

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	8(L,TS,I-1)	SANGAMON	29	1

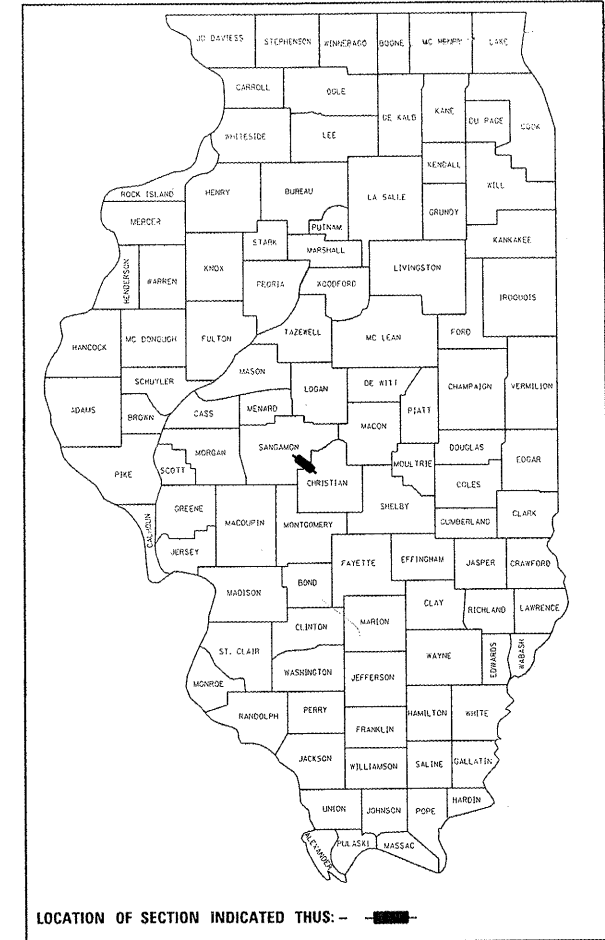
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 75 (IL RTE. 29)
SECTION 8(L,TS,I-1)
SANGAMON COUNTY

C-96-521-06

D-96-506-06



LOCATION OF SECTION INDICATED THUS: ———

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED **Feb. 10, 2006**
Christ M. Radin
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 24, 2006
Mike Hine
ENGINEER OF DESIGN AND ENVIRONMENT

March 24, 2006
Milton R. Sees P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

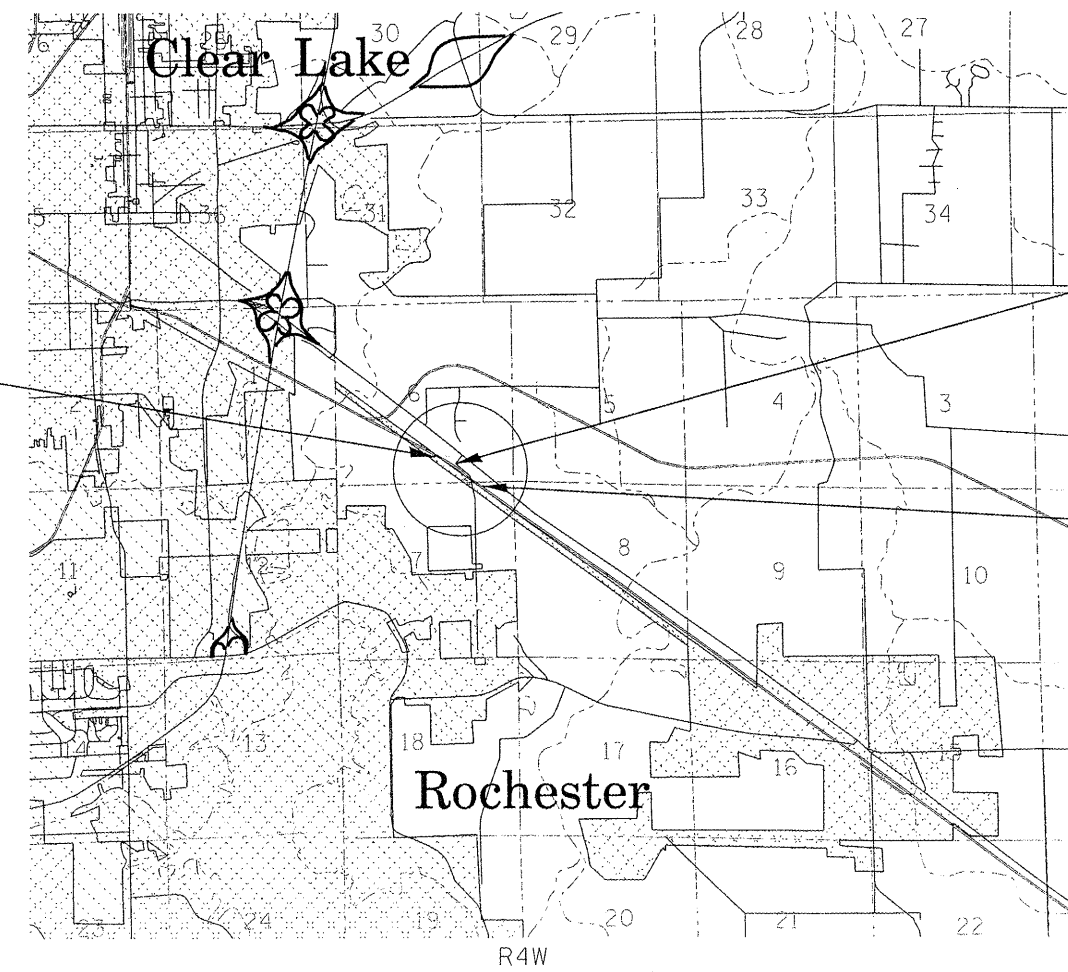
PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

Rev.

FOR INDEX OF SHEETS, SEE SHEET NO. 2

DESCRIPTION OF IMPROVEMENT:

- TRAFFIC SIGNAL INSTALLATION
- SODIUM VAPOR LUMINAIRE INSTALLATION
- NEW SOUTHEAST BOUND RIGHT TURN LANE MEDIUM
- MILL AND RESURFACE WITH ANTI-SKID BITUMINOUS CONCRETE AND OTHER RELATED WORK (STRIPING, SHOULDERS, ETC.)



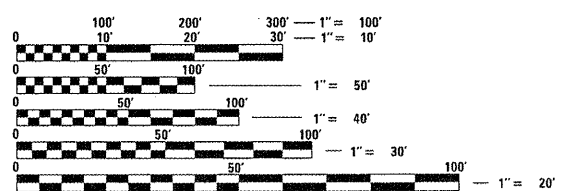
BEGIN SECTION 8(L,TS,I-1)
SE BOUND LANE STA. 86+13.47
NW BOUND LANE STA. 91+48.64

LOCATION OF IMPROVEMENT
FAP 75 (IL 29)
AT HILLTOP ROAD

END SECTION 8(L,TS,I-1)
SE BOUND LANE STA. 93+62.29
NW BOUND LANE STA. 98+60.67

LOCATION MAP

NET LENGTH OF PROJECT: 1247.20 FEET (0.24 MILES)
ROADWAY CLASSIFICATION: OTHER PRINCIPLE ARTERIAL
ADT: 16,108 (2006) CRS: 7.2 (2006)



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

CONTRACT NO. 72A20

PROJECT ENGINEER: SAL MADONIA (217) 782-4761
SQUAD LEADER: MARCUS BRUCE (217) 524-0946

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
121	134RS-4	LOGAN	29	2
STA.		TO STA.		
FED. ROAD DIST. NO. 6		ILLINOIS FED. AID PROJECT		

Index of Sheets

page	
1	Coversheet
2	Index of Sheets, List of Standards, General Notes, Bituminous Mix Requirements, & Signature Block
3	Summary of Quantities
10	Typical Sections
11	Schedule of Quantities
14	Pavement Marking Plan View
16	Traffic Signal Details
23	Lighting Details
28	Sign Details
29	Butt Joint Details

List of Standards

- 000001-04 Standard Symbols, Abbreviations, and Patterns
- 642001 Shoulder Rubbe Strip
- 701101-01 Off Road Operations, Multilane, 4.5 m (15') to 600 mm (24") From Pavement Edge
- 701106-01 Off Road Operations, Multilane, More Than 4.5 m (15') Away
- 701400-02 Approach to Lane Closure, Freeway/Expressway
- 701421-01 Lane Closure Multilane, Day Operations Only For Speed > 45 mph to 55 mph
- 701422-01 Lane Closure, Multilane, for Speeds > 45 mph to 55 mph
- 701501-03 Urban Lane Closure, 2L, 2W Undivided
- 702001-06 Traffic Control Devices
- 720016-01 Mast Arm Mounted Street Name Signs
- 780001-01 Typical Pavement Markers
- 781001-02** Typical Applications for Raised Reflective Pavement Markers
- 805001 Electrical Service Installation Details
- 857001 Standard Phase Designation Diagrams and Phase Sequences
- 862001 Uninterruptable Power Supply (UPS)
- 873001 Traffic Signal Grounding
- 877011-02 Steel Mast Arm Assembly and Pole
- 878001-04 Concrete Foundation Details
- 880001 Span Wire Mounted Signals and Flashing Beacon Installation
- 880006 Traffic Signal Mounting Details

Application Rates

Bituminous Materials (Prime Coat)	0.00038 ton/sq yd
Polymerized Surface Course/Shoulders	0.056 ton/sq yd * in
Aggregate (Prime Coat)	0.002 ton/sq yd
Aggregate Shoulders, Type B	2.05 ton/cu yd
Sub Base Granular Material, Type B	2.05 ton/cu yd

Bituminous Mix Requirements

Mixture Use (s)	Surface	Bit Shoulder
PG:	SBS 70-22	PG 58-22
RAP %: (Max)	0%	15%
Design Air Voids:	4.0% @ N Design = 70	2.0% @ N Design = 30
Mixture Composition (Gradation Mixture)	IL 9.5 or 12.5	BAM
Friction Aggregate:	Mix "D"	N/A

General Notes

- Thickness of resurfacing: The thickness of the reinforced concrete overlay shown on the plans is the nominal thickness. Deviations from the nominal thickness will be permitted when such deviations occur due to irregularities in the existing bridge deck surface on which the overlay is placed.
- All elevations shown on the plans are established from U.S.G.S. mean sea level datum.
- The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on the best information available, but the are not guaranteed. It shall be the responsibility of the contractor to ascertain their exact location from the utility companies and by field inspection.
- Access to all entrances and side roads shall be maintained at all times.

In addition to field surveys and aerial surveys, plan dimensions and details relative to the existing facilities have been taken from existing plans and are subject to construction variations. It shall be the responsibility of the contractor to verify such dimensions and details in the field. Such variations shall not be a cause for additional compensation due to a change in the scope of work. However, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Any reference within these plans to a standard shall be interpreted to mean the edition indicated by the sub-number listed on the list of standards or the copy included in these plans.
- The district bureau of operations shall be notified at least 14 days prior to placement of final pavement markings, phone (217) 782-7314.

7. Where section of sub-section markers are encountered, the engineer shall be notified before such monuments are removed. The contractor shall protect and carefully preserve all property markers and monuments until the owner, an authorized agent or land surveyor has witnessed or otherwise referenced their location. The contractor shall be responsible for having an authorized surveyor re-establish any section or sub-section monuments destroyed by his operations.

IDOT DISTRICT 6	
EXAMINED <u>Feb 9</u> <u>2006</u>	
<u>Jonni J. Hoan</u>	OPERATIONS ENGINEER
EXAMINED <u>FEB 9</u> <u>06</u>	
<u>W. R. Jung</u>	PROGRAM IMPLEMENTATION ENGINEER
EXAMINED <u>February 10</u> <u>06</u>	
<u>William E. Motta</u>	PROGRAM DEVELOPMENT ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES & COMMITMENTS

SCALE: VERT. _____
 DATE: _____

DRAWN BY: BDK
 CHECKED BY: JCN

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	81LTS, I-D	SANGAMON	29	4
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES - IL RTE. 29 @ HILLTOP ROAD

PAY CODE	PAY ITEM DESCRIPTION	UNIT	100% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				1000 RESURFACING QUANTITY	Y031-1F SIGNALS QUANTITY	Y030-1E LIGHTING QUANTITY
* 48101200	AGGREGATE SHOULDER, TYPE B	TONS	59	59		
* 48202000	BITUMINOUS SHOULDERS, SUPERPAVE	TONS	303	303		
81306100	JUNCTION BOX (SPECIAL)	EACH	11		11	
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2		
60608600	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.06	FOOT	22	22		
60610400	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.24	FOOT	40	40		
60618300	CONCRETE MEDIAN SURFACE, 4"	SQ FT	165	165		
* 64200105	SHOULDER RUMBLE STRIP	FOOT	2475	2475		
67100100	MOBILIZATION	L SUM	1	1		
70100310	TRAFFIC CONTROL AND PROTECTION, STANDARD 701421	L SUM	1	1		
70100320	TRAFFIC CONTROL AND PROTECTION, STANDARD 701422	L SUM	1	1		
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1		
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	333	333		
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	93.6	93.6		

* SPECIALTY ITEMS

Rev.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	8(L,TS,I-I)	SANGAMON	29	5
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES - IL RTE. 29 @ HILLTOP ROAD

PAY CODE	PAY ITEM DESCRIPTION	UNIT	100% STATE	CONSTRUCTION TYPE CODE		
			TOTAL QUANTITY	1000 RESURFACING QUANTITY	Y031-1F SIGNALS QUANTITY	Y030-1E LIGHTING QUANTITY
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	4156	4156		
70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	201	201		
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	54	54		
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	113	113		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	111.1	111		
72000100	SIGN PANEL, TYPE I	SQ FT	10		10	
72000200	SIGN PANEL, TYPE II	SQ FT	22		22	
78003100	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LETTERS AND SYMBOLS	SQ FT	93.6	94		
78003120	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 5"	FOOT	4156	4156		
78003140	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 8"	FOOT	201	201		
78003150	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 12"	FOOT	54	54		
78003180	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - LINE 24"	FOOT	113	113		
78100100	RAISED REFLECTIVE PAVEMENT MARKERS	EACH	31	31		
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	31	31		

PLOT DATE = 2/1/2006
 FILE NAME = c:\pwork\11050606\11050606.dwg
 USER NAME = b...
 USER NAME = b...

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BIL,TS,1-D	SANGAMON	29	6
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES - IL RTE. 29 @ HILLTOP ROAD

PAY CODE	PAY ITEM DESCRIPTION	UNIT	100% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				1000 RESURFACING QUANTITY	Y031-1F SIGNALS QUANTITY	Y030-1E LIGHTING QUANTITY
80400100	ELECTRIC SERVICE INSTALLATIONS	EACH	1			1
80500100	SERVICE INSTALLATION, TYPE A	EACH	1		1	
80801400	WOOD POLE, 25', CLASS 4	EACH	1		1	
81012200	CONDUIT IN TRENCH, 3/4" DIA., PVC	FOOT	49		49	
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	2209		2209	
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	509		509	
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	3		3	
81012800	CONDUIT IN TRENCH, 3" DIA., PVC	FOOT	55		55	
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	8		8	
81020500	CONDUIT PUSHED, 2" DIA., INTERMEDIATE METAL	FOOT	95			95
81021540	CONDUIT, AUGERED 1 1/2" DIA., PVC	FOOT	257		257	
81021560	CONDUIT, AUGERED 2 1/2" DIA., PVC	FOOT	68		68	
81021570	CONDUIT, AUGERED 3" DIA., PVC	FOOT	151		151	
81100500	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., GALVANIZED STEEL	FOOT	56		56	

PLOT DATE: 2/7/2006
 FILE NAME: c:\pwork\11\020606\11sumqty.dwg
 USER NAME: bshelton

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT.
 HORIZ.
 DATE

DRAWN BY
 CHECKED BY

Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	81L,TS,I-D	SANGAMON	29	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES - IL RTE. 29 @ HILLTOP ROAD

PAY CODE	PAY ITEM DESCRIPTION	UNIT	100% STATE TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				1000 RESURFACING QUANTITY	Y031-1F SIGNALS QUANTITY	Y030-1E LIGHTING QUANTITY
81400100	HANDHOLE	EACH	4		4	
81400300	DOUBLE HANDHOLE	EACH	1		1	
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	4010		2833	1177
81600115	UD 2 *10 XLP, 1*10 XLPG 3/4 P	FOOT	1402			1402
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	7			7
82103250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL 250 WATT	EACH	2		2	
82500510	LIGHTING CONTROLLER CB -RCS-60-240	EACH	1			1
83003600	LIGHT POLE ALUMINUM 45' MH, 15' DAVIT ARM	EACH	7			7
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	46			46
83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15" BOLT CIRCLE	EACH	7			7
85700300	FULL ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1		1	
85800100	FLASHER CONTROLLER	EACH	1		1	
86000100	MASTER CONTROLLER	EACH	1		1	
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1		1	

PLOT DATE : 2/19/2006
 FILE NAME : c:\pwork\72a20\806\summary.dgn
 USER NAME : bshannon

Rev.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
IL 29 @ HILLTOP ROAD
SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY: _____
 CHECKED BY: _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	8IL,TS,I-D	SANGAMON	29	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES - IL RTE. 29 @ HILLTOP ROAD

PAY CODE	PAY ITEM DESCRIPTION	UNIT	100% STATE	CONSTRUCTION TYPE CODE		
			TOTAL QUANTITY	1000	Y031-1F	Y030-1E
				RESURFACING QUANTITY	SIGNALS QUANTITY	LIGHTING QUANTITY
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 2C	FOOT	2966		2966	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 5C	FOOT	1234		1234	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 7C	FOOT	819		819	
87301265	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 9C	FOOT	177		177	
87301515	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 18, 3 PAIR	FOOT	2018		2018	
87301525	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 18, 6 PAIR	FOOT	160		160	
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6, 3C	FOOT	19		19	
87502680	TRAFFIC SIGNAL POST, ALUMINUM, 14'	EACH	2		2	
87502700	TRAFFIC SIGNAL POST, ALUMINUM, 16'	EACH	4		4	
87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 40'	EACH	1		1	
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48'	EACH	1		1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	18		18	
87800415	CONCRETE FOUNDATION, TYPE E, 36" DIA.	FOOT	26		26	
88020160	SIGNAL HEAD, POLYCARBONATE, LED 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2		2	

PLOT DATE : 2/17/2006
 FILE NAME : g:\projects\060606\auto\0606\0606.dwg
 USER : jrb
 USER NAME : jrb

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SUMMARY OF QUANTITIES
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____

DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL. TS. 1-1	SANGAMON	29	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BITUMINOUS REMOVAL (V. D.) SCHEDULE		
LOCATION	STATION	AREA (SQ. YD.)
SBL - IL 29	86+13.47 - 93+62.29 RT	1890
NBL - IL 29	91+48.64 - 98+60.67 LT	1792
NBL - TURN LANE	92+93.37 - 98+10.67 LT	432
SBL - TURN LANE	86+63.43 - 91+13.46 RT	381
X - OVER	91+98.86 - 93+10.92 LT/RT	353
HILL TOP ROAD	47+45.22 - 49+50.99	1256
TOTAL		6104.0

BITUMINOUS SHOULDERS				
LOCATION	STATION	(TON)	AGGREGATE	BITUMINOUS
			PRIME COAT	PRIME COAT
			(TON)	(TON)
NBL - INSIDE	91+48.64 - 92+15.52 LT	4	0	0.01
SBL - INSIDE	86+13.47 - 92+15.53 RT	31	1	0.11
NBL - OUTSIDE	91+48.64 - 98+60.67 LT	89	2	0.30
NBL - INSIDE	92+90.22 - 98+60.67 LT	29	1	0.10
SBL - INSIDE	92+90.22 - 93+62.29 RT	4	0	0.01
SBL - OUTSIDE	93+23.37 - 93+62.29 RT	3	0	0.01
HILLTOP ROAD	47+45.22 - 48+95.97 RT	10	0	0.03
HILLTOP ROAD	47+45.22 - 48+24.36 LT	5	0	0.02
HILLTOP ROAD	48+37.16 - 49+85.72 LT	9	0	0.03
SBL - OUTSIDE	87+48.55 - 91+13.57 RT	18	0	0.06
SBL - OUTSIDE	86+63.43 - 87+48.55 RT	95	2	0.32
SBL - OUTSIDE	86+13.47 - 86+63.43 RT	6	0	0.02
TOTAL		303	5	1.0

BITUMINOUS SURFACE REMOVAL - BUTT JOINTS			
LOCATION	STATION	BUTT JOINT	TEMPORARY
		RAMP AREA	RAMP
		(SQ. YD.)	(SQ. YD.)
NBL	91+48.64	107	18
NBL	98+60.67	107	18
SBL	86+13.47	107	18
SBL	93+62.29	107	18
HILLTOP ROAD	47+55.22	113	19
HILLTOP ROAD/S.R.	48+37.16	96	18
TOTAL		636	108

Aggregate Shoulder Schedule		
LOCATION	STATION	AGGREGATE
		SHOULDER, TY. B
		(TON)
SBL - OUTSIDE	86+13.47 - 91+20.41 RT	10
SBL - INSIDE	86+13.47 - 92+07.42 RT	23
SBL - INSIDE	93+10.25 - 93+62.29 RT	1
SBL - OUTSIDE	93+21.77 - 93+62.29 RT	1
NBL - INSIDE	92+93.05 - 98+60.67 LT	11
NBL - OUTSIDE	91+48.64 - 98+60.67 LT	14
NBL - INSIDE	91+48.64 - 91+98.77 LT	1
TOTAL		59

BITUMINOUS SCHEDULE				
LOCATION	STATION	AGGREGATE	BITUMINOUS	POL. BIT. CONC. SURF. CSE.
		PRIME COAT	PRIME COAT	SUPERP. MIX "D", N70
		(TON)	(TON)	(TON)
SBL - IL 29	86+13.47 - 93+62.29 RT	4	0.8	224
NBL - IL 29	91+48.64 - 98+60.67 LT	4	0.7	213
NBL - T. L.	92+93.37 - 98+10.67 LT	1	0.2	60
SBL - T. L.	86+63.43 - 91+13.46 RT	1	0.2	55
X-OVER	91+98.96 - 93+10.92	1	0.1	40
HILLTOP RD.	47+45.22 - 49+50.99	3	0.6	164
TOTALS		13	2.6	755

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF QUANTITIES
IL 29 @ HILLTOP ROAD
SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY: _____
 CHECKED BY: _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BIL. TS. 1-1	SANGAMON	29	12
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT REMOVAL		
LOCATION	STATION	AREA (SQ YD)
IL 29 / HILLTOP RD	92+00 RT	35.0
TOTAL		35.0

CONCRETE CURB AND GUTTER			
LOCATION	TYPE	STATION	TOTAL LENGTH (FOOT)
IL 29 / HILLTOP RD	M-6.06	92+00 RT	22
IL 29 / HILLTOP RD	M-6.24	92+00 RT	40

SUB-BASE GRANULAR MATERIAL, TYPE B		
LOCATION	STATION	TOTAL (TONS)
IL 29 / HILLTOP RD	92+00 RT	18
TOTAL		18

PERFORMED PLASTIC PAVEMENT MARKING, TYPE B				
LOCATION	STATION	WHITE LINE 5"	YELLOW LINE 5"	
		(FOOT)	(FOOT)	
NBL - OUTSIDE	91+48.64 - 98+60.67 LT	712		LINE
NBL - INSIDE	91+48.64 - 92+00.70 LT		52	LINE
X-OVER	92+00.70 - 92+18.52 LT		53	LINE
X-OVER	92+87.20 - 93+10.47 LT		44	LINE
NBL - INSIDE	92+92.88 - 98+60.67 LT		568	LINE
SBL - INSIDE	93+10.47 - 93+62.29 RT		52	LINE
SBL - INSIDE	86+13.47 - 92+08.81 RT		595	LINE
SBL - OUTSIDE	86+13.47 - 91+13.52 RT	500		LINE
HILLTOP ROAD	48+47.11 - 49+88.42 LT	198		LINE
HILLTOP ROAD	47+45.16 - 48+26.89 LT	111		LINE
HILLTOP ROAD	47+45.29 - 48+86.31 RT	253		LINE
SBL - RIGHT T. L.	89+12.84 - 91+52.62 RT	240		LINE
NBL - LEFT T. L.	92+99.34 - 95+40.02 LT	241		LINE
SBL - RIGHT T. L.	86+63.43 - 89+12.84 RT	62		SKIP - DASH
NBL - LEFT T. L.	95+40.02 - 98+09.83 LT	67		SKIP - DASH
HILLTOP ROAD	48+47.75 - 49+16.33 CL		71	LINE
HILLTOP ROAD	47+45.22 - 48+47.75 CL		26	SKIP - DASH
NBL	91+48.64 - 91+98.51 LT	12		SKIP - DASH
NBL	92+99.34 - 98+60.67 LT	140		SKIP - DASH
SBL	86+13.47 - 91+95.24 RT	145		SKIP - DASH
SBL	93+10.92 - 93+62.29 RT	13		SKIP - DASH
TOTAL		2696	1460	

PERFORMED PLASTIC PAVEMENT MARKING, TYPE B		
LOCATION	STATION	LINE 8" WHITE
		(FOOT)
SBL / HILLTOP RD	91+52.62 - 92+29.05 RT	201
TOTAL		201

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF QUANTITIES
IL 29 @ HILLTOP ROAD
SANGAMON COUNTY
 SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY: _____
 CHECKED BY: _____

PLOT DATE: 12/19/2006
 FILE NAME: c:\purogens\48060606\hillsch.dwg
 PLOT SCALE: 1/8"=1'-0"
 USER NAME: brenthume

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BIL. TS. 1-1	SANGAMON	29	13
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

SHORT-TERM PAVEMENT MARKING		
LOCATION	STATION	TOTAL (FOOT)
SBL	86+13.47 - 93+62.29 RT	150
NBL	91+48.64 - 98+60.67 LT	142
HILLTOP ROAD	47+45.22 - 49+50.99	41
TOTAL		333

PERFORMED PLASTIC PAVEMENT MARKING, TYPE B			
LOCATION	STATION	LETTERS AND SYMBOLS	
		LEFT ARROW (SQ FT)	RIGHT ARROW (SQ FT)
NBL - LEFT T.L.	93+25	15.6	
NBL - LEFT T.L.	94+26	15.6	
NBL - LEFT T.L.	95+40	15.6	
SBL - RIGHT T.L.	89+14		15.6
SBL - RIGHT T.L.	90+25		15.6
SBL - RIGHT T.L.	91+44		15.6
TOTAL		46.8	46.8

SHORT-TERM PAVEMENT MARKING REMOVAL		
LOCATION	STATION	TOTAL (SQ FT)
SBL	86+13.47 - 93+62.29 RT	49.9
NBL	91+48.64 - 98+60.67 LT	47.5
HILLTOP ROAD	47+45.22 - 49+50.99	13.7
TOTAL		111.1

PERFORMED PLASTIC PAVEMENT MARKING, TYPE B		
LOCATION	STATION	LINE 12" WHITE (FOOT)
SBL / HILLTOP RD	91+52.62 - 92+29.05 RT	54
TOTAL		54

PERFORMED PLASTIC PAVEMENT MARKING, TYPE B		
LOCATION	STATION	LINE 24" WHITE (FOOT)
SBL - RIGHT T.L.	92+00 RT	18
SBL	92+00 RT	24
NBL / NBL LEFT T.L.	93+30 LT	38
HILLTOP ROAD	48+18 RT	33
TOTAL		113

TEMPORARY PAVEMENT MARKINGS		
ITEM	LOCATION	TOTAL
TEMPORARY PAVEMENT MARKING - LETTERS & SYMBOLS	(USE PERMANENT MARKING LOCATIONS)	93.6 SQ FT
TEMPORARY PAVEMENT MARKING - LINE 5"	(USE PERMANENT MARKING LOCATIONS)	4156
TEMPORARY PAVEMENT MARKING - LINE 8"	(USE PERMANENT MARKING LOCATIONS)	201
TEMPORARY PAVEMENT MARKING - LINE 12"	(USE PERMANENT MARKING LOCATIONS)	54
TEMPORARY PAVEMENT MARKING - LINE 24"	(USE PERMANENT MARKING LOCATIONS)	113

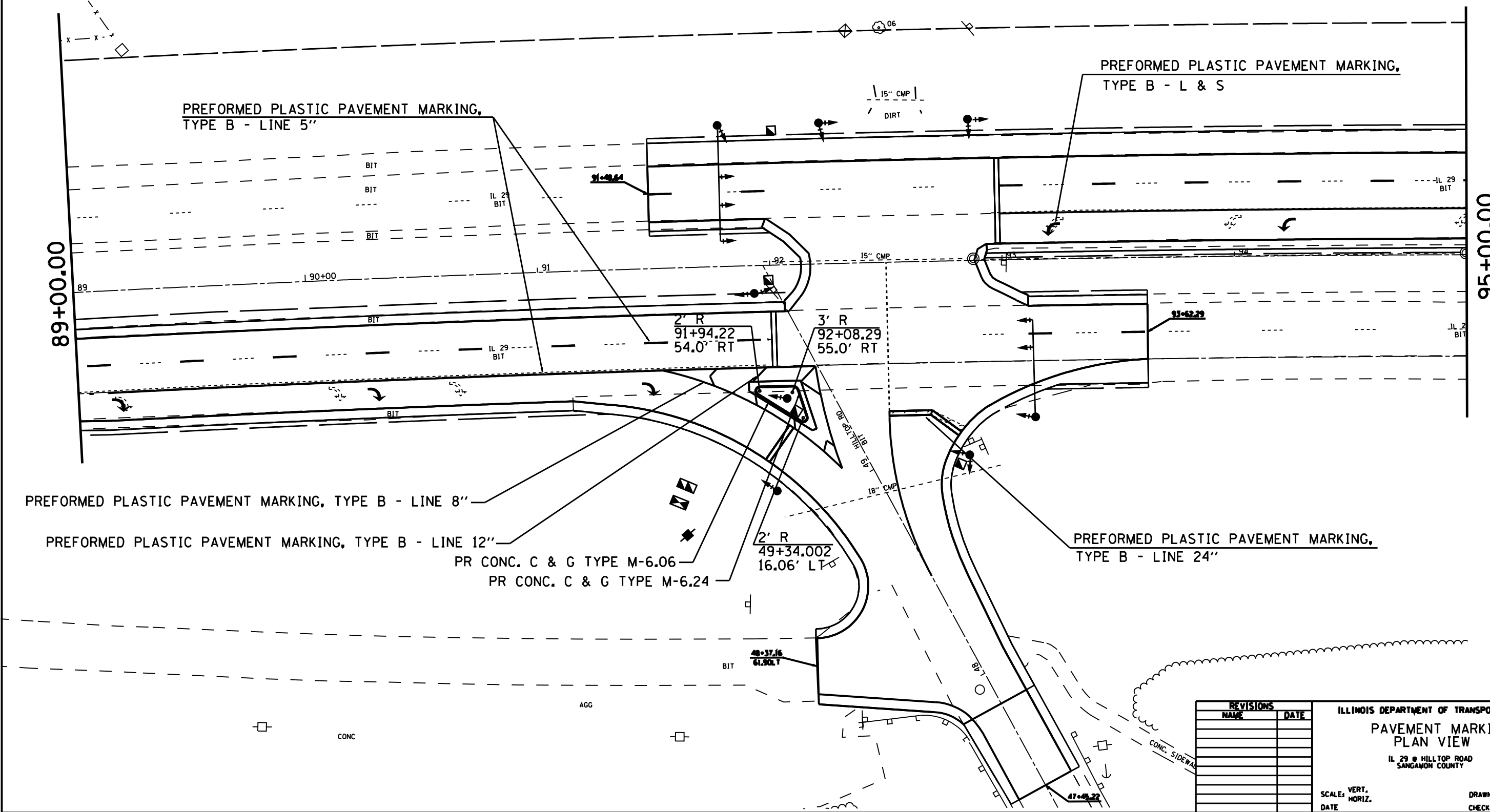
PLOT DATE : 2/9/2006
 FILE NAME : c:\prowork\14800000\hillsch.dgn
 PLOT SCALE : 1/8"=1'-0" / in.
 USER NAME : branhama

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF QUANTITIES
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____
 DATE _____
 DRAWN BY: ...
 CHECKED BY: ...

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	84LTS, I-I	SANGAMON	29	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



89+00.00

95+00.00

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKING
 PLAN VIEW**
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____

DATE _____

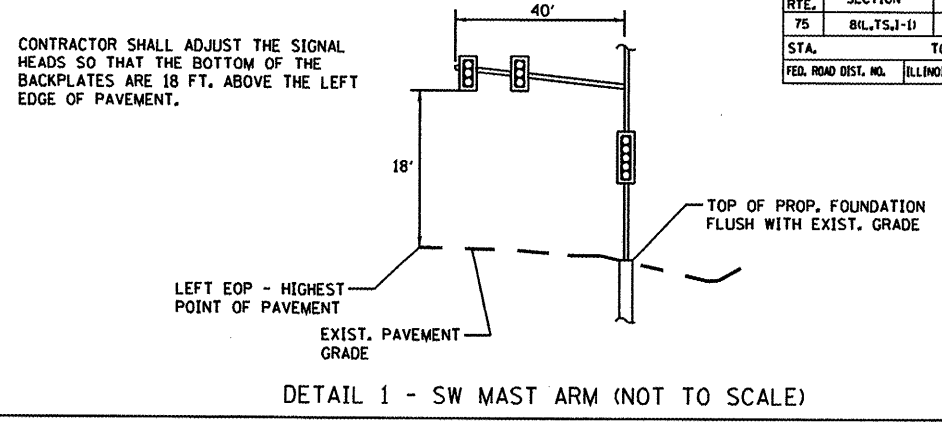
DRAWN BY: MEB
 CHECKED BY: MEB

PLOT DATE: 12/19/2006
 FILE NAME: c:\pavement\75\84lts\14\pavement.dwg
 PLOT SCALE: 1/4" = 1'-0"
 USER NAME: jbrunham

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	81L,TS,I-II	SANGAMON	29	16
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

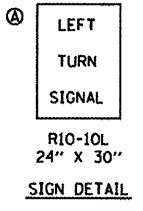
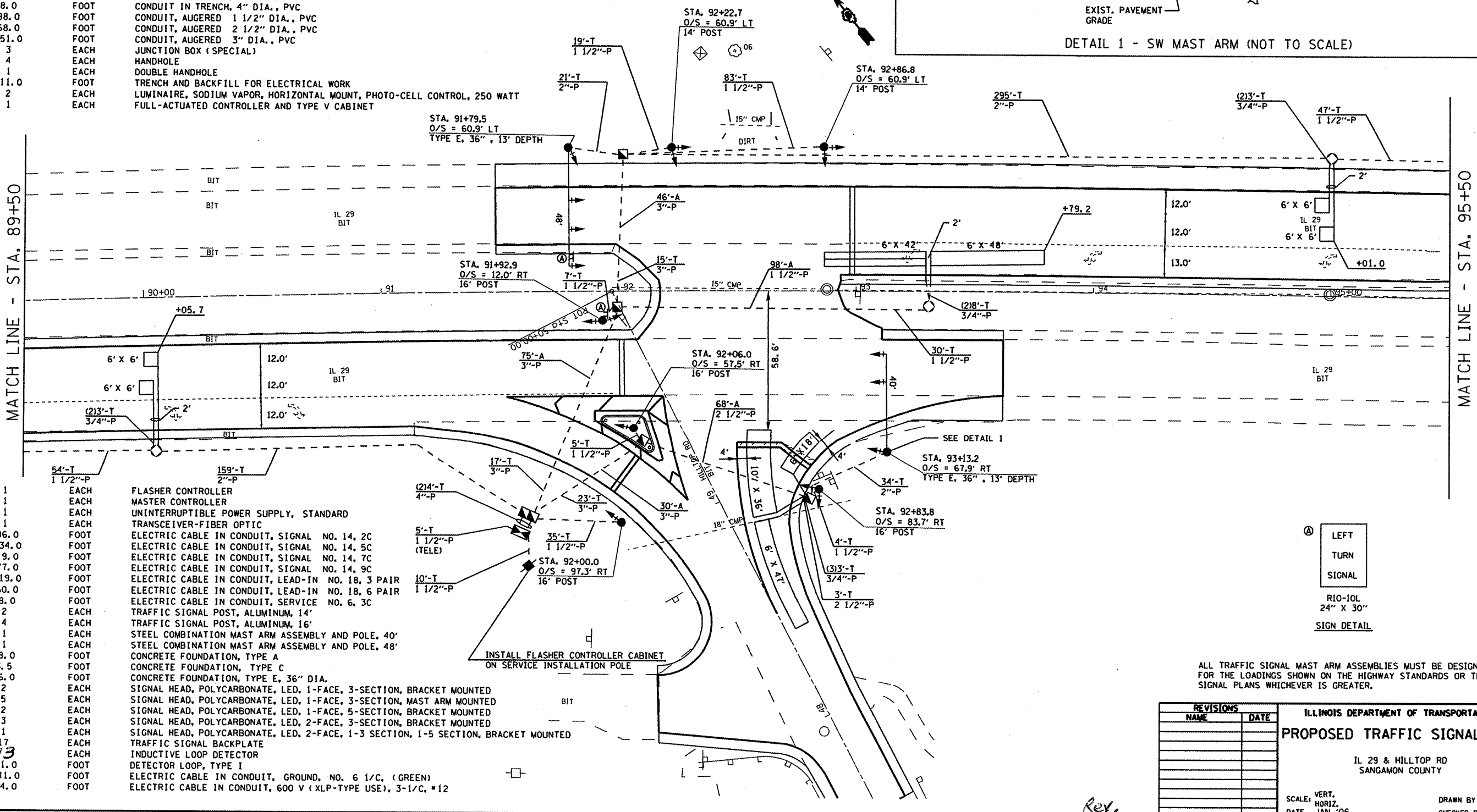
TRAFFIC SIGNAL QUANTITIES
LOCATION: IL 29 & HILLTOP DRIVE

QUANTITY	UNIT	ITEM
10.0	50 FT	SIGN PANEL, TYPE I
22.0	50 FT	SIGN PANEL, TYPE II
1	EACH	SERVICE INSTALLATION, TYPE A
1	EACH	WOOD POLE, 25', CLASS 4
37.0	FOOT	CONDUIT IN TRENCH, 3/4" DIA., PVC
299.0	FOOT	CONDUIT IN TRENCH, 1 1/2" DIA., PVC
509.0	FOOT	CONDUIT IN TRENCH, 2" DIA., PVC
3.0	FOOT	CONDUIT IN TRENCH, 2 1/2" DIA., PVC
55.0	FOOT	CONDUIT IN TRENCH, 3" DIA., PVC
8.0	FOOT	CONDUIT IN TRENCH, 4" DIA., PVC
98.0	FOOT	CONDUIT, AUGERED 1 1/2" DIA., PVC
68.0	FOOT	CONDUIT, AUGERED 2 1/2" DIA., PVC
151.0	FOOT	CONDUIT, AUGERED 3" DIA., PVC
3	EACH	JUNCTION BOX (SPECIAL)
4	EACH	HANDHOLE
1	EACH	DOUBLE HANDHOLE
911.0	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
2	EACH	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE V CABINET



MATCH LINE - STA. 89+50

MATCH LINE - STA. 95+50



ALL TRAFFIC SIGNAL MAST ARM ASSEMBLIES MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS WHICHEVER IS GREATER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC SIGNAL PLAN
IL 29 & HILLTOP RD
SANGAMON COUNTY
SCALE: VERT. _____
HORIZ. _____
DATE: JAN '06
DRAWN BY: KDA
CHECKED BY: _____

PLOT DATE: 2/10/06
 FILE NAME: 41VCS\pct\72A20\ts\ts_06.dwg
 PLOT SCALE: 42.3567 IN.
 USER NAME: kdash

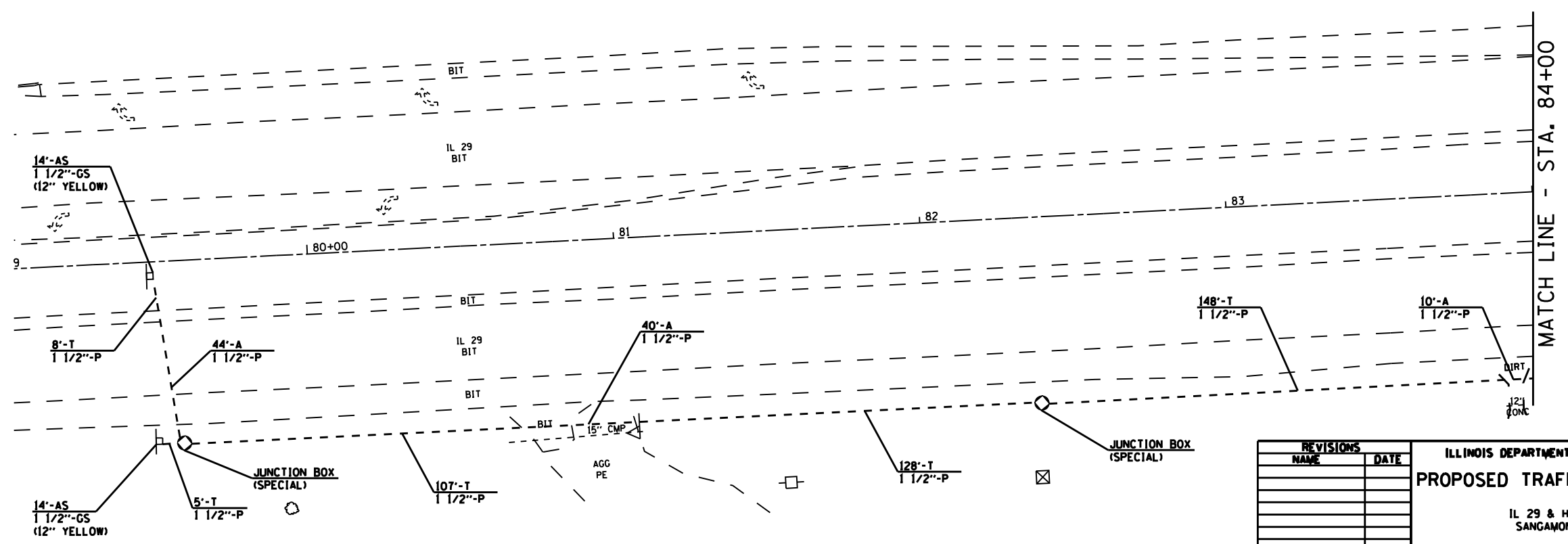
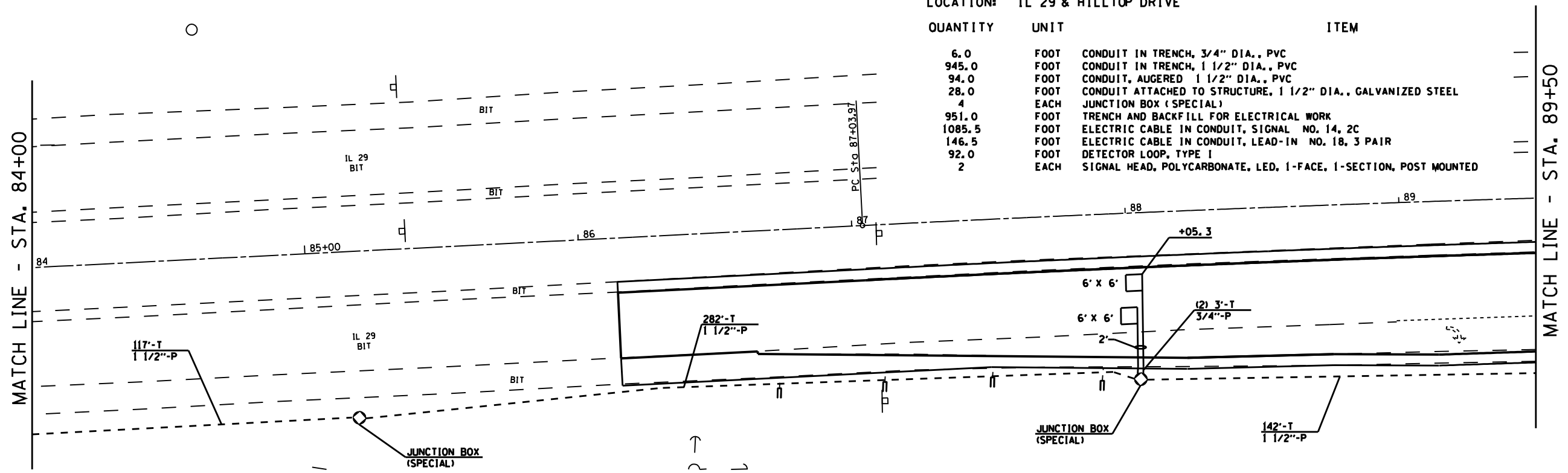
Rev.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	8L.TS.I-I	SANGAMON	29	17
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL QUANTITIES

LOCATION: IL 29 & HILLTOP DRIVE

QUANTITY	UNIT	ITEM
6.0	FOOT	CONDUIT IN TRENCH, 3/4" DIA., PVC
945.0	FOOT	CONDUIT IN TRENCH, 1 1/2" DIA., PVC
94.0	FOOT	CONDUIT, AUGERED 1 1/2" DIA., PVC
28.0	FOOT	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., GALVANIZED STEEL
4	EACH	JUNCTION BOX (SPECIAL)
951.0	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1085.5	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 2C
146.5	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 18, 3 PAIR
92.0	FOOT	DETECTOR LOOP, TYPE I
2	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION, POST MOUNTED



REVISIONS	
NAME	DATE

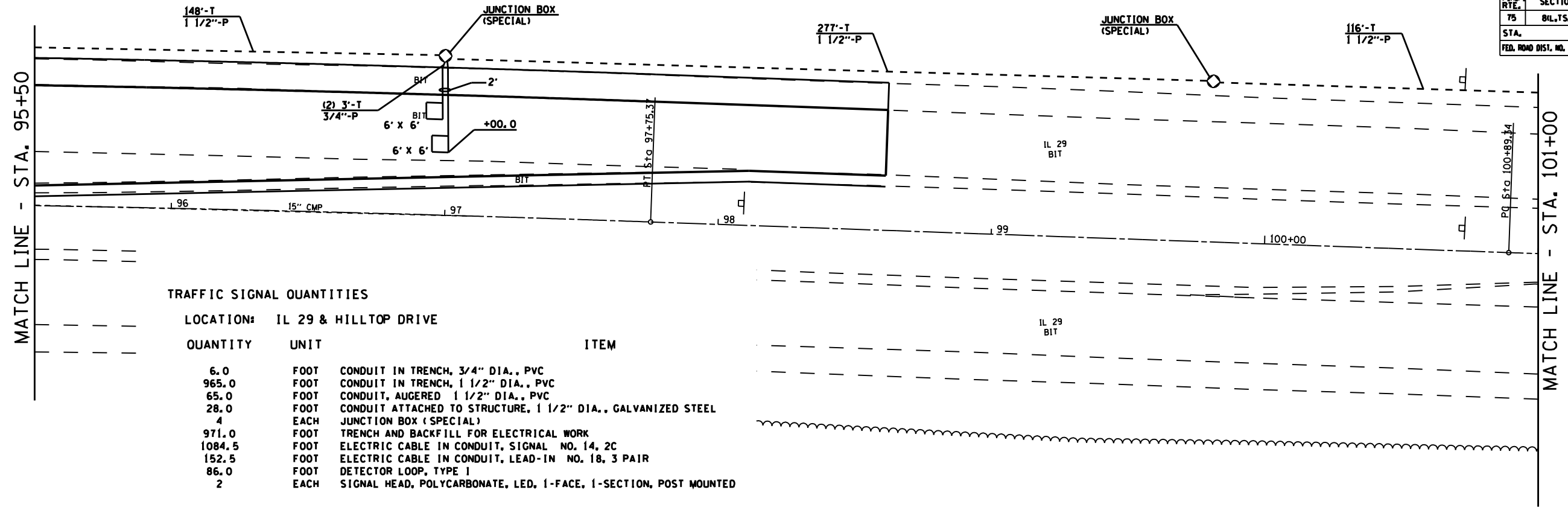
ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC SIGNAL PLAN
 IL 29 & HILLTOP RD
 SANGAMON COUNTY

SCALE: VERT. 1"=20'
 HORIZ. 1"=40'
 DATE: JAN '06

DRAWN BY: KDA
 CHECKED BY: _____

PLOT DATE: 1/24/2006
 FILE NAME: c:\purogen\us\060806\17a_sheets.dgn
 PLOT SCALE: 1/4"=20'
 USER NAME: bbrunham

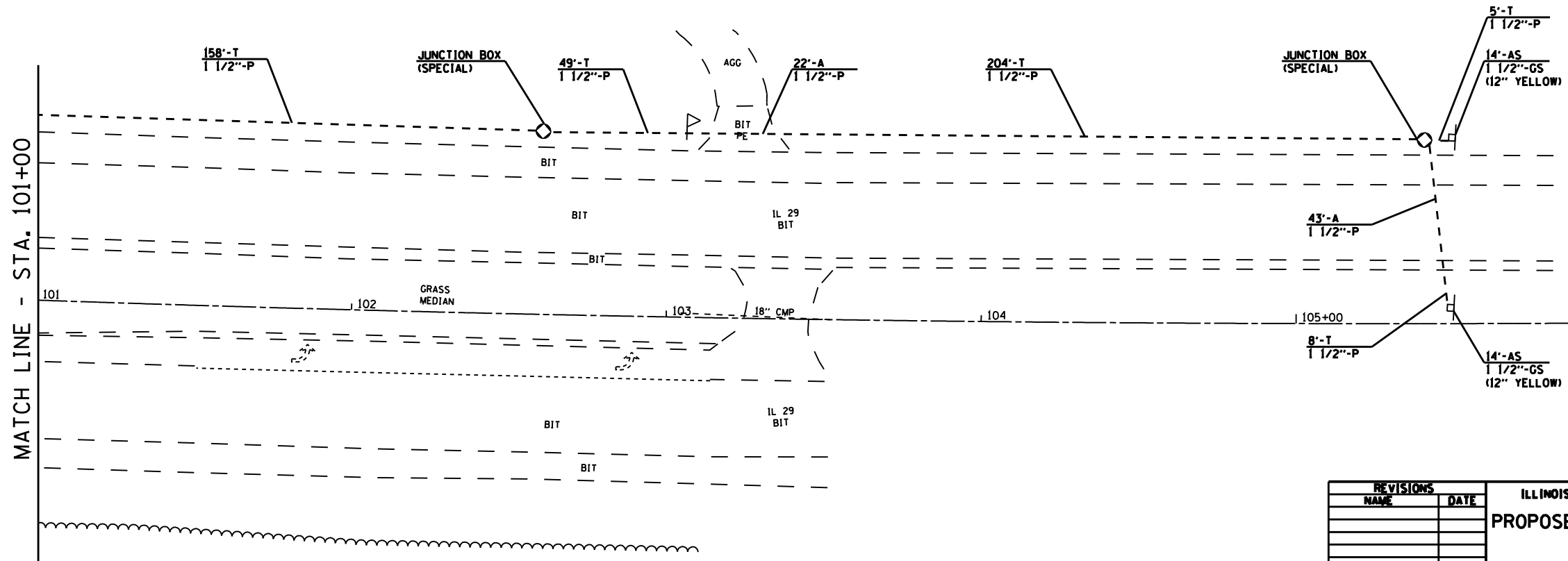
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL.TS.I-I	SANGAMON	29	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	



TRAFFIC SIGNAL QUANTITIES

LOCATION: IL 29 & HILLTOP DRIVE

QUANTITY	UNIT	ITEM
6.0	FOOT	CONDUIT IN TRENCH, 3/4" DIA., PVC
965.0	FOOT	CONDUIT IN TRENCH, 1 1/2" DIA., PVC
65.0	FOOT	CONDUIT, AUGERED 1 1/2" DIA., PVC
28.0	FOOT	CONDUIT ATTACHED TO STRUCTURE, 1 1/2" DIA., GALVANIZED STEEL
4	EACH	JUNCTION BOX (SPECIAL)
971.0	FOOT	TRENCH AND BACKFILL FOR ELECTRICAL WORK
1084.5	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14, 2C
152.5	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 18, 3 PAIR
86.0	FOOT	DETECTOR LOOP, TYPE 1
2	EACH	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 1-SECTION, POST MOUNTED

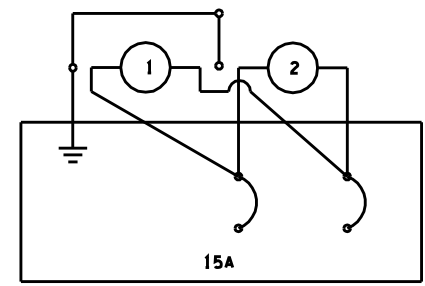
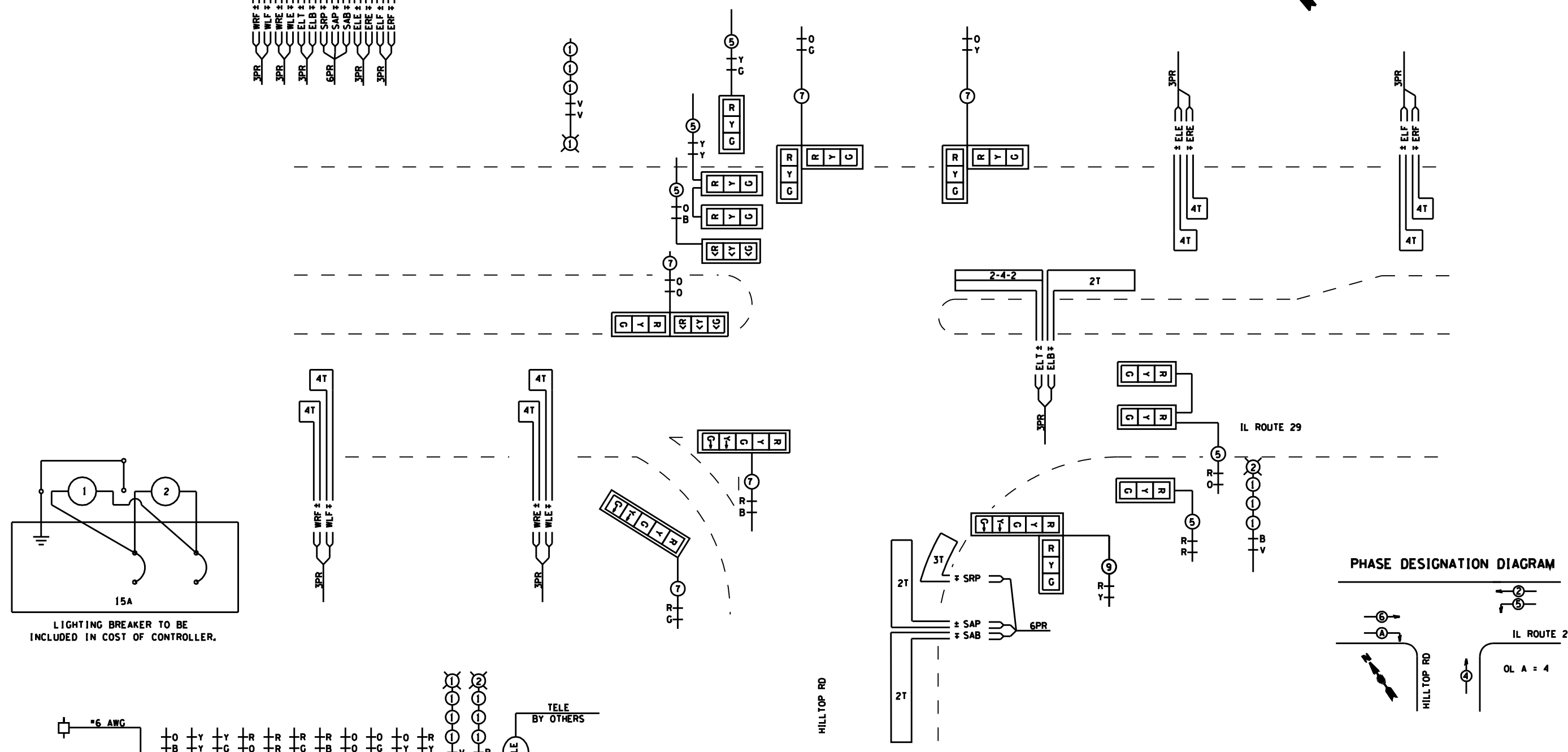
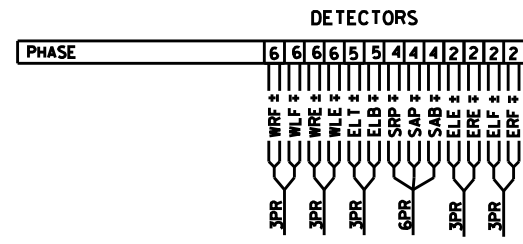


REVISIONS	
NAME	DATE

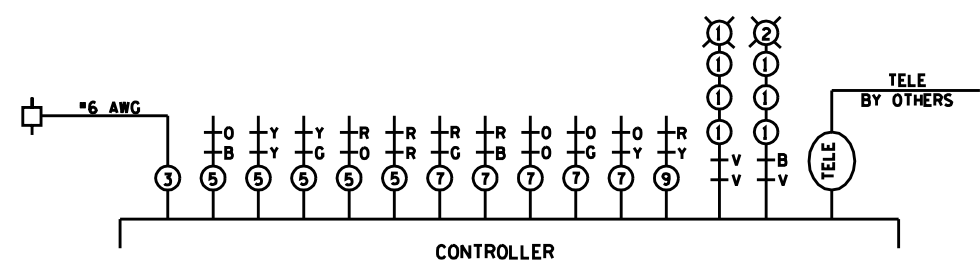
ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED TRAFFIC SIGNAL PLAN
 IL 29 & HILLTOP RD
 SANGAMON COUNTY
 SCALE: VERT. _____
 HORIZ. _____
 DATE: JAN '06
 DRAWN BY: KDA
 CHECKED BY: _____

PLOT DATE: 1/29/2006
 FILE NAME: c:\purogen\14060606\18_sheets.dgn
 PLOT SCALE: 1/4" = 1'-0"
 USER NAME: jbrunham

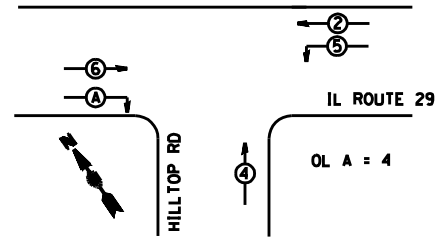
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL.TS.I-1)	SANGAMON	29	19
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



LIGHTING BREAKER TO BE INCLUDED IN COST OF CONTROLLER.



PHASE DESIGNATION DIAGRAM



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PROPOSED CABLE DIAGRAM
 IL 29 & HILLTOP RD
 SANGAMON COUNTY

SCALE: VERT. JAN '06
 HORIZ. DATE

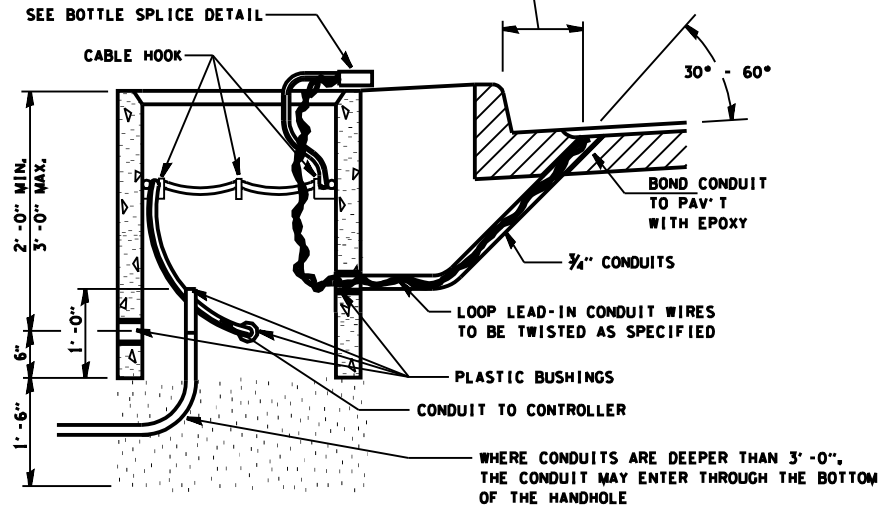
DRAWN BY: KDA
 CHECKED BY:

PLOT DATE: 12/19/2006
 FILE NAME: c:\purogen\148060601\19_sheets\19p
 PLOT SCALE: 1/4" = 100'
 USER NAME: bbrunham

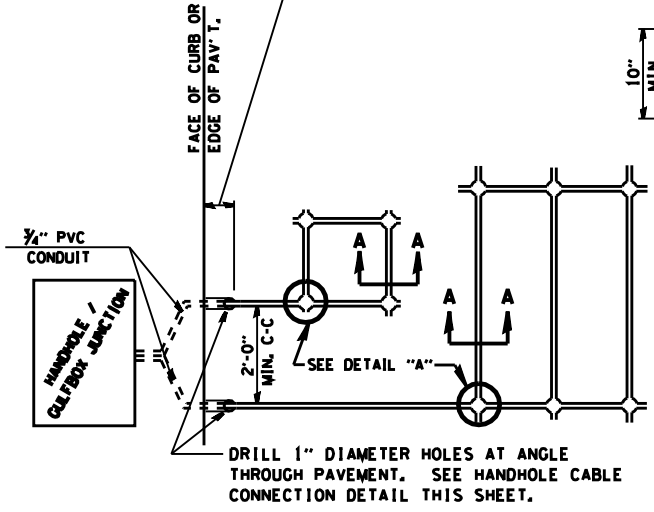
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	8L.TS.1-1	SANGAMON	29	20
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LENGTH OF SLACK FOR LOOP LEAD-INS SHALL PROVIDE FOR MAKING THE SPLICE ON TOP OF THE HANDHOLE AND ONE COMPLETE LOOP OF THE INTERIOR OF THE HANDHOLE. THE SPLICE SHALL BE SUPPORTED BY A CABLE HOOK.

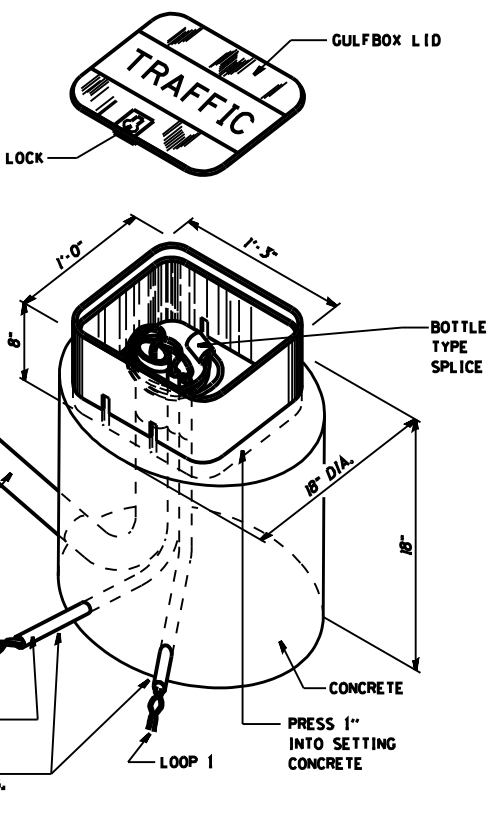
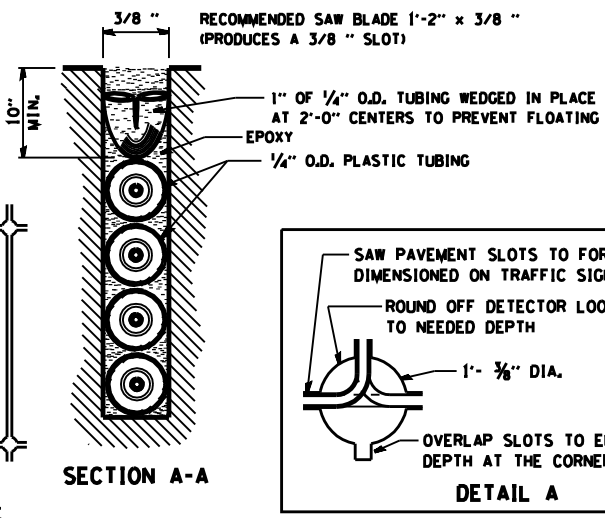
THE LOOP LEAD-IN CONDUIT HOLES SHALL BE PLACED AS CLOSE TO THE CURB AS POSSIBLE TO PERMIT SAW OVERLAP WITHOUT SCARRING FACE OF CURB. IN NON-CURB LOCATIONS THE DISTANCE SHALL NOT BE LESS THAN 6".



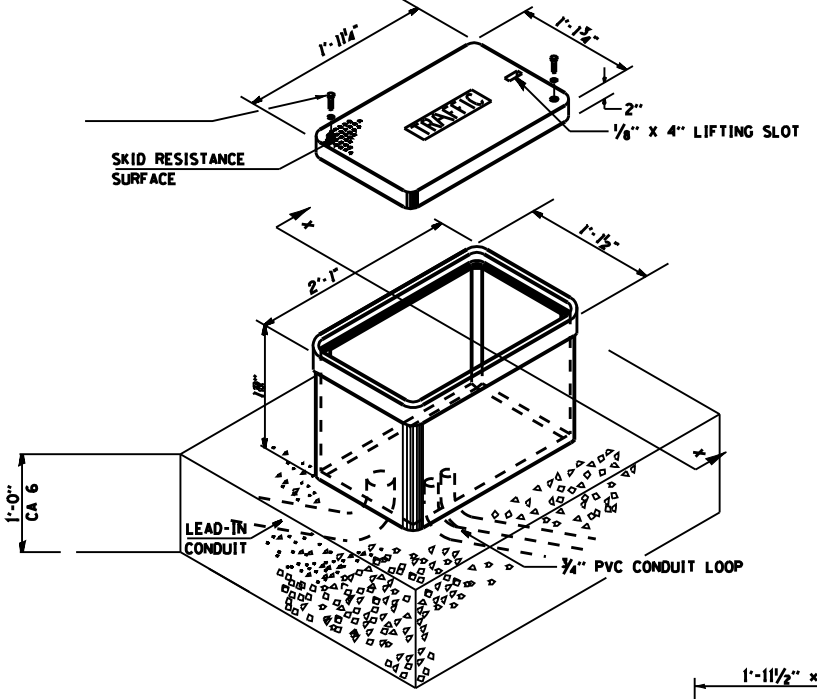
HANDHOLE CABLE CONNECTIONS



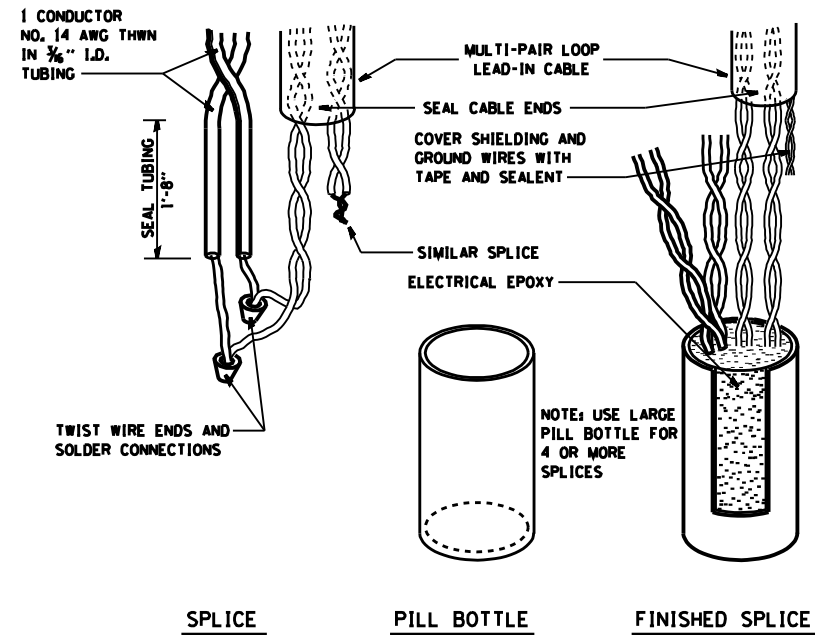
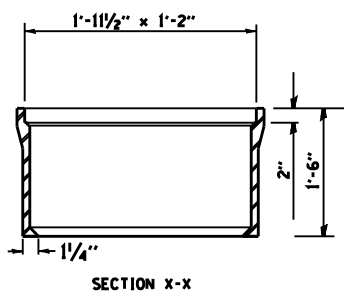
PAVEMENT SAWING DETAIL FOR TUBE ENCASED DETECTOR LOOP WIRE



GULFBOX JUNCTION DETAIL
(SHOWING CONNECTION OF TUBE-ENCASED DETECTOR LOOP TO MULTI-PAIR LEAD-IN CABLE)



JUNCTION BOX (SPECIAL)



BOTTLE SPLICE DETAIL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC SIGNAL
 DETECTOR LOOP DETAILS
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY**

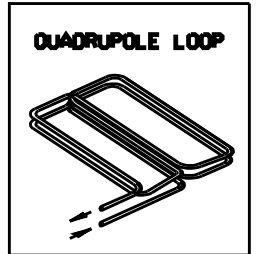
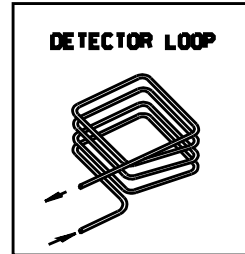
SCALE: VERT. HORIZ.
 DATE

DRAWN BY
 CHECKED BY

PLOT DATE: 12/19/2006
 FILE NAME: c:\puro\proj\114000000\114000000.dwg
 PLOT SCALE: 1/4" = 1'-0"
 USER: MJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	8(L),TS,I-(I)	SANGAMON	29	21
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOOP DESIGNATION	NUMBER OF TURNS	READING @ HANDHOLE OR JUNCTION BOX				READING @ CONTROLLER			
		CALCULATED		METERED		CALCULATED		METERED	
		$\mu\eta$	Ω	$\mu\eta$	Ω	$\mu\eta$	Ω	$\mu\eta$	Ω
WRF	4	141	0.36			174	5.26		
WLF	4	144	0.42			177	5.33		
WRE	4	142	0.38			158	2.72		
WLE	4	145	0.44			161	2.79		
SRP	3	169	0.44			182	2.40		
SAP	2	156	0.57			170	2.52		
SAB	2	180	0.66			194	2.61		
ELT	2-4-2	357	1.05			379	4.26		
ELB	2	183	0.66			205	3.88		
ELE	4	143	0.40			185	6.67		
ERE	4	140	0.34			183	6.61		
ELF	4	143	0.41			203	9.23		
ERF	4	141	0.34			200	9.17		



INSTALLING THE LOOP WIRE:
 THE NEGATIVE LEAD SHALL BE CONNECTED TO THE BLACK CONDUCTOR OF A PAIR OF CONDUCTORS IN THE LEAD-IN CABLE AND THE POSITIVE LEAD SHALL BE CONNECTED TO THE COLOR-CODED CONDUCTOR OF THE CABLE PAIR.

DETECTOR LOOP WIRE INSTALLATION

- DETECTOR NOTES:**
1. THE DETECTOR LOOP SHALL BE CENTERED IN THE LANE IN WHICH IT IS SHOWN. ANY ADJUSTMENTS ARE TO BE MADE ONLY AT THE DIRECTION OF THE ENGINEER.
 2. THE DETECTOR LOOPS SHALL CONSIST OF THE NUMBER OF TURNS AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
 3. ACCEPTANCE OF THE LOOPS AS METERED SHALL BE DETERMINED BY THE ENGINEER.
 4. ALL DETECTOR WIRES SHALL BE MARKED WITH WATERPROOF LABELS USING THE WIRING IDENTIFICATION SHOWN ON THE PLANS. THE + AND - OF EACH LOOP MUST BE USED TO IDENTIFY CURRENT FLOW. ALWAYS CONNECT THE BLACK WIRE OF EACH PAIR TO THE NEGATIVE (-) LOOP WIRE.
 5. ALL QUADRUPOLE LOOPS SHALL BE 2-4-2 DESIGN.
 6. THE CONTRACTOR SHALL CONTACT DISTRICT 6 OPERATIONS FOR ASSISTANCE IN DETECTOR LOOP LAYOUT AT LEAST 48 HOURS BEFORE INSTALLING DETECTOR LOOPS (Ph. # 217-558-6523)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TRAFFIC SIGNAL
 DETECTOR LOOP DETAILS
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY**

SCALE: VERT. _____
 HORIZ. _____

DATE _____ DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL.TS.I-1	SANGAMON	29	22
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD
		SIGNAL HEAD WITH BACKPLATE
		TEMPORARY SIGNAL HEAD
		PEDESTRIAN SIGNAL HEAD
		PEDESTRIAN PUSHBUTTON DETECTOR
		DETECTOR LOOP
		QUADRAPOLE DETECTOR LOOP
		SIGNAL POST
		ALUMINUM MAST ARM ASSEMBLY AND POLE
		STEEL MAST ARM ASSEMBLY AND POLE
		WOOD POLE
		WOOD POLE WITH GUY
		SERVICE INSTALLATION
		CONTROLLER
		HANDHOLE
		HEAVY DUTY HANDHOLE
		DOUBLE HANDHOLE
		JUNCTION BOX
		GULFBOX JUNCTION
		AERIAL CABLE
		CONDUIT
		CONDUIT SPLICE
		SPAN WIRE / TETHER WIRE
		SIDEWALK REMOVAL IN 50 M (50 FT)
		PC CONC SDWLK 100 mm IN 50 M (50 YD)
		PC CONC SDWLK 100 mm SPECIAL IN 50 M (50 YD)

TRAFFIC SIGNAL WIRING DIAGRAM LEGEND

EXISTING	PROPOSED	DESCRIPTION
		200 mm (8") SIGNAL SECTION
		300 mm (12") SIGNAL SECTION
		DIRECTIONAL SIGNAL SECTION
		225 mm (9") PEDESTRIAN SIGNAL FACE
		300 mm (12") PEDESTRIAN SIGNAL FACE
		SIGNAL FACE WITH BACKPLATE
		PROGRAMMED SIGNAL SECTION
		SIGNAL SECTION WITH LOUVRE
		DUAL-INDICATION SIGNAL SECTION
		INDUCTION DETECTOR LOOP
		QUADRAPOLE DETECTOR LOOP
		DIRECT-CONNECTED LOOP LEAD-IN (TWISTED)
		ELECTRIC CABLE DENOTING NUMBER OF CONDUCTORS
		ELECTRIC CABLE TO BE REMOVED
		ELECTRIC CABLE IDENTIFIER TAPE CODES (R= RED W= WHITE Y= YELLOW G= GREEN B= BLUE O= ORANGE)
		PEDESTRIAN PUSHBUTTON DETECTOR
		VIDEO DETECTION CAMERA
		EMERGENCY VEHICLE PREEMPTOR

PLOT DATE: 12/19/2006
 FILE NAME: c:\p06\proj\114806060\114806060.dwg
 PLOT SCALE: 1:42,250
 USER NAME: b.rahman

DETLOOP

REVISIONS	
NAME	DATE

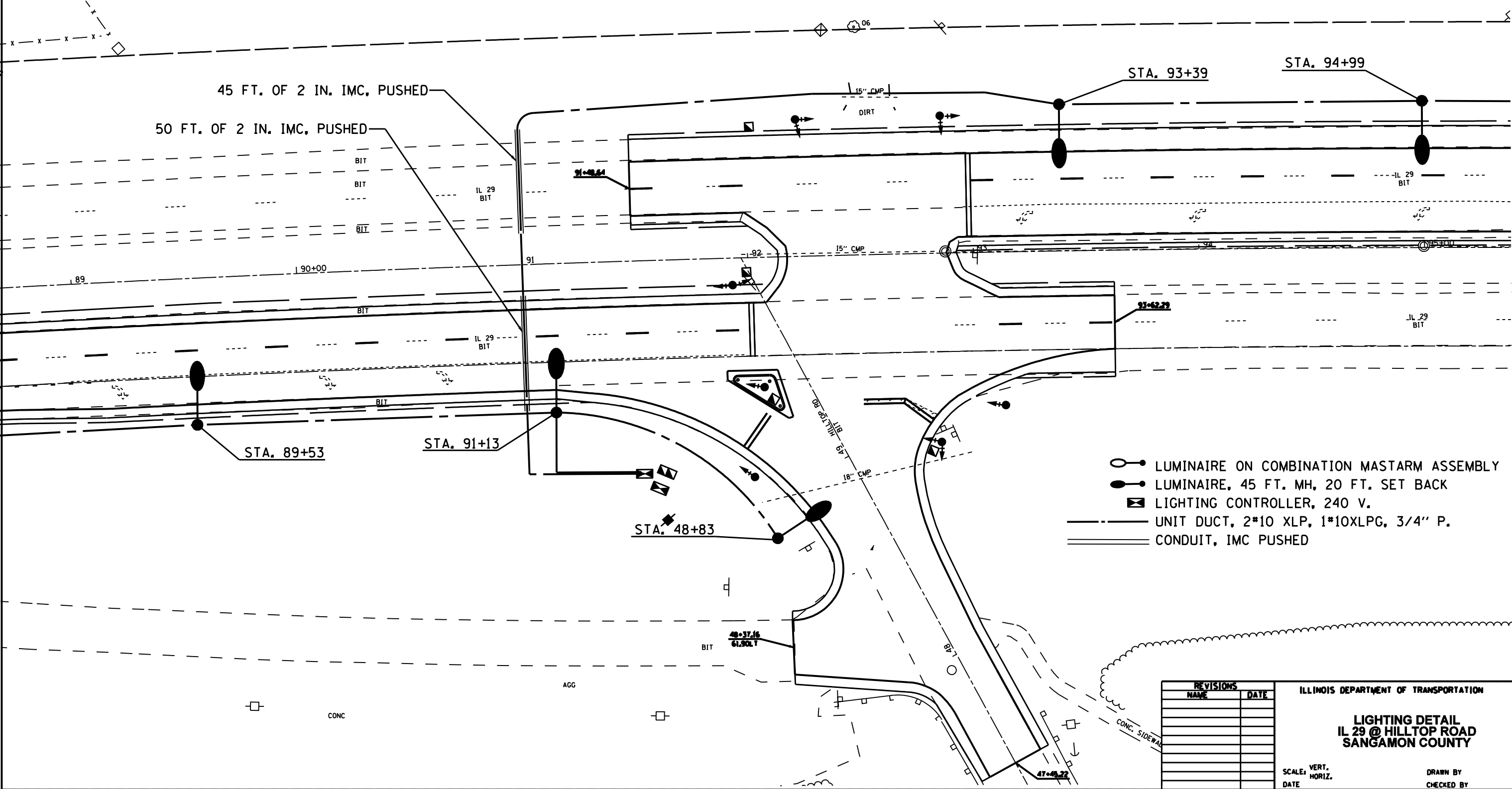
ILLINOIS DEPARTMENT OF TRANSPORTATION

LEGEND FOR TRAFFIC SIGNAL DETAILS
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

VERT. SCALE: 1" = 20'
 HORIZ. SCALE: 1" = 40'
 DATE: DECEMBER 3, 1999

DRAWN BY: []
 CHECKED BY: WCD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL.TS.1-1	SANGAMON	29	23
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



- LUMINAIRE ON COMBINATION MASTARM ASSEMBLY
- LUMINAIRE, 45 FT. MH, 20 FT. SET BACK
- LIGHTING CONTROLLER, 240 V.
- UNIT DUCT, 2*10 XLP, 1*10XLP, 3/4" P.
- CONDUIT, IMC PUSHED

PLOT DATE :
 FILE NAME :
 PLOT SCALE :
 USER NAME :

REVISIONS	
NAME	DATE

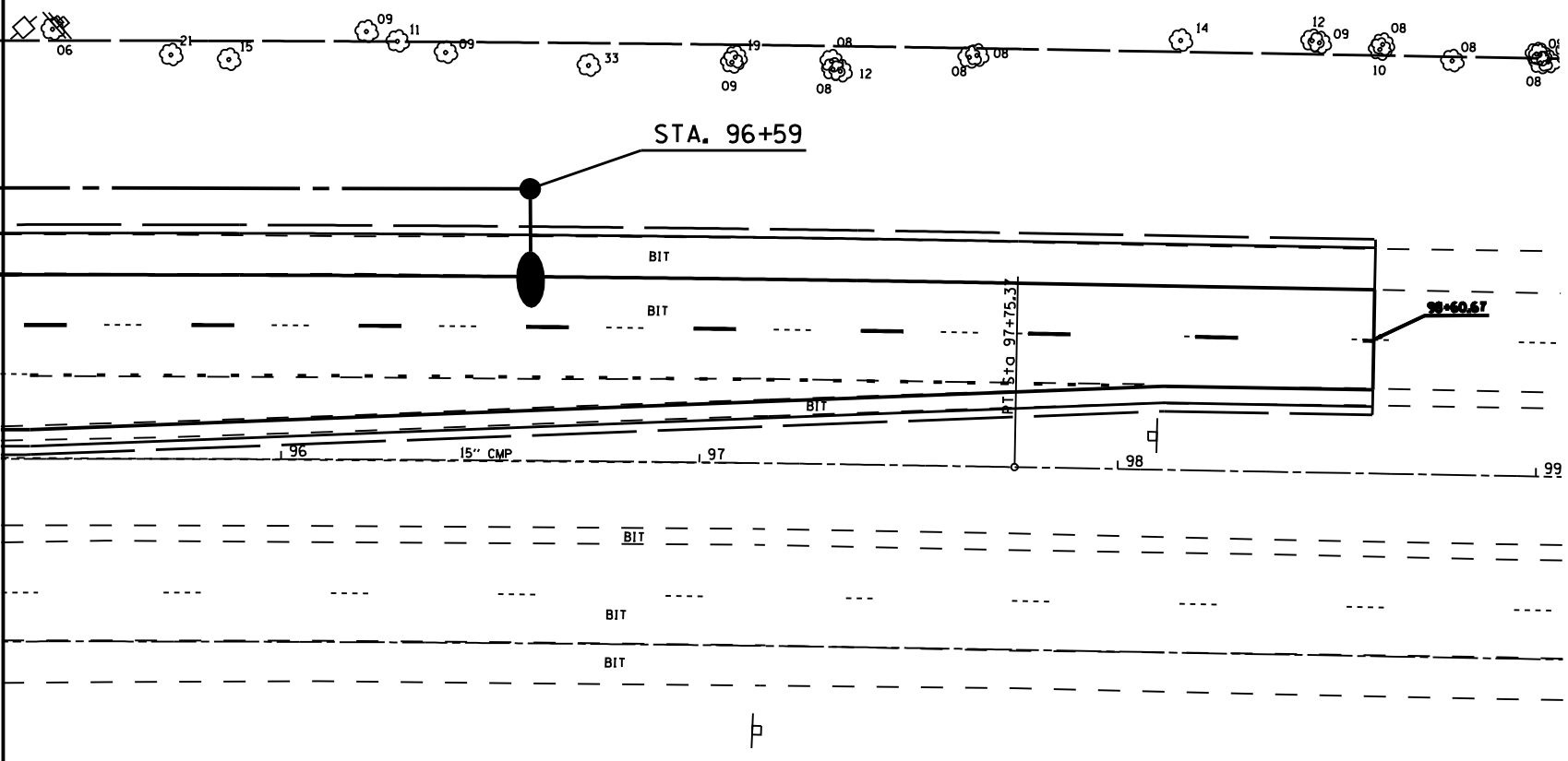
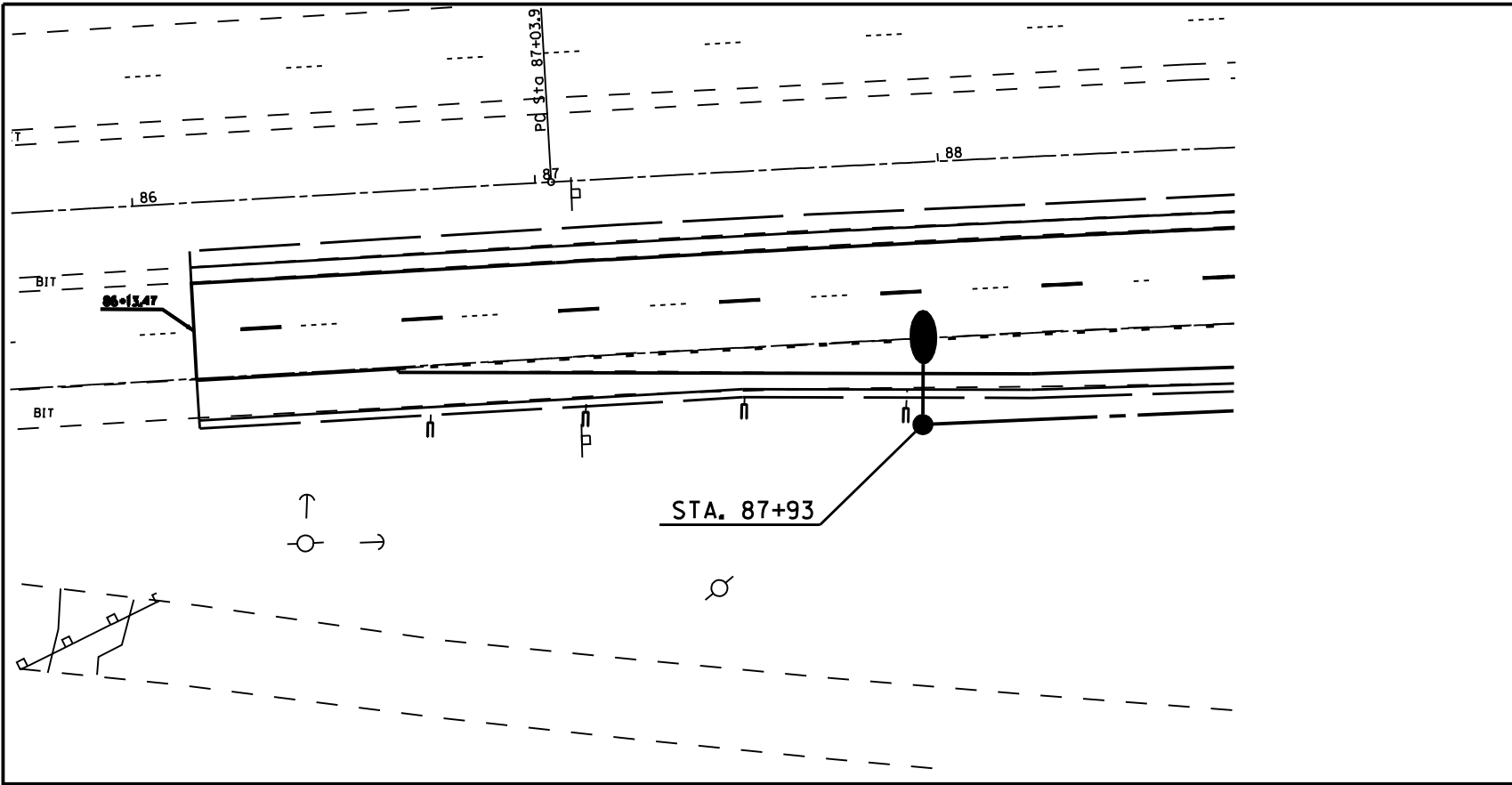
ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHTING DETAIL
IL 29 @ HILLTOP ROAD
SANGAMON COUNTY

SCALE: VERT. _____
 DATE: _____ HORIZ. _____

DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL. TS, I-1	SANGAMON	29	24
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



- LUMINAIRE ON COMBINATION MASTARM ASSEMBLY
- LUMINAIRE, 45 FT. MH, 20 FT. SET BACK
- LIGHTING CONTROLLER, 240 V.
- UNIT DUCT, 2*10 XLP, 1*10XLPG, 3/4" P.
- CONDUIT, IMC PUSHED

PLOT DATE: 12/19/2006
 FILE NAME: c:\purogens\4222024\h11\lighting\detail\h11.dwg
 PLOT SCALE: 1/4" = 1'-0"
 USER NAME: brenthume

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

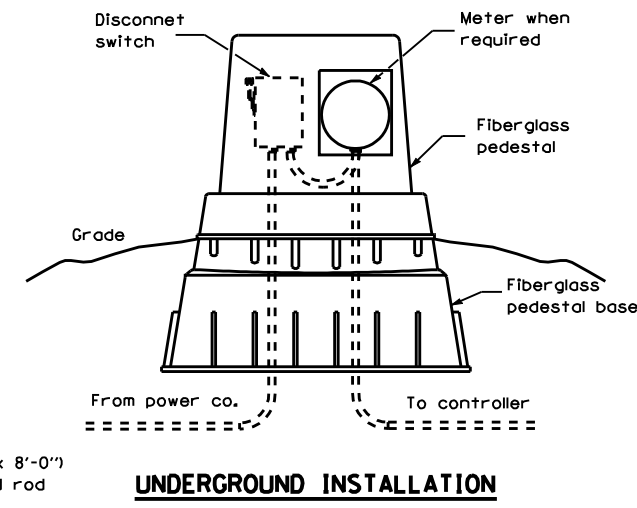
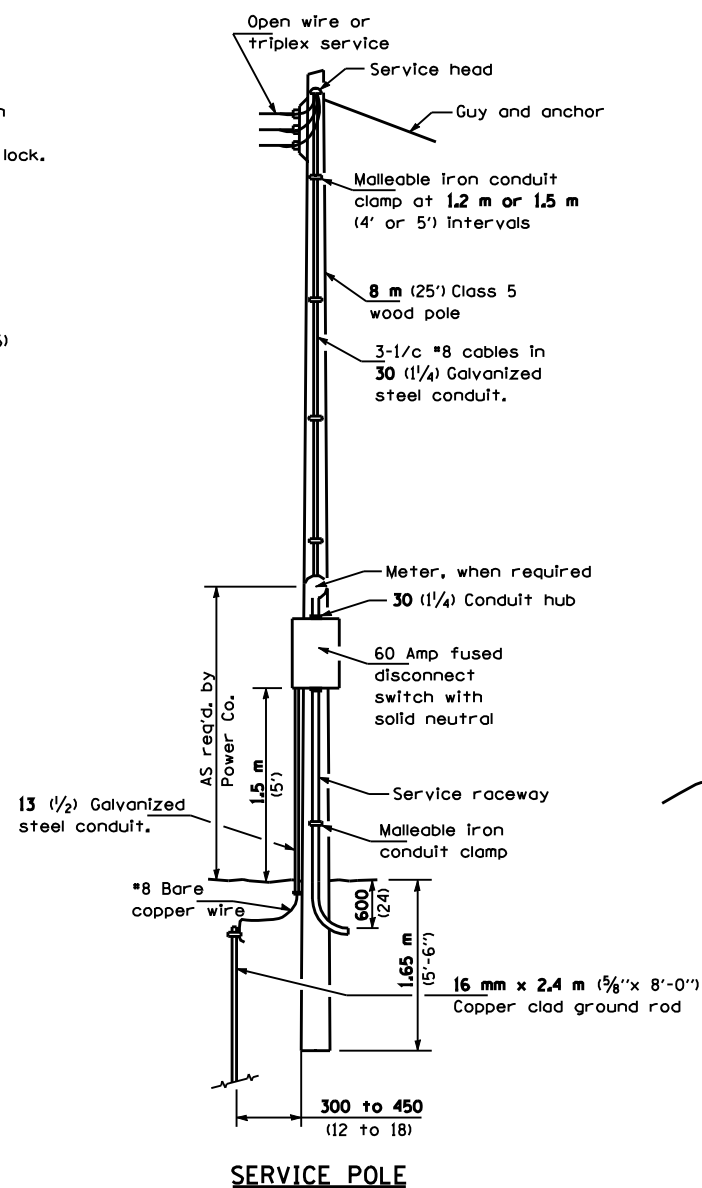
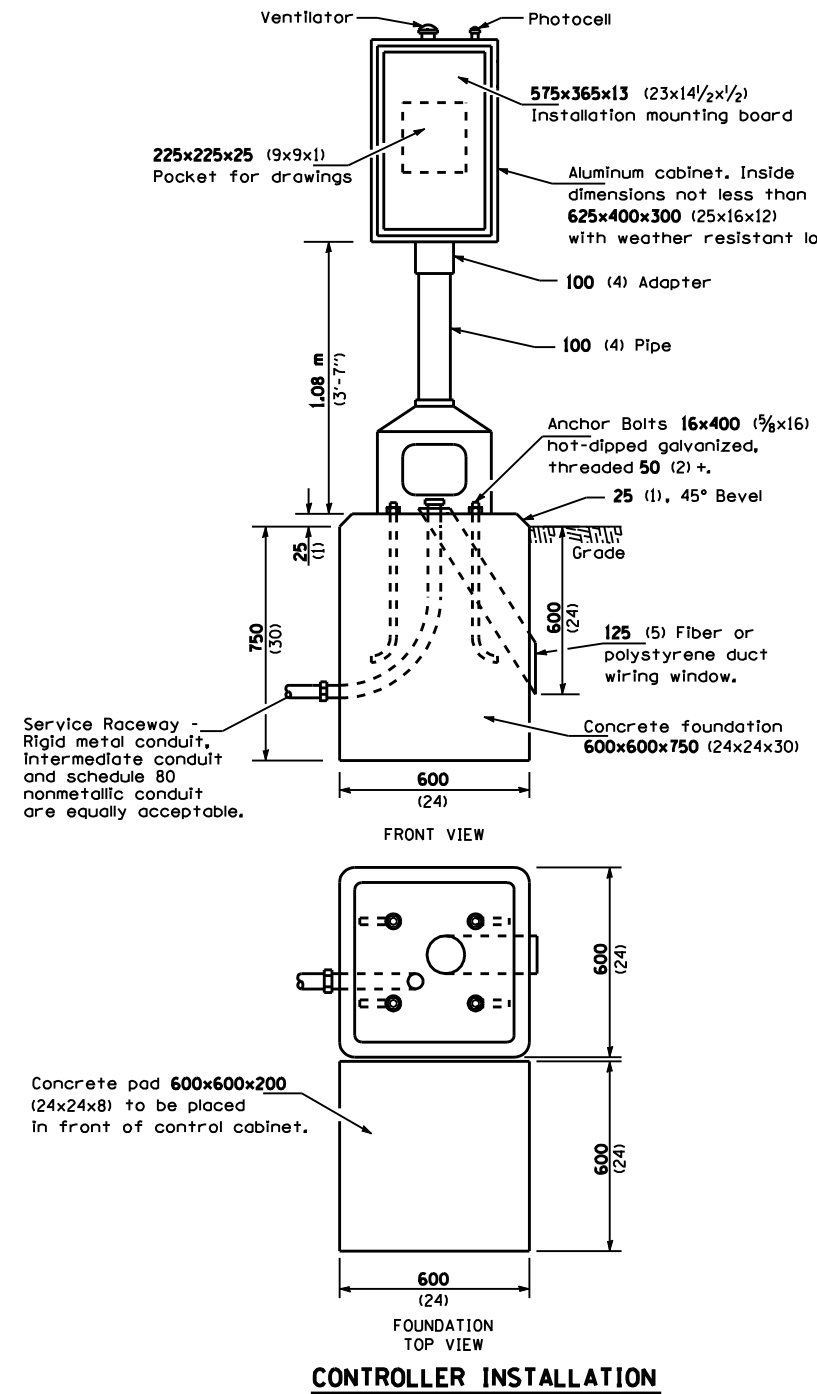
LIGHTING DETAIL
IL. 29 @ HILLTOP ROAD
SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____

DATE _____

DRAWN BY _____
 CHECKED BY _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL.TS.I-1	SANGAMON	29	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



All dimensions are in millimeters unless otherwise shown.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 LIGHTING DETAIL
 CONTROL INSTALLATION
 TYPE CB-RCS-60
 IL 29 @ HILLTOP ROAD
 SANGAMON COUNTY

SCALE: VERT. _____
 HORIZ. _____

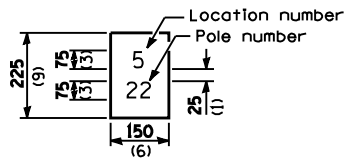
DATE _____ DRAWN BY _____
 CHECKED BY _____

PLOT DATE: 12/19/2006
 FILE NAME: c:\puro\puro\work\2006\11\lighting\detail\ludgn
 PLOT SCALE: 1:1
 USER NAME: jbrunham

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL.TS.I-I	SANGAMON	29	26
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

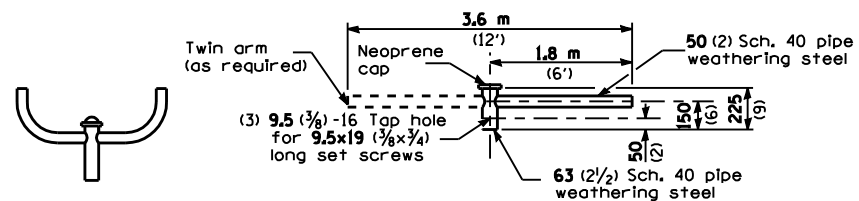
"Install and orient arm bracket over pole tenon and firmly hand tighten the two set screws. Use third hole in arm bracket as a guide to drill a 8.3 (3/4) diameter hole through tenon. Install and tighten self-tapping screw. Tighten set screws an additional (1/4 to 3/8) turn with hex key (not provided). Install locknuts on set screws if threaded projection allows."

Pole shall meet AASHTO Standard Specifications for 128.72 km (80 mph) wind loading and 40.82 kg (90 lb.), .37 m² (4.0 sq. ft.) E.P.A. luminaire.



The contractor shall furnish and install a light pole identification of each new light pole, as shown above, incidental to the respective light pole pay item. The numerals shall be 75 (3) series "D", black, screened on silver-white type B pressure sensitive reflective sheeting conforming to the requirements of section 1602.01 of the Standard Specifications for Traffic Control Items. The numerals shall conform to the FHWA "Standard Alphabets for Highway Signs".

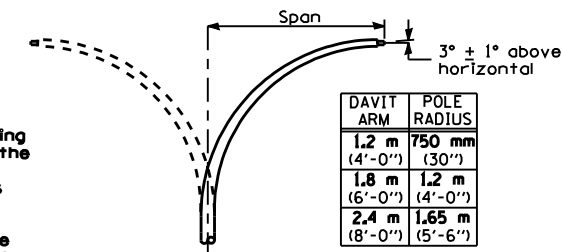
The light pole identification shall be applied to sign base material as specified in section 1085.05 of the Standard Specifications, approximately 180 (7) above the adjacent pavement grade visible to approaching traffic in accordance with Highway Standard 2319.



TWIN TENON

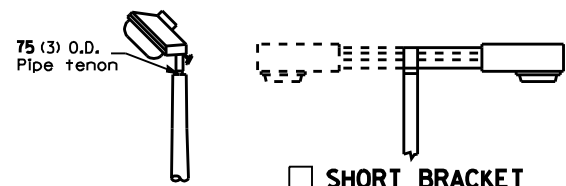
TENON MOUNT BRACKET ARM

NOTE: Single or twin arm assembly shall be tilted 3° above horizontal.



DAVIT ARM (and or)

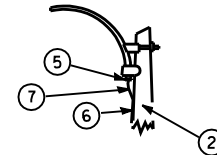
DAVIT ARM-TWIN



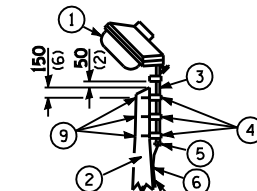
TENON

SHORT BRACKET

SHORT BRACKET - TWIN

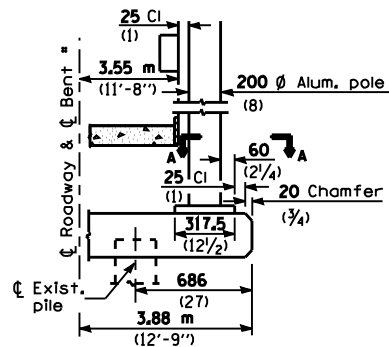


MAST ARM

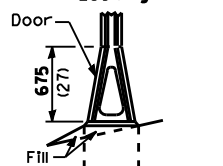


TENON

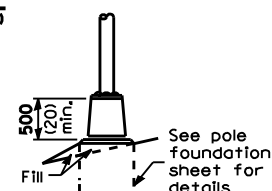
- 1 Luminaire
- 2 Wood pole, class 3 or better
- 3 63 (2 1/2) Galv. steel conduit
- 4 Single offset pole band
- 5 Conduit bushing
- 6 Cable clamps on 600 (24) centers
- 7 2/c #12 Type use cable
- 8 25 (1) Galv. steel conduit 3.0 m (10') in length
- 9 16 (3/8) Ø hot dipped galvanized bolt with flat washer & locknut (3 req'd)
- 10 Conduit clamps on 900 (36) centers
- 11 Unit duct
- 12 Threaded reducer
- 13 "C" Condulet, threaded
- 14 40 (1 1/2) Galv. steel conduit for 1 unit duct or 75 (3) galv. steel conduit for 2 or 3 unit ducts.



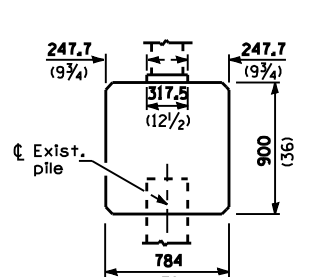
BENT (Looking)



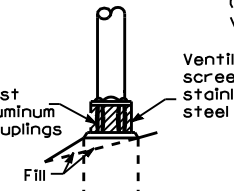
STAINLESS STEEL FLAIR BASE



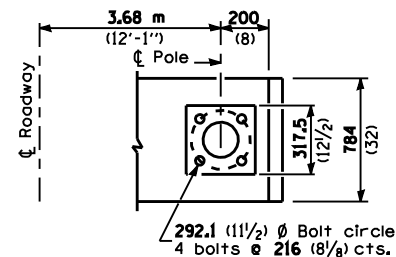
TRANSFORMER BASE



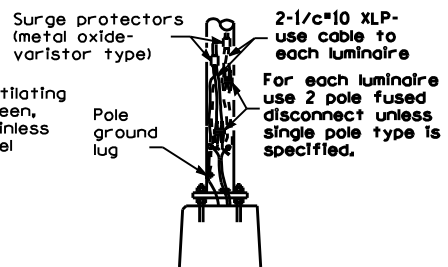
BRIDGE PIER MOUNT



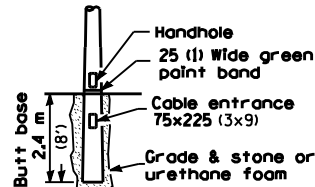
BREAKAWAY COUPLING



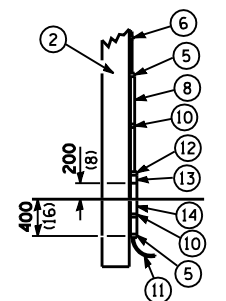
SECTION A-A



ANCHOR



BUTT BASE



POLE, WOOD

POLE LENGTH	DEPTH IN GROUND
19.8 m (65')	3.6 m (12')
18.0 m (60')	3.0 m (10')
16.8 m (55')	2.7 m (9')
16.0 m (50')	2.4 m (8')
13.7 m (45')	2.1 m (7')
12.0 m (40')	2.0 m (6.5')
10.7 m (35')	1.8 m (6')
9.0 m (30')	1.7 m (5.5')

METAL OR CONCRETE

Details for underground distribution if required

added short bracket - twin and edited to section 1085.05 10/30/97 hec

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

REVISIONS	
NAME	DATE

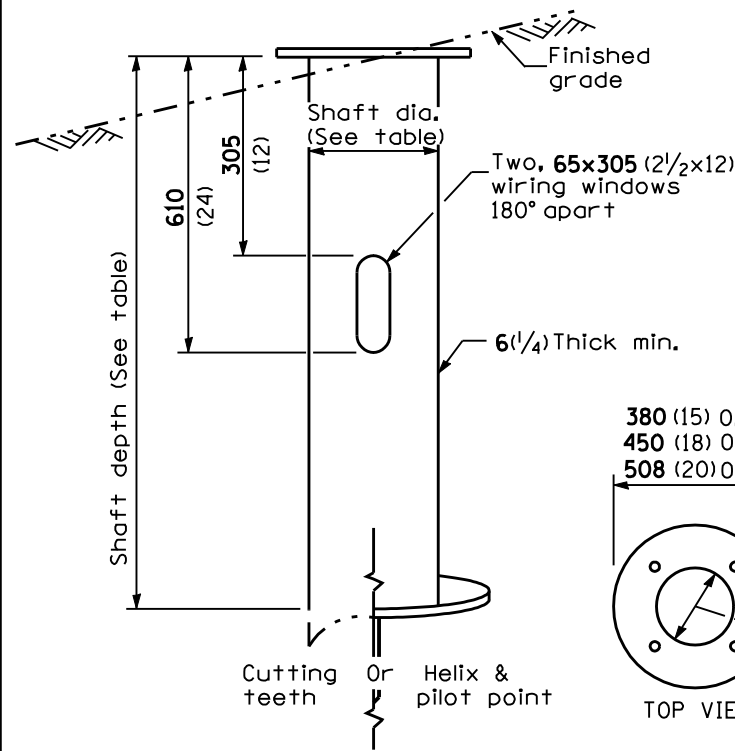
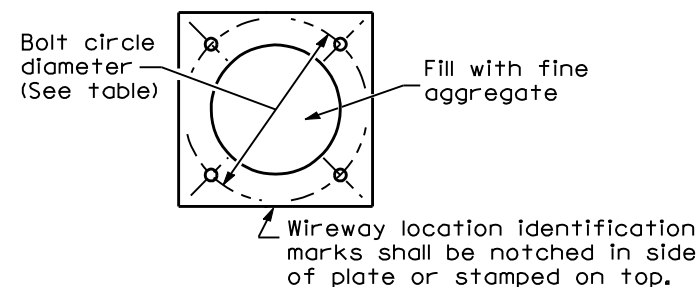
ILLINOIS DEPARTMENT OF TRANSPORTATION
LIGHTING DETAIL
POLE STANDARDS
IL 29 @ HILLTOP ROAD
SANGAMON COUNTY

SCALE: VERT. HORIZ. DATE DRAWN BY CHECKED BY

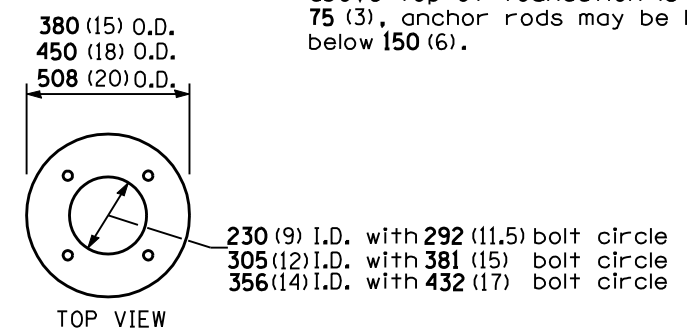
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
75	BL. TS. I-1	SANGAMON	29	27
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

LIGHT POLE MOUNTING HEIGHT	BOLT CIRCLE DIAMETER	STEEL FOUNDATION			CONCRETE FOUNDATION		
		SHAFT DIAMETER	SHAFT DEPTH	TOP PLATE (min)	SHAFT DIAMETER	SHAFT DEPTH	ANCHOR ROD LENGTH ①
< 9.1 m (30')	292 (11.5)	220 (8 5/8)	1.83 m (6')	300 x 300 x 25 12 x 12 x 1	610 (24)	1.52 m (5'-0")	1.45 m (4'-9")
9.4 m - 10.7 m (31'-35')	292 (11.5)	220 (8 5/8)	1.83 m (6')	300 x 300 x 25 12 x 12 x 1	610 (24)	1.67 m (5'-6")	1.60 m (5'-3")
10.9 m - 12.2 m (36'-40')	381 (15) ③	220 (8 5/8)	1.83 m (6') ②	375 x 375 x 31 15 x 15 x 1 1/4	762 (30)	1.83 m (6'-0")	1.75 m (5'-9")
12.5 m - 13.7 m (41'-45')	381 (15) ③	220 (8 5/8)	1.83 m (6') ②	375 x 375 x 31 15 x 15 x 1 1/4	762 (30)	1.98 m (6'-6")	1.90 m (6'-3")
14.0 m - 15.2 m (46'-50')	381 (15) ③	220 (8 5/8)	2.44 m (8')	375 x 375 x 31 15 x 15 x 1 1/4	762 (30)	2.13 m (7'-0")	2.00 m (6'-9")

- ① Length does not include 100(4)hook
- ② 220 mm x 2.44 m (8 5/8" x 8'-0") for Twin luminaires
- ③ Bolt circle diam. shall be 430 (17) when a TB3-17 transformer base is used



STEEL FOUNDATION



RING PLATE DETAIL
(When rock is encountered and foundation is shallower)

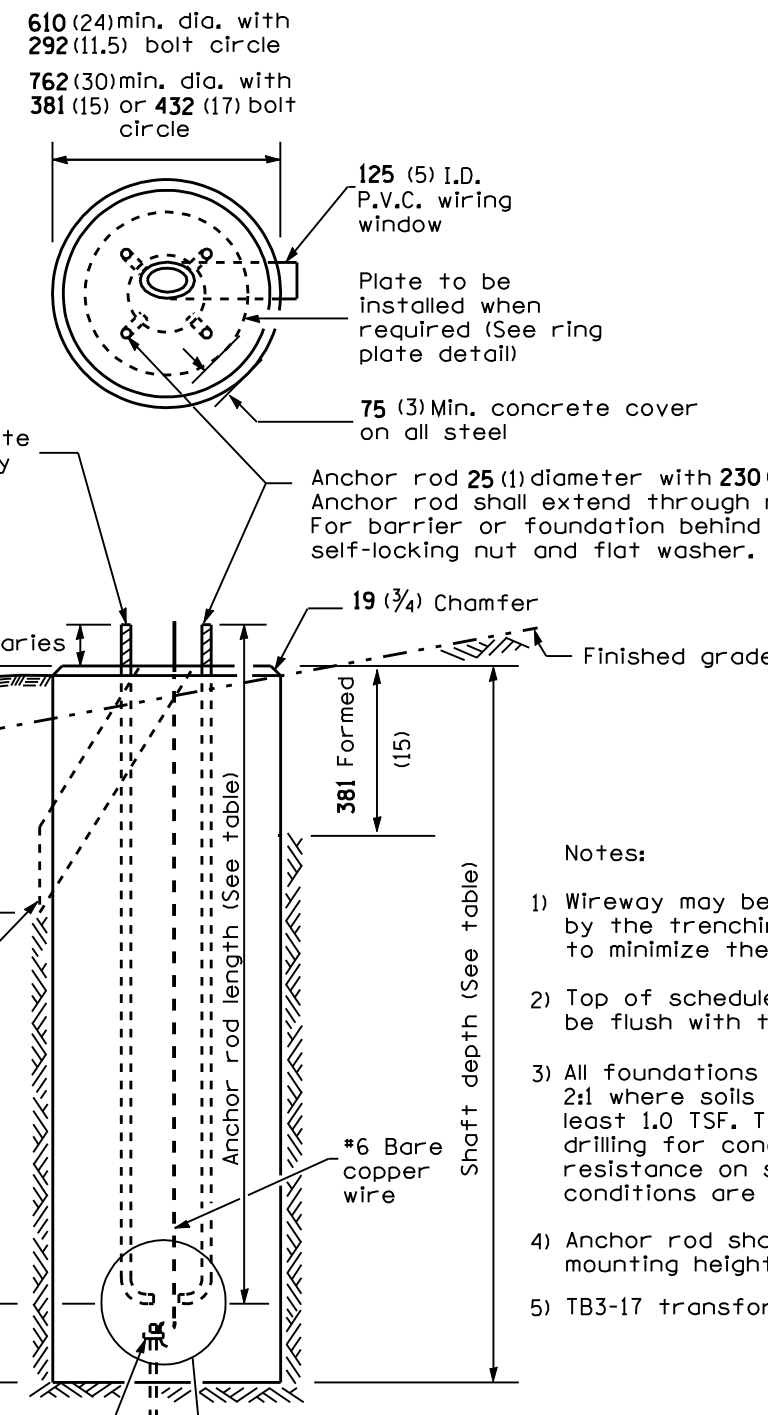
Length above foundation shall be adjusted to accommodate breakaway devices furnished by the contractor for a specific installation.

- ④ If the required anchor rod length above top of foundation is less than 75 (3), anchor rods may be lowered below 150 (6).

Cast bronze clamp

16 mm x 3 m (5/8" x 10') Copperclad grounding electrode. When foundation is set in rock, install ground electrode in cable trench.

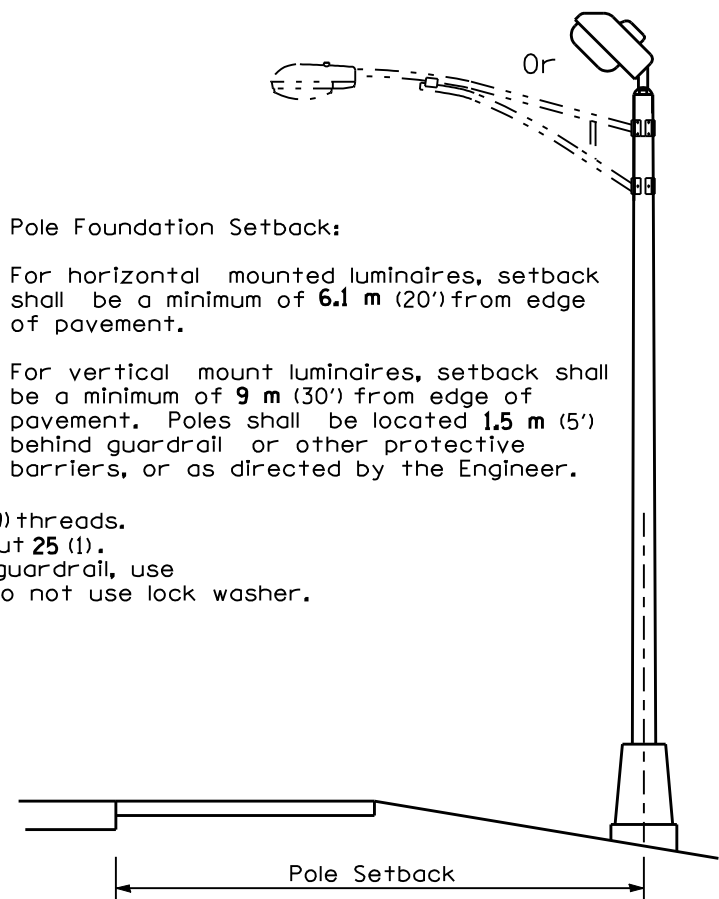
CONCRETE FOUNDATION



Pole Foundation Setback:

For horizontal mounted luminaires, setback shall be a minimum of 6.1 m (20') from edge of pavement.

For vertical mount luminaires, setback shall be a minimum of 9 m (30') from edge of pavement. Poles shall be located 1.5 m (5') behind guardrail or other protective barriers, or as directed by the Engineer.



Notes:

- 1) Wireway may be on front, back or side of foundation as required by the trenching. Place door of transformer base on wireway side to minimize the number of unit duct bends.
- 2) Top of schedule 40 125 (5) I.D. PVC wiring window, shall be flush with the top of foundation for drainage.
- 3) All foundations are designed to be located on slopes not exceeding 2:1 where soils have an unconfined compressive strength of at least 1.0 TSF. The contractor shall verify the soil strength during drilling for concrete foundations or by monitoring installation resistance on steel foundations and notify the engineer if other conditions are encountered.
- 4) Anchor rod shall be increased to 31 (1 1/4) diameter for 15.24 (50') mounting height or above.
- 5) TB3-17 transformer base is not to be used on metal foundation

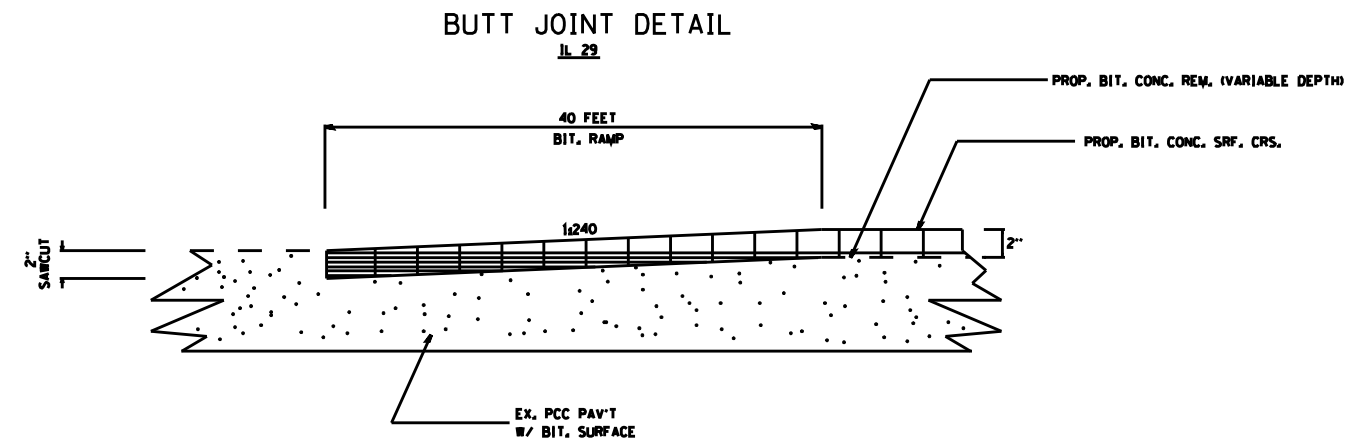
All dimensions are in millimeters (inches) unless otherwise shown.

DATE	REVISIONS
10/7/02	Bridge Office depth calc.

LIGHT POLE FOUNDATION

LGT007-836

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
121	134RS-4	LOGAN	29	29
STA.		TO STA.		
FED. ROAD DIST. NO. 6		ILLINOIS	FED. AID PROJECT	



PLOT DATE : 2/19/2006
 FILE NAME : c:\prowork\10500000\10500000.dwg
 PLOT SCALE : 42.2500' / IN.
 USER NAME : jbrunham

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BUTT JOINT
IL 29 @ HILLTOP ROAD
SANGAMON COUNTY

SCALE: VERT. _____
HORIZ. _____

DRAWN BY: BDK
CHECKED BY: JCN