MANCHESTER-BOSTON REGIONAL AIRPORT
GREEN DRIVE CARGO FACILITY APRON AND ACCESS ROAD

ADDENDUM NO. 2

DATE: March 23, 2022

TO: ALL BIDDERS

FROM: McFarland-Johnson, Inc.
53 Regional Drive
Concord, NH 03301

PROJECT: Manchester-Boston Regional Airport
Manchester, New Hampshire
Green Drive Cargo Facility Apron and Access Road

This Addendum forms part of and modifies Bidding and Contract Documents for the project named above, March 2022. The Bidder is to acknowledge receipt of this Addendum on the Bid Proposal Documents to be in compliance with the bidding requirements.

Where any original item called for in the Project Manual or indicated on the Drawings is supplemented hereby, the supplemental requirements shall be considered as added hereto.

Where any original item is amended, voided, or superseded hereby, the other provisions of such items not specifically amended, voided, or superseded shall remain in effect.

PRE-BID MEETING

NONE

PROJECT MANUAL DOCUMENTS

NONE

PROJECT MANUAL TECHNICAL SPECIFICATIONS

NONE

PLANS

Addendum Item 2.01

REPLACE the plan sheets as follows:

DELETE: The sheets listed in the table below:

Sheet Number	Sheet Title
AS-01	ASOS Site Plan
AS-02	ASOS Details (1 of 4)
AS-03	ASOS Details (2 of 4)
AS-04	ASOS Details (3 of 4)
AS-05	ASOS Details (4 of 4)

INSERT: The attached sheets listed in the table below with Revision Date 3/23/22 – Addendum No. 2.

Sheet Number	Sheet Title
AS-01	ASOS Site Plan
AS-02	ASOS Details (1 of 4)
AS-03	ASOS Details (2 of 4)
AS-04	ASOS Details (3 of 4)
AS-05	ASOS Details (4 of 4)

Addendum Item 2.02

ADD the additional detail plan sheets as follows:

INSERT: The attached sheets listed in the table below with Revision Date 3/23/22 – Addendum No. 2.

Sheet Number	Sheet Title
AS-06	ASOS Details (Sheet 5)
AS-07	ASOS Details (Sheet 6)

QUESTIONS AND CLARIFICATIONS

Addendum Item 2.03

For the attached project, the plans for the ASOS do not depict the existing power feed to be demoed, or new power feed to be supplied. Can the authority please clarify either in writing, or by plan, where these are and what is to be installed for new?

Answer: For the new ASOS site installation, refer to Addendum Items 2.01 and 2.02 above for the proposed site electrical requirements. The Contractor shall install the foundations, conduits, enclosures, and racks, but the wiring installation will be performed by the National Weather Service (and Eversource for the transformer connection), with the exception of the grounding systems which are to be performed by the Contractor as shown on the plans.

For the existing ASOS site demolition, the existing power feed wires to the ASOS equipment though the temporary conduit on the recently installed security fence and old security fencing will be pulled back to the existing disconnect switch by the dumpster pad, unless otherwise directed by the RPR or Owner in the field. Also, the existing power feed conduit, as well as all existing ASOS electrical conduits, wires and foundations for the ASOS site, will be demolished and properly disposed. The limits of the removal for the existing power feed conduits for the ASOS site demolition will be to the existing old section of fence. As part of the project, the remaining existing old fencing and a portion of the recently installed existing fence will also be demolished for the site improvements and the temporary conduit on this section of fence will be removed as part of the fence removal and be considered as part of the fence removal pay item. Any junction boxes removed on the fence shall be salvaged to the Owner. Any conduit on the security fence shown on the plans to remain shall be abandoned in place on the fence for potential future use by the Owner.

Addendum Item 2.04

A few questions concerning the lighting layout for the Cargo Apron.

1. *What light loss factors were used in the design?*
2. *What are the boundaries of the area that the 4 poles are intended to provide light?*
3. *What light levels and uniformity are needed?*
4. *What wind speed is required for the pole/fixture assembly?*

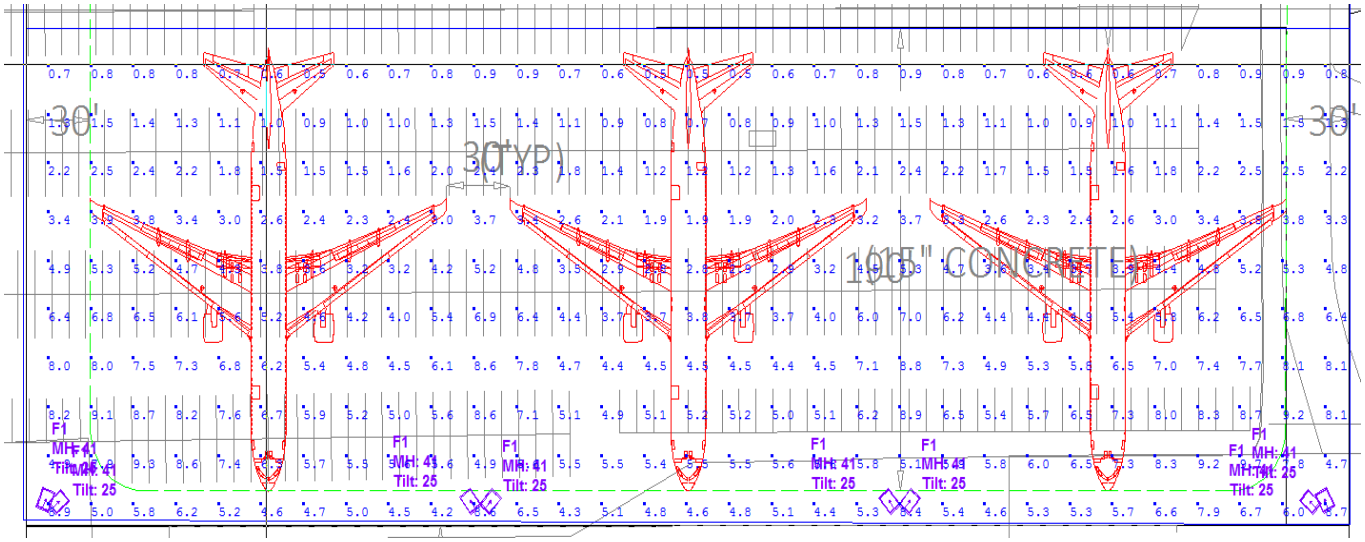
Answer:

Question 1 Response: The light loss factor using the Basis of Design fixture and pole information identified in Section M-400 specification uses a 0.9 lighting loss factor.

Question 2 Response: The following figure was used to determine the apron mast light pole location layout using the Basis of Design fixture and pole information outlined in Technical Specification Section M-400 Non-Airfield Electrical Improvements under paragraphs 400-2.20 Mast Light and 400-2.21 Mast Light Pole. This illumination and geometry layout also indicates the approximate lighting area boundaries and lighting levels.

Addendum Item 2.04 Figure

LIGHT ILLUMINATION AND GEOMETRY LAYOUT
WITH APPROXIMATE BOUNDARIES AND FIXTURE AIMING



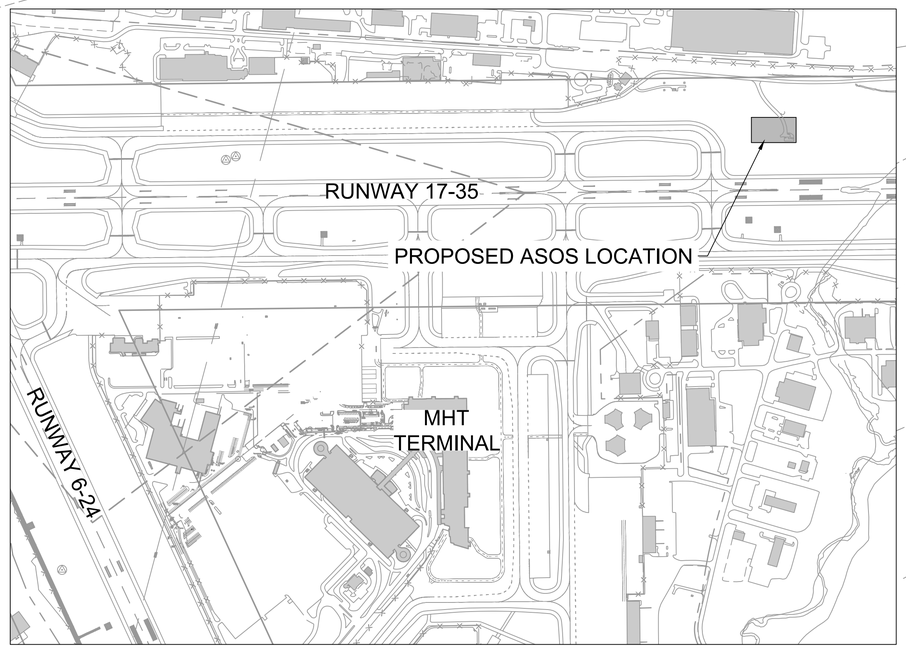
Question 3 Response: From the above figure used for the Basis of Design, the average apron lighting levels are approximately 4 – 5 foot-candles and average/minimum ratio under 10.

Question 4 Response: The wind speed used for the pole/fixture assembly is minimum 100 miles/hour.

END OF ADDENDUM NO. 2

ENTIRE SHEET REISSUED WITH ADDENDUM NO. 2 ⚠2

PROPOSED CONTOURS
243
243.5
PROPOSED SPOT ELEVATION (TYP)
244.18
244
244.19
CONSTRUCT GRAVEL WALKWAY TO LIMITS APPROVED BY RPR (ITEM M-500-3)
ASOS EQUIPMENT RACK (NWS TO INSTALL EQUIPMENT)
INSTALL WIND TOWER CONCRETE PAD SEE DETAIL ON SHEET AS-05 (ITEM M-500-3)
EXISTING CONTOUR (TYP)
INSTALL (1) NEW 1" SCH 40 PVC CONDUIT FROM EQUIPMENT CONTROL CABINET TO WIND TOWER EQUIPMENT (ITEM M-500-3)
INSTALL CONCRETE PAD FOR CONTROL PANEL SEE DETAIL ON SHEET AS-05 (ITEM M-500-3)
244.41
244.42
INSTALL (1) NEW 1" SCH 40 PVC CONDUIT FROM POWER CABINET TO EQUIPMENT CONTROL CABINET (ITEM M-500-3)
25'-0"
GENERATOR
INSTALL LP GAS UST WITH 5' x 10' x 6" THICK P-610 CONCRETE SLAB AND BOLLARDS IN ACCORDANCE WITH THE LP GAS SUPPLIER REQUIREMENTS. PROVIDE (4) 6" BOLLARDS AT THE SLAB CORNERS. SEE GENERATOR BOLLARD DETAIL ON SHEET AS-07 (ITEM M-500-3)
INSTALL NEW LP GAS SERVICE (⅜" PEX) LINE FROM UST TO GENERATOR WITH COORDINATION WITH LP GAS UST SUPPLIER. LINE SIZE TO BE VERIFIED WITH LP GAS UST SUPPLIER. (ITEM M-500-3)
INSTALL NEW (1) ¾" AND (1) 1 ½" SCH 40 PVC CONDUITS BETWEEN GENERATOR AND POWER CABINET (ITEM M-500-3)
POWER CABINET AND GENERATOR TRANSFER SWITCH SEE DETAILS ON SHEET AS-06
R15'
243.5
B
15'
CONSTRUCT NEW DRIVEWAY ACCESS TO ASOS. CONTRACTOR TO LAY OUT TO THE APPROVAL OF THE RPR SEE TYPCIAL SECTION B-B ON SHEET TS-01 (ITEM M-500-3)
ASPHALT DRIVE
INSTALL NEW 2" CONCRETE ENCASED CONDUIT FROM NEW ELECTRIC SERVICE RACK TO RELOCATED POWER CABINET SEE DETAIL ON SHEET EP-05 (ITEM M-500-3)
INSTALL NEW ELECTRIC SERVICE RACK SEE DETAIL ON SHEET AS-07 (ITEM M-500-3)
EXISTING EQUIPMENT RAIL
EXISTING 37.5kVA TRANSFORMER CABINET
APPROXIMATE LIMITS OF EXISTING CRUSHED STONE
PATCH PAVEMENT FOR CONDUIT TRENCH USING TYPICAL SECTION B-B
INSTALL NEW 3" PVC ELECTRICAL SERVICE CONDUIT TO ELECTRIC SERVICE RACK. CONTRACTOR SHALL INSTALL THE CONDUIT FROM THE EXISTING TRANSFORMER AND TO THE EQUIPMENT RACK AND SHALL COORDINATE THE WORK WITH EVERSOURCE (ITEM M-500-3) EVERSOURCE TO PROVIDE METER AND SERVICE CONNECTION FROM THE TRANSFORMER
GLIDE SLOPE SHELTER
EQUIPMENT PAD
RUNWAY 35 GLIDE SLOPE ANTENNA
4" -2 WAY (C. FAA)
DUCT
PSNH
EMH
FAA
ROFA
FAA-PWR
UE
E
245
245.5
246
246.5
247
247.5



KEY PLAN
1" = 500'

NOTES:
1. SITE WORK CONDUITS, CONCRETE PADS, EQUIPMENT RACKS, AND SITE WORK IMPROVEMENTS TO BE INSTALLED BY THE CONTRACTOR AND PAID UNDER ITEM M-500-3. THE EQUIPMENT SHALL BE RELOCATED AND INSTALLED ON THE SITE BY THE NATIONAL WEATHER SERVICE (NWS) WITH ONLY ASSISTANCE FROM THE CONTRACTOR FOR TRANSPORTATION AND PLACING OF LARGE PIECES OF EQUIPMENT.

0 10 20 30 FT
SCALE

ENGINEER'S SEAL
THE STATE OF NEW HAMPSHIRE
BRIAN R. BURNETT
No. 7416
LICENSED PROFESSIONAL ENGINEER

PROJECT DESIGNER
McFarland Johnson
53 REGIONAL DRIVE, CONCORD, NH 03301-5022
PH: 603-225-2978 FAX: 603-225-0095
DESIGNED BY DPB | DRAWN BY BRF | CHECKED BY BMB

CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE

MANCHESTER-BOSTON REGIONAL AIRPORT
CARGO APRON AND ACCESS

ASOS SITE PLAN

SCALE: 1" = 10'
DATE: MARCH 2022

REVISIONS			
REV. NO.	DATE	DESCRIPTION	BY
⚠2	3/23/22	ADDENDUM NO. 2	BRF

MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

DRAWING NO.
AS-01

SHEET 57 OF 90 REV ⚠2

GENERAL ASOS INSTALLATION NOTES:

1. INTERPRET DRAWING IN ACCORDANCE WITH DOD-STD-100.

2. MATERIAL:
   FN1, FN3, FN4-STEEL PIPE, GLV. WLD, TYPE F, SPEC ASTM A53, 3,000 IPS, SCH 40.

   FN23 -RIGID STEEL CONDUIT, GALV, SPEC ANSI C80.1, 1.00 NPS. FOR ALTERNATE WIND TOWER LOCATION, LENGTH MAY VARY DUE TO LOCATION OF WIND TOWER FOUNDATION.

   FN8-STONE AGGREGATE CONCRETE, MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 6% ±1.50%. ADMIXTURES CONTAINING CALCIUM ARE NOT PERMITTED. MAXIMUM AGGREGATE SIZE 1.00, AND MAXIMUM SLUMP 4.00.

   FN9-GRAVEL SHALL BE DURABLE PARTICLES OF ROCK, FREE OF DELTERIOUS SUBSTANCES; 100 PERCENT OF THE AGGREGATE SHALL PASS A ONE-INCH SIEVE AND LESS THAN 60 PERCENT SHALL PASS A #4 SIEVE. THE GRAVEL SHALL BE OF A COMPOSITION AND COLOR COMMON TO THE LOCALE OF THE SITE.

3. WORKMANSHIP SHALL BE IN ACCORDANCE WITH MIL-HDBK-454, GUIDELINE 9.

4. THREADS AND ACCEPTABILITY REQUIREMENTS SHALL BE IN ACCORDANCE WITH FED-STD-H28/7.

5. FLANGE SHALL BE WITHIN ±1° OF HORIZONTAL IN ALL DIRECTIONS.

6. CONCRETE MATERIAL SHALL BE PER NOTE 2, WORK SHALL CONFORM TO:
   ACI 301-89 - STRUCTURAL CONCRETE FOR BUILDINGS

   ACI 318-89 - BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE

   ACI 305R-77 (82) -RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING

   ACI 306R-78 -RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING

   ACI 347-78 - RECOMMENDED PRACTICE FOR CONCRETE FORMWORK.

7. FOOTINGS ARE DESIGNED FOR AN ASSUMED NET SOIL BEARING PRESSURE OF 2000 PSF. NOTIFY PROCURING ACTIVITY IF SOIL BEARING PRESSURE IS LESS THAN 2000 PSF.

8. BROOM FINISH TOP OF ALL FOOTINGS AND CONCRETE PAD

9. MINIMUM FOOTING DEPTH OR FROST DEPTH,WHICHEVER IS GREATER. MINIMUM FROST DEPTH = 5'-0".

10. WHEN THE WIND TOWER IS DETACHED FROM THE MAIN SENSOR GROUP NO GRAVEL WALKWAY SHALL CONNECT TO THE SENSOR GROUP

11. ANGLE IS LIMITED TO 45° MAX WHEN WIND SENSOR TOWER IS WITHIN 27 FEET OF DCP MOUNTING POLES.

12. ALL COMBINATIONS OF ANGLES ARE ACCEPTABLE WITHIN THE CONSTRAINTS GIVEN. IT IS PREFERABLE THAT ONLY ONE WING ROTATES FROM THE ORIGINAL LINEAR ARRAY PATTERN.

13. PEDESTAL FLANGES MUST MAINTAIN A NORTH-SOUTH ORIENTATION REGARDLESS OF THE ANGULAR POSITION OF EITHER PEDESTAL WING.

14. ALL CABLE WITH THE EXCEPTION OF GROUND WIRE TO BE INSTALLED BY NATIONAL WEATHER SERVICE (NWS). SEE GROUNDING ON SHEET AS-04.

15. ADDITIONAL GROUND RODS, FN11, AND CABLE, FN12, SHALL BE INSTALLED AS NECESSARY. GROUND CABLE IS A CONTINUOUS LOOP. ALL GROUNDING SYSTEM CONNECTIONS SHALL BE EXOTHERMICALLY WELDED, IE, CABLE INTERSECTIONS, GROUND ROD CONNECTIONS AND SPLICES. ALL WELDING MATERIALS USED SHALL BE CADWELD MATERIALS, MANUFACTURED BY ERICO PRODUCTS INC. CAGEC: 14045, OR APPROVED EQUAL. ALL MATERIALS MUST BE FROM THE SAME SOURCE FOR COMPATIBILITY. CONNECTIONS MADE FROM THIS PROCESS MUST MEET THE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, ARTICLE 250. ARRANGEMENT OF THE GROUNDING RODS MAY VARY BETWEEN SITES. SEE THE SITE SURVEY. GROUNDING AND GROUND RODS SHALL BE INSTALLED BY THE CONTRACTOR. SEE SHEET AS-04.

16. NWS TO PERFORM ALL INSTALLATION WORK OF THE RELOCATED EQUIPMENT AND NEW WIRING.

17. USE 6" x 6" WIRE CONCRETE REINFORCEMENT MESH, FN 30, ROLLED INTO A 6" DIAMETER TUBE. INSERT 3" TO 6" BELOW SURFACE OF CONCRETE.

CURRENT DESIGN ACTIVITY CAGE CODE 82187
U.S DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE
SILVER SPRING MD 20910

ENTIRE SHEET REISSUED WITH ADDENDUM NO. 2 (2)

ENGINEER'S SEAL
THE STATE OF NEW HAMPSHIRE
BRIAN R. FRANCOEUR
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LICENSED PROFESSIONAL ENGINEER

PROJECT DESIGNER
McFarland Johnson
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DESIGNED BY DPB | DRAWN BY BRF | CHECKED BY BMB

CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE

MANCHESTER-BOSTON REGIONAL AIRPORT
CARGO APRON AND ACCESS

ASOS DETAILS (1 OF 4)

SCALE: NTS | DATE: MARCH 2022

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY
2	3/23/22	ADDENDUM NO. 2	BRF

MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

DRAWING NO.
AS-02

SHEET 58 OF 90 REV 2

ASOS INSTALLATION ITEMS & INSTALL RESPONSIBILITY

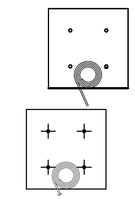
(1)	PIPE, PEDESTAL
(2)	POWER DISTR ASSY
(3)	PIPE, SUPPORT
(4)	PIPE, SUPPORT
(5)	CAP, PIPE
(6)	FLANGE 3X7 1/2 ' GLV
(7)	PIPE FLANGE
(8)	CONCRETE
(9)	GRAVEL
(10)	FILTER FABRIC
(11)	ROD, GROUND
(12)	GROUND WIRE, SOLID COPPER, AWG #2/0
(13)	EXOTHERMIC WELD CONNECTION
(14)	CABLE
(15)	BOLT, ANCHOR
(16)	NUT, HEX, STL
(17)	WASHER, LOCK-SPR,
(18)	WASHER, FLAT 8 EA
(20)	ELEC EQPT MTG FRAME
(21)	ELEC SINGLE LINE DIAGRAM (FOR REFERENCE ONLY)
(22)	COUPLING, PIPE (INSTALLED BY NWS FOR CONNECTIONS)
(23)	CONDUIT (1" PVC SCH 40)
(24)	STUD, CONTINUOUS THREAD, 1/2-13 UNC-2A, A193, 5.50 LG
(25)	NUT,PLAIN,HEX,CRES,1/2-13 UNC-2B
(26)	WASHER, LOCK-SPLIT,
(27)	WASHER, FLAT,ROUND,
(28)	NUT, COUPLING, 1/2-13 X1.75, 18-8 STAINLESS STEEL
(29)	BOLT, ANCHOR, BENT,1/2-13 X 12 X 2
(30)	WELDED WIRE FABRIC, 6 X 6 INCHES, 10 X 10 GAUGE
(31)	CABLE, JACKETED METAL CLAD
(32)	CABLE, JACKETED METAL CLAD

ANCHOR BOLTS AND ACCESSORIES INSTALLED BY THE CONTRACTOR. SIZE COORDINATED WITH THE NWS

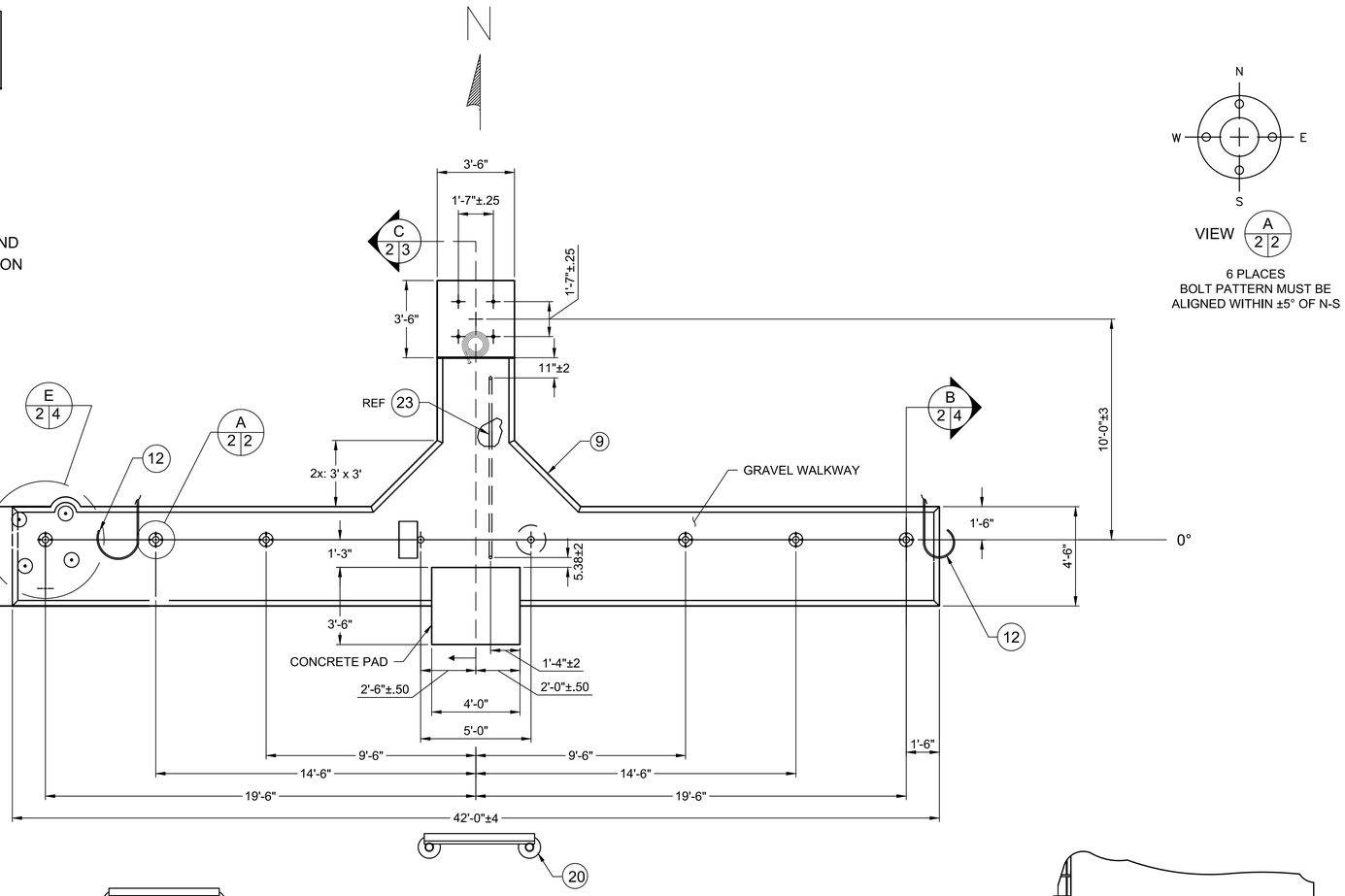
LEGEND

(#) RELOCATED EQUIPMENT AND INSTALLATION BY NWS

(#) INSTALLED BY CONTRACTOR



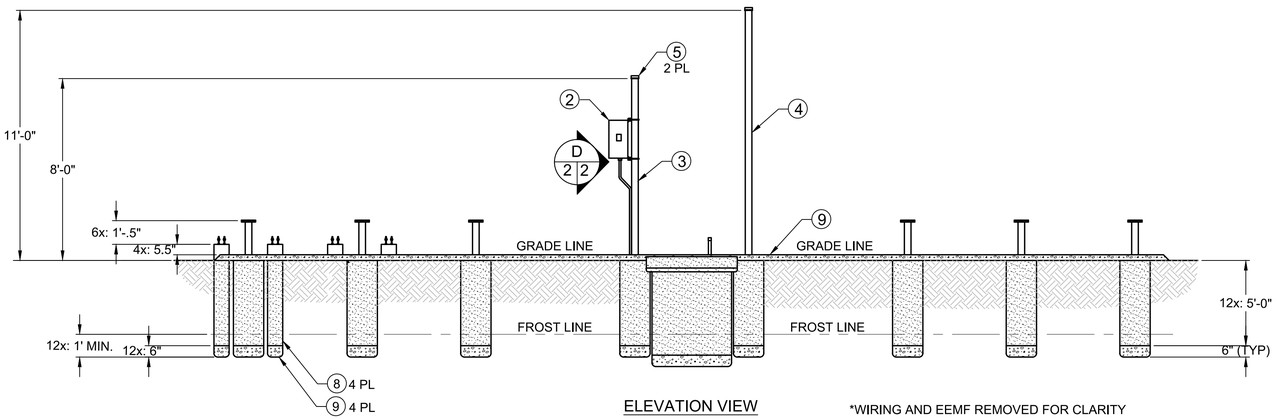
ALTERNATE WIND TOWER LOCATION



PLAN VIEW

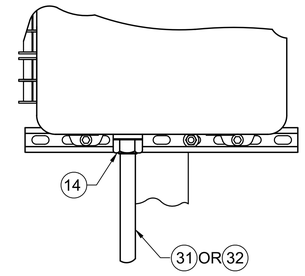
ASSY 62828-40105-10
PEDESTAL FLANGES MUST MAINTAIN A NORTH-SOUTH ORIENTATION REGARDLESS OF THE ANGULAR POSITION OF EITHER PEDESTAL WING

6 PLACES
BOLT PATTERN MUST BE ALIGNED WITHIN ±5° OF N-S



ELEVATION VIEW

*WIRING AND EEMF REMOVED FOR CLARITY



NOTE: CONTRACTOR TO INSTALL ALL FOUNDATIONS, MOUNTING PIPES, AND ANCHOR BOLTS, BUT ALL EQUIPMENT INSTALLATION WORK IS TO BE INSTALLED BY THE NATIONAL WEATHER SERVICE (NWS). THE CONTRACTOR SHALL COORDINATE THE FOUNDATION LAYOUT WITH THE NWS AND RESIDENT PROJECT REPRESENTATIVE (RPR).

ASOS INSTALLATION DETAIL

NOT TO SCALE
(ITEM M-500-3)

ENTIRE SHEET REISSUED WITH ADDENDUM NO. 2 (2)

ENGINEER'S SEAL
THE STATE OF NEW HAMPSHIRE
BRIAN M. BURNETT
No. 7416
LICENSED PROFESSIONAL ENGINEER

PROJECT DESIGNER
McFarland Johnson
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DESIGNED BY DPB | DRAWN BY RHL | CHECKED BY BMB

CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE

MANCHESTER-BOSTON REGIONAL AIRPORT
CARGO APRON AND ACCESS

ASOS DETAILS (2 OF 4)

SCALE: NTS | DATE: MARCH 2022

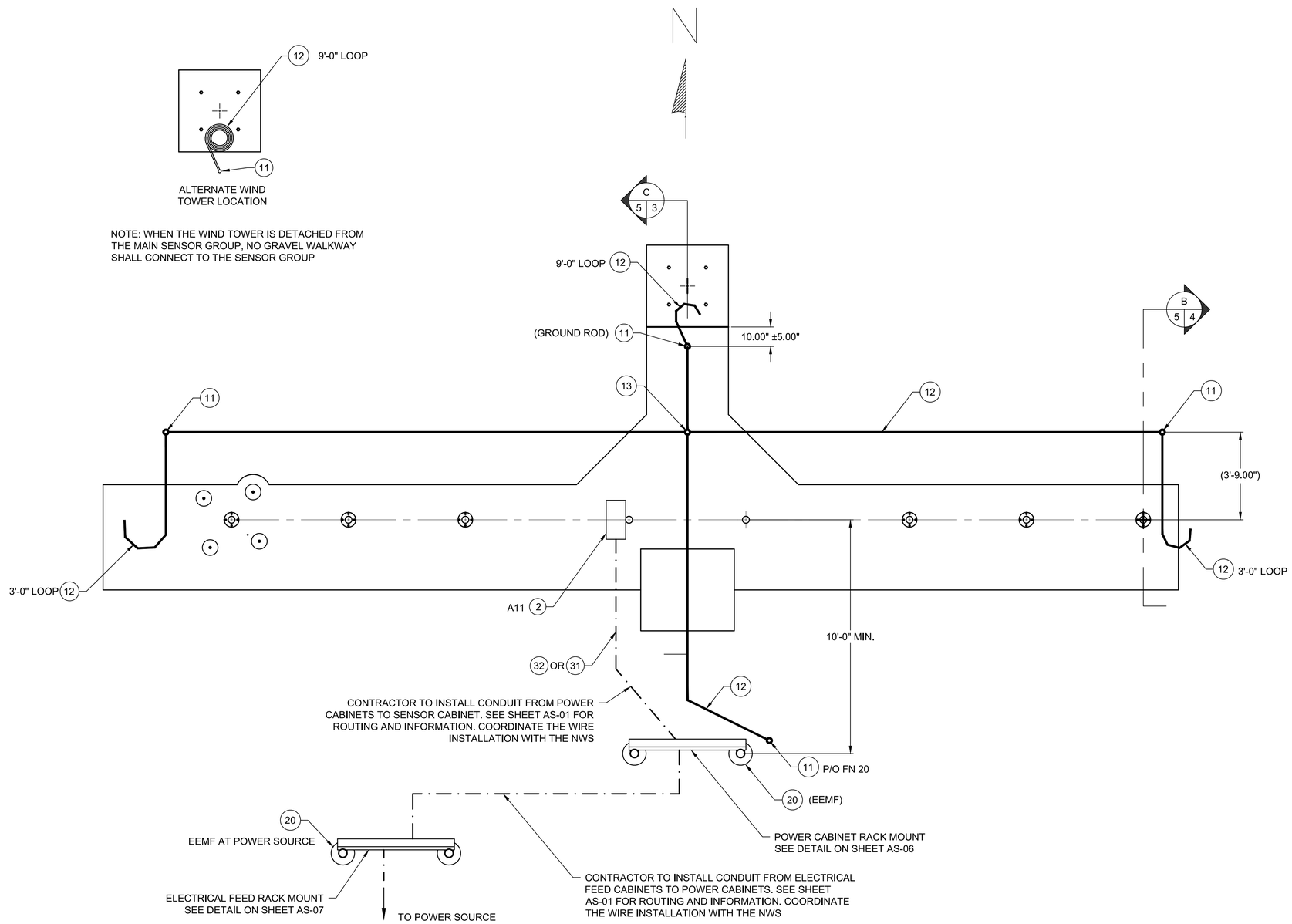
REVISIONS

REV. NO.	DATE	DESCRIPTION	BY
2	3/23/22	ADDENDUM NO. 2	BRF

MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

DRAWING NO.
AS-03

SHEET 59 OF 90 REV 2



ELECTRICAL GROUND GRID PLAN

NOT TO SCALE

(INCIDENTAL TO ITEM M-500-3)

NOTE: ADDITIONAL GROUND RODS AND CABLE SHALL BE INSTALLED AS NECESSARY. GROUND CABLE IS A CONTINUOUS LOOP. ALL GROUNDING SYSTEM CONNECTIONS SHALL BE EXOTHERMICALLY WELDED, IE, CABLE INTERSECTIONS, GROUND ROD CONNECTIONS AND SPLICES. ALL WELDING MATERIALS USED SHALL BE CADWELD MATERIALS, MANUFACTURED BY ERICO PRODUCTS INC, CAGEC: 14045, OR SIMILAR. ALL MATERIALS MUST BE FROM THE SAME SOURCE FOR COMPATIBILITY. CONNECTIONS MADE FROM THIS PROCESS MUST MEET REQUIREMENTS OF THE NATIONAL ELECTRIC CODE, ARTICLE 250.

ENTIRE SHEET REISSUED WITH ADDENDUM NO. 2 ⚠2

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CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE

MANCHESTER-BOSTON REGIONAL AIRPORT
CARGO APRON AND ACCESS

ASOS DETAILS (3 OF 4)

SCALE: NTS | DATE: MARCH 2022

REVISIONS

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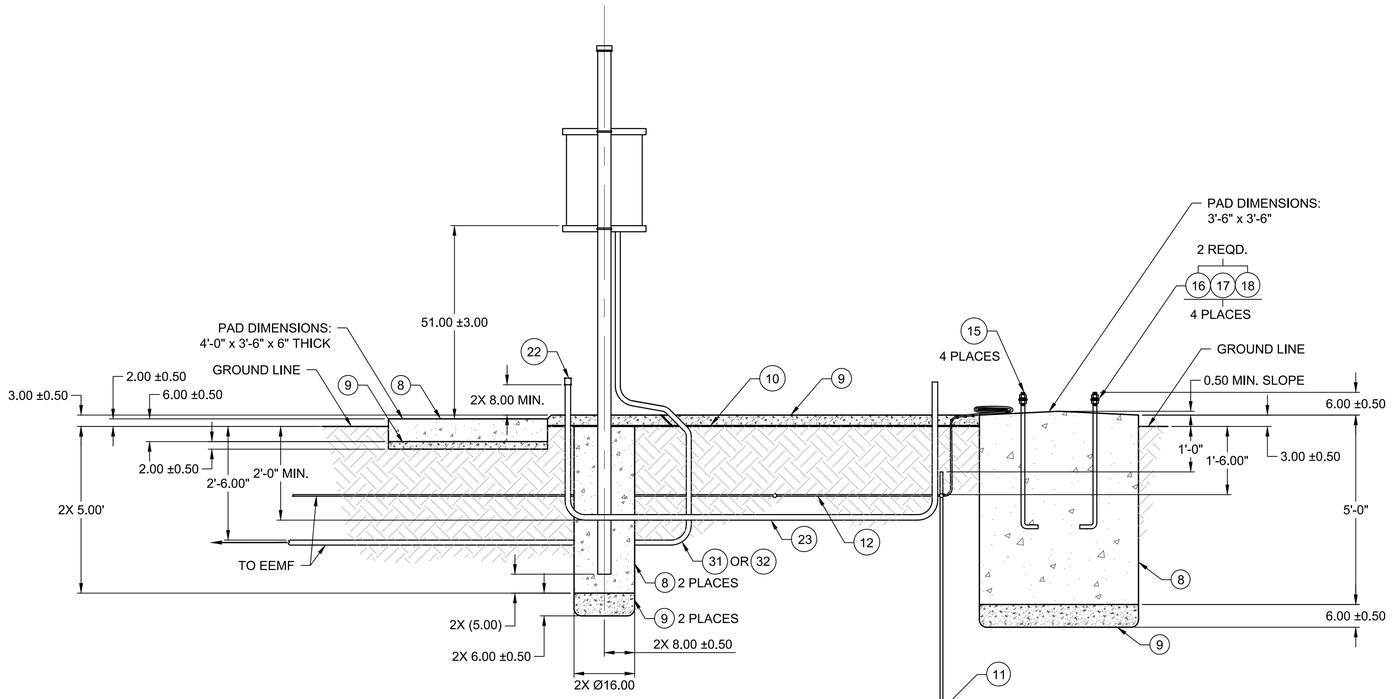
⚠2	3/23/22	ADDENDUM NO. 2	BRF

MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

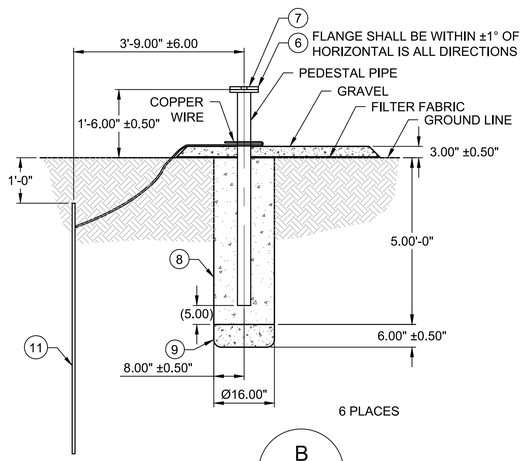
DRAWING NO.
AS-04

SHEET 60 OF 90 REV ⚠2



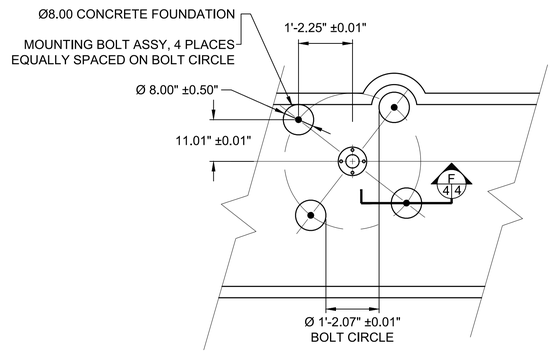
SECTION C 2, 5 3

ROTATED 90° CCW



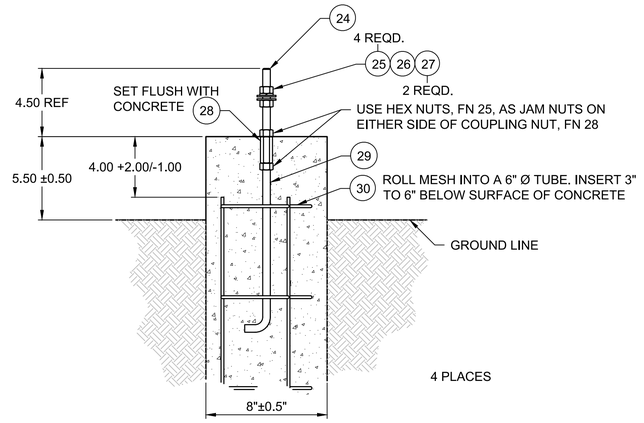
SECTION B 2, 5 4

ROTATED 90° CCW
FN11 AND FN12 INSTALLED ON END PEDESTAL ONLY
SEE ELECTRICAL PLAN



VIEW E 2 4

LOCATIONS OF CONCRETE FOUNDATIONS TO SUPPORT AWPAG WINDSHIELD ASSEMBLY



SECTION F 4 4

MOUNTING BOLT DETAIL

NOT TO SCALE
(INCIDENTAL TO ITEM M-500-3)

CONCRETE FOUNDATIONS TO SUPPORT AWPAG ASSEMBLY

ENTIRE SHEET REISSUED WITH ADDENDUM NO. 2 2

ENGINEER'S SEAL
THE STATE OF NEW HAMPSHIRE
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CARGO APRON AND ACCESS

ASOS DETAILS (4 OF 4)

SCALE: NTS | DATE: MARCH 2022

REVISIONS

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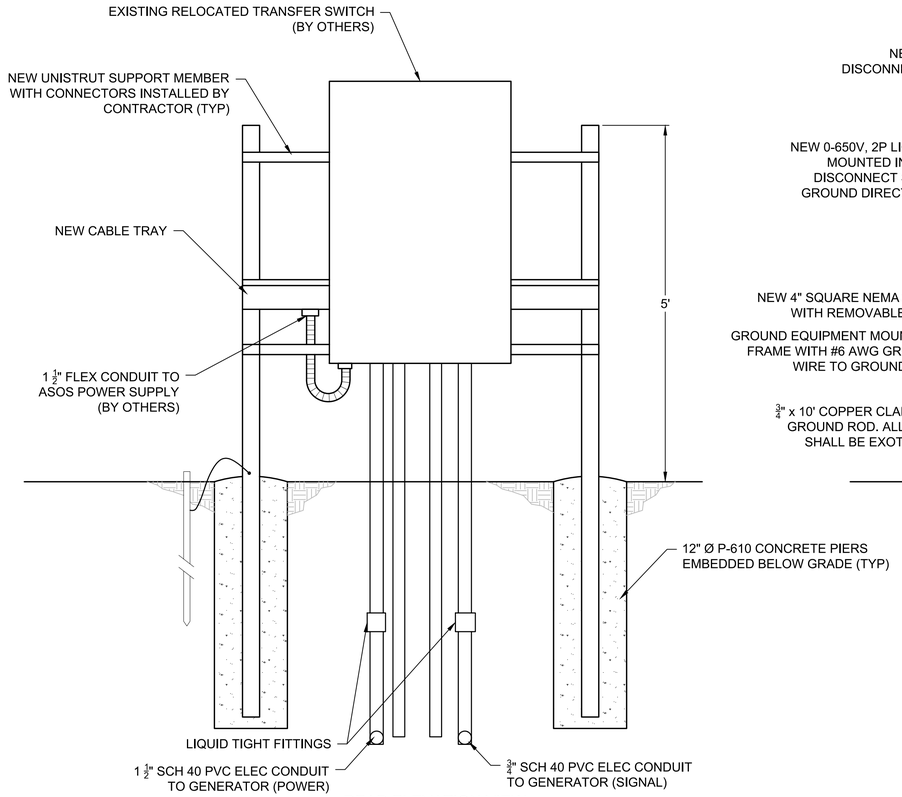
2	3/23/22	ADDENDUM NO. 2	BRF

MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

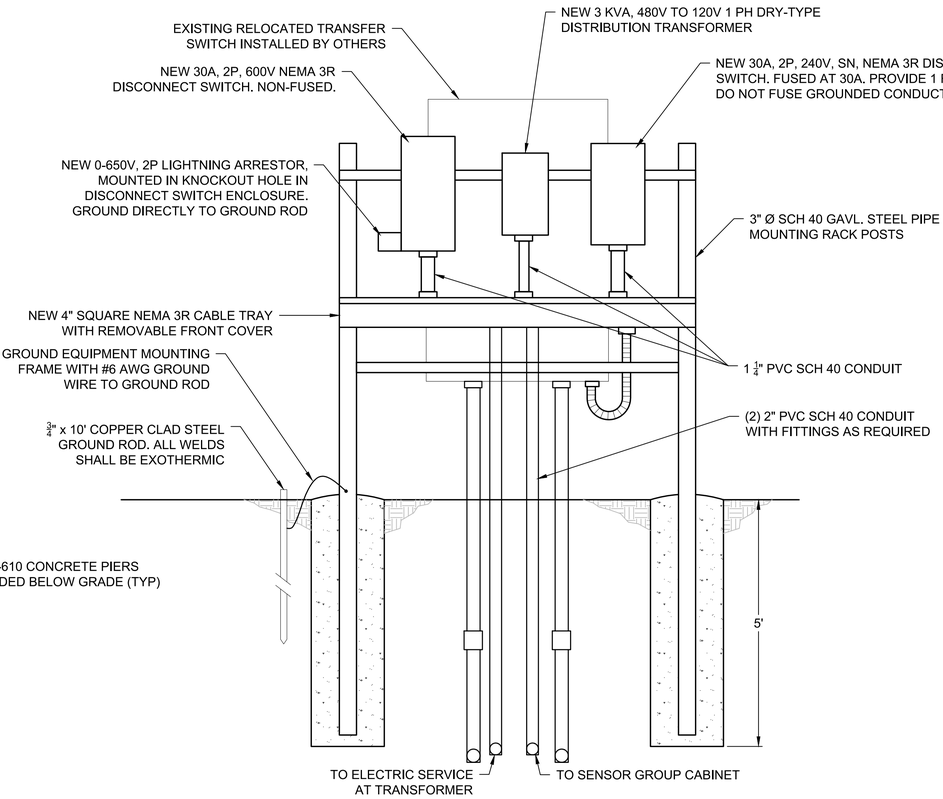
DRAWING NO.
AS-05

SHEET 61 OF 90 REV 2

NOTE: PROVIDE ADDITIONAL UNISTRUT MEMBERS TO MOUNT
THE ELECTRICAL CABINET EQUIPMENT AS REQUIRED

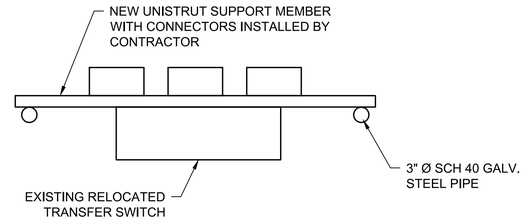


REAR ELEVATION VIEW



FRONT ELEVATION VIEW

NOTE: DISCONNECT SIDE TO FACE THE TRANSFORMER



PLAN VIEW

POWER CABINET RACK MOUNT DETAIL

NOT TO SCALE
(INCIDENTAL TO ITEM M-500-3)

NOTE: ALL WIRING AND ELECTRICAL CONNECTIONS TO BE PERFORMED BY NATIONAL WEATHER SERVICE (NWS). ALL RACK MOUNTING MEMBERS, GROUNDING WITH GROUND RODS, AND ELECTRICAL CABINETS TO BE INSTALLED BY CONTRACTOR. ANY FLEX CONDUIT TO BE INSTALLED BY NWS.

ENTIRE SHEET ISSUED WITH ADDENDUM NO. 2 ⚠2

ENGINEER'S SEAL
THE STATE OF NEW HAMPSHIRE
BRIAN
MICHAUD
No. 7416
LICENSED
PROFESSIONAL ENGINEER

PROJECT DESIGNER
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DESIGNED BY DPB | DRAWN BY BRF | CHECKED BY BMB

CITY OF MANCHESTER
DEPARTMENT OF AVIATION
MANCHESTER, NEW HAMPSHIRE

MANCHESTER-BOSTON REGIONAL AIRPORT
CARGO APRON AND ACCESS

ASOS DETAILS (SHEET 5)

SCALE: NTS | DATE: MARCH 2022

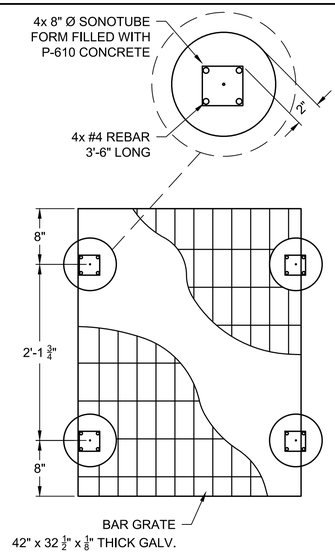
REVISIONS

REV. NO.	DATE	DESCRIPTION	BY
⚠2	3/23/22	ADDENDUM NO. 2	BRF

MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

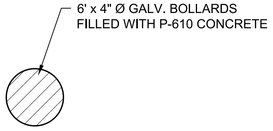
DRAWING NO.
AS-06

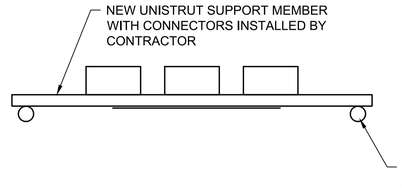
SHEET 61A OF 90 REV ⚠2



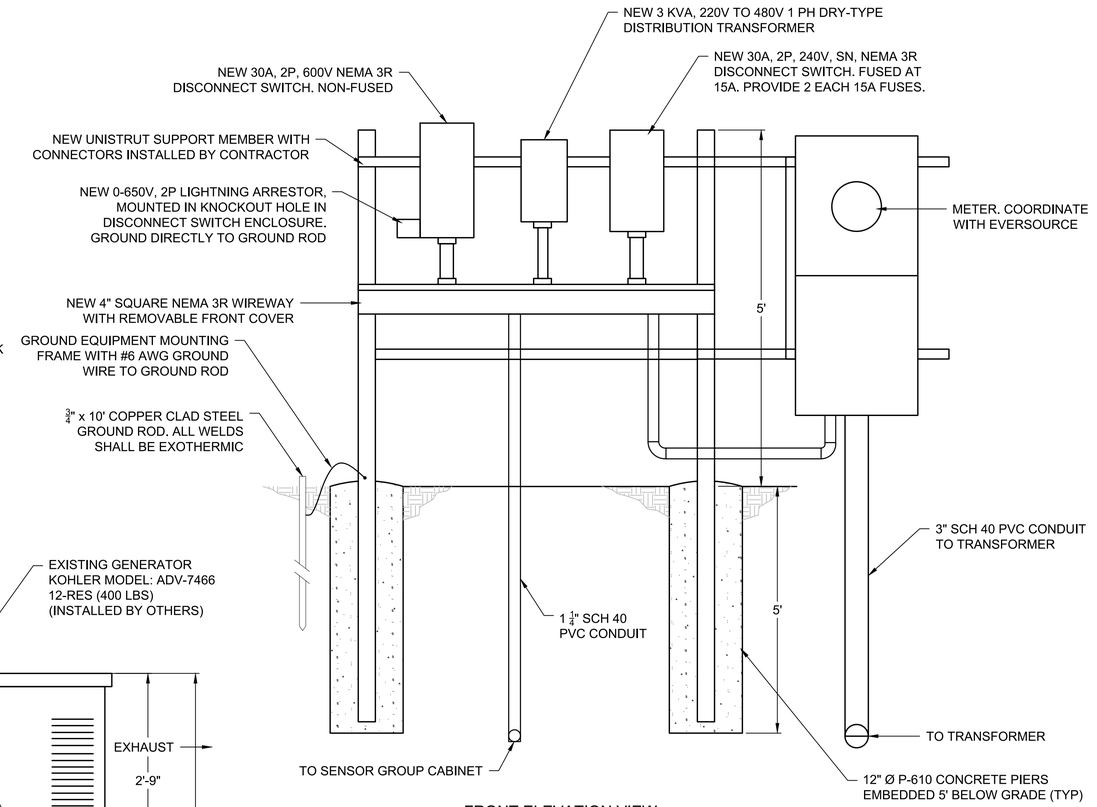
GENERATOR PAD DETAIL

NOT TO SCALE
(INCIDENTAL TO ITEM M-500-3)





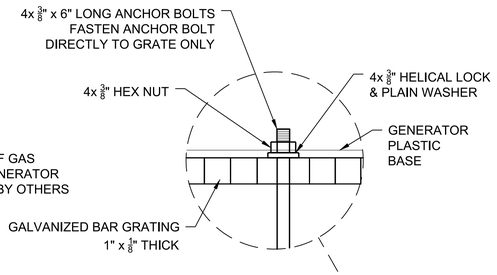
PLAN VIEW

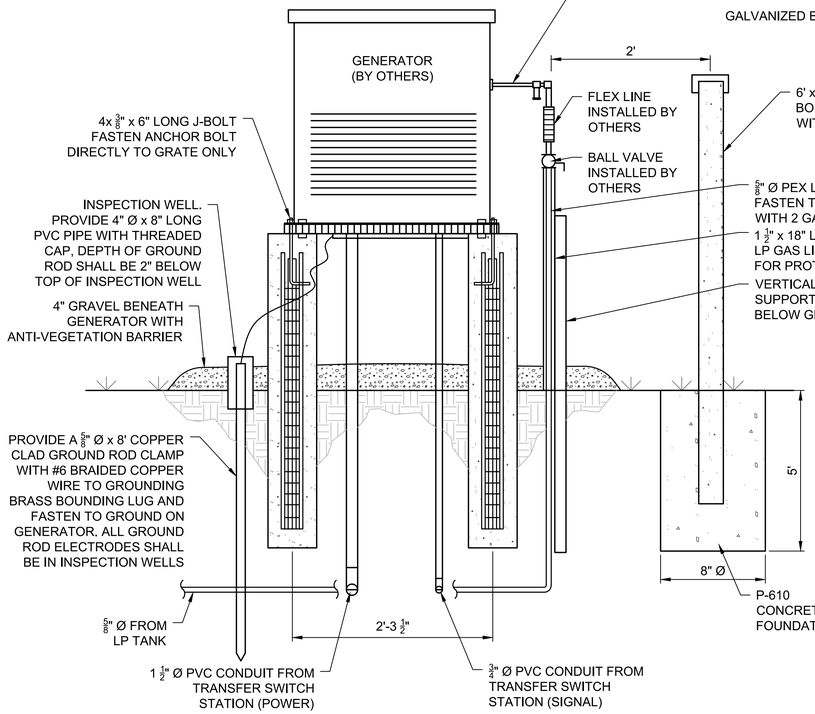


FRONT ELEVATION VIEW

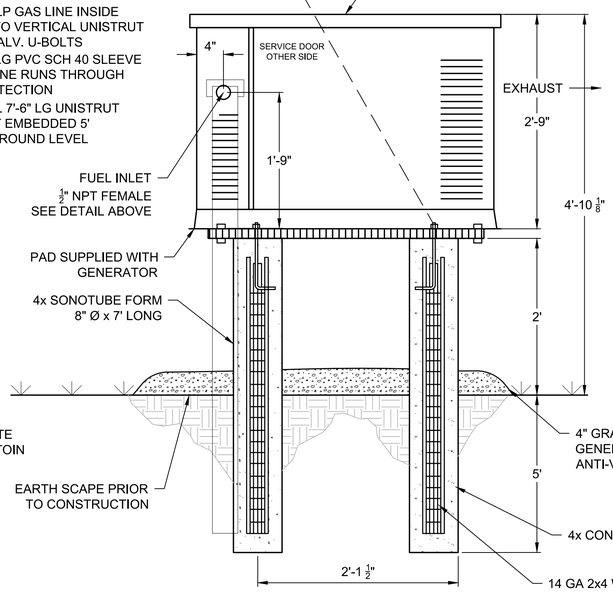
ELECTRICAL FEED RACK MOUNT DETAIL

NOT TO SCALE
(INCIDENTAL TO ITEM M-500-3)





SIDE ELEVATION VIEW



FRONT ELEVATION VIEW

ASOS GENERATOR DETAIL

NOT TO SCALE
(INCIDENTAL TO ITEM M-500-3)

NOTE: ALL WIRING AND ELECTRICAL CONNECTIONS TO BE PERFORMED BY NATIONAL WEATHER SERVICE (NWS). ALL RACK MOUNTING MEMBERS, GROUNDING WITH GROUND RODS, AND ELECTRICAL CABINETS TO BE INSTALLED BY CONTRACTOR. ANY FLEX CONDUIT TO BE INSTALLED BY NWS.

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CARGO APRON AND ACCESS

ASOS DETAILS (SHEET 6)

SCALE: NTS | DATE: MARCH 2022

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY
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MJ PROJ. No.: 18700.08
FILE NAME:
AIP No.: 3-33-0011-XXX-2021

DRAWING NO.
AS-07

SHEET 61B OF 90 REV ⚠2