PROPOSED 100-YEAR PEAK FLOW CALCULATIONS								
I.D. NO.	AREA (AC.)	C	Tc (MIN)	I_{10} (IN/HR)	Q_{10} (CFS)	I_{100} (IN/HR)	Q_{100} (CFS)	COMMENTS
P1-A	0.081	0.90	10.0	5.90	0.4	9.8	0.71	CURB INLETS
P1-B	0.025	0.90	10.0	5.90	0.1	9.8	0.22	CURB INLETS
P2	0.112	0.90	10.0	5.90	0.6	9.8	0.99	TO CURB INLET
P3	0.070	0.90	10.0	5.90	0.4	9.8	0.62	TO CURB INLET
P4	0.755	0.90	10.0	5.90	4.0	9.8	6.66	TO DROP INLET
P5	0.638	0.90	10.0	5.90	3.4	9.8	5.63	TO CURB INLET
P6	0.106	0.90	10.0	5.90	0.6	9.8	0.93	TO CURB INLET
P7	0.130	0.90	10.0	5.90	0.7	9.8	1.15	TO CURB INLET
P8	0.087	0.90	10.0	5.90	0.5	9.8	0.77	TO CURB INLET
P9	0.130	0.90	10.0	5.90	0.7	9.8	1.15	TO CURB INLET
P10	2.133	0.90	10.0	5.90	11.3	9.8	18.81	TO ROOF DRAINS
P11	0.201	0.90	10.0	5.90	1.1	9.8	1.77	TO CURB INLET
P12	0.273	0.90	10.0	5.90	1.4	9.8	2.41	FLUMES TO POND
P13	0.075	0.90	10.0	5.90	0.4	9.8	0.66	TO CURB INLET
P14	0.112	0.90	10.0	5.90	0.6	9.8	0.99	LOADING DOCK INLET
P15	0.859	0.90	10.0	5.90	4.6	9.8	7.58	DETENTION POND
P16-A	0.255	0.90	10.0	5.90	1.4	9.8	2.25	TO CURB INLETS
P16-B	0.133	0.90	10.0	5.90	0.7	9.8	1.17	TO CURB INLETS
P17	0.055	0.90	10.0	5.90	0.3	9.8	0.49	TO MEMORIAL DRIVE
P18	0.136	0.90	10.0	5.90	0.7	9.8	1.20	TO MEMORIAL DRIVE
~~P19~~	~~0.296~~	~~0.90~~	~~10.0~~	~~5.90~~	~~1.6~~	~~9.8~~	~~2.61~~	~~TO HEADWALL~~
P20	0.535	0.90	10.0	5.90	2.8	9.8	4.72	TO CURB INLET
P21	0.054	0.90	10.0	5.90	0.3	9.8	0.48	TO QUAIL RUN
P22	0.169	0.90	10.0	5.90	0.9	9.8	1.49	TO CANOPY DRAIN
~~P23~~	~~1.002~~	~~0.90~~	~~10.0~~	~~5.90~~	~~5.3~~	~~9.8~~	~~8.84~~	~~TO CURB INLET~~
P24	0.424	0.90	10.0	5.90	2.3	9.8	3.74	TO CURB INLET
P25	0.444	0.90	10.0	5.90	2.4	9.8	3.92	TO CURB INLET
P26	1.126	0.90	10.0	5.90	6.0	9.8	9.93	TO CURB INLET
P27	0.821	0.90	10.0	5.90	4.4	9.8	7.24	TO CURB INLET
A1	1.130	0.90	10.0	5.90	6.0	9.8	9.97	PRE ECKERD'S PLAN
A2	0.260	0.90	10.0	5.90	1.4	9.8	2.29	PRE ECKERD'S PLAN
B1	0.850	0.90	10.0	5.90	4.5	9.8	7.50	PRE ECKERD'S PLAN
B2	0.190	0.90	10.0	5.90	1.0	9.8	1.68	PRE ECKERD'S PLAN
B3	0.110	0.90	10.0	5.90	0.6	9.8	0.97	PRE ECKERD'S PLAN
B4	0.470	0.90	10.0	5.90	2.5	9.8	4.15	PRE ECKERD'S PLAN
OFF 18	0.755	0.90	10.0	5.90	4.0	9.8	6.66	TO EX CURB INLET
OFF 19	0.66	0.90	10.0	5.90	3.5	9.8	5.82	TO EX CURB INLET
OFF 20	0.981	0.90	10.0	5.90	5.2	9.8	8.65	TO HEADWALL
TOTAL	16.643						146.791	

Q=C*I*A

3

I.D. NO.	Proposed Drainage Area Separation	Area (AC.)	C	I_{100} (IN/HR)	Q_{100} (C.F.S.)	$Q_{released}$ (C.F.S.)
P1A→P15	Going to Pond 1	5.787	0.90	9.8	51.041	21.500
CVS, QUAIL RUN RD, P16A, P16B, P20, P22-P27	Going to UGD	9.334	0.90	9.8	82.326	22.000
P21 & P19	Going directly to 27" RCP	0.350	0.90	9.8	3.087	3.087
P17 & P18	To Memorial Drive	0.191	0.90	9.8	1.685	1.685
OFF 20	To SH 205	0.981	0.90	9.8	8.652	8.652
Total		16.643			146.791	56.924

I.D. NO.	Existing Drainage Area Separation	Area (AC.)	C	I_{100} (IN/HR)	$Q_{allowed}$ (C.F.S.)
B4, OFF18, OFF19	Quail Run Road	1.885	0.90	9.8	16.626
A1, A2, B1, B2, B3	CVS	2.540	0.35	8.3	7.379
EX-1	Site (East)	3.524	0.35	8.3	10.237
EX-2	Site (West)	7.712	0.35	8.3	22.403
OFF 20	To SH 205	0.981	0.90	9.8	8.652
TOTAL		16.642			65.297

AS–BUILT

THIS RECORD DRAWING IS COMPILATION OF A COPY OF THE SEALED ENGINEERING DRAWING FOR THIS PROJECT; MODIFIED BY ADDENDA, CHANGE ORDERS, AND INFORMATION FURNISHED BY THE CONTRACTOR. THE INFORMATION SHOWN ON THE RECORD DRAWINGS IS PROVIDED BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER. THE ORIGINAL SEALED DRAWING ARE ON FILE AT THE OFFICES OF WINKELMANN AND ASSOCIATES, INC.

Maria L. Bonilla — 10–19–2016

WINKELMANN AND ASSOCIATES, INC. — DATE

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No.	DATE	REVISION	APPROV.
6.			
5.			
4.	01/07/2016	BULLETIN #2	M.B.
3.	12/18/2015	ISSUE FOR CONSTRUCTION	M.B.
2.	12/09/2015	BULLETIN #1	M.B.

LAST SAVED BY: MAUIHOLLAND October 20, 2016

Winkelmann & Associates, Inc.
CONSULTING CIVIL ENGINEERS ▪ SURVEYORS
2001 NORTH HALSEY PLAZA DRIVE, SUITE 325
DALLAS, TEXAS 75230 (972) 490-1099 FAX
Texas Engineers Registration No. F-2966
Texas Surveyors Registration No. 10064-00
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STATE OF TEXAS — MARIA C. BONILLA-NICHOLLS — 100106 — LICENSED PROFESSIONAL ENGINEER

10-19-2016

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIA C. BONILLA-NICHOLLS P.E. # 100106

PROPOSED DRAINAGE AREA TABLE

SEC N. GOLIAD ST. AND E.QUAIL RUN RD.
ROCKWALL, TEXAS

17585.00

C–10.04

DAL574

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