



Addendum No. 4

The Transit Authority of the City of Omaha d/b/a Metro

REQUEST FOR PROPOSALS

OMAHA RAPID BUS TRANSIT (ORBT) STATION CANOPY PACKAGE

Project No. NE-79X-001/ Specification No. 25-18

Date Issued: 8/20/2018

To: All Interested Parties

This Addendum forms a part of the Contract Documents dated **July 27, 2018**. The Bidder shall acknowledge receipt of this Addendum on the Proposal forms provided. Failure to acknowledge receipt may subject the Bidder to disqualification.

This Addendum consists of the following:

*Response to Request for Substitution

RFP DOCUMENTS

***All references to “Contract Completion of 12 months after the written notice to proceed” shall be changed to “Contract Completion of 13 months after the written notice to proceed”.**

ITEM NO. 4-0 DIVISION 2 – SECTION 2- SCOPE OF SERVICES

- a) At section 2.2 E- Contract Completion, change “Substantial completion for the scope of work shall be 12 months after the written Notice to Proceed” to “Substantial completion for the scope of work shall be **13 months** after the written Notice to Proceed”.

SPECIFICATIONS

ITEM NO. 4-1 SECTION: 074213 – METAL WALL PANELS

- b) At section 2.3, A., 1. add the following to list of manufacturers: “g. NorthClad”
- c) Delete paragraph 1.6, D. “Fire-Resistance.... testing agency.” in it’s entirety.

ITEM NO. 4-2

SECTION: 075323 – ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING

- a) At section 1.4, C. add the following:
“2. Walkway pads of color required.”

- b) At section 2.2, A., 1. add the following to list of manufacturers:
“e. Versico Roofing Systems”

- d) Add section 2.6 as follows:
“2.6 WALKWAYS

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads approximately .3” thick and acceptable to roofing system manufacturer.

1. Size: Approximately 30”x30”.
2. Color: Contrasting with roof membrane.”

- e) Add section 3.8 as follows:
WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products according to manufacturer's written instructions.

1. Install flexible walkways at the following locations:
 - a. Perimeter of each rooftop unit.
 - b. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
 - c. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
 - d. Top and bottom of each roof access ladder.
 - e. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
 - f. Locations indicated on Drawings.
 - g. As required by roof membrane manufacturer's warranty requirements.

2. Provide 6-inch clearance between adjoining pads.
3. Adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions.
4. Install pads parallel to front of station to the back side of roof drains and spanning across full length of roof.

ITEM NO. 4-3

SECTION: 088113 – DECORATIVE GLASS GLAZING

- a) Revise portion of line 2.3, A., 2. to read “1/2” (12.0 mm)” in lieu of “3/8” (10.0 mm)”

DRAWINGS

ITEM NO. 4-4

SHEET AES001 – STRUCTURAL GENERAL NOTES

- a) Revise first sentence of 051200 – STRUCTURAL STEEL FRAMING note 11 to read “ALL STEEL MEMBERS SHALL BE GALVANIZED.”

ITEM NO. 4-5

SHEET AE201 – PLATFORM ELEVATIONS

- a) At B1A, SCREEN WALL HEAD, revise note to read “GLASS SUPPORT FITTING” in lieu of “GLASS SUPPORT FITTING FURNISHED AND INSTALLED BY GLASS CONTRACTOR”

ITEM NO. 4-6

SHEET AE401 – PLAN DETAILS AND WALL SECTIONS

- a) At A2 and C1/AE450 add the following note at metal panel steel framing: “GALV STL ANGLE FRAMING BY METAL PANEL MFR. SEE STR STL FRAMING NOTE 11 ON SHEET S001. TYP.

ITEM NO. 4-7

SHEET AE450 – DETAILS

- b) Sheet AE450 is REVISED and REISSUED with this addendum.

ITEM NO. 4-8

SHEETS E111, E112 and E114

- c) Sheets E111, E112 and E114 are REVISED and REISSUED with this addendum.

EXHIBIT F
REQUEST FOR SUBSTITUTIONS/APPROVED EQUALS

OMAHA RAPID BUS TRANSIT STATION CANOPY PACKAGE

Metro Project NE-79-X001, Specification No. 25-18 – ORBT STATION CANOPY PACKAGE

Date August 8, 2018

Use one form per requested equal/per clarification; duplicate as needed.

SPECIFIED ITEM: Metal Wall Panels /Concealed-Fastener,Lap-Seam Metal Wall Panels

Section: 074213 Paragraph 2.3/A./1/

Drawing Number(s): Page 19 of 38

Detail Number(s): All MP-1 Details on pg.28
All MP-1 Details on pg. 29

PROPOSED SUBSTITUTION: NorthClad AL Series Dual Interlocking Panels

REASON FOR NOT GIVING PRIORITY TO SPECIFIED ITEMS: NorthClad provides a superior
quality product.

Attach product data that includes description, specifications, drawings, photographs, performance and test data adequate for evaluation of request; applicable portions of data are clearly identified.

Attached data also includes a description of changes to Contract Documents that proposed substitution will require for its proper installation.

The undersigned certifies that the following paragraphs, unless modified by attachments, are correct:

1. Proposed Substitution has been fully checked and coordinated with Contract Documents.
2. Proposed Substitution does not affect dimensions shown on Drawings.
3. Proposed Substitution does not require revisions to mechanical or electrical work.
4. The undersigned will pay for changes to building design, including Architectural and Engineering design, detailing, and construction costs caused by requested Substitution.
5. Proposed Substitution will have no adverse affect on other trades, construction schedule, or specified warranty requirements.
6. Maintenance and service parts will be locally available for proposed substitution.

The undersigned further states that the function, appearance, and quality of proposed Substitution are equivalent or superior to specified item.

Submitted by:

NorthClad
(Firm)

By: _____
(Signature)

11831 Beverly Park Rd., Bldg C Everett, WA 98204 Telephone: (425) 740-3702
(Address)

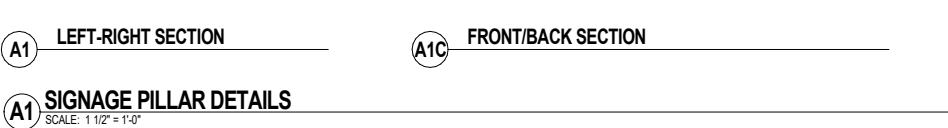
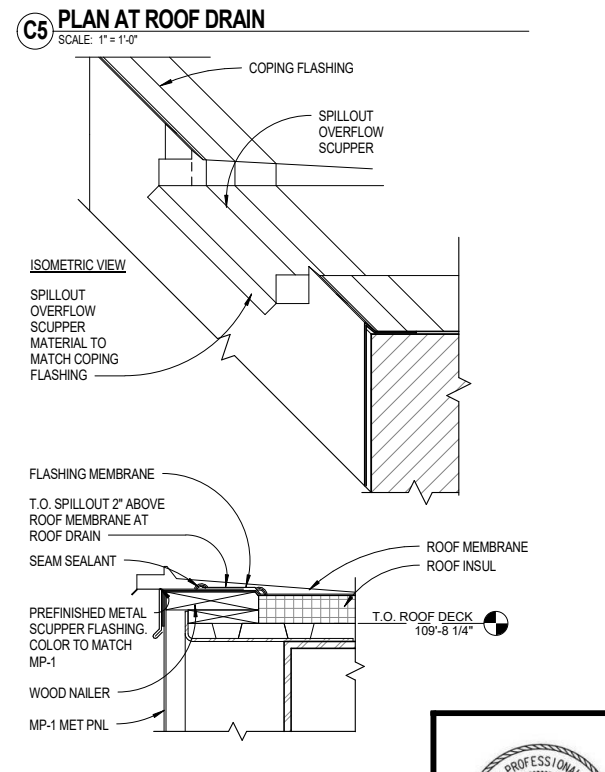
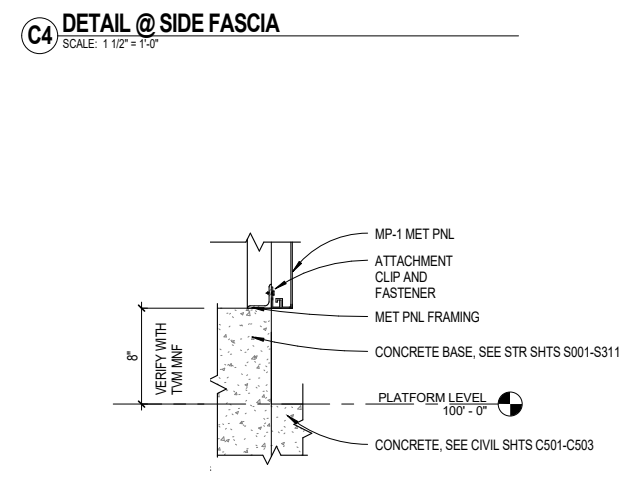
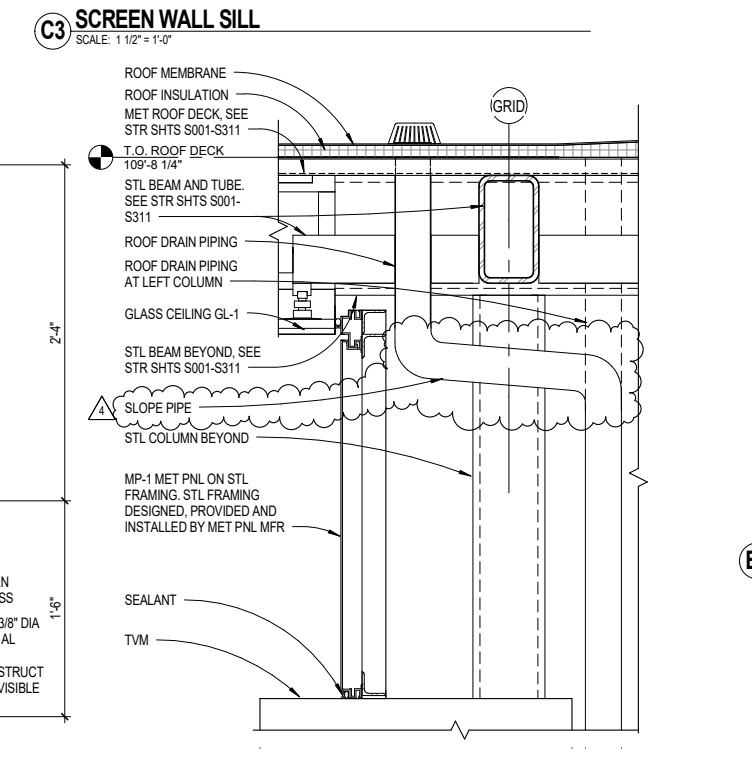
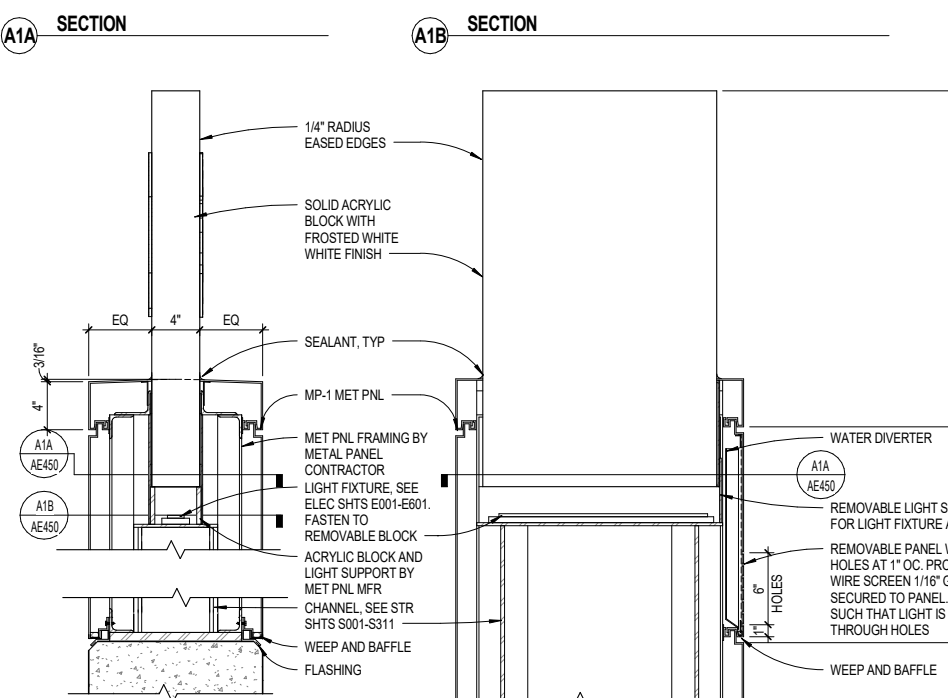
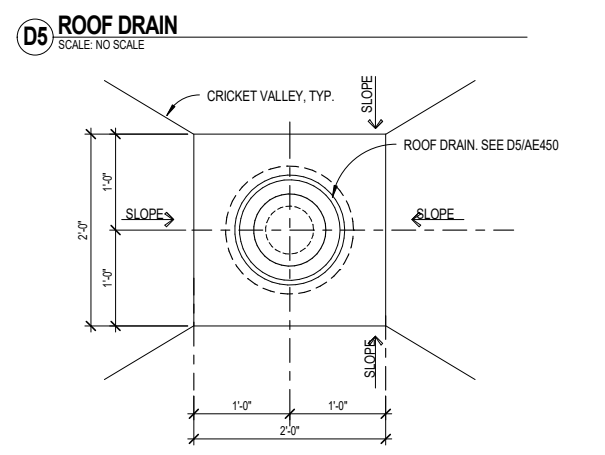
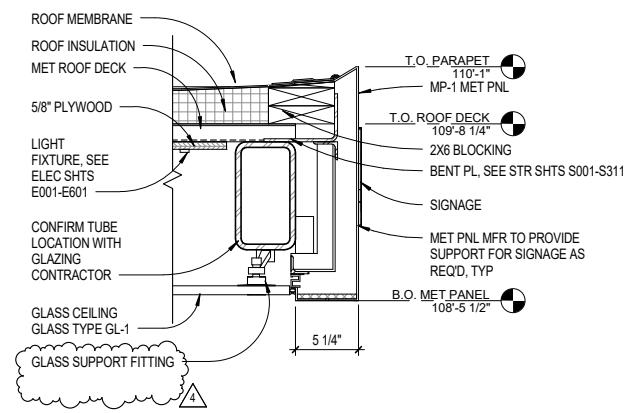
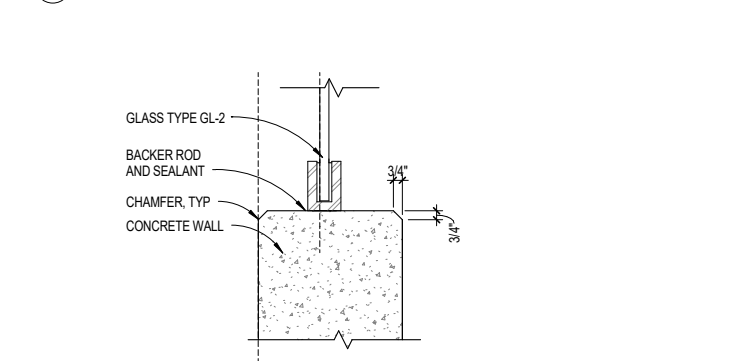
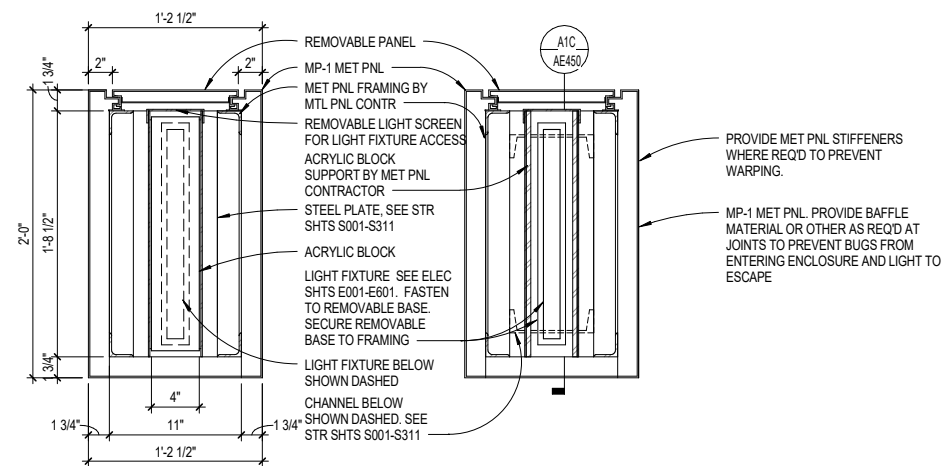
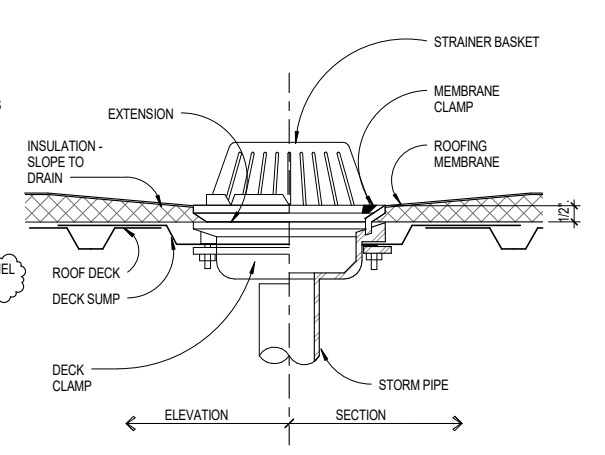
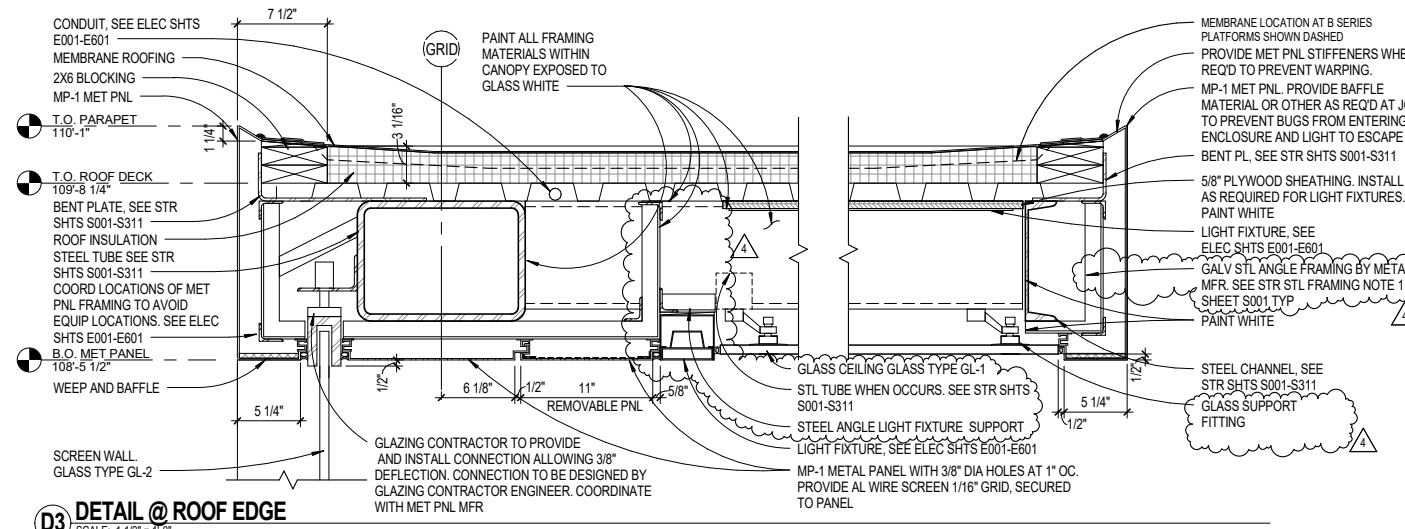
For use by the Architect/Engineer:

Approved Approved as noted Not Approved Received too late

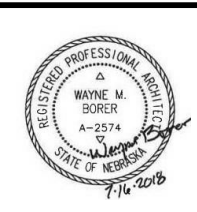
<u>Jeff Rumery</u>	<u>Grant Administrator</u>	<u>08/17/18</u>
Signature	Title	Date

Remarks:

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**DETAILS
AE450**



REV. NO.	REVISION/ISSUE	INITIALS	REVISION DATE
1	ADDENDUM NO. 4	WMB	8/20/2018

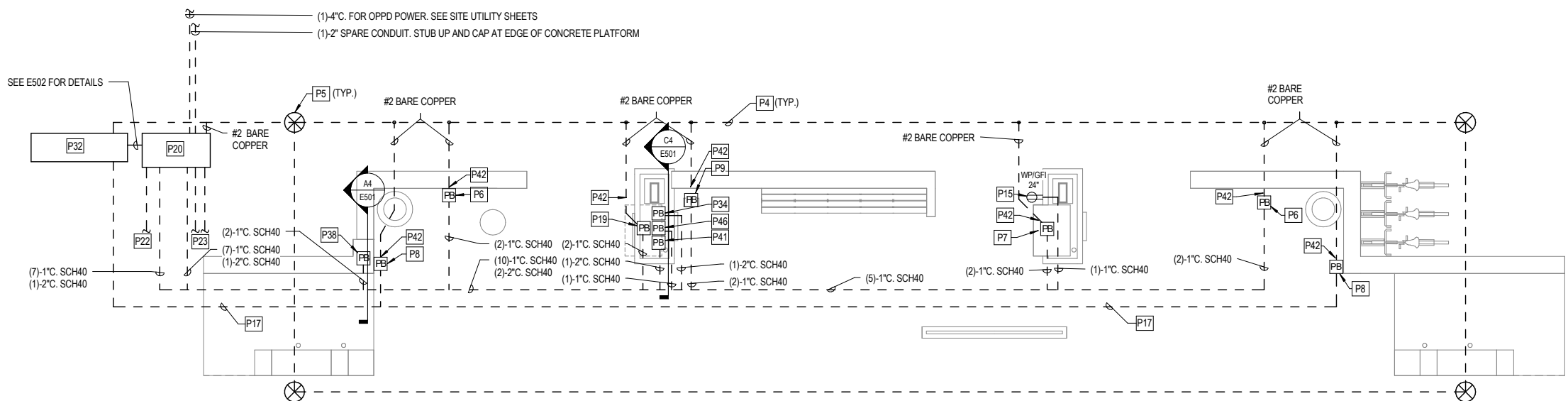
CLIENT
 2222 CUMING STREET
 OMAHA, NEBRASKA 68102
 (402) 341-0800

ORBT
 OMAHA RAPID BUS TRANSIT

AECOM
 12120 SHAMROCK PLZ, STE 100
 OMAHA, NEBRASKA 68154

LEO A DAILY
 002-10178-000
 8600 INDIAN HILLS DRIVE
 OMAHA, NE 68114-4039

NE-79-X001
 OPW 53347



GENERAL NOTES

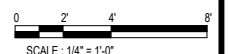
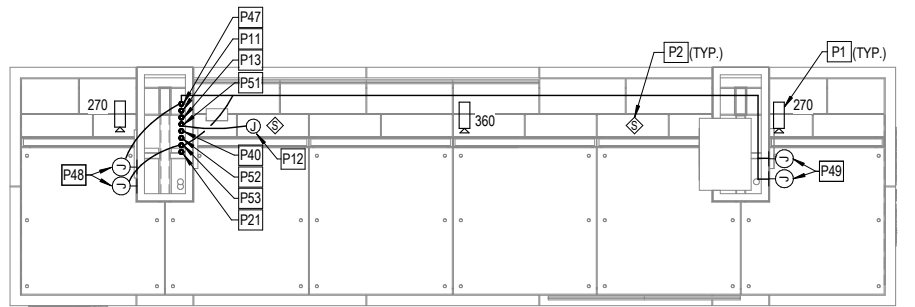
1. CCTV CAMERAS WILL BE FURNISHED BY OTHERS AND INSTALLED BY THE CONTRACTOR
2. ALL CONDUITS SHALL BE ROUTED BACK TO THE POWER AND COMMUNICATIONS CABINET. SEE SITE INFRASTRUCTURE PLANS (BY OTHERS) FOR EXACT LOCATION. MAINTAIN A MINIMUM OF 6" SPACING BETWEEN DATA AND POWER CONDUITS AND SNOW MELT AREA.
3. CONDUITS SHALL NOT BE ROUTED IN SNOW MELT AREA AND SHALL BE ROUTED NOT LESS THAN 6" BELOW SNOW MELT SYSTEM WHERE NEEDED. COORDINATE EXACT DEPTH IN FIELD.
4. NUMBER OF CONDUITS SHOWN FOR REFERENCE ONLY. MULTIPLE BRANCH CIRCUITS IN ONE CONDUIT ARE ALLOWED. FIELD COORDINATE REQUIRED QUANTITY TO COMPLY WITH NEC REQUIREMENTS. INTERFACE BETWEEN CANOPY PULLBOXES AND PLATFORM CONDUITS SHALL BE COORDINATED IN FIELD WITH OTHER TRADES.
5. ALL CABLING IN CANOPY SHALL BE ROUTED IN CONDUIT. COORDINATE EXACT LOCATIONS OF CONDUIT IN FIELD. MAINTAIN A MINIMUM OF 6" SPACING BETWEEN DATA AND POWER CONDUITS.
6. CONTRACTOR SHALL COORDINATE IN FIELD FOR EXACT REQUIREMENTS FOR OWNER FURNISHED EQUIPMENT.
7. ALL POWER AND COMMUNICATIONS CABLES SHALL BE EXTERIOR RATED.
8. SEE PANEL SCHEDULES ON SHEET E601 FOR HOME RUN AND CIRCUITING INFORMATION.
9. CAT. 6 CABLES SHALL BE CONTINUOUS FROM THE PATCH PANEL IN THE PCC TO ALL DEVICES AND OUTLETS. COIL ENOUGH CABLING IN PULLBOXES WHERE FUTURE CONNECTIONS TO EQUIPMENT OR DEVICES ARE NEEDED.
10. WHERE UNDERGROUND CONDUITS ARE ROUTED UNDER DRIVEWAYS AND TRAFFIC AREAS PROVIDE SCHEDULE 80 PVC CONDUITS.
11. CONTRACTOR SHALL COORDINATE IN FIELD WITH EXISTING UTILITY TYPE AND LOCATION IN THE STATION AREA. NEW UTILITY RUNS SHALL BE LOWERED TO AVOID CONFLICT WITH EXISTING UTILITIES. PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
12. POWER BRANCH CIRCUITS SHALL BE MINIMUM #10AWG.
13. ALL PULLBOXES AND PENETRATIONS THROUGH SNOW MELT AREA SHALL COMPLY WITH SNOW MELT SYSTEM REQUIREMENTS.
14. ALL PULL AND JUNCTION BOXES IN THE SNOW MELT SYSTEM AREAS OR IN CONTACT WITH SNOW MELT SYSTEM SHALL NOT BE METAL.

KEYED SHEET NOTES

- P1 CCTV CAMERA MOUNTED ON CEILING WITH CAMERA LENS BELOW LOWEST PART OF THE CANOPY.
- P2 OUTDOOR RATED PAGING SPEAKER FLUSH WITH CEILING. SPEAKERS SHALL BE FURNISHED BY METRO.
- P4 ROUND RING #2 BARE COPPER BURIED 36" BELOW GRADE. MINIMUM 2" FROM FOUNDATION.
- P5 GROUND ROD, 3/4" X 10' LONG COPPER CLAD WITH COLDWELD CONNECTION. ALL GROUND RODS AND GROUNDING CONDUITS SHALL BE BELOW SNOW MELT SYSTEM AND NOT IN CONTACT WITH SNOW MELT SYSTEM.
- P6 PULLBOX FLUSH WITH FINISHED GRADE FOR POWER AND DATA CONNECTION TO FUTURE TICKET VALIDATION MACHINE. COORDINATE EXACT LOCATION IN FIELD. PROVIDE BARRIER BETWEEN DATA AND POWER CABLES.
- P7 PULLBOX FLUSH WITH FINISHED GRADE FOR DATA AND POWER CONNECTION TO TICKET VENDING MACHINE. COORDINATE EXACT LOCATION IN FIELD. PROVIDE BARRIER BETWEEN DATA AND POWER CABLES.
- P8 12" X 24" PULLBOX FLUSH WITH FINISHED GRADE FOR FUSE BLOCK AND CONNECTORS. SEE SNOW MELT SYSTEM DESIGN FOR DETAILS. SNOW MELT SYSTEM DESIGN BY OTHERS.
- P9 PULLBOX FLUSH WITH FINISHED GRADE FOR DATA AND POWER CONNECTION TO EMERGENCY PHONE PEDESTAL. COORDINATE EXACT LOCATION IN FIELD. SEE ARCHITECTURAL SPECIFICATIONS FOR DETAILS. PROVIDE BARRIER BETWEEN POWER AND DATA CABLES. (1) CAT 6 FOR VOICE AND (1) FOR CAMERA.
- P11 (1)-1" CONDUIT FOR LIGHTING CIRCUITS FROM PULLBOX TO CANOPY. COORDINATE EXACT LOCATION IN FIELD. SEE C4/E501 FOR DETAILS.
- P12 J-BOX ABOVE CEILING FOR POWER CONNECTION TO FUTURE RADIANT HEATER.
- P13 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER TO HEAT TAPE ON ROOF DRAIN PIPING. COORDINATE EXACT LOCATION IN FIELD.
- P15 PROVIDE LOCKABLE BOX. COORDINATE EXACT LOCATION IN FIELD.
- P17 SEE E502 FOR DETAILS.
- P19 CONDUIT STUB AND PULLBOX FOR FUTURE TICKET VENDING MACHINE. PROVIDE BARRIER BETWEEN POWER AND DATA CABLES. COORDINATE EXACT LOCATION IN FIELD.
- P20 POWER AND COMMUNICATIONS CABINET. SEE SHEET E501 FOR DETAIL. SEE SITE SHEETS FOR EXACT LOCATIONS FOR EACH STATION.
- P21 (1)-2" CONDUIT FROM PULLBOX TO CANOPY FOR CAT 6 CABLES TO CCTV CAMERAS, SPEAKERS, AND DATA CONNECTION TO BUS INDICATOR. ROUTE CAT 6 CABLES BACK TO PCC.
- P22 (1)-3" UNDERGROUND CONDUIT FOR COMMUNICATIONS CABLES TO SUBFD STATIONS (WHERE THERE ARE TWO STATIONS PAIRED TOGETHER WITH ONE PCC). SEE SITE SHEETS FOR EXACT LOCATIONS.
- P23 (2)-3" UNDERGROUND CONDUITS FOR POWER FEEDERS TO SUBFD STATIONS (WHERE THERE ARE TWO STATIONS PAIRED TOGETHER WITH ONE PCC). SEE SHEET E114 FOR DETAILS.
- P32 SNOW MELT SYSTEM EQUIPMENT CABINET. SEE SHEET E502 FOR DETAILS. SEE SITE DRAWINGS FOR EXACT LOCATION.
- P34 PULLBOX MOUNTED ON UNISTRUT FOR POWER CONNECTION TO LIGHTING CIRCUITS, FUTURE RADIANT HEATER, MESSAGE BOARD, DIGITAL KIOSK, DIGITAL SLOT SIGN AND HEAT TAPE FOR DRAIN PIPES IN CANOPY. SEE C4/E501 FOR DETAILS.
- P37 (1)-1" CONDUIT FOR DATA CONNECTION FROM MESSAGE BOARD TO LIGHTING CONTROLLER. COORDINATE EXACT LOCATION IN FIELD. COORDINATE EXACT CABLE AND INTERFACE REQUIRED. SEE A4/E501.
- P38 PULLBOX FOR POWER CONNECTION TO SIGNAGE AND LIGHTING ON SIGNAGE PILLAR. COORDINATE EXACT LOCATION AND CONNECTION IN FIELD. SEE A4/E501 FOR ROUGH IN INFORMATION.
- P40 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO MESSENGER BOARD. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P41 PULLBOX MOUNTED ON UNISTRUT FOR DATA CABLES TO CCTV CAMERAS, SPEAKERS AND BUS INDICATOR. SEE C4/E501 FOR DETAILS.
- P42 BOND TO EQUIPMENT. COORDINATE EXACT REQUIREMENTS IN FIELD.
- P43 DMX POWER SUPPLY AND CONTROLLER QTRAN QOM-LED-DMX OR APPROVED EQUAL. MOUNT VERTICALLY ON UNISTRUT BEHIND REMOVABLE PANEL FOR ACCESSIBILITY. SEE A4/E501. COORDINATE EXACT LOCATION AND REQUIREMENTS IN FIELD. PROVIDE DATA CONNECTION TO MESSAGE BOARD. PROVIDE ALL NECESSARY COMPONENTS AND CONNECTORS FOR PROPER SYSTEM OPERATION AND CONTROL.
- P46 PULLBOX MOUNTED ON UNISTRUT FOR DATA AND POWER CONNECTION TO DIGITAL KIOSK, DIGITAL SLOT SIGN AND MESSAGE BOARD. SEE C4/E501 FOR DETAILS.
- P47 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO DIGITAL SIGNAGE AND DIGITAL KIOSK. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P48 J-BOX FOR POWER AND DATA CONNECTION TO DIGITAL SLOT SIGN. COORDINATE EXACT LOCATION IN FIELD.
- P49 J-BOX FOR POWER AND DATA CONNECTION TO DIGITAL KIOSK. COORDINATE EXACT LOCATION IN FIELD.
- P51 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO FUTURE RADIANT HEATER. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P52 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR DATA CONNECTION TO MESSENGER BOARD. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
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C1 POWER & SYSTEMS PLAN TYPE A - LARGE (OTHERS SIMILAR)
SCALE: 1/4" = 1'-0"

A1 POWER & SYSTEMS CEILING PLAN TYPE A - LARGE (OTHERS SIMILAR)
SCALE: 1/4" = 1'-0"



**POWER & SYSTEMS PLAN TYPE A
E111**



REV. NO.	REVISION/ISSUE	INITIALS	REVISION DATE
Δ	ADDENDUM NO. 4	YWW	8/20/2018

CLIENT
 2222 CUMING STREET
 OMAHA, NEBRASKA 68102
 (402) 341-0800



AECOM
 12120 SHAMROCK PLZ, STE 100
 OMAHA, NEBRASKA 68154

LEO A DAILY
 002-10178-000
 8600 INDIAN HILLS DRIVE
 OMAHA, NE 68114-4039

NE-79-X001
 OPW 53347

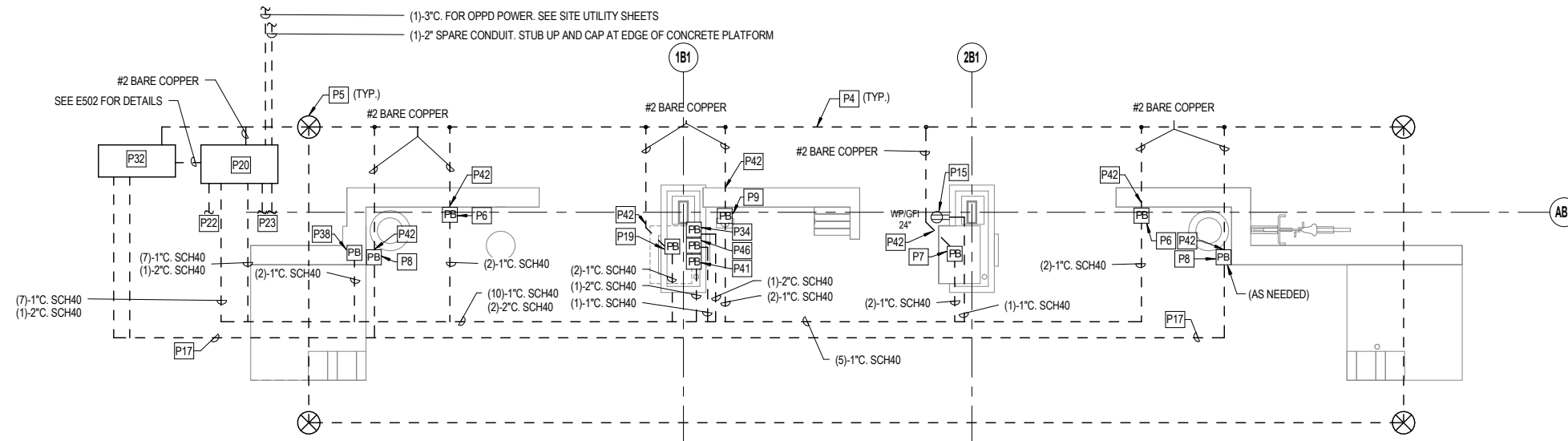
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GENERAL NOTES

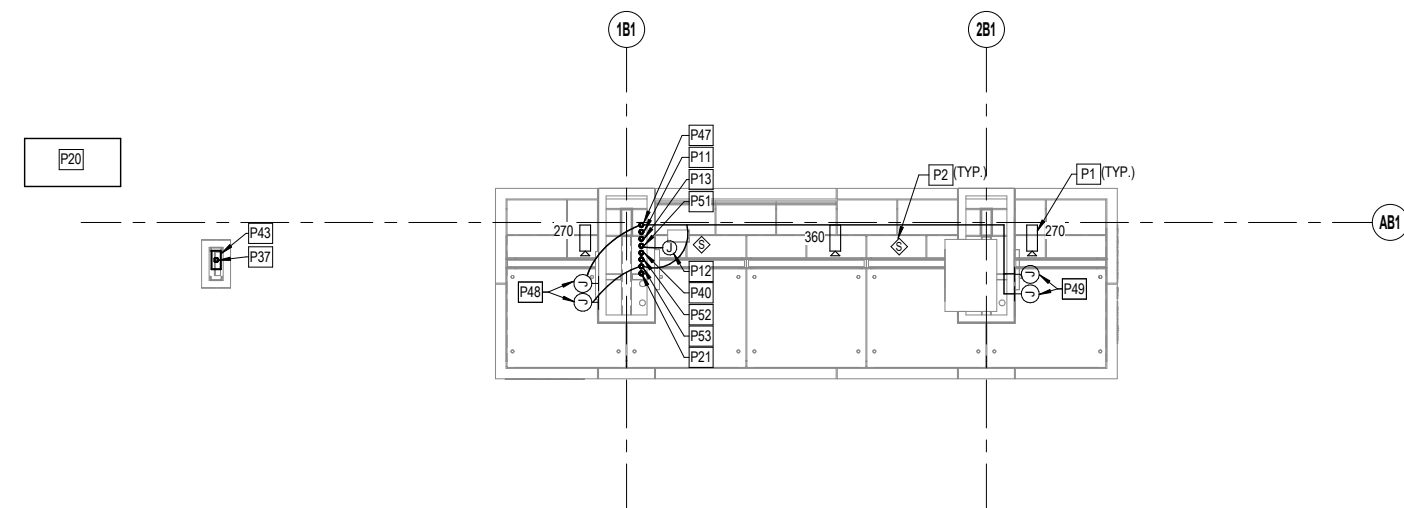
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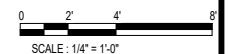
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- P9 PULLBOX FLUSH WITH FINISHED GRADE FOR DATA AND POWER CONNECTION TO EMERGENCY PHONE PEDESTAL. COORDINATE EXACT LOCATION IN FIELD. SEE ARCHITECTURAL SPECIFICATIONS FOR DETAILS. PROVIDE BARRIER BETWEEN POWER AND DATA CABLES. (1) CAT 6 FOR VOICE AND (1) FOR CAMERA.
- P11 (1)-1" CONDUIT FOR LIGHTING CIRCUITS FROM PULLBOX TO CANOPY. COORDINATE EXACT LOCATION IN FIELD. SEE C4/E501 FOR DETAILS.
- P12 J-BOX ABOVE CEILING FOR POWER CONNECTION TO FUTURE RADIANT HEATER.
- P13 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER TO HEAT TAPE ON ROOF DRAIN PIPING. COORDINATE EXACT LOCATION IN FIELD.
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- P17 SEE E502 FOR DETAILS.
- P19 CONDUIT STUB AND PULLBOX FOR FUTURE TICKET VENDING MACHINE. PROVIDE BARRIER BETWEEN POWER AND DATA CABLES. COORDINATE EXACT LOCATION IN FIELD.
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- P37 (1)-1" CONDUIT FOR DATA CONNECTION FROM MESSAGE BOARD TO LIGHTING CONTROLLER. COORDINATE EXACT LOCATION IN FIELD. COORDINATE EXACT CABLE AND INTERFACE REQUIRED. SEE A4/E501.
- P38 PULLBOX FOR POWER CONNECTION TO SIGNAGE AND LIGHTING ON SIGNAGE PILLAR. COORDINATE EXACT LOCATION AND CONNECTION IN FIELD. SEE A4/E501 FOR ROUGH IN INFORMATION.
- P40 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO MESSENGER BOARD. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P41 PULLBOX MOUNTED ON UNISTRUT FOR DATA CABLES TO CCTV CAMERAS, SPEAKERS AND BUS INDICATOR. SEE C4/E501 FOR DETAILS. BOND TO EQUIPMENT. COORDINATE EXACT REQUIREMENTS IN FIELD.
- P43 DMX POWER SUPPLY AND CONTROLLER QTRAN QOM-eLED-DMX OR APPROVED EQUAL. MOUNT VERTICALLY ON UNISTRUT BEHIND REMOVABLE PANEL FOR ACCESSIBILITY. SEE A4/E501. COORDINATE EXACT LOCATION AND REQUIREMENTS IN FIELD. PROVIDE DATA CONNECTION TO MESSAGE BOARD. PROVIDE ALL NECESSARY COMPONENTS AND CONNECTORS FOR PROPER SYSTEM OPERATION AND CONTROL.
- P46 PULLBOX MOUNTED ON UNISTRUT FOR DATA AND POWER CONNECTION TO DIGITAL KIOSK, DIGITAL SLOT SIGN AND MESSAGE BOARD. SEE C4/E501 FOR DETAILS.
- P47 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO DIGITAL SIGNAGE AND DIGITAL KIOSK. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P48 J-BOX FOR POWER AND DATA CONNECTION TO DIGITAL SLOT SIGN. COORDINATE EXACT LOCATION IN FIELD.
- P49 J-BOX FOR POWER AND DATA CONNECTION TO DIGITAL KIOSK. COORDINATE EXACT LOCATION IN FIELD.
- P51 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO FUTURE RADIANT HEATER. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P52 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR DATA CONNECTION TO MESSENGER BOARD. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P53 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO DIGITAL SIGNAGE AND DIGITAL KIOSK. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.



C1 POWER & SYSTEMS PLAN TYPE B - SMALL (OTHERS SIMILAR)
SCALE: 1/4" = 1'-0"



A1 POWER & SYSTEMS CEILING PLAN TYPE B - SMALL (OTHERS SIMILAR)
SCALE: 1/4" = 1'-0"



POWER & SYSTEMS PLAN TYPE B E112



REV. NO.	REVISION/ISSUE	INITIALS	REVISION DATE
4	ADDENDUM NO. 4	YWW	8/20/2018

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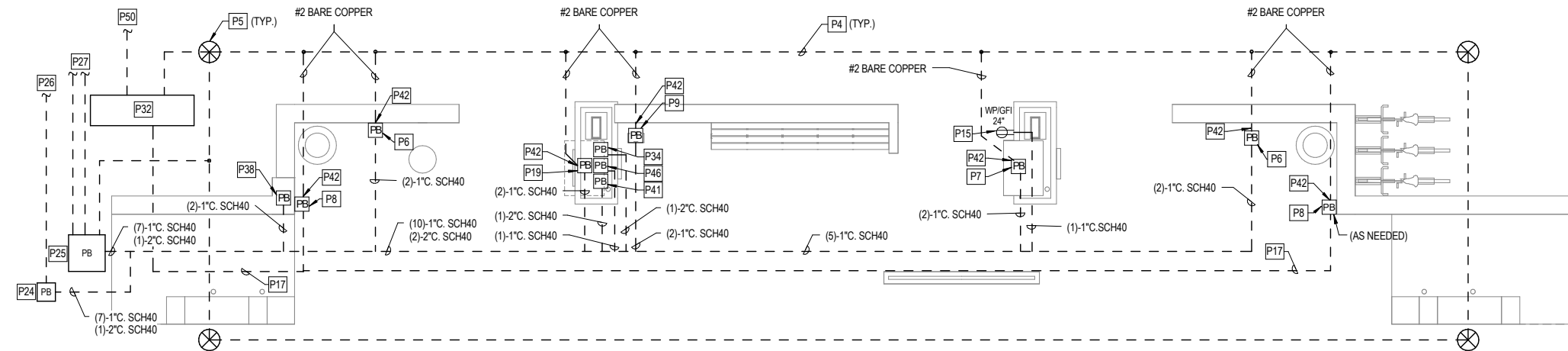


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 OMAHA, NEBRASKA 68154

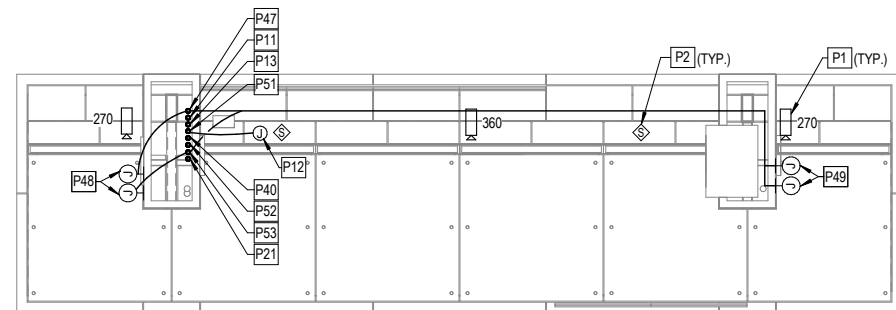
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C1 POWER & SYSTEMS PLAN - SUBFED STATION
SCALE: 1/4" = 1'-0"



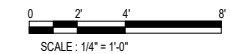
A1 POWER & SYSTEMS CEILING PLAN - SUBFED STATION
SCALE: 1/4" = 1'-0"

GENERAL NOTES

1. CCTV CAMERAS WILL BE FURNISHED BY OTHERS AND INSTALLED BY THE CONTRACTOR
2. ALL CONDUITS SHALL BE ROUTED BACK TO THE POWER AND COMMUNICATIONS CABINET. SEE SITE INFRASTRUCTURE PLANS (BY OTHERS) FOR EXACT LOCATION. MAINTAIN A MINIMUM OF 6" SPACING BETWEEN DATA AND POWER CONDUITS AND SNOW MELT.
3. CONDUIT SHALL NOT BE ROUTED IN SNOW MELT AREA AND SHALL BE ROUTED NOT LESS THAN 6" BELOW SNOW MELT SYSTEM WHERE NEEDED. COORDINATE EXACT DEPTH IN FIELD.
4. NUMBER OF CONDUITS SHOWN FOR REFERENCE ONLY. MULTIPLE BRANCH CIRCUITS IN ONE CONDUIT ARE ALLOWED. FIELD COORDINATE REQUIRED QUANTITY TO COMPLY WITH NEC REQUIREMENTS. INTERFACE BETWEEN CANOPY PULLBOXES AND PLATFORM CONDUITS SHALL BE COORDINATED IN FIELD WITH OTHER TRADES.
5. ALL CABLING IN CANOPY SHALL BE ROUTED IN CONDUIT. COORDINATE EXACT LOCATIONS OF CONDUIT IN FIELD. MAINTAIN A MINIMUM OF 6" SPACING BETWEEN DATA AND POWER CONDUITS.
6. CONTRACTOR SHALL COORDINATE IN FIELD FOR EXACT REQUIREMENTS FOR OWNER FURNISHED EQUIPMENT.
7. ALL POWER AND COMMUNICATIONS CABLES SHALL BE EXTERIOR RATED.
8. CONDUIT SHALL NOT BE ROUTED IN CONDUCTIVE CONCRETE AREA.
9. BRANCH FEEDERS SHALL BE #8AWG MINIMUM. PROVIDE SAME SIZE GROUNDING CONDUCTORS.
10. SEE PANEL SCHEDULES ON SHEET E601 FOR HOME RUN AND CIRCUITING INFORMATION.
11. CAT 6 CABLES SHALL BE CONTINUOUS FROM THE PATCH PANEL IN THE PCC TO ALL DEVICES AND OUTLETS. COIL ENOUGH CABLING IN PULLBOXES WHERE FUTURE CONNECTIONS TO EQUIPMENT OR DEVICES ARE NEEDED.
12. WHERE UNDERGROUND CONDUITS ARE ROUTED UNDER DRIVEWAYS AND TRAFFIC AREAS PROVIDE SCHEDULE 80 PVC CONDUITS.
13. CONTRACTOR SHALL COORDINATE IN FIELD WITH EXISTING UTILITY TYPE AND LOCATION IN THE STATION AREA. NEW UTILITY RUNS SHALL BE LOWERED TO AVOID CONFLICT WITH EXISTING UTILITIES. PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
14. ALL PULLBOXES AND PENETRATIONS THROUGH SNOW MELT AREA SHALL COMPLY WITH SNOW MELT SYSTEM REQUIREMENTS.
15. ALL PULL AND JUNCTION BOXES IN THE SNOW MELT SYSTEM AREA OR IN CONTACT WITH SNOW MELT SYSTEM SHALL NOT BE METAL.

KEYED SHEET NOTES

- P1 CCTV CAMERA MOUNTED ON CEILING WITH CAMERA LENS BELOW LOWEST PART OF THE CANOPY.
- P2 OUTDOOR RATED PAGING SPEAKER FLUSH WITH CEILING. SPEAKERS SHALL BE FURNISHED BY METRO.
- P4 GROUND RING #2 BARE COPPER BURIED 2\"/>
- P5 GROUND ROD, 3/4" X 10' LONG COPPER CLAD WITH COLDWELD CONNECTION. ALL GROUND RODS AND GROUNDING CONDUITS SHALL BE BELOW SNOW MELT SYSTEM AND NOT IN CONTACT WITH SNOW MELT SYSTEM.
- P6 PULLBOX FLUSH WITH FINISHED GRADE FOR POWER AND DATA CONNECTION TO TICKET VALIDATION MACHINE. COORDINATE EXACT LOCATION IN FIELD. PROVIDE BARRIER BETWEEN DATA AND POWER CABLES.
- P7 PULLBOX FLUSH WITH FINISHED GRADE FOR DATA AND POWER CONNECTION TO TICKET VENDING MACHINE. COORDINATE EXACT LOCATION IN FIELD. PROVIDE BARRIER BETWEEN DATA AND POWER CABLES.
- P8 12" X 24" PULLBOX FLUSH WITH FINISHED GRADE FOR FUSE BLOCK AND CONNECTORS. SEE SNOW MELT SYSTEM DESIGN FOR DETAILS. SNOW MELT SYSTEM DESIGN BY OTHERS.
- P9 PULLBOX FLUSH WITH FINISHED GRADE FOR DATA AND POWER CONNECTION TO EMERGENCY PHONE PEDESTAL. COORDINATE EXACT LOCATION IN FIELD. SEE ARCHITECTURAL SPECIFICATIONS FOR DETAILS. PROVIDE BARRIER BETWEEN POWER AND DATA CABLES. (1) CAT 6 FOR VOICE AND (1) FOR CAMERA.
- P11 (1)-1" CONDUIT FOR LIGHTING CIRCUITS FROM PULLBOX TO CANOPY. COORDINATE EXACT LOCATION IN FIELD. SEE C4/E501 FOR DETAILS.
- P12 J-BOX ABOVE CEILING FOR POWER CONNECTION TO FUTURE RADIANT HEATER.
- P13 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER TO HEAT TAPE ON ROOF DRAIN PIPING. COORDINATE EXACT LOCATION IN FIELD.
- P15 PROVIDE LOCKABLE BOX. COORDINATE EXACT LOCATION IN FIELD.
- P17 SEE E502 FOR DETAILS.
- P19 CONDUIT STUB AND PULLBOX FOR FUTURE TICKET VENDING MACHINE. PROVIDE BARRIER BETWEEN POWER AND DATA CABLES. COORDINATE EXACT LOCATION IN FIELD.
- P21 (1)-2" CONDUIT FROM PULLBOX TO CANOPY FOR CAT 6 CABLES TO CCTV CAMERAS, SPEAKERS, AND DATA CONNECTION TO BUS INDICATOR. ROUTE CAT 6 CABLES BACK TO PCC.
- P24 12" X 12" PULLBOX FOR COMMUNICATIONS CABLES FROM PCC PANEL TO THE SUBFED STATION. COORDINATE EXACT LOCATION WITH OTHER TRADES.
- P25 24" X 24" PULLBOX FOR POWER CABLES FROM PCC PANEL TO THE SUBFED STATION. COORDINATE EXACT LOCATION WITH OTHER TRADES.
- P26 (1)-3" CONDUIT FOR COMMUNICATIONS CABLES FROM PCC CABINET. BORE UNDER STREET. COMMUNICATIONS AND POWER CONDUITS SHALL MAINTAIN A 12" SEPARATION.
- P27 (2)-3" CONDUITS FOR POWER CABLES FROM PCC TO THE SUBFED STATION. BORE UNDER STREET. COMMUNICATIONS AND POWER CONDUITS SHALL MAINTAIN A 12" SEPARATION.
- P32 SNOW MELT SYSTEM EQUIPMENT CABINET. SEE SHEET E502 FOR DETAILS. SEE SITE DRAWINGS FOR EXACT LOCATION.
- P34 PULLBOX MOUNTED ON UNISTRUT FOR POWER CONNECTION TO LIGHTING CIRCUITS, FUTURE RADIANT HEATER, MESSAGE BOARD, DIGITAL KIOSK, DIGITAL SLOT SIGN AND HEAT TAPE FOR DRAIN PIPES IN CANOPY. SEE C4/E501 FOR DETAILS.
- P37 (1)-1" CONDUIT FOR DATA CONNECTION FROM MESSAGE BOARD TO LIGHTING CONTROLLER. COORDINATE EXACT LOCATION IN FIELD. COORDINATE EXACT CABLE AND INTERFACE REQUIRED. SEE A4/E501.
- P38 PULLBOX FOR POWER CONNECTION TO SIGNAGE AND LIGHTING ON SIGNAGE PILLAR. COORDINATE EXACT LOCATION AND CONNECTION IN FIELD. SEE A4/E501 FOR ROUGH IN INFORMATION.
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- P41 PULLBOX MOUNTED ON UNISTRUT FOR DATA CABLES TO CCTV CAMERAS, SPEAKERS AND BUS INDICATOR. SEE C4/E501 FOR DETAILS.
- P42 BOND TO EQUIPMENT. COORDINATE EXACT REQUIREMENTS IN FIELD.
- P43 DMX POWER SUPPLY AND CONTROLLER QTRAN QOM-4LED+DMX OR APPROVED EQUAL. MOUNT VERTICALLY ON UNISTRUT BEHIND REMOVABLE PANEL FOR ACCESSIBILITY. SEE A4/E501. COORDINATE EXACT LOCATION AND REQUIREMENTS IN FIELD. PROVIDE DATA CONNECTION TO MESSAGE BOARD. PROVIDE ALL NECESSARY COMPONENTS AND CONNECTORS FOR PROPER SYSTEM OPERATION AND CONTROL.
- P46 PULLBOX MOUNTED ON UNISTRUT FOR DATA AND POWER CONNECTION TO DIGITAL KIOSK, DIGITAL SLOT SIGN AND MESSAGE BOARD. SEE C4/E501 FOR DETAILS.
- P47 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO DIGITAL SIGNAGE AND DIGITAL KIOSK. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P48 J-BOX FOR POWER AND DATA CONNECTION TO DIGITAL SLOT SIGN. COORDINATE EXACT LOCATION IN FIELD.
- P49 J-BOX FOR POWER AND DATA CONNECTION TO DIGITAL KIOSK. COORDINATE EXACT LOCATION IN FIELD.
- P50 UNDERGROUND CONDUITS FOR POWER FROM PCC TO SNOW MELT SYSTEM TRANSFORMERS. COORDINATE EXACT LOCATION IN FIELD. SEE E502 FOR DETAILS.
- P51 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO FUTURE RADIANT HEATER. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P52 (1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR DATA CONNECTION TO MESSENGER BOARD. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.
- P53 1)-1" CONDUIT FROM PULLBOX TO CANOPY FOR POWER CONNECTION TO DIGITAL SIGNAGE AND DIGITAL KIOSK. SEE C4/E501 FOR DETAIL. COORDINATE EXACT LOCATION IN FIELD.



POWER & SYSTEMS PLAN - SUBFED STATION (NO PCC)
E114

REV. NO.	REVISION/ISSUE	INITIALS	REVISION DATE
1	ADDENDUM NO. 4	YWW	8/20/2018

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