00	6.99		Full Road Split Flows	2
30	3	3	10.72	0.78	4.51		6.99	0.65%	5	0.50	15.00		0.97	7.21	10	1.39	0.83	1.00	6.99		To Future Offsite Inlets	3
30	4	4	3.44				3.44	1.06%	5	0.37	7.21		0.82	4.19	10	2.39	1.14	1.00	3.44			4
30	5	5	5.47				5.47	1.06%	5	0.43	9.21		0.89	6.17	10	1.62	0.98	1.00	5.47			5
30	6	6	7.03				7.03	0.50%	5	0.52	16.16	10	SEE SUMP INLET CALCULATIONS INLET #6						7.03			6
30	7	7	8.21				8.21	0.50%	5	0.55	17.53	10	SEE SUMP INLET CALCULATIONS INLET #7						8.21			7
30	8	8A	2.53				2.53	0.60%	5	0.36	7.13	10	SEE SUMP INLET CALCULATIONS INLET #8						4.61			8
30		8B	2.08				2.08	0.50%	5	0.35	6.79	10										
30	9	9	4.52				4.52	1.37%	5	0.38	7.74		0.84	5.38	10	1.86	1.09	1.00	4.52			9
30	10	10	5.01				5.01	0.78%	5	0.43	9.58		0.90	5.58	10	1.79	0.96	1.00	5.01			10
30	11	11	6.69				6.69	0.78%	5	0.48	11.87		0.94	7.08	10	1.41	0.87	1.00	6.69			11
30	12	12	3.30				3.30	0.78%	5	0.38	7.62		0.84	3.95	10	2.53	1.10	1.00	3.30			12
30	13	13	3.08				3.08	0.78%	5	0.37	7.36		0.83	3.73	10	2.68	1.13	1.00	3.08			13
30	14	14	7.35		1.22		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #15	14
30	15	15	4.38	1.22			5.59	1.00%	5	0.43	9.50		0.89	6.26	10	1.60	0.96	1.00	5.59			15
30	16	16	5.16				5.16	0.50%	5	0.47	11.49		0.94	5.50	10	1.82	0.88	1.00	5.16			16
30	17	17	5.21				5.21	1.00%	5	0.42	9.10		0.88	5.90	10	1.70	0.99	1.00	5.21			17
30	18	18	8.68				8.68	1.00%	5	0.50	15.01		0.97	8.95	10	1.12	0.83	1.00	8.68			18
48	19	19	9.33				9.33	0.67%	5	0.53	13.56		1.00	9.33	10	1.07	0.79	1.00	9.33			19
48	20	20	3.71				3.71	1.40%	5	0.33	7.19		0.79	4.72	10	2.12	1.26	1.00	3.71			20
48	21	21	5.51				5.51	1.40%	5	0.38	8.59		0.84	6.56	10	1.52	1.09	1.00	5.51			21
48	22	22	16.94				16.94	1.00%	5	0.61	17.89		1.09	15.48	**15**	0.97	0.69	0.99	16.71	0.23	Possible Future Inlet Location	22
30	23	23	13.41		1.15		12.26	2.00%	5	0.50	15.00		0.97	12.65	**15**	1.19	0.83	1.00	12.26		Qspill to #24	23
30	24	24	10.80	1.15			11.95	2.00%	5	0.50	13.64		0.96	12.39	10	0.81	0.84	0.89	10.63	1.33	Qpass to #35A	24
30	25	25	14.22		1.96		12.26	2.00%	5	0.50	15.00		0.97	12.65	10	0.79	0.83	0.88	10.77	1.49	Qspill to #26 Qpass to #35B	25
30	26	26	10.99	1.96	0.69		12.26	2.00%	5	0.50	15.00		0.97	12.65	10	0.79	0.83	0.88	10.77	1.49	Qspill & Qpass to 35B	26
30	27	27	5.05				5.05	0.50%	5	0.47	11.27		0.93	5.41	10	1.85	0.89	1.00	5.05			27
30	28	28	4.47				4.47	0.50%	5	0.45	10.29		0.91	4.89	10	2.04	0.92	1.00	4.47			28
30	29	29	5.60				5.60	0.50%	5	0.49	12.42		0.95	5.87	10	1.70	0.86	1.00	5.60			29
30	30	30	2.61				2.61	0.50%	5	0.38	7.56		0.83	3.13	10	3.20	1.10	1.00	2.61			30
30	31	31	6.88		0.75		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #32	31
30	32	32	3.67	0.75			4.41	0.50%	5	0.45	10.19		0.91	4.84	10	2.07	0.93	1.00	4.41			32
30	33	33	9.12				9.12	2.19%	5	0.45	10.10		0.91	10.02	10	1.00	0.93	1.00	9.11	0.01	Qpass to #34	33
30	34	34	4.33			0.01	4.35	0.50%	5	0.45	10.09		0.91	4.78	10	2.09	0.93	1.00	4.35			34
30	35	35A	6.48		1.68	1.33	6.13	0.50%	5	0.50	15.00	10	SEE SUMP INLET CALCULATIONS INLET #35						11.12		Qspill to #36A	35
30		35B	1.32	0.69		2.98	4.99	0.50%	5	0.47	11.16	10										
30	36	36A	3.28	1.68			4.96	0.50%	5	0.47	11.10	10	SEE SUMP INLET CALCULATIONS INLET #36						7.32			36
30		36B	2.36				2.36	0.50%	5	0.36	7.20	10										
30	37	37	8.59				8.59	1.30%	5	0.48	11.81		0.94	9.10	10	1.10	0.87	1.00	8.59			37
30	38	38	7.26		1.13		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #39	38
30	39	39	7.21	1.13	2.21		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #40	39
30	40	40	4.04	2.21	0.12		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #44	40
30	41	41	4.69				4.69	0.50%	5	0.46	10.63		0.92	5.08	10	1.97	0.91	1.00	4.69			41
30	42	42	9.32				9.32	1.25%	5	0.49	13.30		0.96	9.69	10	1.03	0.84	1.00	9.32			42
30	43	43	3.10				3.10	0.50%	5	0.40	8.27		0.86	3.61	10	2.77	1.04	1.00	3.10			43
30	44	44	6.19	0.12	0.19		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #45	44
30	45	45	6.48	0.19	0.53		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to 46	45
30	46	46	7.12	0.53	1.53		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to 47	46
30	47	47	4.97	1.53	0.37		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #51B	47
30	48	48	7.05		0.92		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #51A	48
30	49	49	7.91		1.78		6.13	0.50%	5	0.50	15.00		0.97	6.32	10	1.58	0.83	1.00	6.13		Qspill to #51A	49
30	50	50A	3.40				3.40	0.50%	5	0.41	8.70	10	SEE SUMP INLET CALCULATIONS INLET #50						5.83			50
30		50B	2.43				2.43	0.50%	5	0.37	7.31	10										
30	51	51A	2.34	2.69			5.03	0.50%	5	0.47	11.23	10	SEE SUMP INLET CALCULATIONS INLET #51						6.37		Possible Future Inlet Location	51
30		51B	0.97	0.37			1.34	0.50%	5	0.30	5.58	10									Possible Future Inlet Location	

FILE LOCATION: \\rr-data01\eng\CIVIL 3D 2451-2500\2500\ENGINEERING (DOCS)\DRAINAGE\RATIONAL\NOAA Atlas 14 DRNG_01.xlsx

NO.	DATE	DESCRIPTION	BY

RANDALL JONES & ASSOCIATES ENGINEERING INC. #9784

2900 JAZZ STREET
ROUND ROCK, TX 78664
(512) 836-4793

PROJECT: THE RIDGE AT BLACKHAWK, PHASE 1

SHEET: PRELIMINARY DRAINAGE PLAN AREA AND INLET CALCULATIONS

STATE OF TEXAS
J. KEITH COLLINS
80579
REGISTERED PROFESSIONAL ENGINEER
2/20/19

DATE:	JAN. 2019
DRAWN:	MAS
CHECKED:	JKC
FILE:	2500
SCALE	N/A

SHEET
11