

SUNNYBROOK ROAD IMPROVEMENTS PHASE 1 STP-6946-00(001) CITY OF RIDGELAND MADISON COUNTY, MISSISSIPPI

WAGGONER
Engineering, Inc.
Engineers, Scientists, Planners
143 LeFleurs Square
JACKSON, MS 39211
601-355-9526
FAX 601-352-3945

CITY OFFICIALS:

MAYOR

GENE F. McGEE

BOARD OF ALDERMEN

- KEN HEARD, WARD 1
- CHUCK GAUTIER, WARD 2
- CAROLE A. DAVIS, WARD 3
- LARRY ROBERTS, WARD 4
- SCOTT JONES, WARD 5
- LINDA DAVIS TRUNZLER, WARD 6
- GERALD STEEN, AT-LARGE

CITY ATTORNEY

JERRY MILLS

DIRECTOR OF PUBLIC WORKS

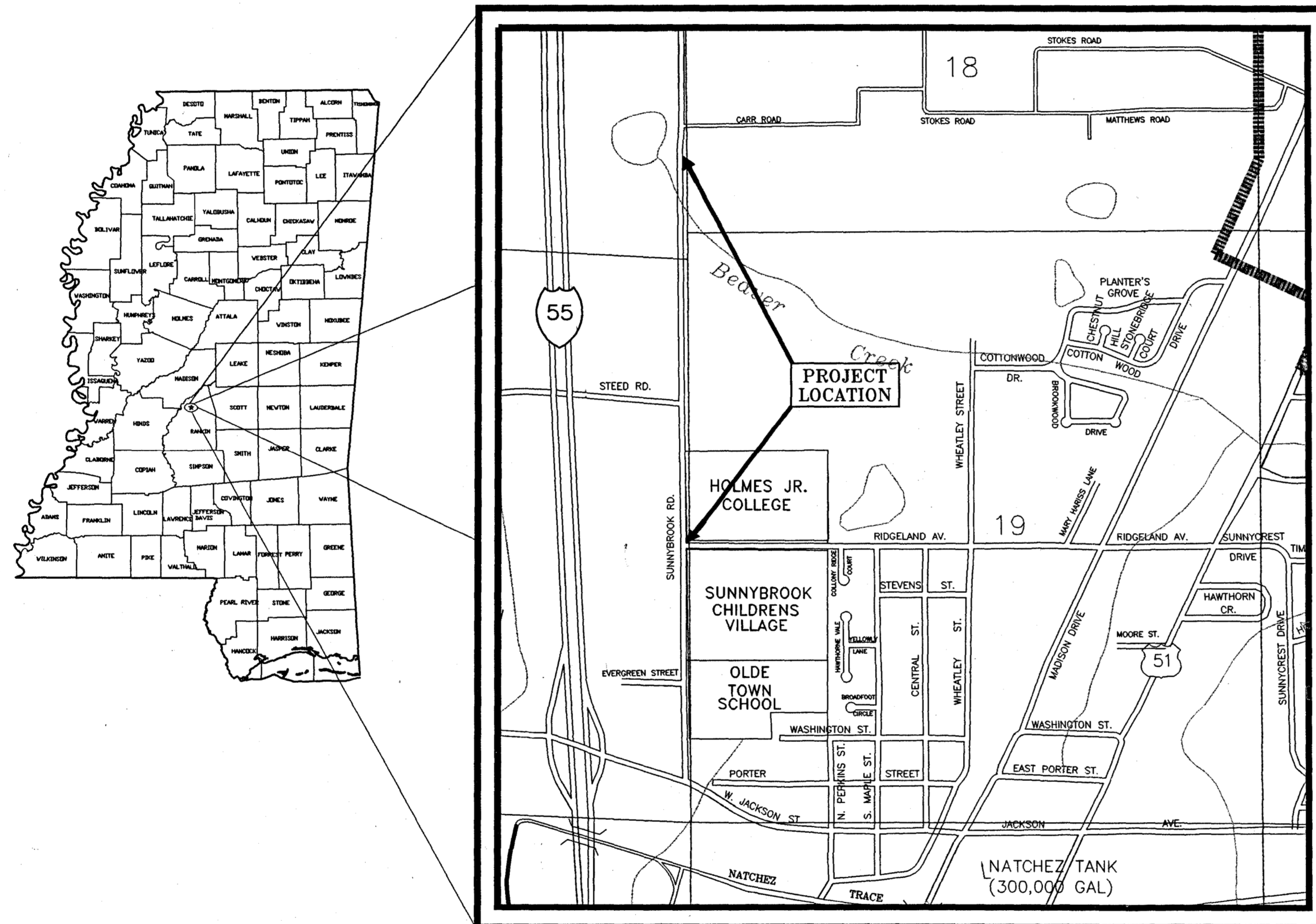
SAM C. VINSON, P.E.

ASST. DIRECTOR OF PUBLIC WORKS

SID HAWTHORNE

ASST. CITY ENGINEER

DAVID E. WILLIAMS, P.E.



VICINITY MAP
APRIL, 2002
T01-068

SUNNYBROOK ROAD

DESIGN SPEED = 45 mph
PROJECTED:
ADT (2000) = 7951
ADT (2025) = 14,360

RIDGELAND AVE.

DESIGN SPEED = 35 mph
PROJECTED:
ADT (2000) = 6838
ADT (2025) = 12,350

INDEX OF DRAWINGS	
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C3.4	Plan/Profile - Sunnybrook Rd. (Sta 39+81 - Sta 46+18)
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125	Legend Detail
250	One Lane Closure Detail
301	Concrete Pipe Collar Detail
302	Junction Box for Pipe Culverts Detail

ENVIRONMENTAL PERMITS		
P.E. NO. TYPE	REQUIRED	BY YES NO
N.W. (WATERS OF U.S.)	<input type="checkbox"/>	<input type="checkbox"/>
N.W. (WETLANDS)	<input type="checkbox"/>	<input type="checkbox"/>
G.P.	<input type="checkbox"/>	<input type="checkbox"/>
404	<input type="checkbox"/>	<input type="checkbox"/>
STORMWATER	<input type="checkbox"/>	<input type="checkbox"/>

APPROVED: _____ DATE _____

PROJECT ENGINEER _____ DATE _____

APPROVED: _____ DATE _____

MAYOR OF RIDGELAND _____ DATE _____

APPROVED: _____ DATE _____

CHIEF ENGINEER _____ DATE _____

EXECUTIVE DIRECTOR _____ DATE _____

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

APPROVED: _____ DATE _____

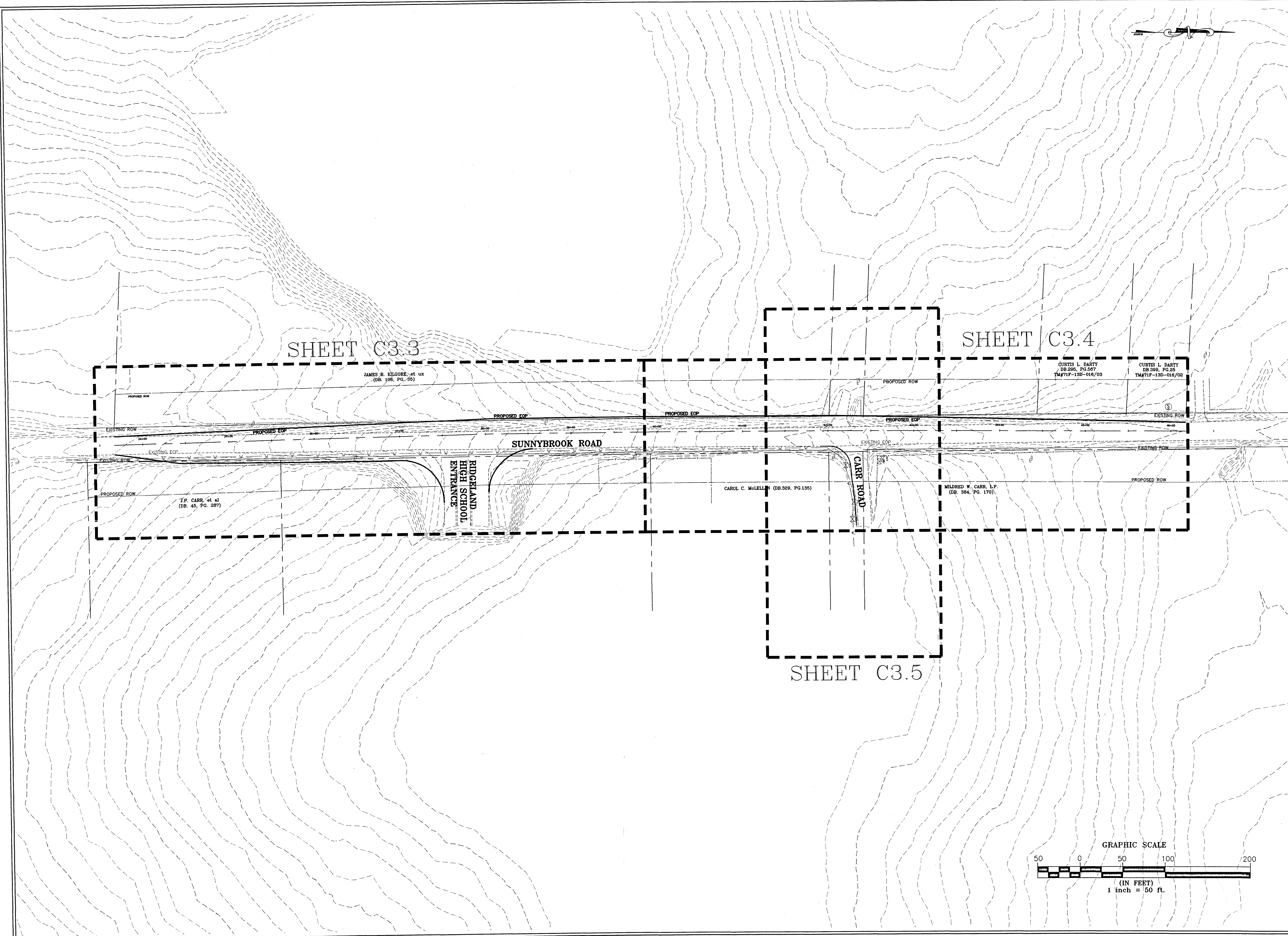
DIVISION ADMINISTRATOR _____ DATE _____

FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

WAGGONER ENGINEERING, INC.
JACKSON, MISSISSIPPI

TWP-01948

**SUNNYBROOK ROAD IMPROVEMENTS
PHASE 1
CITY OF RIDGELAND, MISSISSIPPI
STP-6446-00(001)**



SHEET C3.3
JAMES R. KILGORE, et ux
(DB. 108, PG. 95)

SHEET C3.4
CURTIS L. DARTY
DB. 399, PG. 25
TM#71F-13D-016/03

SHEET C3.5

SUNNYBROOK ROAD

CARR ROAD

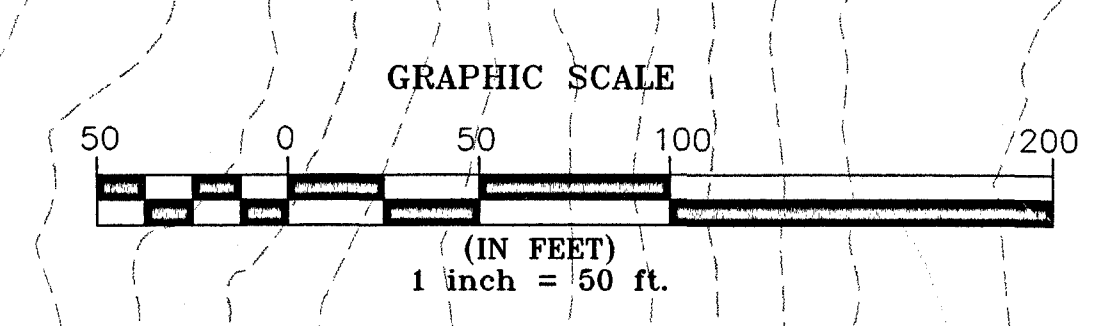
RIDGE LAND HIGH SCHOOL ENTRANCE

J.P. CARR, et al
(DB. 45, PG. 287)

CAROL C. McLELLAN (DB. 329, PG. 136)

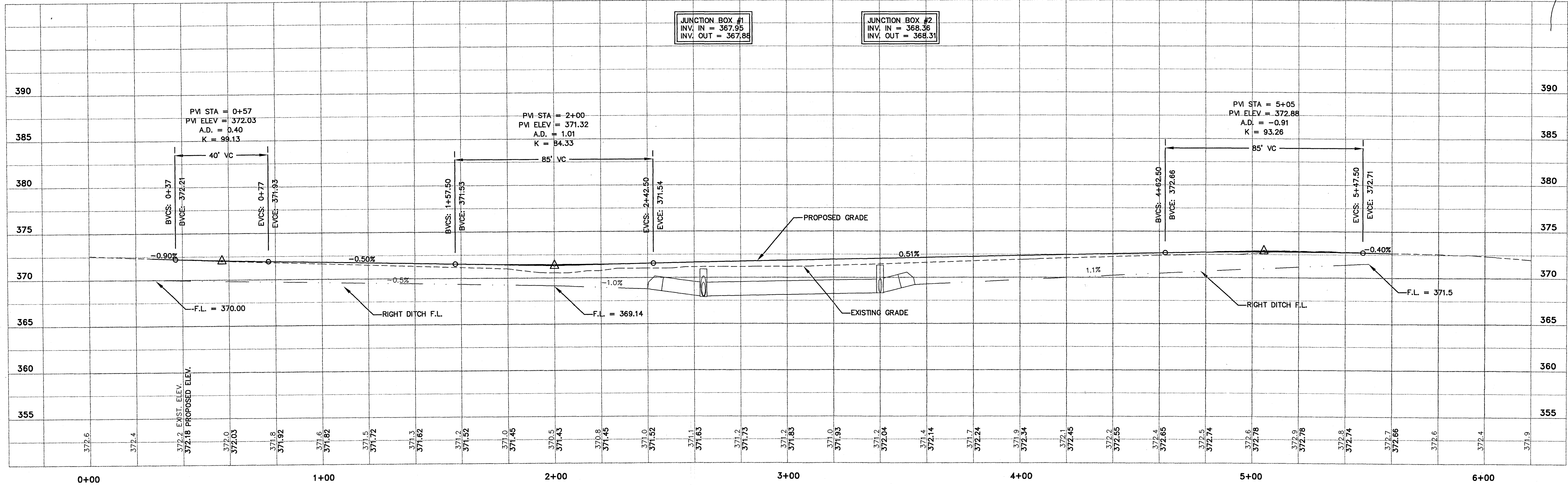
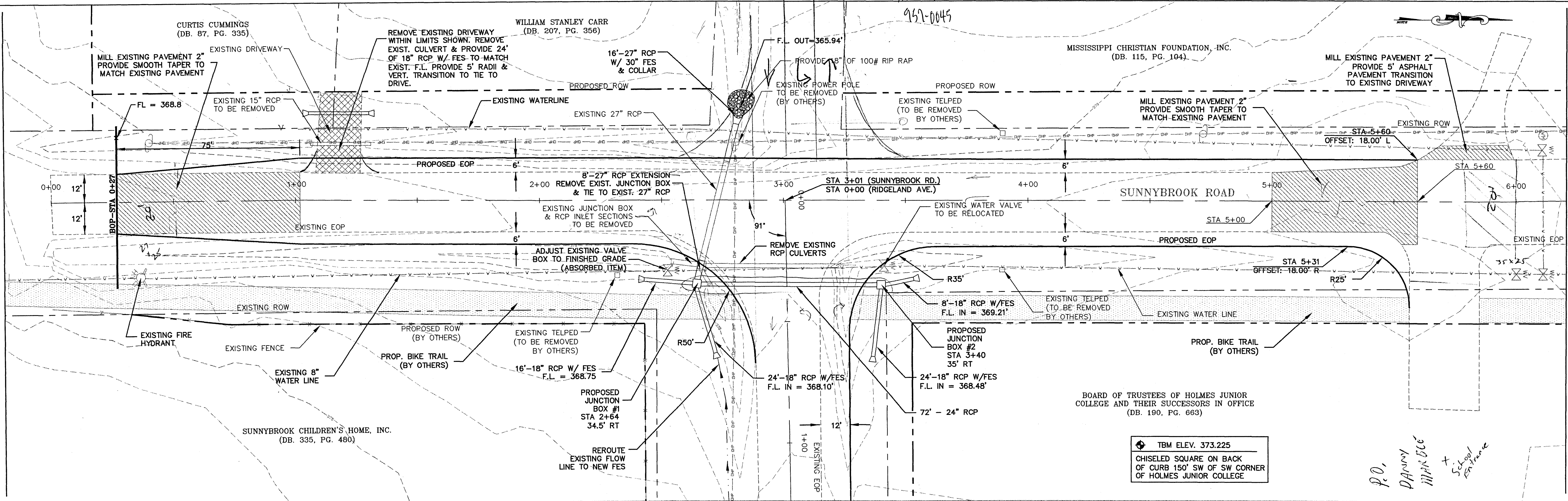
MILDRED W. CARR, L.P.
(DB. 384, PG. 170)

DRAWING REVISIONS		
NO.	REMARKS	DATE



SCALE: 1" = 50'
DESIGNED BY: EE DATE: 04-22-02
CHECKED BY: DD PROJECT: T01-068
DRAWN BY: JB
PROJECT: T01-068
DRAWING TITLE:
**LAYOUT PLAN
RIDGELAND H.S.
INTERSECTION**
SHEET NUMBER:
C2.2

VAN Tynd
957-0045



JUNCTION BOX #1
INV. IN = 367.95
INV. OUT = 367.88

JUNCTION BOX #2
INV. IN = 368.36
INV. OUT = 368.31

TBM ELEV. 373.225
CHISELED SQUARE ON BACK
OF CURB 150' SW OF SW CORNER
OF HOLMES JUNIOR COLLEGE

P.O.
DANNY
M.P.R. Dec
School Entrance

NO.	DATE	NATURE	BY	APP'D	CHECKED	JOB NO.

DESIGNED DD DATE 04-22-02
DRAWN EE SCALE 1" = 20' (H) 1" = 5' (V)
CHECKED JB JOB NO. 101-068

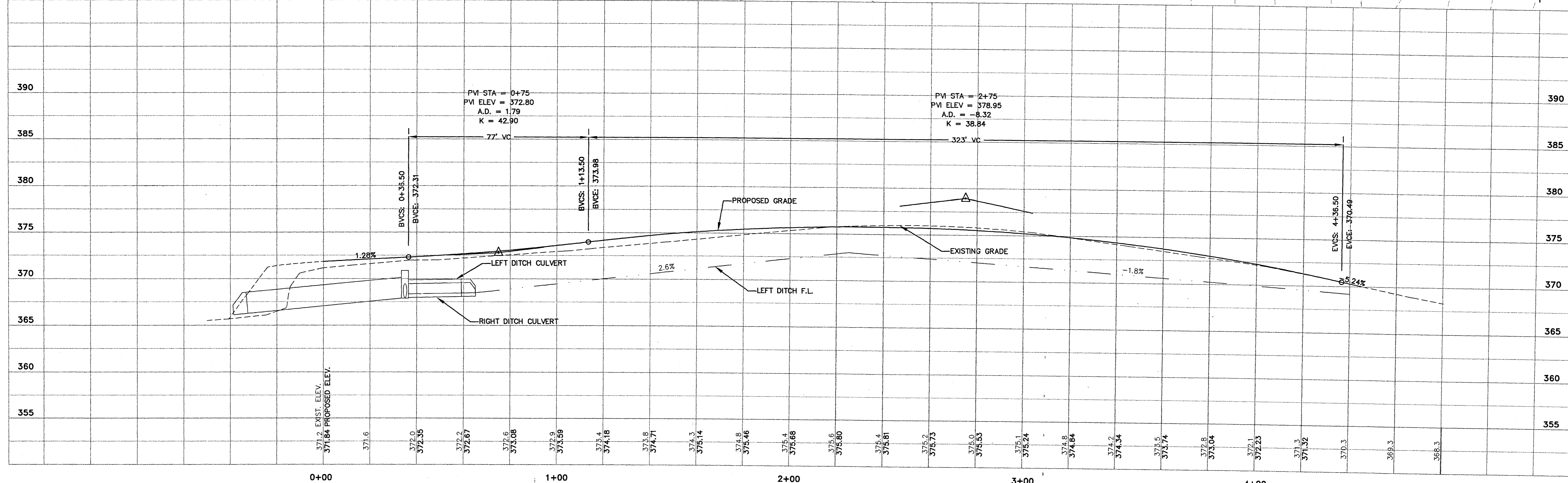
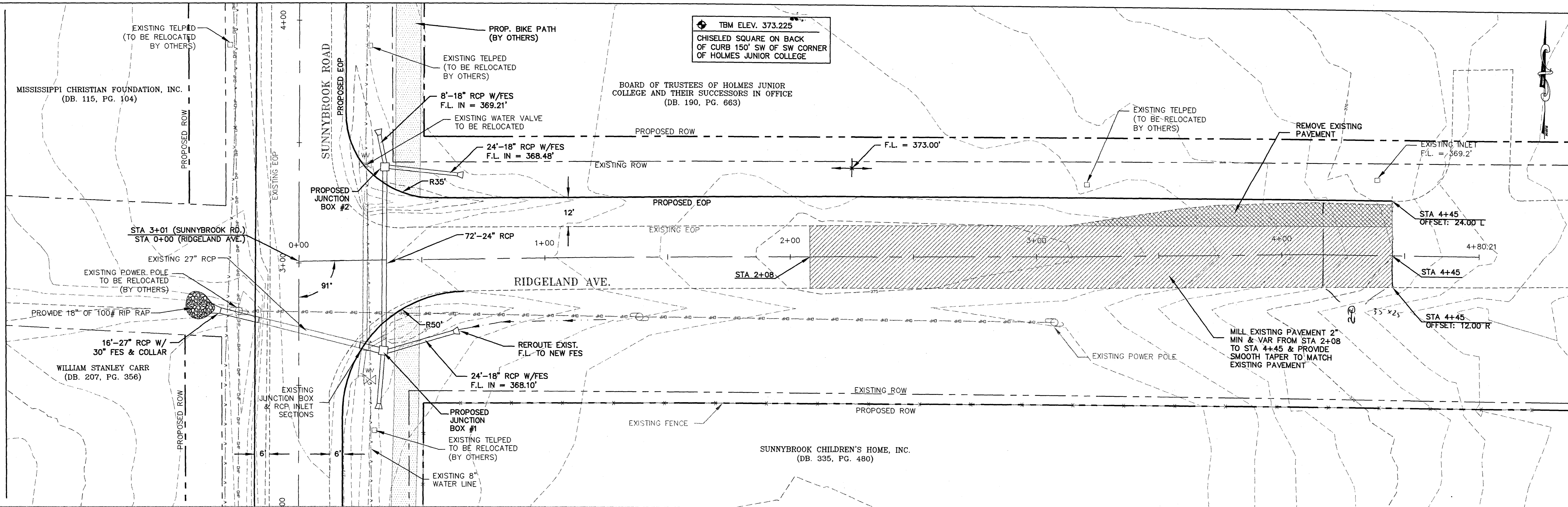
WAGGONER Engineering, Inc.
Engineers, Scientists, Planners
143 LeFleurs Square
JACKSON, MS 39211
601-355-9526
FAX 601-352-3945

OWNER CITY OF RIDGELAND
MADISON COUNTY
MISSISSIPPI

PROJECT TITLE SUNNYBROOK ROAD IMPROVEMENTS
PHASE 1
STP-6946-00(001)

DRAWING TITLE SUNNYBROOK ROAD
PLAN & PROFILE
STA. 0+27 - STA. 5+60

PROJECT NO. T01-068
MADISON COUNTY
CONTRACT SHEET C3.1
LIB-WRK.DWG



NO.	DATE	NATURE	BY	APP'D	CHECKED	JOB NO.
		DESIGNED	DD	DATE	04-22-02	
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		CHECKED	JB	JOB NO.	101-068	
REVISIONS						

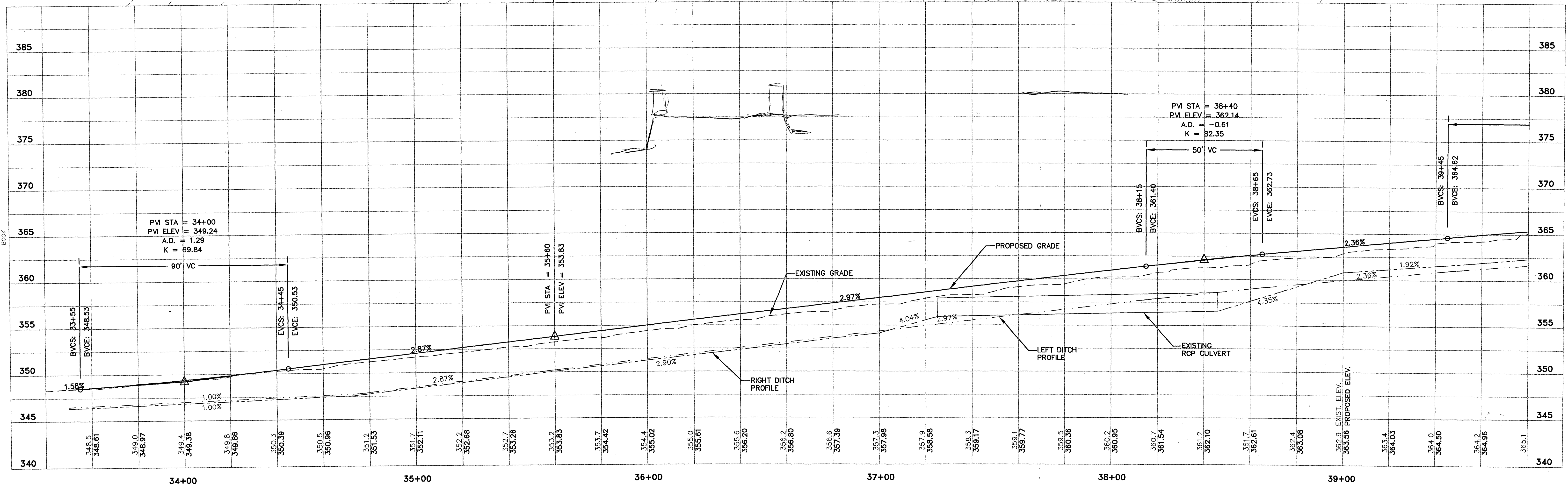
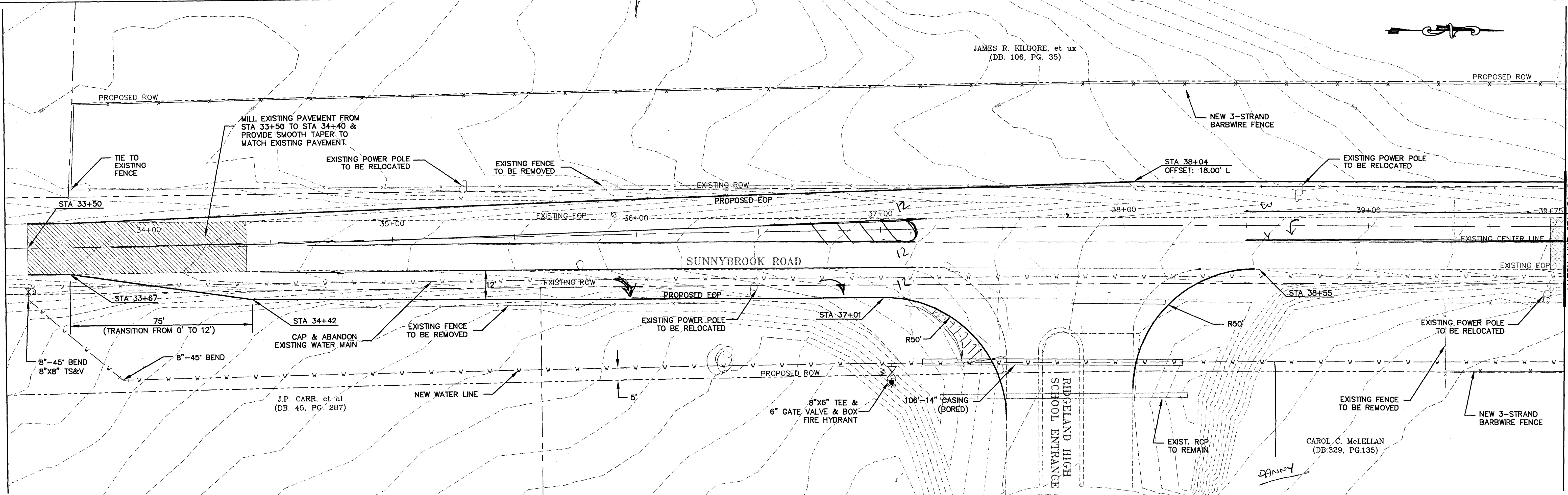
WAGGONER Engineering, Inc.
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 143 LeFleurs Square
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 601-355-9526
 FAX 601-352-3945

OWNER
**CITY OF RIDGELAND
 MADISON COUNTY
 MISSISSIPPI**

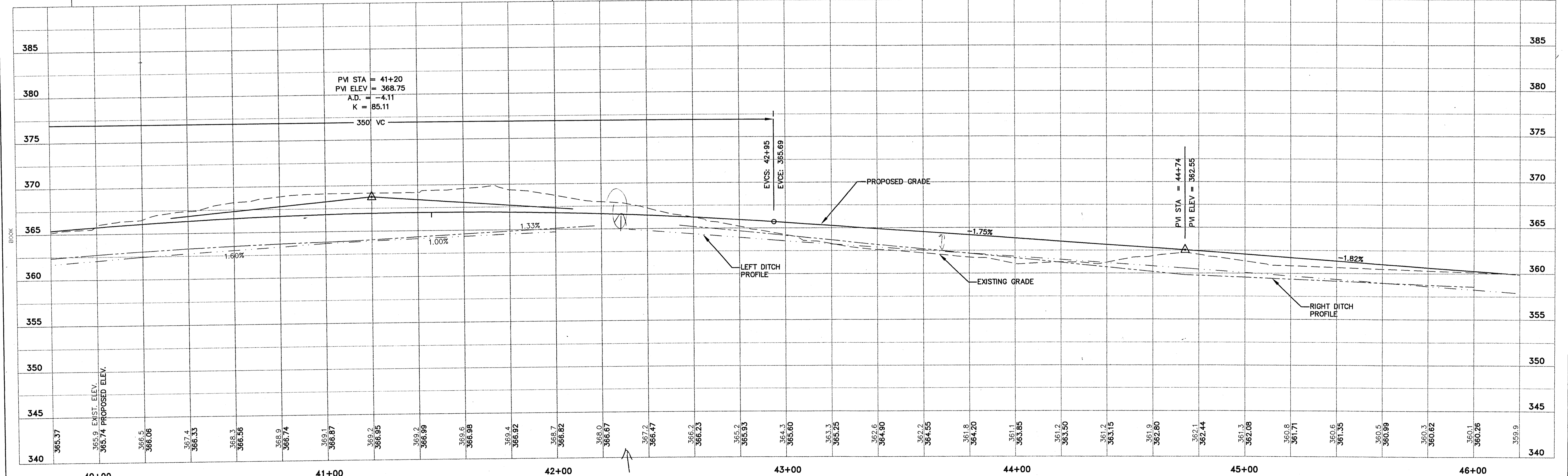
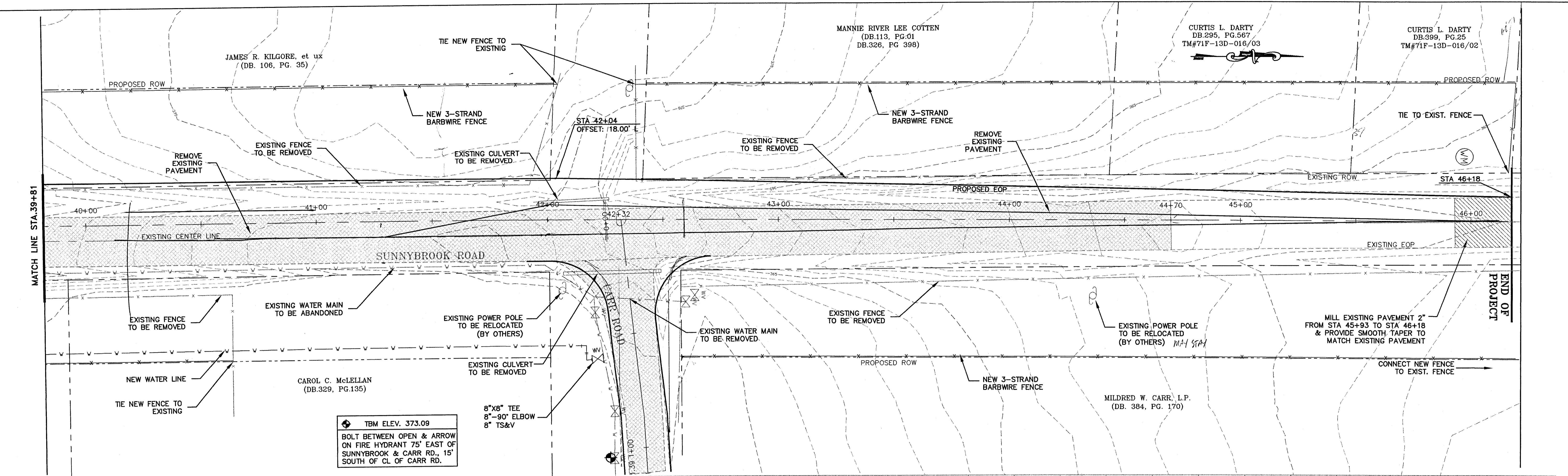
PROJECT TITLE
**SUNNYBROOK ROAD IMPROVEMENTS
 PHASE 1
 STP-6946-00(001)**

DRAWING TITLE
**RIDGELAND AVENUE
 PLAN & PROFILE
 STA. 0+00 - STA. 4+45**

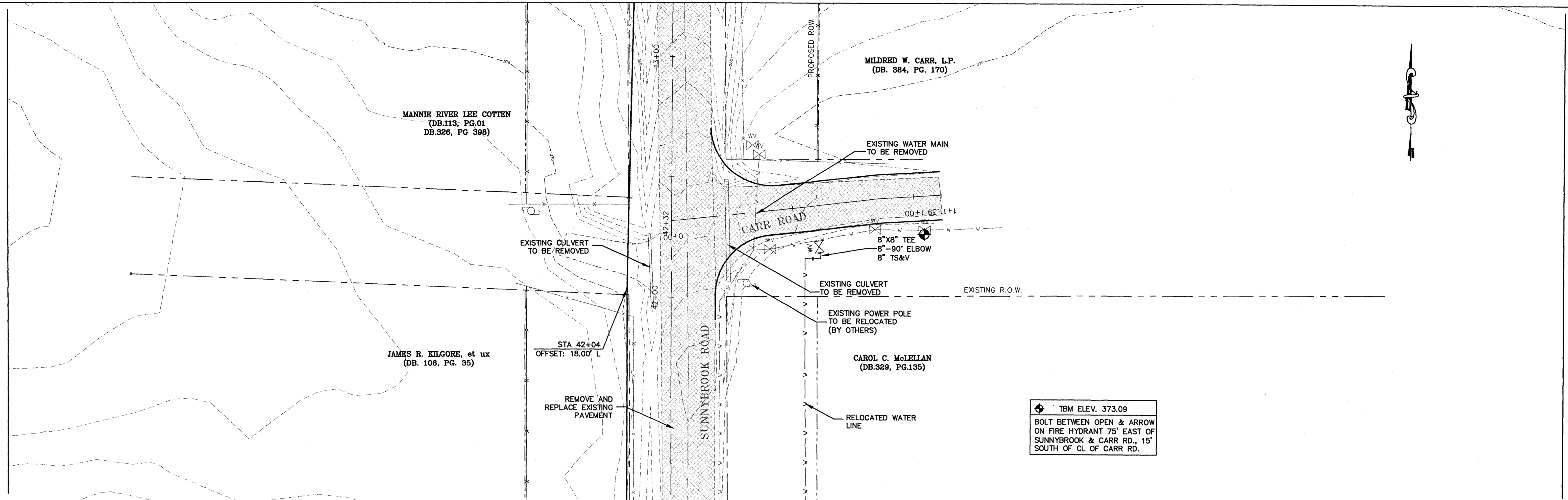
PROJECT NO.
 T01-068
MADISON COUNTY
 CONTRACT SHEET
 C3.2



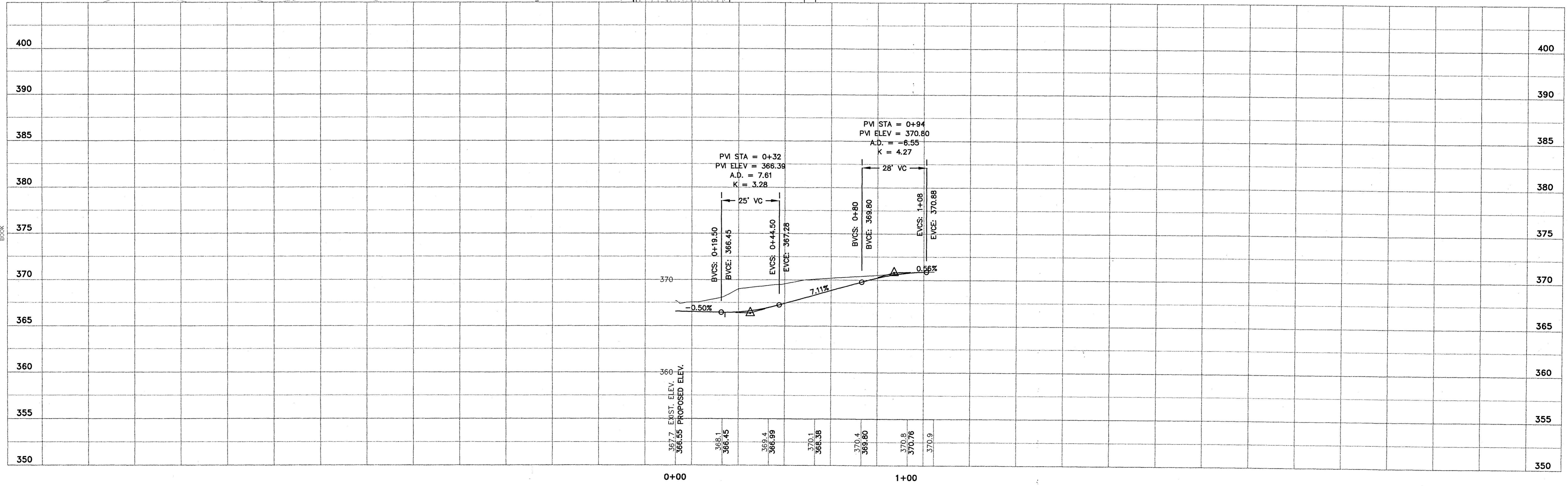
DESIGNED DD		DATE 04-22-02		Engineers, Scientists, Planners 143-A LeFleurs Square JACKSON, MS 39211 601-355-9526 FAX 601-352-3945	OWNER CITY OF RIDGELAND MADISON COUNTY MISSISSIPPI	PROJECT TITLE SUNNYBROOK ROAD IMPROVEMENTS PHASE I STP-6946-00(001)		DRAWING TITLE SUNNYBROOK ROAD PLAN & PROFILE STA. 33+50 - STA. 39+81		PROJECT NO. T01-068 MADISON COUNTY	
DRAWN EE		SCALE 1" = 20' (H) 1" = 5' (V)				CONTRACT		SHEET		C3.3	
NO.	DATE	NATURE	BY			APP'D	CHECKED JB	JOB NO. T01-068			
REVISIONS											



DESIGNED DD		DATE 04-22-02		Engineers, Scientists, Planners 143-A LeFleurs Square JACKSON, MS 39211 601-355-9526 FAX 601-352-3945	OWNER CITY OF RIDGELAND MADISON COUNTY MISSISSIPPI	PROJECT TITLE SUNNYBROOK ROAD IMPROVEMENTS PHASE I STP-6946-00(001)	DRAWING TITLE SUNNYBROOK ROAD PLAN & PROFILE STA. 39+81 - STA. 46+18	PROJECT NO. T01-068	
DRAWN EE		SCALE 1" = 20' (H) 1" = 5' (V)						CONTRACT	SHEET
NO.	DATE	NATURE	BY	APP'D	CHECKED JB	JOB NO. T01-068	C3.4		



⊕ TBM ELEV. 373.09
BOLT BETWEEN OPEN & ARROW
ON FIRE HYDRANT 75' EAST OF
SUNNYBROOK & CARR RD., 15'
SOUTH OF CL OF CARR RD.



NO.	DATE	NATURE	BY	APP'D	CHECKED	JOB NO.
		REVISIONS			JB	701-068

DESIGNED DD,EE DATE 04-22-02
DRAWN EE SCALE 1"=20'
NO. DATE NATURE BY APP'D CHECKED JOB NO.

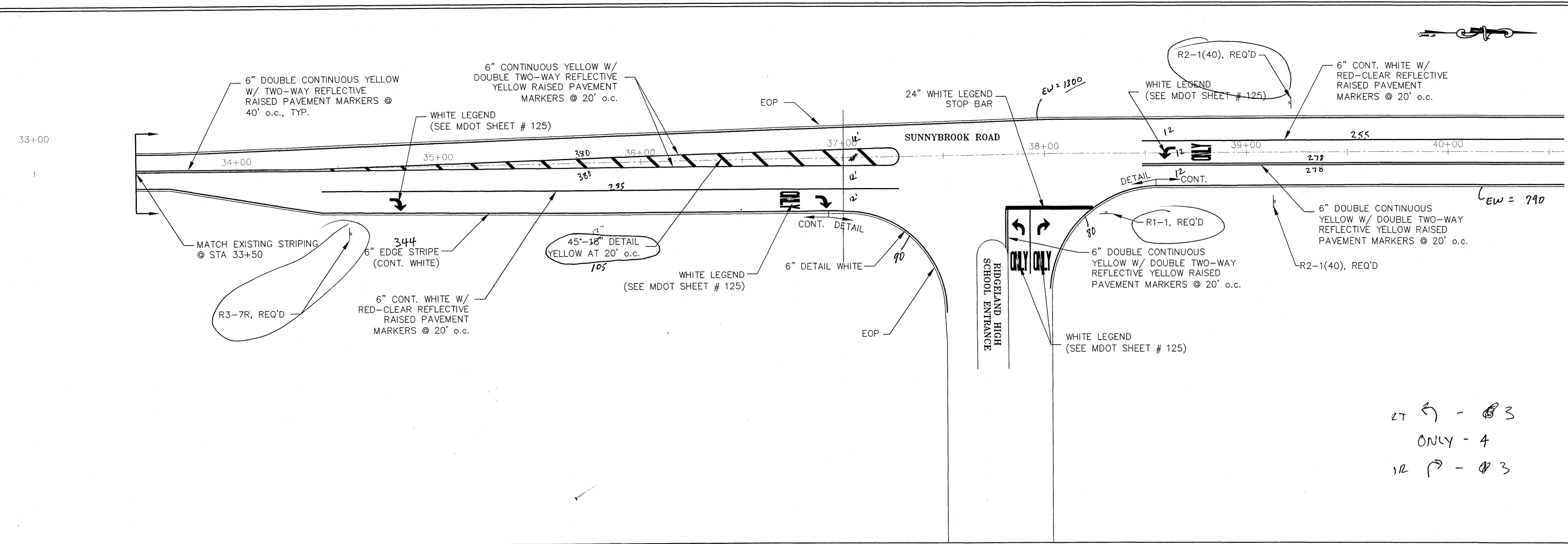
WAGGONER Engineering, Inc.
Engineers, Scientists, Planners
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JACKSON, MS 39211
601-355-9526
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OWNER
**CITY OF RIDGELAND
MADISON COUNTY
MISSISSIPPI**

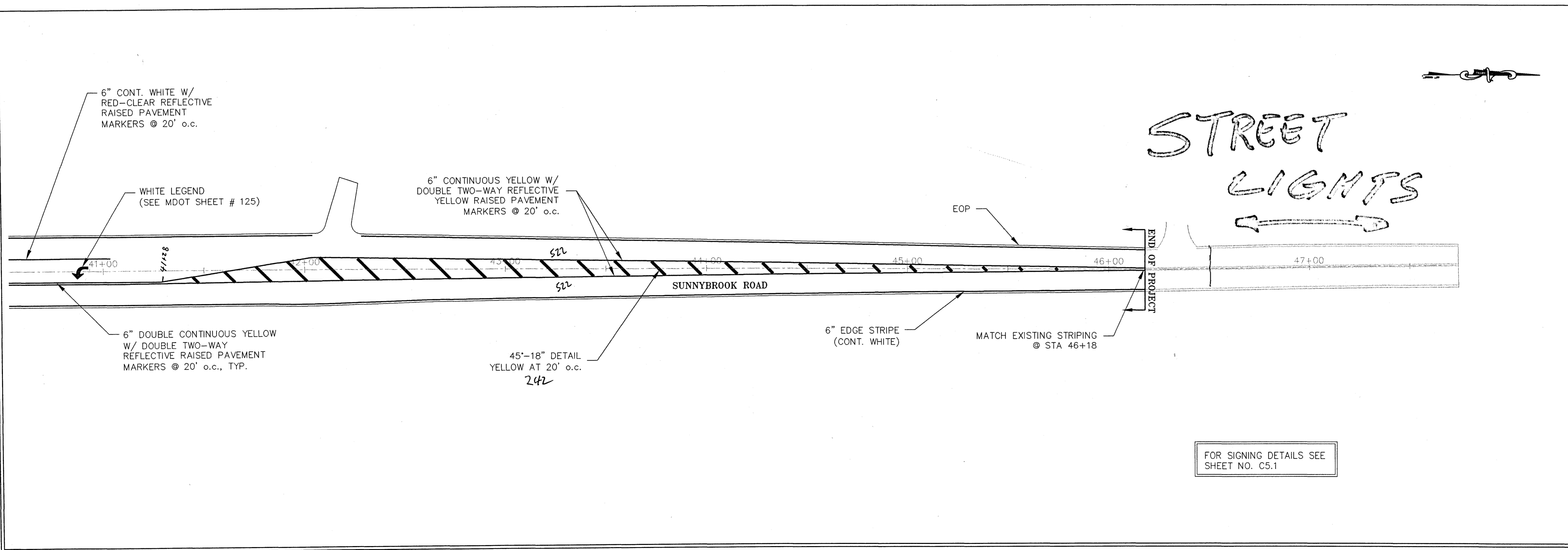
PROJECT TITLE
**SUNNYBROOK ROAD IMPROVEMENTS
PHASE I
STP-6946-00(001)**

DRAWING TITLE
**CARR ROAD
PLAN & PROFILE
STA. 0+00 - STA. 1+11**

PROJECT NO. T01-068	SHEET C3.5
MADISON COUNTY	
CONTRACT	
LB-WRK.DWG	



2T ← - 3
ONLY - 4
12 → - 3



STREET LIGHTS

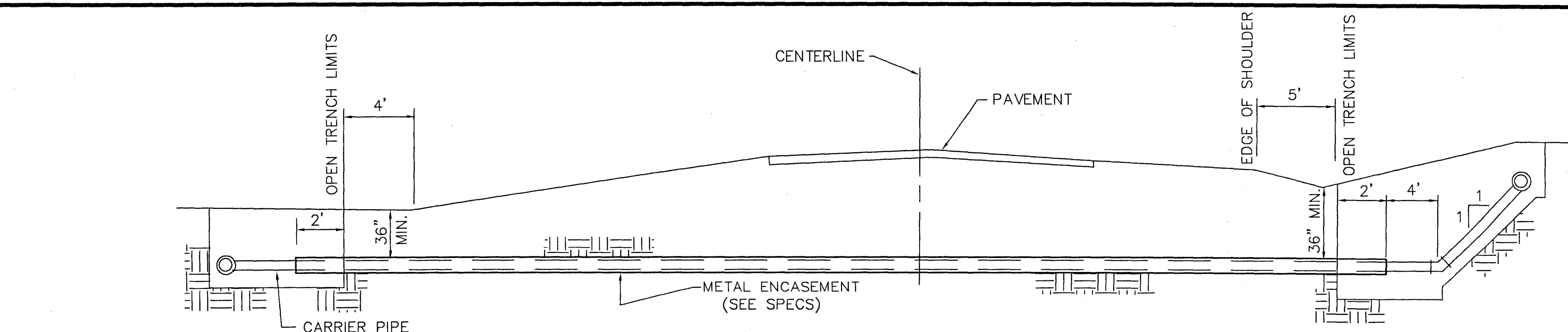
FOR SIGNING DETAILS SEE SHEET NO. C5.1

**SUNNYBROOK ROAD IMPROVEMENTS
PHASE 1
CITY OF RIDGELAND, MISSISSIPPI
STP - 6946-00(001)**

DRAWING REVISIONS		
NO.	REMARKS	DATE

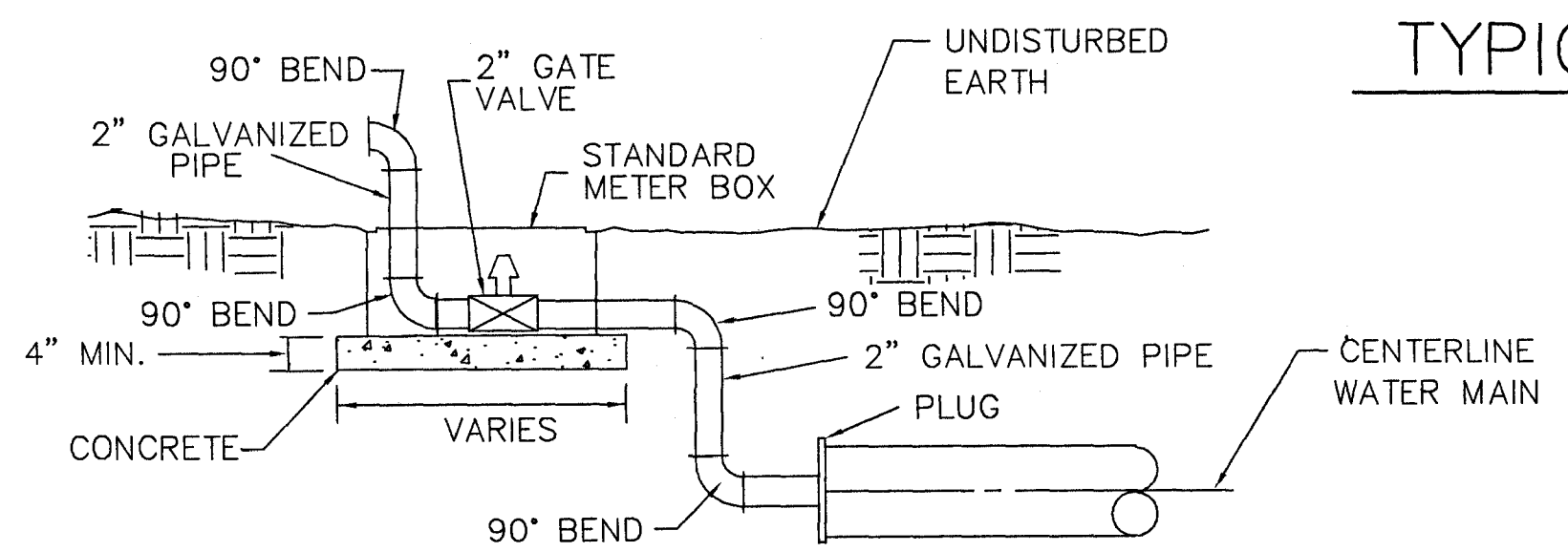
DRAWN BY: EE	SCALE: NTS
DESIGNED BY: DD	DATE: 4-22-02
CHECKED BY: JB	PROJECT: T01068
DRAWING TITLE:	

STRIPING & SIGNAGE PLAN
SHEET NUMBER: C5.2

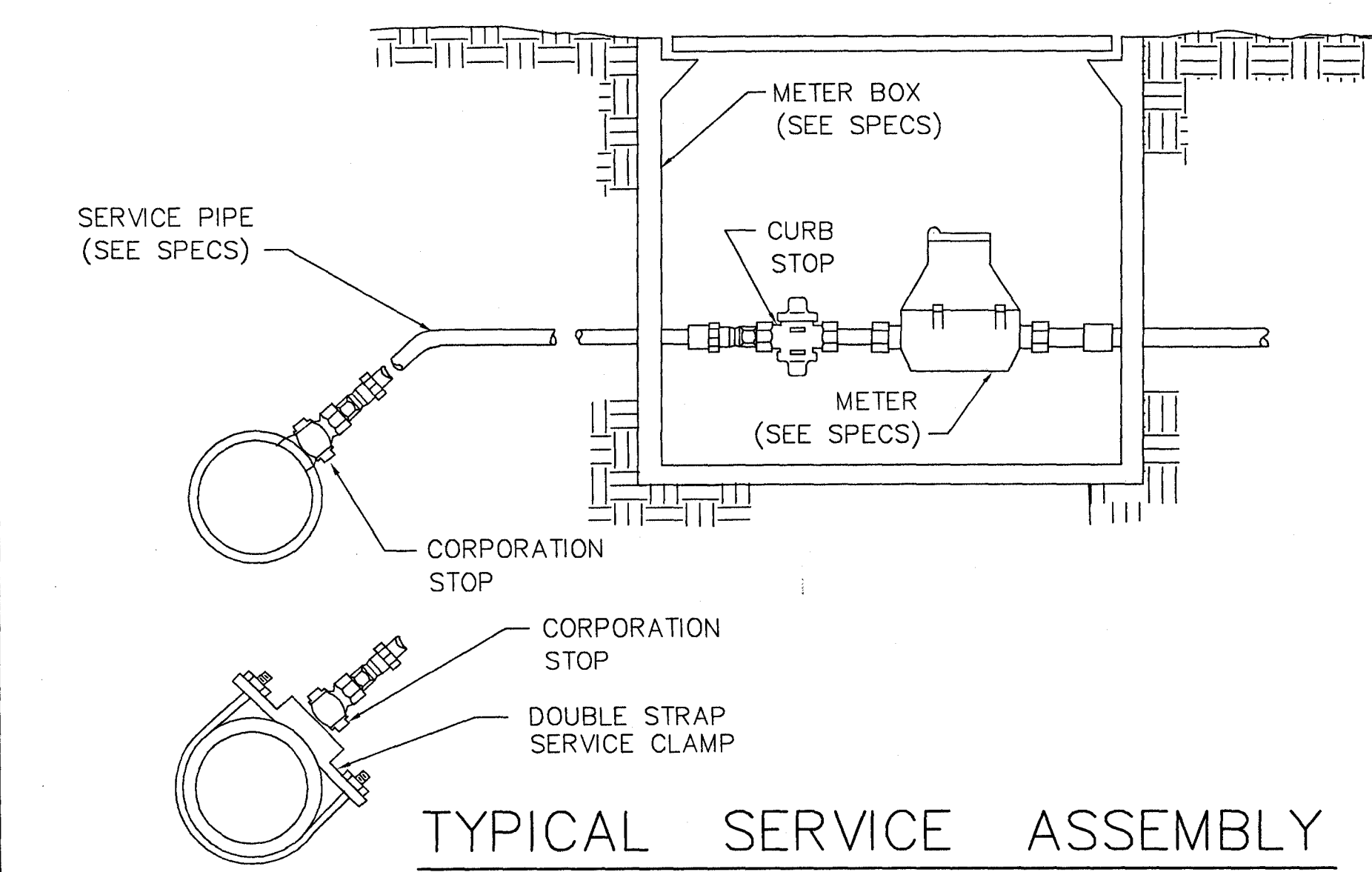


TYPICAL CASED CROSSING

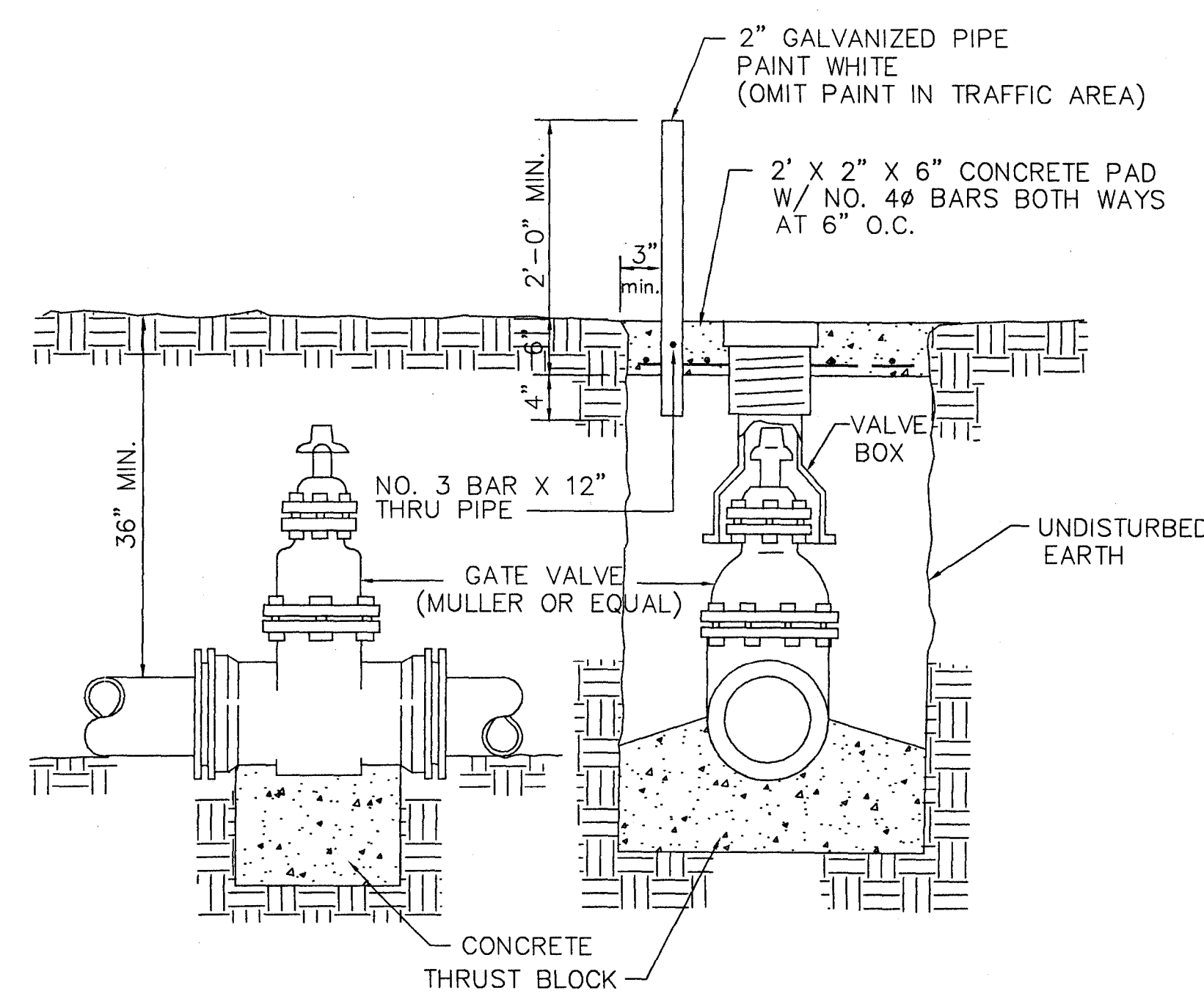
NOTE: COMPENSATION FOR CONCRETE THRUST BLOCKS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR VALVES, FIRE HYDRANTS AND FITTINGS.



TYPICAL 2" BLOW-OFF DETAIL

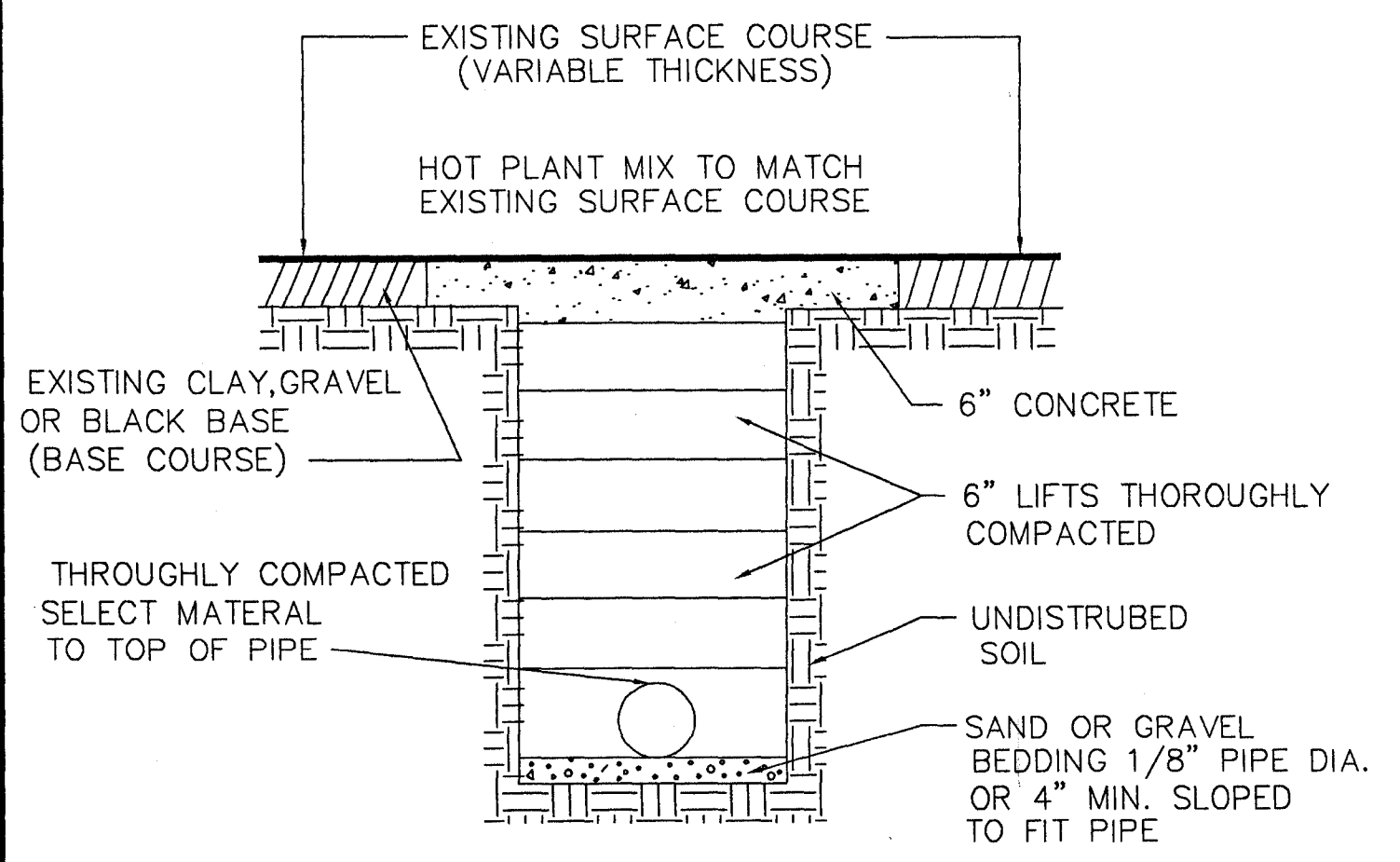


TYPICAL SERVICE ASSEMBLY

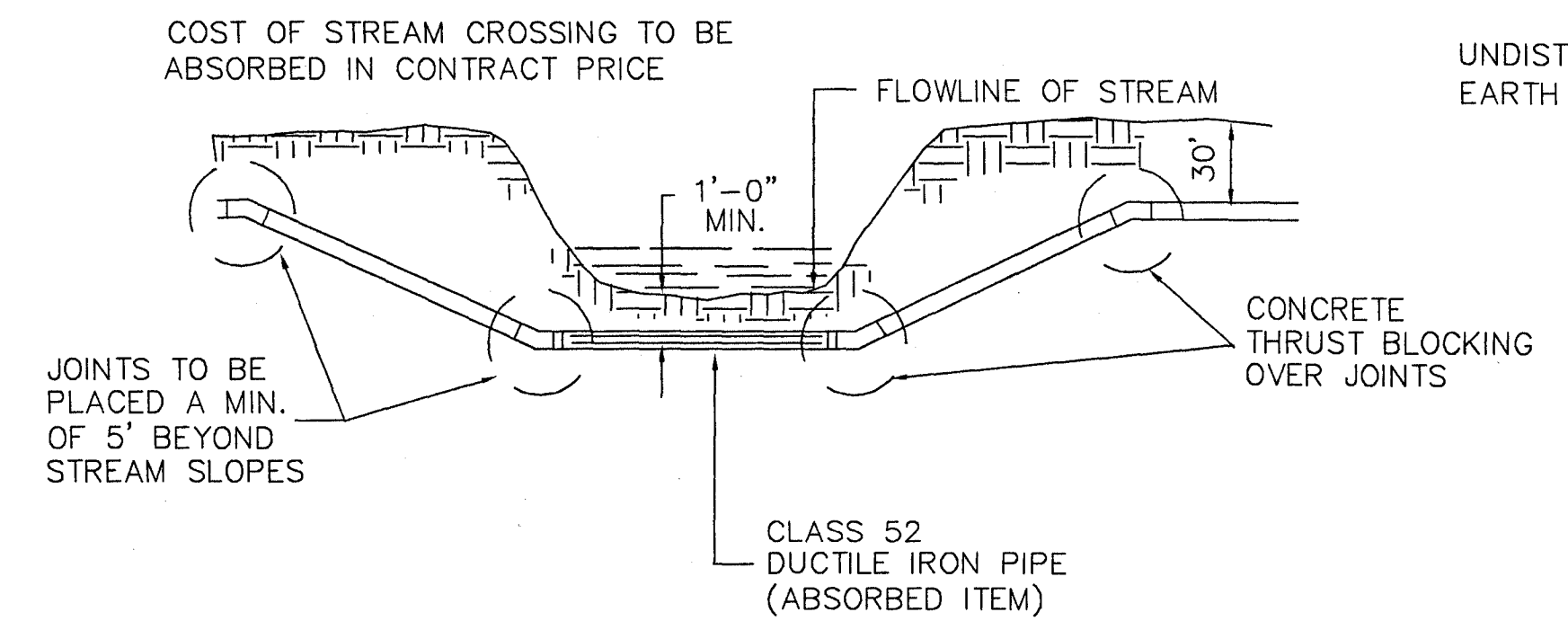


ELEVATION SECTION

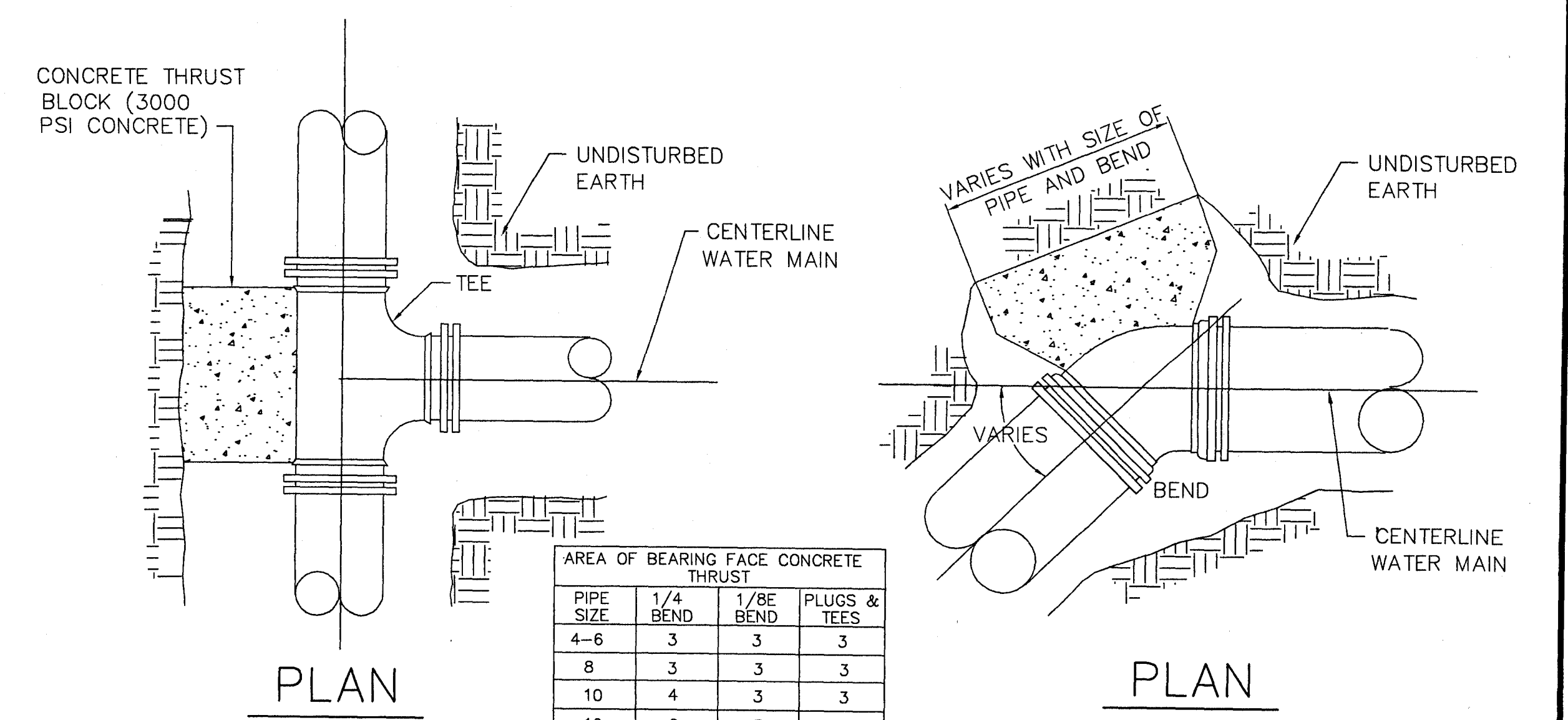
TYPICAL VALVE & BOX



STREET REPAIR OF OPEN CUT



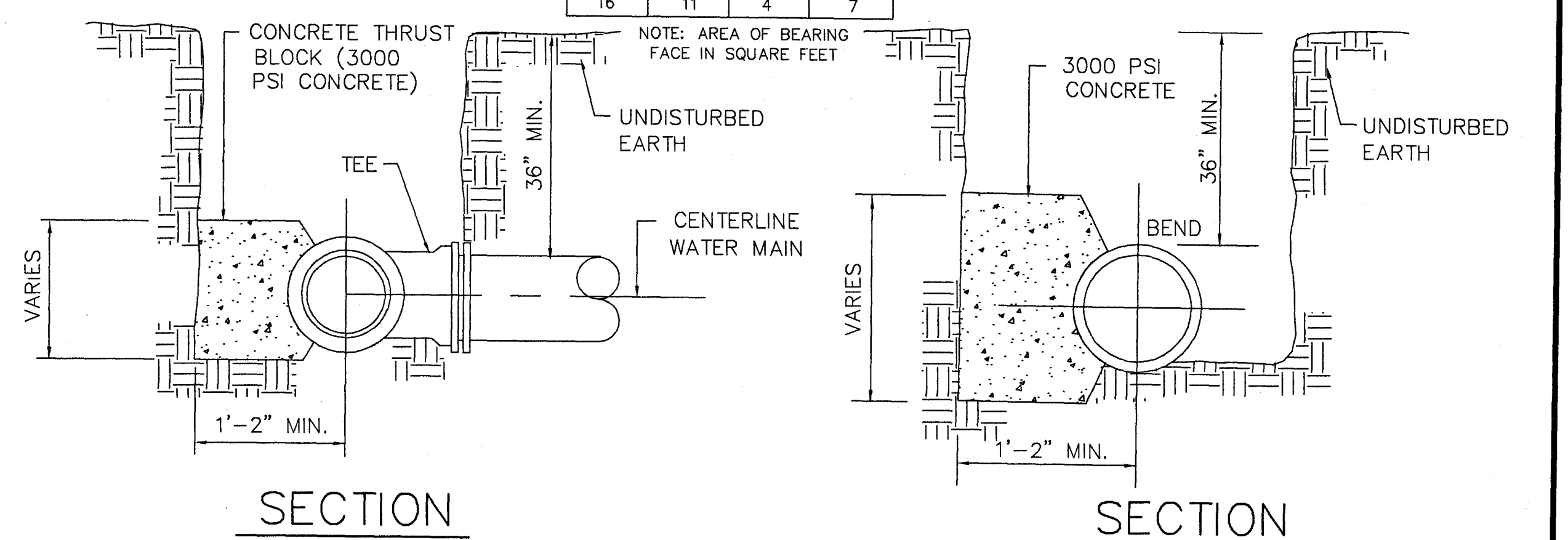
TYPICAL STREAM CROSSING



PLAN

PLAN

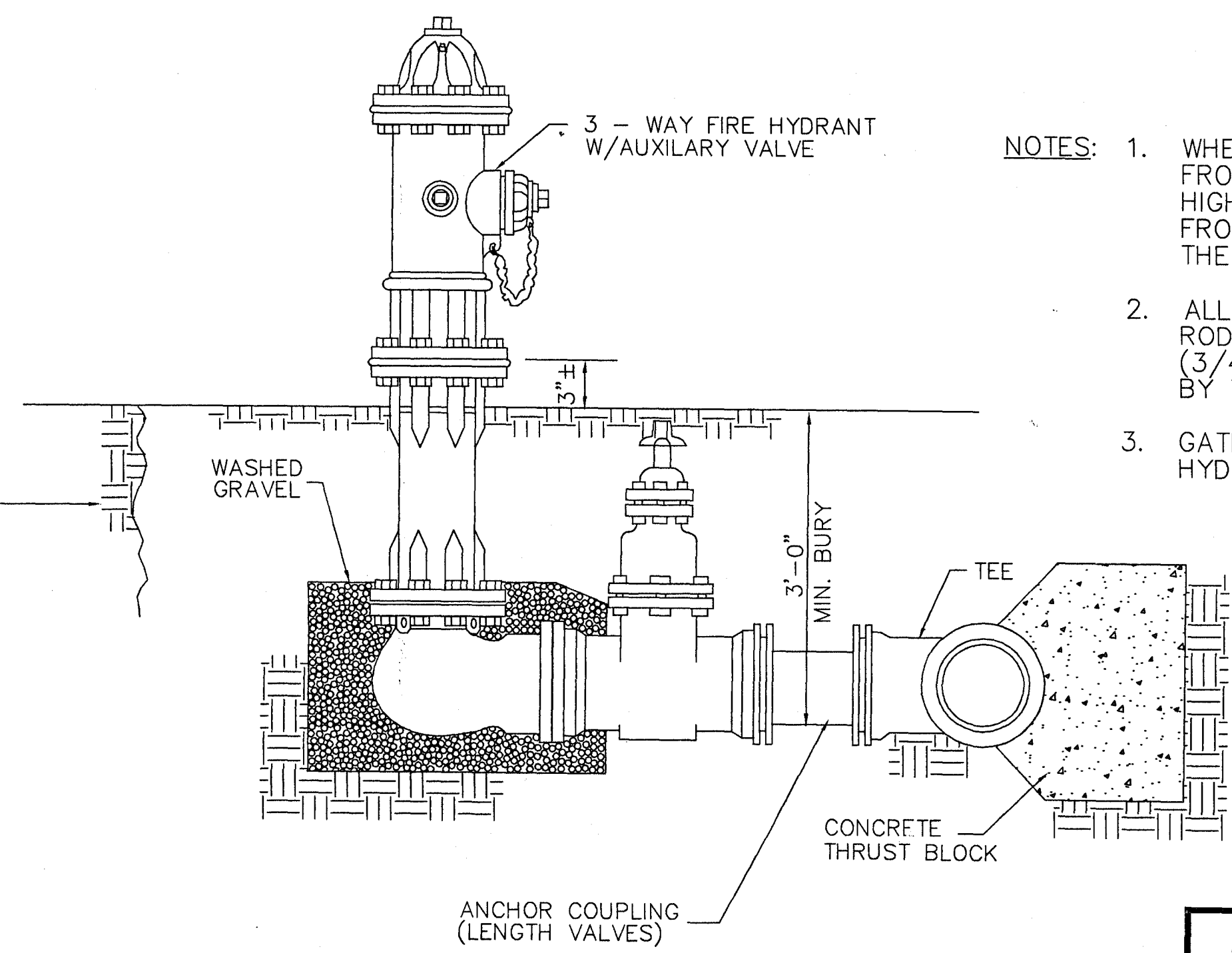
PIPE SIZE	1/4 BEND	1/8 BEND	PLUGS & TEES
4-6	3	3	3
8	3	3	3
10	4	3	3
12	6	3	4
16	11	4	7



SECTION

SECTION

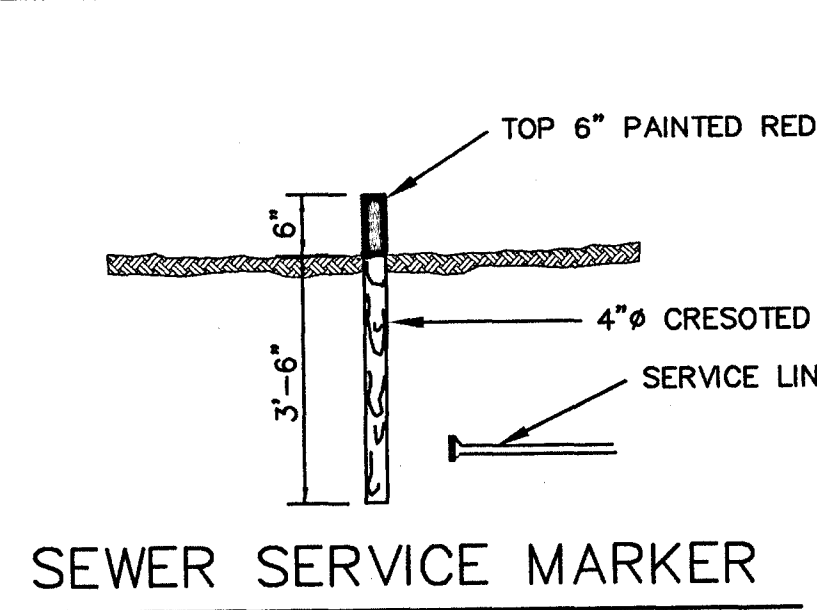
BLOCKING DETAILS FOR TEES & BENDS



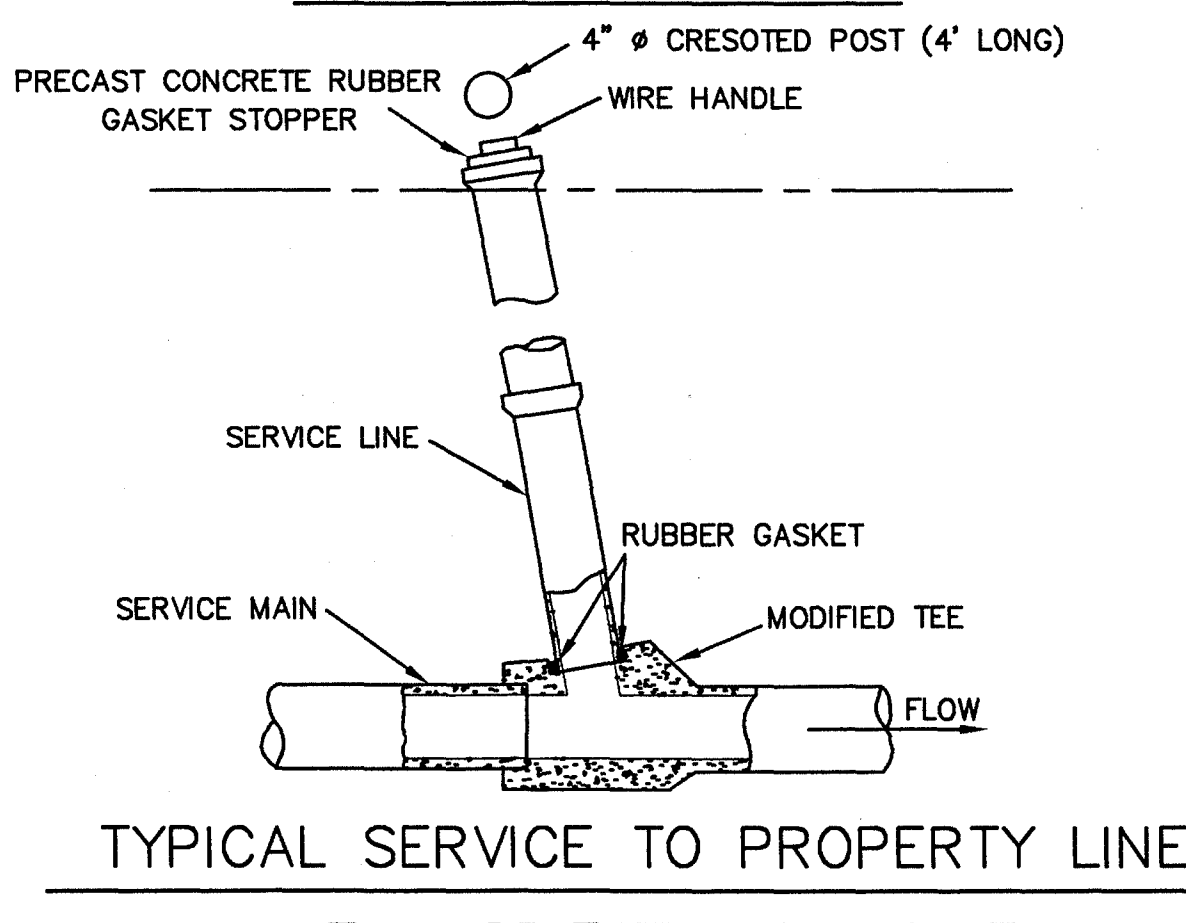
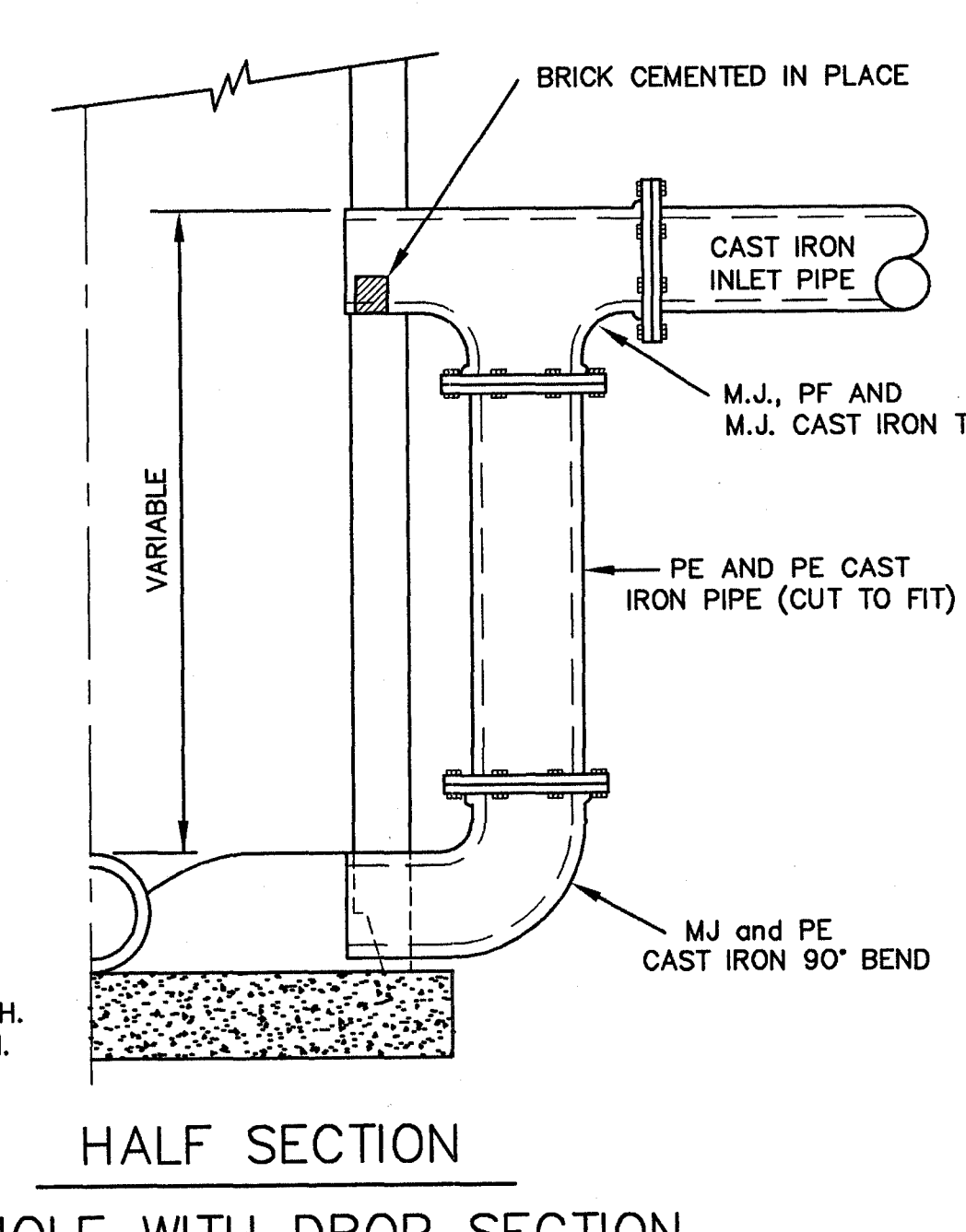
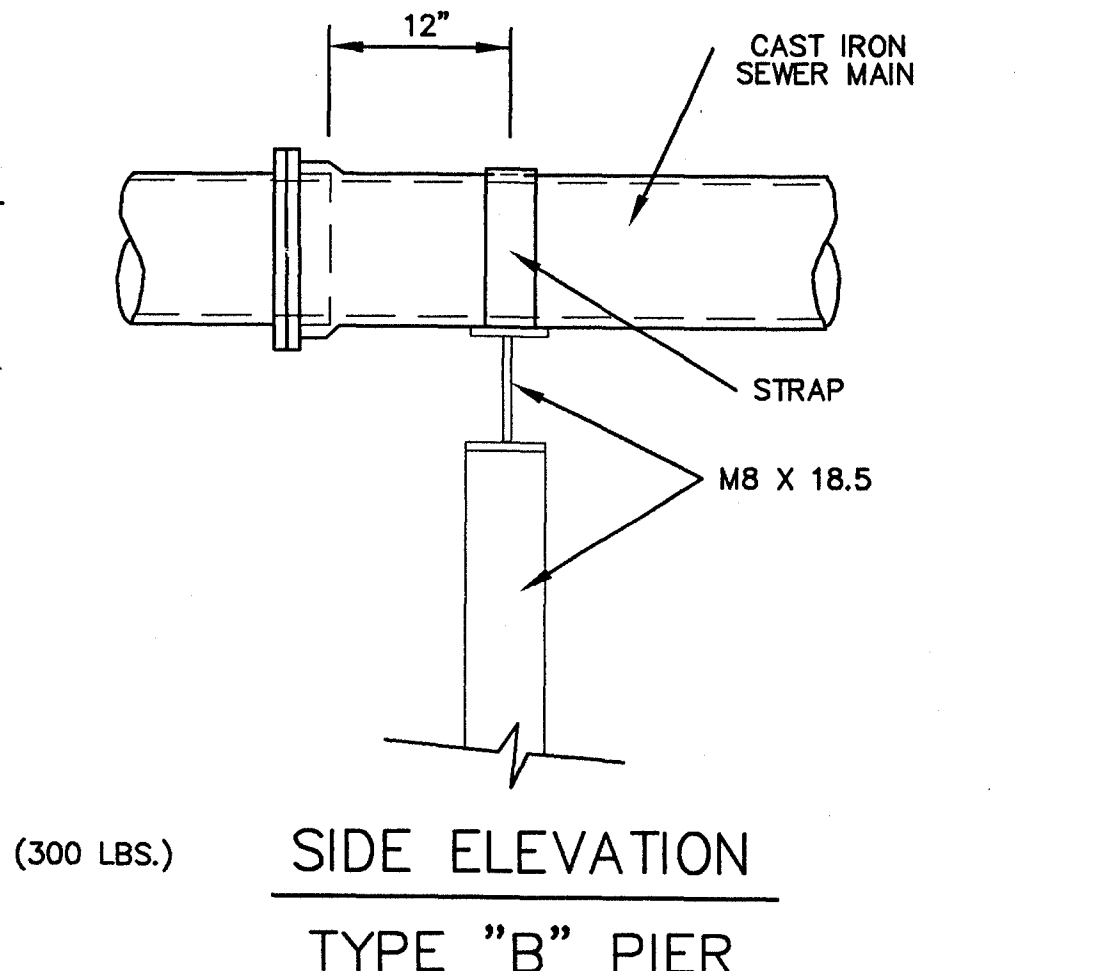
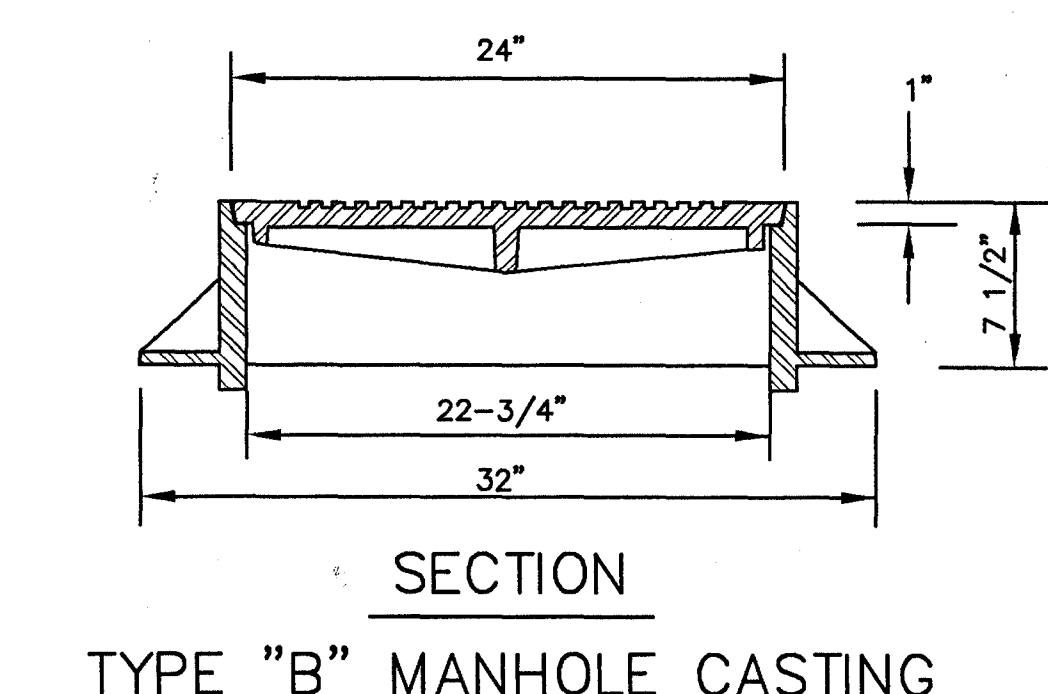
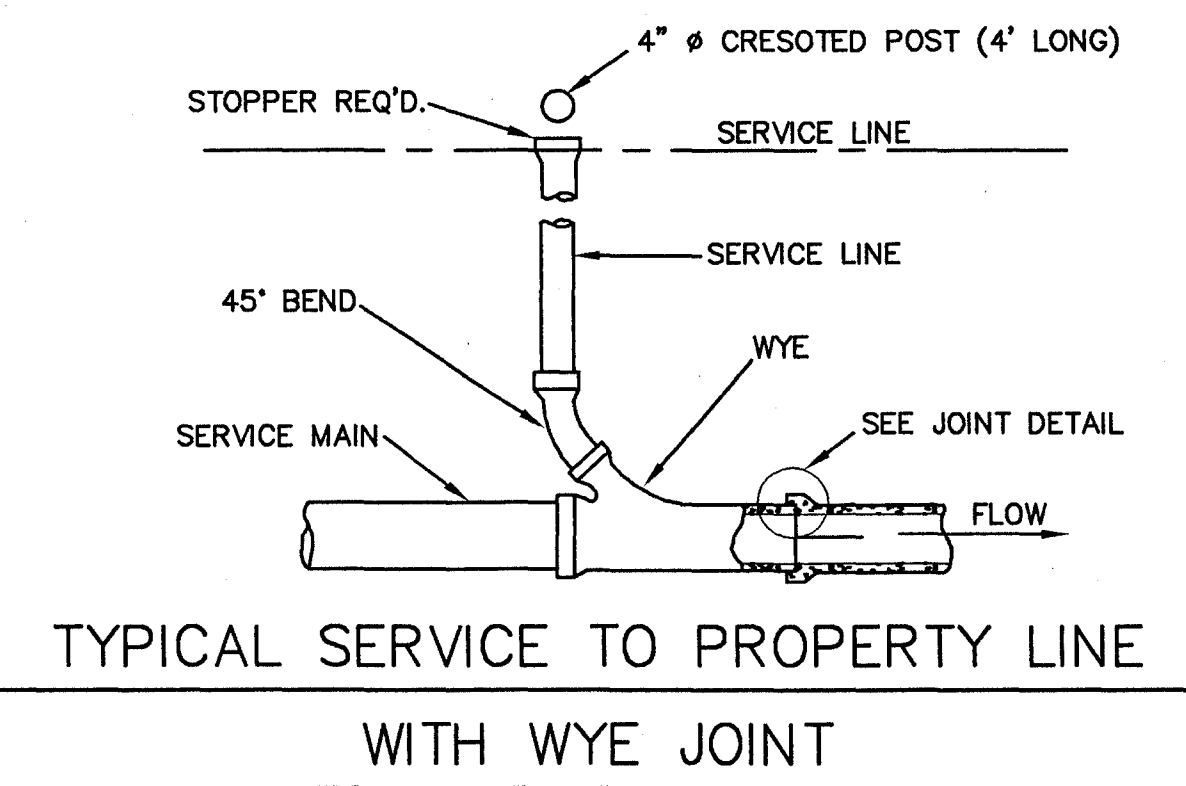
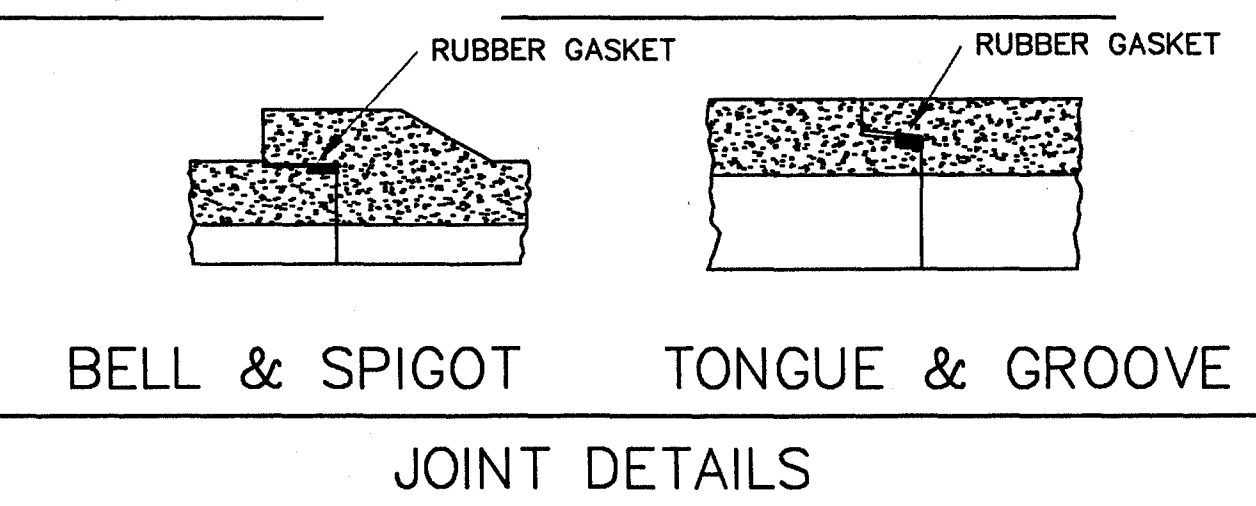
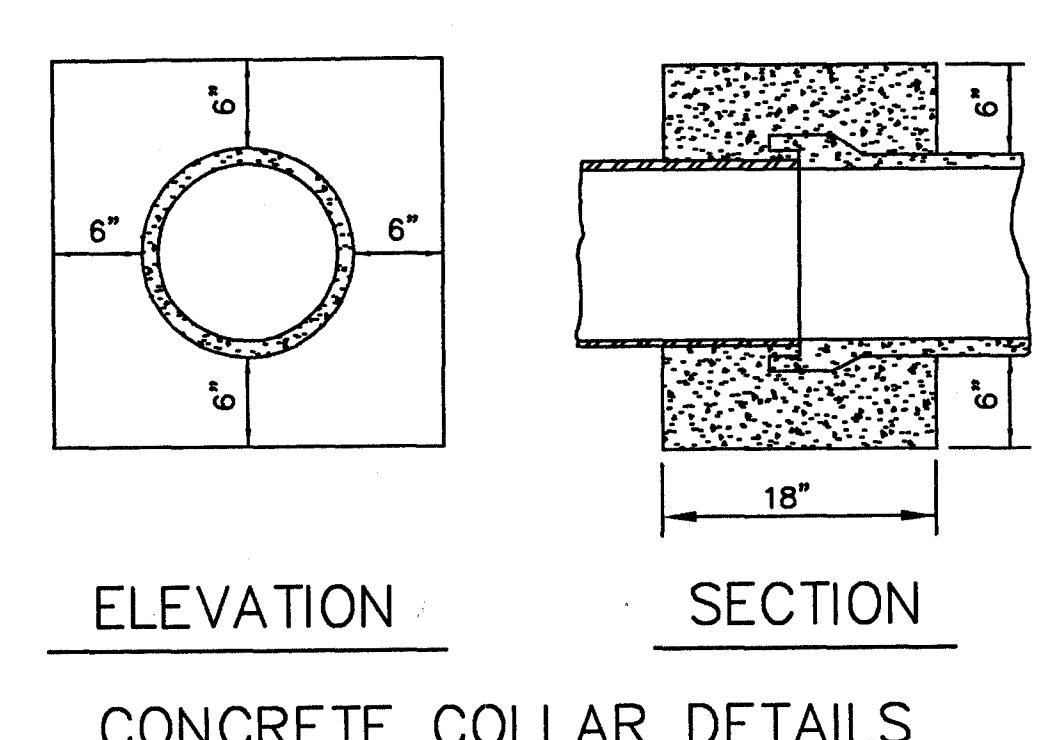
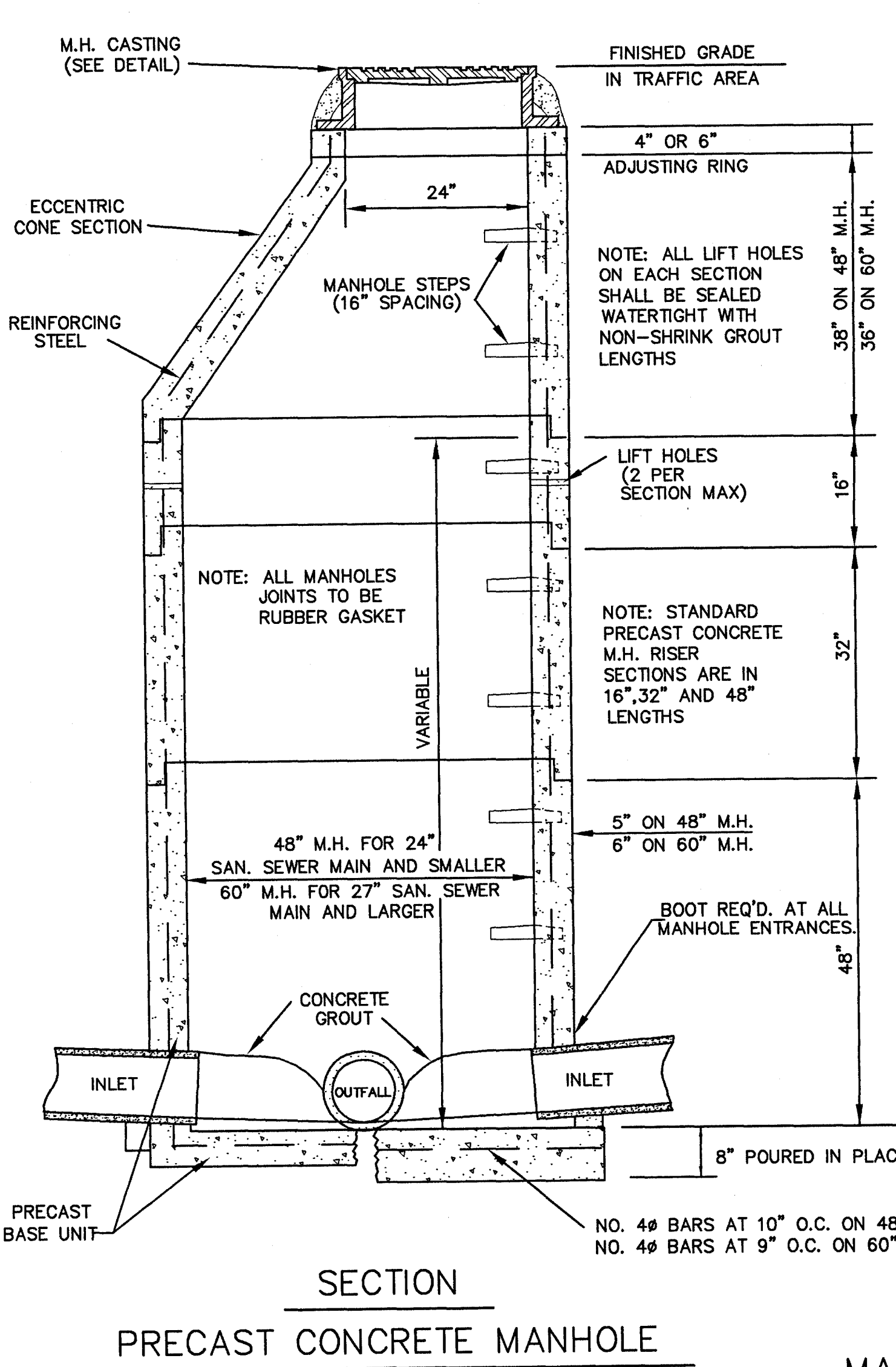
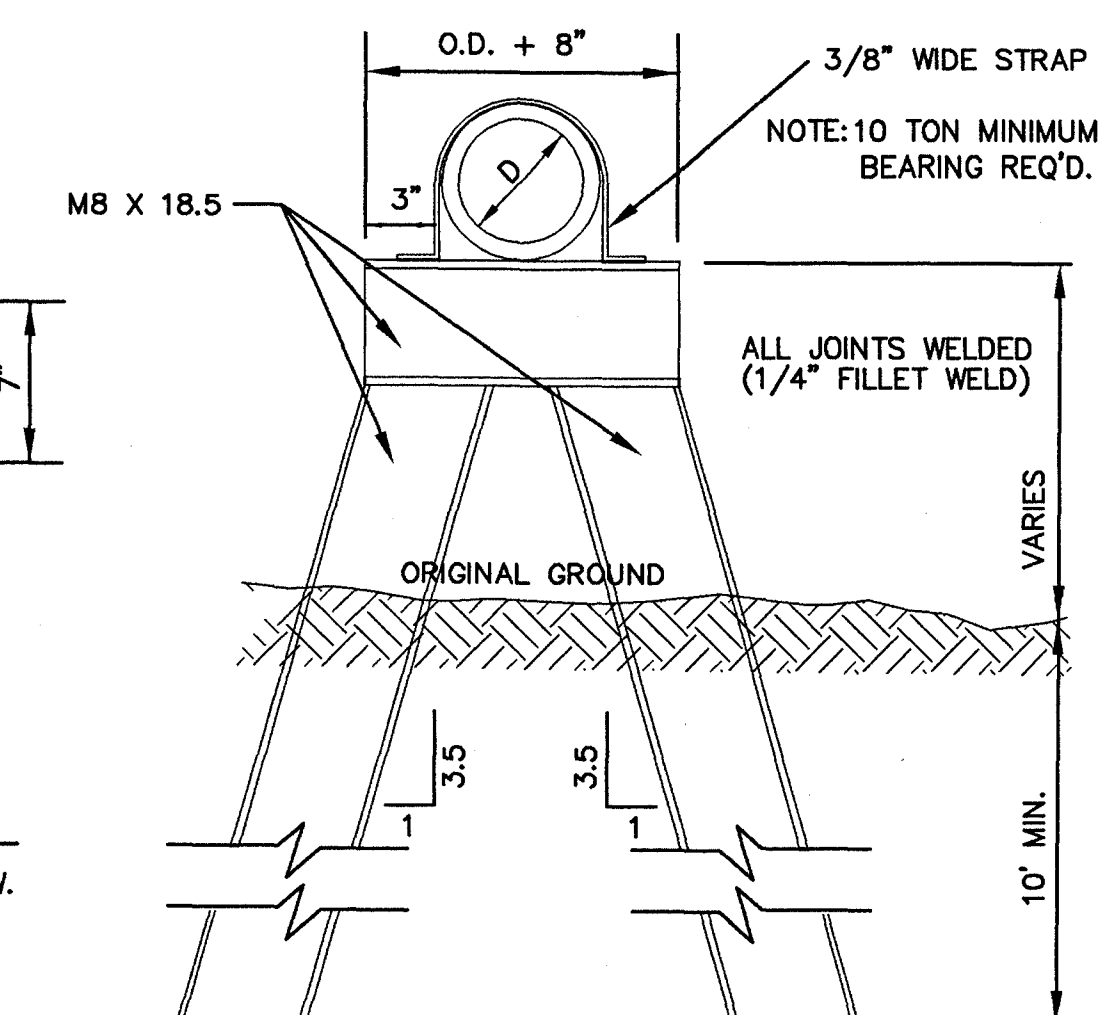
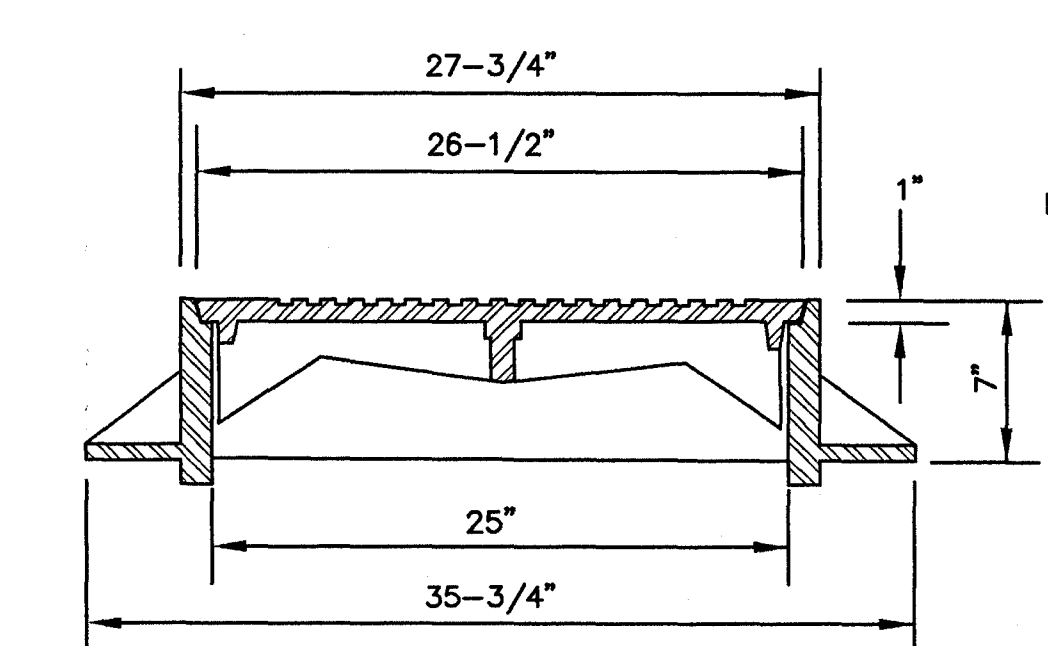
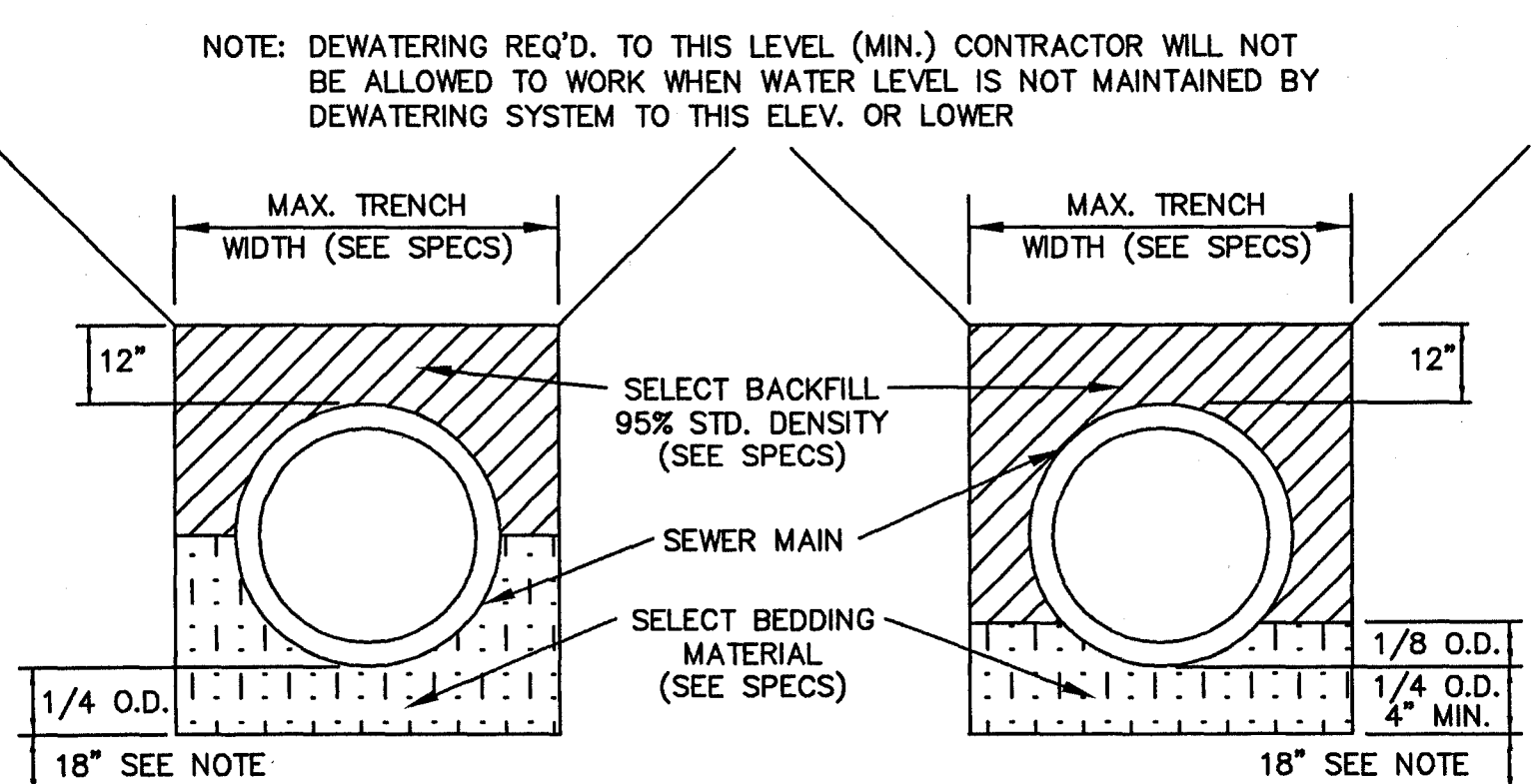
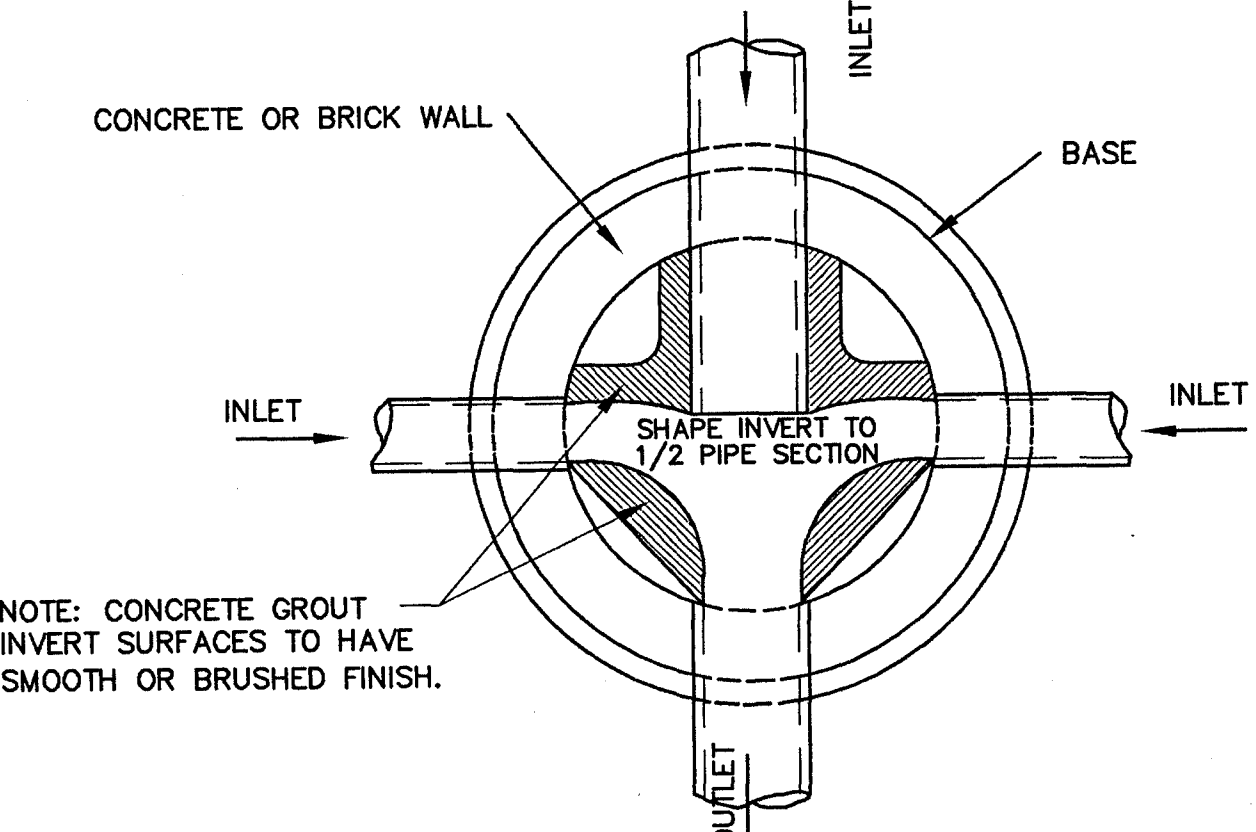
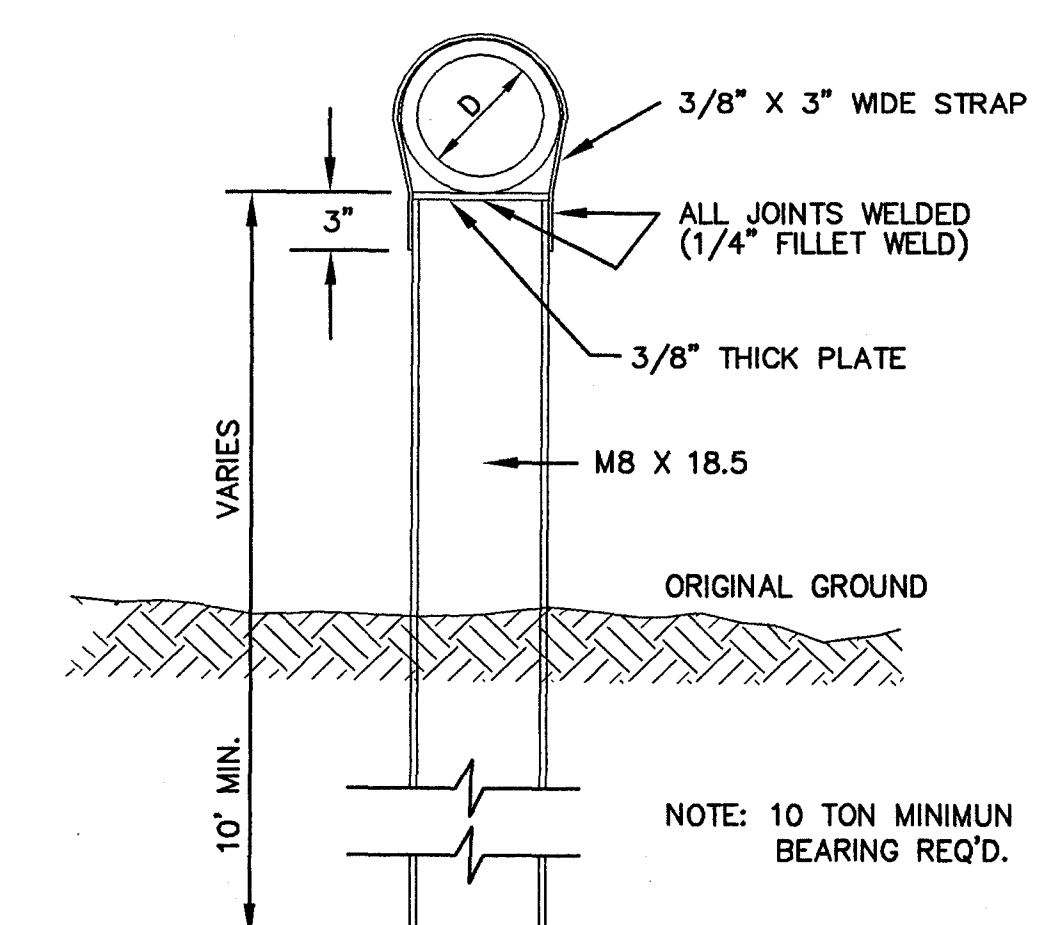
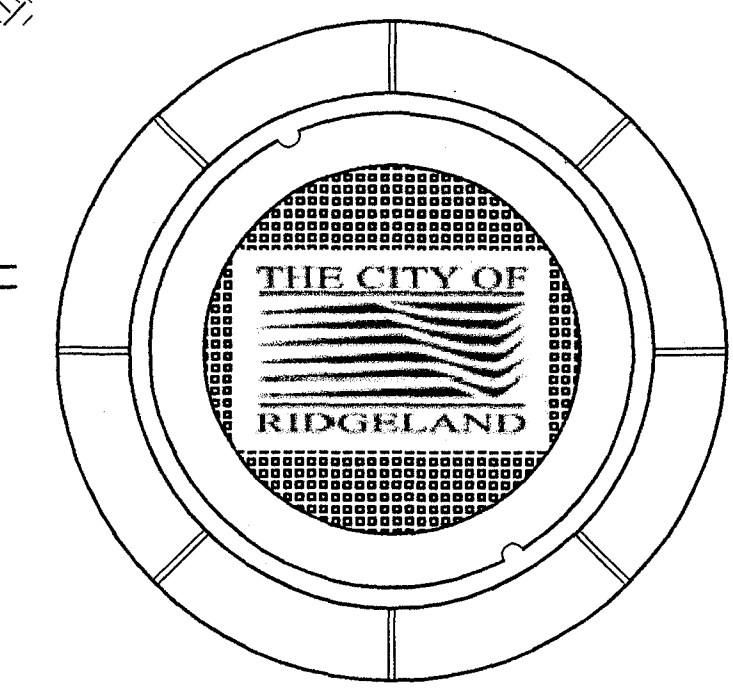
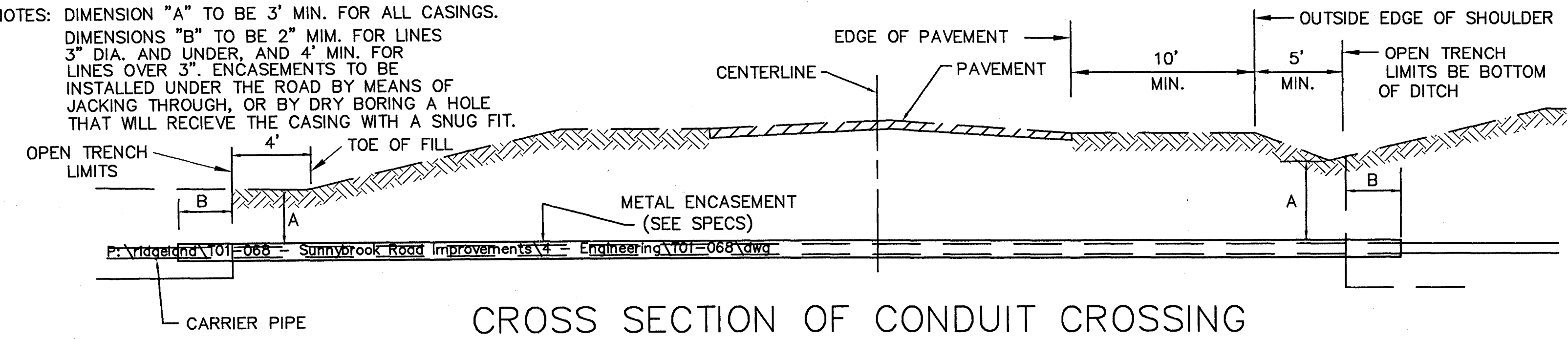
TYPICAL FIRE HYDRANT

- NOTES:
1. WHEN FIRE HYDRANTS ARE PLACED ON THE FRONTAGE OF A DIVIDED OR MULTI-LANE HIGHWAY, THE NOZZLES SHALL FACE AWAY FROM THE HIGHWAY RATHER THAN TOWARD THE HIGHWAY.
 2. ALL WATER MAIN CONNECTIONS SHALL BE RODDED WITH ALL STEEL THREADED RODS (3/4" MIN.) UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
 3. GATE VALVES ARE REQUIRED ON ALL FIRE HYDRANT LATERALS, WITH VALVE BOX.

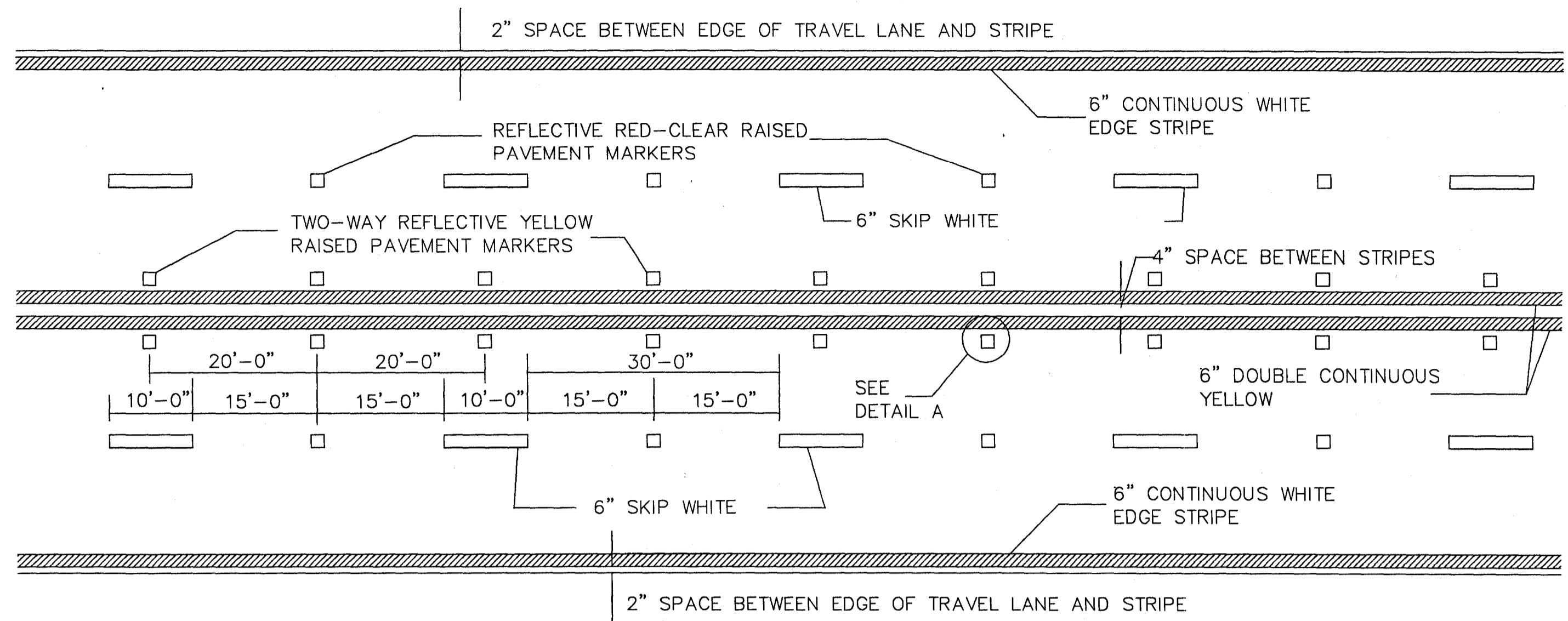
CITY OF RIDGELAND
SUNNYBROOK ROAD IMPROVEMENTS
PHASE I
 WATER MAIN DETAILS
 WAGONER ENGINEERING, INC.
 Consulting Engineers - Jackson, Mississippi
 DRAWN BY: SM DATE: 04-15-02 SHEET NUMBER
 REVIEWED BY: J.B. SCALE: N.T.S. **C6.1**



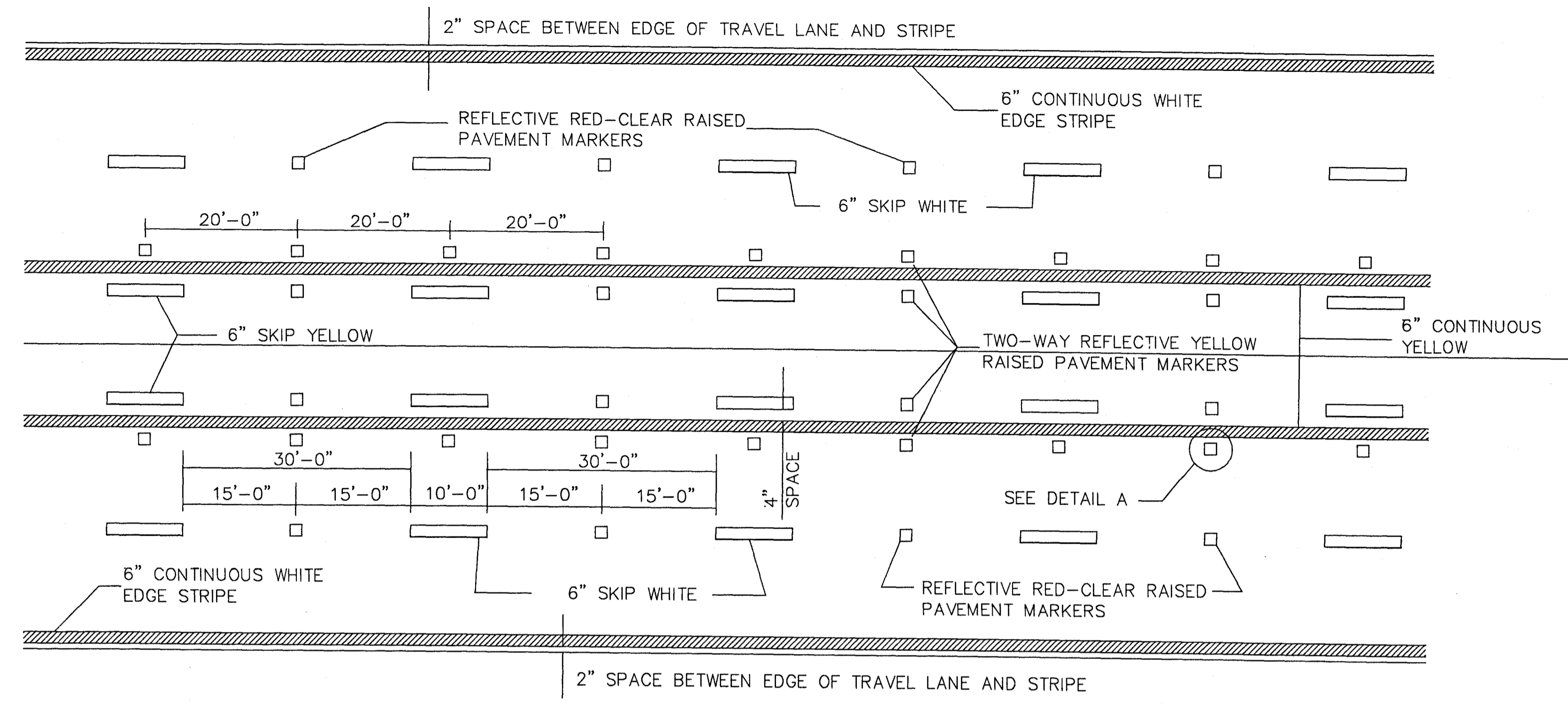
NOTES: DIMENSION "A" TO BE 3' MIN. FOR ALL CASINGS. DIMENSIONS "B" TO BE 2" MIN. FOR LINES 3" DIA. AND UNDER, AND 4" MIN. FOR LINES OVER 3". ENCASUREMENTS TO BE INSTALLED UNDER THE ROAD BY MEANS OF JACKING THROUGH, OR BY DRY BORING A HOLE THAT WILL RECEIVE THE CASING WITH A SNUG FIT.



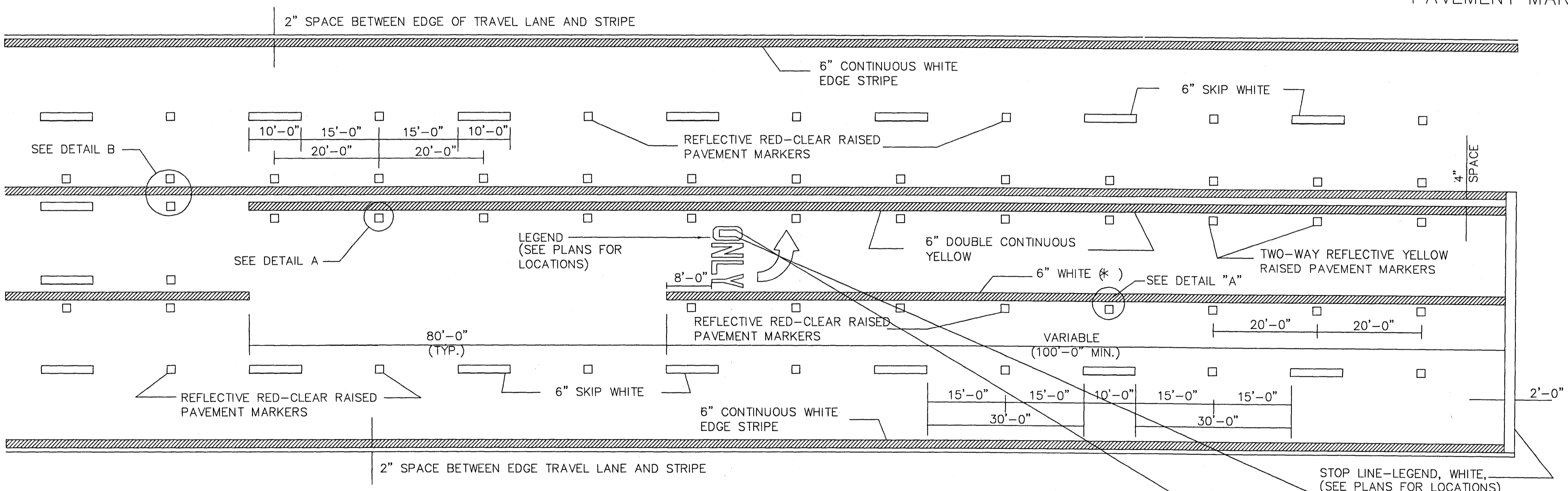
CITY OF RIDGELAND		
SUNNYBROOK ROAD IMPROVEMENTS		
PHASE I		
STANDARD SEWER DRAWINGS		
WAGGONER ENGINEERING, INC. Consulting Engineers - Jackson, Mississippi		
DRAWN BY: SM	DATE: 04-10-02	SHEET NUMBER
REVIEWED BY: J.R.	SCALE: N.T.S.	C6.2



TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION

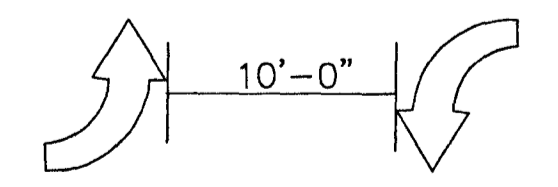
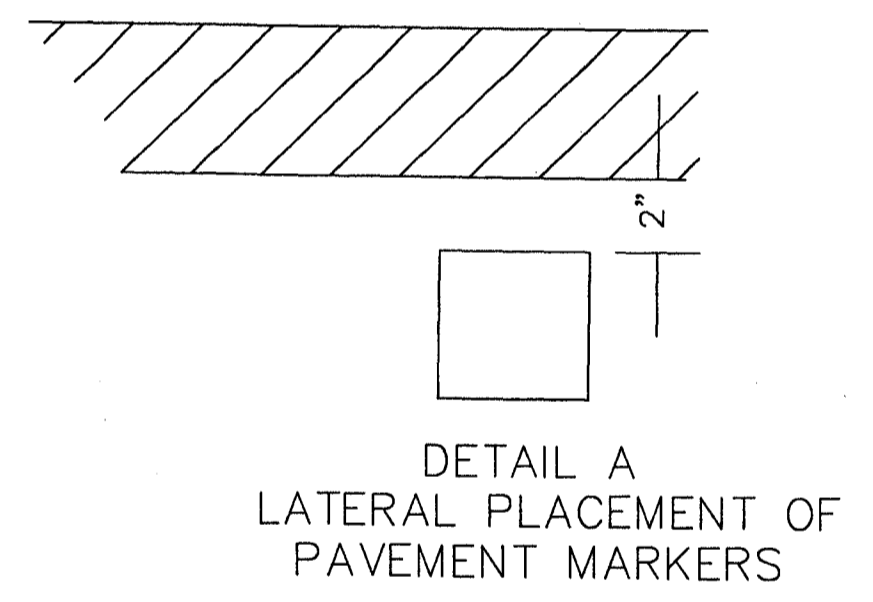


TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION



TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

*NOTE: USE DETAIL STRIPING IF LENGTH ≤ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.



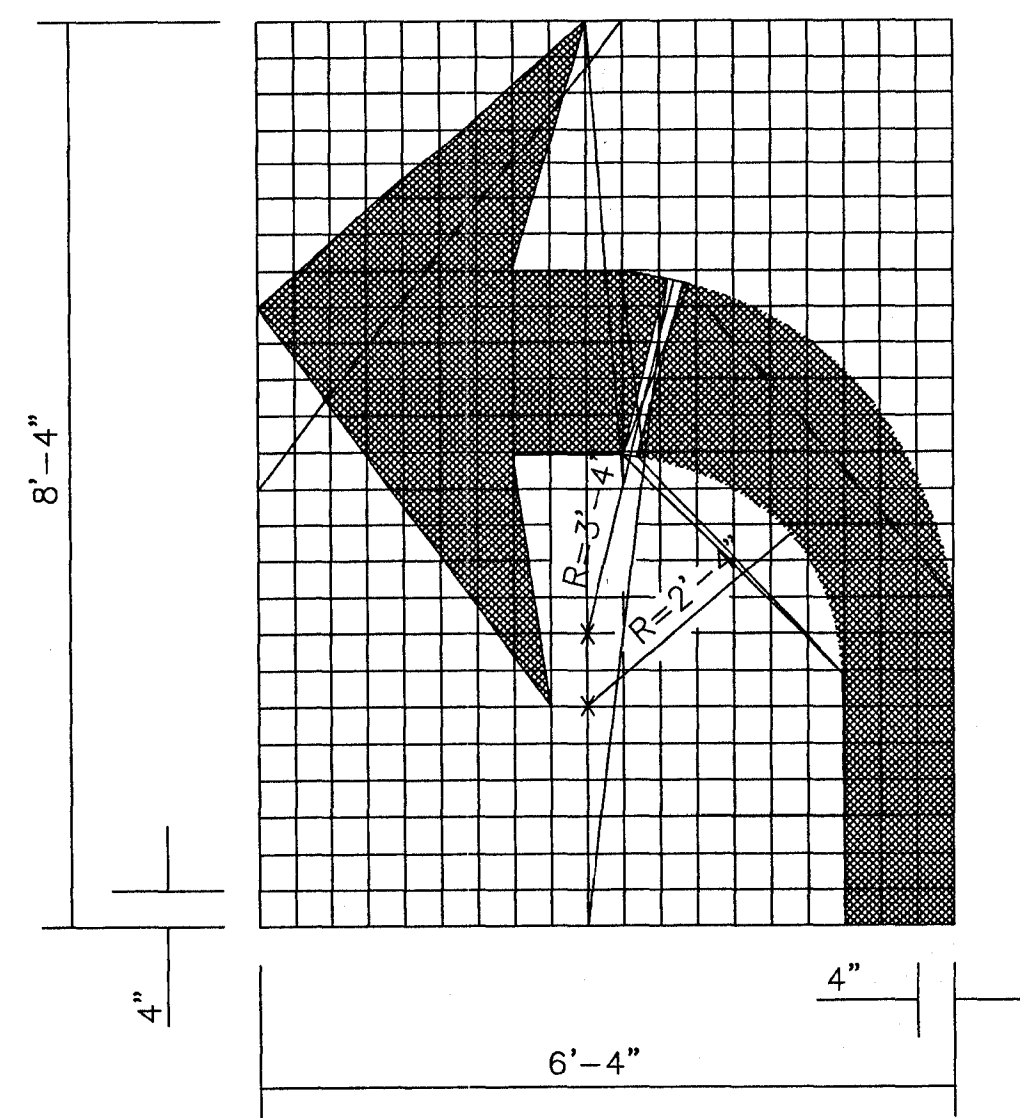
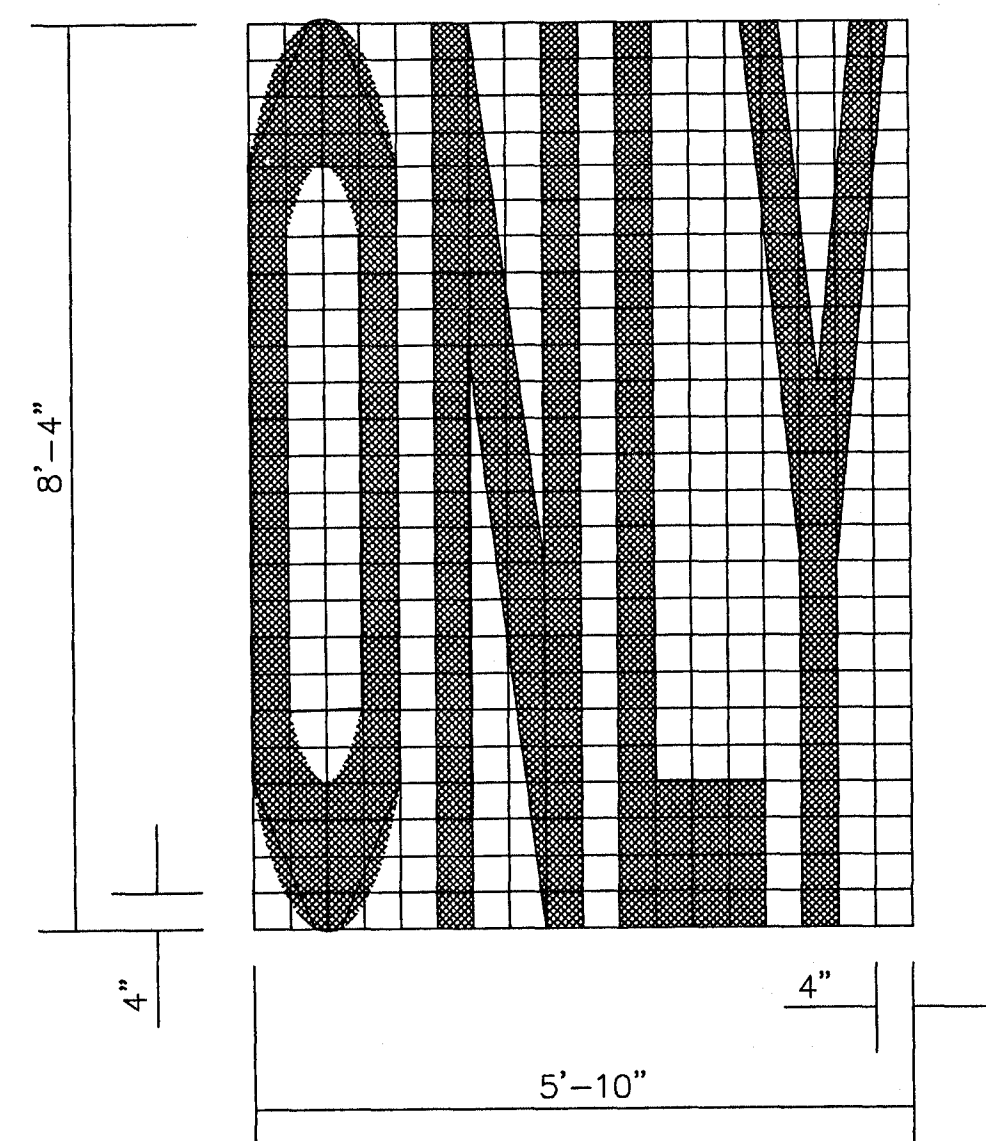
TYPICAL TWO-WAY ARROW INSTALLATION

- NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
 2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
 3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).

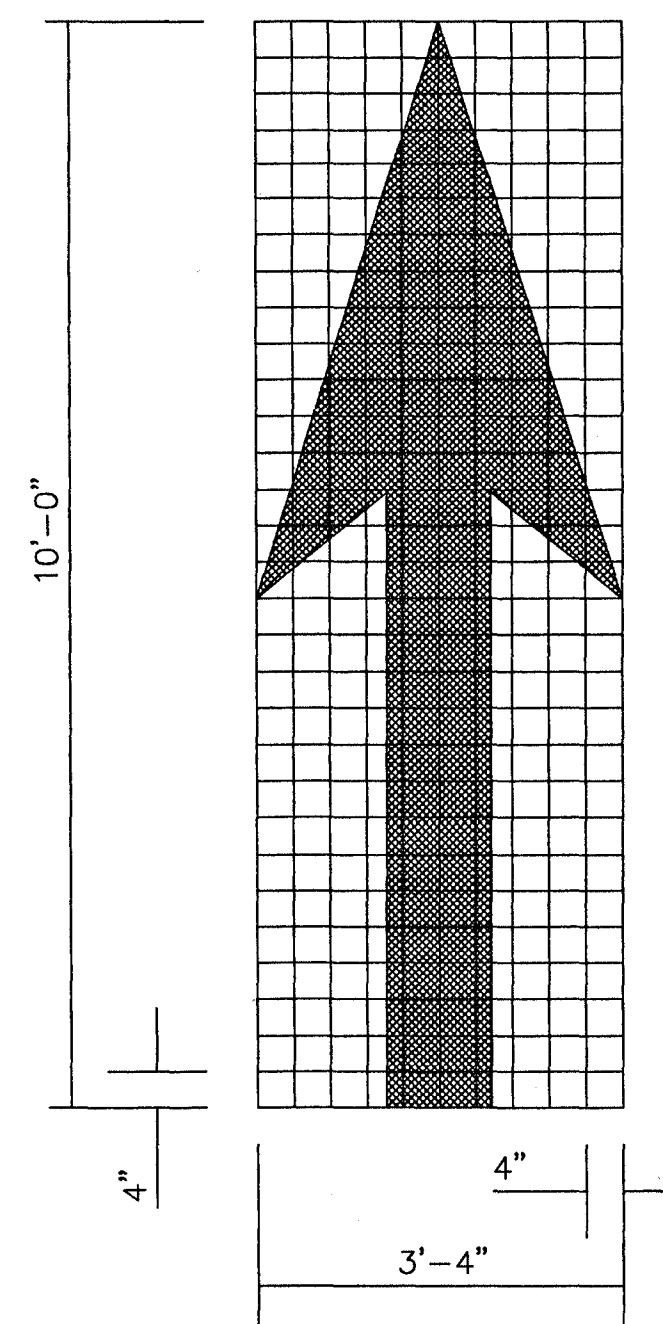
GENERAL NOTE:
 1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".

DETAIL B
LATERAL PLACEMENT OF PAVEMENT MARKERS

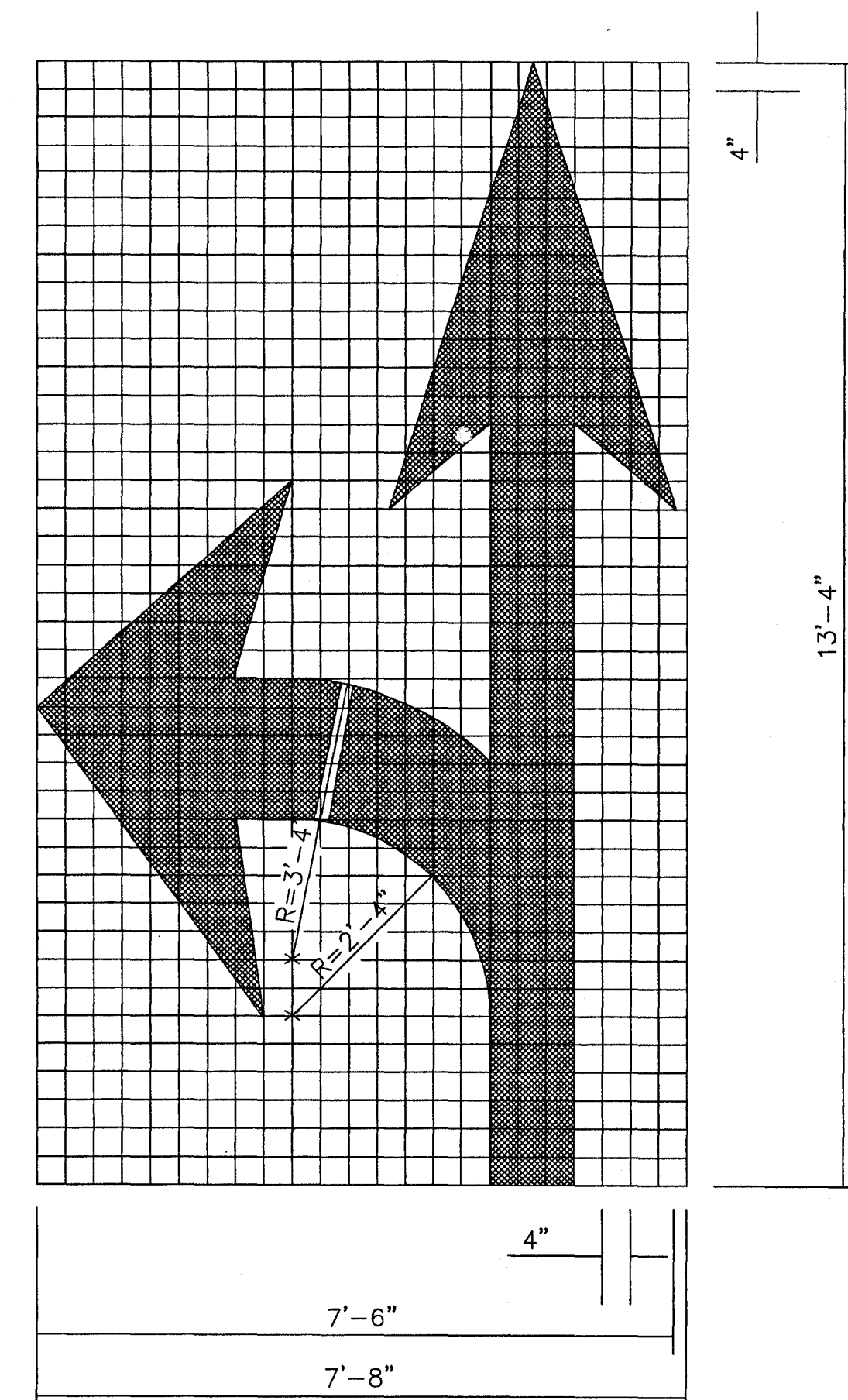
BY		MISSISSIPPI HIGHWAY DEPARTMENT	
REVISIONS		PAVEMENT MARKING DETAILS FOR 4-LANE AND 5-LANE UNDIVIDED ROADWAYS	
DATE	DESIGNED	DATE	TRACED
	CHECKED	DATE	ISSUED
			WORKING NUMBER PM-2
			SHEET NUMBER 121



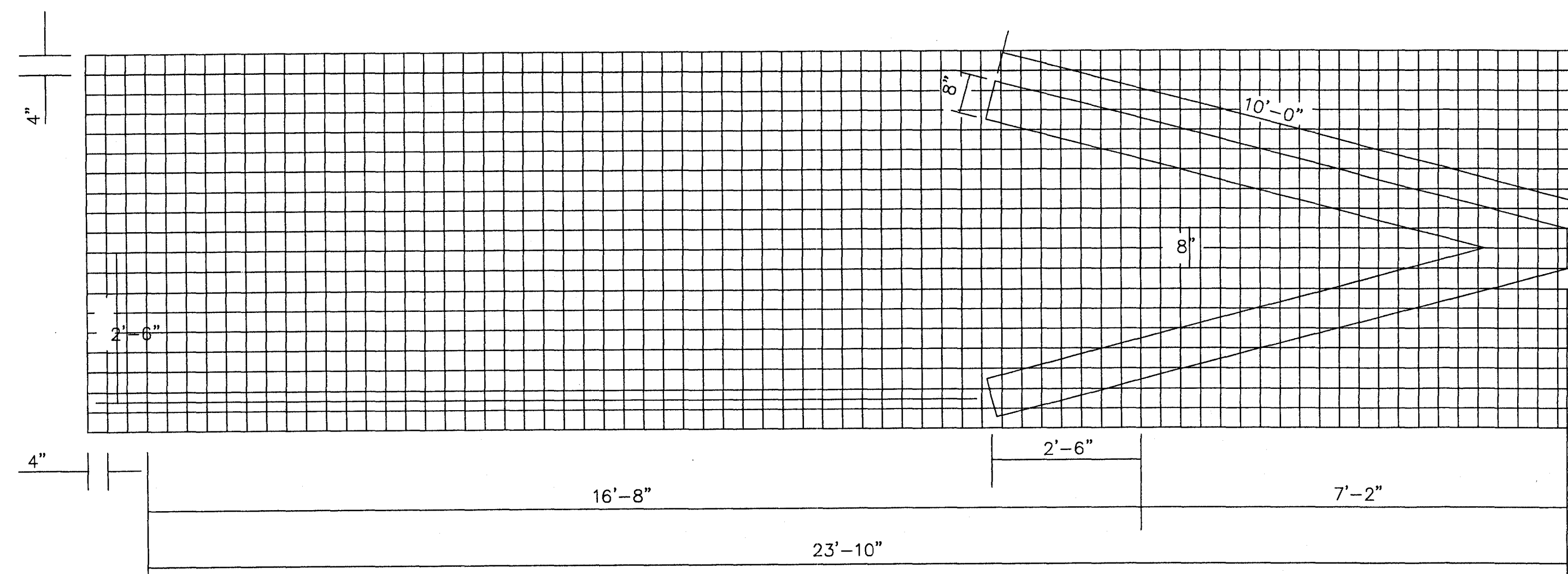
TURN ARROW



THRU ARROW



COMBINATION ARROW



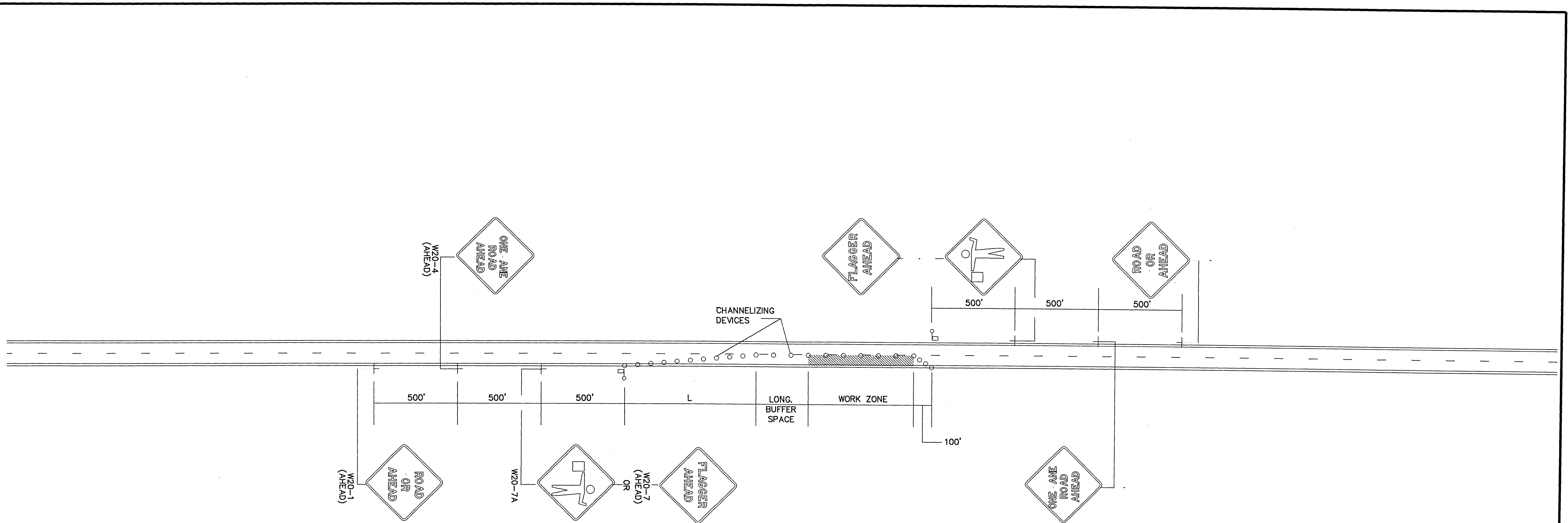
1-WAY ARROW

GENERAL NOTES:

1. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL PAVEMENT MARKING LEGENDS, INCLUDING TURN ARROWS, SHALL BE APPLIED USING HIGH PERFORMANCE MATERIALS.
2. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
3. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND/SYMBOL	AREA (ft ²)
ONLY	22.0
TURN ARROW	16.4
THRU ARROW	12.3
COMB. ARROW	27.5
1-WAY ARROW	24.3

MISSISSIPPI HIGHWAY DEPARTMENT	
PAVEMENT MARKING LEGEND DETAILS	
DATE	DESIGNED _____ DETAILED _____ TRACED _____
REVISIONS	CHECKED _____ ISSUED _____ DATE _____
BY	WORKING NUMBER PM-6
	SHEET NUMBER 125



- LEGEND
- FLAGGER
 - CHANNELIZING DEVICES

GENERAL NOTES:

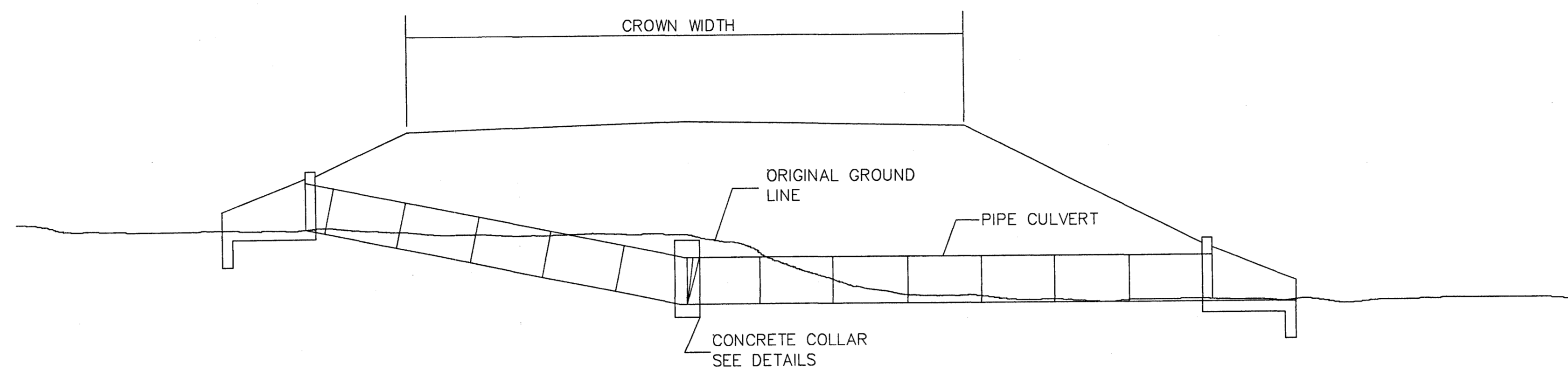
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER ^t RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

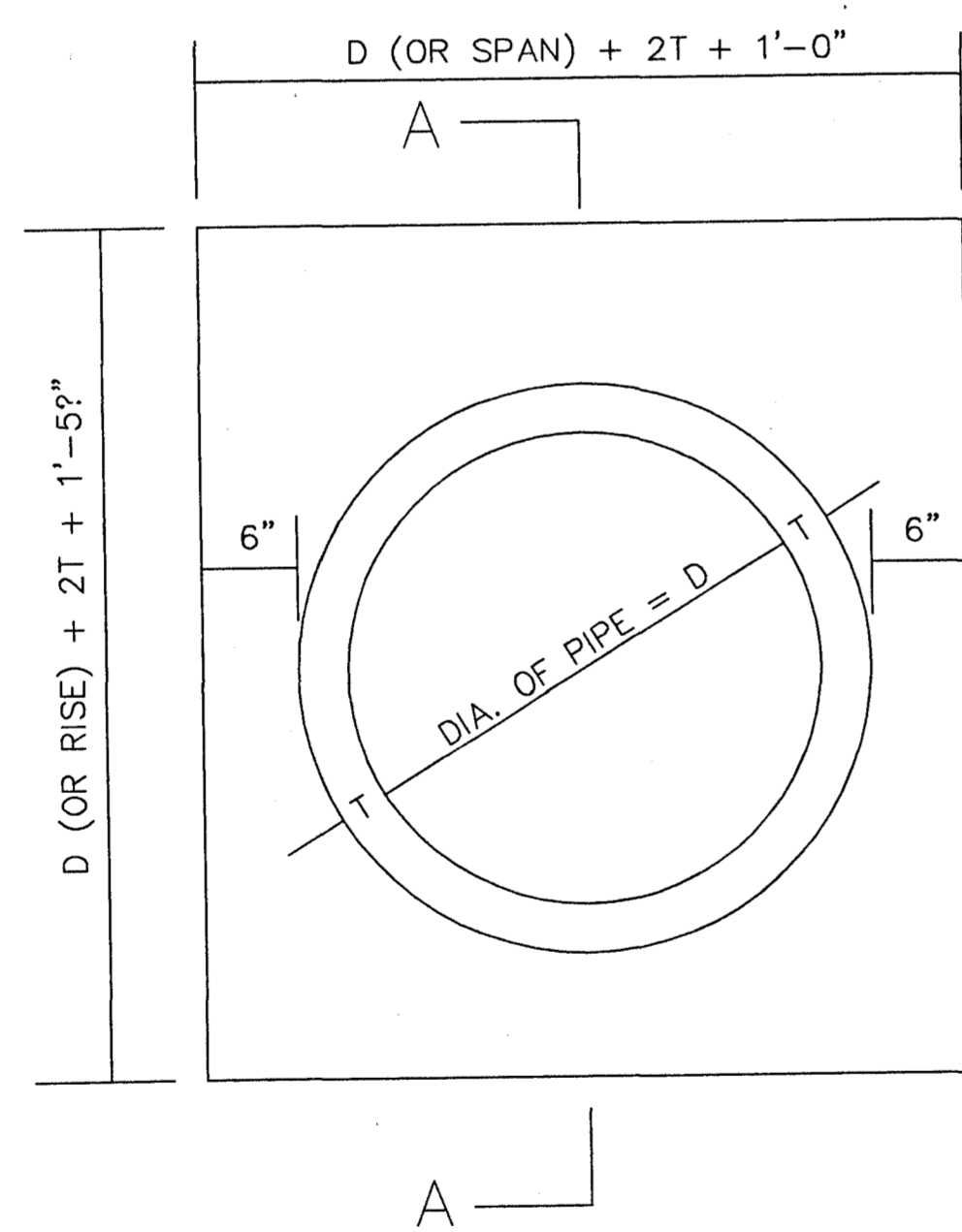
^t NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 L = WS FOR SPEEDS OF 45 mph OR GREATER
 L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
 W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 24" IN HEIGHT.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".
5. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
6. WHERE THE WORK ZONE IS STATIONARY, THE W20-7 (500 FT.) SIGN OR THE W20-7A SIGN TOGETHER WITH THE W20-7 (500 FT.) SUPPLEMENTAL PLATE SHOULD BE USED TO INDICATE THE DISTANCE TO THE FLAGGER.

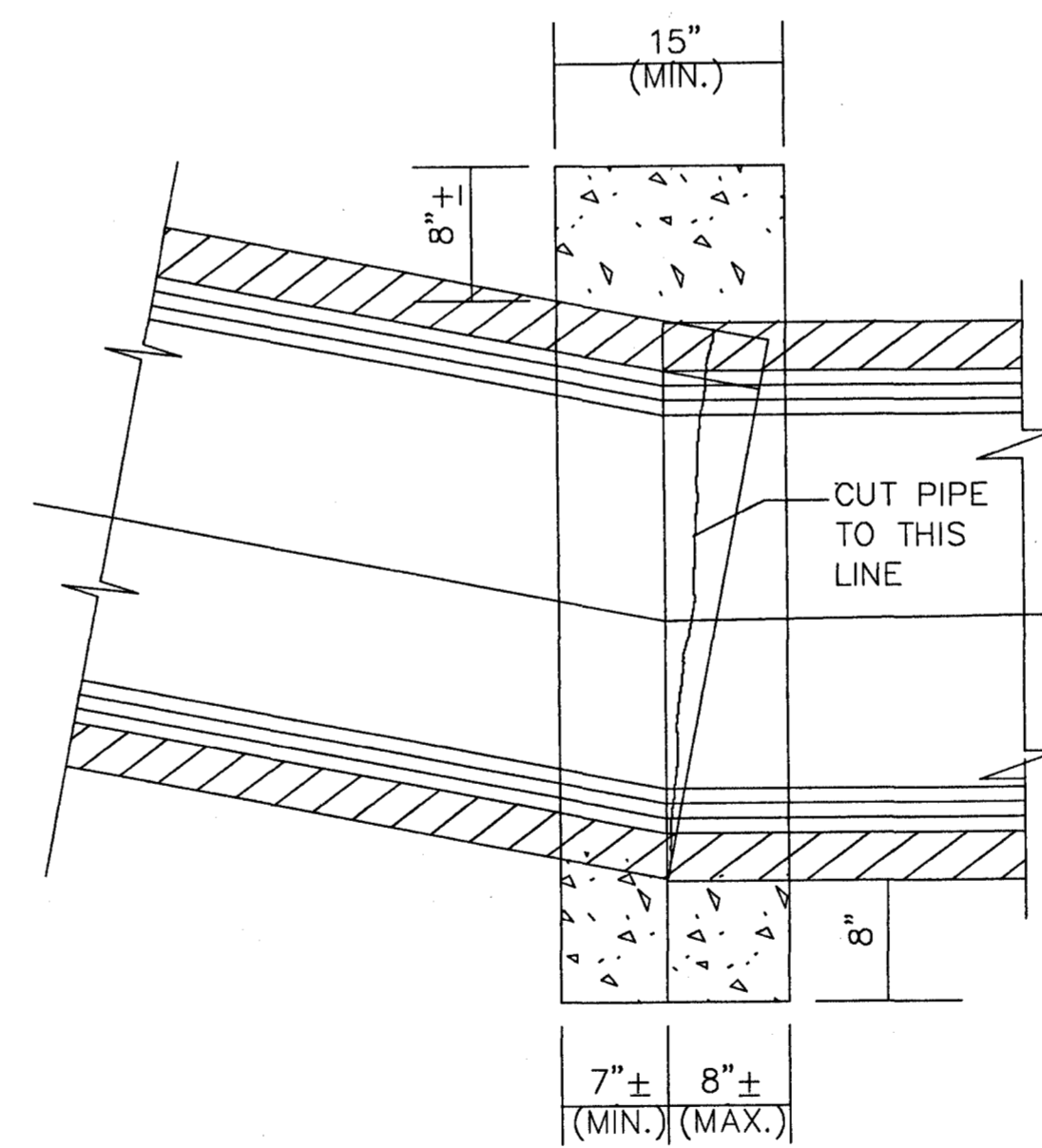
REVISIONS		BY		MISSISSIPPI HIGHWAY DEPARTMENT	
		DATE		WORKING NUMBER TCP-1	
DESIGNED _____		DETAILED _____		TRACED _____	
CHECKED _____		ISSUED _____		DATE _____	
				SHEET NUMBER 250	



TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR
NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.



SECTION A-A

GENERAL NOTE:

- THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR CONCRETE COLLAR FOR PIPE CULVERTS			
CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd ³)	SIZE OF PIPE	CLASS "B" CONCRETE (yd ³)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

REVISIONS		BY	
MISSISSIPPI HIGHWAY DEPARTMENT			
CONCRETE PIPE COLLAR			
DATE	DESIGNED	DATE	TRACED
DATE	CHECKED	DATE	ISSUED
WORKING NUMBER PC-1			SHEET NUMBER 301