

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	29-1-1	ST. CLAIR	8	1
		ILLINOIS	CONTRACT NO. 76E63	

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

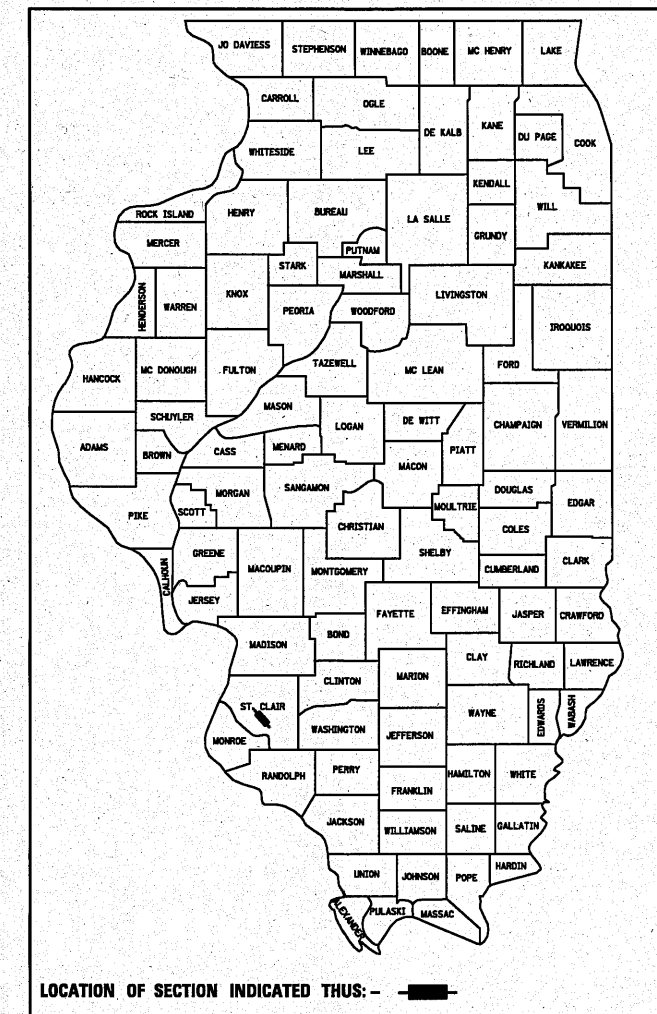
FAP ROUTE 103 (IL 15)  
SECTION 29-1-1

LEFT TURN LANE PAVEMENT  
REMOVAL AND REPLACEMENT  
ST. CLAIR COUNTY

C-98-023-11

FOR INDEX OF SHEETS, SEE SHEET NO. 2

D-98-023-11

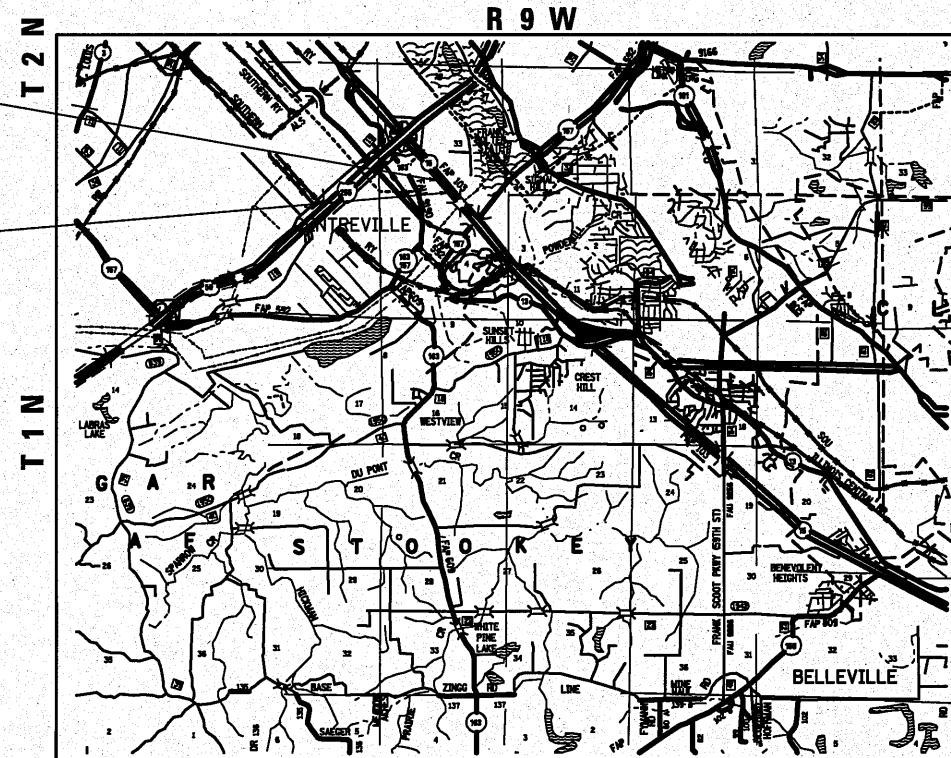


ADT:	ADT - TURN LANE
2011 36,600	2011 1300
2031 44,700	2031 1600
MU 5.8%	MU 28%
SU 3.2%	SU 12%

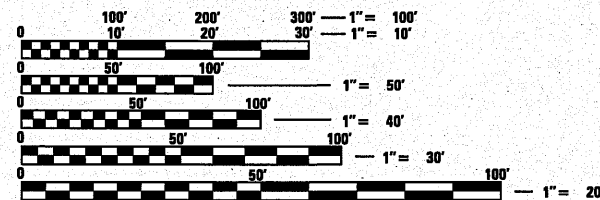
DESIGN DESIGNATION  
NONE

BEGIN IMPROVEMENT  
STA. 132+83.92  
LATITUDE = 38.5764  
LONGITUDE = 90.1011

END IMPROVEMENT  
STA. 138+37.77  
LATITUDE = 38.5764  
LONGITUDE = 90.0991



LOCATION MAP  
NOT TO SCALE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

PROJECT ENGINEER: PATTI LeBEAU 346-3179  
SQUAD LEADER: ART MUEHLFELD 346-3209

GROSS LENGTH = 553.85 FT. = 0.105 MILE  
NET LENGTH = 553.85 FT. = 0.105 MILE

CONTRACT NO. 76E63

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED October 26, 2010  
[Signature]  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

Dec 10, 2010  
Scott E. Stitt, P.E.  
ACTING ENGINEER OF DESIGN AND ENVIRONMENT

Dec 10, 2010  
Christine M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% STATE 0004
30200650	PROCESSING MODIFIED SOIL 12"	SQ YD	800	800
30201500	LIME	TON	16	16
31100500	SUBBASE GRANULAR MATERIAL, TYPE A 6"	SQ YD	800	800
42000564	PORTLAND CEMENT CONCRETE PAVEMENT 14" (JOINTED)	SQ YD	800	800
44000100	PAVEMENT REMOVAL	SQ YD	800	800
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3
67100100	MOBILIZATION	L SUM	1	1
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	3	3
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	62.4	62.4
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	810	810
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	13	13
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	7	7
* 80300100	LOCATING UNDERGROUND CABLE	FOOT	4.5	4.5
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	166	166
X7010206	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 (SPECIAL)	EACH	1	1
70300540	PAVEMENT MARKING TAPE, TYPE III 6"	FOOT	4359	4359

INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES, INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS
- 3 TYPICAL SECTIONS AND PAVEMENT DETAILS
- 4 PLAN SHEET
- 5- 6 MAINTENANCE OF TRAFFIC
- 7- 8 ELECTRICAL PLAN SHEETS

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 420001-07 PAVEMENT JOINTS
- 701001-02 OFF ROAD OPERATIONS
- 701401-06 LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701901-01 TRAFFIC CONTROL DEVICES
- 780001-02 TYPICAL PAVEMENT MARKINGS
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- 886001-01 DETECTOR LOOP INSTALLATION
- 886006-01 TYPICAL LAYOUTS FOR DETECTOR LOOPS

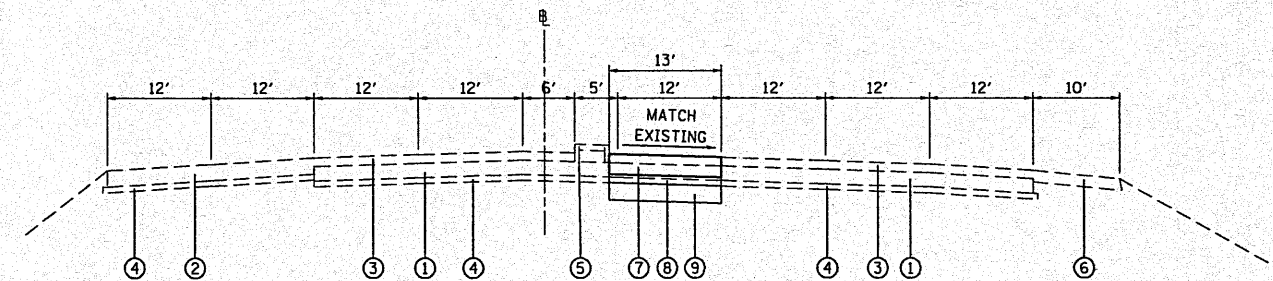
GENERAL NOTES

1. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
  - AMEREN CIPS
  - AMEREN IP
  - AT&T ILLINOIS
  - COMMONFIELDS OF CAHOKIA PUBLIC WATER DISTRICT
  - LEVEL 3 COMMUNICATIONS, LLC
 MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY \*. NON- J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING MATERIALS.
3. THE CONTRACTOR SHALL BE AWARE; THE UNDERGROUND DRAINAGE AT STATION 137+50 35/64 IS SHALLOW AND WILL BE WITHIN THE LIME MODIFICATION AND/OR AGGREGATE SUB-BASE. THE CONTRACTOR SHALL USE CARE NOT TO DAMAGE THIS CULVERT DURING CONSTRUCTION OPERATIONS. IF DAMAGE OCCURS TO THE CULVERT THE CONTRACTOR WILL REPAIR THE DAMAGE TO THE CULVERT AT THE CONTRACTOR'S EXPENSE, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
4. THE DISTRICT'S NUCLEAR DENSITY SUPERVISOR SHALL BE CONTACTED UPON COMPLETION OF THE SUB-GRADE AND PRIOR TO THE LIME MODIFICATION PROCESS TO DETERMINE THE NECESSITY OF THE LIME MODIFICATION. IF THE SUB-GRADE IS FOUND NOT TO REQUIRE REMEDIAL PROCEDURES, THE LIME MODIFICATION WILL NOT BE CONDUCTED.
5. COORDINATION WITH THE DEPARTMENT'S BUREAU OF OPERATIONS IS REQUIRED PRIOR TO IMPLEMENTING THE STAGING TO REPROGRAM THE SEQUENCE AND TIMING OF THE TRAFFIC SIGNALS. CONTACT DAVE WALKER (618-346-3274) ONE WEEK PRIOR TO IMPLEMENTATION TO COORDINATE THESE ACTIVITIES.
6. COORDINATION WITH THE DEPARTMENT'S BUREAU OF OPERATIONS IS REQUIRED BEFORE ANY TRENCHING SHALL BE DONE TO LOCATE HIGHWAY LIGHTING/PUMP STATION/ INTELLIGENT TRANSPORTATION SYSTEM FACILITIES AND TO COORDINATE OTHER FIELD ACTIVITIES.
7. THE RESIDENT ENGINEER SHALL VERIFY THE EXISTENCE OF HIGHWAY LIGHTING AND/OR I.T.S. UTILITIES WITHIN THE PROJECT LIMITS. IF HIGHWAY LIGHTING AND/OR I.T.S. EXISTS WITHIN THE PROJECT LIMITS, AND IF THESE ITEMS REQUIRE LOCATING, THE CONTRACTOR SHALL BE DIRECTED TO DO SO ACCORDING TO SECTION 803 OF THE STANDARD SPECIFICATIONS. THIS WORK SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
8. ALL EXISTING PAVEMENT MARKINGS ALONG IL ROUTE 15 WITHIN THE MAINTENANCE OF TRAFFIC WORK AREA SHALL BE COVERED WITH PAVEMENT MARKING TAPE, TYPE III, BLACK. 139 LINEAL FEET OF PAVEMENT MARKING TAPE, TYPE III, BLACK 6", HAS BEEN INCLUDED TO COVER THE THROUGH / RIGHT TURN ARROW.
9. ONE CHANGEABLE MESSAGE BOARD SHALL BE REQUIRED FOR THIS PROJECT. IT SHALL BE PLACED ONE WEEK PRIOR TO ANY LANE CLOSURE AND SHALL REMAIN UP FOR THE DURATION OF THE PROJECT. THE CHANGEABLE MESSAGE SHALL BE PLACED ALONG THE EASTBOUND LANES OF IL 15 PRIOR TO THE I-255 INTERCHANGE OR AT THE DIRECTION OF THE ENGINEER.

COMMITMENTS  
NONE

*\* Specialty Items*

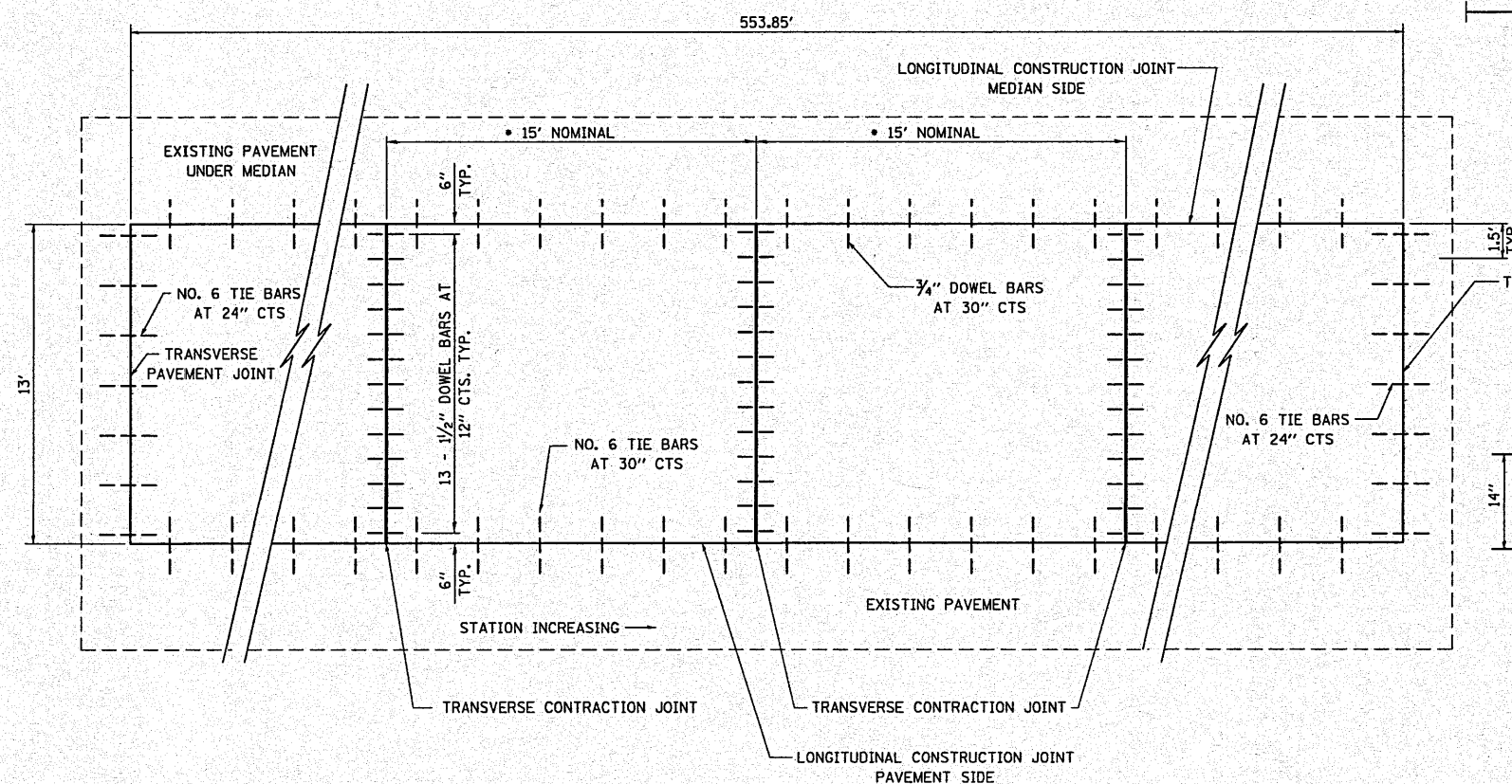
FILE NAME =	USER NAME = #USER#	DESIGNED - ACM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES; INDEX OF SHEETS GENERAL NOTES; HIGHWAY STANDARDS; COMMITMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - ACM	REVISED -			103	29-1-1	ST. CLAIR	8	2	
		CHECKED -	REVISED -			CONTRACT NO. 76E63					
		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



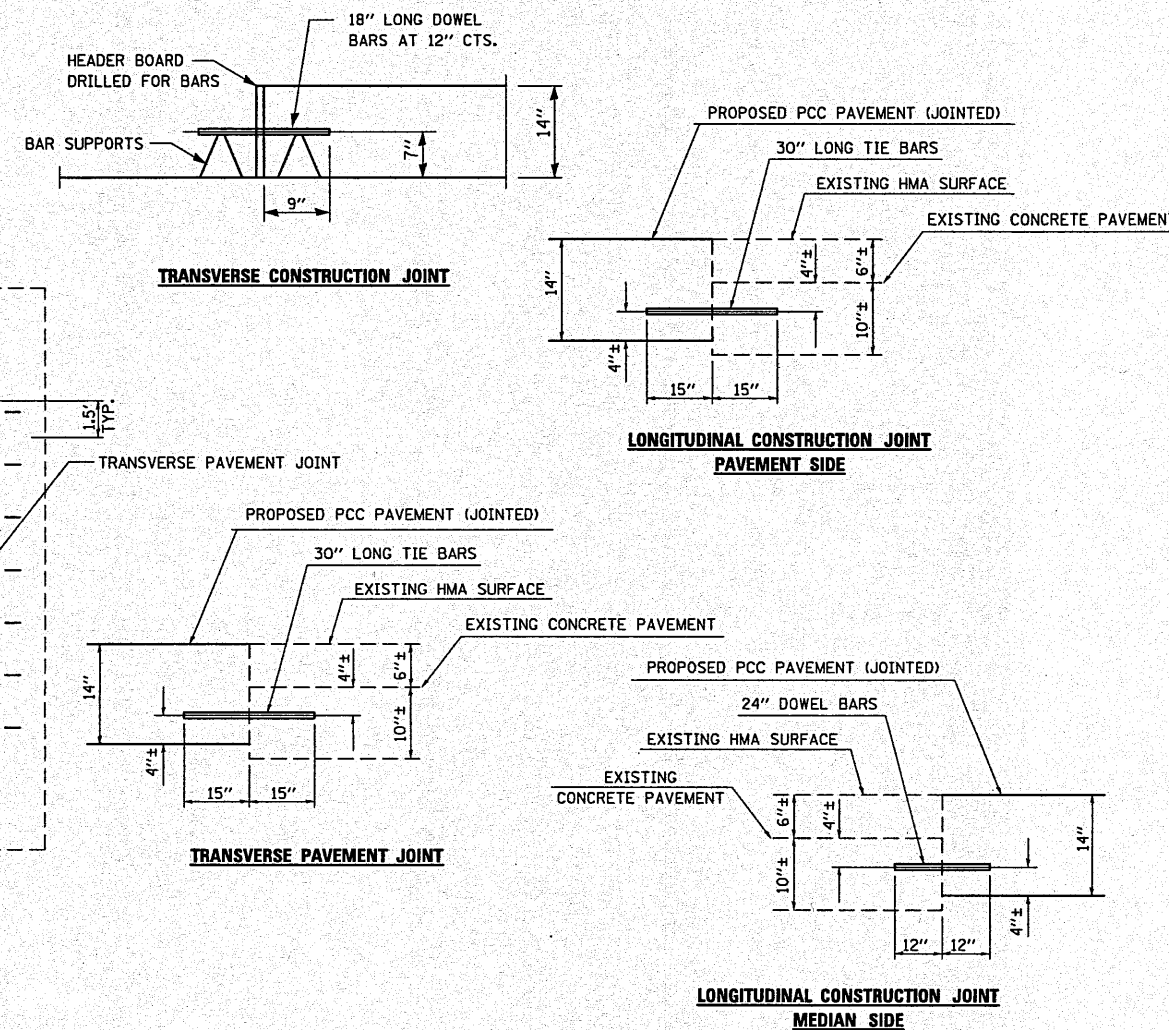
**TYPICAL SECTION**  
STA. 132+83.92 TO STA. 138+37.77

- LEGEND**
- ① EXISTING PCC PAVEMENT 10" ±
  - ② EXISTING CRC PAVEMENT 11.25"
  - ③ EXISTING HMA SURFACE 6"
  - ④ EXISTING SUB-BASE 4" ±
  - ⑤ EXISTING CONCRETE MEDIAN DOWELED
  - ⑥ EXISTING HMA SHOULDER 8" ±
  - ⑦ PROPOSED PCC JOINTED PAVEMENT 14"
  - ⑧ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
  - ⑨ PROPOSED LIME MODIFIED SOIL 12"

• THE 15' DIMENSION SHALL BE ADJUSTED TO 12' MIN. TO 18' MAX. WHEN PLACED ADJACENT TO EXISTING PCC PAVEMENT STRUCTURE SO THAT THE JOINTS ARE IN PROLONGATION



**PAVEMENT DETAILS**  
**PLAN**



FILE NAME =	USER NAME = #USER#	DESIGNED - ACM	REVISED -
#FILE#		DRAWN - ACM	REVISED -
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -
	PLOT DATE = #DATE#	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

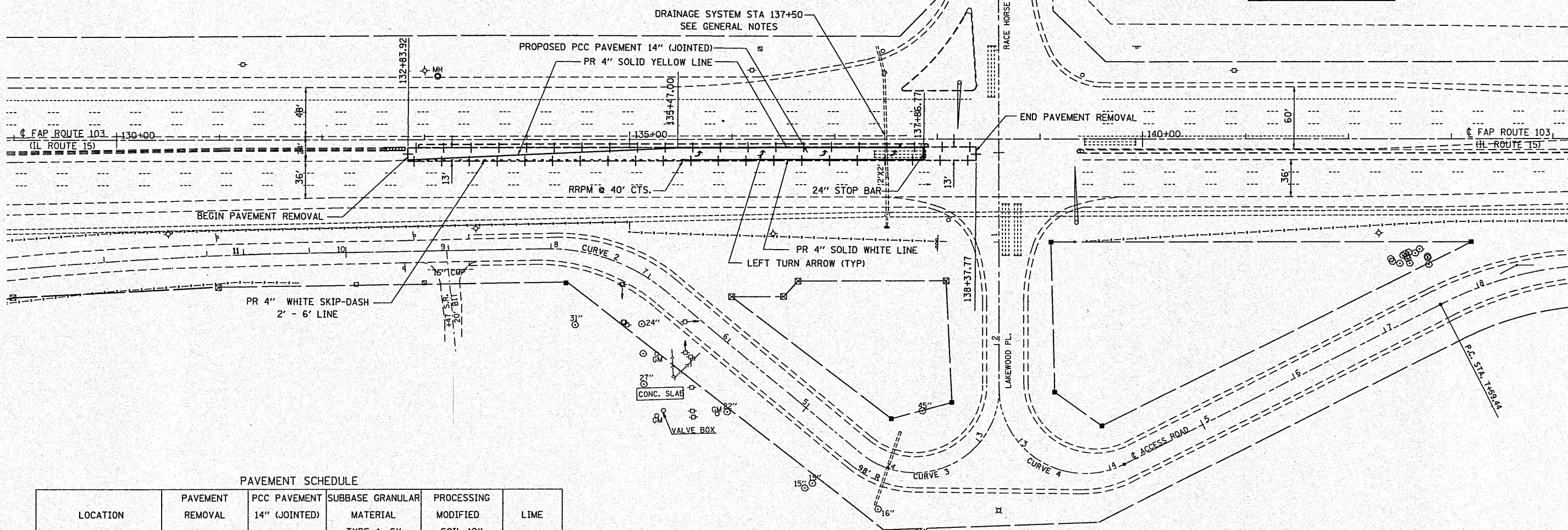
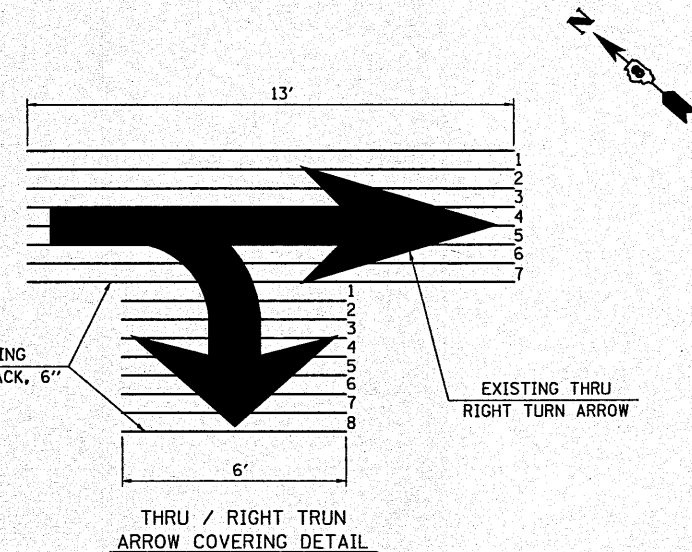
**TYPICAL SECTION**  
**PAVEMENT DETAILS**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 132+83.92 TO STA. 138+37.77

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	29-1-1	ST. CLAIR	8	3
CONTRACT NO. 76E63				
ILLINOIS FED. AID PROJECT				

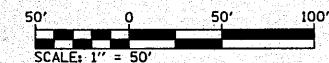
PAVEMENT MARKING SCHEDULE

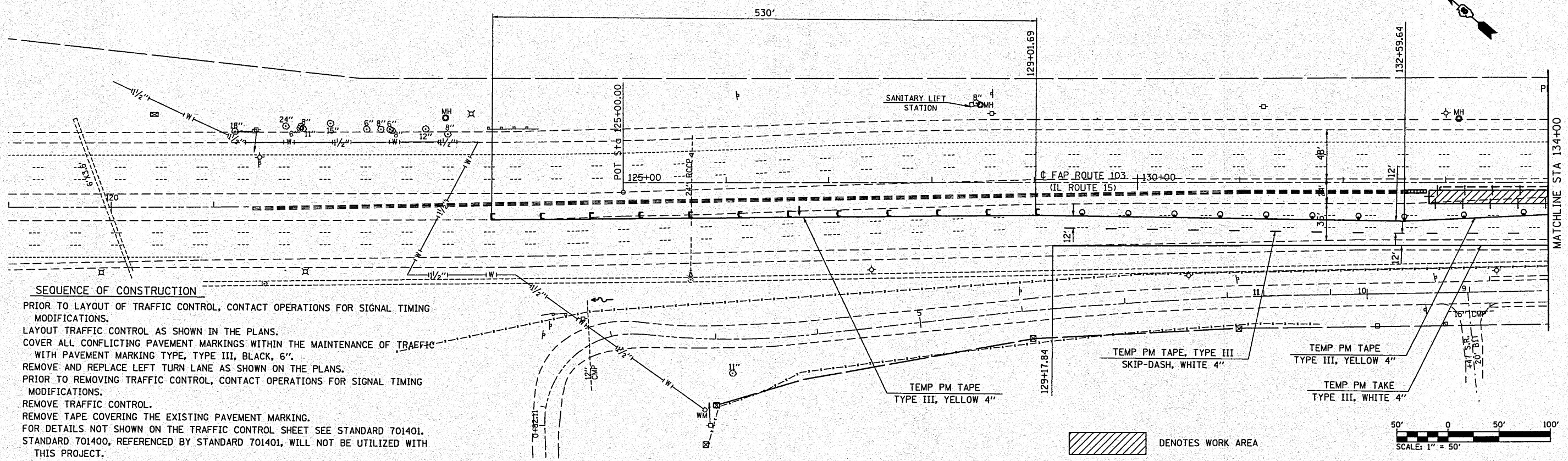
LOCATION		4" SOLID WHITE	4" SOLID YELLOW	4" SKIP DASH WHITE 2' DASH - 6' SKIP LINE	24" SOLID WHITE	LETTERS & SYMBOLS	RAISED REFLECTIVE PAVEMENT MARKERS	PAVEMENT MARKING TAPE TYPE III BLACK, 6"
STATION	TO STATION	FOOT	FOOT	FOOT	FOOT	SQ. FT	EACH	FOOT
132+83.92	TO 135+47.00		264	66				
135+47.00	TO 137+86.77	240	240				7	
	137+86.77				13			
	126+92.24					15.6		
	127+31.97					15.6		
	127+71.44					15.6		
	128+15.90					15.6		
129+17.84	TO 138+37.77							920
129+17.84	TO 138+37.77							920
123+71.69	TO 138+37.77							1467
123+71.69	TO 132+83.92							913
THROUGH / RT TURN ARROWS								139
SUB-TOTAL		240	504	66	13	62.4	7	4359
TOTALS			810					



PAVEMENT SCHEDULE

LOCATION		PAVEMENT REMOVAL	PCC PAVEMENT 14" (JOINTED)	SUBBASE GRANULAR MATERIAL TYPE A, 6"	PROCESSING MODIFIED SOIL 12"	LIME
STATION	TO STATION	SQ YD	SQ YD	SQ YD	SQ YD	TON
132+83.92	TO 138+37.77	800	800	800	800	16





**SEQUENCE OF CONSTRUCTION**

PRIOR TO LAYOUT OF TRAFFIC CONTROL, CONTACT OPERATIONS FOR SIGNAL TIMING MODIFICATIONS.

LAYOUT TRAFFIC CONTROL AS SHOWN IN THE PLANS.

COVER ALL CONFLICTING PAVEMENT MARKINGS WITHIN THE MAINTENANCE OF TRAFFIC WITH PAVEMENT MARKING TYPE, TYPE III, BLACK, 6".

REMOVE AND REPLACE LEFT TURN LANE AS SHOWN ON THE PLANS.

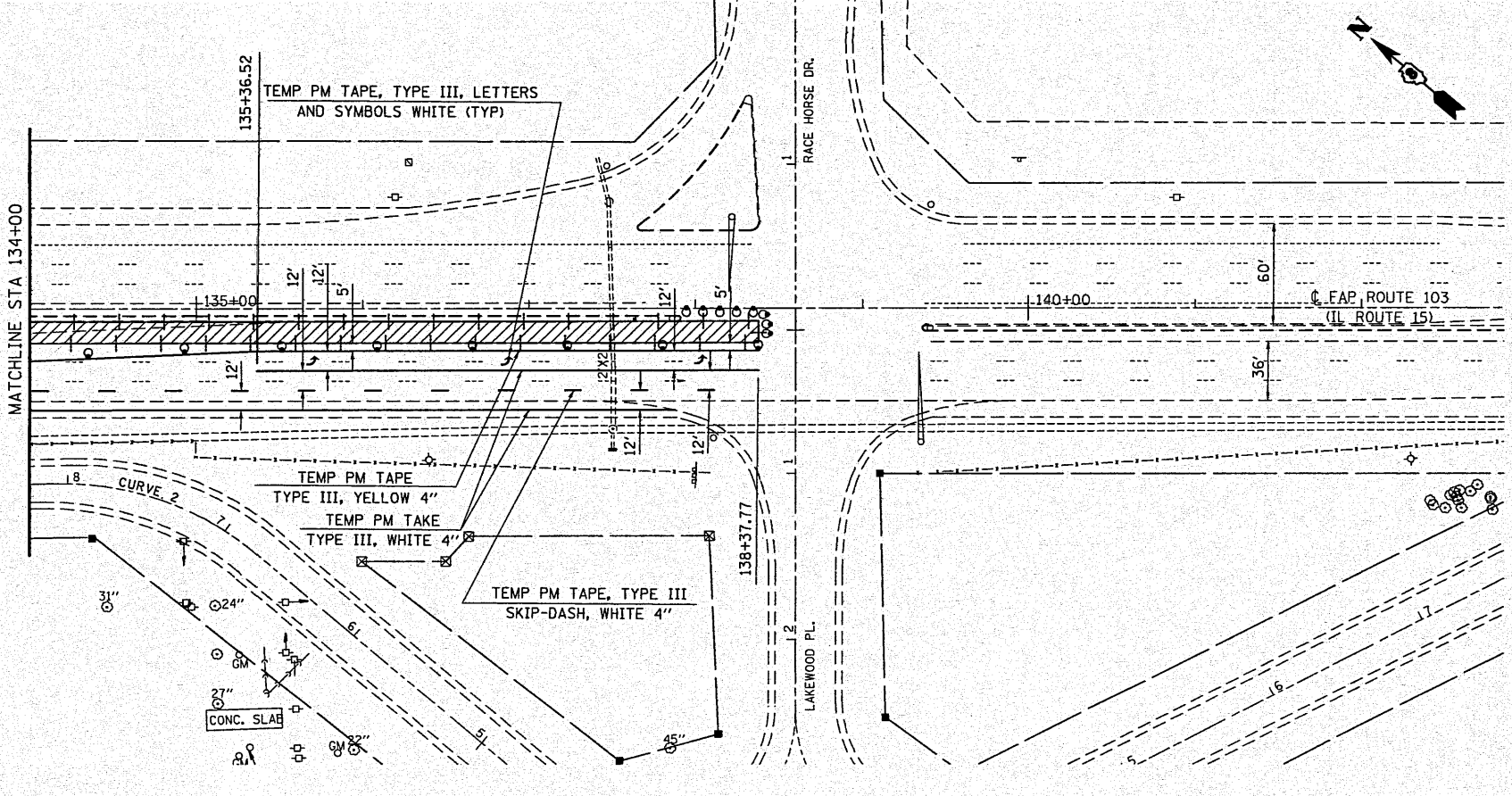
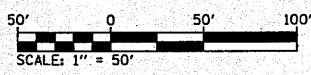
PRIOR TO REMOVING TRAFFIC CONTROL, CONTACT OPERATIONS FOR SIGNAL TIMING MODIFICATIONS.

REMOVE TRAFFIC CONTROL.

REMOVE TAPE COVERING THE EXISTING PAVEMENT MARKING.

FOR DETAILS NOT SHOWN ON THE TRAFFIC CONTROL SHEET SEE STANDARD 701401. STANDARD 701400, REFERENCED BY STANDARD 701401, WILL NOT BE UTILIZED WITH THIS PROJECT.

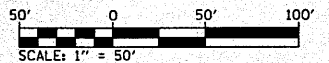
DENOTES WORK AREA

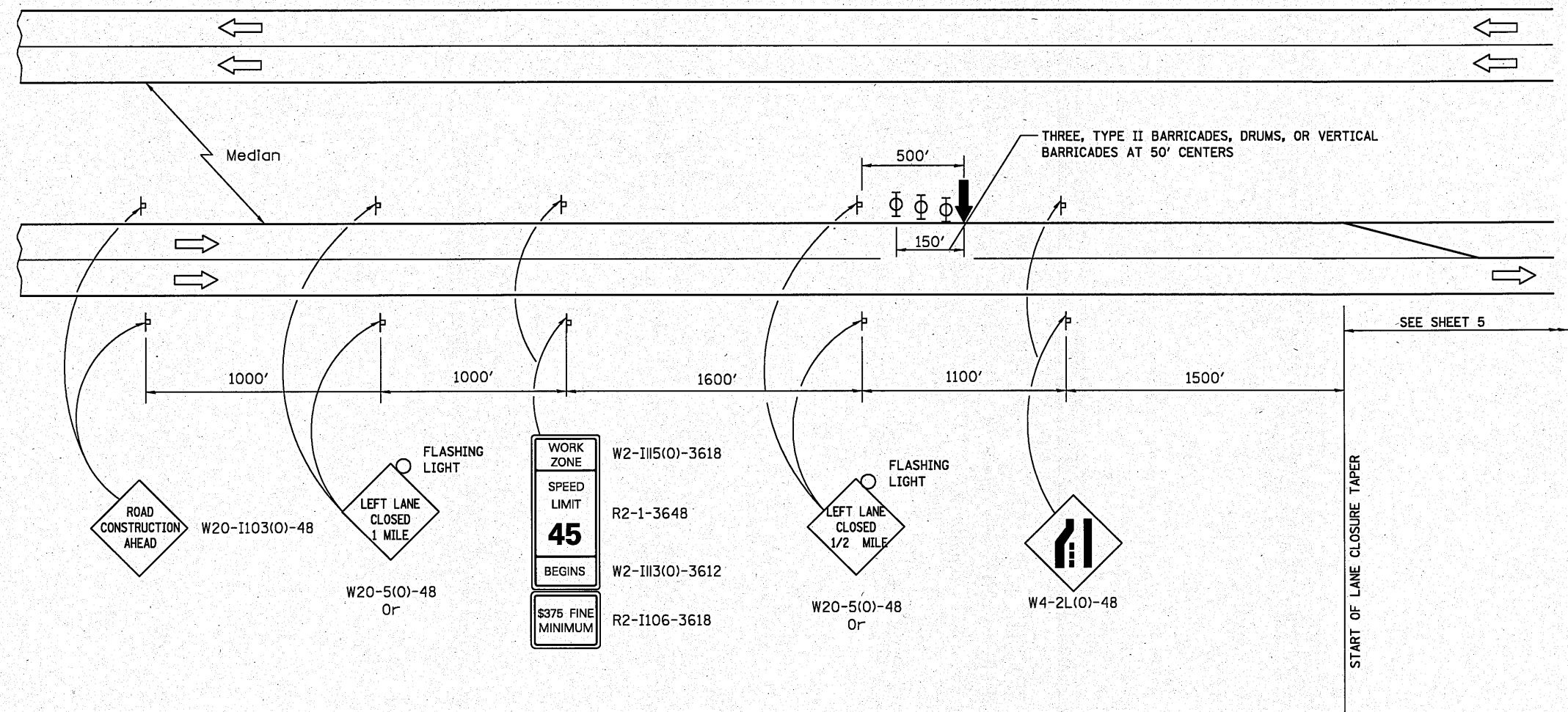


TEMPORARY PAVEMENT MARKING SCHEDULE						
LOCATION		TEMPORARY PAVEMENT MARKING TAPE, TYPE III YELLOW, 4"	TEMPORARY PAVEMENT MARKING TAPE, TYPE III WHITE, 4"	TEMPORARY PAVEMENT MARKING TAPE, TYPE III, SKIP-DASH WHITE, 4"	TEMPORARY PAVEMENT MARKING TAPE, TYPE III LETTERS AND SYMBOLS	
STATION	TO	STATION	FOOT	FOOT	FOOT	SQ FT
123+71.05	TO	129+01.69	531			
129+01.69	TO	132+59.64	358			
129+17.84	TO	132+59.64		342	86	
132+59.64	TO	135+36.52	278			
132+59.64	TO	134+12.46		153		15.6
135+36.52	TO	138+37.77	302	302	145	
135+66.55						15.6
136+83.04						15.6
137+99.48						15.6
SUB-TOTAL			1469	797	231	
TOTALS				2497		46.8

QUANTITIES INCLUDED IN THE COST OF STANDARD 701401 (SPECIAL)

DENOTES WORK AREA





**SYMBOLS**

- ↑ Arrow board
- ⊥ Sign
- ⊕ Type II barricade, drum, or vertical barricade with monodirectional flashing light

FILE NAME =	USER NAME = #USER#	DESIGNED - ACM	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC MANAGEMENT PLAN</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - ACM	REVISED -		103	29-1-1	ST. CLAIR	8	6			
PLOT SCALE = #SCALE#		CHECKED -	REVISED -		SCALE: NONE			SHEET NO. 2 OF 2 SHEETS			STA. 129+00.00 TO STA. 138+38.00	
PLOT DATE = #DATE#		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

	ITEM	UNIT	TOTAL
			QUANTITIES
<del>80309100</del>	LOCATING UNDERGROUND CABLE	FOOT	4.5
<del>88600600</del>	DETECTOR LOOP REPLACEMENT	FOOT	166

STANDARDS  
886001-01  
886006-01

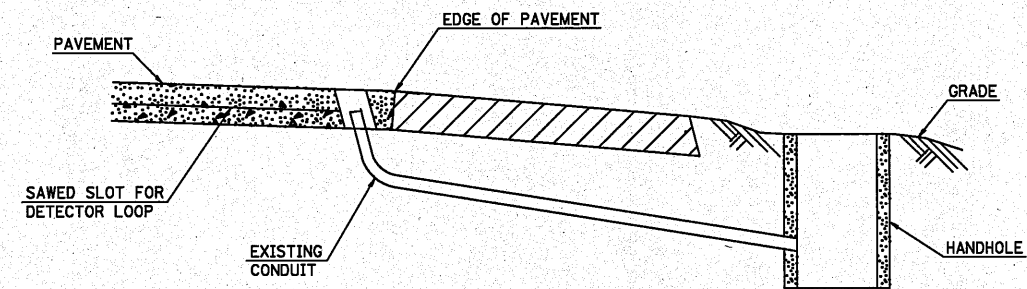
**TRAFFIC SIGNALS LEGEND**

EVPS	EMERGENCY VEHICLE PRIORITY SYSTEM
GSC	GALVANIZED STEEL CONDUIT
PVCC	POLYVINYL CHLORIDE CONDUIT
UD	UNIT-DUCT
○	EXISTING SIGNAL POST
○	EXISTING SIGNAL POST WITH BACKPLATE
○	EXISTING TRAFFIC SIGNAL MAST ARM
□	EXISTING HANDHOLE
□	EXISTING DOUBLE HANDHOLE
□	EXISTING HEAVEY DUTY HANDHOLE
□	EXISTING DETECTOR LOOP
□	EXISTING CONTROLLER
□	EXISTING STREET NAME SIGN/TRAFFIC SIGN
□	EXISTING ILLUMINATED SIGN
□	EXISTING SERVICE INSTALLATION
△	EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)
○	EXISTING (E.V.P.S.) CONFIRMATION BEACON
□	EXISTING SIGNAL HEAD, PEDESTRIAN
○	EXISTING PEDESTRIAN PUSHBUTTON DETECTOR
○	EXISTING GALVANIZED STEEL CONDUIT
○	PROPOSED SIGNAL HEAD WITH BACKPLATE, MAST ARM MOUNTED
△	PROPOSED EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)
○	PROPOSED (E.V.P.S.) CONFIRMATION BEACON
□	PROPOSED HANDHOLE
□	PROPOSED DOUBLE HANDHOLE
□	PROPOSED HEAVEY DUTY HANDHOLE
□	PROPOSED DETECTOR LOOP
□	PROPOSED CONTROLLER
○	PROPOSED PEDESTRIAN PUSHBUTTON DETECTOR
□	PROPOSED SIGNAL HEAD, PEDESTRIAN
○	PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED
□	PROPOSED STREET NAME SIGN/TRAFFIC SIGN
□	PROPOSED ILLUMINATED SIGN
□	PROPOSED SERVICE INSTALLATION
○	PROPOSED SIGNAL POST
○	PROPOSED SIGNAL POST WITH BACKPLATE

NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.

SEE "ELECTRICAL DETAIL" FOR INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUITS.



**ELECTRICAL DETAIL**  
(NO SCALE)

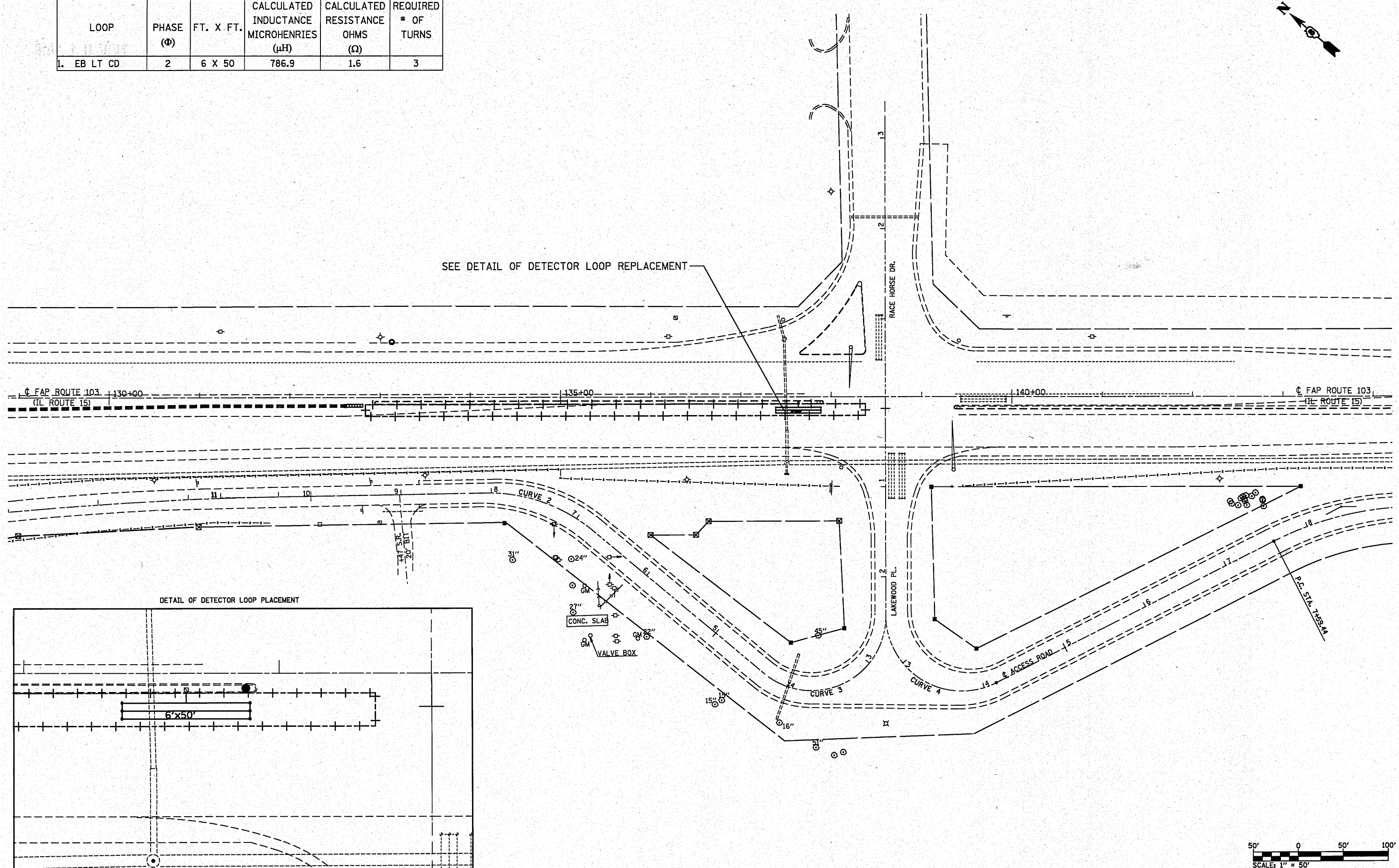
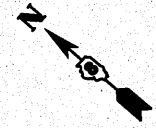
**RE-USE EXISTING DETECTOR LOOP LEAD-IN CONDUIT**

- 1 DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
- 2 REMOVE EXISTING CABLE TO HANDHOLE.
- 3 INSTALL LOOP LEAD-IN CONDUCTORS IN CONDUIT.
- 4 SPLICE NEW DETECTOR LOOP LEAD-IN CONDUCTORS TO EXISTING LEAD-IN CABLE IN HANDHOLE.
- 5 FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.

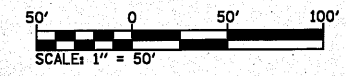
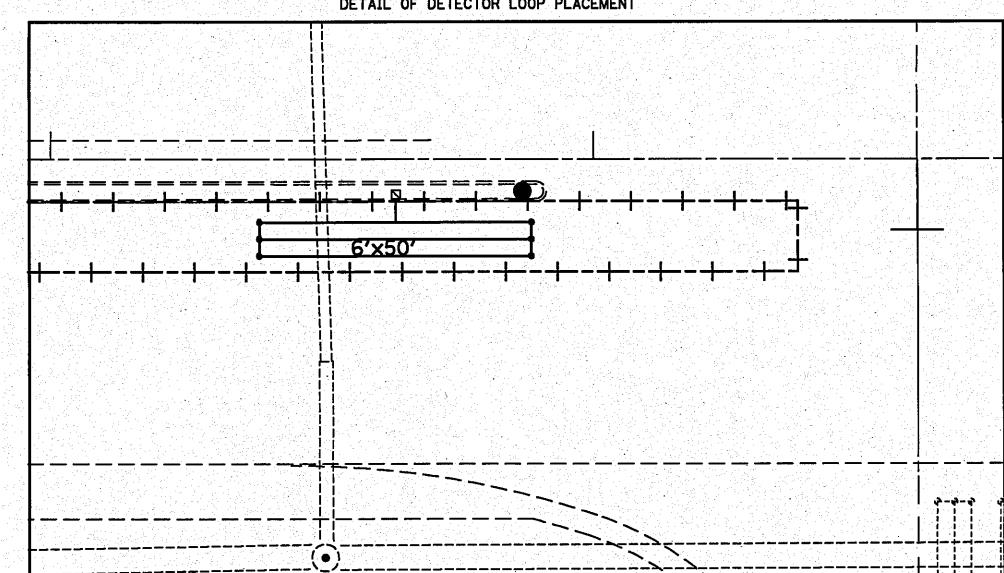
NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"

FILE NAME =	USER NAME = #USER#	DESIGNED - KC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRICAL PLAN SHEET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN - KC	REVISED -			103	29-1-1	ST. CLAIR	8	7	
PLOT SCALE = #SCALE#		CHECKED -	REVISED -			CONTRACT NO. 76E63					
PLOT DATE = #DATE#		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE: 50'	SHEET NO. 1 OF 2 SHEETS	STA. 132+83.92 TO STA. 138+37.77					

LOOP	PHASE (Φ)	FT. X FT.	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)	REQUIRED # OF TURNS
1. EB LT CD	2	6 X 50	786.9	1.6	3



DETAIL OF DETECTOR LOOP PLACEMENT



FILE NAME =	USER NAME = #USER#	DESIGNED - KC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRICAL PLAN SHEET</b>			F.A.P. RTE. 103	SECTION 29-1-I	COUNTY ST. CLAIR	TOTAL SHEETS 8	SHEET NO. 8
#FILE#	PLOT SCALE = #SCALE#	DRAWN - KC	REVISED -		SCALE: 50'	SHEET NO. 2 OF 2 SHEETS	STA. 132+83.92 TO STA. 138+37.77	CONTRACT NO. 76E63		ILLINOIS FED. AID PROJECT		
	PLOT DATE = #DATE#	CHECKED -	REVISED -									
		DATE -	REVISED -									