STORM SEWER PLANS FOR

BEACON HILL

S.W.S. NO. 309

PROJECT NO.

468·76·245·81568 ·000·000·001

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER
JULY, 1986

GENERAL NOTES

1. THE TOPS OF INLETS AND MANHOLE AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
2. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
3. 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 OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
4. TREES TO BE REMOVED ARE MARKED ☆ ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
5. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
6. 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 PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

NOTE: NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY EXCAVATION:

ARKLA GAS COMPANY	942-8350
BELL TELEPHONE	1-316-571-2115
CABLEVISION	262-0661
KPL GAS SERVICE COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
KANSAS ONE-CALL	1-800-344-7233
CITIES SERVICE	524-0491
KANSAS GAS SUPPLY	316-254-7243
CONTINENTAL PIPELINE COMPANY	316-681-2081
CO-OP REFINERY PIPELINE	316-221-2107

BENCH MARKS

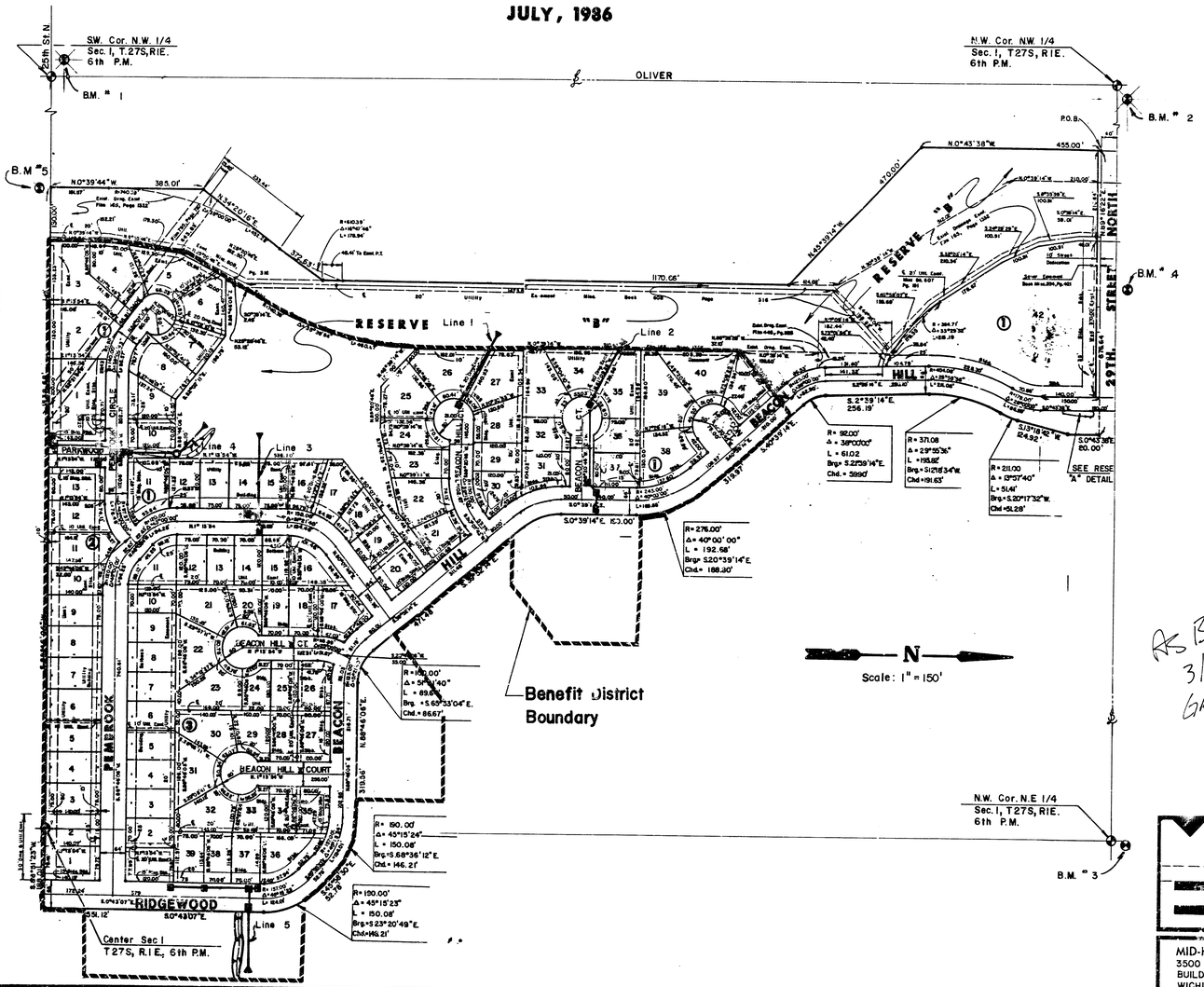
B.M. #1 OLIVER & 25TH STREET NORTH CITY OF WICHITA BENCH MARK DISC, 44' WEST OF CENTERLINE OLIVER AND 32' NORTH OF CENTER A.C. PAVEMENT WEST ON 25TH STREET FG EST. 1972
ELEV. 174.486

B.M. #2 OLIVER & 29TH STREET NORTH CITY OF WICHITA BENCH MARK DISC, 29' NORTH AND 33' EAST OF CENTERLINE BOTH JFG EST. 1972
ELEV. 159.684

B.M. #3 EDGEMOOR & 29TH STREET NORTH CITY OF WICHITA BENCH MARK DISC, 5.5' EAST AND 37' NORTH OF QUARTER SECTION CORNER JFG EST. 1972
ELEV. 172.384

B.M. #4 RAILROAD SPIKE IN S.W. FACE OF POWER POLE 26.5' N. OF 1/16 CORNER 1/4 MILE EAST OF 29TH & OLIVER.
ELEV. 172.384

B.M. #5 * □ * N.W. CORNER OF CURB INLET ON W. SIDE AT N. END OF BATTIN AT 25th. STREET
ELEV. 176.33



INDEX TO DRAWINGS

SHEET NO.	DISCRIPTION
1	TITLE SHEET
2	LINE 1
3	LINE 2
4	LINE 3
5	LINE 4
6-7	LINE 5
8-12	DETAIL SHEETS
13-14	FINAL PLAT

As Builts 3/87 GREENUP 5/10 F 81

BEACON HILL STORM SEWER PLANS

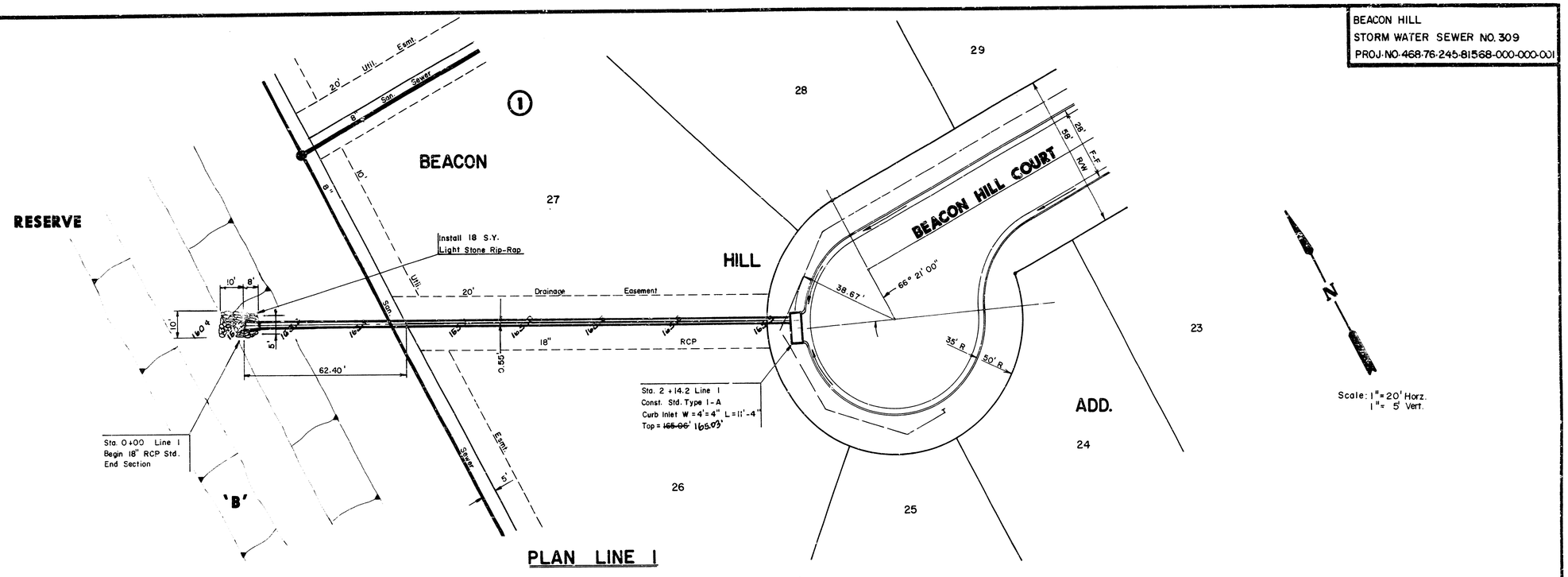
Design: A.M.S.
Drawn by: E.C.G. / F.F.
Checked by: D. S.
Date:
Job no:

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226 682-6561

Sheet 1 of 14

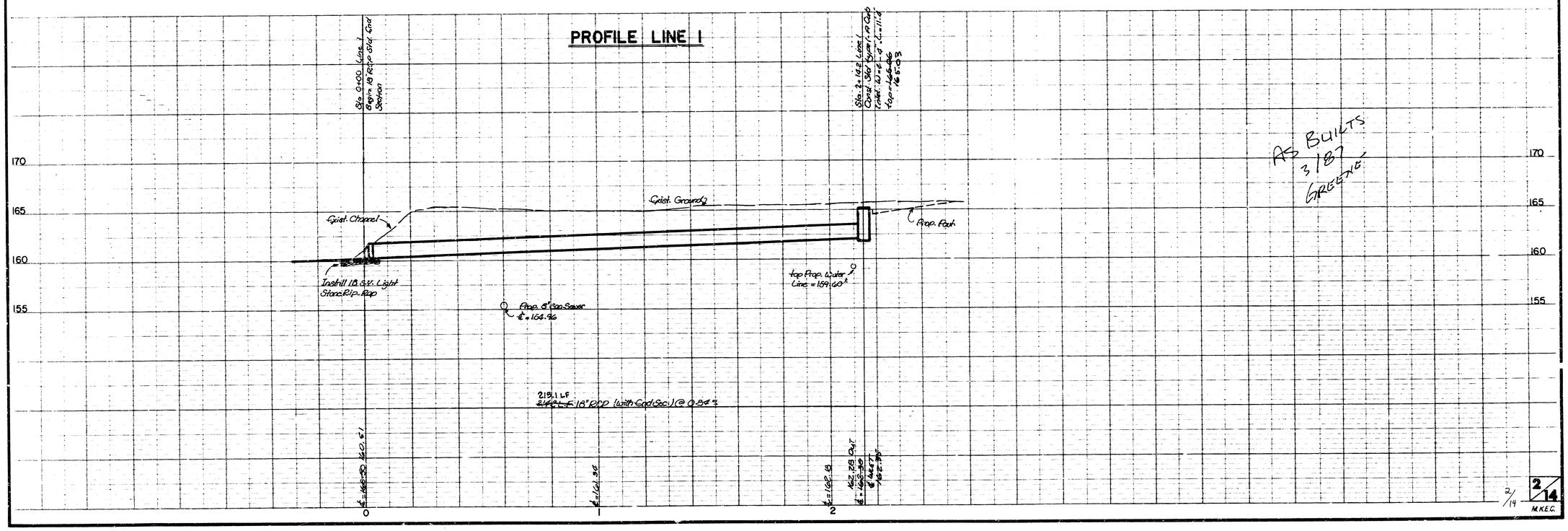
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BEACON HILL
STORM WATER SEWER NO. 309
PROJ. NO. 468-76-245-81568-000-000-001



PLAN LINE 1

PROFILE LINE 1

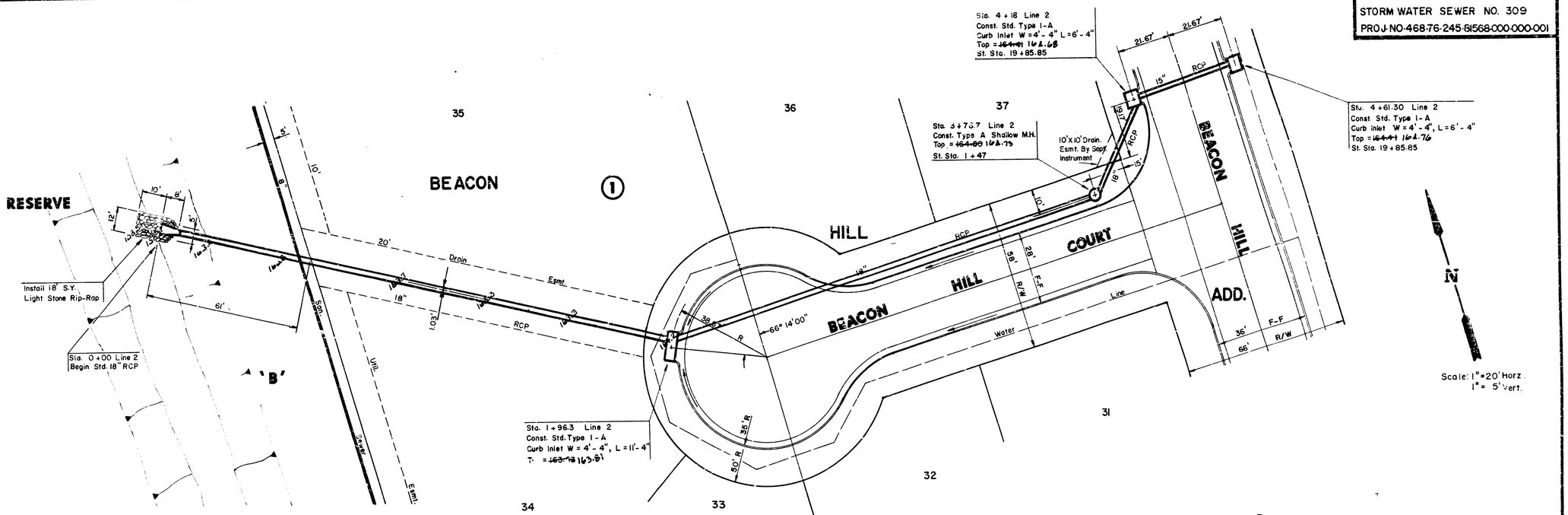


AS BUILTS
3187
GREENE

2/14

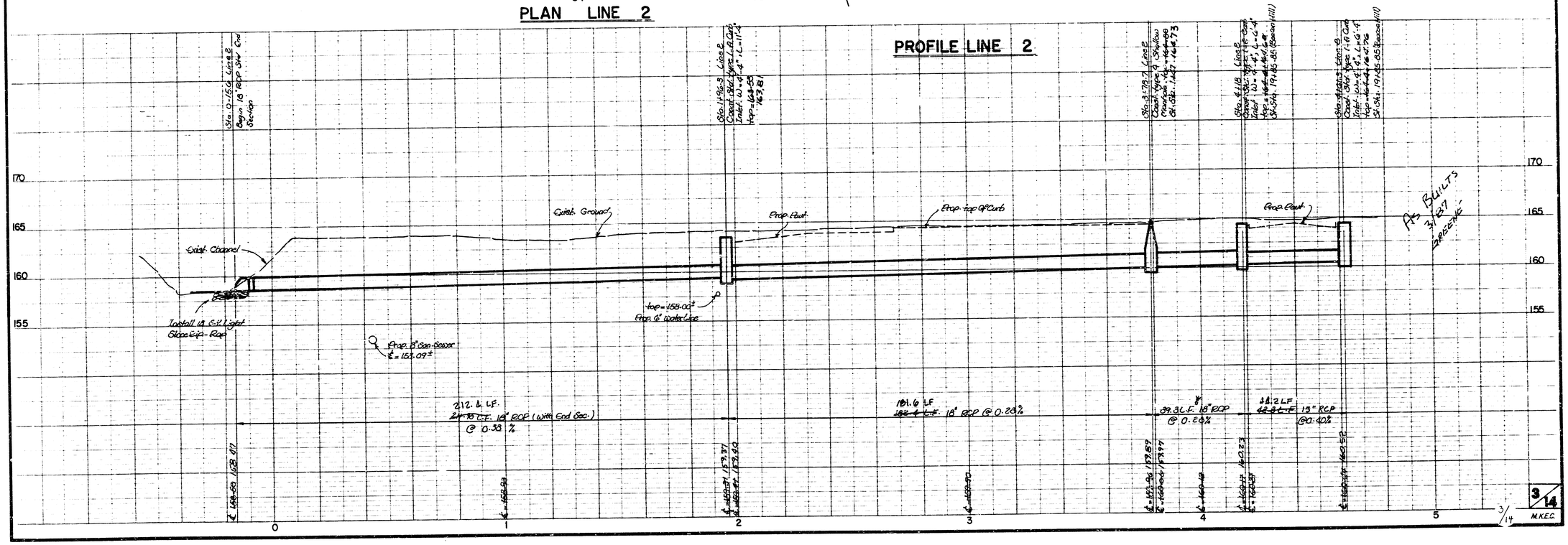
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BEACON HILL
STORM WATER SEWER NO. 309
PROJ NO 468-76-245 61568-000-000-001



PLAN LINE 2

PROFILE LINE 2

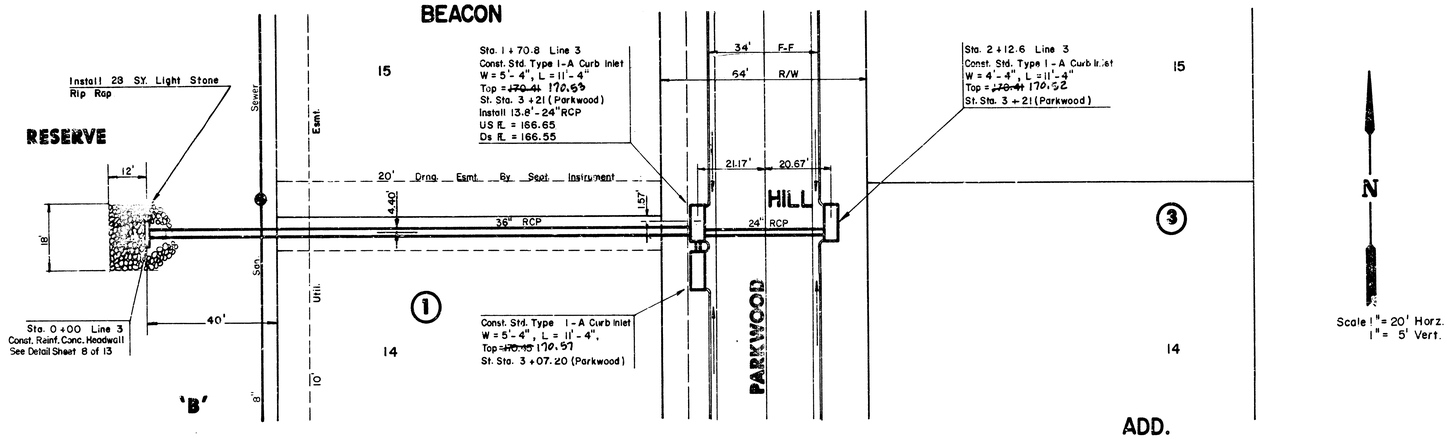


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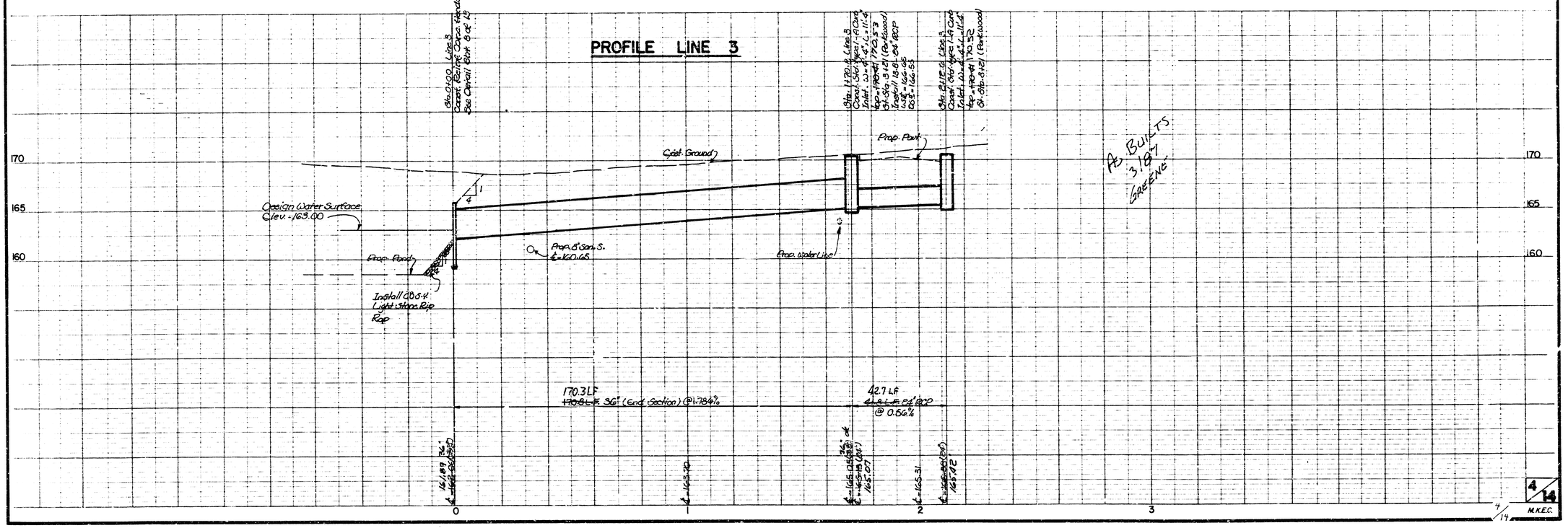
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BEACON HILL
STORM WATER SEWER NO. 309
PROJ-NO-468-76-245-81568-000-000-001



PLAN LINE 3

PROFILE LINE 3



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BEACON HILL
STORM WATER SEWER NO 309
PROJ·NO·468·76·245·81568·000·000·001

N

Scale: 1"= 20' Horiz.
1"= 5' Vert.

BEACON

PEMBROOK CIR.

PARKWOOD

HILL

RESERVE

13 12 11 10

Prop 8" San. Sewer

Water Line

Main

18" R.C.P.

60" R.C.P.

54" R.C.P.

R = 48.28
Δ = 45°00'00"
L = 37.92'
T = 20.00'
LC= 36.95'

Sta. 1+40 Line 4
Const. Special Reinf. Conc. Manhole
See Detail, Sheet 8 of 13
Top = ~~170.50~~ 170.53

Sta. 2+81.3 Line 4
Const. Std. Type 1-A Curb Inlet
W = 4'-4", L = 11'-4"
Top = 172.27
St. Sta. 3+64.58 (Pembrook Cir.)

Sta. 3+41.3 Line 4
Const. Std. Type 1-A Curb Inlet
W = 8'-4", L = 11'-4"
Top = ~~173.07~~ 172.08
St. Sta. 1+33.83 (Parkwood)
& Install 43.3'-18" RCP East
US FL = 167.54
DS FL = 167.11

Const. Std. Type 1-A Curb Inlet
W = 4'-4", L = 11'-4"
Top = ~~173.07~~ 172.00
St. Sta. 1+33.83 (Parkwood)

1' High Berm W/ 1' Wide Top & 3:1 Side Slopes. Cost Subsidiary to Ditch Inlet.

Regrade Ditch to Ditch inlet. Cost Subsidiary to Ditch Inlet.

ADD.

30'X30' Drain. Esmt. Esmt. by Sept. Instrument

Plug 54" RCP Cost Subsidiary To Proj.

Sta. 4+62.60 Line 4
Const. Std. Type 1-A Curb Inlet
W = 7'-4", L = 6'-4"
Top = ~~174.24~~ 174.18
St. Sta. 0+10 (Parkwood)
& Install 10'-54" RCP
US FL = 166.02
DS FL = 165.92

Sta. 4+76.60 Line 4
Const. Ditch Inlet
W = 6'-0", L = 6'-0", H = 6'-0"
Top = ~~173.94~~ 173.97

Sta. 0+00, Line 4
Const. Reinf. Conc. Headwall, See Detail Sheet 8 of 13

Install 13 S.Y. Light Stone Rip-Rap

Install 31 S.Y. Light Stone Rip-Rap

MATCH LINE

DITCH DETAIL

Varies

4'-0"

NOTE: Contractor shall be responsible for seeding and mulching of ditches. Cost subsidiary to Project.

PLAN LINE 4 - DITCH

PROFILE LINE 4-DITCH

Sta. 0+00 Line 4
Const. Reinf. Conc. Headwall
See Detail Sheet 8 of 13

Sta. 0+26.00 Line 4
Begin Prop. Ditch

Sta. 1+40 Line 4
Const. Special Reinf. Conc. Manhole Top = Prop. 170.53
See Detail Sheet 8 of 13

Sta. 2+81.3 Line 4
Const. Std. Type 1-A Curb Inlet W = 4'-4", L = 11'-4"
Top = 172.27
St. Sta. 3+64.58 (Pembrook Cir.)

Sta. 3+41.3 Line 4
Const. Std. Type 1-A Curb Inlet W = 8'-4", L = 11'-4"
Top = 172.08
St. Sta. 1+33.83 (Parkwood)
Install 43.3'-18" RCP East
US FL = 167.54
DS FL = 167.11

Sta. 4+62.60 Line 4
Const. Std. Type 1-A Curb Inlet W = 7'-4", L = 6'-4"
Top = 174.18
St. Sta. 0+10 (Parkwood)
& Install 10'-54" RCP
US FL = 166.02
DS FL = 165.92

Sta. 4+76.60 Line 4
Const. Ditch Inlet W = 6'-0", L = 6'-0", H = 6'-0"
Top = 173.97

Sta. 0+26.00 Begin Prop. Ditch

Sta. 2+68 End of Prop. Ditch

Sta. 4+76.6 End of Prop. Ditch

142.0 L.F. Ditch @ 0.40%
(b = 4', Side Slope 4:1)

Prop. Ditch ℄

Exist. Ground

Prop. Road

Prop. Top of Curb

Design Water Surface Elev. = 123.00

Install 13 S.Y. Light Stone Rip-Rap

Install 31 S.Y. Light Stone Rip-Rap

8" Water Cross

℄ = 172.27 (Ditch)

℄ = 171.99 (Ditch)

℄ = 170.29 (Ditch)

℄ = 169.98 (Ditch)

140 L.F. of 60" R.C.P. @ 2.30%

139.0 LF
~~141.0 L.F.~~ of 60" R.C.P. @ 2.00%

60 L.F. of 60" R.C.P. @ 1.50%

122.7 LF
~~121.3 L.F.~~ of 54" R.C.P. @ 1.00%

14.0 L.F. of 36" R.C.P. @ 1.90%

AS BUILTS 3/87 GREENLEE

180 175 170 165 160 155

0 1 2 3 4 5

5/14

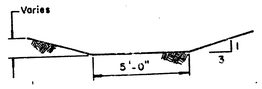
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BEACON HILL ADDITION
STORM WATER SEWER NO 309
PROJ.NO. 468-76-245-81568-000-000-001

DITCH DETAIL

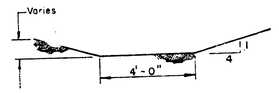
STA. 0+00 through STA. 0+10



NOTE: Contractor shall be responsible for seeding and mulching of ditches. Cost subsidiary to Project.

DITCH DETAIL

STA. 0+32 through STA. 5+60



NOTE: Contractor shall be responsible for seeding and mulching of ditches. Cost subsidiary to Project.

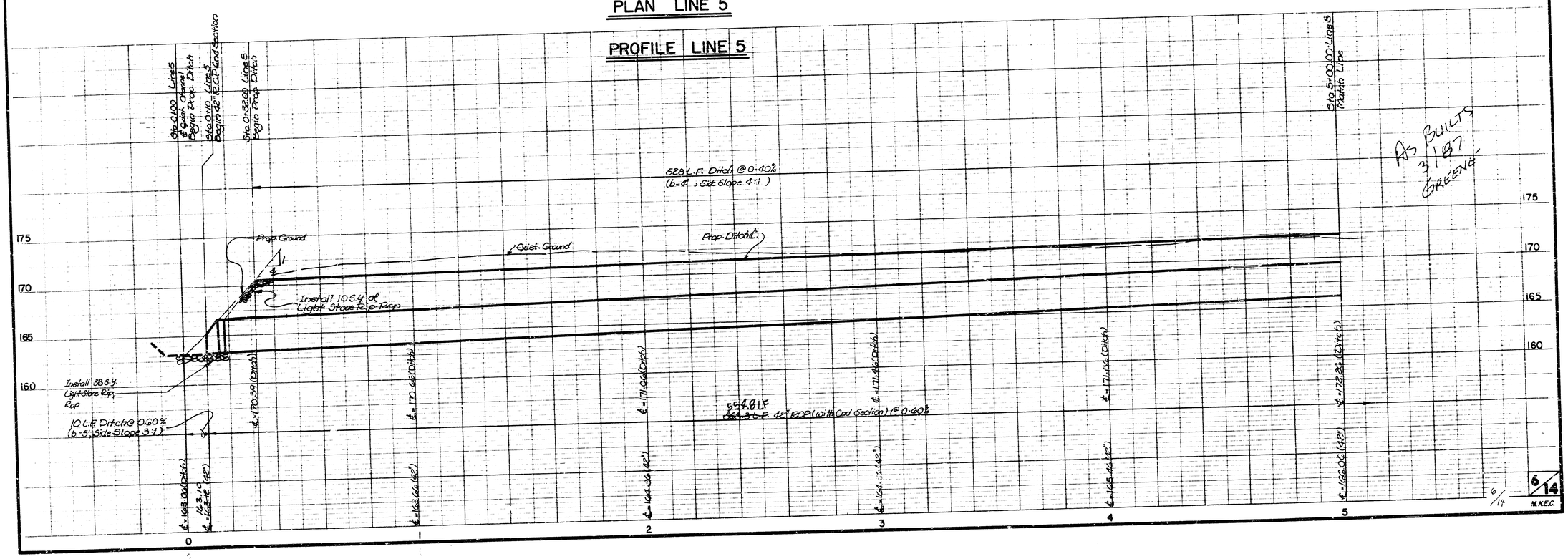
UNPLATTED

N

SCALE 1"=20' Horz.
1"= 5' Vert.

PLAN LINE 5

PROFILE LINE 5



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BEACON HILL ADDITION
STORM WATER SEWER NO. 309
PROJ. NO. 468-76-245-81568-000-000-001

N

SCALE: 1" = 20' HORZ
1" = 5'

Sta. 5+00 Line 5
Match Line

℄ 50' Drain. Esmt. By Sept Instrument

UNPLATTED

Const Std. Type I-A Curb Inlet
W = 4'-4", L = 6'-4"
Top = ~~172.98~~ 173.13
St. Sta. 5+28.59
& Install 11.2'-15" RCP South
US R. = ~~163.63~~ 164.13
DS R. = ~~166.83~~ 164.23

Sta. 5+60
End of Ditch
(b = 4', SS 4:1)

12" RCP

Sta. 5+73.3 Line 5
Const Std. Type I-A Curb Inlet
W = 4'-4" L = 11'-4"
Top = ~~173.24~~ 173.14
St. Sta. 5+17.25 (Ridgewood)

90°00'00"

Sta. 6+17.1 Line 5
Const. Std. Type I-A Curb Inlet
W = 5'-4" L = 11'-4"
Top = ~~173.24~~ 173.11
St. Sta. 5+17.25 (Ridgewood)

Sta. 7+35.1 Line 5
Const. Std. Type I-A Curb Inlet
W = 5'-4" L = 11'-4"
Top = ~~173.58~~ 173.69
St. Sta. 3+99.29 (Ridgewood)

Sta. 8+14.3 Line 5
Const. Std. Type I-A Curb Inlet
W = 4'-4" L = 11'-4"
Top = ~~174.07~~ 174.15
St. Sta. 3+20 (Ridgewood)

RIDGEWOOD

30" RCP

21.67'
22.17'
21.67'
22.17'
21.67'

R/W
66'
FF
36'

24" RCP
18" RCP
12' Wtr. Line

36 | 34.11' | 37 | 38 | 3 | 39 | 4.29' | 1

BEACON HILL ADDITION

PLAN LINE 5

PROFILE LINE 5

Sta. 5+00 Line 5 Match Line
Sta. 5+60 End of Prop. Ditch
Sta. 5+73.3 Line 5 Const. Std. Type I-A Curb Inlet Invert. 164.23 Cl 11.4 Top = 173.14 St. Sta. 5+17.25 (Ridgewood)
Sta. 6+17.1 Line 5 Const. Std. Type I-A Curb Inlet Invert. 164.33 Cl 11.4 Top = 173.11 St. Sta. 5+17.25 (Ridgewood)
Sta. 7+35.10 Line 5 Const. Std. Type I-A Curb Inlet Invert. 164.53 Cl 11.4 Top = 173.69 St. Sta. 3+99.29 (Ridgewood)
Sta. 8+14.3 Line 5 Const. Std. Type I-A Curb Inlet Invert. 164.73 Cl 11.4 Top = 174.07 ~~174.73~~ = St. Sta. 3+20 (Ridgewood)

Sta. L.E. Ditch @ 0.40% (b = 4', Side Slope 4:1)

Prop. Pavt.
Exist. Ground
Prop. Top of Curb

℄ = 172.34 (Ditch)
℄ = 172.50 (Ditch)

175
170
165
160

5548 LF ~~563.3 L.F.~~ 42" RCP (Cod Sec.) @ 0.60%
45.9 LF ~~45.8 L.F.~~ 30" RCP @ 0.51%
122.7 LF ~~118.0 L.F.~~ 24" R.C.P. @ 0.72%
74.7 LF ~~72.6 L.F.~~ 18" R.C.P. @ 0.60%

℄ 168.46 (42")
℄ 168.20 (42")
℄ 167.80 (30")
167.13
℄ 167.30
427.39
℄ 167.30 (30")
℄ 167.30 (30")
℄ 166.99 (15") 166.923
℄ 168.50
449.53
℄ 167.26 (24")
℄ 167.30 (18")
166.926
℄ 168.04 (18")
168.80

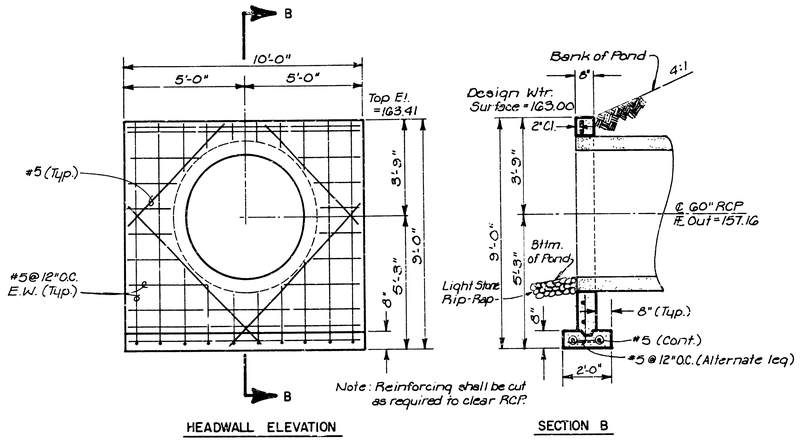
RE BUILDS 3/87 GREENUP

5 | 6 | 7 | 8 | 9

7/14

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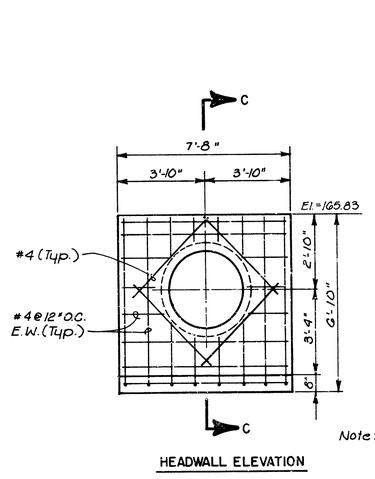


HEADWALL ELEVATION

SECTION B

REINFORCED CONCRETE HEADWALL

STA. 0+00 LINE 4

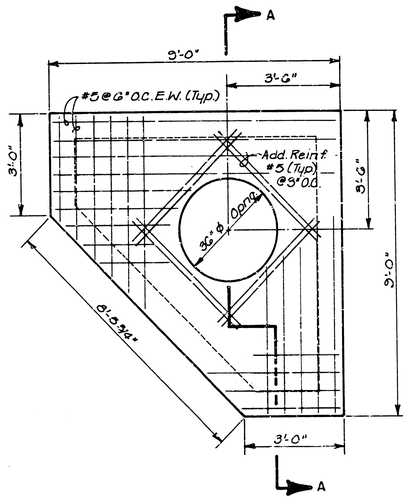


HEADWALL ELEVATION

SECTION C

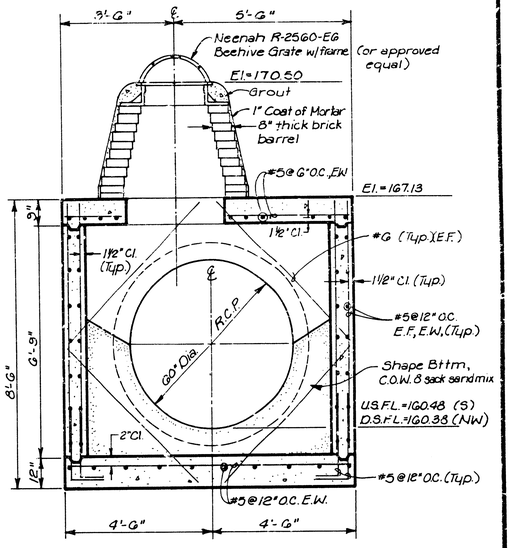
REINFORCED CONCRETE HEADWALL

STA. 0+00 LINE 3

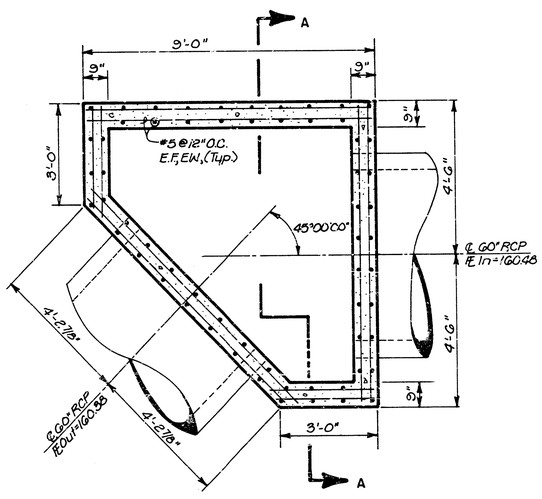


TOP SLAB PLAN

Note: Reinforcing shall be cut as required to clear RCP.



SECTION A



PLAN VIEW

SPECIAL REINFORCED CONCRETE MANHOLE

STA. 1+40 LINE 4

MK EC

BEACON HILL

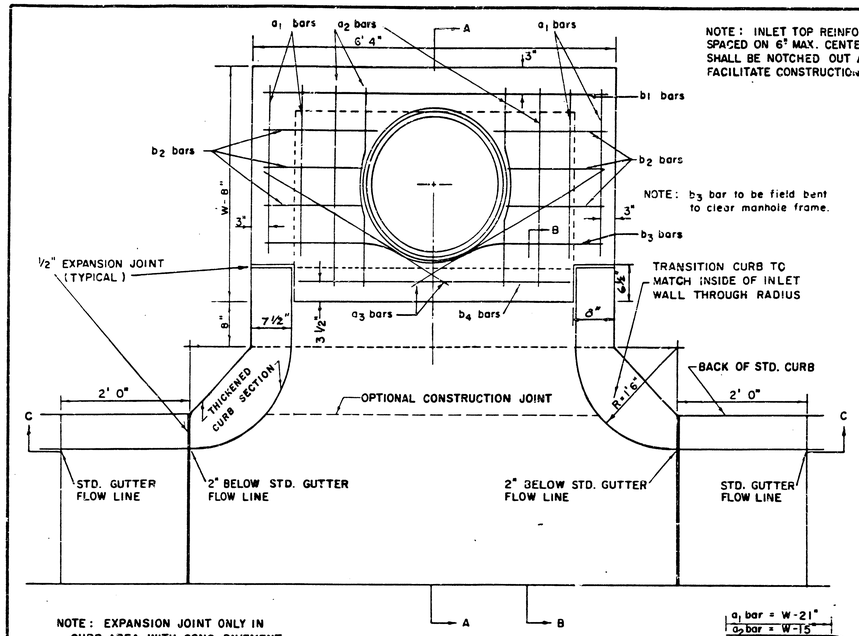
S. W. S. DETAILS

Design	FBN
Drawn by	DPR
Checked by	
Date	AUG. 1986
Job no.	

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226
682-6561

Sheet 8 of 14 8/14

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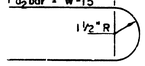


NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

NOTE: b_3 bar to be field bent to clear manhole frame.



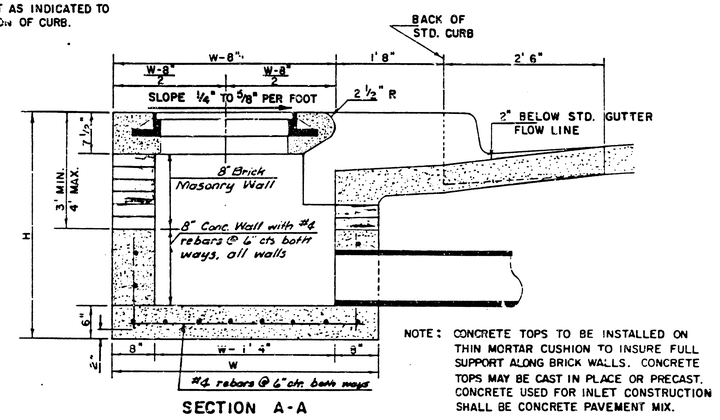
BENDING DIAGRAM

STEEL SCHEDULE

BAR	a_1	a_2	a_3*	D_1 W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9	6	1	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH W=4'4"	5'7"	6'7"	4'0"	6' 1"	–	–	–	–	1' 9"	6'2"	4'8"	60±
LENGTH W=5'4"	7'7"	8'7"	5'0"	–	6' 1"	–	–	–	1' 9"	6'2"	4'8"	81 ±
LENGTH W=6'4"	9'7"	10'7"	6'0"	–	–	6' 1"	–	–	1' 9"	6'2"	4'8"	101±
LENGTH W=7'4"	11'7"	12'7"	7'0"	–	–	–	6' 1"	–	1' 9"	6'2"	4'8"	121±
LENGTH W=8'4"	13'7"	14'7"	8'0"	–	–	–	–	6' 1"	1' 9"	6'2"	4'8"	141±

* NOTE: a_3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	4'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	5'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	6'8"x 6'4" x7 1/2"	48" & 54"	0.77 ±
8' 4"	7'8"x 6'4" x7 1/2"	60" & 66"	0.90 ±



SECTION A-A

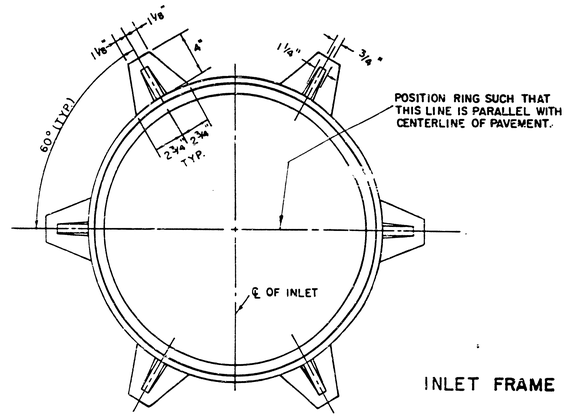
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

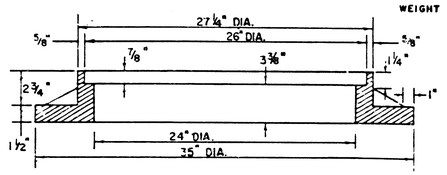
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

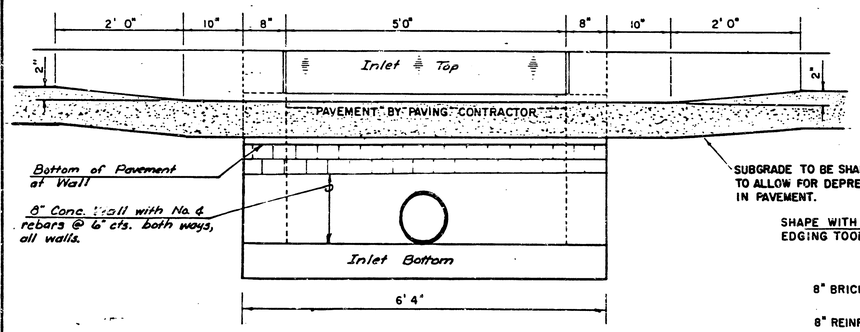


INLET FRAME

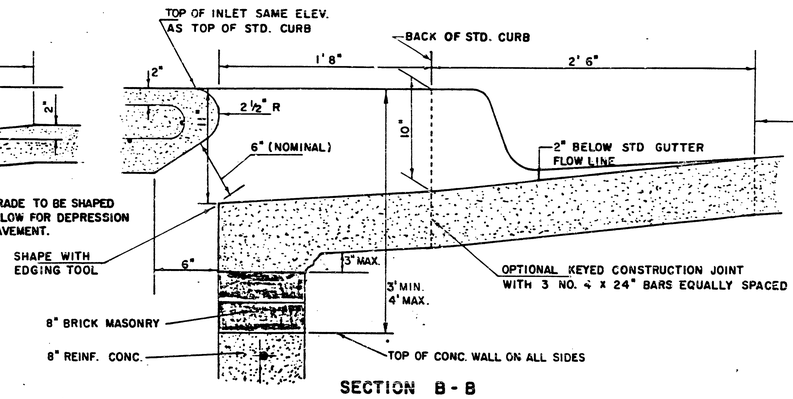
WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



SECTION C - C



SECTION B - B

REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET

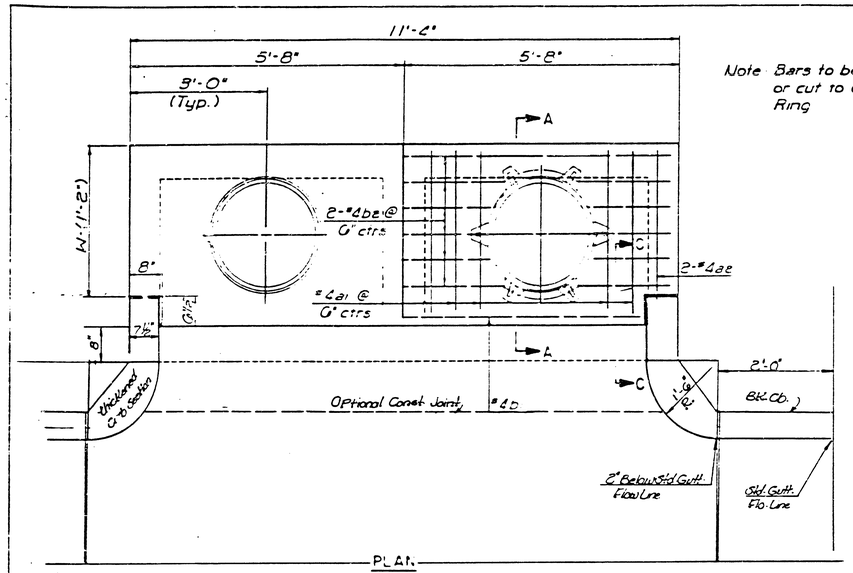
CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

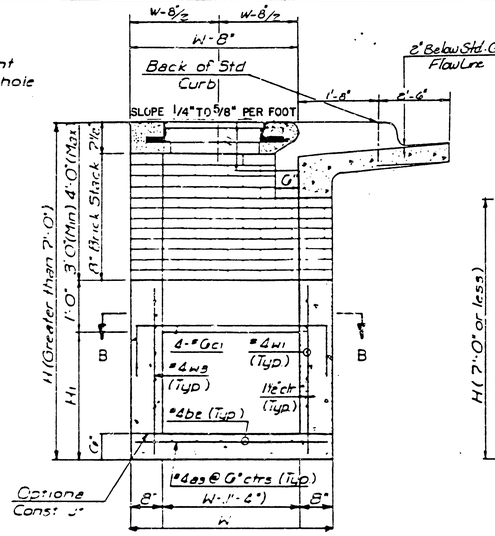
JUNE 1984

9/14

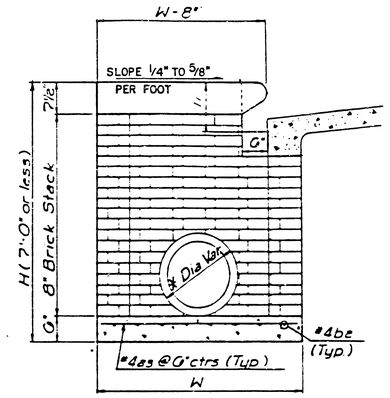
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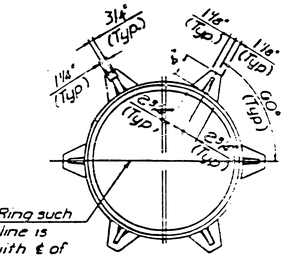
Note Bars to be field bent or cut to clear Manhole Ring



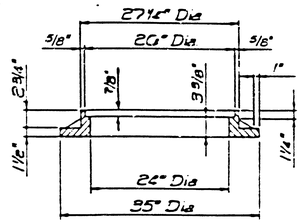
TYPICAL INLET SECTION AT CENTER WALL
(Reinforced Concrete walls)



TYPICAL INLET SECTION AT CENTER WALL
(Masonry Walls)

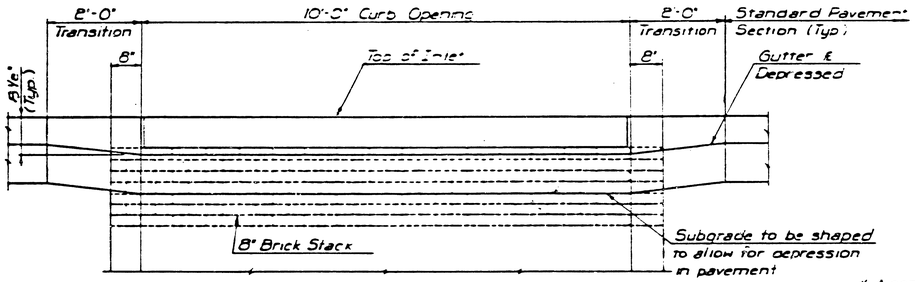


Position Ring such that this line is parallel with ℄ of Pavement

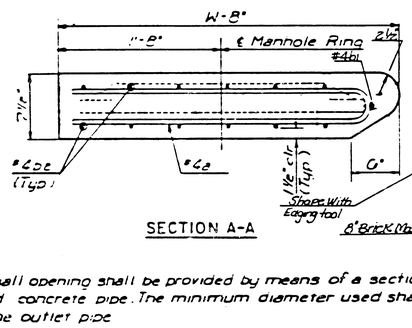


INLET FRAME (Weight = 180 LBS)

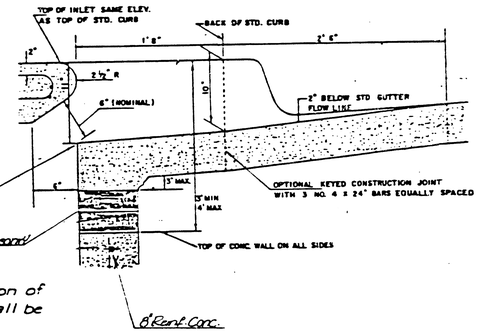
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



ELEVATION

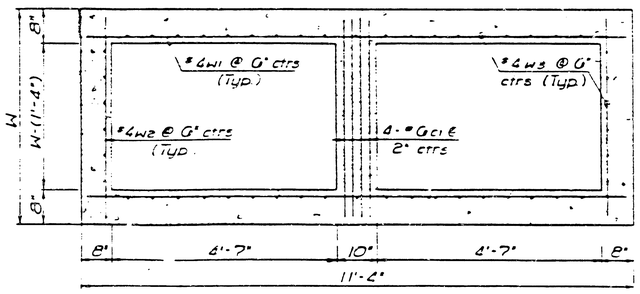


SECTION A-A



* A center wall opening shall be provided by means of a section of reinforced concrete pipe. The minimum diameter used shall be that of the outlet pipe

Note Concrete top to be installed on thin mortar cushion to insure full support along walls



SECTION B-B

SLAB AND FLOOR REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
ai	#4	13	6'-7½"	13	8'-7½"	13	10'-7½"	13	12'-7½"	13	14'-7½"
ae	#4	2	6'-0"	2	8'-0"	2	10'-0"	2	12'-0"	2	14'-0"
as	#4	20	4'-1"	20	5'-1"	20	6'-1"	20	7'-1"	20	8'-1"
bi	#4	1	0'-8"	1	0'-8"	1	0'-8"	1	0'-8"	1	0'-8"
*be	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

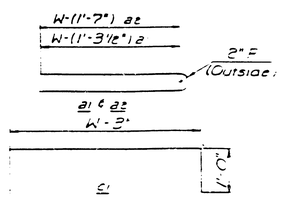
WALL REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
Mark	Size	No	Length	No	Length	No	Length	No	Length	No	Length
ci	#6	4	0'-1"	4	7'-1"	4	8'-1"	4	0'-1"	4	10'-1"
w1	#4	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"	1	11'-1"
w2	#4	1	4'-1"	1	5'-1"	1	0'-1"	1	7'-1"	1	8'-1"
w3	#4	2	3	2	3	2	3	2	3	2	3

* Field bend or cut Reinforcing as required for clearance

① 4 (H1-0") ② 40+4 (W-1) ③ H1-10"

SECTION C-C



BENDING DIAGRAMS

GENERAL NOTES

Concrete shall be 3000 Standard Paving Mix All exposed edges shall be finished with an edging tool
Reinforcing Bars shall be field bent or cut to clear pipes
All bars are #4 bars at 6" Spacing and shall have a minimum clearance of 1½" unless otherwise noted
Floors of inlet shall be shaped with 8 Sack Sand Mix Concrete to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outfall pipe(s)
The Contractor shall have the option of constructing 8" Brick Masonry Walls between the concrete inlet base and top on this inlet when H=7'-0" or less and W=6'-4" or less

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

DETAIL STANDARD TYPE IA CURB INLET

INLET OPENING = 6" x 10'-0"

CITY OF WICHITA

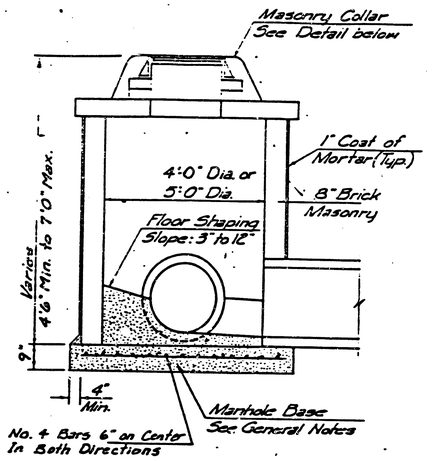
M. E. LINDEBAK, CITY ENGINEER

OCTOBER 1984

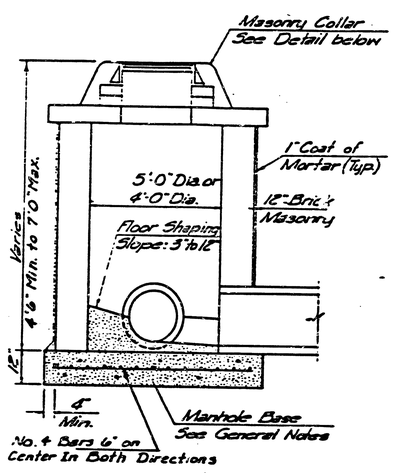
SHEET NO 10 TOTAL SHEETS 14

10/14

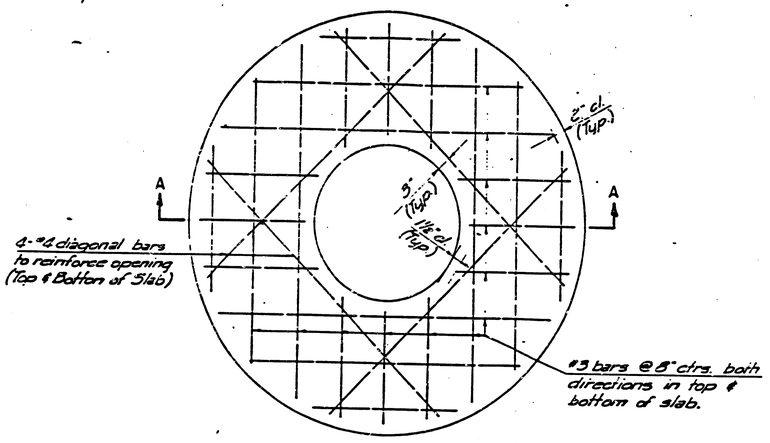
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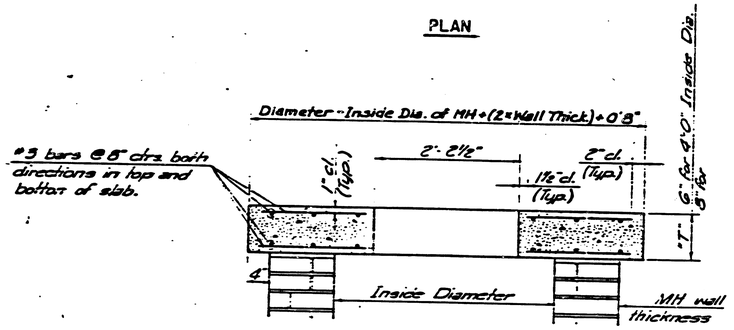
SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE

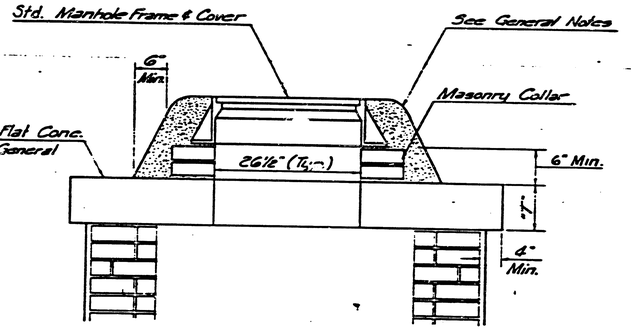


PLAN

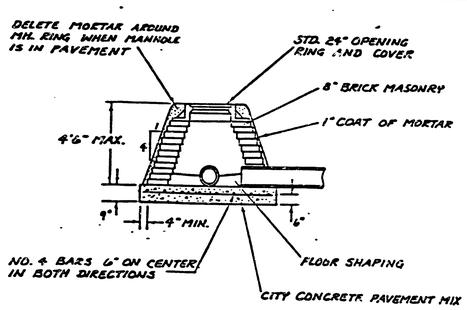


SECTION A-A

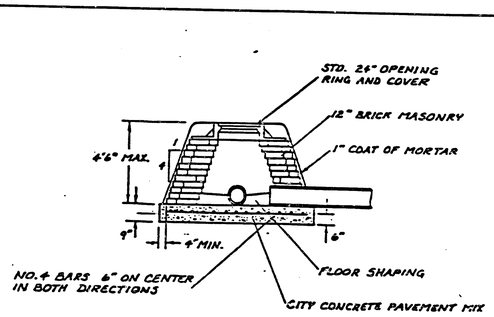
FLAT CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL



SPECIAL SHALLOW TYPE 'A' MANHOLE



SPECIAL SHALLOW TYPE 'B' MANHOLE

GENERAL NOTES :

1. 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 CEMENT 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. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SEWERS WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. 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.

2. 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 6" 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.

3. 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. 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 MEET 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.

4. 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.

5. 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 DRAWINGS.

6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.

7. STANDARD SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

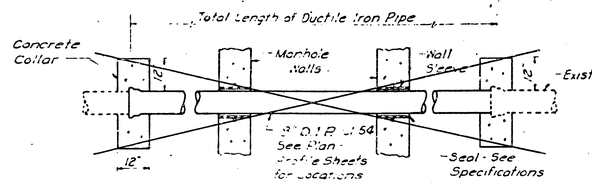
CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'

11/14

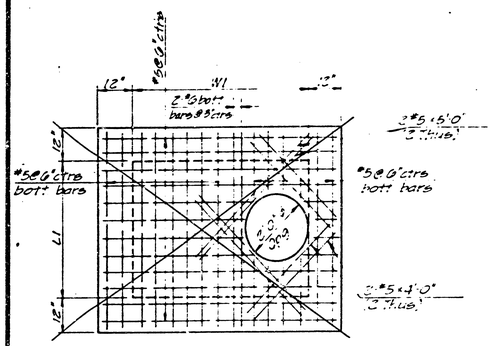
Designed by		Checked by	
Drawn by		Date	Job No.

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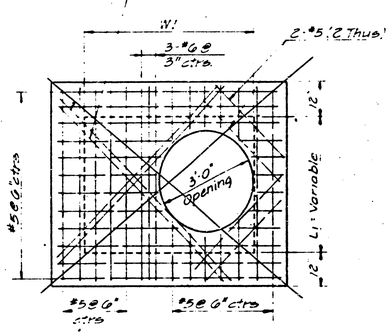
TOBEN SECOND ADDITION
S.W.S NO. 264
PROJ. NO. 458-76-245-81357-000-000-001



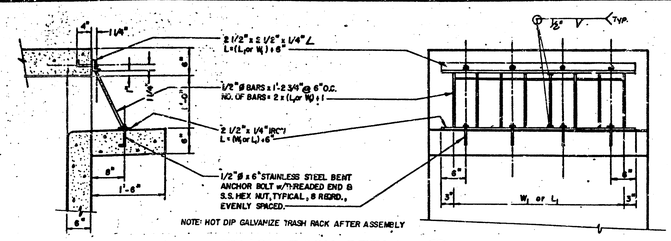
SANITARY SEWER PIPE THRU MANHOLE



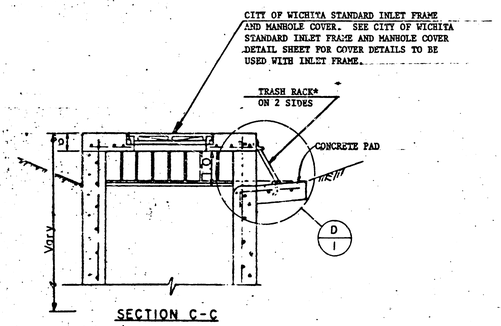
TOP SLAB REINFORCING



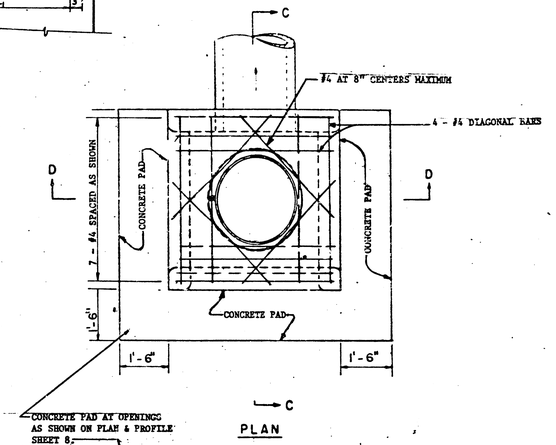
TOP SLAB REINFORCING



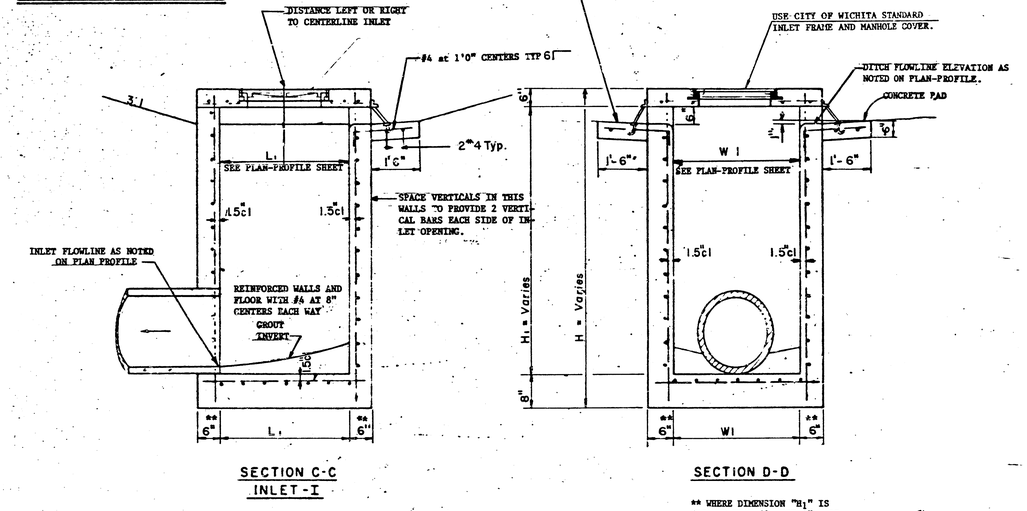
TRASH RACK DETAIL (D/I)



SECTION C-C
for
DITCH INLET TYPE I-A



PLAN

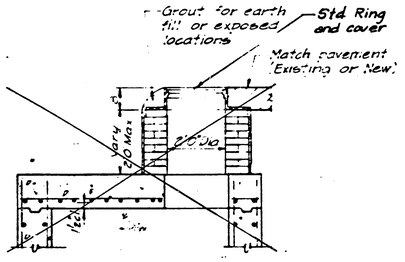


SECTION C-C
INLET-I

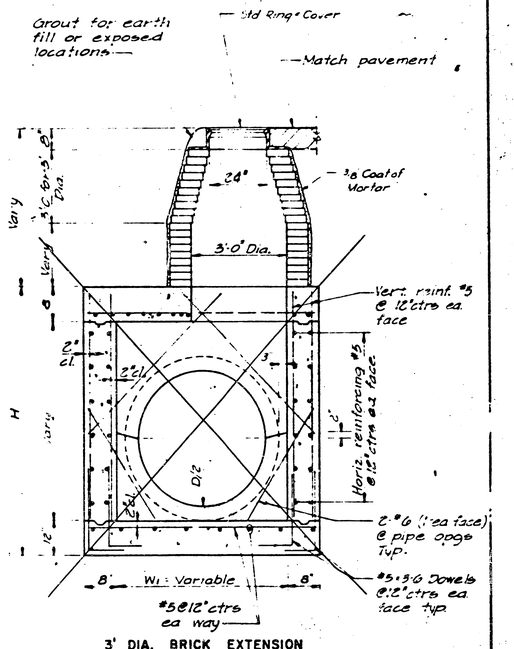
SECTION D-D

** WHERE DIMENSION "B1" IS GREATER THAN 6', USE 8" WALL THICKNESS.

DITCH INLET TYPE I



2' DIA. BRICK EXTENSION
Bottom same as shown on 3' Dia. Brick Extension



3' DIA. BRICK EXTENSION

REINFORCED CONCRETE MANHOLE

Design	F.B.N.
Drawn by	D.P.R.
Checked by	K.H.B.
Date	10-84
Job No.	

DETAIL
DITCH INLET
REINFORCED CONCRETE MANHOLE

MID-KANSAS ENGINEERING CONSULTANTS PA
240 NORTH ROCK ROAD
SUITE 130
WICHITA, KANSAS 67206
682-6561

Sheet 12 of 14

12/14

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FINAL PLAT OF

BEACON HILL

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

N.W. Cor., N.W.1/4 Sec.1, T.27 S., R1 E. 6th. P.M.

N

Scale: 1"= 100'

LEGEND

• = Iron

N.0°43'38"W. 455.00'

N.45°39'14"W. 470.00'

N.0°39'14"W. 1170.66'

East Line West 1/2 N.W. 1/4 Sec.1, T.WP. 27 S., R.1E., 6th. P.M.

N.0°39'44"W. 385.01'

N34°20'16"E. 233.44'

372.63'

R=610.39' Δ=16°47'46" L=178.94'

45.41' To Esmt. P.T.

RESERVE "B"

RESERVE "B" Esmt. Drng. Esmt. Film 165, Page 1332

N.0°39'14"W. 210.00'

S.8°35'59"E. 100.91'

S.0°39'14"E. 59.01'

S.24°29'29"E. 100.91'

S.32°26'14"E. 210.54'

S.45°58'07"E. 155.69'

100.91' 10' Street Dedication

Sewer Esmt. Book Misc. 594, Pg. 421

℄ 20' Util. Esmt. Misc. Bk. 607 Pg. 191

N.89°16'22"E. 676.64'

29TH. STREET NORTH

Control Access Complete

139.74'

48.01'

Exist. Drng. Esmt. Film 445, Pg. 1126

N.0°09'14"W. 182.44'

S.73°01'54"E. 42.40'

N.86°38'28"W. 37.10'

N.0°39'14"W. 199.80'

S.2°39'14"E. 256.19'

R = 364.71' Δ = 33°29'32" L = 213.19

R = 404.08' Δ = 29°55'36" L = 211.06'

R = 178.00' Δ = 28°00'00" L = 86.99'

S.13°18'42"W. 24.92'

S.0°43'38"E. 80.00'

SEE RESERVE "A" DETAIL

HILL

BEACON HILL CT.

BEACON HILL COURT

PARKWOOD

PEMBROOK CIRCLE

PEMBROOK

RIDGEWOOD

BEACON

S.40°39'14"E. 319.97'

S.0°39'14"E. 190.00'

S.39°52'14"E. 471.48'

N.88°46'06"E. 319.56'

S.45°38'30"E. 52.78'

S.0°43'07"E. 551.12'

S.88°46'06"W. 740.81'

S.68°51'23"W. 188.01'

1538.66'

S.0°43'07"E. 379.12'

172.24'

N.1°13'54"W. 536.10'

N.1°13'54"W. 280.69'

N.1°13'54"W. 172.00'

N.1°13'54"W. 145.35'

N.1°13'54"W. 182.31'

N.1°13'54"W. 255.00'

N.1°13'54"W. 166.09'

R = 92.00' Δ = 38°00'00" L = 61.02 Brg. = S.2°39'14"E. Chd. = 59.90'

R = 371.08 Δ = 29°55'36" L = 193.82 Brg. = S.12°18'34"W. Chd = 191.63'

R = 211.00 Δ = 13°57'40" L = 51.41' Brg. = S.20°17'32"W. Chd = 51.28'

R = 276.00' Δ = 40°00'00" L = 192.68' Brg. = S.20°39'14"E. Chd. = 188.80'

R = 150.00' Δ = 39°13'00" L = 102.67' Brg. = S.20°15'44"E. Chd. = 100.67'

R = 100.00' Δ = 51°21'40" L = 89.64' Brg. = S.65°33'04"E. Chd. = 86.67'

R = 190.00' Δ = 45°15'24" L = 150.08' Brg. = S.68°36'12"E. Chd. = 146.21'

R = 190.00' Δ = 45°15'23" L = 150.08' Brg. = S.23°20'49"E. Chd. = 146.21'

R = 157.00' Δ = 45°15'23" L = 124.01'

CENTER SECTION T.27S., R.1E. 6th. P.M.

NW Cor., NE. 1/4 Sec. 1, T.27S., R.1 E. 6th. P.M.

RESERVE "A" DETAIL

BEACON HILL

N.0°43'38"W. 50.33'

N.18°55'25"E. R=183.50' L=62.59'

R=4.50' Δ=161°04'34" L=12.65'

R=15.5' Δ=180°00'00" L=25.85'

S.0°43'38"E. 20.33'

33.5' 2.5' 10' 40' 50' 19' 57' 56.5' 37.5'

NORTH 29TH. STREET

13/14 73/14

20.00

A 737A

L

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A 7378

FINAL PLAT OF
BEACON HILL
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

I, Kenneth H. Bengtson, a Civil Engineer in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "BEACON HILL", an addition to Wichita, Sedgwick County, Kansas, into Lots, Blocks, Streets, and Reserves, the same being accurately set forth in the accompanying plat and described as follows:

A tract of land lying within the northwest quarter and the northeast quarter of Section 1, Township 27 south, Range 1 east of the 6th P.M., more particularly described as follows:

Commencing at the northwest corner of said northwest quarter; thence along the north line of said northwest quarter, bearing N 89° 16' 22" E, 991.14 feet; thence S 0° 43' 38" E, 40.00 feet to the point of beginning; thence N 89° 16' 22" E, 676.64 feet parallel and 40.00 feet south of the north line of said northwest quarter; thence S 0° 43' 38" E, 80.00 feet; thence S 13° 18' 42" W, 124.92 feet to a point on a curve to the right having a central angle of 13° 57' 40", a radius of 211.00 feet, a long chord of 51.28 feet bearing S 20° 17' 32" W; thence along said curve a distance of 51.41 feet to a point on a curve to the left having a central angle of 29° 55' 36", a radius of 371.08 feet, a long chord of 191.63 feet bearing S 12° 18' 34" W; thence along said curve a distance of 193.82 feet; thence S 2° 39' 14" E, 256.19 feet to a point on a curve to the left having a central angle of 38° 00' 00", a radiu of 92.00 feet, a long chord of 59.90 feet bearing S 21° 39' 14" E, thence along said curve a distance of 61.02 feet; thence S 40° 39' 14" E, 319.97 feet to a point on a curve to the right having a central angle of 40° 00' 00", a radius of 276.00 feet, a long chord of 188.80 feet bearing S 20° 39' 14" E; thence along said curve 192.68 feet; thence S 0° 39' 14" E, 190.00 feet parallel with the east line of the west half of said northwest quarter to a point on a curve to the left having a central angle of 39° 13' 00", a radius of 150.00 feet, a long chord of 100.67 feet bearing S 20° 15' 44" E; thence along said curve a distance of 102.67 feet; thence S 39° 52' 14" E, 471.93 feet to a point on a curve to the left having a central angle of 51° 21' 40", a radius of 100.00 feet, a long chord of 86.67 feet bearing S 65° 33' 04" E; thence along said curve a distance of 89.64 feet; thence N 88° 46' 06" E, 319.56 feet parallel with the south line of the northwest quarter to a point on a curve to the right having a central angle of 45° 15' 24", a radius of 190.00 feet, a long chord of 146.21 feet bearing S 68° 36' 12" E; thence along said curve a distance of 150.08 feet; thence S 45° 58' 30" E, 52.78 feet to a point on a curve to the right having a central angle of 45° 15' 23", a radius of 190.00 feet, a long chord of 146.21 feet bearing S 23° 20' 49" E; thence along said curve a distance of 150.08 feet; thence S 0° 43' 07" E, 551.12 feet to a point on the south line of the northeast quarter of said Section 1; thence S 88° 51' 23" W along said south line 188.01 feet to the center of said Section 1; thence along the south line of said northwest quarter bearing S 88° 46' 06" W, 1538.68 feet; thence N 0° 39' 44" W, 385.01 feet; thence N 34° 20' 16" E, 372.63 feet to a point on the east line of the west half of said northwest quarter; thence N 0° 39' 14" W, 1170.66 feet along the east line of the west half of said northwest quarter; thence N 45° 39' 14" W, 470.00 feet; thence N 0° 43' 38" W, 455.00 feet to the point of beginning.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 2 day of April, 1986.

Kenneth H. Bengtson, P.E.
Mid-Kansas Engineering Consultants, P.A.
3500 N. Rock Road, Building #800
Wichita, KS 67226

KENNETH H. BENGTSON LICENSED 7218 KANSAS PROFESSIONAL ENGINEER

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineers Certificate, have caused the same to surveyed and platted into Lots, Blocks, Streets, and Reserves, the same to be known as "BEACON HILL", an addition to Wichita, Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Easements for the construction and maintenance of public utilities and drainage, as indicated on the accompanying plat are hereby granted. Reserve "B" is platted for construction and maintenance of public utilities and drainage. Reserve "A" is platted for entrance monument and landscaping. All reserves shall be owned and maintained by the Homeowners Association. The 5.00 foot wall easement is granted for the purposes of construction and maintenance of a private wall. All abutters' rights of access to or from 29th St. North over and across the north line of Lot 42, Block 1, and the north line of Reserve "B" of "BEACON HILL" are hereby granted to the City of Wichita, Kansas. Reserve "B" is also platted for construction and maintenance of pedestrian ways.

CRITCHFIELD REAL ESTATE LIMITED PARTNERSHIP 1985,
Critchfield, Inc., general partner

By: Stephen N. Critchfield
Stephen N. Critchfield, President

We, Stelbar Oil Corporation, mortgagees on the above described property, do hereby consent to the plat of "BEACON HILL".

STELBAR OIL CORPORATION

By: Maurice L. Holler Vice-Pres
Maurice L. Holler, Vice Pres.

#813979

STATE OF KANSAS)
) ss:
SEDGWICK COUNTY)

Be it remembered that on this 1 day of [illegible], 1986, before me a Notary Public in and for said State and County, came [illegible], on behalf of Stelbar Oil Corporation, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

[illegible], Notary Public.

My Appointment Expires: [illegible]

SUSAN MARIA THOMAS
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Exp. [illegible]

This plat of "BEACON HILL" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 6th day of MARCH, 1986.

WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

William J. Goebel, Chairman

Michael E. Lindebak, Secretary

This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this 13th day of MAY, 1986.

Tony Corado, Mayor
Tony Corado

Donald C. Bisick, City Clerk

Entered on transfer record this 24th day of June, 1986.

Don Wright, County Clerk
Don Wright

STATE OF KANSAS)
) SS:
SEDGWICK COUNTY)

This is to certify that this instrument was filed for record in the Register of Deeds office this 24TH day of JUNE, 1986.

Pat Kettler, Register of Deeds
Pat Kettler

Ann Johns, Deputy
~~Ed Beck~~ ANN JOHNS

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