

04-25-14 LETTING ITEM 004

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.U. ROUTE 1238: IL 176 (PARK AVE.)  
OVER DES PLAINES RIVER  
SECTION: P-2-I-1(12)  
BRIDGE JOINT REPAIR  
LAKE COUNTY

C-91-431-12

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-I-1(12)	LAKE	25	1
		ILLINOIS	CONTRACT NO. 60777	

D-91-431-12



FOR INDEX OF SHEETS, SEE SHEET NO. 2

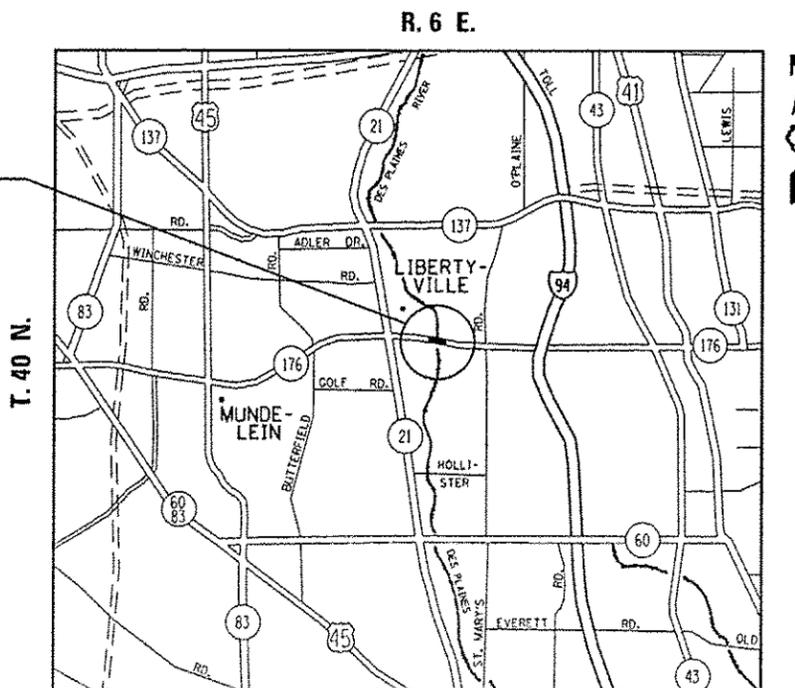
THE IMPROVEMENT IS LOCATED IN THE VILLAGE OF LIBERTYVILLE.

**TRAFFIC DATA**

ADT (2011) = 18,100

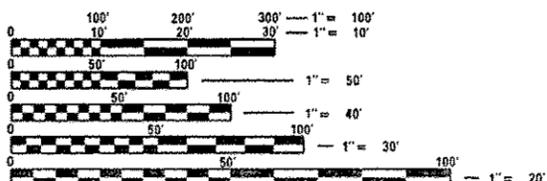
POSTED SPEED LIMIT = 40 MPH

IMPROVEMENT  
LOCATION  
SN: 049-0068



LIBERTYVILLE TOWNSHIP

GROSS & NET LENGTH = 494.75 FT. = 0.094 MILE



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  
OR 811

PROJECT ENGINEER J. ALAIN MIDY (847) 221-3056  
PROJECT MANAGER ISSAM RAYYAN (847) 705-4178

CONTRACT NO. 60777

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED February 4 20 14  
*John D. Baranzoni*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 21 20 14  
*John D. Baranzoni, P.E.*  
ENGINEER OF DESIGN AND ENVIRONMENT

March 21 20 14  
*Omer Osman, P.E.*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1.	TITLE SHEET
2.	INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES
3.	SUMMARY OF QUANTITIES
4-9.	BRIDGE REHABILITATION PLANS (SN 049-0068)
10-14.	TRAFFIC STAGING PLANS
15.	TEMPORARY TRAFFIC SIGNAL PLAN
16-17.	PROPOSED PAVEMENT MARKING PLANS
18.	TEMPORARY LIGHT POLE DETAILS (BE-800)
19.	TEMPORARY ARTERIAL CABLE INSTALLATION (BE-801)
20.	TEMPORARY SERVICE INSTALLATION AND LIGHT POLE WIRING DETAIL
21.	COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX DETAIL
22.	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE (BM-20)
23.	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS (TC-10)
24.	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
25.	ARTERIAL ROAD INFORMATION SIGN (TC-22)

**STATE STANDARDS**

STANDARD NO	DESCRIPTION
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO EOP
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W MOVING OPERATIONS-DAY ONLY
701316-08	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, FOR SPEEDS > 45 MPH
701502-06	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701801-05	SIDEWALK CORNER OR CROSSWALK CLOSURE
701901-03	TRAFFIC CONTROL DEVICES

**GENERAL NOTES:**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES (48 HOUR NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE CITY OF LIBERTYVILLE.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE BRIDGE INSPECTORS.

THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. ACTIVITIES REQUIRING AN ASCOE 404 PERMIT ARE NOT PERMITTED.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. THE CONTRACTOR SHALL FIELD VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED BASED AT THE UNIT PRICE BID FOR THE WORK.

THE CONTRACTOR SHALL CONTACT THE LAKE COUNTY FOREST PRESERVE DISTRICT AT (847) 968-3407 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER AT (847) 715-8419 AT LEAST (2) WEEKS PRIOR TO PLACING PERMANENT PAVEMENT MARKINGS.

FILE NAME *	USER NAME *	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, STATE STANDARDS, AND GENERAL NOTES</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\work\pados\pyrzanovskirb\d030844	0143112-shit-plan.dgn	DRAWN -	REVISED -					1238	P-2-1-1121	LAKE	25	2
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 60777				
Default	PLOT DATE = 2/11/2014	DATE -	REVISED -		ILLINOIS FED. AID PROJECT							

SUMMARY OF QUANTITIES				URBAN 100% STATE TOTAL QUANTITIES					CONSTRUCTION TYPE CODE 0014					SUMMARY OF QUANTITIES				URBAN 100% STATE TOTAL QUANTITIES					CONSTRUCTION TYPE CODE 0014															
CODE NO	ITEM	UNIT	QUANTITIES	0014							CODE NO	ITEM	UNIT	QUANTITIES	0014																							
50102400	CONCRETE REMOVAL	CU YD	6.2	6.2							X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1																							
50300255	CONCRETE SUPERSTRUCTURE	CU YD	6.2	6.2							X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	2332	2332																							
50300300	PROTECTIVE COAT	SQ YD	900	900							X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	56	56																							
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	510	510							Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	12	12																							
50800515	BAR SPLICERS	EACH	8	8							Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4																							
52000110	PREFORMED JOINT STRIP SEAL	FOOT	109	109							Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1																							
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3																																		
67100100	MOBILIZATION	L SUM	1	1																																		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1																																		
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1																																		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	767	767																																		
* 78000200	THERMOPLASTIC PAVEMENT MARKING, LINE 4"	FOOT	1855	1855																																		
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	12	12																																		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	619	619																																		
K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	L SUM	1	1																																		
X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1	1																																		

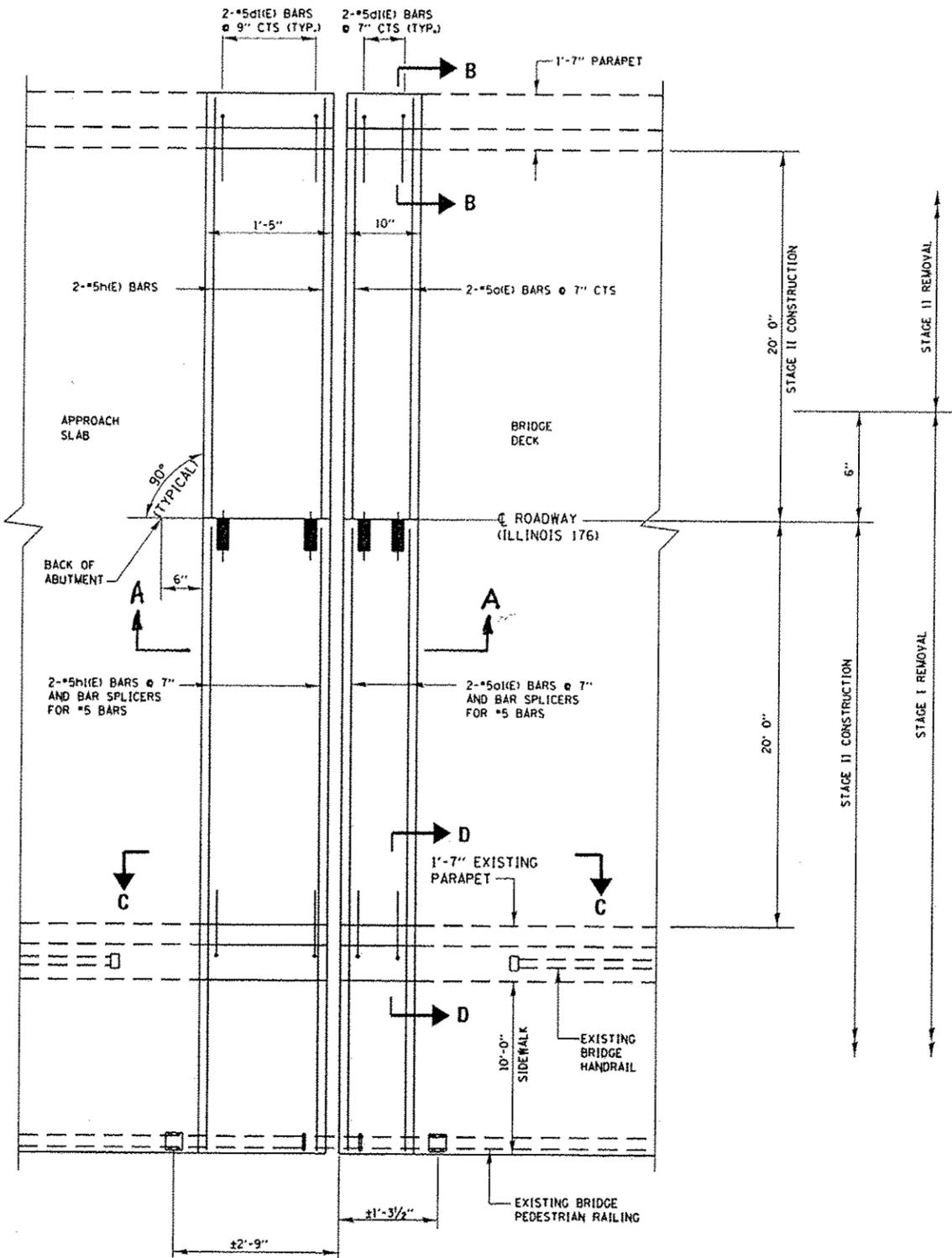
6 \*specialty item

FILE NAME	USER NAME	DESIGNED	REVISOR	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-1(12)	LAKE	25	3	CONTRACT NO. 60777	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

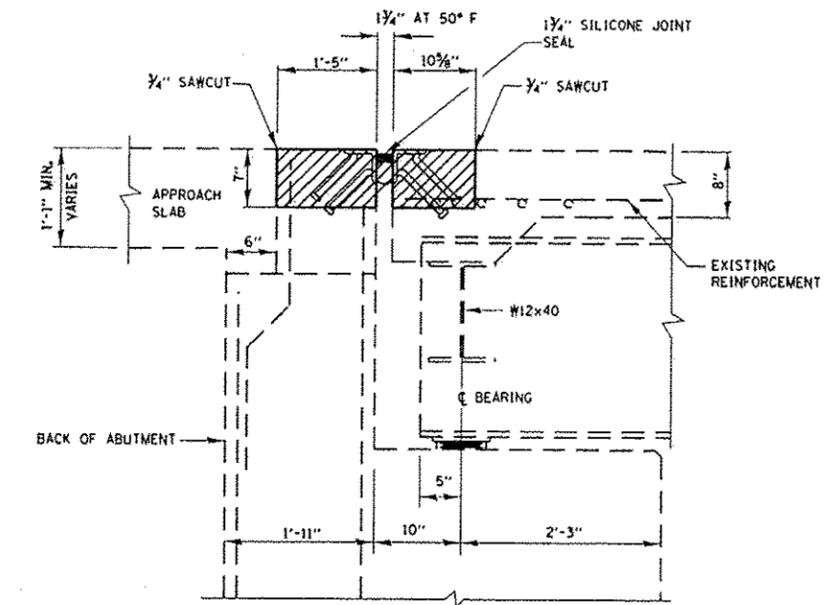


**BILL OF MATERIALS**

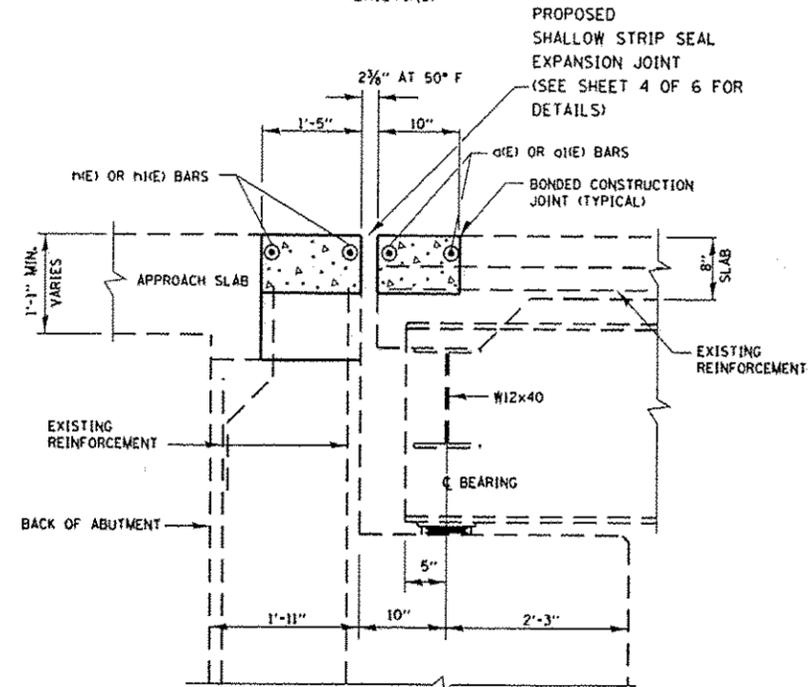
BAR	NO.	SIZE	LENGTH	SHAPE	
ø1E)	4	#5	21'-3"	—	
ø1E)	4	#5	32'-5"	—	
ø1E)	16	#5	3'-11"	L	
n1E)	4	#5	21'-3"	—	
n1E)	4	#5	32'-5"	—	
REINFORCEMENT BARS EPOXY COATED)				POUND	510
CONCRETE REMOVAL				CU. YD.	6.2
CONCRETE SUPERSTRUCTURE				CU. YD.	6.2
PREFORMED JOINT STRIP SEAL				FOOT	109
BAR SPLICERS				EACH	8



**PLAN  
WEST ABUTMENT SHOWN**



**SECTION A-A  
(EXISTING)**



**SECTION A-A  
(PROPOSED)**

**LEGEND:**

HATCHED AREA INDICATES CONCRETE REMOVAL

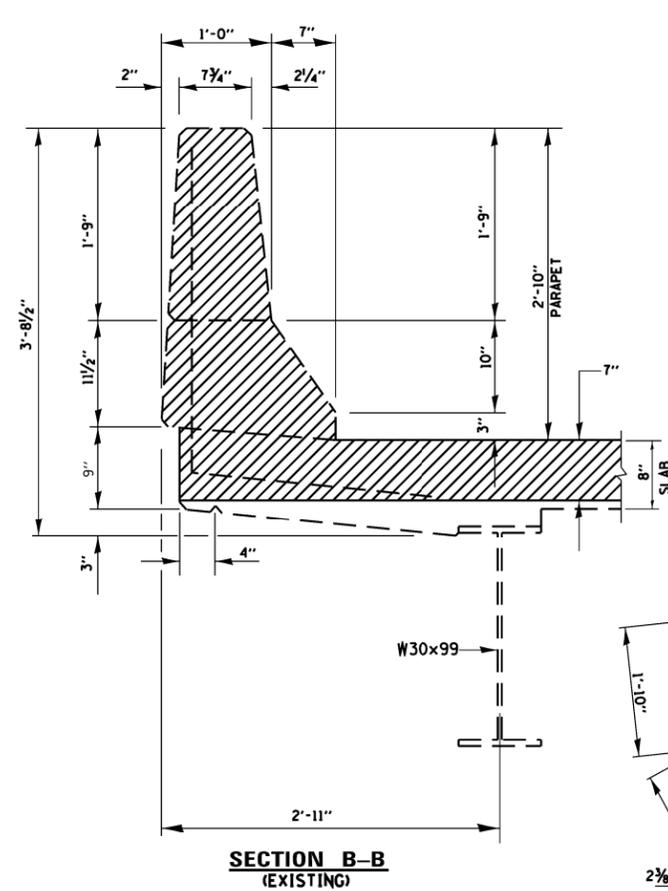
FILE NAME *	USER NAME * pyrzanowski	DESIGNED - MYT	REVISED -
c:\pwork\p1dot\pyrzanowski\bu030844	10143112-shl-plendgn	DRAWN - MYT	REVISED -
Default	PLOT SCALE * 100.0000' / in.	CHECKED - RTB	REVISED -
	PLOT DATE * 2/11/2014	DATE - 2-10-14	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

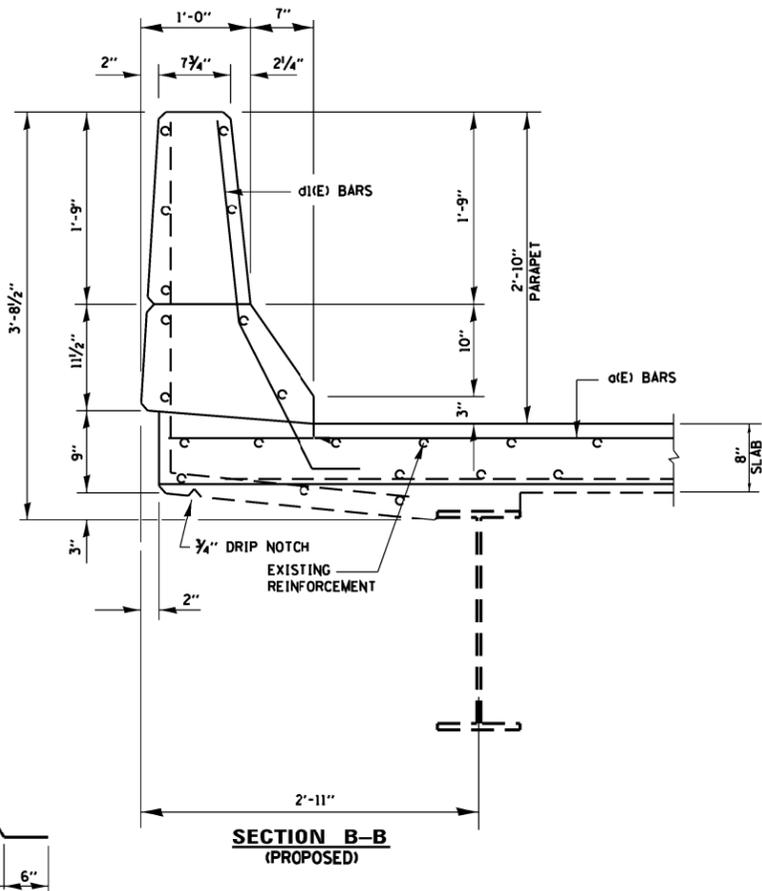
**ILL 176 (PARK AVENUE) AT DES PLAINES RIVER  
TRANSVERSE EXPANSION JOINT DETAILS  
S.N. 049-0068**

SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

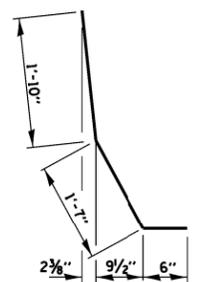
F.A.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-1 (12)	LAKE	25	5
CONTRACT NO. 60777				ILLINOIS FED. AID PROJECT



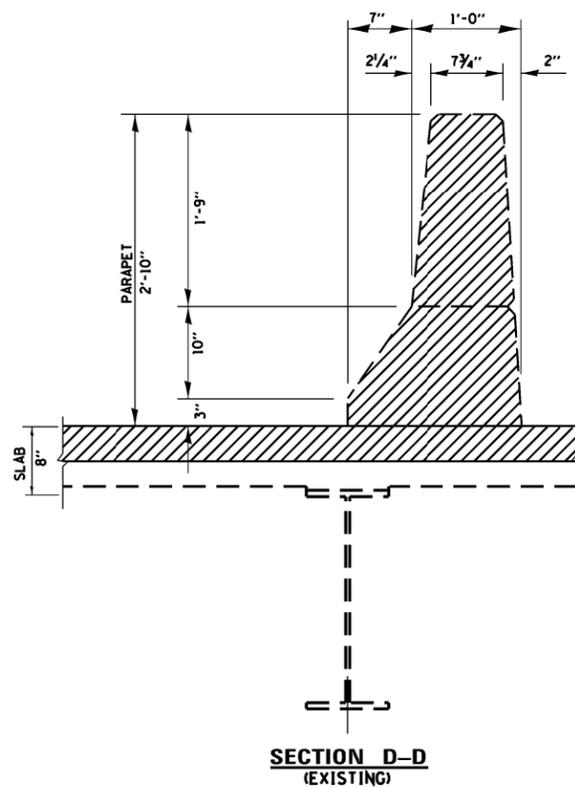
**SECTION B-B  
(EXISTING)**



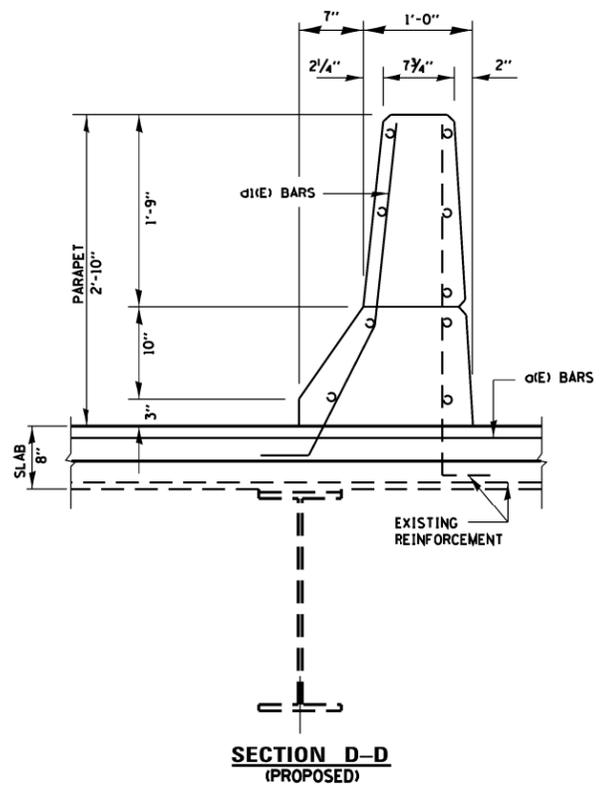
**SECTION B-B  
(PROPOSED)**



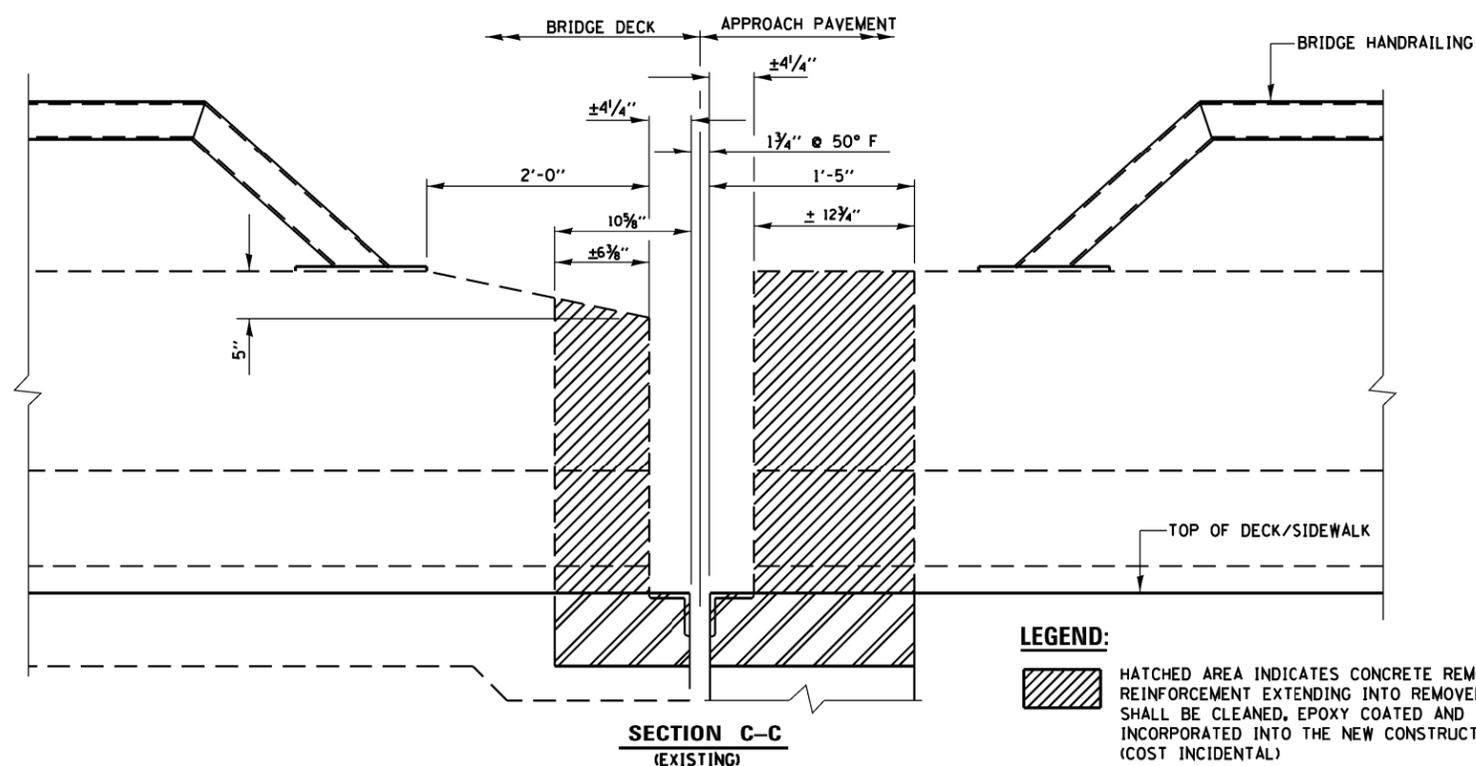
**BAR d1(E)**



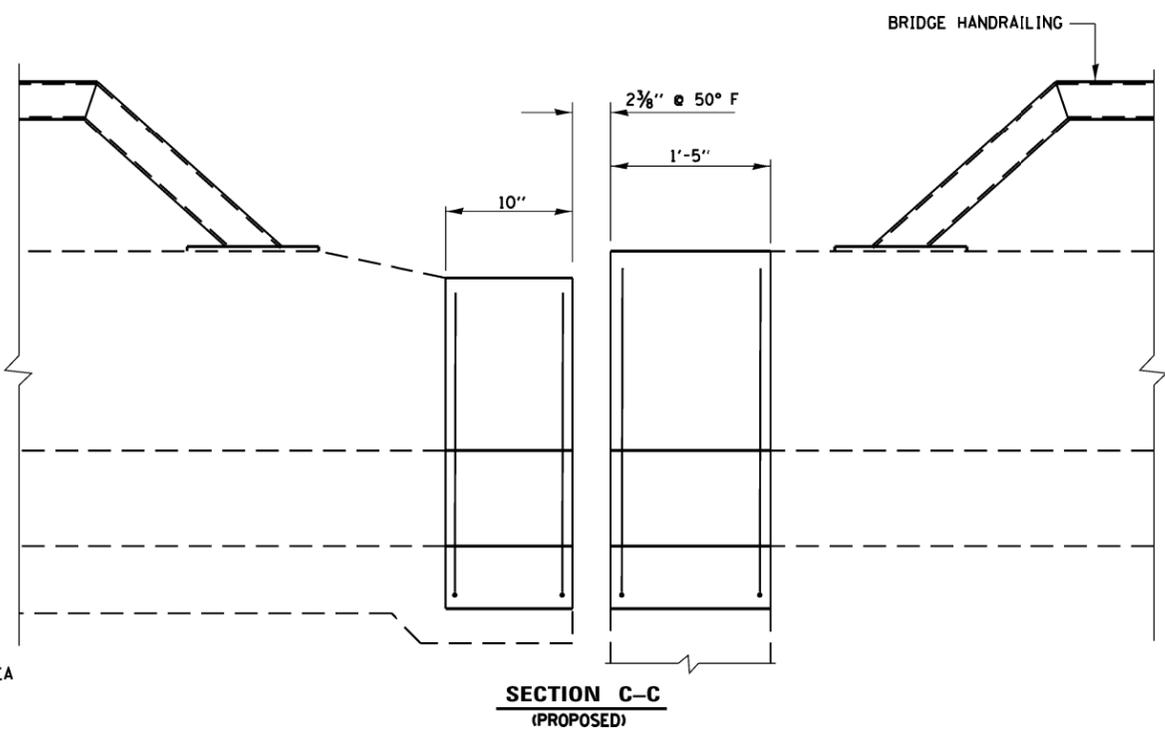
**SECTION D-D  
(EXISTING)**



**SECTION D-D  
(PROPOSED)**



**SECTION C-C  
(EXISTING)**

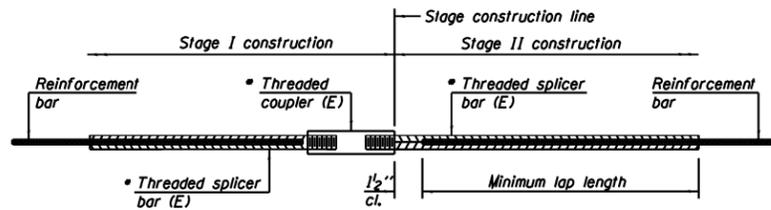


**SECTION C-C  
(PROPOSED)**

**LEGEND:**  
 HATCHED AREA INDICATES CONCRETE REMOVAL. REINFORCEMENT EXTENDING INTO REMOVED AREA SHALL BE CLEANED, EPOXY COATED AND INCORPORATED INTO THE NEW CONSTRUCTION (COST INCIDENTAL)

FILE NAME =	USER NAME = pyzranowskirb	DESIGNED - MVT	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 176 (PARK AVENUE) AT DES PLAINES RIVER TRANSVERSE EXPANSION JOINT DETAILS S.N. 049-0068</b>	F.A.U. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	ND143112-sht-plan.dgn	DRAWN - MVT	REVISED -			1238	P-2-1-1 (12)	LAKE	25	6	
	PLOT SCALE = 100.0000' / 1" =	CHECKED - RTB	REVISED -			<b>CONTRACT NO. 60177</b>					
	PLOT DATE = 2/11/2014	DATE - 2-10-14	REVISED -			ILLINOIS FED. AID PROJECT					





STANDARD BAR SPLICER ASSEMBLY

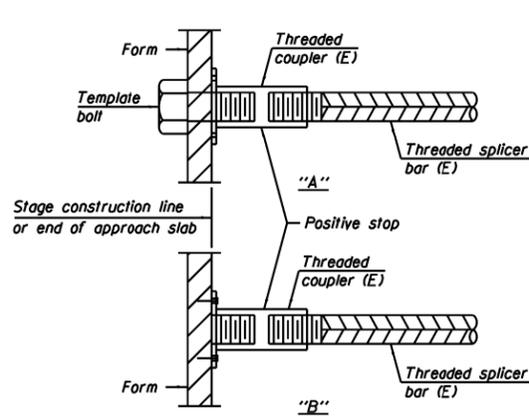
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

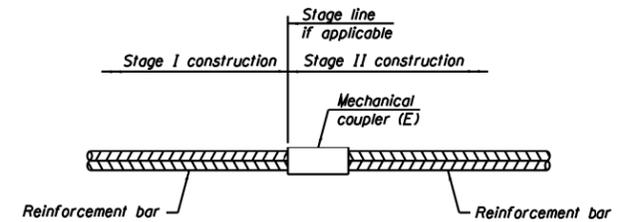
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Abutment	#5	4	4
Deck	#5	4	4



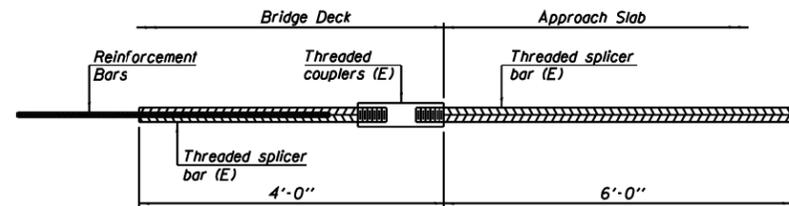
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



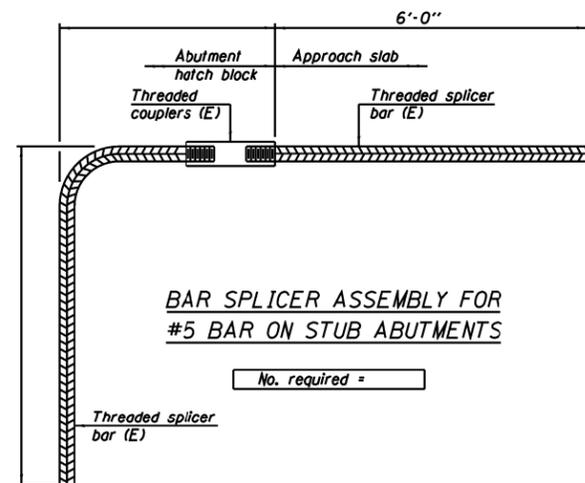
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

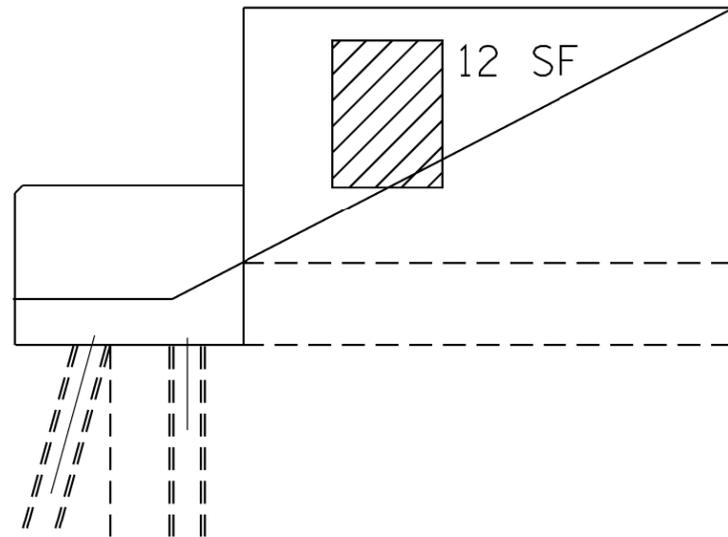
No. required =

**NOTES**  
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.  
 All reinforcement shall be lapped and tied to the splicer bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.  
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 049-0068

BSD-1 1-27-12

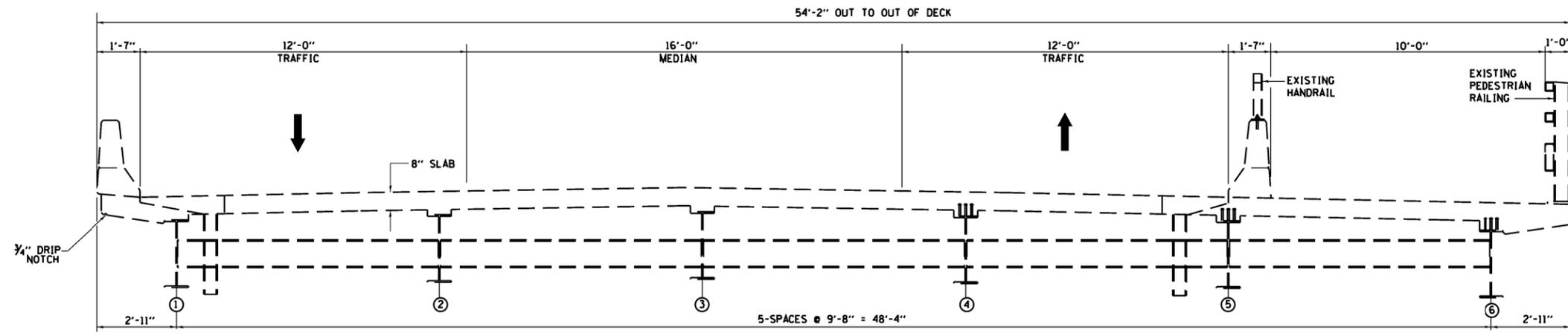
FILE NAME :	USER NAME : pyrzanowskirb	DESIGNED - MYT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ILL 176 (PARK AVENUE) AT DES PLAINES RIVER TRANSVERSE EXPANSION JOINT DETAILS S.N. 049-0068	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	ND143112-sht-plan.dgn	DRAWN - MYT	REVISED -			1238	P-2-1-1 (12)	LAKE	25	8	
	PLOT SCALE = 99.9998' / in.	CHECKED - RTB	REVISED -			CONTRACT NO. 60T77					
	PLOT DATE = 2/11/2014	DATE - 2-10-14	REVISED -			ILLINOIS FED. AID PROJECT					



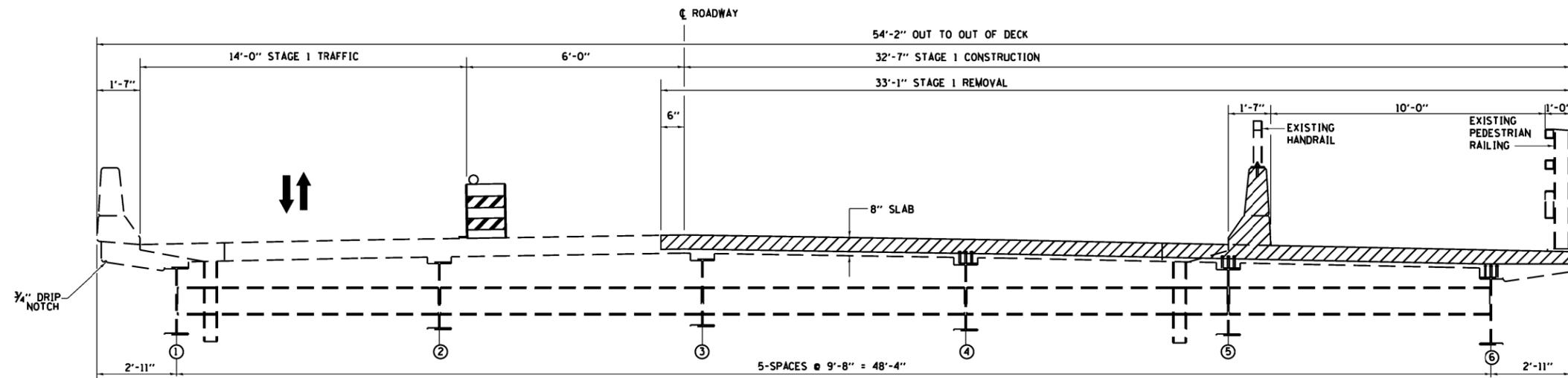
**LEGEND:**

 HATCHED AREA INDICATES  
STRUCTURAL REPAIR OF CONCRETE  
(DEPTH LESS THAN OR EQUAL TO 5")

FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ILL 176 (PARK AVENUE) OVER DES PLAINES RIVER STRUCTURAL REPAIR OF CONCRETE - SOUTHEAST WINGWALL S.N. 049-0068</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pwork\pwork\pyrzanowskirb\d030844	D143112-sht-plan.dgn	DRAWN -	REVISED -			1238	P-2-1-1(12)	LAKE	25	9	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			<b>CONTRACT NO. 60T77</b>			ILLINOIS FED. AID PROJECT		
	PLOT DATE = 2/11/2014	DATE -	REVISED -			SCALE:	SHEET 6	OF 6	SHEETS	STA.	TO STA.

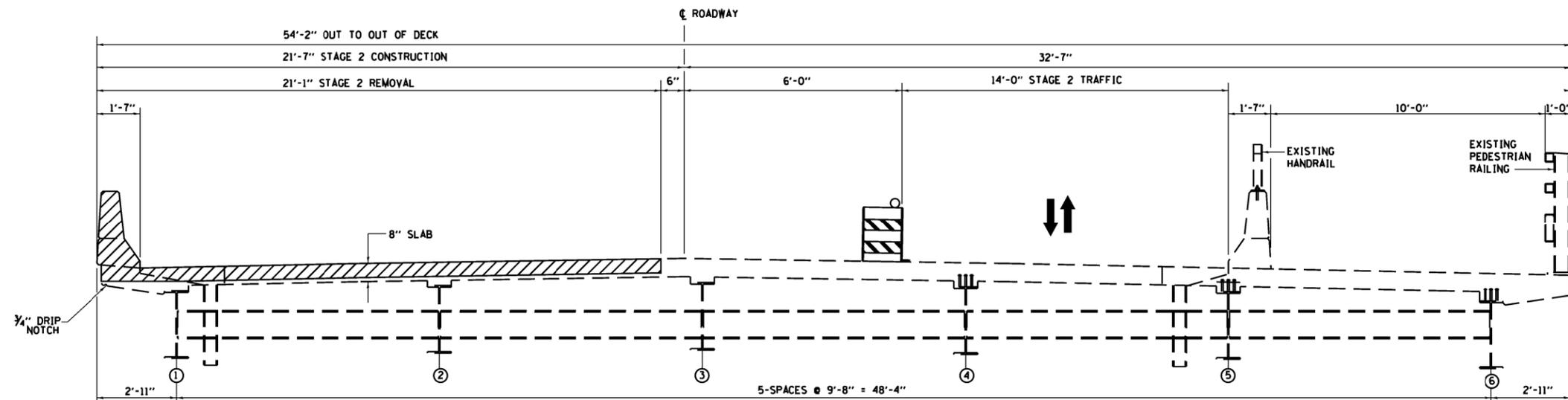


**CROSS SECTION**  
(LOOKING EAST)



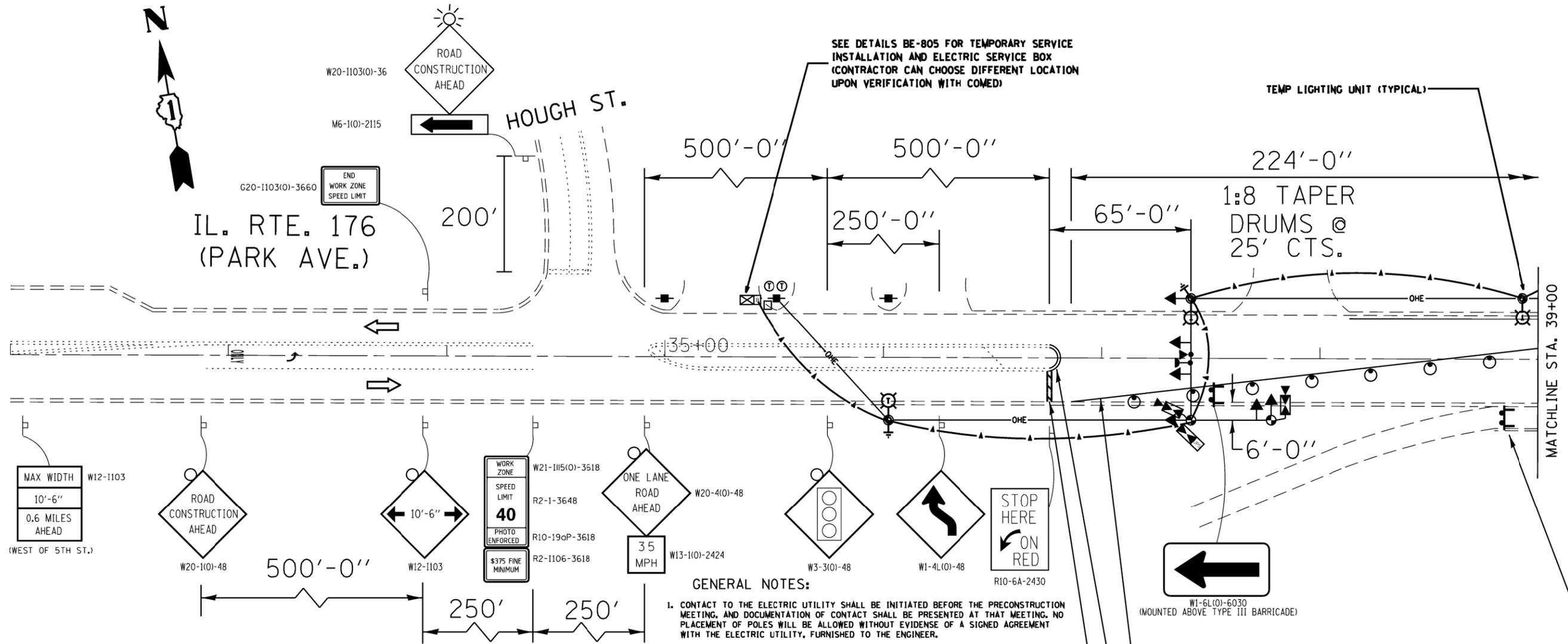
**CROSS SECTION STAGING I**  
(LOOKING EAST)

**LEGEND:**  
 CONCRETE REMOVAL



**CROSS SECTION STAGING II**  
(LOOKING EAST)

FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTION AND STAGING DETAILS IL 176 (PARK AVE.) OVER DES PLAINES RIVER</b>				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	ND143112-sht-plan.dgn	DRAWN -	REVISED -						1238	P-2-1-1(12)	LAKE	25	10
	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -		CONTRACT NO. 60777				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 2/11/2014	DATE -	REVISED -		SCALE:	SHEET	OF SHEETS	STA.	TO STA.				



SEE DETAILS BE-805 FOR TEMPORARY SERVICE INSTALLATION AND ELECTRIC SERVICE BOX (CONTRACTOR CAN CHOOSE DIFFERENT LOCATION UPON VERIFICATION WITH COMED)

TEMP LIGHTING UNIT (TYPICAL)

1:8 TAPER DRUMS @ 25' CTS.

MATCHLINE STA. 39+00

MAX WIDTH	W12-1103
10'-6"	
0.6 MILES AHEAD	

(WEST OF 5TH ST.)

TEMPORARY LIGHTING AND TRAFFIC SIGNAL PLAN LEGEND

- 400W, 120V OR 240V, MCIII HPS, WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4, TEMP LIGHTING
- 3-1/2" x 2" AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- GROUND ROD 5/8" DIA. x 10'
- COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED.
- TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
- TEMPORARY VIDEO DETECTOR
- BARRIER WALL MARKERS, TYPE C
- TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED.
- TYPE III BARRICADE
- DRUM WITH STEADY BURN BIDIRECTIONAL LIGHT
- EXPANSION JOINT RECONSTRUCTION AREA

NOTES:

- BARRIER WALL MARKERS AT 25' CTS SEE STANDARD 635011
- TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED
- ADVANCE WARNING SIGNS & TRAFFIC CONTROL ON IL 176 SHALL BE ACCORDING TO STANDARD 701316 EXCEPT AS SHOWN, COST INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
- ANY ADJUSTMENTS TO THE TEMPORARY TRAFFIC SIGNAL HEADS, EVP AND VIDEO DETECTION FOR STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL NOTES:

1. CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
2. UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
3. THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED
4. THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE, DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
5. THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
6. WHERE THERE IS NO CURB PRESENT, THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
7. EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
8. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
9. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.
10. ANY TREE TRIMMING NECESSARY TO SET UP THE TEMPORARY TRAFFIC LIGHTING WILL BE COVERED UNDER THE SPECIAL PROVISION "PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE."

- CLOSE PATH PER STD. 701801
- WET REFLECTIVE TEMPORARY TAPE, TYPE III, WHITE 4"
- WET REFLECTIVE TEMPORARY TAPE, TYPE III, DOUBLE YELLOW, 4"
- WET REFLECTIVE TEMPORARY TAPE, TYPE III, WHITE 24" STOP BAR

THE CONTRACTOR SHALL VERIFY THE ELECTRICAL SERVICE LOCATION WITH ComEd PRIOR TO DOING ANY WORK.

FILE NAME =	USER NAME = pyzranowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE 1 TRAFFIC CONTROL (SHEET 1 OF 2) IL 176 (PARK AVE.) OVER DES PLAINES RIVER</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pwork\pwork\pyzranowskirb\d030844	D143112-sht-plan.dgn	DRAWN -	REVISED -			1238	P-2-1-1(12)	LAKE	25	11	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			<b>CONTRACT NO. 60777</b>					
	PLOT DATE = 2/11/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

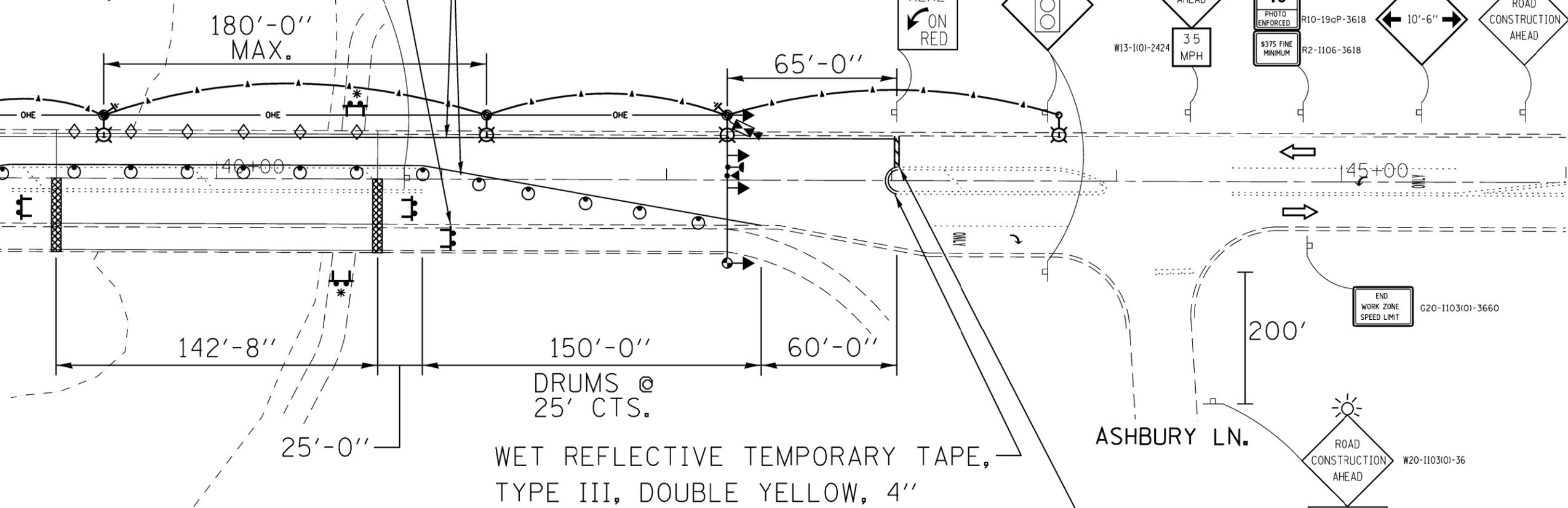
IL. RTE. 176  
(PARK AVE.)



CLOSE PATH PER STD. 701801  
WET REFLECTIVE TEMPORARY  
TAPE, TYPE III, WHITE 4"

500'-0" 500'-0" 250' 250' 500'-0"

MATCHLINE STA. 39+00



**LEGEND**

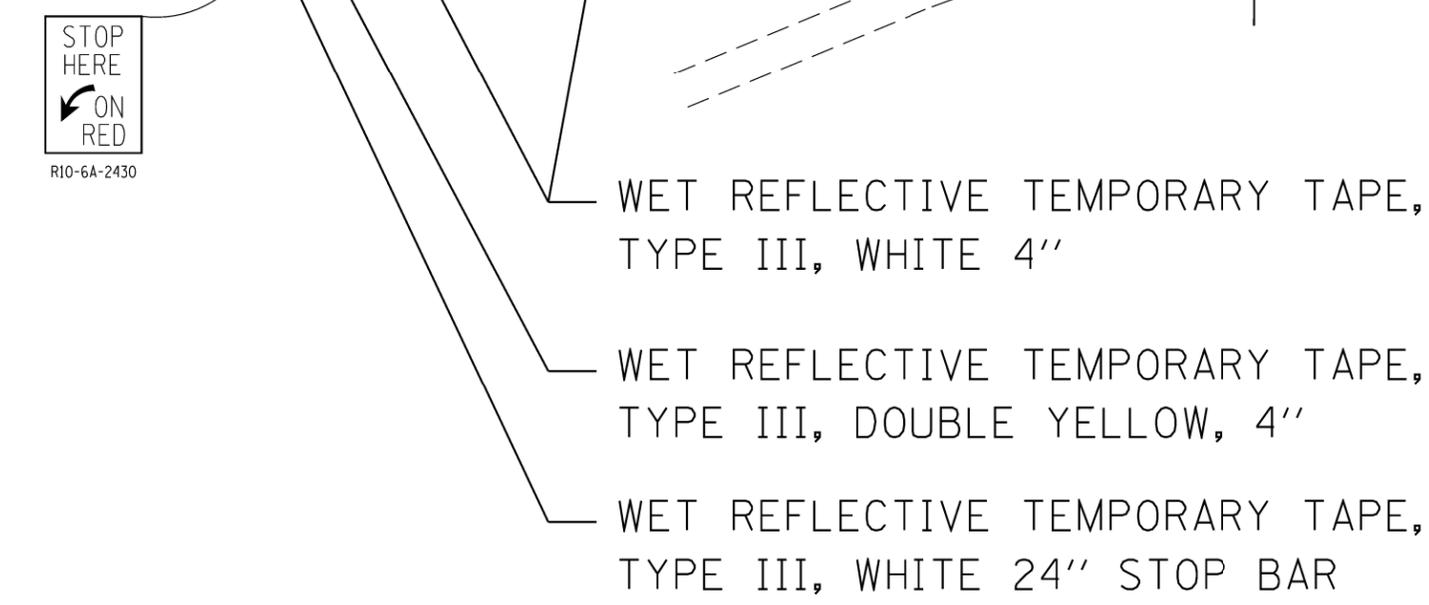
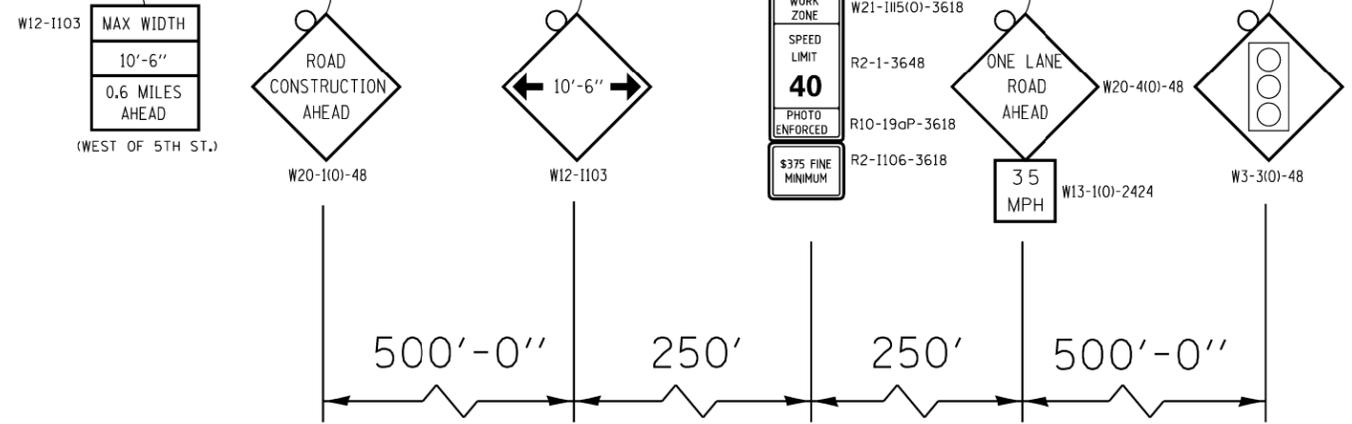
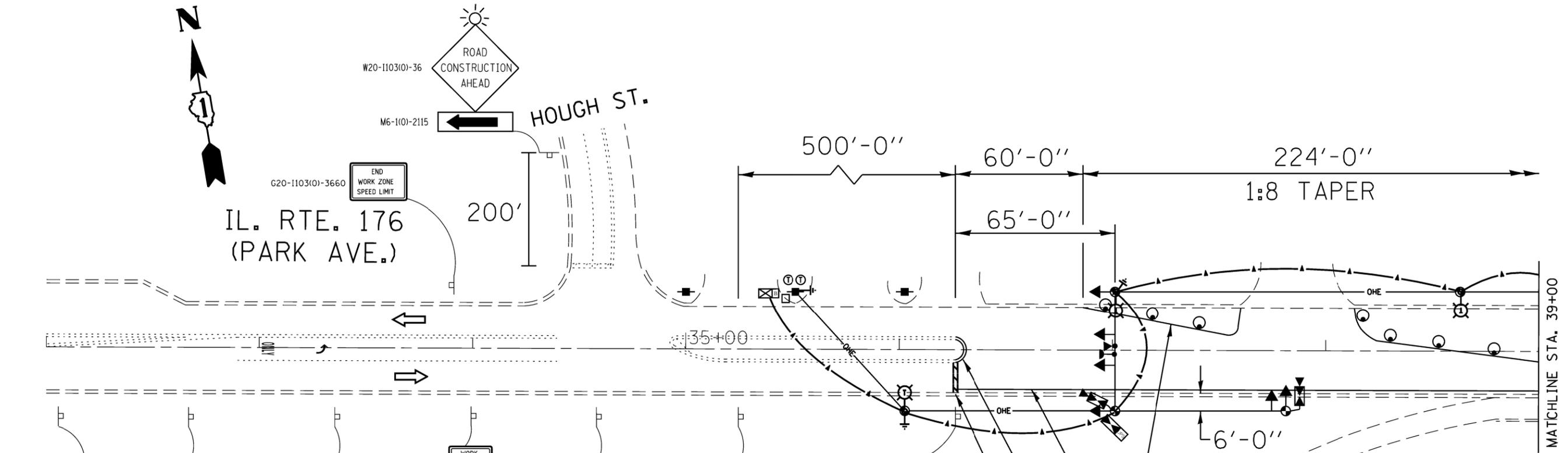
SEE STAGE 1 (SHEET 1 OF 2)

**NOTES:**

- BARRIER WALL MARKERS AT 25' CTS  
SEE STANDARD 635011
- TYPE III BARRICADES TO BE PLACED WHEN NO  
WORK IS BEING PERFORMED
- ADVANCE WARNING SIGNS & TRAFFIC CONTROL ON IL 176  
SHALL BE ACCORDING TO STANDARD 701316 EXCEPT AS SHOWN.  
COST INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
- ANY ADJUSTMENTS TO THE TEMPORARY TRAFFIC SIGNAL HEADS,  
EVP AND VIDEO DETECTION FOR STAGING IS THE RESPONSIBILITY  
OF THE CONTRACTOR.

\* PATH BENEATH BRIDGE SHALL BE CLOSED WHEN WORK  
IS OCCURRING BELOW THE BRIDGE THAT MAY BE DEEMED  
HAZARDOUS BY THE ENGINEER TO PEDESTRIANS BELOW  
THE BRIDGE. CLOSURES MAY ONLY OCCUR SUNDAY  
THROUGH THURSDAY NIGHTS BETWEEN SUNSET AND  
6:30AM.

FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE 1 TRAFFIC CONTROL (SHEET 2 OF 2) IL 176 (PARK AVE.) OVER DES PLAINES RIVER</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p\idot\pyrzanowskirb\d030844	D143112-sht-plan.dgn	DRAWN -	REVISED -			1238	P-2-1-1(12)	LAKE	25	12	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			<b>CONTRACT NO. 60T77</b>					
	PLOT DATE = 2/11/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



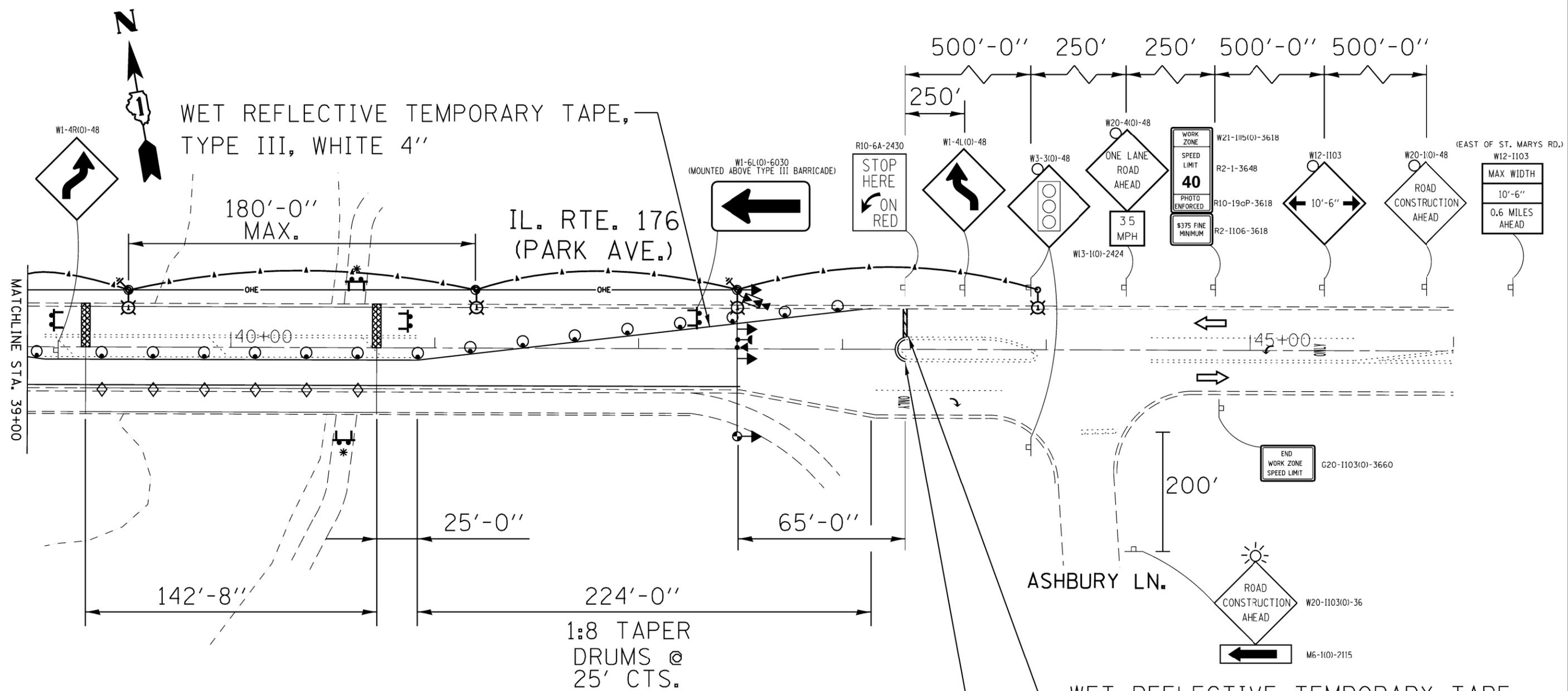
**LEGEND**

SEE STAGE 1 (SHEET 1 OF 2)

**NOTES:**

- BARRIER WALL MARKERS AT 25' CTS  
SEE STANDARD 635011
- TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED
- ADVANCE WARNING SIGNS & TRAFFIC CONTROL ON IL 176 SHALL BE ACCORDING TO STANDARD 701316 EXCEPT AS SHOWN. COST INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
- ANY ADJUSTMENTS TO THE TEMPORARY TRAFFIC SIGNAL HEADS, EVP AND VIDEO DETECTION FOR STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR.

FILE NAME =	USER NAME = pyzranowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE 2 TRAFFIC CONTROL (SHEET 1 OF 2) IL 176 (PARK AVE.) OVER DES PLAINES RIVER</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p1dot\pyzranowskirb\d030844	ND143112-sht-plan.dgn	DRAWN -	REVISED -			1238	P-2-1-1(12)	LAKE	25	13	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			<b>CONTRACT NO. 60T77</b>					
	PLOT DATE = 2/11/2014	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO



**LEGEND**

SEE STAGE 1 (SHEET 1 OF 2)

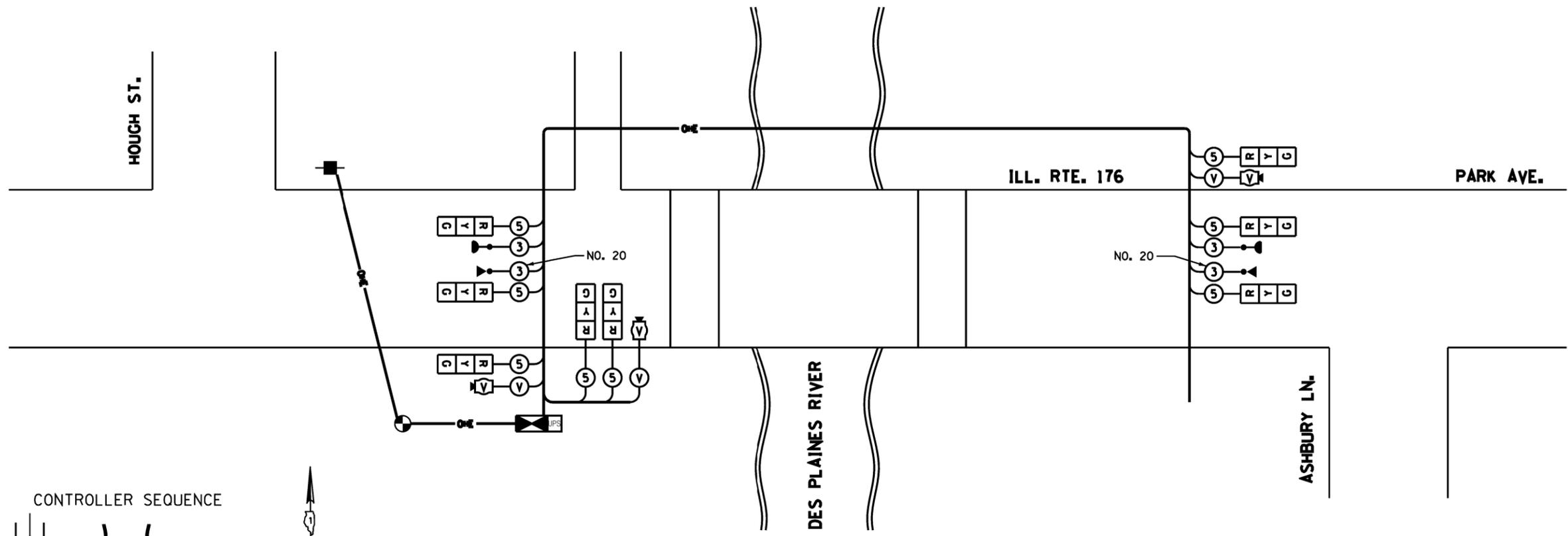
**NOTES:**

- BARRIER WALL MARKERS AT 25' CTS SEE STANDARD 635011
- TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED
- ADVANCE WARNING SIGNS & TRAFFIC CONTROL ON IL 176 SHALL BE ACCORDING TO STANDARD 701316 EXCEPT AS SHOWN. COST INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".
- ANY ADJUSTMENTS TO THE TEMPORARY TRAFFIC SIGNAL HEADS, EVP AND VIDEO DETECTION FOR STAGING IS THE RESPONSIBILITY OF THE CONTRACTOR.

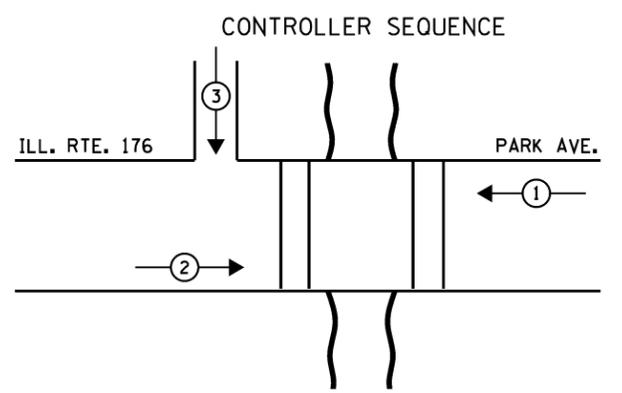
WET REFLECTIVE TEMPORARY TAPE, TYPE III, WHITE 24" STOP BAR  
 WET REFLECTIVE TEMPORARY TAPE, TYPE III, DOUBLE YELLOW, 4"

\* PATH BENEATH BRIDGE SHALL BE CLOSED WHEN WORK IS OCCURING BELOW THE BRIDGE THAT MAY BE DEEMED HAZARDOUS BY THE ENGINEER TO PEDESTRIANS BELOW THE BRIDGE. CLOSURES MAY ONLY OCCUR SUNDAY THROUGH THURSDAY NIGHTS BETWEEN SUNSET AND 6:30AM.

FILE NAME =	USER NAME = pyrzenowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE 2 TRAFFIC CONTROL (SHEET 2 OF 2) IL 176 (PARK AVE.) OVER DES PLAINES RIVER</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\p\idot\pyrzenowskirb\d030844	ND143112-sht-plan.dgn	DRAWN -	REVISED -			1238	P-2-1-1(12)	LAKE	25	14	
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			<b>CONTRACT NO. 60T77</b>					
	PLOT DATE = 2/11/2014	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



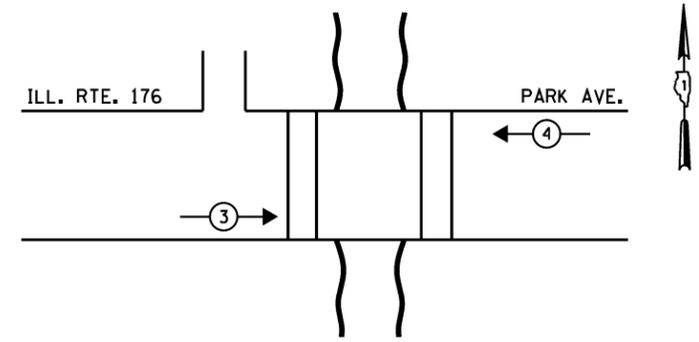
**TEMPORARY BRIDGE TRAFFIC SIGNAL  
CABLE PLAN - STAGE 1 & 2**  
(SEE STAGING PLANS FOR HEAD LOCATIONS)



TEMPORARY PHASE DESIGNATION DIAGRAM

- LEGEND**
- ← (⊙) → DUAL ENTRY PHASE
  - ← (⊙) → SINGLE ENTRY PHASE
  - ◊ O.L. OVERLAP
  - ← (⊙) → PEDESTRIAN PHASE
  - \* NUMBER REFERS TO ASSOCIATED PHASE

**TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE**



- GENERAL NOTES:**
- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
  - UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
  - THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED.
  - THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED.
  - THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
  - THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL, THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
  - EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
  - THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
  - ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.
  - ANY TREE TRIMMING NECESSARY TO SET UP THE TEMPORARY TRAFFIC LIGHTING WILL BE COVERED UNDER THE SPECIAL PROVISION "PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE."

TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	→	←

**CONTRACTOR SHALL COORDINATE WITH THE LIBERTYVILLE FIRE DEPARTMENT FOR EVP INSTALLATION**

**CONTRACTOR SHALL COORDINATE WITH ComEd. FOR ELECTRIC SERVICE INSTALLATION**

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	8	135	17	0.50	68
(YELLOW)	8	135	25	0.25	50
(GREEN)	8	135	15	0.25	30
ARROW		135	12	0.10	
PED. SIGNAL		90	25	1.00	
CONTROLLER	2	100	100	1.00	200
ILLUM. SIGN				0.05	
VIDEO SYSTEM	2	150		1.00	300
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	648

ILLINOIS DEPARTMENT OF TRANSPORTATION  
201 WEST CENTER COURT  
SCHAMBURG, ILLINOIS 60196-1096

ENERGY SUPPLY CONTACT: JOE HURLEY  
PHONE: (847) 816-5503  
COMPANY: COMED

FILE NAME: ct:\pwr\work\pwr\dot\pwrzenowskirb\d030844	USER NAME: pwrzenowskirb	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CABLE PLAN, TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE, AND TEMPORARY PHASE DESIGNATION DIAGRAM ILL 176 (PARK AVE.) OVER DES PLAINES RIVER	F.A.U. RTE.: 1238	SECTION: P-2-1-1(12)	COUNTY: LAKE	TOTAL SHEETS: 25	SHEET NO.: 15		
Default	PLOT SCALE: 100.0000' / in.	CHECKED: -	REVISED: -			SCALE: SHEET OF SHEETS STA. TO STA.	CONTRACT NO. 60777					
	PLOT DATE: 2/11/2014	DATE: -	REVISED: -			ILLINOIS FED. AID PROJECT						

IL. RTE. 176  
(PARK AVE.)

HOUGH ST.

PROP. THPL. PYMT. MK.  
LINE 12", YELLOW DIAGONALS

35+00

PROP. THPL. PYMT. MK.  
LINE 4", DOUBLE YELLOW

MATCHLINE STA. 39+00



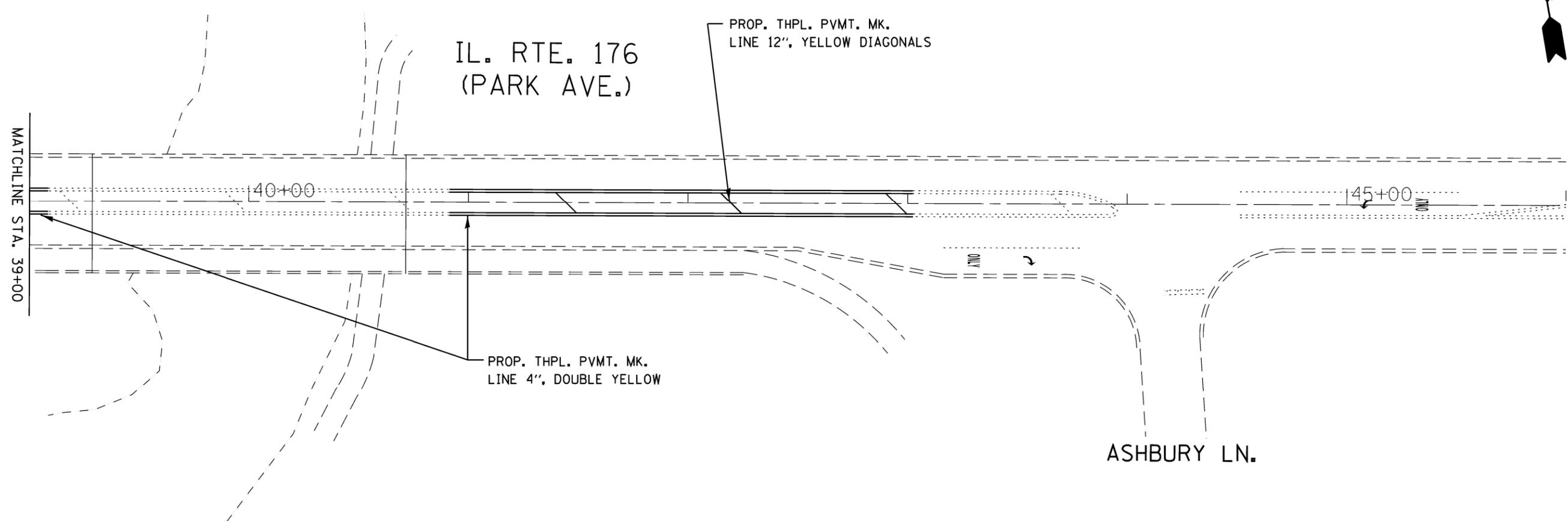
FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -
ct:\pwork\pwork\pyrzanowskirb\030844	D143112-sht-plan.dgn	DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/11/2014	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED PAVEMENT MARKING PLANS (SHEET 1 OF 2)  
IL 176 (PARK AVE.) OVER DES PLAINES RIVER

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-1(12)	LAKE	25	16
CONTRACT NO. 60T77				
ILLINOIS FED. AID PROJECT				

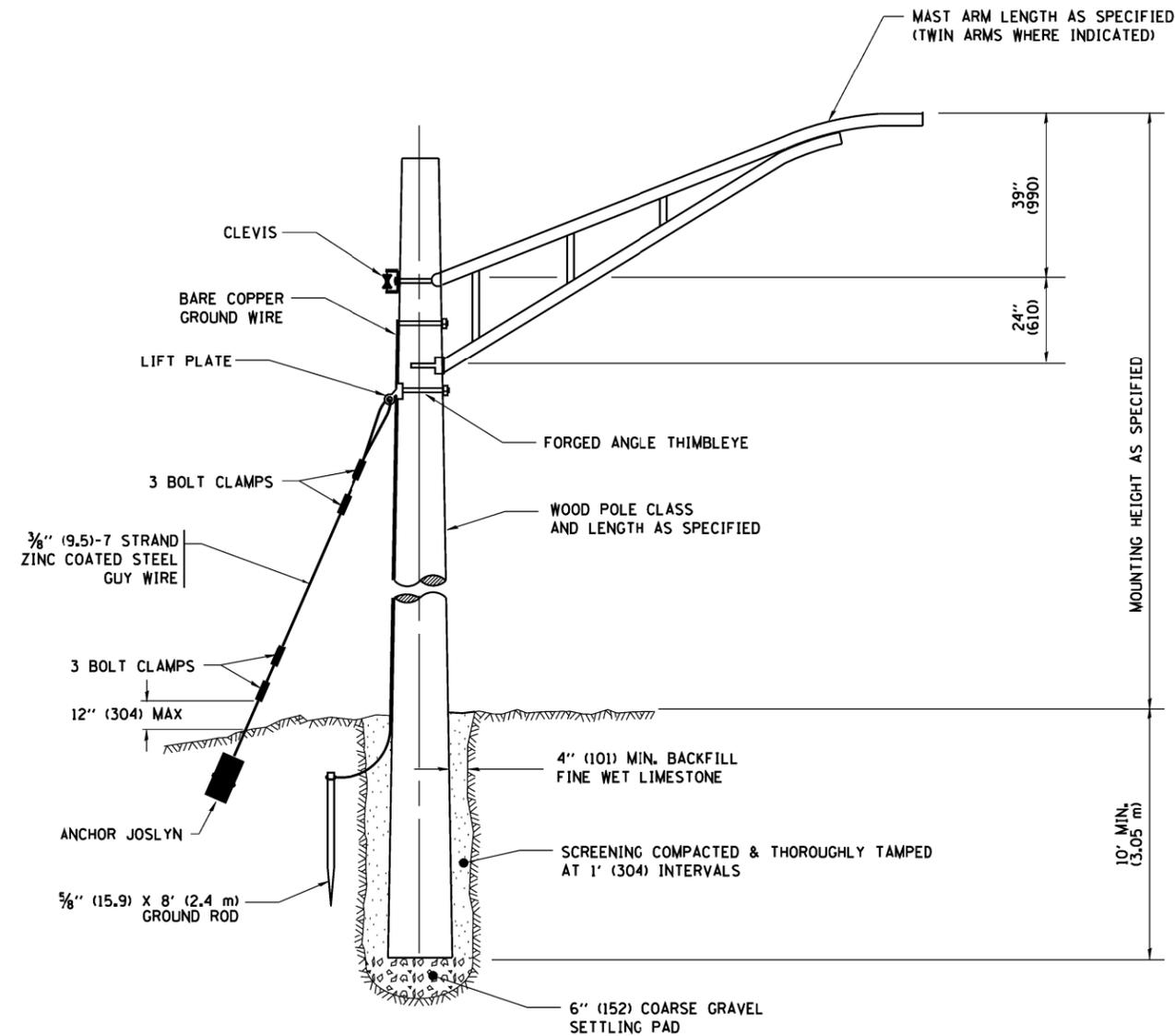


FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -
ct:\pw\work\p\dot\pyrzanowskirb\d030844	D143112-sht-plan.dgn	DRAWN -	REVISED -
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/11/2014	DATE -	REVISED -

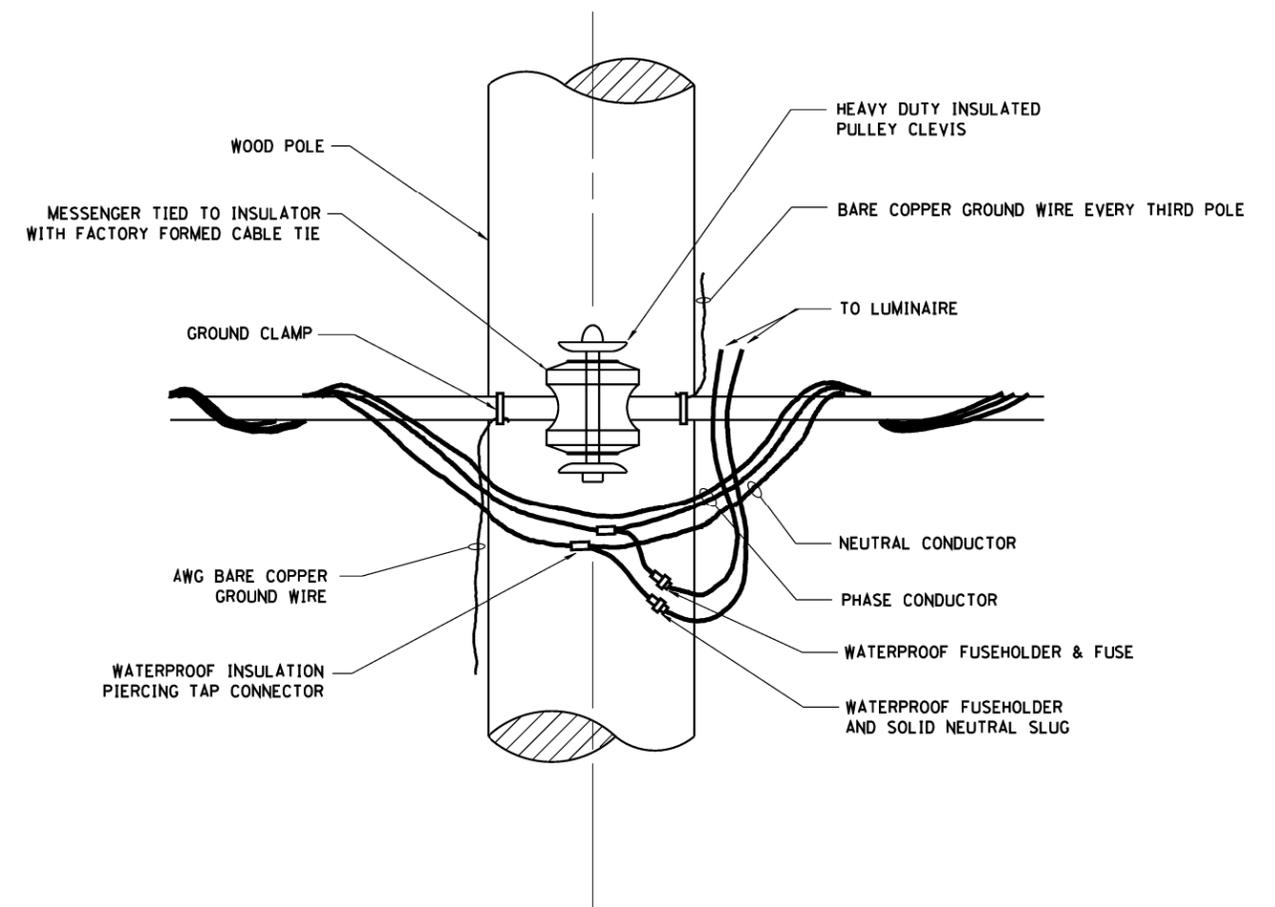
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PROPOSED PAVEMENT MARKING PLANS (SHEET 2 OF 2)  
IL 176 (PARK AVE.) OVER DES PLAINES RIVER**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-1(12)	LAKE	25	17
<b>CONTRACT NO. 60T77</b>				
ILLINOIS FED. AID PROJECT				



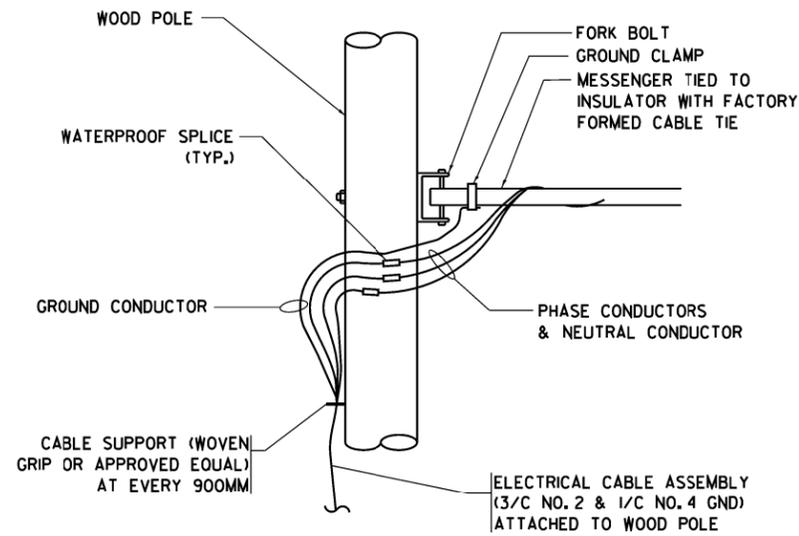
**TEMPORARY LIGHT POLE DETAIL**



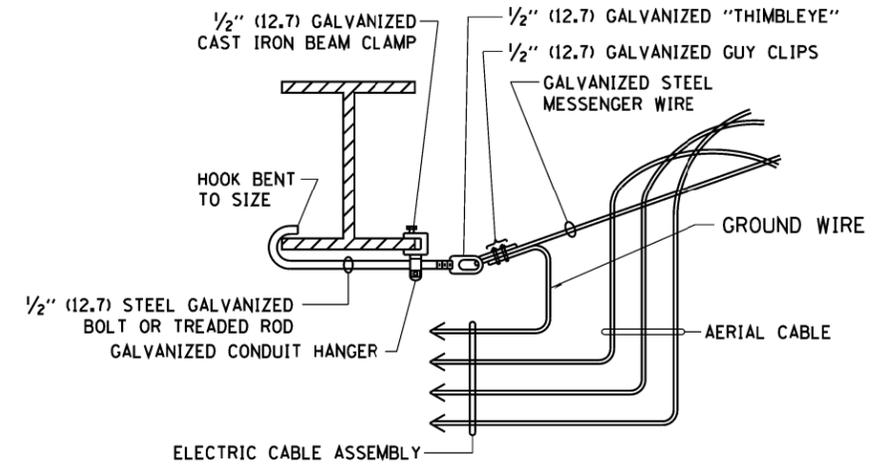
**TEMPORARY LIGHT POLE ATTACHMENT DETAIL**

**NOTES:**  
 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

FILE NAME =	USER NAME = pyzzenowskirb	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY LIGHT POLE DETAILS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\pwork\pyzzenowskirb\d030844	ND143112-sht-plan.dgn	DRAWN -	REVISED -		1238	P-2-1-(112)	LAKE	25	18			
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -		BE-800		CONTRACT NO. 60T77					
	PLOT DATE = 2/11/2014	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



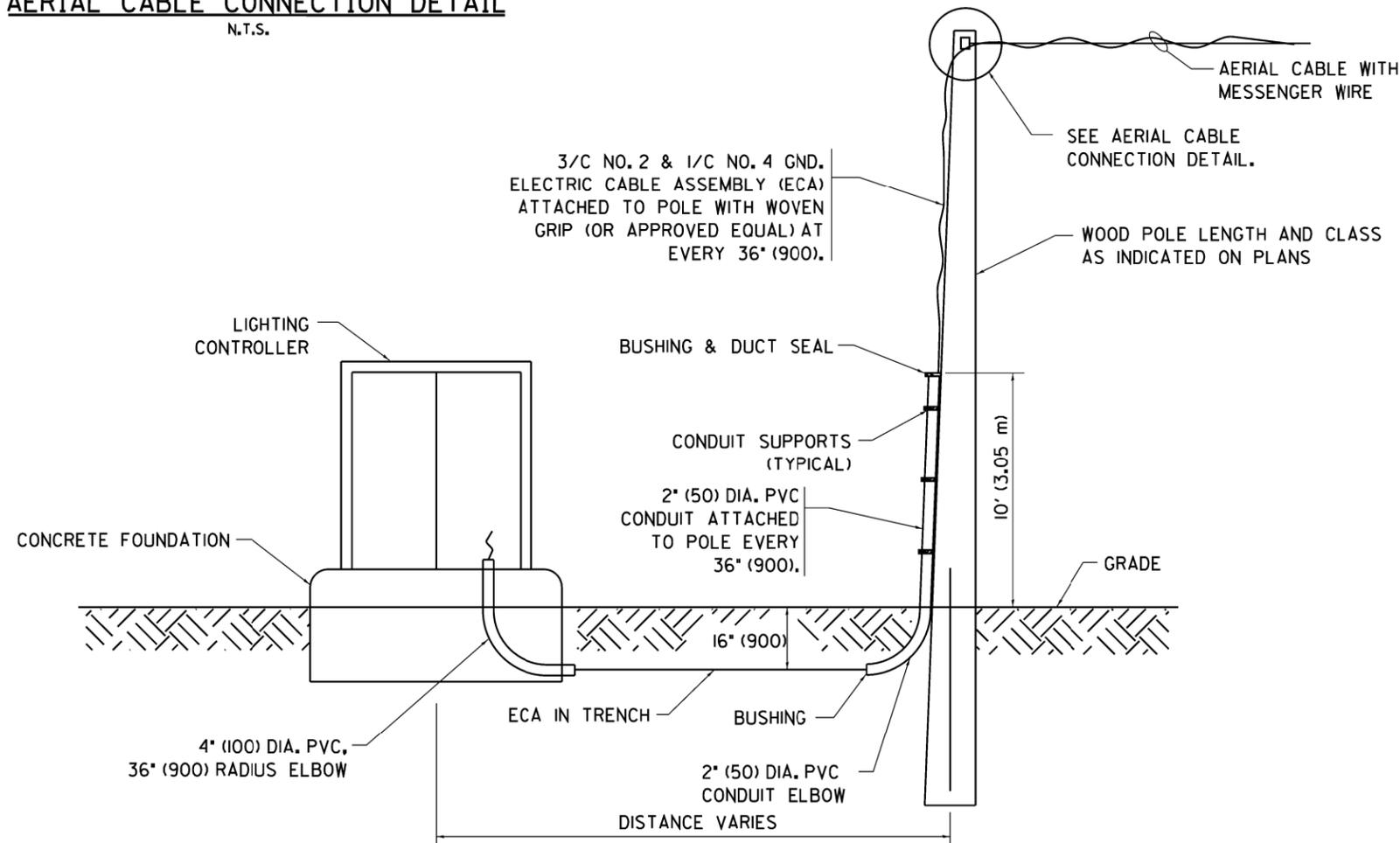
**AERIAL CABLE CONNECTION DETAIL**  
N.T.S.



**AERIAL CABLE ATTACHED TO STRUCTURE**  
NOT TO SCALE

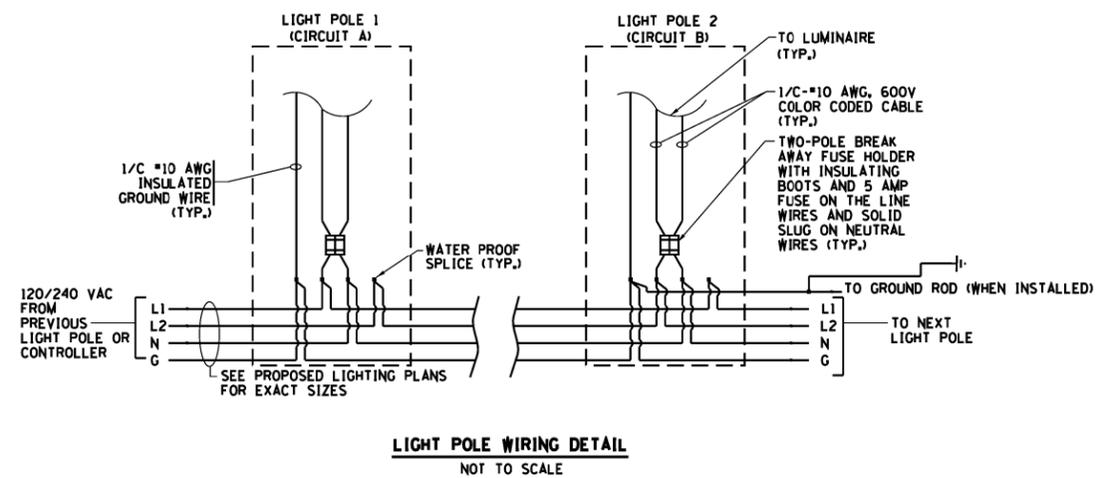
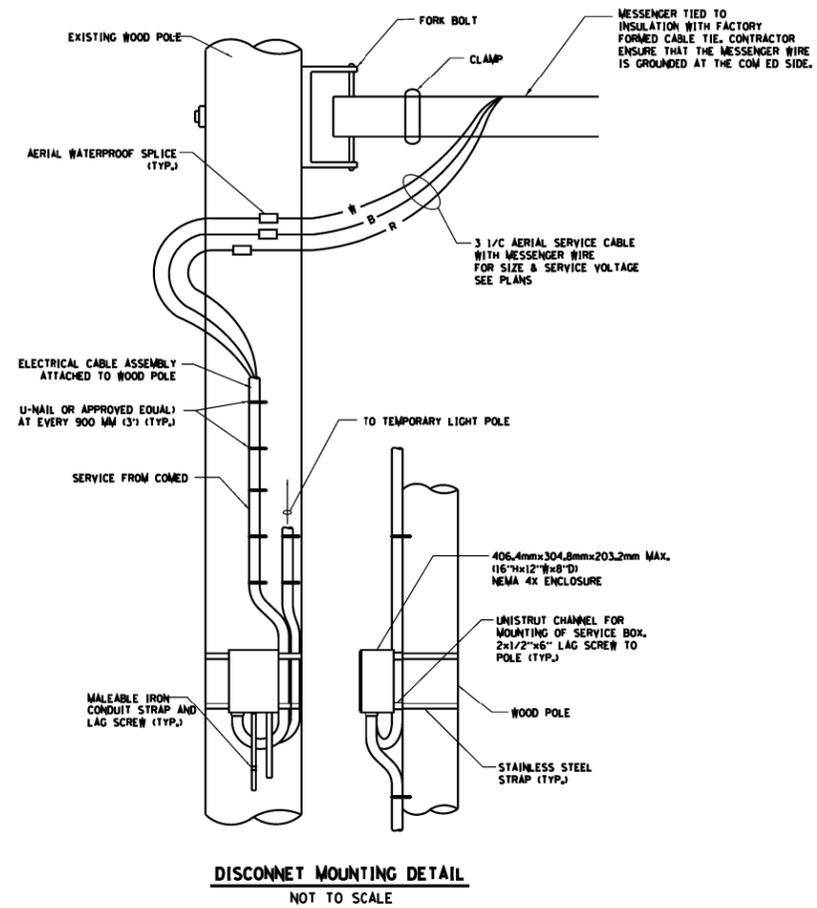
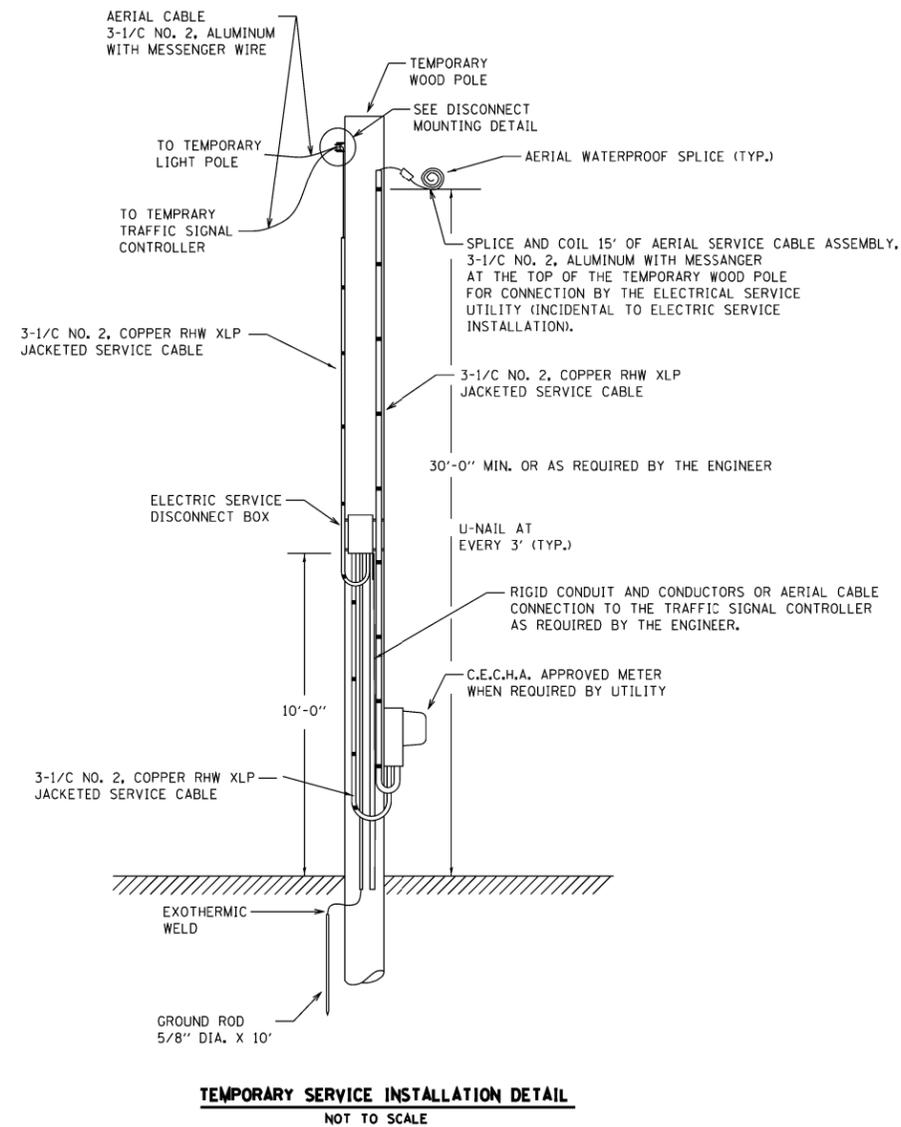
**NOTES:**

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.



**WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL**  
N.T.S.

FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED - 08-08-03	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY AERIAL CABLE INSTALLATION</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pwork\pwork\pyrzanowskirb\030844	ND143112-sht-plan.dgn	DRAWN -	REVISED -					1238	P-2-1-(112)	LAKE	25	19
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -		<b>BE-801</b>			<b>CONTRACT NO. 60T77</b>				
	PLOT DATE = 2/11/2014	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



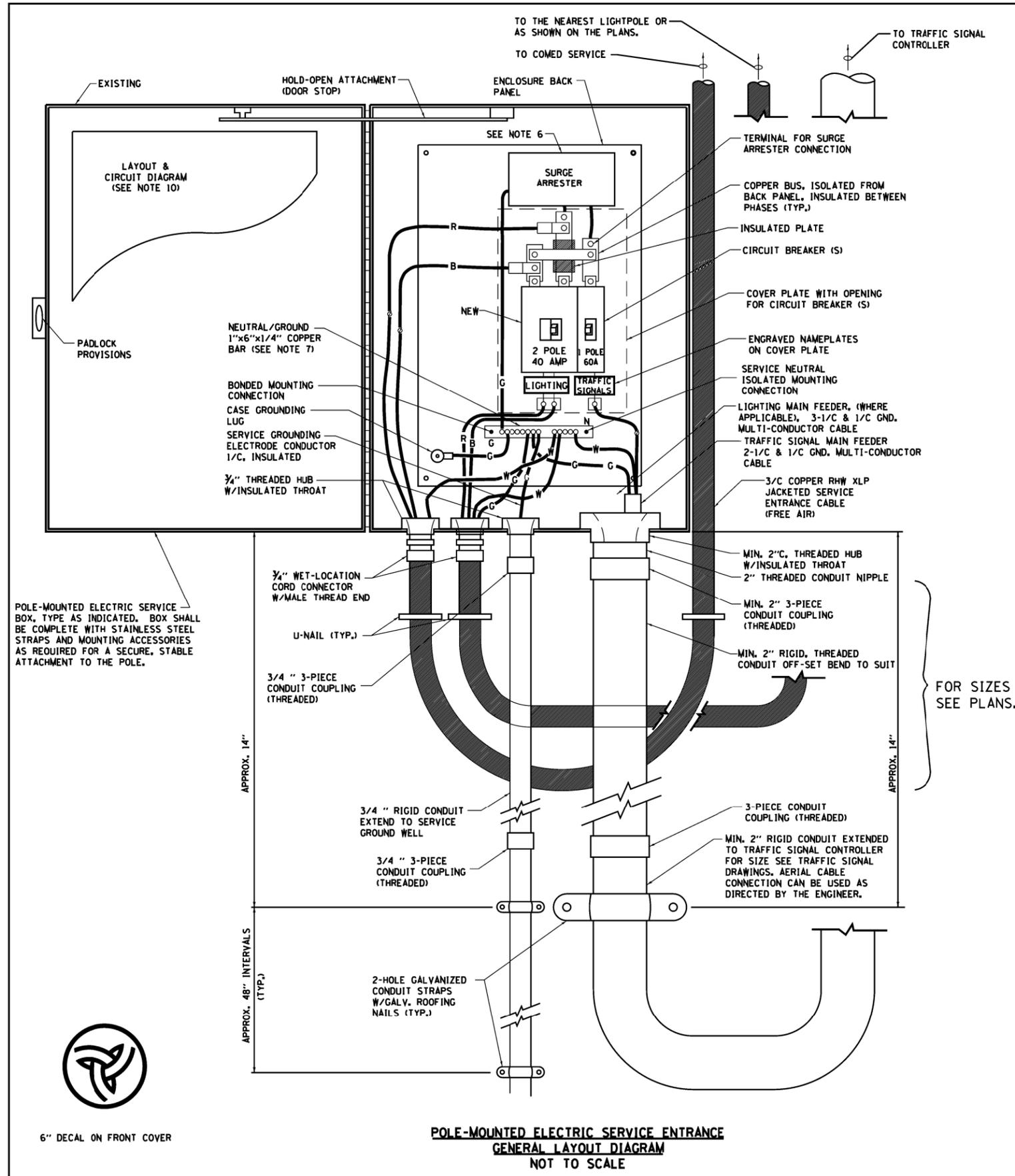
FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED -
ct:\pwork\pwork\pyrzanowskirb\d030844	ND143112-sht-plan.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1in.	CHECKED -	REVISED -
	PLOT DATE = 2/11/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY SERVICE INSTALLATION AND LIGHT POLE WIRING  
DETAIL**

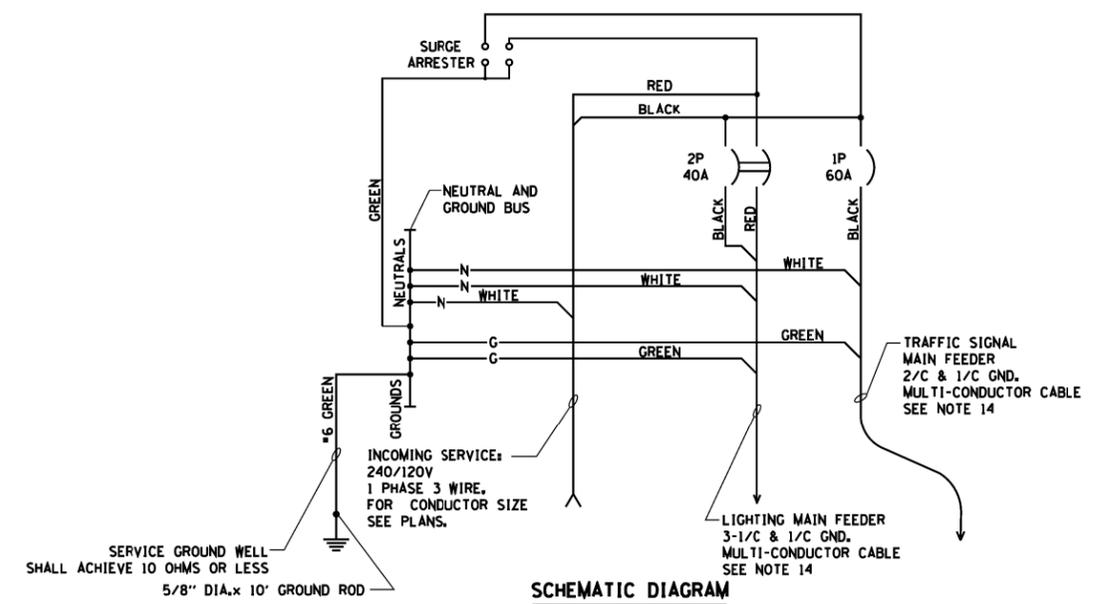
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
--------	-----------	----	--------	------	---------

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-(112)	LAKE	25	20
<b>CONTRACT NO. 60777</b>				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



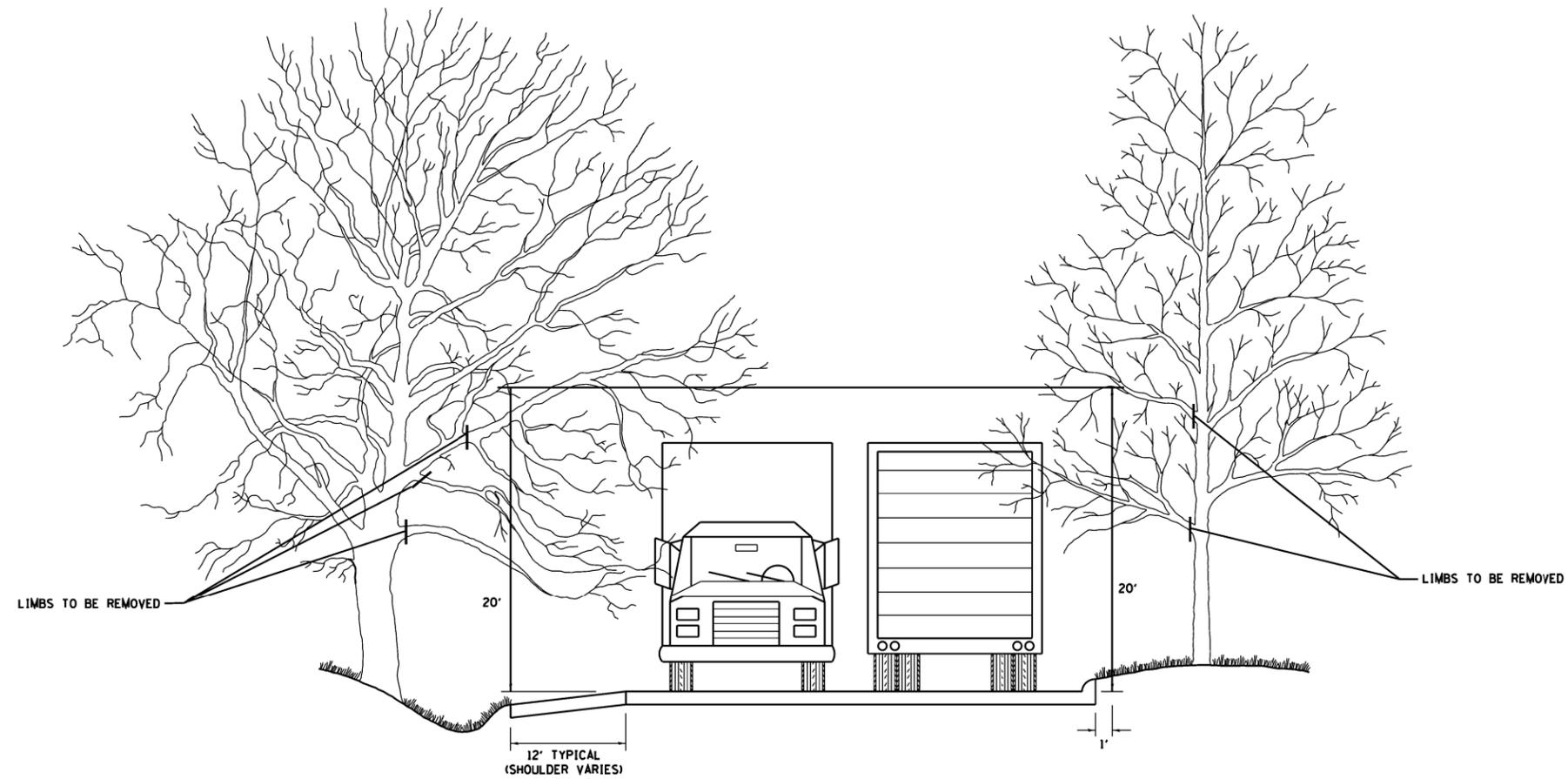
**NOTES:**

1. ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
2. THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGNALS MAIN BREAKER AS REQUIRED.
3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H120856LP/A-16 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
5. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
6. THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CM0V230L065XST OR APPROVED EQUAL.
7. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
8. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
9. THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
10. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
11. A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
12. LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



**POLE-MOUNTED ELECTRIC SERVICE ENTRANCE  
GENERAL LAYOUT DIAGRAM  
NOT TO SCALE**

FILE NAME =	USER NAME = pyzzenowskirb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>COMBINATION LIGHTING &amp; TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX DETAIL</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pwork\pwork\pyzzenowskirb\d030844	ND143112-sht-plan.dgn	DRAWN -	REVISED -			1238	P-2-1-1(12)	LAKE	25	21	
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -			<b>CONTRACT NO. 60777</b>					
	PLOT DATE = 2/11/2014	DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
					SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.		

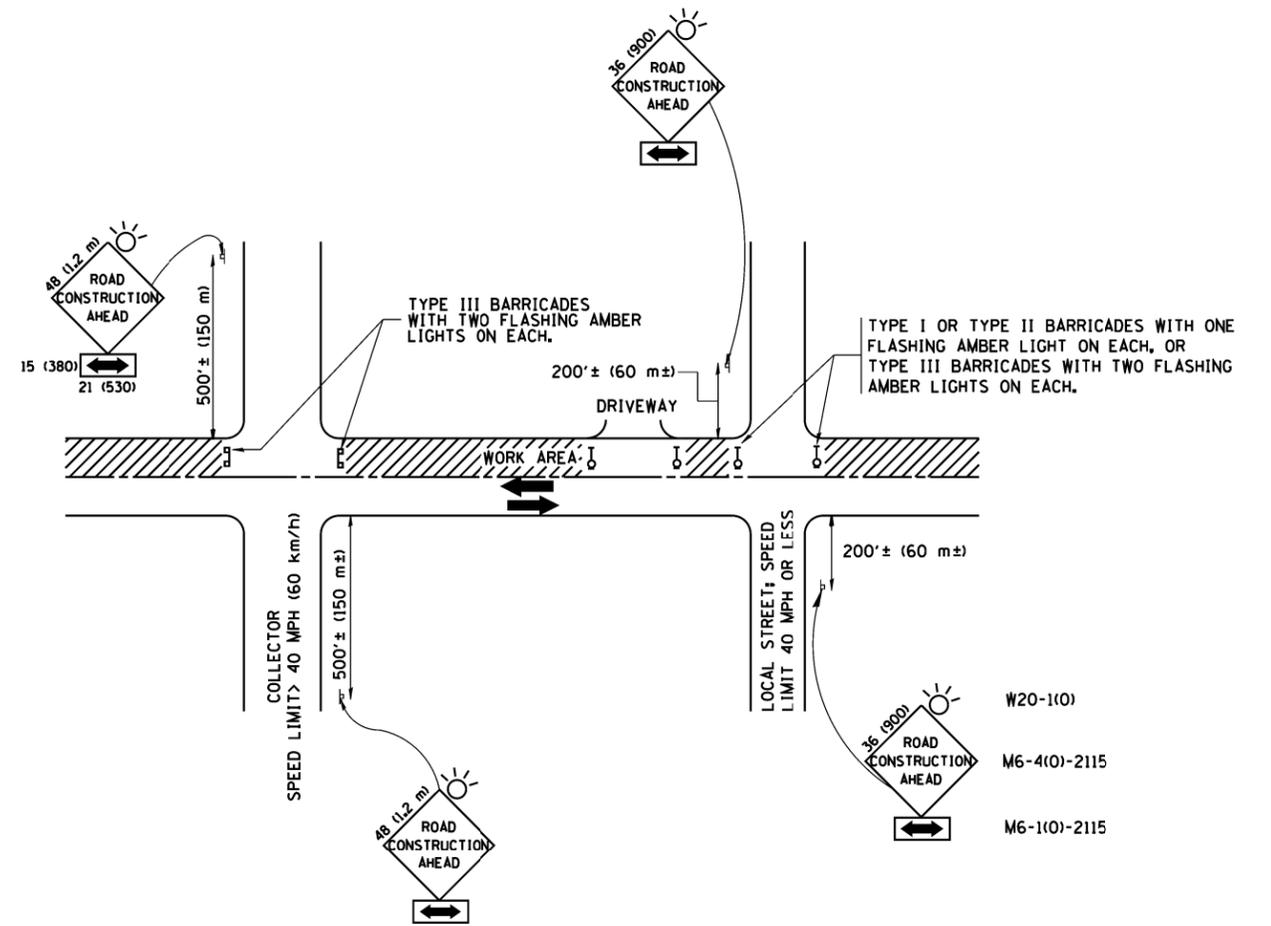


FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED -	REVISED - R. BORO 10-31-06
ct:\pwork\pwork\pyrzanowskirb\030844	D143112-sht.pln.dgn	DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/11/2014	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-1(12)	LAKE	25	22
BM-20			<b>CONTRACT NO. 60T77</b>	
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT				



**TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

**NOTES:**

**A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

**B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

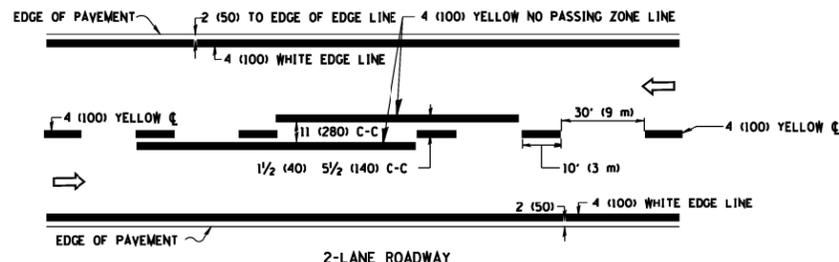
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = pyrzanowski	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
ct:\pwork\pwork\pyrzanowski\030844	ND143112-sht-plan.dgn	DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 2/11/2014	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

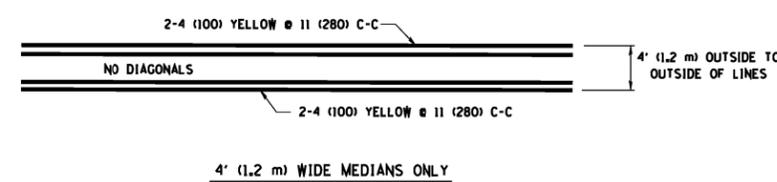
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

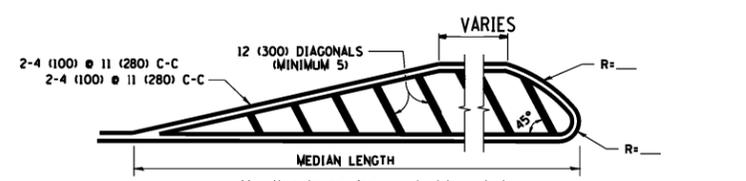
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-(12)	LAKE	25	23
TC-10			CONTRACT NO. 60777	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



2-LANE ROADWAY

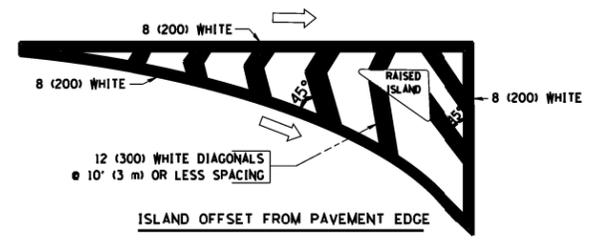


4' (1.2 m) WIDE MEDIANS ONLY

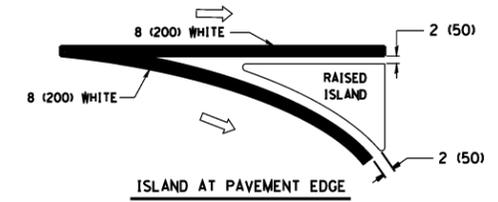


MEDIANS OVER 4' (1.2 m) WIDE

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

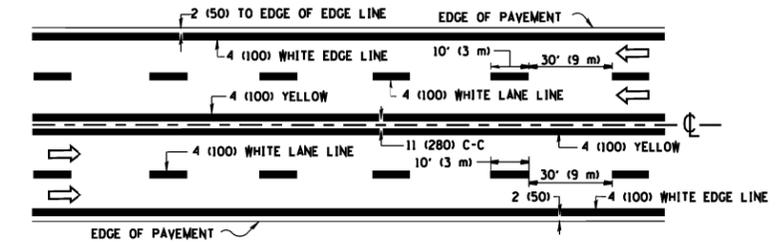


ISLAND OFFSET FROM PAVEMENT EDGE

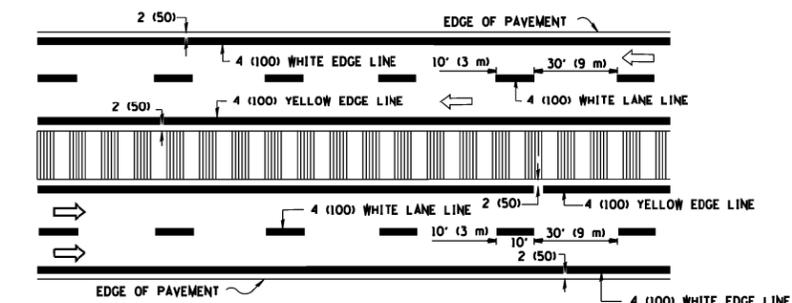


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

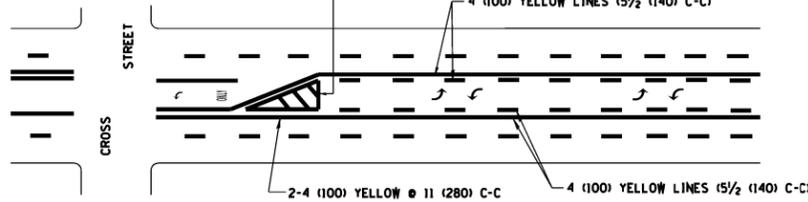


MULTI-LANE UNDIVIDED

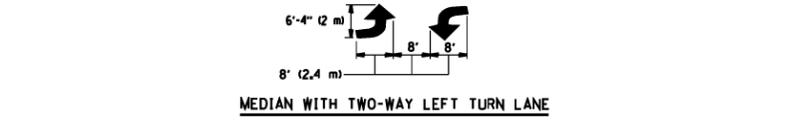


MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

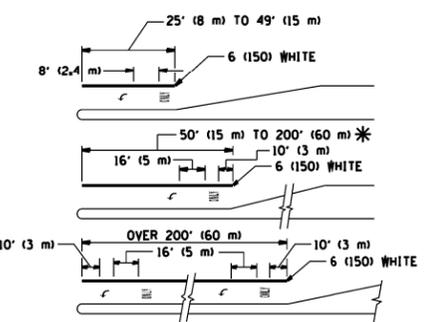


TYPICAL PAINTED MEDIAN MARKING



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL LEFT (OR RIGHT) TURN LANE



TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100)	SKIP-DASH	WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
LANE LINES ON FREEWAYS	5 (125)	SKIP-DASH	WHITE	
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW. EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE. SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID	WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW WHITE	11 (280) C-C FOR THE DOUBLE LINE. SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES "RR" 15' (4.5 m) MIN. LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R": 3.6 SQ. FT. (0.33 m²) EACH "X": 54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

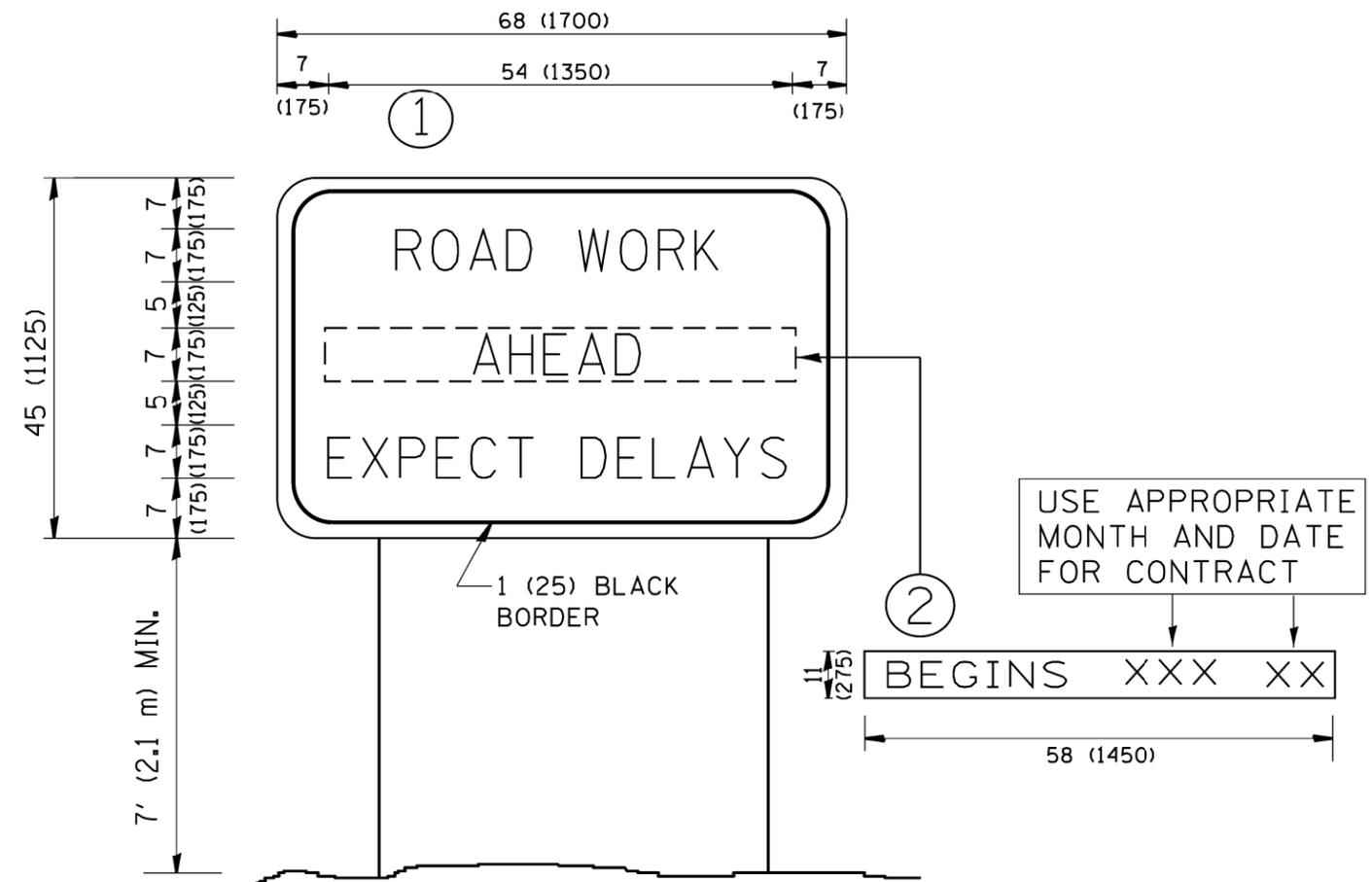
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = pyrzanowskirb	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
ct:\pwork\pwork\pyrzanowskirb\d030844	ND143112-sht-plan.dgn	DRAWN -	REVISED - C. JUCIUS 09-09-09
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 2/11/2014	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-1(12)	LAKE	25	24
TC-13		CONTRACT NO. 60777		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = pyzzenowskirb	DESIGNED -	REVISED - R. MIRS 09-15-97
ct:\pwork\pwork\pyzzenowskirb\d030844	D143112-sht-plan.dgn	DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 2/11/2014	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1238	P-2-1-(112)	LAKE	25	25
TC-22		<b>CONTRACT NO. 60T77</b>		
FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT				