PLANS

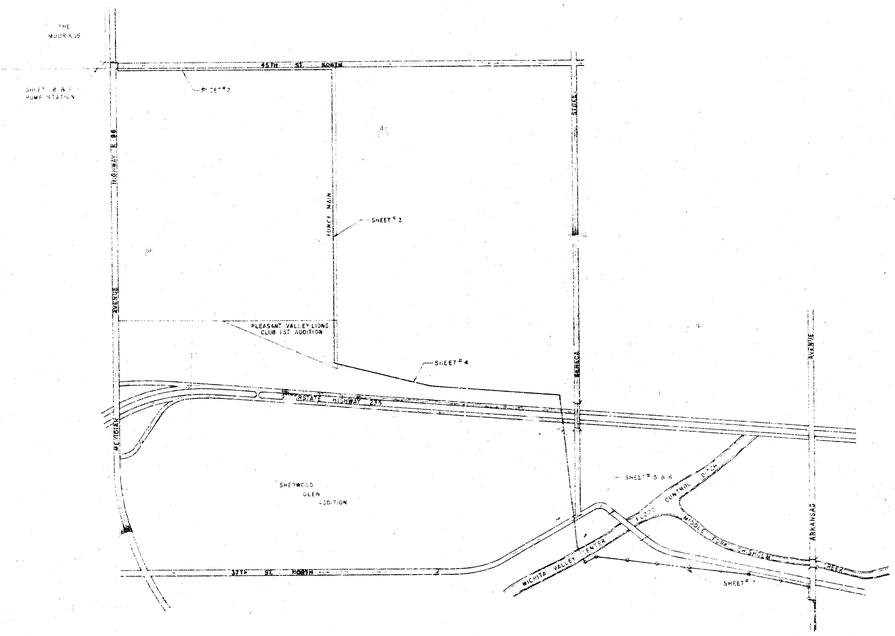
FORCE MAIN AND PUMP STATION

FOR

THE MOORINGS

46-76-245-80482-000-000-008

CITY PROJECT # DBKW 707083



NORTH

NOTE,
THE CONTRACTOR ON THIS PROJECT WILL OBTAIN A PERMIT FROM THE HIGHWAY DEPARTMENT FOR CONSTRUCTION OF THE PROPOSED FORCE MAIN WITHIN HIGHWAY RIGHT OF WAY. FURNISH THEM WITH A $1,000 BOND AND PROVIDE COPIES OF THE PERMIT TO THE CITY ENGINEERING DEPARTMENT.

NOTE TO CONTRACTOR
LEVEE AND RIVER CROSSING

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE DEPARTMENT OF PUBLIC WORKS
MAINTENANCE DIVISION
655 N. MAIN STREET
CONWAY, ARKANSAS 72032
(501) 205-4758 OR 205-4759
OF THE JOB PROGRESS SO THAT ALL OF THE JOB CAN BE INSPECTED BY THEM.

2. A ROSTER OF RESPONSIBLE EMPLOYEES WHO ARE AVAILABLE FOR CALL ON A 24 HOUR, 7 DAY A WEEK BASIS AND LIST OF EQUIPMENT WHICH WILL BE KEPT AVAILABLE AT THE JOB SITE MUST BE FILED WITH THE DEPARTMENT OF PUBLIC WORKS

PRIVATE PROJECT

10-19-79

FORCEMAIN AND PUMP STATION — MIDAC, INC. — 1/1

B-M

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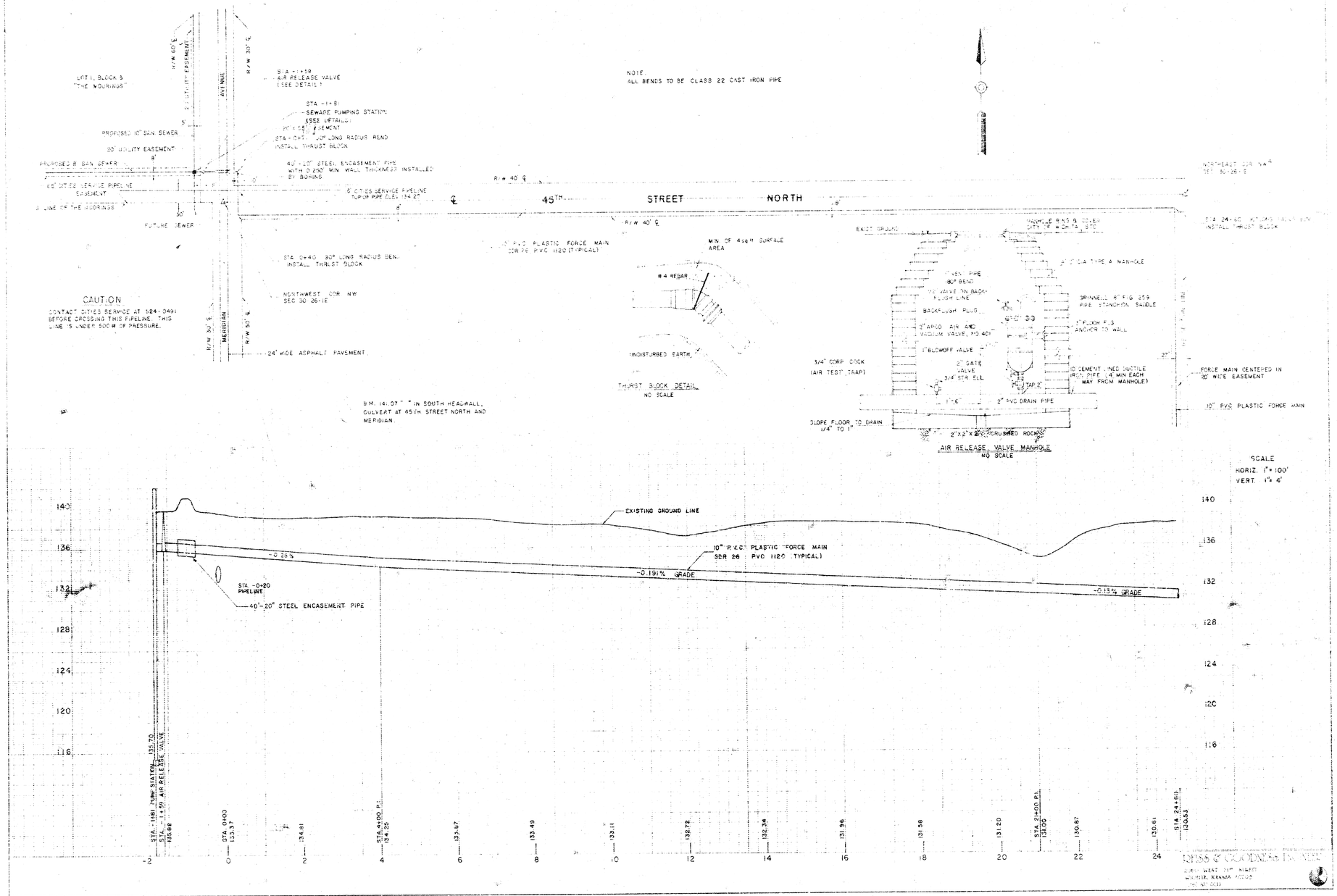

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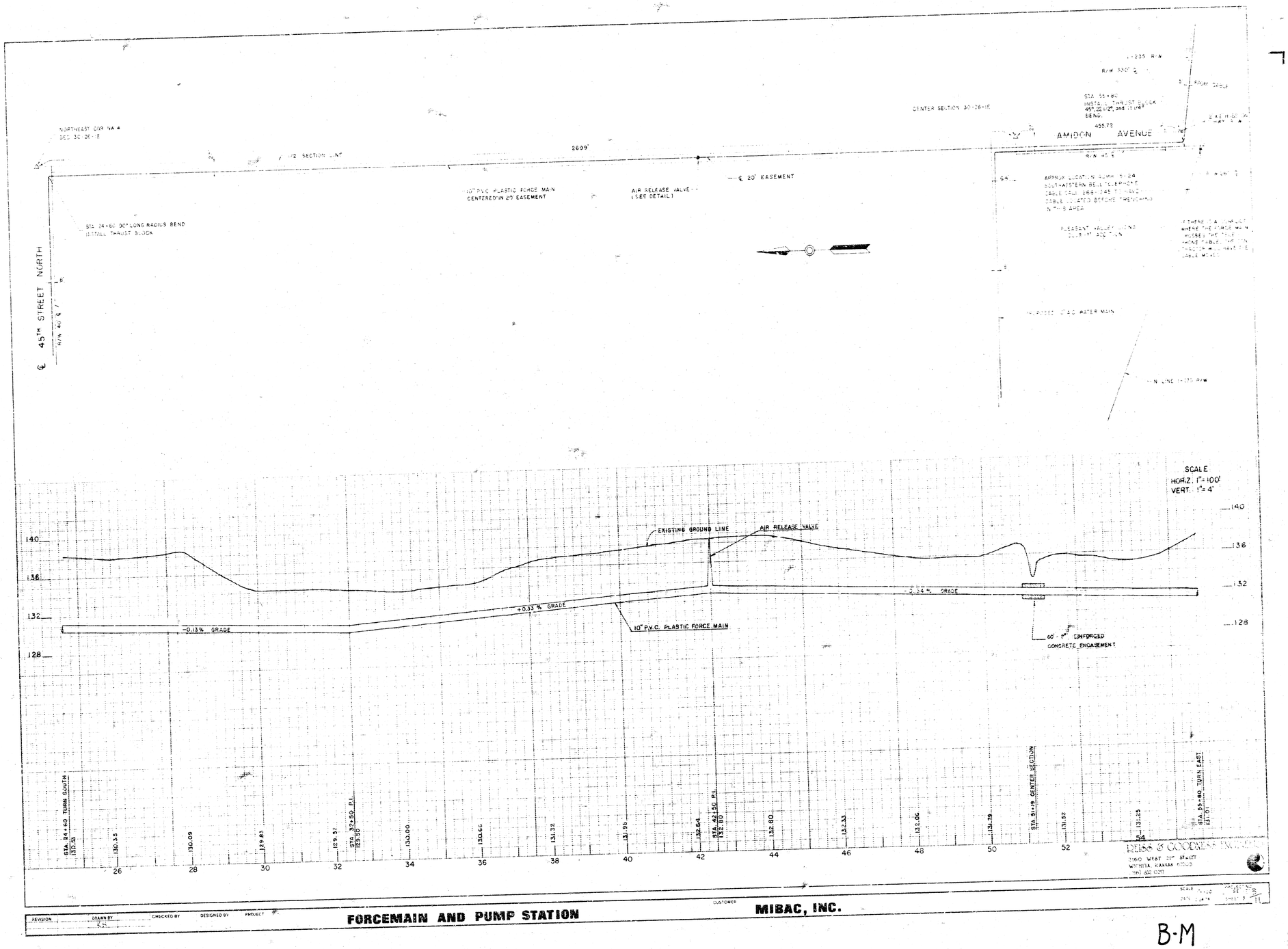

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PLEASANT VALLEY GOLF CLUB 8TH ADDITION

99°38'24"

STA. 55+80
SMALL THRUST BLOCK
R/W 330' ℄ HWY. STA. 370+27.35

2" x 3" HUB

R/W 300' ℄ HWY.
STA. 375+00

TELEPHONE CABLE

473.60

455'57"

606.71

APPROX. LOCATION AGMH 15-24
SOUTHWESTERN BELL TELEPHONE
CABLE CALL 068-1245 TO HAVE
CABLE LOCATED BEFORE TRENCHING
IN THIS AREA.

HWY. R/W

2"x2" HUB

AIR RELEASE VALVE (SEE DETAIL)

R/W 260' ℄
HWY. STA. 37+52.24

FORCE MAIN 5' FROM CABLE (MINIMUM)

8" D.I.P.

STA. 38+00

2"x2" HUB

10" PVC PLASTIC FORCE MAIN

HWY. R/W 210' ℄

STA. 84+15
INSTALL THRUST BLOCK
45°, 22 1/2°, AND
11 1/4° BENDS.

FENCE

HWY. R/W

30

STREET

INSTALL SLAB 375+00

INSTALL THRUST BLOCK AND
11 1/4° BEND

HWY. FENCE

EDGE OF PROPOSED PAVING

I-235

96°00'30"

EXISTING PAVING

I-235

BP 1265

180'-23" STEEL ENCASEMENT
PIPE WITH 0.250" MINIMUM
WALL THICKNESS PIPE
INSTALLED BY BORING

SECTION LINE

R/W FENCE

R/W 150' ℄

STA. 84+78 AT
SOUTH R/W I-235

SECTION LINE

SENECA

R/W FENCE
ON HWY. R/W

SCALE
HORIZ. 1"=100'
VERT. 1"=4'

140
136
132
128
124

AIR RELEASE VALVE

EXISTING GROUND LINE

-0.134 %

+0.162% GRADE

STA. 60+65 11 1/4° BEND
W/THURST BLOCK F.L. 125.80

STA. 61+10 11 1/4° BEND W/THURST
BLOCK F.L. 125.80

10" R.V.C. PLASTIC FORCE MAIN

180'-20" STEEL ENCASEMENT
PIPE WITH 0.250" MINIMUM
WALL THICKNESS

STA. 55+60 TURN EAST P.I.
137.01

STA. 60+42 11 1/4° BEND W/THRUST BLOCK
F.L. 127.90

STA. 60+54 11 1/4° BEND W/THRUST BLOCK
F.L. 125.85

STA. 81+15 TURN SOUTH W/THRUST BLOCK

STA. 84+78.74 SOUTH R/W FENCE
126.98

130.72
130.45
130.54
130.22
129.90
129.57
129.25
128.92
128.60
128.28
127.95
127.63
127.30
126.98

56 58 60 62 64 66 68 70 72 74 76 78 80 82 84

DEISS & GOODMAN ENGINEERS, INC.
250 WEST 54TH AVENUE
WICHITA, KANSAS 67202
316 942-2351

REVISION	DRAWN BY	CHECKED BY	DESIGNED BY	PROJECT
ALL 12-20-78	K.H.			

FORCE MAIN AND PUMP STATION

MIDAC, INC.

B-M

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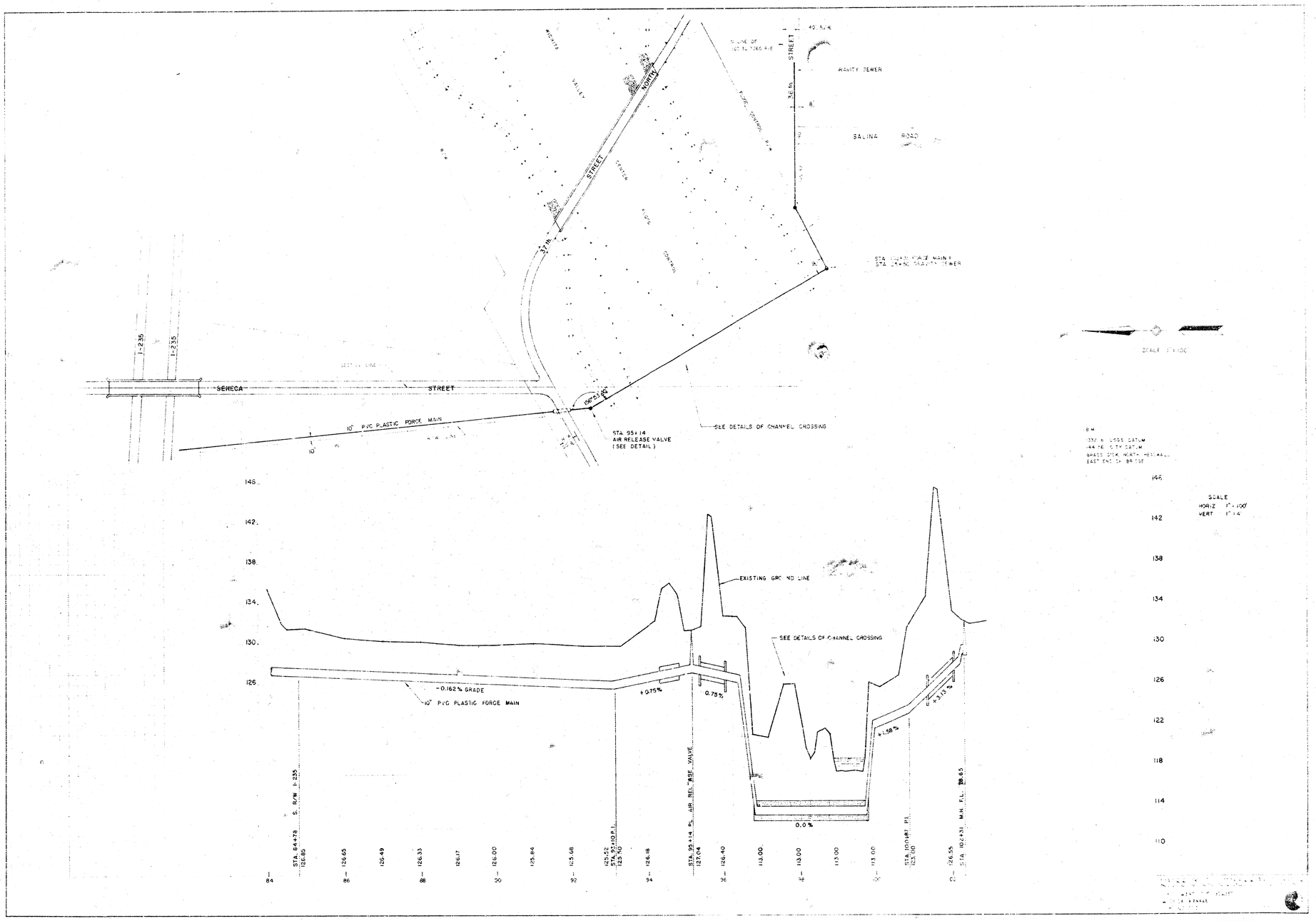

REVISION	DRAWN BY	CHECKED BY	DESIGNED BY	PROJECT
2-19-75				

FORCE MAIN AND PUMP STATION

MIBAC, INC.

B-M

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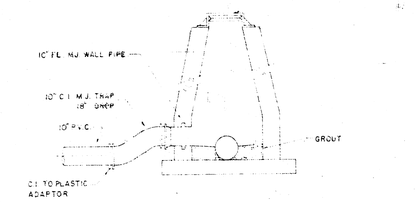
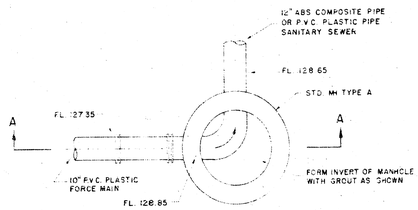
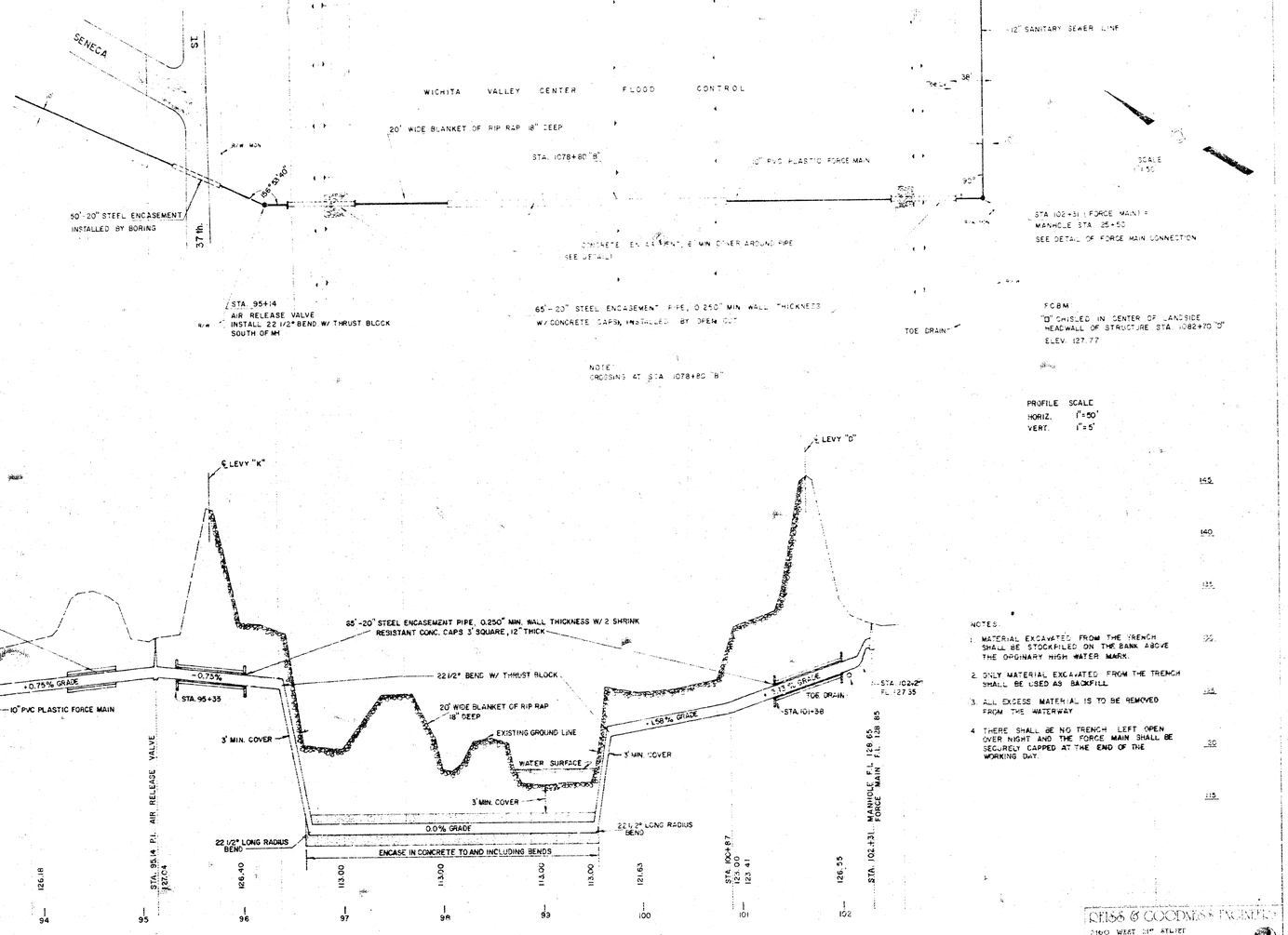


SECTION A - A



PLAN

FORCE MAIN CONNECTION



PROFILE SCALE
HORIZ. 1"=50'
VERT. 1"=5'

NOTES:

1. MATERIAL EXCAVATED FROM THE TRENCH SHALL BE STOCKPILED ON THE BANK ABOVE THE ORDINARY HIGH WATER MARK.
2. ONLY MATERIAL EXCAVATED FROM THE TRENCH SHALL BE USED AS BACKFILL.
3. ALL EXCESS MATERIAL IS TO BE REMOVED FROM THE WATERWAY.
4. THERE SHALL BE NO TRENCH LEFT OPEN OVER NIGHT AND THE FORCE MAIN SHALL BE SECURELY CAPPED AT THE END OF THE WORKING DAY.

REISS & GOODNESS ENGINEERS
3100 WEST 21ST STREET
WICHITA, KANSAS 67203
(316) 832-0333

REVISION	DRAWN BY	CHECKED BY	DESIGNED BY	PROJECT
2-2-78	S.T.			

FORCE MAIN AND PUMP STATION

CUSTOMER: MIBAC, INC.

SCALE 1"=50' | PROJECT NO. 76-1727 | DATE 2-24-78 | SHEET 6 of 11

D-17

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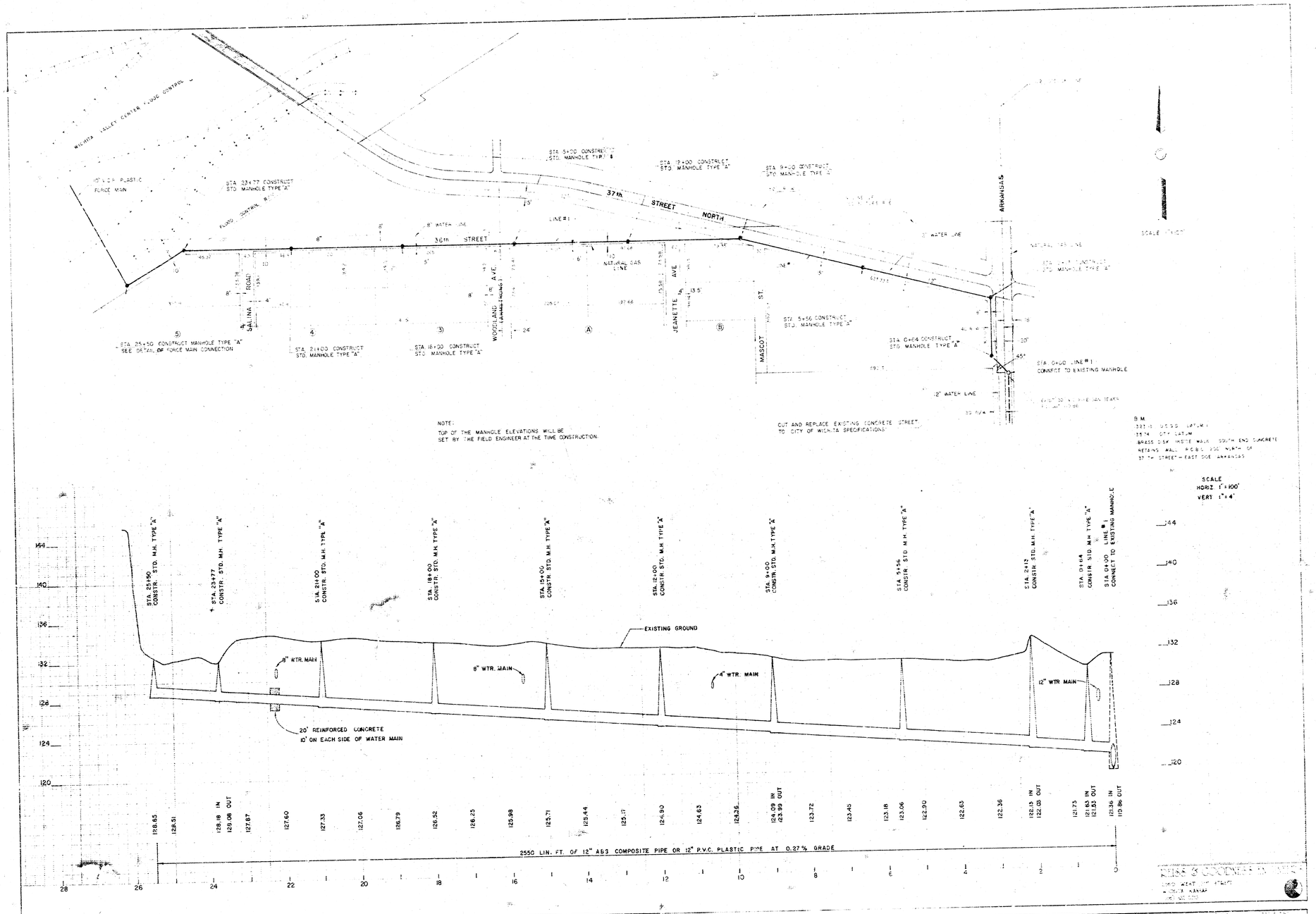

REVISION 1-15-75 | DRAWN BY E.H. | CHECKED BY | DESIGNED BY | PROJECT

FORCE MAIN AND PUMP STATION

MIBAC, INC.

B-M

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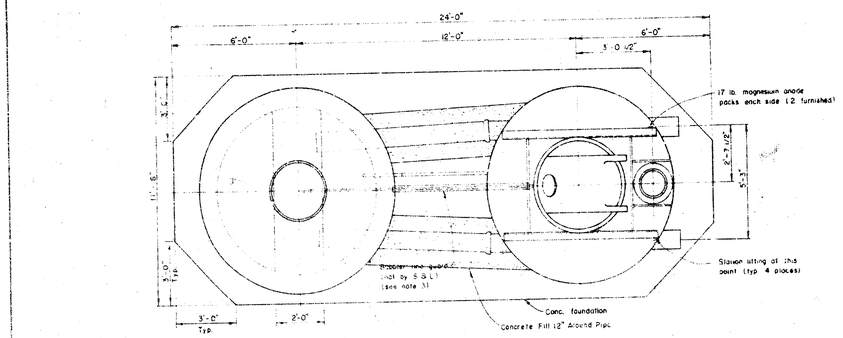
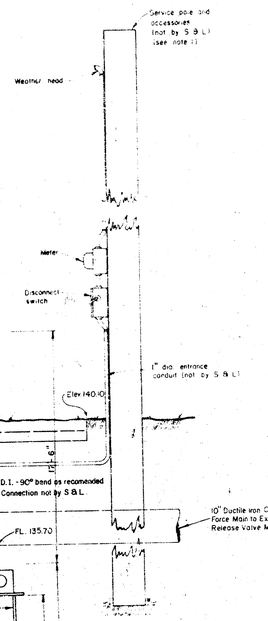
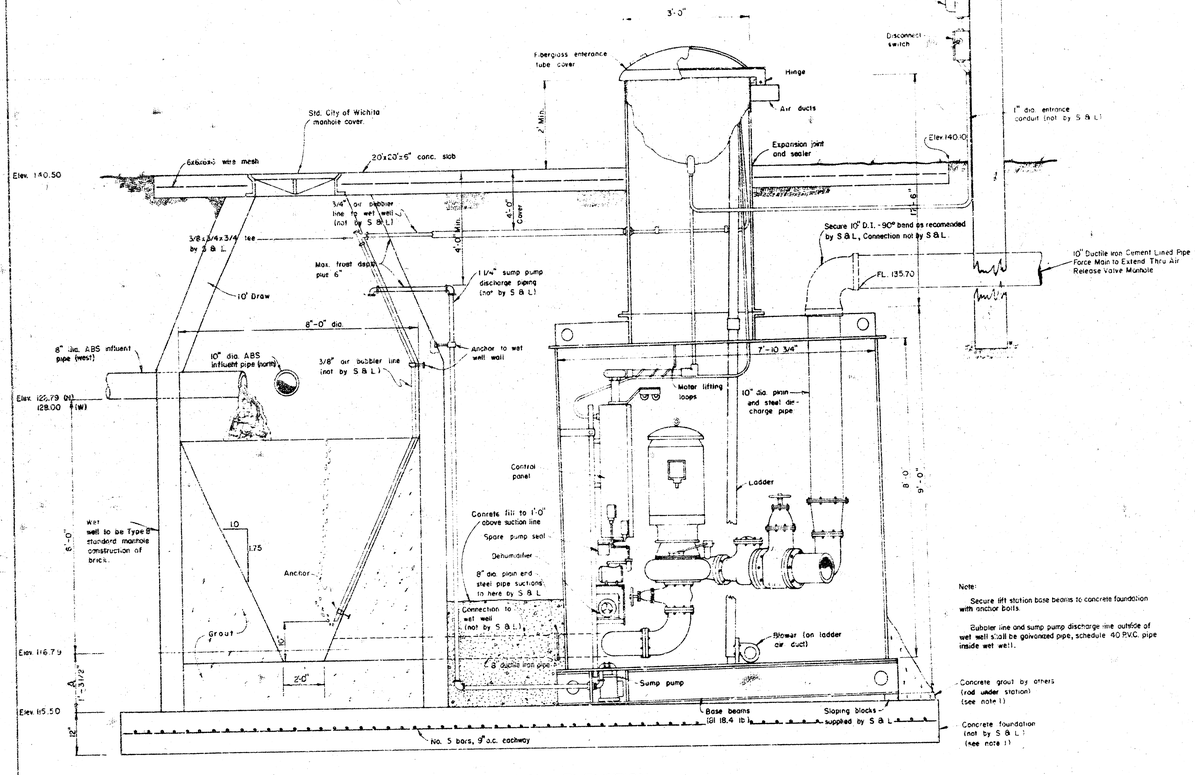


SETTING PLAN
NO SCALE

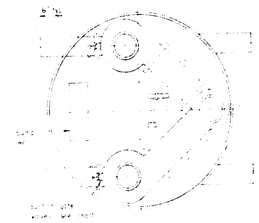




SECTIONAL ELEVATION
NO SCALE

Note:

Lift station shall be furnished with high water and power outage alarms which can be connected to the City Of Wichita alarm system. Lift station to also be furnished with running time meters.



STATION PLAN
NO SCALE

DIMENSIONAL DATA

PUMP SIZE	SUCTION PIPE SIZE	SUCTION GATE VALVE SIZE	COMMON DISCHARGE GATE VALVE SIZE	COMMON DISCHARGE PIPE SIZE	DIM. A
	4,6		4	4,6,8	
483-463	6,8	4,6	4	6/8-10	
483-483	8	6	6	10	
683-683A	6,8		6	6/8/10	
663-663A	8/10	6	6	8/10/12	
6841	10	8	8	10	

NOTES

1. See engineer's plans and specifications for details of wet well, concrete foundation, grout under station and electrical service.
2. Station design characteristics - 8" suction, 4" common pipe size, 10" discharge, 2 pumps at 700 G.P.M. at 36' T.D.H.
3. If danger of earth settlement exist, the bubbler line should be protected, a clip angle is provided to support station and at guard. Bubbler line gaurd required.
4. These drawings show an underground sewage pumping station manufactured by Smith and Loveless (S & L). Station by any other manufacturer must be approved by the city engineer prior to submitting bids.

NOTE

It may be some time before this area is fully developed to where the total wetwell capacity is needed. Therefore the pump controls will be set initially to turn on and off within an 18" vertical of sewage level in the wet well. When the additional wet well storage is needed the controls will be adjusted to a maximum pumping range of 36" between pump on-off levels in the wet well.

REEVES & COUCHMAN ENGINEERS
1060 WEST 13TH STREET
WICHITA, KANSAS 67203
(316) 262-0303

REVISION	DRAWN BY	CHECKED BY	DESIGNED BY	PROJECT
	Sam 2.24.70		L.C.H.	FORCEMAIN AND PUMP STATION

MIBAC, INC.

SCALE NO SCALE
DATE 2-24-70
SHEET # 8

B-M

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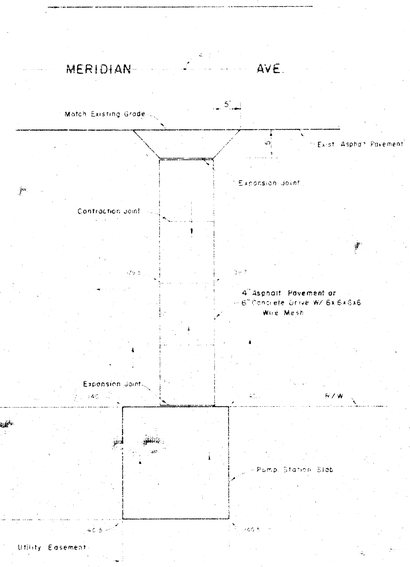
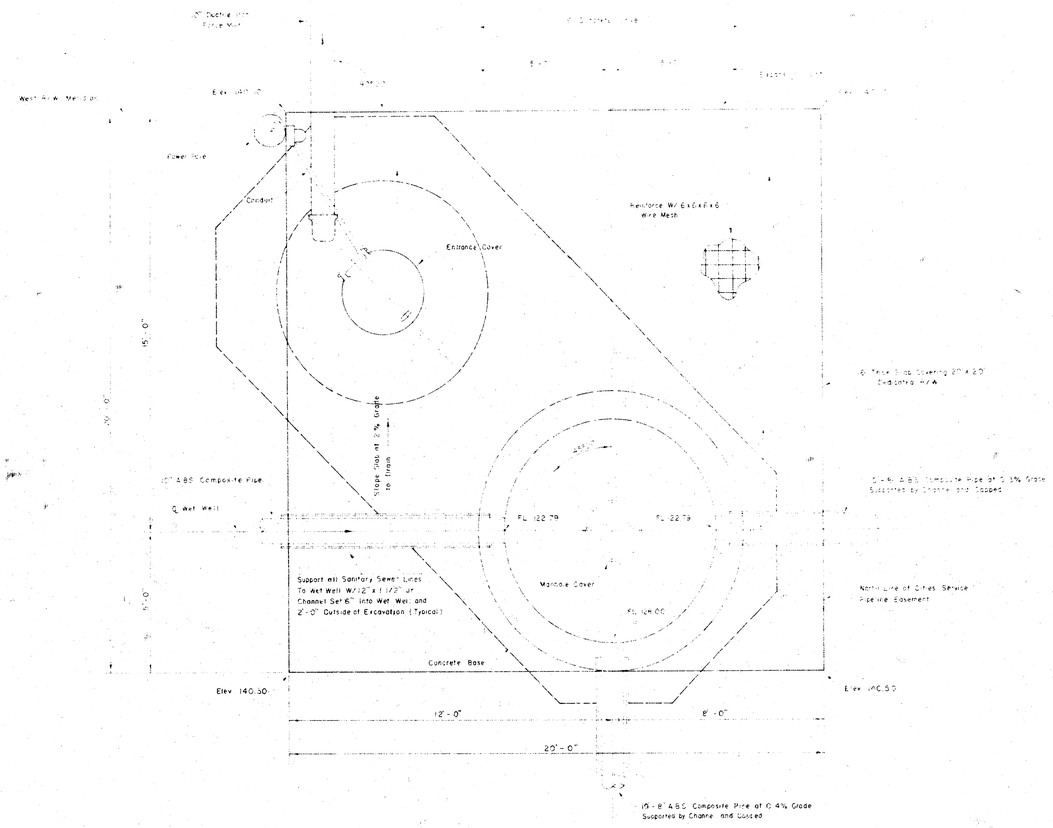


GRADING PLAN

SCALE 1" = 10'



LAYOUT PLAN

SCALE 1/2" = 1'-0"

KEENE & COCHRANE ENGINEERS
1060 WEST 21ST AVENUE
WICHITA, KANSAS 67203
(316) 267-1283

REVISION	DRAWN BY	CHECKED BY	DESIGNED BY	PROJECT
	R.P.			

FORCEMAIN AND PUMP STATION

OWNER **MIBAC, INC.**

SCALE AS SHOWN
DATE

SHEET 9 OF 11

B-M

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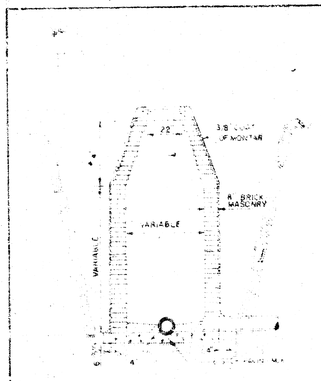
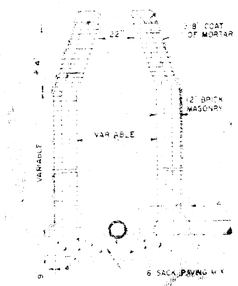
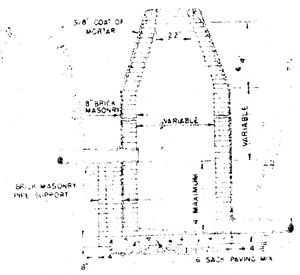


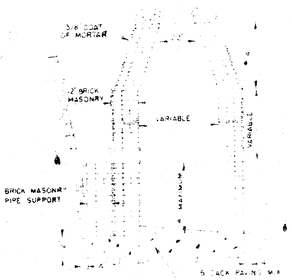
STANDARD MANHOLE
TYPE "A"



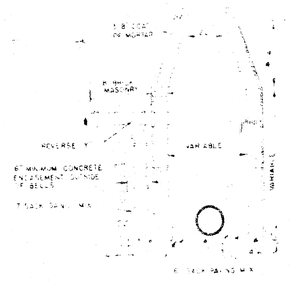
STANDARD MANHOLE
TYPE "B"



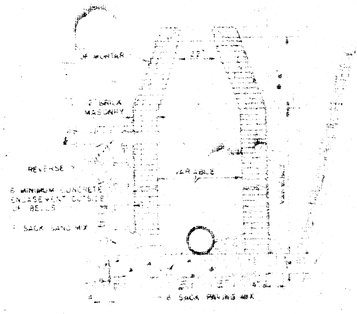
DROP MANHOLE
TYPE "A"



DROP MANHOLE
TYPE "B"

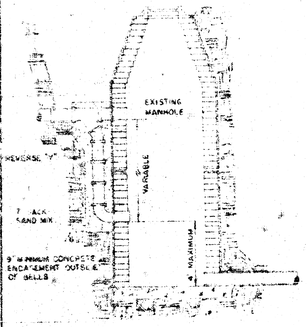


OUTSIDE DROP MANHOLE
TYPE "A"

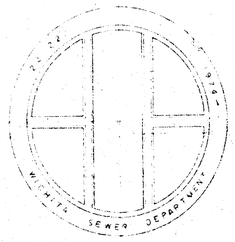


OUTSIDE DROP MANHOLE
TYPE "B"

* DRAW 6' ON 5 DIA. M.H.

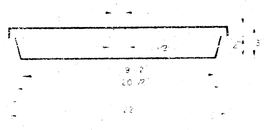


DETAIL OF DROP STACK
FOR EXISTING MANHOLES IN GROUND WATER

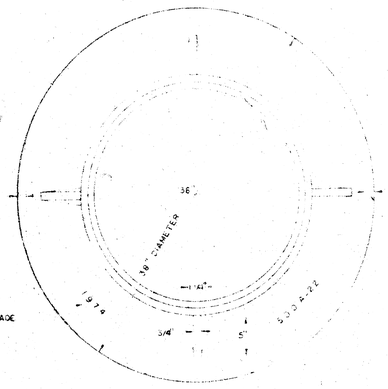


TOP VIEW
MANHOLE COVER
WEIGHT 10 LBS

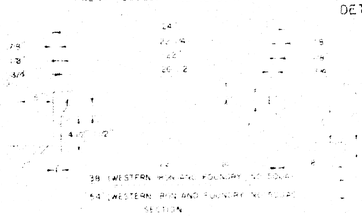
SECTION A-A
MANHOLE COVER



SIDE VIEW
MANHOLE COVER

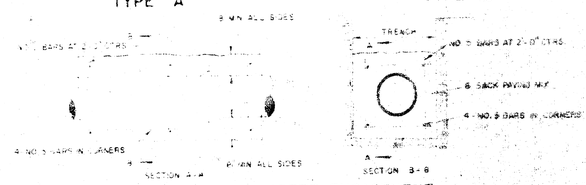


TOP VIEW
MANHOLE RING
WEIGHT 325 LBS RING W/ SUMP
WEIGHT 300 LBS RING NO SUMP

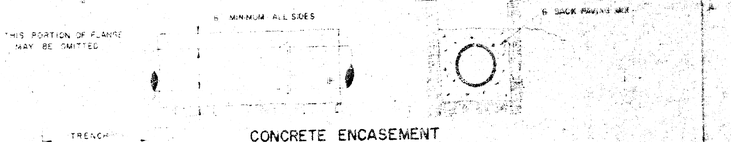


SECTION
MANHOLE RING

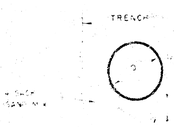
OUTSIDE CIRCUMFERENCE OF COVER AND THE INNER FACE AND SEAT OF RING TO BE MACHINE FIT



REINFORCED CONCRETE ENCASEMENT
FOR STRENGTH

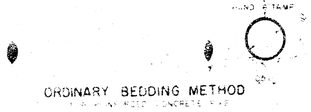


CONCRETE ENCASEMENT
FOR COVER



DETAIL OF CONCRETE CRADLE

ORDINARY BEDDING METOD
FOR CAST PIPE



ORDINARY BEDDING METHOD
FOR A RIGID CONCRETE PIPE

GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 6 SACKS OF CEMENT PER CUBIC YARD.
- STANDARD MANHOLES TYPE A OR TYPE B AND STANDARD DROP MANHOLES TYPE A OR TYPE B 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. MANHOLES WITH PIPE SIZES LARGER THAN 24" SHALL BE 5' DIAMETER.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED TO GIVE MAXIMUM HYDRAULIC EFFICIENCY USING 6 SACK SAND MIX CONCRETE.

FORCE MAIN AND PUMP STATION - MIBAC, INC.

DETAILS OF
SEWER APPURTENANCES
ADOPTED AS STANDARD DESIGN
BY
ENGINEERING DIVISION
CITY OF WICHITA, KANSAS
R. W. LINN CITY ENGINEER
1974

14 3 5 8

B-M

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AS CONSTRUCTED

SANITARY SEWER AND FORCE MAIN

SERVING

THE MOORINGS ADDITION

REISS & GOODNESS ENGINEERS
2180 WEST 21st STREET
WICHITA, KANSAS 67203
(316) 832-0283

DATE: 8-7-78

NORTH

300 200 100 0 300 600

SCALE : 1" = 300'

NOTE:
B.M. TOP OF CONCRETE FOUND E. SIDE COR. POST S. R/W I-235 W/ R/W SENECA
ELEV. 132.51