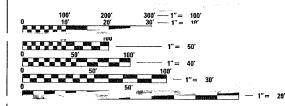
INDEX OF SHEETS

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES
- 3 GENERAL NOTES AND LEGEND
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- 5 PLAN SHEET IL 162 @ MARYVILLE RD.
- 6 PLAN SHEET IL 162 @ 23rd STREET
- 7 CABLE DIAGRAM IL 162 @ MARYVILLE RD.
- 8 CABLE DIAGRAM IL 162 @ 23rd STREET

STANDARDS

70100101	701701-0
701006-02	702001-0
70110101	805001
701106-01	857001
70130102	886001
701501-03	886006
701601-04	

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



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

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LEADER: B

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JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

CONTRACT NO. 76935

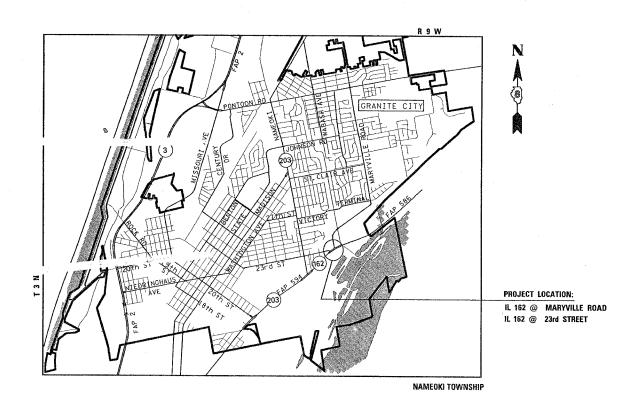
STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 586 (IL 162)
SECTION 57-TS-1
PROJECT
MODERNIZE TRAFFIC SIGNALS
MADISON COUNTY
C-98-097-05



D-98-078-05

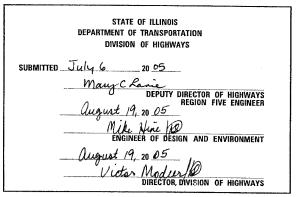


ADT-2005 (ESTIMATE

IL 162 EB - 7300 IL 162 WB - 12600

MARYVILLE RD. - 4500

23rd STREET - 8400



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

COUNTY MADISON

SECTION 57-TS-1

-1 FAP

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

	SUMMARY OF QUANTITIES	S	URBAN		23rd STREET	: Y031-1F
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	MARYVILLE RD. STATE-93.3 % LOCAL-6.7 %	STATE-93.3 % LOCAL-6.7 %	
20400800	FURNISHED EXCAVATION	CU YD	10	6	4	
14003900	MEDIAN SURFACE REMOVAL AND REPLACEMENT	SQ FT	490	300	190	,
6900200	NON-SPECIAL WASTE DISPOSAL	CU YD	10	6	4	
6900450	SPECIAL WASTE PLANS AND REPORT	L SUM	1	0.5	0.5	
6900530	SOIL DISPOSAL ANALYSIS	EACH	1	0.5	0.5	
7100100	MOBILIZATION	L SUM	1	0.5	0.5	
0102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1		1	
0102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	· 1	0.5	0.5	
0102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	i	0.5	0.5	
0300100	LOCATING UNDERGROUND CABLE	FOOT	102	17	85	
0500105	SERVICE INSTALLATION, TYPE A (MODIFIED)	EACH	2	1	1	
1012300	CONDUIT IN TRENCH, 1" DIA., PVC	FOOT	8 %	20	68	
1500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	75	15	60	
6300400	CONTROLLER CABINET TYPE IV	EACH	1		1	
37301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	650	390	260	
37900100	DRILL EXISTING FOUNDATION	EACH	1		1	
17 900 200	DRILL EXISTING HANDHOLE	EACH	6	3	3	
88500100	INDUCTIVE LOOP DETECTOR	EACH	6	3	3	
88600100	DETECTOR LOOP, TYPE I	F00T	1040	525	515	
39502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	900	500	400	:
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2	1	1	
		EDITION COMMITTEE TO A CONTRACT OF THE CONTRAC				

CONTRACT NO. 76935

F.A.P. SECTION COUNTY TOTAL SHEET NO. 586 57-TS-1 MADISON 8 2

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

JATE = 6/28/2005 4AME = c:\projects\ed0/7805\electrical\pln8/78 5CALE = 50.0000 '/ IN,

* SPECIALTY ITEMS

CONTRACT NO. 76935

ELECTRICAL GENERAL NOTES

- 1. THE CONTROLLER CABINET SHALL BE UNPAINTED ALUMINUM AND SHALL BE EQUIPPED WITH TERMINAL FACILITIES AND HARNESS FOR OPTICOM MODEL 134 PHASE SELECTOR. THIS WORK WILL BE INCLUDED IN THE PAY ITEM FOR "CONTROLLER CABINET, TYPE IV"
- 2. THE COST OF REMOVING AND REINSTALLING EXISTING TRAFFIC SIGNAL CONTROLLER AND ITS ASSOCIATED EQUIPMENT, TO FACILITATE INSTALLATION OF NEW CONTROLLER CABINET, SHALL BE INCLUDED IN THE PAY ITEM, "CONTROLLER CABINET, TYPE IV", NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 3. ANCHOR BOLTS, NUTS, AND WASHERS REQUIRED FOR THE INSTALLATION OF PROPOSED CONTROLLER CABINET, AND REMOVING OF EXISTING ANCHORS FLUSH WITH FOUNDATION SHALL BE INCLUDED IN THE THE PAY ITEM. " CONTROLLER CABINET TYPE IV".
- 4. ALL TRAFFIC SIGNAL CABLES SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED. TERMINAL ENDS SHALL HAVE CRIMPED-ON
- 5. THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT. THE LOOP WIRES SHALL BE HELD TIGHTLY IN THE BOTTOM OF THE SAWED SLOT BY MEANS OF A PLASTIC FOAM TYPE MATERIAL. THE "BACKER ROD" SHALL COMPLETELY COVER THE WIRE AND PROVIDE A BARRIER BETWEEN WIRE AND THE SEALENT.
- 6. DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN A HANDHOLE PER SECTION 873 OF THE STANDARD SPECIFICATIONS. CONDUCTORS SHALL BE SPLICED IN A RIGID MOLD FILLED WITH NON-HARDENING EPOXY FILLER. ROSIN-CORE SOLDER SHALL BE USED.
- 7. CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN THE
- 8. ALL INDUCTIVE LOOP DETECTORS SUPPLIED FOR THIS PROJECT SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED. THEY SHALL BE RACK MOUNTED.
- ILLINOIS STATE LAW REQUIRES A 48 HOUR NOTICE BE GIVEN TO UTILITIES 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 IP (GAS & ELECTRIC)
- * CITY OF GRANITE CITY (SANITARY SEWER)
- * CENTER POINT ENERGY (PIPELINE)
- * ILLINOIS AMERICAN WATER
- CHARTER COMMUNICATIONS, INC. (CABLE TV) * Mc LEOD USA TELECOMM., INC. (COMM)
- CONSOLIDATED COMMUNICATIONS (COMM)
 - * SBC (COMM)

(MEMBERS OF J.U.L.I.E. PHONE (800) - 892-0123 ARE INDICATED BY \bullet) NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY

10. LOCATE UNDERGROUND CABLES PRIOR TO ATTEMPTING TO CONSTRUCT THIS PROJECT.

COMMITMENTS

NON-SPECIAL WASTE DISPOSAL SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION. "NON-SPECIAL WASTE WORKING CONDITIONS" AND WITH PLAN DRAWINGS.

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS

	LOCATION IL 162 @	LOOP	PHASE (Ø)	LOOP SIZE(FT)	# OF	CALCULATED INDUCTANCE MICROHENRIES (4H)	CALCULATED RESISTANCE OHMS (\Omega_)
		EB THRU LN	6	6 X 50	3	825	2.47
	23rd ST.	WB THRU LN ①	2	6 X 50	3	803	1.97
		WB THRU LN 2	2.	6 X 50	3	800	1.90
	MARYVILLE RD.	EB THRU LN	6	6 X 50	3	825	2.46
	MIMILIATEE UD.	WB THRU LND	2	6 X 50	. 3	818	2.32
		WB THRU LN 🔾	2	6 X 50	3	815	2.25

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE, ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE

TRAFFIC SIGNALS LEGEND

EMERGENCY VEHICLE PRIORITY SYSTEM

GSC GALVANIZED STEEL CONDUIT

POLYVINYL CHLORIDE CONDUIT

0-

EXISTING SIGNAL POST

0+1> EXISTING SIGNAL POST WITH BACKPLATE EXISTING TRAFFIC SIGNAL MAST ARM

EXISTING HANDHOLE

 Δ EXISTING DOUBLE HANDHOLE

EXISTING HEAVY DUTY HANDHOLE

EXISTING DETECTOR LOOP

 \boxtimes EXISTING CONTROLLER

0 71 EXISTING STREET NAME SIGN/TRAFFIC SIGN

 $-\Box$ EXISTING ILLUMINATED SIGN

---EXISTING SERVICE INSTALLATION

EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)

EXISTING SIGNAL HEAD, PEDESTRIAN (0)

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

Н PROPOSED HEAVY 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

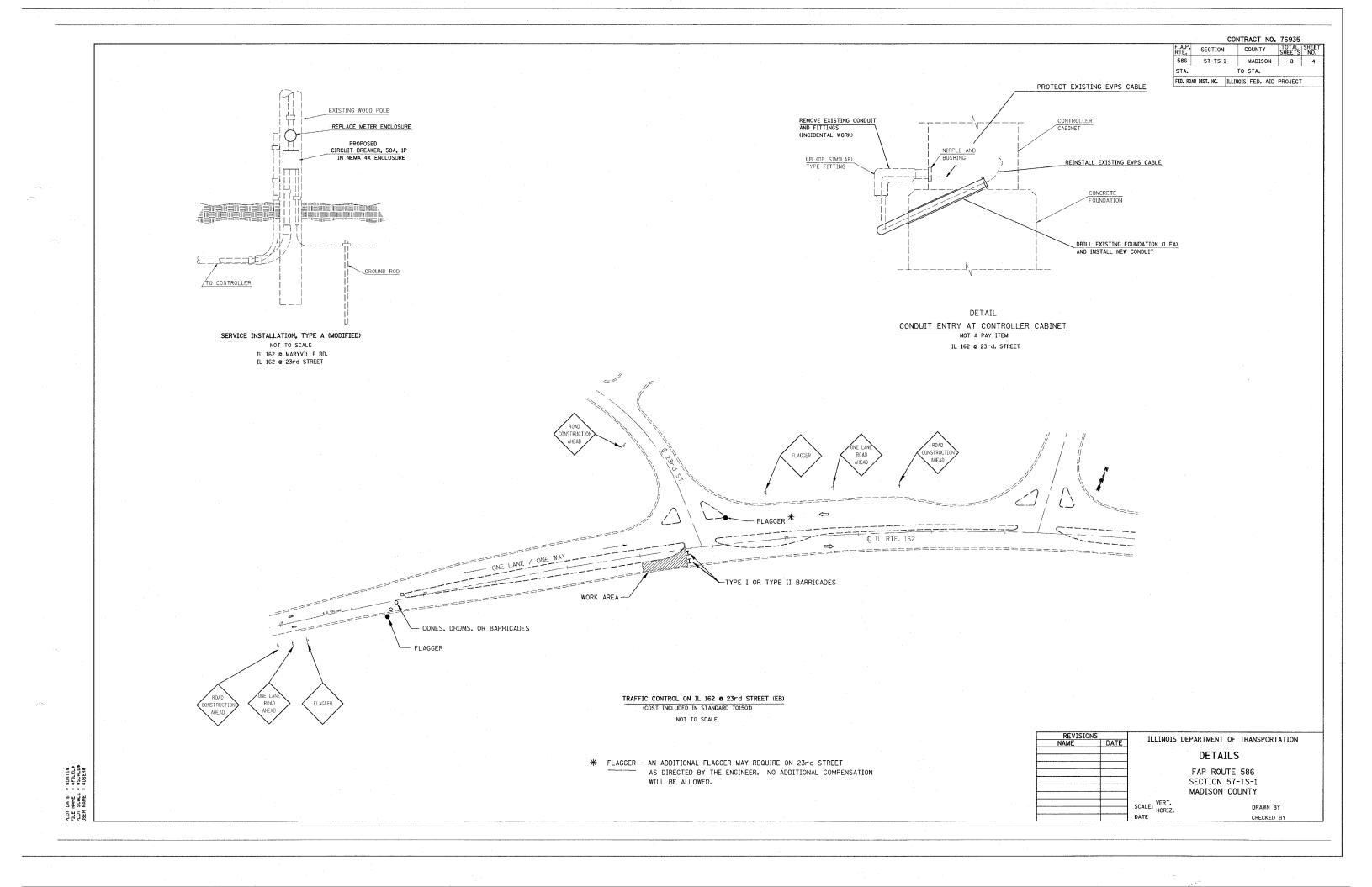
PROPOSED SERVICE INSTALLATION

PROPOSED SIGNAL POST

PROPOSED SIGNAL POST WITH BACKPLATE

ILLINOIS DEPARTMENT OF TRANSPORTATION GENERAL NOTES AND LEGEND FAP ROUTE 586 SECTION 57-TS-1 MADISON COUNTY SCALE: VERT. DRAWN BY

CHECKED BY



CONTRACT NO. 76935

F.A.P. RTE.	SECTION	C	OUNT	Υ	TOTAL SHEETS	SHEET NO.
586	57-TS-	1	MADIS	SON	8	5
STA.		TO	STA.			
ECD DOM	DICT NO	TI I INOTE	EED	ATD	DDO IECT	

IL 162 @ MARYVILLE ROAD

EXISTING SEQUENCE OF OPERATION								
PHASE	1	2	3	4	5	6	7	- 8
MOVEMENT	EB LT	WB	NOT	\mathcal{L}_{SB}	NOT	EB	NOT	NOT
CONCURRENT MOVEMENT PERMITTED	6	6	USED	NONE	USED	OR 2	USED	USED

NOTE: EXISTING CONTROLLER IS ECONOLITE ASC 8000 INSTALL NEW INDUCTIVE LOOP AMPLIFIER-3 EA. -SERVICE INSTALLATION, TYPE A (MODIFIED) - 1 EA ---REMOVE EXISTING METER ENCLOSURE & DISCONNECT. -INSTALL NEW METER ENCLOSURE AND 50 AMP. BREAKER IN PROPOSED NEMA 4X ENCLOSURE. (SEE DETAIL) BITUMINUS ISLAND SURFACE 1 1/2" GSC TO 25th ST. - DRILL EXISTING HANDHOLE - 2 EA - MEDIAN SURFACE REMOVAL &
REPLACEMENT - 300 SQ. FT.
(REPLACE WITH CONCRETE SURFACE) 2-1" PVCC-T-5" (EACH) LOCATE UNDERGROUND CABLE-5' 6' X 50' 2 6' X 50' (1) - LOCATE UNDERGROUND CABLE-12' 1" PVCC-T-10" --DRILL EXISTING HANDHOLE - 1 EA -2---2 ↓ IL 162 (EDWARDSVILLE RD.)



PHASE DESIGNATION DIAGRAM

* REMOVE & REINSTALL ELECTRIC CABLE FROM CONDUIT - 500 FT.

REVISIO NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION PLAN VIEW

FAP ROUTE 586 SECTION 57-TS-1 MADISON COUNTY IL 162 @ MARYVILLE RD. DRAWN BY SCALE: VERT. CHECKED BY

F.A.P. RTE.	SECTION	С	OUNTY	TOTAL SHEETS	SHEET NO.
586	57-TS-1		MADISON	8	6
STA.		TO	STA.		
FED. ROAL	DIST. NO. ILL	INOIS	FED. AIE	PROJECT	-

IL 162 @ 23rd STREET

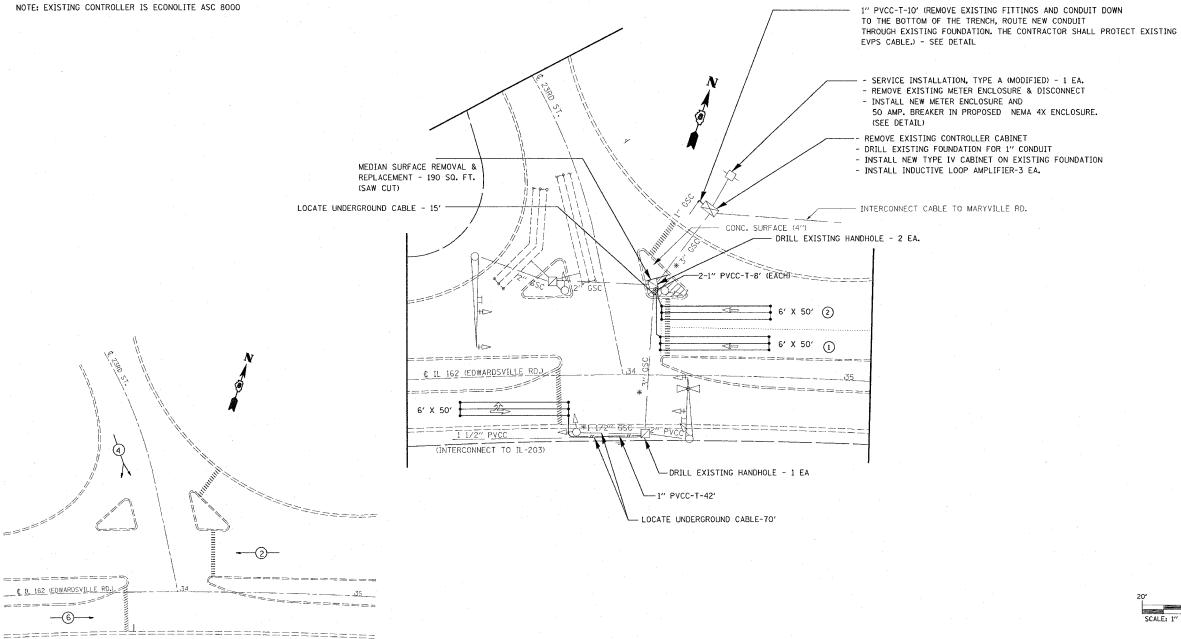
EXISTING SEQUENCE OF OPERATION								
PHASE	1	- 2	3	4	5	6	7	8
MOVEMENT	NOT	w _B	NOT	SB	NOT	EB	NOT	NOT
CONCURRENT MOVEMENT PERMITTED	USED	6	USED	NONE	USED	2	USED	USED

NOTE: EXISTING CONTROLLER IS ECONOLITE ASC 8000

4

_____ ¢ IL 162 (EDWARDSVILLE RD.)

6--



PHASE DESIGNATION DIAGRAM

* REMOVE & REINSTALL ELECTRIC CABLE FROM CONDUIT - 400 FT.

	SCALE: 1" = 20'		
REVISIONS	71.1.711070	DE0.	 ٥.

NAME	DATE	
		SCAL DATE
		DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION PLAN VIEW

> FAP ROUTE 586 SECTION 57-TS-1 MADISON COUNTY IL 162 @ 23rd ST.
> DRAWN BY

