

DRAINAGE PLAN

PRELIMINARY PLAT

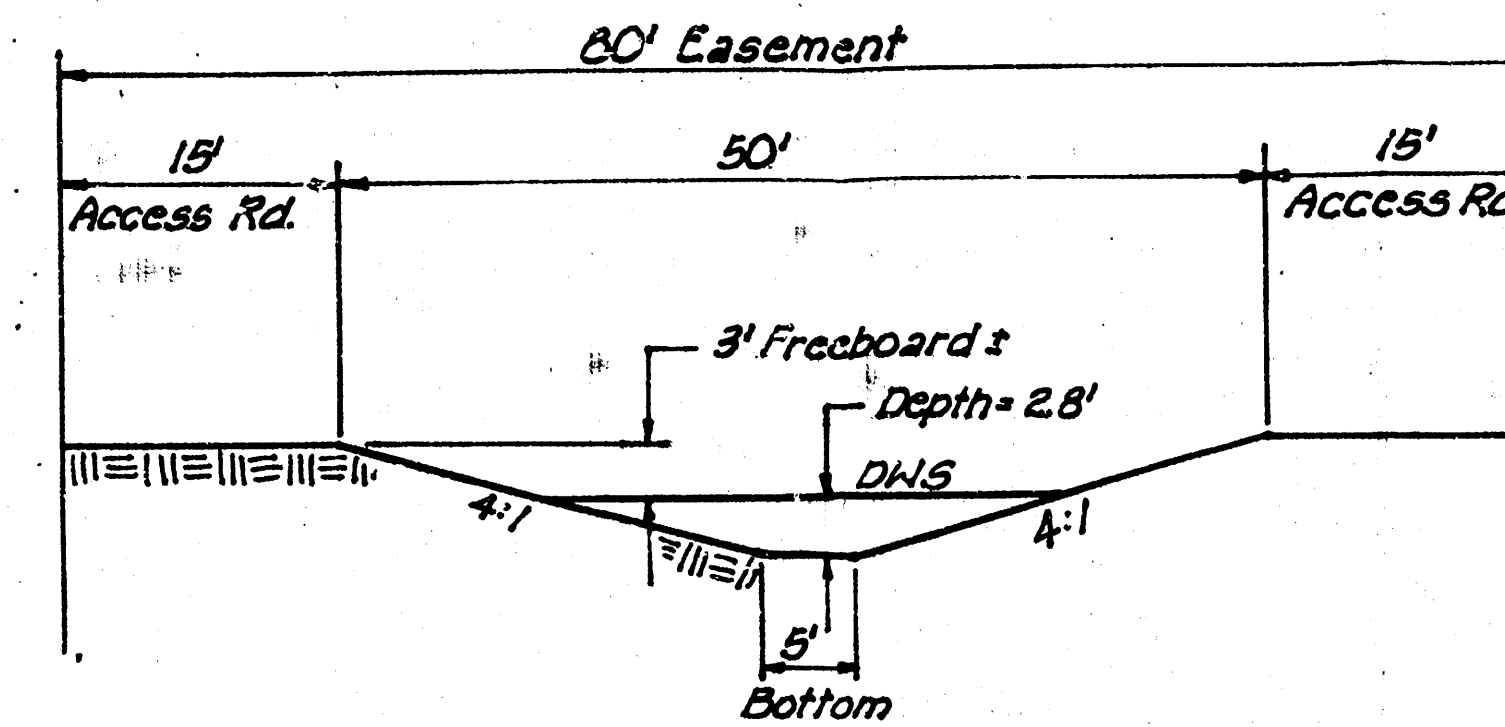
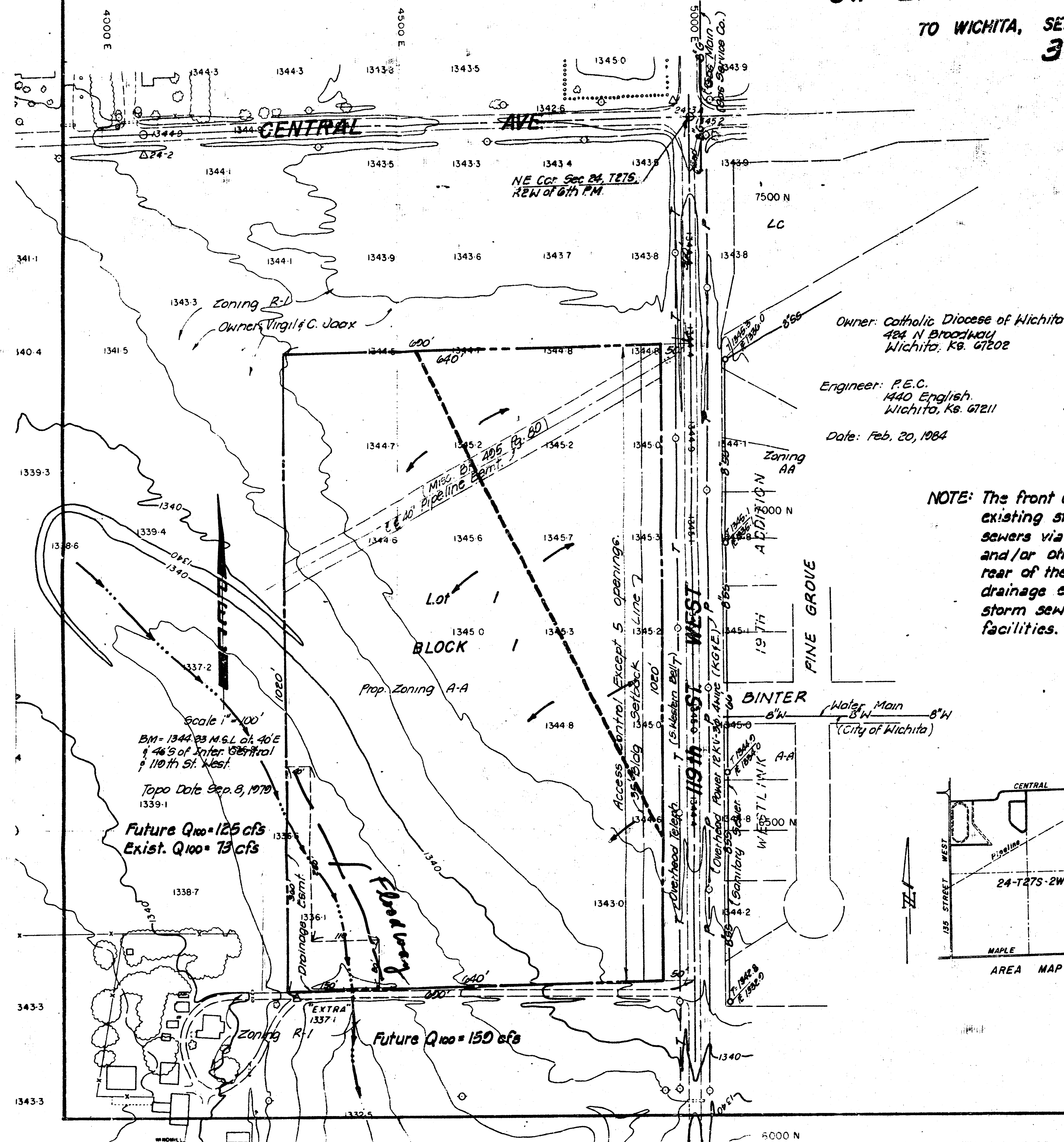
ST. ELIZABETH ANN SETON ADD.

TO WICHITA, SEDGWICK COUNTY, KANSAS.

3-2-84

LEGEND

- DRAINAGE FLOW DIRECTION
- - - DRAINAGE BASIN BOUNDARY
- EXISTING DRAINAGE SWALE



TYPICAL SECTION

MEMO

TO: City of Wichita
Engineering Department
7th Floor - City Hall
455 N. Main
Wichita, KS 67202

PROJECT: St. Elizabeth
Ann Seton Addition

DATE: February 24, 1984

ATTN: Chris Preterstein, F. E.

FROM: Charles S. Brown, P. E.

REFERENCE: Drainage Plan

COPIES TO:

File

Enroute Olin, MDD

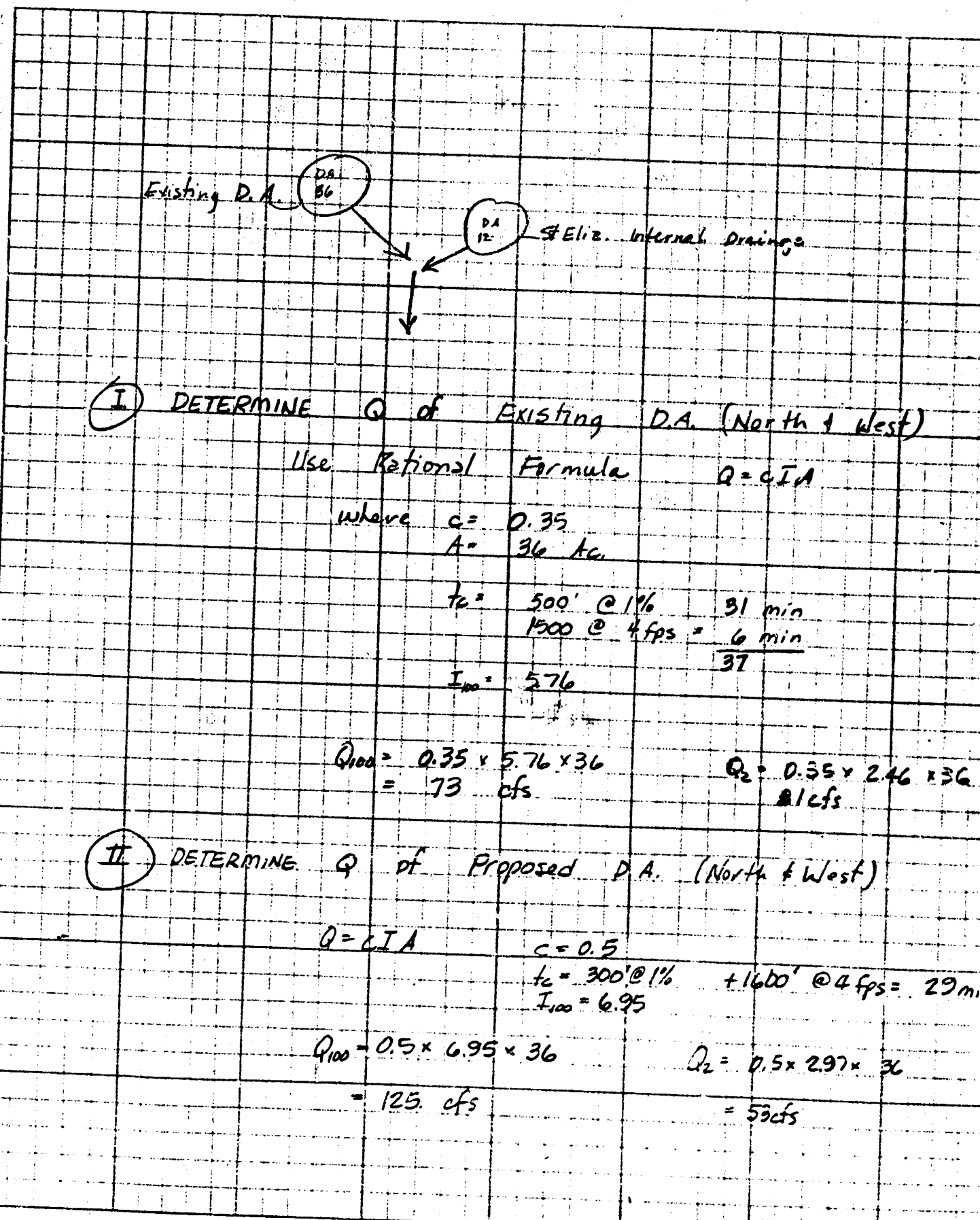
Jim Weber, SCOW

Transmitted herewith is one copy of the Drainage Plan and supporting calculations for the proposed St. Elizabeth Ann Seton Addition to Wichita, Kansas. The preliminary plat will be submitted on March 2, 1984, for hearing by the Sub-Division Committee on March 15, 1984. If you have any questions or need any additional information, please advise.

Date: February 16, 1984 Page 1 of 5

Project: St. Elizabeth Addition

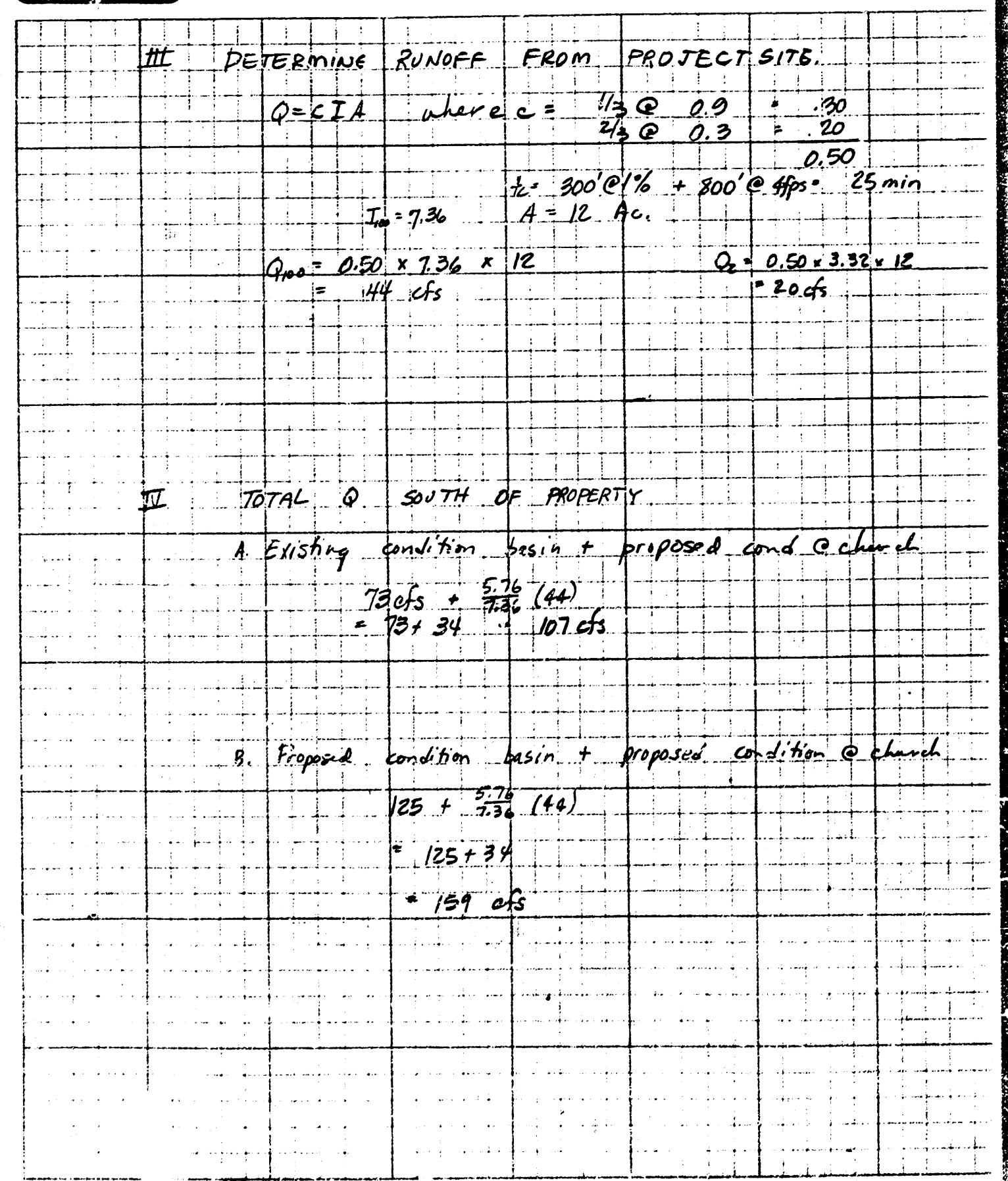
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Date: February 16, 1984 Page 2 of 5

Project: St. Elizabeth Addition

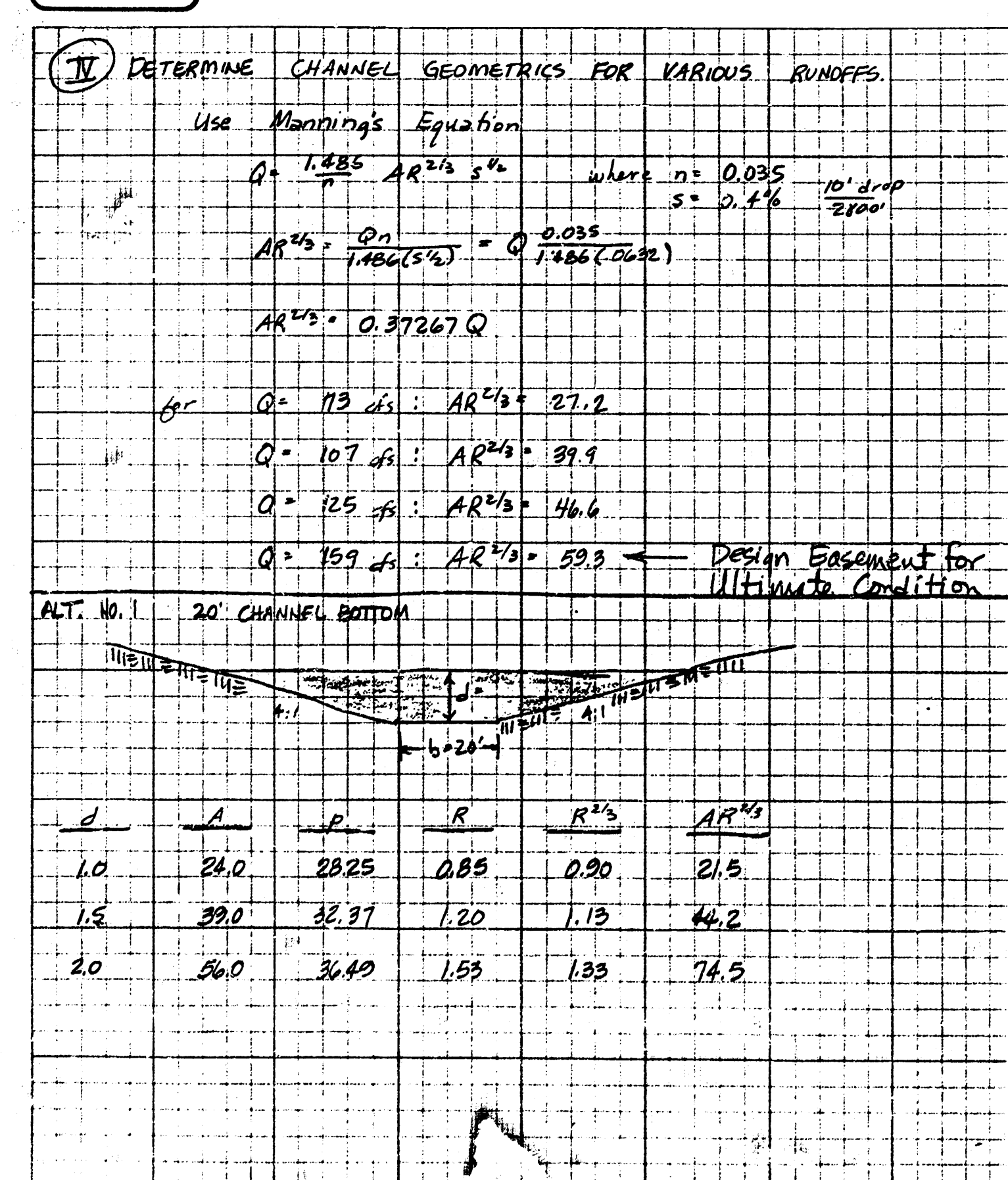
Item: Drainage



Date: Feb 16, 1984 Page 3 of 5

Project: St. Elizabeth Addition

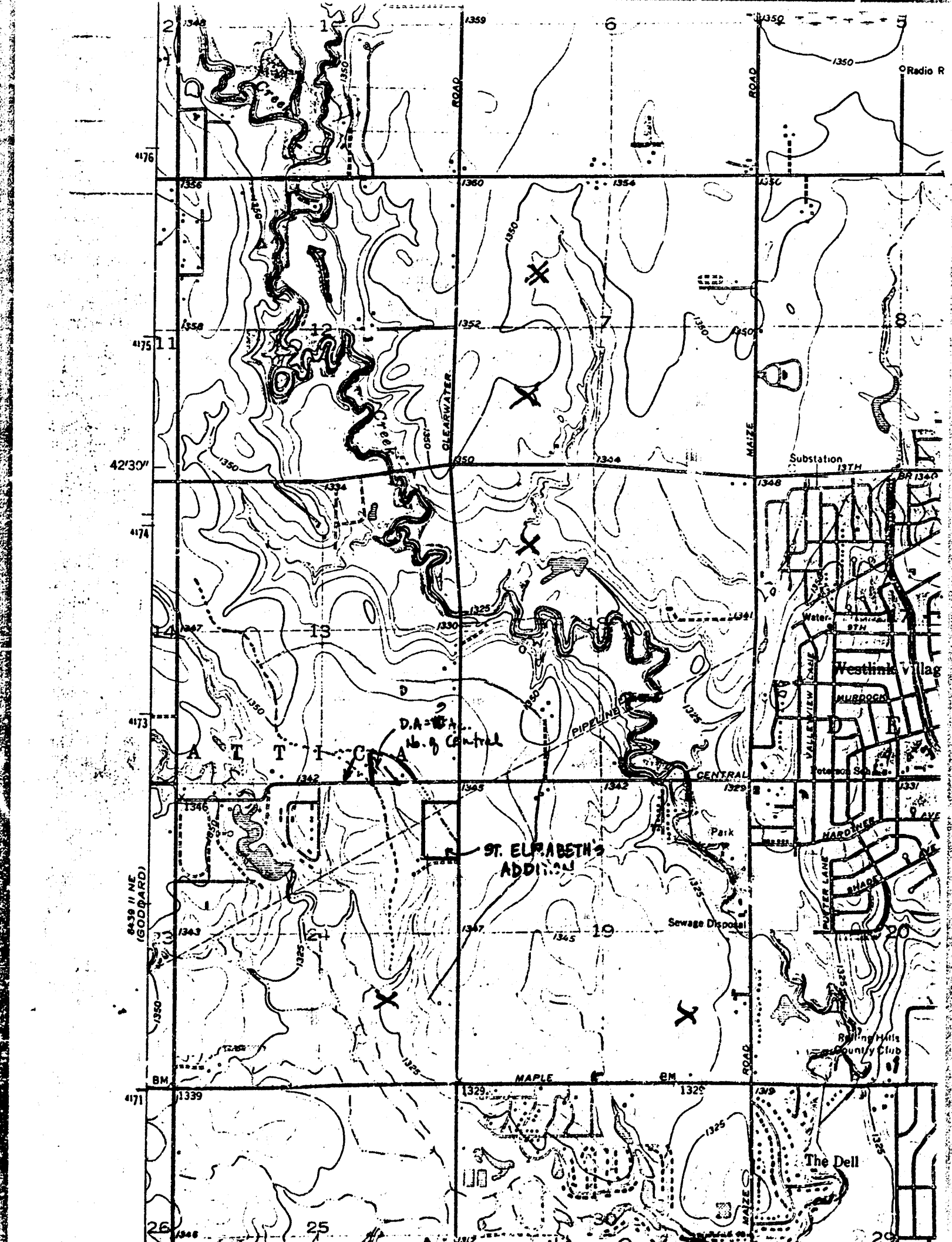
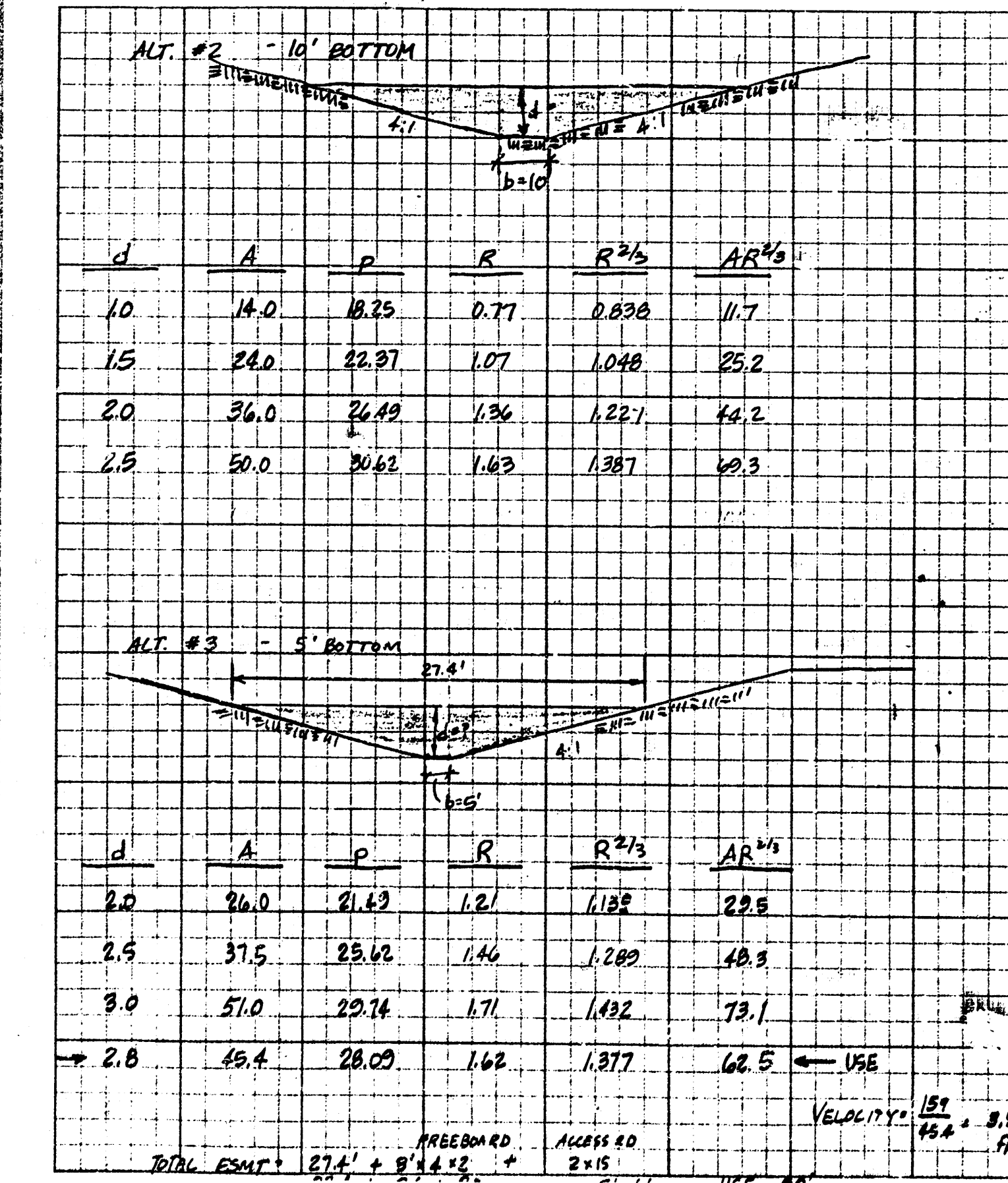
Item: Drainage



Date: Feb 16, 1984 Page 4 of 5

Project: St. Elizabeth

Item: Drainage



RAINFALL INTENSITY TABLE

for SEDGWICK COUNTY KANSAS

The following tabulation contains rainfall intensity in inches per hour as derived from NOAA Weather Bureau Technical Paper 40.

DURATION IN MINUTES	1-YR	2-YR	5-YR	10-YR	25-YR	50-YR	100-YR
5	4.67	6.23	8.00	9.34	10.67	12.23	13.79
6	4.35	5.80	7.45	8.70	9.94	11.29	12.84
7	4.09	5.46	7.02	8.19	9.36	10.72	12.09
8	3.88	5.18	6.66	7.77	8.89	10.18	11.48
9	3.71	4.95	6.36	7.43	8.49	9.72	10.96
10	3.56	4.75	6.11	7.13	8.15	9.33	10.52
11	3.43	4.58	5.89	6.87	7.85	8.99	10.14
12	3.32	4.43	5.69	6.64	7.59	8.69	9.80
13	3.21	4.29	5.51	6.43	7.35	8.42	9.60
14	3.12	4.17	5.36	6.25	7.14	8.18	9.23
15	3.04	4.07	5.21	6.08	6.95	7.97	8.98
16	2.96	3.96	5.09	5.93	6.78	7.77	8.76
17	2.90	3.86	4.97	5.79	6.62	7.59	8.55
18	2.83	3.78	4.86	5.67	6.48	7.42	8.37
19	2.77	3.70	4.76	5.55	6.34	7.27	8.19
20	2.72	3.63	4.66	5.44	6.22	7.12	8.03
21	2.67	3.56	4.57	5.34	6.10	6.99	7.88
22	2.62	3.49	4.49	5.24	5.99	6.86	7.74
23	2.57	3.43	4.41	5.15	5.89	6.74	7.60
24	2.53	3.38	4.34	5.07	5.79	6.60	7.46
25	2.49	3.32	4.27	4.99	5.70	6.53	7.36
26	2.45	3.27	4.21	4.91	5.61	6.43	7.25
27	2.42	3.22	4.15	4.84	5.53	6.33	7.14
28	2.38	3.17	4.09	4.77	5.45	6.25	7.04
29	2.35	3.12	4.02	4.68	5.35	6.16	6.95
30	2.32	3.08	3.97	4.61	5.27	6.08	6.87
31	2.29	3.04	3.92	4.54	5.19	6.00	6.79
32	2.26	3.00	3.87	4.47	5.11	5.92	6.71
33	2.23	2.96	3.82	4.40	5.03	5.84	6.63
34	2.20	2.92	3.77	4.33	4.95	5.75	6.55
35	2.17	2.88	3.72	4.26	4.87	5.67	6.47
36	2.14	2.84	3.67	4.19	4.79	5.59	6.39
37	2.11	2.80	3.62	4.12	4.71	5.51	6.31
38	2.08	2.76	3.57	4.05	4.63	5.43	6.23
39	2.05	2.72	3.52	3.98	4.55	5.35	6.15
40	2.02	2.68	3.47	3.91	4.47	5.27	6.07
41	1.99	2.64	3.42	3.84	4.39	5.19	6.00
42	1.96	2.60	3.37	3.77	4.31	5.11	5.92
43	1.93	2.56	3.32	3.70	4.23	5.03	5.84
44	1.90	2.52	3.27	3.63	4.15	4.95	5.76
45	1.87	2.48	3.22	3.56	4.07	4.87	5.68
46	1.84	2.44	3.17	3.49	3.99	4.79	5.60
47	1.81	2.40	3.12	3.42	3.91	4.71	5.52
48	1.78	2.36	3.07	3.35	3.83	4.63	5.44
49	1.75	2.32	3.02	3.28	3.75	4.55	5.36
50	1.72	2.28	2.97	3.21	3.67	4.47	5.28

DURATION IN MINUTES	1-YR	2-YR	5-YR	10-YR	25-YR	50-YR	100-YR
46	1.72	2.08	2.81	3.27	3.82	4.41	4.86
47	1.69	2.04	2.76	3.21	3.75	4.33	4.78
48	1.67	2.01	2.72	3.16	3.69	4.26	4.70
49	1.64	1.98	2.67	3.11	3.63	4.19	4.63
50	1.61	1.95	2.63	3.06	3.58	4.13	4.56
51	1.59	1.92	2.59	3.01	3.52	4.06	4.49
52	1.56	1.89	2.55	2.97	3.47	4.00	4.42
53	1.54	1.86	2.51	2.92	3.42	3.94	4.35
54	1.52	1.84	2.48	2.88	3.37	3.88	4.29
55	1.50	1.81	2.44	2.84	3.32	3.83	4.23
56	1.47	1.78	2.41	2.80	3.27	3.77	4.17
57	1.45	1.76	2.37	2.76	3.23	3.72	4.11
58	1.43	1.74	2.34	2.73	3.19	3.67	4.06
59	1.42	1.72	2.31	2.69	3.14	3.62	4.01
60	1.40	1.69	2.28	2.65	3.10	3.57	3.95
61	1.38	1.67	2.25	2.62	3.06	3.53	3.90
62	1.36	1.65	2.22	2.59	3.02	3.48	3.85
63	1.34	1.63	2.20	2.55	2.99	3.44	3.81
64	1.33	1.61	2.17	2.52	2.95	3.40	3.76
65	1.31	1.59	2.14	2.49	2.92	3.35	3.71
66	1.30	1.57	2.12	2.46	2.88	3.31	3.67
67	1.28	1.55	2.09	2.44	2.85	3.27	3.63
68	1.26	1.54	2.07	2.41	2.81	3.24	3.59
69	1.25	1.52	2.05	2.38	2.78	3.20	3.54
70	1.24	1.50	2.02	2.35	2.75	3.16	3.51
71	1.22	1.49	2.00	2.33	2.72	3.13	3.47
72	1.21	1.47	1.98	2.30	2.69	3.09	3.43
73	1.20	1.45	1.95	2.28	2.66	3.06	3.39
74	1.18	1.44	1.94	2.25	2.63	3.03	3.36
75	1.17	1.42	1.92	2.23	2.61	3.00	3.32
76	1.16	1.41	1.90	2.21	2.58	2.97	3.28
77	1.15	1.40	1.88	2.18	2.55	2.93	3.25
78	1.14	1.38	1.86	2.16	2.53	2.90	3.22
79	1.13	1.37	1.84	2.14	2.50	2.88	3.19
80	1.11	1.35	1.82	2.12	2.48	2.85	3.15
81	1.10	1.34	1.81	2.10	2.46	2.82	3.11
82	1.09	1.33	1.79	2.08	2.43	2.79	3.08
83	1.08	1.32	1.77	2.06	2.41	2.76	3.07
84	1.07	1.31	1.75	2.04	2.39	2.74	3.04
85	1.06	1.30	1.74	2.02	2.37	2.71	3.01
86	1.05	1.28	1.72	2.00	2.34	2.69	2.99
87	1.04	1.27	1.71	1.99	2.32	2.66	2.96
88	1.03	1.26	1.69	1.97	2.30	2.64	2.93
89	1.02	1.25	1.68	1.95	2.28	2.62	2.91
90	1.01	1.24	1.66	1.93	2.26	2.59	2.88

DURATION IN MINUTES	1-YR	2-YR	5-YR	10-YR	25-YR	50-YR	100-YR
91	1.00	1.23	1.65	1.92	2.24	2.57	2.86
92	1.00	1.22	1.63	1.90	2.22	2.55	2.83
93	0.99	1.21	1.62	1.89	2.20	2.53	2.81
94	0.98	1.20	1.61	1.87	2.19	2.51	2.79
95	0.97	1.19	1.59	1.85	2.17	2.49	2.76
96	0.96	1.18	1.58	1.84	2.15	2.46	2.74
97	0.95	1.17	1.57	1.82	2.13	2.44	2.72
98	0.94	1.16	1.56	1.81	2.12	2.42	2.70
99	0.94	1.15	1.54	1.80	2.10	2.41	2.67
100	0.93	1.14	1.53	1.78	2.08	2.39	2.65
101	0.93	1.13	1.52	1.77	2.07	2.39	2.65
102	0.92	1.13	1.51	1.75	2.05	2.35	2.63
103	0.91	1.12	1.50	1.74	2.04	2.33	2.61
104	0.90	1.11	1.49	1.73	2.02	2.31	2.57
105	0.90	1.10	1.47	1.72	2.01	2.29	2.55
106	0.89	1.09	1.46	1.70	1.99	2.28	2.54
107	0.88	1.09	1.45	1.69	1.98	2.26	2.52
108	0.88	1.08	1.44	1.68	1.96	2.25	2.50
109	0.87	1.07	1.43	1.67	1.95	2.23	2.48
110	0.87	1.06	1.42	1.65	1.93	2.21	2.46
111	0.86	1.06	1.41	1.64	1.92	2.20	2.45
112	0.85	1.05	1.40	1.63	1.91	2.18	2.43
113	0.85	1.04	1.39	1.62	1.89	2.17	2.41
114	0.84	1.03	1.38	1.61	1.88	2.15	2.40
115	0.84	1.03	1.37	1.60	1.87	2.14	2.38
116	0.83	1.02	1.36	1.59	1.86	2.12	2.36
117	0.83	1.01	1.35	1.58	1.85	2.11	2.35
118	0.82	1.01	1.35	1.57	1.83	2.09	2.33
119	0.81	1.00	1.34	1.56	1.82	2.08	2.32
120	0.81	0.99	1.33	1.55	1.81	2.07	2.30
121	0.80	0.99	1.32	1.54	1.80	2.05	2.29
122	0.80	0.98	1.31	1.53	1.79	2.04	2.27
123	0.79	0.97	1.30	1.52	1.77	2.03	2.26
124	0.79	0.97	1.30	1.51	1.76	2.01	2.24
125	0.78	0.96	1.29	1.50	1.75	2.00	2.23
126	0.78	0.96	1.28	1.49	1.74	1.99	2.22
127	0.77	0.95	1.27	1.48	1.73	1.98	2.20
128							
129							
130							
131							
132							
133							
134							
135							

DRAINAGE PLAN
GOLDEN HILLS ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

OWNER: **SUNN ENTERPRISES, LTD.**
49 Industrial Road
Gardner, Kansas 67205

ENGINEER: **PROFESSIONAL ENGINEERING CONSULTANTS, P.A.**
1440 E. English
Wichita, Kansas 67211

DATE: JUNE 7, 1988

LEGEND

1. Inlet w/Node Identification
2. Manhole w/Node Identification
3. Storm Sewer w/Size
4. Open Channel
5. Storm Sewer (By Other)
6. Drainage Direction (Minor Storm)
7. Drainage Direction (Major Storm)
8. Drainage Crest (Minor Storm)
9. Drainage Crest (Major Storm)
10. Elevation (Top of sidewalk)
11. FEMA Floodplain Boundary
12. FEMA Floodway Boundary

NOTES

1. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE KANSAS DRAINAGE CODE, 1987 EDITION.

2. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR A 100-YEAR FLOOD.

3. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR A 1% CHANCE OF EXCEEDANCE.

4. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR A 1% CHANCE OF EXCEEDANCE.

5. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR A 1% CHANCE OF EXCEEDANCE.

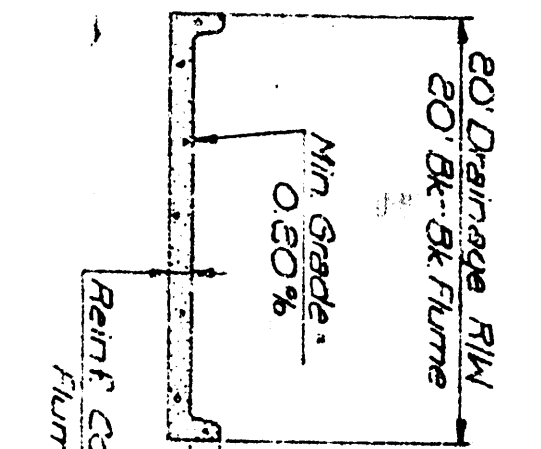
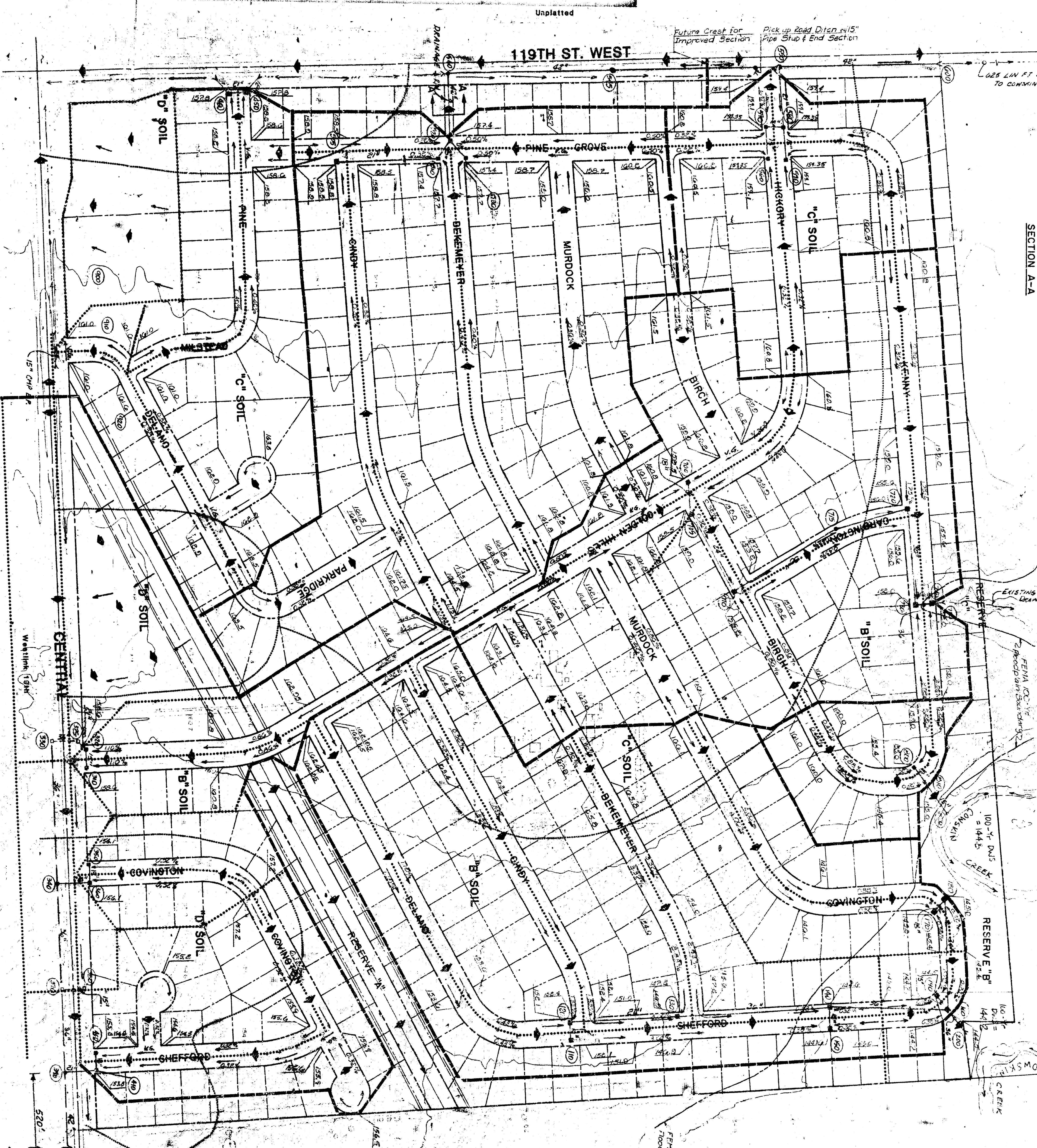
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9. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR A 1% CHANCE OF EXCEEDANCE.

10. ALL DRAINAGE STRUCTURES SHALL BE DESIGNED FOR A 1% CHANCE OF EXCEEDANCE.



NOTES:

1. Computations have been based on the following:
a) Standard Curb (10.38')
b) Reinforced concrete pipe conduits
(Manholes 10.00')
c) Minimum Road Elevations:
Block 10, Lots 50 thru 52 144.9
Block 10, Lots 53 thru 61 144.8
Block 6, Lots 10 thru 24 144.8

