





## SUMMARY OF QUANTITIES

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				ROADWAY 0004		BRIDGE 0014
				STU	STP-BR	STP-BR
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	5	5	-	-
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	2	-	2	-
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2	-	-
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2	-	-
60266600	VALVE BOXES TO BE ADJUSTED	EACH	1	1	-	-
60500040	REMOVING MANHOLES	EACH	1	1	-	-
60500060	REMOVING INLETS	EACH	5	3	2	-
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,932	1,865	67	-
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	40	-	40.0	-
63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	826	763	63	-
63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	-	1	-
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2	-	2	-
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1	-	-
63200310	GUARDRAIL REMOVAL	FOOT	1,280	1,159	121	-
63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	25	25	-	-

\* INDICATES SPECIALTY ITEM

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE			
				ROADWAY 0004		BRIDGE 0014	
				STU	STP-BR	STP-BR	STP-BR
66300105	CALCIUM CHLORIDE APPLIED	TON	3	2	1	-	
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	400	400	-	-	
66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1	-	-	
66900530	SOIL DISPOSAL ANALYSIS	EACH	2	2	-	-	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	11	2	1	8	
67100100	MOBILIZATION	L SUM	1	0.17	0.05	0.78	
72000100	SIGN PANEL - TYPE 1	SQ FT	78	56	22	-	
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	8	5	3	-	
72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	18	18	-	-	
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	192	144	48	-	
78005100	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	148	-	148	-	
78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	3,744	1,580	2,164	-	
78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	363	-	363	-	
78005150	EPOXY PAVEMENT MARKING - LINE 12"	FOOT	357	-	357	-	
78005180	EPOXY PAVEMENT MARKING - LINE 24"	FOOT	63	31	32	-	

\* INDICATES SPECIALTY ITEM

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<b>BAXTER &amp; WOODMAN</b> <small>Consulting Engineers</small>	DESIGNED - DJS	REVISED -5-8-14 PER IDOT REVIEW
	DRAWN - UKB	REVISED -5-16-14 PER IDOT REVIEW
	CHECKED - RWL	REVISED <u>AD</u> - ADDENDUM 7-24-14
	DATE - 03/14/14	FILE - 110511.PH2_SHT-S01.dgn

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

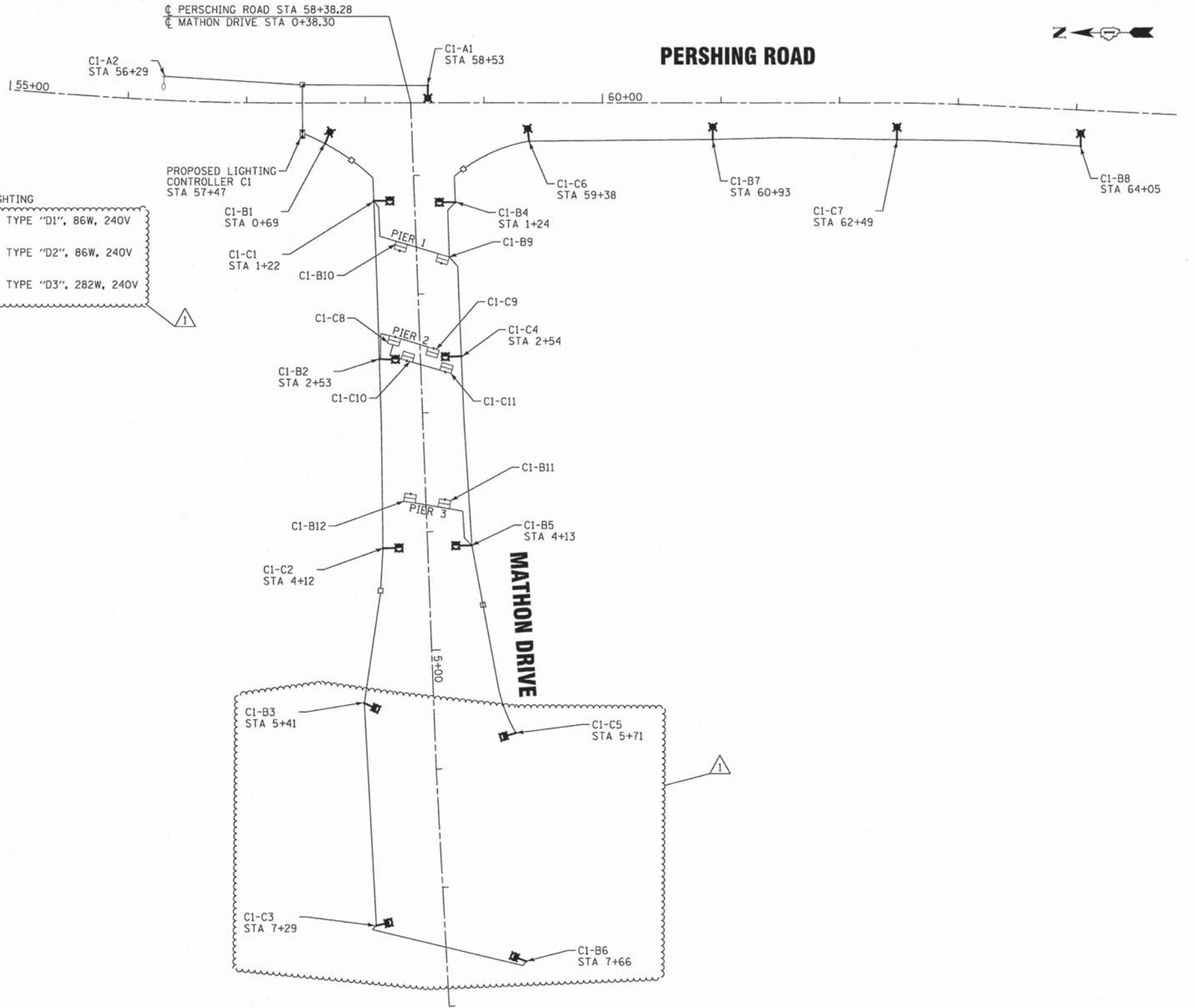
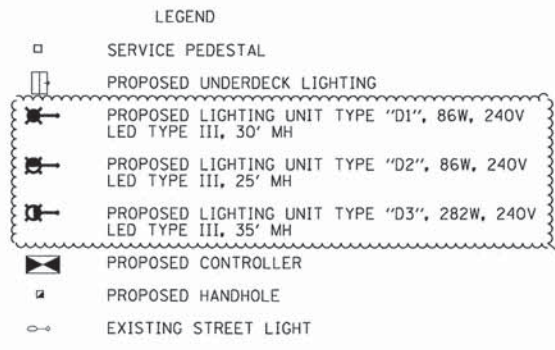
SCALE:	STA.	TO STA.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			3719	12-00239-00-BR	LAKE	88	5
			FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT M-8MM-9003952J		
			CONTRACT NO. 61A57				







- GENERAL NOTES**
- THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.
  - EXISTING STREET LIGHTING UNITS (NOTED IN PLANS) TO REMAIN IN OPERATION ARE TO BE MAINTAINED BY THE CONTRACTOR UNTIL NEW STREET LIGHTS ARE OPERATIONAL AND ACCEPTED BY THE CITY.
  - ANY DAMAGE TO EXISTING CONDUITS, CONDUCTORS, AND EQUIPMENT TO REMAIN SHALL BE REPAIRED AND/OR REPLACED AT NO COST TO THE DEPARTMENT.
  - ANY TURF AND/OR SOIL DISTURBED THAT CANNOT REMAIN OR BE RE-USED SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEM.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF FOUNDATION AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.
  - ALL DISTURBED AREAS SHALL BE RESTORED TO THE SATISFACTION OF THE ENGINEER AND INCLUDED IN THE COST OF THE ASSOCIATED PAY ITEM.
  - THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "UNDERGROUND RACEWAYS". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO BACKFILLING.
  - THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.
  - THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR GROUNDING. GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO BACKFILLING. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND/OR BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
  - CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS, OTHER UTILITIES, AND LANDSCAPING.
  - NO UNDERGROUND SPLICES OR SPLICES IN HANDHOLES WILL BE PERMITTED. ELECTRIC HANDHOLES SHALL BE USED FOR THE PURPOSE OF PULLING CABLES ONLY.
  - LIGHTING UNIT SETBACK SHALL BE AS CALLED OUT ON DRAWINGS.
  - NO POLES SHALL BE ERRECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.
  - ALL CONDUITS UNDER PROPOSED ROADWAYS AND DRIVEWAYS IN TRENCHES SHALL BE INSTALLED BEFORE PAVEMENT IS PLACED. CONDUIT LENGTHS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE ACTUAL LENGTH REQUIREMENTS IN THE FIELD.
  - ALL ELECTRICAL DEVICES AND MATERIALS SHALL BE U/L LISTED WHERE APPLICABLE.



SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	290
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	600
81100320	CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	150
81200230	CONDUIT EMBEDDED IN STRUCTURE, 2" DIA., PVC	FOOT	802
81300220	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 6" X 6" X 4"	EACH	3
81300530	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 10" X 6"	EACH	4
81300550	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6"	EACH	4
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	1
81603100	UNIT DUCT, 600V, 4-1C NO.6, 1/C NO.6 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	2165
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1305
81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	680
82500350	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	1
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	130
84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	11
84200804	REMOVAL OF POLE FOUNDATION	EACH	8
84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	1
84500130	REMOVAL OF LIGHTING CONTROLLER FOUNDATION	EACH	1
89502380	REMOVE EXISTING HANDHOLE	EACH	2
X0211000	UNDERPASS LUMINAIRE (SPECIAL)	EACH	8
X008367	DECORATIVE LIGHTING UNIT, TYPE "D1"	EACH	6
X008368	DECORATIVE LIGHTING UNIT, TYPE "D2"	EACH	6
X008369	DECORATIVE LIGHTING UNIT, TYPE "D3"	EACH	4
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	11

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<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	DESIGNED - MWH	REVISED -7-14-14 ADDENDUM A
	DRAWN - LKB	REVISED -5-16-14 PER IDOT REVIEW
	CHECKED - RWL	REVISED -5-30-14 PER IDOT REVIEW
	DATE - 03/14/14	FILE - 110511-PH2-SHT-SL-Diagram.dgn

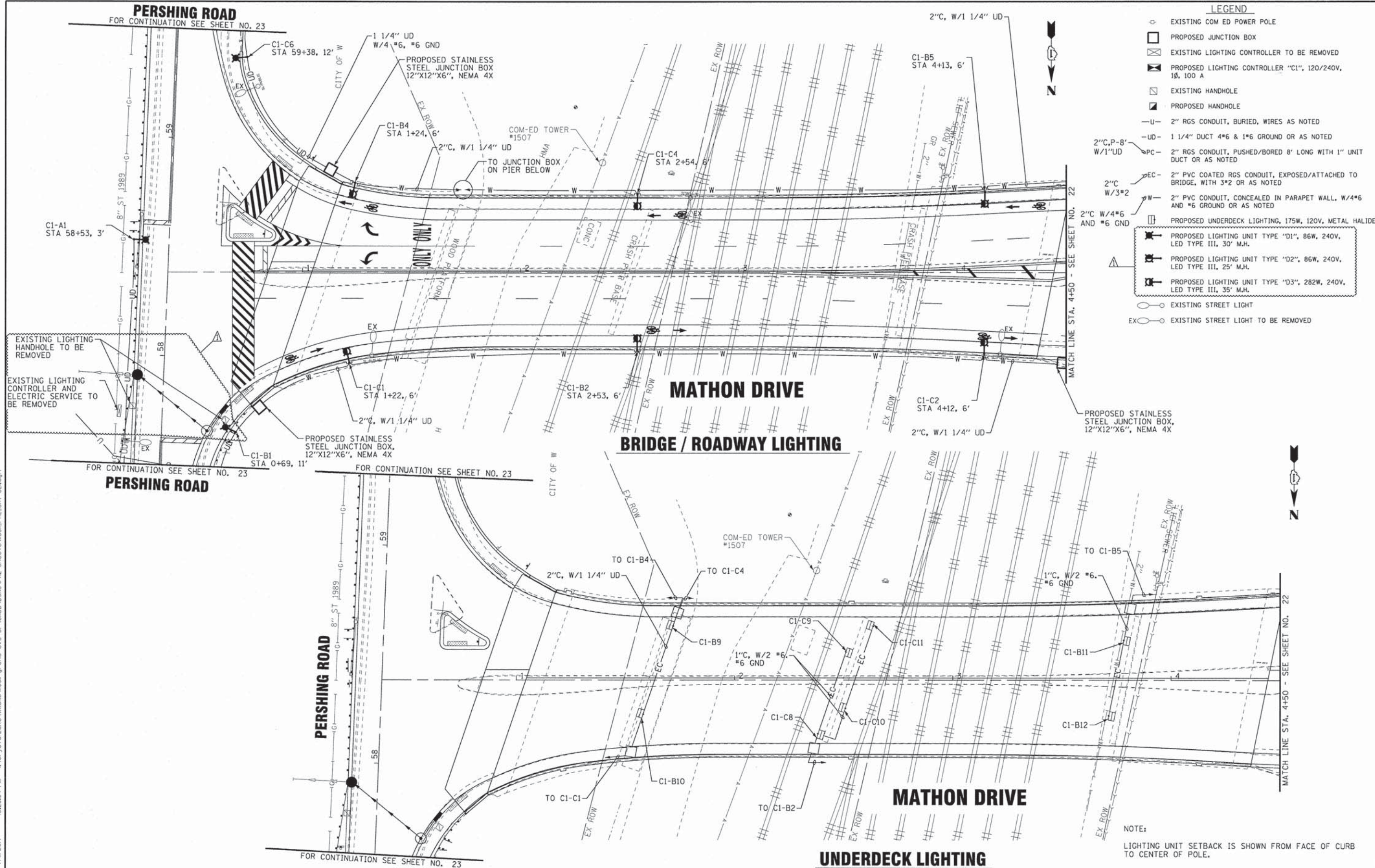
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LIGHTING GENERAL NOTES, QUANTITIES  
AND ONE-LINE DIAGRAM**

SCALE: 1"=50' STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3719	12-00239-00-BR	LAKE	88	20
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-BHM-90039521				





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**BAXTER & WOODMAN**  
Consulting Engineers

DESIGNED - MWH	REVISED -7-14-14 ADDENDUM A
DRAWN - UKB	REVISED -5-16-14 PER IDOT REVIEW
CHECKED - RWL	REVISED -5-30-14 PER IDOT REVIEW
DATE - 03/14/14	FILE - 110511.PH2.SHT-SL1.dgn

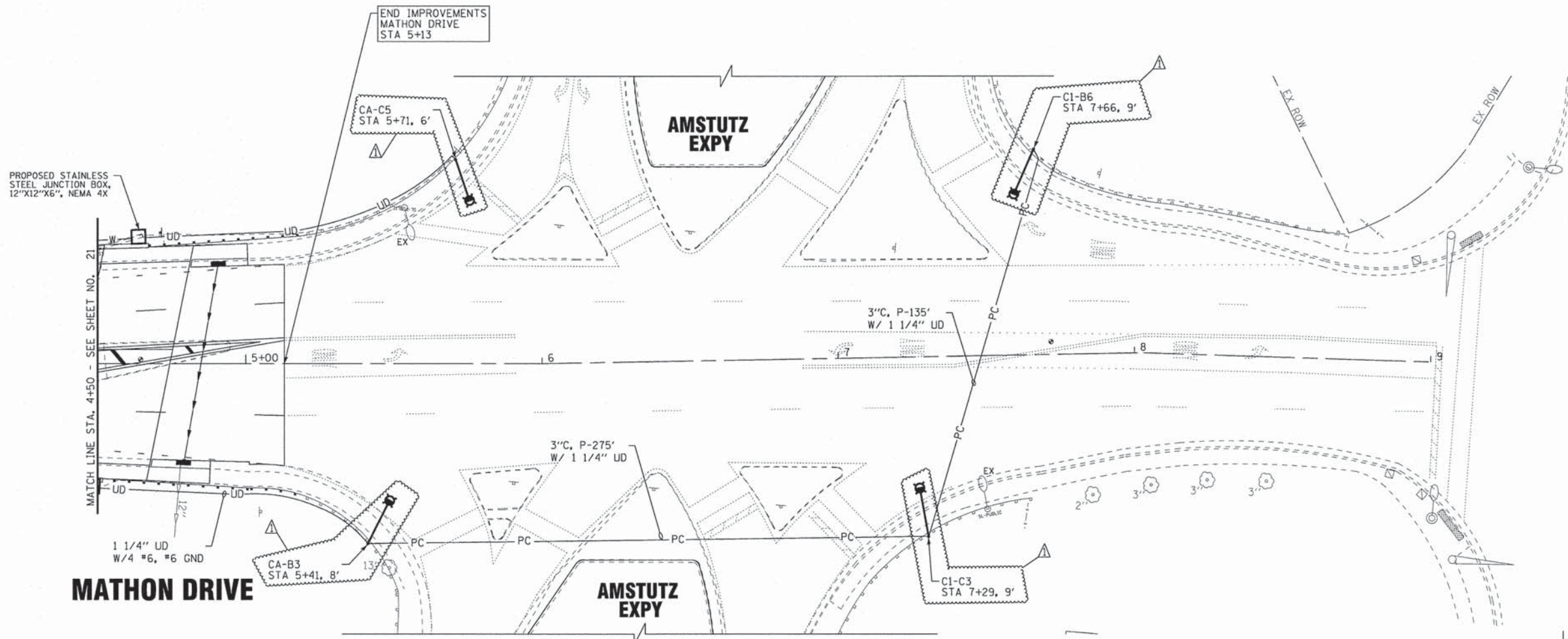
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

<b>LIGHTING PLAN MATHON DRIVE</b>	
SCALE: 1"=20'	STA. 0+38.30 TO STA. 4+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3719	12-00239-00-BR	LAKE	88	21
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT M-BM-9003952				

NOTE:  
LIGHTING UNIT SETBACK IS SHOWN FROM FACE OF CURB TO CENTER OF POLE.





PROPOSED STAINLESS STEEL JUNCTION BOX, 12"X12"X6", NEMA 4X

END IMPROVEMENTS MATHON DRIVE STA 5+13

CA-C5 STA 5+71, 6'

C1-B6 STA 7+66, 9'

MATHON DRIVE

AMSTUTZ EXPY

SHERIDAN ROAD

MATCH LINE STA. 4+50 - SEE SHEET NO. 21

1 1/4" UD W/4 #6, #6 GND

CA-B3 STA 5+41, 8'

3" C, P-275' W/ 1 1/4" UD

C1-C3 STA 7+29, 9'

3" C, P-135' W/ 1 1/4" UD

NOTE:  
LIGHTING UNIT SETBACK IS SHOWN FROM FACE OF CURB TO CENTER OF POLE.

LEGEND

- ⊕ EXISTING COM ED POWER POLE
- PROPOSED JUNCTION BOX
- ⊗ EXISTING LIGHTING CONTROLLER TO BE REMOVED
- ⊠ PROPOSED LIGHTING CONTROLLER "C1", 120/240V, 1Ø, 100 A
- ⊞ EXISTING HANDHOLE
- ⊡ PROPOSED HANDHOLE
- U- 2" RGS CONDUIT, BURIED, WIRES AS NOTED
- UD- 1 1/4" DUCT 4#6 & 1#6 GROUND OR AS NOTED
- PC- 2" RGS CONDUIT, PUSHED/BORED 8' LONG WITH 1" UNIT DUCT OR AS NOTED
- EC- 2" PVC COATED RGS CONDUIT, EXPOSED/ATTACHED TO BRIDGE, WITH 3#2 OR AS NOTED
- W- 2" PVC CONDUIT, CONCEALED IN PARAPET WALL, W/4#6 AND #6 GROUND OR AS NOTED
- ⊞ PROPOSED UNDERDECK LIGHTING, 175W, 120V, METAL HALIDE
- ⊠ PROPOSED LIGHTING UNIT TYPE "D1", 86W, 240V, LED TYPE III, 30' M.H.
- ⊡ PROPOSED LIGHTING UNIT TYPE "D2", 86W, 240V, LED TYPE III, 25' M.H.
- ⊞ PROPOSED LIGHTING UNIT TYPE "D3", 282W, 240V, LED TYPE III, 35' M.H.
- ⊙ EXISTING STREET LIGHT
- ⊗ EXISTING STREET LIGHT TO BE REMOVED

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DESIGNED - MWH	REVISED -7-14-14 ADDENDUM
DRAWN - LKB	REVISED -5-16-14 PER IDOT REVIEW
CHECKED - RWL	REVISED -5-30-14 PER IDOT REVIEW
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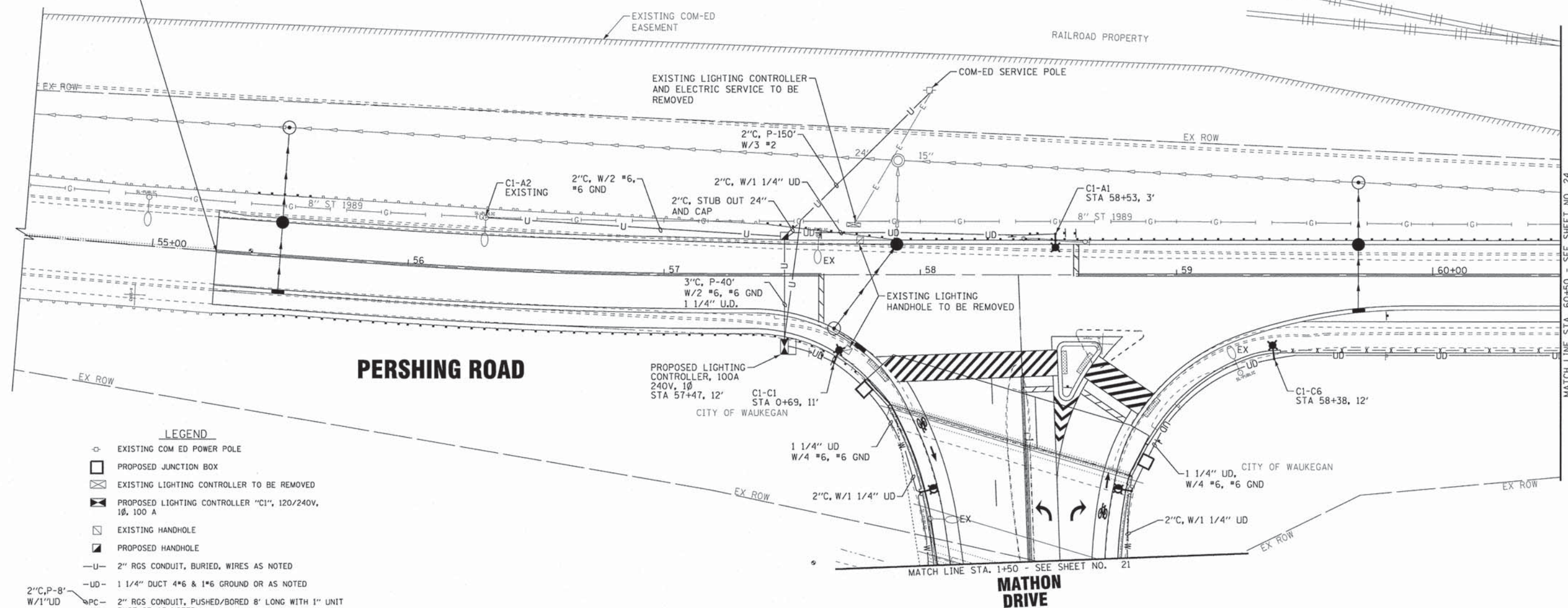
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MATHON DRIVE  
SCALE: 1"=20'  
STA. 4+50 TO STA. 9+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3719	12-00239-00-BR	LAKE	88	22
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT M-BHM-9003952				





BEGIN RECONSTRUCTION  
PERSHING ROAD  
STA 55+25



- LEGEND**
- ⊕ EXISTING COM ED POWER POLE
  - PROPOSED JUNCTION BOX
  - ⊗ EXISTING LIGHTING CONTROLLER TO BE REMOVED
  - ⊠ PROPOSED LIGHTING CONTROLLER "C1", 120/240V, 1Ø, 100 A
  - ⊡ EXISTING HANDHOLE
  - ⊢ PROPOSED HANDHOLE
  - U- 2" RGS CONDUIT, BURIED, WIRES AS NOTED
  - UD- 1 1/4" DUCT 4#6 & 1#6 GROUND OR AS NOTED
  - PC- 2" RGS CONDUIT, PUSHED/BORED 8' LONG WITH 1" UNIT DUCT OR AS NOTED
  - EC- 2" PVC COATED RGS CONDUIT, EXPOSED/ATTACHED TO BRIDGE, WITH 3#2 OR AS NOTED
  - W- 2" PVC CONDUIT, CONCEALED IN PARAPET WALL, W/4#6 AND #6 GROUND OR AS NOTED
  - ⊞ PROPOSED UNDERDECK LIGHTING, 175W, 120V, METAL HALIDE
  - ⊞ PROPOSED LIGHTING UNIT TYPE "D1", 86W, 240V, LED TYPE III, 30' M.H.
  - ⊞ PROPOSED LIGHTING UNIT TYPE "D2", 86W, 240V, LED TYPE III, 25' M.H.
  - ⊞ PROPOSED LIGHTING UNIT TYPE "D3", 282W, 240V, LED TYPE III, 35' M.H.
  - EXISTING STREET LIGHT
  - EX ○ EXISTING STREET LIGHT TO BE REMOVED

NOTE:  
LIGHTING UNIT SETBACK IS SHOWN FROM FACE OF CURB TO CENTER OF POLE.

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DESIGNED - MWH	REVISED -7-14-14 ADDENDUM
DRAWN - LKB	REVISED -5-16-14 PER IDOT REVIEW
CHECKED - RWL	REVISED -5-30-14 PER IDOT REVIEW
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DEPARTMENT OF TRANSPORTATION**

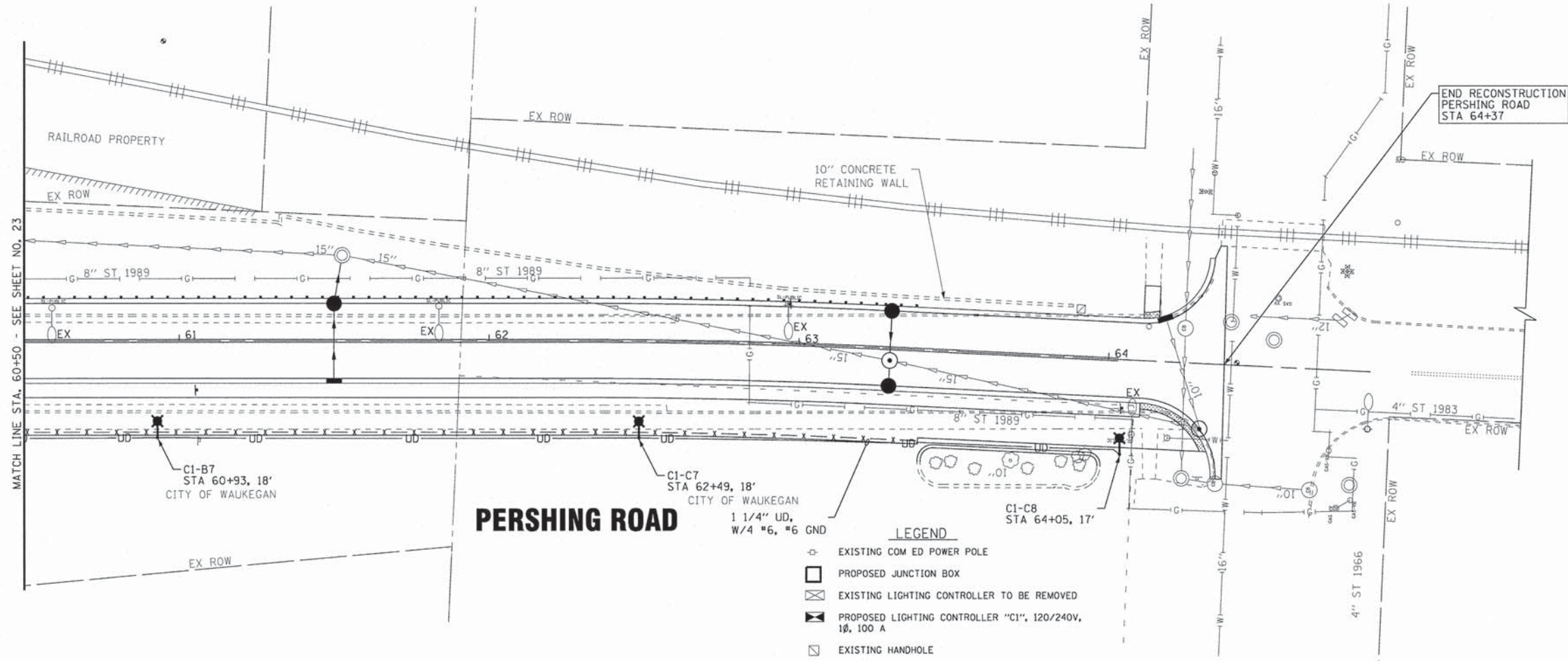
<b>LIGHTING PLAN PERSHING ROAD</b>	
SCALE: 1"=20'	STA. 54+50 TO STA. 60+50

F.A.U. RTE. 3719	SECTION 12-00239-00-BR	COUNTY LAKE	TOTAL SHEETS 88	SHEET NO. 23
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT M-BHM-9003952				

MATCH LINE STA. 60+50 - SEE SHEET NO. 24

MATCH LINE STA. 1+50 - SEE SHEET NO. 21





**PERSHING ROAD**

**CLAYTON STREET**

- LEGEND**
- ⊙ EXISTING COM ED POWER POLE
  - PROPOSED JUNCTION BOX
  - ⊠ EXISTING LIGHTING CONTROLLER TO BE REMOVED
  - ⊡ PROPOSED LIGHTING CONTROLLER "C1", 120/240V, 1Ø, 100 A
  - ⊞ EXISTING HANDHOLE
  - ⊟ PROPOSED HANDHOLE
  - U- 2" RGS CONDUIT, BURIED, WIRES AS NOTED
  - UD- 1 1/4" DUCT 4\*6 & 1\*6 GROUND OR AS NOTED
  - 2"C,P-8' W/1"UD PC- 2" RGS CONDUIT, PUSHED/BORED 8' LONG WITH 1" UNIT DUCT OR AS NOTED
  - 2"C W/3\*2 EC- 2" PVC COATED RGS CONDUIT, EXPOSED/ATTACHED TO BRIDGE, WITH 3\*2 OR AS NOTED
  - 2"C W/4\*6 AND #6 GND W- 2" PVC CONDUIT, CONCEALED IN PARAPET WALL, W/4\*6 AND #6 GROUND OR AS NOTED
  - ⊞ PROPOSED UNDERDECK LIGHTING, 175W, 120V, METAL HALIDE
  - ⊞ PROPOSED LIGHTING UNIT TYPE "D1", 86W, 240V, LED TYPE III, 30' M.H.
  - ⊞ PROPOSED LIGHTING UNIT TYPE "D2", 86W, 240V, LED TYPE III, 25' M.H.
  - ⊞ PROPOSED LIGHTING UNIT TYPE "D3", 282W, 240V, LED TYPE III, 35' M.H.
  - ⊙ EXISTING STREET LIGHT
  - EX ⊙ EXISTING STREET LIGHT TO BE REMOVED

**NOTE:**  
LIGHTING UNIT SETBACK IS SHOWN FROM FACE OF CURB TO CENTER OF POLE.

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DESIGNED - MWH	REVISED -7-14-14 ADDENDUM
DRAWN - LKB	REVISED -5-16-14 PER IDOT REVIEW
CHECKED - RWL	REVISED -5-30-14 PER IDOT REVIEW
DATE - 03/14/14	FILE - I10511.PH2_SHT-SL4.dgn

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING PLAN PERSHING ROAD</b>	
SCALE: 1"=20'	STA. 60+50 TO STA. 64+50

F.A.U. RTE. 3719	SECTION 12-00239-00-BR	COUNTY LAKE	TOTAL SHEETS 88	SHEET NO. 24
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-BHM-9003952				



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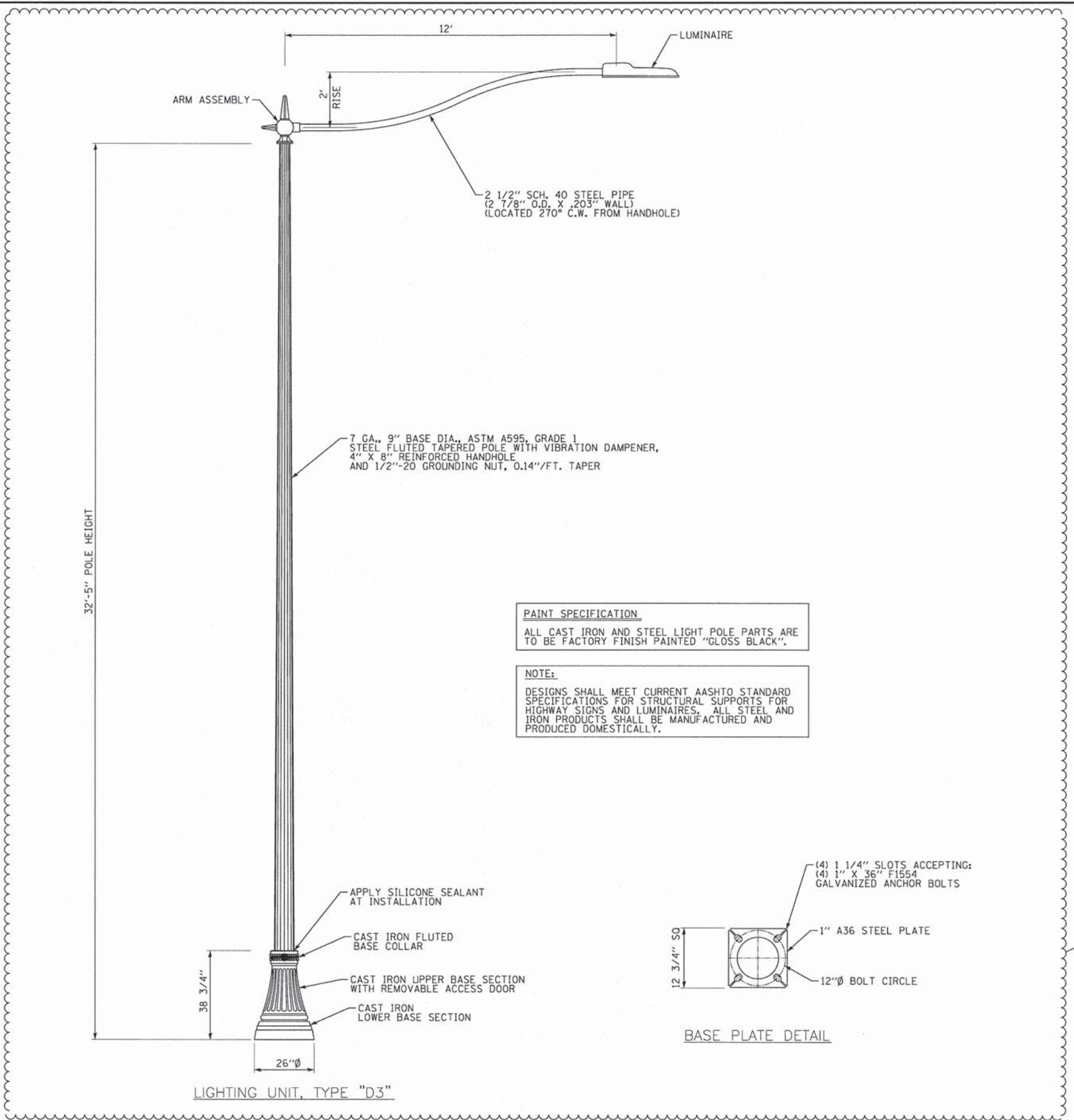


DESIGNED - MWH	REVISED -7-14-14 ADDENDUM
DRAWN - LKB	REVISED -
CHECKED - RWL	REVISED -
DATE - 03/14/14	FILE - 110511_PH2_SHT-SL-lightpole-Dets.dgn

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING DETAILS</b>	
SCALE: NONE	STA. TO STA.

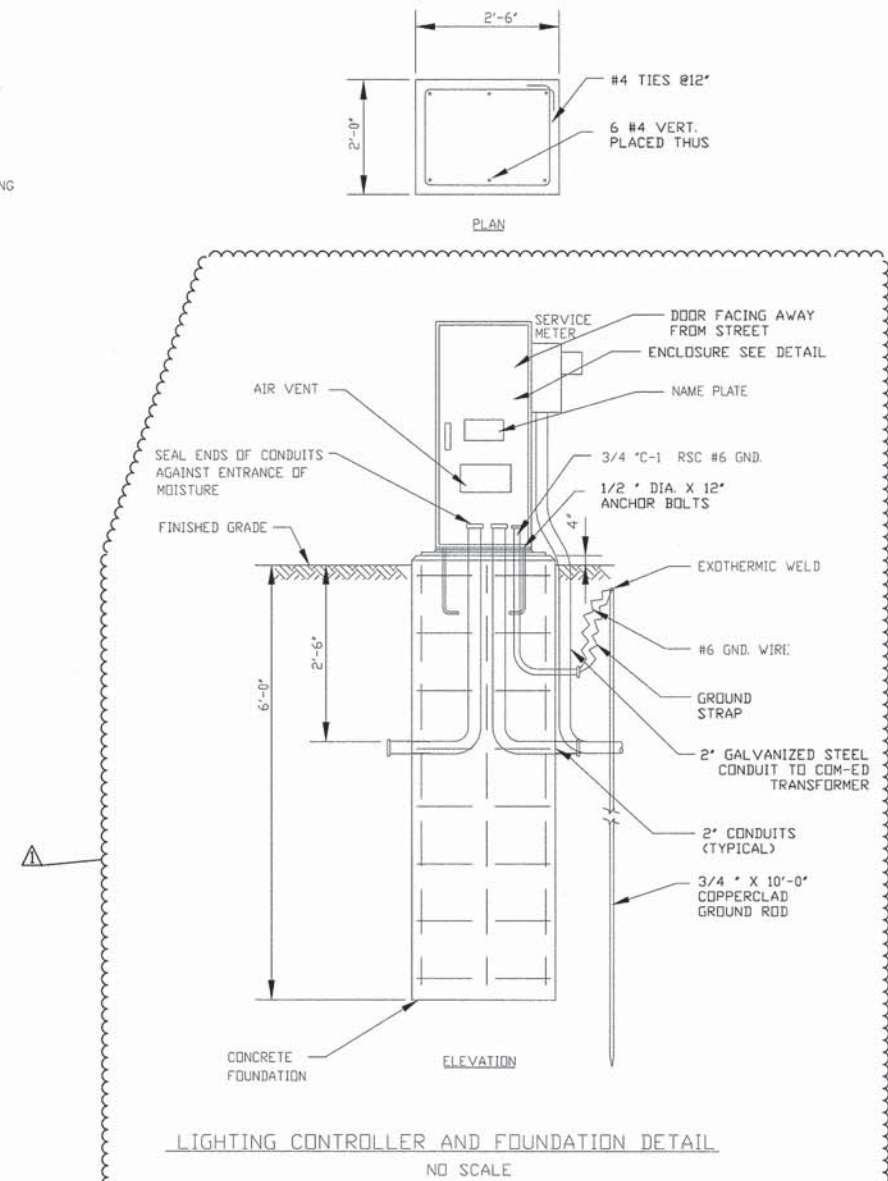
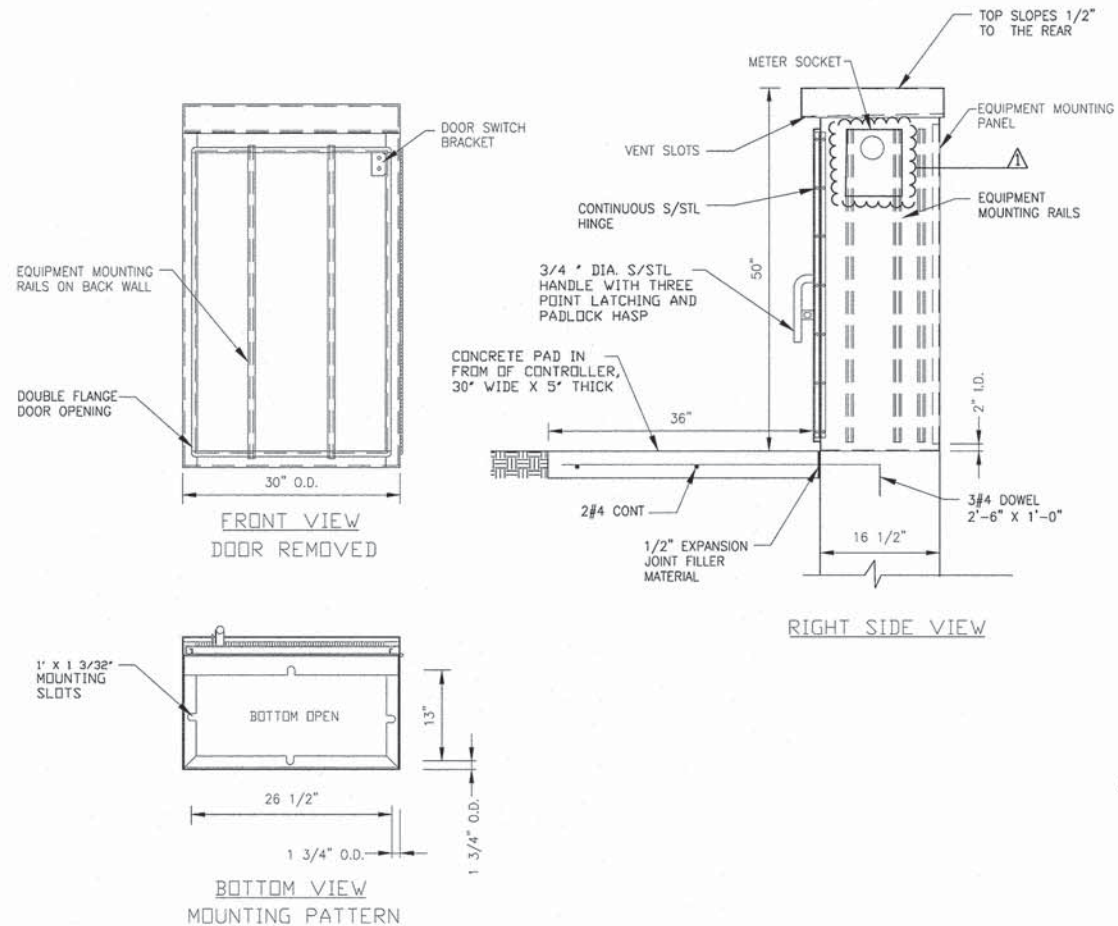
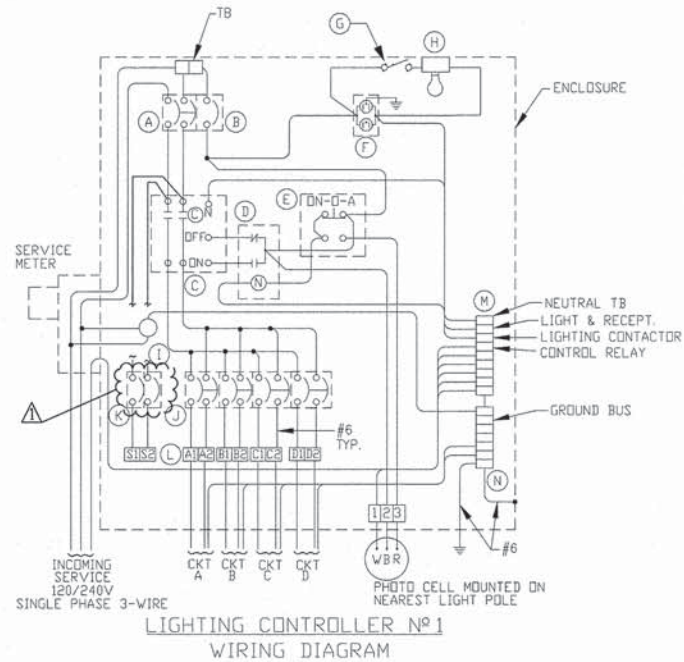
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3719	12-00239-00-BR	LAKE	88	25A
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-BM-90031952				











**NOTE:**  
 INSTALL (2) SPARE 2" CONDUITS STUBBED OUT AND CAPPED 18" BEYOND FOUNDATION.

**NOTES:**

- CABINET SHALL BE FABRICATED FROM 0.125-INCH SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED ASSEMBLY WITH NEMA 3R RATING.
- ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL.
- NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH HIGH LETTERS FILLED IN BLACK: "STREET LIGHTING".
- CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
- ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
- THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
- METAL MOUNTING PANEL SHALL BE #10 GAUGE GALVANIZED SHEET STEEL FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
- CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH THICK GLASTIC INSULATION BACK PANEL.
- ALL DEVICES SHALL BE FRONT REMOVABLE.
- BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES. NEUTRAL BUS SHALL BE PAINTED WHITE. GROUND BUS SHALL BE PAINTED GREEN.
- ALL LUGS SHALL BE COPPER SCREWS AND CONNECTORS, SPRING HELD.
- ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
- ALL CONTROL WIRING SHALL BE 600V MACHINE TOOL WIRE TYPE MTW.
- ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
- A LAMINATED COPY OF THE CIRCUIT SCHEMATIC DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER.
- ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE #12 AWG STRANDED UNLESS OTHERWISE INDICATED.
- ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

ITEM	QTY.	DESCRIPTION
A	1	MAIN CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 240 V. SINGLE-PHASE, 100 A., BOLT-ON TYPE, TRIP INTERRUPTING RATING OF 22,000 RMS SYMMETRICAL AMPERES AT 240 V.
B	1	CONTROL CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, SINGLE-POLE, 120 V. SINGLE-PHASE 20 A. BOLT-ON TYPE, TRIP INTERRUPTING RATING OF 14,000 RMS SYMMETRICAL AMPERES AT 120 V.
C	1	LIGHTING CONTACTOR MECHANICALLY HELD, CUTLER HAMMER A202K3BMM 100 A. 2-POLE, 600 V. WITH 120 COIL
D	1	CONTROL RELAY CUTLER HAMMER D3PR2 RATED 12 A. AT 120 VAC
E	1	DN-OFF-AUTO 3-POSITION SELECTOR SWITCH GE CR104P HEAVY DUTY SWITCH, RATED FOR 10 A. AT 600 VAC.
F	1	GFCI RECEPTACLE, 120 V., 20 A. SPEC. GRADE, NEMA CONFIG. 5-20R
G	1	SPDT MOMENTARY NORMALLY OPEN, NORMALLY CLOSED PUSHBUTTON SWITCH CUTLER HAMMER B4F1063 RATED 15 A. AT 120 V.
H	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE, GUARD AND MOUNTING BOX.
I	1	SECONDARY SURGE ARRESTER SQUARE D SDSA1175, 175 VAC PHASE-TO-GROUND MAXIMUM
J	4	BRANCH CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 240 V. SINGLE-PHASE, 30A. TRIP INTERRUPTING RATING 10,000 RMS SYMMETRICAL AMPERES AT 240 V.
K	2	BRANCH CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 120 V. SINGLE-PHASE, 20A. TRIP INTERRUPTING RATING 10,000 RMS SYMMETRICAL AMPERES.
L	1	TERMINAL BLOCK RATED 600 V., 85 A.
M	1	COPPER NEUTRAL BUS
N	1	COPPER GROUND BUS

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<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	DESIGNED - MWH DRAWN - LKB CHECKED - RWL DATE - 03/14/14	REVISED -5-8-14 PER IDOT REVIEW REVISED -5-16-14 PER IDOT REVIEW REVISED -7-14-14 ADDENDUM FILE - 110511-PH2-SHT-SL-Controller-Dets.dgn
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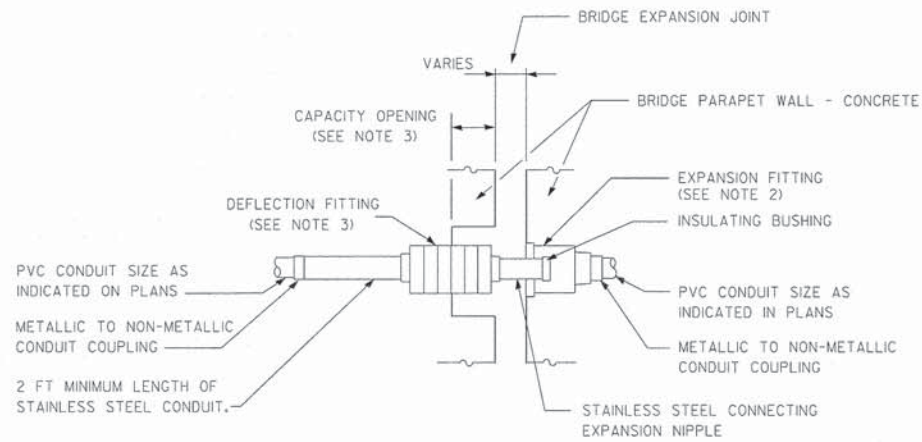
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING DETAILS</b>		F.A.U. RTE. 3719	SECTION 12-00239-00-BR	COUNTY LAKE	TOTAL SHEETS 88	SHEET NO. 27
SCALE: NONE	STA. TO STA.	CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT M-BM-9003952						

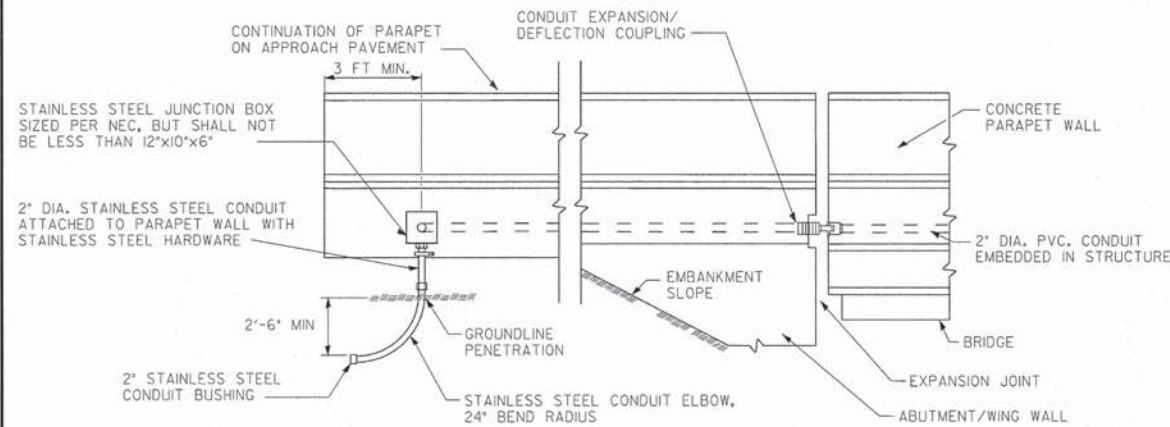


**CONDUIT EXPANSION DEFLECTION COUPLING NOTES**

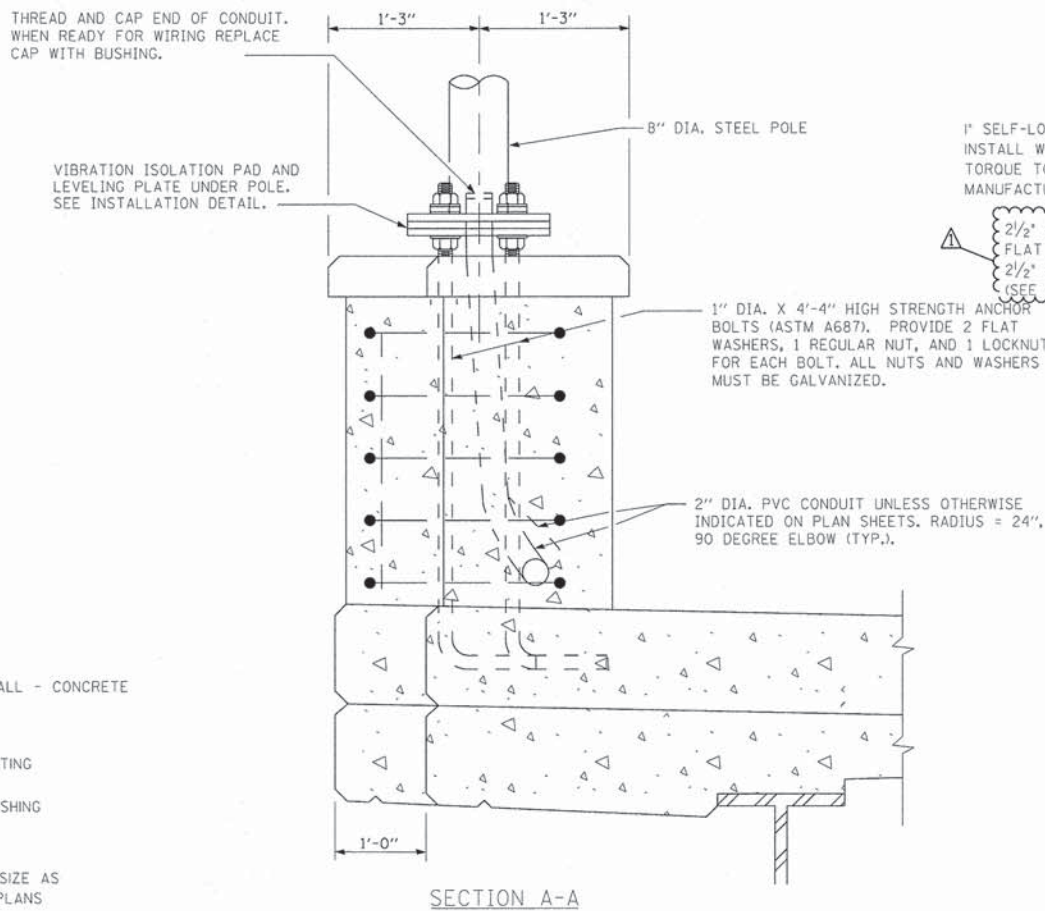
1. THE CONTRACTOR SHALL INSTALL A CONDUIT EXPANSION/DEFLECTION COUPLING AT THE JOINTS IN THE CONCRETE PARAPET ON THE BRIDGE CAPABLE OF ACCEPTING THE LONGITUDINAL MOVEMENT. ALL METALLIC PARTS OF THE COUPLING SHALL BE MADE OF STAINLESS STEEL OR AS APPROVED BY THE ENGINEER. ANY NON-STAINLESS METAL SHALL BE HOT DIP GALVANIZED AND COATED TO PREVENT REACTION WITH THE CONCRETE. THE COST OF THE COUPLING SHALL BE PART OF AND INCIDENTAL TO THE CONDUIT SYSTEM.
2. THE BARREL IN THE EXPANSION FITTING SHALL BE FULLY EMBEDDED IN THE CONCRETE ON ONE SIDE OF THE EXPANSION JOINT. ONE HALF THE LENGTH OF THE DEFLECTION FITTING SHALL BE EMBEDDED IN THE CONCRETE ON THE OTHER SIDE OF THE COUPLING.
3. A CAVITY OPENING 3" LARGER IN DIAMETER THAN THE DEFLECTION FITTING SHALL BE PROVIDED IN THE CONCRETE TO ENSURE PROPER PERFORMANCE OF THE COUPLING.
4. CAREFUL ATTENTION TO JOINT MOVEMENT OVER A RANGE OF TEMPERATURES SHALL BE COORDINATED WITH THE SELECTION AND INSTALLATION OF THE COUPLING TO ENSURE THE RANGE OF MOVEMENT OF THE COUPLING IS NOT EXCEEDED AT TEMPERATURE EXTREMES.
5. ALL MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE CAREFULLY FOLLOWED TO ENSURE OPTIMUM PERFORMANCE OF THE EXPANSION/DEFLECTION COUPLING.
6. THE CONTRACTOR SHALL INSTALL COUPLINGS AT ALL BRIDGE EXPANSION JOINTS AND SHALL BE RESPONSIBLE TO DETERMINE THE PROPER NUMBER OF COUPLINGS REQUIRED.



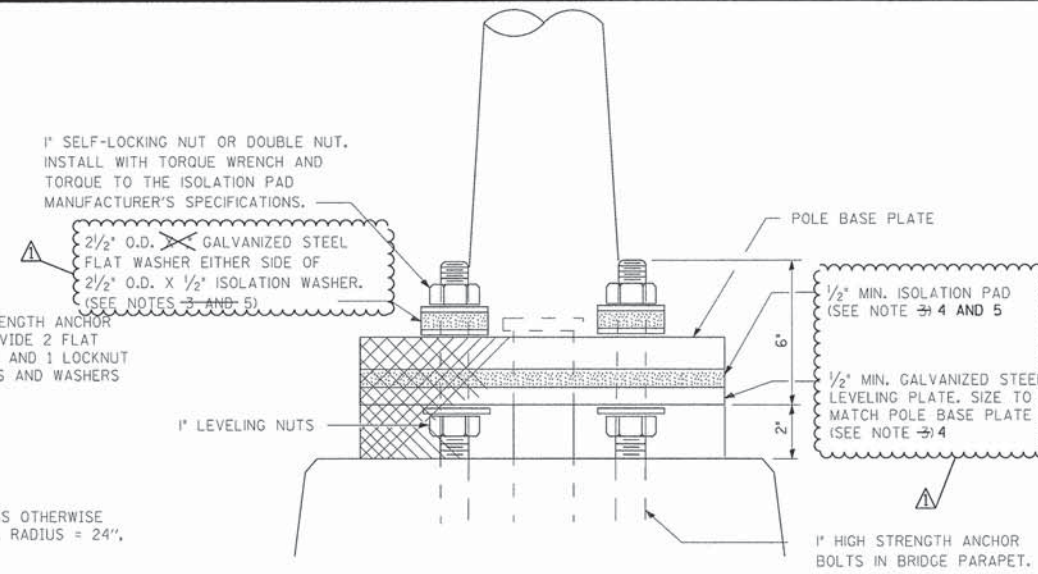
**CONDUIT EXPANSION/DEFLECTION COUPLING DETAIL**



**CONDUIT AT PARAPET DETAIL**



**SECTION A-A**



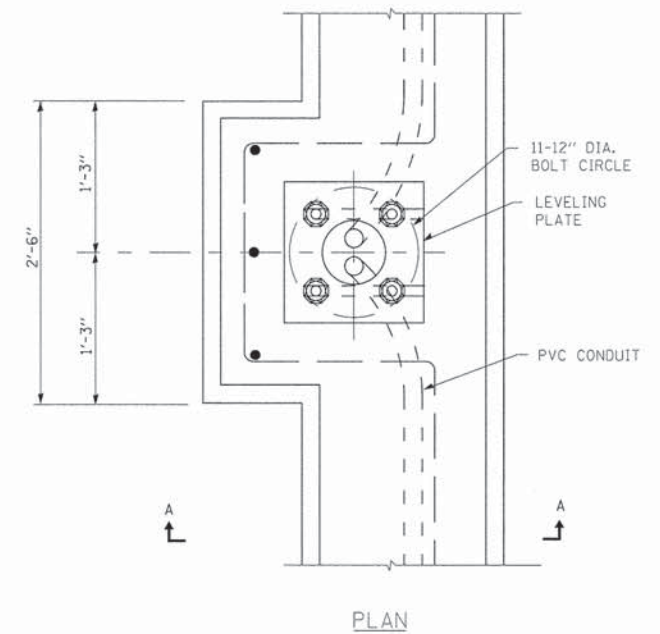
**POLE MOUNTED ON BRIDGE PARAPET (INSTALLATION DETAIL)**

**PARAPET MOUNTED LIGHT POLE NOTES**

1. THE OUTLINE OF THE POLE LEVELING PLATE AND VIBRATION ISOLATION PAD SHALL MATCH THAT OF THE POLE BASE PLATE.
2. THE COST OF ANCHOR BOLTS, AND FOUNDATION IS INCLUDED WITH CONCRETE SUPERSTRUCTURE. SEE BRIDGE PLANS.
3. ANCHOR BOLTS SHALL BE THREADED A MINIMUM OF 6 INCHES WITH A MINIMUM OF 3" OF THREADED ANCHOR BOLTS EMBEDDED IN THE FOUNDATION AND PROJECT A MINIMUM OF 2 3/4" ABOVE THE TOP OF THE FOUNDATION.
4. THE VIBRATION ISOLATION PAD AND LEVELING PLATE SHALL MATCH THE FOOTPRINT OF THE POLE BASE PLATE.
5. THICKNESS OF ISOLATION PAD AND WASHERS SHALL BE ACCORDING TO THE ISOLATION PAD MANUFACTURER'S RECOMMENDATIONS BASED UPON POLE HEIGHT AND LOADING.

**CONDUIT AT PARAPET NOTES**

1. STAINLESS STEEL CONDUIT, COUPLINGS, AND ELBOWS SHALL BE ACCORDING TO SECTION 810 OF THE STANDARD SPECIFICATIONS, AS APPLICABLE, SHALL BE TYPE 304 OR TYPE 316, AND SHALL BE MANUFACTURED ACCORDING TO UL STANDARD 6A AND ANSI STANDARD C 80.1.
2. CONDUIT FITTINGS SHALL BE THE THREADED TYPE, SHALL BE TYPE 304 OR TYPE 316 STAINLESS STEEL, AND SHALL BE MANUFACTURED ACCORDING TO UL STANDARD 514B.
3. ALL STAINLESS STEEL AND LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT, INCLUDING ALL FITTINGS, BUSHINGS, COUPLINGS, AND ELBOWS SHALL BE INCLUDED IN THE COST OF THE 'JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 12" X 12" X 6" - PAY ITEM.



**LIGHT POLE MOUNTED ON CONCRETE PARAPET**

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<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	DESIGNED - MWH	REVISED -5-8-14 PER IDOT REVIEW
	DRAWN - LKB	REVISED -5-16-14 PER IDOT REVIEW
	CHECKED - RWL	REVISED -7-14-14 ADDENDUM
	DATE - 03/14/14	FILE - 110511-PH2-SHT-SL-Controller-Dets.dgn

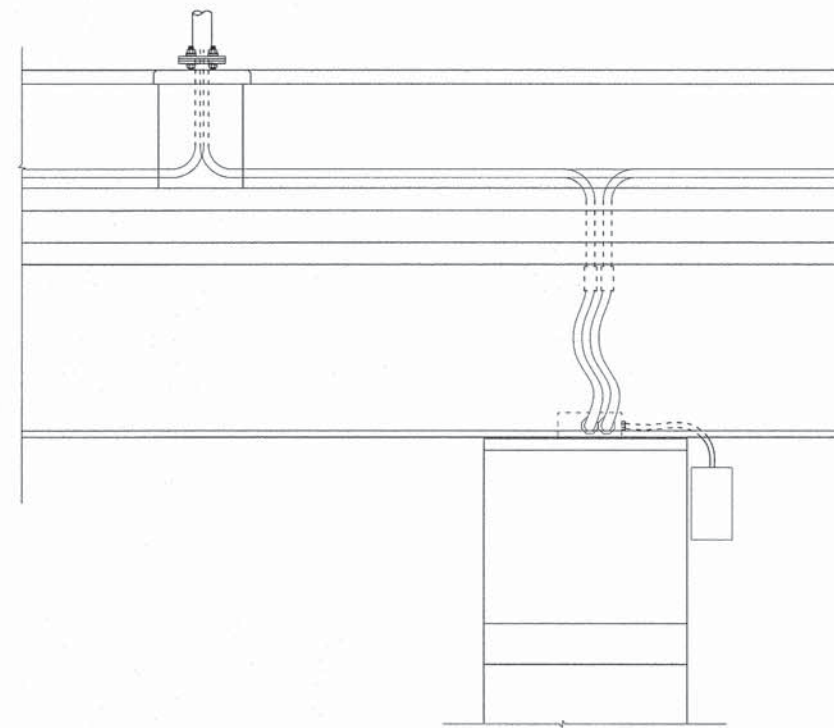
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>LIGHTING DETAILS</b>		F.A.U. RTE. 3719	SECTION 12-00239-00-BR	COUNTY LAKE	TOTAL SHEETS 88	SHEET NO. 28
SCALE: NONE	STA. TO STA.	CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-BM-9003952						

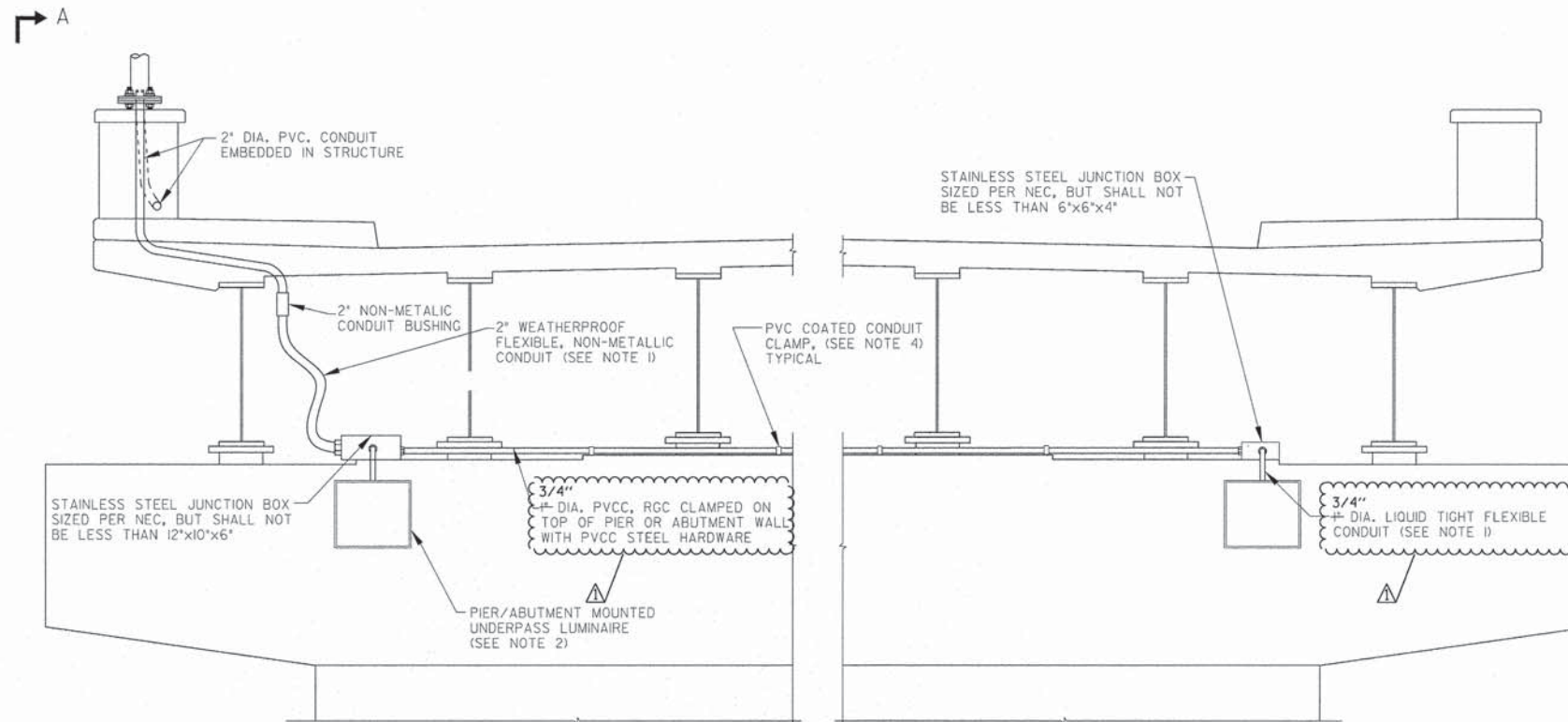


**UNDERPASS LIGHTING NOTES:**

1. LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT THE COST OF THE 3/4" DIA. RIGID STEEL CONDUIT AND 3/4" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE LUMINAIRE INSTALLATION.
2. UNDERPASS LUMINAIRE MOUNTED TO FACE OF PIER OR ABUTMENT WALL. MOUNTING HEIGHT OF 1" BELOW THE TOP OF PIER OR ABUTMENT WALL TYPICAL FOR ALL PIER/ABUTMENT MOUNTED UNDERPASS LUMINAIRES UNLESS OTHERWISE NOTED.
3. EXPANSION ANCHOR, POWDER ACTUATED FASTENERS WILL NOT BE ALLOWED. EXPANSION ANCHOR MUST BE SIZED IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
4. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
5. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.



SIDEVIEW A-A



UNDERPASS LIGHTING DETAIL PIER 2 AND 3

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<b>BAXTER &amp; WOODMAN</b> Consulting Engineers	DESIGNED -	REVISED -5-8-14 PER IDOT REVIEW
	DRAWN - LKB	REVISED -5-16-14 PER IDOT REVIEW
	CHECKED - RWL	REVISED -7-14-14 ADDENDUM
	DATE - 03/14/14	FILE - 110511.PH2.SHT-SL-Controller-Dets.dgn

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DEPARTMENT OF TRANSPORTATION

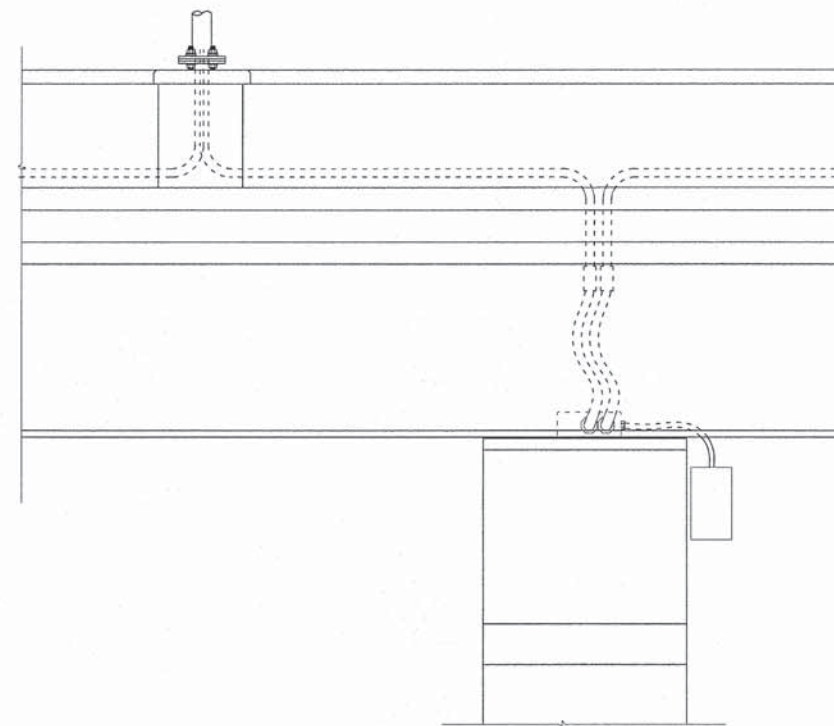
<b>LIGHTING DETAILS</b>	
SCALE: NONE	STA. TO STA.

F.A.U. RTE. 3719	SECTION 12-00239-00-BR	COUNTY LAKE	TOTAL SHEETS 88	SHEET NO. 29A
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-BHM-90039521				

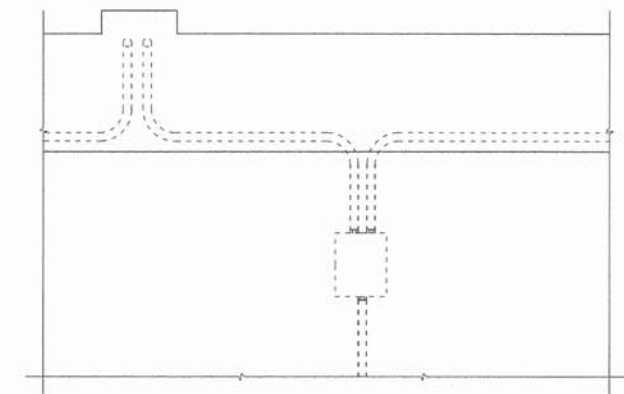


**UNDERPASS LIGHTING NOTES:**

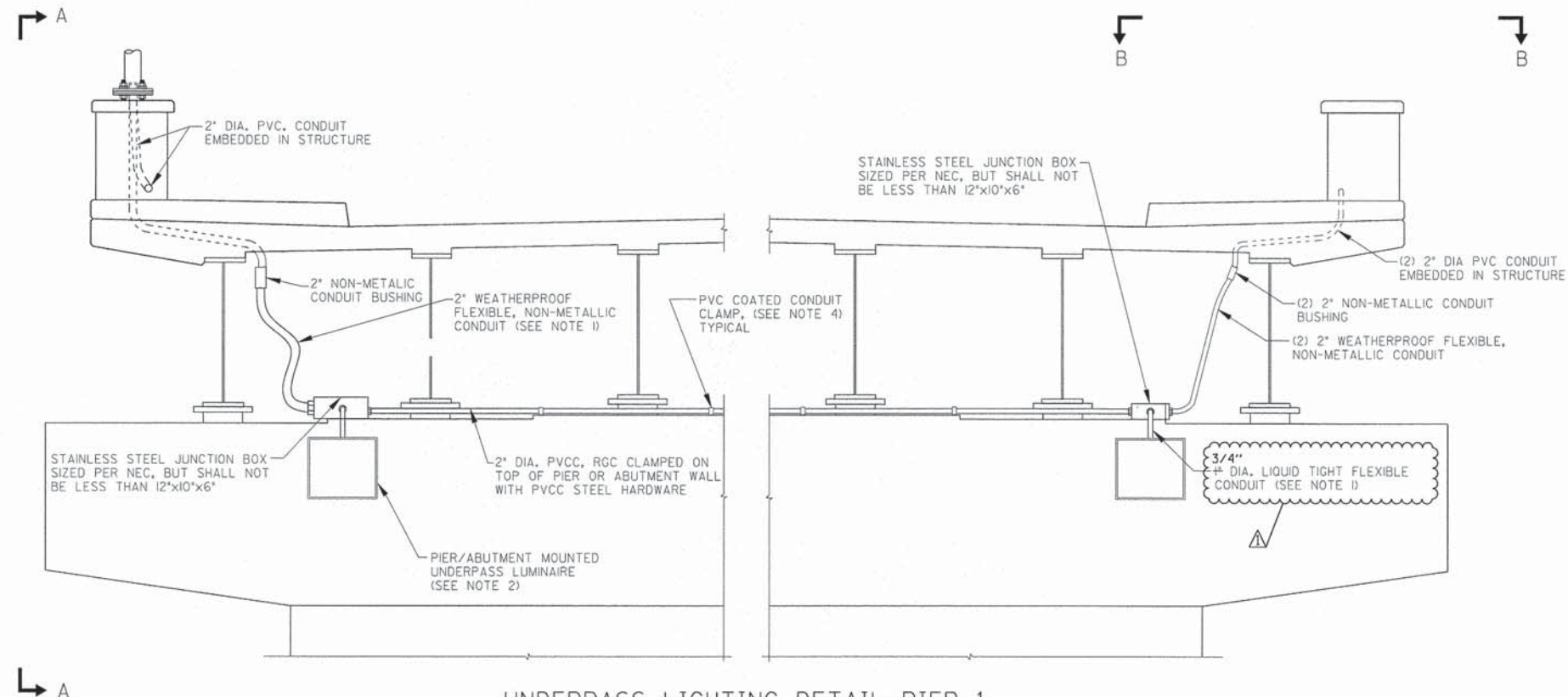
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5. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.



SIDEVIEW A-A



TOP VIEW B-B



UNDERPASS LIGHTING DETAIL PIER 1

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DESIGNED - MWH	REVISED - 5-8-14 PER IDOT REVIEW
DRAWN - UKB	REVISED - 5-16-14 PER IDOT REVIEW
CHECKED - RWL	REVISED - 7-14-14 ADDENDUM A
DATE - 03/14/14	FILE - 110511.PH2.SHT-SL-Controller-Dets.dgn

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS

SCALE: NONE

STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3719	12-00239-00-BR	LAKE	88	29
CONTRACT NO. 61A57				
FED. ROAD DIST. NO. 1   ILLINOIS   FED. AID PROJECT M-BM-9003952				



**GENERAL NOTES**

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts (in painted areas and ASTM A325 Type 3 in unpainted areas). Bolts 3/4 in. φ, holes 15/16 in. φ, unless otherwise noted.

Calculated weight of Structural Steel = 923,680 lbs. (AASHTO M 270 Grade 50W).

All structural steel shall be AASHTO M 270 Grade 50W except as noted.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

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.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

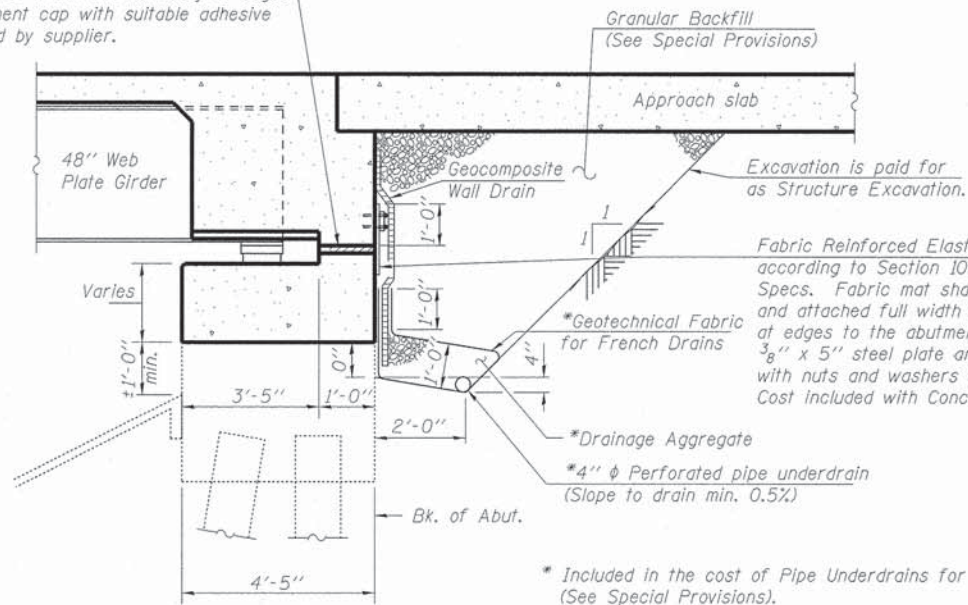
See Roadway General Notes and Special Provisions for additional requirements by Union Pacific.

Protective Shield was installed in 2013 throughout all of Span 2, and Span 3 over the UPRR tracks. This protective shield can be assumed to be in acceptable condition for use during superstructure removal. Existing protective shield shall become the property of the Contractor after removal.

The overhead power lines crossing Span 2 will remain active and will require a minimum construction clearance to avoid arcing. As of the printing of these contract documents, ComEd is expected to raise these lines prior to construction to increase the allowable work zone height under the wires to approximately 30 feet above the bridge deck. The Contractor shall verify available vertical clearances and safe distances with ComEd prior to beginning work.

Copies of record drawings for the existing bridge are available upon request. Contact Baxter & Woodman at (815) 459-1260 and allow up to two business days.

2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to abutment cap with suitable adhesive as recommended by supplier.



**SECTION THRU SEMI-INTEGRAL ABUTMENT**  
(Horiz. dim. @ Rt. L's)

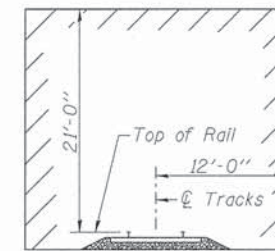
All drainage system components shall extend to the inside face of the existing wingwalls. 4" perforated pipe drains shall be extended through field-cored holes in the wingwalls and until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Superstructures	Each	1		1
Concrete Removal	Cu Yd		135.1	135.1
Protective Shield	Sq Yd	1185		1185
Structure Excavation	Cu Yd		218	218
Concrete Structures	Cu Yd		295.5	295.5
Concrete Superstructure	Cu Yd	966.2		966.2
Bridge Deck Grooving	Sq Yd	2630		2630
Form Liner Textured Surface	Sq Ft	4590		4590
Protective Coat	Sq Yd	3624		3624
Furnishing And Erecting Structural Steel	L Sum	1		1
Stud Shear Connectors	Each	11955		11955
Reinforcement Bars, Epoxy Coated	Pound	223670	39160	262830
Bar Splicers	Each	1196	132	1328
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	202		202
Elastomeric Bearing Assembly, Type I	Each	24		24
Elastomeric Bearing Assembly, Type II	Each	24		24
Anchor Bolts, 1"	Each		48	48
Anchor Bolts, 1 1/4"	Each		24	24
Anchor Bolts, 1 1/2"	Each		24	24
Anchor Bolts, 2"	Each		24	24
Epoxy Crack Injection	Foot		80	80
Geocomposite Wall Drain	Sq Yd		90	90
Drainage System	L Sum	1		1
Concrete Surface Color Treatment	Sq Ft	4050		4050
Concrete Wearing Surface, 5"	Sq Yd	353		353
Concrete Wearing Surface (Variable Depth)	Sq Yd	134		134
Precast Bridge Approach Slab	Sq Ft	3933		3933
Parapet Railing, Special	Foot	811		811
Granular Backfill For Structures	Cu Yd		132	132
Structural Repair Of Concrete (Depth Equal To Or Less Than 5 Inches)	Sq Ft		350	350
Structural Repair Of Concrete (Depth Greater Than 5 Inches)	Sq Ft		50	50
Drainage Scuppers, DS-II	Each	6		6
Temporary Sheet Piling	Sq Ft		634	634
Pipe Underdrains For Structures 4"	Foot		220	220
Slope Wall Repair	Sq Yd		100	100
Temporary Support System, Location 1	Each		1	1
Temporary Support System, Location 2	Each		1	1

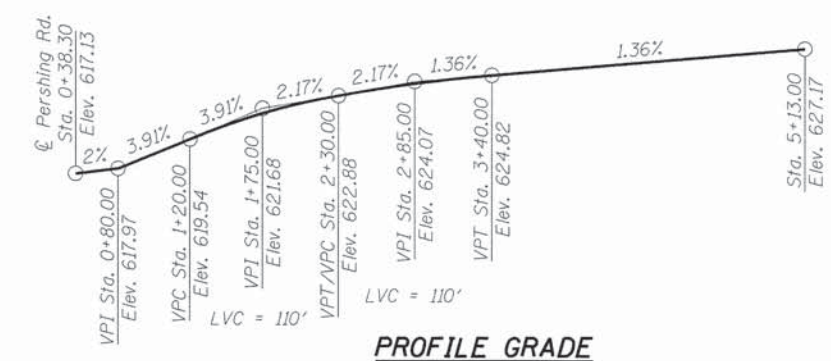
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50. Boring Logs



**MINIMUM CONSTRUCTION CLEARANCE ENVELOPE**

From BNSF/UPRR Guidelines  
Dimensions perpendicular to tracks



**PROFILE GRADE**

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 17/14/2014

**BAXTER & WOODMAN**  
Consulting Engineers

USER NAME = 611bib	DESIGNED - BLB	REVISED - 7/11/2014 BLB
	CHECKED - DCD	REVISED -
PLOT SCALE =	DRAWN - BLB	REVISED -
PLOT DATE = 7/14/2014	CHECKED - DCD	REVISED -

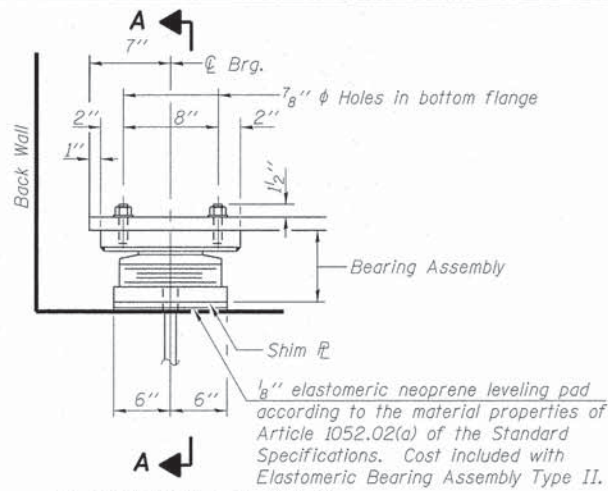
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA**  
**STRUCTURE NO. 049-2050**

SHEET NO. 2 OF 50 SHEETS

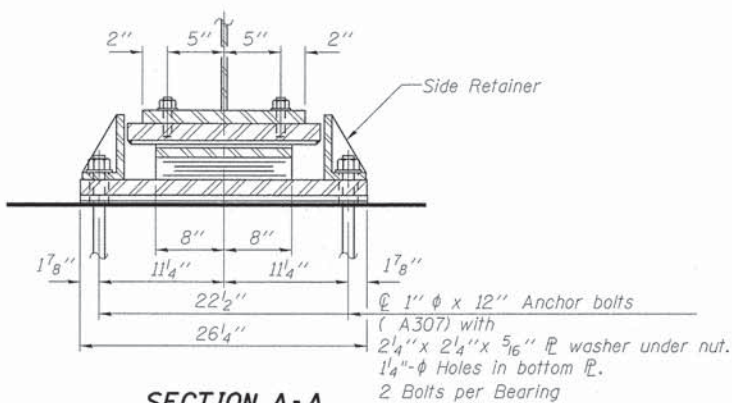
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CONTRACT NO. 61A57			ILLINOIS FED. AID PROJECT M-BM-9003(952)	



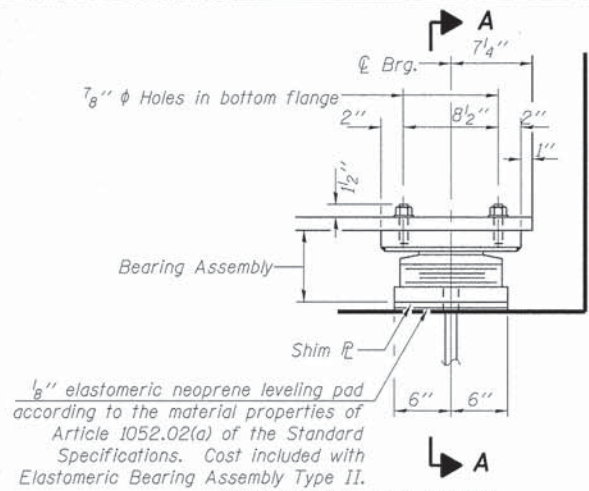


ELEVATION AT ABUT.

TYPE II ELASTOMERIC EXP. BRG. AT EAST ABUTMENT

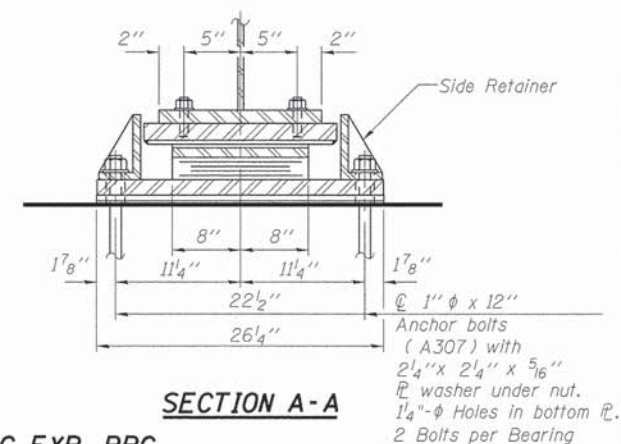


SECTION A-A



ELEVATION AT ABUT.

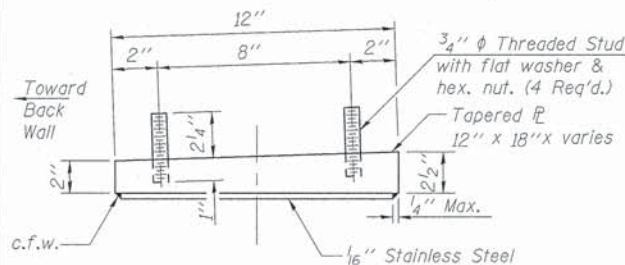
TYPE II ELASTOMERIC EXP. BRG. AT WEST ABUTMENT



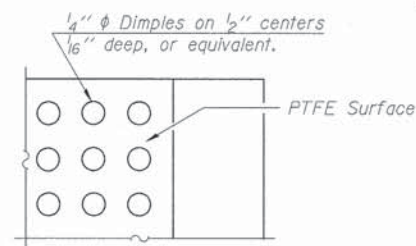
SECTION A-A

Abutment	East	West
Beam No.	1 4 5 6	
Shim Height (in.)	1/8 3/4 1/4 1/4	

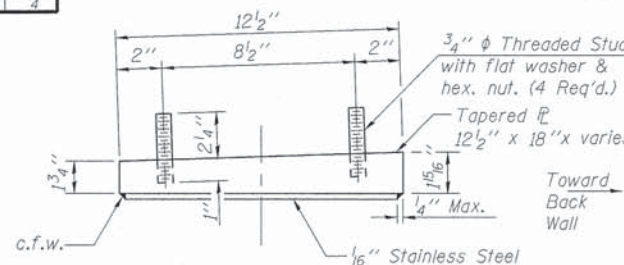
SHIM TABLE



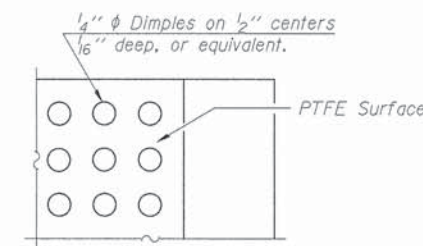
TOP BEARING ASSEMBLY - EAST ABUT



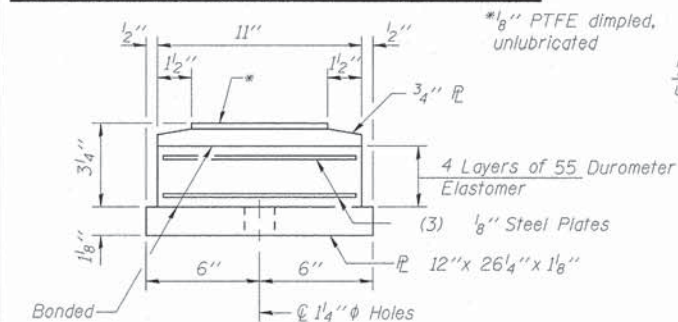
PLAN-PTFE SURFACE



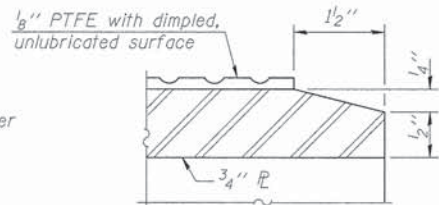
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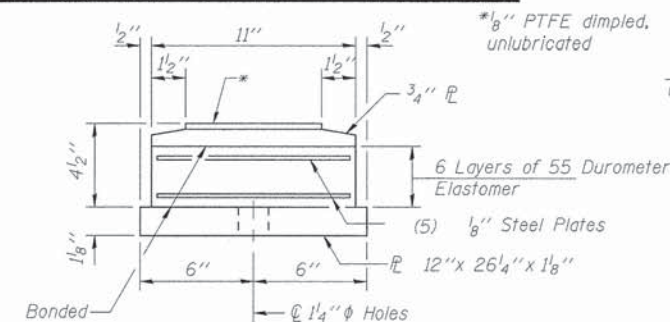
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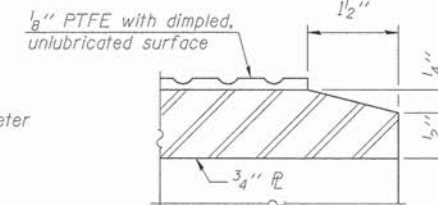
BOTTOM BEARING ASSEMBLY - EAST ABUT



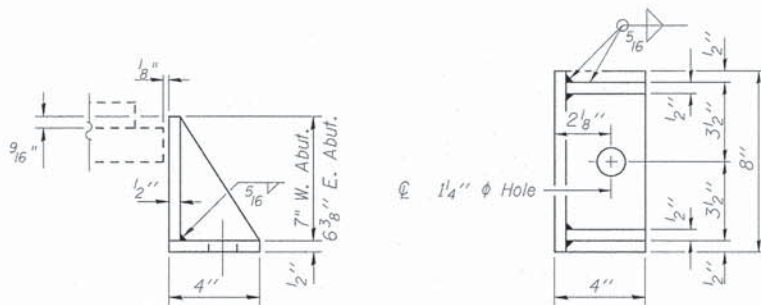
SECTION THRU PTFE



BOTTOM BEARING ASSEMBLY - WEST ABUT



SECTION THRU PTFE



SIDE RETAINER AT EAST AND WEST ABUTMENTS

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



SETTING ANCHOR BOLTS AT EXP. BRG. (Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Notes:  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

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 elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

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

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

The 1/8" 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 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	24
Anchor Bolts, 1"	Each	48

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 206 W. WASHINGTON ST., SUITE 200, CHICAGO, IL 60601  
 TEL: 312.467.1000 FAX: 312.467.1001  
 WWW.BAXTERANDWOODMAN.COM

**BAXTER & WOODMAN**  
Consulting Engineers

USER NAME = 611bib  
 PLOT SCALE =  
 PLOT DATE = 7/14/2014

DESIGNED - ABW  
 CHECKED - DCD  
 DRAWN - ABW  
 CHECKED - DCD

REVISED 7/11/2014 BLB  
 REVISED -  
 REVISED -  
 REVISED -

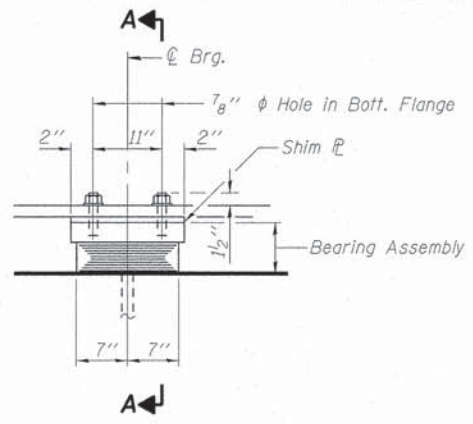
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS AT ABUTMENTS  
 STRUCTURE NO. 049-2050

SHEET NO. 38 OF 50 SHEETS

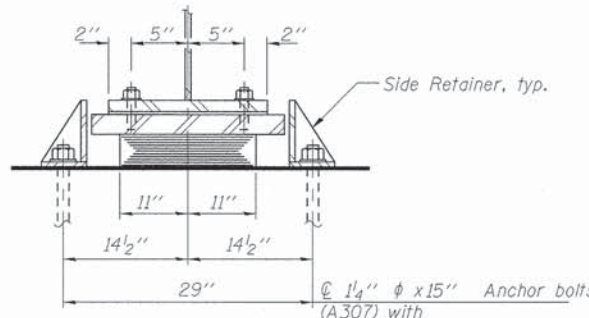
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61A57				
[ILLINOIS] FED. AID PROJECT M-BM-9003(952)				





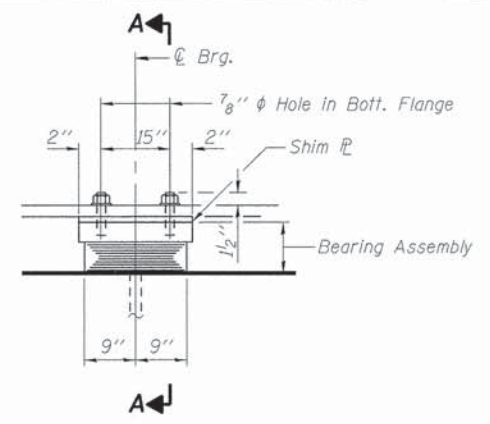
**ELEVATION**

**TYPE I ELASTOMERIC EXP. BRG. AT PIER 1**



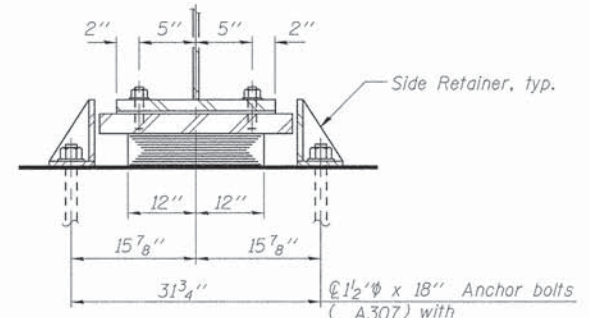
**SECTION A-A**

Anchor bolts  
(A307) with  
2 3/4" x 2 3/4" x 5/16" PL washer  
under nut  
2 Bolts per Bearing



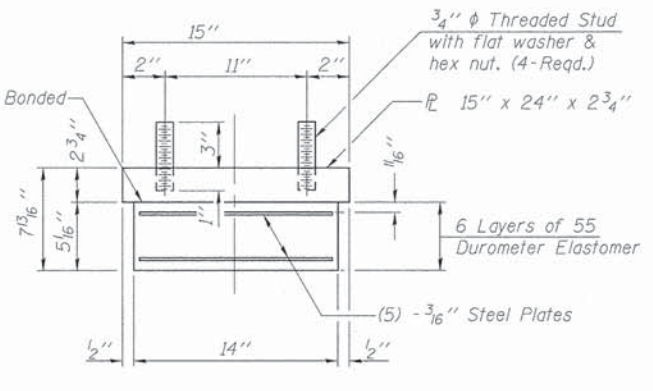
**ELEVATION**

**TYPE I ELASTOMERIC EXP. BRG. AT PIER 3**



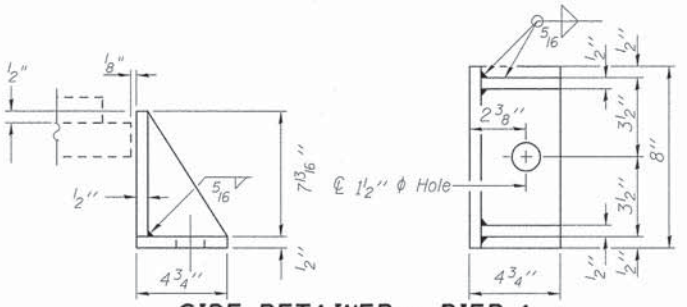
**SECTION A-A**

Anchor bolts  
(A307) with  
3" x 3" x 5/16" PL washer  
under nut  
2 Bolts per Bearing



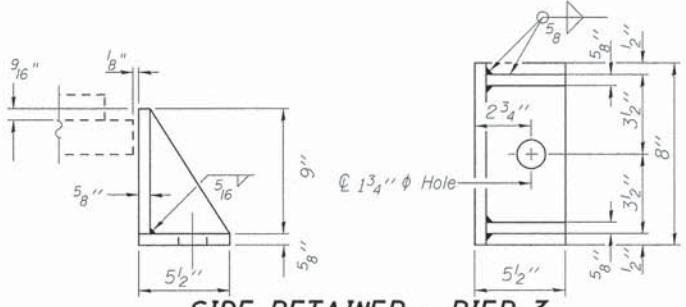
**BEARING ASSEMBLY AT PIER 1**

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



**SIDE RETAINER - PIER 1**

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

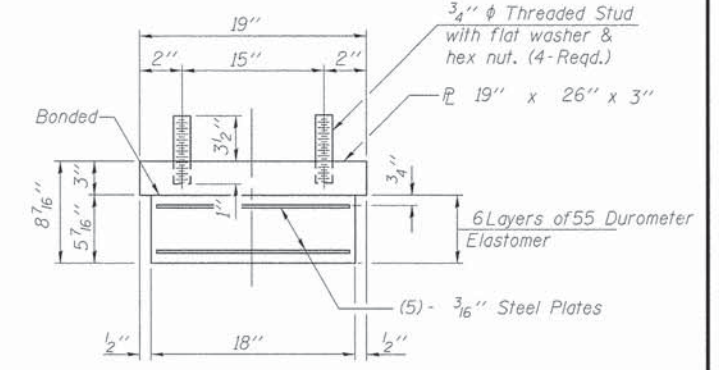


**SIDE RETAINER - PIER 3**

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

Pier	1	3
Beam No.	2	6
Shim Height (in.)	1/2	1/4

**SHIM TABLE**



**BEARING ASSEMBLY AT PIER 3**

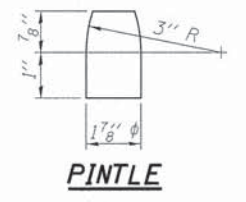
Note:  
Shim plates shall not be placed  
under Bearing Assembly.

Notes:  
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.  
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.  
Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.  
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 elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

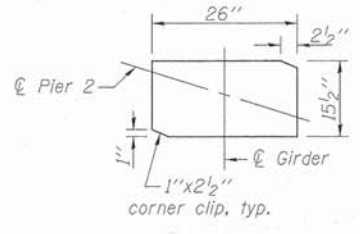
The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50W.  
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.  
Cost of fixed bearings shall be included with Furnish & Erect Structural Steel.

**BILL OF MATERIAL**

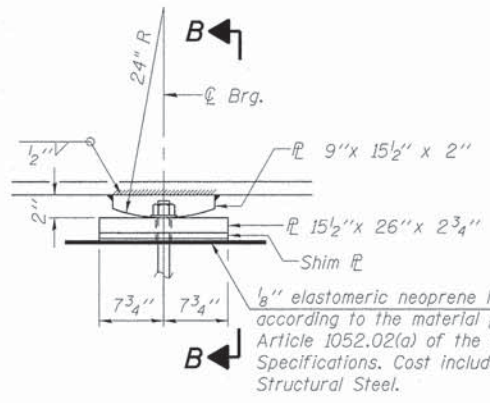
Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	24
Anchor Bolts, 1 1/4"	Each	24
Anchor Bolts, 1 1/2"	Each	24
Anchor Bolts, 2"	Each	24



**PINTLE**

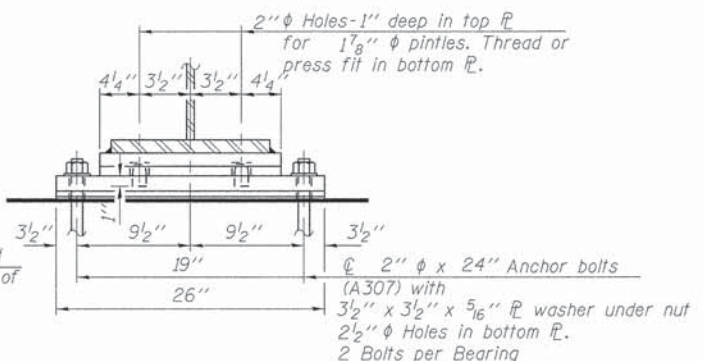


**BOTTOM PLATE PLAN**



**ELEVATION AT PIER**

**FIXED BEARING AT PIER 2**



**SECTION B-B**

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**BAXTER & WOODMAN**  
Consulting Engineers

USER NAME = 611bib  
DESIGNED - ABW  
CHECKED - DCD  
DRAWN - ABW  
CHECKED - DCD  
PLOT SCALE =  
PLOT DATE = 7/14/2014

DESIGNED - ABW  
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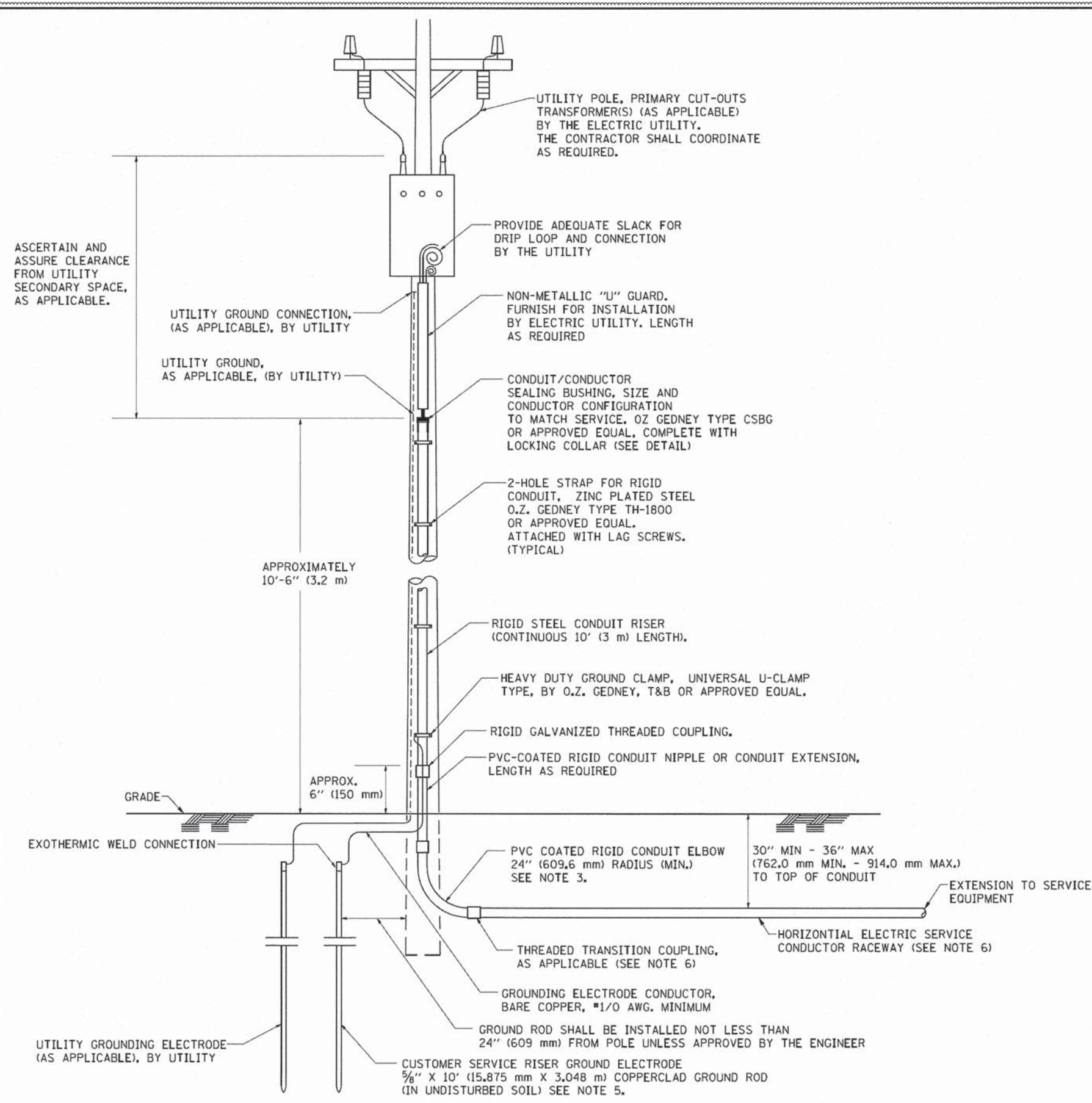
REVISED 7/11/2014 BLB  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS AT PIERS  
STRUCTURE NO. 049-2050  
SHEET NO. 39 OF 50 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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				CONTRACT NO. 61A57
				[ILLINOIS] FED. AID PROJECT M-BM-9003952



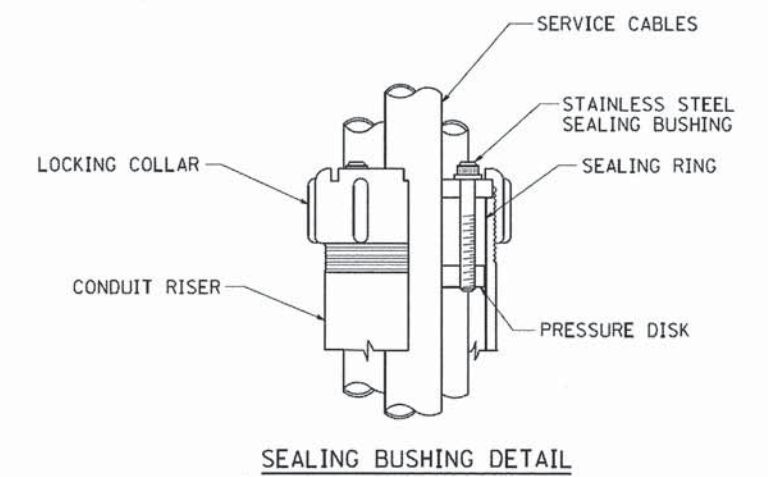


**APPLICATION**

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

**NOTES**

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 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.
- 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.
- 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 METALLIC TO NON METALLIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 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.



FILE NAME = W:\distsd\22x34\be228.dgn	USER NAME = geglennob	DESIGNED -	REVISED - 03-03-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT</b>			F.A.U. RTE. 3719	SECTION 12-00239-00-BR	COUNTY LAKE	TOTAL SHEETS 88	SHEET NO. 80A
	PLOT SCALE = 50.0000' / IN.	DRAWN -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	<b>BE-220</b>		CONTRACT NO. 61A57	
	PLOT DATE = 1/4/2008	CHECKED - MEA	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT-M-BM-9003/9521							
		DATE -	REVISED -									