



**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.

**LEGEND**

- PROPERTY LINE
- - - - - EXISTING CONTOUR
- 565 — PROPOSED CONTOUR
- DRAINAGE FLOW DIRECTION
- (X) DRAINAGE AREA NUMBER
- (X) PROPOSED DRAINAGE AREA (Ac.)
- (XX.XX) PROPOSED DRAINAGE AREA 100 YR. RUNOFF (CFS)
- PROPOSED DRAINAGE AREA LINE

DRAINAGE AREA CALCULATIONS						
Drainage Area No.	Total Area (Acres)	Runoff Coefficient C	Time of Concentration Tc (Min.)	Rainfall Intensity I <sub>100</sub> (in/hr)	Proposed Flow Q <sub>100</sub> (cfs)	Remarks
OS-1	0.050	0.90	10	9.80	0.44	FLOWS TO ADJACENT LOT
1	0.030	0.90	10	9.80	0.26	FLOWS TO DUNKIN DONUTS INLET
2	0.090	0.90	10	9.80	0.79	FLOWS OFFSITE
3	0.630	0.90	10	9.80	5.56	FLOWS TO INLET 2
4	0.065	0.90	10	9.80	0.57	FLOWS UNDERGROUND TO DET. SYSTEM
5	0.043	0.90	10	9.80	0.38	FLOWS UNDERGROUND TO DET. SYSTEM
6	0.390	0.90	10	9.80	3.44	FLOWS TO INLET 1
7	0.240	0.90	10	9.80	2.12	FLOWS TO INLET 3
<b>TOTAL</b>	<b>1.54</b>				<b>8.01</b>	

INLET DESIGN CALCULATIONS														
INLET NO.	LOCATION	DESIGN STORM FREQUENCY (yrs)	TIME OF CONC. Tc (min.)	AREA RUNOFF Q = CIA			CARRY-OVER FROM UPSTREAM INLET (CFS)	TOTAL GUTTER FLOW (CFS)	GUTTER CAPACITY (CFS)	GUTTER SLOPE (FT/FT)	CROWN TYPE	SELECTED INLET		INLET CAPACITY (CFS)
				INTENSITY I (in/hr)	RUNOFF COEFF. "C"	AREA (Ac.)						Q (CFS)	LENGTH "L" (FEET)	
1	LINE-4	100	10	9.8	0.9	0.39	3.44	0	3.44	N/A	N/A	5	IA	8.6
2	LINE-3	100	10	9.8	0.9	0.63	5.56	0	4.06	N/A	N/A	5	IA	8.6
3	LINE-1	100	10	9.8	0.9	0.24	2.12	0	2.12	N/A	N/A	5	IA	8.6

**Detention Notes:**

- Drainage areas 3, 4, 5, 6 and 7 will enter the underground detention system directly.
- The proposed detention system will "over-detain" for the bypass of drainage areas 2 and OS-1 as seen in the drainage area calculations found on the Detention Pond Calculations sheet.
- Drainage area 1 will drain to the existing underground detention system provided by the Western adjacent property owner.

**Benchmark Note**

"X" cut on curb lying on the South side of Summer Lee Drive approximately 766 feet East from the intersection of Summer Lee Drive and Ridge Road. At the Northwest PC of the curb line of Summer Lee Drive and Oak Drive. Elevation = 562.80

Revision	Date	Description

Owner: **LOWDENT, LLC.**  
 17393 Adams Trail • Forney, TX 75126 • (214) 869-7181

**LOWRANCE / YOUNG MEDICAL OFFICE BUILDINGS**  
 Rockwall, Texas

HALL AND LEE LAND COMPANY, LLC.  
 217 Rush Creek • Heath, TX 75032 • (972) 816-2904

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

7/28/2016

STATE OF TEXAS  
 CHAMBERLAIN A. SLOAN  
 06317  
 LICENSED PROFESSIONAL ENGINEER

Drawn By: F.C. CUNY  
 Checked By: F.C. CUNY

Date: 04/15  
 Project No.: -

Sheet Title: **Drainage Area Map**

Scale: 1"=20'  
 Sheet No.: 7 of 9