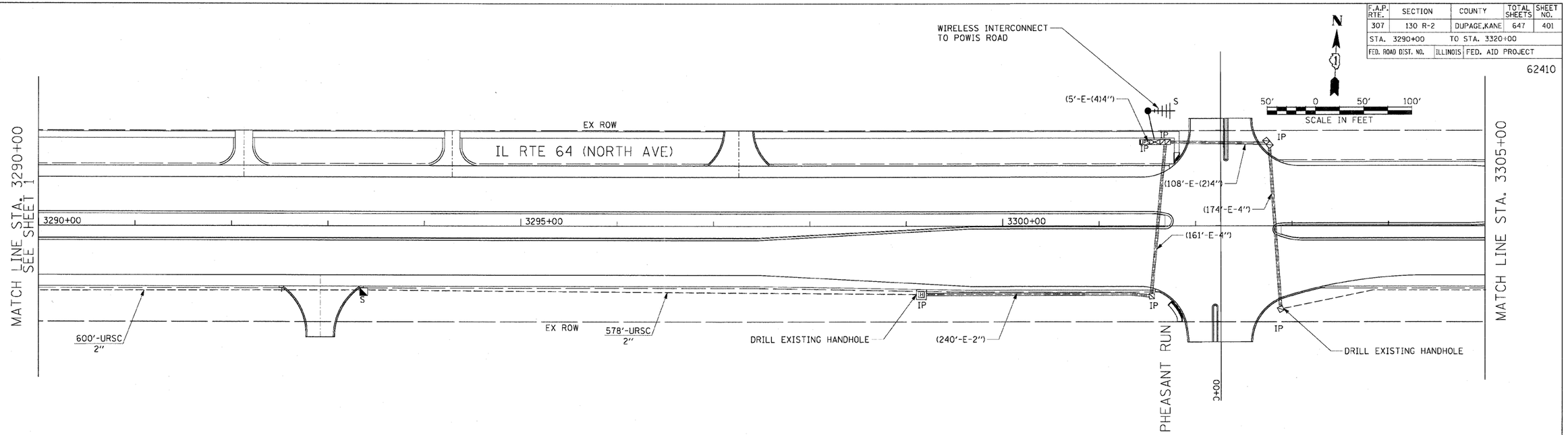
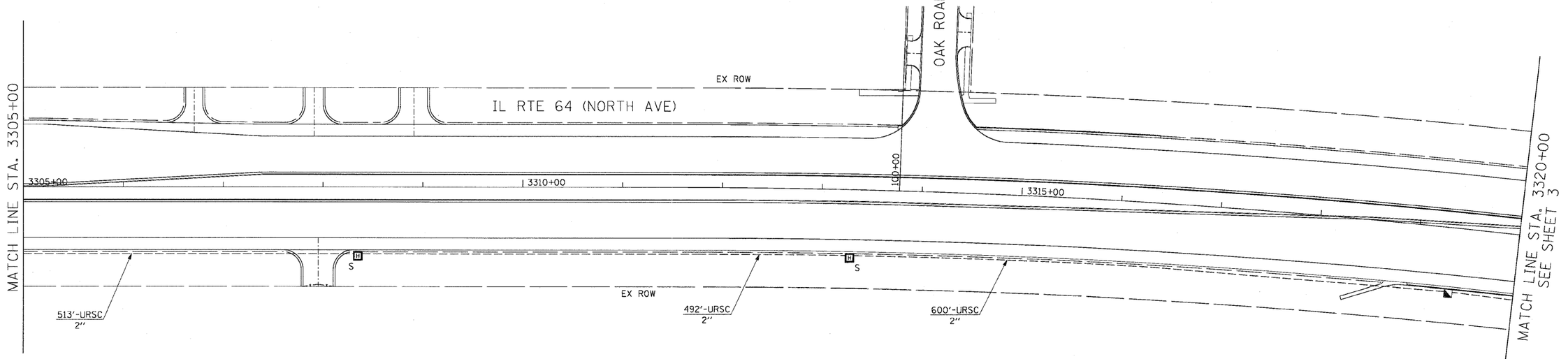
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	401
STA. 3290+00		TO STA. 3320+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUDNATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACE SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

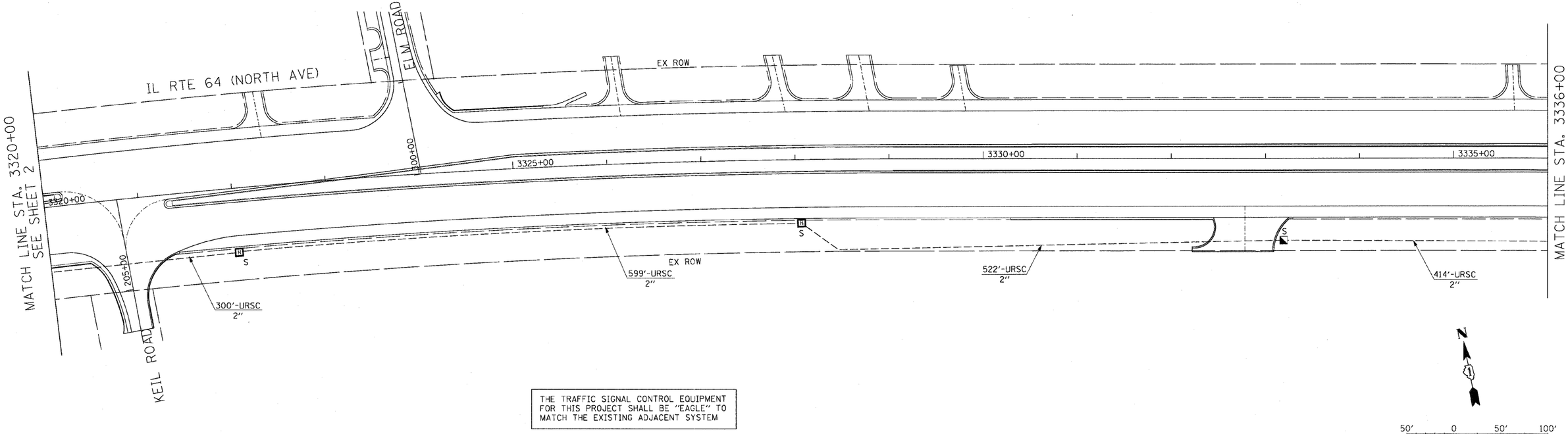
INTERCONNECT PLAN
IL ROUTE 64 (NORTH AVE)
FROM 38TH AVE TO POWIS RD

SCALE: 1"=50'
DATE: NOVEMBER 1, 2011

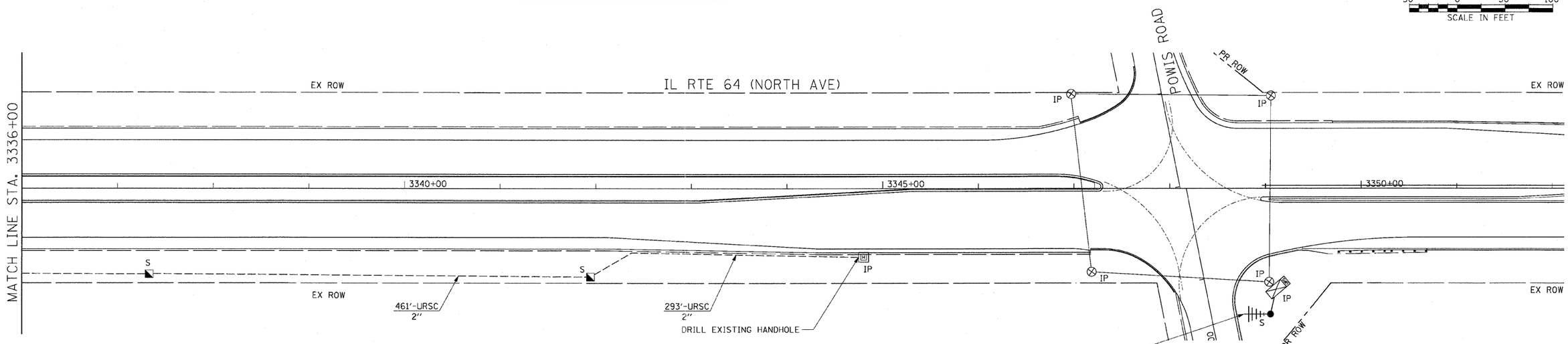
DRAWN BY: JS
DESIGNED BY: JS
CHECKED BY: WP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	402
STA. 3320+00		TO STA. 3344+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUDNATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACE SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

AECOM

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

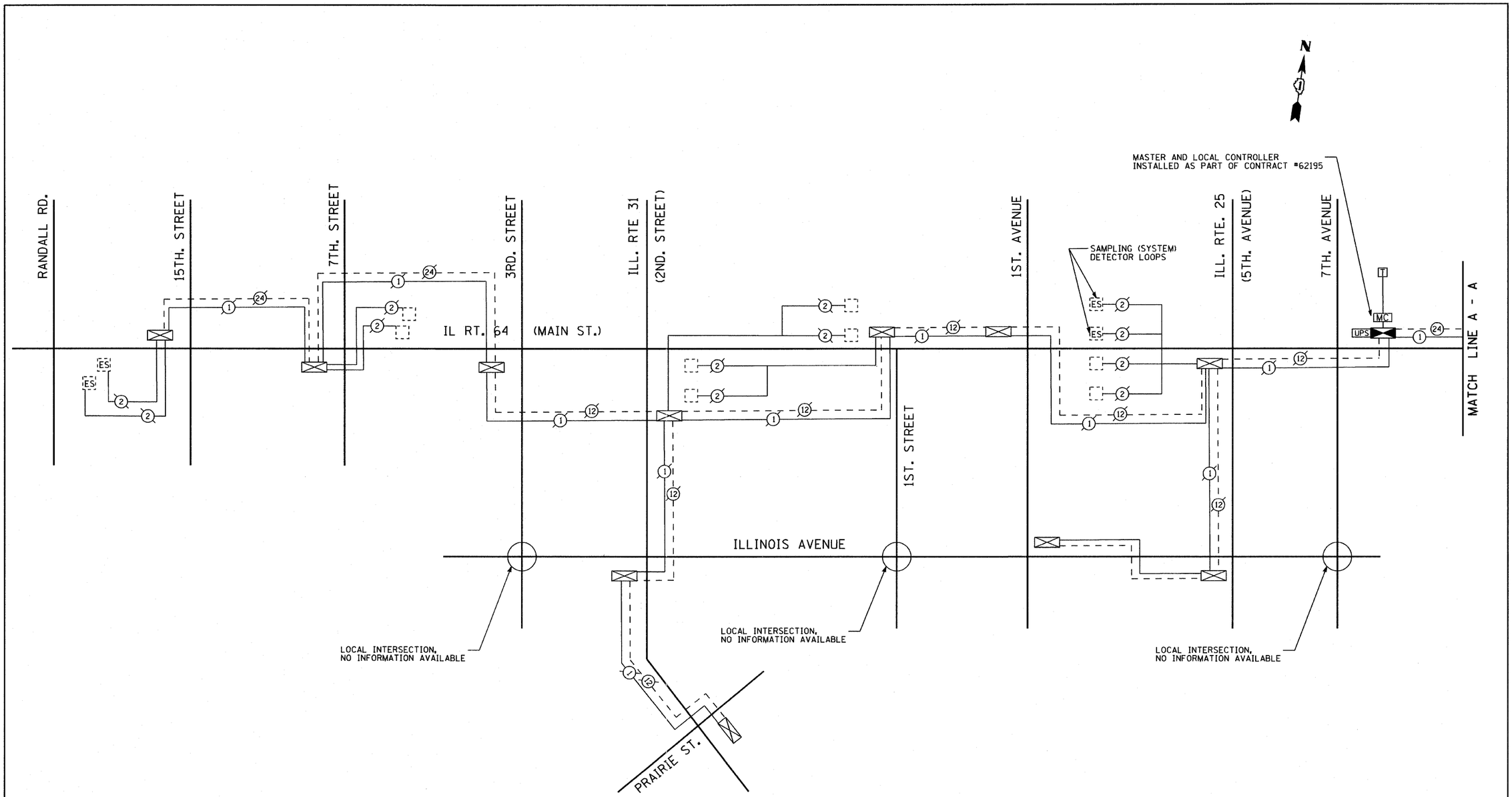
INTERCONNECT PLAN
IL ROUTE 64
FROM 38TH AVE TO POWIS RD

SCALE: 1"=50'
DATE: NOVEMBER 1, 2011

DRAWN BY: JS
DESIGNED BY: JS
CHECKED BY: WP

SHEET 8 OF 8

CIVIL ENGINEERING CONSULTANTS
RWA
Regina Webster & Associates, Inc.
8619 W. Bryn Mawr Ave., Suite 602
Chicago, IL 60631-3551
773-283-2600 Fax: 773-283-2602
www.RWAengineers.com



ALL FIBER OPTIC AND TRACER CABLE WILL BE INSTALLED AS PART OF CONTRACT #62410

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED - DW	REVISED -
		DRAWN - DW	REVISED -
	PLOT SCALE = $SCALE$	CHECKED - JS	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

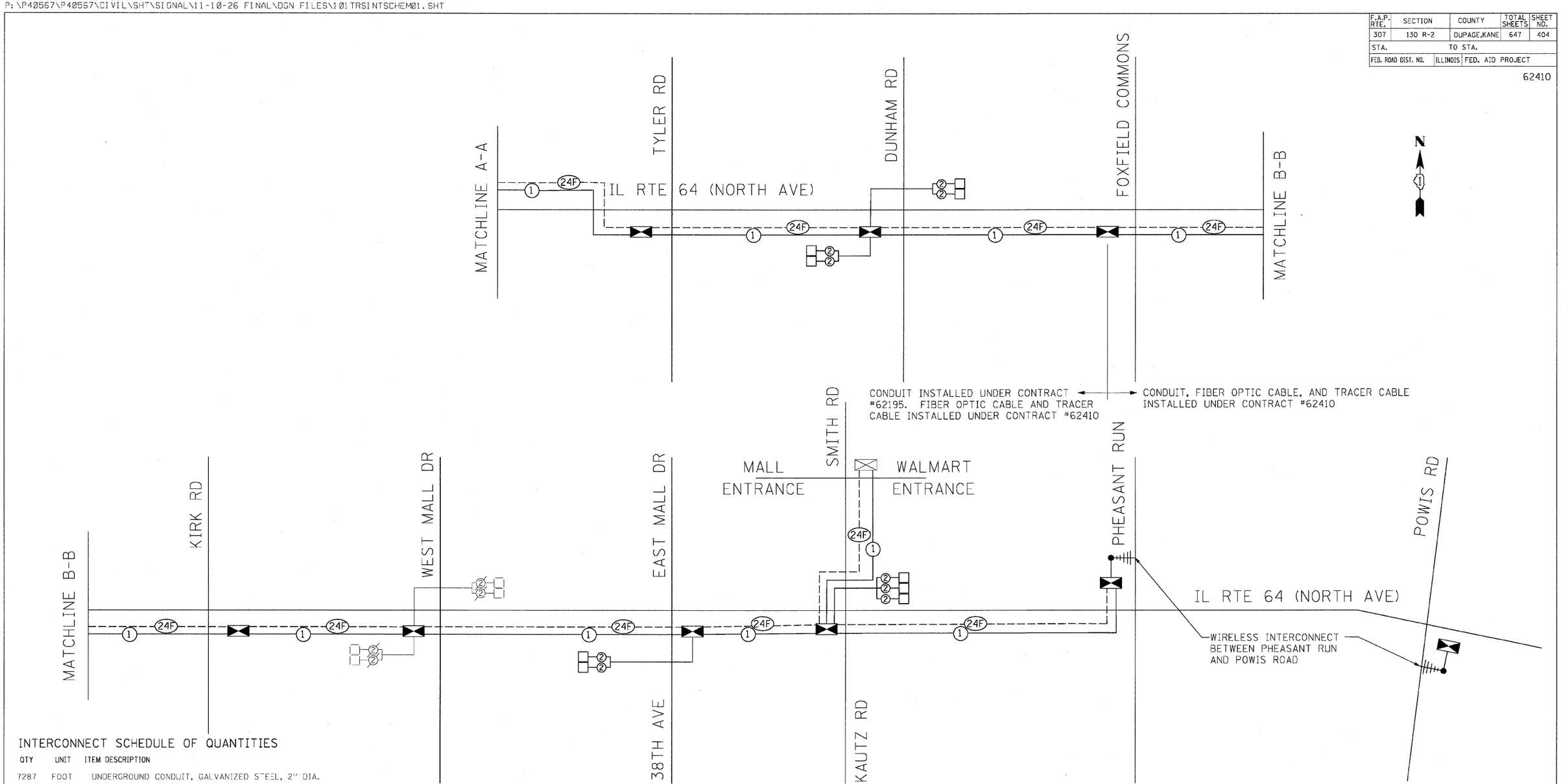
INTERCONNECT SCHEMATIC PLAN AND SCHEDULE OF QUANTITIES

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	KANE	647	403
		CONTRACT NO. 62410		
	ILLINOIS FED. AID PROJECT			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	404
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



INTERCONNECT SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM DESCRIPTION
7287	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
6	EACH	HANDHOLE
5	EACH	HEAVY-DUTY HANDHOLE
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
15562	FOOT	FIBER OPTIC CABLE IN CONDUIT, NC. 62.5/125, MM12F SM 12F
15536	FOOT	ELECTRICAL CABLE IN CONDUIT, TRACER, NO. 14 1C
7	EACH	DRILL EXISTING HANDHOLE
22	EACH	REMOVE EXISTING HANDHOLE
1	LUMP SUM	TEMPORARY WIRELESS INTERCONNECT, COMPLETE
1	LUMP SUM	OPTIMIZE TRAFFIC SIGNAL SYSTEM
1	LUMP SUM	INSTALL EXISTING FIBER OPTIC CABLE IN CONDUIT

AECOM

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

IL RTE 64 (NORTH AVE)

SHEET 2 OF 2

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

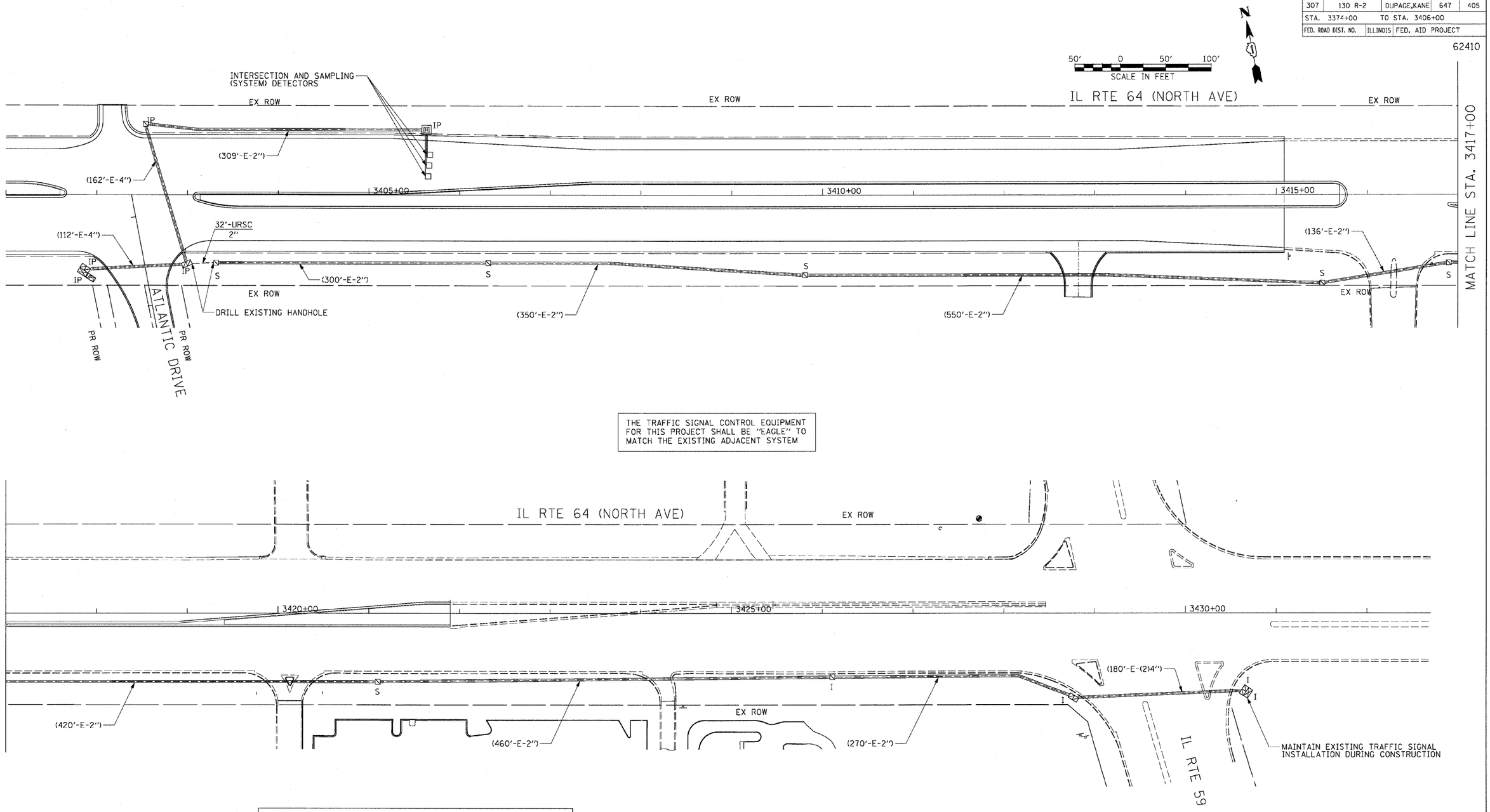
INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
IL RTE 64 (NORTH AVE)
15TH ST TO POWIS ROAD

SCALE: N.T.S.
DATE: NOVEMBER 1, 2011

DRAWN BY: JS
DESIGNED BY: JS
CHECKED BY: WP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	405
STA. 3374+00		TO STA. 3406+00		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUDNATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACE SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

AECOM

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

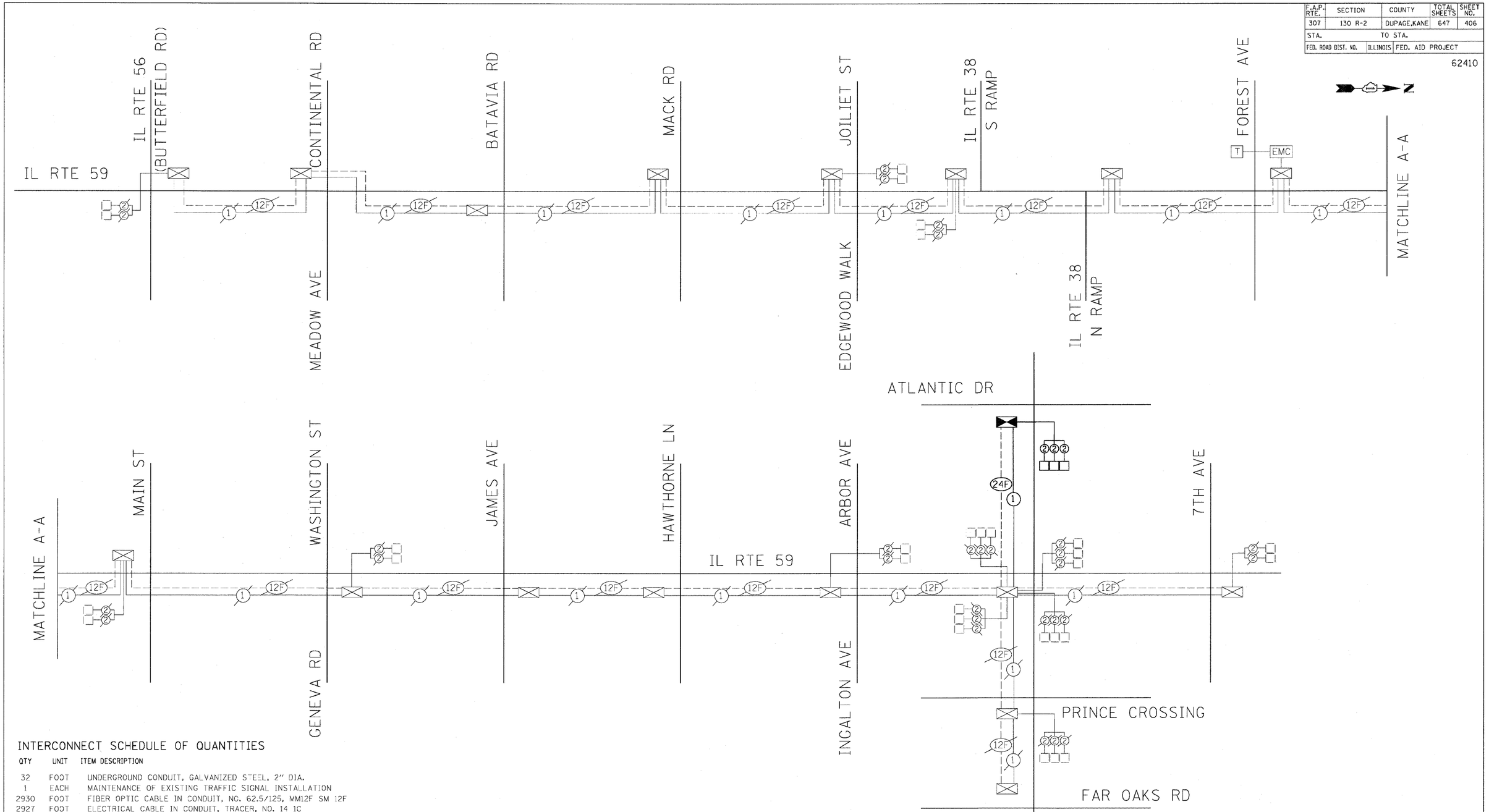
INTERCONNECT PLAN
IL ROUTE 64 (NORTH AVE)
FROM ATLANTIC DR TO IL ROUTE 59

SCALE: 1"=50'
DATE: NOVEMBER 1, 2011

DRAWN BY: JS
DESIGNED BY: JS
CHECKED BY: WP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	406
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



INTERCONNECT SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM DESCRIPTION
32	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2930	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM 12F
2927	FOOT	ELECTRICAL CABLE IN CONDUIT, TRACER, NO. 14 1C
2	EACH	DRILL EXISTING HANDHOLE
1	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

AECOM

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

INTERCONNECT SCHEMATIC

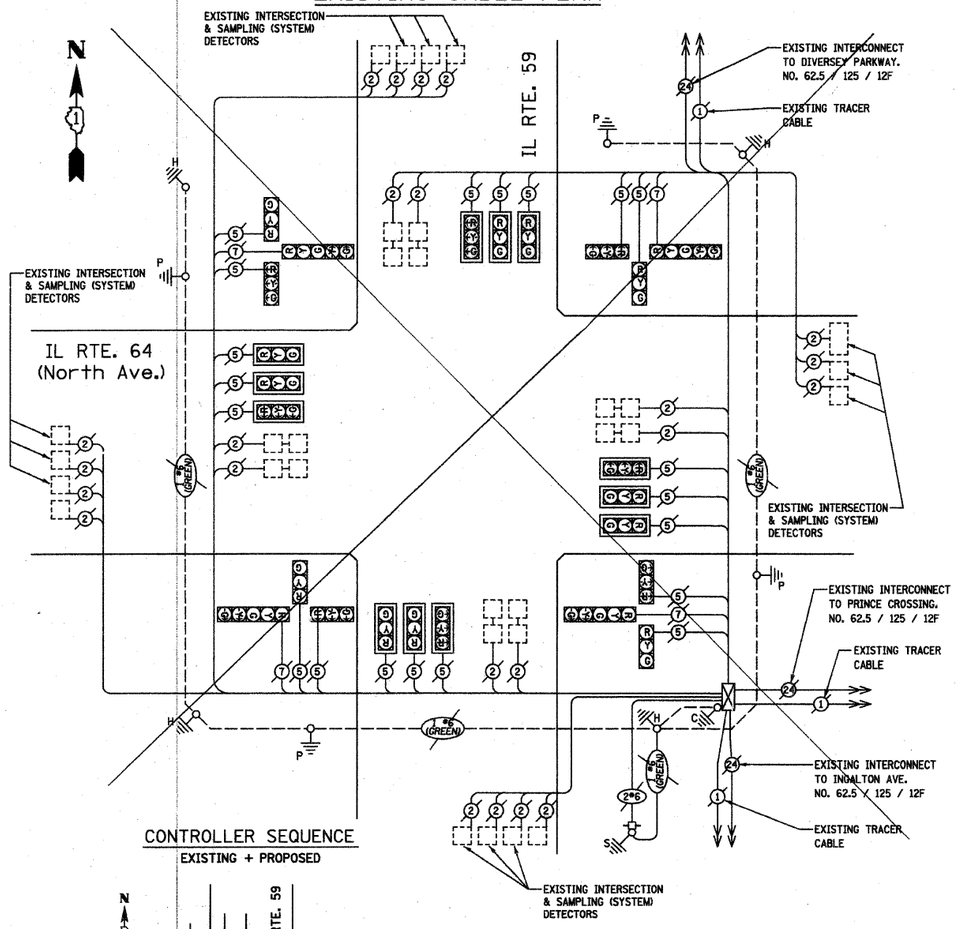
IL RTE 64 (NORTH AVE) AND IL RTE 59

SCALE: N.T.S.
DATE: NOVEMBER 1, 2011

DRAWN BY: JS
DESIGNED BY: JS
CHECKED BY: WP

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130TR-2	KANE, DUPAGE	647	406R
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EXISTING CABLE PLAN

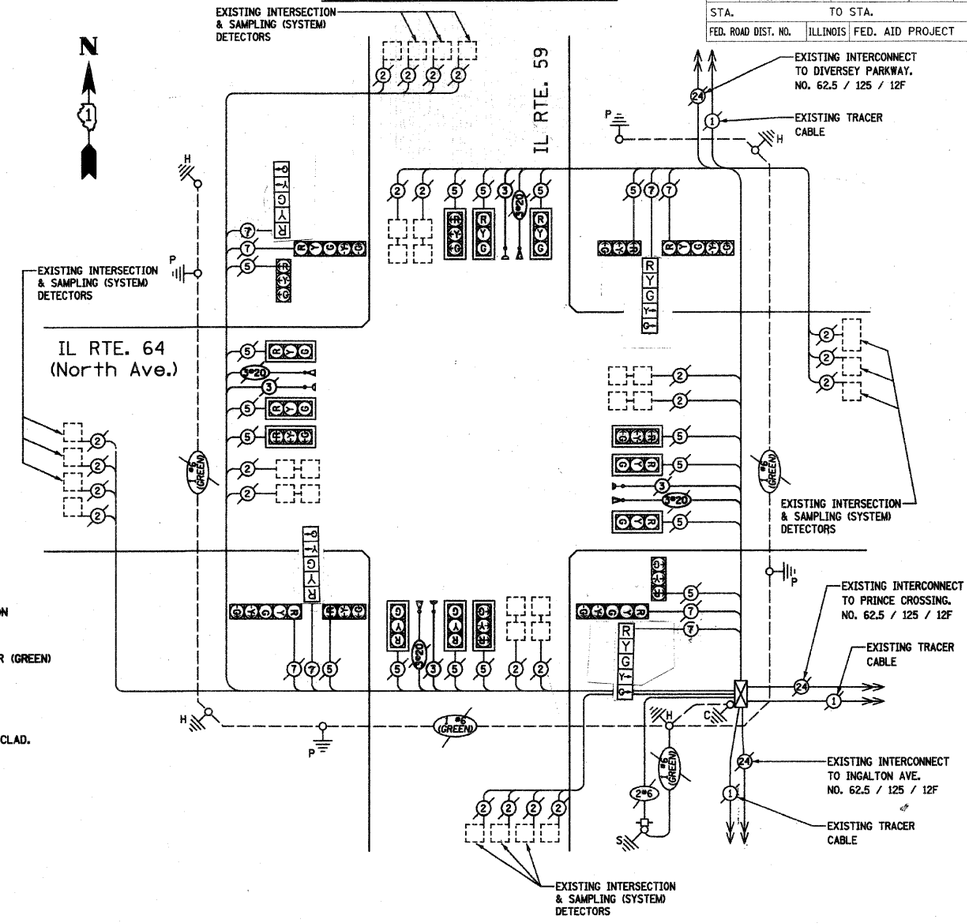


CABLE PLAN LEGEND

EXISTING	PROPOSED	
O	O	8" (200MM) TRAFFIC SIGNAL SECTION
R	R	12"(300MM) TRAFFIC SIGNAL SECTION
W	W	12"(300MM) PEDESTRIAN SIGNAL SECTION
DON'T WALK	DON'T WALK	12"(300MM) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
②	②	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		SIGNAL FACE WITH BACKPLATE "P" INDICATES PROGRAMMED HEAD
H/C		GROUND ROD AT HANDHOLE OR CONTROLLER
P		GROUND ROD AT POST OR MAST ARM POLE
S		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
E		GROUND ROD EXISTING TO BE REUSED
		GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)
24		NO. 62.5/125 FIBER OPTIC CABLE, 12 MULTI MODE AND 12 SINGLE MODE
1		NO. 14 TRACER CABLE, 1C.

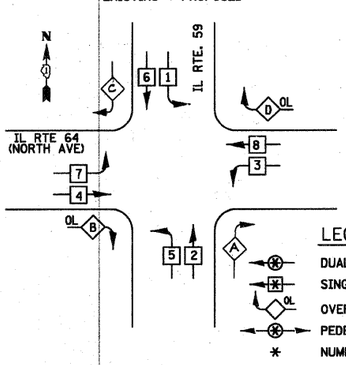
NOTE: ALL NEW GROUND RODS SHALL BE ¾" X 10'-0" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

PROPOSED CABLE PLAN



CONTROLLER SEQUENCE

EXISTING + PROPOSED



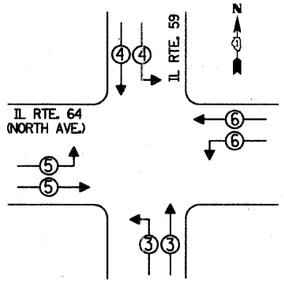
LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE.

PHASE DESIGNATION DIAGRAM

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE		DISPLAY
B	=	4	+	5	-	4
D	=	8	+	1	-	8

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↰↑	↓↳	→↱	←↲

SCHEDULE OF QUANTITIES

MAINTENANCE OF THE EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,200
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	980
REMOVE EXISTING TRAFFIC SIGNAL EQUIMENT	EACH	1

NO.	DATE	BY	REVISION	NO.	DATE	BY	REVISION
1	10/29/02	JS	ADD RIGHT-TURN OVERLAPS FOR IL. 59				

SCALE	1"=20'
DRAWN BY	JMC
DATE	09/04/02
CHECKED BY	JDC
DATE	09/20/02
APPROVED BY	
DATE	

PROJECT

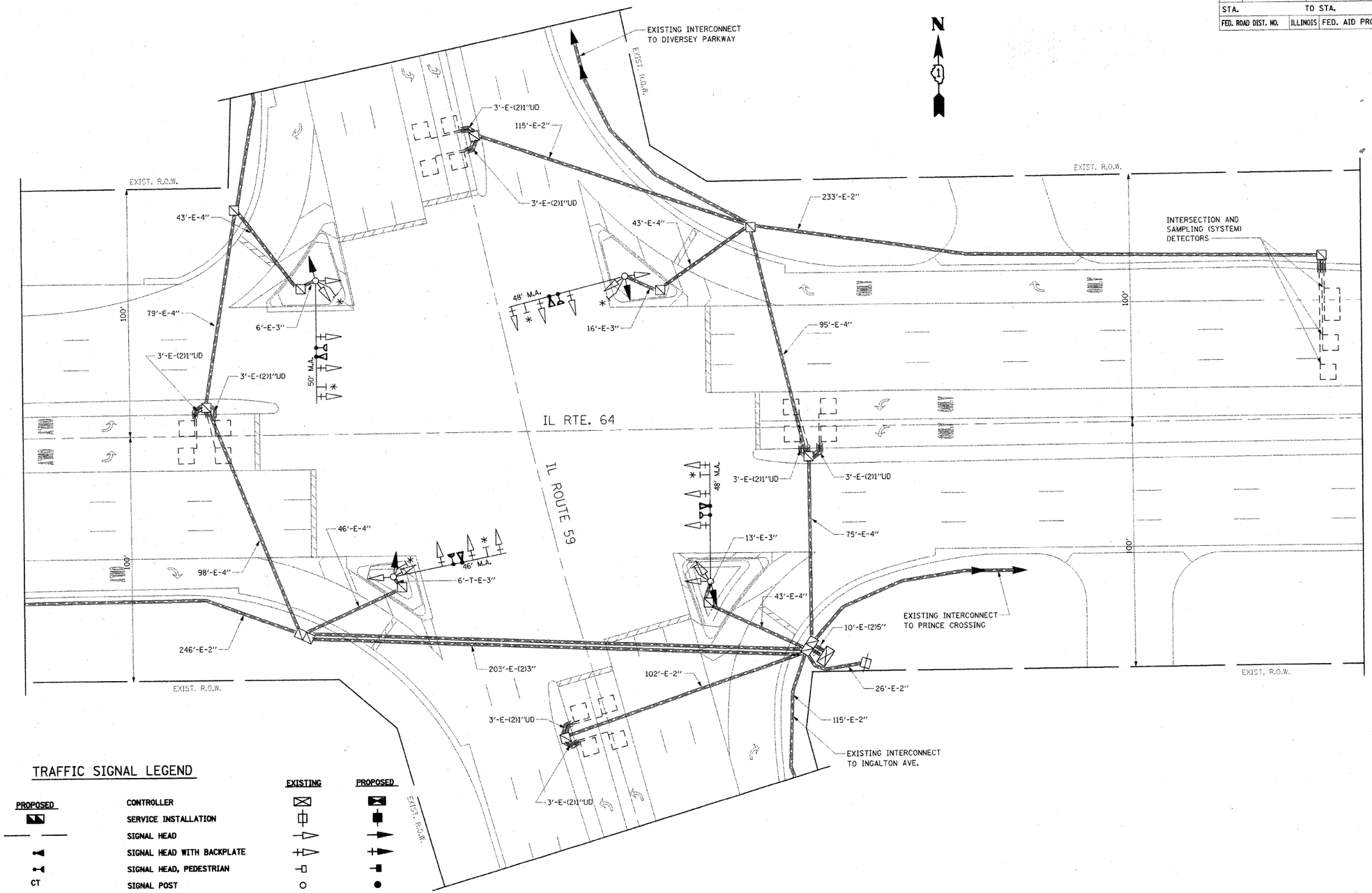
TITLE: **PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE, CABLE PLAN AND SCHEDULE OF QUANTITIES IL RTE. 64 (NORTH AVENUE) AT IL RTE. 59**

DATE: NOVEMBER 2002

PROJECT No. II-I70I-00

SHEET

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	KANE, DUPAGE	647	406B
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC SIGNAL LEGEND

	EXISTING	PROPOSED
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
EMERGENCY VEHICLE SYSTEM DETECTOR		
CONFIRMATION BEACON		
COMMON TRENCH		CT
ATTACHED TO STRUCTURE		ATS
UNIT DUCT		UD
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		

	EXISTING	PROPOSED
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
HANDHOLE		
HEAVY DUTY HANDHOLE	H"E"	H
CAST IRON JUNCTION BOX	"E"	
R10-10L SIGN		

NO.	DATE	BY	REVISION	NO.	DATE	BY	REVISION
1	AUG. 11	J.E.	ADD RIGHT-TURN OVERLAPS FOR IL. 59				

SCALE	1"=20'		
DRAWN BY	JMC	DATE	09/04/02
CHECKED BY	JDC	DATE	09/20/02
APPROVED BY		DATE	

PROJECT

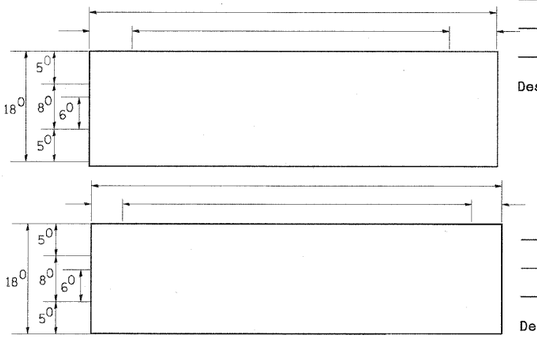
TITLE: TRAFFIC SIGNAL MODIFICATION
IL RTE. 64 (NORTH AVENUE) AND IL RTE. 59

DATE: NOVEMBER 2002
PROJECT No. II-1701-00
SHEET

CONTRACT NO.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2		647	407
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1

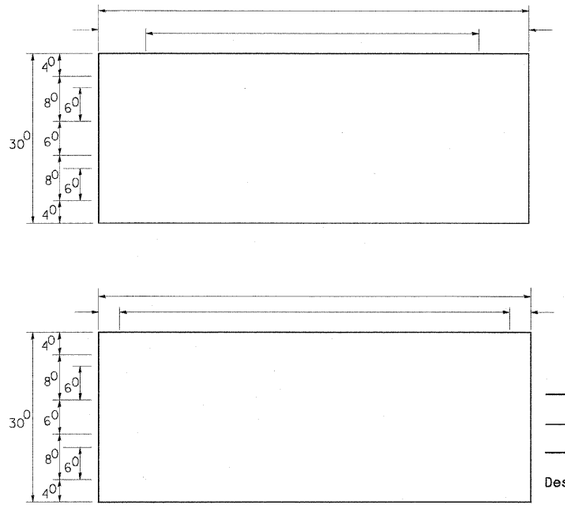


___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___

___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___

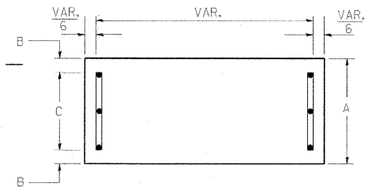
NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2

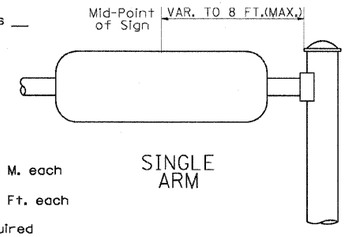


___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___

SUPPORTING CHANNELS

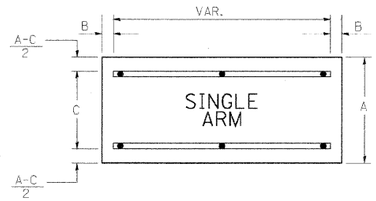


A	B	C
18"	2"	14"



SINGLE ARM

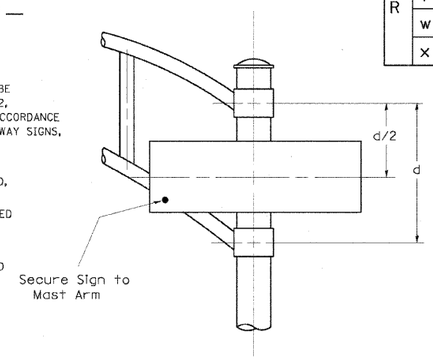
SUPPORTING CHANNELS



SINGLE ARM

A	B	C
18"	2"	12"
30"	2"	22"

___ Sq. M. each
___ Sq. Ft. each
___ Required
Design Series ___



DUAL ARM

GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE;

* J.O. HERBERT CO. MIDLOTHIAN, VA.
* WESTERN REMAC INC. WOODRIDGE, IL.

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER: acde goq		bhikl mnpru		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{2}	1^{4}
B	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{6}	1^{7}
C E G	1^{4}	1^{5}	2^{0}	2^{1}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
D O Q R	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
F	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}
H I M N	2^{0}	2^{1}	2^{2}	2^{4}	2^{0}	2^{1}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}	2^{0}	2^{1}
J U	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}
K L	1^{1}	1^{2}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
P	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
S	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
T	1^{1}	1^{2}	1^{6}	1^{7}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
V	0^{6}	1^{0}	1^{4}	1^{5}	1^{1}	1^{2}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
Y	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{5}	0^{7}	0^{5}	0^{6}	0^{6}	1^{0}	1^{1}	1^{2}
Z	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER: acde goq		bhikl mnpru		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}
b f k o p s	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
c e	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
r	0^{6}	1^{0}	1^{2}	1^{4}	0^{6}	1^{0}	0^{3}	0^{3}	0^{5}	0^{6}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}
t z	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
v y	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}
w	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
x	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}

Number To Number
Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER	SECOND NUMBER: 0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}
1	2^{0}	2^{1}	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}
2 3 4	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{6}	1^{7}	1^{4}	1^{5}
5	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
6	1^{6}	1^{7}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
7	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{5}	0^{5}	0^{6}	1^{2}	1^{4}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}
8	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{4}	1^{5}

EXAMPLE, 2 (3) DENOTES $\frac{3''}{8}$

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	D	8 INCH UPPER CASE LETTERS SERIES C	D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	D
A	3^{6}	5^{0}	5^{0}	6^{5}	a	3^{5}	4^{2}
B	3^{2}	4^{0}	4^{3}	5^{3}	b	3^{5}	4^{2}
C	3^{2}	4^{0}	4^{3}	5^{3}	c	3^{5}	4^{1}
D	3^{2}	4^{0}	4^{3}	5^{3}	d	3^{5}	4^{2}
E	3^{0}	3^{5}	4^{0}	4^{7}	e	3^{5}	4^{2}
F	3^{0}	3^{5}	4^{0}	4^{7}	f	2^{3}	2^{6}
G	3^{2}	4^{0}	4^{3}	5^{3}	g	3^{5}	4^{2}
H	3^{2}	4^{0}	4^{3}	5^{3}	h	3^{5}	4^{2}
I	0^{7}	0^{7}	1^{1}	1^{2}	i	1^{1}	1^{1}
J	3^{0}	3^{6}	4^{0}	5^{0}	j	2^{0}	2^{2}
K	3^{2}	4^{1}	4^{3}	5^{4}	k	3^{5}	4^{2}
L	3^{0}	3^{5}	4^{0}	4^{7}	l	1^{1}	1^{1}
M	3^{7}	4^{5}	5^{1}	6^{1}	m	6^{0}	7^{0}
N	3^{2}	4^{0}	4^{3}	5^{3}	n	3^{5}	4^{2}
O	3^{4}	4^{2}	4^{5}	5^{5}	o	3^{6}	4^{3}
P	3^{2}	4^{0}	4^{3}	5^{3}	p	3^{5}	4^{2}
Q	3^{4}	4^{2}	4^{5}	5^{5}	q	3^{5}	4^{2}
R	3^{2}	4^{0}	4^{3}	5^{3}	r	2^{6}	3^{2}
S	3^{2}	4^{0}	4^{3}	5^{3}	s	3^{6}	4^{2}
T	3^{0}	3^{5}	4^{0}	4^{7}	t	2^{7}	3^{2}
U	3^{2}	4^{0}	4^{3}	5^{3}	u	3^{5}	4^{2}
V	3^{5}	4^{4}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{4}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{4}	5^{1}
Y	3^{6}	5^{0}	5^{0}	6^{6}	y	4^{6}	5^{3}
Z	3^{2}	4^{0}	4^{3}	5^{3}	z	3^{6}	4^{3}

NUMBER	6 INCH SERIES C	D	8 INCH SERIES C	D
1	1^{2}	1^{4}	1^{5}	2^{0}
2	3^{2}	4^{0}	4^{3}	5^{3}
3	3^{2}	4^{0}	4^{3}	5^{3}
4	3^{5}	4^{3}	4^{7}	5^{7}
5	3^{2}	4^{0}	4^{3}	5^{3}
6	3^{2}	4^{0}	4^{3}	5^{3}
7	3^{2}	4^{0}	4^{3}	5^{3}
8	3^{2}	4^{0}	4^{3}	5^{3}
9	3^{2}	4^{0}	4^{3}	5^{3}
0	3^{4}	4^{2}	4^{5}	5^{5}

REVISIONS NAME	DATE
CREATED	2/79
D.A.Z./ D.A.G.	11/90
	6/98
CADD	10/01/00
D.A.G.	10/28/09

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
MAST ARM MOUNTED
STREET NAME SIGNS

SCALE: NONE

DRAWN BY BCK
CHECKED BY DAG/DAD

TS 2

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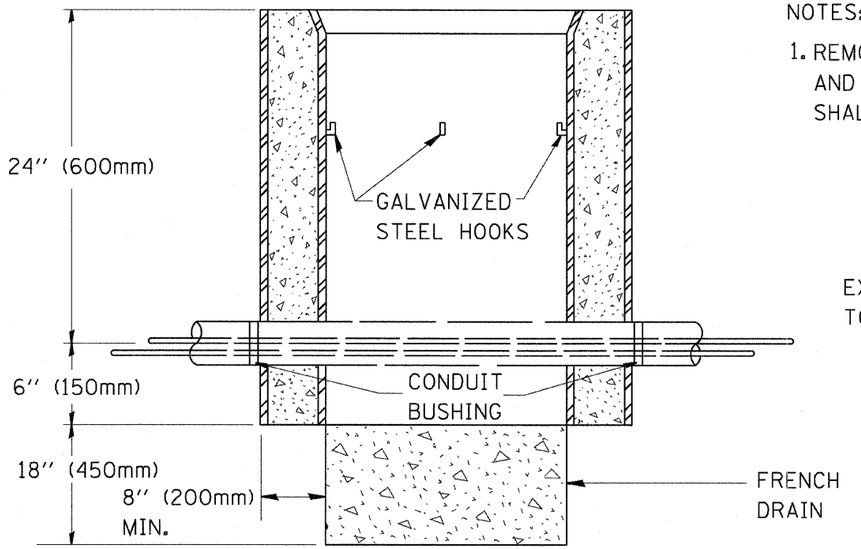
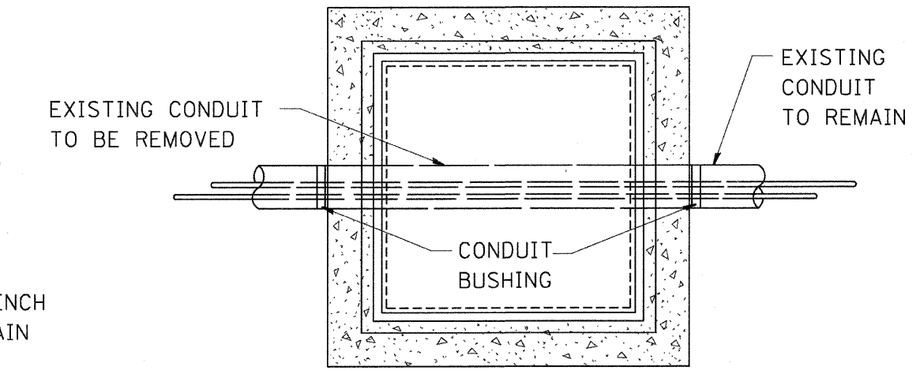


ELEVATION

NOTES:

1. REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.



PLAN

DETAIL
HANDHOLE TO INTERCEPT EXISTING CONDUIT

REVISION DATE: 10/01/00

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CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2		647	409
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.

2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.

3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.

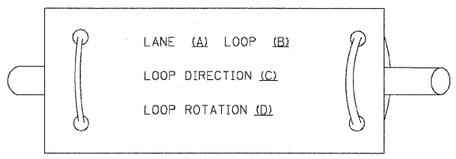
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.

6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.

7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

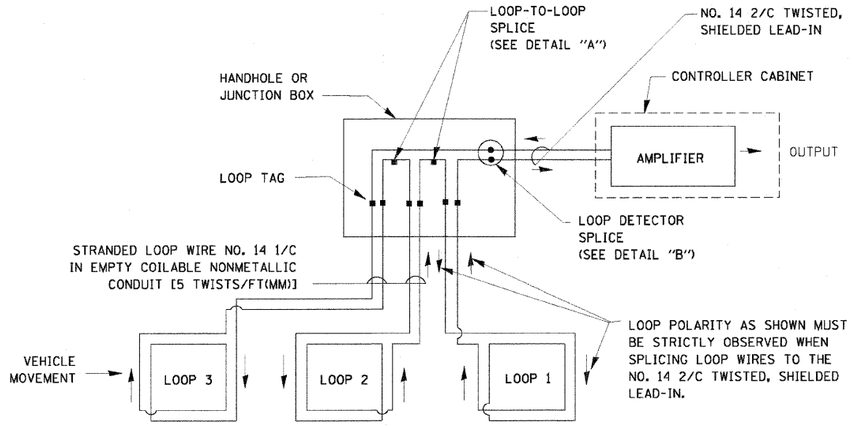


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

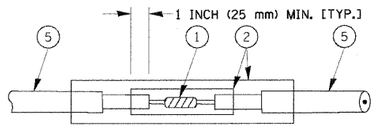
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

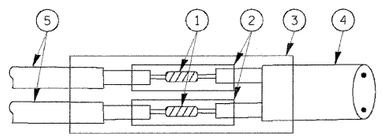


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

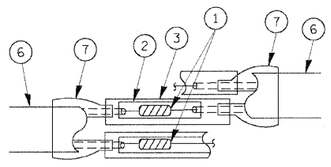


DETAIL "A"
LOOP-TO-LOOP SPLICE



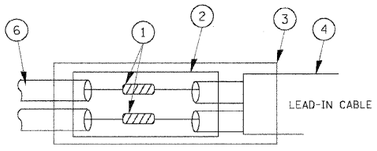
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

◯ XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

REVISIONS	
NAME	DATE
CADD	5/30/00
ADD NOTE NO. 8	11/12/01
BUREAU OF TRAFFIC	1-01-02
BCK	10/28/09

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: NONE

DRAWN BY: BCK
DESIGNED BY: DAD
CHECKED BY: DAD
SHEET 1 OF 6

TS05

PLOT DATE = 11/4/2009
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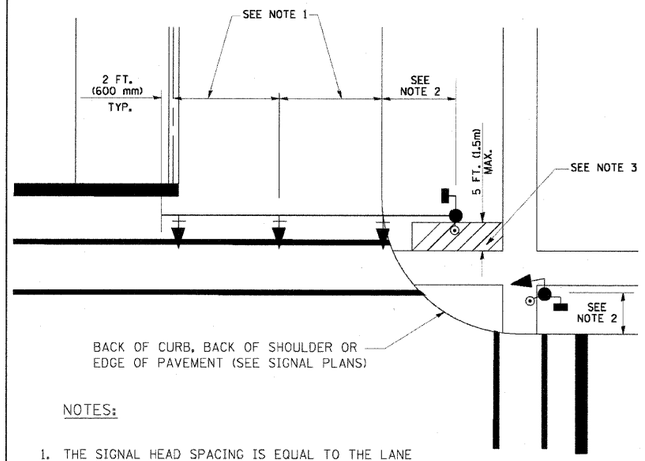
CONTRACT NO. 62410

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2		647	410
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

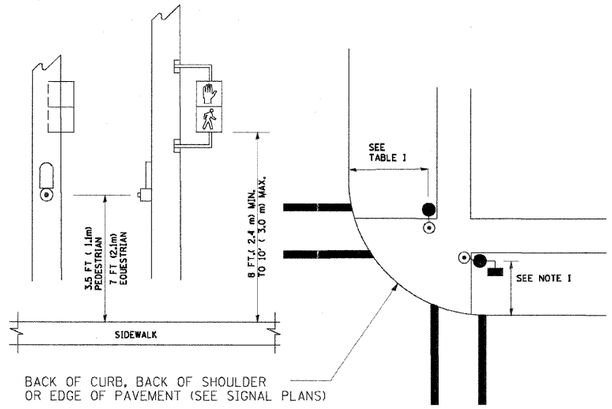
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

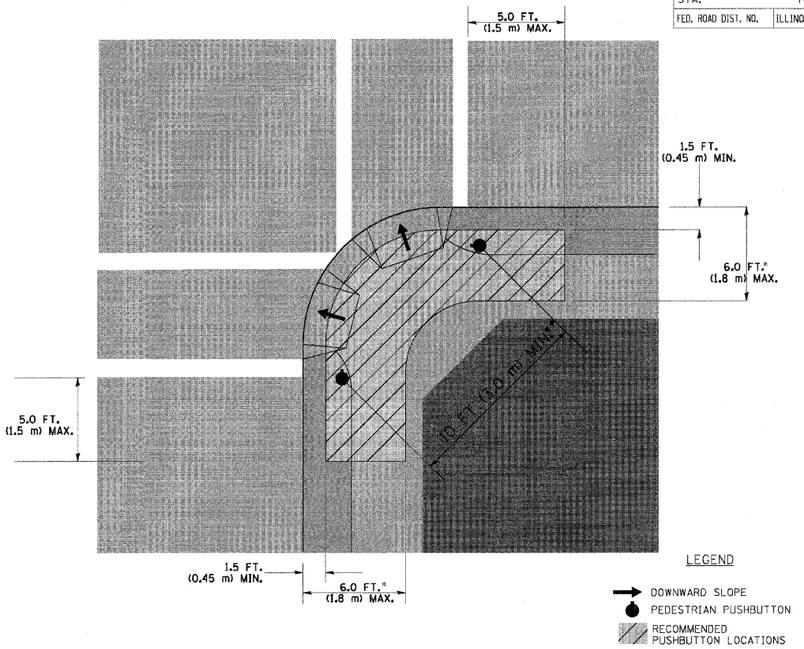
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



* WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.

** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	1/01/02
BCK	10/28/09

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

DRAWN BY: BCK
DESIGNED BY: DAD
CHECKED BY: DAD
SHEET 2 OF 6

TS05

PLOT DATE = 11/4/2003
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CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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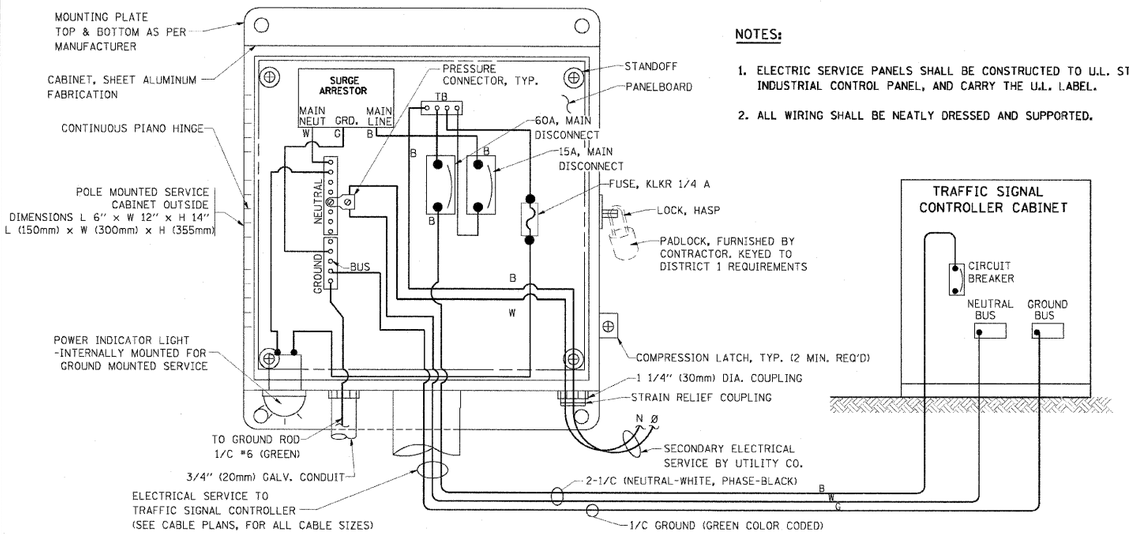
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



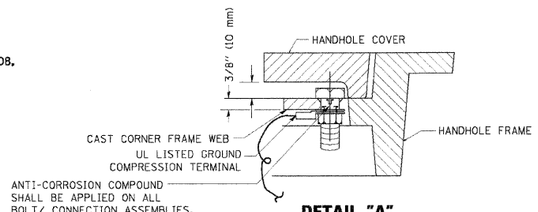
NOTES:

1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

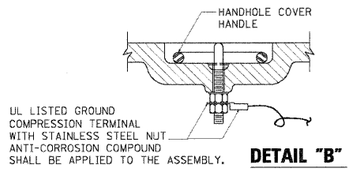
ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



DETAIL "A"

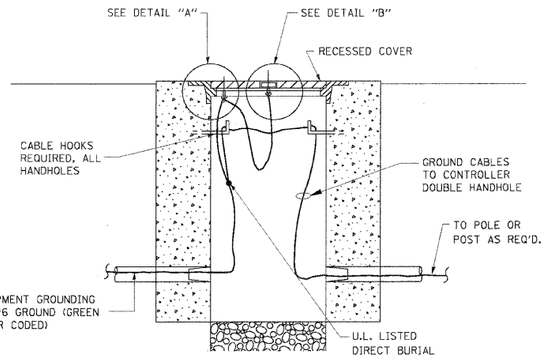


DETAIL "B"

NOTES:

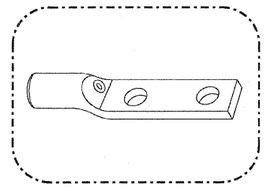
GROUNDING SYSTEM

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)

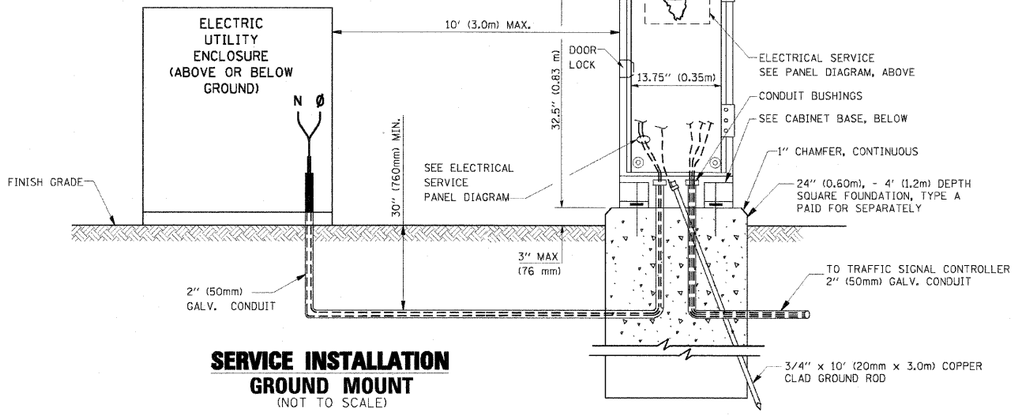


HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EQUAL)

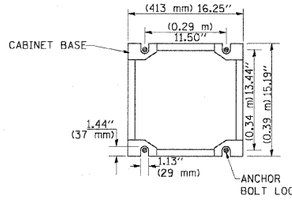
NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



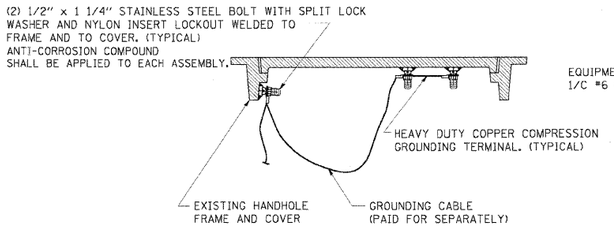
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)



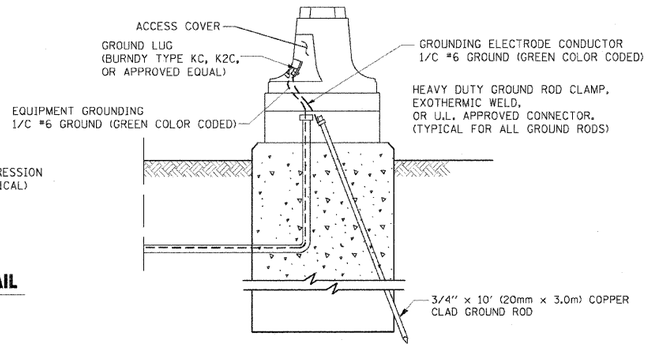
CABINET – BASE BOLT PATTERN

(NOT TO SCALE)



EXISTING HANDHOLE COVER & FRAME – GROUNDING DETAIL

(NOT TO SCALE)



MAST ARM POLE / POST–GROUNDING DETAIL

(NOT TO SCALE)

REVISIONS	
NAME	DATE
CADD	5/30/00
CADD	3/15/01
BUREAU OF TRAFFIC	1/01/02
BCK	10/28/09

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

DRAWN BY: BCK
DESIGNED BY: DAD
CHECKED BY: DAD
SHEET 3 OF 6

TS05

PLOT DATE = 11/4/2009
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USER NAME = bauerdl

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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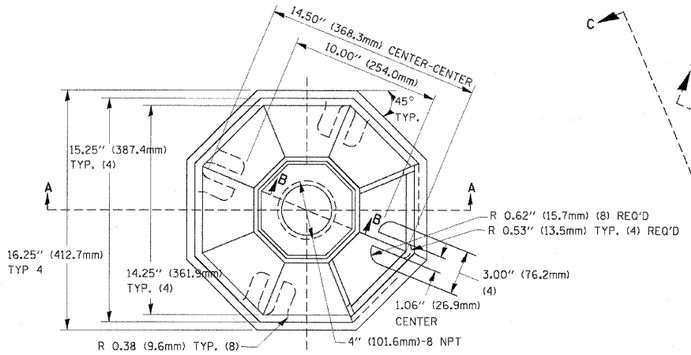
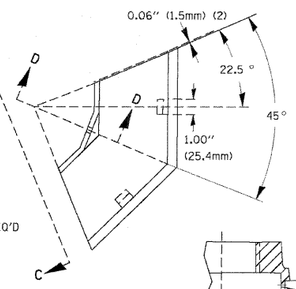
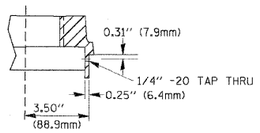
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

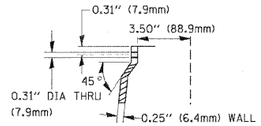


TOP VIEW





SECTION B-B



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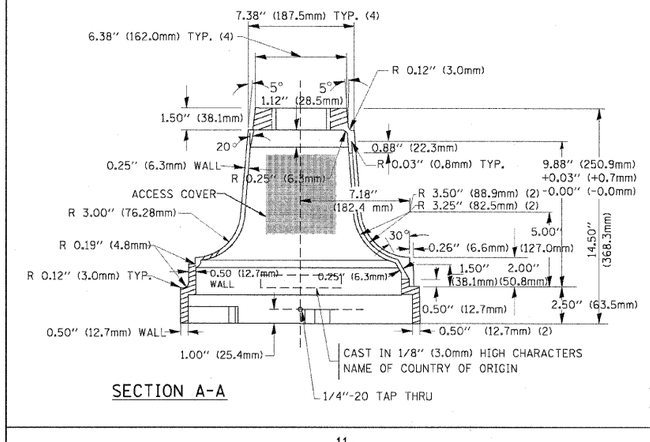
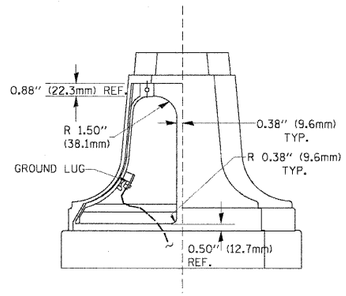
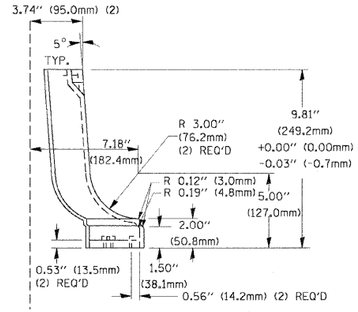


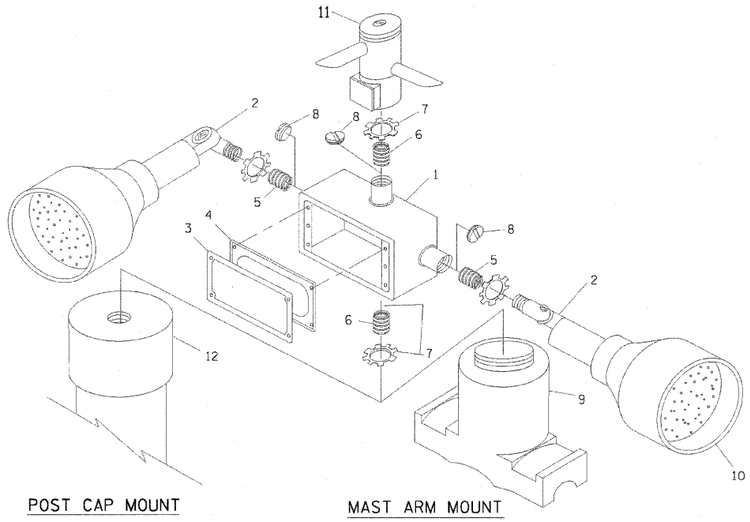
SECTION A-A



VIEW C-C



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



POST CAP MOUNT

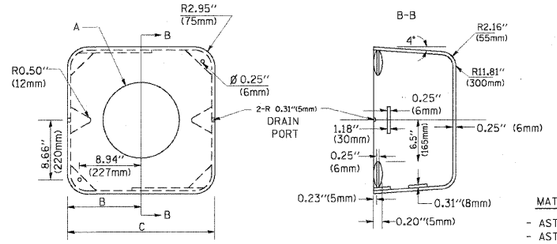
MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾"(19 mm) CLOSE NIPPLE
7	¾"(19 mm) LOCKNUT
8	¾"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP (18 FT. (5.4 m) POST MIN.)

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
   ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
   ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A ¾"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:

- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

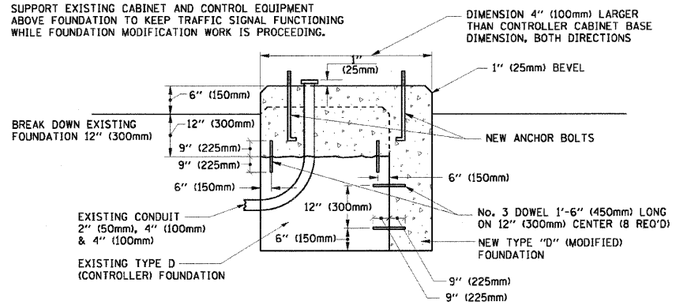
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

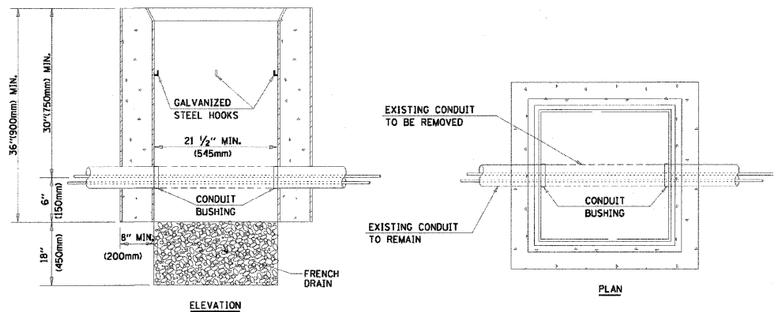
NOTES:

1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



HANDHOLE TO INTERCEPT EXISTING CONDUIT

NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

REVISIONS	
NAME	DATE
BUREAU OF TRAFFIC	5/30/00
BUREAU OF TRAFFIC	3/15/01
BUREAU OF TRAFFIC	11/12/01
BUREAU OF TRAFFIC	1-01-02
BCK	10/28/09

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE

DRAWN BY: BCK
DESIGNED BY: DAD
CHECKED BY: DAD
SHEET 4 OF 6

TS05

PLOT DATE = 11/4/2009
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CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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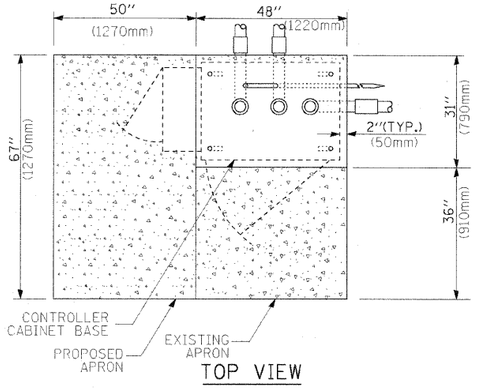
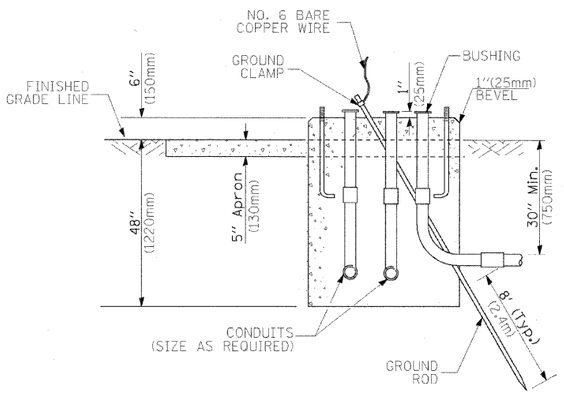
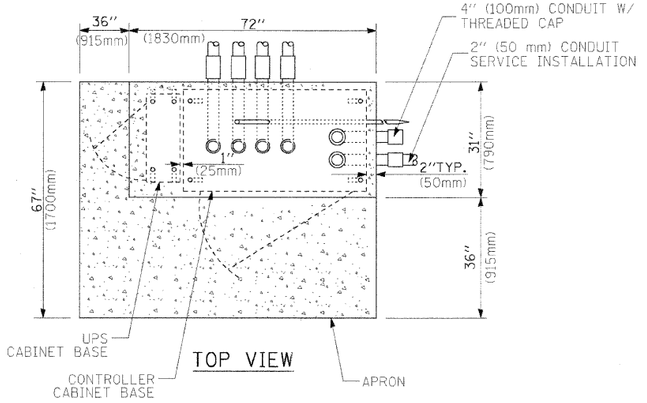
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



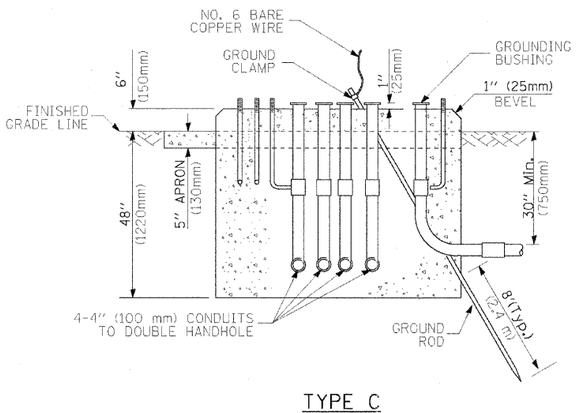
TOP VIEW



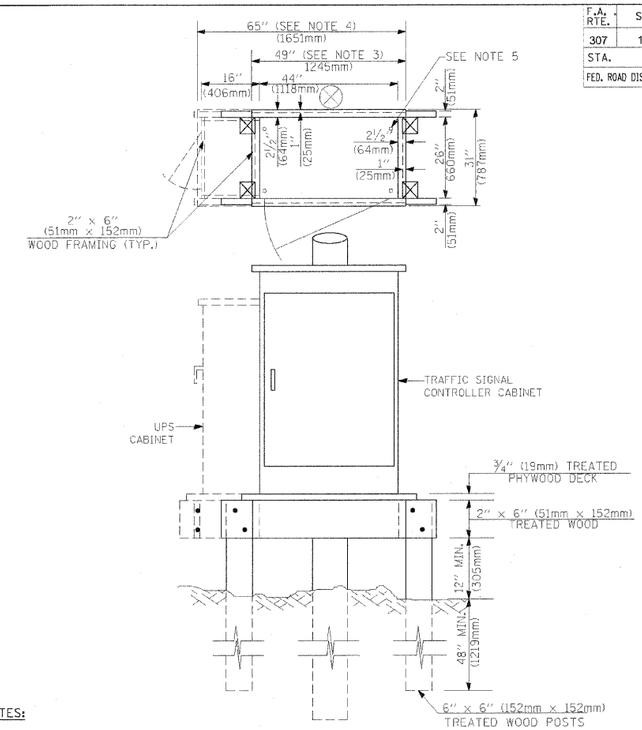
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



TOP VIEW



TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. 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 (Qu) > 1.0 tsf (100 kpa). 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.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameterfoundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

REVISIONS NAME	DATE
	5/30/00
	3/15/01
	11/12/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: NONE

DRAWN BY: BCK
DESIGNED BY: DAD
CHECKED BY: DAD
SHEET 5 OF 6

TS05

PLOT DATE = 11/4/2009
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PLOT SCALE = 50.0000 ' / IN.
USER NAME = bauerdl

TRAFFIC SIGNAL LEGEND

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2		647	414
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET		R R	R R
COMMUNICATIONS CABINET	R CC	E C C	C C
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G Y G	R Y G Y G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G Y G "P"	R Y G Y G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		1	1
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET	R R	R R
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

REVISIONS NAME	DATE
	5/30/00
	3/15/01
	11/12/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: NONE

DRAWN BY: BCK
DESIGNED BY: DAD
CHECKED BY: DAD
SHEET 6 OF 6

TS05

PLOT DATE = 11/4/2009
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PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauer01

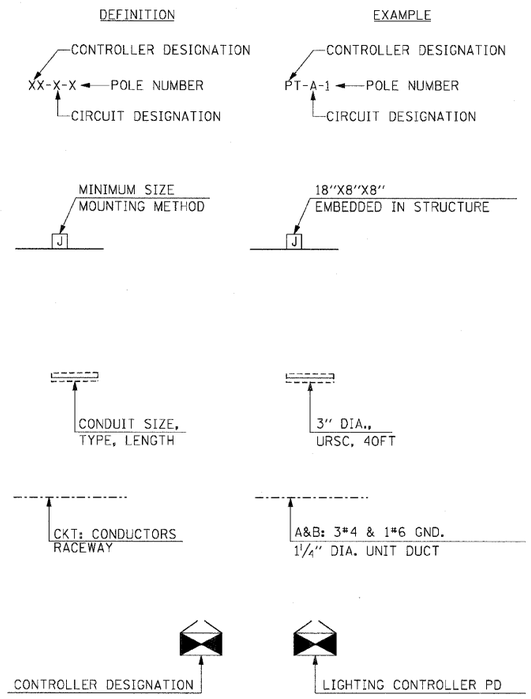
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	415
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

ELECTRICAL SYMBOLS

- LIGHTING UNIT: 47.5 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE, UNO, (240V) 9" BREAKAWAY TRANSFORMER BASE
- LIGHTING UNIT: 20 FT. M.H., 6 FT. M.A., 150W HPS M-C-III LUMINAIRE, (240V) 9" BREAKAWAY TRANSFORMER BASE
- PARAPET WALL LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE, (240V)
- TWIN LIGHTING UNIT: 20 FT. M.H., TWIN 6 FT. M.A., 150W HPS M-C-III LUMINAIRE, (240V) 9" BREAKAWAY TRANSFORMER BASE
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 400W HPS M-C-III LUMINAIRE, (240V)
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE, (240V)
- AVIATION OBSTRUCTION WARNING LUMINAIRE (6W LED, 240V)
- (E) EXISTING ORNAMENTAL LIGHTING UNIT TO REMAIN
- (ER) LOCATION OF REINSTALLED ORNAMENTAL LIGHTING UNIT
- (RR) EXISTING ORNAMENTAL LIGHTING UNIT TO BE REMOVED AND RELOCATED
- (E) EXISTING LIGHTING UNIT TO REMAIN
- (R) EXISTING LIGHTING UNIT TO BE REMOVED (NOTE 14)
- (E)-(E) EXISTING TWIN LIGHTING UNIT TO REMAIN
- (R)-(R) EXISTING TWIN LIGHTING UNIT TO BE REMOVED (NOTE 14)
- UNIT DUCT 3 #4 XLP & 1 #6 XLP GND IN 1¼" DIA. SCHEDULE 40 POLYETHYLENE DUCT
- CONDUIT EMBEDDED IN STRUCTURE 2" PVC CONDUIT, CONDUCTORS AS INDICATED
- UNIT DUCT INSTALLED IN UNDERGROUND RIGID STEEL CONDUIT
- EXPANSION FITTING
- LIGHTING CONTROLLER CABINET (DOOR SIDE AS INDICATED)
- RR EXISTING LIGHTING CONTROLLER CABINET "AC-2" TO BE REMOVED AND RELOCATED (NOTE 14)
- EXISTING UTILITY POLE
- GROUND ROD
- UTILITY SERVICE CONNECTION POLE MOUNTED
- A/C AERIAL CABLE
- [E] EXISTING ELECTRIC UTILITY MANHOLE/HANDHOLE TO REMAIN
- PVC CONDUIT ENCASED IN REINFORCED CONCRETE DUCTBANK IN TRENCH

CALL-OUT SAMPLES



ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
A/C	AERIAL CABLE
AFG	ABOVE FINISHED GRADE
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COMED	COMMONWEALTH EDISON
DIA	DIAMETER
DP	DISTRIBUTION PANEL
E	EXISTING LIGHTING UNIT TO REMAIN
EOP	EDGE OF PAVEMENT
FT	FEET OR FOOT
FU	FUSE
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HPS	HIGH PRESSURE SODIUM
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION
IN	INCH/INCHES
JB	JUNCTION BOX
KV	KILOVOLT
M	METER
MA	MAST ARM
MC	MULTI-CONDUCTOR CABLE (TYPE TC)
MH	MOUNTING HEIGHT
MIN	MINIMUM
NO, #	NUMBER
PB	PUSH BUTTON
P	POLE
PH	PHASE
PNL	PANEL
PVC	POLYVINYL CHLORIDE
R	EXISTING LIGHTING UNIT TO BE REMOVED (OWNER SALVAGED UNLESS NOTED OTHERWISE)
RECP	RECEPTACLE
RGSC	RIGID GALVANIZED STEEL CONDUIT
SS	STAINLESS STEEL
STA	STATION
TYP	TYPICAL
UD	UNIT DUCT
UNO	UNLESS NOTED OTHERWISE
URSC	UNDERGROUND RIGID STEEL CONDUIT
V	VOLT
VA	VOLT-AMPERE
W	WATT
WP	WEATHERPROOF
XFMR	TRANSFORMER
XLP	CROSS LINKED POLYETHYLENE

GENERAL NOTES

1. PRIOR TO THE INSTALLATION OF NEW UNIT DUCTS, CONDUITS, HANDHOLES, JUNCTION BOXES, LIGHT STANDARD FOUNDATIONS AND APPURTENANCES, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING LIGHTING CONDUITS, CABLE AND UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL VERIFY ALL OF THE DATA SHOWN ON THE CONTRACT PLANS WHICH WOULD AFFECT HIS/HER WORK UNDER THIS CONTRACT.
3. ALL NEW UNIT DUCTS, CONDUITS, HANDHOLES, JUNCTION BOXES AND APPURTENANCES ARE ILLUSTRATED DIAGRAMATICALLY. THE ACTUAL LOCATION IN THE FIELD SHALL BE APPROVED BY THE ENGINEER.
4. CONDUITS, UNIT DUCT, HANDHOLES, JUNCTION BOXES, LIGHT STANDARD FOUNDATION AND APPURTENANCES SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH DRAINS AND ALL OTHER UTILITIES, BOTH UNDERGROUND AND ABOVE GROUND.
5. ALL DISTURBED AREAS WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.
6. THE CABLE INSTALLATION FROM THE LIGHTING CONTROL CABINET TO THE LIGHT STANDARDS SHALL BE CONTINUOUS WITHOUT UNDERGROUND SPLICES. SPLICING OF CABLES IS PERMITTED ONLY IN THE BASE OF THE LIGHT STANDARDS AND IN ABOVE GROUND JUNCTION BOXES.
7. NOT USED
8. ALL PITS USED FOR BORING AND PULLING CONDUITS UNDER ROADWAYS AND DRIVEWAYS SHALL BE LOCATED FIVE (5) FEET (MINIMUM) CLEAR FROM THE EDGE OF SHOULDER. LOCATIONS OF THE CONDUIT CROSSINGS SHOWN ARE APPROXIMATE AND MAY BE SHIFTED AS NECESSARY TO MEET THE MINIMUM CLEARENCE REQUIREMENTS. THE PITS SHALL BE ADEQUATELY GUARDED TO PROTECT THE MOTORIST. THE CONTRACTOR SHALL SUBMIT PLANS OF EACH PIT TO THE ENGINEER PRIOR TO EXCAVATING EACH PIT. THE PIT PLANS SHALL SHOW THE PIT SIZE, PIT LOCATION, PROTECTION TO BE INSTALLED, AND MAINTENANCE OF TRAFFIC AT PIT SITE.
9. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL LUMINAIRE LAMPS IN ACCORDANCE WITH THE LUMINAIRE SUPPLIER RECOMMENDATIONS. THE CONTRACTOR SHALL COORDINATE THE LAMP TYPE, VOLTAGE, AND WATTAGE WITH THE LUMINAIRE SUPPLIER.
10. THE CONTRACTOR SHALL CONTACT THE ELECTRIC UTILITY COMPANY TO COORDINATE THE ELECTRICAL SERVICE WORK.
11. TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE LIGHT POLES, THE LIGHT POLES SHALL NOT BE ERECTED AND/OR LEFT TO STAND WITHOUT LUMINAIRES. THE LIGHT POLES WILL NOT BE PAID FOR UNTIL THE POLES ARE FULLY APPROVED WITH THE LUMINAIRES INSTALLED, CONNECTED, AND TESTED.
12. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE SPLICED AND BONDED TO EACH JUNCTION BOX AND PULL BOX THAT THE CONDUCTORS PASS THROUGH. JUNCTION BOXES AND PULL BOXES SHALL BE EQUIPPED WITH GROUND LUGS FOR THE GROUND WIRE TERMINATION. THE GROUND LUG INSTALLATION SHALL NOT DEGRADE THE JUNCTION BOX RATING.
13. TRENCHES FOR LIGHTING RACEWAYS SHALL HAVE A MINIMUM DEPTH OF 30".
14. CONTRACTOR SHALL DELIVER THE EXISTING LIGHTING UNITS TO BE REMOVED AND THE EXISTING LIGHTING CONTROLLERS TO BE REMOVED TO THE CITY OF ST. CHARLES.
15. THE CONTRACTOR SHALL CONTACT THE CITY OF ST. CHARLES ELECTRICAL PERSONEL-MR. TOM BRUHL AT 630-377-4401 TO SCHEDULE THE WORK TO CORE DRILL THE EXISTING MANHOLE AND INSTALLTHE ELECTRIC UTILITY DUCT BANK SHOWN ON SHEET E-04.

E-01

AECOM

REVISIONS NAME	DATE

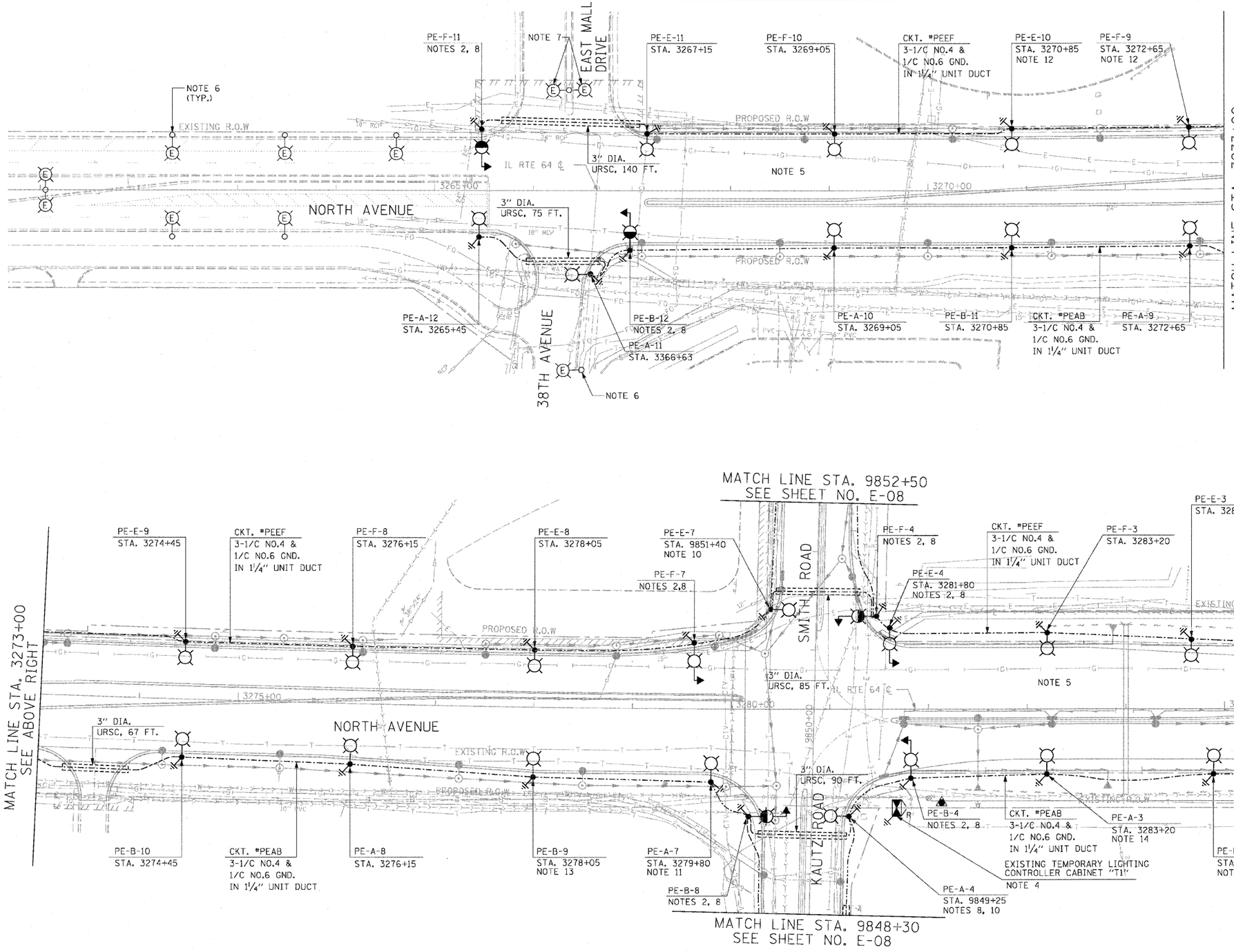
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS, AND GENERAL NOTES

SCALE: NONE DRAWN BY: HR
DATE: MAY 13, 2011 CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	416
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



N

NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. SEE TRAFFIC SIGNAL PLANS FOR THE EXACT LOCATIONS OF COMBINATION TRAFFIC SIGNAL/LIGHT POLES.
3. THE TYPICAL LIGHT POLE SETBACK, FROM 38TH AVENUE TO KAUTZ/SMITH ROAD, SHALL BE 3 FEET FROM BACK OF CURB TO THE FACE OF LIGHT POLE, UNO.
4. REMOVE EXISTING TEMPORARY LIGHTING CONTROLLER CABINET "T1" AFTER INSTALLATION, OPERATION, TESTING, AND APROVAL OF THE PROPOSED LIGHTING SYSTEM. CONTRACTOR SHALL DELIVER THE EXISTING LIGHTING CONTROLLERS TO BE REMOVED TO THE CITY OF ST. CHARLES.
5. REMOVE EXISTING TEMPORARY LIGHTING UNITS AFTER INSTALLATION, OPERATION, TESTING, AND APPROVAL OF THE PROPOSED LIGHTING SYSTEM. SEE TEMPORARY LIGHTING PLAN TL-01.
6. EXISTING LIGHTING UNIT OWNED AND OPERATED BY CITY OF ST. CHARLES.
7. EXISTING PARKING LOT LIGHTING UNIT OWNED AND OPERATED BY CHARLESTOWNE MALL.
8. PROVIDE 2 - 3½" PVC CONDUIT SLEEVES IN THE POLE FOUNDATION FOR LIGHTING UNIT DUCTS. COORDINATE ALL WORK WITH TRAFFIC SIGNAL INSTALLATION.
9. THE TYPICAL LIGHT POLE SETBACK, FROM KAUTZ/SMITH ROAD TO ILLINOIS ROUTE 59, SHALL BE 15 FEET FROM EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE, UNO.
10. OFFSET LIGHTING UNIT 3 FEET FROM BACK OF CURB TO THE FACE OF LIGHT POLE.
11. LUMINAIRE SHALL BE 400W HPS.
12. OFFSET LIGHTING UNIT 10 FEET FROM BACK OF CURB TO THE FACE OF LIGHT POLE.
13. OFFSET LIGHTING UNIT 7'-6" FROM BACK OF CURB TO THE FACE OF LIGHT POLE.
14. OFFSET LIGHTING UNIT 18'-6" FROM EDGE OF OF PAVEMENT TO THE FACE OF LIGHT POLE.

E-02

0 50 100 150 200
SCALE (1:50 FT)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

ROADWAY LIGHTING PLAN
STA. 3260+00 TO STA. 3287+00

SCALE: 1" = 50'
DATE: NOVEMEBER 1, 2011
DRAWN BY: HR
CHECKED BY: JPC

AECOM

10/24/2011 11:03:30 AM
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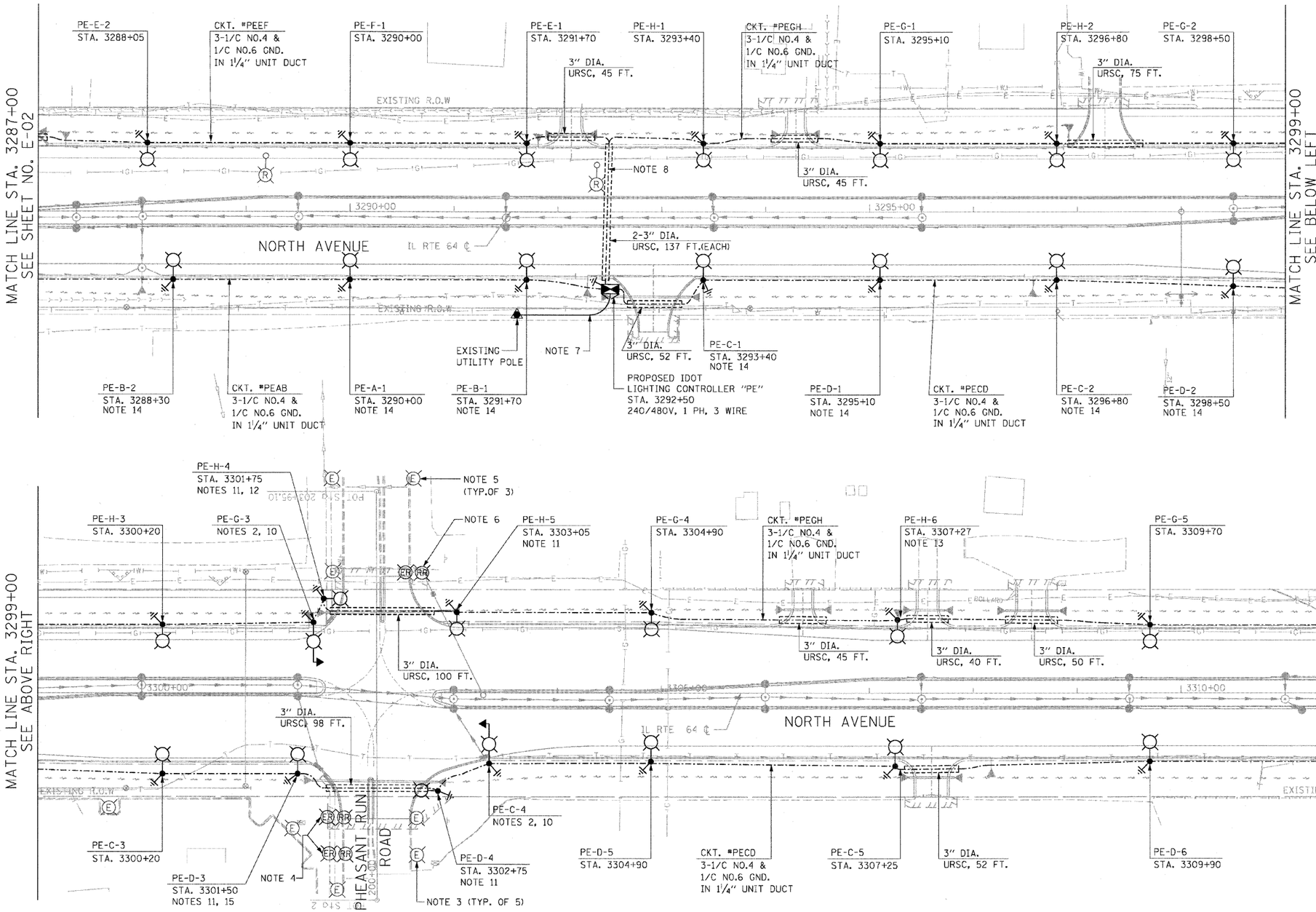
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	417
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. SEE TRAFFIC SIGNAL PLANS FOR THE EXACT LOCATIONS OF COMBINATION TRAFFIC SIGNAL/LIGHT POLES.
3. EXISTING ORNAMENTAL LIGHTING UNIT OWNED AND OPERATED BY PHEASANT RUN RESORT. CONTRACTOR SHALL PROTECT LIGHTING UNIT FROM DAMAGE DURING CONSTRUCTION.
4. REMOVE, STORE AND PROTECT EXISTING LIGHTING UNIT AND REINSTALL EXISTING LIGHTING UNIT 3 FEET FROM PROPOSED BACK OF CURB TO THE FACE OF LIGHT POLE. CONTRACTOR SHALL MATCH EXISTING POLE FOUNDATION AND RE-CIRCUIT EXISTING LIGHTING UNIT. COORDINATE ALL WORK WITH PHEASANT RUN RESORT.
5. EXISTING ORNAMENTAL LIGHTING UNIT OWNED AND OPERATED BY HILTON GARDEN INN. CONTRACTOR SHALL PROTECT LIGHTING UNIT FROM DAMAGE DURING CONSTRUCTION.
6. REMOVE, STORE AND PROTECT EXISTING LIGHTING UNIT AND REINSTALL EXISTING LIGHTING UNIT 3 FEET FROM PROPOSED BACK OF CURB TO THE FACE OF LIGHT POLE. CONTRACTOR SHALL MATCH EXISTING POLE FOUNDATION AND RECIRCUIT THE EXISTING LIGHTING UNIT. COORDINATE ALL WORK WITH HILTON GARDEN INN.
7. PROVIDE 3-350 KCMIL TYPE USE IN 4" URSC FROM THE UTILITY POLE TO THE LIGHTING CONTROLLER CABINET. COORDINATE ALL WORK WITH COMED.
8. INSTALL ONE 1¼" UNIT DUCT PER URSC UNDER ROADWAY.
9. THE TYPICAL LIGHT POLE SETBACK SHALL BE 15 FEET FROM THE EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE, UNLESS NOTED OTHERWISE.
10. PROVIDE 2 - 3½" PVC CONDUIT SLEEVES IN THE POLE FOUNDATION FOR LIGHTING UNIT DUCTS. COORDINATE ALL WORK WITH TRAFFIC SIGNAL INSTALLATION.
11. LUMINAIRE SHALL BE 400W HPS.
12. LIGHT POLE SETBACK SHALL BE 2 FEET FROM CENTERLINE OF POLE TO BACK EDGE OF SIDEWALK.
13. OFFSET LIGHTING UNIT 25'-6" FEET FROM THE EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE.
14. OFFSET LIGHTING UNIT 18'-6" FROM THE EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE.
15. OFFSET LIGHTING UNIT 16'-0" FROM THE EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE.

E-03

0 50 100 150 200
SCALE (1:50 FT)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

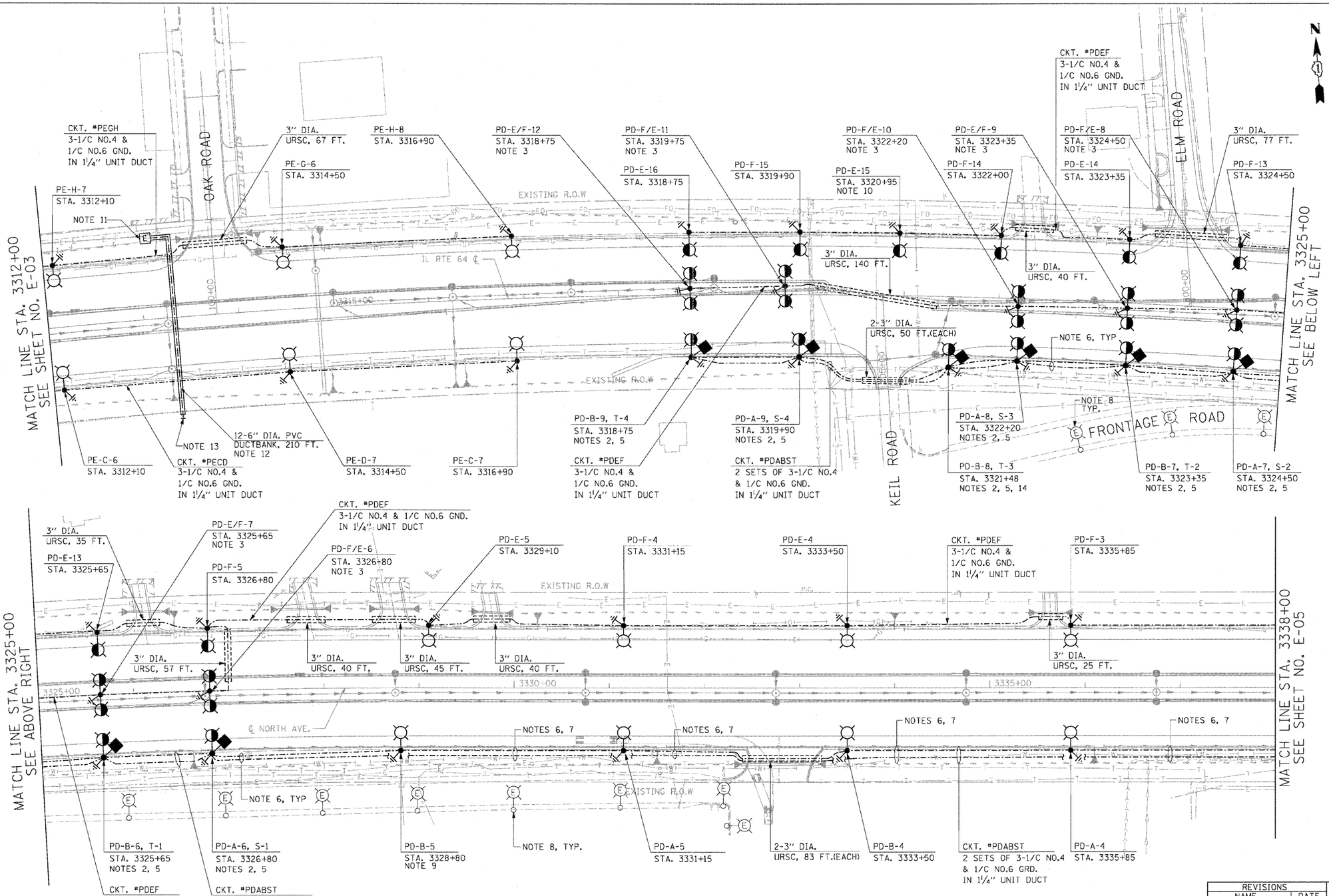
ROADWAY LIGHTING PLAN
STA. 3287+00 TO STA. 3312+00

SCALE: 1" = 50' DRAWN BY: HR
DATE: NOVEMBER 1, 2011 CHECKED BY: JM

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	418
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. PROVIDE 2 - 3½" PVC CONDUIT SLEEVES IN THE POLE FOUNDATION FOR LIGHTING UNIT DUCTS.
3. FOR LIGHT POLES LOCATED IN THE MEDIAN AREA, CONTRACTOR SHALL CENTER LIGHT POLES BETWEEN MEDIAN OR ADJUST LIGHT POLES TO MEET MINIMUM 2 FEET CLEARANCE FROM THE BACK OF CURB TO THE FACE OF LIGHT POLE.
4. THE TYPICAL LIGHT POLE SETBACK SHALL BE 15 FEET FROM EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE, UNO.
5. PROVIDE AN AVIATION OBSTRUCTION WARNING LUMINAIRE. THE OBSTRUCTION LUMINAIRE SHALL BE OPERATED AT 240 VOLTS. SEE SHEET E-12 FOR AVIATION OBSTRUCTION WARNING LUMINAIRE MOUNTING DETAILS.
6. PROVIDE TWO 1¼" UNIT DUCTS.
7. THE UNIT DUCT THAT FEEDS AVIATION OBSTRUCTION WARNING LUMINAIRE SHALL SWEEP AROUND THE LIGHT POLE FOUNDATIONS.
8. EXISTING LIGHTING UNIT OWNED AND OPERATED BY DUPAGE COUNTY AIRPORT.
9. OFFSET LIGHTING UNIT 19'-6" FROM THE EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE.
10. OFFSET LIGHTING UNIT 18'-6" FROM THE EDGE OF PAVEMENT TO THE FACE OF LIGHTING UNIT.
11. ROUTE PROPOSED CONCRETE ENCASED DUCTBANK INTO EXISTING ELECTRIC UTILITY MANHOLE.
12. PROVIDE TWELVE 6" DIA. SCHEDULE 40 PVC CONDUITS ENCASED IN REINFORCED CONCRETE DUCTBANK. INSTALL DUCTBANK AT APPROXIMATELY STA. 3313+30. COORDINATE FINAL DUCTBANK INSTALLATION LOCATION AND DEPTH WITH DRAINAGE AND CIVIL WORK. SEE SHEET E-16 FOR DUCTBANK DETAILS.
13. ROUTE DUCTBANK TO THE R.O.W. AND CAP ENDS FOR FUTURE USE. MARK END OF DUCTBANK WITH A SECTION OF 6" DIA. PVC CONDUIT INSTALLED VERTICALLY IN THE GROUND. SEE SHEET E-16 FOR DETAILS.
14. VERFIY EXISTING WATER MAIN HAS BEEN RELOCATED BY OTHERS PRIOR TO INSTALLATION OF LIGHT POLE FOUNDATION.

E-04

0 50 100 150 200
SCALE (1:50 FT)

AECOM

REVISIONS	
NAME	DATE

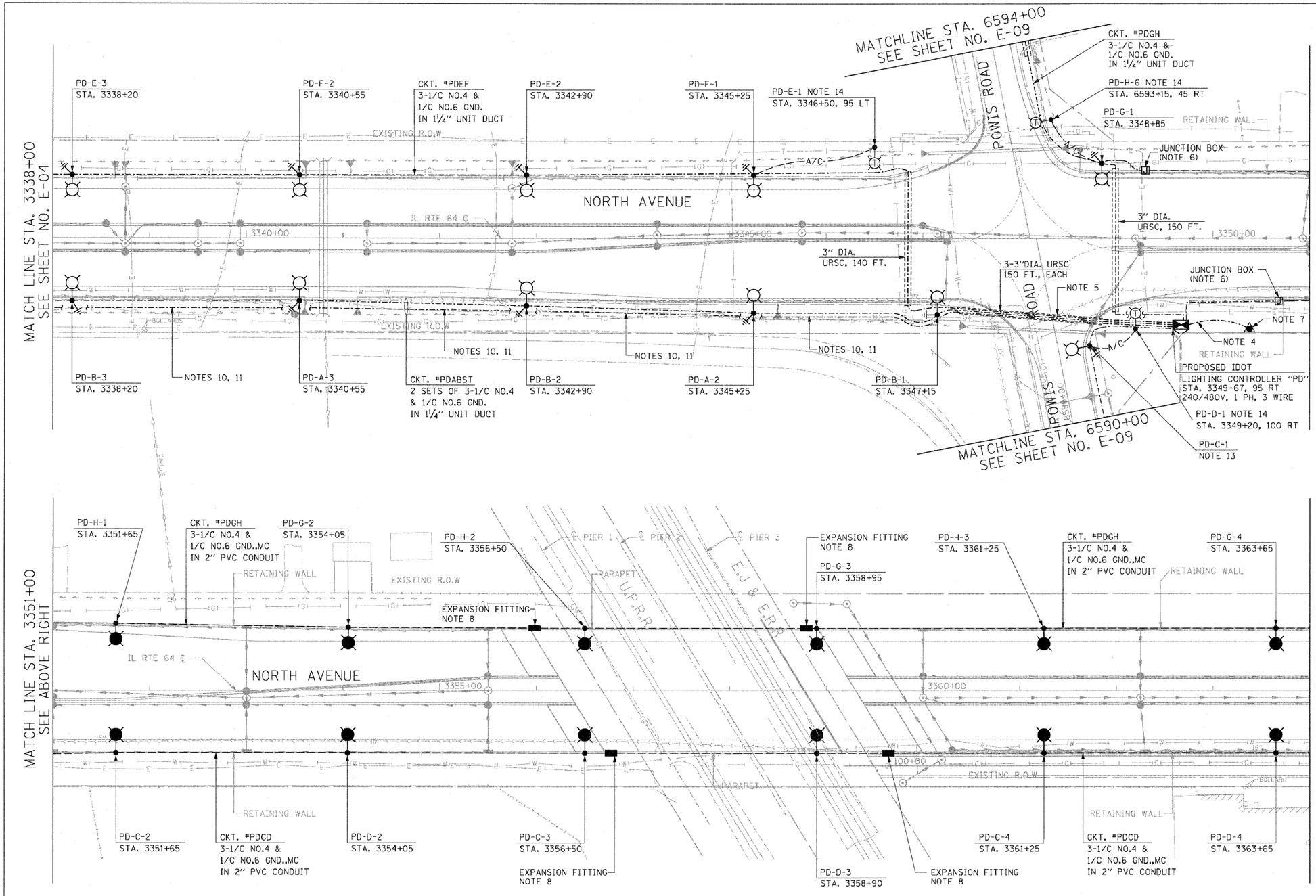
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

ROADWAY LIGHTING PLAN
STA. 3312+00 TO STA. 3338+00

SCALE: 1" = 50'
DRAWN BY: HR
DATE: NOVEMBER 1, 2011
CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	419
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. NOT USED
3. NOT USED
4. PROVIDE 3-350 KCMIL TYPE USE IN 4" URSC FROM THE UTILITY POLE TO THE LIGHTING CONTROLLER CABINET. CONTRACTOR SHALL COORDINATE ALL WORK WITH COMED.
5. INSTALL ONE 1¼"UNIT DUCT PER URSC UNDER ROADWAY.
6. PROVIDE AN 18"X8"X8" NON-METALIC JUNCTION BOX EMBEDDED IN RETAINING WALL TO TRANSITION FROM UNIT DUCT IN TRENCH TO CONDUIT EMBEDDED IN RETAINING WALL. SEE DRAWING E-17 FOR DETAILS.
7. PROPOSED COMED UTILITY POLE.
8. PROVIDE AX/DX TYPE EXPANSION FITTINGS AT LOCATIONS NOTED. IN ADDITION PROVIDE DX TYPE DEFLECTION FITTINGS AT ALL ½" CORK FILLED EXPANSION JOINTS IN RETAINING WALL PARAPET. SEE STRUCTURAL DRAWINGS FOR LOCATION OF EXPANSION AND CONSTRUCTION JOINTS.
9. THE TYPICAL LIGHT POLE SETBACK SHALL BE 15 FEET FROM EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE.
10. 3#4 & 1#6 GND. IN 1¼" UNIT DUCT FOR AVIATION OBSTRUCTION WARNING LUMINAIRE.
11. THE UNIT DUCT FOR AVIATION OBSTRUCTION WARNING LUMINAIRE SHALL SWEEP AROUND THE LIGHT POLE FOUNDATION.
12. IN LIGHTING CONTROLLER "PD" PROVIDE TWO 30 AMP, 1 POLE CIRCUIT BREAKERS FOR AVIATION OBSTRUCTION WARNING LUMINAIRE. THE BREAKERS MUST BE INSTALLED ON LINE SIDE OF MAIN BREAKER FOR CONTINUOUS OPERATION. SEE NOTE 2 ON SHEET E-14.
13. LIGHT POLE SETBACK SHALL BE 3 FEET FROM BACK OF CURB TO FACE OF LIGHT POLE.
14. TEMPORARY LIGHTING UNIT CONSISTING OF 60 FT. WOOD POLE, 15 FT. MAST ARM, 47.5 FOOT MOUNTING HEIGHT, AND 400 WATT, 240 VOLT HPS LUMINAIRE. SEE SHEET TL-03.

E-05

AECOM

0 50 100 150 200
SCALE (1:50 FT)

REVISIONS	
NAME	DATE

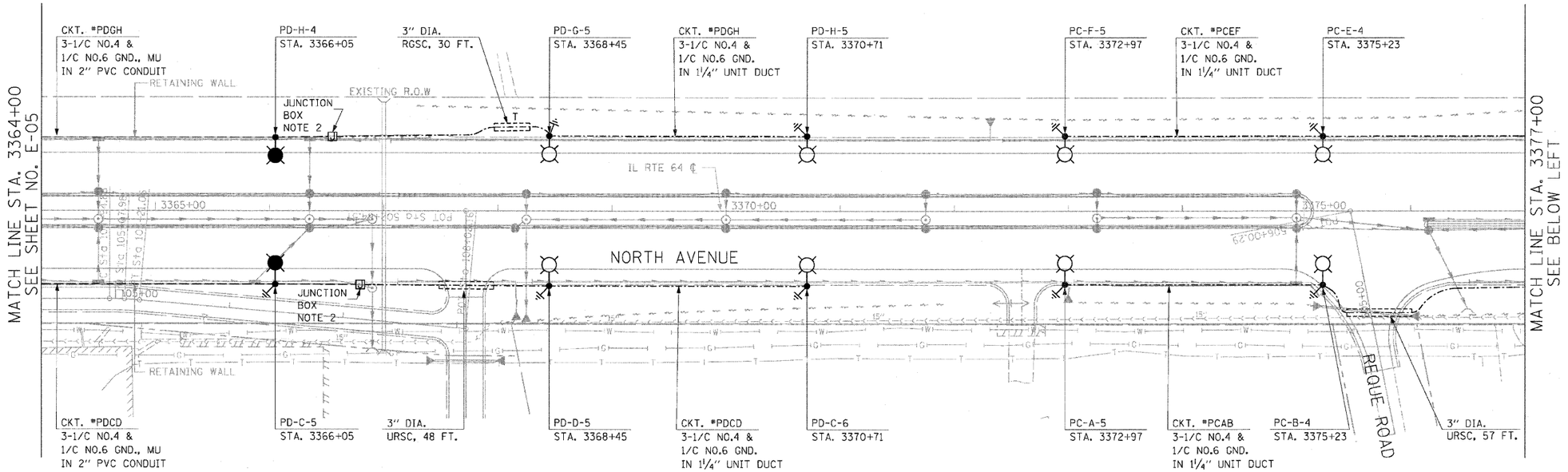
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

ROADWAY LIGHTING PLAN
STA. 3338+00 TO STA. 3364+00

SCALE: 1" = 50'
DATE: MAY 13, 2011
DRAWN BY: HR
CHECKED BY: JPC

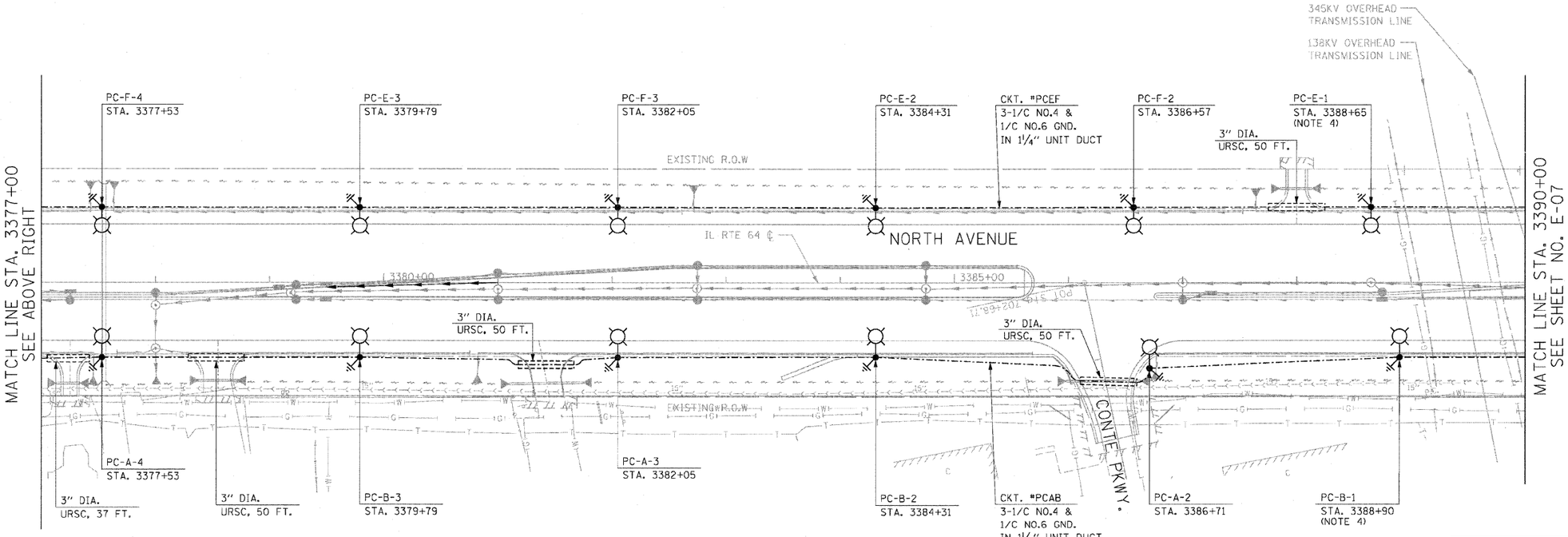
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	420
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. POVIDE AN 18"X8"X8" NON-METALLIC JUNCTION BOX EMBEDDED IN RETAINING WALL TO TRANSITION FROM UNIT DUCT IN TRENCH TO CONDUIT EMBEDDED IN RETAINING WALL. SEE DRAWING E-17 FOR DETAILS.
3. THE TYPICAL LIGHT POLE SETBACK SHALL BE 15 FEET FROM EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE, UNLESS NOTED OTHERWISE.
4. THE CONTRACTOR SHALL CONTACT COM ED AND OBTAIN APPROVAL PRIOR TO THE INSTALLATION OF THE LIGHT POLE FOUNDATIONS NEAR THE TRANSMISSION LINES.



E-06

0 50 100 150 200
SCALE (1:50 FT)

AECOM

REVISIONS	
NAME	DATE

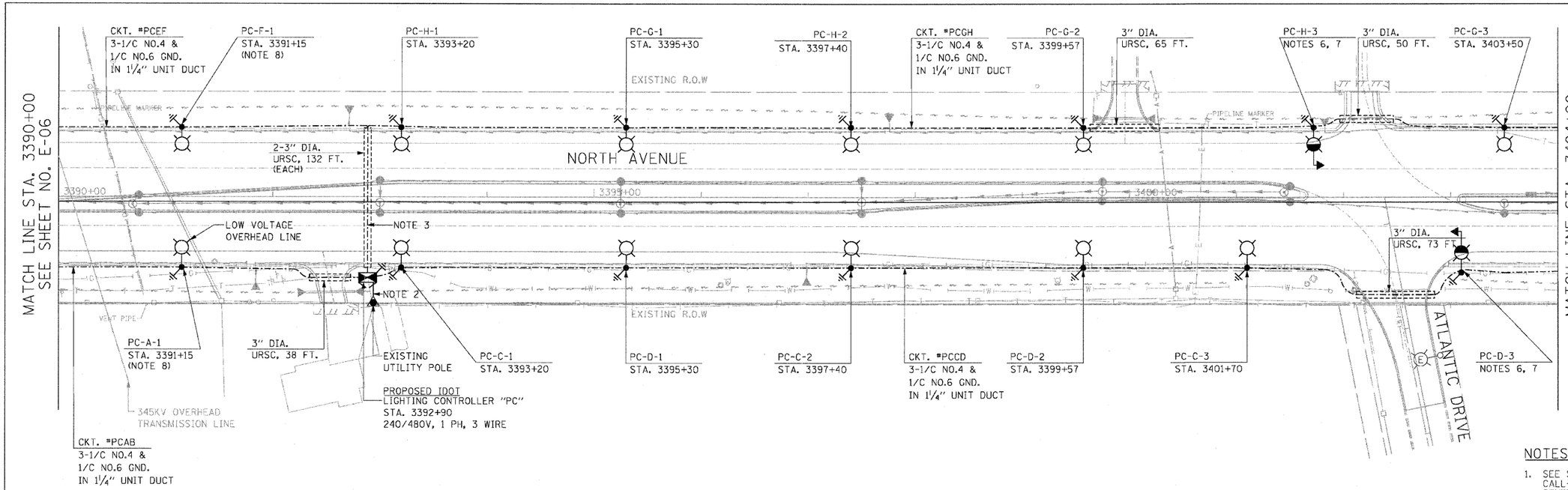
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

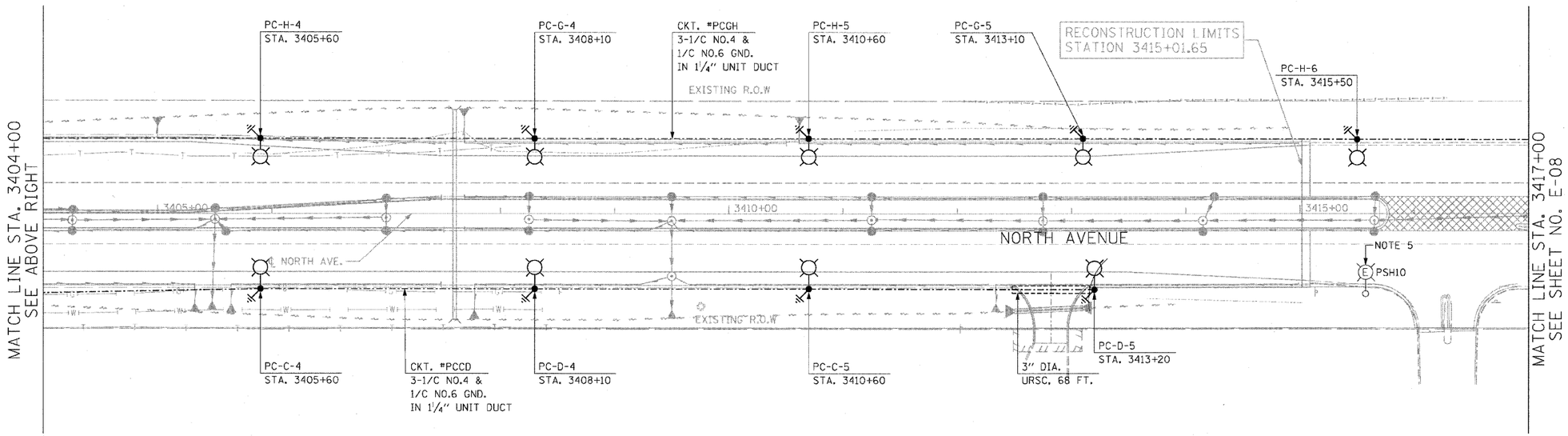
ROADWAY LIGHTING PLAN
STA. 3364+00 TO STA. 3390+00

SCALE: 1" = 50' DRAWN BY: HR
DATE: MAY 13, 2011 CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	421
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410





NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. PROVIDE 3# 350 KCMIL TYPE USE IN 4" URSC FROM THE UTILITY POLE TO THE LIGHTING CONTROLLER CABINET. COORDINATE ALL WORK WITH COMED.
3. INSTALL ONE 1¼" UNIT DUCT PER URSC UNDER ROADWAY.
4. THE TYPICAL LIGHT POLE SETBACK SHALL BE 15 FEET FROM THE EDGE OF THE PAVEMENT TO THE FACE OF LIGHT POLE.
5. EXISTING LIGHTING UNIT OWNED AND OPERATED BY IDOT.
6. SEE TRAFFIC SIGNAL PLANS FOR THE EXACT LOCATIONS OF COMBINATION TRAFFIC SIGNAL/LIGHT POLES.
7. PROVIDE 2 - 3½" PVC CONDUIT SLEEVES IN THE POLE FOUNDATION FOR LIGHTING UNIT DUCTS. COORDINATE ALL WORK WITH TRAFFIC SIGNAL INSTALLATION.
8. THE CONTRACTOR SHALL CONTACT COM ED AND OBTAIN APPROVAL PRIOR TO THE INSTALLATION OF LIGHT POLE FOUNDATIONS NEAR THE TRANSMISSION LINES.

E-07

AECOM

0 50 100 150 200
SCALE (1:50 FT)

REVISIONS	
NAME	DATE

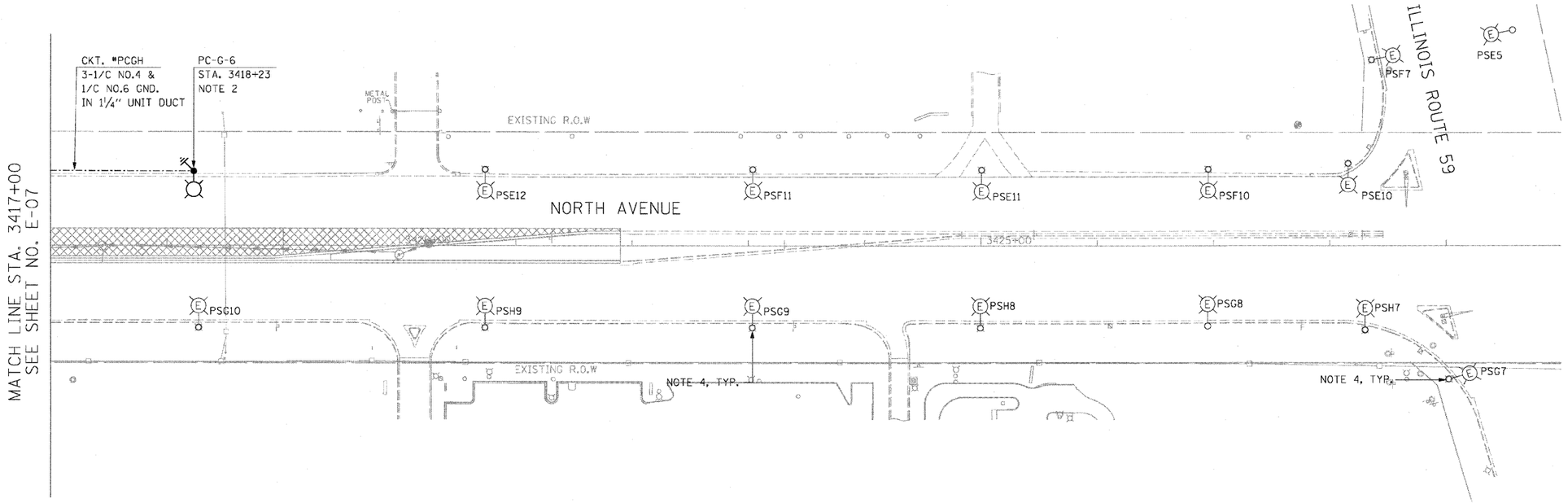
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

ROADWAY LIGHTING PLAN
STA. 3390+00 TO STA. 3417+00

SCALE: 1" = 50'
DRAWN BY: HR
DATE: MAY 13, 2011
CHECKED BY: JPC

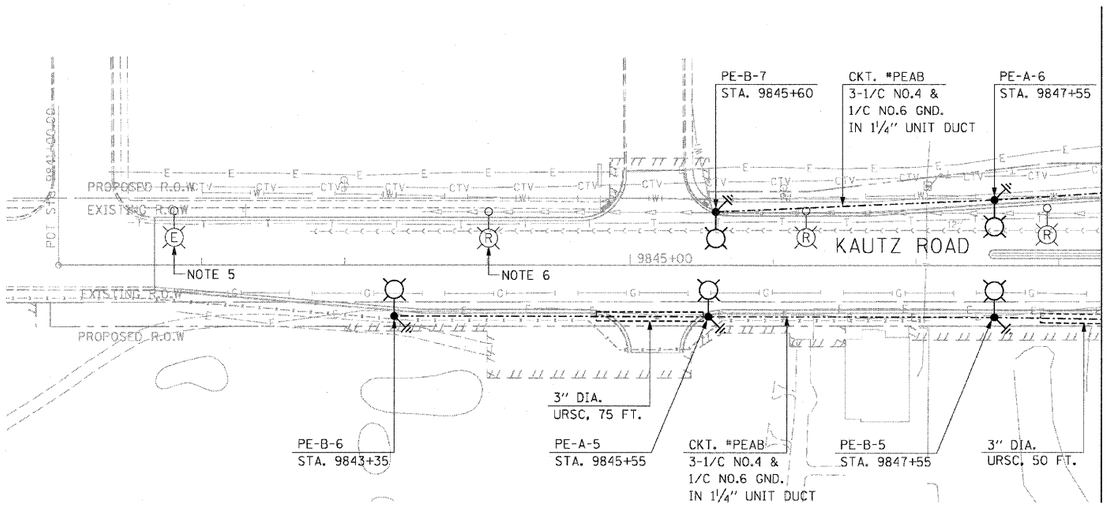
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	422
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

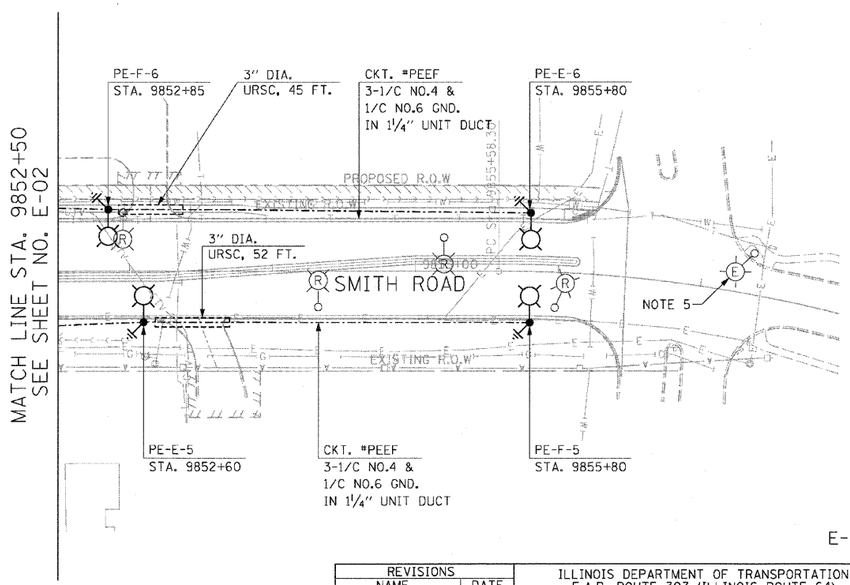
62410



NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. OFFSET LIGHT POLE 15 FEET FROM EDGE OF PAVEMENT TO THE FACE OF LIGHT POLE.
3. THE TYPICAL LIGHT POLE SETBACK SHALL BE 3 FEET FROM BACK OF CURB TO THE FACE OF LIGHT POLE.
4. EXISTING LIGHTING UNIT OWNED AND OPERATED BY IDOT. INSTALLED IN CONTRACT 82634 IN 2002.
5. EXISTING LIGHTING UNIT OWNED AND OPERATED BY CITY OF ST. CHARLES.
6. PULL EXISTING LIGHTING CIRCUITS TO THE NEAREST EXISTING LIGHTING UNIT TO REMAIN. COORDINATE ALL WORK WITH CITY OF ST. CHARLES.





E-08

0 50 100 150 200
SCALE (1:50 FT)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

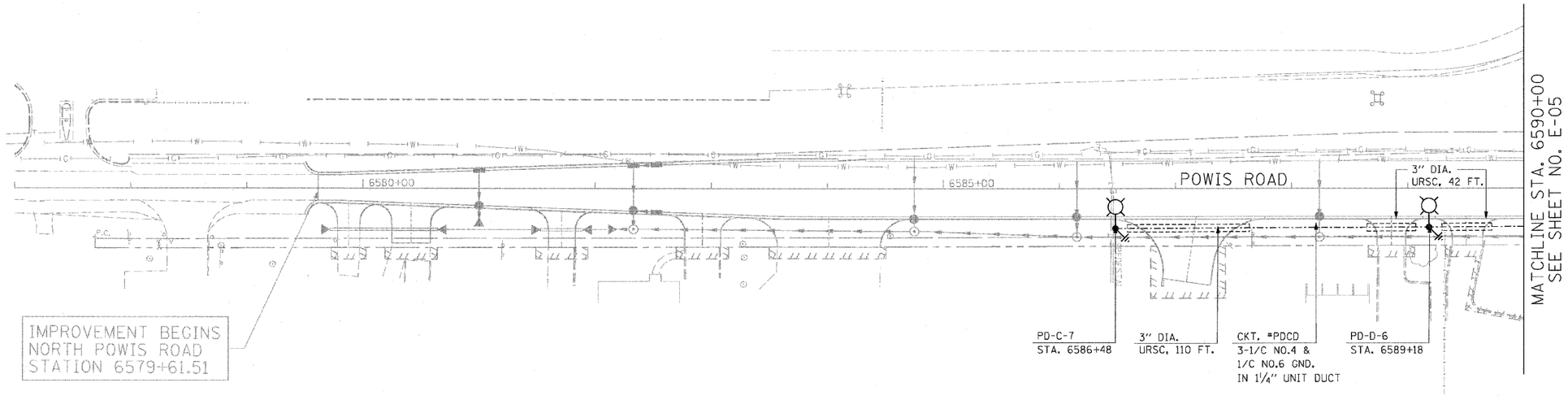
ROADWAY LIGHTING PLANS
STA. 3417+00 TO STA. 3425+00
STA. 9842+50 TO STA. 9848+50
STA. 9850+50 TO STA. 9856+83.72

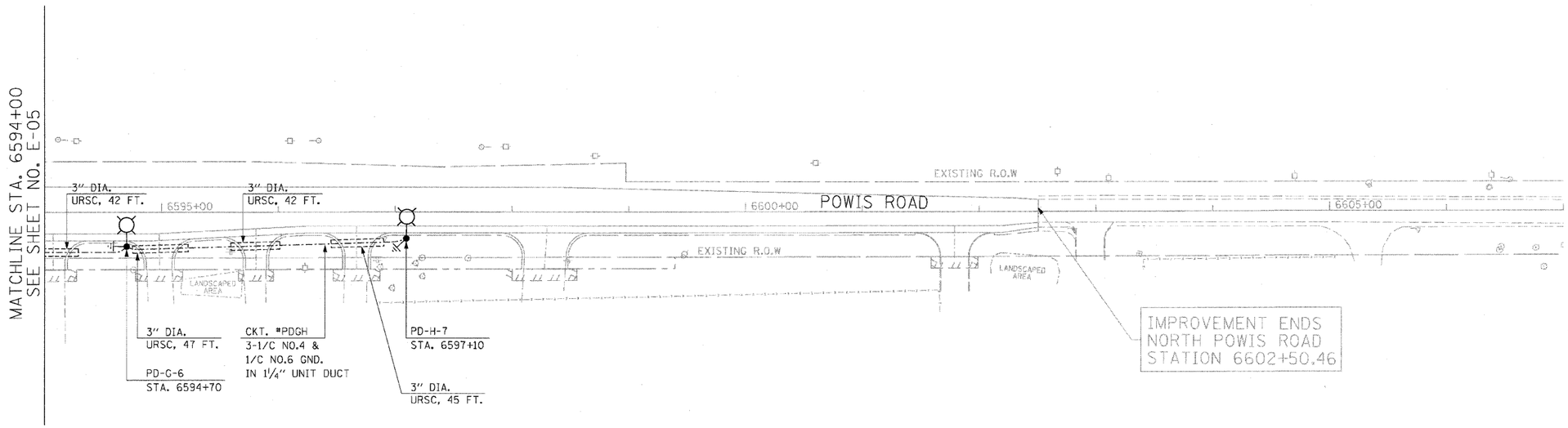
SCALE: 1" = 50' DRAWN BY: HR
DATE: MAY 13, 2011 CHECKED BY: JPC

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	423
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410





NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. THE TYPICAL LIGHT POLE SETBACK SHALL BE 3 FEET FROM BACK OF CURB TO THE FACE OF LIGHT POLE.

E-09

AECOM

0 50 100 150 200
SCALE (1:50 FT)

REVISIONS	
NAME	DATE

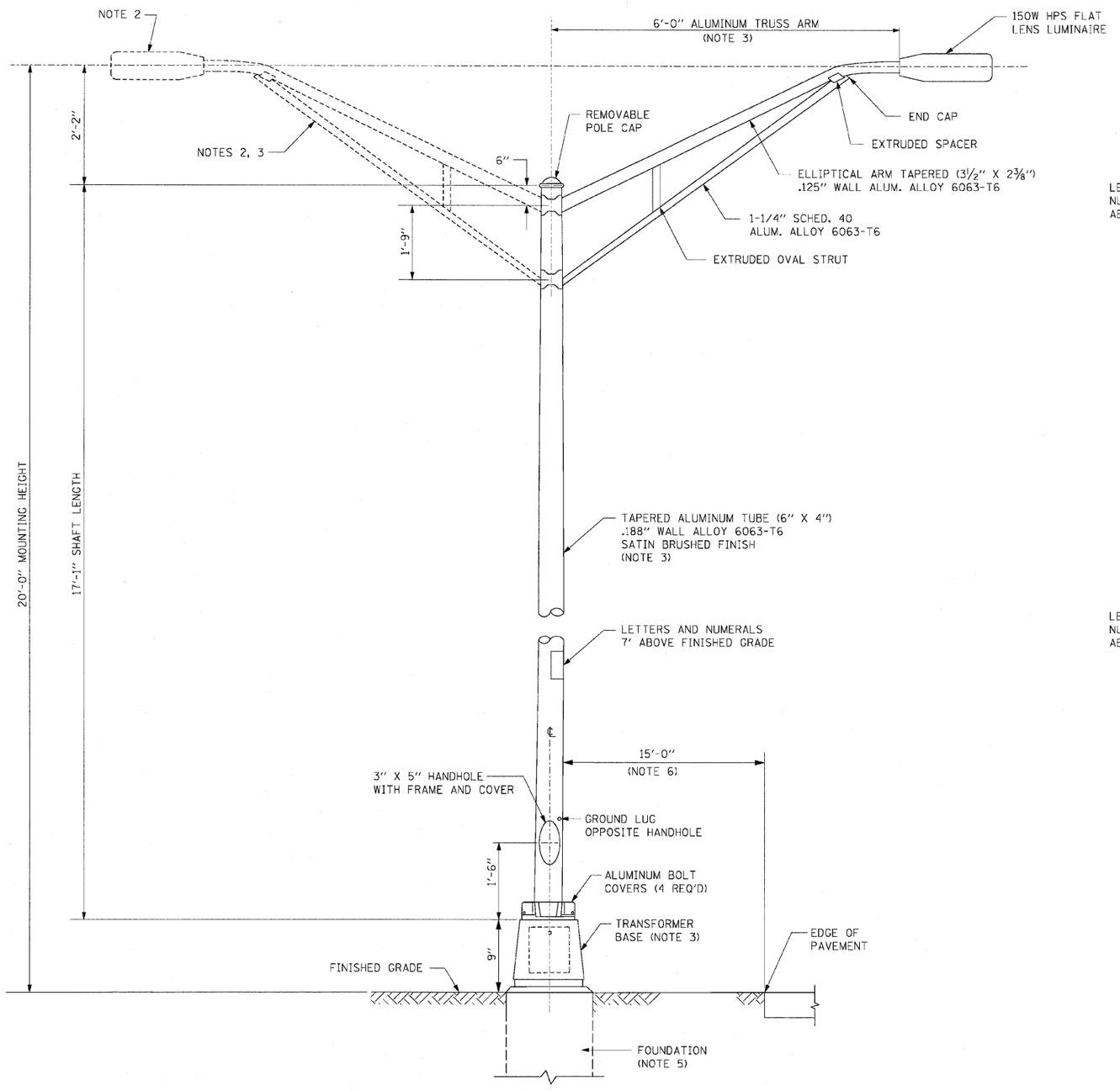
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

ROADWAY LIGHTING PLANS
STA. 6580+00 TO STA. 6590+00
STA. 6594+00 TO STA. 6605+00

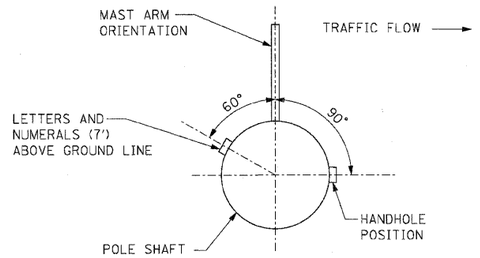
SCALE: 1" = 50' DRAWN BY: HR
DATE: NOVEMBER 1, 2011 CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	424
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

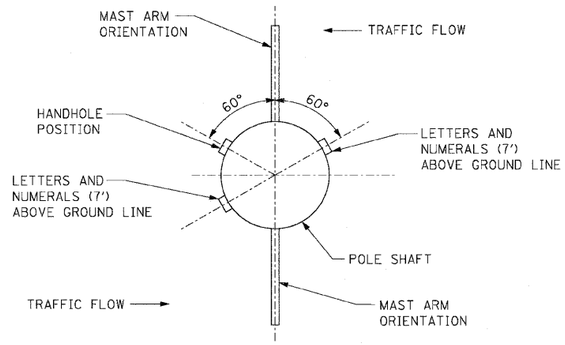
62410



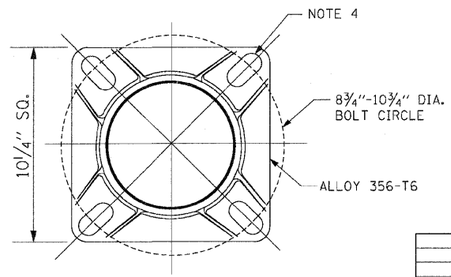
1 / E-10 SINGLE/TWIN ARM LIGHT POLE FOR 20' M.H.
NOT TO SCALE



2 / E-10 POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES
NOT TO SCALE



3 / E-10 POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES
NOT TO SCALE



4 / E-10 LIGHT POLE BASE PLATE DETAIL
NOT TO SCALE

NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. FURNISH AND INSTALL SECOND LUMINAIRE AND MAST ARM WHERE SHOWN ON ROADWAY LIGHTING PLANS.
3. THE LIGHT POLE, MAST ARM, AND TRANSFORMER BASE SHALL BE FURNISHED BY A SINGLE MANUFACTURER.
4. PROVIDE ¾" ANCHOR BOLTS. VERIFY BOLT CIRCLE AND ANCHOR BOLT SIZE PRIOR TO INSTALLATION OF LIGHT POLE FOUNDATIONS.
5. SEE SHEET BE-301 FOR IDOT STANDARD LIGHT POLE FOUNDATION DETAILS.
6. FOR LIGHT POLE LOCATED IN THE MEDIAN AREA, CENTER LIGHT POLE BETWEEN MEDIAN OR ADJUST LIGHT POLE TO MEET MINIMUM 2 FEET CLEARANCE FROM THE BACK OF CURB TO THE FACE OF LIGHT POLE.

AECOM

E-10

REVISIONS NAME	DATE

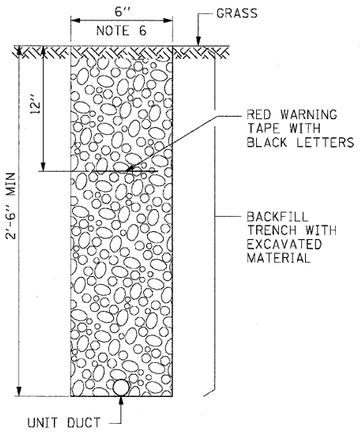
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

SINGLE/TWIN ARM ALUMINUM LIGHT POLE AND LIGHTING DETAILS

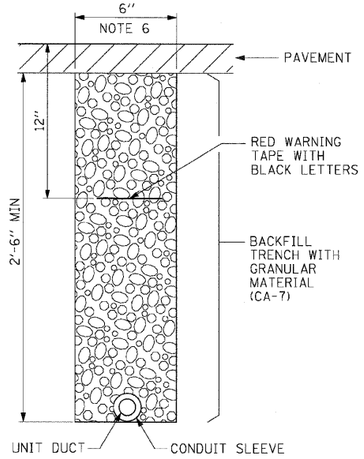
SCALE: NONE
DRAWN BY: HR
DATE: MAY 13, 2011
CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	425
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

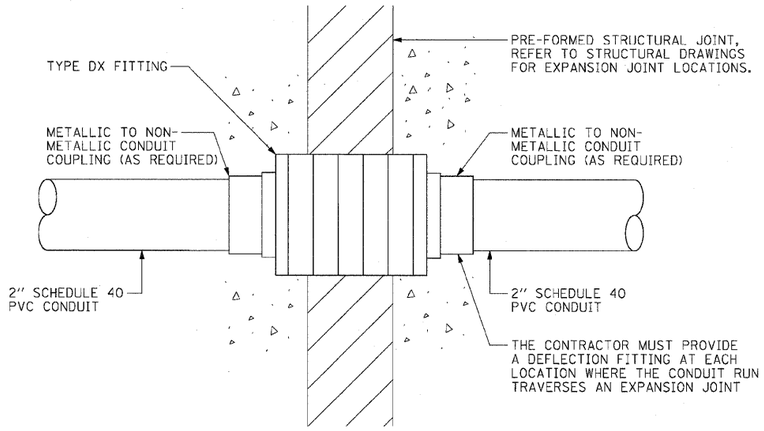
62410



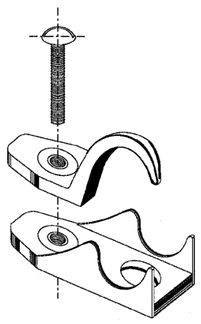
1 / E-11 CONDUIT TRENCH IN GRASS AREA
NOT TO SCALE - NOTE 7



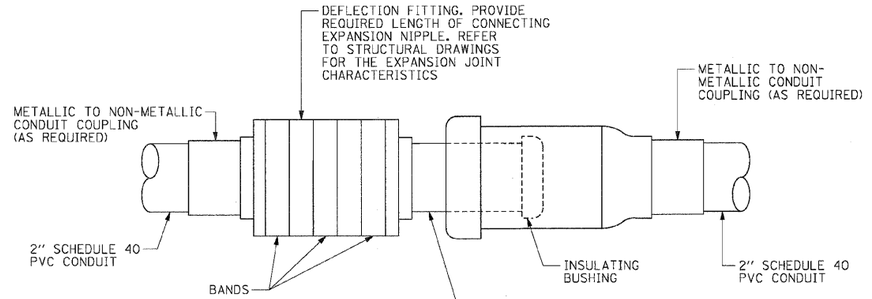
2 / E-11 CONDUIT TRENCH IN PAVED AREA
NOT TO SCALE - NOTE 7



4 / E-11 CONDUIT DEFLECTION FITTING DETAIL
DEFLECTION FITTING, O-Z/GEDNEY DX200 OR APPROVED EQUAL
NOT TO SCALE

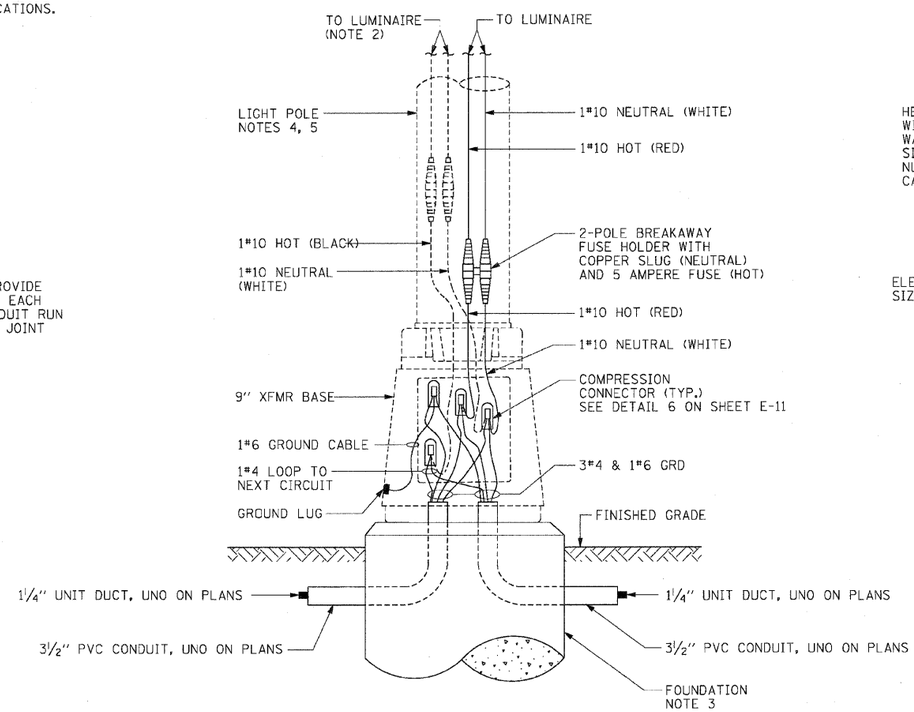


7 / E-11 GALVANIZED CONDUIT CLAMP
NOT TO SCALE

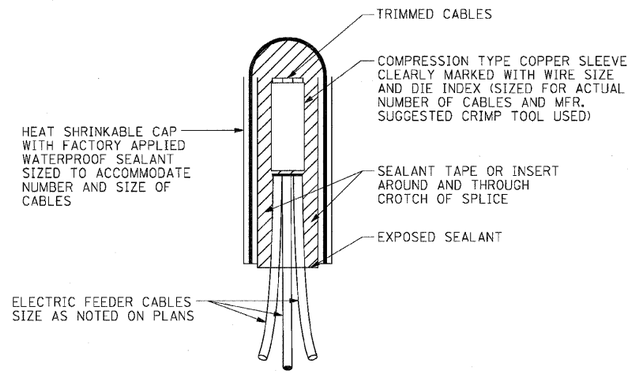


NOTE: THE CONTRACTOR MUST PROVIDE AN EXPANSION/DEFLECTION FITTING AT EACH LOCATION WHERE THE CONDUIT RUN TRAVERSES AN EXPANSION JOINT

3 / E-11 CONDUIT EXPANSION/DEFLECTION COUPLING DETAIL
EXPANSION/DEFLECTION FITTING, O-Z/GEDNEY AX/DX OR APPROVED EQUAL
NOT TO SCALE



5 / E-11 POLE BASE WIRING DETAIL FOR SINGLE/DOUBLE MAST ARM
NOT TO SCALE



6 / E-11 SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS DETAIL
NOT TO SCALE

NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. FURNISH AND INSTALL SECOND LUMINAIRE AND WIRING WHERE SHOWN ON ROADWAY LIGHTING PLANS.
3. SEE SHEET BE-301 FOR IDOT STANDARD LIGHT POLE FOUNDATION DETAILS.
4. ALL EXPOSED SCREWS, EXCEPT FOR ANCHOR BOLTS WASHERS AND HEX NUTS, SHALL BE STAINLESS STEEL.
5. SEE SHEET BE-400 FOR IDOT STANDARD 47.5' M.H. ALUMINUM LIGHT POLE DETAILS. SEE SHEET E-10 FOR 20' M.H. ALUMINUM LIGHT POLE DETAILS.
6. CONTRACTOR SHALL REPLACE AND MATCH EXISTING.
7. CONDUIT TRENCH DETAILS ARE PROVIDED FOR INFORMATION. TRENCH AND BACKFILL WILL NOT BE PAID FOR. AT THE CONTRACTOR'S OPTION, UNDERGROUND RACEWAYS SHALL BE INSTALLED BY TRENCHING, PLOWING OR BORING AND PULLING IN ACCORDANCE WITH SECTIONS 810 AND 816 OF THE STANDARD SPECIFICATIONS.

AECOM

E-11

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

MISCELLANEOUS ELECTRICAL DETAILS

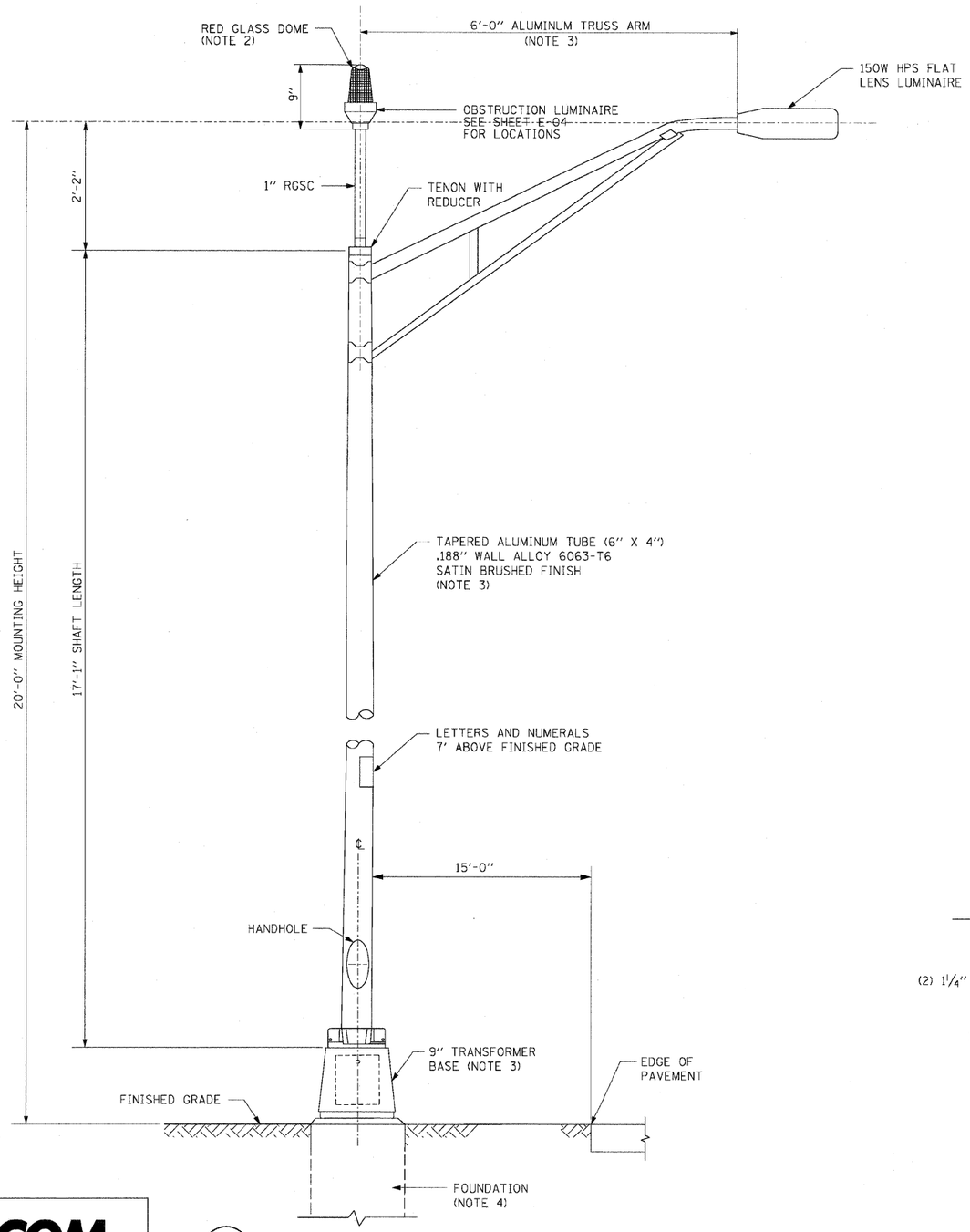
SCALE: NONE
DRAWN BY: HR
DATE: NOVEMBER 1, 2011
CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	426
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

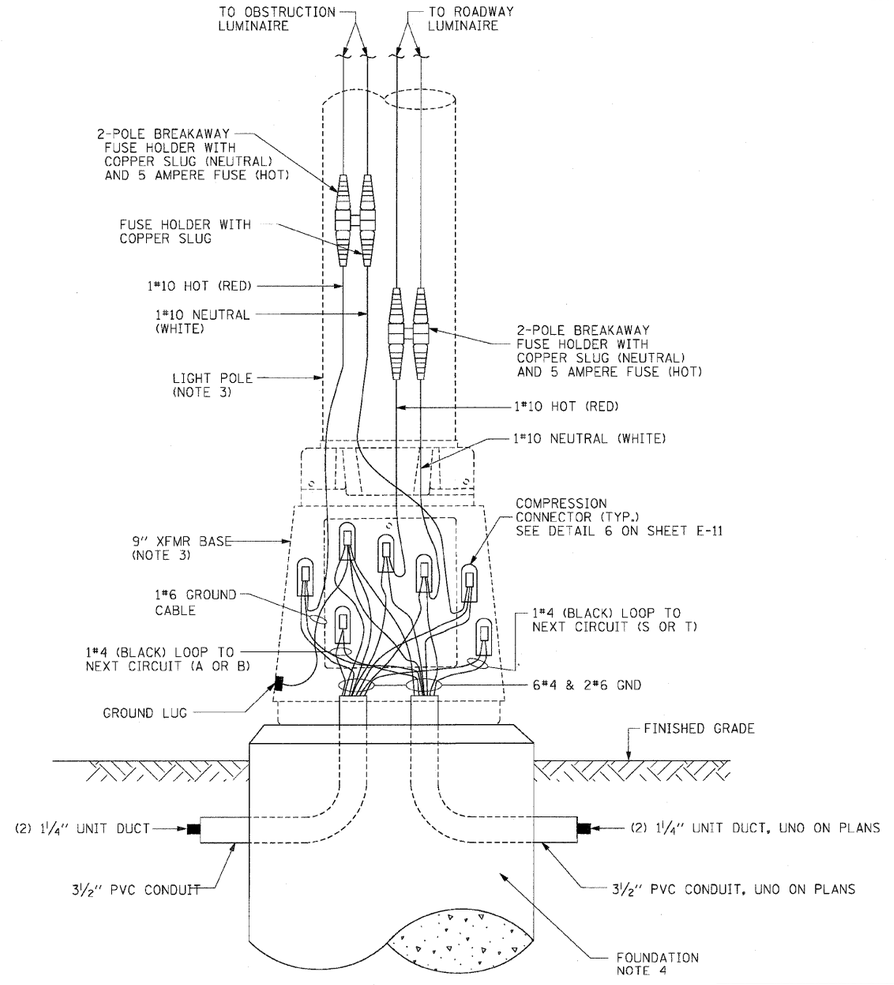
62410

NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. CONTRACTOR SHALL FURNISH AND INSTALL AVIATION OBSTRUCTION WARNING LED LUMINAIRE, FAA TYPE L-810 AS MANUFACTURED BY FLIGHT LIGHT OR APPROVED EQUAL. THE OBSTRUCTION LUMINAIRE SHALL BE OPERATED AT 240 VOLT.
3. SEE DETAIL 1 ON SHEET E-10 FOR LIGHT POLE REQUIREMENTS.
4. SEE SHEET BE-301 FOR IDOT STANDARD LIGHT POLE FOUNDATION DETAILS.



1 / E-13 AVIATION OBSTRUCTION WARNING LUMINAIRE MOUNTING DETAIL
NOT TO SCALE



2 / E-13 POLE BASE WIRING DETAIL FOR ROADWAY/WARNING LUMINAIRE
NOT TO SCALE

AECOM

REVISIONS NAME	DATE

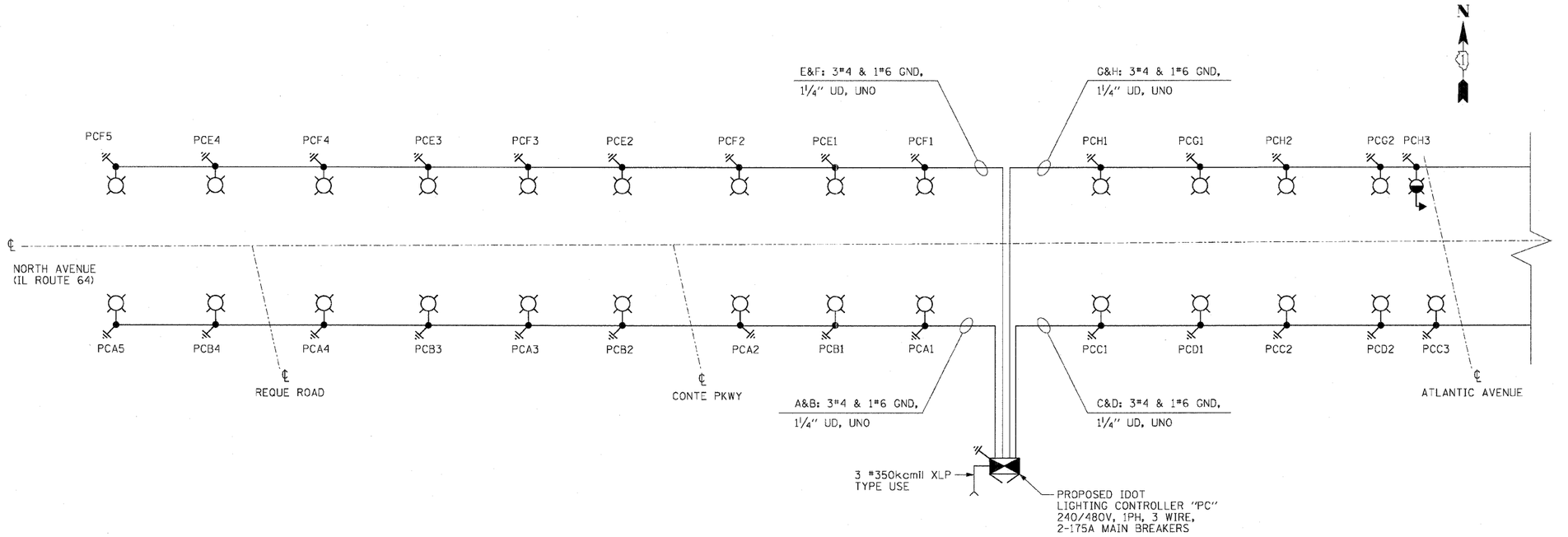
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

OBSTRUCTION/ROADWAY LUMINAIRE WIRING AND MOUNTING DETAILS

SCALE: NONE
DRAWN BY: HR
DATE: MAY 13, 2011
CHECKED BY: JPC

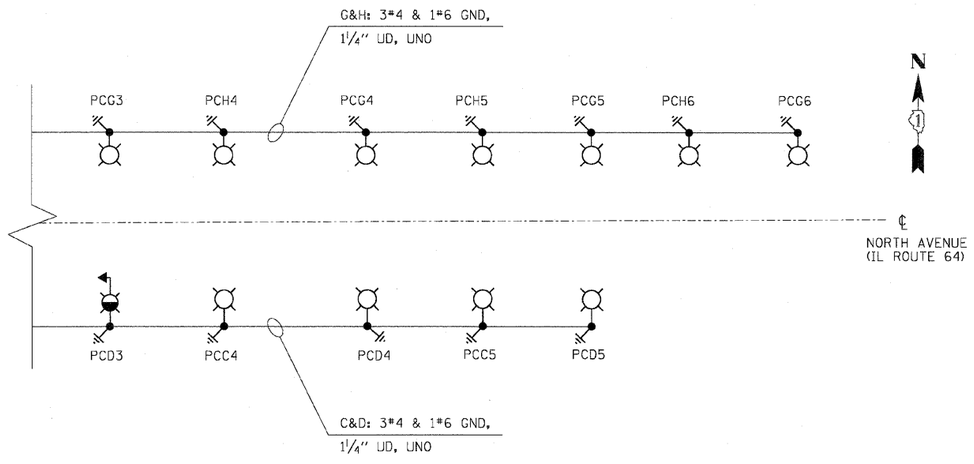
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	427
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



LEGEND

- LIGHTING UNIT: 47.5 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE, 9" BREAKAWAY TRANSFORMER BASE
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE
- LIGHTING CONTROLLER CABINET
- GROUND ROD
- ELECTRIC UTILITY SERVICE



SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "PC"
NOT TO SCALE

LOAD TABLE
LIGHTING CONTROLLER "PC"

RED PHASE			BLACK PHASE		
CIRCUIT	AMPERES	WATTS	CIRCUIT	AMPERES	WATTS
A	8.5	2040	B	6.8	1632
C	8.5	2040	D	8.5	2040
E	6.8	1632	F	8.5	2040
G	10.2	2448	H	10.2	2448
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-

TOTAL LOAD=16,320 WATTS

AECOM

REVISIONS NAME	DATE

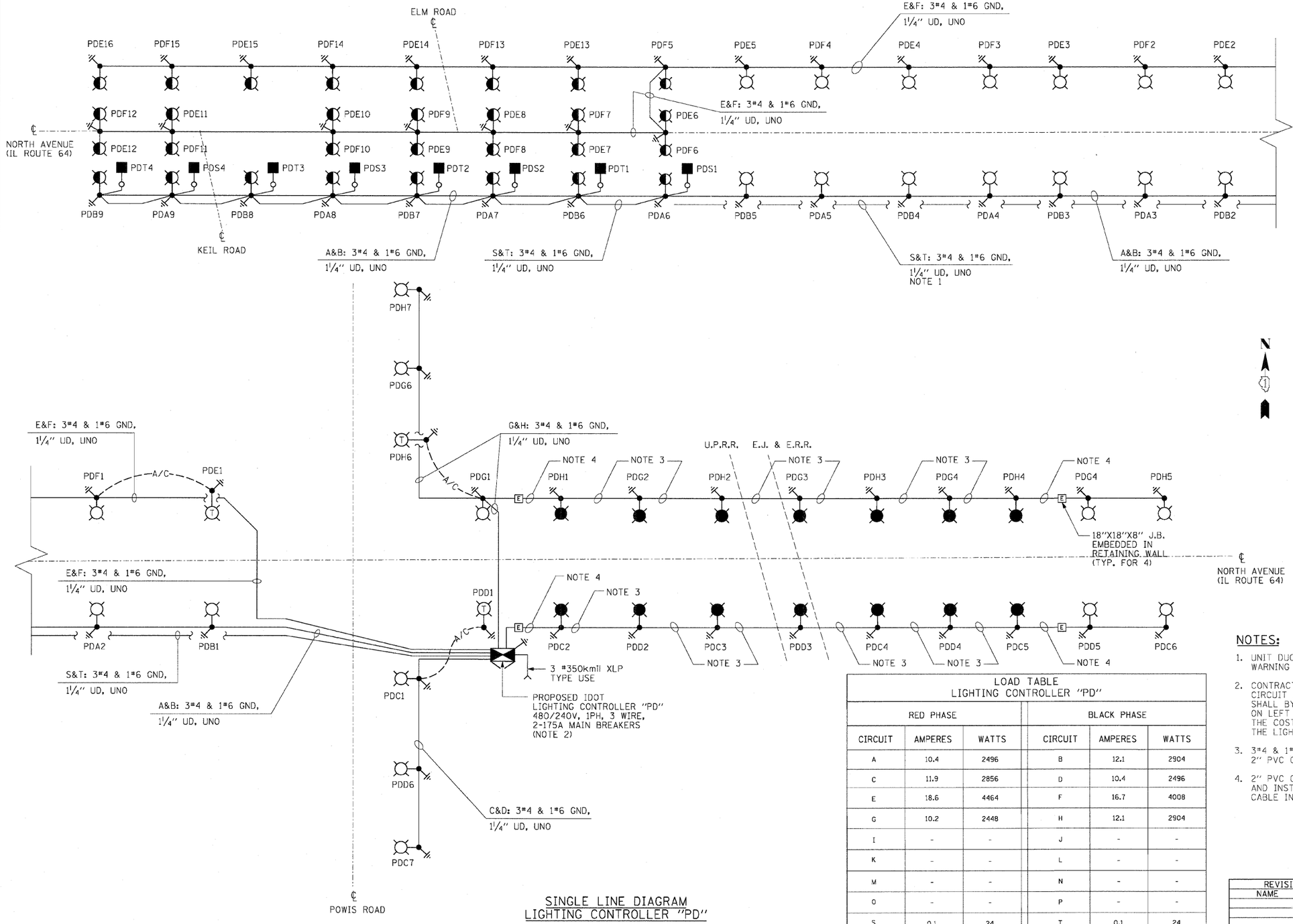
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "PC"

SCALE: NONE
DRAWN BY: HR
DATE: NOVEMBER 1, 2011
CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	428
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "PD"
NOT TO SCALE

LEGEND

- LIGHTING UNIT: 47.5 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE, 9" BREAKAWAY TRANSFORMER BASE
- LIGHTING UNIT: 20 FT. M.H., 6 FT. M.A., 150W HPS M-C-III LUMINAIRE, 9" BREAKAWAY TRANSFORMER BASE
- PARAPET WALL LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE
- TWIN LIGHTING UNIT: 20 FT. M.H., TWIN 6 FT. M.A., 150W HPS M-C-III LUMINAIRE, 9" BREAKAWAY TRANSFORMER BASE
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 400W HPS M-C-III LUMINAIRE
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE
- AVIATION OBSTRUCTION WARNING LUMINAIRE
- LIGHTING CONTROLLER CABINET
- GROUND ROD
- A/C — AERIAL CABLE, 3-1/C #4 WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- ELECTRIC UTILITY SERVICE
- TEMPORARY LIGHTING UNIT 60 FT. WOOD POLE, 15 FT. MAST ARM 47.5 FOOT MOUNTING HEIGHT 400 W HPS LUMINAIRE

LOAD TABLE
LIGHTING CONTROLLER "PD"

RED PHASE			BLACK PHASE		
CIRCUIT	AMPERES	WATTS	CIRCUIT	AMPERES	WATTS
A	10.4	2496	B	12.1	2904
C	11.9	2856	D	10.4	2496
E	18.6	4464	F	16.7	4008
G	10.2	2448	H	12.1	2904
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-
S	0.1	24	T	0.1	24

TOTAL LOAD=24,624 WATTS

NOTES:

1. UNIT DUCT THAT FEED CIRCUITS S AND T, OBSTRUCTION WARNING LUMINAIRE, SHALL LOOP AROUND POLE FOUNDATION.
2. CONTRACTOR SHALL FURNISH AND INSTALL TWO 30 AMP, 1 POLE, CIRCUIT BREAKERS FOR CIRCUITS S AND T. EACH CIRCUIT BREAKER SHALL BY-PASS THE LIGHTING CONTACTOR. INSTALL CIRCUIT BREAKERS ON LEFT SIDE PANEL, ADJACENT TO AUTO-MANUAL SWITCH (ITEM O) THE COST OF THESE CIRCUIT BREAKERS SHALL BE INCLUDED IN THE LIGHTING CONTROLLER CABINET PAY ITEM.
3. 3#4 & 1#6 GND MULTI-CONDUCTOR TYPE TC CABLE IN 2" PVC CONDUIT EMBEDDED IN RETAINING WALL.
4. 2" PVC CONDUIT EMBEDDED IN RETAINING WALL. REMOVE UNIT DUCT AND INSTALL 3#4 & 1#6 IN CONDUIT TO FIRST LIGHT POLE ON WALL. CABLE IN CONDUIT SHALL BE PAID AS UNIT DUCT.

E-14

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

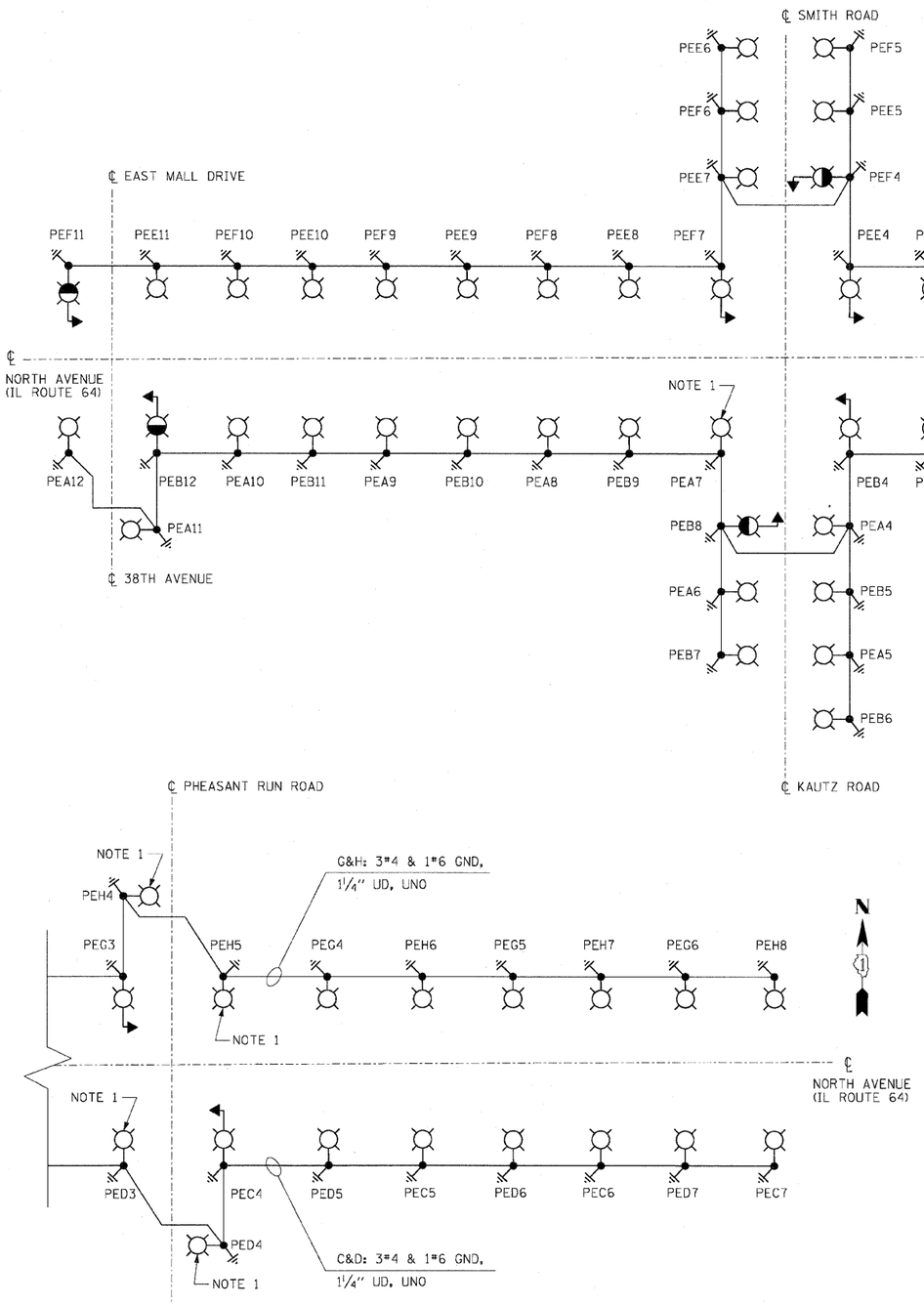
SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "PD"

SCALE: NONE DRAWN BY: HR
DATE: NOVEMBER 1, 2011 CHECKED BY: JPC

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	429
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "PE"
NOT TO SCALE

LEGEND

- LIGHTING UNIT: 47.5 FT. W.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE, UNO, 9" BREAKAWAY TRANSFORMER BASE
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 400W HPS M-C-III LUMINAIRE
- COMBINATION TRAFFIC SIGNAL AND LUMINAIRE LIGHTING UNIT: 45 FT. M.H., 15 FT. M.A., 310W HPS M-C-III LUMINAIRE
- LIGHTING CONTROLLER CABINET
- GROUND ROD
- ELECTRIC UTILITY SERVICE

NOTES

1. LUMINAIRE SHALL BE 400W HPS.

LOAD TABLE
LIGHTING CONTROLLER "PE"

RED PHASE			BLACK PHASE		
CIRCUIT	AMPERES	WATTS	CIRCUIT	AMPERES	WATTS
A	20.6	4944	B	20.6	4944
C	12.1	2904	D	12.3	2952
E	18.9	4536	F	18.9	4536
G	10.4	2496	H	14.0	3360
I	-	-	J	-	-
K	-	-	L	-	-
M	-	-	N	-	-
O	-	-	P	-	-

TOTAL LOAD=30,672 WATTS

E-15

AECOM

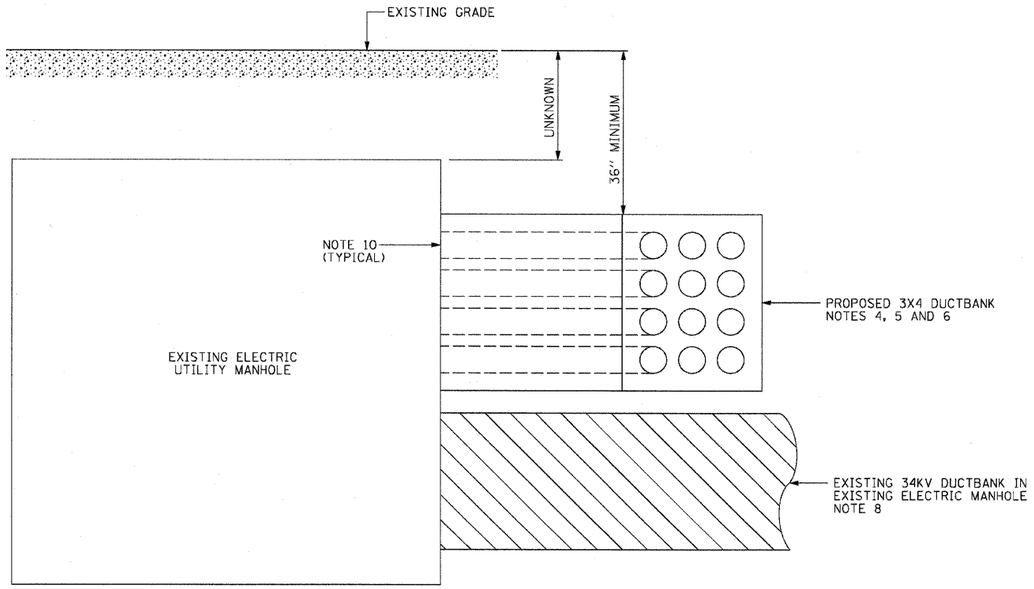
REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

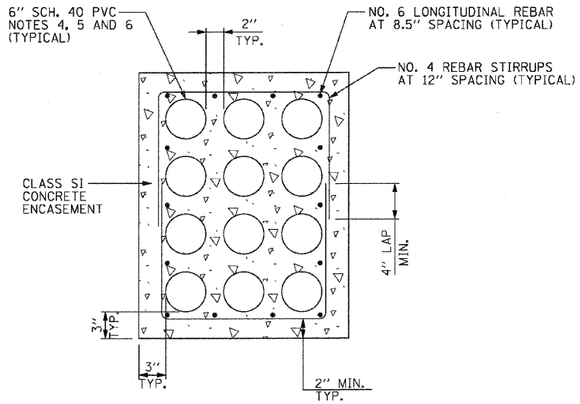
SINGLE LINE DIAGRAM
LIGHTING CONTROLLER "PE"

SCALE: NONE
DATE: NOVEMEBER 1, 2011
DRAWN BY: HR
CHECKED BY: JPC

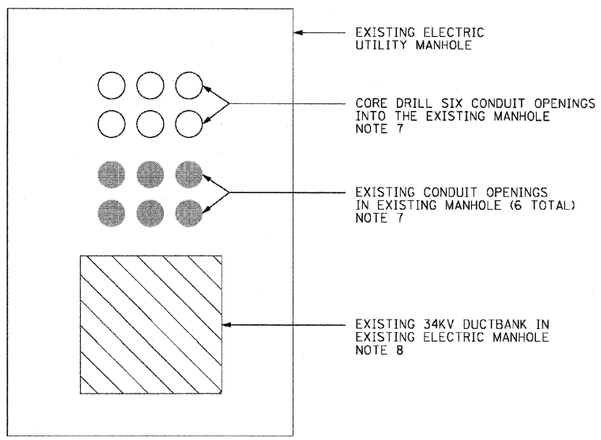
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	430
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



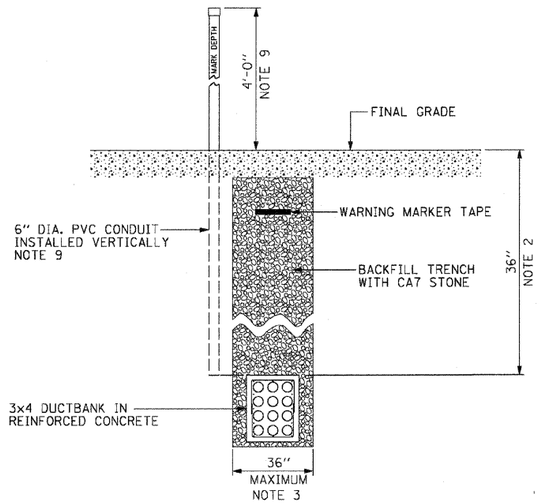
1 / E-16 EXISTING ELECTRIC MANHOLE - VIEW LOOKING NORTH
NOT TO SCALE



3 / E-16 3X4 REINFORCED CONCRETE ENCASED DUCTBANK DETAIL
NOT TO SCALE



2 / E-16 EXISTING ELECTRIC MANHOLE - VIEW LOOKING WEST
NOT TO SCALE



4 / E-16 DUCTBANK TRENCH DETAIL
NOT TO SCALE

NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUTS SAMPLES, ABBREVIATIONS, AND GENERAL NOTES. SEE SHEET E-04 FOR THE PLAN VIEW OF THE DUCTBANK INSTALLATION.
2. PROVIDE A MINIMUM CLEARANCE OF 36 INCHES AS MEASURED FROM TOP OF DUCTBANK TO FINISHED GRADE. THE CONTRACTOR SHALL INSTALL THE DUCTBANK DEEPER AS NEEDED AND AS DIRECTED BY THE ENGINEER TO AVOID CONFLICT WITH OTHER UTILITIES, DRAINAGE STRUCTURES AND ALL UNDERGROUND OBSTACLES AT NO ADDITIONAL COST TO IDOT.
3. THE TRENCH SHALL HAVE MAXIMUM WIDTH OF 36 INCHES. THE CONTRACTOR SHALL NOT INCREASE THE TRENCH WIDTH WITHOUT PRIOR APPROVAL FROM THE ENGINEER. WIDENING OF THE TRENCH WIDTH IN EXCESS OF 36 INCHES WILL BE DONE AT NO ADDITIONAL COST TO IDOT.
4. PROVIDE RIGID GALVANIZED STEEL CONDUIT ELBOWS FOR ALL BENDS AND CHANGES IN CONDUIT DIRECTION. THE CONDUIT ELBOWS SHALL HAVE A MINIMUM BEND RADIUS OF 48". THE CONDUIT ELBOWS SHALL BE PAID FOR UNDER THE "CONDUIT ELBOW ENCASED, 6" DIA., GALVANIZED STEEL" PAY ITEM.
5. PROVIDE CONDUIT SPACERS TO OBTAIN A MINIMUM ENVELOPE OF 2" OF CONCRETE AROUND EACH CONDUIT AND A MINIMUM OF 3" CONCRETE COVER OVERALL AROUND THE ENCASED RUN AS SHOWN.
6. PROVIDE A PULLABLE MULE TAPE IN EACH CONDUIT.
7. THE EXISTING MANHOLE SHALL BE CORED DRILLED FOR SIX OF THE PROPOSED CONDUITS AND THE REMAINING CONDUITS SHALL BE INSTALLED IN THE SIX EXISTING CONDUIT OPENINGS. THE CORE DRILLING SHALL BE PAID FOR UNDER THE "DRILL EXISTING HEAVY DUTY HANDHOLE" PAY ITEM.
8. EXISTING LIVE 34KV AND 12KV CABLES ARE LOCATED INSIDE THE EXISTING ELECTRIC MANHOLE. THE CONTRACTOR WILL NOT BE ALLOWED UNSUPERVISED ACCESS INTO THE MANHOLE TO PERFORM WORK. THE CITY OF ST. CHARLES ELECTRIC PERSONNEL WILL PROVIDE ACCESS INTO THE MANHOLE AND MUST BE PRESENT DURING THE CORE DRILLING AND CONDUIT INSTALLATION WORK. CONTACT THE CITY OF ST. CHARLES ELECTRICAL DEPARTMENT, MR TOM BRUHL AT 630-377-4401 TO SCHEDULE A DATE TO PERFORM THE WORK.
9. PROVIDE A 6" DIA. SCHEDULE 40 PVC CONDUIT INSTALLED VERTICALLY TO MARK THE END OF THE DUCTBANK. THE VERTICAL CONDUIT SHALL BE INSTALL DIRECTLY IN LINE WITH THE END OF THE DUCTBANK, BURIED A MINIMUM 3' BELOW GRADE AND EXTEND A MINIMUM OF 4' ABOVE FINAL GRADE. THE CONTRACTOR SHALL MARK THE APPROXIMATE DEPTH OF THE TOP OF THE DUCTBANK ON THE CONDUIT, 3' ABOVE GRADE, USING PERMANENT MARKER. THIS WORK SHALL BE PAID FOR UNDER THE "CONDUIT IN TRENCH, 6" DIA., PVC" PAY ITEM.
10. PROVIDE WATER-TIGHT CONDUIT PLUGS FOR EACH OF THE TWELVE CONDUIT ENDS LOCATED IN THE VAULT.

AECOM

REVISIONS	
NAME	DATE

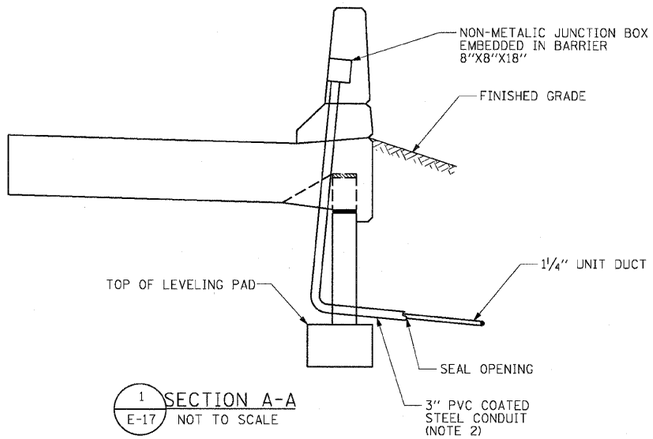
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

CONCRETE ENCASED CONDUIT DETAILS

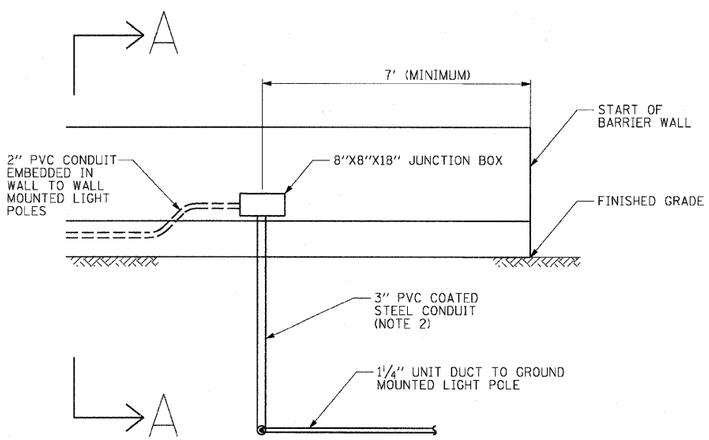
SCALE: NONE DRAWN BY: WDS
DATE: MAY 13, 2011 CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	431
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



1 / E-17 SECTION A-A
NOT TO SCALE



2 / E-17 JUNCTION BOX EMBEDDED IN BARRIER WALL
NOT TO SCALE

NOTES:

1. SEE SHEET E-01 FOR ELECTRICAL SYMBOLS, CALL-OUT SAMPLES, ABBREVIATIONS AND GENERAL NOTES.
2. THE 3" COATED CONDUIT SLEEVE SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF EACH JUNCTION BOX, EMBEDDED IN STRUCTURE, 18"X8"X8"
3. THE CONTRACTOR SHALL REMOVE THE DUCT FROM A SUFFICIENT LENGTH OF CABLE TO REACH FROM THE EMBEDDED JUNCTION BOX TO THE FIRST WALL MOUNTED LIGHT POLE. THIS WORK SHALL BE MEASURED AND PAID AS UNIT DUCT, 600V, 3-1/C NO. 4, 1/C NO. 6 GROUND (EPR-TYPE RHW) 1¼" POLYETHYLENE.

AECOM

REVISIONS NAME	DATE

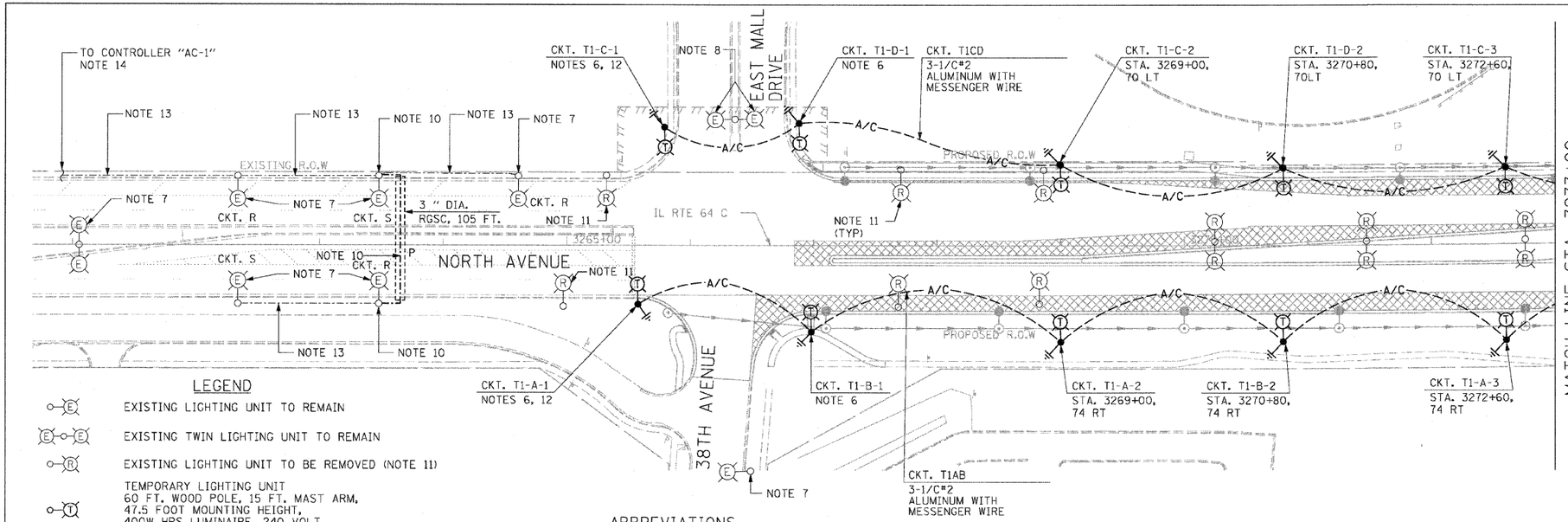
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

EMBEDDED JUNCTION BOX DETAILS

SCALE: NONE
DRAWN BY: TCL
DATE: MAY 13, 2011
CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	432
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

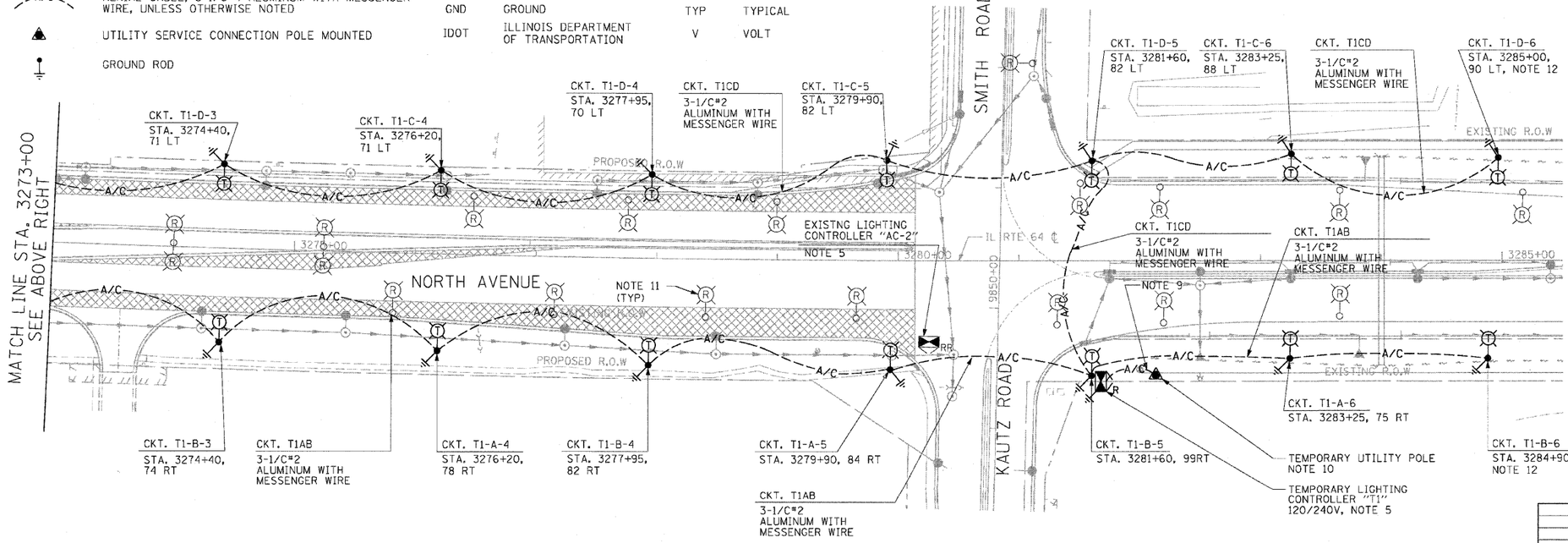


LEGEND

- EXISTING LIGHTING UNIT TO REMAIN
- EXISTING TWIN LIGHTING UNIT TO REMAIN
- EXISTING LIGHTING UNIT TO BE REMOVED (NOTE 11)
- TEMPORARY LIGHTING UNIT 60 FT. WOOD POLE, 15 FT. MAST ARM, 47.5 FOOT MOUNTING HEIGHT, 400W HPS LUMINAIRE, 240 VOLT SEE SHEET TL-03
- ER — LOCATION OF REINSTALLED TEMPORARY LIGHTING CONTROLLER CABINET (DOOR SIDE AS INDICATED)
- RR — EXISTING LIGHTING CONTROLLER CABINET TO BE REMOVED AND RELOCATED
- A/C — AERIAL CABLE, 3-1/C#4 ALUMINUM WITH MESSENGER WIRE, UNLESS OTHERWISE NOTED
- UTILITY SERVICE CONNECTION POLE MOUNTED
- GROUND ROD

ABBREVIATIONS

A/C	AERIAL CABLE	IN	INCH
CKT	CIRCUIT	NO, #	NUMBER
E	EXISTING	STA	STATION
FT	FEET OR FOOT	T	TEMPORARY
GND	GROUND	TYP	TYPICAL
IDOT	ILLINOIS DEPARTMENT OF TRANSPORTATION	V	VOLT



NOTES:

1. CONTRACTOR SHALL ASSURE THAT ALL TRAVELED PAVEMENT IS LIGHTED DURING NORMAL NIGHTTIME HOURS. THE EXISTING LIGHTING SYSTEM SHALL REMAIN IN OPERATION UNTIL THE TEMPORARY LIGHTING SYSTEM HAS BEEN INSTALLED, ENERGIZED, TESTED, ADJUSTED, AND ACCEPTED BY IDOT.
2. PROVIDE 20 FEET OF SLACK CABLE AT EACH WOOD POLE TO ALLOW FOR THE RELOCATION/ADJUSTMENT OF THE LIGHTING UNITS AS REQUIRED DURING CONSTRUCTION.THE SLACK CABLE SHALL BE LOOPED AND ANCHORED TO THE TOP OF EACH POLE. 20 FEET OF SLACK CABLE WILL BE MEASURED FOR PAYMENT AT EACH WOOD POLE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING ANY DAMAGE THAT MAY OCCUR TO THE EXISTING LIGHTING SYSTEM DURING CONSTRUCTION. THE REPAIRS SHALL BE MADE TO THE SATISFACTION OF IDOT AND AT NO ADDITIONAL COST TO IDOT.
4. MINIMUM HEIGHT OF AERIAL CABLE ABOVE GROUND MUST COMPLY WITH NEC ARTICLE 225.18(4).
5. RELOCATE EXISTING LIGHTING CONTROLLER CABINET "AC-2" TO THE TEMPORARY LOCATION AND LABEL CABINET AS "T1". CONTRACTOR SHALL PROVIDE ALL LABOR AND EQUIPMENT NECESSARY TO MOUNT THE TEMPORARY LIGHTING CONTROLLER CABINET "T1" TO THE WOOD POLE. CONTRACTOR SHALL INSTALL THE TEMPORARY ELECTRICAL SERVICE IN ACCORDANCE WITH NEC AND IDOT REQUIREMENTS. SEE SHEET TL-02 FOR TEMPORARY LIGHTING CONTROLLER CABINET POWER FEED DETAILS. COORDINATE WORK WITH THE CITY OF ST. CHARLES
6. MOUNT THE TEMPORARY LUMINAIRES AND MAST ARMS ON THE TEMPORARY TRAFFIC SIGNAL WOOD POLES. SEE TRAFFIC SIGNAL PLANS FOR LOCATIONS OF TEMPORARY TRAFFIC SIGNAL WOOD POLES. COORDINATE THE ELECTRICAL WORK WITH THE TEMPORARY TRAFFIC SIGNAL INSTALLATION.
7. EXISTING LIGHTING UNIT OWNED AND OPERATED BY CITY OF ST. CHARLES, TO REMAIN.
8. EXISTING PARKING LOT LIGHTING UNIT OWNED AND OPERATED BY CHARLESTOWNE MALL, TO REMAIN.
9. TEMPORARY ELECTRIC SERVICE, 100 AMPERE, 120/240V, 1 PHASE, 3 WIRE, 3-1/C #1/0 ALUMINUM WITH MESSENGER WIRE, GROUNDED UTILITY SERVICE.
10. INTERCEPT EXISTING LIGHTING CIRCUITS AND CONNECT TO THE EXISTING LIGHTING CIRCUITS ON OPPOSITE SIDE OF ROADWAY. PULL 4-1/C #6 & 1-1/C #6 GND, XLP, IN 3" RGSC. DISCONNECT CIRCUITS FROM THE EXISTING LIGHTING CONTROLLER "AC-2". THIS WORK SHALL BE PERFORMED BEFORE INSTALLATION OF THE TEMPORARY LIGHTING SYSTEM. COORDINATE ALL WORK WITH CITY OF ST. CHARLES.
11. CONTRACTOR SHALL REMOVE EXISTING LIGHTING UNITS AFTER INSTALLATION, OPERATION, AND SUCCESSFUL TESTING OF THE TEMPORARY LIGHTING SYSTEM. CONTRACTOR SHALL DELIVER THE EXISTING LIGHTING UNITS TO BE REMOVED TO THE CITY OF ST. CHARLES.
12. SEE SHEET TL-03 FOR TEMPORARY WOOD END POLE INSTALLATION DETAIL.
13. EXISTING UNIT DUCT, CIRCUITS R AND S, TO REMAIN.
14. THE EXISTING LIGHTING CONTROLLER "AC-1" THAT FEEDS CIRCUITS R AND S IS LOCATED AT THE NORTHWEST CORNER OF WEST MALL DRIVE AND ILLINOIS ROUTE 64. EXTEND LIGHTING CIRCUITS R AND S TO EXISTING LIGHTING UNITS AS SHOWN.

0 50 100 150 200
SCALE (1:50 FT)

TL-01

AECOM

REVISIONS	
NAME	DATE

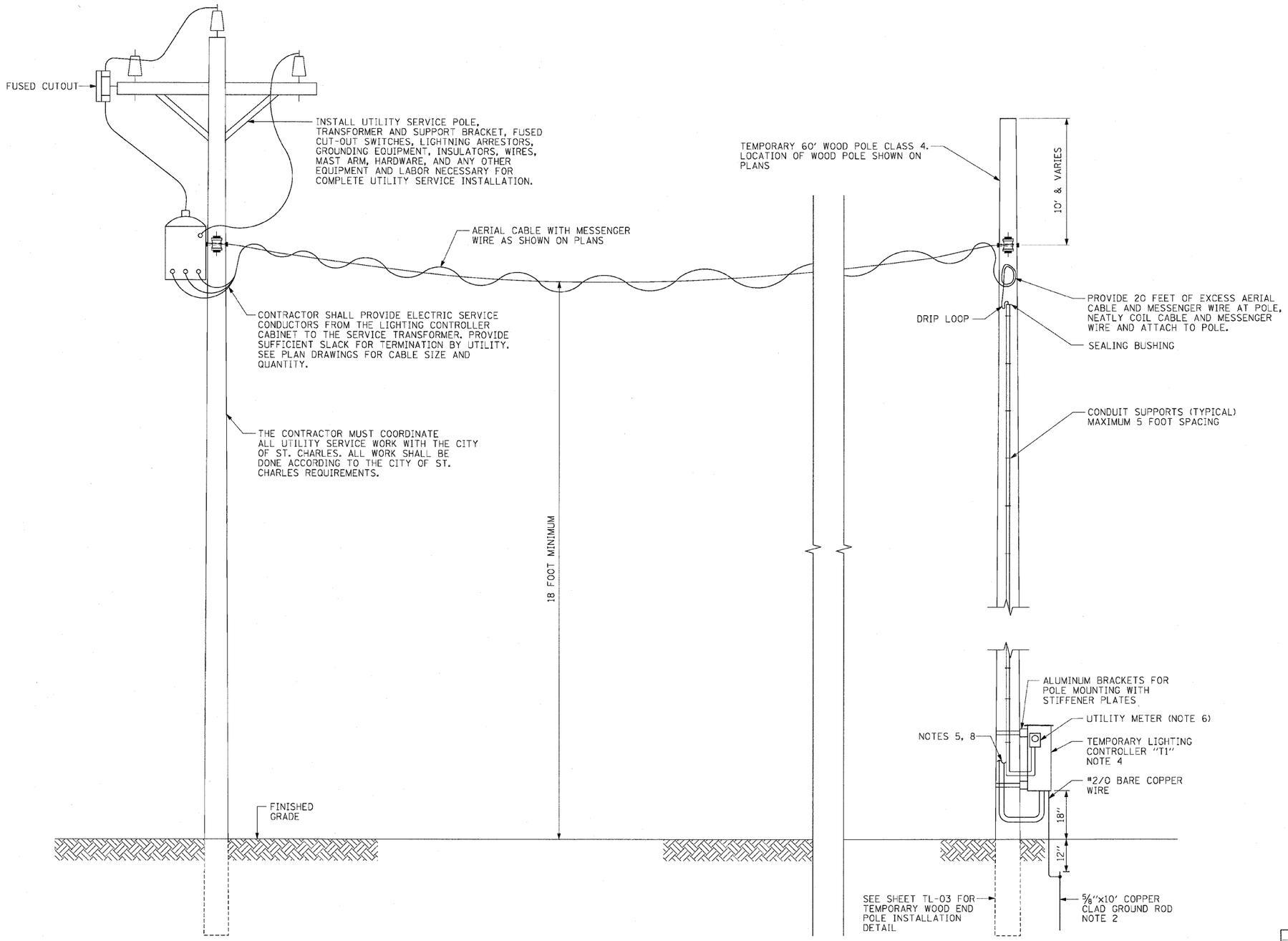
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

TEMPORARY ROADWAY LIGHTING PLAN STA. 3262+00 TO STA. 3285+00

SCALE: 1" = 50'
DRAWN BY: HR
DATE: NOVEMBER 1, 2011
CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	433
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



1 / TL-02 TEMPORARY POWER FEED TO TEMPORARY LIGHTING CONTROLLER "T1" DETAIL (NOTE 7)
NOT TO SCALE

NOTES:

1. SEE SHEET TL-01 FOR LEGEND AND ABBREVIATIONS.
2. PROVIDE A GROUND ROD, CONDUCTOR, AND CLAMPS FOR GROUNDING. THE COST OF THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE TEMPORARY LIGHTING CONTROLLER PAY ITEM.
3. SEE SHEET TL-03 FOR TEMPORARY ROADWAY LIGHTING WOOD POLE DETAILS.
4. SEE SHEET TL-01 FOR LOCATION OF TEMPORARY LIGHTING CONTROLLER CABINET "T1". ALL TEMPORARY FEEDS ROUTED INTO THE CONTROLLER SHALL BE THROUGH THE BOTTOM OF THE ENCLOSURE.
5. PROVIDE TEMPORARY CONNECTIONS TO LIGHTING CIRCUITS AS SHOWN ON THE PLANS.
6. UNDER PAY ITEM FOR TEMPORARY ELECTRIC UTILITY SERVICE CONNECTION, COMED SHALL FURNISH AND INSTALL THE METER ON THE CABINET.
7. INSTALLATION LOCATION OF TEMPORARY POLES AND AERIAL CABLE CLEARANCES SHALL BE COORDINATED WITH THE CITY OF ST. CHARLES.
8. PROVIDE PVC COATED RGS CONDUIT WITH SEALING BUSHING AT TOP FOR ALL LIGHTING CONDUCTORS.

TL-02

AECOM

REVISIONS NAME	DATE

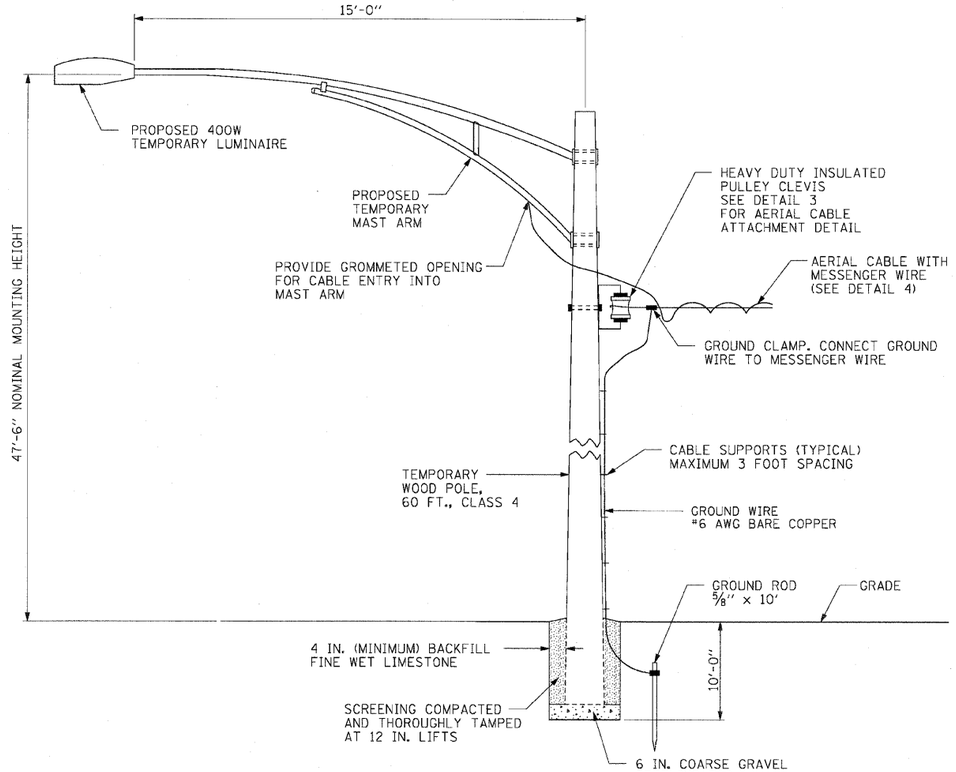
ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

TEMPORARY LIGHTING CONTROLLER "T1" POWER FEED DETAIL

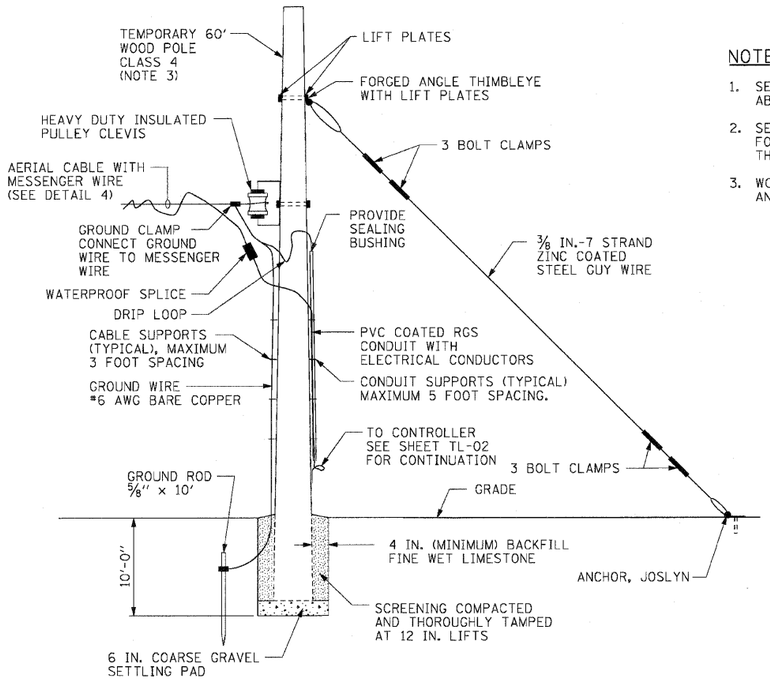
SCALE: NONE DRAWN BY: HR
DATE: MAY 13, 2011 CHECKED BY: JPC

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	434
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



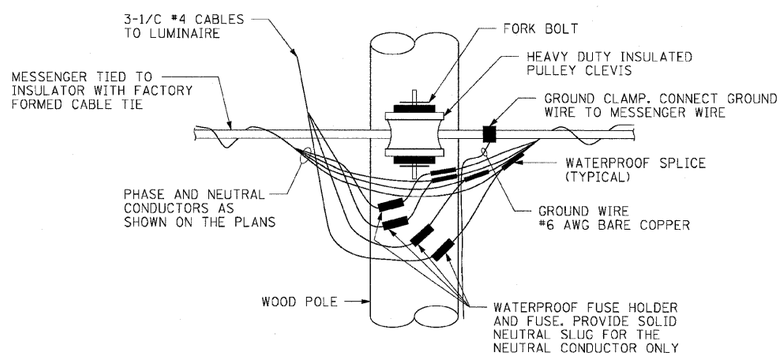
1 / TL-03 TEMPORARY LIGHTING UNIT INSTALLATION DETAIL
WOOD POLE INSTALLATION IS SIMILAR
NOT TO SCALE



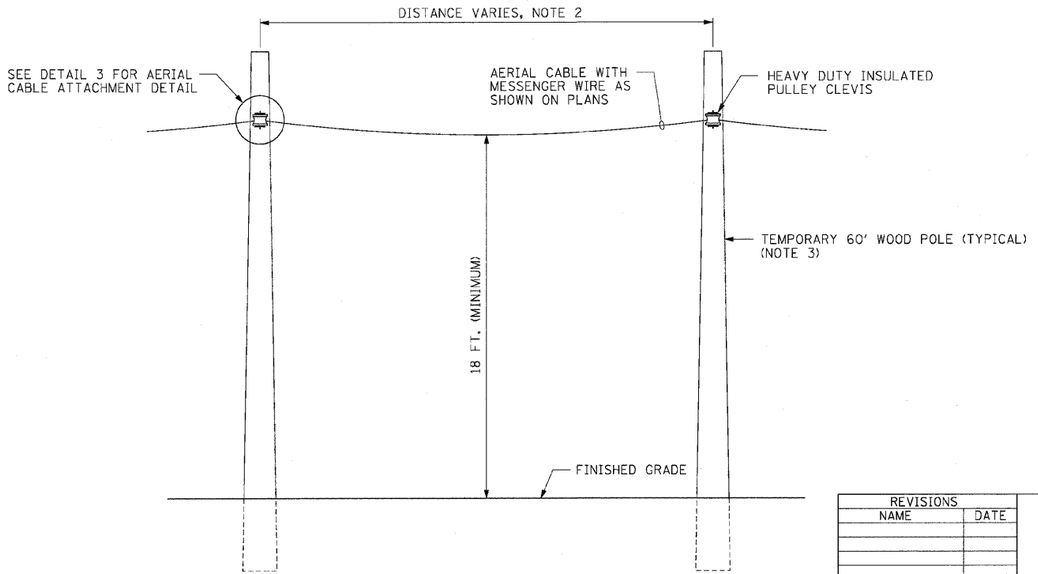
2 / TL-03 TEMPORARY WOOD END POLE INSTALLATION DETAIL
NOT TO SCALE

NOTES

1. SEE SHEET TL-01 FOR LEGEND AND ABBREVIATIONS.
2. SEE TEMPORARY ROADWAY LIGHTING PLANS FOR PROPOSED INSTALLATION LOCATIONS OF THE WOOD POLES.
3. WOOD POLE IS SHOWN WITHOUT MAST ARM AND LUMINAIRE.



3 / TL-03 TEMPORARY WOOD POLE AERIAL CABLE ATTACHMENT DETAIL
NOT TO SCALE



4 / TL-03 AERIAL CABLE INSTALLATION DETAIL
NOT TO SCALE

AECOM

TL-03

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

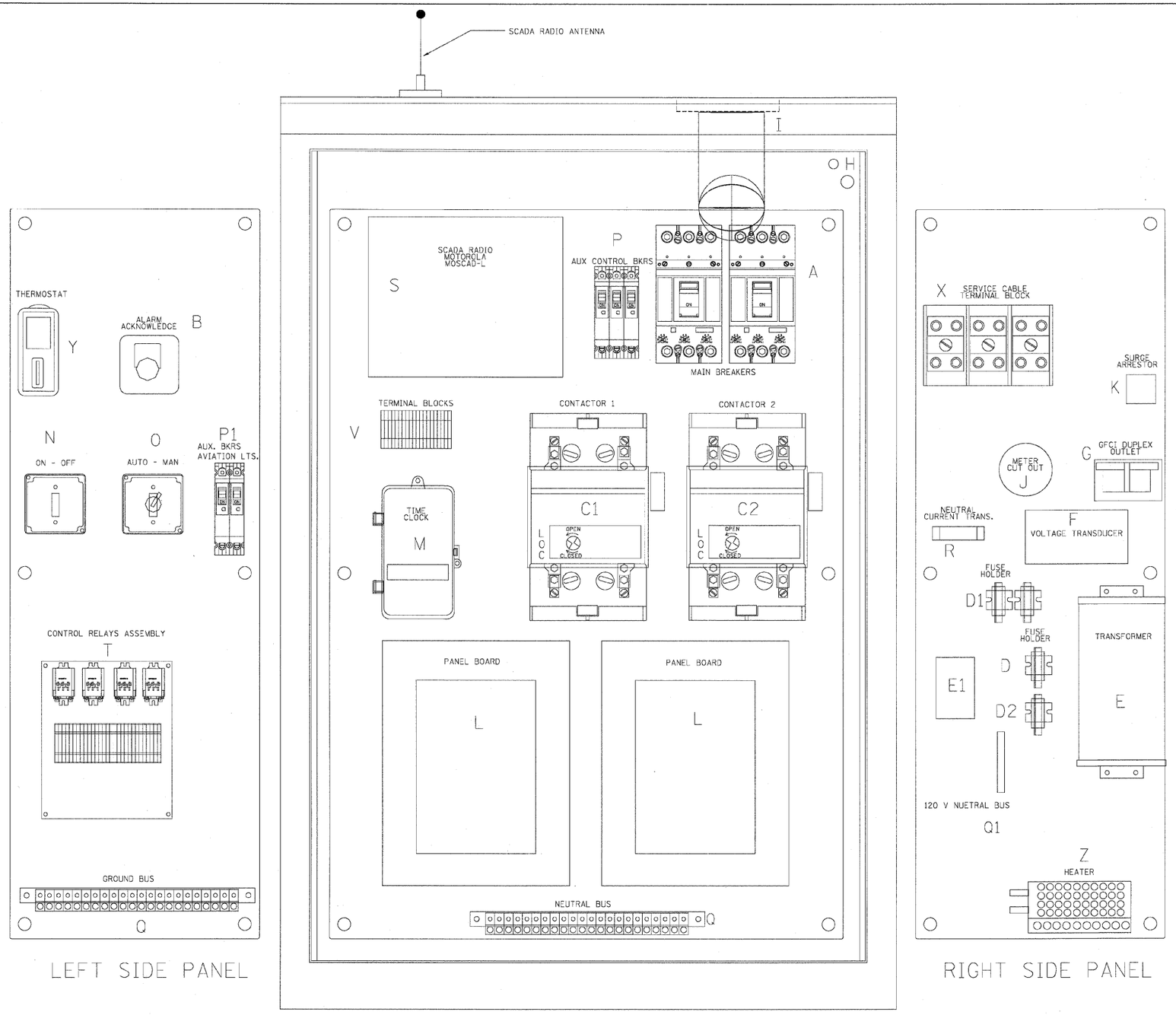
TEMPORARY ROADWAY LIGHTING WOOD POLE DETAILS

SCALE: NONE DRAWN BY: HR
DATE: MAY 13, 2011 CHECKED BY: JPC

5/12/2011 10:35:12 AM
P:\P40567\P40567\ELECT\SHT\BE-205R-1.DGN

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	435
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



BILL OF MATERIALS

ITEM	QTY	DESCRIPTION
A	2	MAIN CIRCUIT BREAKERS 2 POLE 175 AMP WITH AUX CONTACT
B	1	ACKNOWLEDGE SWITCH, PUSH BUTTON WITH YELLOW INSERT
C1, C2 *	2	CONTACTOR 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	1	FINGERSAFE FUSE HOLDER WITH KTK-20 FUSE
D1	2	FINGERSAFE FUSE HOLDER WITH KTK-½ FUSE
D2	1	FINGERSAFE FUSE HOLDER WITH KTK-2A FUSE
E	1	2.0 KVA 277V-240/120 TRANSFORMER
E1	1	0.25 KVA 240/120 - 24 VAC TRANSFORMER
F	1	VOLTAGE TRANSDUCER WITH COVERED TERMINALS
G	1	20 AMP GFCI DUPLEX OUTLET W/COVER
H	2	DOOR SWITCH
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OFF
O	1	SQUARE D, 9001KS11BH13, 2 POSITION SWITCH IN 9001KY1 ENCLOSURE OR APPROVED EQUAL
P	3	BREAKER 1P 15A
P1	2	BREAKER 1P 30A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 x 16 x 1/4
Q1	1	COPPER NEUTRAL BUS WITH 1 #6 AND 8 #12 CONDUCTOR POINTS
R	1	CURRENT TRANSDUCER
S	1	MOTOROLA MOSCAD-L RADIO, 240 V
T *	1	CONTROL RELAY ASSEMBLEY 240V COILS WITH 4 3 PDT 25A RELAYS (W389ACX-15) (R1, R2, R3, R4). QTY 32 TERMINAL BLOCKS
V	20	TERMINAL BLOCKS
X *	1	620 AMP SLPICE BLOCK
Y	1	40-80 DEG THERMOSTAT
Z	1	375 WATT HEATER

* TERMINALS SHALL BE COVERED WITH CLEAR PLEXIGLASS SHEET

BE-205R-1

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

LIGHTING CONTROLLER, RADIO CONTROL
DUPLEX TYPE WITH SCADA
BE-205 SHT 1 OF 4

SCALE: VERT: NONE HORIZ: NONE
DATE: MAY 13, 2011
DRAWN BY: TCL
CHECKED BY: JPC

AECOM

5/12/2011 10:34:59 AM
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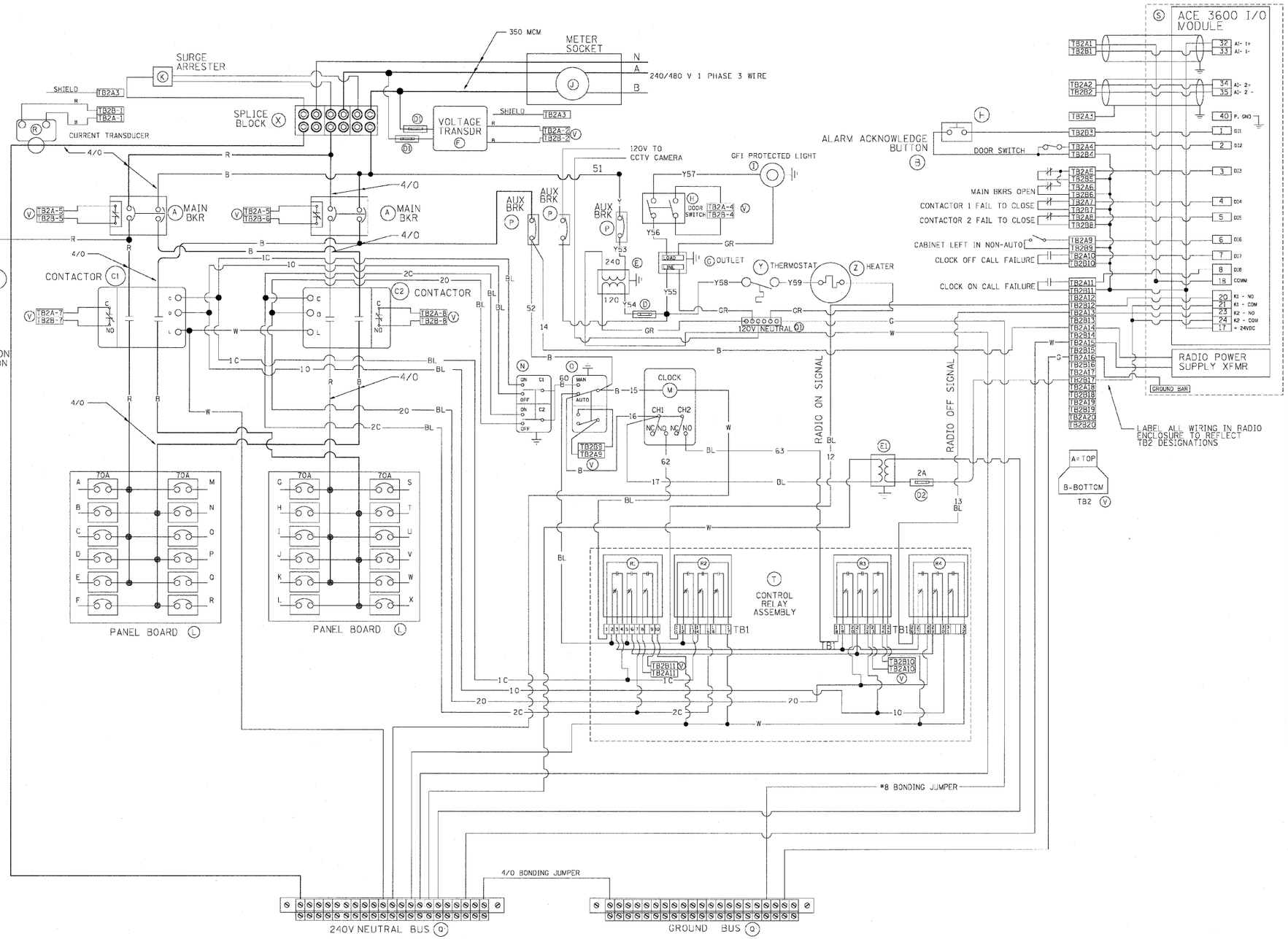
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	436
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

NOTE
AUXILIARY BREAKERS FOR AVIATION OBSTRUCTION LIGHTS ARE ONLY REQUIRED ON CONTROLLER "PD"



BILL OF MATERIALS

ITEM *	QTY	DESCRIPTION
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C1, C2	2	CONTACTOR 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	1	FINGERSAFE FUSE HOLDER WITH KTK-20A FUSE
D1	2	FINGERSAFE FUSE HOLDER WITH KTK-½ FUSE
D2	1	FINGERSAFE FUSE HOLDER WITH KTK- 2A FUSE
E	1	2.0 KVA 277V-240/120 TRANSFORMER
E1	1	0.25 KVA 240/120-24 VAC TRANSFORMER
F	1	VOLTAGE TRANSDUCER
G	1	15 AMP GFCI DUPLEX OUTLET W/COVER
H	2	DOOR SWITCH A-2CGQ-B7-K
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OFF
O	1	SQUARE D, 9001KS11BH13, 2 POSITION SWITCH IN 9001KY1 ENCLOSURE
P	3	BREAKER 1P 15A
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Q1	1	COPPER NEUTRAL BUS WITH 1 1/0 AND #6 CONDUCTOR POINTS
R	1	CURRENT TRANSDUCER
S	1	MOTOROLA ACE 3600
T	1	CONTROL RELAY ASSEMBLEY 240V COILS WITH 4 3 PDT 25A RELAYS (W389ACX-15) (R1, R2, R3, R4) . QTY 32 TERMINAL BLOCKS
V	20	TERMINAL BLOCKS
X	1	620 AMP SLPICE BLOCK
Y	1	40-80 DEG THERMOSTAT
Z	1	375 WATT HEATER

*

BE-205R-2

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 307 (ILLINOIS ROUTE 64)

LIGHTING CONTROLLER, RADIO CONTROL
DUPLEX TYPE WITH SCADA
BE-205 SHT 2 OF 4

SCALE: VERT: NONE
HORIZ: NONE
DATE: MAY 13, 2011

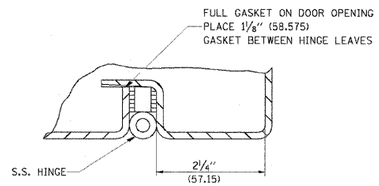
DRAWN BY: TCL
CHECKED BY: JPC

AECOM

CREATED 8/5/92

CONTRACT NO. 62410

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	437
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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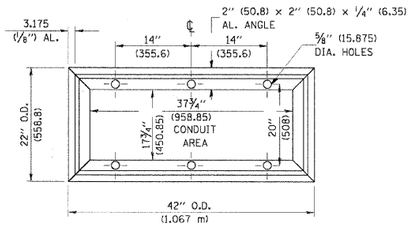
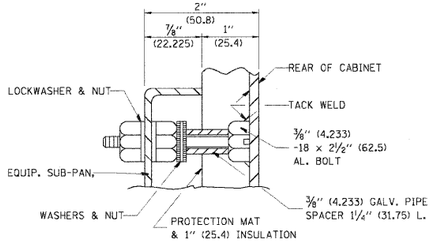


BASE MTG. DETAIL



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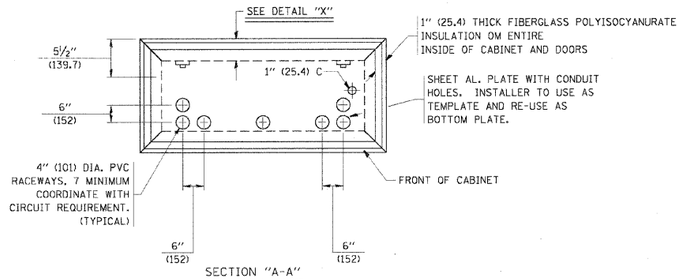
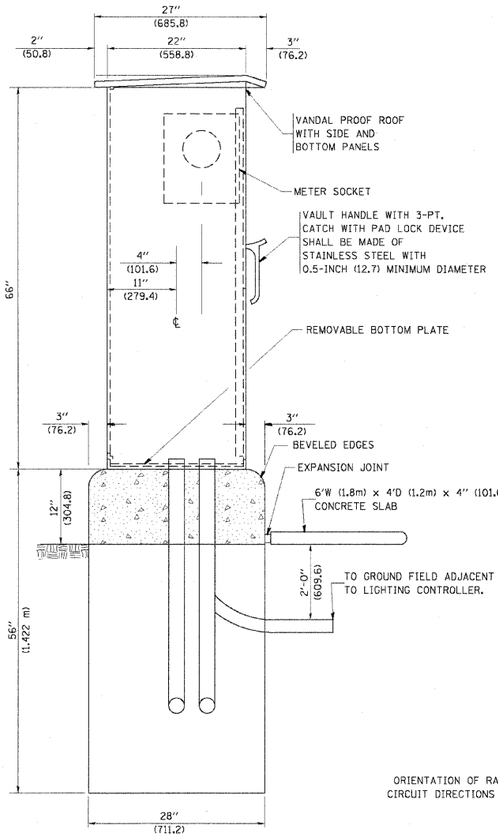
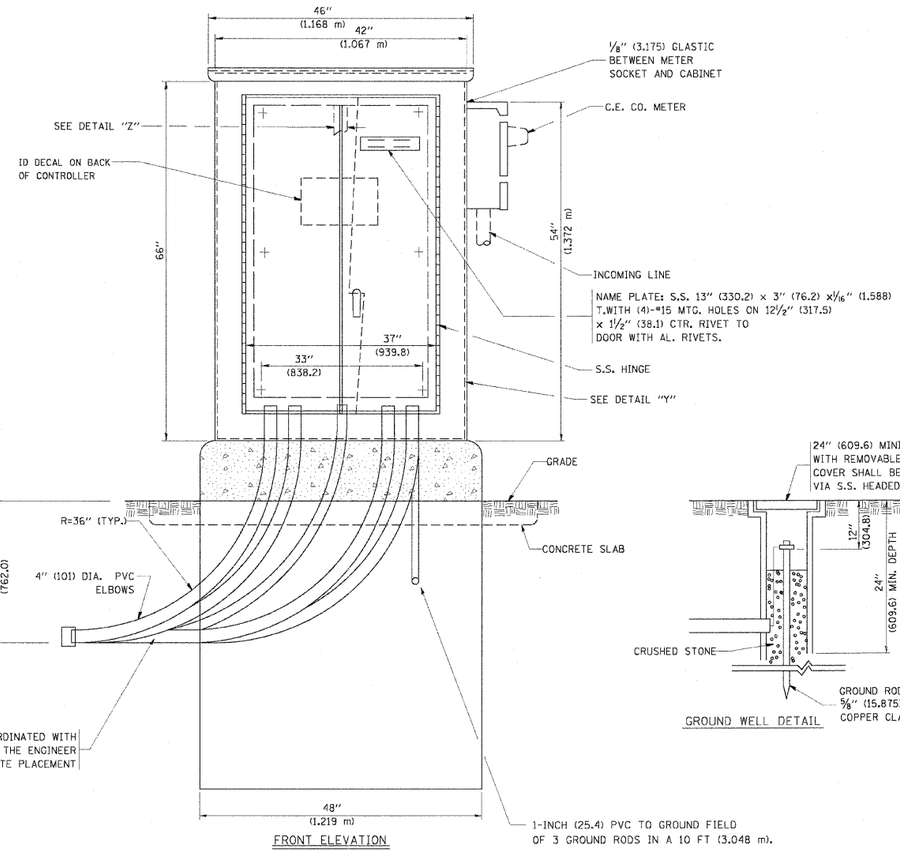


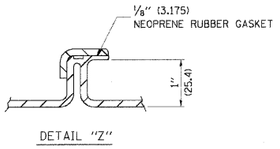
SECTION "A-A"



LEFT SIDE ELEVATION

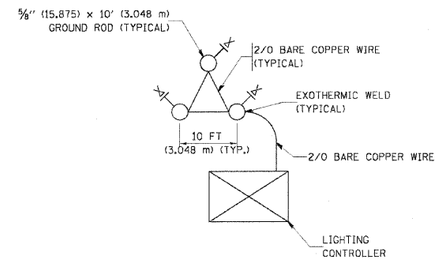


FRONT ELEVATION



DETAIL "Z"

GROUND WELL DETAIL



GROUND FIELD DETAIL
(N.T.S.)

THE CONTRACTOR SHALL
VERIFY EXACT LOCATION
WITH THE ENGINEER

REVISIONS	
NAME	DATE
R. TOMSOMS	08/19/04
R. TOMSONS	5/11/09
R. TOMSONS	3/03/10

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, RADIO CONTROL
DUPLEX TYPE WITH SCADA
BE-205 SHT 3 OF 4

SCALE: NONE

DRAWN BY CADD

CHECKED BY

BE 205

PLOT DATE = 3/30/2010
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USER NAME = leysa

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	438
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES

1. CABINET SHALL BE FABRICATED FROM 0.125-INCH (3.175) SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED.
2. ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL, UNLESS OTHERWISE NOTED.
3. NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH (19.05) HIGH LETTERS FILLED IN BLACK: "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
4. ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALL AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
5. CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
6. ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
7. THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
8. METAL MOUNTING PANEL SHALL BE FABRICATED FROM THE SAME MATERIAL AS THE CABINET AND SHALL BE FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
9. CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH (3.175) THICK GLASTIC INSULATION BACK PANEL.
10. ALL DEVICES SHALL BE FRONT REMOVABLE.
11. TIME CLOCK CHANNEL 1 N.O. CONTACT IS CLOSED NIGHT AND OPEN DAY (LIGHTS ON).
12. SET LATITUDE TO 42 DEGREES. SET CH.1 TO 23 MINUTES AFTER ASTRONOMICAL SUNSET, 50 MINUTES BEFORE ASTRONOMICAL SUNRISE. SET CH.2 TO 60 MINUTES AFTER ASTRONOMICAL SUNSET (WITH A SIGNAL LENGTH OF 1 SECOND), +28 MINUTES AFTER ASTRONOMICAL SUNRISE (WITH A SIGNAL LENGTH OF 7 SECONDS.)
13. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES. 240V NEUTRAL BUS SHALL BE PAINTED WHITE, GROUND BUS SHALL BE PAINTED GREEN, AND THE 120V NEUTRAL BUS SHALL BE PAINTED GREY.
14. ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
15. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
16. ALL CONTROL WIRING SHALL BE 600V #12 TYPE MTW, SCADA WIRING SHALL BE #18.
17. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
18. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:

    R - RED Y - YELLOW
    B - BLACK W - WHITE
    BL- BLUE G - GREEN
    C - GREY

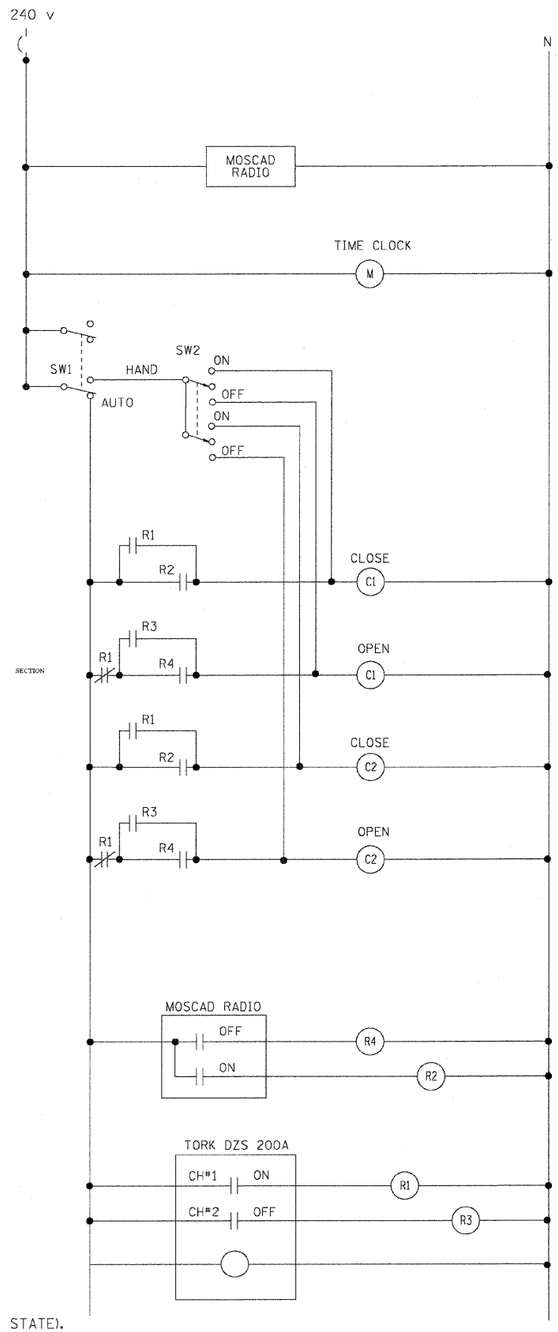
19. MOSCAD I/O WIRING SHALL BE:

    DIGITAL INPUT (DI) WIRING SHALL BE #18 MTW PURPLE.

    ANALOG INPUT (AI) WIRING SHALL BE #18, 2/C SHIELDED.

    AI AND DI WIRING MAY BE BUNDLED TOGETHER, BUT SHALL NOT BE BUNDLED WITH OTHER WIRING.

20. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
21. SCHEMATIC SHOWN WITH BREAKER OPEN, CONTACTOR OPEN, CABINET DOOR CLOSED, CLOCK NOT ACTIVE (DE-ENERGIZED STATE).
22. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC AND SCADA I/O DIAGRAM (NO SMALLER THAN 11"x17" EACH) SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER WITH STAINLESS STEEL SCREWS.



CONTROL CIRCUIT LADDER LOGIC DIAGRAM

MOSCAD I/O ASSIGNMENTS		
TERM	MOSCAD DESTINATION	DESCRIPTION OF INPUT
1	DIGITAL INPUT 1	ALARM KNOWLEDGE
2	DIGITAL INPUT 2	DOOR OPEN
3	DIGITAL INPUT 3	MAIN(S) BREAKER OPEN
4	DIGITAL INPUT 4	CONTACTOR 1 OPEN
5	DIGITAL INPUT 5	CONTACTOR 2 OPEN
6	DIGITAL INPUT 6	CABINET IN NON-AUTO
7	DIGITAL INPUT 7	BACK-UP CLOCK OFF CALL
8	DIGITAL INPUT 8	BACK-UP CLOCK ON CALL
17	24 V+	24+VDC
18	DI COMMON	COMMON
21	K1 C	K1 COMMON
22	K1 NO	LIGHTS ON CALL
24	K2 C	K2 COMMON
25	K2 NO	LIGHTS OFF CALL
32	ANALOG INPUT 1 (+)	CABINET NEUTRAL CURRENT
33	ANALOG INPUT 1 (-)	CABINET NEUTRAL CURRENT
34	ANALOG INPUT 2 (+)	CABINET SERVICE VOLTAGE
35	ANALOG INPUT 2 (-)	CABINET SERVICE VOLTAGE
40	P. GROUND	GROUND

ALL ANALOG INPUTS WILL BE 4-20 MA ONLY. DIGITAL OUTPUT RELAYS WILL BE ELECTRICALLY ENERGIZED AND MOMENTARILY HELD

MIXED I/O MODULE MODEL NUMBER V436

REVISIONS	
NAME	DATE
R. TOMSONS	8/19/04
R. TOMSONS	5/11/09
R. TOMSONS	3/03/10

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, RADIO CONTROL
DUPLEX TYPE WITH SCADA
BE-205 SHT 4 OF 4

SCALE: NONE

DRAWN BY CADD
CHECKED BY

BE 205

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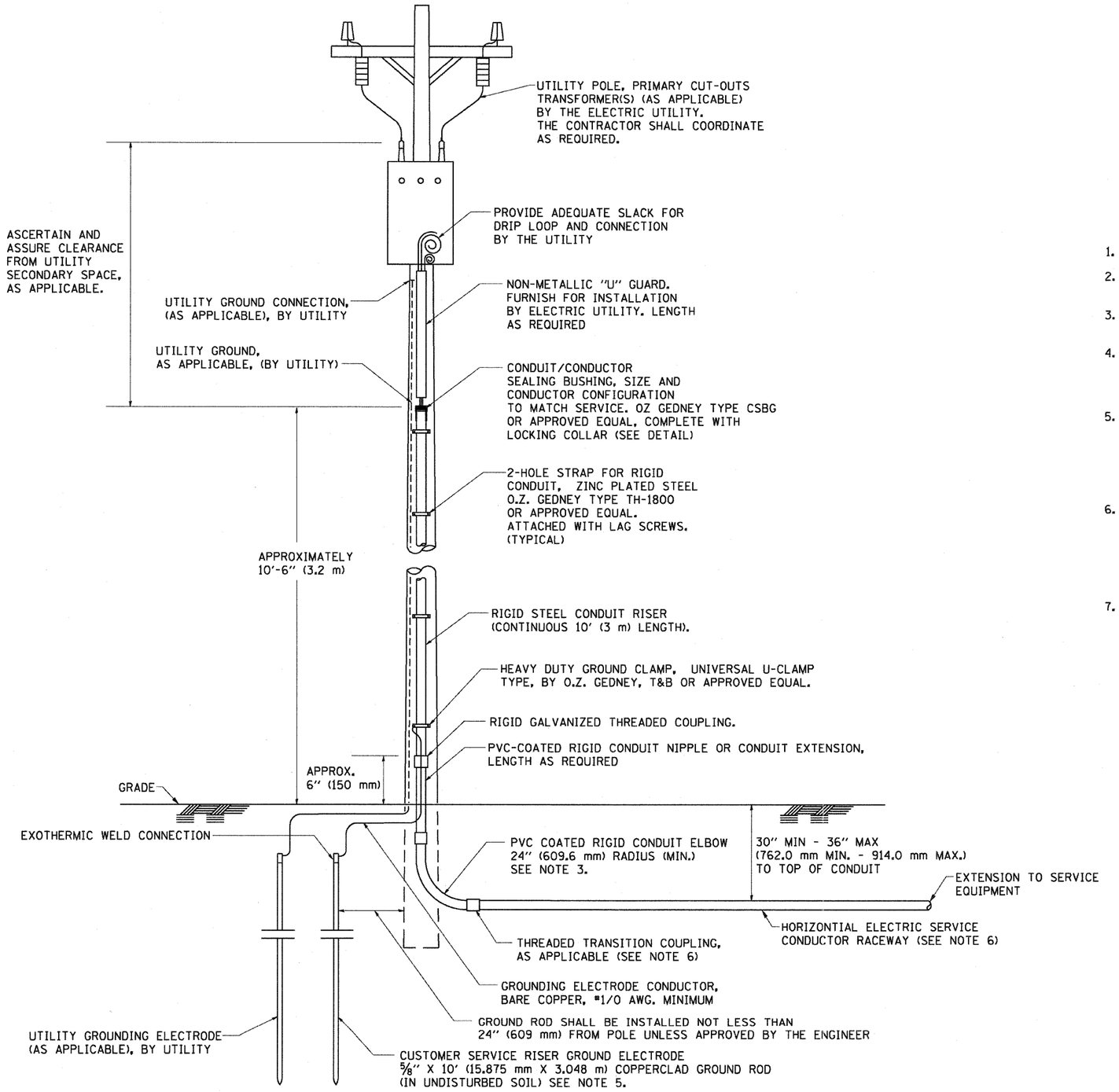
CONTRACT NO. 62410

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	439
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

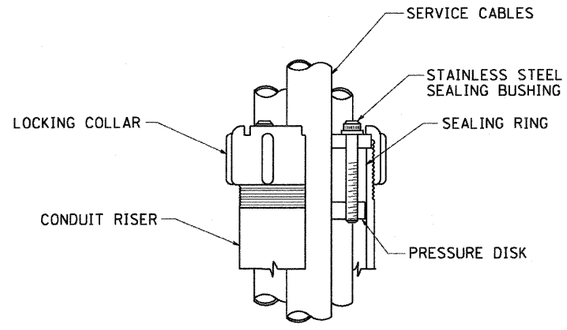


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

BE-220

REVISIONS NAME	DATE
	03/03/06

ILLINOIS DEPARTMENT OF TRANSPORTATION

ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT BE - 220

SCALE: NONE

DRAWN BY

CHECKED BY MEA

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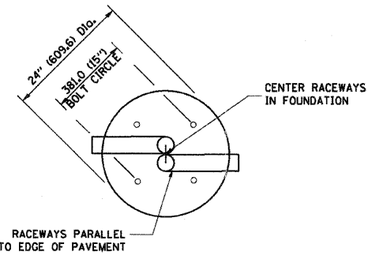
USER NAME = bauerd1

CONTRACT NO.

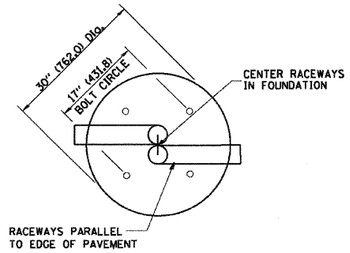
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	440
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

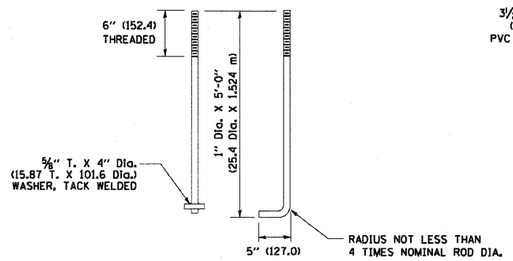
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-6" (2.09 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND Ø = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND Ø = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND Ø = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



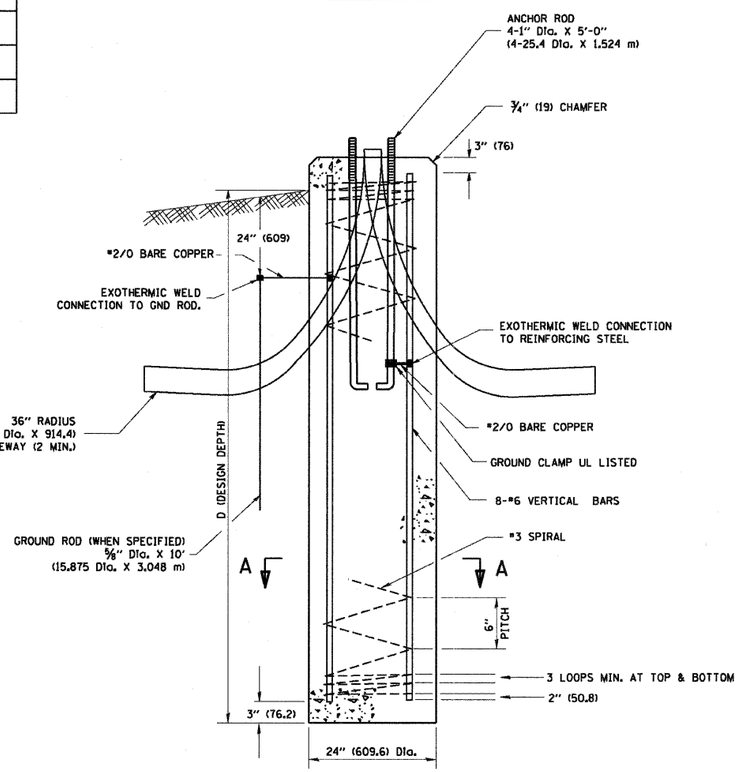
TOP VIEW



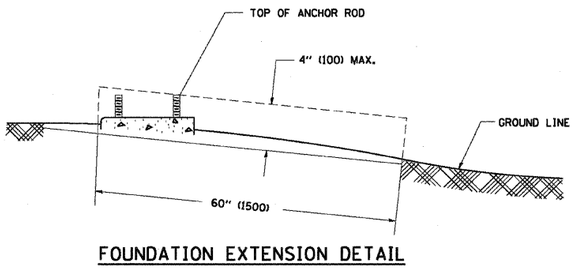
TOP VIEW



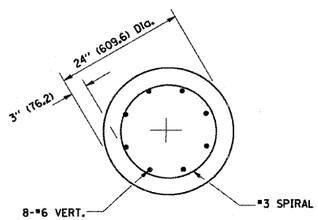
ANCHOR ROD DETAIL



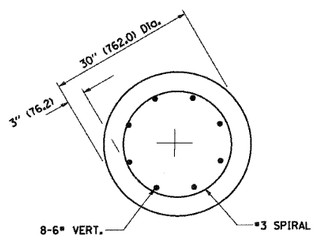
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

E-301

REVISIONS	
NAME	DATE
	04/22/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
40' (12.192 m) TO 47 1/2' (14.478 m) M.H.
15" (381) BOLT CIRCLE

SCALE: NONE

DRAWN BY

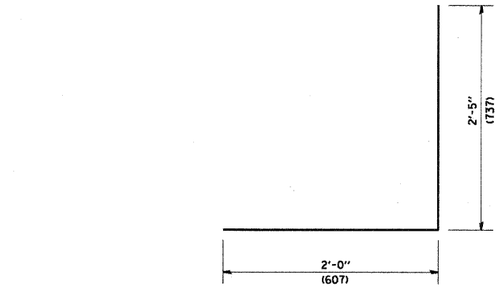
CHECKED BY

BE301

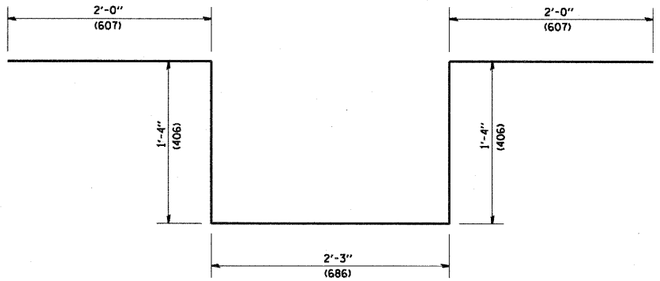
PLOT DATE = 4/18/2007
FILE NAME = K:\district\be381.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = bauerdl

CONTRACT NO.

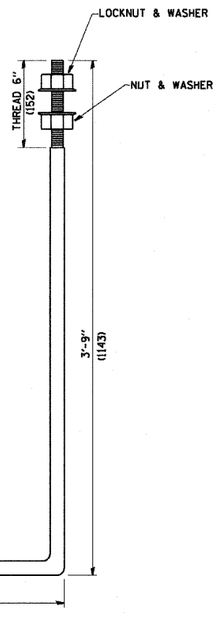
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	441
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



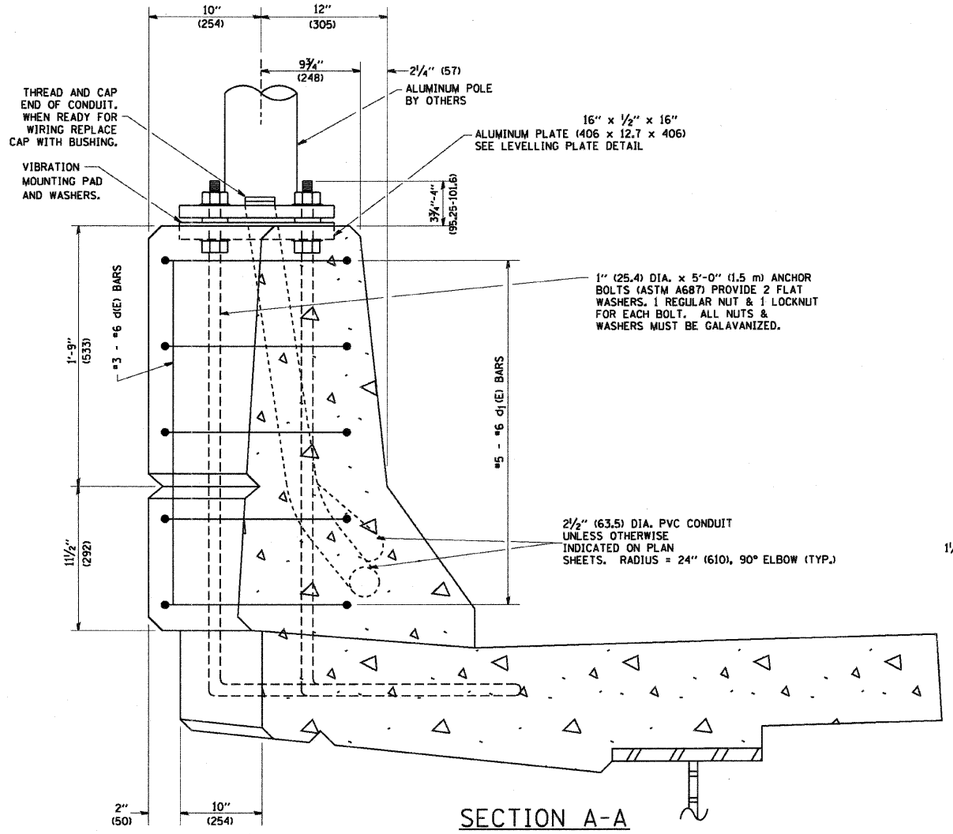
BAR d (E)



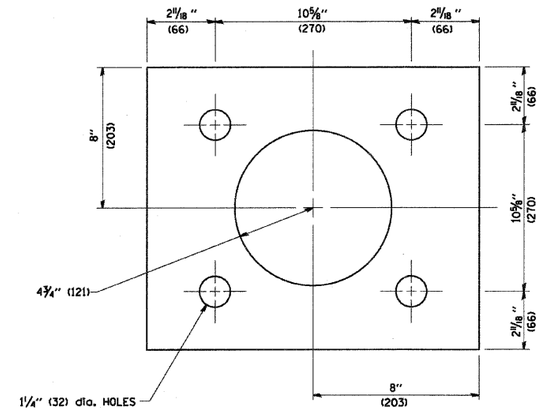
BAR d_1 (E)



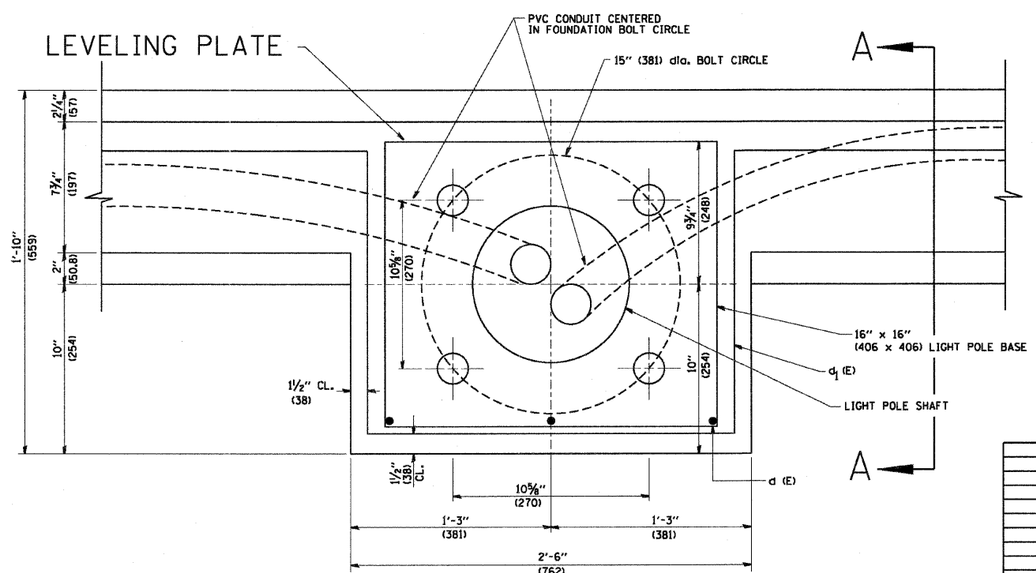
1" (25.4) dia. ANCHOR BOLT



SECTION A-A



LEVELING PLATE DETAIL



PLAN

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. LEVEL LIGHT POLE PLATES, USING THE FLANGE NUTS, PRIOR TO POURING THE PARAPET WALL. THE TOP OF THE PLATE SHALL BE AT THE SAME ELEVATION AS THE FINISHED CONCRETE PARAPET.
3. THE COST OF ANCHOR BOLTS, CONDUIT, LEVELLING PLATE AND FOUNDATION IS INCLUDED IN THE COST OF THE BRIDGE STRUCTURE.

BE-330

REVISIONS NAME	DATE
	04/22/02

ILLINOIS DEPARTMENT OF TRANSPORTATION

LIGHT POLE MOUNTED ON CONCRETE PARAPET WALL 15" (381 mm) BOLT CIRCLE

SCALE: NONE

DRAWN BY

CHECKED BY

BE-330

PLOT DATE = 4/18/2007
FILE NAME = k:\drisroot\be338.dgn
PLOT SCALE = 50.0000 '/ IN.
USER NAME = bsworth

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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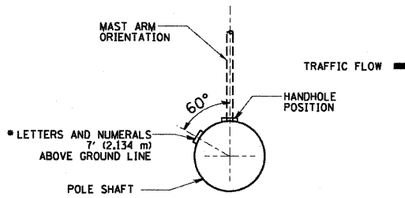
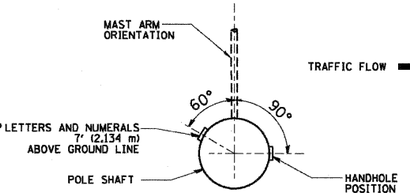
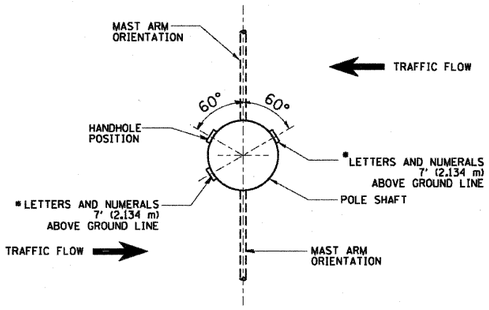
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



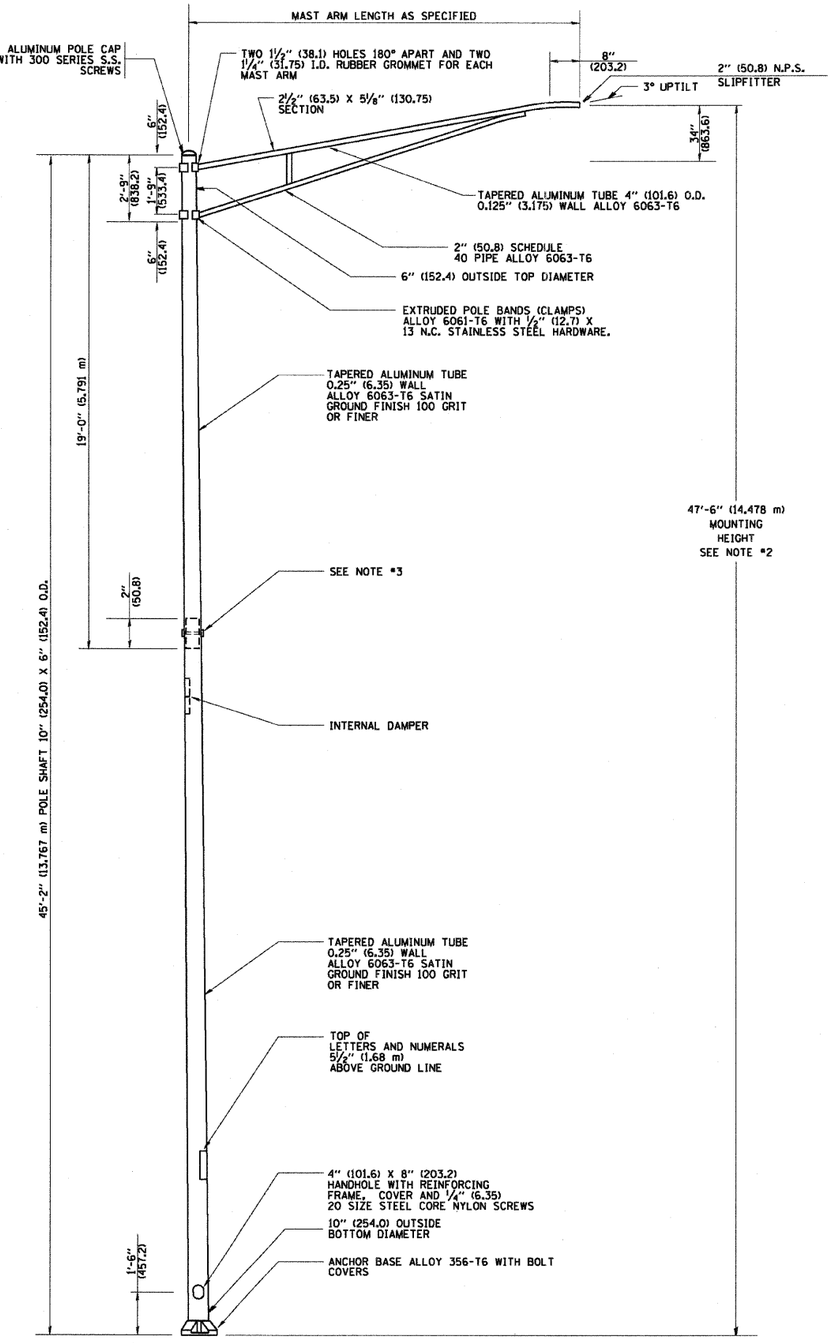
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

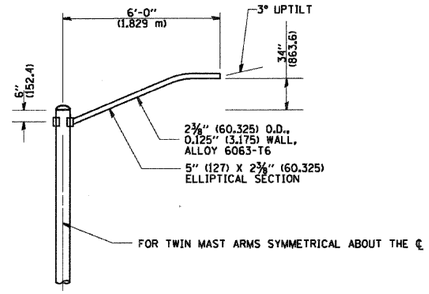


POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



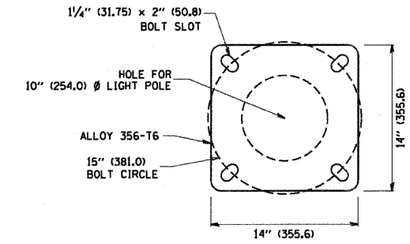


6' (1.8 m) SINGLE MEMBER MAST ARM

(N.T.S.)

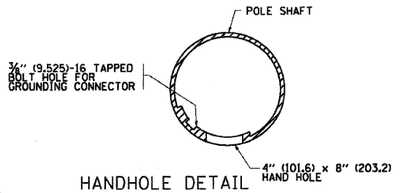
NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



LIGHT POLE BASE PLATE DETAIL

15 INCH (381.0) BOLT CIRCLE



HANDHOLE DETAIL

(N.T.S.)

BE-400

REVISIONS	
NAME	DATE
R. TOWSONS	9-6-00
R. TOWSONS	8-12-03

ILLINOIS DEPARTMENT OF TRANSPORTATION

ALUMINUM LIGHT POLE
47'-6" (14.478 m)
MOUNTING HEIGHT

SCALE: NONE

DRAWN BY

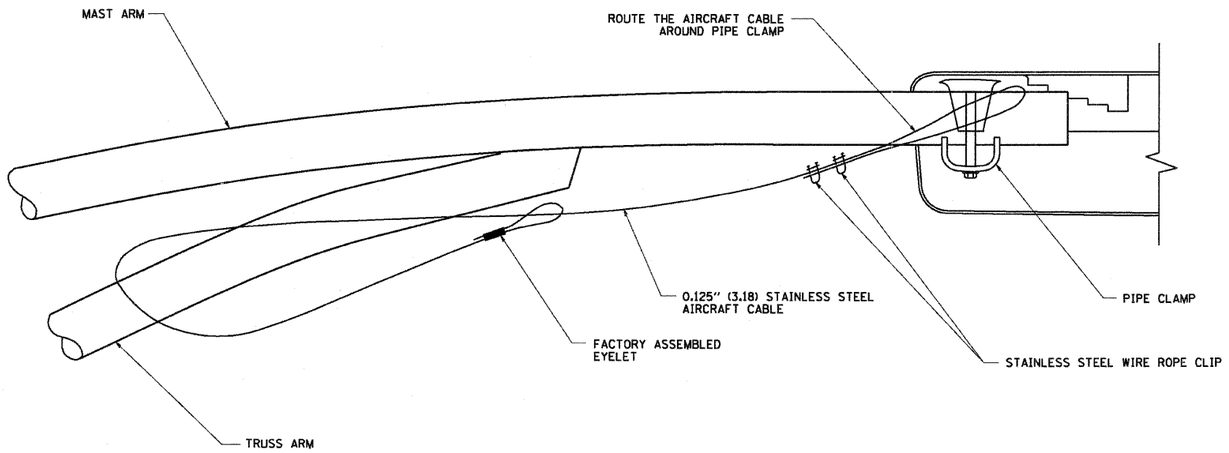
CHECKED BY

BE-400

PLOT DATE = 3/5/2007
FILE NAME = k:\dist\std\be400.dgn
PLOT SCALE = 0.0300 ' / IN.
USER NAME = bbuerdl

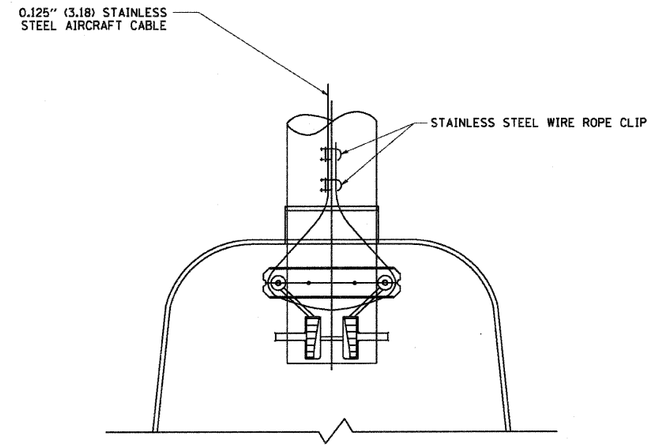
CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	443
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



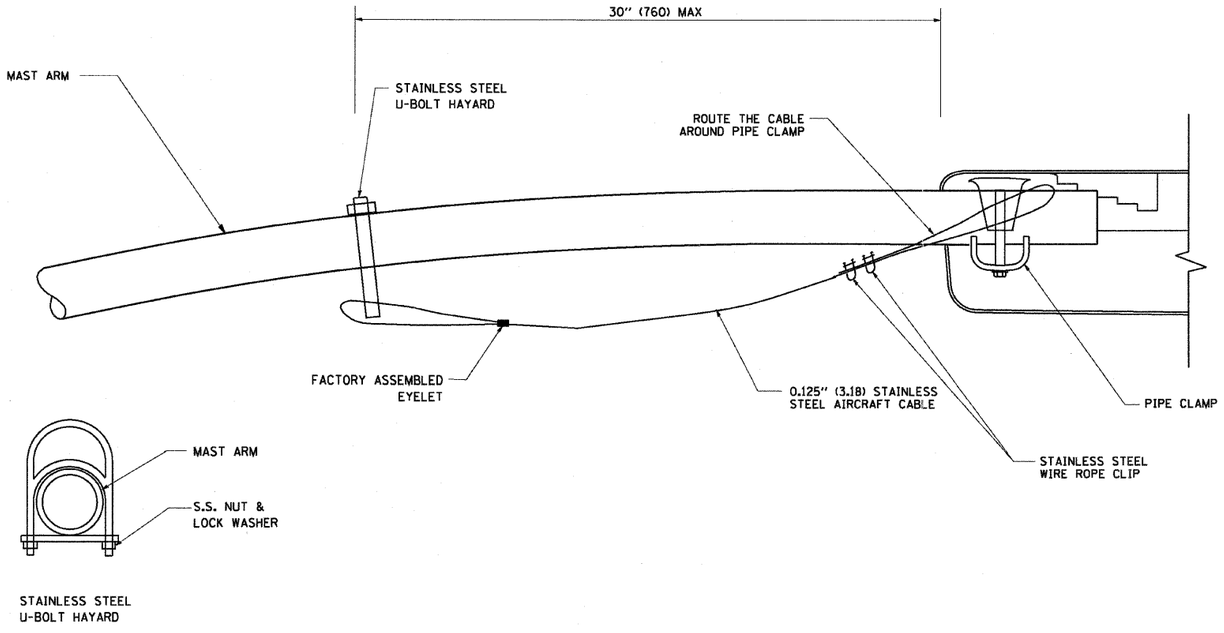
SIDE VIEW (TRUSS ARM)

N.T.S.



BOTTOM VIEW

N.T.S.



SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

REVISIONS	
NAME	DATE
	08/08/03

ILLINOIS DEPARTMENT OF TRANSPORTATION

LUMINAIRE SAFETY CABLE ASSEMBLY

SCALE: VERT. NONE HORIZ.

DRAWN BY

CHECKED BY

BE-701

PLOT DATE = 4/18/2007
FILE NAME = k:\dist\sch\be701.dgn
PLOT SCALE = 48.000 '/ IN.
USER NAME = bauerdl

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	444
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmark: "D" Cut In SW Corner Concrete Base of Traffic Signal Box in NW Corner IL Rte. 64 & Powis Rd. Elev. 758.46

Existing Structure: Sta. 3357+79.35
FAP 307 (IL Rte. 64) Section 130VB-2-R-1
Built in 1930. Structure No. 022-0059
(Six-span 255'-0" Bk. to Bk. of Abut., 56'-0" O. to O. Deck).

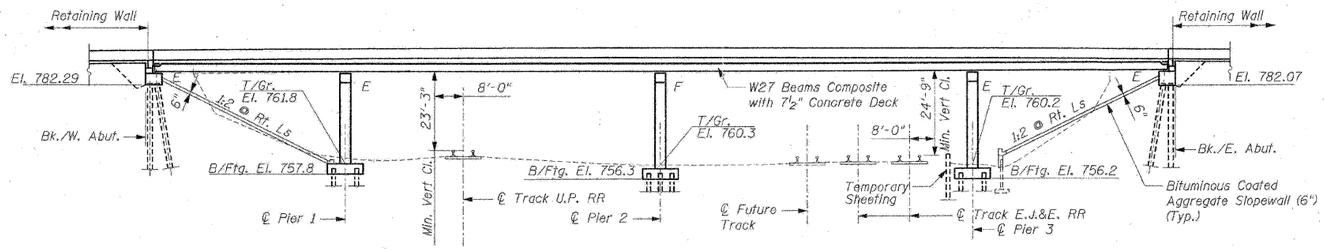
Superstructure: PPC deck beams built in 1973, repaired in 1992 and replaced in 1995.

Substructure: RC multiple column piers & closed abutments with buttresses on spread footings built in 1930 and recapped in 1973 and 1995.

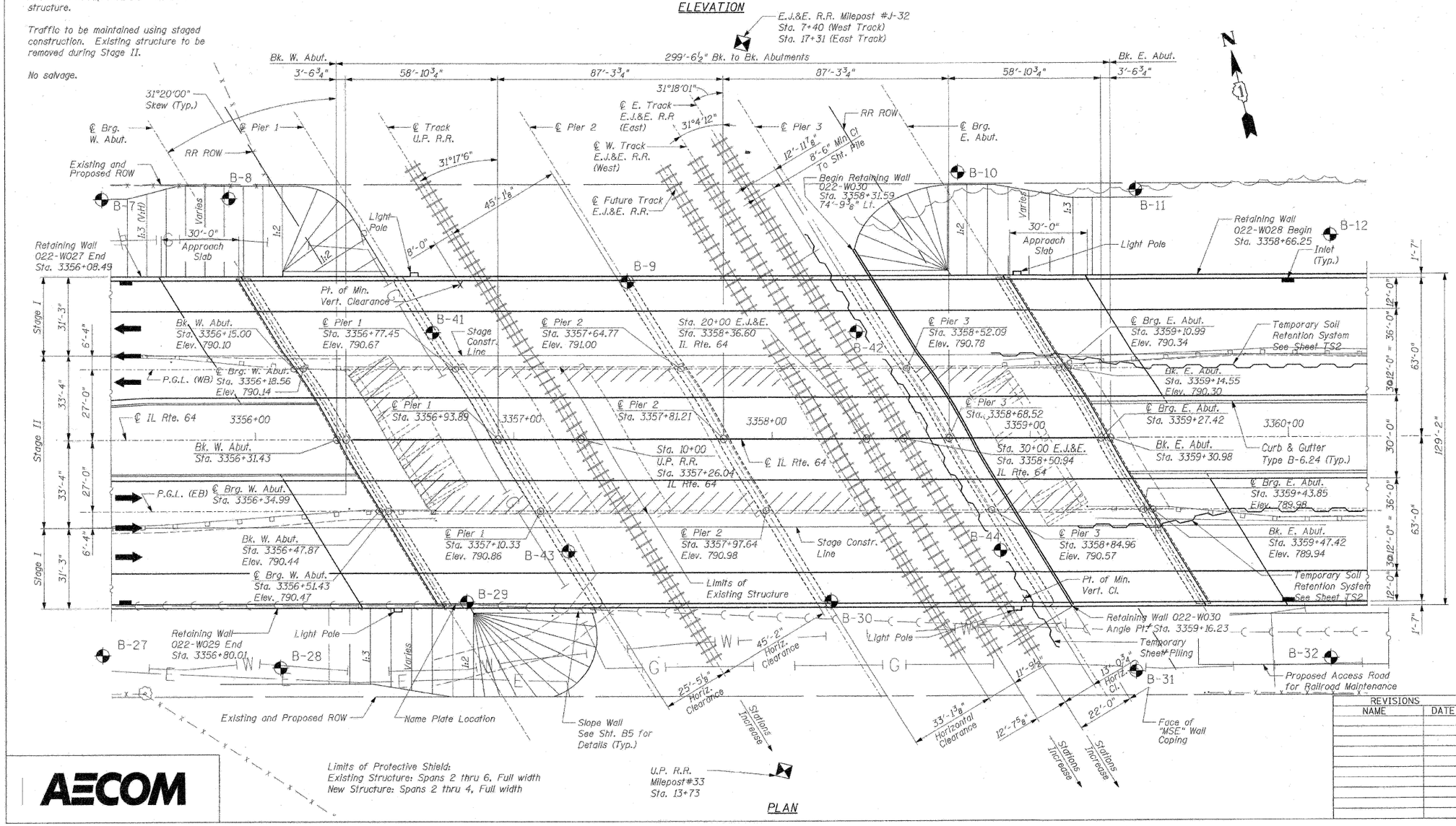
Superstructure and substructure to be removed and replaced with widened structure.

Traffic to be maintained using staged construction. Existing structure to be removed during Stage II.

No salvage.



ELEVATION



PLAN

DESIGN SPECIFICATIONS

AASHTO Standard Specifications for Highway Bridges, 17th Edition - 2002

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

LOADING HS20-44

Allow 50 psf for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Acceleration Coefficient (A) = 0.037g
site Coefficient (S) = 1.0

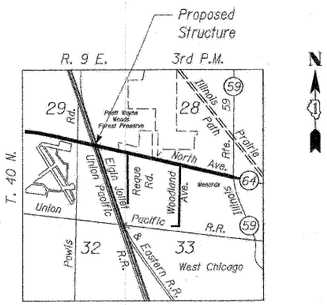
APPROVED
FOR STRUCTURAL ADEQUACY ONLY

ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
MATTHEW J. PREGMON
081-006009
PROFESSIONAL STRUCTURAL ENGINEER

3.12.2011

EXPIRATION DATE: 11-30-2012



LOCATION SKETCH

Not to Scale

Sheet B1 of 56

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
GENERAL PLAN AND ELEVATION
NORTH AVENUE
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: MJP

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	445
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS:

STATION 3357+81.21
BUILT ☐ BY
STATE OF ILLINOIS
F.A.P. RT 307 SEC. 130 R-2
LOADING HS20-44
STR. NO. 022-0190

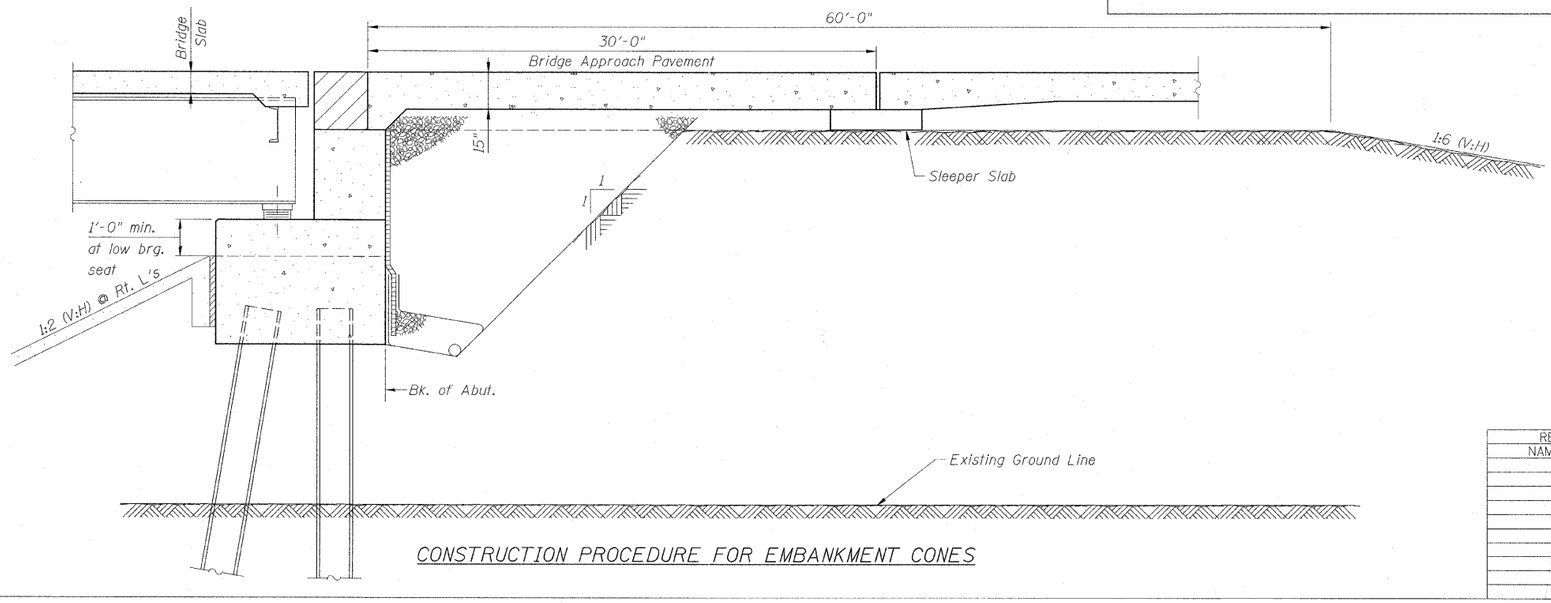
NAME PLATE
See Std. 515001

GENERAL NOTES:

1. Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts
   Bolts $\frac{7}{8}$"ϕ, open holes $\frac{15}{16}$"ϕ unless otherwise noted.
2. Calculated weight of Structural Steel = 1,206,290 lbs (AASHTO M270, Grade 50).
   Calculated weight of Structural Steel = 69,310 lbs (AASHTO M270, Grade 36).
3. No field welding is permitted except as specified in the contract documents.
4. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
5. Reinforcement bars designated (E) shall be epoxy coated.
6. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
7. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.
8. Concrete Sealer shall be applied to the designated areas of the abutments.
9. The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No. 5B 7/1. The color of the final finish coat for all exterior and bottom flange of the fascia beams shall also be gray, Munsell No 5B 7/1
10. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of abutments.
11. Slipforming of parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUB	SUPER	TOTAL
POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	497	-	497
REMOVAL OF EXISTING STRUCTURES	EACH	-	-	1
PROTECTIVE SHIELD	SQ YD	-	4,542	4,542
STRUCTURE EXCAVATION	CU YD	980	-	980
CONCRETE STRUCTURES	CU YD	1,765.0	-	1,765.0
CONCRETE SUPERSTRUCTURE	CU YD	-	1,575.5	1,575.5
BRIDGE DECK GROOVING	SQ YD	-	3,710	3,710
PROTECTIVE COAT	SQ YD	-	5,225	5,225
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	-	1	1
STUD SHEAR CONNECTORS	EACH	-	21,996	21,996
REINFORCEMENT BARS, EPOXY COATED	POUND	238,974	320,516	559,490
BAR SPLICERS	EACH	724	1,952	2,676
BITUMINOUS COATED AGGREGATE SLOPEWALL 6"	SQ YD	1,673	-	1,673
FURNISHING STEEL PILES HP14X73	FOOT	16,932	-	16,932
DRIVING PILES	FOOT	16,932	-	16,932
TEST PILE STEEL HP14X73	EACH	5	-	5
PILE SHOES	EACH	328	-	328
TEMPORARY SHEET PILING	SQ FT	5,967	-	5,967
NAME PLATES	EACH	-	1	1
PREFORMED JOINT STRIP SEAL	FOOT	-	299	299
ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	-	52	52
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	-	52	52
CONCRETE SEALER	SQ FT	2,668	-	2,668
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	299	-	299
GEOCOMPOSITE WALL DRAIN	SQ YD	180	-	180
PREFORMED JOINT SEAL ($1\frac{3}{4}$")	FOOT	-	300	300
CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	-	753	753
ANCHOR BOLTS, 1"	EACH	-	104	104
ANCHOR BOLTS, $1\frac{1}{4}$"	EACH	-	104	104
ANCHOR BOLTS, $1\frac{1}{2}$"	EACH	-	52	52
CONCRETE ENCASEMENT	CU YD	173.5	-	173.5



CONSTRUCTION PROCEDURE FOR EMBANKMENT CONES

AECOM

Sheet B2 of 56

REVISIONS	
NAME	DATE

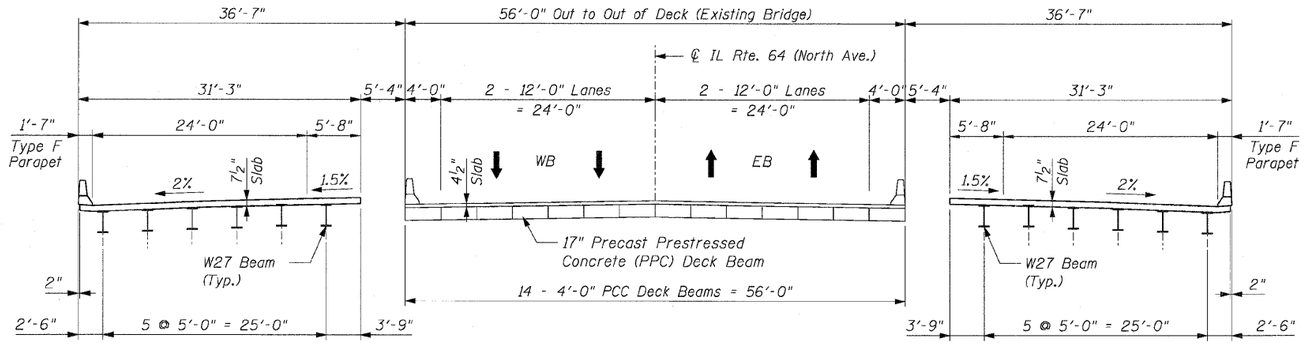
F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
INDEX OF SHEETS, GENERAL NOTES AND
TOTAL BILL OF MATERIAL
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: NOVEMBER 1, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	446
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

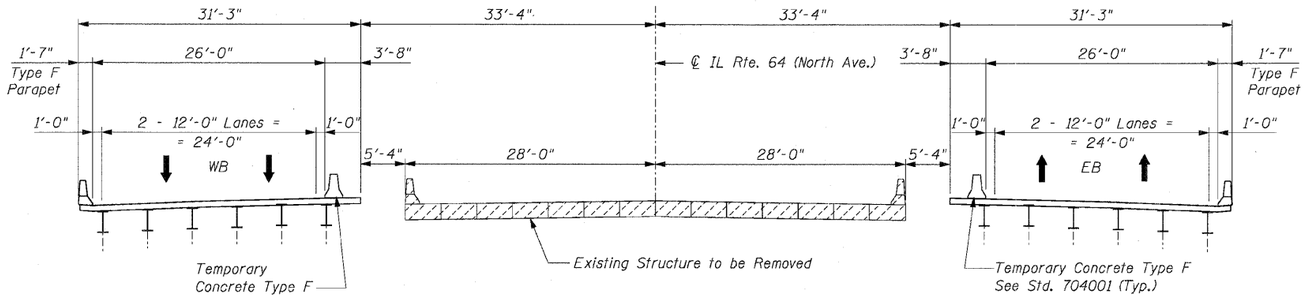
62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

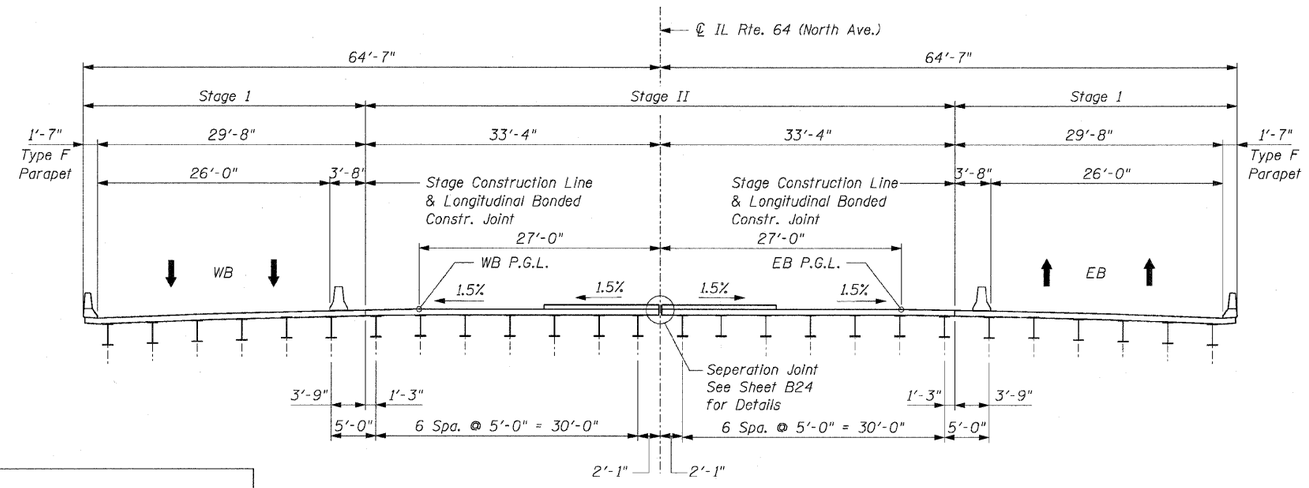


PROPOSED SECTION — EXISTING SECTION — PROPOSED SECTION

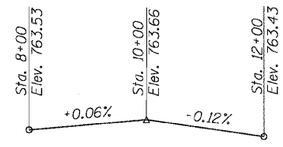
STAGE I CONSTRUCTION
(Looking East)



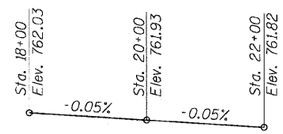
STAGE II - REMOVAL
(Looking East)



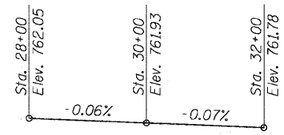
STAGE II - CONSTRUCTION
(Looking East)



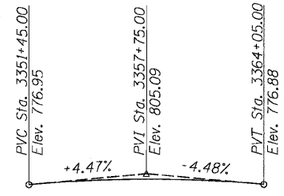
PROFILE GRADE - U.P. TRACK



PROFILE GRADE - E.J.&E. WEST TRACK



PROFILE GRADE - E.J.&E. EAST TRACK



PROFILE GRADE - IL RTE. 64
LVC = 1260'

SEQUENCE OF CONSTRUCTION

1. Construct outside lane, shoulder and outer half of middle lane (EB and WB).
2. Remove existing superstructure, substructure and foundation (EB and WB).
3. Construct inside lane, median and inner half of middle lane (EB and WB).

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
CONSTRUCTION STAGING

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	447
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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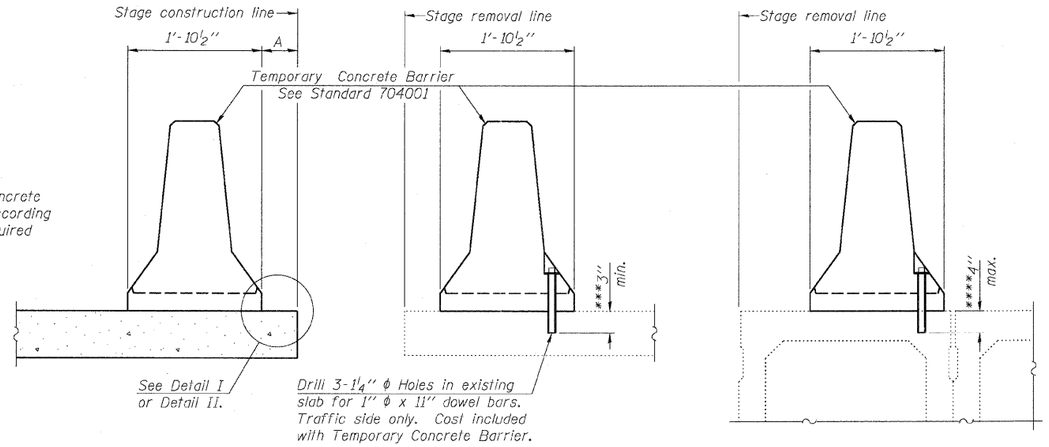
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB | EXISTING SLAB | EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" 'x "W" steel ℄ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℄ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

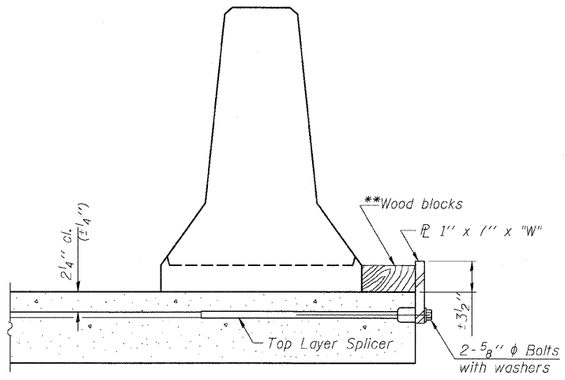
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

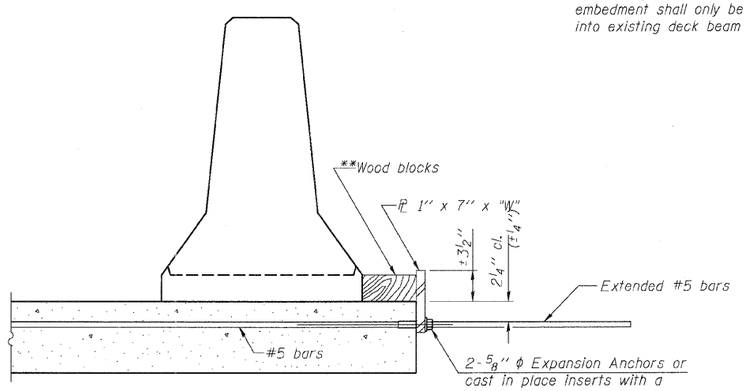
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



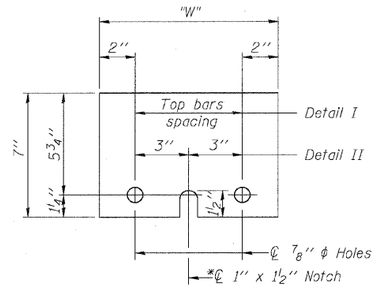
DETAIL I



DETAIL II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



STEEL RETAINER ℄ 1" x 7" x "W"

* Required only with Detail II

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TEMPORARY CONCRETE BARRIER
FOR STAGE CONSTRUCTION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

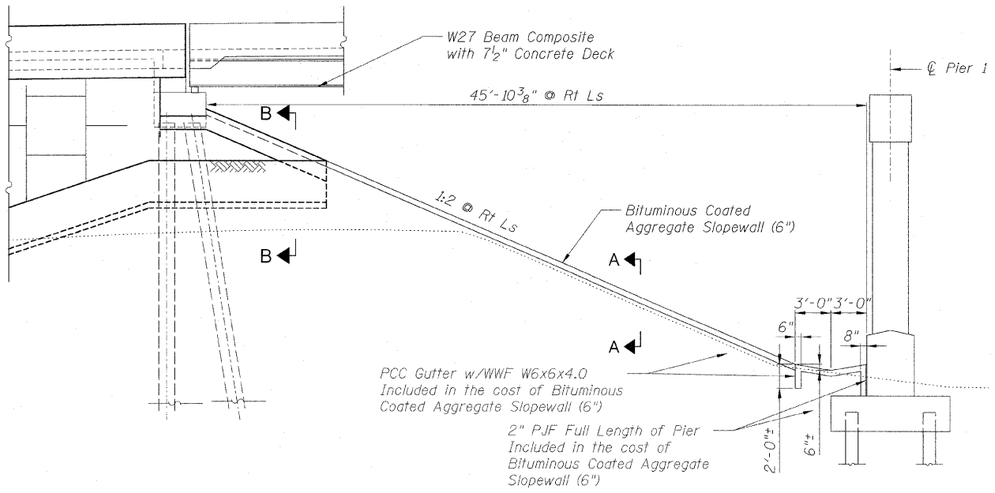
SCALE: DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: MJP

AECOM

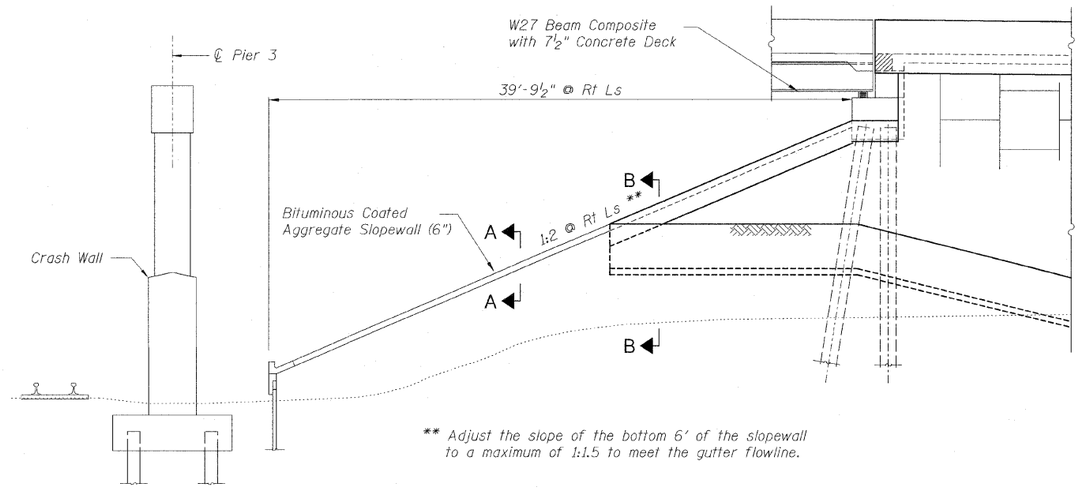
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	448
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

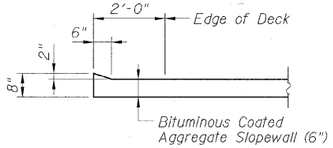
62410



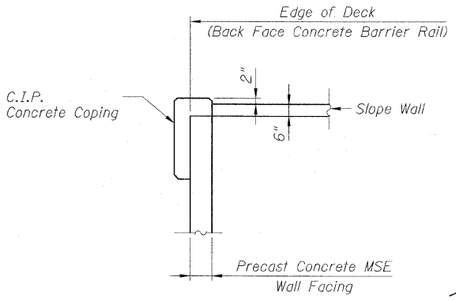
TYPICAL SECTION THRU W. ABUT. SLOPE WALL
(Looking North)



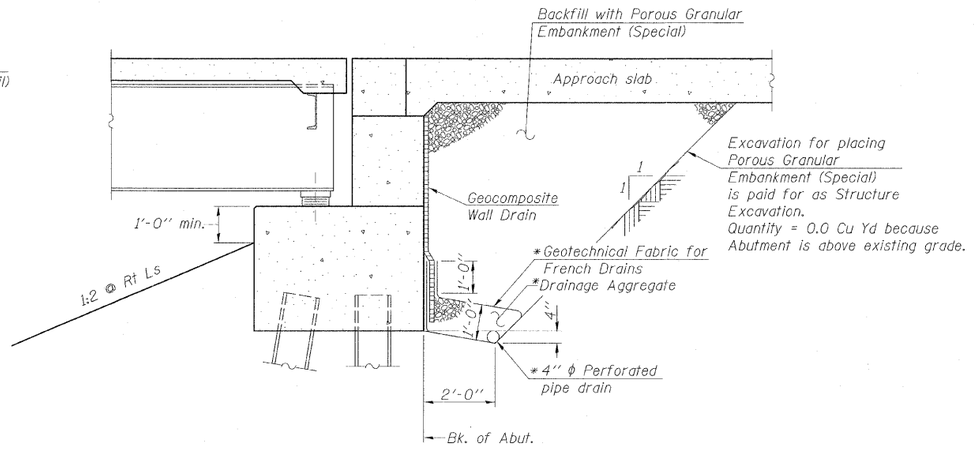
TYPICAL SECTION THRU E. ABUT. SLOPE WALL
(Looking North)



SECTION A-A



SECTION B-B



SECTION THRU ABUTMENT
(Showing Backfill and Drainage System)
(Horiz. dim. @ Rt. L's)
*Included in the cost of Pipe Underdrains for Structures.

Note:
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

BILL OF MATERIAL

Item	Unit	Total
Bituminous Coated Aggregate Slope Wall, (6")	Sq Yd	1,673

NOTES:

1. For General Notes see Sheet B2.
2. For location and limits of Slope Wall see Sheet B1.
3. For Abutment Details see Sheets B37 thru B41.
4. For Retaining Wall Details see Sheets NW1 thru NW9, NE1 thru NE8, SW1 thru SW8, and SE1 thru SE9.
5. Concrete Sealer shall be applied to the area of the abutment bearing seats, backwall, and the exposed portion of the front face of the abutment pile caps.

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
SLOPE WALL DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	449
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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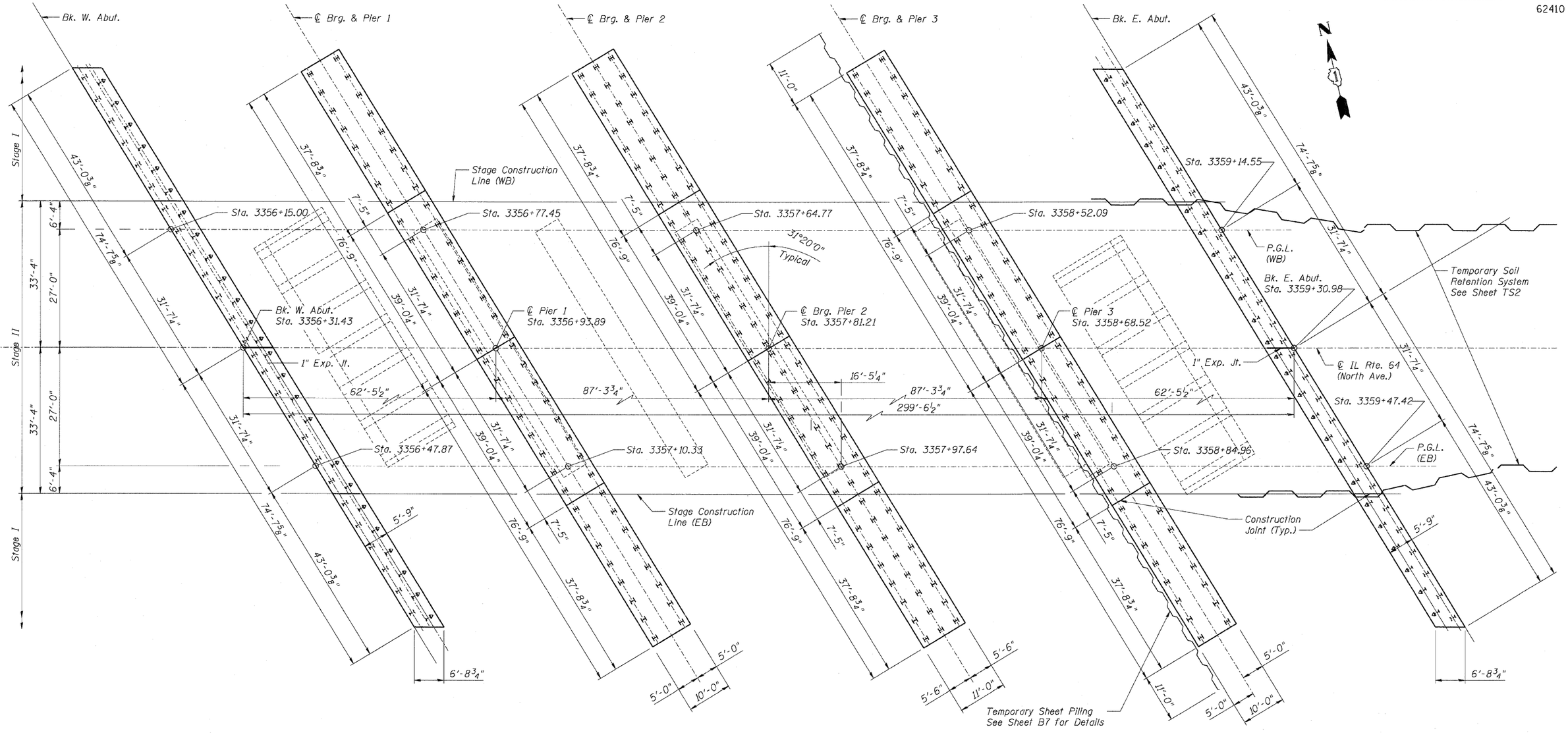
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



FOOTING LAYOUT

NOTES:

1. For General Plan and Elevation see Sheet B1.
2. For Temporary Sheet Piling Details see Sheet B7.
3. For Abutment Details see Sheets B37 thru B41.
4. For Pier Details see Sheets B42 thru B50.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
SUBSTRUCTURE LAYOUT

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	450
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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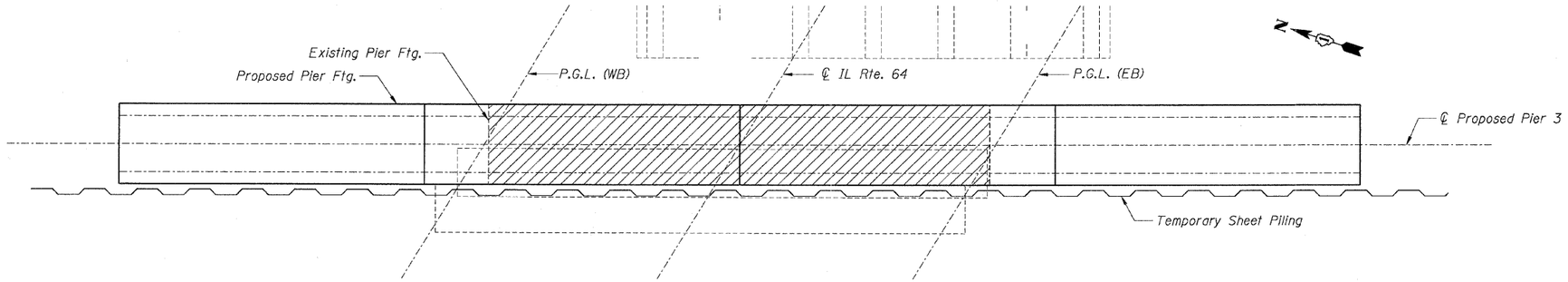
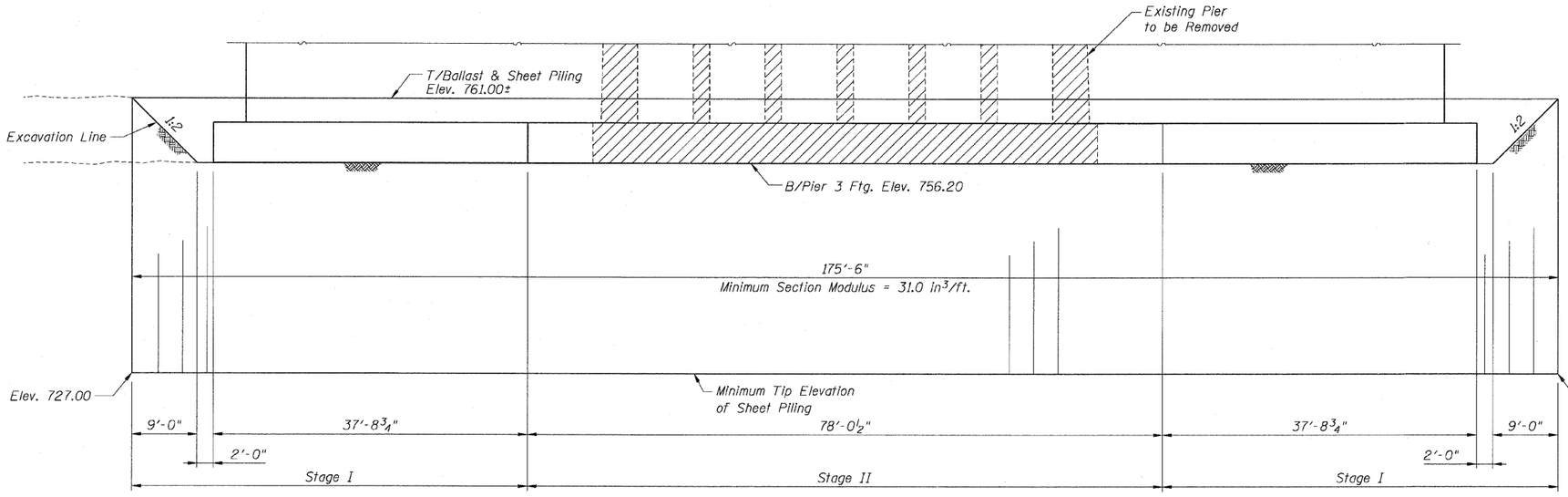
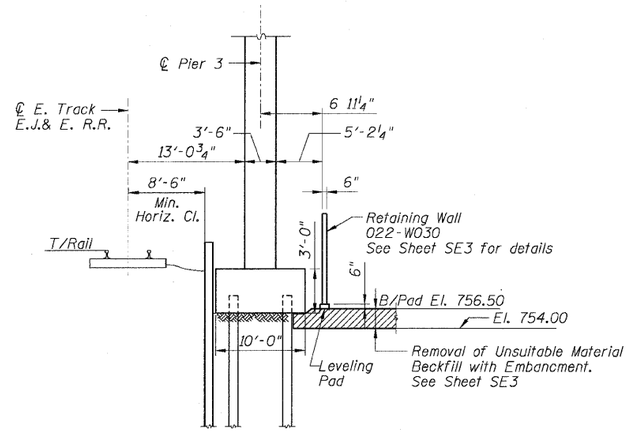
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



ELEVATION



TYPICAL SECTION AT PIER 3

BILL OF MATERIAL

Item	Unit	Total
Temporary Sheet Piling	Sq Ft	5967

NOTES:

1. For General Plan and Elevation see Sheet B1.
2. For location of temporary sheet piling see Sheet B6.
3. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TEMPORARY SHEET PILING DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

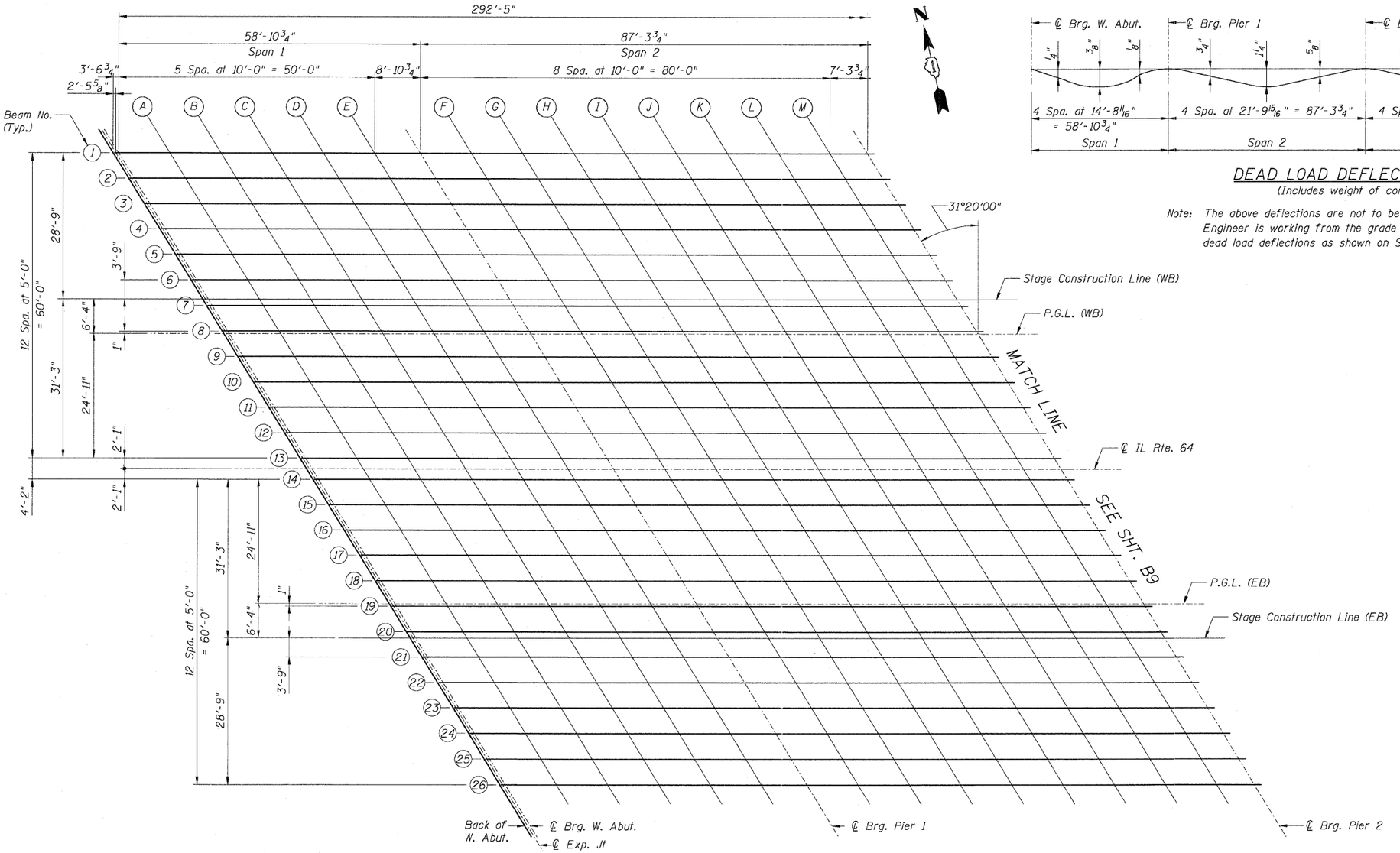
SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE, KANE	647	451
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



PLAN - SPANS 1 & 2

DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets B10 to B17.

NOTES:

For Spans 3 and 4 Top of Slab Elevation Locations see Sheet B9.

For Top of Slab Elevations see Sheets B10 thru B17.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION LOCATIONS - I

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

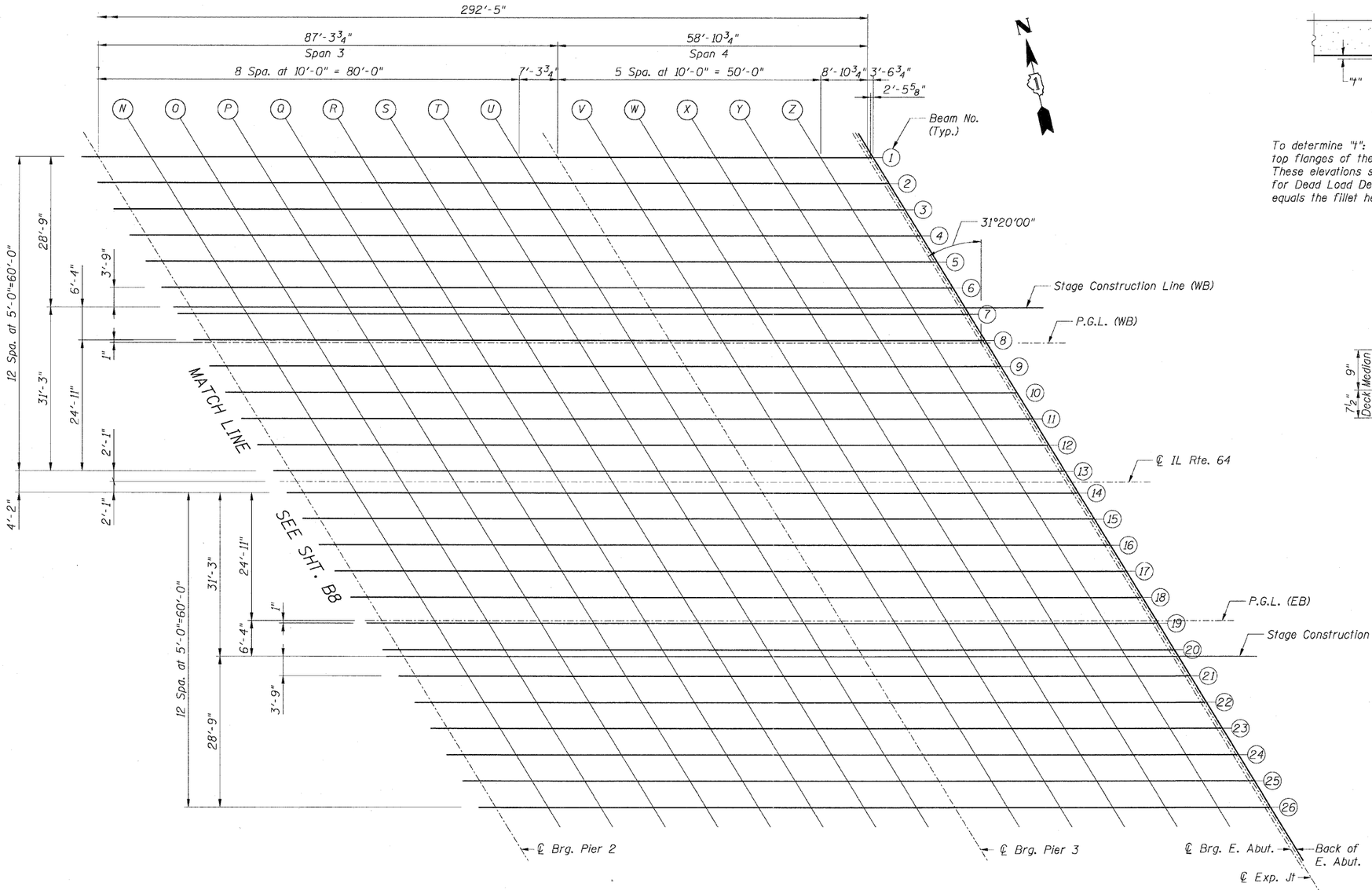
SCALE: None DRAWN BY: MRK/CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

AECOM

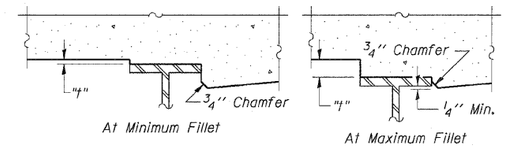
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	452
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

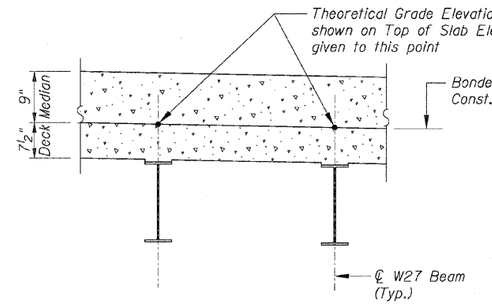


PLAN - SPANS 3 & 4



To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on Sheets B8 and B9. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets B10 to B17, minus slab thickness, equals the fillet heights "f" above top flange of beams.

FILLET HEIGHTS



TOP OF SLAB ELEVATIONS AT MEDIAN

NOTES:

For Spans 1 and 2 Top of Slab elevation locations see Sheet B8.

For Top of Slab Elevations see Sheets B10 thru B17.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION LOCATIONS - II

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:MRK/CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	453
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3355+93.63	-62.08	789.20	789.20
C L Brg W. Abut	3355+97.19	-62.08	789.25	789.25
A	3356+07.19	-62.08	789.37	789.39
B	3356+17.19	-62.08	789.49	789.51
C	3356+27.19	-62.08	789.59	789.62
D	3356+37.19	-62.08	789.69	789.71
E	3356+47.19	-62.08	789.79	789.79
C L Brg Pier 1	3356+56.09	-62.08	789.87	789.87
F	3356+66.09	-62.08	789.95	789.97
G	3356+76.09	-62.08	790.02	790.07
H	3356+86.09	-62.08	790.09	790.15
I	3356+96.09	-62.08	790.14	790.22
J	3357+06.09	-62.08	790.20	790.27
K	3357+16.09	-62.08	790.24	790.30
L	3357+26.09	-62.08	790.28	790.31
M	3357+36.09	-62.08	790.31	790.32
C L Brg Pier 2	3357+43.41	-62.08	790.33	790.33
N	3357+53.41	-62.08	790.35	790.36
O	3357+63.41	-62.08	790.36	790.39
P	3357+73.41	-62.08	790.36	790.42
Q	3357+83.41	-62.08	790.36	790.43
R	3357+93.41	-62.08	790.35	790.43
S	3358+03.41	-62.08	790.33	790.39
T	3358+13.41	-62.08	790.31	790.35
U	3358+23.41	-62.08	790.28	790.29
C L Brg Pier 3	3358+30.72	-62.08	790.25	790.25
V	3358+40.72	-62.08	790.20	790.21
W	3358+50.72	-62.08	790.15	790.17
X	3358+60.72	-62.08	790.10	790.12
Y	3358+70.72	-62.08	790.03	790.05
Z	3358+80.72	-62.08	789.96	789.97
C L Brg E Abut	3358+89.62	-62.08	789.89	789.89
Bk of E Abut	3358+93.18	-62.08	789.86	789.86

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3355+96.68	-57.08	789.34	789.34
C L Brg W. Abut	3356+00.24	-57.08	789.39	789.39
A	3356+10.24	-57.08	789.51	789.52
B	3356+20.24	-57.08	789.62	789.64
C	3356+30.24	-57.08	789.73	789.75
D	3356+40.24	-57.08	789.82	789.83
E	3356+50.24	-57.08	789.92	789.92
C L Brg Pier 1	3356+59.14	-57.08	789.99	789.99
F	3356+69.14	-57.08	790.07	790.09
G	3356+79.14	-57.08	790.14	790.19
H	3356+89.14	-57.08	790.20	790.27
I	3356+99.14	-57.08	790.26	790.34
J	3357+09.14	-57.08	790.31	790.38
K	3357+19.14	-57.08	790.35	790.41
L	3357+29.14	-57.08	790.39	790.42
M	3357+39.14	-57.08	790.42	790.43
C L Brg Pier 2	3357+46.46	-57.08	790.43	790.43
N	3357+56.46	-57.08	790.45	790.46
O	3357+66.46	-57.08	790.46	790.50
P	3357+76.46	-57.08	790.46	790.52
Q	3357+86.46	-57.08	790.46	790.53
R	3357+96.46	-57.08	790.44	790.52
S	3358+06.46	-57.08	790.42	790.49
T	3358+16.46	-57.08	790.40	790.44
U	3358+26.46	-57.08	790.36	790.38
C L Brg Pier 3	3358+33.77	-57.08	790.34	790.34
V	3358+43.77	-57.08	790.29	790.29
W	3358+53.77	-57.08	790.24	790.25
X	3358+63.77	-57.08	790.18	790.20
Y	3358+73.77	-57.08	790.11	790.13
Z	3358+83.77	-57.08	790.04	790.05
C L Brg E Abut	3358+92.67	-57.08	789.96	789.96
Bk of E Abut	3358+96.23	-57.08	789.93	789.93

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3355+99.72	-52.08	789.48	789.48
C L Brg W. Abut	3356+03.28	-52.08	789.52	789.52
A	3356+13.28	-52.08	789.64	789.66
B	3356+23.28	-52.08	789.75	789.78
C	3356+33.28	-52.08	789.86	789.88
D	3356+43.28	-52.08	789.95	789.96
E	3356+53.28	-52.08	790.04	790.04
C L Brg Pier 1	3356+62.18	-52.08	790.12	790.12
F	3356+72.18	-52.08	790.19	790.21
G	3356+82.18	-52.08	790.26	790.31
H	3356+92.18	-52.08	790.32	790.39
I	3357+02.18	-52.08	790.38	790.46
J	3357+12.18	-52.08	790.42	790.50
K	3357+22.18	-52.08	790.47	790.52
L	3357+32.18	-52.08	790.50	790.53
M	3357+42.18	-52.08	790.52	790.53
C L Brg Pier 2	3357+49.50	-52.08	790.54	790.54
N	3357+59.50	-52.08	790.55	790.57
O	3357+69.50	-52.08	790.56	790.60
P	3357+79.50	-52.08	790.56	790.62
Q	3357+89.50	-52.08	790.55	790.63
R	3357+99.50	-52.08	790.54	790.62
S	3358+09.50	-52.08	790.52	790.58
T	3358+19.50	-52.08	790.49	790.53
U	3358+29.50	-52.08	790.45	790.47
C L Brg Pier 3	3358+36.81	-52.08	790.42	790.42
V	3358+46.81	-52.08	790.37	790.38
W	3358+56.81	-52.08	790.32	790.33
X	3358+66.81	-52.08	790.26	790.28
Y	3358+76.81	-52.08	790.19	790.21
Z	3358+86.81	-52.08	790.11	790.13
C L Brg E Abut	3358+95.71	-52.08	790.04	790.04
Bk of E Abut	3358+99.27	-52.08	790.01	790.01

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+02.77	-47.08	789.62	789.62
C L Brg W. Abut	3356+06.33	-47.08	789.66	789.66
A	3356+16.33	-47.08	789.78	789.79
B	3356+26.33	-47.08	789.89	789.91
C	3356+36.33	-47.08	789.99	790.01
D	3356+46.33	-47.08	790.08	790.09
E	3356+56.33	-47.08	790.17	790.17
C L Brg Pier 1	3356+65.23	-47.08	790.24	790.24
F	3356+75.23	-47.08	790.31	790.33
G	3356+85.23	-47.08	790.38	790.43
H	3356+95.23	-47.08	790.44	790.51
I	3357+05.23	-47.08	790.49	790.57
J	3357+15.23	-47.08	790.54	790.61
K	3357+25.23	-47.08	790.58	790.63
L	3357+35.23	-47.08	790.61	790.64
M	3357+45.23	-47.08	790.63	790.64
C L Brg Pier 2	3357+52.55	-47.08	790.64	790.64
N	3357+62.55	-47.08	790.66	790.67
O	3357+72.55	-47.08	790.66	790.70
P	3357+82.55	-47.08	790.66	790.72
Q	3357+92.55	-47.08	790.65	790.73
R	3358+02.55	-47.08	790.63	790.71
S	3358+12.55	-47.08	790.61	790.67
T	3358+22.55	-47.08	790.58	790.62
U	3358+32.55	-47.08	790.54	790.55
C L Brg Pier 3	3358+39.86	-47.08	790.51	790.51
V	3358+49.86	-47.08	790.46	790.46
W	3358+59.86	-47.08	790.40	790.41
X	3358+69.86	-47.08	790.34	790.36
Y	3358+79.86	-47.08	790.27	790.29
Z	3358+89.86	-47.08	790.19	790.20
C L Brg E Abut	3358+98.76	-47.08	790.11	790.11
Bk of E Abut	3359+02.32	-47.08	790.08	790.08

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - I

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	454
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+05.81	-42.08	789.75	789.75
C L Brg W. Abut	3356+09.37	-42.08	789.80	789.80
A	3356+19.37	-42.08	789.91	789.93
B	3356+29.37	-42.08	790.02	790.04
C	3356+39.37	-42.08	790.12	790.14
D	3356+49.37	-42.08	790.21	790.22
E	3356+59.37	-42.08	790.29	790.29
C L Brg Pier 1	3356+68.27	-42.08	790.36	790.36
F	3356+78.27	-42.08	790.43	790.45
G	3356+88.27	-42.08	790.50	790.54
H	3356+98.27	-42.08	790.56	790.62
I	3357+08.27	-42.08	790.61	790.69
J	3357+18.27	-42.08	790.65	790.72
K	3357+28.27	-42.08	790.69	790.74
L	3357+38.27	-42.08	790.72	790.74
M	3357+48.27	-42.08	790.74	790.75
C L Brg Pier 2	3357+55.59	-42.08	790.75	790.75
N	3357+65.59	-42.08	790.76	790.77
O	3357+75.59	-42.08	790.76	790.80
P	3357+85.59	-42.08	790.76	790.82
Q	3357+95.59	-42.08	790.75	790.82
R	3358+05.59	-42.08	790.73	790.80
S	3358+15.59	-42.08	790.70	790.76
T	3358+25.59	-42.08	790.67	790.71
U	3358+35.59	-42.08	790.63	790.64
C L Brg Pier 3	3358+42.90	-42.08	790.59	790.59
V	3358+52.90	-42.08	790.54	790.54
W	3358+62.90	-42.08	790.48	790.49
X	3358+72.90	-42.08	790.42	790.44
Y	3358+82.90	-42.08	790.34	790.37
Z	3358+92.90	-42.08	790.26	790.28
C L Brg E Abut	3359+01.80	-42.08	790.18	790.18
Bk of E Abut	3359+05.36	-42.08	790.15	790.15

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+08.85	-37.08	789.88	789.88
C L Brg W. Abut	3356+12.41	-37.08	789.92	789.92
A	3356+22.41	-37.08	790.03	790.05
B	3356+32.41	-37.08	790.14	790.16
C	3356+42.41	-37.08	790.24	790.26
D	3356+52.41	-37.08	790.33	790.34
E	3356+62.41	-37.08	790.41	790.41
C L Brg Pier 1	3356+71.31	-37.08	790.48	790.48
F	3356+81.31	-37.08	790.55	790.56
G	3356+91.31	-37.08	790.61	790.65
H	3357+01.31	-37.08	790.66	790.73
I	3357+11.31	-37.08	790.71	790.79
J	3357+21.31	-37.08	790.75	790.83
K	3357+31.31	-37.08	790.79	790.84
L	3357+41.31	-37.08	790.81	790.84
M	3357+51.31	-37.08	790.83	790.84
C L Brg Pier 2	3357+58.63	-37.08	790.84	790.84
N	3357+68.63	-37.08	790.85	790.86
O	3357+78.63	-37.08	790.85	790.89
P	3357+88.63	-37.08	790.84	790.91
Q	3357+98.63	-37.08	790.83	790.91
R	3358+08.63	-37.08	790.81	790.89
S	3358+18.63	-37.08	790.78	790.85
T	3358+28.63	-37.08	790.75	790.79
U	3358+38.63	-37.08	790.70	790.72
C L Brg Pier 3	3358+45.94	-37.08	790.67	790.67
V	3358+55.94	-37.08	790.61	790.62
W	3358+65.94	-37.08	790.55	790.57
X	3358+75.94	-37.08	790.48	790.51
Y	3358+85.94	-37.08	790.41	790.43
Z	3358+95.94	-37.08	790.33	790.34
C L Brg E Abut	3359+04.84	-37.08	790.25	790.25
Bk of E Abut	3359+08.40	-37.08	790.21	790.21

STAGE CONSTRUCTION LINE (WB)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+11.14	-33.33	789.96	789.96
C L Brg W. Abut	3356+14.70	-33.33	790.00	790.00
A	3356+24.70	-33.33	790.11	790.13
B	3356+34.70	-33.33	790.22	790.24
C	3356+44.70	-33.33	790.31	790.33
D	3356+54.70	-33.33	790.40	790.41
E	3356+64.70	-33.33	790.48	790.48
C L Brg Pier 1	3356+73.60	-33.33	790.55	790.55
F	3356+83.60	-33.33	790.62	790.64
G	3356+93.60	-33.33	790.68	790.72
H	3357+03.60	-33.33	790.73	790.80
I	3357+13.60	-33.33	790.78	790.86
J	3357+23.60	-33.33	790.82	790.89
K	3357+33.60	-33.33	790.85	790.90
L	3357+43.60	-33.33	790.87	790.90
M	3357+53.60	-33.33	790.89	790.90
C L Brg Pier 2	3357+60.92	-33.33	790.90	790.90
N	3357+70.92	-33.33	790.91	790.92
O	3357+80.92	-33.33	790.91	790.94
P	3357+90.92	-33.33	790.90	790.96
Q	3358+00.92	-33.33	790.88	790.96
R	3358+10.92	-33.33	790.86	790.94
S	3358+20.92	-33.33	790.83	790.89
T	3358+30.92	-33.33	790.79	790.83
U	3358+40.92	-33.33	790.75	790.76
C L Brg Pier 3	3358+48.23	-33.33	790.71	790.71
V	3358+58.23	-33.33	790.66	790.66
W	3358+68.23	-33.33	790.59	790.61
X	3358+78.23	-33.33	790.52	790.55
Y	3358+88.23	-33.33	790.45	790.47
Z	3358+98.23	-33.33	790.36	790.38
C L Brg E Abut	3359+07.13	-33.33	790.28	790.28
Bk of E Abut	3359+10.69	-33.33	790.25	790.25

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+11.90	-32.08	789.99	789.99
C L Brg W. Abut	3356+15.46	-32.08	790.03	790.03
A	3356+25.46	-32.08	790.14	790.16
B	3356+35.46	-32.08	790.24	790.27
C	3356+45.46	-32.08	790.34	790.36
D	3356+55.46	-32.08	790.43	790.44
E	3356+65.46	-32.08	790.51	790.51
C L Brg Pier 1	3356+74.36	-32.08	790.57	790.57
F	3356+84.36	-32.08	790.64	790.66
G	3356+94.36	-32.08	790.70	790.75
H	3357+04.36	-32.08	790.75	790.82
I	3357+14.36	-32.08	790.80	790.88
J	3357+24.36	-32.08	790.84	790.91
K	3357+34.36	-32.08	790.87	790.93
L	3357+44.36	-32.08	790.90	790.92
M	3357+54.36	-32.08	790.91	790.92
C L Brg Pier 2	3357+61.68	-32.08	790.92	790.92
N	3357+71.68	-32.08	790.93	790.94
O	3357+81.68	-32.08	790.92	790.96
P	3357+91.68	-32.08	790.92	790.98
Q	3358+01.68	-32.08	790.90	790.98
R	3358+11.68	-32.08	790.88	790.95
S	3358+21.68	-32.08	790.85	790.91
T	3358+31.68	-32.08	790.81	790.85
U	3358+41.68	-32.08	790.77	790.78
C L Brg Pier 3	3358+48.99	-32.08	790.73	790.73
V	3358+58.99	-32.08	790.67	790.67
W	3358+68.99	-32.08	790.61	790.62
X	3358+78.99	-32.08	790.54	790.56
Y	3358+88.99	-32.08	790.46	790.48
Z	3358+98.99	-32.08	790.37	790.39
C L Brg E Abut	3359+07.89	-32.08	790.29	790.29
Bk of E Abut	3359+11.45	-32.08	790.26	790.26

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - II

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:

DATE: MAY 13, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	455
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+14.94	-27.08	790.10	790.10
C L Brg W. Abut	3356+18.50	-27.08	790.14	790.14
A	3356+28.50	-27.08	790.25	790.26
B	3356+38.50	-27.08	790.35	790.37
C	3356+48.50	-27.08	790.44	790.46
D	3356+58.50	-27.08	790.53	790.54
E	3356+68.50	-27.08	790.61	790.61
C L Brg Pier 1	3356+77.40	-27.08	790.67	790.67
F	3356+87.40	-27.08	790.73	790.75
G	3356+97.40	-27.08	790.79	790.84
H	3357+07.40	-27.08	790.84	790.91
I	3357+17.40	-27.08	790.89	790.97
J	3357+27.40	-27.08	790.92	791.00
K	3357+37.40	-27.08	790.95	791.01
L	3357+47.40	-27.08	790.98	791.01
M	3357+57.40	-27.08	790.99	791.00
C L Brg Pier 2	3357+64.72	-27.08	791.00	791.00
N	3357+74.72	-27.08	791.00	791.01
O	3357+84.72	-27.08	791.00	791.03
P	3357+94.72	-27.08	790.99	791.05
Q	3358+04.72	-27.08	790.97	791.05
R	3358+14.72	-27.08	790.94	791.02
S	3358+24.72	-27.08	790.91	790.97
T	3358+34.72	-27.08	790.87	790.91
U	3358+44.72	-27.08	790.83	790.84
C L Brg Pier 3	3358+52.03	-27.08	790.79	790.79
V	3358+62.03	-27.08	790.73	790.73
W	3358+72.03	-27.08	790.66	790.67
X	3358+82.03	-27.08	790.59	790.61
Y	3358+92.03	-27.08	790.51	790.53
Z	3359+02.03	-27.08	790.42	790.44
C L Brg E Abut	3359+10.93	-27.08	790.34	790.34
Bk of E Abut	3359+14.49	-27.08	790.30	790.30

PROFILE GRADE LINE (WB)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+15.00	-27	790.10	790.10
C L Brg W. Abut	3356+18.56	-27	790.14	790.14
A	3356+28.56	-27	790.25	790.27
B	3356+38.56	-27	790.35	790.37
C	3356+48.56	-27	790.44	790.46
D	3356+58.56	-27	790.53	790.54
E	3356+68.56	-27	790.61	790.61
C L Brg Pier 1	3356+77.45	-27	790.67	790.67
F	3356+87.45	-27	790.74	790.75
G	3356+97.45	-27	790.79	790.84
H	3357+07.45	-27	790.84	790.91
I	3357+17.45	-27	790.89	790.97
J	3357+27.45	-27	790.93	791.00
K	3357+37.45	-27	790.96	791.01
L	3357+47.45	-27	790.98	791.01
M	3357+57.45	-27	790.99	791.00
C L Brg Pier 2	3357+64.77	-27	791.00	791.00
N	3357+74.77	-27	791.00	791.01
O	3357+84.77	-27	791.00	791.04
P	3357+94.77	-27	790.99	791.05
Q	3358+04.77	-27	790.97	791.05
R	3358+14.77	-27	790.94	791.02
S	3358+24.77	-27	790.91	790.98
T	3358+34.77	-27	790.87	790.91
U	3358+44.77	-27	790.83	790.84
C L Brg Pier 3	3358+52.08	-27	790.79	790.79
V	3358+62.09	-27	790.73	790.73
W	3358+72.09	-27	790.66	790.68
X	3358+82.09	-27	790.59	790.61
Y	3358+92.09	-27	790.51	790.53
Z	3359+02.09	-27	790.42	790.44
C L Brg E Abut	3359+10.99	-27	790.34	790.34
Bk of E Abut	3359+14.55	-27	790.30	790.30

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+17.99	-22.08	790.21	790.21
C L Brg W. Abut	3356+21.55	-22.08	790.25	790.25
A	3356+31.55	-22.08	790.35	790.37
B	3356+41.55	-22.08	790.45	790.48
C	3356+51.55	-22.08	790.54	790.56
D	3356+61.55	-22.08	790.63	790.64
E	3356+71.55	-22.08	790.70	790.70
C L Brg Pier 1	3356+80.45	-22.08	790.76	790.76
F	3356+90.45	-22.08	790.83	790.85
G	3357+00.45	-22.08	790.88	790.93
H	3357+10.45	-22.08	790.93	791.00
I	3357+20.45	-22.08	790.97	791.05
J	3357+30.45	-22.08	791.01	791.08
K	3357+40.45	-22.08	791.04	791.09
L	3357+50.45	-22.08	791.06	791.09
M	3357+60.45	-22.08	791.07	791.08
C L Brg Pier 2	3357+67.77	-22.08	791.08	791.08
N	3357+77.77	-22.08	791.08	791.09
O	3357+87.77	-22.08	791.07	791.11
P	3357+97.77	-22.08	791.06	791.12
Q	3358+07.77	-22.08	791.04	791.11
R	3358+17.77	-22.08	791.01	791.09
S	3358+27.77	-22.08	790.97	791.04
T	3358+37.77	-22.08	790.93	790.97
U	3358+47.77	-22.08	790.88	790.90
C L Brg Pier 3	3358+55.08	-22.08	790.84	790.84
V	3358+65.08	-22.08	790.78	790.79
W	3358+75.08	-22.08	790.72	790.73
X	3358+85.08	-22.08	790.64	790.66
Y	3358+95.08	-22.08	790.56	790.58
Z	3359+05.08	-22.08	790.47	790.48
C L Brg E Abut	3359+13.98	-22.08	790.38	790.38
Bk of E Abut	3359+17.54	-22.08	790.35	790.35

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+21.03	-17.08	790.32	790.32
C L Brg W. Abut	3356+24.59	-17.08	790.36	790.36
A	3356+34.59	-17.08	790.46	790.48
B	3356+44.59	-17.08	790.56	790.58
C	3356+54.59	-17.08	790.64	790.66
D	3356+64.59	-17.08	790.73	790.74
E	3356+74.59	-17.08	790.80	790.80
C L Brg Pier 1	3356+83.49	-17.08	790.86	790.86
F	3356+93.49	-17.08	790.92	790.94
G	3357+03.49	-17.08	790.97	791.02
H	3357+13.49	-17.08	791.02	791.09
I	3357+23.49	-17.08	791.06	791.14
J	3357+33.49	-17.08	791.09	791.17
K	3357+43.49	-17.08	791.12	791.17
L	3357+53.49	-17.08	791.14	791.17
M	3357+63.49	-17.08	791.15	791.16
C L Brg Pier 2	3357+70.81	-17.08	791.15	791.15
N	3357+80.81	-17.08	791.15	791.16
O	3357+90.81	-17.08	791.14	791.18
P	3358+00.81	-17.08	791.13	791.19
Q	3358+10.81	-17.08	791.10	791.18
R	3358+20.81	-17.08	791.07	791.15
S	3358+30.81	-17.08	791.04	791.10
T	3358+40.81	-17.08	790.99	791.03
U	3358+50.81	-17.08	790.94	790.96
C L Brg Pier 3	3358+58.12	-17.08	790.90	790.90
V	3358+68.12	-17.08	790.84	790.84
W	3358+78.12	-17.08	790.77	790.78
X	3358+88.12	-17.08	790.69	790.71
Y	3358+98.12	-17.08	790.61	790.63
Z	3359+08.12	-17.08	790.52	790.53
C L Brg E Abut	3359+17.02	-17.08	790.43	790.43
Bk of E Abut	3359+20.58	-17.08	790.39	790.39

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - III

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	456
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+24.07	-12.08	790.43	790.43
C L Brg W. Abut	3356+27.63	-12.08	790.46	790.46
A	3356+37.63	-12.08	790.56	790.58
B	3356+47.63	-12.08	790.66	790.68
C	3356+57.63	-12.08	790.74	790.77
D	3356+67.63	-12.08	790.82	790.83
E	3356+77.63	-12.08	790.90	790.90
C L Brg Pier 1	3356+86.53	-12.08	790.95	790.95
F	3356+96.53	-12.08	791.01	791.03
G	3357+06.53	-12.08	791.06	791.11
H	3357+16.53	-12.08	791.11	791.18
I	3357+26.53	-12.08	791.15	791.22
J	3357+36.53	-12.08	791.18	791.25
K	3357+46.53	-12.08	791.20	791.25
L	3357+56.53	-12.08	791.22	791.24
M	3357+66.53	-12.08	791.22	791.23
C L Brg Pier 2	3357+73.85	-12.08	791.23	791.23
N	3357+83.85	-12.08	791.22	791.24
O	3357+93.85	-12.08	791.21	791.25
P	3358+03.85	-12.08	791.20	791.26
Q	3358+13.85	-12.08	791.17	791.25
R	3358+23.85	-12.08	791.14	791.22
S	3358+33.85	-12.08	791.10	791.16
T	3358+43.85	-12.08	791.05	791.09
U	3358+53.85	-12.08	791.00	791.01
C L Brg Pier 3	3358+61.16	-12.08	790.96	790.96
V	3358+71.16	-12.08	790.89	790.89
W	3358+81.16	-12.08	790.82	790.83
X	3358+91.16	-12.08	790.74	790.76
Y	3359+01.16	-12.08	790.65	790.68
Z	3359+11.16	-12.08	790.56	790.58
C L Brg E Abut	3359+20.06	-12.08	790.47	790.47
Bk of E Abut	3359+23.62	-12.08	790.43	790.43

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+27.12	-7.08	790.53	790.53
C L Brg W. Abut	3356+30.68	-7.08	790.57	790.57
A	3356+40.68	-7.08	790.67	790.68
B	3356+50.68	-7.08	790.76	790.78
C	3356+60.68	-7.08	790.84	790.87
D	3356+70.68	-7.08	790.92	790.93
E	3356+80.68	-7.08	790.99	790.99
C L Brg Pier 1	3356+89.58	-7.08	791.05	791.05
F	3356+99.58	-7.08	791.10	791.12
G	3357+09.58	-7.08	791.15	791.20
H	3357+19.58	-7.08	791.20	791.26
I	3357+29.58	-7.08	791.23	791.31
J	3357+39.58	-7.08	791.26	791.33
K	3357+49.58	-7.08	791.28	791.34
L	3357+59.58	-7.08	791.29	791.32
M	3357+69.58	-7.08	791.30	791.31
C L Brg Pier 2	3357+76.90	-7.08	791.30	791.30
N	3357+86.90	-7.08	791.30	791.31
O	3357+96.90	-7.08	791.28	791.32
P	3358+06.90	-7.08	791.26	791.32
Q	3358+16.90	-7.08	791.24	791.31
R	3358+26.90	-7.08	791.20	791.28
S	3358+36.90	-7.08	791.16	791.23
T	3358+46.90	-7.08	791.11	791.15
U	3358+56.90	-7.08	791.06	791.07
C L Brg Pier 3	3358+64.21	-7.08	791.01	791.01
V	3358+74.21	-7.08	790.95	790.95
W	3358+84.21	-7.08	790.87	790.88
X	3358+94.21	-7.08	790.79	790.81
Y	3359+04.21	-7.08	790.70	790.73
Z	3359+14.21	-7.08	790.61	790.62
C L Brg E Abut	3359+23.11	-7.08	790.51	790.51
Bk of E Abut	3359+26.67	-7.08	790.48	790.48

BEAM 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+30.16	-2.08	790.64	790.64
C L Brg W. Abut	3356+33.72	-2.08	790.68	790.68
A	3356+43.72	-2.08	790.77	790.79
B	3356+53.72	-2.08	790.86	790.88
C	3356+63.72	-2.08	790.94	790.96
D	3356+73.72	-2.08	791.02	791.03
E	3356+83.72	-2.08	791.09	791.09
C L Brg Pier 1	3356+92.62	-2.08	791.14	791.14
F	3357+02.62	-2.08	791.19	791.21
G	3357+12.62	-2.08	791.24	791.29
H	3357+22.62	-2.08	791.28	791.35
I	3357+32.62	-2.08	791.32	791.39
J	3357+42.62	-2.08	791.34	791.42
K	3357+52.62	-2.08	791.36	791.42
L	3357+62.62	-2.08	791.37	791.40
M	3357+72.62	-2.08	791.38	791.38
C L Brg Pier 2	3357+79.94	-2.08	791.38	791.38
N	3357+89.94	-2.08	791.37	791.38
O	3357+99.94	-2.08	791.35	791.39
P	3358+09.94	-2.08	791.33	791.39
Q	3358+19.94	-2.08	791.30	791.38
R	3358+29.94	-2.08	791.27	791.34
S	3358+39.94	-2.08	791.22	791.29
T	3358+49.94	-2.08	791.17	791.21
U	3358+59.94	-2.08	791.12	791.13
C L Brg Pier 3	3358+67.25	-2.08	791.07	791.07
V	3358+77.25	-2.08	791.00	791.00
W	3358+87.25	-2.08	790.92	790.94
X	3358+97.25	-2.08	790.84	790.86
Y	3359+07.25	-2.08	790.75	790.77
Z	3359+17.25	-2.08	790.65	790.66
C L Brg E Abut	3359+26.15	-2.08	790.56	790.56
Bk of E Abut	3359+29.71	-2.08	790.52	790.52

℄ IL RTE. 64

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+31.43	0	790.68	790.68
C L Brg W. Abut	3356+34.99	0	790.72	790.72
A	3356+44.99	0	790.82	790.83
B	3356+54.99	0	790.90	790.93
C	3356+64.99	0	790.98	791.01
D	3356+74.99	0	791.06	791.07
E	3356+84.99	0	791.13	791.13
C L Brg Pier 1	3356+93.89	0	791.18	791.18
F	3357+03.89	0	791.23	791.25
G	3357+13.89	0	791.28	791.32
H	3357+23.89	0	791.32	791.39
I	3357+33.89	0	791.35	791.43
J	3357+43.89	0	791.38	791.45
K	3357+53.89	0	791.39	791.45
L	3357+63.89	0	791.40	791.43
M	3357+73.89	0	791.41	791.42
C L Brg Pier 2	3357+81.21	0	791.41	791.41
N	3357+91.21	0	791.40	791.41
O	3358+01.21	0	791.38	791.42
P	3358+11.21	0	791.36	791.42
Q	3358+21.21	0	791.33	791.41
R	3358+31.21	0	791.29	791.37
S	3358+41.21	0	791.25	791.31
T	3358+51.21	0	791.20	791.24
U	3358+61.21	0	791.14	791.15
C L Brg Pier 3	3358+68.52	0	791.09	791.09
V	3358+78.52	0	791.02	791.02
W	3358+88.52	0	790.94	790.96
X	3358+98.52	0	790.86	790.88
Y	3359+08.52	0	790.77	790.79
Z	3359+18.52	0	790.67	790.68
C L Brg E Abut	3359+27.42	0	790.57	790.57
Bk of E Abut	3359+30.98	0	790.54	790.54

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - IV

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	457
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+32.70	2.08	790.67	790.67
C L Brg W. Abut	3356+36.26	2.08	790.70	790.70
A	3356+46.26	2.08	790.80	790.81
B	3356+56.26	2.08	790.88	790.91
C	3356+66.26	2.08	790.96	790.98
D	3356+76.26	2.08	791.04	791.05
E	3356+86.26	2.08	791.10	791.10
C L Brg Pier 1	3356+95.16	2.08	791.15	791.15
F	3357+05.16	2.08	791.21	791.23
G	3357+15.16	2.08	791.25	791.30
H	3357+25.16	2.08	791.29	791.36
I	3357+35.16	2.08	791.32	791.40
J	3357+45.16	2.08	791.35	791.42
K	3357+55.16	2.08	791.36	791.42
L	3357+65.16	2.08	791.37	791.40
M	3357+75.16	2.08	791.38	791.38
C L Brg Pier 2	3357+82.48	2.08	791.37	791.37
N	3357+92.48	2.08	791.36	791.38
O	3358+02.48	2.08	791.35	791.38
P	3358+12.48	2.08	791.32	791.39
Q	3358+22.48	2.08	791.29	791.37
R	3358+32.48	2.08	791.26	791.33
S	3358+42.48	2.08	791.21	791.28
T	3358+52.48	2.08	791.16	791.20
U	3358+62.48	2.08	791.10	791.11
C L Brg Pier 3	3358+69.79	2.08	791.05	791.05
V	3358+79.79	2.08	790.98	790.98
W	3358+89.79	2.08	790.90	790.91
X	3358+99.79	2.08	790.82	790.84
Y	3359+09.79	2.08	790.72	790.75
Z	3359+19.79	2.08	790.62	790.64
C L Brg E Abut	3359+28.69	2.08	790.53	790.53
Bk of E Abut	3359+32.25	2.08	790.49	790.49

BEAM 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+35.74	7.08	790.62	790.62
C L Brg W. Abut	3356+39.30	7.08	790.66	790.66
A	3356+49.30	7.08	790.75	790.76
B	3356+59.30	7.08	790.83	790.86
C	3356+69.30	7.08	790.91	790.93
D	3356+79.30	7.08	790.98	790.99
E	3356+89.30	7.08	791.05	791.05
C L Brg Pier 1	3356+98.20	7.08	791.10	791.10
F	3357+08.20	7.08	791.15	791.17
G	3357+18.20	7.08	791.19	791.24
H	3357+28.20	7.08	791.23	791.29
I	3357+38.20	7.08	791.26	791.33
J	3357+48.20	7.08	791.28	791.35
K	3357+58.20	7.08	791.29	791.35
L	3357+68.20	7.08	791.30	791.33
M	3357+78.20	7.08	791.30	791.31
C L Brg Pier 2	3357+85.52	7.08	791.30	791.30
N	3357+95.52	7.08	791.29	791.30
O	3358+05.52	7.08	791.27	791.30
P	3358+15.52	7.08	791.24	791.30
Q	3358+25.52	7.08	791.21	791.28
R	3358+35.52	7.08	791.17	791.25
S	3358+45.52	7.08	791.12	791.18
T	3358+55.52	7.08	791.07	791.11
U	3358+65.52	7.08	791.01	791.02
C L Brg Pier 3	3358+72.83	7.08	790.96	790.96
V	3358+82.83	7.08	790.88	790.88
W	3358+92.83	7.08	790.80	790.81
X	3359+02.83	7.08	790.71	790.74
Y	3359+12.83	7.08	790.62	790.64
Z	3359+22.83	7.08	790.52	790.53
C L Brg E Abut	3359+31.73	7.08	790.42	790.42
Bk of E Abut	3359+35.29	7.08	790.38	790.38

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+38.79	12.08	790.58	790.58
C L Brg W. Abut	3356+42.35	12.08	790.61	790.61
A	3356+52.35	12.08	790.70	790.72
B	3356+62.35	12.08	790.78	790.81
C	3356+72.35	12.08	790.86	790.88
D	3356+82.35	12.08	790.93	790.94
E	3356+92.35	12.08	790.99	790.99
C L Brg Pier 1	3357+01.25	12.08	791.04	791.04
F	3357+11.25	12.08	791.09	791.10
G	3357+21.25	12.08	791.13	791.17
H	3357+31.25	12.08	791.16	791.23
I	3357+41.25	12.08	791.19	791.27
J	3357+51.25	12.08	791.21	791.28
K	3357+61.25	12.08	791.22	791.28
L	3357+71.25	12.08	791.23	791.26
M	3357+81.25	12.08	791.23	791.23
C L Brg Pier 2	3357+88.57	12.08	791.22	791.22
N	3357+98.57	12.08	791.21	791.22
O	3358+08.57	12.08	791.18	791.22
P	3358+18.57	12.08	791.16	791.22
Q	3358+28.57	12.08	791.12	791.20
R	3358+38.57	12.08	791.08	791.16
S	3358+48.57	12.08	791.03	791.09
T	3358+58.57	12.08	790.97	791.01
U	3358+68.57	12.08	790.91	790.92
C L Brg Pier 3	3358+75.88	12.08	790.86	790.86
V	3358+85.88	12.08	790.78	790.79
W	3358+95.88	12.08	790.70	790.71
X	3359+05.88	12.08	790.61	790.63
Y	3359+15.88	12.08	790.51	790.54
Z	3359+25.88	12.08	790.41	790.42
C L Brg E Abut	3359+34.78	12.08	790.31	790.31
Bk of E Abut	3359+38.34	12.08	790.27	790.27

BEAM 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+41.83	17.08	790.53	790.53
C L Brg W. Abut	3356+45.39	17.08	790.56	790.56
A	3356+55.39	17.08	790.65	790.67
B	3356+65.39	17.08	790.73	790.75
C	3356+75.39	17.08	790.81	790.83
D	3356+85.39	17.08	790.87	790.88
E	3356+95.39	17.08	790.93	790.93
C L Brg Pier 1	3357+04.29	17.08	790.98	790.98
F	3357+14.29	17.08	791.02	791.04
G	3357+24.29	17.08	791.06	791.11
H	3357+34.29	17.08	791.10	791.16
I	3357+44.29	17.08	791.12	791.20
J	3357+54.29	17.08	791.14	791.21
K	3357+64.29	17.08	791.15	791.20
L	3357+74.29	17.08	791.15	791.18
M	3357+84.29	17.08	791.15	791.16
C L Brg Pier 2	3357+91.61	17.08	791.14	791.14
N	3358+01.61	17.08	791.13	791.14
O	3358+11.61	17.08	791.10	791.14
P	3358+21.61	17.08	791.07	791.13
Q	3358+31.61	17.08	791.03	791.11
R	3358+41.61	17.08	790.99	791.07
S	3358+51.61	17.08	790.94	791.00
T	3358+61.61	17.08	790.88	790.92
U	3358+71.61	17.08	790.82	790.83
C L Brg Pier 3	3358+78.92	17.08	790.76	790.76
V	3358+88.92	17.08	790.68	790.69
W	3358+98.92	17.08	790.60	790.61
X	3359+08.92	17.08	790.51	790.53
Y	3359+18.92	17.08	790.41	790.43
Z	3359+28.92	17.08	790.30	790.32
C L Brg E Abut	3359+37.82	17.08	790.20	790.20
Bk of E Abut	3359+41.38	17.08	790.16	790.16

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - V

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	458
STA. 3356-37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

BEAM 18

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+44.87	22.08	790.48	790.48
C L Brg W. Abut	3356+48.43	22.08	790.52	790.52
A	3356+58.43	22.08	790.60	790.62
B	3356+68.43	22.08	790.68	790.70
C	3356+78.43	22.08	790.75	790.77
D	3356+88.43	22.08	790.82	790.83
E	3356+98.43	22.08	790.87	790.87
C L Brg Pier 1	3357+07.33	22.08	790.92	790.92
F	3357+17.33	22.08	790.96	790.98
G	3357+27.33	22.08	791.00	791.04
H	3357+37.33	22.08	791.03	791.10
I	3357+47.33	22.08	791.05	791.13
J	3357+57.33	22.08	791.07	791.14
K	3357+67.33	22.08	791.08	791.13
L	3357+77.33	22.08	791.08	791.11
M	3357+87.33	22.08	791.07	791.08
C L Brg Pier 2	3357+94.65	22.08	791.06	791.06
N	3358+04.65	22.08	791.04	791.06
O	3358+14.65	22.08	791.02	791.05
P	3358+24.65	22.08	790.99	791.05
Q	3358+34.65	22.08	790.95	791.02
R	3358+44.65	22.08	790.90	790.98
S	3358+54.65	22.08	790.85	790.91
T	3358+64.65	22.08	790.79	790.82
U	3358+74.65	22.08	790.72	790.73
C L Brg Pier 3	3358+81.96	22.08	790.66	790.66
V	3358+91.96	22.08	790.58	790.59
W	3359+01.96	22.08	790.50	790.51
X	3359+11.96	22.08	790.40	790.43
Y	3359+21.96	22.08	790.30	790.33
Z	3359+31.96	22.08	790.19	790.21
C L Brg E Abut	3359+40.86	22.08	790.09	790.09
Bk of E Abut	3359+44.42	22.08	790.05	790.05

PROFILE GRADE LINE (EB)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+47.87	27	790.44	790.44
C L Brg W. Abut	3356+51.43	27	790.47	790.47
A	3356+61.43	27	790.55	790.57
B	3356+71.43	27	790.63	790.65
C	3356+81.43	27	790.70	790.72
D	3356+91.43	27	790.76	790.77
E	3357+01.43	27	790.81	790.82
C L Brg Pier 1	3357+10.33	27	790.86	790.86
F	3357+20.33	27	790.90	790.92
G	3357+30.33	27	790.93	790.98
H	3357+40.33	27	790.96	791.03
I	3357+50.33	27	790.98	791.06
J	3357+60.33	27	791.00	791.07
K	3357+70.33	27	791.00	791.06
L	3357+80.33	27	791.00	791.03
M	3357+90.33	27	790.99	791.00
C L Brg Pier 2	3357+97.64	27	790.98	790.98
N	3358+07.64	27	790.96	790.98
O	3358+17.64	27	790.94	790.97
P	3358+27.64	27	790.90	790.96
Q	3358+37.64	27	790.86	790.94
R	3358+47.64	27	790.81	790.89
S	3358+57.64	27	790.76	790.82
T	3358+67.64	27	790.69	790.73
U	3358+77.64	27	790.62	790.64
C L Brg Pier 3	3358+84.96	27	790.57	790.57
V	3358+94.96	27	790.49	790.49
W	3359+04.96	27	790.40	790.41
X	3359+14.96	27	790.30	790.32
Y	3359+24.96	27	790.20	790.22
Z	3359+34.96	27	790.09	790.10
C L Brg E Abut	3359+43.85	27	789.98	789.98
Bk of E Abut	3359+47.42	27	789.94	789.94

BEAM 19

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+47.92	27.08	790.44	790.44
C L Brg W. Abut	3356+51.48	27.08	790.47	790.47
A	3356+61.48	27.08	790.55	790.57
B	3356+71.48	27.08	790.63	790.65
C	3356+81.48	27.08	790.70	790.72
D	3356+91.48	27.08	790.76	790.77
E	3357+01.48	27.08	790.81	790.81
C L Brg Pier 1	3357+10.38	27.08	790.86	790.86
F	3357+20.38	27.08	790.90	790.92
G	3357+30.38	27.08	790.93	790.98
H	3357+40.38	27.08	790.96	791.03
I	3357+50.38	27.08	790.98	791.06
J	3357+60.38	27.08	790.99	791.07
K	3357+70.38	27.08	791.00	791.06
L	3357+80.38	27.08	791.00	791.03
M	3357+90.38	27.08	790.99	791.00
C L Brg Pier 2	3357+97.70	27.08	790.98	790.98
N	3358+07.70	27.08	790.96	790.97
O	3358+17.70	27.08	790.93	790.97
P	3358+27.70	27.08	790.90	790.96
Q	3358+37.70	27.08	790.86	790.94
R	3358+47.70	27.08	790.81	790.89
S	3358+57.70	27.08	790.75	790.82
T	3358+67.70	27.08	790.69	790.73
U	3358+77.70	27.08	790.62	790.63
C L Brg Pier 3	3358+85.01	27.08	790.57	790.57
V	3358+95.01	27.08	790.48	790.49
W	3359+05.01	27.08	790.39	790.41
X	3359+15.01	27.08	790.30	790.32
Y	3359+25.01	27.08	790.19	790.22
Z	3359+35.01	27.08	790.08	790.10
C L Brg E Abut	3359+43.91	27.08	789.98	789.98
Bk of E Abut	3359+47.47	27.08	789.94	789.94

BEAM 20

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+50.96	32.08	790.39	790.39
C L Brg W. Abut	3356+54.52	32.08	790.42	790.42
A	3356+64.52	32.08	790.50	790.52
B	3356+74.52	32.08	790.57	790.60
C	3356+84.52	32.08	790.64	790.66
D	3356+94.52	32.08	790.70	790.71
E	3357+04.52	32.08	790.75	790.75
C L Brg Pier 1	3357+13.42	32.08	790.80	790.80
F	3357+23.42	32.08	790.84	790.85
G	3357+33.42	32.08	790.87	790.91
H	3357+43.42	32.08	790.89	790.96
I	3357+53.42	32.08	790.91	790.99
J	3357+63.42	32.08	790.92	791.00
K	3357+73.42	32.08	790.93	790.98
L	3357+83.42	32.08	790.92	790.95
M	3357+93.42	32.08	790.91	790.92
C L Brg Pier 2	3358+00.74	32.08	790.90	790.90
N	3358+10.74	32.08	790.88	790.89
O	3358+20.74	32.08	790.85	790.89
P	3358+30.74	32.08	790.81	790.87
Q	3358+40.74	32.08	790.77	790.85
R	3358+50.74	32.08	790.72	790.80
S	3358+60.74	32.08	790.66	790.72
T	3358+70.74	32.08	790.60	790.63
U	3358+80.74	32.08	790.52	790.54
C L Brg Pier 3	3358+88.05	32.08	790.47	790.47
V	3358+98.05	32.08	790.38	790.38
W	3359+08.05	32.08	790.29	790.30
X	3359+18.05	32.08	790.19	790.21
Y	3359+28.05	32.08	790.09	790.11
Z	3359+38.05	32.08	789.97	789.99
C L Brg E Abut	3359+46.95	32.08	789.87	789.87
Bk of E Abut	3359+50.51	32.08	789.82	789.82

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - VI

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	459
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STAGE CONSTRUCTION LINE (EB)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+51.72	33.33	790.38	790.38
C L Brg W. Abut	3356+55.28	33.33	790.41	790.41
A	3356+65.28	33.33	790.49	790.50
B	3356+75.28	33.33	790.56	790.58
C	3356+85.28	33.33	790.63	790.65
D	3356+95.28	33.33	790.69	790.70
E	3357+05.28	33.33	790.74	790.74
C L Brg Pier 1	3357+14.18	33.33	790.78	790.78
F	3357+24.18	33.33	790.82	790.84
G	3357+34.18	33.33	790.85	790.90
H	3357+44.18	33.33	790.88	790.94
I	3357+54.18	33.33	790.89	790.97
J	3357+64.18	33.33	790.90	790.98
K	3357+74.18	33.33	790.91	790.96
L	3357+84.18	33.33	790.90	790.93
M	3357+94.18	33.33	790.89	790.90
C L Brg Pier 2	3358+01.50	33.33	790.88	790.88
N	3358+11.50	33.33	790.86	790.87
O	3358+21.50	33.33	790.83	790.86
P	3358+31.50	33.33	790.79	790.85
Q	3358+41.50	33.33	790.75	790.82
R	3358+51.50	33.33	790.70	790.77
S	3358+61.50	33.33	790.64	790.70
T	3358+71.50	33.33	790.57	790.61
U	3358+81.50	33.33	790.50	790.51
C L Brg Pier 3	3358+88.81	33.33	790.44	790.44
V	3358+98.81	33.33	790.36	790.36
W	3359+08.81	33.33	790.27	790.28
X	3359+18.81	33.33	790.17	790.19
Y	3359+28.81	33.33	790.06	790.08
Z	3359+38.81	33.33	789.95	789.96
C L Brg E Abut	3359+47.71	33.33	789.84	789.84
Bk of E Abut	3359+51.27	33.33	789.80	789.80

BEAM 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+54.01	37.08	790.34	790.34
C L Brg W. Abut	3356+57.57	37.08	790.37	790.37
A	3356+67.57	37.08	790.45	790.46
B	3356+77.57	37.08	790.52	790.54
C	3356+87.57	37.08	790.59	790.61
D	3356+97.57	37.08	790.64	790.65
E	3357+07.57	37.08	790.69	790.69
C L Brg Pier 1	3357+16.47	37.08	790.73	790.73
F	3357+26.47	37.08	790.77	790.79
G	3357+36.47	37.08	790.80	790.85
H	3357+46.47	37.08	790.82	790.89
I	3357+56.47	37.08	790.84	790.92
J	3357+66.47	37.08	790.85	790.92
K	3357+76.47	37.08	790.85	790.91
L	3357+86.47	37.08	790.85	790.88
M	3357+96.47	37.08	790.83	790.84
C L Brg Pier 2	3358+03.79	37.08	790.82	790.82
N	3358+13.79	37.08	790.80	790.81
O	3358+23.79	37.08	790.76	790.80
P	3358+33.79	37.08	790.73	790.79
Q	3358+43.79	37.08	790.68	790.76
R	3358+53.79	37.08	790.63	790.70
S	3358+63.79	37.08	790.57	790.63
T	3358+73.79	37.08	790.50	790.54
U	3358+83.79	37.08	790.43	790.44
C L Brg Pier 3	3358+91.10	37.08	790.37	790.37
V	3359+01.10	37.08	790.28	790.28
W	3359+11.10	37.08	790.19	790.20
X	3359+21.10	37.08	790.09	790.11
Y	3359+31.10	37.08	789.98	790.00
Z	3359+41.10	37.08	789.86	789.88
C L Brg E Abut	3359+50.00	37.08	789.76	789.76
Bk of E Abut	3359+53.56	37.08	789.71	789.71

BEAM 22

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+57.05	42.08	790.27	790.27
C L Brg W. Abut	3356+60.61	42.08	790.30	790.30
A	3356+70.61	42.08	790.38	790.40
B	3356+80.61	42.08	790.45	790.47
C	3356+90.61	42.08	790.51	790.53
D	3357+00.61	42.08	790.57	790.58
E	3357+10.61	42.08	790.62	790.62
C L Brg Pier 1	3357+19.51	42.08	790.66	790.66
F	3357+29.51	42.08	790.69	790.71
G	3357+39.51	42.08	790.72	790.76
H	3357+49.51	42.08	790.74	790.81
I	3357+59.51	42.08	790.75	790.83
J	3357+69.51	42.08	790.76	790.83
K	3357+79.51	42.08	790.76	790.82
L	3357+89.51	42.08	790.75	790.78
M	3357+99.51	42.08	790.74	790.75
C L Brg Pier 2	3358+06.83	42.08	790.72	790.72
N	3358+16.83	42.08	790.70	790.71
O	3358+26.83	42.08	790.66	790.70
P	3358+36.83	42.08	790.62	790.68
Q	3358+46.83	42.08	790.57	790.65
R	3358+56.83	42.08	790.52	790.60
S	3358+66.83	42.08	790.46	790.52
T	3358+76.83	42.08	790.39	790.43
U	3358+86.83	42.08	790.31	790.32
C L Brg Pier 3	3358+94.14	42.08	790.25	790.25
V	3359+04.14	42.08	790.16	790.16
W	3359+14.14	42.08	790.07	790.08
X	3359+24.14	42.08	789.96	789.99
Y	3359+34.14	42.08	789.85	789.88
Z	3359+44.14	42.08	789.74	789.75
C L Brg E Abut	3359+53.04	42.08	789.63	789.63
Bk of E Abut	3359+56.60	42.08	789.58	789.58

BEAM 23

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+60.09	47.08	790.20	790.20
C L Brg W. Abut	3356+63.65	47.08	790.23	790.23
A	3356+73.65	47.08	790.30	790.32
B	3356+83.65	47.08	790.37	790.39
C	3356+93.65	47.08	790.43	790.45
D	3357+03.65	47.08	790.48	790.50
E	3357+13.65	47.08	790.53	790.53
C L Brg Pier 1	3357+22.55	47.08	790.57	790.57
F	3357+32.55	47.08	790.60	790.62
G	3357+42.55	47.08	790.63	790.67
H	3357+52.55	47.08	790.64	790.71
I	3357+62.55	47.08	790.66	790.74
J	3357+72.55	47.08	790.66	790.74
K	3357+82.55	47.08	790.66	790.71
L	3357+92.55	47.08	790.65	790.68
M	3358+02.55	47.08	790.63	790.64
C L Brg Pier 2	3358+09.87	47.08	790.62	790.62
N	3358+19.87	47.08	790.59	790.60
O	3358+29.87	47.08	790.55	790.59
P	3358+39.87	47.08	790.51	790.57
Q	3358+49.87	47.08	790.46	790.53
R	3358+59.87	47.08	790.40	790.48
S	3358+69.87	47.08	790.34	790.40
T	3358+79.87	47.08	790.27	790.30
U	3358+89.87	47.08	790.19	790.20
C L Brg Pier 3	3358+97.18	47.08	790.12	790.12
V	3359+07.18	47.08	790.03	790.04
W	3359+17.18	47.08	789.94	789.95
X	3359+27.18	47.08	789.83	789.85
Y	3359+37.18	47.08	789.72	789.74
Z	3359+47.18	47.08	789.60	789.61
C L Brg E Abut	3359+56.08	47.08	789.49	789.49
Bk of E Abut	3359+59.64	47.08	789.44	789.44

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - VII

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	460
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 24

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+63.14	52.08	790.12	790.12
C L Brg W. Abut	3356+66.70	52.08	790.15	790.15
A	3356+76.70	52.08	790.22	790.24
B	3356+86.70	52.08	790.29	790.31
C	3356+96.70	52.08	790.35	790.37
D	3357+06.70	52.08	790.40	790.41
E	3357+16.70	52.08	790.44	790.44
C L Brg Pier 1	3357+25.60	52.08	790.48	790.48
F	3357+35.60	52.08	790.51	790.53
G	3357+45.60	52.08	790.53	790.58
H	3357+55.60	52.08	790.55	790.62
I	3357+65.60	52.08	790.56	790.64
J	3357+75.60	52.08	790.56	790.64
K	3357+85.60	52.08	790.56	790.61
L	3357+95.60	52.08	790.55	790.57
M	3358+05.60	52.08	790.53	790.53
C L Brg Pier 2	3358+12.92	52.08	790.51	790.51
N	3358+22.92	52.08	790.48	790.49
O	3358+32.92	52.08	790.44	790.47
P	3358+42.92	52.08	790.39	790.45
Q	3358+52.92	52.08	790.34	790.42
R	3358+62.92	52.08	790.28	790.36
S	3358+72.92	52.08	790.22	790.28
T	3358+82.92	52.08	790.14	790.18
U	3358+92.92	52.08	790.06	790.07
C L Brg Pier 3	3359+00.23	52.08	790.00	790.00
V	3359+10.23	52.08	789.90	789.91
W	3359+20.23	52.08	789.80	789.82
X	3359+30.23	52.08	789.70	789.72
Y	3359+40.23	52.08	789.58	789.61
Z	3359+50.23	52.08	789.46	789.48
C L Brg E Abut	3359+59.13	52.08	789.35	789.35
Bk of E Abut	3359+62.69	52.08	789.30	789.30

BEAM 25

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+66.18	57.08	790.05	790.05
C L Brg W. Abut	3356+69.74	57.08	790.07	790.07
A	3356+79.74	57.08	790.14	790.16
B	3356+89.74	57.08	790.21	790.23
C	3356+99.74	57.08	790.26	790.29
D	3357+09.74	57.08	790.31	790.32
E	3357+19.74	57.08	790.36	790.36
C L Brg Pier 1	3357+28.64	57.08	790.39	790.39
F	3357+38.64	57.08	790.42	790.44
G	3357+48.64	57.08	790.44	790.48
H	3357+58.64	57.08	790.45	790.52
I	3357+68.64	57.08	790.46	790.54
J	3357+78.64	57.08	790.46	790.53
K	3357+88.64	57.08	790.45	790.51
L	3357+98.64	57.08	790.44	790.47
M	3358+08.64	57.08	790.42	790.43
C L Brg Pier 2	3358+15.96	57.08	790.40	790.40
N	3358+25.96	57.08	790.37	790.38
O	3358+35.96	57.08	790.33	790.36
P	3358+45.96	57.08	790.28	790.34
Q	3358+55.96	57.08	790.22	790.30
R	3358+65.96	57.08	790.16	790.24
S	3358+75.96	57.08	790.09	790.16
T	3358+85.96	57.08	790.02	790.06
U	3358+95.96	57.08	789.94	789.95
C L Brg Pier 3	3359+03.27	57.08	789.87	789.87
V	3359+13.27	57.08	789.78	789.78
W	3359+23.27	57.08	789.67	789.68
X	3359+33.27	57.08	789.56	789.59
Y	3359+43.27	57.08	789.45	789.47
Z	3359+53.27	57.08	789.32	789.34
C L Brg E Abut	3359+62.17	57.08	789.21	789.21
Bk of E Abut	3359+65.73	57.08	789.16	789.16

BEAM 26

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection
Bk of W Abut	3356+69.23	62.08	789.97	789.97
C L Brg W. Abut	3356+72.79	62.08	790.00	790.00
A	3356+82.79	62.08	790.06	790.08
B	3356+92.79	62.08	790.13	790.15
C	3357+02.79	62.08	790.18	790.20
D	3357+12.79	62.08	790.23	790.24
E	3357+22.79	62.08	790.27	790.27
C L Brg Pier 1	3357+31.69	62.08	790.30	790.30
F	3357+41.69	62.08	790.32	790.34
G	3357+51.69	62.08	790.34	790.39
H	3357+61.69	62.08	790.36	790.42
I	3357+71.69	62.08	790.36	790.44
J	3357+81.69	62.08	790.36	790.43
K	3357+91.69	62.08	790.35	790.41
L	3358+01.69	62.08	790.33	790.36
M	3358+11.69	62.08	790.31	790.32
C L Brg Pier 2	3358+19.01	62.08	790.29	790.29
N	3358+29.01	62.08	790.25	790.27
O	3358+39.01	62.08	790.21	790.25
P	3358+49.01	62.08	790.16	790.22
Q	3358+59.01	62.08	790.11	790.18
R	3358+69.01	62.08	790.04	790.12
S	3358+79.01	62.08	789.97	790.04
T	3358+89.01	62.08	789.89	789.93
U	3358+99.01	62.08	789.81	789.82
C L Brg Pier 3	3359+06.32	62.08	789.74	789.74
V	3359+16.32	62.08	789.64	789.65
W	3359+26.32	62.08	789.54	789.55
X	3359+36.32	62.08	789.43	789.45
Y	3359+46.32	62.08	789.31	789.33
Z	3359+56.32	62.08	789.18	789.20
C L Brg E Abut	3359+65.22	62.08	789.07	789.07
Bk of E Abut	3359+68.78	62.08	789.02	789.02

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - VIII

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	461
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND WEST APPROACH

	Location	Station	Offset	Theoretical Grade Elevations
North Edge of Shoulder	W. End W. Appr. Pav't	3355+63.67	-63.00	788.77
	A	3355+73.67	-63.00	788.91
	B	3355+83.67	-63.00	789.05
	E. End W. Appr. Pav't	3355+93.67	-63.00	789.18
North Edge of Pavement	W. End W. Appr. Pav't	3355+70.98	-51.00	789.12
	A	3355+80.98	-51.00	789.26
	B	3355+90.98	-51.00	789.39
	E. End W. Appr. Pav't	3356+00.98	-51.00	789.52
Slope Change (Transition from 1.5% to 2.0%)	W. End W. Appr. Pav't	3355+78.28	-39.00	789.46
	A	3355+88.28	-39.00	789.59
	B	3355+98.28	-39.00	789.72
	E. End W. Appr. Pav't	3356+08.28	-39.00	789.84
Stage Construction Line	W. End W. Appr. Pav't	3355+81.73	-33.33	789.60
	A	3355+91.73	-33.33	789.72
	B	3356+01.73	-33.33	789.85
	E. End W. Appr. Pav't	3356+11.73	-33.33	789.97
Profile Grade Line	W. End W. Appr. Pav't	3355+85.58	-27.00	789.74
	A	3355+95.58	-27.00	789.87
	B	3356+05.58	-27.00	789.99
	E. End W. Appr. Pav't	3356+15.58	-27.00	790.11
South Edge of Pavement	W. End W. Appr. Pav't	3355+92.89	-15.00	790.01
	A	3356+02.89	-15.00	790.14
	B	3356+12.89	-15.00	790.26
	E. End W. Appr. Pav't	3356+22.89	-15.00	790.37
South Edge of Shoulder	W. End W. Appr. Pav't	3355+94.11	-13.00	789.91
	A	3356+04.11	-13.00	790.03
	B	3356+14.11	-13.00	790.15
	E. End W. Appr. Pav't	3356+24.11	-13.00	790.26

WESTBOUND EAST APPROACH

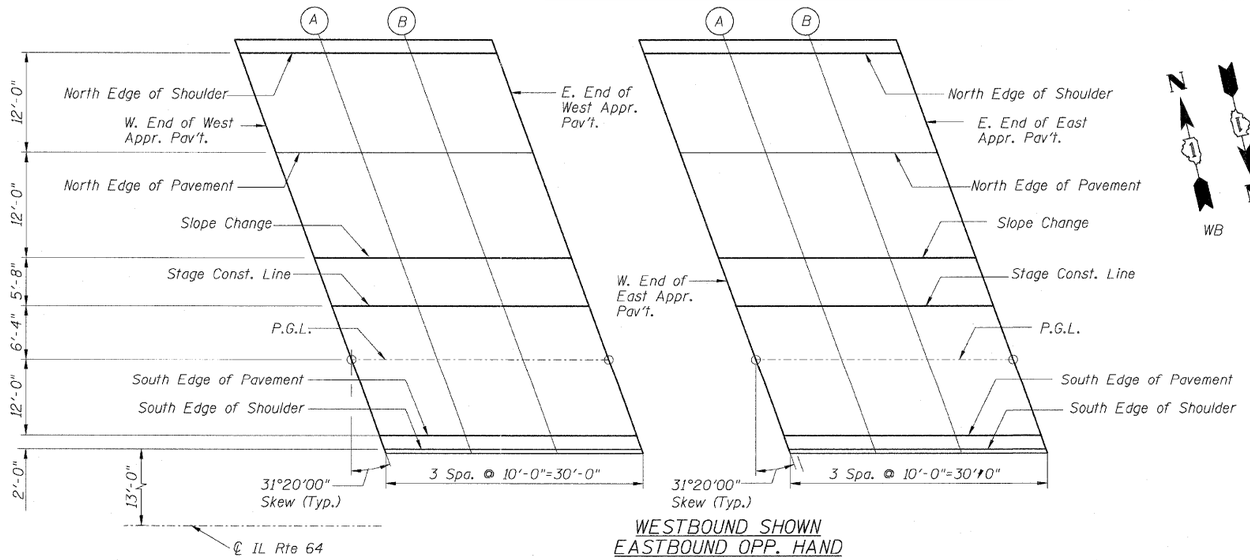
	Location	Station	Offset	Theoretical Grade Elevations
North Edge of Shoulder	W. End E. Appr. Pav't	3358+92.04	-63.00	789.85
	A	3359+02.04	-63.00	789.76
	B	3359+12.04	-63.00	789.67
	E. End E. Appr. Pav't	3359+22.04	-63.00	789.56
North Edge of Pavement	W. End E. Appr. Pav't	3358+99.35	-51.00	790.02
	A	3359+09.35	-51.00	789.93
	B	3359+19.35	-51.00	789.83
	E. End E. Appr. Pav't	3359+29.35	-51.00	789.73
Slope Change (Transition from 1.5% to 2.0%)	W. End E. Appr. Pav't	3359+06.66	-39.00	790.20
	A	3359+16.66	-39.00	790.10
	B	3359+26.66	-39.00	790.00
	E. End E. Appr. Pav't	3359+36.66	-39.00	789.88
Stage Construction Line	W. End E. Appr. Pav't	3359+10.11	-33.33	790.25
	A	3359+20.11	-33.33	790.15
	B	3359+30.11	-33.33	790.04
	E. End E. Appr. Pav't	3359+40.11	-33.33	789.93
Profile Grade Line	W. End E. Appr. Pav't	3359+13.96	-27.00	790.31
	A	3359+23.96	-27.00	790.20
	B	3359+33.96	-27.00	790.09
	E. End E. Appr. Pav't	3359+43.96	-27.00	789.98
South Edge of Pavement	W. End E. Appr. Pav't	3359+21.27	-15.00	790.41
	A	3359+31.27	-15.00	790.30
	B	3359+41.27	-15.00	790.64
	E. End E. Appr. Pav't	3359+51.27	-15.00	790.07
South Edge of Shoulder	W. End E. Appr. Pav't	3359+22.49	-13.00	790.28
	A	3359+32.49	-13.00	790.17
	B	3359+42.49	-13.00	788.95
	E. End E. Appr. Pav't	3359+52.49	-13.00	789.93

EASTBOUND WEST APPROACH

	Location	Station	Offset	Theoretical Grade Elevations
North Edge of Shoulder	W. End W. Appr. Pav't	3356+09.93	13.00	790.10
	A	3356+19.93	13.00	790.22
	B	3356+29.93	13.00	790.32
	E. End W. Appr. Pav't	3356+39.93	13.00	790.42
North Edge of Pavement	W. End W. Appr. Pav't	3356+11.15	15.00	790.24
	A	3356+21.15	15.00	790.35
	B	3356+31.15	15.00	790.45
	E. End W. Appr. Pav't	3356+41.15	15.00	790.55
Profile Grade Line	W. End W. Appr. Pav't	3356+18.45	27.00	790.14
	A	3356+28.45	27.00	790.25
	B	3356+38.45	27.00	790.35
	E. End W. Appr. Pav't	3356+48.45	27.00	790.44
Stage Construction Line	W. End W. Appr. Pav't	3356+22.31	33.33	790.09
	A	3356+32.31	33.33	790.19
	B	3356+42.31	33.33	790.29
	E. End W. Appr. Pav't	3356+52.31	33.33	790.38
Slope Change (Transition from 1.5% to 2.0%)	W. End W. Appr. Pav't	3356+25.76	39.00	790.04
	A	3356+35.76	39.00	790.14
	B	3356+45.76	39.00	790.24
	E. End W. Appr. Pav't	3356+55.76	39.00	790.32
South Edge of Pavement	W. End W. Appr. Pav't	3356+33.06	51.00	789.87
	A	3356+43.06	51.00	789.97
	B	3356+53.06	51.00	790.06
	E. End W. Appr. Pav't	3356+63.06	51.00	790.14
South Edge of Shoulder	W. End W. Appr. Pav't	3356+40.37	63.00	789.71
	A	3356+50.37	63.00	789.80
	B	3356+60.37	63.00	789.88
	E. End W. Appr. Pav't	3356+70.37	63.00	789.96

EASTBOUND EAST APPROACH

	Location	Station	Offset	Theoretical Grade Elevations
North Edge of Shoulder	W. End E. Appr. Pav't	3359+38.32	13.00	790.10
	A	3359+48.32	13.00	789.98
	B	3359+58.32	13.00	789.86
	E. End E. Appr. Pav't	3359+68.32	13.00	789.72
North Edge of Pavement	W. End E. Appr. Pav't	3359+39.53	15.00	790.21
	A	3359+49.53	15.00	790.09
	B	3359+59.53	15.00	789.96
	E. End E. Appr. Pav't	3359+69.53	15.00	789.83
Profile Grade Line	W. End E. Appr. Pav't	3359+46.84	27.00	789.94
	A	3359+56.84	27.00	789.82
	B	3359+66.84	27.00	789.68
	E. End E. Appr. Pav't	3359+76.84	27.00	789.54
Stage Construction Line	W. End E. Appr. Pav't	3359+50.69	33.33	789.80
	A	3359+60.69	33.33	789.67
	B	3359+70.69	33.33	789.54
	E. End E. Appr. Pav't	3359+80.69	33.33	789.39
Slope Change (Transition from 1.5% to 2.0%)	W. End E. Appr. Pav't	3359+54.14	39.00	789.67
	A	3359+64.14	39.00	789.54
	B	3359+74.14	39.00	789.40
	E. End E. Appr. Pav't	3359+84.14	39.00	789.26
South Edge of Pavement	W. End E. Appr. Pav't	3359+61.45	51.00	789.34
	A	3359+71.45	51.00	789.20
	B	3359+81.45	51.00	789.06
	E. End E. Appr. Pav't	3359+91.45	51.00	788.91
South Edge of Shoulder	W. End E. Appr. Pav't	3359+68.75	63.00	789.00
	A	3359+78.75	63.00	788.86
	B	3359+88.75	63.00	788.71
	E. End E. Appr. Pav't	3359+98.75	63.00	788.55



WESTBOUND SHOWN
EASTBOUND OPP. HAND

NOTES:

1. Offsets taken from the IL Route 64 Center Line
2. For Approach Slab details, see sheets B26 to B28

AECOM

REVISIONS NAME	DATE

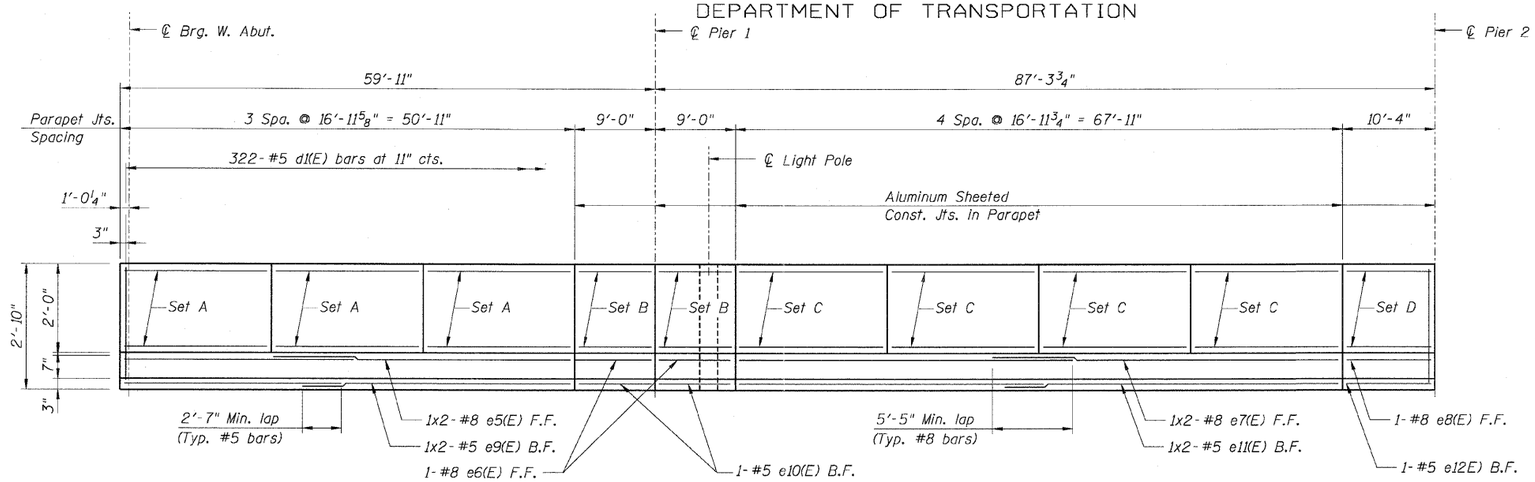
F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TOP OF SLAB ELEVATION TABLES - IX
(APPROACH)
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: RDP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	462
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



Set A (3 locations)
7-#4 e1(E) bars around perimeter
(See section thru parapet)

Set B (2 locations)
7-#4 e2(E) bars around perimeter
(See section thru parapet)

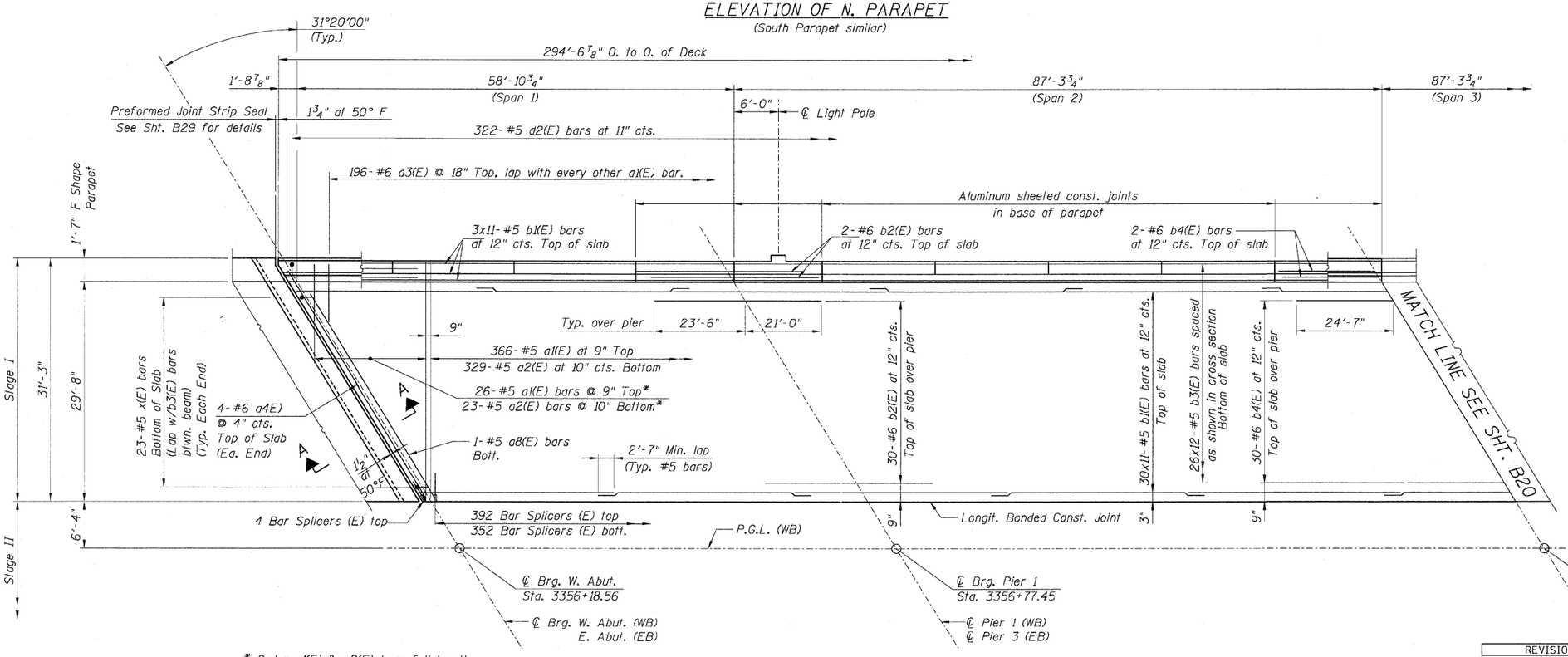
Set C (4 locations)
7-#4 e3(E) bars around perimeter
(See section thru parapet)

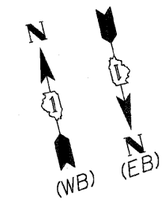
Set D (1 locations)
7-#4 e4(E) bars around perimeter
(See section thru parapet)

F.F. = Front Face

B.F. = Back Face

ELEVATION OF N. PARAPET
(South Parapet similar)





NOTES:

1. For reinforcement in Spans 3 and 4 WB and Spans 1 and 2 EB see Sheet B20.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. For Typical Sections, Details and Bill of Material, see Sheet B21.
4. For Section A-A see Sheet B25.
5. For Light Pole Foundation Details see Sheet B25.
6. Dimensions are based on Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustment to satisfy the details on Base Sheet EJ-SSJ. (Sheet B29)
7. Provide AXDX Expansion Fittings for Conduit at bridge ends. See Sheets E-05 and E-11 for additional details.

* Order a1(E) & a2(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

SPANS 1 & 2
W.B. Stage I - Shown
E.B. Stage I - Opp. Hand and Rotated

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
DECK PLAN
SPANS 1 & 2 - STAGE I
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

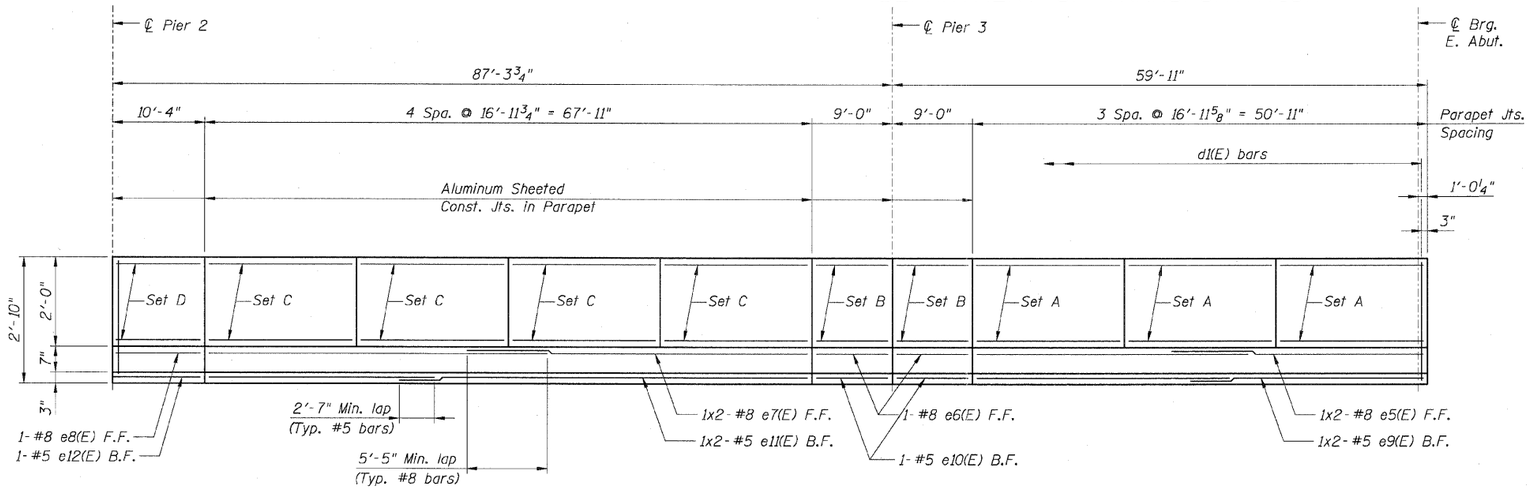
SCALE: None DRAWN BY: CHD

DATE: MAY 13, 2011 CHECKED BY: RDP

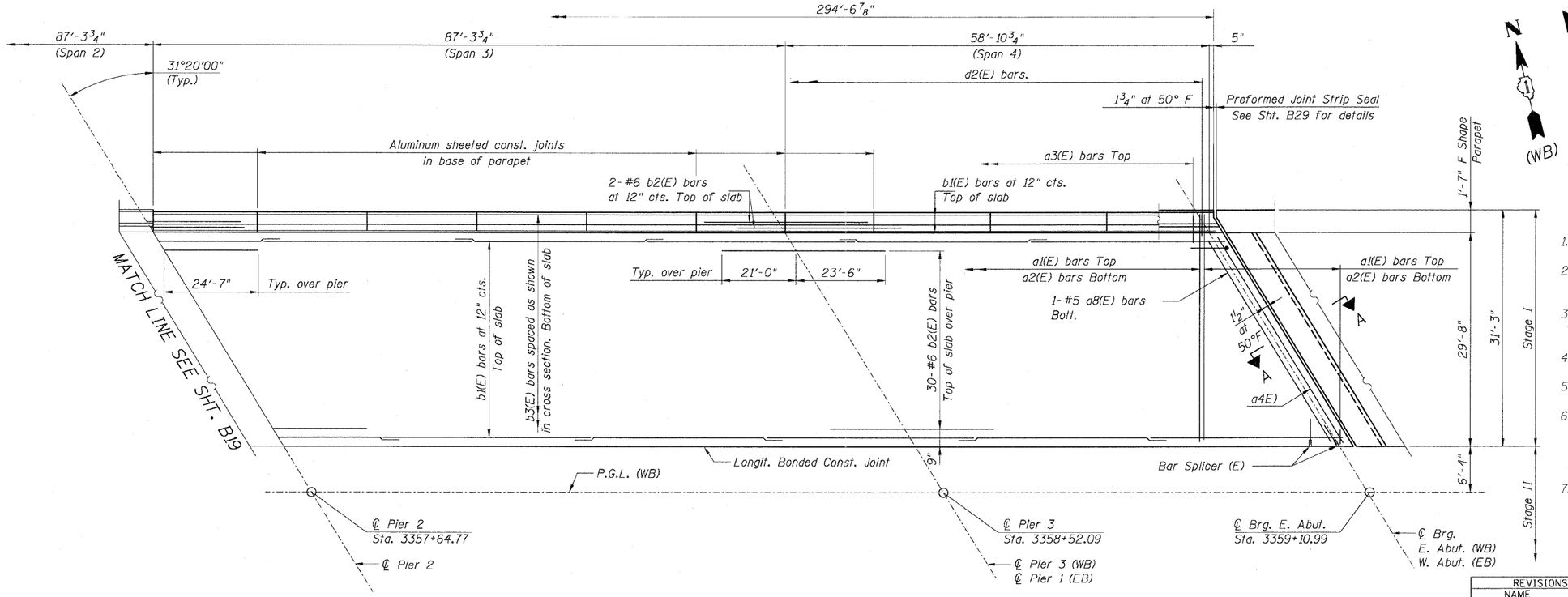
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	463
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



ELEVATION OF N. PARAPET
(South Parapet similar)



Set A (3 locations)
7-#4 e1(E) bars around perimeter
(See section thru parapet)

Set B (2 locations)
7-#4 e2(E) bars around perimeter
(See section thru parapet)

Set C (4 locations)
7-#4 e3(E) bars around perimeter
(See section thru parapet)

Set D (1 locations)
7-#4 e4(E) bars around perimeter
(See section thru parapet)

F.F. = Front Face
B.F. = Back Face

NOTES:

1. For reinforcement in Spans 1 and 2 see Sheet B19.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. For Typical Sections, Details and Bill of Material, see Sheet B21.
4. For Section A-A see Sheet B25.
5. For Light Pole Foundation Details see Sheet B25.
6. Dimensions are based on Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint deck dimensions may require adjustment to satisfy the details on Base Sheet EJ-SSJ.
7. Provide AXDX Expansion Fittings for Conduit at bridge ends. See Sheets E-05 and E-11 for additional details.

SPANS 3 & 4
W.B. Stage I - Shown
E.B. Stage I - Opp. Hand and Rotated

AECOM

REVISIONS NAME	DATE

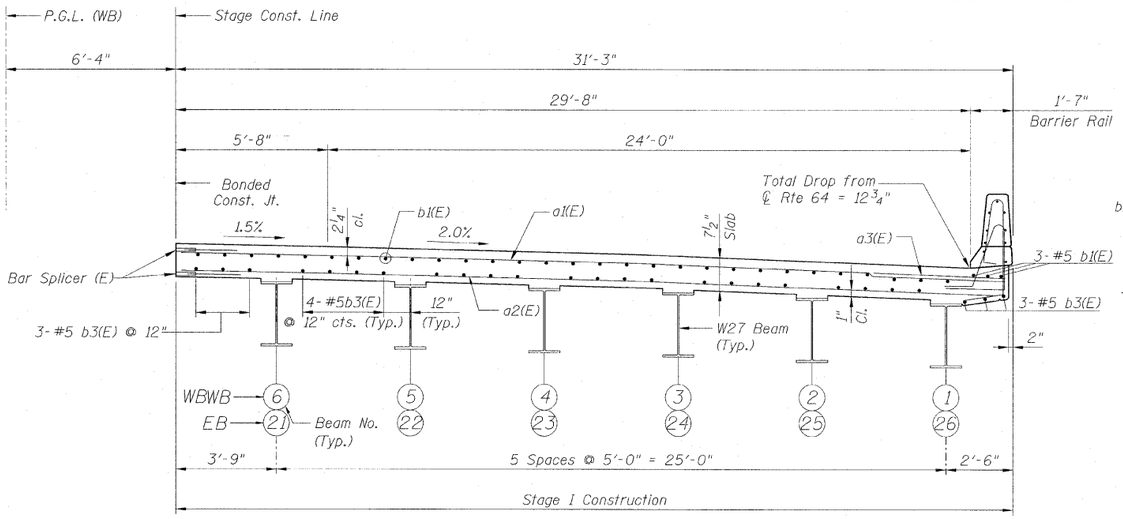
F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
DECK PLAN
SPANS 3 & 4 - STAGE I
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

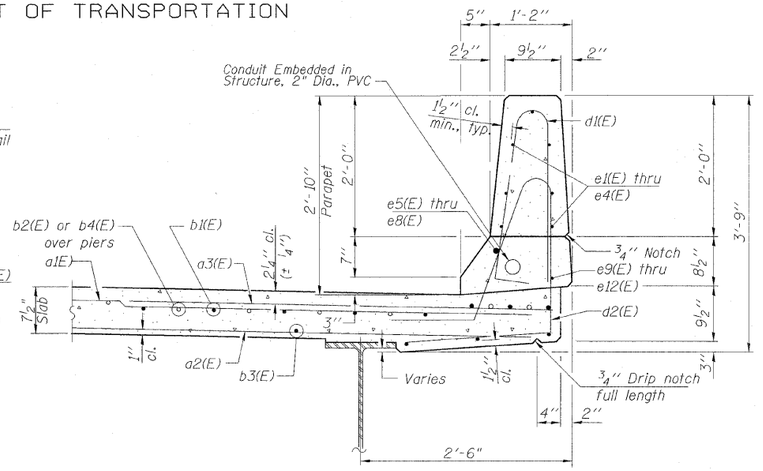
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	464
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

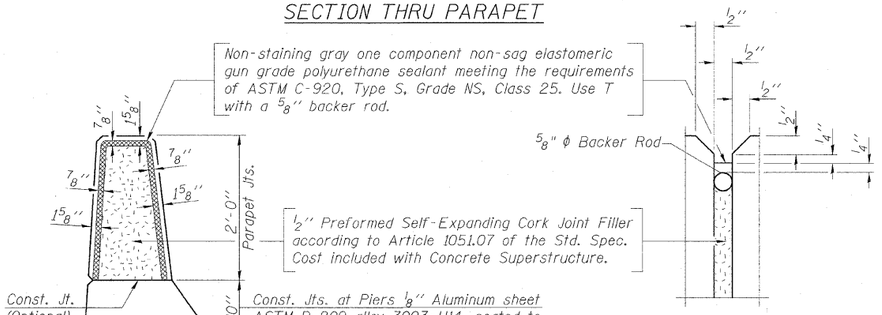
62410



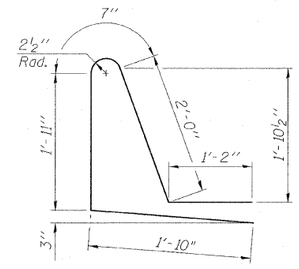
TYPICAL DECK CROSS SECTION - MIDSPAN
W.B. STAGE I - SHOWN
E.B. STAGE I - OPP. HAND
(Looking West)

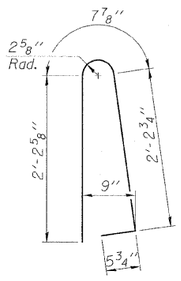


SECTION THRU PARAPET



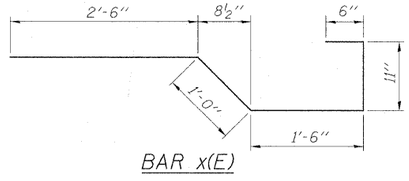
PARAPET JOINT DETAILS





BAR d1(E)

BAR d2(E)



BAR x(E)

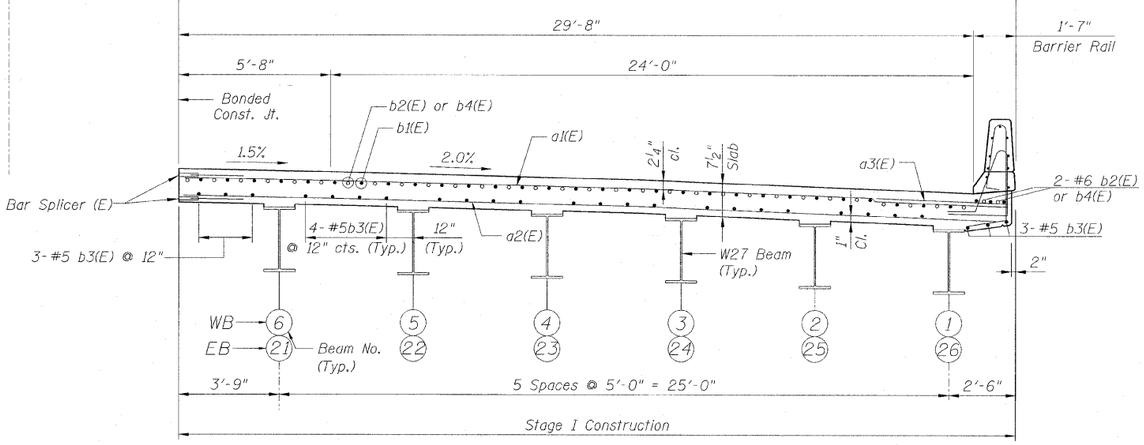
Bar	No.	Size	Length	Shape
a1(E)	784	#5	30'-9"	
a2(E)	704	#5	30'-1"	
a3(E)	392	#6	6'-6"	
a4(E)	16	#6	36'-3"	
a8(E)	4	#5	36'-5"	
a9(E)	72	#5	5"-11"	
b1(E)	726	#5	29'-1"	
b2(E)	128	#6	44'-6"	
b3(E)	624	#5	26'-8"	
b4(E)	64	#6	49'-2"	
d1(E)	644	#5	5'-7"	
d2(E)	644	#5	7'-6"	
d3(E)	10	#6	8'-11"	
d4(E)	6	#6	4'-5"	
e1(E)	84	#4	16'-8"	
e2(E)	56	#4	8'-8"	
e3(E)	112	#4	16'-9"	
e4(E)	28	#4	10'-0"	
e5(E)	8	#8	28'-2"	
e6(E)	8	#8	8'-8"	
e7(E)	8	#8	36'-8"	
e8(E)	4	#8	10'-0"	
e9(E)	8	#5	26'-9"	
e10(E)	8	#5	8'-8"	
e11(E)	8	#5	35'-3"	
e12(E)	4	#5	10'-0"	
x(E)	92	#5	6'-5"	

Item	Unit	Quantity
Concrete Superstructure	Cu. Yd.	529.2
Reinforcement Bars, Epoxy Coated	Lbs.	119,770
Bridge Deck Grooving	Sq. Yd.	1,859
Protective Coat	Sq. Yd.	2,226
Conduit Embedded in Structure, 2" Dia., PVC	Foot	612

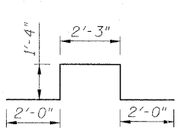
NOTES:

1. See Light Pole Foundation Details on Sheet B25 for Bars d3(E) & d4(E).
2. See Section A-A on Sheet B25 for bar a9(E).

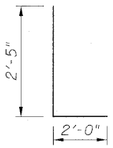
Sheet B21 of 56



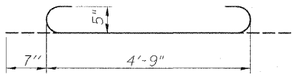
TYPICAL DECK CROSS SECTION - PIER
W.B. STAGE I - SHOWN
E.B. STAGE I - OPP. HAND
(Looking West)



BAR d3(E)



BAR d4(E)



a9(E) BAR

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TYPICAL CROSS SECTION AND DETAILS
STAGE I
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

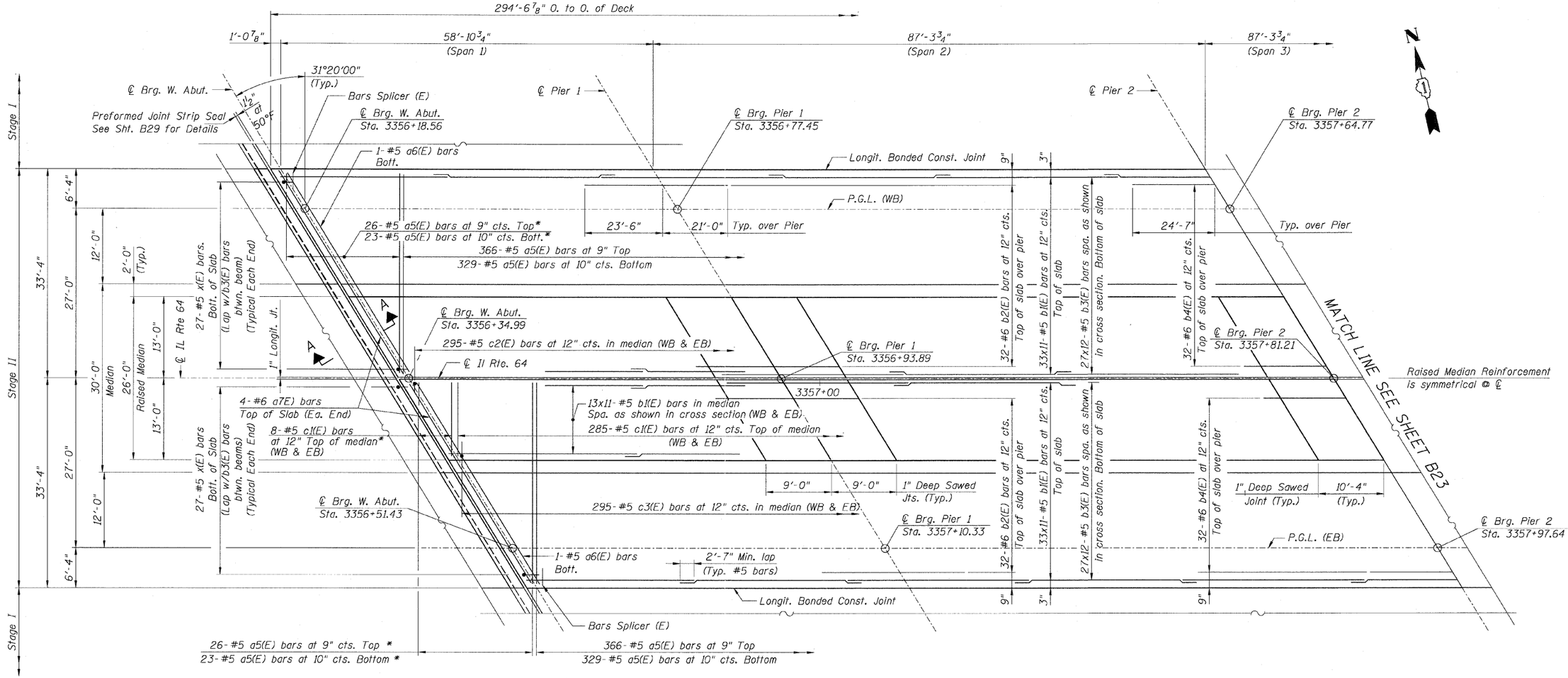
SCALE: None DRAWN BY: MRK/CHD

DATE: NOVEMBER 1, 2011 CHECKED BY: RDP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	465
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



* Order a5(E) and c1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

SPANS 1 & 2
Stage II - EB & WB

NOTES:

1. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
2. For Typical Sections, Details and Bill of Material, see Sheet B24.
3. For Section A-A see Sheet B25.
4. Dimensions are based on Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint deck dimensions may require adjustment to satisfy the details on Base Sheet EJ-SSJ.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
DECK PLAN
SPANS 1 & 2 - STAGE II
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

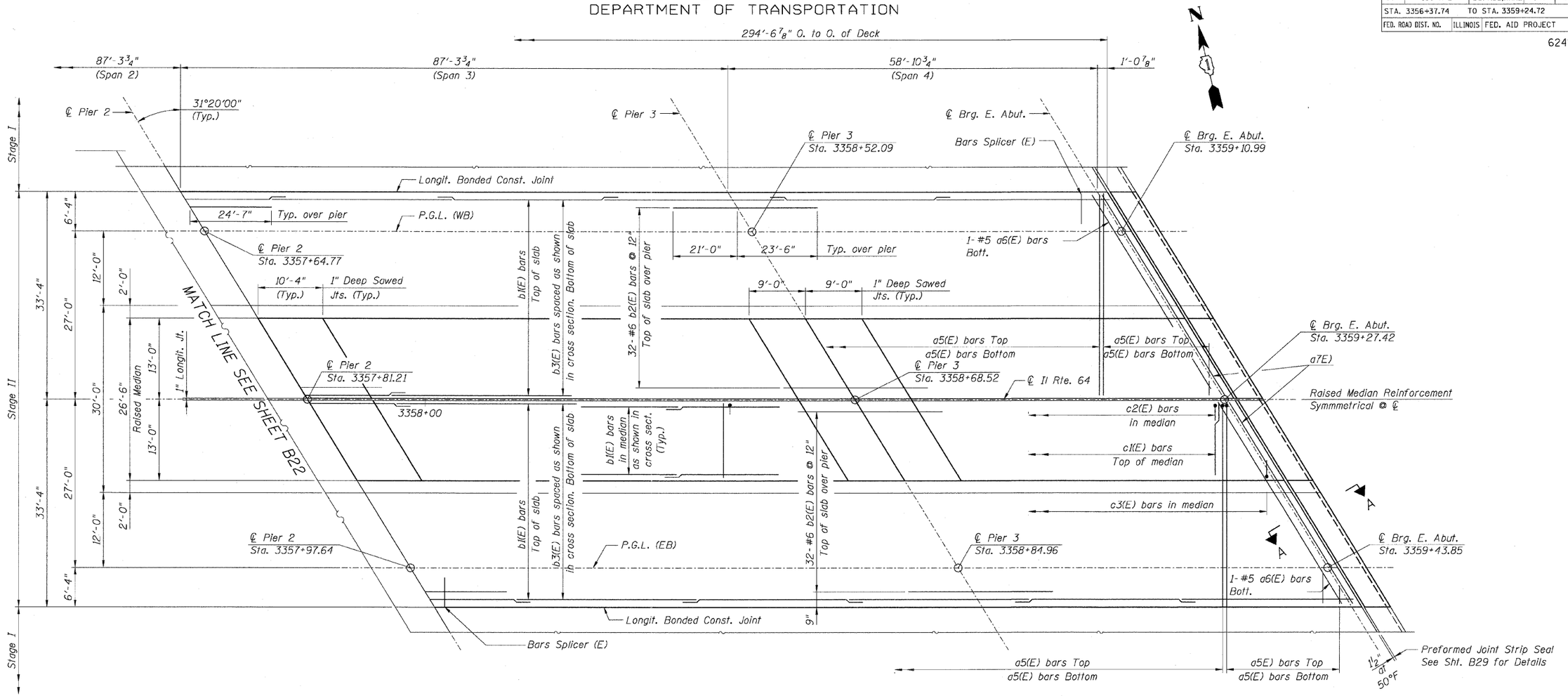
SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	466
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SPANS 3 & 4
Stage II - EB & WB

NOTES:

1. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
2. For Typical Sections, Details and Bill of Material, see Sheet B24.
3. For Section A-A see Sheet B25.
4. Dimensions are based on Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint deck dimensions may require adjustment to satisfy the details on Base Sheet EJ-SSJ.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
DECK PLAN
SPANS 3 & 4 - STAGE II
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

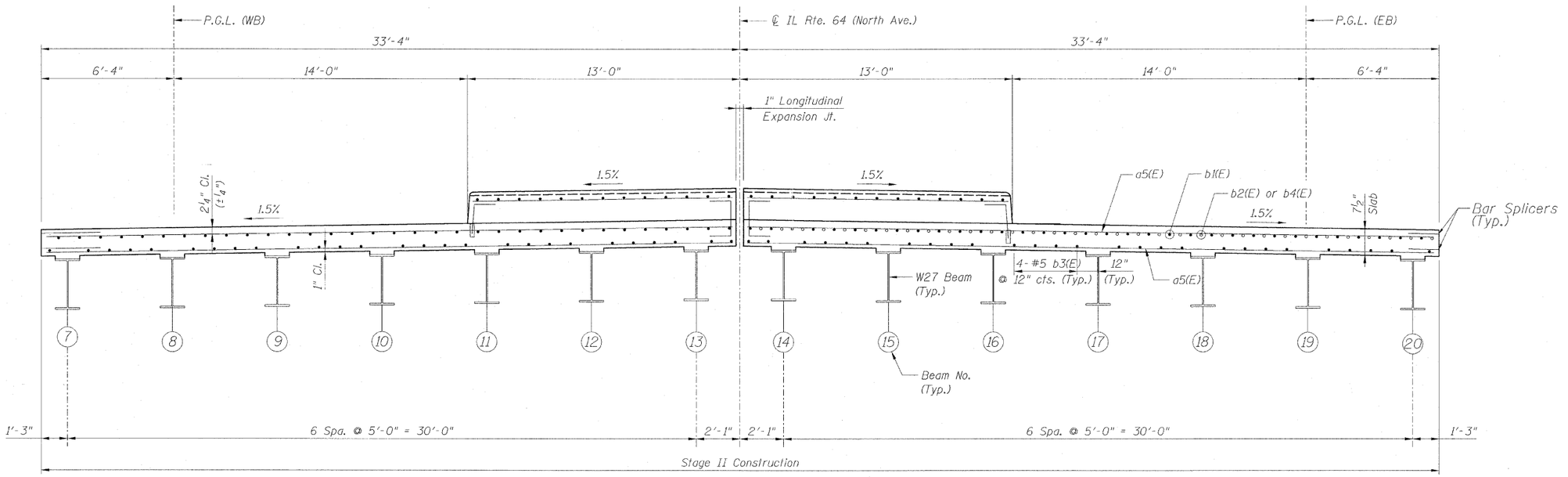
SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: RDP

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	467
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



STAGE II BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a5(E)	1488	#5	33'-0"	
a6(E)	4	#5	38'-9"	
a7(E)	16	#6	38'-9"	
a9(E)	72	#5	5'-11"	
b1(E)	1012	#5	29'-1"	
b2(E)	128	#6	44'-6"	
b3(E)	648	#5	26'-8"	
b4(E)	64	#6	49'-2"	
c1(E)	586	#5	12'-8"	
c2(E)	590	#5	2'-11"	
c3(E)	590	#5	1'-6"	
x(E)	108	#5	6'-5"	

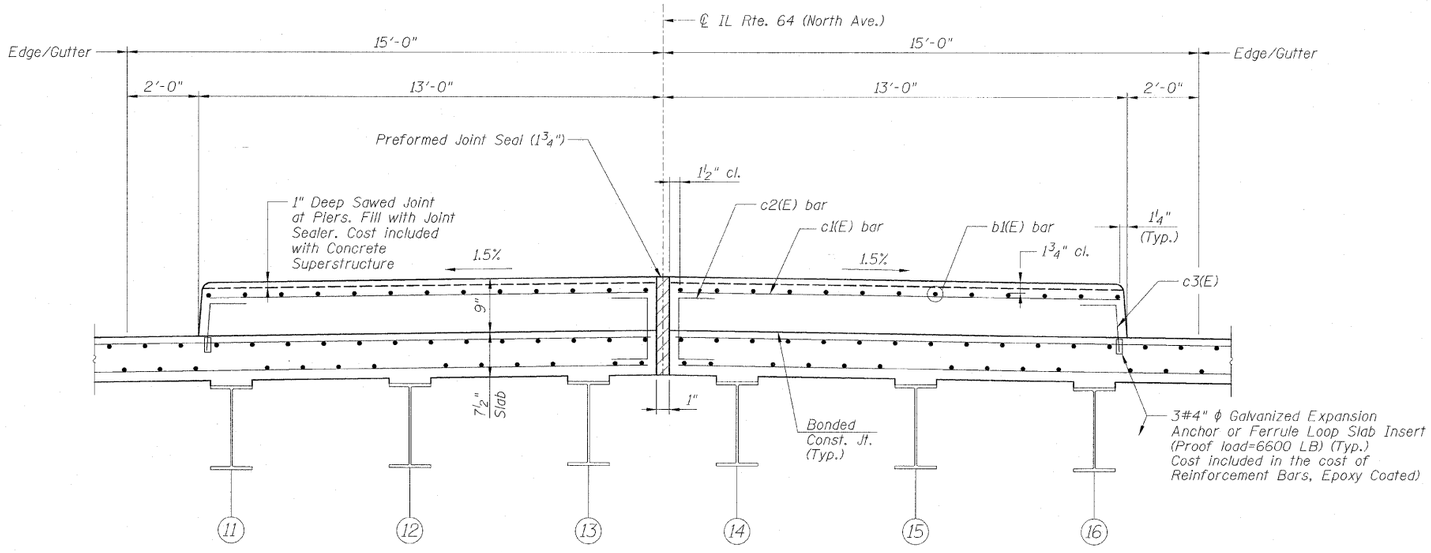
Item	Unit	Quantity
Concrete Superstructure	Cu. Yd.	709.8
Reinforcement Bars, Epoxy Coated	Pound	125,950
Bridge Deck Grooving	Sq. Yd.	1,253
Protective Coat	Sq. Yd.	2,261
Preformed Joint Seal (1¾")	Foot	300

MIDSPAN

AT PIER

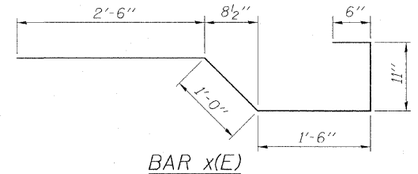
TYPICAL DECK CROSS SECTION STAGE II CONSTRUCTION - E.B. & W.B.

(Looking East)

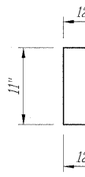


RAISED MEDIAN DETAIL

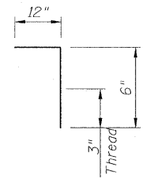
(Looking East)



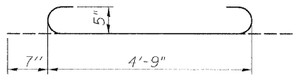
BAR x(E)



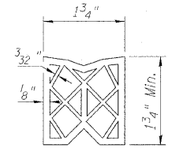
BAR c2(E)



BAR c3E)



a9(E) BAR



PREFORMED JOINT SEAL (1¾")

NOTES:

1. For Reinforcement Plans see Sheet B22 and B23
2. For location of sawed joints in median see Sheets B22 and B23.
3. See Section A-A on Sheet B25 for bar a9(E).

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64 (NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
TYPICAL CROSS SECTIONS AND DETAILS
STAGE II
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

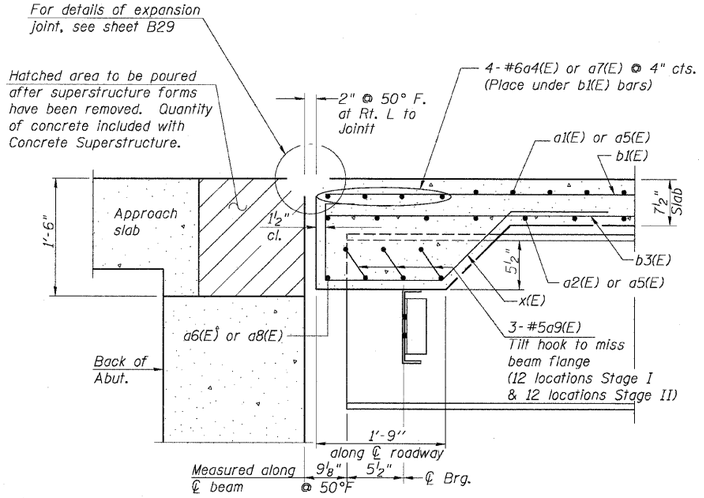
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: RDP

AECOM

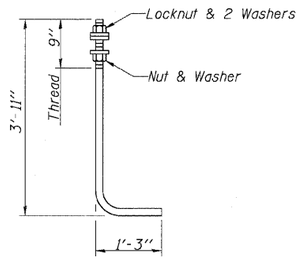
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	468
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

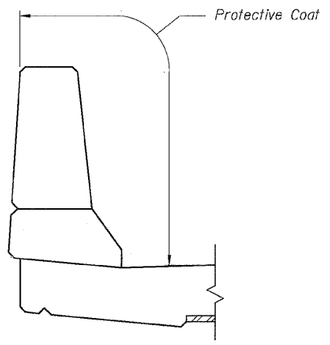


SECTION A-A



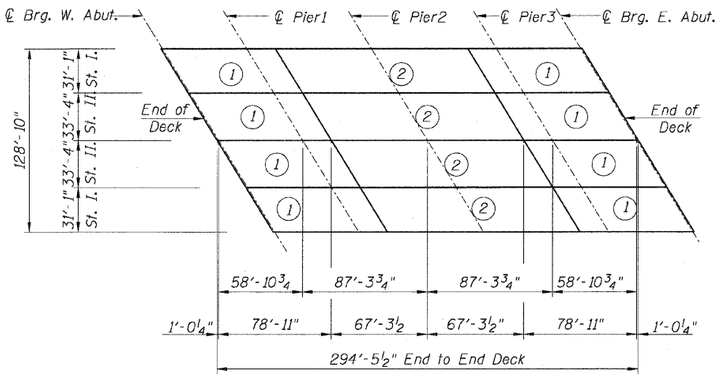
ANCHOR ROD

Diameter as specified for light poles.
(ASTM F 1554 Grade 105)
Included in the Cost of Concrete Superstructure.

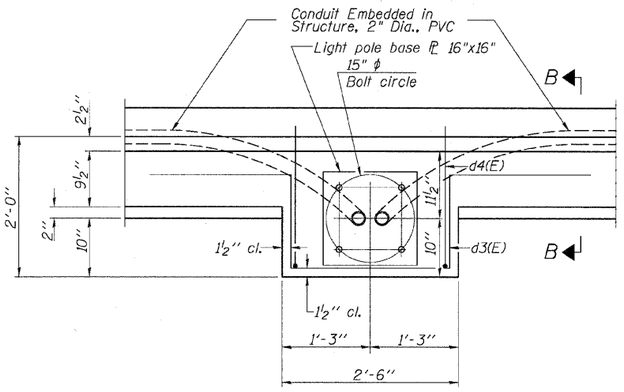


LIMITS OF PROTECTIVE COAT

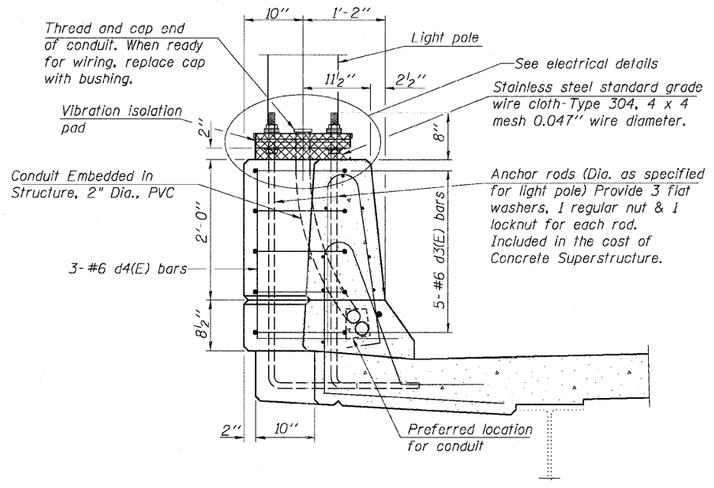
On Parapets & Wing Walls



DECK POURING SEQUENCE



PLAN



SECTION B-B

NOTES:

1. For location of Section A-A see Sheets B22 and B23.
2. For Typical Sections, Details and Bill of Material see Sheets B21 and B24.
3. When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
   1) At least 72 hours shall have elapsed from the end of the previous pour.
   2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

LIGHT POLE FOUNDATION DETAILS

Note: See Electrical Drawings for additional details.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
DECK SECTIONS & DETAILS
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: RDP

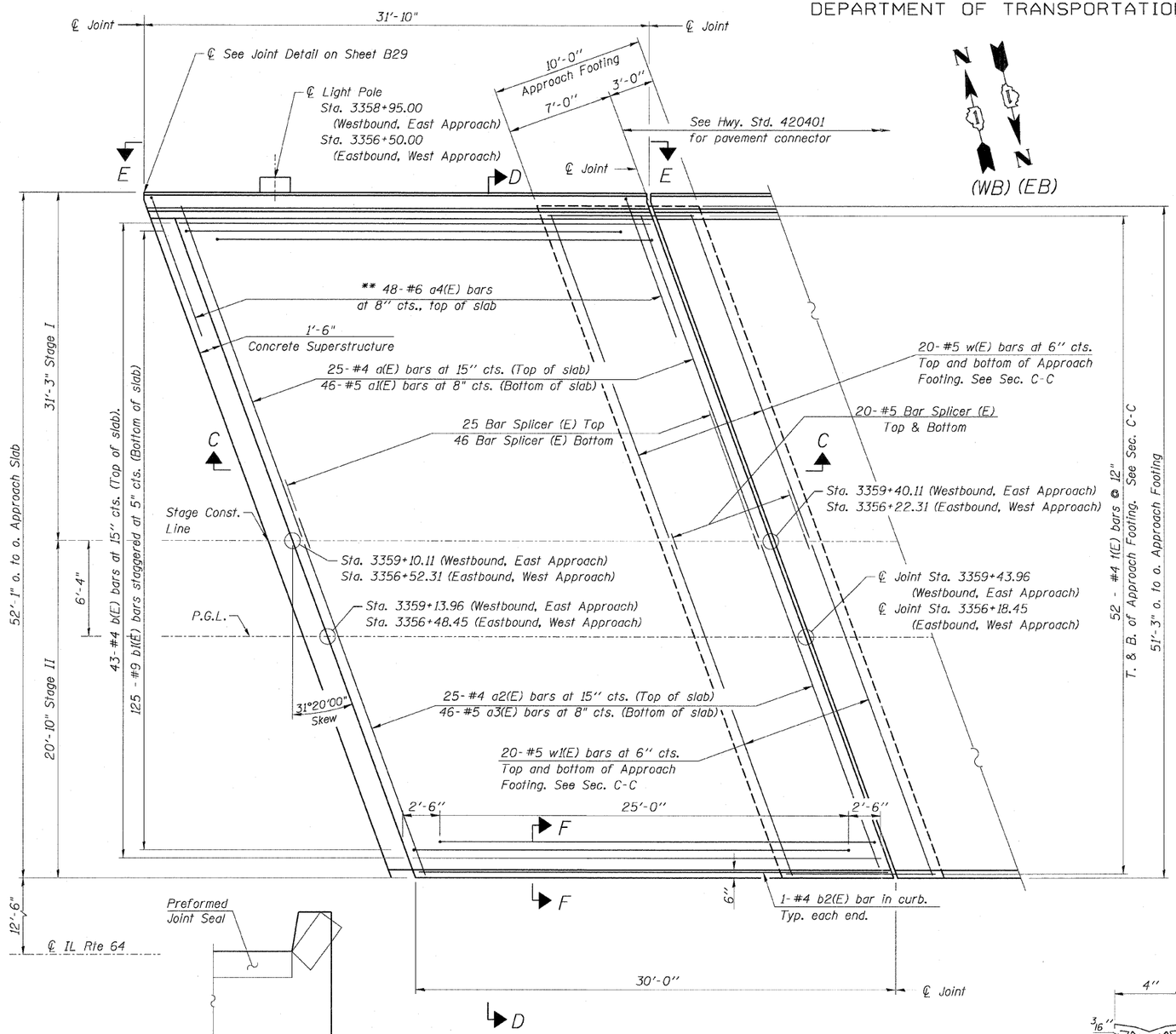
AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	469
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

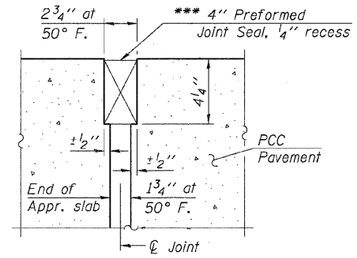
Notes:
See Sheet B28 for Sections C-C & D-D and View E-E.
a(E) and a1 (E) bar spacings measured along ℄ Rdwy.



PLAN
Westbound, East Approach
Eastbound, West Approach

* Tilt #9 b1(E) bars as required to maintain clearance.
** Space to miss a(E) bars, typ. each parapet.

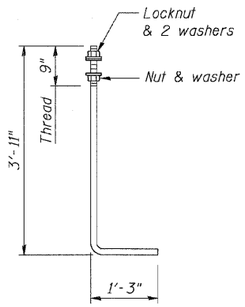
VIEW F-F
Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



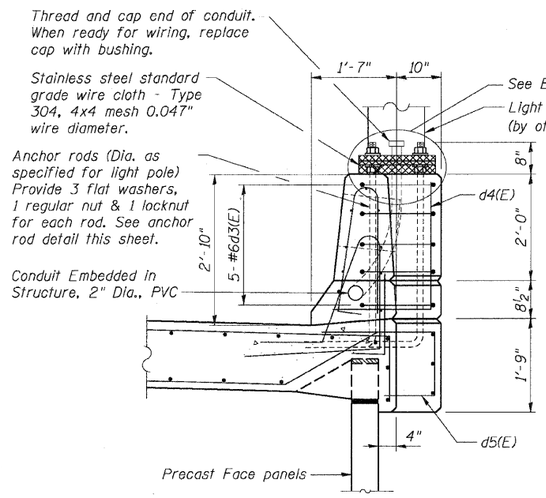
*** Cost included with Concrete Superstructure.

RIGID PAVEMENT

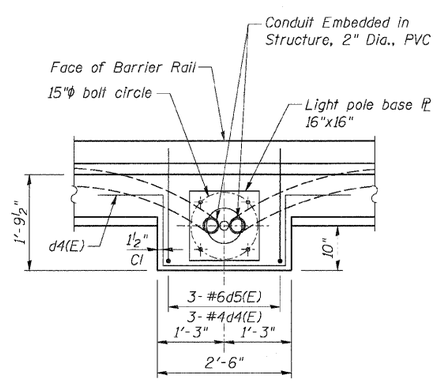
DETAIL A
Dimensions are at rt. L to Joint.



ANCHOR ROD
Diameter as specified for light poles (ASTM F 1554 Grade 105)



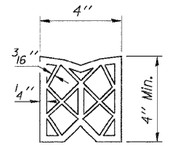
SECTION



PLAN

Note: Cost of Anchor Rods is included in the cost of Concrete Superstructure.

LIGHT POLE MOUNTED ON CONCRETE BARRIER RAIL



PREFORMED JOINT SEAL

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

APPROACH SLABS I

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

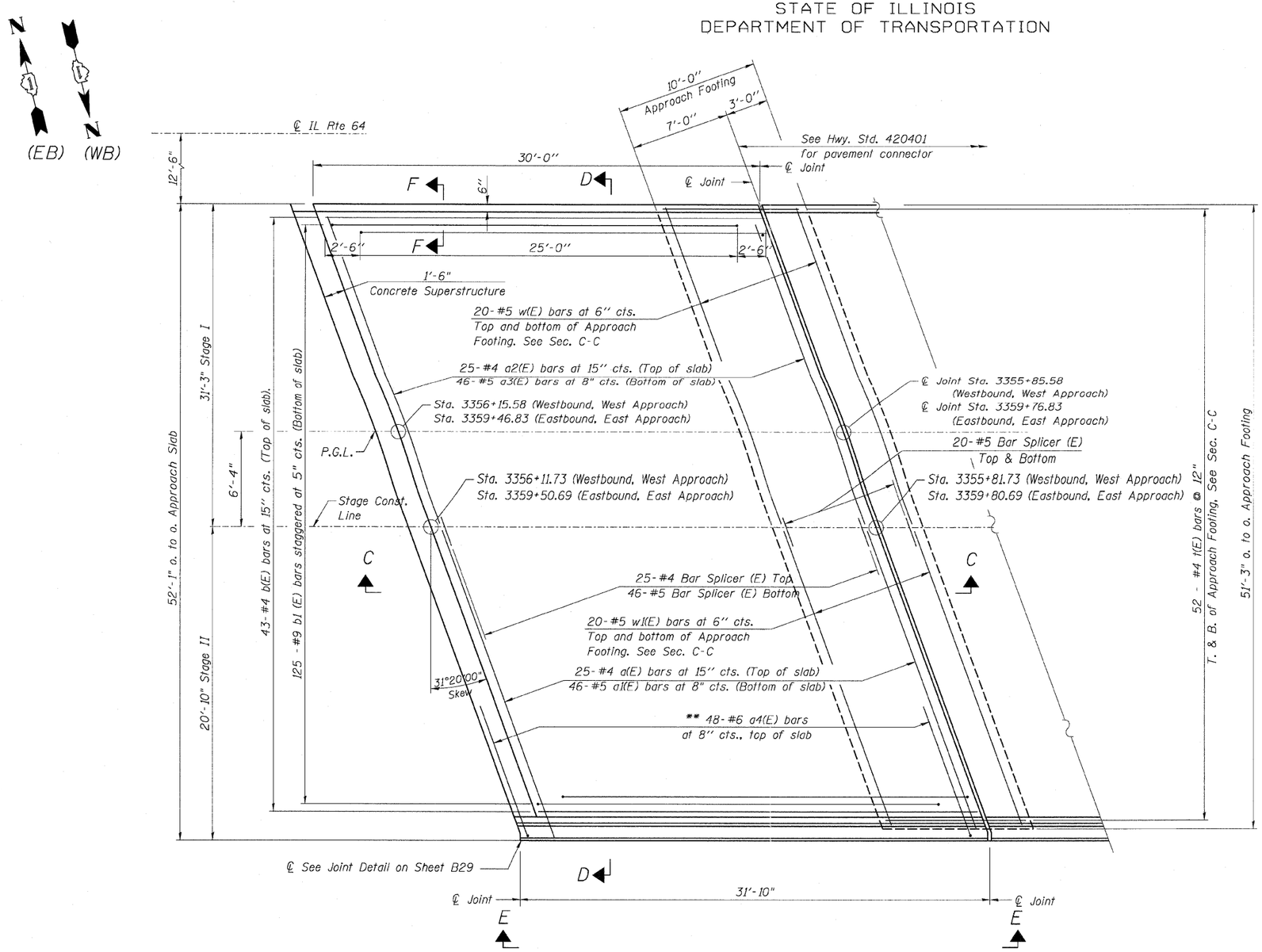
AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	470
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

Notes:
See Sheet B28 for Sections C-C & D-D and View E-E.
See Sheet B26 for Section F-F
a(E) and a1 (E) bar spacings measured along ℄ Rdwy.



PLAN

Westbound, West Approach
Eastbound, East Approach

* Tilt #9 b1(E) bars as required to maintain clearance.
** Space to miss a(E) bars, typ. each parapet.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

APPROACH SLABS II

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

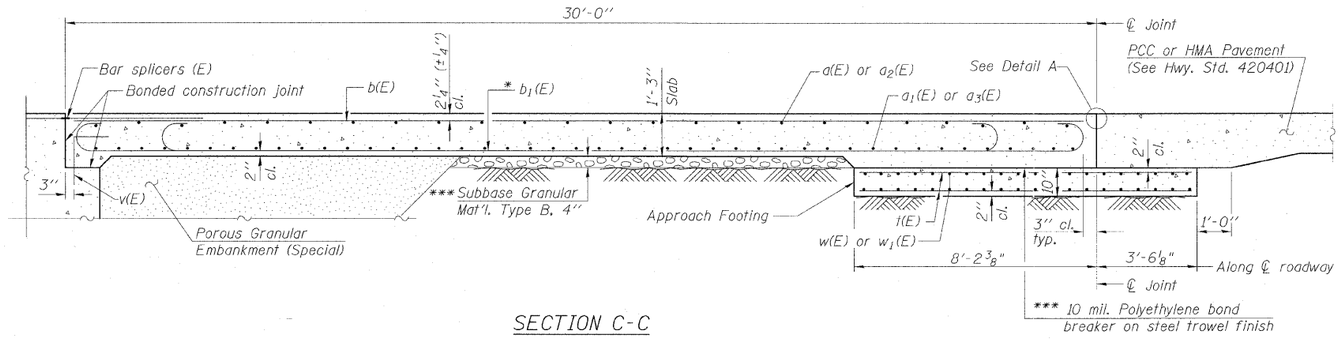
SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

AECOM

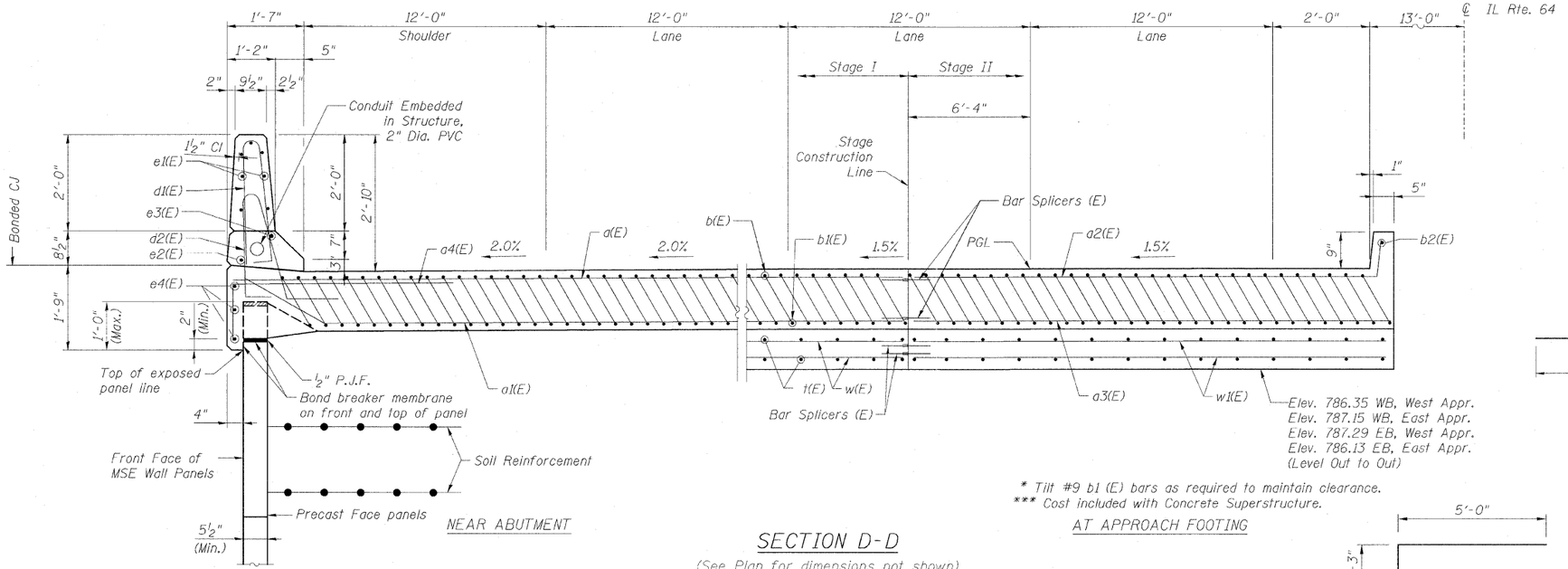
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	471
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION C-C



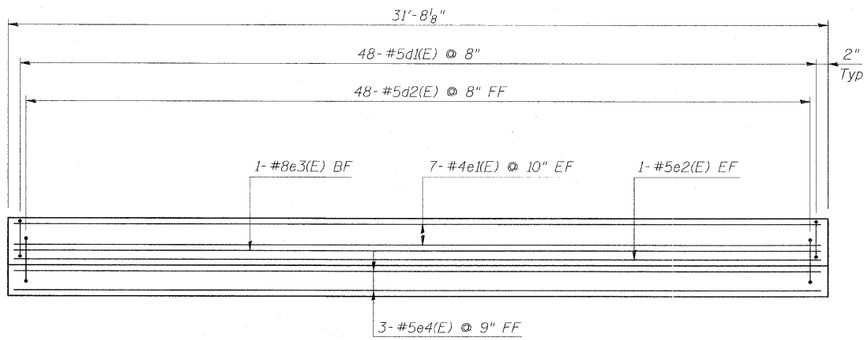
NEAR ABUTMENT

* Tilt #9 b1 (E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

AT APPROACH FOOTING

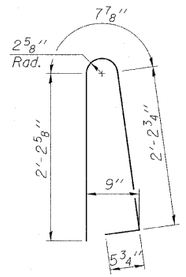
SECTION D-D

(See Plan for dimensions not shown)

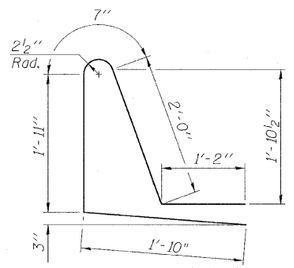


VIEW E-E

Notes:
See Sheet B18 for Top of Slab Elevations.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see Sheet B41
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see Sheet B52
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see Sheet B5
For additional parapet details, see Sheet B26.
See Sheet B26 for Detail A.



BAR d1(E)

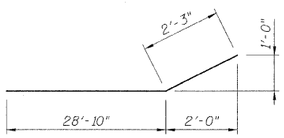


BAR d2(E)

FOUR APPROACHES
BILL OF MATERIAL

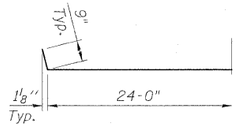
Bar	No.	Size	Length	Shape
a(E)	100	#4	36'-4"	
a1(E)	184	#5	31'-1"	
a2(E)	100	#4	24'-9"	
a3(E)	184	#5	24'-1"	
a4(E)	192	#6	6'-3"	
b(E)	172	#4	29'-8"	
b1(E)	500	#9	29'-9"	
b2(E)	4	#4	29'-8"	
d1(E)	192	#5	5'-7"	
d2(E)	192	#5	7'-6"	
d3(E)	10	#6	8'-11"	
d4(E)	6	#4	4'-5"	
d5(E)	6	#6	4'-9"	
e1(E)	28	#4	31-4"	
e2(E)	4	#5	31-4"	
e3(E)	4	#8	31-4"	
e4(E)	12	#5	31-4"	
t(E)	416	#4	11'-4"	
w(E)	160	#5	25'-1"	
w1(E)	160	#5	34'-3"	

Item	Unit	Quantity
Concrete Superstructure	Cu. Yd.	336.5
Concrete Structures	Cu. Yd.	75.3
Reinforcement Bars, Epoxy Coated	Pound	87,840
Conduit Embedded in Structure, 2" Dia., PVC	Foot	141
Bridge Deck Grooving	Sq. Yd.	597
Protective Coat	Sq. Yd.	738

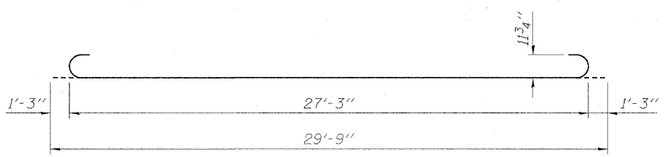


BAR a1(E)

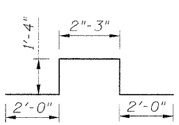
BAR a4(E)



BAR a2(E)



BAR b1(E)



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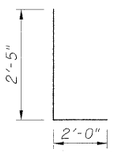
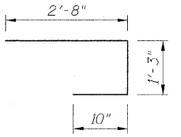


BAR d4(E)



BAR d5(E)

Sheet B28 of 56

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

APPROACH SLABS DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

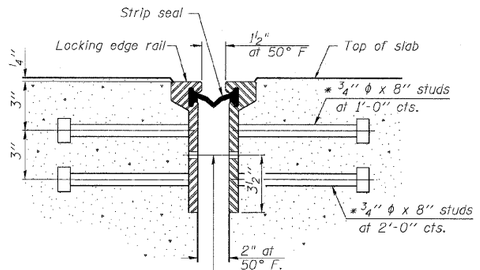
AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	472
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

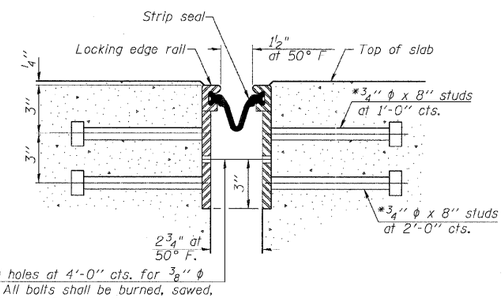
62410

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



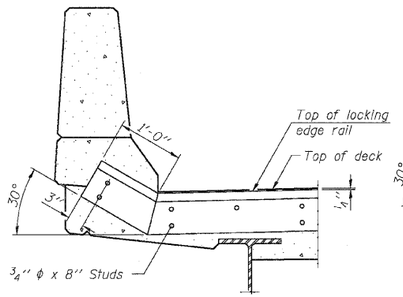
7/16" ϕ holes at 4'-0" cts. for ⅜" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU ROLLED RAIL JOINT



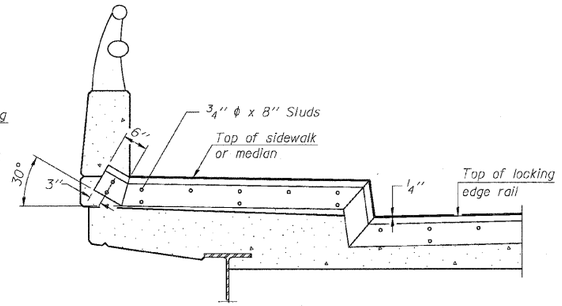
7/16" ϕ holes at 4'-0" cts. for ⅜" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT



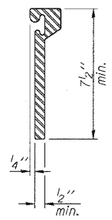
AT PARAPET

See Section A-A for end treatment of skews > 30°.

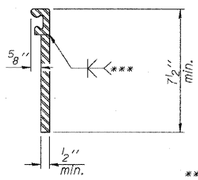


AT SIDEWALK OR MEDIAN

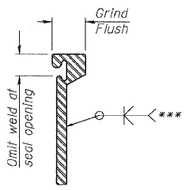
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



ROLLED EXTRUDED RAIL



WELDED RAIL

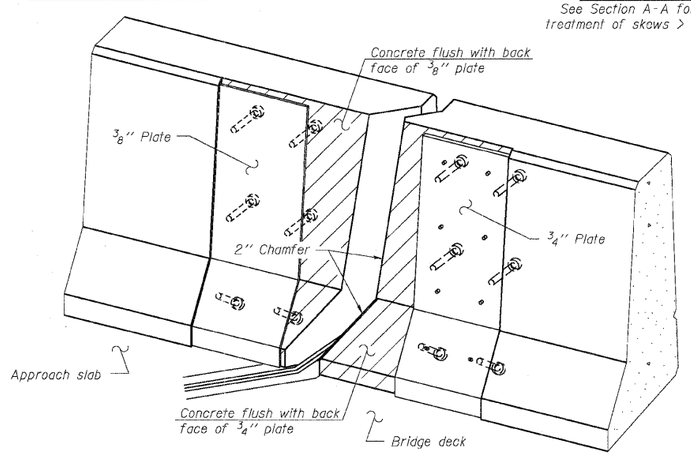


*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.



TRIMETRIC VIEW

(Showing back plates only)

TYPICAL END TREATMENTS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

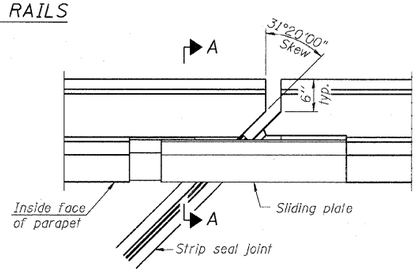
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

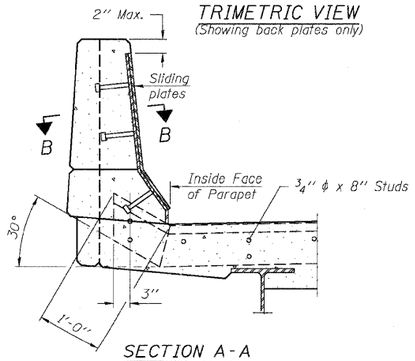
Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

LOCKING EDGE RAILS



PLAN

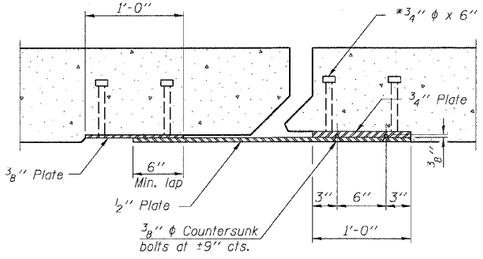
(Skew Shown opposite hand)



SECTION A-A

POINT BLOCK DETAILS

(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal (1½")	Foot	299

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

PREFORMED JOINT STRIP SEAL

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK

DATE: MAY 13, 2011 CHECKED BY: MJP

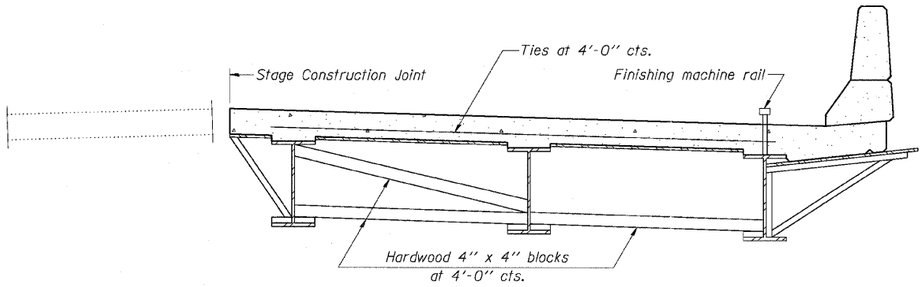
AECOM

EJ-SSJ 11-1-09

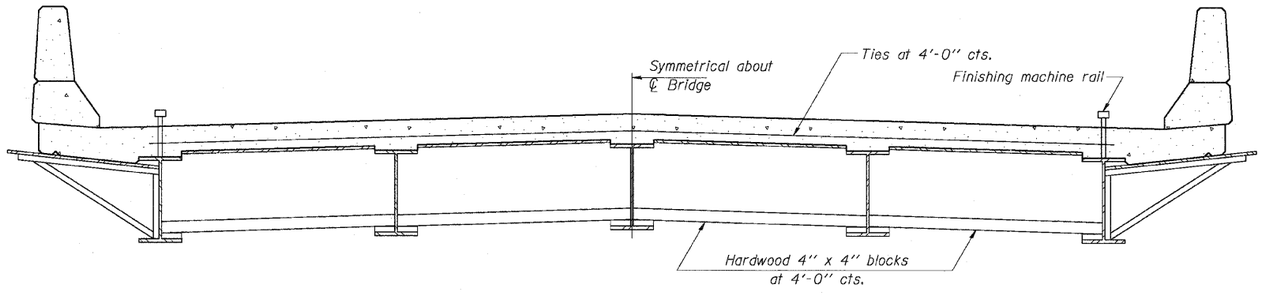
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	473
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



FORM BRACES FOR
STAGE CONSTRUCTION



FORM BRACES FOR
STANDARD CONSTRUCTION

When cantilever forming brackets are used, the work shall be done according to Article 503.06, except as modified below and in the details shown on this sheet.

The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.

AECOM

SB-1 7-1-10

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

CANTILEVER FORMING BRACKETS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

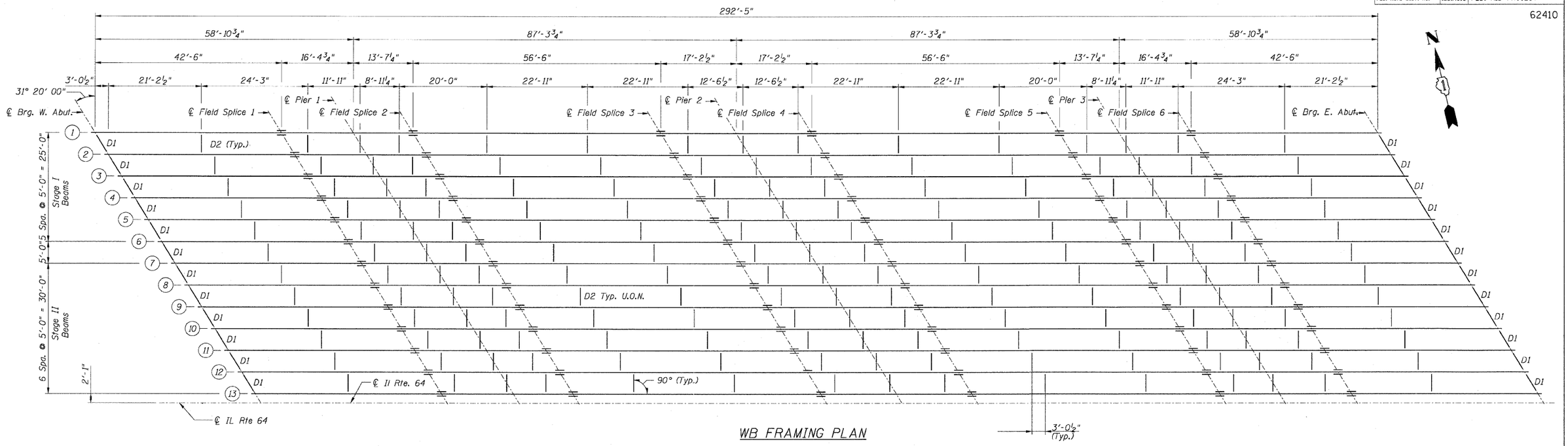
SCALE: None DRAWN BY: MRK

DATE: MAY 13, 2011 CHECKED BY: MJP

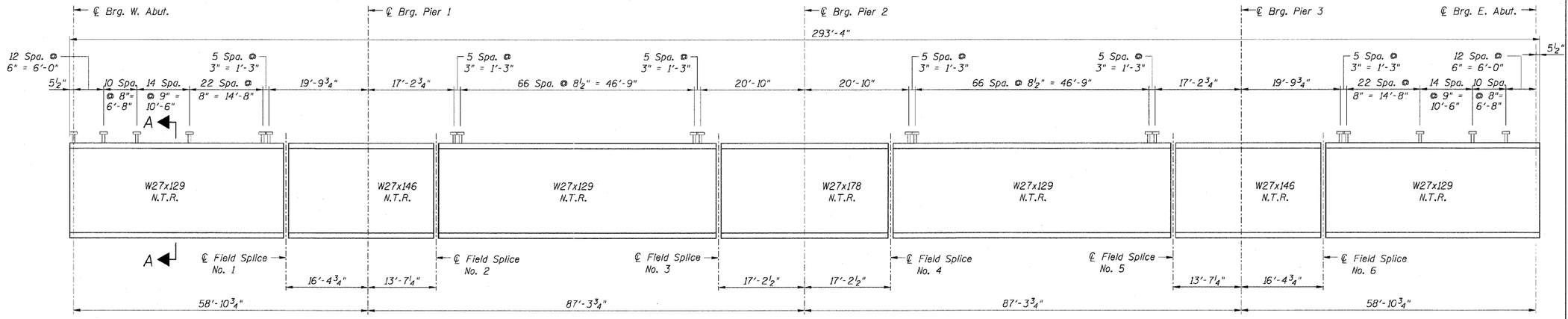
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	474
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410



WB FRAMING PLAN



BEAM ELEVATION

Connection & Splice ℄'s Not Shown for Clarity.
Load carrying components designated "NTR" shall conform to the supplemental Requirements for Notch Toughness, Zone 2.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
WB FRAMING PLAN
STAGES I & II
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

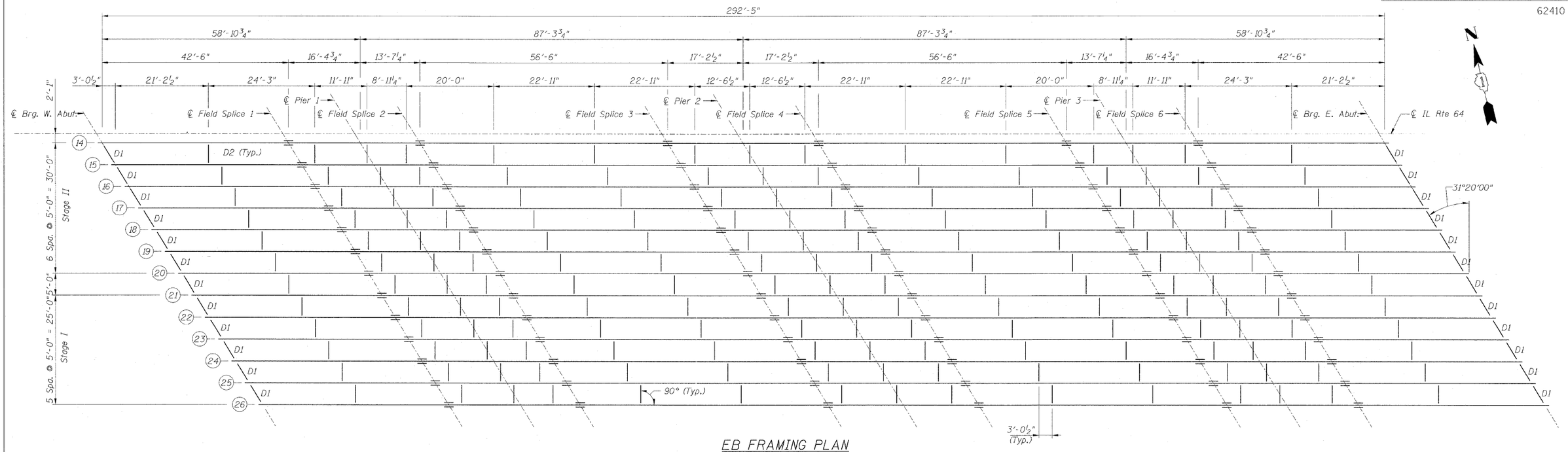
SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE, KANE	647	475
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

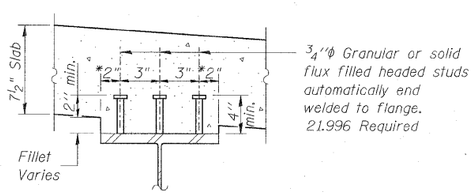
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EB FRAMING PLAN

TOP OF BEAM ELEVATIONS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
℄ Brg. W. Abut.	788.59	788.73	788.86	789.00	789.11	789.24	789.34	789.45	789.56	789.67	789.78	789.88	789.99	790.01	789.97	789.92	789.88	789.83	789.78	789.73	789.68	789.62	789.54	789.46	789.39	789.31
Field Splice No. 1	788.98	789.11	789.24	789.37	789.47	789.58	789.68	789.78	789.88	789.98	790.08	790.18	790.27	790.29	790.24	790.18	790.12	790.07	790.01	789.95	789.89	789.82	789.73	789.65	789.56	789.48
℄ Brg. Pier 1	789.13	789.26	789.38	789.50	789.60	789.72	789.81	789.91	790.01	790.10	790.19	790.29	790.38	790.40	790.34	790.28	790.22	790.16	790.10	790.04	789.97	789.90	789.81	789.72	789.63	789.54
Field Splice No. 2	789.26	789.38	789.50	789.62	789.72	789.83	789.92	790.01	790.11	790.20	790.29	790.38	790.47	790.48	790.42	790.36	790.30	790.23	790.17	790.11	790.04	789.96	789.87	789.78	789.68	789.59
Field Splice No. 3	789.56	789.67	789.78	789.89	789.97	790.07	790.15	790.23	790.31	790.39	790.47	790.55	790.63	790.63	790.56	790.48	790.41	790.33	790.26	790.18	790.10	790.01	789.91	789.80	789.70	789.59
℄ Brg. Pier 2	789.60	789.70	789.81	789.91	790.00	790.09	790.17	790.25	790.32	790.40	790.47	790.55	790.62	790.62	790.54	790.47	790.39	790.31	790.23	790.15	790.07	789.97	789.86	789.76	789.65	789.54
Field Splice No. 4	789.63	789.74	789.84	789.94	790.02	790.11	790.18	790.26	790.33	790.40	790.47	790.55	790.62	790.61	790.53	790.45	790.37	790.28	790.20	790.12	790.03	789.93	789.82	789.71	789.60	789.48
Field Splice No. 5	789.57	789.66	789.75	789.84	789.91	789.99	790.05	790.11	790.17	790.23	790.29	790.35	790.41	790.40	790.30	790.21	790.11	790.02	789.92	789.83	789.73	789.62	789.49	789.37	789.25	789.12
℄ Brg. Pier 3	789.51	789.59	789.68	789.77	789.83	789.91	789.97	790.03	790.09	790.14	790.20	790.25	790.31	790.29	790.20	790.10	790.00	789.91	789.81	789.71	789.61	789.49	789.37	789.24	789.11	788.98
Field Splice No. 6	789.43	789.51	789.59	789.68	789.74	789.81	789.87	789.92	789.98	790.03	790.08	790.14	790.19	790.17	790.07	789.97	789.87	789.77	789.66	789.56	789.46	789.34	789.21	789.08	788.95	788.82
℄ Brg. E. Abut.	789.22	789.29	789.36	789.44	789.50	789.56	789.61	789.65	789.70	789.74	789.78	789.83	789.87	789.84	789.73	789.62	789.51	789.40	789.29	789.18	789.07	788.94	788.80	788.66	788.52	788.38



SECTION A-A

* Varies 2" Min.

AECOM

Sheet B32 of 56

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
EB FRAMING PLAN
STAGES I & II
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK

DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	476
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

INTERIOR GIRDER MOMENT TABLE					
		0.4 Span 1 0.6 Span 4	Pier 1 & 3	0.5 Span 2 & 3	Pier 2
Is	(in^4)	4760	5630	4760	6990
Ic (n)	(in^4)	12819	-	12189	-
Ic (3n)	(in^4)	9042	-	9042	-
Ss	(in^3)	345	411	345	503
Sc (n)	(in^3)	520	-	520	-
Sc (3n)	(in^3)	460	-	460	-
D	(k/ft.)	0.73	1.16	0.73	1.19
MD	('k)	134	-558	209	-768
sD	(k/ft.)	0.4	-	0.4	-
MsD	('k)	91	-	154	-
ML	('k)	302	-239	409	-306
M (Imp)	('k)	82	-60	96	-72
5/3[ML+M(Imp)]	('k)	641	-499	842	-629
Ma	('k)	1126	-1374	1567	-1816
* Mu	('k)	2333	-1921	2333	-2363
fsD non-comp	(ksi)	4.7	-16.3	7.3	-18.3
fsD (comp)	(ksi)	2.4	-	4.0	-
fs5/3M(L+Imp)	(ksi)	14.8	-14.6	19.4	-15.0
fs (Overload)	(ksi)	21.8	-30.8	30.7	-33.3
VR	(k)	44.5	-	33.4	-

INTERIOR GIRDER REACTION TABLE					
		W. Abut.	Pier 1 & 3	Pier 2	E. Abut.
RD	(k)	22.1	86.1	99.8	22.1
RL	(k)	31.4	36.5	40.0	31.4
Imp.	(k)	10.9	8.0	7.8	10.9
R (Total)	(k)	64.4	130.5	147.6	64.3

* Compact section

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing f (Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f (Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

D: Un-factored non-composite dead load (kips/ft.).

MD: Un-factored moment due to non-composite dead load (kip-ft.).

sD: Un-factored long-term composite (superimposed) dead load (kips/ft.)

MsD: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

ML: Un-factored live load moment (kip-ft.).

MI: Un-factored moment due to impact (kip-ft.).

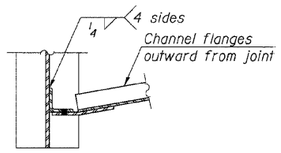
Ma: Factored design moment (kip-ft.).
$1.3\ [\ MD + MsD + \frac{5}{3}\ (ML + MI)]$

Mu: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

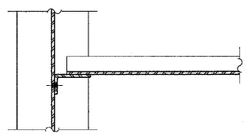
fs (Overload): Sum of stresses as computed from the moments below (ksi).
$MD + MsD + \frac{5}{3}\ (ML + MI)$

fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [MD + MsD + \frac{5}{3}\ (ML + MI)]$

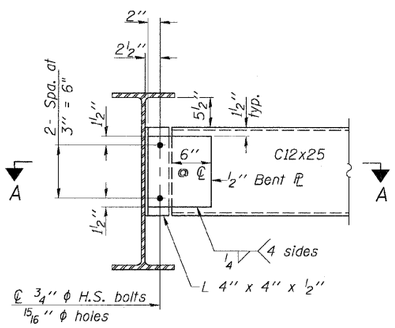
VR: Maximum + impact shear range within the composite portion of the span for stud shear connector design (kips).



SECTION A-A



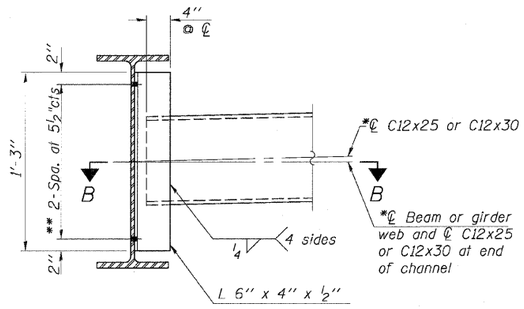
SECTION B-B



END DIAPHRAGM D1

(48 Required)

Note:
Two hardened washers required for each set of oversized holes.

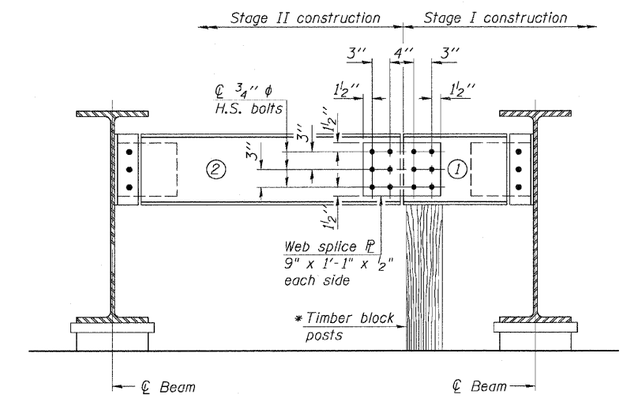


INTERIOR DIAPHRAGM D2

(360 Required)

Note:
Two hardened washers required for each set of oversized holes.
*Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
**¾" ϕ HS bolts, 15/16" ϕ holes except at the stage construction line, where one end shall be ¾" ϕ HS bolts with 13/16"x1 7/8" long slotted holes.

* Cost of Timber Block Posts is included with Structural Steel.



END DIAPHRAGM

4 locations

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

1.) Order diaphragm in two sections.
2.) Attach section (1) of diaphragm to beam
3.) Place timber block posts between section (1) of diaphragm and abutment bearing section.
4.) Attach section (2) of diaphragm to both beam and section (1) of diaphragm during stage II construction with splice plates.
5.) Remove timber block posts.

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
FRAMING DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

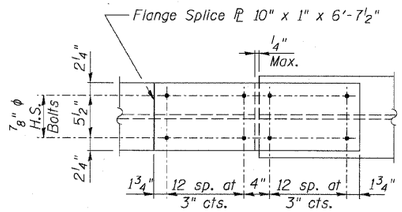
SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

AECOM

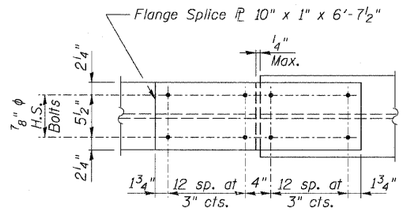
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	477
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

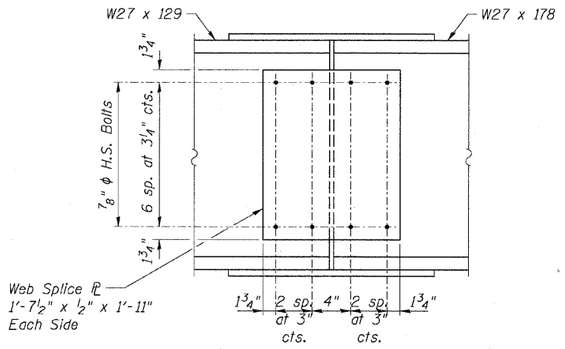
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



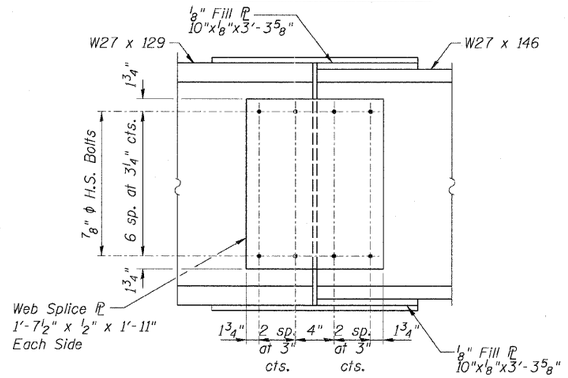
TOP FLANGE DETAILS



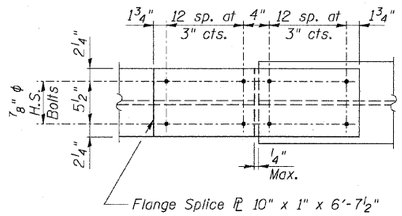
TOP FLANGE DETAILS



WEB DETAILS



WEB DETAILS

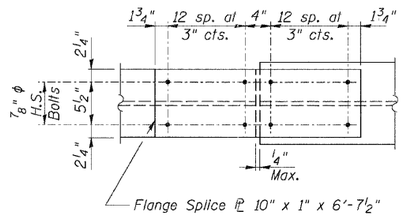


BOTTOM FLANGE DETAILS

FIELD SPLICE DETAILS

For No's 3 & 4

(52 Required)



BOTTOM FLANGE DETAILS

FIELD SPLICE DETAILS

For No's 1, 2, 5 & 6

(104 Required)

NOTES:

1. All Bolts shall be ASTM A325.
2. All splice material shall conform to the requirements of AASHTO M270 Grade 50 and the suppiemental Requirements for Notch Toughness, Zone 2 (NTR). Fill plates are not required to meet NTR.

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
FIELD SPLICE DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

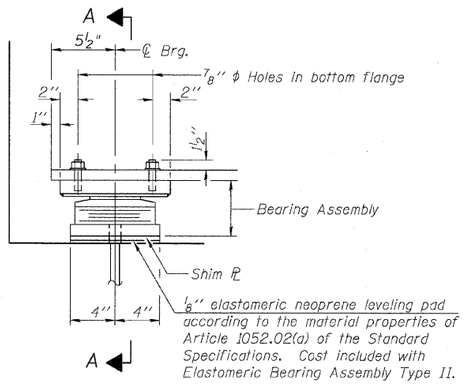
SCALE: None DRAWN BY: MRK

DATE: MAY 13, 2011 CHECKED BY: MJP

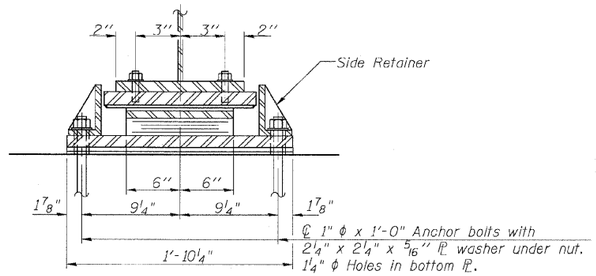
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE, KANE	647	478
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

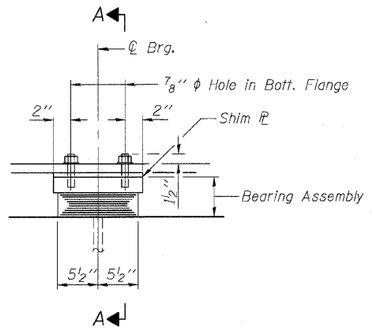


ELEVATION AT ABUT.

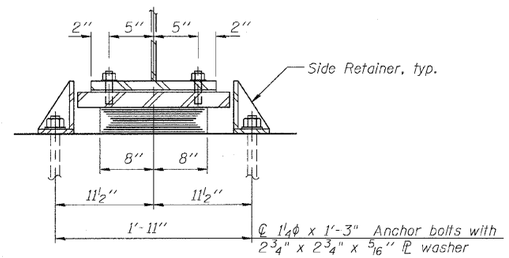


SECTION A-A

TYPE II ELASTOMERIC EXP. BRG.

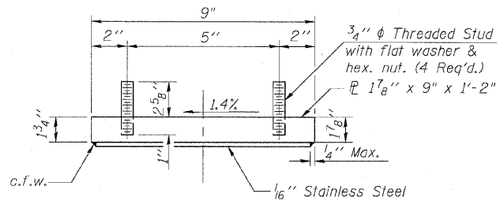


ELEVATION AT PIERS 1 AND 3

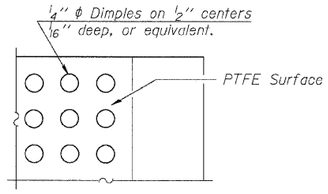


SECTION A-A

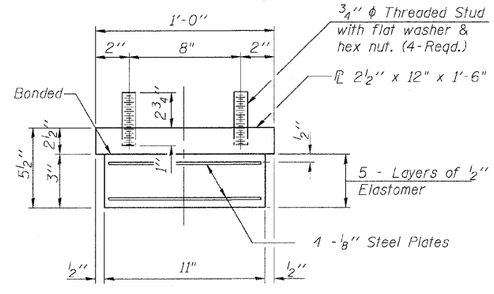
TYPE I ELASTOMERIC EXP. BRG.



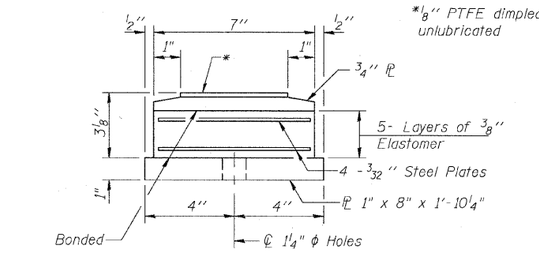
TOP BEARING ASSEMBLY



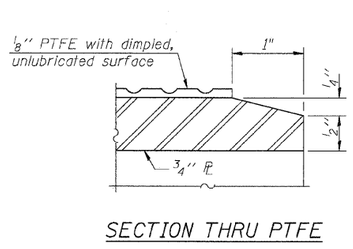
PLAN-PTFE SURFACE



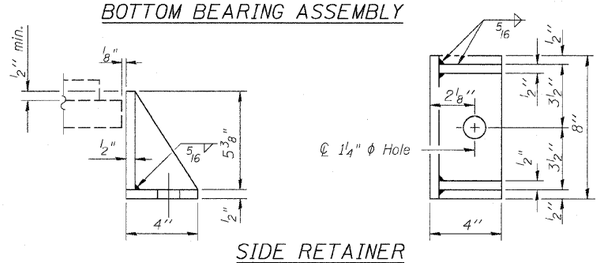
BEARING ASSEMBLY



BOTTOM BEARING ASSEMBLY

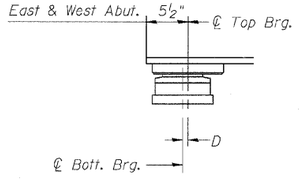


SECTION THRU PTFE

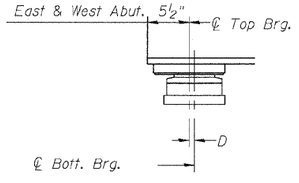


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50°F.
(Move bott. brg. away from fixed brg.)

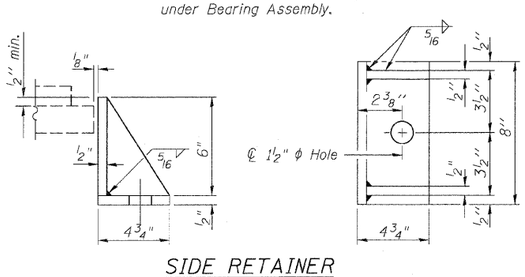


ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

TYPE I ELASTOMERIC EXP. BRG. @ PIERS 1 & 3

(52 Required)

TYPE II ELASTOMERIC EXP. BRG. @ EAST & WEST ABUTMENTS

(52 Required)

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I or TypeII.

The ⅛" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	52
Elastomeric Bearing Assembly Type II	Each	52
Anchor Bolts, 1" ϕ	Each	104
Anchor Bolts, 1¼" ϕ	Each	104

AECOM

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
ELASTOMERIC EXPANSION BEARINGS

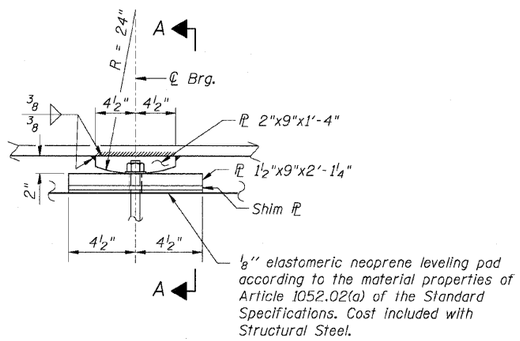
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

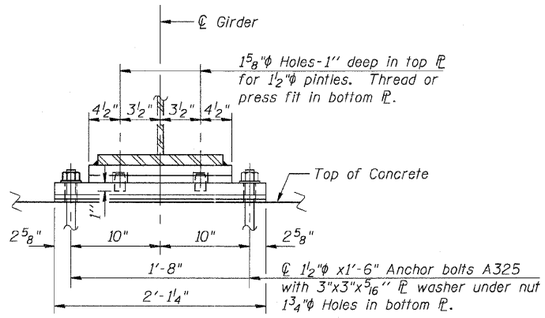
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	479
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

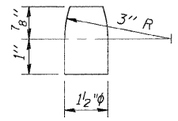
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT PIER



SECTION A-A



PINTLE

FIXED BEARING AT PIER 2
(26 Required)

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1½" ϕ	Each	52

NOTES:

1. Anchor bolts at fixed bearings may be built into the masonry.
2. Furnishing and installing Fixed Bearings is included with "Furnishing and Erecting Structural Steel".
3. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
4. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

FIXED BEARING DETAILS

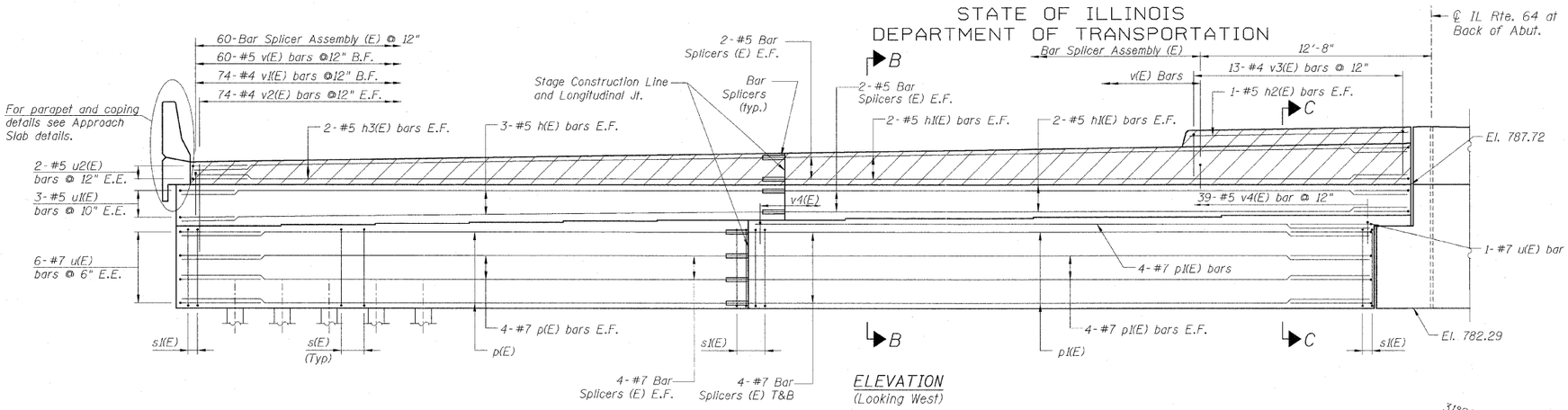
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

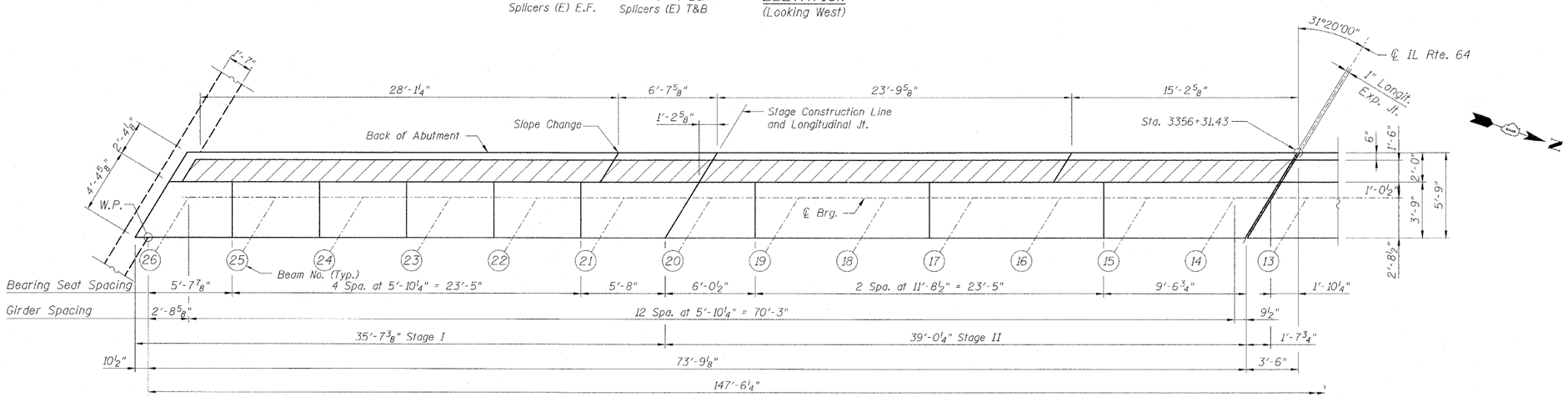
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	480
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

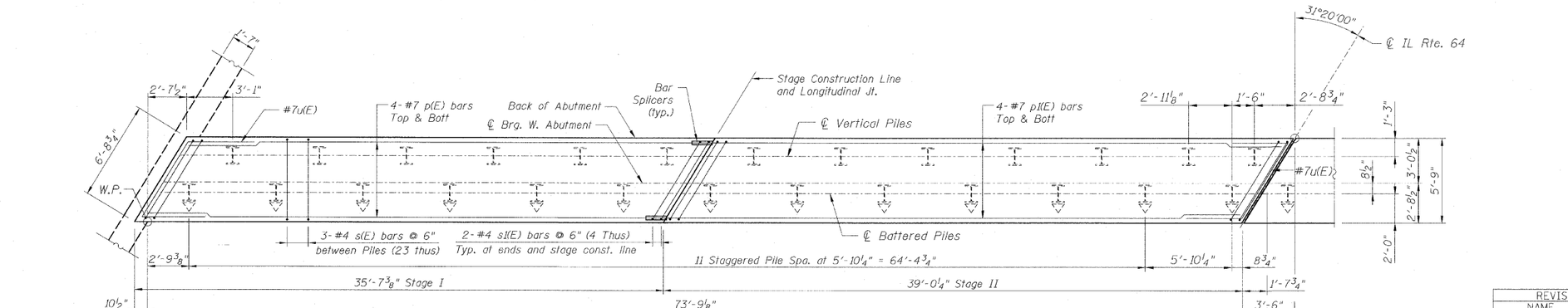
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking West)



TOP VIEW



PLAN-PILE CAP
(East Bound)

BEARING SEAT ELEVATIONS

Beam No.	℄ Brg.	Step Height	Shim Height
14	787.16	0"	½"
15	787.16	1⅛"	--
16	787.06	0"	⅝"
17	787.06	1⅛"	--
18	786.97	0"	⅝"
19	786.97	1⅛"	--
20	786.87	0"	⅝"
21	786.87	¾"	--
22	786.80	⅞"	--
23	786.73	⅞"	--
24	786.65	⅞"	--
25	786.57	⅞"	--
26	786.50	--	--

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 62'
Piles Required: 26

Denotes Vertical Pile

Denotes Battered Pile

NOTES:

1. In areas of existing embankment, piles shall be driven through 18 in. diameter precored holes extending to elevation 755.00 according to Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.
2. For Expansion Joint details see Sheet B41.
3. See Sheet B51 for HP Pile Encasement.
4. Hatched area to be poured after Superstructure falsework has been removed. Concrete quantity is included with Concrete Superstructure.
5. Pour steps monolithically with cap.
6. Space reinforcement to miss anchor bolts.
7. Concrete Sealer shall be applied to the area of the bearing seats, backwall, and the exposed portion of the abutment pile caps.
8. Work sheets B37 thru B41 together.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

WEST ABUTMENT (EB) PLANS AND ELEVATION

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

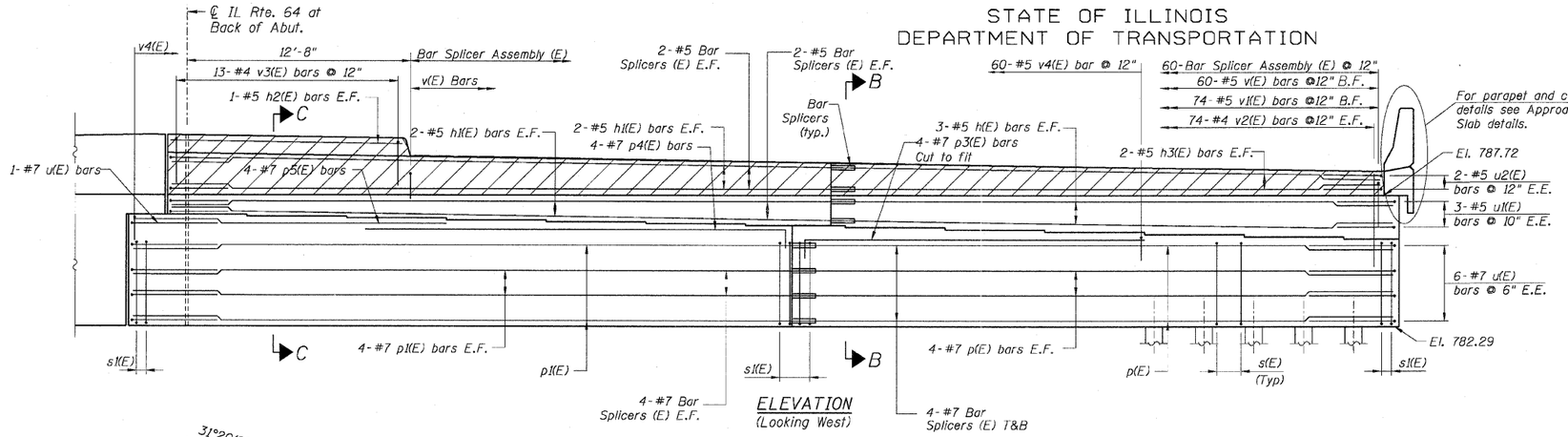
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: RDP

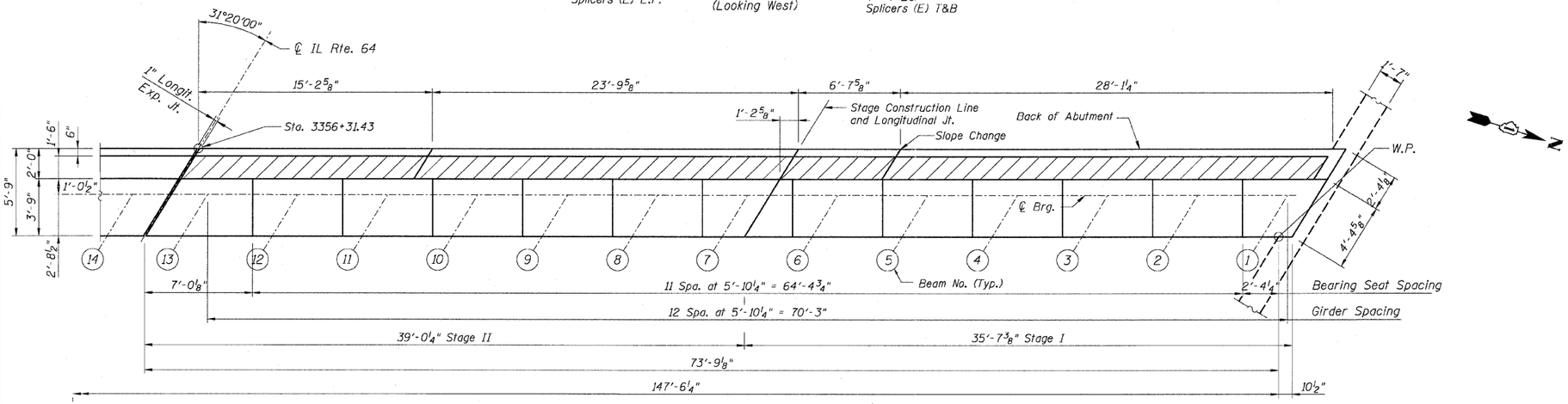
AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

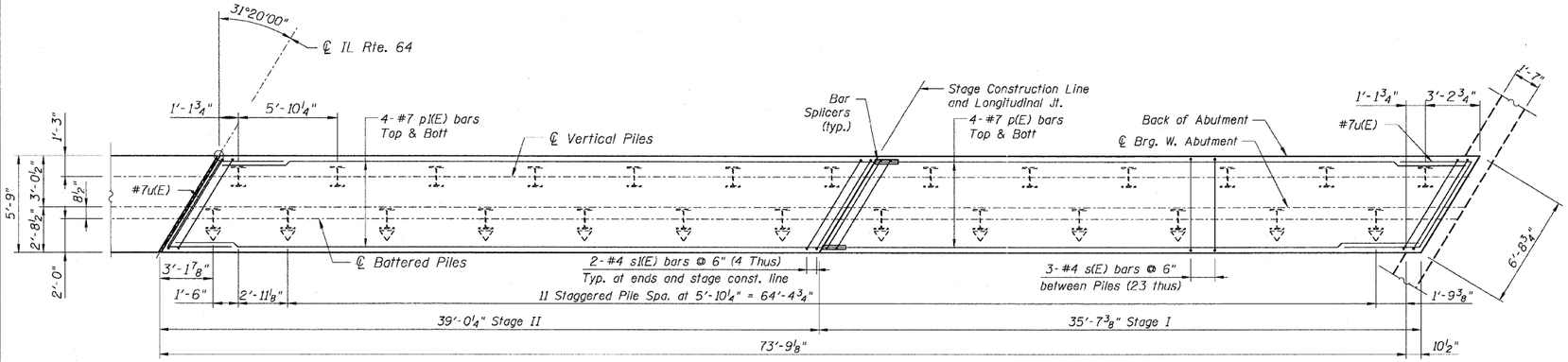
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	481
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410





TOP VIEW



PLAN-PILE CAP
(West Bound)

BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	Step Height
1	785.79	--
2	785.92	1⅝"
3	786.06	1⅝"
4	786.20	1⅝"
5	786.31	1¼"
6	786.43	1½"
7	786.54	1⅜"
8	786.65	1¼"
9	786.76	1¼"
10	786.87	1¼"
11	786.97	1¼"
12	787.08	1¼"
13	787.19	1¼"

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 62'
Piles Required: 25
Test Piles: 1

Denotes Vertical Pile

Denotes Battered Pile

NOTES:

1. In areas of existing embankment, piles shall be driven through 18 in. diameter precored holes extending to elevation 760.00 according to Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.
2. For Expansion Joint details see Sheet B41.
3. See Sheet B51 for HP Pile Encasement.
4. Hatched area to be poured after Superstructure falsework has been removed. Concrete quantity is included with Concrete Superstructure.
5. Pour steps monolithically with cap.
6. Space reinforcement to miss anchor bolts.
7. Concrete Sealer shall be applied to the area of the bearing seats, backwall, and the exposed portion of the abutment pile caps.
8. Work sheets B37 thru B41 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

WEST ABUTMENT (WB) PLANS AND ELEVATION

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

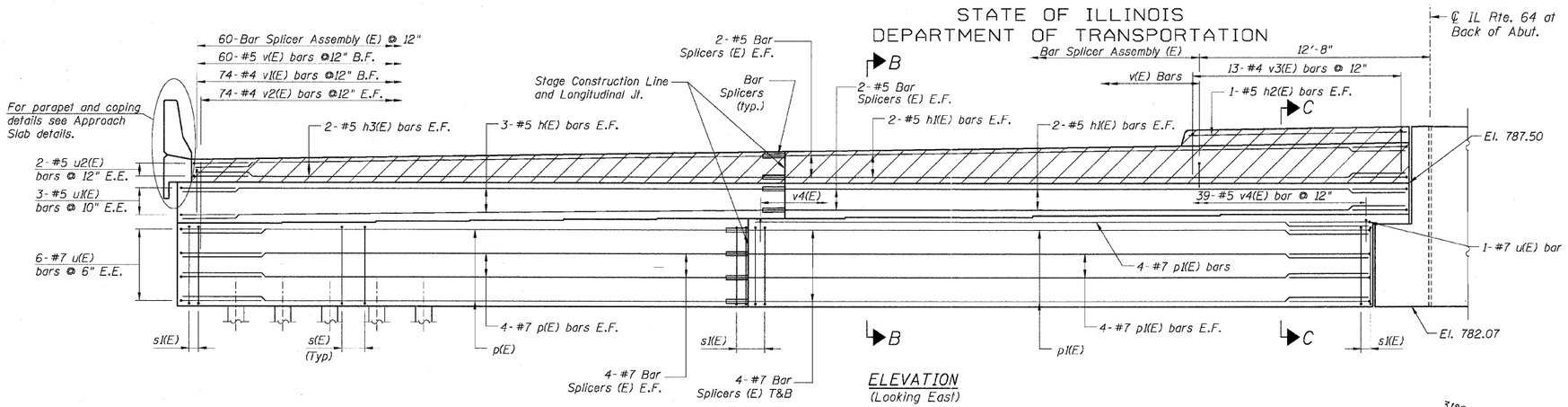
SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: MJP

AECOM

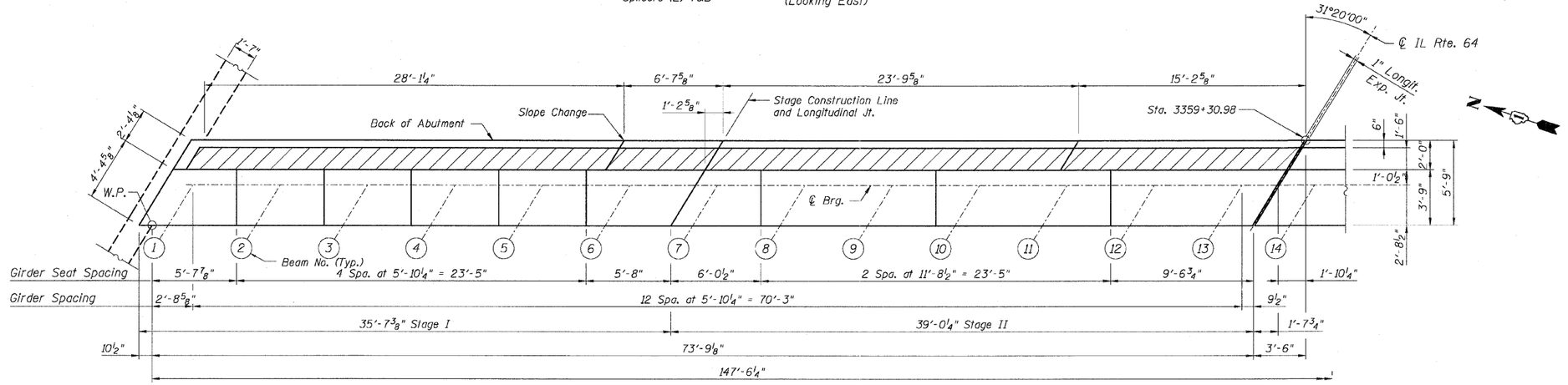
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	482
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

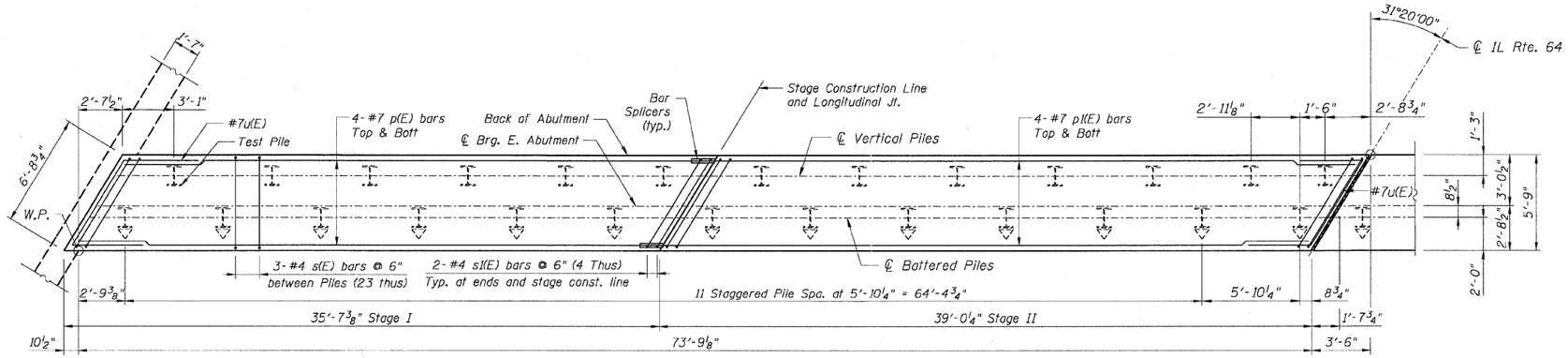
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking East)



TOP VIEW



PLAN-PILE CAP
(West Bound)

BEARING SEAT ELEVATIONS			
Beam No.	℄ Brg.	Step Height	Shim Height
1	786.41	--	--
2	786.49	⅞"	--
3	786.56	⅞"	--
4	786.64	⅞"	--
5	786.69	¾"	--
6	786.76	¾"	--
7	786.76	0"	½"
8	786.85	1⅛"	--
9	786.85	0"	½"
10	786.94	1⅛"	--
11	786.94	0"	½"
12	787.02	1"	--
13	787.02	0"	½"

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 75'
Piles Required: 25
Test Piles: 1

Denotes Vertical Pile

Denotes Battered Pile

NOTES:

1. In areas of existing embankment, piles shall be driven through 18 in. diameter precored holes extending to elevation 760.00 according to Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.
2. For Expansion Joint details see Sheet B41.
3. See Sheet B51 for HP Pile Encasement.
4. Hatched area to be poured after Superstructure falsework has been removed. Concrete quantity is included with Concrete Superstructure.
5. Pour steps monolithically with cap.
6. Space reinforcement to miss anchor bolts.
7. Concrete Sealer shall be applied to the area of the bearing seats, backwall, and the exposed portion of the abutment pile caps.
8. Work sheets B37 thru B41 together.

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

EAST ABUTMENT (WB) PLANS AND ELEVATION

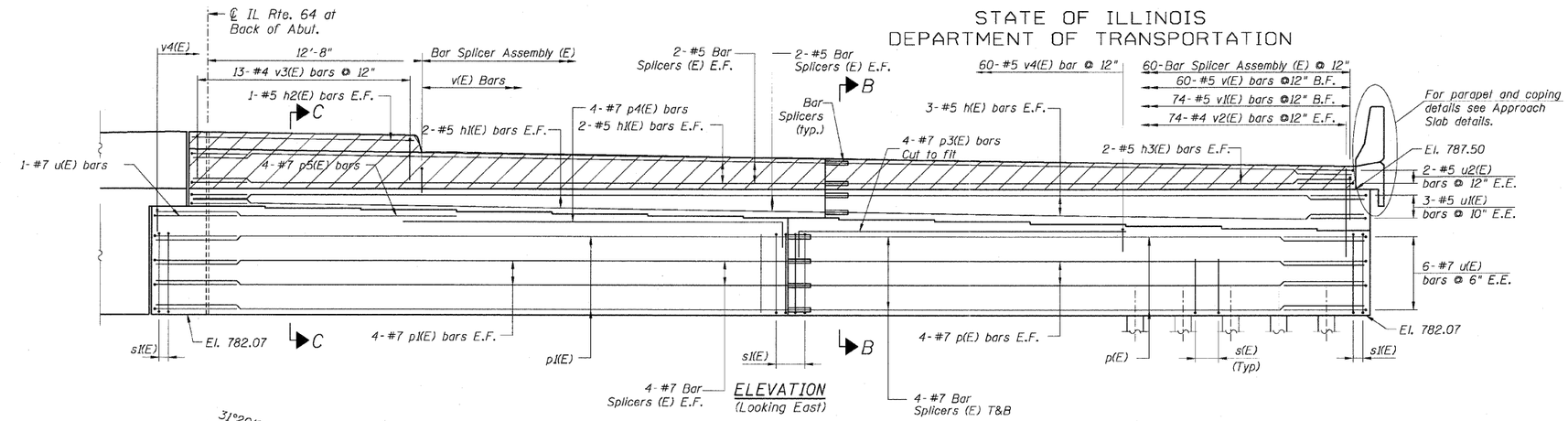
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

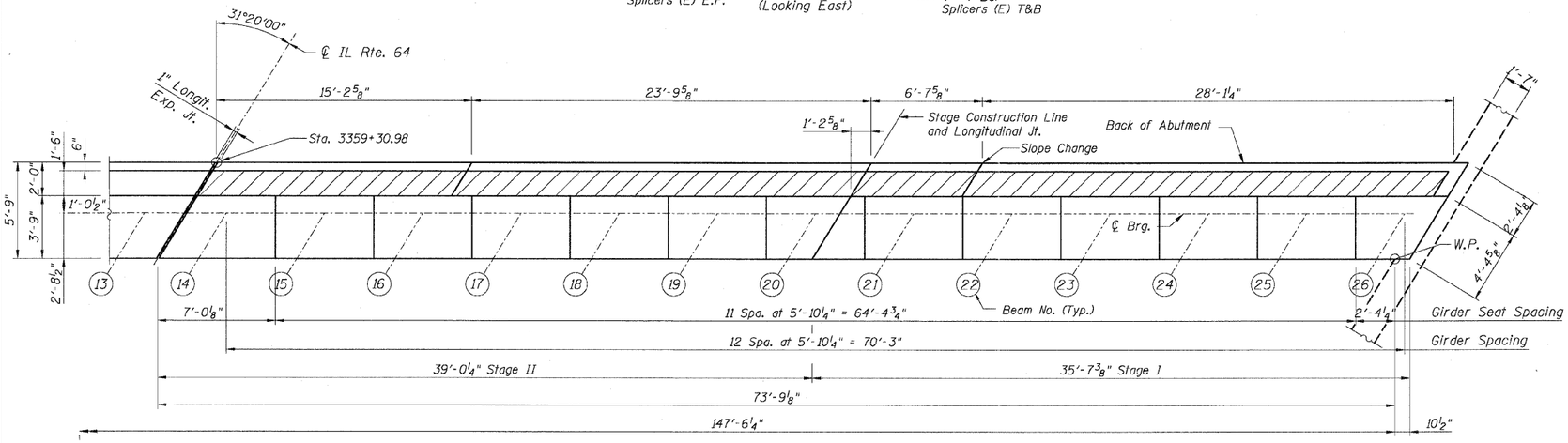
SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: MJP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

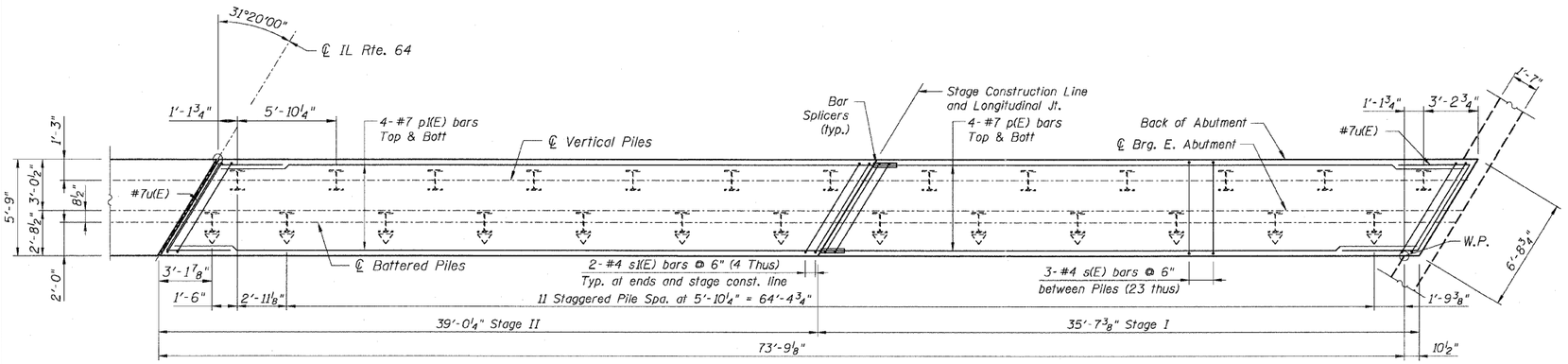
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	483
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410





TOP VIEW



PLAN-PILE CAP
(East Bound)

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 75'
Piles Required: 26

Denotes Vertical Pile

Denotes Battered Pile

BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	Step Height
14	787.03	1 1/4"
15	786.92	1 1/4"
16	786.81	1 3/8"
17	786.70	1 3/8"
18	786.59	1 3/8"
19	786.48	1 3/8"
20	786.37	1 3/8"
21	786.25	1 1/2"
22	786.13	1 5/8"
23	785.99	1 5/8"
24	785.85	1 5/8"
25	785.71	1 3/4"
26	785.57	--

NOTES:

1. In areas of existing embankment, piles shall be driven through 18 in. diameter precored holes extending to elevation 760.00.

   If piles are driven prior to installation of new embankment, piles shall be driven through 18 in. diameter precored holes extending to elevation 745.00.

   Precored holes shall be constructed in accordance with Article 512.09(c) of the Standard Specifications. Cost included in Driving Piles.

2. For Expansion Joint details see Sheet B41.
3. See Sheet B51 for HP Pile Encasement.
4. Hatched area to be poured after Superstructure falsework has been removed. Concrete quantity is included with Concrete Superstructure.
5. Pour steps monolithically with cap.
6. Space reinforcement to miss anchor bolts.
7. Concrete Sealer shall be applied to the area of the bearing seats, backwall, and the exposed portion of the abutment pile caps.
8. Work sheets B37 thru B41 together.

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

EAST ABUTMENT (EB) PLANS AND ELEVATION

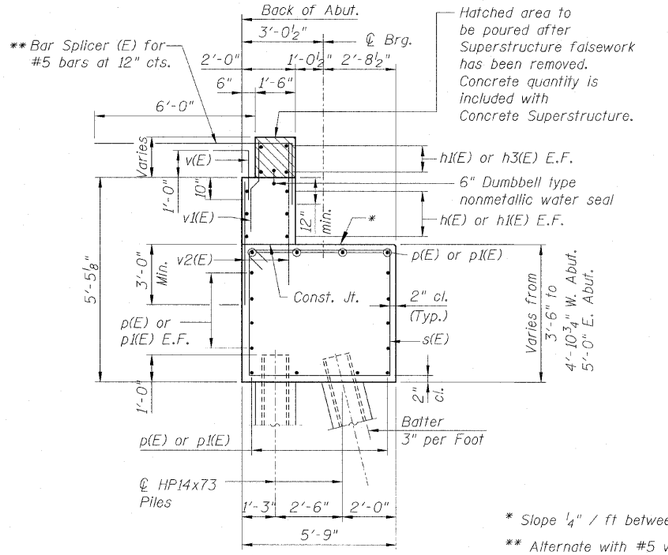
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: MAY 13, 2011 CHECKED BY: MJP

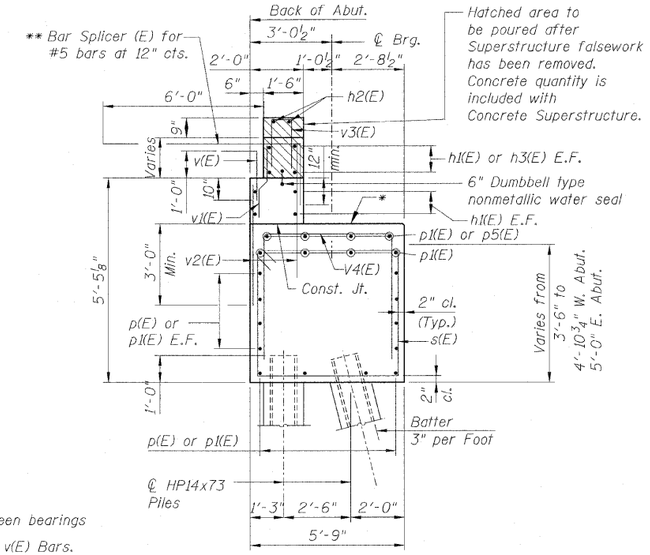
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	484
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION B-B



SECTION C-C

* Slope ¼" / ft between bearings

** Alternate with #5 v(E) Bars. Place parallel to the beams.

Note: Additional bars in steps not shown in Section B-B.

EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#5	34'-9"	
h_1(E)	16	#5	38'-7"	
h_2(E)	4	#5	14'-10"	
h_3(E)	8	#5	34'-0"	
p(E)	32	#7	34'-9"	
p_1(E)	36	#7	38'-7"	
p_3(E)	4	#7	21'-0"	
p_4(E)	4	#7	26'-2"	
p_5(E)	4	#7	18'-4"	
s(E)	138	#4	17'-11"	
s_1(E)	16	#4	19'-9"	
u(E)	26	#7	15'-0"	
u_1(E)	12	#5	7'-5"	
u_2(E)	8	#5	5'-4"	
v(E)	120	#5	3'-4"	
v_1(E)	148	#4	3'-1"	
v_2(E)	148	#4	4'-10"	
v_3(E)	26	#4	5'-2"	
v_4(E)	99	#5	8'-8"	

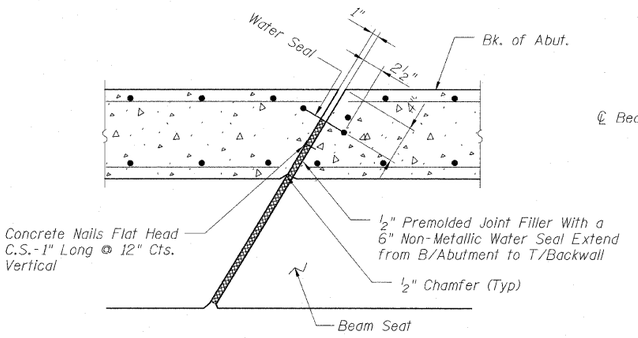
Item	Unit	Quantity
Structure Excavation	Cu. Yd.	0
Concrete Structures	Cu. Yd.	148.8
Reinforcement Bars, Epoxy Coated	Pound	12,060
Porous Granular Embankment, Special	Cu. Yd.	248.5
Furnishing Steel Piles HP14x73	Foot	3,825
Driving Piles	Foot	3,825
Test Pile HP14x73	Each	1
Pile Shoes	Each	52
Concrete Sealer	Sq. Ft.	1335
Geocomposite Wall Drain	Sq. Yd.	90
Pipe Underdrains for Structures 4"	Foot	149.5
Concrete Encasement	Cu. Yd.	27.5

WEST ABUTMENT BILL OF MATERIAL

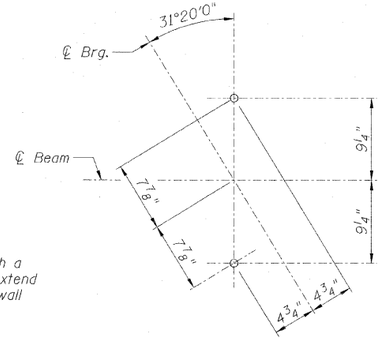
Bar	No.	Size	Length	Shape
h(E)	12	#5	34'-9"	
h_1(E)	16	#5	38'-7"	
h_2(E)	4	#5	14'-10"	
h_3(E)	8	#5	34'-0"	
p(E)	32	#7	34'-9"	
p_1(E)	36	#7	38'-7"	
p_3(E)	4	#7	21'-0"	
p_4(E)	4	#7	26'-2"	
p_5(E)	4	#7	18'-4"	
s(E)	138	#4	17'-11"	
s_1(E)	16	#4	19'-9"	
u(E)	26	#7	15'-0"	
u_1(E)	12	#5	7'-5"	
u_2(E)	8	#5	5'-4"	
v(E)	120	#5	3'-4"	
v_1(E)	148	#4	3'-1"	
v_2(E)	148	#4	4'-10"	
v_3(E)	26	#4	5'-2"	
v_4(E)	99	#5	8'-8"	

Item	Unit	Quantity
Structure Excavation	Cu. Yd.	0
Concrete Structures	Cu. Yd.	148.8
Reinforcement Bars, Epoxy Coated	Pound	12,060
Porous Granular Embankment, Special	Cu. Yd.	248.5
Furnishing Steel Piles HP14x73	Foot	3,162
Driving Piles	Foot	3,162
Test Pile HP14x73	Each	1
Pile Shoes	Each	52
Concrete Sealer	Sq. Ft.	1335
Geocomposite Wall Drain	Sq. Yd.	90
Pipe Underdrains for Structures 4"	Foot	149.5
Concrete Encasement	Cu. Yd.	27.5

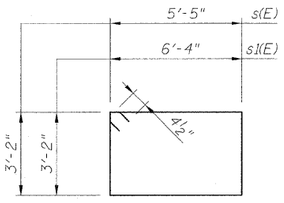
Note: Structure Excavation is not required at Abutments because the existing grade is below the bottom of the Abutments.



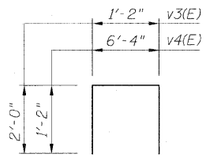
EXPANSION JOINT DETAIL



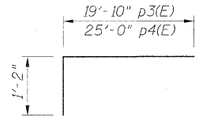
ANCHOR BOLT LOCATION DETAIL



BARS s(E) & s1(E)

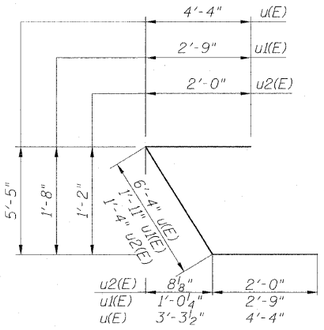


BARS v3(E) & v4(E)

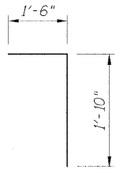


BARS p3(E), p4(E)

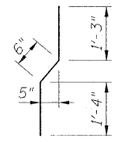
Cut to fit



BARS u(E), u1(E) & u2(E)



BAR v(E)



BAR v1(E)

NOTES:

1. Work sheets B37 thru B41 together.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

WB & EB ABUTMENTS SECTIONS & DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD

DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

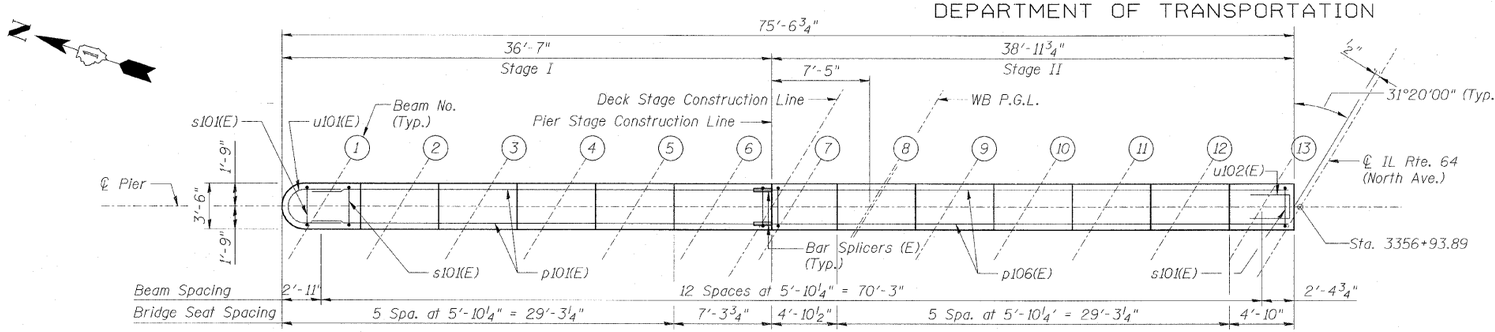
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	485
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

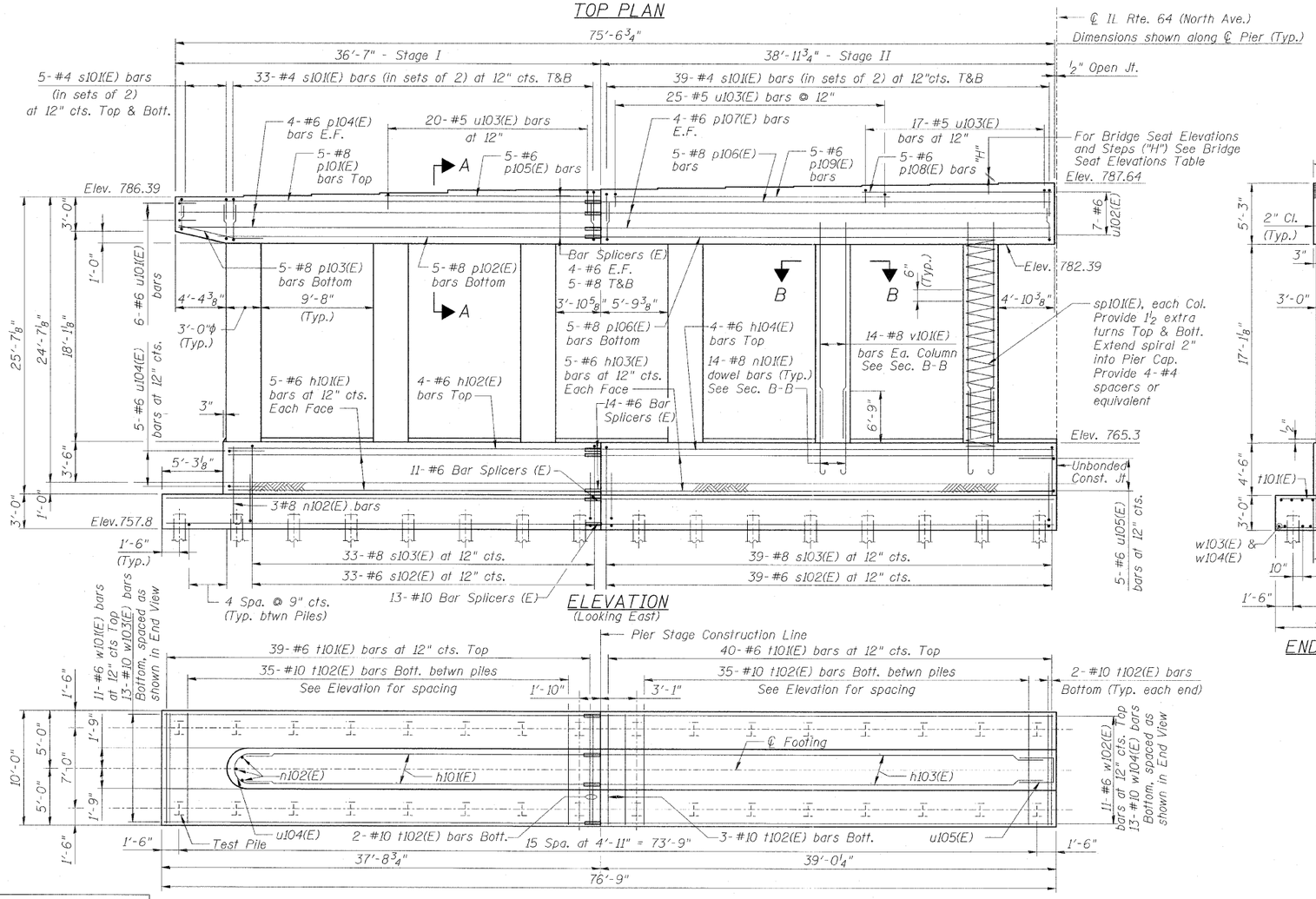
PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 45'
Piles Required: 31
Test Piles: 1

BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	Step "H"
1	786.39	- -
2	786.52	1 1/2"
3	786.64	1 1/2"
4	786.76	1 1/2"
5	786.86	1 1/4"
6	786.98	1 3/8"
7	787.07	1 1/8"
8	787.17	1 1/8"
9	787.27	1 1/8"
10	787.36	1 1/8"
11	787.45	1 1/8"
12	787.55	1 1/8"
13	787.64	1 1/8'

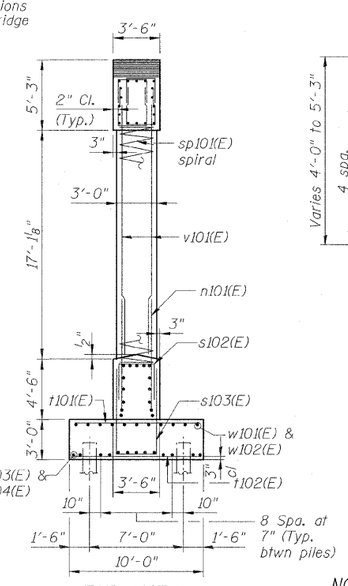


TOP PLAN

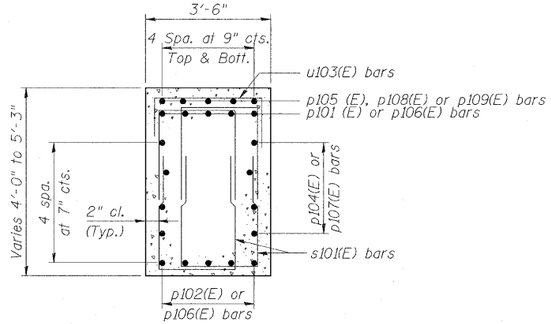


ELEVATION
(Looking East)

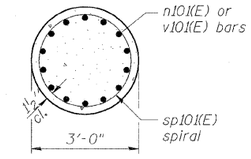
FOOTING PLAN



END VIEW



SECTION A-A



SECTION B-B

NOTES:

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. See Sheet B44 for Details and Bill of Material.
4. Work Sheets B42 thru B44 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
WB PIER 1
PLANS & ELEVATION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	486
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

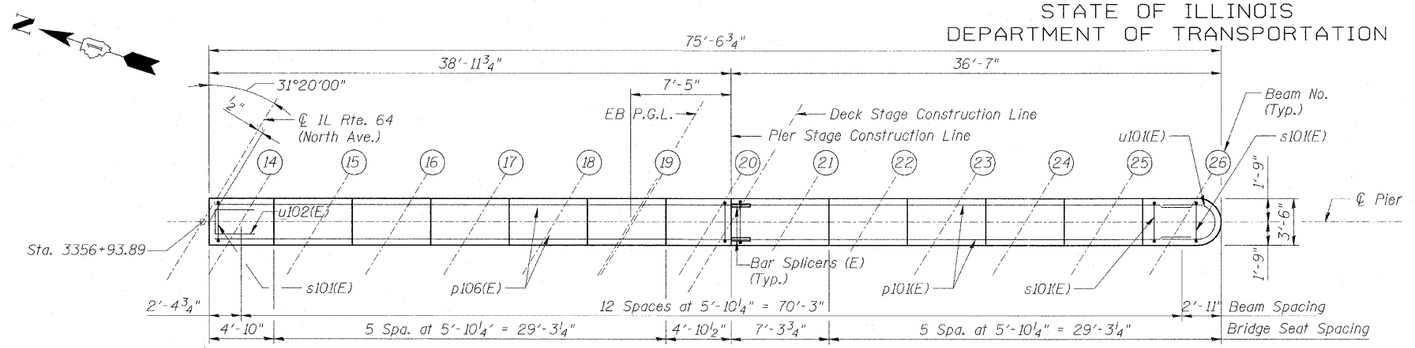
62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

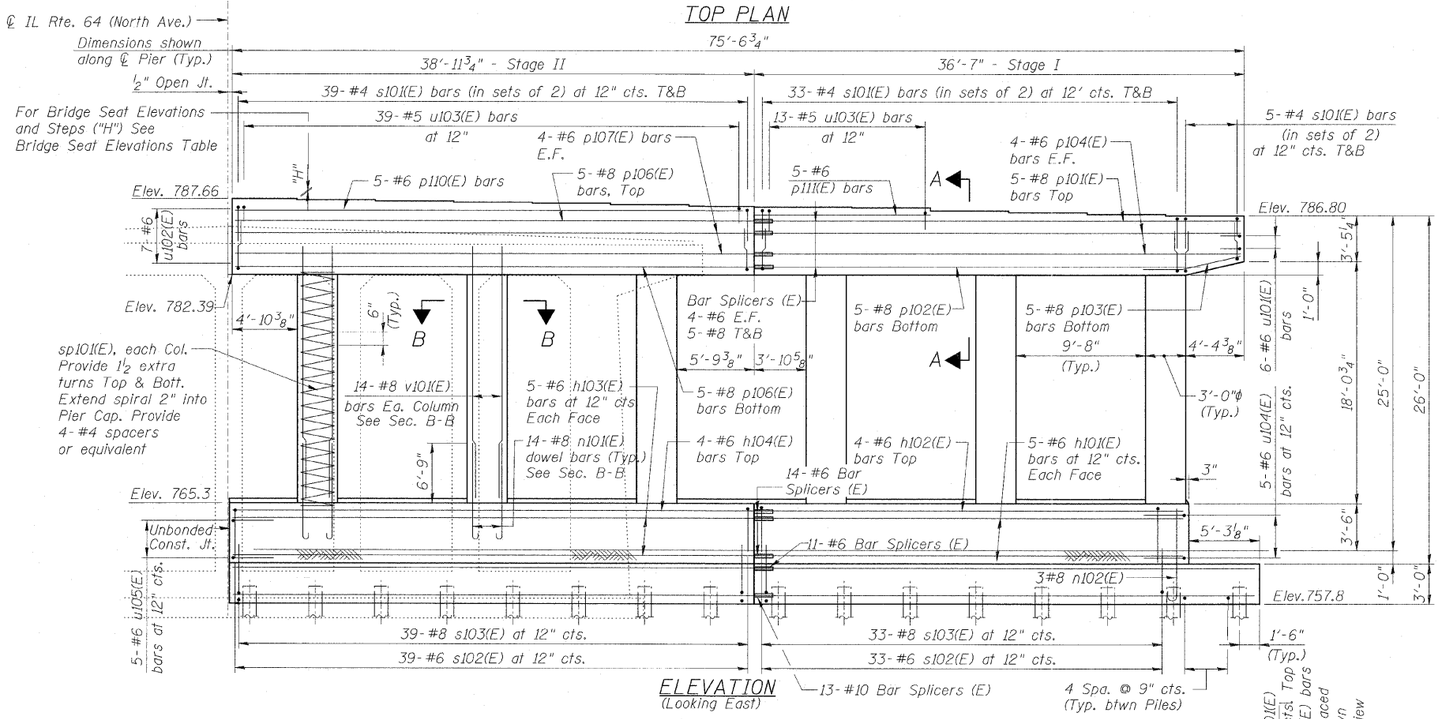
PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 45'
Piles Required: 32

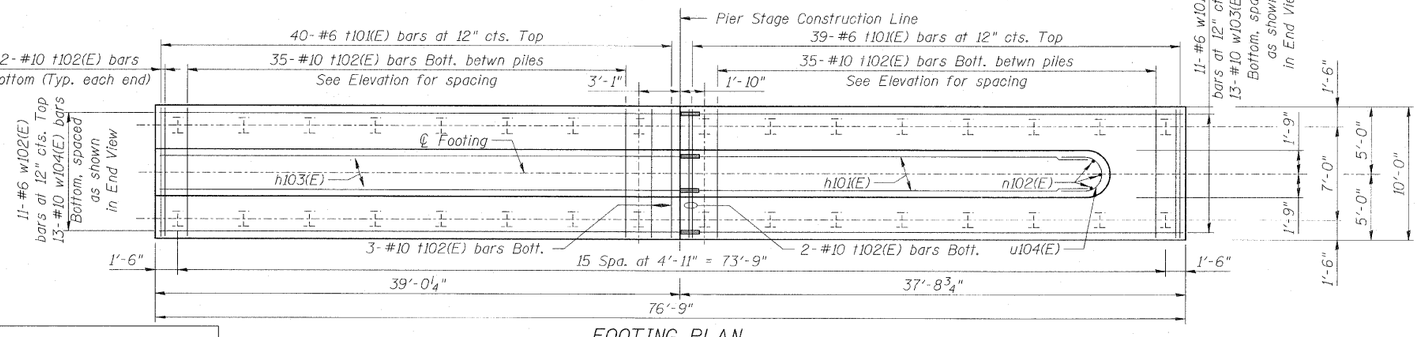
BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	Step "H"
14	787.66	3/4"
15	787.60	3/4"
16	787.54	3/4"
17	787.48	3/4"
18	787.42	3/4"
19	787.36	3/4"
20	787.30	3/4"
21	787.23	7/8"
22	787.16	1/8"
23	787.07	1/8"
24	786.98	1/8"
25	786.89	1/8"
26	786.80	---



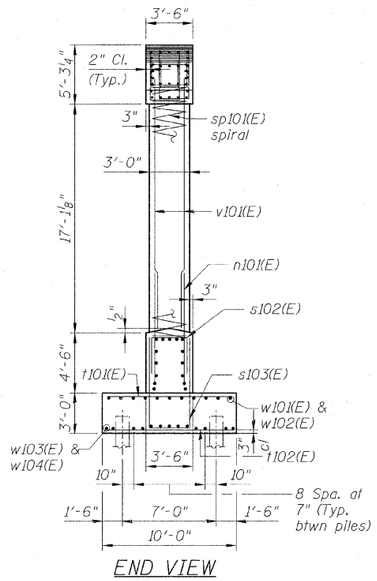
TOP PLAN



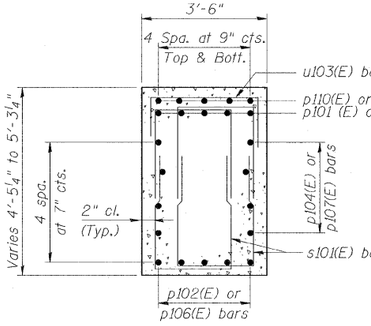
ELEVATION
(Looking East)



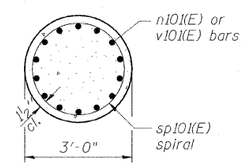
FOOTING PLAN



END VIEW



SECTION A-A



SECTION B-B

NOTES:

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. See Sheet B44 for Details and Bill of Material.
4. Work Sheets B42 thru B44 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
EB PIER 1
PLANS & ELEVATION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

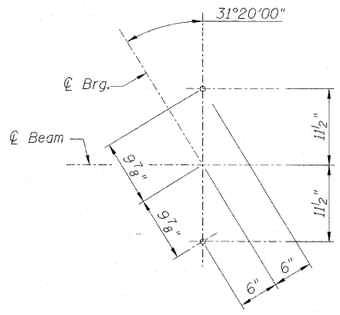
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

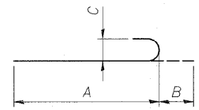
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	487
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

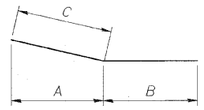
62410



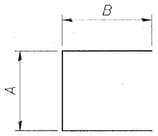
ANCHOR BOLT LOCATION



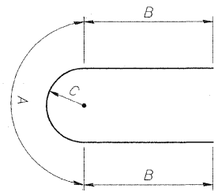
BARS n101(E) & n102(E)



BAR p103(E)



BARS s101(E), s102(E), s103(E)
u102(E), u103(E) & u105(E)



BARS u101(E) & u104(E)

A, B & C DIMENSIONS

Bar	A	B	C
n101(E)	9'-3"	11"	8"
n102(E)	7'-0"	11"	8"
p103(E)	4'-4⅝"	4'-6"	4'-6"
s101(E)	2'-5"	2'-8"	-
s102(E)	3'-2"	2'-8"	-
s103(E)	3'-2"	7'-2"	-
u101(E)	4'-11½"	3'-10"	1'-7"
u102(E)	3'-2"	3'-10"	-
u103(E)	3'-2"	1'-8"	-
u104(E)	4'-11½"	3'-10"	1'-7"
u105(E)	3'-2"	3'-10"	-

WB PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h101(E)	10	#6	30'-8"	
h102(E)	4	#6	30'-8"	
h103(E)	10	#6	38'-8"	
h104(E)	4	#6	38'-8"	
n101(E)	84	#8	10'-2"	
n102(E)	3	#8	7'-11"	
p101(E)	5	#8	34'-10"	
p102(E)	5	#8	32'-1"	
p103(E)	5	#8	9'-0"	
p104(E)	8	#6	34'-10"	
p105(E)	5	#6	18'-10"	
p106(E)	10	#8	38'-8"	
p107(E)	8	#6	38'-8"	
p108(E)	5	#6	16'-4"	
p109(E)	5	#6	24'-8"	
s101(E)	308	#4	7'-9"	
s102(E)	72	#6	8'-6"	
s103(E)	72	#8	17'-6"	
* sp101(E)	6	#4	17'-5"	
t101(E)	79	#6	9'-8"	
t102(E)	79	#10	9'-8"	
u101(E)	6	#6	12'-8"	
u102(E)	7	#6	10'-10"	
u103(E)	62	#5	6'-6"	
u104(E)	5	#6	12'-8"	
u105(E)	5	#6	10'-10"	
v101(E)	84	#8	20'-0"	
w101(E)	11	#6	37'-5"	
w102(E)	11	#6	38'-8"	
w103(E)	13	#10	37'-5"	
w104(E)	13	#10	38'-8"	

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	29,590
Concrete Structures	Cu Yd	199.3
Structure Excavation	Cu Yd	163.4
Furnishing Steel Piles HP14x73	Foot	1,395
Driving Piles	Foot	1,395
Test Pile Steel HP14x73	Each	1
Pile Shoes	Each	32
Concrete Encasement	Cu Yd	16.9

* Length is height of spiral

EB PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h101(E)	10	#6	30'-8"	
h102(E)	4	#6	30'-8"	
h103(E)	10	#6	38'-8"	
h104(E)	4	#6	38'-8"	
n101(E)	84	#8	10'-2"	
n102(E)	3	#8	7'-11"	
p101(E)	5	#8	34'-10"	
p102(E)	5	#8	32'-1"	
p103(E)	5	#8	9'-0"	
p104(E)	8	#6	34'-10"	
p106(E)	10	#8	38'-8"	
p107(E)	8	#6	38'-8"	
p110(E)	5	#6	38'-8"	
p111(E)	5	#6	12'-10"	
s101(E)	308	#4	7'-9"	
s102(E)	72	#6	8'-6"	
s103(E)	72	#8	17'-6"	
* sp101(E)	6	#4	17'-5"	
t101(E)	79	#6	9'-8"	
t102(E)	79	#10	9'-8"	
u101(E)	6	#6	12'-8"	
u102(E)	7	#6	10'-10"	
u103(E)	52	#5	6'-6"	
u104(E)	5	#6	12'-8"	
u105(E)	5	#6	10'-10"	
v101(E)	84	#8	20'-0"	
w101(E)	11	#6	37'-5"	
w102(E)	11	#6	38'-8"	
w103(E)	13	#10	37'-5"	
w104(E)	13	#10	38'-8"	

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	29,460
Concrete Structures	Cu Yd	199.2
Structure Excavation	Cu Yd	163.4
Furnishing Steel Piles HP14x73	Foot	1,440
Driving Piles	Foot	1,440
Pile Shoes	Each	32
Concrete Encasement	Cu Yd	16.9

NOTES:

1. Cast steps monolithically with cap.
2. Space cap reinforcement to miss anchor bolts.
3. Work sheets B42 thru B44 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
PIER 1
SECTIONS & DETAILS
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

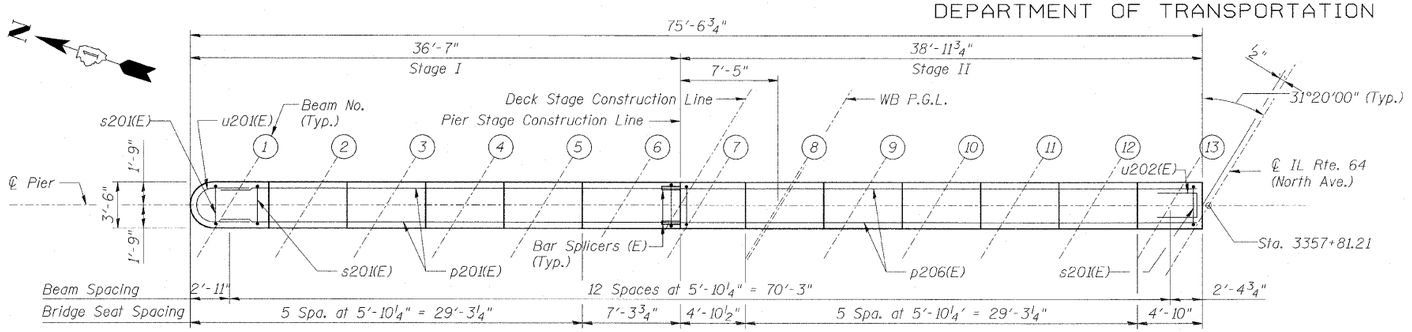
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

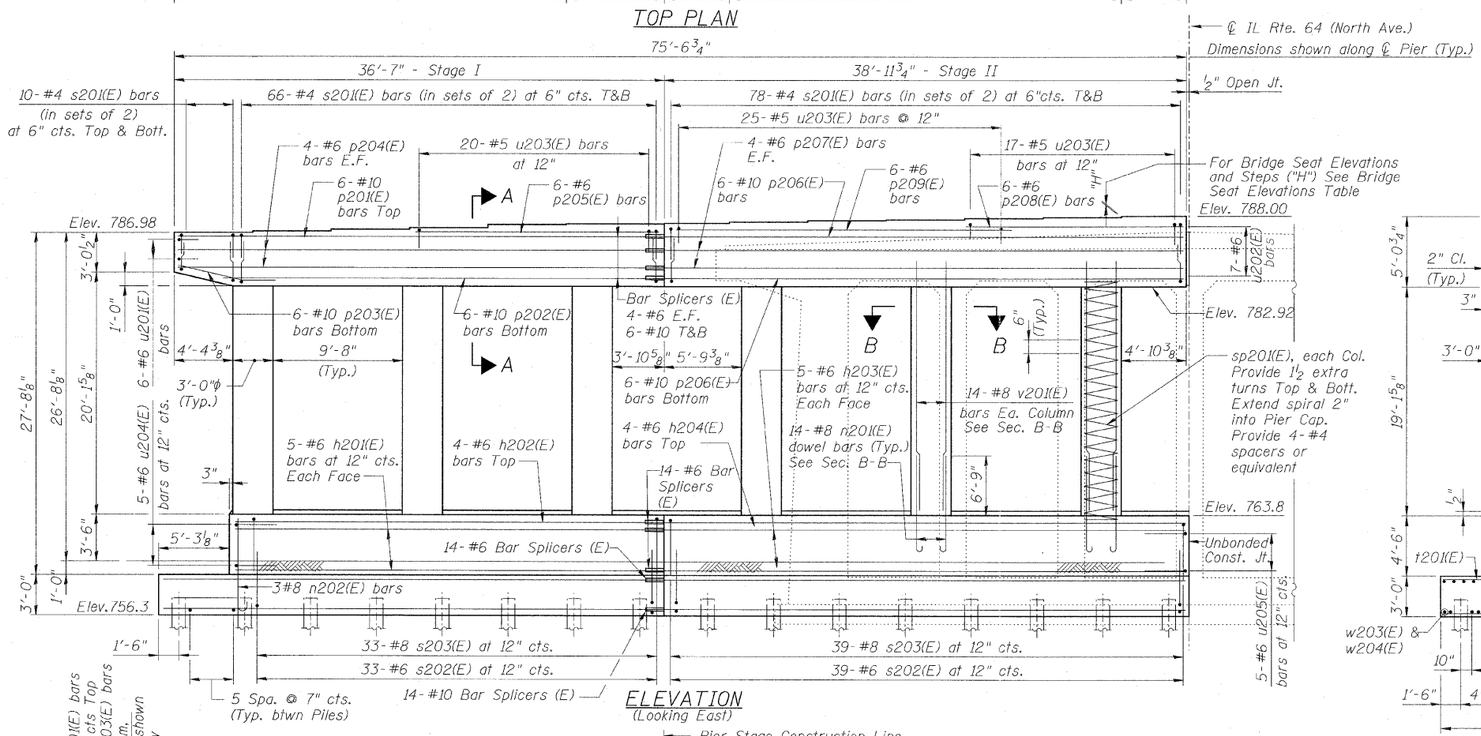
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	488
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

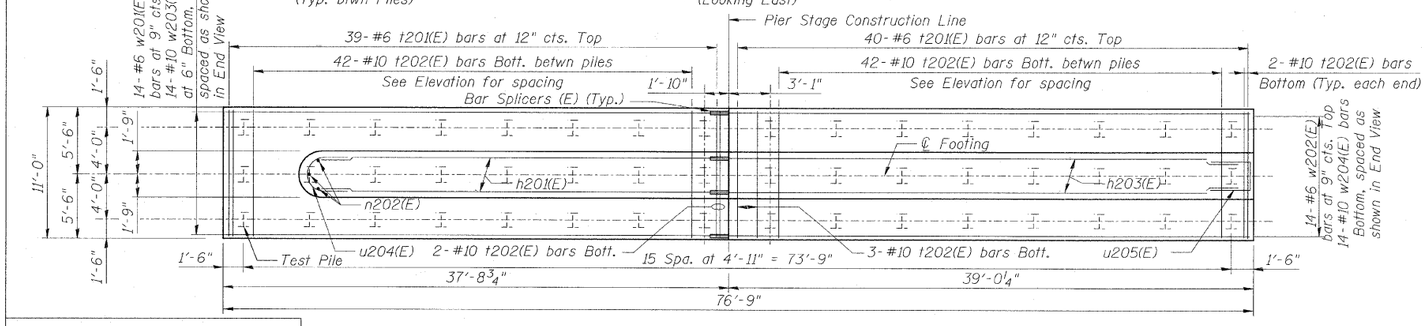
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



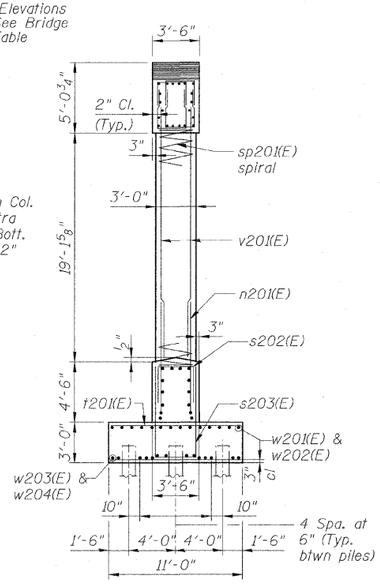
TOP PLAN



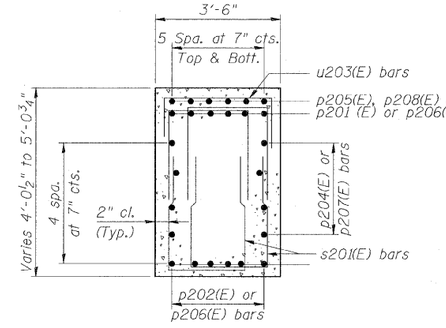
ELEVATION
(Looking East)



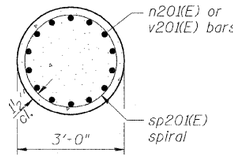
FOOTING PLAN



END VIEW



SECTION A-A



SECTION B-B

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 45'
Piles Required: 47
Test Piles: 1

BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	Step "H"
1	786.98	---
2	787.08	1 1/4"
3	787.19	1 1/4"
4	787.29	1 1/4"
5	787.38	1"
6	787.47	1 1/8"
7	787.55	1"
8	787.63	7/8"
9	787.70	1"
10	787.78	7/8"
11	787.85	7/8"
12	787.93	7/8"
13	788.00	1"

NOTES:

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. See Sheet B47 for Details and Bill of Material.
4. Work Sheets B45 thru B47 together.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
WB PIER 2
PLANS & ELEVATION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

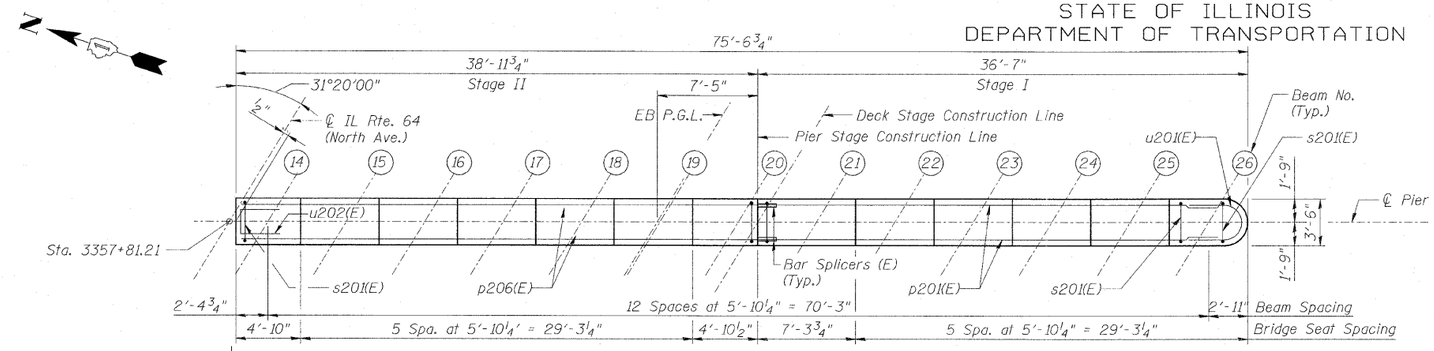
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

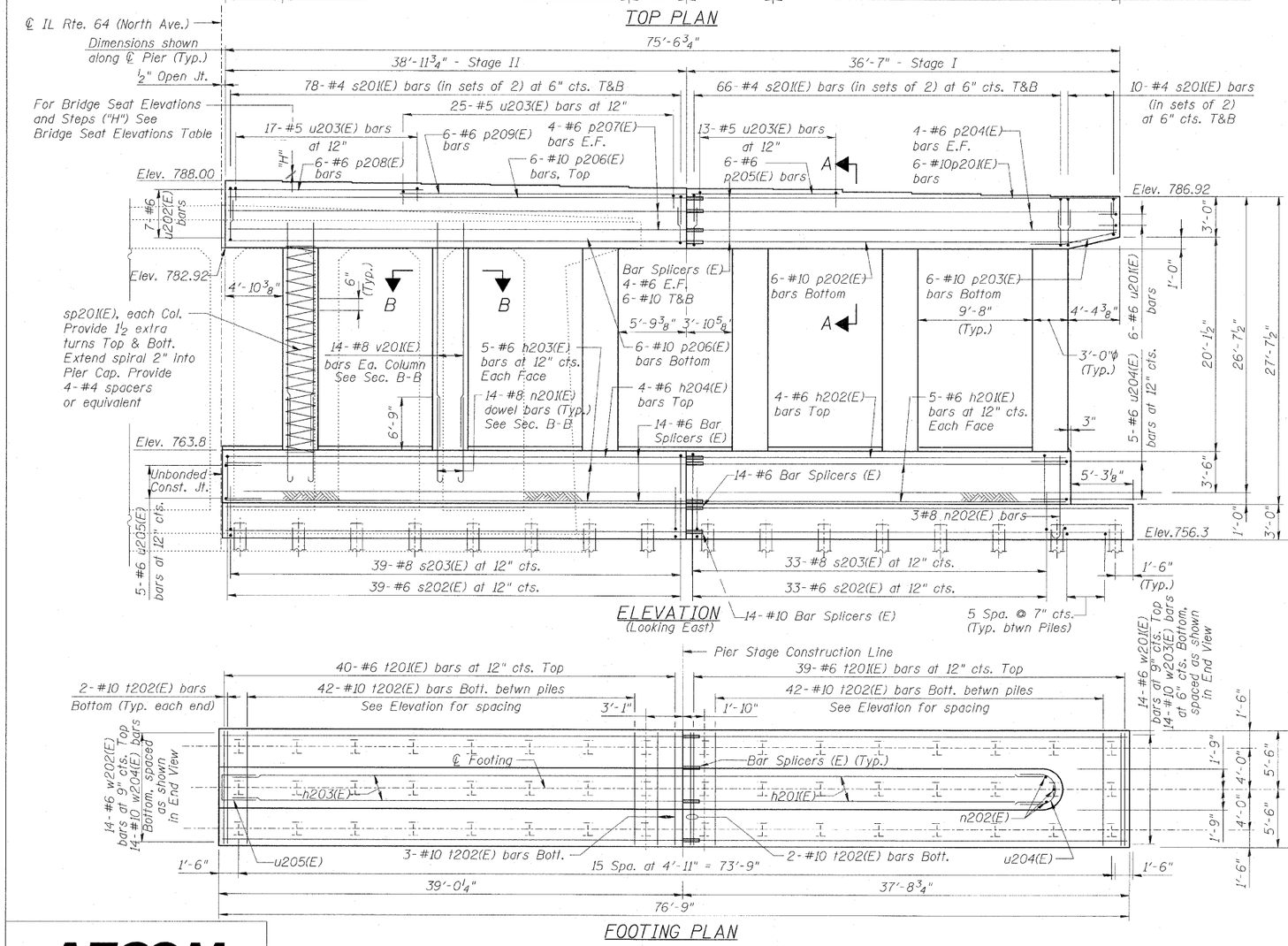
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	489
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

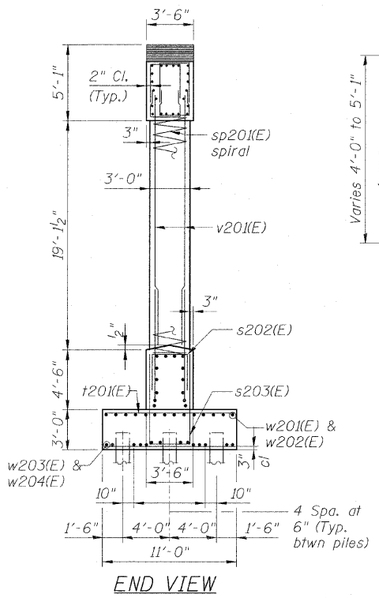


TOP PLAN

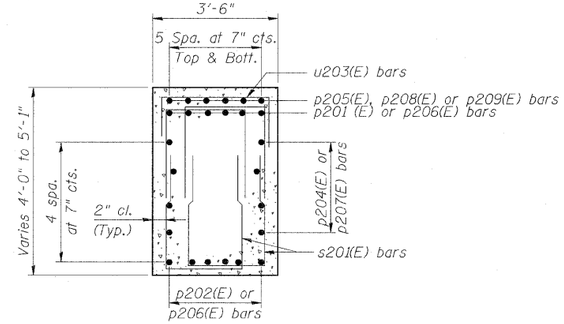


ELEVATION
(Looking East)

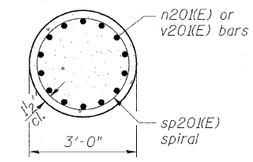
FOOTING PLAN



END VIEW



SECTION A-A



SECTION B-B

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 45'
Piles Required: 48

BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	"H"
14	788.00	7/8"
15	787.92	7/8"
16	787.85	1"
17	787.77	1"
18	787.69	1"
19	787.61	1"
20	787.53	1"
21	787.45	1 1/8"
22	787.35	1 1/4"
23	787.24	1 1/4"
24	787.14	1 1/4"
25	787.03	1 3/8"
26	786.92	---

NOTES:

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. See Sheet B47 for Details and Bill of Material.
4. Work Sheets B45 thru B47 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
EB PIER 2
PLANS & ELEVATION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

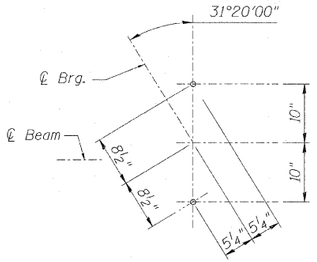
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

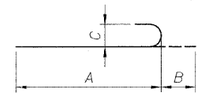
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	490
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

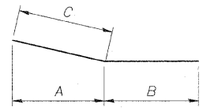
62410



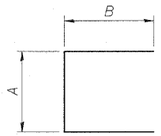
ANCHOR BOLT LOCATION



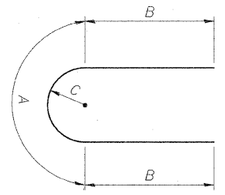
BARS n201(E) & n202(E)



BAR p203(E)



BARS s201(E), s202(E), s203(E)
u202(E), u203(E) & u205(E)



BARS u201(E) & u204(E)

A, B & C DIMENSIONS

Bar	A	B	C
n201(E)	9'-3"	11"	8"
p203(E)	4'-4⅝"	4'-6"	4'-6"
s201(E)	2'-5"	2'-8"	-
s202(E)	3'-2"	2'-8"	-
s203(E)	3'-2"	7'-2"	-
u201(E)	4'-11½"	3'-10"	1'-7"
u202(E)	3'-2"	3'-10"	-
u203(E)	3'-2"	1'-8"	-
u204(E)	4'-11½"	3'-10"	1'-7"
u205(E)	3'-2"	3'-10"	-

WB PIER 2
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h201(E)	10	#6	30'-8"	
	h202(E)	4	#6	30'-8"	
	h203(E)	10	#6	38'-8"	
	h204(E)	4	#6	38'-8"	
	n201(E)	84	#8	10'-2"	
	n202(E)	3	#8	7'-11"	
	p201(E)	6	#10	34'-10"	
	p202(E)	6	#10	32'-1"	
	p203(E)	6	#10	9'-0"	
	p204(E)	8	#6	34'-10"	
	p205(E)	6	#6	18'-10"	
	p206(E)	12	#10	38'-8"	
	p207(E)	8	#6	38'-8"	
	p208(E)	6	#6	16'-4"	
	p209(E)	6	#6	24'-8"	
	s201(E)	616	#4	7'-9"	
	s202(E)	72	#6	8'-6"	
	s203(E)	72	#8	17'-6"	
*	sp201(E)	6	#4	19'-6"	
	t201(E)	79	#6	9'-8"	
	t202(E)	93	#10	9'-8"	
	u201(E)	6	#6	12'-8"	
	u202(E)	7	#6	10'-10"	
	u203(E)	62	#5	6'-6"	
	u204(E)	5	#6	12'-8"	
	u205(E)	5	#6	10'-10"	
	v201(E)	84	#8	22'-3"	
	w201(E)	14	#6	37'-5"	
	w202(E)	14	#6	38'-8"	
	w203(E)	14	#10	37'-5"	
	w204(E)	14	#10	38'-8"	

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	35,080
Concrete Structures	Cu Yd	209.9
Structure Excavation	Cu Yd	175
Furnishing Steel Piles HP14x73	Foot	2,115
Driving Piles	Foot	2,115
Test Pile Steel HP14x73	Each	1
Pile Shoes	Each	48
Concrete Encasement	Cu Yd	25.4

EB PIER 2
BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h201(E)	10	#6	30'-8"	
	h202(E)	4	#6	30'-8"	
	h203(E)	10	#6	38'-8"	
	h204(E)	4	#6	38'-8"	
	n201(E)	84	#8	10'-2"	
	n202(E)	3	#8	7'-11"	
	p201(E)	6	#10	34'-10"	
	p202(E)	6	#10	32'-1"	
	p203(E)	6	#10	9'-0"	
	p204(E)	8	#6	34'-10"	
	p205(E)	6	#6	18'-10"	
	p206(E)	12	#10	38'-8"	
	p207(E)	8	#6	38'-8"	
	p208(E)	6	#6	16'-4"	
	p209(E)	6	#6	24'-8"	
	s201(E)	616	#4	7'-9"	
	s202(E)	72	#6	8'-6"	
	s203(E)	72	#8	17'-6"	
*	sp201(E)	6	#4	19'-6"	
	t201(E)	79	#6	9'-8"	
	t202(E)	93	#10	9'-8"	
	u201(E)	6	#6	12'-8"	
	u202(E)	7	#6	10'-10"	
	u203(E)	55	#5	6'-6"	
	u204(E)	5	#6	12'-8"	
	u205(E)	5	#6	10'-10"	
	v201(E)	84	#8	22'-3"	
	w201(E)	14	#6	37'-5"	
	w202(E)	14	#6	38'-8"	
	w203(E)	14	#10	37'-5"	
	w204(E)	14	#10	38'-8"	

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	35,220
Concrete Structures	Cu Yd	209.9
Structure Excavation	Cu Yd	175
Furnishing Steel Piles HP14x73	Foot	2,160
Driving Piles	Foot	2,160
Test Pile Steel HP14x73	Each	0
Pile Shoes	Each	48
Concrete Encasement	Cu Yd	25.4

* Length is height of spiral

NOTES:

1. Cast steps monolithically with cap.
2. Space cap reinforcement to miss anchor bolts.
3. Work sheets B45 thru B47 together.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
PIER 2
SECTIONS & DETAILS
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

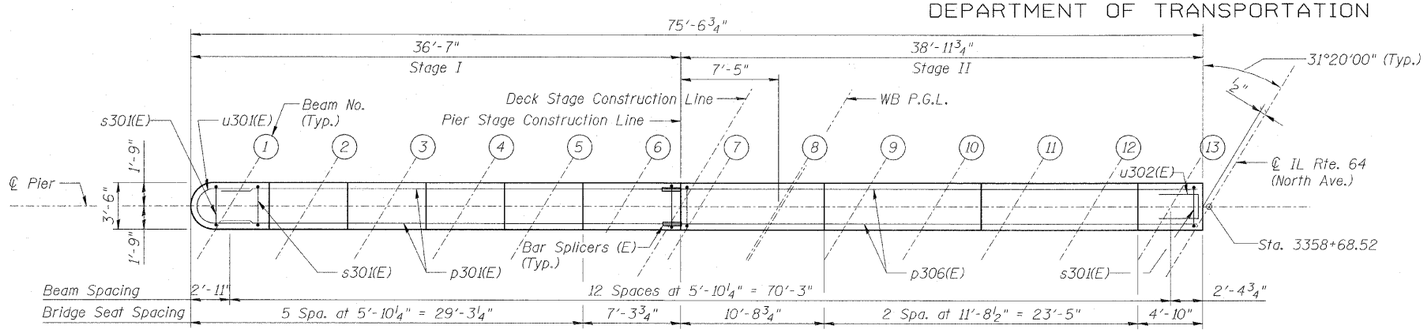
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

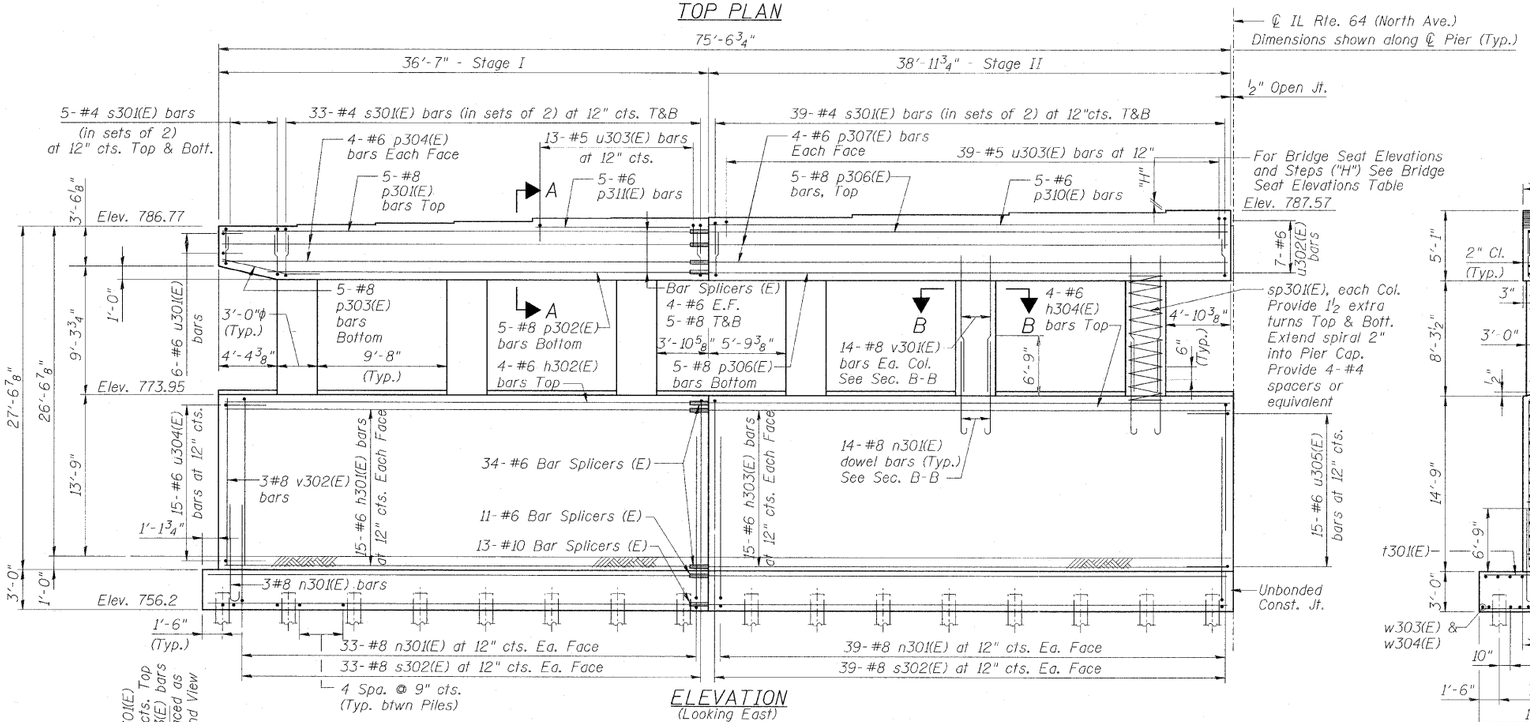
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	491
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

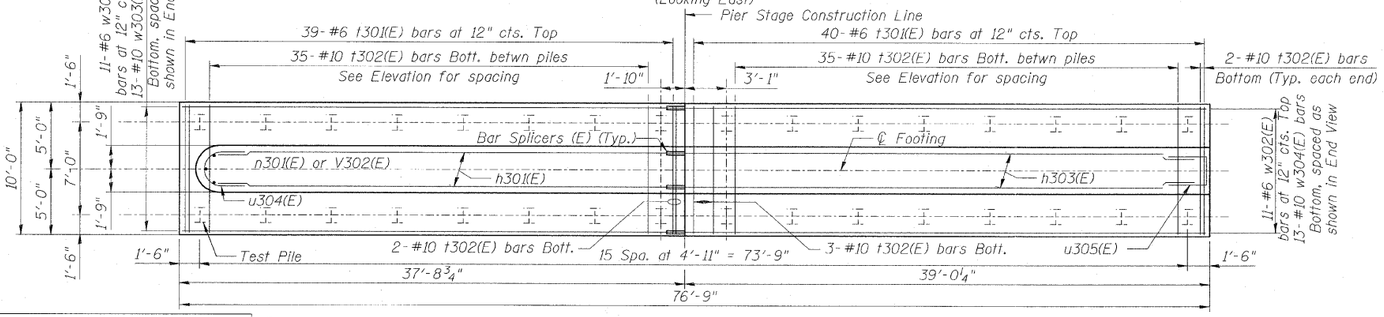
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



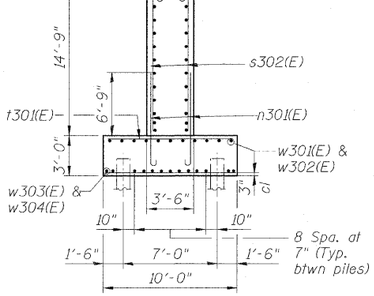
TOP PLAN



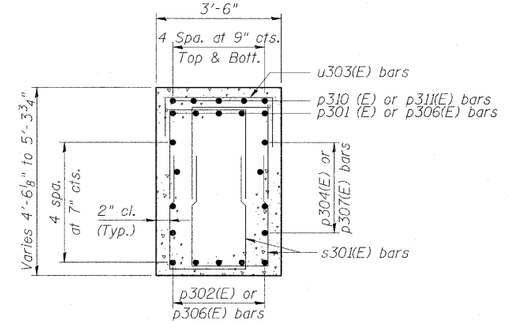
ELEVATION
(Looking East)



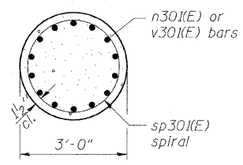
FOOTING PLAN



END VIEW



SECTION A-A



SECTION B-B

PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 45'
Piles Required: 31
Test Piles: 1

BEARING SEAT ELEVATIONS

Beam No.	℄ Brg.	Step "H"	Shim Height
1	786.77	---	--
2	786.85	1"	--
3	786.94	1"	--
4	787.03	1"	--
5	787.09	7/8"	--
6	787.17	7/8"	--
7	787.23	3/4"	--
8	787.23	0"	5/8"
9	787.35	1 3/8"	--
10	787.35	0"	5/8"
11	787.46	1 3/8"	--
12	787.46	0"	5/8"
13	787.57	1 3/8"	--

NOTES:

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. See Sheet B50 for Superstructure Details and Bill of Material.
4. Work Sheets B48 thru B50 together.

Sheet B48 of 56

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
WB PIER 3
PLANS & ELEVATION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

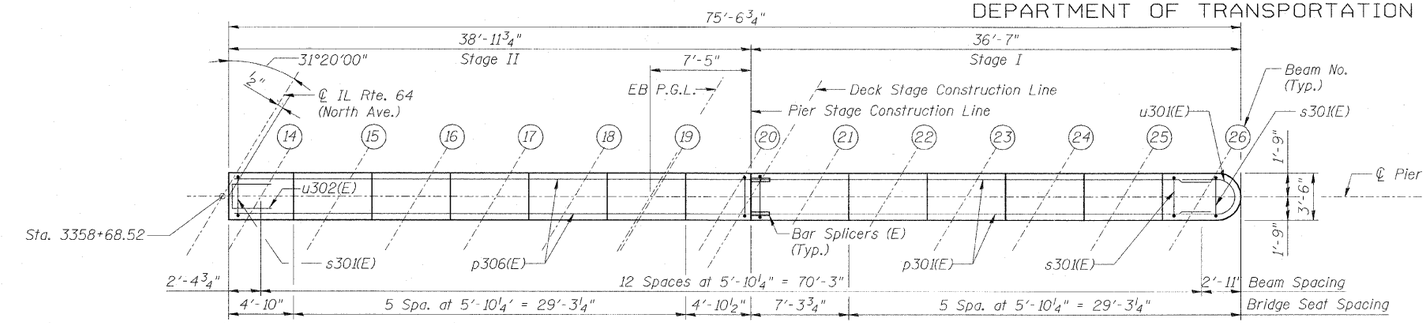
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	492
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

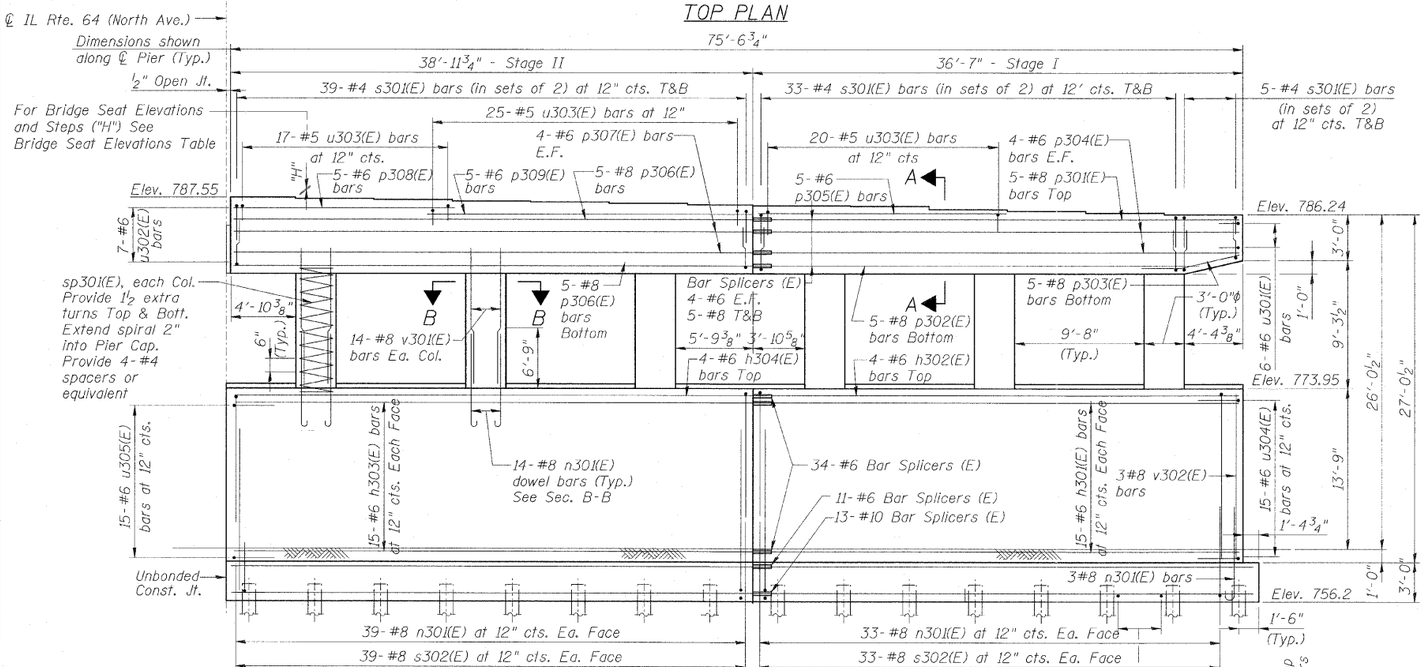
PILE DATA:

Type: Steel HP 14x73 w/ Pile Shoes
Nominal Required Bearing: 240 Kips
Factored Resistance Available: 120 Kips
Est. Length: 45'
Piles Required: 32

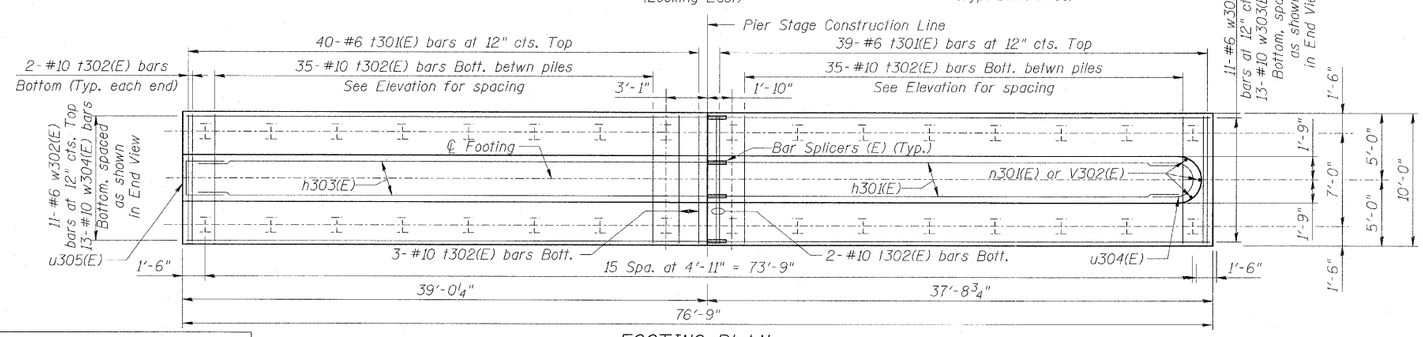
BEARING SEAT ELEVATIONS		
Beam No.	℄ Brg.	Step "H"
14	787.55	1⅛"
15	787.46	1⅛"
16	787.36	1⅛"
17	787.26	1⅛"
18	787.17	1¼"
19	787.07	1¼"
20	786.97	1¼"
21	786.87	1⅜"
22	786.75	1½"
23	786.63	1½"
24	786.50	1½"
25	786.37	1½"
26	786.24	---



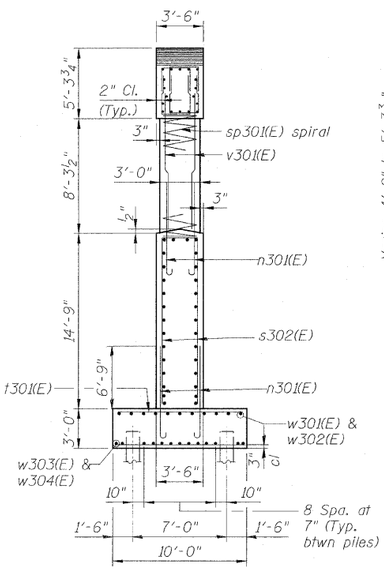
TOP PLAN



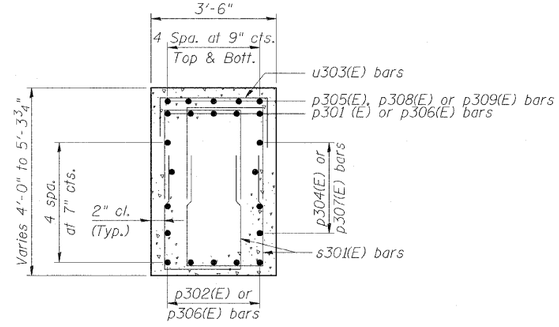
ELEVATION
(Looking East)



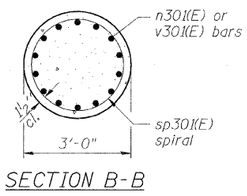
FOOTING PLAN



END VIEW



SECTION A-A



SECTION B-B

NOTES:

1. Reinforcement Bars designated (E) shall be epoxy coated.
2. Bars indicated thus 26x7-#5 etc. indicates 26 lines of bars with 7 lengths per line.
3. See Sheet B50 for Details and Bill of Material.
4. Work Sheets B48 thru B50 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
EB PIER 3
PLANS & ELEVATION
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

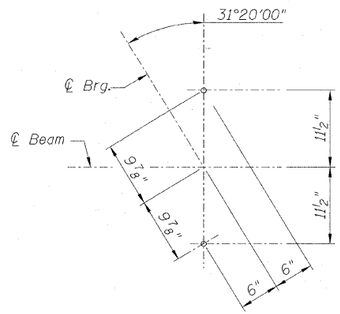
SCALE: None DRAWN BY: CHD
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

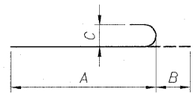
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	493
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

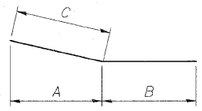
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



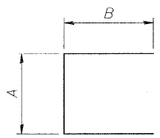
ANCHOR BOLT LOCATION



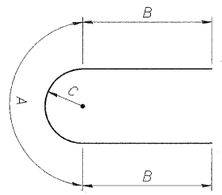
BAR n301(E)



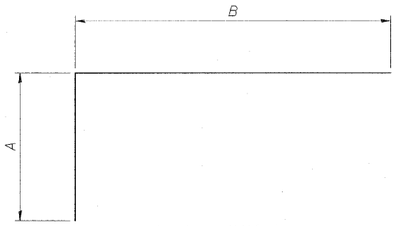
BAR p303(E)



BARS s301(E), u302(E), u303(E) & u305(E)



BARS u301(E) & u304(E)



BAR s302(E)

A, B & C DIMENSIONS

Bar	A	B	C
n301(E)	9'-3"	11"	8"
p303(E)	4'-4 5/8"	4'-6"	4'-6"
s301(E)	2'-5"	2'-8"	-
s302(E)	3'-2"	14'-5"	-
u301(E)	4'-11½"	3'-10"	1'-7"
u302(E)	3'-2"	3'-10"	-
u303(E)	3'-2"	1'-8"	-
u304(E)	4'-11½"	3'-10"	1'-7"
u305(E)	3'-2"	3'-10"	-

WB PIER 3 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h301(E)	30	#6	34'-10"	
h302(E)	4	#6	34'-10"	
h303(E)	30	#6	38'-8"	
h304(E)	4	#6	38'-8"	
n301(E)	231	#8	10'-2"	
p301(E)	5	#8	34'-10"	
p302(E)	5	#8	32'-1"	
p303(E)	5	#8	9'-0"	
p304(E)	8	#6	34'-10"	
p306(E)	10	#8	38'-8"	
p307(E)	8	#6	38'-8"	
p310(E)	5	#6	38'-8"	
p311(E)	5	#6	12'-10"	
s301(E)	308	#4	7'-9"	
s302(E)	144	#8	17'-7"	
* sp301(E)	6	#4	8'-7"	
t301(E)	79	#6	9'-8"	
t302(E)	79	#10	9'-8"	
u301(E)	6	#6	12'-8"	
u302(E)	7	#6	10'-10"	
u303(E)	52	#5	6'-6"	
u304(E)	15	#6	12'-8"	
u305(E)	15	#6	10'-10"	
v301(E)	84	#8	11'-5"	
v302(E)	3	#8	13'-6"	
w301(E)	11	#6	37'-5"	
w302(E)	11	#6	38'-8"	
w303(E)	13	#10	37'-5"	
w304(E)	13	#10	38'-8"	

Item	Unit	Quantity
Reinforcement Bars Epoxy Coated	Pound	36,230
Concrete Structures	Cu Yd	285.5
Structure Excavation	Cu Yd	151.7
Furnishing Steel Piles HP14x73	Foot	1,395
Driving Piles	Foot	1,395
Test Pile Steel HP14x73	Each	1
Pile Shoes	Each	32
Concrete Encasement	Cu Yd	16.9

* Length is height of spiral

EB PIER 3 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h301(E)	30	#6	34'-10"	
h302(E)	4	#6	34'-10"	
h303(E)	30	#6	38'-8"	
h304(E)	4	#6	38'-8"	
n301(E)	236	#8	10'-2"	
p301(E)	5	#8	34'-10"	
p302(E)	5	#8	32'-1"	
p303(E)	5	#8	9'-0"	
p304(E)	8	#6	34'-10"	
p305(E)	5	#6	18'-10"	
p306(E)	10	#8	38'-8"	
p307(E)	8	#6	38'-8"	
p308(E)	5	#6	16'-4"	
p309(E)	5	#6	24"-8"	
s301(E)	308	#4	7'-9"	
s302(E)	144	#8	17'-7"	
* sp301(E)	6	#4	8'-7"	
t301(E)	79	#6	9'-8"	
t302(E)	79	#10	9'-8"	
u301(E)	6	#6	12'-8"	
u302(E)	7	#6	10'-10"	
u303(E)	62	#5	6'-6"	
u304(E)	15	#6	12'-8"	
u305(E)	15	#6	10'-10"	
v301(E)	84	#8	11'-5"	
v302(E)	3	#8	13'-6"	
w301(E)	11	#6	37'-5"	
w302(E)	11	#6	38'-8"	
w303(E)	13	#10	37'-5"	
w304(E)	13	#10	38'-8"	

Item	Unit	Quantity
Reinforcement Bars Epoxy Coated	Pound	36,230
Concrete Structures	Cu Yd	288.3
Structure Excavation	Cu Yd	151.7
Furnishing Steel Piles HP14x73	Foot	1,440
Driving Piles	Foot	1,440
Pile Shoes	Each	32
Concrete Encasement	Cu Yd	16.9

NOTES:

1. Cast steps monolithically with cap.
2. Space cap reinforcement to miss anchor bolts.
3. Work sheets B48 thru B50 together.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
PIER 3
SECTIONS & DETAILS
STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: XXX

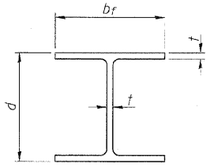
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

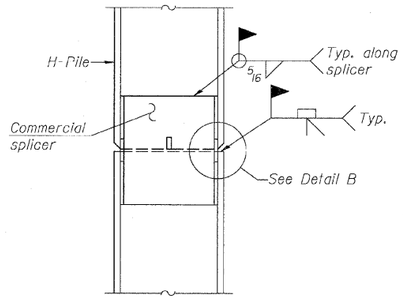
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	494
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

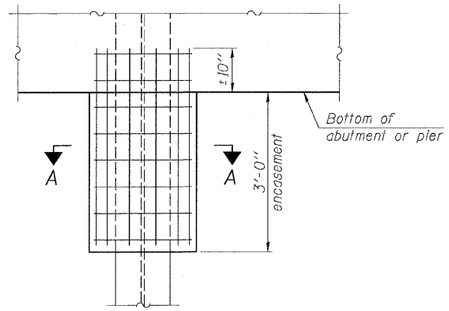


STEEL PILE TABLE

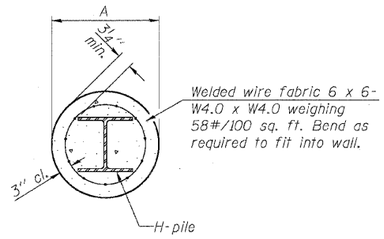
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x73	$13\frac{5}{8}$''	$14\frac{5}{8}$''	$\frac{1}{2}$''	30''



ELEVATION



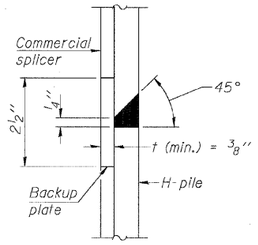
ELEVATION



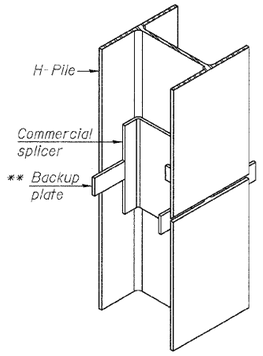
SECTION A-A

Note:
Forms for encasement may be omitted when soil conditions permit.

PILE ENCASEMENT

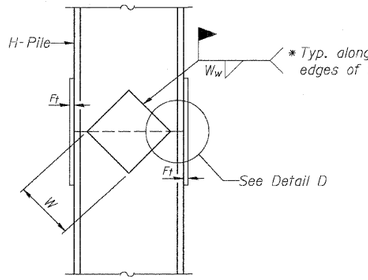


DETAIL "B"

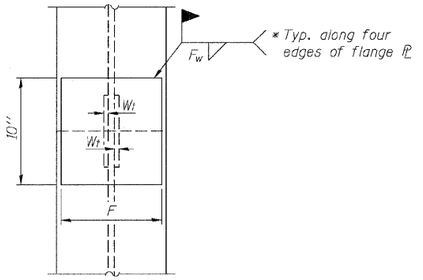


ISOMETRIC VIEW

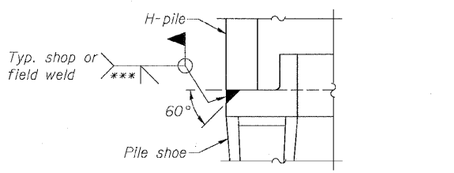
WELDED COMMERCIAL SPLICE



ELEVATION



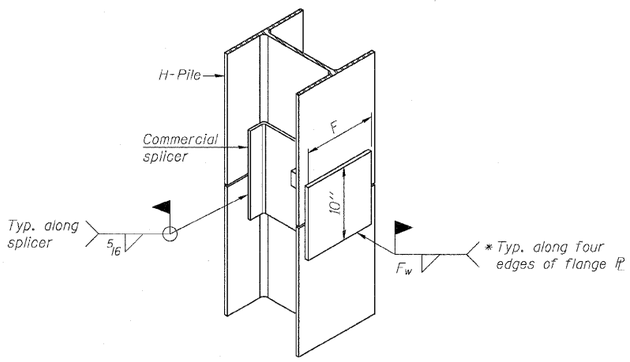
END VIEW



ELEVATION

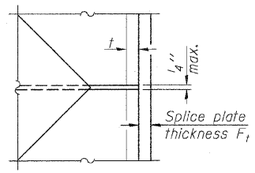
DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x73	$12\frac{1}{2}$''	$\frac{5}{8}$''	$\frac{9}{16}$''	$7\frac{3}{4}$''	$\frac{5}{8}$''	$\frac{1}{2}$''

WELDED PLATE FIELD SPLICE

* Interrupt welds ¼'' from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer ($\frac{5}{16}$'' min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

HP PILE DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

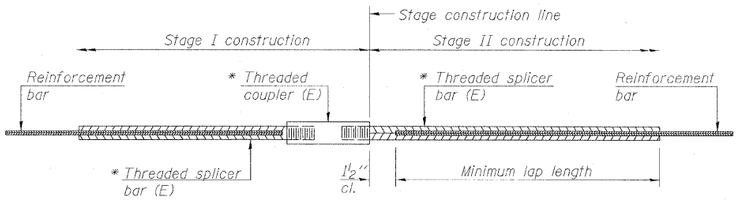
SCALE: None DRAWN BY:
DATE: MAY 13, 2011 CHECKED BY: MJP

F-HP 11-1-09

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	495
STA. 3356+37.74	TO STA. 3359+24.72			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

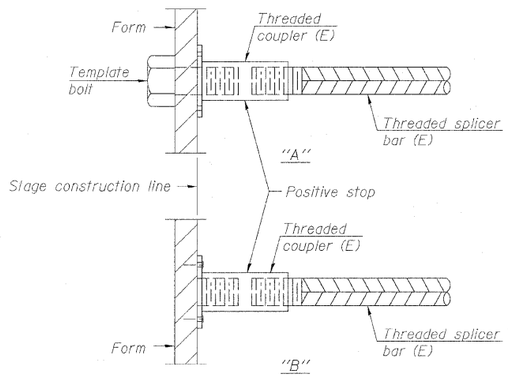
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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

Threaded splicer bar length = min. lap length + 1½" + thread length

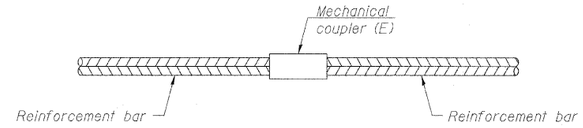
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Slabs	#5	1,508	Table 3
Piers	#6, #8, #10	388	Table 4
Abutments	#5, #7	96	Table 4
Approach Slabs	#4, #5	444	Table 3



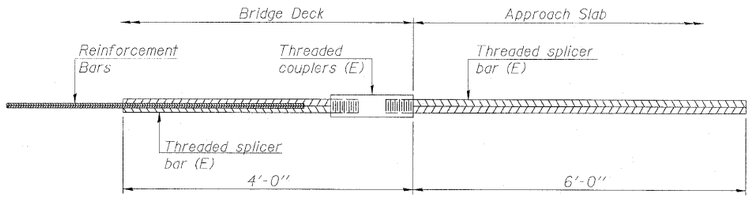
INSTALLATION AND SETTING METHODS

"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.



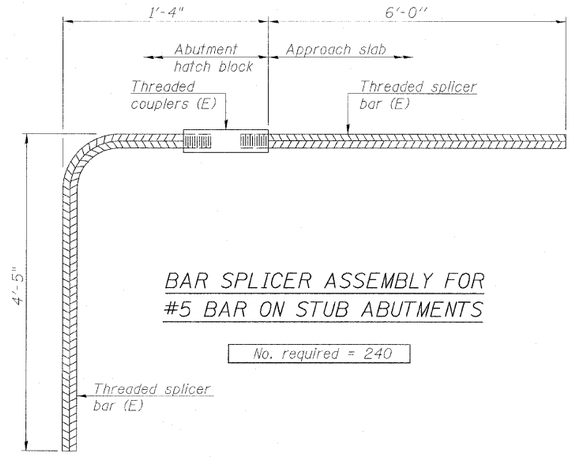
STANDARD MECHANICAL SPLICER

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 = 240

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 special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

BAR SPLICER ASSEMBLY DETAILS

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP

AECOM

BSD-1 11-1-09

5/2/2011 9:57:16 AM
P:\P40567\P40567\Struct\Sht\Bridge\S53_022-0190-bridge.sht

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	496
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)259-1414 • FAX(847) 259-2376

PAGE 1 of 2
DATE April 22, 2002
LOGGED BY D & G
OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-8
Station 3355+91
Offset 95.1' Left
Ground Surface Elev. 762.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter n/a
Upon Completion n/a
After Hrs.

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
SILTY CLAY- dark brown (FILL)			
	4		
CLAY- brown & gray- very stiff (A-6)	4	3.5P	17
	4		122
	6		
-5.0	10	3.2P	14
	5		115
	7		
	11	3.7P	17
	8		114
-10.0	15	4.3P	18
CLAY- gray-very stiff to hard (A-6)	3		110
	5		
	7	2.4P	20
	3		111
	8		
-15.0	9	2.1P	19
CLAY- gray-stiff (A-6)	3		109
	3		
	6	1.3P	20
	6		112
	3		
-20.0	5	1.6P	19

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
CLAY- gray-stiff to hard (A-6)	2		
	3		
	5		
	6	1.0P	15
	4		127
	4		
-25.0	6	1.4P	12
	7		125
	7		
	7	1.6P	13
	6		
	8		
-30.0	11	1.2P	11
	4		107
	7		
	9	1.6P	12
CLAY- gray-hard (A-6)	8		107
	11		
-35.0	12	5.3P	12
SAND & GRAVEL- gray-medium dense to very dense (A-2-6)	10		
	40		
	22	NP	9
	14		
	14		
-40.0	15	NP	8

SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)259-1414 • FAX(847) 259-2376

PAGE 1 of 2
DATE June 18, 2002
LOGGED BY TK
OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-9
Station 3357+45
Offset 62.3' Left
Ground Surface Elev. 763.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter -724.9
Upon Completion -733.9
After Hrs. -731.9 ACR

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
SANDY CLAY with STONE- brown & black (FILL)			
	3		
SILTY CLAY- brown-stiff (A-6) Wet	3		
	4	1.5P	28
	2		113
SILTY CLAY to SILTY CLAY LOAM- brown & gray-very stiff to hard (A-6/A-4)	5		
-5.0	6	2.1B	16
	4		122
	7		
	8	4.0B	14
	4		90
	9		
-10.0	13	2.3B	17
CLAY- gray- very stiff (A-6)	3		113
	8		
	11	2.2SB	18
	3		109
	5		
-15.0	7	2.5B	18
	4		109
	5		
	7	2.6B	18
	4		110
	7		
-20.0	7	3.2B	18

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
CLAY- gray- very stiff (A-6)	4		129
	5		
	7	1.2B	12
	7		
	10		
-25.0	12	4.5+P	9
	50/1"		
Possible cobbles or boulders @ -26.0'			
		3.5P	9
	7		
	9		
-30.0	12	4.5+P	10
	7		120
	8		
	9	1.7B	13
	6		110
	11		
-35.0	14	5.1B	12
	6		
	23		
	36	NP	3
	10		
	18		
-40.0	22	NP	8

SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
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PAGE 1 of 2
DATE December 9, 2002
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OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-10
Station 3358+73
Offset 105' Left
Ground Surface Elev. 761.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 729.0 WD
Upon Completion 727.0 AB
After Hrs.

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
CLAYEY TOPSOIL- dark brown & black (FILL)			
	1		
CLAY LOAM- brown-medium dense (A-4) Apparent FILL	13	NP	15
	4		
SANDY LOAM- brown-loose (A-2-4) Apparent FILL	4	NP	12
-5.0	4	NP	12
	10		
SAND with GRAVEL- brown-medium dense (A-1-b)	11		
	17	NP	8
	7		
	11		
CLAY- gray-stiff to hard (A-6)	11	3.3B	16
-10.0	11	3.3B	16
	6		
	11		
	12	2.9B	19
	4		
	8		
-15.0	9	2.7B	19
	7		
	8		
	11	2.5B	18
	5		
	6		
-20.0	10	1.7SP	13

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
CLAY- gray-stiff to hard (A-6)	5		
	6		
	17	1.1B	12
	15		
	17		
-25.0	17	2.5B	11
	24		
	25		
	32	3.4B	10
	18		
	20		
-30.0	21	4.0B	12
SANDY CLAY- gray-hard (A-6)	14		
	17		
	24	4.5+P	13
	14		
	15		
-35.0	11	4.5P	13
CLAY- gray-hard (A-6)	15		
	21		
	32	5.3B	16
	50/4"		
-40.0		3.9B	16

SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
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PAGE 2 of 2
DATE April 22, 2002
LOGGED BY D & G
OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-8
Station 3355+91
Offset 95.1' Left
Ground Surface Elev. 762.8

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
SAND & GRAVEL- gray-medium dense to very dense (A-2-6)	24		
	19		
	25	NP	7
	19		
	19		
-45.0	16	NP	6
	17		
	14		
	15	NP	9
	18		
	18		
-50.0	17	NP	9
	11		
	11		
-55.0	31	NP	8
CLAY- gray-very stiff to hard (A-6)	8		118
	10		
-60.0	15	3.2B	15

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
CLAY- gray-very stiff to hard (A-6)	12		122
	16		
-65.0	20	3.4B	14
END OF BORING @ -70.0' Hollow Stem Augers CME Automatic Hammer	18	4.0B	14
-70.0			
-75.0			
-80.0			

SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
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PAGE 2 of 2
DATE June 18, 2002
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OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" Hollow Stem Auger HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-9
Station 3357+45
Offset 62.3' Left
Ground Surface Elev. 763.4

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
SAND & GRAVEL- gray-medium dense to very dense (A-1)	8		
	14		
	16	NP	6
	10		
	10		
-45.0	24	NP	12
	10		
	18		
	6	NP	13
	5		
	6		
-50.0	8	NP	10
	29		
	50/5"		
-55.0		NP	10
	17		
	18		
-60.0	9	NP	9

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
SAND & GRAVEL- gray-medium dense to very dense (A-1)			
	0		
	6		
SILTY SAND & GRAVEL- gray-dense (A-2-4)	14	NP	15
-65.0			
END OF BORING @ -65.0' Hollow Stem Augers CME Automatic Hammer			
-70.0			
-75.0			
-80.0			

SOIL BORING LOG

O'BRIEN & ASSOCIATES, INC.
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PAGE 2 of 2
DATE December 9, 2002
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OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-10
Station 3358+73
Offset 105' Left
Ground Surface Elev. 761.0

DEPTH	BLOWS	UCS Qu	MOIST
(ft)	(6")	(tsf)	(%)
CLAY- gray-hard (A-6)	46		
	50/4"		
SAND with GRAVEL- gray-very dense (A-1-b)		NP	10
	14		
	16		
-45.0	21	NP	18
Fine SAND- gray-medium dense to very dense (A-3)	10		
	12		
	14	NP	21
	11		
	11		
-50.0	9	NP	7
SAND & GRAVEL- gray-medium dense to very dense (A-1)	12		
	19		
	29	NP	10
	19		
	24		
-55.0	28	NP	11
	16		
	19		
	22	NP	8
END OF BORING @ -60.0' Hollow Stem Augers CME Automatic Hammer	14		
	18		
-60.0	28	NP	11
-65.0			
-70.0			
-80.0			

AECOM

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

SOIL BORINGS - I

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

5/2/2011 9:57:18 AM
P:\P40567\P40567\Struct\Sht\Bridge\S54_022-0190-bridge.sht

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	497
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-4445 • FAX(847) 398-2276

SOIL BORING LOG

PAGE 1 of 2
DATE January 6,2003
LOGGED BY RH
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-29
Station 3356+82
Offset 62' Right
Ground Surface Elev. -766.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 757.1WD
Upon Completion n/a
After Hrs.

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
CRUSHED STONE with Clay- 2" nominal aggregate size-very dense (FILL)	48		
	37		
	39	NP	5
	2		
	3		
-5.0	3	1.5P	19
CLAY-brown & gray spotted black- medium stiff to stiff (CL)	2		
	2		
	1	0.75P	23
▼	0		
	1		
-10.0	1	0.75P	23
	10		
CLAY-brown & gray- hard (A-6)	12		
	14	4.08	16
	6		
	6		
-15.0	7	2.88	19
CLAY-gray- stiff to very stiff (A-6)	5		
	7		
	8	2.48	19
	6		
	8		
-20.0	8	3.63	19

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
CLAY-gray- stiff to very stiff (A-6)			
	3		
CLAY to CLAY LOAM- gray-medium stiff (A-6)	5		
	4	0.96	15
	10		
	14		
-25.0	16	3.63	13
CLAY-gray- very stiff (A-6)	10		
	11		
	13	2.23	14
	8		
	8		
-30.0	9	3.23	12
	7		
	9		
	11	3.23	11
	7		
	10		
-35.0	13	2.83	12
	8		
	7		
	7	2.78	12
	10		
SANDY CLAY LOAM- gray-dense (A-2-6)	12		
	26	NP	9

PAGE 2 of 2
DATE January 6,2003
LOGGED BY RH
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-29
Station 3356+82
Offset 62' Right
Ground Surface Elev. -766.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 757.1WD
Upon Completion n/a
After Hrs.

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
SANDY CLAY LOAM- gray-dense (A-2-6)			
	12		
	18		
	24	NP	6
SAND & GRAVEL- gray-dense to very dense (A-1)	11		
	17		
-45.0	21	NP	6
	16		
	24		
	28	NP	13
	14		
	15		
-60.0	29	NP	6
	16		
	29		
	32	NP	8
END OF BORING @ -52.5' Hollow Stem Augers CME Automatic Hammer			
-65.0			
-75.0			
-80.0			

O'BRIEN & ASSOCIATES, INC.
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SOIL BORING LOG

PAGE 1 of 2
DATE June 25, 2002
LOGGED BY TK
OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-30
Station 3358+23
Offset 62.0' Right
Ground Surface Elev. -763.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter -722.4
Upon Completion n/a
After Hrs.

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
SAND, GRAVEL & STONE			
	9		
SILTY CLAY- dark brown-very stiff (A-6) Wet	3		
	3	2.0P	27
	3		
SILTY CLAY- brown & gray-very stiff to hard (A-6)	5		
-5.0	7	4.68	15
	4		
	6		
	9	3.28	15
	3		#3
	5		
-10.0	7	3.18	17
	5		109
SILTY CLAY to CLAY- gray-stiff to hard (A-6)	9		
	7	3.18	18
	3		100
	5		
-15.0	7	1.68	20
	3		#11
	6		
	5	2.78	18
	3		
	5		
-20.0	7	0.75P	15

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
SILTY CLAY to CLAY- gray-stiff to hard (A-6)			
	4		126
	6		
	9	1.68	12
	4		#3
	6		
-25.0	12	1.48	12
	5		130
	8		
	11	2.58	11
	11		
	12		
-30.0	13	4.75P	10
	4		124
	7		
	10	1.88	22
	5		123
	8		
-35.0	12	1.68	11
	7		#3
	11		
	13	4.78	16
	8		125
	10		
-40.0	14	4.28	14

PAGE 2 of 2
DATE June 25, 2002
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OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-30
Station 3358+23
Offset 62.0' Right
Ground Surface Elev. -763.4

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter -722.4
Upon Completion n/a
After Hrs.

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
SILTY CLAY to CLAY- gray-stiff to hard (A-6)			
	9		
SAND & GRAVEL- gray-medium dense to very dense (A-1)	7		
	8	NP	10
	5		
	6		
-45.0	8	NP	6
	7		
	22		
	34	NP	13
	13		
	23		
-50.0	31	NP	16
	13		
SILTY SAND & GRAVEL- gray-medium dense (A-2-4)	18		
	10	NP	16
	17		
	10		
-55.0	2	NP	13
	12		
SAND & GRAVEL- gray-medium dense to dense (A-1)	13		
	13	NP	10
	12		
	14		
-60.0	15	NP	9

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
SAND & GRAVEL- gray-medium dense to dense (A-1)	10		
	15	NP	10
	11		
	8		
-65.0	7	NP	11
	10		
	10		
	10	NP	10
	11		
	12		
-70.0	13	NP	8
	9		
	13		
	11	NP	11
END OF BORING @ -72.5' Hollow Stem Augers CME Automatic Hammer			
-75.0			
-80.0			

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
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SOIL BORING LOG

PAGE 1 of 2
DATE April 5, 2002
LOGGED BY D & G
OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-31
Station 3359+42
Offset 30.0' Right
Ground Surface Elev. -764.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After Hrs.

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
SANDY TOPSOIL-black			
	3		
SILTY CLAY to CLAY- brown & gray spotted black- stiff to very stiff (A-6) FILL	3		
	3	2.0P	19
	3		
	5		
-5.0	5	NP	17
	2		
	2		
	2	NP	20
	1		
	1		
-10.0	1	1.0P	22
	1		
SILTY CLAY- brown & gray spotted black- soft (A-6) Wet, FILL	1		
	1	0.38	25
	5		
CLAYEY SAND & GRAVEL- brown & gray-loose (A-2-6) FILL	4		
-15.0	3	NP	19
	2		
CLAY- brown & gray- medium stiff (A-6) FILL	1		
	2	0.88	21
	1		
CLAY- gray-stiff to very stiff (A-6)	1		
-20.0	2	1.75P	16

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
CLAY- gray-stiff to very stiff (A-6)			
	2		
	5		
	6	4.25P	11
	2		
	4		
-25.0	7	2.5P	2
	5		127
	6		
	10	2.0P	2
	2		
	6		
30.0	16	2.75P	10
	7		
	6		
	8	2.0P	2
	6		
	6		
-35.0	8	4.25P	3
	6		
	6		
	9	3.25P	14
	24		110
	7		
-40.0	6	2.88	17

PAGE 2 of 2
DATE April 5, 2002
LOGGED BY D & G
OBA JOB No. 02124

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-31
Station 3359+42
Offset 30.0' Right
Ground Surface Elev. -764.1

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter n/a
Upon Completion n/a
After Hrs.

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
CLAY- gray-stiff to very stiff (A-6)	4		116
	7		
	8	2.4P	17
	4		106
	7		
-45.0	9	1.75	19
	9		
CLAYEY SAND & GRAVEL- gray-medium dense to dense (A-2-6)	14		
	14	NP	17
	11		
	24		
-50.0	18	NP	12
	10		
	17		
-55.0	17	NP	7
	12		
	15		
-60.0	15	NP	11

DEPTH (ft)	BLOWS (/6")	QU (tsf)	MOIST (%)
CLAYEY SAND & GRAVEL- gray-medium dense to dense (A-2-6)			
	14		
SANDY CLAY to CLAY- gray-very stiff to hard (A-6)	14		
-65.0	18	3.5P	9
	11		
	14		
-70.0	22	7.0P	14
	19		
	30		
-75.0	50/5"	7.5P+	8
END OF BORING @ -75.0' Hollow Stem Augers CME Automatic Hammer			
-80.0			

AECOM

Sheet B54 of 56

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

SOIL BORINGS - II

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

5/2/2011 9:57:20 AM
P:\P40567\P40567\Struct\Sht\Bridge\S55_022-0190-bridge.sht

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	498
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-4414 • FAX(847) 398-2376

SOIL BORING LOG

PAGE 1 of 2
DATE January 8, 2003
LOGGED BY RH
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. B-41
Station 3356+69
Offset 43' Left
Ground Surface Elev. 759.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 759.8 WD
Upon Completion 725.8 AB
After Hrs.

DEPTH (ft)	BLOWS (/6")	UNCONFINED Qu (tsf)	MOISTURE (%)
CRUSHED STONE (FILL)			
CLAY-brown & gray-very stiff to hard (A-6)	3		
	4		
	10	3.0P	15
	5		
	5		
-5.0	10	5.3B	18
	5		
	6		
	10	4.5+P	17
	5		
	6		
-10.0	8	3.5B	18
CLAY-brown & gray-stiff to very stiff (A-6)	4		
	7		
	10	3.2B	19
	4		
	6		
-15.0	8	2.4B	19
	4		
	6	1.9B	20
CLAY to CLAY LOAM-gray-medium stiff (A-6)	4		
	5		
-20.0	2	0.8B	15
CLAY to CLAY LOAM-gray-medium stiff (A-6)	4		
	4		
	5	0.75P	13
	4		
-25.0	11	4.3B	11
CLAY-brown & gray-stiff to hard (A-6)	4		
	7		
	7	4.3B	12
	5		
-30.0	9	4.7B	12
	6		
	6	1.9B	13
	10		
-35.0	17	5.7B	13
SANDY CLAY LOAM-gray-dense (A-2-6)	12		
	18		
	21	NP	11
SAND & GRAVEL-gray-medium dense to dense (A-1)	8		
	14		
-40.0	16	NP	12

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SOIL BORING LOG

PAGE 2 of 2
DATE January 8, 2003
LOGGED BY RH
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. B-41
Station 3356+69
Offset 43' Left
Ground Surface Elev. 759.8

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 759.8 WD
Upon Completion 725.8 AB
After Hrs.

DEPTH (ft)	BLOWS (/6")	UNCONFINED Qu (tsf)	MOISTURE (%)
SAND & GRAVEL-gray-medium dense to dense (A-1)	9		
	14		
	15	NP	13
	8		
	13		
-45.0	17	NP	15
	10		
	11		
	16	NP	10
	9		
	12		
-50.0	12	NP	12
	10		
	12		
	10	NP	11
CLAY-gray-very stiff to hard (A-6)	8		
	9		
-55.0	10	2.2SP	12
	8		
	9		
	13	4.5+P	13
	9		
	16		
-60.0	16	4.5+P	14
CLAY-gray-very stiff to hard (A-6)	4		
	5		
	7	3.0P	15
	8		
	9		
-65.0	16	3.25P	15
	7		
	10		
	15	3.0P	15
	8		
	12		
-70.0	14	4.0P	15
END OF BORING @ -70.0' Hollow Stem Augers CME Automatic Hammer			

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SOIL BORING LOG

PAGE 1 of 2
DATE December 10, 2002
LOGGED BY CC
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. B-42
Station 3356+69
Offset 43' Left
Ground Surface Elev. 759.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 750.5 WD
Upon Completion 745.5 AB
After Hrs.

DEPTH (ft)	BLOWS (/6")	UNCONFINED Qu (tsf)	MOISTURE (%)
SAND, GRAVEL & STONE-block (FILL)	4		
CLAY LOAM with CINDERS-brown, gray & black-medium stiff (FILL)	4	0.5P	16
	3		
CLAY-brown & gray-soft to stiff (A-6)	3		
-5.0	4	1.25P	17
	3		
	3		
	2	0.25P	18
SILTY CLAY LOAM-gray-medium dense (A-4)	4		
	12		
-10.0	15	NP	17
	8		
	11		
CLAY-gray-stiff to very stiff (A-6)	16	3.6B	19
	6		
	11		
-15.0	16	2.8B	20
	7		
	10		
	14	2.5B	18
	5		
	8		
-20.0	10	3.25B	13
CLAY-gray-stiff to very stiff (A-6)	10		
	21		
	21	2.5B	12
-25.0	16	2.2B	12
Drillers Observation: Cobbles & Boulders-very dense	28		
	50/5"		
			NR
	26		
	26		
-30.0	29		NR
CLAY-gray-very stiff to hard (A-6)	29		
	31		
	38	4.5P	16
	12		
	16		
-35.0	18	2.9B	18
	9		
	16		
	26	3.6B	17
	13		
	16		
-40.0	24	4.2B	16

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SOIL BORING LOG

PAGE 2 of 2
DATE December 10, 2002
LOGGED BY CC
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. B-42
Station 3356+69
Offset 43' Left
Ground Surface Elev. 759.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 750.5 WD
Upon Completion 745.5 AB
After Hrs.

DEPTH (ft)	BLOWS (/6")	UNCONFINED Qu (tsf)	MOISTURE (%)
SAND with GRAVEL-gray-dense to very dense (A-1-b)	18		
	24		
	26	NP	15
	16		
	19		
-45.0	23	NP	16
	18		
	18		
	20	NP	17
	29		
SAND & GRAVEL-gray-very dense (A-1)	41		
-50.0	44	NP	11
	19		
	38		
	42	NP	10
	18		
	24		
-55.0	26	NP	11
	16		
	21		
	27	NP	9
-60.0			
END OF BORING @ -57.5' Hollow Stem Augers CME Automatic Hammer			

O'BRIEN & ASSOCIATES, INC.
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SOIL BORING LOG

PAGE 1 of 2
DATE January 7, 2002
LOGGED BY CC
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. B-43
Station 3357+22
Offset 43' Right
Ground Surface Elev. -764.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 726.0 WD
Upon Completion 692.5 AB
After Hrs.

DEPTH (ft)	BLOWS (/6")	UNCONFINED Qu (tsf)	MOISTURE (%)
Miscellaneous GRAVEL, STONE, CONCRETE & CLAY-medium dense to stiff	13		
	16	NP	12
	7		
CLAY-brown & gray-stiff to hard (A-6)	10		
-5.0	10	4.5P	16
	5		
	6		
	7	1.5P	15
	7		
	12		
-10.0	14	6.0B	17
SILTY CLAY LOAM to SILTY LOAM-brown & gray-dense (A-4)	8		
	16		
	19	NP	20
	7		
CLAY-gray-very stiff (A-6)	8		
-15.0	8	2.4B	18
	6		
	8		
	9	2.9B	18
CLAY to CLAY LOAM-gray-medium stiff to stiff (A-6)	4		
	4		
-20.0	5	0.5P	13
CLAY to CLAY LOAM-gray-medium stiff to stiff (A-6)	4		
	7		
	6	1.2B	13
	6		
CLAY-gray-stiff to hard (A-6)	10		
-25.0	16	2.4B	11
	8		
	14		
	14	4.5+P	12
	12		
	16		
-30.0	18	4.5+P	10
	10		
	18		
	18	4.0P	10
	8		
	11		
-35.0	11	2.5B	12
	12		
	21		
	31	4.5+P	11
SAND with GRAVEL-gray-medium dense to very dense (A-1)	14		
	29		
-40.0	33	NP	7

O'BRIEN & ASSOCIATES, INC.
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SOIL BORING LOG

PAGE 2 of 2
DATE January 7, 2002
LOGGED BY CC
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. B-43
Station 3357+22
Offset 43' Right
Ground Surface Elev. -764.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 726.0 WD
Upon Completion 692.5 AB
After Hrs.

DEPTH (ft)	BLOWS (/6")	UNCONFINED Qu (tsf)	MOISTURE (%)
SAND with GRAVEL-gray-medium dense to very dense (A-1)	13		
	27		
	35	NP	6
	12		
	18		
-45.0	26	NP	8
	14		
	21		
	28	NP	7
	6		
	8		
-50.0	11	NP	8
	8		
	12		
	13	NP	10
	7		
	10		
-55.0	12	NP	10
	8		
	12		
	14	NP	11
	10		
	18		
-60.0	23		NR
END OF BORING @ -60.0' Hollow Stem Augers CME Automatic Hammer			

AECOM

Sheet B55 of 56

REVISIONS	
NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

SOIL BORINGS - III

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	499
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

OBA
O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1128 S. DAVIS ST./ARLINGTON HTS., IL 60005
(847)359-0464 • FAX(847) 398-2376

SOIL BORING LOG

PAGE 1 of 2
DATE December 11, 2002
LOGGED BY CC
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-44
Station 3358+89
Offset 43' Right
Ground Surface Elev. 759.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 728.5 WD
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAYEY TOPSOIL-black	7			CLAY- gray-stiff to hard (A-6)	8		
	4				11		
	4	-	18		14	1.98	12
CLAY- dark brown & black-stiff (A-6) Fill	2				9		
	2				12		
-5.0	3	1.0P	20	-25.0	18	3.48	11
	6			NOTE: Cobbles from -25.0' to -26.0'	11		
CLAY- brown-stiff (A-6)	4				15		
	4	0.58	18		51	4.28	10
	9				15		
	9				17		
-10.0	10	4.5+P	14	-30.0	24	1.68	11
CLAY- gray-stiff to hard (A-6)	6				16		
	8				16		
	12	3.28	18		16		NR
	5				14		
	6				18		
-15.0	10	3.38	20	-35.0	18	4.98	12
	7				8		
	8				11		
	12	2.08	20		19	2.48	13
NOTE: Silt Seams from -18.5' to -19.0'	8				9		
	11				12		
-20.0	8	1.08	16	-40.0	20	2.58	18

OBA
O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1128 S. DAVIS ST./ARLINGTON HTS., IL 60005
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SOIL BORING LOG

PAGE 2 of 2
DATE December 11, 2002
LOGGED BY CC
OBA JOB No. 02335

ROUTE FAP 307 DESCRIPTION North Avenue Bridge Widening Project
SECTION LOCATION North Avenue at the E.J. & E. RR, DuPage County, Illinois
COUNTY DuPage DRILLING METHOD 3.25" HSA/Rotary HAMMER TYPE CME Automatic
STRUCT. NO.
Station
BORING NO. B-44
Station 3358+89
Offset 43' Right
Ground Surface Elev. 759.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevations:
First Encounter 728.5 WD
Upon Completion n/a
After ____ Hrs. ____

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
CLAY- gray-very stiff to hard (A-6)	10			SAND & GRAVEL- gray-medium dense (A-1)	8		
	13				12		
	20	4.78	20		14	NP	10
	12			END OF BORING @ -62.5' Hollow Stem Augers CME Automatic Hammer			
	16						
-45.0	18	4.68	16	-65.0			
SAND, GRAVEL & Fractured STONE- gray-very dense (A-1)	37						
	29						
	59	NP	6				
	25						
SILT- gray-very dense (A-4)	40						
-50.0	36	NP	18	-70.0			
SAND with GRAVEL- gray-dense to very dense (A-1-b)	12						
	16						
	21	NP	12				
	22						
	39						
-55.0	38	NP	8	-75.0			
	21						
	35						
	38		NR				
	22						
	32						
-60.0	37	NP	18	-80.0			

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Sheet B56 of 56

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.

SOIL BORINGS - IV

STRUCTURE NUMBER 022-0190
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3357+81.21

SCALE: None DRAWN BY: MRK
DATE: MAY 13, 2011 CHECKED BY: MJP

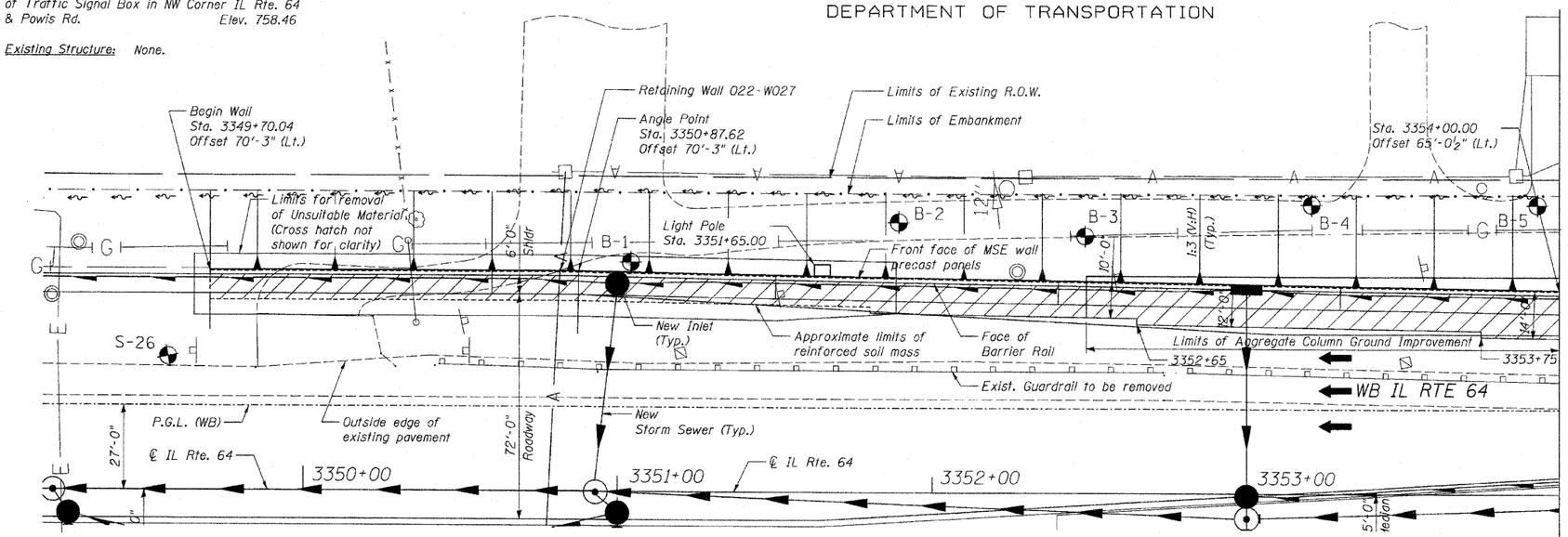
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
307	130 R-2	DUPAGE,KANE	647	500
STA. 3356+37.74		TO STA. 3359+24.72		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

62410

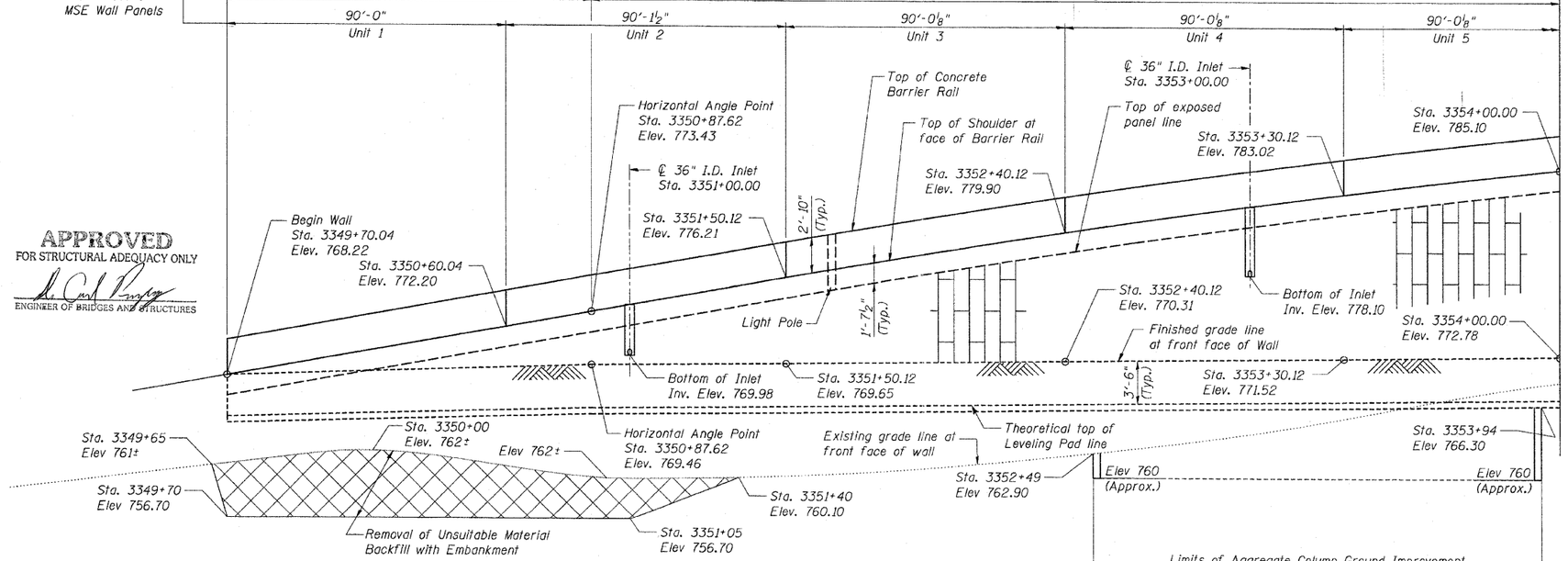
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmark: "□" Cut in SW Corner Concrete Base of Traffic Signal Box in NW Corner IL Rte. 64 & Powis Rd. Elev. 758.46

Existing Structure: None.



PLAN



ELEVATION

(Looking North at back face of Wall)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

AECOM
11-18-11

DESIGN SPECIFICATIONS

AASHTO Standard Specifications for Highway Bridges, 17th Edition-2002

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
PRECAST UNITS
f'c = 4,500 psi (Precast Face Panels)

INDEX OF SHEETS:

NOTES:

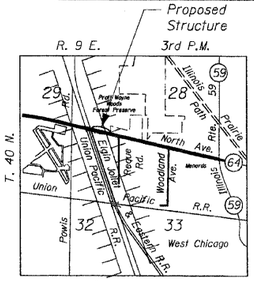
1. For General Notes see Sheet NW2.
2. The face of abutment station is measured to an offset equal to 63'-9" (The assumed back face of the MSE wall panels).
3. The vertical scale of the Elevation view has been exaggerated to show detail.

BILL OF MATERIAL

Item	Unit	Quantity
Removal and Disposal of Unsuitable Material	Cu Yd	525
Structure Excavation	Cu Yd	300
Concrete Structures	Cu Yd	271.5
Protective Coat	Sq Yd	648
Reinforcement Bars, Epoxy Coated	Pound	44,420
Mechanically Stabilized Earth Retaining Wall	Sq Ft	6,703
Aggregate Column Ground Improvement	L. Sum	0.25
Conduit Embedded in Structure, 2" Dia., PVC	Foot	606

STATE OF ILLINOIS
MATTHEW J. PREGMON
061-006009
DESIGNED STRUCTURAL ENGINEER

EXPIRATION DATE: 11-30-2012



LOCATION SKETCH
Not to Scale

Sheet NW1 of 9

REVISIONS NAME	DATE

F.A.P. ROUTE 307 ILLINOIS ROUTE 64
(NORTH AVENUE)
OVER E.J.&E. AND U.P. R.R.
GENERAL PLAN
NORTH AVENUE
STRUCTURE NUMBER 022-W027
FAP 307 SECTION 130 R-2
DUPAGE COUNTY
STA. 3349+70.04 TO 3356+08.49

SCALE: None DRAWN BY: MRK
DATE: NOVEMBER 1, 2011 CHECKED BY: MJP