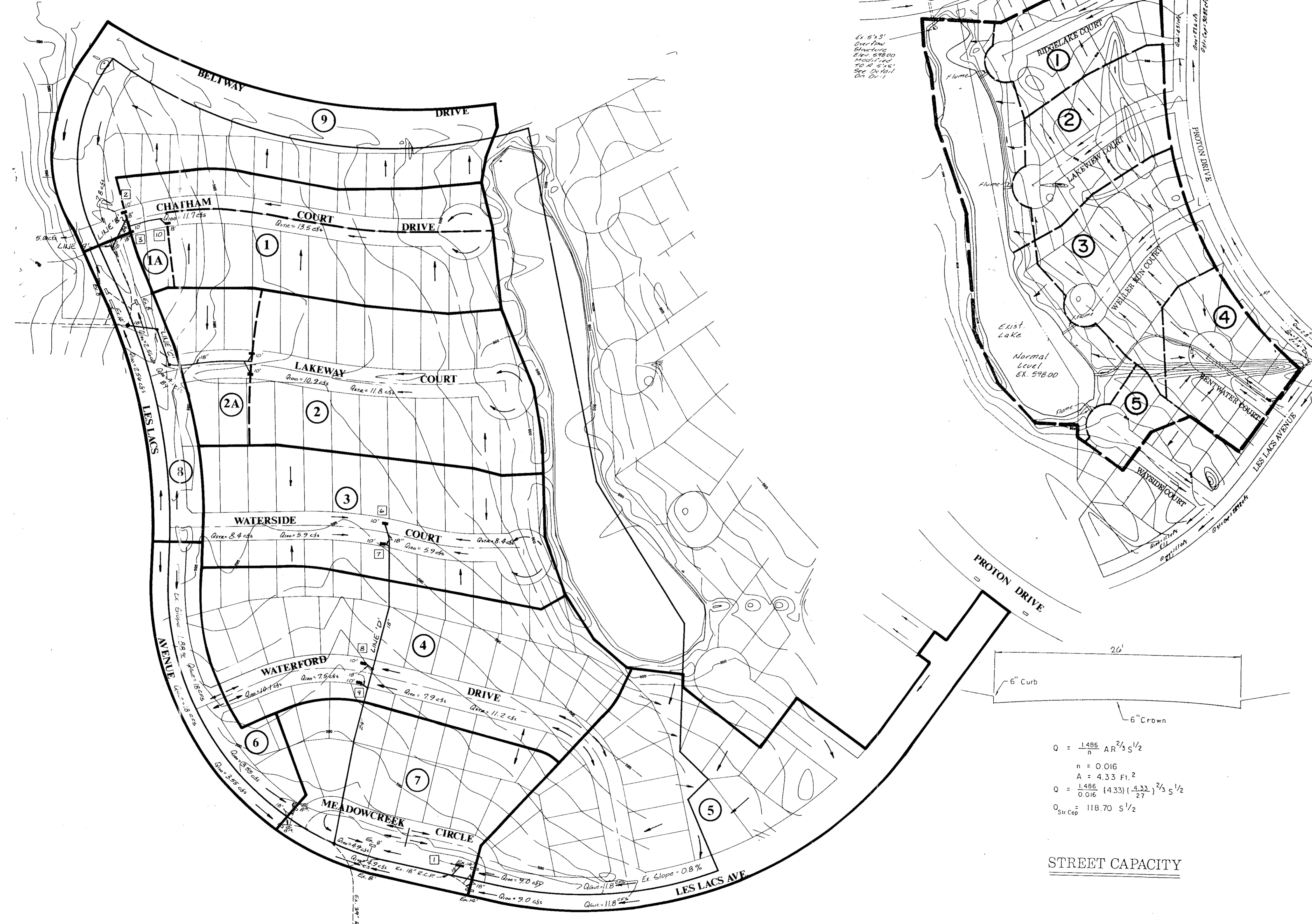
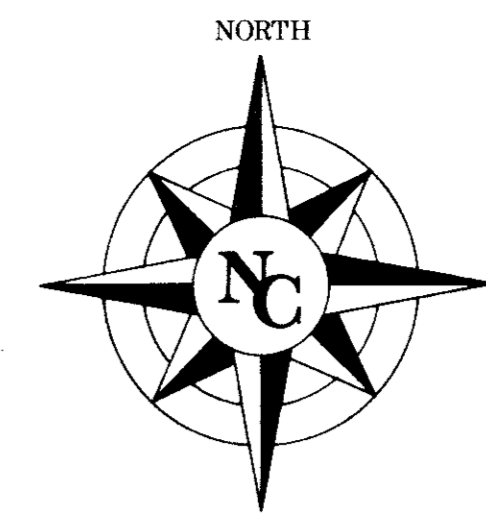


Revisions	Date	Description	Drawn By	Checked By



TOTAL ON SITE DRAINAGE INTO EXIST. LAKE: 140 ACRES

$$Q = CA \sqrt[3]{A}$$

$$C = 0.50$$

$$A = 7.52 \text{ in } (10 \times 15 \text{ min})$$

$$A = 14.0 \text{ ACRES}$$

$$Q_{100} = (5) (7.52) (14)$$

On Site  $Q_{100} = 52.64 \text{ cfs}$   
 Off Site  $Q_{100} = 84.8 \text{ cfs}$

TOTAL  $Q_{100} = 137.44 \text{ cfs}$

EXISTING OVERFLOW STRUCTURE (INLET CONTROL)

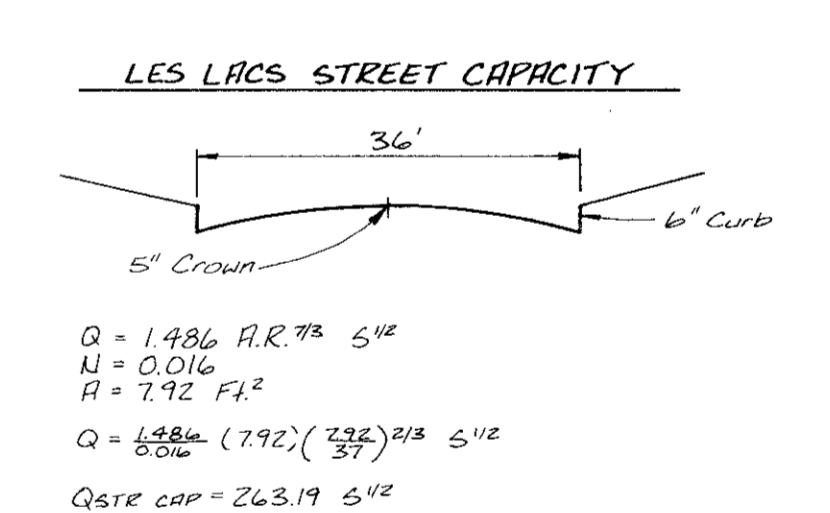
5' x 5' Box Intake  
 Overflow Structure Elev. 598.00

$$Q = CA \sqrt[3]{A}$$

$$H = \frac{(Q/CA)^2}{2.9}$$

$$H = \frac{(137.44)^2}{(60)(2.9)^2} = 1.00'$$

100 YEAR ELEV. = 598.00  
 + 1.00  
 599.00



$Q = \frac{1.486}{n} A R^{2/3} S^{1/2}$

$$n = 0.016$$

$$A = 4.33 \text{ FT}^2$$

$$Q = \frac{1.486}{0.016} (4.33) (1.27)^{2/3} (0.0027)^{1/2}$$

$$Q_{\text{STRE CAP}} = 118.70 \text{ cfs}$$

STREET CAPACITY

Area No.	Area (Ac)	T.A.	C	CA	I <sub>100</sub>	Q <sub>100</sub> (cfs)	Q <sub>100</sub> By Pass	Inlet	Inlet Type
1	1.96	15	0.5	0.98	7.52	740	740	1-B'	I
1A	1.14	15	0.5	0.57	7.52	43	43	2-10'	I
2	2.9	15	0.5	1.45	7.52	10.9	10.9	2-10'	I
2A	1.1	15	0.5	.55	7.52	4.1	4.1	2-10'	-
3	3.1	15	0.5	1.55	7.52	11.7	11.7	2-10'	IA
4	4.1	15	0.5	2.05	7.52	15.4	15.4	2-10'	IA
5	4.8	15	0.5	2.40	7.52	18.0	18.0	2-10'	I
6	1.9	15	0.5	0.95	7.52	7.1	7.1	2-8'	I
7	2.6	15	0.5	1.3	7.52	9.8	9.8	2-8'	IA
8	1.35	15	0.5	0.68	7.52	5.11	5.11	2-8'	I
9	3.4	15	0.5	1.7	7.52	12.8	12.8	*	*

\* Drainage Area To Be Collected At Area No. 1A

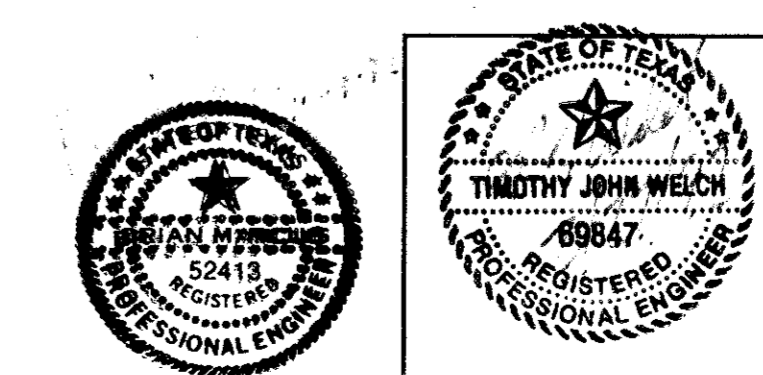
- LEGEND**
- DRAINAGE AREA LINE
  - EXIST. CONTOUR LINE
  - PROP. STORM SEWER LINE
  - EXIST. STORM SEWER LINE
  - ① DRAINAGE AREA
  - INLET NUMBER

**INLET TYPES**

I - Inlet On Grade  
 IA - Inlet At Sag

AS BUILTS

I CERTIFY THIS PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THESE CONSTRUCTION PLANS AND WILL FUNCTION AS DESIGNED.



**WATERFORD PARK II**  
 TOWN OF ADDISON, TEXAS

Date: DECEMBER, 1991 Scale: 1" = 100'  
 Drawn By: TNC Approved By: TNC SHEET DA-1 OF SHEETS

**THE NELSON CORPORATION**  
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