OFFICE OF COUNTY ENGINEER
RAMSEY COUNTY, MINN.

PLAN Survey

FROST AVE.

From BIRMINGHAM To WHITE BEAR

Road Acc't. No. D12-848

Date Filed 2-28-86 File

ML
DS
DK

Sunny 60°
SEPT 29, 81 1

PLAN SURVEY
FROST AVE
300'± WEST OF BIRMINGHAM
TO HAZELWOOD AVE

ALINEMENT

STA	PT		
58+98.72	MONUMENT	HAZELWOOD + FROST	
46+28.03	P.O.T.		
43+00	BEG SURVEY		

PLAN SURVEY

FROST AVE.

HAZELWOOD TO WHITE BEAR AVE

ML
DS
MR

DEC 27, 18

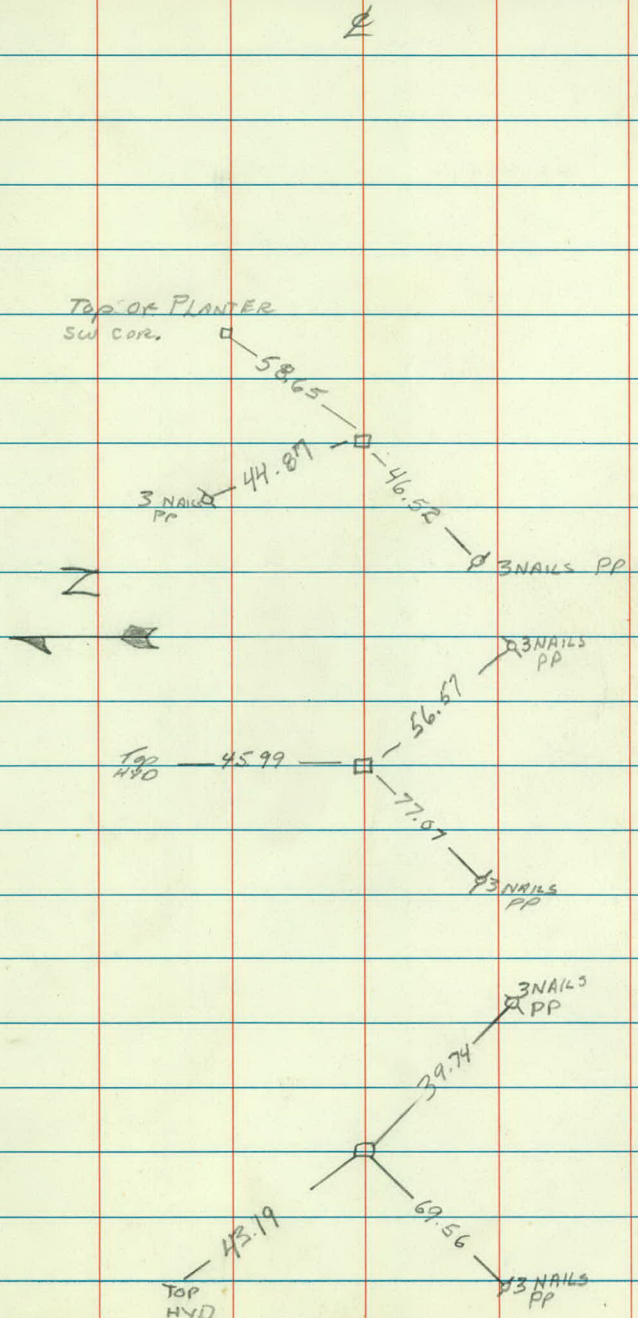
SUNNY 2°

ALINEMENT

FROST AVE

HAZELWOOD TO WHITE BEAR AVE

STA	POINT
84+00	POL
72+00	POL
58+98.72	℄ HAZELWOOD AVE (C.I. MONUMENT)


Top of Planter
SW cor.
58.65
44.87
46.52
3 Nails
PP
3 Nails PP
N
3 Nails
PP
56.57
Top
Hyd
45.99
77.07
3 Nails
PP
3 Nails
PP
39.74
69.56
43.19
Top
Hyd
3 Nails
PP

ML
DS
DK

Sunny 60°
Sept 29 81 4

BENCH MARKS

FROST AVE

300± WEST BIRMINGHAM

TO HAZELWOOD AVE

STA	+	IA	−	ELEV	
BM1	2.05	904.43		902.38	
BM2	4.73	908.80	0.36	904.07	
BM3	4.32	910.45	2.67	906.13	
SS 4			1.89	908.56	
BM5	5.82	912.61	3.66	906.79	
BM6	2.14	914.21	1.14	911.47	
BM7	0.80	912.95	2.06	912.15	
BM8	5.62	913.06	5.51	907.44	
BM7	2.17	914.32	0.91	912.15	
BM6	1.03	912.49	2.86	911.46	
BM5	3.14	910.52	5.71	906.78	
SS 4	[illegible]	[illegible]	1.98	908.54	
BM3	2.64	908.76	4.40	906.12	
BM2	0.60	904.65	4.71	904.05	
BM1			2.29	902.36	902.38

Top HYD NW Cor Dieter & Frost

NE Cor Bottom Step No = 1488

Top HYD NW Cor Barclay & Frost

Spike in PP 50+80 Rt

Top HYD NW Cor Manton & Frost

Top HYD 45+50 LT 35'

Top HYD NW Cor Ide & Frost

ML
DS
RC

SUNNY 30°

BENCH LEVELS

FROST AVE.

HAZELWOOD TO W. B. A.

STA	+	π	−	ELEV
BM_1	0.79	974.29		973.50
BM_2	0.32	965.18	9.43	964.86
BM_3	0.20	953.88	11.50	953.68
BM_4	0.62	942.69	11.81	942.07
BM_5	0.95	934.01	9.63	933.06
BM_6	0.08	925.44	8.65	925.36
BM_7	2.55	916.36	11.63	913.81
BM_8	1.45	910.93	6.88	909.48
BM_9	3.50	911.96	2.47	908.46
BM_{10}	0.19	908.45	3.70	908.26
BM_{11}	6.15	908.53	6.07	902.38
BM_{10}	3.68	911.93	0.28	908.25
BM_9	2.59	911.04	3.48	908.45
BM_8	7.15	916.62	1.57	909.47
BM_7	12.27	926.06	2.83	913.79
BM_6	9.00	934.33	0.73	925.33
BM_5	9.46	942.49	1.30	933.03
BM_4	12.49	954.53	0.45	942.04
BM_3	11.88	965.52	0.89	953.64

Top HYD IN FRONT YARD R.C. NURSING HOME

SPIKE IN P.P. LT Ho 1761

Top S.E COR BOTTOM STEP 1739

Top HYD SW COR FROST & FLANDRAU

SPIKE GUIDE POLE LT Ho # 1931

SPIKE TRANSFORMER POLE RT Ho # 1695

N.W. COR RETAINING WALL Ho # 1684

Top HYD N.W COR FROST & KENNARD

Top HYD N.W COR. FROST & ROSELWOOD

Top HYD N.W. COR FROST & PROSPERITY

Top HYD N.W. COR FROST & HAZELWOOD

	+	Π	−	ELEV.	
BM 2	9.48	974.30	0.76	964.82	
BM 1			0.84	973.46	973.50

ML
DS
DK

Cloudy 55°
Oct 5, 81 6

TOPOGRAPHY

FROST AVE

300± WEST OF BIRMINGHAM

TO HAZELWOOD AVE

LT ℄ RT

+50

+49 BR
22

+34 15" C.W.
+05 15" C.W.
41

+22 3" PINE
55

+00 SW
28-31

45

+00 RD
20

+00 CONC
10

+00 CONC
10

+00 RD
21

+05 NE COR NO
58

+75 MW
18

+78 20" ASH
41

+61 4" ASH
42

+73 NW COR NO
58

+50

+38 BEG CONC SW
28-34

+46 FLOWER BED (3'R)
55

+31 2" PINE
58

+38 BG 18 C+G
34-109

+21 MW
18

+22 PP
27

+26 BUSH
37

+28 9" COTTONWOOD
50

+11 PP
67

+12 BG 18 C+G
34

+19 FLAGSTONE WALK
28-64

+06 20" ELM
53

+05 CORNER HEDGE
33

+12 ℄ 12' GRAV. ENT

+02 PROP IRON
33

44

+00 RD
20

+00 CONC
10

+00 CONC
10

+00 RD
21

+98 HOUSE FOUNDATION (BLOCK)
47-78

+85 SE COR NO
66

+73 BEG HEDGE
33

+88 CTR CONC STEPS 5'
29-47

+67 SW NO
66

+70 CONC S.W. 3'
33

+68 END HEDGE
33

+63 15" PINE
41

+74 HOUSE FOUNDATION (BLOCK)
47-78

+63 18" ELM
51

+63 16" ELM
62

+56 SE COR GAR
70

+50

+39 ℄ 9' BIT ENT

+48 BEG HEDGE
34

+39 SW COR GAR
70

+36 28" ELM
36

+22 BUSH
67

+13 15" APPLE
71

+13 STUMP
54

+00 RD
20

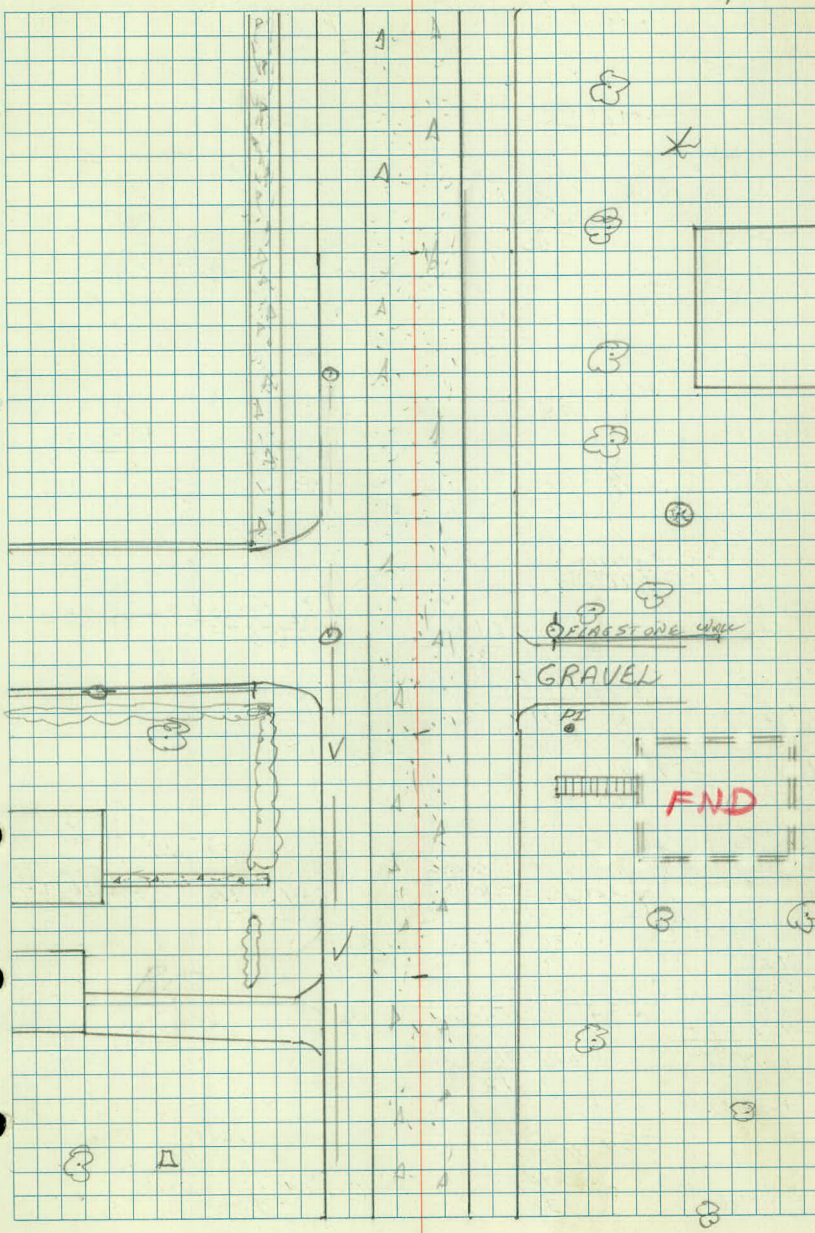
+00 CONC
10

+00 RD
10

+00 17" ELM
60

43

+00 RD
20


FIRST ONE WALK
GRAVEL
PL
FND

LT ℄ RT

48 +00 SW 27-33 +00 RD 27 +00 CONC 10 +00 CONC 10 +00 RD 20

+89 ℄ 6' CONC S.W. +89 LIGHT POST 65 +90 COR WOOD FE 66

+57 CONC SW 96-100 +57 SW COR SCHOOL WING 107

+50 18" ELM 63

+50

+30 END SIGN 55 +28 BUSH 39 +28 BUSH 79 +49 PP 28 +49 PP 76

+21 BEG SIGN 55

+04 CONC SW 95-101 +04 SE COR SCHOOL WING 124

+13 NE COR APT BLDG 63

47 +00 CONC SW 27-33 +00 RD 27 +00 CONC 10 +00 CONC 10 +00 RD 21

+81 WSO 20

+81 12" PINE 66

+66 ℄ 9' CONC SW 34 +75 ℄ 5' CONC S.W. 23-63

+60 14" ELM 39

+50

+51 PP 27

+49 14" PINE 65

#426

+35 NW COR APT BLDG 63

+29 SW COR SCHOOL WING 124 +04 ER 21 +06 20" TWIN B.E. 34

46 +00 SW 28-34 +60 RD 28 +00 CONC 10 +00 CONC 10

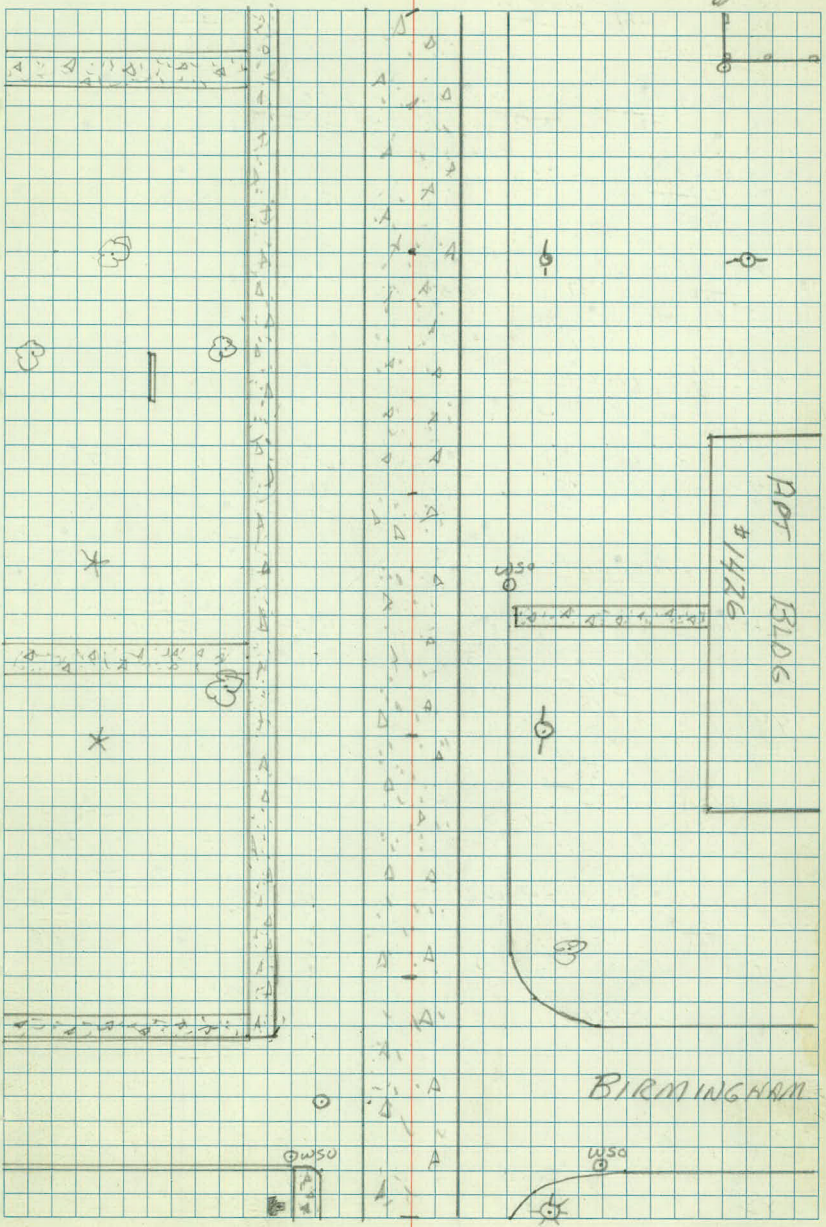
+96 SW 100-106 +87 BG 18 C46 ← 34 +87 BEG S.W. 28-34

+90 ℄ C.S.W. ← 34 +74 MN 18 +96 POR 26 +90 BR 39

+63 WSO 35 +61 BG 18 C46 34-109 +61 END SW 28-34 +60 ER 40 +62 WSO 34

+53 MYD 38 +52 ARC LT 27 +56 POR 26

45+50


DOT
BLDG
#1426
WSO
WSO
WSO
BIRMINGHAM

LT

+50

+41 24" BIT ENT

+31 SW COR GAR 70

+28 END BEECH 37

+20 SE COR HO 77

+20 END SW 64

+14 4" PINE 46

+06 BEC WOOD 37

+00 COR HO 70-77

+25 12" CMP 27

+00 RD 20

+00 CONC 10

50

+89 5" PINE 47

+90 12" MAPLE 37

+83 COR HO 64-70

+80 BUSH 37

+76 20" ELM 48

+71 BUSH 37

+71 SW COR HO 64

+58-61

+67 BUSH 37

+63 6" PINE 47

+62 HO MAPLE 36

+85 BUSH 37

+56 BUSH 37

+58 BUSH 37

+53 CEDAR 45

+52 BUSH 37

+50

+48 BUSH 37

+44 4" PINE 47

+49 ER 21

+37 ROW BUSHES 39-70

+33 CONC SW 47-50

+29 PO 26

+26 PP 66

+21 BR 39

+03 MH 18

49

+00 CONC 10

+00 CONC 10

+90 WSO 33

+81 ER 37

+76 PO 29

+79 END SW 27-33

+79 HO 37

+68 6' CONC SW 33

+68 BR 27

+65 END SW 96-100

+65 17" ELM 54

+50

+47 FLAGPOLE 68

+15 4' CONC 96-100

+15 SE COR HO SE NW CONC

48

POS

RT

+48 12" CMP 28

+40 NW COR GAR 63

+27 3" CEDAR 52

+23 END FE 60

+06 (3) BEECH 8" 43

+04 BEC WOOD FE 60

+04 NE COR HO 63

+00 RD 21

+65 8" CEDAR 51

+65 NW COR HO 63

+46 END FE 32

+44 BUSH 35

+41 8" MAPLE 58

+40 BUSH 35

+39 COR WOOD FE 32-40

+32 ER 21

+30 PP 26

+26 PO 23

+21 BR 31

+92 WSO 33

+89 ER 38

+75 PO 26

+62 BUSH 47

+62 BR 21

+52 20" PINE 58

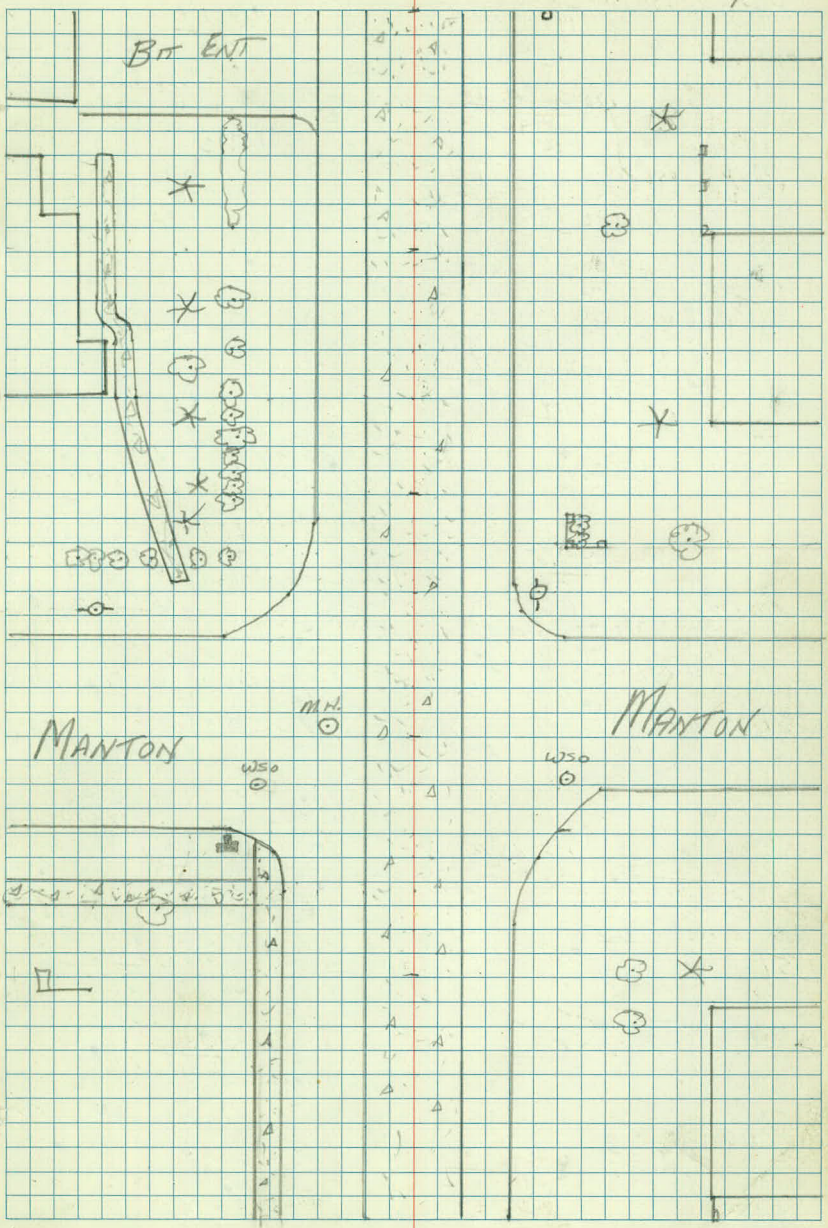
+52 BUSH 46

+44 NE COR HO 63

+42 BUSH 46

+05 END FE 63

+05 NW COR HO 63


BTT ENT.
MANTON
M.H.
WSO
MANTON
WSO

LT

53

+00 RO 19

+00 CONC 10

+00 CONC 10

+98 NW COR HO 65

+70 SW COR HO 92

+64 BEG HEDGE 36

+56 GR 20

+58 PP 53

+52 POR 23

+51 CMP 26

+50

+16 GR 35

+47 BR 31

+33 MH 18

+11 HMO 35

+11 POR 27

+07 COR HEDGE 33

+07 15" CMP 26

+04 24" BE 54

+04 BR 20

(K)

52

+00 16" BR 35

+88 SE COR HO 54

+74 BEG HEDGE 33

+71 E3 CONC S.W 22

+66 18" B.E 35

+69 END HEDGE 33

+55 SW COR HO 54

+50

+14 TWIN 20" BE 35

+10 BEG HEDGE 33

+38 2" MAPLE 35

+08 CMP 26

+05 SE COR GAR 55

+00 RO 19

+00 CONC 10

51

+91 E25 BIT ENT

+77 SW COR GAR 55

+64 HEDGE ← 35

+64 S.D. 26

50+50

+52 SE COR GAR 70

RT

+00 RO 21

+83 17" MAPLE 56

+59 ER 21

+56 ARC LIGHT 29

+52 POR 26

+47 BR 33

+21 W30 34

+05 POR 25

+14 ER 38

+14 DIRT ENT 38-50

+94 BR 21

+94 3" Pop 33

+89 4" Pop 33

+88 9" MAPLE 33

+87 9" Pop 33

+85 4" POP 33

+82 4" Pop 33

+69 NE CLEN'O 56

+78 BUSH 33

+74 4" Pop 33

+77 GRAVEL ENT 40-56

+70 2" Pop 33

+66 COR FE (C-L) 35-56

+63 2" Pop 33

+69 3" Pop 33

+56 4" Pop 33

+50 3" Pop 33

+64 3" Pop 33

+46 4" Pop 33

+44 NW COR HOUSE 56

+41 3" Pop 33

+40 15" ASH 38

+22 15" BIRCH 39

+03 4" BIRCH 55

+27 STUMP 54

+00 NE COR GAR 63

+00 CONC 10

+00 RO 22

+00 COR C-L. FE 35

+89 E15 BIT ENT

+79 NW COR GAR 63

+71 END FE (WOOD) 63

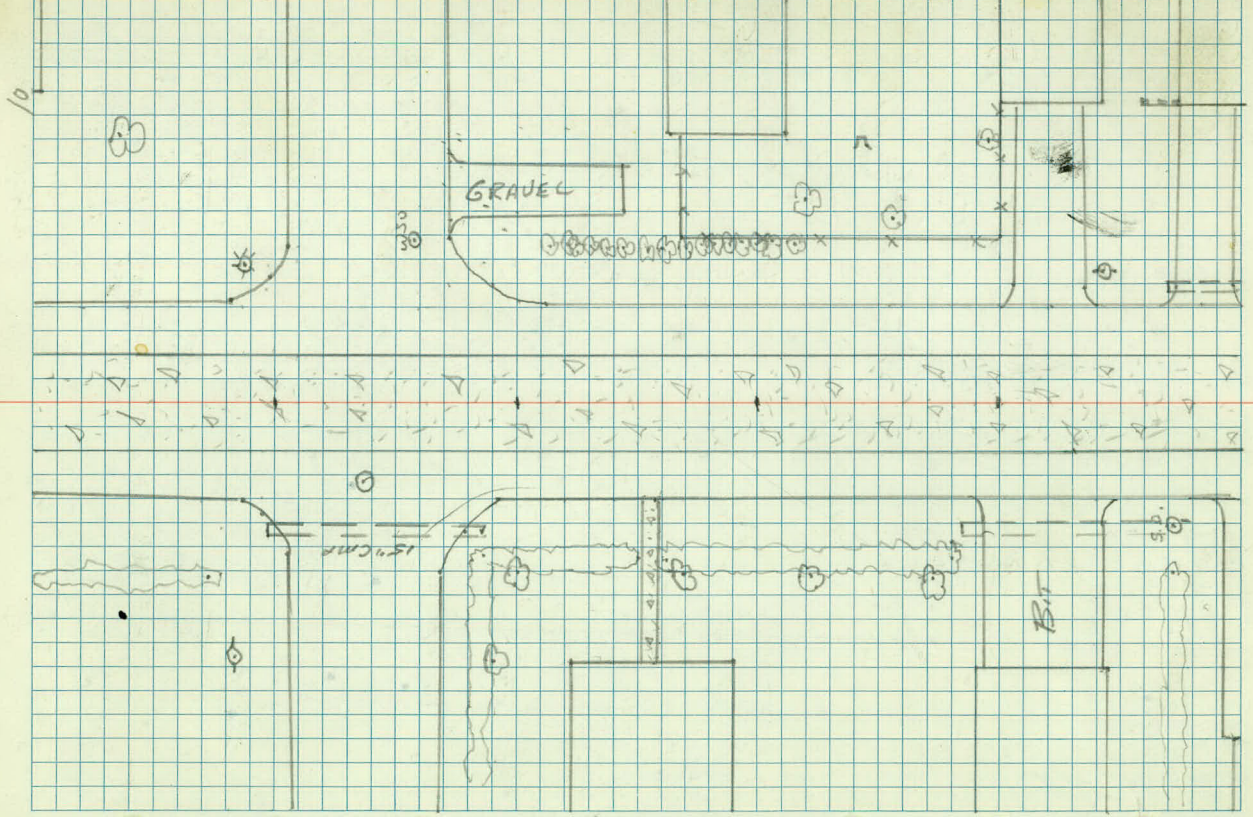
+79 PP 28

+64 BEG WOOD FE 63

+64 12" CMP 28

+64 NE COR GAR 63

+57 E12 BIT ENT

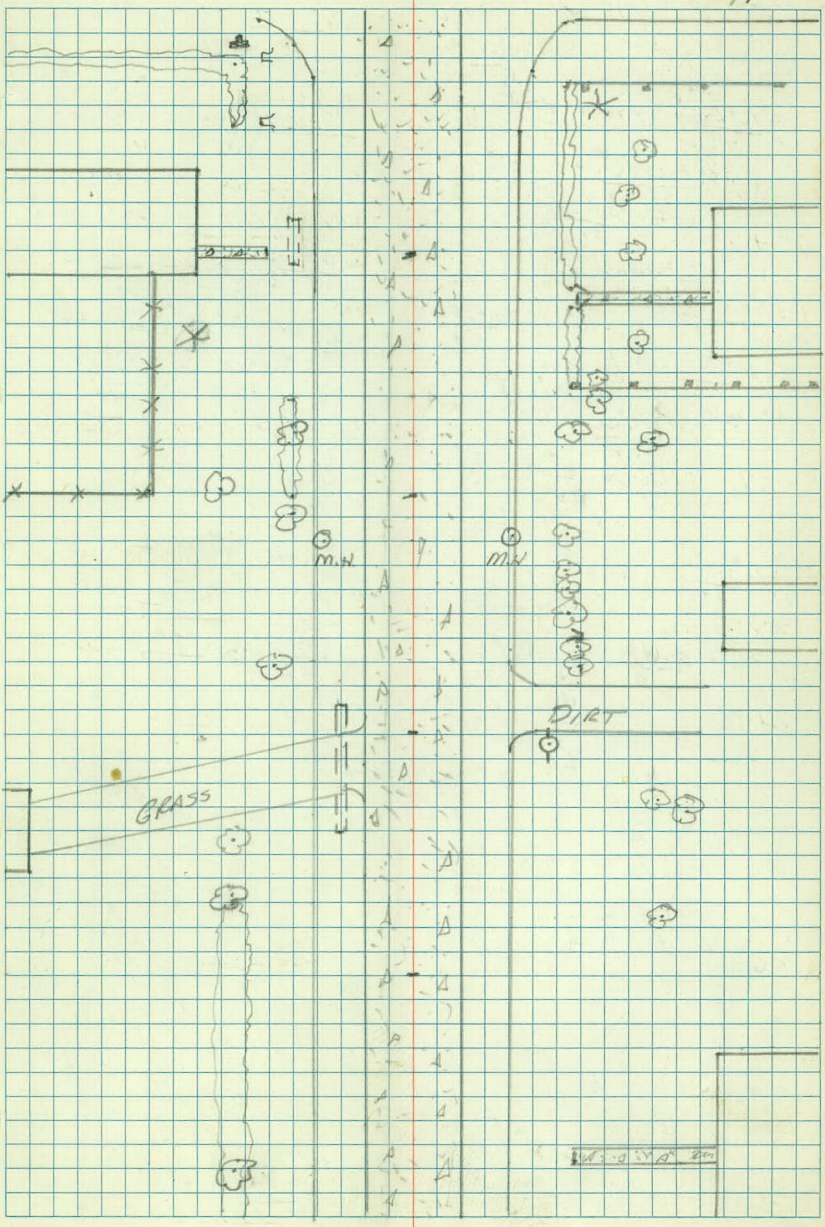

GRAVEL

+50
+41 BR 32
+42 MAP 36
+40 STUMP 32
+42 POR 25
+36 BR 21
+38 COR HEDGE 32
+28 STUMP 32
+26 BEG HEDGE 37
+06 15" CMP 25
+17 COR NO 45
+00 E 3' CONC SW 32
55
+98 15" CMP 25
#1503
+95 SW COR NO 45
+95 END FE (C-C) 54
+83 W" PINE 47
+68 END HEDGE 25
+63 18" ELM 24
+51 COR C-L FE 54
+51 18" ELM 40
+49 BEG HEDGE 25
+46 (3) 5" ASH 25
+41 MA 18
+14 3" POP 29
+06 15" CMP 25
+00 RO 20
+00 CONC 10
54
+94 E GRASS ENT
+80 15" CMP 25
+87 SE COR GAR 80
+78 BUSH 37
+73 SW COR GAR 80
+66 END HEDGE 37
+66 12" ASH 37
+50

+41 BR 43
+31 10" PINE 38
+09 NE COR NO 63
+00 CONC 10
+00 RO 20
+93 BEG HEDGE 33
#1504
+77 NW COR NO 3
+87 GATE 36
+94 GATE 3
+72 WOOD FE 33
+69 14" CW 39
+61 15" CW 50
+63 15" CW 34
+42 15" ELM 33
+41 MA 21
+19 STUMP 33
+30 (3) 8" POP 33
+34 5" POP 33
+32 NE COR NO 65
+25 15" CW 33
#1496
+17 NW COR NO 65
+17 3" POP 34
+65 2" DIRT ENT
+14 2" POP 35
+00 CONC 10
+00 RO 20
+97 PP 29
+86 10" ELM 52
+84 5" POP 53
+63 8" ASH 53

+38 POR 25
+35 END HEDGE 33
+35 WOOD COR FE 33
+26 BR 23
+21 2" MAPLE 48
+13 4" MAPLE 45
+00 2" APPLE 46
+88 END HEDGE
+74 BUSH 38
+81 2" 46
+72 BEG HEDGE 33

+22 SE COR NO 92
+08 16" MAPLE 36
53
+11 E 3' CONC SW 34
#1488
+34 NE COR NO 65


M.H
M.H
DIRT
GRASS

LT

58

+00 RO 18

+00 CONC 10

+80 22" MAPLE 42

+78 12" CEDAR 71

+78 10" PINE 56

+74 15" CMP 26

+69 COR FE (C-L) 34-87

+60 ¢ 17" CONC ENT 32

+50 SW COR NO 87

+50 15" CMP 26

+50

+46 BEG WEDGE 50

+38 SE COR NO 89

+46 22" MAPLE 41

+38 15" CMP 26

+29 ¢ 16 BIT ENT

+18 15" CMP 26

+20 COR C-L FE 33-84

57

+00 8" RSN 52

+00 RO 18

+00 CONC 10

+80 MH 17

+75 17" MAPLE 58

+73 SW COR NO 84

+73 COR FE C-L 33-84

+53 SE COR NO 84

+50

+15 18" ELM 39

+05 SW COR NO 84

+07 2" CONC SW 31-84

56

+98 ER 19

+98 12" BIRCH 74

+86 POR 27

+79 BR 39

+64 MH 18

+51 WSO 33

55+50

RT

+00 CONC 10

+00 RO 20

+90 IRON POST 37

+91 (3) 6" ASH 42

+94 IRON POST 31

+60 15" MAPLE 52

+60 (3) 8" MAPLE 33

+60 14" MAPLE 41

+59 POST 31

+59 COR FE C-L 32

+59 NE COR GAR 63

+49 ¢ 17 CONC ENT 31

+39 NW COR GAR 63

+31 PP 30

+25 6" CED 56

+29 COR FE 33-39

+23 BEG FE (WOOD) 33

+24 6" PINE 46

+18 NW COR GAR 62

+16 15" CMP 28

+06 ¢ 16" CONC ENT 35

+06 SW COR GAR 62

+06 CONC 10

+00 RO 21

+95 15" CMP 27

+80 10" PINE 57

+82 END FE 35

+72 END BRICK WALL 63

+63 NE COR NO 63

+63 BEG BRICK WALL 63

+24 NW COR NO 63

+04 BEG FE 34

+96 7" MAPLE 59

+96 ER 23

+89 ARC LT 30

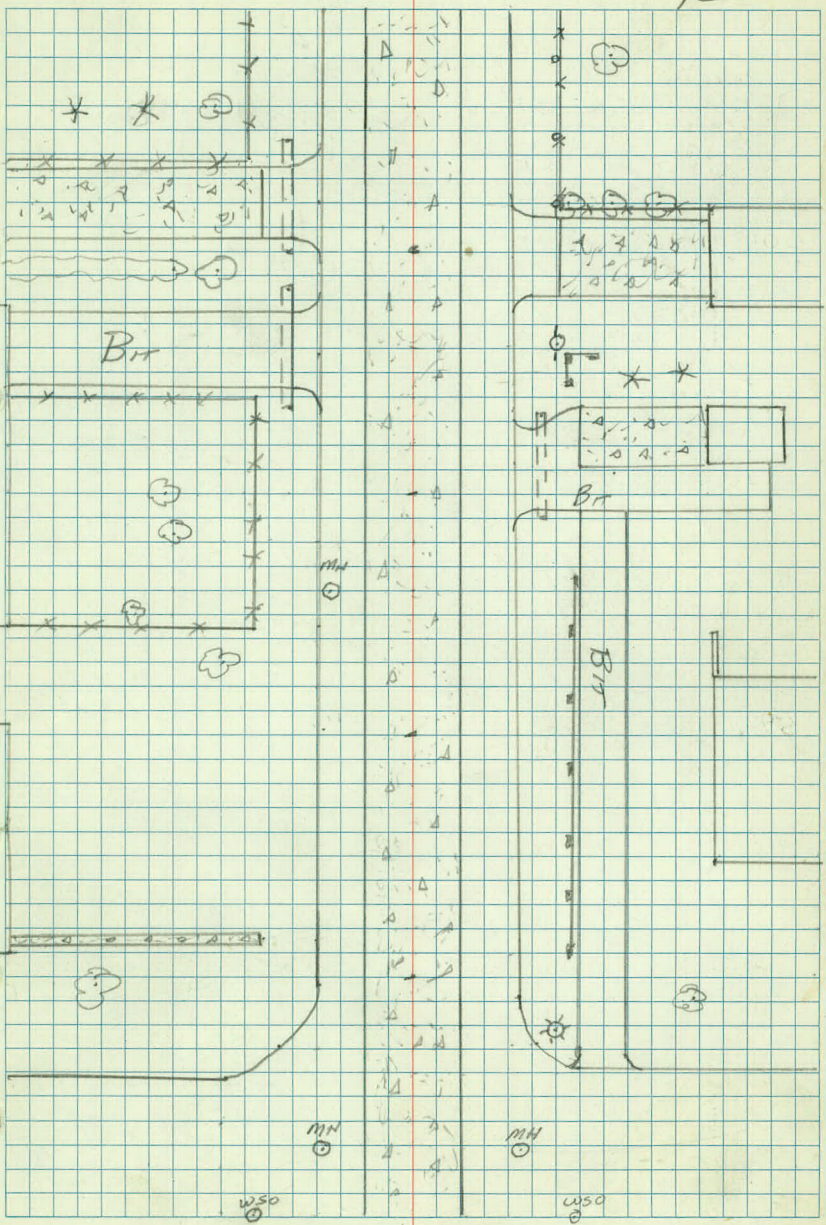
+80 POR 26

+81 BR 35

+81 BIT ENT 35-45

+64 MH 22

+50 WSO 34


Br
MH
Br
Br
MH
MH
WSO
WSO

LT ℄ RT

M.L.
DS
GA
BW
MR

DEC 28, 78

CLOUDY 28°

1

TOPOGRAPHY

FROST AVE

HAZELWOOD TO W.BA

LT ℄ RT

+50

+56 PARKING LOT 43

+41 LT. POLE 61

+40 7" MAPLE 59

60+00

+00 PARKING LOT 43 RO 24 RO 21

+92 4" ASH 60

+76 COR SIGN 42

+69 COR SIGN 43

+50

+43 SWCOR PARKINGLOT 43

+35 10" ELM 63

+28 ER 24

+36 5" MAPLE 65

+33 15" CMP 27

+21 24" RCP 35

+17 POR 32

+25 PP 30

+30 ER 20

+16 POR 29

+21 24" RCP 28

+10 BR 41

+99 MH 17

+08 BR 39

59+00

+81 ER 48

+75 HYD 35

+84 WSO 31

+72 POR 24

+83 ER 39

+62 16" MAPLE 70

+66 15" CMP 23

+64 COR FEN 33

+73 POR 27

+62 12" PINE 50

+60 BR 19

+58 END FEN 32

+59 POST 31

+60 TWIN 8" MAPLE 42

+57 BR 18

+47 3" POPLAR 32

+50

+40 3" POPLAR 33

+46 POST 31

+35 PP 30

+37 4" PINE 34

+33 POPLAR 33

+31 HO 55

+42 12" PINE 43

+33 4" PINE 35

+31 COR FEN 32-55

+34 CA. TREE 60

+24 POST 31

+08 HO # 1533 89

+21 24" MAPLE 43

+06 FEN 32-47

+06 HO 55

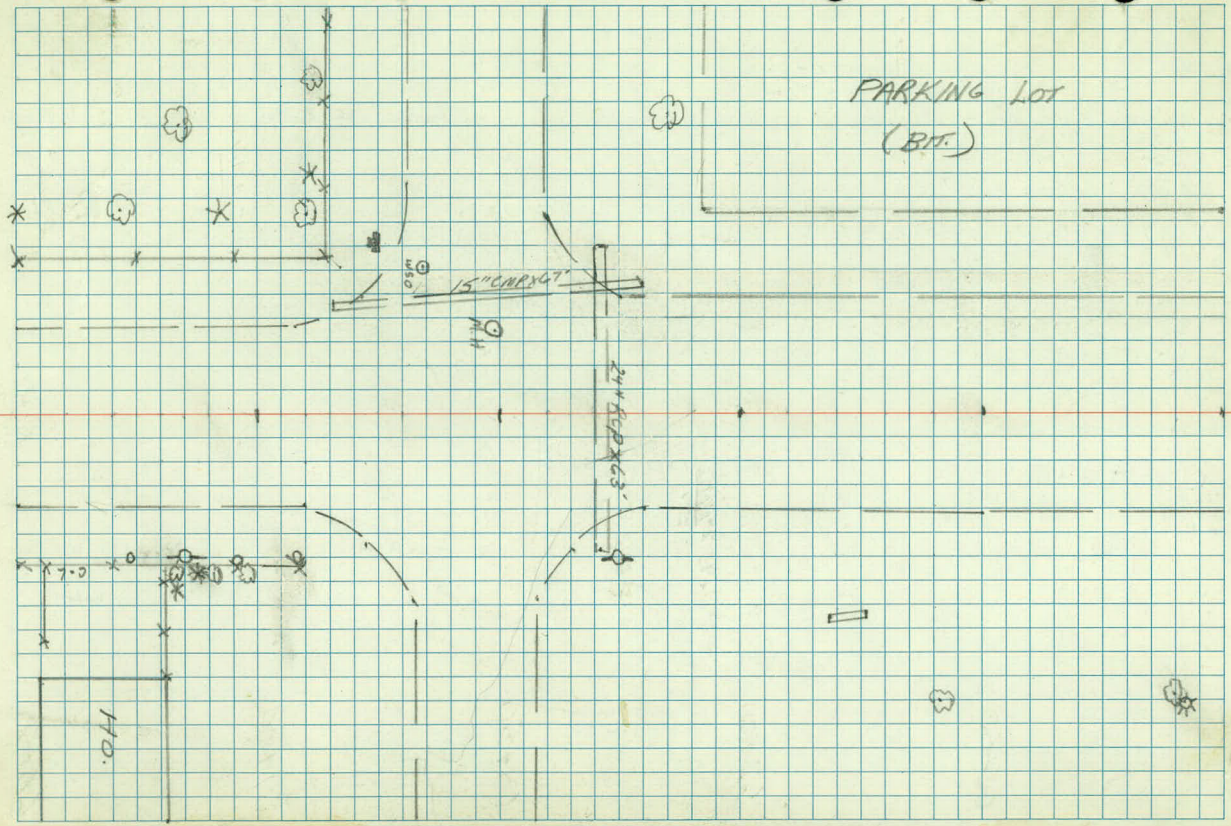
58+00

+00 8" PINE 42

+00 FEN 33

RO 18 RO 19

+00 FEN 32


PARKING LOT
(BIT.)
15" CMP x 67'
24" RCP x 63'
H.O.

LT

RT

63+00

+96 POR 33

+96 WYD 41

+79 BR 29

+80 4" CED. 56

+76 END SIGN 58

+70 BEG SIGN 62

+69 4" CEDAR 62

+00 POR 30

+00 POR 37

GR.

+79 COR BS 71

+73 BR 22

+71 COR BS. 67

+63 10" ELM 59

+61 END FE 62

+61 BACKSTOP 67

+59 BR 60 28

+53 END FE 70

+50

+31 RE. WALL 41-47

+41 LT POLE 55

+21 PP 31

+21 PP 37

+27 SCORE BOARD 45

+16 SCORE BOARD 43

+32 2" MAPLE 58

+12 RE WALL 41-47

+12 BEG FE 67

+12 BEG FE 69

62+00

RD 29

RD 22

+00 GR 28

+95 2" MAPLE 57

+72 END PARKING LOT 43

+75 GR 28

+59 E ENT 25'

+50

+51 18" COTTONWOOD 58

+40 GUARD RAIL 30

+40 LT POLE 61

+21 M.H 17

61+00

+00 PARKING LOT 43

RD 24

RD 22

+96 20" MAPLE 60

+70 PP 32

60+50

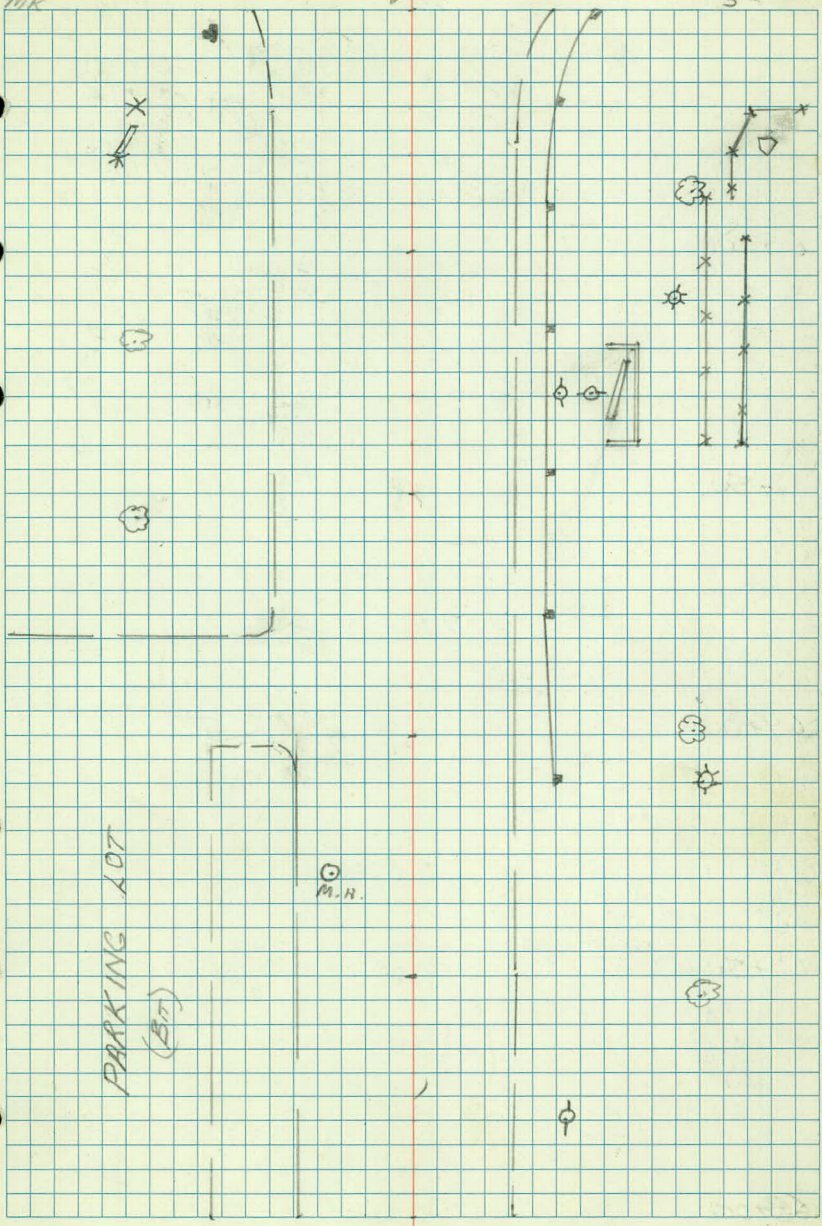
RD 24

RD 21

M.L.
DS
BW
MR

JAN 3, 79
PARTLY CLOUDY -6° (-39° WC)

3



LT

RT

+50

RO 23 RO 22

+45 ℄ CONC DR 11'

+34 12" CMP 30

+31 8" PINE 68

+29 20" ELM 46

+20 4" MAPLE 90

+42 12" CMP 30

+46 16" ELM 48

+46 14" ELM 71

+40 FE (C.L.) 43 →

+15 22" POP 43

+15 8" MAP 58

+00 PP 29

+02 28" POP 43

65+00

RO 23 RO 22

1597

+98 SW COR HO 116

+95 20" ELM 95

+92 12" MAP 44

+90 26" POPLAR 42

+78 10" ELM 69

+74 PP 28

+76 ARBA 42

+50

+48 SE COR HO 113

+46 10" MAPLE 68

+41 HO NE 74

+28 SW COR HO 95

+27 PINE 83

+21 SCHRUB 48

+31 10" APPLE 52

+08 NW COR HO 113

+06 1" MAPLE 71

+03 ER 23

+17 HO NW COR 78

+00 2" PINE 57

64+00

+96

+96 1" MAPLE 70

RO 22

+89 4" MAPLE 86

+82 ER 22

+74 PP 30

+63 POR 30

+60 M.H. 17

+61 POR 38

+53 BR 46

+50

+47 BR 67

+25 ER 76

+20 ER 76 GR 140

+24 WSO 34

+21 WSO 39

+22 WSO 45

+11 ER 59

+01 WSO 23

+12 POR 44

+12 POR 49 GR

63+00


4
(C+L)
M.H.
PROSPERITY
WSD
WSD

LT ℄ RT

+65 CB

68+00

+81 ER 38

+95 MH 17

Ro Ro 23 ~~22~~

+84 ER 47

+75 POR 25

+75 18" CMP 28

+75 POR 25

+69 HYD 40

+66 BR 23

+69 APPLE 30

+69 6" PINE 66

+56 12" BIRCH 81

+55 CB 22

+61 8" ELM 64

+66 BR 22

+65 CB 26

+55 6" BIRCH 63

+55 6" BIRCH 53

+57 BUSH 67

+50

+46 BUSH 68

+35 BUSH 89

+31 5" BIRCH 51

+29 DR BIT 71-84

+29 NE COR HO 68

+14 9" BIRCH 49

+02 NW COR HO 65

67+00

Ro Ro 23 22

1615

+94 12" ASH 45

+92 SW COR HO 123

+85 14" BIRCH 60

+63 12 CMP 31

+66 8" BIRCH 48

1603

+78 30" WILLOW 58

+55 6" BIRCH 69

+62 SE COR HO 117

+65 PP 29

+55 TWIN 6" BIRCH 43

+53 ℄ GRAVEL DR 13'

END

+50 COR FE 44 →

+50

+44 12" CMP 31

+46 PP 30

+34 BUSH 50

+34 TWIN 6" BIRCH 46

+34 1" PINE 50

+34 SERVICE 43

+36 17" ELM 47

+22 16" APPLE 90

+19 20" ELM 47

1604

+15 NE COR HO 75

+01 FE COR 44.75

66+00

1603

Ro Ro 23 22

+94 SW COR HO 117

1604

+81 NW COR HO 75

+76 MH 17

+75 20" ELM 46

+68 S.W 65-69

+69 FE 44

+60 15" ELM 64

+54 CMP 12" 30

+67 12" CMP 30

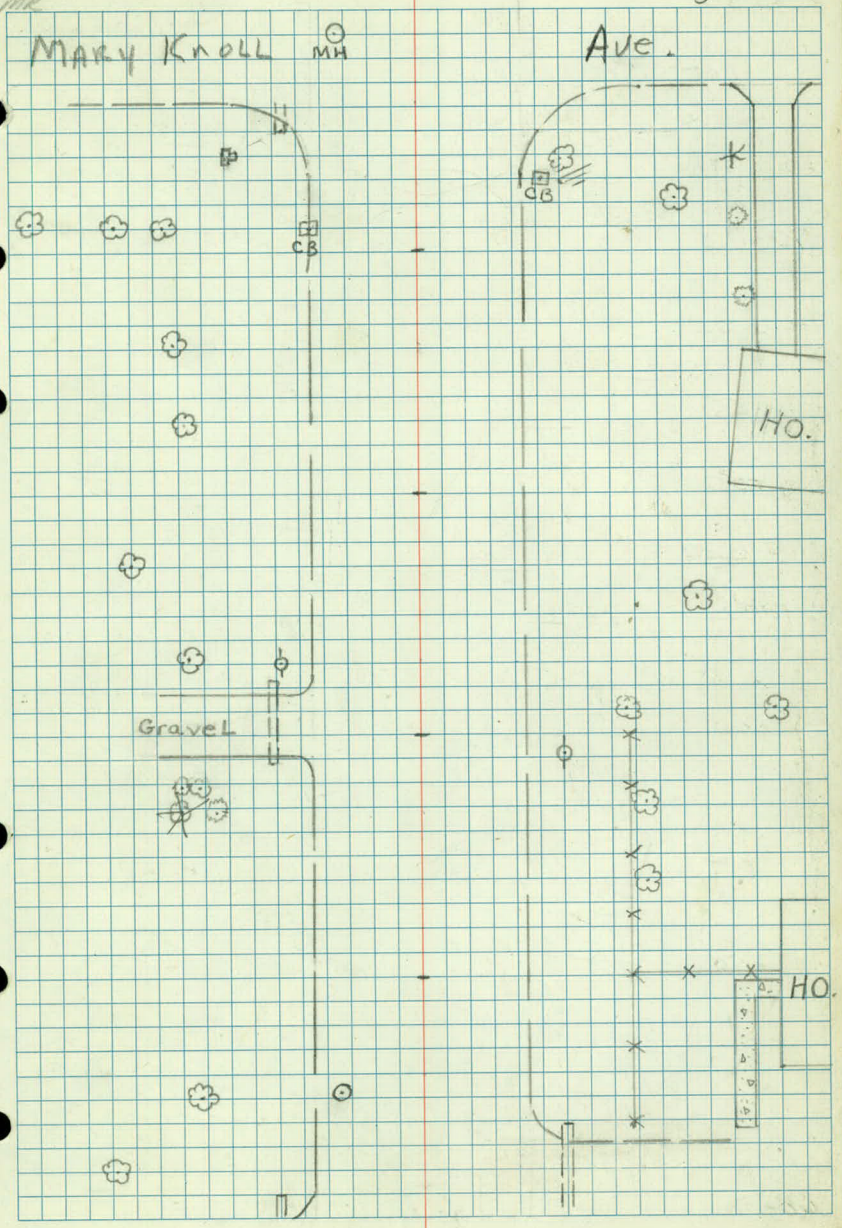
65+50

Ro Ro 23 22

+57 ℄ BIT DR 17'

ML
DS
RC
BW
MC

JAN 4, 79
SUNNY - 8° (-33° WC)
5



LT

RT

℄

+50

1645

+48 SW COR HO 97

+49 15" CMP 29

+37 ℄ BIT DR 10'

+35 15" CMP 31

+46 HED 43

+25 ℄ BIT DR 12'

+26 HED 31-62

+26 15" CMP 29

1637

+19 SE COR HO 100

+23 WALL ← 60

+15 14" PINE 50

+14 7" PINE 46

+14 15" CMP 31

+12 BUSH 58

+10 END HED 46

+12 LT 59

+13 20" ASH 63

+08 MH 17

+05 7" MAPLE 69

+07 PP 29

70+00

RD 23

RD 22

1637

+86 SW COR HO 100

+94 10" BIRCH 52

1638

+98 NW COR HO 94

+75 14" PINE 57

+86 6" ASH 59

+71 12" CATLUP 75

+62 12" CMP 29

+67 2" MAPLE 75

1638

+53 NW COR HO 94

+53 ℄ GRAVEL DR 8'

+50

+42 12" CMP 28

+43 22" POP 58

+43 22" POP 73

+29 10" BIR 79

+24 PP 30

+37 BEG HO 45-54

1625

+21 SE COR HO 100

+21 12" PINE 56

+27 12" CMP 31

+33 8" OLIVE 46

+09 15" MAPLE 83

+07 12" CMP 31

+18 ℄ DIRT DR 13'

+00 8" BIRCH 57

+02 PP 30

+90 6" OLIVE 41

69+00

RD 23

RD 22

+84 6" OLIVE 40

+84 NE COR HO 73

+96 9" OLIVE 41

+79 TWIN 6" OLIVE 41

+72 6" TWIN OLIVE 40

+67 8" MAPLE 68

1625

+52 SW COR HO 100

+65 8" BIRCH 59

+59 8" OLIVE 40

+57 NW COR HO 73

+51 QUAD 8" BR 85

+51 7" ELM 57

+50

+53 8" OLIVE 40

+46 5" OLIVE 37

+24 BUSH 72

+27 TWIN 8" ELM 62

+41 BUSH 48

+39 2" OLIVE 44

+18 CB 24

+21 BR 23

+38 6" OLIVE 39

+40 BUSH 54

+28 BR 22

+26 HEDGE ← 77

+12 POR 25

+34 ARBH 34

+15 POR 26

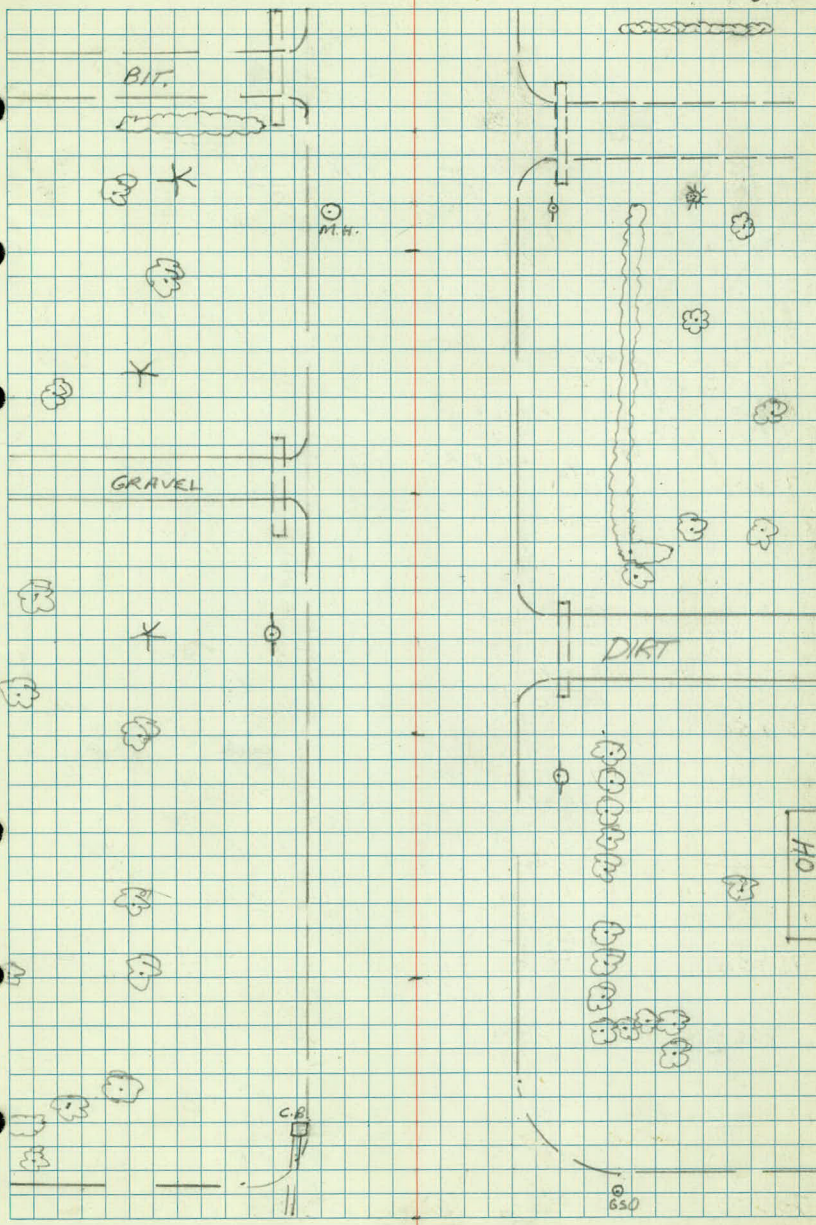
+12 20" COTTON 80

+07 BR 36

+05 650 43

+09 BR 45

68+00


BIT.
M.H.
GRAVEL
DIRT
C.B.
GSD

Lt Rt

73+00

Ro 23 PP 21+94 BEG RR WALL 46

+78 C.B 24

+69 M.H 28

+92 18" ELM 45

+72 12" ELM 44

BEG +66 SPILLWAY 23-32

+70 C.B. 24

+87 18" COTTON 69

+81 15" COTTON 67

+71 8" ELM 59

+56 20" COTTON 51

+55 ER 28

+50 DRIVE 53-65

+50 PP 29

+57 ER 23

+47 POR 24

+38 BR 44

+38 BR 46

+44 POR 27

+12 ER 59

+25 M.H 17

+10 ER 56

+05 POR 25

+00 POR 30

72+00

+06 HYD 46

Ro 23 Ro 22

+97 BR 23

+87 BR 22

+76 M.H. 26

BEG +64 18 CMP 32

+67 M.H. 24

1653

+57 SEC COR HO 98

+63 12" PINE 52

+56 DITCH 67

+56 E.B. 98

+50

+28 18" ELM 65

1653

+16 SW COR HO 98

+23 8" PINE 43

+13 6" PINE 86

+10 PP 30

+07 BUSH 44

+29 PP 30

+37 DITCH 46

+06 DITCH 37

71+00

Ro 21 Ro 22

+92 12" CEDAR 52

+79 SE COR HO 97

+56 32" ELM 53

70+50

+56 8" CEDAR 78

Ro 23 Ro 22

7
wall
SPILLWAY
CB
Kennard
MH
St
DITCH
DITCH

Lt ℄ Rt

+50

+44 18" ELM 33

+37 CONC DR 77-87

+47 END HED 31

+31 2" MAPLE 66

+26 FLAG POLE 54

+11 14" ELM 72

+13 12" ELM 33

+06 CONC DR 118

+05 24" CMP 29

75+00

+01 NE COR TURN SLOT 40

+97 TWIN 8" ELM 33

+95 BEG HED 36

+83 S.W. 67-71

+83 ℄ CONC DR 12' 33

+83 NE COR HD 75

+75 Lt 46

+71 24" CMP 30

+59 S.W 67-75

+50

+40 10" PINE 58

+29 NW COR HO 75 1284

+09 RET. WALL 43

H5 SNP WALL 41

+15 SPILLWAY 36

+06 PP 30

+07 PP 64

+21 (4) 8" ELM 78

74+00

RO 23

RO 21

+01 BUSHES 27

+01 16" COTTON 49

+71 22" ELM 32

+66 10" ELM 64

+76 18" ELM 36

+54 BEG DITCH 116

+54 54" ARCH R&P 57 116

13" ELM 34

+76 12" MAPLE 48

+88 WIND ASH 47

+50

+51 6" ELM 41

+59 NE COR GARAGE 50

+47 14" ELM 34

+21 QUAD 5" ELM 44

+23 10" ELM 38

+37 NW COR GARAGE 53

+28 NE COR HO 75

+07 10" ELM 56

+05 NW COR HO 75

73+00

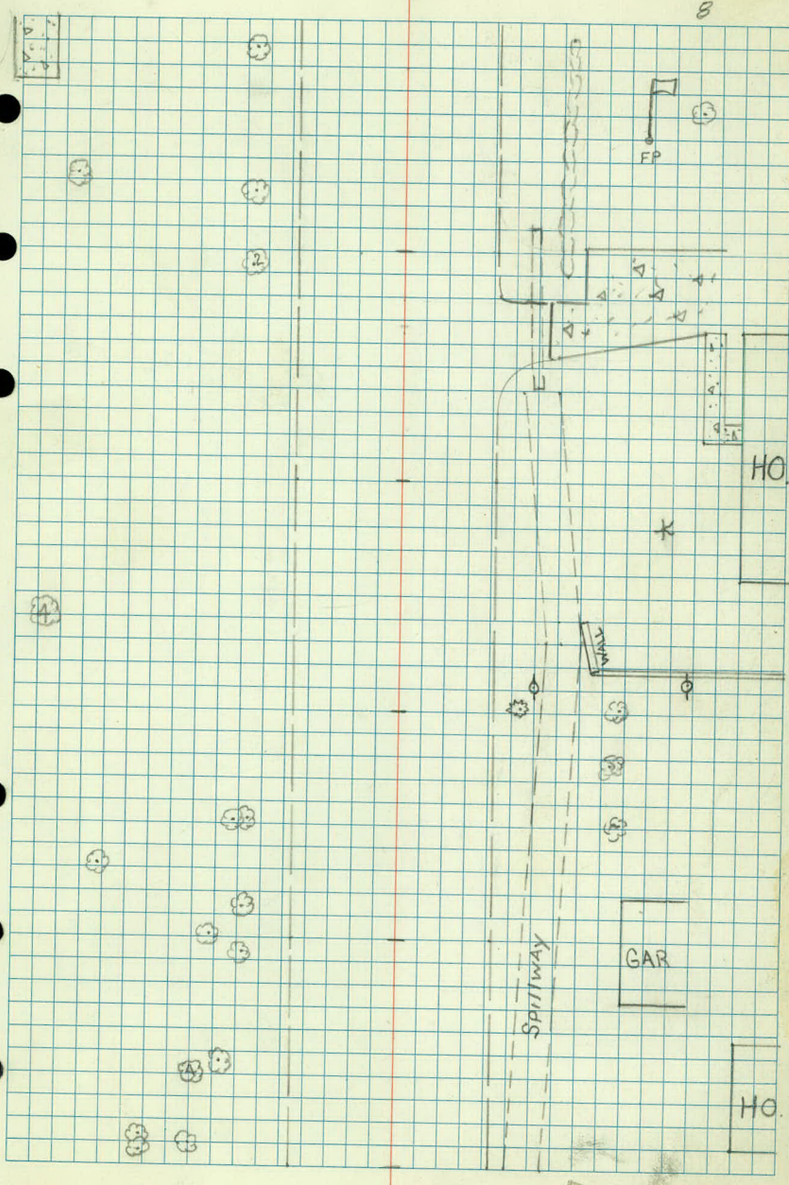
+06 10" ELM 45

+03 8" ELM 56

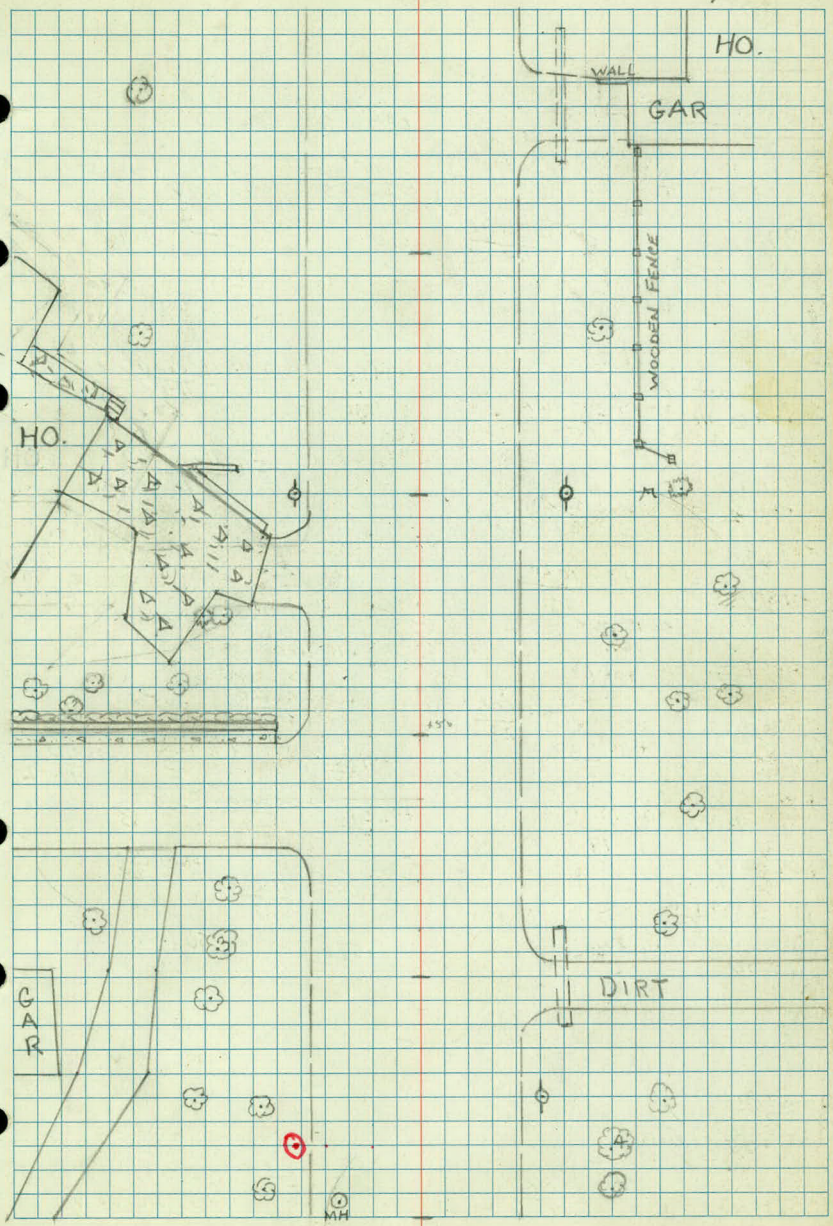
RO 23

RO 21

+00 SPILLWAY 25-33


FP
HO
GAR
SPILLWAY
HO

78800


HO.
WALL
GAR
WOODEN FENCE
HO.
GAR
DIRT
MH

LT RT

+50

+45 SE COR HO 83

+22 15" CMP 33

+09 24" MAPLE 49

+11 1731 S.W COR HO 83

+37 8" BIRCH 55

+07 BE 4' S.W 35

+05 END FE 47

+09 101 GR PRIV

80+00

+00 18" APPLE 70 RL24 RD-18

+05 END HEDGE 47

+09 BE FE 47

+98 15" CMP 31

+74 1725 SE HO 87

+75 20" MAP 60

+74 BEG EX 47

+74 NE COR HO 47

+54 NW COR HO 47

+50

+40 1725 SW HO 87

+40 S.W 87

+35 BUSH 55

+35 END LT 55

+31 8" PINE 73

+16 18" MAP 68

+16 BEG HEO 43

+19 S.W 34-37

+06 ER 27

+06 CB 24

+05 15" CMP 27

+03 ARC LT 31

+05 ER 21

79+00

+00 POR 26

+96 BR 33

+91 BR 35

+96 POR 95

+92 S.W. 49-52

+95 S.W 43-47

+80 M.H 17

+92 C.B 33

+65 WSO 29

+65 ER 35

+69 ER 34

+67 CB 58 15" CMP 27

+60 POR 24

+65 POR 21

+61 BR 23

+51 BR 21

+56 HYD 45

+50

+41 5" PINE 68

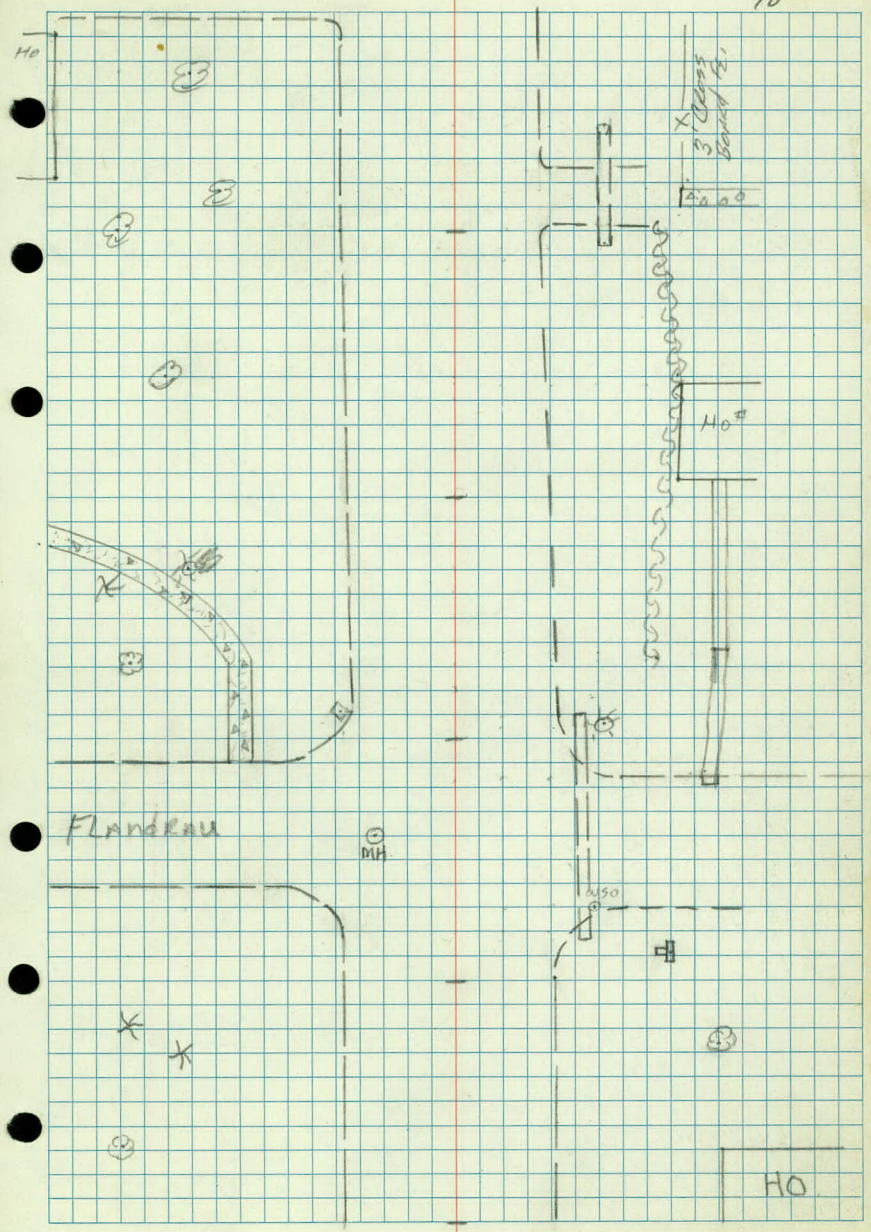
+35 5" PINE 57

+37 6" ASH 55

+16 6" MAPLE 68

45 NE COR HO 56

78+00


HO
3 Cars
HO#
Flandkau
MH
MSO
HO

LT

RT

83+00

+93 BUSH 60

RD 24 RO 35

+90 WOOD FE 44 →

+98 S.W COR HO #1751 84

+86 BIT CURB 35

+89 24" ELM 78

+70 16" MAPLE 50

+88 HEDGE 40 →

+68 H.W COR HO 93

+60 14" PINE 74

+68 SE COR HO 1751 83

+54 BE BIT CURB 33

+54 6" BIT WALK 33-39

+50

+46 BE S.W 44 28

+44 FOR S.W 52

+46 4.LITE 54

+35 6" MAPLE 47

+33 S.W COR HO #1751 83

+18 WOOD FE 50 →

+25 10' GR DR

+44 16' CONC DR 33

+26 RP 32

+29 15" RCP 29

+04 SE COR HO 83

+08 8" PINE 67

+09 HEDGE 55 →

+09 CHAINLINK FE 55 →

82+00

RD 24 RO 22

+98 30" COTT 42

+95 6" CEDAR 70

+68 S.W COR HO 83

+59 36" COTT 44

+55 COR WOOD FE 45 →

+50

+50 11" BIT DR

+32 9' CONC DR CONC TRE 33

+41 HEDGE 34 →

+19 10" ASH 43

+20 SE COR HO 84

81+00

+00 WOOD FE 47

+86 S.W COR HO #1739 84

+66 P.P 31

+81 8" ASH 47

+79 BUSH 50

+81 TRP 12" ASH 59

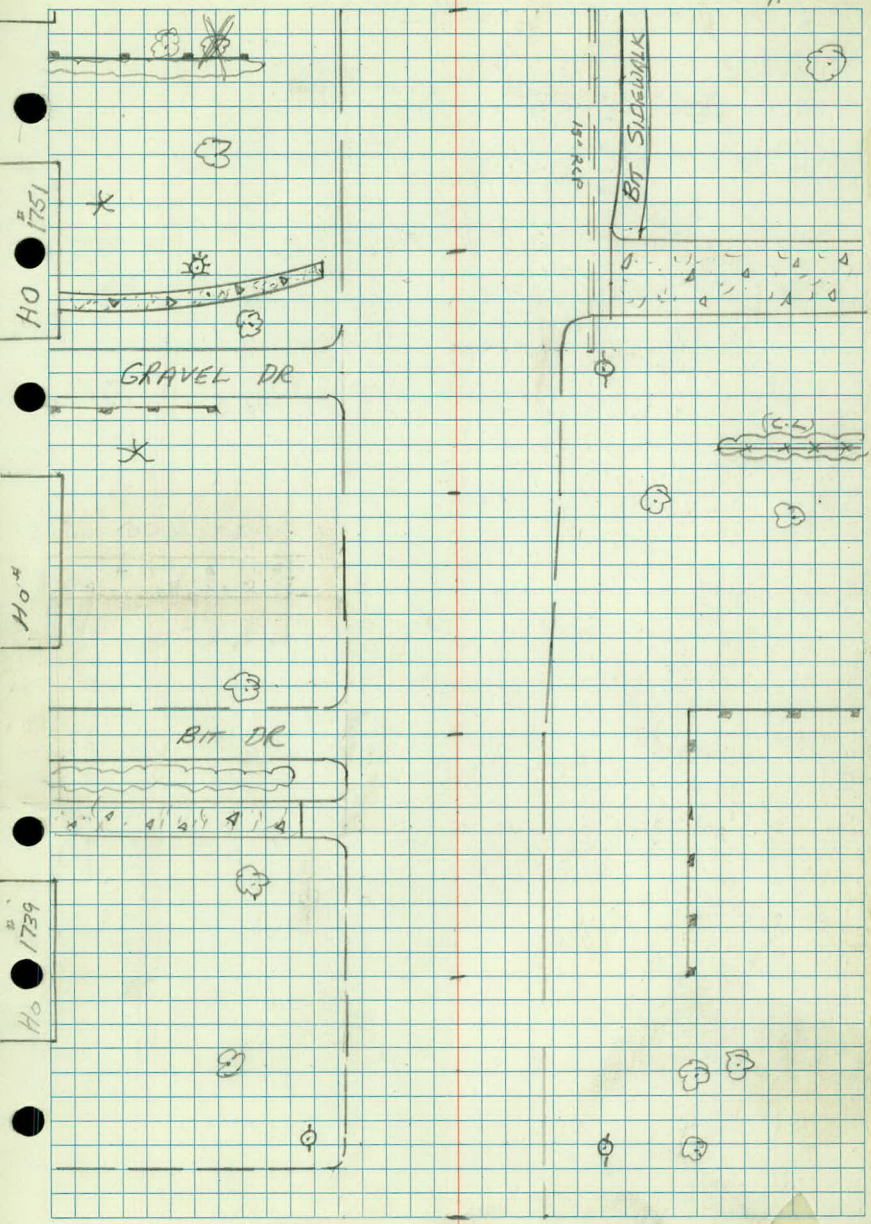
+54 12' GR DRIVEWAY

+64 P.P 31

+64 BUSH 50

+50

RD 24 RO 18


HO #1751
GRAVEL DR
HO #
BIT DR
HO #1739
BIT SIDEWALK

LT

+50

+44 TRAFFIC LIGHT 50

+44 NOSE 35

+36 MEO 43

+21 GSO 60

+10 ER 48

+20 WSO 26

+00 TRAFFIC SIGNAL 38

+00 POR 30

85+00

+89 10" PINE 53

+89 8" PINE 69

+89 10" BIRCH 58

+89 12" PINE 49

+86 BEG CONC CURB 26

+86 BR 26

+80 M.H. 17

+80 12" PINE 49

+77 FLAG POLE 69

+62 SE COR HO 87

+66 FE 70-87

+63 BUSH 57

+61 10" MAPLE 59

+50

+47 8" MAPLE 64

+34 FE 66

+37 FE 70

+26 FE (WOOD) 66

+29 TWIN 6" DIA 39

+21 3" PINE 69

+20 VD LT 56

+03 ℄ CONC DR 20' 44

1769

84+00

+92 SW HO 84

#1761

+85 14" MAPLE 63

+85 BUSH 61

+84 10" PINE 79

+80 16" BOXELDER 35

+70 10" MAPLE 75

+70 6" PINE 62

+70 8" PINE 50

1761

+60 SE COR HO 87

+64 PP 35

+50

+53 ℄ BIT DR 20'

+41 VD LT 63

+37 BUSH 63

+37 8" PINE 69

+27 8" BIRCH 58

83+00

RT

+40 MEO 29

+38 NOSE 27

+36 MEO 29

+29 M.H. 55

+11 ER 48

+01 SIGNAL 36

+01 CONTROL BOX 51

+97 POR 30

+93 CORL FE 53

+86 PP 32

+81 BR 27

+81 BEG CONC C&G 27

+81 12" ELM 54

+73 12" ELM 54

+67 18" ELM 54

+52 3" MAPLE 55

+60 10" ELM 54

+42 16" ELM 54

+29 COR FE (CL) 53

+27 NE COR HO 83

+28 24" ELM 55

+14 BUSH 54

+00 BIT CURB 27

+99 M.H. COR HO 94

+85 H.E COR GARAGE 83

+95 ℄ PIET DR

+81 BUSH 57

+69 N.W COR GARAGE 83

+77 END WOOD FE 55

+81 END PAPER 27

+67 COR WOOD FE 55

+75 BUSH 58

+58 P.P 32

+59 LILAC 58

+73 BUSH 58

BE TAPER

+26 BIT CURB 35

+44 6" PINE 72

+26 BIT CURB 35-41

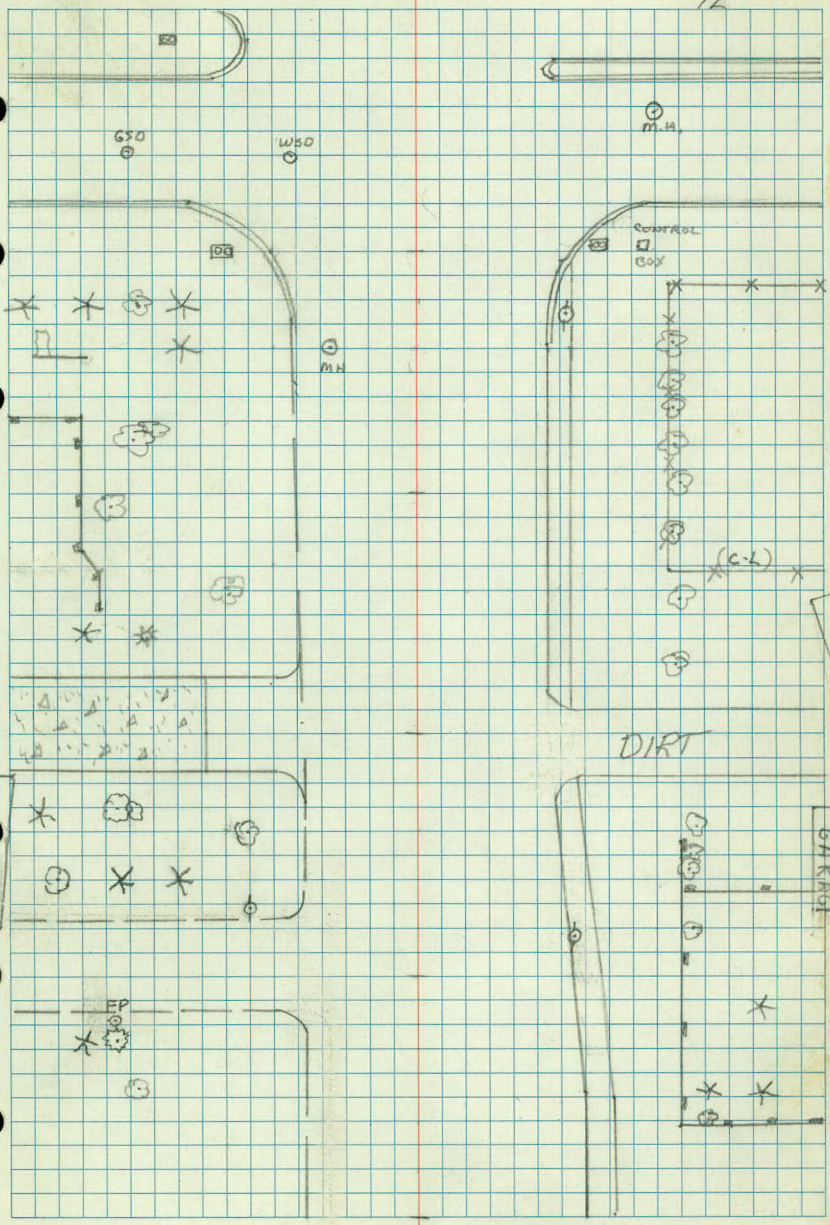
+26 6" PINE 61

+26 8" PINE 72

+19 COR WOOD FE 55

+26 6" PINE 61

+13 N.E COR HO 93



?

#761

OH

STA	LT	℄	RT
86+00			
	+84 SIGNAL 45		+84 SIGNAL 24
		+81 PP 34	
85+50	+52 MED 48	+78 EAST C+G W.B.A ← 0 →	

SEE STADIA NOTES
ON FOLLOWING PAGES
FOR ENT. R.C. NURSING
HOME

WHITE BEAR AVENUE

Nursing Home Entrance

Stadia

STADIA SURVEY

Sta	Azimuth	Vert Angle or Rod R	Horizontal Distance		
#	⊼ Sta	85+51.44	SIGNTING	MON.	"B" + WBA
Monument B&WhiteBearAve	0°00'				
Gutter Line Median	0°00'		45	✓	
Curb EastSideWBA	30°12'		51	✓	
Signal	35°14'		53	✓	
Flagstone Wall	36°42'		54	✓	
BR B6-18	41°39'		38	✓	
POR	50°10'		35	✓	
ER	70°20'		42	✓	
End Flagstone wall	53°08'		41	✓	
4" Maple	59°28'		57	✓	
HH	71°19'		49	✓	
BR	77°06'		62	✓	
B6-18 C+G	103°33'		64	✓	
Beg B6-18 C+G	114°47'		36	✓	
Cor Bit+Walk & Conc	122°18'		30	✓	
Beg ConcCurb	130°22'		33	✓	
Conc Curb	141°47'		42	✓	
HH	125°19'		33	✓	

mL
DS
BW
mR

3-31-82
PC 35°-40°

STADIA SURVEY

Sta	Azimuth	Vert. Angle or Rod R	Horizontal Distance		
Signal	127°24'		37	✓	
PP	137°44'		41	✓	
Nose 4' Conc Median	208°29'		29	✓	

3-31-82
PC 35°-40'

ML
DS
DK

CLOUDY 50°
OCT 9, 81

X- SECTIONS
FROST AVE
300'± WEST OF BIRMINGHAM
TO HAZELWOOD

REDUCED BY B.L.

STA	+	T	−	ELEV
	6.12	913.56		907.44
43+00				
✓				
+39	BIT ENT LT			
44				
+12	GUTTER LINE B618		& GRAVEL ENT	
M.H			6.18	907.38

LT ℄ RT 14

TOP HYD FROST + TOE

902.1	903.2	905.1	904.7	906.1	905.9	906.11	905.81	905.3	908.0	907.9
11.5	10.4	8.5	8.9	7.5	7.7	7.45	7.95	8.3	5.6	5.7
54	44	34	29	23	20		19	28	34	75

900.3
13.3
75

906.66	906.7	906.3	906.63	906.6	906.5	910.2	910.0
6.90	6.9	7.3	6.93	7.0	7.1	3.4	3.6
66	44	20		20	28	37	75
CONC SLAB							

906.7	906.8	907.5	907.2	907.26	907.4	908.3	911.4	911.6
6.9	6.8	6.1	6.4	6.30	6.2	5.3	2.2	2.0
75	52	31	20		20	29	37	75

906.96	907.41	907.78	907.3	907.38	907.6	908.7	910.7	910.8
6.60	6.15	5.78	6.3	6.18	6.0	4.9	2.9	2.8
75	52	34	20		20	39	75	100
CONC GUTTER	CONC GUTTER	CONC GUTTER						

44+21 LT 18

STA	+	⊼	—		
		913.56			
44+38	GUTTER	LINE LT	B6 18		
M.H.			5.52	908.04	
45					
T.P.	2.16	914.31	1.40	912.16	912.15
+61	GUTTER CONC	B6 18 LT	GUTTER	BIRMINGHAM	
+75			& BIRMINGHAM		
+86	GUTTER CONC	B6 18 LT	GUTTER	BIRMINGHAM	

LT ? ¢ RT 15

907.08	907.60	908.12	907.6	907.72	907.6	906.8	910.1	910.9
6.48	5.96	5.44	6.0	5.84	6.0	6.8	3.5	2.7
75	55	34	20		20	28	36	75
GUTTER	GUTTER	GUTTER						

44 + 75 LT 18

908.5	908.9	908.97	908.3	908.41	908.0	907.4	909.3	909.9
5.1	4.7	4.59	5.3	5.15	5.6	6.2	4.3	3.7
75	50	28	19		21	28	35	58
		CONC S.W						HO

Top 45 + 50 LT

908.36	908.73	909.01	908.9	908.79	908.5	907.5	906.9
5.95	5.58	5.30	5.4	5.52	5.8	6.8	7.4
75	52	34	22		22	50	75
GUTTER	GUTTER	GUTTER					

908.2	909.0	909.0	908.84	908.7	907.5	906.7
6.1	5.3	5.3	5.47	5.6	6.8	7.6
100	52	18		22	60	100
		MIT				

908.4	908.86	909.33	909.3	908.92	908.7	907.8	906.9
5.9	5.45	4.98	5.0	5.39	5.6	6.5	7.4
75	57	34	21		22	50	75
GUTTER	GUTTER	GUTTER					

STA	+	⊼	−		
		914.31			
46					
+66	CONC S.W. LT				
47					
+50					
+87	CONC SW LT				
48					
T.P.	2.08	913.55	2.86	911.45	911.47

LT ℄ RT 16

908.5	909.5	909.64	909.4	909.02	908.7	908.1	907.6
5.8	4.8	4.67	4.9	5.29	5.6	6.2	6.7
75	57	27	27		21	45	75
		S.W.					

909.31	909.47	908.94	908.8	909.17	908.8	909.3	909.6
5.00	4.84	5.37	5.5	5.14	5.5	5.0	4.7
75	63	27	27		19	42	63
SW	SW	S.W.					

909.5	909.6	908.86	908.7	909.17	908.9	909.4	909.5
4.8	4.7	5.45	5.6	5.14	5.4	4.9	4.8
75	40	27	27		21	44	63
		S.W					

909.3	909.2	908.79	908.5	909.10	908.7	908.7	908.3
5.0	5.1	5.52	5.8	5.21	5.6	5.6	6.0
75	53	27	27		21	51	75
		SW					

909.23	909.01	908.72	908.5	909.00	908.9	909.2	909.3
5.08	5.30	5.59	5.8	5.31	5.4	5.1	50
75	53	27	27		20	44	63
SW	SW	SW					FE

909.4	909.2	908.76	908.5	908.96	908.8	909.6	909.4
4.9	5.1	5.55	5.8	5.35	5.5	4.7	4.9
75	52	27	27		20	42	63
		SW					FE

Top HYD MANTON & FROST

STA	+	Π	—	ELEV	
		913.55			
48+50					
49+01	℄ MANTON LT				
M.H.			908.29	5.26	
49+05			℄ MANTON RT		
+50					
50					
T.P	504	911.83	6.76	906.79	906.79

LT ℄ RT 17

909.3	909.2	908.56	908.3	908.74	908.5	909.5	909.7
4.3	4.4	4.99	5.3	4.81	5.1	4.1	3.9
75	55	37 (30)	27		19	39	63

909.3	908.8	908.3	908.24
4.3	4.8	5.3	5.31
100	66	35	

49+03 LT 18

908.24	908.5	908.2	908.0
5.31	5.1	5.4	5.6
	21	50	100

909.4	909.02	908.4	907.4	907.5	908.00	907.9	907.0	907.7	908.0
4.2	4.43	5.2	6.2	6.1	5.55	5.7	6.6	5.9	5.6
75	53	40	29	20		20	32	44	75

910.2	909.99	907.8	906.3	907.0	907.48	907.2	906.4	907.2	907.3
3.4	3.56	5.8	7.3	6.6	6.07	6.4	7.2	6.4	6.3
70	64	37	27	20		20	32	46	63

SPIKE IN PP STA

STA	+	Δ	—	
		911.83		
56+40	℄ BIT ENT LT			
+48			6.65	905.18
+57			℄ BIT ENT RT	
+64			5.60	906.23
+91	℄ BIT ENT LT		℄ BIT ENT RT	
51				

ML
DS
DK

Cloudy 46°
OCT 12, 81

LT				℄		RT	18
908.60	907.98	907.3	906.7	907.17	906.7	906.0	905.99
3.23	3.85	4.5	5.1	4.66	5.1	5.8	5.84
70	61	44	19		21	34	63
Conc	Conc						Conc

F.L. 12" CMP

907.1	906.8	906.4	906.6	907.03	906.6	906.0	905.82
4.7	5.0	5.4	5.2	4.80	5.2	5.8	6.01
75	60	31	19		20	44	63
							Conc

S.D. 50+64 LT

907.11	906.8	906.4	906.70	906.2	905.3	905.1	905.41
4.72	5.0	5.4	5.13	5.6	6.5	6.7	6.42
58	39	18		21	30	46	63
Conc							Conc

907.11	906.7	906.2	906.59	906.1	905.4	905.3	905.34
4.72	5.1	5.6	5.24	5.7	6.4	6.5	6.49
54	36	18		21	32	47	63
Conc							Conc

STA	+	π	—	ELEV
		911.83		
51+07			7.05	904.78
+50				
T.P.	4.11	909.77	6.17	905.66
52				
+08			5.85	903.92
+32	& BARCLAY			

F.L. 15" CMP LT

906.3	905.3	904.5	905.8	905.9	906.18	905.6	905.2	905.7	905.8
5.5	6.5	7.3	6.0	5.9	5.65	6.2	6.6	6.1	6.0
75	30	27	23	19		20	29	40	75

P.K. ℄ 52+00

906.0	905.9	905.6	904.3	905.6	905.7	905.66	905.5	905.2	904.9	904.7
3.8	3.9	4.2	5.5	4.2	4.1	4.11	4.3	4.6	4.9	5.1
75	51	29	25	22	18		20	30	45	75

F.L. 15" CMP LT

906.6	906.1	905.3	905.39	905.1	905.0	904.6
3.2	3.7	4.5	4.38	4.7	4.8	5.2
100	53	18		20	50	100

STA	+	π	−	ELEV
		909.77		
M.H.			4.48	905.29
+52			6.25	903.52
+59				
53				
+50				
+80			7.85	901.92

LT ~~RT~~ ~~RT~~ 20

52+32 Lt 18"

F.L. 15" Cmp LT

906.3	906.2	907.0	904.2	905.1	904.9	905.08	904.8	904.7	904.7	904.5
3.5	3.6	2.8	5.6	4.7	4.9	4.69	5.0	5.1	5.1	5.3
75	46	35	27	22	18		20	29	52	75

907.0	906.6	906.7	903.6	904.4	904.4	904.63	904.5	904.5	903.3	905.7
2.8	3.2	3.1	6.2	5.4	5.4	5.14	5.3	5.3	4.5	4.1
83 NO	62	33	27	24	18		20	28	41	66

906.5	905.9	903.1	903.5	903.7	903.98	903.7	904.6	904.0	904.7
3.3	3.9	6.7	6.3	6.1	5.79	6.1	5.2	5.8	5.1
75	32	26	23	18		20	29	53	75

F4 15" Cmp LT

STA	+	⊼	−	ELEV
		909.77		
54	℄ GRASS ENT			
+66			℄ DIRT ENT.	
M.H			7.20	902.57
+50				
T.P.	3.47	905.68	8.16	901.61
M.H.			3.07	902.01
+98			5.08	900.00

Lt ℄ Rt 21

906.9	904.7	904.3	903.2	903.21	903.1	902.8	903.0	902.9
2.9	5.1	5.5	6.6	6.56	6.7	7.0	6.8	6.9
75	52	32	17		19	36	59	75

905.8	904.6	903.8	901.53	903.6	903.2	903.12	903.1	902.8	903.0	902.9
4.0	5.2	6.0	8.24	6.2	6.6	6.65	6.7	7.0	6.8	6.9
75	50	29	25	22	17		19	36	58	75
			F.L. 15" Cmp							

54+41 Lt 18

904.8	904.0	903.3	902.0	903.1	902.6	902.44	902.0	901.8	901.8	901.9
5.0	5.8	6.5	7.8	6.7	7.2	7.33	7.8	8.0	8.0	7.9
25	52	33	28	21	17		22	44	67	75

P.K. ℄ 55+00

54+41 Rt 21

F.L. 15" CMP Lt

STA	+	↑	—	ELEV
55				
+05			5.27	899.81
+40				
+65	2 DIETER			
M.H.			4.80	900.28
M.H.			4.62	900.46
56				

LT		℄		RT		
902.0	901.8	901.5	901.61	901.0	901.1	901.4
3.1	3.3	3.6	3.47	4.1	4.0	3.7
45	33	18		23	43	63
HO						HO.

FL 15" CMP LT

902.1	902.0	901.3	900.7	900.9	900.96	900.8	900.2	900.1	899.8
3.0	3.1	3.8	4.4	4.2	4.12	4.3	4.9	5.0	5.3
75	53	32	27	18		26	28	51	75

901.6	900.8	900.5	900.59	900.3	899.8	899.5
3.5	4.3	4.6	4.49	4.8	5.3	5.6
100	57	18		23	57	100

55+65 RT 23'

55+65 LT 18

900.8	900.1	900.0	900.15	899.3	898.8	899.5	899.5
4.3	5.0	5.1	4.93	5.8	6.3	5.6	5.6
75	50	18		23	31	40	75
						BIT	
						ENT	

STA	+	X	—	ELEV
		905.08		
56+50				
M.H			5.81	899.27
+95			8.32	896.76
57+06			℄ CONC ENT RT	
+16			8.65	896.43
+19			7.08	898.00
+29	℄ BIT ENT LT			

LT ℄ RT 23

901.0	900.7	899.7	899.0	899.8	899.5	899.59	899.1	898.2	898.9	899.0
4.1	4.4	5.4	6.1	5.3	5.6	5.49	6.0	6.9	6.2	6.1
85 HO	55	31	26	22	18		22	29	39 B.T ENT	63 HO

56+80 LT 18

FL CMP RT

901.4	900.1	899.4	898.5	899.1	899.18	898.6	897.90	897.24	897.45
3.7	5.0	5.7	6.6	6.0	5.90	6.5	7.18	7.84	7.63
85 HO	52	33 FR	26	19		20	35 CONC	49 CONC	63 CONC GAR

F.L. 15" CMP RT

FL 15" CMP LT

901.73	899.9	899.1	897.08	898.3	896.4	896.2	896.1	895.9
3.35	5.2	6.0	6.00	6.8	8.7	8.9	9.0	9.2
85 CONC	45	18		21	32	45	60	75

STA	+	Π	−	ELEV
57+38			7.36	897.72
57+50			8.25	896.83
57+49			℄ CONC ENT RT	
57+60	CONC ENT LT			
57+74			7.96	897.12
58				

LT ℄ RT 24

F.L. 15" CMP LT

F.L. 15" CMP LT

901.9	899.0	896.8	897.1	899.00	898.4	897.48	896.96
3.2	6.1	8.3	6.4	6.08	6.7	7.60	8.12
75	33	25	19		20	31 CONC	63 CONC GRR

902.41	900.9	899.9	897.1	898.98	898.5	897.56	897.00
2.67	4.2	5.2	6.0	6.10	6.6	7.52	8.08
88 CONC	57	33	19		20	32 CONC	63 CONC GRR

F.L. 15" CMP LT

900.6	899.8	897.2	898.6	898.9	898.95	898.4	897.2	898.0	897.6
4.5	5.3	7.9	6.5	6.2	6.13	6.7	7.9	7.1	7.5
47	35	26	23	18		20	31 FE	44	75

902.6
2.5
88
HO

Top H40 DIETER & FROST

J.A
ML
DS
RC
BW
MR
GA

JAN 9, 79
-5 SUNNY

X SECTIONS

FROST AVE

STA	+	π	−	ELEV
	4.24	906.62		902.38
58+00				
✓				
+50				
✓				
+66			10.07	896.55
+78	GUTTER LINE (HAZELWOOD WEST)			

LT ℄ RT

Top HWD HAZELWOOD + FROST

00.50	99.20	97.90	99.00	99.0	99.0	98.6	98.4	97.4	98.3
6.1	7.4	8.7	7.6	7.6	7.60	8.0	8.2	9.2	8.3
46	35	28	20	13		17	23	31 FL	54

01.1
5.5
67

00.7	00.4	97.5	98.6	98.7	98.9	98.7	98.6	97.9	98.0	97.4
5.9	6.2	9.1	8.0	7.9	7.72	7.9	8.0	8.7	8.6	9.2
56	34	26	20	14		17	23	31	47	88

00.8
5.8
75

INVERT 15" C.M.P.

92.12	99.2	98.5	98.7	98.9	98.5	97.9	97.2	96.7
4.5	7.4	8.1	7.9	7.72	8.1	8.7	9.4	9.9
100	46	24	11		17	40	74	100

STA	+	π	−	ELEV
		906.62		
+95	℄ HAZELWOOD			
+99			7.82	898.80
59+07	GUTTER LINE (EAST EDGE HAZELWOOD)			
+17				
✓				
+50				

LT ℄ RT

901.5	99.4	98.8	98.7	98.8	98.6	97.3	96.6
5.1	7.2	7.8	7.9	7.80	8.0	9.3	10.0
89	44	17	12	MON	18	65	100

M.H LT 17'

901.2	900.1	98.7	98.8	98.89	98.5	97.8	97.0	96.3
5.4	6.5	7.9	7.8	7.73	8.1	8.8	9.6	10.3
89	66	34	13		17	39	67	100

97.1	98.5	98.5	99.6	98.9	98.4	98.2	95.4	95.9	94.6
9.5	8.1	8.1	7.0	7.7	8.2	8.4	11.2	10.7	12.0
35	32	23	13		17	27	29	39	48

99.5	900.7	94.9	94.92
7.1	5.9	11.7	11.7
68	84	96	71

901.22	99.9	99.4	98.6	98.6	98.9	98.6	98.4	98.6	95.8	95.12
5.4	6.7	7.2	8.0	8.0	7.74	8.0	8.2	8.0	10.8	11.5
78	45	36	24	15		17	25	31	58	83

PARKING LOT

STA	+	Π	−	ELEV
		906.62		
60+00				
✓				
+50				
61+00				
+21			5.96	900.66
+59	ENT.	LT		

LT ℄ RT

902.62	900.22	99.82	99.12	98.9	99.2	99.02	98.9	98.9	95.8	94.5
4.0	6.4	6.8	7.5	7.7	7.42	7.6	7.7	7.7	10.8	12.1
100	45	32	24	12		18	25	32	55	89

94.42
12.2
100

903.52	902.32	900.32	900.12	99.62	99.52	99.45	99.52	99.42	99.32	95.62	94.52
3.1	4.3	6.3	6.5	7.0	7.1	7.17	7.1	7.2	7.3	11.0	12.1
100	75	42	33	24	13		18	26	34	53	100
		PARKING LOT									

03.72	02.12	00.62	00.42	00.22	00.22	900.25	900.12	00.02	99.52	95.12	94.72
2.9	4.5	6.0	6.2	6.4	6.4	6.37	6.5	6.6	7.1	11.5	11.9
100	68	43	34	25	16		19	26	38	67	100
		PARKING LOT									

M.H. LT 17'

04.22	02.82	01.32	01.32	01.42	901.47	01.22	01.02	00.72	96.12	95.02
2.4	3.8	5.3	5.3	5.2	5.15	5.4	5.6	5.9	10.5	11.6
95	72	36	24	16		17	25	35	55	100

STA	+	π	−	ELEV
		906.62		
T.P.	5.51	911.07	1.12	905.50
B.M.	3.02	911.28	3.02	908.26
62+00				
+50				
63+00				
+35	℄ Prosperity			
+65				

JA
ML
DS
GA
RC
GW
MR

LT ℄ RT

JAN 9, 79

18

P.K. ℄ 63+00

Top Hyd Frost & Prosperity

05.28	03.98	03.18	02.68	02.78	902.39	02.48	02.28	01.68	96.58	95.78
6.0	7.3	8.1	8.6	8.5	8.39	8.8	9.0	9.4	14.7	15.5
100	66	42	31	22		20	25	33	59	100

05.88	05.68	04.58	03.78	03.98	904.27	03.68	03.48	03.38	97.08	95.98
5.4	5.6	6.7	7.5	7.3	7.01	7.6	7.8	7.9	14.2	15.3
100	72	32	24	19		20	25	32	54	100

06.2	06.1	05.3	05.1	05.8	05.5	05.3	04.8	05.1	89.61	89.94
5.1	5.2	6.0	6.2	5.5	5.77	6.0	6.5	6.2	13.2	13.9
100	87	48	34	21		21	31	39	64	100

06.8	06.2	06.1	06.2	06.1	06.2	06.2	06.0
4.5	5.1	5.2	5.11	5.2	5.1	5.1	5.3
100	50	21		22	33	66	100

06.1	06.0	06.0	06.3	06.6	06.3	06.0	05.9	05.9	06.3
5.2	5.3	5.3	5.0	4.74	5.0	5.3	5.4	5.4	5.0
85	65	44	22		19	30	41	89	100

STA	+	↑	−	ELEV
		911.28		
+60			4.92	906.36
64+00				
+50				
65+00				
+50	Ent	Lt &	Rt	
T.P.	6.43	912.89	4.82	906.46

LT ℄ RT

M.H. Lt. 17'

10.7	10.3	08.6	05.8	06.5	06.9	06.3	06.1	06.0	07.2	07.7
0.6	1.0	2.7	5.5	4.8	4.42	5.0	5.2	5.3	4.1	3.6
85	72	49	30	18		19	24	39	58	85

09.5	06.8	05.7	06.4	06.6	06.8	06.3	05.7	07.3	07.3
1.8	4.5	5.6	4.9	4.7	4.47	5.0	5.6	4.0	4.0
62	40	29	21	17		21	29	56	79

10.9
0.4
85

10.0	07.6	05.3	06.5	06.7	06.3	06.4	05.7	07.2	07.5
1.3	3.7	6.0	4.8	4.62	5.0	4.9	5.6	4.1	3.8
80	50	29	16		15	22	37	53	85

10.8	08.4	07.1	06.7	06.5	06.5	06.2	06.5	07.0	07.6	08.4
Conc	Conc	Conc								Conc
0.46	2.93	4.18	4.6	4.8	4.76	5.1	4.8	4.3	3.5	2.93
93	66	44	29	19		16	27	43	76	100

PK Stn 66+00 ℄

STA	+	Δ	-	ELEV
		912.89		
66+00				
+53		Ent. Lt.		
67+00				
+50				
+95			6.88	906.01
+95		℄ Rosewood		

JA
ML
DS
BW
MR

LT | ℄ | ~~RT~~ | JAN 10, 79

20

10.5	07.2	05.5	06.2	06.3	06.5	06.1	06.0	05.6	07.0	07.8	07.9
											CONC
2.4	5.7	7.4	6.7	6.6	6.43	6.8	6.9	7.3	5.9	5.1	5.02
91	54	33	22	14		16	21	29	43	56	66

10.3	07.3	06.2	06.2	06.3	06.1	05.9	05.3	06.3	06.4
2.6	5.6	6.7	6.7	6.60	6.8	7.0	7.6	6.6	6.3
91	44	21	14		16	21	31	54	90

12.1	07.0	04.9	06.2	06.2	06.2	06.0	05.9	05.3	06.0	07.6
0.8	5.9	8.0	6.7	6.7	6.74	6.9	7.0	7.6	6.9	5.3
91	48	30	21	13		16	22	29	46	53

09.8	09.3	08.0	05.8	04.7	05.8	06.0	05.7	05.5	05.0	05.4	07.3
											CONC
3.1	3.6	4.9	7.1	8.2	7.1	6.89	7.2	7.4	7.9	7.5	5.64
96	73	50	41	32	20		16	21	30	45	71

MH LT. 17'

08.5	06.9	06.2	05.9	05.9	05.7	05.3	04.6	03.6
4.4	6.0	6.7	7.0	6.98	7.2	7.6	8.3	9.3
100	58	29	15		16	30	61	97

STA	+	⊼	−	ELEV
		912.89		
T.P.	4.36	912.82	4.43	908.46
68+50				
✓				
69+16			ENT RT	
153	ENT LT			
T.P.	7.56	912.76	7.62	905.20

LT ℄ RT

Top HYD ROSEWOOD + HAZELWOOD

11.1	10.6	07.5	03.7	05.3	05.4	05.7	05.4	05.2	04.4	05.4	05.6
1.7	2.2	5.3	8.1	7.5	7.4	7.09	7.4	7.6	8.4	7.4	7.2
26	56	13	30	20	13		15	21	31	49	72

12.3
0.5
95
HOUSE

12.3	10.6	08.4	04.4	05.3	05.4	05.4	05.1	05.1	05.5	05.4
0.5	2.2	4.4	8.4	7.5	7.4	7.38	7.7	7.7	7.3	7.39
95	65	46	30	21	13		15	31	61	86
HO										CONC

09.5	07.4	06.2	05.4	05.3	04.9	04.9	03.6	05.2	05.5	05.9
3.3	5.4	6.6	7.4	7.49	7.9	7.9	9.2	7.6	7.3	6.9
75	54	33	16		15	22	34	51	75	90
										HO

P.K. @ 70+00

STA	+	π	−	ELEV
		912.76		
70+00				
+08			7.68	905.08
+25		Bit	ENT RT	
+37	ENT LT			
+50				

Lt	℄	Rt	22

10.4	08.2	07.8	05.1	05.1	04.9	04.9	03.1	05.3	04.6	06.0
										Conc
2.4	4.6	9.0	7.7	7.7	7.9	7.9	9.7	7.5	8.2	6.75
89	55	32	21	14		21	33	45	66	86

M.H Lt 17'

07.3	06.4	04.7	05.1	05.1	04.9	05.1	06.3
				7.66	7.9	7.7	6.5
85	53	28	16		16	46	92

05.6	05.5	05.1	05.1	05.1	05.1	05.6	05.8
7.2	7.3	7.7	7.7	7.65			
69	51	26	18		15	47	91

04.7	03.4	05.0	05.0	05.1	05.3	05.3	03.9	06.1	05.3
8.1	9.4	7.8	7.8	7.68	7.5	7.5	8.9	6.7	7.5
35	32	25	14		15	25	33	48	91

05.6
7.2
60

STA	+	π	−	ELEV
		912.76		
71+00				
+56			9.99	902.77
+50				
+65			8.94	903.82
72+00				
+25			5.73	907.03
+25	@	KENNARD		
"				
+50				

LT				℄				RT	23
06.0	05.6	03.8	05.0	05.0	05.1	04.9	04.6	04.2	06.0	05.4
6.8	7.2	9.0	7.8	7.8	7.74	7.9	8.2	8.6	6.8	7.4
81	47	32	21	14	✓	15	22	34	51	91

C.B. Rt 97'

06.7	06.2	04.0	05.6	05.6	06.6	05.5	05.4	04.8	03.6	03.7
6.1	6.6	8.8	7.2	7.2	7.24	7.3	7.4	8.0	9.2	9.1
85	51	34	21	14	✓	15	21	39	47	58

West End CMP

05.9	06.0	06.2	06.4	06.5	06.6	06.5	06.5	06.4	07.5	07.7
6.9	6.8	6.6	6.4	6.3	6.177	6.3	6.3	6.4	5.3	51
85	60	42	26	14	✓	18	29	44	66	85

MH Lt

05.5	06.1	06.6	07.2	07.4	07.1	07.1	07.0	07.2
7.3	6.7	6.2	5.6	5.39	5.7	5.7	5.8	5.6
100	63	36	16	✓	26	50	75	100

06.6	07.1	07.9	07.7	08.4	08.1	08.0	07.5	07.9	07.9
6.2	5.7	4.9	5.1	4.42	4.7	4.8	5.3	4.9	4.9
85	60	37	21		19	26	42	68	85

STA	+	Π	−	ELEV	
		912.76			
B.M.	7.30	916.78	3.32	909.44	909.48
73+00					
+50					
~~+54~~					
+54			20.39	896.39	
74+00					
		0.57			
T.P.	12.12	925.93	2.97	913.81	
74+50					

Lt | ℄ | Rt

Top H40 KENNARD & FROST

01.4	01.7	10.2	10.3	10.8	10.5	10.4	07.2	09.2	10.6
								top WALL	
15.4	11.1	6.6	6.5	5.96	6.3	6.4	9.6	7.6	6.2
57	46	28	20		20	25	31	41	48

89.9
16.9
90

10.5
40.

09.5
7.3
49

08.5	02.5	06.8	12.8	14.2	14.4	13.0	12.6	09.8	10.9	10.5
										GAR.
18.3	14.3	10.0	4.0	2.6	2.40	3.8	4.2	7.0	5.9	6.3
100	66	45	27	21		21	28	36	42	50

Apron Lt 116'

09.5	01.0	09.3	15.2	15.9	15.8	15.4	15.0	12.2	11.9	11.3
17.3	15.8	7.5	1.6	0.9	1.0	1.4	1.8	6.0	4.9	5.5
100	69	43	30	22		19	24	33	40	59

11.5
5.3
75

Top N.W. COR WALL STA 73+10 ±

02.2	11.8	17.8	18.2	18.1	17.9	17.9	16.3	16.7	16.7	19.7
										Ho.
23.2	14.1	8.1	7.7	7.76	8.0	8.0	9.6	9.2	7.2	6.2
68	43	30	22		20	26	31	36	52	73

01.1
24.8
100

Sta	+	⊼	−	Elev
		925.93		
74+87		℄ Ent. Rt.		
75+50				
B.M.	7.95	933.32	0.56	925.37
75+62				
76+00			ENT Rt	
+36	ENT Lt			

Lt			℄			Rt	
03.7	05.9	13.1	19.9	20.0	19.7	19.4	19.7
22.2	20.0	12.8	6.0	5.87	6.2	conc 6.50	conc 6.18
100	65	39	20		20	35	75

09.8	13.5	13.9	24.1	24.0	23.2	23.8	20.9	21.4	23.7
16.1	14.4	12.0	1.8	1.9	2.66	2.1	5.0	4.3	2.2
90	66	51	28	22		21	32	45	78

Spike in P.P.

12.3	14.6	23.7	23.7	23.9	23.6	22.6	27.6	29.5	30.1
21.0	18.7	9.6	9.6	9.36	9.7	10.7	5.7	3.8	3.2
84	54	29	20		21	30	55	74	92

19.5	19.2	23.4	25.6	25.5	27.8	27.7	24.8	29.1	30.3	31.6
13.8	14.1	9.9	7.7	7.8	7.45	7.6	6.5	4.2	3.0	1.7
74	55	38	27	21		19	34	56	77	100

GARRCH

22.2	23.5	25.7	27.1	27.6	27.5	26.1	27.3	28.4	32.3	32.2
11.1	9.8	7.6	6.2	5.66	5.8	7.2	6.0	4.9	1.0	1.1
98	70	41	20		20	29	35	43	60	100

Sta	+	∧	—	Elev	
		933.32			
76+48	RETAINING WALL LT				
T.P	8.53	94.59	0.23	933.09	933.06
76+87	℄ END LT.				
77+50					

Lt ℄ Rt 26

26.6	27.1	27.2	27.9	27.6	28.0	28.2	26.3	24.9	26.3	27.4	31.2	31.2
6.7	6.2	6.1	5.4	5.7	5.3	5.08	7.0	8.4	7.0	5.9	2.1	2.1
84	67	55	44	33	20		19	29	35	45	60	100

GUY?

SPIKE IN ~~GUNE~~ Pork

32.8	32.0	30.9	29.9	30.1	29.8	28.3	30.4	32.1	34.9
CONC	CONC	CONC							
8.76	9.58	10.72	11.7	11.52	11.8	13.3	11.2	9.5	6.7
60	50	35	20		18	29	35	47	56

35.4	35.3
6.2	6.3
90	75

40.6	39.5	39.8	39.1	39.1	39.4	39.2	32.8	31.5	37.8	38.1	38.8
MOUSE											
1.0	2.1	7.8	8.5	8.5	8.18	8.4	8.8	10.1	7.8	3.5	2.8
80	62	39	28	20		19	26	32	39	49	61

STA	+	↑	−	ELEV
		941.59		
78+00				
178+50				
TP	12.02	952.67	0.94	940.65
+80	℄ Flandreau			
79+00				

L+				℄			R+		
40.4	39.8	36.0	35.7	35.7	35.9	35.7	35.5	34.0	40.2	40.5
1.2	1.8	5.6	5.9	5.9	5.70	5.9	6.1	7.6	1.4	1.1
82	62	42	30	22		18	24	30	44	54

HOUSE

38.6	39.1	38.6	38.5	38.2	38.3	38.3	38.4	37.1	40.5	41.6
3.0	2.5	3.0	3.1	3.4	3.25	3.3	3.2	4.5	1.1	0.0
90	73	47	27	20		19	24	31	45	53

38.2	39.0	39.7	39.83	39.9	39.8	40.1	40.5	41.2
14.5	13.7	13.0	12.84	12.77	12.9	12.6	12.2	11.5
72	52	25	17		20	44	60	72

37.3
15.4
100

40.21	40.8	40.53	40.5	41.1	40.7	40.9	41.13	40.76	41.9
Conc.		CB					Sw.	C.B.	
12.46	11.9	12.14	12.2	11.75	12.0	11.8	11.54	11.91	10.8
46	35	25	22		19	29	49	52	66

39.2 38.8
13.5 13.9
72 92

STA	+	π	-	ELEV	
		952.67			
79+50					
✓					
80+00		Ent. Rt.			
+54		Ent. Lt.			
T.P.	5.60	956.55	1.72	950.95	
B.M.	8.37	962.05	2.85	953.70	953.68
81+00					

2+				℄ 1-12-78		R+		28
46.9	45.6	43.2	42.9	43.4	43.2	42.7	49.6	50.3
Ho.								Ho.
5.8	7.1	9.5	9.8	9.29	9.5	10.2	3.1	2.4
75	51	32	22		18	29	44	49
Ho. 47.3								
5.4								
83								

50.3	48.9	46.0	45.7	45.9	45.8	46.9	48.0	49.4	50.4	50.6
2.4	3.8	6.7	7.0	6.78	6.9	5.8	4.7	3.3	2.3	2.1
77	55	34	22		16	25	39	47	64	78

50.9	50.4	48.6	48.4	48.6	48.6	48.0	47.4	51.8	51.7
1.8	2.3	4.1	4.3	4.05	4.1	4.7	5.3	0.9	1.0
93	56	31	22		15	23	34	56	85

PK in ℄ STA. 81+00

Top SE Cor. Bottom Step Ho. No. 1739

53.1	52.9	52.4	51.3	51.0	51.0	50.9	50.1	49.9	49.7	52.7
Ho.										
9.0	9.2	9.7	10.8	11.1	11.12	11.2	12.0	12.2	12.4	9.4
80	49	45	28	23		19	23	32	36	47
							53.0	52.9	52.6	
							9.1	9.2	9.3	
							95	92	54	

Sta	+	π	-	Elev
		962.05		
81 +31		Ent	Lt	
+52		ENT LT		
82				
TP	10.18	971.09	1.14	960.91
+25		Ent	Lt	
+45		Ent	Rt	

J.A.
G.A.
B.W
R.C
M.R.

1-15-79
℄ -10°

Lt					Rt			29
53.38	53.05	52.75	52.5	52.6	52.8	52.5	50.9	53.9	54.2
8.67	9.00	Core 9.30	9.6	9.52	9.3	9.60	11.2	8.2	7.9
84	58	36	25	✓	20	23	32	46	63
									54.1
									8.0
									80
54.8	54.5	54.0	53.4	53.6	53.4	52.2	52.1	54.3	55.4
7.3	7.6	8.1	8.7	8.48	8.7	9.9	10.0	7.8	6.7
79	59	40	23	✓	21	26	33	47	64
									55.2
									6.9
									87
56.2	56.0	56.0	56.2	56.0	55.9	54.9	53.6	59.1	59.3
5.9	6.1	6.1	5.9	6.14	6.2	7.2	8.5	3.0	2.8
75	55	30	24	✓	21	25	31	46	68
									59.6
									2.5
									80

P.K. ℄ STA 83+00

59.2	58.8	58.2	57.4	57.2	56.4	56.1	60.3
11.9	12.3	12.9	13.7	13.9	14.5	15.0	10.8
80	58	37	23	✓	22	32	67
59.2	59.1	58.6	58.4	58.2	58.2	58.4	61.2
11.9	12.0	12.5	12.7	12.86	12.9	12.7	9.9
72	53	38	25	✓	23	33	65

Sta	+	π	−	ELEV
		971.09		
83+00				
+54		Ent Lt		
84+10		Ent Rt & Lt		
+50				
+93				
85+00				

Lt				℄			Rt		30
63.0	62.1	60.4	60.8	60.9	60.5	61.0	61.4	63.4	63.9
8.1	9.0	10.5	10.3	10.18	10.6	10.1	9.7	7.7	7.2
70	46	33	26	✓	30	39	44	54	58
	63.60							66.9	
	Conc	63.3	63.0	63.1	62.7	62.7	63.1	Fe.	
	7.49	7.8	8.1	8.00	8.4	8.4	8.0	4.2	
	83	50	25	✓	21	27	40	55	
67.79	67.34	65.98	64.8	64.7	64.7	64.1	64.6	68.4	70.7
								Mo	
3.30	3.75	5.11	6.3	6.4	6.44	7.0	6.5	2.7	0.9
81	61	45	32	2.5	✓	20	33	61	94
69.4	68.8	65.9	65.3	65.1	65.0	65.5	66.3	69.5	69.8	70.4
1.7	2.3	5.2	5.8	5.55	6.1	5.6	4.8	1.6	1.3	0.7
71	58	38	26	✓	21	33	44	54	71	89
68.6	68.4	66.8	66.3	65.7	66.1	65.8	66.9	69.1	69.7	70.1
2.5	2.7	4.3	4.8	5.4	5.00	5.3	4.2	2.0	1.4	1.0
88	68	45	34	22	✓	25	40	56	73	92
64.3	64.3	65.1	65.7	66.2	66.0	67.7	68.6	69.8		
6.8	6.8	6.0	5.4	4.94	5.1	3.4	2.5	1.3		
100	83	55	28	✓	28	46	69	100		

Sta	+	π	−	Elev	
		971.09			
85 +44		℄ White Bear Ave.			
B.M.			6.22	964.87	964.86

Lt		℄			Rt		
63.6	64.6	63.6	63.7	66.4	67.1	67.7	68.3
Med.	Med.	Median					
7.5	6.5	5.5	5.4	4.69	4.0	3.4	2.8
110	75	50	25		31	70	110

Spike in P.P. Lt. Ho. 1761

STA	+	π	−	ELEV	
B.M.	2.36	910.82		908.46	
67+55			5.51		
67+65			5.71		
71+67			5.41		
71+76			5.15		
72+69			1.73		
72+78			1.70		
72+70			4.59		
B.M.			1.34	909.48	909.48

HYD FROST + ROSEWOOD

C.B. LT 22'

C.B. RT 26'

M.H. LT 24'

M.H. LT 26'

M.H. LT 28'

C.B. LT 24'

C.B. RT 24'

ML
DS
BW
MR

MAR 22, 82

SUNNY 35°

FROST AUK

X-SECTIONS 7479 ENTRANCE

STA	+	$\bar{\Delta}$	−	Elev
				942.07
77+79				

LINKER ROD

℄

LT RT

Top Hyd SW Cor FLANDRAU

40.7	39.8	34.9	34.6	34.8	34.9	34.9	34.7	35.01
80	54	39	22	10		10	24	43 CONC SLAB

ML
BR
GJ
LS

AUG 16 82

SUNNY 65°

X SECTION

W.B.A. + FROST

25+00 TO 28+50

	+	⊼	−		
BM	5.30	958.98		953.68	
	12.75	971.24	0.49	958.49	
25					
+50					
26+09	GUTTER LINE RT				
+38	GUTTER LINE RT				
T.P.	9.47	916.12	4.59	906.65	
+48	BEG WALL				

2 RT

Top Se Cor / Bottom Step 1739

Se Cor C.B.

56.43	56.85	57.3	58.9
2.55	2.13	1.7	0.1
25	25	33	48.
64.	T.C.		

55.54	55.97	56.0	58.4	56.5
3.44	3.01	3.0	0.6	2.5
25	25	31	55	82
Gutter	T.C.			T.C.

54.22	54.4	54.9
4.76	4.64	4.09
25	33	64
Gutter		

53.47	54.0	54.8
5.51	5.01	4.18
25	33	
Gutter		

Se Cor H.H

65.50	65.92	66.62	68.0	68.13
10.62	10.2	9.5	8.1	7.99
25	33	33	52	80
	B. Wall	Top Wall		T.C.

	+	⊼	−	Elev	
		976.12			
26+80					
27					
+50					
28					
+50					
T.P.	2.87	968.91	10.08	966.04	
29			15.23	953.68	953.68

64.58	65.00	65.22	70.02	70.92	68.81
11.54	11.12	10.9	6.1	5.2	7.31
25	25	33	33	55	81
Gu.	T.C.	B. WALL	Top WALL		T.C.

63.92	64.41	64.62	69.32	70.22	70.72	68.20
12.20	11.71	11.5	6.8	5.9	5.4	6.92
25	25	33	34	41	60	82
Gu	T.C.	B.W.	T.W.			T.C.

62.36	62.81	62.62	66.12	69.62	70.01
13.76	13.31	13.5	10.0	6.5	6.11
25	25	32	32	46	88
G.W	T.C.	B.W.	T.W.		T.C.

60.59	60.86	61.02	64.22	68.22	69.02
15.58	15.27	15.1	11.9	7.9	7.1
25	25	32	32	46	72
Gu.	T.C.	B.W	T.W.		BIT

58.86	59.33	59.32	62.82	66.02	66.82
17.26	16.79	16.8	13.8	10.1	9.3
25	25	32	32	49	77
Gu	T.C.	B.W	T.W		

NW Cor HH SE Rad W.B.A + Rost

SE Cor Bottom Step Ho 1739

ML
BL
GJ
SS

SUNNY 90°
AUG 3, 82

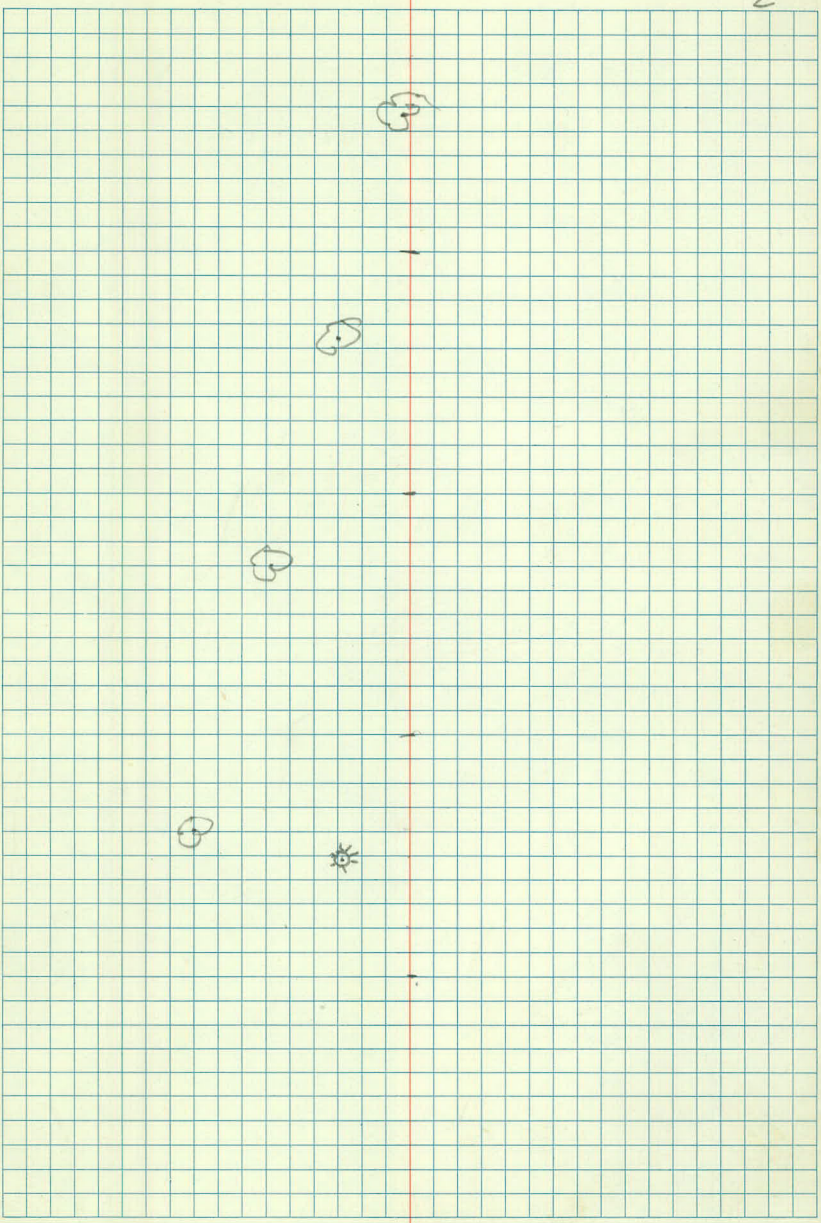
/

TOPOGRAPHY
STORM SEWER
FROST AVE
61+65 TO VAULT

Lt	℄	Rt
+77 10" ELM 2		
+50		
+33 8" ASH 15		
4+00		
+85 8" ELM 29		
+50		
+31 MAPLE 10" 45		
+24 LITE POLE 14		
3+00		
C1+C5 = 0+00		

LT ℄ RT

2

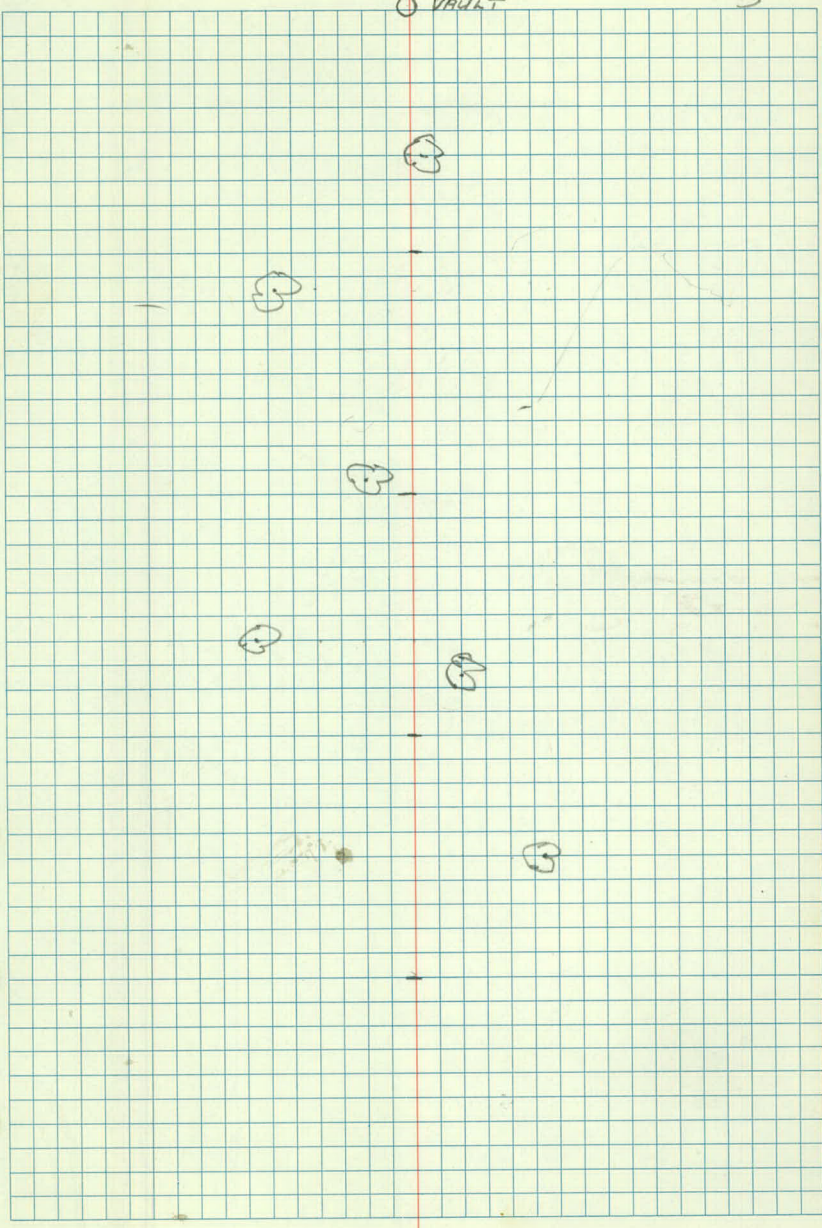


	Lt	Rt
+50		+51 VAULT / ℄
		+20 6" ASH / 3
7+00		
	+93 10" ASH / 28	
	+53 8" ASH / 10	
+50		
	+20 8" MAPLE / 33	+13 8" ASH / 10
6+00		
		+75 3" TRI ASH / 27
+50		
5+00		

LT ℄ RT

VAULT

3



ML
BZ
SS
GJ

AUG 3, 04
SUNNY 90°

PROFILE GRADES

STORM SEWER

FROST AVE

61+65 TO VAULT

STA	+	π	—	ELEV
BM	1.25	909.51 ✓		908.26
			901.88	
0+00			7.63	
			901.41	
+35			8.1	
T.P.	2.73	900.63 ✓	11.61	897.90 ✓
			896.03	
+64			4.6	
			895.63	
1+00			5.0	
			895.63	
+50			5.0	
			895.33	
2+00			5.3	
			895.23	
+50			5.4	
			895.43	
3+00			5.2	
			895.43	
+50			5.2	
			895.53	
4+00			5.1	
			896.13	
+50			4.5	
			897.63	
5+00			3.0	
T.P.	6.92	905.37 ✓	2.18	898.45 ✓
			899.27	
+50			6.1	
			899.57	
6+00			5.8	
			901.57	
+49			3.8	
			900.87	
7+00			4.5	

Top Hyd NW Cor Frost + Prosperity

Spike @ 5+00

STA	+	π	−	ELEV
		905.37		
			899.97	
7+20			5.4	
			896.72	
+51			8.65	
		✓		✓
T.P.	8.25	909.91	3.71	901.66
				✓
BM			2.26	907.65

VAULT Top Casting

Top Rock 6 + 48 ℄

FROST AVE.

Birmingham St. to White Bear Ave.

Soil Borings

62-628-03

BW
DS
MR

2-9-82
Clr. -10° 5°

43+00 Lt. 15'

0-.8'	Bit	
.8'-4'	Gr. SL	bwn slpl
4'-6'	SL	bwn np
6'-7'	Gr. SL	dkbwn np

44+00 Lt. 15'

0-.8'	Bit	
.8'-7'	LS	bwn np

45+00 Lt. 12'

0-.8'	Bit	
.8'-1'	SiL	dk gray se pl
1'-2'	SiL	tan pl
2'-7'	LS occ Gr.	bwn np

BW
DS
MR

2-9-82
Clr. -10°-5°

46+00 Lt. 12'

0-.8'	Bit.	
.8'-2'	L	dk bwn sepl
2'-4'	Gr SL	bwn slpl
4'-7'	LS	bwn np

47+00 Lt. 14'

0-.9	Bit	
.9-4'	L	bwn sepl
4'-7'	SL	bwn slpl

48+00 Lt. 13'

0-.9	Bit	
.9-4'	CL	bwn pl
4'-6'	SL	bwn slpl
6'-7'	SL	bwn pl

BW
DS
MR

3
2-9-82
Clr.-10°-5°

48+70 Lt. 12'

0-.9'	Bit.	
.9-1'	L	blk pl
1'-2'	SiC	tan pl
2'-4'	SL	lt bwn pl
4'-6'	LS	bwn np
6'-7'	SiL	bwn pl

50+00 Lt. 13'

0-.9	Bit	
.9-1'	SL	bwn sepl
1'-6'	SiL	bwn pl
6'-7'	Gr. SL	bwn slpl

51+00 Lt. 13'

0-.9	Bit.	
.9-2'	SL	bwn pl
2'-7'	SiL	bwn pl

BW
DS
MR

2-9-82
Clr.-10°-5°

52+00 Lt. 12'

0-.9	Bit	
.9'-2'	SL	dk bwn sepl
2'-4'	SiCL	lt bwn pl
4'-7'	SL	bwn slpl

53+00 Lt. 12'

0-.9	Bit.	
.9'-4'	SL	lt bwn slpl
4'-6'	LS	lt bwn np
6'-7'	SL	bwn sepl

54+00 Lt. 12'

0-.9'	Bit	
.9-2'	L	dk bwn pl
2'-7'	Gr. SL	lt bwn slpl

BW
DS
MR

4
2-9-82
Cln.-10°-5'

55+00 Lt. 14'

0-.9'	Bit	
.9'-2'	L	dk bwn
2'-4'	SiL	tan sepl
4'-7'	SL	bwn slpl

56+00 Lt. 12'

0-.9	Bit	
.9-3'	L	bwn pl
3'-5'	SiL	dk bwn pl
5'-6'	SiCL	bwn pl
6'-7'	SL	bwn slpl

BW
MR

2-16-82
PC 25°-35°

57+00 Lt. 12'

0-.9	Bit	
.9-3'	SL	bwn sepl
3'-5'	L	dk bwn sepl
5'-7'	SiL	tan pl

58+00 Lt. 12'

0-.9'	Bit	
.9-2'	SL	bwn slpl
2'-3'	SiL	lt bwn sepl
3'-4'	SL	bwn slpl
4'-7'	LS	tan np

60+00 Lt 12'

0-.9	Bit	
.9-3'	SL	bwn pl
3'-5'	SiCL	blk pl
5'-6'	SL	bwn slpl
6'-10'	SiL	gray pl
10-12	LS	lt bwn np

BW
MR

2-16-82
PC 25°35"

61+00 Lt. 12'

0 - .8	Bit	
.8 - 5'	SL	bwn slpl
5' - 7'	SL	bwn pl

62+00 Lt. 12'

0 - .8'	Bit	
.8 - 3'	SL	bwn slpl
3' - 7'	LS	lt bwn np

64+00 Lt. 12'

0 - .8	Bit	
.8 - 2'	LS	lt bwn np
2' - 4'	L	dk bwn sepl
4' - 6'	SL	bwn pl
6' - 7'	CL	bwn pl

BW
MR

2-16-82
PC 25°-35°

64+85 Lt. 13'

0-.8	Bit	
.8-2'	LS	bwn np
2'-5'	L	dk gray pl
5'-7'	SiCL	gray pl

66+00 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-3'	SiL	bwn pl
3'-4'	SL	bwn slpl
4'-7'	SiCL	bwn pl
7'-8'	SiC	dk bwn pl
8'-12'	SiCL	bwn pl

67+00 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-7'	SiCL	bwn pl

BW
MR

2-16-82
PC 25°-35°

68+20 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-3'	L	bwn sepl
3'-6'	LS	bwn np
6'-7'	SL	bwn sepl

69+00 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-3'	SiL	bwn pl
3'-7'	CL	bwn pl

69+90 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-4'	L	bwn sepl
4'-6'	SiCL	dk bwn pl
6'-7'	SiL	bwn-gray pl

BW
MR

2-16-82
PC 25°-35°

71+00 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-4'	SiCL	bwn pl
4'-6'	CL	bwn pl
6'-8'	SL	bwn slpl
8'-10'	SiL	bwn pl
10'-12'	LS	bwn np

72+00 Lt. 12'

0-.8	Bit	
.8-2'	SL	lt bwn slpl
2'-4'	SiL	bwn sepl
4'-5'	SL	bwn slpl
5'-7'	CL	bwn pl

BW
MR

2-16-82
PC 25"-35

73+00 Lt. 12'

0-.8	Bit	
.8-7'	SL	occ.gr. bwn sepl

73+90 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn slpl
2'-4'	SiL	bwn sepl
4'-6'	SL	bwn sepl
6'-7'	LS	bwn np

75+00 Lt. 12'

0-.8	Bit	
.8-7'	SL	bwn sepl

BW
MR

2-17-82
PC 24°-36°

76+00 Lt. 12'

0-.8 Bit

.8-7' LS lt. bwn np

77+00 Lt. 12'

0-.8 Bit

.8-5' SL bwn sl pl

5'-7' SL bwn pl

78+00 Lt. 12'

0-.8 Bit

.8-7' Gr. SL bwn sl pl

79+10 Lt. 12'

0-.8 Bit

.8-7' SL occ. gr. bwn sl pl

BW
MR

2-17-82
PC 24°-36

80+00 Lt. 12'

0-.8	Bit	
.8-3'	LS	bwn np
3'-4'	SL	bwn sl pl
4'-7'	LS	bwn np

81+00 Lt. 12'

0-.8	Bit	
.8-2'	SL	bwn pl
2'-4'	LS	bwn np
4'-7'	SL	bwn sl pl

81+80 Lt. 12'

0-.8	Bit	
.8-5'	L	lt bwn se pl
5'-7'	CL	lt bwn pl

BW
MR

2-17-82
PC 24°-36°

	82+90	Lt. 12'	
0-.8	Bit		
.8-5'	SL	lt bwn	slpl
5'-7'	LS	lt bwn	np
	84+00	Lt. 12'	
0-.8	Bit		
.8-4'	SL	bwn	slpl
4'-7'	LS	bwn	np

ML
MR
RL

Cloudy 30°
Dec 21, 82

TOPOGRAPHY
FROST AVE
EASEMENT

0+00 - 53+93.53

LT | ℄ | RT

+50

+32 4" C.W 2 | +32 12" ELM 4

+29 COR FE 1 | +30 STUMP 4

+26 BUSH 5

+24 BUSH 3

+29 12" ELM 15

+07 10" PINE 16

2

+93 BUSH 3

+85 10" B.E 4 | +85 BUSH 4

+65 4" MAP 6

+65 4" ELM 13

+58 COR FE (WOVEN WOOD) 1

+57 18" ELM 13

+50 BUSH 5 | +50 PP 1

+50

+43 8" ELM 10

+43 BUSH 1

+31 2" C.W 7 | +25 STUMP 10

+29 CHA. 1" 5

+05 GAR (NE COR) 11

+03 10" ELM 9

+08 2" C.W 1 | +06 1" MAPLE 1

+05 3" ELM 4

1+00

+00 GAR 11

+80 GAR (SE COR) 10

+65 3" ELM 6 ✓

+50

0+00

0+00 = 53+93.53

GR

+71 $\frac{PP}{5}$

+50

ML
MR
RL

Sunny 28°

Dec 21, 87

PROFILE GRADES

FROST AVE

EASEMENT @ 53+84.73

300' TO NORTH

STA	+	Π	−	ELEV
BM	4.65	913.21		908.56
0+00			9.72	903.49
+18			9.81	903.40
+20			9.30	903.91
+50			8.2	905.0
1+00			5.9	907.9
+27			4.9	908.3
+50			5.4	907.8
+75			5.9	907.3
2+00			7.4	905.8
+29			8.6	904.6
+35			9.7	903.5
+50			10.4	902.8
+64			10.5	902.7
3+00			9.9	903.3
BM			4.65	908.56

TOP HYD NW BARCLAY + FROST

FROST AVE → TO W.B.A.

STRUCTURAL DATA

#3

TYPE

STORM		ELECTRIC		WATER	
SANITARY	✓	TELEPHONE		OTHER	

STATION	LEFT	RIGHT	SIZE	
45+75	18'		9"	INCH CASTING

TYPE OF CONST.	
BLOCK	
BRICK	
SECTIONAL	✓

COMMENTS

2.1 SECTION

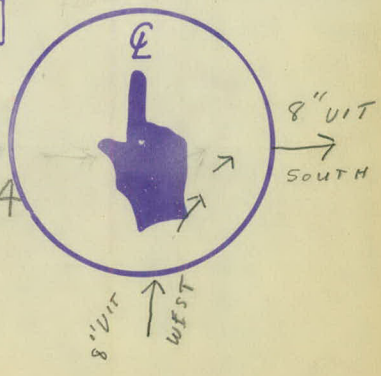
4.8 CONCENTRIC CONE

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	4	0.8	

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	8.33	900.67
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW

62-628-04



DESIGN

ELEVATION – TOP	909.00
FINAL ELEVATION	908.89
DIFFERENCES	0.11

ADJUST

RECONSTRUCT

OK Leave

STRUCTURAL DATA #4
TYPE

STORM		ELECTRIC		WATER			
SANITARY	✓	TELEPHONE		OTHER			

STATION	LEFT	RIGHT	SIZE	
49+03	18'		7"	INCH CASTING

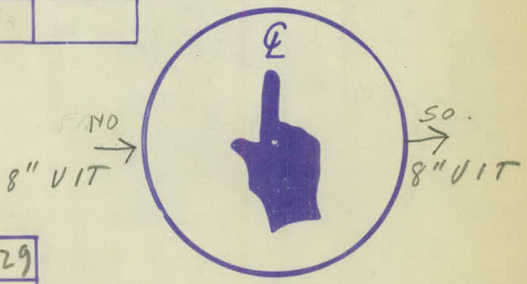
TYPE OF CONST.		COMMENTS
BLOCK		4.1' SECTION
BRICK		5.0' CONCENTRIC CONE
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	1	0.2	

906.13
908.46
3.67

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	10.50	897.79
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	908.29
FINAL ELEVATION	906.71
DIFFERENCES	1.58
ADJUST	
RECONSTRUCT	—

STRUCTURAL DATA

TYPE

#5

STORM	✓	ELECTRIC		WATER			
SANITARY		TELEPHONE		OTHER			

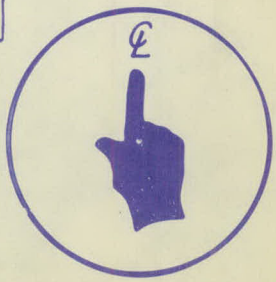
STATION	LEFT	RIGHT	SIZE	
50 + 64				INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		COVER CONCRETED SHUT
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING		ELEV.
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

REMOVE

STRUCTURAL DATA
TYPE #6

STORM		ELECTRIC		WATER	
SANITARY	✓	TELEPHONE		OTHER	

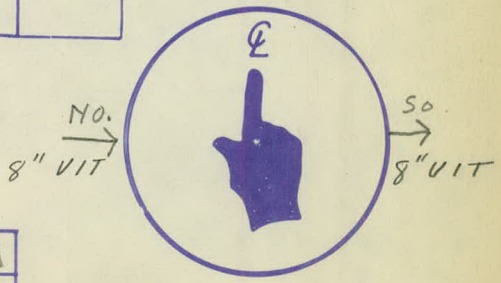
STATION	LEFT	RIGHT	SIZE	
52+33	18'		9"	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		3' SECTION
BRICK		4.3' CONCENTRIC CONE
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	6	1.5	

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	9.82	895.47
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	905.29
FINAL ELEVATION	903.89
DIFFERENCES	1.40

ADJUST ——

RECONSTRUCT

STRUCTURAL DATA

TYPE MH #7

STORM		ELECTRIC		WATER	
SANITARY	✓	TELEPHONE		OTHER	

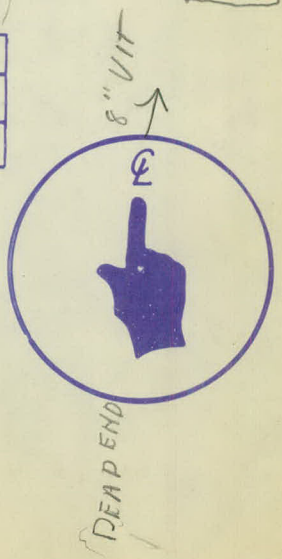
STATION	LEFT	RIGHT	SIZE	
54+41	✓		9	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	8	2.4	

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	10.2	892.4
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	902.6
FINAL ELEVATION	900.98
DIFFERENCES	1.62

ADJUST

RECONSTRUCT

STRUCTURAL DATA

TYPE #8

STORM		ELECTRIC		WATER		
SANITARY	X	TELEPHONE		OTHER		

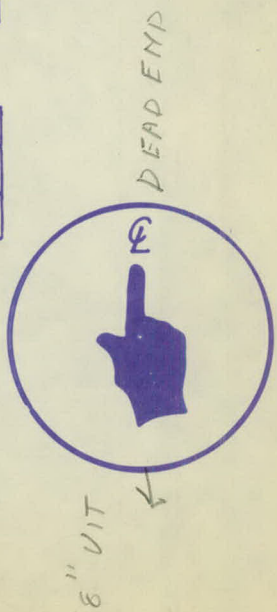
STATION	LEFT	RIGHT	SIZE	
54+41		21	9"	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		3'0 SECTION
BRICK		4.4 CONCENTRIC CONE
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	7	1.4	

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	9.74	893.36
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN	
ELEVATION – TOP	902.01
FINAL ELEVATION	900.92
DIFFERENCES	1.09
ADJUST	
RECONSTRUCT	6.8'

STRUCTURAL DATA

TYPE #9

STORM		ELECTRIC		WATER	
SANITARY	✓	TELEPHONE		OTHER	

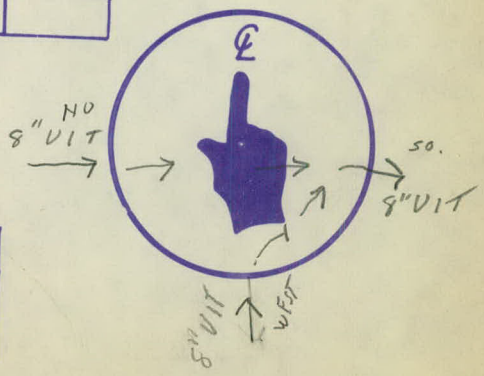
STATION	LEFT	RIGHT	SIZE	
55+64	✓		9	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		2.4' SECTION
BRICK		4.4' CONCENTRIC CONE
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	4	0.9	

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	8.80	891.66
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	900.46
FINAL ELEVATION	899.18
DIFFERENCES	1.28

ADJUST

RECONSTRUCT — 6.8'

STRUCTURAL DATA #10

TYPE

STORM		ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

STATION	LEFT	RIGHT	SIZE	
55+64		✓	9	INCH CASTING

TYPE OF CONST.	
BLOCK	
BRICK	
SECTIONAL	✓

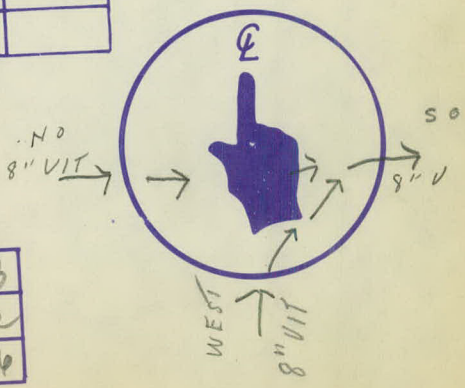
COMMENTS

2.2' SECTION
4.5 CONCENTRIC CONE

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	4	0.9	

DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	8.74	ELEV. 891.54
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN	
ELEVATION – TOP	100.28
FINAL ELEVATION	899.12
DIFFERENCES	1.16

ADJUST

RECONSTRUCT 6.8'

STRUCTURAL DATA

TYPE #11

STORM		ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

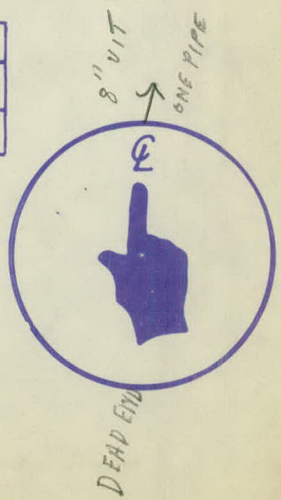
STATION	LEFT	RIGHT	SIZE	
56+80	✓		9"	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		3. 1 SECTION
BRICK		4. 4' CONCENTRIC CONE
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	4	0.8	

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	9.29	889.98
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	899.27
FINAL ELEVATION	897.62
DIFFERENCES	1.65
ADJUST	
RECONSTRUCT	6.9'

STRUCTURAL DATA #12

TYPE

STORM		ELECTRIC		WATER	
SANITARY	X	TELEPHONE		OTHER	

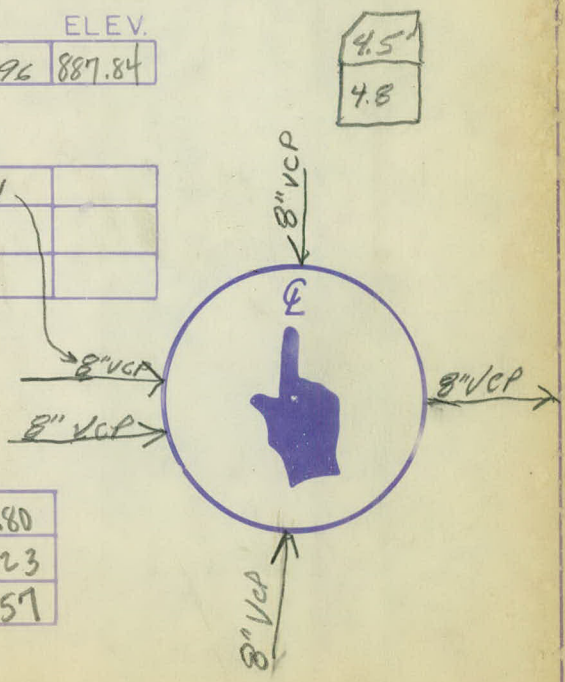
STATION	LEFT	RIGHT	SIZE	
58+99	17			7" INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		CONC
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS		3		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	10.96	887.84
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	8.1	
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN	
ELEVATION - TOP	898.80
FINAL ELEVATION	898.23
DIFFERENCES	.57

ADJUST

RECONSTRUCT

STRUCTURAL DATA

TYPE #13

STORM		ELECTRIC		WATER			
SANITARY	X	TELEPHONE		OTHER			

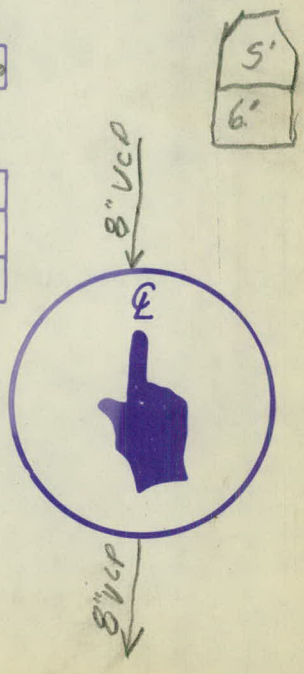
STATION	LEFT	RIGHT	SIZE	7" INCH CASTING
61+21	17			

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				CONC
BRICK				
CONC. RINGS		3		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	12.0	888.66
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	900.66
FINAL ELEVATION	899.81
DIFFERENCES	.85

ADJUST

RECONSTRUCT ← 10.6'

STRUCTURAL DATA

TYPE

#14

STORM		ELECTRIC		WATER		
SANITARY	X	TELEPHONE		OTHER		

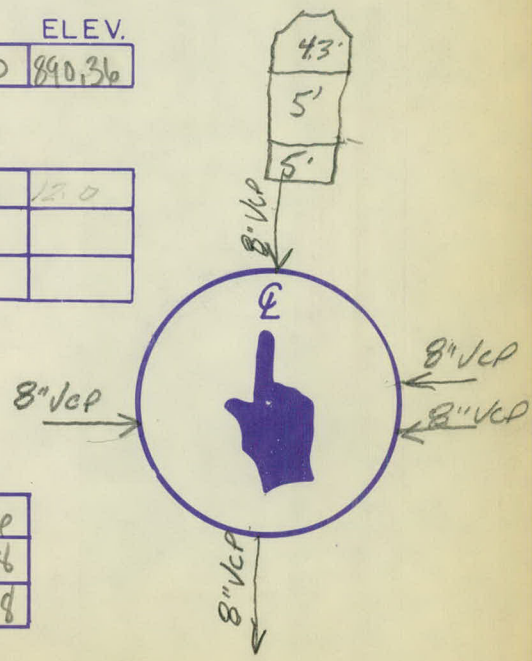
STATION	LEFT	RIGHT	SIZE
63+60	17		7' INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		ECCEN
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS		4		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	16.0	890.36
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	12.0	12.0
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN	
ELEVATION – TOP	906.36
FINAL ELEVATION	904.88
DIFFERENCES	1.48
ADJUST	
RECONSTRUCT	9.5'

STRUCTURAL DATA

TYPE

#15

STORM		ELECTRIC		WATER			
SANITARY	X	TELEPHONE		OTHER			

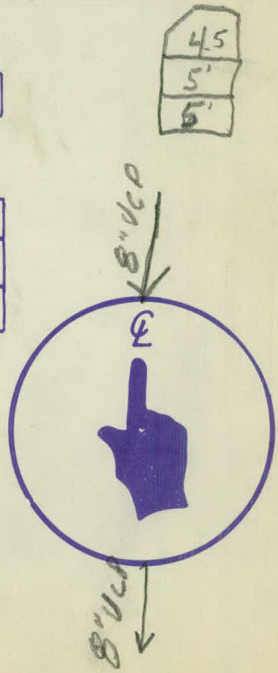
STATION	LEFT	RIGHT	SIZE	
65+76	17			7" INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		CONC
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS		5		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	16.15	890.24
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	906.39
FINAL ELEVATION	905.37
DIFFERENCES	1.02

ADJUST

RECONSTRUCT

STRUCTURAL DATA

TYPE CB 16

STORM ✓	ELECTRIC	WATER	
SANITARY	TELEPHONE	OTHER	

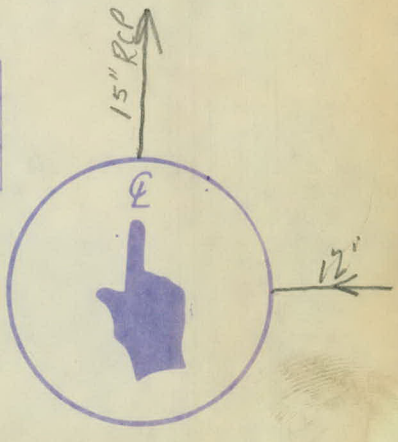
STATION	RIGHT	LEFT	SIZE	
67+55		24		INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		908.46 910.40 90.40
BRICK	X	1.94 5.10 4.66
SECTIONAL		910.40 905.30 905.74

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	X	2		

DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	3.3	ELEV. 905.30 TOP CAST
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	905.30
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

REMOVE

STRUCTURAL DATA

TYPE MH 18

STORM		ELECTRIC		WATER			
SANITARY	X	TELEPHONE		OTHER			

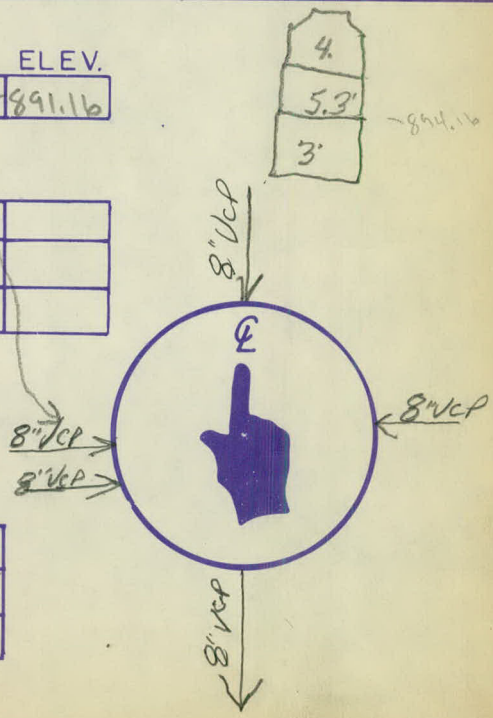
STATION	LEFT	RIGHT	SIZE	
67+95				7" INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		CONC
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS		6		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	14.85	891.16
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	10.85	
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN	
ELEVATION – TOP	906.01
FINAL ELEVATION	904.27
DIFFERENCES	1.74
ADJUST	
RECONSTRUCT	

STRUCTURAL DATA Top

TYPE CB 19

STORM	X	ELECTRIC		WATER			
SANITARY		TELEPHONE		OTHER			

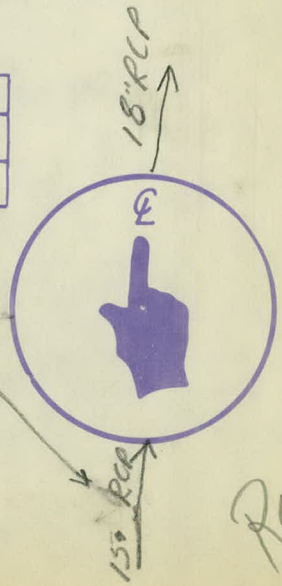
STATION	LEFT	RIGHT	SIZE	
68+18	24			11" INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK	X	C.B.
BRICK		
SECTIONAL		MEXICAN HAT 3'

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	5.40	
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	4.0	
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	905.74
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

REMOVE

STRUCTURAL DATA

TYPE MH 20

STORM		ELECTRIC		WATER	
SANITARY	✓	TELEPHONE		OTHER	

STATION	LEFT	RIGHT	SIZE	
70+08	17			7" INCH CASTING

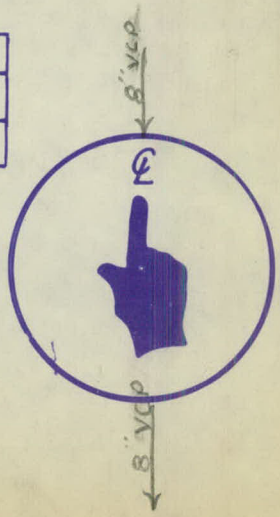
TYPE OF CONST.		COMMENTS
BLOCK		CONCENTRIC
BRICK		
SECTIONAL	3"	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS		4		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	13.5	891.58
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

4.5
5.5
3.0'
891.58

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	905.08
FINAL ELEVATION	903.60
DIFFERENCES	1.48

ADJUST

RECONSTRUCT 10'

STRUCTURAL DATA
TYPE CB 21

STORM	✓	ELECTRIC		WATER		
SANITARY		TELEPHONE		OTHER		

STATION	LEFT	RIGHT	SIZE	
71+56.		98		INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	8.2.	
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

902.77 TC

FROZE
1-15-79

SIZES OF ALL PIPES AND DIRECTION OF FLOW

DESIGN

ELEVATION – TOP	
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

OK

STRUCTURAL DATA

TOP

TYPE

MH 22

STORM	✓	ELECTRIC		WATER			
SANITARY		TELEPHONE		OTHER			

STATION	RIGHT	LEFT	SIZE	
71+67		24	7"	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	X	2		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	6.6	
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW

DESIGN

ELEVATION – TOP	905.41
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

Remove

STRUCTURAL DATA

TYPE

MH 23

STORM	✓	ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

STATION	RIGHT	LEFT	SIZE	
71+76		26		INCH CASTING

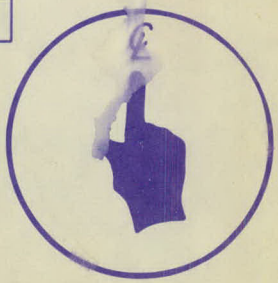
TYPE OF CONST.		COMMENTS
BLOCK		NO CASTING
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING		
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

HAS PLYWOOD OVER IT

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

STRUCTURAL DATA

TYPE

MH 24

STORM		ELECTRIC		WATER		
SANITARY	✓	TELEPHONE		OTHER		

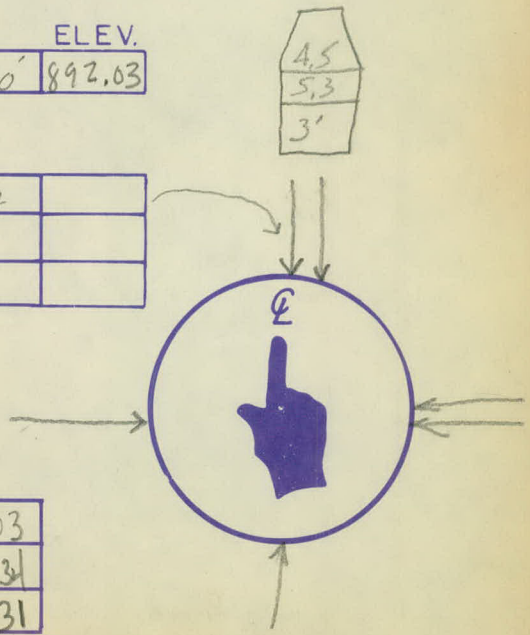
STATION	LEFT	RIGHT	SIZE	7" INCH CASTING
72+25	17			

TYPE OF CONST.		COMMENTS
BLOCK		CONCENTRIC
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	15.0'	892.03
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	9.4	
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	907.03
FINAL ELEVATION	907.34
DIFFERENCES	+.31

ADJUST

RECONSTRUCT

Top

STRUCTURAL DATA

TYPE MH 25

STORM	✓	ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

STATION	RIGHT	LEFT	SIZE	
72+69		28		No CASTING INCH CASTING

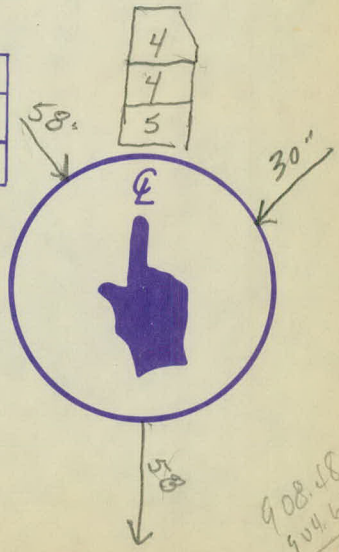
TYPE OF CONST.		COMMENTS
BLOCK		ECC
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	13.3	895.66
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	6.0	
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW

909.06
908.66
0.4



908.48
904.66
3.8

DESIGN

ELEVATION – TOP	908.96
FINAL ELEVATION	909.06
DIFFERENCES	+.10
ADJUST	
RECONSTRUCT	

STRUCTURAL DATA

TYPE CB 26

STORM		ELECTRIC		WATER			
SANITARY		TELEPHONE		OTHER			

STATION	LEFT	RIGHT	SIZE	
72+70		24"		INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

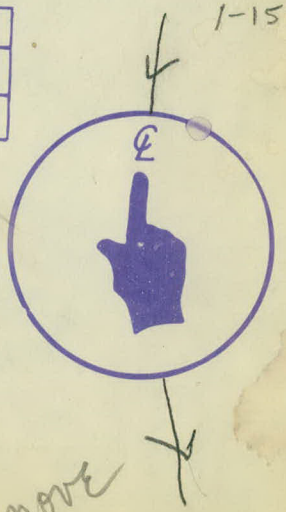
ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	4.	50
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

ELEV.

SIZES OF ALL PIPES AND DIRECTION OF FLOW

Froze Shut
1-15-79



DESIGN

ELEVATION – TOP	905.85
FINAL ELEVATION	
DIFFERENCES	
ADJUST	
RECONSTRUCT	

STRUCTURAL DATA

TYPE

CB 27

STORM	✓	ELECTRIC		WATER		
SANITARY		TELEPHONE		OTHER		

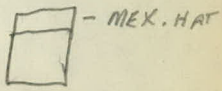
STATION	LEFT	RIGHT	SIZE	
72+78	24		11"	INCH CASTING

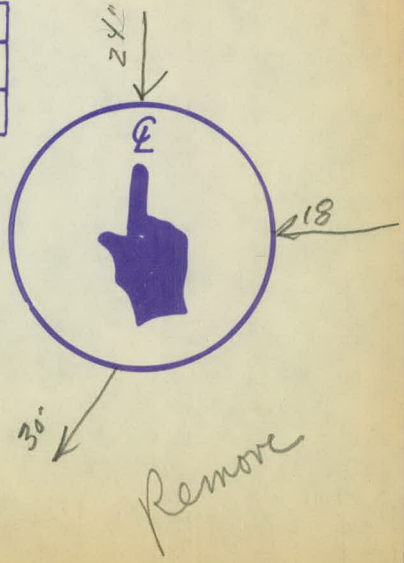
TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL	X	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	7.4	
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING	4.2	
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW





DESIGN

ELEVATION – TOP	909.07
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

STRUCTURAL DATA

TYPE MH29

STORM		ELECTRIC		WATER		
SANITARY	✓	TELEPHONE		OTHER		

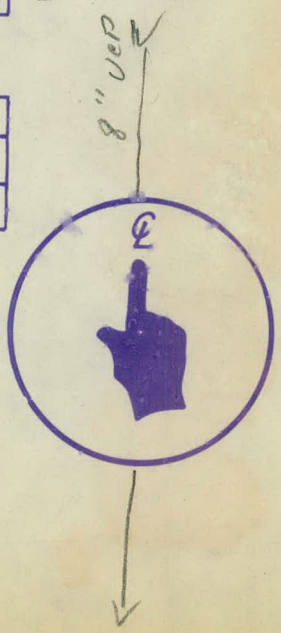
STATION	LEFT	RIGHT	SIZE	
75+53			9"	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL	✓	

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	8		

DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	ELEV. 12.91	11.23 ±
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	923.33
FINAL ELEVATION	922.44
DIFFERENCES	.89

ADJUST ——

RECONSTRUCT

STRUCTURAL T&D DATA

TYPE C.B. 30

STORM		ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

STATION	LEFT	RIGHT	SIZE	
75+67	26'	~~26'~~	11"	INCH CASTING

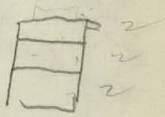
TYPE OF CONST.	
BLOCK	
BRICK	
SECTIONAL	X

B.J. COMMENTS

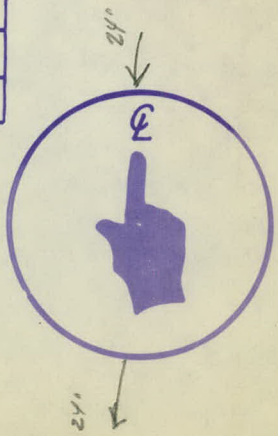
NEW RC-2 TOP .5' +2"

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	X	3		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	6.9	916.85
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		



SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	923.75
FINAL ELEVATION	922.60
DIFFERENCES	1.15
ADJUST	
RECONSTRUCT	1.0

STRUCTURAL DATA Top

TYPE CB 31

STORM		ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

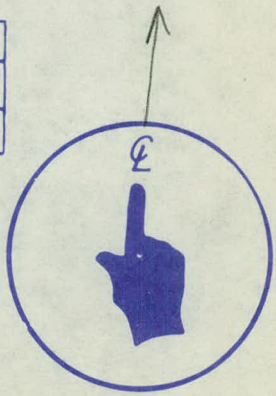
STATION	LEFT	RIGHT	SIZE	
78 + 63		53	11	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK	X	
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	2.1	
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	939.44
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

OK

STRUCTURAL DATA

TYPE MH 32

STORM		ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

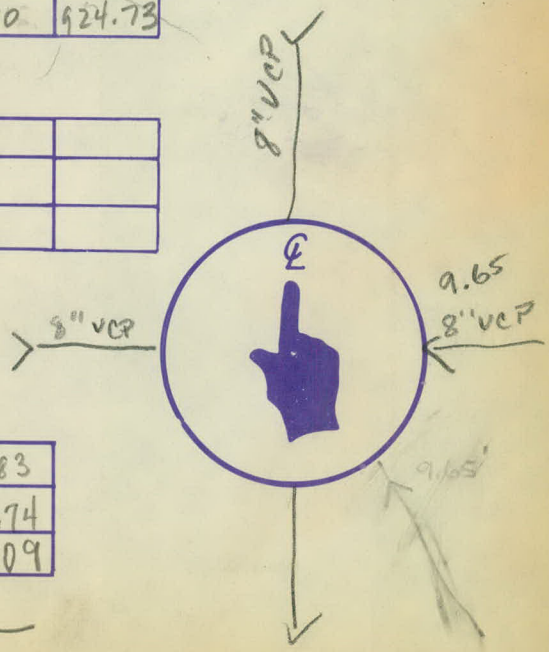
STATION	LEFT	RIGHT	SIZE	
78+80	17		7	INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	5		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	15.10	924.73
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	939.83
FINAL ELEVATION	939.74
DIFFERENCES	.09
ADJUST	
RECONSTRUCT	

52.67
12.14
40.53

STRUCTURAL DATA

TYPE CB 33

STORM	✓	ELECTRIC		WATER			
SANITARY		TELEPHONE		OTHER			

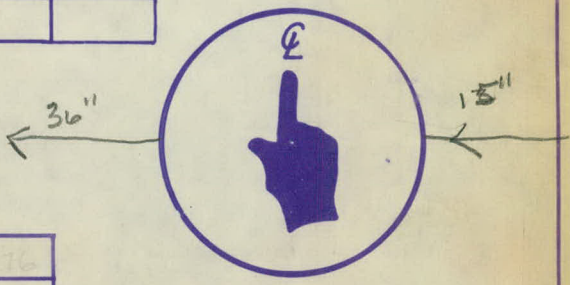
STATION	LEFT	RIGHT	SIZE	
78+92		53		INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	4.	70
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	96.76
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT

OK

STRUCTURAL DATA
TYPE CB 34

STORM		ELECTRIC		WATER		
SANITARY		TELEPHONE		OTHER		

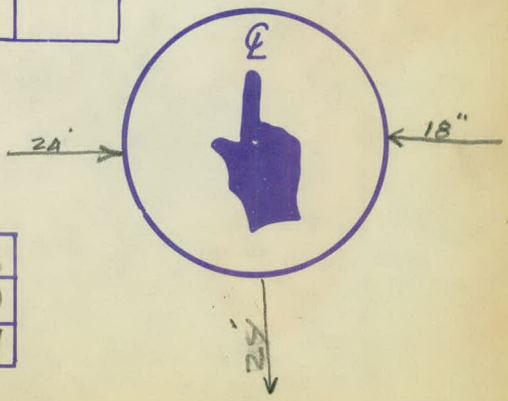
STATION	LEFT	RIGHT	SIZE	
79+06	24'			INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	9.99	ELEV. 930.63
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	940.53
FINAL ELEVATION	940.90
DIFFERENCES	+.37

ADJUST

RECONSTRUCT

STRUCTURAL DATA Top

TYPE S.D. 35

STORM		ELECTRIC		WATER	
SANITARY		TELEPHONE		OTHER	

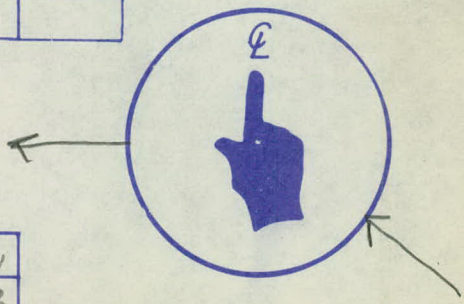
STATION	LEFT	RIGHT	SIZE	
79 + 20		25		INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	8.0	934.51
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION - TOP	939.51
FINAL ELEVATION	941.33
DIFFERENCES	+1.82

ADJUST

RECONSTRUCT

STRUCTURAL DATA Top

TYPE MH.36

STORM		ELECTRIC		WATER		
SANITARY		TELEPHONE		OTHER		

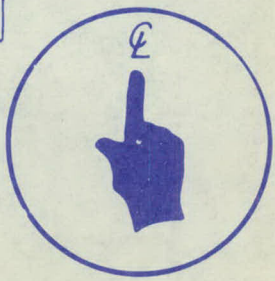
STATION	LEFT	RIGHT	SIZE	
81+80	17'			INCH CASTING

TYPE OF CONST.		COMMENTS
BLOCK		
BRICK		
SECTIONAL		

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS				

		ELEV
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING		
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	954.96
FINAL ELEVATION	954.74
DIFFERENCES	.22

ADJUST

RECONSTRUCT

STRUCTURAL DATA

TOP

TYPE MH 37

STORM		ELECTRIC		WATER	
SANITARY	✓	TELEPHONE		OTHER	

STATION	LEFT	RIGHT	SIZE	
84+80	17			INCH CASTING

TYPE OF CONST.	
BLOCK	
BRICK	
SECTIONAL	✓

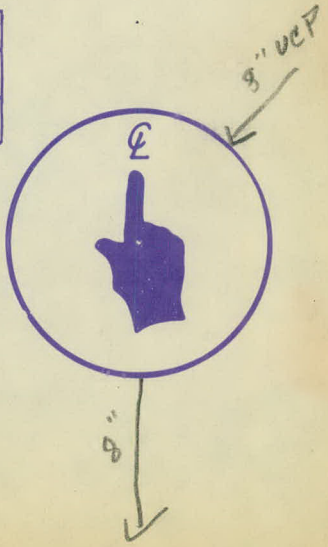
COMMENTS

2' Section
4' Cone Concentric

ADJUSTING RINGS	TYPE	NO.	DEPTH	COMMENTS
BLOCK				
BRICK				
CONC. RINGS	✓	5		

		ELEV.
DEPTH FROM BOTTOM OF M.H TO TOP OF CASTING	8.	70
DISTANCE FROM HIGHEST FLOW LINE TO TOP OF CASTING		
ETC.		
INV.		

SIZES OF ALL PIPES AND DIRECTION OF FLOW



DESIGN

ELEVATION – TOP	
FINAL ELEVATION	
DIFFERENCES	

ADJUST

RECONSTRUCT