



June 27, 2016

Invitation to Bid 16163 Fabricated Steel Module Structure  
Addendum 1

No Change, Bid shall be publically opened at, 2:00 p.m. July 15, 2016, in the Willow  
Conference Room.

Addendum 1 replaces Appendix B Drawings in its entirety (attached)

Thank you for your interest in our requirements.

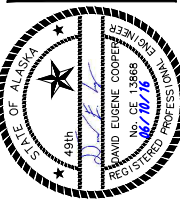
Rich Wooten  
Contracting Officer  
[rwooten@aidea.org](mailto:rwooten@aidea.org)

# KAKE RURAL POWER SYSTEM UPGRADE

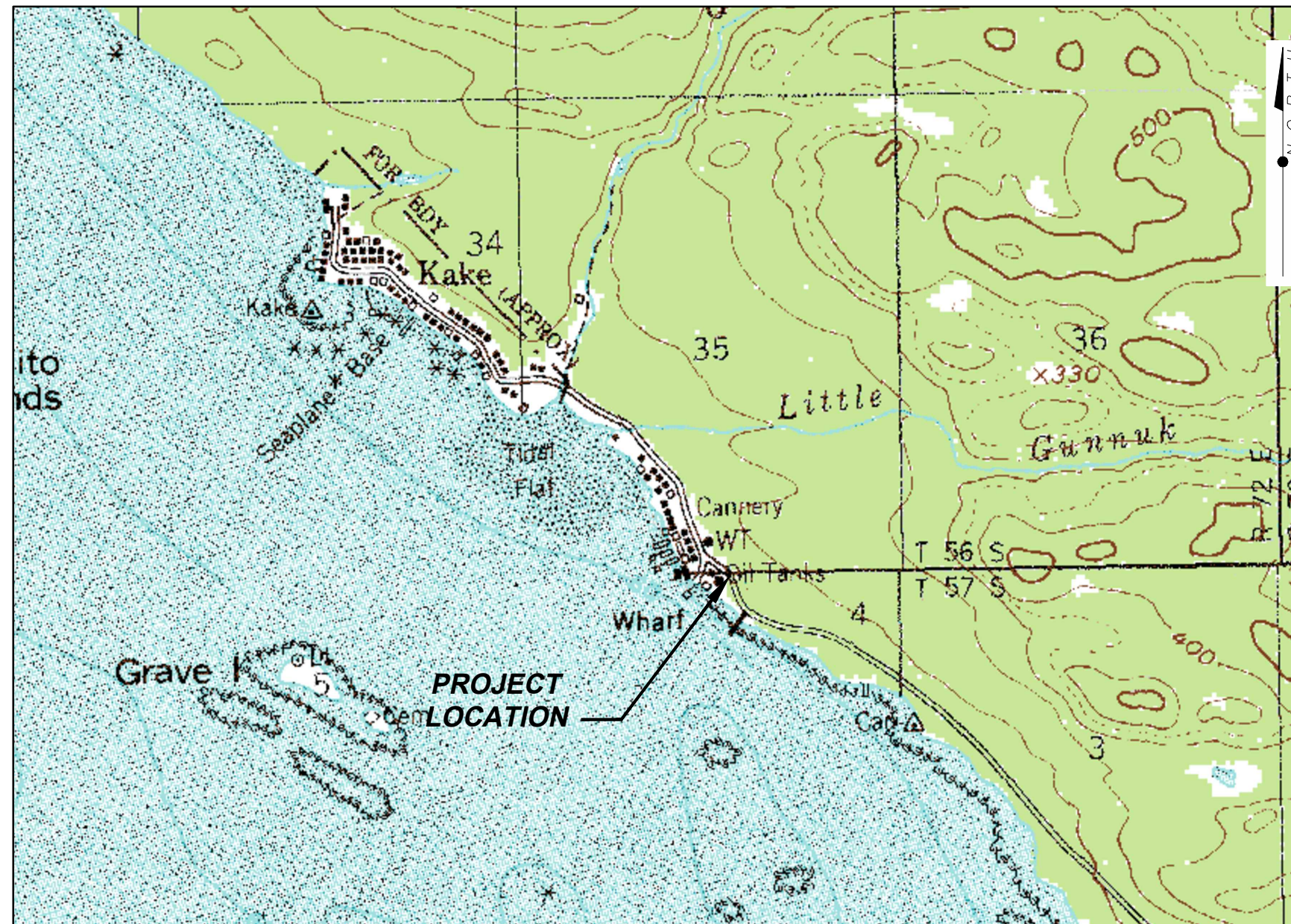
## CONSTRUCTION DRAWINGS

### KAKE, ALASKA

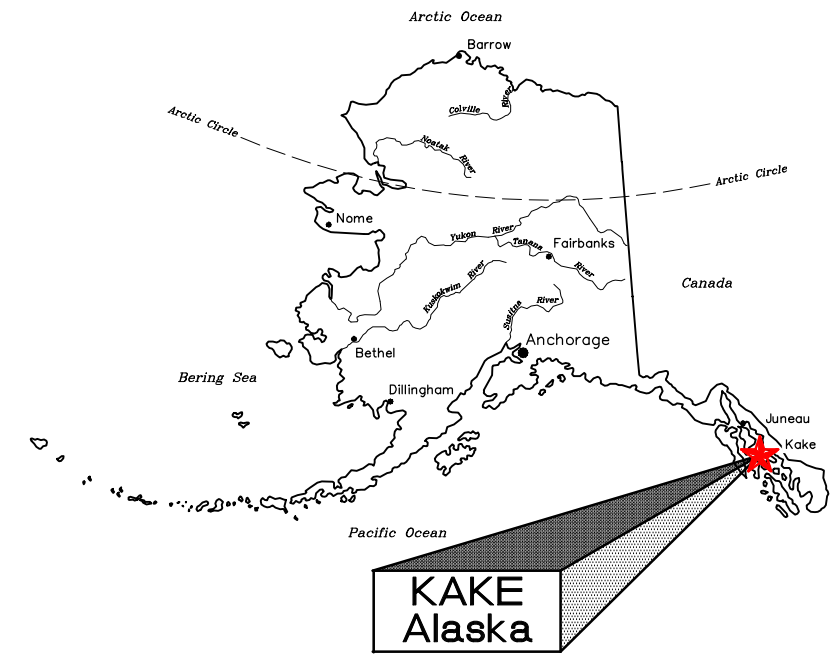
REVISIONS	DATE	DESCRIPTION
MARK	5/04/16	95% SUBMITTAL FOR AGENCY REVIEW



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VICINITY MAP



LOCATION MAP

**SCHEDULE B**  
**MODULE FABRICATION ONLY**  
**CONSTRUCTION DRAWINGS**  
**REVISED 6-24-2016**

**ALASKA ENERGY AUTHORITY**  
 KAKE, ALASKA

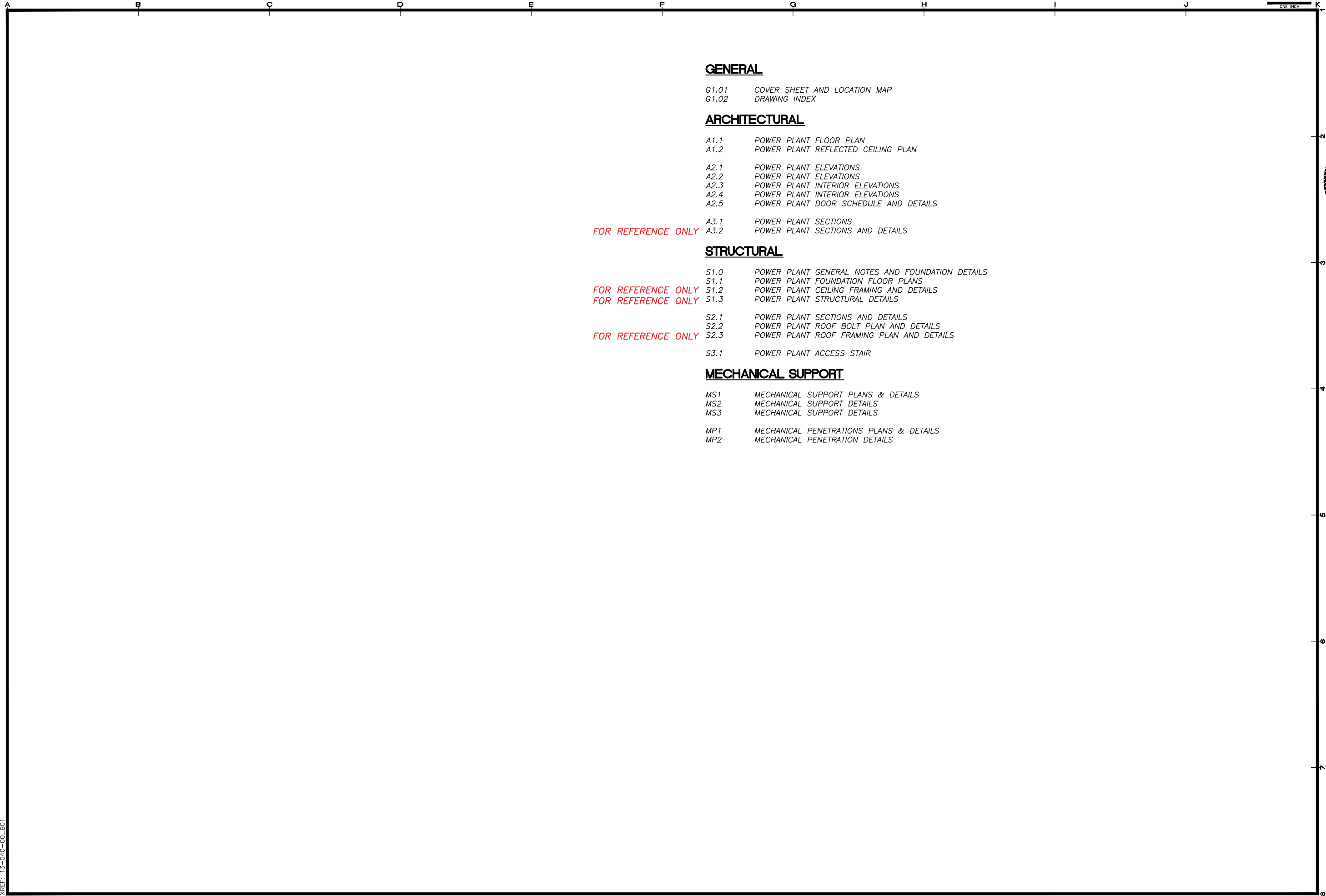
KAKE RURAL POWER SYSTEM UPGRADES  
 COVER SHEET AND LOCATION MAP

SHEET: **G1.01**

DRAWN BY: HDL      CHECKED BY: MRS  
 DATE: 06/10/16      SCALE: NONE  
 JOB NUMBER: 13-039

H:\Jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040-00\_PP-G101, 1=1, 06-14-16 at 09:03 by jkk  
 LAYOUT: G1.01 - COVER SHEET  
 VIEW: G101\_H\_PDF  
 XREF: 13040-00\_B01-BK

H:\jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_PP-0102, 1=1, 06-16-16 at 08:14 by jkk  
LAYOUT: G1.02 - DRAWING INDEX  
VIEW: G10201\_H\_PDF  
XREF: 13-040-00-B01



**GENERAL**

- G1.01 COVER SHEET AND LOCATION MAP
- G1.02 DRAWING INDEX

**ARCHITECTURAL**

- A1.1 POWER PLANT FLOOR PLAN
- A1.2 POWER PLANT REFLECTED CEILING PLAN
- A2.1 POWER PLANT ELEVATIONS
- A2.2 POWER PLANT ELEVATIONS
- A2.3 POWER PLANT INTERIOR ELEVATIONS
- A2.4 POWER PLANT INTERIOR ELEVATIONS
- A2.5 POWER PLANT DOOR SCHEDULE AND DETAILS
- A3.1 POWER PLANT SECTIONS
- A3.2 POWER PLANT SECTIONS AND DETAILS

FOR REFERENCE ONLY

**STRUCTURAL**

- S1.0 POWER PLANT GENERAL NOTES AND FOUNDATION DETAILS
- S1.1 POWER PLANT FOUNDATION FLOOR PLANS
- S1.2 POWER PLANT CEILING FRAMING AND DETAILS
- S1.3 POWER PLANT STRUCTURAL DETAILS
- S2.1 POWER PLANT SECTIONS AND DETAILS
- S2.2 POWER PLANT ROOF BOLT PLAN AND DETAILS
- S2.3 POWER PLANT ROOF FRAMING PLAN AND DETAILS
- S3.1 POWER PLANT ACCESS STAIR

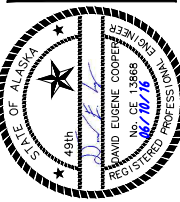
FOR REFERENCE ONLY  
FOR REFERENCE ONLY

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**MECHANICAL SUPPORT**

- MS1 MECHANICAL SUPPORT PLANS & DETAILS
- MS2 MECHANICAL SUPPORT DETAILS
- MS3 MECHANICAL SUPPORT DETAILS
- MP1 MECHANICAL PENETRATIONS PLANS & DETAILS
- MP2 MECHANICAL PENETRATION DETAILS

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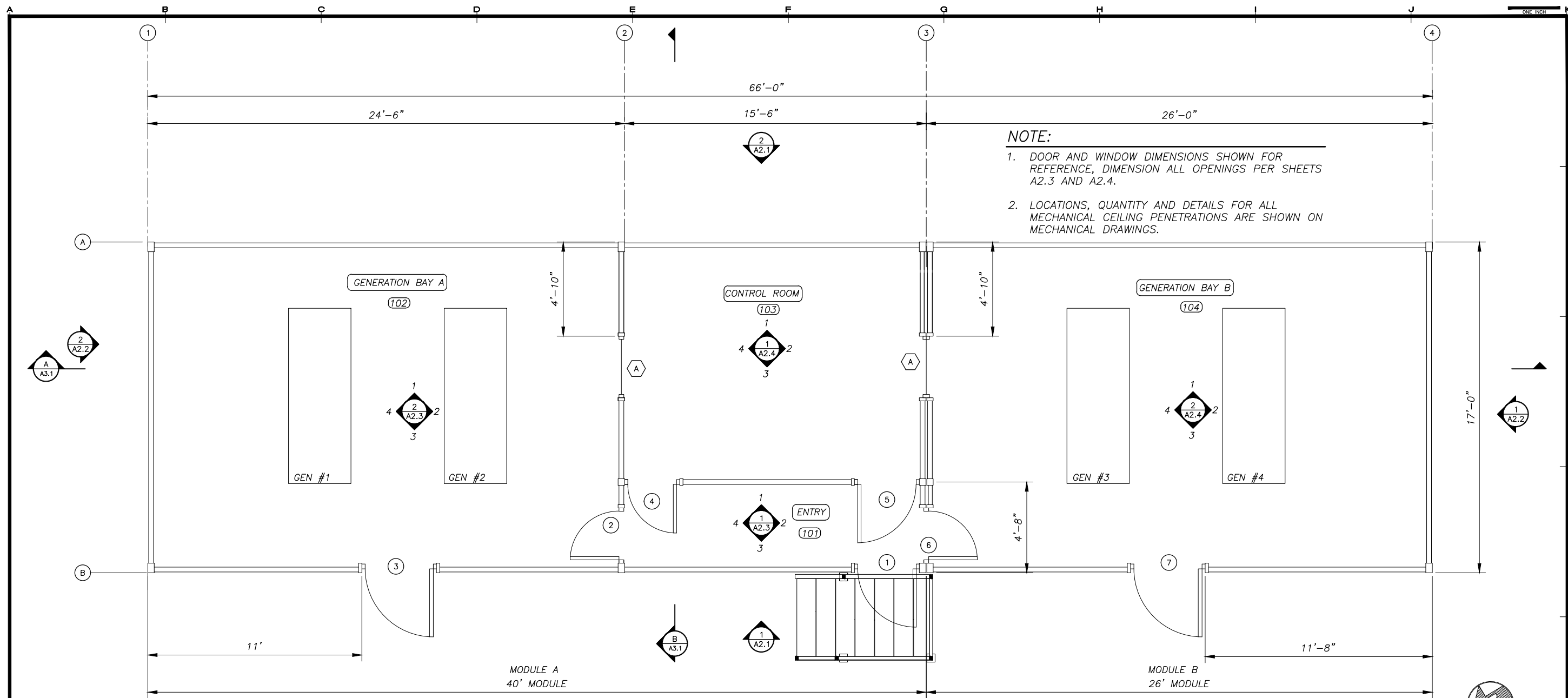
**ALASKA ENERGY AUTHORITY**  
KAKE RURAL POWER SYSTEM UPGRADES  
ALASKA ENERGY AUTHORITY  
KAKE, ALASKA

SHEET TITLE  
**DRAWING INDEX**

SHEET  
**G1.02**

DRAWN BY: <b>RSB</b>	CHECKED BY: <b>MRS</b>
DATE: <b>06/10/16</b>	SCALE: <b>NONE</b>
JOB NUMBER: <b>13-039</b>	

H:\Jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_A1.1-A1.2-PP, 1=1, 06-10-16 at 08:27 by jkk  
 LAYOUT: A1.1 - FLOOR PLAN  
 XREF: 13-040\_00\_STRUCUT-PP-BASE, 13040-00\_B01-BK



**NOTE:**

1. DOOR AND WINDOW DIMENSIONS SHOWN FOR REFERENCE, DIMENSION ALL OPENINGS PER SHEETS A2.3 AND A2.4.
2. LOCATIONS, QUANTITY AND DETAILS FOR ALL MECHANICAL CEILING PENETRATIONS ARE SHOWN ON MECHANICAL DRAWINGS.

**1 FLOOR PLAN - POWER PLANT**

A1.1 SCALE: 3/8" = 1'-0"

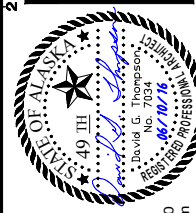
**CODE ANALYSIS - 2009 EDITION INTERNATIONAL BUILDING CODE**

<b>OCCUPANCY CLASSIFICATION</b>	REF: IBC-2009, SEC. 306.2
GROUP F-1:FACTORY INDUSTRIAL MODERATE HAZARD-ELECTRIC GENERATION PLANT	
<b>TYPE OF CONSTRUCTION</b>	REF: IBC-2009, TABLE 601
TYPE V-B (NON-RATED)	REF: IBC-2009, SEC. 602.5
<b>BUILDING HEIGHTS AND AREAS</b>	REF: IBC-2009, TABLE 503
ALLOWED 40'-0" 1 STORY 8,500 S.F. PROVIDED: 17'-0" 1 STORY 1125 S.F.	
<b>FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS</b>	REF: IBC-2009, TABLE 601
STRUCTURAL FRAME-OHR, BEARING WALLS-OHR, INTERIOR PARTITIONS-OHR, FLOOR-OHR, ROOF-OHR	
<b>FIRE RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS</b>	REF: IBC-2009, TABLE 602
EXTERIOR WALLS 10' ≤ X ≤ 30' 0 HR	
<b>FIRE PROTECTION SYSTEM</b>	REF: IBC-2009, SEC. 903.2.4
FIRE PROTECTION NOT REQUIRED. WATER MIST FIRE SUPPRESSION SYSTEM PROVIDED (SEE MECHANICAL).	
<b>OCCUPANT LOAD</b>	REF: IBC-2009, TABLE 1004.1.1
MECHANICAL/STORAGE= 300 S.F./PERSON 1125 S.F./300 S.F. PER OCCUPANT= 4 OCCUPANTS	
<b>MEANS OF EGRESS - TRAVEL DISTANCE</b>	REF: IBC-2009, TABLE 1016.1
REQUIRED 200' PROVIDED < 25'	

**ARCHITECTURAL GENERAL NOTES:**

- 1) SEE CIVIL/MECHANICAL SITE PLAN FOR LOCATION AND LAYOUT. PROVIDE SEPARATION TO PROPERTY BOUNDARIES IN ACCORDANCE WITH CODE ANALYSIS. PROVIDE THICKNESS AS INDICATED ON DRAWINGS. MECHANICALLY FASTEN FLOOR INSULATION TIGHT TO FLOOR.
- 2) DO NOT BLOCK OR OBSTRUCT ACCESS, REQUIRED PARKING AREAS, OR REQUIRED EGRESS FROM NEIGHBORING FACILITIES. PROVIDE TEMPORARY BARRICADES OR OTHER FORMS OF PROTECTION TO PROTECT EMPLOYEES, RESIDENTS, AND VISITORS FROM INJURIES DURING CONSTRUCTION ACTIVITIES
- 3) PROJECT MANAGER SHALL BE RESPONSIBLE FOR ALL BUILDING PERMITS, LETTERS OF NON-OBJECTION, UTILITY SERVICES AND APPLICATIONS AS REQUIRED. PROJECT MANAGER OR CONSTRUCTION MANAGER TO BE RESPONSIBLE FOR ALL REQUIRED SAFETY PRECAUTIONS, METHODS AND TECHNIQUES.
- 4) PROVIDE A COMPLETE AND OPERATIONAL FACILITY. ALL WORK TO BE IN ACCORDANCE WITH CURRENT APPROVED EDITIONS OF THE IBC, IMC, IFC, AND NEC INCLUDING STATE OF ALASKA AMENDMENTS.
- 5) SEE SHEET A3.2 FOR DESCRIPTION OF FIELD INSTALLED ROOF SYSTEM.
- 6) INSULATE ALL WALLS, FLOORS, AND CEILINGS WITH HIGH TEMPERATURE MINERAL FIBER ACOUSTICAL FIRE BATT INSULATION, MIN R VALUE 4 PER INCH, MIN 2000F MELTING TEMP. ROXUL AFB OR EQUAL. FILL ALL PANEL VOIDS OR
- 7) UPON COMPLETION OF FABRICATION ROUND ALL CORNERS AND GRIND EDGES SMOOTH AND PAINT ALL INTERIOR AND EXTERIOR EXPOSED STEEL. PERFORM ALL PAINTING IN A WARM DRY ENVIRONMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS INCLUDING DRYING TIME TO RE-COAT.
- 8) SANDBLAST EXTERIOR SURFACE TO SSPC-SP-10. PRIME WITH ONE COAT OF REINFORCED INORGANIC ZINC PRIMER, DEVOE CATHA-COAT 302, NO SUBSTITUTES, COLOR GREEN, TO 3 MILS DRY FILM THICKNESS. COVER WITH TWO COATS OF EPOXY, DEVOE BAR-RUST 236, NO SUBSTITUTES, TO 12 MILS DRY FILM THICKNESS. FIRST COAT COLOR GRAY, SECOND COAT COLOR WHITE.
- 9) FINISH EXTERIOR WALLS AND SKIDS (ALL EXPOSED VERTICAL EXTERIOR SURFACES) WITH ONE COAT OF ALIPHATIC URETHANE ENAMEL, DEVOE DEVTHANE 389, NO SUBSTITUTES, COLOR WHITE, TO 3 MILS DRY FILM THICKNESS.
- 10) SANDBLAST INTERIOR SURFACE TO SSPC-SP-6. PRIME AND FINISH WITH TWO COATS OF EPOXY, SHERWIN WILLIAMS MACROPOXY 646, NO SUBSTITUTES, TO 8 MILS TOTAL DRY FILM THICKNESS. CEILING COLOR WHITE. WALL AND FLOOR COLOR STRUCTURAL GRAY 4031. NOTE THAT FIRST COAT ON WALLS AND FLOOR MAY BE WHITE.

REVISIONS	DATE	DESCRIPTION
1	5/04/16	95% SUBMITTAL FOR AGENCY REVIEW



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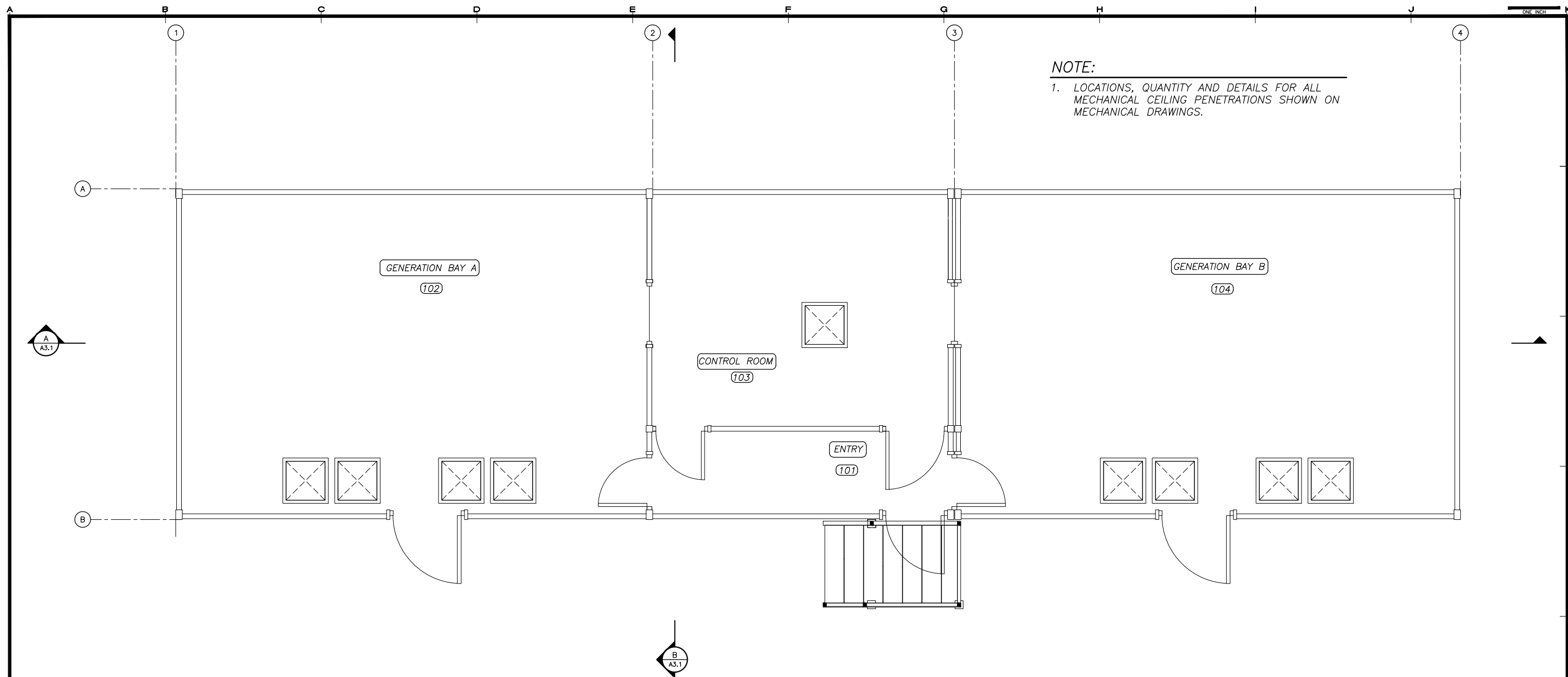
KAKE RURAL POWER SYSTEM UPGRADES

SHEET TITLE  
**POWER PLANT FLOOR PLAN**

SHEET  
**A1.1**

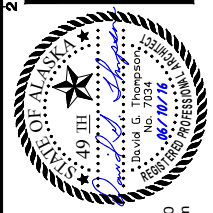
DRAWN BY: KK CHECKED BY: DGT  
 DATE: 06/10/16 SCALE: AS SHOWN  
 JOB NUMBER: 13-039

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 LAYOUT: A1.2 - REFLECTED CEILING PLAN  
 XREF: 13-040\_00\_STRUC-PP-BASE, 13040-00\_B01-BK



**NOTE:**  
 1. LOCATIONS, QUANTITY AND DETAILS FOR ALL MECHANICAL CEILING PENETRATIONS SHOWN ON MECHANICAL DRAWINGS.

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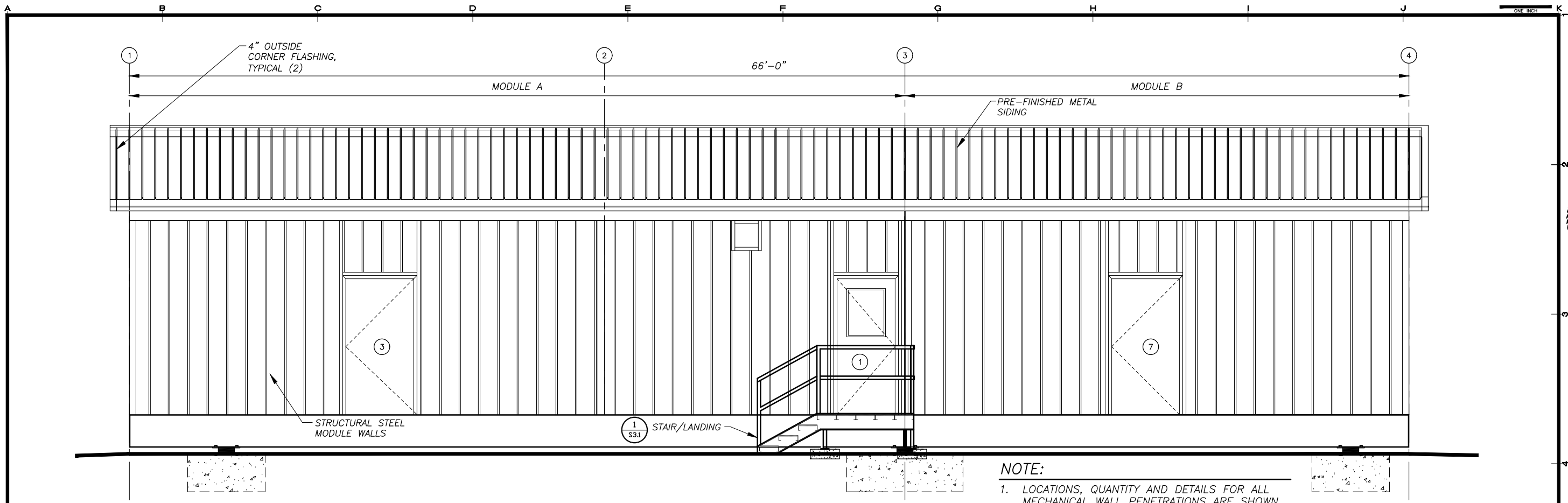
KAKE RURAL POWER SYSTEM UPGRADES  
**ALASKA ENERGY AUTHORITY**  
 KAKE, ALASKA

SHEET TITLE	
POWER PLANT REFLECTED CEILING PLAN	
SHEET	
A1.2	
DRAWN BY:	CHECKED BY:
KK	DGT
DATE:	SCALE:
06/10/16	AS SHOWN
JOB NUMBER:	
13-039	

**1 REFLECTED CEILING PLAN - POWER PLANT**  
 SCALE: 3/8" = 1'-0"

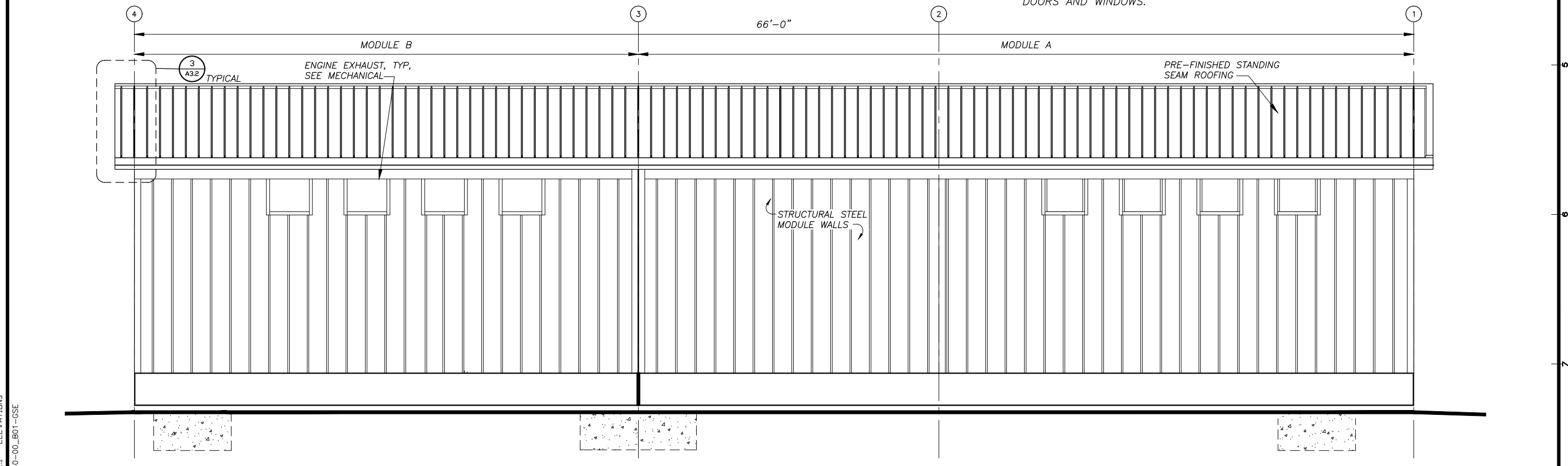


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 LAYOUT: A2.1 - ELEVATIONS  
 XREF: 13040-00\_B01-GSE



**1 EAST ELEVATION - FRONT**  
 A2.1 SCALE: 3/8" = 1'-0"

**NOTE:**  
 1. LOCATIONS, QUANTITY AND DETAILS FOR ALL MECHANICAL WALL PENETRATIONS ARE SHOWN ON MECHANICAL SHEETS.  
 2. OWNER SHALL FURNISHED AND INSTALL DOORS AND WINDOWS.



**2 WEST ELEVATION - BACK**  
 A2.1 SCALE: 3/8" = 1'-0"

REVISIONS	MARK	DATE	DESCRIPTION



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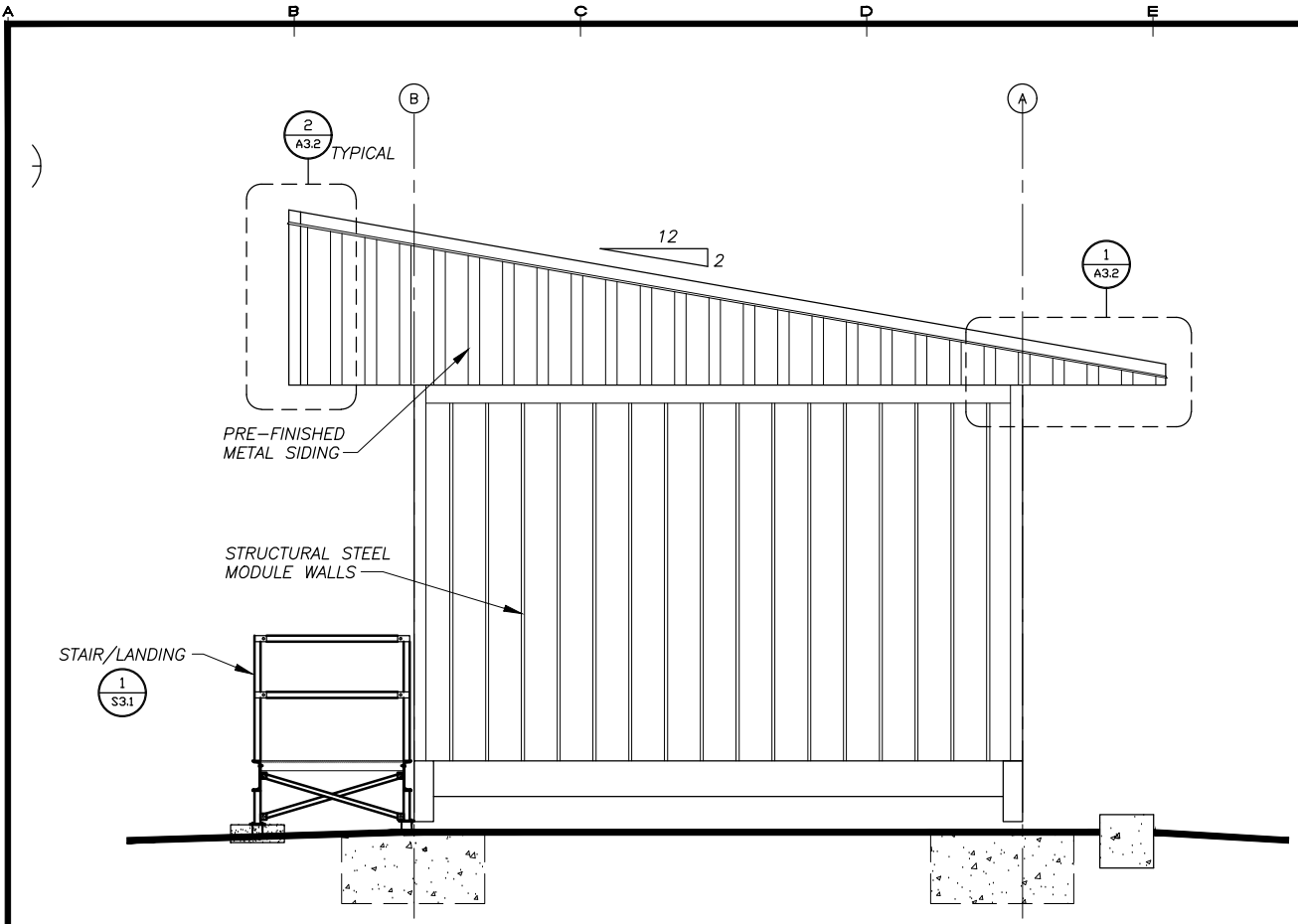
KAKE RURAL POWER SYSTEM UPGRADES  
**ALASKA ENERGY AUTHORITY**  
 KAKE, ALASKA

SHEET TITLE  
**POWER PLANT ELEVATIONS**

SHEET  
**A2.1**

DRAWN BY: **KK** CHECKED BY: **DGT**  
 DATE: **06/10/16** SCALE: **AS SHOWN**  
 JOB NUMBER: **13-039**

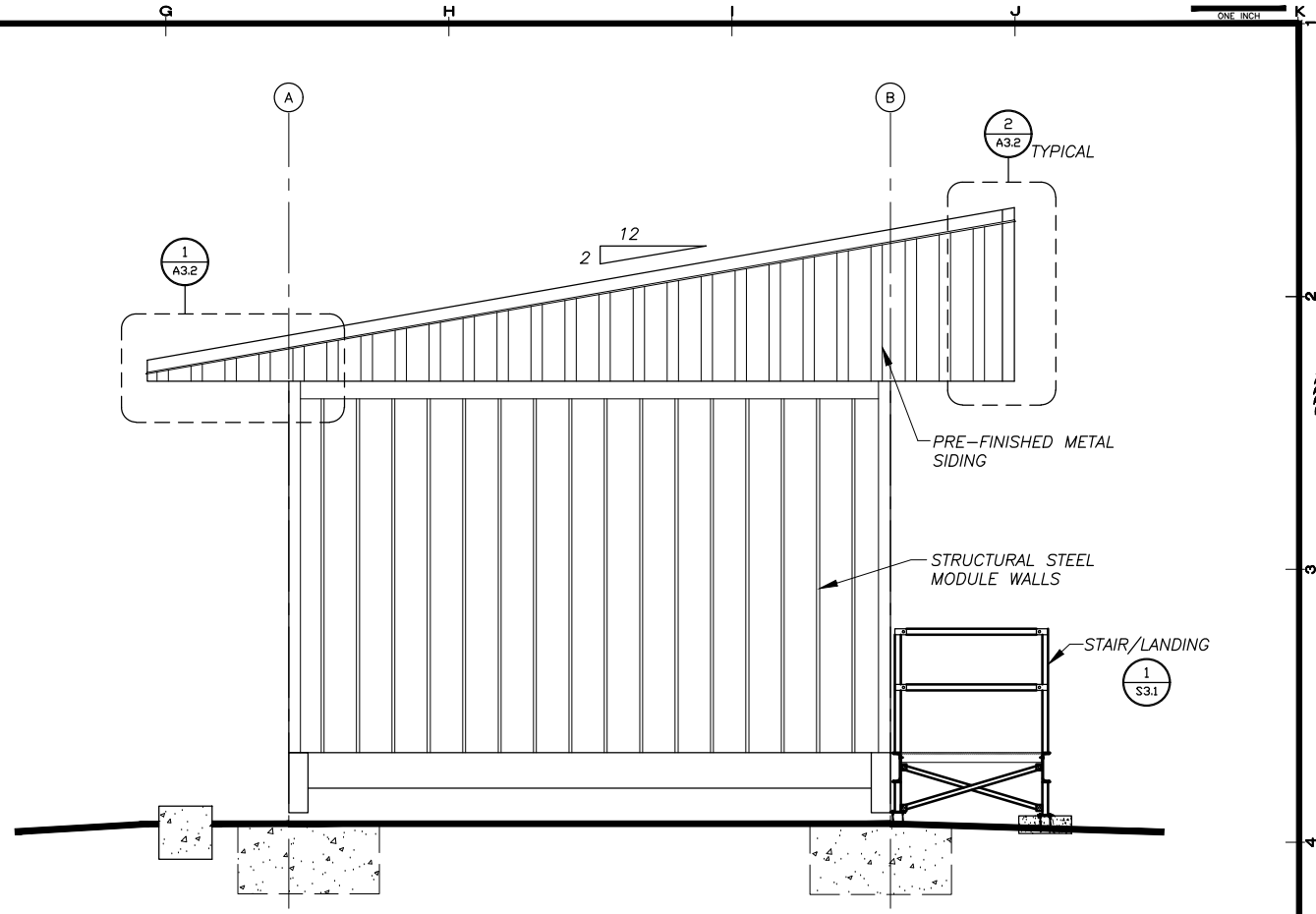
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 LAYOUT: A2.2 - ELEVATIONS  
 XREF: 13040-00\_B01-GSE



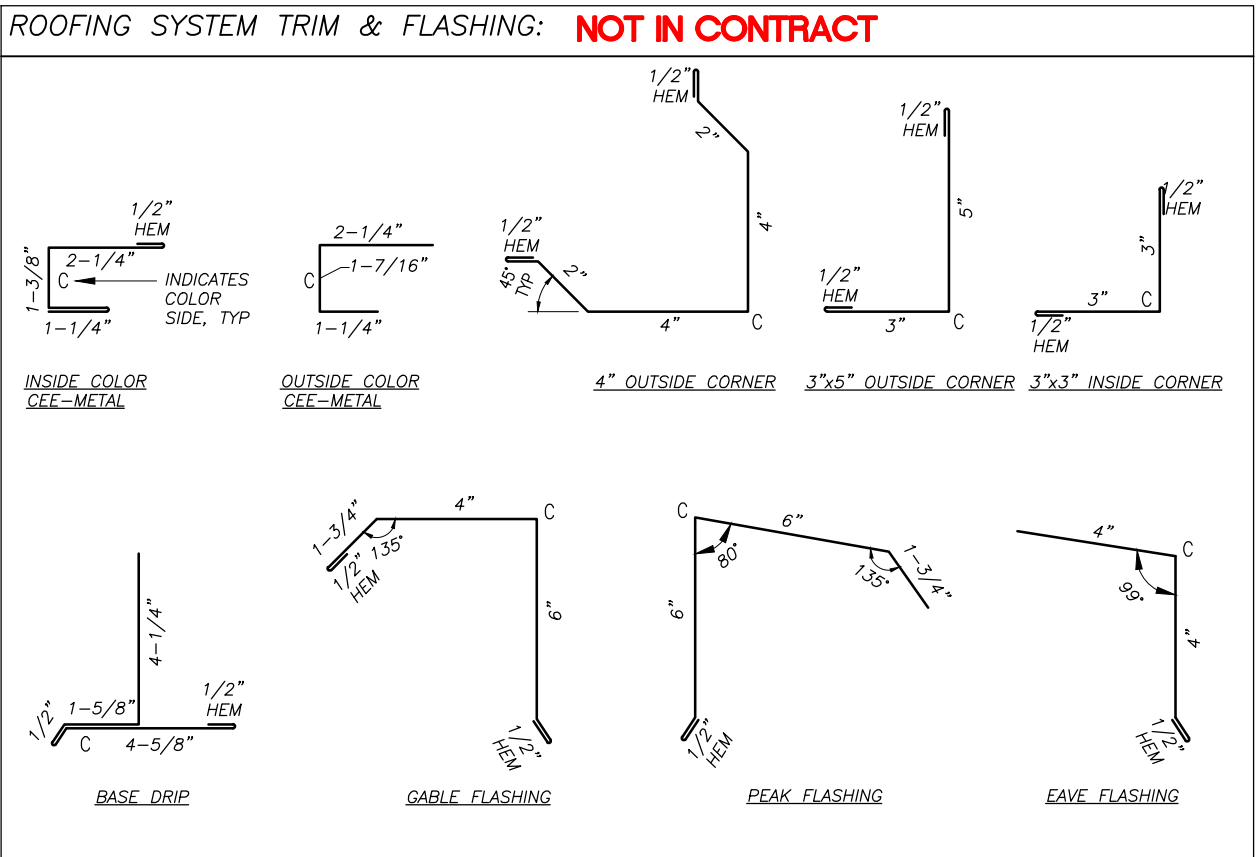
**1 NORTH ELEVATION**  
 SCALE: 3/8" = 1'-0"

- ROOFING SYSTEM NOTES: NOT IN CONTRACT**
- |  |  |   |   |
|--|--|---|---|
| <p>1) FIELD INSTALL TRUSSES TO MODULE STRUCTURE, SEE STRUCTURAL. FIELD INSTALL PLYWOOD SHEATHING, BITUTHENE, AND METAL ROOFING/SIDING AS INDICATED. SEAL AND FLASH ALL SEAMS TO FORM A CONTINUOUS WEATHERPROOF SEAL.</p> | <p>2) ALL ROOFING, SIDING, TRIM, AND FLASHING SHALL BE MIN 24 GAUGE GALVANIZED STEEL WITH KYNAR FINISH, COLOR JADE GREEN. ALL FASTENERS SHALL BE CORROSION RESISTANT STAINLESS STEEL SCREWS AND ALUMINUM RIVETS.</p> | <p>3) ROOFING SHALL BE STANDING SEAM TYPE, 24 GAUGE, 16" NET COVERAGE, 1-5/8" HIGH RIBS AT 8" O.C. AEP SPAN KLIP-RIB OR EQUAL. FURNISH CLIPS AND FASTENERS AS REQUIRED TO MEET LOAD CONDITIONS INDICATED ON SHEET S1.</p> | <p>4) SIDING SHALL BE LOW PROFILE, 24 GAUGE, 36" NET COVERAGE, 1-1/4" HIGH MAJOR RIBS AND 1/4" HIGH MINOR RIBS AT 12" O.C. AEP SPAN SUPER-SPAN OR EQUAL. FURNISH FASTENERS AS REQUIRED TO MEET LOAD CONDITIONS INDICATED ON SHEET S1.</p> |
|--|--|---|---|

ROOF AND  
 FOUNDATION  
 NOT IN  
 CONTRACT



**2 SOUTH ELEVATION**  
 SCALE: 3/8" = 1'-0"



REVISIONS	MARK	DATE	DESCRIPTION

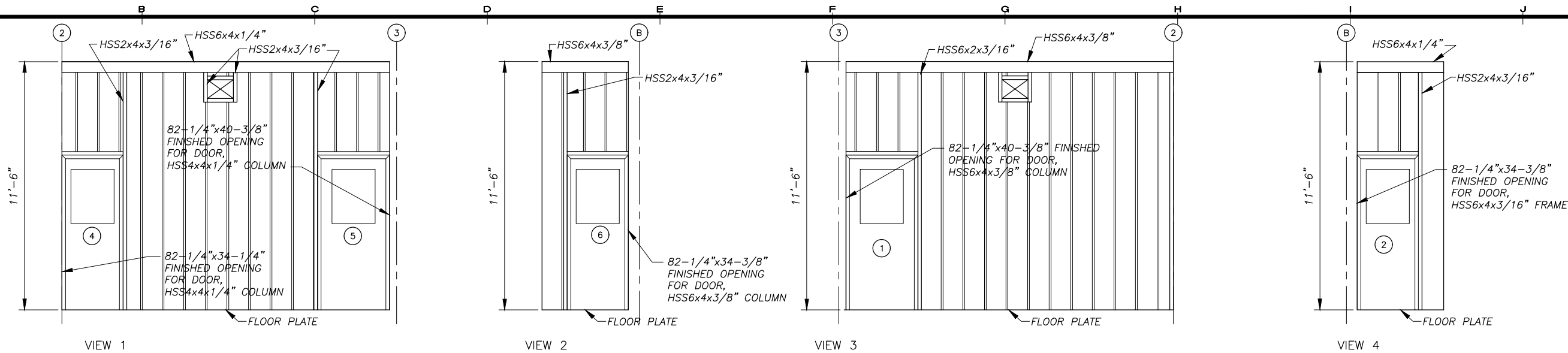


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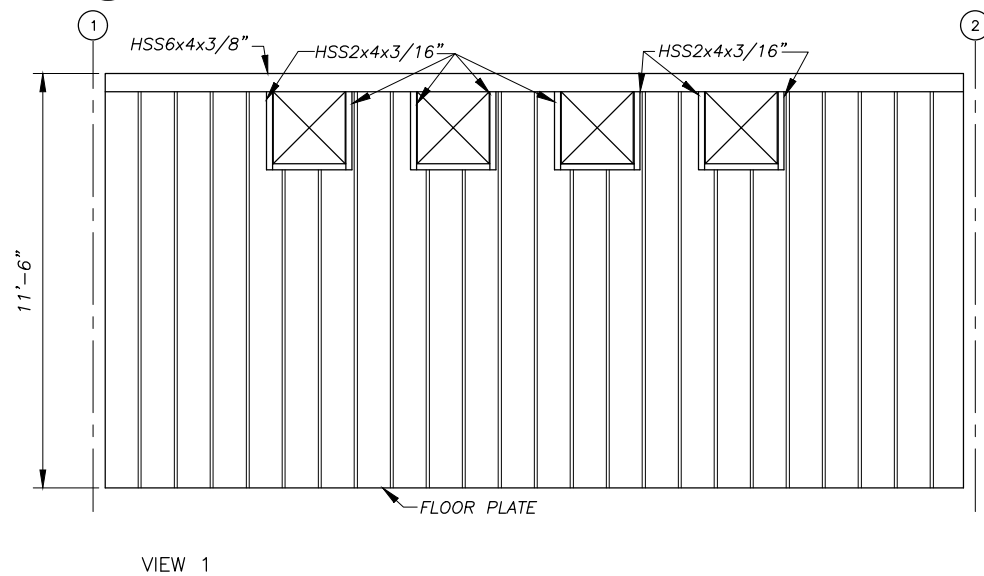
KAKE RURAL POWER SYSTEM UPGRADES  
**ALASKA ENERGY AUTHORITY**  
 KAKE, ALASKA

SHEET TITLE: POWER PLANT ELEVATIONS  
 SHEET: A2.2  
 DRAWN BY: KK  
 CHECKED BY: DGT  
 DATE: 06/10/16  
 SCALE: AS SHOWN  
 JOB NUMBER: 13-039

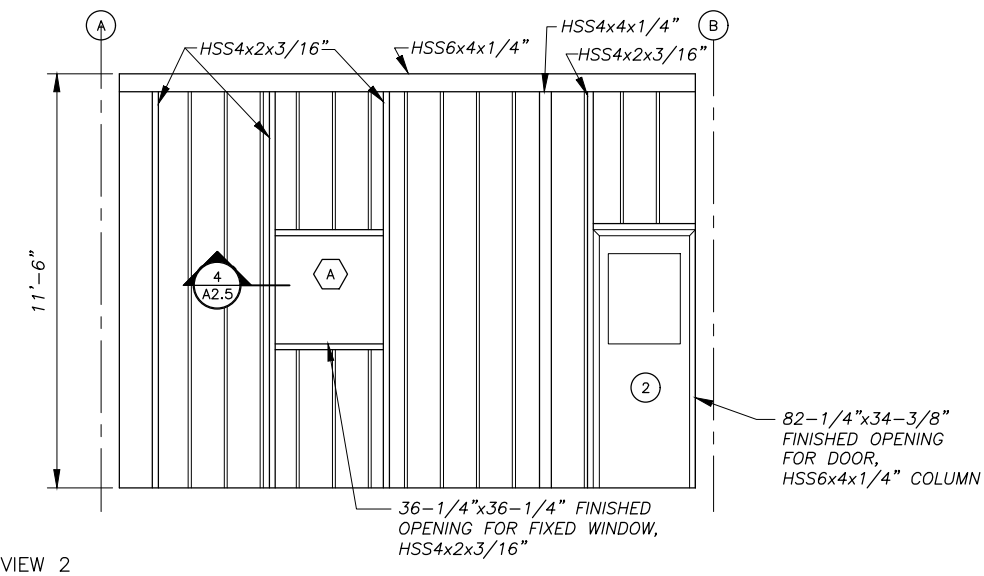
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 LAYOUT: A2.3 - INTERIOR ELEVATIONS  
 XREF: 13040-00\_B01-GSE



1 INTERIOR ELEVATION - ENTRY ROOM No. 101  
 A2.3 SCALE: NONE



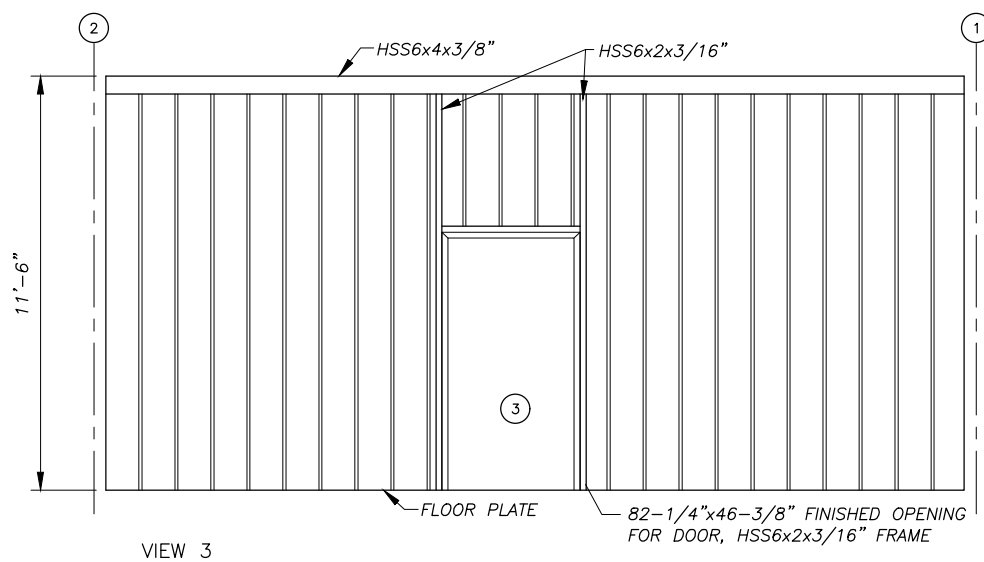
VIEW 1



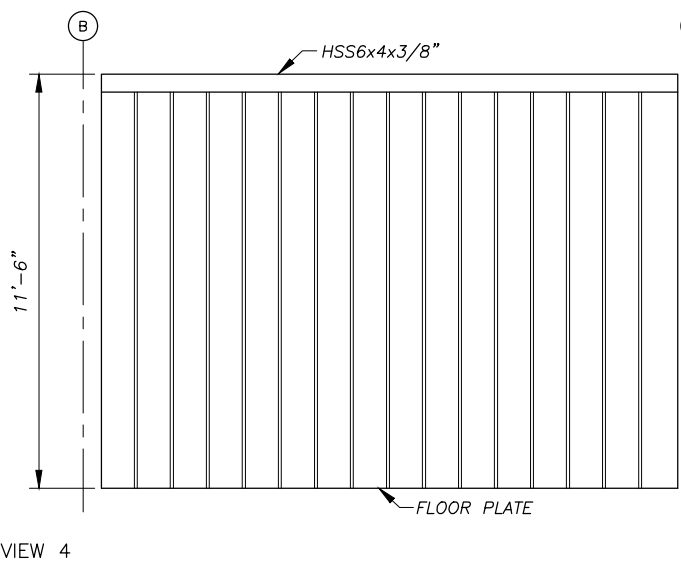
VIEW 2

**NOTE:**

1. LOCATIONS, QUANTITY AND DETAILS FOR ALL MECHANICAL WALL PENETRATIONS SHOWN ON MECHANICAL SHEETS.
2. OWNER SHALL FURNISH AND INSTALL DOORS AND WINDOWS.



VIEW 3



VIEW 4

2 INTERIOR ELEVATION - GENERATION BAY ROOM No. 102  
 A2.3 SCALE: NONE

REVISIONS	DATE	DESCRIPTION



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SHEET TITLE  
**POWER PLANT INTERIOR ELEVATIONS**

SHEET  
**A2.3**

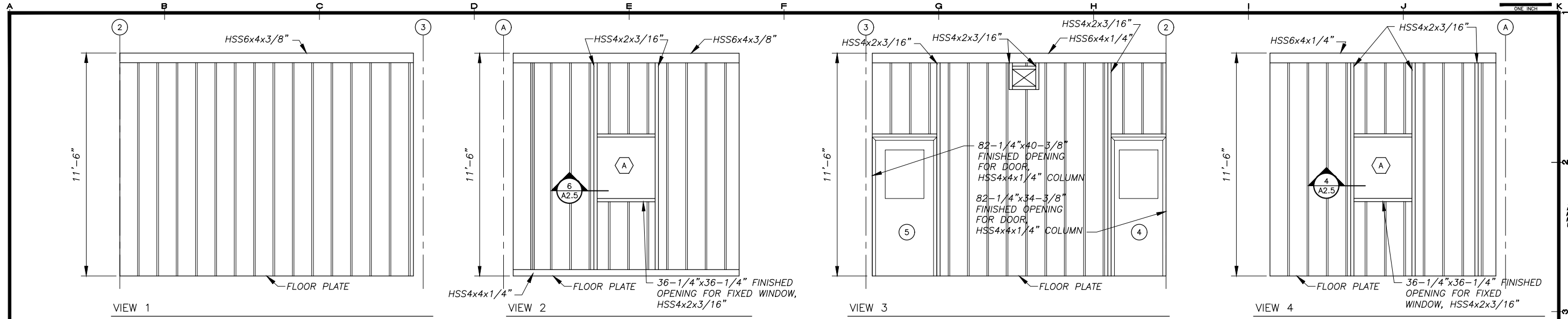
DRAWN BY: **KK** CHECKED BY: **DGT**

DATE: **06/10/16** SCALE: **AS SHOWN**

JOB NUMBER: **13-039**



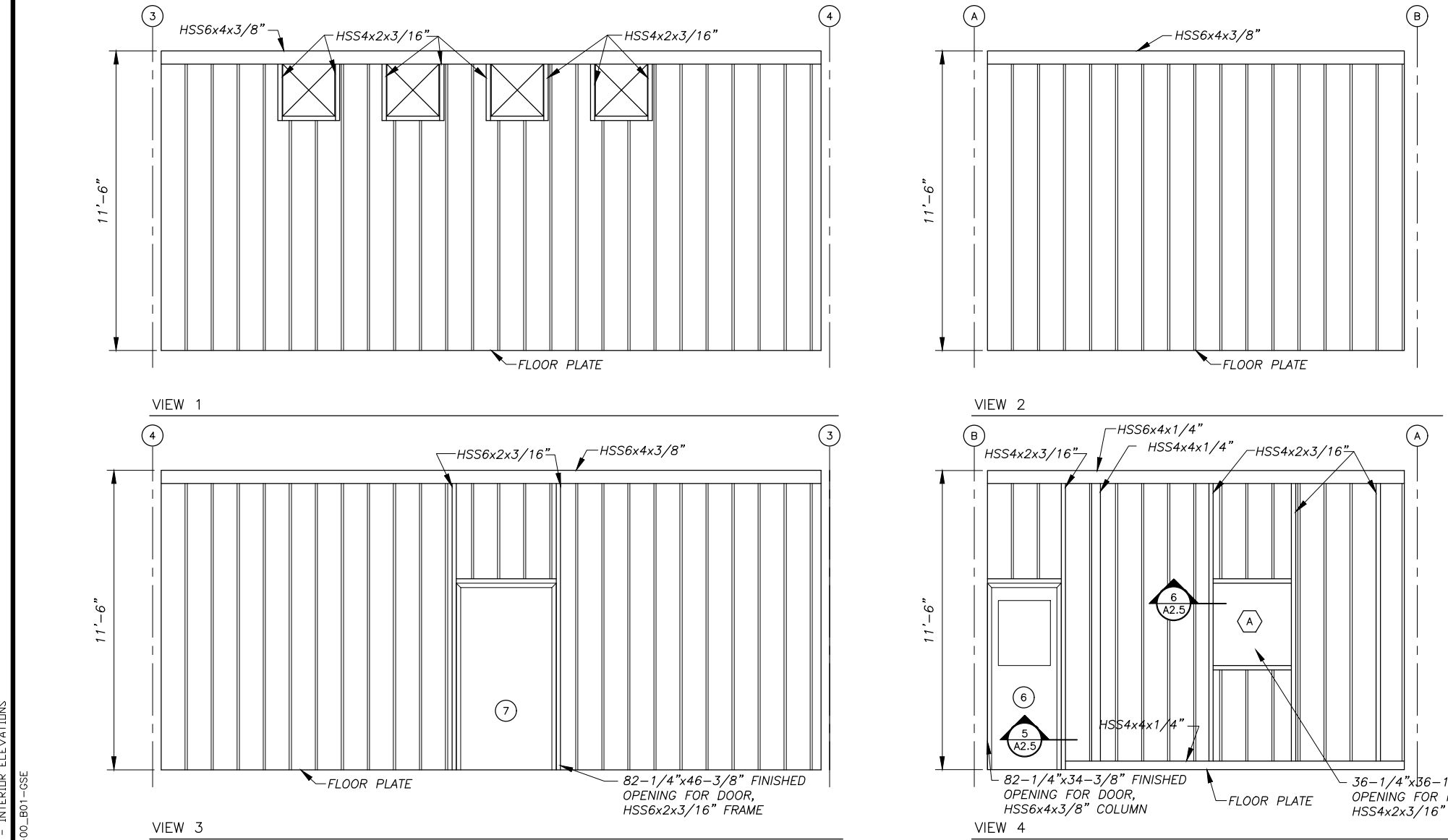
H:\Jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_A2.1-A2.5-PP, I=1, 06-10-16 at 09:08 by jkk  
 LAYOUT: A2.4 - INTERIOR ELEVATIONS  
 XREF: 13040-00\_B01-GSE



**1 INTERIOR ELEVATION - CONTROL ROOM No. 103**  
 SCALE: NONE

**NOTE:**

- LOCATIONS, QUANTITY AND DETAILS FOR ALL MECHANICAL WALL PENETRATIONS SHOWN ON MECHANICAL SHEETS.
- OWNER SHALL FURNISH AND INSTALL DOORS AND WINDOWS.



**2 INTERIOR ELEVATION - GENERATION BAY ROOM No. 102**  
 SCALE: NONE

REVISIONS	MARK	DATE	DESCRIPTION



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 KAKE, ALASKA

SHEET TITLE  
**POWER PLANT INTERIOR ELEVATIONS**

SHEET  
**A2.4**

DRAWN BY: **KK**      CHECKED BY: **DGT**  
 DATE: **06/10/16**      SCALE: **AS SHOWN**  
 JOB NUMBER: **13-039**

DOOR CONSTRUCTION							FRAME CONSTRUCTION							
DOOR NO.	WIDTH	HEIGHT	THICKNESS	MATERIAL	CORE	REMARKS	HEAD/JAMB DETAIL	SILL DETAIL	WALL THICKNESS	MATERIAL	TYPE	PROFILE	FIRE RTG	HWR
1	3'-0"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED	24"x24" RE-LIGHT {2}	2/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-1
2	2'-6"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED	24"x24" RE-LIGHT {2}	4/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-2
3	3'-6"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED		2/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-3
4	2'-6"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED	24"x24" RE-LIGHT {2}	4/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-2
5	3'-0"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED	24"x24" RE-LIGHT {2}	4/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-4
6	2'-6"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED	24"x24" RE-LIGHT {2}	5/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-2
7	3'-6"	6'-8"	1-3/4"	16 GA. H.M.	INSULATED		2/A2.5	1/A2.5	N/A	16 GA. H.M.	WELDED	SINGLE RABBETED	NONE	HW-3

DOOR HARDWARE:				DOOR FRAME PROFILE:			
<b>HW-1</b>				<b>HW-3</b>			
3 EA HINGES	HAGER	BB1191	4.5 x 4.5NRP x 630	3 EA HINGES	HAGER	BB1191	4.5 x 4.5NRP x 630
1 EA EXIT DEVICE	PRECISION	2108	x 4908AX3 x 630	1 EA EXIT LOCK	SCHLAGE	ND25D	x RHODES x 626
1 EA CORE	BEST	BROWN CONSTRUCTION CORE		1 EA OVERHEAD STOP	ROCKWOOD	OH1004M	x US32D
1 EA DOOR CLOSER	LCN	4040XP	x CUSH x AL	1 EA WEATHER STRIP	PEMCO	2891AS	x 42 (HEAD)
1 EA KICK PLATE	ROCKWOOD	K1050	10 x 34 x 630	2 EA WEATHER STRIP	PEMCO	290AS	x 80 (SIDE JAMBS)
1 EA WEATHER STRIP	PEMCO	2891AS	x 36 (HEAD)	1 EA THRESHOLD	HAGER	580S	x 42
2 EA WEATHER STRIP	PEMCO	290AS	x 80 (SIDE JAMBS)				
1 EA THRESHOLD	HAGER	580S	x 36				
<b>HW-2</b>				<b>HW-4</b>			
3 EA HINGES	HAGER	BB1191	4.5 x 4.5 x 630	3 EA HINGES	HAGER	BB1191	4.5 x 4.5 x 630
1 EA EXIT DEVICE	PRECISION	2108	x 4908AX3 x 630	1 EA EXIT DEVICE	PRECISION	2108	x 4908AX3 x 630
1 EA DOOR CLOSER	LCN	4040XP	x CUSH x AL	1 EA DOOR CLOSER	LCN	4040XP	x CUSH x AL
1 EA KICK PLATE	ROCKWOOD	K1050	10 x 28 x 630	1 EA KICK PLATE	ROCKWOOD	K1050	10 x 34 x 630
1 EA MOP PLATE	ROCKWOOD	K1050	10 x 29 x 630	1 EA MOP PLATE	ROCKWOOD	K1050	10 x 35 x 630
1 EA SOUND SEAL	PEMCO	2891AS	x 30 (HEAD)	1 EA SOUND SEAL	PEMCO	2891AS	x 36 (HEAD)
2 EA SOUND SEAL	PEMCO	290AS	x 80 (SIDE JAMBS)	2 EA SOUND SEAL	PEMCO	290AS	x 80 (SIDE JAMBS)
1 EA THRESHOLD	HAGER	580S	x 30	1 EA THRESHOLD	HAGER	580S	x 36

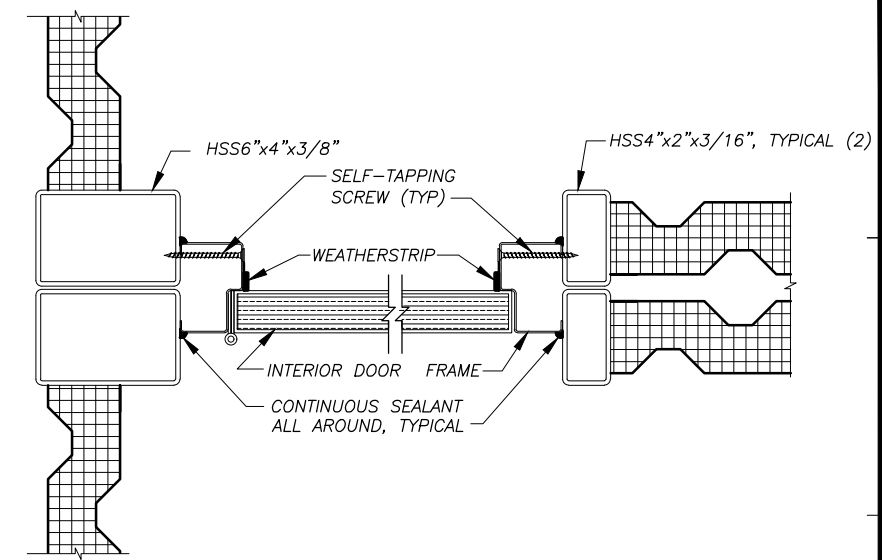
  

**NOTES:**

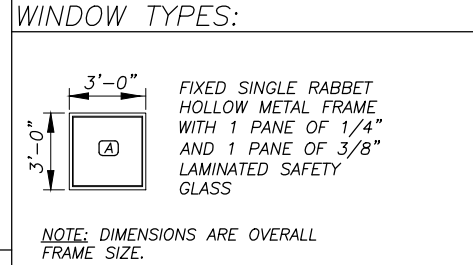
{1} ALL DOORS FURNISHED WITH TOPS INVERTED, CAULKED, AND SEALED.

{2} INSTALL 24"x24" INSULATED RE-LIGHT WITH TWO PANE OF LAMINATED SAFETY GLASS IN EACH DOOR PANEL.

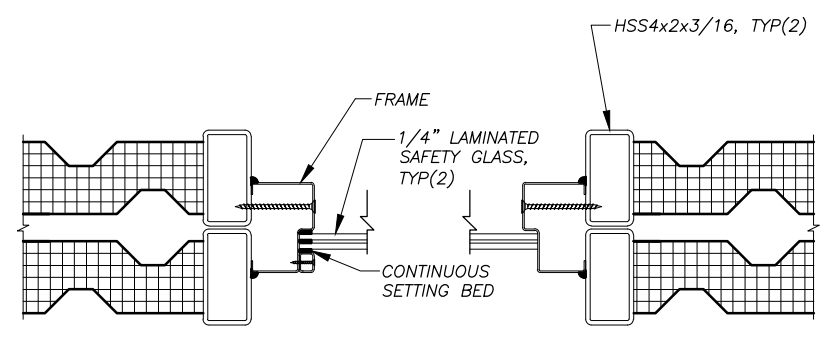
{3} DOORS AND DOOR FRAMES GALVANIZED AND FACTORY PRIMED. HOLLOW METAL WINDOW FRAMES FACTORY PRIMED. SPRAY FINISH ALL DOORS AND FRAMES WITH TWO COATS OF SHERWIN WILLIAMS MACROPOXY 646, NO SUBSTITUTES, COLOR STRUCTURAL GRAY 4031.



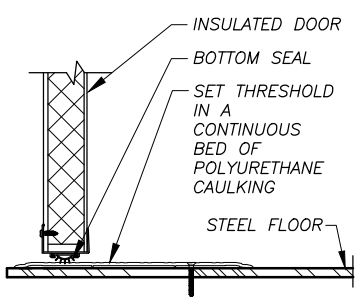
5 INTERIOR DOOR JAMB/HEAD  
SCALE: NONE



4 WINDOW TYPES:  
SCALE: NONE



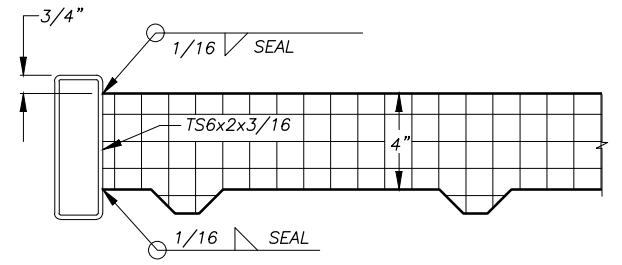
6 INTERIOR WINDOW JAMB/HEAD  
SCALE: NONE



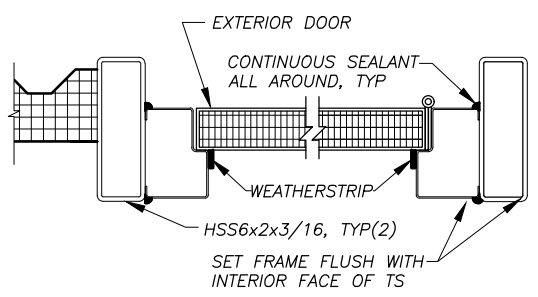
1 TYPICAL DOOR THRESHOLD  
SCALE: N.T.S.

**FRAMED OPENING NOTES:**

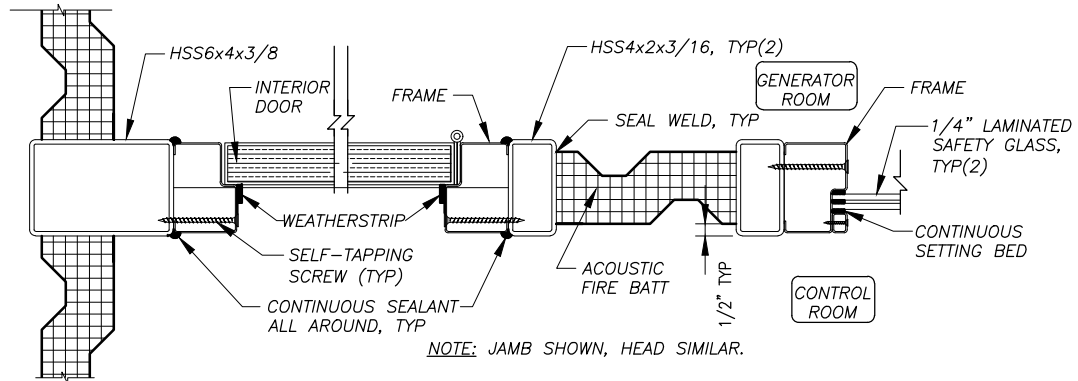
- 1) FABRICATE FRAMED OPENINGS FOR DOORS, WINDOWS, ETC. WITH MITERED CORNERS AND FULL PENETRATION GROOVE WELDS.
- 2) FABRICATE TO FINISHED INSIDE (CLEAR) DIMENSIONS INDICATED ON REFLECTED CEILING PLAN.
- 3) GRIND OUT INSIDE OF MITERED CORNERS TO PROVIDE FULL CLEAR OPENING.



3 FINISH CEILING OPENING DETAIL  
SCALE: NONE



2 TYPICAL EXTERIOR DOOR JAMB/HEAD  
SCALE: 3" = 1'-0"



4 INTERIOR DOOR AND WINDOW JAMB/HEAD  
SCALE: 3" = 1'-0"

**DOORS AND WINDOWS NOT IN CONTRACT**

REVISIONS	DATE	DESCRIPTION

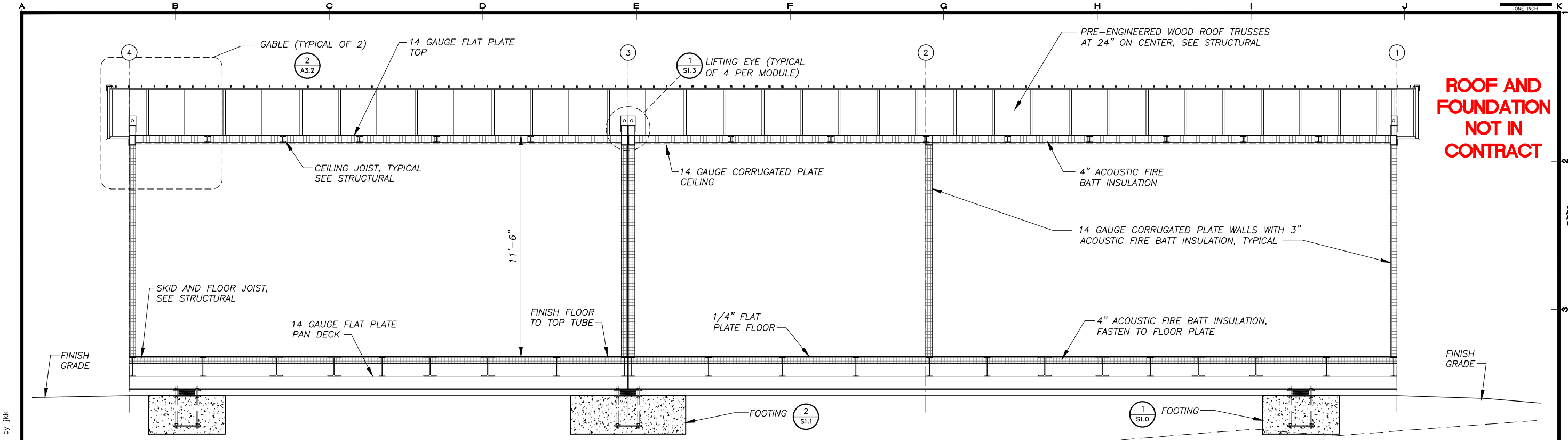


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KAKE RURAL POWER SYSTEM UPGRADES  
**ALASKA ENERGY AUTHORITY**  
KAKE, ALASKA

SHEET TITLE: POWER PLANT DOOR SCHEDULE AND DETAILS  
SHEET: A2.5  
DRAWN BY: KK CHECKED BY: DGT  
DATE: 06/10/16 SCALE: AS SHOWN  
JOB NUMBER: 13-039

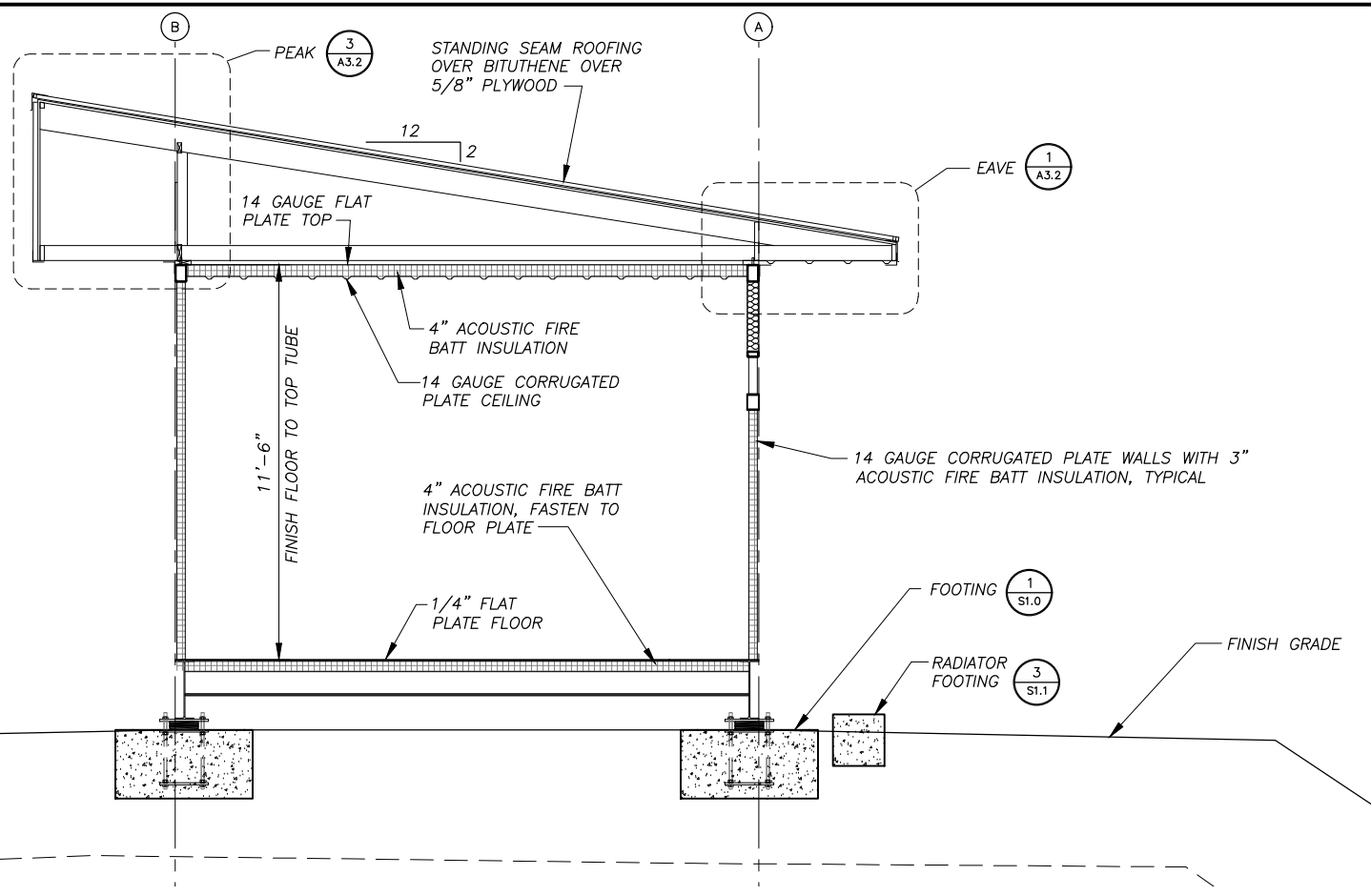
H:\Jobs\13-039 Kake Rural Power Systems Upgrade (AIECA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_A2.1-A2.5-PP\_1=1\_06-10-16 at 09:08 by jkk LAYOUT: A2.5 - DDDR SCHEDULE XREF: 13040-00\_B01-GSE



**ROOF AND FOUNDATION NOT IN CONTRACT**

**SECTION A A3.1**  
SCALE: 3/8" = 1'-0"

**ROOF AND FOUNDATION NOT IN CONTRACT**



**SECTION B A3.1**  
SCALE: 1/4" = 1'-0"

REVISIONS	MARK	DATE	DESCRIPTION



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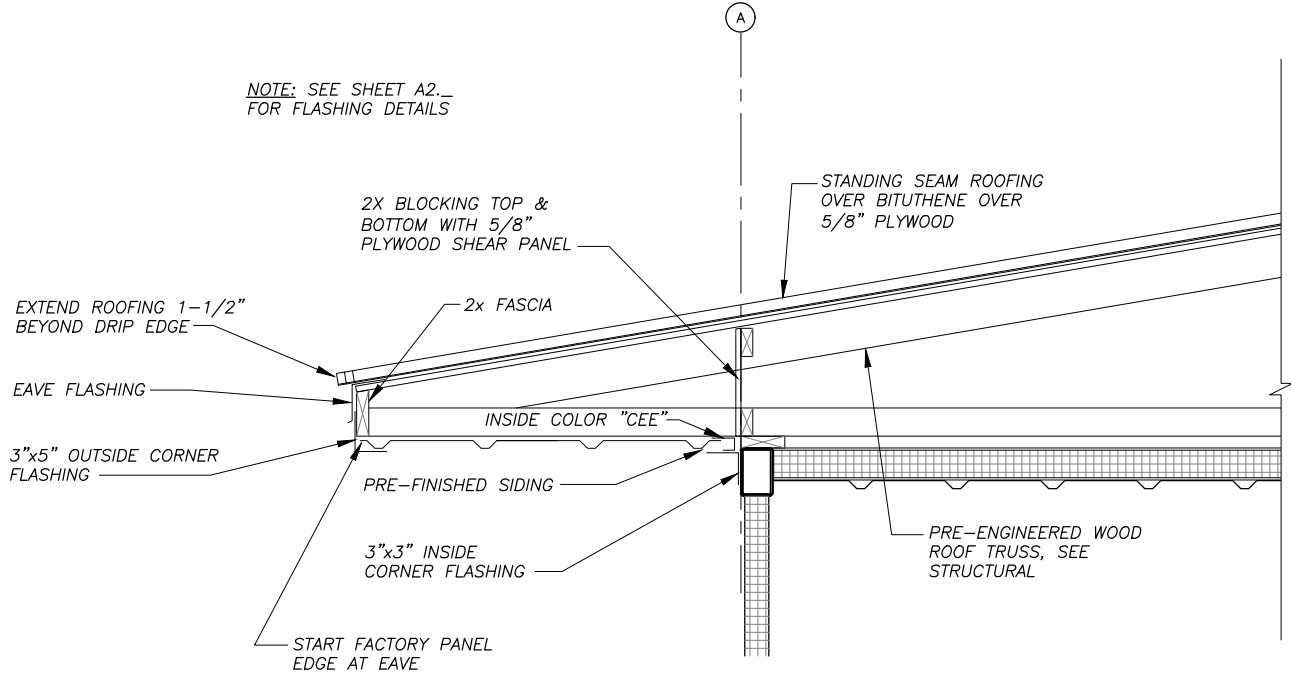
**ALASKA ENERGY AUTHORITY**  
KAKE, ALASKA

SHEET TITLE: POWER PLANT SECTIONS  
SHEET: A3.1  
DRAWN BY: KK  
CHECKED BY: DGT  
DATE: 06/10/16  
SCALE: AS SHOWN  
JOB NUMBER: 13-039

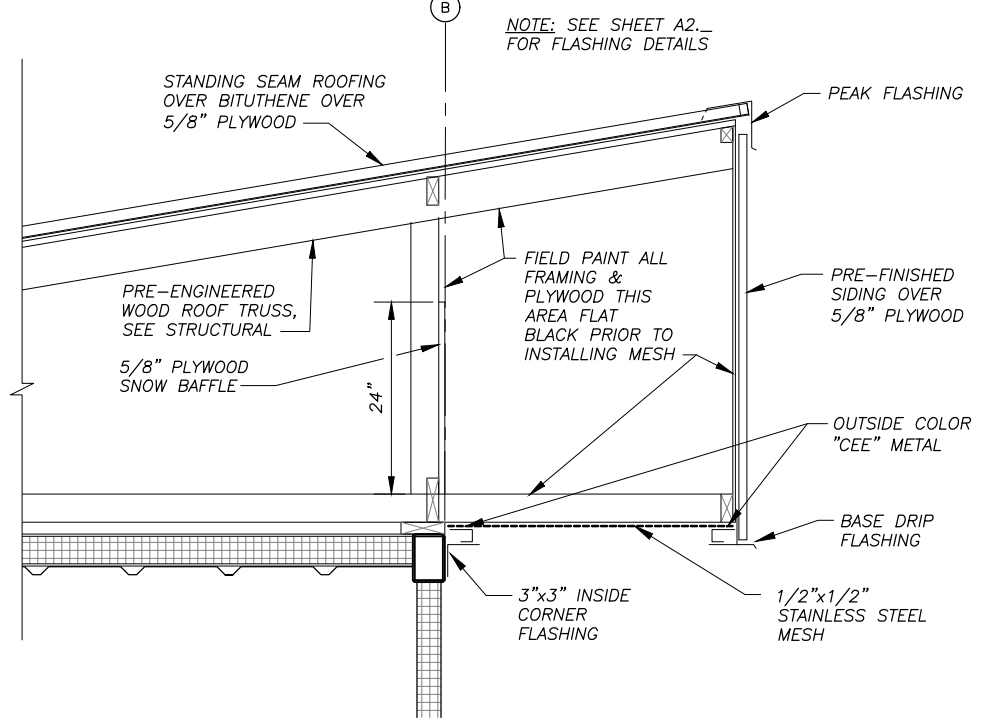
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 LAYOUT: A3.1 - SECTIONS  
 XREF: 13-040\_00\_STRCUT-PP-BASE, 13040-00\_B01-GSE

H:\jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_A3.1-A3.2-PP\_1=1, 06-10-16 at 09:22 by jkk  
 LAYOUT: A3.2 - SECTIONS  
 XREF: 13-040\_00\_STRUC-PP-BASE, 13040-00\_B01-GSE

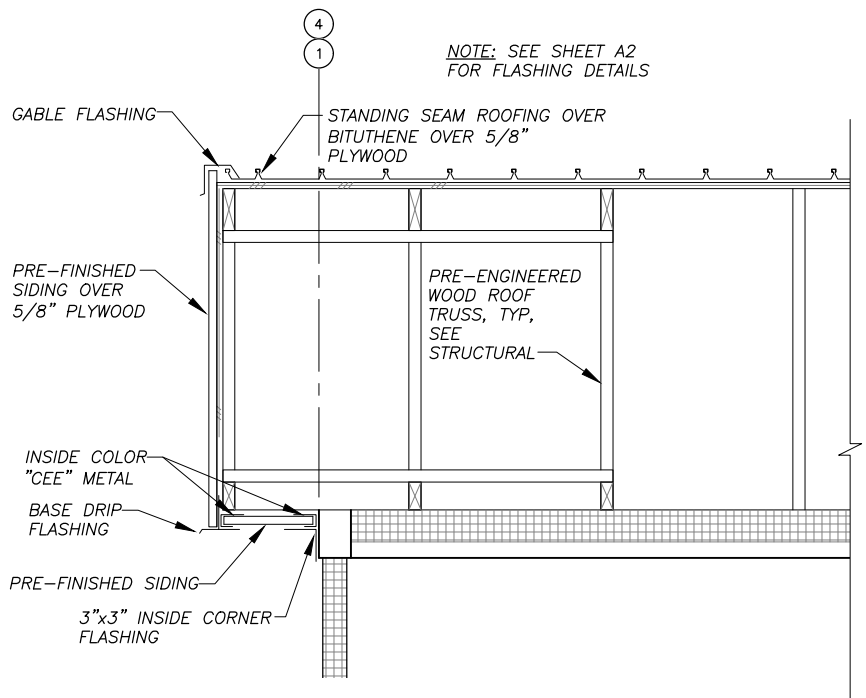
A B C D E F G H I J K ONE INCH



1 EAVE DETAIL  
 A3.2 SCALE: 1" = 1'-0"



2 PEAK DETAIL  
 A3.2 SCALE: 1" = 1'-0"



3 GABLE DETAIL  
 A3.2 SCALE: 1" = 1'-0"

REVISIONS	DATE	DESCRIPTION



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SHEET TITLE POWER PLANT SECTIONS AND DETAILS	
SHEET A3.2	
DRAWN BY: KK	CHECKED BY: DGT
DATE: 06/10/16	SCALE: AS SHOWN
JOB NUMBER: 13-039	

**ROOF AND FOUNDATION  
 NOT IN CONTRACT**

**STRUCTURAL GENERAL NOTES – MODULE:**

**1.0 DESIGN LOADS:**

- A. BUILDING CODE: 2009 INTERNATIONAL BUILDING CODE (IBC 2009)
- B. FLOOR LIVE LOADS: (IBC TABLE 1607.1)  
 LIGHT STORAGE/MANUFACTURING 125 PSF OR 2000 POUND POINT LOAD  
 MAXIMUM GENERATOR UNIT WEIGHT 10,000 POUNDS
- C. SNOW LOADS: (ASCE 7-10)  
 GROUND SNOW LOAD,  $P_g = 60$  PSF  
 COEFFICIENT OF EXPOSURE,  $C_e = 1.0$ , PARTIALLY EXPOSED  
 SNOW IMPORTANCE FACTOR,  $I_s = 1.2$ , CATEGORY IV  
 THERMAL COEFFICIENT,  $C_t = 1.2$ , COLD, VENTILATED ROOF
- D. WIND LOADS:  
 BASIC WIND SPEED = 120 MPH, 3 SECOND GUST  
 WIND IMPORTANCE FACTOR,  $I_w = 1.15$ , CATEGORY IV  
 EXPOSURE CLASSIFICATION = EXPOSURE C
- E. SEISMIC LOADING:  
 SEISMIC =  $S_s = 0.422$   $S_1 = 0.353$   
 SEISMIC IMPORTANCE FACTOR = 1.50, CATEGORY IV  
 SITE CLASS "D"  
 BASIC SEISMIC FORCE RESISTANCE SYSTEM = BUILDING – BEARING WALL WITH STEEL SHEAR PANELS  
 FOUNDATION – SPREAD CONCRETE FOOTINGS  
 SEISMIC RESPONSE COEFFICIENT,  $R = 7.0$

**2.0 FOUNDATIONS:**

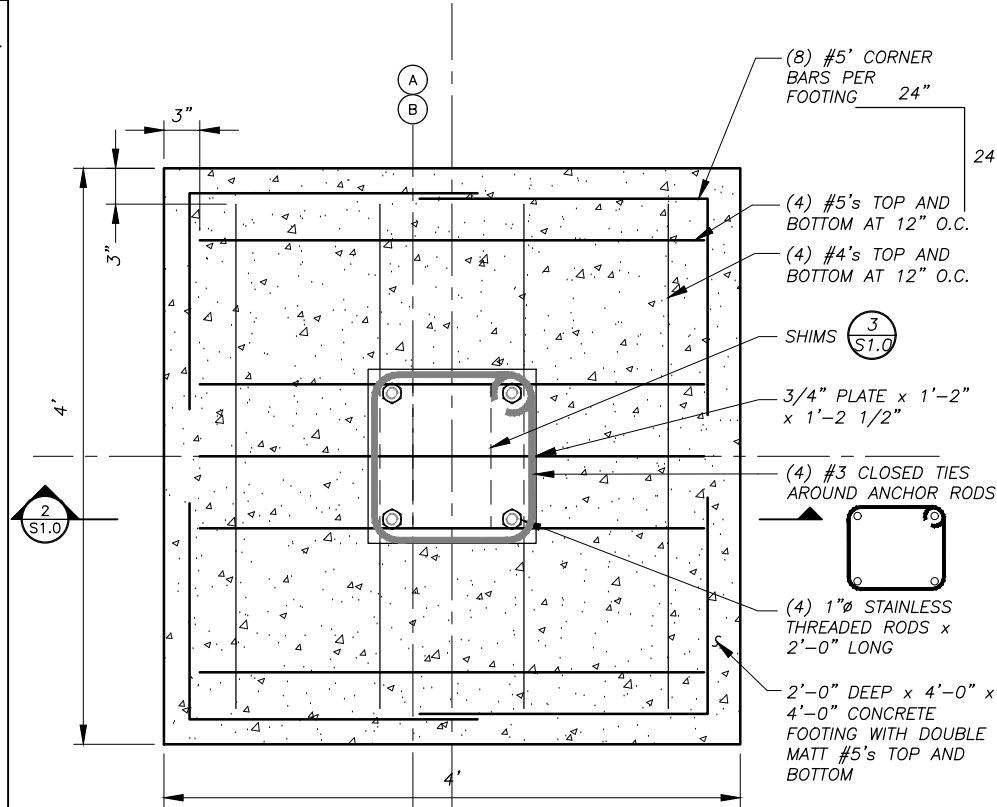
- A. SEE SITE/FOUNDATION PLANS.
- B. THE MODULE DESIGN SHOWS STANDARD CONSTRUCTION ON A SKID SYSTEM INSTALLED ON CONCRETE FOOTINGS.

**3.0 STRUCTURAL STEEL:**

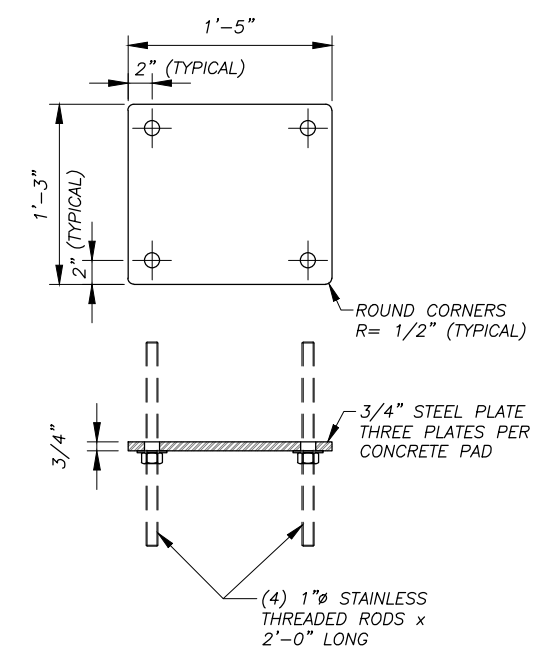
- A. THE DESIGN, FABRICATION, AND ERECTION OF ALL STRUCTURAL STEEL SHALL COMPLY WITH THE CODE OF STANDARD PRACTICE OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- B. ALL STEEL PLATE, SHAPES, AND ROLLED SECTIONS SHALL BE ASTM A36. ALL STEEL TUBING SHALL BE ASTM A500, GRADE B.
- C. ALL METAL TO METAL CONNECTIONS SHALL BE EQUAL TO STANDARD CONNECTION, OR AS DETAILED USING A325 BOLTS (BEARING TYPE CONNECTIONS). TIGHTEN HIGH STRENGTH BOLTS WITH PROPERLY CALIBRATED WRENCHES, BY TURN-OF-THE-NUT METHOD, OR BY LOAD WASHERS. ALL CONNECTIONS UNLESS OTHERWISE DETAILED, SHALL HAVE THE MAXIMUM NUMBER OF 3/4" DIAMETER BOLTS USING STANDARD GAUGES AND CLEARANCES.
- D. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE CURRENT CODE OF THE AMERICAN WELDING SOCIETY. USE AWS 5.1 E70XX ELECTRODES. MINIMUM FILLET WELD SHALL BE 3/16" EXCEPT FOR SEAL WELDS TO GAUGE METAL AS INDICATED.
- E. ALL EXPOSED STEEL SURFACES SHALL BE PREPARED AND PAINTED AS INDICATED IN THE ARCHITECTURAL DRAWINGS.

**4.0 WOOD:**

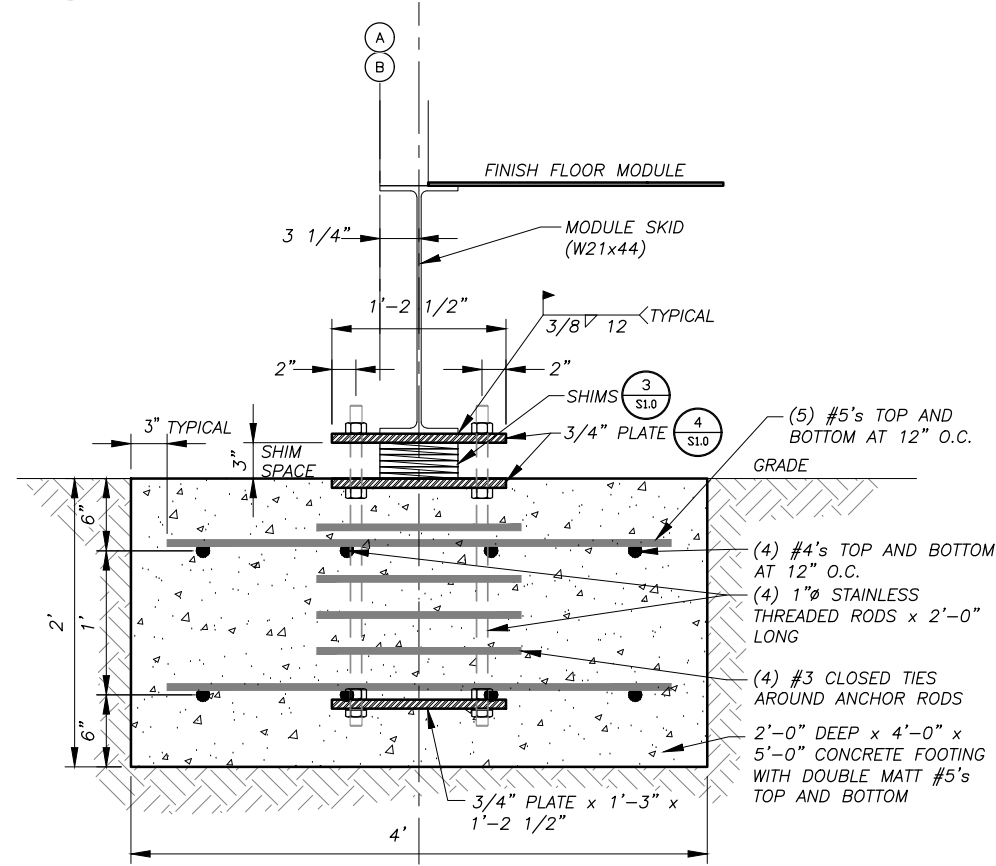
- A. PLYWOOD ROOF DECK AND WALL SHEATHING SHALL BE TREATED (AWW). 5/8" PLYWOOD SHALL HAVE A PANEL SPAN RATING OF 32/16 – MINIMUM NAILING FOR PANELS, UNLESS OTHERWISE NOTED, SHALL EQUAL 10d NAILS AT 4" CENTERS AROUND PLYWOOD PANEL EDGES AND 10d'S @ 12" CENTERS ALONG INTERMEDIATE FRAMING. BLOCK ALL DIAPHRAGM PANEL EDGES WITH 2X4 FLAT BLOCKING. OSB OR NON-TREATED PLYWOOD PANELS WILL NOT BE ACCEPTED.
- B. FRAMING MATERIAL: DOUGLAS FIR OR HEM FIR, NO. 2 OR BETTER MINIMUM FOR JOISTS, STUDS, PANEL JOINTS, WOOD PLATES, BLOCKING, AND HEADERS. MAXIMUM MOISTURE CONTENT SHALL BE 19%. ALL FRAMING MATERIAL SHALL BE TREATED FOR GROUND CONTACT TO 0.4 MINIMUM RETENTION.
- C. ALL METAL TO WOOD OR WOOD TO WOOD CONNECTIONS SHALL BE STANDARD OR AS DETAILED ON THE DRAWINGS. ALL FASTENERS IN CONTACT WITH WOOD MEMBERS AND PLYWOOD SHALL BE STAINLESS STEEL.
- D. ALL METAL FRAMING ANCHORS AND SPLICE PLATES SHALL BE FABRICATED FROM STAINLESS STEEL AND SHALL SUPPORT THE LOADS INDICATED ON THE DRAWINGS. ANCHORS INDICATED ON THE DRAWINGS ARE "SIMPSON COMPANY" OR EQUAL.
- E. MINIMUM NAILING SHALL EQUAL THAT INDICATED IN INTERNATIONAL BUILDING CODE TABLE 2304.9.1 UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- F. ERECT WOOD FRAMING MEMBERS TRUE TO LINES AND LEVELS. DO NOT DEVIATE FROM TRUE ALIGNMENT MORE THAN 1/4 INCH.
- G. PREMANUFACTURED ROOF TRUSSES: ALL PREMANUFACTURED WOOD TRUSSES SHALL BE "GANG NAIL" OR EQUAL AND SHALL BE FABRICATED FROM TREATED LUMBER WITH STAINLESS STEEL PLATES AND FASTENERS AS INDICATED ABOVE. TRUSSES SHALL BE DESIGNED FOR THE GRAVITY LOADS, WIND & SEISMIC LATERAL & UPLIFT LOADS, AND SUPPORT CONDITIONS AS INDICATED ON THE DRAWINGS. NO DURATION OF LOAD INCREASE IN STRESSES WILL BE ALLOWED FOR SNOW LOADING. UNBALANCED SNOW AND DRIFT LOADING IS REQUIRED. SUBMIT TRUSS DESIGNS STAMPED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF ALASKA. TRUSS DRAWINGS SHALL INDICATE ALL MATERIALS OF CONSTRUCTION.



**1 PLAN - FOOTING**  
SCALE: 1 1/2' = 1'-0"

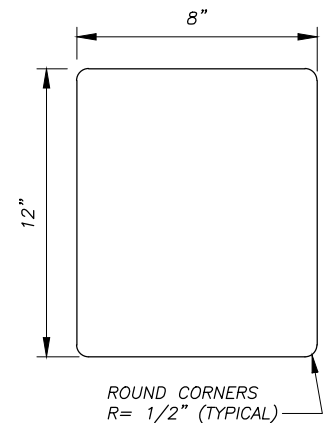


**4 TYPICAL STEEL PLATE**  
SCALE: N.T.S.



**2 SECTION - FOOTING**  
SCALE: 1 1/2' = 1'-0"

**FOUNDATION NOT IN CONTRACT**

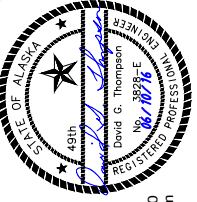


SHIM FABRICATION TABLE		
THICKNESS	QUANTITY	MATERIAL
1/4"	12	ALUMINUM
1/2"	8	ALUMINUM
1"	4	ALUMINUM

**3 TYPICAL SHIM**  
SCALE: N.T.S.

H:\Jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_S1.1-MODULE STRUCT. 1=1, 06-08-16 at 08:35 by jkk  
LAYOUT: S1.0 - GENERAL NOTES  
XREF: 13040-00\_B01-BK

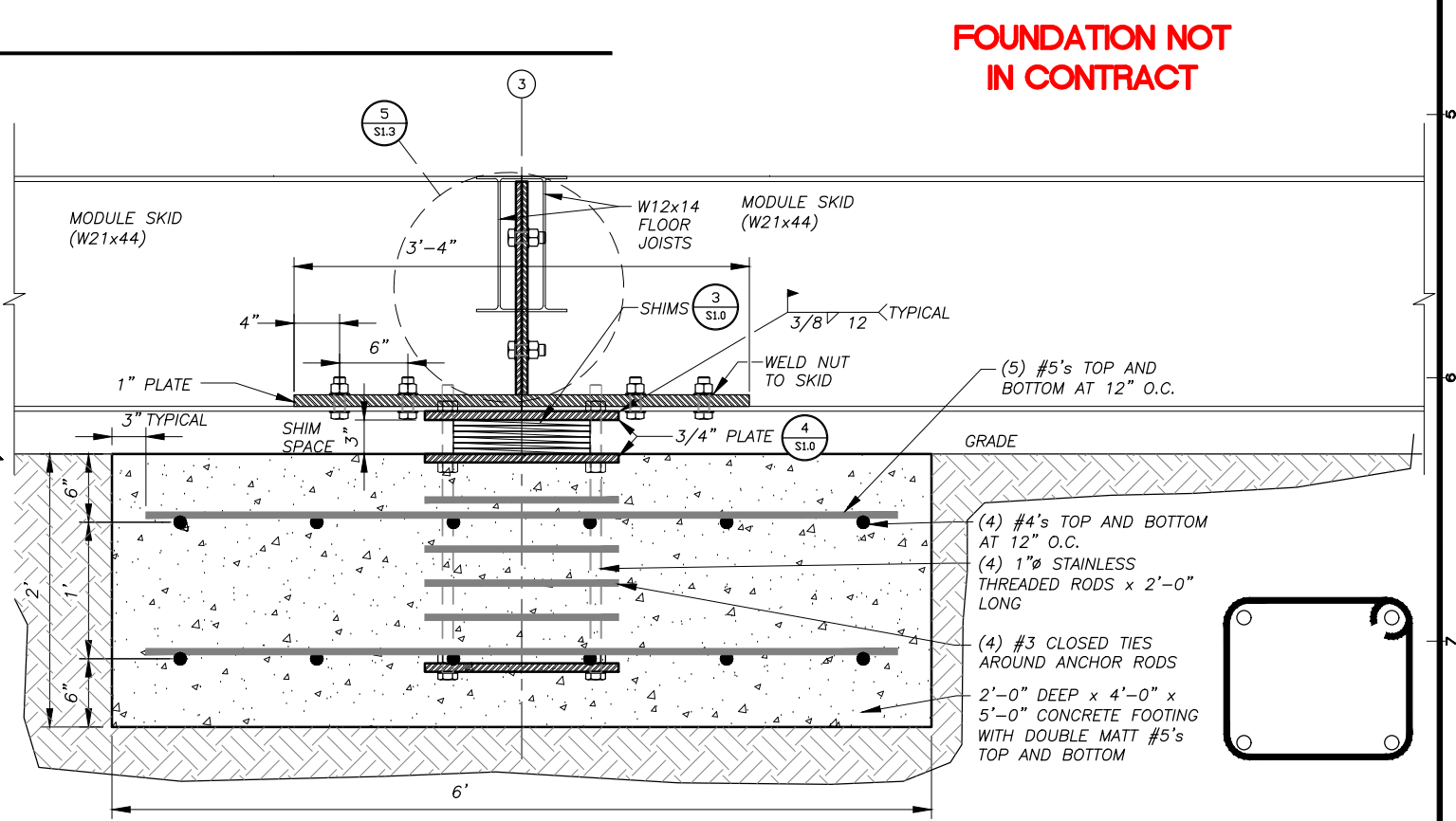
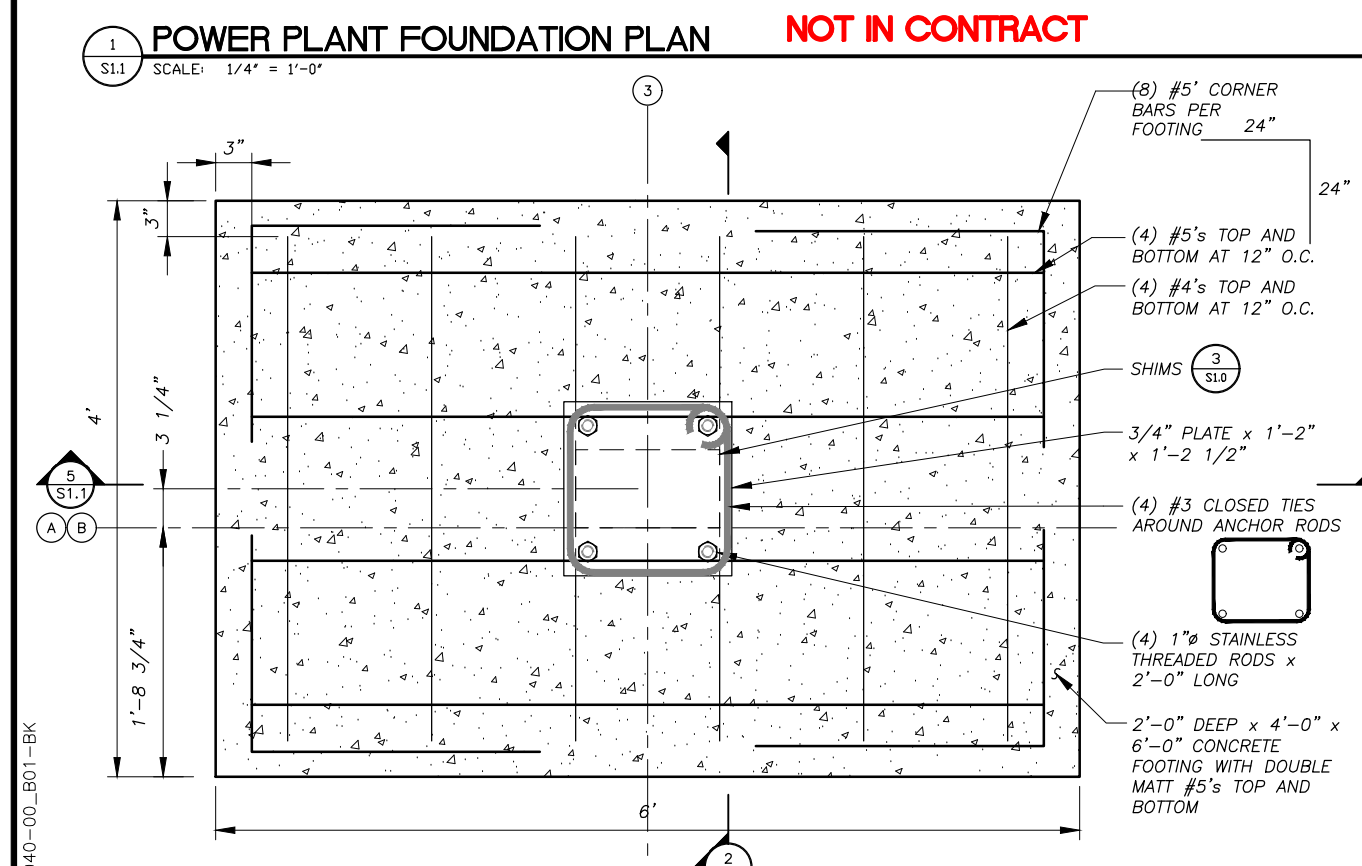
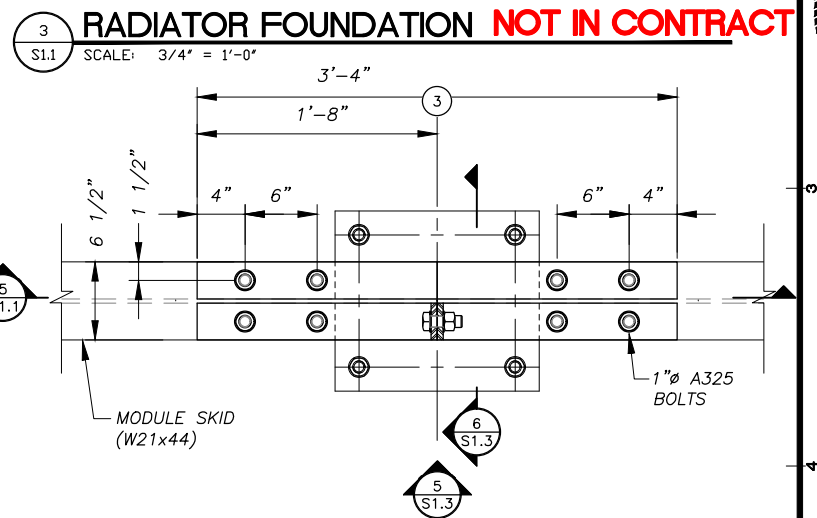
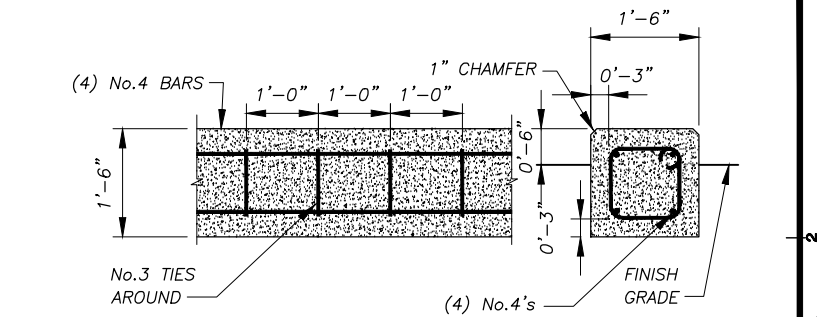
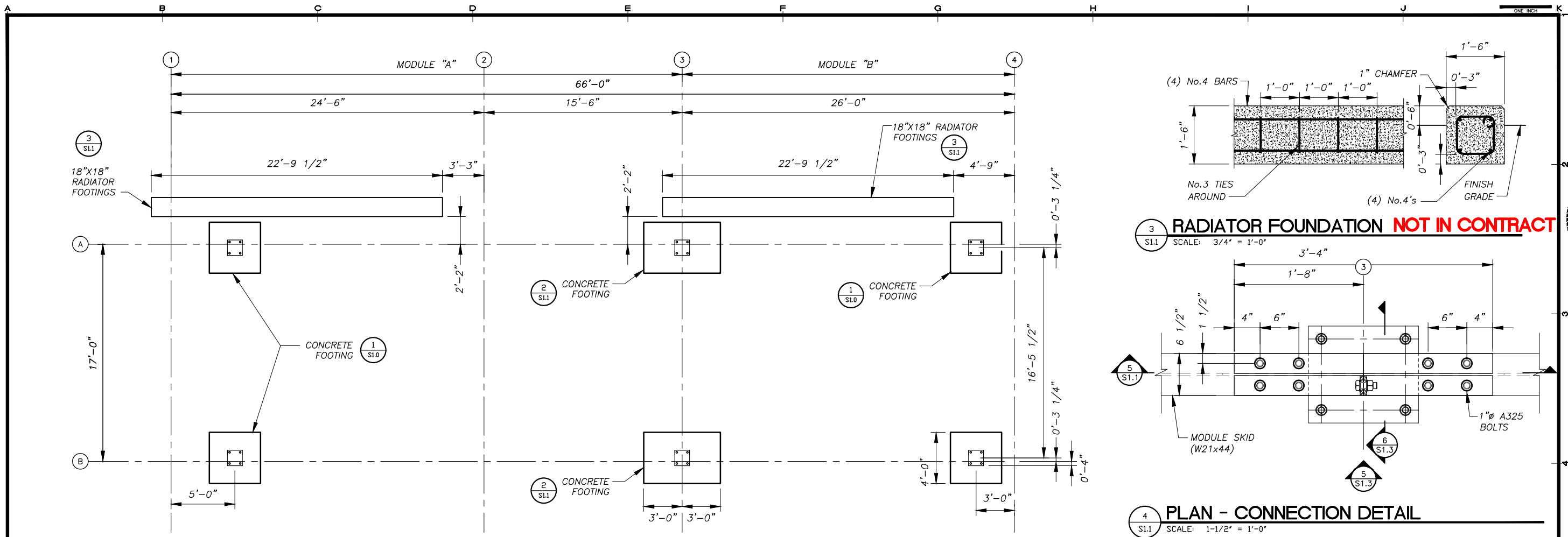
REVISIONS	DATE	DESCRIPTION
1	5/04/16	95% SUBMITTAL FOR AGENCY REVIEW



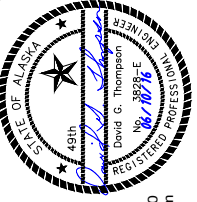
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 KAKE RURAL POWER SYSTEM UPGRADES  
 POWER PLANT GENERAL NOTES AND FOUNDATION DETAILS  
 SHEET: S1.0  
 DRAWN BY: KK CHECKED BY: DGT  
 DATE: 06/10/16 AS SHOWN  
 JOB NUMBER: 13-039

H:\jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_S1.1-MODULE STRUCT, 1=1, 06-08-16 at 08:35 by jkk  
 LAYOUT: S1.1 - FOUNDATION PLAN  
 REF: 13040-00\_B01-BK



REVISIONS	DATE	DESCRIPTION
1	5/04/16	95% SUBMITTAL FOR AGENCY REVIEW

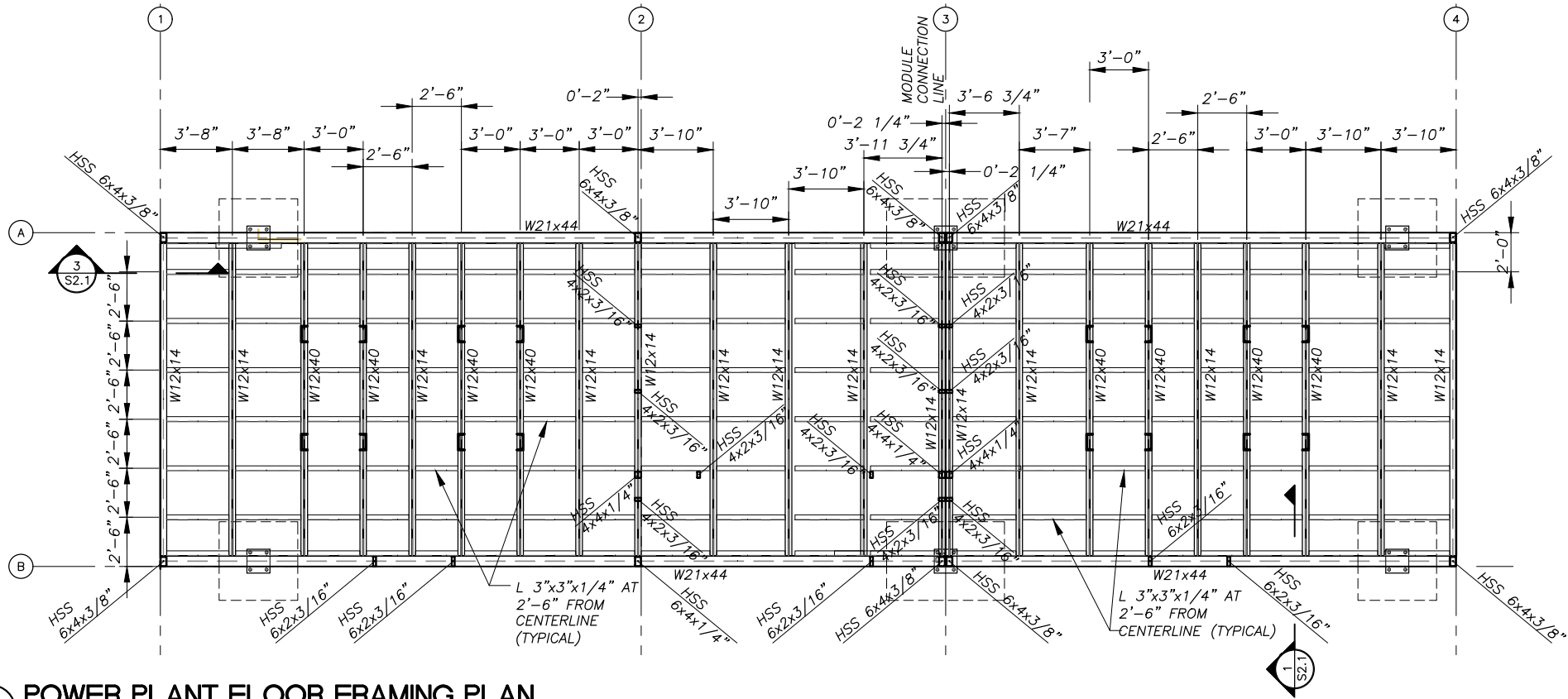


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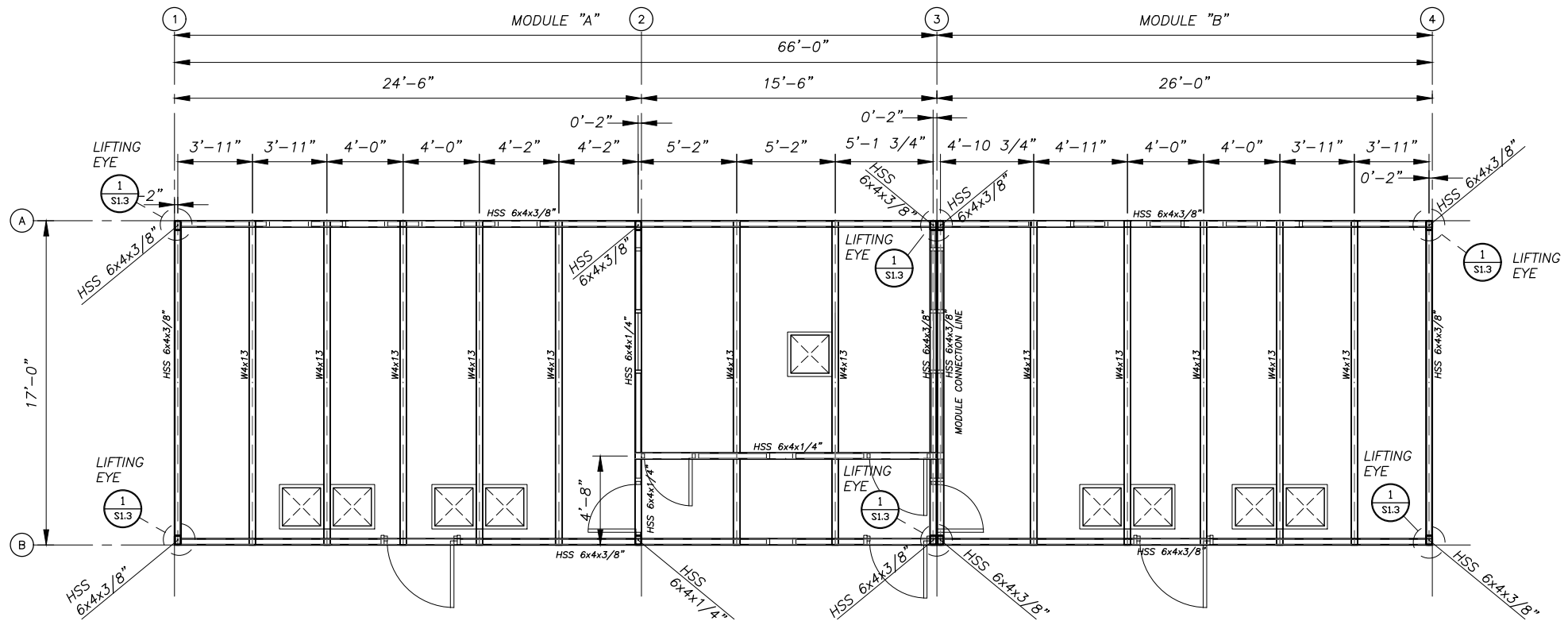
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 KAKE RURAL POWER SYSTEM UPGRADES  
 KAKE, ALASKA

SHEET TITLE: POWER PLANT FOUNDATION AND DETAILS  
 SHEET: S1.1  
 DRAWN BY: KK  
 CHECKED BY: DGT  
 DATE: 06/10/16  
 SCALE: AS SHOWN  
 JOB NUMBER: 13-039

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 LAYOUT: S1.2 - CEILING PLANS DETAILS  
 REF: 13040-00\_B01-BK

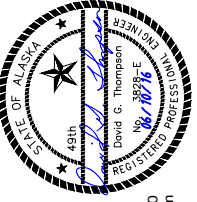


**1 POWER PLANT FLOOR FRAMING PLAN**  
 SCALE: 1/4" = 1'-0"



**2 POWER PLANT CEILING PLAN**  
 SCALE: 1/4" = 1'-0"

REVISIONS	DATE	DESCRIPTION
1	5/04/16	95% SUBMITTAL FOR AGENCY REVIEW

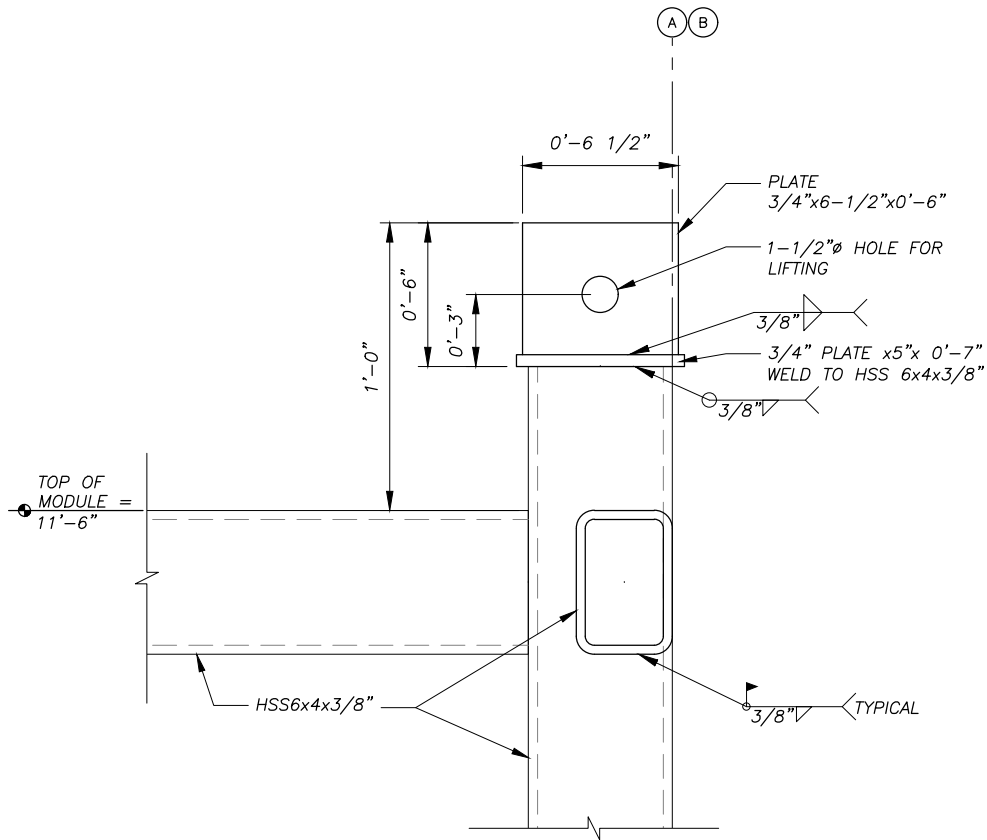


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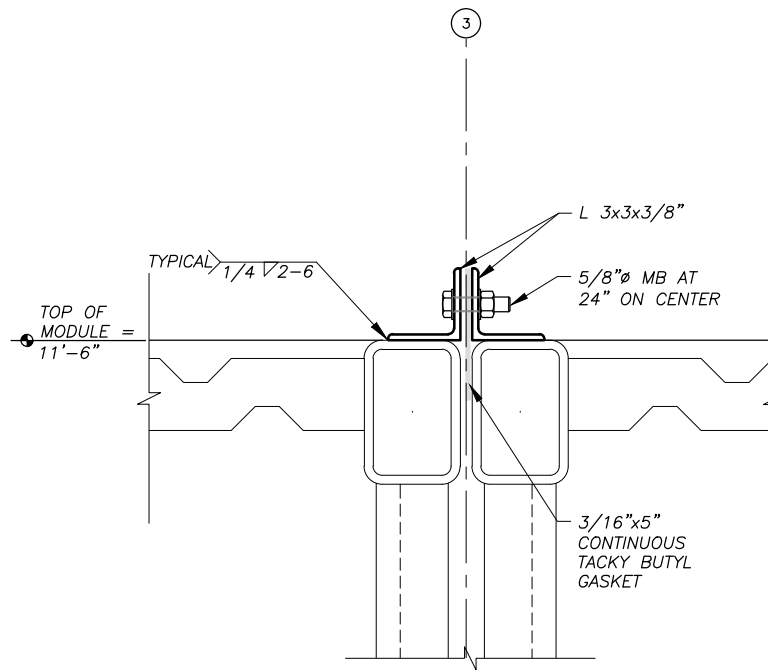
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**ALASKA ENERGY AUTHORITY**  
 KAKE, ALASKA

SHEET TITLE: POWER PLANT FRAMING AND CEILING PLAN  
 SHEET: S1.2  
 DRAWN BY: KK CHECKED BY: DGT  
 DATE: 06/10/16 SCALE: AS SHOWN  
 JOB NUMBER: 13-039

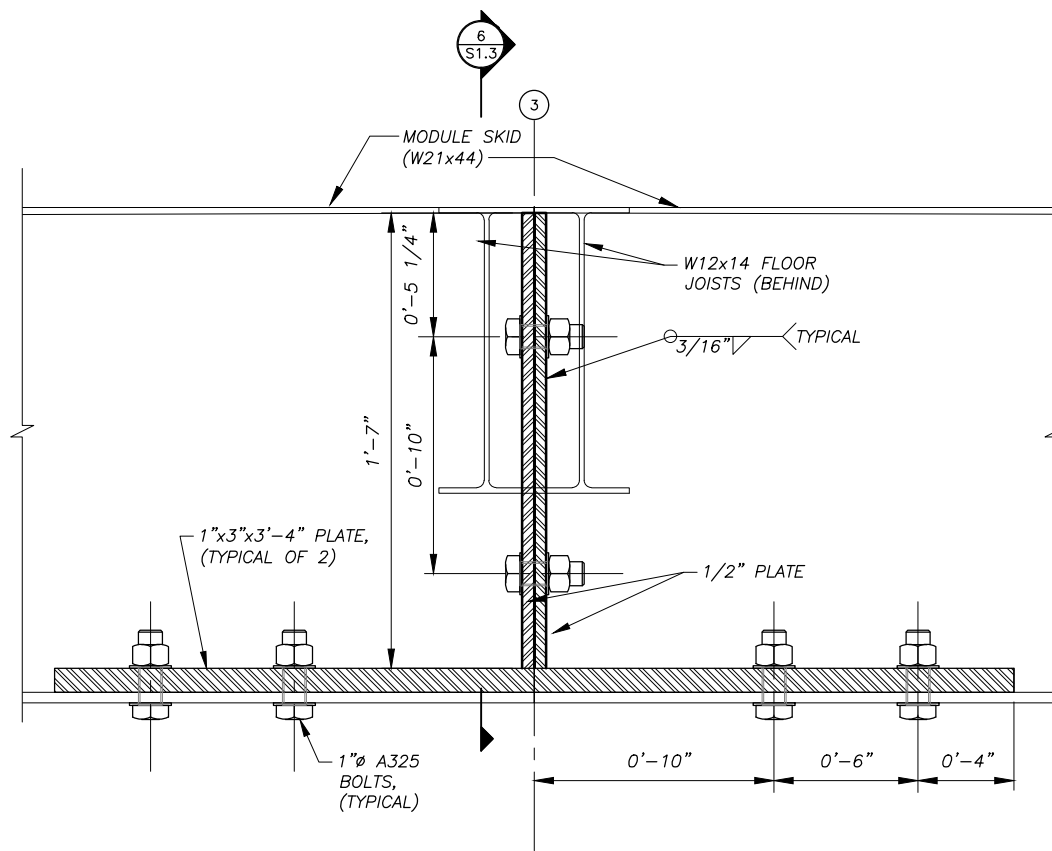
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 LAYOUT: S1.3 DETAILS  
 XREF: 13040-00\_B01-BK



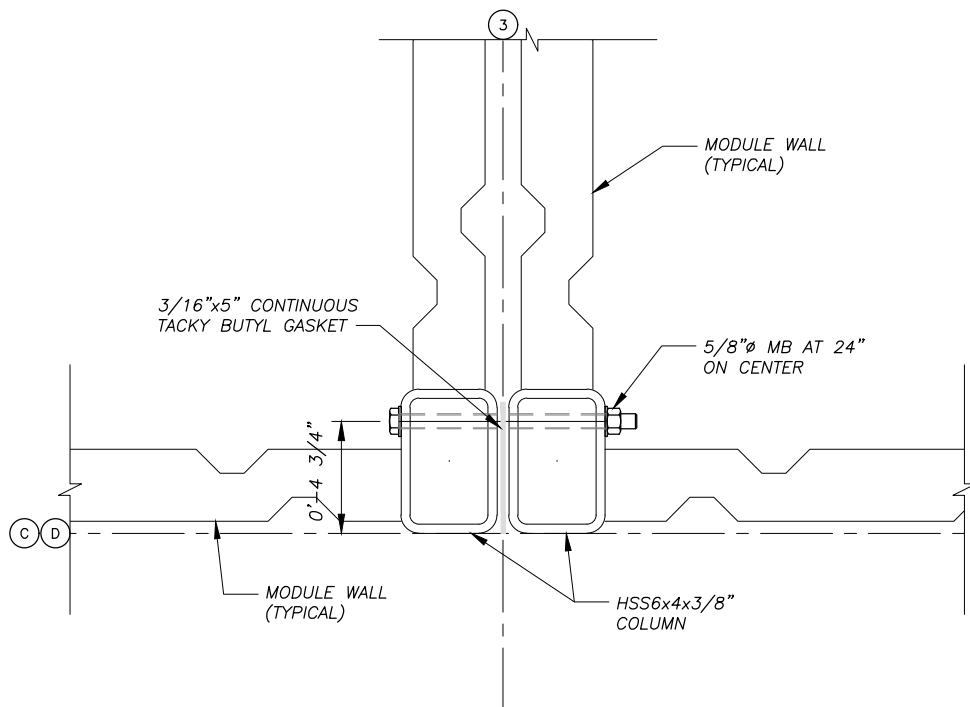
**1 LIFTING EYE AND COLUMN CONNECTION**  
 S1.3 SCALE: 3' = 1'-0"



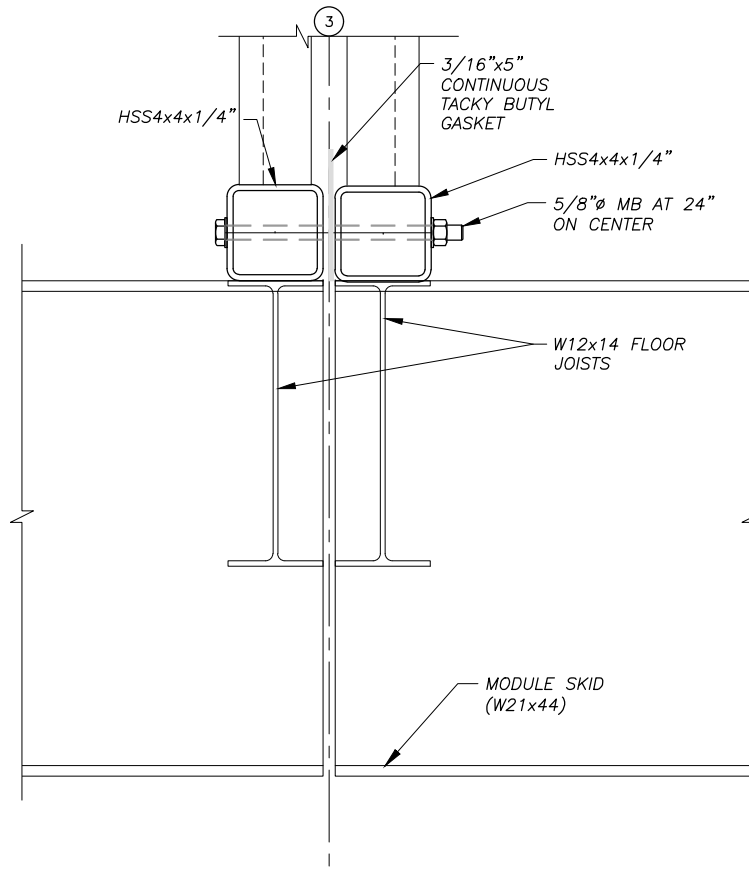
**3 MODULE CONNECTION AT CEILING BEAMS**  
 S1.3 SCALE: 3' = 1'-0"



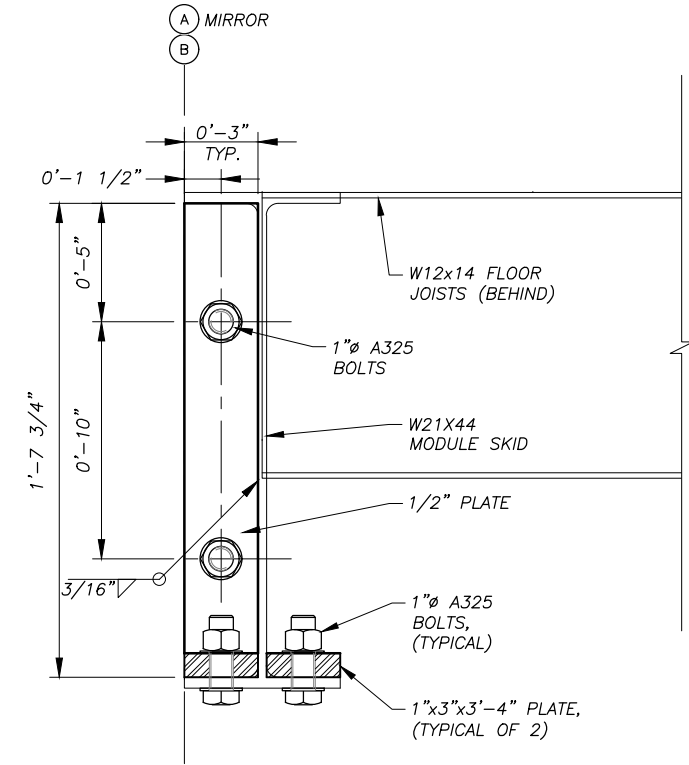
**5 MODULE CONNECTION AT SKIDS**  
 S1.3 SCALE: 3' = 1'-0"



**2 MODULE CONNECTION AT COLUMNS**  
 S1.3 SCALE: 3' = 1'-0"



**4 MODULE CONNECTION AT FLOOR**  
 S1.3 SCALE: 3' = 1'-0"



**6 SECTION**  
 S1.3 SCALE: 3' = 1'-0"

REVISIONS	DATE	DESCRIPTION
6	5/04/16	SUBMITTAL FOR AGENCY REVIEW



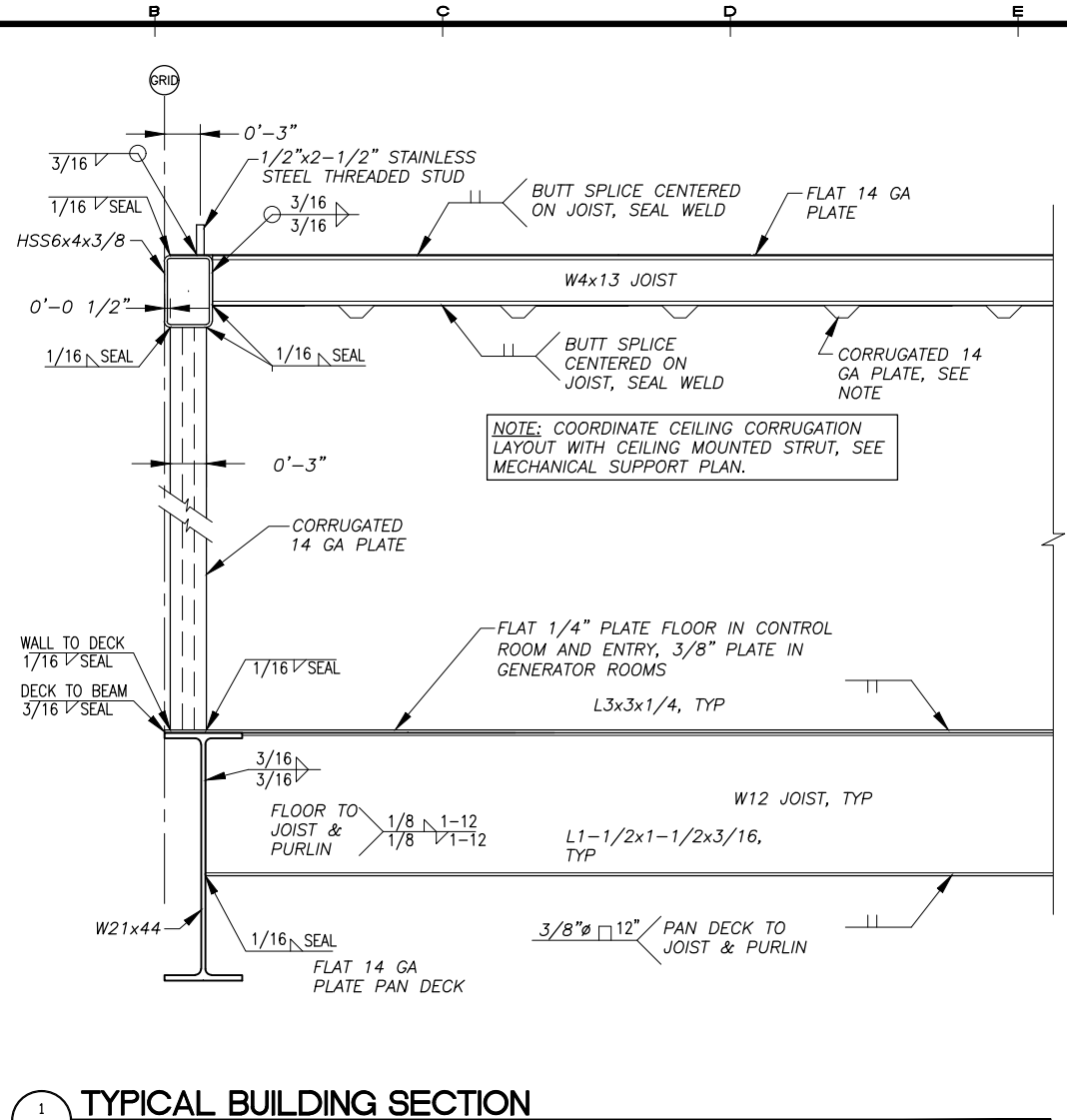
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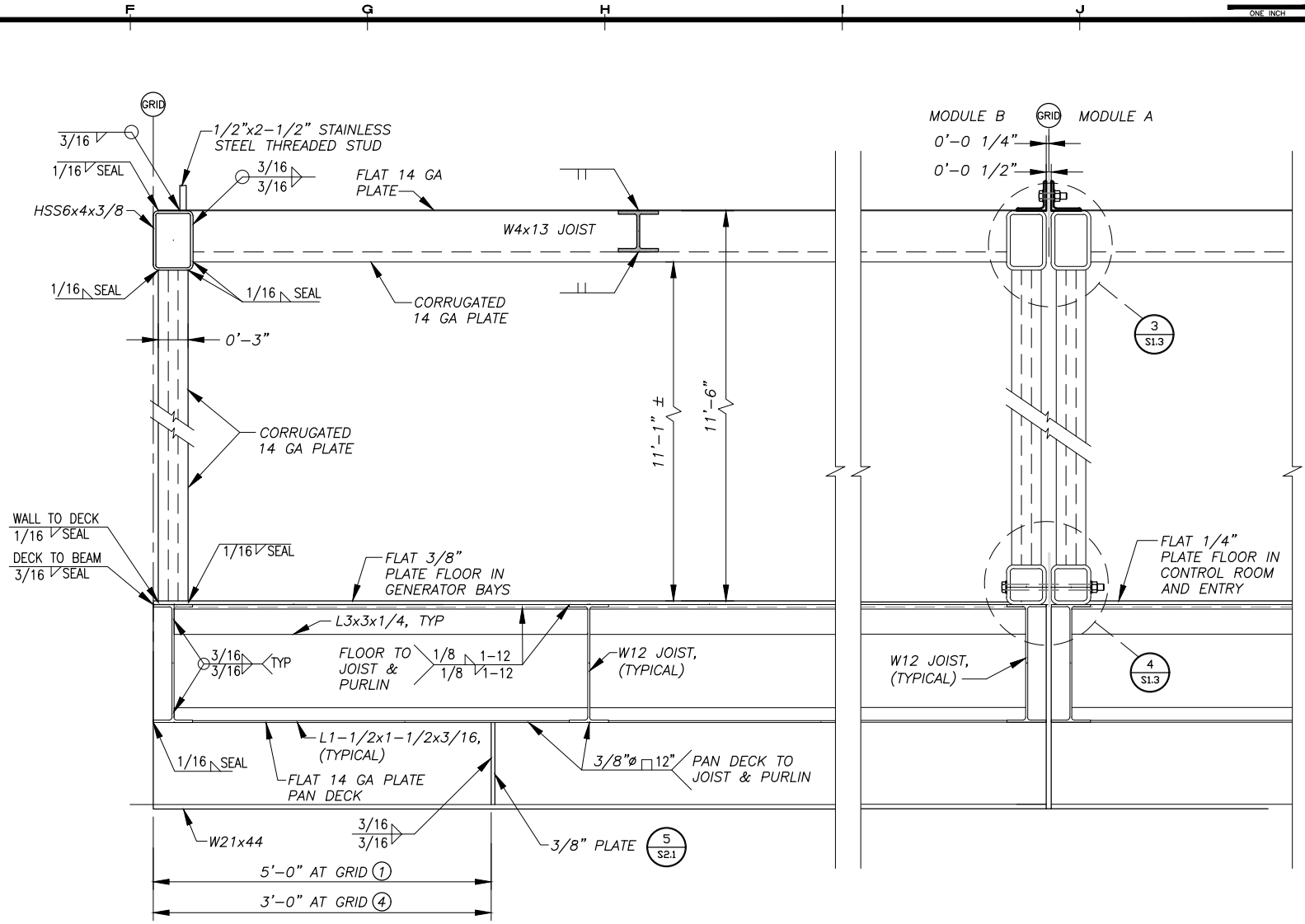
SHEET TITLE: POWER PLANT STRUCTURAL DETAIL  
 SHEET: S1.3  
 DRAWN BY: KK CHECKED BY: DGT  
 DATE: 06/10/16 AS SHOWN  
 JOB NUMBER: 13-039



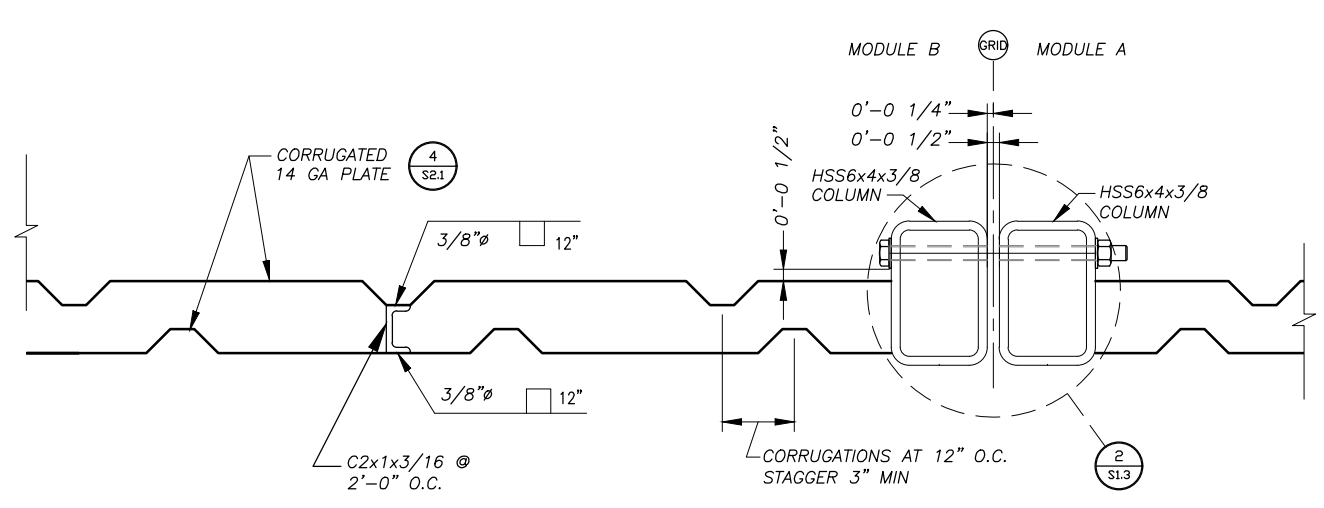
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 LAYOUT: S2.1 - SECTIONS  
 XREF: 13040-00\_B01-BK



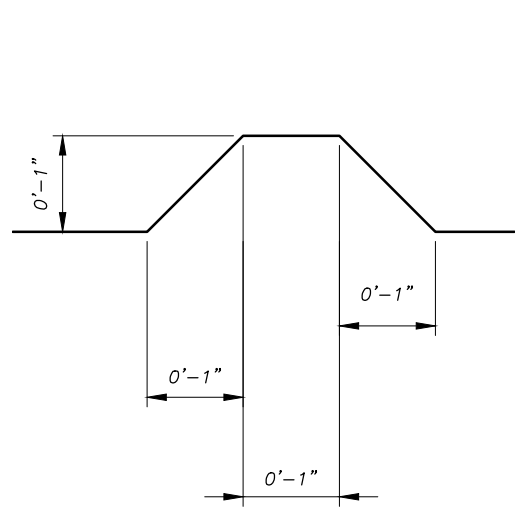
**1 TYPICAL BUILDING SECTION**  
 S2.1 SCALE: 1 1/2" = 1'-0"



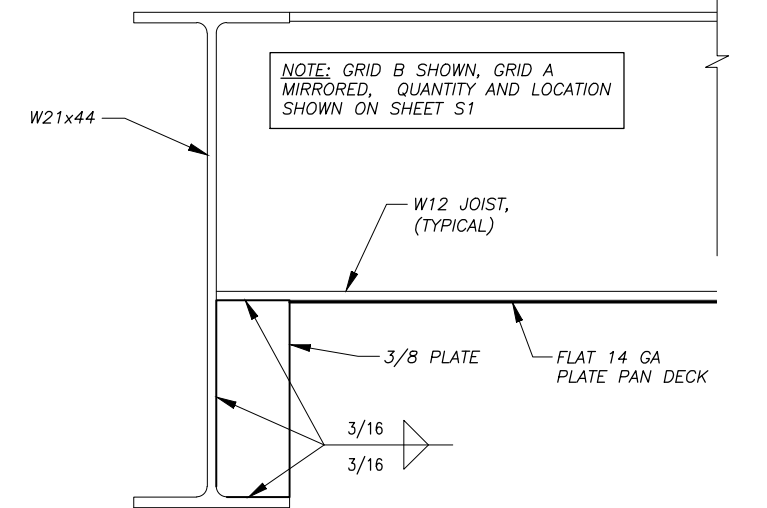
**3 TYPICAL BUILDING SECTION**  
 S2.1 SCALE: 1 1/2" = 1'-0"



**2 TYPICAL EXTERIOR WALL - PLAN VIEW**  
 S2.1 SCALE: 3' = 1'-0"

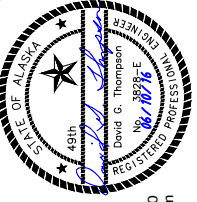


**4 TYPICAL CORRUGATION**  
 S2.1 SCALE: N.T.S.



**5 ANCHOR HOLE AND WEB STIFFENER DETAIL**  
 S2.1 SCALE: 3' = 1'-0"

REVISIONS	MARK	DATE	DESCRIPTION



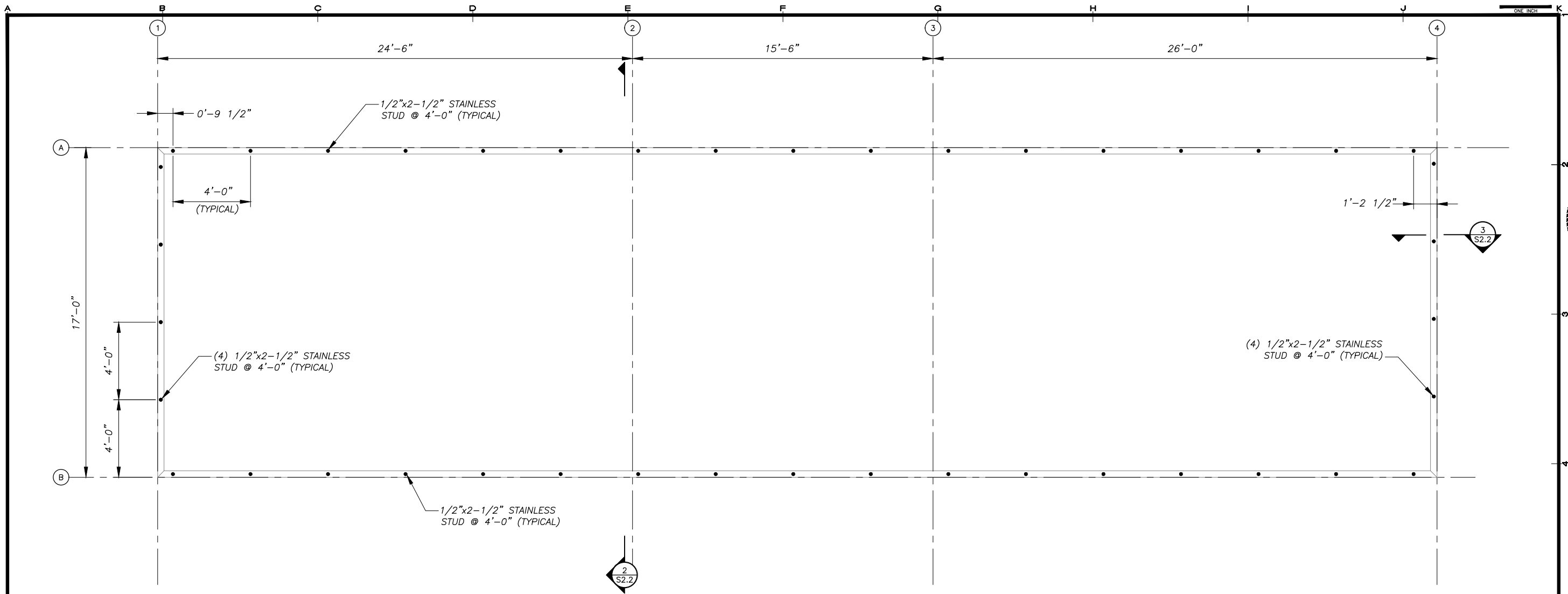
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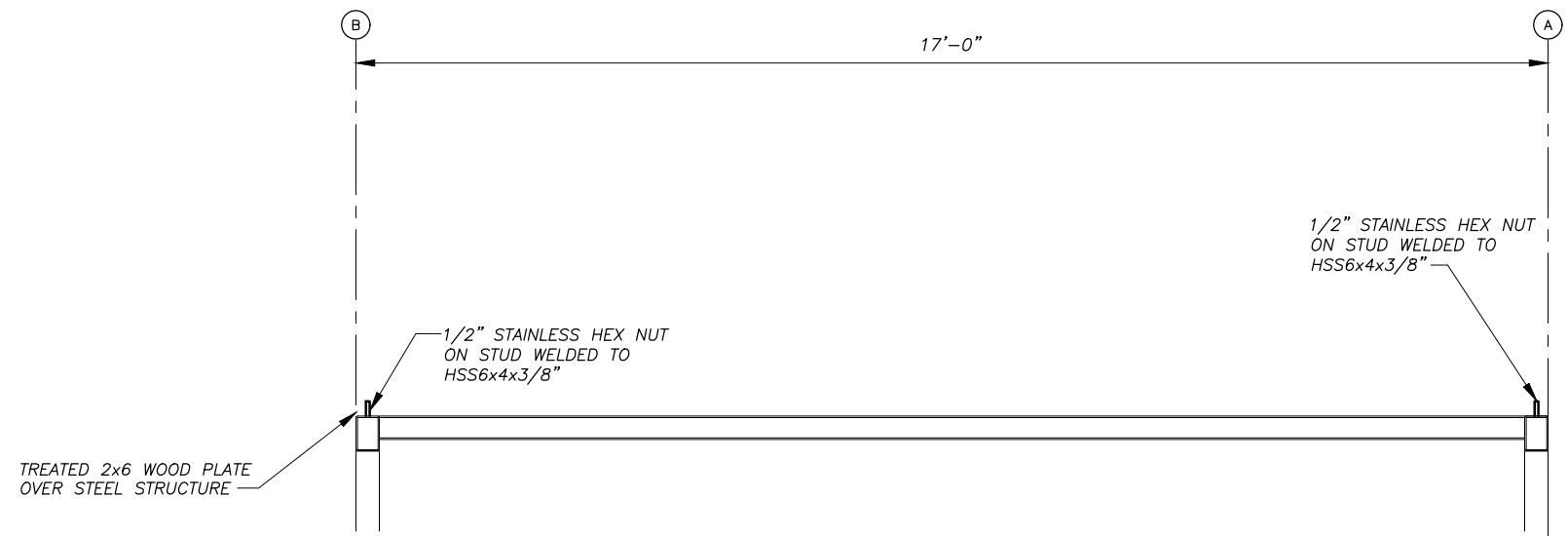
KAKE RURAL POWER SYSTEM UPGRADES  
**ALASKA ENERGY AUTHORITY**  
 KAKE, ALASKA

SHEET TITLE <b>POWER PLANT SECTIONS AND DETAILS</b>	
SHEET <b>S2.1</b>	
DRAWN BY: KK	CHECKED BY: DGT
DATE: 06/10/16	SCALE: AS SHOWN
JOB NUMBER: 13-039	

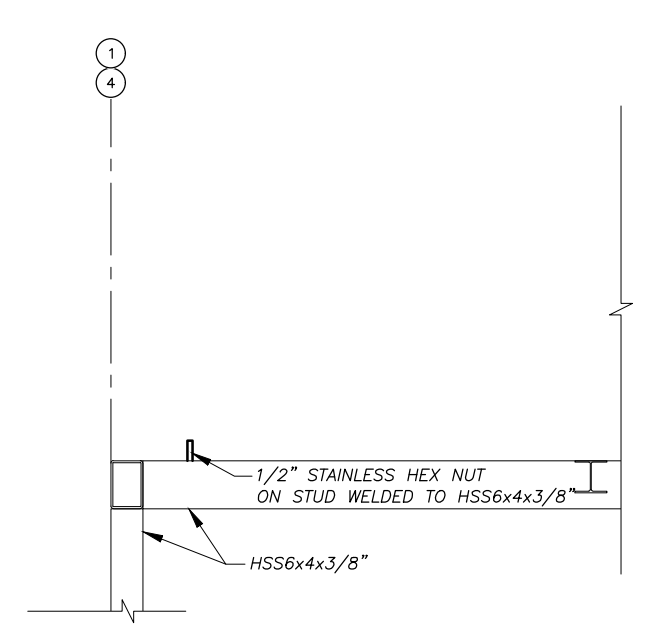
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 LAYOUT: S2.2 - ROOF FRAMING  
 XREF: 13040-00\_B01-BK



**1 ROOF BOLT PLAN**  
 SCALE: 3/8" = 1'-0"

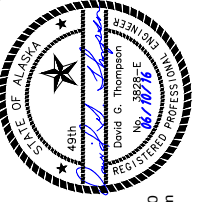


**2 ROOF TRUSS INSTALLATION**  
 SCALE: 3/4" = 1'-0"



**3 SECTION**  
 SCALE: 1" = 1'-0"

REVISIONS	MARK	DATE	DESCRIPTION



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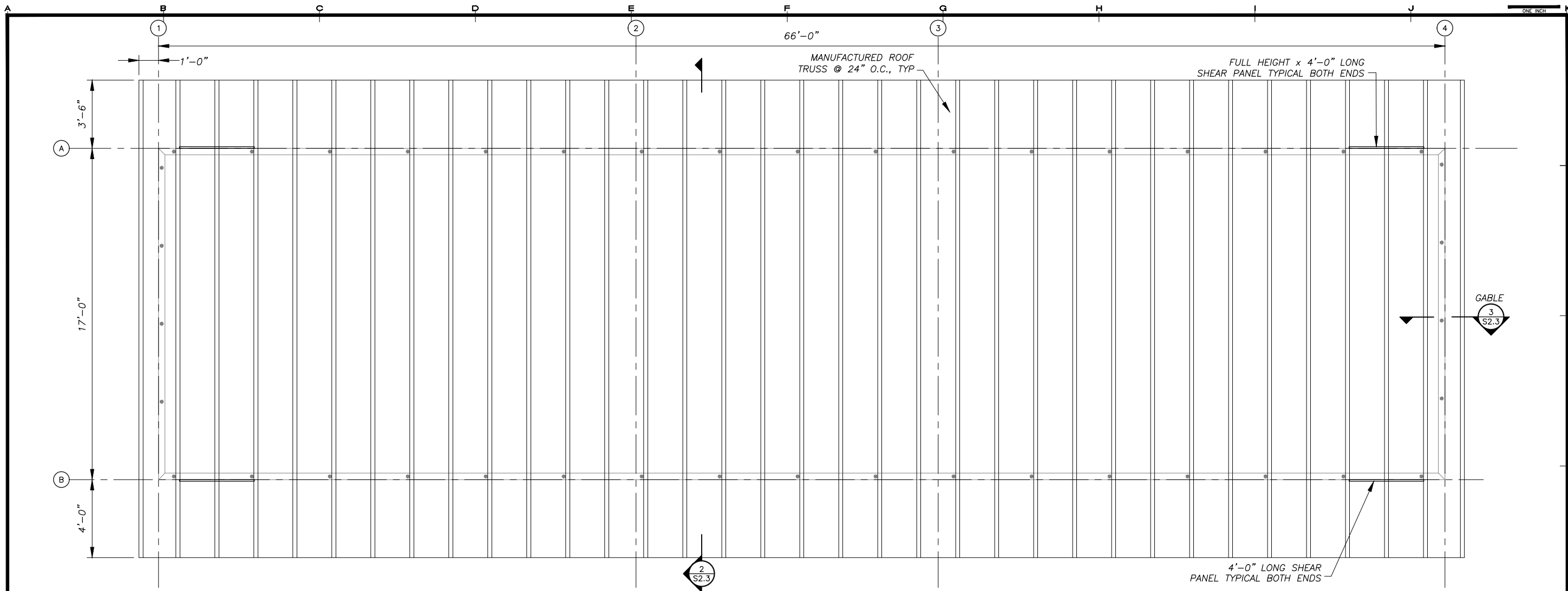
KAKE RURAL POWER SYSTEM UPGRADES  
**ALASKA ENERGY AUTHORITY**  
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SHEET TITLE  
**POWER PLANT ROOF BOLT PLAN AND DETAILS**

SHEET  
**S2.2**

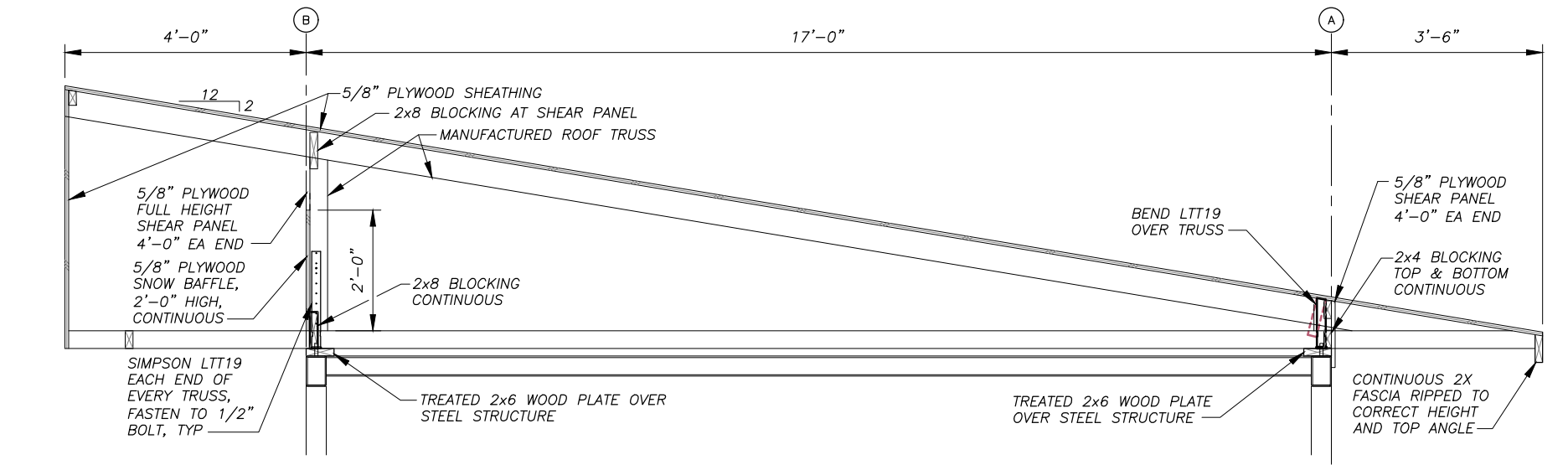
DRAWN BY: KK	CHECKED BY: DGT
DATE: 06/10/16	SCALE: AS SHOWN
JOB NUMBER: 13-039	

H:\Jobs\13-039 Kake Rural Power Systems Upgrade (AIDEA AEA-Term)\04 - CAD\Drawings Design\13-040\_00\_S2.1-S2.3-MODULE STRUCT. 1=1, 06-10-16 at 09:51 by jkk  
 LAYOUT: S2.3 - ROOF FRAMING  
 XREF: 13040-00\_B01-BK

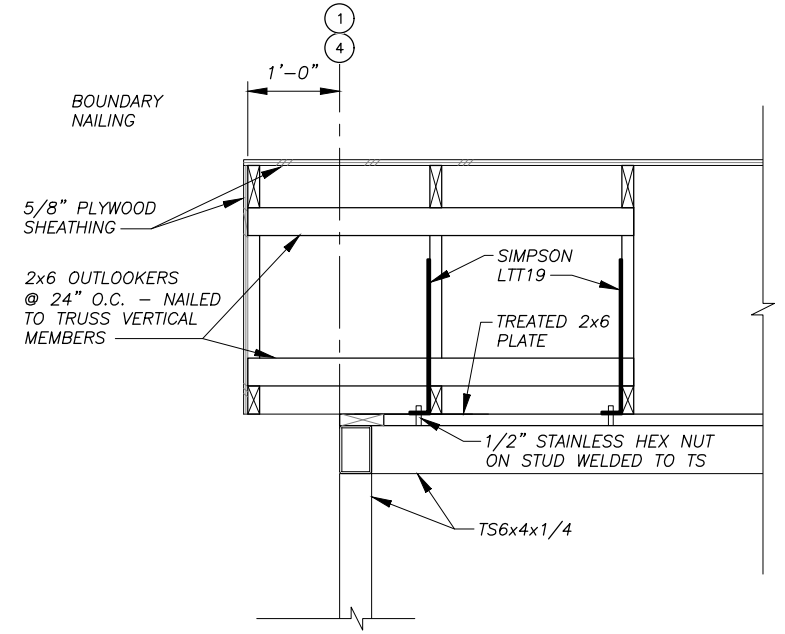


**1 ROOF FRAMING PLAN**  
 S2.3 SCALE: 3/8" = 1'-0"

**ROOF NOT IN CONTRACT**

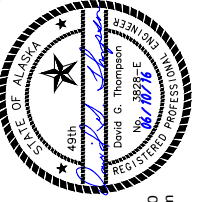


**2 ROOF TRUSS INSTALLATION**  
 S2.3 SCALE: 3/4" = 1'-0"

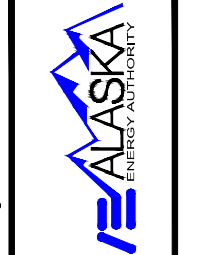


**3 TYPICAL GABLE**  
 S2.3 SCALE: 1" = 1'-0"

REVISIONS	MARK	DATE	DESCRIPTION



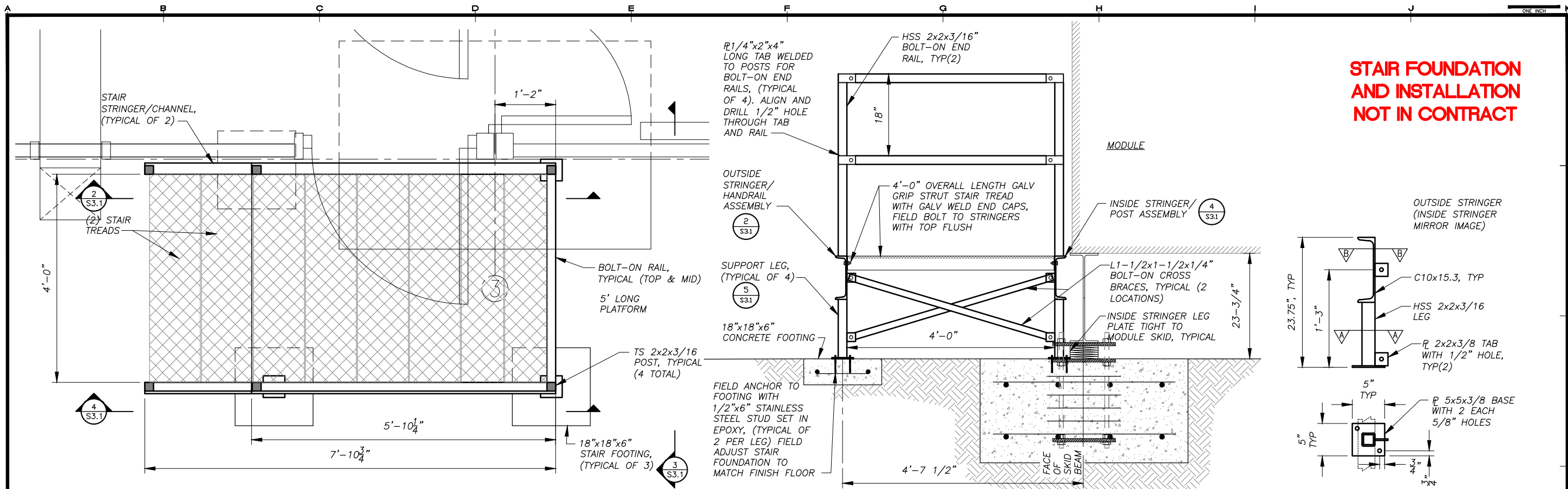
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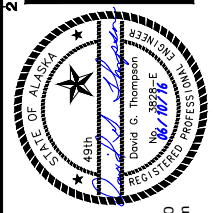
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POWER PLANT ROOF FRAMING PLAN AND DETAILS	
SHEET	
S2.3	
DRAWN BY:	CHECKED BY:
KK	DGT
DATE:	SCALE:
06/10/16	AS SHOWN
JOB NUMBER:	
13-039	

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 LAYOUT: S3.01 STAIRS  
 XREF: 13040-00\_B01-BK

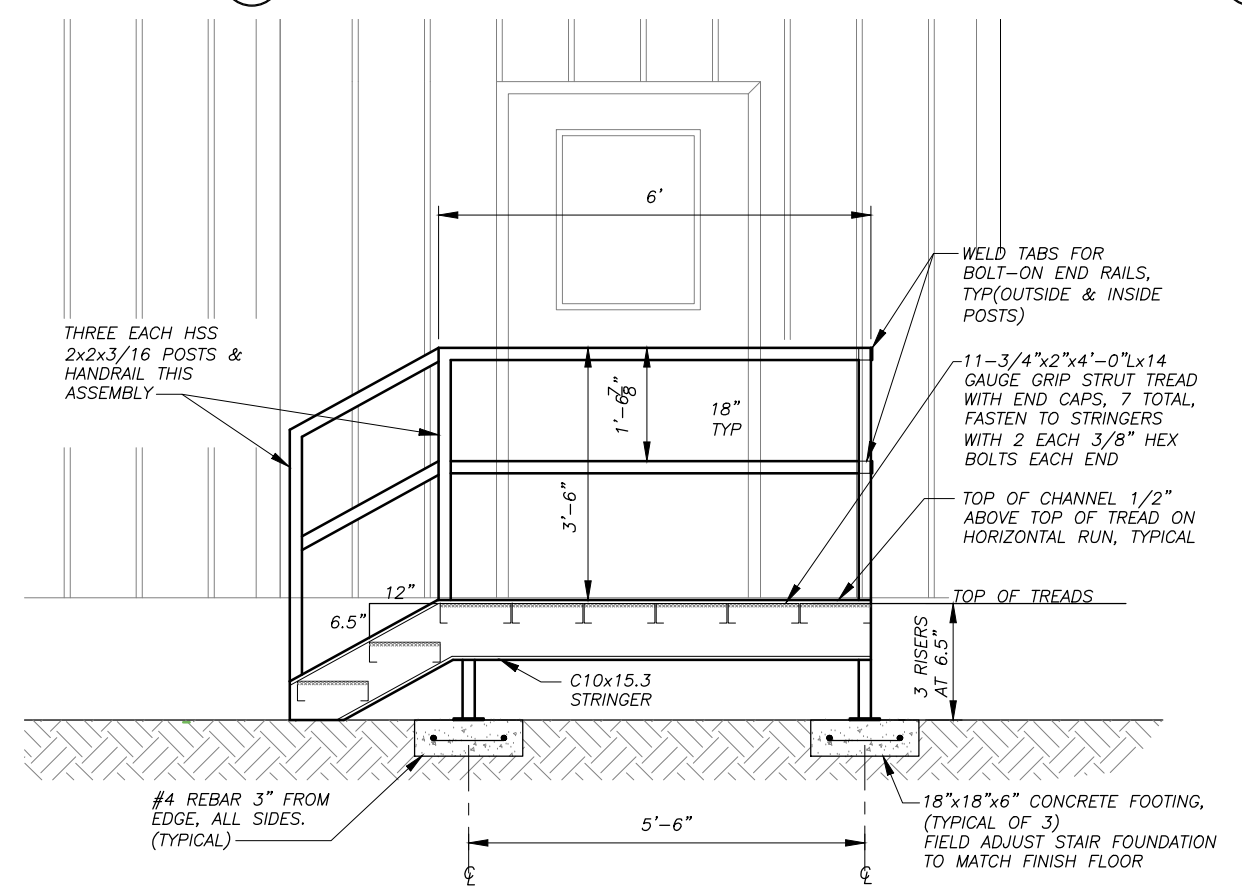
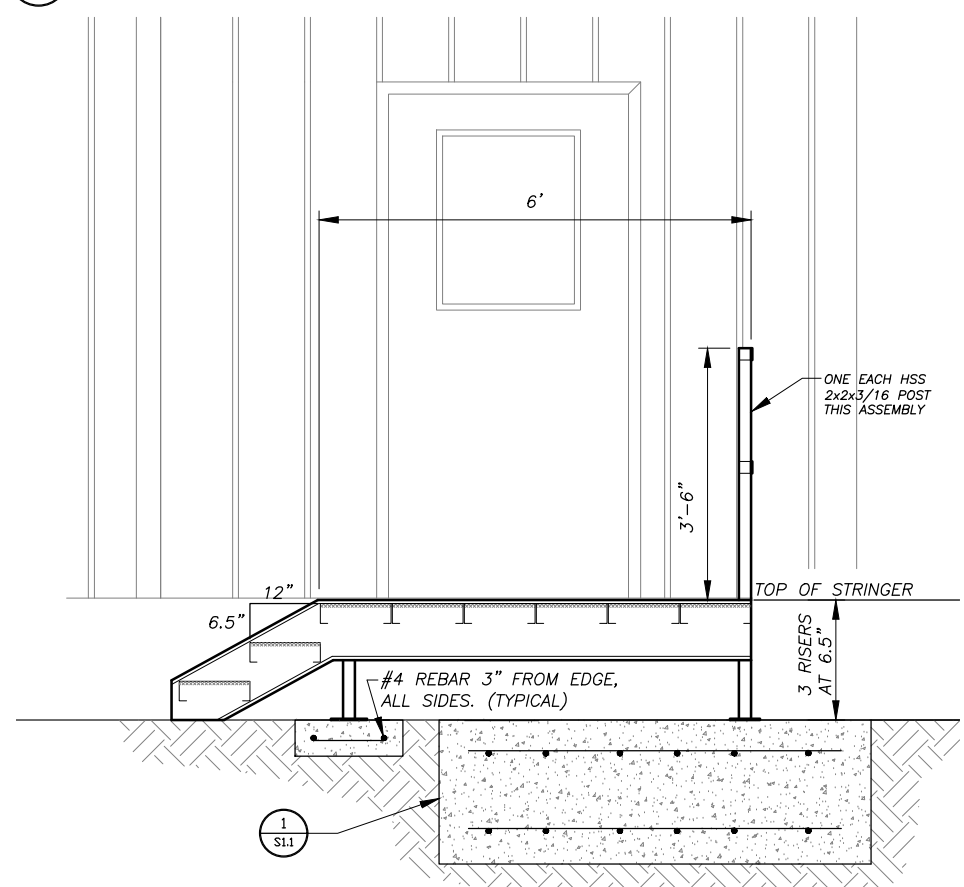


**STAIR FOUNDATION AND INSTALLATION NOT IN CONTRACT**

REVISIONS	DATE	DESCRIPTION
1	5/04/16	95% SUBMITTAL FOR AGENCY REVIEW



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- NOTES:**
- SHOP FABRICATE "KNOCK DOWN" WITH TWO COMPLETE STRINGER/HANDRAIL ASSEMBLIES AND 7 TOTAL 4'-0" LONG STAIR TREADS.
  - SEAL WELD ALL JOINTS. ROUND CORNERS AND GRIND SMOOTH IN PREPARATION FOR COATING. DRILL FOR FIELD BOLTED ASSEMBLY.
  - STAIR TREADS TO BE CUT FROM PRE-GALV GRIP-STRUT PLANKS. WELD PRE-GALV TWO-HOLE END PLATES TO BOTH ENDS OF EACH TREAD. WIRE BRUSH AND APPLY GALVANIZING SOLDER (HOT STICK) TO ALL WELD AREAS.
  - ALL STEEL SHAPES CARBON STEEL. AFTER FABRICATION SANDBLAST ENTIRE STRINGER/ RAIL ASSEMBLIES TO SSPC-SP-10 AND APPLY TWO COATS OF SELF PRIMING SHERWIN-WILLIAMS MACROPOXY 646, COLOR GRAY.
  - FURNISH TYPE 304 STAINLESS STEEL FASTENERS AS REQUIRED FOR FIELD ASSEMBLY.
  - DESIGN INDICATES KNOCK DOWN ASSEMBLY FOR SHIPPING PURPOSES. WHERE SHIPPING ALLOWS ASSEMBLY MAY HAVE WELDED JOINTS EXCEPT FOR GALV STAIR TREADS TO PAINTED FRAME.

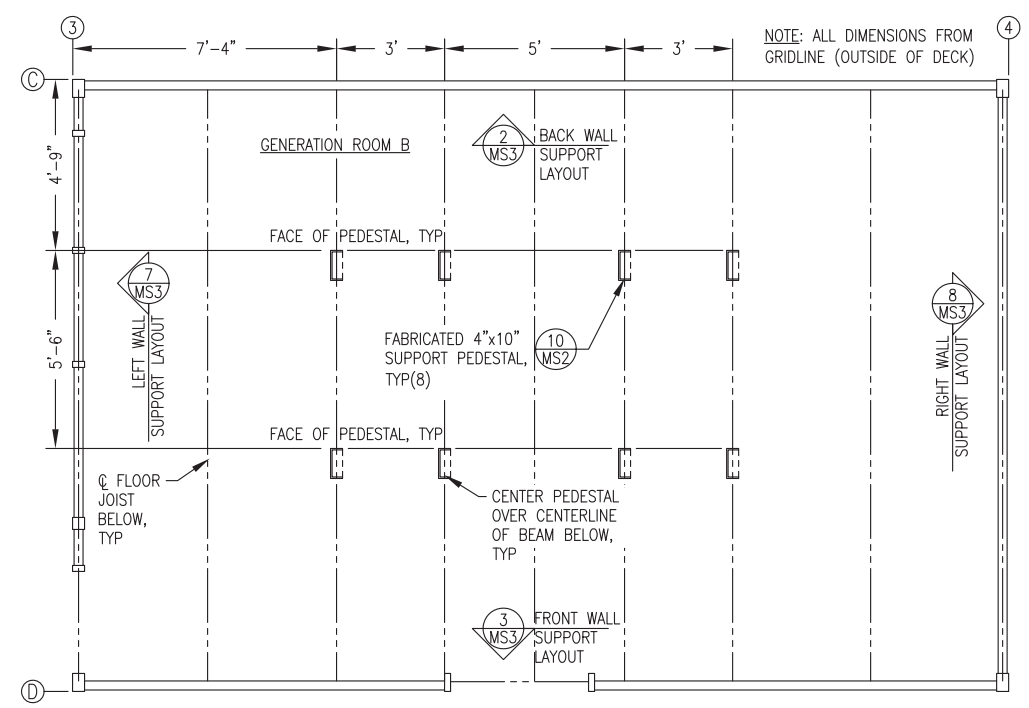
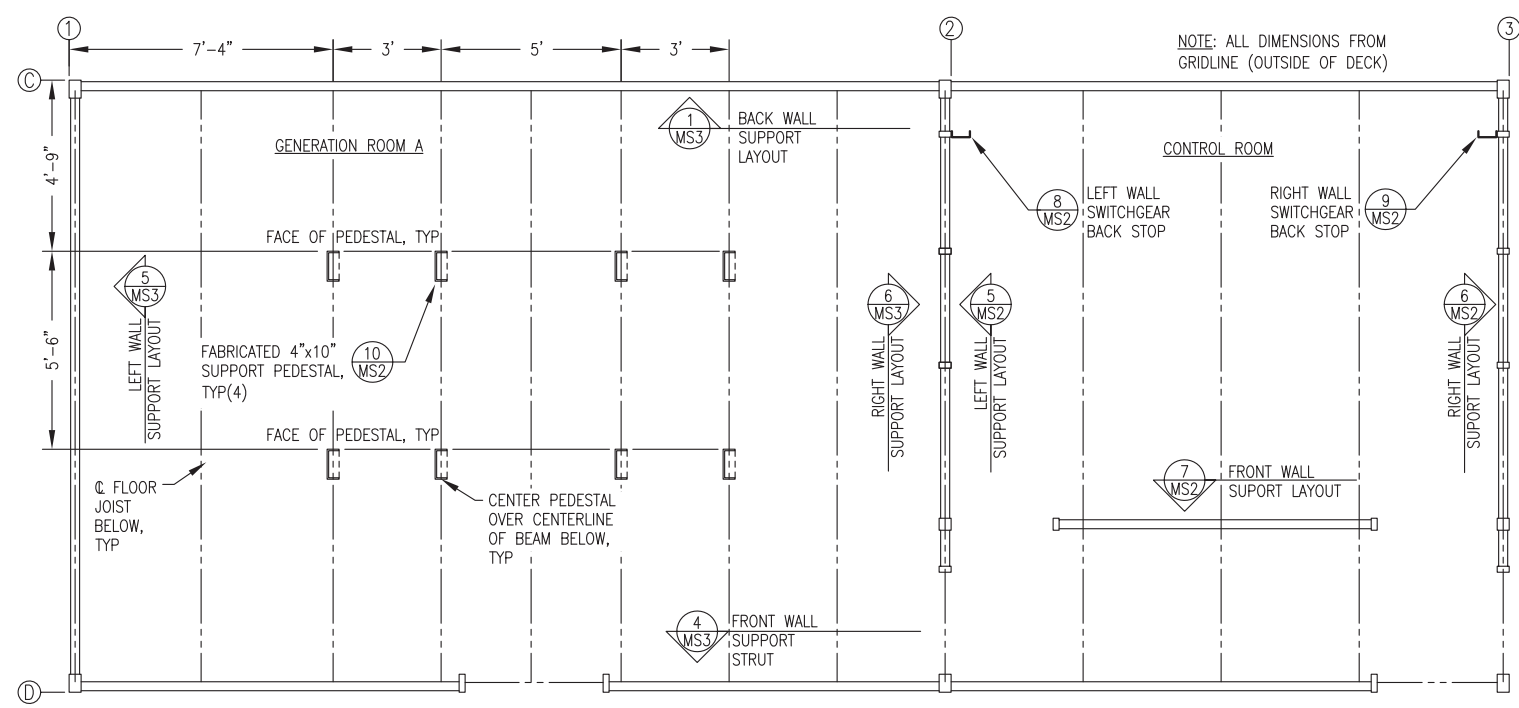
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 KAKE RURAL POWER SYSTEM UPGRADES  
 KAKE, ALASKA

SHEET TITLE: POWER PLANT ACCESS STAIRS  
 SHEET: S3.1  
 DRAWN BY: KK CHECKED BY: DGT  
 DATE: 06/10/16 SCALE: AS SHOWN  
 JOB NUMBER: 13-039

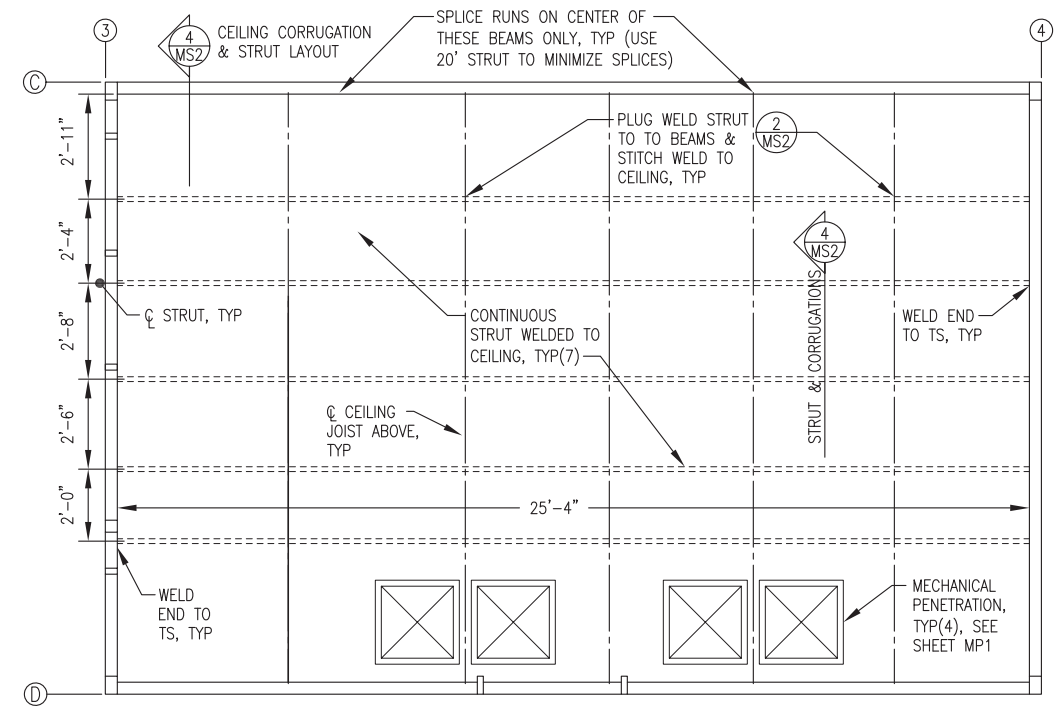
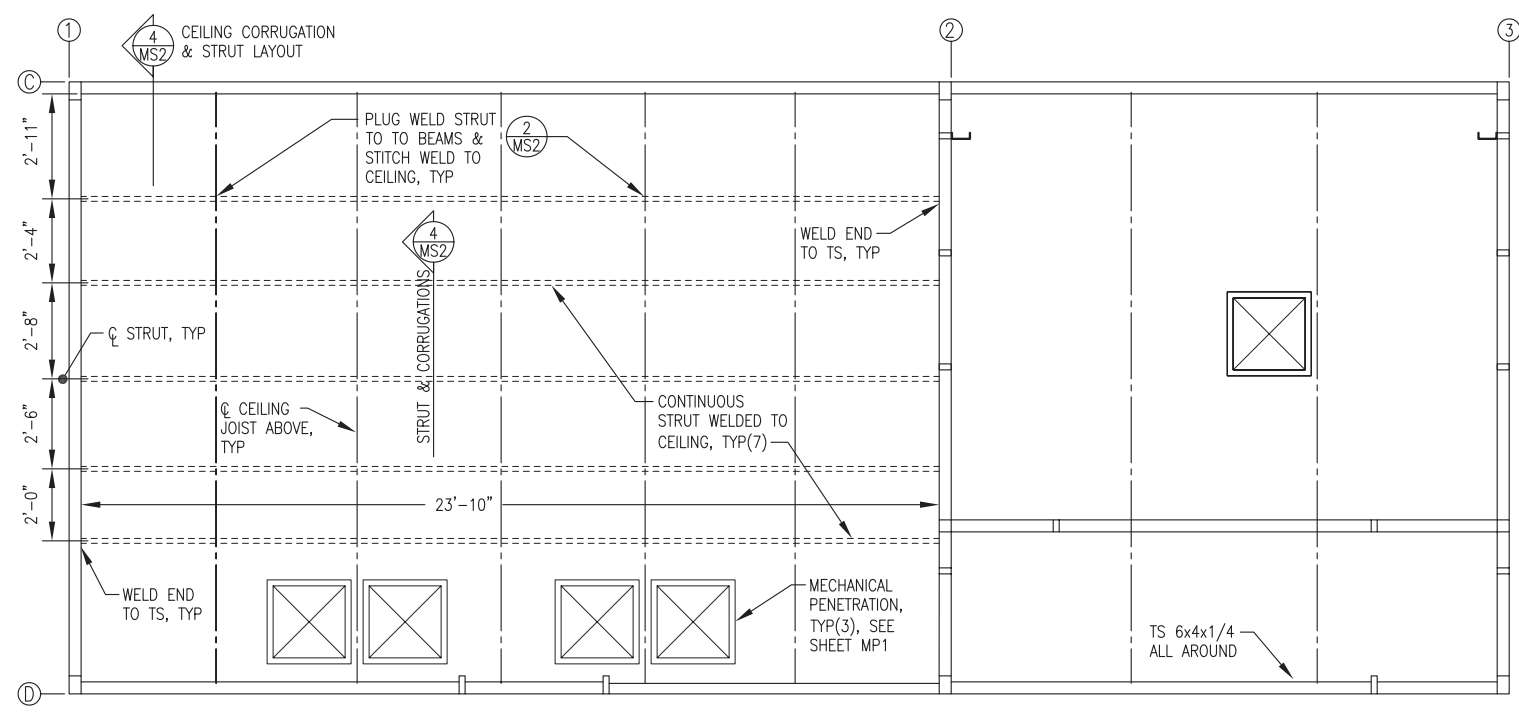
**GENERAL NOTES:**

1) ALL STRUT 12 GAUGE 1-5/8"x1-5/8" SOLID BACK PLAIN (UNFINISHED). B-LINE B22-PLN OR EQUAL. PURCHASE IN 20' LENGTHS TO MINIMIZE SPLICES.

2) INSTALL ALL SUPPORTS INDICATED AND GRIND SMOOTH PRIOR TO SANDBLASTING MODULE. SANDBLAST AND PAINT ALL SUPPORTS THIS SHEET EQUIVALENT TO MODULE INTERIOR. SEE SHEET A1.1 FOR PAINTING SPECIFICATIONS.



**1** MODULE MECHANICAL SUPPORT FLOOR PLANS  
MS1 3/8"=1'-0"



**2** MODULE MECHANICAL SUPPORT REFLECTED CEILING PLANS  
MS1 3/8"=1'-0"

MODULE A CEILING STRUT LAYOUT

MODULE B CEILING STRUT LAYOUT

ISSUED FOR CONSTRUCTION JUNE 2016

REVISIONS MARK	DATE	DESCRIPTION
1		
2		
3		
4		
5		



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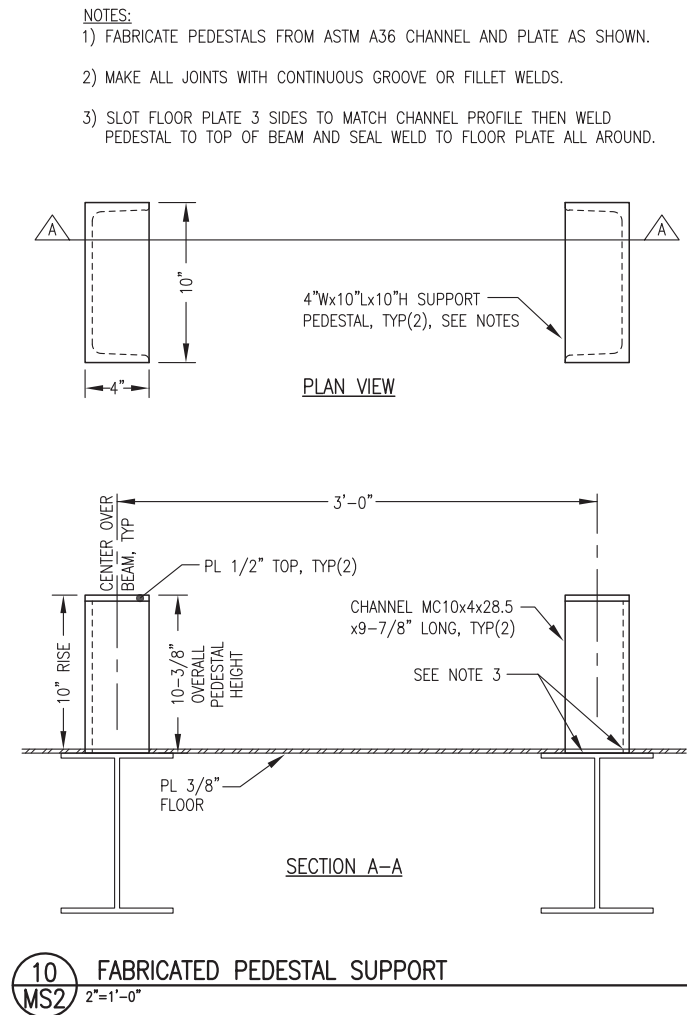
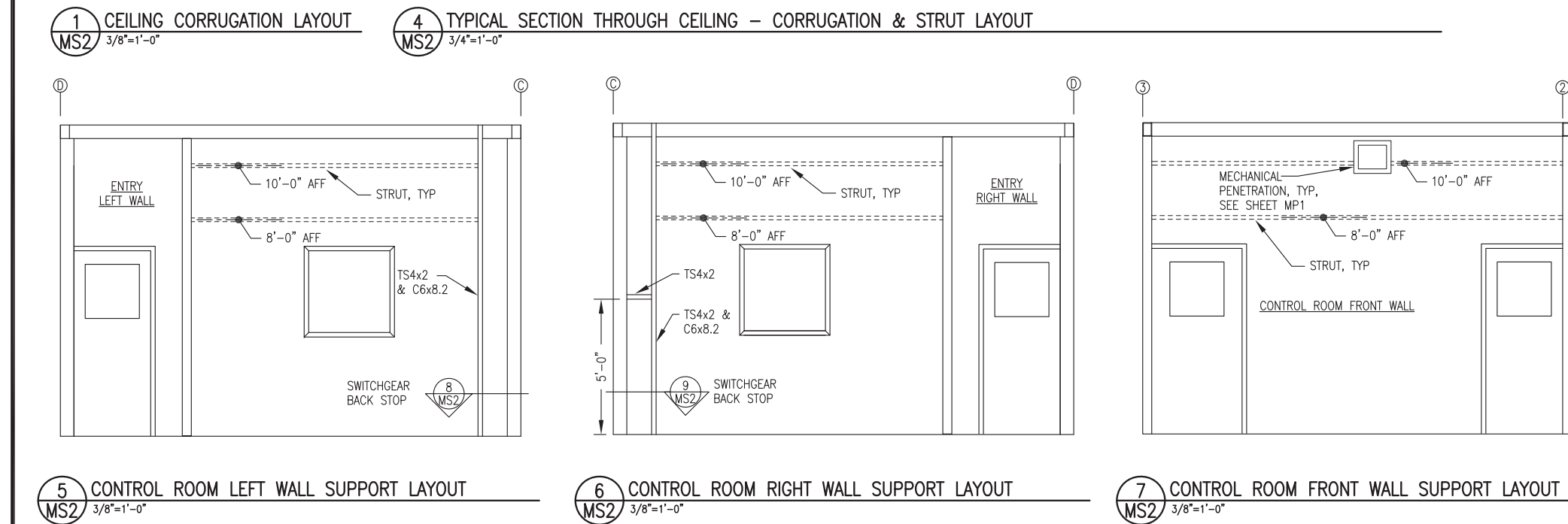
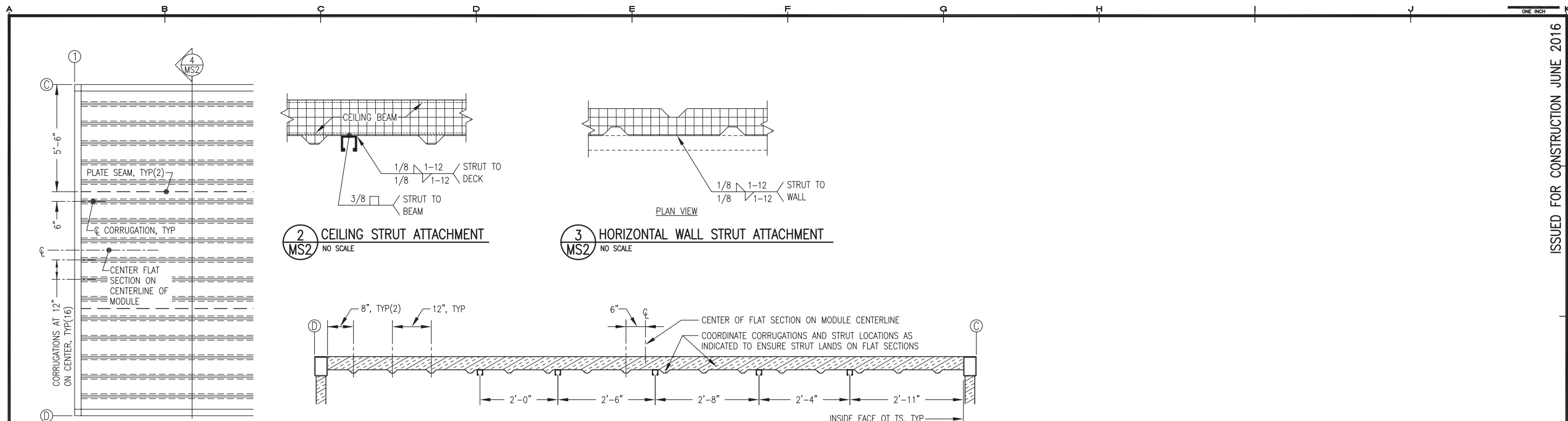
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SHEET TITLE	
MECHANICAL SUPPORT PLANS & DETAILS	
SHEET	
MS1	
DRAWN BY: WJP	CHECKED BY: BCG
DATE: 6/23/16	SCALE: AS SHOWN
JOB NUMBER:	



**GENERAL NOTES:**

- DETAILS 5, 6, & 7 THIS SHEET ARE INTERIOR ELEVATIONS.
- ALL STRUT LOCATION DIMENSIONS ARE CENTERLINE HEIGHT ABOVE FINISHED FLOOR (AFF).
- ALL STRUT 12 GAUGE 1-5/8"x1-5/8" SOLID BACK PLAIN (UNFINISHED), B-LINE B22-PLN OR EQUAL. PURCHASE IN 20' LENGTHS TO MINIMIZE SPLICES.
- INSTALL ALL SUPPORTS INDICATED AND GRIND SMOOTH PRIOR TO SANDBLASTING MODULE. SANDBLAST AND PAINT ALL SUPPORTS THIS SHEET EQUIVALENT TO MODULE INTERIOR. SEE SHEET A1.1 FOR PAINTING SPECIFICATIONS.
- DEE DETAIL 3/MS2 FOR STRUT ATTACHMENT TO WALL.

ISSUED FOR CONSTRUCTION JUNE 2016

REVISIONS	MARK	DATE	DESCRIPTION
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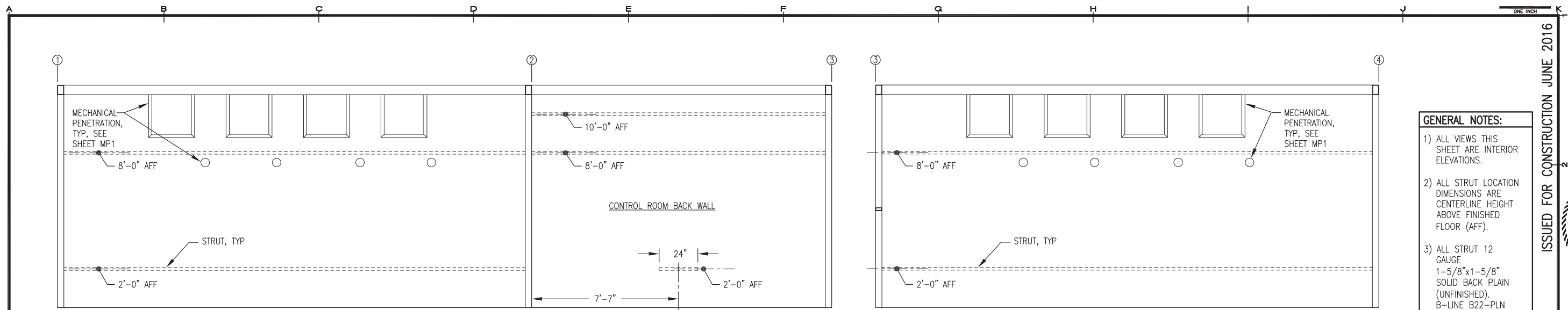
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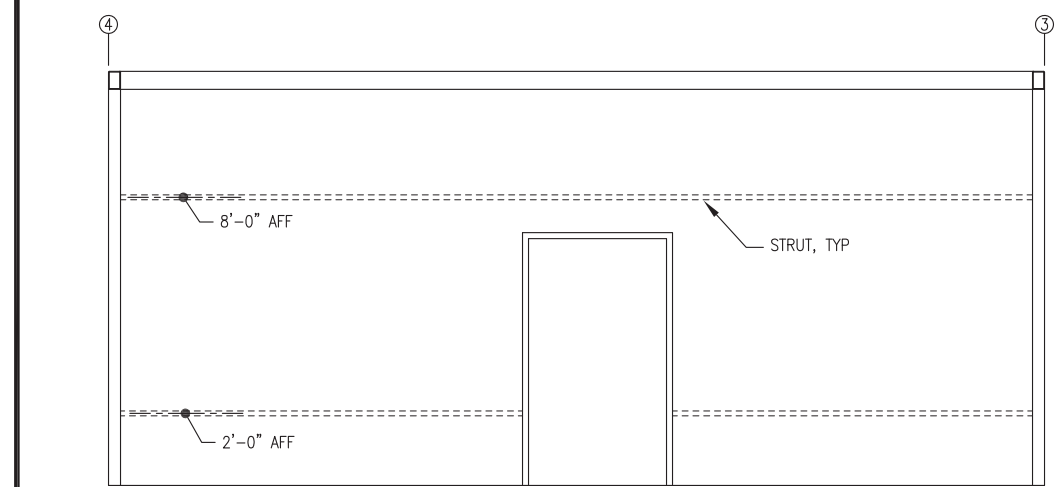
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SHEET TITLE <b>MECHANICAL SUPPORT DETAILS</b>	
SHEET <b>MS2</b>	
DRAWN BY WJP	CHECKED BY BCG
DATE 6/23/16	SCALE AS SHOWN
JOB NUMBER	

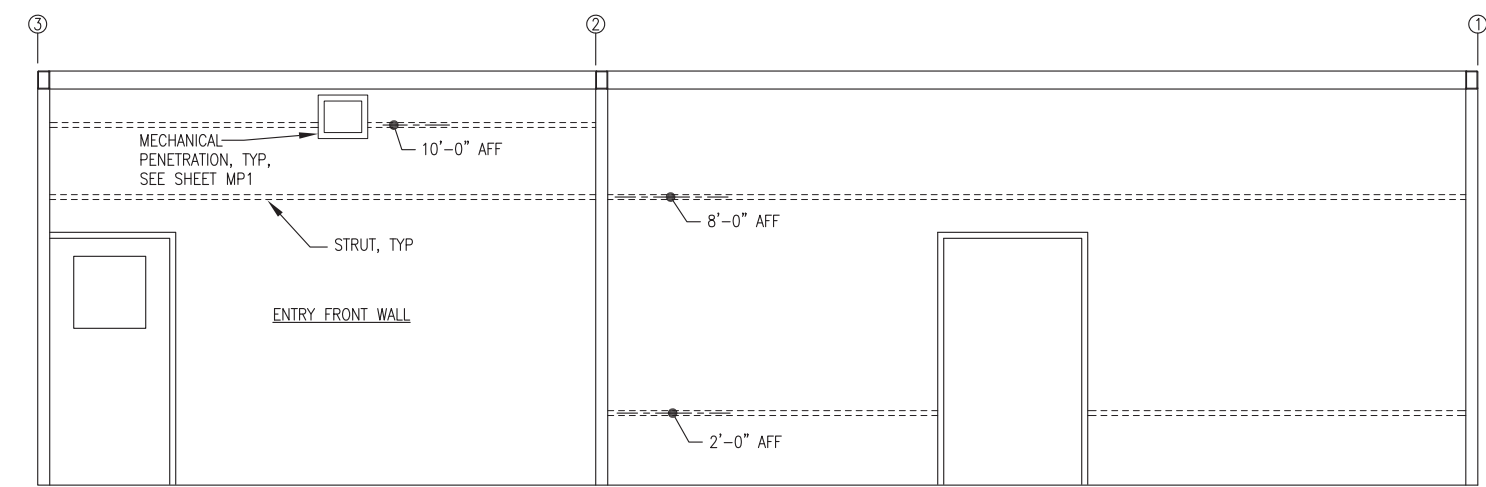


**1** MODULE A BACK WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"

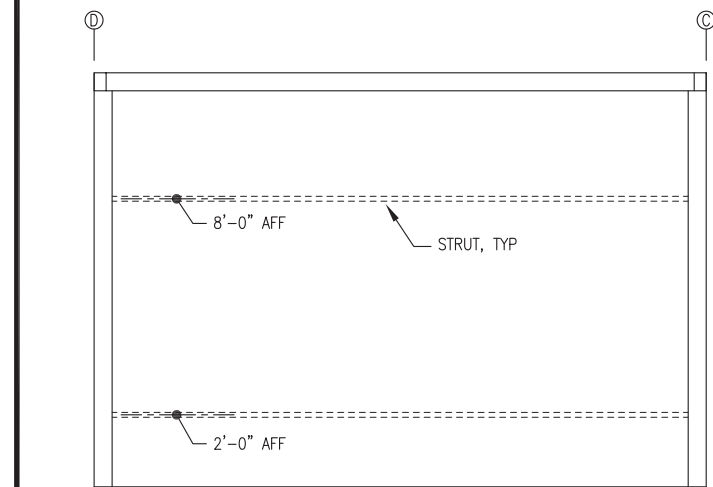
**2** MODULE B BACK WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"



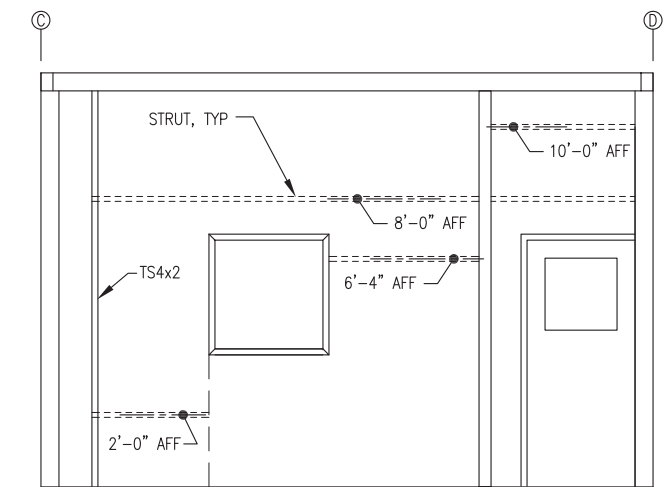
**3** MODULE B FRONT WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"



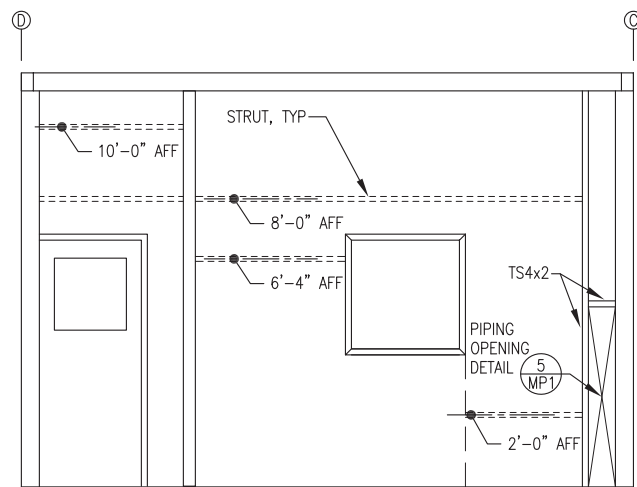
**4** MODULE A FRONT WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"



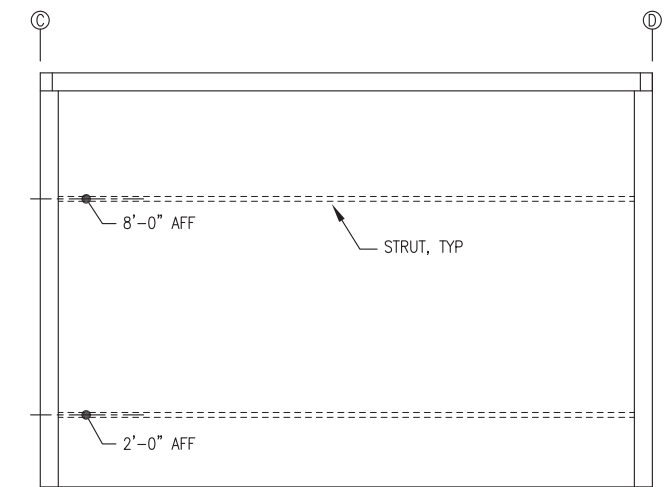
**5** GENERATION ROOM A LEFT WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"



**6** GENERATION ROOM A RIGHT WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"



**7** MODULE B LEFT WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"



**8** MODULE B RIGHT WALL SUPPORT LAYOUT  
MS3 3/8"=1'-0"

- GENERAL NOTES:**
- 1) ALL VIEWS THIS SHEET ARE INTERIOR ELEVATIONS.
  - 2) ALL STRUT LOCATION DIMENSIONS ARE CENTERLINE HEIGHT ABOVE FINISHED FLOOR (AFF).
  - 3) ALL STRUT 12 GAUGE 1-5/8"x1-5/8" SOLID BACK PLAIN (UNFINISHED). B-LINE B22-PLN OR EQUAL. PURCHASE IN 20' LENGTHS TO MINIMIZE SPLICES.
  - 4) INSTALL ALL SUPPORTS INDICATED AND GRIND SMOOTH PRIOR TO SANDBLASTING MODULE. SANDBLAST AND PAINT ALL SUPPORTS THIS SHEET EQUIVALENT TO MODULE INTERIOR. SEE SHEET A1.1 FOR PAINTING SPECIFICATIONS.
  - 5) SEE DETAIL 3/MS2 FOR STRUT ATTACHMENT TO WALL.

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REVISIONS	MARK	DATE	DESCRIPTION
1			
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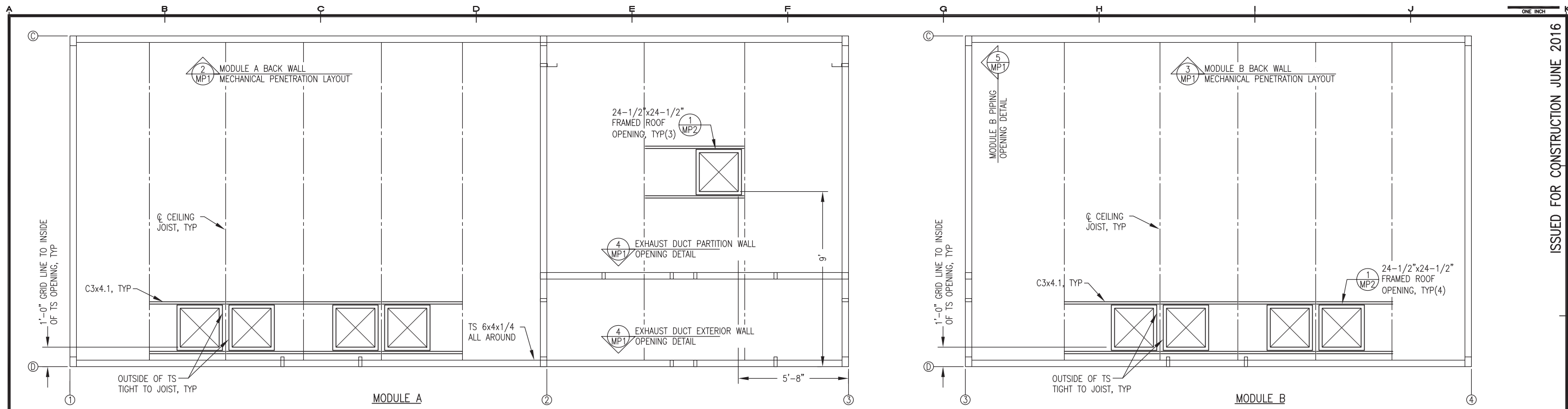


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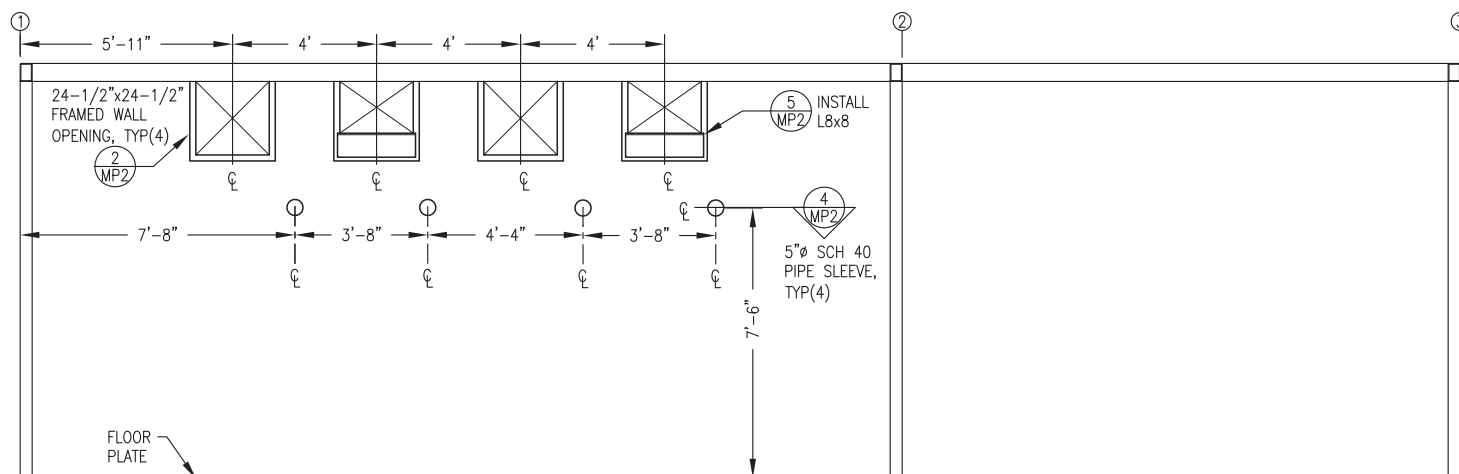


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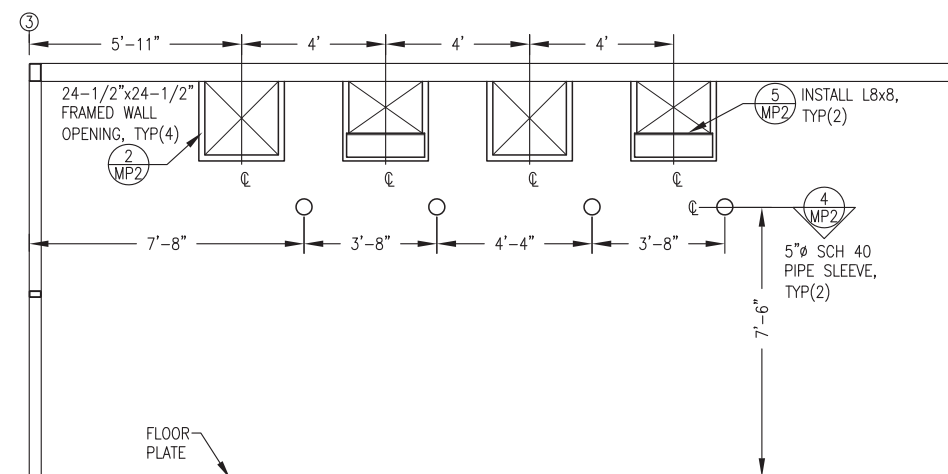
SHEET TITLE MECHANICAL SUPPORT DETAILS	
SHEET MS3	
DRAWN BY WJP	CHECKED BY BCG
DATE 6/23/16	SCALE AS SHOWN
JOB NUMBER	



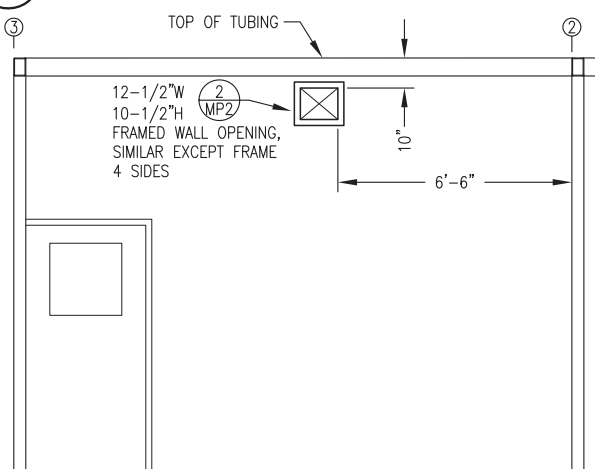
**1** MODULE MECHANICAL PENETRATION PLANS  
 3/8"=1'-0"



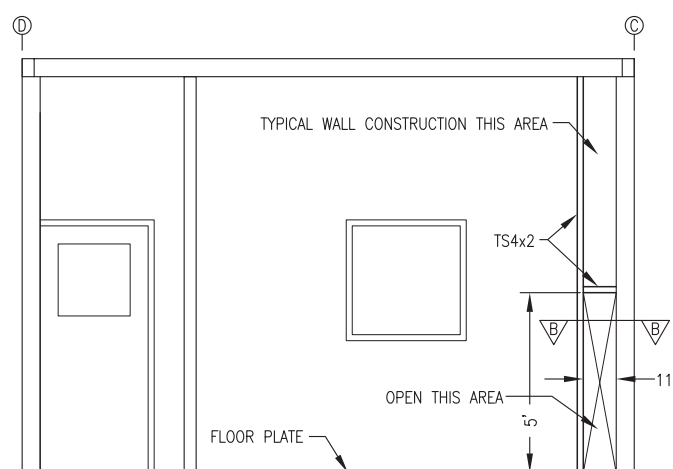
**2** MODULE A BACK WALL MECHANICAL PENETRATION LAYOUT - INTERIOR ELEVATION AT GRIDLINE C  
 3/8"=1'-0"



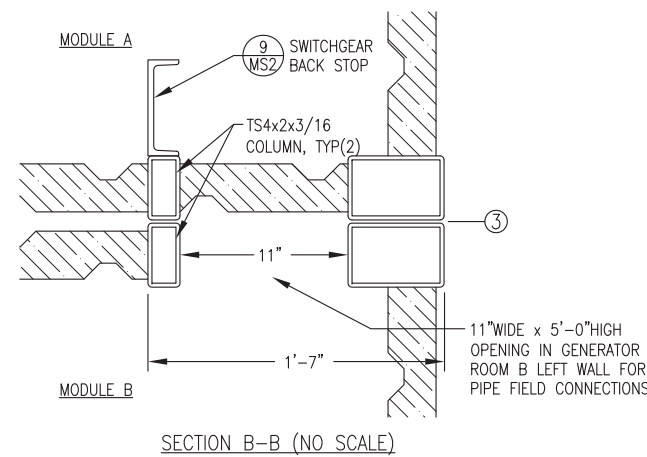
**3** MODULE B BACK WALL MECHANICAL PENETRATION LAYOUT - INTERIOR ELEVATION AT GRIDLINE C  
 3/8"=1'-0"



**4** EXHAUST DUCT WALL OPENING DETAIL  
 3/8"=1'-0"



**5** MODULE B PIPING OPENING DETAIL  
 3/8"=1'-0"



SECTION B-B (NO SCALE)

REVISIONS	MARK	DATE	DESCRIPTION
1			
2			
3			
4			
5			



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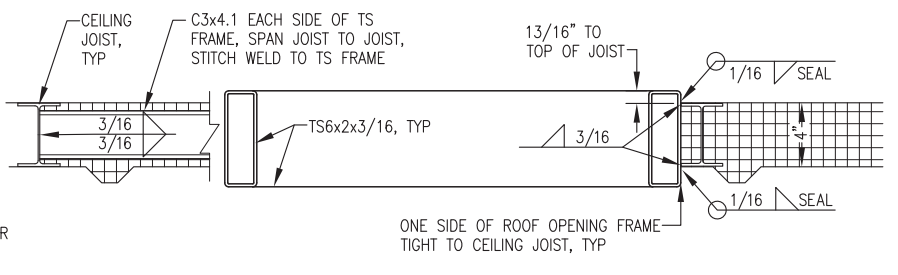
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**MECHANICAL PENETRATIONS PLANS & DETAILS**

SHEET  
**MP1**

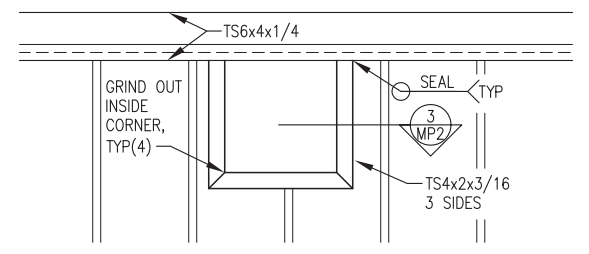
DRAWN BY: WJP  
 CHECKED BY: BCG  
 DATE: 6/23/16  
 SCALE: AS SHOWN  
 JOB NUMBER:



- NOTES:
- 1) FABRICATE FRAMED OPENING WITH MITERED CORNERS AND FULL PENETRATION GROOVE WELDS.
  - 2) FABRICATE TO FINISHED INSIDE (CLEAR) DIMENSIONS INDICATED ON PLANS.
  - 3) GRIND OUT INSIDE OF MITERED CORNERS TO PROVIDE FULL CLEAR OPENING.

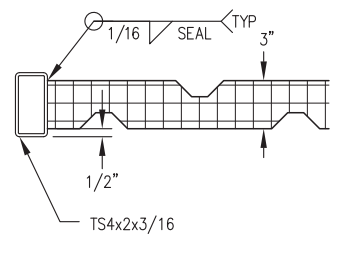


1 TYPICAL ROOF OPENING DETAIL  
MP2 2"=1'-0"

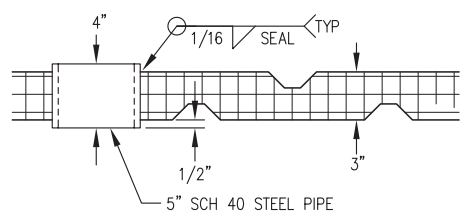


2 TYPICAL WALL OPENING - ELEVATION  
MP2 1"=1'-0"

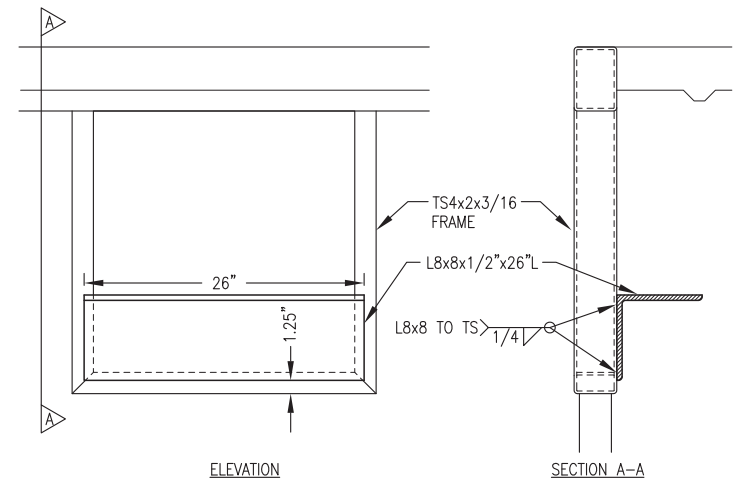
- NOTES:
- 1) FABRICATE FRAMED OPENING WITH MITERED CORNERS AND FULL PENETRATION GROOVE WELDS.
  - 2) FABRICATE TO FINISHED INSIDE (CLEAR) DIMENSIONS INDICATED ON ELEVATIONS.
  - 3) GRIND OUT INSIDE OF MITERED CORNERS TO PROVIDE FULL CLEAR OPENING.



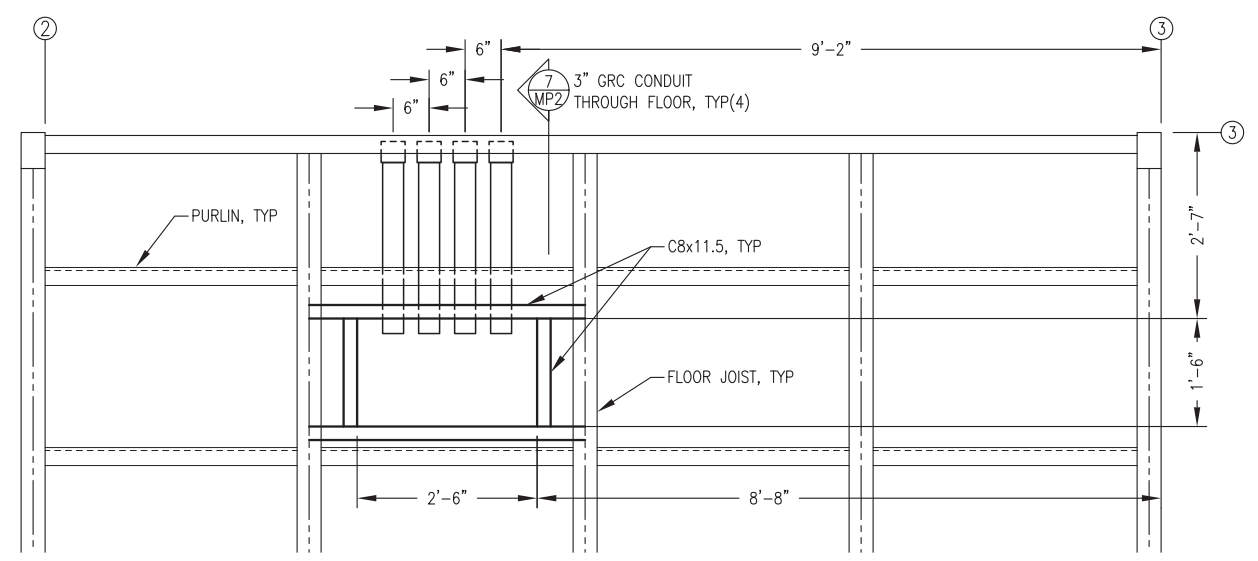
3 TYPICAL SECTION THROUGH WALL OPENING  
MP2 2"=1'-0"



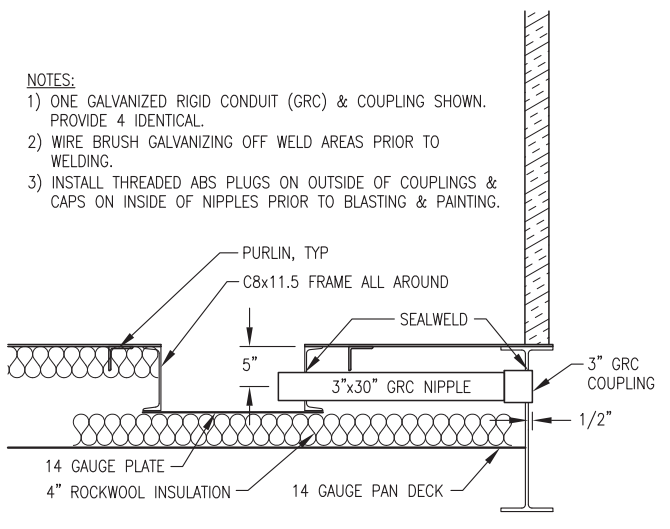
4 TYPICAL PIPE SLEEVE PENETRATION  
MP2 2"=1'-0"



5 EXHAUST SUPPORT AT FRAMED OPENING  
MP2 NO SCALE



6 FLOOR PENETRATION SLEEVE LOCATIONS  
MP2 3/4"=1'-0"



- NOTES:
- 1) ONE GALVANIZED RIGID CONDUIT (GRC) & COUPLING SHOWN. PROVIDE 4 IDENTICAL.
  - 2) WIRE BRUSH GALVANIZING OFF WELD AREAS PRIOR TO WELDING.
  - 3) INSTALL THREADED ABS PLUGS ON OUTSIDE OF COUPLINGS & CAPS ON INSIDE OF NIPPLES PRIOR TO BLASTING & PAINTING.

7 FLOOR SLEEVE INSTALLATION  
MP2 1"=1'-0"

ISSUED FOR CONSTRUCTION JUNE 2016

REVISIONS	DATE	DESCRIPTION
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ANC, AK 99511

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(907) 349-0100



KAKE RPSU PROJECT  
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SHEET TITLE	
MECHANICAL PENETRATIONS DETAILS	
SHEET	
MP2	
DRAWN BY: WJP	CHECKED BY: BCG
DATE: 6/23/16	SCALE: AS SHOWN
JOB NUMBER:	