

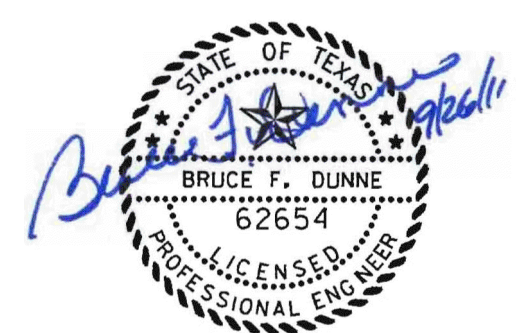
DRAINAGE AREA CALCULATIONS - PROPOSED																	
AREA NO.	AREA (acres)	RUNOFF COEFF.	CA	Tc (min)	I2 (in/hr)	Q2 (cfs)	I5 (in/hr)	Q5 (cfs)	I10 (in/hr)	Q10 (cfs)	I25 (in/hr)	Q25 (cfs)	I50 (in/hr)	Q50 (cfs)	I100 (in/hr)	Q100 (cfs)	COLLECTION POINT
C22	0.67	0.90	0.60	10.0	5.2	3.2	5.9	3.5	6.5	3.9	7.4	4.5	8.2	4.9	8.9	5.4	FUTURE STORM DRAIN
C23	0.50	0.95	0.48	10.0	5.2	2.5	5.9	2.8	6.5	3.1	7.4	3.5	8.2	3.9	8.9	4.2	FUTURE INLETS & STORM DRAIN
C24-1	0.51	0.90	0.46	10.0	5.2	2.4	5.9	2.7	6.5	3.0	7.4	3.4	8.2	3.7	8.9	4.1	FUTURE STORM DRAIN
C24-2	0.30	0.90	0.27	10.0	5.2	1.4	5.9	1.6	6.5	1.8	7.4	2.0	8.2	2.2	8.9	2.4	FUTURE STORM DRAIN
C25	0.49	0.90	0.44	10.0	5.2	2.3	5.9	2.6	6.5	2.9	7.4	3.3	8.2	3.6	8.9	3.9	FUTURE STORM DRAIN
C26	0.72	0.95	0.68	10.0	5.2	3.6	5.9	4.0	6.5	4.4	7.4	5.1	8.2	5.6	8.9	6.1	CURB INLET
C27	0.52	0.90	0.47	10.0	5.2	2.4	5.9	2.8	6.5	3.0	7.4	3.5	8.2	3.8	8.9	4.2	FUTURE STORM DRAIN
	<b>3.7</b>					<b>17.8</b>		<b>20.0</b>		<b>22.1</b>		<b>25.3</b>		<b>27.7</b>		<b>30.2</b>	

STORM DRAIN CALCULATIONS - 100 YR																		
MH or INLET DESIGN POINT	DISTANCE Between Points (ft)	Peak Flow in Pipe (cfs)	PIPE SIZE (in)	FRICTIONAL SLOPE "S"	HYDRAULIC GRADIENT ELEVATIONS (ft MSL)		HEAD LOSS AT CHANGE IN SECTION						Elev of Upstream (ft MSL)	Elev of Hyd Grade (ft MSL)	Elev Difference TC/FG - HGL at Des Pt (ft)	REMARKS		
					UPSTRM	DNSTRM	V1 Flow IN (fps)	V2 Flow OUT (fps)	V1(2) 2g (ft)	V1(2) 2g (ft)	Kj Of Loss (const)	Kj(1/2) 2g (ft)					Hj Head Loss (ft)	TC/FG - HGL DIFF
LINE C1																		
384.80	384.80	0.00	5.4	18	0.0061	559.85	559.85	---	3.06	0.14	---	1.25	---	0.18	560.03	560.49	0.46	GRATE INLET
384.80	342.37	42.43	5.4	18	0.0026	559.85	559.74	0.00	3.06	0.14	0.00	0.75	0.14	0.00	559.85	565.20	5.35	45° WYE
342.37	290.09	52.28	9.6	24	0.0018	559.70	559.61	3.06	3.06	0.14	0.14	0.25	0.11	0.04	559.74	565.93	6.19	MANHOLE W/ 90° BEND
290.09	229.47	60.62	19.9	27	0.0041	559.50	559.25	3.06	5.00	0.39	0.14	0.75	0.28	0.11	559.61	564.70	5.09	45° WYE
229.47	127.36	102.11	26.0	27	0.0070	559.15	558.43	5.00	6.54	0.66	0.39	0.25	0.57	0.10	559.25	564.58	5.33	MANHOLE W/ 90° BEND
127.36	90.00	37.36	30.2	27	0.0095	556.38	556.02	6.54	7.60	0.90	0.66	0.00	0.90	0.00	556.38	562.75	6.37	TEMPORARY HEADWALL
90.00	0.00	90.00	30.2	27	0.0095	555.46	554.80	7.60	7.60	0.90	0.90	0.75	0.22	0.67	556.13	559.60	3.47	45° WYE

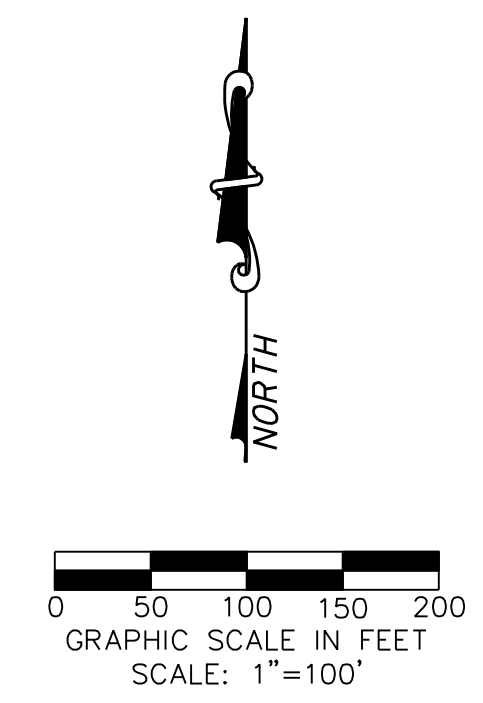
INLET CALCULATIONS														
INLET NO.	STATION	TYPE	DRAINAGE CALCS 100 YR			ROADWAY SECTION				INLET		COMMENTS		
			AREA NO.	PEAK FLOW (CFS)	CARRY OVER (CFS)	TOTAL FLOW (CFS)	CROSS SLOPE (FT/FT)	LONG SLOPE (FT/FT)	MAX DEPTH (FT)	SPREAD OF FLOW (FT)	LENGTH PROV. (FT)		INLET FLOW (CFS)	CARRY OVER (CFS)
1	PONTE CIRCLE	CO-S	C26	6.10	0.00	6.10	0.0208	0.0208	0.34	16.7	10.0	6.10	0.00	

**WARNING**  
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47  
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF VITRUVIAN WAY.  
 BM #2 REF. ELEVATION = 547.84  
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF VITRUVIAN WAY AND MARSH LANE.



- LEGEND**
- A17 DRAINAGE AREA DESIGNATION
  - MAJOR DRAINAGE AREA DIVIDE
  - MINOR DRAINAGE AREA DIVIDE
  - DIRECTION OF FLOW
  - INLET NUMBER



NO.	REVISION	BY	DATE
<b>TOWN OF ADDISON</b> DALLAS COUNTY, TEXAS			
<b>PAVING, DRAINAGE &amp; UTILITY IMPROVEMENTS</b> PONTE AVENUE CIRCLE			
<b>DRAINAGE AREA MAP &amp; CALCULATIONS</b>			
<b>icon</b> Consulting Engineers, Inc. Civil Engineers - Designers - Planners		250 W. Southlake Blvd., Suite 117 Southlake, Tx 76092 (817) 552-6210	
PROJECT	DESIGN	DRAWN	DATE
5019-09	ICE	ICE	SEPT 22, 2011
FILE	SHEET		
PW# 2011-03	11		

PAVING, DRAINAGE, & UTILITY IMPROVEMENTS - PONTE AVENUE CIRCLE