

CITY OF MUSCATINE

LIGHTING

STP-E-5330(611)-8V-70

LETTING DATE
11-20-07

STANDARD ROAD PLANS					
The following Standard Road Plans shall be considered applicable to construction work on this project.					
NUMBER	DATE	NUMBER	DATE	NUMBER	DATE
TC-1	10-17-06			RM-36	10-03-00
TC-212	10-16-07			RM-38	04-27-99
				RM-40	09-21-99



Iowa Department of Transportation

Highway Division

PLANS OF PROPOSED IMPROVEMENTS ON THE
PRIMARY ROAD SYSTEM
CITY OF MUSCATINE

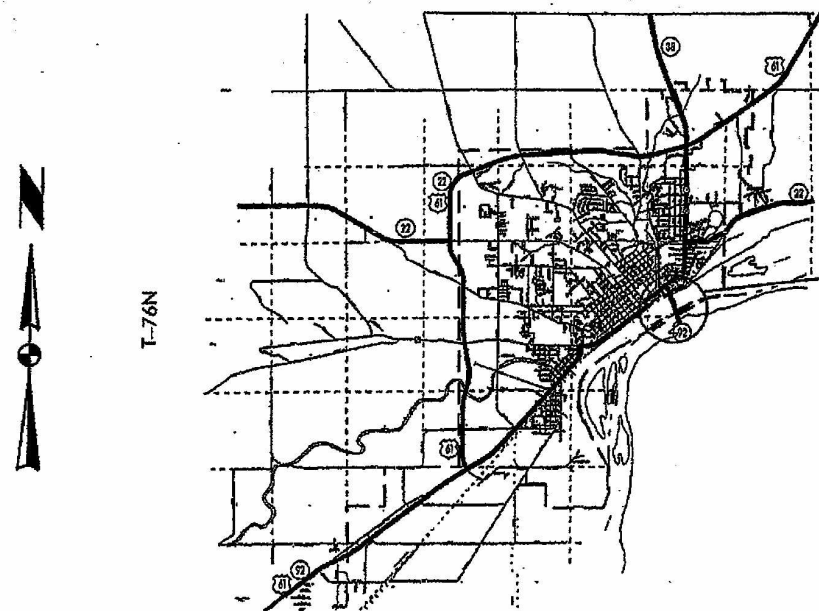
STP-E-5330(611)-8V-70
LIGHTING- LED DECORATIVE
IA-92 Mississippi River Bridge
In Muscatine

SCALES: As Noted

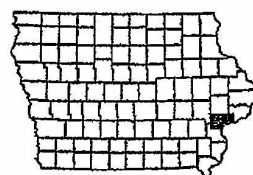
The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, series of 2001, plus General Supplemental Specifications, and applicable Supplemental Specification, Developmental Specifications, and Special Provisions, shall apply to the construction on this project.

Value Engineering Saves. Refer to Article 1105.15 of Specifications

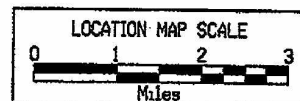
NO MILEAGE SUMMARY



PROJECT LOCATION
BOP STATION 4+72.20
EOP STATION 34+90.36



R-3W



TOTAL	9
PROJECT NUMBER	
STP-E-5330(611)-8V-70	
R.O.W. PROJECT NUMBER	
PROJECT IDENTIFICATION NUMBER	
??????????	

INDEX OF SHEETS	
105-3 07-21-87	
NO.	DESCRIPTION
A.01	TITLE SHEET
C.01-02	GENERAL NOTES AND ESTIMATE OF QUANTITIES
P.01	APPROACH SITE PLAN LAYOUT
E.01-08	LIGHTING DETAILS AND SCHEMATICS ORIGINAL BRIDGE CONSTRUCTION DRAWINGS

REVISIONS

CITY OF MUSCATINE
PUBLIC WORKS
DIRECTOR:

Laurel E. Hill



I hereby certify that this plan was prepared under my supervision and that engineering decisions with regard to the design were made by me or by other duly licensed Professional Engineers under the laws of the State of Iowa.

Vernon L. McAllister
Vernon L. McAllister
Printed or Typed Name

My license renewal date is December 31, 2008.

Pages or sheets covered by this seal: A.01, C.01-02, P.01, AND E.01-08

DESIGN TEAM

JORGENSEN/JENSEN/SCI

CITY OF MUSCATINE

MUSCATINE COUNTY

PROJECT NO. STP-E-5330(611)-8V-70

SHEET NO. A.01

108-11
08-20-85

MUSCATINE POWER AND WATER WILL PROVIDE SECONDARY SERVICE (120/240 VOLTS SINGLE PHASE) AND INTERNET SERVICE TO THE CONTROL STATION LOCATED ON THE PLAN. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAKE THE NECESSARY CONTACTS WITH THE UTILITY COMPANY WITH REGARD TO THE ELECTRICAL SERVICE. CONTACT IS: MUSCATINE POWER AND WATER, SMR. STEVE SHOPPA, PHONE: (563) 262-3324.

LED ACCENT LUMINAIRE, 240 VOLT, ANSI/IES GRARE CONTROL RATINGS SHALL BE "FULL CUTOFF" WITH FLAT GLASS LENS. LED COLOR SHALL BE CHANGEABLE.

Following completion of work on this project seeding, fertilizing, and mulching of all disturbed areas shall be done as directed by the Engineer.

3 lbs. of Fescue, Kentucky 31 or Fawn per 1000 sq. ft.

17 lbs. of 13-13-13 (or equivalent) chemically combined fertilizer
per 1000 sq. ft.

70 lbs. of dry cereal straw per 1000 sq. ft. All mulch to be consolidated into the soil with the mulch stabilizer.

The preparation of the seedbed, furnishing and application of seed, fertilizer, and mulch to all disturbed areas on this project shall be considered incidental to work on this project and no extra compensation will be allowed.

201-1

Lighting Contractor shall check for locations of utilities, drainage structures or other facilities in the construction area. Any damage to such facilities due to the contractor's carelessness shall be corrected at the contractor's expense.

100-4
10-29-02

ITEM NO.	ITEM CODE	DESCRIPTION
1	2523-0000200	ALL NEW CABLES AND RACEWAY SHALL BE ATTACHED TO THE OUTSIDE OF THE BRIDGE BARRIER, AND BURIED IN THE GROUND. ALL CONDUIT ATTACHED TO THE BRIDGE SHALL BE SUPPORTED AT MAXIMUM 4 FOOT INTERVALS, WITH SUFFICIENT EXPANSION FITTINGS. THE NEW ELECTRICAL SERVICE TO LIGHTING CONTROLLER "LC-1" CIRCUIT IS 120/240 VOLT, 1 PHASE 3 WIRE, DMX/XLR COMMUNICATION CABLE PROVIDED BY CITY OF MUSCATINE TO CONTRACTOR. CONTRACTOR TO PROVIDE COMMUNICATION RACEWAY. 62.5 MICRON MULTI MODE FIBER CABLE BY CONTRACTOR IN COMMUNICATION RACEWAY.

2	2523-000031D	NEW RM-37 FIBER REINFORCED JUNCTION BOXES SHALL BE FURNISHED AND INSTALLED FOR LED LIGHTS AND TRUSS SPAN LIGHTS. THESE JUNCTION BOXES SHALL BE USED FOR ELECTRICAL, SPLITTER/AMPLIFIERS, AND COMMUNICATION FOR INSTALLING ALL CABLE SPLICES, DISTRIBUTION BLOCKS, AND CONNECTORS.
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3	2523-0000400	CONTROLLER TO INCLUDE CONCRETE FOUNDATION, DMX CONTROLLER (PROVIDED BY CITY OF MUSCATINE), NAVIGATIONAL CONTROLLER, AND REQUIRED TIME CLOCK, AND PHOTOCCELL.
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METHOD OF MESUREMENT: THE ENGINEER WILL COUNT THE CONTROL CABINET TO SERVICE.

BASIS OF PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE FOR ONE CONTROL CABINET FOR SERVICE. THIS PAYMENT SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED FOR CONTROL CABINET TO SERVICE, AS SPECIFIED.

4	2599-9999Q05	NEW LED DECORATIVE BRIDGE LUMINAIRES PROVIDED BY CITY OF MUSCATINE TO CONTRACTOR FOR THE EXTERIOR DOWNSTREAM SIDE OF THE BRIDGE SPANS 8-13 SHALL BE FURNISHED AND INSTALLED AS SHOWN ON THE DRAWINGS. THE LUMINAIRES SHALL BE INSTALLED ON GALVANIZED 2" METAL GRATING PAINTED RAL#6021 WITH FULLY ADJUSTABLE MOUNTING FOR AIMING OF FIXTURES. THE LED'S SHALL OPERATE ON 240 VOLTS A-C, AND EMIT LIGHT OF PROGRAMMABLE VARYING WAVELENGTH. THE INSTALLATION SHALL INCLUDE NEW WIRING, AND NEW FLEXIBLE LIQUID-TITE CONDUIT INSTALLED TO THE NEW JUNCTION BOXES. LIGHTS SHALL BE FURNISHED WITH ALL REQUIRED METAL GRATE PLATFORM AND MOUNTING HARDWARE AS REQUIRED FOR COMPLETE INSTALLATION. CONTRACTOR TO PROVIDE EQUIPMENT AND COST TO HAVE MANUFACTURER SERVICE ENGINEER TO DO FINAL AIMING OF FIXTURES AT COMPLETION OF JOB. MINIMUM OF 2 NIGHTS AFTER DARK FOR 6 HOURS PER NIGHT.
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METHOD OF MEASUREMENT: THE ENGINEER WILL COUNT THE NUMBER OF COMPLETE NEW LED LUMINAIRE INSTALLATIONS AND REQUIRED LUMINAIRES AT EACH LOCATION.

BASIS OF PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE FOR EACH COMPLETE NEW LED LUMINAIRE INSTALLED. THIS PAYMENT SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL LABOR, EQUIPMENT, AND MOUNTS FOR EACH LUMINAIRE, AS SPECIFIED.

100-4
10-29-02

ITEM NO.	ITEM CODE	DESCRIPTION
5	2599-9999010	NEW LED DECORATIVE LIGHT SYSTEM SHALL BE FURNISHED AND INSTALLED WITH NAV PHOTOCELL OVERRIDE AS SHOWN ON THE DRAWINGS. ALL JUNCTION BOXES, CONDUIT, AND WIRE REQUIRED FOR A COMPLETE NAV PHOTOCELL OVERRIDE INSTALLATION, SHALL BE INCIDENTAL TO THIS SYSTEM.

METHOD OF MEASUREMENT: THE ENGINEER WILL VERIFY THE NAVIGATION LIGHT SYSTEM IS COMPLETE AND OPERABLE. TO TURN OFF BRIDGE DECORATIVE LIGHTING BY NAVIGATIONAL TRAFFIC SEARCH LIGHTS.

BASIS OF PAYMENT: THE CONTRACTOR WILL BE PAID THE CONTRACT UNIT PRICE FOR THE COMPLETE NEW NAVIGATION LIGHT SYSTEM. THIS PAYMENT SHALL BE CONSIDERED FULL COMPENSATION FOR FURNISHING ALL LABOR, EQUIPMENT, AND MATERIALS FOR THE OVERRIDE SYSTEM, AS SPECIFIED.

100-1A
07-15-97

[illegible]

* PROVIDED BY CITY OF MUSCATINE FOR CONTRACTOR TO INSTALL.
LED MOUNTS PROVIDED BY CONTRACTOR FOR LIGHT FIXTURES AS
SHOWN ON DWG E.03.

** PROVIDED AND INSTALLED BY CONTRACTOR. ONLY SUNLIGHT CONTROLLER
INSTALLED IN "LC-1" LIGHTING CONTROLLER IS PROVIDED BY CITY
OF MUSCATINE FOR CONTRACTOR TO INSTALL.

GENERAL NOTES AND ESTIMATE OF QUANTITIES

IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

C.01

TABULATION OF ELECTRICAL DUCTS

108-2
QB-20-85

[illegible]

APPROXIMATE DISTANCES:
720' FROM CONTROLLER TO PIER 8
502' - PIER 8-10
512' - PIER 10-11
502' - PIER 10-13

TABULATION OF ELECTRICAL WIRE, CABLE AND CONNECTORS

108-12
2-11-00

[illegible]

TRAFFIC CONTROL PLAN

108-23A
10-29-02

1. Through traffic will be maintained on the project at all times.
2. Traffic control on this project shall be found in accordance with the RS series of Standard Road Plans found in Tab. 105-4 on the Title Sheet and/or appropriate Detail Sheets included in the plans. For additional complementary information, refer to Part VI of the Manual on Uniform Traffic Control Devices and the current Standard Specifications.
3. The contractor shall coordinate traffic control with other projects in the area.
4. All traffic control devices shall be furnished, erected, maintained, and removed by the contractor.
5. Where possible, all post mounted signs shall be placed at least 2 feet beyond the curb or edge of shoulder.
6. The location for storage of equipment by the contractor during non-working hours shall be as approved by the engineer in charge of construction.
7. The engineer may require modifications to the pavement marking details shown. Conflicting permanent edge lines, center lines, or lane lines shall be removed. As applicable, permanent edge lines, center lines, and lane lines shall be placed before the roadway is returned to normal traffic. The current Standard Specifications and supplemental specifications shall apply.
8. Proposed sign spacing may be modified as approved by the engineer to meet existing field conditions or to prevent obstruction of the motorist's view of permanent signing.
9. Permanent signing that conveys a message contrary to the message of the temporary signing and not applicable to the working conditions shall be covered by the contractor when directed by the engineer.
10. Proposed changes in the traffic control plan shall be reviewed with the Office of Construction before changes are made.
11. "Traffic control devices, procedures, layouts, signing, and pavement markings installed within the limits of this project shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways" as adopted by the Department per 761 of the Iowa Administrative Code (IAC) chapter 130."

TABULATION OF COMMUNICATION DUCTS

108-2
08-20-85

LOCATION	CONDUIT TYPE	DIA. Inches	LENGTH Feet	REMARKS
COMM #1	RIGID PVC	2	1250	LC-1 TO 9L2R
COMM #2	RIGID PVC	1	700	9L2R TO 22L1R
COMM #3	RIGID PVC	1	530	9L2R TO 23L1
COMM #4	RIGID PVC	1	530	23L1 TO NAV CONTROL
INTERNET SERVICE	RIGID PVC	1	300	UTILITY POLE TO "LC-1"

TABULATION OF COMMUNICATION WIRE, CABLE AND CONNECTORS

108-12
2-11-00

CIRCUIT NUMBER																	REMARKS	
	TYPE	QUAN. NO.	TYPE	QUAN. NO.	TYPE	QUAN. NO.	TYPE	QUAN. NO.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.	SIZE A.W.G.	QUAN. L.F.		
FIBER OPTIC										2500								LC-1 TO NAV CONT
62.5 MICRON																		
MULTI MODE																		

NOTES:

1. METAL GRATE, LIGHT FIXTURES, RACEWAYS, AND MOUNTING HARDWARE
TO BE PAINTED TO MATCH BRIDGE RAL #6021 COLOR.
PRIMER AND 2 FINISH COATS.

GENERAL NOTES AND ESTIMATE OF QUANTITIES

IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

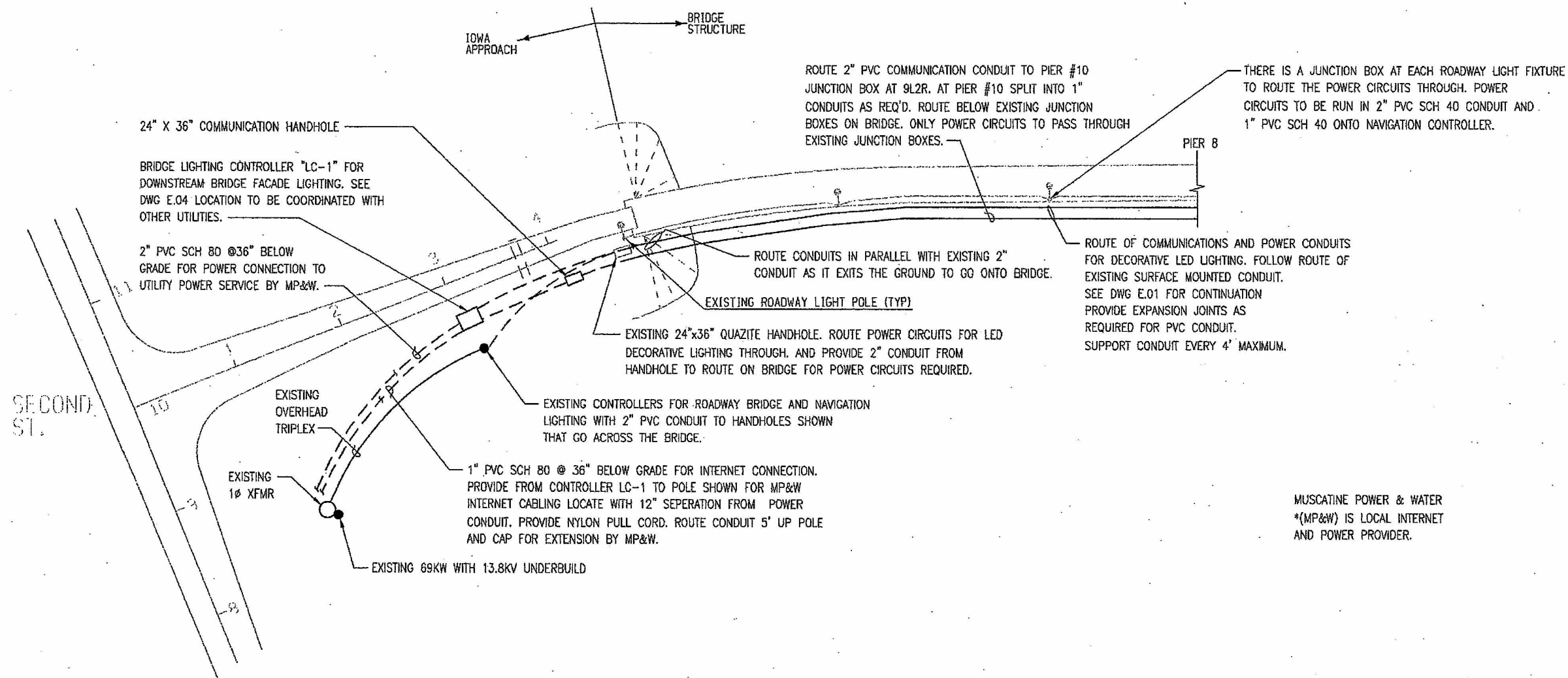
DESIGN TEAM

JORGENSEN/JENSEN/SCI

CITY OF MUSCATINE MUSCATINE COUNTY

PROJECT NO. STP-E-5330(611)-8V-70

SHEET NO. C.02



MUSCATINE POWER & WATER
*(MP&W) IS LOCAL INTERNET
AND POWER PROVIDER.



HIGHWAY LIGHTING LAYOUT

IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

DESIGN TEAM

JORGENSEN/JENSEN/SCI

CITY OF MUSCATINE MUSCATINE COUNTY

PROJECT NO. STP-E-5330(611)-8V-70

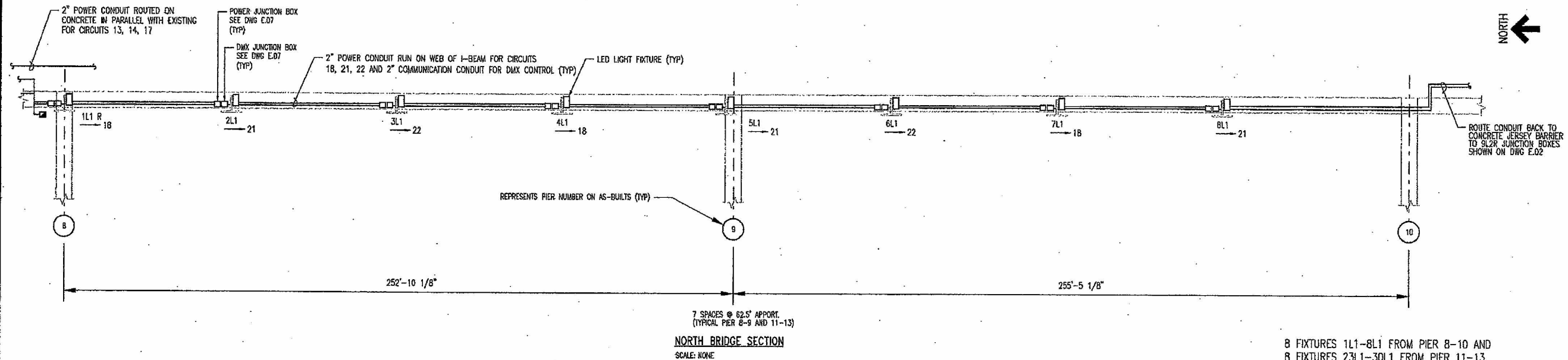
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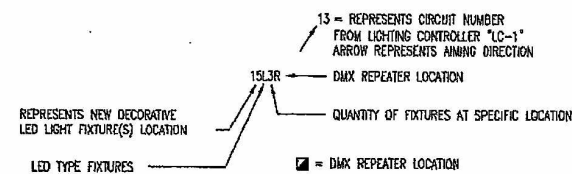
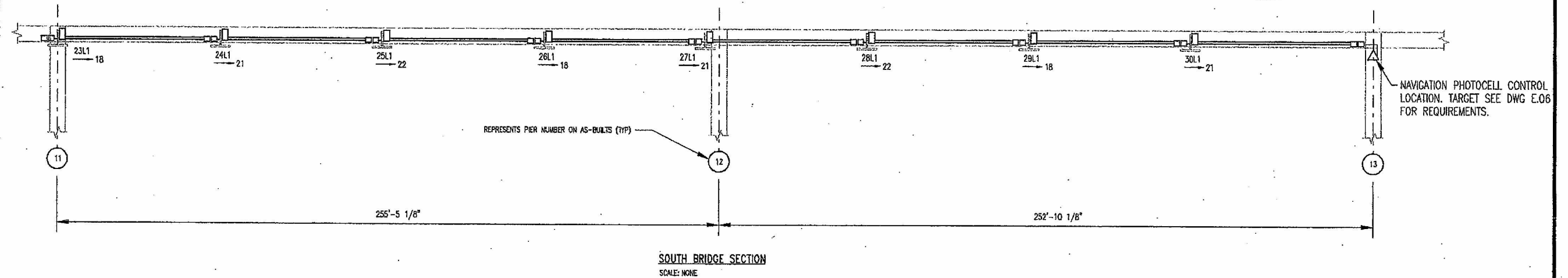
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NORTH ←



8 FIXTURES 1L1-8L1 FROM PIER 8-10 AND 8 FIXTURES 23L1-30L1 FROM PIER 11-13. START AT PIERS 8 AND 11 AND SPACE AT 62.5'.



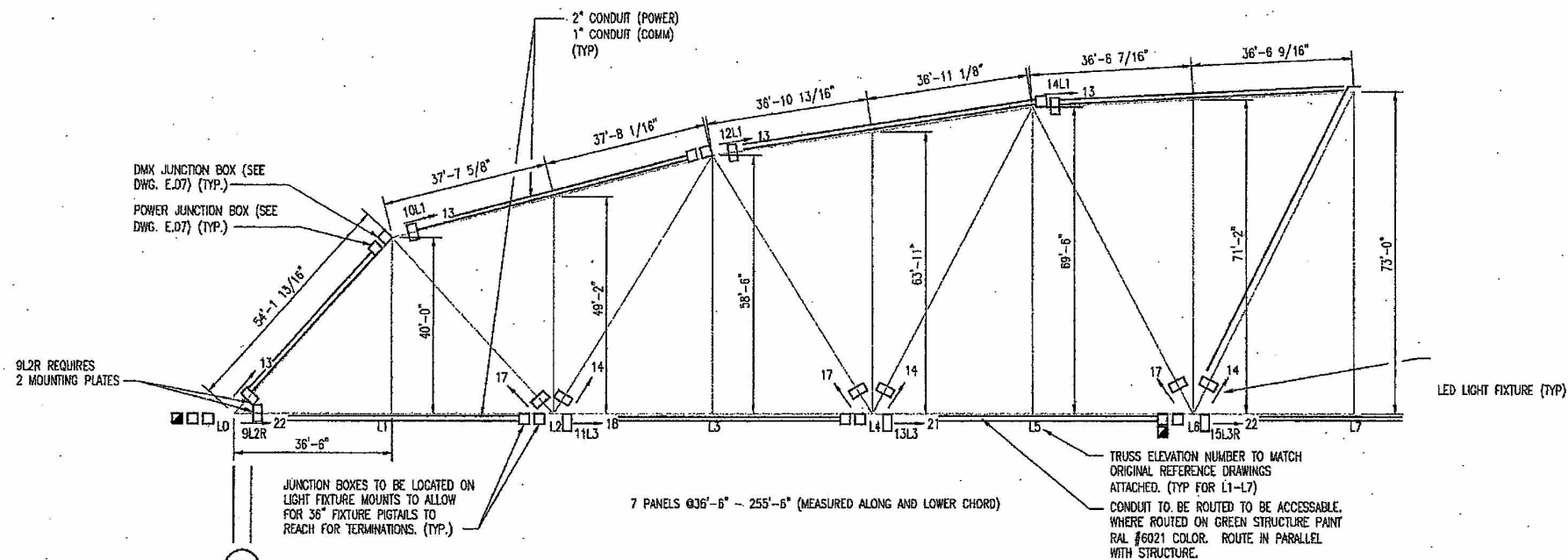
LIGHT LOCATION LEGEND:

**LED LIGHTING LAYOUTS
PIERS 8-10 AND PIERS 11-13**

IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

DESIGN TEAM	JORGENSEN/JENSEN/SCI	STATE OF IOWA	FHWA REGION 7	FISCAL YEAR	CITY OF MUSCATINE	MUSCATINE	COUNTY	PROJECT NUMBER	STP-E-5330(611)-8V-70	SHEET NUMBER	E.01
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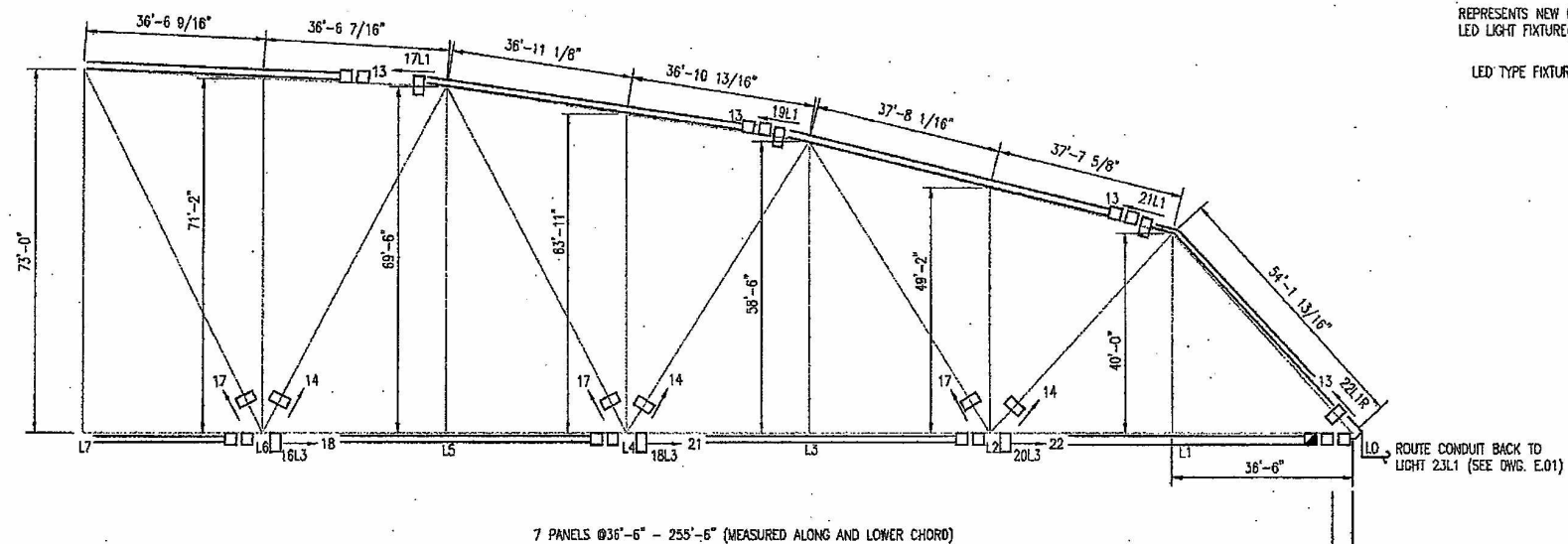
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NORTH TRUSS ELEVATION
SCALE: NONE

LIGHT LOCATION LEGEND:

- 13 = REPRESENTS CIRCUIT NUMBER FROM LIGHTING CONTROLLER "LC-1" ARROW REPRESENTS AIMING DIRECTION
- 15L3R = DMX REPEATER LOCATION
- REPRESENTS NEW DECORATIVE LED LIGHT FIXTURE(S) LOCATION
- LED TYPE FIXTURES
- QUANTITY OF FIXTURES AT SPECIFIC LOCATION
- DMX REPEATER LOCATION



SOUTH TRUSS ELEVATION
SCALE: NONE

NOTES:

1. SEE ORIGINAL AS-BUILT DRAWINGS ATTACHED FOR GUSSET PLATE AND CHORD SIZE INFORMATION AT SPECIFIC LIGHT FIXTURE LOCATIONS.
2. AT DMX SPLITTER/AMPLIFIER LOCATIONS PROVIDE 240 VAC FROM ASSOCIATED LED LIGHT FIXTURE 240V CIRCUIT SHOWN AND LOCATE SPLITTER/AMPLIFIER IN A VENTRATED NEMA 4 ENCLOSURE.

ROUTE CONDUIT BACK TO LIGHT 23L1 (SEE DWG. E.01)

**LED LIGHTING LAYOUTS
PIERS 10-11**

IA-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

DESIGN TEAM JORGENSEN/JENSEN/SCI

STATE OF IOWA

FHWA REGION 7

FISCAL YEAR

MUSCATINE COUNTY

PROJECT NUMBER STP-E-5330(611)-8V-70

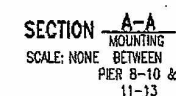
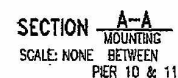
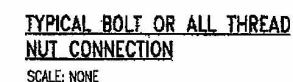
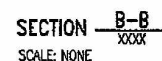
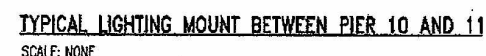
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E.02

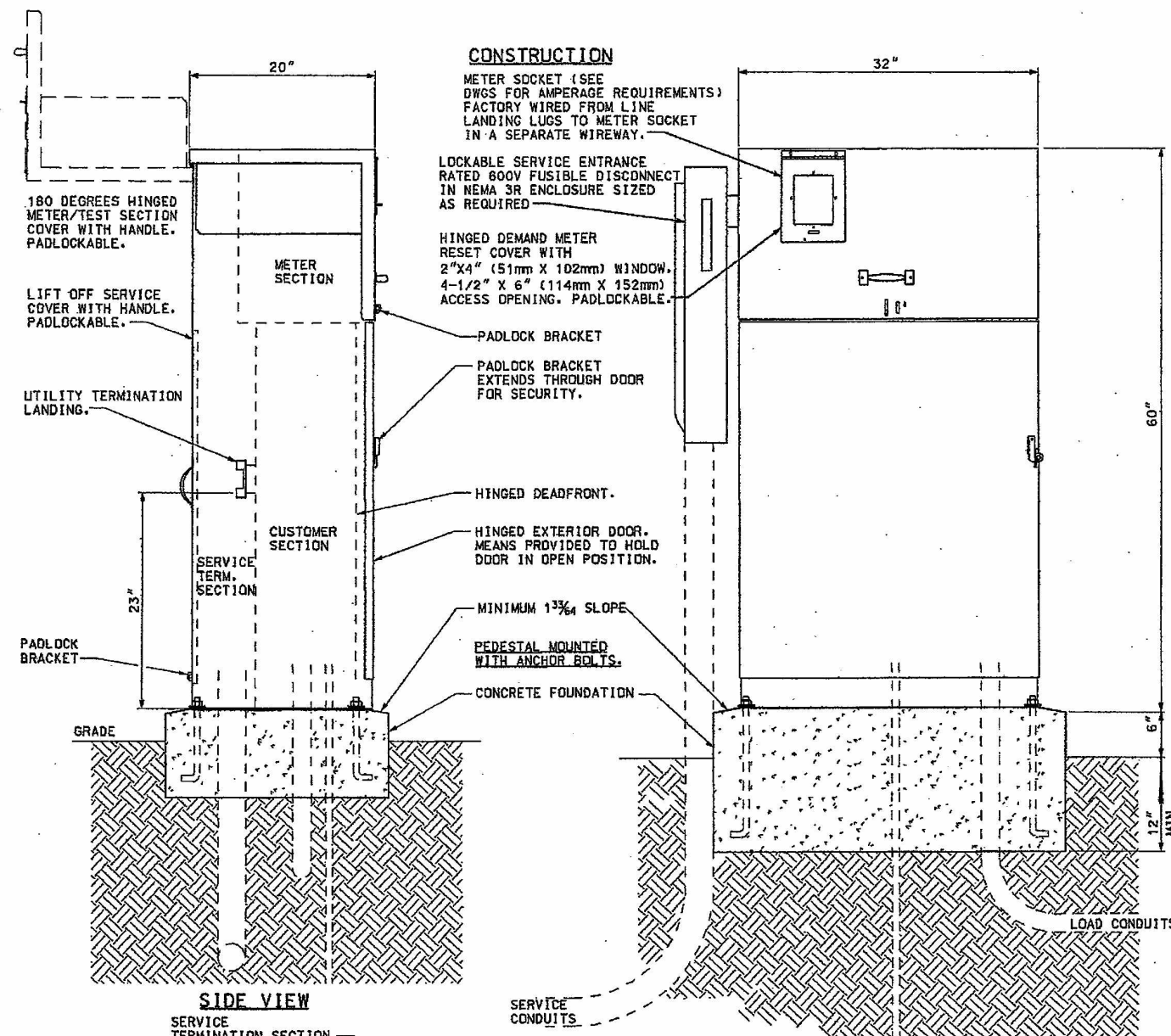
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- NOTES:
1. DOUBLE NUT 3/4" GALVANIZED ALL THREAD AND USE MINIMUM 3" GALVANIZED FLAT WASHERS BETWEEN STEEL GRATING AND DOUBLE NUTS.
 2. PLACEMENT OF FLOOR FLANGE FOR LIGHT FIXTURE PLACEMENTS TO BE DETERMINED IN FIELD.

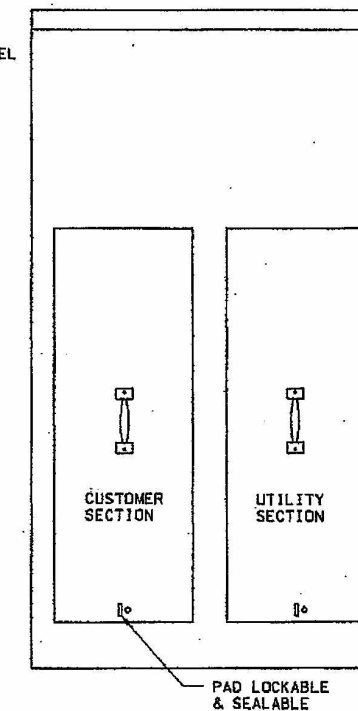


CONSTRUCTION MATERIAL:

1/4" 14 GA. #304 STAINLESS STEEL

PHOTO ELECTRIC CELL:

1" IN SERVICE CABINET



BACK VIEW

NOTES:

- CONTROL CABINET SHALL BE U/L LISTED "INDUSTRIAL CONTROL PANEL" PER UL 508.
- CONSTRUCTION SHALL BE NEMA 3R.
- VOLTAGE RATINGS OF SERVICE EQUIPMENT SHALL CONFORM TO THE SERVICE VOLTAGES INDICATED ON THE PLANS.
- SERVICE EQUIPMENT ENCLOSURE AND METERING EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE SERVING UTILITY. WHEN THE SERVING UTILITY PROVIDES BOTH METERED AND UNMETERED CIRCUITS, A SEPARATE BUS SHALL BE PROVIDED FOR EACH CIRCUIT. THE METER AREA SHALL HAVE A SEALABLE, LOCKABLE, RAIN-TIGHT COVER THAT CAN BE REMOVED WITHOUT THE USE OF TOOLS.
- SERVICE EQUIPMENT SHALL BE FACTORY WIRED AND CONFORM TO NEMA STANDARDS AND TO SECTION 86-2.11, "SERVICE" OF THE STANDARD SPECIFICATIONS.
- THE EXTERIOR DOOR SHALL HAVE PROVISIONS FOR PADLOCKING. THE PADLOCK HOLE SHALL BE A MINIMUM DIAMETER OF 1/2".
- ALL TERMINALS FOR INCOMING SERVICE CONDUCTORS SHALL BE COMPATIBLE WITH EITHER COPPER OR ALUMINUM CONDUCTORS SIZED TO SUIT THE CONDUCTORS SHOWN ON THE PLAN. TERMINAL LUGS SHALL BE COPPER OR TIN-PLATED ALUMINUM. SOLID NEUTRAL TERMINAL STRIP SHALL BE RATED 125A UNLESS OTHERWISE SPECIFIED AND FOR USE WITH COPPER OR ALUMINUM CONDUCTORS. THE TERMINAL SHOULD INCLUDE BUT NOT BE LIMITED TO:
 - INCOMING TERMINALS (LANDING LUGS)
 - NEUTRAL LUGS
 - SOLID NEUTRAL TERMINAL STRIP.
 - TERMINAL STRIPS FOR CONDUCTORS WITHIN THE ENCLOSURE.
- PROVIDE BREAKERS AS SHOWN ON PANEL SCHEDULES FOR BRANCH CIRCUITS. CIRCUIT BREAKER INTERIORS SHALL BE COPPER. INTERIORS SHALL ACCEPT PLUG-IN OR CABLE-IN/ CABLE-OUT CIRCUIT BREAKERS.
- PLUG-IN CIRCUIT BREAKERS MAY BE MOUNTED IN THE VERTICAL OR HORIZONTAL POSITION. CABLE-IN/ CABLE-OUT CIRCUIT BREAKERS SHALL BE MOUNTED IN THE VERTICAL POSITION.
- FASTENERS ON THE EXTERIOR OF THE ENCLOSURE SHALL BE VANDAL RESISTANT AND SHALL NOT BE REMOVABLE FROM THE EXTERIOR. ALL NUTS, BOLTS, SCREWS, WASHERS, AND HINGES SHALL BE STAINLESS STEEL.
- PHENOLIC NAME PLATES SHALL BE PROVIDED AS REQUIRED.
- A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
- FOUNDATION SHALL EXTEND 3" MINIMUM BEYOND EDGE OF ENCLOSURE.
- SEE CROSS REFERENCE TO LED/LEB WIRING DIAGRAM FOR SIZING OF IPLAYER AND PS-60 THAT ALSO NEED TO GO INTO LC-12.

LIGHTING CONTROLLER "LC-1" DETAILS

1A-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

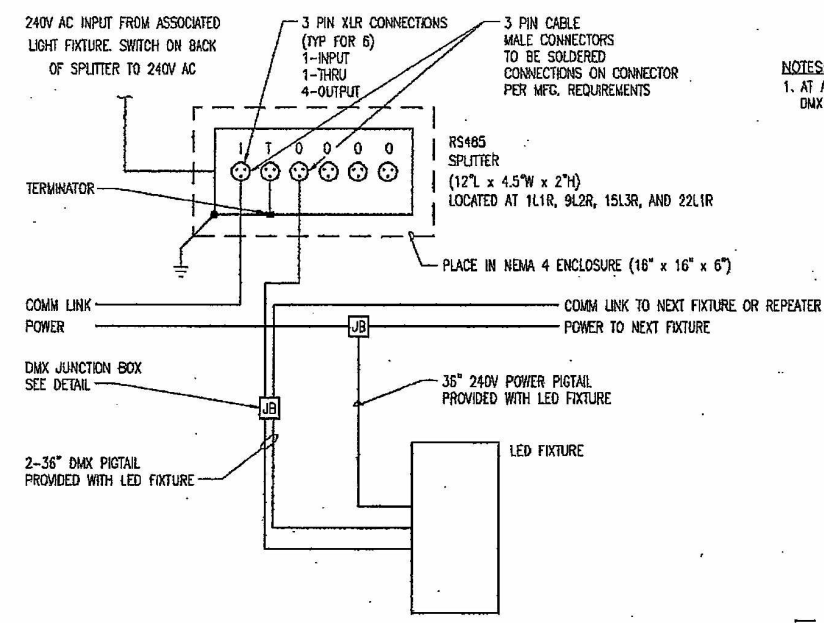
DESIGN TEAM

JORGENSEN/JENSEN/SCI

CITY OF MUSCATINE MUSCATINE COUNTY

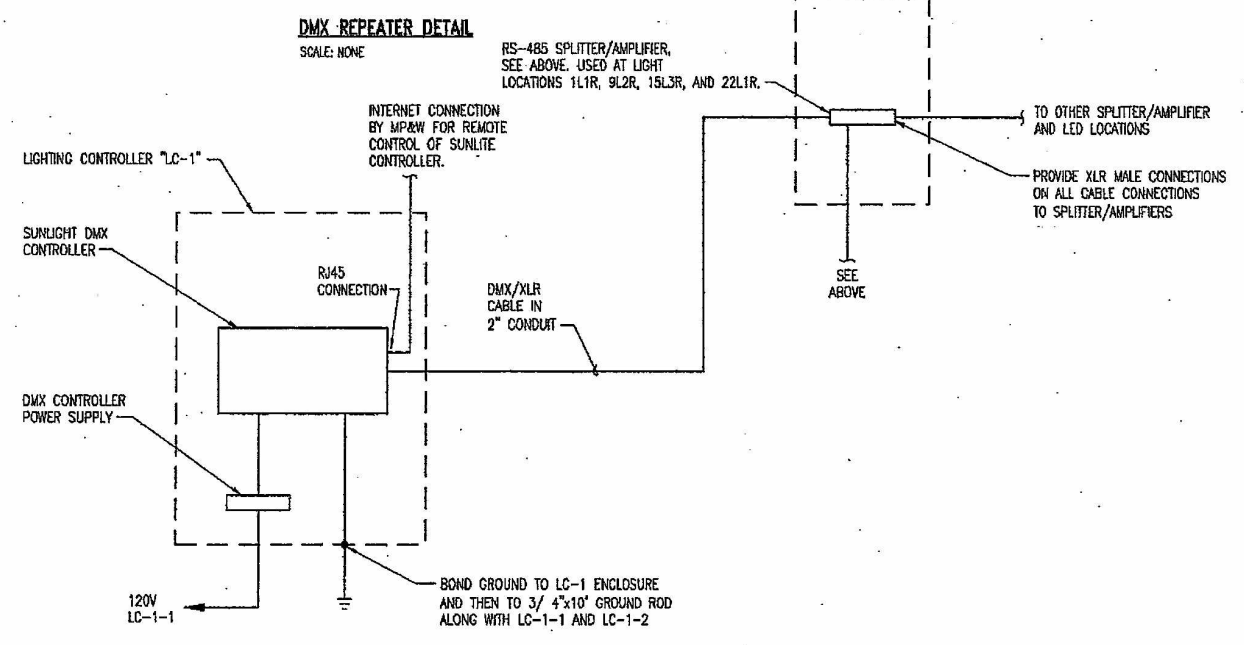
PROJECT NO. STP-E-5330(611)-8V-70

SHEET NO. E.04

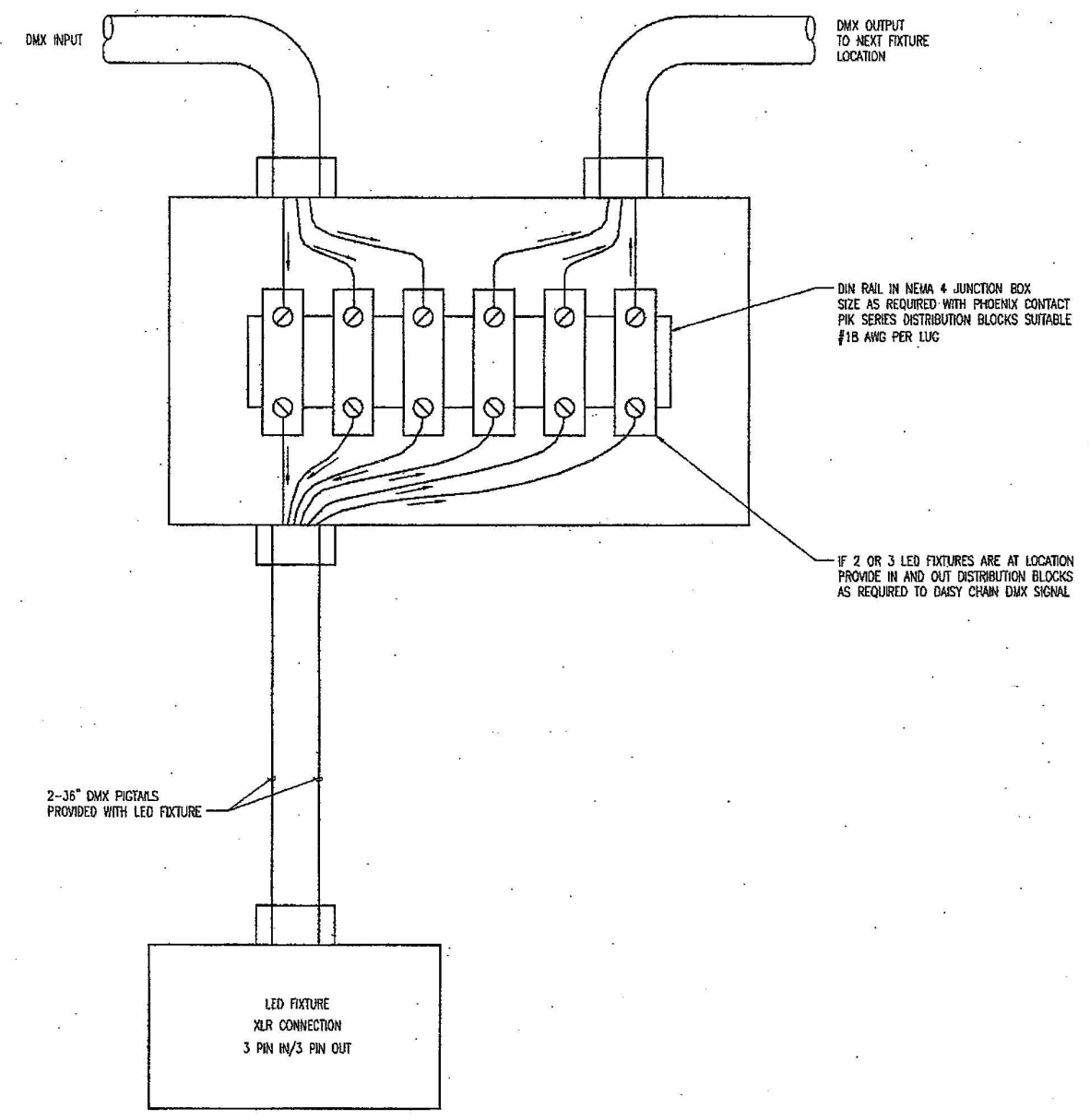


NOTES:
1. AT ALL OTHER LIGHT LOCATIONS USE DMX JUNCTION BOX DETAIL.

DMX REPEATER DETAIL
SCALE: NONE



CONTROL SCHEMATIC FOR LED LIGHT FIXTURES ON SIDE OF BRIDGE
SCALE: NONE



DMX JUNCTION BOX DETAIL (TYP ALL LED FIXTURE LOCATIONS)
SCALE: NONE

DMX CONTROL DETAILS

1A-92 MISSISSIPPI RIVER BRIDGE IN MUSCATINE

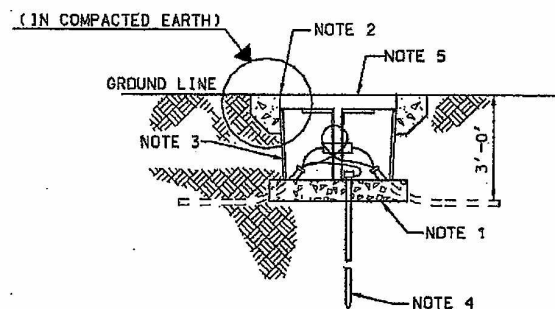
DESIGN TEAM

JORGENSEN/JENSEN/SCI

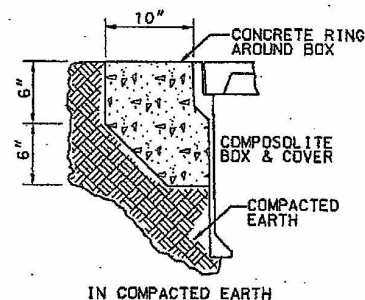
CITY OF MUSCATINE MUSCATINE COUNTY

PROJECT NO. STP-E-5330(611)-8V-70

SHEET NO. E.07



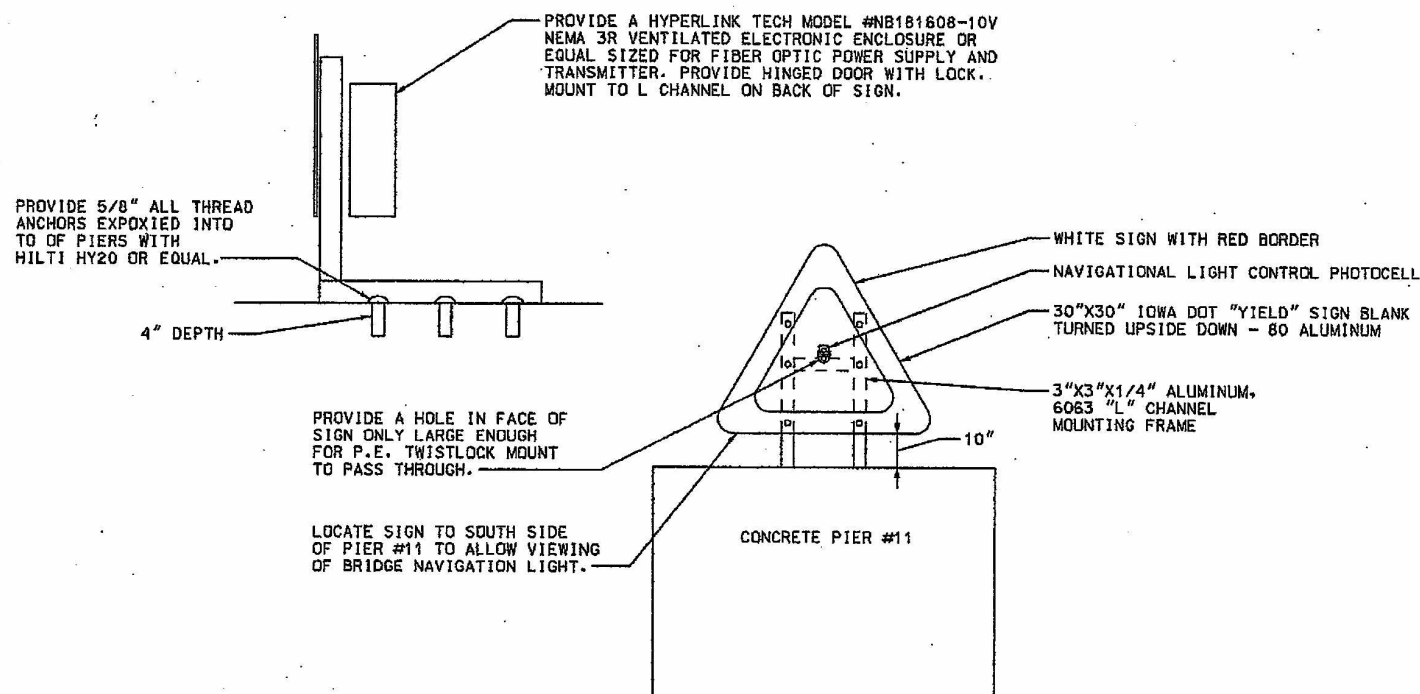
- NOTES:
1. PREPARE THE EXCAVATION APPROXIMATELY 6 INCHES DEEPER THAN THE DEPTH OF THE BOX, THEN ADD 6 TO 8 INCHES OF GRAVEL OR CRUSHED ROCK FOR DRAINAGE.
 2. PLACE BOX IN HOLE WITH TOP AT GRADE LEVEL.
 3. FILL AND COMPACT SOIL TO GRADE LEVEL WITH COVER IN BOX.
 4. 3/4"x10'-0" COPPER CLAD GROUND ROD. LEAVE 3" OF ROD ABOVE BASE OF HANDHOLE FOR EXOTHERMIC WELDING GROUNDS TO.
 5. SEE DRAWINGS FOR EXACT LOCATION OF HANDHOLES.



- NOTES:
1. CONCRETE ENCASEMENT TO BE 3,500 PSI @ 28 DAYS MINIMUM.
 2. CONCRETE ENCASEMENT RIN DIMENSION. D TO BE EQUAL TO DESIGN PAVEMENT DEPTH.

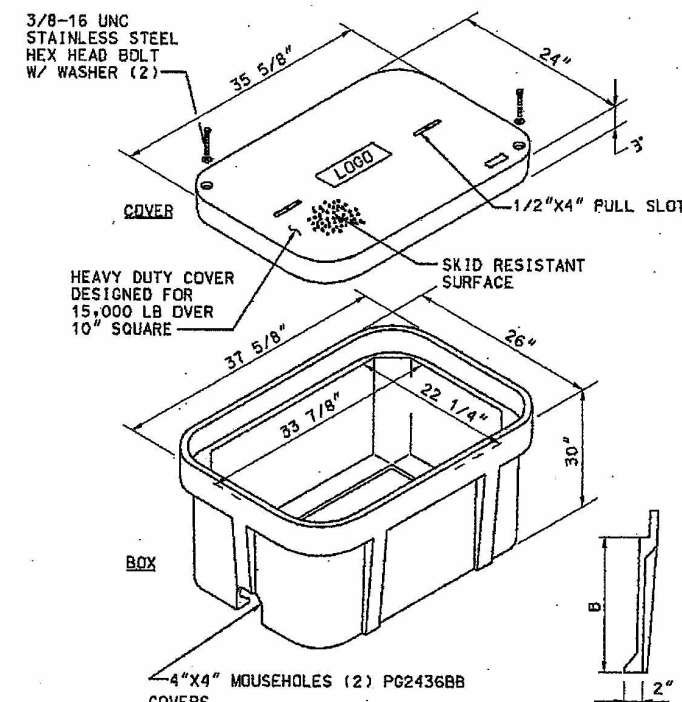
TYPICAL HANDHOLE INSTALLATION ELEVATION

SCALE: NONE



NAVIGATION LIGHT CONTROL PE2

SCALE: NONE



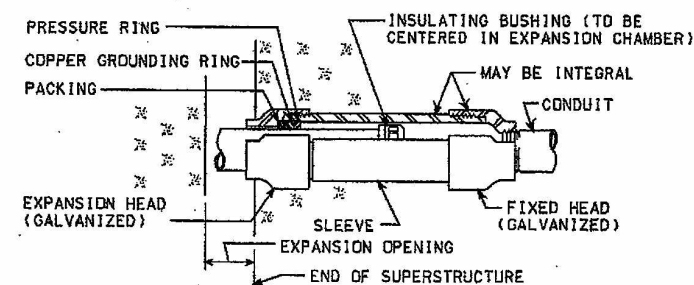
DESCRIPTION	PART NO.
HEAVY DUTY W/ 2 BOLTS	PG2436HA00

DESCRIPTION	PART NO.
W/ NO BASE, (2) MOUSEHOLES	PG2436BB30

- PROVIDE:
1. SPECIFIC "ELECTRIC" LOGO.
 2. QUARTZITE COLOR-GRAY.
 3. 1/2"x4" BELL PULL SLOT.

24"x36" QUARTZITE HANDHOLE

SCALE: NONE



EXPANSION FITTING DETAIL

SCALE: NONE

SITE ELECTRICAL
DETAILS

1A-92 MISSISSIPPI RIVER BRIDGE
IN MUSCATINE

DESIGN TEAM

JORGENSEN/JENSEN/SCI

CITY OF MUSCATINE MUSCATINE COUNTY

PROJECT NO. STP-E-5330(611)-8V-70

SHEET NO. E.08