STORM CALCULATIONS

RUNOFF COLLECTION POINT		Distance Between Collection Points	DRAINAGE AREA			Runoff Coeff.	Accum.	Intensity	STORMWATER RUNOFF		PROPOSED STORM SEWER				Proposed Storm Sewer Slope	Slope of Hydraulic Gradient Based on Pipe Size	Full Flow Capacity	Q·· Flow Velocity	Head Loss Coeff.	Velocity Head Loss at Upstream Station	Pipe Flowline Elev.	Pipe Flowline Elev.	Top of Pipe Elev.	Top of Pipe Elev.	Hg Elev.	Hg Elev.	Full/Partial Flow
Downstream Station	Upstream Station	"L" (feet)	Drainage Area Name	Increm. "A" (acres)	Accum. "A" (acres)	"C"	"CA" (acres)	"I" (in./hr.)	Increm. "Q" (c.f.s.)	Accum. "Q" (c.f.s.)	Pipe or Box	Round Pipe Diameter "d" (in.)	Rectangular Box Width "w" (ft.)	Rectangular Box Height "h" (ft.)	S_p (ft/ft.)	"S" (ft/ft.)	"C" (c.f.s.)	V_c (f.p.s.)	K_j	$\frac{V_2^2 - K_j V_1^2}{2g}$ (feet)	Downstream (feet)	Upstream (feet)	Downstream (feet)	Upstream (feet)	Downstream (feet)	Upstream (feet)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	21	27	28	30	29	32	31	34	33	35
Storm Sewer Line A																											
14+87.57																							629.90		624.79		PARTIAL
	14+87.57	115.56	A1	0.27	0.27	0.90	0.24	9.27	2.3	2.3	Pipe	18	-	-	0.0231	0.0005	16.0	1.27	0.35	0.03		628.40		629.90		624.76	
13+72.01																					625.73		627.23		624.71		PARTIAL
	13+72.01	81.93	BLDGA	0.22	0.49	0.90	0.44	9.27	1.8	4.1	Pipe	18	-	-	0.0231	0.0015	16.0	2.31	0.35	0.06		625.73		627.23		624.65	
12+90.08																					623.84		625.34		624.53		PARTIAL
	12+90.08	66.85	BLDG-B1	0.50	0.99	0.90	0.89	9.27	4.2	8.3	Pipe	18	-	-	0.0231	0.0062	16.0	4.67	1.00	0.26		623.84		625.34		624.27	
12+23.23																					622.30		623.80		623.86		FULL
	12+23.23	16.71	Garage Drain	0.00	0.99	0.90	0.89	9.27	0.0	8.3	Pipe	18	-	-	0.0231	0.0062	16.0	4.67	1.00	0.00		622.30		623.80		623.86	
12+06.52																					621.91		623.41		623.76		FULL
	12+06.52	5.00	Garage Drain	0.00	0.99	0.90	0.89	9.27	0.0	8.3	Pipe	18	-	-	0.0231	0.0062	16.0	4.67	1.00	0.00		621.91		623.41		623.76	
12+01.52																					621.80		623.30		623.73		FULL
	12+01.52	121.68	Grade Break	0.00	0.99	0.90	0.89	9.27	0.0	8.3	Pipe	18	-	-	0.0148	0.0062	12.8	4.67	1.00	0.00		621.80		623.30		623.73	
10+79.84																					619.99		621.49		622.97		FULL
	10+79.84	104.84	BLDG-B2	0.50	1.49	0.90	1.34	9.27	4.2	12.4	Pipe	18	-	-	0.0148	0.0140	12.8	7.03	1.00	0.43		619.99		621.49		622.54	
9+75.00																					618.44		619.94		621.08		FULL
	9+75.00	64.23	BLDGA	0.00	1.49	0.90	1.34	9.27	0.0	12.4	Pipe	21	-	-	0.0455	0.0062	33.8	5.17	0.15	-0.18		618.19		619.94		621.25	
9+10.77																					615.27		617.02		620.86		FULL
	9+10.77	10.00	Grade Break	0.00	1.49	0.90	1.34	9.27	0.0	12.4	Pipe	21	-	-	0.0102	0.0062	16.0	5.17	1.00	0.00		615.27		617.02		620.86	
9+00.77																					615.17		616.92		620.80		FULL
	9+00.77	50.41	BLDG-C, BLDG-D1, BLDG-D2	0.69	2.18	0.90	1.96	9.27	5.8	18.2	Pipe	21	-	-	0.0102	0.0132	16.0	7.56	1.00	0.47		615.17		616.92		620.32	
8+50.36																					614.65		616.40		619.66		FULL
	8+50.36	71.12	BLDG-D2	0.12	2.30	0.90	2.07	9.27	1.0	19.2	Pipe	21	-	-	0.0102	0.0147	16.0	7.98	1.00	0.10		614.65		616.40		619.56	
7+79.24																					613.93		615.68		618.51		FULL
	7+79.24	56.40	BLDG-D2	0.12	2.42	0.90	2.18	9.27	1.0	20.2	Pipe	21	-	-	0.0102	0.0162	16.0	8.39	1.00	0.11		613.93		615.68		618.41	
7+22.84																					613.35		615.10		617.49		FULL
	7+22.84	47.36	BLDG-D2	0.25	2.67	0.90	2.40	9.27	2.1	22.3	Pipe	21	-	-	0.0102	0.0198	16.0	9.26	1.00	0.24		613.35		615.10		617.26	
6+75.48																					612.87		614.62		616.32		FULL
	6+75.48	130.48	BLDG-D2	0.15	2.82	0.90	2.54	9.27	1.3	23.5	Pipe	21	-	-	0.0102	0.0220	16.0	9.78	1.00	0.15		612.87		613.29		616.17	
5+45.00																					611.54		613.29		613.29		PARTIAL
	5+45.00	20.00	BLDG-E	0.24	3.06	0.90	2.75	9.27	2.0	25.5	Box	-	8	5	0.0247	0.0000	957.7	0.64	1.00	NA		608.30		613.30		602.96	
5+25.00																					607.81		612.81		602.96		PARTIAL
	5+25.00	310.00	45° BEND	0.00	3.06	0.90	2.75	9.27	0.0	25.5	Box	-	8	5	0.0247	0.0000	957.7	0.64	1.00	NA		607.81		612.81		602.96	
2+15.00																					600.15		605.15		602.96		PARTIAL
	2+15.00	115.00	Detention Outfall	0.00	3.06	0.90	2.75	9.27	0.0	12.8	Pipe	18	-	-	0.0035	0.0148	6.2	7.24	1.25	NA		600.15		601.65		602.96	
1+00.00																					599.75		601.25		601.25		FULL

RECORD DRAWINGS (May 2014)
Information Provided By:
BOB MOORE CONSTRUCTION

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
ROY BRASWELL
104908
LICENSED
PROFESSIONAL ENGINEER
7/16/13

KHA PROJECT 063319038
DATE 07/16/2013
SCALE AS SHOWN
DESIGNED BY TBB
DRAWN BY AAE
CHECKED BY TBB

VILLAGE ON THE PARKWAY PHASE II
ADDISON, TEXAS

STORM CALCULATIONS

SHEET NUMBER
C-12

PLOTTED BY WHITE, SARAH BETH 7/16/2013 10:25 AM
DWG NAME K:\DFW_CIVIL\063319038-VOPD\DWG\PLAN SET\PHASE II\C-12-STM-CALCS.DWG [C-02-GENERAL NOTES]
LAST SAVED 7/16/2013 10:12 AM
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