

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
649	28 N & I	LIVINGSTON	6	1

INDEX OF SHEETS

- COVER SHEET
- GENERAL NOTES
- SUMMARY OF QUANTITIES
- TRAFFIC SIGNAL PLAN
- CABLE PLAN
- RUMBLE STRIP PLAN

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

FAP 649 (IL 17)  
 SECTION 28 N & I  
 LIVINGSTON COUNTY

C-93-105-08  
 PROJECT HSIP-0649(015)

FLASHING BEACON REPLACEMENT  
 IL 17 AND IL 170

HIGHWAY STANDARDS

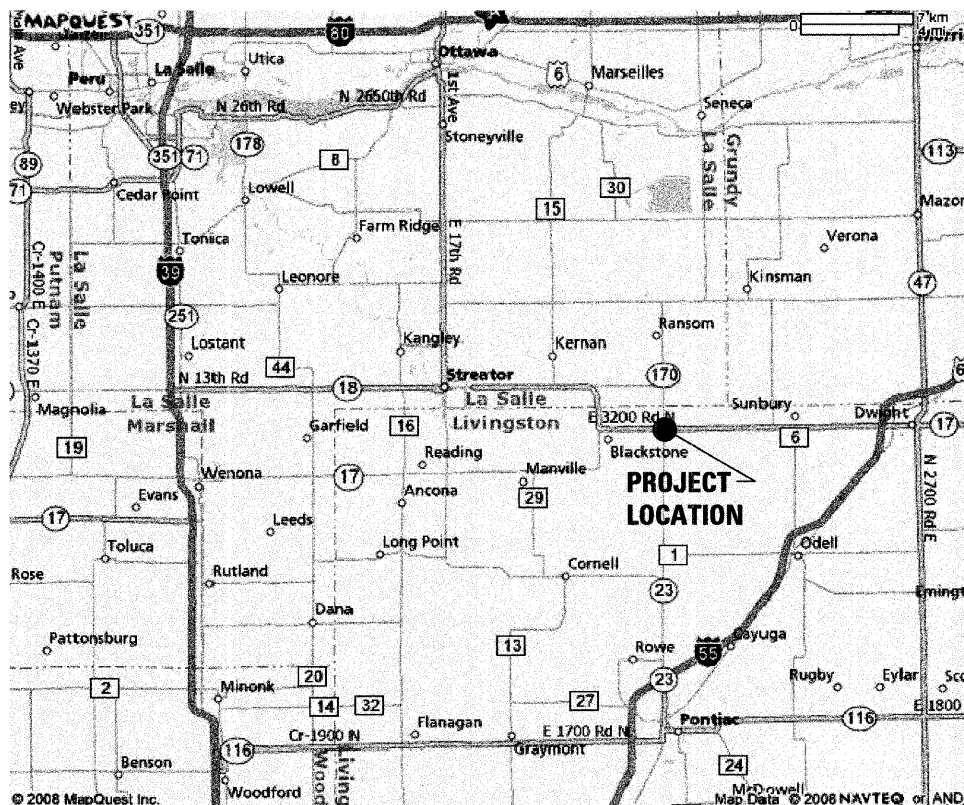
- 000001-05 Standard Symbols, Abbreviations, and Patterns
- 642001 Shoulder Rumble Strips
- 701001-01 Off-Road Operations, 2L, 2W, More Than 4.5m (15') Away
- 701006-02 Off-Road Operations, 2L, 2W, 4.5m (15') to 600mm (24") From Pavement Edge
- 701201-02 Lane Closure, 2L, 2W, Day Only, for Speeds ≥ 45 MPH
- 701301-02 Lane Closure, 2L, 2W, Short Time Operations
- 701901 Traffic Control Devices
- 805001 Electrical Service Installation Details
- 814001-01 Handholes
- 873001-01 Traffic Signal Grounding & Bonding
- 880001 Span Wire Mounted Signals and Flashing Beacon Installation

MICROFILMED \_\_\_\_\_  
 REEL NUMBER \_\_\_\_\_  
 AWARDED \_\_\_\_\_  
 RESIDENT ENGINEER \_\_\_\_\_  
 AS BUILT CHANGES WERE MADE  
 ON THE FOLLOWING SHEETS \_\_\_\_\_

DISTRICT 3 NO. (815) 434-6131  
 PROJECT ENGINEER: TOM HUFNAGEL  
 UNIT CHIEF: DAN DEVINE

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

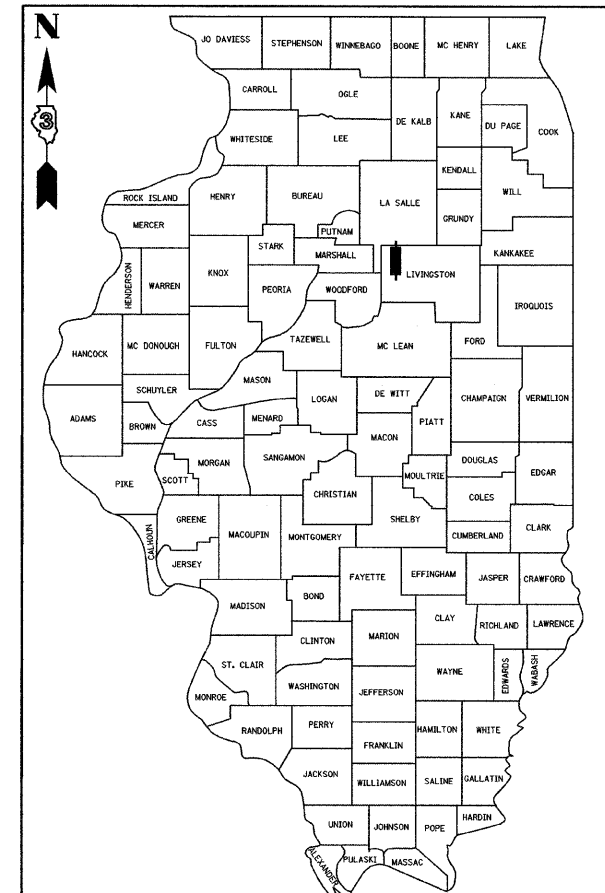
CONTRACT NO. 66831



LOCATION MAP  
 SPOT IMPROVEMENT



D-93-070-08



LOCATION OF SECTION INDICATED THIS: - [black bar] -

OTHER PRINCIPAL ARTERIAL  
 FAP 649 (IL 17)  
 ADT = 2,350 (2007)

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

SUBMITTED \_\_\_\_\_ 20 \_\_\_\_\_  
 date  
*George L. Sanchez*  
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
 August 15, 20 08  
*Ciri E. Plam*  
 ENGINEER OF DESIGN AND ENVIRONMENT  
 August 15, 20 08  
*Christine M. Reed*  
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



PROFESSIONAL DESIGN FIRM  
 LICENSE NO. 184-001717

PRINTED BY THE AUTHORITY  
 OF THE STATE OF ILLINOIS

JORGE SANCHEZ  
 CHAMLIN & ASSOCIATES  
 (815)223-3344

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
649	28 N & I	LIVINGSTON	6	2
STA.		TO STA.		
FED. ROAD DIST. NO. _		ILLINOIS	FED. AID PROJECT	

**GENERAL NOTES**

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.
2. ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRIC CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.
3. MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE: COM ED, MEDIACOM, NICOR GAS
4. ALL TRAFFIC SIGNAL HEADS SHALL BE 12" UNLESS OTHERWISE NOTED.
5. ALL CONDUIT IN TRENCH SHALL BE P.V.C. ALL CONDUIT PUSHED MAY BE GALVANIZED STEEL OR P.V.C. CONDUIT ATTACHED TO STRUCTURES SHALL BE GALVANIZED STEEL.
6. A 1/4" DIAMETER CONTINUOUS NYLON ROPE SHALL BE FURNISHED AND LEFT IN PLACE IN ALL CONDUITS BETWEEN HANDHOLES AND FOUNDATIONS OR CONTROLLER AS INCIDENTAL TO THE RESPECTIVE CONDUIT PAY ITEM.
7. THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNAL IS TURNED ON, INCIDENTAL TO THE CONTROLLER PAY ITEM.
8. THE DEPARTMENT OF TRANSPORTATION (815-434-8505) SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO THE TURNING ON OF THE CONTROLLER UNIT.
9. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FEET MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
10. THE ELECTRICAL CONDUCTORS FOR ALL TRAFFIC SIGNAL HEADS SHALL BE SOLID, SOFT COPPER.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES, AS NECESSARY, INCIDENTAL TO THE CONDUIT PAY ITEM.
12. ALL THREADS OF BOLTS USED IN TRAFFIC COMPONENT ASSEMBLIES SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.
13. BACK PLATES MUST BE POLYCARBONATE WITH A DEEP BACK FLANGE.
14. THE CONTRACTOR SHALL PROVIDE 3 FEET SLACK CABLE IN EACH TRAFFIC SIGNAL STRUCTURE: MAST ARM, POST, CONTROLLER. THE SLACK, WHICH IS IN ADDITION TO THE VERTICAL LENGTH OF CABLE DEFINED IN THE SPECIFICATIONS, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH CABLE.
15. ALL GROUNDING MATERIALS FOR TRAFFIC SIGNAL CONCRETE FOUNDATIONS SHALL REFER TO SECTION 807 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2007.
16. SIGNAL AND PEDESTRIAN HEADS SHALL HAVE BLACK HOUSING AND BLACK POLYCARBONATE BRACKETS.
17. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
18. THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUBSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
19. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED TRAFFIC SIGNAL PAY ITEMS.
20. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS IN THESE PLANS.

**COMMITMENTS**

NONE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
DISTRICT THREE

PREPARED BY: Steve A. Huskins  
DISTRICT OPERATIONS ENGINEER

DATE: July 9, 2008

EXAMINED BY: Herb Jung  
DISTRICT CONSTRUCTION ENGINEER

Wayne Phillips  
DISTRICT MATERIALS ENGINEER

Rick Farnell  
DISTRICT STUDIES & PLANS ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
GENERAL NOTES  
FAP 649 (IL 17)  
SECTION 28 N & I  
LIVINGSTON COUNTY

SCALE: VERT.  
HORIZ.  
DATE 05/08

DRAWN BY NOE  
CHECKED BY JLS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
649	28 N & I	LIVINGSTON	6	3
STA.		TO STA.		
FED. ROAD DIST. NO. _		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE:	
				Y031-IF	QOY F.E.D. 10% STATE
67100100	MOBILIZATION	L SUM	1		1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1		1
80500300	SERVICE INSTALLATION, TYPE C	EACH	3		3
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	1828		1828
81021320	CONDUIT PUSHED, 1 1/2" DIA., PVC	FOOT	495		495
81100500	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., GALVANIZED STEEL	FOOT	75		75
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	11		11
81900200	TRENCH BACKFILL FOR ELECTRICAL WORK	FOOT	1828		1828
83057150	LIGHT POLE, WOOD, 30 FOOT, CLASS 4	EACH	1		1
85000500	MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION	EACH	1		1
85800100	FLASHER CONTROLLER	EACH	3		3
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2925		2925
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	101		101
88040030	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION, POST MOUNTED	EACH	6		6
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	221		221
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	2434		2434
Z0055300	RUMBLE STRIP	EACH	6		6

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUMMARY OF QUANTITIES  
 FAP 649 (IL 17)  
 SECTION 28 N & I  
 LIVINGSTON COUNTY

SCALE: VERT. DATE 05/08

DRAWN BY NOE  
 CHECKED BY JLS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
649	28 N & I	LIVINGSTON	6	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

**CONSTRUCTION NOTES:**

CONTRACTOR SHALL INSTALL FLASHER BEACONS ATOP THE STOP AHEAD SIGNS ALONG IL 170 IMMEDIATELY NORTH AND SOUTH OF THE INTERSECTION WITH IL 17.

CONTRACTOR SHALL REPLACE THE EXISTING FLASHER BEACONS AND CONTROLLERS ATOP THE STOP AHEAD SIGNS ALONG IL 17 IMMEDIATELY EAST AND WEST OF THE INTERSECTION WITH IL 170.

CONTRACTOR SHALL REPLACE THE EXISTING FLASHER BEACONS ATOP THE STOP SIGNS AS WELL AS FLASHER CONTROLLER AT THE INTERSECTION OF IL 17 AND IL 170.

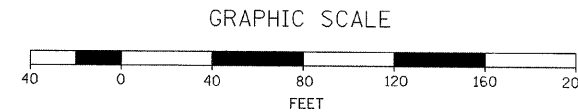
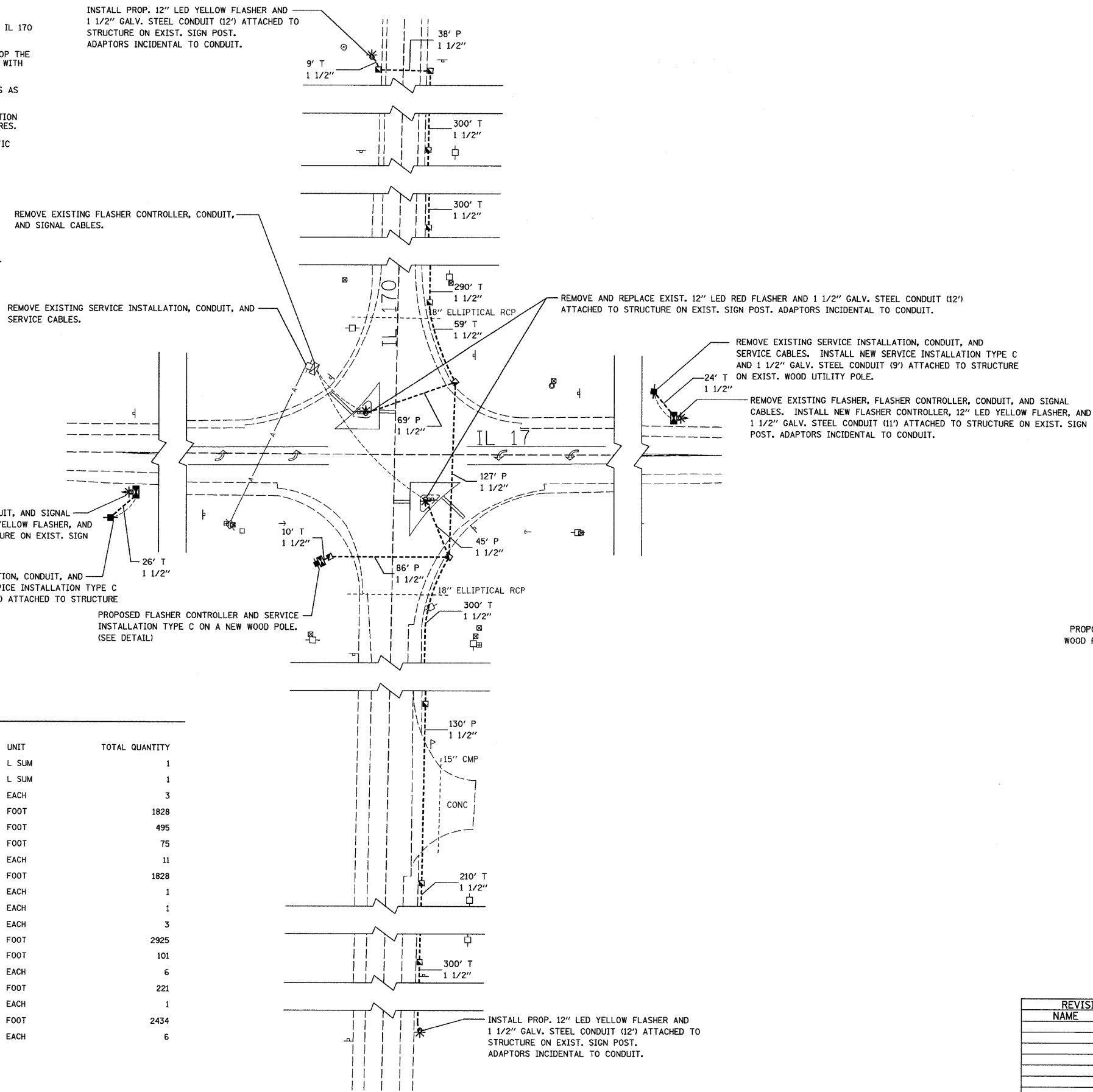
THE EXISTING SERVICE INSTALLATIONS FOR BOTH ADVANCE FLASHERS AND INTERSECTION FLASHERS SHALL BE REPLACED WITH NEW WEATHERPROOF STAINLESS STEEL ENCLOSURES.

REMOVAL OF THE FOLLOWING ITEMS SHALL BE PAID FOR AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT:

- 3 EACH - FLASHER CONTROLLER
- 4 EACH - SIGNAL HEAD, 1-FACE, 1-SECTION, POST MOUNTED
- 3 EACH - ELECTRICAL SERVICE

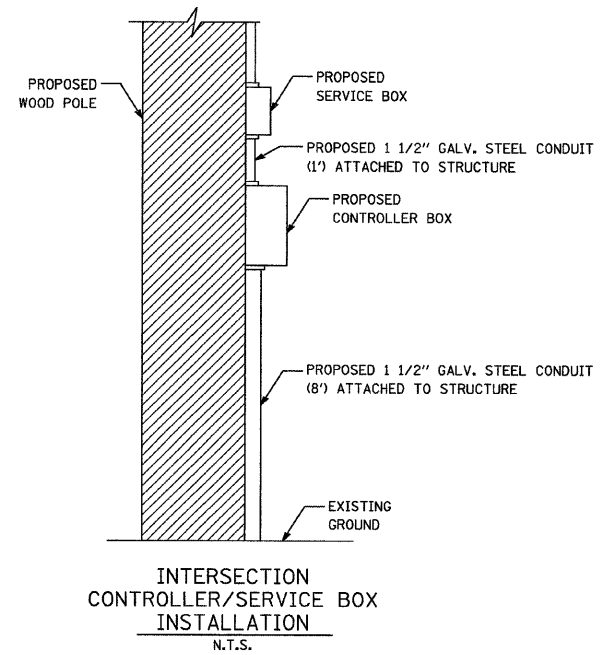
**TRAFFIC SIGNALS LEGEND**

EXISTING	PROPOSED	
		SERVICE INSTALLATION
		FLASHER CONTROLLER
		CONDUIT
		SIGNAL HEAD WITH BACKPLATE
		HANDHOLE
		AERIAL CABLE



**SCHEDULE OF QUANTITIES**

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
80500300	SERVICE INSTALLATION, TYPE C	EACH	3
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	1828
81021320	CONDUIT PUSHED, 1 1/2" DIA., PVC	FOOT	495
81100500	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., GALVANIZED STEEL	FOOT	75
81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	11
81900200	TRENCH BACKFILL FOR ELECTRICAL WORK	FOOT	1828
83057150	LIGHT POLE, WOOD, 30 FOOT, CLASS 4	EACH	1
85000500	MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION	EACH	1
85800100	FLASHER CONTROLLER	EACH	3
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2925
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	101
88040030	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION, POST MOUNTED	EACH	6
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	221
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	2434
Z0055300	RUMBLE STRIP	EACH	6



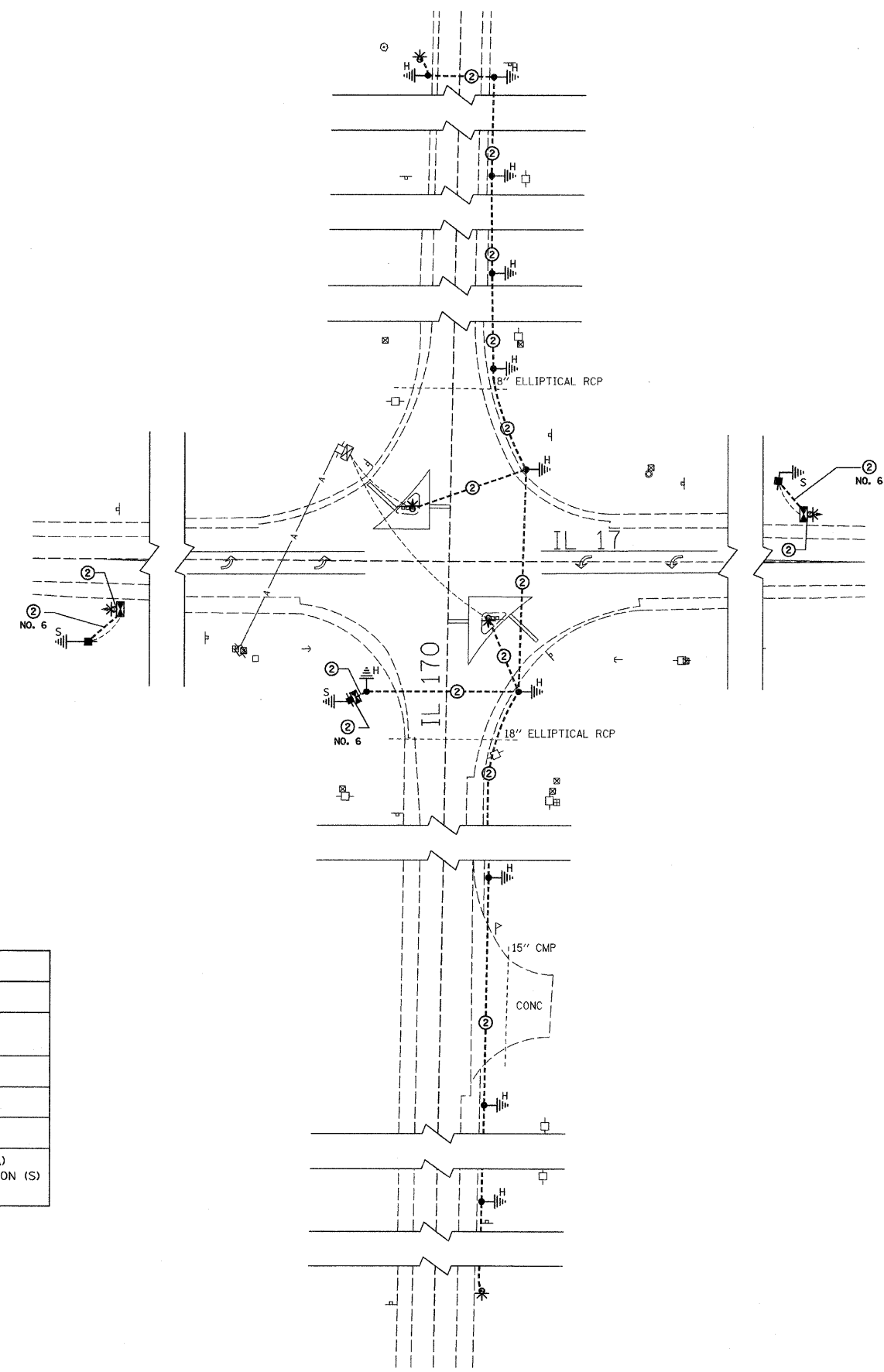
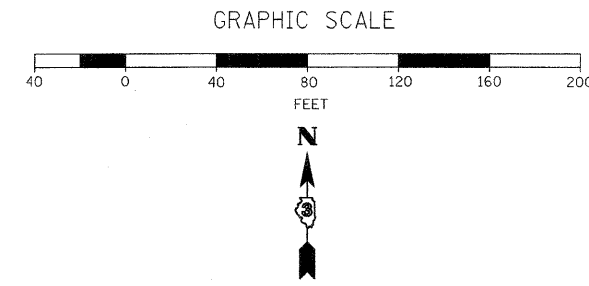
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC SIGNAL PLAN**  
 FAP 649 (IL 17)  
 SECTION 28 N & I  
 LIVINGSTON COUNTY

SCALE: VERT. 1" = 40'  
 HORIZ. 1" = 40'  
 DATE 05/08  
 DRAWN BY NOE  
 CHECKED BY JLS

PLOT DATE = 04/08  
 FILE NAME = SPLANDON  
 USER NAME = NOE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
649	28 N & I	LIVINGSTON	6	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC SIGNALS LEGEND		
EXISTING	PROPOSED	
	⊙	DETNOTES NUMBER OF CONDUCTORS (NEW) ALL CABLE NO. 14 EXCEPT AS INDICATED
□	■	SERVICE INSTALLATION
	⚡	FLASHER CONTROLLER
*	*	12" FLASHER BEACON
	⚡	GROUND ROD AT POST (P) OR MAST ARM (MA) OR CONTROLLER (C) OR SERVICE INSTALLATION (S) OR HANDHOLE (H)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**CABLE PLAN**  
**FAP 649 (IL 17)**  
**SECTION 28 N & I**  
**LIVINGSTON COUNTY**

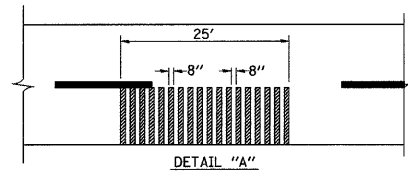
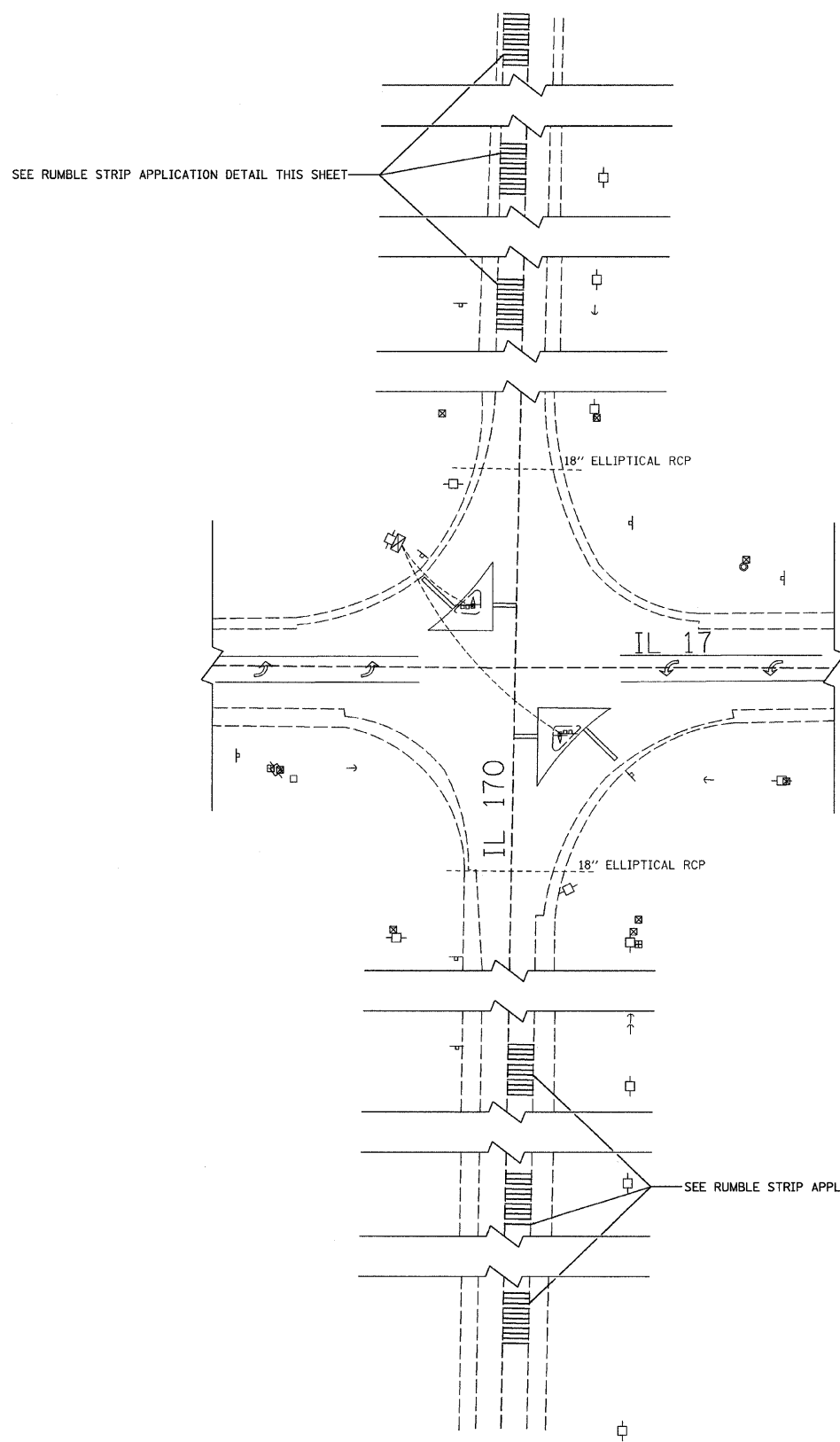
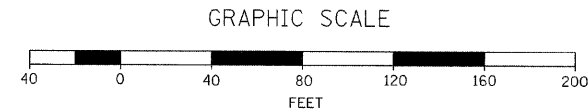
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 HORIZ. 1" = 40'

DATE 05/08

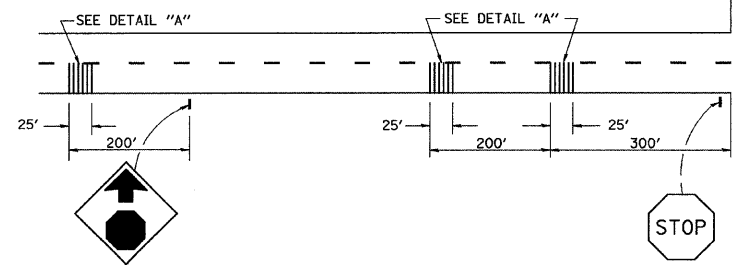
DRAWN BY NOE  
 CHECKED BY JLS

PLOT DATE = 04/08  
 FILE NAME = TSCABLE.DGN  
 PLOT SCALE = 1" = 40'  
 USER NAME = NCE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
649	28 N & I	LIVINGSTON	6	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



NOTE: THE 25-FOOT RUMBLE AREA HAS 8-INCH LENGTHS OF TREATED SURFACE STRETCHED ACROSS THE WIDTH OF APPROACH LANE, EACH SEPARATED BY 8 INCHES OF EXISTING PAVEMENT.



RUMBLE STRIP APPLICATION DETAIL

SCHEDULE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
Z0055300	RUMBLE STRIPS	EACH	6

PLOT DATE = 04/08  
 FILE NAME = T3RUMBLE.DGN  
 USER NAME = JLS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 RUMBLE STRIP PLAN  
 FAP 649 (IL 17)  
 SECTION 28 N & I  
 LIVINGSTON COUNTY

SCALE: VERT. 1" = 40'  
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