

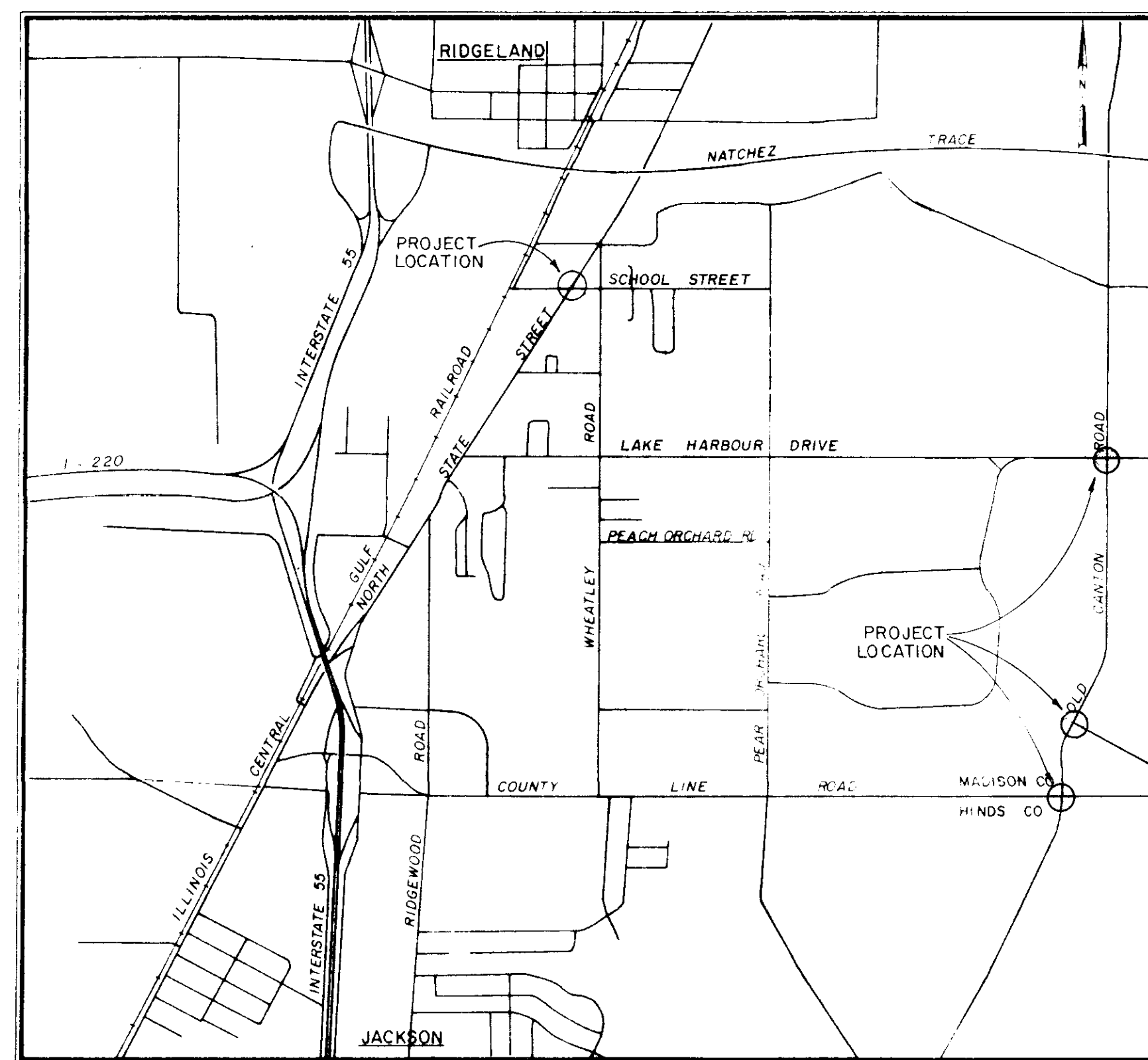
# CITY OF RIDGELAND, MISSISSIPPI

## TRAFFIC SIGNAL & INTERSECTION IMPROVEMENTS

Mayor  
Hite Wolcott

Mayor Pro Tem  
Hilda Boyd

City Attorneys:  
Smith & Case



Aldermen  
Al Bible  
Hilda Boyd  
Harvey Carr Jr.  
Gene McGee  
Gilbert Sollek  
Public Works Superintendent  
Horace M. Ross

DECEMBER 1988

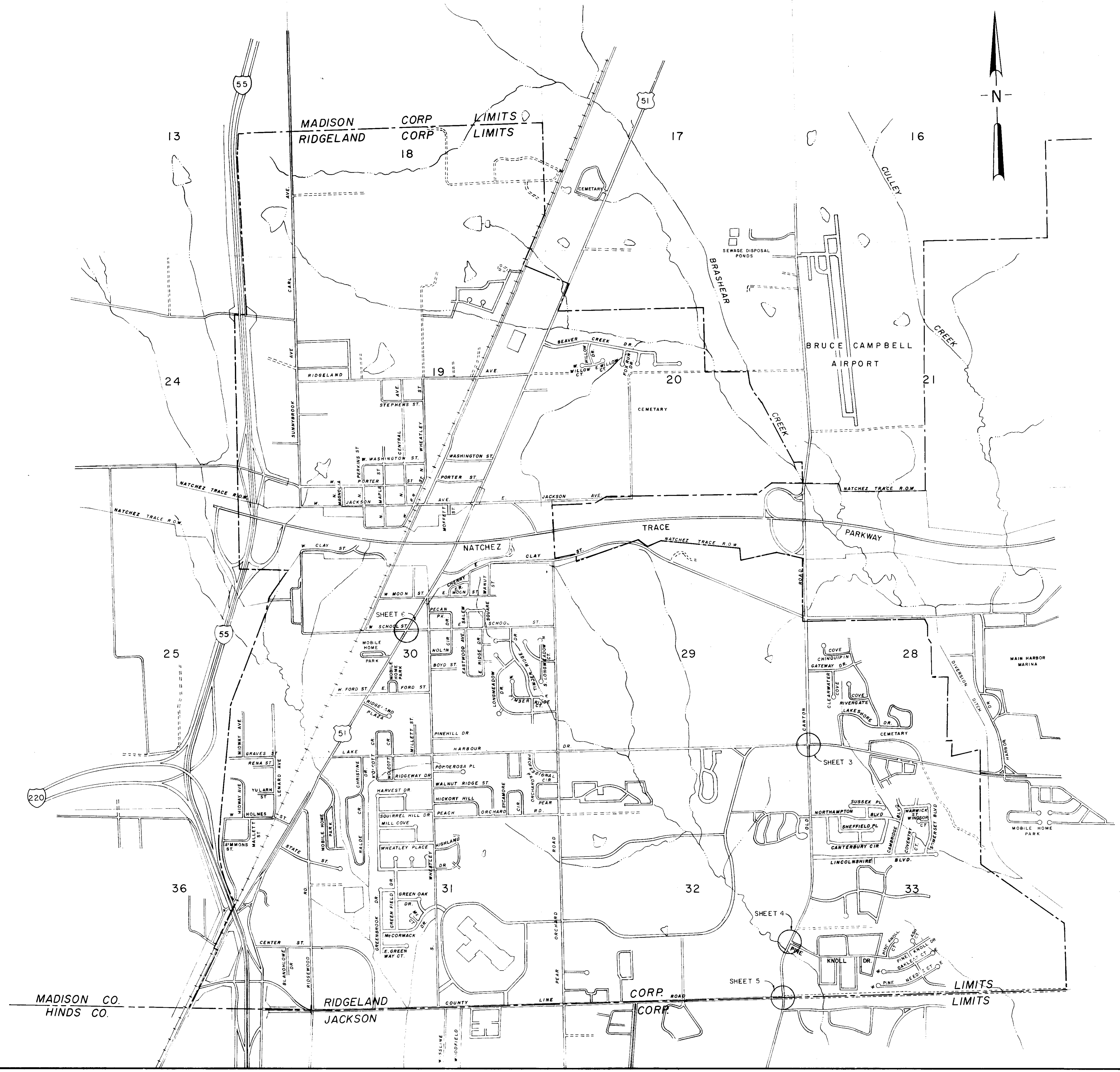
LIST OF UTILITIES:  
MISSISSIPPI POWER & LIGHT — 856-3841  
ENTEX GAS — 825-3156  
MISSISSIPPI VALLEY GAS — 961-6784  
CITY OF RIDGELAND WATER & SEWER — 856-3877  
CAPITOL CABLEVISION — 982-0922  
MISSISSIPPI ONE-CALL — 362-4374

**WAGGONER ENGINEERING INC.**  
Consulting Engineers  
Jackson / Brandon, MS

SHEET NO. 1 COVER SHEET  
2 PROJECT LAYOUT  
3 LEGENDS & GENERAL NOTES  
4-7 SIGNAL PLANS  
8 PAVEMENT MARKING  
9 PLAN PROFILE  
10 TRAFFIC CONTROL  
11 DETAILS

**PWP-02013**

Traffic Lights - Bids



<b>CITY OF RIDGELAND</b>			
<b>PROJECT LAYOUT</b>			
WAGGONER ENGINEERING INC. Consulting Engineers — Jackson / Brandon, MS			
DRAWN BY: T.D.L.	DATE: 10-9-86	SHEET NO.	
CHECKED BY: M.A.L.	SCALE: 1" = 1000'	2 OF 11	
APPROVED BY: J.A.W.			

**LEGEND**

- METAL TRAFFIC SIGNAL POLE
- PRE-EMPT OPTICAL DETECTOR
- ▶ TRAFFIC SIGNAL INDICATION
- ▶ TRAFFIC SIGNAL INDICATION WITH BACKPLATE
- ▼ MAST ARM SUSPENDED TRAFFIC SIGNAL WITH MAST ARM MOUNTED SIGN
- ⊙ SERVICE BOX
- CONDUIT TRENCHED
- CONDUIT JACKED
- EXISTING CONDUIT (U.A.C.)
- ▴ JUNCTION BOX
- ⊗ CONTROLLER AND CABINET
- ⊙ SECONDARY SERVICE POINT
- VEHICLE DETECTOR LOOP
- ⊙ DETECTOR NUMBER
- LUMINAIRE
- POWER OR TELEPHONE POLE
- WATER OR GAS VALVE
- ⊙ FIRE PLUG
- ⊙ INLET
- ⊙ MANHOLE
- GAS LINE
- TELEPHONE LINE
- WATER LINE
- RIGHT-OF-WAY
- FENCE
- TELEPHONE

**GENERAL NOTES**

1. THE PLAN LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL THE UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION ON THE PROJECT TO ESTABLISH LOCATIONS.
2. THE LOCATIONS OF ALL FOOTINGS, AND SERVICE BOXES ARE APPROXIMATE ONLY AND ARE SUBJECT TO ADJUSTMENT IN THE FIELD BY THE ENGINEER.
3. THE CONTRACTOR SHALL INSTALL ONE SIGNAL CABLE FROM EACH SIGNAL HEAD TO THE BASE OF THE POLE. A 7-CONDUCTOR CABLE SHALL BE UTILIZED IN THE POLES FOR 4 AND 5 SECTION SIGNAL HEADS AND A 5-CONDUCTOR CABLE USED IN THE POLES FOR 3 SECTION AND PEDESTRIAN SIGNAL HEAD, AND PEDESTRIAN PUSH BUTTONS.
4. ALL 6'X50' AND 6'X60' DETECTOR LOOPS SHALL BE INSTALLED IN THE QUADRAPOLE METHOD WITH 2-4-2 TURNS IN EACH LOOP.
5. ALL 6'X6' DETECTOR LOOPS SHALL HAVE 4 TURNS IN EACH LOOP.
6. ALL MAST ARM SIGNALS SHALL BE MOUNTED WITH A UNIVERSALLY ADJUSTABLE MAST ARM MOUNT SIGNAL BRACKET.
7. ALL SIDE OF POLE MOUNTED SIGNALS SHALL BE MOUNTED WITH BANDING HUBS OR AN APPROVED EQUAL.
8. RIGID CONDUIT SHALL BE USED FOR THE DETECTOR LOOP WIRE RUNS BETWEEN THE JUNCTION/SERVICE BOXES TO A POINT EXTENDING 6 INCHES INTO PAVEMENT.
9. THE CONTRACTOR SHALL INSTALL AND CAP A SPARE 2" ELBOW IN EACH MAST ARM AND PEDESTAL POLE BASE; AND A SPARE 3" ELBOW IN EACH CONTROLLER BASE.
10. ALL MAST POLES SHALL BE PLATE BASE MOUNTED AND EQUIPPED WITH TERMINAL BLOCK.
11. THE CONTRACTOR SHALL EXTEND IN-PLACE CONDUIT AS NECESSARY TO POLE FOOTINGS, SERVICE BOXES, AND CONTROLLER PADS.
12. THE LOCATION OF THE SECONDARY SERVICE POINT IS APPROXIMATED AND THE CONTRACTOR SHALL VERIFY THE SERVICE POINT LOCATION WITH THE LOCAL POWER COMPANY.
13. SIGN, SIGNAL AND PAVEMENT MARKING INSTALLATIONS ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES 1978 EDITION AND REVISIONS.
14. ALL SALVAGEABLE MATERIALS REMOVED BY THE CONTRACTOR SHALL BE PROTECTED FOR THE OWNER TO PICK UP. SALVAGEABLE MATERIAL WILL CONSIST OF ALL POLES, CONTROLLERS, HEADS, CONDUIT, WIRE, AND ANY OTHER EQUIPMENT OF VALUE.
15. ALL TRAFFIC SIGNAL POLES SHALL BE LOCATED A MINIMUM DISTANCE OF 6 FEET FROM THE FACE OF CURB.
16. ALL UTILITIES TO BE RELOCATED SHALL BE RELOCATED A MINIMUM DISTANCE OF 1 1/2 FEET FROM THE FACE OF CURB.
17. 3-1C POWER SUPPLY CABLE AND 1-1/2" RIGID STEEL CONDUIT SHALL BE AN ABSORBED ITEM IN PAY ITEM NO. 8 - POWER SUPPLY.
18. "LEFT TURN SIGNAL" SIGN 24"X30" WITH ADJACENT MAST ARM MOUNTING BRACKET. NOT A SEPARATE PAY ITEM. LEFT TURN SIGNS ARE TO BE SUBSIDIARY TO PAY ITEM NO. 5, 6 & 7 TRAFFIC SIGNAL HEAD.
19. MATERIALS OR STORED EQUIPMENT ALONG THE ROADWAY SHALL BE PROTECTED WITH TYPE I BARRICADES AND TYPE A LIGHTS AT MAXIMUM 50' INTERVALS.
20. FLAGMAN SHALL HAVE STOP/SLOW PADDLE FOR DIRECTING TRAFFIC.

**ESTIMATED PROJECT QUANTITIES**

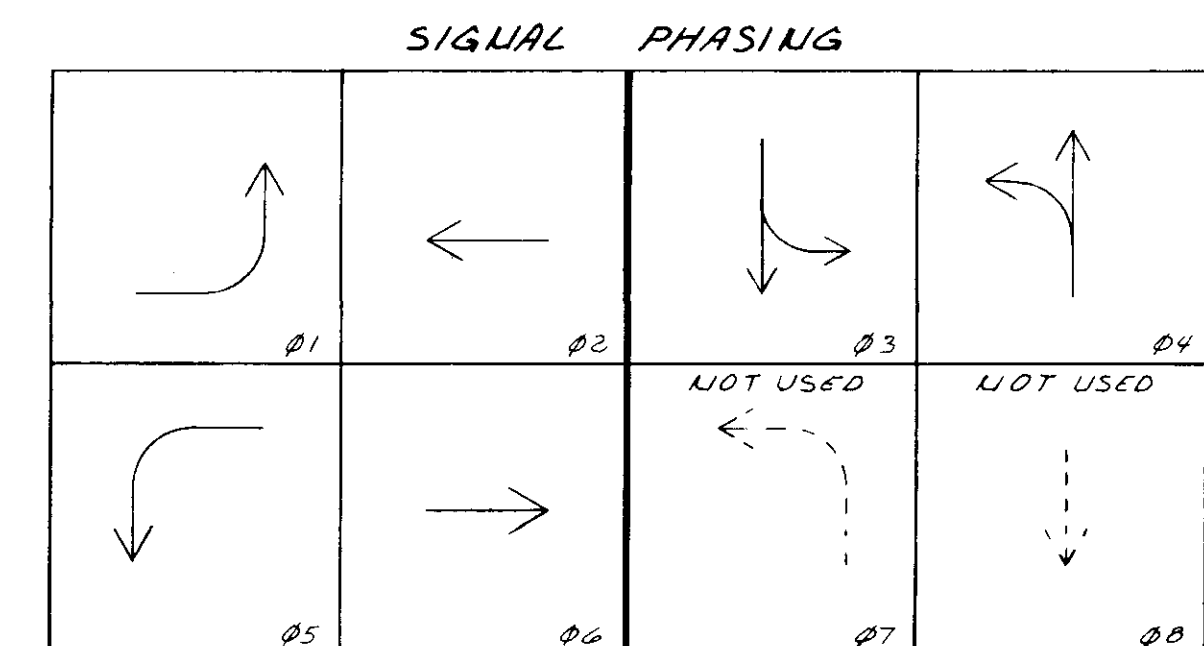
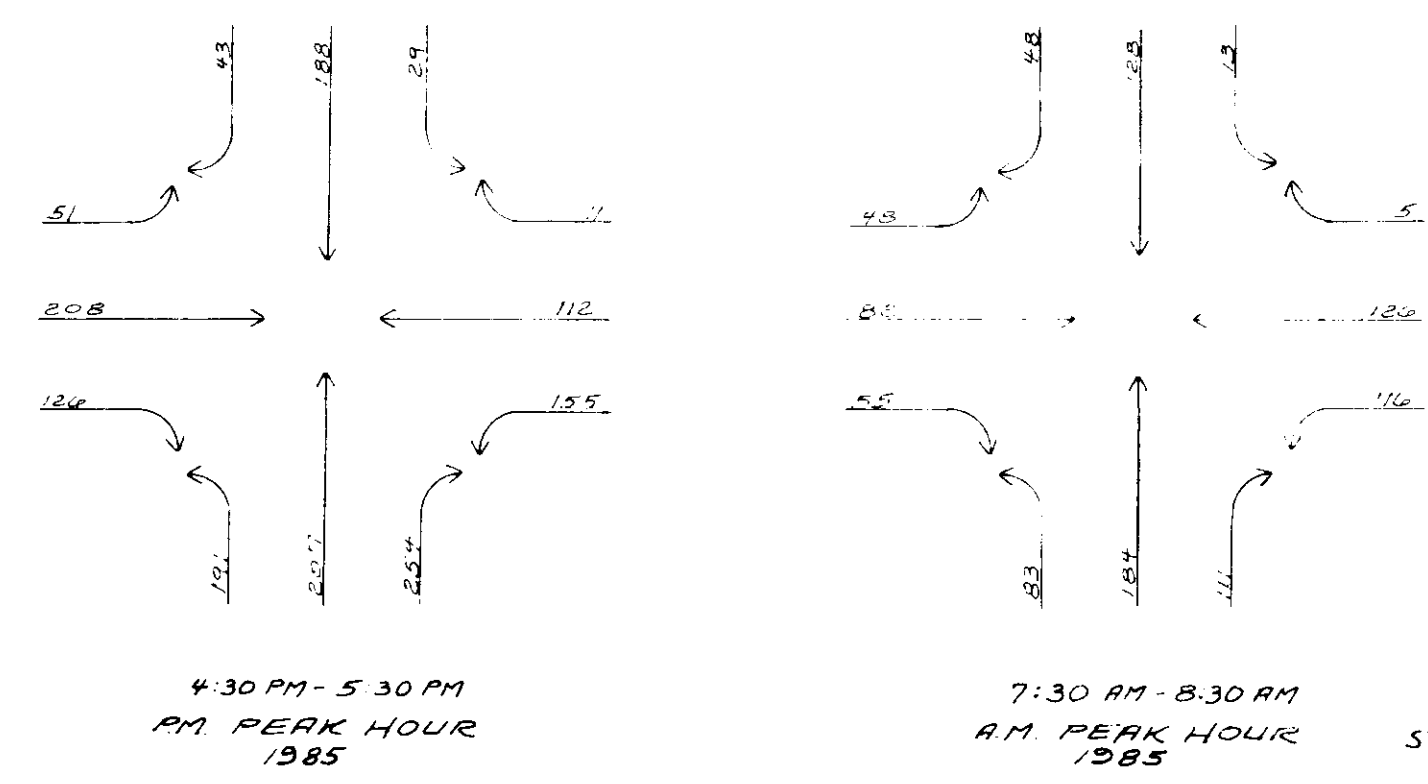
NO.	ITEM	UNIT	LOCATION				TOTAL
			L.S. 51 SCHOOL ST	OLD CANTON COUNTY LINE	OLD CANTON PINE KNOLL	OLD CANTON LAKE HARBOR	
1	EIGHT PHASE, SOLID STATE, FULLY ACTUATED CONTROLLER WITH CABINET & ACCESSORIES	EA	1	1	1	1	4
2	LOOP DETECTOR / PHASE SELECTOR ASSEMBLIES	EA	1	1	1	1	4
3	12" TRAFFIC SIGNAL HEAD R,Y,G MAST ARM MOUNTED W/ BACKPLATE	EA	8	6	8	8	30
4	12" TRAFFIC SIGNAL HEAD R,Y,G SIDE OF POLE MOUNTED	EA	4	2	4	4	14
5	12" TRAFFIC SIGNAL HEAD R,Y,G MAST ARM MOUNTED	EA	---	1	---	3	4
6	12" TRAFFIC SIGNAL HEAD R,Y,G MAST ARM MOUNTED	EA	---	2	---	---	2
7	12" TRAFFIC SIGNAL HEAD R,Y,G MAST ARM MOUNTED	EA	---	1	2	2	5
8	POWER SUPPLY	EA	1	1	1	1	4
9	SERVICE BOX	EA	4	---	---	---	4
10	JUNCTION BOX	EA	4	---	4	---	8
11	LUMINAIRE 250 WATT, 120V, HPS	EA	4	3	4	4	15
11-A	PRE-EMPT OPTICAL DETECTOR	EA	3	1	2	2	8
12	COMBINATION GAL. STEEL MAST ARM POLE W/21 36' MAST ARMS	EA	---	1	---	---	1
13	COMBINATION GAL. STEEL MAST ARM POLE W/20' MAST ARM	EA	1	---	---	---	1
14	COMBINATION GAL. STEEL MAST ARM POLE W/24' MAST ARM	EA	1	---	---	1	2
15	COMBINATION GAL. STEEL MAST ARM POLE W/28' MAST ARM	EA	---	1	---	---	1
16	COMBINATION GAL. STEEL MAST ARM POLE W/30' MAST ARM	EA	---	---	1	1	2
17	COMBINATION GAL. STEEL MAST ARM POLE W/34' MAST ARM	EA	---	---	1	---	1
18	COMBINATION GAL. STEEL MAST ARM POLE W/36' MAST ARM	EA	1	---	1	---	2
19	COMBINATION GAL. STEEL MAST ARM POLE W/38' MAST ARM	EA	1	---	---	2	3
20	COMBINATION GAL. STEEL MAST ARM POLE W/40' MAST ARM	EA	---	1	1	---	2
21	1 CONDUCTOR #8 AWG LUMINAIRE CABLE	LF	970	850	1120	1300	4240
22	2 CONDUCTOR #14 AWG SHIELDED DETECTOR CABLE	LF	2800	630	2260	1500	7190
23	5 CONDUCTOR #14 AWG SIGNAL CABLE	LF	610	600	610	1050	2870
24	7 CONDUCTOR #14 AWG SIGNAL CABLE	LF	260	530	340	380	1510
24A	3 CONDUCTOR #20 AWG PRE-EMPT CABLE	LF	380	190	290	260	1120
25	1 1/2" PVC CONDUIT TRENCHED	LF	750	30	490	35	1305
26	2" PVC CONDUIT TRENCHED	LF	70	30	30	35	165
27	3" PVC CONDUIT TRENCHED	LF	40	30	20	20	110
28	3" RIGID STEEL CONDUIT JACKED	LF	330	---	40	---	370
29	LOOP DETECTOR INSTALLATION	LF	2000	1140	1900	1650	6690
30	REMOVAL OF EXISTING SIGNAL EQUIPMENT	LS	---	1	1	1	3
31	UNCLASSIFIED EXCAVATION	CY	900	---	---	---	900
32	UNDERCUTTING SUBGRADE	CY	100	---	---	---	100
33	COMPACTED SELECT BACKFILL	CY	600	---	---	---	600
34	1 1/2" ASPHALT SURFACE COURSE	TON	68	---	---	---	68
35	5" ASPHALT BASE COURSE	TON	226	---	---	---	226
36	COMPACTED CLAY GRAVEL	CY	20	---	---	---	20
37	4" WHITE CHANNELIZATION	LF	75	---	---	---	75
38	4" YELLOW CENTERLINE	LF	750	---	---	---	750
39	12" YELLOW CROSSHATCH	LF	18	---	---	---	18
40	18" WHITE STOP LINE	LF	75	---	---	---	75
41	24" WHITE STOP LINE	LF	74	---	---	---	74
42	DETAIL ARROW	SF	16.4	---	---	---	16.4
43	CONCRETE FLUME	LF	30	---	---	---	30
44	CONCRETE CURB & GUTTER	LF	230	---	---	---	230
45	SEEDING	ACRE	0.20	---	---	---	0.20
46	FERTILIZING	TON	0.10	---	---	---	0.10
47	CLEARING & GRUBING	LS	1	---	---	---	1
48	MAINTENANCE OF TRAFFIC	LS	1	1	1	1	4
49	MAINTENANCE OF TRAFFIC FOR INTERSECTION IMPROVEMENTS	LS	1	---	---	---	1

CITY OF RIDGELAND

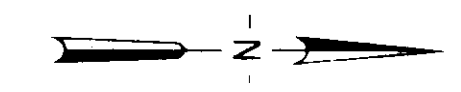
**LEGEND AND GENERAL NOTES**

WAGGONER ENGINEERING, INC.  
Consulting Engineers - Jackson, Madison, MS

DRAWN BY: H.D.C. DATE: 11-18-84 SHEET NO. 3 OF 11  
 CHECKED BY: J.K. SCALE: 1" = 40'   
 APPROVED BY: J.A.W.



NOTE: PHASES 3 & 4 ARE SPLIT PHASING FOR LAKE HARBOUR DR./SPILLWAY ROAD. PHASES 1 & 2 ARE PROTECTED / PERMITTED ON OLD CANTON ROAD INTERSECTION TO FINISH ALL RED.  
 PRE-EMPT NO. 1 (D1) ACTIVATES PHASE 1 AND 2 W/ 10 SECOND EXTENSION  
 PRE-EMPT NO. 2 (D2) ACTIVATES PHASE 3 & 4 W/ 10 SECOND EXTENSION  
 5' POSITION DARK RACK REQUIRED



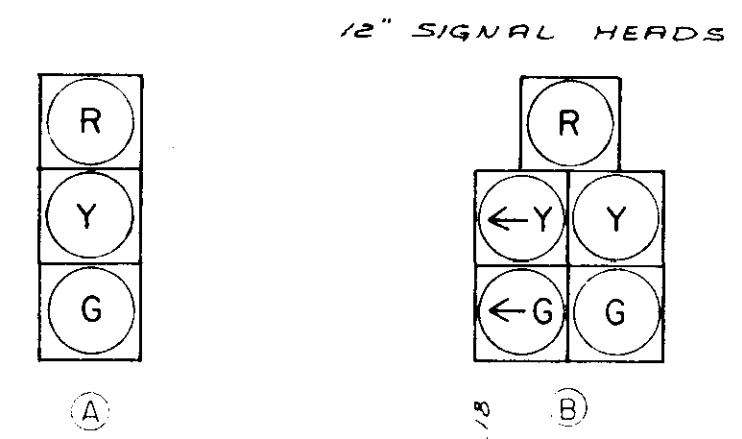
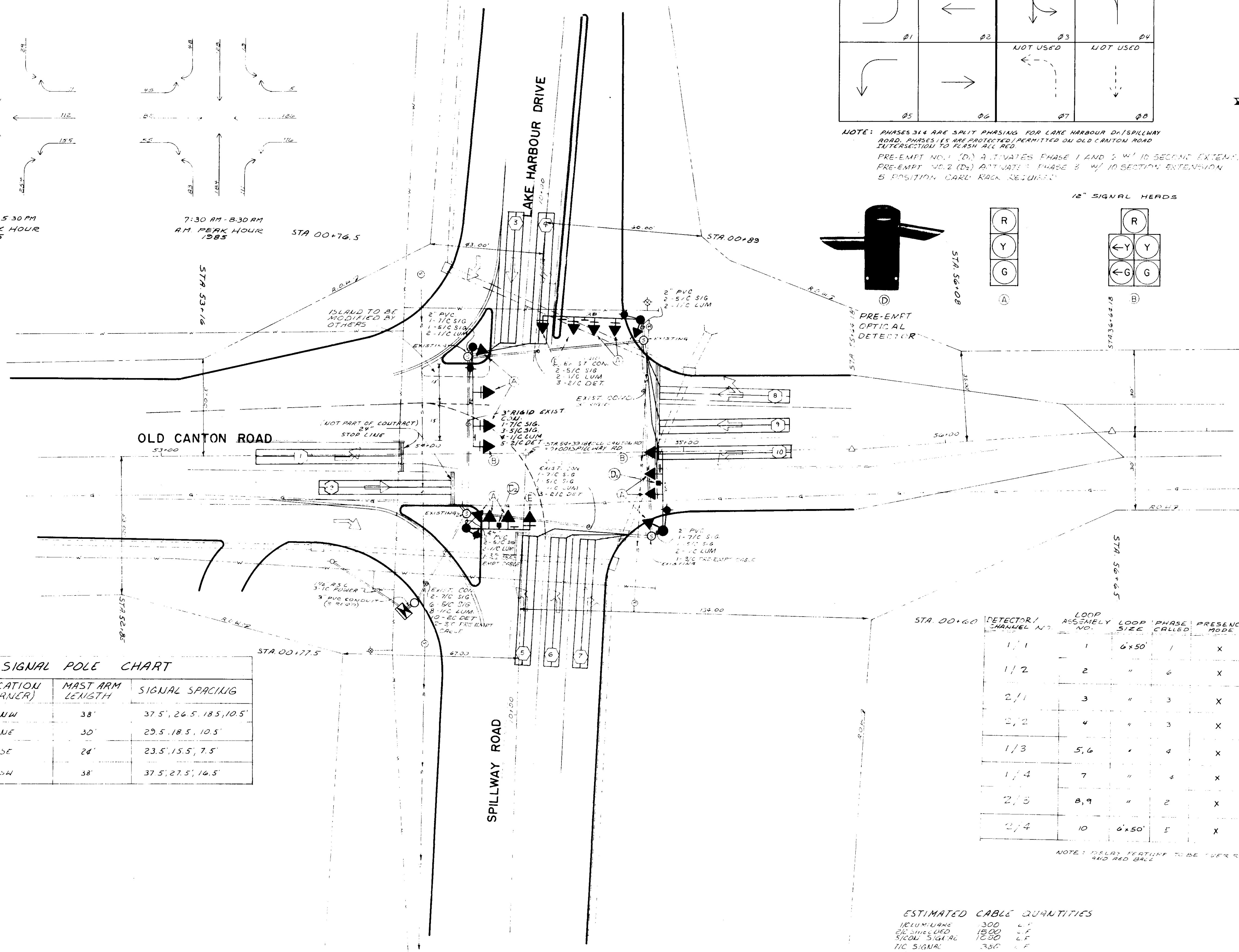
4:30 PM - 5:30 PM  
PM PEAK HOUR  
1985

7:30 AM - 8:30 AM  
AM PEAK HOUR  
1985

STA 00+76.5

**SIGNAL POLE CHART**

LOCATION (CORNER)	MAST ARM LENGTH	SIGNAL SPACING
NW	38'	37.5', 26.5', 18.5', 10.5'
NE	30'	29.5', 18.5', 10.5'
SE	24'	23.5', 15.5', 7.5'
SW	38'	37.5', 27.5', 16.5'



LEFT  
TURN  
SIGNAL

MAST ARM  
MOUNTED SIGNAL

STA 00+60	DETECTOR / CHANNEL NO.	LOOP ASSEMBLY NO.	LOOP PHASE SIZE CALLED	PRESENCE MODE	IMPULSE MODE	COMMENTS
	1/1	1	6'x50'	1	X	10 SEC DELAY
	1/2	2	"	6	X	
	2/1	3	"	3	X	
	2/2	4	"	3	X	
	1/3	5,6	"	4	X	
	1/4	7	"	4	X	
	2/3	8,9	"	2	X	
	2/4	10	6'x50'	5	X	10 SEC DELAY

NOTE: DELAY FEATURE TO BE OVER RISE ON 100' IN RISE. 440 RED BRK.

**ESTIMATED CABLE QUANTITIES**

18/0 W/LANE 300 LF  
 24/0 S/SIG 1500 LF  
 5/000 S/SIG 1250 LF  
 11/0 SIGNAL 350 LF  
 24/0 PRE-EMPT 250 LF

REVISION NOV 11, 1986

**CITY OF RIDGELAND**

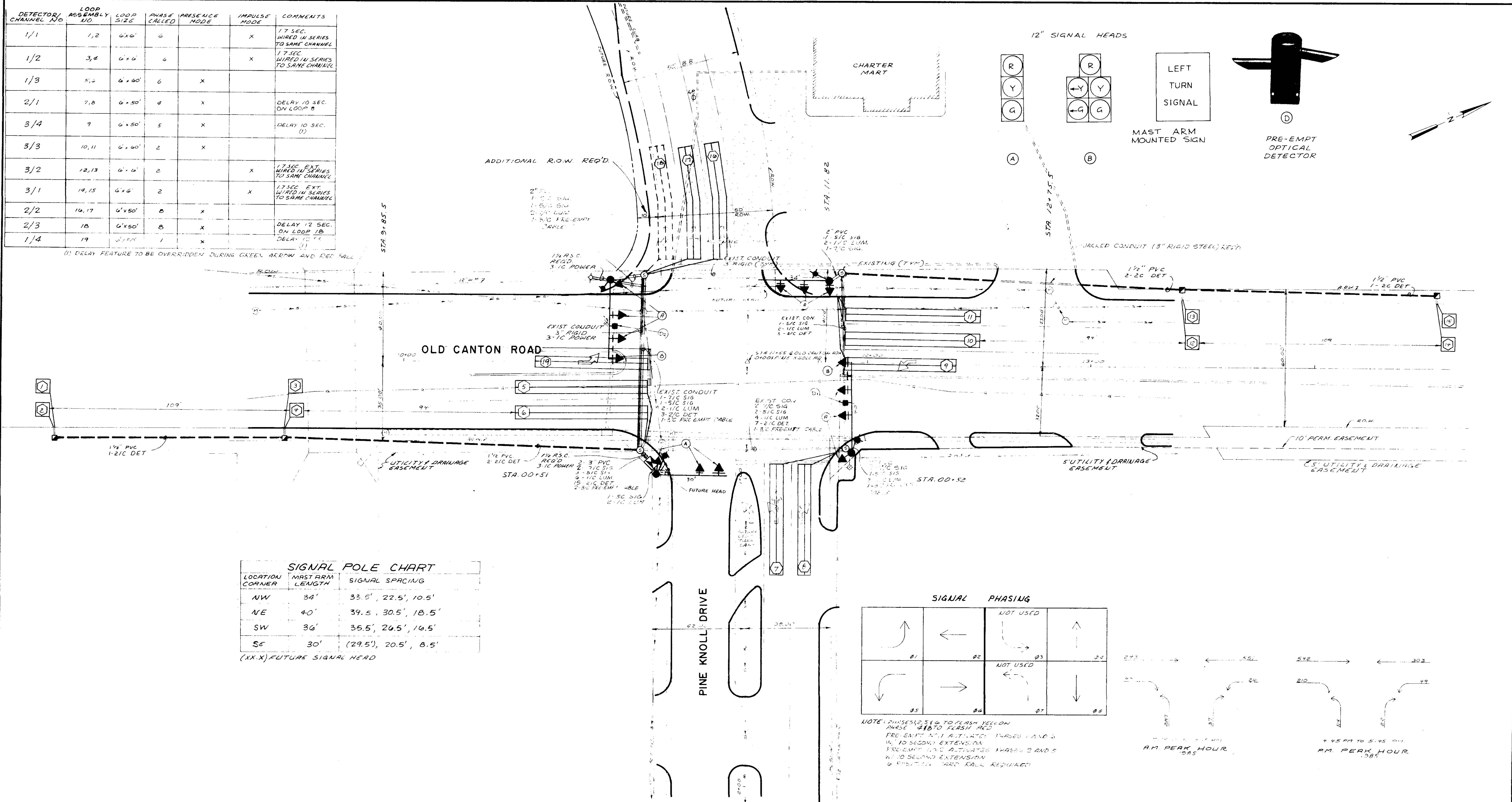
OLD CANTON ROAD,  
 SPILLWAY ROAD &  
 LAKE HARBOUR DRIVE

WAGGONER ENGINEERING CO. INC.  
 Consulting Engineers - Jackson / Brandon, MS

DRAWN BY: J.P.	DATE: 10-9-86	SHEET NO.
CHECKED BY: M.L.	SCALE: 1"=20'	4 of 11
APPROVED BY: J.A.W.		

DETECTOR/CHANNEL NO.	LOOP ASSEMBLY NO.	LOOP SIZE	PHASE CALLED	PRESENCE MODE	IMPULSE MODE	COMMENTS
1/1	1,2	6x6'	6		X	17 SEC. WIRED IN SERIES TO SAME CHANNEL
1/2	3,4	6x6'	6		X	17 SEC. WIRED IN SERIES TO SAME CHANNEL
1/3	5,6	6x60'	6	X		
2/1	7,8	6x50'	4	X		DELAY 10 SEC. ON LOOP B
3/4	9	6x50'	5	X		DELAY 10 SEC. (1)
3/3	10,11	6x60'	2	X		
3/2	12,13	6x6'	2		X	17 SEC. EXT. WIRED IN SERIES TO SAME CHANNEL
3/1	14,15	6x6'	2		X	17 SEC. EXT. WIRED IN SERIES TO SAME CHANNEL
2/2	16,17	6x50'	8	X		DELAY 12 SEC. ON LOOP 1B
2/3	18	6x50'	8	X		DELAY 10 SEC.
1/4	19	6x50'	1	X		DELAY 10 SEC.

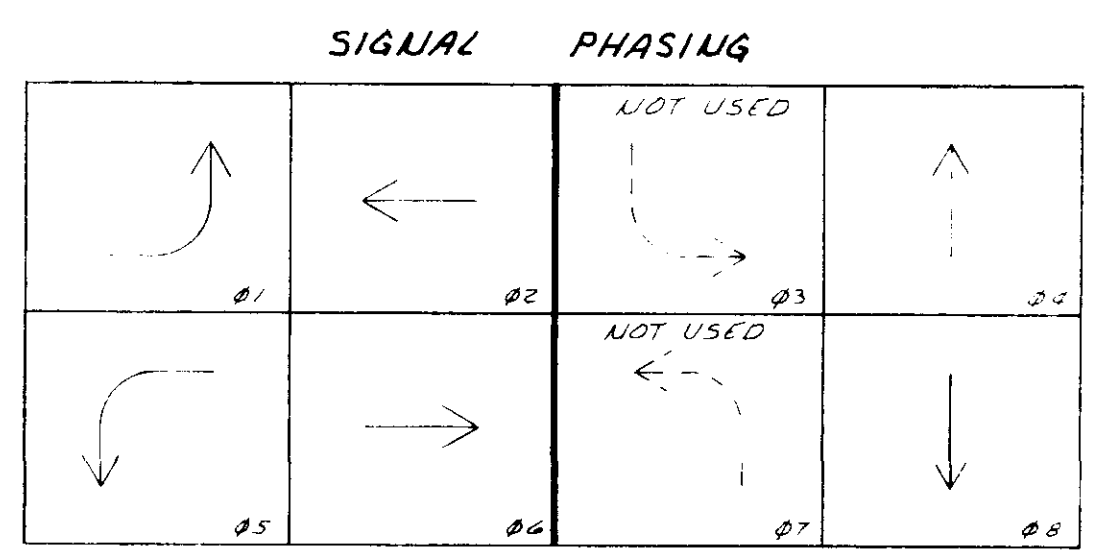
(1) DELAY FEATURE TO BE OVERRIDDEN DURING GREEN ARROW AND RED BALL



**SIGNAL POLE CHART**

LOCATION CORNER	MAST ARM LENGTH	SIGNAL SPACING
NW	34'	33.5', 22.5', 10.5'
NE	40'	39.5', 30.5', 18.5'
SW	30'	35.5', 26.5', 16.5'
SE	30'	(29.5'), 20.5', 8.5'

(XX.X) FUTURE SIGNAL HEAD



NOTE: PHASES 1, 2 & 6 TO FLASH YELLOW  
 PHASE 4 TO FLASH RED  
 PRE-EMPT UNIT ALTERNATES PHASES 1 AND 3  
 PRE-EMPT UNIT ALTERNATES PHASES 2 AND 5  
 NO DELAY EXTENSION  
 6 POSITION YARD RAIL REQUIRED

**ESTIMATED CABLE QUANTITIES**

1/2" LUMINAIRE	1120	L.F.
5/8" SIGNAL	610	L.F.
7/8" SIGNAL	340	L.F.
2" SHIELDED	2280	L.F.
3" PRE-EMPT CABLE	290	L.F.

REVISION DEC. 29, 1988  
 REVISION NOV. 14, 1987

**CITY OF RIDGELAND**

OLD CANTON ROAD & PINE KNOLL DRIVE

WAGGONER ENGINEERING CO. INC.  
 Consulting Engineers - Jackson / Brandon, MS

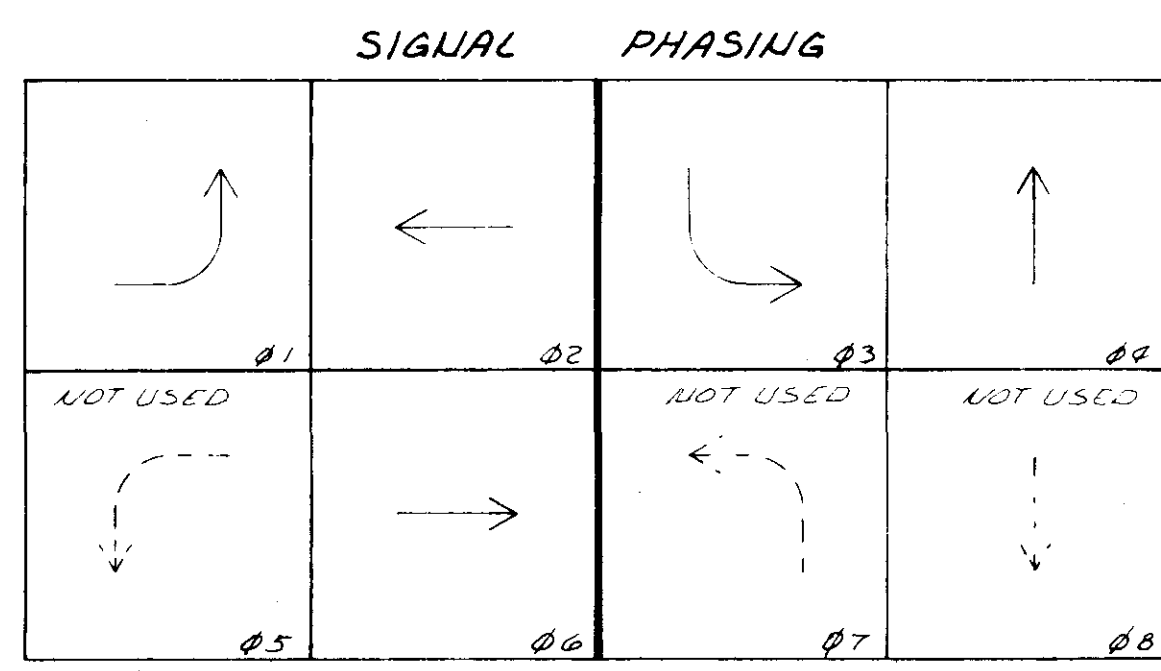
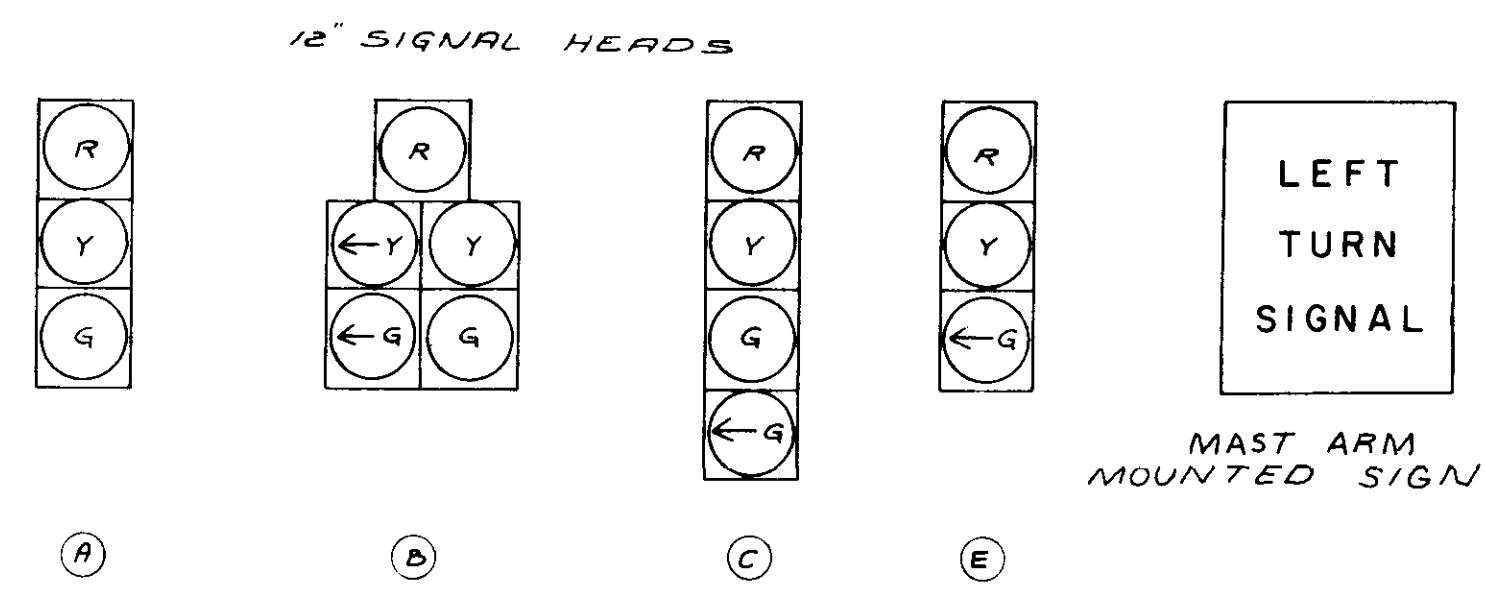
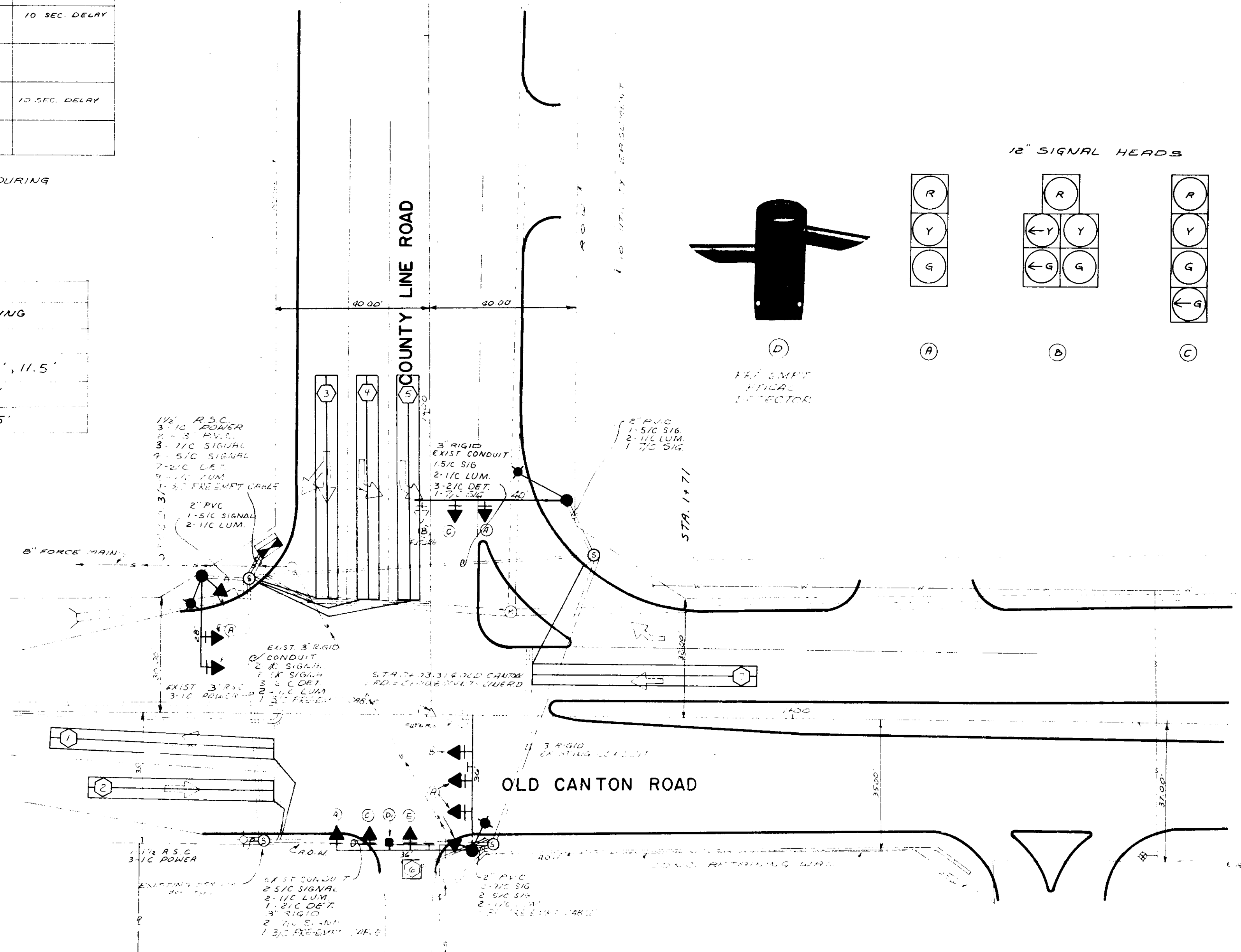
DRAWN BY: J.P.	DATE: 10-9-88	SHEET NO.
CHECKED BY: M.L.	SCALE: 1" = 20'	5 of 11
APPROVED BY: J.A.W.		

DETECTOR/ CHANNEL NO.	LOOP ASSEMBLY NO	LOOP SIZE	PHASE CALLED	PRESENCE MODE	IMPULSE MODE	COMMENTS
1/1	1	6' x 60'	1	X		
1/2	2	6' x 50'	6	X		
1/3	3	6' x 60'	3	X		10 SEC. DELAY
1/4	4,5	6' x 60'	3	X		
2/1	6	6' x 6'	4	X		10 SEC. DELAY
2/2	7	6' x 60'	2	X		

NOTE: DELAY FEATURE TO BE OVERRIDDEN DURING GREEN ARROW AND RED BALL

LOCATION CORNER	MAST ARM LENGTH	SIGNAL SPACING
NW	40'	(35.5'), 21.0'
NE	36'	(35.5') 27.5', 19.5', 11.5'
SE	36'	35.5', 26.5', 17.5'
SW	28'	27.5', 18.5', 16.5'

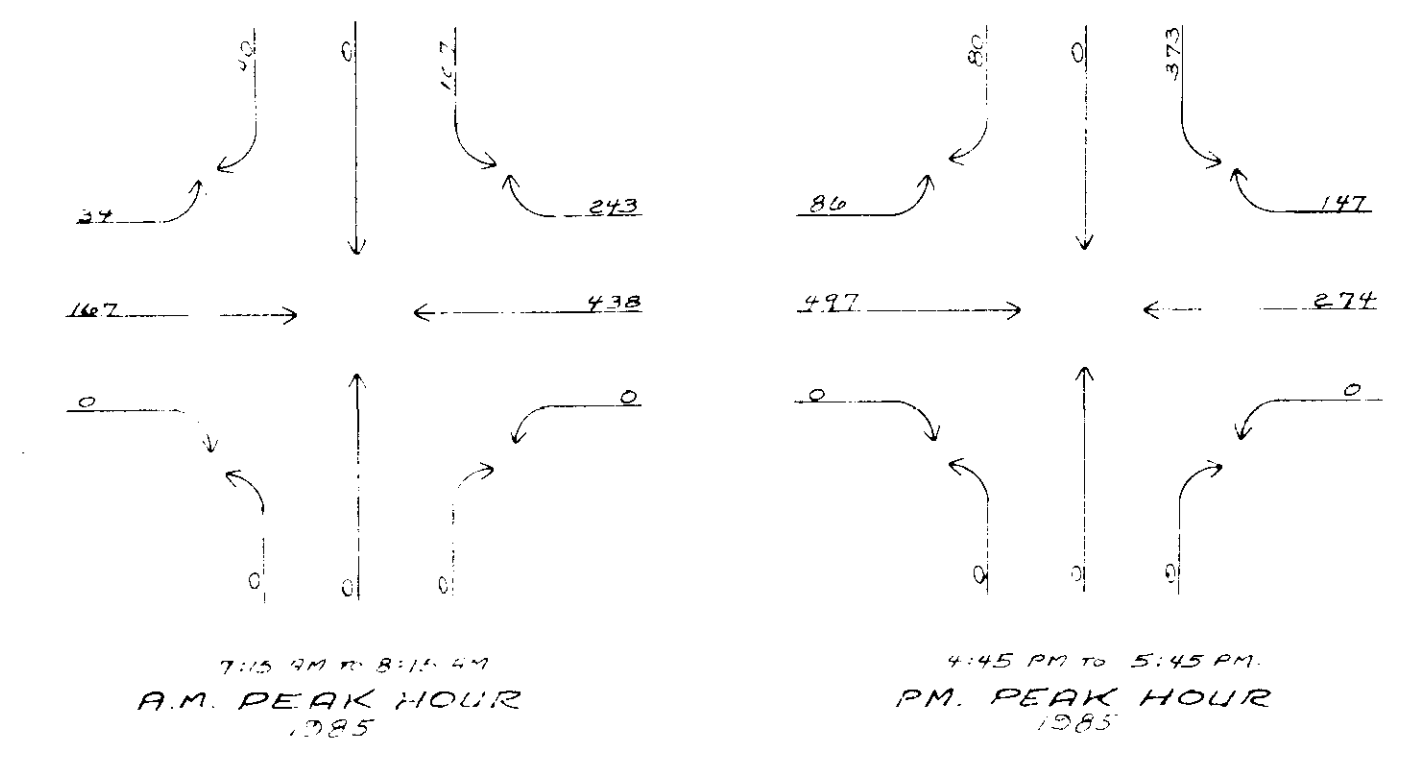
(XX.X) FUTURE SIGNAL HEAD



NOTE: PHASES 3 & 4 ARE TO BE SPLIT PHASED  
PHASES 1, 2 & 6 ARE TO FLASH YELLOW  
PHASES 3 & 4 ARE TO FLASH RED  
PRE-EMPT. LOG. ACTIVATES PHASE 2 & 4 TO GROUND EXTENSION  
5 POSITION CARD RACK REQUIRED

ESTIMATED CABLE QUANTITIES

1/2" LUMINAIRE	850 L.F.
5/8" SIGNAL	600 L.F.
1/2" SIGNAL	530 L.F.
2/1" SHIELDED	630 L.F.
3/4" PRE-EMPT CABLE	190 L.F.



HELIXION NOV 14 1986

**CITY OF RIDGELAND**

COUNTY LINE ROAD &  
OLD CANTON ROAD

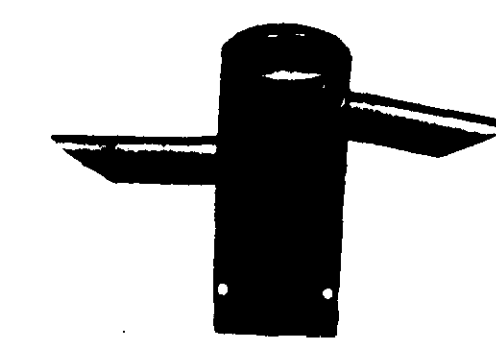
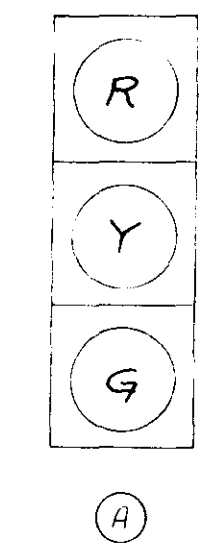
WAGGONER ENGINEERING CO. INC.  
Consulting Engineers - Jackson / Brandon, MS

DRAWN BY: J.P.	DATE: 10-9-86	SHEET NO.
CHECKED BY: M.L.	SCALE: 1" = 20'	6 OF 11
APPROVED BY: J.A.W.		

SIGNAL POLE CHART		
LOCATION (CORNER)	MAST ARM LENGTH	SIGNAL SPACING
NW	24'	23.5', 11.5'
NE	38'	(37.5'), 29.5', 18.5'
SE	20'	19.5', 11.5'
SW	36'	35.5', 27.5', 16.5'

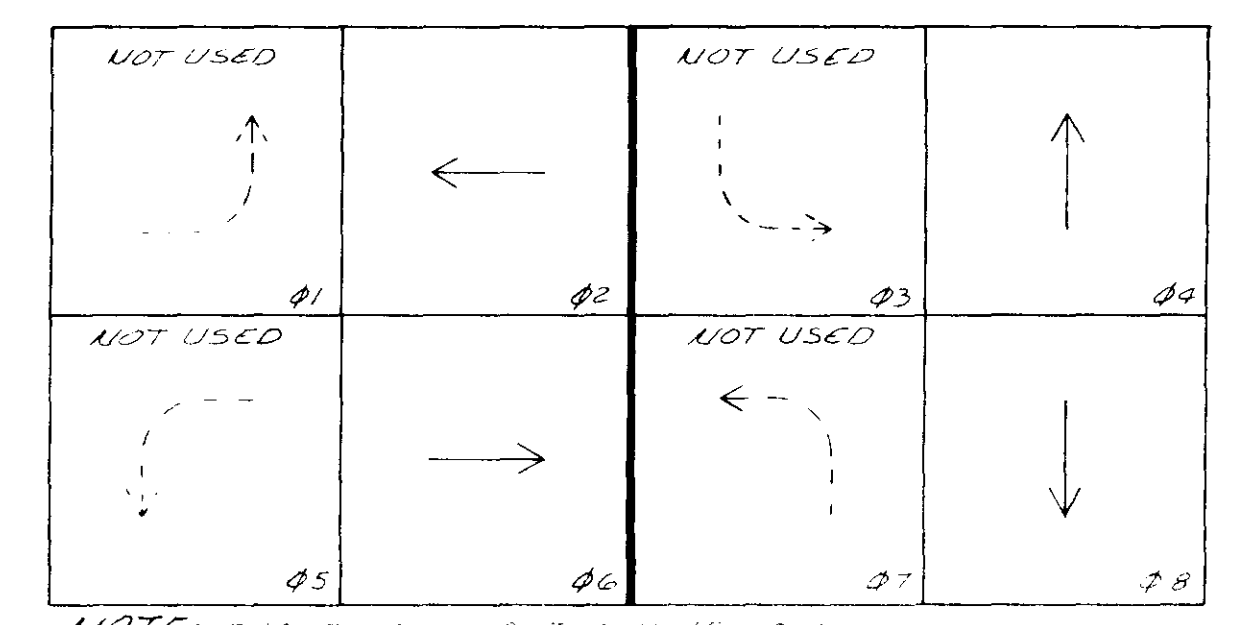
(XX.X) FUTURE SIGNAL HEAD

12" SIGNAL HEAD

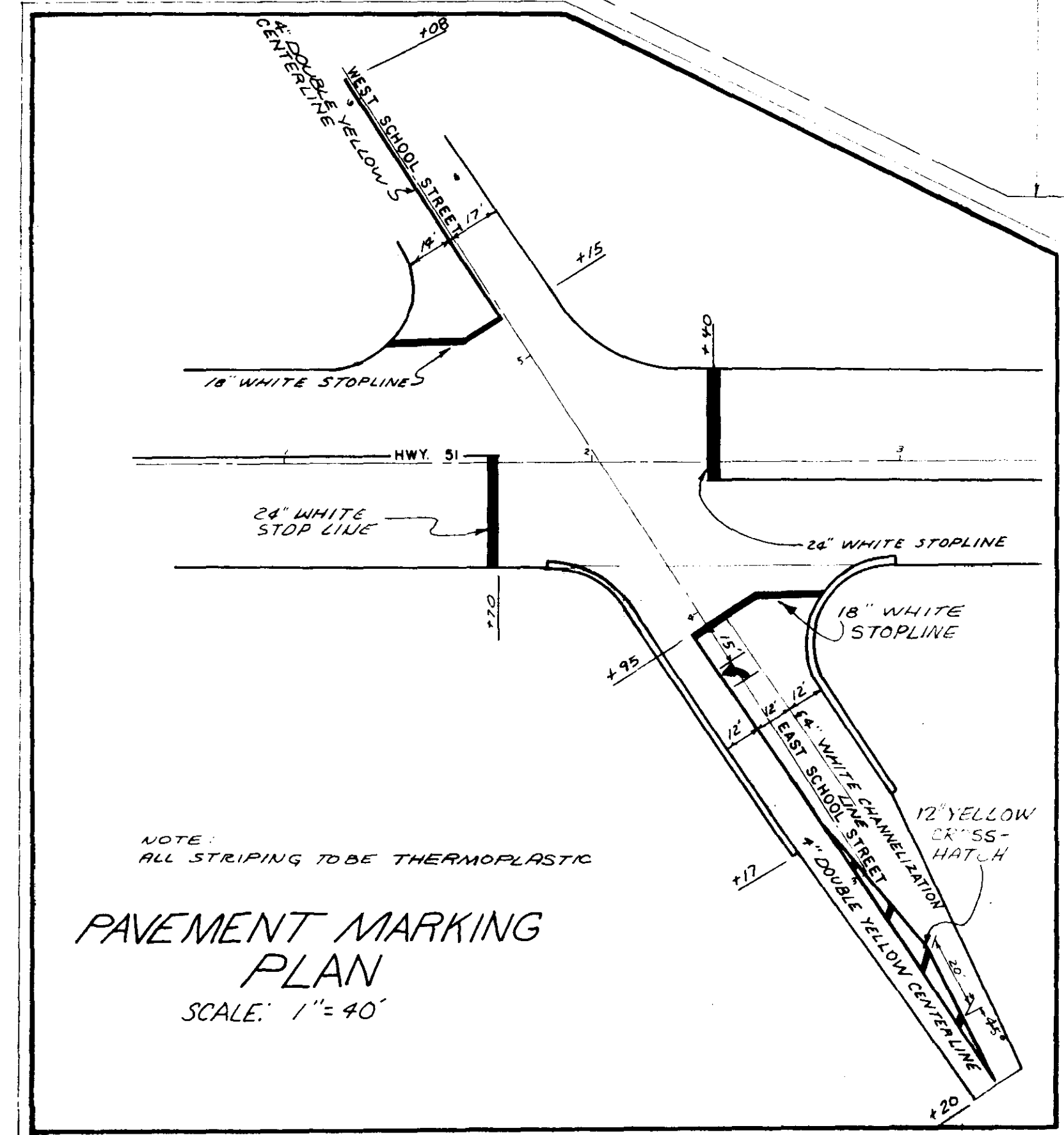
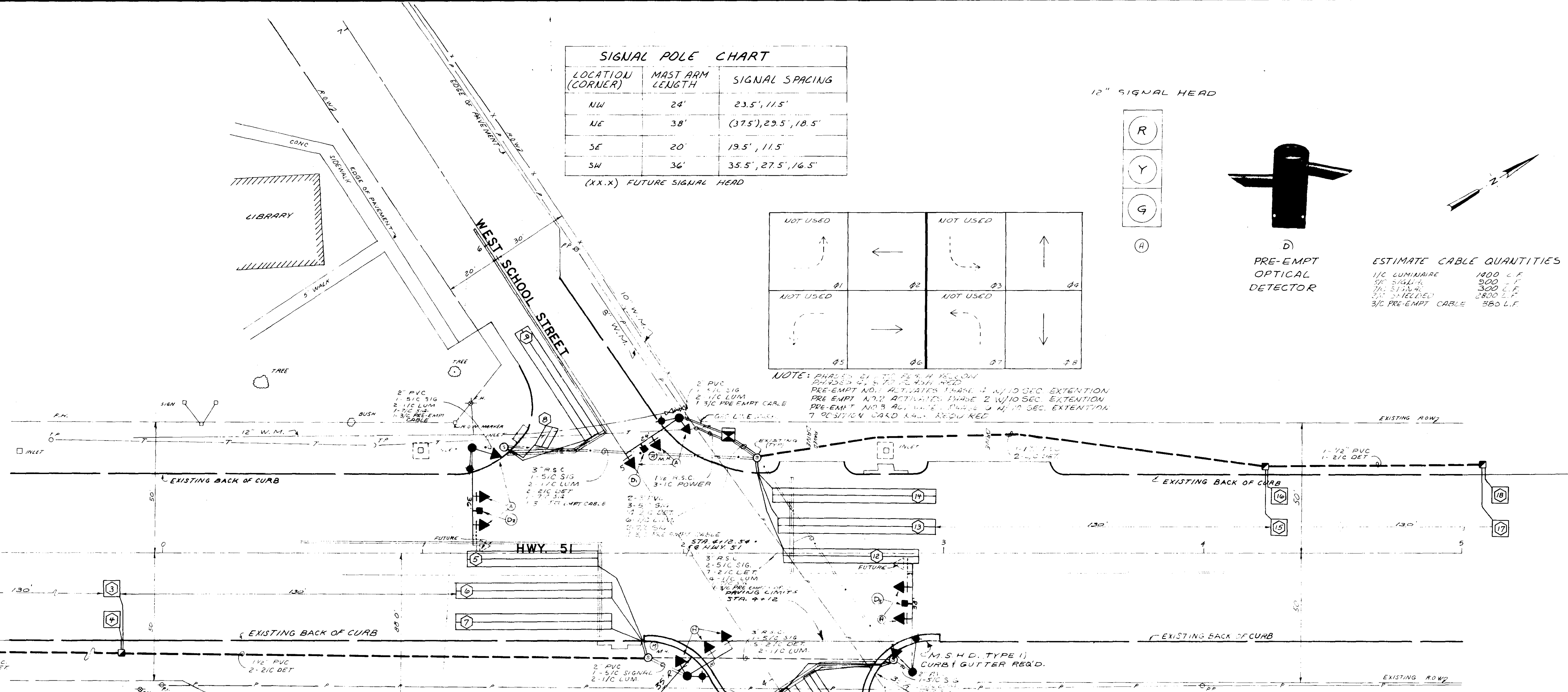


D) PRE-EMPT OPTICAL DETECTOR

ESTIMATE CABLE QUANTITIES  
 1/2 LUMINAIRE 1900 L.F.  
 5/8 SIGNAL 300 L.F.  
 3/4 SIGNAL 300 L.F.  
 1/2 PRE-EMPT 2800 L.F.  
 3/4 PRE-EMPT CABLE 880 L.F.

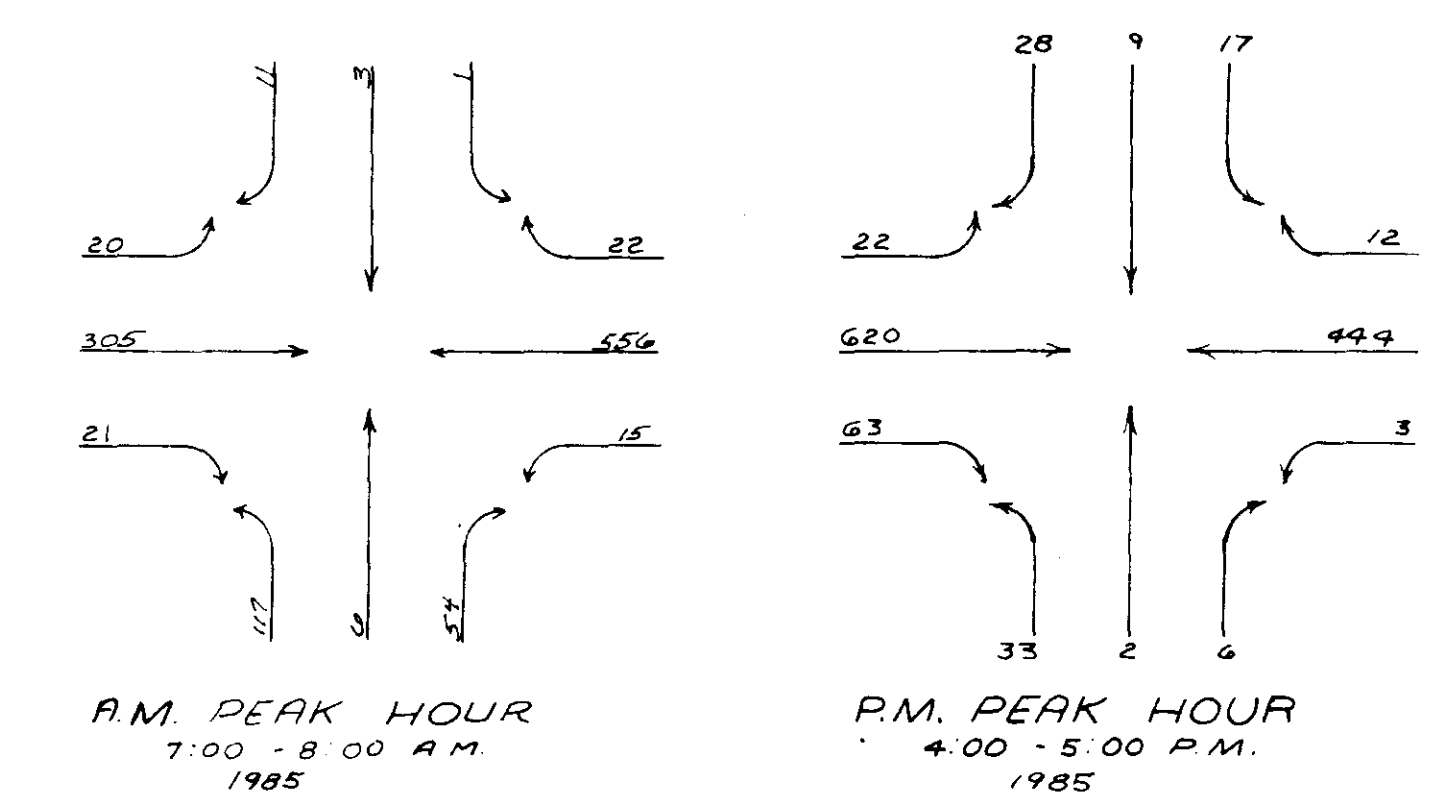


NOTE: PHASES Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8  
 PHASED AS SHOWN  
 PRE-EMPT NO. 1 ACTIVATES PHASE 1 W/ 10 SEC EXTENSION  
 PRE-EMPT NO. 2 ACTIVATES PHASE 2 W/ 10 SEC EXTENSION  
 PRE-EMPT NO. 3 ACTIVATES PHASE 3 W/ 10 SEC EXTENSION  
 PRE-EMPT NO. 4 ACTIVATES PHASE 4 W/ 10 SEC EXTENSION  
 7 POSITION CARD R/W REQUIRED

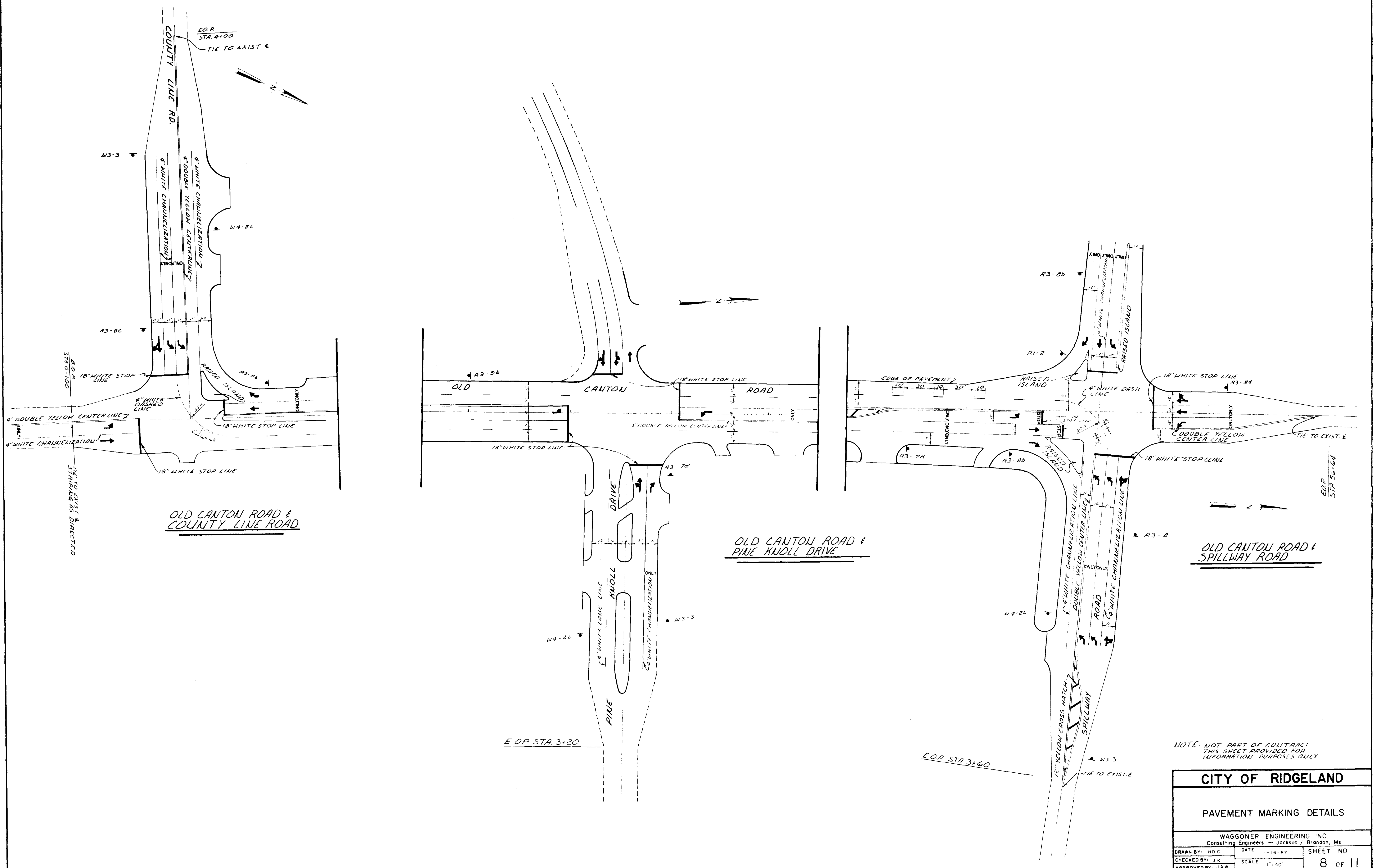


DETECTOR / CHANNEL NO.	LOOP ASSEMBLY NO.	LOOP SIZE	PHASE CALLED	PRESENCE MODE	IMPULSE MODE	COMMENTS
1/1	1,2	6'x6'	6	X	X	EXIST 17 SEC W/RED IN SERIES TO SAME CHANNEL
1/2	3,4	6'x6'	6	X	X	EXIST 7 SEC W/RED IN SERIES TO SAME CHANNEL
1/4	5	6'x50'	6	X		100 SEC DELAY
1/3	6,7	6'x60'	6	X		120 SEC DELAY
2/1	8	6'x10'	8	X		120 SEC DELAY
2/2	9	6'x50'	8	X		100 SEC DELAY
2/3	10,11	6'x50'	4	X		100 SEC DELAY
3/4	12	6'x50'	2	X		100 SEC DELAY
3/3	13,14	6'x60'	2	X		100 SEC DELAY
3/2	15,16	6'x6'	2	X	X	EXIST 17 SEC W/RED IN SERIES TO SAME CHANNEL
3/1	17,18	6'x6'	2	X	X	EXIST 17 SEC W/RED IN SERIES TO SAME CHANNEL

X: 1 FEATURE TO BE OVERRIDDEN DURING GREEN ARROW PHASE



CITY OF RIDGELAND  
 HWY 51 AND SCHOOL STREET  
 WAGGONER ENGINEERING INC.  
 Consulting Engineers - Jackson / Brandon, MS  
 DRAWN BY: T.D.L. DATE: 10-9-85 SHEET NO.  
 CHECKED BY: M.A.L. SCALE: 1" = 20' 7 OF 11  
 APPROVED BY: J.A.W.

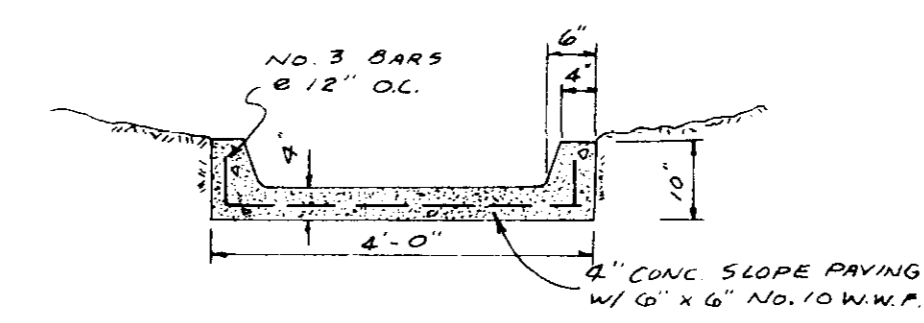
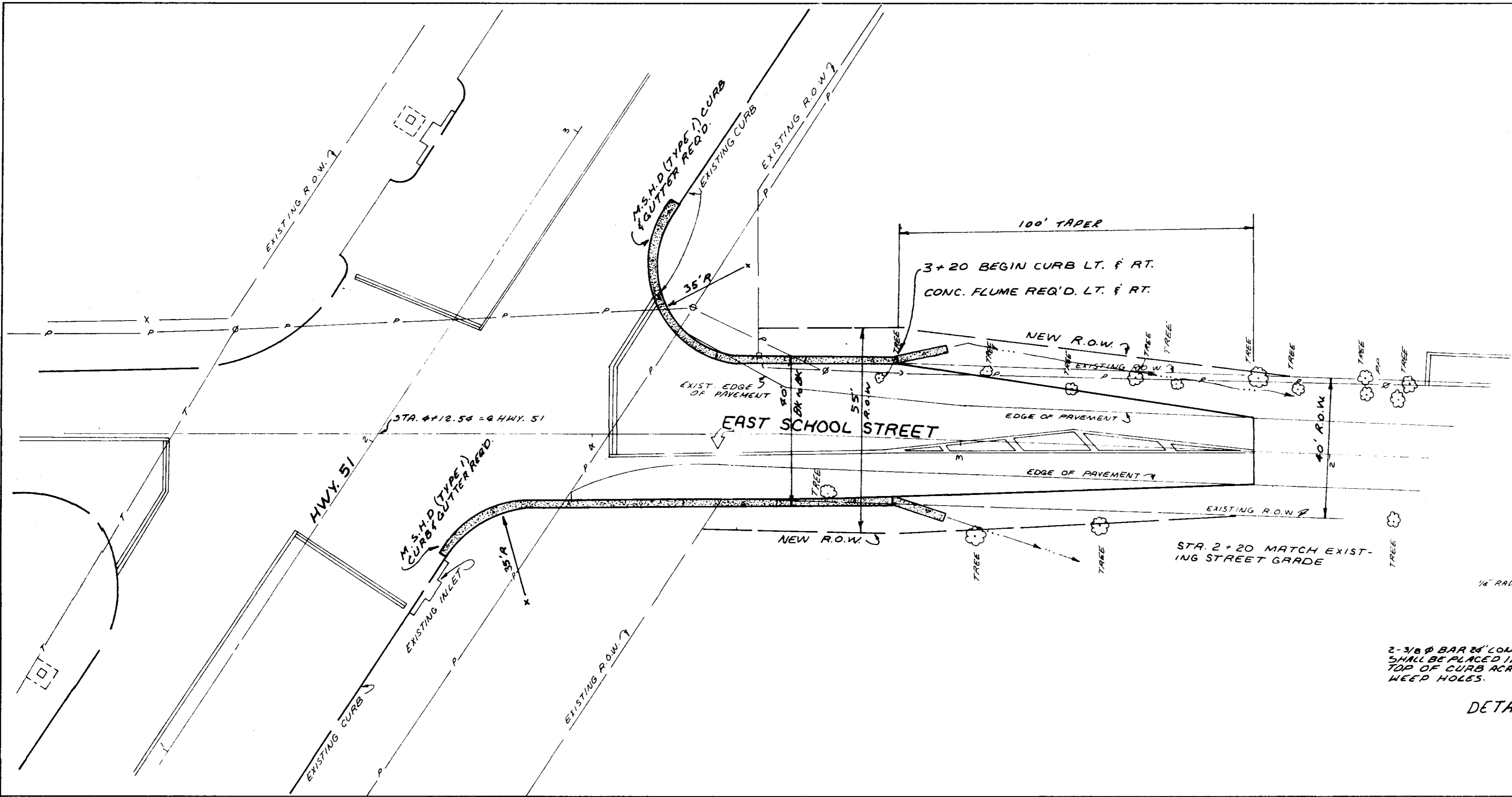


NOTE: NOT PART OF CONTRACT  
THIS SHEET PROVIDED FOR  
INFORMATION PURPOSES ONLY

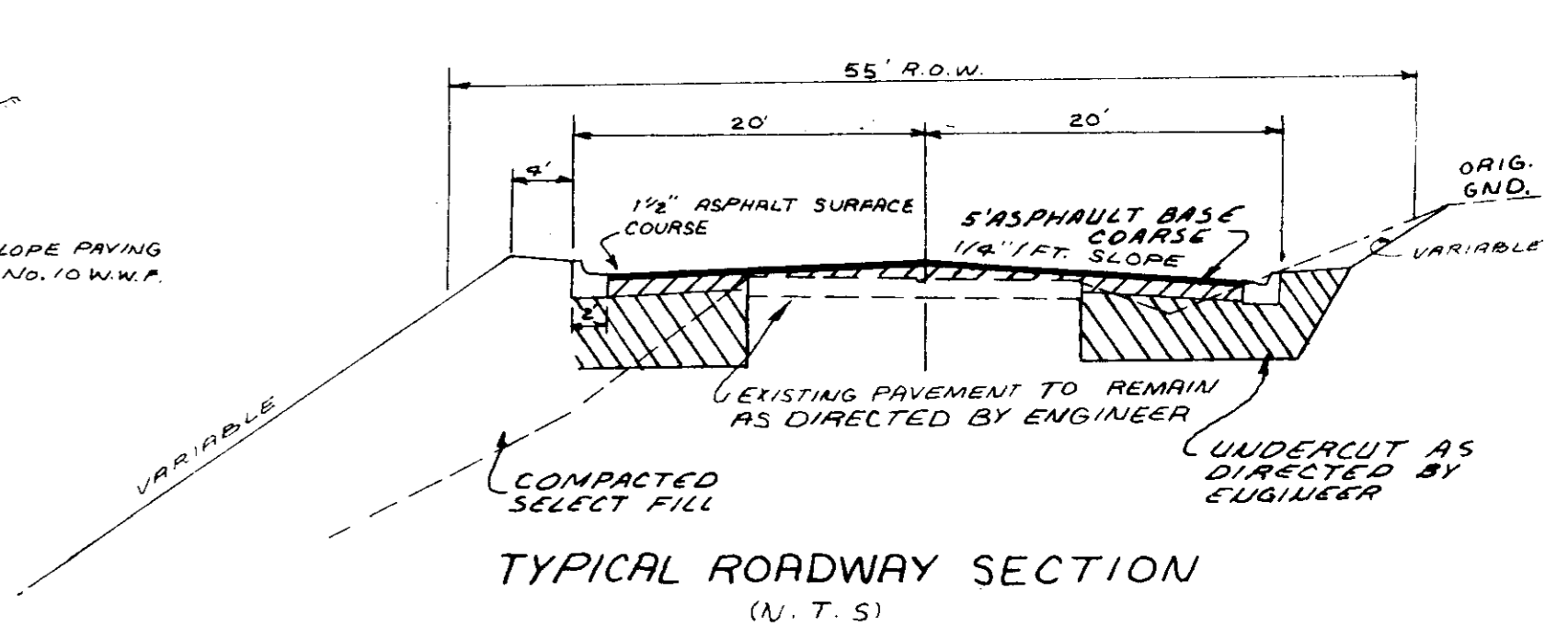
CITY OF RIDGELAND		
PAVEMENT MARKING DETAILS		
WAGGONER ENGINEERING INC. Consulting Engineers — Jackson / Brandon, Ms		
DRAWN BY: HDC	DATE: 1-16-87	SHEET NO:
CHECKED BY: J.K.	SCALE: 1"=40'	8 OF 11
APPROVED BY: J.A.W.		



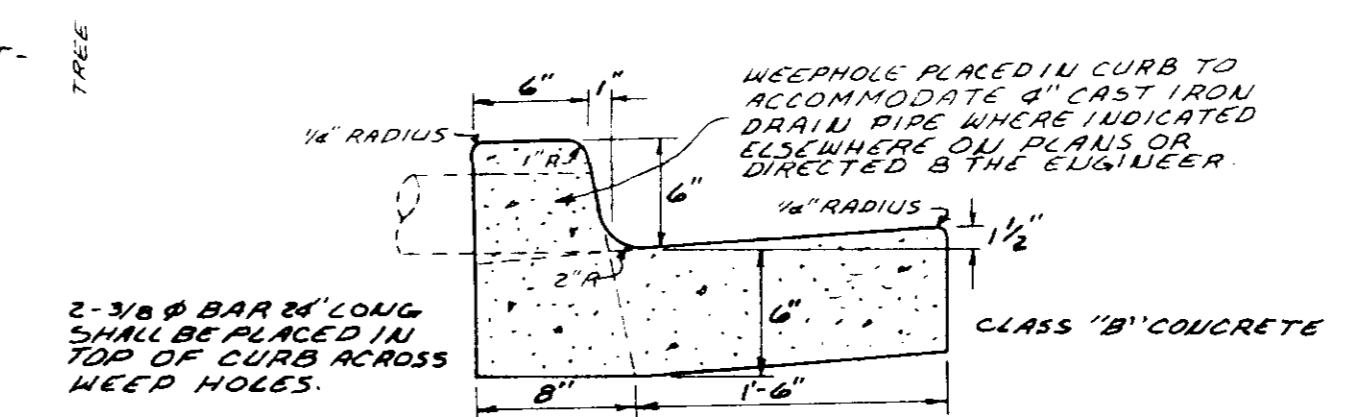
PLAN	BY	DATE
SURVEYED		
PLOTTED		
NOTED		
RT. OF WAY CHECKED		
NO.		



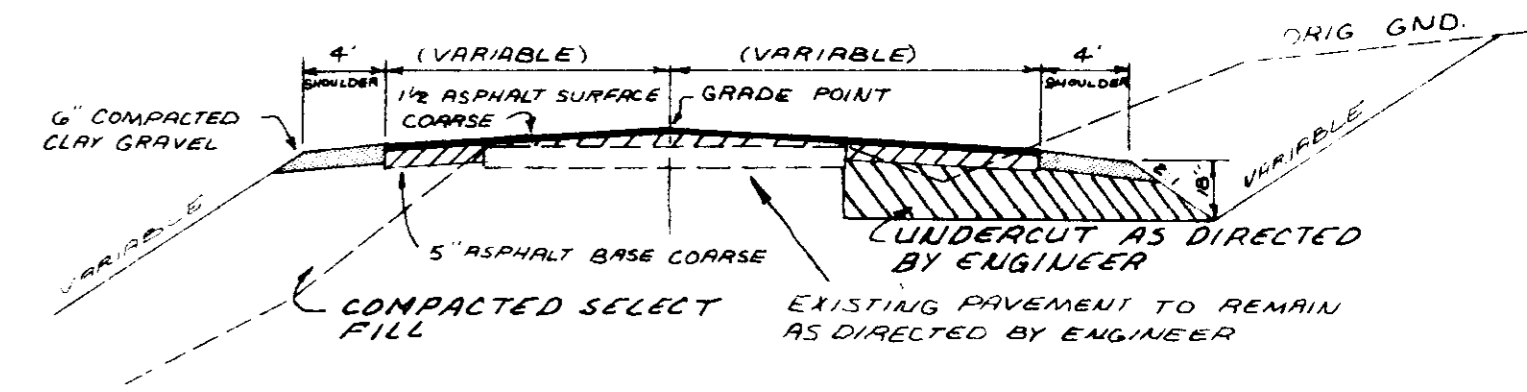
TYPICAL SECTION  
CONCRETE FLUME  
(N.T.S.)



TYPICAL ROADWAY SECTION  
(N.T.S.)



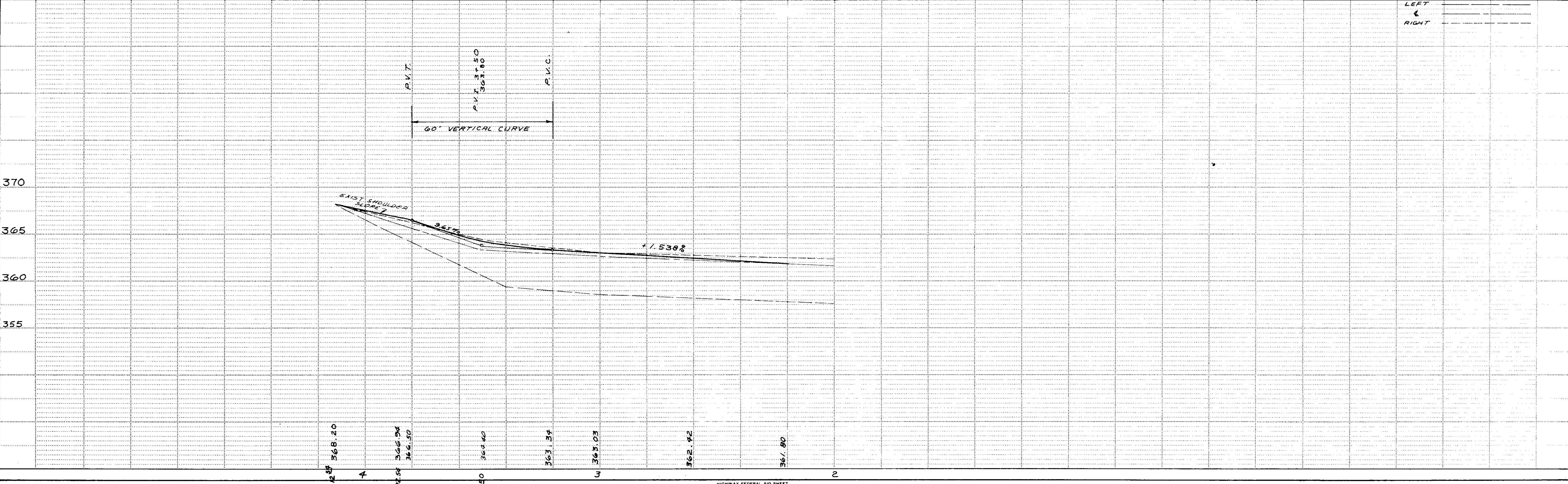
DETAIL OF COMBINATION CONCRETE CURB & GUTTER (TYPE I)



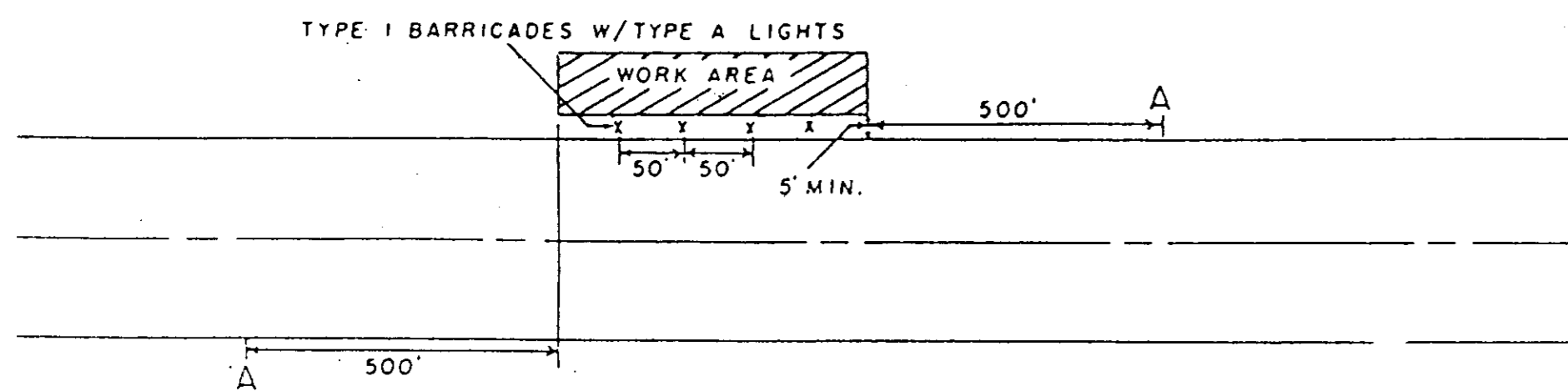
TYPICAL TRANSITION SECTION  
(N.T.S.)

SCALE: 1" = 20' HORIZ.  
1" = 5' VERT.

PROFILE	BY	DATE
SURVEYED		
GRADES CHECKED		
B.M. NOTED		
STRUCTURE NOTATIONS CHECKED		
NO.		

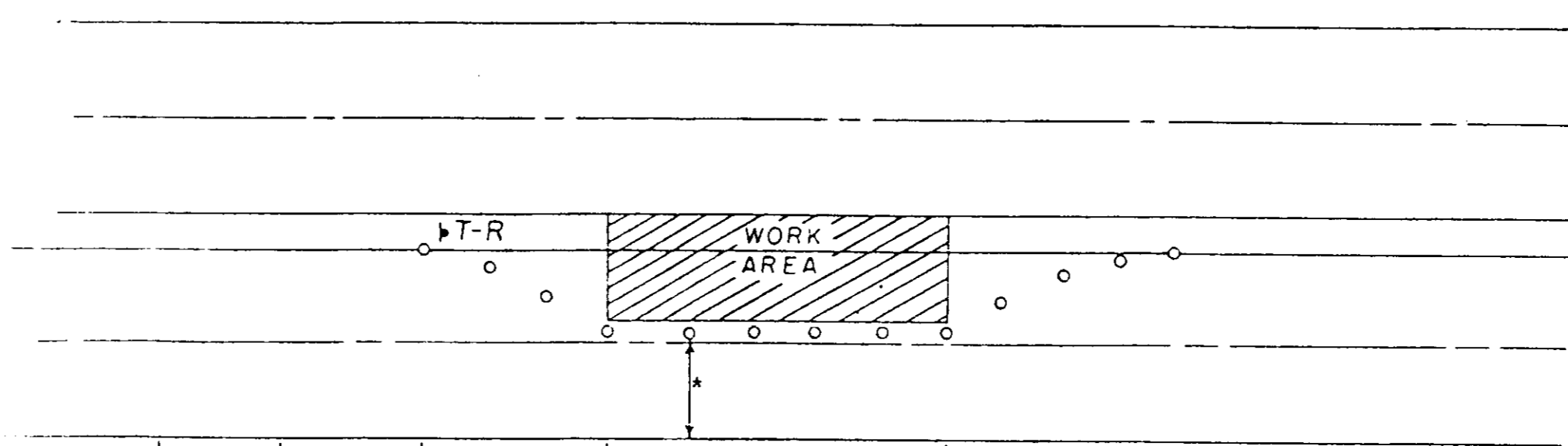


TRAFFIC CONTROL FOR A WORK AREA LOCATED OFF THE ROADWAY BUT WITHIN THE PUBLIC RIGHT OF WAY



- NOTES!!
1. See standard sign chart for description of signs.
  2. Work area shall be confined to length of trench that can be excavated, pipe laid and backfilled in a single working day.
  3. Open excavations or stored equipment along the side of the roadway shall be protected with Type I barricades equipped with a Type A flashing light at maximum fifty (50') foot intervals.

TRAFFIC CONTROL PLAN FOR CLOSING THE CENTER LANE(S) OF A TWO-WAY STREET WITH FOUR OR MORE LANES OF TRAFFIC



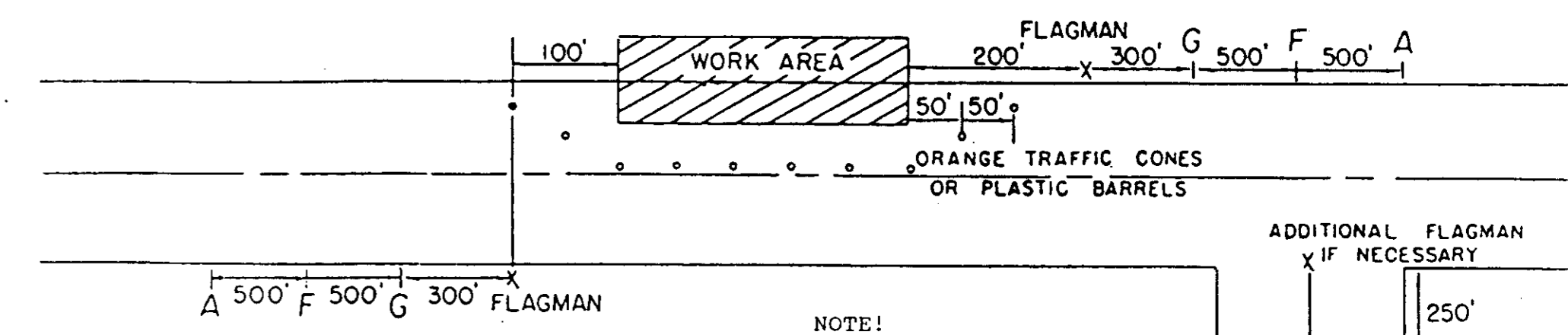
DISTANCE	SPEED LIMIT LESS THAN 35 MPH	SPEED LIMIT GREATER THAN 35 MPH
D1	200 ft	500 ft
D2	200 ft	500 ft
D3	150 ft	300 ft
D4	150 ft	200 ft

NOTES!!!

Minimum distance eleven (11) feet for single lane traffic.

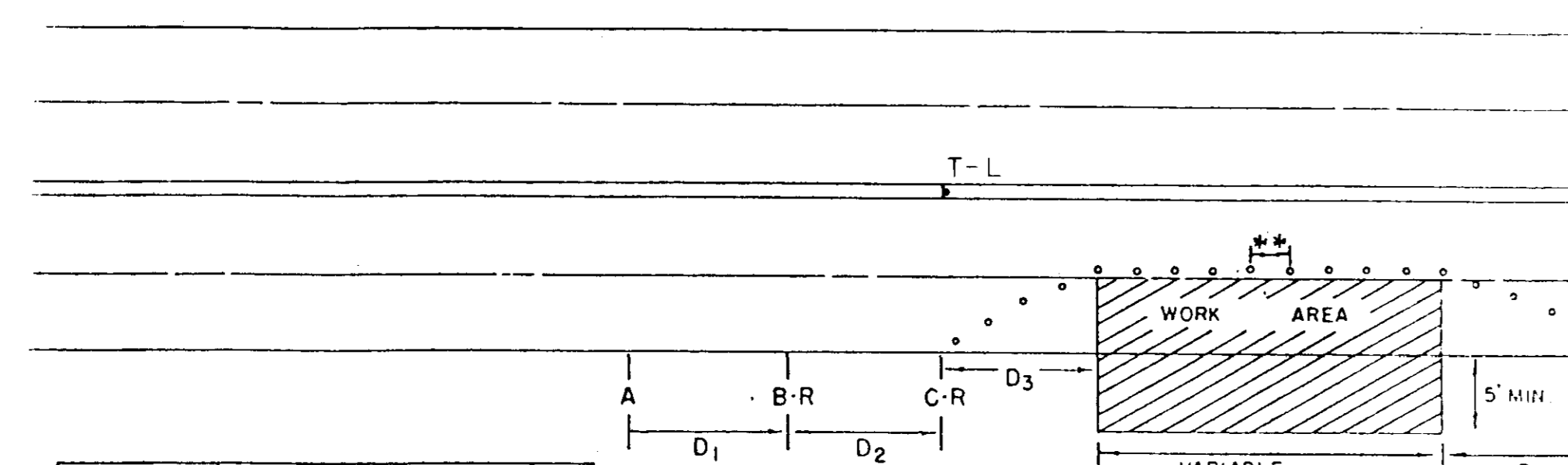
See standard sign chart for sign description. If additional work room is required, then close either curb lane or opposite center.

TRAFFIC CONTROL FOR MAINTAINING TWO-WAY TRAFFIC IN A SINGLE LANE WHENEVER EXCAVATION IS WITHIN 5' OF THE EDGE OF ROADWAY OR CONTRACTORS EQUIPMENT IS OCCUPYING A PORTION OF THE ROADWAY.



- NOTE!
1. See standard sign chart for description of signs.
  2. Work area shall be confined to length of trench which can be excavated, pipe laid and backfilled in a single day.
  3. All traffic control devices to be in place before work commences. All signs except (A) shall be removed during non-working hours.
  4. If work area is within 500 feet of an intersecting street. An additional flagman may be necessary to direct traffic at intersection.
  5. Materials or stored equipment along the roadway shall be protected with Type I barricades and Type A lights at maximum 50' intervals.
  6. Flagman shall have stop/slow paddle for directing traffic.

TRAFFIC CONTROL PLAN FOR CLOSING A SINGLE LANE ON A TWO-WAY STREET OF FOUR OR MORE LANES.



DISTANCE	SPEED LIMIT LESS THAN 35 MPH	SPEED LIMIT MORE THAN 35 MPH
D1	200'	500'
D2	200'	500'
D3	150'	300'
D4	100'	200'

NOTES!!!

-Spacing between channelization devices in feet equal to the speed limit in mph.

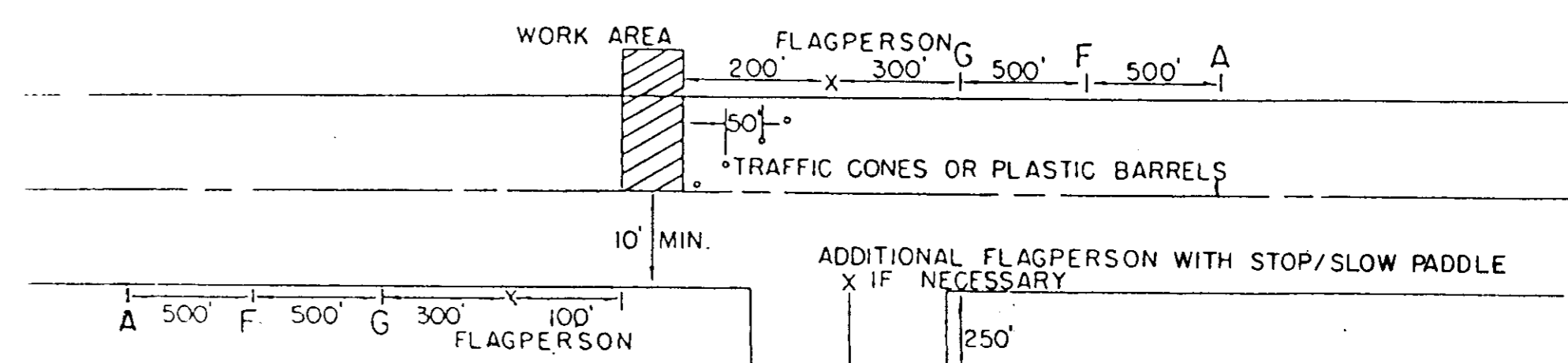
- See standard sign chart for sign descriptions.

-Reverse traffic control layout to close curb lane going in opposite directions.

STANDARD SIGN CHART

A	W20-1	ROAD CONSTRUCTION AHEAD
F	W20-4	ONE LANE ROAD
G	W20-70 <small>WS, SP, L, M, F, T, L, P, S, T, E</small>	FLAGPERSON
T-R	W4-2	TAPER RIGHT
T-L	W4-2	TAPER LEFT
B-R	W20-5	RIGHT LANE CLOSED AHEAD
C-R	W20-5	RIGHT LANE CLOSED AHEAD
B-L	W20-5	LEFT LANE CLOSED AHEAD
C-L	W20-5	LEFT LANE CLOSED AHEAD

TRAFFIC CONTROL FOR PIPELINE CROSSINGS. TWO-WAY TRAFFIC IN A SINGLE LANE ON ONE-HALF (1/2) OF THE EXISTING ROADWAY



- NOTES!!
1. See standard sign chart for a description of signs.
  2. Work area must be limited to 1/2 of the roadway. A minimum of ten (10') feet must be available (may be partially on the opposite shoulder) to maintain a single lane-two-way traffic.
  3. All excavations within roadway limits (including 18" on either side) must be backfilled and temporarily repaired at the end of each working day and maintained during all non-working hours.

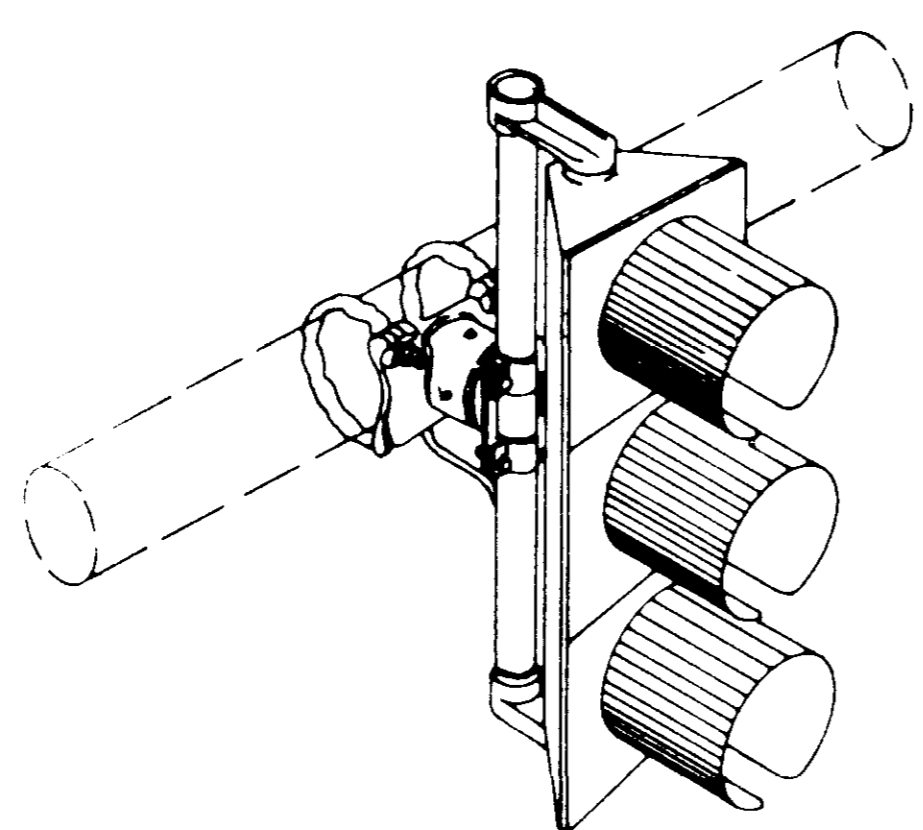
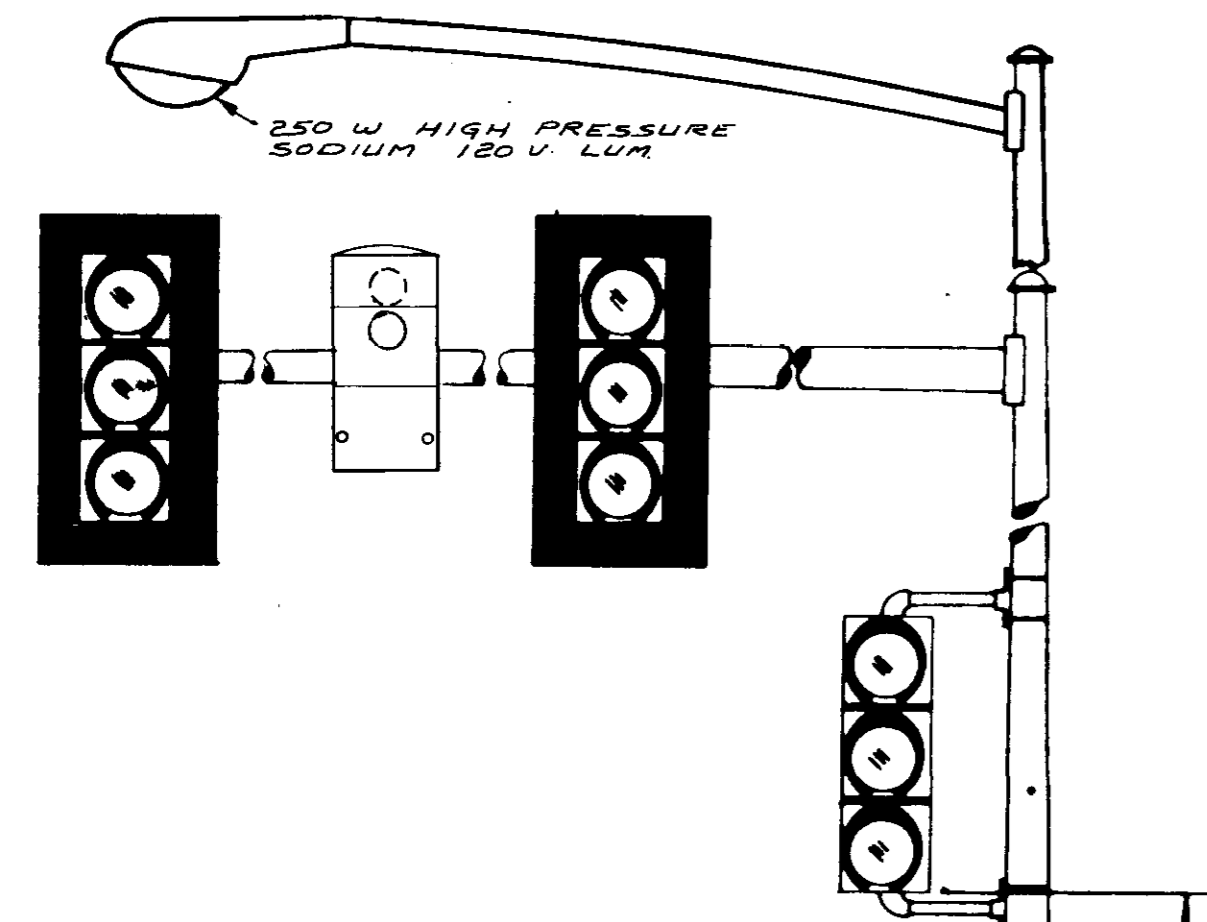
4. If work area is within 500 feet of an intersecting street, then signs (A) & (G) are to be installed as shown. Additional flagpersons may be necessary as shown.
5. All traffic control devices must be in place before work commences and all except sign (A) shall be removed during non-working hours.
6. Materials and/or stored equipment along the roadway shall be protected with Type I barricades and Type A lights at maximum 50' intervals.
7. Reverse traffic control layout to cross the other one-half (1/2) of the roadway.

CITY OF RIDGELAND

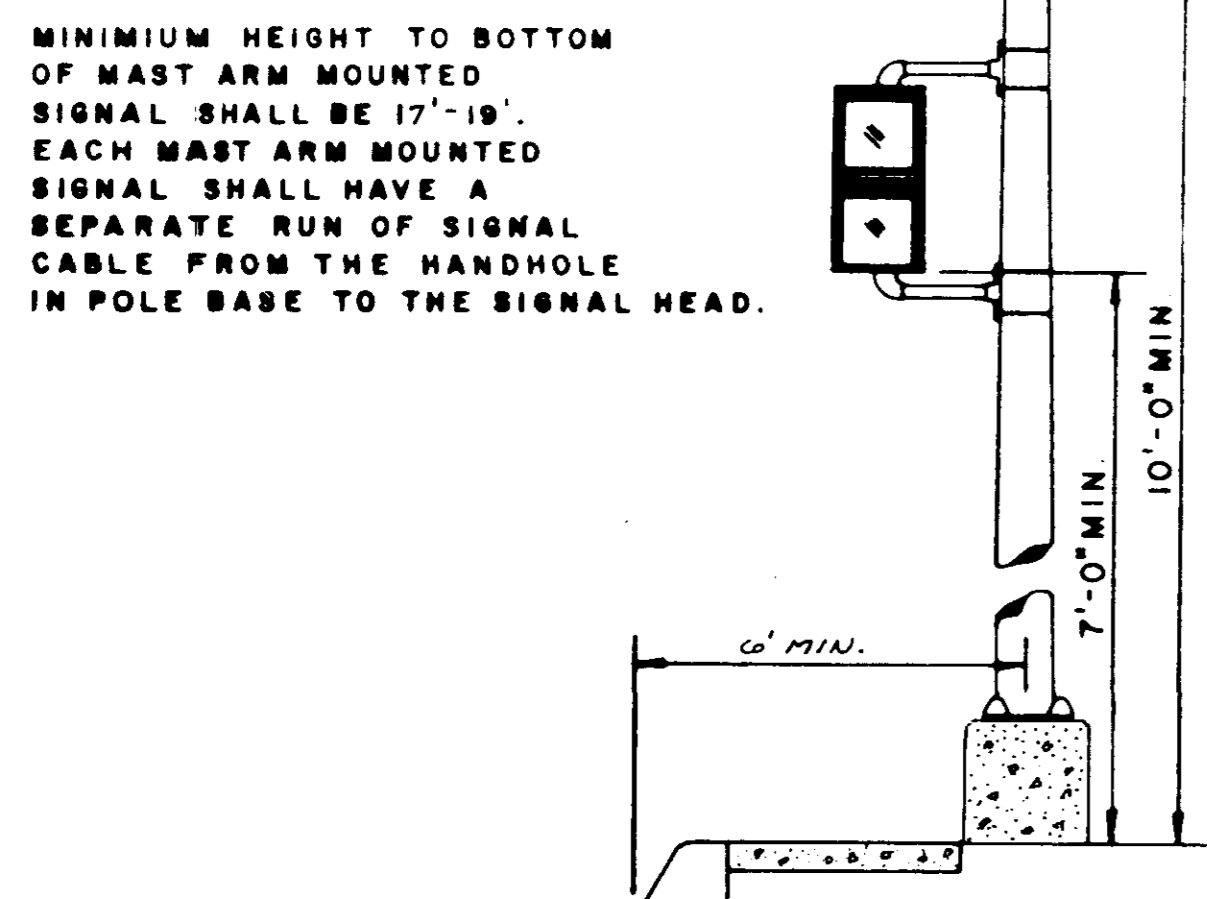
TRAFFIC CONTROL PLANS

WAGGONER ENGINEERING INC.  
Consulting Engineers - Jackson / Brandon, Ms

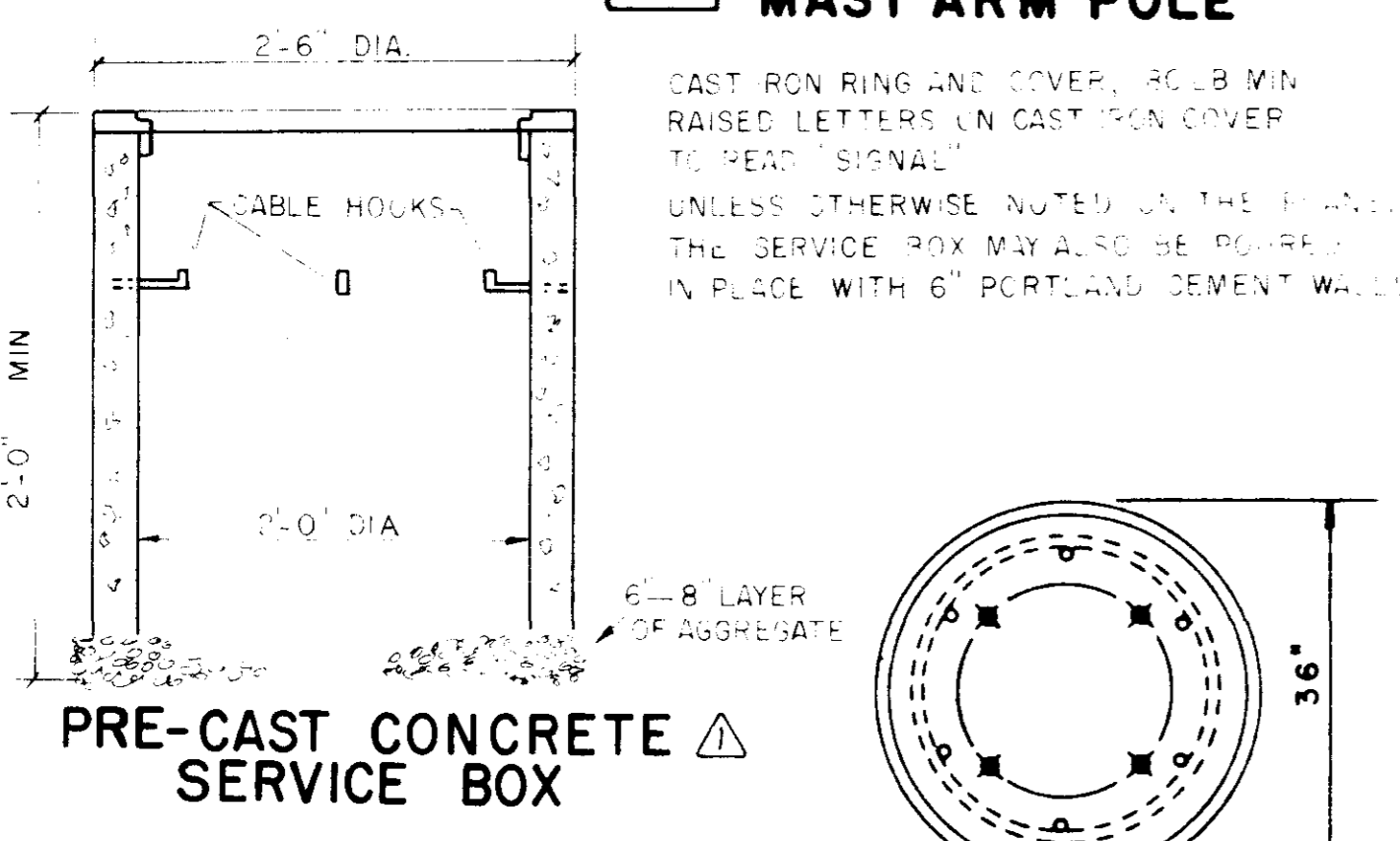
DRAWN BY: H.D.C.	DATE: 2-4-1987	SHEET NO.
CHECKED BY: J.K.	SCALE: N.T.S.	10 OF 11
APPROVED BY: J.A.W.		



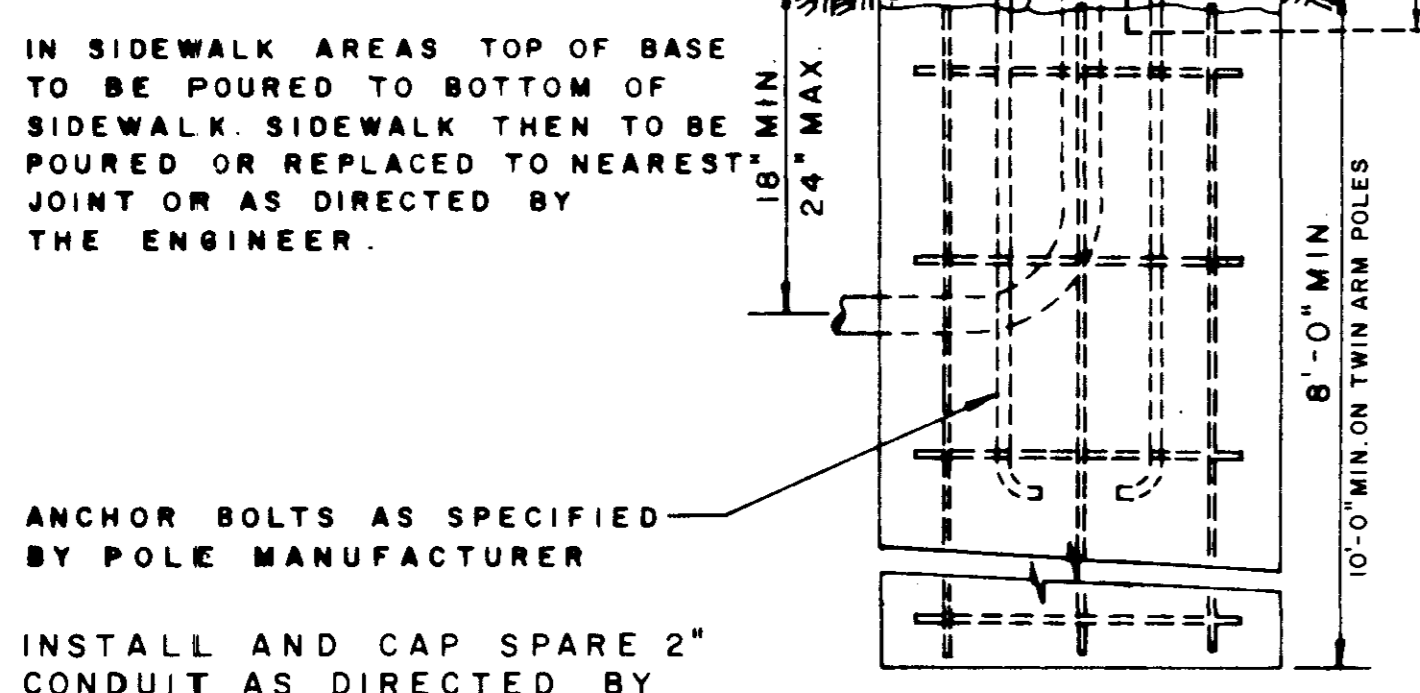
**MAST ARM MOUNTING BRACKET**



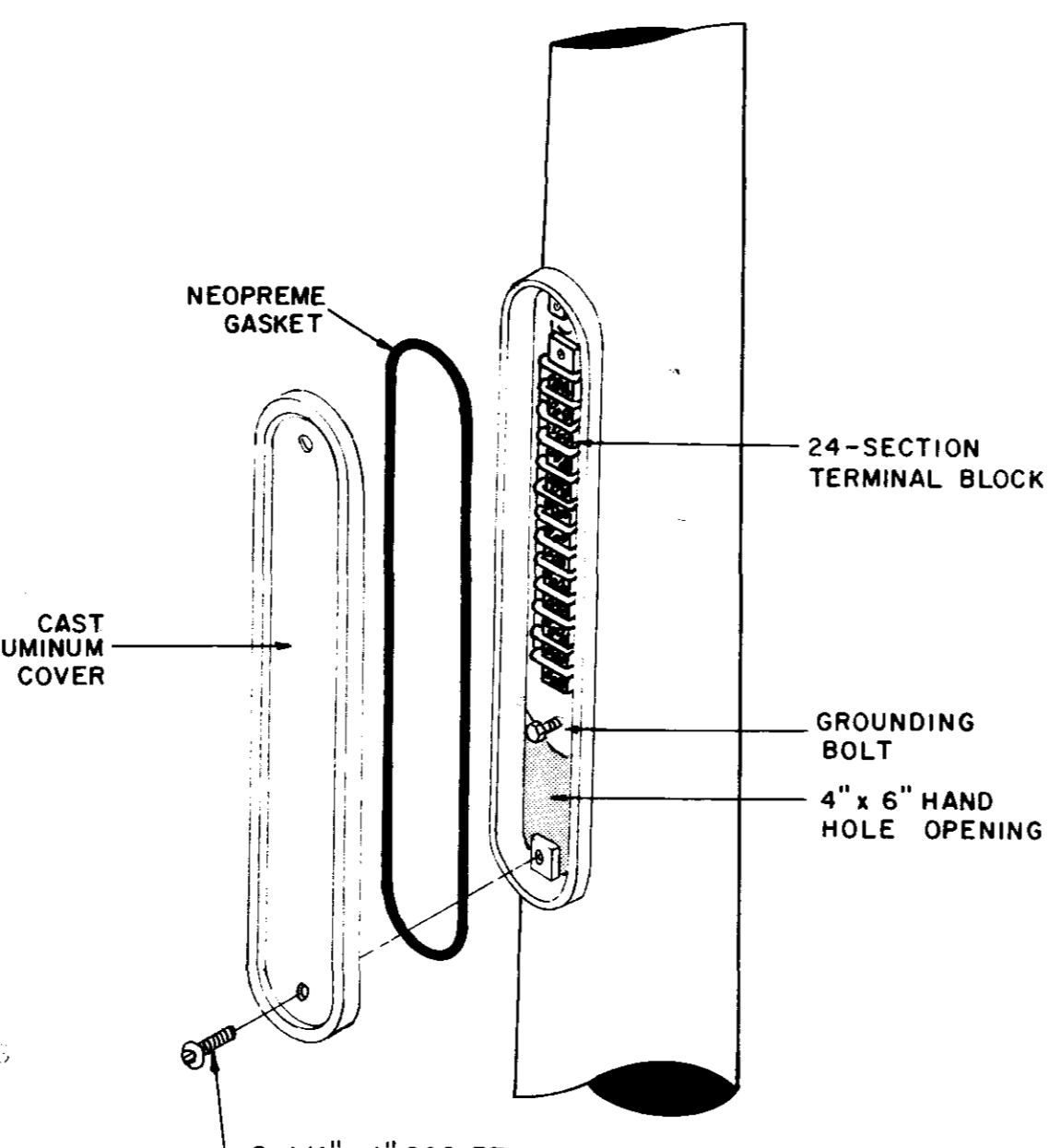
**MAST ARM POLE**



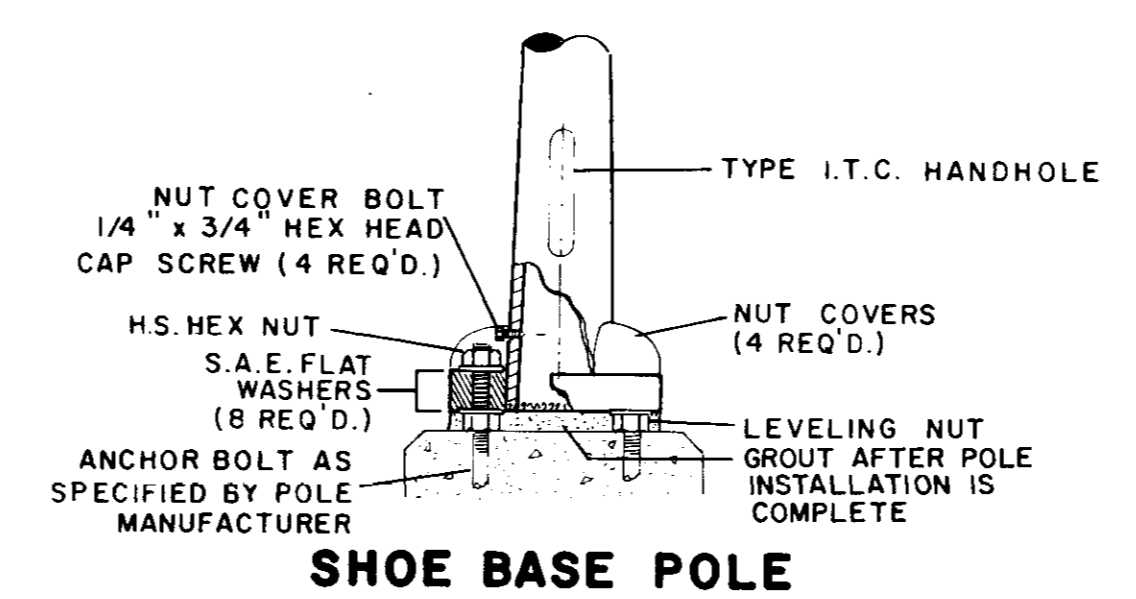
CONDUIT EXTENSIONS ABOVE BASE SHALL HAVE A PLASTIC OR METAL RIM BUSHING TO PREVENT THE CHAFING OF CABLES. TOP OF BASE SHALL NOT BE HIGHER THAN TOP OF SURFACE OR CURB.



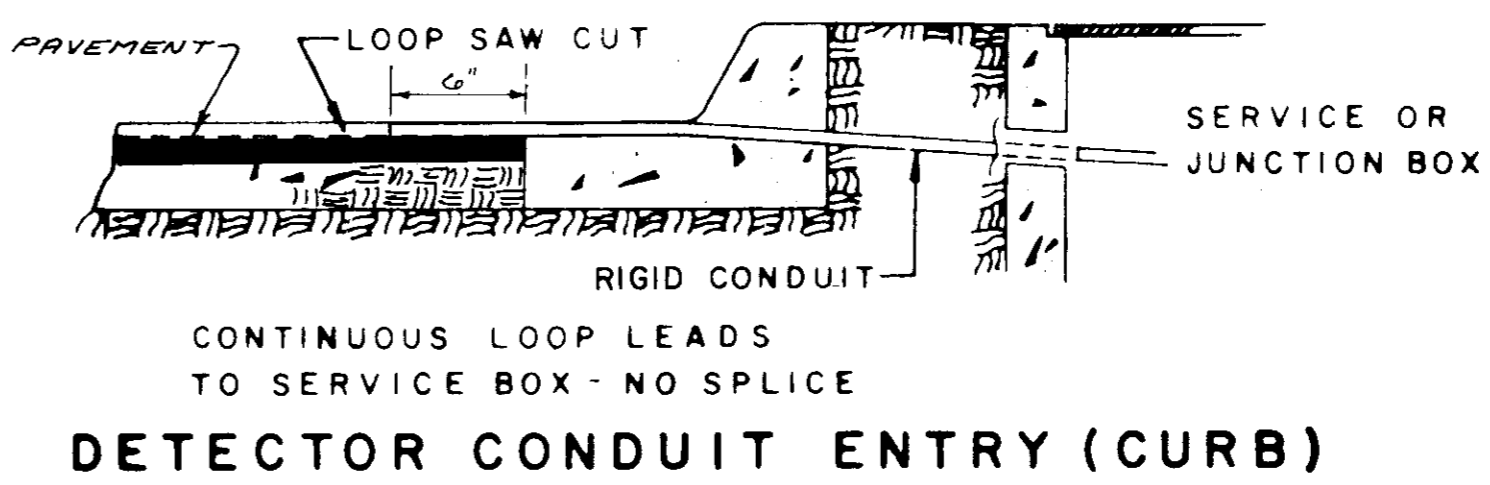
**MAST ARM POLE BASE**



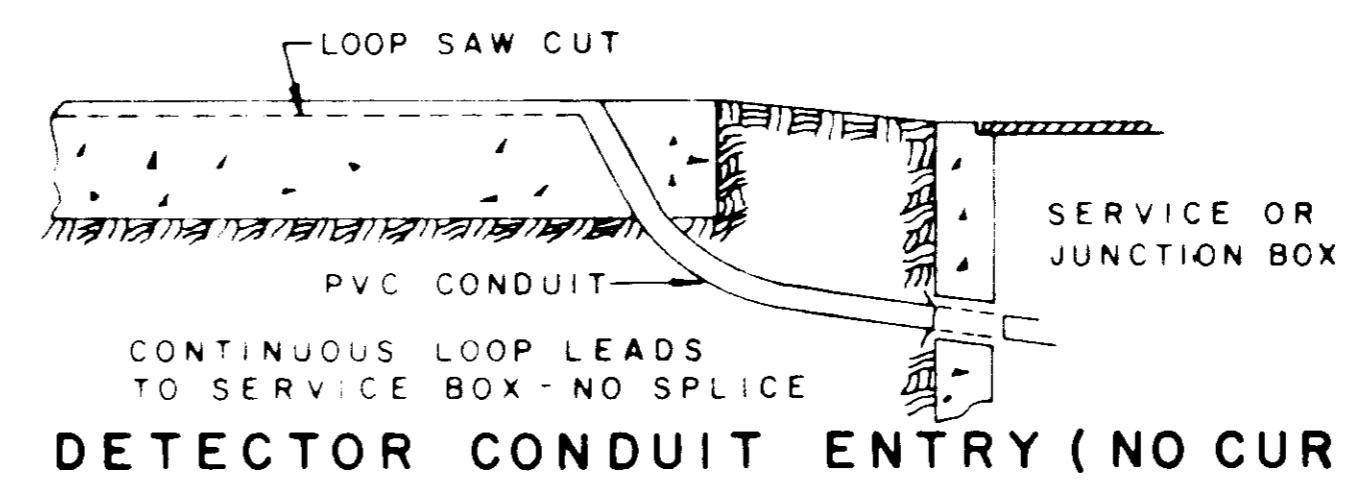
**INTEGRAL HANDHOLE AND TERMINAL COMPARTMENT**



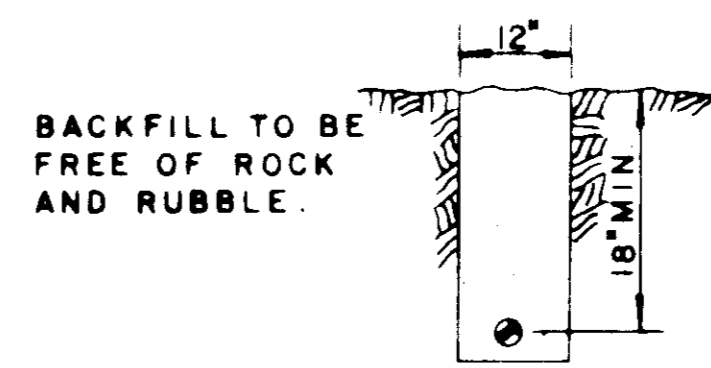
**SHOE BASE POLE**



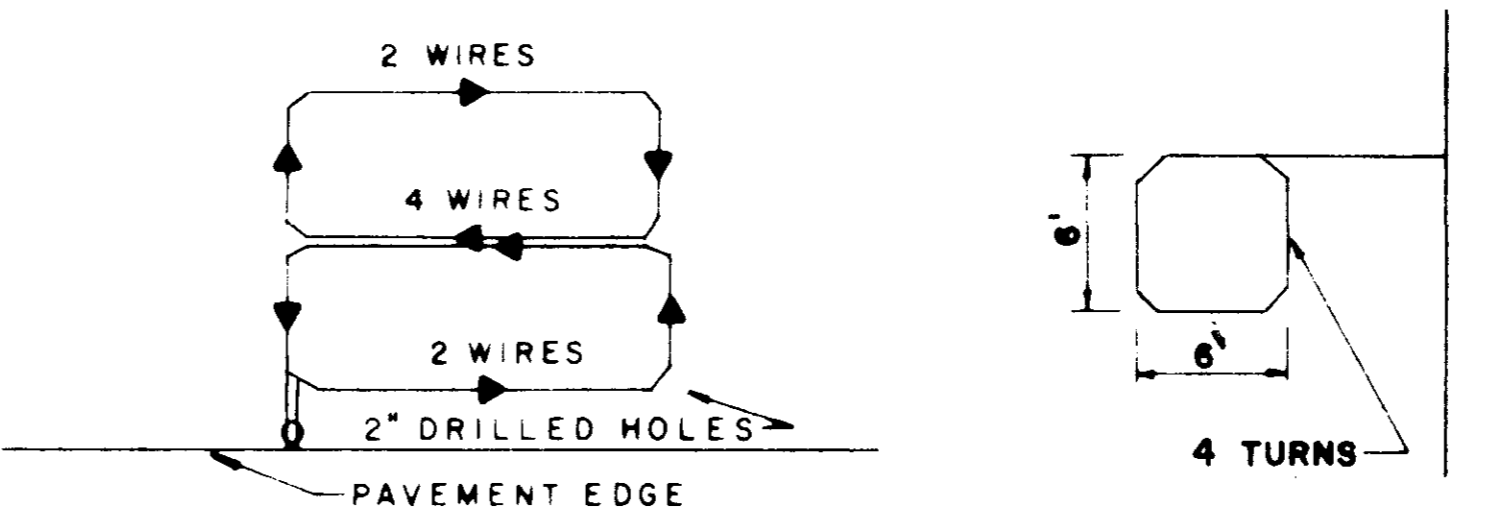
**DETECTOR CONDUIT ENTRY (CURB)**



**DETECTOR CONDUIT ENTRY (NO CURB)**



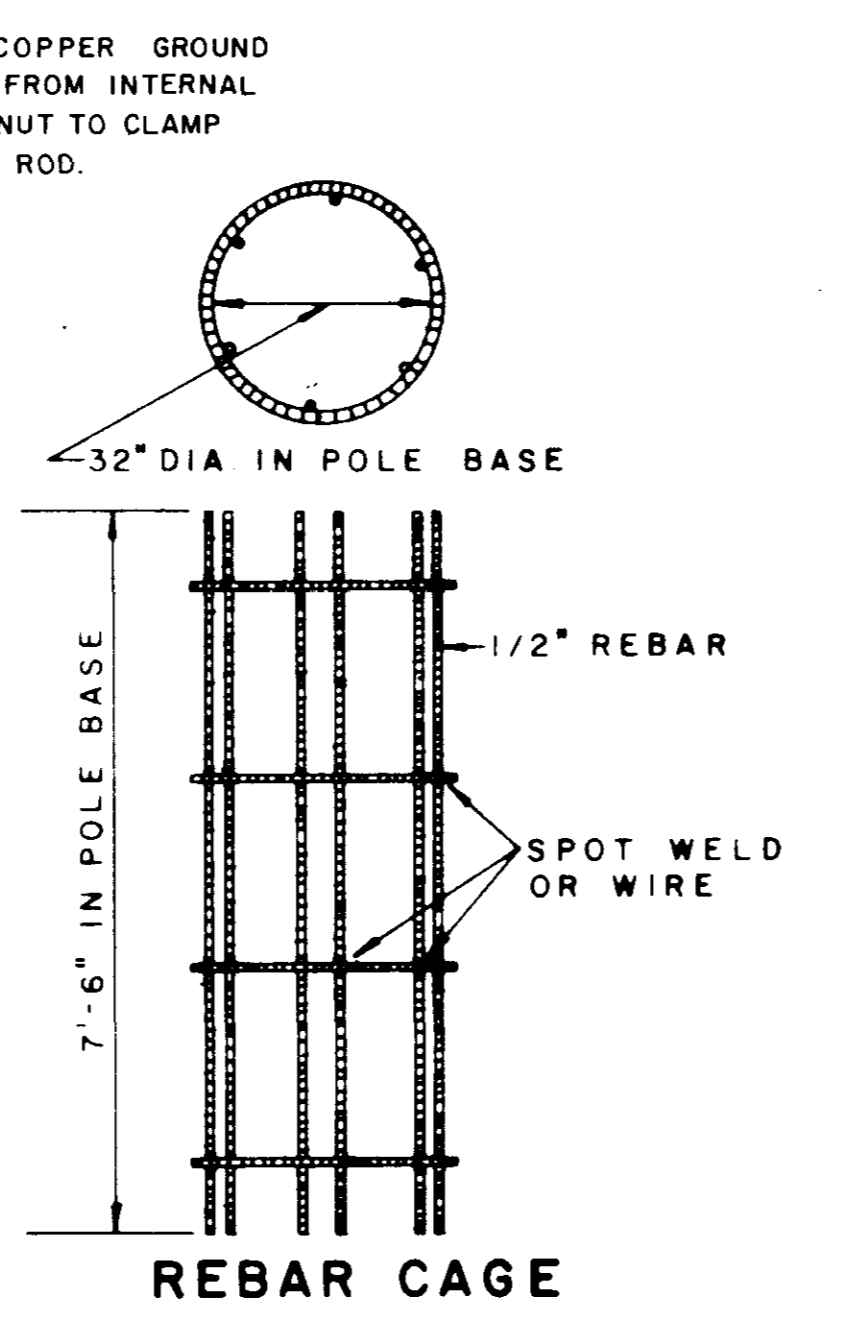
**TRENCHING IN UNPAVED AREAS**



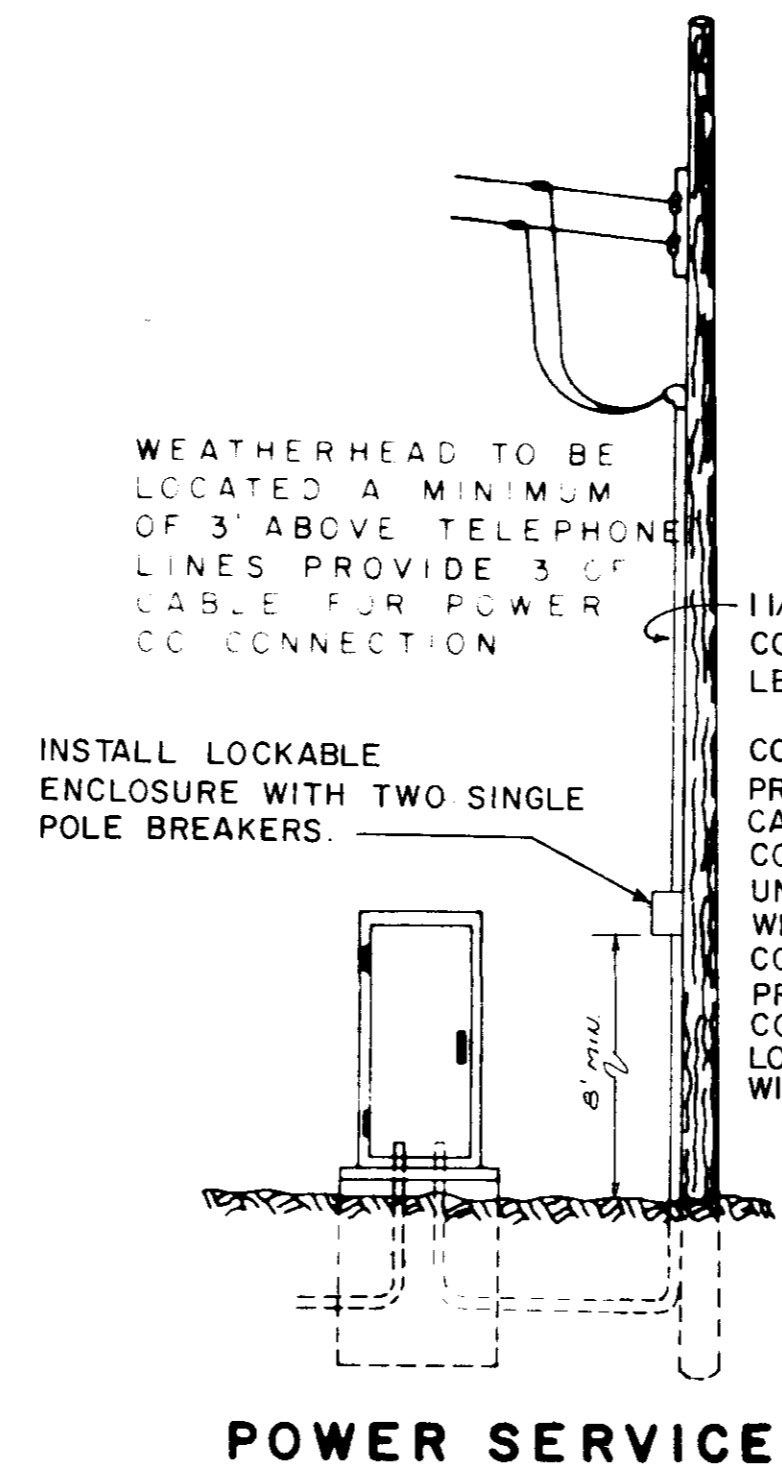
**QUADRAPOLE LOOP DETECTOR LOOP**

SLOTS IN PAVEMENT FOR LOOPS TO BE CUT A MINIMUM OF 1/4" WIDE AND 1-1/2" TO 2" DEEP. SLOTS TO BE FILLED WITH LOOP SEALANT MATERIAL APPROVED BY THE ENGINEER. THE CONNECTION OF THE LOOP WIRE WITH THE FEEDER CABLE SHALL BE MADE WITH A SOLDERED "WESTERN UNION" TYPE SPLICE, WRAPPED WITH WATERPROOF TAPE AND COATED WITH A WATER-TIGHT PROTECTIVE COVERING OR APPROVED EQUAL METHOD BY ENGINEER. FEEDER CABLE AND LOOP WIRE SHALL BE CONTINUOUS RUN WITH NO SPLICES.

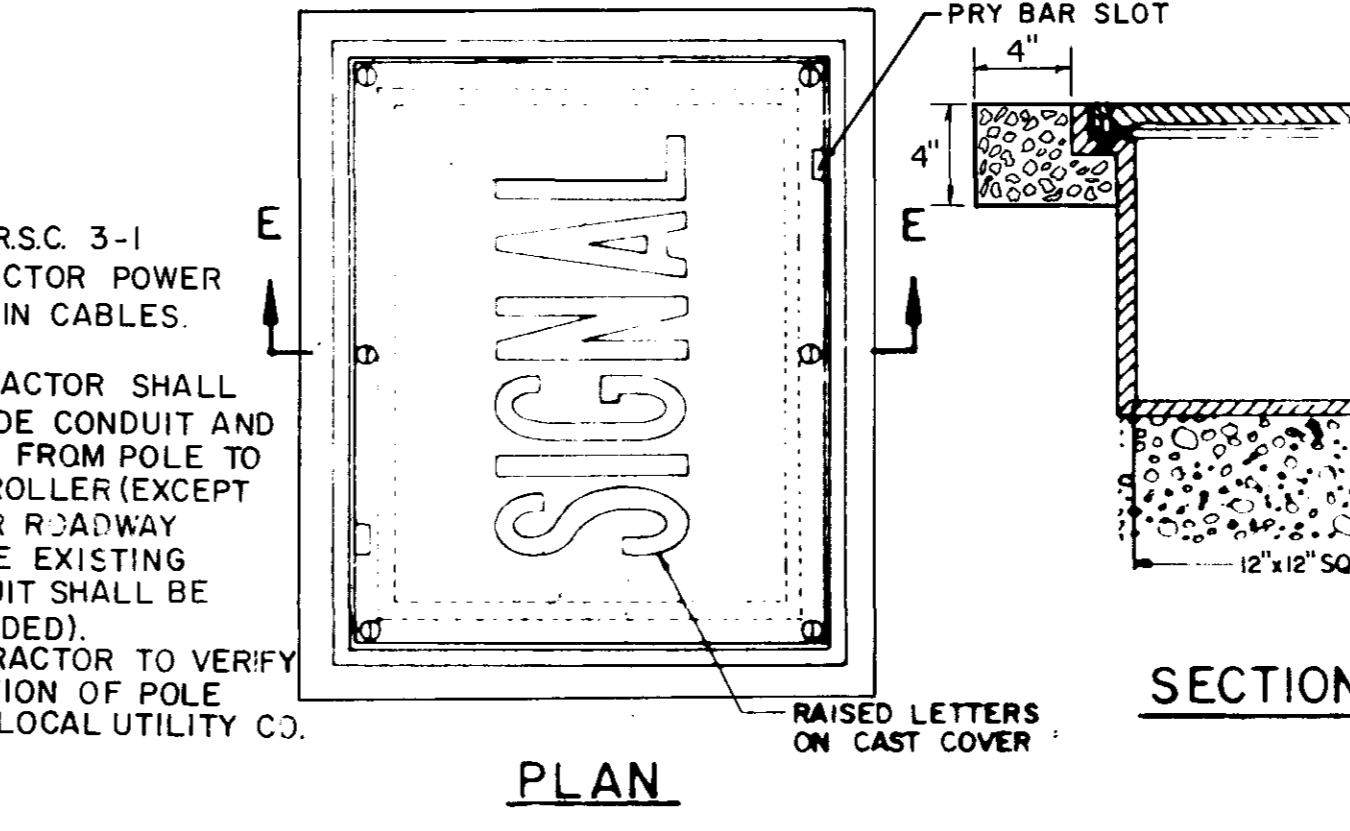
**NOTES:**  
THE ENGINEER IN CHARGE OF CONSTRUCTION SHALL STAKE ALL LOCATIONS FOR TRAFFIC SIGNAL POLES AND PEDESTALS TO BE INSTALLED. FINAL POSITIONS AND POINTING OF SIGNAL FACES TO BE DETERMINED IN THE FIELD.  
TRAFFIC SIGNAL HEADS SHALL REMAIN COVERED DURING CONSTRUCTION UNTIL THE ENTIRE INSTALLATION IS IN PLACE AND IN OPERATION.  
ALL WIRING INSTALLED SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE AND LOCAL ORDINANCES AND REQUIREMENTS.  
THE POWER COMPANY SHOULD BE NOTIFIED IN ADVANCE AS TO WHEN THE SIGNAL SYSTEM SHALL BE ENERGIZED.  
THE TRAFFIC SIGNAL SYSTEM SHALL BE COMPLETE AND THE CONTRACTOR SHALL FURNISH AND INSTALL ALL EQUIPMENT NECESSARY FOR THE SATISFACTORY OPERATION OF ELECTRICAL APPARATUS AND FOR THE COMPLETE OPERATION OF THE TRAFFIC SIGNAL SYSTEM WHETHER SPECIFICALLY MENTIONED OR NOT.  
PRE-EMPT DETECTORS TO BE BAND MOUNTED TO MASS ARM.



**REBAR CAGE**

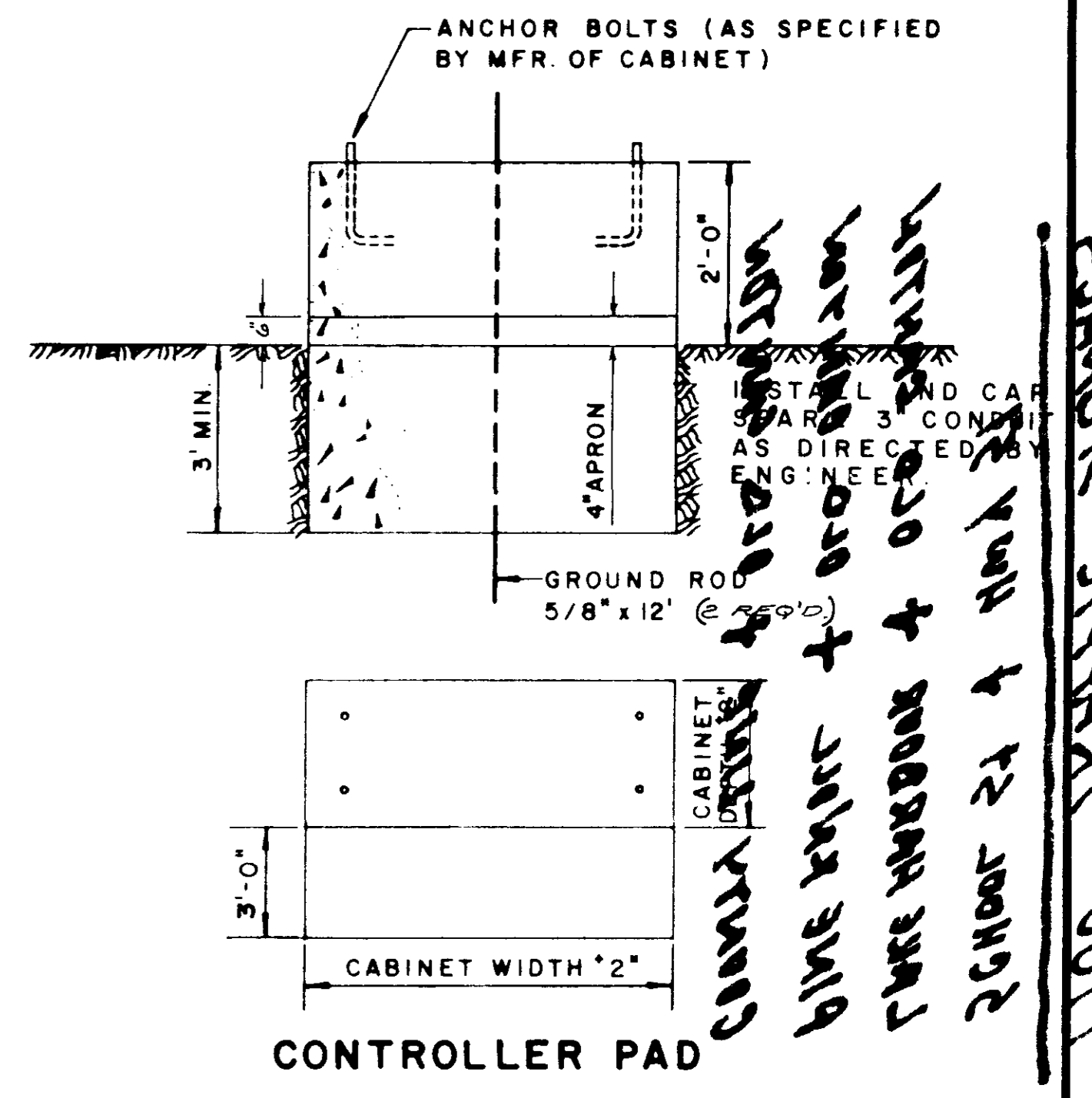


**POWER SERVICE**



**JUNCTION BOX**

**JUNCTION BOX MATERIAL SPECIFICATIONS**  
Cast Iron, ASTM A-48, hot dipped galvanized  
ASTM A-53;  
Cast Aluminum, ASTM B-108-62T, SG70-T6;  
Welded Aluminum, Alcoa 6061-T6.



**CONTROLLER PAD**

<b>CITY OF RIDGELAND</b>		
TRAFFIC SIGNAL INSTALLATION		
DETAIL SHEET		
WAGGONER ENGINEERING INC. Consulting Engineers - Jackson / Brandon, MS		
DESIGNED BY H.D.C.	DATE 10-9-86	SHEET NO. 11 OF 11
CHECKED BY J.K.	SCALE None	

*Handwritten notes:*  
CONCRETE PAD TO BE 4" ABOVE FINISH GRADE  
5/8" x 12" GROUND ROD TO BE 4" ABOVE FINISH GRADE  
CABINET WIDTH 2"  
2" ABOVE FINISH GRADE  
8891