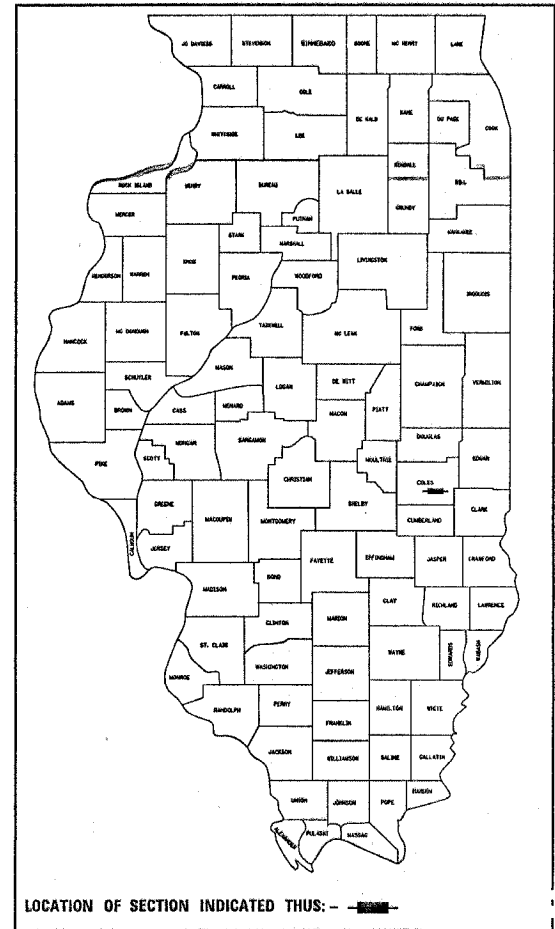


FAP ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	1
F.A.P. ROUTE		ILLINOIS	PROJECT	

CONTRACT NO. 70415  
D-95-057-04

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**HIGHWAY IMPROVEMENT**

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3-5



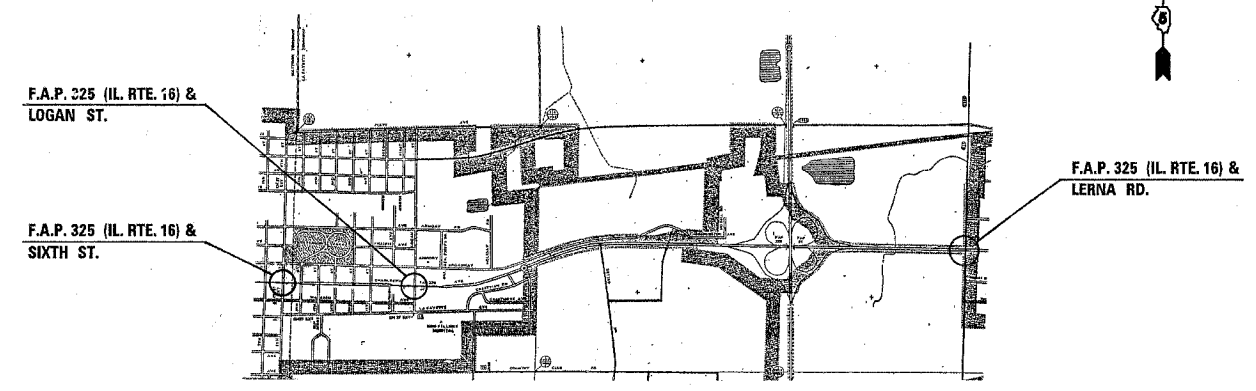
SCALES { PLAN 1"=20'  
PROFILE HORIZ.  
PROFILE VERT.  
CROSS SECTIONS HORIZONTAL 1"=5' VERTICAL 1"=2'

**FAP ROUTE 325 (ILLINOIS ROUTE 16)**  
**SECTION 501**  
**COLES COUNTY**  
**PROJECT HS-0325 (044)**

C-95-060-04

**TRAFFIC SIGNAL MODERNIZATION**

DESIGNER: ROGER BIGGS PROJECT ENGINEER: SCOTT NEUMART (217)465-4181



**DESIGN DESIGNATION**  
**NA**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED FEB 8 20 05  
Johnnie  
DEPUTY DIRECTOR OF HIGHWAYS, REGION THREE ENGINEER

March 25 20 05  
Mike Hine  
ENGINEER OF DESIGN AND ENVIRONMENT

March 25 20 05  
Victor Mader  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

FOR UNDERGROUND UTILITY  
LOCATIONS CALL  
TOLL FREE J.U.L.I.E. TELEPHONE NO.  
1-800-892-0123  
MATTOON & LAFAYETTE TOWNSHIPS

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

**CONTRACT NO. 70415**

TOTAL LENGTH OF SECTION & PROJECT = FEET = MILES  
NET LENGTH OF SECTION & PROJECT = FEET = MILES

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

FAP ROUTE 325 SECTION 501 COLES COUNTY

GENERAL NOTES

G. N. -100  
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G. N. -1004.01  
COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

G. N. -1004.03  
REVISE ARTICLE 1004.03 (c) NOTE 5/ OF THE STANDARD SPECIFICATIONS TO READ:

'5/ GRADATION CA-16 SHALL BE USED IN LIEU OF CA-13 WHEN THE SURFACE COURSE IS LESS THAN 1 3/4 INCHES IN THICKNESS. CA-13 OR CA-16 MAY BE USED WHEN THE SURFACE COURSE IS 1 3/4 INCHES OR MORE IN THICKNESS.'

G. N. -105.09A  
ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G. N. -107.31  
UTILITY LINES WERE PLOTTED FROM INFORMATION FURNISHED BY THE VARIOUS UTILITY COMPANIES INVOLVED (QUALITY LEVEL C &/OR QUALITY LEVEL D) AND THE ACCURACY SHOULD BE CONSIDERED APPROXIMATE ONLY.

UTILITY COMPANIES MAY BE ADJUSTING THEIR FACILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL COOPERATE WITH THESE ORGANIZATIONS WHILE THESE ADJUSTMENTS ARE BEING PERFORMED. J.U.L.I.E. - JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS SYSTEM (800)892-0123.

G. N. -202  
GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G. N. -353  
THE SHADED AREAS OF P.C. CONCRETE BASE COURSE CONSTRUCTED ADJACENT TO COMBINATION CONCRETE CURB AND GUTTER AS SHOWN IN THE PLANS SHALL BE POURED MONOLITHIC WITH THE COMBINATION CONCRETE CURB AND GUTTER. THIS WORK WILL BE MEASURED AND INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE YARD FOR PORTLAND CEMENT CONCRETE BASE COURSE OF THE THICKNESS SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G. N. -406  
THE QUANTITIES INCLUDED IN THE PLANS FOR BITUMINOUS CONCRETE RESURFACING ARE INTENDED TO GIVE THE COVERAGE SHOWN ON THE TYPICAL CROSS SECTIONS. IT IS NOT INTENDED TO INCREASE THE THICKNESS OF THE BITUMINOUS MIXTURE IN ORDER TO USE ALL OF THE QUANTITIES INCLUDED IN THE CONTRACT.

G. N. -406H

MIXTURE REQUIREMENTS

The following mixture requirements are applicable for this project:

Location(s):	6th St. Rt. Turn Lane
Mixture Use(s):	Surface
AC/PG:	PG 64-22
RAP %: (Max)**	15%
Design Air Voids:	4.0% @ Ndes = 70
Mixture Composition:	IL 9.5
(Gradation Mixture)	
Friction Aggregate:	Mix D

G. N. -440B  
THE EXISTING TIE BARS BETWEEN THE EXISTING PAVEMENT AND EXISTING MEDIANS, GUTTERS AND/OR COMBINATION CURB AND GUTTERS THAT ARE FOUND SUITABLE FOR REUSE SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY EXISTING TIE BARS THAT ARE FOUND UNSUITABLE TO BE INCORPORATED INTO THE PROPOSED CONSTRUCTION DUE TO EXCESSIVE RUSTING OR DISTRESS SHALL BE REMOVED FLUSH WITH THE FACE OF THE EXISTING CONCRETE AND DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS REMOVAL PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS, STANDARDS IN THE PLANS & GENERAL NOTES
3-5	SUMMARY OF QUANTITIES
6-9	TYPICAL CROSS - SECTIONS
10	SCHEDULE OF QUANTITIES
11	ROADWAY PLAN SHEET - IL, 16 & 6TH ST.
12-20	TRAFFIC SIGNAL PLAN SHEETS
21	DETAIL OF DEPRESSING GUTTER GRADE AT INLETS, CATCH BASINS AND MANHOLES
21	DETAIL OF P.C. CONCRETE DRIVEWAYS
22-24	DETAIL OF TYPICAL APPLICATION OF PAVEMENT MARKINGS AND MARKERS
25-26	CROSS - SECTIONS

STANDARDS IN THE PLANS

420001-05	PAVEMENT JOINTS
602301	INLET, TYPE A
604001-02	FRAME AND LIDS, TYPE 1
604006-02	FRAME AND GRATE, TYPE 3
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-01	TRAFFIC CONTROL
701106-01	TRAFFIC CONTROL
701421-01	TRAFFIC CONTROL
701601-04	TRAFFIC CONTROL
701701-04	TRAFFIC CONTROL
702001-05	TRAFFIC CONTROL DEVICES
720016-01	MAST ARM MOUNTED STREET NAME SIGNS
805001	ELECTRICAL SERVICE INSTALLATION DETAILS
814001	CONCRETE HANDHOLES
814006	DOUBLE HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
877001-02	STEEL MAST ARM ASSEMBLY AND POLE
877011-02	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-03	CONCRETE FOUNDATION DETAILS
880006	TRAFFIC SIGNAL MOUNTING DETAILS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTION LOOPS
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT

## SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	3

CONTRACT NO. 70415

CODE NO.	ITEM	CONSTRUCTION TYPE CODE:	UNIT	URBAN TOTAL QUANTITY	LOCATION OF WORK:					
					1000 - 1A	Y031 - 1F	Y031 - 1F	Y031 - 1F	Y030 - 1E	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)		UNIT	16.0	16.0					
20200100	EARTH EXCAVATION		CU YD	199.0	199.0					
20800150	TRENCH BACKFILL		CU YD	2.4	2.4					
25200110	SODDING, SALT TOLERANT		SQ YD	94.0	94.0					
25200200	SUPPLEMENTAL WATERING		UNIT	.6	.6					
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"		SQ YD	489.0	489.0					
35300210	PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2"		SQ YD	380.0	380.0					
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH		SQ YD	23.0	23.0					
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH		SQ FT	154.0	154.0					
44000100	PAVEMENT REMOVAL		SQ YD	55.0	55.0					
44000200	DRIVEWAY PAVEMENT REMOVAL		SQ YD	62.0	62.0					
44000500	COMBINATION CURB AND GUTTER REMOVAL		FOOT	348.0	348.0					
44000600	SIDEWALK REMOVAL		SQ FT	284.0	284.0					
55019500	STORM SEWERS, TYPE 1, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS IV 12"		FOOT	10.0	10.0					
60235700	INLETS, TYPE A, TYPE 3 FRAME AND GRATE		EACH	1.0	1.0					
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID		EACH	1.0	1.0					
60500080	REMOVING CATCH BASINS TO MAINTAIN FLOW		EACH	1.0	1.0					
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24		FOOT	318.0	318.0					
67100100	MOBILIZATION		L SUM	1.0	0.2	0.3	0.2	0.3		
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421		L SUM	1.0				1.0		
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601		L SUM	1.0		0.5	0.5			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701		L SUM	1.0	0.2	0.3	0.2	0.3		
*78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS		SQ FT	78.0	78.0					
*78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"		FOOT	613.0	613.0					
*78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"		FOOT	295.0	295.0					
*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"		FOOT	38.0	38.0					
78300100	PAVEMENT MARKING REMOVAL		SQ FT	84.0	84.0					
80500100	SERVICE INSTALLATION, TYPE A		EACH	2.0		1.0		1.0		
80802100	WOOD POLE, 35 FT., CLASS 4		EACH	2.0		1.0		1.0		
81012300	CONDUIT IN TRENCH, 1" DIA., PVC		FOOT	372.0		144.0	105.0	123.0		
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC		FOOT	738.0		16.0		722.0		
81012600	CONDUIT IN TRENCH, 2" DIA., PVC		FOOT	308.0		94.0	82.0	132.0		

\* SPECIALTY ITEMS

## SUMMARY OF QUANTITIES (Cont'd)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	4

CONTRACT NO. 70415

CODE NO	ITEM	CONSTRUCTION TYPE CODE:	UNIT	TOTAL QUANTITY	LOCATION OF WORK:				
					FAP 325 IL. 16 & 6TH ST. 90% FED. 10% STATE	FAP 325 IL. 16 & 6TH ST. 90% FED. 5% STATE 5% CITY	FAP 325 IL. 16 & LOGAN ST. 90% FED. 5% STATE 5% CITY	FAP 325 IL. 16 & LERNA RD. 90% FED. 10% STATE	FAP 325 IL. 16 & LERNA RD. 100% CITY
					1000-1A	Y031 - 1F	Y031 - 1F	Y031 - 1F	Y030 - 1E
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC		FOOT	28.0	28.0				
81012800	CONDUIT IN TRENCH, 3" DIA., PVC		FOOT	88.0	29.0	32.0	27.0		
81013000	CONDUIT IN TRENCH, 4" DIA., PVC		FOOT	77.0	44.0		33.0		
81013100	CONDUIT IN TRENCH, 5" DIA., PVC		FOOT	75.0			75.0		
81013200	CONDUIT IN TRENCH, 6" DIA., PVC		FOOT	4.0	4.0				
81021550	CONDUIT, AUGERED 2" DIA., PVC		FOOT	82.0			82.0		
81021570	CONDUIT, AUGERED 3" DIA., PVC		FOOT	551.0	173.0	179.0	199.0		
81021590	CONDUIT, AUGERED 4" DIA., PVC		FOOT	185.0	59.0		126.0		
81030100	CONDUIT SPLICE		EACH	2.0	1.0	1.0			
81400100	HANDHOLE		EACH	15.0	7.0	2.0	6.0		
81400300	DOUBLE HANDHOLE		EACH	2.0	1.0		1.0		
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK		FOOT	1,690.0	359.0	219.0	1,112.0		
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10		FOOT	1,961.0				1,961.0	
82103400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT		EACH	4.0				4.0	
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET		EACH	2.0	1.0		1.0		
86600010	GULFBOX JUNCTION		EACH	4.0			4.0		
86600020	GULFBOX JUNCTION REMOVAL		EACH	6.0			6.0		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C		FOOT	593.0	593.0				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C		FOOT	4,338.0	631.0	771.0	2,936.0		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C		FOOT	3,792.0	2,076.0	522.0	1,194.0		
87301515	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR		FOOT	6,355.0	1,833.0	1,073.0	3,449.0		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C		FOOT	44.0	20.0		24.0		
87502660	TRAFFIC SIGNAL POST, ALUMINUM 12 FT.		EACH	3.0		1.0	2.0		
87502680	TRAFFIC SIGNAL POST, ALUMINUM 14 FT.		EACH	3.0		1.0	2.0		
87502700	TRAFFIC SIGNAL POST, ALUMINUM 16 FT.		EACH	4.0	4.0				
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.		EACH	1.0	1.0				
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.		EACH	1.0	1.0				
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.		EACH	1.0	1.0				

## SUMMARY OF QUANTITIES (Cont' d)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	5

CONTRACT NO. 70415

CODE NO	ITEM	CONSTRUCTION TYPE CODE:	UNIT	TOTAL QUANTITY	LOCATION OF WORK:				
					FAP 325 IL. 16 & 6TH ST. 90% FED. 10% STATE	FAP 325 IL. 16 & 6TH ST. 90% FED. 5% STATE 5% CITY	FAP 325 IL. 16 & LOGAN ST. 90% FED. 5% STATE 5% CITY	FAP 325 IL. 16 & LERNA RD. 90% FED. 10% STATE	FAP 325 IL. 16 & LERNA RD. 100% CITY
					1000-1A	Y031 - 1F	Y031 - 1F	Y031 - 1F	Y030 - 1E
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.		EACH	2.0		1.0	1.0		
87702880	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.		EACH	2.0				2.0	
87702950	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.		EACH	1.0				1.0	
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.		EACH	1.0				1.0	
87800100	CONCRETE FOUNDATION, TYPE A		FOOT	31.0		12.4	6.2	12.4	
87800200	CONCRETE FOUNDATION, TYPE D		FOOT	7.0		3.5		3.5	
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER		FOOT	114.0		42.0	24.0	48.0	
87900200	DRILL EXISTING HANDHOLE		EACH	2.0			1.0	1.0	
88200100	TRAFFIC SIGNAL BACKPLATE		EACH	24.0		8.0	8.0	8.0	
88500100	INDUCTIVE LOOP DETECTOR		EACH	21.0		9.0		12.0	
88600100	DETECTOR LOOP, TYPE I		FOOT	2,106.0		981.0	556.0	569.0	
88800100	PEDESTRIAN PUSH-BUTTON		EACH	8.0		8.0			
89501300	RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE		EACH	1.0			1.0		
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT		EACH	1.0				1.0	
89502200	MODIFY EXISTING CONTROLLER		EACH	1.0			1.0		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT		FOOT	3,890.0		433.0	3,283.0	174.0	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT		EACH	3.0		1.0	1.0	1.0	
89502380	REMOVE EXISTING HANDHOLE		EACH	15.0		8.0	2.0	5.0	
89502385	REMOVE EXISTING CONCRETE FOUNDATION		EACH	23.0		10.0	4.0	9.0	
X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70		TON	43.0					
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C		FOOT	1,462.0		589.0		873.0	
X8801300	SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED		EACH	4.0			2.0	2.0	
X8801310	SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED		EACH	16.0		4.0	6.0	6.0	
X8801400	SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED		EACH	8.0		4.0	2.0	2.0	
X8801415	SIGNAL HEAD ,POLYCARBONATE, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED		EACH	2.0				2.0	
X8801437	SIGNAL HEAD ,POLYCARBONATE, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED		EACH	8.0		4.0	2.0	2.0	
X8810495	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, BRACKET MOUNTED		EACH	4.0		4.0			

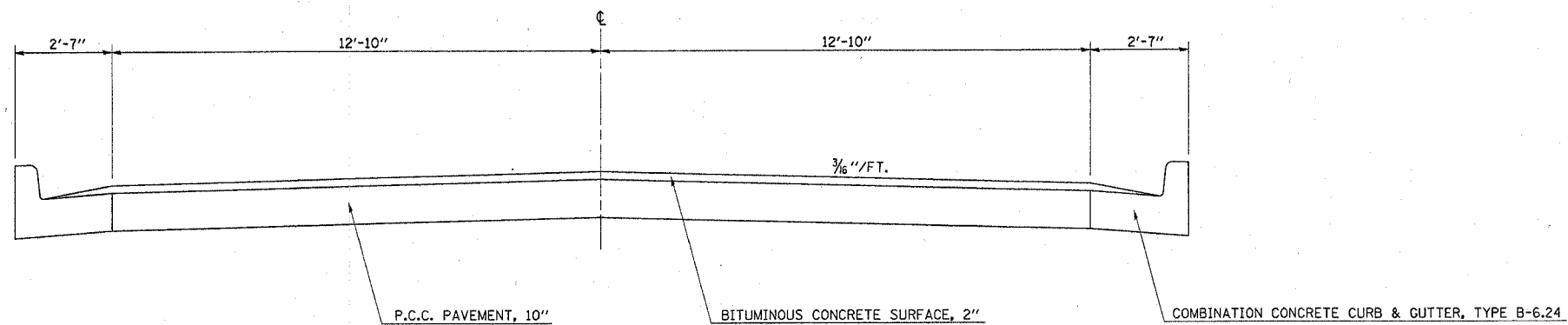
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	6

CONTRACT NO. 70415

### EXISTING TYPICAL CROSS SECTION

#### 6TH ST.

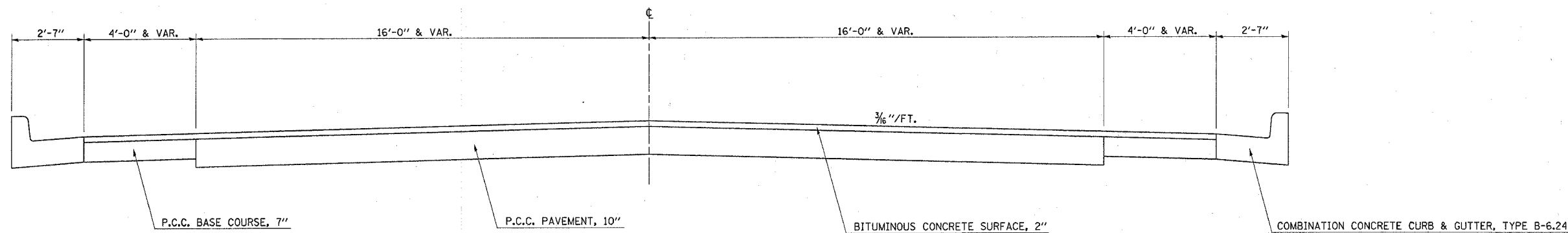
STATION 96+56 TO STATION 98+10.5



### EXISTING TYPICAL CROSS SECTION

#### 6TH ST.

STATION 98+10.5 TO STATION 98+82



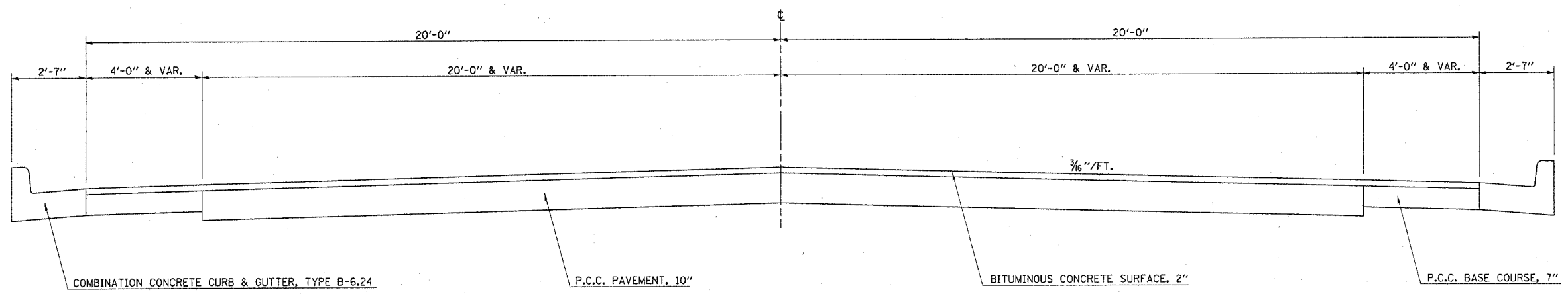
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	7

CONTRACT NO. 70415

### EXISTING TYPICAL CROSS SECTION

#### 6TH ST.

STATION 98+82 TO STATION 99+31



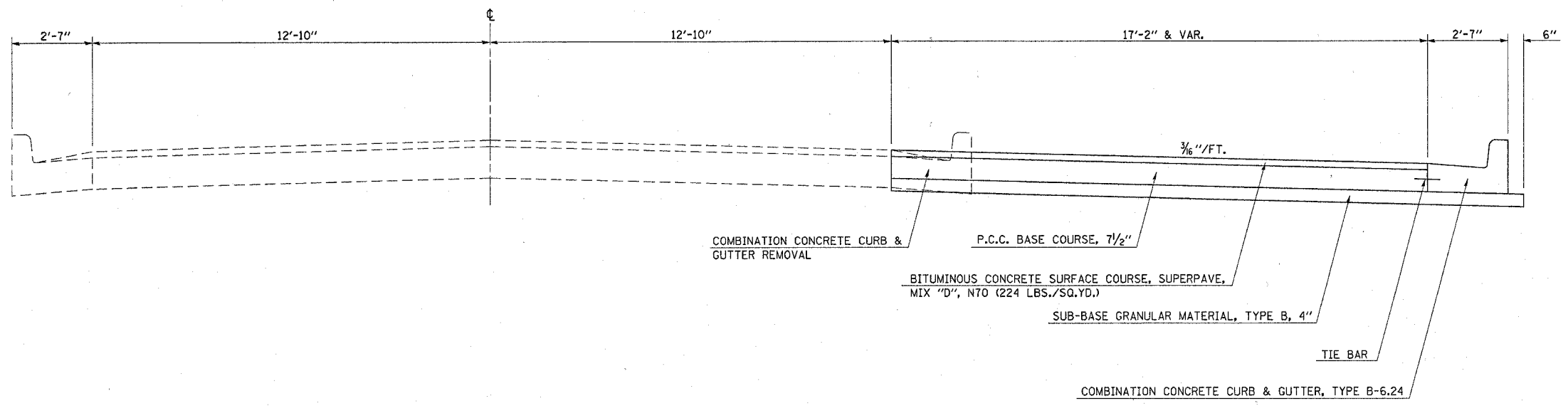
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	8

CONTRACT NO. 70415

### PROPOSED TYPICAL CROSS SECTION

#### 6TH ST.

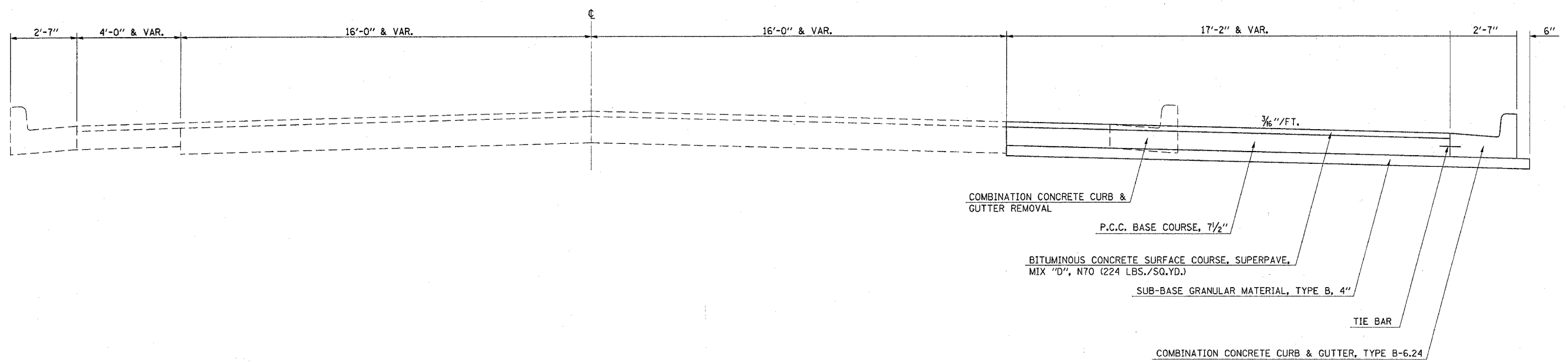
STATION 96+56 TO STATION 98+00



### PROPOSED TYPICAL CROSS SECTION

#### 6TH ST.

STATION 98+00 TO STATION 98+82





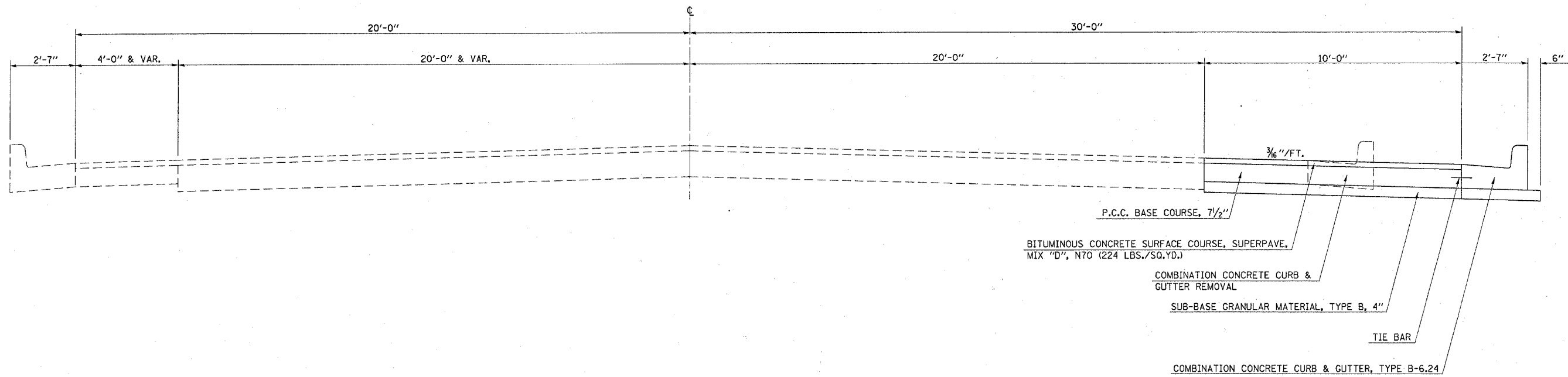
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	9

CONTRACT NO. 70415

### PROPOSED TYPICAL CROSS SECTION

### 6TH ST.

STATION 98+82 TO STATION 99+35



## 6TH STREET SCHEDULE OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	10

CONTRACT NO. 70415

TREE REMOVAL OVER 15

<u>LOCATION</u>	<u>UNIT</u>
STA. 97+33; 29.3' RT.	16 UNIT

SODDING, SALT TOLERANT

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>SQ. YD.</u>
96+49 RT.		97+10 RT.	33
97+11 RT.		97+68.5 RT.	36
98+14.5 RT.		99+36 RT.	25
TOTAL =			94 SQ. YD.

PCC DRIVEWAY PAVT 6

<u>LOCATION</u>	<u>SQ. YD.</u>
RT. 97+97	23 SQ. YD.

PC CONCRETE SIDEWALK 5

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>SQ. FT.</u>
RT. 97+10		RT. 97+15.5	69
RT. 99+24		RT. 99+52	85
TOTAL =			154 SQ. FT.

PAVEMENT REMOVAL

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>SQ. YD.</u>
98+10.5; 14.2' R		99+70.0; 42.0' R	55 SQ. YD.

DRIVE PAVEMENT REMOVAL

<u>LOCATION</u>	<u>SQ. YD.</u>
RT. 97+97	62 SQ. YD.

COMB CURB & GUTTER REM

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>FOOT</u>
RT. 96+56		RT. 99+57	348 FOOT

SIDEWALK REMOVAL

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>SQ. FT.</u>
RT. 97+02.3		RT. 97+23.7	134
RT. 99+29.2		RT. 99+32.0	150
TOTAL =			284 SQ. FT.

SS 1 RCP CL 4 12

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>FOOT</u>
35+03.5; 36.5' L		35+13.7; 38.0' R	10 FOOT

INLETS TA T3F&G

<u>LOCATION</u>	<u>EACH</u>
STA. 35+13.7; 38.0' RT.	1 EACH

MAN ADJ NEW TIF CL

<u>LOCATION</u>	<u>EACH</u>
STA. 98+33; 24.2' RT.	1 EACH

REMOVE CB - MAINTAIN FLOW

<u>LOCATION</u>	<u>EACH</u>
STA. 35+06.2; 36' RT.	1 EACH

THPL PVT MK LINE 4

<u>STATION</u>	<u>TO</u>	<u>STATION</u>	<u>FOOT</u>	
CL 96+52.3		CL 98+15.5	164	YELLOW
CL 98+15.5		98+75.8; 6' LT.	120	DBL YELLOW
98+75.8; 6' LT.		99+43.8; 6' LT.	136	DBL YELLOW
98+75.8; 6' RT.		99+43.8; 6' RT.	69	WHITE
98+20.6; 18' RT.		99+43.8; 18' RT.	124	WHITE
TOTAL =			613 FOOT	

THPL PVT MK LTR & SYM

<u>LOCATION</u>	<u>SQ. FT.</u>
98+20.5 RT TURN LANE	15.6
98+73.5 RT TURN LANE	15.6
98+75.0 LT TURN LANE	15.6
99+22.5 LT TURN LANE	15.6
99+22.5 RT TURN LANE	15.6
TOTAL = 78 SQ. FT.	

THPL PVT MRK LINE 6

<u>LOCATION</u>	<u>FOOT</u>
SOUTH CROSS WALK	125
EAST CROSS WALK	170
TOTAL = 295 FOOT	

THPL PVT MRK LINE 24

<u>LOCATION</u>	<u>FOOT</u>
SOUTH LEG STOP BAR	38 FOOT

PAVT MARKING REMOVAL

<u>LOCATION</u>	<u>SQ. FT.</u>
EAST CROSSWALK	45
SOUTH CROSSWALK	11
SOUTH STOP BAR	28
TOTAL = 84 SQ. FT.	

REMOVE EXIST HANDHOLE

<u>LOCATION</u>	<u>EACH</u>
34+21.9; 45.6' RT.	1
34+35.1; 52.1' RT	1
34+34.5; 60.0' LT.	1
34+94.9; 53.9' LT.	1
35+27.3; 36.9' LT.	1
35+16.0; 40.2' RT.	1
98+27.9; 23.5' RT.	1
101+70.1; 24.5' LT.	1
TOTAL = 8 EACH	

REMOVE EXIST CONC FOUNDATION

<u>LOCATION</u>	<u>EACH</u>
34+23.5; 42.8' RT.	1
34+31.2; 52.2' RT.	1
34+14.6; 41.3' LT.	1
34+26.2; 42.6' LT.	1
34+36.9; 64.6' LT.	1
34+94.4; 60.8' LT.	1
34+95.7; 56.9' LT.	1
35+11.9; 42.1' LT.	1
34+95.1; 53.6' RT.	1
35+06.3; 43.3' RT.	1
TOTAL = 10 EACH	

HANDHOLE

<u>LOCATION</u>	<u>EACH</u>
34+24.0; 43.0' LT.	1
34+37.5; 54.8' LT.	1
34+99.0; 71.0' RT.	1
35+17.3; 45.5' RT.	1
34+14.3; 43.0' RT.	1
34+29.5; 56.0' RT.	1
35+18.0; 43.7' LT.	1
TOTAL = 7 EACH	

CONC FOUNDATION TY A

<u>LOCATION</u>	<u>FOOT</u>
34+24.5; 44.0' RT.	3.1
34+34.5; 54.0' LT.	3.1
35+04.3; 56.5' RT.	3.1
35+09.5; 42.5' LT.	3.1
TOTAL = 12.4 FOOT	

TS POST A 16

<u>LOCATION</u>	<u>FOOT</u>
34+24.5; 44.0' RT.	1
34+34.5; 54.0' LT.	1
35+04.3; 56.5' RT.	1
35+09.5; 42.5' LT.	1
TOTAL = 4 FOOT	

CONC FOUNDATION TY D

<u>LOCATION</u>	<u>FOOT</u>
34+95.8; 68.0' LT.	3.5 FOOT

CONC FOUNDATION TY E

<u>LOCATION</u>	<u>FOOT</u>
34+10.0; 42.5' LT.	11
34+30.5; 60.2' RT.	10
34+95.8; 68.0' LT.	10
35+33.0; 38.5' RT.	11
TOTAL = 42 FOOT	

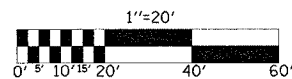
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	11

CONTRACT NO. 70415

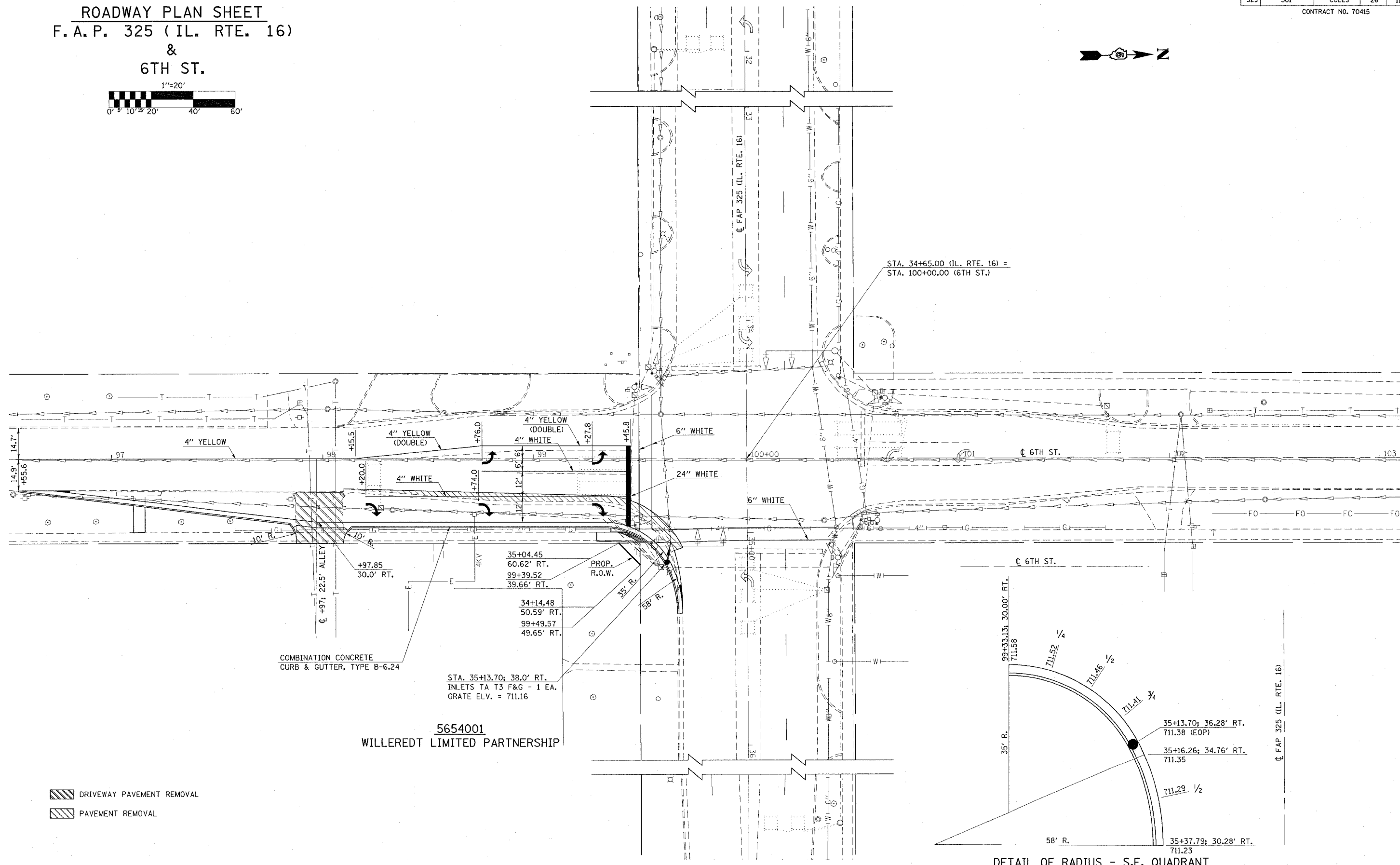
# ROADWAY PLAN SHEET

## F.A.P. 325 (IL. RTE. 16)

### & 6TH ST.



STA. 34+65.00 (IL. RTE. 16) =  
STA. 100+00.00 (6TH ST.)



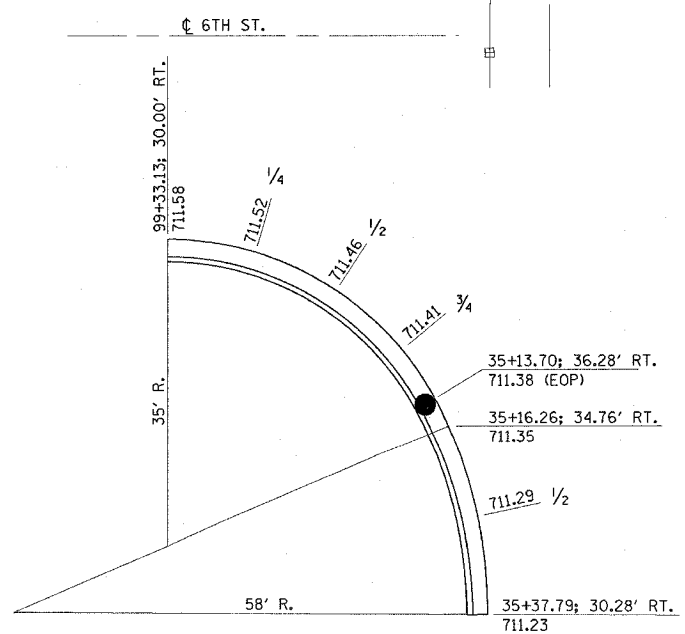
COMBINATION CONCRETE  
CURB & GUTTER, TYPE B-6.24

35+04.45  
60.62' RT.  
99+39.52  
39.66' RT.

34+14.48  
50.59' RT.  
99+49.57  
49.65' RT.

STA. 35+13.70; 38.0' RT.  
INLETS TA T3 F&G - 1 EA.  
GRATE ELV. = 711.16

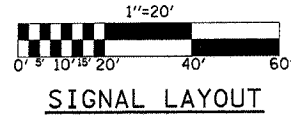
5654001  
WILLEREDT LIMITED PARTNERSHIP



DETAIL OF RADIUS - S.E. QUADRANT

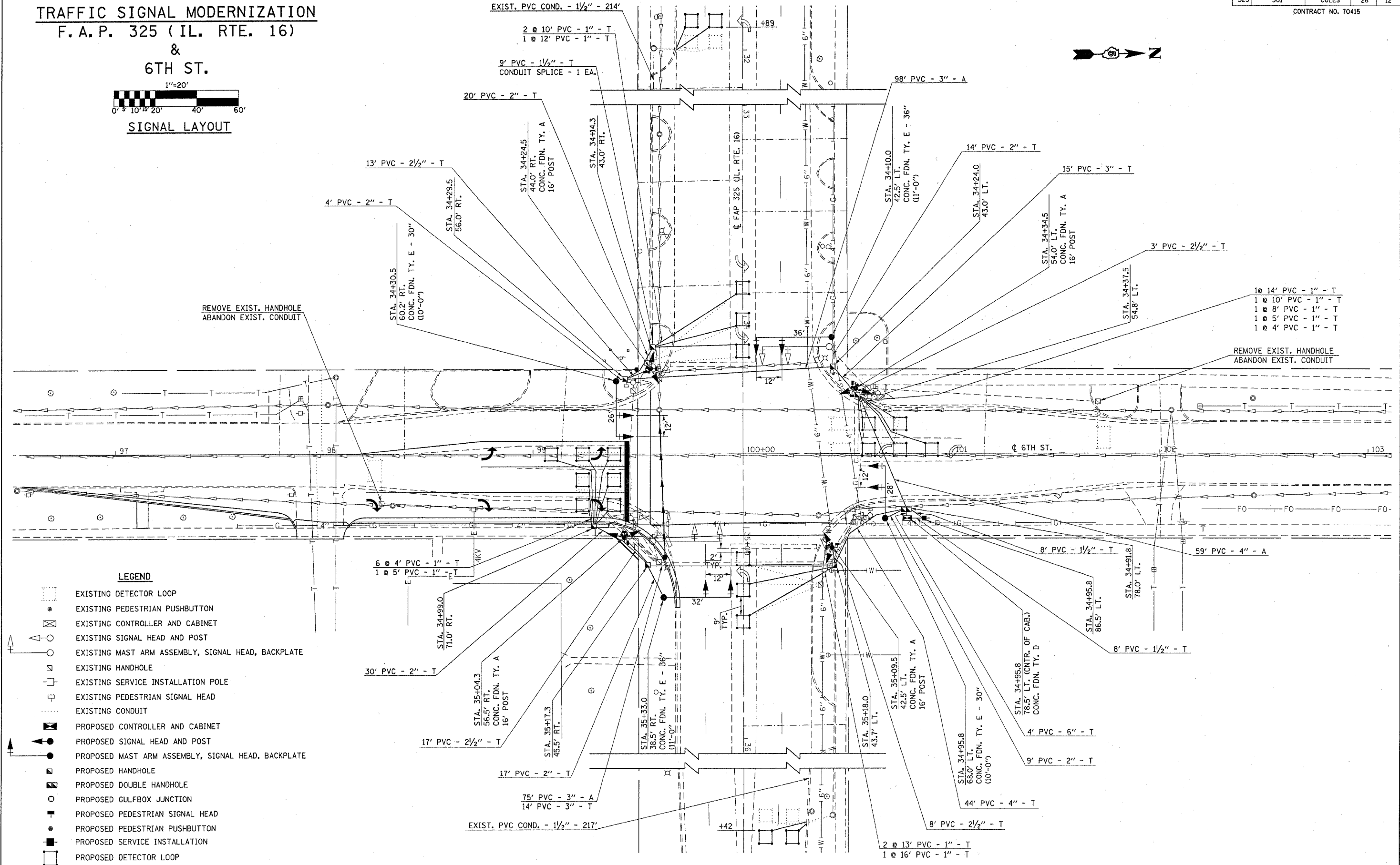
- DRIVEWAY PAVEMENT REMOVAL
- PAVEMENT REMOVAL

# TRAFFIC SIGNAL MODERNIZATION F.A.P. 325 (IL. RTE. 16) & 6TH ST.



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	12

CONTRACT NO. 70415

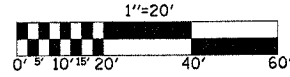


### LEGEND

- EXISTING DETECTOR LOOP
- EXISTING PEDESTRIAN PUSHBUTTON
- EXISTING CONTROLLER AND CABINET
- EXISTING SIGNAL HEAD AND POST
- EXISTING MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- EXISTING HANDHOLE
- EXISTING SERVICE INSTALLATION POLE
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING CONDUIT
- PROPOSED CONTROLLER AND CABINET
- PROPOSED SIGNAL HEAD AND POST
- PROPOSED MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- PROPOSED HANDHOLE
- PROPOSED DOUBLE HANDHOLE
- PROPOSED GULFTOX JUNCTION
- PROPOSED PEDESTRIAN SIGNAL HEAD
- PROPOSED PEDESTRIAN PUSHBUTTON
- PROPOSED SERVICE INSTALLATION
- PROPOSED DETECTOR LOOP

# TRAFFIC SIGNAL MODERNIZATION F.A.P. 325 (IL. RTE. 16)

&  
6TH ST.



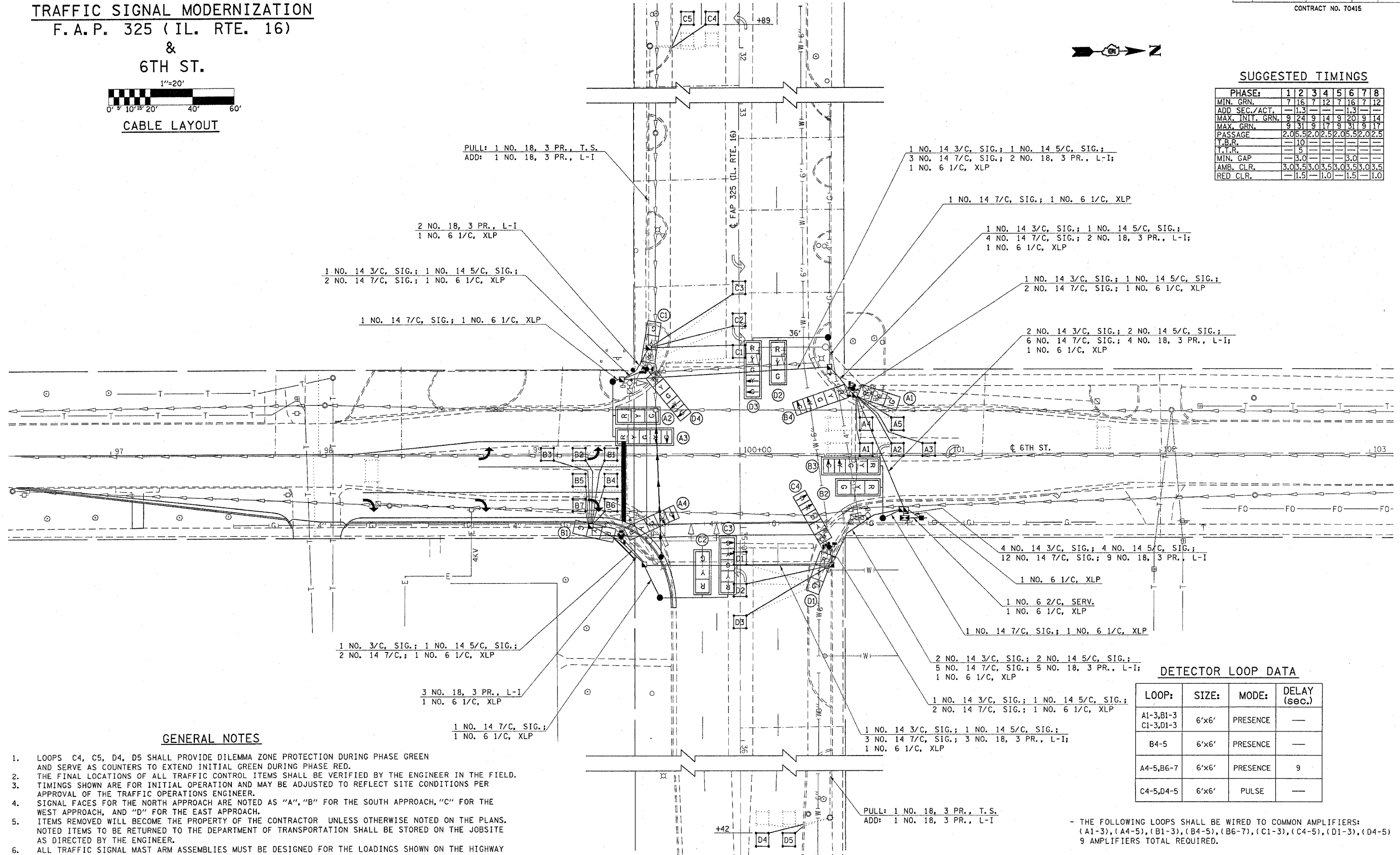
CABLE LAYOUT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	13

CONTRACT NO. 70415

### SUGGESTED TIMINGS

PHASE:	1	2	3	4	5	6	7	8
MIN. GRN.	7	16	7	12	7	16	7	12
ADD. SEC./ACT.	-	1.3	-	-	1.3	-	-	-
MAX. INIT. GRN.	9	24	9	14	9	20	9	14
MAX. GRN.	9	31	9	17	9	31	9	17
PASSAGE	2.05	5.2	2.02	5.2	2.05	5.2	2.02	5.2
T.B.R.	-	10	-	-	-	-	-	-
T.T.R.	-	5	-	-	-	-	-	-
MIN. GAP	-	3.0	-	-	3.0	-	-	-
AMB. CLR.	3.0	3.5	3.0	3.5	3.0	3.5	3.0	3.5
RED CLR.	-	1.5	-	1.0	-	1.5	-	1.0



1 NO. 14 7/C, SIG.; 1 NO. 6 1/C, XLP

1 NO. 14 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
2 NO. 14 7/C, SIG.; 1 NO. 6 1/C, XLP

2 NO. 18, 3 PR., L-I  
1 NO. 6 1/C, XLP

PULL: 1 NO. 18, 3 PR., T.S.  
ADD: 1 NO. 18, 3 PR., L-I

1 NO. 14 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
3 NO. 14 7/C, SIG.; 2 NO. 18, 3 PR., L-I;  
1 NO. 6 1/C, XLP

1 NO. 14 7/C, SIG.; 1 NO. 6 1/C, XLP

1 NO. 14 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
4 NO. 14 7/C, SIG.; 2 NO. 18, 3 PR., L-I;  
1 NO. 6 1/C, XLP

1 NO. 14 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
2 NO. 14 7/C, SIG.; 1 NO. 6 1/C, XLP

2 NO. 14 3/C, SIG.; 2 NO. 14 5/C, SIG.;  
6 NO. 14 7/C, SIG.; 4 NO. 18, 3 PR., L-I;  
1 NO. 6 1/C, XLP

4 NO. 14 3/C, SIG.; 4 NO. 14 5/C, SIG.;  
12 NO. 14 7/C, SIG.; 9 NO. 18, 3 PR., L-I

1 NO. 6 1/C, XLP  
1 NO. 6 2/C, SERV.  
1 NO. 6 1/C, XLP

1 NO. 14 7/C, SIG.; 1 NO. 6 1/C, XLP

1 NO. 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
2 NO. 14 7/C.; 1 NO. 6 1/C, XLP

3 NO. 18, 3 PR., L-I  
1 NO. 6 1/C, XLP

1 NO. 14 7/C, SIG.;  
1 NO. 6 1/C, XLP

1 NO. 14 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
2 NO. 14 7/C, SIG.; 1 NO. 6 1/C, XLP

1 NO. 14 3/C, SIG.; 1 NO. 14 5/C, SIG.;  
3 NO. 14 7/C, SIG.; 3 NO. 18, 3 PR., L-I;  
1 NO. 6 1/C, XLP

PULL: 1 NO. 18, 3 PR., T.S.  
ADD: 1 NO. 18, 3 PR., L-I

### GENERAL NOTES

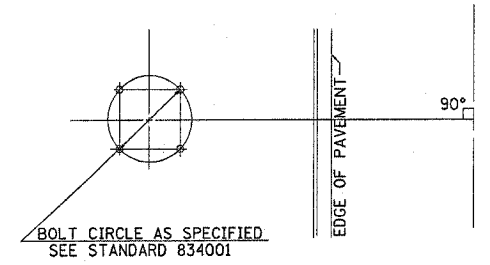
1. LOOPS C4, C5, D4, D5 SHALL PROVIDE DILEMMA ZONE PROTECTION DURING PHASE GREEN AND SERVE AS COUNTERS TO EXTEND INITIAL GREEN DURING PHASE RED.
2. THE FINAL LOCATIONS OF ALL TRAFFIC CONTROL ITEMS SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.
3. TIMINGS SHOWN ARE FOR INITIAL OPERATION AND MAY BE ADJUSTED TO REFLECT SITE CONDITIONS PER APPROVAL OF THE TRAFFIC OPERATIONS ENGINEER.
4. SIGNAL FACES FOR THE NORTH APPROACH ARE NOTED AS "A", "B" FOR THE SOUTH APPROACH, "C" FOR THE WEST APPROACH, AND "D" FOR THE EAST APPROACH.
5. ITEMS REMOVED WILL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. NOTED ITEMS TO BE RETURNED TO THE DEPARTMENT OF TRANSPORTATION SHALL BE STORED ON THE JOBSITE AS DIRECTED BY THE ENGINEER.
6. ALL TRAFFIC SIGNAL MAST ARM ASSEMBLIES MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.

### DETECTOR LOOP DATA

LOOP:	SIZE:	MODE:	DELAY (sec.)
A1-3,B1-3 C1-3,D1-3	6'x6'	PRESENCE	—
B4-5	6'x6'	PRESENCE	—
A4-5,B6-7	6'x6'	PRESENCE	9
C4-5,D4-5	6'x6'	PULSE	—

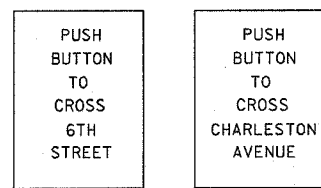
- THE FOLLOWING LOOPS SHALL BE WIRED TO COMMON AMPLIFIERS: (A1-3), (A4-5), (B1-3), (B4-5), (B6-7), (C1-3), (C4-5), (D1-3), (D4-5) 9 AMPLIFIERS TOTAL REQUIRED.
- THE CONTROLLER SHALL BE SET TO MINIMUM RECALL IL. RTE. 16.

**B I L L O F M A T E R I A L S**  
**IL. ROUTE 16 & SIXTH ST.**



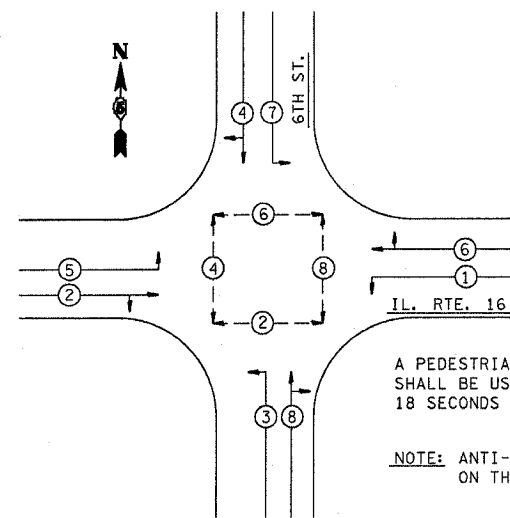
**DETAIL OF MAST ARM FOUNDATION  
BOLT PATTERN**

**PEDESTRIAN PUSH-BUTTON SIGNS**



**NOTE:** PEDESTRIAN PUSH-BUTTON SIGNS SHALL BE MOUNTED ABOVE THE PEDESTRIAN PUSH-BUTTONS. THE SIGNS SHALL BE BOLTED TO THE POSTS. THE SIGNS SHALL BE CONSIDERED AS INCLUDED IN THE COST OF PEDESTRIAN PUSH-BUTTONS IN ACCORDANCE WITH SECTION 888 OF THE STANDARD SPECIFICATIONS.

**PHASE DESIGNATION DIAGRAM**



A PEDESTRIAN CLEARANCE INTERVAL OF 20 SECONDS SHALL BE USED FOR PHASE 2; 24 SECONDS FOR PHASE 4; 18 SECONDS FOR PHASE 6; 26 SECONDS FOR PHASE 8.

**NOTE:** ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE BACKPANEL OF THE CONTROLLER.

**ITEMS TO BE RETURNED TO THE CITY OF MATTOON**

ITEM	QUANTITY
CABINET & CONTROLLER	1 EA.
TS POST & BASE, ALUMINUM	1 EA.
SERVICE INSTALLATION	1 EA.
PED PUSH BUTTON & POST	1 EA.

ITEM	UNIT	QUANTITY
SERVICE INSTALLATION, TYPE A	EACH	1
WOOD POLE, 35 FT., CLASS 4	EACH	1
CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	144
CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	16
CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	94
CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	28
CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	29
CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	44
CONDUIT IN TRENCH, 6" DIA., PVC	FOOT	4
CONDUIT, AUGERED 3" DIA., PVC	FOOT	173
CONDUIT, AUGERED 4" DIA., PVC	FOOT	59
CONDUIT SPLICE	EACH	1
HANDHOLE	EACH	7
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	359
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	593
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	631
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2076
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	1833
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	20
TRAFFIC SIGNAL POST, ALUMINUM 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12.4
CONCRETE FOUNDATION, TYPE D	FOOT	3.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	42
TRAFFIC SIGNAL BACKPLATE	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	9
DETECTOR LOOP, TYPE I	FOOT	981
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	433
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	8
REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	589
SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EAC	4
SIGNAL HEAD ,POLYCARBONATE, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EAC	4
PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, BRACKET MOUNTED	EAC	4

**GENERAL NOTES**

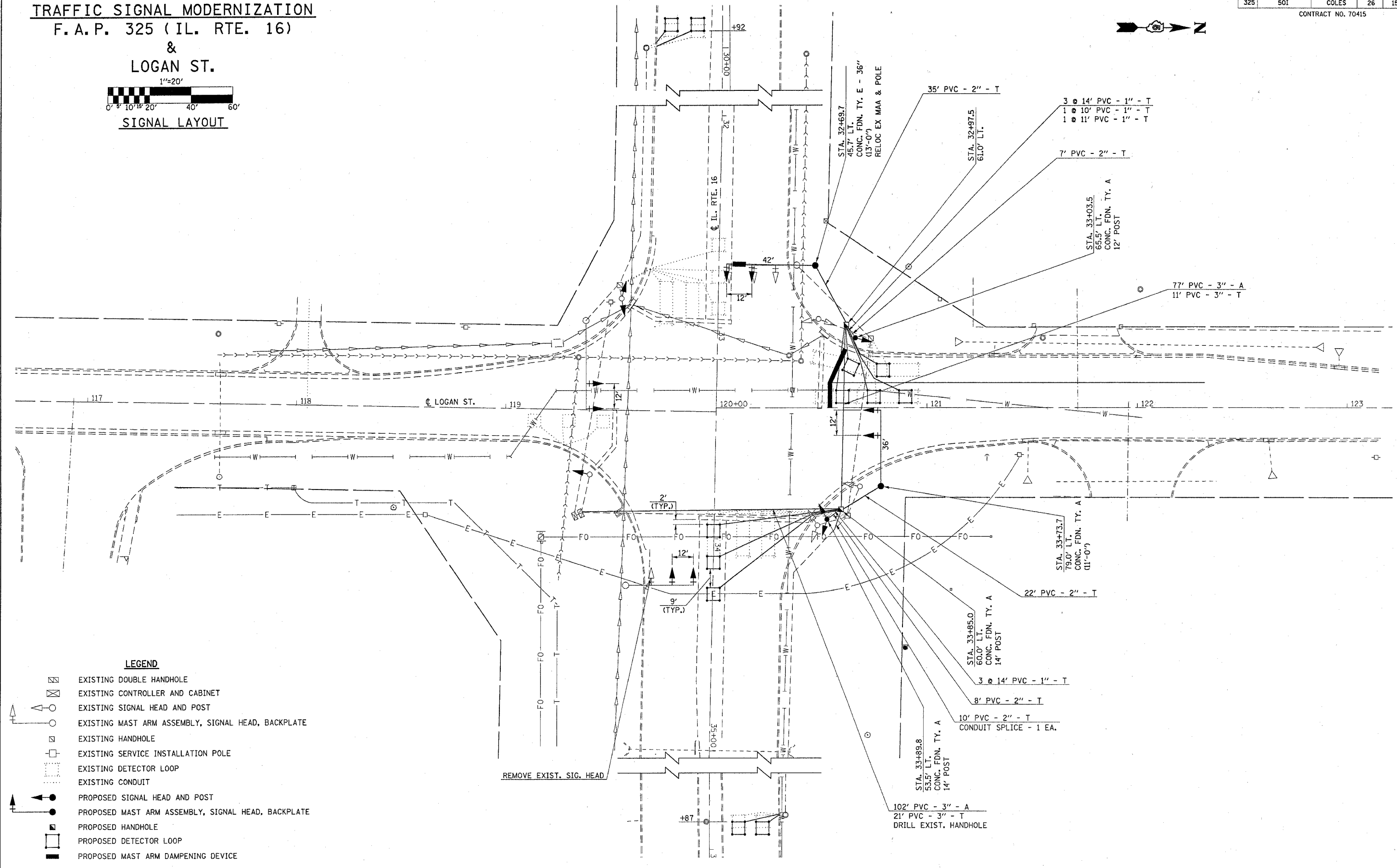
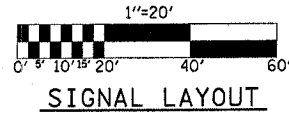
1. THE FOLLOWING SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE: (A2, A3), (B2, B3), (C2, C3), (D2, D3) - EACH MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE TO THE SIGNAL HEAD.
2. THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND TRAFFIC CONTROLLER WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. POST MOUNTED SIGNALS SHALL BE INSTALLED SO THAT NO PART OF THE SIGNAL HEAD IS WITHIN 2 FT. OF THE FACE OF CURB.
4. ALL MAST ARM POLES SHALL BE A MINIMUM OF 6 FT. FROM THE CENTER OF THE POLE TO THE FACE OF CURB (ON THE MAST ARM SIDE) OR AS SHOWN ON THE PLANS.
5. ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
6. THE BASE FOR A TRAFFIC SIGNAL POST SHALL BE SITUATED SUCH THAT THE HANDHOLE IS LOCATED ON A SIDE AWAY FROM A TRAVELED LANE.
7. PEDESTRIAN PUSHBUTTON SIGNAL SIGNS SHALL BE MOUNTED ABOVE THE APPROPRIATE PEDESTRIAN PUSHBUTTON.
8. THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE BACKPANEL OF THE CONTROLLER CABINET.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	15

CONTRACT NO. 70415

# TRAFFIC SIGNAL MODERNIZATION F.A.P. 325 (IL. RTE. 16)

## & LOGAN ST.

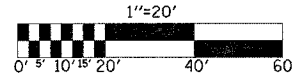


### LEGEND

- EXISTING DOUBLE HANDHOLE
- EXISTING CONTROLLER AND CABINET
- EXISTING SIGNAL HEAD AND POST
- EXISTING MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- EXISTING HANDHOLE
- EXISTING SERVICE INSTALLATION POLE
- EXISTING DETECTOR LOOP
- EXISTING CONDUIT
- PROPOSED SIGNAL HEAD AND POST
- PROPOSED MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- PROPOSED HANDHOLE
- PROPOSED DETECTOR LOOP
- PROPOSED MAST ARM DAMPENING DEVICE

# TRAFFIC SIGNAL MODERNIZATION F.A.P. 325 (IL. RTE. 16)

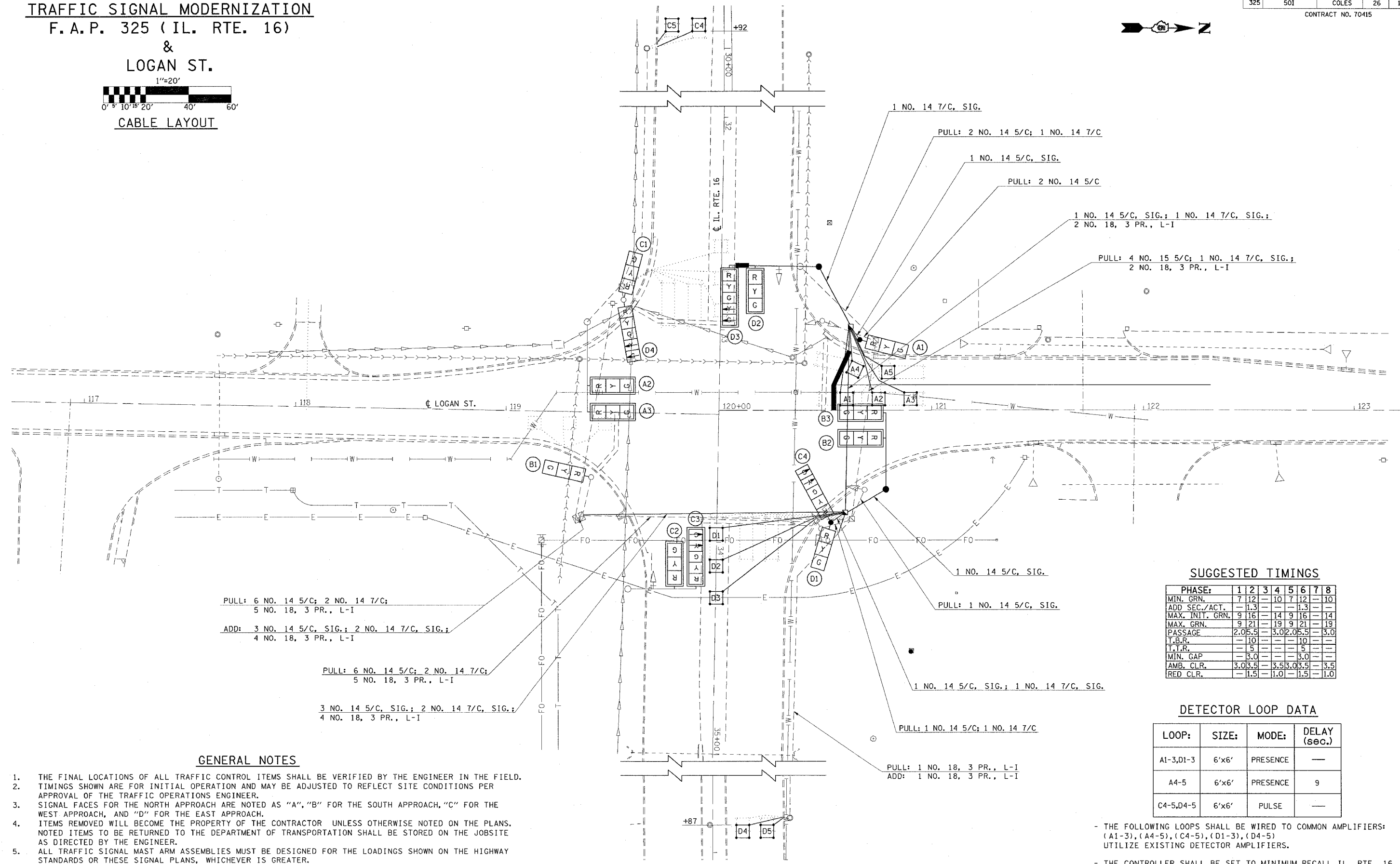
## & LOGAN ST.



CABLE LAYOUT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	16

CONTRACT NO. 70415



PULL: 6 NO. 14 5/C; 2 NO. 14 7/C;  
5 NO. 18, 3 PR., L-I

ADD: 3 NO. 14 5/C, SIG.; 2 NO. 14 7/C, SIG.;  
4 NO. 18, 3 PR., L-I

PULL: 6 NO. 14 5/C; 2 NO. 14 7/C;  
5 NO. 18, 3 PR., L-I

3 NO. 14 5/C, SIG.; 2 NO. 14 7/C, SIG.;  
4 NO. 18, 3 PR., L-I

1 NO. 14 7/C, SIG.  
PULL: 2 NO. 14 5/C; 1 NO. 14 7/C

1 NO. 14 5/C, SIG.

PULL: 2 NO. 14 5/C

1 NO. 14 5/C, SIG.; 1 NO. 14 7/C, SIG.;  
2 NO. 18, 3 PR., L-I

PULL: 4 NO. 15 5/C; 1 NO. 14 7/C, SIG.;  
2 NO. 18, 3 PR., L-I

1 NO. 14 5/C, SIG.

PULL: 1 NO. 14 5/C, SIG.

1 NO. 14 5/C, SIG.; 1 NO. 14 7/C, SIG.

PULL: 1 NO. 14 5/C; 1 NO. 14 7/C

PULL: 1 NO. 18, 3 PR., L-I  
ADD: 1 NO. 18, 3 PR., L-I

### GENERAL NOTES

- THE FINAL LOCATIONS OF ALL TRAFFIC CONTROL ITEMS SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.
- TIMINGS SHOWN ARE FOR INITIAL OPERATION AND MAY BE ADJUSTED TO REFLECT SITE CONDITIONS PER APPROVAL OF THE TRAFFIC OPERATIONS ENGINEER.
- SIGNAL FACES FOR THE NORTH APPROACH ARE NOTED AS "A", "B" FOR THE SOUTH APPROACH, "C" FOR THE WEST APPROACH, AND "D" FOR THE EAST APPROACH.
- ITEMS REMOVED WILL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. NOTED ITEMS TO BE RETURNED TO THE DEPARTMENT OF TRANSPORTATION SHALL BE STORED ON THE JOBSITE AS DIRECTED BY THE ENGINEER.
- ALL TRAFFIC SIGNAL MAST ARM ASSEMBLIES MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.

### SUGGESTED TIMINGS

PHASE:	1	2	3	4	5	6	7	8
MIN. GRN.	7	12	10	7	12	10	7	10
ADD SEC./ACT.	-	1.3	-	-	1.3	-	-	-
MAX. INIT. GRN.	9	16	14	9	16	14	9	14
MAX. GRN.	9	21	19	9	21	19	9	19
PASSAGE	2.05	5	3.02	0.5	3.0	0.5	3.0	0.5
T.B.R.	-	10	-	-	10	-	-	10
T.T.R.	-	5	-	-	5	-	-	5
MIN. GAP	-	3.0	-	-	3.0	-	-	3.0
AMB. CLR.	3.0	3.5	3.0	3.5	3.0	3.5	3.0	3.5
RED CLR.	-	1.5	-	1.0	-	1.5	-	1.0

### DETECTOR LOOP DATA

LOOP:	SIZE:	MODE:	DELAY (sec.)
A1-3, D1-3	6'x6'	PRESENCE	—
A4-5	6'x6'	PRESENCE	9
C4-5, D4-5	6'x6'	PULSE	—

- THE FOLLOWING LOOPS SHALL BE WIRED TO COMMON AMPLIFIERS: (A1-3), (A4-5), (C4-5), (D1-3), (D4-5) UTILIZE EXISTING DETECTOR AMPLIFIERS.
- THE CONTROLLER SHALL BE SET TO MINIMUM RECALL IL. RTE. 16.



## LOGAN ST. SCHEDULE OF QUANTITIES

REMOVE EXIST CONC FOUNDATION

LOCATION	EACH
32+70.0; 31.5' LT.	1
32+96.0; 47.0' LT.	1
33+74.0; 68.5' LT.	1
33+93.2; 48.5' LT.	1
<b>TOTAL =</b>	<b>4 EACH</b>

REMOVE EXIST HANDHOLE

LOCATION	EACH
33+04.5; 72.5' LT.	1
33+88.5; 63.0' LT.	1
<b>TOTAL =</b>	<b>2 EACH</b>

CONC FOUNDATION TY A

LOCATION	FOOT
32+97.5; 65.5' LT.	3.1
33+89.8; 53.5' LT.	3.1
<b>TOTAL =</b>	<b>6.2 FOOT</b>

CONC FOUNDATION TY E 36D

LOCATION	FOOT
32+69.7; 45.7' LT.	11
33+73.7; 79.0' LT.	13
<b>TOTAL =</b>	<b>24 FOOT</b>

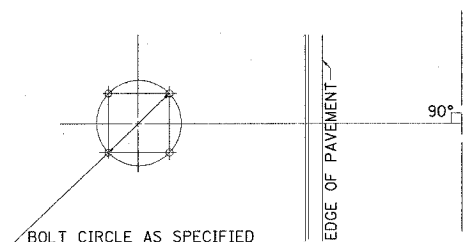
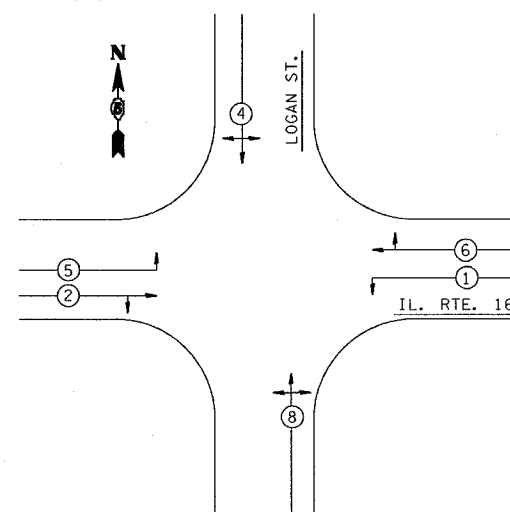
## BILL OF MATERIALS IL. ROUTE 16 & LOGAN ST.

ITEM	UNIT	QUANTITY
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	219
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	771
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	522
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	1073
TRAFFIC SIGNAL POST, ALUMINUM 12 FT.	EACH	1
TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	6.2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	24
DRILL EXISTING HANDHOLE	EACH	1
TRAFFIC SIGNAL BACKPLATE	EACH	8
DETECTOR LOOP, TYPE I	FOOT	556
RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3283
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, MO	EACH	2
CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	105
CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	82
CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	32
CONDUIT, AUGERED 3" DIA., PVC	FOOT	179
CONDUIT SPLICE	EACH	1
HANDHOLE	EACH	2

### GENERAL NOTES

- THE FOLLOWING SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE: (A2, A3), (B2, B3), (C2, C3), (D2, D3) - EACH MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE TO THE SIGNAL HEAD.
- THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND TRAFFIC CONTROLLER WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- POST MOUNTED SIGNALS SHALL BE INSTALLED SO THAT NO PART OF THE SIGNAL HEAD IS WITHIN 2 FT. OF THE FACE OF CURB.
- ALL MAST ARM POLES SHALL BE A MINIMUM OF 6 FT. FROM THE CENTER OF THE POLE TO THE FACE OF CURB (ON THE MAST ARM SIDE) OR AS SHOWN ON THE PLANS.
- ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
- THE BASE FOR A TRAFFIC SIGNAL POST SHALL BE SITUATED SUCH THAT THE HANDHOLE IS LOCATED ON A SIDE AWAY FROM A TRAVELED LANE.

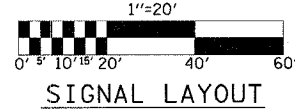
### PHASE DESIGNATION DIAGRAM



**DETAIL OF MAST ARM FOUNDATION  
BOLT PATTERN**

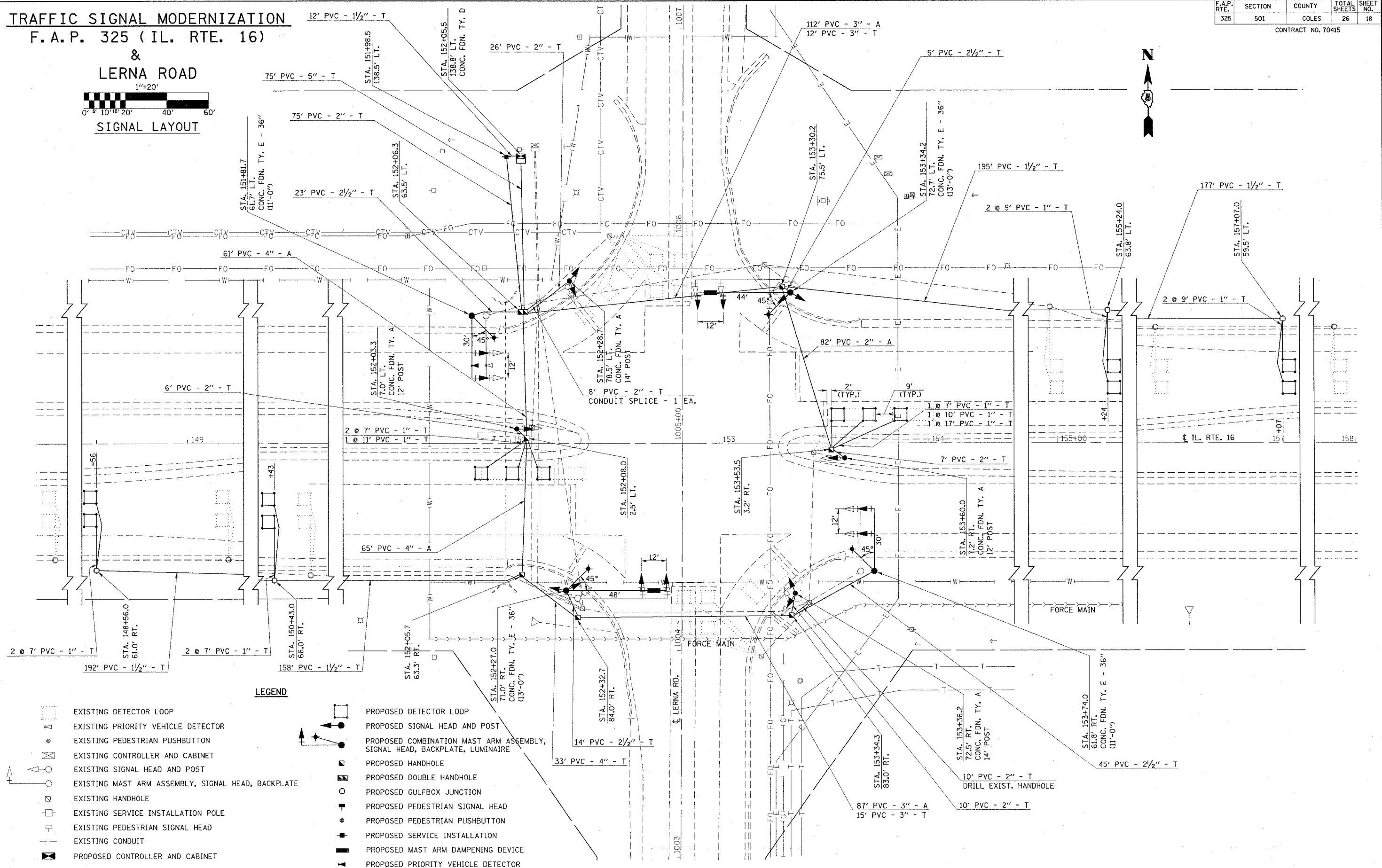
# TRAFFIC SIGNAL MODERNIZATION F.A.P. 325 (IL. RTE. 16)

## & LERNA ROAD



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	18

CONTRACT NO. 70415



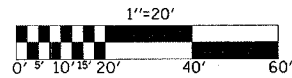
### LEGEND

- |  |                                                    |  |                                                                           |
|--|----------------------------------------------------|--|---------------------------------------------------------------------------|
|  | EXISTING DETECTOR LOOP                             |  | PROPOSED DETECTOR LOOP                                                    |
|  | EXISTING PRIORITY VEHICLE DETECTOR                 |  | PROPOSED SIGNAL HEAD AND POST                                             |
|  | EXISTING PEDESTRIAN PUSHBUTTON                     |  | PROPOSED COMBINATION MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE, LUMINAIRE |
|  | EXISTING CONTROLLER AND CABINET                    |  | PROPOSED HANDHOLE                                                         |
|  | EXISTING SIGNAL HEAD AND POST                      |  | PROPOSED DOUBLE HANDHOLE                                                  |
|  | EXISTING MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE |  | PROPOSED GULFBOX JUNCTION                                                 |
|  | EXISTING HANDHOLE                                  |  | PROPOSED PEDESTRIAN SIGNAL HEAD                                           |
|  | EXISTING SERVICE INSTALLATION POLE                 |  | PROPOSED PEDESTRIAN PUSHBUTTON                                            |
|  | EXISTING PEDESTRIAN SIGNAL HEAD                    |  | PROPOSED SERVICE INSTALLATION                                             |
|  | EXISTING CONDUIT                                   |  | PROPOSED MAST ARM DAMPENING DEVICE                                        |
|  | PROPOSED CONTROLLER AND CABINET                    |  | PROPOSED PRIORITY VEHICLE DETECTOR                                        |

# TRAFFIC SIGNAL MODERNIZATION

F.A.P. 325 (IL. RTE. 16)

&  
LERNA ROAD



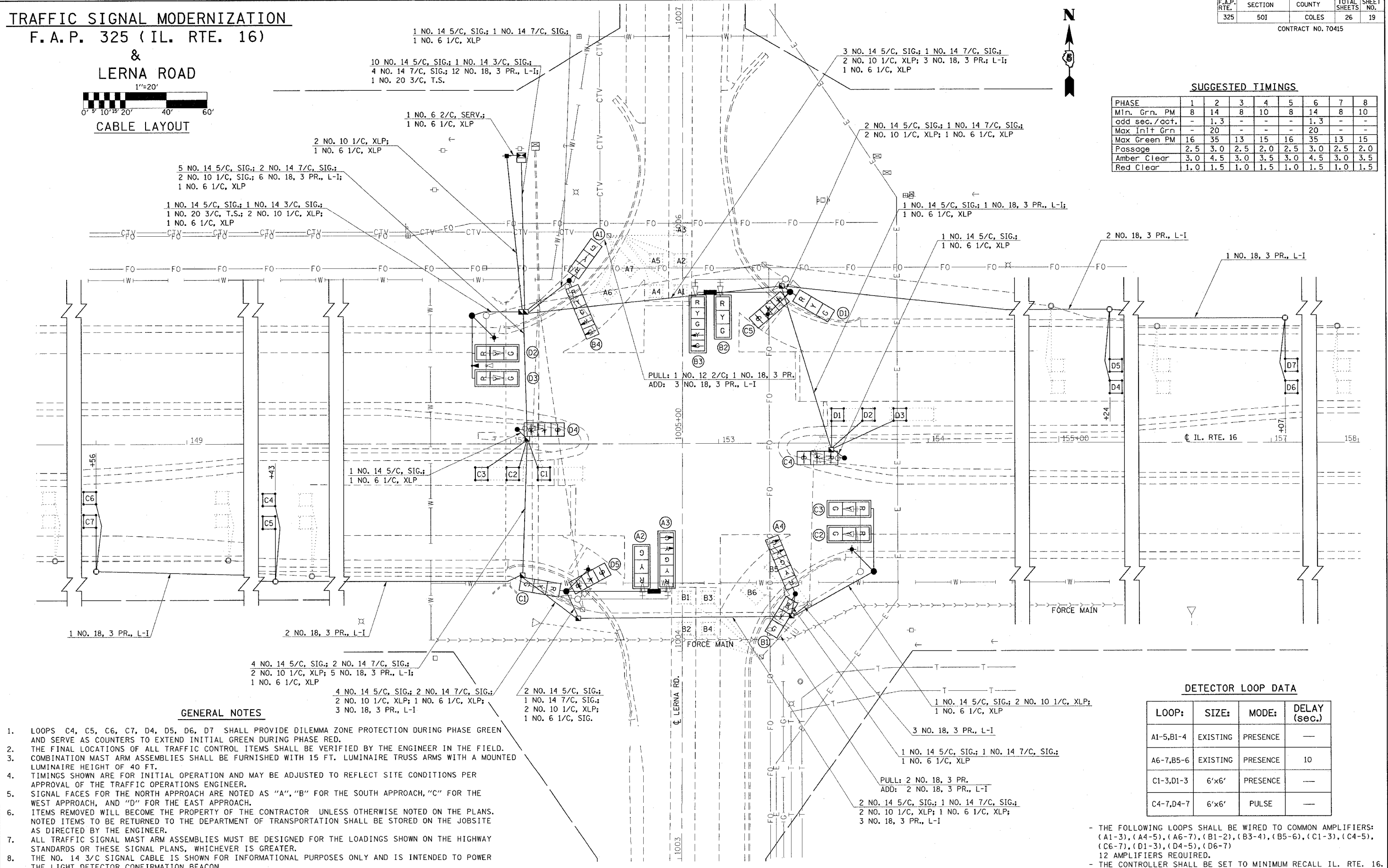
CABLE LAYOUT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	19

CONTRACT NO. 70415

SUGGESTED TIMINGS

PHASE	1	2	3	4	5	6	7	8
Min. Grn. PM	8	14	8	10	8	14	8	10
add sec./act.	-	1.3	-	-	-	1.3	-	-
Max Init Grn	-	20	-	-	-	20	-	-
Max Green PM	16	35	13	15	16	35	13	15
Passage	2.5	3.0	2.5	2.0	2.5	3.0	2.5	2.0
Amber Clear	3.0	4.5	3.0	3.5	3.0	4.5	3.0	3.5
Red Clear	1.0	1.5	1.0	1.5	1.0	1.5	1.0	1.5



**GENERAL NOTES**

1. LOOPS C4, C5, C6, C7, D4, D5, D6, D7 SHALL PROVIDE DILEMMA ZONE PROTECTION DURING PHASE GREEN AND SERVE AS COUNTERS TO EXTEND INITIAL GREEN DURING PHASE RED.
2. THE FINAL LOCATIONS OF ALL TRAFFIC CONTROL ITEMS SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.
3. COMBINATION MAST ARM ASSEMBLIES SHALL BE FURNISHED WITH 15 FT. LUMINAIRE TRUSS ARMS WITH A MOUNTED LUMINAIRE HEIGHT OF 40 FT.
4. TIMINGS SHOWN ARE FOR INITIAL OPERATION AND MAY BE ADJUSTED TO REFLECT SITE CONDITIONS PER APPROVAL OF THE TRAFFIC OPERATIONS ENGINEER.
5. SIGNAL FACES FOR THE NORTH APPROACH ARE NOTED AS "A", "B" FOR THE SOUTH APPROACH, "C" FOR THE WEST APPROACH, AND "D" FOR THE EAST APPROACH.
6. ITEMS REMOVED WILL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. NOTED ITEMS TO BE RETURNED TO THE DEPARTMENT OF TRANSPORTATION SHALL BE STORED ON THE JOBSITE AS DIRECTED BY THE ENGINEER.
7. ALL TRAFFIC SIGNAL MAST ARM ASSEMBLIES MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.
8. THE NO. 14 3/C SIGNAL CABLE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY AND IS INTENDED TO POWER THE LIGHT DETECTOR CONFIRMATION BEACON.

**DETECTOR LOOP DATA**

LOOP:	SIZE:	MODE:	DELAY (sec.)
A1-5, B1-4	EXISTING	PRESENCE	—
A6-7, B5-6	EXISTING	PRESENCE	10
C1-3, D1-3	6'x6'	PRESENCE	—
C4-7, D4-7	6'x6'	PULSE	—

- THE FOLLOWING LOOPS SHALL BE WIRED TO COMMON AMPLIFIERS: (A1-3), (A4-5), (A6-7), (B1-2), (B3-4), (B5-6), (C1-3), (C4-5), (C6-7), (D1-3), (D4-5), (D6-7)
- 12 AMPLIFIERS REQUIRED.
- THE CONTROLLER SHALL BE SET TO MINIMUM RECALL IL. RTE. 16.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	20

CONTRACT NO. 70415

## LERNA RD. SCHEDULE OF QUANTITIES

### GULFBOX JUNCTION REMOVAL

LOCATION	EACH
147+75.0; 56.0' RT.	1
149+20.0; 56.0' RT.	1
150+65.0; 65.0' RT.	1
154+97.0; 65.5' LT.	1
156+45.0; 56.0' LT.	1
157+90.5; 56.0' LT.	1
<b>TOTAL =</b>	<b>6 EACH</b>

### REMOVE EXIST HANDHOLE

LOCATION	EACH
152+10.5; 7.5' LT.	1
152+13.5; 68.0' LT.	1
152+35.0; 80.0' RT.	1
153+22.5; 86.0' LT.	1
153+45.5; 4.5' RT.	1
<b>TOTAL =</b>	<b>5 EACH</b>

### REMOVE EXIST CONC FOUNDATION

LOCATION	EACH
151+89.0; 61.5' LT.	1
152+07.0; 7.5' LT.	1
152+10.0; 4.0' LT.	1
152+27.5; 75.0' LT.	1
152+32.3; 75.0' RT.	1
153+32.5; 79.0' LT.	1
153+53.0; 76.5' RT.	1
153+68.0; 62.0' RT.	1
152+10.5; 144.0' LT.	1
<b>TOTAL =</b>	<b>9 EACH</b>

### CONC FOUNDATION TY A

LOCATION	FOOT
152+03.3; 7.0' LT.	3.1
152+28.7; 78.5' LT.	3.1
153+36.2; 72.5' RT.	3.1
153+60.0; 7.2' RT.	3.1
<b>TOTAL =</b>	<b>12.4 FOOT</b>

### CONC FOUNDATION TY E 36D

LOCATION	FOOT
151+81.7; 61.7' LT.	11
152+27.0; 71.0' RT.	13
153+34.2; 72.7' LT.	13
153+74.0; 61.8' RT.	11
<b>TOTAL =</b>	<b>48 FOOT</b>

### CONC FOUNDATION TY D

LOCATION	FOOT
152+05.5; 138.8' LT.	3.5
<b>TOTAL =</b>	<b>3.5 FOOT</b>

## BILL OF MATERIALS IL. ROUTE 16 & LERNA RD.

ITEM	UNIT	QUANTITY
SERVICE INSTALLATION, TYPE A	EACH	1
WOOD POLE, 35 FT., CLASS 4	EACH	1
CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	123
CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	722
CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	132
CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	27
CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	33
CONDUIT IN TRENCH, 5" DIA., PVC	FOOT	75
CONDUIT, AUGERED 2" DIA., PVC	FOOT	82
CONDUIT, AUGERED 3" DIA., PVC	FOOT	199
CONDUIT, AUGERED 4" DIA., PVC	FOOT	126
HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	1
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1112
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1961
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 400 WATT	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
GULFBOX JUNCTION	EACH	4
GULFBOX JUNCTION REMOVAL	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2936
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1194
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 18 3 PAIR	FOOT	3449
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	24
TRAFFIC SIGNAL POST, ALUMINUM 12 FT.	EACH	2
TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12.4
CONCRETE FOUNDATION, TYPE D	FOOT	3.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	48
DRILL EXISTING HANDHOLE	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	12
DETECTOR LOOP, TYPE I	FOOT	569
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	174
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	873
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, POLYCARBONATE, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	2

### GENERAL NOTES

- THE FOLLOWING SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE: (A2, A3), (B2, B3), (C2, C3), (D2, D3) -- EACH MAST ARM MOUNTED SIGNAL HEAD SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE TO THE SIGNAL HEAD.
- THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, AND TRAFFIC CONTROLLER WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- POST MOUNTED SIGNALS SHALL BE INSTALLED SO THAT NO PART OF THE SIGNAL HEAD IS WITHIN 2 FT. OF THE FACE OF CURB.
- ALL MAST ARM POLES SHALL BE A MINIMUM OF 6 FT. FROM THE CENTER OF THE POLE TO THE FACE OF CURB (ON THE MAST ARM SIDE) OR AS SHOWN ON THE PLANS.
- ALL MAST ARM POLES SHALL BE A MINIMUM OF 6 FT. FROM THE CENTER OF THE POLE TO THE FACE OF CURB (ON THE MAST ARM SIDE) OR AS SHOWN ON THE PLANS.
- ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
- THE BASE FOR A TRAFFIC SIGNAL POST SHALL BE SITUATED SUCH THAT THE HANDHOLE IS LOCATED ON A SIDE AWAY FROM A TRAVELED LANE.
- THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE BACKPANEL OF THE CONTROLLER CABINET FOR PHASES 3 & 7. IT SHALL BE DISABLED FOR PHASES 1 & 5.

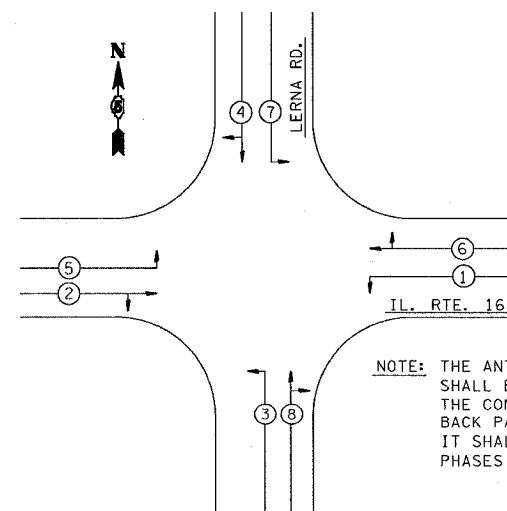
### ITEMS TO BE RETURNED TO IL. DEPT. OF TRANS.

ITEM	QUANTITY
CABINET & CONTROLLER	1 EA.

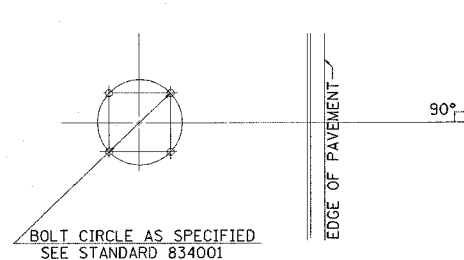
### ITEMS TO BE RETURNED TO THE CITY OF MATTOON

ITEM	QUANTITY
TS POSTS & BASES, ALUMINUM	4 EA.

### PHASE DESIGNATION DIAGRAM



NOTE: THE ANTI-BACKUP FEATURE SHALL BE HARDWIRED ON THE CONTROLLER CABINET BACK PANEL FOR PHASES 3 & 7. IT SHALL BE DISABLED FOR PHASES 1 & 5.



**DETAIL OF MAST ARM FOUNDATION  
BOLT PATTERN**

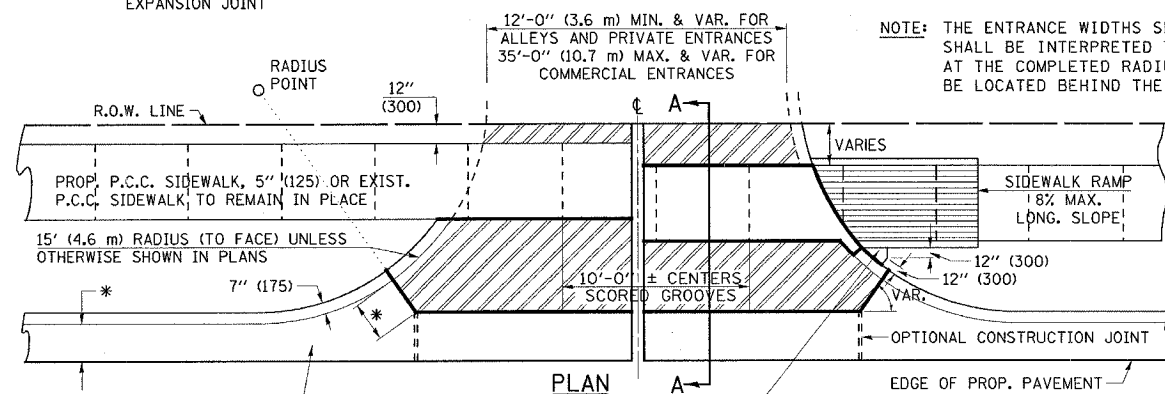
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	21

CONTRACT NO. 70415

### DETAIL OF P.C. CONCRETE DRIVEWAYS

#### LEGEND

- PROP. P.C. CONCRETE DRIVEWAY PAVEMENT
- LONGITUDINAL CURB EXPANSION JOINT



NOTE: SIDEWALK RAMPS SHALL BE CONSTRUCTED AT COMMERCIAL ENTRANCES. AT PRIVATE ENTRANCES RAMPS SHALL USUALLY BE NEEDED WHERE NARROW BOULEVARDS OR RADII GREATER THAN 15' (4.6 m) ARE CONSTRUCTED. THE BACK CURB RAMPS AT PRIVATE ENTRANCES MAY BE ELIMINATED IF GRADING CAN BE ACCOMPLISHED WITHOUT THE CURB.

NOTE: THE ENTRANCE WIDTHS SHOWN ON THE PLANS SHALL BE INTERPRETED TO BE THE WIDTHS AT THE COMPLETED RADIUS, WHICH MAY BE LOCATED BEHIND THE R.O.W. LINE.

PROP. P.C. CONCRETE DRIVEWAY PAVEMENT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ. FT. (M<sup>2</sup>) FOR P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

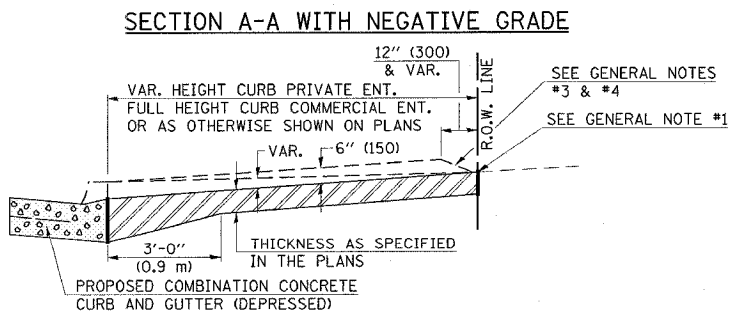
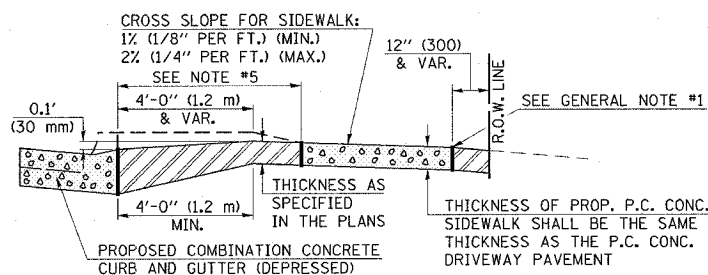
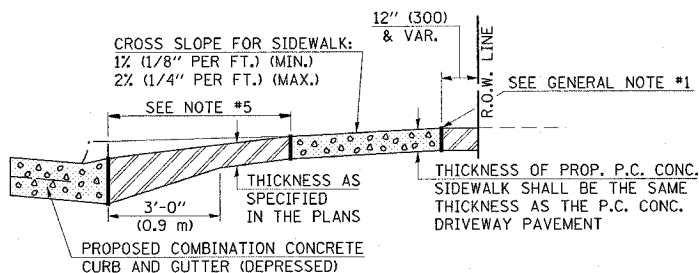
PROP. COMBINATION CONCRETE CURB AND GUTTER SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LIN. FT. (METER) FOR COMBINATION CONCRETE CURB AND GUTTER OF THE TYPE SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

\* WIDTH OF PROPOSED GUTTER FLAG

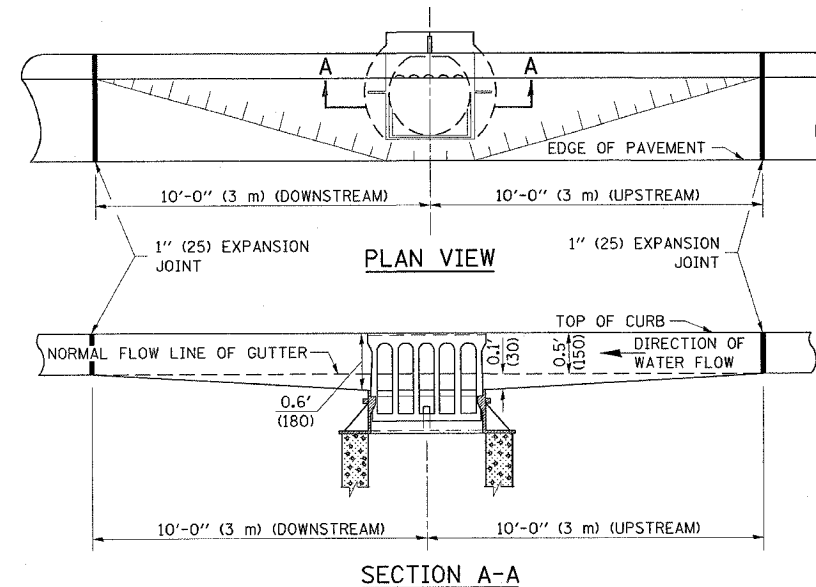
P.C. CONCRETE SIDEWALK, 5" (125) SHALL BE PAID FOR BETWEEN THE CURB OF THE DRIVEWAY AND SIDEWALK RAMP, WHERE IN THE OPINION OF THE ENGINEER, CONSTRUCTION WILL CREATE A MOWING PROBLEM (I.E. POINTED AREAS ADJACENT TO HIGH CURBS).

#### GENERAL NOTES

- THIS LONGITUDINAL CURB EXPANSION JOINT SHALL BE PLACED ONLY WHERE THE PROPOSED P.C. CONCRETE SIDEWALK OR DRIVEWAY PAVEMENT MEETS AN EXISTING CONCRETE ENTRANCE. THE P.C. CONCRETE DRIVEWAY PAVEMENT WILL BE PAID MONOLITHIC WITH THE P.C. CONCRETE SIDEWALK WHEN THE DISTANCE BETWEEN THE SIDEWALK AND RIGHT-OF-WAY IS LESS THAN OR EQUAL TO 2' (0.6 m). THE LONGITUDINAL EXPANSION JOINT BETWEEN THE DRIVEWAY PAVEMENT AND SIDEWALK WILL NOT BE NEEDED UNLESS THE DISTANCE EXCEEDS 2' (0.6 m).
- THE LONGITUDINAL CURB EXPANSION JOINT SHALL CONFORM TO SECTION 1051 OF THE STANDARD SPECS.
- DRIVEWAYS THAT WILL MEET EXISTING OR PROPOSED CURB NEAR THE R.O.W. LINE SHALL HAVE THE CURB CONSTRUCTED FULL HEIGHT TO THE R.O.W. LINE.
- DRIVEWAYS THAT WILL BE CONSTRUCTED WITH FULL HEIGHT CURBS AND NOT MEETING EXISTING OR PROPOSED CURBS NEAR THE R.O.W. LINE SHALL HAVE THE CURB SLOPED AS SHOWN ABOVE.
- DEPRESSED CURB SHALL BE BUILT ONLY AT PRIVATE DRIVES WITH NO SIDEWALK RAMPS.
- THE ENTRANCE GRADES WILL BE AS SHOWN ON THE STATION CROSS SECTIONS AND AS DIRECTED BY THE ENGINEER.
- THE P.C. CONCRETE DRIVEWAY PAVEMENT SHALL BE CONSTRUCTED WITH SCORED GROOVES, AS SPECIFIED IN ARTICLE 424.06 OF THE STANDARD SPECIFICATIONS, AT APPROXIMATELY EVERY OTHER JOINT, EITHER IN THE EXISTING SIDEWALK OR THE PROPOSED SIDEWALK. THE PROPOSED P.C. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PRIOR TO CONSTRUCTING THE P.C. CONCRETE DRIVEWAY PAVEMENT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE COMBINATION CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED AS SHOWN AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LIN. FT. (METER) FOR COMBINATION CONCRETE CURB AND GUTTER OF THE TYPE SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE P.C. CONCRETE SIDEWALK SHALL BE CONSTRUCTED AS SHOWN ABOVE AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ. FT. (M<sup>2</sup>) FOR P.C. CONCRETE SIDEWALK OF THE THICKNESS SPECIFIED IN THE PLANS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE EXTRA THICKNESS AS SHOWN ABOVE OR THE SEQUENCE OF CONSTRUCTION AS SPECIFIED.
- BEFORE A CHANGE IN THE METHOD OF CONSTRUCTION IS ALLOWED, THE REQUEST SHALL BE SUBMITTED IN WRITING AND MUST BE APPROVED BY THE ENGINEER.
- THE VARIABLE HEIGHT CURB ADJACENT TO THE P.C. CONCRETE DRIVEWAY PAVEMENT SHALL BE CONSTRUCTED MONOLITHIC WITH AND INCLUDED IN THE AREA OF THE P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ. YD. (M<sup>2</sup>) FOR P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS, INCLUDING THE MONOLITHIC CURBS AS SPECIFIED, THE SCORED GROOVES, THE LONGITUDINAL CURB EXPANSION JOINTS, AND THE ADDITIONAL THICKNESS REQUIRED ADJACENT TO THE DEPRESSED COMBINATION CONCRETE CURB AND GUTTER, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



### DETAIL OF DEPRESSING GUTTER GRADE AT INLETS, CATCH BASINS AND MANHOLES



#### GENERAL NOTES

- THE TWO EXPANSION JOINTS SHALL BE PLACED AS SHOWN IN STANDARD 606001.
- THE GUTTER GRADE SHALL BE DEPRESSED AT ALL INLETS, CATCH BASINS AND MANHOLES UNLESS OTHERWISE SPECIFIED IN THE PLANS.
- THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE VARIOUS PAY ITEMS OF WORK INVOLVED.

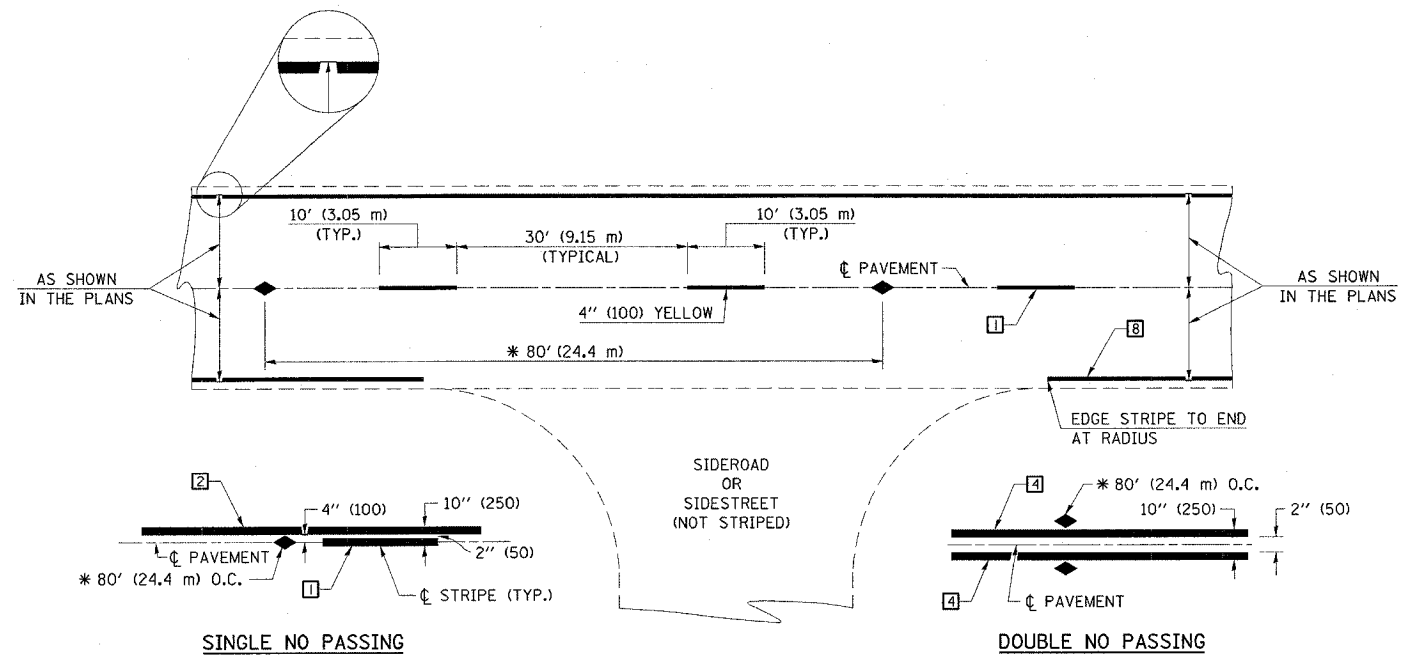
		REVISIONS	
DESIGNED	NAME	DATE	DATE
J.M.H.	J.M.H.	11/87	10/96
CHECKED	F.M.S.	11/87	06/03
CADD NO.	A-1.31	K.A.G.	

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

		REVISIONS	
DESIGNED	NAME	DATE	DATE
J.M.H.	J.M.H.	04/83	11/97
CHECKED	F.M.S.	04/83	06/03
CADD NO.	C-1.14	K.A.G.	

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

### TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



\* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

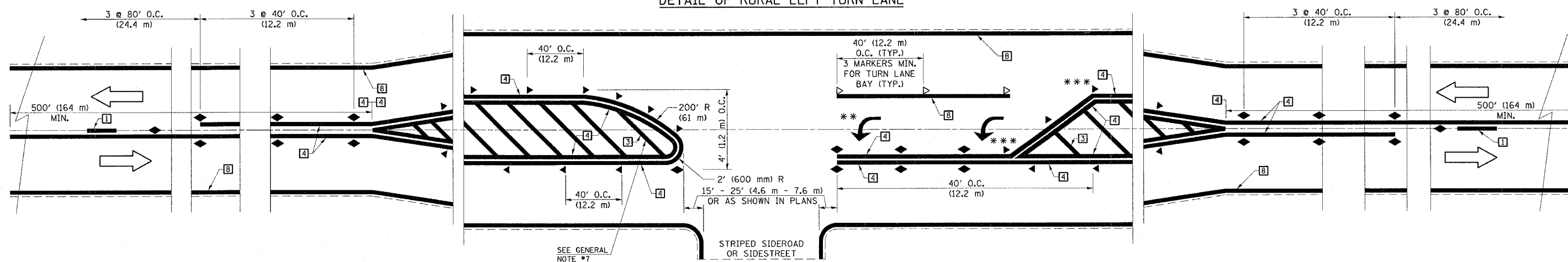
#### TYPICAL PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 6 RESERVED
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) CROSS WALK (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

#### TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

#### DETAIL OF RURAL LEFT TURN LANE



\*\*\* REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

\*\* TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

SHEET 1 OF 3

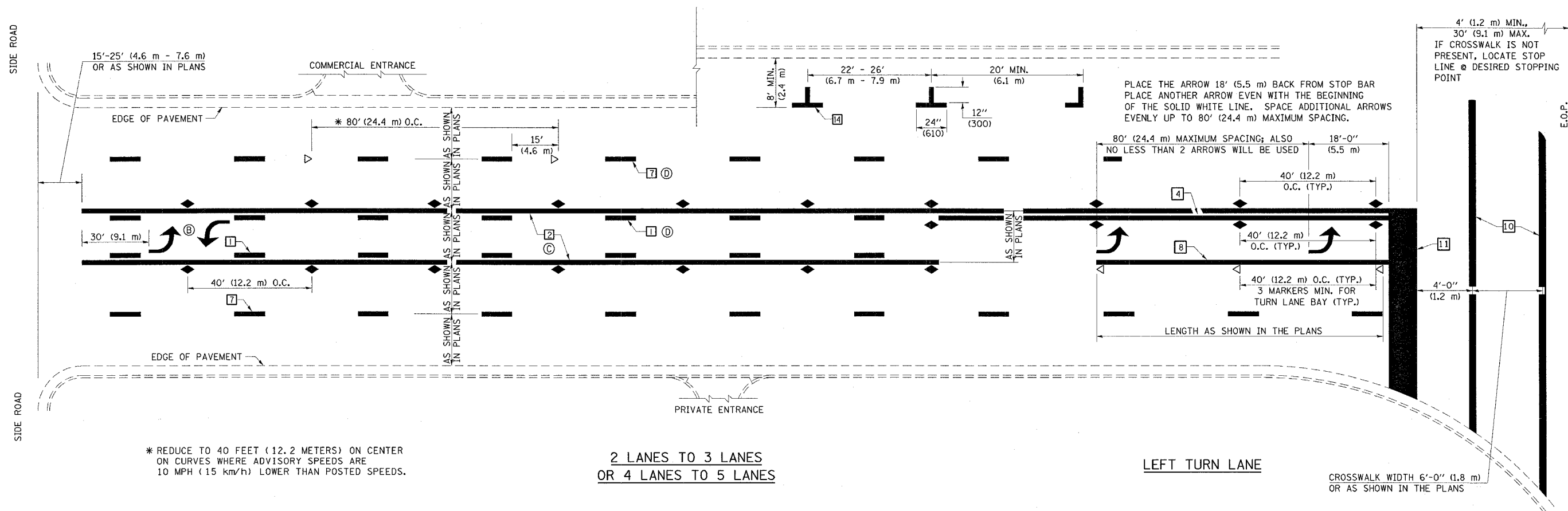
DESIGNED	NAME	DATE	REVISIONS
J.M.H.	J.M.H.	5/85	
CHECKED	FMS	6/85	
CADD NO.	F-5.25	6/88	

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	23

CONTRACT NO. T0415

### TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



\* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

2 LANES TO 3 LANES  
OR 4 LANES TO 5 LANES

LEFT TURN LANE

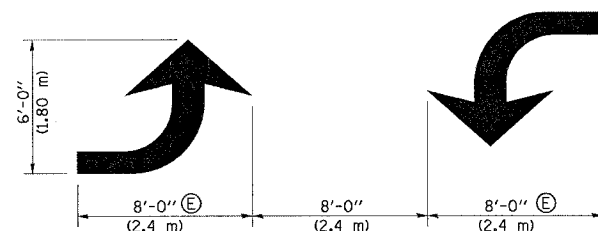
CROSSWALK WIDTH 6'-0" (1.8 m) OR AS SHOWN IN THE PLANS

SHEET 2 OF 3

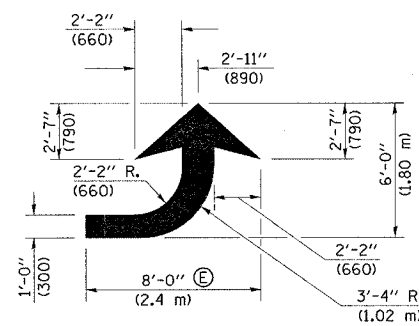
DESIGNED	NAME	DATE	REVISIONS
J.M.H.	5/85	6/88	NAME
FMS	6/85	6/88	GEOMETRICS/K.A.G.
CDD NO.	F-5.25		K.A.G.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

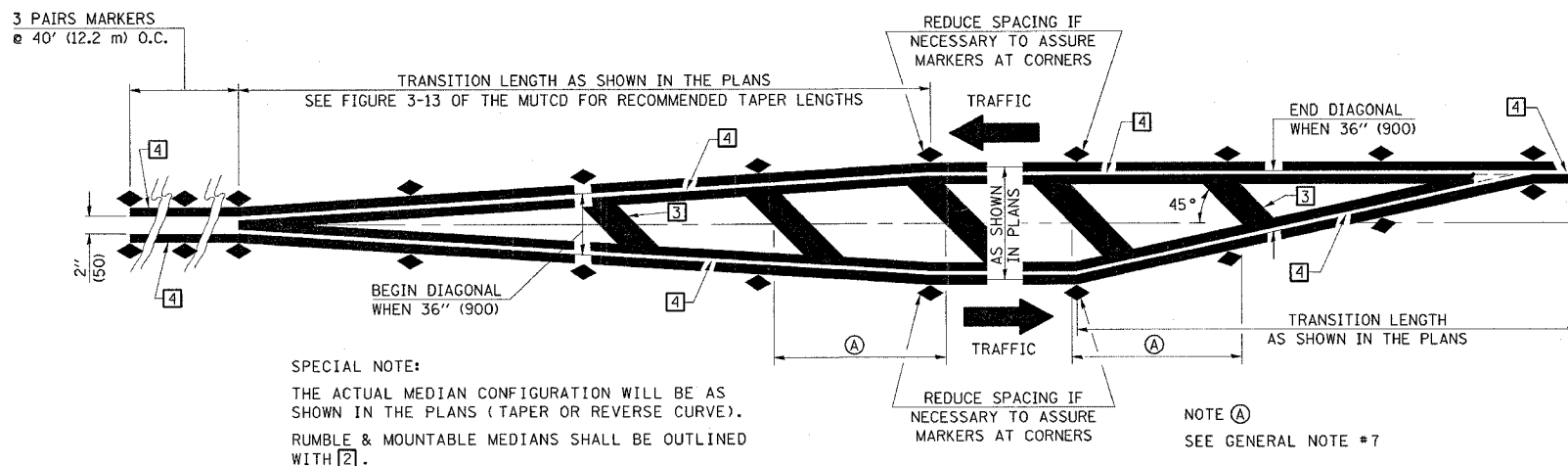
### TYPICAL APPLICATIONS OF PAVEMENT MARKINGS AND MARKERS



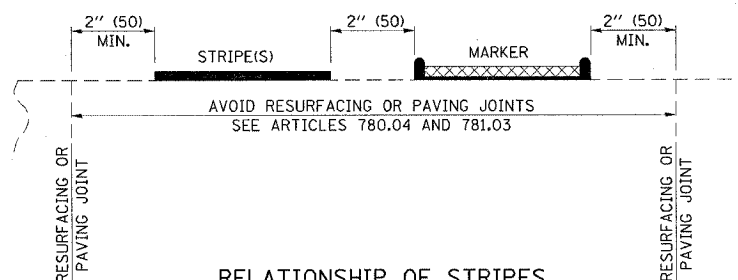
TYPICAL DOUBLE TURN ARROWS (WHITE)



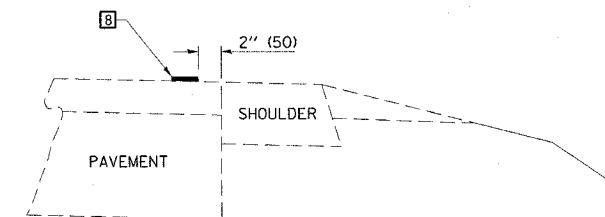
LEFT ARROW  
REVERSE FOR RIGHT ARROW  
AREA = 15.6 SQ. FT. (1.47 m<sup>2</sup>)  
(WHITE)



TYPICAL MEDIAN TRANSITIONS



RELATIONSHIP OF STRIPES, MARKERS AND JOINTS



RELATIONSHIP OF EDGE STRIPE TO SAFETY SHOULDER OR PAVED SURFACE

SPECIAL NOTES:

- (B) TURN ARROW PAIRS SHALL BE PLACED AT 250' (75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE.
- (C) THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
- (D) THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER. SEE EXAMPLE ON SHEET 2 OF 3.
- (E) TURN ARROW SIZE DEPENDS ON THE LOCATION.  
RURAL LOCATION - LARGE ARROW SIZE  
URBAN LOCATION - SMALL ARROW SIZE

GENERAL NOTES

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SCALE: NONE
3. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
4. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
5. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
6. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
7. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING.  
< 30 MPH USE 15' (< 50 km/h USE 4.5 m)  
30-45 MPH USE 20' (50-75 km/h USE 6.0 m)  
> 45 MPH USE 30' (> 75 km/h USE 9.0 m)

SHEET 3 OF 3

NAME	DATE	REVISIONS
DESIGNED	J.M.H. 5/85	NAME
CHECKED	FMS CTD 6/85	GEOMETRICS/K.A.G.
CADD NO.	F-5.25	K.A.G.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	25
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 70415		

FINAL SURVEY NOTE BOOK NO. \_\_\_\_\_

DATE \_\_\_\_\_

BY \_\_\_\_\_

REVIEWED BY \_\_\_\_\_

PLOTTED \_\_\_\_\_

AREAS CHECKED \_\_\_\_\_

ORIGINAL SURVEY NOTE BOOK NO. \_\_\_\_\_

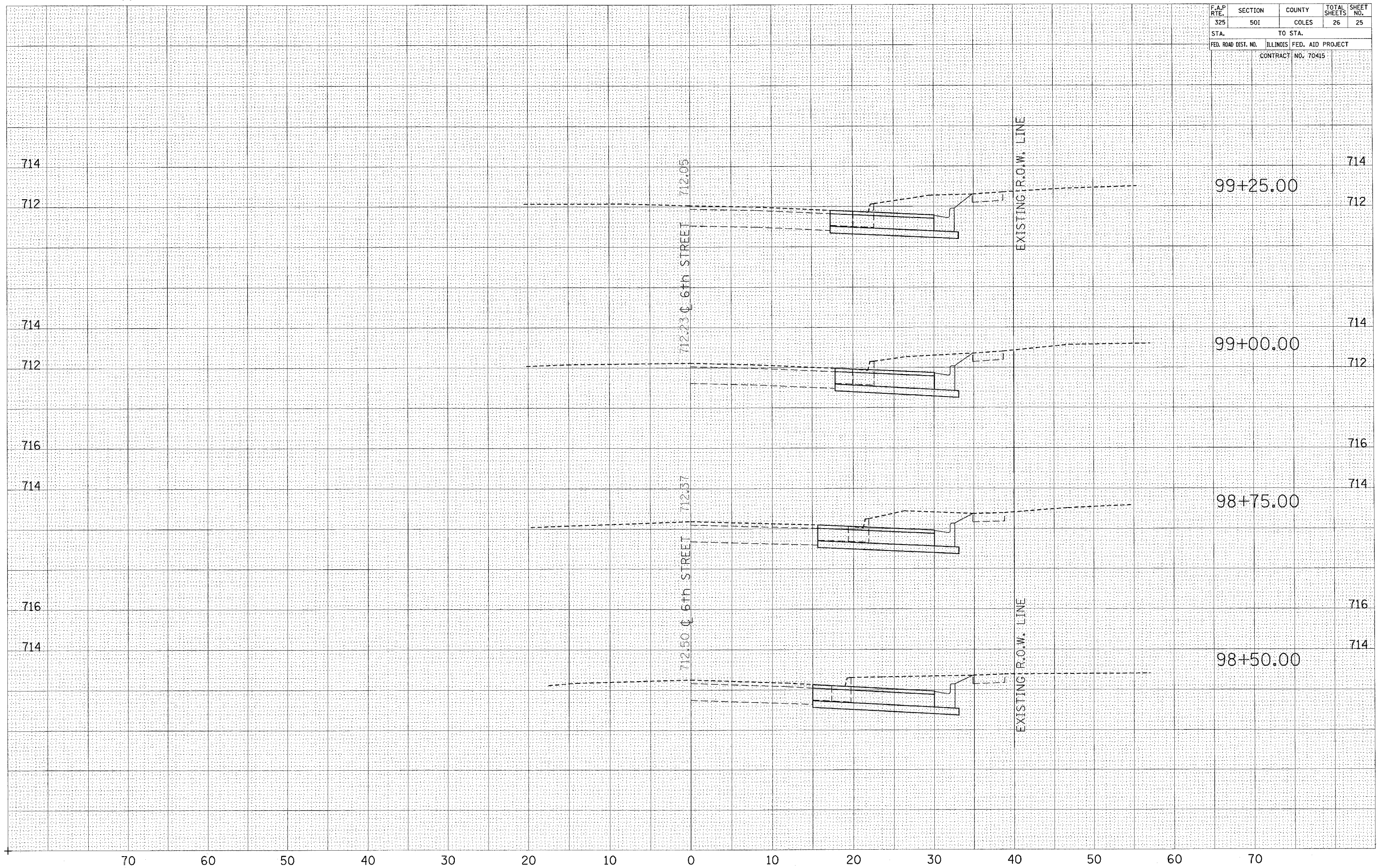
DATE \_\_\_\_\_

BY \_\_\_\_\_

REVIEWED BY \_\_\_\_\_

PLOTTED \_\_\_\_\_

AREAS CHECKED \_\_\_\_\_

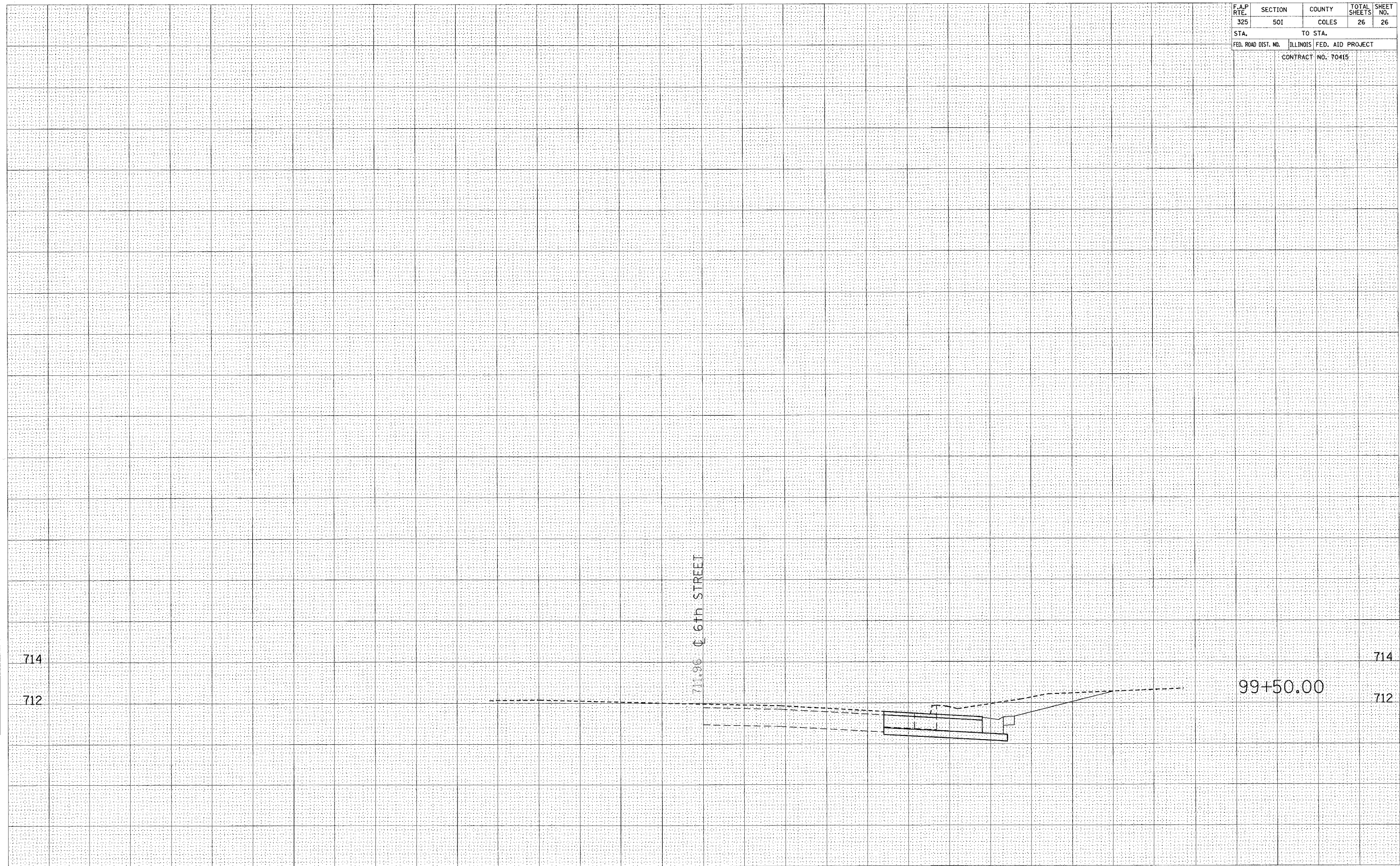


70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
325	501	COLES	26	26
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 70415				

FINAL SURVEY	DATE
NOTE BOOK NO.	BY
PLOTTED	
TEMPLATE	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
NOTE BOOK NO.	BY
PLOTTED	
TEMPLATE	
AREAS CHECKED	



714

714

712

712

711.96 ± 6th STREET

99+50.00

70 60 50 40 30 20 10 0 10 20 30 40 50 60 70