EXISTNG DRAINAGE AREA																	
Area	Acreage (ac)	C	C*A	Tc (min)	I2 (in/hr)	I5 (in/hr)	I10 (in/hr)	I25 (in/hr)	I50 (in/hr)	I100 (in/hr)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Q25 (cfs)	Q50 (cfs)	Q100 (cfs)	**Comments**
A1	11.67	0.35	4.08	20	3.90	4.90	5.90	6.60	7.50	8.30	15.93	20.01	24.10	26.96	30.63	33.90	Sheet flows to existing floodplain
A2	8.95	0.35	3.13	20	3.90	4.90	5.90	6.60	7.50	8.30	12.22	15.35	18.48	20.67	23.49	26.00	Sheet flows to existing floodplain
A3	8.65	0.35	3.03	20	3.90	4.90	5.90	6.60	7.50	8.30	11.81	14.83	17.86	19.98	22.71	25.13	Sheet flows to existing floodplain
A4	0.70	0.35	0.25	20	3.90	4.90	5.90	6.60	7.50	8.30	0.96	1.20	1.45	1.62	1.84	2.03	Sheet flows to existing floodplain
B	5.87	0.35	2.05	20	3.90	4.90	5.90	6.60	7.50	8.30	8.01	10.07	12.12	13.56	15.41	17.05	Sheet flows to existing grate inlet
C	1.97	0.35	0.69	20	3.90	4.90	5.90	6.60	7.50	8.30	2.69	3.38	4.07	4.55	5.17	5.72	Sheet flows to existing pond
D1	2.65	0.35	0.93	20	3.90	4.90	5.90	6.60	7.50	8.30	3.62	4.54	5.47	6.12	6.96	7.70	Sheet flows to existing floodplain
D2	0.84	0.35	0.29	20	3.90	4.90	5.90	6.60	7.50	8.30	1.15	1.44	1.73	1.94	2.21	2.44	Sheet flows to existing floodplain
E1	5.74	0.35	2.01	20	3.90	4.90	5.90	6.60	7.50	8.30	7.84	9.84	11.85	13.26	15.07	16.67	Sheet flows to existing floodplain
E2	0.67	0.35	0.23	20	3.90	4.90	5.90	6.60	7.50	8.30	0.91	1.15	1.38	1.55	1.76	1.95	Sheet flows to existing floodplain
F	0.09	0.90	0.08	10	5.30	6.10	7.10	8.30	9.00	9.80	0.43	0.49	0.58	0.67	0.73	0.79	Offsite that sheet flows over future entrance
Totals	47.80										65.55	82.32	99.10	110.88	125.97	139.39	

PROPOSED DRAINAGE AREA Q=C*A*I																	
Area	Acreage (ac)	C	C*A	Tc (min)	I2 (in/hr)	I5 (in/hr)	I10 (in/hr)	I25 (in/hr)	I50 (in/hr)	I100 (in/hr)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Q25 (cfs)	Q50 (cfs)	Q100 (cfs)	**Comments**
A1	1.31	0.80	1.05	10	5.30	6.10	7.10	8.30	9.00	9.80	5.55	6.39	7.44	8.70	9.43	10.27	Sheet flows to storm system to North Pond C35
A2	1.27	0.80	1.02	10	5.30	6.10	7.10	8.30	9.00	9.80	5.38	6.20	7.21	8.43	9.14	9.96	Sheet flows to storm system to North Pond C35
A3	1.37	0.80	1.10	10	5.30	6.10	7.10	8.30	9.00	9.80	5.81	6.69	7.78	9.10	9.86	10.74	Sheet flows to storm system to North Pond C35
A4	1.20	0.80	0.96	10	5.30	6.10	7.10	8.30	9.00	9.80	5.09	5.86	6.82	7.97	8.64	9.41	Sheet flows to storm system to North Pond C35
A5	0.41	0.80	0.33	10	5.30	6.10	7.10	8.30	9.00	9.80	1.74	2.00	2.33	2.72	2.95	3.21	Sheet flows to storm system to North Pond C35
A6	0.80	0.80	0.64	10	5.30	6.10	7.10	8.30	9.00	9.80	3.39	3.90	4.54	5.31	5.76	6.27	Sheet flows to storm system to North Pond C35
A7	0.92	0.80	0.74	10	5.30	6.10	7.10	8.30	9.00	9.80	3.90	4.49	5.23	6.11	6.62	7.21	Sheet flows to storm system to North Pond C35
A8	1.16	0.80	0.93	10	5.30	6.10	7.10	8.30	9.00	9.80	4.92	5.66	6.59	7.70	8.35	9.09	Sheet flows to storm system to North Pond C35
A9	0.37	0.80	0.30	10	5.30	6.10	7.10	8.30	9.00	9.80	1.57	1.81	2.10	2.46	2.66	2.90	Sheet flows to storm system to North Pond C35
A10	0.62	0.80	0.50	10	5.30	6.10	7.10	8.30	9.00	9.80	2.63	3.03	3.52	4.12	4.46	4.86	Sheet flows to storm system to North Pond C35
A11	0.99	0.80	0.79	10	5.30	6.10	7.10	8.30	9.00	9.80	4.20	4.83	5.62	6.57	7.13	7.76	Sheet flows to storm system to North Pond C35
A12	2.70	0.35	0.95	20	3.90	4.90	5.90	6.60	7.50	8.30	3.69	4.63	5.58	6.24	7.09	7.84	Sheet flows to North Pond C35
B1	1.62	0.80	1.30	10	5.30	6.10	7.10	8.30	9.00	9.80	6.87	7.91	9.20	10.76	11.66	12.70	Sheet flows to storm system to South Pond C36
B2	1.76	0.80	1.41	10	5.30	6.10	7.10	8.30	9.00	9.80	7.46	8.59	10.00	11.69	12.67	13.80	Sheet flows to storm system to South Pond C36
B3	1.85	0.80	1.48	10	5.30	6.10	7.10	8.30	9.00	9.80	7.84	9.03	10.51	12.28	13.32	14.50	Sheet flows to storm system to South Pond C36
B4	4.78	0.35	1.67	20	3.90	4.90	5.90	6.60	7.50	8.30	6.52	8.20	9.87	11.04	12.55	13.89	Sheet flows to South Pond C36
C1	1.84	0.80	1.47	10	5.30	6.10	7.10	8.30	9.00	9.80	7.80	8.98	10.45	12.22	13.25	14.43	Sheet flows to storm system to East Pond C37
C1.1	0.01	0.80	0.01	10	5.30	6.10	7.10	8.30	9.00	9.80	0.04	0.05	0.06	0.07	0.07	0.08	Sheet flows to storm system to East Pond C37
C1.2	0.01	0.80	0.01	10	5.30	6.10	7.10	8.30	9.00	9.80	0.04	0.05	0.06	0.07	0.07	0.08	Sheet flows to storm system to East Pond C37
C2	0.42	0.80	0.34	10	5.30	6.10	7.10	8.30	9.00	9.80	1.78	2.05	2.39	2.79	3.02	3.29	Sheet flows to storm system to East Pond C37
C3	1.84	0.80	1.47	10	5.30	6.10	7.10	8.30	9.00	9.80	7.80	8.98	10.45	12.22	13.25	14.43	Sheet flows to storm system to East Pond C37
C3.1	0.02	0.80	0.02	10	5.30	6.10	7.10	8.30	9.00	9.80	0.08	0.10	0.11	0.13	0.14	0.16	Sheet flows to storm system to East Pond C37
C3.2	0.01	0.80	0.01	10	5.30	6.10	7.10	8.30	9.00	9.80	0.04	0.05	0.06	0.07	0.07	0.08	Sheet flows to storm system to East Pond C37
C4	1.83	0.80	1.46	10	5.30	6.10	7.10	8.30	9.00	9.80	7.76	8.93	10.39	12.15	13.18	14.35	Sheet flows to storm system to East Pond C37
C5	2.30	0.80	1.84	10	5.30	6.10	7.10	8.30	9.00	9.80	9.75	11.22	13.06	15.27	16.56	18.03	Sheet flows to East Pond C37
D1	0.55	0.80	0.44	10	5.30	6.10	7.10	8.30	9.00	9.80	2.33	2.68	3.12	3.65	3.96	4.31	Sheet flows to existing grate in JK, South Pond Bypass
D2	0.72	0.35	0.25	20	3.90	4.90	5.90	6.60	7.50	8.30	0.98	1.23	1.49	1.66	1.89	2.09	Sheet flows to existing flood plain South Pond Bypass
D3	0.67	0.35	0.23	20	3.90	4.90	5.90	6.60	7.50	8.30	0.91	1.15	1.38	1.55	1.76	1.95	Sheet flows to existing flood plain on the west lot
E1	2.58	0.80	2.06	10	5.30	6.10	7.10	8.30	9.00	9.80	10.94	12.59	14.65	17.13	18.58	20.23	Sheet flows to existing flood plain North Pond Bypass
E2	1.39	0.80	1.11	10	5.30	6.10	7.10	8.30	9.00	9.80	5.89	6.78	7.90	9.23	10.01	10.90	Sheet flows to existing flood plain East Pond Bypass
E3	0.70	0.35	0.25	20	3.90	4.90	5.90	6.60	7.50	8.30	0.96	1.20	1.45	1.62	1.84	2.03	Sheet flows to existing flood plain on the east lot
E4	8.65	0.35	3.03	20	3.90	4.90	5.90	6.60	7.50	8.30	11.81	14.83	17.86	19.98	22.71	25.13	Sheet flows to existing flood plain on the east lot
E5	0.84	0.35	0.29	20	3.90	4.90	5.90	6.60	7.50	8.30	1.15	1.44	1.73	1.94	2.21	2.44	Sheet flows to existing flood plain on the west lot
E6	0.20	0.35	0.07	20	3.90	4.90	5.90	6.60	7.50	8.30	0.27	0.34	0.41	0.46	0.53	0.58	Sheet flows to existing flood plain North Pond Bypass
F	0.09	0.90	0.08	10	5.30	6.10	7.10	8.30	9.00	9.80	0.43	0.49	0.58	0.67	0.73	0.79	Offsite that sheet flows to South Pond C36
Totals	47.80										147.35	172.36	201.94	234.07	256.13	279.79	

80 0 80 160 240 Feet

SCALE: 1"=80'

BM: CITY OF ROCKWALL CONTROL MONUMENT "COR-1" CALLED ELEV. 523.27. MEASURED ELEV. = 523.56

BM: CITY OF ROCKWALL CONTROL MONUMENT "COR-2" CALLED ELEV. 529.10. MEASURED ELEV. = 529.37

GENERAL NOTES

1. ALL RESPONSIBILITIES FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.
2. REGIONAL DETENTION PONDS SIZED FOR RESIDENTIAL DEVELOPMENT, WILL NEED TO BE RESIZED FOR FUTURE COMMERCIAL DEVELOPMENT
3. FOR MORE INFORMATION ON THE CROSS SECTIONS FOR THE ULTIMATE 100 YR FLOODPLAIN REFER TO "HYDROLOGIC AND HYDRAULIC STUDY IN SUPPORT OF LADERA ROCKWALL DEVELOPMENT" PREPARED BY JEA-HYDROTECH ENGINEERING, INC.

AS-BUILT
RECORD DRAWING

TO THE BEST OF OUR KNOWLEDGE, THE JOHN R. MCADAMS COMPANY, INC. HEREBY STATES THAT THIS PLAN IS AS-BUILT. THIS INFORMATION PROVIDED IS BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR.

Michael D. Duval
MCADAMS,

Date: 5/21/2020

STATE OF TEXAS
MICHAEL D. DUVAL
133095
LICENSED
PROFESSIONAL ENGINEER

MCADAMS
TBPE: 19762

OWNER/DEVELOPER
RW LADERA, LLC.
361 W. BYRON NELSON BLVD. STE. 104
ROANOKE, TX 76262
Ph. 817.430.3318
Contact: John Delin

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MCADAMS

LADERA ROCKWALL PHASE 1

LADERA ROCKWALL PHASE 1
Lot 1, Block A & Lot 1, Block B
LADERA ROCKWALL
47.694 Acres
in the
M. JONES SURVEY, ABSTRACT NO. 122
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

DRAINAGE AREA CALCULATIONS

Drawn By: MD
Date: 02/23/2018
Scale: 1"=80'
Revisions:
04/23/2018
07/16/2018
09/06/2018
01/28/2019
02/11/2019
03/11/2019 Signed

17191

C34