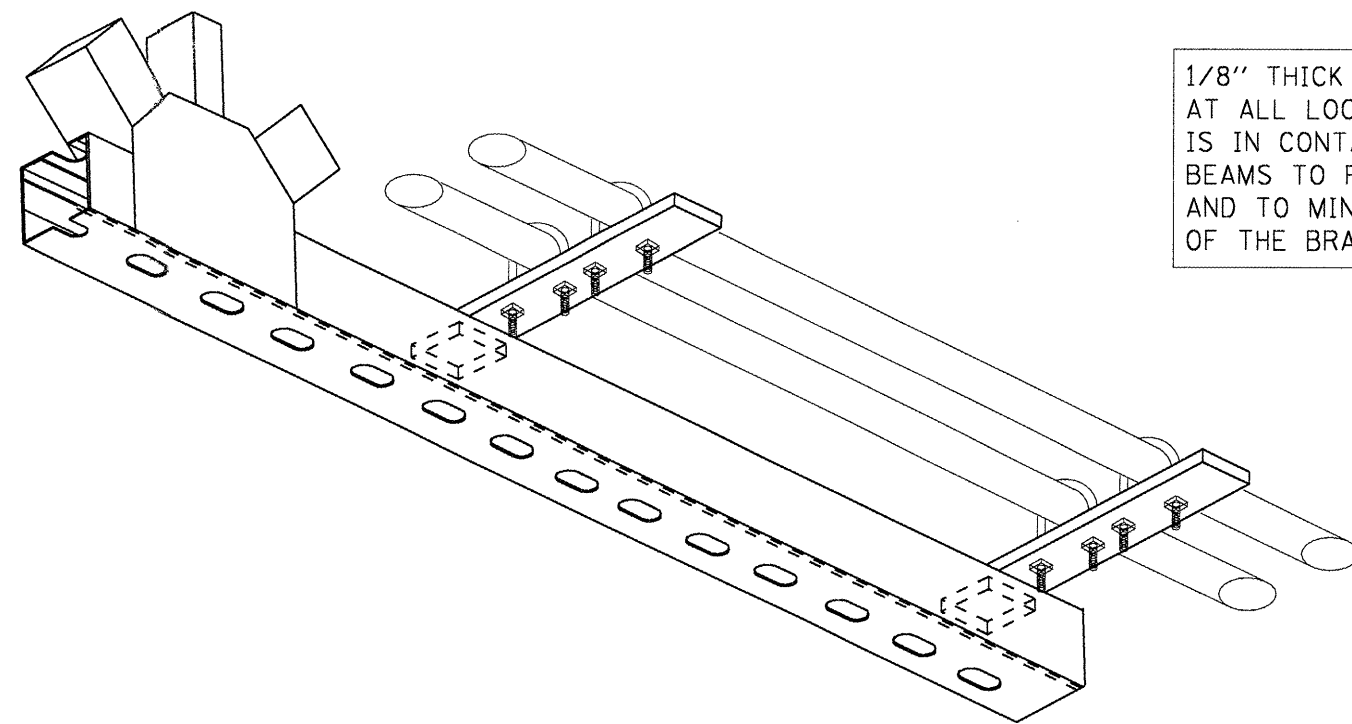


- FIBER OPTIC CABLE TERMINATION NOTES (SINGLE MODE CABLE)**
1. THE PROPOSED FIBER OPTIC CABLE SHALL BE TERMINATED AS SHOWN.
 2. ALL CABLE SPLICES AND TERMINATIONS SHALL BE FUSION SPLICED.
 3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR FIBER OPTIC CABLE TERMINATION, INCLUDING, BUT NOT LIMITED TO, BREAKOUT KITS, FANOUT KITS, ENCLOSURES, WEATHERPROOF SPLICE BOOTS, SPLICE SLEEVES, CONNECTORS, ETC.
 4. ALL ST CONNECTORS SHALL BE FUSION SPLICED UTILIZING PRE-FORMED CABLES WITH CONNECTORS THAT ARE FUSION SPLICED TO THE PROPOSED FIBER.
 5. THE SINGLE MODE CABLE SHALL BE INSTALLED CONTINUOUS FROM THE PROPOSED TYPE 334 ITS CABINET LOCATED AT THE EAST END OF THE BRIDGE TO THE PROPOSED TYPE 334 ITS CABINET LOCATED AT THE WEST END OF THE BRIDGE.
 6. ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE BID PRICE FOR THE PROPOSED 48 FIBER SINGLE MODE FIBER OPTIC CABLE. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.

- FIBER OPTIC CABLE TERMINATION NOTES (MULTIMODE CABLE)**
1. THE PROPOSED FIBER OPTIC CABLE SHALL BE TERMINATED AS SHOWN.
 2. ALL CABLE TERMINATIONS SHALL BE FUSION SPLICED OR SPLICED UTILIZING APPROVED MECHANICAL ST CONNECTORS.
 3. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS REQUIRED FOR FIBER OPTIC CABLE TERMINATION, INCLUDING, BUT NOT LIMITED TO, BREAKOUT KITS, FANOUT KITS, ENCLOSURES, SPLICE SLEEVES, CONNECTORS, ETC.
 4. ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE INCLUDED IN THE BID PRICE FOR THE PROPOSED 12 FIBER MULTIMODE FIBER OPTIC CABLE. THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.

FILE NAME *	USER NAME * #USER#	DESIGNED - ---	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-474 SHADE LOHMANN BRIDGE CCTV SURVEILLANCE FIBER OPTIC CABLE TERMINATION DIAGRAM	F.A.I RTE. 474	SECTION [172.9015B]1-2	COUNTY PEOR A/TAZEWELL	TOTAL SHEETS 121	SHEET NO. 121	
*FILE#		DRAWN - ---	REVISED - ---			SCALE: ITS SHEET NO. 8 OF 16 SHEETS STA. TO STA.					
PLOT SCALE * #SCALE#		CHECKED - ---	REVISED - ---			ILLINOIS FED. AID PROJECT					
PLOT DATE * #DATE#		DATE - ---	REVISED - ---			CONTRACT NO. 68069					



1/8" THICK RUBBER PAD SHALL BE USED AT ALL LOCATIONS WHERE THE BRACKET IS IN CONTACT WITH THE BRIDGE BEAMS TO PREVENT DAMAGE TO THE PAINT AND TO MINIMIZE VIBRATION INDUCED MOVEMENT OF THE BRACKET ON THE BEAM.

INSTALL LOCK WASHERS AND NUTS ON BOTTOM SIDE OF TOP BRACKET. INSTALL BRACKET ASSEMBLY AND TIGHTEN (DO NOT OVERTIGHTEN TO THE POINT WHERE THE PLATE IS BOWED AND THE BRACKET IS NOT MAKING GOOD CONTACT WITH THE SURFACE OF THE BRIDGE BEAM).

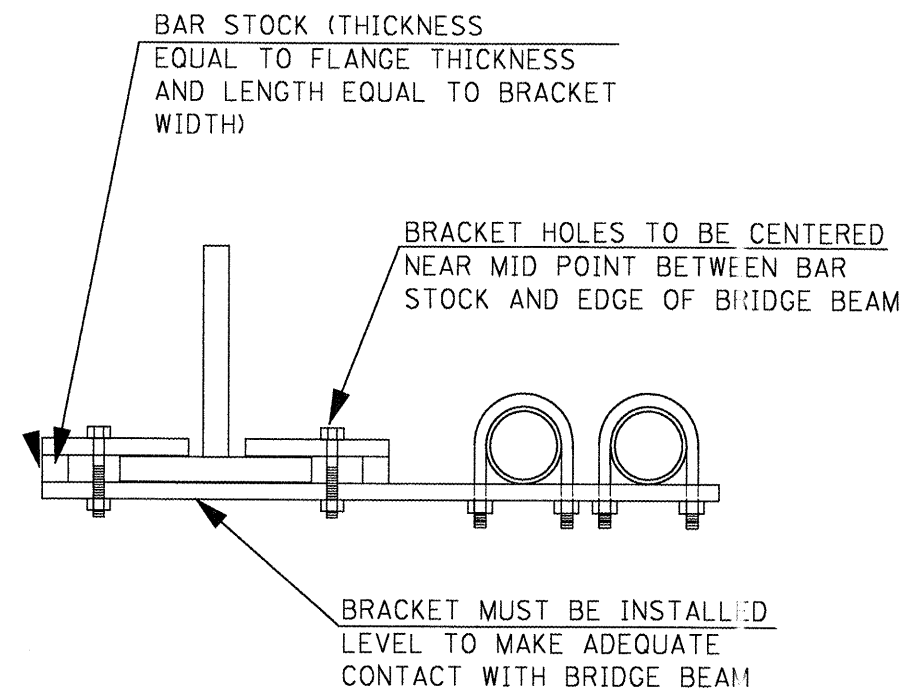
2" GALVANIZED STEEL CONDUIT

1/2" STAINLESS STEEL BOLTS TYP.

3.00" X .375 GALVANIZED STEEL BAR LENGTH AS REQUIRED

8 FT. MAX SPACING BETWEEN BRACKETS TYP. (CENTER TO CENTER)

CONDUIT ATTACHMENT ON SUPERSTRUCTURE BOX BEAM



BAR STOCK (THICKNESS EQUAL TO FLANGE THICKNESS AND LENGTH EQUAL TO BRACKET WIDTH)

BRACKET HOLES TO BE CENTERED NEAR MID POINT BETWEEN BAR STOCK AND EDGE OF BRIDGE BEAM

BRACKET MUST BE INSTALLED LEVEL TO MAKE ADEQUATE CONTACT WITH BRIDGE BEAM

NOTES: CONDUIT ATTACHMENT ON APPROACH SPANS

1. THE CONTRACTOR SHALL VERIFY AND FINALIZE ALL BRACKET DIMENSIONS. THE BRACKETS SHALL BE COMPATIBLE WITH EXISTING FIELD CONDITIONS.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ENSURING THAT THE BRACKET DIMENSIONS ARE CORRECT PRIOR TO RELEASING THE BRACKETS FOR PRODUCTION.
3. THE CONTRACTOR SHALL CONSTRUCT PROTOTYPE BRACKETS AND INSTALL THEM ON THE STRUCTURE TO VERIFY FIT PRIOR TO RELEASE.
4. ALL HARDWARE SHALL BE 1/2" DIAMETER STAINLESS STEEL (GRADE 18-8/304).
5. THE CONTRACTOR SHALL UTILIZE LOCK WASHERS WITH ALL NUTS.
6. THE CONTRACTOR SHALL UTILIZE THREAD LOCKER ON ALL THREADED CONNECTIONS.
7. ALL BRACKET COMPONENTS SHALL BE FULLY HOT DIPPED GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS (AASHTO M 111).
8. THERE WILL BE NO ADDITIONAL COMPENSATION FOR MINOR ADJUSTMENTS TO THE CONDUIT MOUNTING BRACKETS THAT ARE REQUIRED FOR COMPATIBILITY WITH EXISTING FIELD CONDITIONS.
9. THE CONTRACTOR SHALL SUBMIT A COMPLETE PACKAGE (INCLUDING CONDUIT BRACKETS, HARDWARE, ATTACHMENT POINTS, ATTACHMENT METHODS, ETC.) TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO COMMENCING WORK.

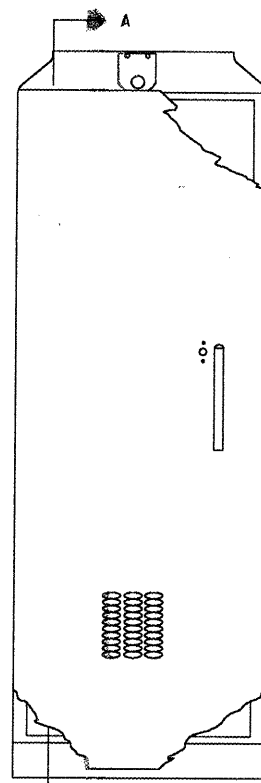
FILE NAME =	USER NAME = howald	DESIGNED -	REVISD -
68069 - I-474 Shade Lohmann Bridge CCTV	Surveillance - Final 2-7-11.dgn	DRAWN -	REVISD -
	PLOT SCALE = 100.000' / 1IN.	CHECKED -	REVISD -
	PLOT DATE = 2/7/2011	DATE -	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

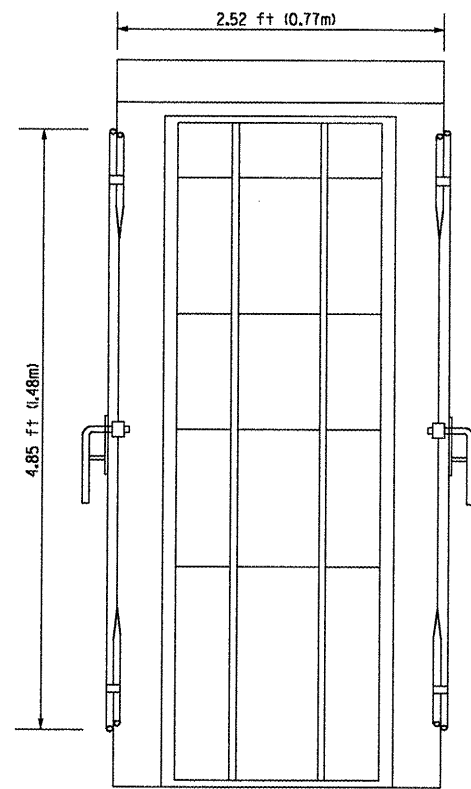
**I-474 SHADE LOHMANN BRIDGE CCTV SURVEILLANCE
CONDUIT BRACKET DETAIL**

SCALE: _____ ITS SHEET NO. 9 OF 16 SHEETS STA. _____ TO STA. _____

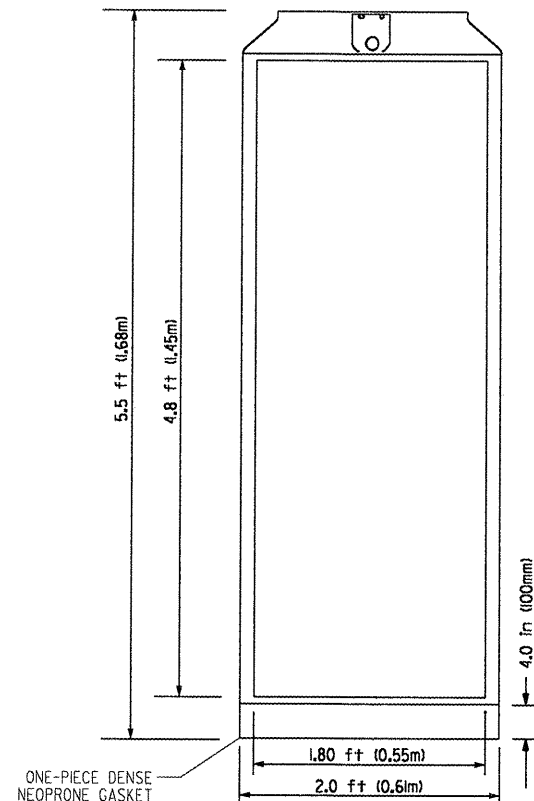
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
474	(172.90)5B11-2	PEOR	129
CONTRACT NO. 68069			
ILLINOIS FED. AID PROJECT			



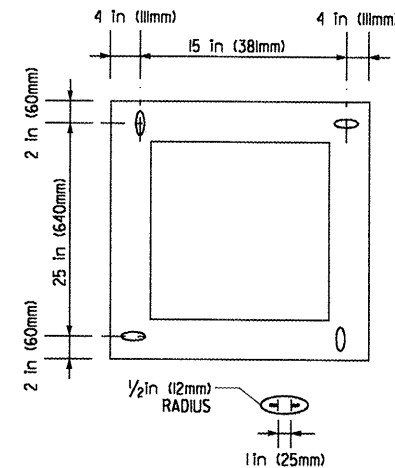
FRONT VIEW
(DOOR CLOSED)
(MODEL 334)



SECTION A-A
FOUNDATION MOUNTED CABINET
(MODEL 334)



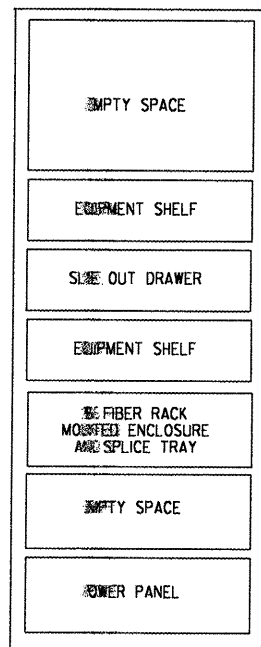
FRONT VIEW
(DOOR REMOVED)
(MODEL 334)



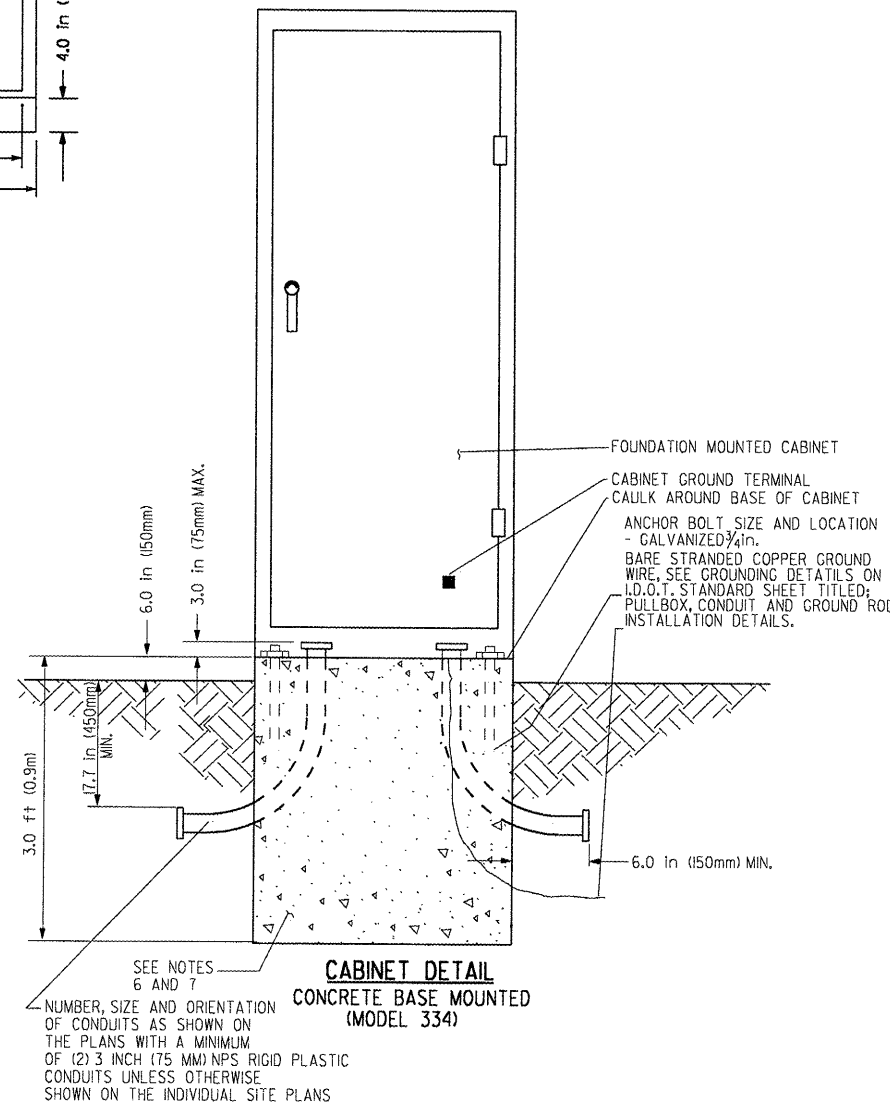
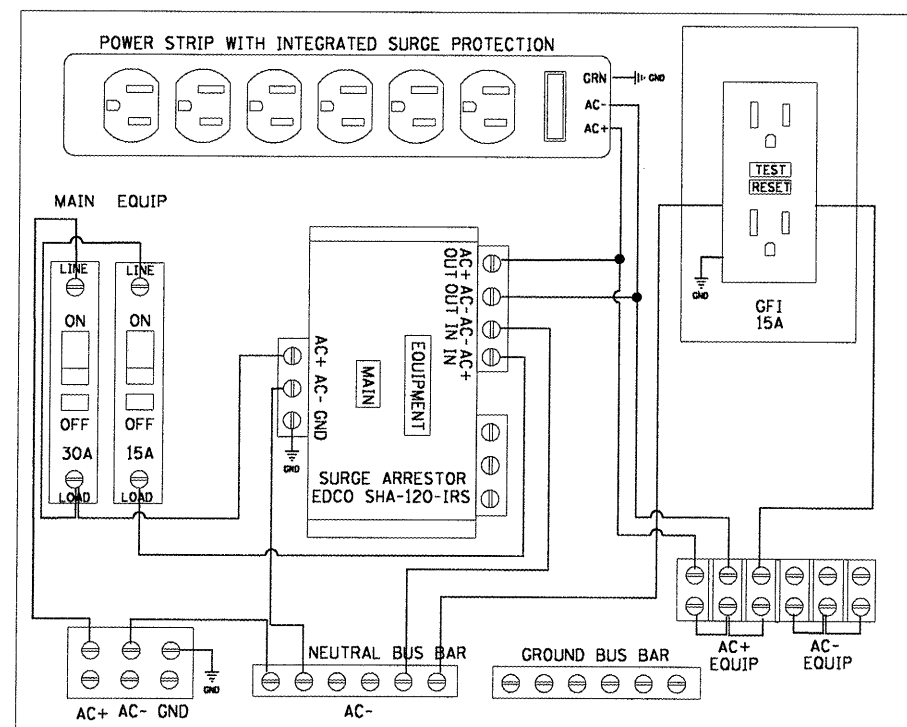
BOTTOM VIEW
(MODEL 334)

NOTES (MODEL 334 CABINET):

- REFER TO SPECIAL PROVISIONS FOR CABINET DETAILS AND ADDITIONAL REQUIREMENTS.
- CABINET ENTRIES INCLUDE VERTICAL ARRANGEMENT FOR MAJOR EQUIPMENT ITEMS ONLY.
- THERE WILL BE ADDITIONAL ITEMS INSTALLED IN THE CABINET ON SIDE AND BACK PANELS AS PER THE SPECIAL PROVISIONS.
- PROVIDE ALL UNUSED SPACE AT BOTTOM OF CABINET.
- THE CONTRACTOR SHALL INSTALL INSULATED BUSHINGS AND DUCT SEALANT AT ALL CONDUIT BEND TERMINATIONS IN FOUNDATIONS.
- CONCRETE BASE TO BE FORMED AT LEAST 6.0 in (150mm) BELOW THE GROUND SURFACE.
- CONCRETE BASE MUST BE CAST IN PLACE.
- THE CABINET SHALL BE EQUIPPED WITH A THERMOSTATICAL Y CONTROLLER VENTILATION FAN, DELUXE PLEATED FILTER, POWER PANEL, 96 FIBER RACK MOUNTED ENCLOSURE WITH SPLICE TRAYS, 19" MOUNTING RAILS, EQUIPMENT SHELF, AND SLIDE OUT DRAWER WITH STORAGE.
- ALL WORK INDICATED SHALL BE PAID FOR UNDER ITEM CABINET, MODEL 334 EXCLUSIVE OF THE CONCRETE FOUNDATION.

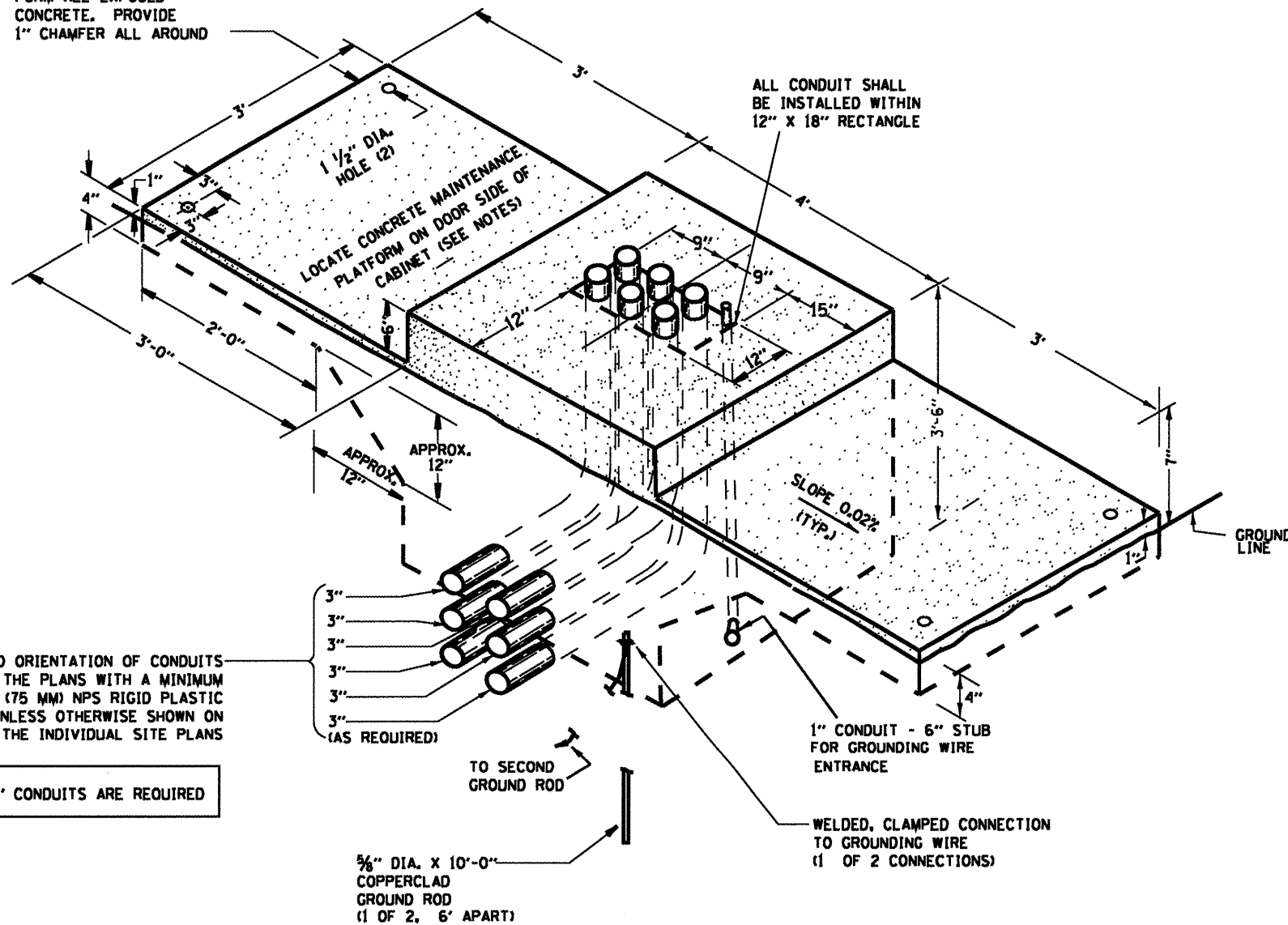


CONTROL CABINET LAYOUT (TYPICAL)
(MODEL 334)



SEE NOTES 6 AND 7
NUMBER, SIZE AND ORIENTATION OF CONDUITS AS SHOWN ON THE PLANS WITH A MINIMUM OF (2) 3 INCH (75 MM) NPS RIGID PLASTIC CONDUITS UNLESS OTHERWISE SHOWN ON THE INDIVIDUAL SITE PLANS

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



ALL CONDUIT SHALL BE INSTALLED WITHIN 12" X 18" RECTANGLE

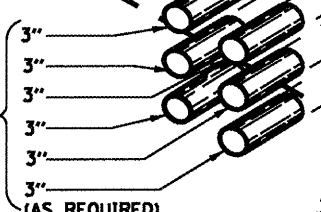
LOCATE CONCRETE MAINTENANCE PLATFORM ON DOOR SIDE OF CABINET (SEE NOTES)

SLOPE 0.02% (TYP.)

GROUND LINE

NUMBER, SIZE AND ORIENTATION OF CONDUITS AS SHOWN ON THE PLANS WITH A MINIMUM OF (2) 3 INCH (75 MM) NPS RIGID PLASTIC CONDUITS UNLESS OTHERWISE SHOWN ON THE INDIVIDUAL SITE PLANS

ONLY TWO 3" CONDUITS ARE REQUIRED



TO SECOND GROUND ROD

3/8" DIA. X 10'-0" COPPERCLAD GROUND ROD (1 OF 2, 6' APART)

1" CONDUIT - 6" STUB FOR GROUNDING WIRE ENTRANCE

WELDED, CLAMPED CONNECTION TO GROUNDING WIRE (1 OF 2 CONNECTIONS)

TYPICAL DETAIL
CONCRETE BASE, CONTROLLER CABINET

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR- 3/4 INCH DIAMETER X 12 INCH MINIMUM LENGTH APPROVED J-BOLTS TO ANCHOR THE CABINET BASES. THE ANCHOR BOLTS SHALL BE GALVANIZED STEEL AND LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL, PRIOR TO CABINET INSTALLATION. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

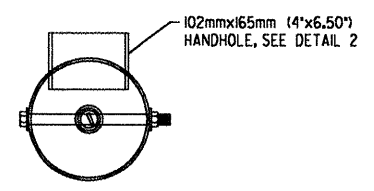
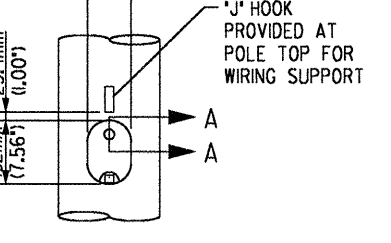
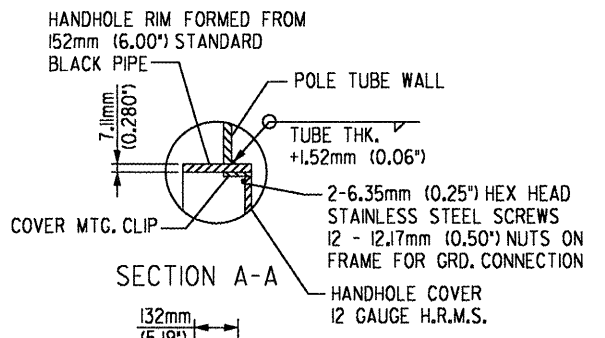
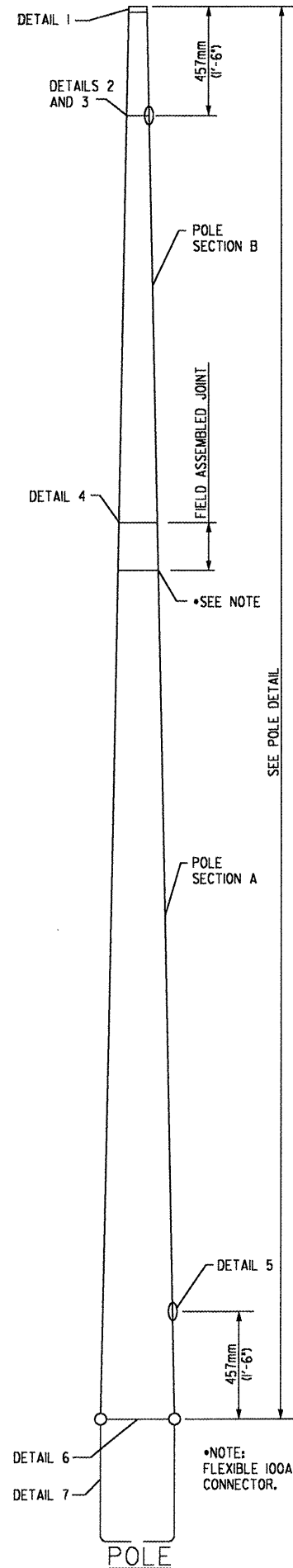
ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

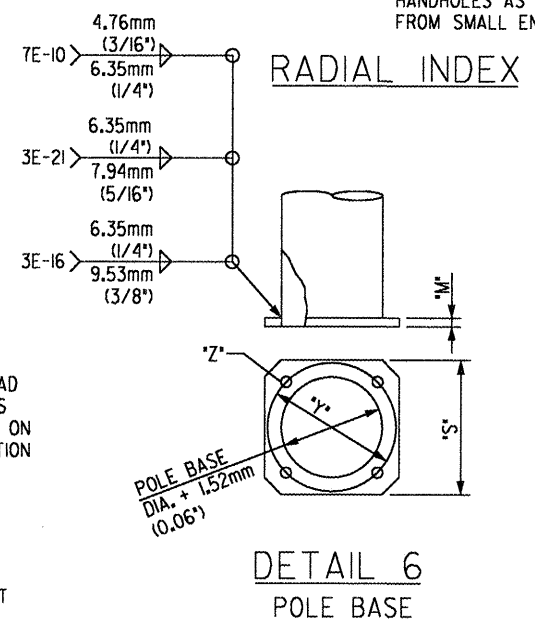
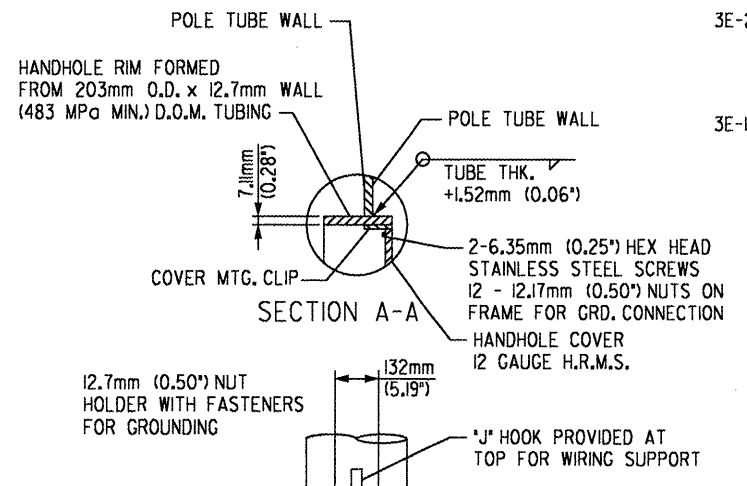
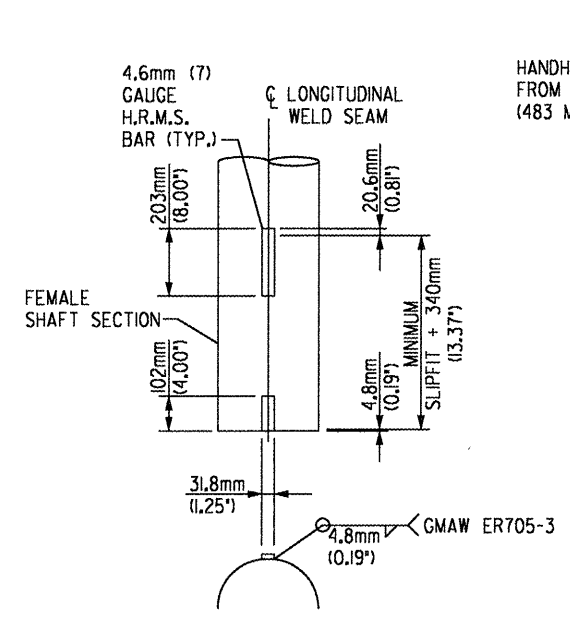
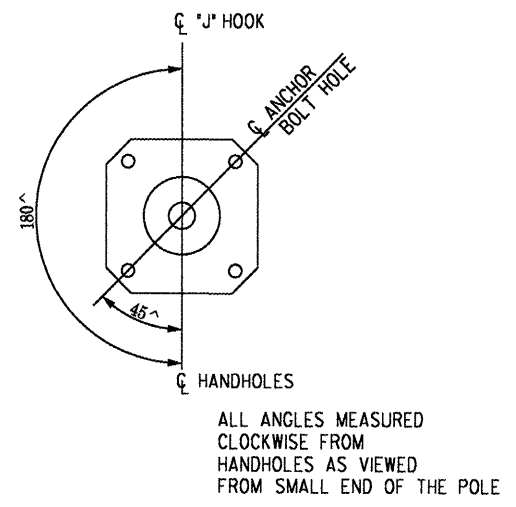
ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE BUSHINGS IF WIRE IS INSTALLED AND ALL NON METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS IF WIRE IS INSTALLED.

FILE NAME :	USER NAME : #USER#	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	I-474 SHADE LOHMANN BRIDGE CCTV SURVEILLANCE CONCRETE FOUNDATION, TYPE 1 (MODEL 334 CABINET) DETAIL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#		DRAWN -	REVISED -			474	[(172.90583)]-2	PEOR	A/TAZEWELL	124	105
PLOT SCALE : #SCALE#		CHECKED -	REVISED -			CONTRACT NO. 68069					
PLOT DATE : #DATE#		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE:	ITS SHEET NO. 12 OF 16 SHEETS		STA.			

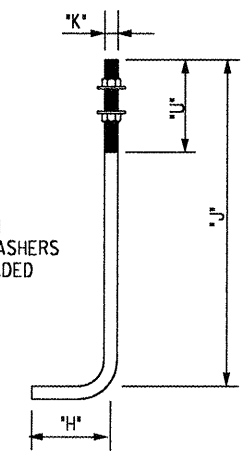
APPROVED CAMERA POLE DRAWING:
VALMONT, DRAWING NUMBER ILI22179PI



NOTE:
9.53mm (0.375)-16 UNC CAP SCREW WITH HEX NUT, FLAT WASHER AND LOCK WASHER ARE PROVIDED FOR ATTACHING CHAIN DAMPER TO INSIDE OF POLE SHAFT. DAMPER CONSISTS OF 3.20m (10'-6") LENGTH OF CHAIN COVERED WITH BLACK HOSE. HOSE CLAMPS ARE PROVIDED. ALL THREADED FASTENERS ARE PLATED.



4-ANCHOR BOLTS WITH 2-HEX NUTS AND 2-WASHERS PER BOLT WITH THREADED FULLY GALVANIZED

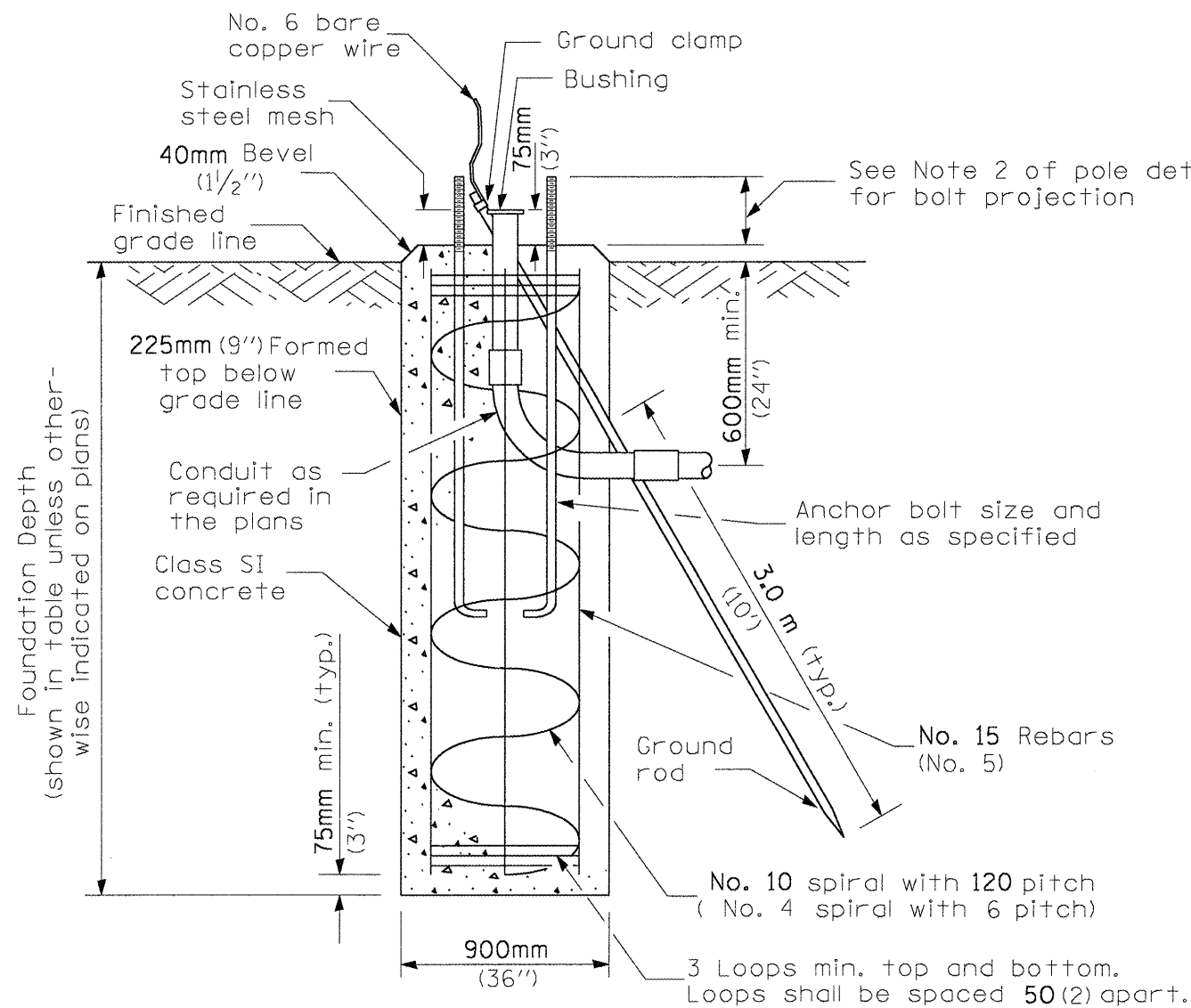
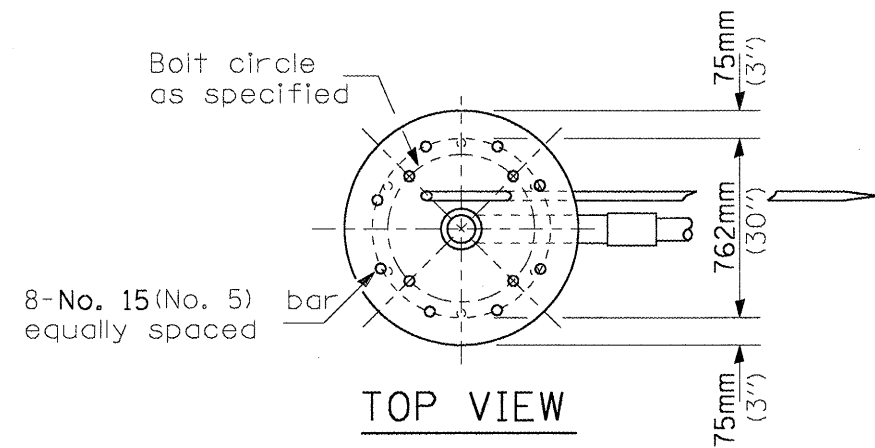


POLE DATA																
ITEM	QTY.	MOUNTING HEIGHT (ft)	SEC.	POLE TUBE				POLE BASE				ANCHOR BOLT				
				BASE DIA. (in)	LENGTH (ft)	TOP DIA. (in)	THICK OR GAUGE (in/no.)	MIN. SLIP (in)	SQUARE 'S' (in)	BOLT CIRCLE 'Y' (in)	THK 'M' (in)	SLOT 'Z' (in)	DIA. 'K' (in)	LENGTH 'J' (in)	HOOK 'H' (in)	THREAD LENGTH 'U' (in)
1	1	13.72 (45.00)	A	330 (13.00)	13.72 (45.00)	170 (6.70)	6.07 (3)	N.A.	457 (18.00)	432 (17.00)	38 (1.50)	44x62 (1.75x2.44)	38 (1.50)	1372 (54.00)	152 (6.00)	203 (8.00)
2	1	16.76 (55.00)	A	406 (16.00)	10.27 (33.70)	287 (11.28)	4.8 (0.1875)	443 (17.45)	622 (24.50)	597 (23.50)	38 (1.50)	44x62 (1.75x2.44)	38 (1.50)	1372 (54.00)	152 (6.00)	203 (8.00)
			B	305 (12.00)	7.27 (23.87)	220 (8.66)	4.55 (7)									

MATERIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD MPa (ksi)
SHAFTS OVER 330mm (13.00) DIA.	A572 GR. 65	448 (65)
SHAFTS TO 330mm (13.00) DIA.	A595 GR. A	379 (55)
ANCHOR BOLTS	F1554 GR55	379 (55)
BASE PLATE	A36	248 (36)
GALVANIZING	A123 & A153	
FLAT WASHERS	F436	

MATERIAL DATA		
COMPONENT	ASTM DESIGNATION	MIN. YIELD MPa (ksi)
ANCHOR BOLT NUTS	A563 GR. A	
H. H. COVER	C1010 STEEL	
H. H. FRAME	A36	248 (36)
POLE TOP	B26	

*METRIC EQUAL



Pole Height	Foundation depth
13.7m (45')	4.4m (14'-6'')
16.8m (55')	6.2m (20'-4'')

Notes:

- The Engineer shall determine the class of soil during excavation. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Q_u) > 100 kPa (1.0 tsf). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- The anchor bolts and raceways shall be properly secured in place.
- Concrete shall be class "SI" Concrete and the foundation must be cured for ten (10) days before the pole is erected.
- The cable trench shall be backfilled and firmly compacted before the pole is erected.
- For sloping grades, the foundation design depth shall be increased by the corresponding cross slope shaft depth increase factor given by:
 - Cohesive soil - cross slope shaft increase factor $0.009 \times (\text{slope angle}) + 1.0$
 - Granular soil - cross slope shaft increase factor $0.00005 \times (\text{slope angle}) + 1.0$
- Install grounding system in accordance with Section 806 of the IDOT Standard Specifications.

**MICROWAVE DETECTOR
INSTALLATION DETAILS**

HORIZONTAL OFFSET FT (M)	MOUNTING HEIGHT FT (M)		
	MINIMUM	MAXIMUM	RECOMMENDED
10.0 (3.0)	17.0 (5.2)	20.0 (6.1)	17.0 (5.2)
15.0 (4.6)	17.0 (5.2)	20.0 (6.1)	17.0 (5.2)
20.0 (6.1)	17.0 (5.2)	20.0 (6.1)	17.0 (5.2)
25.0 (7.6)	17.0 (5.2)	25.0 (7.6)	20.0 (6.1)
30.0 (9.1)	23.0 (7.0)	25.0 (7.6)	23.0 (7.0)
35.0 (10.7)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)
40.0 (12.2)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)
45.0 (13.7)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)
50.0 (15.2)	25.0 (7.6)	25.0 (7.6)	25.0 (7.6)

DIMENSIONS REFERENCED FROM THE EDGE OF PAVEMENT.

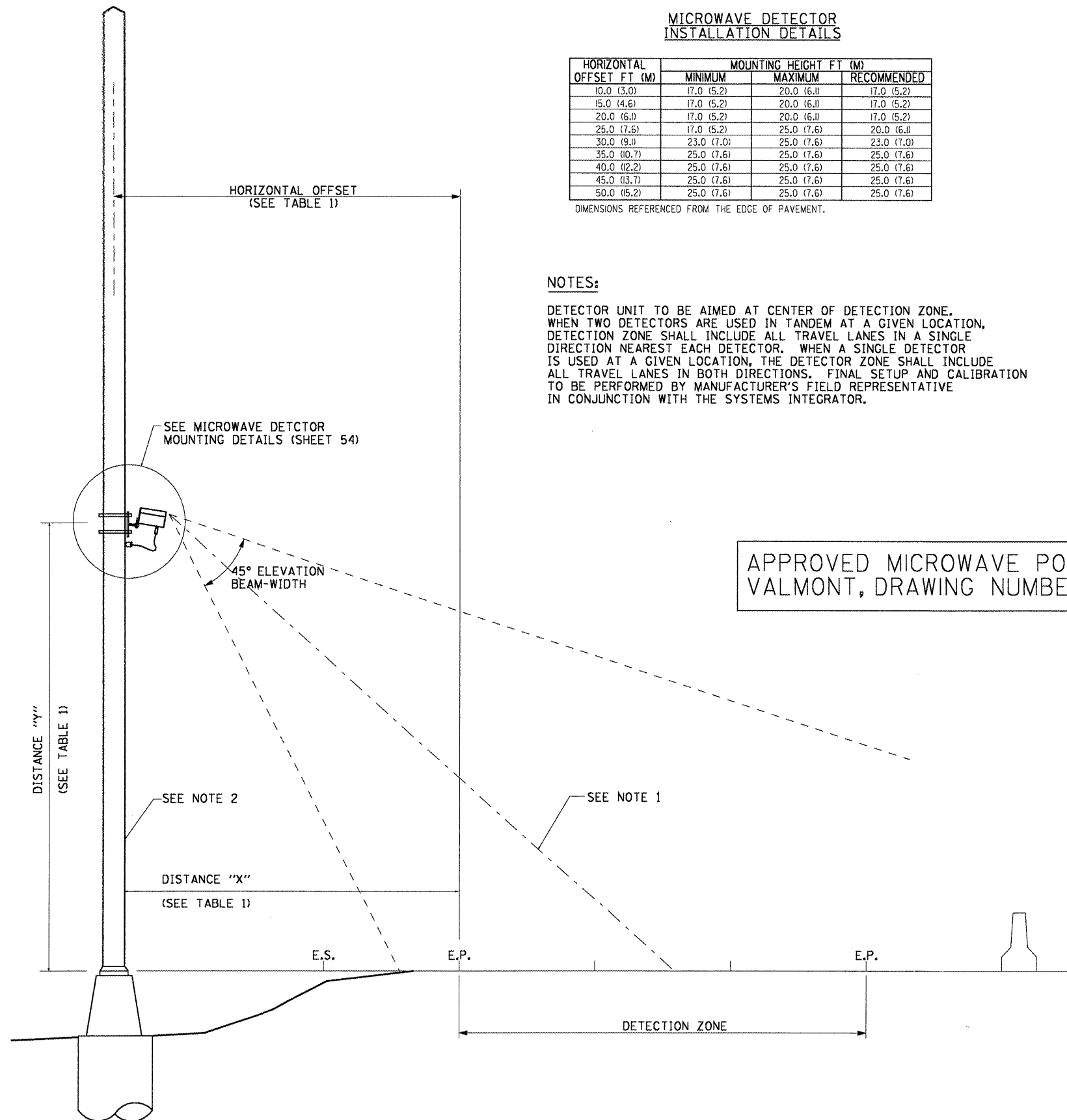
NOTES:

DETECTOR UNIT TO BE AIMED AT CENTER OF DETECTION ZONE. WHEN TWO DETECTORS ARE USED IN TANDEM AT A GIVEN LOCATION, DETECTION ZONE SHALL INCLUDE ALL TRAVEL LANES IN A SINGLE DIRECTION NEAREST EACH DETECTOR. WHEN A SINGLE DETECTOR IS USED AT A GIVEN LOCATION, THE DETECTOR ZONE SHALL INCLUDE ALL TRAVEL LANES IN BOTH DIRECTIONS. FINAL SETUP AND CALIBRATION TO BE PERFORMED BY MANUFACTURER'S FIELD REPRESENTATIVE IN CONJUNCTION WITH THE SYSTEMS INTEGRATOR.

DETECTOR POLE			
SHAFT LENGTH	SHOE BASE BOLT CIRCLE	TRANS. BASE BOLT CIRCLE	POLE BASE DIA. (D)
28 ft (8.5 m)	11.0 in (280 mm)	15.0 in (380 mm)	8.0 in (203 mm)

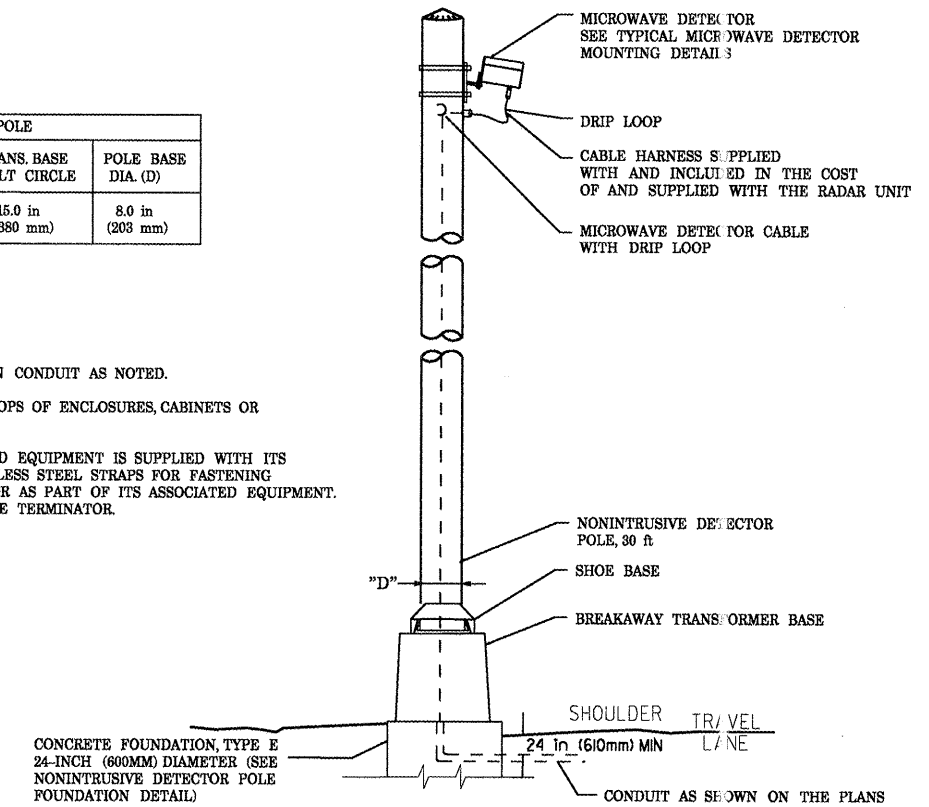
NOTES:

- ALL CABLES TO BE INSTALLED WITHIN CONDUIT AS NOTED.
- CABLE/CONDUITS SHALL NOT ENTER TOPS OF ENCLOSURES, CABINETS OR PULL/JUNCTION BOXES.
- CABLE HARNESS FROM POLE MOUNTED EQUIPMENT IS SUPPLIED WITH ITS ASSOCIATED EQUIPMENT. ALL STAINLESS STEEL STRAPS FOR FASTENING CABLES BRACKETS, ETC. ARE PAID FOR AS PART OF ITS ASSOCIATED EQUIPMENT. PROVIDE DRIP LOOP AT EACH CABLE TERMINATOR.



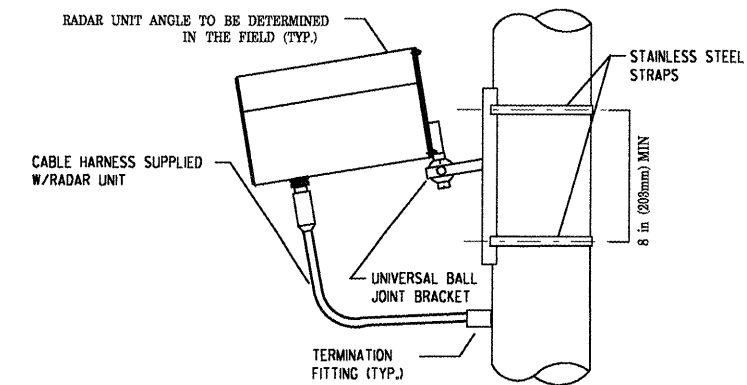
TYPICAL MICROWAVE DETECTOR INSTALLATION CROSS SECTION VIEW

APPROVED MICROWAVE POLE DRAWING:
VALMONT, DRAWING NUMBER IL4894404



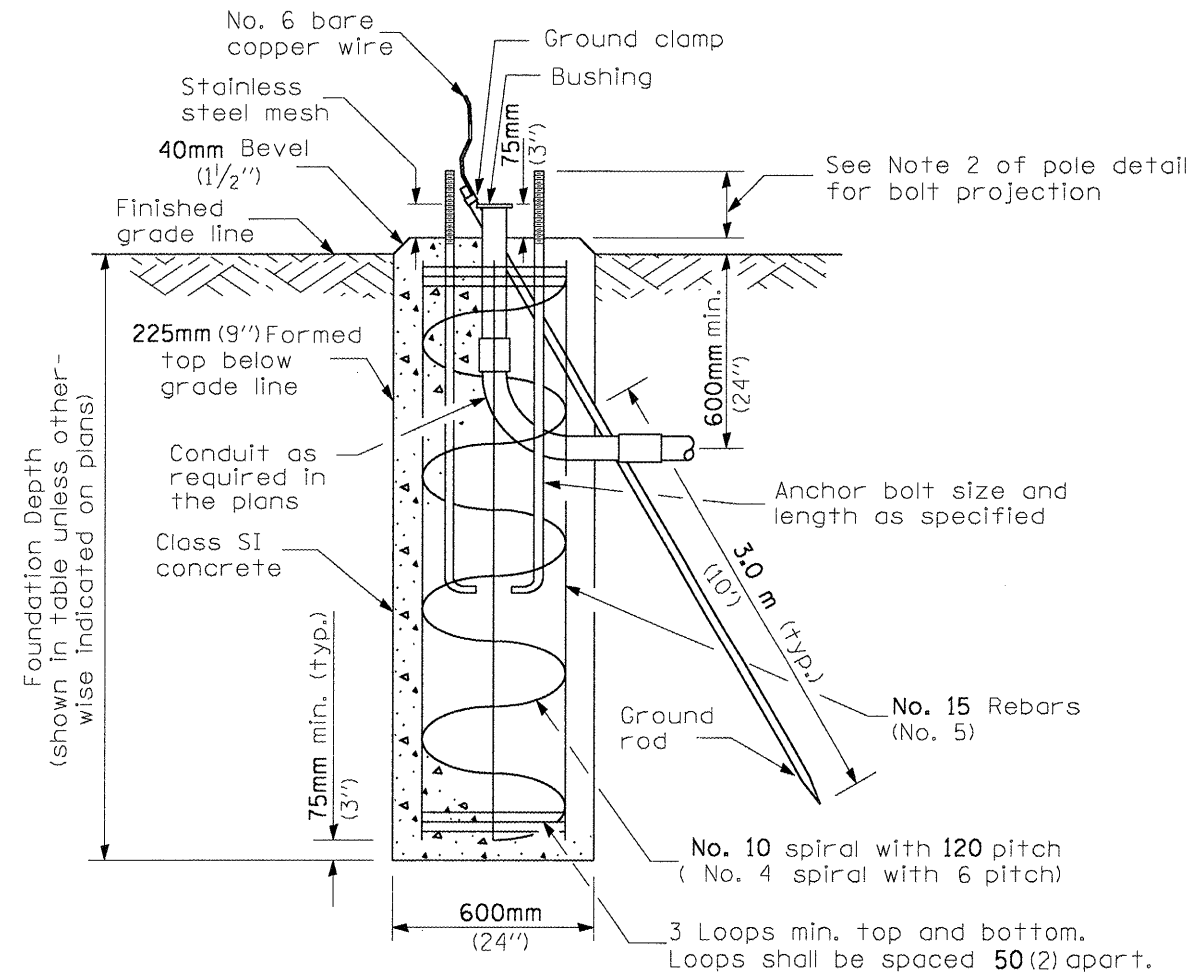
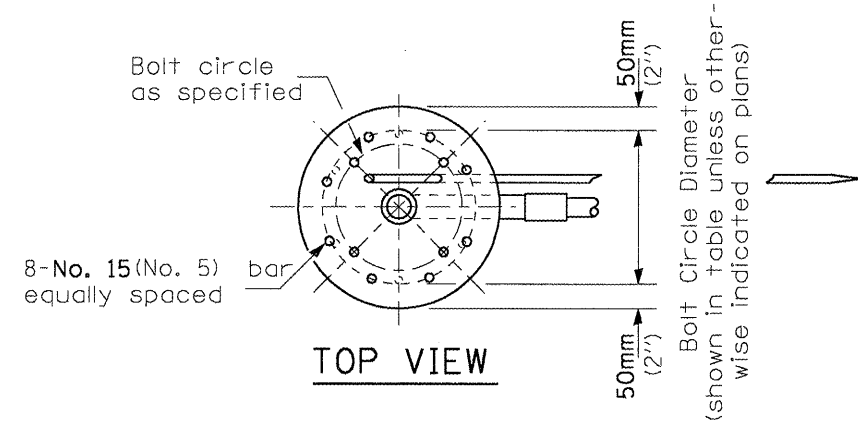
MICROWAVE DETECTOR POLE MOUNTING DETAIL

SEE MICROWAVE DETECTOR INSTALLATION DETAILS TABLE FOR POLE OFFSET AND MOUNTING HEIGHT



MOUNTED TO VERTICAL POLE

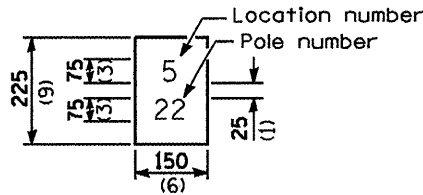
MICROWAVE DETECTOR MOUNTING DETAILS



Pole Height	Bolt Circle Diameter	Foundation depth
9.1m (30')	380mm (15.0")	1.5m (5'-0")

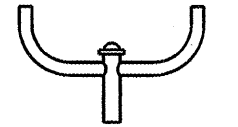
Notes:

- The Engineer shall determine the class of soil during excavation. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Q_u) > 100 kPa (1.0 tsf). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
- The anchor bolts and raceways shall be properly secured in place.
- Concrete shall be class "SI" Concrete and the foundation must be cured for ten (10) days before the pole is erected.
- The cable trench shall be backfilled and firmly compacted before the pole is erected.
- For sloping grades, the foundation design depth shall be increased by the corresponding cross slope shaft depth increase factor given by:
 - Cohesive soil - cross slope shaft increase factor $0.009 \times (\text{slope angle}) + 1.0$
 - Granular soil - cross slope shaft increase factor $0.00005 \times (\text{slope angle}) + 1.0$
- Install grounding system in accordance with Section 807 of the IDOT Standard Specifications.

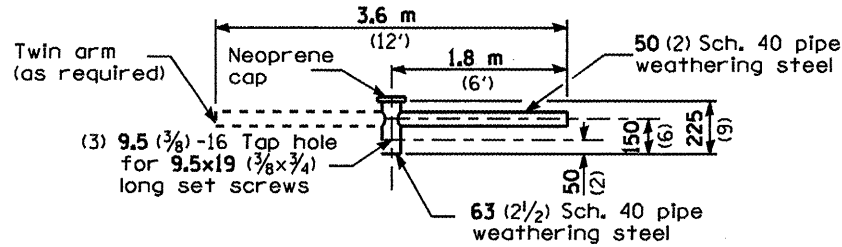


The contractor shall furnish and install a light pole identification of each new light pole, as shown above, incidental to the respective light pole pay item. The numerals shall be 75 (3) series "D", black, screened on silver-white type B pressure sensitive reflective sheeting conforming to the requirements of section T602.01 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 1069.06 of the Standard Specifications, approximately 180 (7) above the adjacent pavement grade visible to approaching traffic in accordance with Highway Standard 720001.

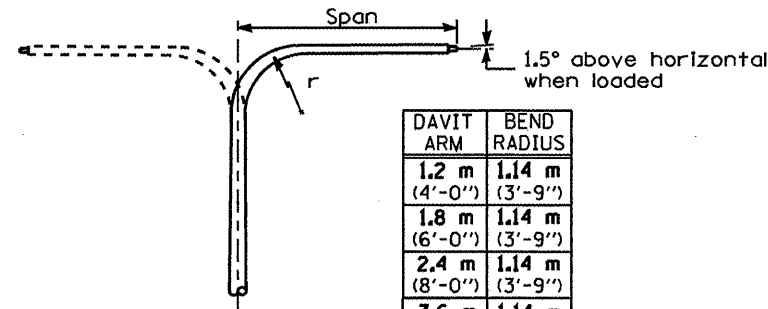


TWIN TENON



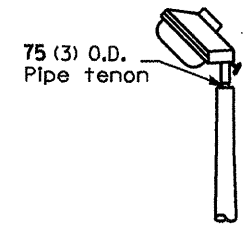
TENON MOUNT BRACKET ARM

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

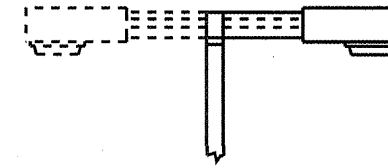


DAVIT ARM

DAVIT ARM-TWIN

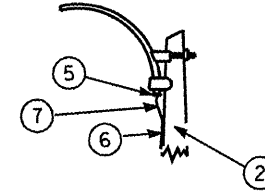


TENON

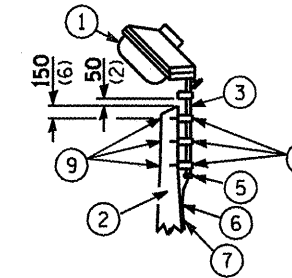


SHORT BRACKET

SHORT BRACKET - TWIN



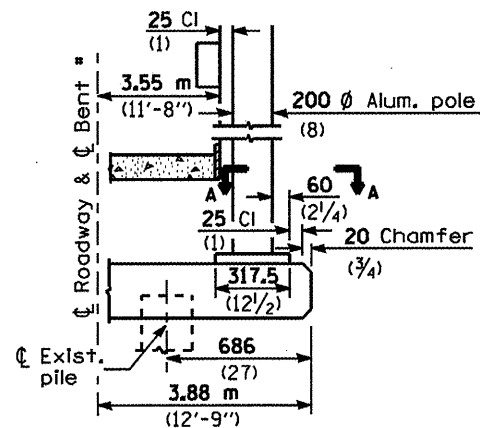
MAST ARM



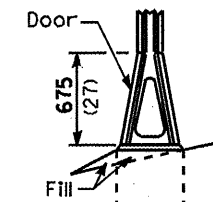
TENON

SEE NOTES

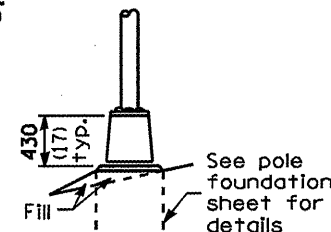
- ① Luminaire
- ② Wood pole, class 3 or better
- ③ 63 (2 1/2) Galv. steel conduit
- ④ Single offset pole band
- ⑤ Conduit bushing
- ⑥ Cable clamps on 600 (24) centers
- ⑦ 2/c #12 Type use cable
- ⑧ 25 (1) Galv. steel conduit 3.0 m (10') in length
- ⑨ 16 (5/8) Ø hot dipped galvanized bolt with flat washer & 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)

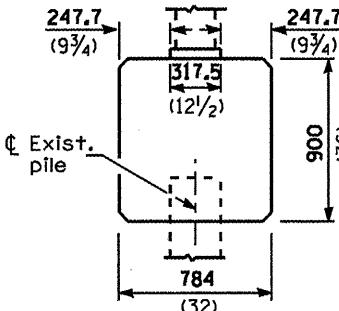


STAINLESS STEEL FLAIR BASE

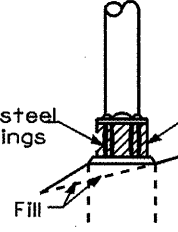


TRANSFORMER BASE

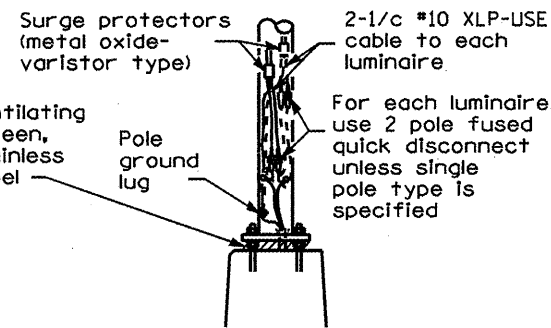
FRANGIBLE



BRIDGE PIER MOUNT



BREAKAWAY COUPLING

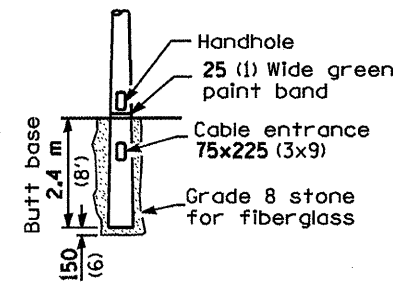


ANCHOR

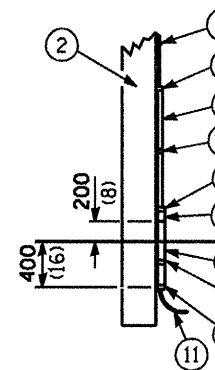
METAL OR CONCRETE

Details for underground distribution if required

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BUTT BASE



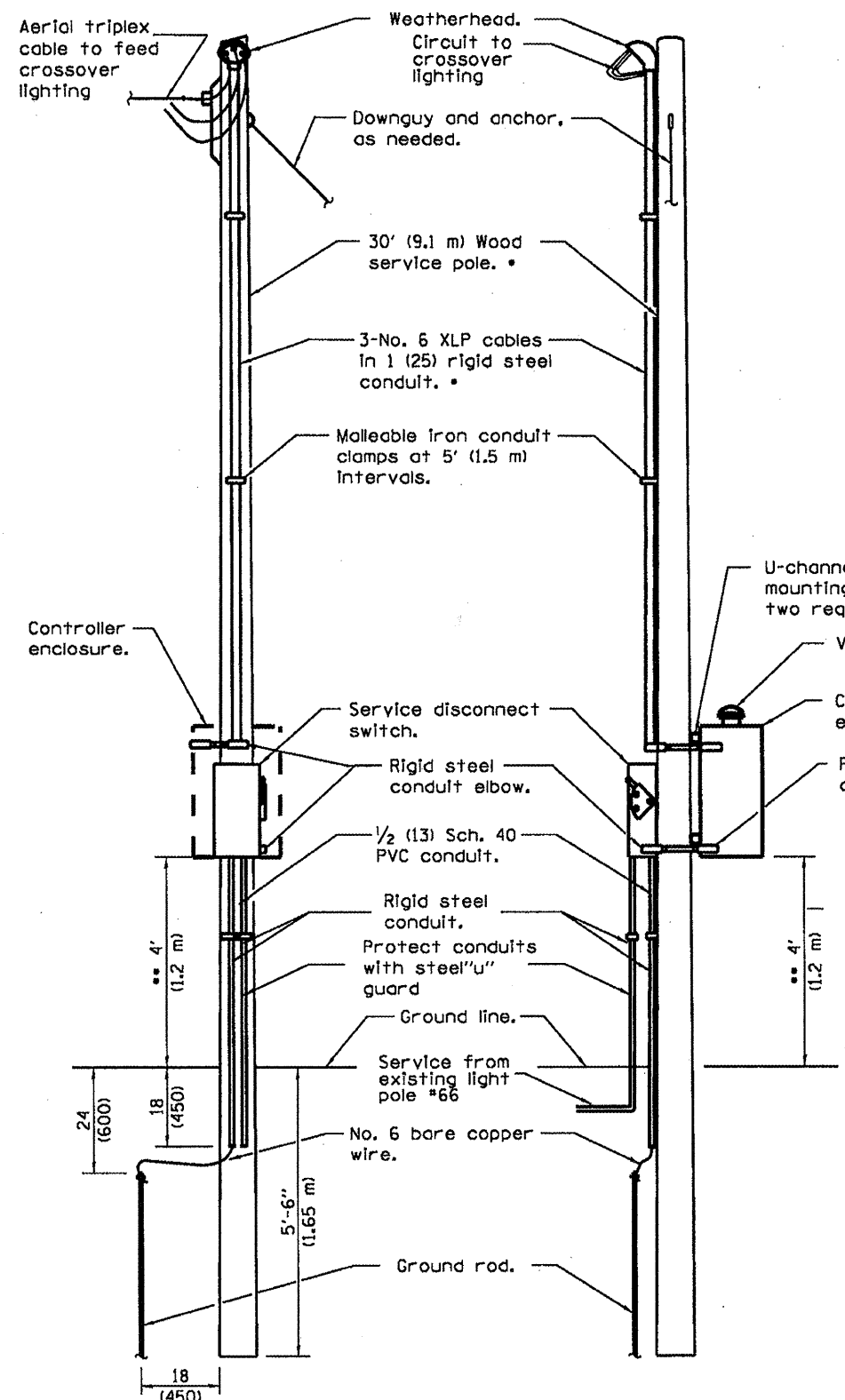
POLE, WOOD

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')

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

NOTES:

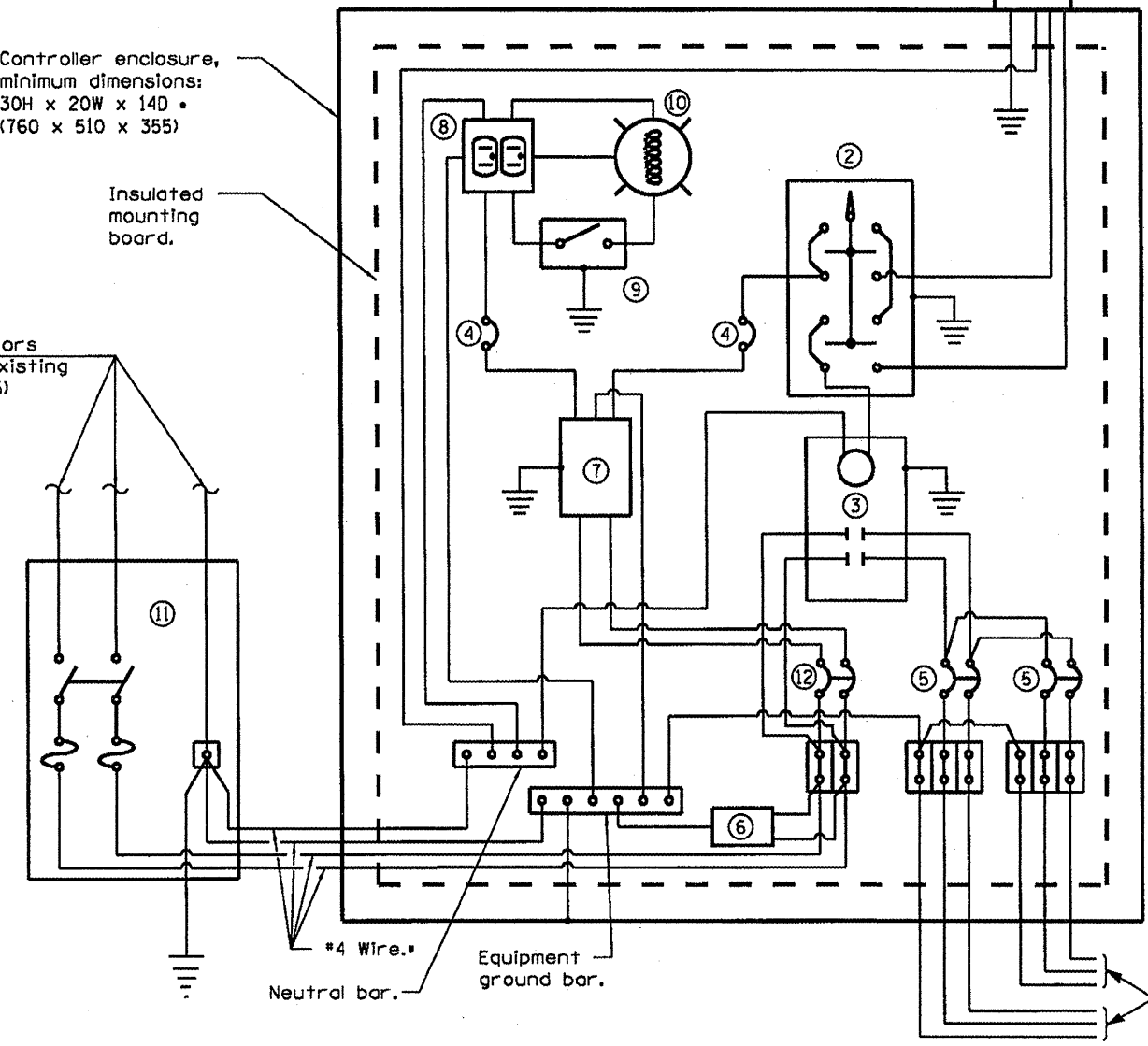
- 1.) LUMINAIRES SHALL HAVE A 2-POLE IN-LINE WEATHERPROOF QUICK DISCONNECT FUSE HOLDER.
- 2.) CONNECT LUMINAIRE EQUIPMENT GROUND TO ACSR MESSENGER.
- 3.) THE COST OF INSTALLING THE TENON MOUNT AND ALL ASSOCIATED ITEMS SHOWN IN THE DETAIL ABOVE SHALL BE INCLUDED IN THE COST OF LIGHT POLE, WOOD, 60 FT, CLASS 3.



- Size larger as needed.
- Or as directed by Utility Company.
- When cold sequencing is required, provide a meter disconnect switch as directed by Utility Company.

Controller enclosure, minimum dimensions: 30H x 20W x 14D • (760 x 510 x 355)

Service conductors (from existing pole #66)



CONTROL SCHEMATIC

- ① Photocell with integral surge arrester.
 - ② HAND-OFF-AUTO selector switch
 - ③ 60 amp*, electrically held contactor.
 - ④ 15 amp, 1-pole circuit breaker
 - ⑤ 20 amp*, 2-pole circuit breaker (spare breakers not required).
 - ⑥ Surge arrester.
 - ⑦ Transformer - 1KVA*, 480V primary, 120/240V secondary, single-phase, 60Hz.
 - ⑧ GFCI duplex receptacle.
 - ⑨ Single-pole, single-throw switch.
 - ⑩ Incandescent luminaire, enclosed and gasketed with 100 watt lamp
 - ⑪ Service disconnect switch - 2-pole, 3-wire, 60 amp*, fused at 60 amp*, solid neutral in NEMA 4X enclosure having lockable external handle. Handle shall be lockable in both on and off positions.
 - ⑫ 15 amp, 2-pole circuit breaker.
- * Size larger as needed.








ALL EQUIPMENT ON POLE SHALL BE INCLUDED IN THE COST OF LIGHTING CONTROLLER (SPECIAL)

GENERAL NOTES

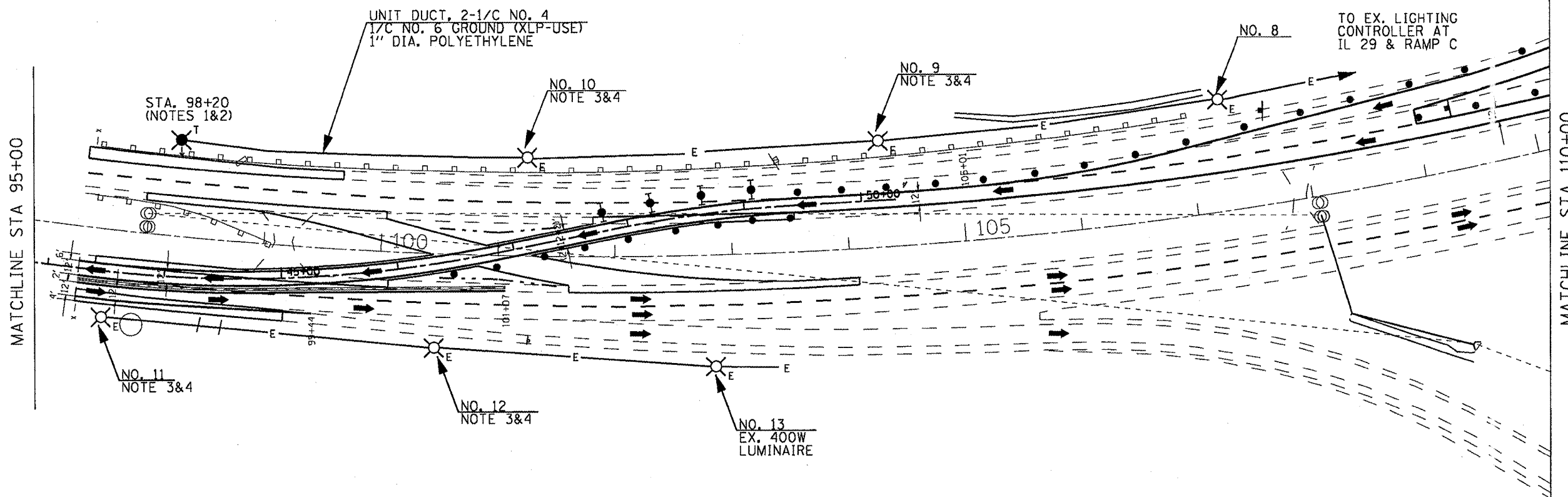
- Provide 12x9x1 (305x225x25) watertight pouch mounted inside controller door with as-built plans and schematics.
- Provide engraved nameplate on front of enclosure reading "LIGHTING".
- Enclosure shall be mounted to pole with pole-bands and lag-bolts.
- Work pad not shown.
- All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING CONTROLLER (SPECIAL) DETAIL	F.A.I. RTE.	SECTION	COUNT	TOTAL SHEETS	SHEET NO.
#FILE#	#USER#	---	---			474	(172,905811)-2	PEORIA/TAZ WELLS	129	111
PLOT SCALE	#SCALE#	CHECKED	REVISED			SCALE: TEMP LIGHTING SHEET 5 OF 6		STA.	TO STA.	
PLOT DATE	#DATE#	DATE	REVISED			ILLINOIS FED. AID PROJECT				
CONTRACT NO. 68069										

LEGEND

-  TEMPORARY LIGHTING UNIT, 60 FT. WOOD POLE, CLASS 3 WITH 400W HPS MULTIMOUNT LUMINAIRE
-  AERIAL CABLE, 2-1/2 NO. 1/0, ALUMINUM WITH MESSENGER WIRE
-  ELECTRIC CABLE IN TRENCH, 600V (TRIPLEXED), 2-1/2 NO. 4/0 AND 1-1/2 NO. 2/0 GROUND
-  EXISTING LIGHTING UNIT
-  EXISTING UNIT DUCT
-  TEMPORARY WOOD POLE, 30 FT., CLASS 5
-  LIGHTING CONTROLLER (SPECIAL)

SHADE-LOHMANN BRIDGE



SCHEDULE OF QUANTITIES - TEMPORARY LIGHTING (TAZEWELL COUNTY APPROACH)

ITEM DESCRIPTION	UNIT	TOTAL QTY.
UNIT DUCT, 600V, 2-1/2 NO. 4, 1/2 NO. 6 GROUND, (XLP-TYPE USE), 1" DIA. POLY	FOOT	360.0
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	360.0
LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT	EACH	4.0
LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 400 WATT	EACH	5.0
LIGHT POLE, WOOD, 60 FOOT, CLASS 3	EACH	1.0
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	1.0

NOTES (TAZEWELL COUNTY APPROACH)

1. TEMPORARY WOOD POLES SHALL BE SIZED TALLER AS NEEDED TO MAINTAIN REQUIRED GROUND CLEARANCE OF AERIAL CABLES AND 50 FT. LUMINAIRE MOUNTING HEIGHT.
2. TEMPORARY WOOD POLES SHALL BE SET BACK A MINIMUM OF 30 FT. FROM THE EXISTING EDGE OF PAVEMENT OR 4 FEET BEHIND GUARD RAIL OR TEMPORARY BARRIER.
3. THE CONTRACTOR SHALL REMOVE AND REPLACE EXISTING 250W LUMINAIRE WITH PROPOSED 400W HPS MULTI-MOUNT LUMINAIRE. THE CONTRACTOR SHALL DELIVER THE EXISTING LUMINAIRES TO THE IDOT MAINTENANCE YARD LOCATED AT 6500 W. ROUTE 150, EDWARDS, IL. THE CONTRACTOR SHALL CONTACT PAUL GRANT AT (309) 671-4474 FORTY EIGHT HOURS PRIOR TO DELIVERY. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM FOR LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 400 WATT.
4. AT THE END OF THE CONTRACT, THE CONTRACTOR SHALL REMOVE THE 400 WATT LUMINAIRE AND INSTALL A NEW 250 WATT LUMINAIRE. THE CONTRACTOR SHALL DELIVER THE 400 WATT LUMINAIRES TO THE IDOT MAINTENANCE YARD LOCATED AT 6500 W. ROUTE 150, EDWARDS, IL. THE CONTRACTOR SHALL CONTACT PAUL GRANT AT (309) 671-4474 FORTY EIGHT HOURS PRIOR TO DELIVERY. THIS WORK SHALL BE INCLUDED IN THE PAY ITEM FOR LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 250 WATT.

FILE NAME =	USER NAME = hawc.dsr	DESIGNED -	REVISED -
Stage : sheets East & WestLogr		DRAWN -	REVISED -
	PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED -
	PLOT DATE = 2/11/2011	DATE -	REVISED -








STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING PLAN
STAGES 1 AND 2 (TAZEWELL COUNTY APPROACH)

SCALE: TEMP LIGHTING SHEET 4 OF 6 STA. TO STA.

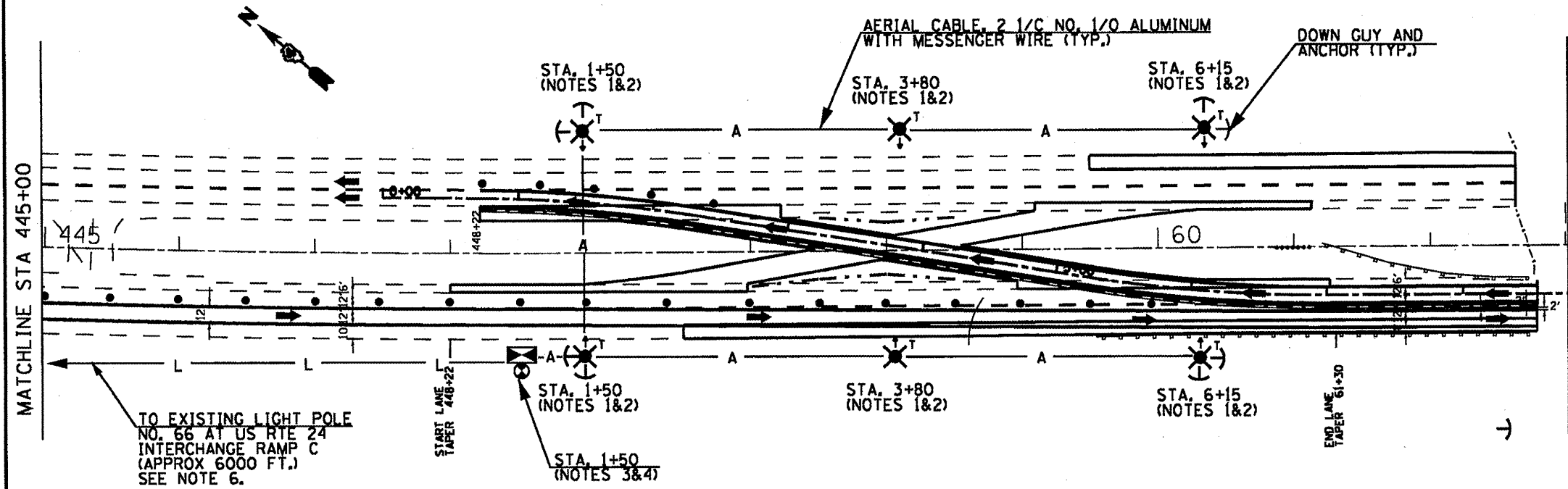
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
474	(172, 9015B)1-2	PEORIA-TAZEWELL	129/172
			CONTRACT NO. 68069
ILLINOIS FED. AID PROJECT			

LEGEND

-  TEMPORARY LIGHTING UNIT, 60 FT. WOOD POLE, CLASS 3 WITH 400W HPS MULTIMOUNT LUMINAIRE (ARROW INDICATES LUMINAIRE AIMING DIRECTION)
-  AERIAL CABLE, 2-1/C NO. 1/0, ALUMINUM WITH MESSENGER WIRE
-  ELECTRIC CABLE IN TRENCH, 600V (TRIPLEXED), 2-1/C NO. 4/0 AND 1-1/C NO. 2/0 GROUND
-  EXISTING LIGHTING UNIT
-  EXISTING UNIT DUCT
-  TEMPORARY WOOD POLE, 30 FT., CLASS 5
-  LIGHTING CONTROLLER (SPECIAL)

SCHEDULE OF QUANTITIES - TEMPORARY LIGHTING (PEORIA COUNTY APPROACH)		
ITEM DESCRIPTION	UNIT	TOTAL QTY.
AERIAL CABLE, 2-1/C NO. 1/0 WITH MESSENGER WIRE	FOOT	1300.0
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	6000.0
LUMINAIRE, SODIUM VAPOR, MULTI-MOUNT, 400 WATT	EACH	6.0
LIGHT POLE, WOOD, 60 FOOT, CLASS 3	EACH	6.0
REMOVAL OF TEMPORARY LIGHTING UNIT	EACH	6.0
LIGHTING CONTROLLER, SPECIAL	EACH	1.0
ELECTRIC CABLE IN TRENCH, 600V, 2-1/C NO. 4/0 AND 1/C NO. 2/0 GROUND	FOOT	6000.0
LIGHT POLE, WOOD, 30 FOOT, CLASS 5	EACH	1.0

ILLINOIS DEPARTMENT OF TRANSPORTATION LUMINAIRE PERFORMANCE TABLE - TEMPORARY LIGHTING		
GIVEN CONDITIONS		
ROADWAY DATA:	Pavement Width	24 FT
	Number Of Lanes	2
	Median Width	FT
	IES Surface Classification	R3
LIGHT POLE DATA:	Q-Zero Value	.07
	Mounting Height	50 FT
	Mast Arm Length	FT
	Pole Set-Back From Edge Of Pavement	30 FT
LUMINAIRE DATA:	Lamp Type	HPS
	Lamp Lumens	50000
	IES Vertical Distribution	M
	IES Control Of Distribution	NC
	IES Lateral Distribution	3
LAYOUT DATA:	Total Light Loss Factor	0.684
	Spacing	260 FT
	Configuration	One Side
	Luminaire Overhang Over Edge Of Pavement Lane	-30 FT
NOTE: Variations from the above specified IES distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.		
PERFORMANCE REQUIREMENTS		
NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.		
ILLUMINATION:	Average Horizontal Illumination, (E _{Ave})	0.90 fc
	Uniformity Ratio, (E _{Ave} /E _{Min})	3.0
LUMINANCE:	Average Luminance: (L _{Ave})	0.60 Cd/m ²
	Uniformity Ratios: (L _{Ave} /L _{Min})	3.5
	(L _{Max} /L _{Min})	6.0
	Maximum Veiling Luminance Ratio: (L _v /L _{Ave})	0.3

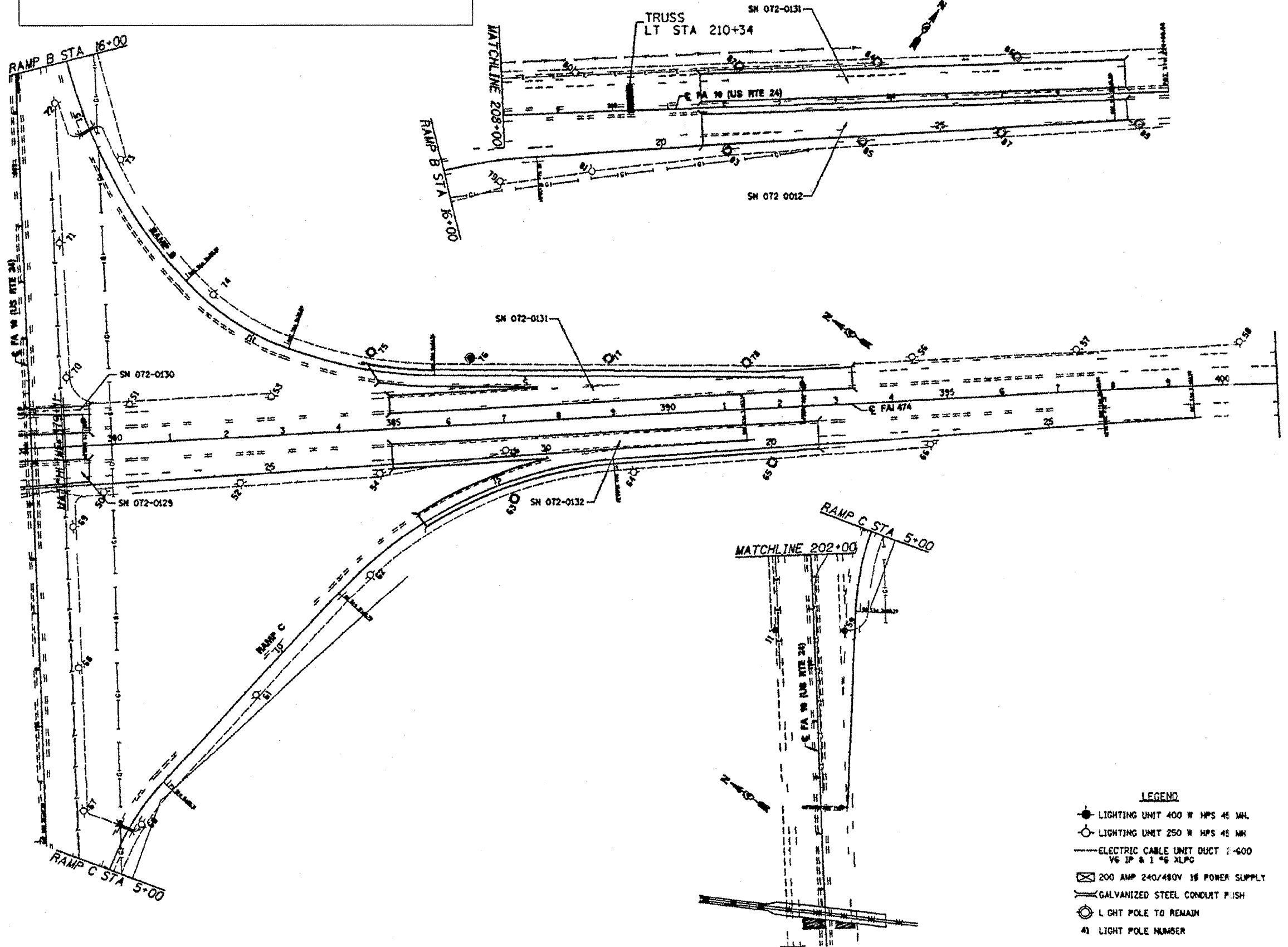


- TEMPORARY LIGHTING GENERAL NOTES**
- CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
 - CONTRACTOR SHALL INSTALL LIGHT POLES AT THE LOCATIONS INDICATED ON THE PLANS, MAINTAINING ADEQUATE CLEARANCE FROM OVERHEAD UTILITY LINES. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY CLEARANCES PER THE NATIONAL ELECTRICAL SAFETY CODE AND THE REQUIREMENTS OF THE UTILITY COMPANIES. THE LOCATION OF BURIED AND ABOVE GROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. REROUTING, DISCONNECTION, RELOCATION, PROTECTION, ETC. OF ANY UTILITIES SHALL BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
 - THE CONTRACTOR IS RESPONSIBLE FOR UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THE COST OF THIS WORK IS TO BE INCLUDED IN THE BID PRICE FOR THE PAY ITEM "TRENCH AND BACKFILL FOR ELECTRICAL WORK".
 - NO LIGHTING CIRCUIT OR PORTION THEREOF SHALL BE REMOVED FROM NIGHT TIME OPERATION WITHOUT APPROVAL OF THE ENGINEER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED LIGHTING SYSTEM UNTIL THE CROSSOVERS ARE REMOVED AND THE LIGHTING SYSTEM IS NO LONGER NEEDED. ANY MAINTENANCE OF THE EXISTING LIGHTING SYSTEM SHALL BE PAID IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

- NOTES (PEORIA COUNTY APPROACH)**
- TEMPORARY WOOD POLES SHALL BE SIZED TALLER AS NEEDED TO MAINTAIN REQUIRED GROUND CLEARANCE OF AERIAL CABLES AND 50 FT. LUMINAIRE MOUNTING HEIGHT.
 - TEMPORARY WOOD POLES SHALL BE SET BACK A MINIMUM OF 30 FT. FROM THE EXISTING EDGE OF PAVEMENT OR 4 FEET BEHIND GUARD RAIL OR TEMPORARY BARRIER.
 - LOCATE POLE ADJACENT TO ACCESS FENCE.
 - THE CONTRACTOR SHALL REMOVE THE CROSSOVER LIGHTING AT THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL REMOVE THE WOOD POLES AND AERIAL CABLE ONLY. THE SERVICE POLE AND LIGHTING CONTROLLER SHALL REMAIN IN PLACE AND BECOME THE PROPERTY OF THE DEPARTMENT.
 - THE 400W LUMINAIRES SHALL BE SALVAGED AND DELIVERED TO THE IDOT MAINTENANCE YARD LOCATED AT 6500 W. ROUTE 150, EDWARDS, IL IN ACCORDANCE WITH ARTICLE 842.03. THE CONTRACTOR SHALL CONTACT PAUL GRANT AT (309) 671-4474 FORTY EIGHT HOURS PRIOR TO DELIVERY. ALL OTHER TEMPORARY LIGHTING FACILITIES SHALL BE REMOVED AND DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.
 - THE COST TO CONNECT THE PROPOSED CABLE TO THE EXISTING LIGHTING CIRCUIT IN POLE HAND HOLE SHALL BE INCLUDED IN THE COST OF THE PROPOSED CABLE. THE CONTRACTOR SHALL UTILIZE APPROPRIATE ALUMINUM TO COPPER CABLE SPLICE AS APPROVED BY THE ENGINEER.

FOR INFORMATION ONLY

LIGHT NO.	S. ATION	#S F	55 FT	400 W HPS	250 W HPS
50	30+63 US 24				
51	379+35 FAI 474				
52	388+30 FAI 474				
53	382 28 FAI 474				
54	382+83 FAI 474				
55	38+70 FAI 474				
56	38 400 FAI 474				
57	374+40 FAI 474				
58	377 35 FAI 474				
59	408 35 FAI 474				
60	3+15 RAMP C				
61	6+00 RAMP C				
62	9+18 RAMP C				
63	12+18 RAMP C				
64	5+18 RAMP C				
65	17+50 RAMP C				
66	20+00 RAMP				
67	22+85 RAMP C				
68	183+85 US 24				
69	184+00 US 24				
70	20+5 US 24				
71	204+58 US 24				
72	203+75 US 24				
73	208+15 US 24				
74	21+00 RAMP B				
75	31+00 RAMP B				
76	4+85 RAMP B				
77	3+47 RAMP B				
78	400 RAMP B				
79	408 RAMP B				
80	209+35 US 24				
81	209+60 US 24				
82	212 31+44 US 24				
83	211+98.76 US 24				
84	214+78.23 US 24				
85	214+50 US 24				
86	21 30.01 US 2				
87	215+98.51 US 24				
88	228+08 US 24				
89	219+58 US 24				



NOTE: LIGHTING UNIT IN BOLD PRINT REPRESENTS POLES TO BE LEFT IN PLACE.

- LEGEND**
- LIGHTING UNIT 400 W HPS 45 MH
 - LIGHTING UNIT 250 W HPS 45 MH
 - ELECTRIC CABLE UNIT DUCT 2-600 V6 IP & 1-6 XLPC
 - ⊠ 200 AMP 240/480V 1Φ POWER SUPPLY
 - GALVANIZED STEEL CONDUIT P.I.S.H.
 - LIGHT POLE TO REMAIN
 - ④ LIGHT POLE NUMBER

FILE NAME: 68869 - I-474 Snape Lammann Bridge CCT

USER NAME: nowaide
 Surveillance - Final 2-7-11.dgn
 PLOT SCALE = 1/28.000" / 1"
 PLOT DATE = 2/11/2011

DESIGNED	---	REVISED	-----
DRAWN	---	REVISED	-----
CHECKED	---	REVISED	-----
DATE	---	REVISED	-----

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING LIGHTING PLANS I-474 @ US 24 BARTONVILLE
 FOR INFORMATION ONLY
 SCALE: TEMP LIGHTING SHEET 2 OF 6 STA. TO STA.

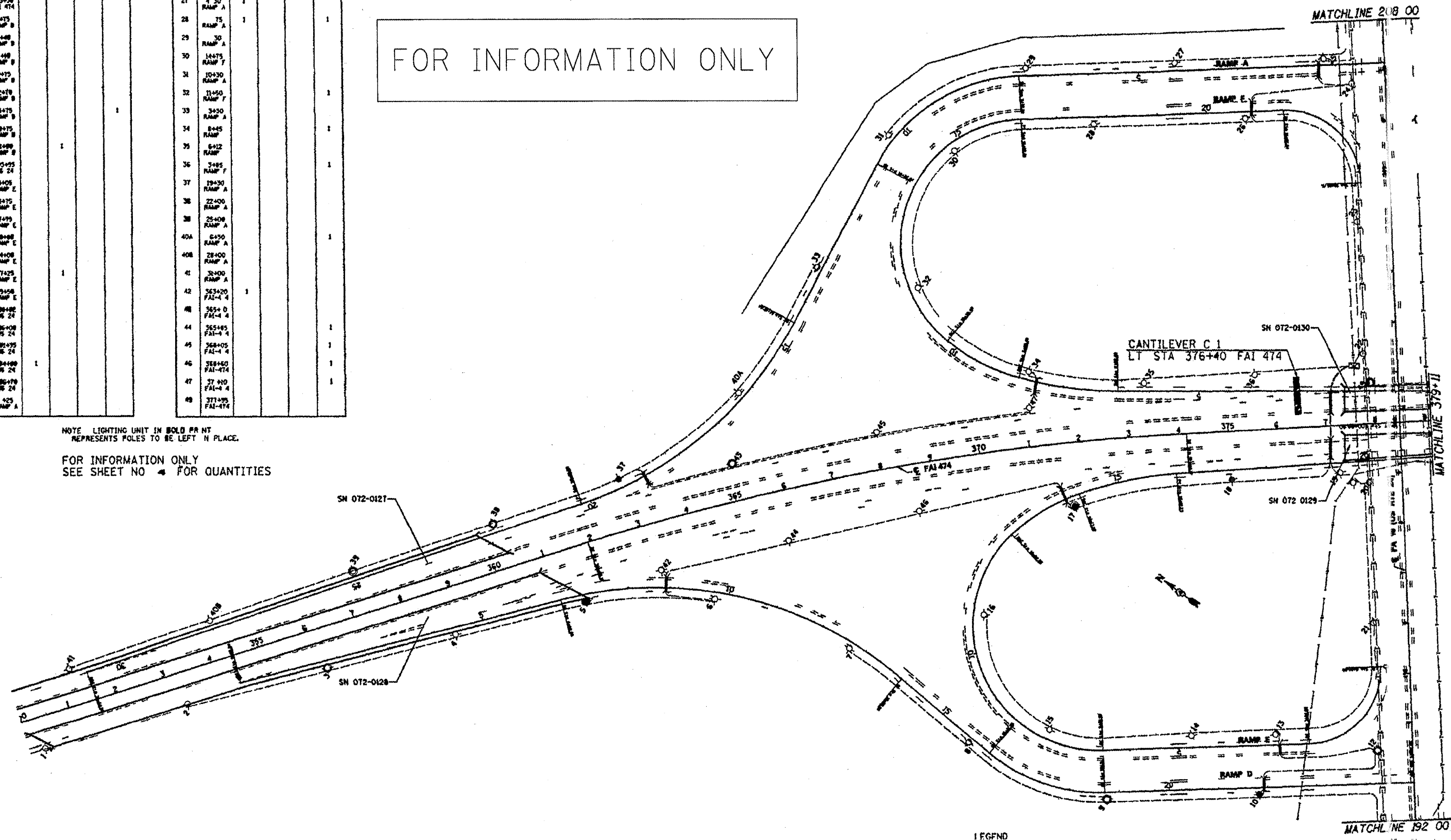
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
474	(172,90)5B11-2	PEORIA/TAZEWELL	129 / 124
			CONTRACT NO. 68069
ILLINOIS FED. AID PROJECT			

LIGHT NO.	STATION	45 FT	55 F	400 W HPS	250 W HPS
2	250+30 FAI-474				
3	253+30 FAI-474				
4	1475 RAMP B				
5	448 RAMP B				
6	448 RAMP B				
7	3475 RAMP B				
8	12470 RAMP B				
9	38475 RAMP B				
10	18475 RAMP B				
11	22480 RAMP B				
12	195+25 US 24				
13	3405 RAMP E				
14	4475 RAMP E				
15	7470 RAMP E				
16	18480 RAMP E				
17	4408 RAMP E				
18	17425 RAMP E				
19	19458 RAMP E				
20	190+80 US 24				
21	36408 US 24				
22	290+25 US 24				
23	204+80 US 24				
24	280+70 US 24				
25	425 RAMP A				

LIGHT NO.	STATION	45	36	480 W HPS	250 W HPS
26	20+75 RAMP				
27	4 30 RAMP A				
28	75 RAMP A				
29	30 RAMP A				
30	14475 RAMP F				
31	10430 RAMP A				
32	11450 RAMP F				
33	3430 RAMP A				
34	8445 RAMP				
35	6412 RAMP				
36	3485 RAMP F				
37	19430 RAMP A				
38	22400 RAMP A				
39	25408 RAMP A				
40A	6450 RAMP A				
40B	28400 RAMP A				
41	3400 RAMP A				
42	363+20 FAI-474				
43	365+0 FAI-474				
44	365+45 FAI-474				
45	368+05 FAI-474				
46	388+50 FAI-474				
47	37410 FAI-474				
48	371+25 FAI-474				

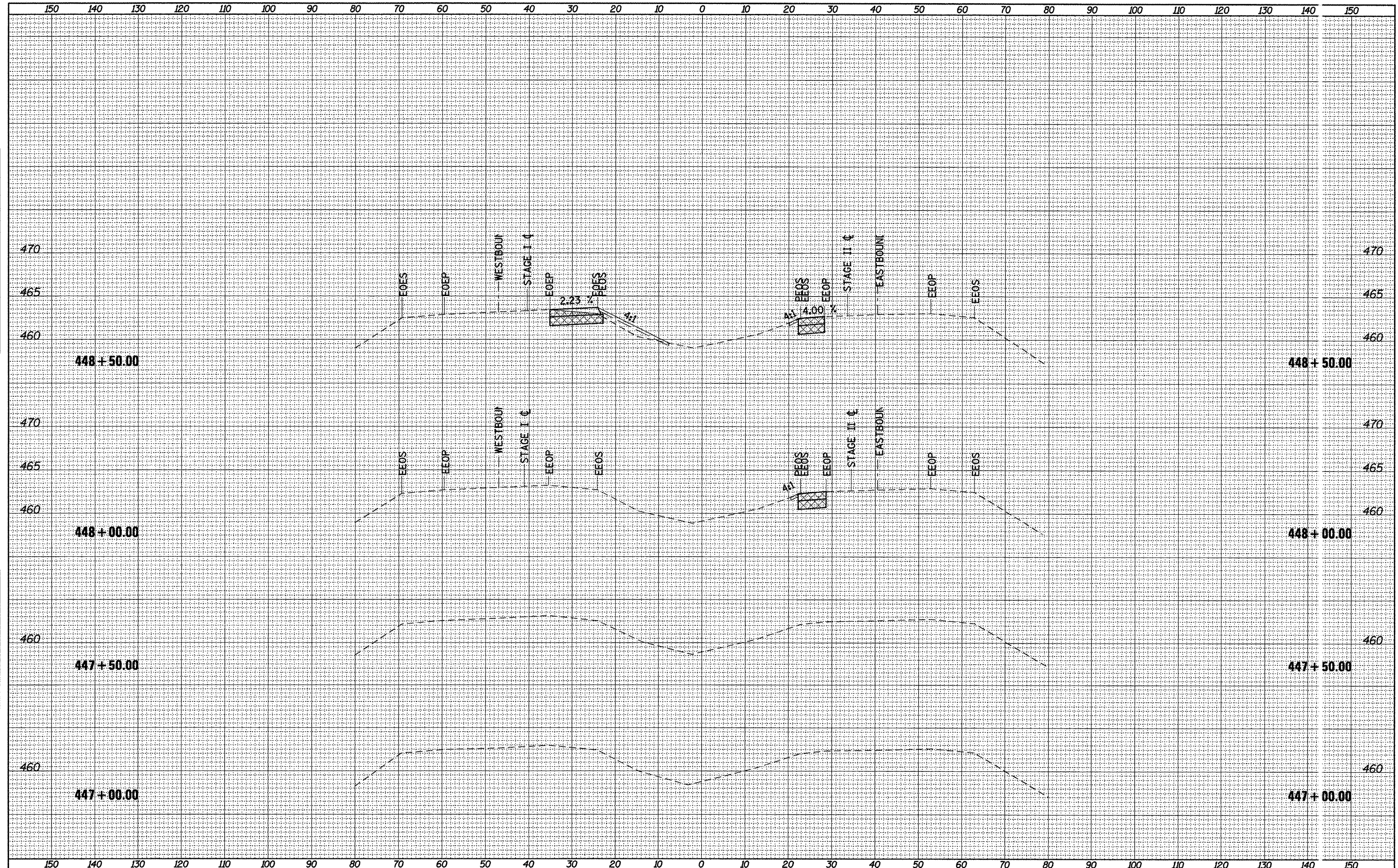
FOR INFORMATION ONLY

NOTE: LIGHTING UNIT IN BOLD PRINT REPRESENTS POLES TO BE LEFT IN PLACE.
FOR INFORMATION ONLY
SEE SHEET NO. 4 FOR QUANTITIES



SURVEYED	
PLOTTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	

SURVEYED	
PLOTTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	



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USER NAME = labebidism

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

CROSS SECTIONS WEST CROSS-OVER

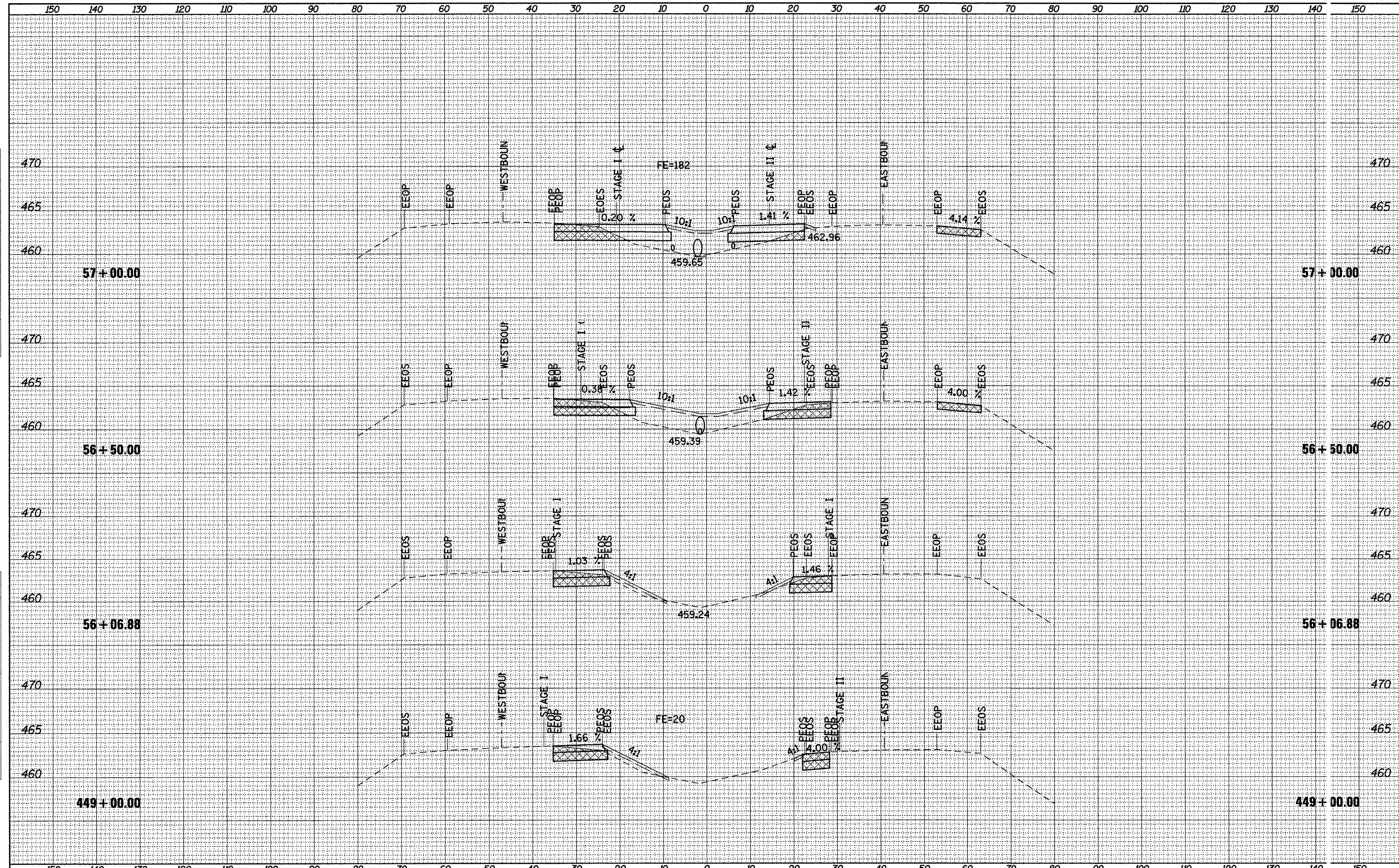
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS
474	((72,90)5BI-2	PEO-TAZ	129/116
CONTRACT NO. 68069			

ILLINOIS FED. AID PROJECT

SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

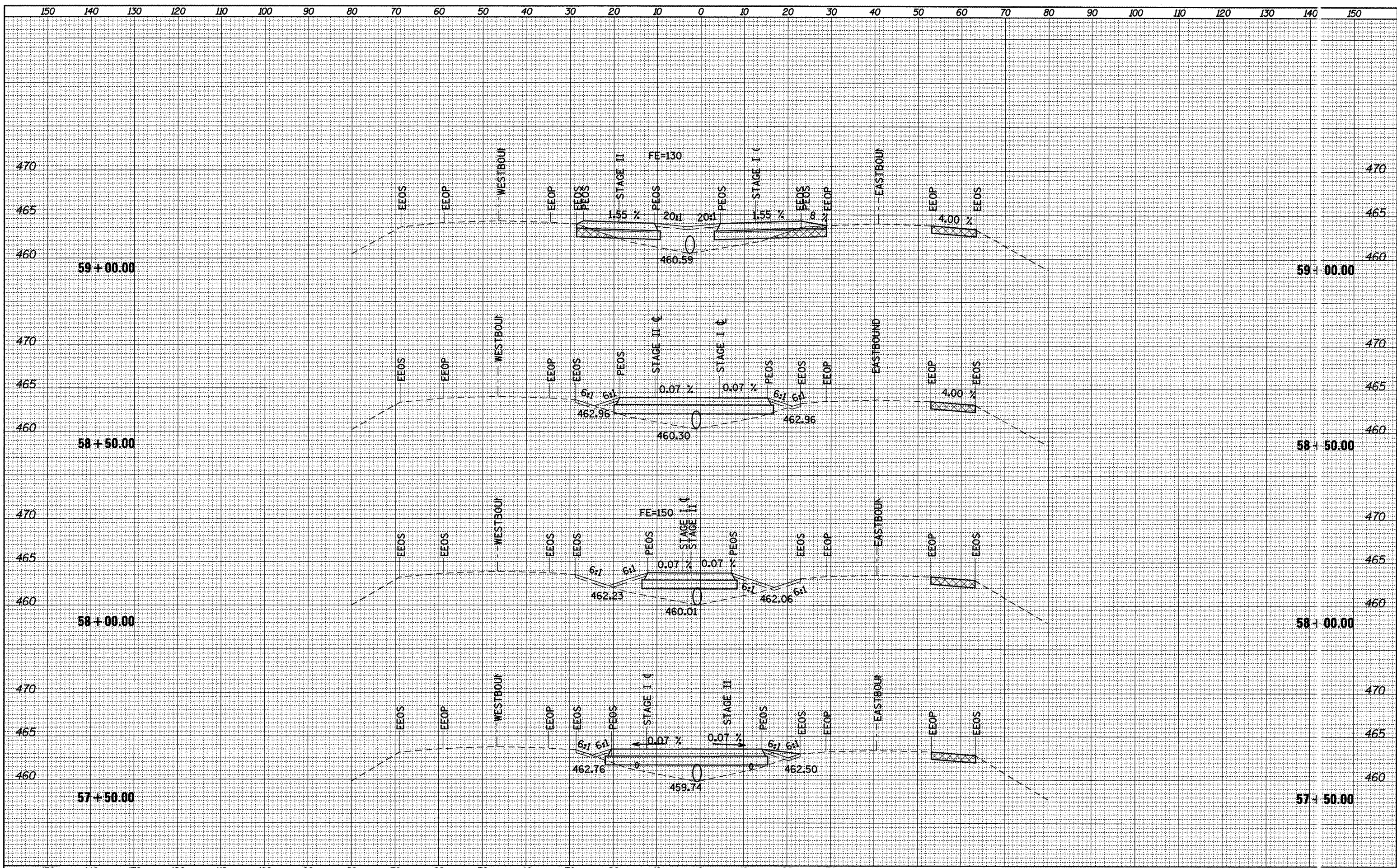
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 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____



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PLOT SCALE = 20.0000' / IN.				SCALE: SHEET NO. OF SHEETS STA. 449+00.00 TO STA. 57+00.00										
PLOT DATE = 2/9/2011														

SUBMITTED
 SURVEY
 PLOTTED
 NOTE BOOK
 TEMPLATE
 AREAS
 CHECKED

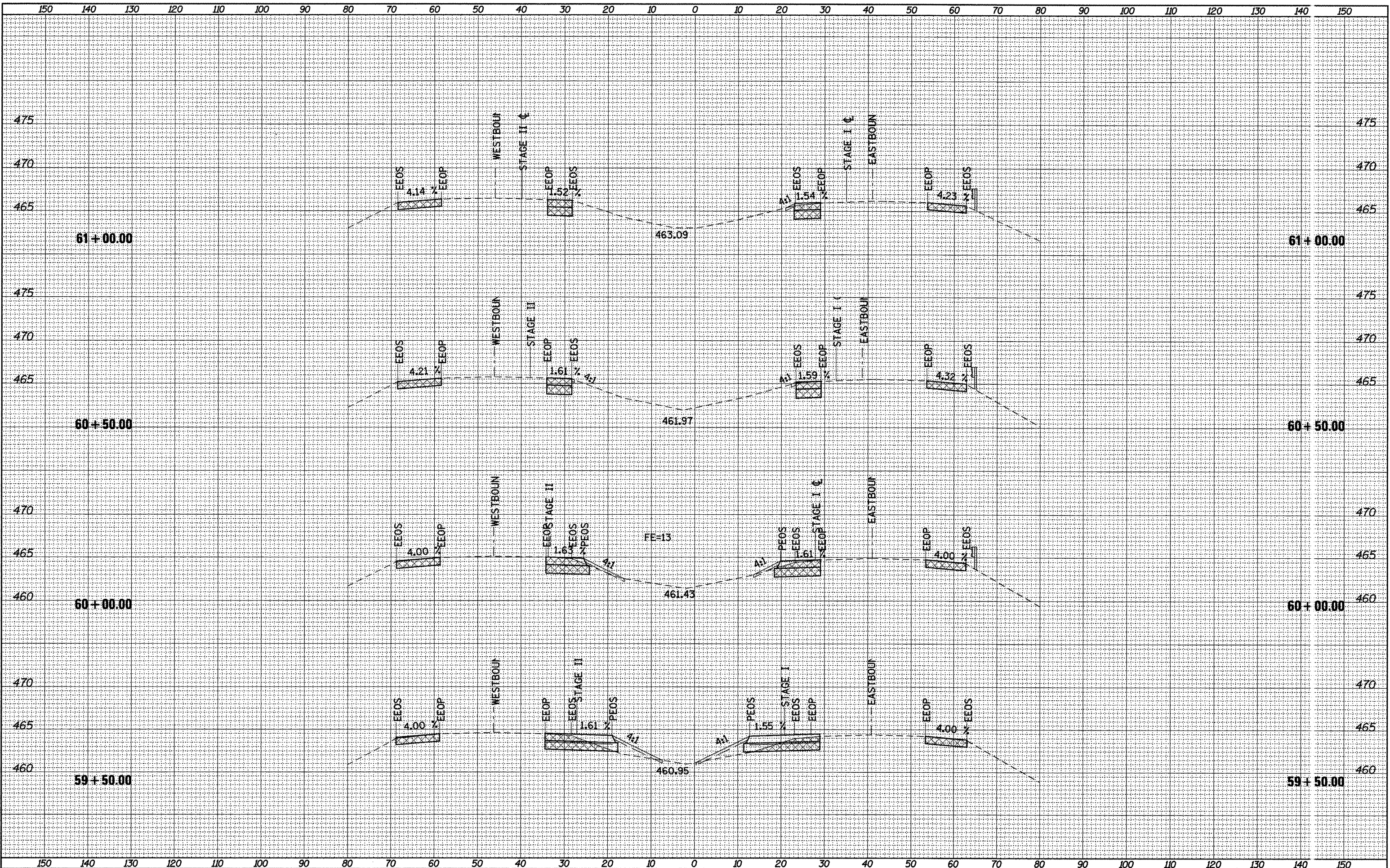
SUBMITTED
 SURVEY
 PLOTTED
 NOTE BOOK
 TEMPLATE
 AREAS
 CHECKED



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	PLOT SCALE = 28.0000' / IN.	DRAWN -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. 57+50.00 TO STA. 59+00.00	CONTRACT NO. 68069	ILLINOIS FED. AID PROJ. CT	
	PLOT DATE = 2/9/2011	CHECKED -	REVISED -								
		DATE -	REVISED -								

SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 NO. _____
 AREAS CHECKED _____

SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 NO. _____
 AREAS CHECKED _____



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DESIGNED -
 DRAWN -
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 DATE -

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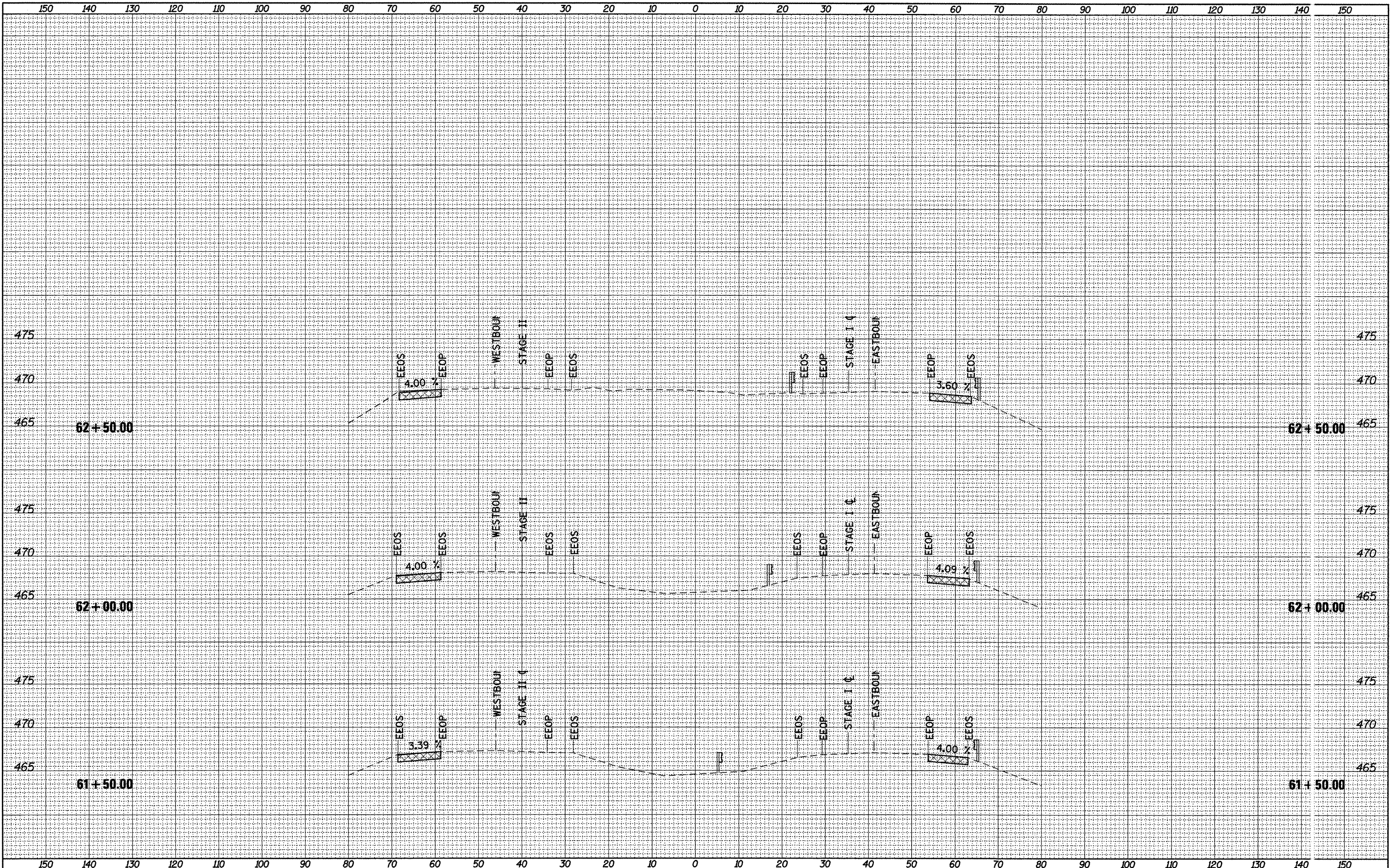
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS WEST CROSS-OVER
 SCALE: SHEET NO. OF SHEETS STA. 59+50.00 TO STA. 61+00.00

F.A.T. RTE. 474	SECTION (72,90)5BII-2	COUNTY PEO-TAZ	TOTAL SHEETS 129	SHEET NO. 119
CONTRACT NO. 68069			ILLINOIS FED. AID PROJECT	

SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	NO.
AS	CHECKED

SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	NO.
AS	CHECKED



FILE NAME = xwestsheets.dgn

USER NAME = lebabidism
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 DRAWN -
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REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

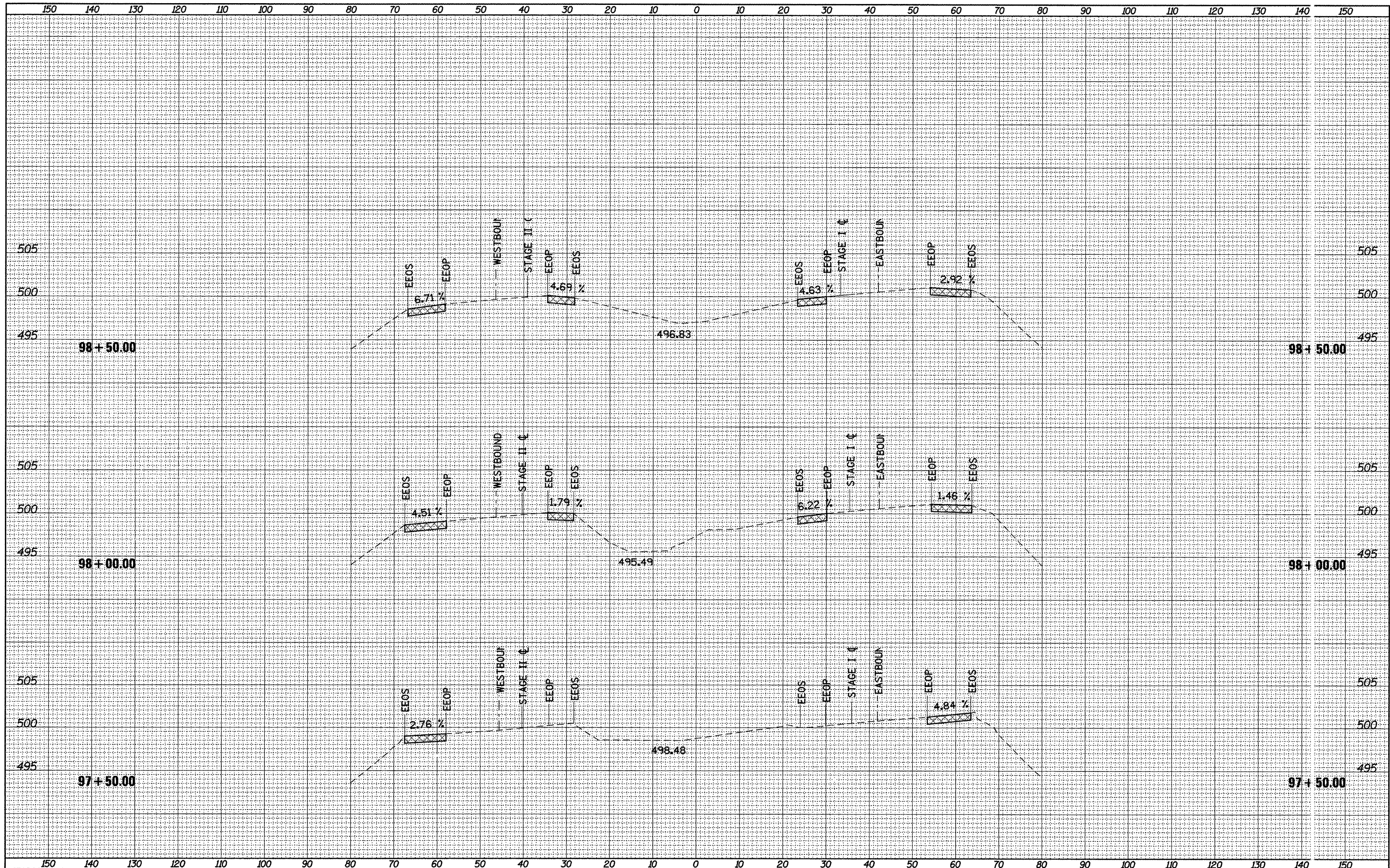
CROSS SECTIONS WEST CROSS-OVER

SCALE: SHEET NO. OF SHEETS STA. 61+50.00 TO STA. 62+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	((72,90)5BI-2	PEO TAZ	129	120
CONTRACT NO. 68069			ILLINOIS FED. AID PROJECT	

FINAL SURVEY
 SURVEYED
 TEMPLATE
 NOTE BOOK
 AREAS CHECKED

ORIGINAL SURVEY
 PLOTTED
 TEMPLATE
 NOTE BOOK
 AREAS CHECKED



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PLOT DATE = 2/9/2011	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

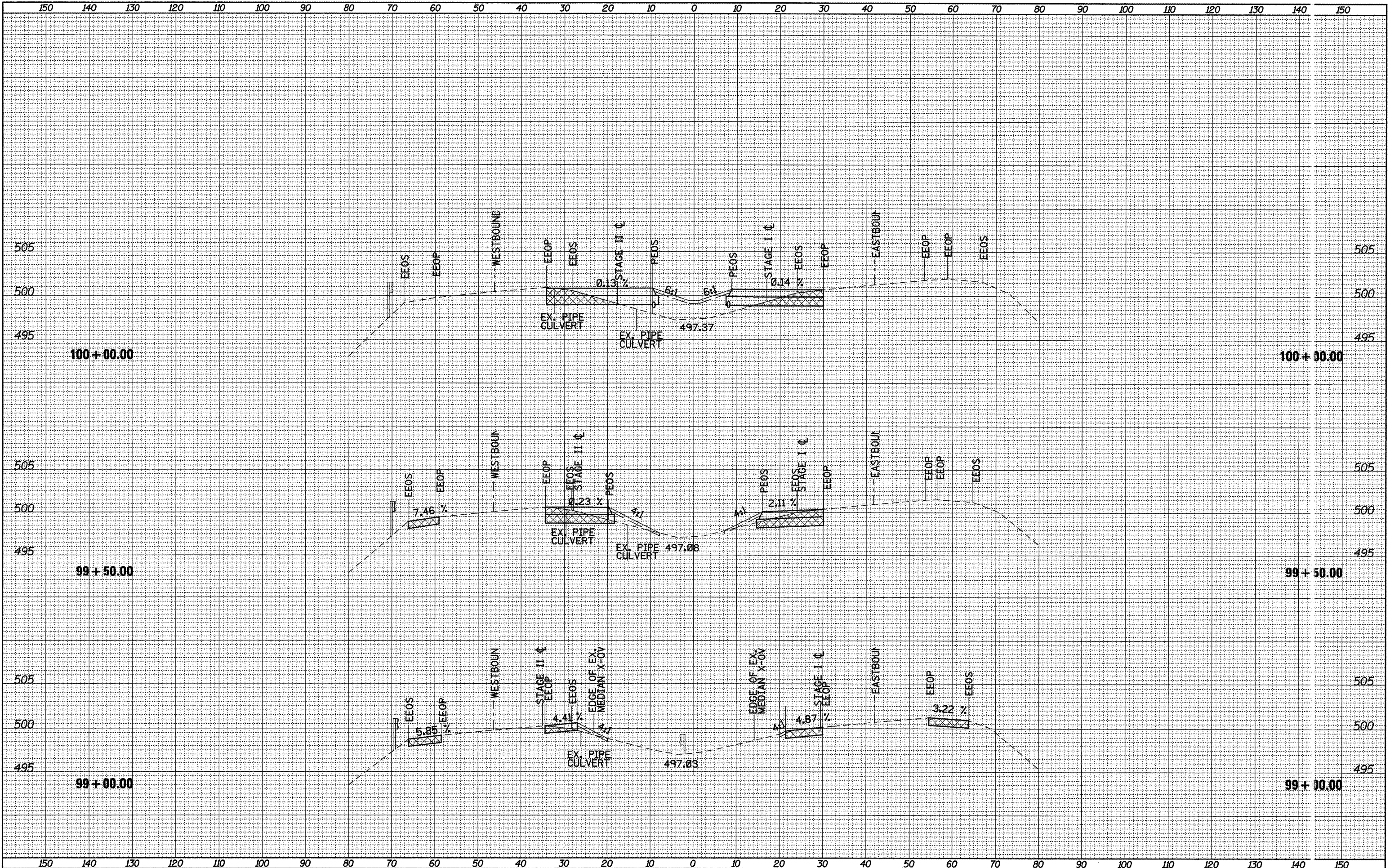
CROSS SECTIONS EAST CROSS-OVER

SCALE: SHEET NO. OF SHEETS STA. 97+50.00 TO STA. 98+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(172,90)5BI-2	PEO TAZ	129	121
CONTRACT NO. 68069			ILLINOIS FED. AID PROJECT	

SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

SURVEYED	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED



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 PLOT DATE = 2/9/2011

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

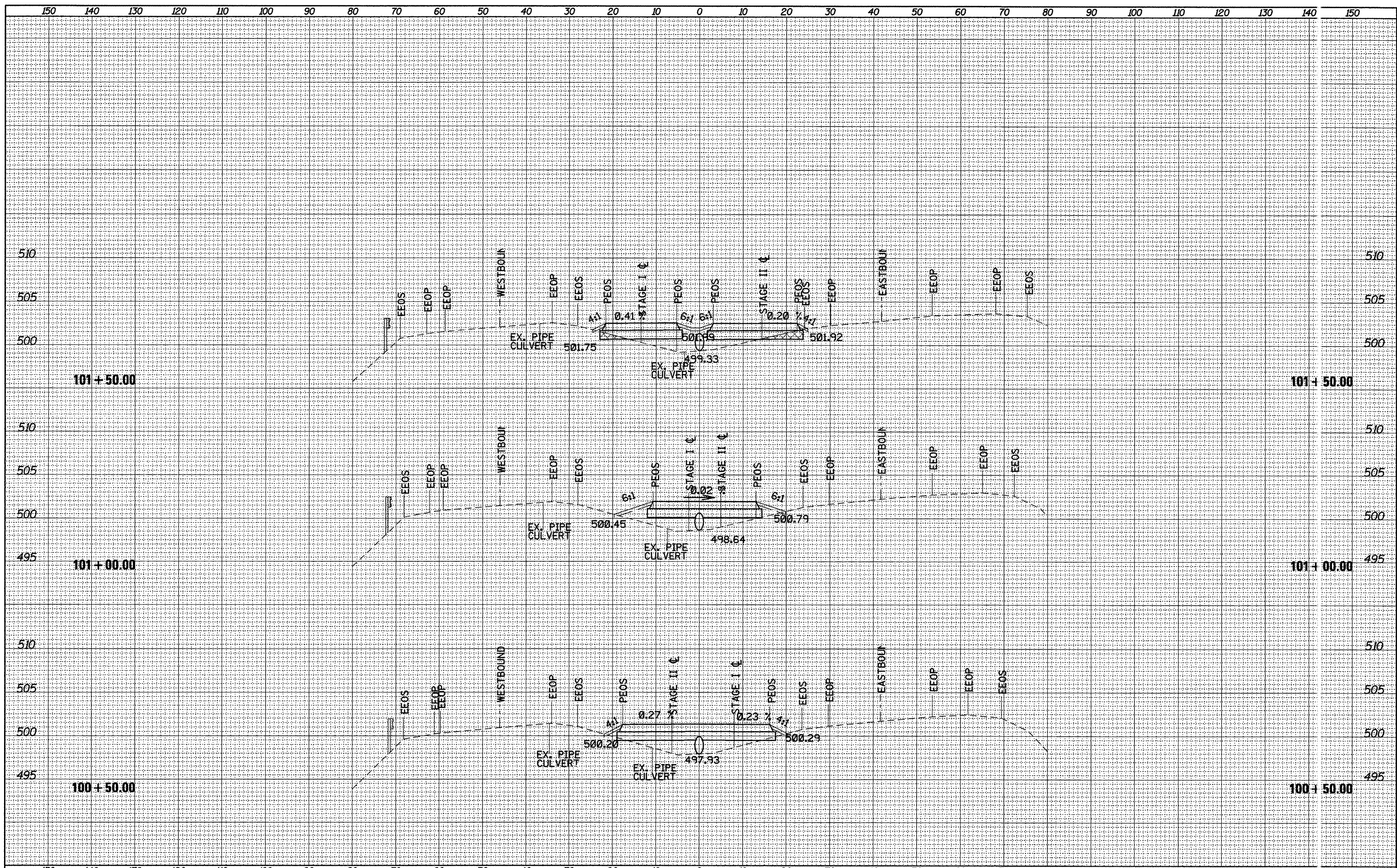
CROSS SECTIONS EAST CROSS-OVER

SCALE: SHEET NO. OF SHEETS STA. 99+00.00 TO STA. 100+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72,90)SBJ-2	PEO-AZ	129	122
CONT. FACT NO. 68069			ILLINOIS FED. AID PROJ.	

ORIGINAL SURVEY
 SURVEY PLATTED
 NOTE BOOK
 NO.

ORIGINAL SURVEY
 SURVEY PLATTED
 NOTE BOOK
 NO.



FILE NAME =	USER NAME = lehabidson	DESIGNED -	REVISED -
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	PLDT DATE = 2/9/2011	DATE -	REVISED -

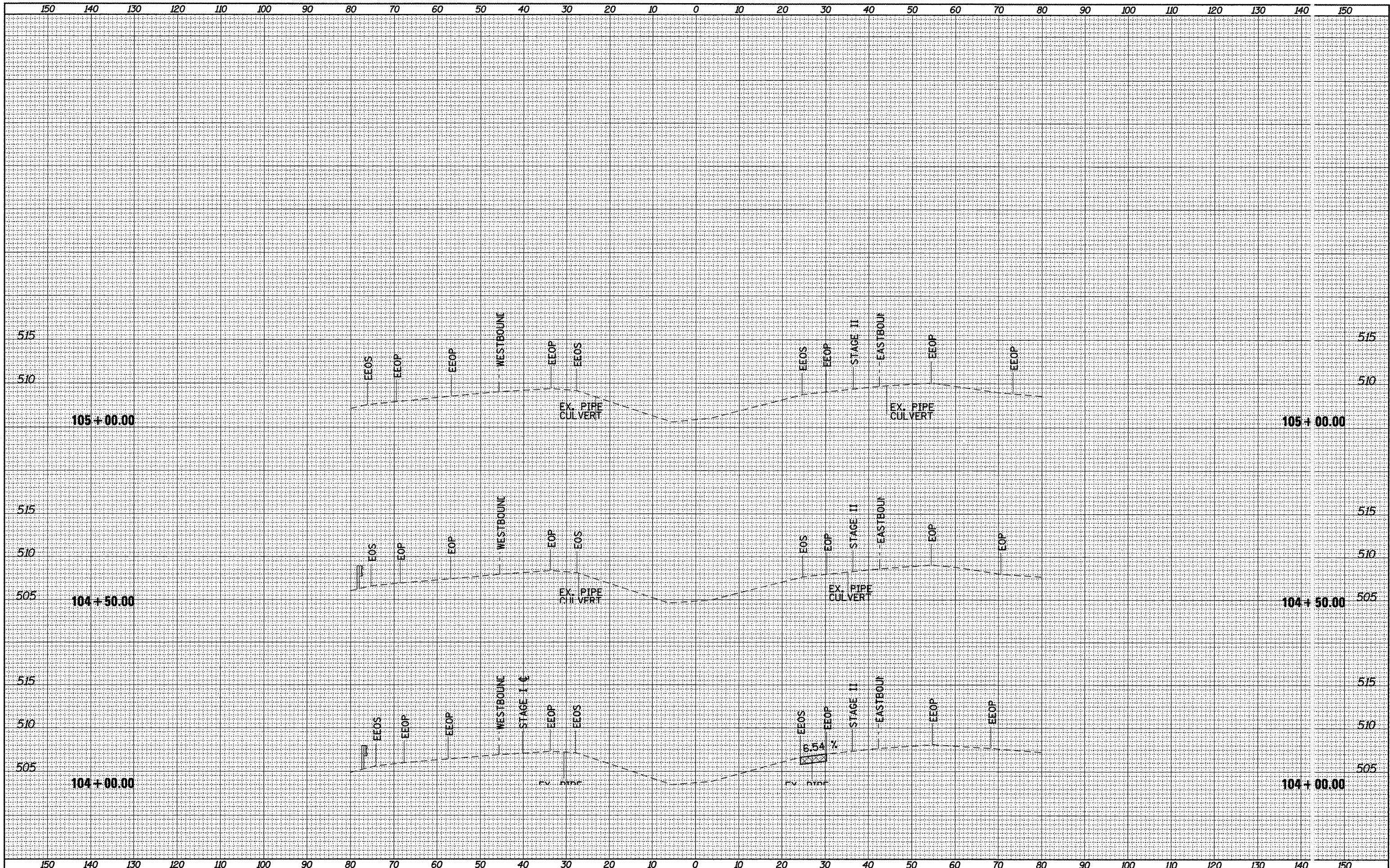
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS EAST CROSS-OVER
 SCALE: SHEET NO. OF SHEETS STA. 100+50.00 TO STA. 101+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	((72,90)5B)1-2	PEO TAZ	129	123
CONTRACT NO. 68069			ILLINOIS FED. AID PROJECT	

SURVEY NO. _____
 CHECKED BY _____
 PLOTTED BY _____
 TEMPLATE NO. _____
 AREAS CHECKED _____
 NO. _____

SURVEY NO. _____
 CHECKED BY _____
 PLOTTED BY _____
 TEMPLATE NO. _____
 AREAS CHECKED _____
 NO. _____



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 PLOT DATE = 2/9/2011

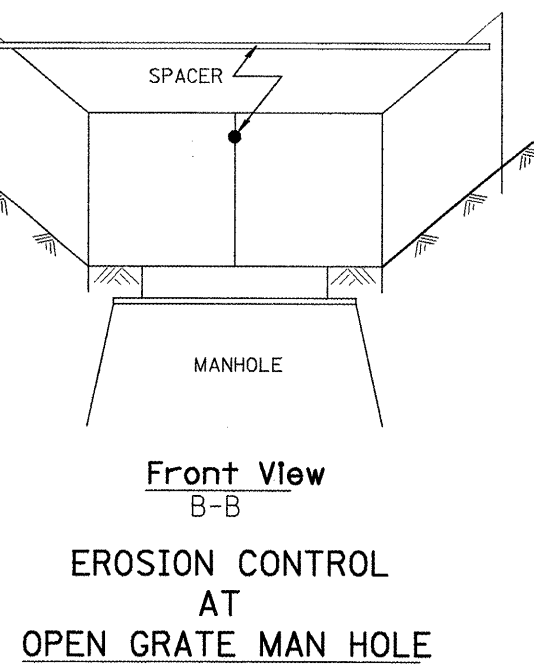
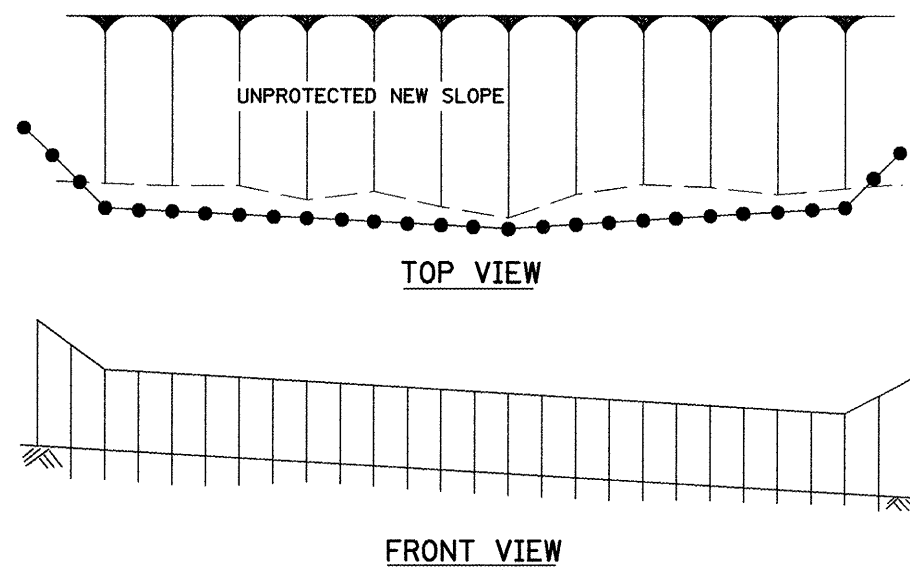
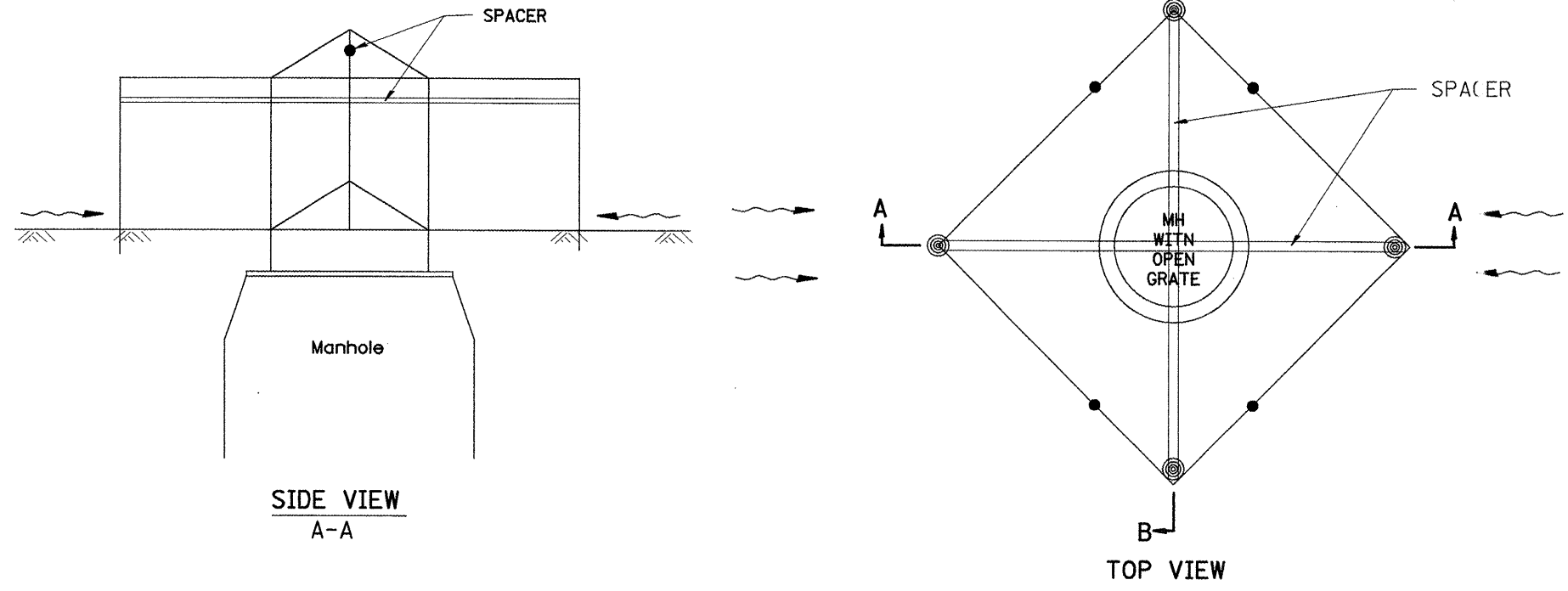
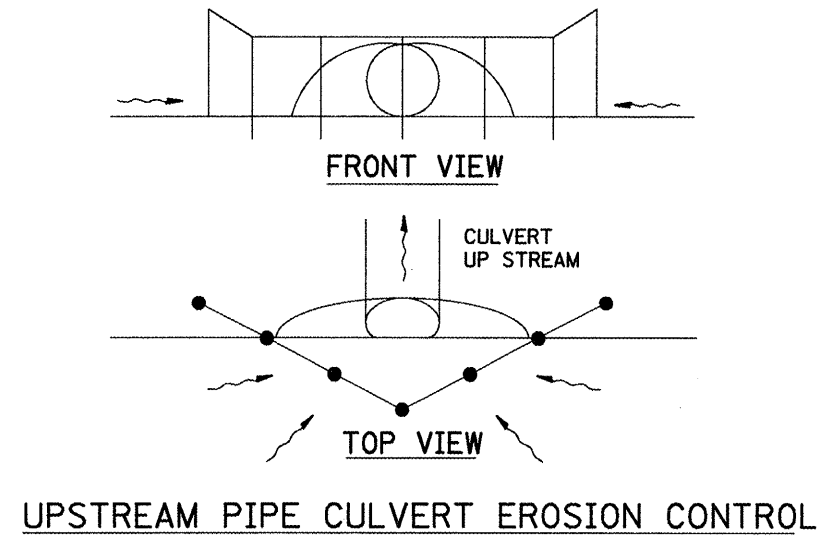
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS EAST CROSS-OVER
 SCALE: _____ SHEET NO. _____ OF _____ SHEETS STA. 104+00.00 TO STA. 105+00.00

F.A. RTE. 474	SECTION ((72,90)5BI-2	COUNTY PEO TAZ	TOTAL SHEETS NO. 129	SHEET NO. 125
CONTRACT NO. 68069			ILLINOIS FED. AID PROJECT	

Designer Notes:
 1. Designer to modify this Special Detail sheet, as needed, for inclusion in plans.
 2. Include Highway Standard 280001 "TEMPORARY EROSION CONTROL SYSTEM."



GENERAL NOTES:

1. This work shall be performed in accordance with Sections 280 & .081, of the Standard Specifications.
2. Additional Timber or Metal Post shall be installed, as needed.

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

1-1-97		T.P.		
3-11-03	ELIMINATED SILT FENCE DITCH CHECK	M.A.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOT TO SCALE

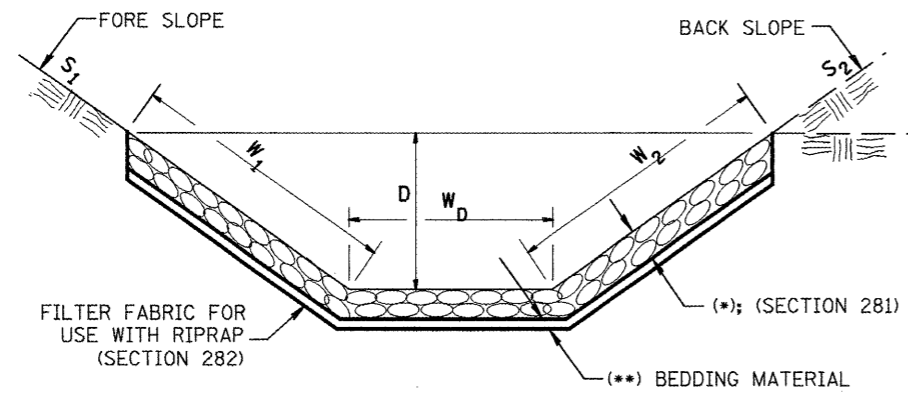
TYPICAL APPLICATION OF SILT FILTER FENCE

CADD STD. 280001-D4

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72, 90)5B1-2	PEO- AZ	129	126
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68069	

1. Designer to modify this Special Detail Sheet, as needed for inclusion in plans.
 2. (*) Designer to specify pay item including material, quality, and gradation.
 3. (**) Designer to specify thickness of bedding material.
 4. Include District Special Provision if needed.

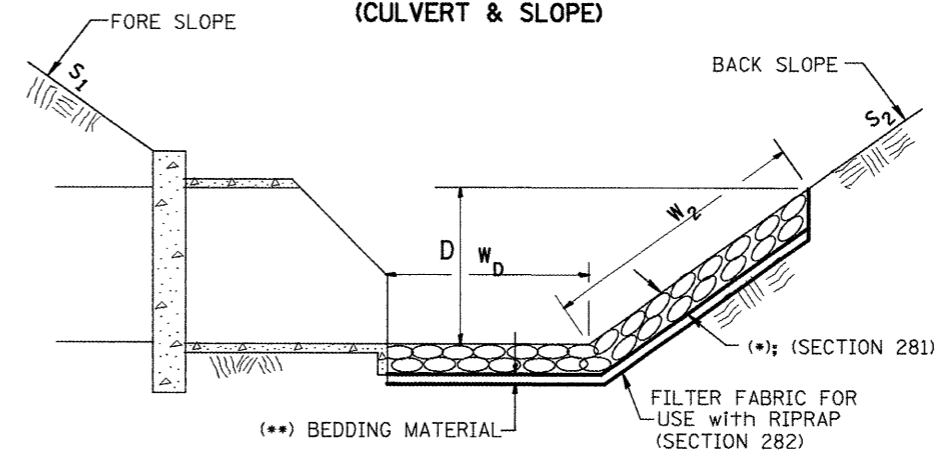
**CASE 1
(DITCH)**



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m ²)
TOTAL				

(1) WIDTH = $W_1 + W_2 + W_D$

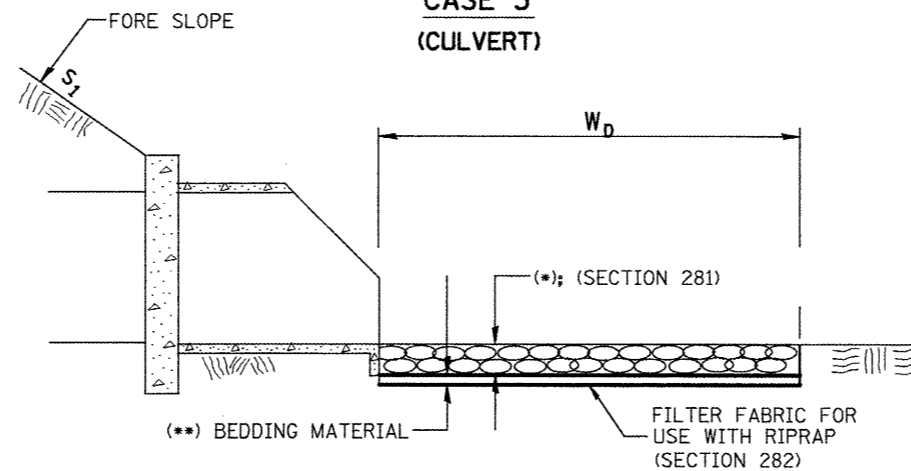
**CASE 2
(CULVERT & SLOPE)**



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m ²)
TOTAL				

(1) WIDTH = $W_2 + W_D$

**CASE 3
(CULVERT)**



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m ²)
TOTAL				

(1) WIDTH = W_D

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
 All dimensions are in inches (millimeters) unless otherwise noted.

1-1-97	RENUM. A-12.02, NEW REVISION BOX	T.P.
12-1-97	CORRECT FILTER FABRIC LEADER ARROW	J.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

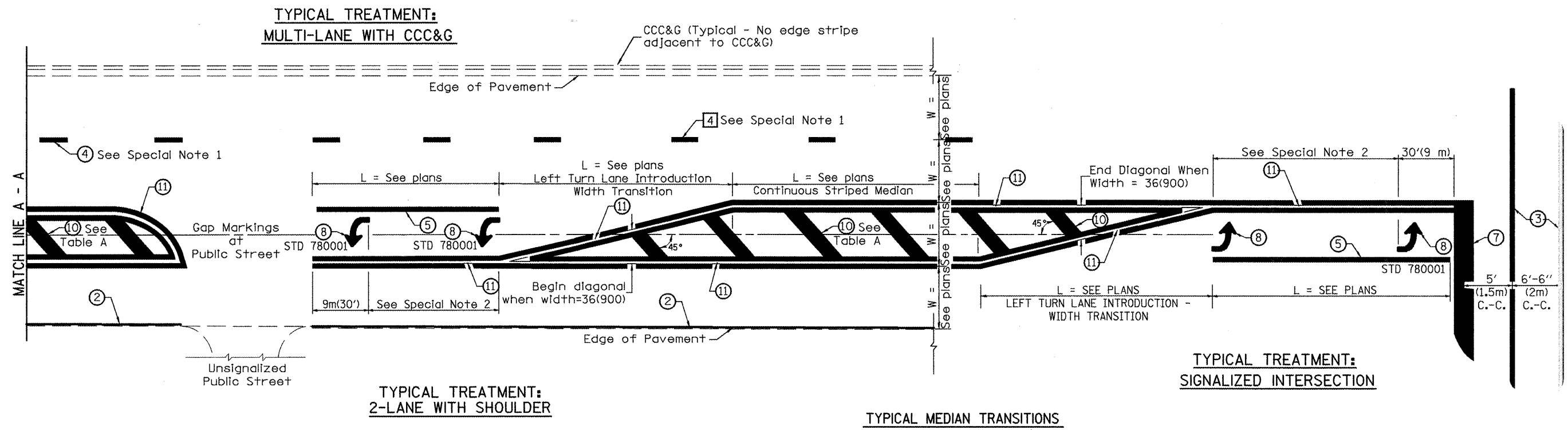
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIPRAP DITCH FOR EROSION PROTECTION

NOT TO SCALE

CADD STD. 281001-D4

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(172, 9015B)-2	PEO-TAZ	129	127
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 68069	



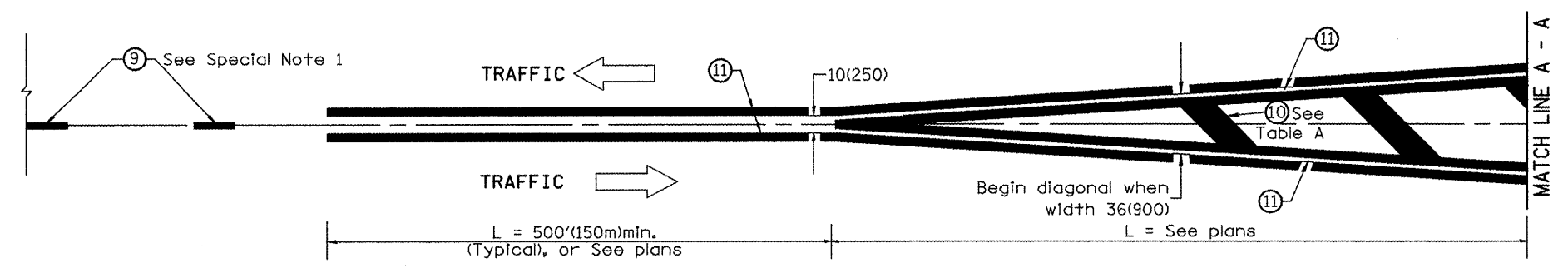
TYPICAL MEDIAN TRANSITIONS

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)	
	CONTINUOUS	
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL PAVEMENT MARKINGS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 780001-D4

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(T2, 90)5B11-2	PEO TAZ	129	129
CONTRACT NO. 68069				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			