

CITY OF RIDGELAND, MISSISSIPPI

STOKES, MATTHEWS ROAD AREA WATER AND SANITARY SEWER IMPROVEMENTS

MAYOR

GENE F. McGEE

BOARD OF ALDERMEN

HARVEY CARR, JR.

DARYL SMITH

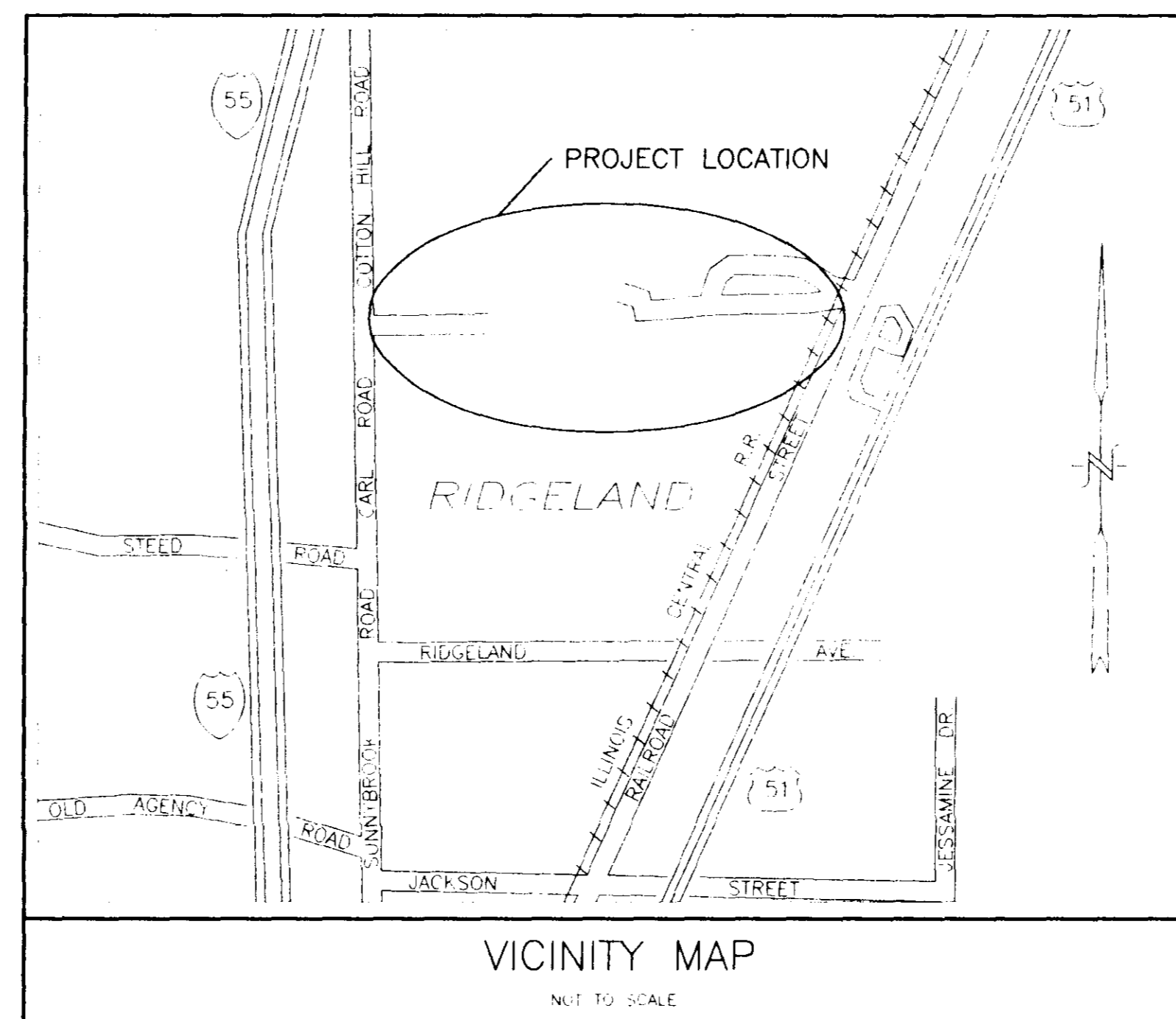
BRIAN BARCELLONA

AL BIBLE

JOE BARLOW

LINDA DAVIS

CHUCK KOBERT



APPROVED BY:

DATE:

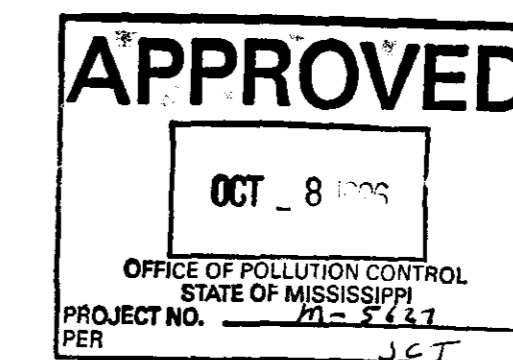
SAM VINSON, P.E.
DIRECTOR OF PUBLIC WORKS

PREPARED BY:

ABMB ENGINEERS, INCORPORATED

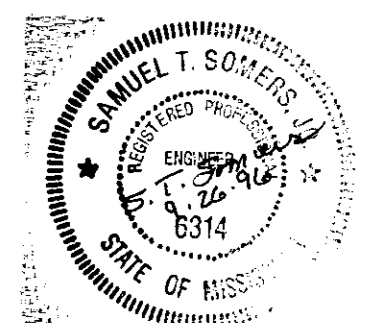
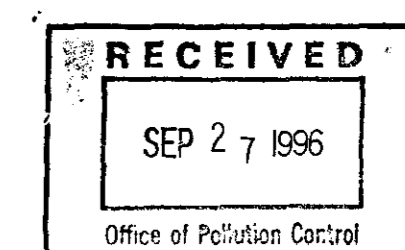
DATE:

TED SOMERS, P.E.
MISSISSIPPI LICENSE NO. 06314



RECEIVED
OCT 16 1996

PUBLIC WORKS DEPT.



ABMB Civil/Structural Engineers
ENGINEERS Jackson, Mississippi
INCORPORATED

PWP-01926

PROJECT NUMBER	COUNTY	SHEET NUMBER
1124	MADISON	A

GENERAL NOTES

1. THE LOCATION OF ALL PIPES, DUCTS OR UNDERGROUND STRUCTURES IS NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES, DUCTS OR STRUCTURES ARE SHOWN. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANY FOR THE LOCATION OF THEIR UNDERGROUND SERVICE A MINIMUM OF 48 HOURS PRIOR TO BEGINNING CONSTRUCTION IN EACH AREA.
2. CONTRACTOR SHALL MAINTAIN UTILITY SERVICES TO ALL RESIDENTS AFFECTED BY HIS WORK.
3. UTILITY INFORMATION SHOWN IN PLANS WERE MARKED IN FIELD BY OWNERS AND RECORDED BY ABMB ENGINEERS, INC., JACKSON, MS.
4. ALL ELEVATIONS REFER TO NGVD(MSL) DATUM (0.00 MEAN SEA LEVEL).
5. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS AND THE CONTRACTOR SHALL LOCATE THEM IN THE FIELD AT NO ADDITIONAL COST TO THE OWNER.
6. RESTORATION OF PAVEMENT, CURBING DRAINAGE STRUCTURES AND SIDEWALKS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF RIDGELAND DEPARTMENT OF PUBLIC WORKS.
7. ANY FENCE DAMAGE DURING CONSTRUCTION SHALL BE REPLACED IN KIND. (NO DIRECT PAY)
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF DRAINAGE PIPE AND DRAINAGE DITCHES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER TO MINIMIZE OBSTRUCTION TO DRAINAGE PIPES AND DITCHES AND SHALL REMOVE ANY OBSTRUCTIONS CAUSED BY HIS OPERATIONS ON A DAILY BASIS. (NO DIRECT PAY)
9. THE REMOVAL OF PAVEMENT, DRIVEWAYS AND OTHER IMPROVED ASPHALT AND CONCRETE SURFACES FOR WATER AND SEWER CONSTRUCTION SHALL NOT BE PAID FOR DIRECTLY AND SHALL BE ACCOMPLISHED BY SAW CUTTING. (SEE SPECIAL PROVISIONS)
10. FORCE MAIN THRUST BLOCKING SHALL CONFORM TO WATER MAIN THRUST BLOCKING DEPICTED ON STANDARD DETAIL SHEETS.

LEGEND

- C — CABLE TELEVISION
- - - D - - - STORM DRAIN
- - - G - - - GAS LINE
- - - S - - - SANITARY SEWER
- - - T - - - TELEPHONE CABLE, DUCT OR DUCT BANK
- - - W - - - WATER LINE
- - - L - - - UNDERGROUND ELECTRICAL
- - - x - - - BARBED WIRE FENCE
- - - p - - - CHAIN LINK FENCE
- - - - - PROPERTY LINE
- - - o - - - WOOD FENCE
- - - - - EXISTING RIGHT-OF-WAY OR EASEMENT
- - - - - DITCH BOTTOM
- REQ'D PERMANENT RIGHT-OF-WAY OR EASEMENT
- - - - - REQ'D CONSTRUCTION RIGHT-OF-WAY OR EASEMENT
- TMH TELEPHONE MANHOLE
- SMH SANITARY SEWER MANHOLE
- WMH WATER MANHOLE
- WM WATER METER
- DMH STORM DRAIN MANHOLE
- C.B. OR D.I. STORM DRAIN CATCH BASIN OR DROP INLET
- TELEPHONE PEDESTAL
- ◇ FIRE HYDRANT
- ◆ BENCH MARK OR TEMPORARY BENCH MARK
- FOUND IRON PIN
- ⊗ POLE
- T OR E TELEPHONE OR ELECTRIC SWITCH BOX, TRANSFORMER, ETC,
- - - - - EXISTING PIPE
- ⊗ WATER VALVE W/ BOX
- ⊗ BLOW-OFF ASSEMBLY
- ⊗ AIR RELEASE VALVE W/ MANHOLE
- ⊗ REDUCER
- W — PROPOSED WATER LINE
- - - ► PROPOSED SEWER FORCE MAIN
- ▬ PROPOSED GRAVITY SEWER LINE

LEGEND

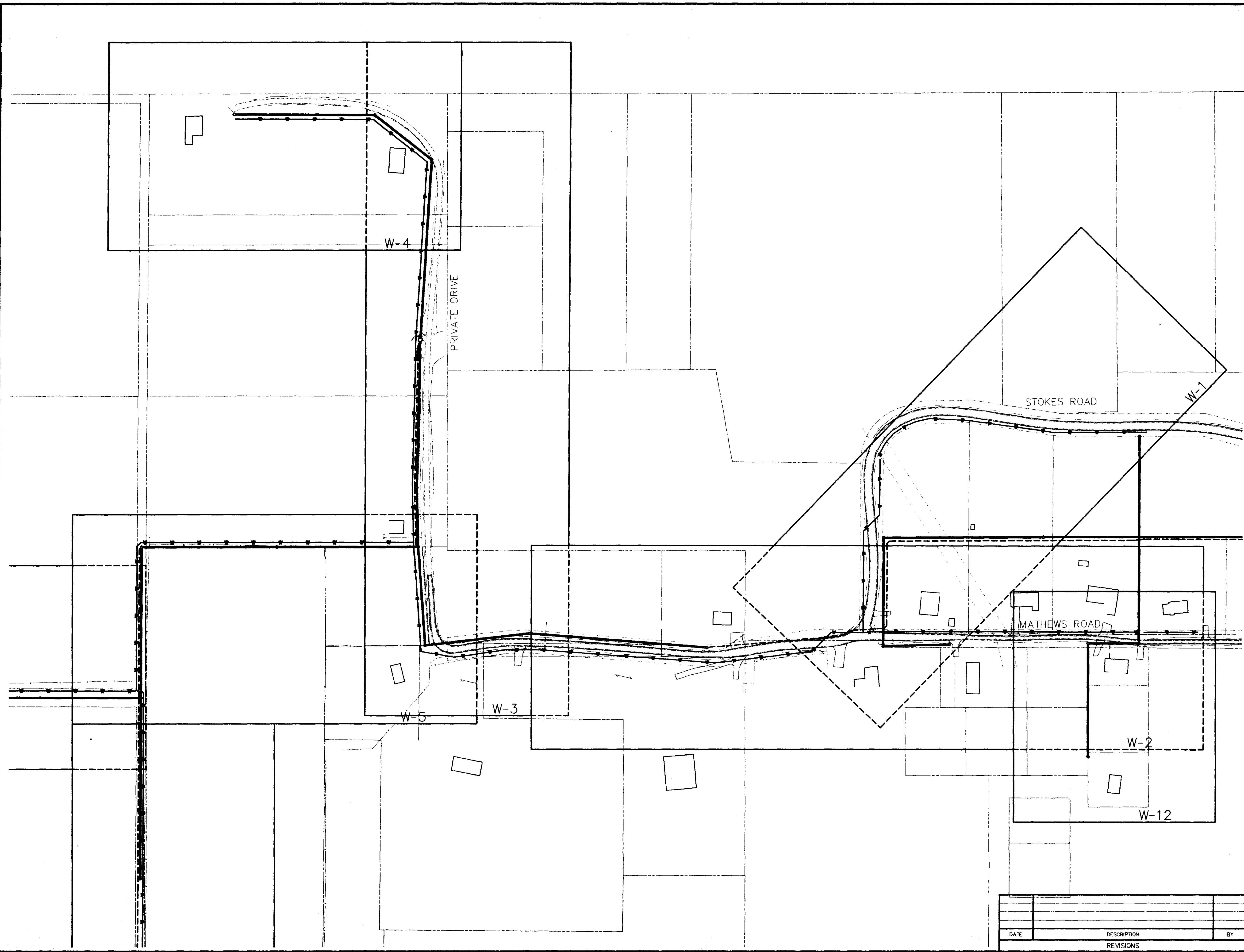
- ⊗ GRAVEL OR SHELL FILL
- ▨ BACKFILL OR UNDISTURBED EARTH
- + 252.32 EXISTING ELEVATION
- INV. INVERT
- S.P. SERVICE POLE
- T.P. OR P.P. TELEPHONE OR POWER POLE
- B.O.C. BACK OF CURB
- D.P. HOUSE DRAIN PIPE
- EL. OR ELEV. ELEVATION
- E.O.D. EDGE OF DRIVEWAY
- E.O.P. EDGE OF PAVEMENT
- E.O.R. EDGE OF ROAD

O:\P\01124\LEGEND 02-20-96 AT 13:52

LEGEND CITY OF RIDGELAND DEPARTMENT OF PUBLIC WORKS			
RIDGELAND STOKES, MATTHEWS ROAD AREA WATER AND SANITARY SEWER IMPROVEMENTS			
ABMB ENGINEERS INCORPORATED		Civil/Structural Engineers Jackson, Mississippi	
DATE	DESCRIPTION	BY	DESIGNED N/A
	REVISIONS		CHECKED N/A
			DETAILED N/A
			TRACED N/A
			DATE 12-95
			CHECKED N/A
			CHECKED N/A
			SHEET A

PROJECT NUMBER	COUNTY	SHEET NUMBER
1124	MADISON	B

SCALE: 1"=100'



C:\DCA\CIVIL\SYMBOLS\BORD 06-27-91 AT 10:19

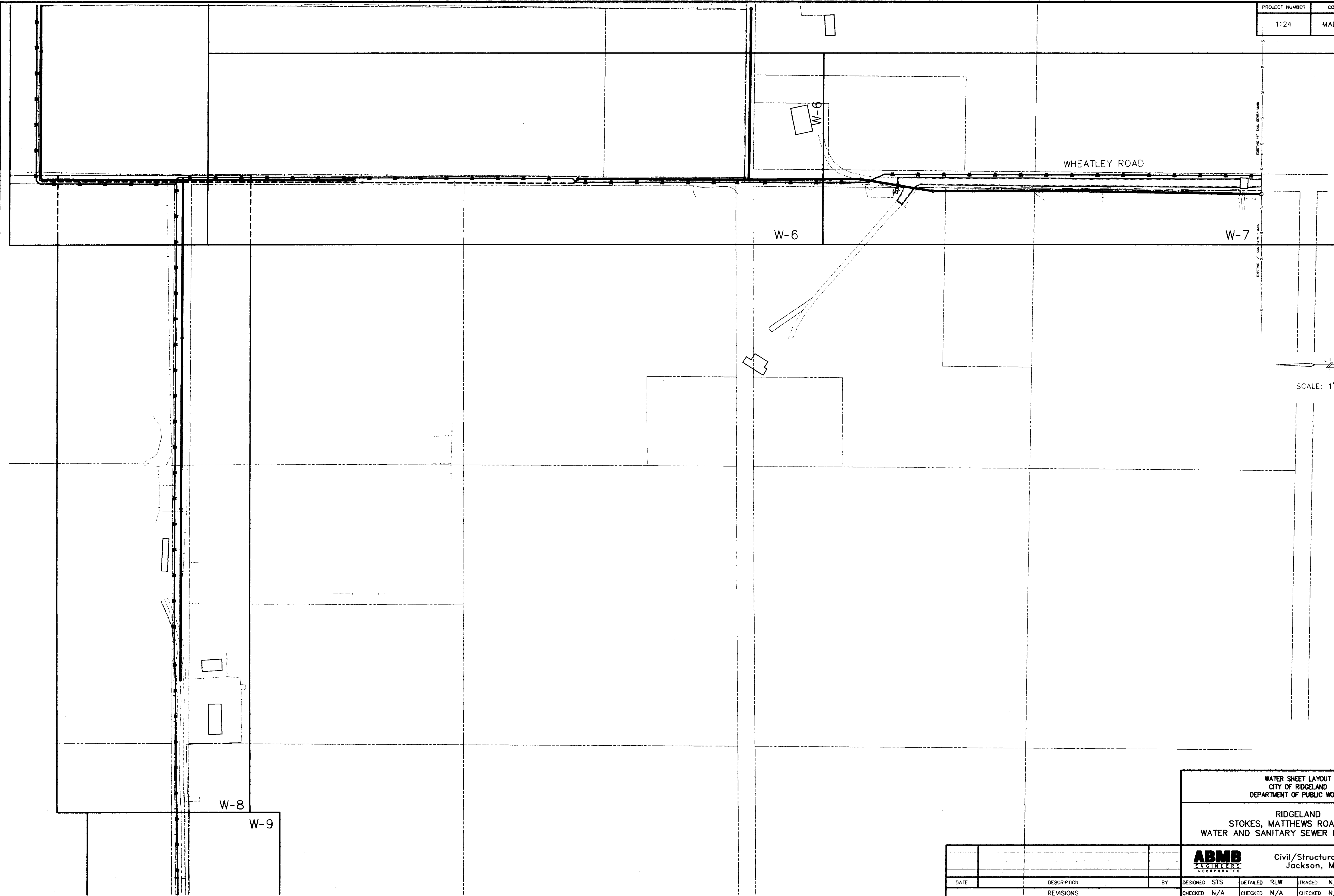
WATER SHEET LAYOUT
CITY OF RIDGELAND
DEPARTMENT OF PUBLIC WORKS

RIDGELAND
STOKES, MATHEWS ROAD AREA
WATER AND SANITARY SEWER IMPROVEMENTS

ABMB
KLEINFELDER
INCORPORATED
Civil/Structural Engineers
Jackson, Mississippi

DATE	DESCRIPTION	BY	DESIGNED STS	DETAILED RLW	TRACED N/A	DATE 12-95
	REVISIONS		CHECKED N/A	CHECKED N/A	CHECKED N/A	SHEET B

PROJECT NUMBER	COUNTY	SHEET NUMBER
1124	MADISON	C



C:\DCA\CIVIL\SYMBOLS\BORD 06-27-91 AT 10:19

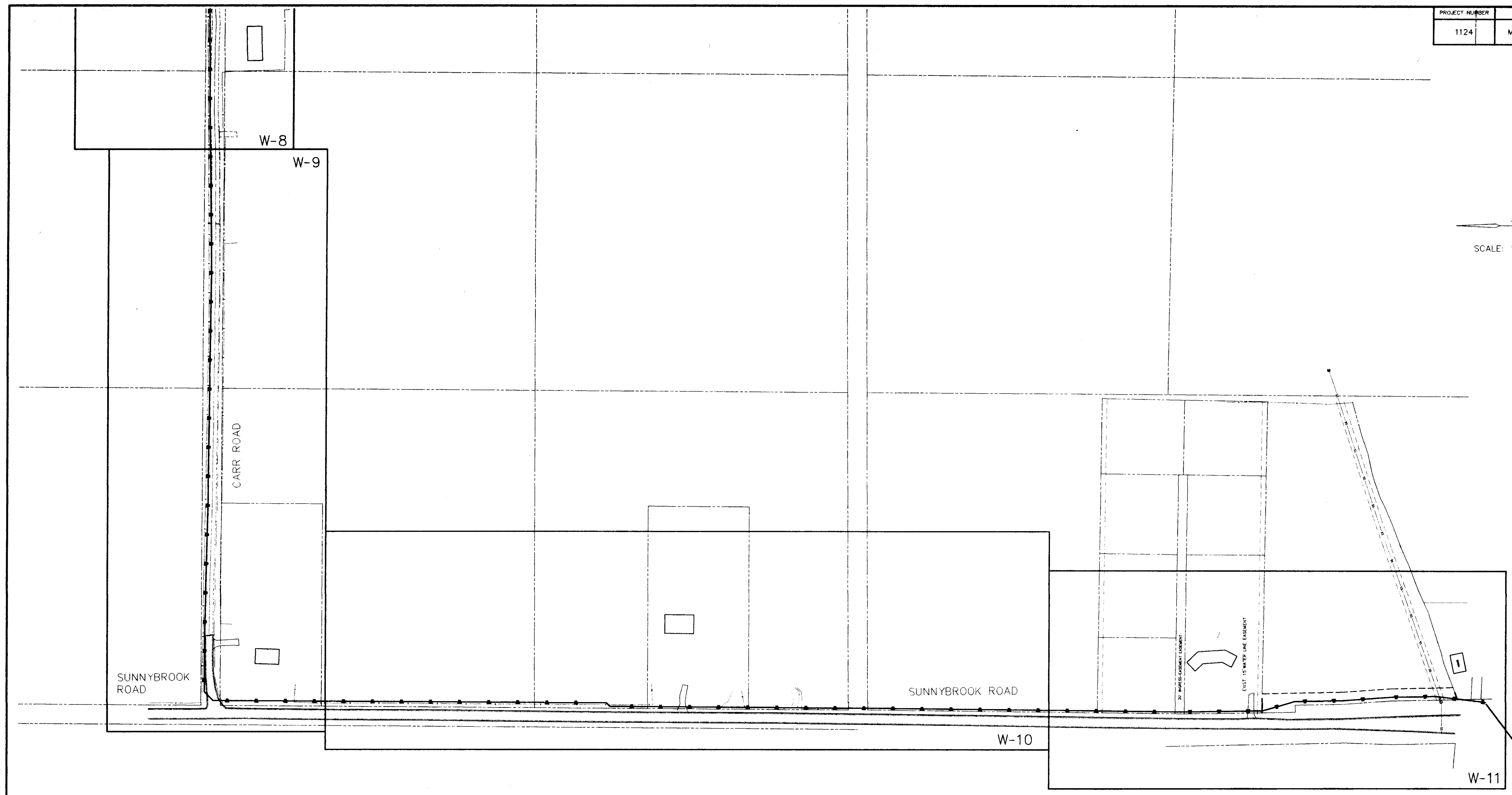
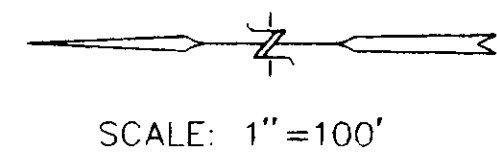
WATER SHEET LAYOUT
CITY OF RIDGELAND
DEPARTMENT OF PUBLIC WORKS

RIDGELAND
STOKES, MATTHEWS ROAD AREA
WATER AND SANITARY SEWER IMPROVEMENTS

ABMB
ENGINEERS
INCORPORATED
Civil/Structural Engineers
Jackson, Mississippi

DATE	DESCRIPTION	BY	DESIGNED STS	DETAILED RLW	TRACED N/A	DATE 12-95
	REVISIONS		CHECKED N/A	CHECKED N/A	CHECKED N/A	SHEET C

PROJECT NUMBER	COUNTY	SHEET NUMBER
1124	MADISON	D



Q:\P\01124\W-LYT 12-14-95 AT 09:16

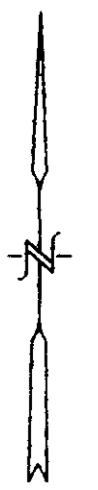
WATER SHEET LAYOUT
CITY OF RIDGELAND
DEPARTMENT OF PUBLIC WORKS

RIDGELAND
STOKES, MATTHEWS ROAD AREA
WATER AND SANITARY SEWER IMPROVEMENTS

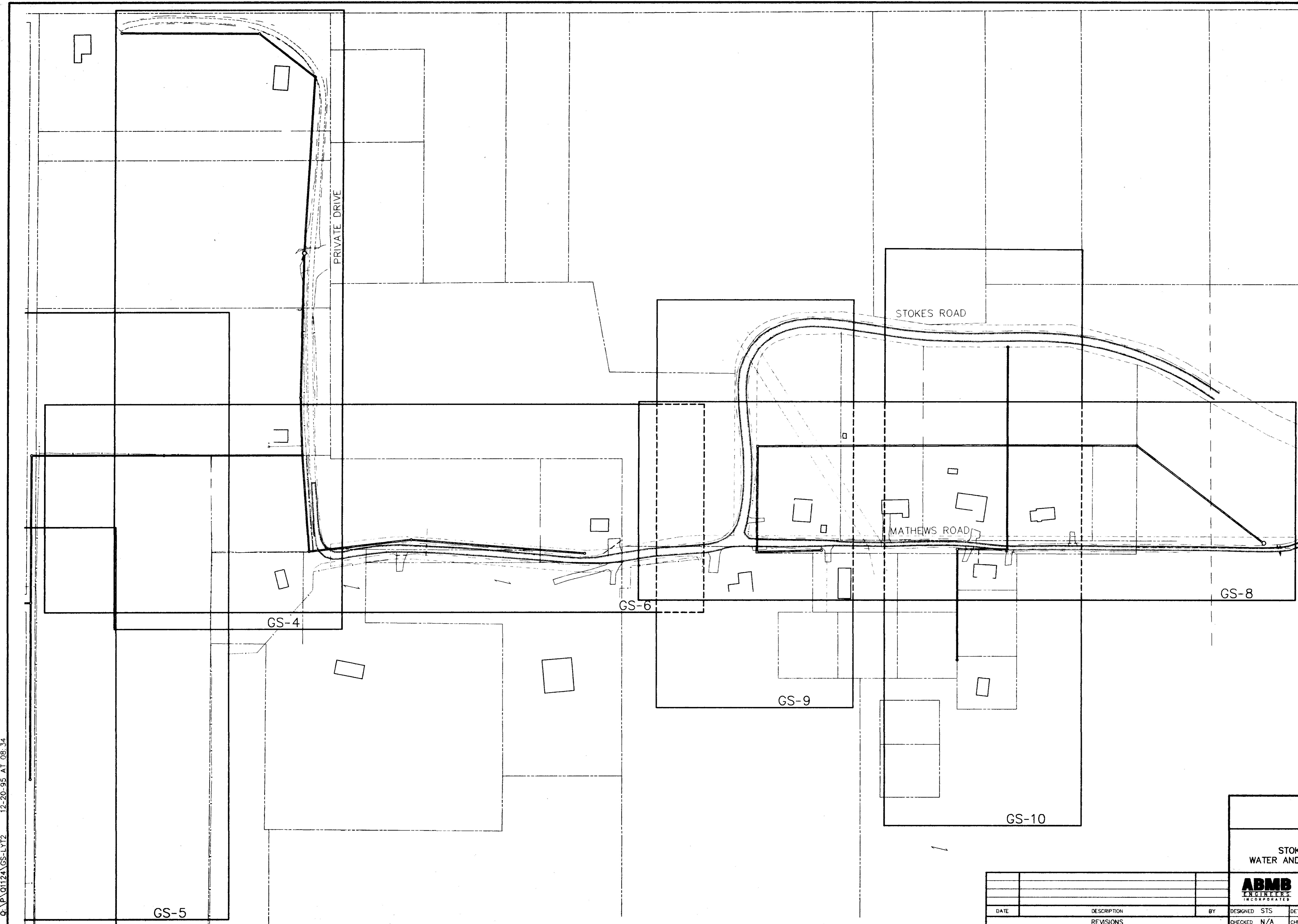
ABMB
ENGINEERS
INCORPORATED
Civil/Structural Engineers
Jackson, Mississippi

DATE	DESCRIPTION	BY	DESIGNED STS	DETAILED RLW	TRACED N/A	DATE 12-95
	REVISIONS		CHECKED N/A	CHECKED N/A	CHECKED N/A	SHEET D

PROJECT NUMBER	COUNTY	SHEET NUMBER
1124	MADISON	F



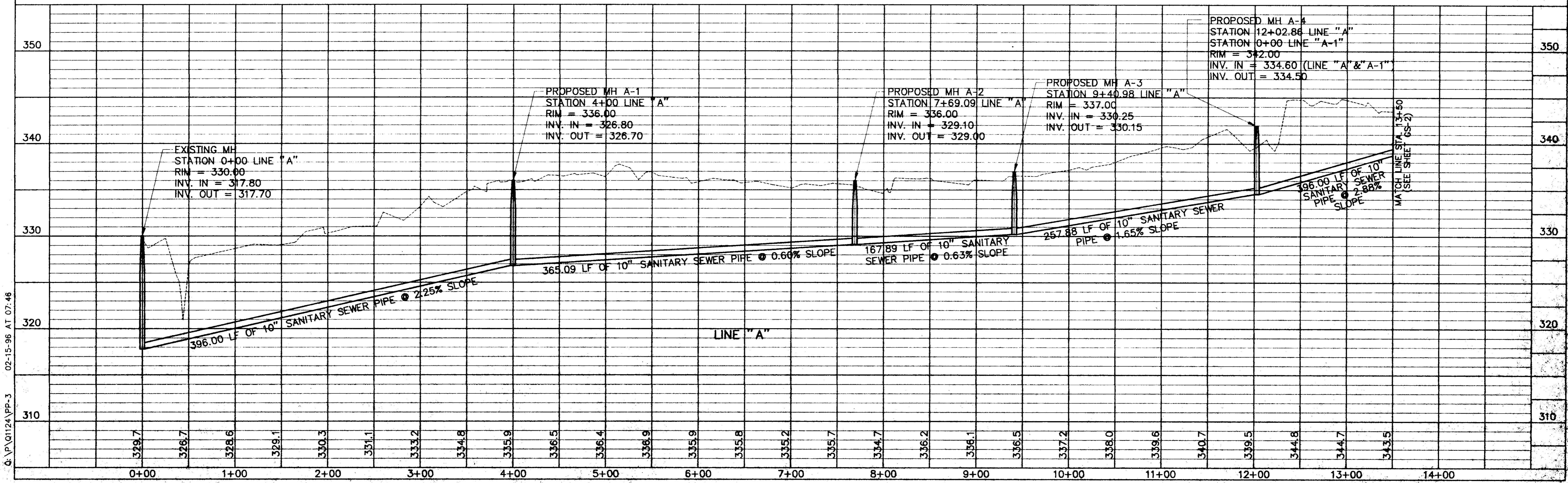
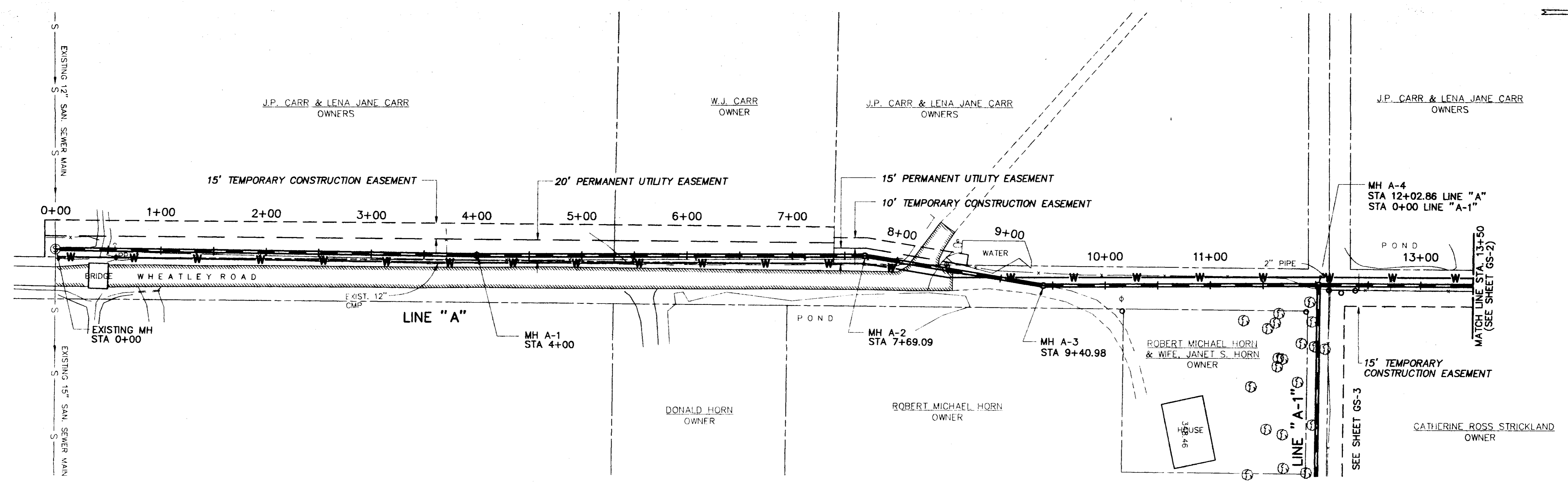
SCALE: 1"=100'



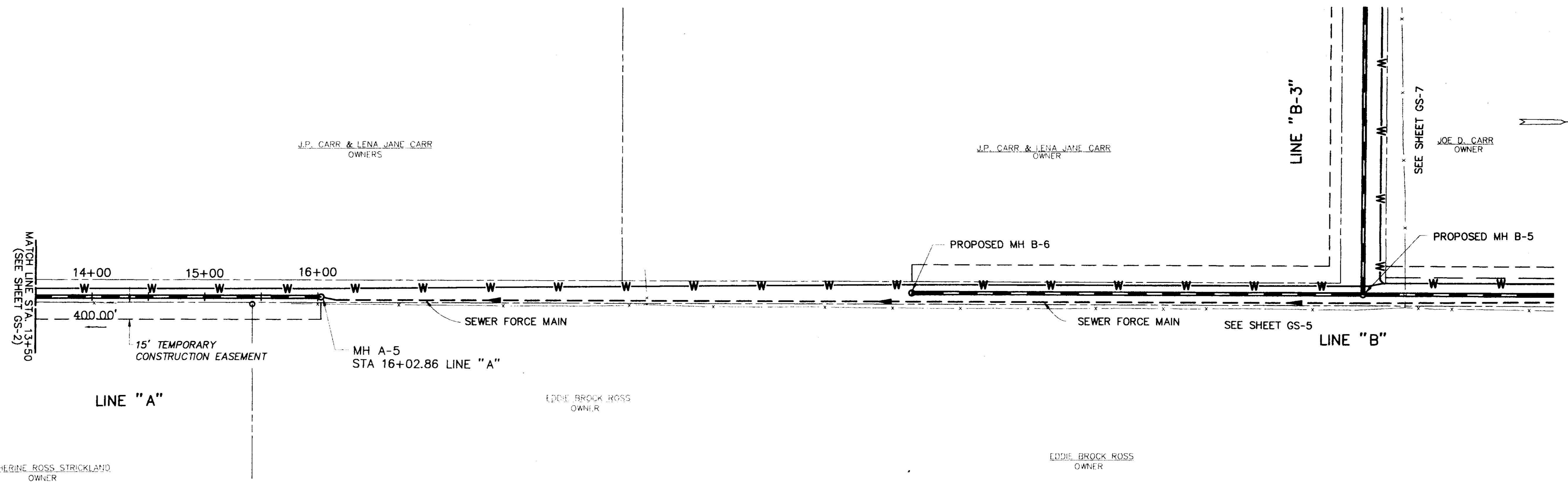
G:\P\01124\GS-LYT2 12-20-95 AT 08:34

GRAVITY SEWER SHEET LAYOUT CITY OF RIDGELAND DEPARTMENT OF PUBLIC WORKS							
RIDGELAND STOKES, MATHEWS ROAD AREA WATER AND SANITARY SEWER IMPROVEMENTS							
				Civil/Structural Engineers Jackson, Mississippi			
DATE	DESCRIPTION	BY	DESIGNED STS	DETAILED RLW	TRACED N/A	DATE	12-95
	REVISIONS		CHECKED N/A	CHECKED N/A	CHECKED N/A	SHEET	F

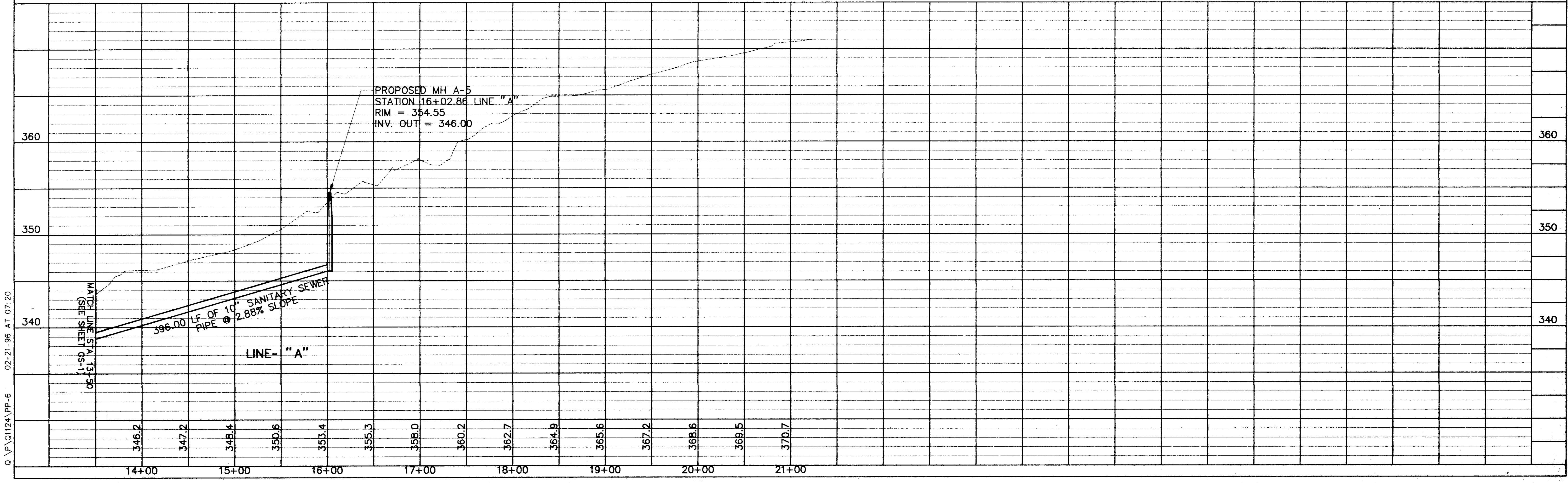
SCALES:
 1" = 50' HOR
 1" = 5' VER



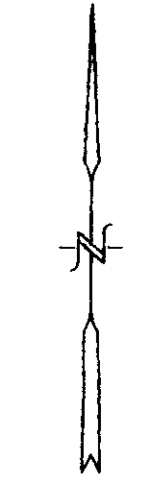
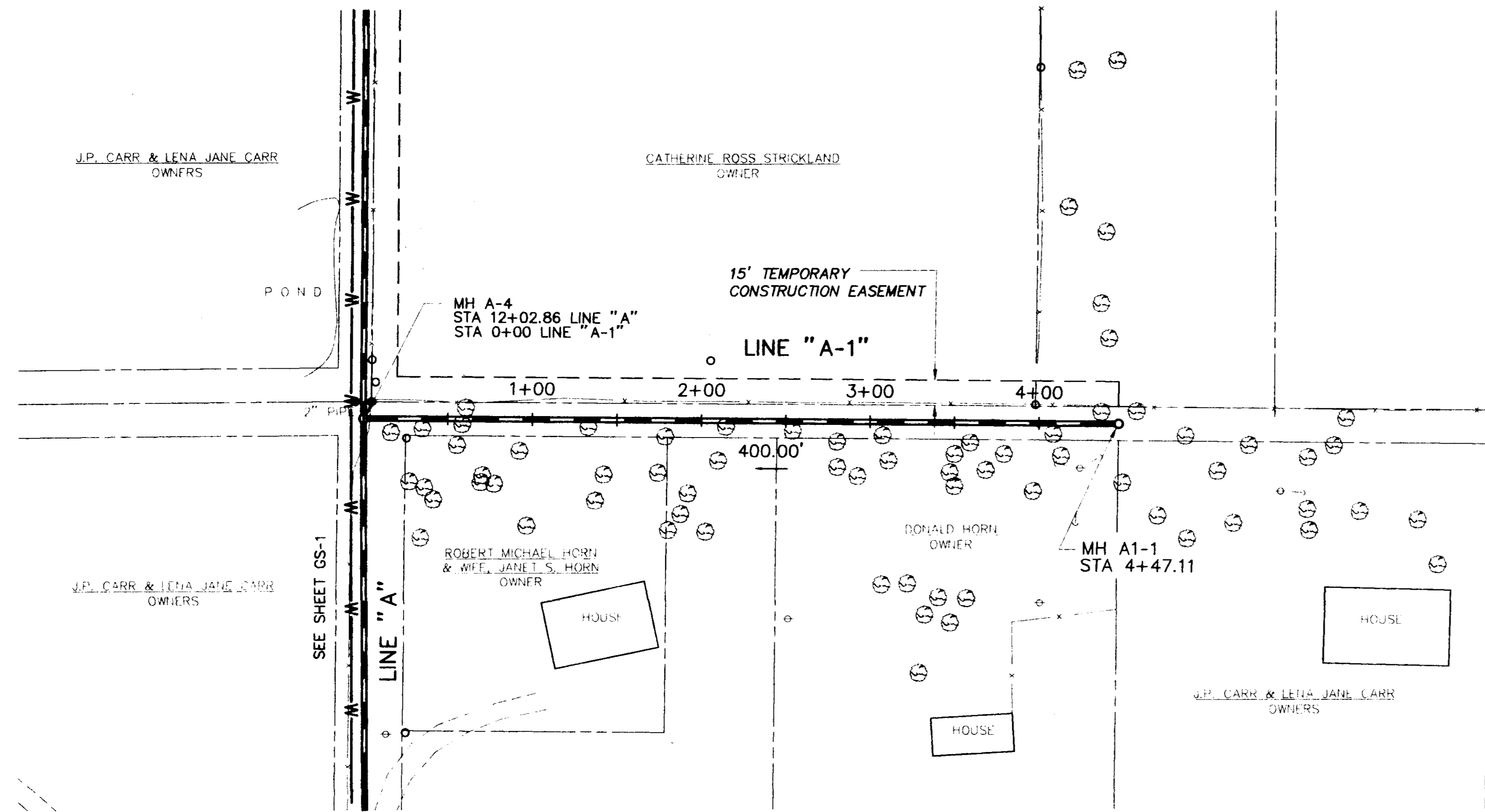
Q:\P\0124\PP-3 02-15-96 AT 07.46



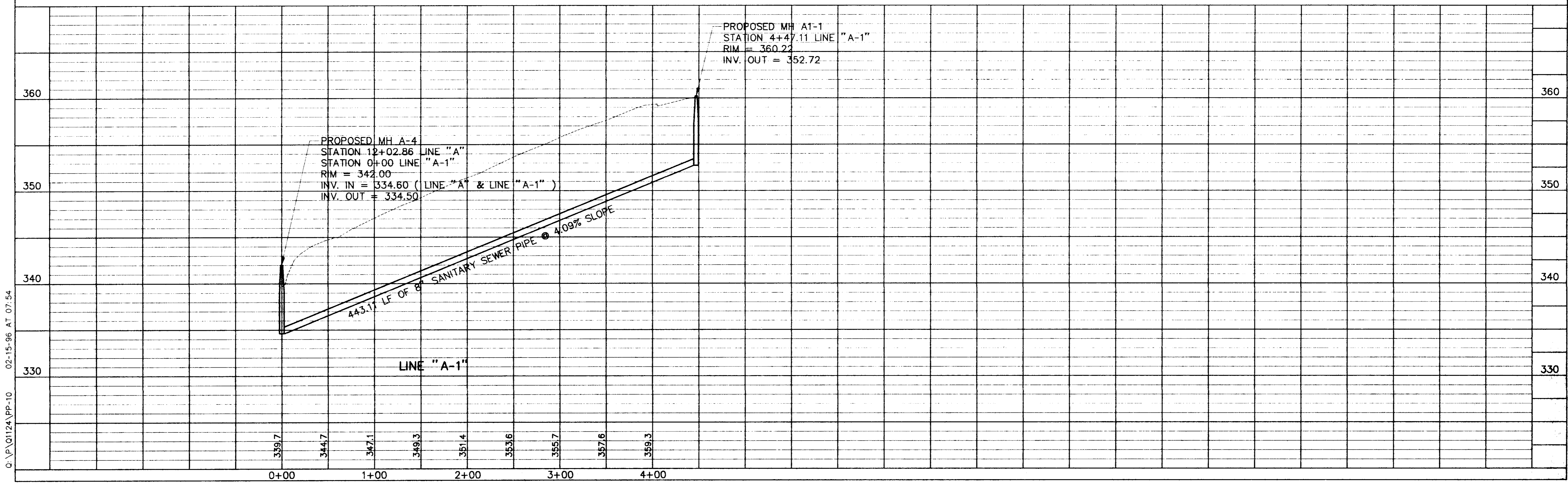
SCALES:
 1" = 50' HOR
 1" = 5' VER



Q:\P\01124\PP-6 02-21-96 AT 07:20

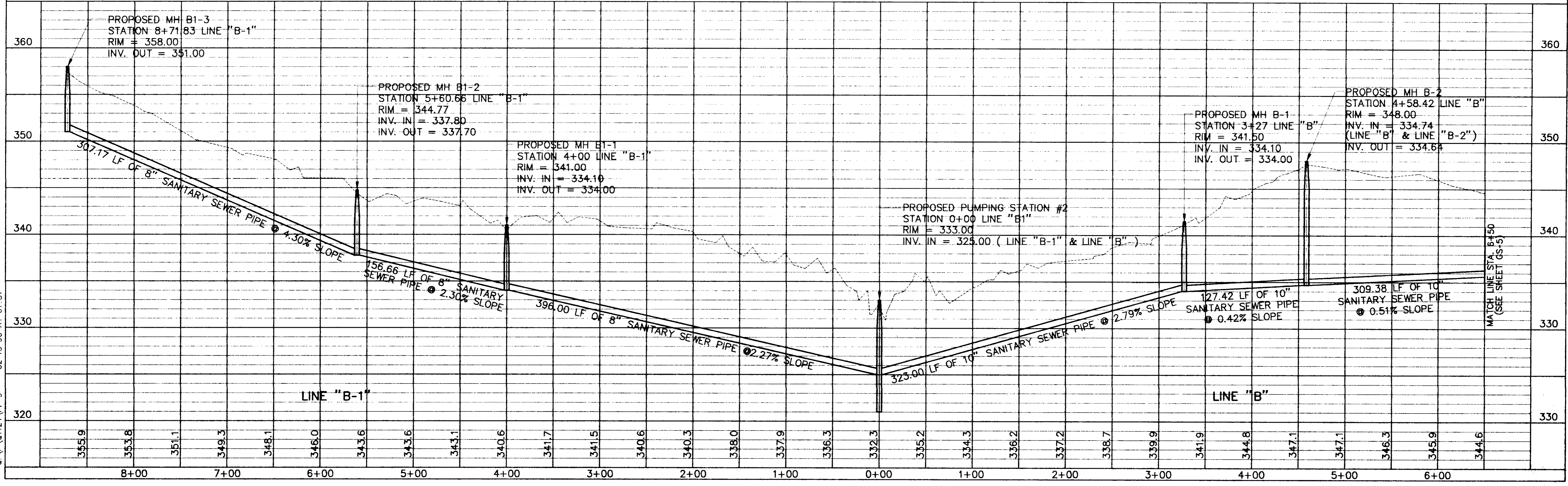
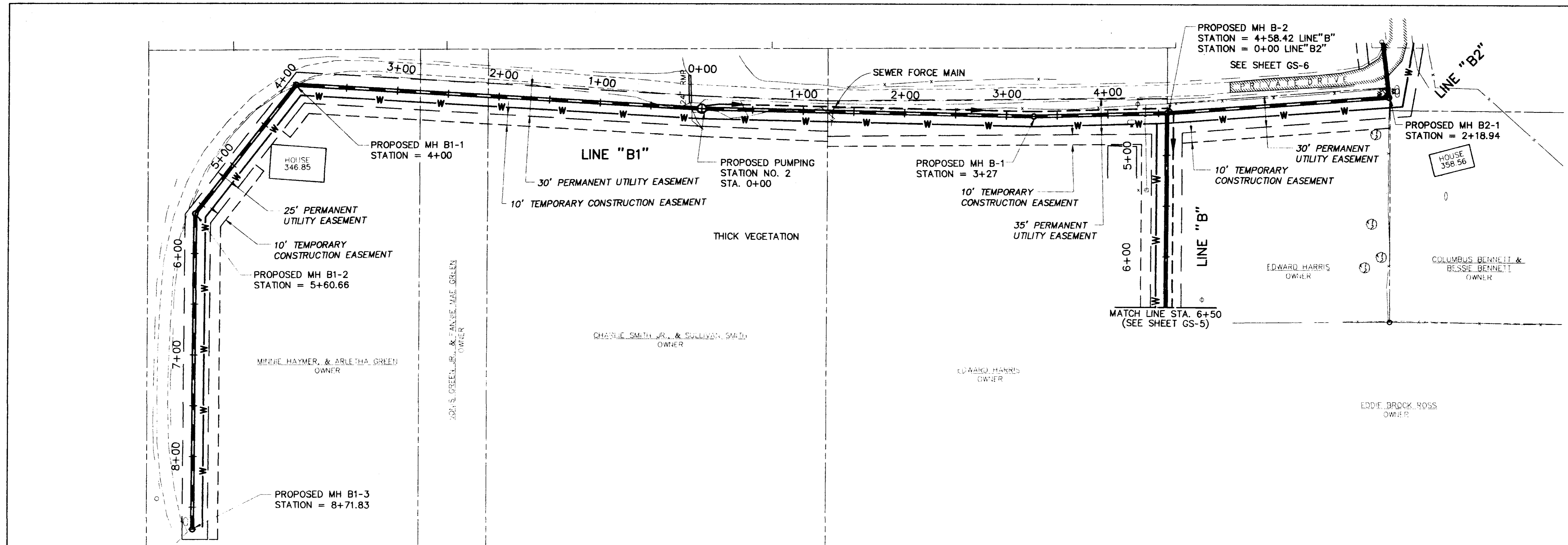


SCALES:
1" = 50' HOR
1" = 5' VER

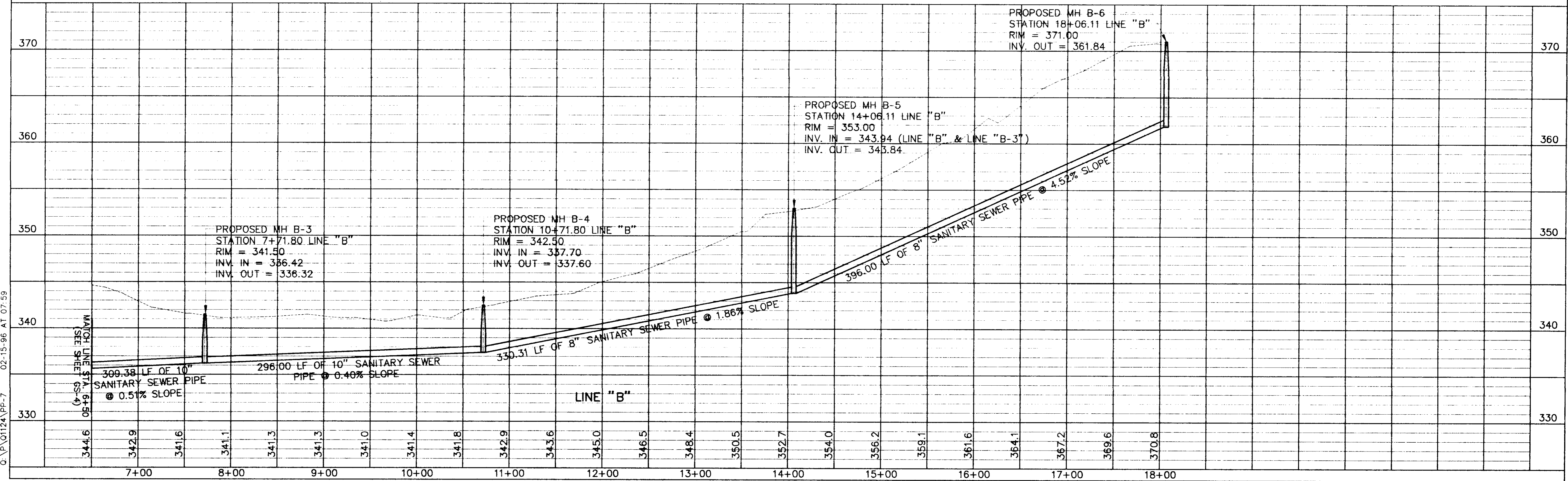
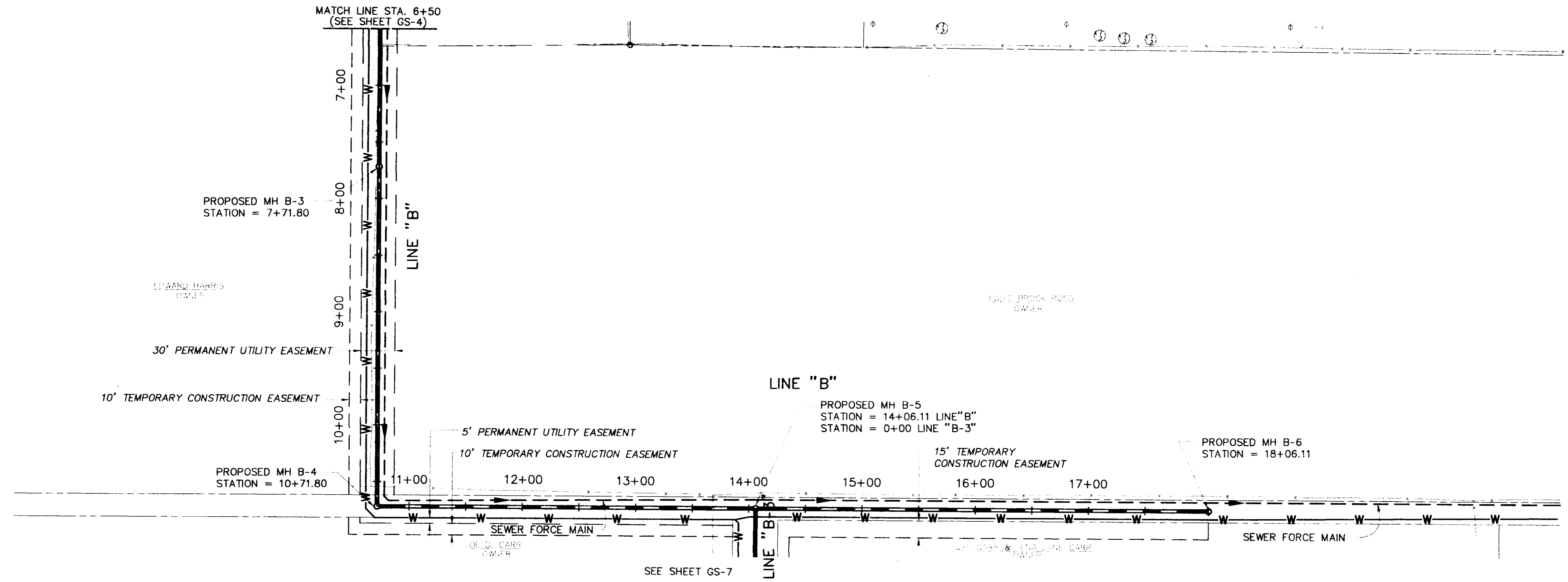


Q:\P\01124\PP-10 02-15-96 AT 07:54

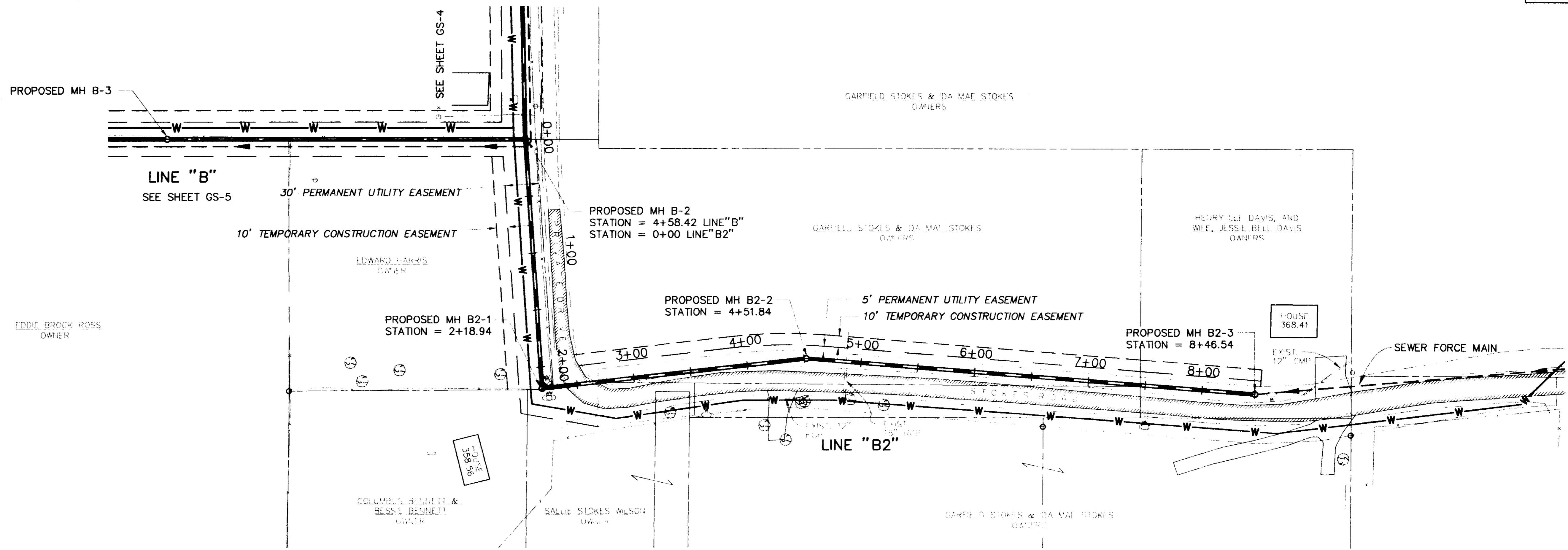
SCALES:
 1" = 50' HOR
 1" = 5' VER



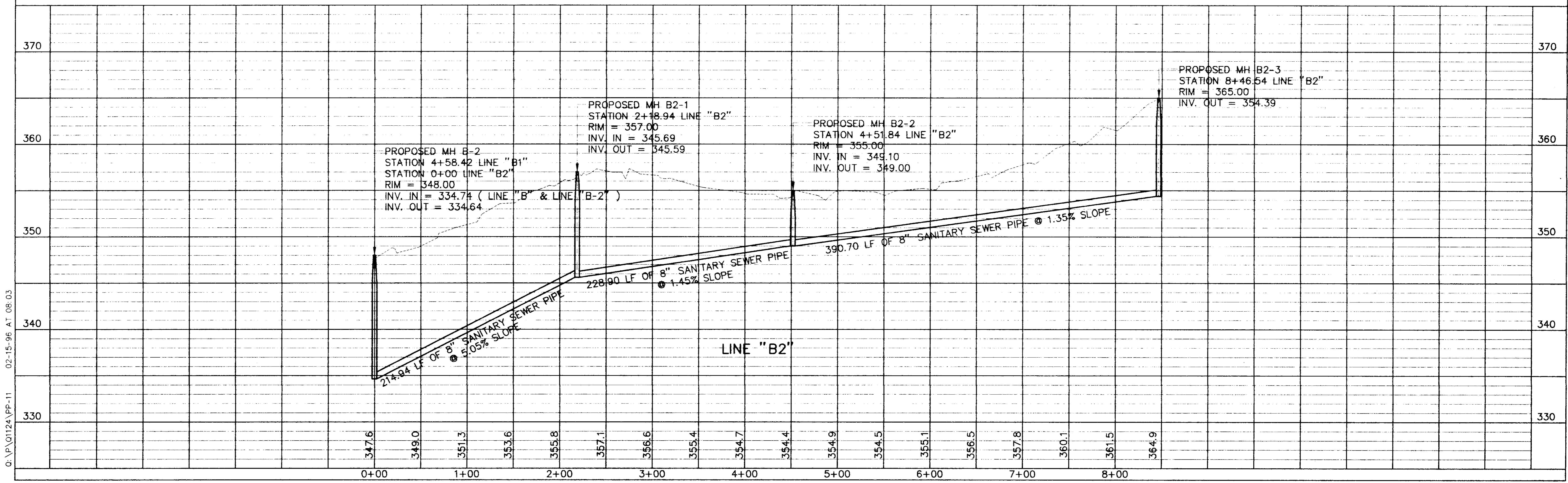
Q:\P\01124\PP-9 02-15-96 AT 07:57

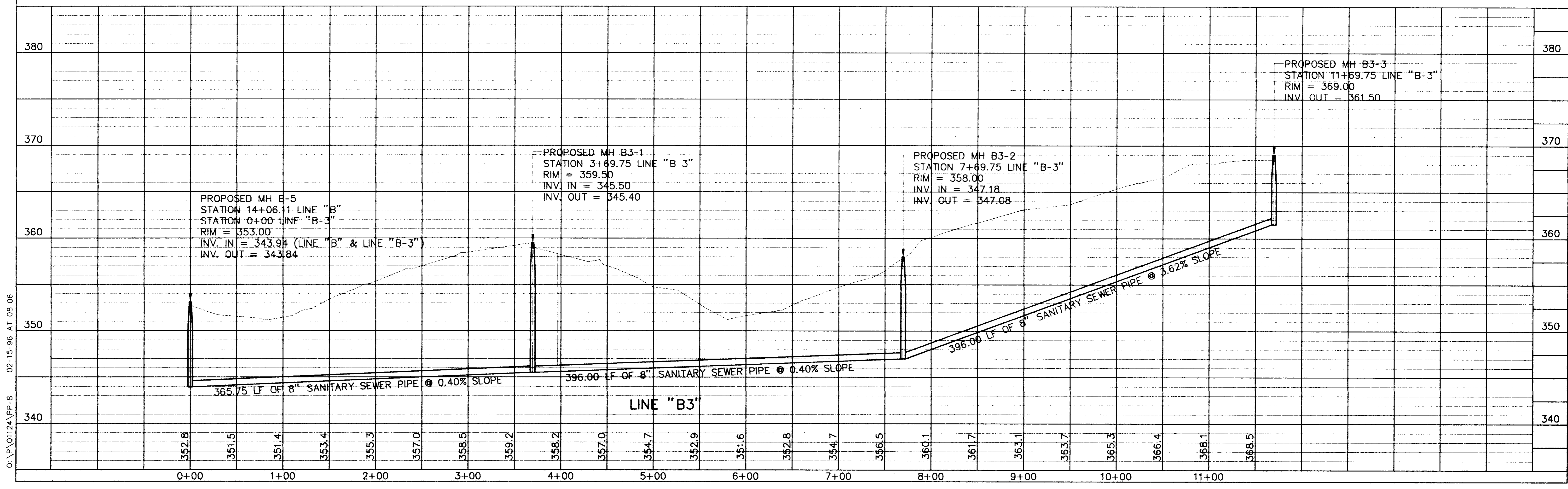
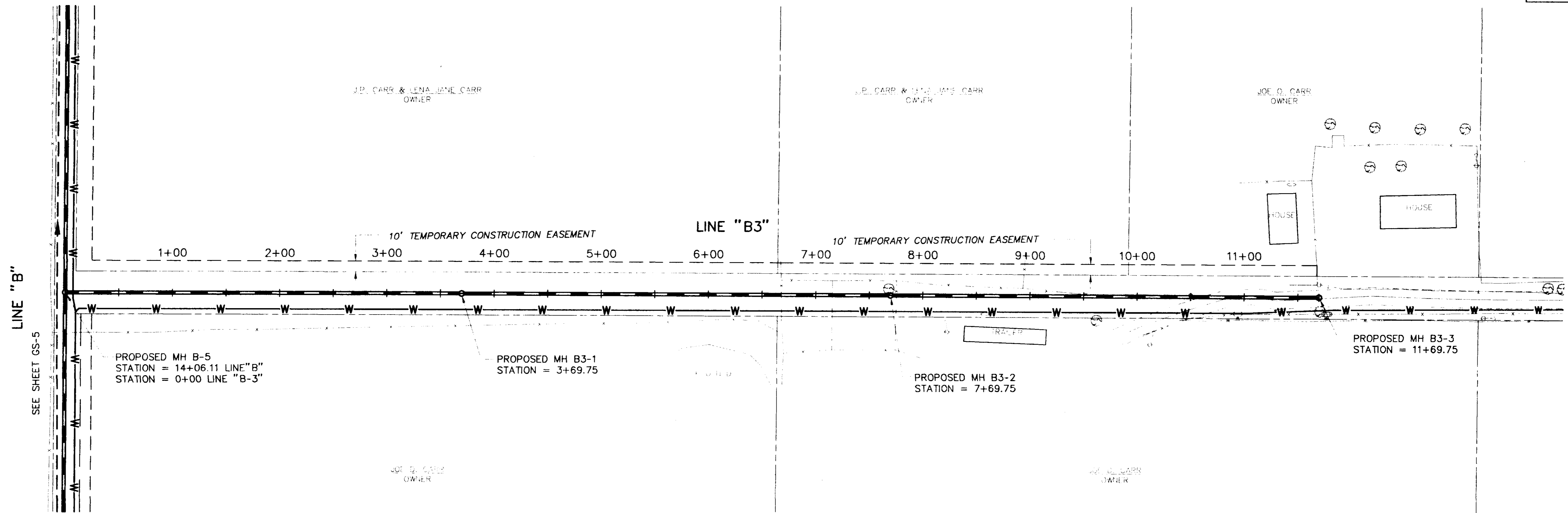
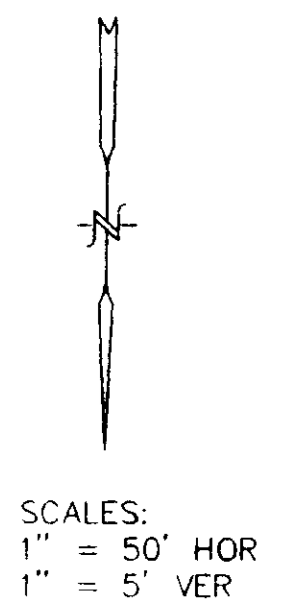


G:\P\01124\PP-7 02-15-96 AT 07:59



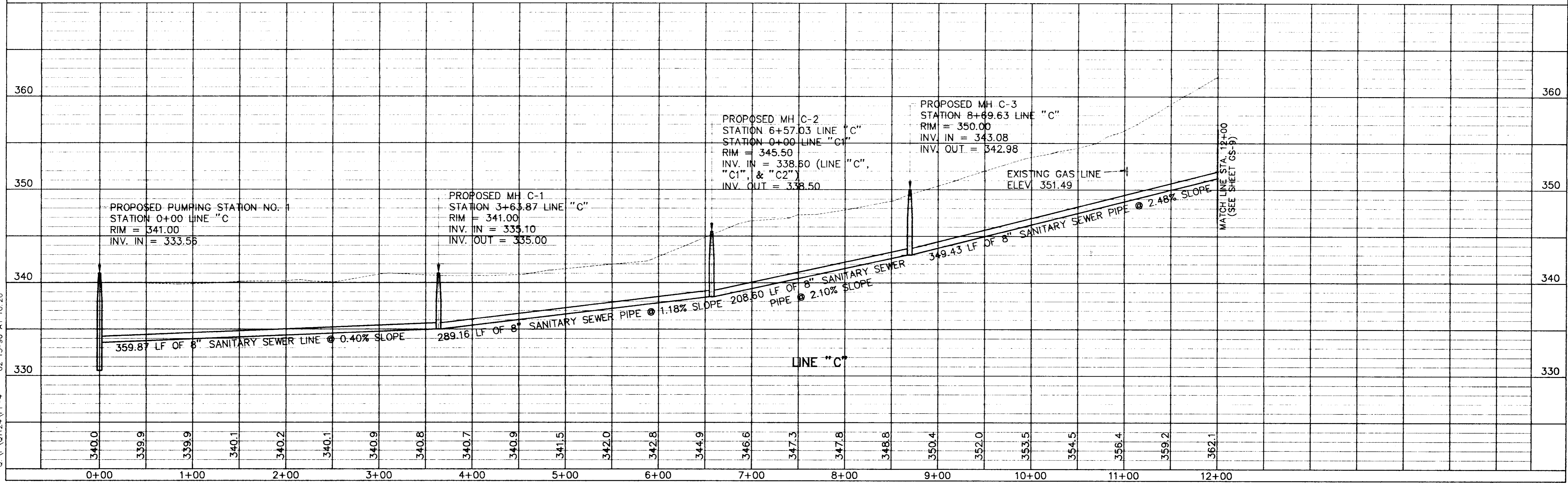
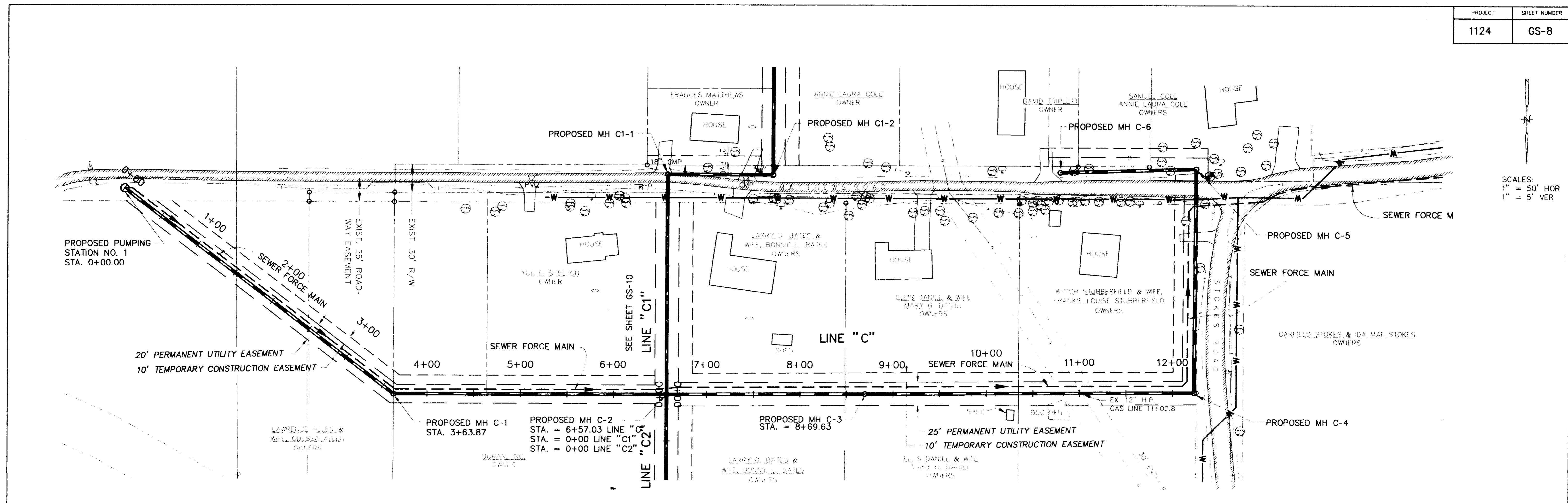
SCALES:
1" = 50' HOR
1" = 5' VER





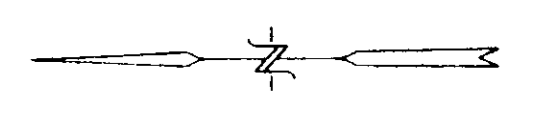
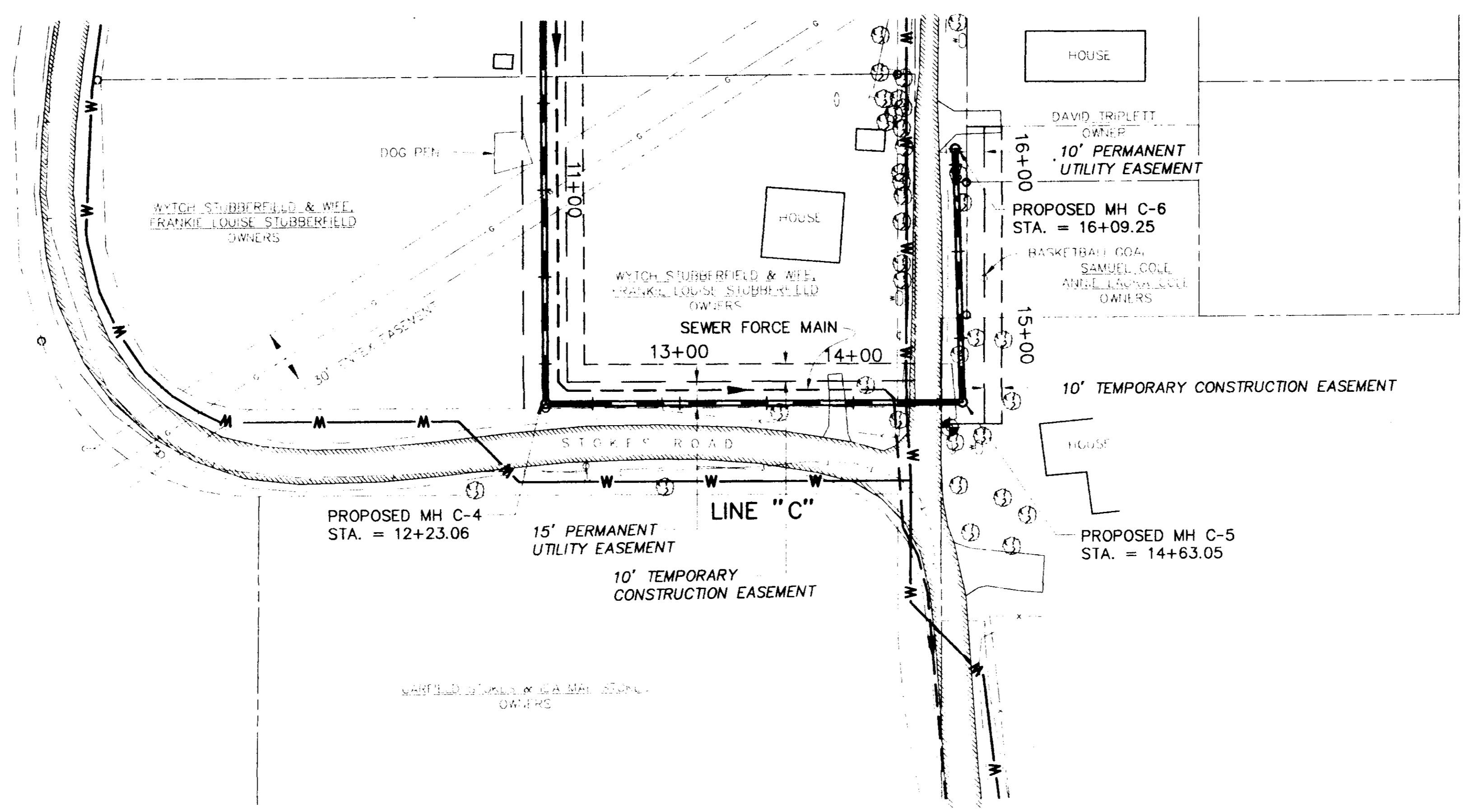
c:\p\01124\pp-8 02-15-96 AT 08.06

SCALES:
 1" = 50' HOR
 1" = 5' VER

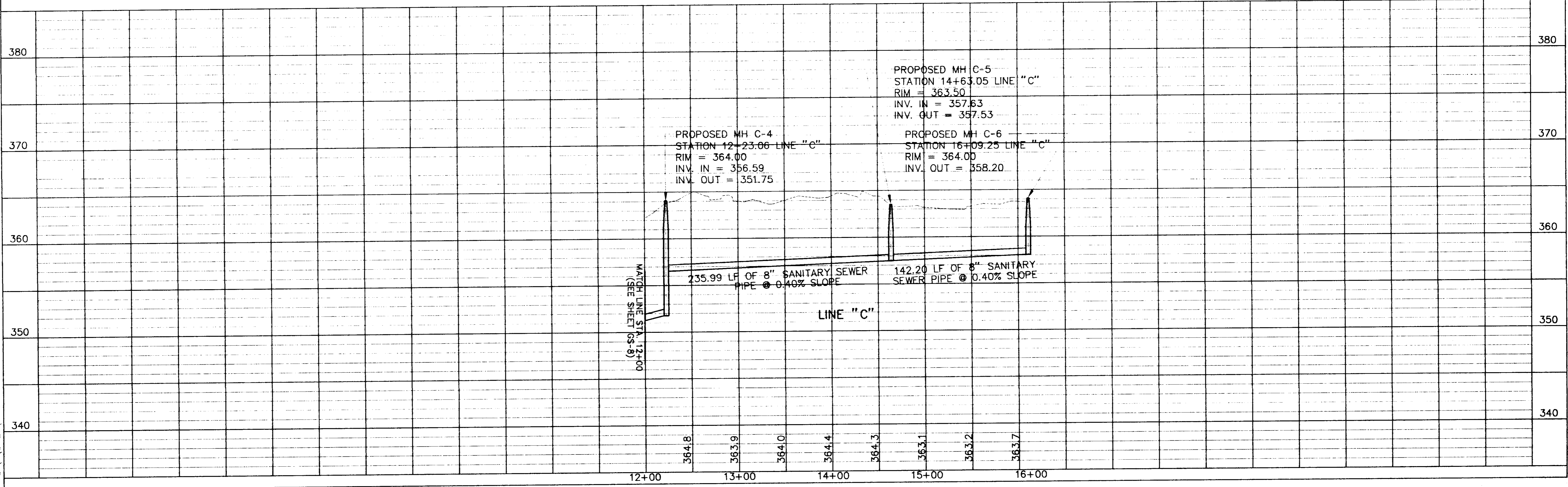


02-15-96 AT 10.26

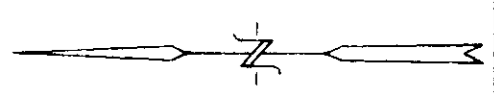
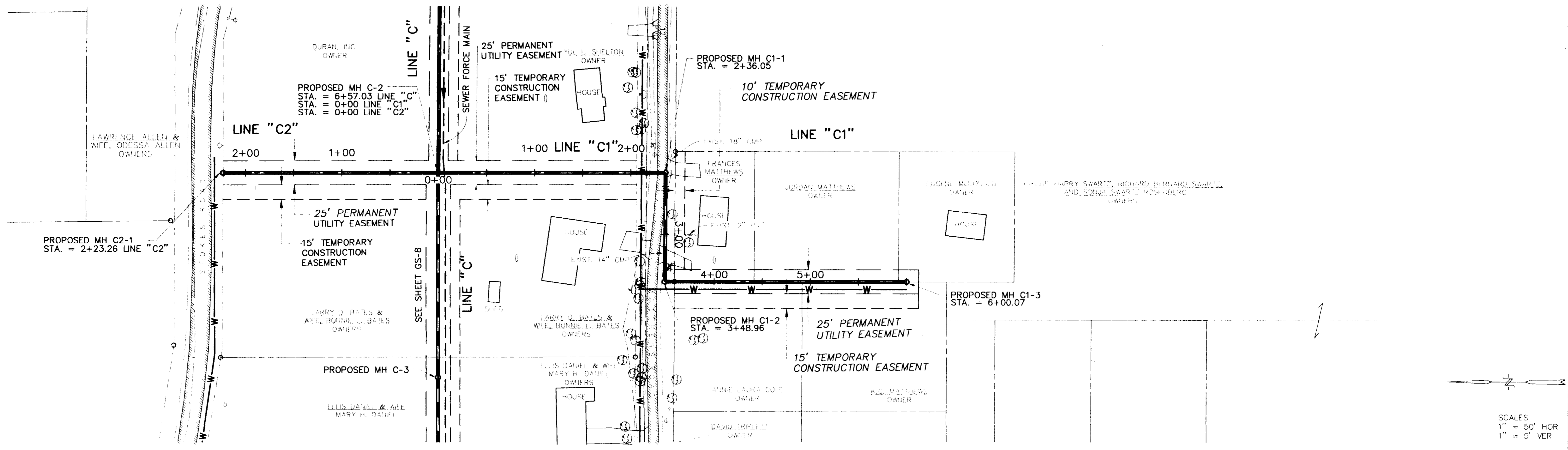
Q:\P\01124\PP-4



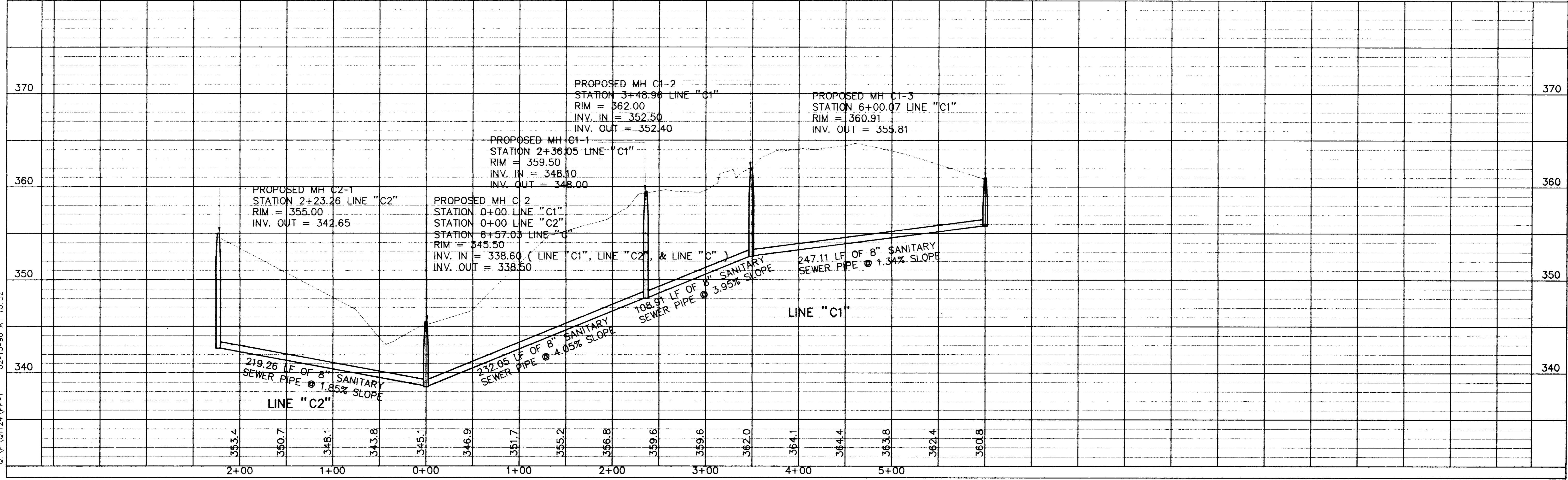
SCALES:
 1" = 50' HOR
 1" = 5' VER



G:\Q124\PP-5 02-15-96 AT 10:23

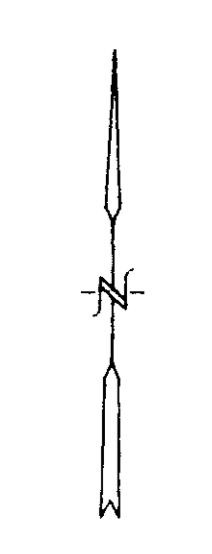


SCALES:
 1" = 50' HOR
 1" = 5' VER

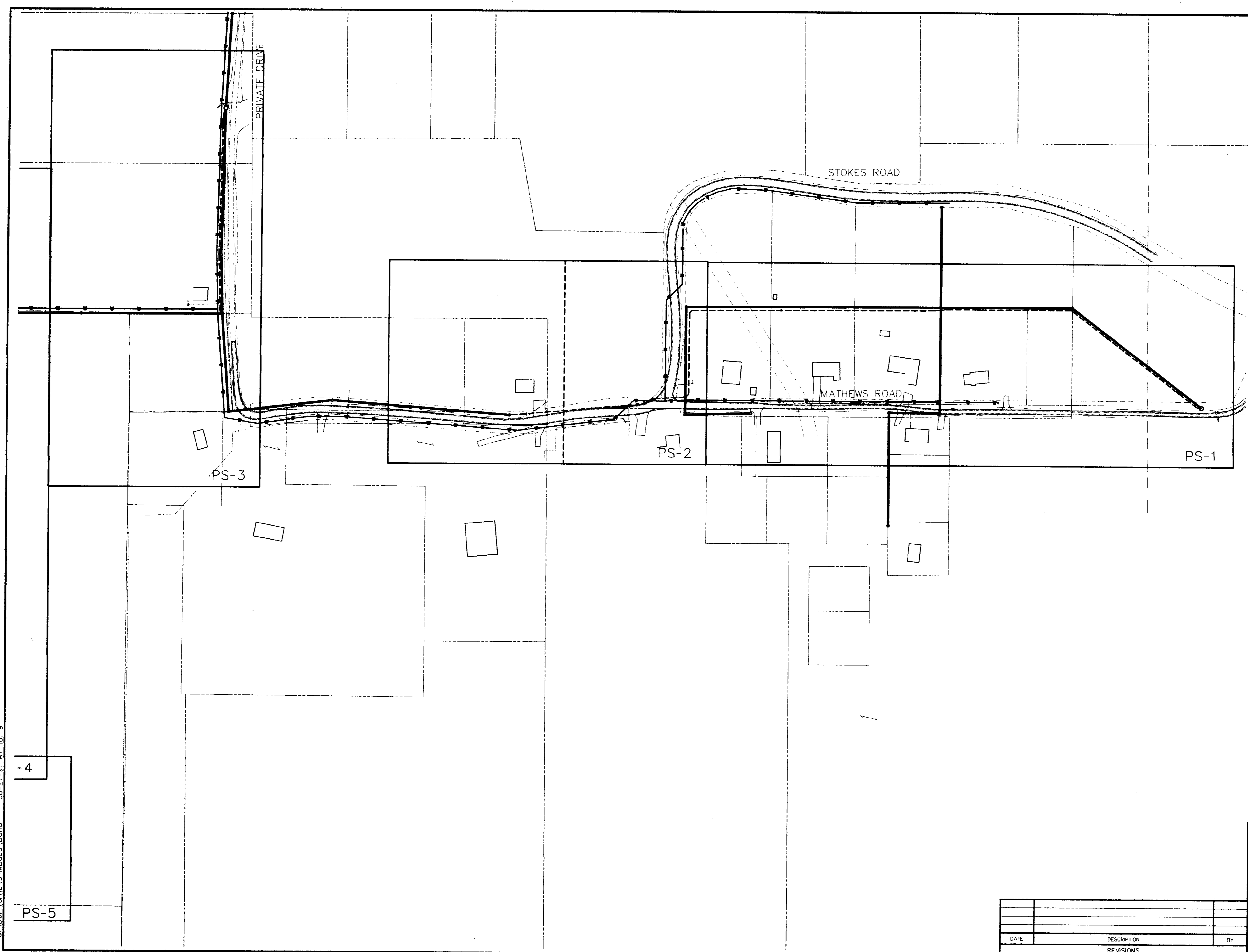


C:\XP\01124\PP-1 02-15-96 AT 10:32

PROJECT NUMBER	COUNTY	SHEET NUMBER
1124	MADISON	H



SCALE: 1"=50'



PRESSURE SEWER SHEET LAYOUT
CITY OF RIDGELAND
DEPARTMENT OF PUBLIC WORKS

RIDGELAND
STOKES, MATHEWS ROAD AREA
WATER AND SANITARY SEWER IMPROVEMENTS

ABMB
ENGINEERS
INCORPORATED
Civil/Structural Engineers
Jackson, Mississippi

DATE	DESCRIPTION	BY	DESIGNED	STS	DETAILED	RLW	TRACED	N/A	DATE
	REVISIONS								12-95
			CHECKED	N/A	CHECKED	N/A	CHECKED	N/A	SHEET H

C:\DCA\CIVIL\SYMBOLS\BORD 06-27-91 AT 10:19

-4

PS-5

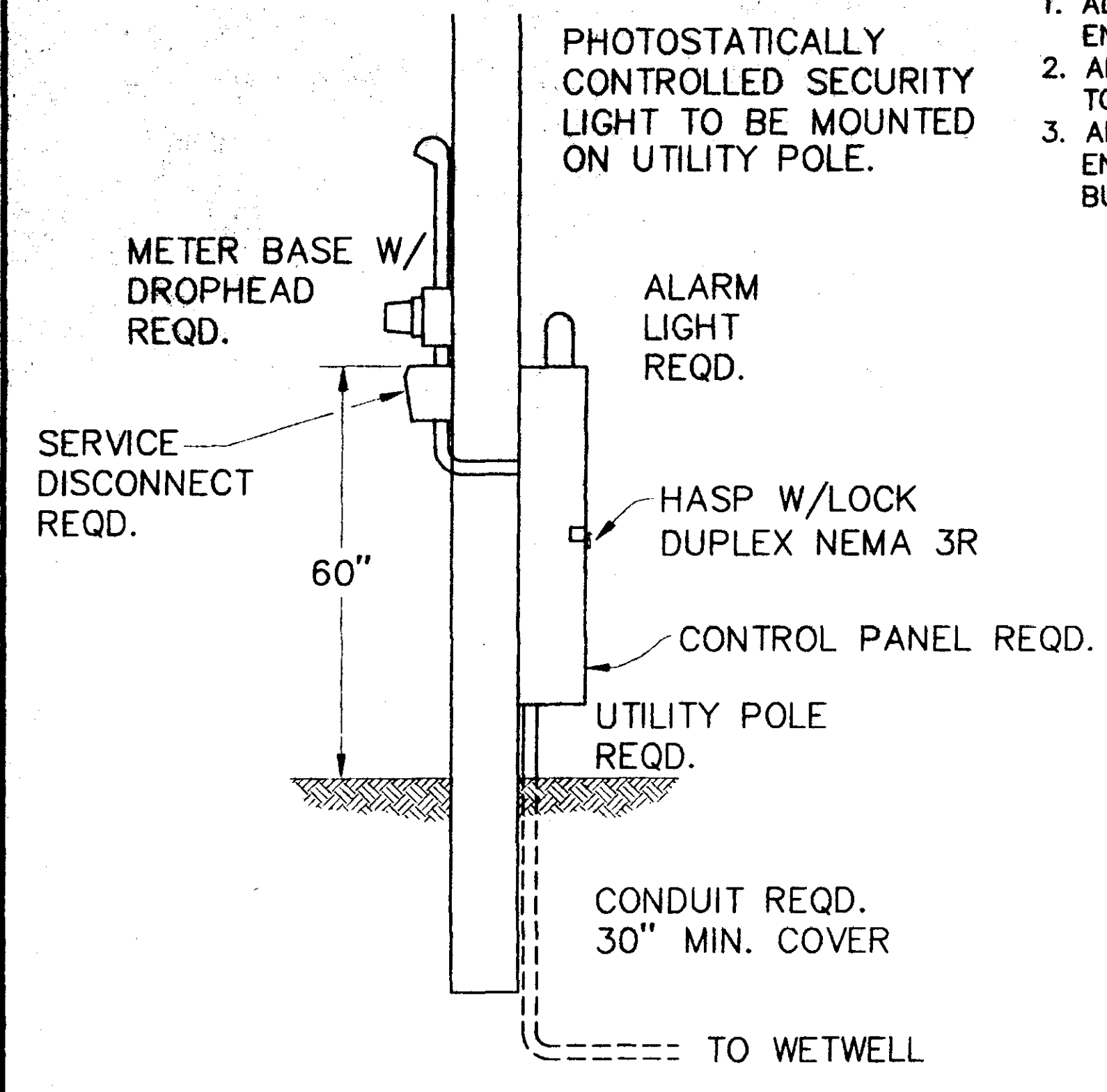
ELECTRICAL NOTES:

1. ALL ABOVE GROUND ELECTRICAL TO BE ENCLOSED IN RIGID CONDUIT.
2. ALL CONDUIT AND DUCT OPENINGS TO BE SEALED.
3. ALL BELOW GROUND ELECTRICAL TO BE ENCLOSED IN PVC ELECTRICAL CONDUIT BURIED NOT LESS THAN 30".

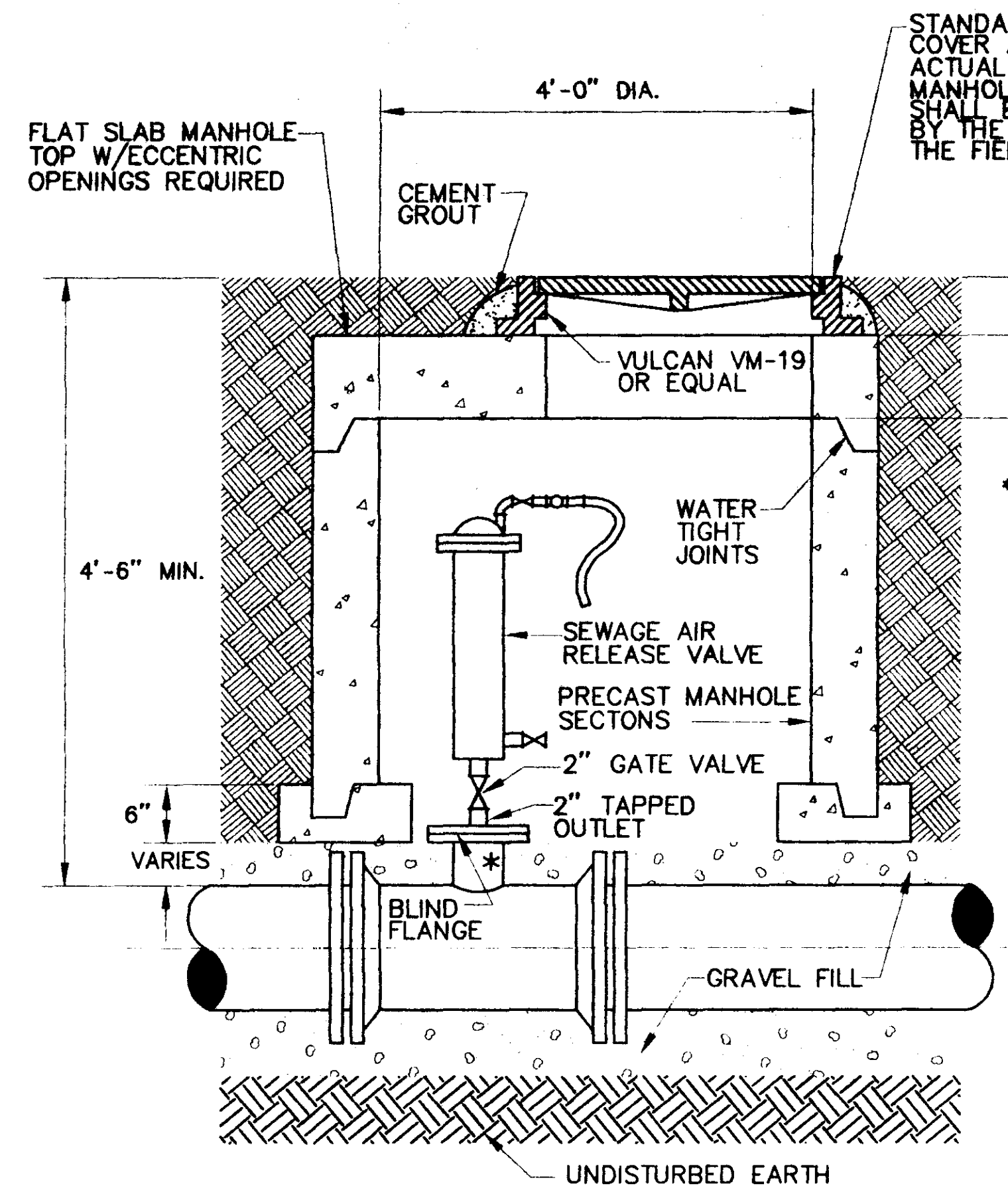
NOTES:

1. BRICK ADJUSTING COURSES SHALL BE REQUIRED FOR ALL AIR RELEASE VALVE STRUCTURES BETWEEN THE TOP SLAB AND THE MANHOLE CASTING AS SHOWN FOR PRECAST CONCRETE MANHOLES.
2. THE CONTRACTOR SHALL OFFSET THE AIR RELEASE VALVE TO ONE SIDE OF THE MANHOLE OPENING TO ALLOW ACCESS INTO THE MANHOLE STRUCTURE.

P.S. NO.	ELEVATIONS (M.S.L.)							DIMENSIONS (AS NOTED)			
	E1	E2	E3	E4	E5	E6	E7	D1	D2	D3	D4
1	330.72	331.72	332.06	333.56	332.56	333.06	341.00	8"	2"	2"	2 1/2"
2	318.00	319.00	319.60	325.00	320.20	324.50	333.00				
3											
4											



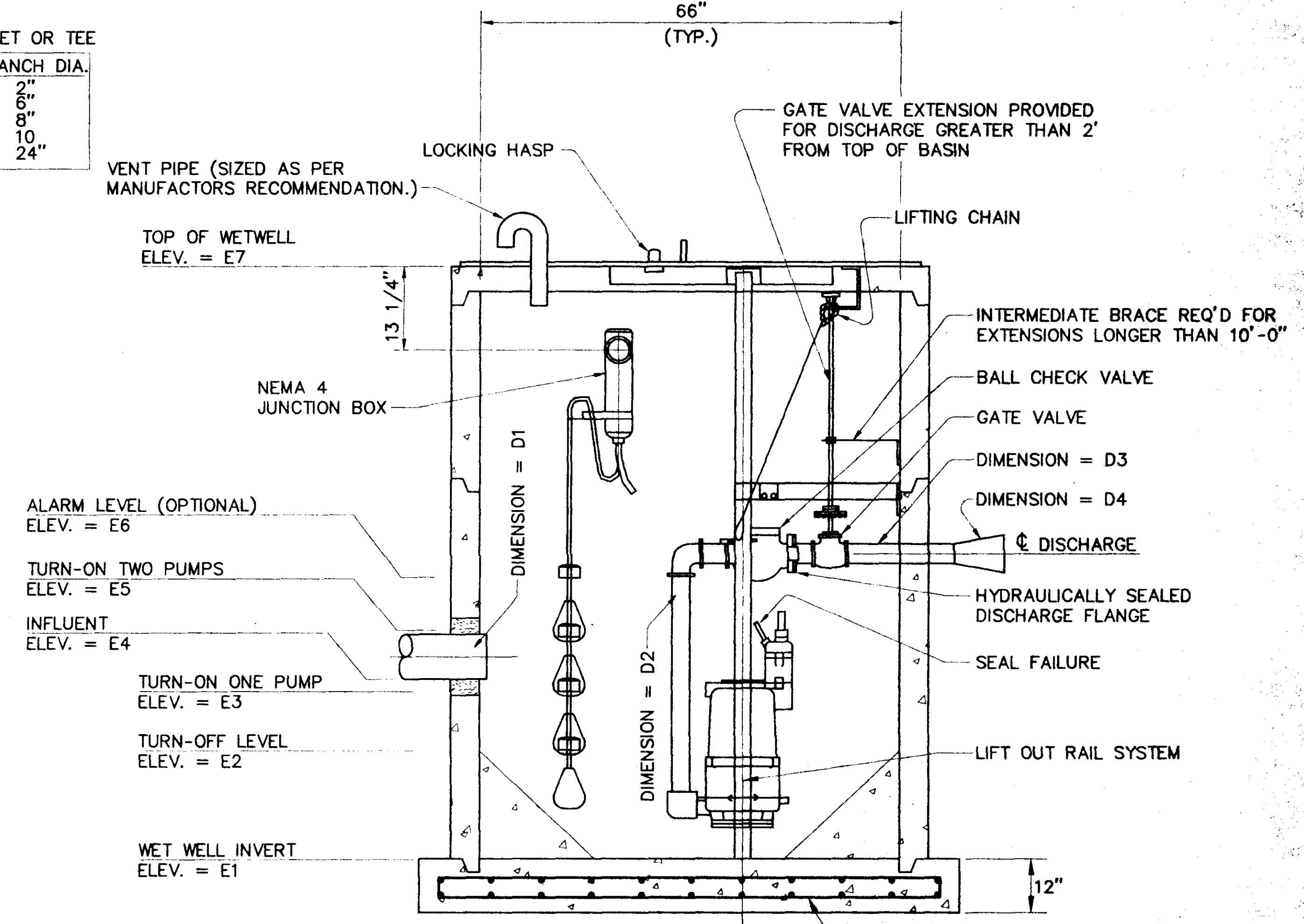
UTILITY POLE DETAIL



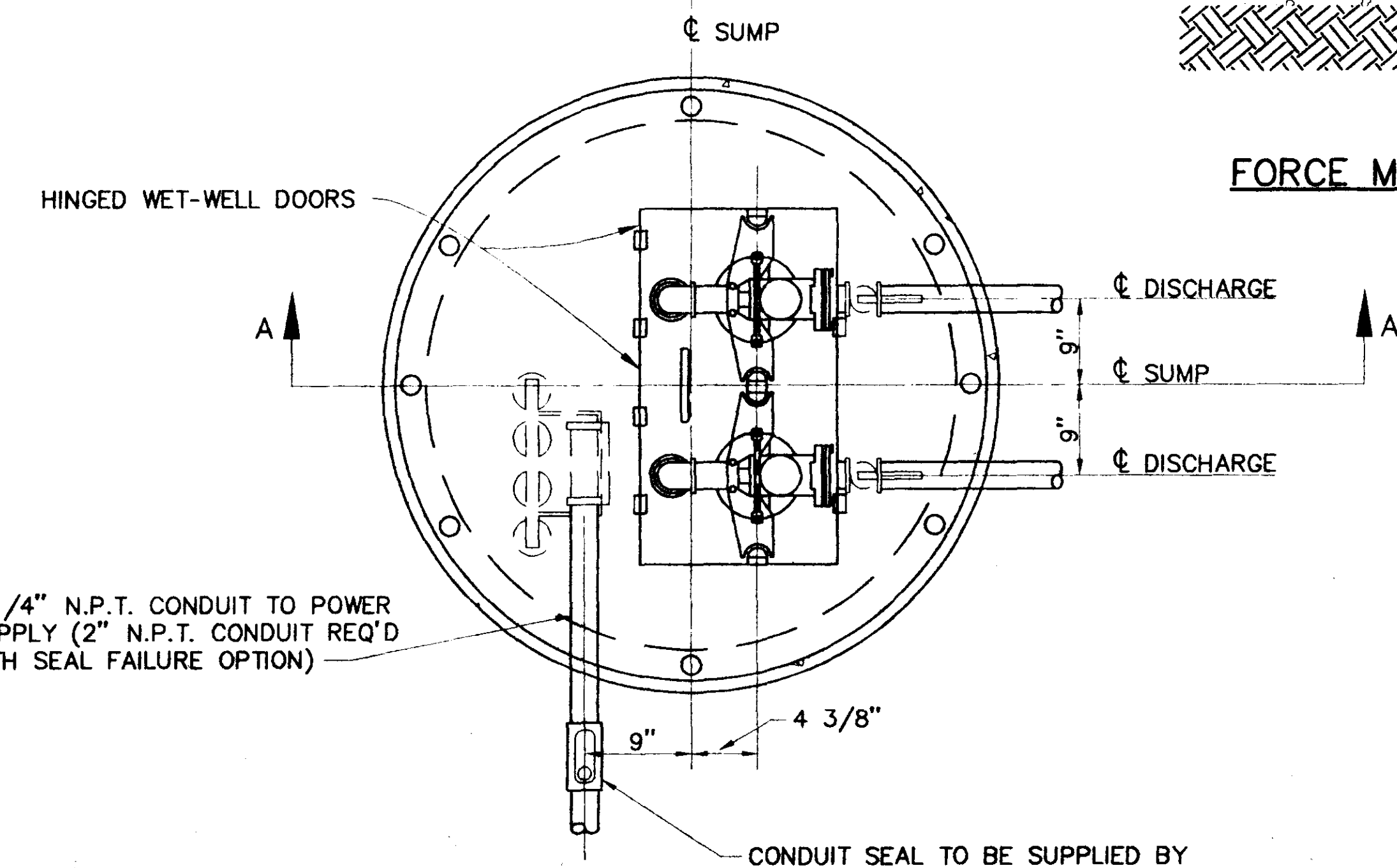
FORCE MAIN AIR RELEASE VALVE

* FLANGED OUTLET OR TEE

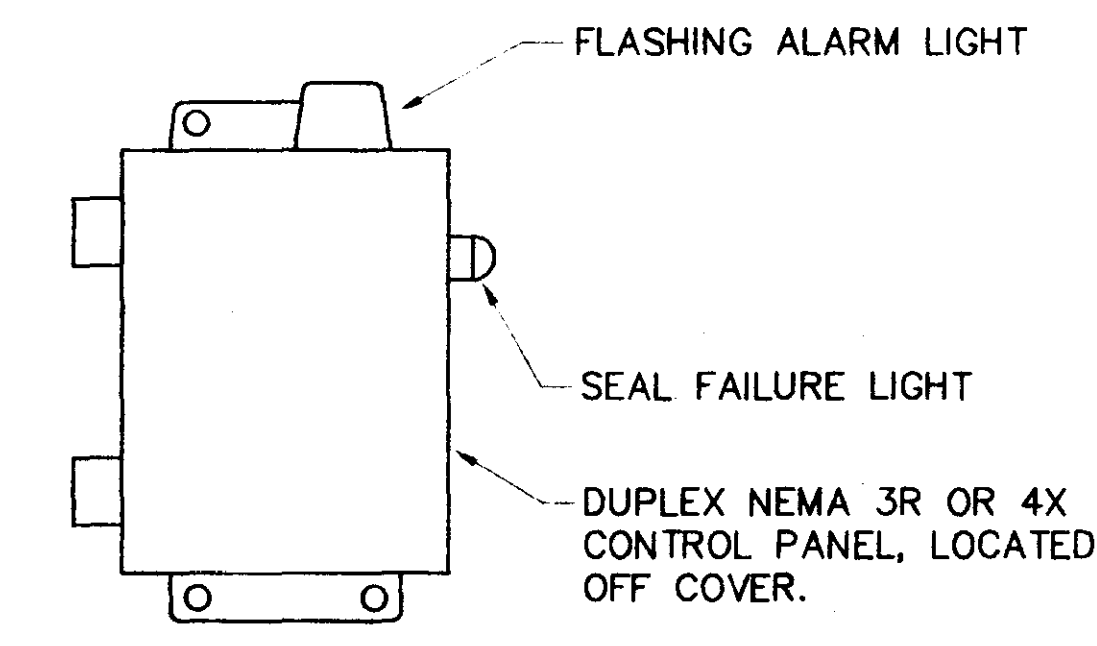
PIPE SIZE	BRANCH DIA.
4"-8"	2"
10"-16"	6"
18"-24"	8"
30"-42"	10"
48"-54"	24"



SECTION A-A



PLAN



CONTROL PANEL

PUMP DETAILS
SCALE: NONE

02-15-96 AT 14:27 P:01124 V:T-PSMD1

NOTE: SEPARATE CONDUIT SHALL BE PROVIDED FOR POWER AND CONTROL CABLE FOR EACH MOTOR AND FOR FLOAT CONTROLS.

CONDUIT SEAL TO BE SUPPLIED BY CONTRACTOR TO MEET CODES & PREVENT SURFACE WATER FROM ENTERING JUNCTION BOX

NOTE:
OVER EXCAVATION FOR WET WELL SHALL BE BACK FILLED WITH CONCRETE ONLY.

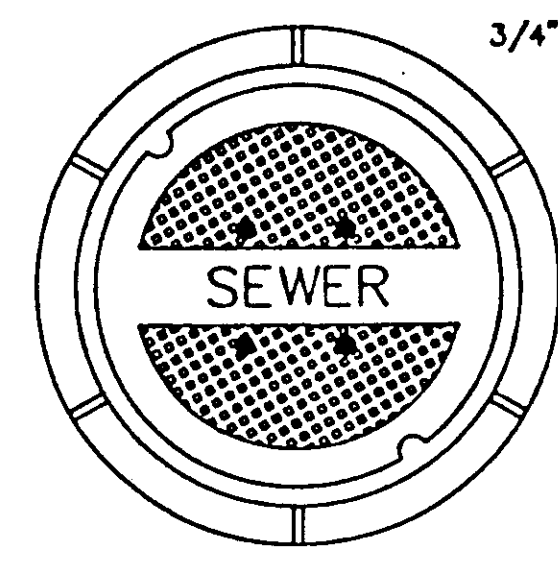
PUMP STATION MECHANICAL DETAILS
CITY OF RIDGELAND
DEPARTMENT OF PUBLIC WORKS

RIDGELAND
STOKES, MATTHEWS ROAD AREA
WATER AND SANITARY SEWER IMPROVEMENTS

ABMB
REGISTERED
INCORPORATED

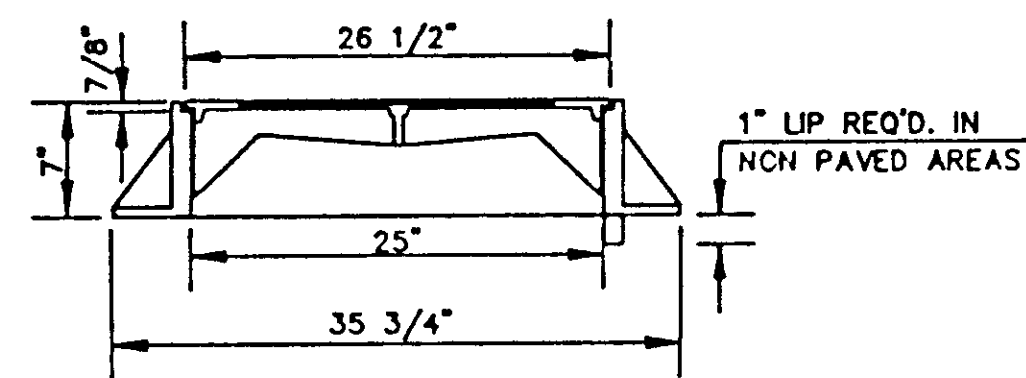
Civil/Structural Engineers
Jackson, Mississippi

DATE	DESCRIPTION	BY	DESIGNED N/A	DETAILED N/A	TRACED N/A	DATE
	REVISIONS		CHECKED N/A	CHECKED N/A	CHECKED N/A	SHEET



TOP PLAN OF COVER

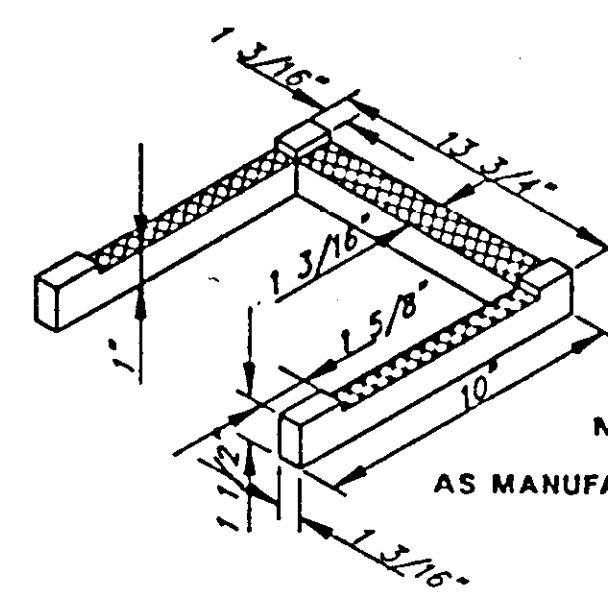
FRAME & COVER WEIGHT 420 LBS.



SECTION

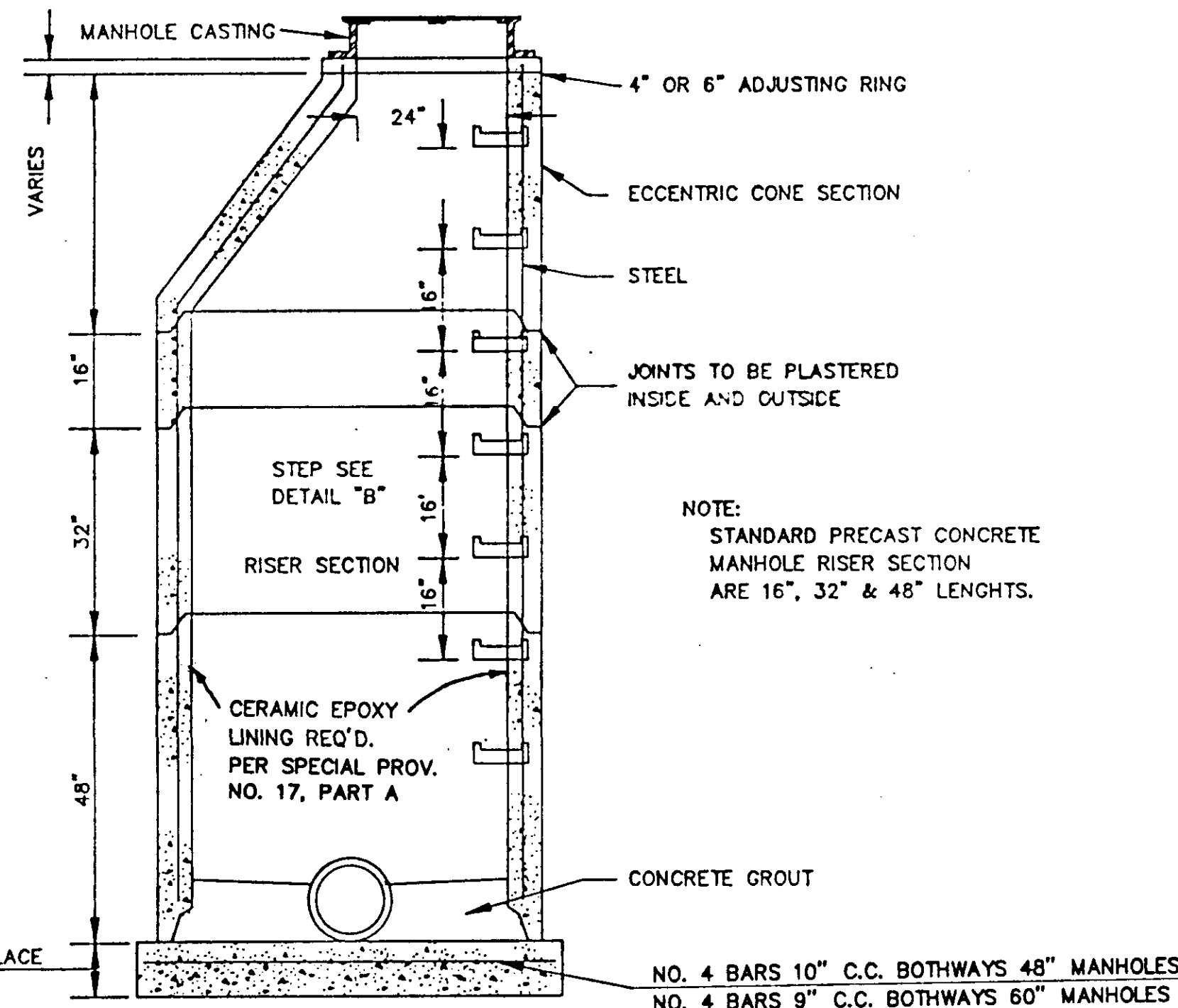
STANDARD MANHOLE FRAME AND COVER

N.T.S.



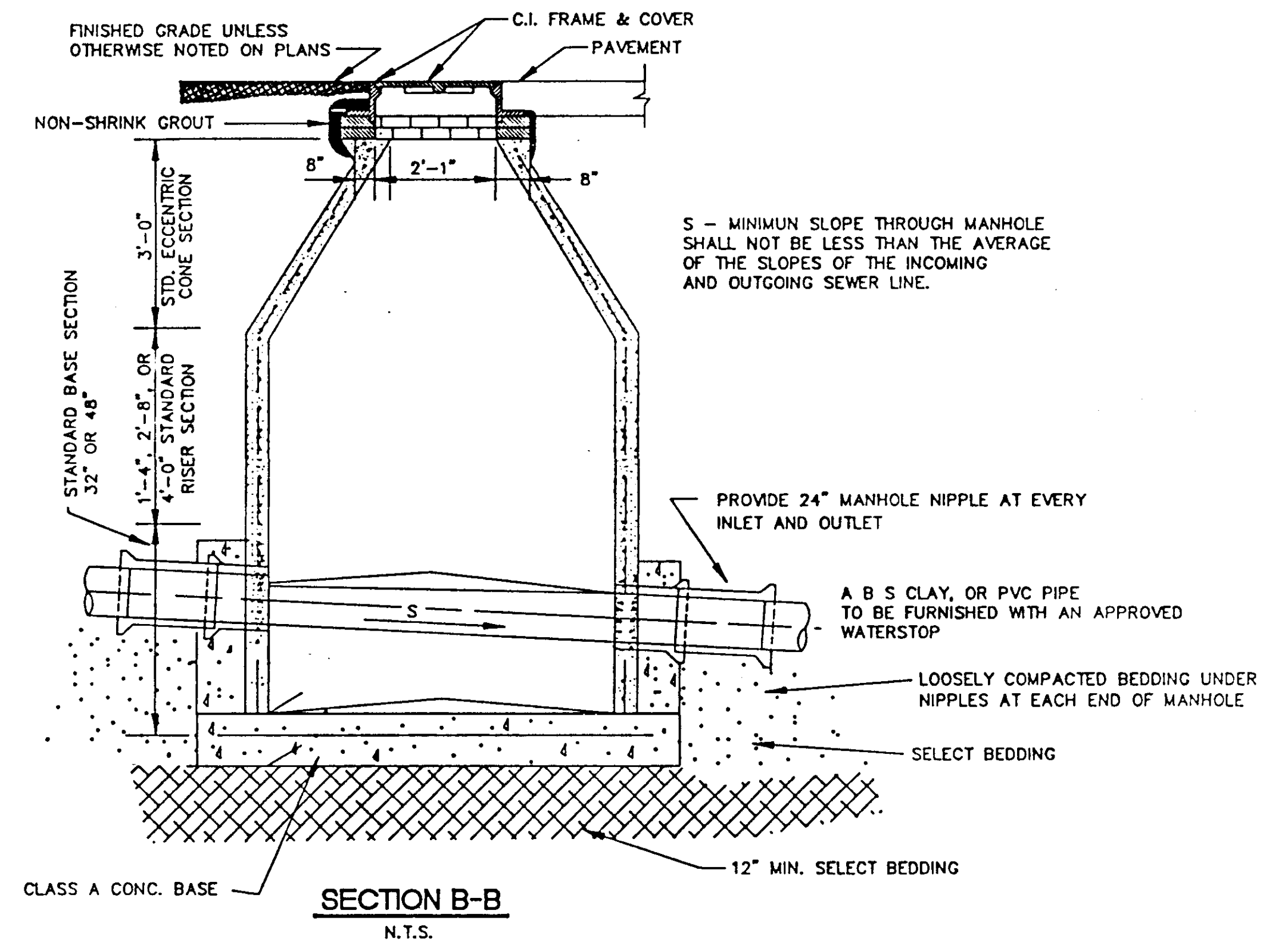
DETAIL 'B'

MODEL NO. PS2 - PF
AS MANUFACTURED BY M.A. INDUSTRIES INC.



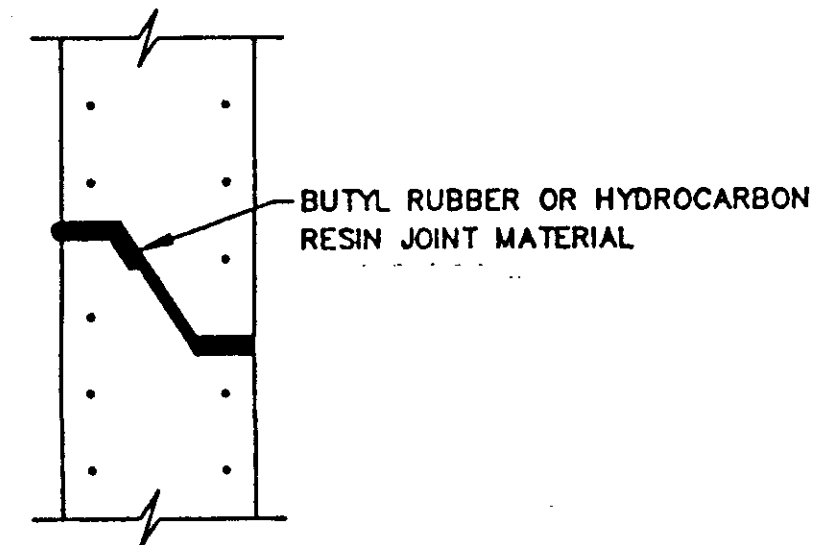
SECTION OF PRECAST CONCRETE MANHOLE

N.T.S.



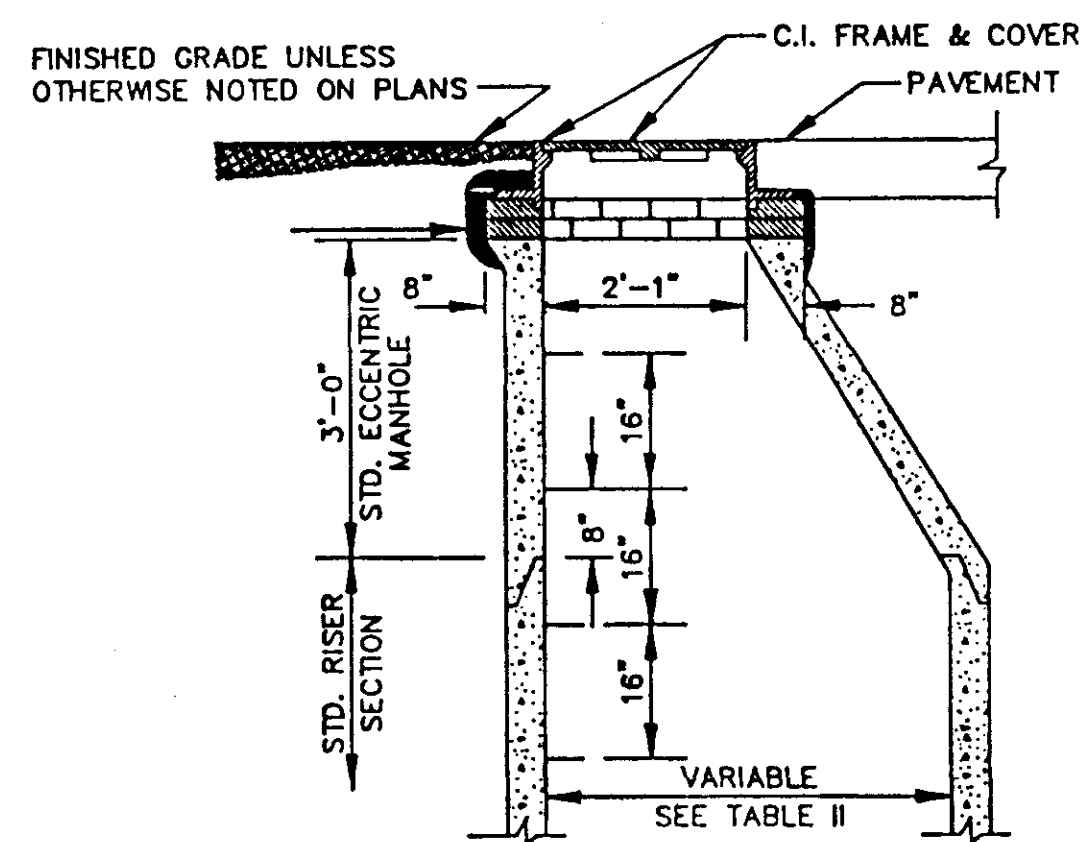
SECTION B-B

N.T.S.



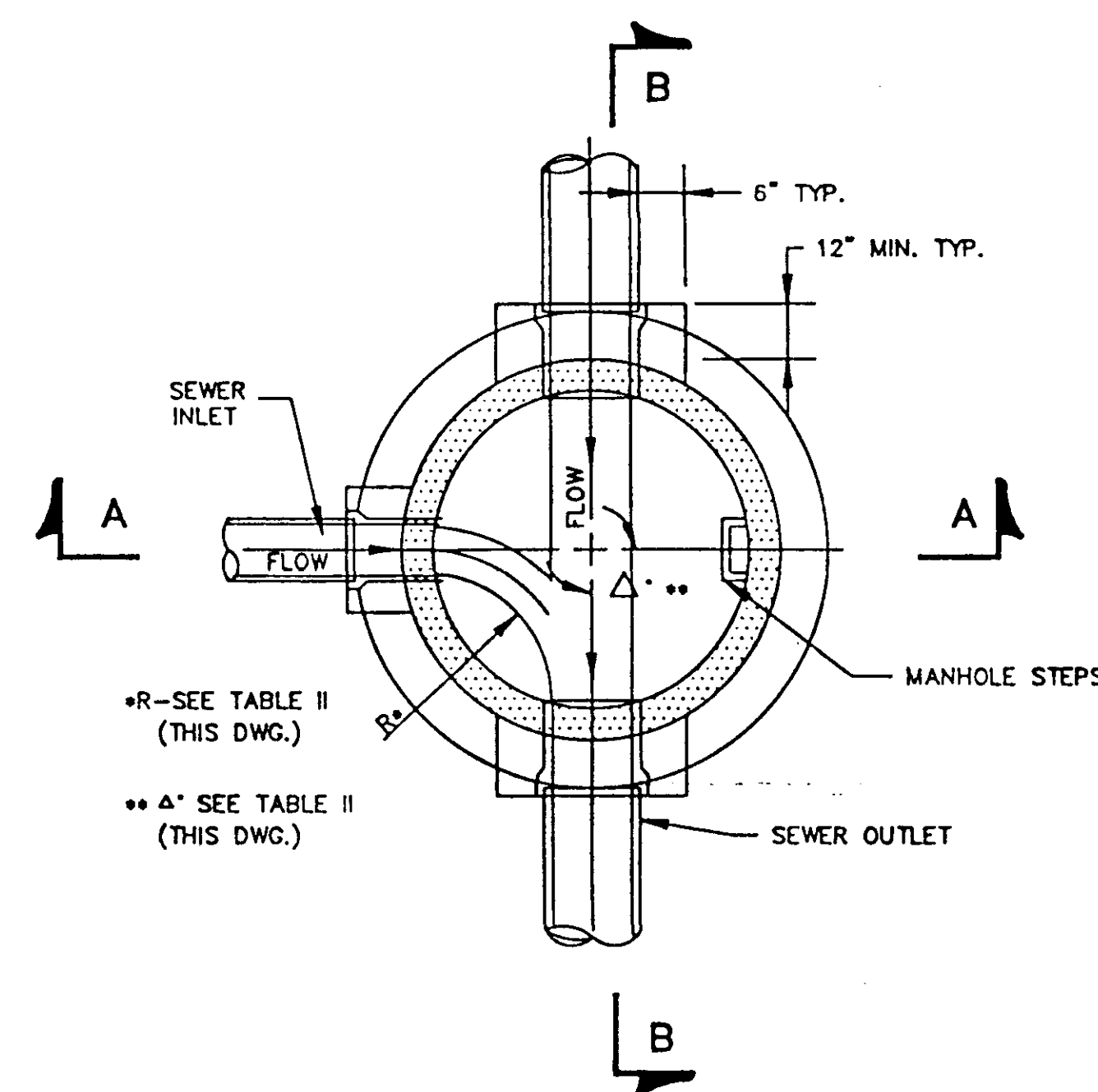
TYPICAL PRECAST CONCRETE
MANHOLE JOINT DETAIL

N.T.S.



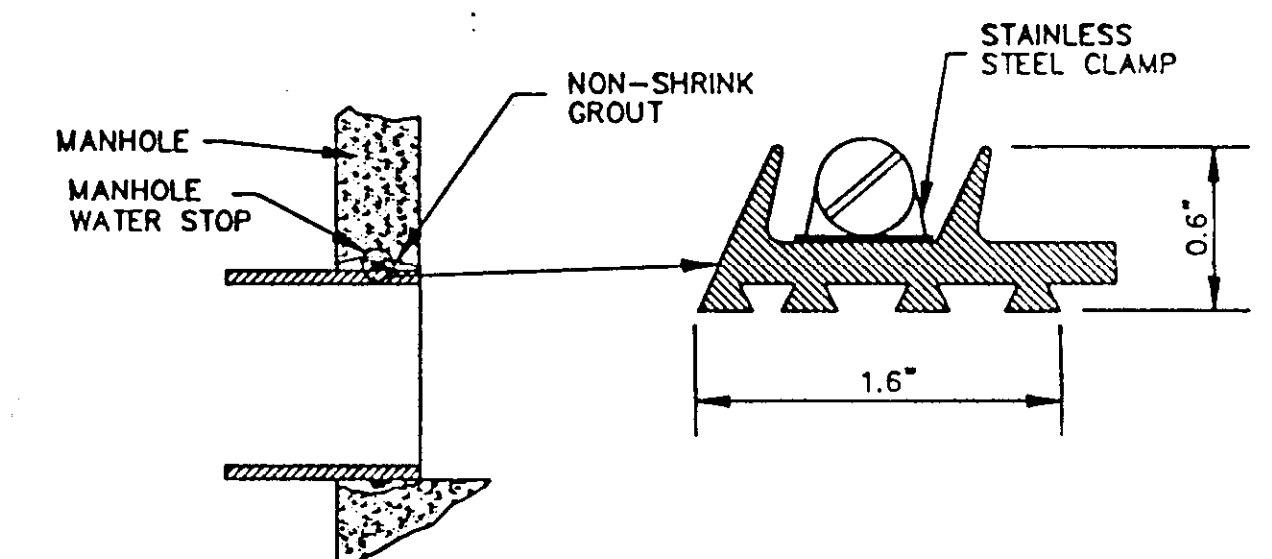
STANDARD ECCENTRIC CONE
FOR ALL DIAMETER MANHOLES

N.T.S.



SECTIONAL PLAN
STANDARD MANHOLE

N.T.S.



TYPICAL MANHOLE WATER STOP
FOR ABS, CLAY OR PVC PIPE

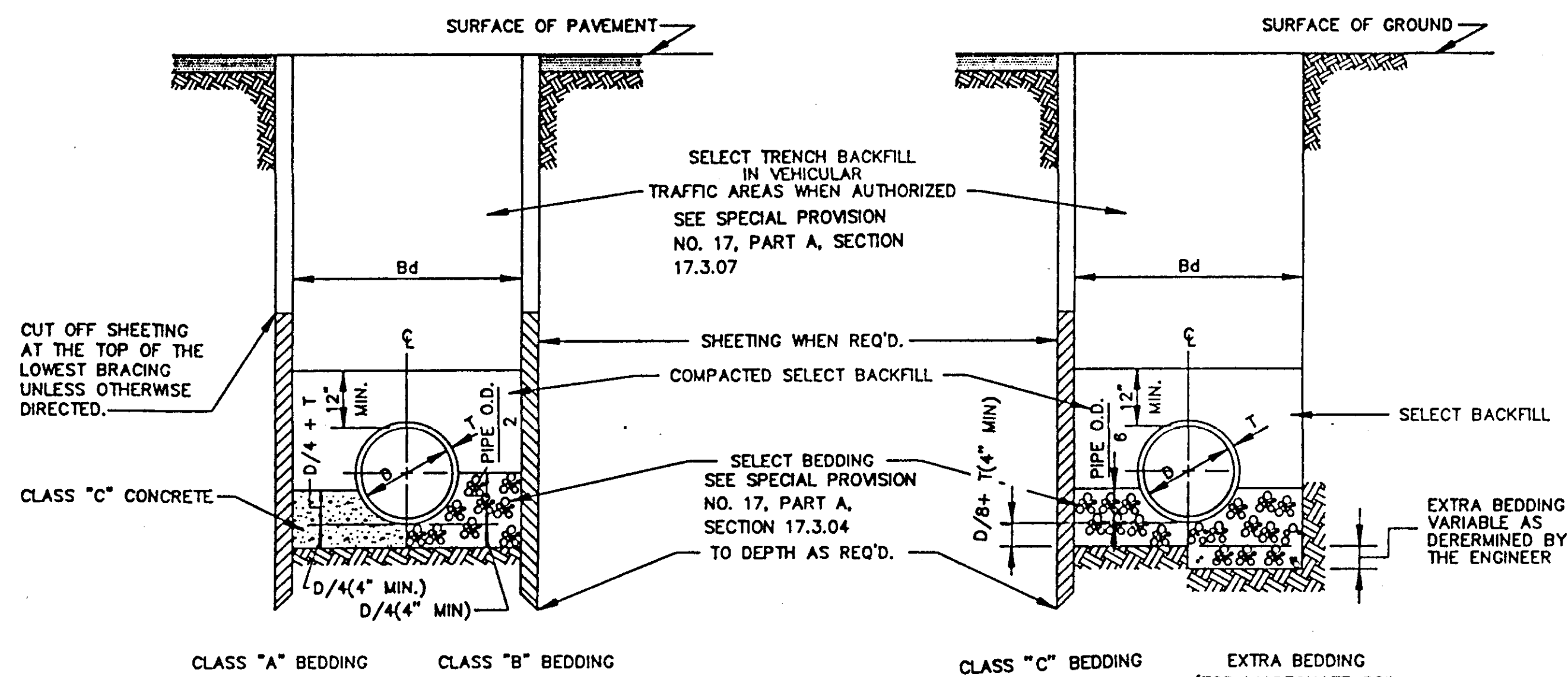
EXISTING AND "STRADDLE" MANHOLES
N.T.S.

CITY OF RIDGELAND, MS.

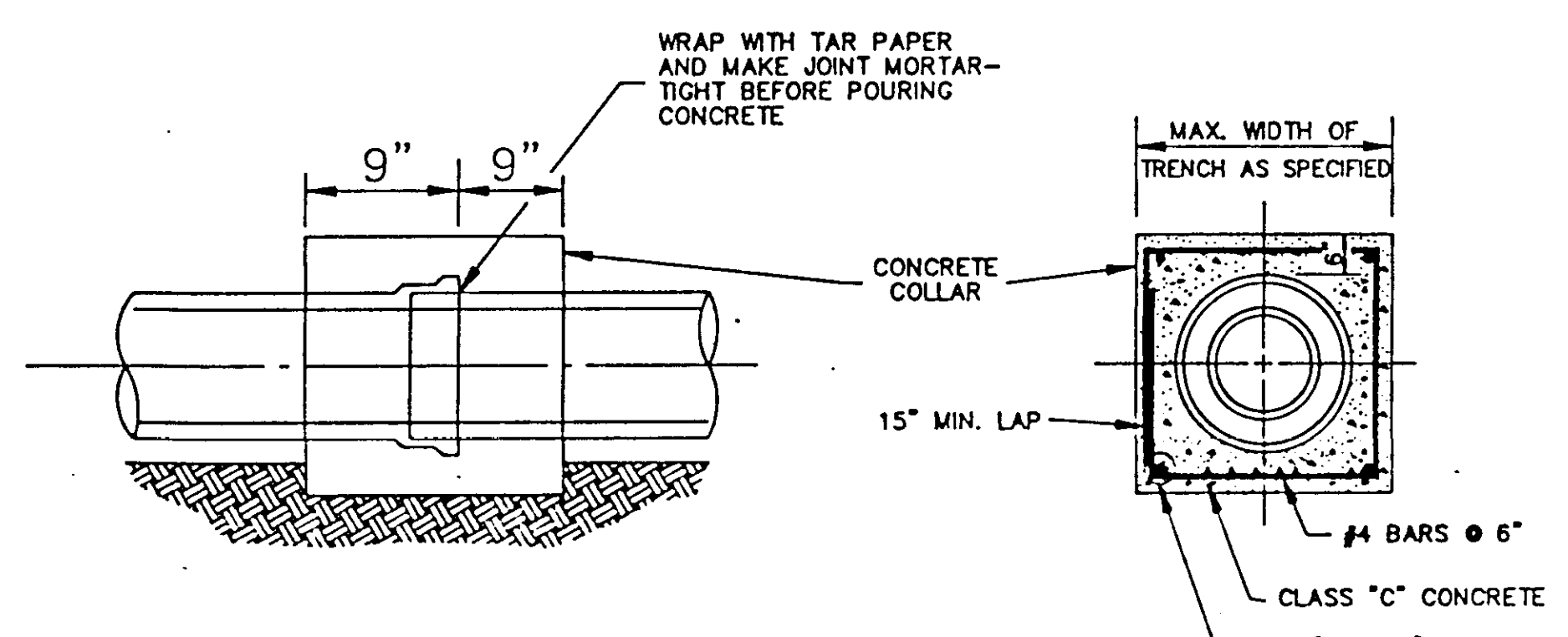
STANDARD DETAILS

SANITARY SEWER DETAILS

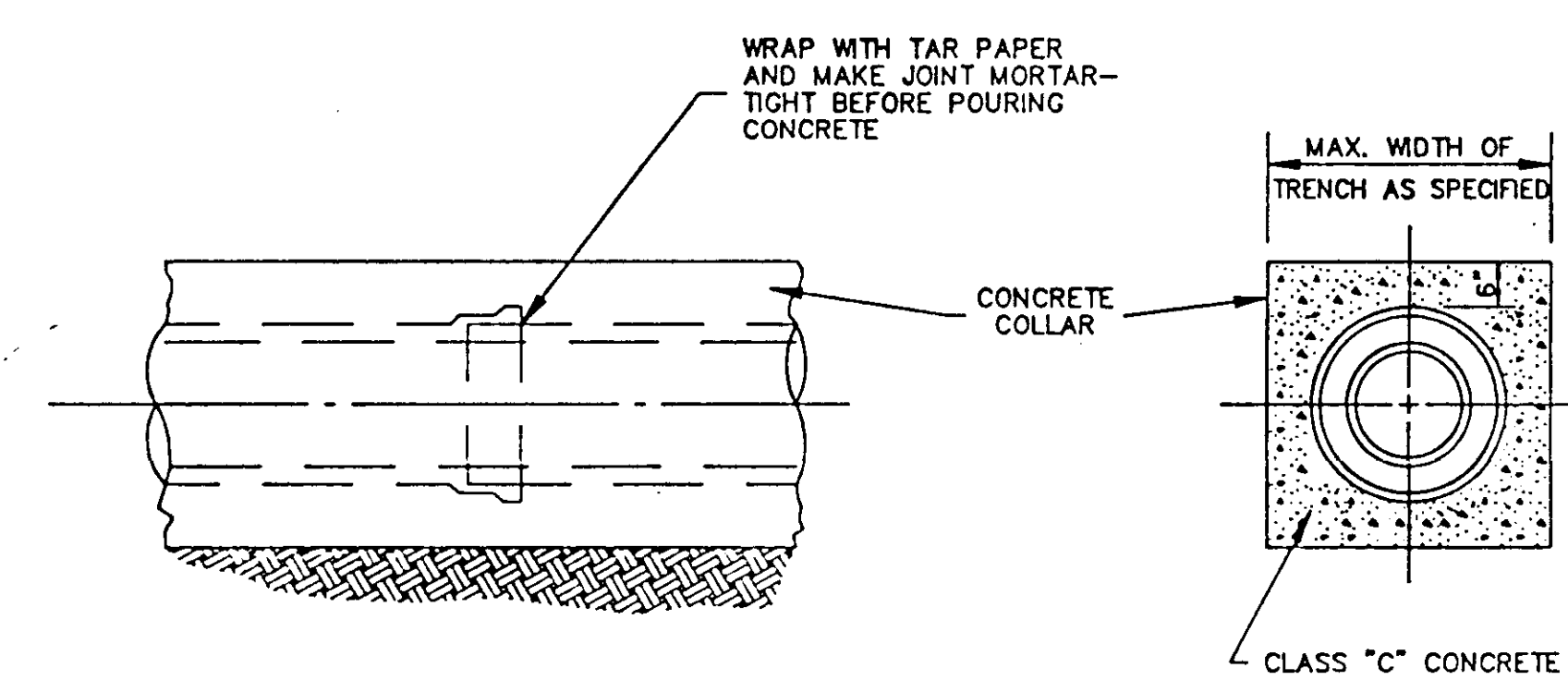
DSGN:			DRAWING NO.
DRWN:			OF
CHKD:			
SCALE:			



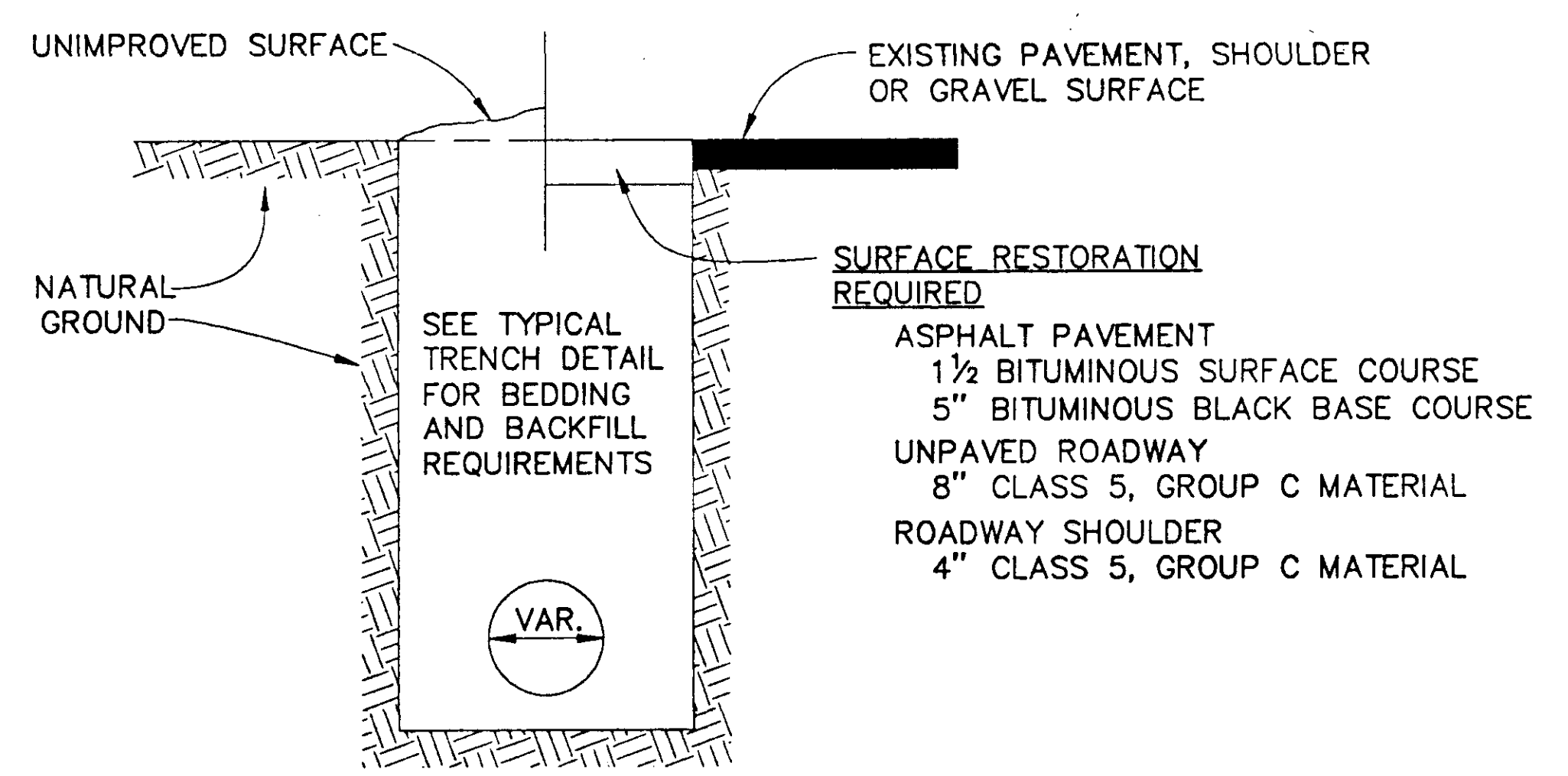
TYPICAL TRENCH DETAILS
N.T.S.



TYPICAL DETAIL OF CONCRETE COLLAR
N.T.S.



TYPICAL DETAIL OF CONCRETE ENCASEMENT
N.T.S.



TYPICAL SURFACE RESTORATION

CLASS "A" BEDDING

MATERIAL SHALL BE CLASS "C" CONCRETE CRADLES. THE PIPE SHALL BE LAID ON CONCRETE SADDLES CONSTRUCTED TO PROVIDE VERTICAL AND LATERAL SUPPORT FOR THE PIPE WHILE THE CRADLE IS BEING PLACED. PIPE SUPPORTS OF WOOD BLOCKS, LOOSE BRICK, ETC., WILL NOT BE PERMITTED. THE CRADLE SHALL BE POURED AFTER THE JOINTS HAVE BEEN MADE, CARE BEING TAKEN TO PREVENT MOVEMENT OF THE PIPE. WHENEVER THE CONTRACTOR PLACES CONCRETE OUTSIDE THE DIMENSIONS SHOWN ON THE DRAWINGS, THE COST OF SUCH CONCRETE WILL BE AT THE CONTRACTOR'S EXPENSE.

CLASS "B" BEDDING

MATERIAL SHALL BE SELECT BEDDING AS SPECIFIED. MATERIAL SHALL BE CAREFULLY PLACED AND THOROUGHLY COMPACTED BY TAMPING.

CLASS "C" BEDDING (STANDARD BEDDING)

MATERIAL SHALL BE THE SAME AS FOR CLASS "B" BEDDING AND SHALL BE PLACED AS SHOWN BY STANDARD DETAILS FOR THE TYPE OF PIPE USED.

TABLE "A"
PIPE SIZE

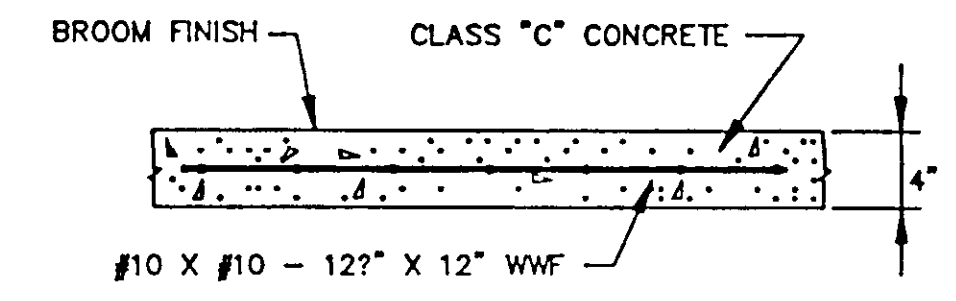
CARRIER PIPE (INCHES)	CASING PIPE DIA. (INCHES)	STEEL PIPE WALL THICK
8	16	1/4"
10	20	5/16"
12	24	3/8"
14 & 16	30	1/2"
18	36	1/2"
24	36	1/2"
30	54	1/2"
36	54	1/2"
42	66	SEE TABLE "B"
48	72	-
54	78	-
60	84	-
66	96	-
72	108	-
84	120	-
96	144	-

TABLE "B"
GAGES OF LINER PLATE FOR CONTINUOUS LOAD-CARRYING STRUCTURES

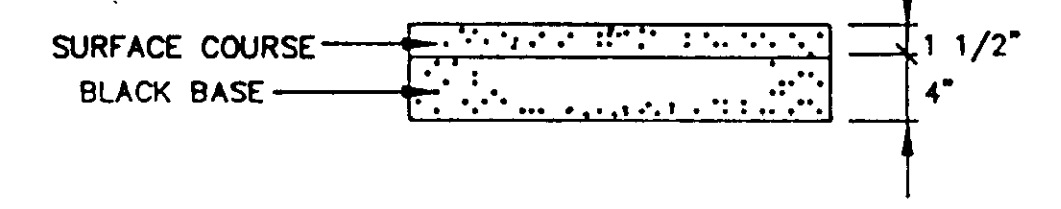
NOMINAL DIA. (INCHES)	HEIGHT OF COVER (FEET)									
	2-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50
48	12	12	12	12	12	12	12	10	8	7
54	12	12	12	12	12	12	12	10	8	7
60	12	12	12	12	12	12	12	10	8	7
66	12	12	12	12	12	12	10	8	7	5
72	12	12	12	12	12	10	8	7	5	5
78	12	12	12	12	10	8	7	5	5	5
84	12	12	12	10	10	8	7	5	5	5
96	12	10	10	10	10	8	7	5	5	5
108	10	10	10	10	8	7	5	5	5	5
120	10	10	10	8	8	7	5	5	5	3
144	8	8	8	8	5	5	3	1	1	1

CASING PIPE

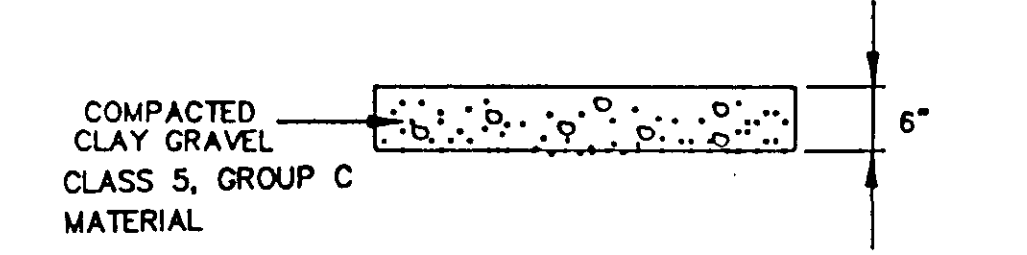
SIZE AND THICKNESS OF PIPE FOR RAILROAD & HIGHWAY CROSSING



TYPICAL CONC. DRIVEWAY AND SIDEWALK REPAIR



TYPICAL ASPHALT DRIVEWAY REPAIR



TYPICAL GRAVEL DRIVEWAY REPAIR

CITY OF RIDGELAND, MS.

STANDARD DETAILS

SANITARY SEWER DETAILS

DSGN:		THE CITY OF	DRAWING NO.
DRWN:		RIDGELAND	OF
CHKD:			
SCALE:			

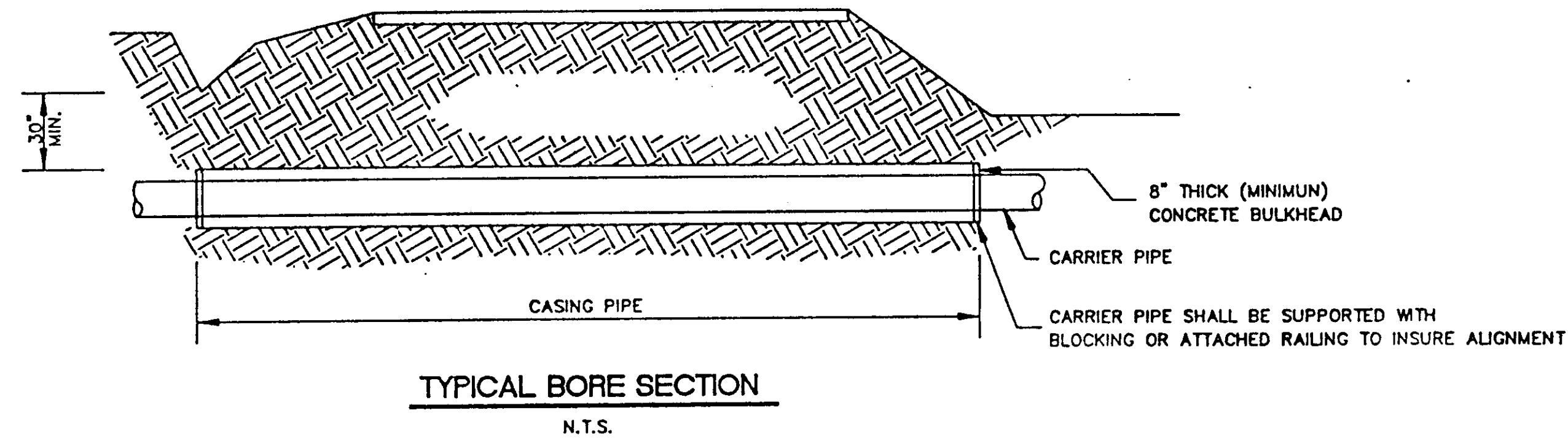
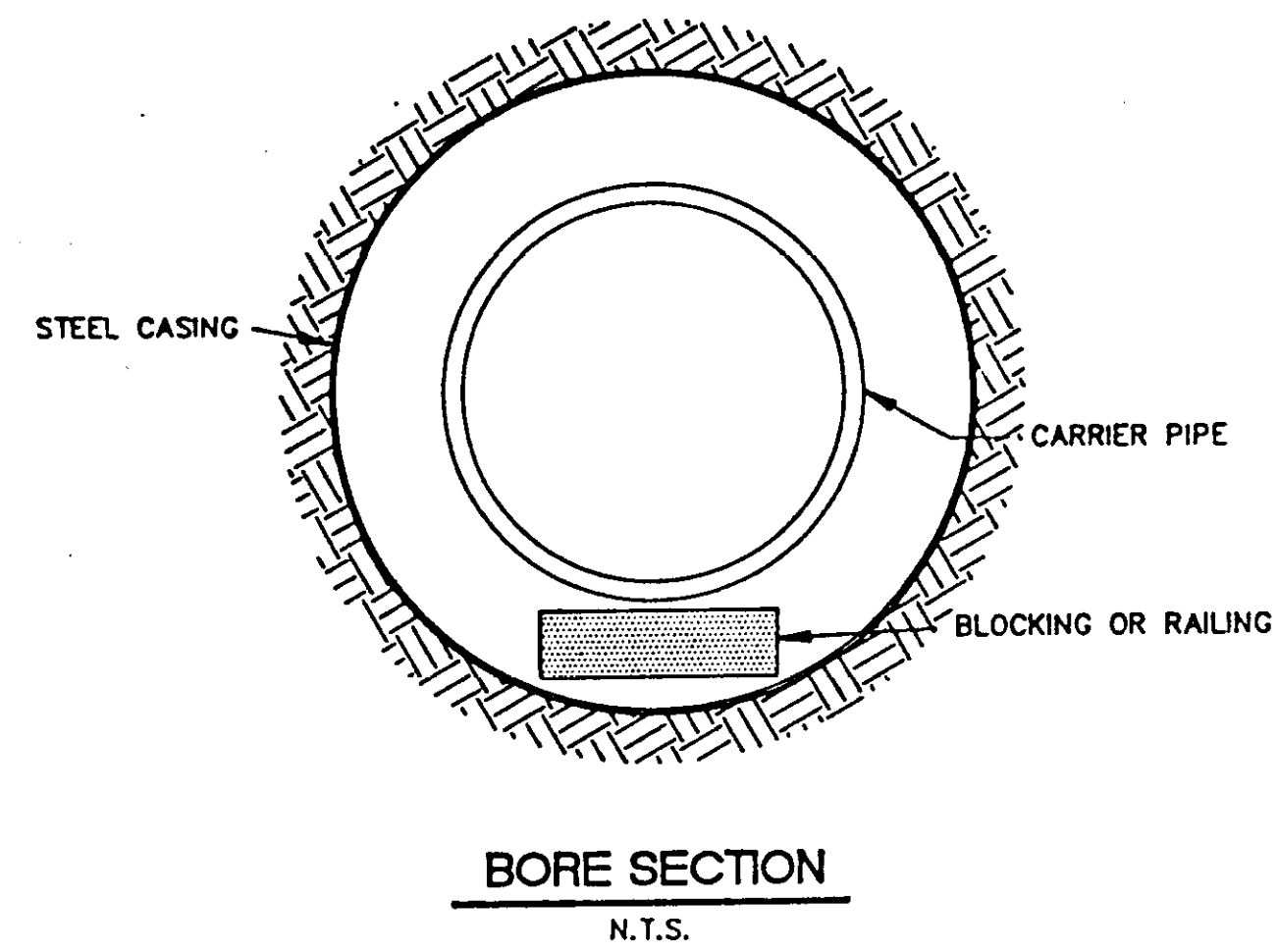
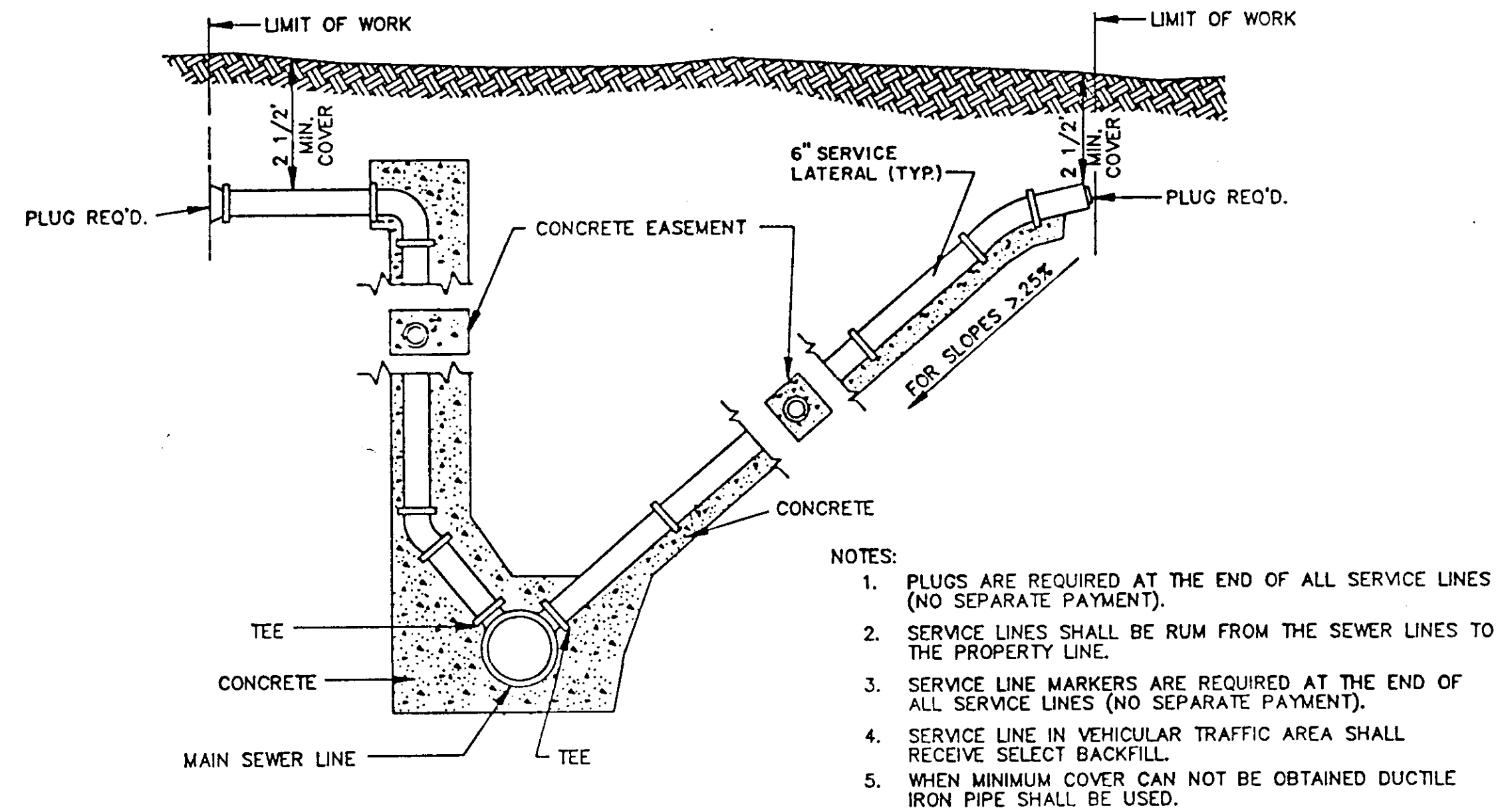


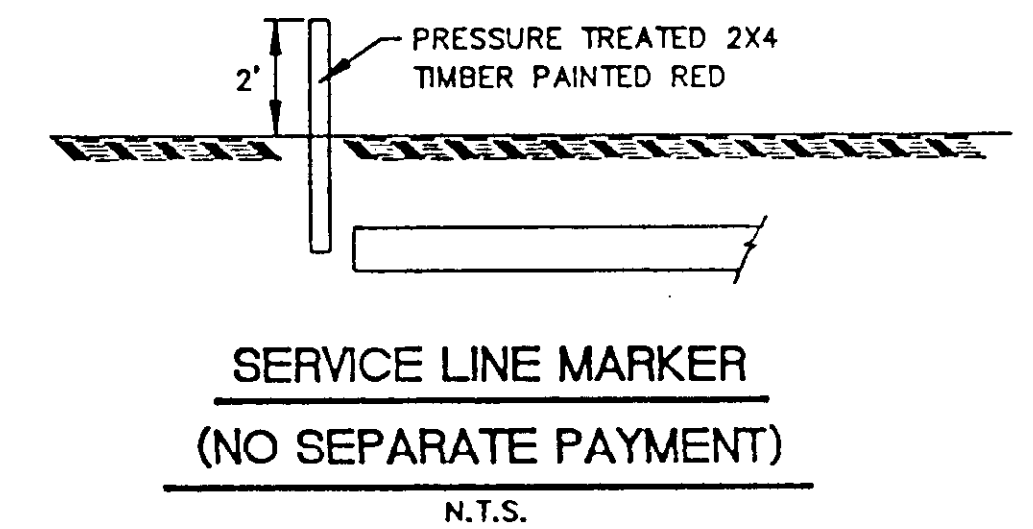
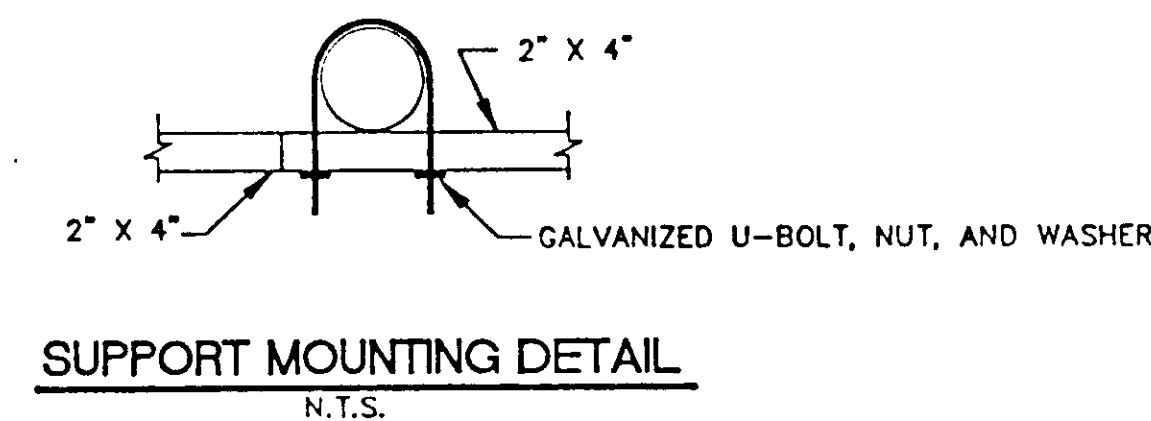
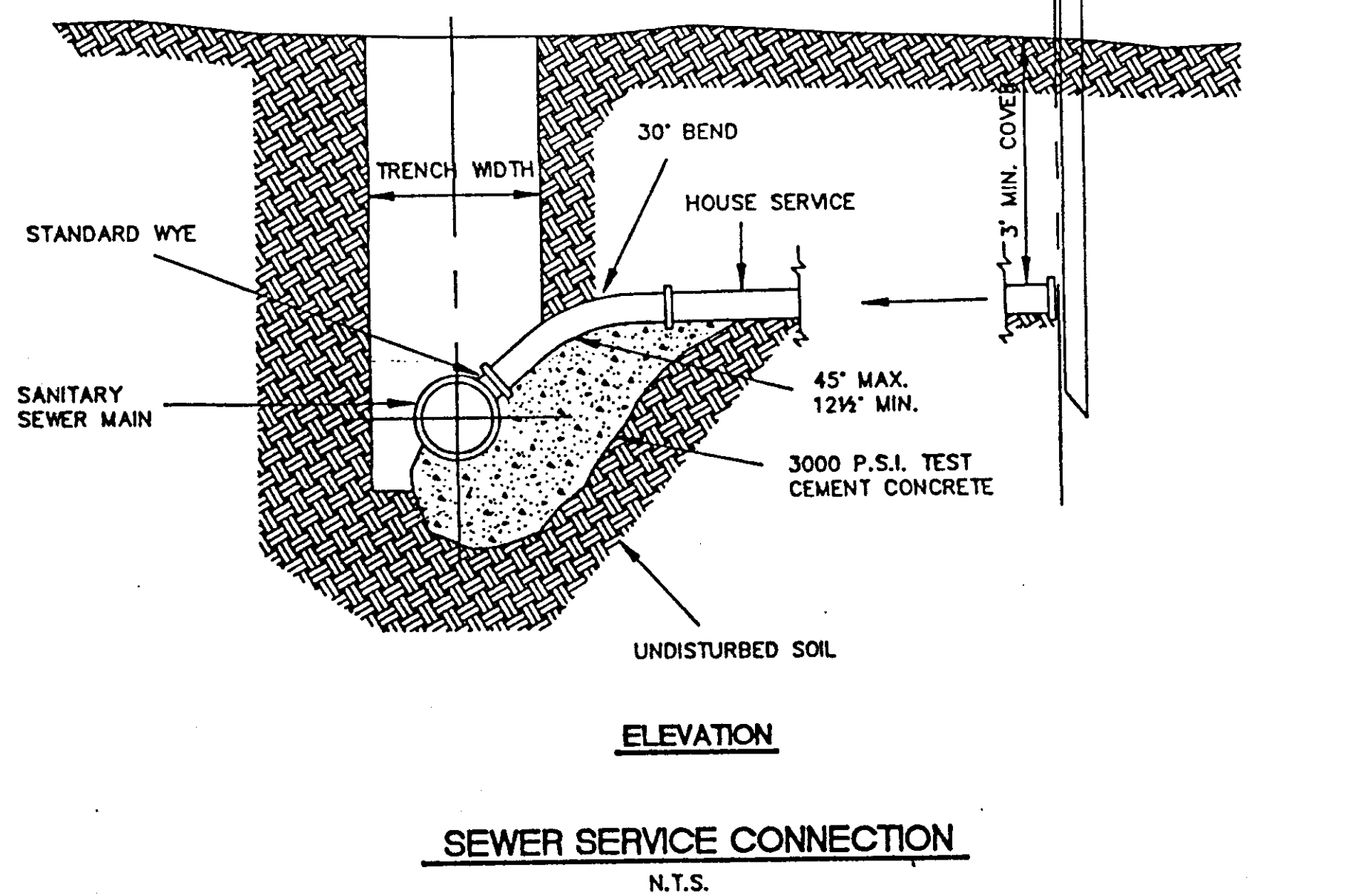
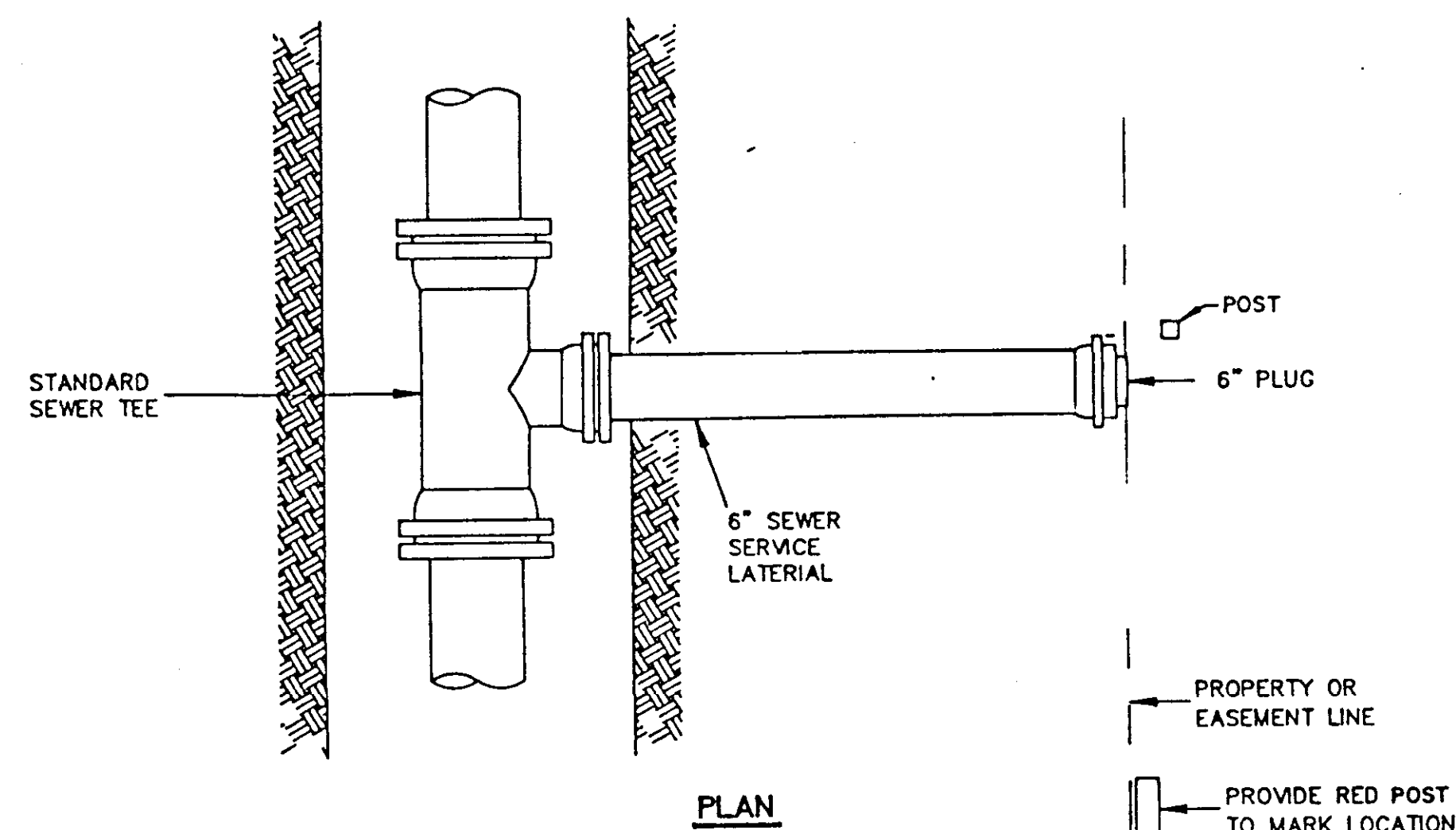
TABLE II
GOVERNING DIMENSIONS FOR MANHOLES

PIPE SIZE	Δ ANGLE	BASE DIAMETER **	"R" *
8" THRU 12"	0° TO 90°	4'	1'- 6"
15"	0° TO 60°	4'	1'- 10"
15"	60° TO 90°	4'	1'- 10"
18"	0° TO 60°	4'	2'- 3"
18"	60° TO 90°	4'	1'- 10"
21"	0° TO 60°	4'	2'- 7"
21"	60° TO 90°	5'	2'- 4"
24"	0° TO 45°	4'	3'- 0"
24"	45° TO 90°	5'	2'- 3"
30"	0° TO 60°	5'	3'- 9"
30"	60° TO 90°	6'	2'- 8"
36"	0° TO 60°	6'	4'- 6"
36"	60° TO 90°	7'	3'- 11"
42"	0° TO 60°	7'	5'- 3"
42"	60° TO 90°	8'	4'- 7"
48"	0° TO 60°	8'	6'- 0"
48"	60° TO 90°	9'	5'- 3"

* SEE SECTIONAL PLAN, STANDARD MANHOLE
** PRECAST MANHOLE



- NOTES:
1. PLUGS ARE REQUIRED AT THE END OF ALL SERVICE LINES (NO SEPARATE PAYMENT).
 2. SERVICE LINES SHALL BE RUM FROM THE SEWER LINES TO THE PROPERTY LINE.
 3. SERVICE LINE MARKERS ARE REQUIRED AT THE END OF ALL SERVICE LINES (NO SEPARATE PAYMENT).
 4. SERVICE LINE IN VEHICULAR TRAFFIC AREA SHALL RECEIVE SELECT BACKFILL.
 5. WHEN MINIMUM COVER CAN NOT BE OBTAINED DUCTILE IRON PIPE SHALL BE USED.

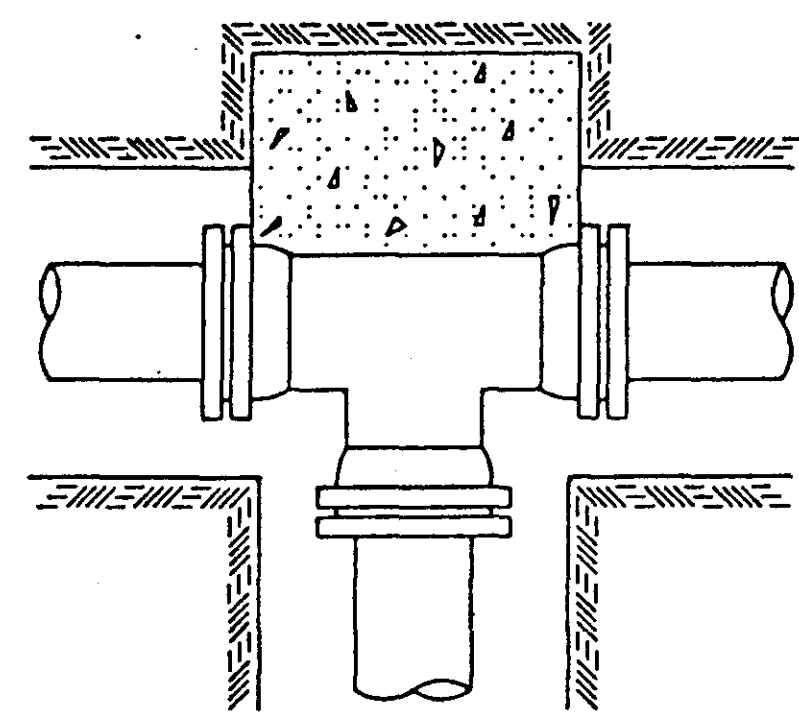


CITY OF RIDGELAND, MS.

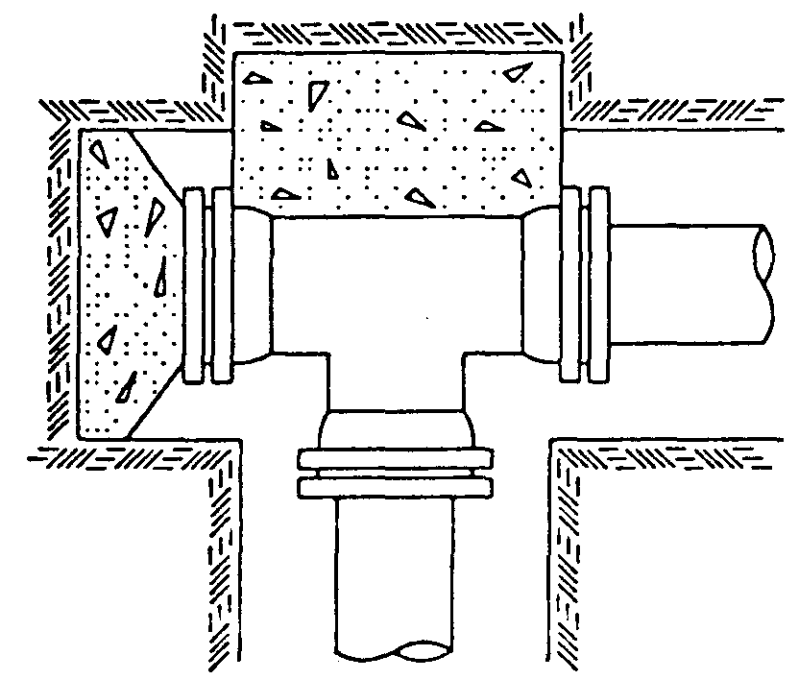
STANDARD DETAILS

SANITARY SEWER DETAILS

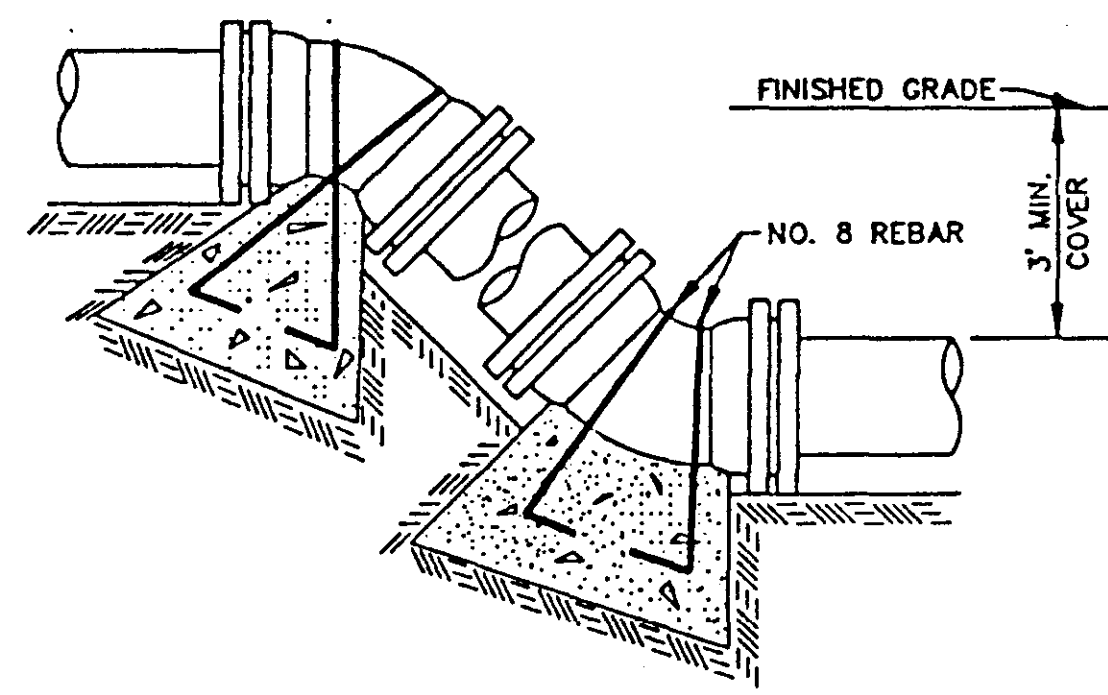
DSGN:			DRAWING NO.
DRWN:			OF
CHKD:			
SCALE:			



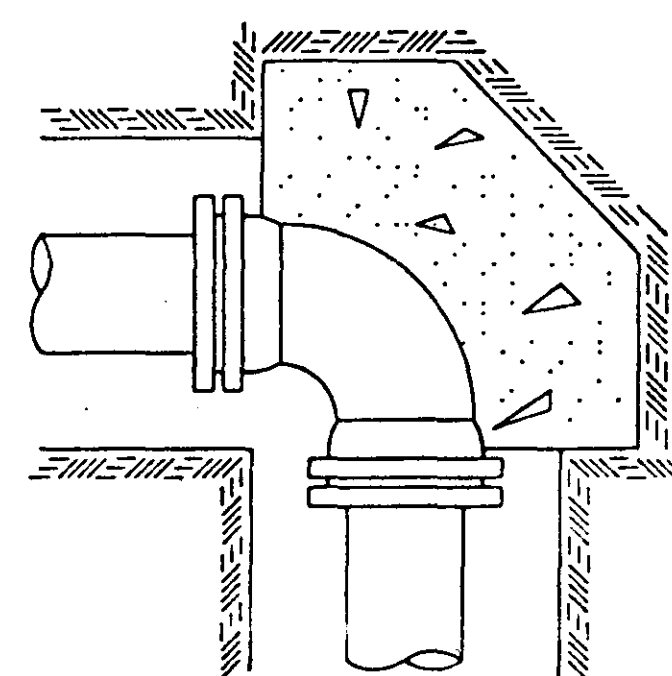
TEE



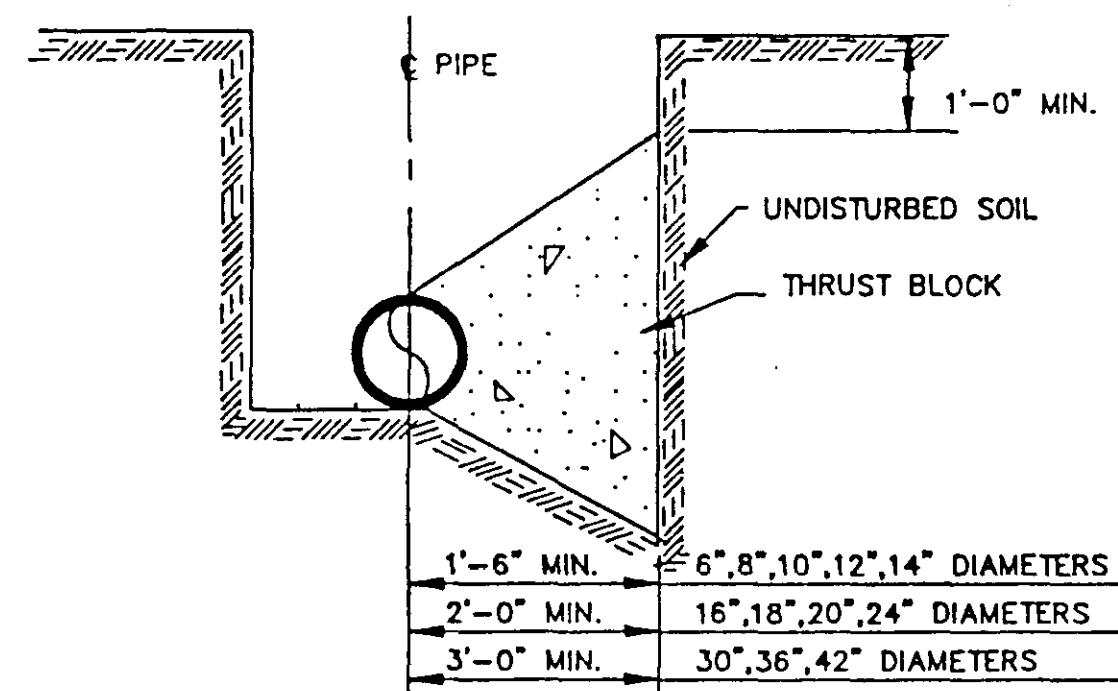
PLUGGED TEE



VERTICAL BENDS



90° BEND



TYPICAL CROSS SECTION

TYPICAL THRUST BLOCKING IN WATER MAINS AND SEWAGE FORCE MAINS

N.T.S.
NOTE: ALL THRUST BLOCKS 2,500 PSI CONCRETE AGAINST UNDISTURBED EARTH

BEARING AREA IN SQ. FT.

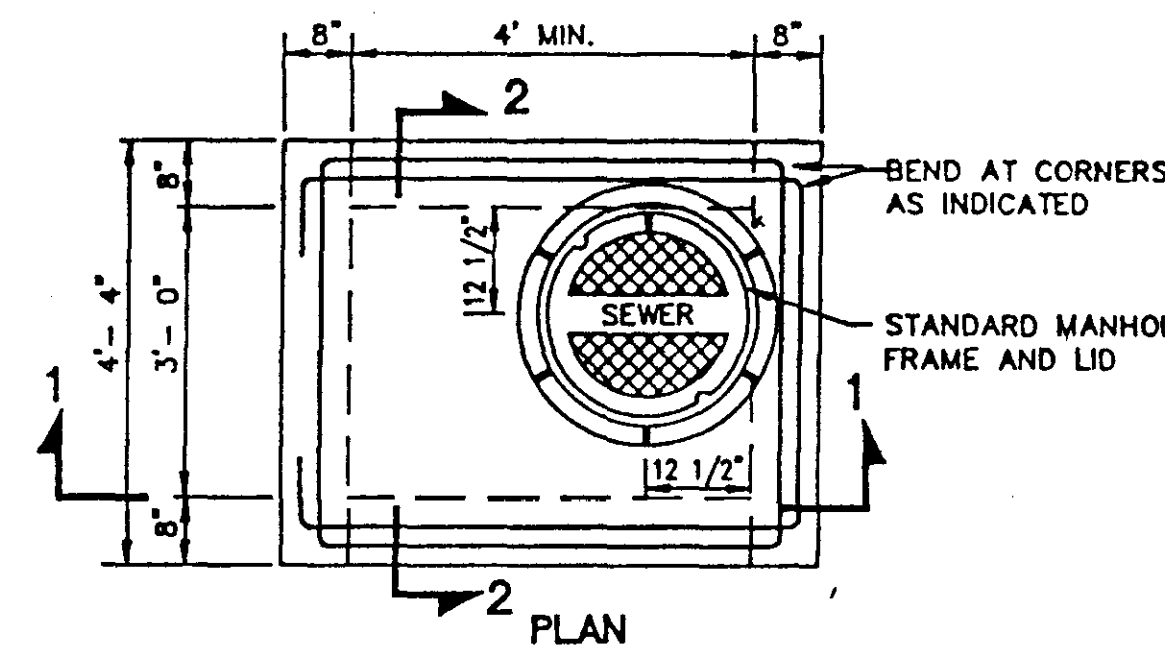
NOMINAL PIPE DIAMETER (IN)	DEAD-END OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
6	2.5	3.0	2.0	2.0	2.0
8	4.0	6.0	3.0	2.0	2.0
10	6.0	9.0	5.0	2.5	2.0
12	9.0	11.0	6.0	3.5	2.0
14	12.0	18.0	9.0	5.0	2.5
16	16.0	22.5	12.0	6.0	3.0
18	20.0	28.0	15.0	8.0	4.0
20	24.5	34.0	19.0	10.0	5.0
24	35.0	49.0	27.0	14.0	7.0
30	54.0	76.0	41.0	21.0	10.0
36	77.0	108.0	59.0	30.0	15.0
42	104.0	146.0	79.0	40.0	20.0

NOTE: ABOVE VALUES CALCULATED USING P=100 AND ALLOWANCE SOIL BRG. = 1500 PSF. FOR DIFFERENT P, MULTIPLY ABOVE VALUES BY P/100. FOR DIFFERENT SOIL BRG, MULTIPLY ABOVE VALUES BY 1500/S.B.

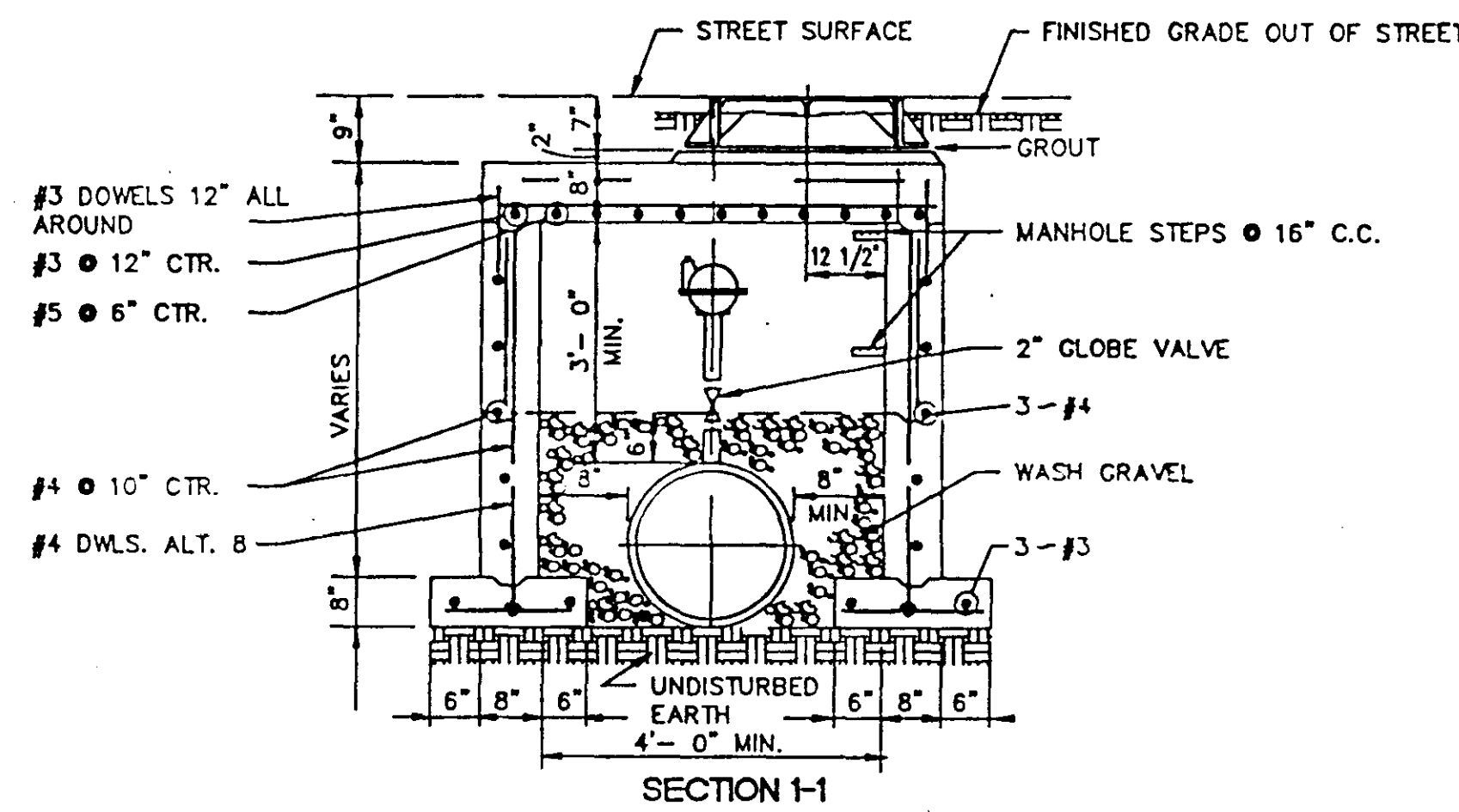
VERTICAL BENDS

NOMINAL PIPE DIAMETER (IN)	DEAD-END OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
6	—	—	26.0(1.0)	14.0(5)	7.0(3)
8	—	—	45.0(1.7)	25.0(9)	13.0(5)
10	—	—	68.0(2.5)	37.0(1.4)	19.0(7)
12	—	—	97.0(3.6)	52.0(1.9)	27.0(1.0)
14	—	—	130(4.8)	70.0(2.6)	36.0(1.3)
16	—	—	168(6.2)	91.0(3.4)	46.0(1.7)
18	—	—	211(7.8)	114(4.2)	58.0(2.2)
20	—	—	259(9.6)	140(5.2)	72.0(2.6)
24	—	—	370(13.7)	200(7.4)	102(3.8)
30	—	—	568(21.1)	308(11.4)	156(5.8)
36	—	—	814(30.1)	440(16.3)	225(8.3)
42	—	—	1100(40.7)	595(22.0)	303(11.2)

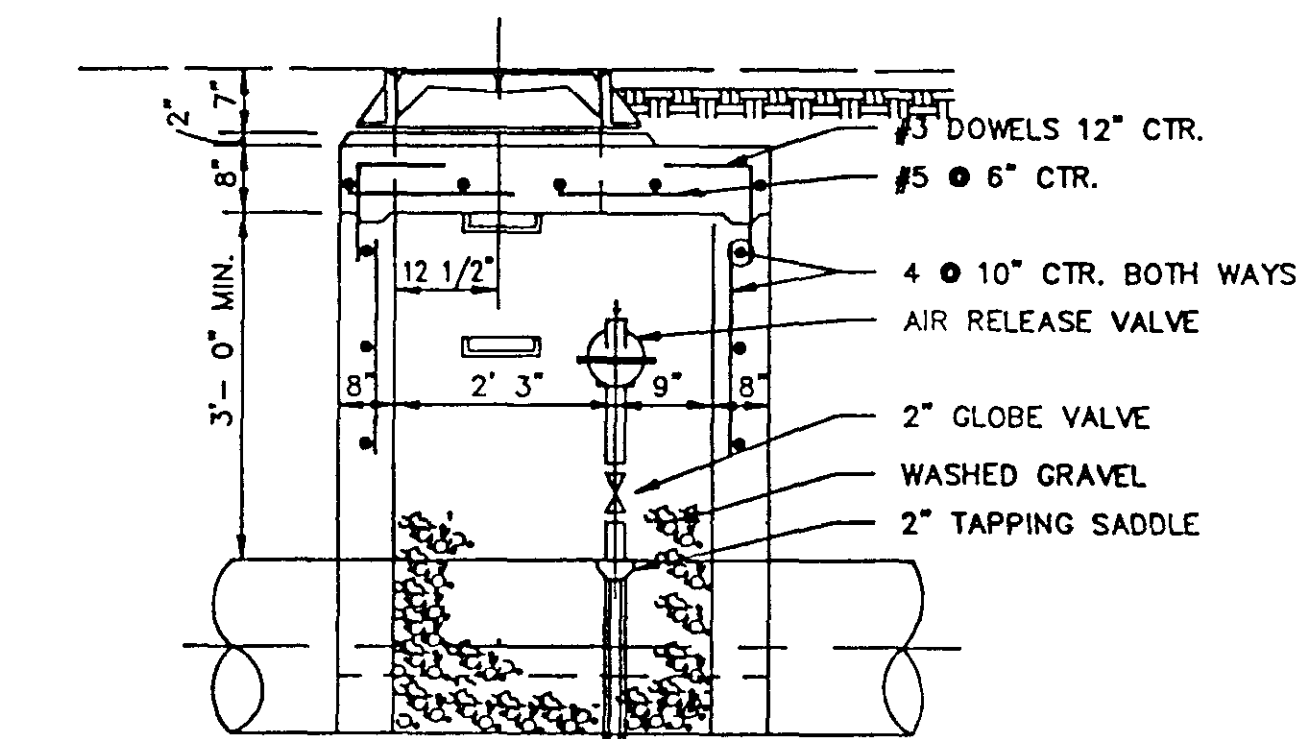
NOTE: ABOVE VALUES REPRESENT THE VOLUME OF BLOCKS INCLUDING SOIL LOAD IN CU.FT. (CU.YDS.). THE VALUES WERE CALCULATED USING A P=100 PSI AND A S.F.=1.5. FOR DIFFERENT P, MULTIPLY VALUES BY P/100.



PLAN



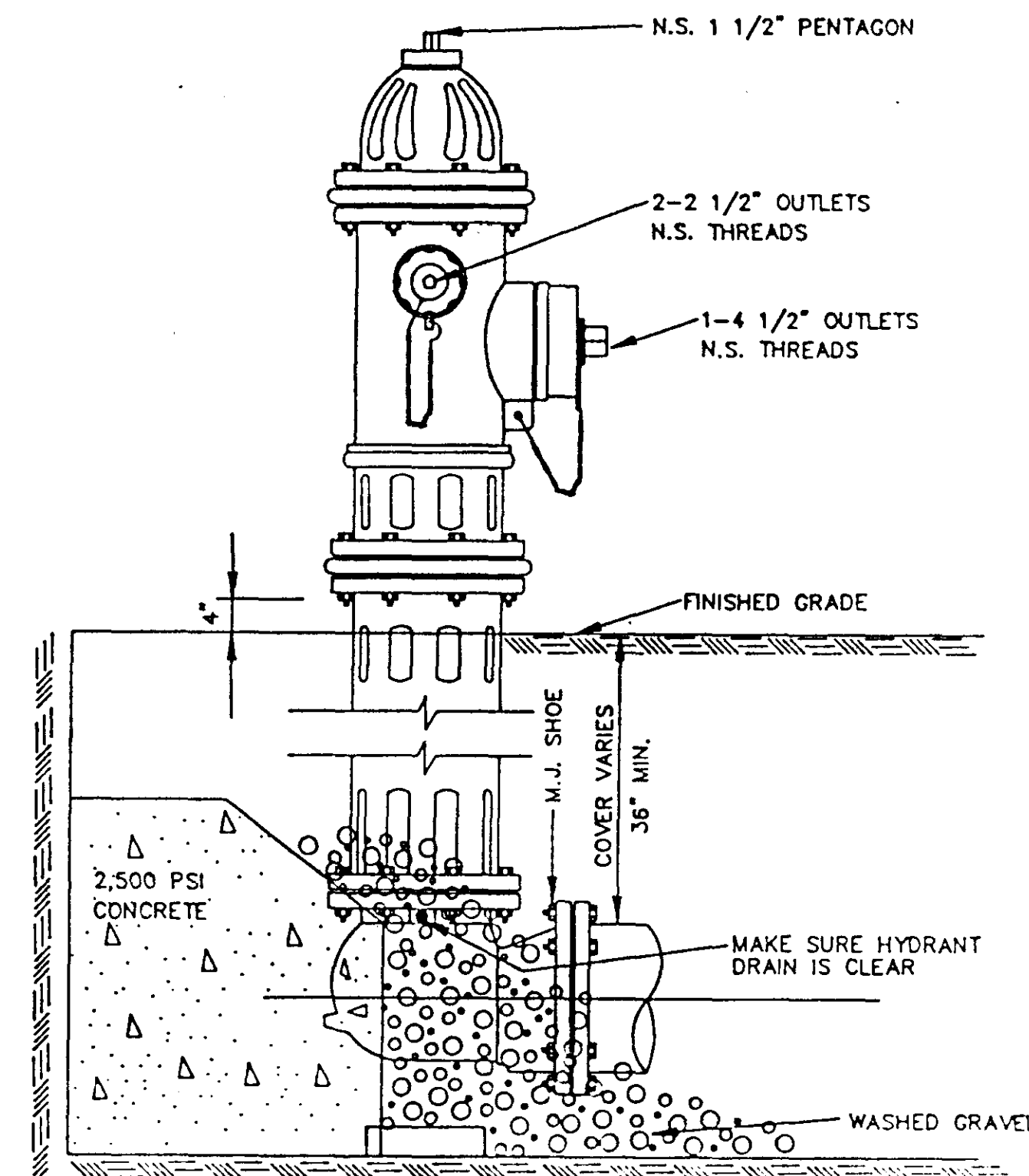
SECTION 1-1



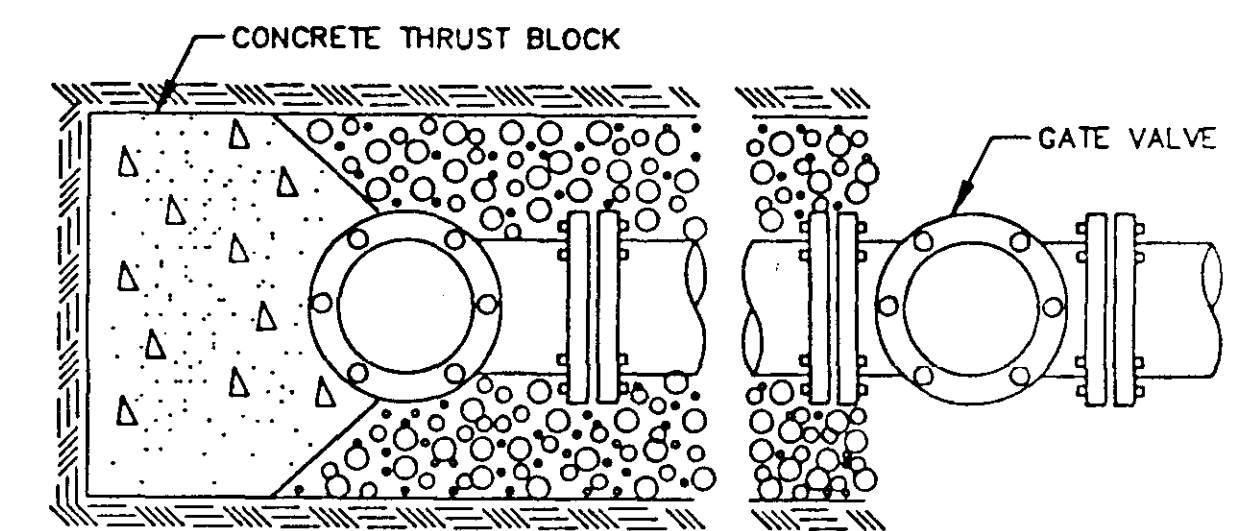
SECTION 2-2

TYPICAL AIR OR AIR VACUUM RELEASE VALVE INSTALLATION WITH MANHOLE

NOT TO SCALE



ELEVATION



PLAN

TYPICAL FIRE HYDRANT INSTALLATION

NOTE: GATE VALVES WILL BE REQUIRED ON ALL FIRE HYDRANT LEGS. N.T.S.

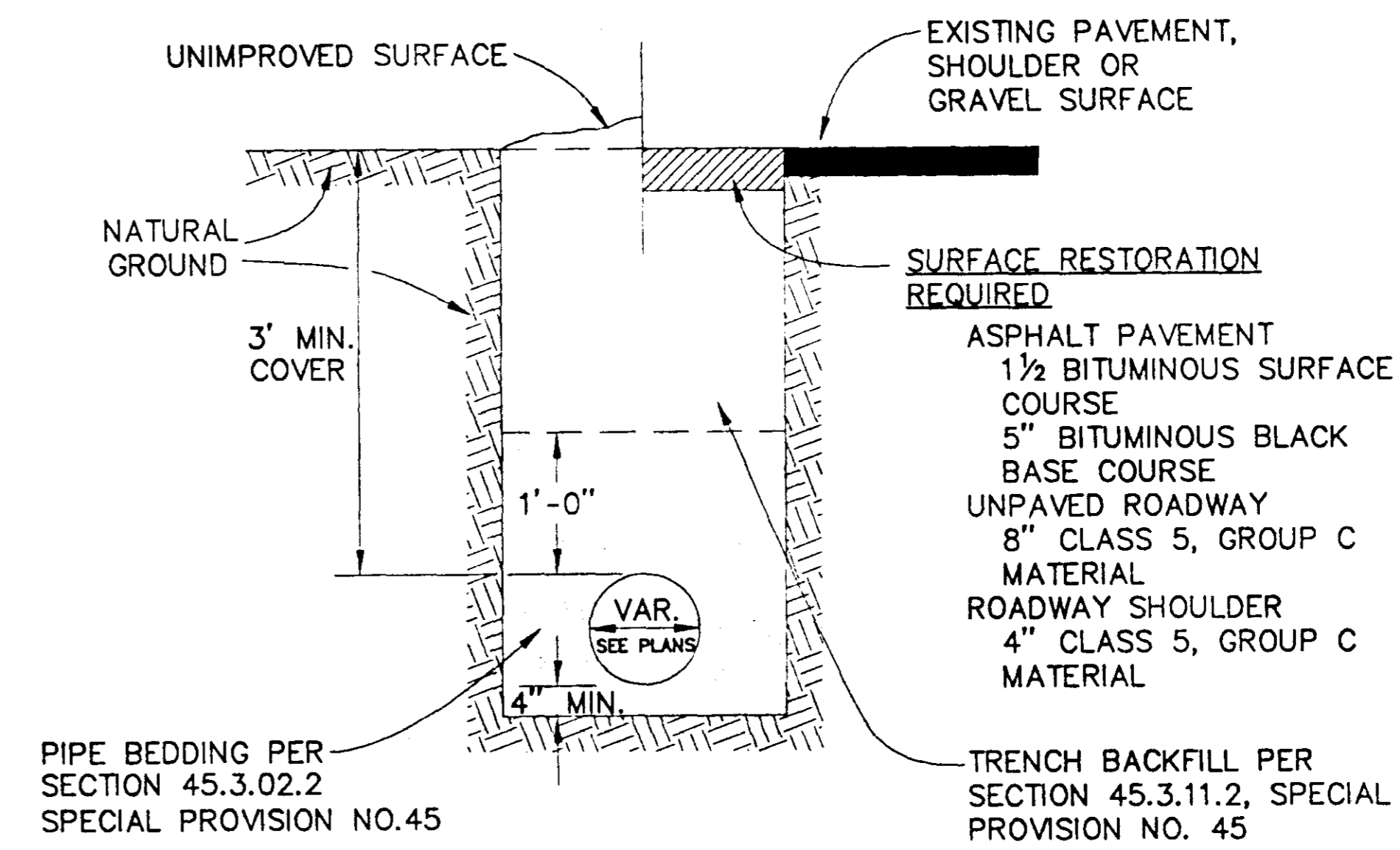
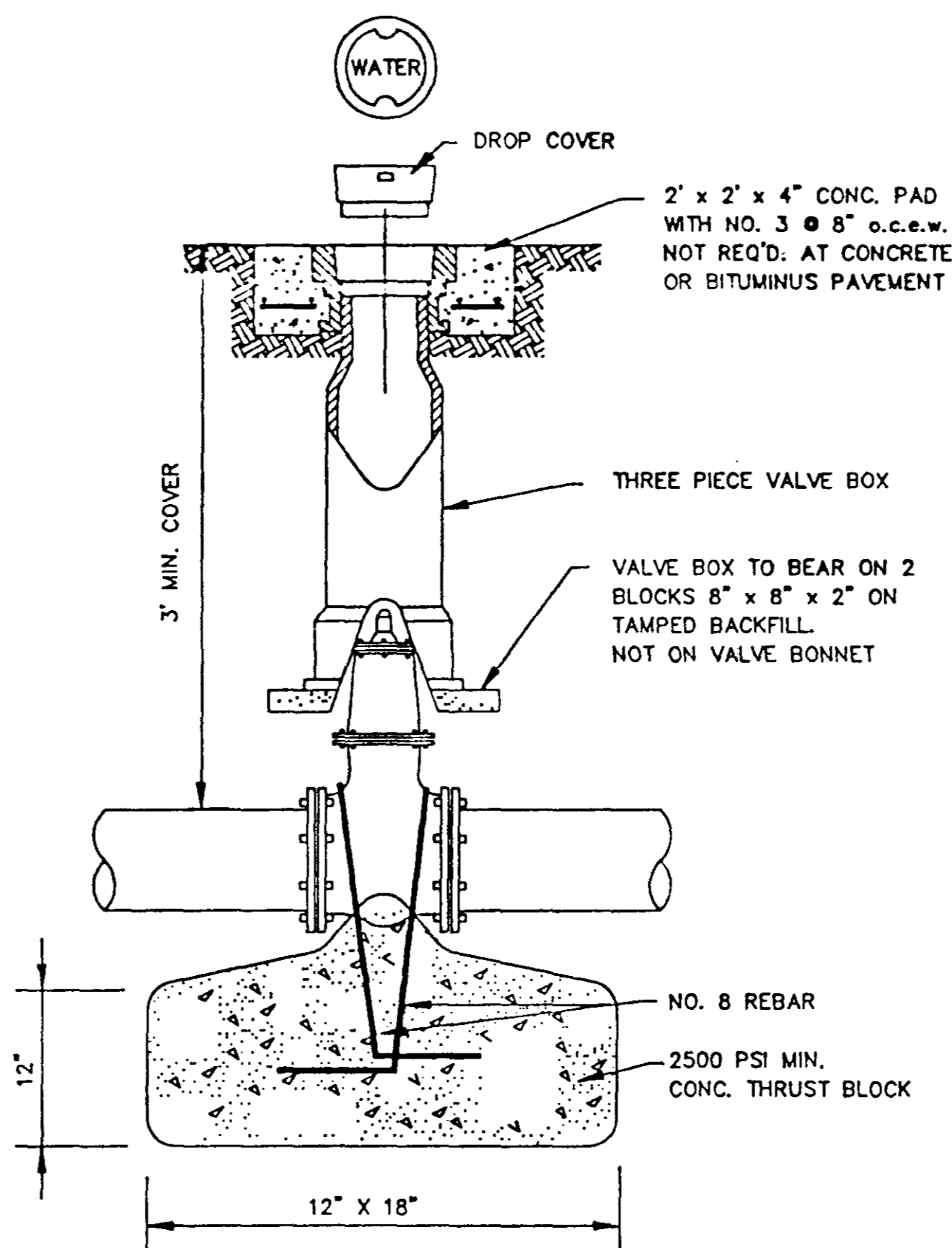
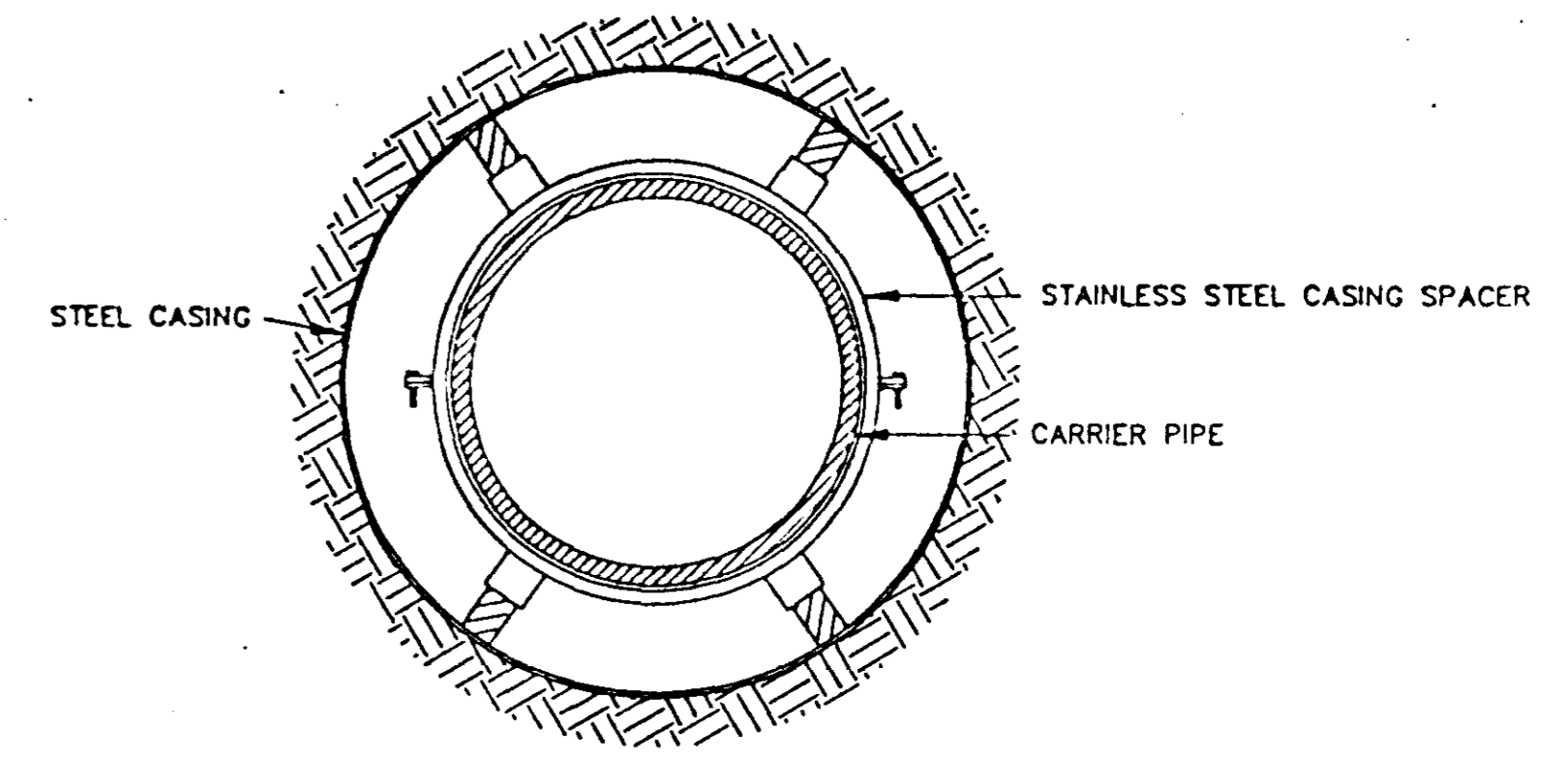
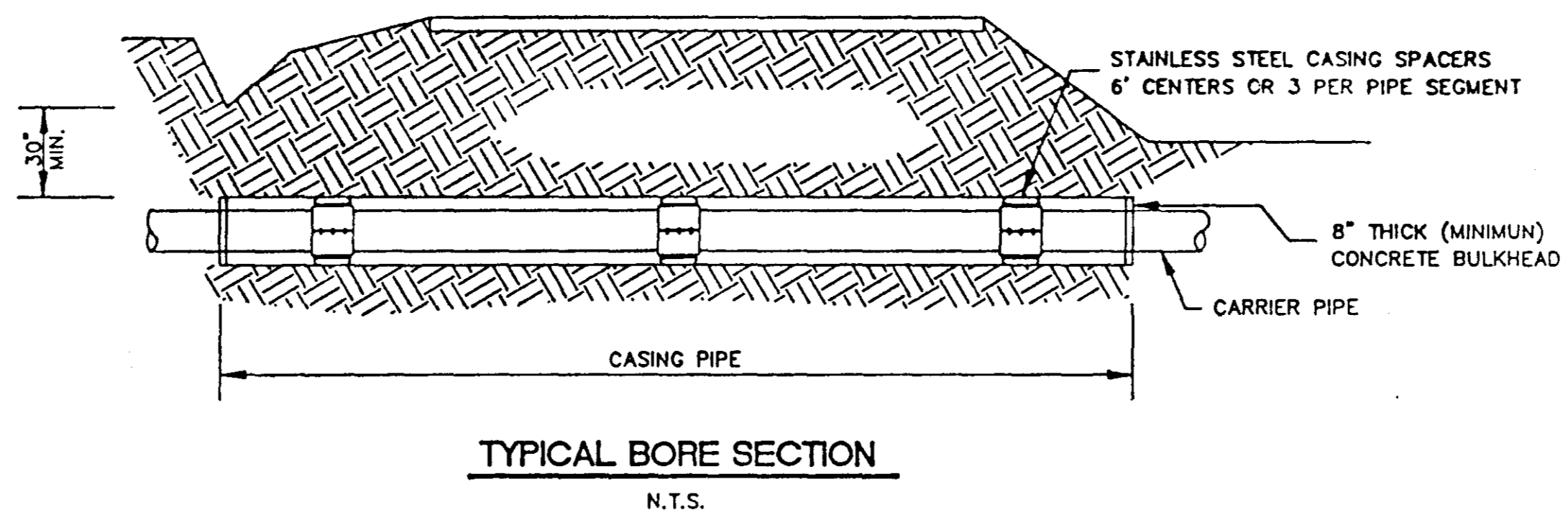
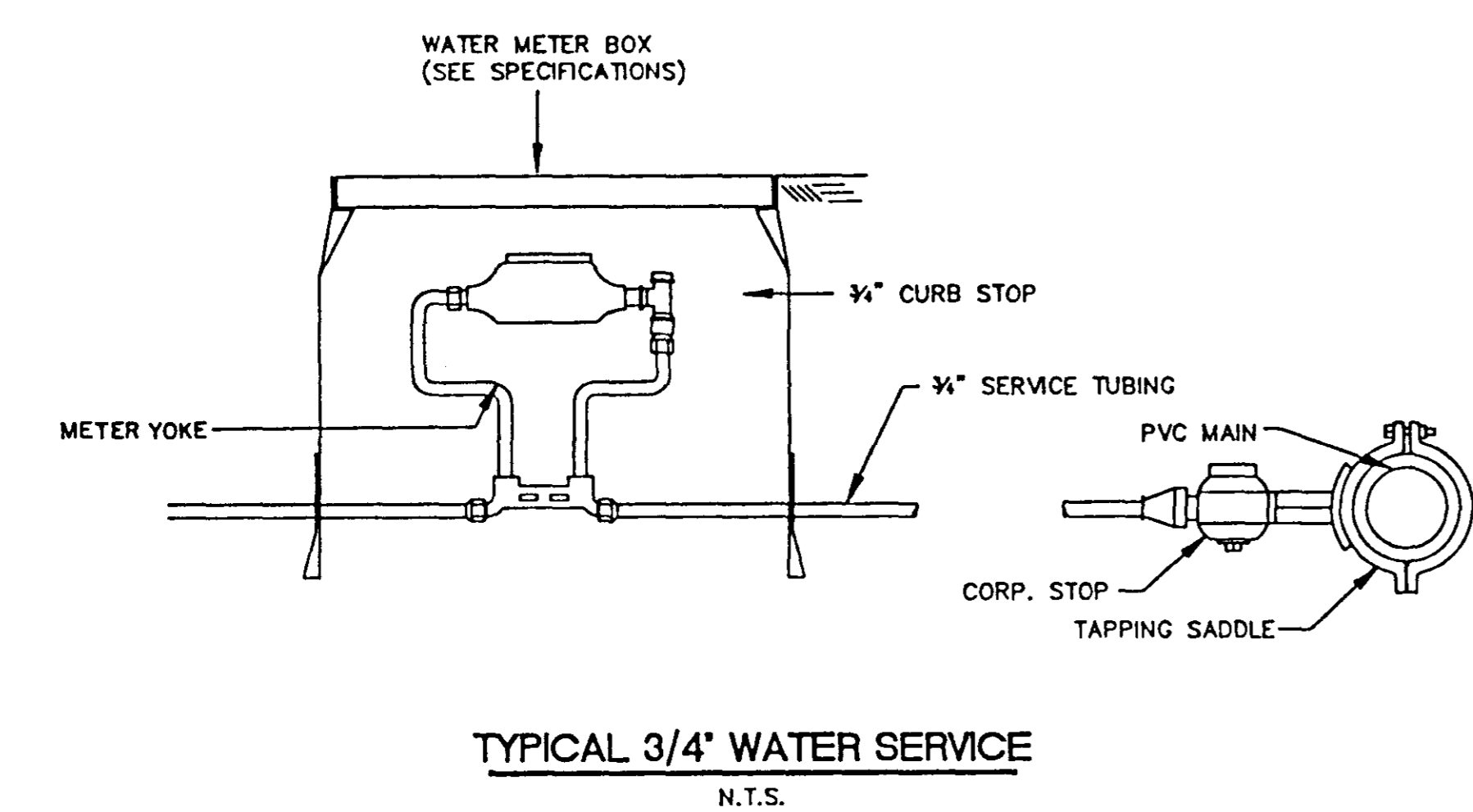
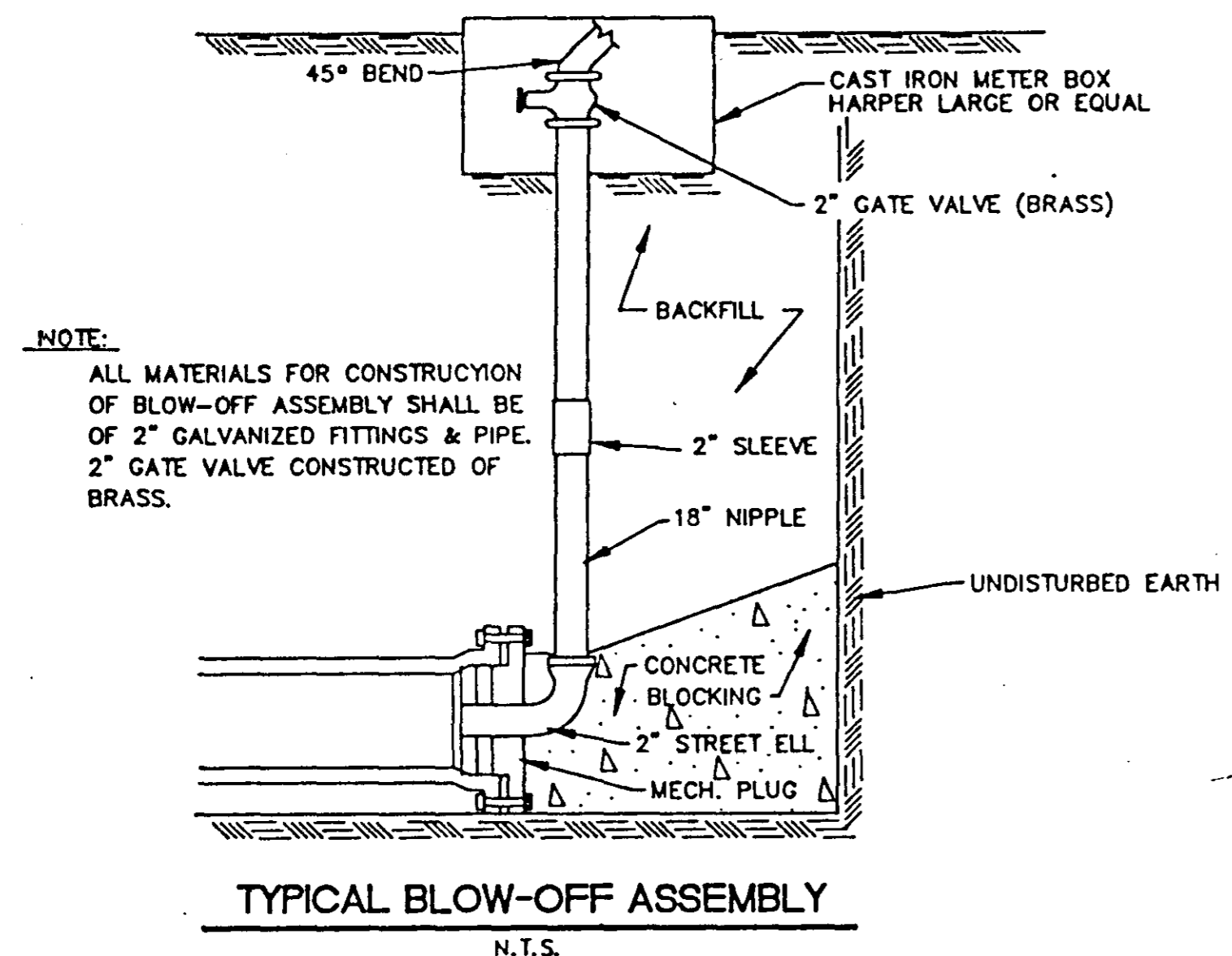
ANCHOR COUPLINGS REQ'D.

CITY OF RIDGELAND, MS.

STANDARD DETAILS

WATER MAIN DETAILS

DSGN:			DRAWING NO.
DRWN:			OF
CHKD:			
SCALE:			



CITY OF RIDGELAND, MS.

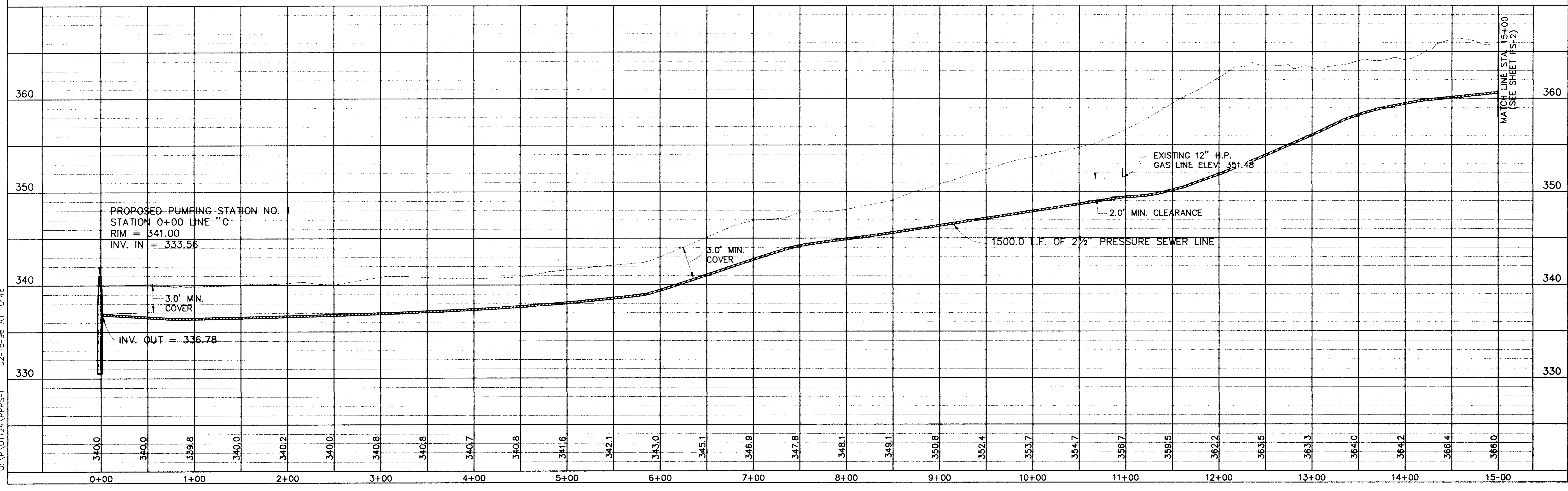
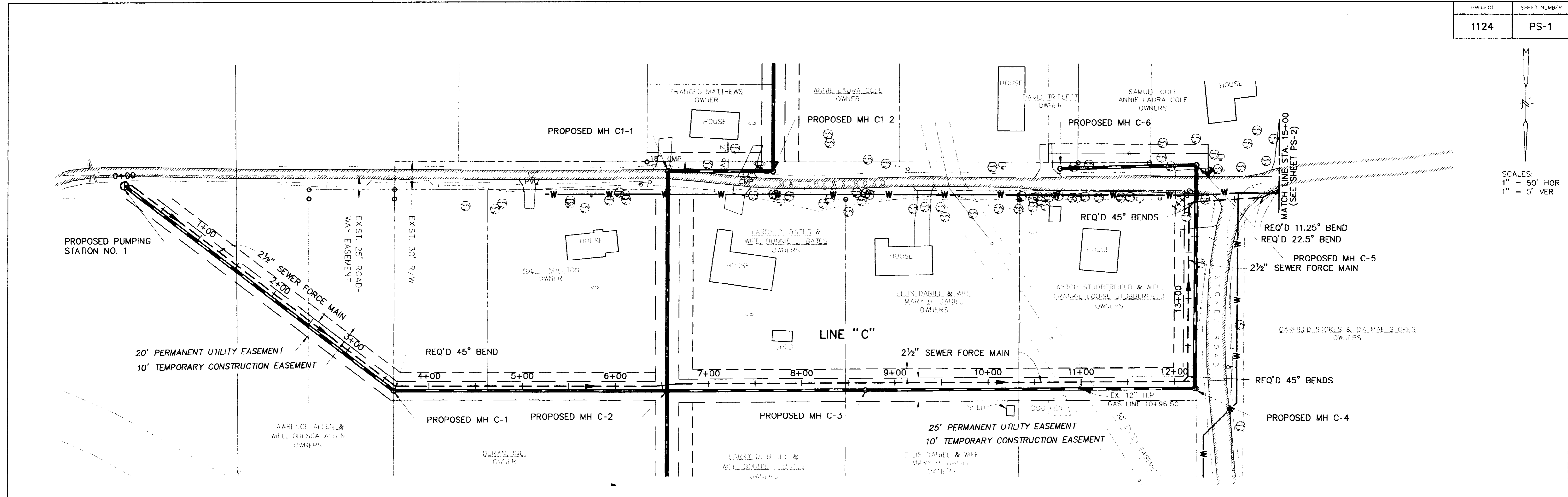
STANDARD DETAILS

WATER MAIN DETAILS

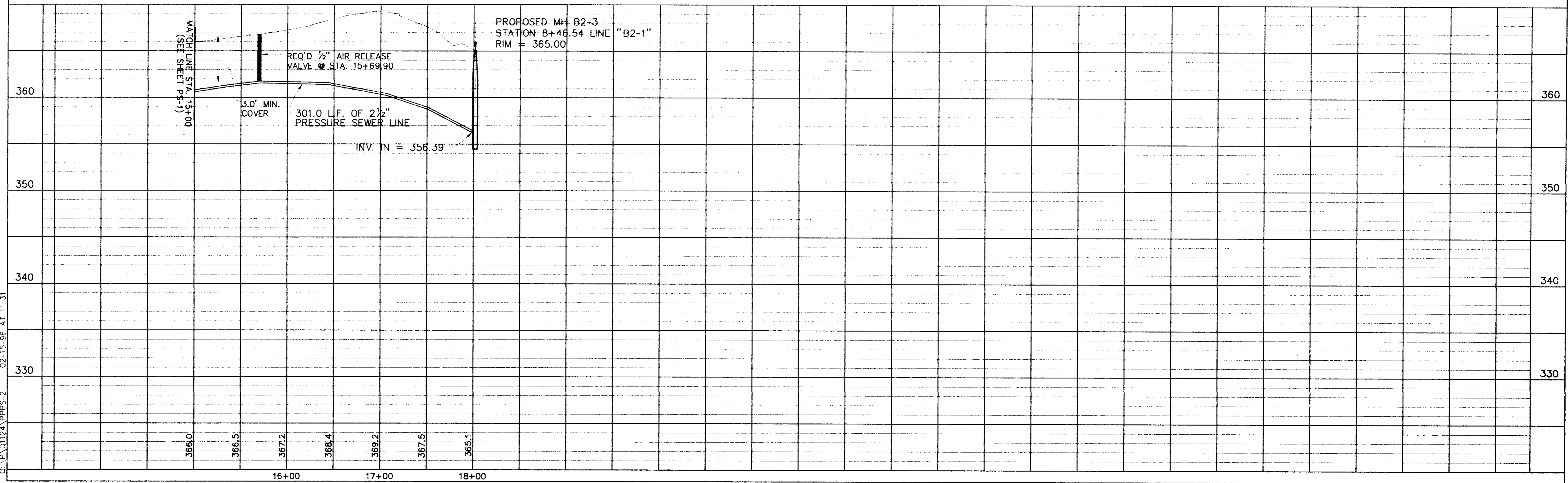
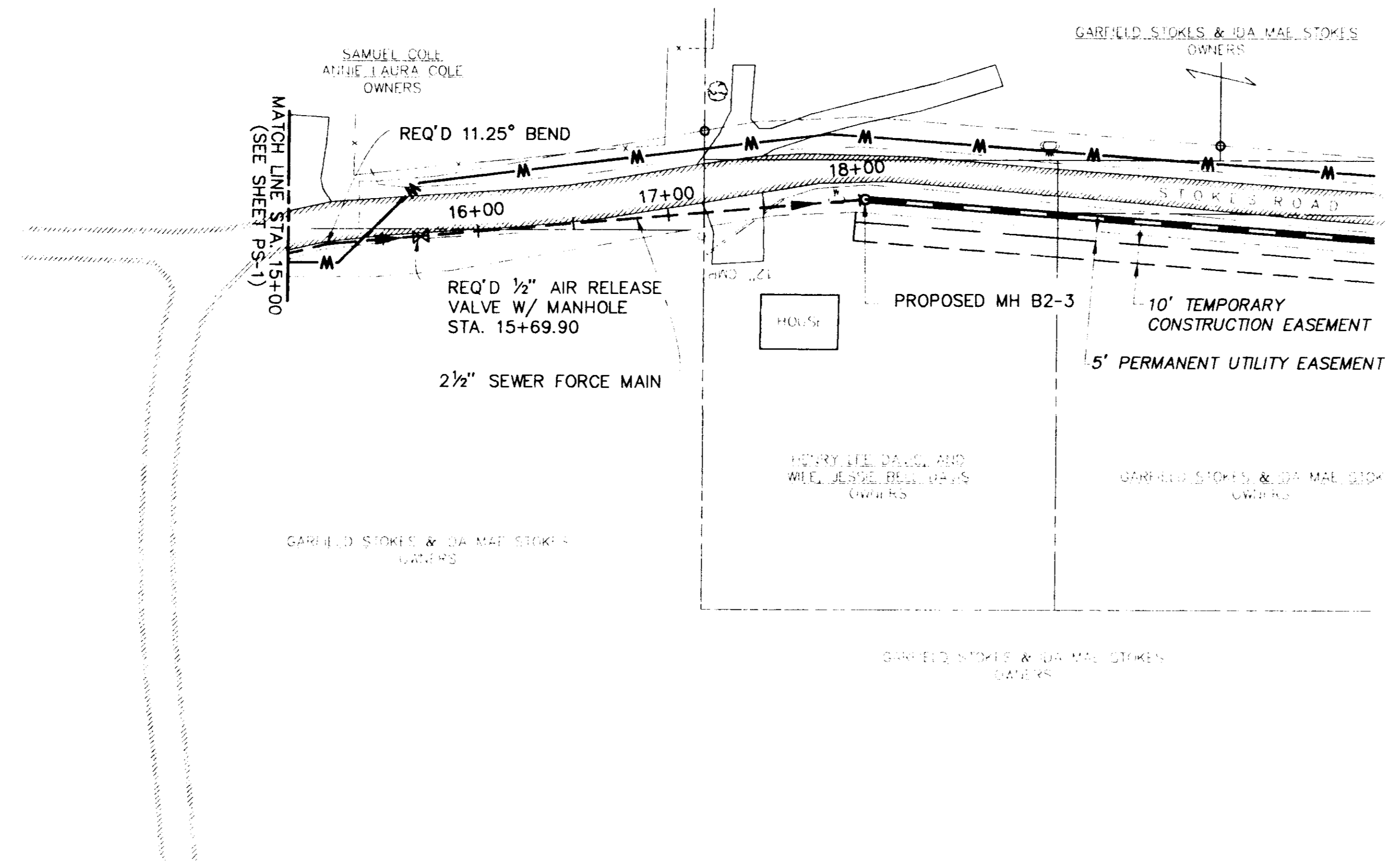
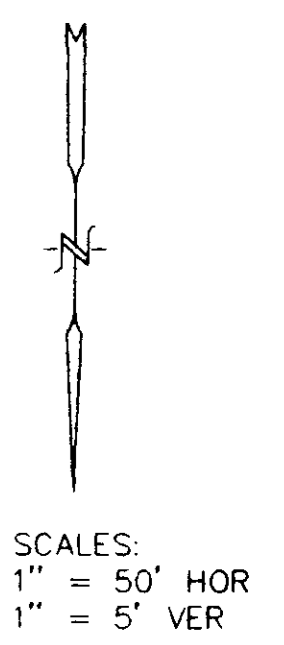
DSGN:			DRAWING NO.
DRWN:			OF
CHKD:			
SCALE:			

STANDARD 77176 FORM 12165

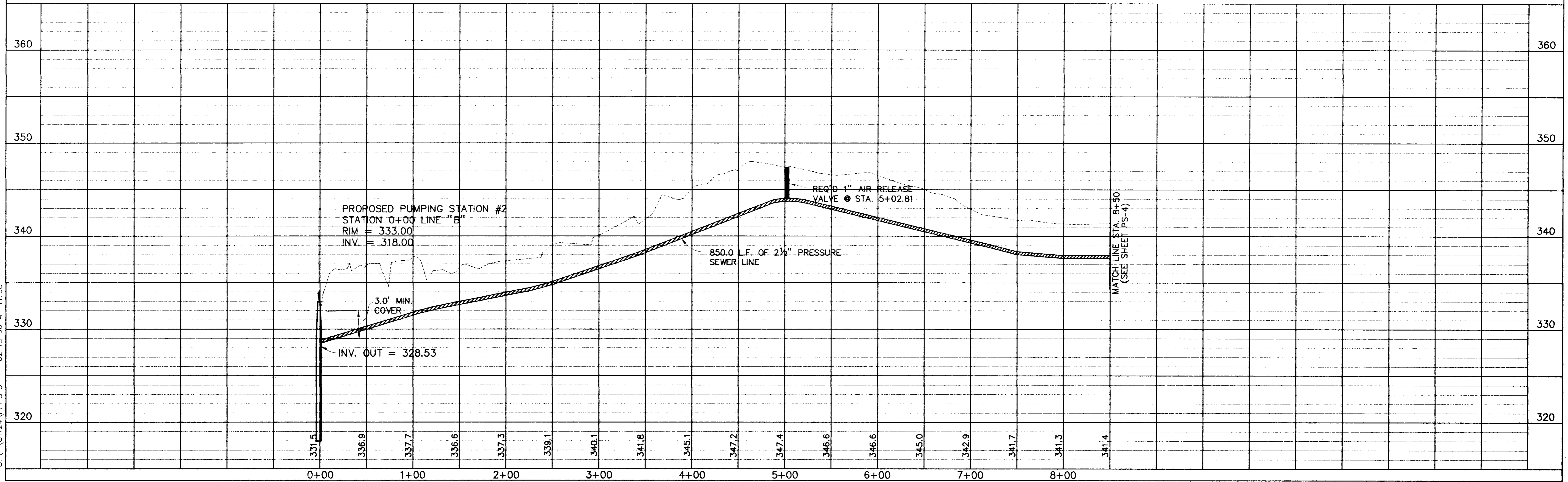
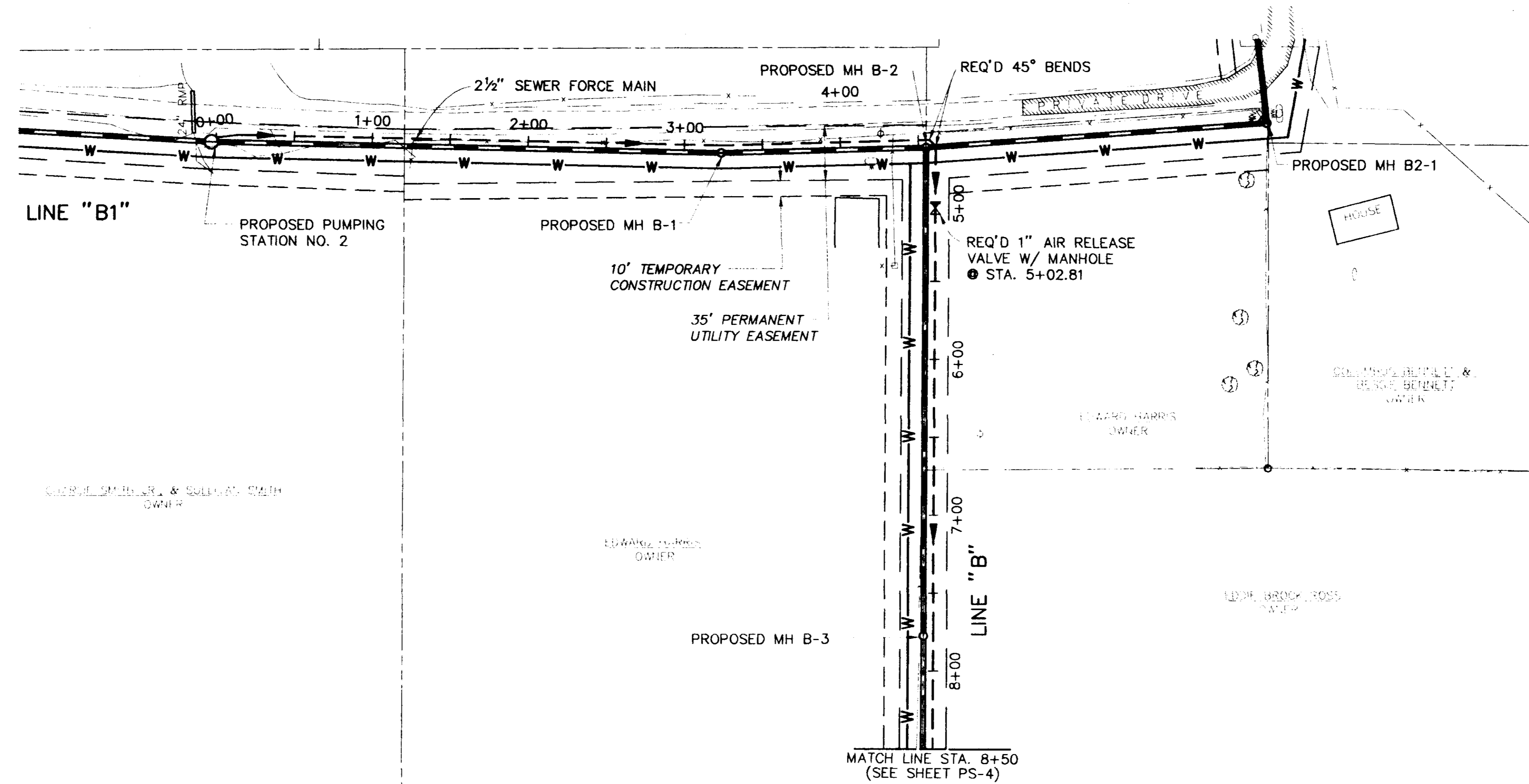
SCALES:
 1" = 50' HOR
 1" = 5' VER



0:\P\01124\PPPS-1 02-15-96 AT 10:46



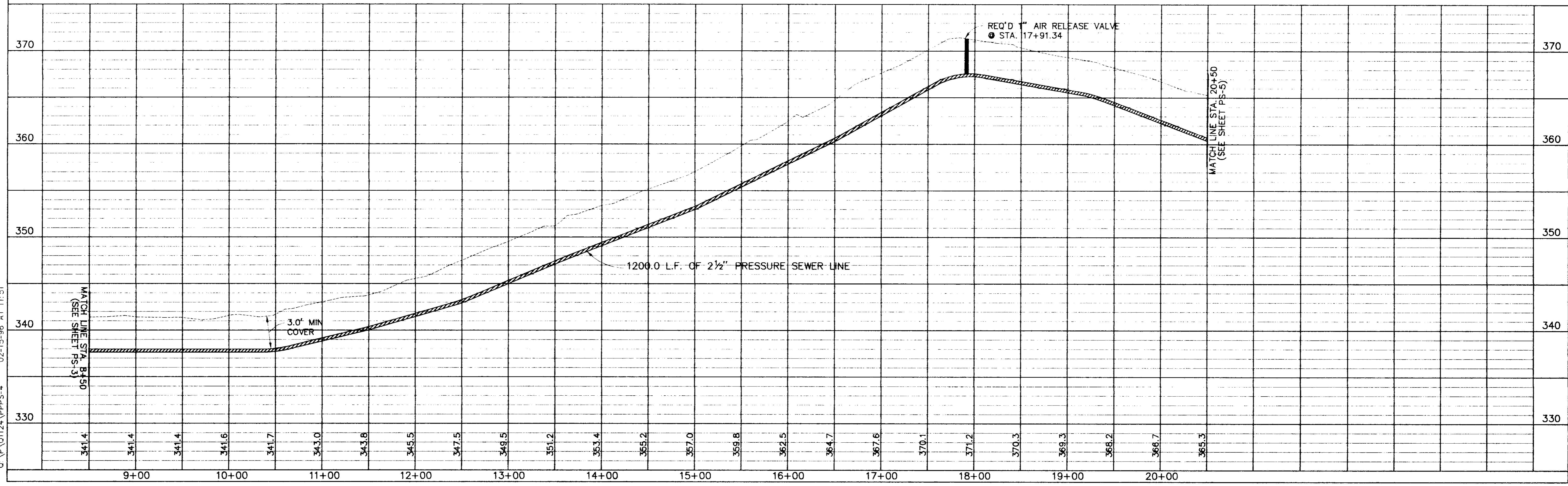
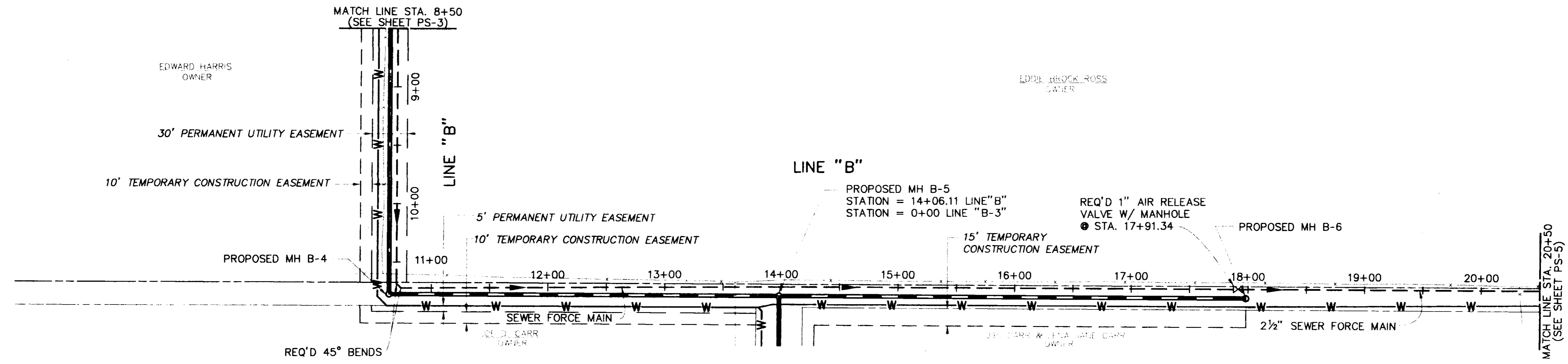
C:\P\01124\PPPS-2_02-15-96 AT 11:31



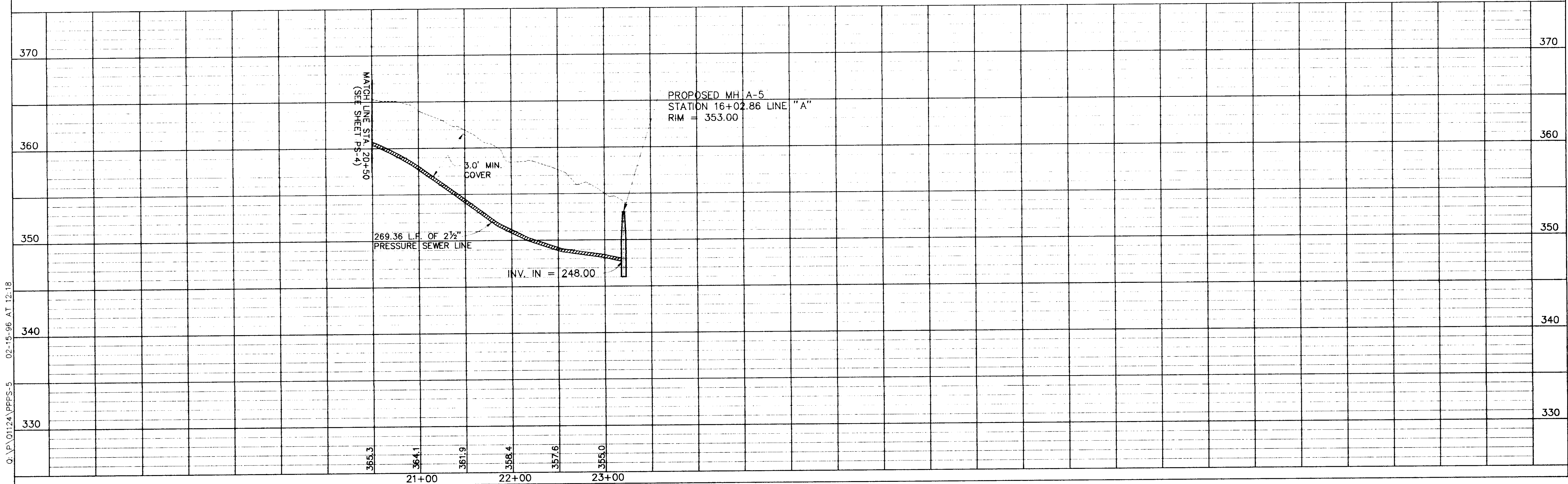
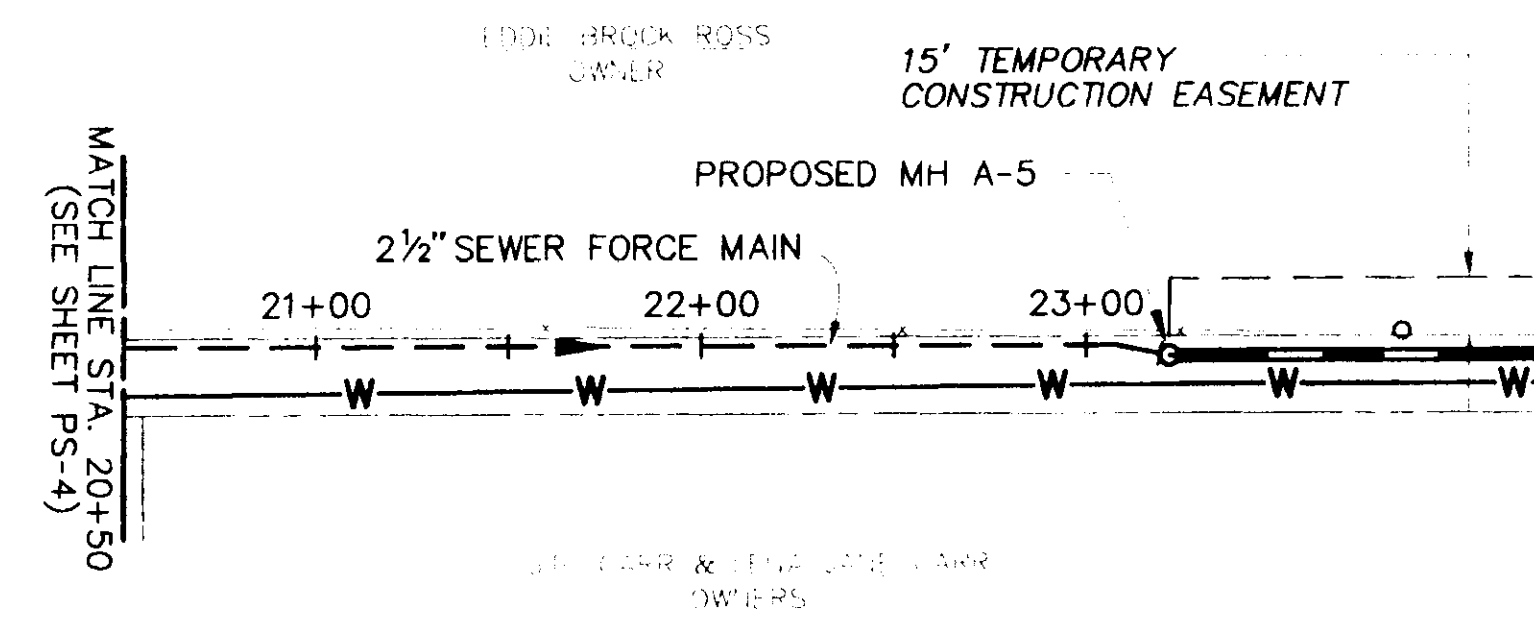
O:\P\01124\PPPS-3 02-15-96 AT 11:38



SCALES:
 1" = 50' HOR
 1" = 5' VER

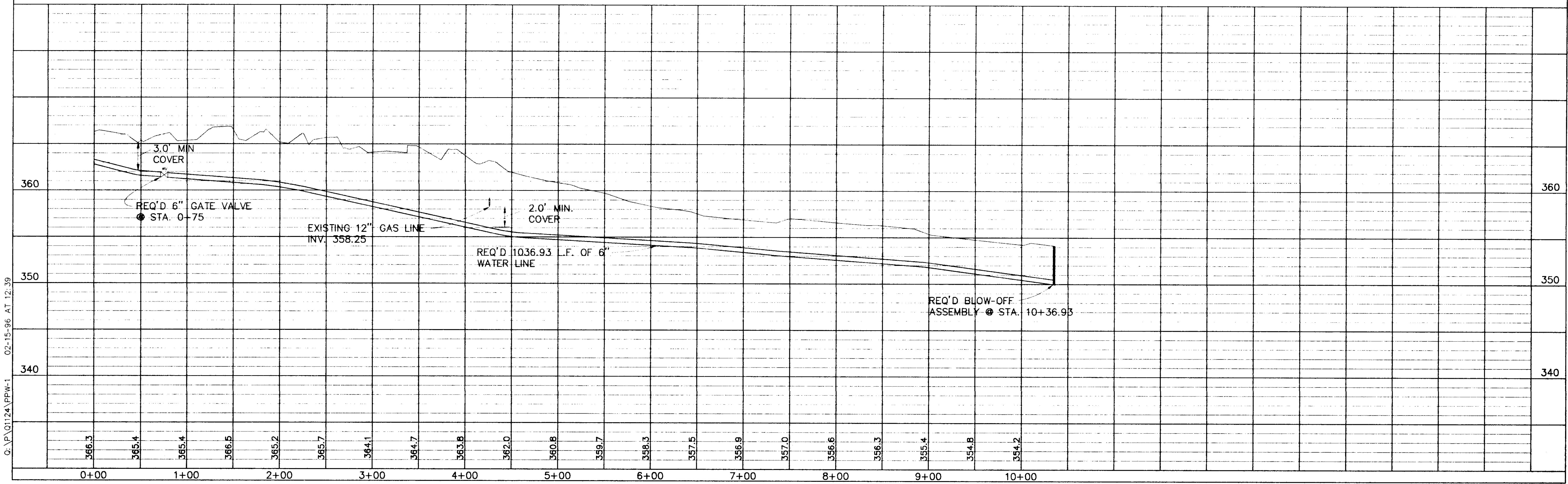
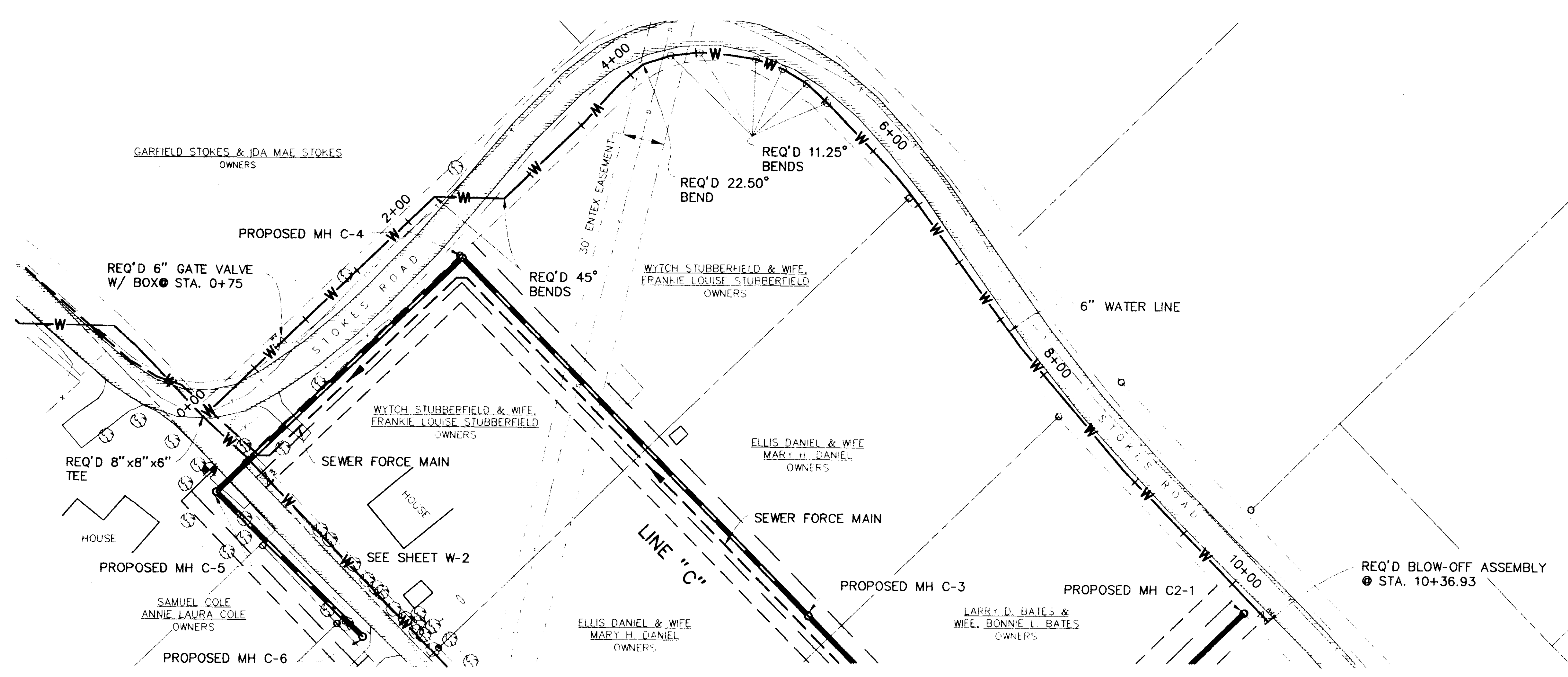


O:\P\01124\PPPS-4 02-15-96 AT 11:51



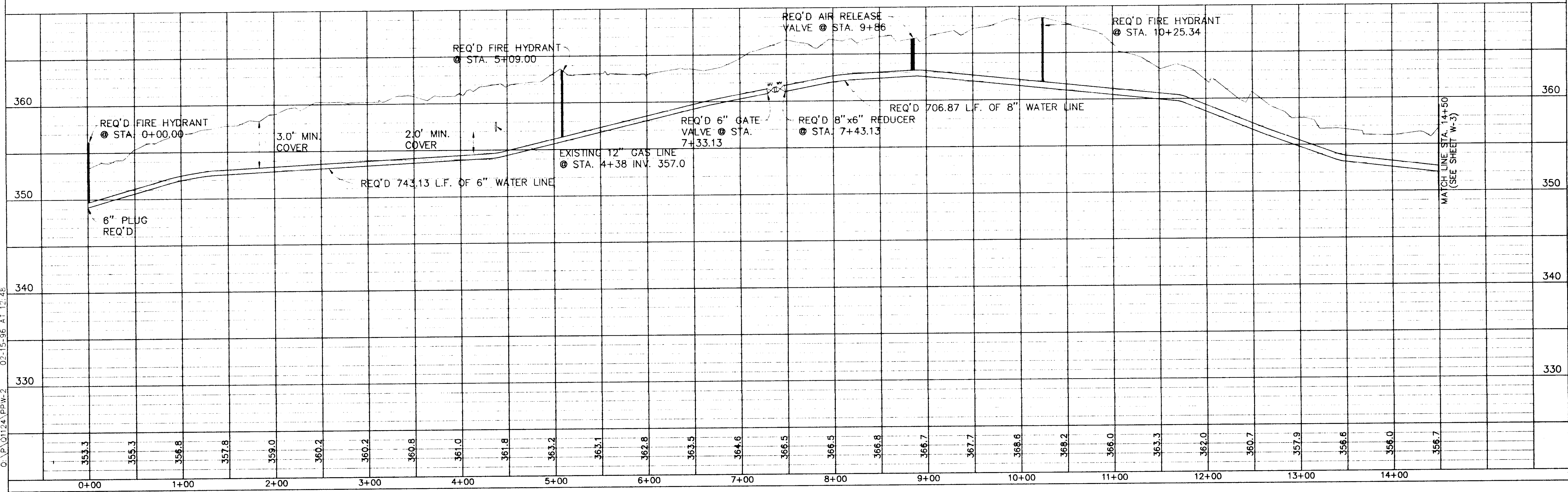
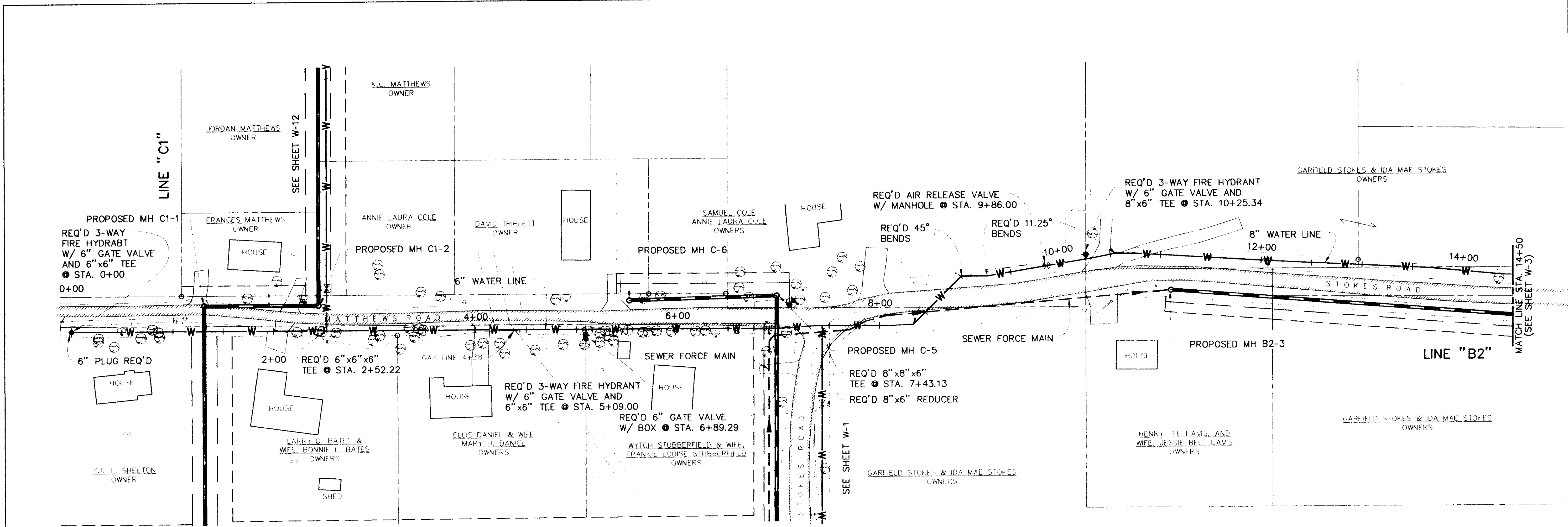
Q:\P\01124\PPPS-5 02-15-96 AT 12:18

SCALES:
 1" = 50' HOR
 1" = 5' VER



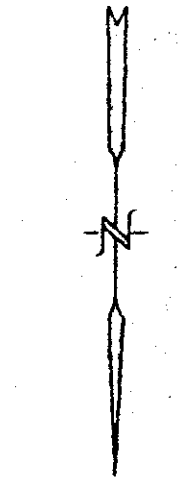
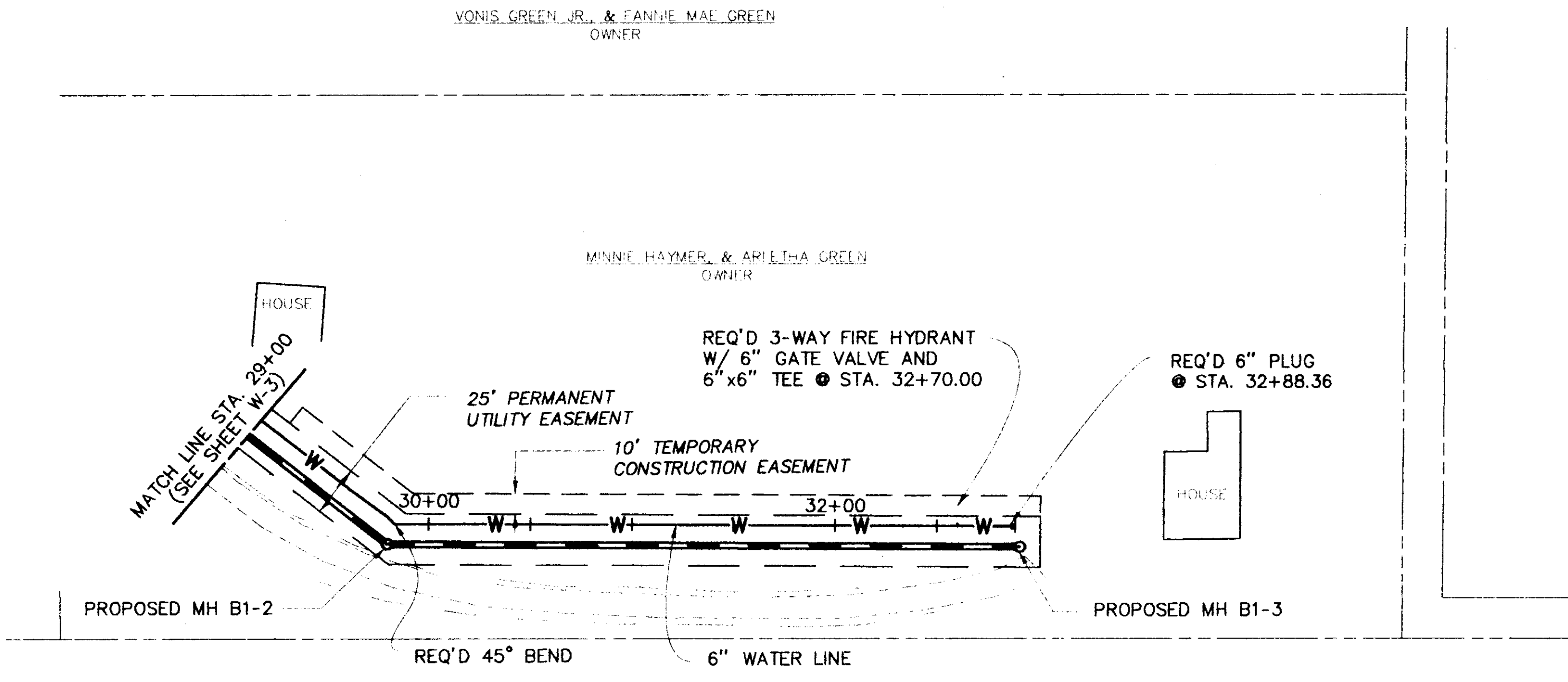
G:\P\01124\PPW-1 02-15-96 AT 12:39

SCALES:
 1" = 50' HOR
 1" = 5' VER

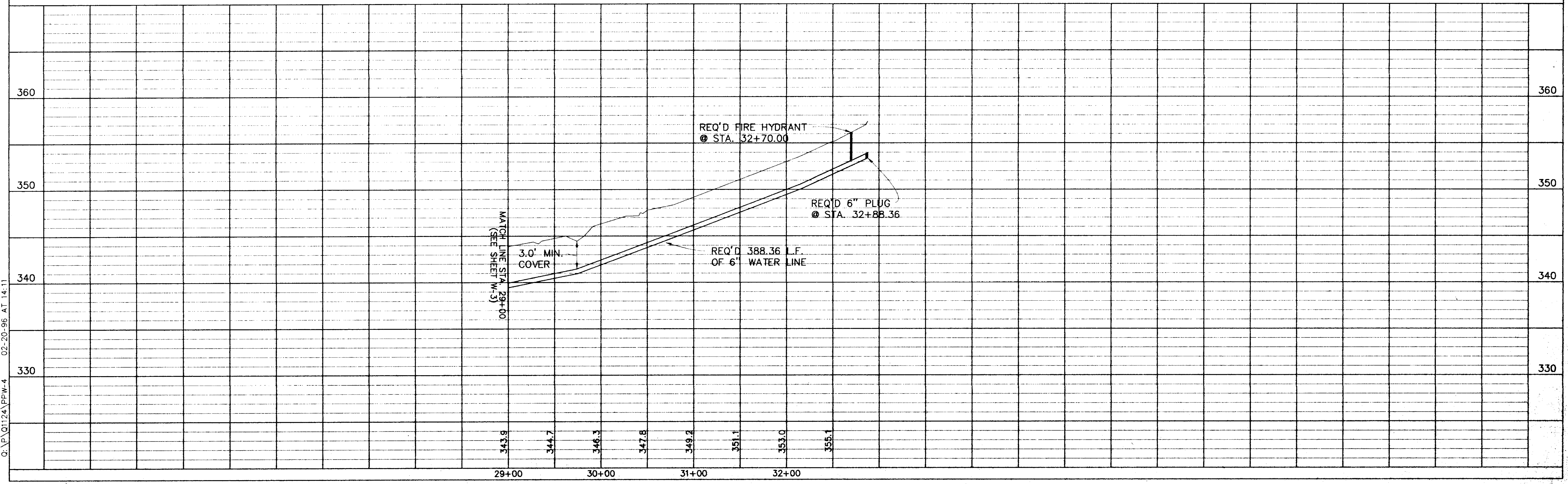


O:\PA\01124_PPW-2 02-15-96 AT 12:48

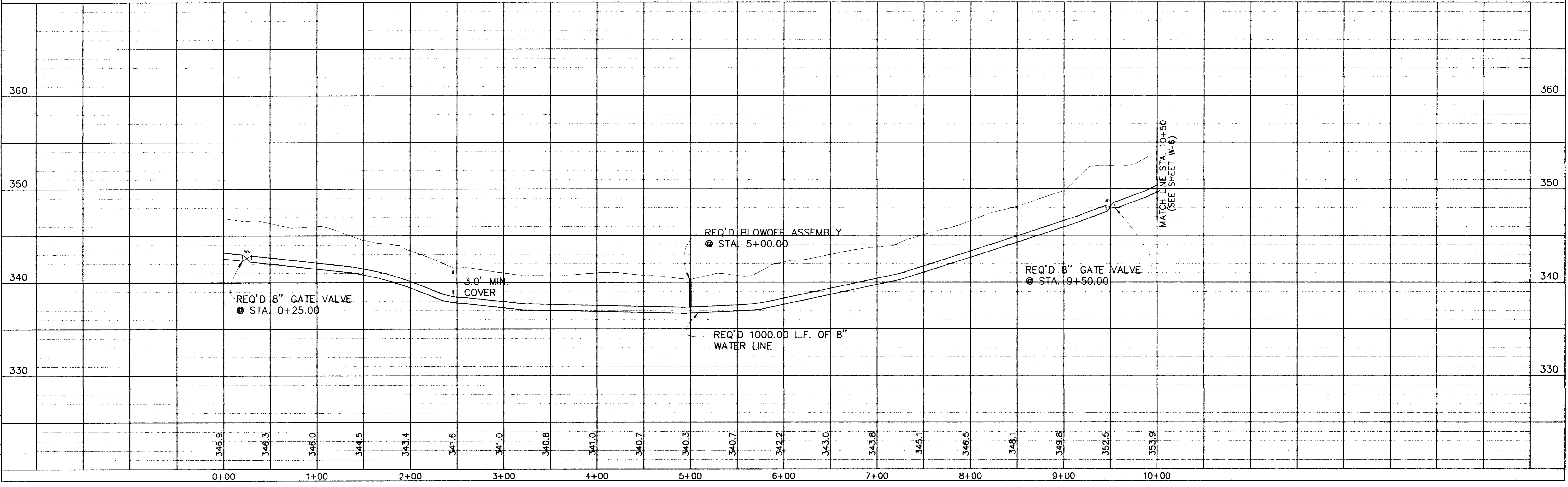
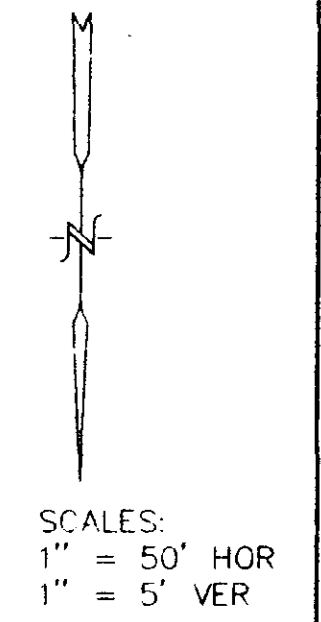
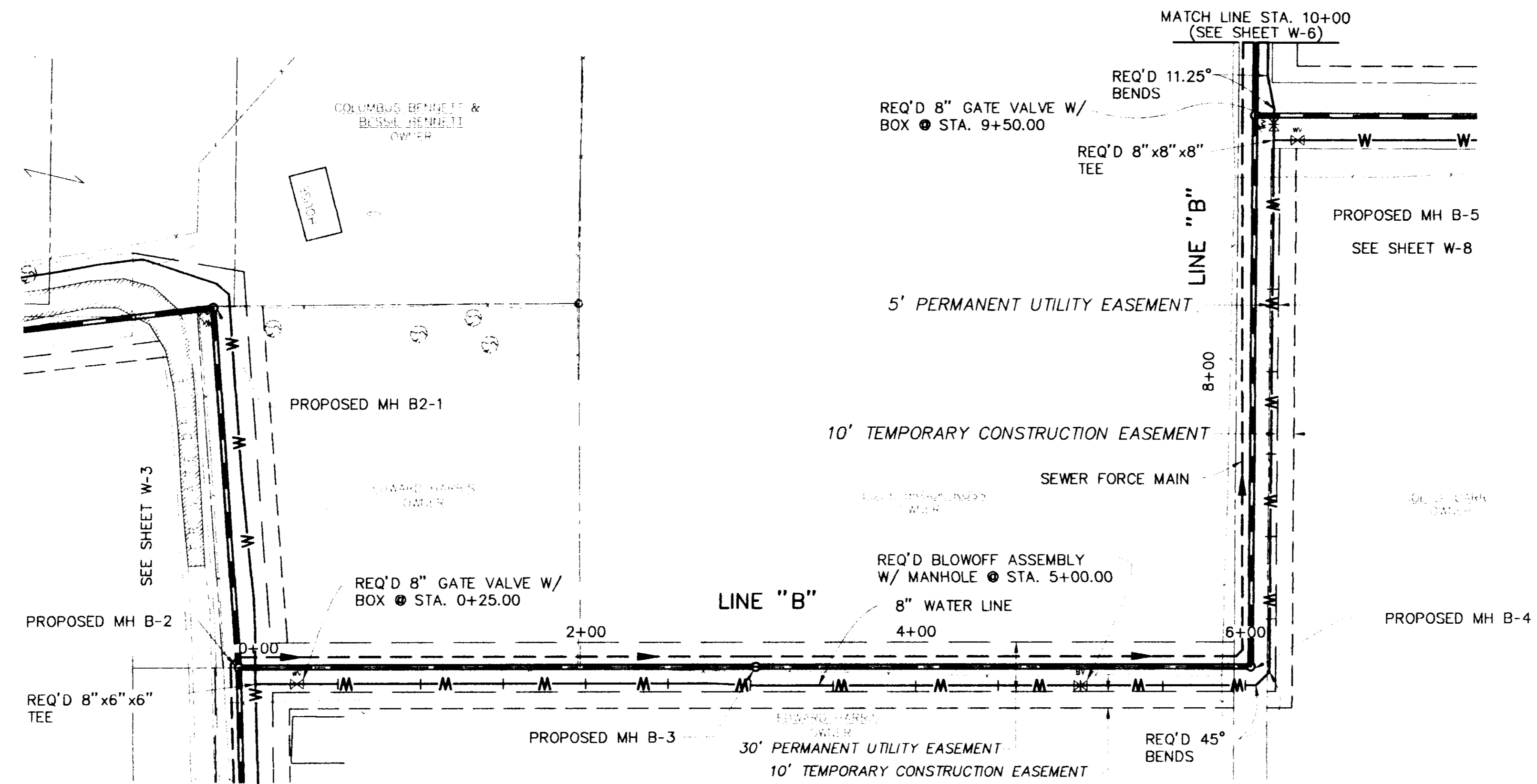
PROJECT	SHEET NUMBER
1124	W-4



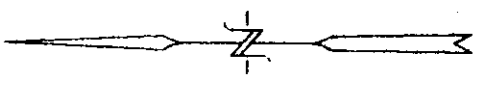
SCALES:
 1" = 50' HOR
 1" = 5' VER



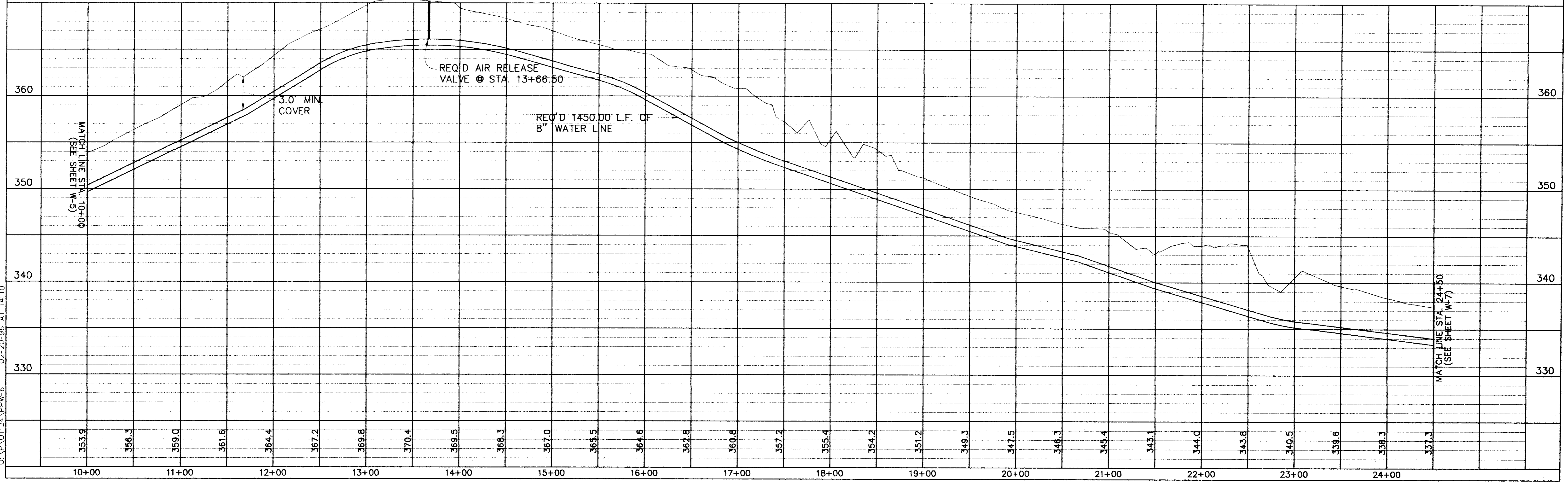
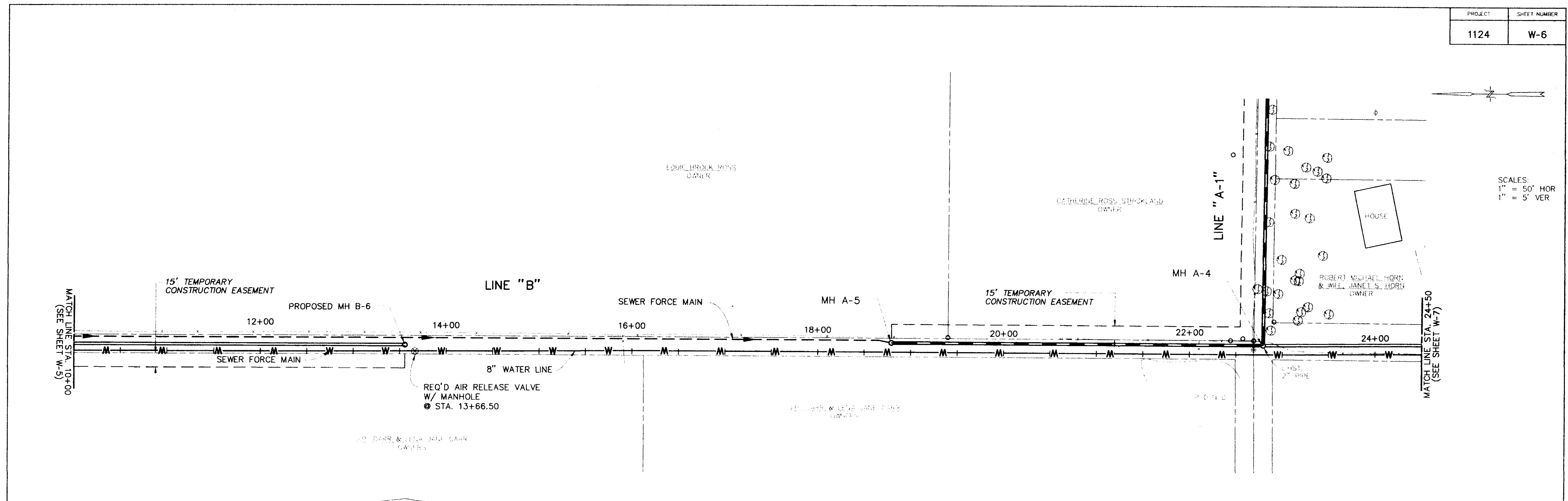
C:\P\0124\PPW-4 02-20-96 AT 14:11



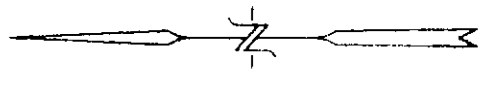
O:\P\01124\PPW-5 02-15-96 AT 13:11



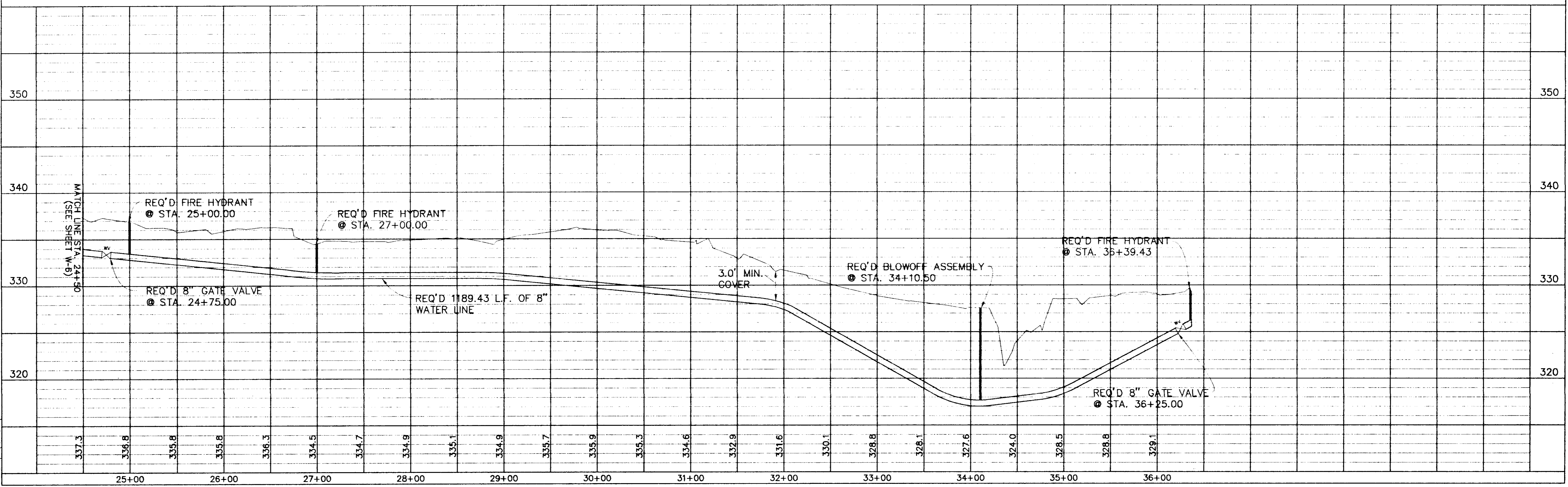
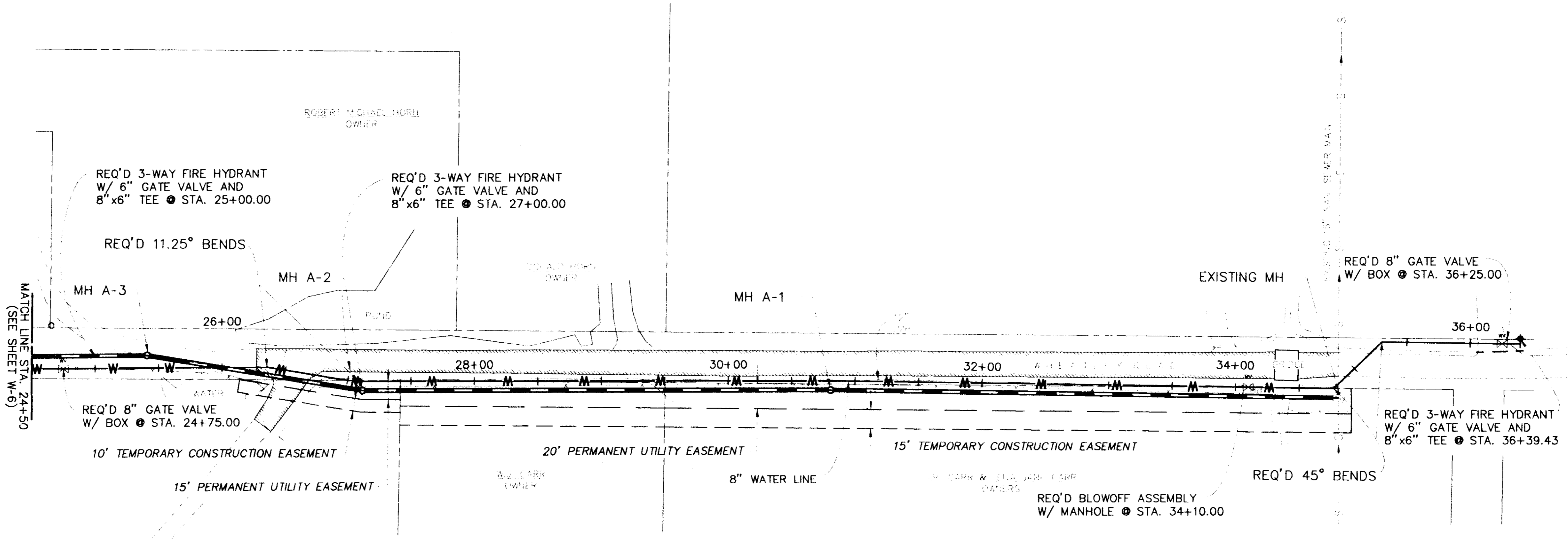
SCALES:
 1" = 50' HOR
 1" = 5' VER



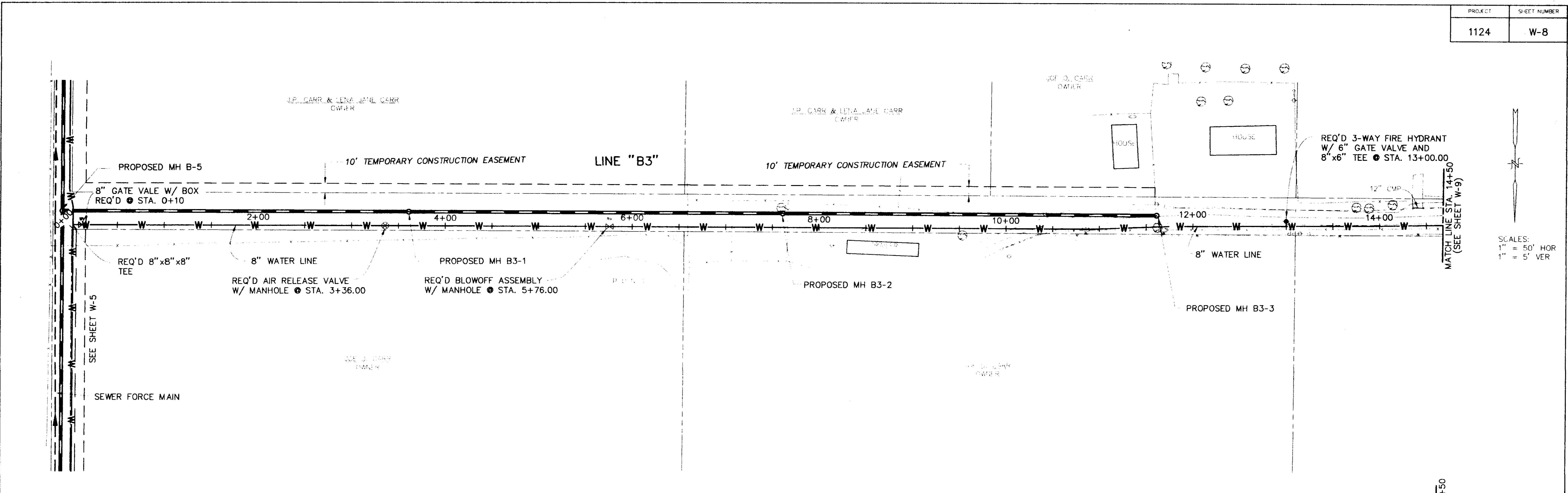
O:\P\01124\PPW-6 02-20-96 AT 14:10



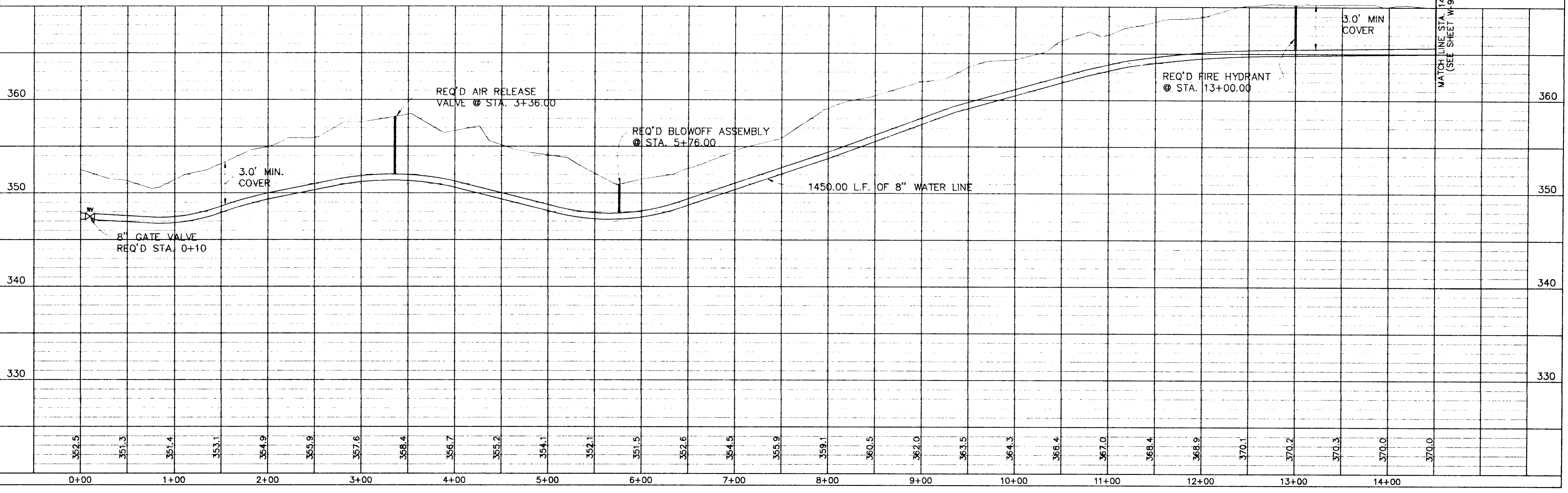
SCALES:
 1" = 50' HOR
 1" = 5' VER



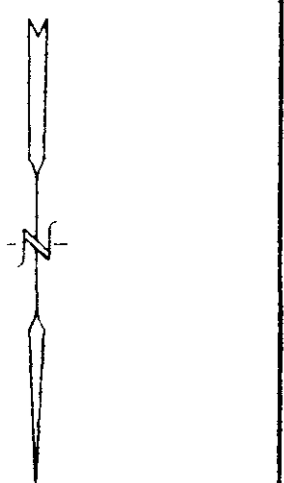
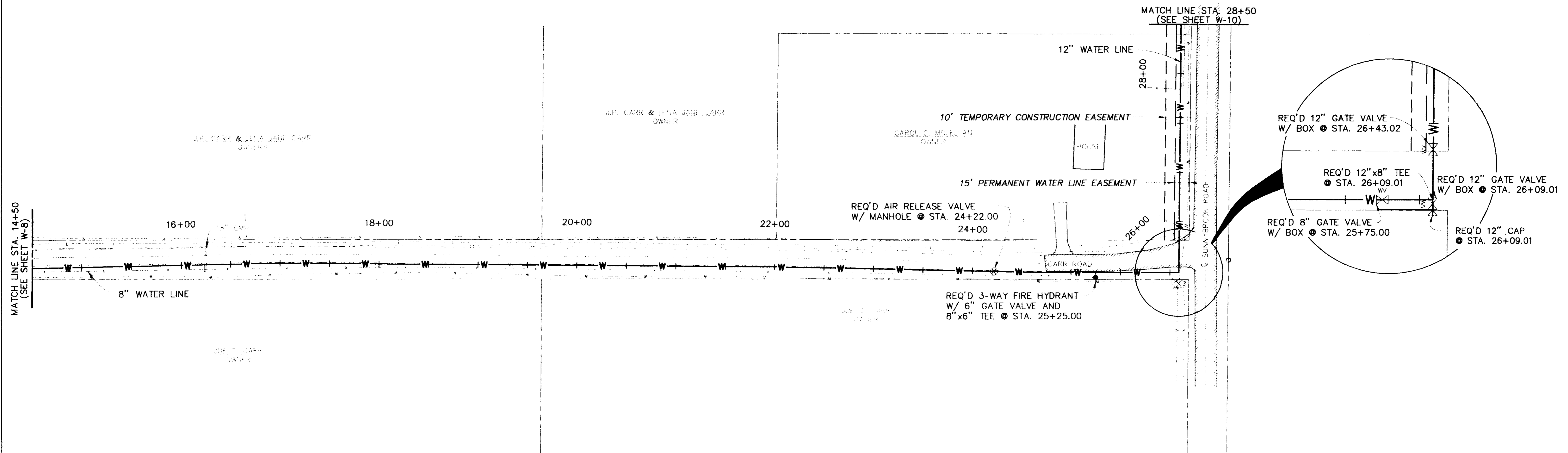
C:\P\01124\PPW-7 02-15-96 AT 13:21



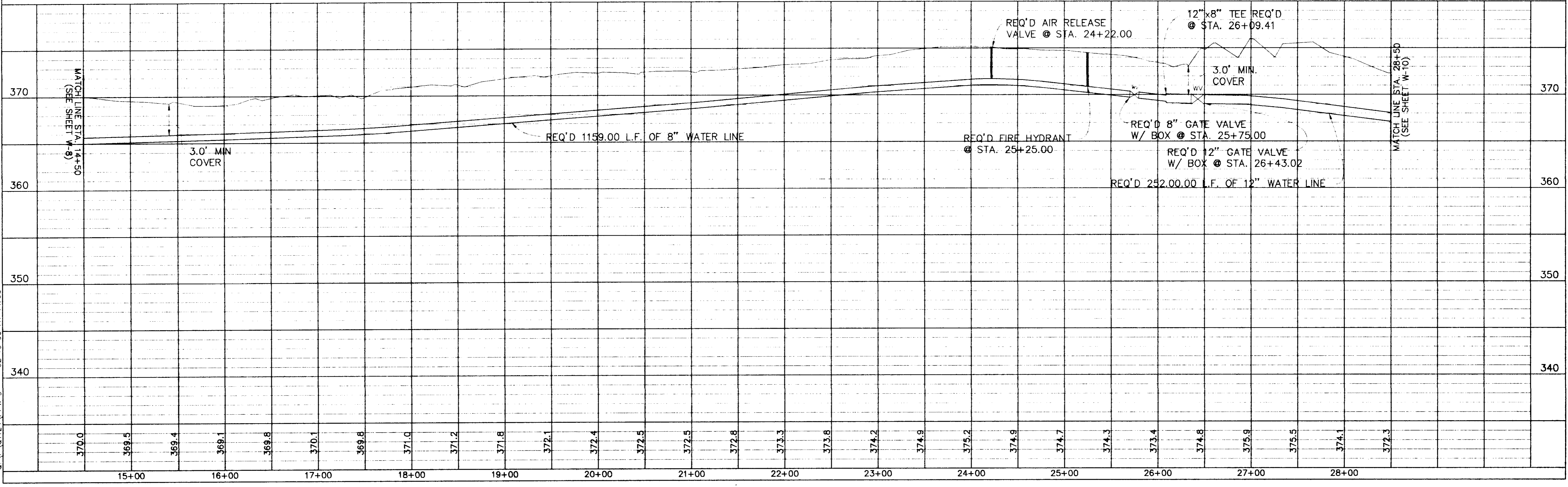
SCALES:
 1" = 50' HOR
 1" = 5' VER



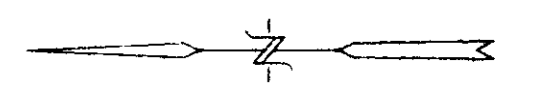
C:\P\01124\PPW-8 02-15-96 AT 13:48



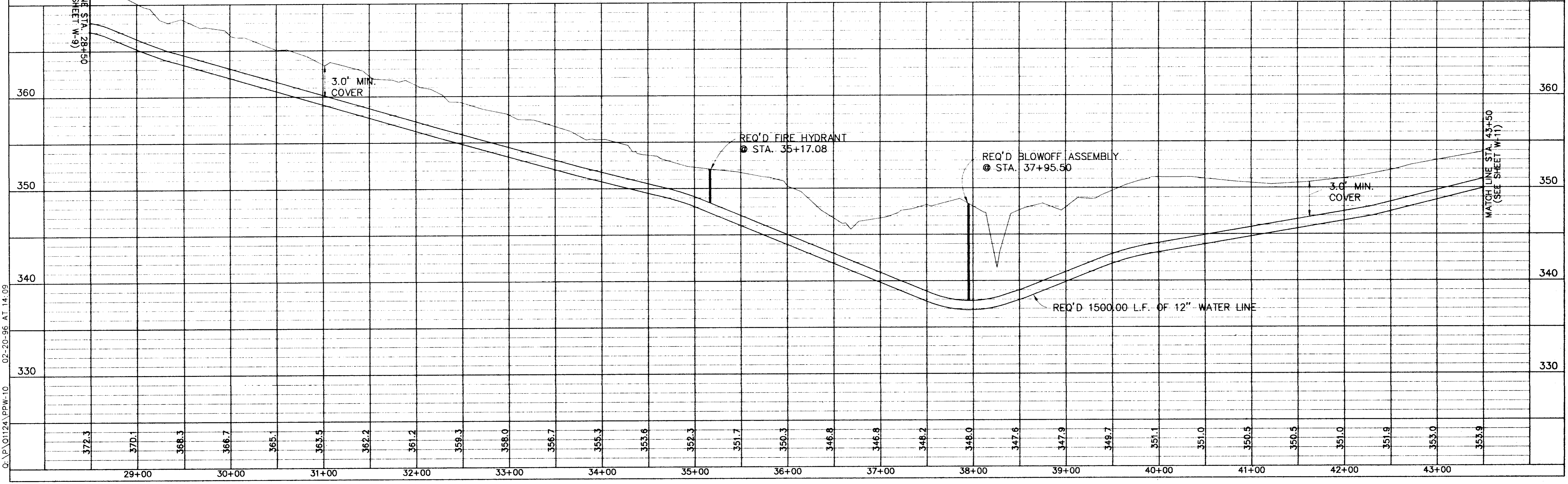
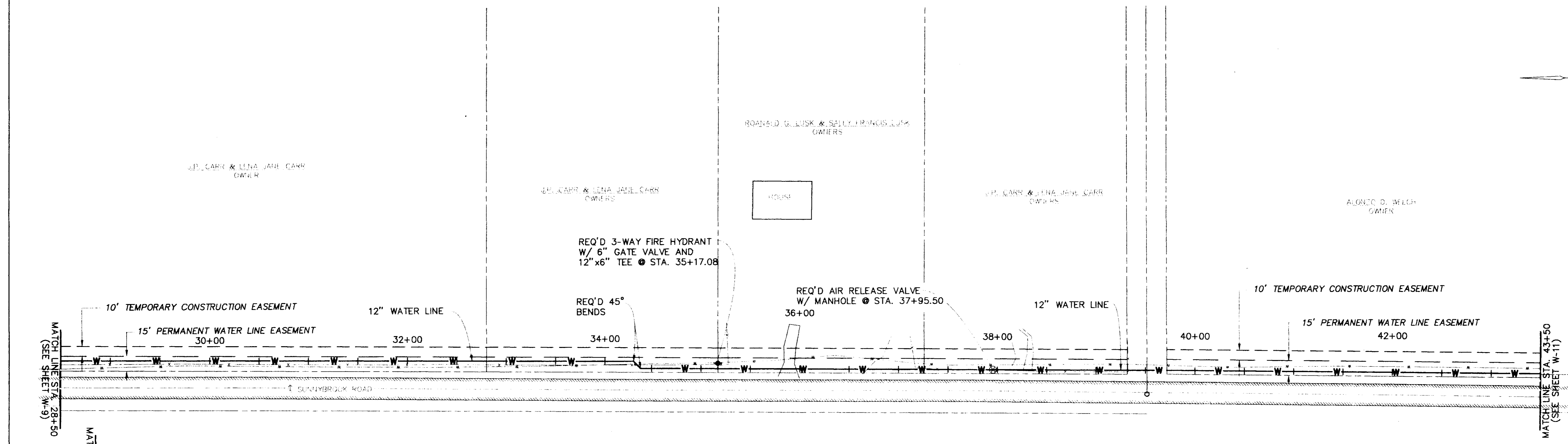
SCALES:
1" = 50' HOR
1" = 5' VER



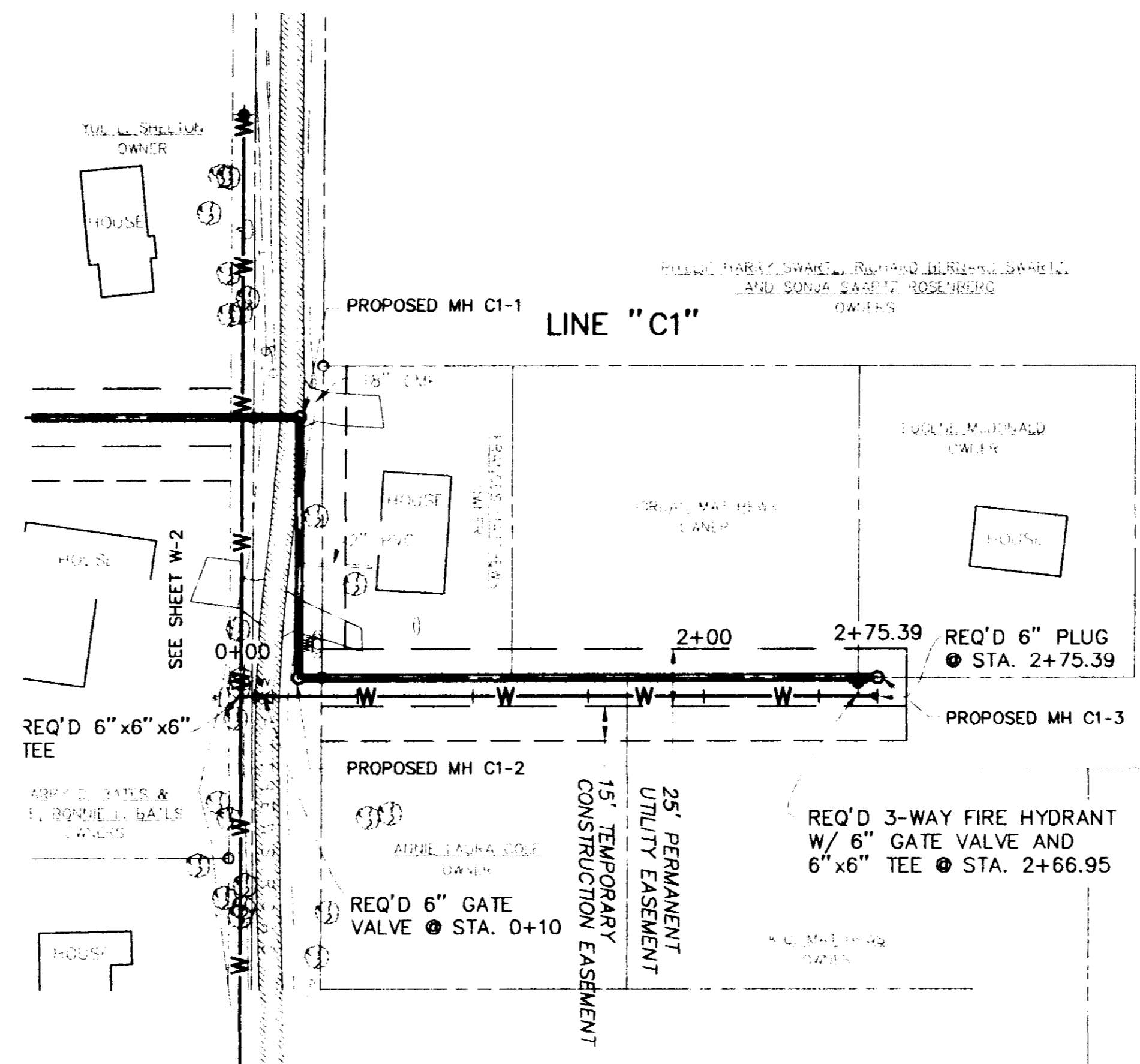
Q:\P\01124\PPW-9 02-15-96 AT 14:00



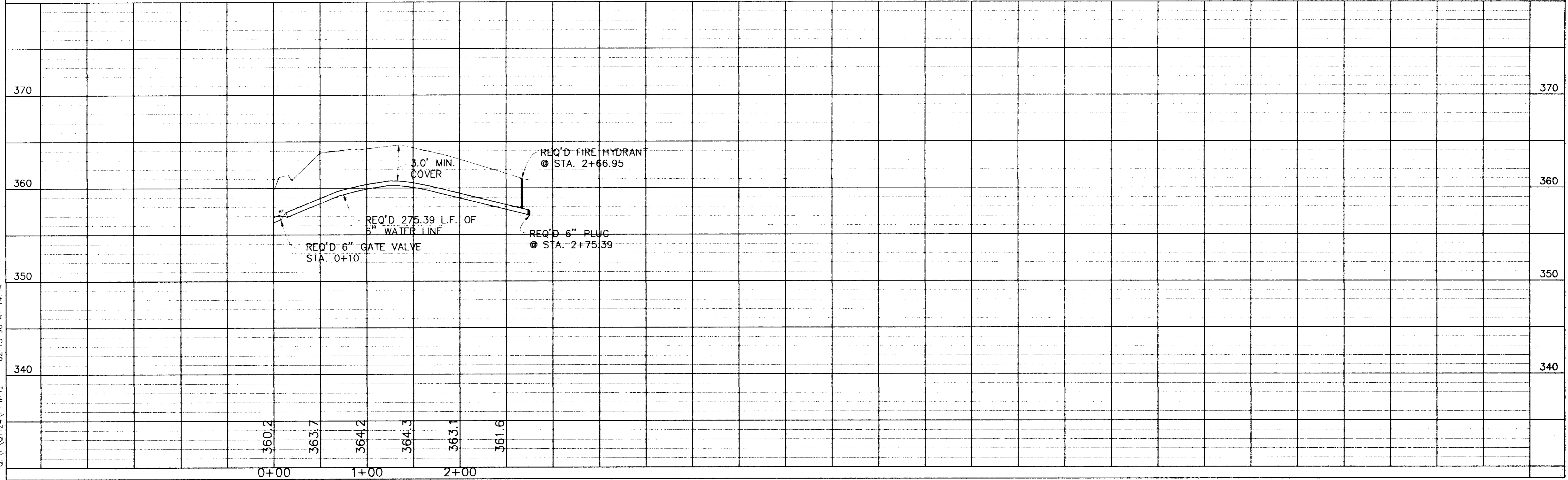
SCALES:
 1" = 50' HOR
 1" = 5' VER



Q:\P\01124\PPW-10 02-20-96 AT 14:09



SCALES:
 1" = 50' HOR
 1" = 5' VER



Q:\P\01124\PFW-12 02-15-96 AT 14:14