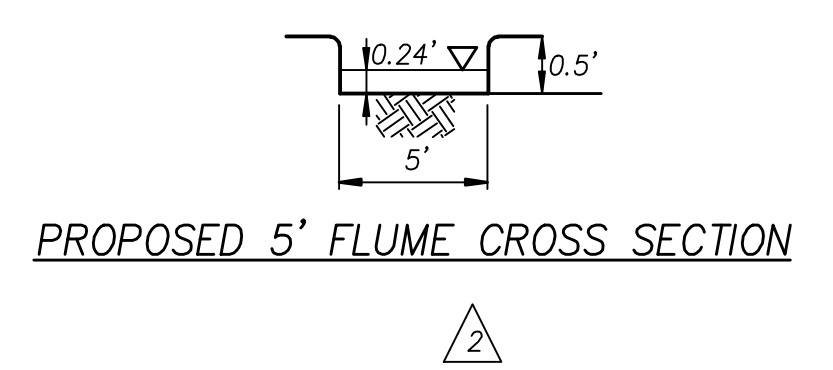


DRAINAGE AREA CALCULATIONS

Drainage Area No.	Total Area (Acres)	Runoff Coefficient C	Time of Concentration Tc (Min.)	Rainfall Intensity I ₁₀₀ (in/hr)	Existing Flow Q ₁₀₀ (cfs)	Remarks
1	1.80	0.90	10	9.80	14.14	FLWS TO PROPOSED PIPE AND PROPOSED CHANNEL
2	0.19	0.90	10	9.80	1.68	FLWS TO AREA INLET AND PROPOSED CHANNEL
3	0.09	0.90	10	9.80	0.78	FLWS TO OBSERVATION TRAIL
4	0.13	0.90	10	9.80	1.18	FLWS TO PROPOSED PIPE AND PROPOSED CHANNEL
5	0.39	0.90	10	9.80	3.48	FLWS TO PROPOSED CHANNEL
TOTAL	2.41				21.26	

$Q = 14.14$ cfs
 $n = 0.013$
 $S = 8.3\%$
 $V = 11.8$ ft/s
 Depth of flow = 0.24'
 Wetted Perimeter = 5.48 ft
 Flow Area = 1.20 sf



CAUTION EXISTING UTILITIES !!!

CALL TEXAS 811!!! EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION. TO TAKE THE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.

Benchmark Note

Benchmark: An "X" found in the centerline intersection of Observation Trail and Technology Trail. Elevation=580.50

Revision	Date	Description
1	07/11/12	REVISIONS PER CITY COMMENTS
2	07/19/12	REVISIONS PER CITY COMMENTS
3	10/30/12	PAVEMENT THICKNESS REVISION
	04/03/12	RECORD DRAWING

Owner:
KRT ENTERPRISES, INC.
 P.O. Box 1103 • Rockwall, TX 75087

Nolan Power Building
 Rockwall, Texas

~ Civil Engineer ~
F.C. CUNY CORPORATION
 #2 Horizon Court • Heath, Texas 75032 • (469) 402-7700
 Texas Registered Engineering Firm F-7449

Drawn By: F.C. CUNY
 Checked By: F.C. CUNY
 Date: 05/12
 Project No.:
 Sheet Title:
Drainage Plan
 Scale: 1" = 20'
 Sheet No.: 6 of 7