

# CITY OF RIDGELAND, MISSISSIPPI

## RIDGELAND AVE. AND U.S. HIGHWAY 51

### INTERSECTION IMPROVEMENTS AND TRAFFIC SIGNAL INSTALLATION

MAYOR

**Gene F. McGee**

MAYOR PRO TEM

**Harvey Carr, Jr.**

CITY ATTORNEY

**Jerry Mills**

BOARD OF ALDERMEN

**Brian Barcellona**

**Al Bible**

**Harvey Carr, Jr.**

**Linda Davis**

**Daryl Smith**

PUBLIC WORKS DIRECTOR

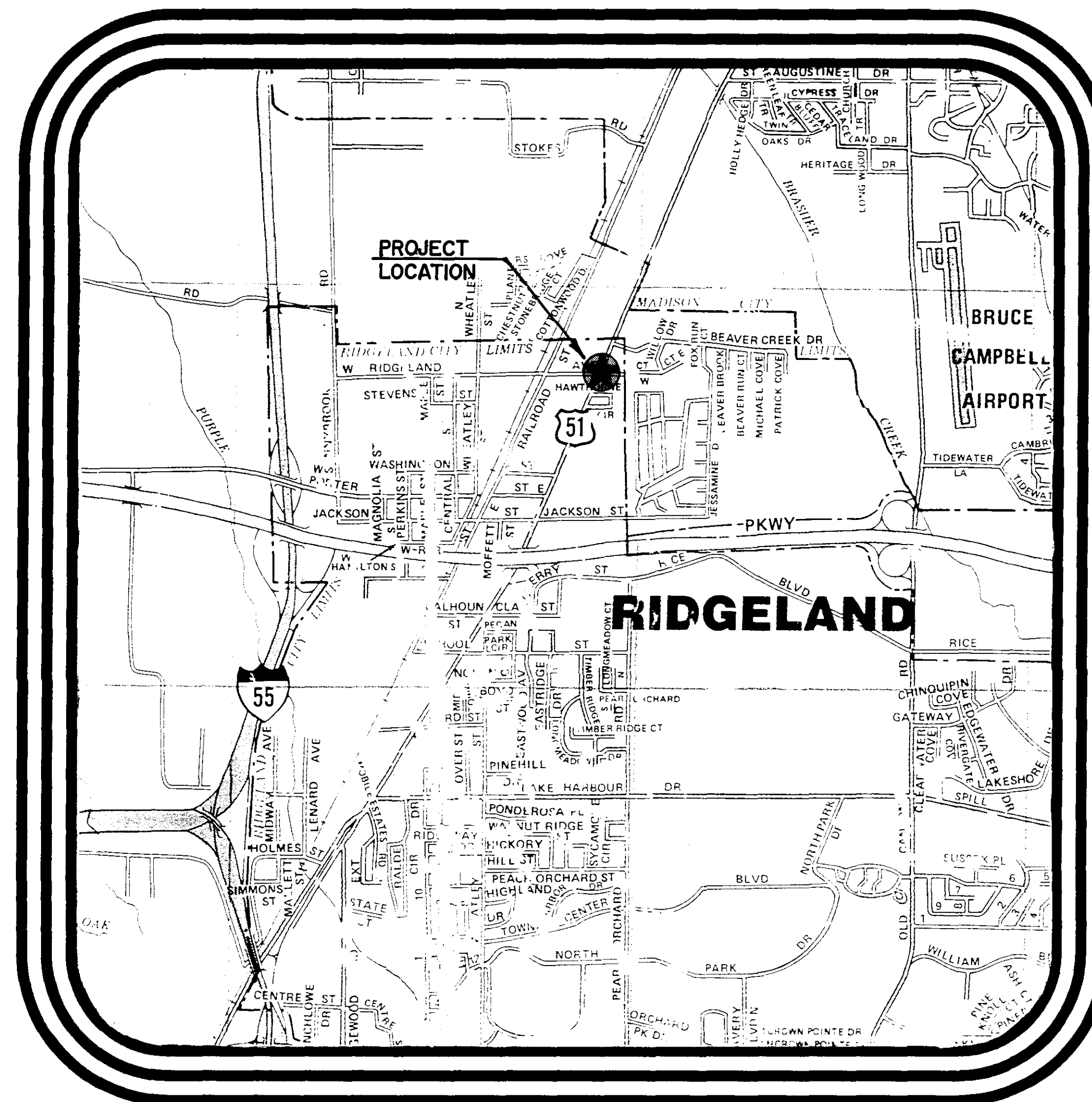
**Sam Vinson**

ASSISTANT PUBLIC WORKS DIRECTOR

**Sid Hawthorne**

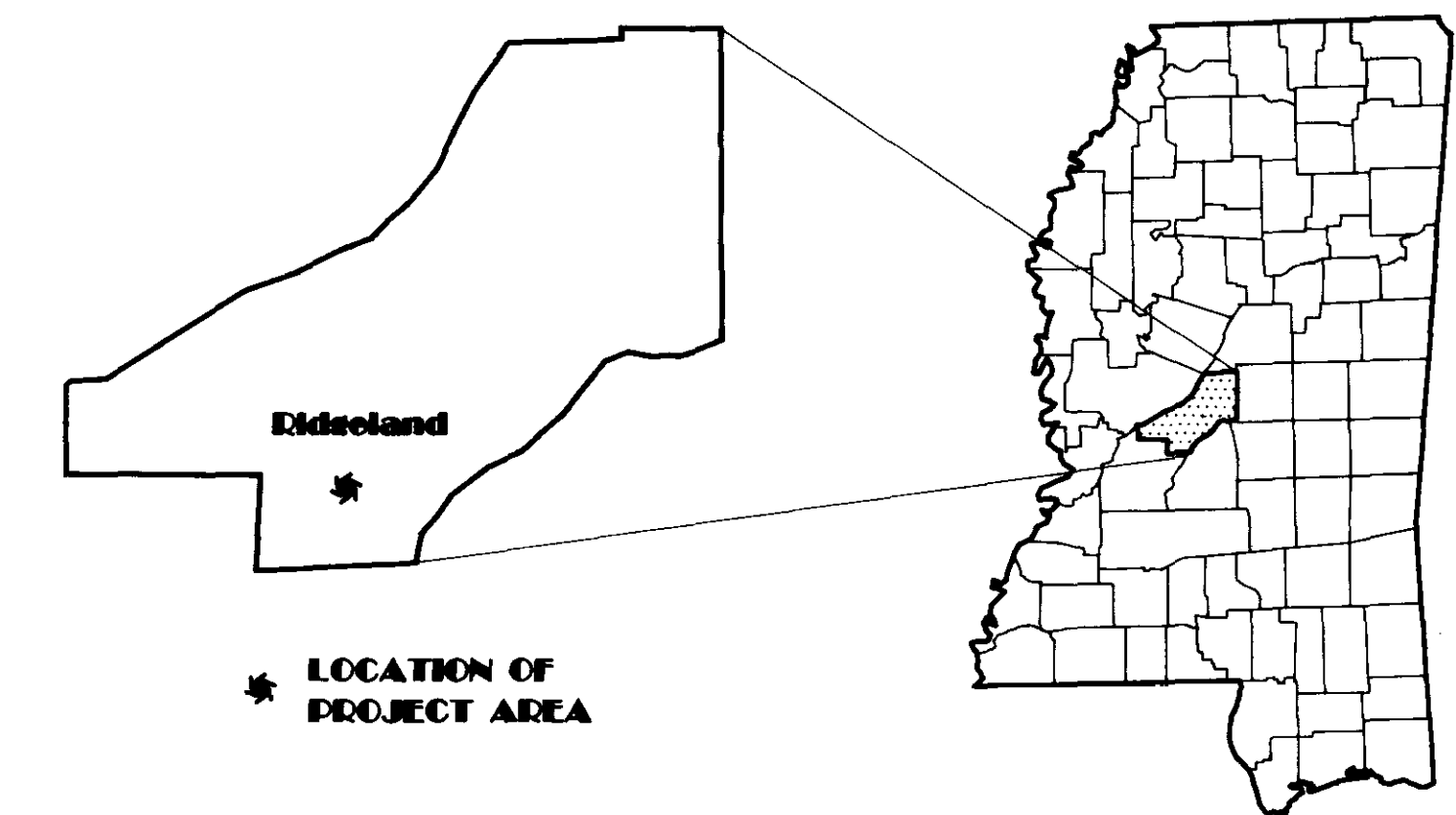
CITY CLERK

**Michael McPhearson**



VICINITY MAP  
PROJECT LOCATION

LOCATION MAP



UTILITIES

- City of Ridgeland
- Mississippi Power & Light Company
- A. T. & T. Company
- South Central Bell Telephone Company
- Entex Inc.
- United Gas Pipeline Company

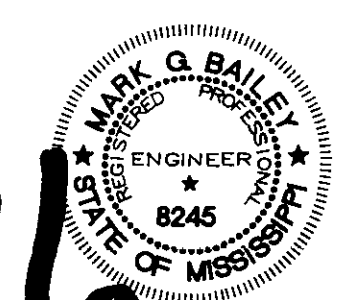
PREPARED BY



**NEEL-SCHAFFER, INC.**  
ENGINEERS • PLANNERS  
Jackson, Mississippi

*Mark G. Bailey* Date \_\_\_\_\_  
**MARK G. BAILEY, D.E.**  
Mississippi License No. 8245

**PWP-1826**



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## GENERAL NOTES

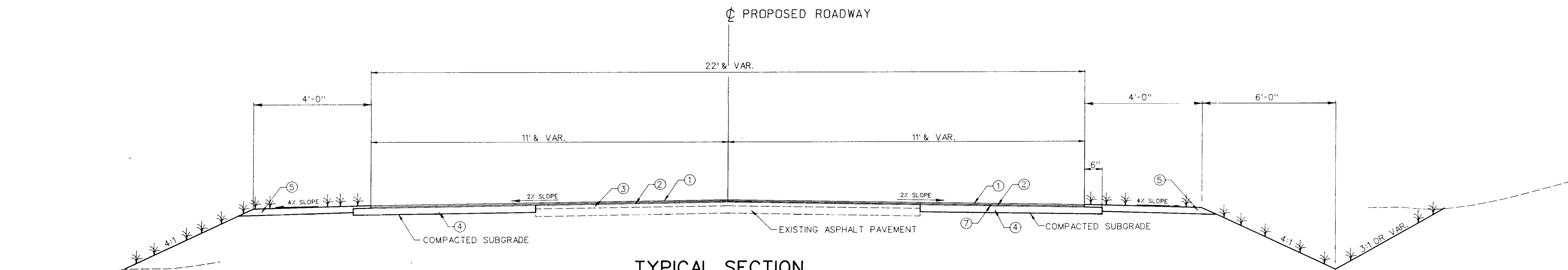
1. The Mississippi Standard Specifications for Road and Bridge Construction, 1990 edition, as amended, shall be the standard specifications for the construction of this project unless otherwise indicated or amended in the Special Provisions, Proposal and Contract Document.
2. All signs, signals, pavement markings and temporary traffic control devices are to conform to the Manual on Uniform Traffic Control Devices (1988 Edition and all subsequent revisions).
3. Underground utilities shown on plans are plotted in their approximate locations from the best information available to the Engineer. The Engineer does not guarantee their accuracy or guarantee that all utilities are shown. The Contractor shall be responsible for making for himself independent investigations, including subsurface investigations, as may be necessary.
4. All raised objects to be placed a minimum of 2' behind face of curb. New Traffic Signal Poles to be placed a minimum of 5' behind face of curb except where in conflict with utilities or Right-of-Way.
5. All poles, pullboxes, controllers, and pavement markings shall be field located by the Engineer and the Contractor at the nearest practical location indicated on the plan sheets.
6. Controller timings to be provided by the Engineer.
7. Contractor shall make the application for power service, coordinating with City Officials, in advance of acquiring the electrical service.
8. Any pavement markings required in the field shall be placed as directed by the Engineer.
9. All pavement marking removal shall be accomplished by grinding or blasting methods only with no undue damage to pavement surface and are to be cost absorbed items.
10. Contractor to provide the City with Laptop Compac 486/33 MHz or equal with 120 MB harddrive, 3.5" floppy disk drive and 9600 baud modem to be cost absorbed under pay item 907-642-A, "Solid State Traffic Actuated Controller".
11. Contractor to provide the City with NEMA controller tester or equal to be cost absorbed under pay item 907-642-A, "Solid State Traffic Actuated Controller".
12. Contractor to provide the City with four spare optical detectors, two spare phase selectors, 1000' of optical detector cable, one case of 150 watt bulbs and spare lens for 3 type 1 traffic signal heads, to be cost absorbed under pay item 907-642-A.

RIDGELAND AVE. AND  
U.S. 51 INTERSECTION SIGNALIZATION

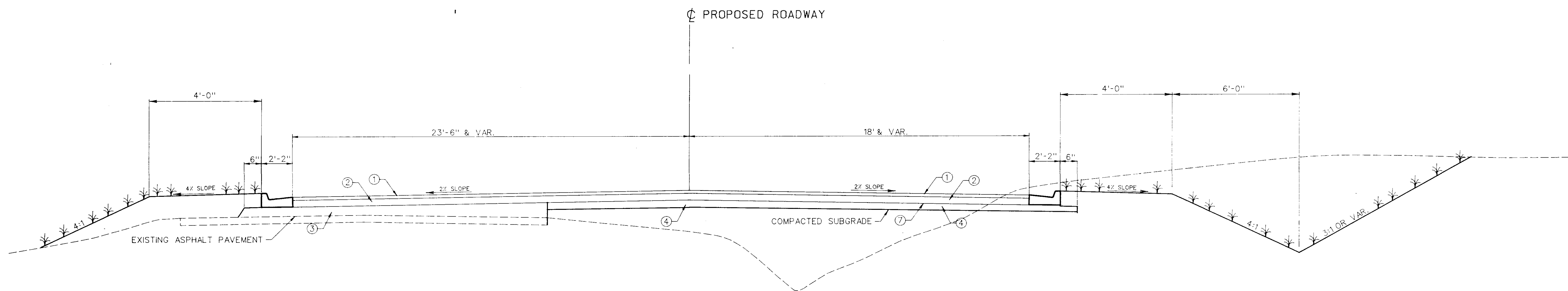
### INDEX TO DRAWINGS AND GENERAL NOTES

CITY OF RIDGELAND, MISSISSIPPI

DSGN: M.G.B. 3/93	DRAWING NO.
DRWN: D.B. 3/93	<b>2</b>
CHKD: E.L.S. 5/93	NEEL-SCHAFFER, INC. Engineers - Planners Jackson, Mississippi
SCALE: NONE	



**TYPICAL SECTION  
RIDGELAND AVENUE WITH 4' SHOULDERS**

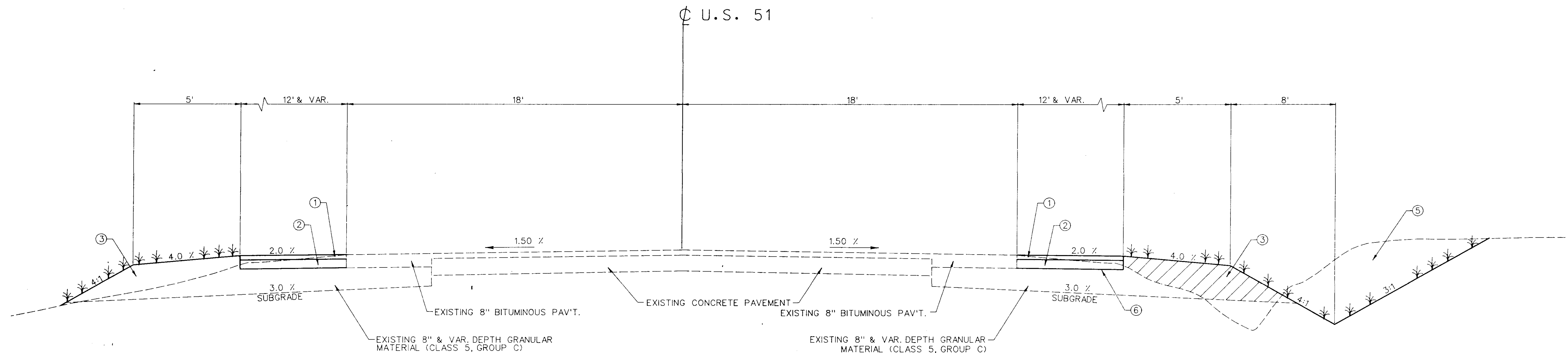


**TYPICAL SECTION  
RIDGELAND AVENUE WITH CURB & GUTTER**

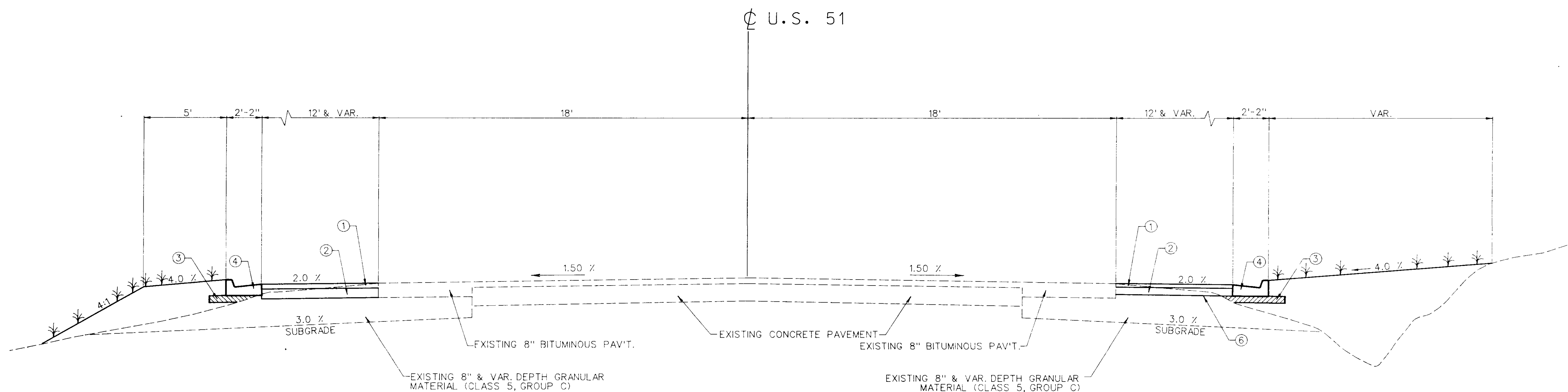
- ① 2" PLANT MIX PAVEMENT (SURFACE COURSE) REQ'D.
- ② 4" PLANT MIX BITUMINOUS BASE COURSE REQ'D.
- ③ VAR. DEPTH PLANT MIX BITUMINOUS BASE COURSE (LEVELING) REQ'D.
- ④ 8" GRANULAR MATERIAL (CLASS 5, GROUP C) REQ'D.
- ⑤ 4" GRANULAR MATERIAL (CLASS 5, GROUP C) REQ'D.
- ⑥ COMBINATION CONCRETE CURB & GUTTER (TYPE 1 MODIFIED) REQ'D.
- ⑦ BITUMINOUS PRIME COAT REQ'D. (MAY BE DELETED WHEN PERMITTED BY THE ENGINEER).

INDICATES AREAS TO BE VEGETATED

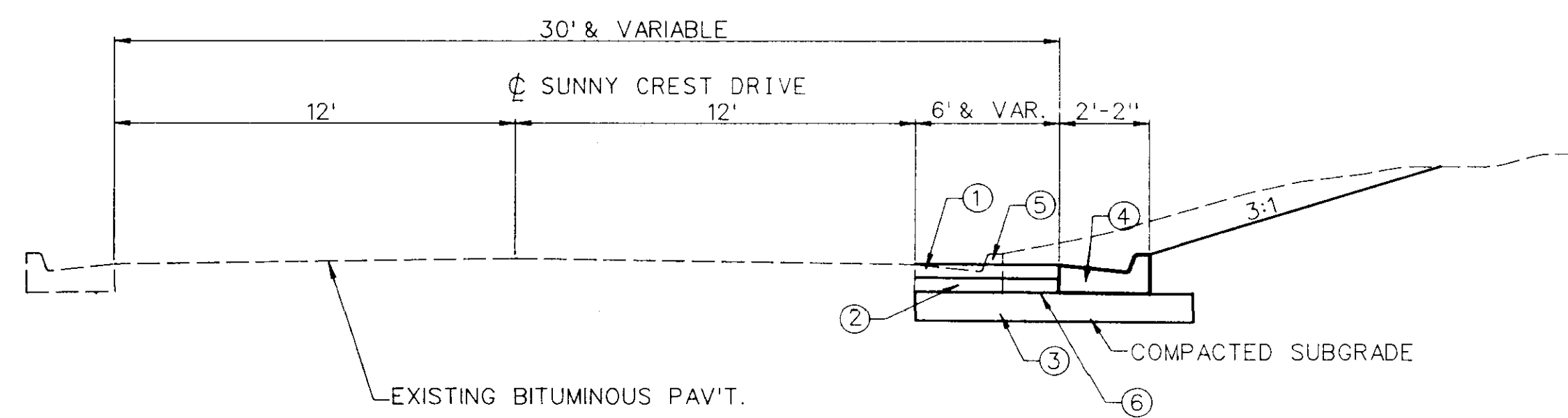
RIDGELAND AVE. AND U.S. 51 INTERSECTION SIGNALIZATION	
<b>TYPICAL SECTIONS RIDGELAND AVENUE</b>	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: A.W.K. 3/93	DRAWING NO. 3
DRWN: D.C.B. 3/93	
CHKD: E.L.S. 5/93	
SCALE:	NEEL-SCHAFFER, INC. Engineers - Planners Jackson, Mississippi



**TYPICAL SECTION  
U.S. 51 WITH 5' SHOULDERS**



**TYPICAL SECTION  
U.S. 51 WITH CURB & GUTTER**



**TYPICAL SECTION  
SUNNY CREST DRIVE**

- ① 2" HOT BITUMINOUS PAVEMENT SURFACE COURSE REQ'D.
- ② 6" PLANT MIX BITUMINOUS BASE COURSE REQ'D.
- ③ 8" & VARIABLE DEPTH GRANULAR MATERIAL (CLASS 5, GROUP C) REQ'D.
- ④ COMBINATION CONCRETE CURB & GUTTER (TYPE 1 MOD.) REQ'D.
- ⑤ UNCLASSIFIED EXCAVATION (FM)(ABSORBED HAUL) REQ'D.
- ⑥ BITUMINOUS PRIME COAT REQ'D. (MAY BE DELETED WHEN PERMITTED BY THE ENGINEER)

\*\*\* INDICATES AREAS TO BE VEGETATED

RIDGELAND AVE. AND U.S. 51 INTERSECTION SIGNALIZATION	
<b>TYPICAL SECTIONS U.S. 51 SUNNY CREST DRIVE</b>	
CITY OF RIDGELAND, MISSISSIPPI	
DESGN: A.W.K. 3/93 DRWN: D.C.B. 3/93 CHKD: E.L.S. 5/93	DRAWING NO. <b>4</b>





## SUMMARY OF QUANTITIES (ROADWAY)

PAY ITEM NO.	PAY ITEMS	UNITS	PRELIMINARY	FINAL
609-D	COMBINATION CONCRETE CURB AND GUTTER, TYPE I (MODIFIED)	LIN. FT.	575	
614-B	CONCRETE DRIVEWAY (WITH REINFORCEMENT)	SQ. YD.	50	
618-A	MAINTENANCE OF TRAFFIC	LUMP SUM	LUMP SUM	
619-B2	SHORT-TERM TRAFFIC STRIPE (CONTINUOUS YELLOW)	LIN. FT.	1645	
619-B6	SHORT-TERM TRAFFIC STRIPE (LEGEND)	SQ. FT.	286	
619-C1	RED-CLEAR REFLECTIVE RAISED PAVEMENT MARKER	EACH	55	
619-C2	TWO-WAY YELLOW REFLECTIVE RAISED PAVEMENT MARKER	EACH	150	
619-D1	STANDARD ROADSIDE CONSTRUCTION SIGNS (LESS THAN 10 SQ. FT.)	SQ. FT.	72	
619-D2	STANDARD ROADSIDE CONSTRUCTION SIGNS (10 SQ. FT. OR MORE)	SQ. FT.	40	
619-G5	FREE STANDING PLASTIC DRUMS	EACH	56	
620-A	MOBILIZATION	LUMP SUM	LUMP SUM	
625-B	TRAFFIC STRIPE (SKIP YELLOW)	L. F.	550	
625-C	TRAFFIC STRIPE (CONTINUOUS WHITE)	L. F.	2675	
625-D	TRAFFIC STRIPE (CONTINUOUS YELLOW)	L. F.	3450	
625-F	LEGEND	S. F.	623	
908-635-A	VEHICLE LOOP ASSEMBLIES	L. F.	920	
908-636-A	SHIELDED CABLE	L. F.	1333	
908-638-D	LOOP DETECTOR AMPLIFIER, CARD RACK MOUNTED, 4-CHANNEL WITH DELAY & EXT. TIMING	EACH	2	
908-639-A1	TRAFFIC SIGNAL EQUIP. POLE (STEEL) (SINGLE MAST ARM) (30' SHAFT) (36' ARM)	EACH	2	
908-639-A2	TRAFFIC SIGNAL EQUIP. POLE (STEEL) (SINGLE MAST ARM) (30' SHAFT) (42' ARM)	EACH	1	
908-639-A3	TRAFFIC SIGNAL EQUIP. POLE (STEEL) (SINGLE MAST ARM) (30' SHAFT) (50' ARM)	EACH	1	
908-640-A1	TRAFFIC SIGNAL HEADS (TYPE 1)	EACH	11	
908-640-A2	TRAFFIC SIGNAL HEADS (TYPE 7)	EACH	1	
907-646-A	SOLID-STATE TRAFFIC ACTUATED CONTROLLERS, TYPE 8A, WITH TBC	EACH	1	
907-647-B1	PULLBOXES (TYPE 1)	EACH	7	
907-647-B2	PULLBOXES (TYPE 2)	EACH	4	
908-666-B1	ELECTRIC CABLE (UG IN CONDUIT) (IMSA 20-1) (AWG #6) (2 CONDUCTORS)	L. F.	20	
908-666-B2	ELECTRIC CABLE (UG IN CONDUIT) (IMSA 20-1) (AWG #8) (2 CONDUCTORS)	L. F.	368	
908-666-B3	ELECTRIC CABLE (UG IN CONDUIT) (IMSA 20-1) (AWG #14) (5 CONDUCTORS)	L. F.	253	
908-666-B4	ELECTRIC CABLE (UG IN CONDUIT) (IMSA 20-1) (AWG #14) (7 CONDUCTORS)	L. F.	253	
908-668-A1	TRAFFIC SIGNAL CONDUIT (UNDERGROUND) (TYPE I) (1")	L. F.	40	
908-668-A2	TRAFFIC SIGNAL CONDUIT (UNDERGROUND) (TYPE IV) (1")	L. F.	372	
908-668-A3	TRAFFIC SIGNAL CONDUIT (UNDERGROUND) (TYPE IV) (2")	L. F.	120	
908-668-B1	TRAFFIC SIGNAL CONDUIT (UNDERGROUND) (DRILLED OR JACKED) (TYPE I) (1")	L. F.	289	
908-668-B2	TRAFFIC SIGNAL CONDUIT (UNDERGROUND) (DRILLED OR JACKED) (TYPE I) (2")	L. F.	502	
907-673-OD	OPTICAL DETECTOR	EACH	4	
907-673-ODC	OPTICAL DETECTOR CABLE	L. F.	584	
907-673-PS	PHASE SELECTOR (2-CHANNEL)	EACH	2	

RIDGELAND AVE. AND  
U.S.51 INTERSECTION SIGNALIZATION

### SUMMARY OF QUANTITIES

CITY OF RIDGELAND, MISSISSIPPI

DSGN: A.W.K. 3/93	DRAWING NO.
DRWN: D.C.B. 3/93	6
CHKD: ELS 5/93	NEEL-SCHAFFER, INC. Engineers · Planners Jackson, Mississippi
SCALE:	





SIGNS REQUIRED					
SIGN NO.	SIZE	UNIT AREA SQ. FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ. FT.	REMARKS
G20 - 1	60" x 36"	15.00			ROAD CONST. NEXT X X MILES
G20 - 2	60" x 24"	10.00	4	40.00	END CONST. PILOT CAR FOLLOW ME
G20 - 4	36" x 18"	4.50			
1 MI - 1	24" x 24"	4.00			1 OR 2 DIGIT
1 MI - 1	30" x 24"	5.00			3 DIGIT
2 MI - 4	24" x 24"	4.00			1 OR 2 DIGIT
2 MI - 4	30" x 24"	5.00			3 DIGIT
3 MI - 6	24" x 24"	4.00			1 OR 2 DIGIT
3 MI - 6	30" x 24"	5.00			3 DIGIT
4 M3 - 1	24" x 12"	2.00			NORTH-USE WITH 1 OR 2 DIGIT RTE. MARKER
4 M3 - 1	30" x 15"	3.13			NORTH-USE WITH 3 DIGIT RTE. MARKER
4 M3 - 2	24" x 12"	2.00			EAST-USE WITH 1 OR 2 DIGIT RTE. MARKER
4 M3 - 2	30" x 15"	3.13			EAST-USE WITH 3 DIGIT RTE. MARKER
4 M3 - 3	24" x 12"	2.00			SOUTH-USE WITH 1 OR 2 DIGIT RTE. MARKER
4 M3 - 3	30" x 15"	3.13			SOUTH-USE WITH 3 DIGIT RTE. MARKER
4 M3 - 4	24" x 12"	2.00			WEST-USE WITH 1 OR 2 DIGIT RTE. MARKER
4 M3 - 4	30" x 15"	3.13			WEST-USE WITH 3 DIGIT RTE. MARKER
M4 - 8	24" x 12"	2.00			DETOUR-USE WITH 1 OR 2 DIGIT RTE. MARKER
M4 - 8	30" x 15"	3.13			DETOUR-USE WITH 3 DIGIT RTE. MARKER
M4 - 9	43" x 36"	12.00			DETOUR
M4 - 9L	48" x 36"	12.00			DETOUR
M4 - 9RL	49" x 36"	12.00			DETOUR
M4 - 9SL	48" x 36"	12.00			DETOUR
M4 - 9SL	45" x 36"	12.00			DETOUR
M4 - 9R	43" x 36"	12.00			DETOUR
M4 - 9BR	48" x 36"	12.00			DETOUR
M4 - 9SR	48" x 36"	12.00			DETOUR
M4 - 9BSR	48" x 36"	12.00			DETOUR
M4 - 10L	48" x 18"	6.00			DETOUR
M4 - 10R	48" x 18"	6.00			DETOUR
4 M4 - 5	24" x 12"	2.00			TO
4 M5 - 1L	21" x 15"	2.19			
4 M5 - 1R	21" x 15"	2.19			
4 M5 - 2L	21" x 15"	2.19			
4 M5 - 2R	21" x 15"	2.19			
4 M6 - 1L	21" x 15"	2.19			
4 M6 - 1R	21" x 15"	2.19			
4 M6 - 2L	21" x 15"	2.19			
4 M6 - 2R	21" x 15"	2.19			
4 M6 - 3	21" x 15"	2.19			
R1 - 1	30" x 30"	9.00			STOP
R1 - 1	45" x 45"	15.00			
R1 - 2	45" x 45"	6.93			
R1 - 2	63" x 30" x 6"	10.93			YIELD

SIGNS REQUIRED (CONT'D)					
SIGN NO.	SIZE	UNIT AREA SQ. FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ. FT.	REMARKS
R1 - 3	12" x 6"	0.50			3-WAY, 4 WAY ETC.
R2 - 1	48" x 60"	20.00			SPEED LIMIT
R3 - 1	36" x 36"	9.00			
R3 - 1	48" x 48"	16.00			
R3 - 2	36" x 36"	9.00			
R3 - 2	48" x 48"	16.00			
R3 - 3	36" x 36"	9.00			
R3 - 3	48" x 48"	16.00			NO TURNS
R3 - 4	36" x 36"	9.00			
R3 - 4	48" x 48"	16.00			
R3 - 5L	30" x 36"	7.50			
R3 - 5R	30" x 36"	7.50			
R3 - 6L	30" x 36"	7.50			
R3 - 6R	30" x 36"	7.50			
R3 - 7L	30" x 30"	6.25			LEFT LANE MUST TURN LEFT
R3 - 7R	30" x 30"	6.25			RIGHT LANE MUST TURN RIGHT
R4 - 1	48" x 60"	20.00			DO NOT PASS
R4 - 2	48" x 60"	20.00			PASS WITH CARE
R4 - 7	48" x 60"	20.00			
R4 - 8	48" x 60"	20.00			
R5 - 1	48" x 48"	16.00			DO NOT ENTER
R5 - 1a	42" x 30"	8.75			WRONG WAY
R6 - 1L	36" x 12"	3.00			ONE WAY
R6 - 1R	36" x 12"	3.00			ONE WAY
R6 - 2L	18" x 24"	3.00			ONE WAY
R6 - 2L	24" x 30"	5.00			ONE WAY
R6 - 2R	18" x 24"	3.00			ONE WAY
R6 - 2R	24" x 30"	5.00			ONE WAY
R11 - 2	48" x 30"	10.00			ROAD CLOSED
R11 - 3a	60" x 30"	12.50			ROAD CLOSED XX MILES AHEAD
R11 - 3b	60" x 30"	12.50			BRIDGE OUT XX MILES AHEAD
R11 - 4	60" x 30"	12.50			ROAD CLOSED TO THRU TRAFFIC
R12 - 1	36" x 48"	12.00			WEIGHT LIMIT XX TONS
W1 - 1L	48" x 48"	16.00			
W1 - 1R	48" x 48"	16.00			
W1 - 2L	48" x 48"	16.00			
W1 - 2R	48" x 48"	16.00			
W1 - 3L	48" x 48"	16.00			
W1 - 3R	48" x 48"	16.00			
W1 - 4L	48" x 48"	16.00			
W1 - 4R	48" x 48"	16.00			
W1 - 5L	48" x 48"	16.00			
W1 - 5R	48" x 48"	16.00			
W1 - 6L	48" x 24"	8.00			
W1 - 6L	60" x 30"	12.50			
W1 - 6R	48" x 24"	8.00			
W1 - 6R	60" x 30"	12.50			
W1 - 7	48" x 24"	8.00			

SIGNS REQUIRED (CONT'D)					
SIGN NO.	SIZE	UNIT AREA SQ. FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ. FT.	REMARKS
W1 - 7	60" x 30"	12.50			
W1 - 8L	18" x 24"	3.00			
W1 - 8L	36" x 48"	12.00			
W1 - 8R	18" x 24"	3.00			
W1 - 8R	36" x 48"	12.00			
W3 - 1a	48" x 48"	16.00			
W3 - 1P	24" x 18"	3.00			STOP AHEAD
W3 - 2a	48" x 48"	16.00			
W3 - 2P	24" x 18"	3.00			YIELD AHEAD
W3 - 3	48" x 48"	16.00			
W4 - 1L	48" x 48"	16.00			
W4 - 1R	48" x 48"	16.00			
W4 - 2L	48" x 48"	16.00			
W4 - 2R	48" x 48"	16.00			
W6 - 1	48" x 48"	16.00			
W6 - 2	48" x 48"	16.00			
W6 - 3	48" x 48"	16.00			
W8 - 1	48" x 48"	16.00			BUMP
W8 - 4	48" x 48"	16.00			SOFT SHOULDER
W8 - 6	48" x 48"	16.00			TRUCK CROSSING
W8 - 9	48" x 48"	16.00			LOW SHOULDER
W10 - 1	36" DIA.	9.00			
W10 - 1	48" DIA.	16.00			
W13 - 1	24" x 24"	4.00			XX MPH
W14 - 3	48" x 64" x 64"	9.89			NO PASSING ZONE
W20 - 1	48" x 48"	16.00			ADVANCE ROAD CONST.
W20 - 1	36" x 36"	9.00	8	72.00	
W20 - 2	48" x 48"	16.00			ADVANCE DETOUR
W20 - 3	48" x 48"	16.00			ADVANCE RD. CLOSED
W20 - 4	48" x 48"	16.00			ADVANCE ONE-LN. RD.
W20 - 4B	48" x 48"	16.00			ADVANCE ONE-LN. BR.
W20 - 5L	48" x 48"	16.00			ADVANCE LT. LN. CLOSED
W20 - 5R	48" x 48"	16.00			ADVANCE RT. LN. CLOSED
W20 - 7	48" x 48"	16.00			ADVANCE FLAGGER
W20 - 7a	48" x 48"	16.00			
W21 - 1	36" x 36"	9.00			WORKERS
W21 - 1a	36" x 36"	9.00			

SIGNS REQUIRED (CONT'D)						STATE	PROJECT NO.
SIGN NO.	SIZE	UNIT AREA SQ. FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ. FT.	REMARKS	MISS.	
W21 - 2	36" x 36"	9.00			FRESH OIL (TAR)		
W21 - 3	48" x 48"	16.00			ADVANCE ROAD MACHINERY		
W21 - 5	48" x 48"	16.00			SHOULDER WORK		
W21 - 6	36" x 36"	9.00			SURVEY CREW		
DP - 1	24" x 18"	3.00			XXX FEET		
VP - 1L	12" x 36"	3.00					
VP - 1R	12" x 36"	3.00					
5 OM - 3L	12" x 36"	3.00					
5 OM - 3R	12" x 36"	3.00					
TOTAL SIGN AREA LESS THAN 10 SQ. FT.						72	SQ. FT.
TOTAL SIGN AREA 10 SQ. FT. OR MORE						40	SQ. FT.
① STANDARD ② SPECIAL (USE WHERE WARRANTED)							

**NOTES**

- INTERSTATE ROUTE MARKER
- UNITED STATES ROUTE MARKER
- STATE ROUTE MARKER
- COLORS OF CARDINAL DIRECTION MARKERS AND DIRECTIONAL ARROWS SHALL BE APPROPRIATE TO MATCH ACCOMPANYING ROUTE MARKERS.
- BLACK STRIPES ON YELLOW BACKGROUND

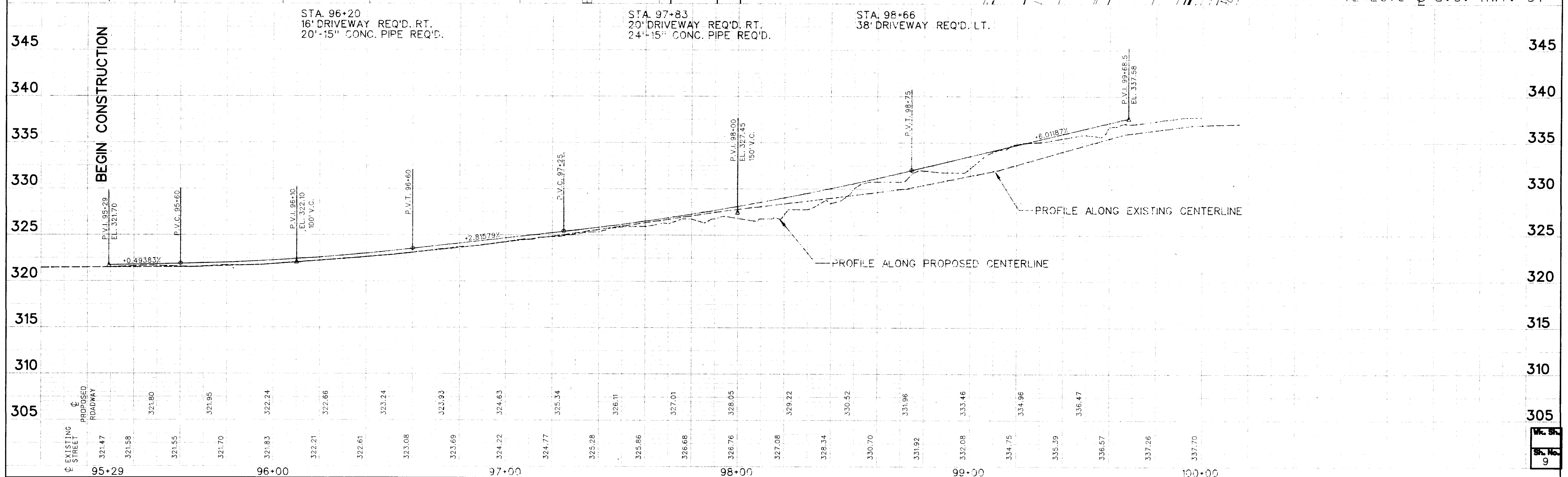
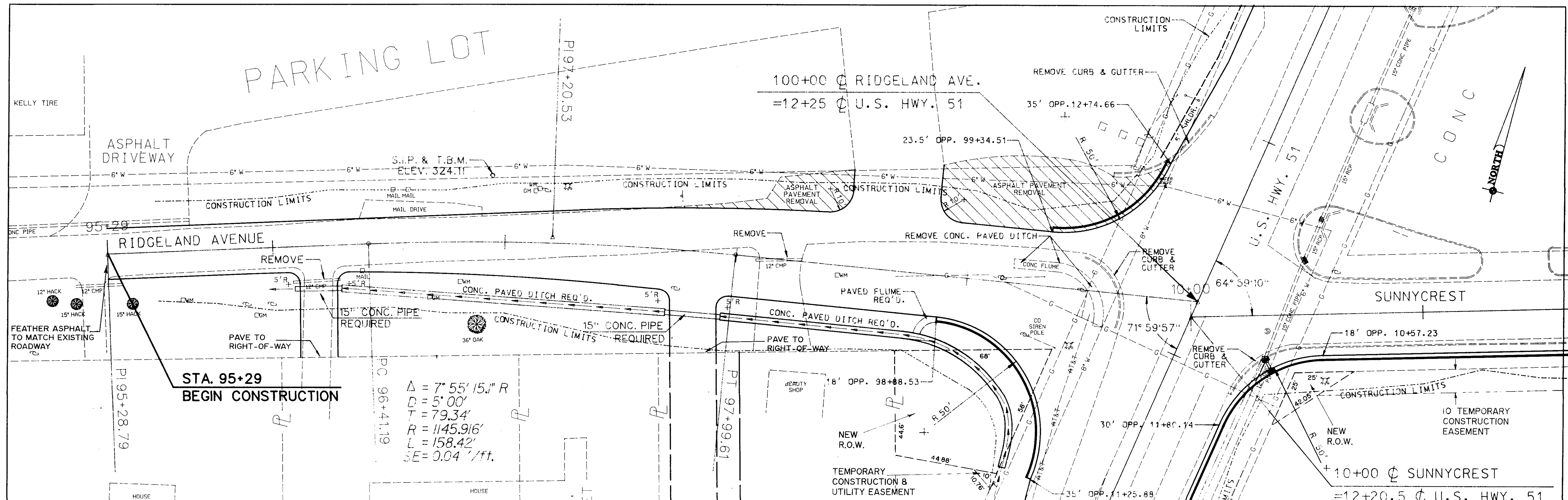
THE BACKGROUND OF ALL WARNING SIGNS ("W" SERIES) EXCEPT W10 - 1 SHALL BE ORANGE. THE W10 - 1 BACKGROUND SHALL BE YELLOW IN ALL CASES.

MISSISSIPPI STATE HIGHWAY DEPARTMENT	
<b>ESTIMATED QUANTITIES FOR TRAFFIC CONTROL SIGNS</b>	
PROJECT NO. :	WORKING NUMBER
COUNTY :	TCP - 0
DESIGNED J.M.T. DETAILED	TRACED C.A.C.
CHECKED	ISSUED DATE 3/12/90
SHEET NUMBER 8	



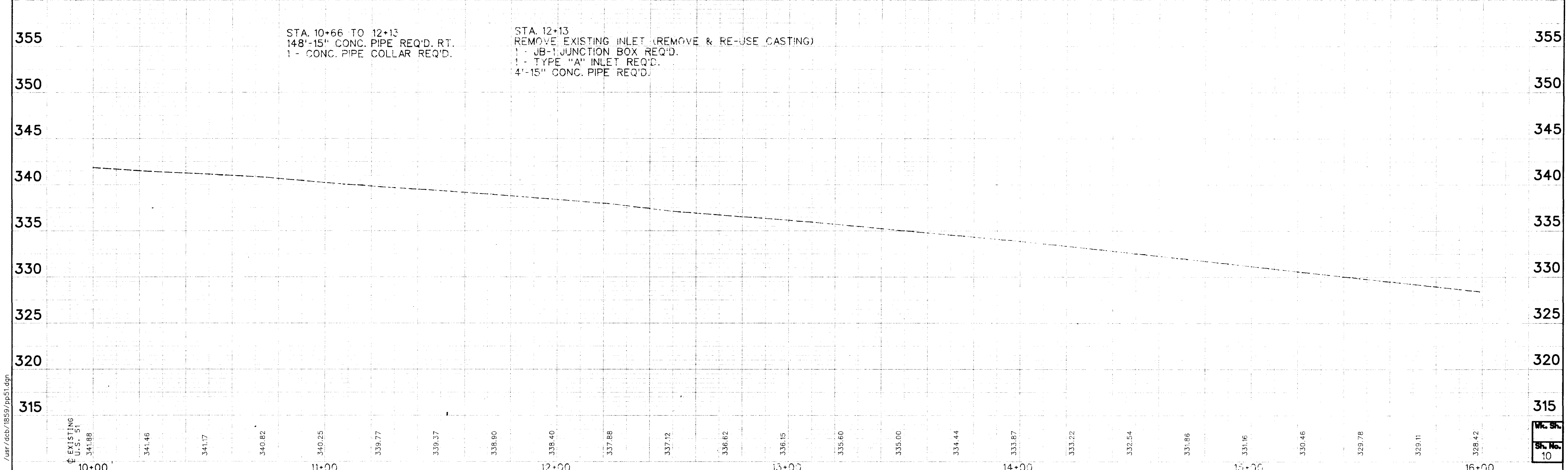
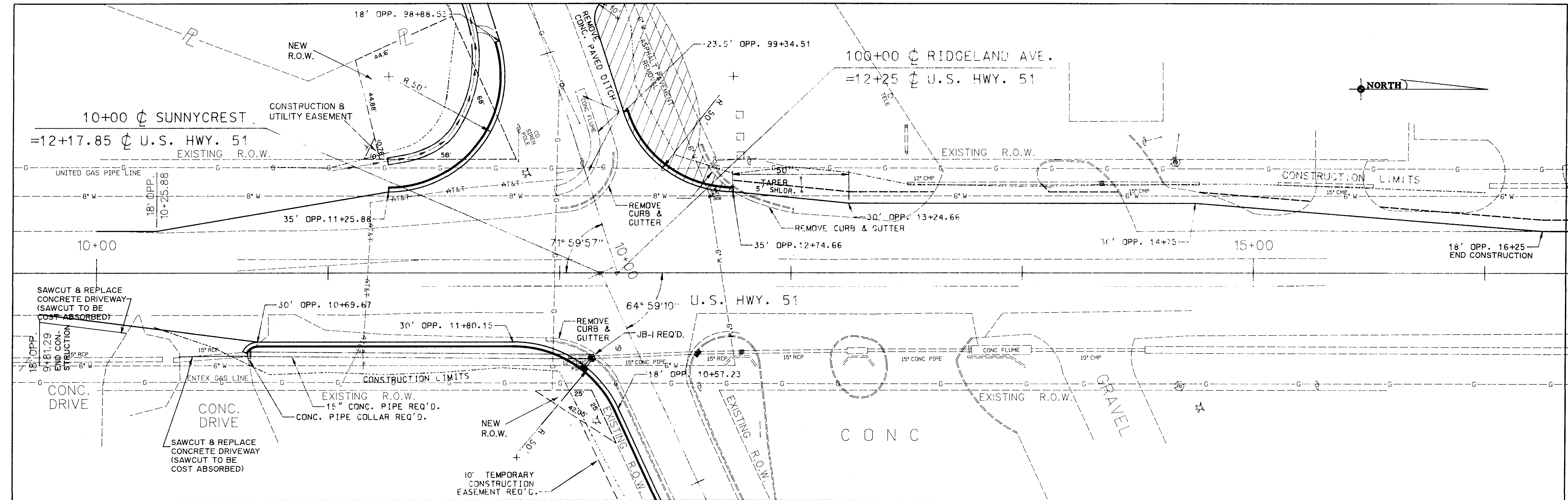
DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_ PLOTTED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_ ALIGNED CHECKED: \_\_\_\_\_  
 NO. \_\_\_\_\_ PT. OF WAY CHECKED: \_\_\_\_\_

PROFILE: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 NO. \_\_\_\_\_



DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
DATE	
BY	
REVISIONS	
NO.	
DESCRIPTION	
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BY	
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DESCRIPTION	



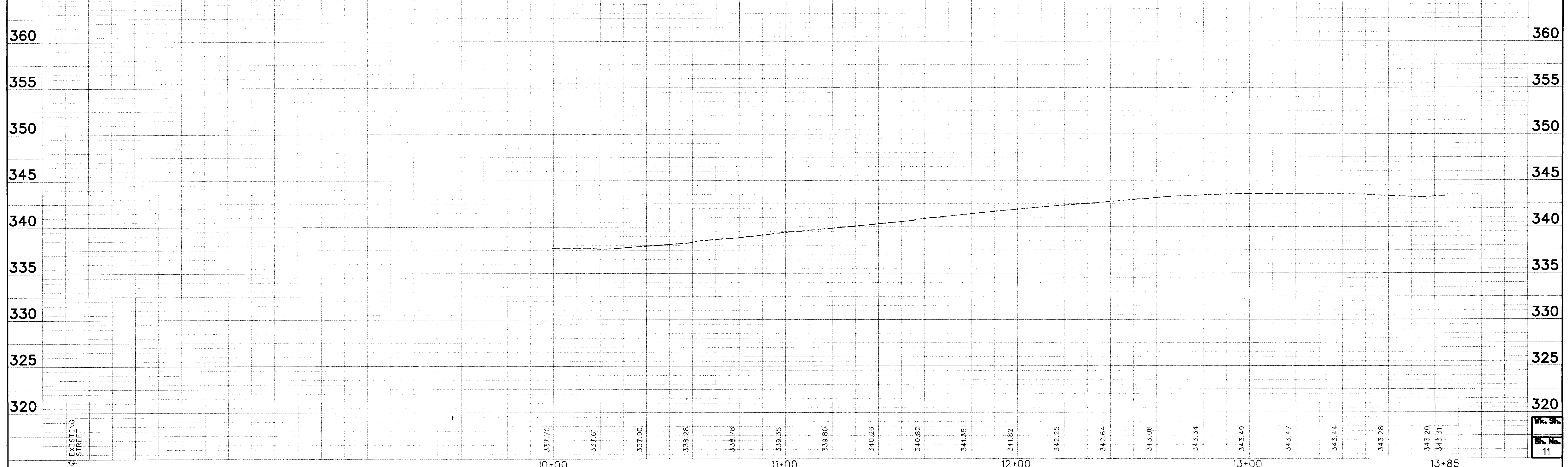
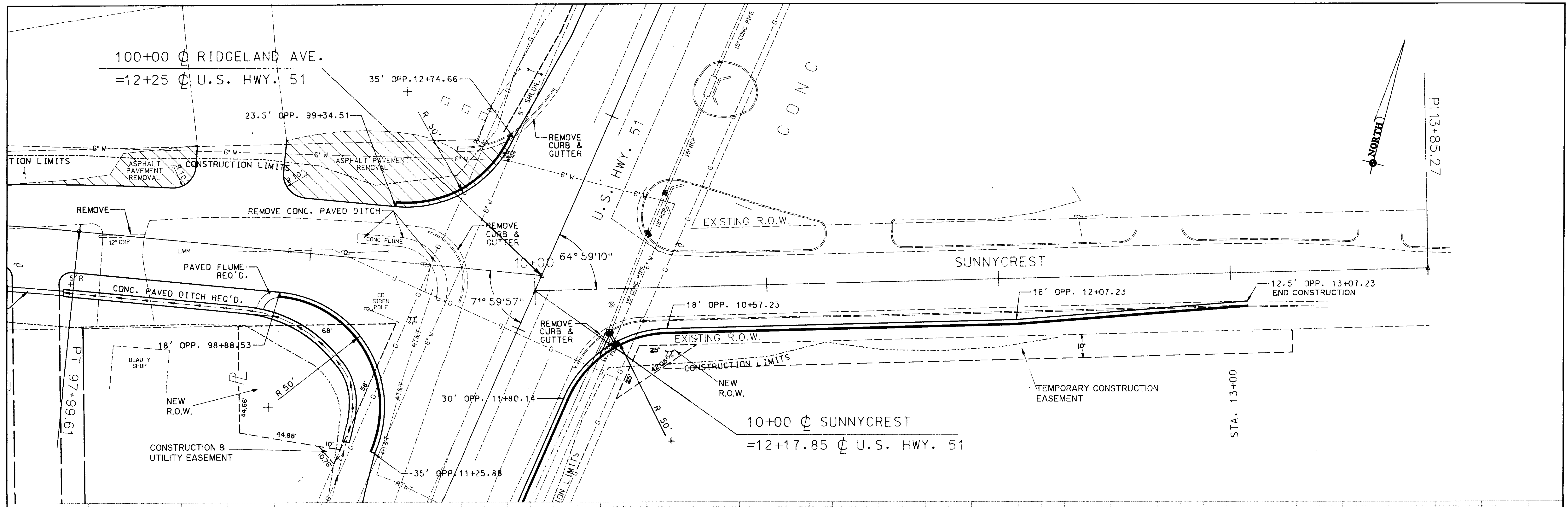
/usr/acb/1859/pp51.dgn

Wk. Sh.  
Sh. No.  
10

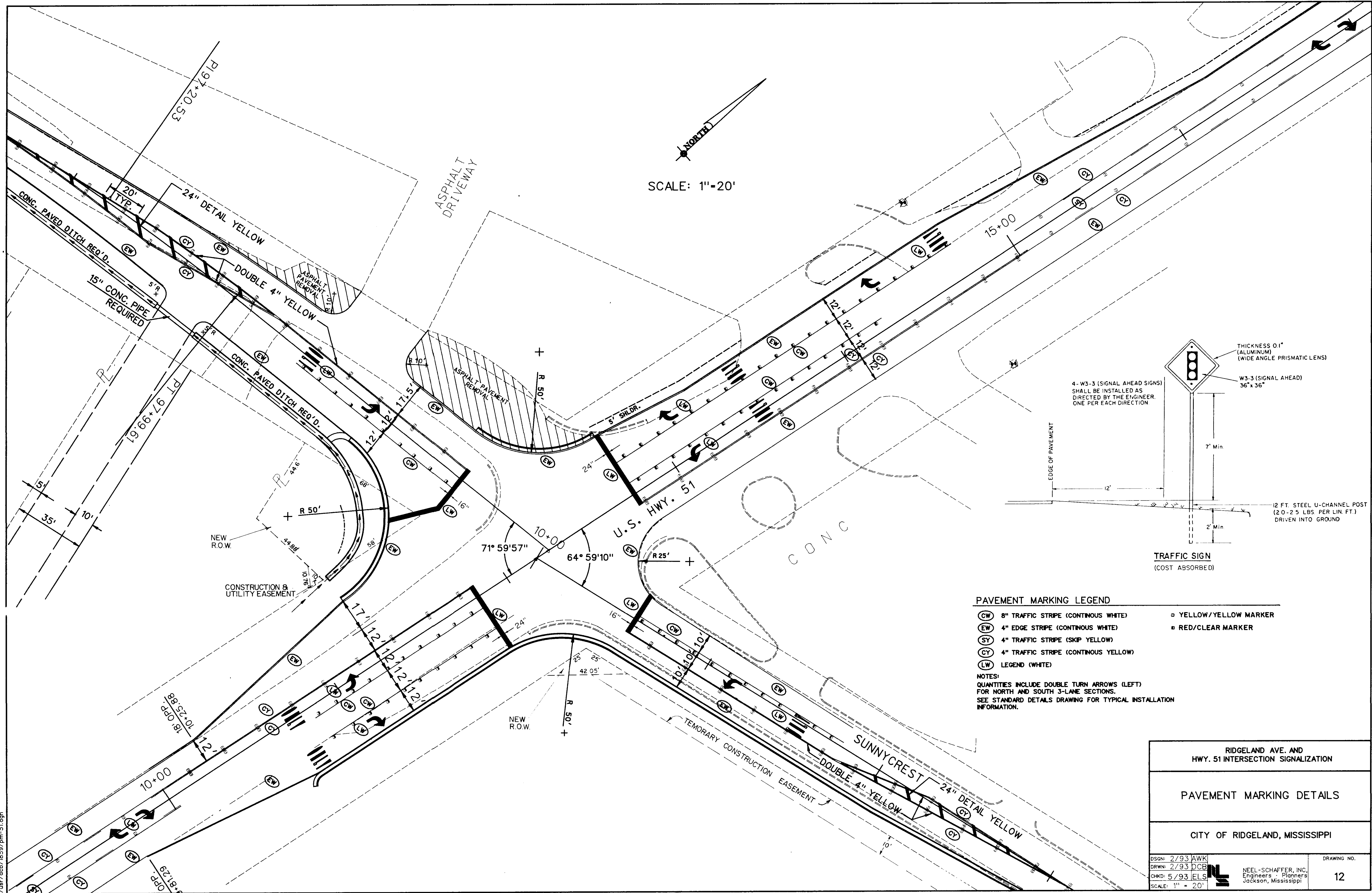


**PLAN**  
 DRAWING NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 ALIGNMENT CHECKED \_\_\_\_\_  
 RT OF WAY CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_

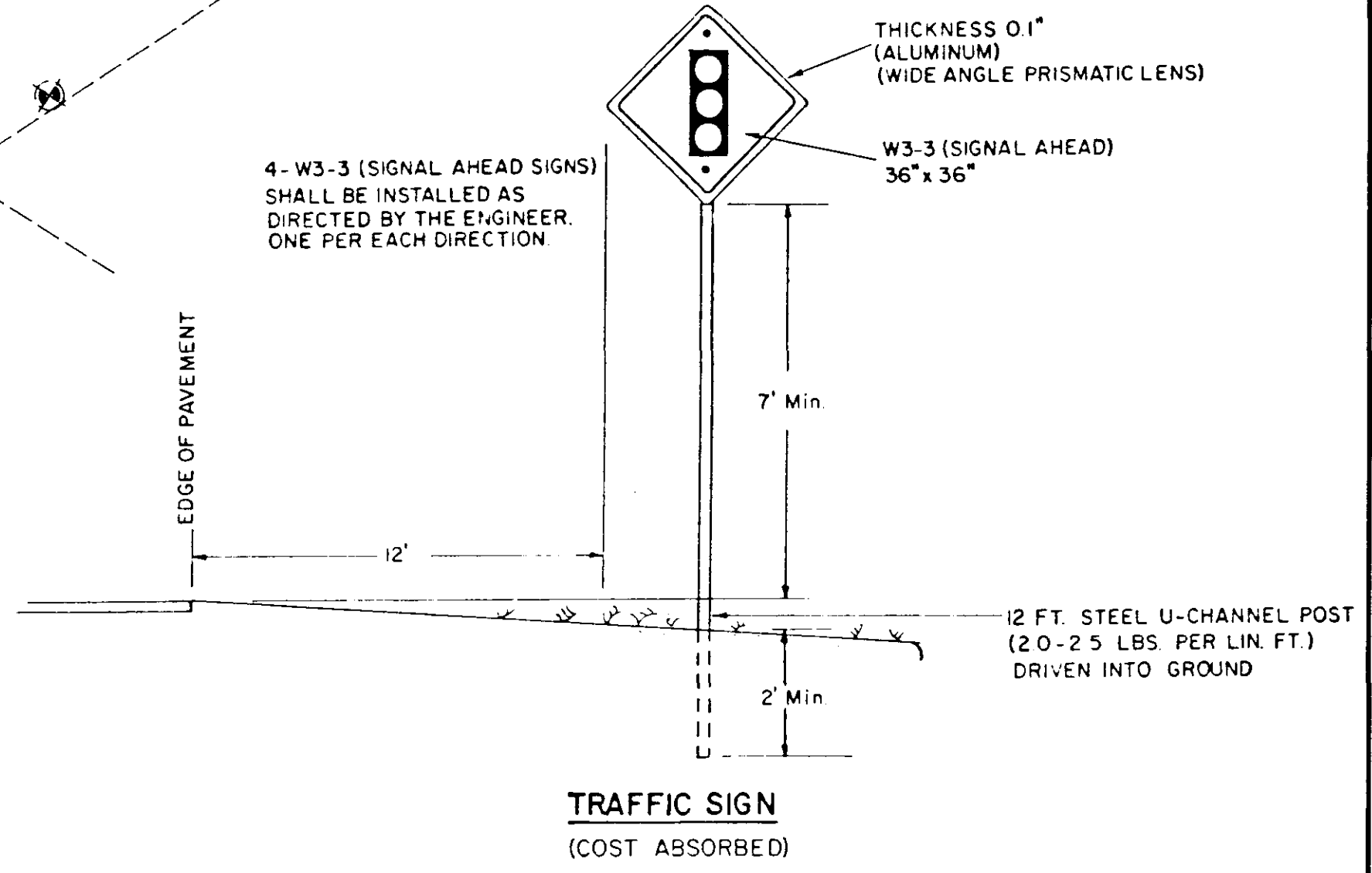
**PROFILE**  
 DRAWING NO. \_\_\_\_\_  
 DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 GRADES CHECKED \_\_\_\_\_  
 RT OF WAY CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_







SCALE: 1"=20'

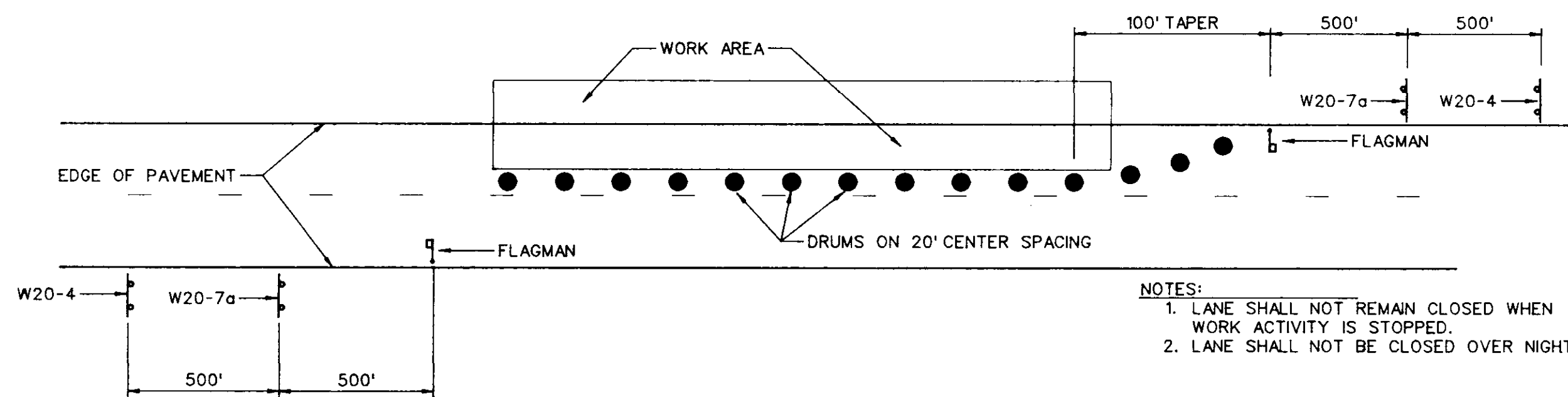


- PAVEMENT MARKING LEGEND**
- (CW) 8" TRAFFIC STRIPE (CONTINUOUS WHITE)
  - (EW) 4" EDGE STRIPE (CONTINUOUS WHITE)
  - (SY) 4" TRAFFIC STRIPE (SKIP YELLOW)
  - (CY) 4" TRAFFIC STRIPE (CONTINUOUS YELLOW)
  - (LW) LEGEND (WHITE)
  - o YELLOW/YELLOW MARKER
  - RED/CLEAR MARKER
- NOTES:  
 QUANTITIES INCLUDE DOUBLE TURN ARROWS (LEFT) FOR NORTH AND SOUTH 3-LANE SECTIONS.  
 SEE STANDARD DETAILS DRAWING FOR TYPICAL INSTALLATION INFORMATION.

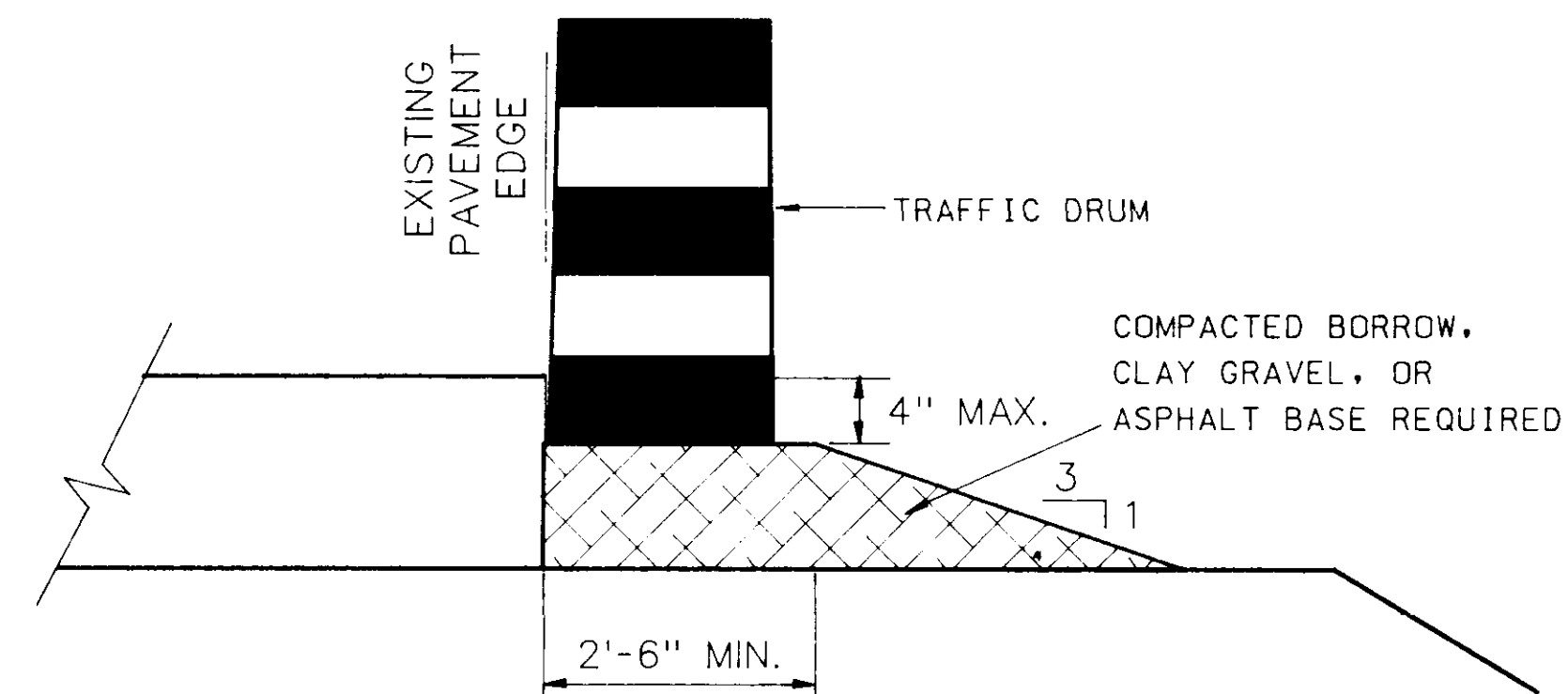
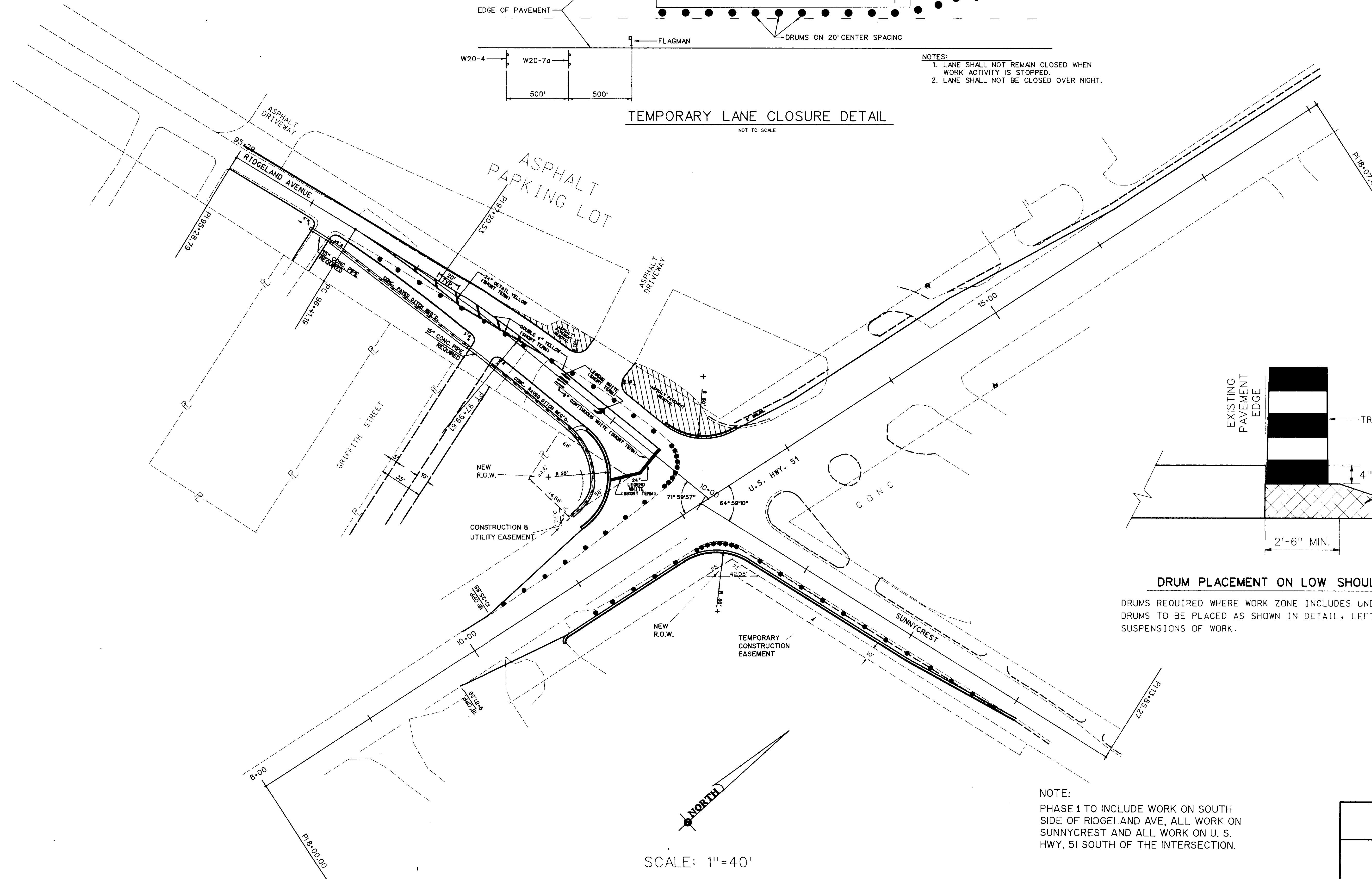
RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION	
PAVEMENT MARKING DETAILS	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: 2/93 AWK DRWN: 2/93 DCB CHKD: 5/93 ELS SCALE: 1" = 20'	DRAWING NO. 12

NEEL-SCHAFFER, INC.  
 Engineers - Planners  
 Jackson, Mississippi

/usr/dcb/1859/pm-51.dgn



TEMPORARY LANE CLOSURE DETAIL  
NOT TO SCALE



DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING

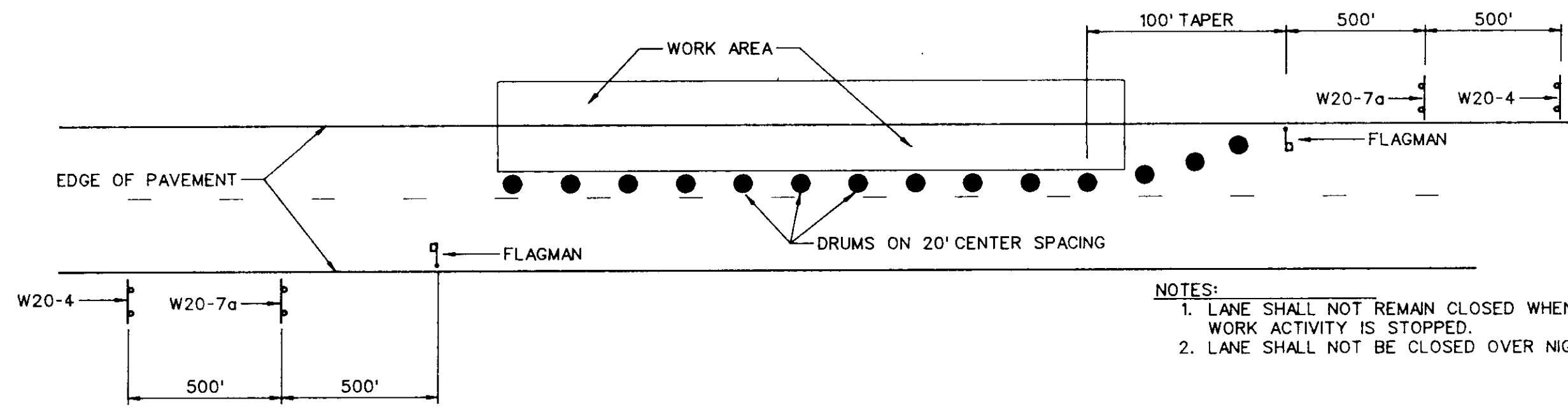
DRUMS REQUIRED WHERE WORK ZONE INCLUDES UNDERCUT SHOULDER.  
DRUMS TO BE PLACED AS SHOWN IN DETAIL. LEFT FOR NIGHT TIME OPERATION OR SUSPENSIONS OF WORK.

NOTE:  
PHASE 1 TO INCLUDE WORK ON SOUTH SIDE OF RIDGELAND AVE, ALL WORK ON SUNNYCREST AND ALL WORK ON U. S. HWY. 51 SOUTH OF THE INTERSECTION.

SCALE: 1" = 40'

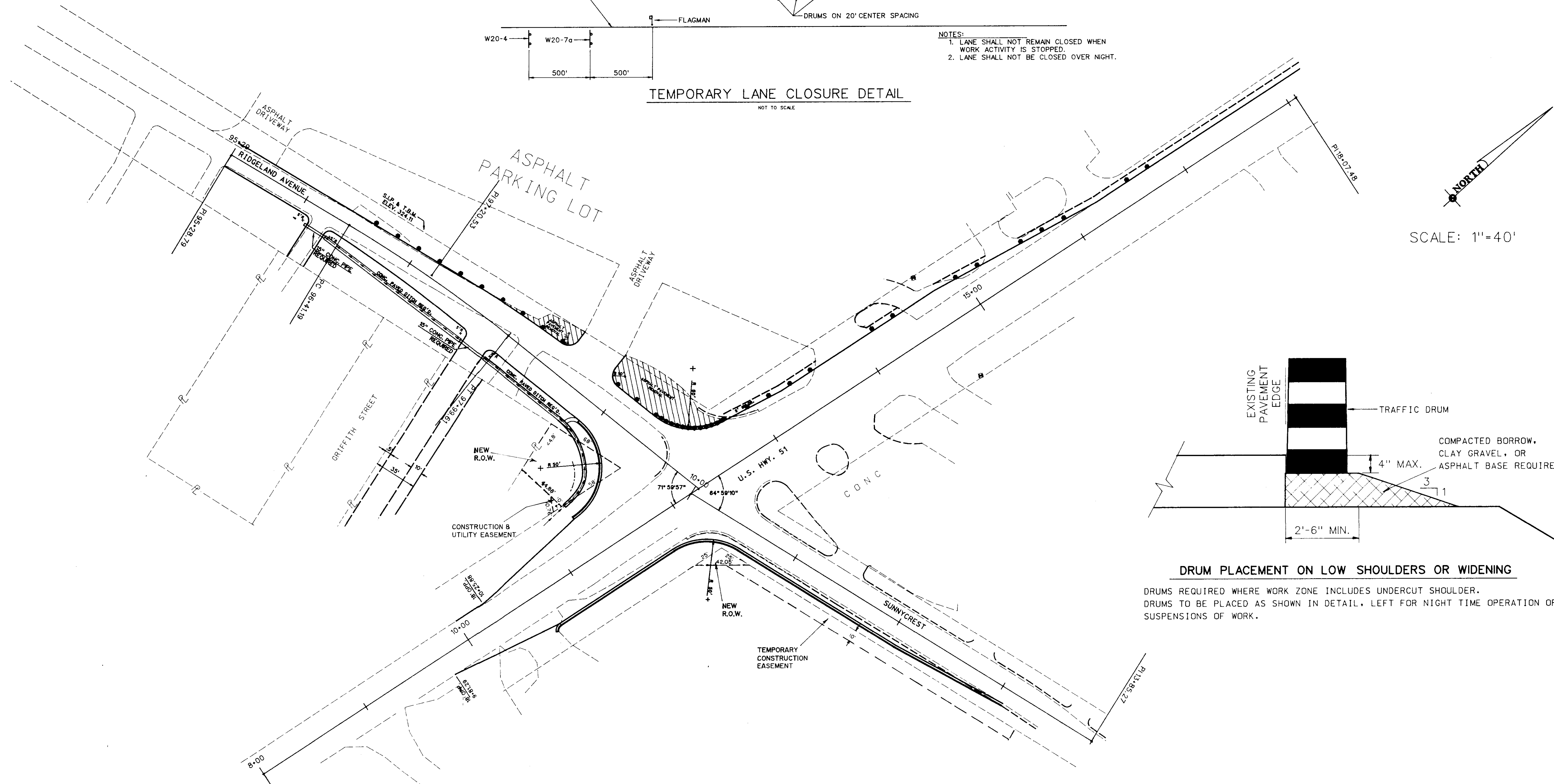
RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION	
TRAFFIC CONTROL PLANS PHASE 1	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: 2/93 JAWK DRWN: 2/93 DCB CHKD: 5/93 ELS SCALE: 1" = 40'	NEEL-SCHAFFER, INC. Engineers - Planners Jackson, Mississippi
DRAWING NO.	<b>13</b>

/usr/dcb/1859/tcp1.dgn

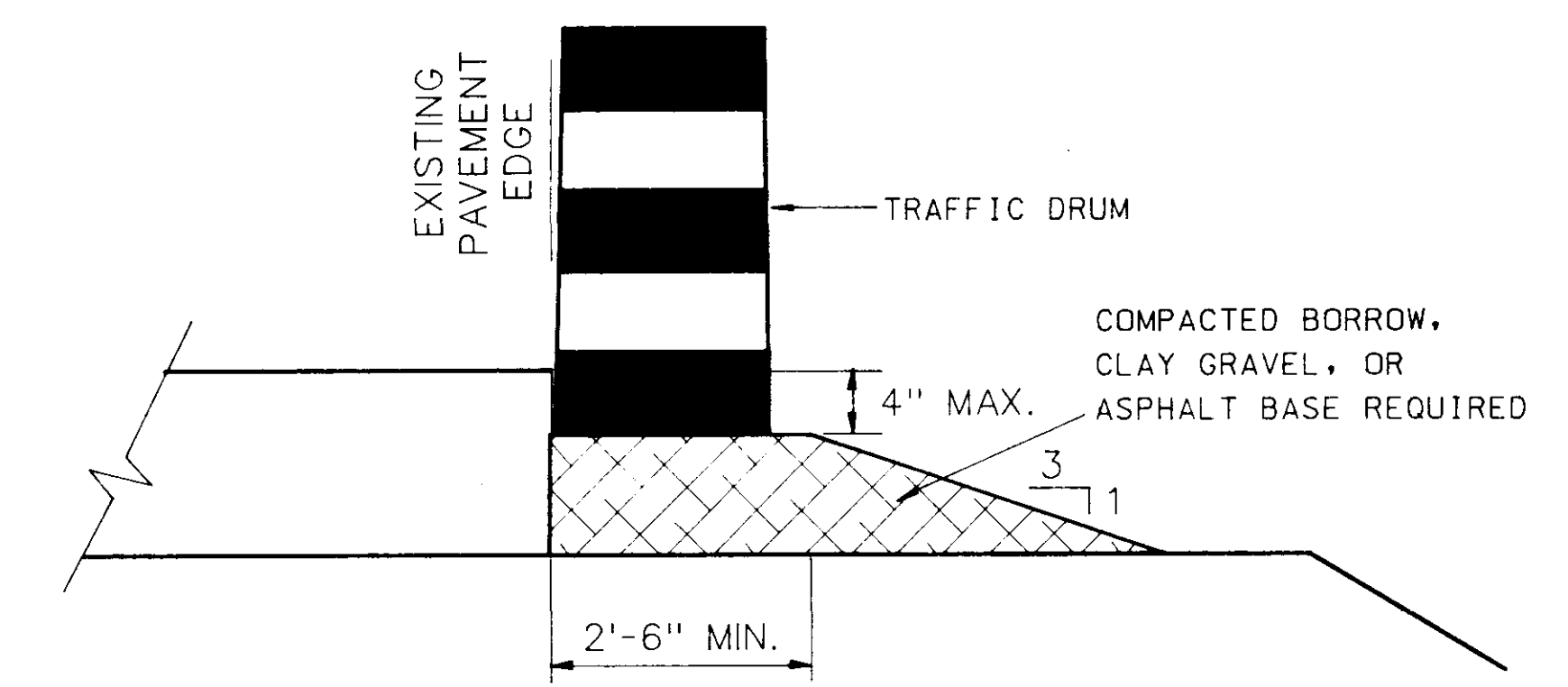


NOTES:  
 1. LANE SHALL NOT REMAIN CLOSED WHEN WORK ACTIVITY IS STOPPED.  
 2. LANE SHALL NOT BE CLOSED OVER NIGHT.

TEMPORARY LANE CLOSURE DETAIL  
 NOT TO SCALE



NORTH  
 SCALE: 1"=40'



**DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING**  
 DRUMS REQUIRED WHERE WORK ZONE INCLUDES UNDERCUT SHOULDER.  
 DRUMS TO BE PLACED AS SHOWN IN DETAIL, LEFT FOR NIGHT TIME OPERATION OR SUSPENSIONS OF WORK.

NOTES:  
 • PHASE 2 TO INCLUDE WORK ON NORTH SIDE OF RIDGELAND AVE. & ALL WORK ON U. S. HWY. 51 NORTH OF THE INTERSECTION.  
 • PHASE 3 TO INCLUDE OVERLAY & PAVEMENT MARKINGS.

RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION	
TRAFFIC CONTROL PLANS PHASE 2	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: 2/93 AWK DRWN: 2/93 DCB CHKD: 5/93 ELS SCALE: 1" = 40'	NEEL-SCHAFFER, INC. Engineers - Planners Jackson, Mississippi DRAWING NO. 14



**DETECTOR LOOP CHART**

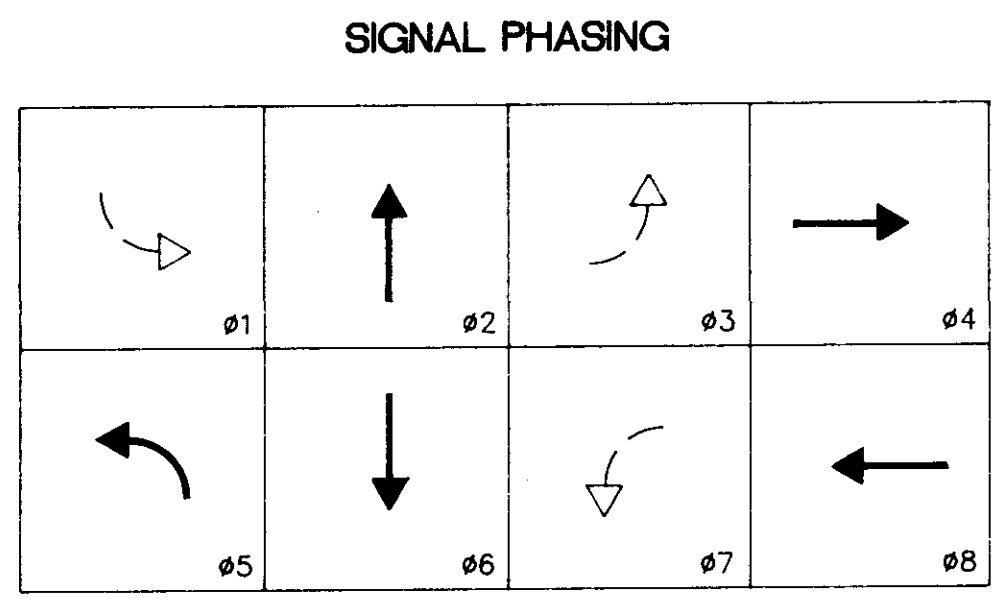
NUMBER	SIZE	TURNS	AMP-CHANNEL	COMMENTS
1	6' x 50'	2-4-2	1-1	FOR FUTURE USE
2	6' x 6'	3	1-3	330' FROM STOPLINE
4A	6' x 50'	2-4-2	2-1	
4B	6' x 50'	2	2-2	
5	6' x 50'	2-4-2	1-4	
6	6' x 6'	3	1-2	330' FROM STOPLINE
8A	6' x 50'	2-4-2	2-3	
8B	6' x 50'	2	2-4	

DETECTOR NUMBER CORRESPONDS WITH INPUT PHASE NUMBER.

**MAST ARM POLE CHART**

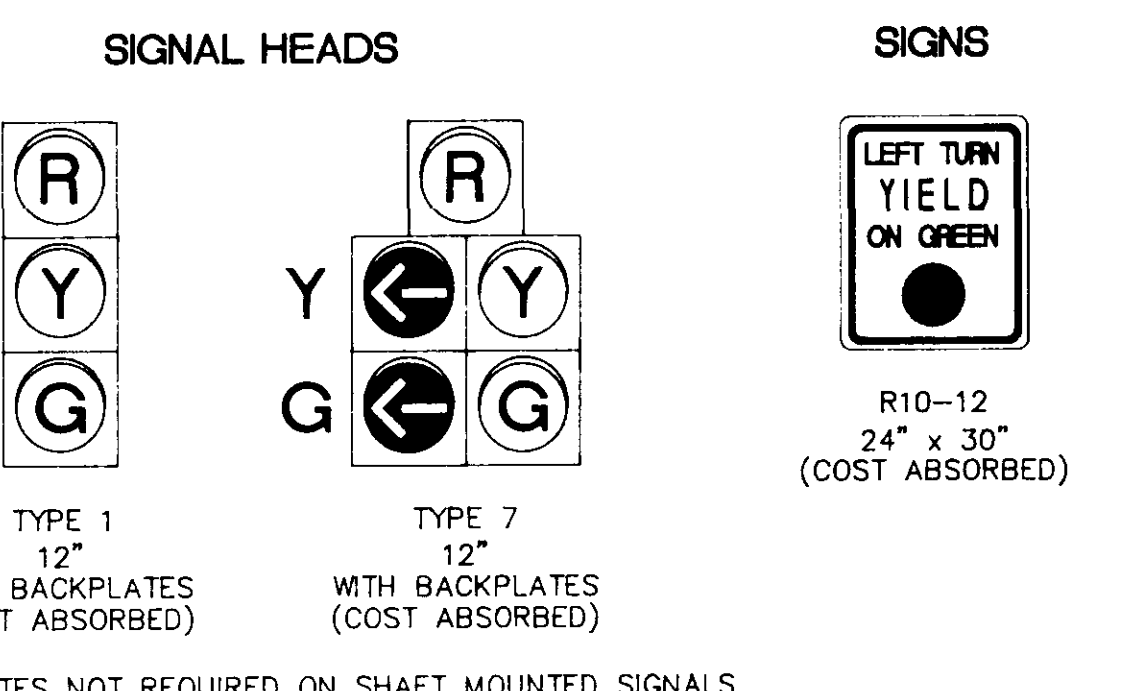
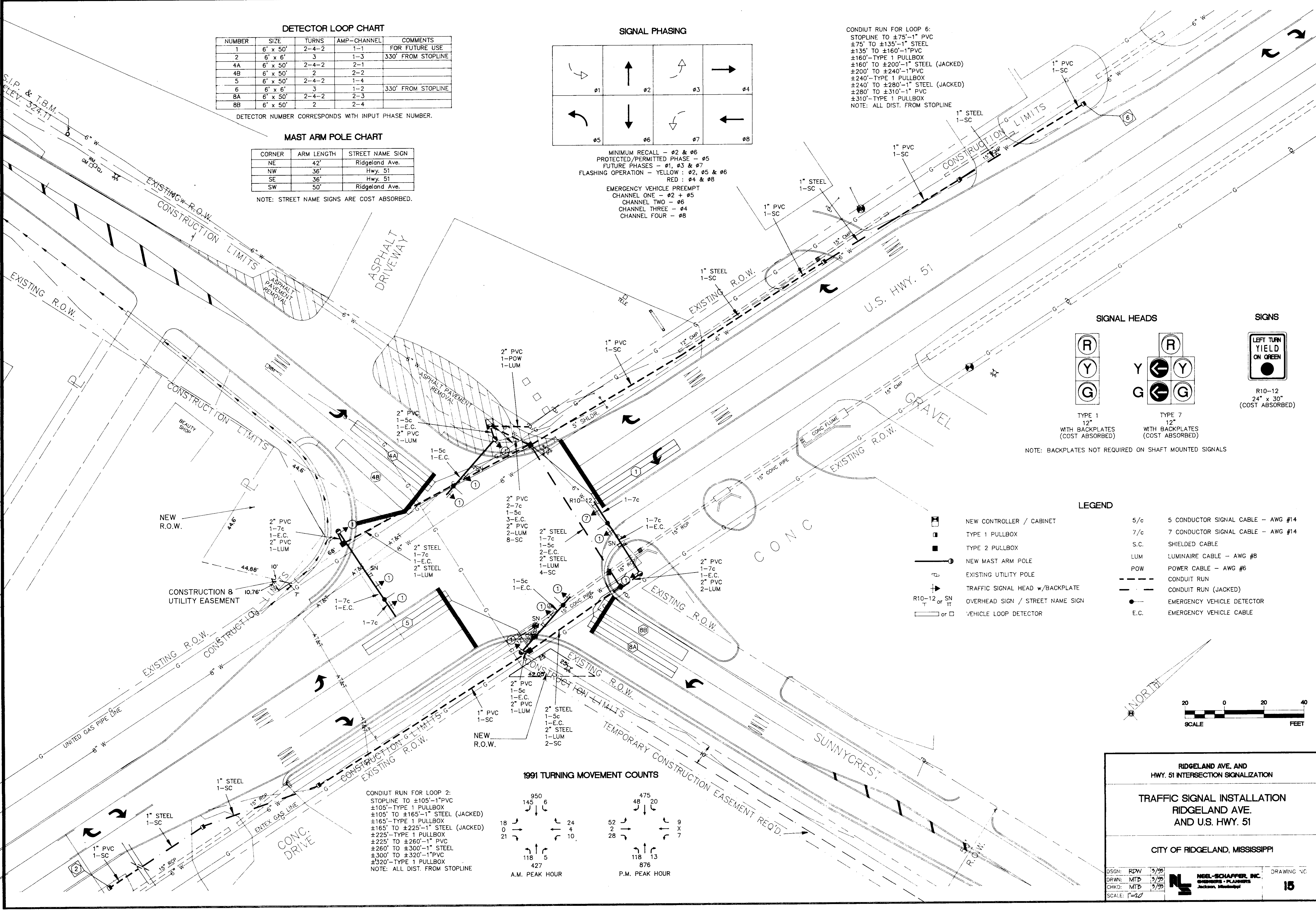
CORNER	ARM LENGTH	STREET NAME SIGN
NE	42'	Ridgeland Ave.
NW	36'	Hwy. 51
SE	36'	Hwy. 51
SW	50'	Ridgeland Ave.

NOTE: STREET NAME SIGNS ARE COST ABSORBED.



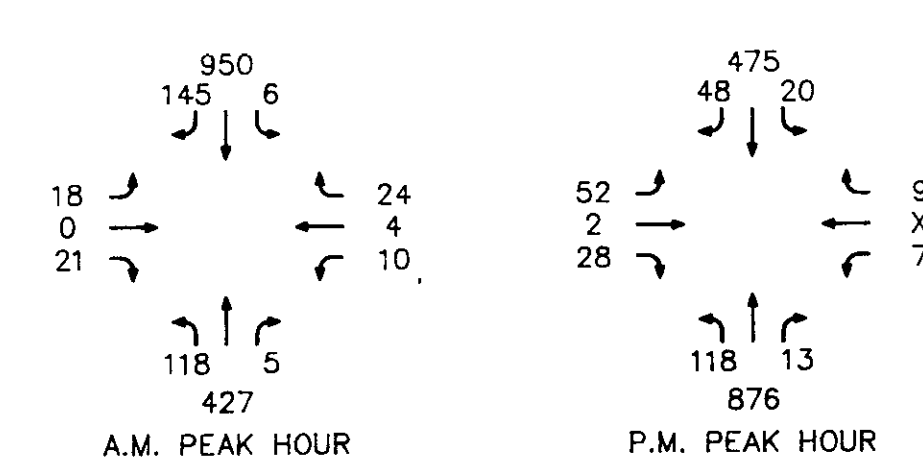
MINIMUM RECALL - 02 & 06  
 PROTECTED/PERMITTED PHASE - 05  
 FUTURE PHASES - 01, 03 & 07  
 FLASHING OPERATION - YELLOW : 02, 05 & 06  
 RED : 04 & 08  
 EMERGENCY VEHICLE PREEMPT  
 CHANNEL ONE - 02 + 05  
 CHANNEL TWO - 06  
 CHANNEL THREE - 04  
 CHANNEL FOUR - 08

CONDUIT RUN FOR LOOP 6:  
 STOPLINE TO ±75'-1" PVC  
 ±75' TO ±135'-1" STEEL  
 ±135' TO ±160'-1" STEEL  
 ±160' TO ±200'-1" STEEL (JACKED)  
 ±200' TO ±240'-1" PVC  
 ±240' TO ±280'-1" STEEL (JACKED)  
 ±280' TO ±310'-1" PVC  
 ±310' TO ±330'-1" STEEL (JACKED)  
 NOTE: ALL DIST. FROM STOPLINE



- LEGEND**
- NEW CONTROLLER / CABINET
  - TYPE 1 PULLBOX
  - TYPE 2 PULLBOX
  - NEW MAST ARM POLE
  - EXISTING UTILITY POLE
  - TRAFFIC SIGNAL HEAD w/BACKPLATE
  - R10-12 or SN
  - VEHICLE LOOP DETECTOR
  - 5/c 5 CONDUCTOR SIGNAL CABLE - AWG #14
  - 7/c 7 CONDUCTOR SIGNAL CABLE - AWG #14
  - S.C. SHIELDED CABLE
  - LUM LUMINAIRE CABLE - AWG #8
  - POW POWER CABLE - AWG #6
  - CONDUIT RUN
  - CONDUIT RUN (JACKED)
  - EMERGENCY VEHICLE DETECTOR
  - E.C. EMERGENCY VEHICLE CABLE

**1991 TURNING MOVEMENT COUNTS**



CONDUIT RUN FOR LOOP 2:  
 STOPLINE TO ±105'-1" PVC  
 ±105' TO ±165'-1" STEEL (JACKED)  
 ±165' TO ±225'-1" STEEL (JACKED)  
 ±225' TO ±280'-1" STEEL (JACKED)  
 ±280' TO ±300'-1" STEEL  
 ±300' TO ±320'-1" STEEL  
 ±320' TO ±330'-1" STEEL  
 NOTE: ALL DIST. FROM STOPLINE



**RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION**

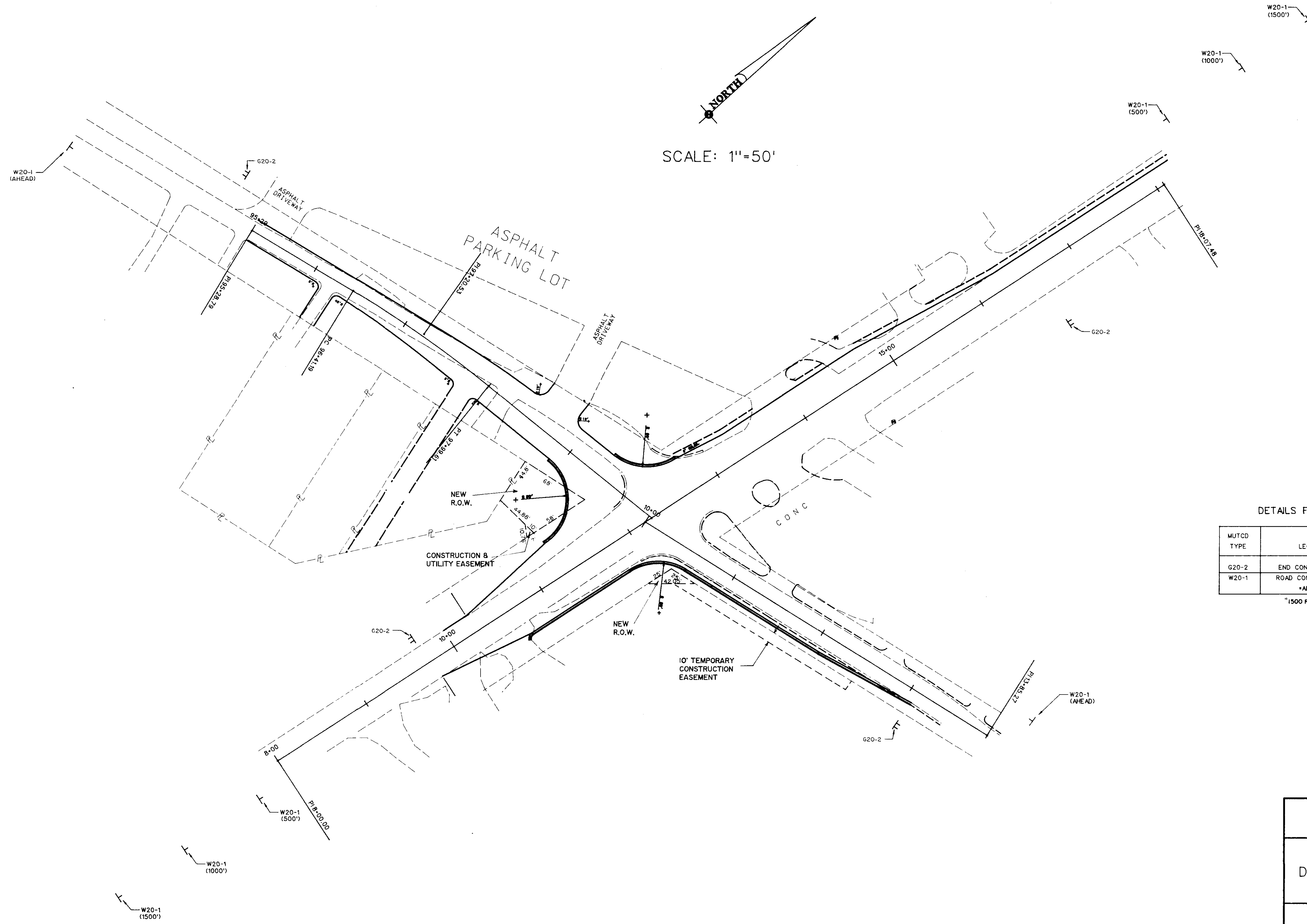
**TRAFFIC SIGNAL INSTALLATION**  
 RIDGELAND AVE.  
 AND U.S. HWY. 51

CITY OF RIDGELAND, MISSISSIPPI

DSGN: RDW 3/99  
 DRWN: MTP 3/99  
 CHKO: MTP 3/99  
 SCALE: 1"=40'

NEEL-SCHAFFER, INC.  
 ENGINEERS - PLANNERS  
 Jackson, Mississippi

DRAWING NO. 15



SCALE: 1"=50'

DETAILS FOR CONSTRUCTION SIGNS REQUIRED

MUTCD TYPE	LEGEND	SIZE	MOUNTING	QUANTITY
G20-2	END CONSTRUCTION	60" x 24"	DOUBLE POST	4
W20-1	ROAD CONSTRUCTION •AHEAD	36" x 36"	POST	10

"1500 FT.", "1000 FT.", "500 FT." AS APPROPRIATE

RIDGELAND AVE. AND  
HWY. 51 INTERSECTION SIGNALIZATION

DETAIL OF CONSTRUCTION SIGNING

CITY OF RIDGELAND, MISSISSIPPI

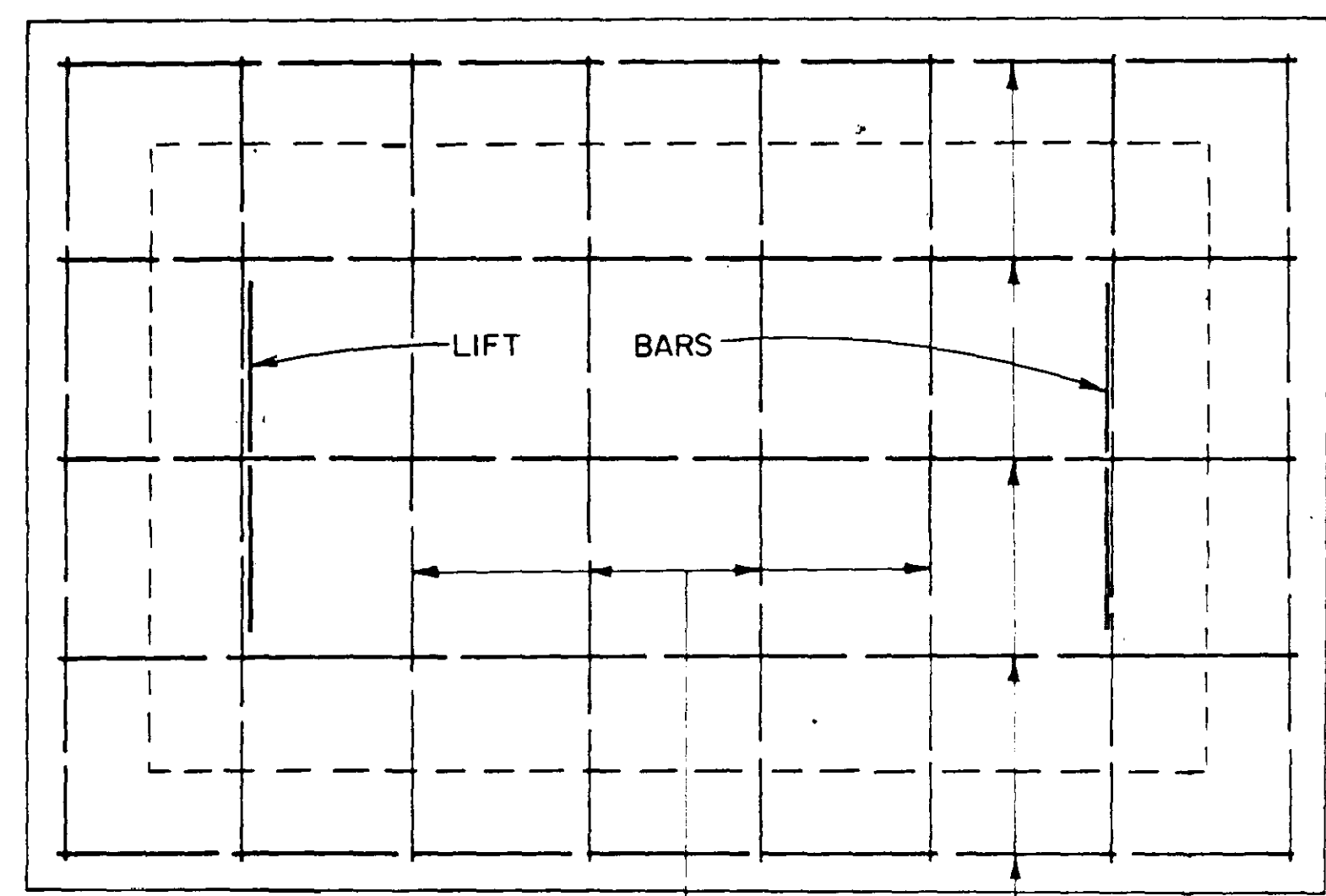
DSGN: 2/93 AWK		DRAWING NO.
DRWN: 2/93 DCB		16
CHKD: 5/93 ELS		
SCALE: 1" = 50'		

/usr/dcb/1859/signing.dgn

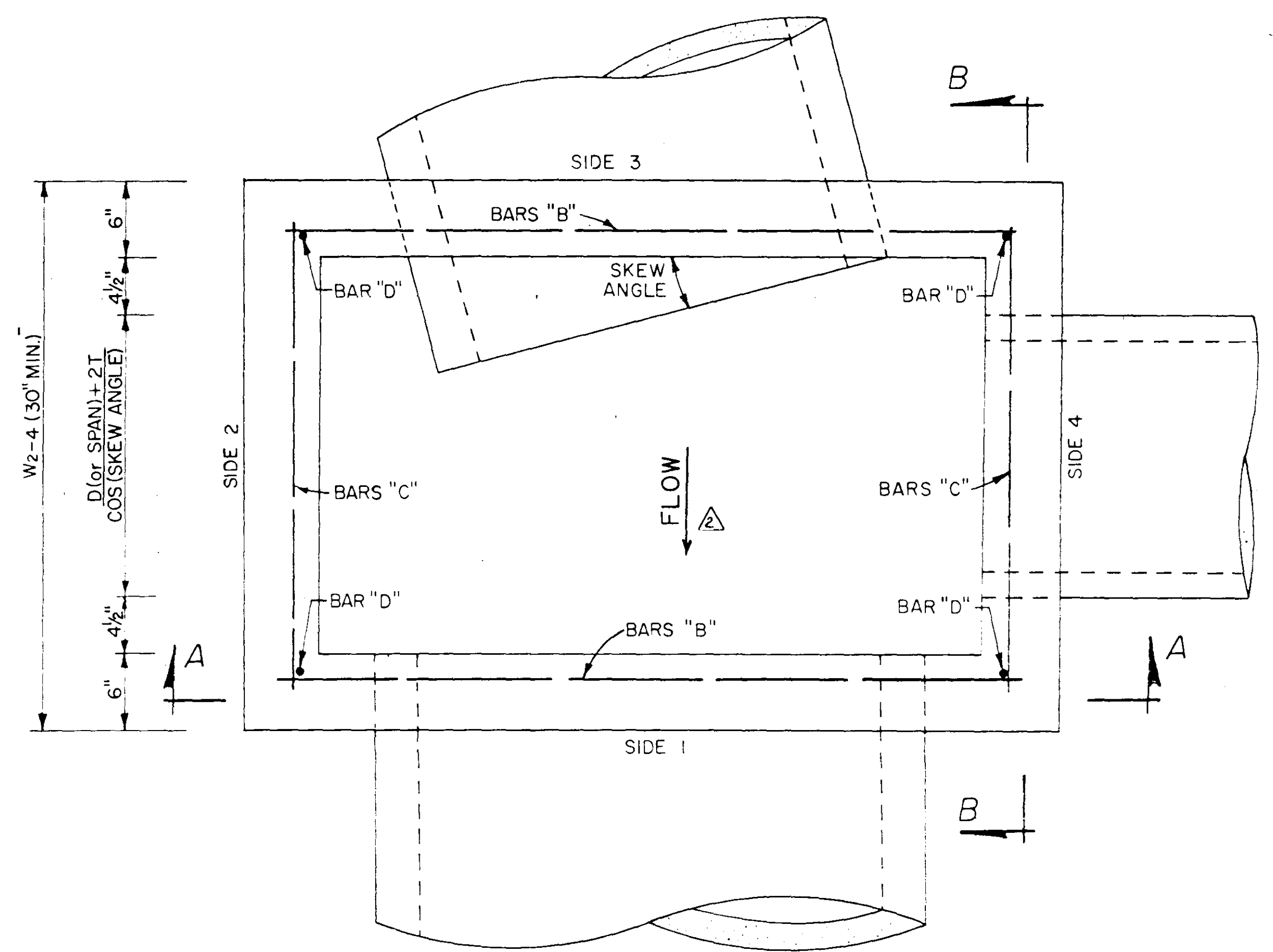




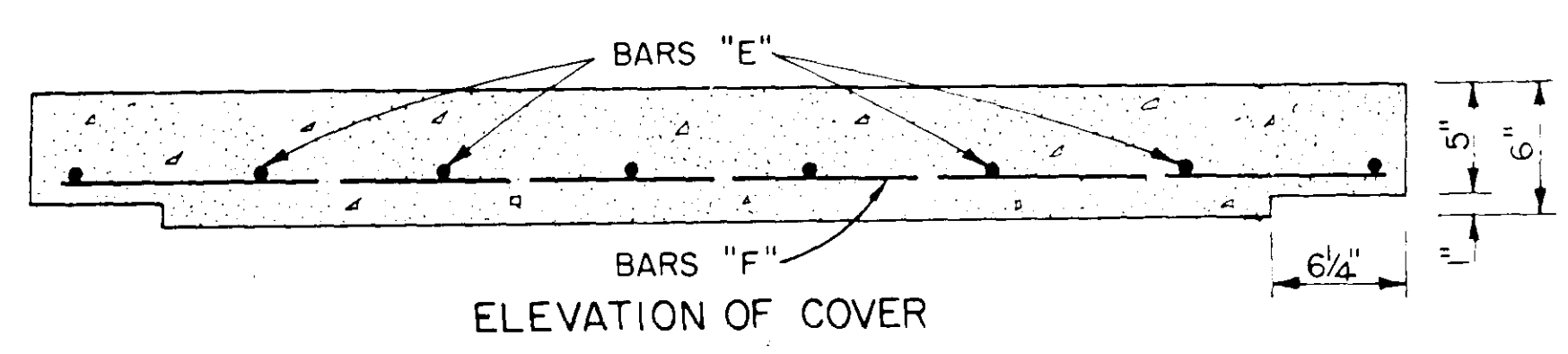




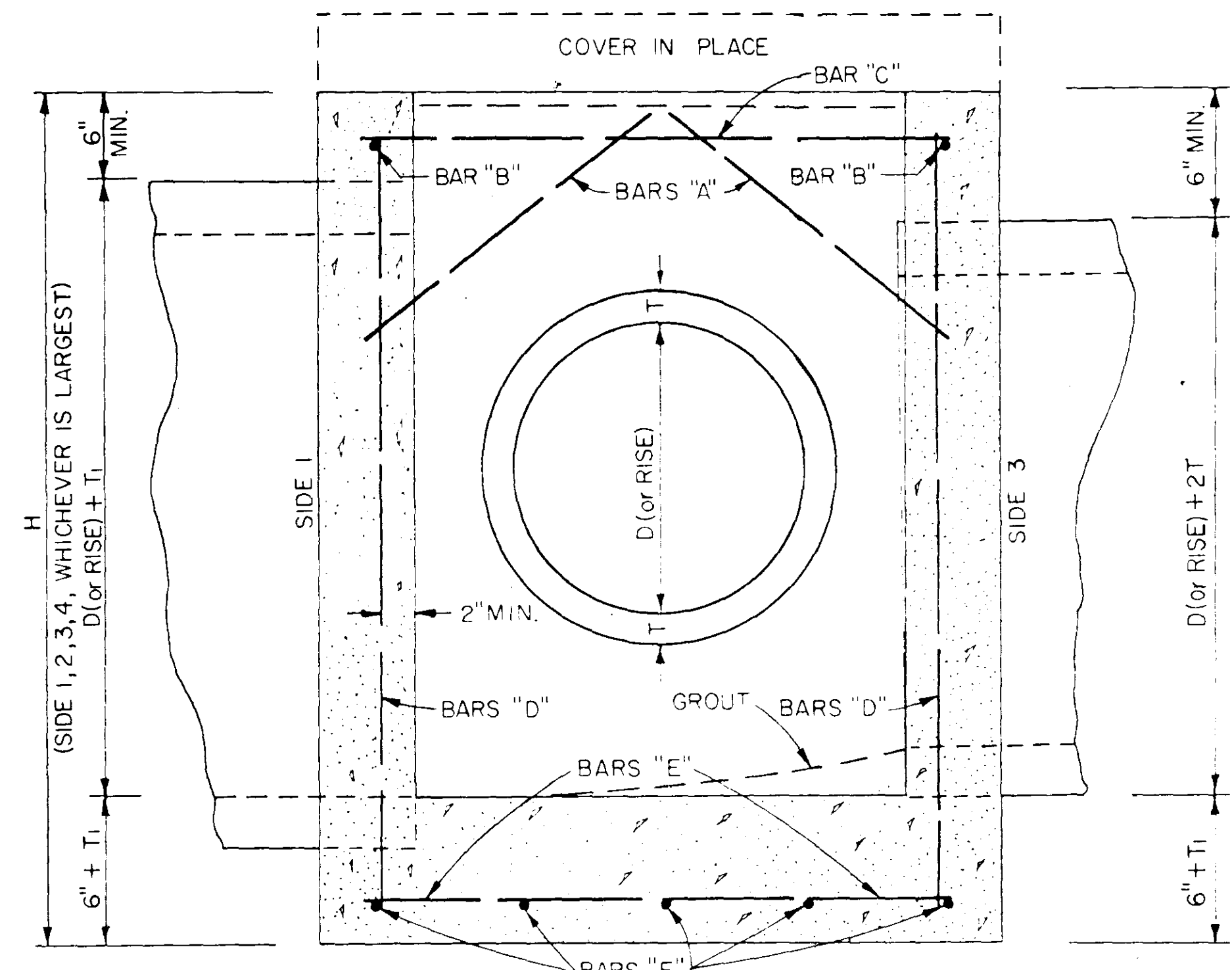
PLAN OF COVER



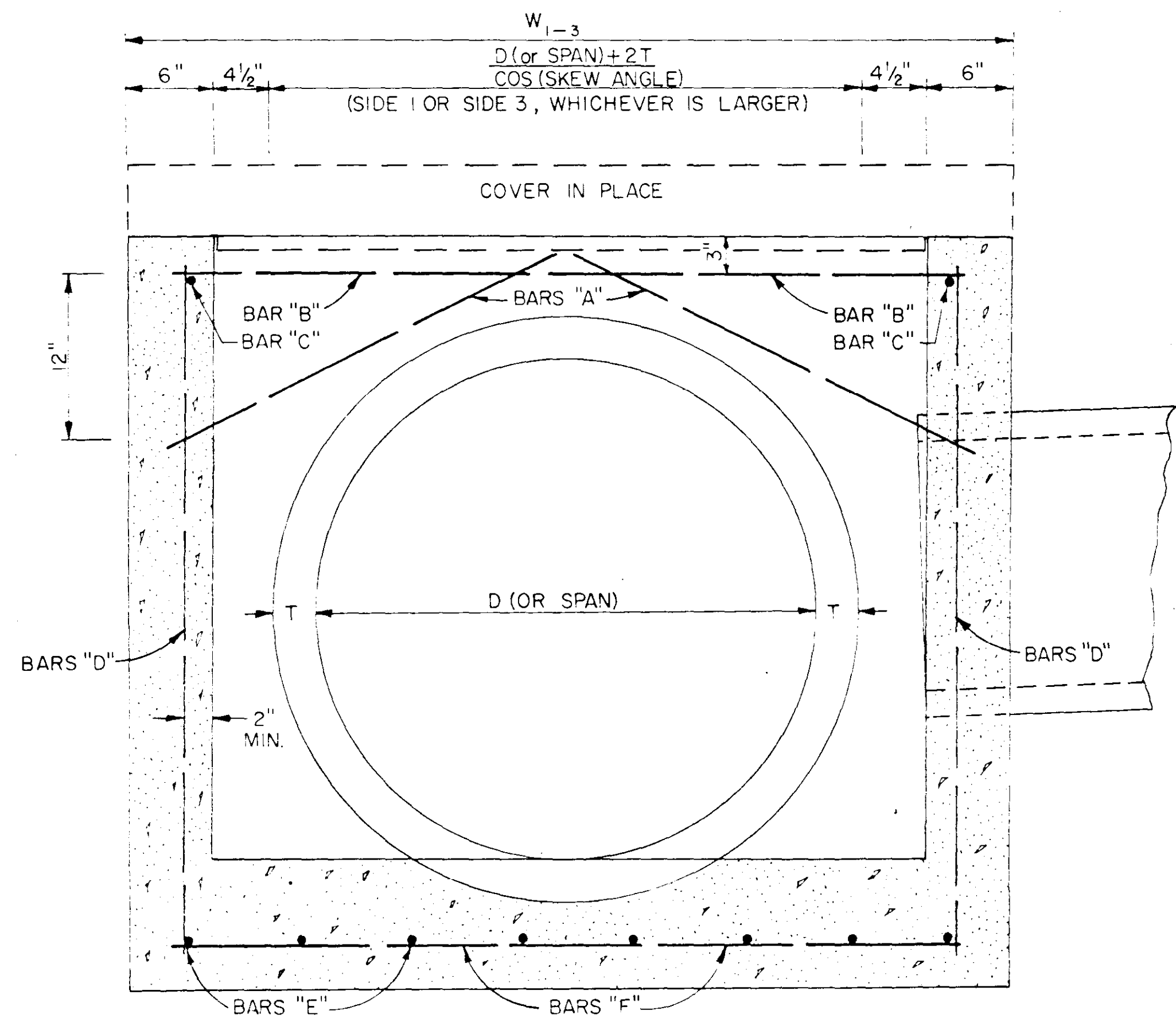
PLAN



ELEVATION OF COVER



SECTION B-B



SECTION A-A

BAR LIST		
BAR	NUMBER REQUIRED	LENGTH (INCHES)
A	2 PER PIPE OPENING	$\sqrt{96 + \left(\frac{W^*}{2} + 2\right)^2}$
B	2	$W_{1-3} - 6$
C	2	$W_{2-4} - 6$
D	4	$H - 6$
E	$2 \left[ \frac{(W_{1-3})^{**} + 1}{9} \right]$	$W_{2-4} - 4$
F	$2 \left[ \frac{(W_{2-4})^{**} + 1}{9} \right]$	$W_{1-3} - 4$

WHERE: D (or SPAN) = PIPE DIAMETER (or SPAN) (INCHES)  
 $W_{1-3}$  = WIDTH OF SIDE 1 & SIDE 3 (INCHES)  
 $W_{2-4}$  = WIDTH OF SIDE 2 & SIDE 4 (INCHES)  
 $W^*$  =  $W_{1-3}$  OR  $W_{2-4}$  (SIDE OF ENTERING PIPE)  
 $**$  = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (CY) =  $5W_{1-3}W_{2-4} + [(W_{1-3} - 12.5)(W_{2-4} - 12.5)] + [T + 6]W_{1-3}W_{2-4} + 12[H - (T + 6)] [W_{1-3} - 12] + W_{2-4}$   
 46,656

(MINUS) DEDUCTIONS FOR PIPE OPENINGS (C.Y.)

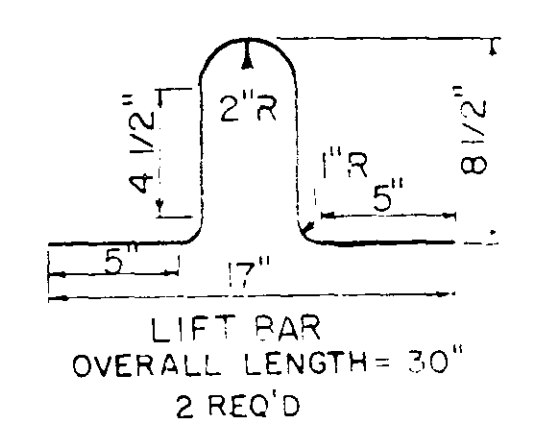
REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.

REINFORCING STEEL FOR 2 LIFT BARS = 4 LBS.

COMMON PIPE SIZE					
CIRCULAR PIPE			ARCH PIPE		
PIPE SIZE	THICKNESS INCHES	PIPE OPENING DEDUCTION (CY)	PIPE SIZE	THICKNESS INCHES	PIPE OPENING DEDUCTION (CY)
18"	2 1/2	0.053	22' x 3'	2 1/2	0.053
24"	3	0.091	29' x 9'	3	0.087
30"	3 1/2	0.138	36' x 23'	3 1/2	0.129
36"	4	0.195	44' x 27'	4	0.185
42"	4 1/2	0.263	51' x 31'	4 1/2	0.245
48"	5	0.340	58' x 36'	5	0.318
54"	5 1/2	0.427	65' x 40'	5 1/2	0.394
60"	6	0.524	73' x 45'	6	0.489
66"	6 1/2	0.630			
72"	7	0.747			

GENERAL NOTES

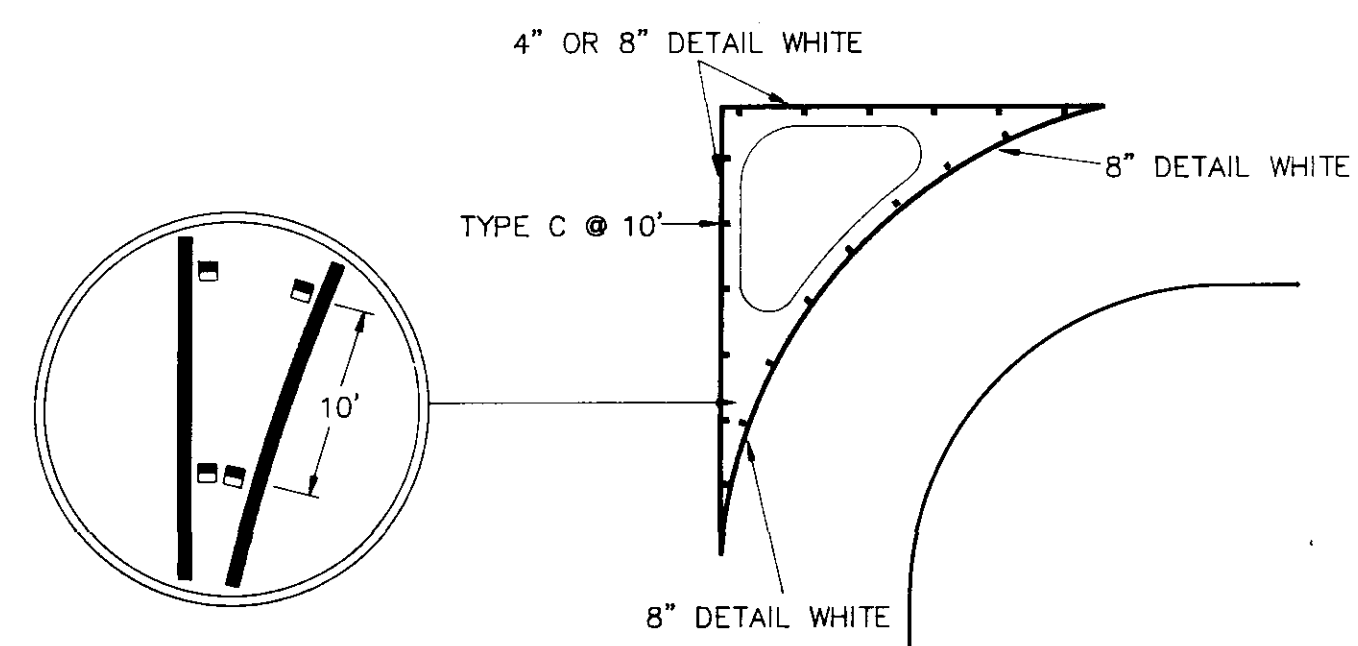
1. QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS, SIZE #4.
3. SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
4. IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.



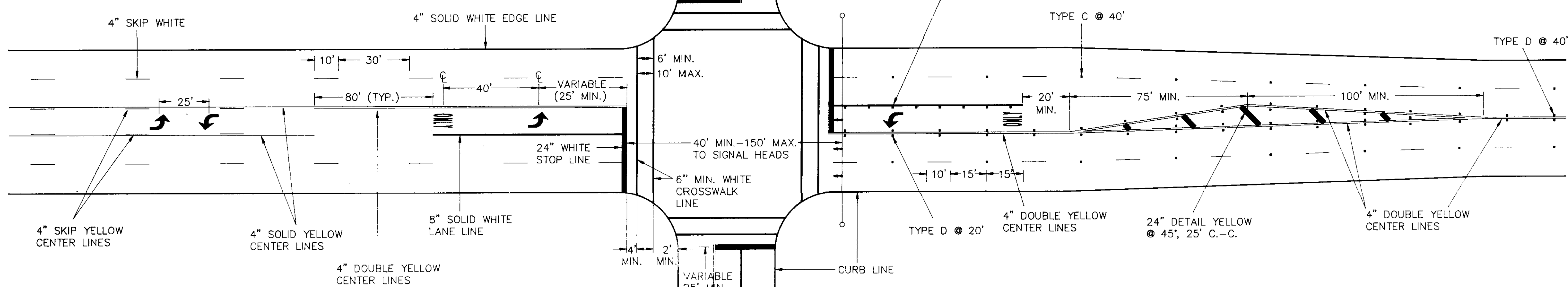
MISSISSIPPI STATE HIGHWAY DEPARTMENT

## JUNCTION BOX FOR PIPE CULVERTS

DESIGNED: <u>AWK</u> CHECKED: <u>D.B.J.</u> DATE: <u>11-1-79</u>	DETAILED: _____ TRACED: _____ ISSUED: <u>D.B.J.</u> DATE: <u>11-1-79</u>	WORKING NUMBER: <u>JB-1</u> SHEET NUMBER: <u>19</u>	GENERAL REVISIONS: NO. REV. BY DATE 1/15/81 G.W. REV. A 4/17/82 G.W. REV. B
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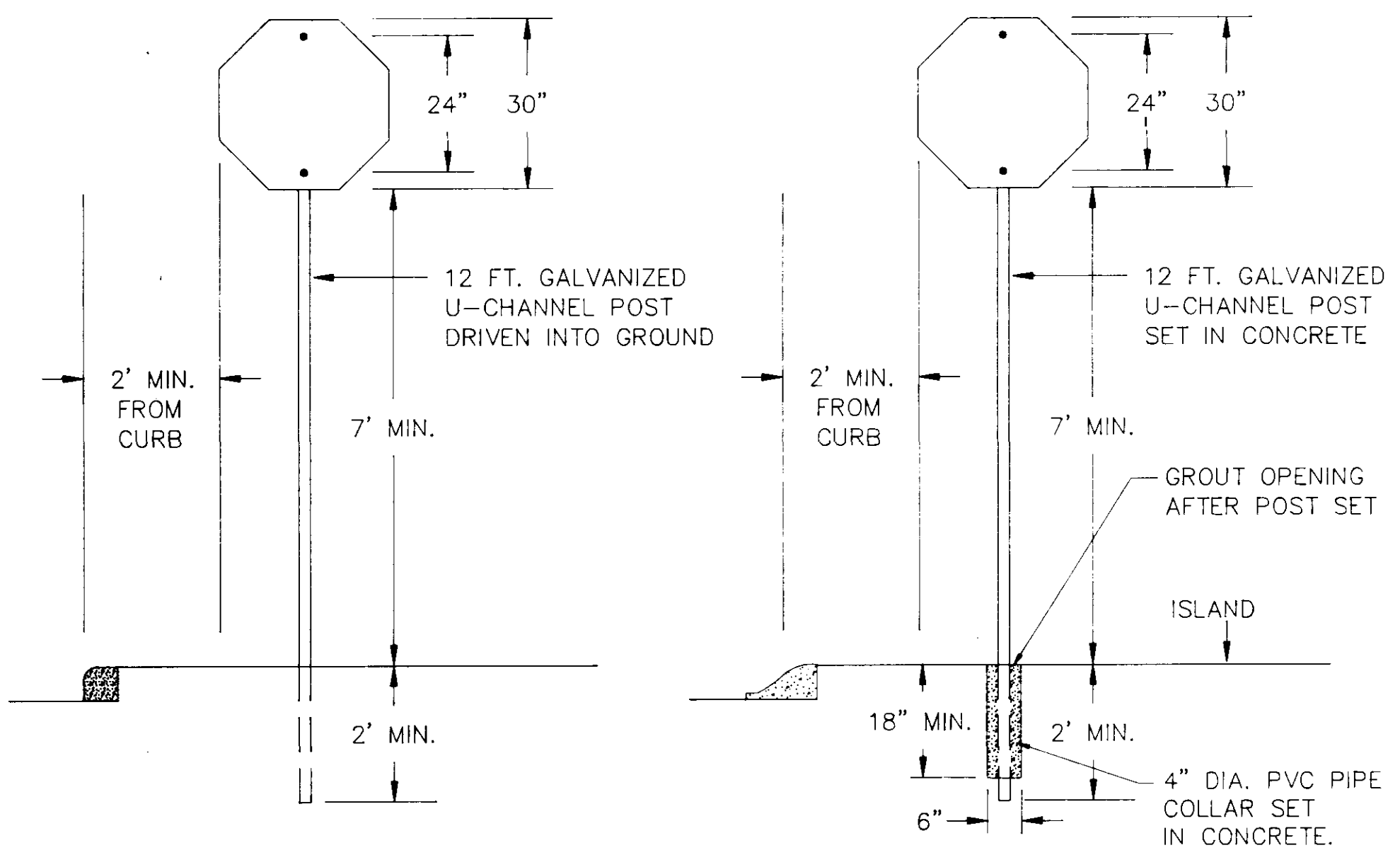


CHANNELIZING ISLAND DETAIL  
(NOT TO SCALE)

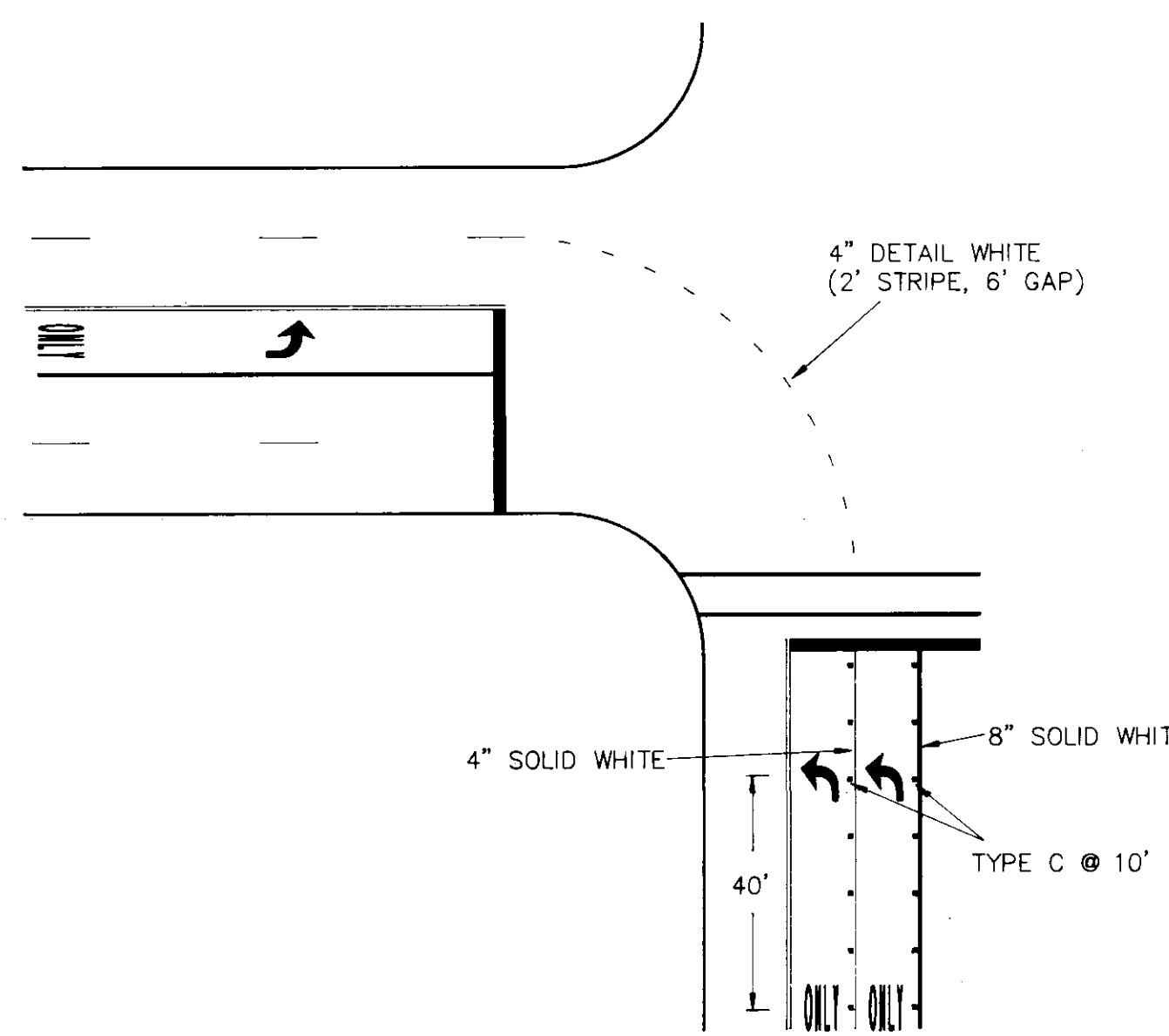


PAVEMENT MARKINGS - TYPICAL INTERSECTION  
(NOT TO SCALE)

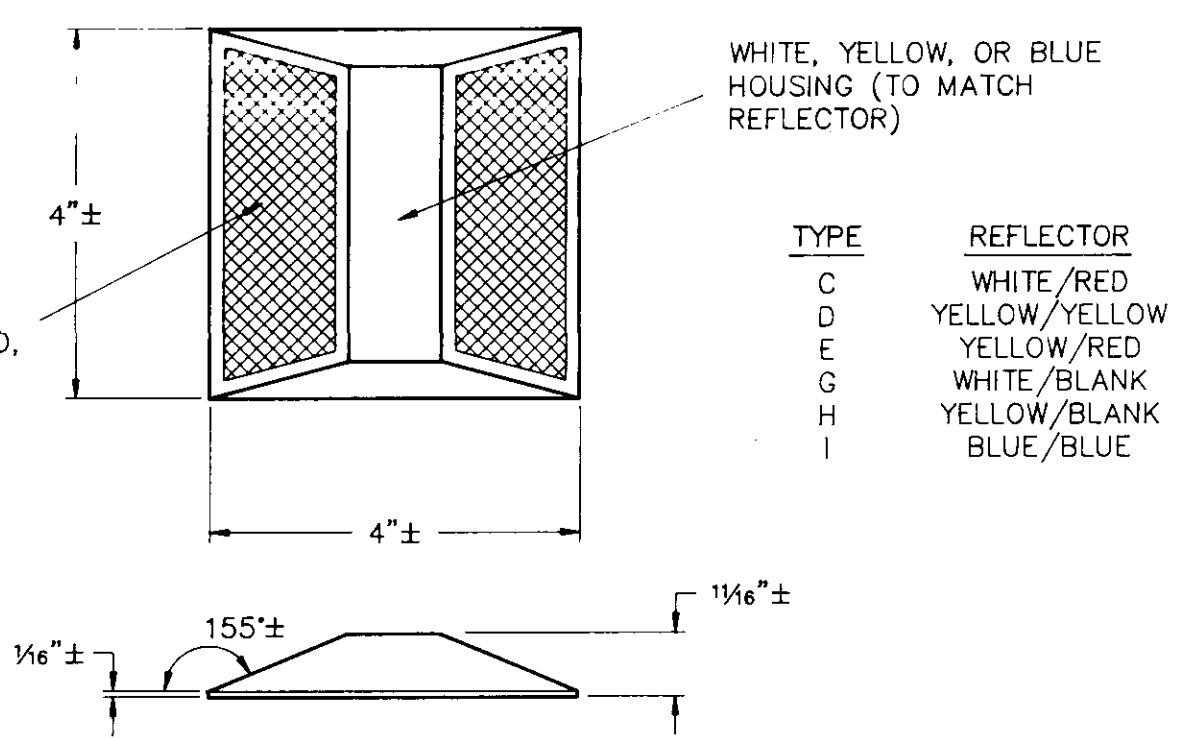
- NOTES:
1. ALL PAVEMENT MARKING INSTALLATIONS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (1988 EDITION AND LATEST REVISIONS).
  2. CROSSWALKS TO LINE UP WITH SIDEWALKS AND AVOID OBSTACLES WHERE POSSIBLE.



TRAFFIC SIGN INSTALLATION  
(NOT TO SCALE)

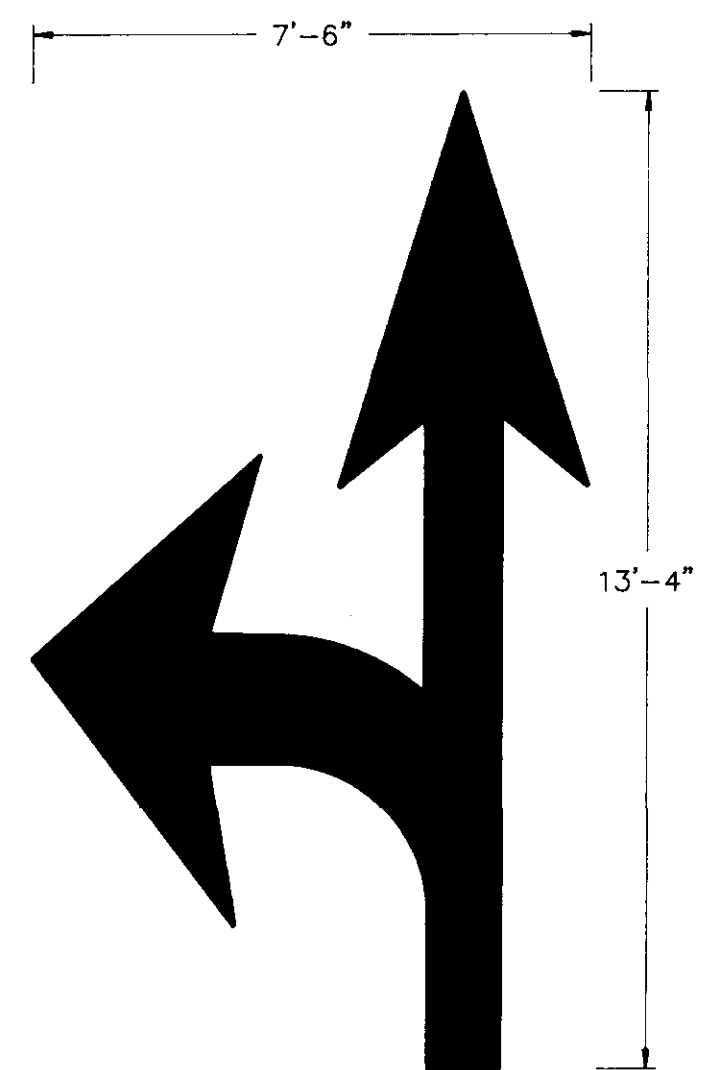


DUAL TURN LANE MARKINGS  
(NOT TO SCALE)

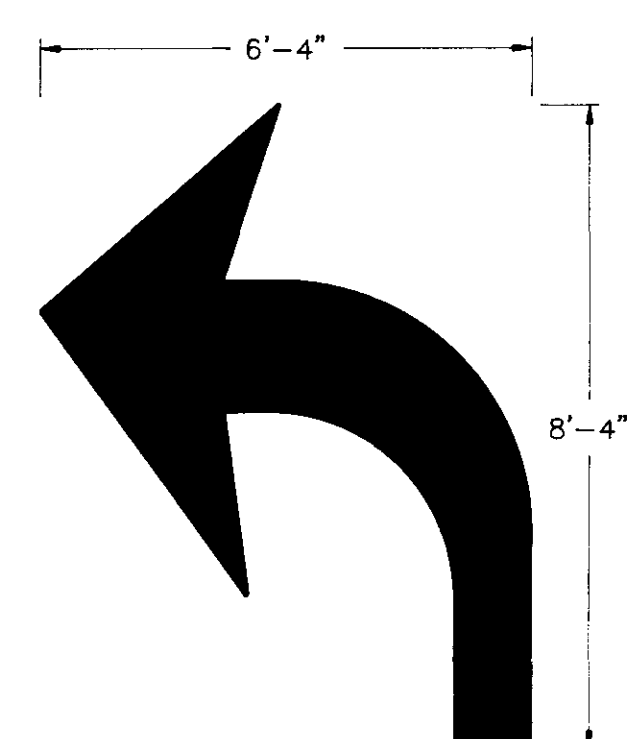


REFLECTIVE RAISED MARKER  
(NOT TO SCALE)

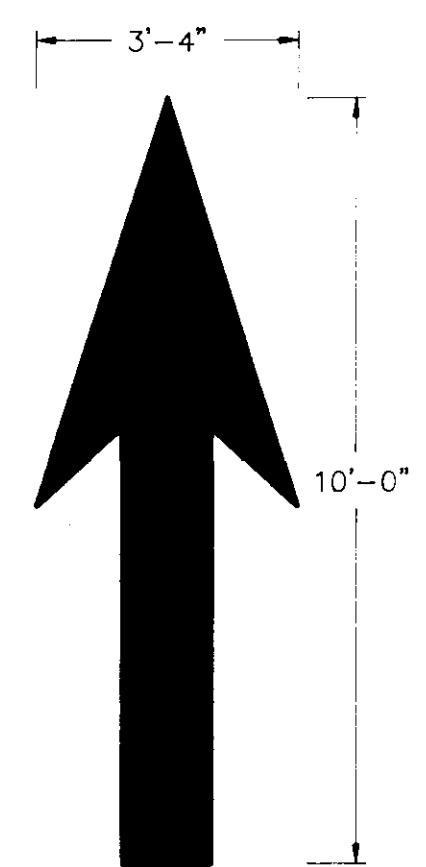
TYPE	REFLECTOR
C	WHITE/RED
D	YELLOW/YELLOW
E	YELLOW/RED
G	WHITE/BLANK
H	YELLOW/BLANK
I	BLUE/BLUE



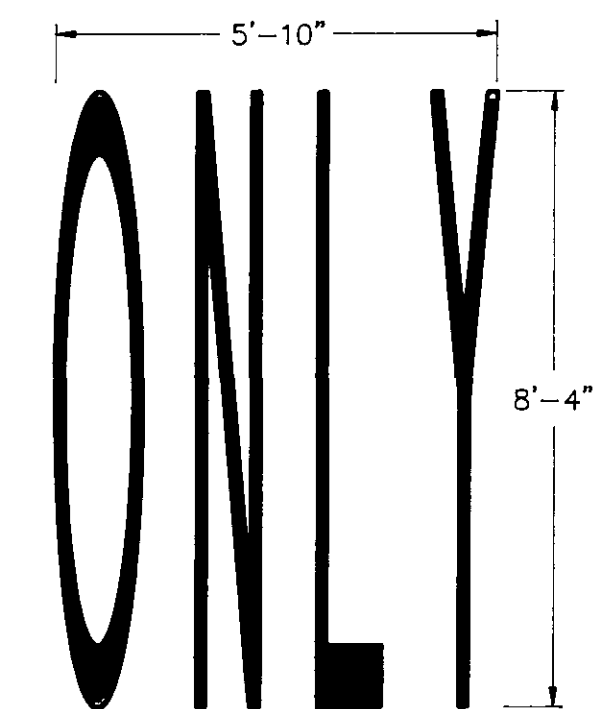
COMBINATION ARROW  
(WHITE - 27.5 S.F.)



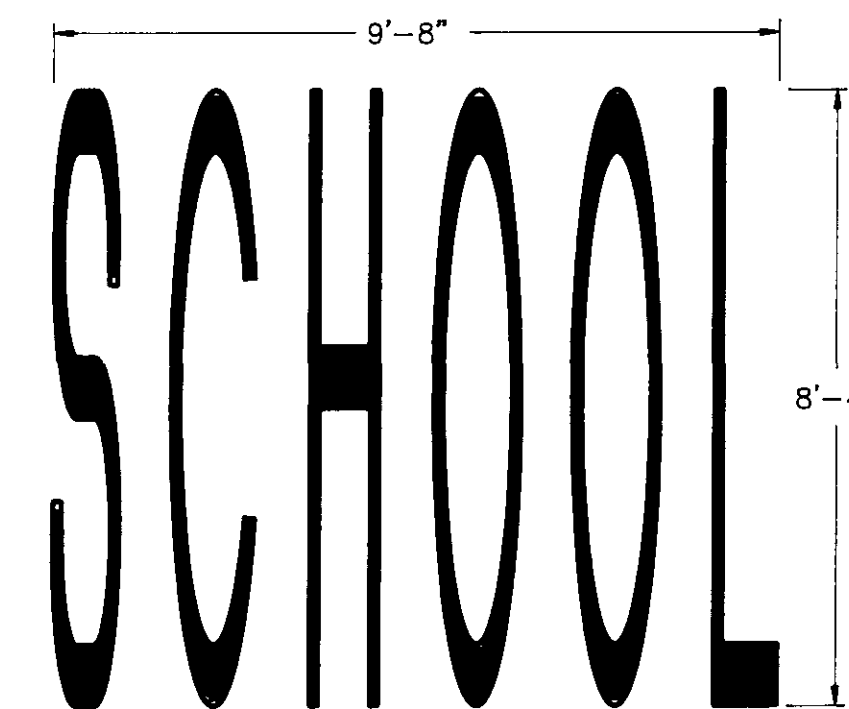
TURN ARROW  
(WHITE - 16.4 S.F.)



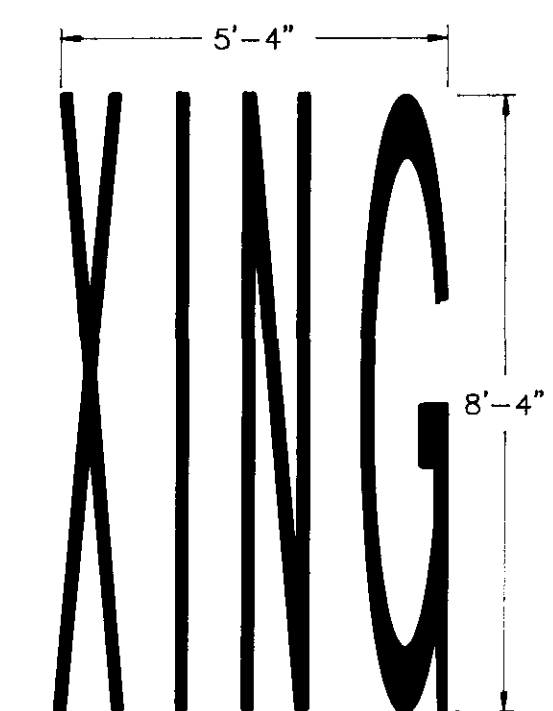
THRU ARROW  
(WHITE - 12.3 S.F.)



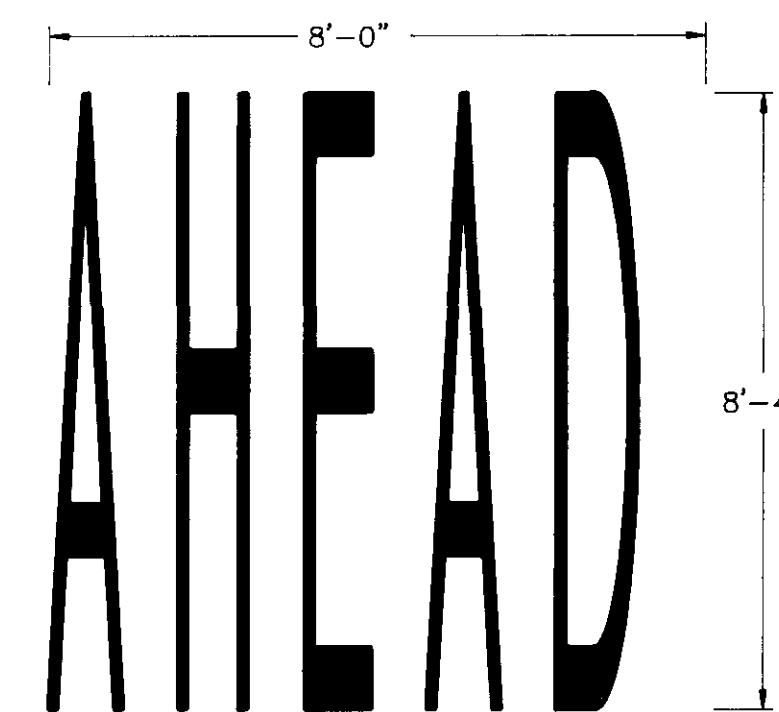
ONLY  
(WHITE - 22.0 S.F.)



SCHOOL  
(WHITE - 35.5 S.F.)



XING  
(WHITE - 18.5 S.F.)



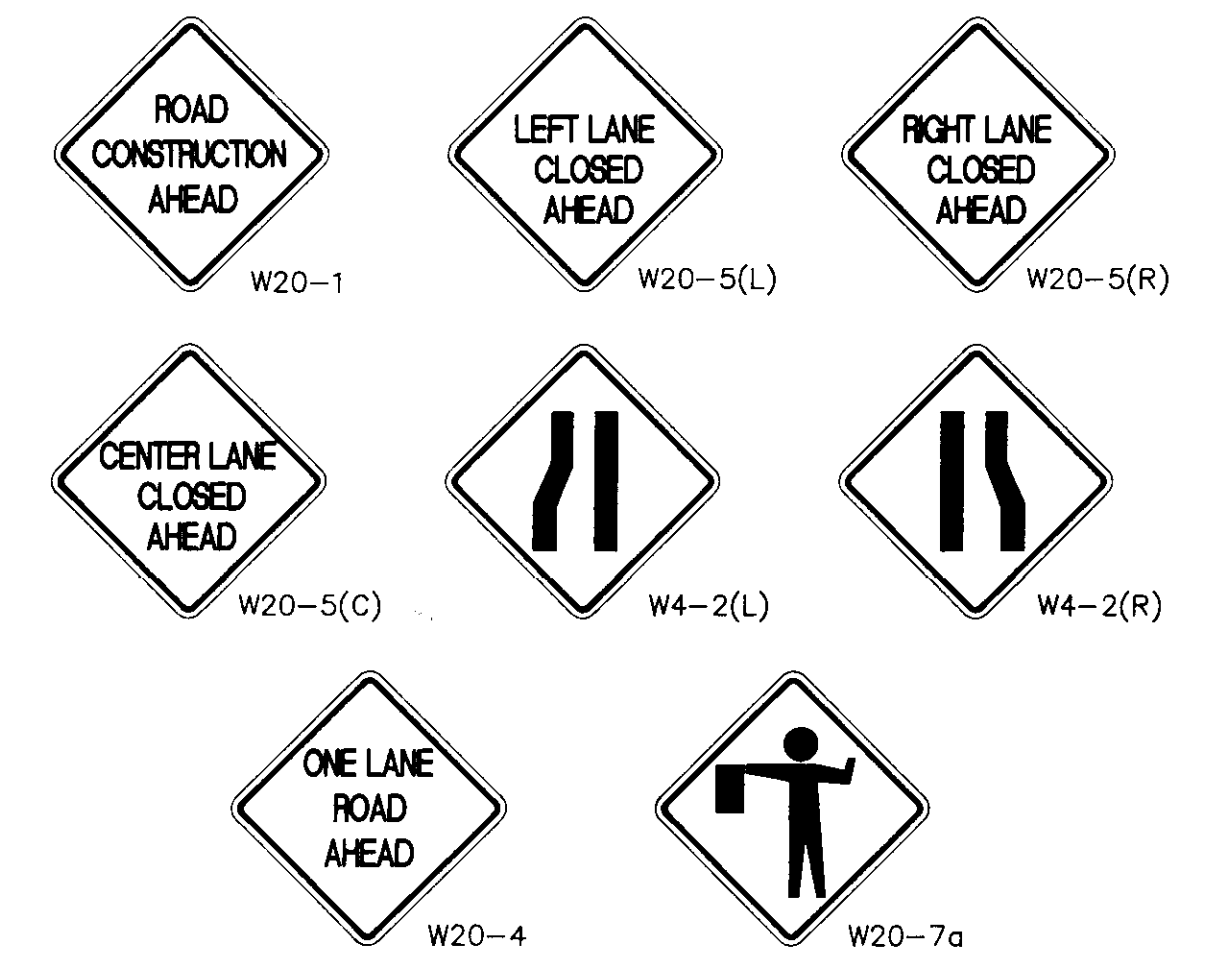
AHEAD  
(WHITE - 32.3 S.F.)

PAVEMENT MARKING LEGENDS  
(NOT TO SCALE)

RIDGELAND AVE. AND U.S. 51 INTERSECTION	
PAVEMENT MARKING STANDARD DETAILS	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: MGB 3/93	DRAWING NO. 20
DRWN: MTB 3/93	NEEL-SCHAFFER, INC.
CHKD: ELS 5/93	ENGINEERS & PLANNERS
SCALE: N.T.S.	JACKSON, MISSISSIPPI



**SIGN LEGEND**



**GENERAL NOTES**

- ADDITIONAL ADVANCE WARNING SIGNS MAY BE NECESSARY.
- POST MOUNTED SIGNS SHALL HAVE A 7' MINIMUM MOUNTING HEIGHT.
- PAYMENT FOR ALL SIGNS, CONES, DRUMS, STEEL PLATES AND OTHER MATERIALS, BARRICADES, LABOR AND INCIDENTALS REQUIRED TO IMPLEMENT THE TRAFFIC CONTROL PLAN SHALL BE INCLUDED UNDER PAY ITEM 618-A MAINTENANCE OF TRAFFIC.
- APPROACH SIDE TRAFFIC CONTROL TO BE USED WHEN WORK OCCURS ON EITHER THE APPROACH SIDE OR THE FAR SIDE OF THE INTERSECTION. FAR SIDE TRAFFIC CONTROL IS NOT NEEDED WHEN WORK IS CONFINED TO THE APPROACH SIDE ONLY.
- FOR A DIVIDED HIGHWAY SITUATION, A SECOND SET OF ADVANCE WARNING SIGNS SHALL BE ERECTED IN MEDIAN AREA (8' MIN. MEDIAN WIDTH REQUIRED).
- CONTRACTOR SHALL NOT BE ALLOWED TO CLOSE A LANE OF TRAFFIC DURING THE TIME PERIODS OF 7:00 - 9:00 A.M. & 4:00 - 6:00 P.M. WEEKDAYS.

**LEGEND**

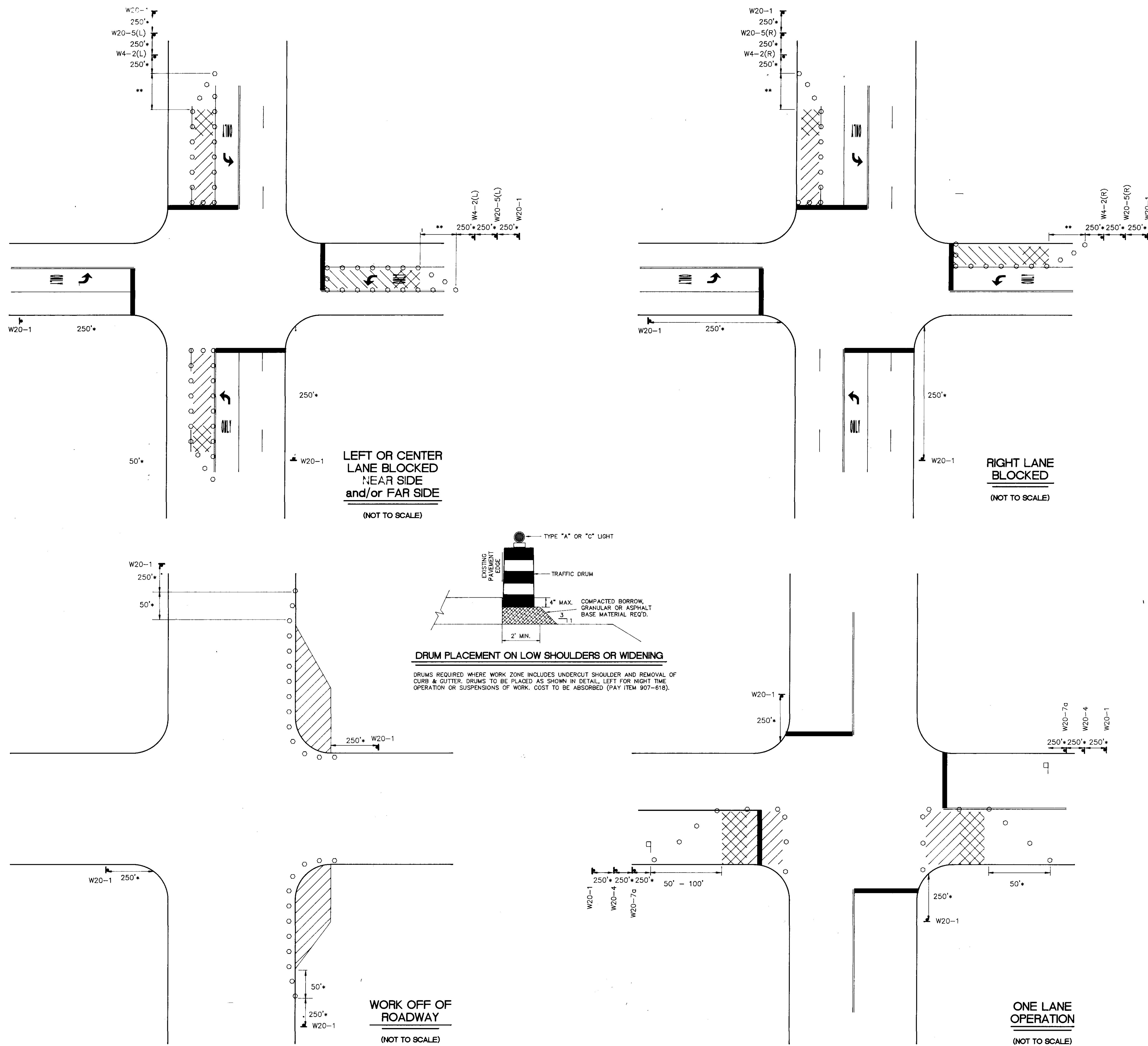
- DRUMS (30' MAXIMUM SPACING) - 36" CONES MAY BE USED AS A SUBSTITUTE FOR SHORT TERM WORK OR AS DIRECTED BY ENGINEER (DAY TIME ONLY)
- W20-1 SIGNS - SEE SIGN LEGEND  
MIN. SIZE 48" x 48", BLACK ON ORANGE BACKGROUND
- FLAGGER WITH PADDLE - 18" STOP/SLOW PADDLES SHALL BE USED. HANDHELD FLAGS SHALL NOT BE ACCEPTED AS PROPER TRAFFIC CONTROL DEVICES FOR FLAGGING OPERATION.
- ▨ WORK AREA      ▩ BUFFER AREA
- \* CONSIDERED MINIMUM DISTANCE - ENGINEER TO DETERMINE APPROPRIATE SPACING IN THE FIELD
- \*\* SPEED LIMIT      TAPER LENGTH  
M.P.H.      FEET  
25      125  
30      180  
35      250  
40      325  
45      550

**RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION**

**STANDARD DETAILS  
TYPICAL TRAFFIC  
CONTROL PLANS**

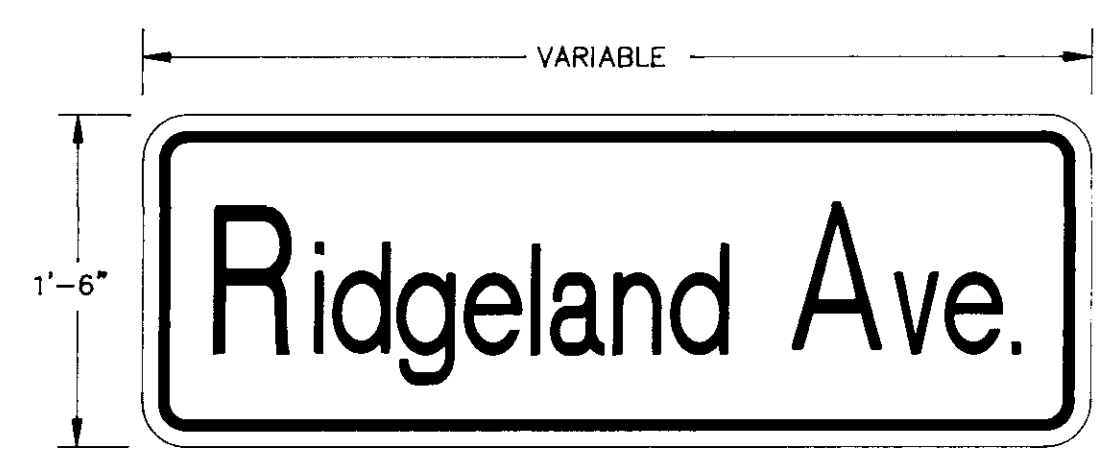
**CITY OF RIDGELAND, MISSISSIPPI**

DSGN: DEW	3/93		DRAWING NO.
DRWN: MTB	3/93		<b>21</b>
CHKD: ELS	5/93		
SCALE: N.T.S.			



DRAWING: 77276 FROM 13863

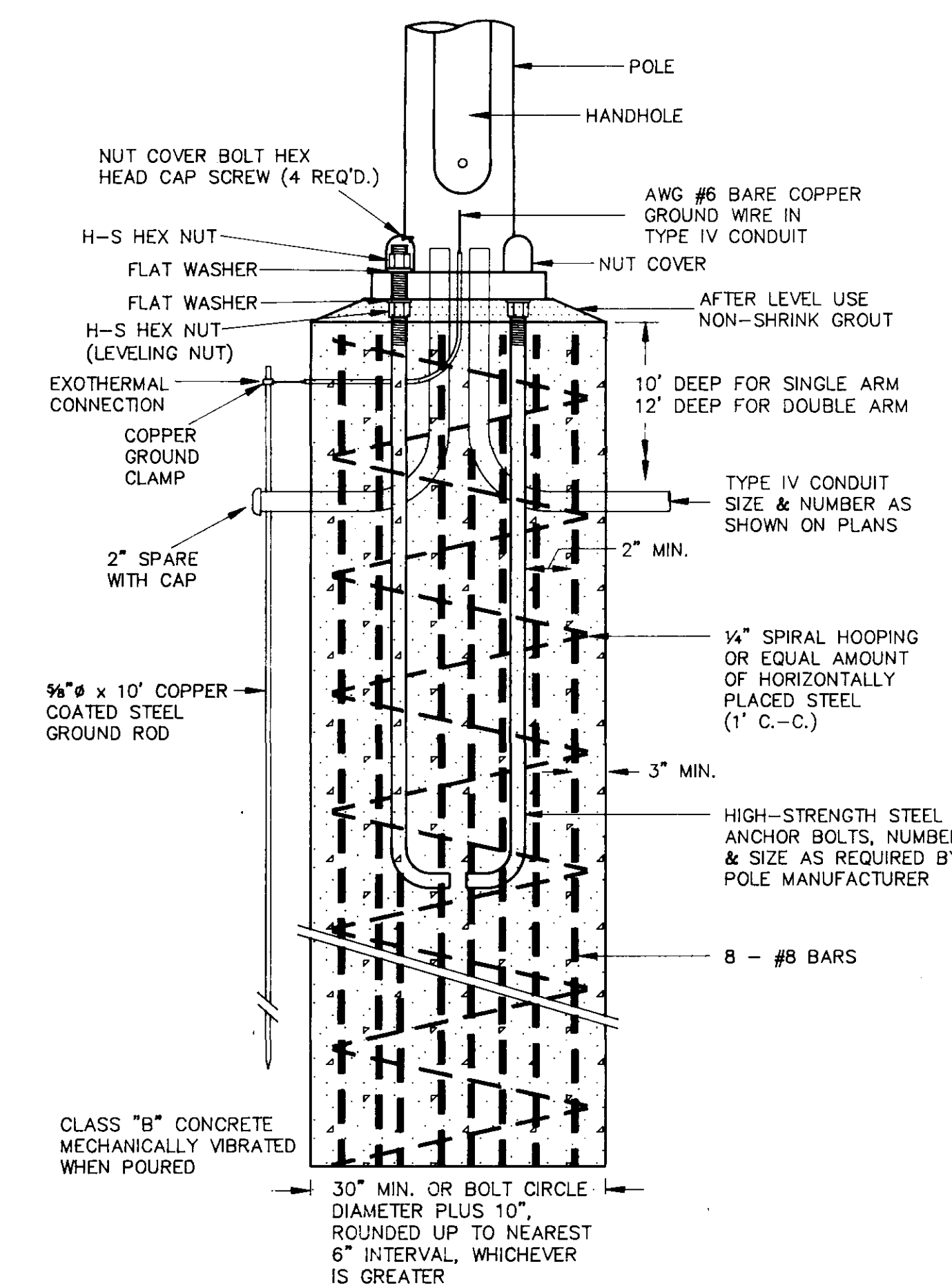
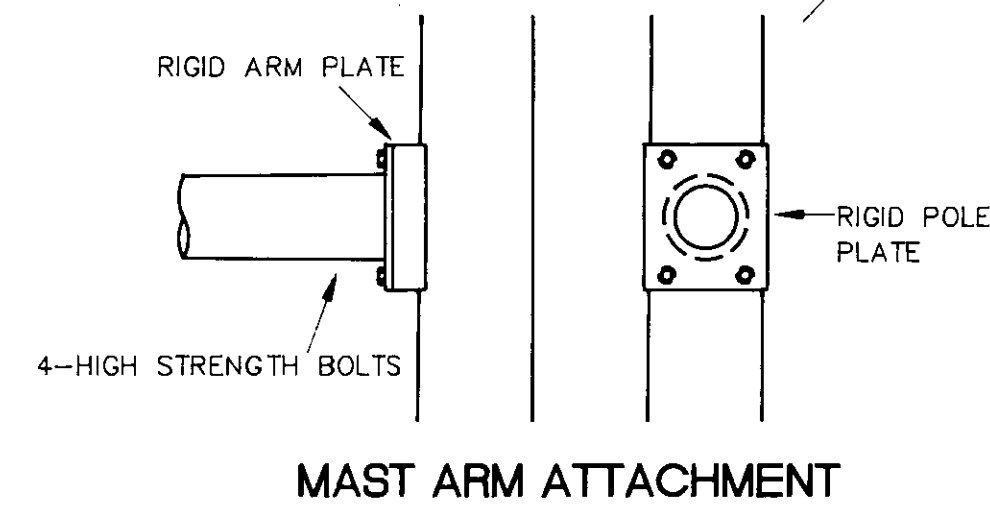
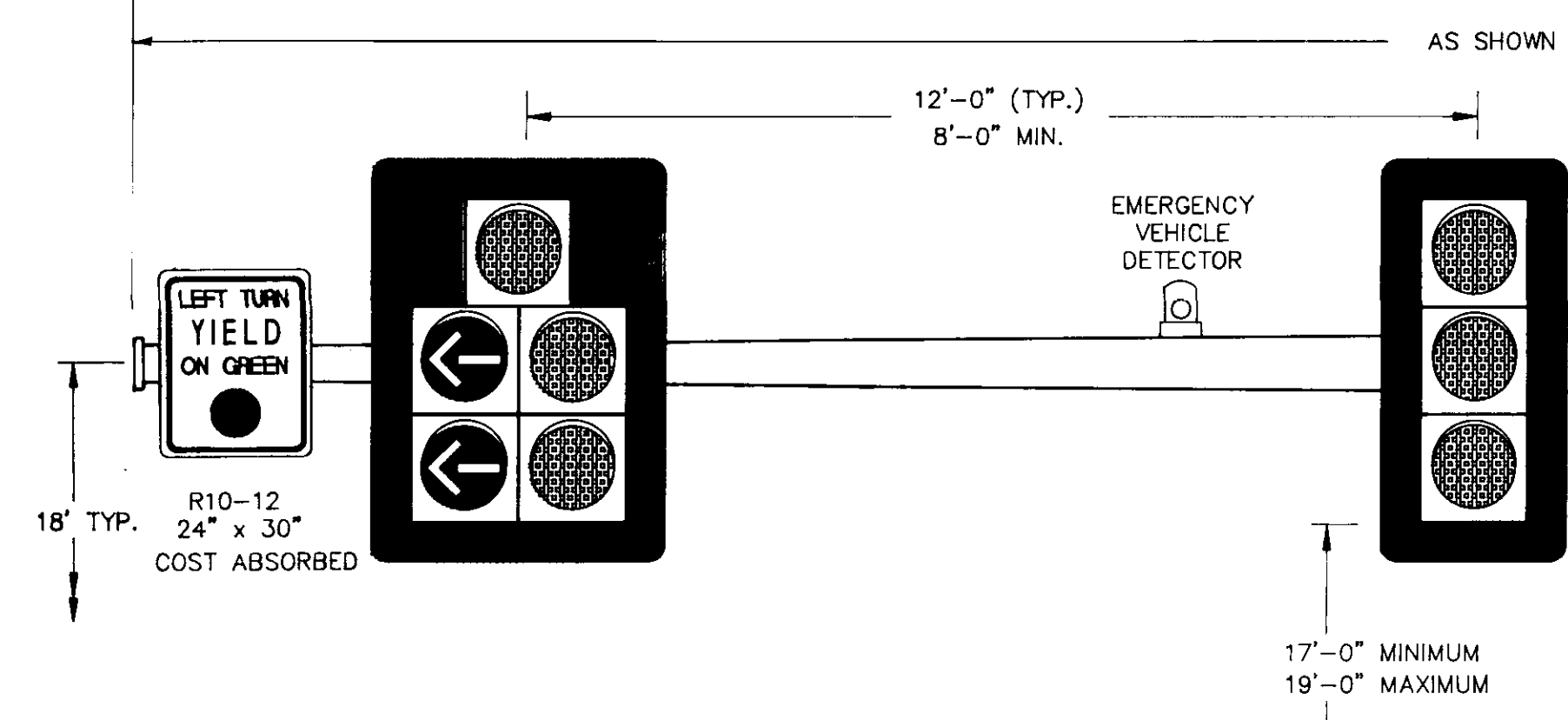
1859-5091.DWG(95...35)(01)



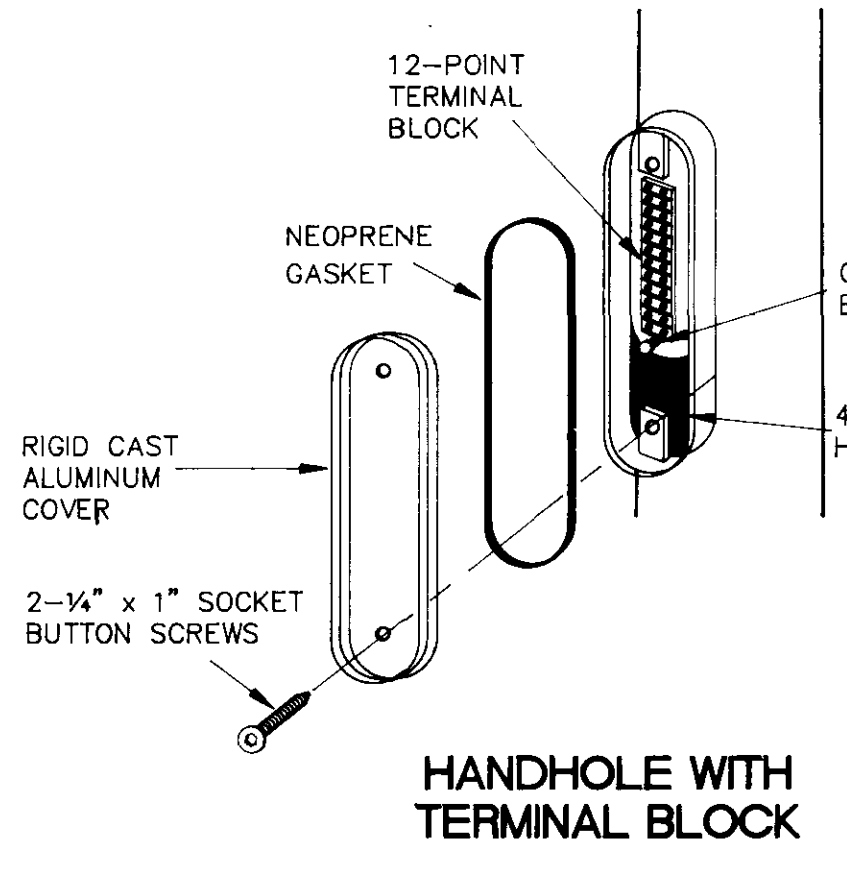
**STREET NAME SIGNS (TYPICAL)**  
 THICKNESS = 0.1"  
 WHITE ON GREEN SHEETING  
 8" UPPER CASE, 6" LOWER CASE LETTERS; SERIES "C"  
 STREET NAME SIGNS REQUIRE A MINIMUM OF 2 MOUNTING BRACKETS (30" MAXIMUM SPACING BETWEEN BRACKETS)  
 COST OF STREET NAME SIGNS TO BE COST ABSORBED

NOTE:  
 LUMINAIRE AND PHOTOELECTRIC CONTROL  
 250 WATT H.P.S.  
 LIGHT FIXTURE WITH 250 WATT  
 LAMPS AND PHOTO CELL TO BE  
 PROVIDED BY THE CONTRACTOR.  
 COST ABSORBED UNDER PAY ITEM 907-639.

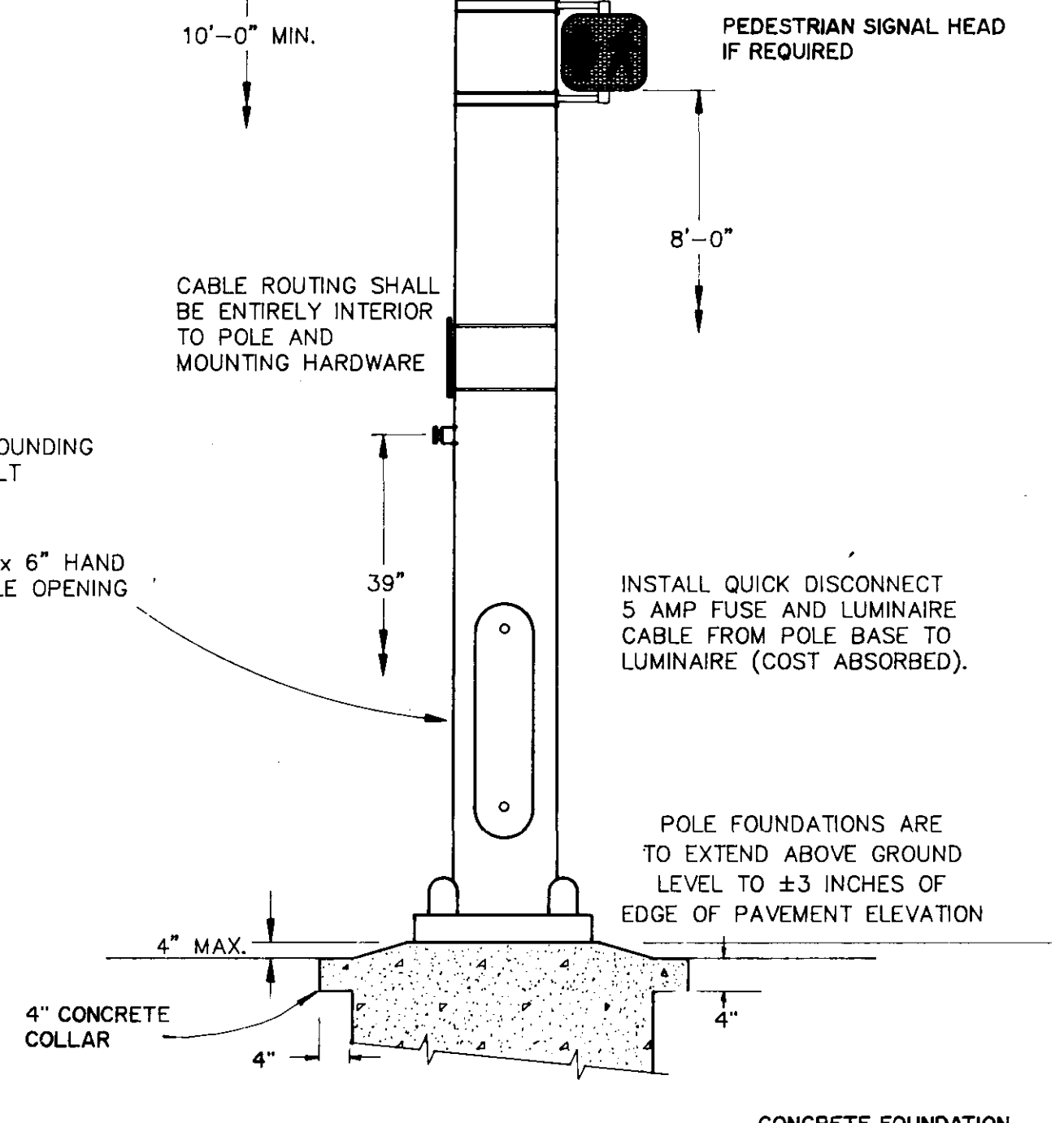
- NOTES:
1. WIRE ENTRANCE TO MAST ARM WILL BE FIELD DRILLED TO CORRESPOND TO THE LOCATION OF THE SIGNAL HEADS WHEN ALIGNED IN THE FIELD.
  2. RED SECTION INDICATIONS TO BE APPROXIMATELY SAME HEIGHT.
  3. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE POLE MANUFACTURER.
  4. DESIGN WIND LOAD FOR POLES AND MAST ARMS IS 70 MPH.



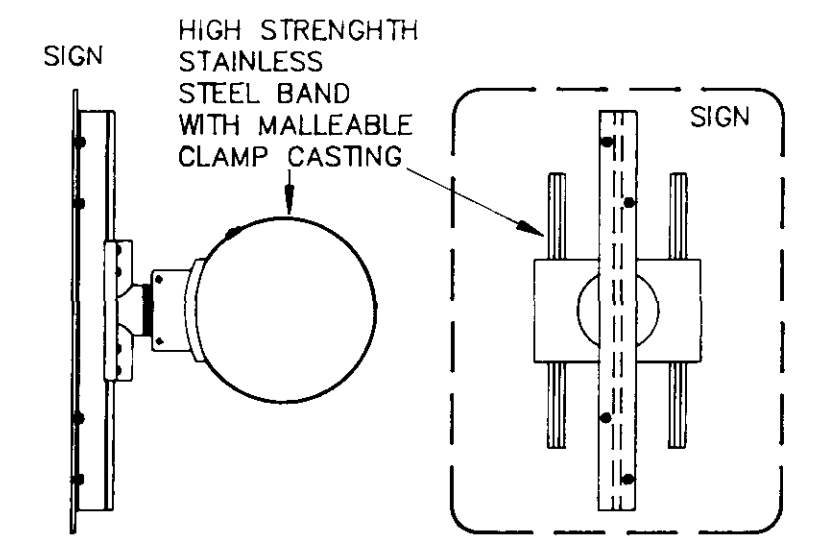
STEEL MAST ARM POLE FOUNDATION DETAIL



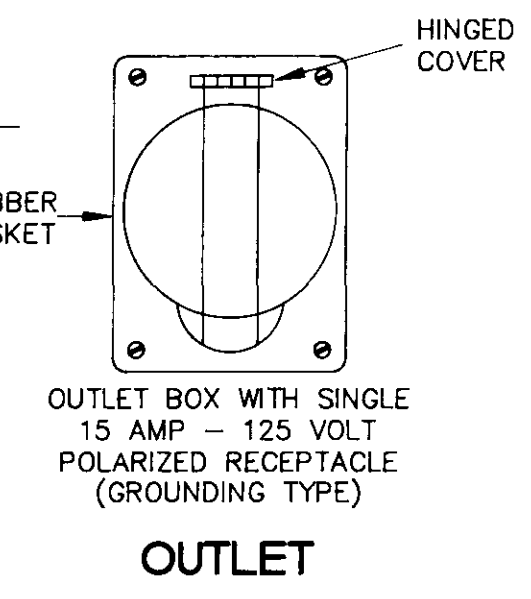
HANDHOLE WITH TERMINAL BLOCK



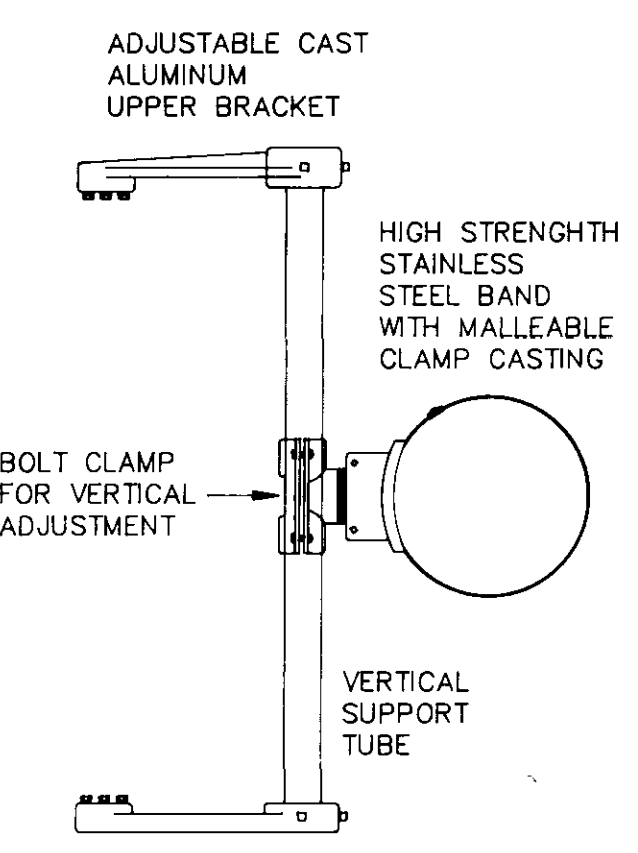
STEEL MAST ARM POLE DETAIL



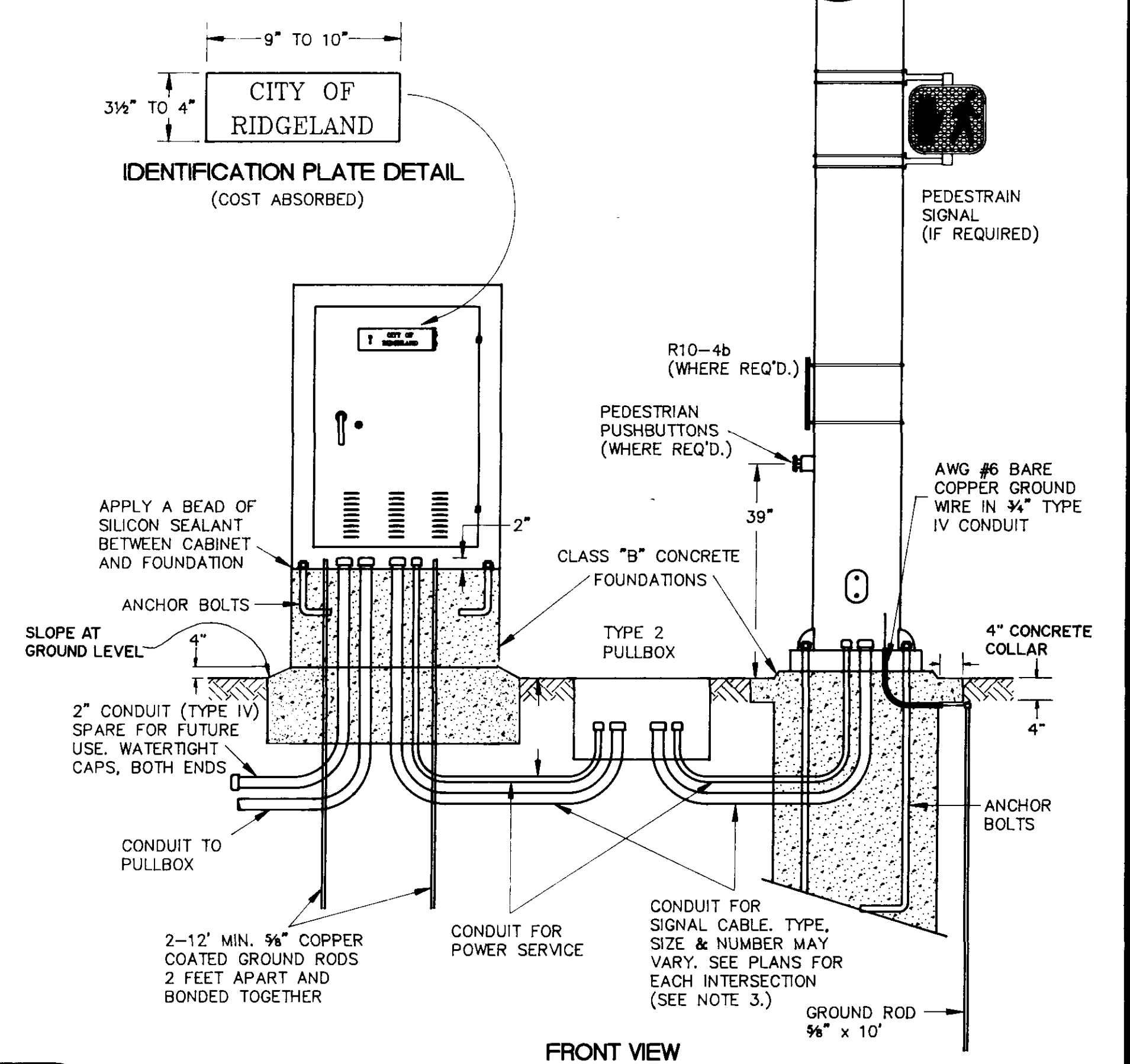
MAST ARM SIGN BRACKET (TYPICAL)



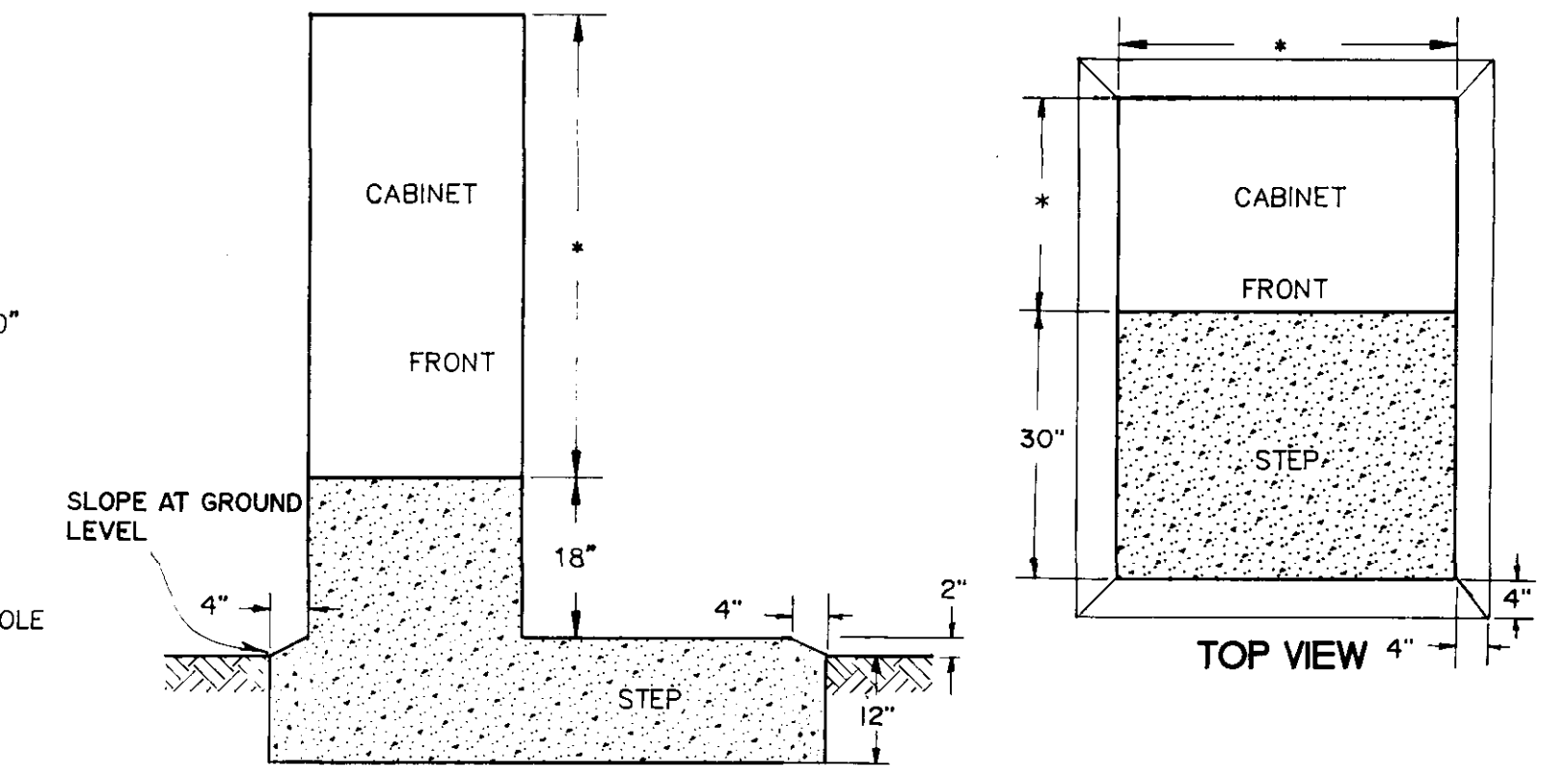
OUTLET



SIGNAL MOUNTING BRACKET (TYPICAL)



FRONT VIEW



SIDE VIEW

CONTROLLER BASE DETAIL

- \* CABINET DIMENSIONS TO MEET SIGNAL CABINET MANUFACTURER'S SPECIFICATIONS.  
 NOMINAL DIMENSIONS: 8-PHASE - D=26", W=38", H=55"  
 4-PHASE - D=17", W=30", H=55"

**GENERAL FOUNDATION NOTES**

1. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER.
2. TYPE IV CONDUIT TO BE RUN INTERNALLY FOR CONCRETE AND STEEL POLES; TYPE I CONDUIT RISERS REQUIRED FOR WOOD POLES.
3. DESIGN WIND LOAD FOR POLES SHALL BE 70 MPH.
4. FOUNDATIONS TO BE CLASS "B" CONCRETE, MECHANICALLY VIBRATED WHEN POURING.
5. MINIMUM STEEL POLE FOUNDATION SHALL BE 30" DIA. x 10' DEEP.

**RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION**

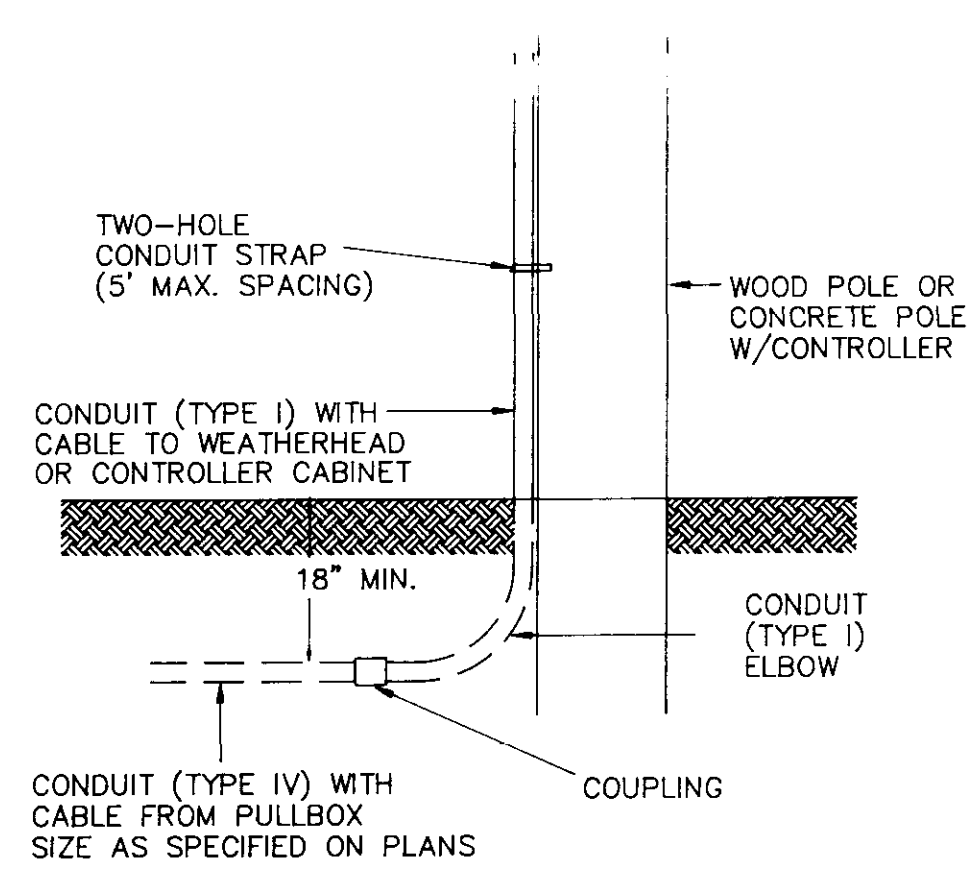
**STANDARD SIGNAL DETAILS SIGNAL POLES AND CONTROLLER CABINET**

**CITY OF RIDGELAND, MISSISSIPPI**

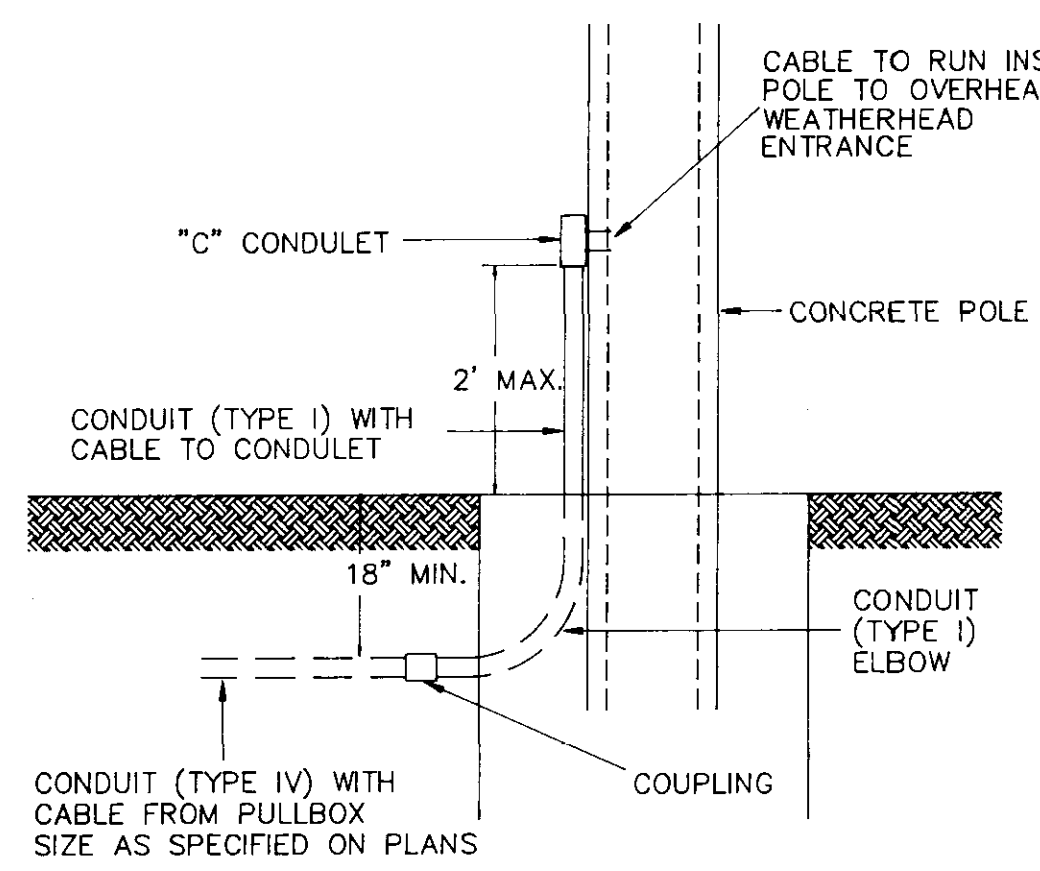
DSGN: DEW	3/93	NEEL-SCHAFFER, INC. ENGINEERS - PLANNERS JACKSON, MISSISSIPPI	DRAWING NO.
DRWN: MTB	3/93		<b>22</b>
CHKD: ELS	5/93		
SCALE: N.T.S.			

DRAWING: 27456 (REV. 05-95)

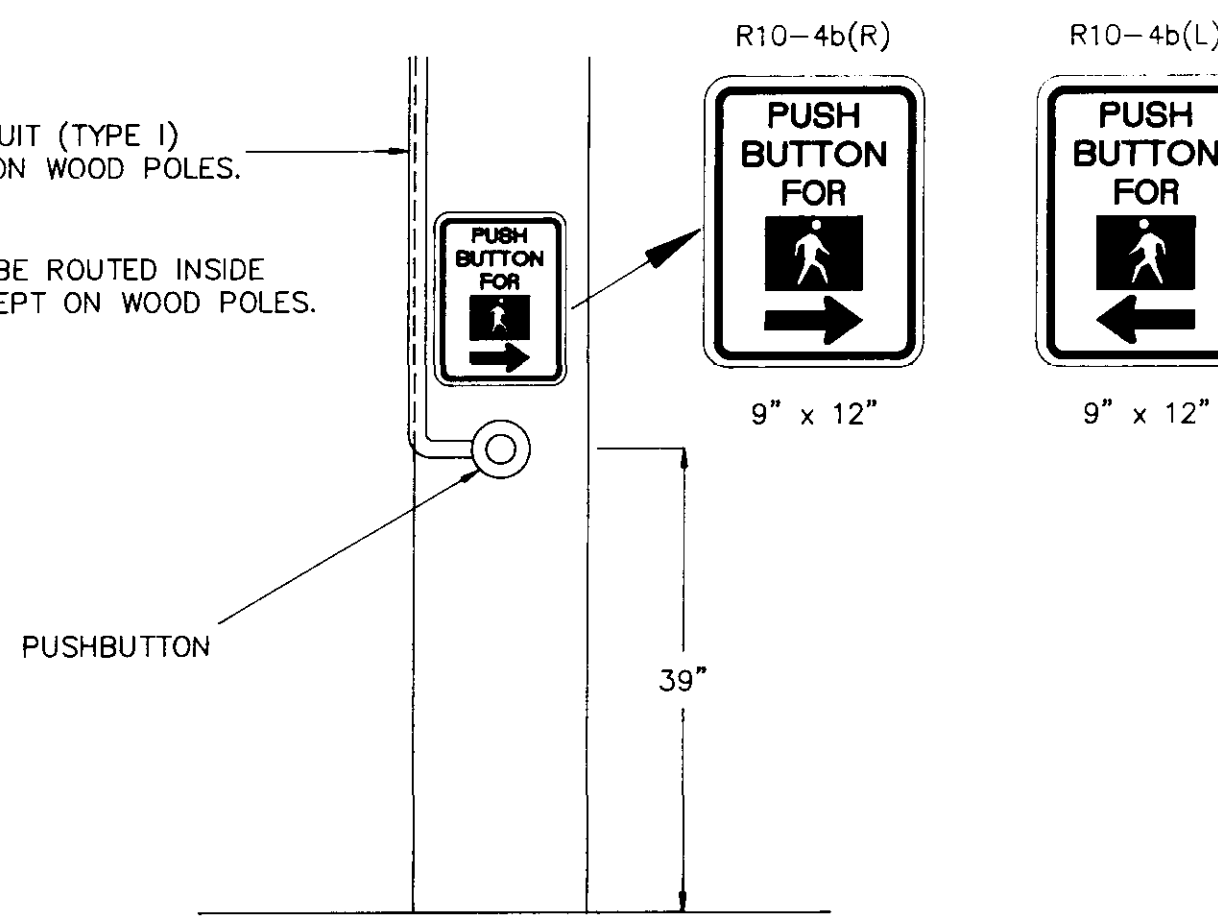
1859-503.DWG(95-35)(01)



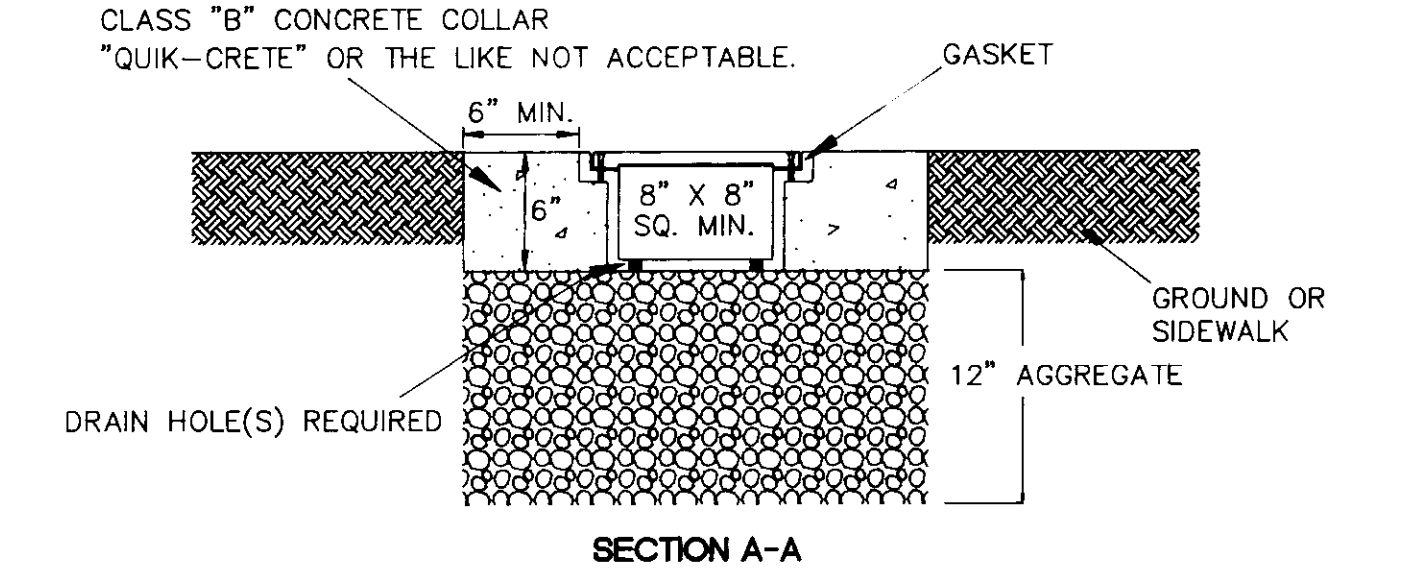
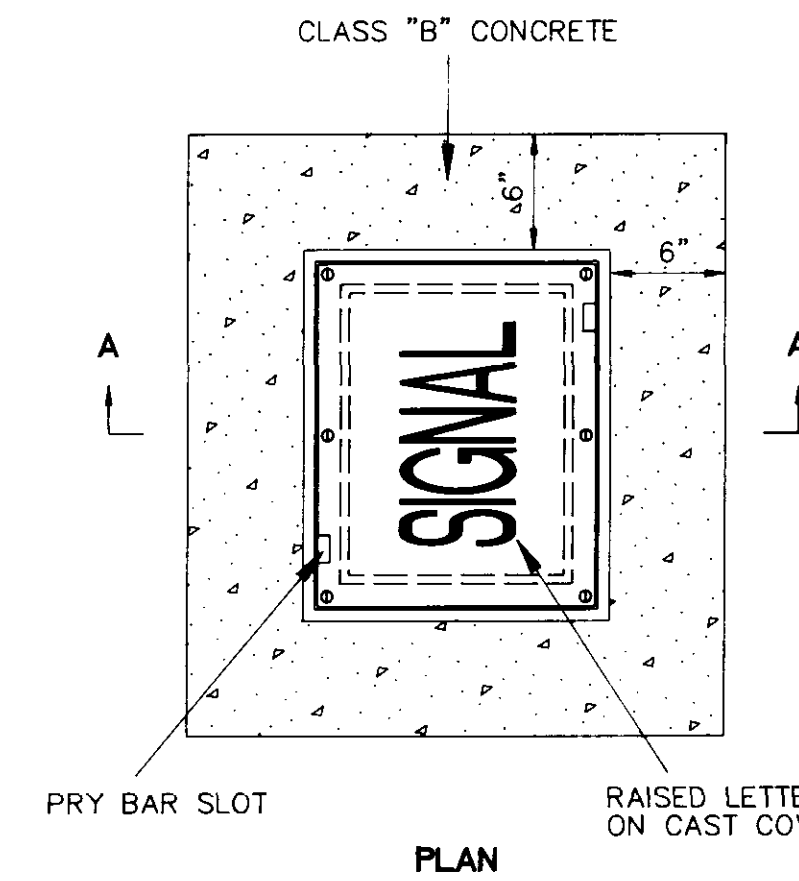
CONDUIT DETAIL AT POLES



3/4" CONDUIT (TYPE I) REQUIRED ON WOOD POLES.  
CABLE TO BE ROUTED INSIDE POLES EXCEPT ON WOOD POLES.



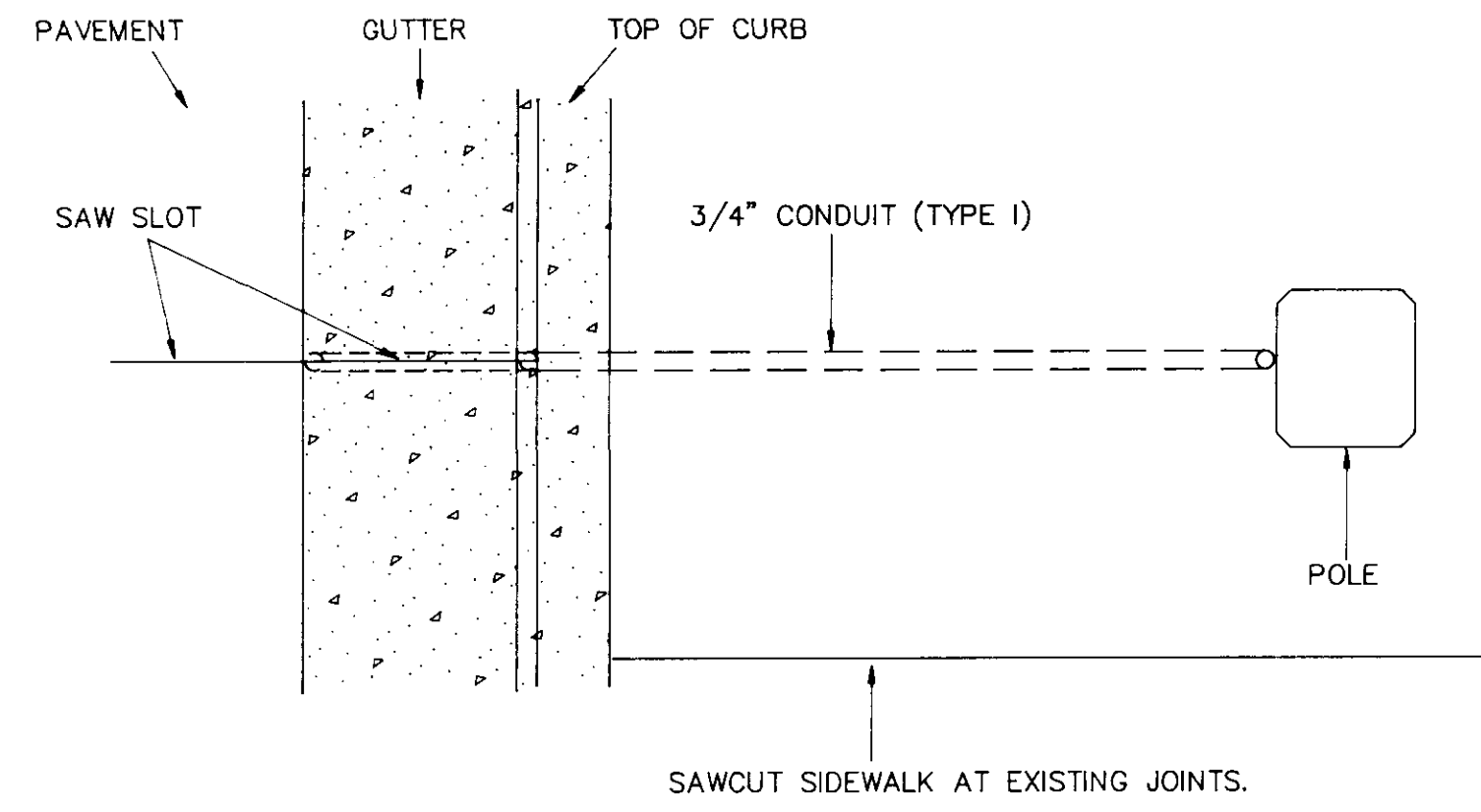
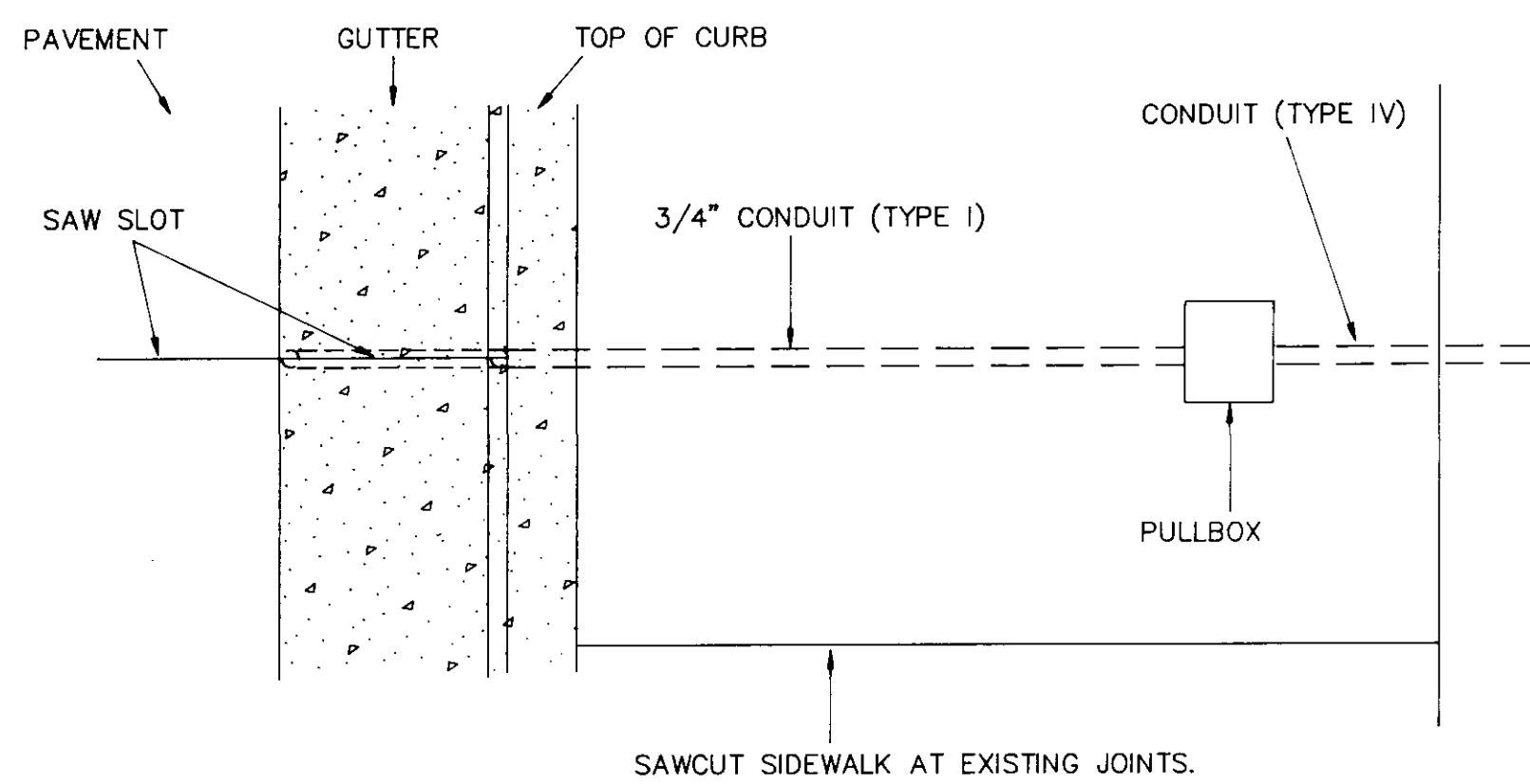
PEDESTRIAN PUSH BUTTON AND SIGN INSTALLATION DETAIL



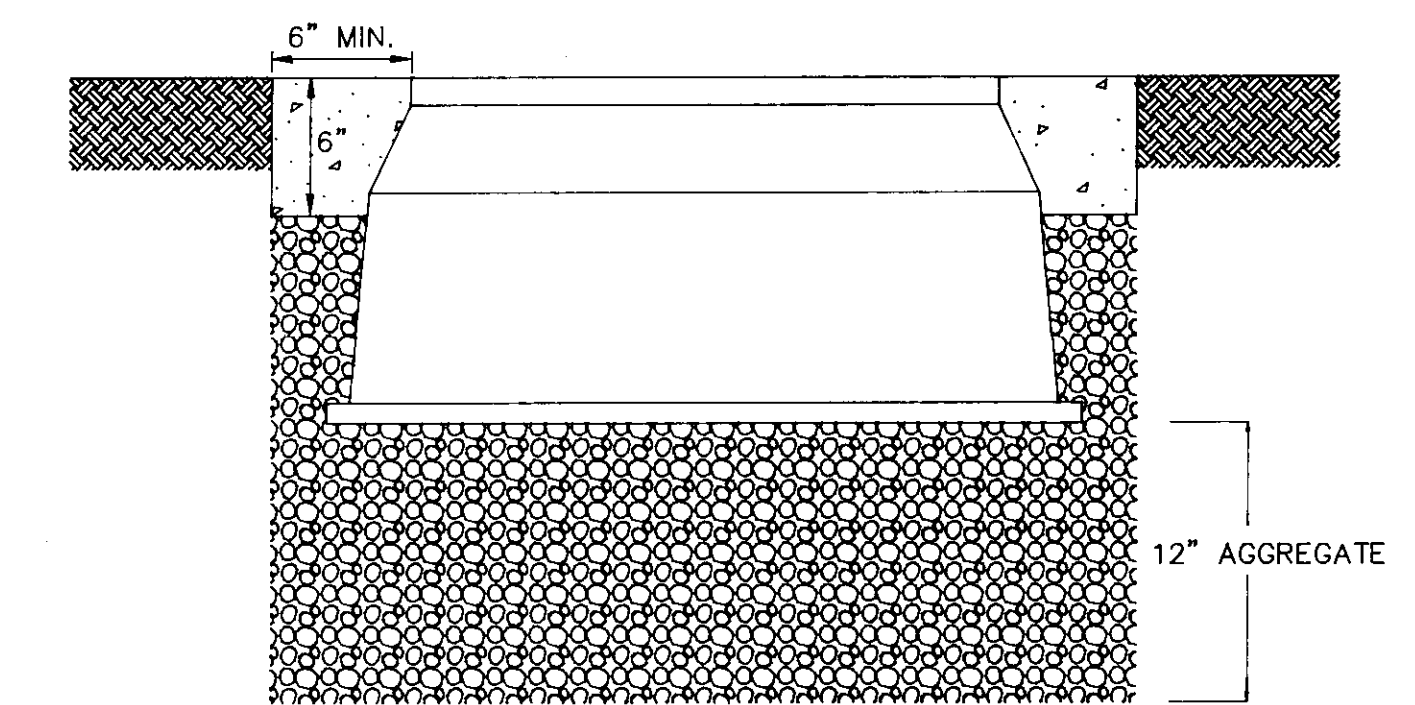
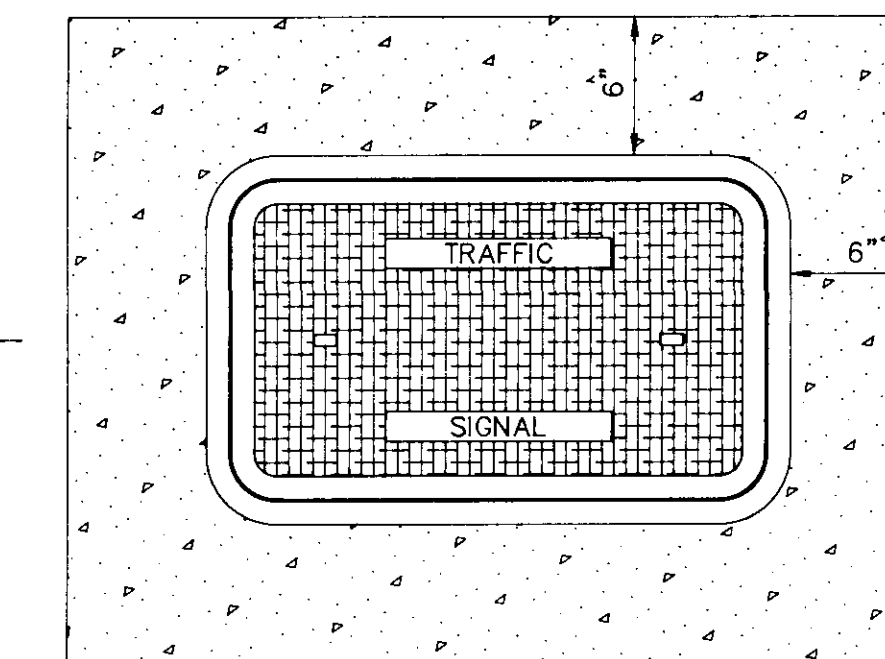
- SECTION A-A
- PULLBOX NOTES:
- NOMINAL PULLBOX DIMENSIONS:  
TYPE 1 - 8"L x 8"W x 6"D  
TYPE 2 - TOP BODY - 25"L x 15"W x 15"D  
BOTTOM BODY (INSIDE) - 29"L x 18"W
  - GRAVEL, 12" DEEP, IS REQUIRED UNDER PULLBOXES FOR DRAINAGE.
  - CONCRETE COLLAR, 6"W x 6"D, IS REQUIRED FOR PULLBOXES PLACED IN SOIL.
  - TRAFFIC SIGNAL, TRAFFIC OR SIGNAL LEGEND REQUIRED.
  - COVERS SHALL BOLT DOWN.

TWO-PIECE PULLBOX (TYPE 1)

CAST IRON, CAST ALUMINUM, WELDED ALUMINUM, OR APPROVED EQUAL

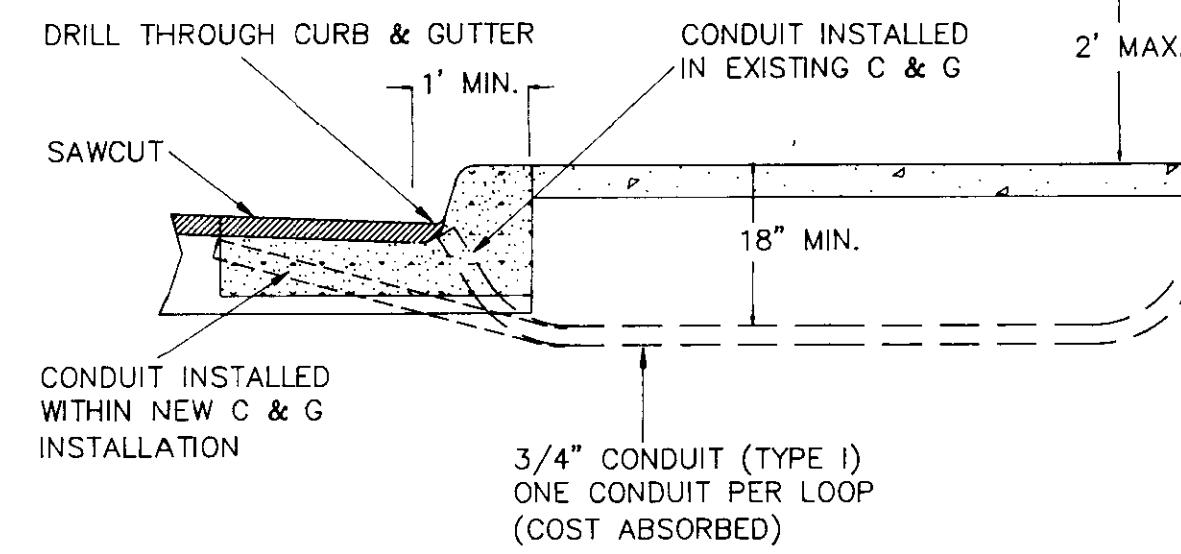
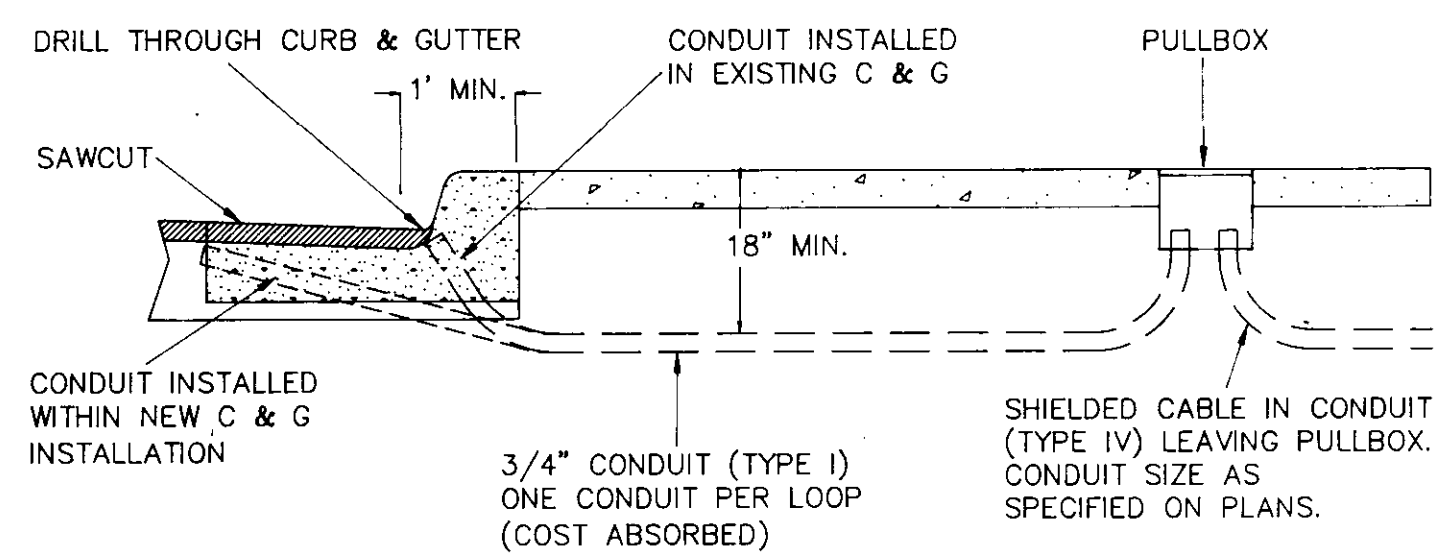


PLAN VIEW - LOOP LEAD-IN CONDUIT

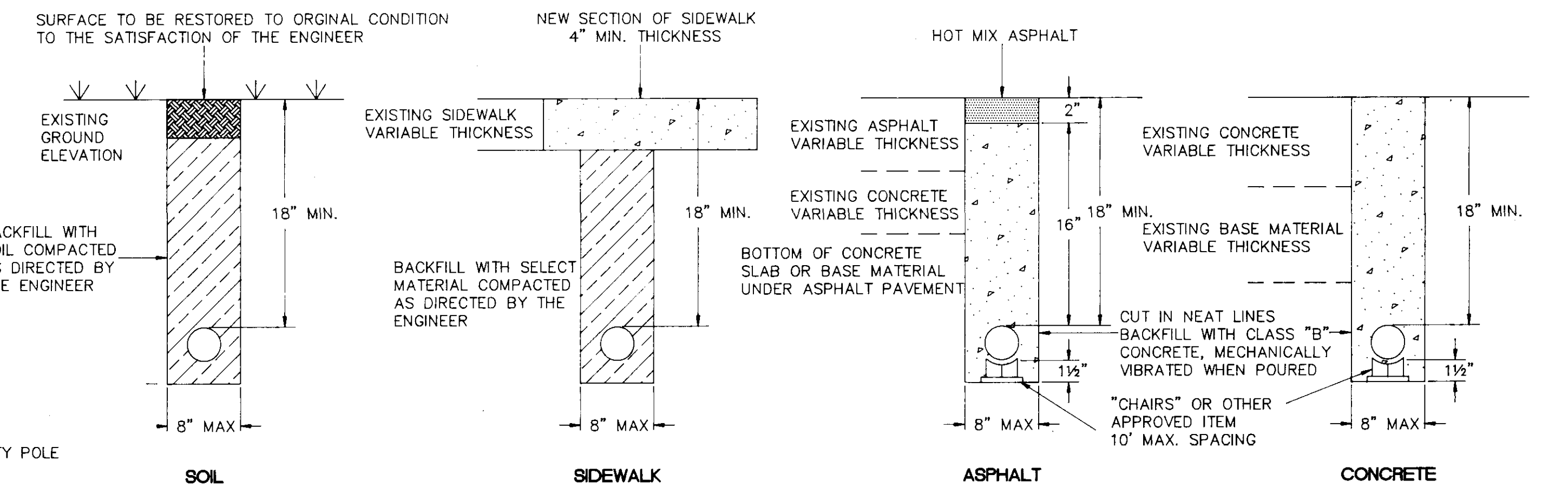


TWO-PIECE PULLBOX (TYPE 2)

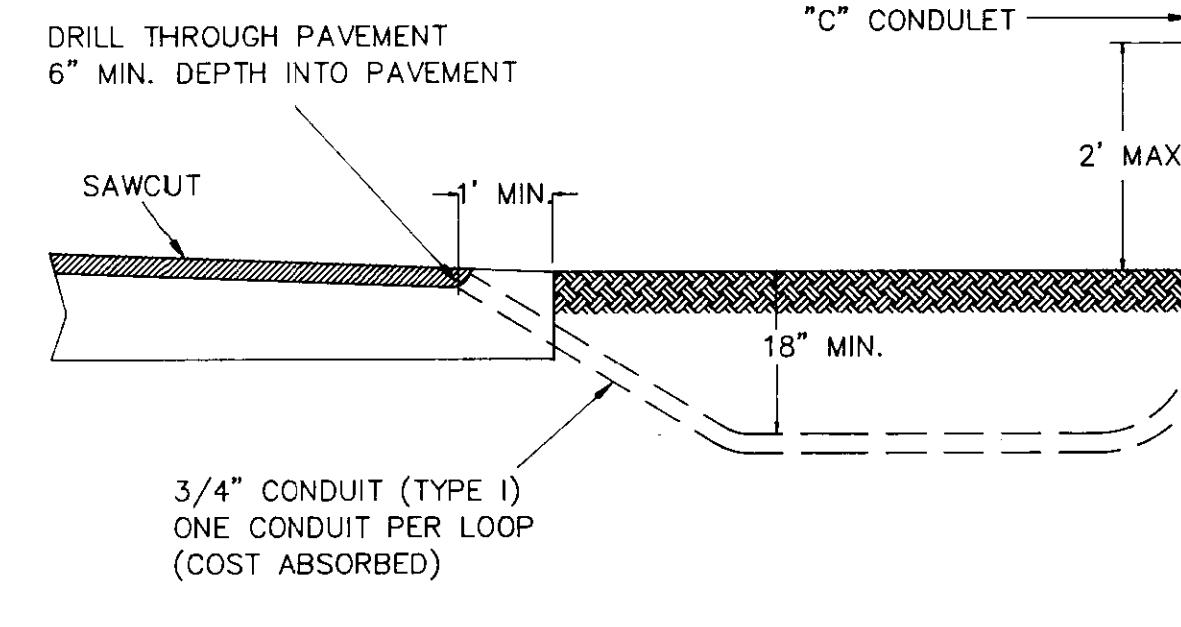
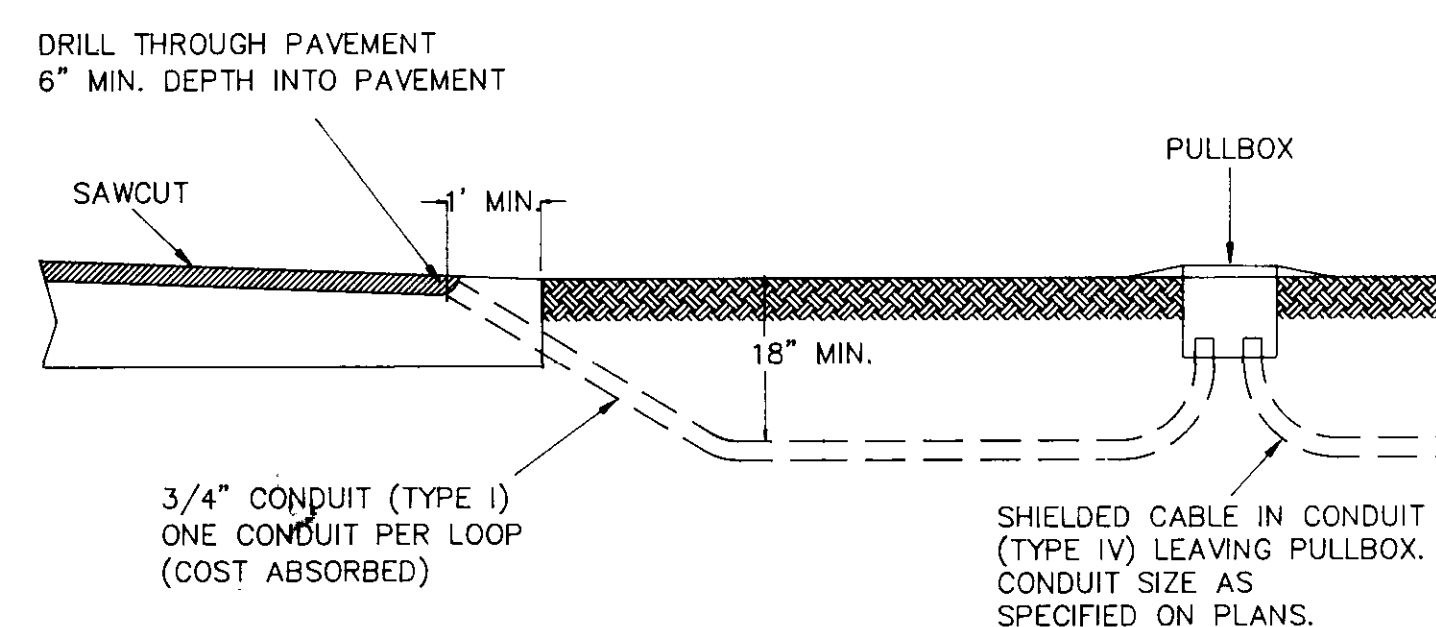
PRECAST CLASS "B" CONCRETE, HIGH DENSITY POLYETHYLENE, COMPOSOLITE, OR APPROVED EQUAL



TYPICAL SECTION IN GUTTER AND SIDEWALK



CONDUIT TRENCHING DETAIL



TYPICAL SECTION IN EARTH

NOTES :

- CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED.
- SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.
- TYPE I CONDUIT IS RIGID STEEL; TYPE IV CONDUIT IS PVC.

**RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION**

**STANDARD SIGNAL DETAILS**  
**CONDUIT, PULLBOX AND PEDESTRIAN PUSHBUTTON**

**CITY OF RIDGELAND, MISSISSIPPI**

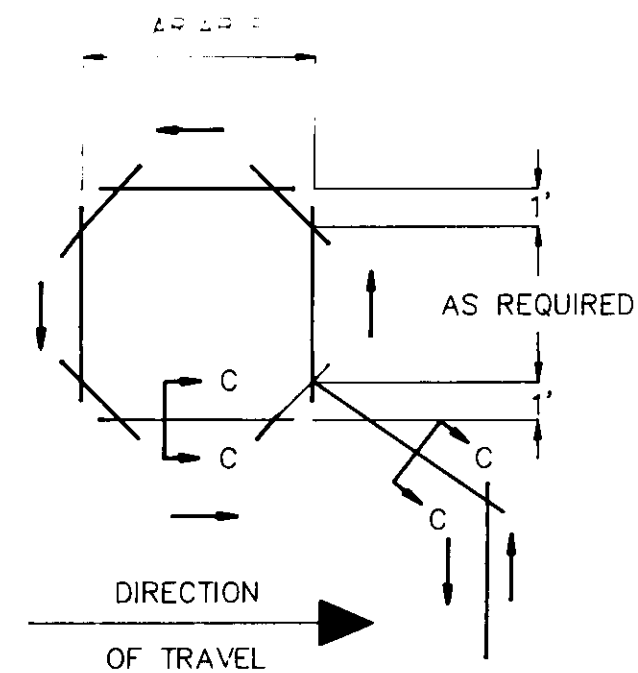
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DRWN: MTB	3/93		23
CHKD: ELS	5/93		
SCALE: N.T.S.			

BRANDING FROM 43865

1859-506 DWG (85-35) (01)

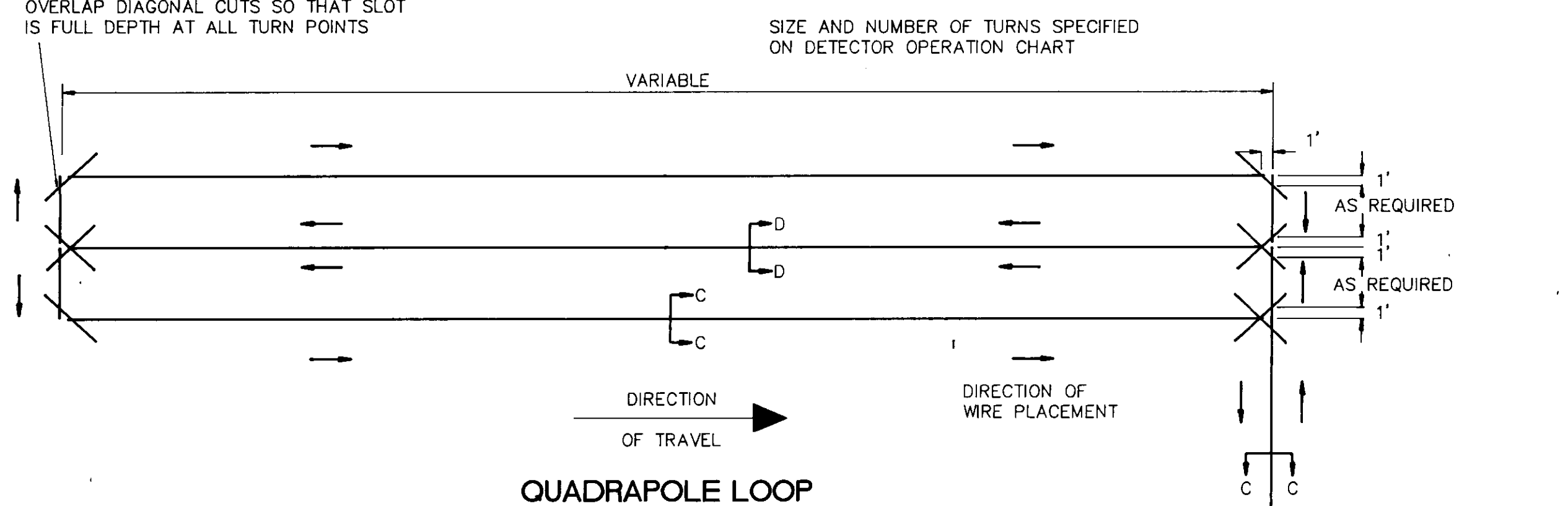


SIZE AND NUMBER OF TURNS SPECIFIED ON DETECTOR OPERATION CHART



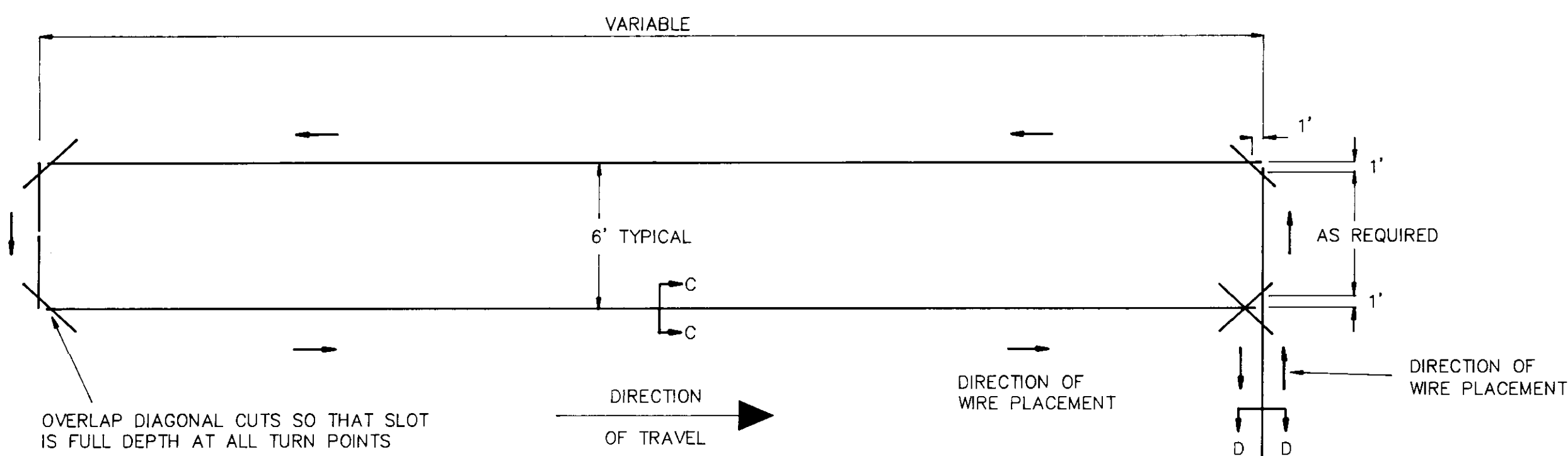
SMALL LOOP

OVERLAP DIAGONAL CUTS SO THAT SLOT IS FULL DEPTH AT ALL TURN POINTS

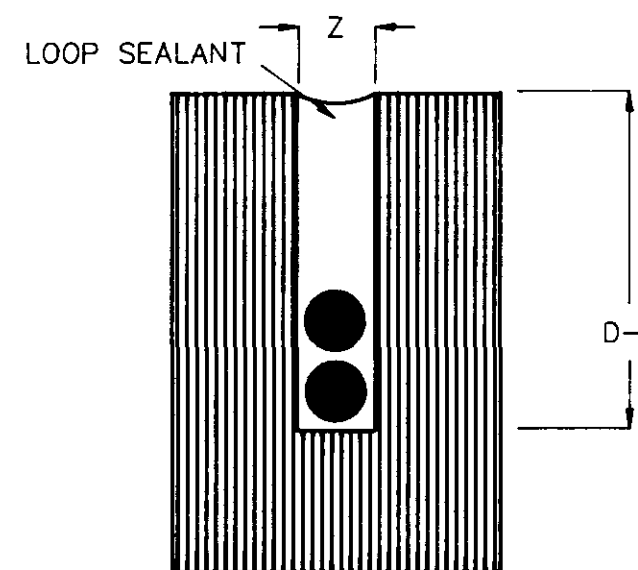


QUADRAPOLE LOOP

SIZE AND NUMBER OF TURNS SPECIFIED ON DETECTOR OPERATION CHART

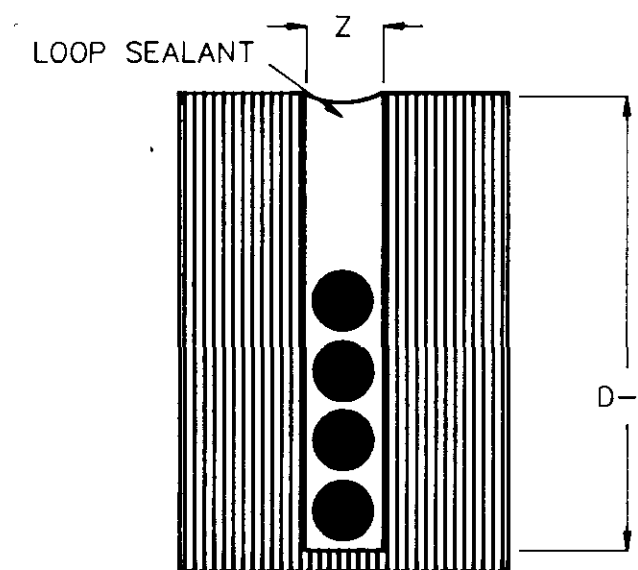


RECTANGULAR LOOP  
SAW CUT DIAGRAM

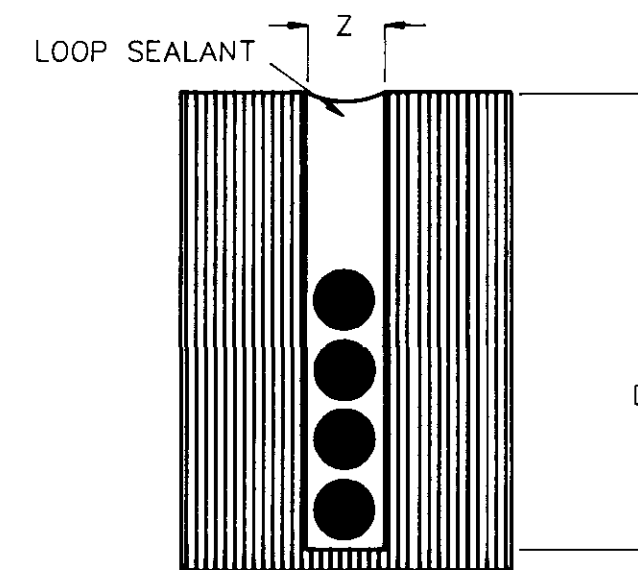


SECTION C

LOOP IN CONCRETE



SECTION D



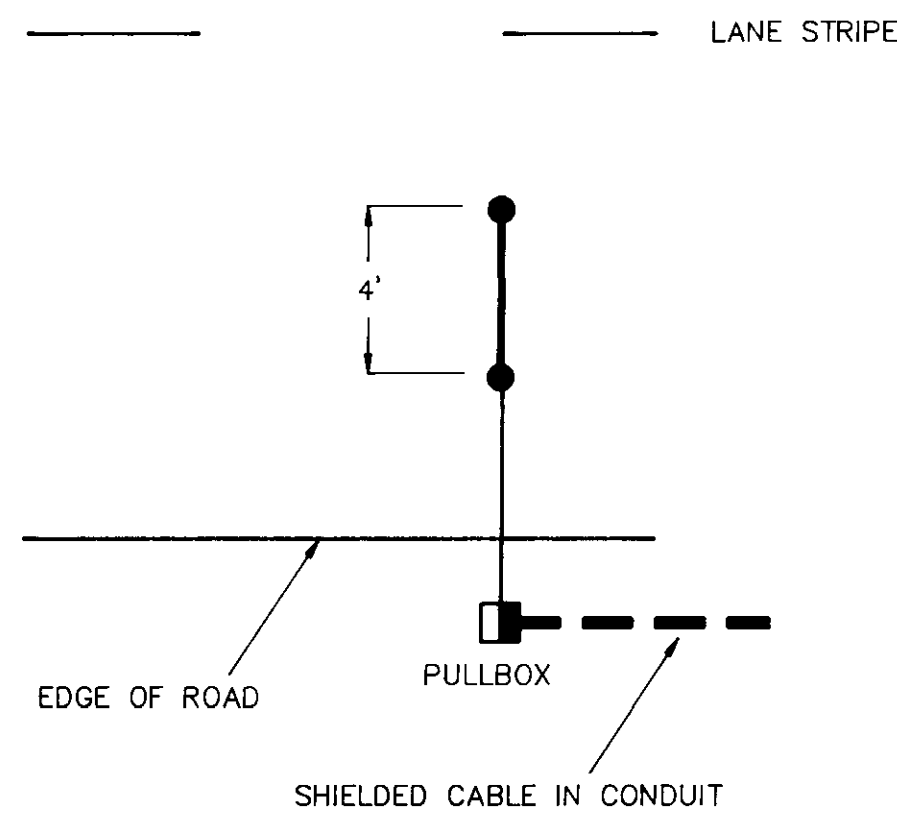
SECTION C & D

LOOP IN ASPHALT

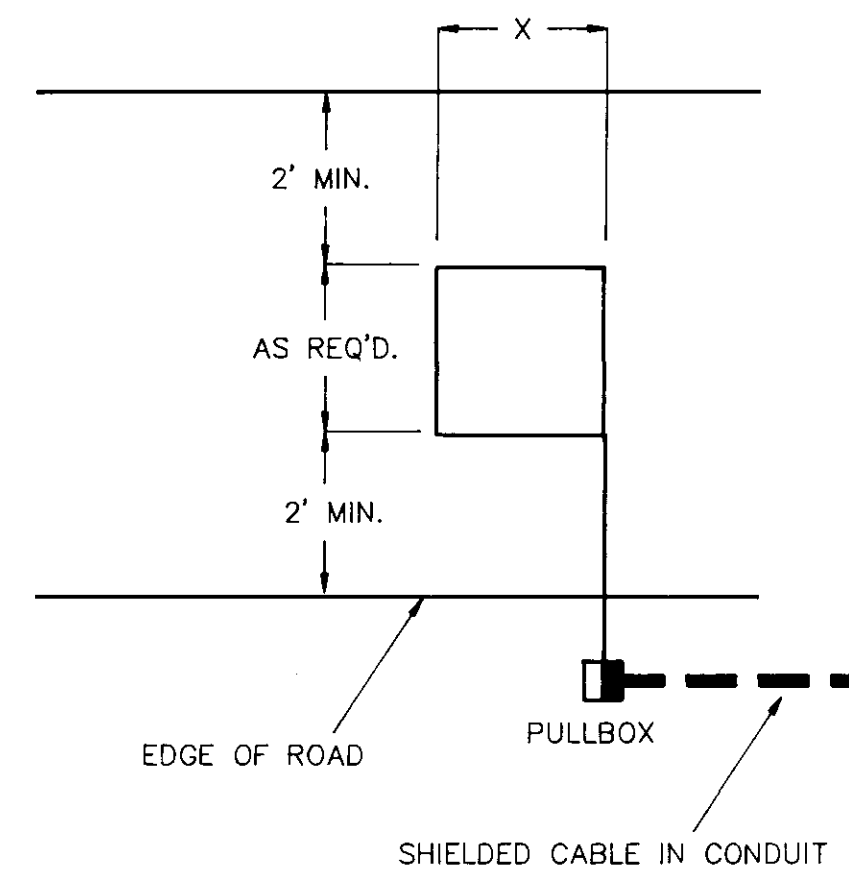
"Z" DIMENSION SHALL BE WIDE ENOUGH TO ACCOMMODATE LOOP WIRE WITHOUT CHAFING THE INSULATION (5/16" NOMINAL).

DEPTH	NUMBER OF WIRES				
	1	2	3	4	6
D-1	1.5"	2.0"	2.0"	2.5"	3.0"
D-2	-	2.0"	2.0"	2.5"	3.0"
D-3	2.0"	2.0"	2.5"	3.0"	3.0"

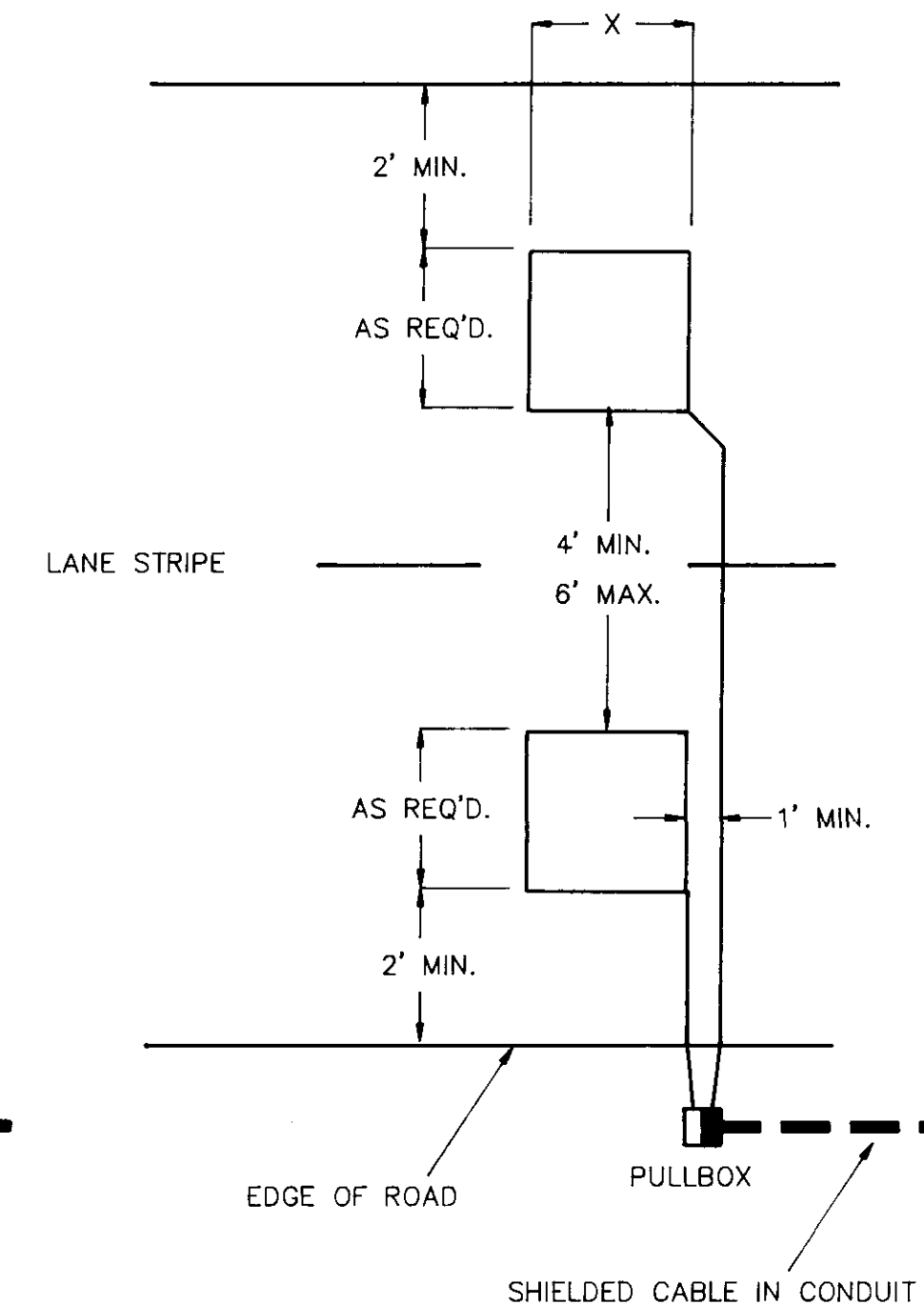
SAW SLOT DETAIL



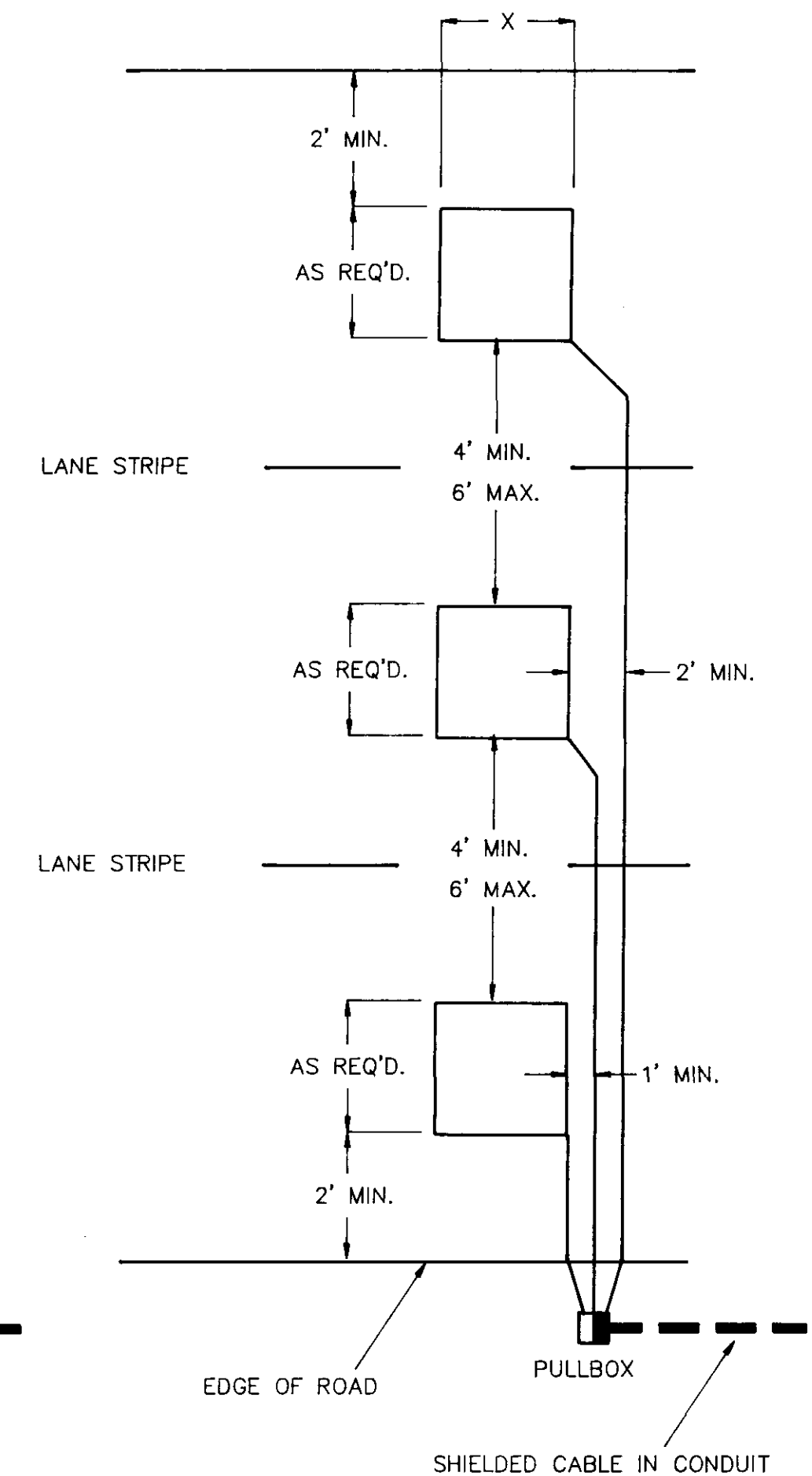
PROBE DETECTOR



ONE LANE COVERAGE



TWO LANE COVERAGE



THREE LANE COVERAGE

TYPICAL LOOP DETECTOR LANE COVERAGE DIAGRAM

"X" DIMENSION SPECIFIED ON PLANS

SAW SLOT AND LOOP WIRE INSTALLATION PROCEDURES

1. CONCRETE PAVEMENT JOINTS SHALL NOT BE USED FOR EITHER LOOP OR FEEDER WIRE. NO LOOPS ARE TO BE INSTALLED THROUGH, OVER, OR UNDER TRANSVERSE CONCRETE JOINTS IN CONCRETE PAVEMENT. NO MANHOLES, INLETS, VALVES, ETC. MAY BE LOCATED WITHIN A LOOP. IF JOINTS OR MANHOLES ARE ENCOUNTERED, THE LOCATION OF THE LOOP MAY BE VARIED SLIGHTLY AS DIRECTED BY THE ENGINEER. IF THE JOINTS OR MANHOLES ARE UNAVOIDABLE, SMALLER LOOPS, THE SIZE TO BE DETERMINED BY THE ENGINEER, MAY BE USED INSTEAD OF ONE LARGER LOOP AND SHALL PROVIDE THE SAME AREA OF COVERAGE AS THE LARGE LOOP. THE SMALLER LOOPS USED TO REPLACE THE ONE LARGE LOOP MAY BE CONNECTED TO ONE DETECTOR AMPLIFIER.
2. WHEN A BEND OR CORNER IS REQUIRED THE SLOTS PRODUCING THE "WOULD-BE" RIGHT ANGLE SHALL NOT OVERLAP.
3. WHEN A BEND OR CORNER IS REQUIRED THE SLOTS PRODUCING THE ANGLES APPROXIMATELY 45° SHALL OVERLAP THE SLOTS IT CONNECTS. THIS IS TO INSURE FULL DEPTH OF SLOTS AT BENDS OR CORNERS.
4. ALL CORNERS OF THE LOOP SHALL BE CUT AT A 45° ANGLE AND HAVE A MINIMUM DIAGONAL LENGTH OF 16".
5. SAW CUTS IN THE PAVEMENT SHALL BE FLUSHED WITH CLEAN WATER UNDER SUFFICIENT PRESSURE TO REMOVE MUD AND SMALL DEBRIS. SAW CUTS SHALL THEN BE DRIED AND CLEANED OF ALL DEBRIS BEFORE INSTALLING THE LOOP WIRE.
6. ONE CONTINUOUS, UNBROKEN LENGTH OF WIRE SHALL BE USED TO FORM A LOOP OF THE NUMBER OF TURNS AS SPECIFIED IN THE PLANS. THE CONTINUOUS RUN SHALL BE FROM THE PULLBOX/CONDULET INCLUDING THE LOOP AND RETURN.
7. ALL WIRE SHALL BE PUSHED INTO THE SAW CUT WITH WOOD STICKS TO INSURE THE INSULATION IS NOT DAMAGED. THE USE OF METAL TOOLS IS NOT PERMITTED.
8. SPLICE BETWEEN LEAD-IN AND SHIELDED CABLE REQUIRED IN PULLBOX OR CONDULET. ALL SPLICES IN THE LEAD-IN WIRE SHALL BE MADE ONLY IN THE PULLBOX OR CONDULET. ALL SPLICES MUST BE CAREFULLY MADE TO INSURE CONSTANT LOW RESISTANCE AND MUST BE INSULATED IN SUCH A MANNER THAT UNDER THE LOCAL PREVAILING CONDITIONS THE INSTALLATION MAINTAINS A RESISTANCE TO GROUND OF NOT LESS THAN 5 MEGOHMS. TO INSURE CONSISTENT LOW RESISTANCE CONNECTIONS, THE SPLICES SHALL BE SOLDERED WITH RESIN FILLED SOLDER AND WATERPROOFED BY SHRINK WRAP OR BY OTHER METHOD APPROVED BY THE ENGINEER. OPEN FLAME SOLDER SHALL NOT BE PERMITTED.
9. WHERE THE WIRES LEAVE THE LOOP, EACH PAIR OF LEAD-IN WIRES MUST BE TWISTED TOGETHER WITH A MINIMUM OF THREE TWISTS PER FOOT.
10. IF THE LEAD-IN IS TAKEN OVERHEAD THE WIRE MUST BE PROTECTED BY CONDUIT (TYPE I) FROM UNDERGROUND TO SPAN.
11. WHEN A PULLBOX IS NOT USED IN THE LEAD-IN (THE WIRE WHICH CONNECTS THE SENSING LOOP TO THE DETECTOR AMPLIFIER), THE LOOP WIRE SHALL BE TWISTED A MINIMUM OF THREE TURNS PER FOOT FROM THE LOOP TO THE DETECTOR AMPLIFIER.

**RIDGELAND AVE. AND  
HWY. 51 INTERSECTION SIGNALIZATION**

**STANDARD SIGNAL DETAILS  
VEHICLE LOOP  
DETECTOR ASSEMBLY**

**CITY OF RIDGELAND, MISSISSIPPI**

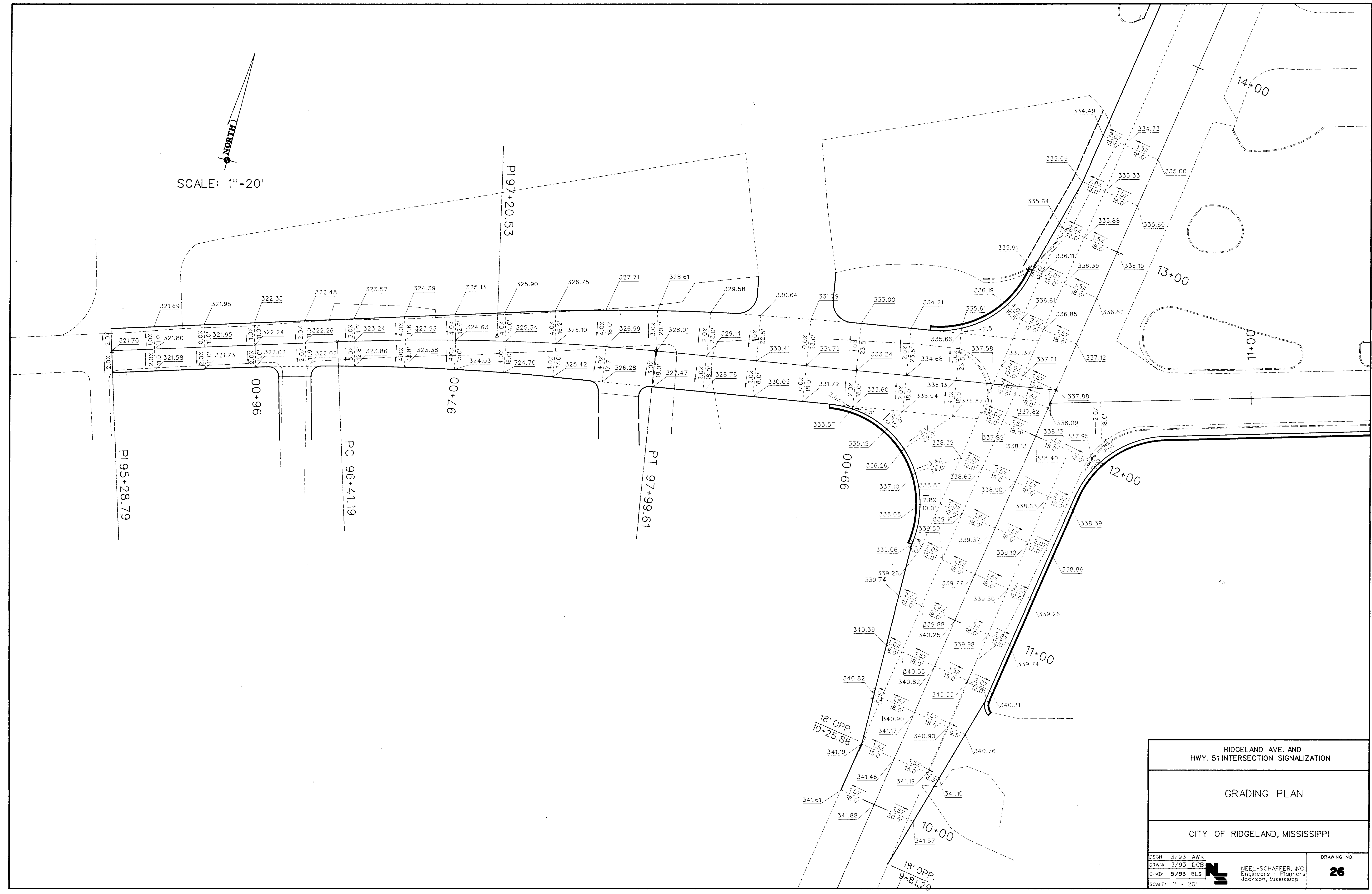
DSGN: DEW	3/93	<b>NEEL-SCHAFFER, INC.</b> <small>ENGINEERS - PLANNERS Jackson, Mississippi</small>	DRAWING NO.
DRWN: MTB	3/93		<b>24</b>
CHKD: ELS	5/93		
SCALE: N.T.S.			

REVISIONS FROM 12/85

1859-507.DWG(95-35) (01)



SCALE: 1"=20'



RIDGELAND AVE. AND HWY. 51 INTERSECTION SIGNALIZATION	
GRADING PLAN	
CITY OF RIDGELAND, MISSISSIPPI	
DSGN: 3/93   AWK DRWN: 3/93   DCB CHKD: 5/93   ELS SCALE: 1" = 20'	NEEL-SCHAFFER, INC. Engineers - Planners Jackson, Mississippi DRAWING NO. <b>26</b>