STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

**DIVISION OF HIGHWAYS** 

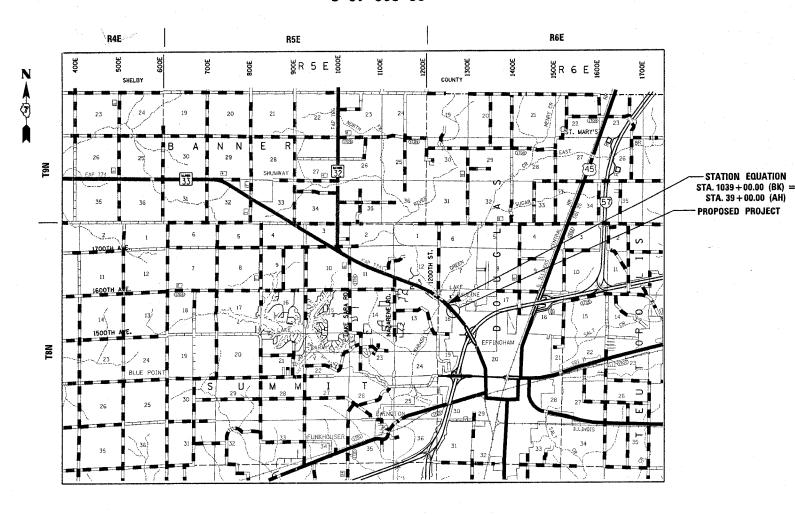
# PLANS FOR PROPOSED FEDERAL HIGHWAY PROJECT

FOR INDEX OF SHEETS, SEE SHEET NO 2

FOR GENERAL NOTES, SEE SHEET NO 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO 3

F.A.P. ROUTE 774 (ILLINOIS ROUTE 32/33) SECTION (107Z) TSL-4 PROJECT: F-0774-(027) **EFFINGHAM COUNTY** C-97-008-06

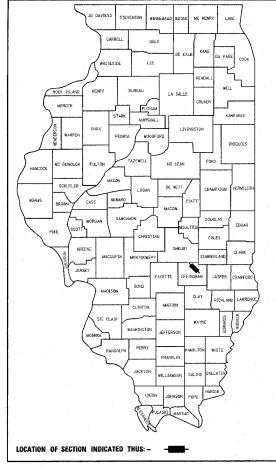


CONTRACT NO. 74133

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

SECTION 774 (107Z) TSL-4 EFFINGHAM 13

D-97-006-06



DEPARTMENT OF TRANSPORTATION ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION august 18, 20 06 Mike Him 10 august 18/20 06 Milton R. Sew, P.E. P.D.

DIVISION ADMINISTRATOR

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

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.

> FOR UNDERGROUND UTILITY LOCATIONS CALL J.U.L.I.E. TOLL FREE 1-800-892-0123 SUMMIT TOWNSHIP DOUGLAS TOWNSHIP

**CONTRACT NO. 74133 DOUGLAS TOWNSHIP** 

LOCATION MAP 5280' 10560' 1584

GROSS AND NET LENGTH OF PROJECT = 300 FT. = 0.06 MILES

#### GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". ADOPTED JANUARY 1, 2002; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED MARCH 1, 2005; AND "THE SPECIAL PROVISIONS" INCLUDED IN THE PROPOSAL.

THIS PROJECT IS LOCATED AT THE INTERSECTION OF FAP 774 (IL 32/33) AND FORD AVENUE IN THE CITY OF EFFINGHAM, IN EFFINGHAM COUNTY. THE WORK INCLUDED IN THIS SECTION CONSISTS OF INSTALLING TRAFFIC AND HIGHWAY LIGHTING AND ALL OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

LOCATIONS OF UTILITIES HAVE NOT BEEN SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATIONS OF UNDERGROUND UTILITIES WITH J.U.L.I.E. FIELD MARKINGS OF ACTIVITIES IN WORK AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 96 HOURS ADVANCE NOTICE THROUGH THE J.U.LI.E. SYSTEM BY CALLING 1-800-892-0123.

AGENCIES WITH UTILITIES WITHIN THE PROJECT LIMITS:

ILLINOIS CONSOLIDATED TELEPHONE CO.

VERIZON NORTH INC.

AMEREN CIPS

NORRIS ELECTRIC COOPERATIVE

EJ WATER CORPORATION

LAKE SARA AREA WATER COOPERATIVE, INC.

CITY OF EFFINGHAM

AT&T MEDIA SERVICE

THE TRAFFIC OPERATIONS UNIT CHIEF (MIKE WORTHEY) AT THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE NOTIFIED AT 217-342-8284 AT LEAST 72 HOURS PRIOR TO TURNING ON ANY FLASHER OR CONTROLLER UNIT.

THE SIZE OF THE CABLE SUPPLIED SHALL BE EQUAL TO OR GREATER THAN THE SIZE OF THE CABLE REQUIRED TO CARRY THE LOAD BETWEEN THE CONTROLLER AND THE SERVICE INSTALLATION.

THE CONTROLLER CABINET SHALL BE PLACED SO THAT A TECHNICIAN CAN SEE THE INTERSECTION OVER THE TOP OF THE CABINET WHILE WATCHING THE COMPONENTS IN THE CABINET.

THE CONTRACTOR SHALL ARRANGE FOR A FACTORY OR SUPPLIER REPRESENTATIVE TO BE PRESENT AT THE INTERSECTION WHEN THE SIGNALS ARE TURNED ON. THE REPRESENTATIVE SHALL MAKE CERTAIN THAT ALL EQUIPMENT OPERATES TO THE SATISFACTION OF THE ENGINEER.

A 2 FOOT MINIMUM, 6 FOOT DESIRABLE, HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM THE BACK OF CURB TO THE EDGE OF HANDHOLES, JUNCTION BOXES AND SIGNAL POST FOUNDATIONS. A 5 FOOT MINIMUM HORIZONTAL CLEARANCE SHALL BE MAINTAINED FROM THE BACK OF THE CURB TO ALL MAST ARM FOUNDATIONS. CONTROLLER FOUNDATIONS SHALL BE LOCATED AS FAR FROM THE BACK OF THE CURB AS POSSIBLE TO PROTECT THE CONTROLLER CABINET.

ALL HARDWARE SHALL BE TIGHTENED AND WELL SECURED. CABLES SHALL BE NEATLY WOUND IN HANDHOLES. CABLES SHALL BE NEATLY TRAINED IN THE CONTROLLER CABINET.

ALL THREADS OF BOLTS USED IN ASSEMBLY OF TRAFFIC SIGNAL COMPONENTS SHALL BE COATED WITH A NON-LEAD BASED ANTI-SEIZE COMPOUND, SIMILAR TO LEAD PLATE, PRIOR TO ASSEMBLY.

NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN 2 FOOT MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.

THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED WITH THE TRENCH AND BACKFILL FOR ELECTRICAL WORK PAY ITEM.

THE NUMBER OF CONDUCTORS FOR ELECTRIC CABLES AS SHOWN ON THE PLANS SHALL BE THE MINIMUM NUMBER OF CONDUCTORS FURNISHED FOR EACH LOCATION. THE CONTRACTOR MAY SUBSTITUTE AN ELECTRIC CABLE WITH MORE CONDUCTORS THAN SPECIFIED BUT NO ADDITIONAL COMPENSATION WILL BE MADE FOR THE EXTRA CONDUCTORS.

ALL NEW TRAFFIC AND PEDESTRIAN SIGNAL WIRING SHALL EXTEND FROM CONTROLLER TO SIGNAL. SPLICES IN HANDHOLES WILL NOT BE ALLOWED.

ALL MAST ARM MOUNTED SIGNAL HEADS ON AN INDIVIDUAL MAST ARM SHALL BE MOUNTED SO THAT THE RED INDICATIONS ARE LEVEL WITH EACH OTHER.

TRAFFIC SIGNAL HEADS SHALL BE PROPERLY COVERED PRIOR TO INTERSECTION TURN-ON OR AS DIRECTED BY THE ENGINEER. THIS COST SHALL BE INCLUDED WITH THE COST OF THE ASSOCIATED SIGNAL HEAD PAY ITEMS.

ALL TRAFFIC SIGNAL MAST ARM ASSEMBLIES (STANDARD, COMBINATION, OR DUAL) MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.

ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITY WITHIN THE RIGHT-OF-WAY SHALL BE RESHAPED AND RESEEDED, SEEDING SHALL BE CLASS 2 IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. THE COST OF RESHAPING AND RESEEDING SHALL BE INCLUDED IN THE UNIT PRICE OF THE VARIOUS ITEMS OF WORK AND SHALL NOT BE PAID FOR SEPARATELY.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RELOCATING SIGNS OR DELIVERING EXISTING SIGNS TO THE IDOT DISTRICT 7 SIGN SHOP AS DIRECTED BY THE ENGINEER. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE OF THE VARIOUS ITEMS OF WORK AND SHALL NOT BE PAID FOR SEPARATELY.

CITY OF EFFINGHAM CONTACT: STEVE MILLER CITY ENGINEER 201 E JEFFERSON EFFINGHAM, IL 62401 PHONE: (217) 342-5303 | F.A.P. | SECTION | COUNTY | TOTAL | SHEET | NO. | 774 | (107Z) TSL-4 | EFFINGHAM | 13 | 2 | | FED. ROAD DIST. NO. | ILLINOIS | FED. AID | PROJECT |

CONTRACT NO. 74133

#### INDEX OF SHEETS

COVER SHEET
INDEX OF SHEETS AND GENERAL NOTES
SUMMARY OF QUANTITIES
HORIZONTAL ALIGNMENT PLAN
TRAFFIC SIGNAL PLANS-SIGNAL LAYOUT
TRAFFIC SIGNAL PLANS-SIGNAL LAYOUT
TRAFFIC SIGNAL PLANS-BILL OF MATERIALS AND DETAILS
LIGHTING SCHEDULE
LIGHTING SCHEDULE
LIGHTING DETAILS
BORING LOOS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE
INCLUDED AFTER SHEET NO. 13:

COOOO1-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
TO1001-01 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
TO1006-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
TO1006-02 OFF-RD OPERATIONS, BULTILANE, 15' TO 2' FROM EDGE OF
PAVEMENT
TO1101-01 OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
TO1201-02 LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEEDS 3/= 45MPH
TURN LANE
TO2001-06 TRAFFIC CONTROL DEVICES
TO20010 SIGN PANEL MOUNTING DETAILS
TO20016-01 MAST ARM MOUNTED STREET NAME SIGNS
BO5001 ELECTRICAL SERVICE INSTALLATION DETAILS
TO0015 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
TO110-02 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
TANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
TAFFIC SIGNAL MOUNTING DETAILS
TRAFFIC SIGNAL MOUNTING DETAILS

REVISIONS
NAME DATE
DRM 6-06

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
AND
GENERAL NOTES

DATE 4/05

CHECKED BY SJK

# SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	1	COUNTY	TOTAL	SHEET NO.
774	(107Z) TSL-	-4	EFFINGHAM	13	3
FEO. F	OAD DIST. NO.	ILLINOIS	FED. Al	D PROJE	CT

CONTRACT NO. 74133		CONTR	ACT	NO.	74133
--------------------	--	-------	-----	-----	-------

	SUMMARY OF QUANTITIES				TRUCTION TYPE (	<del></del>
CODE NO	ITEM ITEM	UNIT	TOTAL QUANTITIES	Y030-1E 100% CITY	80% FEDERAL 10% STATE 10% CITY	Y031-3D 100% CITY
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4		4	
67100100	MOBILIZATION	L SUM	1		1	
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	. 1		1	
<b>*</b> 72000100	SIGN PANEL - TYPE 1	SQ FT	9		9	
*72000200	SIGN PANEL - TYPE 2	SQ FT	62		62	
<b>★</b> 73000100	WOOD SIGN SUPPORT	FOOT	18		18	
80400100	ELECTRIC SERVICE INSTALLATION	EACH	. 1	1		
80500100	SERVICE INSTALLATION, TYPE A	EACH	1		1	
80802100	WOOD POLE, 35 FT., CLASS 4	EACH	1		1	
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	1044	137	907	
81013200	CONDUIT IN TRENCH, 6" DIA., PVC	F00T	8		8	
81021560	CONDUIT, AUGERED 2 1/2" DIA., PVC	FOOT	515	80	435	
81021590	CONDUIT, AUGERED 4" DIA., PVC	FOOT	270		270	
81021610	CONDUIT, AUGERED 6" DIA., PVC	FOOT	96		96	
81400100	HANDHOLE	EACH	7		7	
81400300	DOUBLE HANDHOLE	EACH	1		1	
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1046	137	909	
81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	3047	3047		
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	4	4		
82103900	LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	1	1		
82500605	LIGHTING CONTROLLER PHOTOCELL RELAY	EACH	1	1		
83052600	LIGHT POLE, FIBERGLASS ANCHOR BASE, 45 FT. M.H., TENON MOUNT	EACH	1	1		
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	6.5	6.5		
83800505	BREAKAWAY DEVICE, COUPLING, WITH ALUMINUM SKIRT	EACH	4	4		
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1		1	
86200300	UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1		1	
86400100	TRANSCEIVER - FIBER OPTIC	EACH	2		2	
87100110	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 6F	FOOT	1419		1419	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	267		267	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1889		1889	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	797		797	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE.	FOOT	54		54	
87502680	TRAFFIC SIGNAL POST, ALUMINUM 14 FT.	EACH	1		1	
87502700	TRAFFIC SIGNAL POST, ALUMINUM 16 FT.	EACH	2		2	
87502720	TRAFFIC SIGNAL POST, ALUMINUM 18 FT.	EACH	1		1	

		TICC		SUMMARY OF QUANTITIES CONSTRUCTION TYPE CODE  V030-1F Y031-1F Y031-1F Y031-1F						
	T	115		TOTAL	Y030-1E 100% CITY	Y031-1F 80% FEDERAL 10% STATE	Y031-3D 100% CITY			
CODE NO	ITEM		UNIT	OUANTITIES		10% CITY				
87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	·	EACH	1		1				
87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.		EACH	1		1				
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.		EACH	1		1				
87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.		EACH	1		1				
87800100	CONCRETE FOUNDATION, TYPE A		FOOT	12		12				
87800150	CONCRETE FOUNDATION, TYPE C		FOOT	. 3		3				
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER		FOOT	52		52				
87900200	DRILL EXISTING HANDHOLE		EACH	1		1				
88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC		EACH	18		18				
88700200	LIGHT DETECTOR		EACH	4			4			
88700300	LIGHT DETECTOR AMPLIFIER		EACH	1			1 :			
88800100	PEDESTRIAN PUSH-BUTTON		EACH	. 2		2				
X0320872	VIDEO VEHICLE DETECTION SYSTEM		EACH	1 .		. 1				
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C		FOOT	627		627				
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED		FOOT	1175			1175			
X8801310	SIGNAL HEAD , POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED		EACH	8		8				
X8801400	SIGNAL HEAD , POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED		EACH	2		2				
X8801415	SIGNAL HEAD , POLYCARBONATE, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED		EACH	2		2				
X8801437	SIGNAL HEAD , POLYCARBONATE, LED, 2-FACE, 1-3-SECTION, 1-5-SECTION, BRACKET MOUNTED		EACH	2		2	·			
X8810395	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED		EACH	2		2				

\* DENOTES SPECIALTY ITEM

REVISIONS
NAME DATE
DRM 6-06

SUMMARY OF QUANTITIES

DRAWN BY MLO
DATE 4/05

DATE 4/05

DATE BY SJK

RTE. SECTION COUNTY TOTAL SHEETS NO.

774 (107Z) TSL-4 EFFINGHAM 13 4 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 74133 ILLINOIS DEPARTMENT OF TRANSPORTATION **HORIZONTAL ALIGNMENT PLAN** SCALE: 1"=200' DRAWN BY NJV

EXIST. CURVE C13 PI STA. = 187+56.58 \( \text{\Delta} = 41^\) 14' 58'' (RT) \( \text{\Delta} = 300.00'\) \( \text{\Delta} = 112.91'\) \( \text{\L} = 20.54'\) \( \text{\Delta} = \text{\Delta} = 20.54'\) PROP. CURVE PROP5 PI STA. = 1014+09.68 EXISTING CURVE C3
P.I. STA= 1034+69.01
\( \text{\Delta} \text{ 44\* 02' 24'' (RT)} \)
D= 0° 30' 00'''
R= 11457.45''
T= 4633.77'
L= 8806.70'
E= 901.55'
e= 1.555''
P.C. STA. = 988+35.24
P.T. STA. = 1076+41.94 PROP. CURVE PROP4-2
PI STA. = 45+21.11

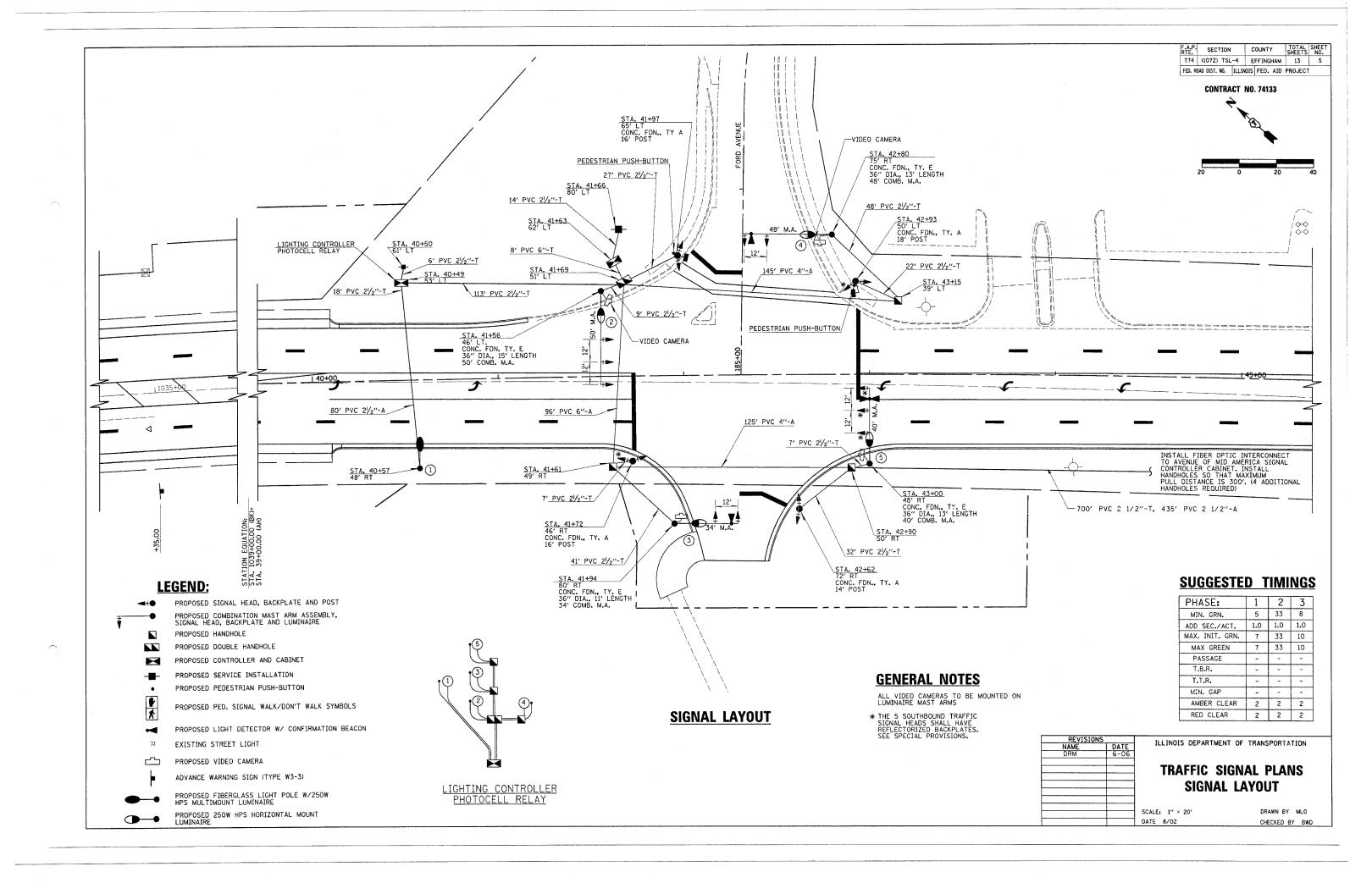
\[ \Delta = 4^\circ 27' \ 29'' \ (RT) \]
\[ D = 0^\circ 33' \ 30'' \]
\[ R = 10,263.16' \]
\[ T = 399.48' \]
\[ L = 798.55' \]
\[ E = 7.77' \]
\[ \text{e} = N/C \]
\[ \text{C} = \text{C} \] Δ = 25° 19′ 45″ (RT) D = 0° 30′ 00″ R = 11,456.75'T = 2.574.44'L = 5,064.76' E = 285.69' e = \_\_\_\_ P.C. STA. = 186+43.67 P.T. STA. = 188+59.66 e = 1.56 % P.C. STA. = 988+35.24 P.T. STA. = 1039+00.00 P.C. STA. = 41+21.63 P.T. STA. = 49+20.18 SE ATTAINED STA. 985+70.00 TO STA. 989+00.00 SE REMOVED STA. 1025+00.00 TO STA. 1026+75.00 POI STA 189443.66 , STA. 42+30.72 (IL RTE 32/33) =
STA. 185+00.00 (FORD AVE)

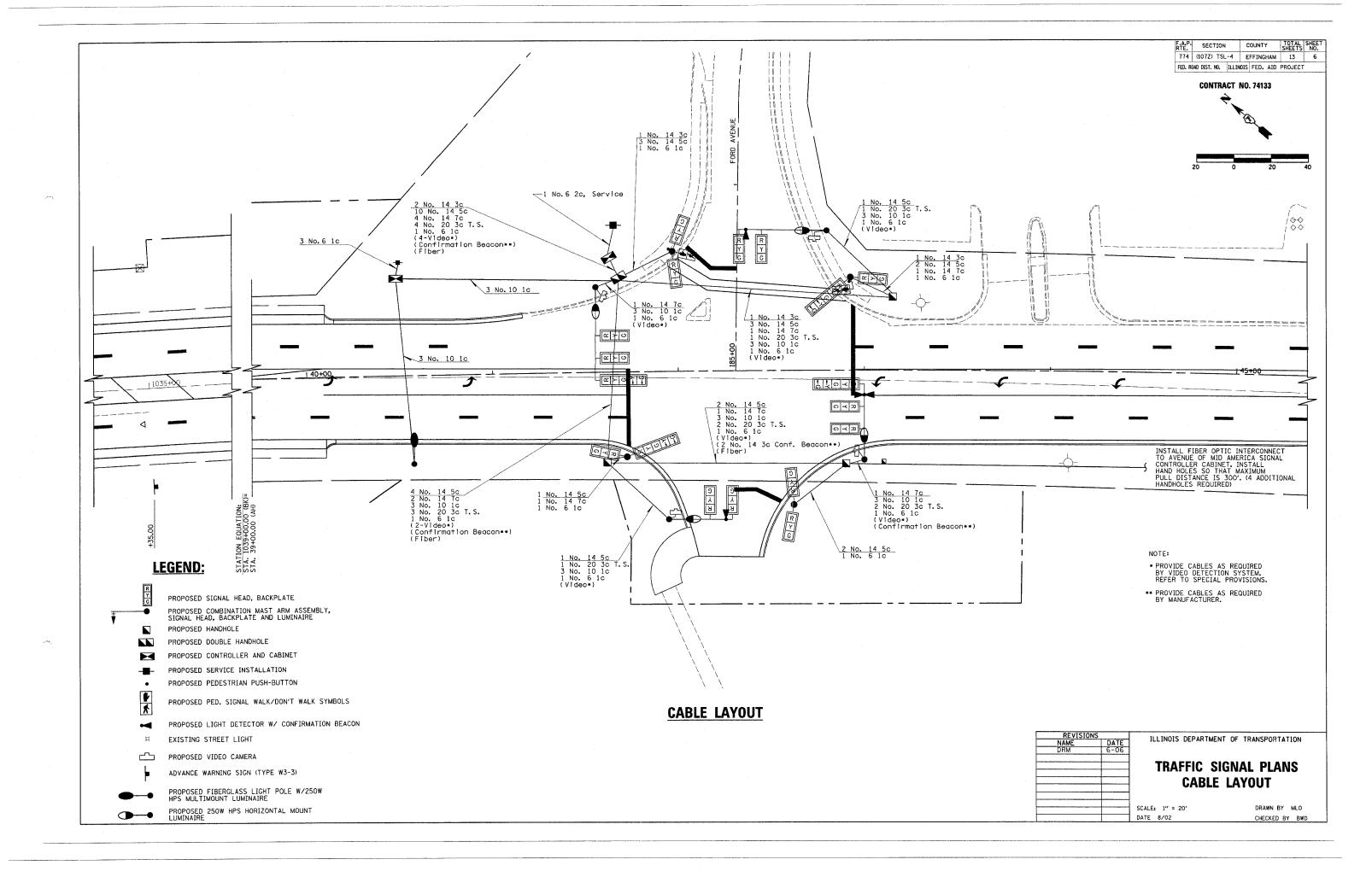
STA. 185+00.00 (FORD AVE) STA. 41+21.63 PT STA. 188+59.66 PC STA. 186+43.67 PROP 4-2 EXIST C3 1065+00 PT STA. 298+68.20 1030+00 1.51A 1.00 (6) 1.14 -288+333-29 POT STA. 157+00.01 PROPOSED PROJECT LOCATION STA. 298+06.29 (WOOD BIRD DR) = PROP. CURVE C61
PI STA. = 298+51.49
\[ \Delta = 40^{\circ} 00' 00'' (LT)
\]
D = 114^{\circ} 35' 30''
R = 50.00'
T = 18.20'
L = 34.91'
E = 3.21'
\[ \Delta = N/C
P.C. STA. = 298+33.29
P.T. STA. = 298+68.20

<u>LEGEND</u>

DENOTES PERMANENT SURVEY MARKER PLACED DURING ROADWAY CONSTRUCTION.

DATE 4/22/02 CHECKED BY BKB





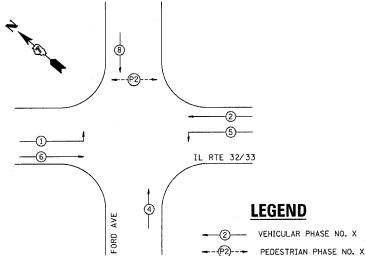


**BILL OF MATERIALS-TRAFFIC SIGNALS** ITEM SIGN PANEL - TYPE 1 SIGN PANEL - TYPE 2 WOOD SIGN SUPPORT SERVICE INSTALLATION, TYPE A WOOD POLE, 35 FT., CLASS 4 CONDUIT IN TRENCH, 2 1/2" DIA., PVC CONDUIT IN TRENCH, 6" DIA., PVC CONDUIT, AUGERED 2 1/2" DIA., PVC

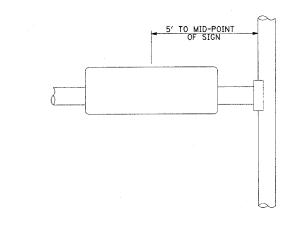
EACH FOOT FOOT FOOT CONDUIT. AUGERED 4" DIA., PVC FOOT CONDUIT, AUGERED 6" DIA., PVC FOOT EACH EACH FOOT EACH EACH EACH

96 HANDHOLF DOUBLE HANDHOLE TRENCH AND BACKFILL FOR ELECTRICAL WORK 909 FULL-ACTUATED CONTROLLER AND TYPE IV CABINET UNINTERRUPTABLE POWER SUPPLY, EXTENDED TRANSCEIVER - FIBER OPTIC FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 6F FOOT 1419 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C FOOT 267 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C FOOT 1889 ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C FOOT 797 ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C FOOT 54 TRAFFIC SIGNAL POST, ALUMINUM 14 FT. EACH TRAFFIC SIGNAL POST, ALUMINUM 16 FT. EACH TRAFFIC SIGNAL POST, ALUMINUM 18 FT. EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT. EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT. EACH STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT. EACH CONCRETE FOUNDATION, TYPE A FOOT CONCRETE FOUNDATION, TYPE C FOOT CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER 52 DRILL EXISTING HANDHOLE TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC 18 LIGHT DETECTOR EACH LIGHT DETECTOR AMPLIFIER EACH PEDESTRIAN PUSH-BUTTON EACH VIDEO VEHICLE DETECTION SYSTEM EACH ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C FOOT 627 ELECTRIC CABLE IN CONDUIT NO. 20 3/C, TWISTED, SHIELDED SIGNAL HEAD ,POLYCARBONATE, LED, 1-FACE, 3 SECTION, MAST ARM MOUNTED FOOT 1175 EACH SIGNAL HEAD , POLYCARBONATE, LED, 1-FACE, 5 SECTION, MAST ARM MOUNTED EACH SIGNAL HEAD , POLYCARBONATE, LED, 2-FACE, SECTION, BRACKET MOUNTED EACH SIGNAL HEAD , POLYCARBONATE, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED FACH PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED EACH

DETAIL OF MAST ARM FOUNDATION **BOLT PATTERN** 



#### PHASE DESIGNATION DIAGRAM



#### STOP LIGHT AHEAD SIGN TYPE W3-3

(1 REQUIRED)



**S-1** (2 REQUIRED)



**MOUNTING LOCATION** 

**S-2** (2 REQUIRED)

#### STREET NAME SIGNS

1. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED

2. LETTER SIZE 8D.

ILLINOIS DEPARTMENT OF TRANSPORTATION TRAFFIC SIGNAL PLANS BILL OF MATERIALS & DETAILS DRAWN BY MLO DATE 8/02

F.A.P. SECTION COUNTY TOTAL SHEET NO. 774 (107Z) TSL-4 EFFINGHAM 13 7 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT CONTRACT NO. 74133

SQ FT

SQ FT

FOOT

EACH

QUANTITY

62

18

907

435

270

 F.A.P. RTE.	SECTION		COUNTY			TOTAL SHEETS	SHEET NO.
774	(107Z) TSL	-4	EFI	FIN	ЗНАМ	.13	8
FED. RO	AD DIST. NO.	ILLIN	OIS F	ED.	AID	PROJECT	

CONTRACT NO. 74133

## SCHEDULE OF LIGHTING QUANTITIES

ELECTRIC SERVICE INSTALLATION (80400100)

STATION EACH 61' LT STA. 40+50.12 1

CONDUIT IN TRENCH, 21/2" DIA., PVC (81012700)

 STATION
 STATION
 FEET

 53' LT STA. 40+49
 33' LT STA. 40+51
 18

 53' LT STA. 40+49
 61' LT STA. 40+50
 6

 53' LT STA. 40+49
 51' LT STA. 41+69
 113

 137
 137

CONDUIT, AUGERED, 21/2" DIA., PVC (81021560)

<u>STATION</u> <u>STATION</u> <u>FEET</u> 33' LT STA, 40+51 48' RT STA, 40+57 80

TRENCH AND BACKFILL FOR ELECTRICAL WORK (81500200)

 STATION
 STATION
 FEET

 61' LT STA. 40+50
 53' LT STA. 40+49
 6

 53' LT STA. 40+49
 33' LT STA. 40+51
 18

 53' LT STA. 40+49
 51' LT STA. 41+69
 113

 33' LT STA. 40+49
 51' LT STA. 41+69
 137

ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10 (81702110)

STATION STATION FEET M.H. SLACK \*COND. FEET 48' RT STA. 40+57 53' LT STA, 40+49 53' LT STA. 40+49 51' LT STA. 41+69 113 387 228 41 51' LT STA. 41+69 49' RT STA. 41+61 55 897 48' RT STA, 43+00 55 297 80' RT STA. 41+94 46' LT STA. 41+56 51' LT STA. 41+69 75' LT STA. 42+80 193 55 9.5 3 772.5 51' LT STA. 41+69 TOTAL: 3046.5

NOTE:

M.H.=LUMINAIRE MOUNTING HEIGHT+ DAVIT ARM LENGTH SLACK: CONTROLLER=3', DHH=13', HH=3.5' & FOUNDATION=3' LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT (82102250)

 STATION
 EAC

 51' RT STA. 184+39.00
 1

 51' RT STA. 185+73.00
 1

 36' LT STA. 184+28.00
 1

 79' LT STA. 185+44.00
 1

LUMINAIRE, SODIUM VAPOR, MULTI MOUNT, 250 WATT (82103900)

STATION EACH 48' RT STA. 40+57.43 1

LIGHTING CONTROLLER PHOTOCELL RELAY - 240 VOLT (82500605)

 STATION
 EACH

 53' LT STA. 40+49
 1

LIGHT POLE, FIBERGLASS ANCHOR BASE, 45 FT. M.H., TENON MOUNT (83052600)

<u>STATION</u> <u>EACH</u>
48' RT STA. 40+57.43 1

LIGHT POLE FOUNDATION, 30" DIAMETER (83600300)

STATION FEET 48' RT STA. 40+57.43 6'-6"

BREAKAWAY DEVICE, COUPLING, WITH ALUMINUM SKIRT (83800505)

STATION EACH 48' RT STA. 40+57.43 4

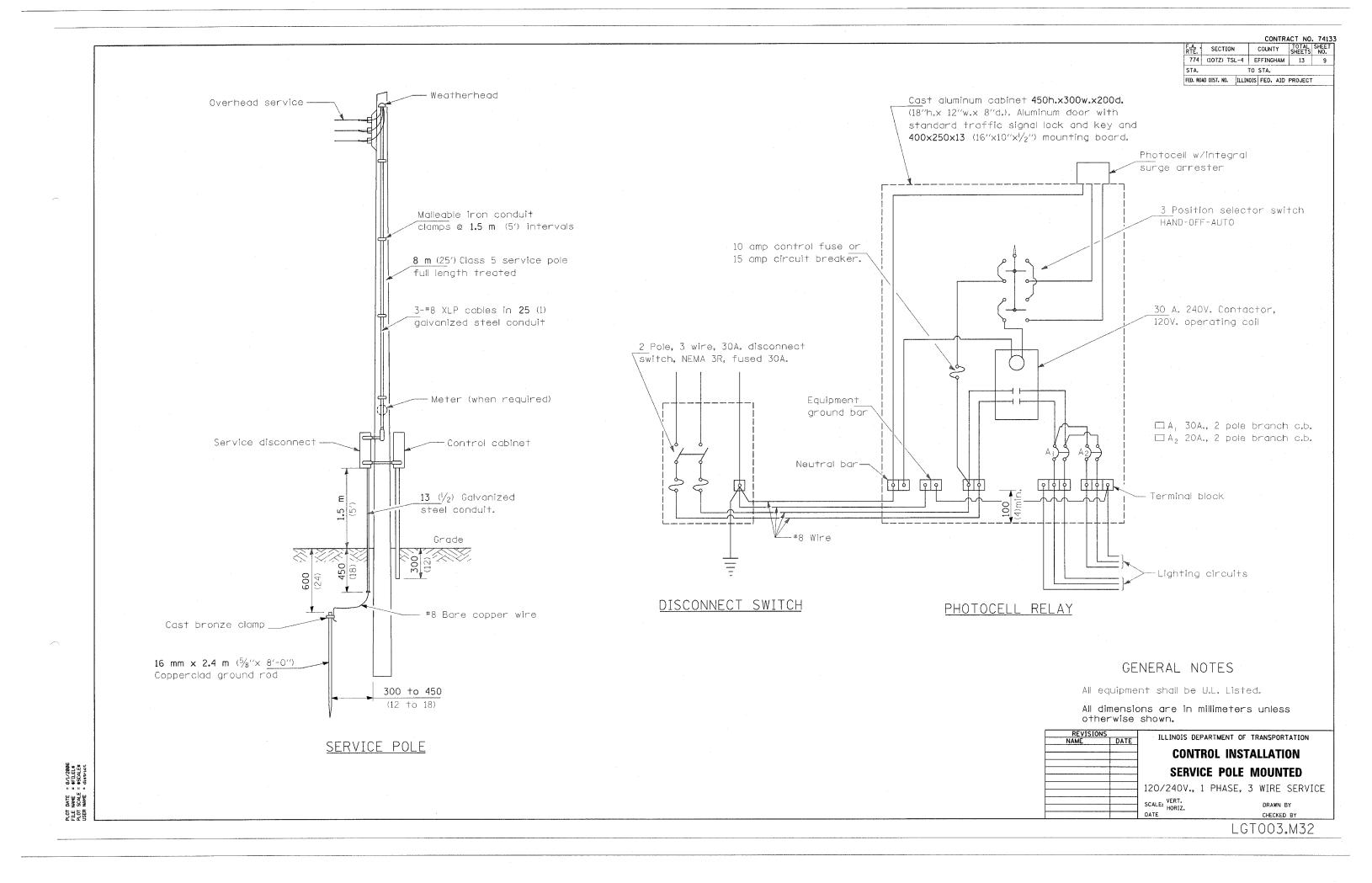
REVISIONS
NAME DATE
DRM 6-06

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHTING SCHEDULE

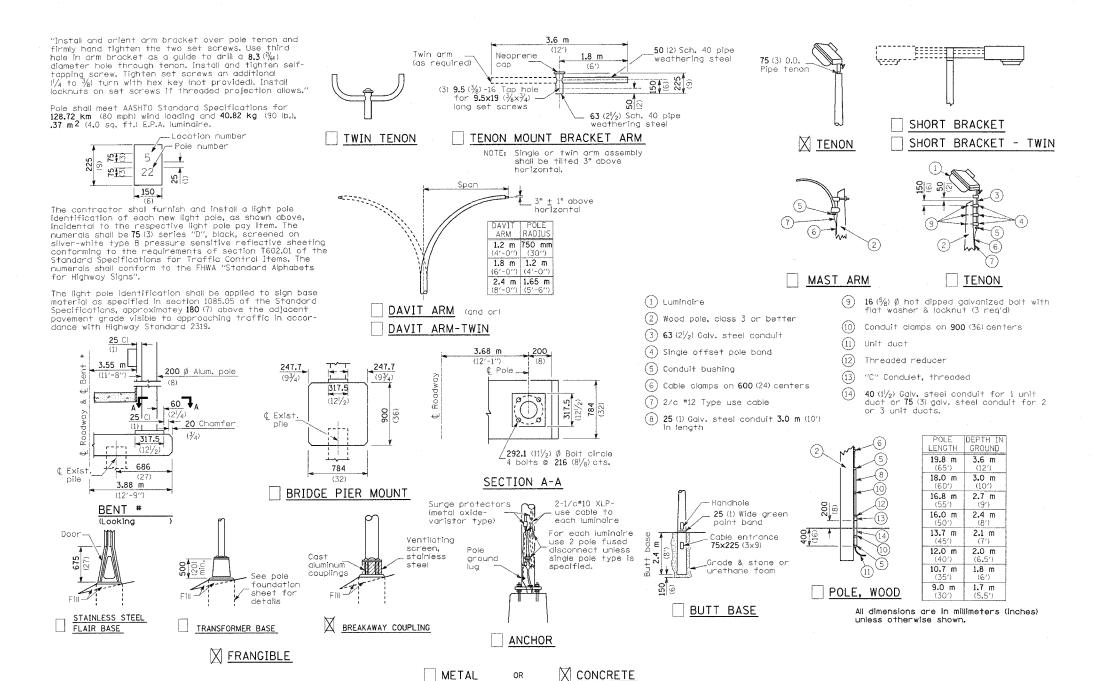
ATE 8/02

DRAWN BY MLO CHECKED BY BWD



F.A.P. RTE.	SECTION		COUNTY		TOTAL	SHEET NO.	
774	(107Z) TSI	4	EFFINGHAM		13	10	
FED. RO	AD DIST. NO.		OIS	FED.	AID	PROJECT	

#### CONTRACT NO. 74133

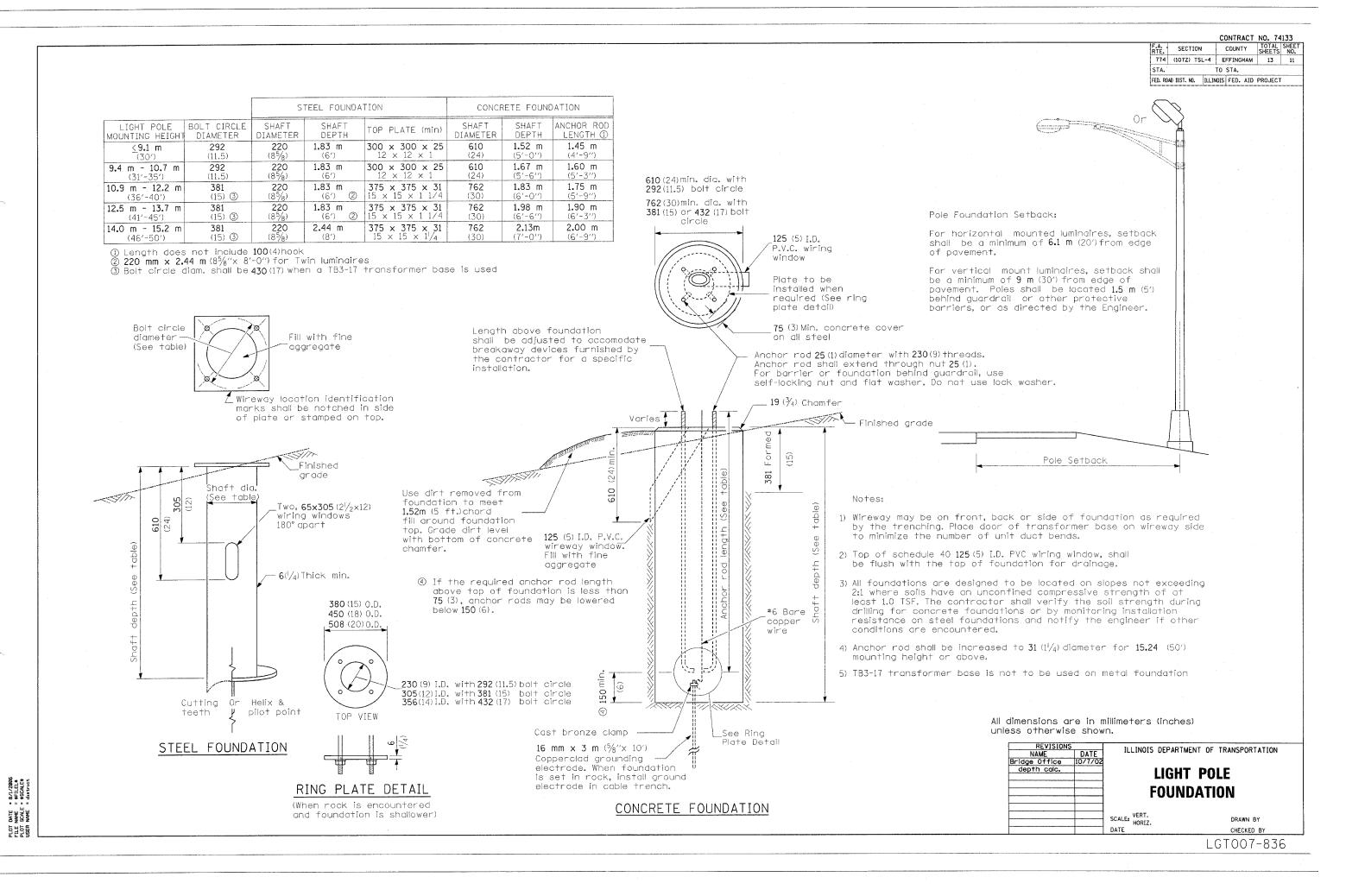


Details for underground distribution if required

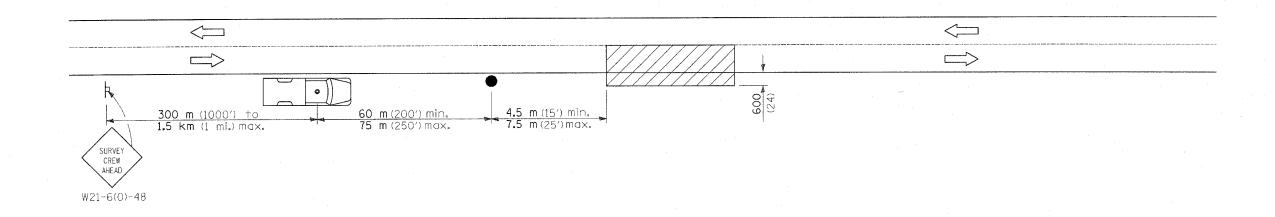
REVISIONS
NAME DATE

LIGHTING DETAILS

DRAWN BY DIST. 7
DATE 2/03 CHECKED BY BWC



| CONTRACT NO. 74133 | FA. | SECTION | COUNTY | TOTAL SHEETS | NO. | SHEETS | NO. | SHEETS | NO. | SHEETS | NO. | STA. | TP STA. | FED. ROAD DIST. NO. | ILLINOIS | FED. AID | PROJECT |



### SYMBOLS

Work area

TYPICAL APPLICATIONS

Utility operations

Sign on portable or permanent support

Truck with flashing amber light and dual emergency flashers

• Flagger with traffic control sign

All dimensions are in millimeters (inches) unless otherwise shown.

N	REVISIONS AME	DATE		DETAIL	OF TRANSPORTATION FOR LIGHTING
			SCALE: VERT. HORIZ. DATE	INSPEC	DRAWN BY CHECKED BY

LGT017.M32

		CONTRACT	NO. 74	1133
A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
774	(107Z)TSL-4	EFFINGHAM	13	13
STA.		TO STA.		

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

Illinois Department of Transportation	nt			4	SOIL BORING LOG	P	age <u>1</u>	of <u>1</u>
Division of Highways Ell. Dept. of Trans. D-7						D	)ate	614/06
ROUTE FAP 774 (IL 8238) DESCRIPTIO	N _		TS Mast	Arm F	oundations: IL 3233 and Ford Ave LOGGED	ВУ	E. Sand	schafer
SECTION (107Z)TSL-4	LOCATIO	N	SE 1/4,	SEC. 18, 1	TWP. 8 N, RNG. 6 E, 3 PM			
COUNTY Effingham DRILL	NG METH	HOD		Hollow	stem auger & split spoon HAMMER TYPE		Auto 140#	
STRUCT, NO.         gINT File           Station         025-4804           BORING NO.         1 (SW)	D E P T	B L O W	U C S	M O I S	Surface Water Elev. NA ft Stream Bed Elev. NA ft Groundwater Elev.:	D E P T	B U L C O S W S Qu	M O I S
Station         43+00           Offset         48.00ft Rt		(6")	(tsf)	(%)	First Encounter 579.8 ft Upon Completion 576.1 ft		(6") (tsf)	:
Ground Surface Elev. 591.76  Very stiff to stiff, damp, gray	ft (It)	1. (6)	(tat)	(10)	After <u>24</u> Hrs. <u>587.6</u> ft	(16)	(0)	(10)
very sum to sum, usury, gray mottled red, CLAY w'trace fine gravel and sand.		2		-	Benchmark: TBM painted square on sidewalk ramp in SE quadrant of IL 32/33 and Ford Avenue			
		4 5	2.1 B	14	intersection = 591.06'.	_		
	_	Ť				_		
		2				 -25		
		4 5	1.5 B	15		$\exists$		
	_	_				_		
	83,96	8	0.3	17		_		
Soft, very damp, red, SANDY LOAM w/trace fine gravel.		4	В					
	82.26	1				-		
Very stiff to hard, very moist, red to gray, SANDY CLAY LOAM		13 31	10	7		-30		
TILL.	_	39	4.0 S	'				
						25		
		16					ľ	
* Note: Samples re-assembled to test for Qu.		29	6.5	8				
<b></b>	-	38	8 *			_		
	-	20		1		-35		
		34	6.5	7				
		50	s ·					
		19				$\Box$		
	_	30	6.1	7	·	$\dashv$		
	73.26	38	8 *			コ		
Extent of exploration.		1		-		$\dashv$		
	-24					-40		

Illinois Department of Transportation	v		SOIL BORING LOG		Date	6/1
ROUTE FAP 774 (IL 32/33) DESCRIPTION		TS Mast Arm	Foundations: IL 3233 and Ford Ave	OGGED BY		. Sandsch
	_		TWP. 8 N, RNG. 6 E, 3 PM			440.0
COUNTY Effingham DRILLIN	G METHOD	Hollow	stem auger & split spoon HAMMER TYP	E	Auto	140#
STRUCT, NO. gINT File Station 025-ts04	D B E L P O	U M C O	Surface Water Elev. NA Stream Bed Elev. NA		B L O	U C S
BORING NO. 2 (NE)  Station 41-56	T W H S	Qu T	Groundwater Elev.: First Encounter Dry		w s	Qu
Offset 46,00ft Lt  Ground Surface Elev. 589.84 f	t (ft) (6")	(tsf) (%)	Upon Completion         Dry           After 24 Hrs.         583.6		(6")	(tsf)
Very stiff to medium, damp, red marbled gray, CLAY w'trace	-		Soft, damp, gray, SANDY LOAM.	569.04	24 21	0.4 S
sand.			Brown, CLAY TILL.  Extent of exploration.	568.84/		
	3 3	2.4 17	Benchmark: TBM painted square on sidewalk ramp in SE quadrant			
	4	B 17	of IL 3233 and Ford Avenue intersection = 591.06'.			
			microconon – obligo.			
	_5 <u>2</u>	1.0 15		25		
	- 3	В		4		
. 588	.54					
Very stiff, very moist, gray, SANDY CLAY TILL.	12	3.9 10		_		
	23	В				
579	84 10 17					
Very stiff, very moist, gray, SANDY LOAM TILL.	36 505"	3.1 7 S *	1	30		
* Note: Samples re-assembled to			-	_		
test for Qu. 577 Hard, very moist, gray, SANDY	506"	4.5 7		-		
CLAY TILL. Damaged sampler shoe, possible cobble at sample	500"	PP				
depth. 578						
Hard, very moist, tan mottled red, SILTY CLAY LOAM TILL.	15 29 40	3.7 8		35		
	50	3.7 8 S *				
				4		
	30 506"	6.3 7				
	50/4"	8	-			
	<u> </u>	-				
569	.84 -20 23			-40		

OPTATION	DEPARTMENT OF TRANSPORTAT	ILL INDIS		REVISIONS
OKTATION	DEFARTMENT OF TRANSFORTAT	ILLINOIS	DATE	NAME
•	BORING LOGS			
N BY DIST. 7	DRAWN BY	ALE: VERT.		
KED BY L.A.M.		TE HORIZ.		

BBS, from 137 (Rev. 8-99)

PLOT DATE = 8/1/2006 FILE NAME = #FILEL\$ PLOT SCALE = %SCALE\$ USER NAME = district