Bridgefield Addition

By: BLG 3-19-97 Page 1 of 11 BAUGHMAN COMPANY, P.A.

Inflow from off-site 36" RCP assume H&L control w/ depth = 4.5'

$Q = CA\sqrt{2gH}$

$Q = (.5 \times 4.5 \times \frac{5}{7})\sqrt{2g(4.5-1.5)}$

$Q = 50$ cfs

Sum of Flows from SWS Systems

System #	Qp
1	4.3
2	20.5
3	36.8
4	14.0
	75 cfs

SHEET FLOW from Basin #4 Q = 21

Total on-site Flow = 108

Total D.A. Flow = 158 cfs

CHANNEL SECTION # 1 Top Width = 47.6'

CHANNEL SECTION # 2 Top Width = 43.6'

CHANNEL SECTION # 3 Top Width = 46'

System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P1-1	I1-1	0.80	0.72	0.58	Outlet	18 inch	0.021260	127.00	53.70	51.00	4.28
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Project Title: Bridgefield Addition
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Project Engineer: Baughman Company, P.A.
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System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P2-1	I2-1	1.10	0.72	0.79	I2-2	18 inch	0.009804	51.00	51.00	50.50	5.88
P2-2	I2-2	1.90	0.72	2.16	I2-3	18 inch	0.005336	281.00	50.00	48.50	15.94
P2-3	I2-3	0.95	0.72	2.81	Outlet	24 inch	0.019802	202.00	48.00	44.00	20.45
	N/A	N/A	N/A	2.81	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P3-1	I3-1	0.70	0.00	0.00	I3-2	18 inch	0.011429	35.00	50.90	50.50	2.00
P3-2	I3-2	5.10	0.00	0.00	I3-3	18 inch	0.001553	322.00	50.00	49.50	5.00
P3-3	I3-3	2.20	0.72	1.58	I3-4	24 inch	0.014286	35.00	49.00	48.50	32.70
P3-4	I3-4	1.20	0.72	2.45	Outlet	24 inch	0.030864	162.00	48.00	43.00	36.79
	N/A	N/A	N/A	2.45	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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System Report

Pipe	Upstream Node	Inlet Area (acres)	Weighted Roughness Coefficient	Total CA (acres)	Downstream Node	Section Size	Constructed Slope (ft/ft)	Length (ft)	Upstream Invert Elevation (ft)	Downstream Invert Elevation (ft)	Discharge (cfs)
P4-6	I4-5	0.90	0.72	0.65	I4-6	18 inch	0.005556	36.00	43.00	42.80	2.50
P4-7	I4-6	0.50	0.72	1.01	I4-4	18 inch	0.003106	161.00	42.60	42.10	3.84
P4-1	I4-1	1.30	0.72	0.94	I4-2	18 inch	0.002976	168.00	43.40	42.90	3.61
P4-2	I4-2	1.20	0.72	1.80	I4-3	18 inch	0.002778	36.00	42.70	42.60	6.68
P4-3	I4-3	0.60	0.72	2.23	I4-4	24 inch	0.001987	151.00	42.40	42.10	8.24
P4-4	I4-4	1.00	0.72	3.96	J4-1	24 inch	0.001863	161.00	41.90	41.60	14.22
P4-5	J4-1	N/A	N/A	3.96	Outlet	24 inch	0.002083	192.00	41.40	41.00	13.98
	N/A	N/A	N/A	3.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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CURRENT DATE: 03-19-1997 FILE DATE: 03-19-1997
CURRENT TIME: 14:35:18 FILE NAME: BRIDGE

FHWA CULVERT ANALYSIS
HY-8, VERSION 4.1

C U L V	SITE DATA			CULVERT SHAPE, MATERIAL, INLET				
	INLET ELEV. (FT)	OUTLET ELEV. (FT)	CULVERT LENGTH (FT)	BARRELS SHAPE MATERIAL	SPAN (FT)	RISE (FT)	MANNING n	INLET TYPE
1	39.94	38.06	97.01	3 RCP	3.00	3.00	.012	CONVENTIONAL
2								
3								
4								
5								
6								

SUMMARY OF CULVERT FLOWS (CFS) FILE: BRIDGE DATE: 03-19-1997

ELEV (FT)	TOTAL	1	2	3	4	5	6	ROADWAY	ITR
41.00	0	0	0	0	0	0	0	0	1
41.25	20	20	0	0	0	0	0	0	1
41.55	40	40	0	0	0	0	0	0	1
42.02	60	60	0	0	0	0	0	0	1
42.42	80	80	0	0	0	0	0	0	1
42.81	100	100	0	0	0	0	0	0	1
43.22	120	120	0	0	0	0	0	0	1
43.67	140	140	0	0	0	0	0	0	1
44.18	160	160	0	0	0	0	0	5	9
44.57	180	173	0	0	0	0	0	22	4
44.68	200	177	0	0	0	0	0	OVERTOPPING	
44.50	171	171	0	0	0	0	0		

SUMMARY OF ITERATIVE SOLUTION ERRORS FILE: BRIDGE DATE: 03-19-1997

HEAD ELEV(FT)	HEAD ERROR(FT)	TOTAL FLOW(CFS)	FLOW ERROR(CFS)	% FLOW ERROR
41.00	0.00	0	0	0.00
41.25	0.00	20	0	0.00
41.55	0.00	40	0	0.00
42.02	0.00	60	0	0.00
42.42	0.00	80	0	0.00
42.81	0.00	100	0	0.00
43.22	0.00	120	0	0.00
43.67	0.00	140	0	0.00
44.18	0.00	160	0	0.00
44.57	-0.01	180	1	0.78
44.68	-0.00	200	1	0.74

<1> TOLERANCE (FT) = 0.010 <2> TOLERANCE (%) = 1.000

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CURRENT DATE: 03-19-1997 FILE DATE: 03-19-1997
CURRENT TIME: 14:35:18 FILE NAME: BRIDGE

PERFORMANCE CURVE FOR CULVERT # 1 - 3 (3 BY 3) RCP

DISCHARGE FLOW (cfs)	HEADWATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE	NORMAL DEPTH <ft>	CRITICAL DEPTH <ft>	OUTLET VEL. (fps)	OUTLET TAILWATER DEPTH (ft)	TAILWATER VEL. (fps)	TAILWATER DEPTH (ft)
0	41.00	0.00	1.06	0-NF	0.00	0.00	0.00	0.00	0.00	2.94
20	41.25	1.02	1.31	5-M1t	0.50	0.80	0.95	2.94	0.00	2.94
40	41.55	1.61	1.61	1-S2n	0.72	1.16	10.05	0.72	0.00	2.94
60	42.02	2.07	2.07	1-S2n	0.91	1.43	10.52	0.95	0.00	2.94
80	42.42	2.48	2.48	1-S2n	1.05	1.66	11.24	1.11	0.00	2.94
100	42.81	2.87	2.87	1-S2n	1.19	1.87	11.84	1.26	0.00	2.94
120	43.22	3.27	3.27	5-S2n	1.31	2.06	12.29	1.41	0.00	2.94
140	43.67	3.72	3.72	5-S2n	1.43	2.22	12.72	1.55	0.00	2.94
160	44.18	4.24	4.24	5-S2n	1.55	2.37	13.10	1.68	0.00	2.94
173	44.56	4.62	4.62	5-S2n	1.63	2.45	13.35	1.77	0.00	2.94
177	44.67	4.73	4.73	5-S2n	1.65	2.47	13.43	1.79	0.00	2.94

El. inlet face invert 39.94 ft El. outlet invert 38.06 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

- SITE DATA ***** EMBANKMENT TOE **********
UPSTREAM STATION (FT) 0.00
UPSTREAM ELEVATION (FT) 40.00
UPSTREAM EMBANKMENT SLOPE (X:1) 1.00
DOWNSTREAM STATION (FT) 103.00
DOWNSTREAM ELEVATION (FT) 38.00
DOWNSTREAM EMBANKMENT SLOPE (X:1) 1.00

*-*** CULVERT DATA SUMMARY **********
BARREL SHAPE CIRCULAR
BARREL DIAMETER 3.00 FT
BARREL MATERIAL CONCRETE
BARREL MANNING'S N 0.012
INLET TYPE CONVENTIONAL
INLET EDGE AND WALL SQUARE EDGE WITH HEADWALL
INLET DEPRESSION NONE

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CURRENT DATE: 03-19-1997 FILE DATE: 03-19-1997
CURRENT TIME: 14:35:18 FILE NAME: BRIDGE

TAILWATER

CONSTANT WATER SURFACE ELEVATION
41.00

ROADWAY OVERTOPPING DATA

WEIR COEFFICIENT	2.86
EMBANKMENT TOP WIDTH (FT)	46.00
CREST LENGTH (FT)	100.00
OVERTOPPING CREST ELEVATION (FT)	44.50

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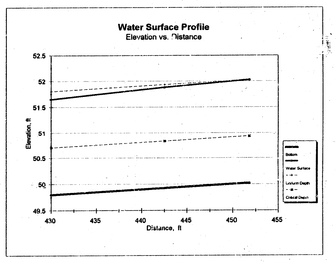
Channel Properties

Bottom Width ft	Bottom Slope ft/ft	Left Side Slop H:1	Right Side Slop H:1	Manning's n	Discharge cfs	Critical Depth ft	Uniform Depth ft	Classifications Channel	Profile
30	0.0103	4	4	0.1	160	0.91	2.00	mild	M2

Starting Point

Station ft	Bottom Elevation ft	Flow Depth ft	Depth Step ft	Directional Depth Ste ft
430	49.8	1.65	0.1	0.10

Depth ft	Area ft^2	Velocity ft/s	Specific Energy ft	Wetted Perimeter ft	Hydraulic Radius ft	Ave. Friction Slope ft/ft	Delta X ft	X ft	Bottom Elevation ft	Water Surface Elevation ft
1.65	90.90	2.04	1.95	45.26	1.990	-------		430.00	49.80	51.45
1.85	96.30	2.41	2.04	46.06	1.439	0.0175	12.00	442.00	49.63	51.48
1.90	98.12	2.35	2.09	46.52	1.464	0.0155	2.32	451.66	50.03	51.93
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03
2.00	98.12	2.35	2.09	46.52	1.464	0.0149	0.00	451.66	50.03	52.03



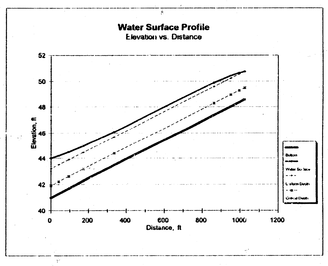
Channel Properties

Bottom Width ft	Bottom Slope ft/ft	Left Side Slop H:1	Right Side Slop H:1	Manning's n	Discharge cfs	Critical Depth ft	Uniform Depth ft	Classifications Channel	Profile
30	0.0074	4	4	0.1	160	0.91	2.20	mild	M1

Starting Point

Station ft	Bottom Elevation ft	Flow Depth ft	Dep. S Step ft	Directional Depth Ste ft
0	41	3	0.1	-0.10

Depth ft	Area ft^2	Velocity ft/s	Specific Energy ft	Wetted Perimeter ft	Hydraulic Radius ft	Ave Friction Slope ft/ft	Delta X ft	X ft	Bottom Elevation ft	Water Surface Elevation ft
3.00	102.00	1.57	3.04	54.74	1.863	-------		0.00	41.00	44.00
2.90	98.80	1.62	2.94	53.91	1.828	0.0061	41.74	41.74	41.31	44.21
2.80	95.20	1.68	2.84	53.08	1.793	0.0056	53.57	84.81	41.70	44.50
2.70	91.80	1.74	2.75	52.25	1.756	0.0061	47.23	132.08	42.27	44.97
2.60	88.40	1.81	2.65	51.44	1.719	0.0066	183.91	315.99	43.49	46.09
2.50	85.00	1.88	2.56	50.62	1.679	0.0078	524.51	840.51	47.36	49.86
2.40	81.60	1.96	2.46	49.79	1.639	0.0085	88.33	928.84	48.04	50.44
2.30	78.20	2.05	2.37	49.97	1.597	0.0095	41.22	970.06	48.36	50.66
2.20	74.80	2.14	2.27	48.14	1.554	0.0108	27.89	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77
2.20	74.73	2.14	2.27	48.12	1.553	0.0115	0.00	1023.98	48.57	50.77



Channel Properties

Bottom Width ft	Bottom Slope ft/ft	Left Side Slop H:1	Right Side Slop H:1	Manning's n	Discharge cfs	Critical Depth ft	Uniform Depth ft	Classifications Channel	Profile
30	0.0187	4	4	0.1	160	0.91	1.59	mild	M1

Starting Point

Station ft	Bottom Elevation ft	Flow Depth ft	Depth Step ft	Directional Depth Ste ft
200	45.5	2.7	0.1	-0.10

Depth ft	Area ft^2	Velocity ft/s	Specific Energy ft	Wetted Perimeter ft	Hydraulic Radius ft	Ave Friction Slope ft/ft	Delta X ft	X ft	Bottom Elevation ft	Water Surface Elevation ft
2.70	91.80	1.74	2.75	52.25	1.756	-------		200.00	45.50	48.20
2.60	88.40	1.81	2.65	51.44	1.719	0.0036	8.10	208.10	45.65	48.25
2.50	85.00	1.88	2.56	50.62	1.679	0.0078	8.62	216.72	45.81	48.31
2.40	81.60	1.96	2.46	49.79	1.639	0.0085	9.33	226.05	45.99	48.39
2.30	78.20	2.05	2.37	49.97	1.597	0.0095	10.33	236.38	46.18	48.48
2.20	74.80	2.14	2.27	48.14	1.554	0.0108	11.68	248.24	46.40	48.60
2.10	71.40	2.24	2.18	47.32	1.508	0.0123	14.45	262.69	46.67	48.77
2.00	68.00	2.35	2.09	46.49	1.463	0.0150	19.78	282.45	47.04	49.04
1.90	64.40	2.48	2.00	45.67	1.410	0.0182	36.44	318.88	47.72	49.62
1.80	61.40	2.61	1.91	44.84	1.365	0.0199	527.14	846.03	57.58	59.38
1.70	57.80	2.77	1.82	44.02	1.313	0.0227	25.11	871.14	58.05	59.75
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
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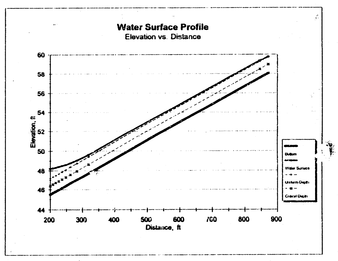
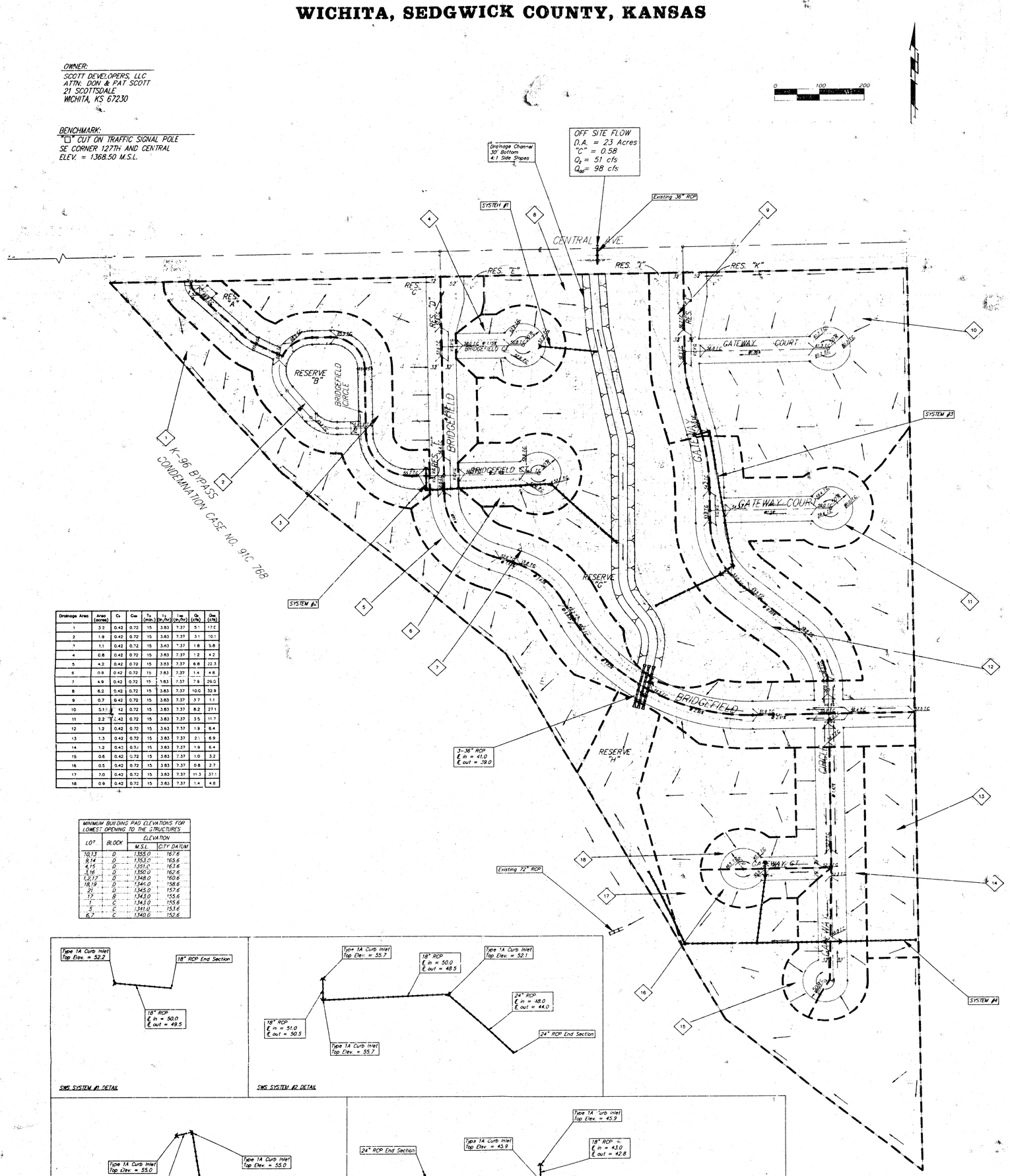
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76
1.69	57.57	2.78	1.81	43.96	1.310	0.0243	0.00	872.21	58.07	59.76



DRAINAGE PLAN
BRIDGEFIELD ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

OWNER:
SCOTT DEVELOPERS, LLC
ATTN: DON & PAT SCOTT
21 SCOTTSDALE
WICHITA, KS 67230

BENCHMARK:
"□" CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127TH AND CENTRAL
ELEV. = 1368.50 M.S.L.



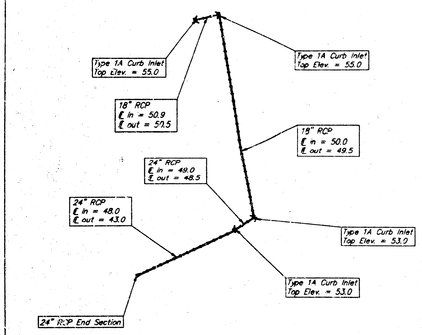
Drainage Area	Area (acres)	C_5	C_{100}	T_c (min.)	I_5 (in/hr)	I_{100} (in/hr)	Q_5 (cfs)	Q_{100} (cfs)
1	3.2	0.42	0.72	15	3.83	7.37	5.1	17.0
2	1.9	0.42	0.72	15	3.83	7.37	3.1	10.1
3	1.1	0.42	0.72	15	3.83	7.37	1.8	5.8
4	0.8	0.42	0.72	15	3.83	7.37	1.2	4.2
5	4.2	0.42	0.72	15	3.83	7.37	6.8	22.3
6	0.9	0.42	0.72	15	3.83	7.37	1.4	4.8
7	4.9	0.42	0.72	15	3.83	7.37	7.9	26.0
8	6.2	0.42	0.72	15	3.83	7.37	10.0	32.9
9	0.7	0.42	0.72	15	3.83	7.37	1.1	3.7
10	5.1	0.42	0.72	15	3.83	7.37	8.2	27.1
11	2.2	0.42	0.72	15	3.83	7.37	3.5	11.7
12	1.2	0.42	0.72	15	3.83	7.37	1.9	6.4
13	1.3	0.42	0.72	15	3.83	7.37	2.1	6.9
14	1.2	0.42	0.72	15	3.83	7.37	1.9	6.4
15	0.6	0.42	0.72	15	3.83	7.37	1.0	3.2
16	0.5	0.42	0.72	15	3.83	7.37	0.8	2.7
17	7.0	0.42	0.72	15	3.83	7.37	11.3	37.1
18	0.9	0.42	0.72	15	3.83	7.37	1.4	4.8

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES

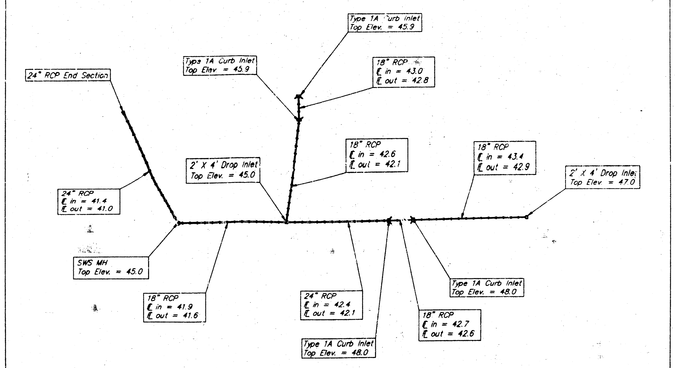
LOT	BLOCK	ELEVATION M.S.L.	ELEVATION CITY DATUM
10,13	D	1355.0	167.6
9,14	D	1353.0	165.6
4,15	D	1351.0	163.6
3,16	D	1350.0	162.6
1,2,17	D	1348.0	160.6
18,19	D	1346.0	158.6
21	D	1345.0	157.6
12	B	1343.0	155.6
1	C	1343.0	155.6
5	C	1341.0	153.6
6,7	C	1340.0	152.6

SWS SYSTEM #1 DETAIL

SWS SYSTEM #2 DETAIL



SWS SYSTEM #3 DETAIL

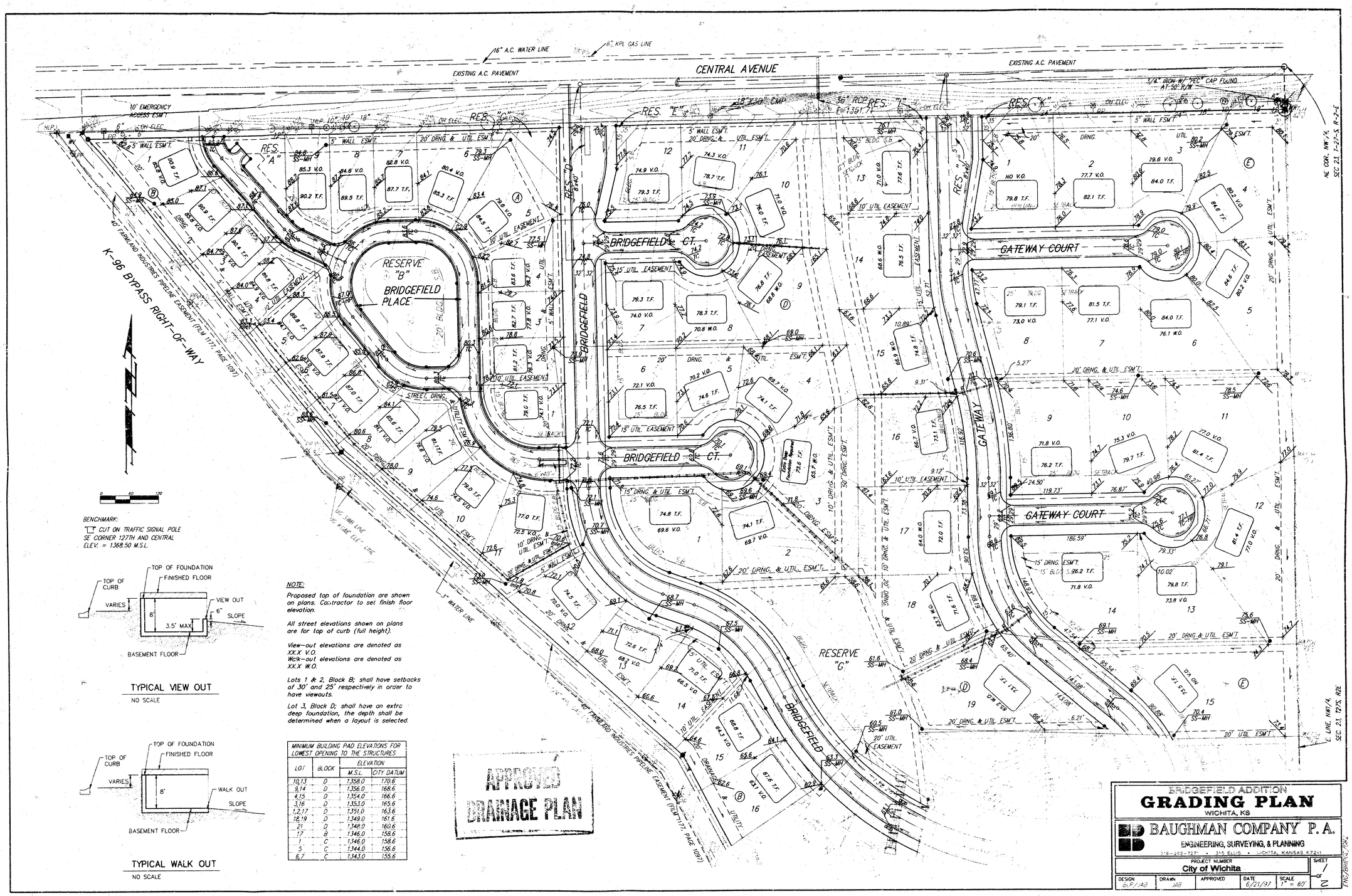


SWS SYSTEM #4 DETAIL

Note: Elevations shown on this Drainage Plan are in Mean Sea Level. To Convert MSL to City Datum subtract 1187.4' from MSL.

The "Drainage Plan" being submitted herein is intended to serve as a guide for the design of streets and storm water sewer improvements. Modifications to structures, pipes, etc. may be necessary during the final design in order to obtain the most economical design and construction possible.

BAUGHMAN COMPANY P. A.
ENGINEERING, SURVEYING, & PLANNING
316 N. 7TH • 315 ELLIS • WICHITA, KANSAS 67211



BENCHMARK:
CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127TH AND CENTRAL
ELEV. = 1368.50 M.S.L.

TYPICAL VIEW OUT
NO SCALE

TYPICAL WALK OUT
NO SCALE

NOTE:

Proposed top of foundation are shown on plans. Contractor to set finish floor elevation.

All street elevations shown on plans are for top of curb (full height).

View-out elevations are denoted as XX.X V.O.
Walk-out elevations are denoted as XX.X W.O.

Lots 1 & 2, Block B; shall have setbacks of 30' and 25' respectively in order to have viewouts.

Lot 3, Block D; shall have an extra deep foundation, the depth shall be determined when a layout is selected.

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES

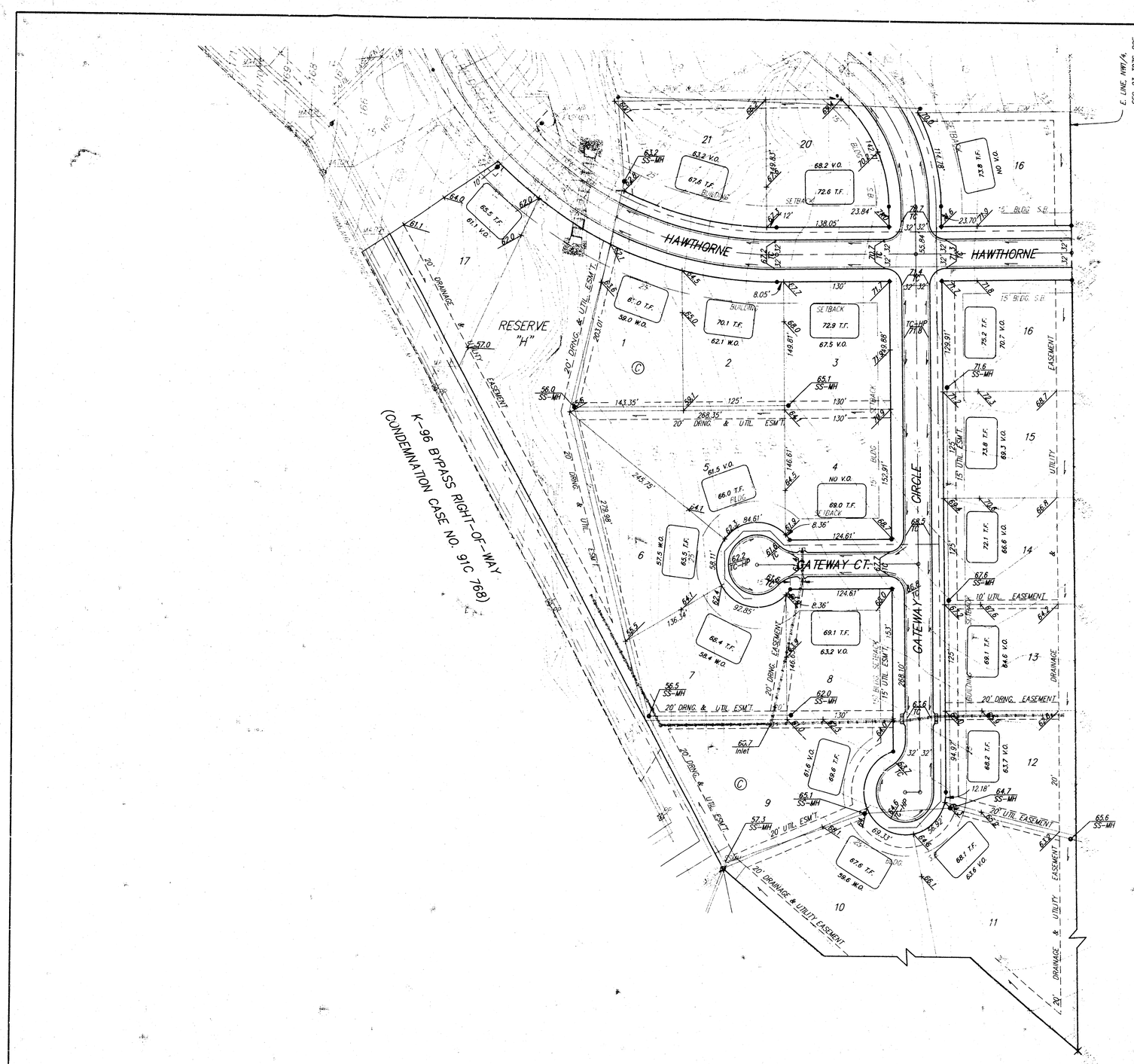
LOT	BLOCK	ELEVATION	
		M.S.L.	CITY DATUM
10,13	D	1358.0	170.6
9,14	D	1356.0	168.6
4,15	D	1354.0	166.6
3,16	D	1353.0	165.6
1,2,17	D	1351.0	163.6
18,19	D	1349.0	161.6
21	D	1348.0	160.6
17	B	1346.0	158.6
1	C	1346.0	158.6
5	C	1344.0	156.6
6,7	C	1343.0	155.6

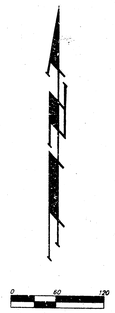
BRIDGEFIELD ADDITION
GRADING PLAN
WICHITA, KS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

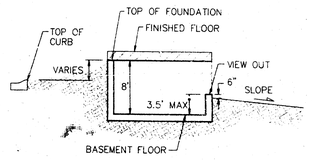
PROJECT NUMBER					SHEET
City of Wichita					1 OF 2
DESIGN	DRAWN	APPROVED	DATE	SCALE	
BLP/JAB	JAB		6/21/97	1" = 60'	

ENG/BRIDGE/GRA

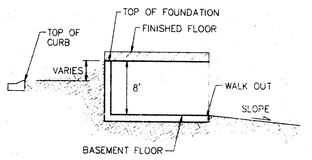




BENCHMARK:
"L" CUT ON TRAFFIC SIGNAL POLE
SE CORNER 127TH AND CENTRAL
ELEV. = 1368.50 M.S.L.



TYPICAL VIEW OUT
NO SCALE



TYPICAL WALK OUT
NO SCALE

NOTE:
Proposed top of foundation are shown on plans. Contractor to set finish floor elevation.

All street elevations shown on plans are for top of curb (full height).

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LOT	BLOCK	ELEVATION M.S.L.	ELEVATION CITY DATUM
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4,15	D	1354.0	166.6
3,16	D	1353.0	165.6
1,2,17	D	1351.0	163.6
18,19	D	1349.0	151.6
21	D	1348.0	160.6
17	B	1346.0	158.6
1	C	1346.0	156.6
5	C	1344.0	156.6
6,7	C	1343.0	155.6

BRIDGEFIELD
GRADING PLAN
WICHITA, KS

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER				SHEET
				2 OF 2
DESIGN: SLP/JAB	DRAWN: JAB	APPROVED	DATE: 5/29/97	SCALE: 1" = 60'

ENG/BRIDGE/GP2