GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.

2. ALL CONCRETE SHALL BE STANDARD CITY OF WICHITA PAVING MIX UNLESS OTHERWISE NOTED.

3. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLES & LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS, OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

   NOTE: NOTIFY ALL OF THE FOLLOWING COMPANIES FORTY EIGHT (48) HOURS PRIOR TO EXCAVATION:

KANSAS ONE-CALL	1-800-344-7233 (WICHITA) 687-2470
KG & E (ELECTRIC)	1-316-264-1141
KG & E (GAS)	1-316-832-3169 1-316-832-3180
MULTIMEDIA CABLEVISION	1-316-262-0661
SOUTHWESTERN BELL TELEPHONE	1-316-571-2115
CITY OF WICHITA WATER & SEWER	1-316-268-4908
WILLIAMS NATURAL GAS CO.	(TULSA) 1-918-588-4200 (WICHITA) 524-0491

4. A WILLIAMS NATURAL GAS CO. PIPELINE CROSSES THE PROJECT NEAR STA. 21+80. THE GAS COMPANY WILL REBUILD THIS PIPELINE DURING PHASE 1 OF THE CHANNEL CONSTRUCTION BELOW THE EXCAVATION LIMITS. THE STORM DRAIN CONTRACTOR SHALL COORDINATE HIS WORK WITH THE GAS COMPANY.

5. SPOIL MATERIAL SHALL BE PLACED ON CITY OF WICHITA PROPERTY ADJACENT TO THE IMPROVEMENTS AS SHOWN ON THE DRAWINGS AND AS APPROVED BY THE FIELD ENGINEER. FINAL GRADING WILL BE AT A SLOPE OF 6:1 OR LESS. NATURAL DRAINAGE PATH SHALL BE PRESERVED.

6. ALL AREAS DISTURBED BY EXCAVATION OF THE CHANNEL AND STORM DRAIN ABOVE THE NORMAL WATER SURFACE SHALL BE SEEDED AND MULCHED.

7. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WILL REQUIRE A KANSAS STATE DEPARTMENT OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

9. CONTRACTOR SHALL NOTIFY THE KANSAS CORPORATION COMMISSION, DOUG LOUIS (316-337-6231), IN THE EVENT ANY ABANDONED OIL OR GAS OR EXPLORATORY HOLES ARE ENCOUNTERED, SO THAT THE APPROPRIATE REGULATORY RESPONSE CAN BE MADE.

10. COASTAL DERBY HAS ABANDONED THEIR WELL FIELD LINES IN THIS AREA. THESE LINES SHALL BE CUT, AS NECESSARY, REMOVED, AND THE REMAINING LINES CAPPED. COASTAL DERBY MAY BE CONTACTED FOR QUESTIONS. (GLEN BERG, 316-291-2416)

11. CONTRACTOR MAY USE EITHER PRECAST SECTIONS OR CAST-IN-PLACE RCBB.

12. THE CONTRACTOR MAY BORROW MATERIAL FOR SHAPING THE EAST BANK CHANNEL BERM FROM EITHER PHASE 1 OR PHASE 2 SPOIL AREAS. THE CONTRACTOR SHALL COORDINATE BORROW OPERATIONS WITH OTHER CONTRACTORS THROUGH THE ENGINEER. THE CONTRACTOR SHALL GRADE AND RESEED BORROW AREAS AS REQUIRED.

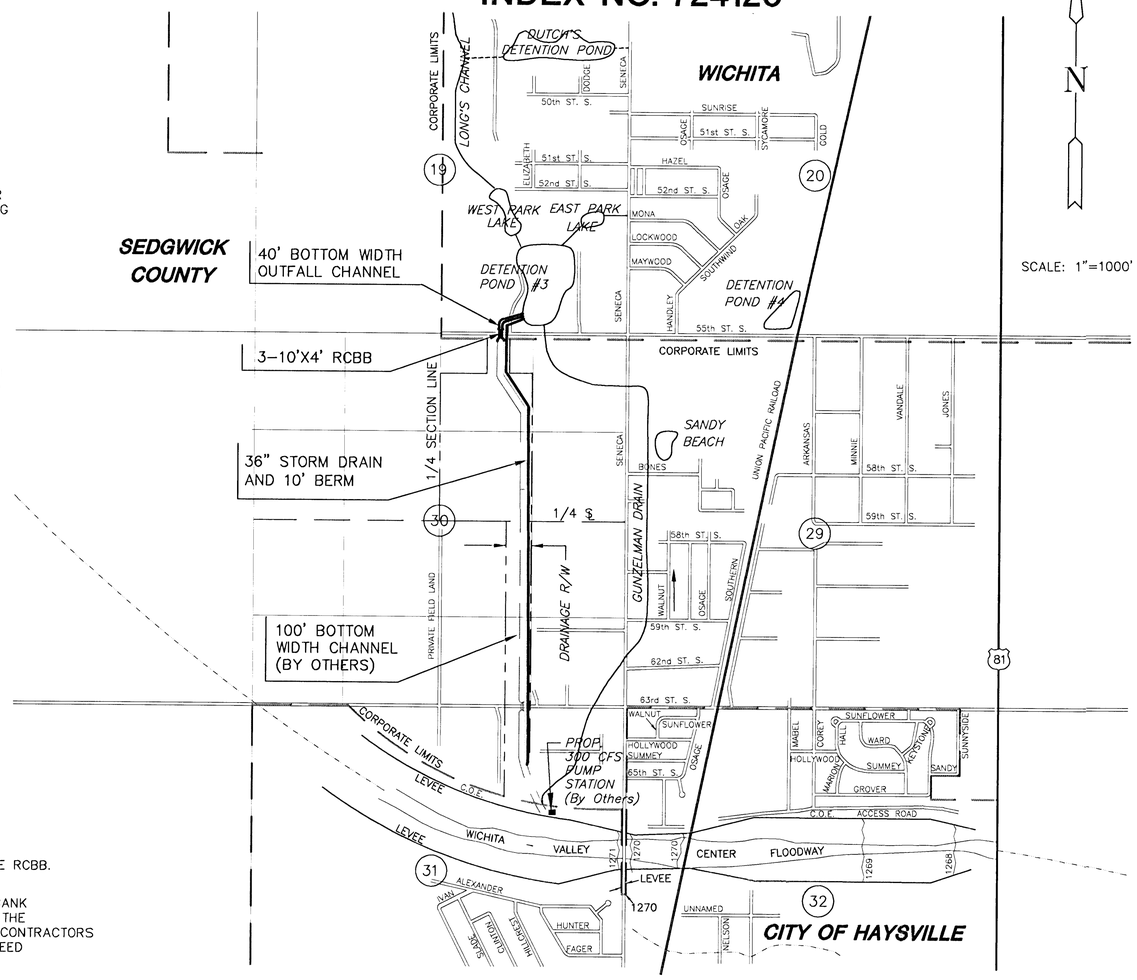
SOUTH SENECA DRAINAGE IMPROVEMENTS

DRAINAGE OUTFALL PROJECT NO. 468-82557

PHASE 3 - CHANNEL SEGMENT FROM 100' S. OF 55TH ST. SO. TO DETENTION POND #3 AND 36" STORM DRAIN SEWER

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER
NOVEMBER 1995

INDEX NO. 724120



INDEX TO DRAWINGS

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3	STORM DRAIN PLAN & PROFILE - STA. 7+09.5 TO 19+00
4	STORM DRAIN PLAN & PROFILE - STA. 19+00 TO STA. 31+00
5	STORM DRAIN PLAN & PROFILE - STA. 31+00 TO STA. 43+00
6	STORM DRAIN PLAN & PROFILE - STA. 43+00 TO STA. 55+00
7	STORM DRAIN PLAN & PROFILE - STA. 55+00 TO STA. 63+00
8	STORM DRAIN PLAN & PROFILE - STA. 63+00 TO STA. 72+68.7
9	CHANNEL PLAN & PROFILE - STA. 68+00 TO STA. 74+00
10	STORM DRAIN DETAILS\SANITARY SEWER MODIFICATIONS
11	STD. TYPE "P" MANHOLE DETAILS
12	STD. REINFORCED CONCRETE MANHOLE DETAILS
13	STANDARD COVER & FRAME DETAILS
14	CHANNEL AND BERM DETAILS
15	3-10'X4'X100' RCBB DETAILS
16	TYPICAL ROADWAY SECTION AND PAVEMENT MARKING PLAN
17	55TH STREET SO. AND RCBB GRADING PLAN AND TRAFFIC CONTROL
18-19	CROSS SECTIONS-CHANNEL

BENCH MARKS

BM #1 RR SPIKE IN EAST FACE OF 2ND PP NORTH OF 55TH ST. S. ON WEST SIDE OF SENECA
ELEV. = 82.48

BM #2 CHISELED "□" ON EAST END OF N. HEADWALL OF RCB, 1629' WEST & 22' NORTH OF NE COR 55TH ST. S. & SENECA.
ELEV. = 85.11

BM #3 RR SPIKE IN HEDGE TREE, 1329' SOUTH OF NORTH LINE NE 1/4 SEC 30 & 196' WEST OF EAST LINE OF THE WEST 1/2 NE 1/4 SEC 30-T28S-R1E
ELEV. = 85.745

BM #4 RR SPIKE IN WEST FACE OF NORTH LEG OF "H" POLE 67' S. & 77' E OF THE NE COR, NW 1/4, SE 1/4, OF SEC. 30-T28S-R1E
ELEV. = 82.355

BM #5 RR SPIKE IN WEST SIDE OF 24" COTTONWOOD, 1177' NORTH & 7' WEST OF SE COR,SW 1/4, SE 1/4 SEC 30-T28S-R1E
ELEV. = 85.11

BM #6 STEPPED SPIKE IN NORTH FACE PP, 36' SOUTH OF SE COR ,SW 1/4, SE 1/4 SEC 30-T28S-R1E
ELEV. = 79.63

NGVD = 1187.4 + WICHITA DATUM

MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

S. SENECA DRAINAGE IMPROVEMENTS
PROJECT NAME

CHANNEL & STORM DRAIN - PHASE 3
SHEET TITLE

DLM	DPG	JNJ
DESIGN BY:	DRAWN BY:	CHECKED BY:
11-95	93035	1 / 19
DATE	JOB NO.	SHEET/OF

G:\CIVIL\93035\TITLE\TITLE.DWG Thu Jan 25 10:25:07 1996

HORIZONTAL CONTROL

PT. NO.	NORTH	EAST	DESC.
1	11000.000	11000.000	I.P
16	4848.153	9594.697	NAIL
33	5692.883	9688.460	I.P.
37	8322.957	8359.147	I.P.
57	8336.978	9681.769	I.P.
102	4712.758	9479.706	HUB
103	5471.784	9388.728	I.P.
104	5989.683	9378.673	I.P.
105	7132.195	9364.888	I.P.
107	8088.951	9354.492	I.P.
108	8587.298	9270.673	I.P.
109	9571.427	9163.758	I.P.
110	9937.287	9256.947	I.P.
111	11011.335	9654.846	I.P.
112	10973.453	9078.357	I.P.
113	11094.099	9434.210	I.P.
120	10967.416	9223.890	I.P.
121	10565.587	9265.451	I.P.
122	10215.900	9268.810	I.P.

SCALE: 1"=300'

300 0 300 600

CENTER SECTION
SEC. 31, T28S, R1E

STA. 7+09.5
BEGIN PHASE 3
36" STORM DRAIN
AND BERM

CHANNEL CONSTRUCTION AND
SPOIL PILES, PHASE 1 AND
PHASE 2 (BY OTHERS)

STA. 68+00
BEGIN PHASE 3
NORTH CHANNEL SEGMENT
FROM 100' SOUTH OF 55TH ST.

CENTER SECTION 30
T28S, R1E

Project Right-of-Way

Project R/W

3-10'X4'X100' RCBB
PHASE 3

STA. 74+00
END PHASE 3
NORTH CHANNEL

STA. 72+68.7
END PHASE 3
36" STORM DRAIN

TRACT 30
COWSKIN FLOODWAY
CONDEMNATION

ANITA F. PATTERSON

R1-417
ANITA F. PATTERSON

R1-408-2
JUANITA F. SWANN

R1-408
PAULINE JAMES &
FAMILY TRUST

R1-407
ALVA J. COOK

R1-406-1
ALVA J. COOK

R1-406-2B
WILLIAM F. ANDRLA

R1-8904
WILLIAM F. ANDRLA

R1-406

25' (Typ.)

400'

50' (Typ.)

400' Drainage Right-of-Way

258' Drainage R/W

25'

250' 25' 250'

250' 50' 250'

200' 50' 200' 100'

350'

700'

WELL

103 102 16 104 105 107 108 109 110 122 121 120 112 113 111

33 37 57

POND #3

WICHITA
VALLEY-CENTER
FLOODWAY
(BIG DITCH)

JIMMY E. BALLARD, ET UX

TRACT 28
COWSKIN FLOODWAY
CONDEMNATION

RON'S
ADD.

BLAIR'S
ADDITION

R1-420-2
WILLIAM A &
BESSIE MATNEW

r1-420-3
REX GRAVIS
ET UX

R1-413-3
ROSETTA V. CODY,
ET AL

STEIN
3RD
ADDITION

R1-414-1
PAUL J. & KRISTY L.
SUTHERLAND

R1-416
ANITA F. PATTERSON

R1-421-2
R1-421-2A

R1-407-1

63RD STREET SOUTH

55TH STREET SOUTH

SOUTH SENECA STREET

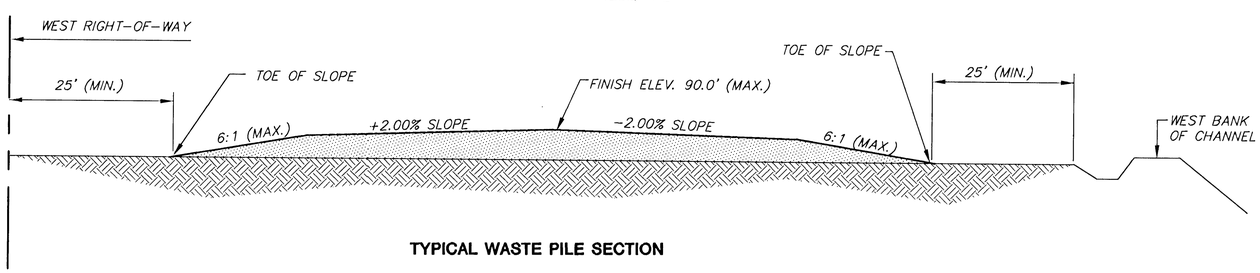
SE COR. SEC. 30
T28S, R1E

NE COR. SEC. 30
T28S, R1E

LEGEND

WASTE PILE LOCATIONS - PHASE 1 & PHASE 2

108 HORIZONTAL CONTROL POINT



TYPICAL WASTE PILE SECTION

MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

S. SENECA DRAINAGE IMPROVEMENTS
PROJECT NAME

KEY MAP AND GRADING PLAN - PHASE 3
SHEET TITLE

DLM	DPG	JNJ
DESIGN BY:	DRAWN BY:	CHECKED BY:
11-95	93035	2 / 19
DATE	JOB NO.	SHEET/OF

G:\CIVIL\93035\MAP\KEYMAP_PH3 Thu Jan 25 10:32:11 1996

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN PLAN/PROFILE
PROJ. NO. 468-82329

SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

R1-423
ANITA F. PATTERSON

R1-417
ANITA F. PATTERSON

R1-422-2
JIMMY E. BALLARD, et ux

STA. 7+09.5
BEGIN 36" STORM DRAIN
N. 4891.7920
E. 9617.4693

RIP-RAP TOEWALL
L = 10'
W = 2'
H = 2'

EXISTING 100' BOTTOM CHANNEL

TOP OF 10' WIDE BERM

63RD. STREET SOUTH

SECTION LINE

COSTAL DERBY ABANDONED GAS LINE

8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00

BM

25' ℄ TO 1/16 Section Line

1/16 CORNER

40' 40'

STA. 7+71.2
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 78.17
N. 4932.7358
E. 9663.5782

STA. 14+00.0
INSTALL 36" RISER
TOP = 79.13
SEE SH. 10 FOR RISER DETAILS

STA. 16+00.0
INSTALL 36" RISER
TOP = 79.23
SEE SH. 10 FOR RISER DETAILS

REMOVE AND REPLACE
24 L.F. OF PAVEMENT

PLAN

PROFILE

STA. 7+09.5
BEGIN 36" STORM DRAIN

STA. 7+71.2
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 78.17

STA. 14+00.0
INSTALL 36" RISER
TOP = 79.13

63RD. STREET SOUTH

STA. 16+00.0
INSTALL 36" RISER
TOP = 79.23

STA. 19+00

EXISTING GROUND

TOP OF PIPE

RIP-RAP TOEWALL
L = 10'
W = 2'
H = 2'

1128.8 L.F. 36" PIPE @ 0.06%

61.7 L.F. 36" PIPE
@ 0.06%

FL OUT = 68.64

FL OUT = 68.68
FL IN = 68.68

68.70 68.76 68.82 68.88 68.94 69.00 69.06 69.12 69.18 69.24 69.30 69.36

ELEVATION IN FEET (WICHITA DATUM)
85 80 75 70 65

7 8 9 10 11 12 13 14 15 16 17 18 19

3/19

FILE: 9335SW01
DATE: 9-8-95

G:\CIVIL\93\01\SWS\93195801 Thu Jan 05 10:43:26 1995

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN PLAN/PROFILE
PROJ. NO. 468-82329

R1-417
ANITA F. PATTERSON

SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

EXISTING 100' BOTTOM CHANNEL

6" WILLIAMS NATURAL GAS (1989)
T-316-524-0491, HAGAN-WARD TOC-5

COASTAL DERBY ABANDONED GAS LINE

TOP OF 10' WIDE BERM

19+00 20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00

BM

CAUTION!
6" WILLIAMS NATURAL
GAS LINE

STA. 22+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 80.22
SEE SH. 10 FOR RISER DETAILS

25' FROM 1/16 SECTION
LINE TO ℄

STA. 28+00.0
INSTALL 36" RISER
TOP = 80.51
SEE SH. 10 FOR RISER DETAILS

PLAN

PROFILE

STA. 19+00
6" WILLIAMS NATURAL GAS
STA. 22+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 80.22
STA. 28+00.0
INSTALL 36" RISER
TOP = 80.51
STA. 31+00

EXISTING GROUND

TOP OF PIPE

1200 L.F. 36" PIPE @ 0.06%

ELEVATION IN FEET (WICHITA DATUM)
85 80 75 70 65

69.36 69.42 69.48 69.54 69.60 69.66 69.72 69.78 69.84 69.90 69.96 70.02 70.08

19 20 21 22 23 24 25 26 27 28 29 30 31

4/19

FILE: 9335SW02
DATE: 9-8-95

D:\CIVIL\9335\DGN\9335SW02 Thu Jan 25 10:41:36 1996

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN PLAN/PROFILE
PROJ. NO. 468-82329

SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

R1-417
ANITA F. PATTERSON

R1-408-2
JUANITA F. SWANN

EXISTING 100' BOTTOM CHANNEL

COASTAL DERBY ABANDONED GAS LINE

TOP OF 10' BERM

HIGH VOLTAGE POWER LINE

SECTION LINE 1/2 SECTION

31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00

25' FROM 1/16 SECTION LINE TO ℄

1/16 CORNER

STA. 34+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
GRATE TOP = 78.97
SEE SH. 10 FOR RISER DETAILS

STA. 40+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 80.84
SEE SH. 10 FOR RISER DETAILS

BM

PLAN

PROFILE

STA. 31+00

STA. 34+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 78.97

STA. 40+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 80.84

STA. 43+00

HIGH VOLTAGE POWER LINE

EXISTING GROUND

TOP OF PIPE

1200 L.F. 36" PIPE @ 0.06%

ELEVATION IN FEET (WICHITA DATUM)

85 80 75 70 65

70.08 70.14 70.20 70.26 70.32 70.38 70.44 70.50 70.56 70.62 70.68 70.74 70.80

31 32 33 34 35 36 37 38 39 40 41 42 43

FILE: 9335SW03
DATE: 9-8-95

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN PLAN/PROFILE
PROJ. NO. 468-82329

SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

R1-408-2
JUNITA F. SWANN

R1-408
PAULINE JAMES
& FAMILY TRUST

EXISTING
100' BOTTOM
CHANNEL

TOP OF 10' BERM

1/16 SECTION LINE

BM

43+00 44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00

29°32'16"

STA. 46+00.0
INSTALL 36" RISER
TOP = 80.93
SEE SH. 10 FOR RISER DETAIL

25' FROM 1/16 SECTION
LINE TO ℄

STA. 52+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 82.52
SEE SH. 10 FOR RISER DETAIL

STA. 54+65.3
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 83.63
N 9626.9025
E 9653.8652

PLAN

PROFILE

STA. 43+00

STA. 46+00.0
INSTALL 36" RISER
TOP = 80.93

STA. 52+00.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 82.52

STA. 54+65.3
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 83.62

EXISTING GROUND

TOP OF PIPE

300 L.F. 36" PIPE @ 0.06%

600 L.F. 36" PIPE @ 0.06%

265.3 L.F. 36" PIPE @ 0.06%

FL OUT = 71.50

FL IN = 71.50

ELEVATION IN FEET (WICHITA DATUM)

85 80 75 70 65

70.80 70.86 70.92 70.98 71.04 71.10 71.16 71.22 71.28 71.34 71.40 71.46 71.52

43 44 45 46 47 48 49 50 51 52 53 54 55

FILE: 9335SW04
DATE: 9-8-95

G:\CIVIL\9335\SW\9335SW04.dgn Thu Jun 15 10:46:57 1995

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN PLAN/PROFILE
PROJ. NO. 468-82557

R1-407
ALVA J. COOK

R1-408
PAULINE JAMES
& FAMILY TRUST

SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

R1-406-2

STA. 62+70.9
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 83.11
N. 10324.5123
E. 9251.0985

STA. 54+65.3
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 83.63
N. 9626.9025
E. 9653.8652

STA. 58+70.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 81.68
SEE SH. 10 FOR RISER DETAIL

EXISTING WELL
100' BOTTOM CHANNEL
10' ESMT.
BM
TOP OF 10' BERM
54+00
56+00
56+00'
57+00
58+00
59+00
60+00
61+00
62+00
63+00
29°52'16"
25' FROM 1/16 SECTION LINE TO ℄
1/16 SECTION LINE
25' FROM PROPERTY LINE TO ℄

R1-407
ALVA J. COOK

R1-407
ALVA J. COOK

R1-406-2B
WILLIAM F. ANDRLA

PLAN

PROFILE

STA. 54+65.3
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 83.63

STA. 58+70.0
INSTALL 36" RISER
WITH BEEHIVE GRATE
FRAME TOP = 81.68

STA. 62+70.9
CONST. TYPE "P" MANHOLE
5' DIA.
MANHOLE TOP = 83.11

EXISTING GROUND
TOP OF PIPE

404.7 L.F. 36" PIPE @ 0.06%
400.9 L.F. 36" PIPE @ 0.06%

RL OUT = 71.50
FL IN = 71.50
FL OUT = 71.98
FL IN = 71.98

ELEVATION IN FEET (WICHITA DATUM)
85
80
75
70
65

71.52 71.58 71.64 71.70 71.74 71.76 71.82 71.88 71.94

53 54 55 56 57 58 59 60 61 62 63 64

FILE: 9335SW05
DATE: 9-8-95

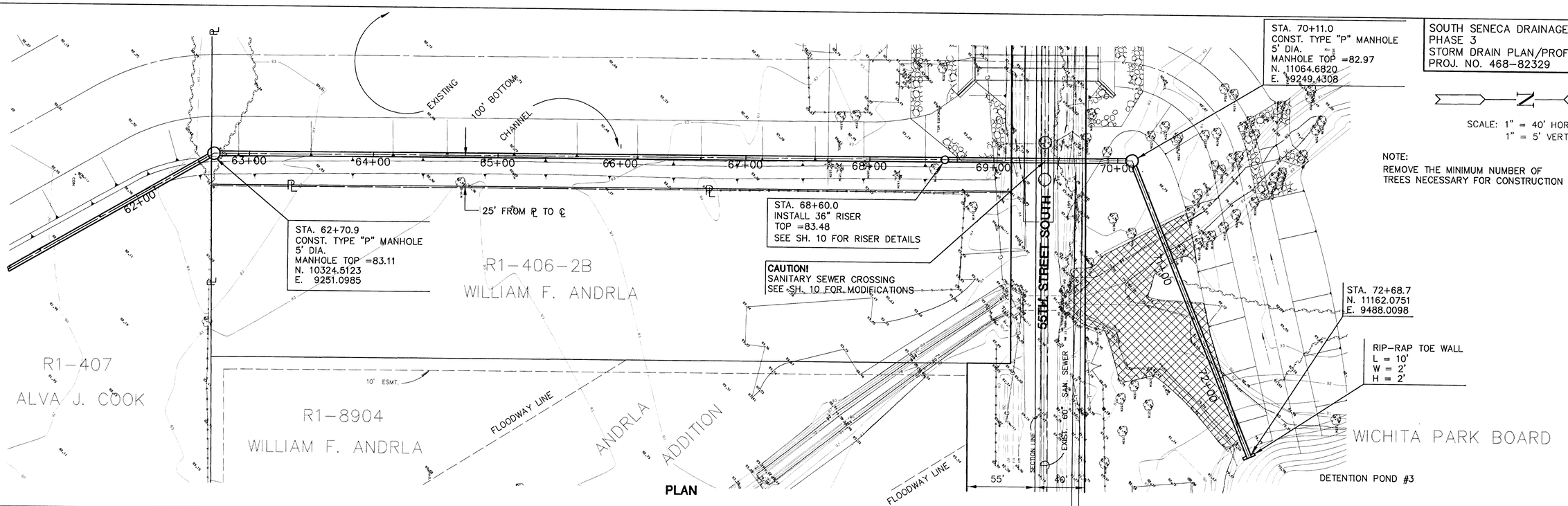
G:\CIVIL\9335\PLOTS\9335SW05 Thu Jan 25 10:43:01 1996

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN PLAN/PROFILE
PROJ. NO. 468-82329

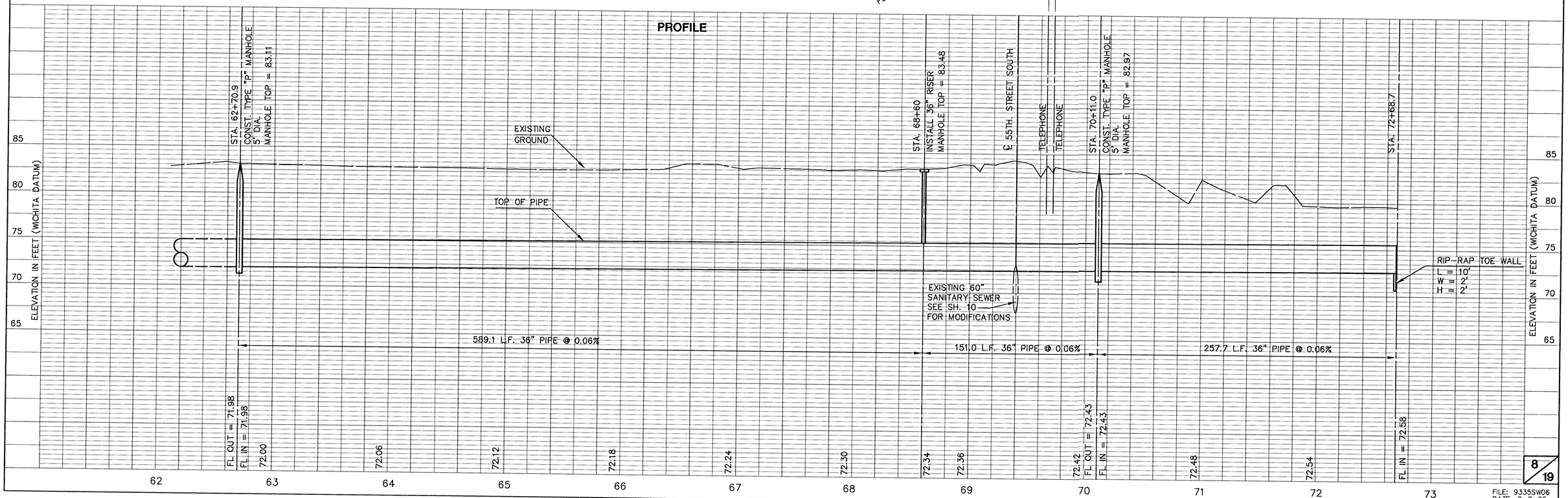
SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

NOTE:
REMOVE THE MINIMUM NUMBER OF TREES NECESSARY FOR CONSTRUCTION

PLAN



PROFILE



8/19

FILE: 9335SW06
DATE: 9-8-95

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM CHANNEL PLAN & PROFILE
PROJ. NO. 468-82557

SCALE: 1" = 40' HORIZ.
1" = 5' VERT.

RI-406-2

RI-406-2B
WILLIAM F. ANDRLA

RI-407
WILLIAM F. ANDRLA

STA. 69+23 CONST.
BERM FLUME, LT.
INSTALL 154 S.Y.
LIGHT STONE RIPRAP
SEE SHEET NO. 14

15' WIDE BERM

100' BOTTOM WIDTH CHANNEL

105' ℄ TO ℄

36" STORM DRAIN

STA. 68+00 BEGIN
CHANNEL - PHASE 3
SEE SHEET NO. 14

CAUTION!
ABANDONED
WATER WELLS
CUT & CAP 3'
BELOW FINISHED
GRADE

INSTALL 974 S.Y.
LIGHT STONE RIPRAP
SEE SHEET NO. 8

REMOVE EXISTING DRAINAGE STRUCTURE.
REMOVE AND REPLACE PAVEMENT AS
REQUIRED. SHAPE DITCHES TO DRAIN.

FLOODWAY EASEMENT

55TH STREET SOUTH

EXIST. R/W

STA. 69+67.41 CONST.
3-10'X4'X100' RCBB
WITH APRON, EACH END
SEE SHEET NO. 7

STA. 70+31.25 P.C.

CHANNEL CURVE DATA
Δ = 77°04'59"
R = 100.00'
T = 79.66'
L = 134.54'

INSTALL 380 S.Y.
LIGHT STONE RIPRAP
SEE SHEET NO. 8

EXIST. GUNZELMAN CHANNEL

STA. 71+65.78 P.T.

STA. 71+66 INSTALL
300 S.Y.
LIGHT STONE RIPRAP

FILL EXIST. CHANNEL
TO ELEV. 82.0

EXISTING LAKE

NOTE:
1. COMPACT ALL FILL WITHIN THE 55TH STREET RIGHT-OF-WAY TO 95% ASTM D-698
2. STRUCTURES AND OTHER PROPERTY IMPROVEMENTS WITHIN THE PROJECT RIGHT-OF-WAY BETWEEN STA. 67+50 AND STA. 68+90 WILL BE DEMOLISHED AND REMOVED BY OTHERS PRIOR TO JANUARY 31, 1996

PLAN CHANNEL

PROFILE CHANNEL

EXISTING GROUND
SPECIAL DITCH, LT.
CHANNEL BOTTOM
℄ GAS LINE
℄ 55TH ST. SO.
℄ 60" SAN. SWR.
+0.30%
-0.50%
81.63 +00
80.68 +18
FL 68.50
517.41 L.F. 100' BOTTOM WIDTH CHANNEL @ +0.05%
117.41 L.F. 100' BOTTOM WIDTH CHANNEL @ +0.05%
3-10'X4'X100' RCBB
382.59 L.F. 40' BOTTOM WIDTH CHANNEL @ -0.50%

ELEVATION IN FEET (WICHITA DATUM)

FL = 74.10 | 74.15 | 74.20 | 74.25 | 74.30 | 74.35 | 75.70 | 75.70 | 75.70 | 75.29 | 74.79 | 74.29 | 73.79

64 65 66 67 68 69 70 71 72 73 74

9/19

FILE: 9335CH7A
DATE: 5-3-95

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM DRAIN DETAILS
PROJ. NO. 468-82557

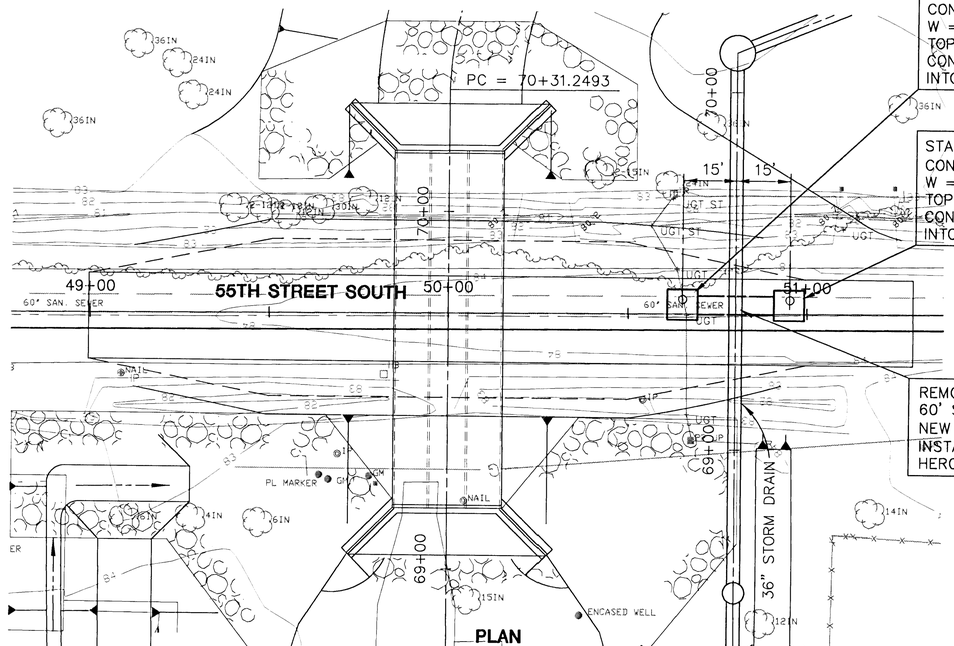
STA. 50+65
CONST. REINF. CONC. M.H.
W = 8.0', L = 6.5'
TOP OF M.H. = 84.15
CONNECT EXIT. 60" RCP
INTO NEW MANHOLE

STA. 50+95
CONST. REINF. CONC. M.H.
W = 8.0', L = 6.5'
TOP OF M.H. = 84.25
CONNECT EXIT. 60" RCP
INTO NEW MANHOLE

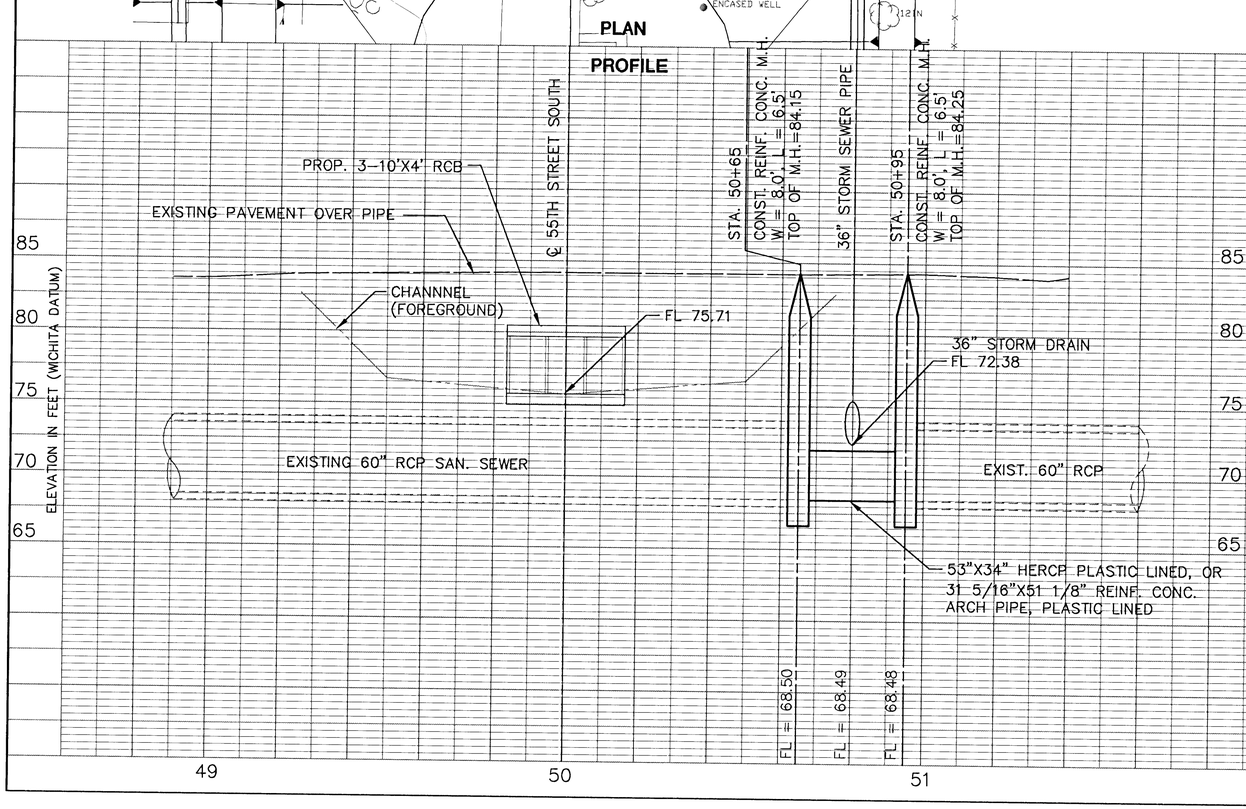
REMOVE 30 L.F. OF EXIST.
60' SAN. SWR. BETWEEN
NEW REINF. CONC. M.H.
INSTALL PLASTIC LINED
HERCP OR RCAP

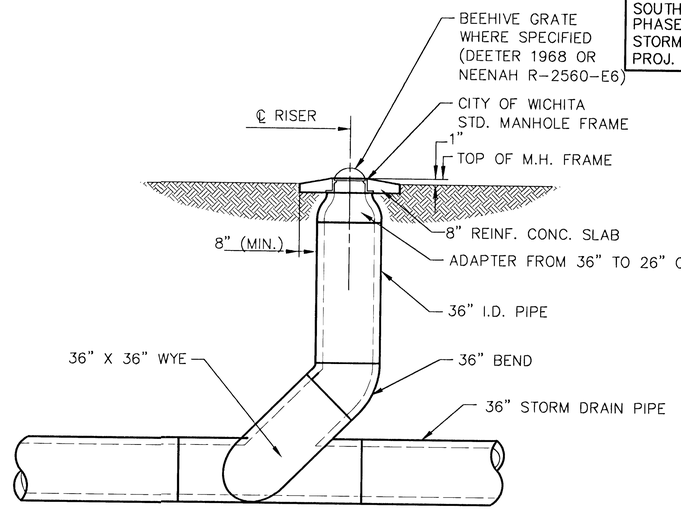
N

SCALE: 1"=20' HORIZ.
1"=5' VERT.



PLAN





STORM DRAIN RISER DETAIL

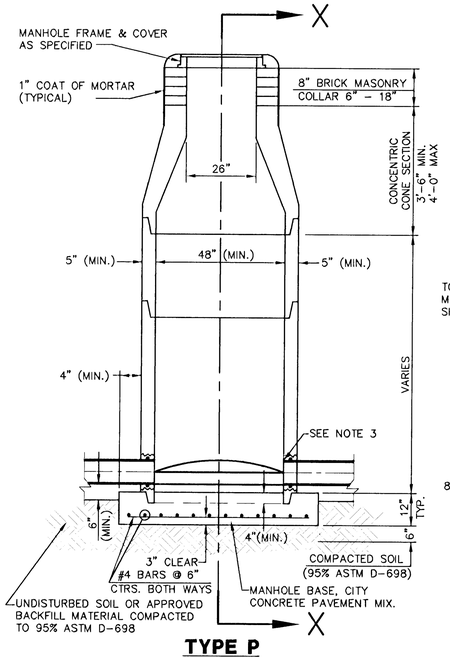
CONTRACTOR MAY PROVIDE AND INSTALL 5-FOOT DIAMETER MANHOLE IN PLACE OF 36" WYE AND RISER ASSEMBLY AT NO EXTRA COST. MANHOLES SHALL HAVE WATERTIGHT JOINTS AND WATERTIGHT CONNECTIONS TO PIPE. PLACTIC MANHOLE SHALL BE ANCHORED TO A CONCRETE BASE 8" THICK WITH A DIAMETER AT LEAST 8" GREATER THAN THE MANHOLE OUTSIDE DIAMETER.

FILE: SANSWR
DATE: 9-8-95

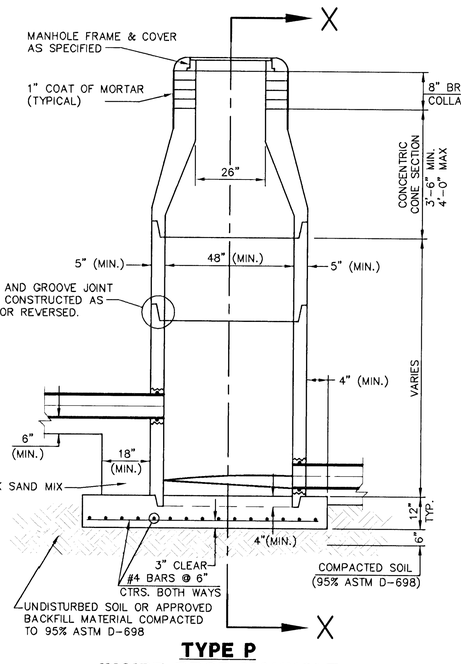
G:\CIVIL\DRAWINGS\SANSWR.S Thu Jan 25 16:57:25 1996

SEWER APPURTENANCES DETAILS

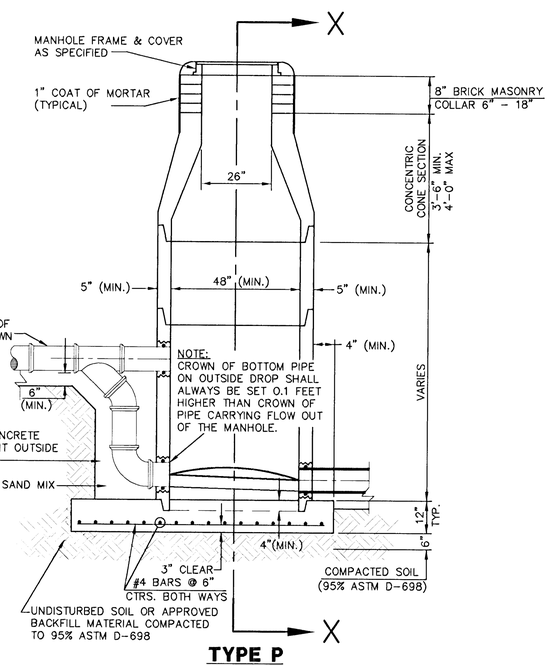
ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA



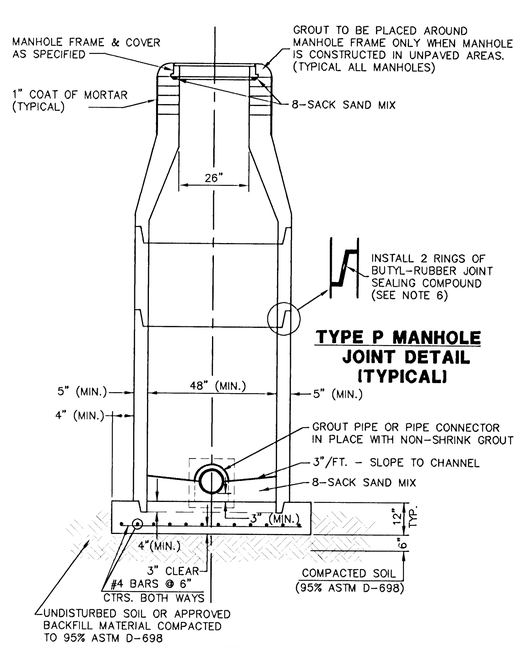
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE

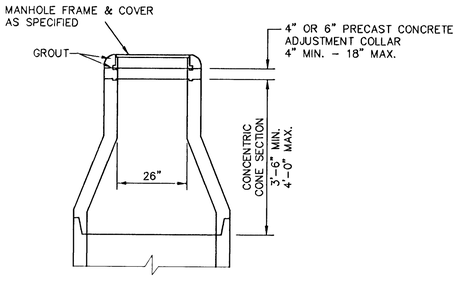


TYPE P MANHOLE
JOINT DETAIL
(TYPICAL)

SECTION X
(TYPICAL)

GENERAL NOTES - PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEMEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
8. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.



ALTERNATE CONSTRUCTION
IN UNPAVED AREAS

REVISED: 6-12-86

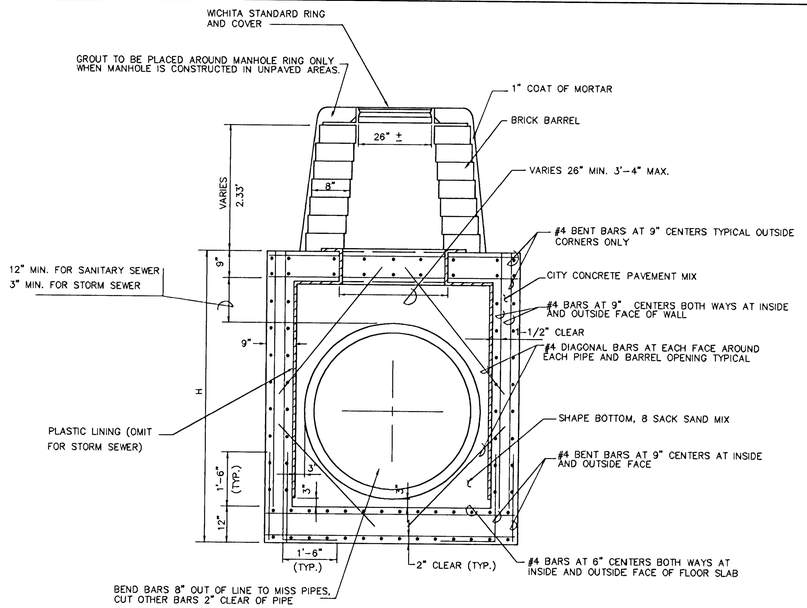
MANHOLE DETAILS

CITY OF WICHITA, KANSAS

Design C.O.W.	Checked by	Checked by	
Drawn by	Date	Date 11-95	Job No.

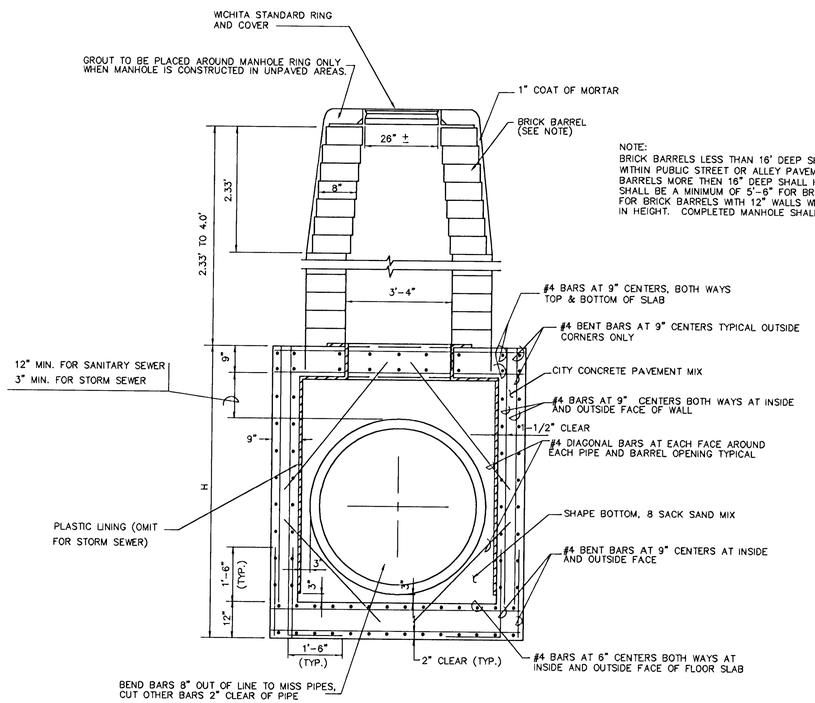
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6/5/96 11:54:56 AM Tue, Jun 25, 1996 MHDTLS.DWG



REINFORCED CONCRETE MANHOLE

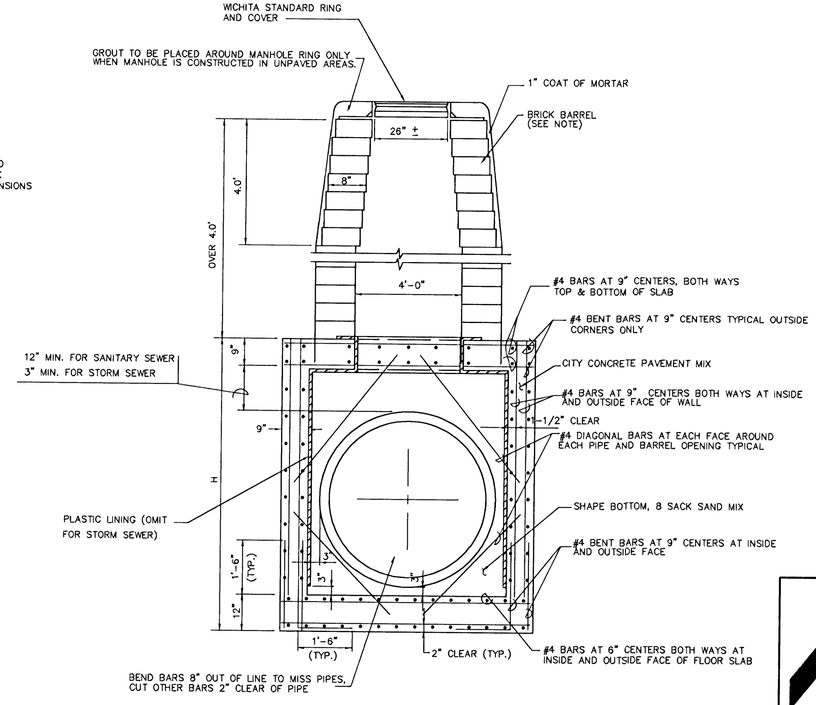
DEPTH OF STACK: 0' TO 2.33'



NOTE:
BRICK BARRELS LESS THAN 16' DEEP SHALL HAVE 1" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12". BRICK BARRELS MORE THEN 16" DEEP SHALL HAVE 12" WALLS. THE "L " AND "W " DIMENSIONS SHALL BE A MINIMUM OF 5'-6" FOR BRICK BARRELS WITH 8" WALLS AND 6'-2" FOR BRICK BARRELS WITH 12" WALLS WHEN THE BRICK BARRELS ARE OVER 4 FEET IN HEIGHT. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATERTIGHT.

REINFORCED CONCRETE MANHOLE

DEPTH OF STACK: 2.33' TO 4.0'



REINFORCED CONCRETE MANHOLE

DEPTH OF STACK: OVER 4.0'

MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

SOUTH SENECA DRAINAGE OUTFALL
PROJECT NAME

REINFORCED CONCRETE MANHOLE
SHEET TITLE

DESIGN BY:	DRAWN BY:	CHECKED BY:
DATE: 11-95	JOB NO.: 93035	SHEET / OF: 12 / 19

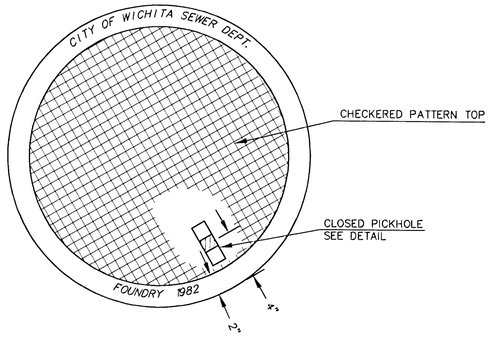
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MANHOLE FRAME AND COVER DETAIL

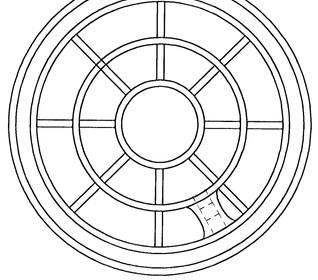
ADOPTED AS STANDARD DESIGN

City of Wichita, Kansas

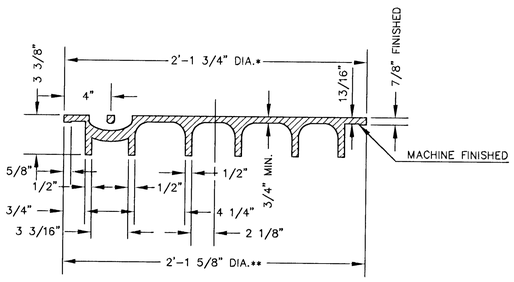
MANHOLE COVER
WEIGHT: 240 LBS.



TOP VIEW



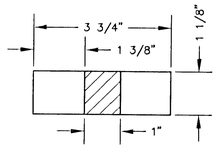
BOTTOM VIEW



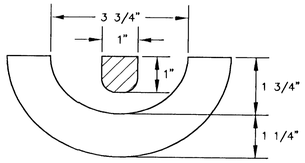
SECTION VIEW

* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

PICKHOLE DETAIL

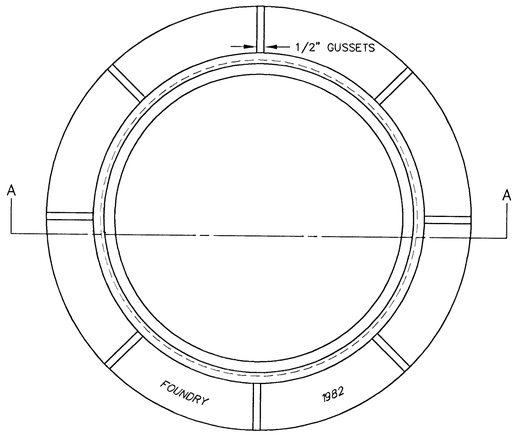


TOP VIEW

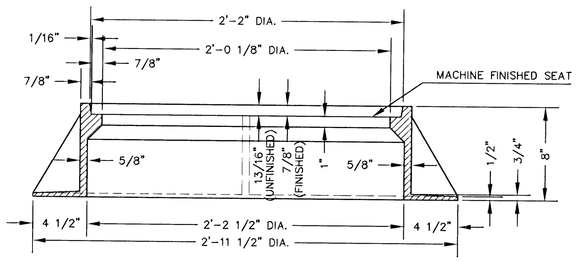


SECTION VIEW

MANHOLE FRAME
WEIGHT: 240 LBS.



TOP VIEW



SECTION A–A

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A–48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON–ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUM–FERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CICUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

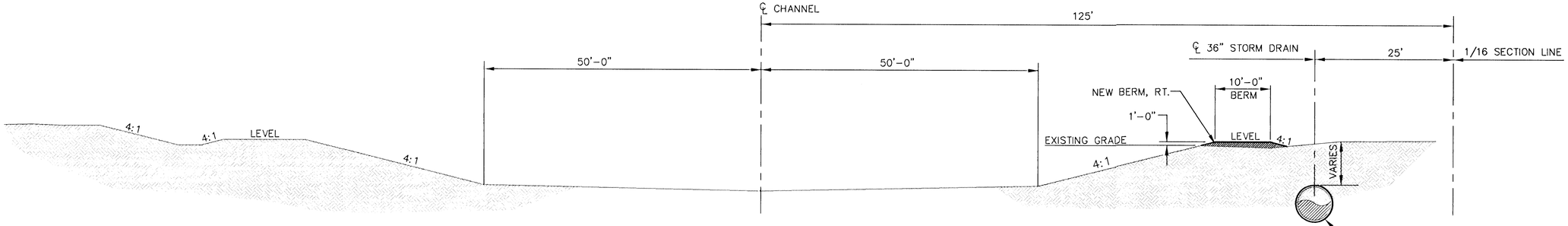
MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

SOUTH SENECA DRAINAGE OUTFALL
PROJECT NAME

MANHOLE FRAME AND COVER
SHEET TITLE

DESIGN BY:	DRAWN BY:	CHECKED BY:
11–95	93035	13 / 19
DATE	JOB NO.	SHEET/OF

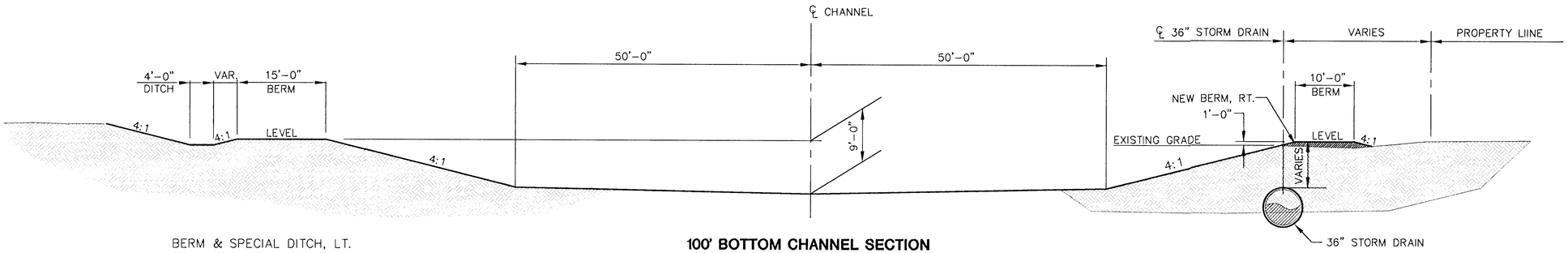
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EXISTING BERM & SPECIAL DITCH, LT.

EXISTING 100' BOTTOM CHANNEL SECTION

BERM & 36" STORM DRAIN, RT.
STA. 7+71.2 TO STA. 54+65.3



BERM & SPECIAL DITCH, LT.

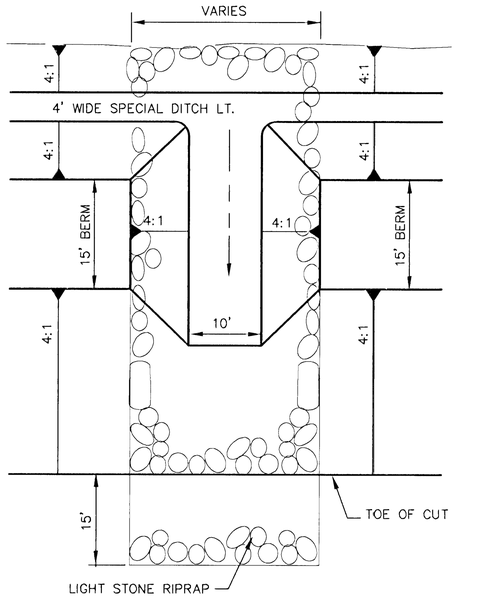
CONSTRUCT BERM & SPECIAL DITCH, LT
STA. 68+00 TO STA. 69+17.41 – PHASE 3

100' BOTTOM CHANNEL SECTION

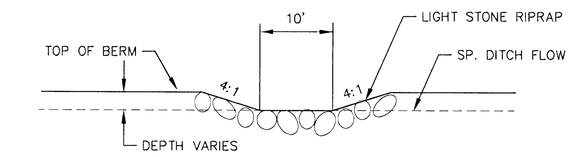
CONSTRUCT CHANNEL SECTION FROM STA. 68+00 TO RCBB – PHASE 3

BERM & 36" STORM DRAIN, RT.

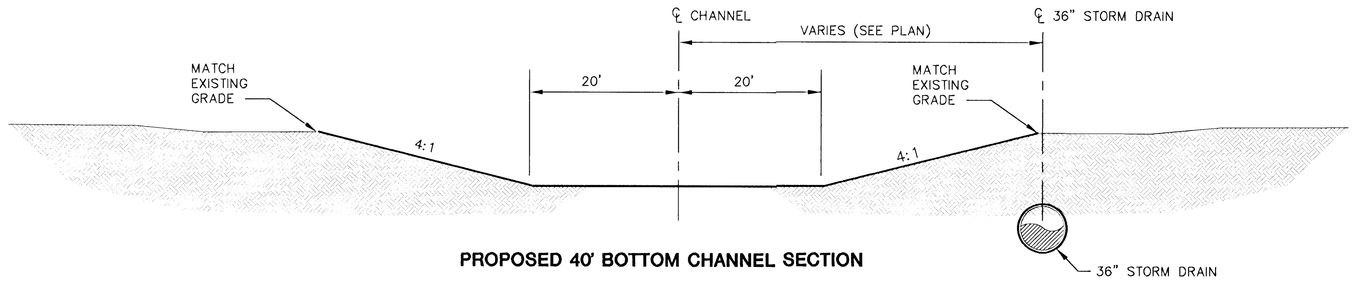
STA. 54+65.3 TO STA. 68+60



BERM FLUME PLAN



BERM FLUME ELEVATION



PROPOSED 40' BOTTOM CHANNEL SECTION

CONSTRUCT CHANNEL SECTION FROM STA. 70+31 TO STA. 74+00 – PHASE 3

36" STORM DRAIN, RT.

STA. 68+60 TO STA. 72+68.7

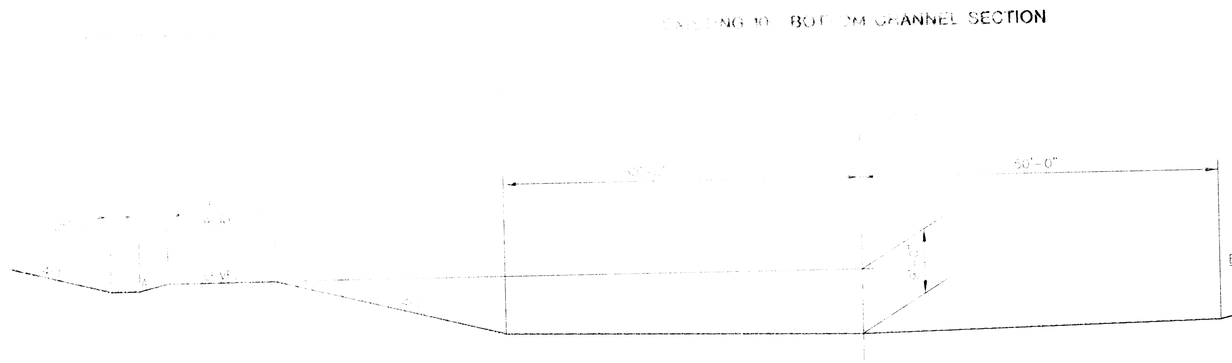
MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

S. SENECA DRAINAGE OUTFALL
PROJECT NAME

CHANNEL & BERM DETAILS - PHASE 3
SHEET TITLE

DESIGN BY:	DRAWN BY:	CHECKED BY:
DLM	DPG	JNJ
DATE	JOB NO.	SHEET/OF
11–95	93035	14 / 19

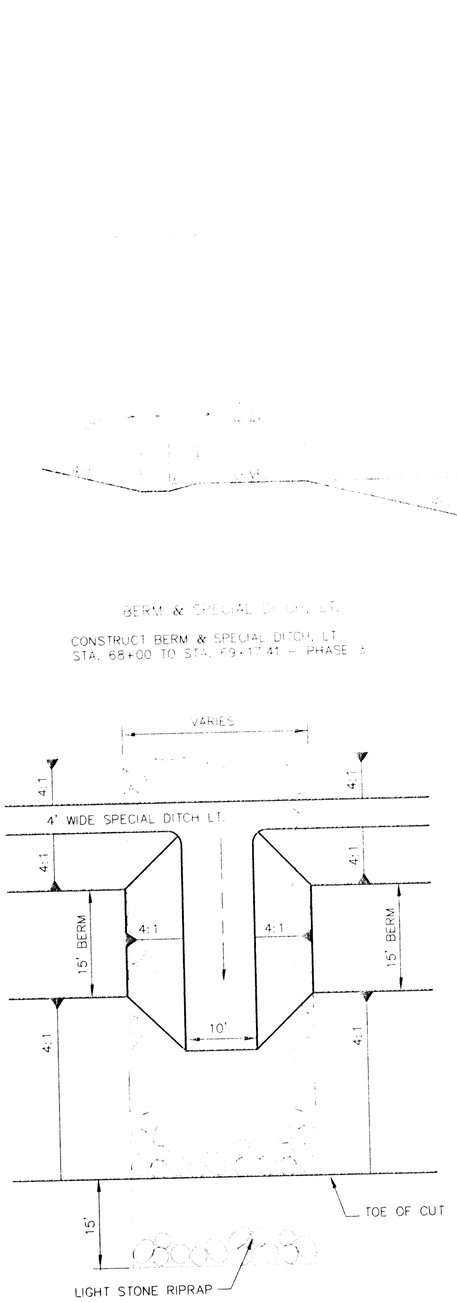
G:\CIVIL\93035\PRS\CVLDFT_P13 Thu Jan 25 11:01:58 1996



EXISTING 40' BOTTOM CHANNEL SECTION

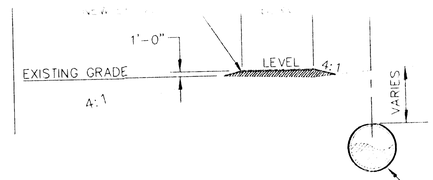
BERM & SPECIAL DITCH, LT.

CONSTRUCT BERM & SPECIAL DITCH, LT.
STA. 68+00 TO STA. 69+17.41 - PHASE 3

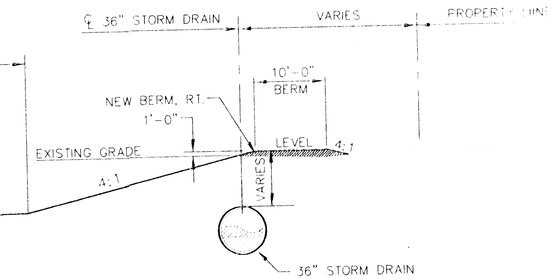


BERM FLUME PLAN

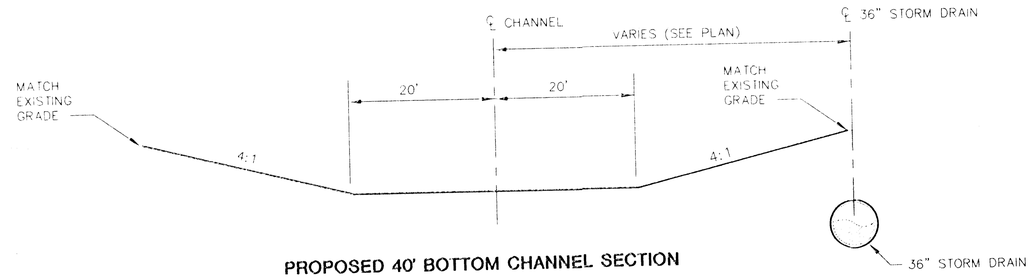
BERM FLUME ELEVATION



BERM & 36" STORM DRAIN, RT.
STA. 7+71.2 TO STA. 54+65.3



BERM & 36" STORM DRAIN, RT.
STA. 54+65.3 TO STA. 68+60



PROPOSED 40' BOTTOM CHANNEL SECTION

CONSTRUCT CHANNEL SECTION FROM STA. 70+31 TO STA. 74+00 - PHASE 3

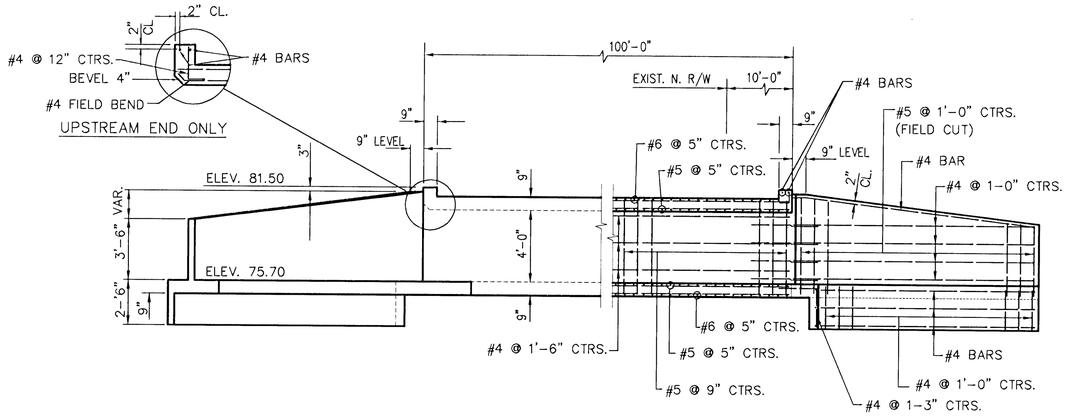
36" STORM DRAIN, RT.
STA. 68+60 TO STA. 72+68.7

MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

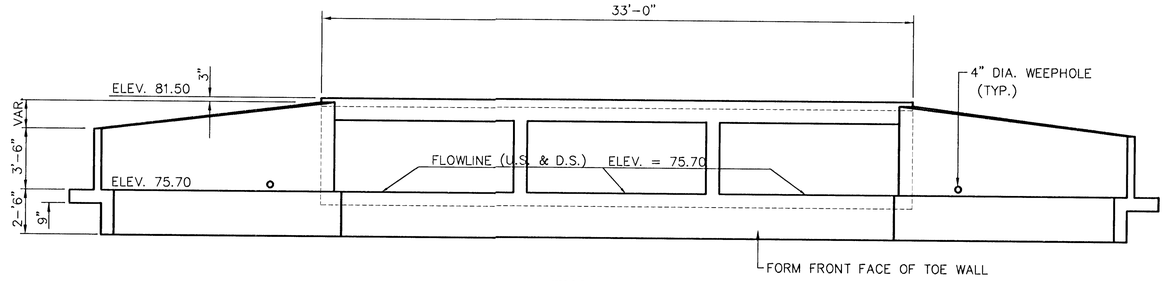
S. SENECA DRAINAGE OUTFALL
PROJECT NAME

CHANNEL & BERM DETAILS - PHASE 3
SHEET TITLE

DLM	DPG
DESIGN BY	
11-95	93035
DATE	

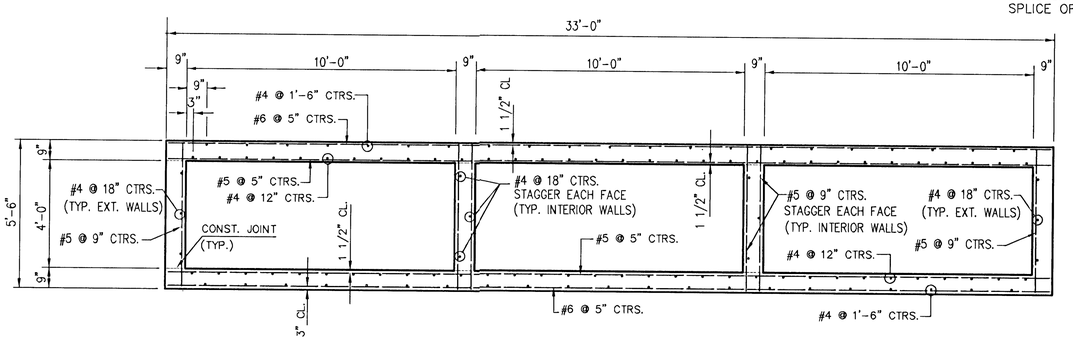


SECTION AND ELEVATION

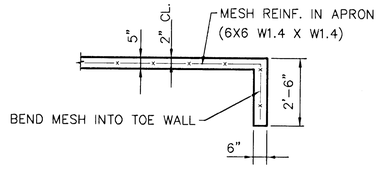


END ELEVATION

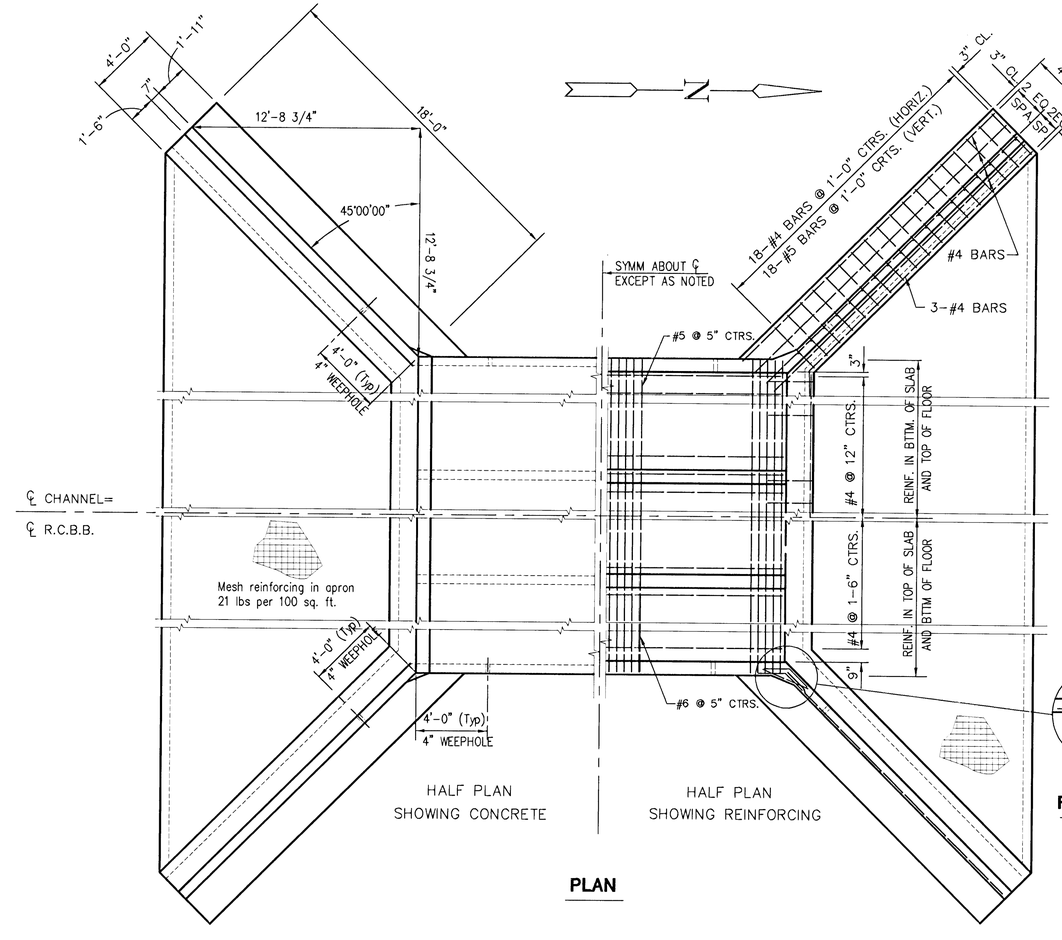
NOTE: ALL LONGITUDINAL #4 BARS SHALL HAVE A MIN. LAP SPLICE OF 2'-0"



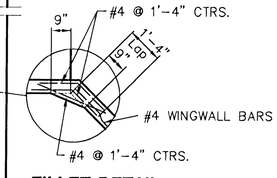
TYPICAL SECTION THRU BOX



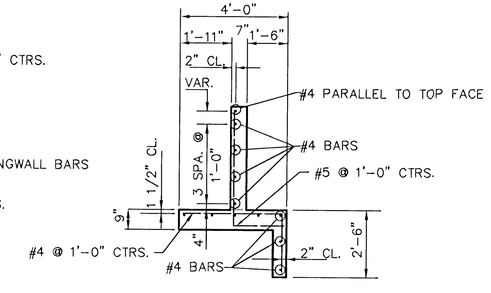
SECTION THRU APRON



PLAN



FILLET DETAIL



SECTION THRU WINGWALL

GENERAL NOTES

LOADING: HS20-44 AASHTO SPECIFICATIONS, EDITION 1992 WITH THE LATEST INTERM.
UNIT STRESSES: F'C = 4,000 PSI; FS = 24,000 PSI (GR. 60)
THE CONCRETE MIX SPECIFIED FOR THE CITY OF WICHITA CONCRETE PAVEMENT SHALL BE USED THROUGHOUT. BEVEL ALL EXPOSED EDGES WITH A 3/4" TRIANGULAR MOULDING, UNLESS OTHERWISE NOTED.

COARSE AGGREGATE SHALL BE DEPOSITED BEHIND EACH WEEPHOLE TO OCCUPY A SPACE EXTENDING 15" IN ALL DIRECTIONS ABOVE THE WEEPHOLE FLOWLINE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED AS PART OF THE EXCAVATION WORK.

CONSTRUCTION JOINTS SHALL BE FORMED ONLY AT LOCATIONS SHOWN OR AS APPROVED BY THE ENGINEER.

A SEAL COURSE OF 2" CONCRETE SHALL BE CONSTRUCTED UNDER THE ENTIRE FLOOR SLAB AND WING FOOTINGS. NO REINFORCING STEEL SHALL BE PLACED UNTIL THE SEAL COURSE HAS GAINED SUFFICIENT STRENGTH TO PERMIT WORKING UPON IT WITHOUT INJURY. THIS ITEM SHALL NOT BE PAID DIRECTLY BUT SHALL BE SUBSIDIARY TO OTHER ITEMS.

THE BARREL OF THE CULVERT MAY BE FORMED OF PRECAST UNITS APPROVED BY THE ENGINEER WITH THE HEADWALLS CAST-IN-PLACE AS SHOWN ON THIS DRAWING. IF USED, LAYOUT AND INSTALLATION DRAWINGS SHALL BE SUBMITTED PRIOR TO PRECAST INSTALLATION. PRECAST BARREL SHALL BE TIED TO THE HEADWALL WITH REINFORCING APPROVED BY THE ENGINEER.

FLOWABLE FILL SHALL BE SUBSIDIARY TO CONSTRUCTION OF THE REINFORCED CONCRETE BOX.

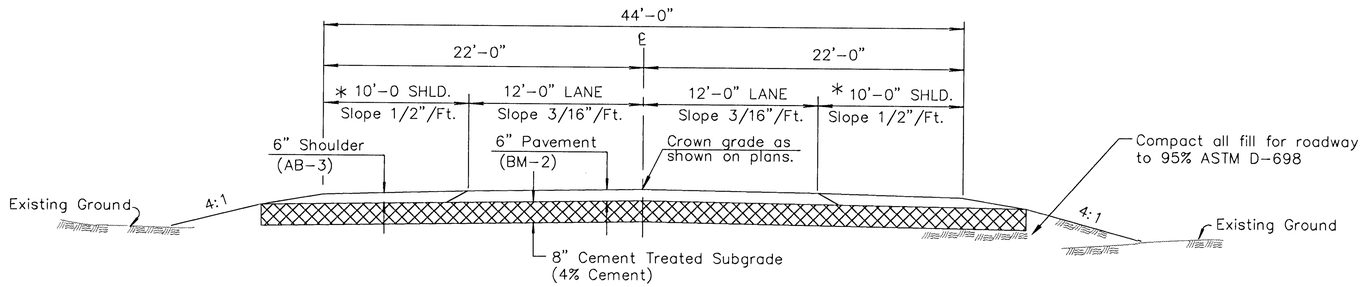
MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

SOUTH SENECA DRAINAGE OUTFALL
PROJECT NAME

3 - 10' X4' X 100' R.C.B.B. - PHASE 3
SHEET TITLE

JAH	DPG	KJS
DESIGN BY:	DRAWN BY:	CHECKED BY:
11-95	93035	15 / 19
DATE	JOB NO.	SHEET/OF

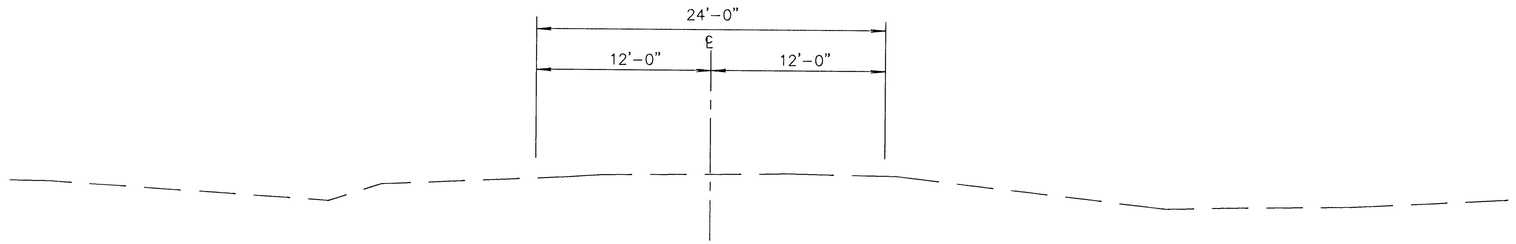
G:\CIVIL\93035\DWG\93035DET2.DGN Thu, Nov 09, 11:03:20 1995



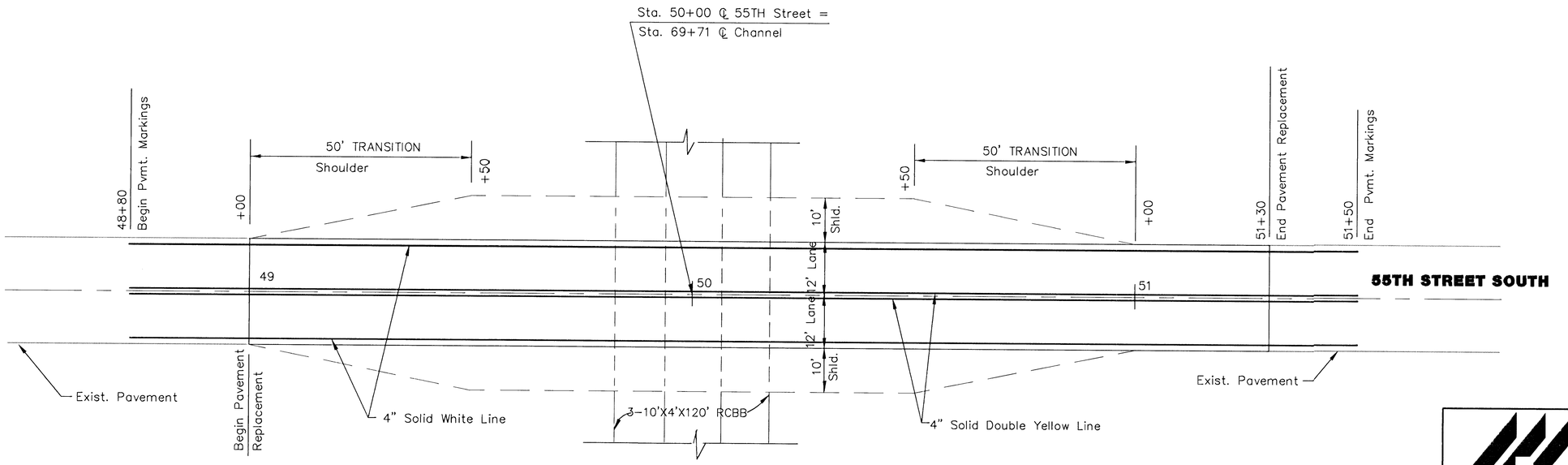
TYPICAL SECTION - STA. 49+00 TO 51+30

* Transition Shoulder Width from 10' to 0' in 50 feet.

Note: Intersection of all slope lines shall be softened and rounded for pleasing appearance.



EXISTING SECTION STA. 49+50



NOTE: Striping shall be thermal plastic reflective pavement markings and shall meet Sedgwick County Specifications.

PAVEMENT MARKING PLAN

MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

S. SENECA DRAINAGE IMPROVEMENTS
PROJECT NAME

PAVEMENT REPLACEMENT DETAILS
SHEET TITLE

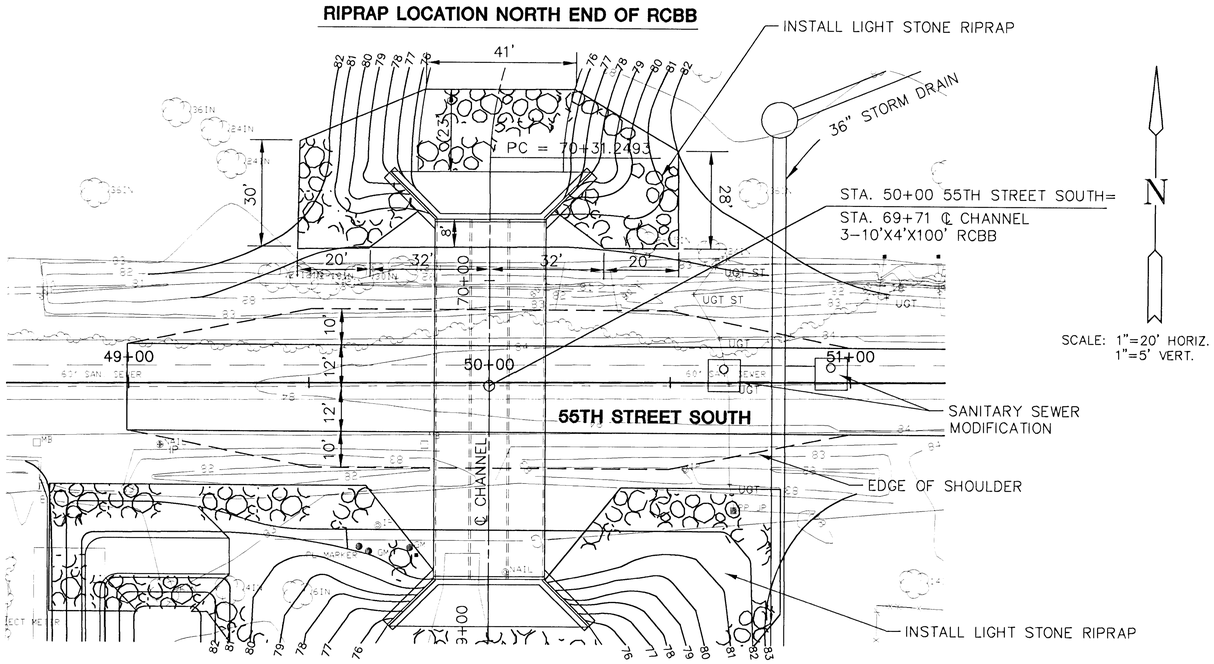
DESIGN BY:	DRAWN BY:	CHECKED BY:
	DPG	

DATE	JOB NO.	SHEET/OF
11-95	93035	16 / 19

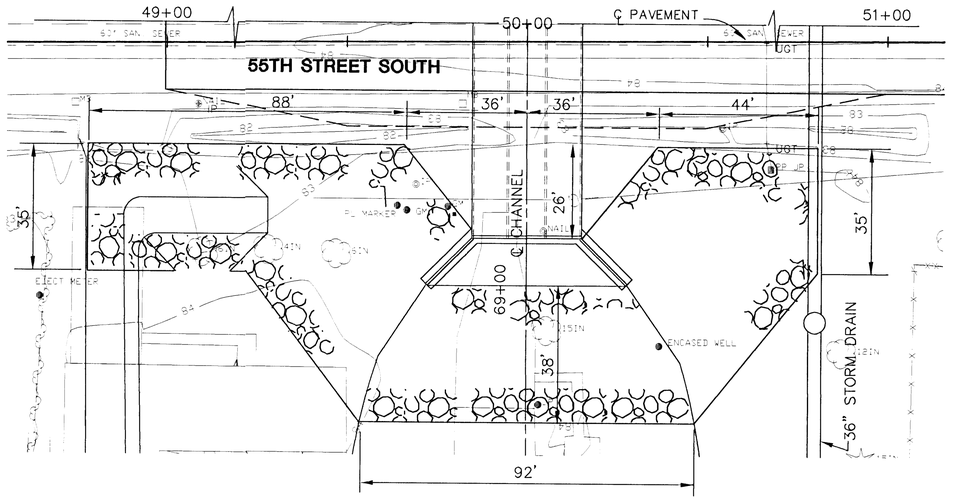
C:\CIVIL\MSDESIGN\MSDCIVIL.DGN Thu Jan 25 11:08:05 1996

SOUTH SENECA DRAINAGE OUTFALL
55TH STREET & RCBB GRADING
AND TRAFFIC CONTROL–PHASE 3
PROJ. NO. 468–82557

RIPRAP LOCATION NORTH END OF RCBB

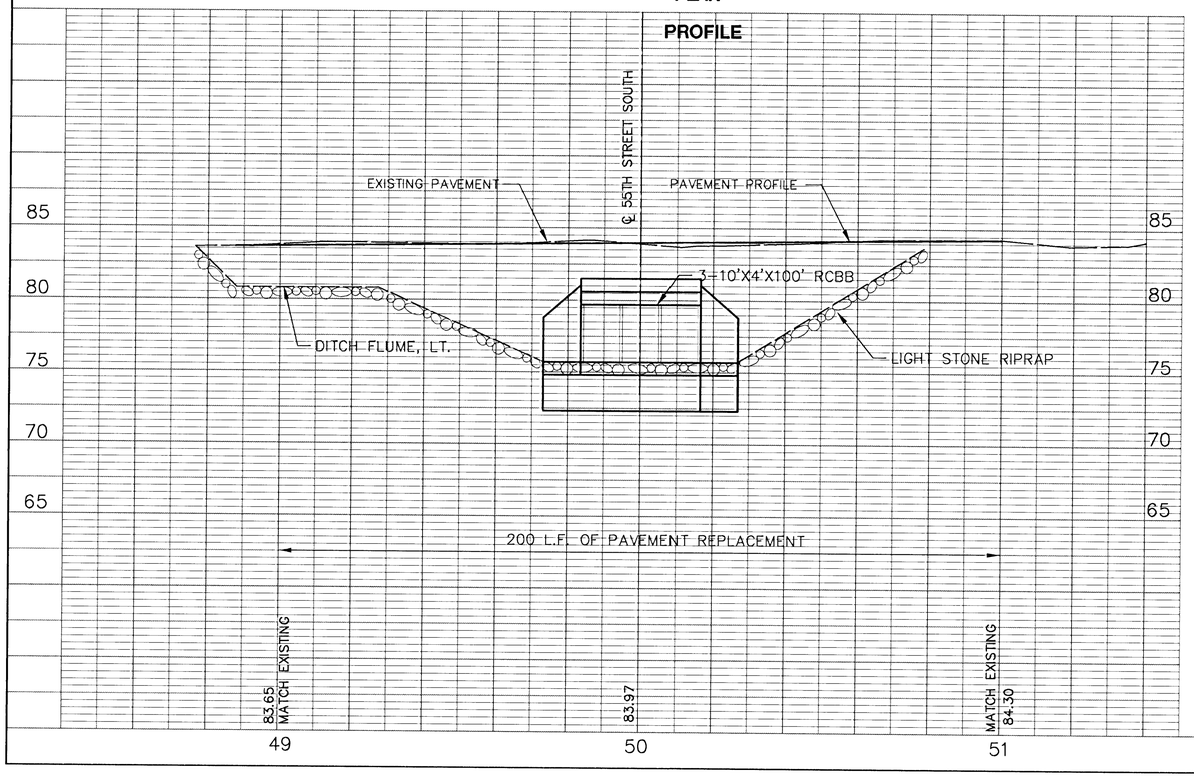


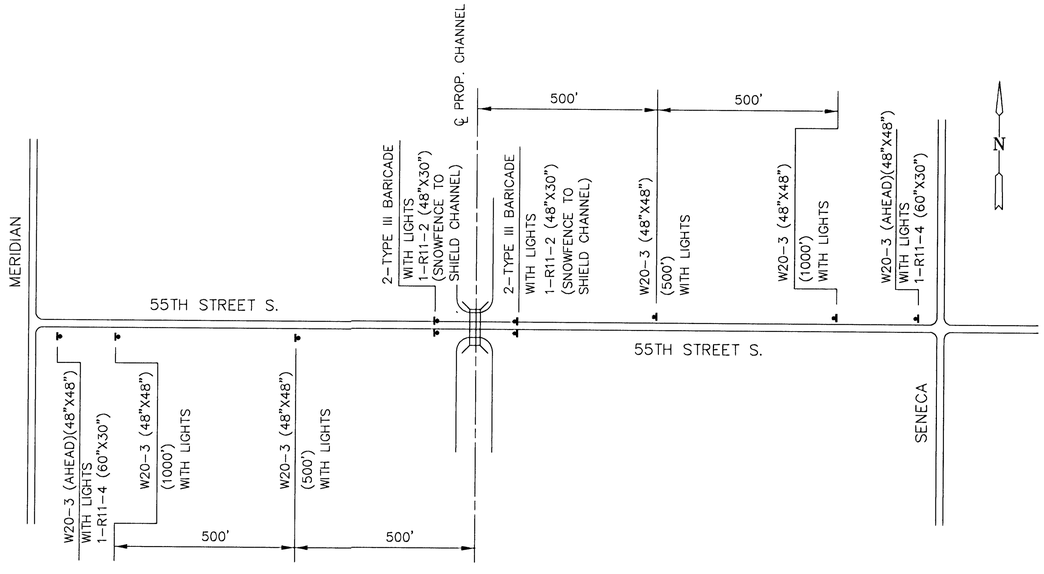
PLAN



RIPRAP LOCATION SOUTH END OF RCBB

PROFILE





TRAFFIC CONTROL PLAN

ROAD CLOSED TO TRAFFIC

17/19

FILE: PAVPH2
DATE: 9-8-95

G:\CIVIL\468\PAVPH3 Thu Jan 25 11:05:24 1996

SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM CHANNEL CROSS SECTIONS
PROJ. NO. 468-82532

200 180 160 140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

80
70

STA. 70+17.41

3-10'X4'X100' RCB

75:70

CUT=216.04 SQ. FT.
FILL=0.00 SQ. FT.

STA. 70+17.41

80
70

STA. 70+00

3-10'X4'X100' RCBB

75:70

CUT=284.04 SQ. FT.
FILL=0.00 SQ. FT.

STA. 70+00

80
70

STA. 69+17.41

3-10'X4'X100' RCBB

75:70

CUT=1084.08 SQ. FT.
FILL=0.00 SQ. FT.

STA. 69+17.41

80
70

STA. 69+00

80.73

74.35

CUT=1095.57 SQ. FT.
FILL=0.00 SQ. FT.

STA. 69+00

80
70

STA. 68+00

74.30

STA. 68+00

STA. 68+00 TO STA. 70+17.41

180 160 140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

18/19

FILE: 9335X14A
DATE: 9-8-95

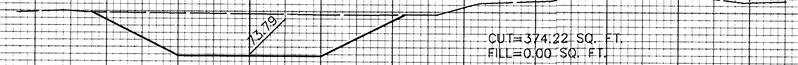
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SOUTH SENECA DRAINAGE OUTFALL
PHASE 3
STORM CHANNEL CROSS SECTIONS
PROJ. NO. 468-82532

200 180 160 140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

80
70

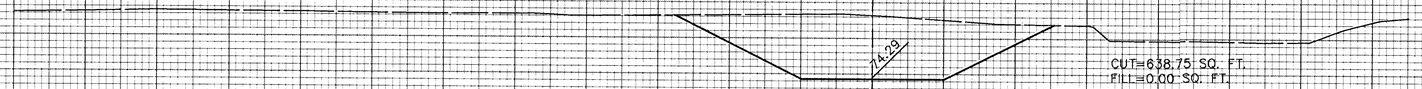
STA. 74+00



STA. 74+00

80
70

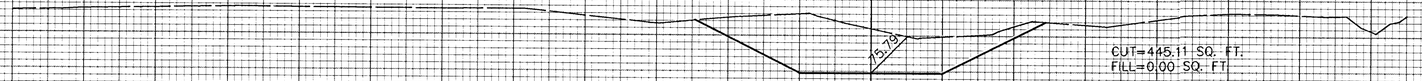
STA. 73+00



STA. 73+00

80
70

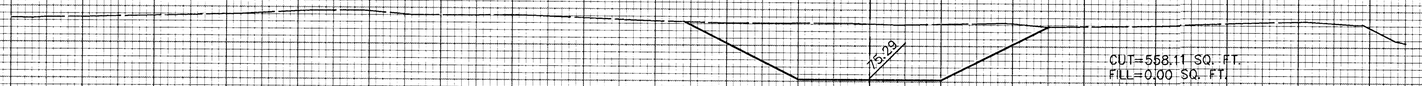
STA. 72+00



STA. 72+00

80
70

STA. 71+00



STA. 71+00

STA. 71+00 TO STA. 74+00

180 160 140 120 100 80 60 40 20 ℄ 20 40 60 80 100 120 140

19
19

FILE: 9355X315
DATE: 9-8-95

G:\CIVIL\9355\9355X315.dgn 25-JAN-1996 11:47:42