

Δ = 13'11"28"  
R = 1005.00'  
T = 116.20'  
L = 231.38'  
CD = 230.87'  
CB = N 83°31'34" E

DRAINAGE CALCULATIONS

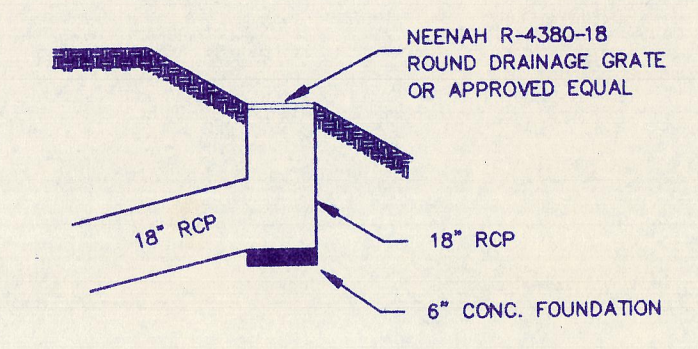
AREA NO.	AREA (ACRES)	RUNOFF COEFF. "C"	TIME OF CONC. "Tc"	INTENSITY (IN/HR)	Q <sub>100</sub> = 100 (c.f.s.)	COMMENTS
1	1.42	0.54	8.50	9.1	6.98	DRAINS TO MIDWAY RD.
2	1.21	0.65	17.03	7.3	5.74	DRAINS TO EXIST. 10' INLET
3	2.01	0.49	18.69	7.0	6.89	DRAINS TO PROP. 10' INLET
4	0.25	0.90	5.00	10.5	2.36	ROOF DRAINS
5	0.75	0.88	16.17	7.5	4.95	DRAINS TO PROP. 10' INLET
6	0.32	0.90	5.00	10.5	3.02	ROOF DRAINS
7	1.17	0.90	13.33	8.0	8.42	DRAINS TO PROP. 10' INLET, THEN TO POND "2"
8	4.48	0.35	5.80	10.0	15.68	DRAINS INTO POND "1"
9	0.70	0.90	11.80	8.2	5.17	DRAINS TO PROP. 8' INLET, THEN TO POND "2"
10	0.20	0.35	5.00	10.5	0.74	POND "2"
11	2.81	0.90	5.51	10.6	26.81	DRAINS TO MIDWAY RD.

- POND NO. 1 HAS A STORAGE VOLUME OF 76.387 CUBIC FEET. THE 100-YEAR W.S. ELEVATION IS 630.00. IT HAS BEEN DESIGNED TO PICK UP ALL OF AREA NO. 8 FOR FULLY DEVELOPED CONDITIONS AND HAS A MAXIMUM ALLOWABLE RELEASE RATE OF 5 CFS.
- POND NO. 2 HAS A STORAGE VOLUME OF 19.738 CUBIC FEET. THE 100-YEAR W.S. ELEVATION IS 623.00. IT HAS BEEN DESIGNED TO PICK UP THE DISCHARGE FROM AREAS 7, 9, AND 10. IT HAS A MAXIMUM DISCHARGE RATE OF 5 CFS.
- STORM SEWER LINE "A" HAS BEEN DESIGNED TO PICK UP THE EXISTING RESTAURANT SITE IN ITS EXISTING CONDITION. ANY DEVELOPMENT OF AREAS 1 OR 3 WHICH WOULD INCREASE RUNOFF, MUST MEET THE TOWN OF ADDISON DRAINAGE CRITERIA FOR DETENTION.
- EXISTING FLOW TO MIDWAY ROAD IS 35.97 CFS; PROPOSED 33.79 CFS.

DRAINAGE CRITERIA

- Q = CIA
- Q = 100 YEAR STORM
- C = COEFFICIENT OF RUN-OFF: 0.90 (PAVED AREA); 0.35 (GRASS AREA)
- I = INTENSITY, FROM HYDRO-35, DATED JUNE, 1977
- A = DRAINAGE AREA IN ACRES

Δ = 04°07'59"  
R = 945.00'  
T = 34.10'  
L = 68.17'  
CD = 68.15'  
CB = N 88°05'28" E



MORNING GLORY SPILLWAY DETAIL  
NTS

BENCHMARK NO. 1:  
"1" CUT IN CURB LOCATED ON NORTHEAST CORNER OF AN INLET ON THE WEST SIDE OF MIDWAY ROAD APPROXIMATELY 911 FEET SOUTH OF BELTWAY DRIVE.  
ELEV. = 615.72

BENCHMARK NO. 2:  
"1" CUT IN CURB LOCATED ON SOUTH SIDE OF BELTWAY DRIVE APPROXIMATELY 627 FEET EAST OF MIDWAY ROAD.  
ELEV. = 631.63

**Winkelmann & Associates, Inc.**  
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12800 HILLCREST ROAD, SUITE 200  
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(214) 490-7090  
(214) 490-7099 FAX

Professional Engineer Seal for Thomas L. Chenoweth, State of Texas, No. 156025, Exp. 12/31/93.

THOMAS L. CHENOWETH, SURVEYOR,  
REGISTERED, DALLAS COUNTY, TEXAS  
TOWN OF ADDISON, DALLAS COUNTY, TEXAS  
WOLFCHAIN PROPERTIES  
14900 WESTERN ROAD, SUITE 200  
DALLAS, TEXAS 75380  
CLIENT:

**DRAINAGE PLAN**

Scale: 1" = 50'  
Date: 10/93  
Designed By: T.L.  
Drawn By: T.L.  
Checked By: F.E.M.  
File: I56025TM.dwg  
Project No.: I56025.01

SHEET 5 OF 18

