



# CONSTRUCTION DRAWINGS

# SANTA CLARA UNIVERSITY RADIANT HOUSE



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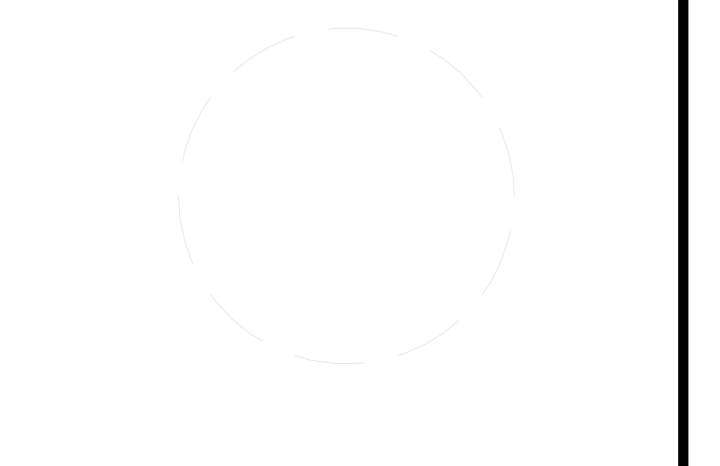
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**S.O.S. STEEL CO., INC.**  
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 U.S. DEPARTMENT OF ENERGY  
**SOLAR DECATHLON**

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**COVER SHEET**

**G-000**

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### GENERAL SHEET NOTES

1. ALL CONSTRUCTION, MATERIALS AND INSTALLATIONS SHALL CONFORM TO THE 2013 SOLAR DECATHLON BUILDING CODE AND WITH ALL APPLICABLE MUNICIPAL, STATE AND FEDERAL REGULATIONS
2. ANY OMISSIONS OR CONFLICTS WITHIN THE DRAWINGS, NOTES OR DETAILS SHALL BE REPORTED TO THE ENGINEERS BEFORE PROCEEDING WITH WORK
3. UNLESS NOTED OTHERWISE PLAN CUT LINE IS TAKEN AT 4'-0" ABOVE FINISHED FLOOR
4. ALL ABBREVIATIONS USED ARE REFERENCED FROM THE UNIFORM DRAWING SYSTEM TERMS AND ABBREVIATIONS MODULE PUBLISHED IN THE NATIONAL CAD STANDARD VERSION 4
5. NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER REPEATED OR NOT. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN



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**GENERAL SHEET NOTES**

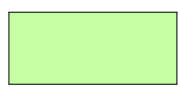






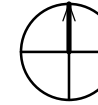
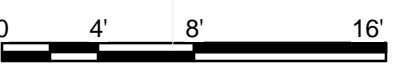
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3. EXISTING STRUCTURAL GRID LINES ARE PARALLEL IN N-S AND E-W DIRECTIONS
4. UNLESS NOTED OTHERWISE PLAN CUT LINE IS TAKEN AT 4'-0" ABOVE FINISHED FLOOR
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**ABBREVIATIONS**

- ADJ. ADJUSTABLE
- ALUM. ALUMINUM
- BLDG. BUILDING
- BOS. BOTTOM OF STEEL
- CTR. CENTER
- DN. DOWN
- DR. DOOR
- DS. DOWNSPOUT
- EL. ELEVATION
- EXT. EXTERIOR
- FLASH. FLASHING
- FT. FOOT OR FEET
- GALV. GALVANIZED
- GND. GROUND
- GYP. GYPSUM
- HT. HEIGHT
- INSUL. INSULATION
- INT. INTERIOR
- MFR. MANUFACTURER
- MECH. MECHANICAL
- MTL. METAL
- MTD. MOUNTED
- NTS. NOT TO SCALE
- PLYWD. PLYWOOD
- PNL. PANEL
- RD. ROOF DRAIN
- SCHED. SCHEDULE
- SECT. SECTION
- STOR. STORAGE
- TYP. TYPICAL
- U-PVS. UNPLASTICIZED-POLYVINYL CHLORIDE
- WD. WOOD
- WP. WATER PROOF

**GENERAL SYMBOLS**

-  CONDITIONED SPACE
-  UNCONDITIONED SPACE
-  ARCHITECTURAL FOOTPRINT
-  FIRE EXTINGUISHER
-  SMOKE DETECTOR
-  EGRESS PLAN
-  MEETING ZONE
-  NORTH ARROW
-  GRAPHIC SCALE  
1/8" to 1" (EXAMPLE)

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GENERAL NOTES AND SYMBOLS  
**G-002**





**GENERAL SHEET NOTES**

1. THE FINISHED AREA OF THE HOUSE HAS BEEN CALCULATED IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARD FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS 2765-2003
2. SQUARE FOOTAGE CALCULATIONS WERE MADE BASED ON PLAN DIMENSIONS ONLY AND MAY VARY FROM THE FINISHED SQUARE FOOTAGE OF THE HOUSE AS BUILT
3. ALL MEASUREMENTS ARE ROUNDED TO THE NEAREST WHOLE SQUARE FOOT IN ACCORDANCE WITH ANSI Z765-2003



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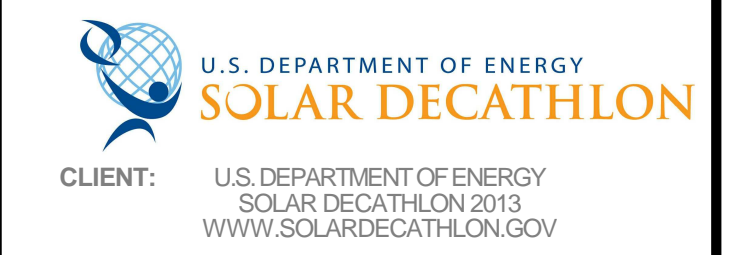
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**LEGEND**

- CONDITIONED SPACE
- UNCONDITIONED SPACE
- RULE COMPLIANT AREA

**SQUARE FOOTAGE**

CONDITIONED SPACE	844 SF
UNCONDITIONED SPACE	62 SF
RULE COMPLIANT AREA	964 SF



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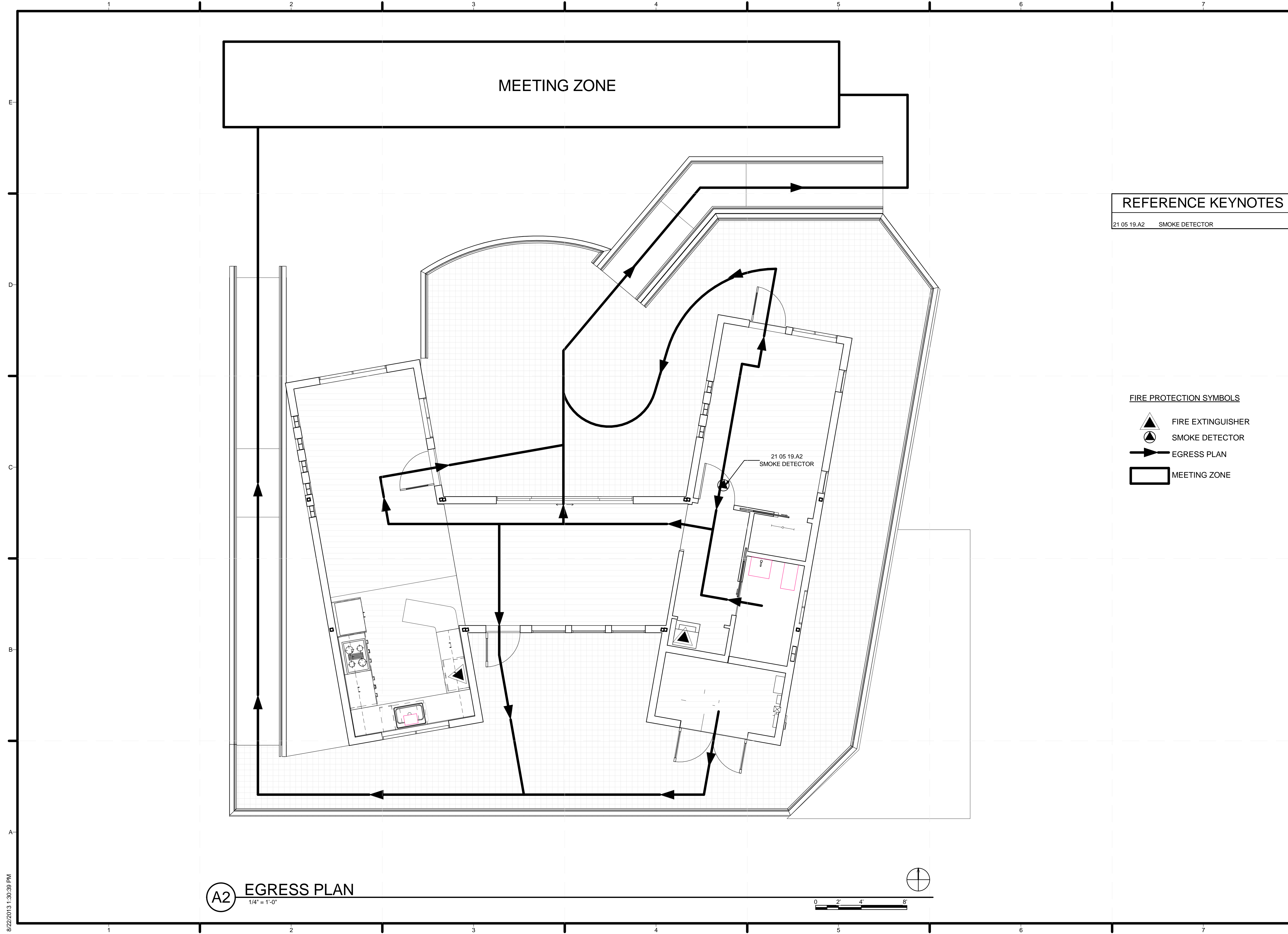
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**FINISHED SQUARE FOOTAGE COMPLIANCE**  
**G-101**

**(A1) FINISHED SQUARE FOOTAGE**  
 3/8" = 1'-0"

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**A2** EGRESS PLAN  
1/4" = 1'-0"





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**REFERENCE KEYNOTES**

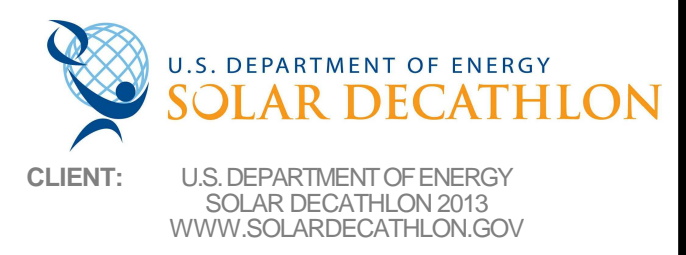
21 05 19.A2 SMOKE DETECTOR

**FIRE PROTECTION SYMBOLS**

-  FIRE EXTINGUISHER
-  SMOKE DETECTOR
-  EGRESS PLAN
-  MEETING ZONE

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**EGRESS PLAN**

**G-102**

**GENERAL SHEET NOTES**

1. THE MAXIMUM SLOPE OF ALL RAMPS ON THE SITE SHALL BE 1:12. SLOPE MAY BE LESS DEPENDING ON SITE CONDITIONS.
2. RADIUS OF CURVATURE OF ENTRY RAMP CENTERLINE TO NOT EXCEED 30'



**REFERENCE KEYNOTES**

26 05 33.A4 METER LOAD CENTER

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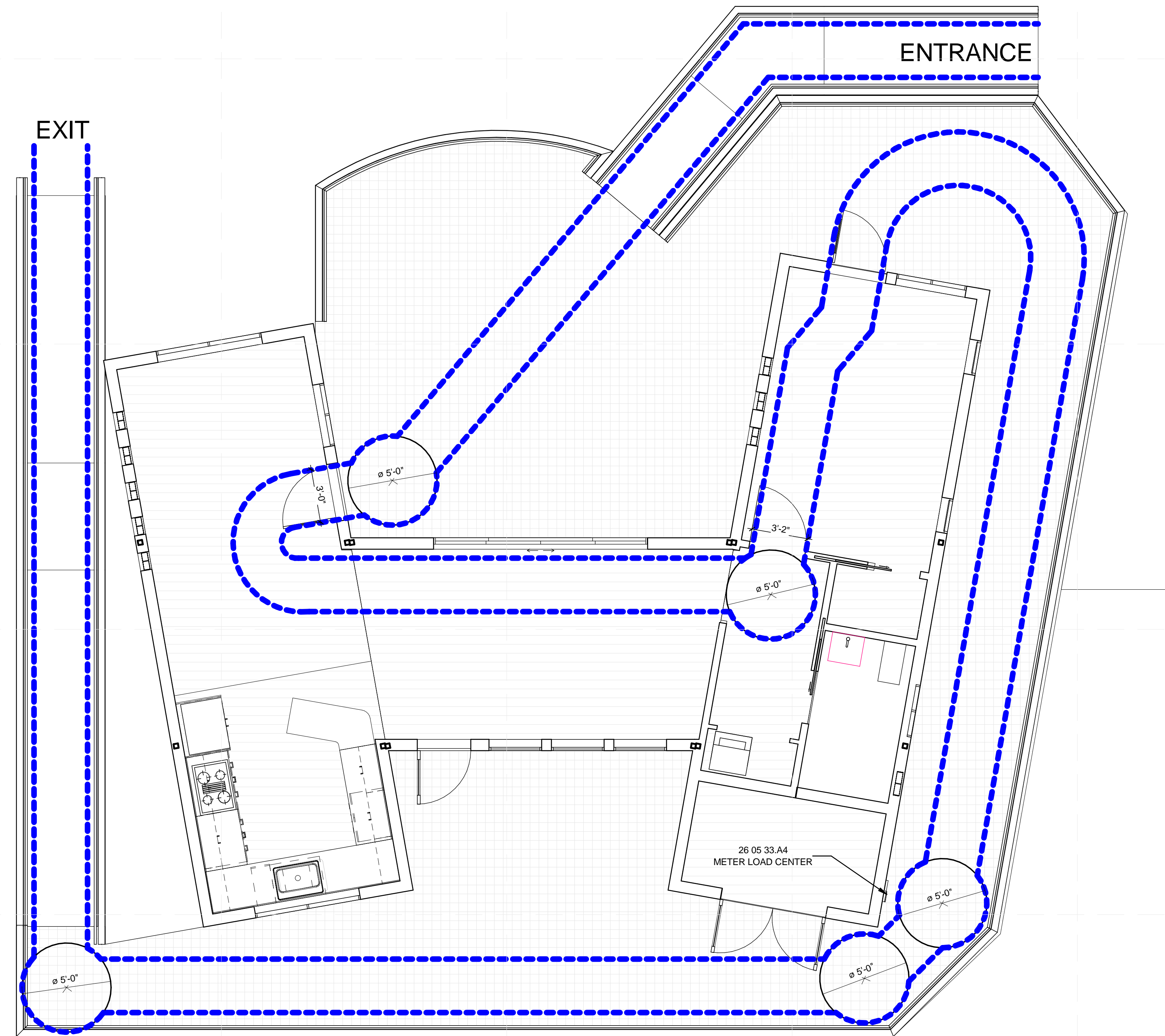
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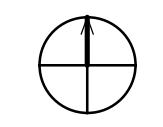
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**ADA TOUR ROUTE COMPLIANCE PLAN**  
**G-103**



**A2** TOUR ROUTE COMPLIANCE  
 1/4" = 1'-0"



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**GENERAL SHEET NOTES**

1. THE HOUSE AND ALL ASSOCIATED COMPONENTS HAVE BEEN DESIGNED TO FIT WITHIN THE DEFINED SOLAR ENVELOPE.

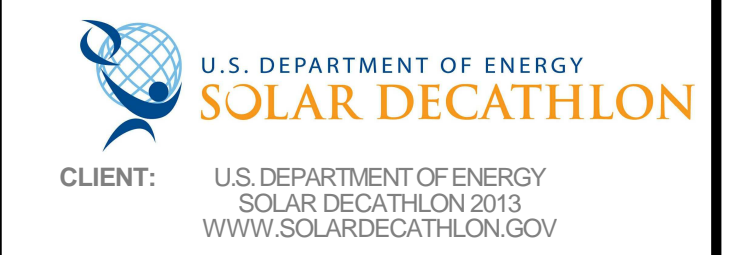


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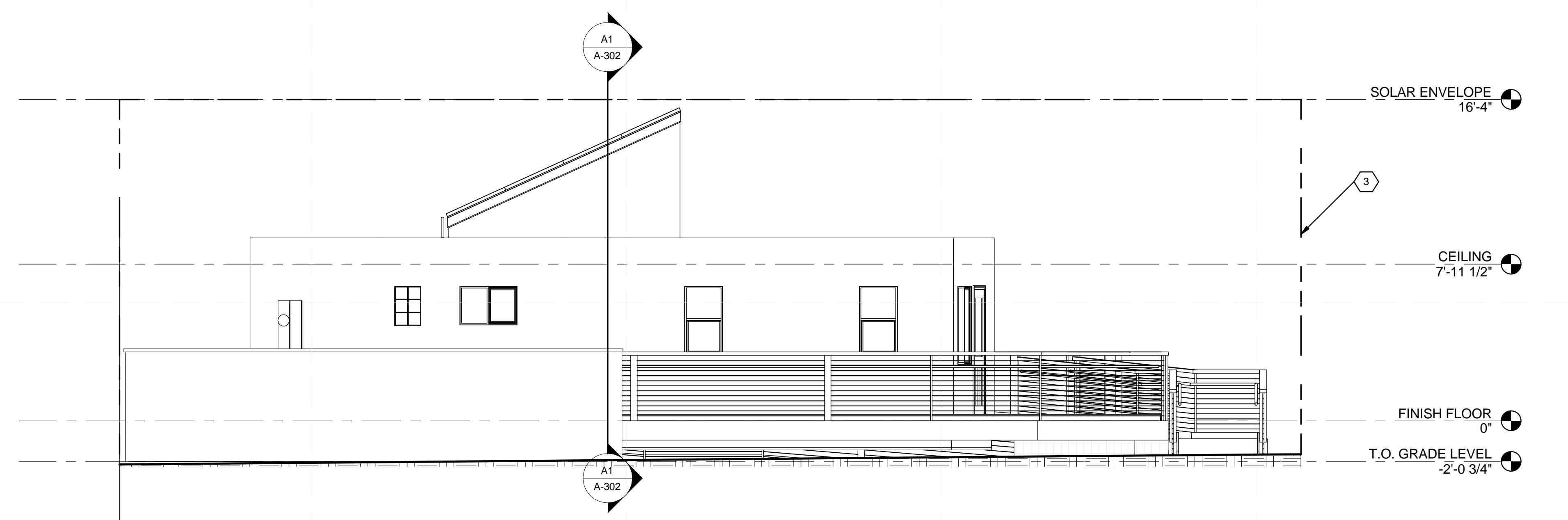
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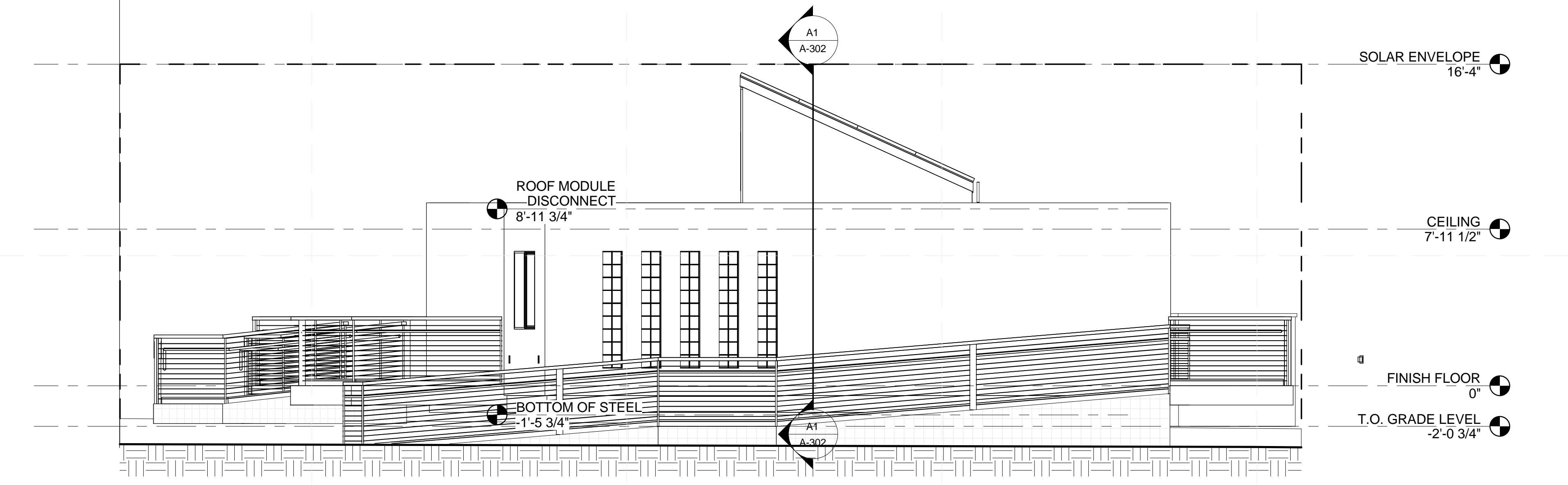
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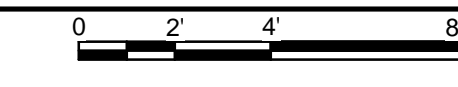
SHEET TITLE:  
**SOLAR ENVELOPE  
 COMPLIANCE ELEVATIONS**  
**G-201**



**C2** SOLAR ENVELOPE COMPLIANCE EAST  
 1/4" = 1'-0"



**A2** SOLAR ENVELOPE COMPLIANCE WEST  
 1/4" = 1'-0"



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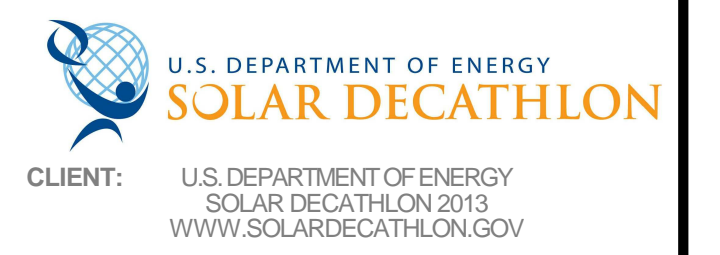
**GENERAL SHEET NOTES**

1. THE HOUSE AND ALL ASSOCIATED COMPONENTS HAVE BEEN DESIGNED TO FIT WITHIN THE DEFINED SOLAR ENVELOPE.



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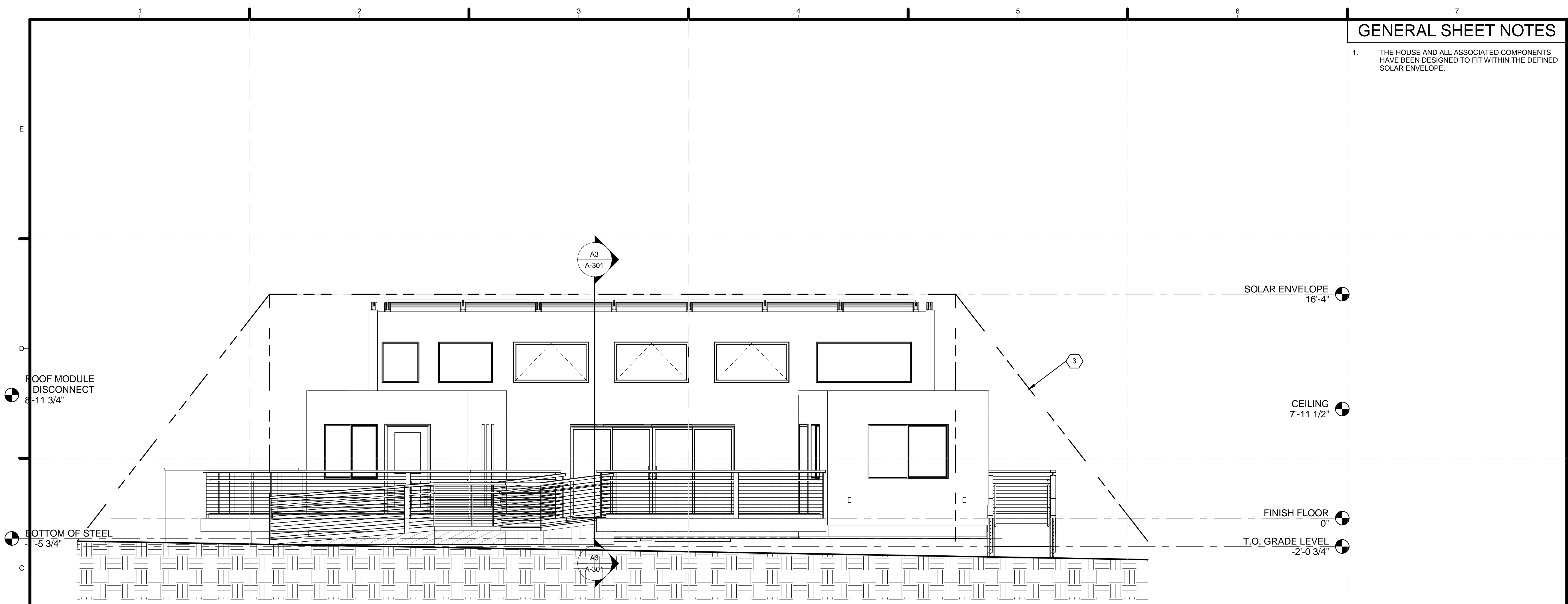
CONSULTANTS:  
**MESSANA**  
 2224 ALBERTA LANE  
 CAPITOLA CA 95010  
**WALSCHON FIRE PROTECTION INC.**  
 1015 TERMINAL WAY  
 SAN CARLOS, CA 94070  
**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035



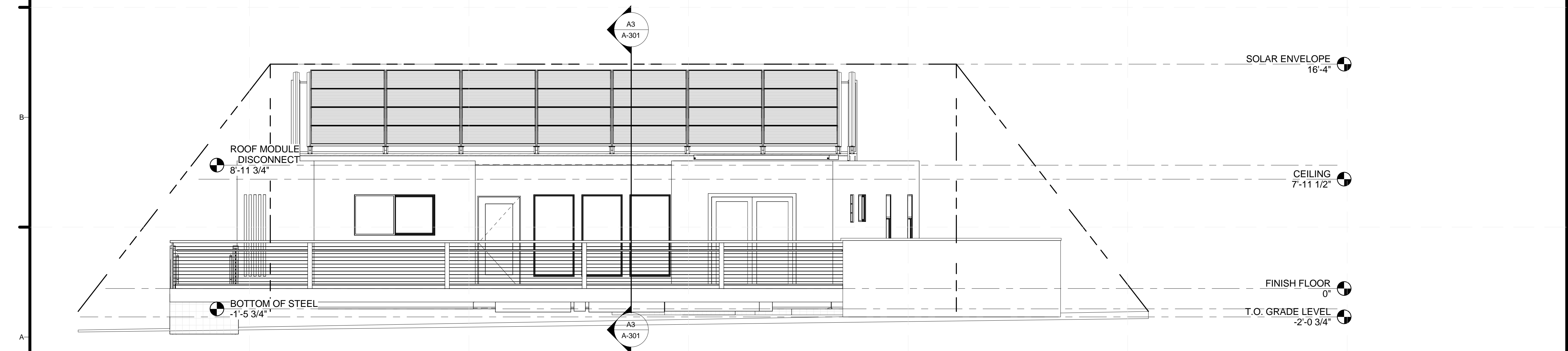
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	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**SOLAR ENVELOPE  
 COPMLIANCE ELEVATIONS**  
**G-202**



**(C1) SOLAR ENVELOPE COMPLIANCE NORTH**  
 1/4" = 1'-0"



**(A1) SOLAR ENVELOPE COMPLIANCE SOUTH**  
 1/4" = 1'-0"

8/22/2013 1:30:44 PM





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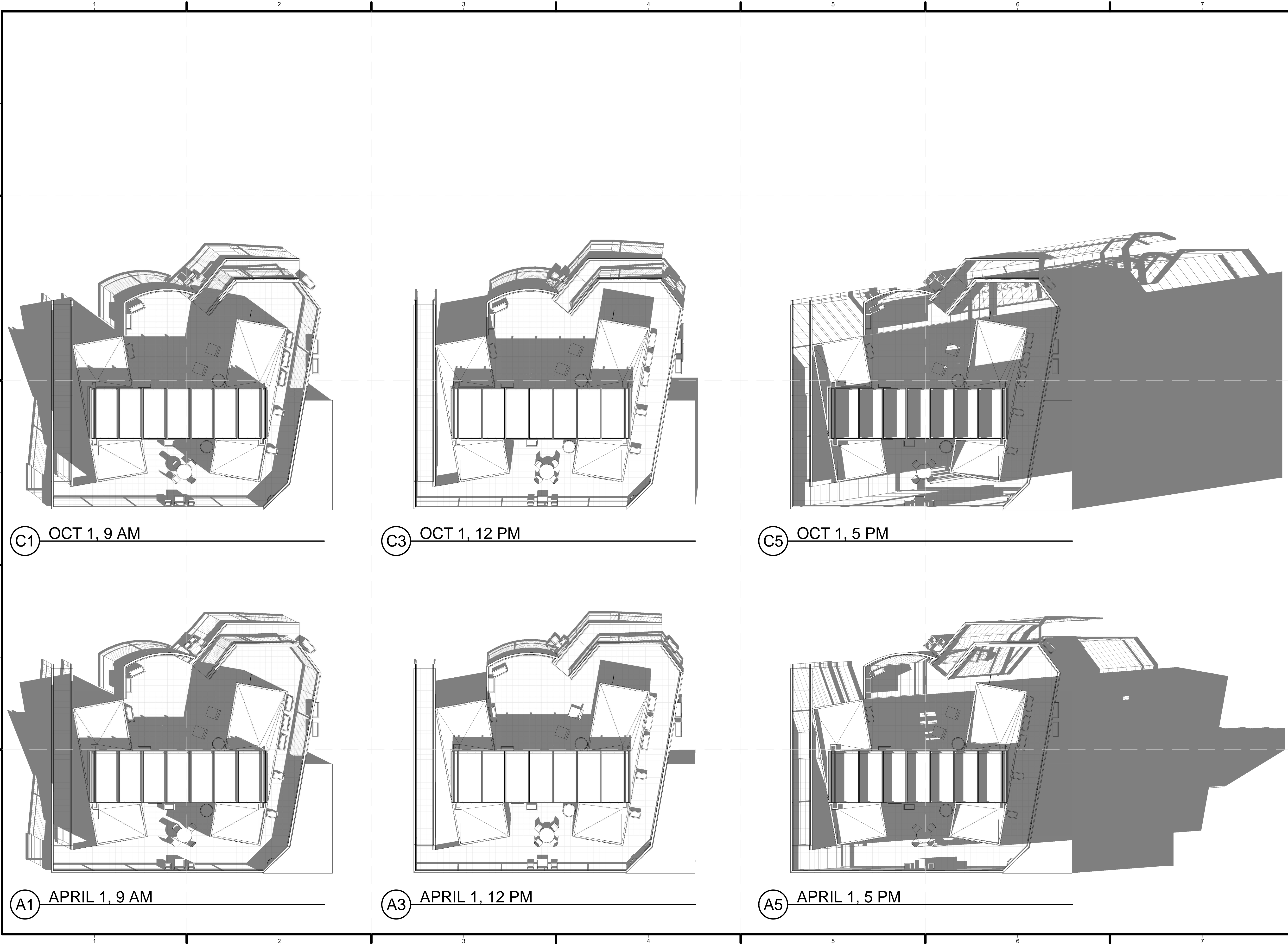
U.S. DEPARTMENT OF ENERGY  
**SOLAR DECATHLON**  
 CLIENT: U.S. DEPARTMENT OF ENERGY  
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SHEET TITLE:  
**SHADING DIAGRAMS**

**G-601**



8/22/2013 1:31:15 PM



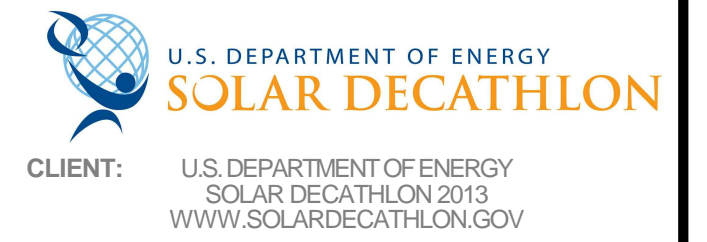
**GENERAL SHEET NOTES**

1. LIQUID IN FIRE SUPPRESSION SYSTEM, SOLAR THERMAL, HYDRONIC SYSTEMS DOMESTIC WATER NOT FULLY SHOWN
2. REFER TO FP SERIES FOR DETAILS ON FIRE SUPPRESSION WATER SYSTEM
3. REFER TO P SERIES FOR DETAILS ON DOMESTIC WATER SYSTEM
4. REFER TO M SERIES FOR DETAILS ON SOLAR THERMAL WATER SYSTEM AND HYDRONIC WATER SYSTEM
5. ALL PRESSURIZED WATER SYSTEMS SHALL HAVE PROPER CONTAINMENT AND SHALL BE EQUIPPED WITH AN OVERFLOW PAN OR VALVE AND DRAIN BELOW UNIT
6. IN THE EVENT OF A SPILL, TEAM TO CONSULT SAFETY PLAN AND CONTACT EVENT ORGANIZERS


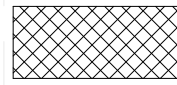
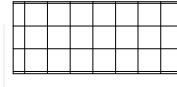



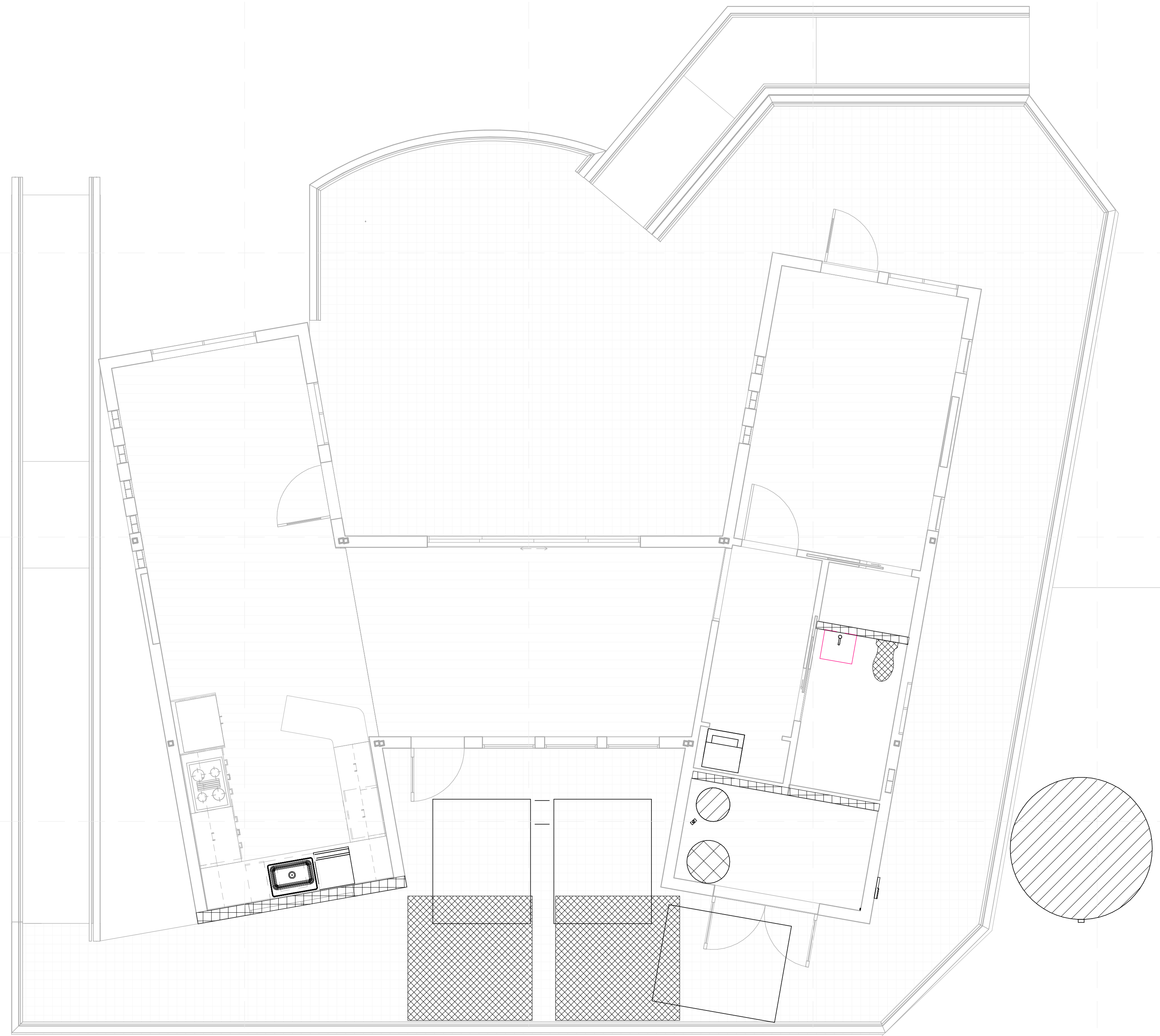
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**LIQUID CONTAINMENT LEGEND**

-  STANDING POTABLE WATER
-  STANDING WASTE WATER
-  PLUMBING WALL
-  PLUMBING WALL



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SHEET TITLE:  
**LIQUID LOCATION AND SPILL CONTAINMENT PLAN**

**H-101**

**(A2) LIQUID CONTAINMENT PLAN**  
 1/4" = 1'-0"



8/22/2013 1:31:22 PM





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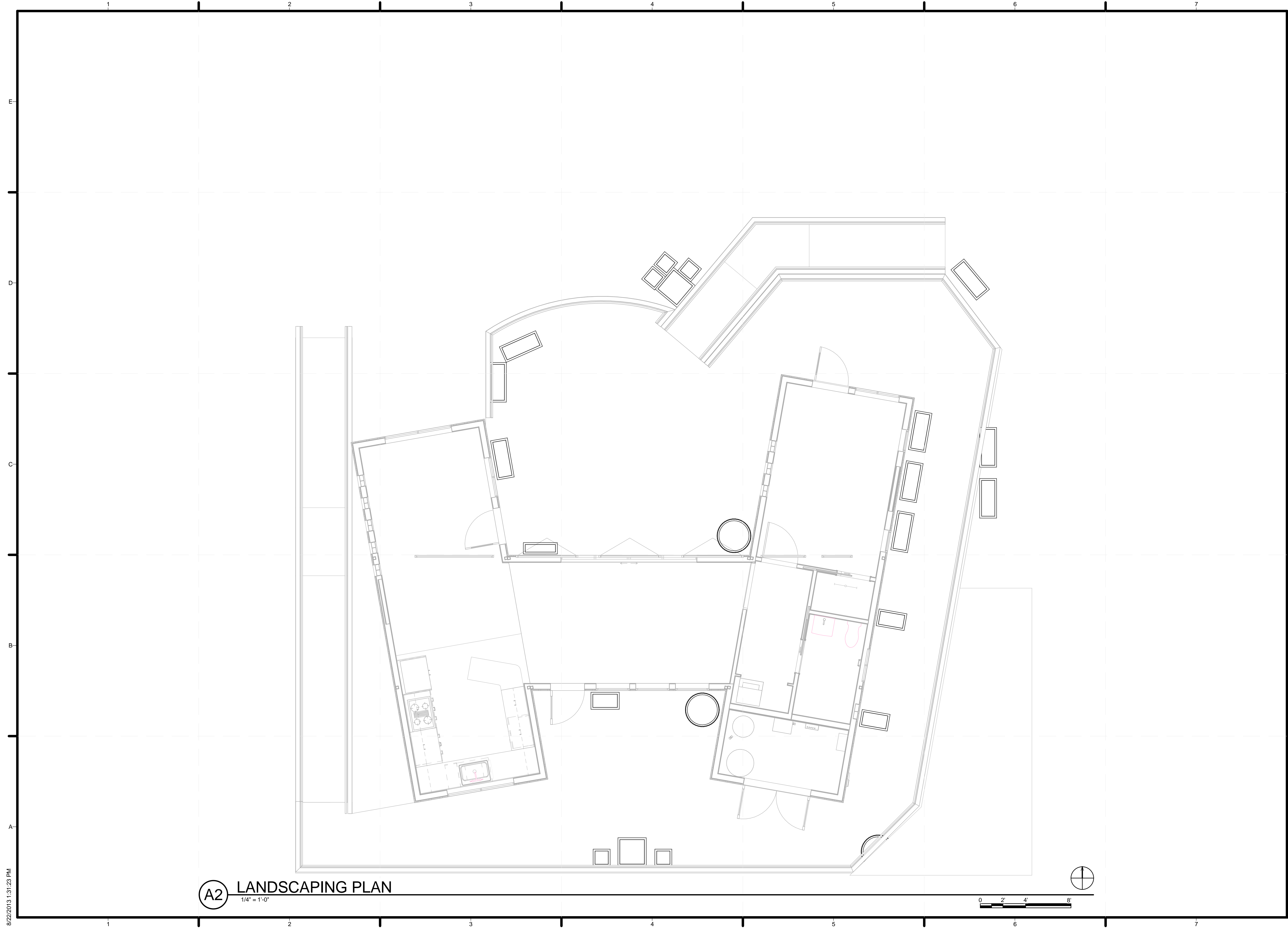
CONSULTANTS:  
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SHEET TITLE:  
**LANDSCAPE AND PLANTING PLAN**  
**L-101**



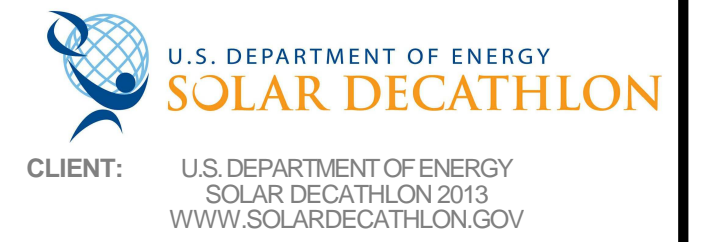
**A2** LANDSCAPING PLAN  
 1/4" = 1'-0"

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SHEET TITLE:  
**PLANT SCHEDULES**

**L-601**

PLANT NAME	QUANTITY	SIZE (GALLON)
DEER GRASS	10	1
WINDMILL PALM	1	15
LAVENDER	11	1
BUSH MONKEY FLOWER	2	1
GOLDEN GODDESS (BAMBOO)	5	15
ROSEMARY	6	1
COTINUS COGGYGRIA SMOKE TREE	5	15
LENONOTIS LEONURUS LION'S TAIL	3	5
SCARLET BUGLER	5	1
KANGAROO PAWS	20	1
ALOE CAMERONII	3	1
BUSH MARIGOLD	5	1
CLYSTO CACTUS STRAUSII	1	
ALOE STRIATA	5	
DYCKIA FOSTERANA HYBRID	5	
ALOE PLICATILLIS	5	
AEONIUM ZORCOFT	5	



GENERAL STRUCTURAL NOTES

1. GENERAL NOTES AND TYPICAL DETAILS APPLY TO ALL STRUCTURAL FEATURES UNLESS OTHERWISE SHOWN OR NOTED
2. IF CERTAIN FEATURES ARE NOT FULLY SHOWN OR CALLED FOR ON THE DRAWINGS OR SPECIFICATIONS, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS FOR SIMILAR CONDITIONS.
3. THE PROJECT SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS
4. SPECIFICATIONS, CODES AND STANDARDS NOTED IN THE CONTRACT DOCUMENTS SHALL BE OF THE LATEST EDITION UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL FIELD VERIFY ALL JOB CONDITIONS AND DIMENSIONS. VARIATIONS THEREOF FROM THE DRAWINGS MUST BE REPORTED TO THE STRUCTURAL ENGINEER. DETAILS INDICATED ON THE DRAWINGS SHALL CONFORM TO BEST PRACTICE AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. DIMENSIONS SHALL NOT BE SCALED
7. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING CODES: THE 2010 BUILDING CODE, THE 2013 SOLAR DECATHLON BUILDING CODE, THE INTERNATIONAL RESIDENTIAL CODE (2012 EDITION), AND ANY OTHER REGULATING AGENCIES WHICH HAVE THE AUTHORITY OVER ANY PORTION OF THE WORK, INCLUDING THE STATE OF CALIFORNIA DIVISION OF INDUSTRIAL SAFETY, AND THOSE CODES AND STANDINGS LISTED IN THESE NOTES AND THE SPECIFICATIONS.
8. MANUFACTURED MATERIALS SHALL BE APPROVED BY THE CONTRACTOR PRIOR TO THEIR USE. ALL REQUIREMENTS OF THOSE APPROVALS SHALL BE FOLLOWED.
9. NON-STRUCTURAL FEATURES NOT FULLY SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS INCLUDE BUT ARE NOT LIMITED TO:
  - A. ARCHITECTURAL FEATURES
    - I. SIZE AND LOCATIONS OF ALL DOOR AND WINDOW OPENINGS.
    - II. SIZE AND LOCATION OF ALL NON-BEARING PARTITIONS
    - III. SIZE AND LOCATION OF ALL FLOOR DRAINS, SLOPES, DEPRESSED AREAS
    - IV. CHANGES IN LEVEL, CHAMFERS, GROOVES, INSERTS, ETC.
    - V. SIZE AND LOCATION OF ALL FLOOR AND ROOF OPENINGS
    - VI. DIMENSIONS NOT SHOWN IN THE STRUCTURAL DRAWINGS
  - B. MECHANICAL, PLUMBING AND ELECTRICAL FEATURES
    - I. PIPE RUNS, SLEEVES, HANGERS, TRENCHES, WALL, ROOF AND FLOOR OPENINGS, ETC. NOT SHOWN OR NOTED.
    - II. ELECTRICAL CONDUIT RUNS, BOXES, OUTLETS IN WALLS
    - III. ANCHORAGE AND BRACING FOR ELECTRICAL, MECHANICAL OR PLUMBING EQUIPMENT
    - IV. ANCHOR BOLTS FOR MOTOR MOUNTS
    - V. SIZE AND LOCATION OF MACHINE AND EQUIPMENT BASES
10. OPENINGS, POCKETS, ETC. SHALL NOT BE PLACED IN STRUCTURAL MEMBERS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN WORK REQUIRES OPENINGS POCKETS, ETC. IN STRUCTURAL MEMBERS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS AND HOLES AND OPENINGS REQUIRED IN STRUCTURAL MEMBERS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND SHALL BE RESOLVED BEFORE PROCEEDING WITH WORK.
12. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO BRACING AND SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT AND MATERIALS. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO SUPERVISORY AUTHORITY OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR.
14. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT. IF PLACED ON FRAMED FLOORS OR ROOFS. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING WHERE OVERLOAD IS ANTICIPATED.
15. THE LATERAL SYSTEM OF THE STRUCTURE IS DESIGNED WITH LATERAL RESTRAINT AT EACH LEVEL. STRUCTURAL WALLS OR FRAMES ARE NOT Laterally SELF SUPPORTING UNTIL THE ENTIRE DESIGN LATERAL RESTRAINT SYSTEM IS IN PLACE. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
16. UNLESS OTHERWISE NOTED, FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR ALL STRUCTURAL PRODUCTS USED IN THIS PROJECT
17. CONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
18. DRAWINGS INDICATED GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF SHALL CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

INSPECTION, OBSERVATION, AND TESTING

1. THIS SECTION SUMMARIZES THE SPECIFIC REQUIREMENTS OF CHAPTER 17 OF THE 2010 CBC AS THEY APPLY TO THE SPECIAL INSPECTION, STRUCTURAL OBSERVATION AND TESTING OF THE STRUCTURAL PORTIONS OF THE PROJECT.
2. THE TYPES OF WORK LISTED IN THE FOLLOWING TABLE SHALL BE INSPECTED IN ACCORDANCE WITH CBC 1701.5 WHEN INDICATED AS EITHER "CONTINUOUS" OR "PERIODIC". ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY A CERTIFIED SPECIAL INSPECTION FROM AN INDEPENDENT TESTING AGENCY WHO IS EMPLOYED BY THE OWNER OR AGENT OF THE AGENT AND NOT THE CONTRACTOR.
  - A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
  - B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OF RECORD, AND OTHER DESIGNATED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.
  - C. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING INSPECTION WAS, TO THE BEST OF THE SPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISIONS AND STANDARDS OF QUALITY OF THE 2010 CBC
  - D. CONTINUOUS AND PERIODICAL SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH CBC 1701.6
3. TYPES OF WORK LISTED IN THE FOLLOWING TABLE SHALL BE OBSERVED DURING PERIODIC SITE VISITS BY THE STRUCTURAL ENGINEER WHEN INDICATED AS "STRUCTURAL OBSERVATION". CONTRACTOR IS RESPONSIBLE FOR NOTIFYING STRUCTURAL ENGINEER 48 HOURS BEFORE WORK IS READY FOR OBSERVATION. THESE VISITS DO NOT CONSTITUTE SPECIAL INSPECTION UNDER SECTION 1701 OF THE CBC
4. IN ADDITION TO INSPECTION BY THE SPECIAL INSPECTOR, THE STRUCTURAL ENGINEER WILL REVIEW THE CONSTRUCTION FOR GENERAL CONFORMANCE WITH THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER AT LEAST FIVE WORKING DAYS PRIOR TO CONCEALING ANY STRUCTURAL ITEMS. THE STRUCTURAL ENGINEER WILL THEN DETERMINE IF A SITE VISIT IS APPROPRIATE. NOTIFICATIONS SHALL INCLUDE REINFORCEMENT AND EMBEDDED ITEMS, PRIOR TO CONCRETE PLACEMENT AND STRUCTURAL FRAMING AND PANEL SHEAR WALL PRIOR TO CONCEALMENT BY FIREPROOFING OR FINISH SURFACES.
5. THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING INVOLVING THE STRUCTURAL ENGINEER AND THE SPECIAL INSPECTOR IN ORDER TO DISCUSS THE SPECIFIC REQUIREMENTS OF THIS SECTION.

DESIGN DATA

1. CODE: 2010 CALIFORNIA BUILDING CODE  
OCCUPANCY CATEGORY: II  
SITE CLASS: D
2. DESIGN LIVE LOADS:
 

AREA	DESIGN LIVE LOADS	REMARKS
ROOF:	20 PSF	PER SD 2013 BUILDING CODE
FLOORS:	50 PSF	PER SD 2013 BUILDING CODE
DECKS:	100 PSF	PER SD 2013 BUILDING CODE
3. EARTHQUAKE DESIGN LOADS:  
SEISMIC DESIGN CATEGORY: D  
EQUIVALENT LATERAL FORCE PROCEDURE USED  
ZIP CODE 95053  
  
 $F_a = 1.0$  (FOR SITE CLASS D)  
 $S_s = 1.5$   
 $S_{ms} = F_a \times S_s = 1.5$   
 $S_{ds} = 2 \times S_{ms}/3 = 1.000 G$
- LONGITUDINAL AND TRANSVERSE DIRECTION  
 $R = 6.5$   
 $I = 1.0$   
 $CS = S_{ds}/(R/I) = 0.154$   
 $W = \text{EFFECTIVE SEISMIC DEAD LOAD}$   
 $V = CS \times W = 0.154 W$  (DESIGN BASE SHEAR)  
 $P = 1.3$   
 $E = P \times V = 0.200 W$
4. WIND DESIGN LOADS:  
BASIC WIND SPEED 85 MPH  
EXPOSURE C








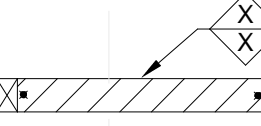

FOUNDATION NOTES

1. CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE SOLAR DECATHLON OFFICIALS REGARDING SITE PREPARATION AND FOUNDATION
2. METAL PIER STANDS AND PIER AND PIER STAND CAPS SHALL BE MANUFACTURED BY CENTRAL PIER INC. MANUFACTURE AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE CALIFORNIA STATE SUPPLEMENTAL CERTIFICATION REPORT FOR PIER LISTING NUMBER 186.5
3. ABS PIER PADS SHALL BE MANUFACTURED BY TIE-DOWN ENGINEERING. MANUFACTURE AND INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THE DETAIL DRAWINGS
4. FOUNDATION TYPE: TEMPORARY SEISMIC PIERS AND STANDARD PIERS FOR MODULAR STRUCTURES.

FOOTING DESIGN VALUES:

FOOTINGS	ALLOWABLE BEARING PRESSURES
SEISMIC PIER	1500 PSF
STANDARD PIER	1500 PSF

Symbols

-  PLYWOOD DIAPHRAGM
-  REMOVABLE PLYWOOD ACCESS PANEL
-  ST22
-  DATUM POINT
-  FOOTING
-  HOLDOWN
-  4X6 POST
-  SHEAR WALL
-  GRAVITY WALL



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 COPYRIGHT: NONE. PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
 STRUCTURAL NOTES AND  
 SYMBOLS

**S-001**



**GENERAL SHEET NOTES**

1. REFER TO GENERAL STRUCTURAL NOTES & DETAILS FOR GENERAL REQUIREMENTS OF CONSTRUCTION, MATERIALS, AND REQUIREMENTS OF CONSTRUCTION OBSERVATIONS.
2. S.A.D. FOR ALL DIMENSIONS AND FINISH ELEVATIONS NOT NOTED.
3. S.A.D. FOR ALL FINISHES, FIRE PROTECTION, THERMAL AND MOISTURE PROTECTION, WATERPROOFING, AND ACOUSTICAL REQUIREMENTS FOR ALL CEILINGS, WALLS, FLOORS, ROOF DECKS AND TERRACES.
4. SEE S-601 FOR FOOTING SCHEDULE.
5. PREPARE A LEVEL SURFACE AT THE LOCATION OF EACH PIER TO ENSURE FULL CONTACT FOR THE FOOTING PAD.
6. CONTRACTOR TO SELECT APPROPRIATELY SIZED PIERS BY DETERMINING THE PIER HEIGHT AT EACH SUPPORT LOCATION, MEASURE TO THE TOP OF THE PAD TO THE STEEL CHANNEL TO ENSURE THAT HEIGHT IS NO GREATER THAN 18".
7. FOUNDATION PIERS ARE TO SIT ON TOP OF LOAD RATED ABS PAD. SEE S-501 FOR TYPICAL STANDARD PIER DETAIL.
8. THE MAXIMUM ADJUSTMENT ON THE THREADED ROD ADJUSTER FOR THE STANDARD PIER IS 2" AND THE MAXIMUM ADJUSTMENT OF THE SEISMIC PIER IS 7". WHEN MORE HEIGHT IS NEEDED USE THE NEXT TALLER SIZE PIER SUPPORT.
9. THE STANDARD PIERS TIGHTEN ROD ADJUSTER AGAINST BOTTOM OF STEEL CHANNEL UNTIL SNUG PLUS 1/2 TURN.
10. ALL FOOTINGS FOR DECK SHALL BE SPACED NO FARTHER THAN 6 FEET APART. ALL GIRDERS SHALL HAVE FOOTINGS AT BOTH ENDS.
11. ALL GROUND PENETRATIONS SHALL BE A 38" IN DEPTH TO ALLOW PROPER ATTACHMENT OF 42" THREADED ANCHOR RODS TO THE SEISMIC PIER PLATES.



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**LEGEND**

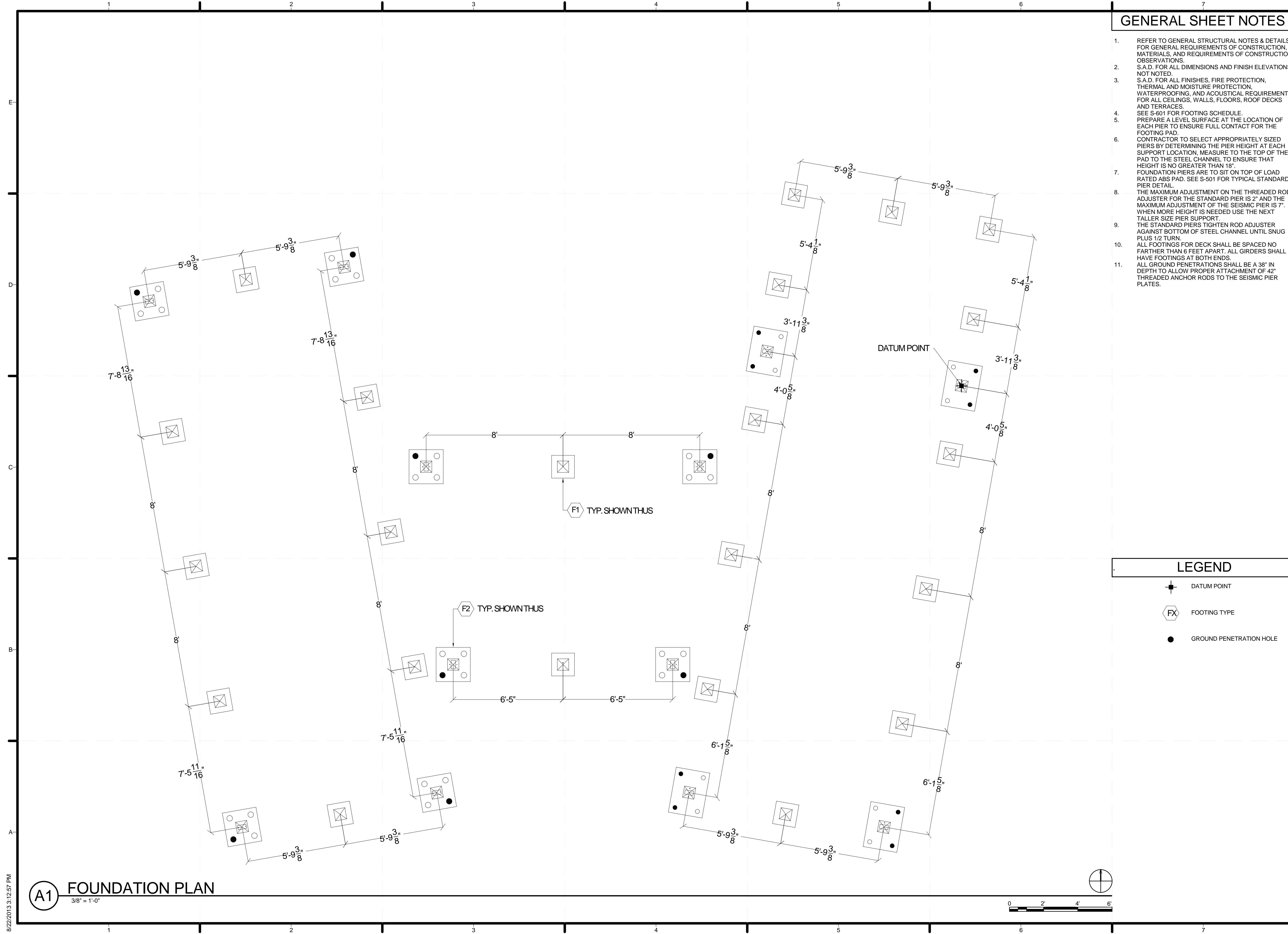
- DATUM POINT
- FOOTING TYPE
- GROUND PENETRATION HOLE

MARK	DATE	DESCRIPTION
	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: ML/KM  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**FOUNDATION PLAN**

**S-101**



**(A1) FOUNDATION PLAN**  
 3/8" = 1'-0"

8/22/2013 3:12:57 PM

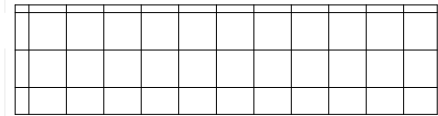
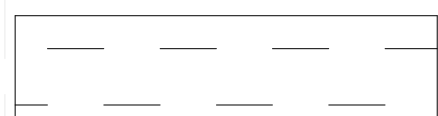
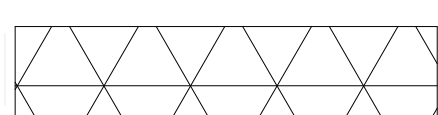


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**LEGEND**

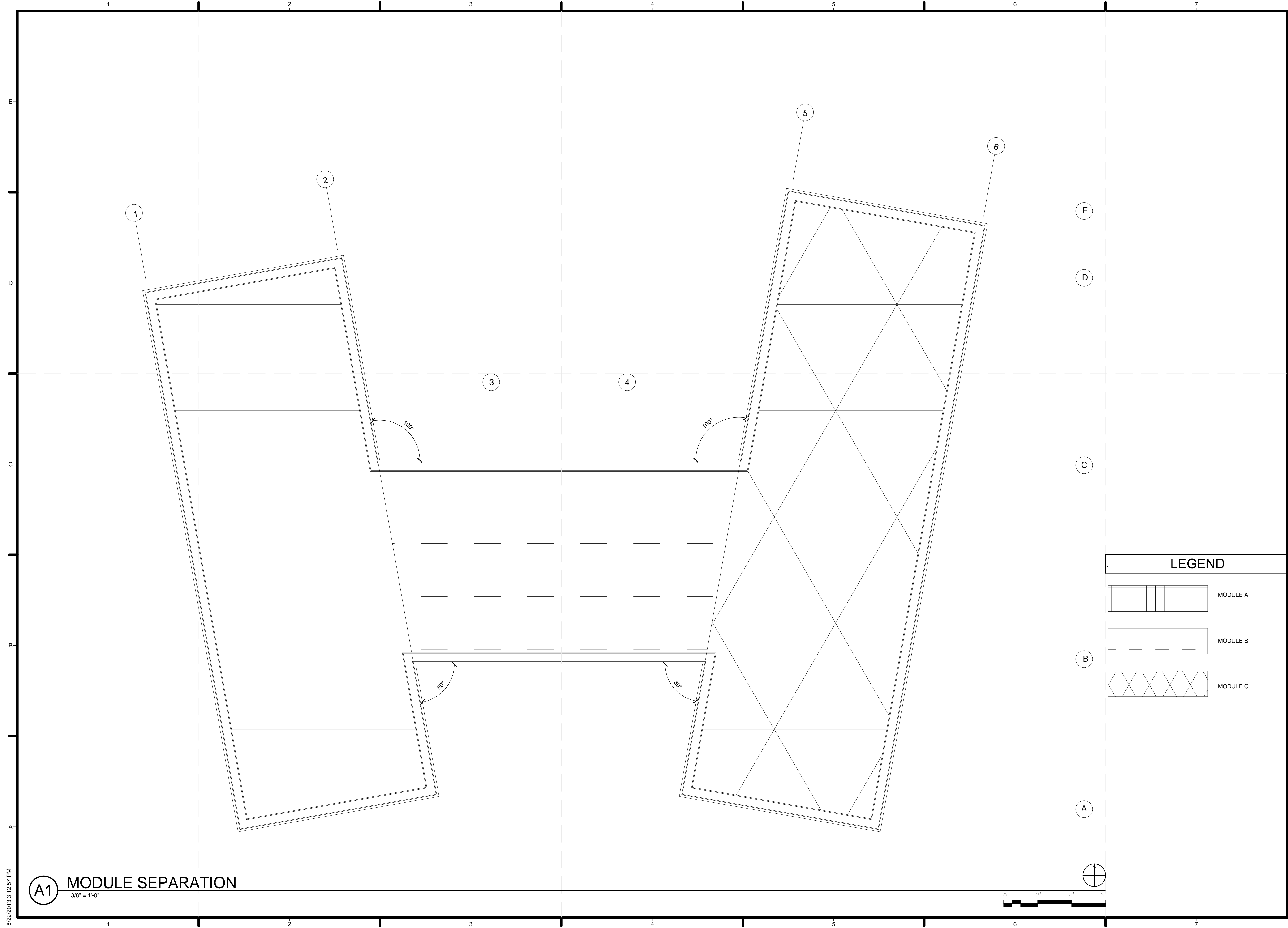
-  MODULE A
-  MODULE B
-  MODULE C

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	08/12/13	AS BUILT REVISIONS
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	07/19/13	CD CITY INSPECTION
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	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: Author  
 CHECKED BY: Checker  
 COPYRIGHT: NONE; PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**MODULE SEPARATION**

**S-102**



**(A1) MODULE SEPARATION**  
 3/8" = 1'-0"

8/22/2013 3:12:57 PM





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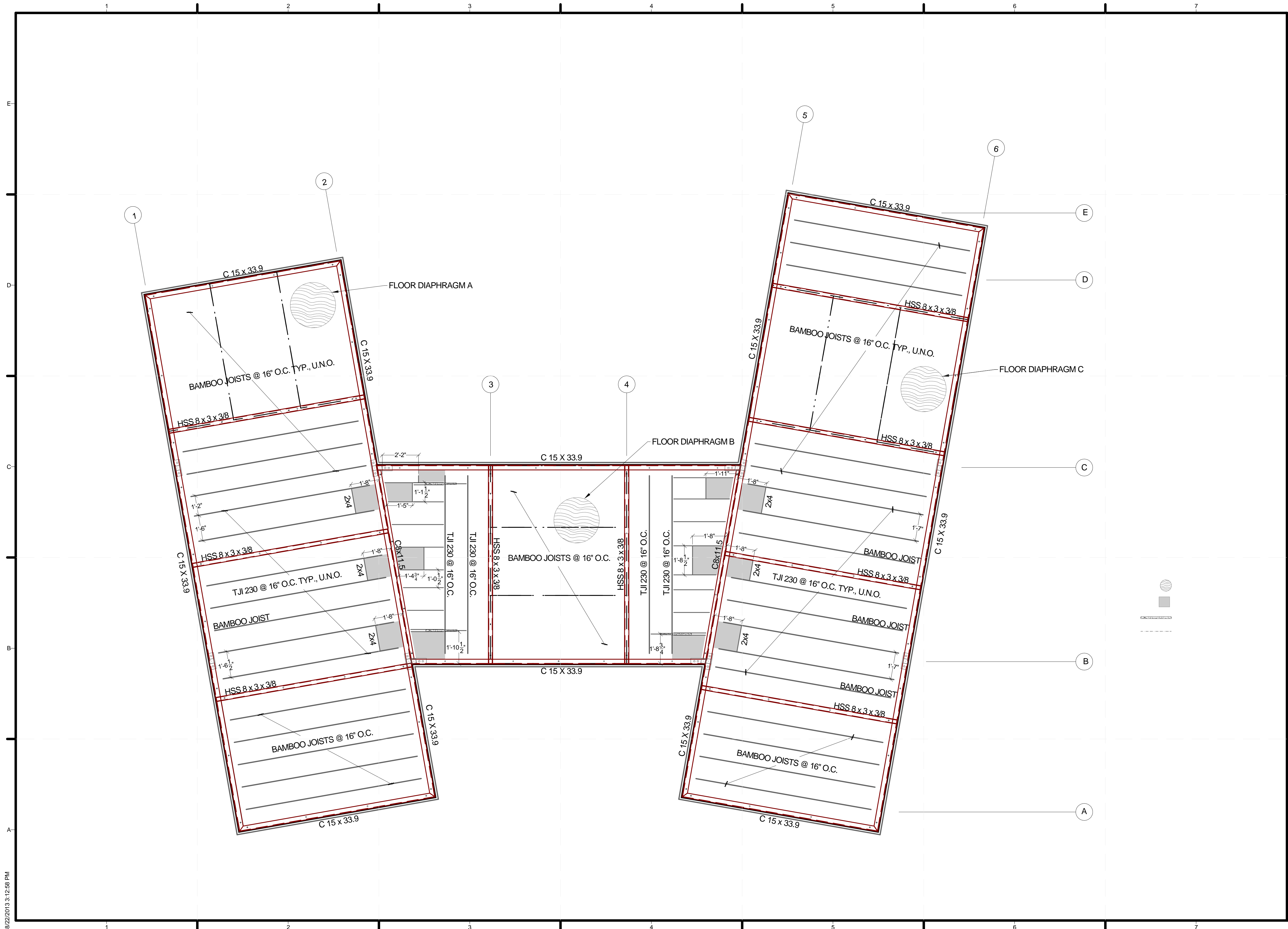
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04/04/13	CD RESUBMISSION
02/14/13	CD SUBMISSION
11/20/12	DD RESUBMISSION
10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: ML/KM  
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 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**FLOOR FRAMING PLAN**

**S-103**



8/22/2013 3:12:58 PM

**GENERAL SHEET NOTES**

1. REFER TO GENERAL STRUCTURAL NOTES & DETAILS FOR GENERAL REQUIREMENTS OF CONSTRUCTION, MATERIALS, AND REQUIREMENTS OF CONSTRUCTION OBSERVATIONS.
2. THE TOP NUMBER CORRESPONDING TO A SHEAR WALL INDICATES THE EDGE NAILING OR STAPLING. BOTTOM NUMBER INDICATES THE SHEAR WALL. SEE S-601 FOR SHEAR WALL SCHEDULE.
3. ALL EXTERIOR STUD WALLS ARE STAGGERED STUD 2X4 @ 16" O.C.



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**LEGEND**

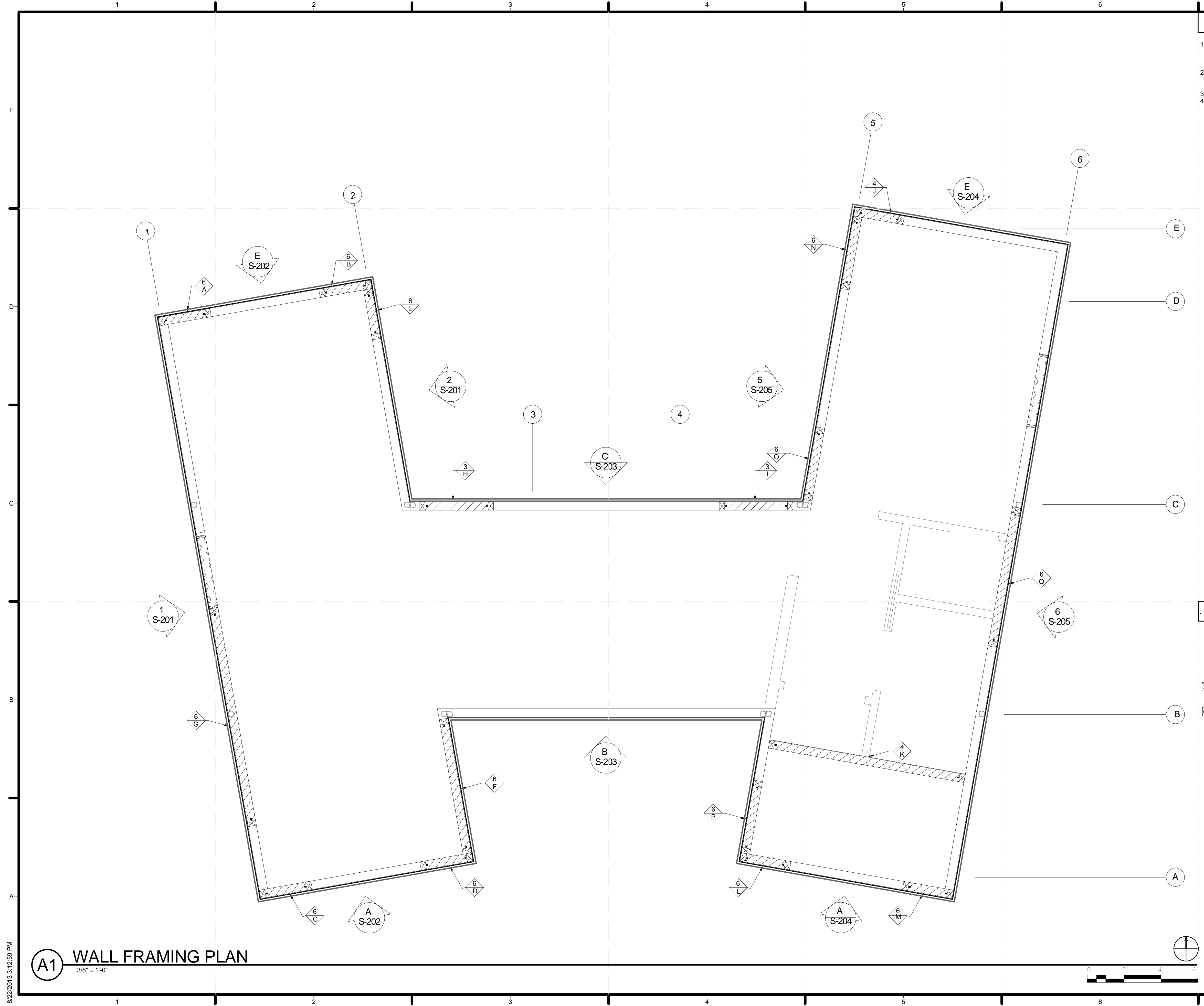
- HOLDDOWN
- ⊠ 4x6 POST
- ▨ SHEAR WALL
- ▨ GRAVITY WALL

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	08/22/13	DOE AS BUILT SUBMISSION
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	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
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	10/11/12	DD SUBMISSION

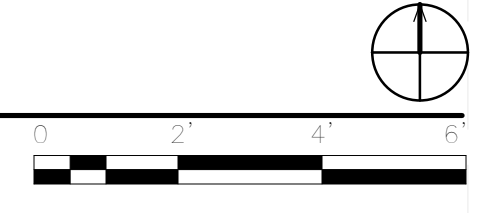
LOT NUMBER: 118  
 DRAWN BY: Author  
 CHECKED BY: Checker  
 COPYRIGHT: NONE; PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**WALL FRAMING PLAN**

**S-104**



**(A1) WALL FRAMING PLAN**  
 3/8" = 1'-0"



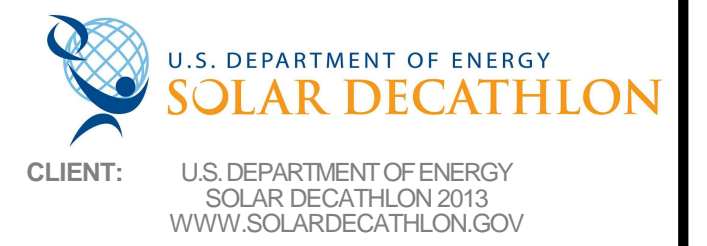
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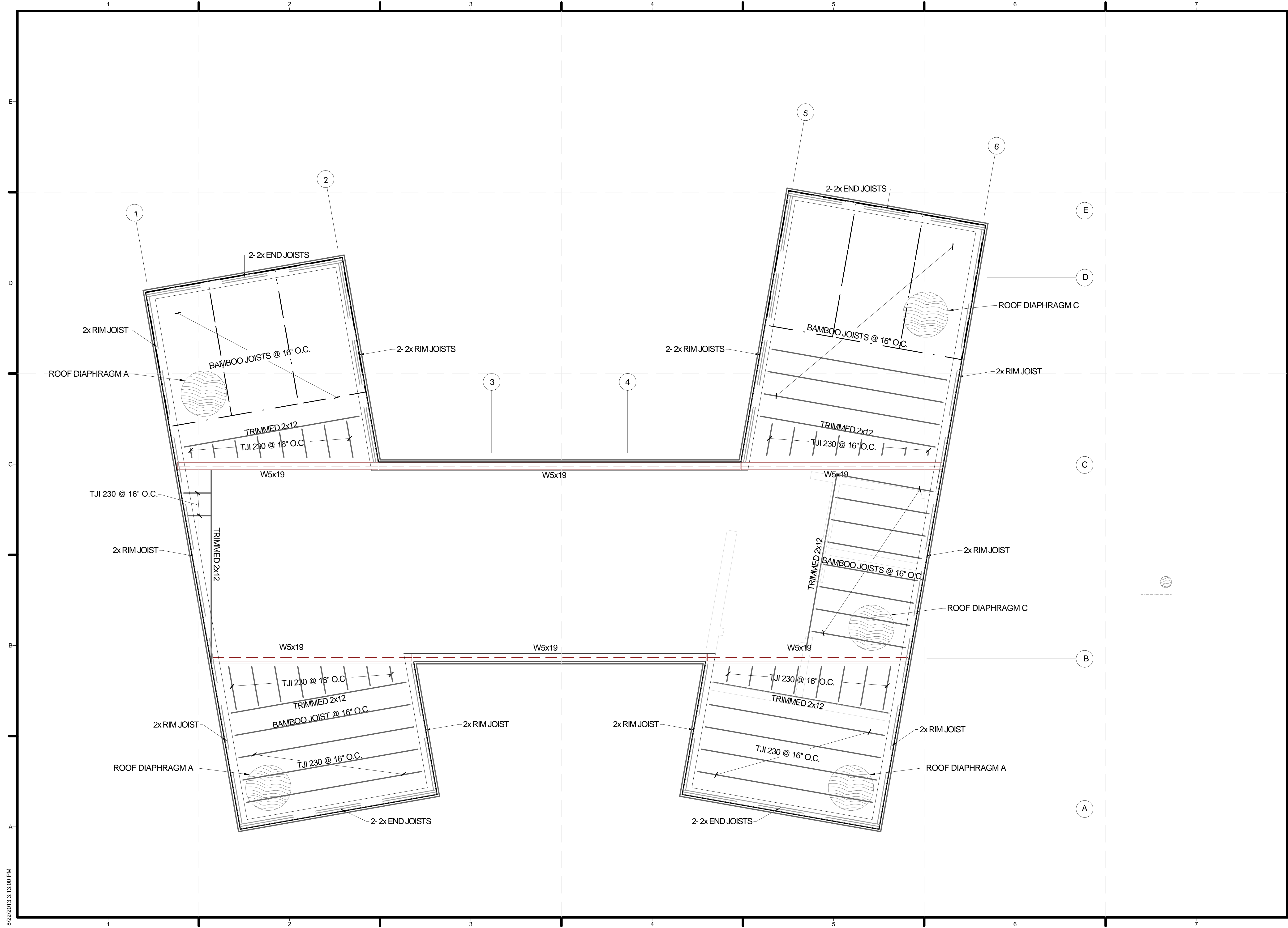
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08/06/13	CD CITY INSPECTION 3
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07/19/13	CD CITY INSPECTION
05/10/13	CD RESUBMISSION 2
04/04/13	CD RESUBMISSION
02/14/13	CD SUBMISSION
11/20/12	DD RESUBMISSION
10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: ML/KM  
 CHECKED BY: SCU  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
 LOWER ROOF FRAMING

S-105



**GENERAL SHEET NOTES**

1. REFER TO GENERAL STRUCTURAL NOTES & DETAILS FOR GENERAL REQUIREMENTS OF CONSTRUCTION, MATERIALS, AND REQUIREMENTS OF CONSTRUCTION OBSERVATIONS.
2. SEE S-601 FOR JOIST HANGER SCHEDULE.
3. SEE S-601 FOR PLYWOOD DIAPHRAGM SCHEDULE.
4. 1 - 4X12 TRIMMED RIM JOIST NAILED TOGETHER SHALL RUN CONTINUOUSLY INSIDE STEEL ANGLE.



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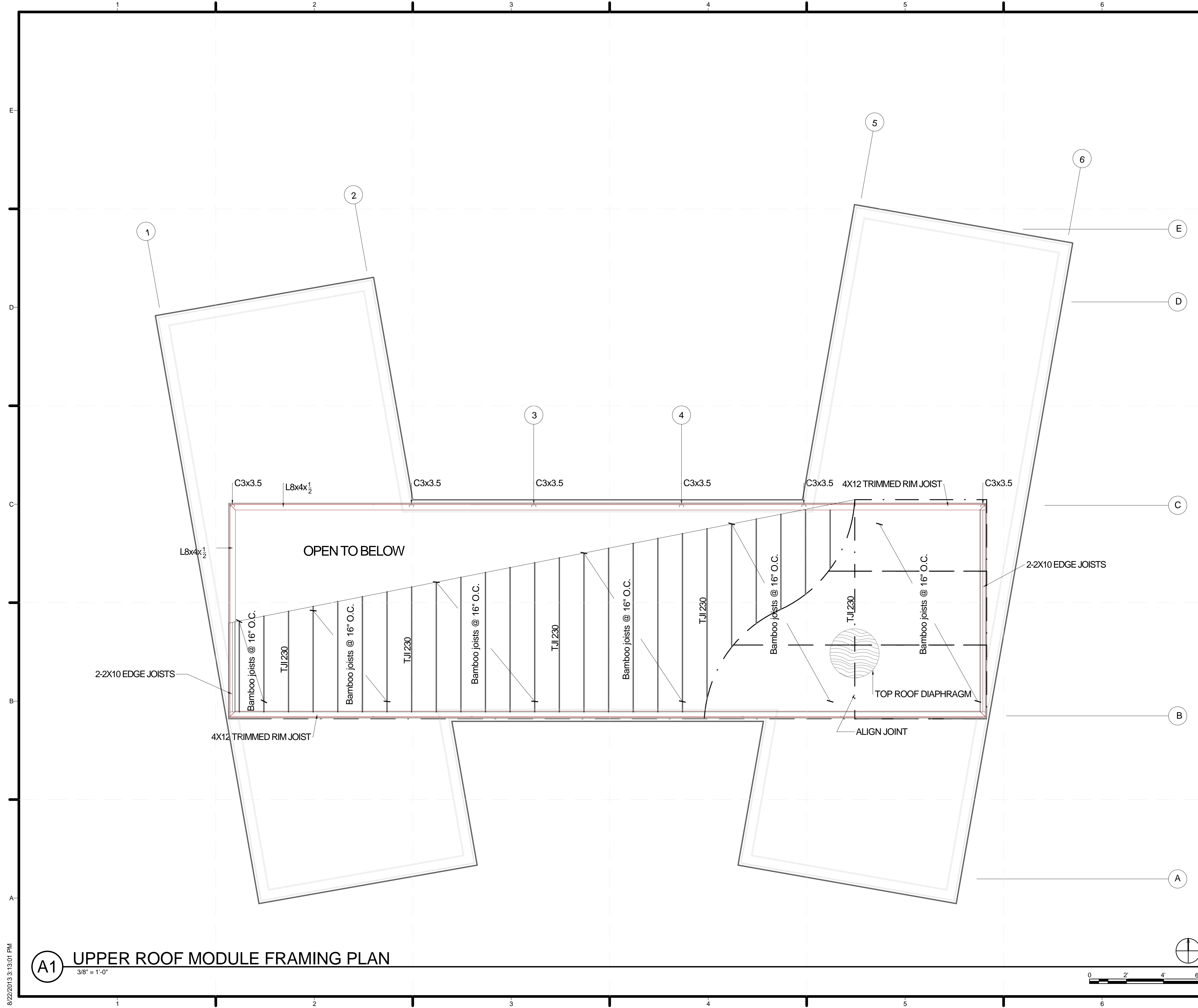
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- ROOF DIAPHRAGM
- PLYWOOD BORDER

MARK	DATE	DESCRIPTION
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	08/12/13	AS BUILT REVISIONS
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	02/14/13	CD SUBMISSION
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: ML/KM  
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 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**UPPER ROOF MODULE  
 FRAMING PLAN**  
**S-106**



**(A1) UPPER ROOF MODULE FRAMING PLAN**  
 3/8" = 1'-0"

8/22/2013 3:13:01 PM



**GENERAL SHEET NOTES**

1. ALL PIERS SHOWN AND PROVIDED FOR THE DECK ARE STANDARD PIERS.



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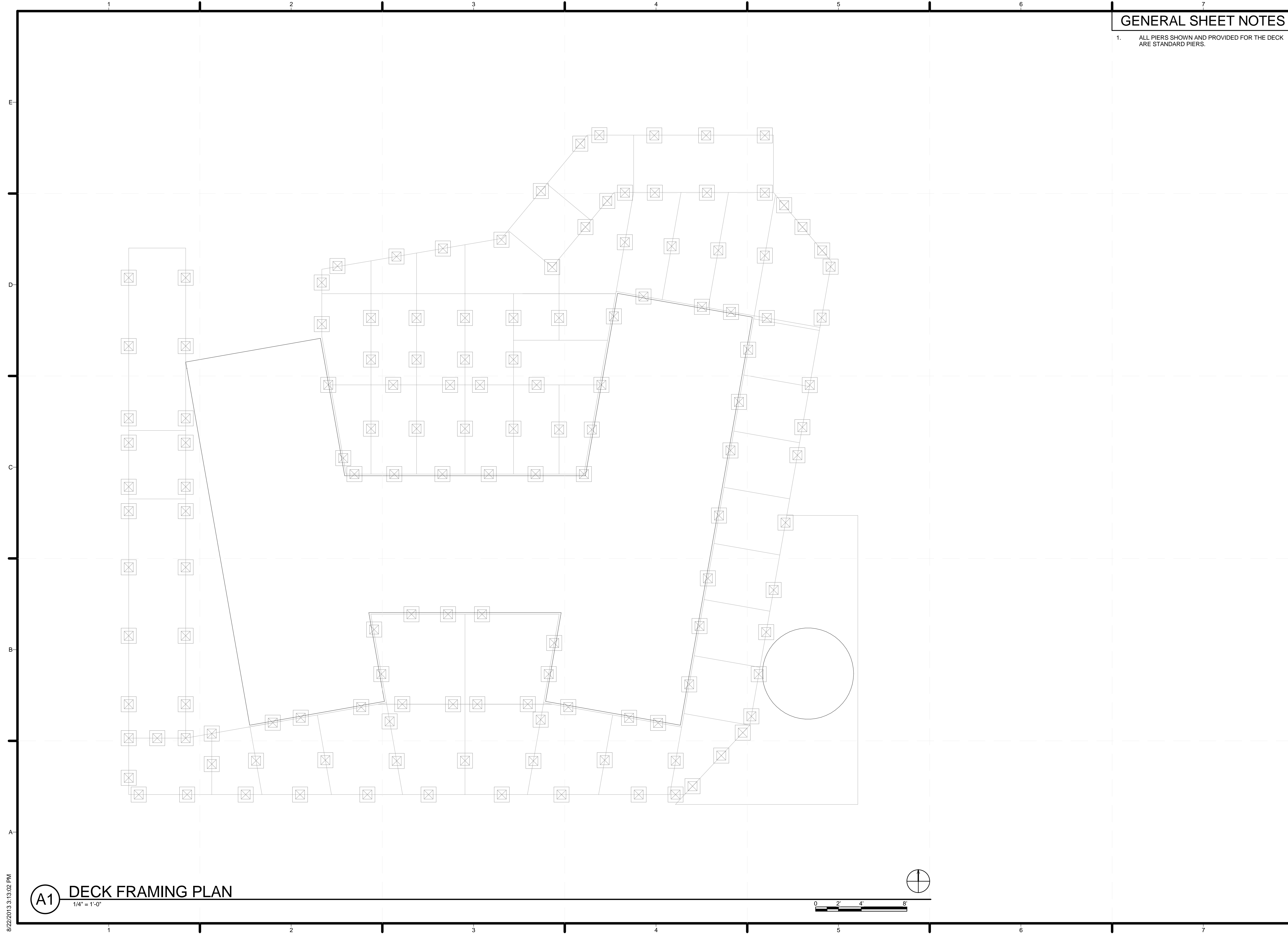
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	08/22/13	DOE AS BUILT SUBMISSION
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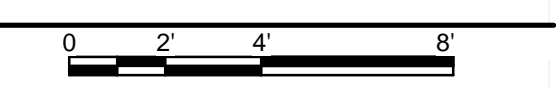
LOT NUMBER: 118  
 DRAWN BY: ML/KM  
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 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**DECK FRAMING PLAN**

**S-107**



**(A1) DECK FRAMING PLAN**  
 1/4" = 1'-0"



8/22/2013 3:13:02 PM

**GENERAL SHEET NOTES**

1. REFER TO GENERAL STRUCTURAL NOTES & DETAILS FOR GENERAL REQUIREMENTS OF CONSTRUCTION, MATERIALS, AND REQUIREMENTS OF CONSTRUCTION OBSERVATIONS.
2. S.A.D. FOR ALL DIMENSIONS AND FINISH ELEVATIONS NOT NOTED.
3. S.A.D. FOR ALL FINISHES, FIRE PROTECTION, THERMAL, AND MOISTURE PROTECTION, WATERPROOFING, AND ACOUSTICAL REQUIREMENTS FOR ALL CEILINGS, WALLS, FLOORS, ROOF DECKS AND TERRACES.
4. SEE S-601 FOR FOOTING SCHEDULE.
5. BEARING CAPACITY AND FOOTING DESIGN BASED ON GOVERNING CASE OF GRAVITY AND LATERAL FORCES.
6. MAXIMUM BEARING CAPACITY FOR ALL FOOTINGS TO BE 1500 PSF.



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**LEGEND**

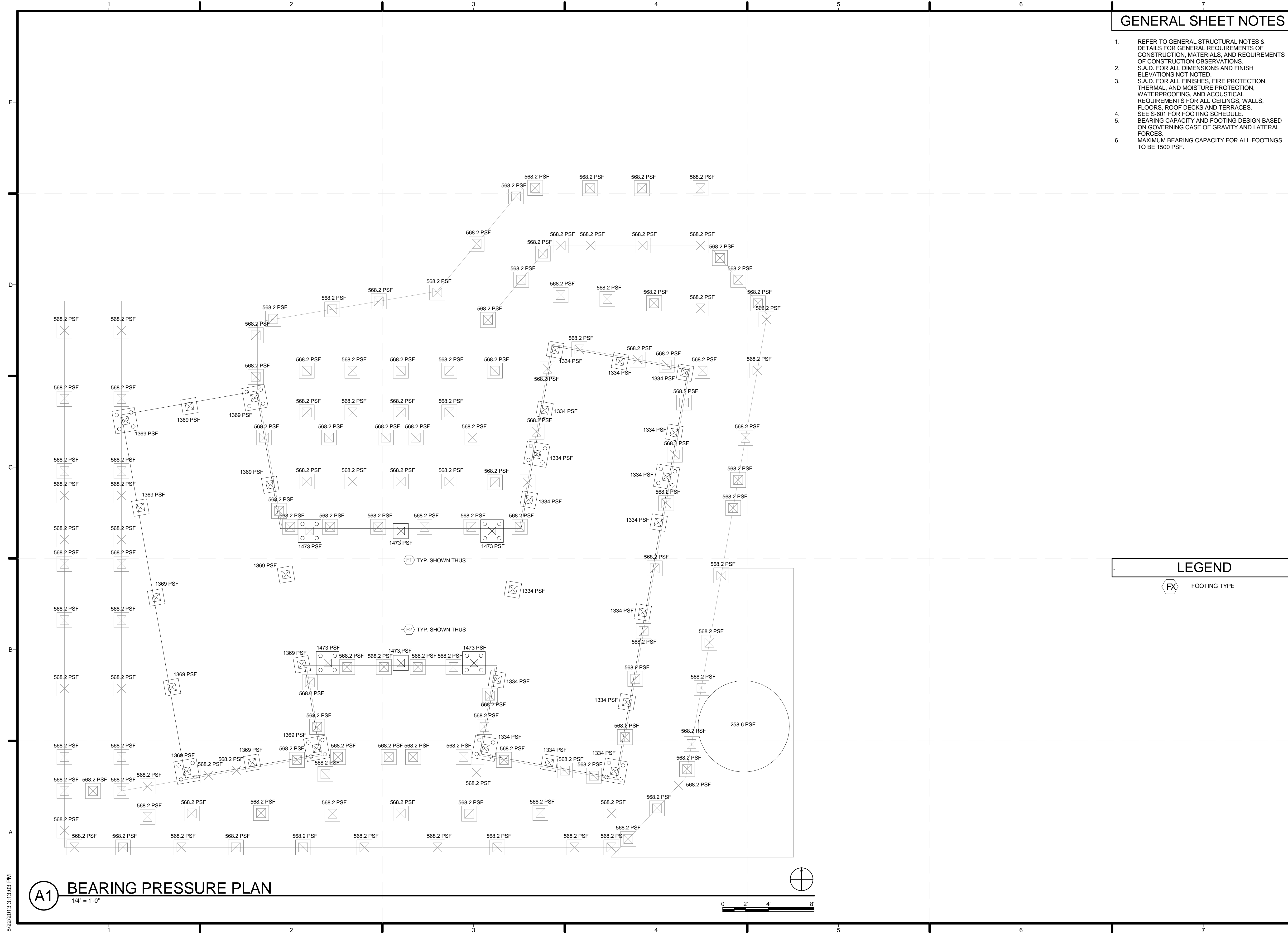
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MARK	DATE	DESCRIPTION
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	08/12/13	AS BUILT REVISIONS
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	07/26/13	CD CITY INSPECTION 2
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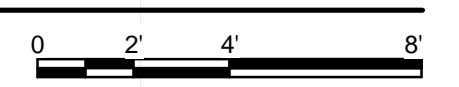
LOT NUMBER: 118  
 DRAWN BY: ML/KM  
 CHECKED BY: SCU  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE: BEARING PRESSURE PLAN

**S-108**



**(A1) BEARING PRESSURE PLAN**  
 1/4" = 1'-0"



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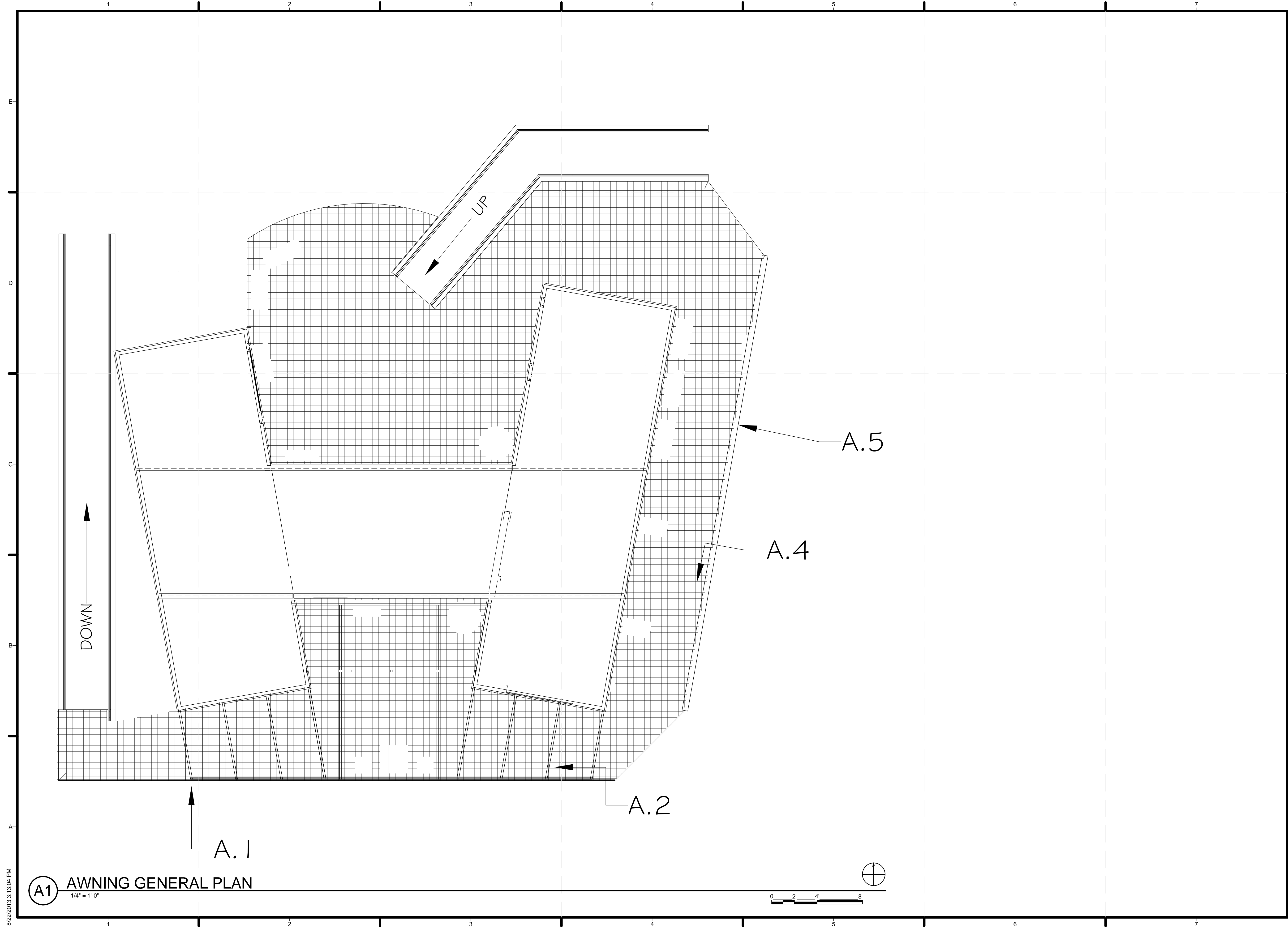
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	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: Author  
 CHECKED BY: Checker  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**SOUTH AWNING PLAN**

**S-109**



**(A1) AWNING GENERAL PLAN**  
 1/4" = 1'-0"

8/22/2013 3:13:04 PM

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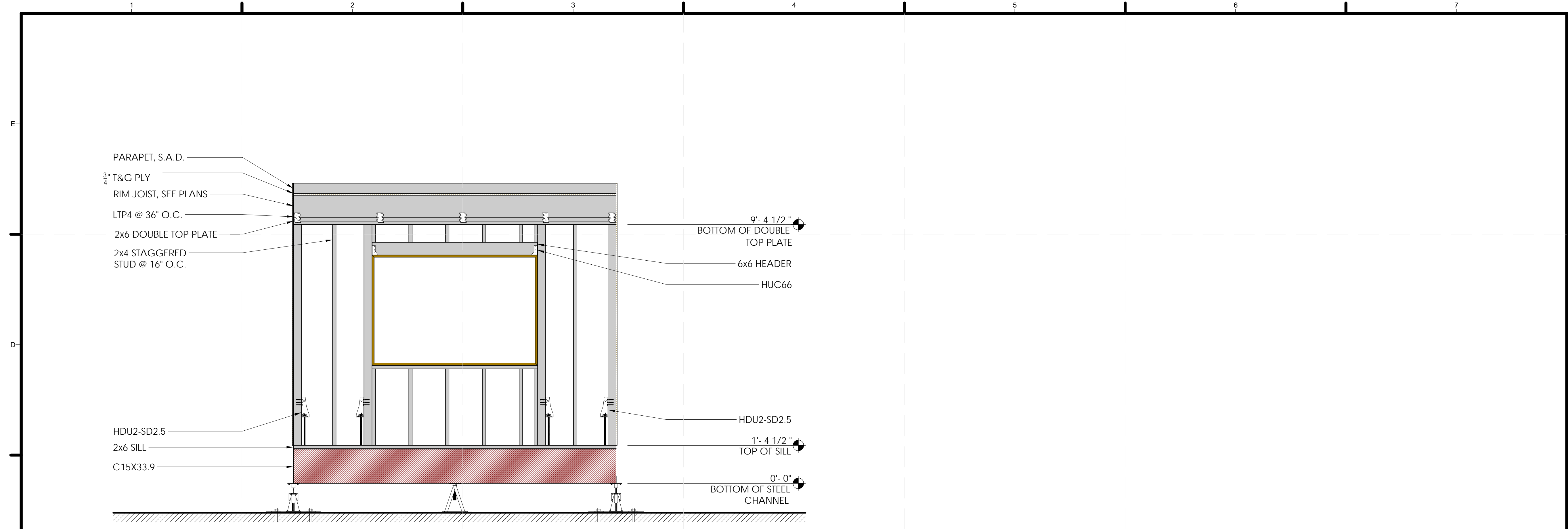
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	10/11/12	DD SUBMISSION

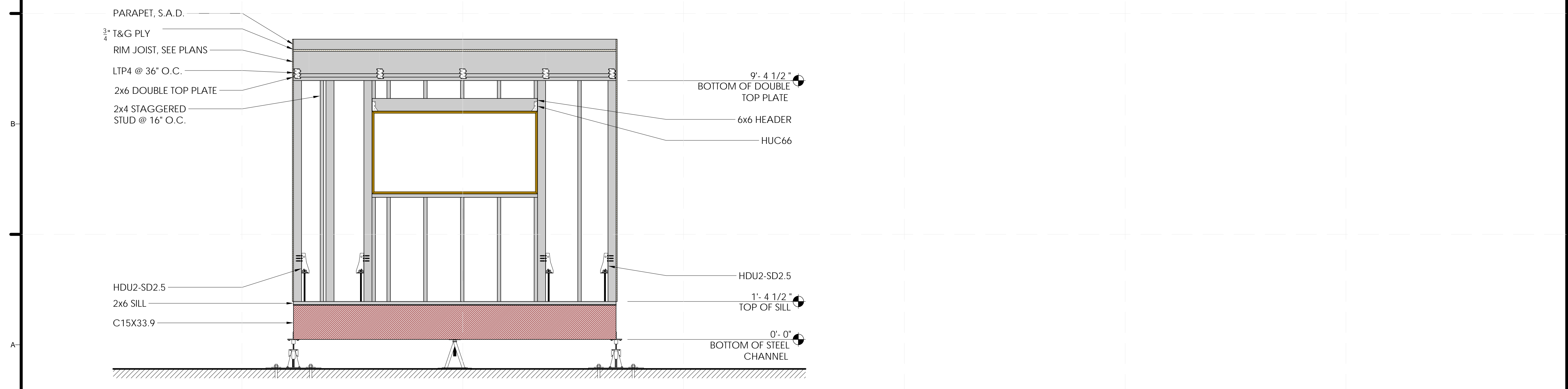
LOT NUMBER: 118  
 DRAWN BY: Author  
 CHECKED BY: Checker  
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SHEET TITLE:  
 MODULE A WALL FRAMING

**S-201**



**(E) MODULE A NORTH WALL ELEVATIONS**  
 1/2" = 1'-0"  
 0 1' 2' 3' 4'



**(A) MODULE A SOUTH WALL ELEVATIONS**  
 1/2" = 1'-0"  
 0 1' 2' 3' 4'

8/22/2013 3:44:39 PM



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**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035



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**SOLAR DECATHLON**

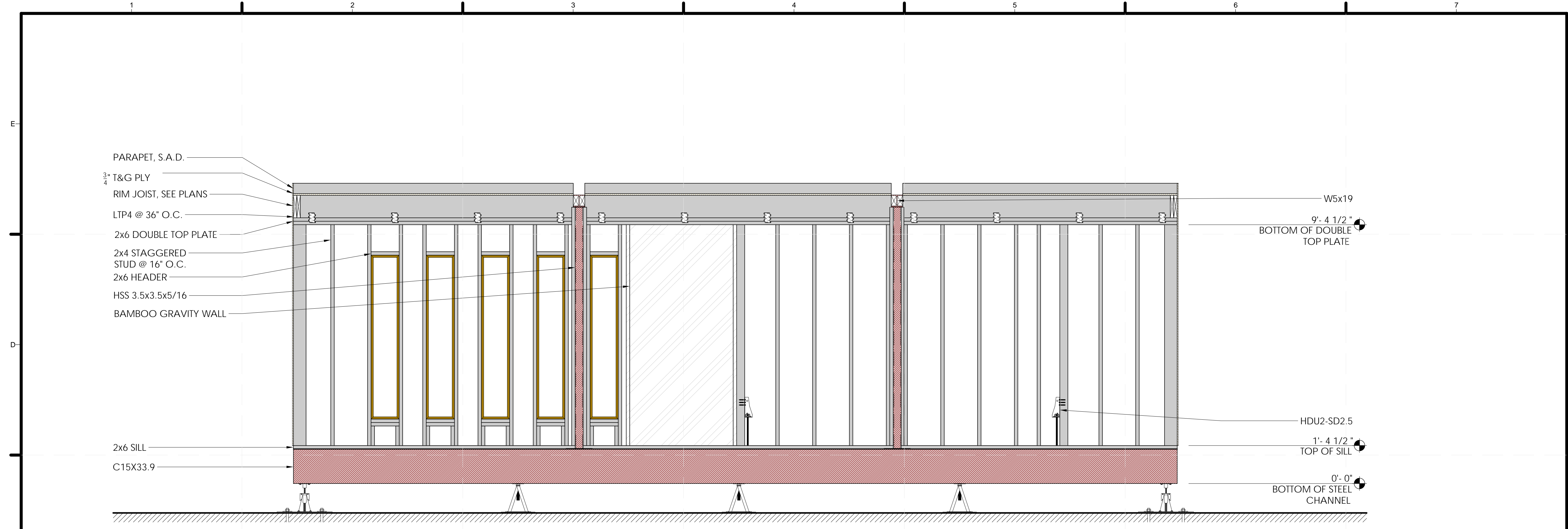
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	07/26/13	CD CITY INSPECTION 2
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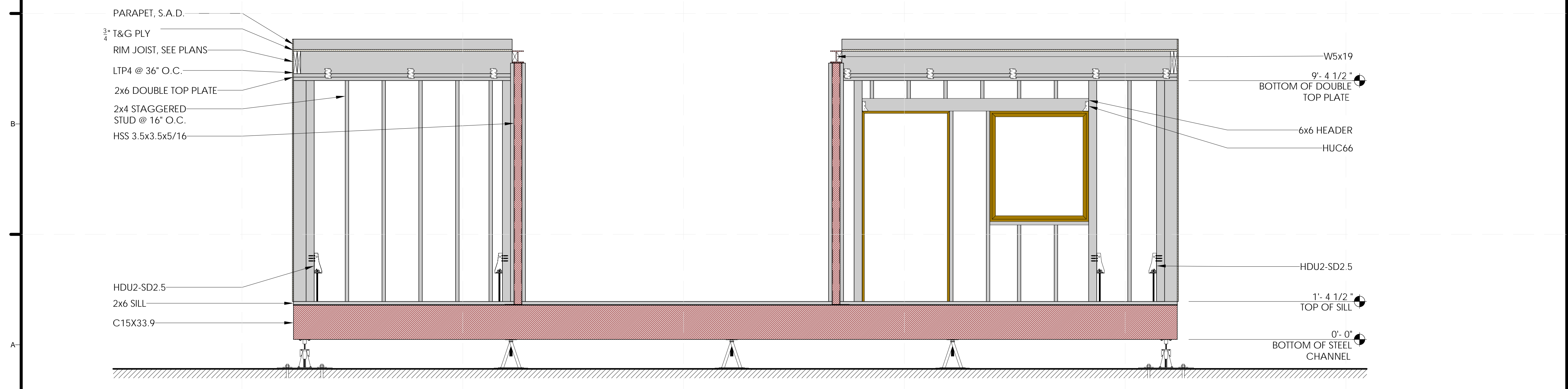
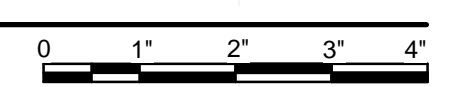
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 CHECKED BY: SCU  
 COPYRIGHT: NONE. PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
 MODULE A WALL FRAMING

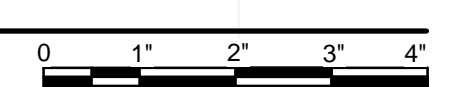
**S-202**



**1** MODULE A WEST WALL ELEVATIONS  
 1/2" = 1'-0"



**2** MODULE A EAST WALL ELEVATIONS  
 1/2" = 1'-0"

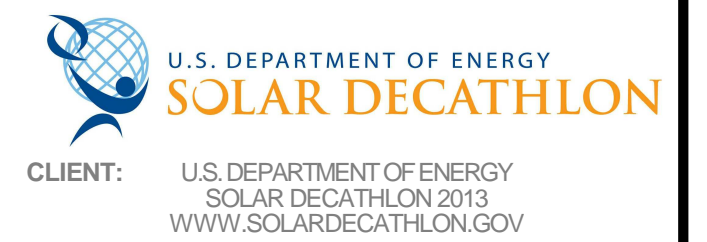


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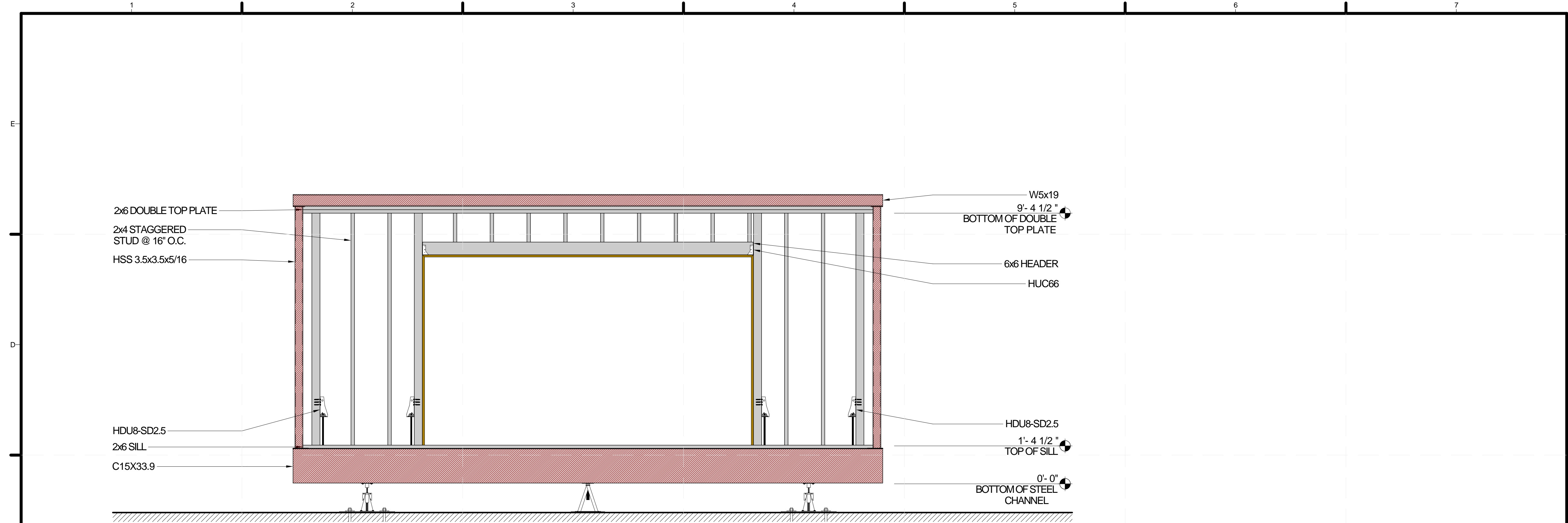
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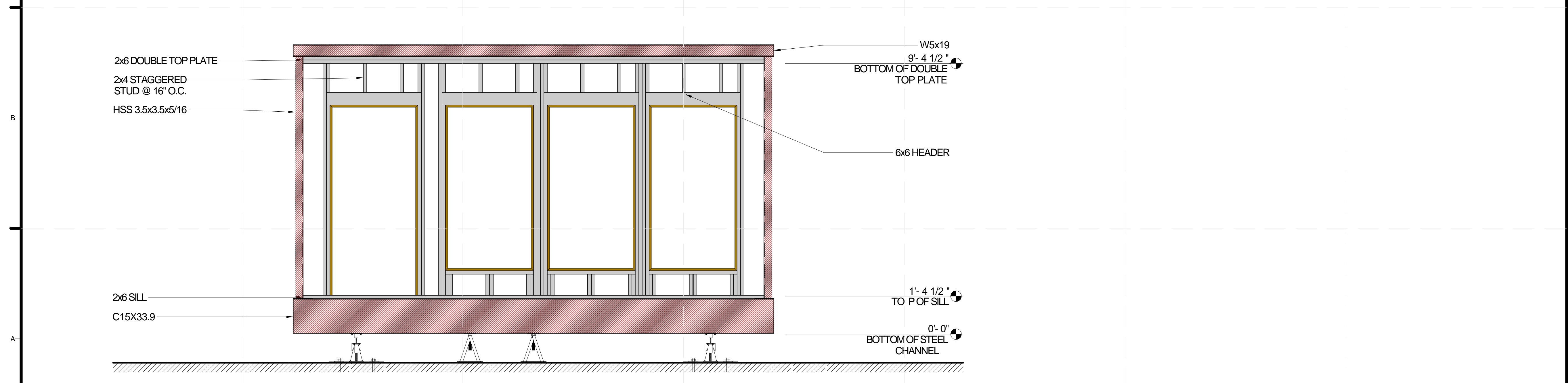
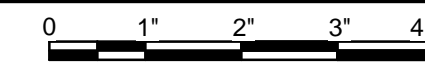
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 CHECKED BY: Checker  
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SHEET TITLE:  
 MODULE B WALL FRAMING

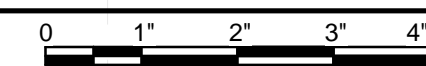
**S-203**



**(C) MODULE B NORTH WALL ELEVATIONS**  
 1/2" = 1'-0"



**(B) MODULE B SOUTH WALL ELEVATIONS**  
 1/2" = 1'-0"



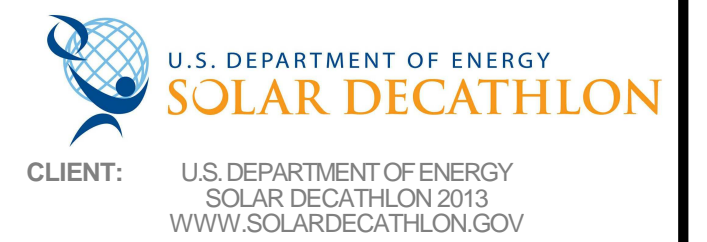
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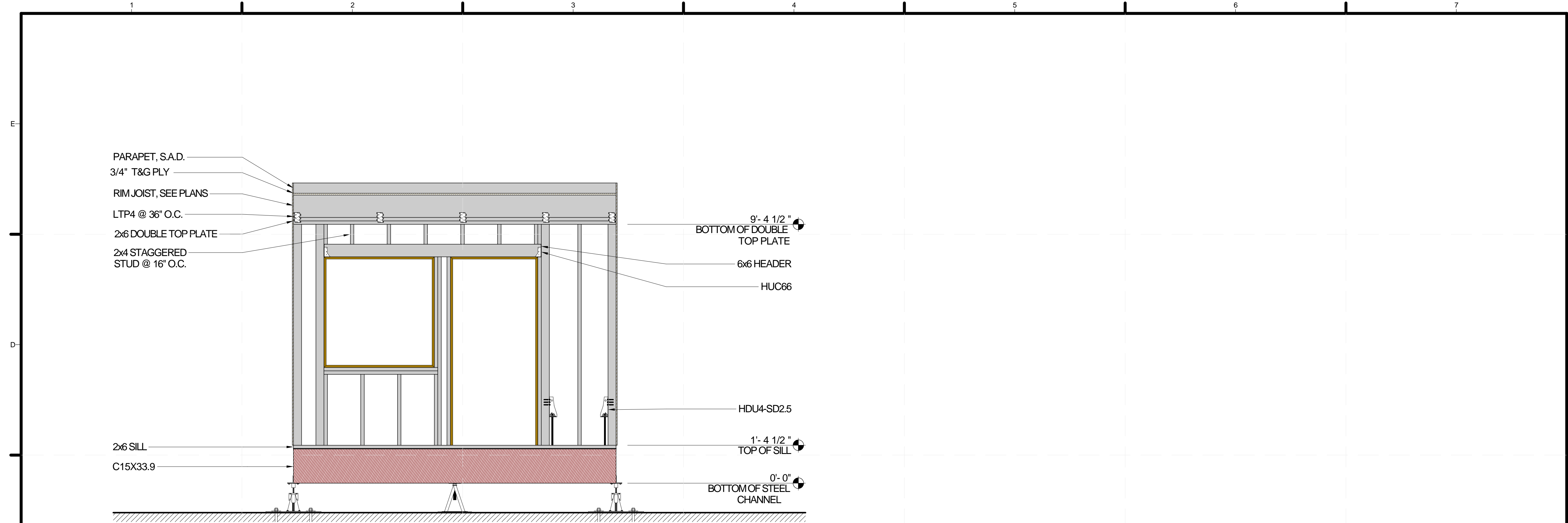


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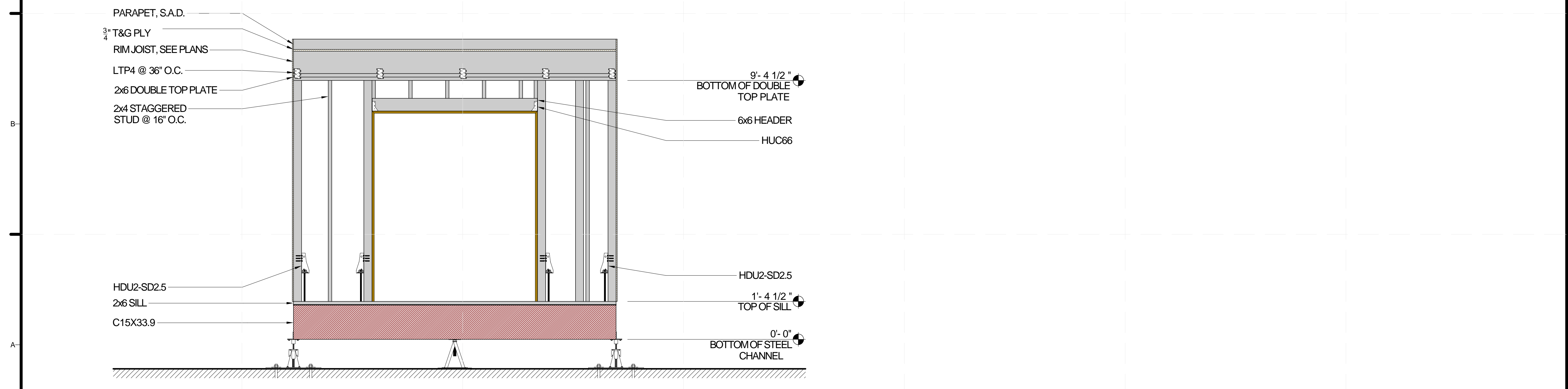
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 DRAWN BY: Author  
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SHEET TITLE:  
**MODULE C WALL FRAMING**

**S-204**



**(E) MODULE C NORTH WALL ELEVATIONS**  
 1/2" = 1'-0"  
 0 1" 2" 3" 4"



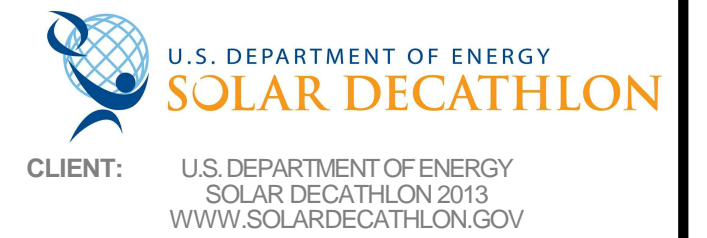
**(A) MODULE C SOUTH WALL ELEVATIONS**  
 1/2" = 1'-0"  
 0 1" 2" 3" 4"

8/22/2013 3:13:08 PM



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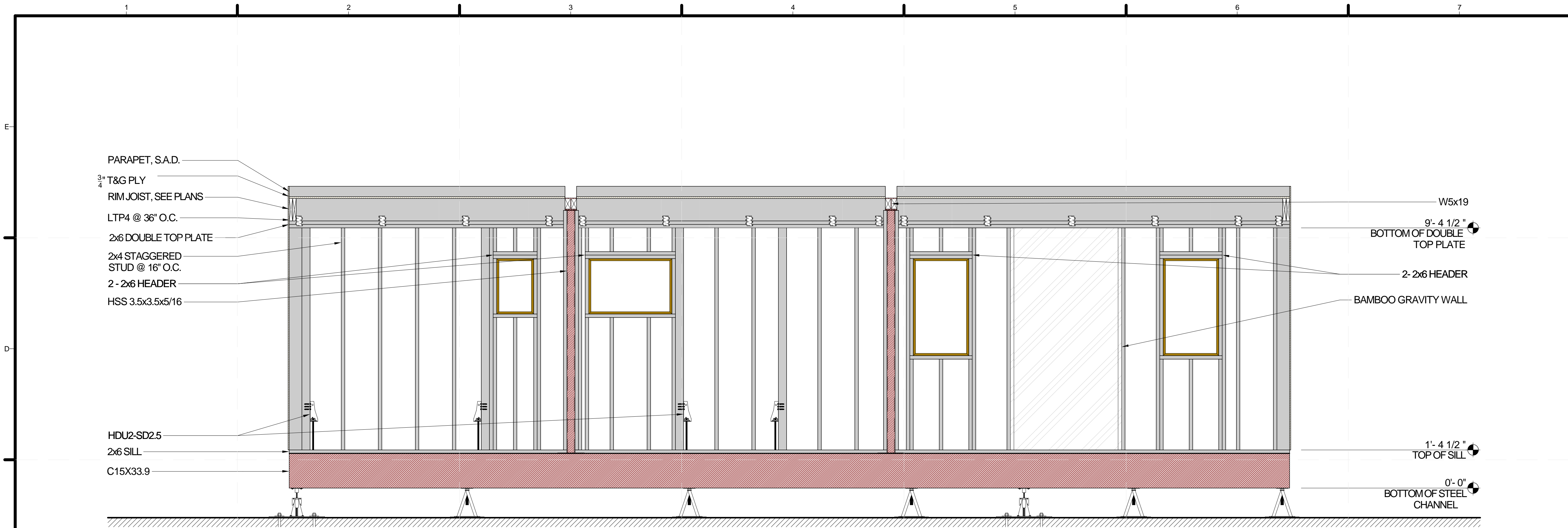


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LOT NUMBER: 118  
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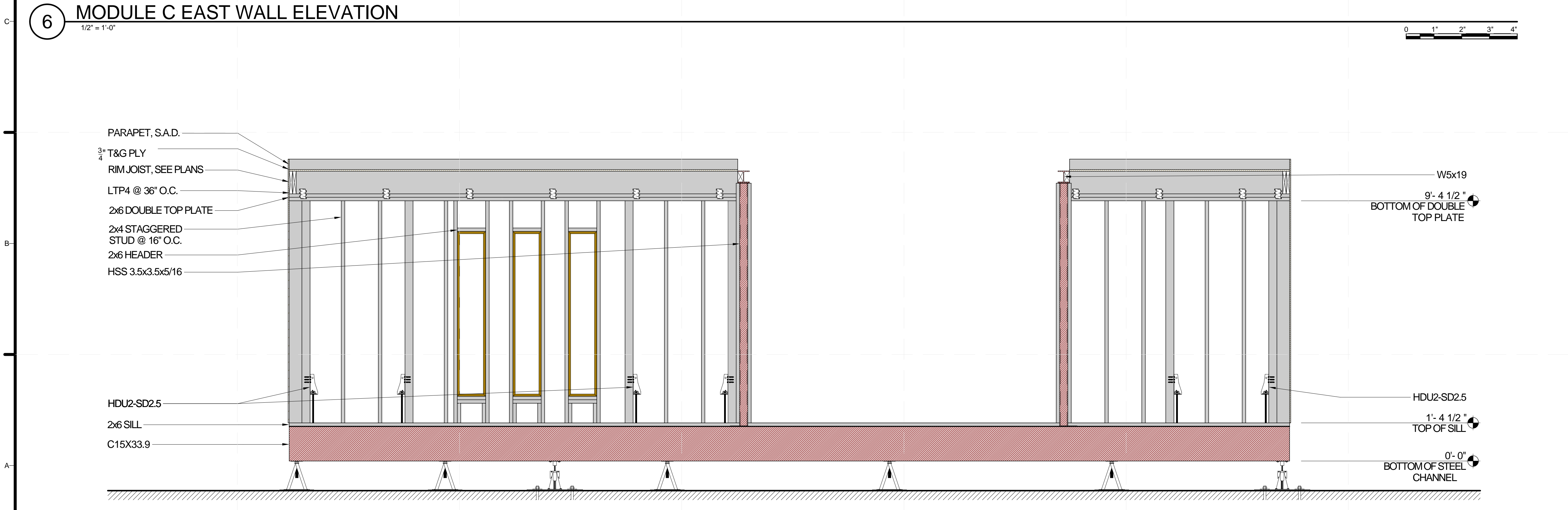
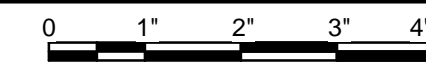
SHEET TITLE:  
**MODULE C WALL FRAMING**

**S-205**



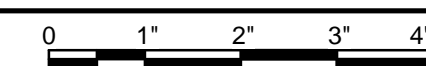
**6** MODULE C EAST WALL ELEVATION

1/2" = 1'-0"



**5** MODULE C WEST WALL ELEVATIONS

1/2" = 1'-0"



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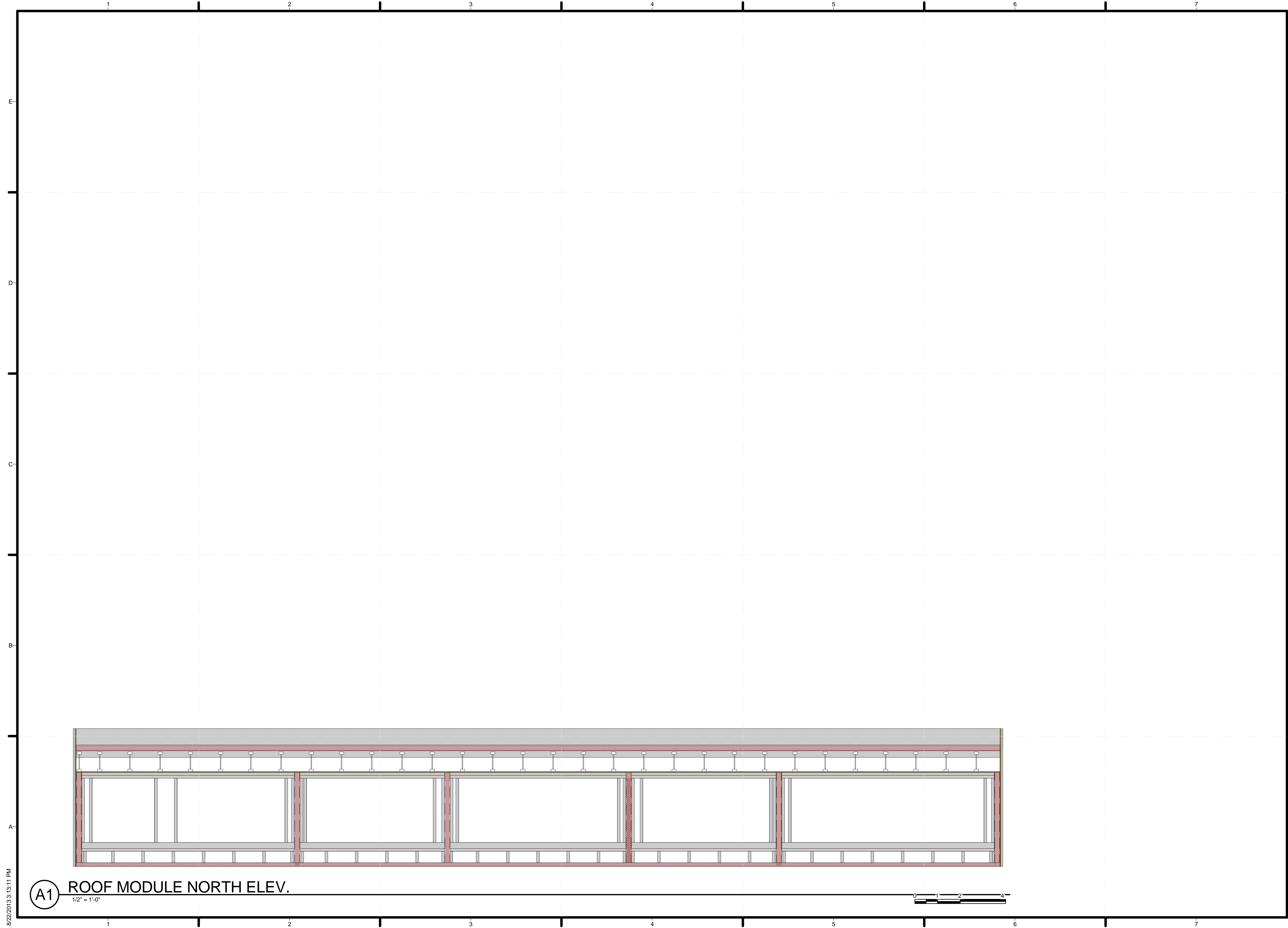
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	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**ROOF ELEVATION**

**S-206**



**(A1) ROOF MODULE NORTH ELEV.**  
 1/2" = 1'-0"

8/22/2013 3:13:11 PM

**GENERAL SHEET NOTES**

1. REFER TO GENERAL STRUCTURAL NOTES & DETAILS FOR GENERAL REQUIREMENTS OF CONSTRUCTION, MATERIALS, AND REQUIREMENTS OF CONSTRUCTION OBSERVATIONS.
2. S.A.D. FOR ALL DIMENSIONS AND FINISH ELEVATIONS NOT NOTED.
3. S.A.D. FOR ALL FINISHES, FIRE PROTECTION, THERMAL AND MOISTURE PROTECTION, WATERPROOFING, AND ACOUSTICAL REQUIREMENTS FOR ALL CEILINGS, WALLS, FLOORS, ROOF DECKS, AND TERRACES.



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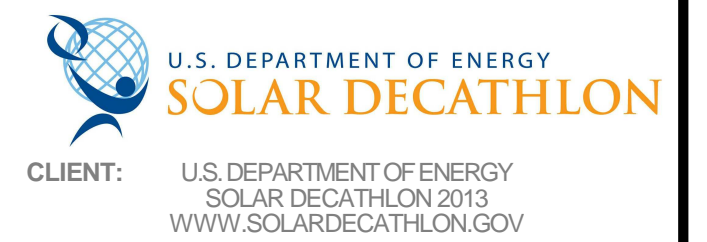
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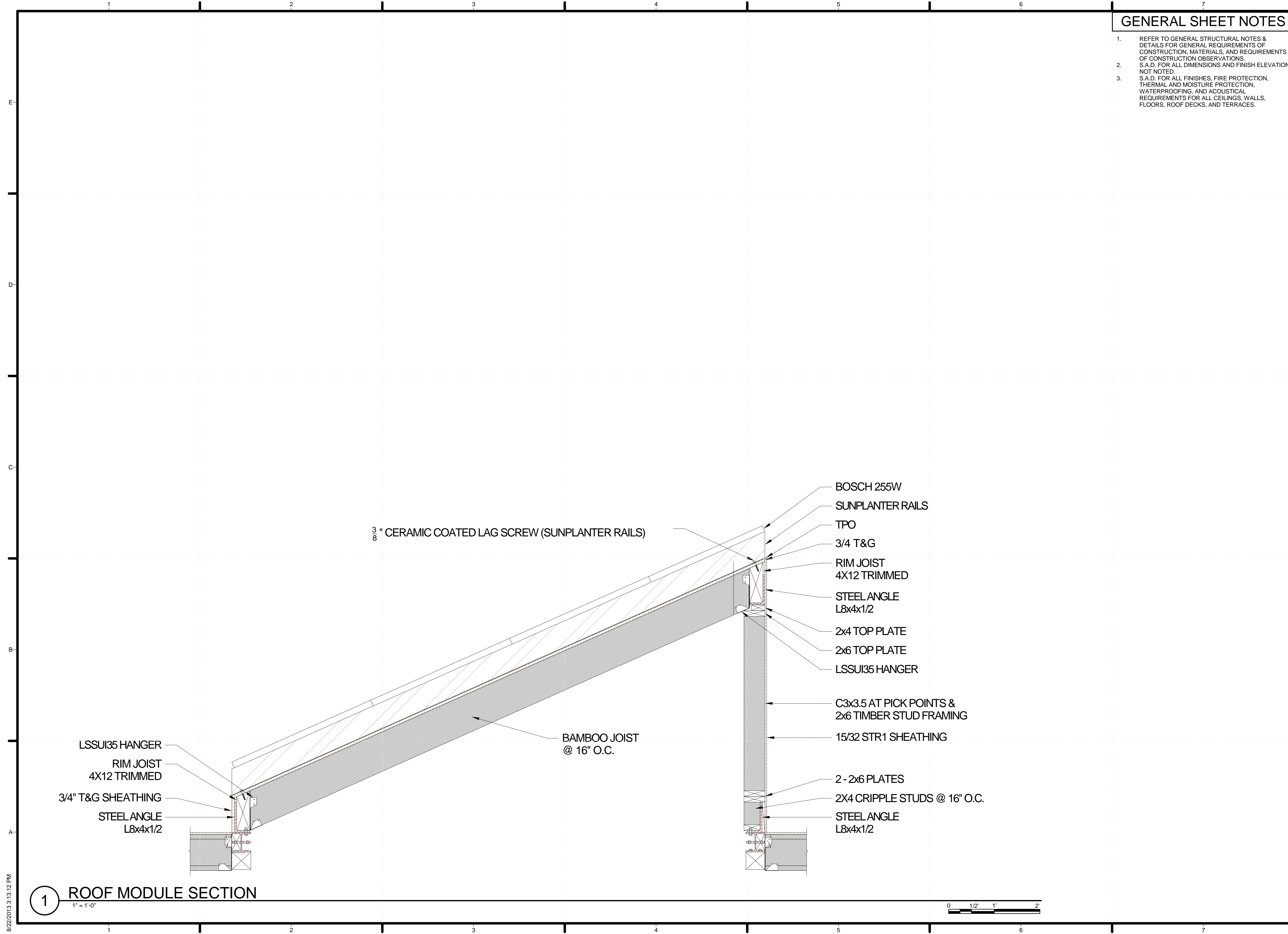


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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: ML/KM  
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SHEET TITLE:  
**ROOF MODULE SECTION**

**S-301**



8/22/2013 3:13:12 PM





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SHEET TITLE:  
 DECK SECTION

S-311

1 2 3 4 5 6 7

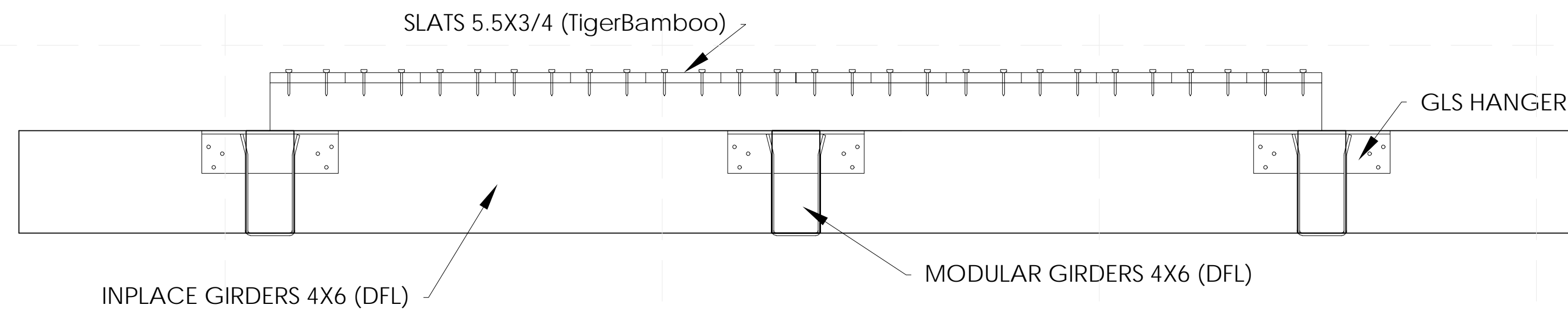
E

D

C

B

A



**A1** DECK SECTION  
 1 1/2" = 1'-0"



8/22/2013 3:25:35 PM

GENERAL SHEET NOTES

1. DECK JOISTS RUN NORTH/SOUTH, DECK BEAMS RUN EASTWEST



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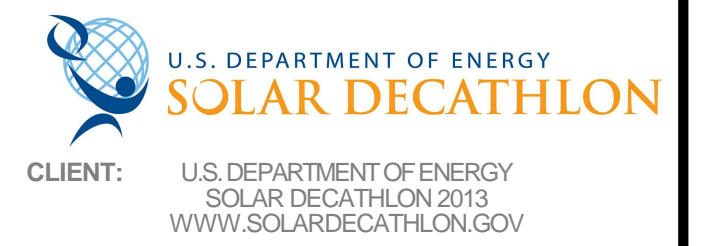
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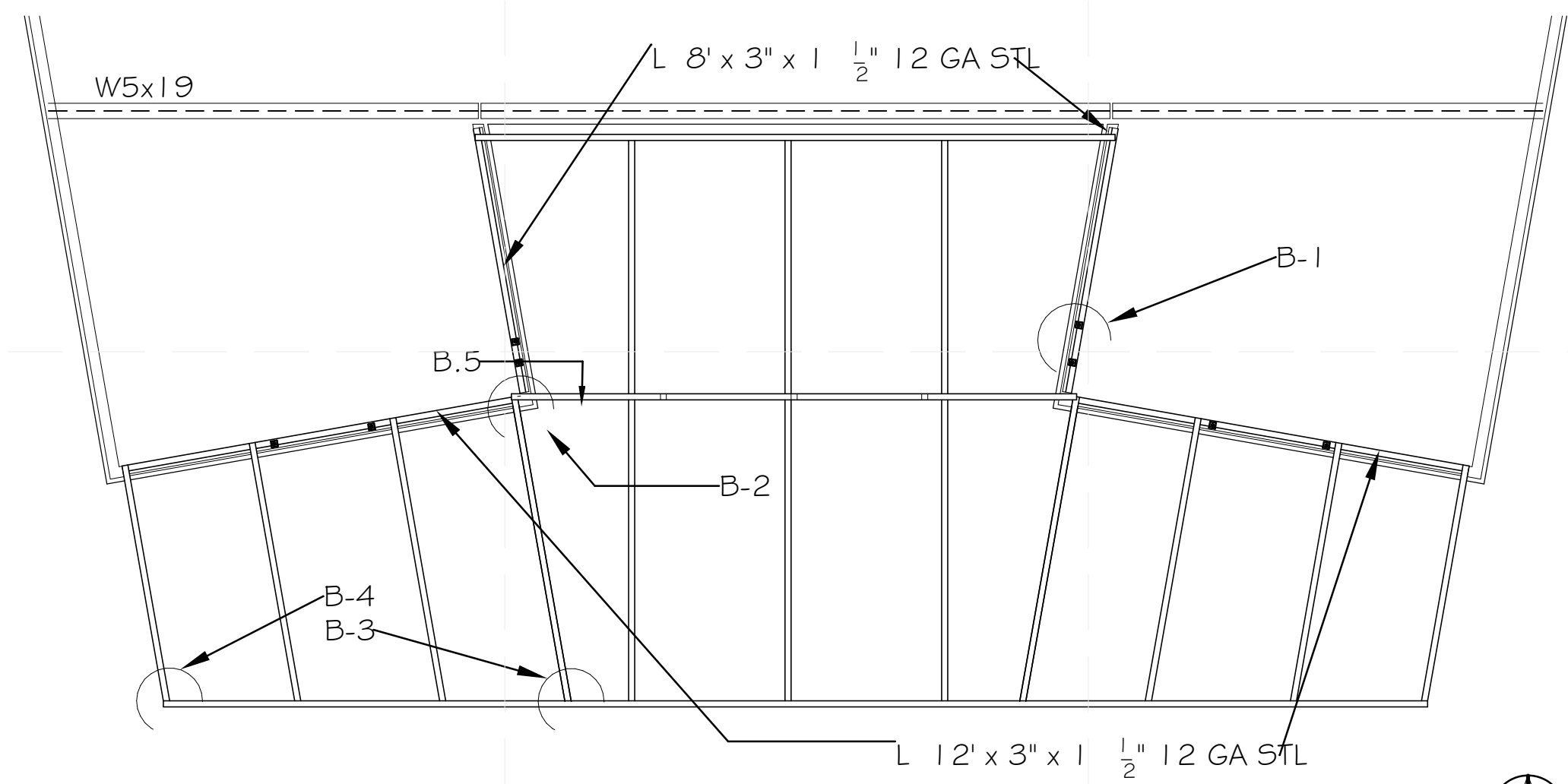


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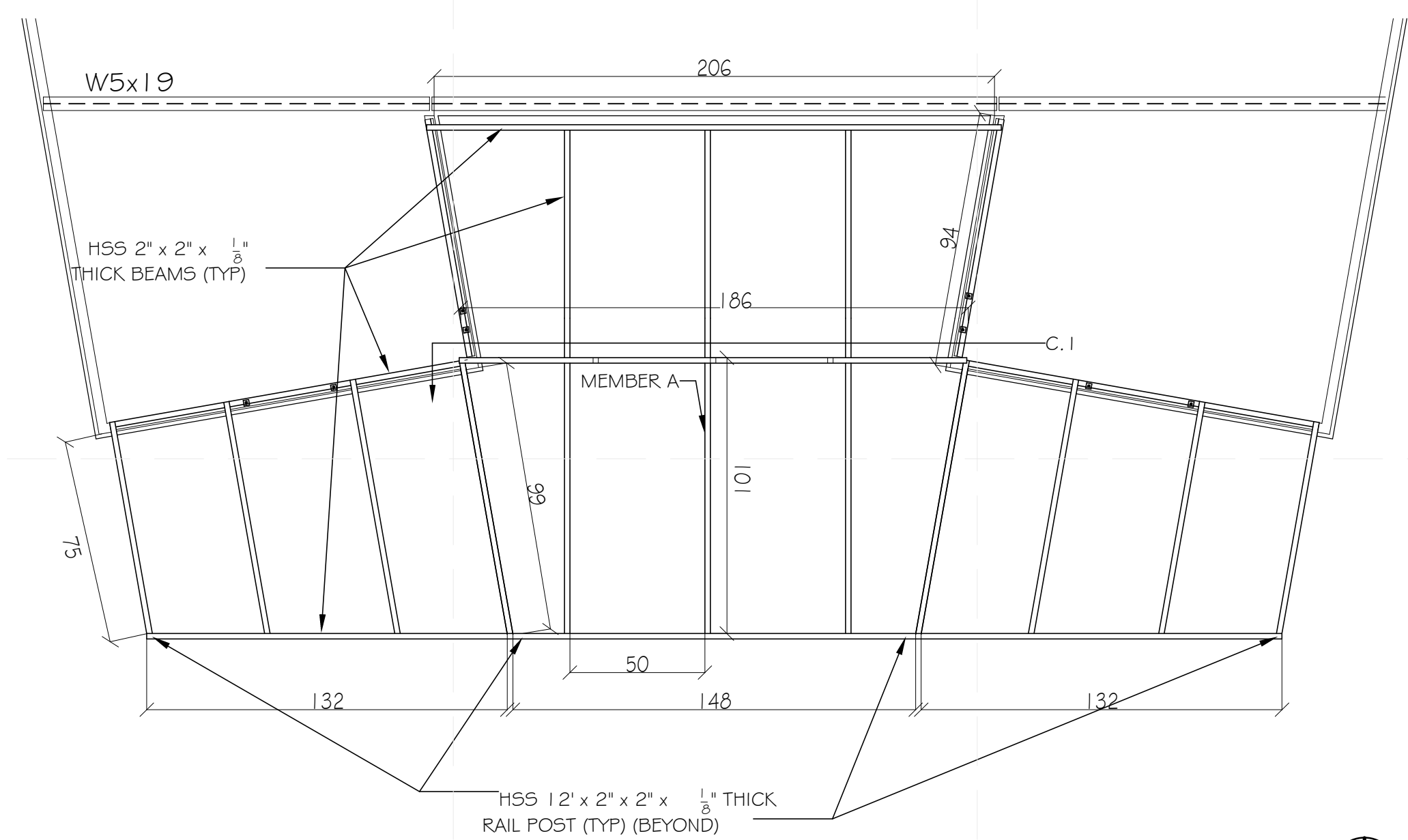
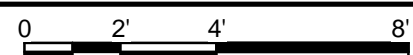
SHEET TITLE:  
**AWNING LARGE SCALE PLAN**

**S-401**



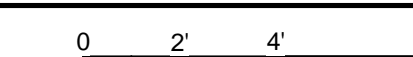
**C1** AWNING DETAIL CALLOUTS PLAN

1/4" = 1'-0"



**A1** AWNING LARGE SCALE PLAN

1/4" = 1'-0"



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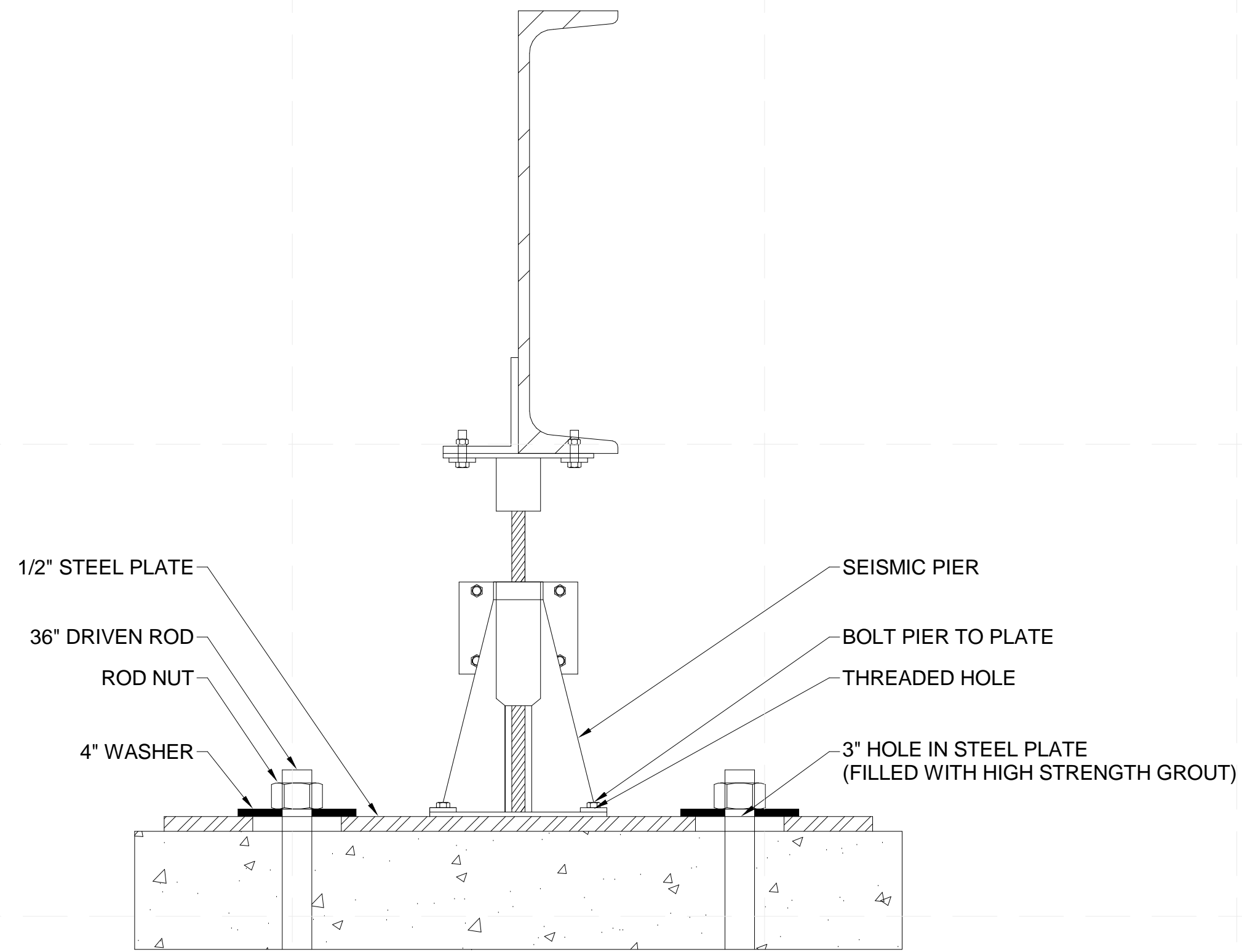
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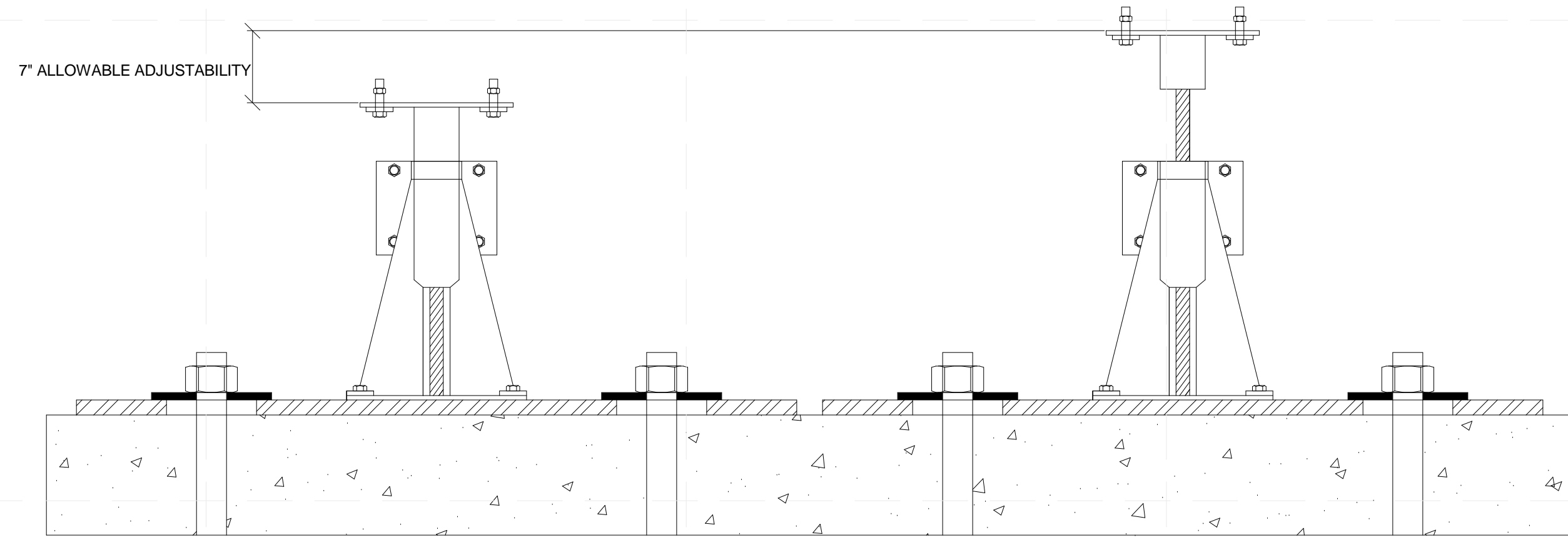
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SHEET TITLE:  
**PIER DETAILS**

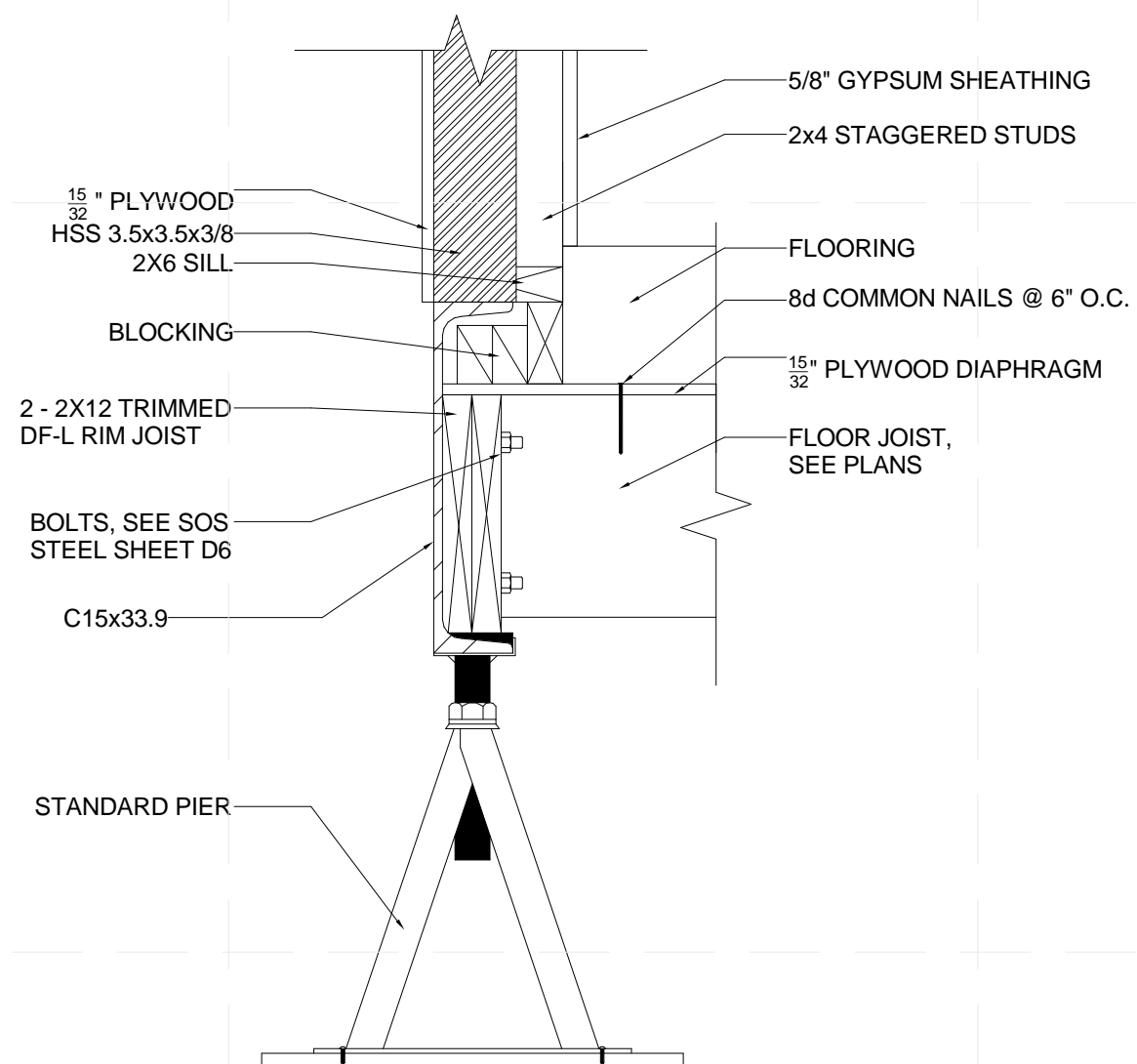
**S-501**



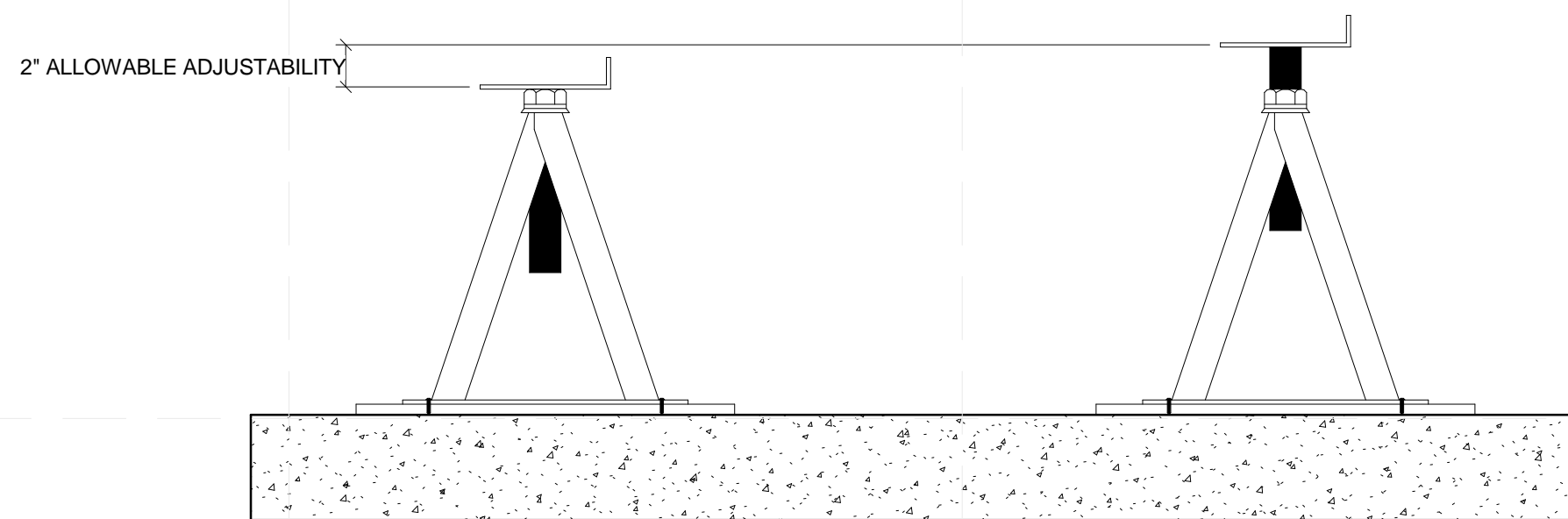
**C1 SEISMIC PIER DETAIL**  
 3" = 1'-0"



**C3 SEISMIC PIER ADJUSTABILITY**  
 3" = 1'-0"



**A1 STANDARD PIER DETAIL**  
 1 1/2" = 1'-0"



**A3 STANDARD PIER ADJUSTABILITY**  
 1 1/2" = 1'-0"



**GENERAL SHEET NOTES**

- SEE S.O.S. STEEL CO., INC. SHEET D1, DETAIL 12-PL1/2X-1PL1 FOR MODULE A AND B SEISMIC PIER PLATE DETAILS.

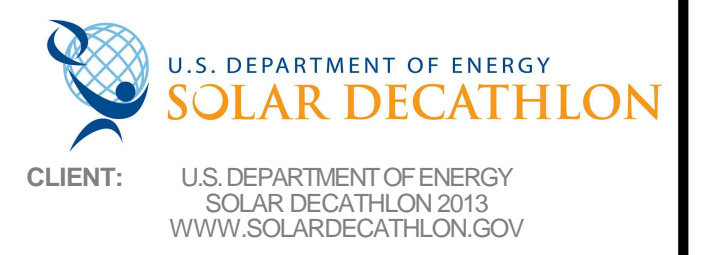


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*BILL OF MATERIAL*

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
1PL1		4	PL 1/2x24	2'-8"	A36	SHIP LOOSE

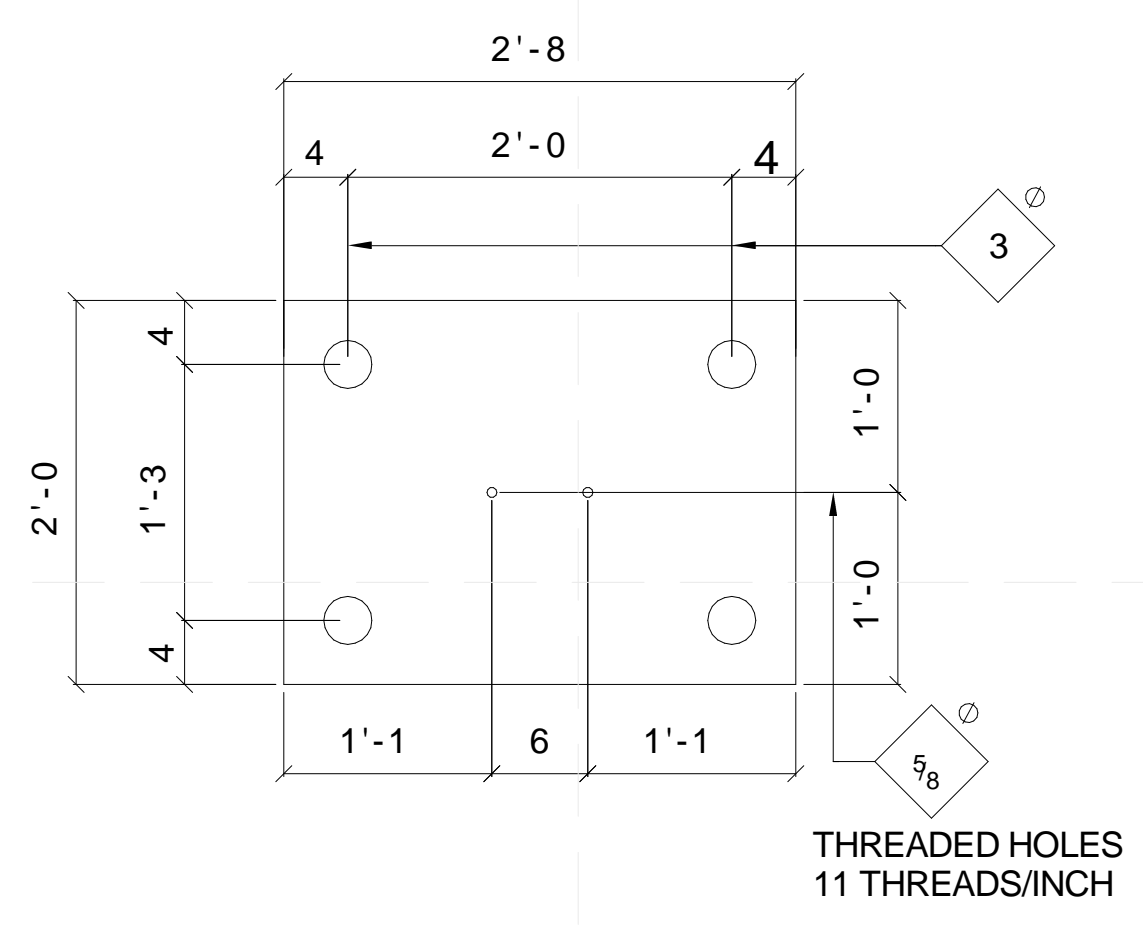


MARK	DATE	DESCRIPTION
	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**PIER PLATE DETAILS**

**S-502**



**D1** MODULE C SEISMIC PIER PLATE  
 1" = 1'-0"  
 0 1" 2"

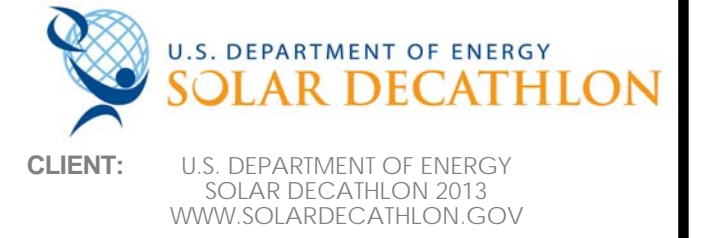
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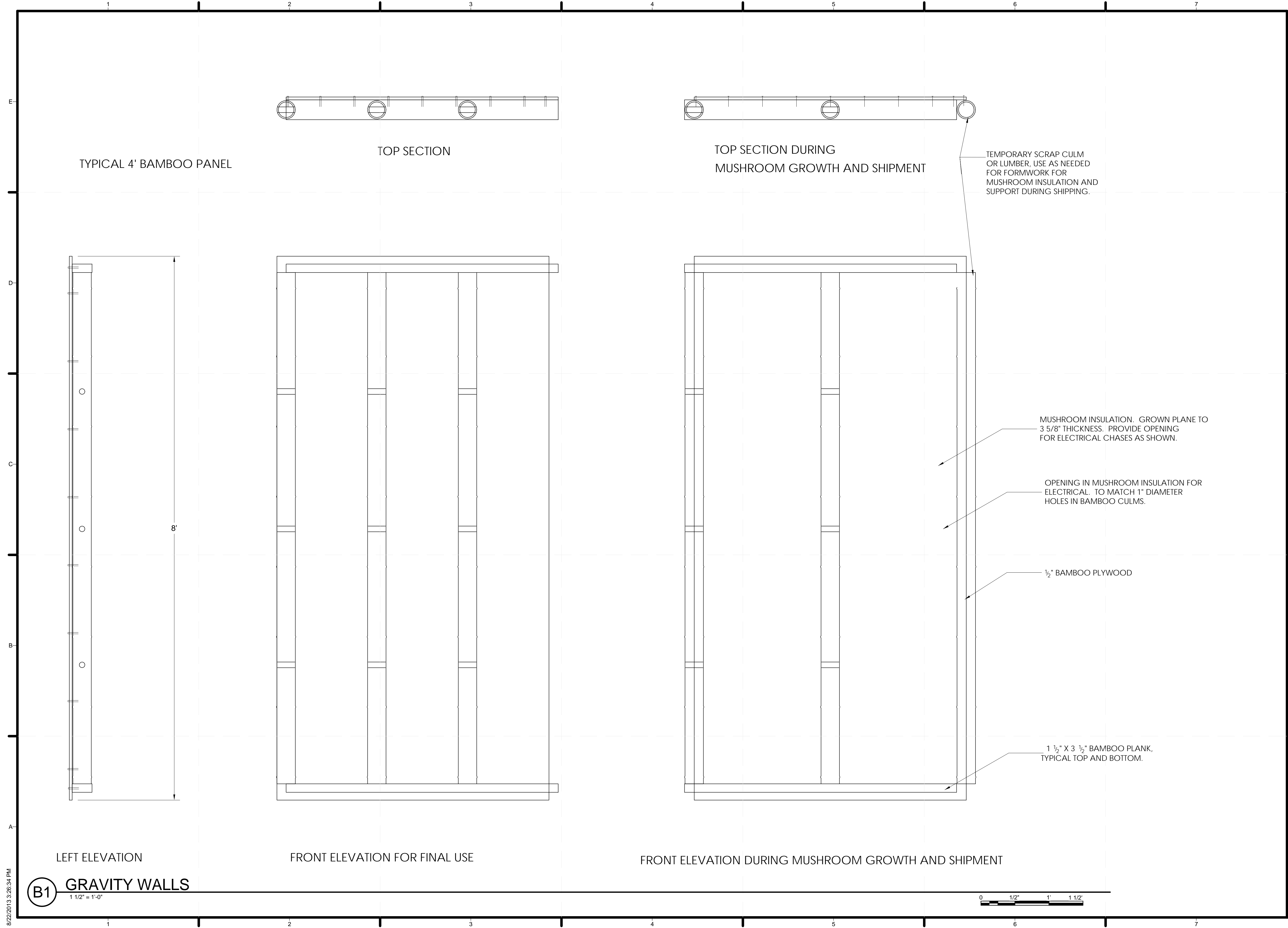


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	02/14/13	CD SUBMISSION
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: ML/KM  
 CHECKED BY: SCU  
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SHEET TITLE:  
**BAMBOO GRAVITY WALL  
 DETAILS**

**S-512**



**(B1) GRAVITY WALLS**  
 1 1/2" = 1'-0"

8/22/2013 3:26:34 PM

GENERAL SHEET NOTES

1. NOT FOR CONSTRUCTION



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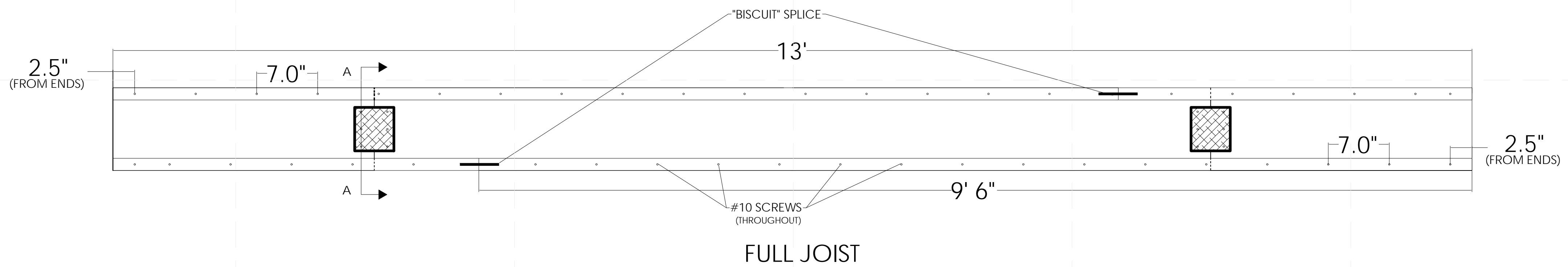
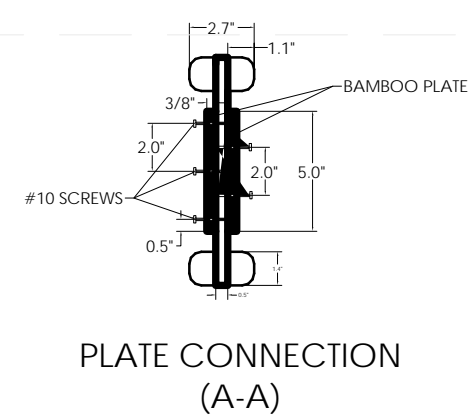
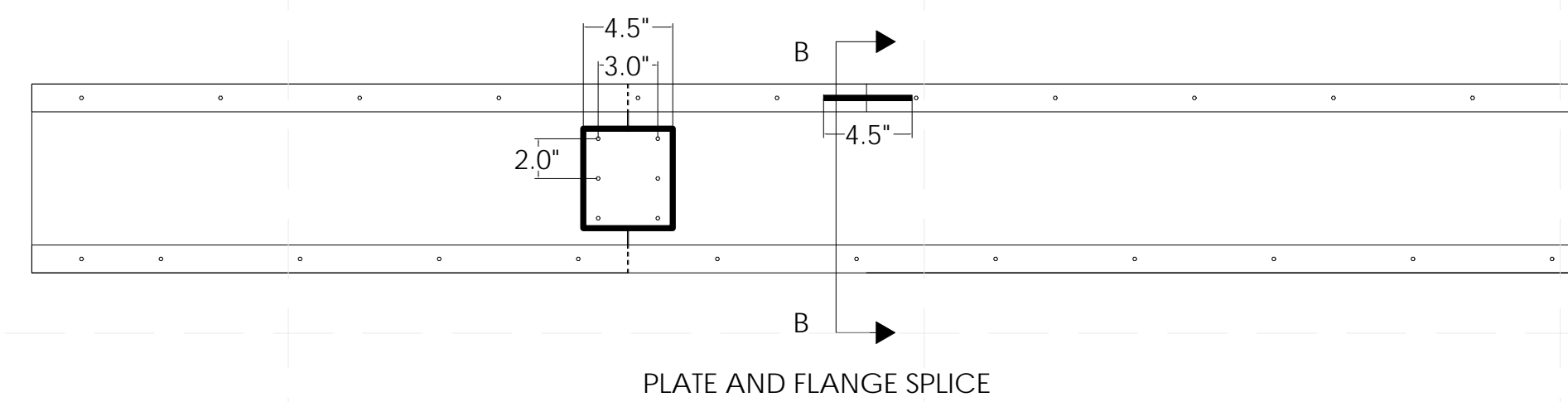
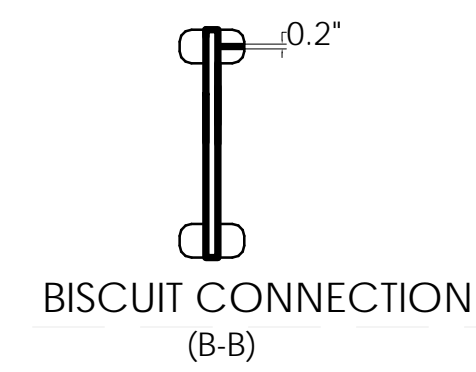
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	10/11/12	DD SUBMISSION

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SHEET TITLE:  
 I JOIST DETAILS

S-521



**B1** I JOIST DETAILS  
 1 1/2" = 1'-0"





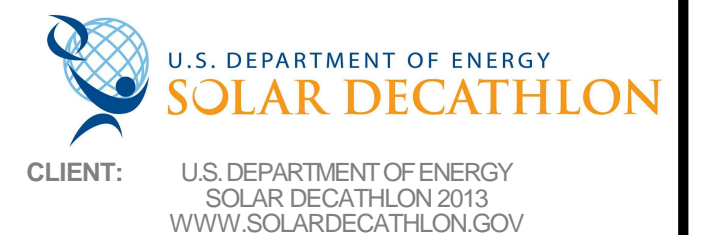
**GENERAL SHEET NOTES**

1. REFER TO SOS STEEL SHEET D9 FOR CORRESPONDING LOCATIONS OF DETAIL D2.
2. DETAIL D5 IS LOCATED AT B2, B5, C2 AND C5. REFER TO SHEET S-107 FOR GRID PLAN.



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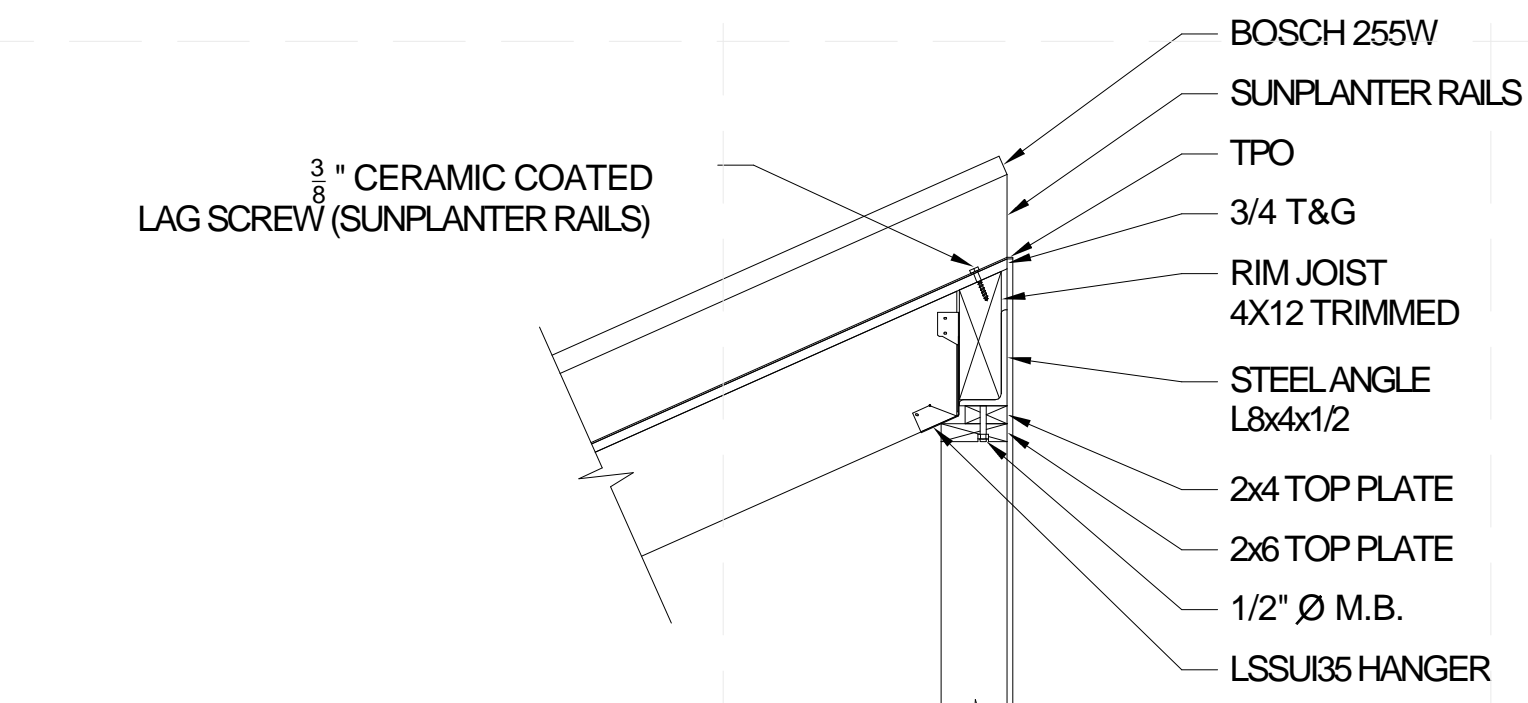
SHEET TITLE:  
**CONNECTION DETAILS**

**S-531**

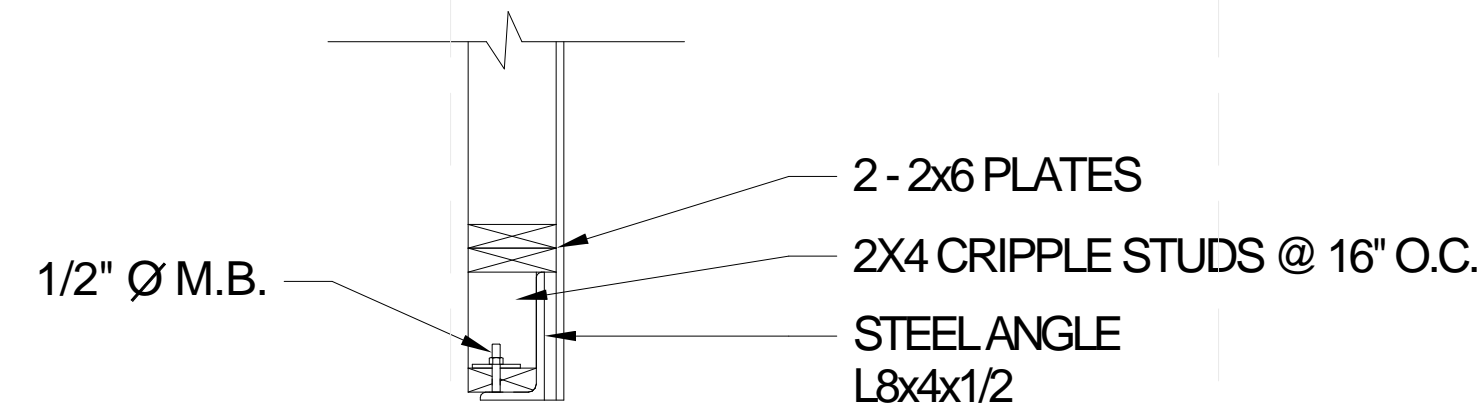
CHANNEL TO ANGLE WELD

CHANNEL TO ANGLE WELD

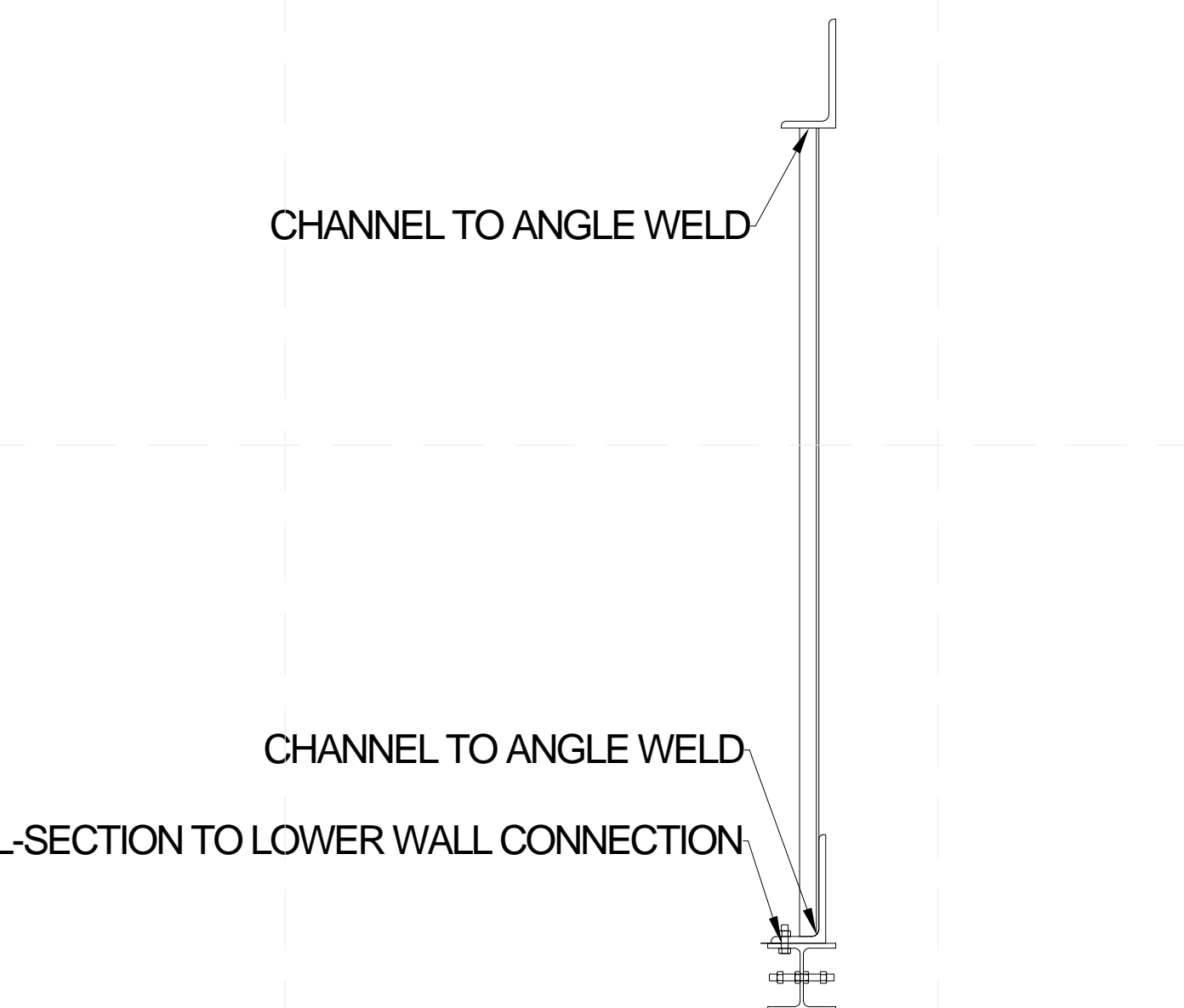
L-SECTION TO LOWER WALL CONNECTION



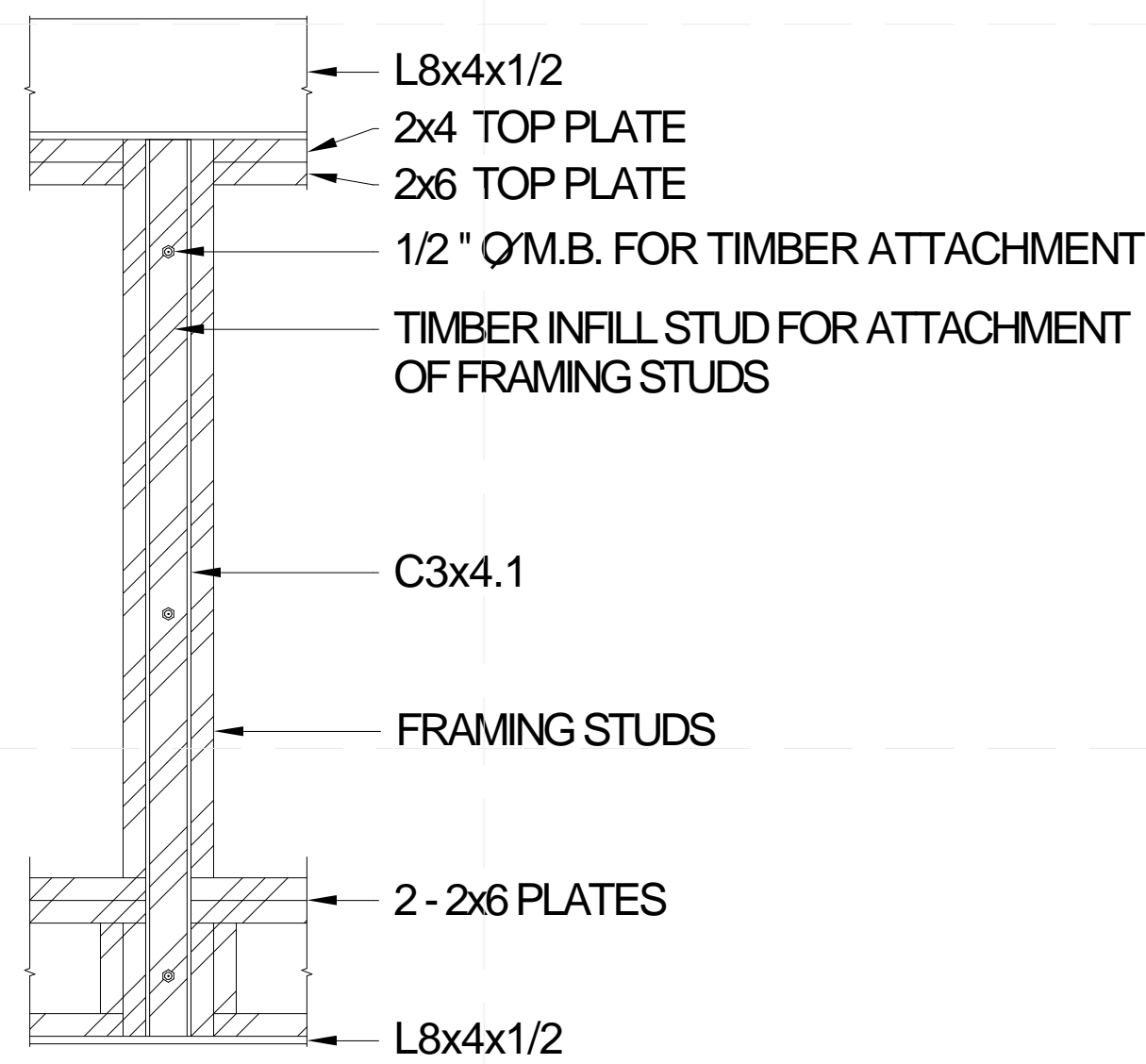
**D1 ROOF TOP CONNECTION DETAIL**  
 3/4" = 1'-0" 0 1 2 3



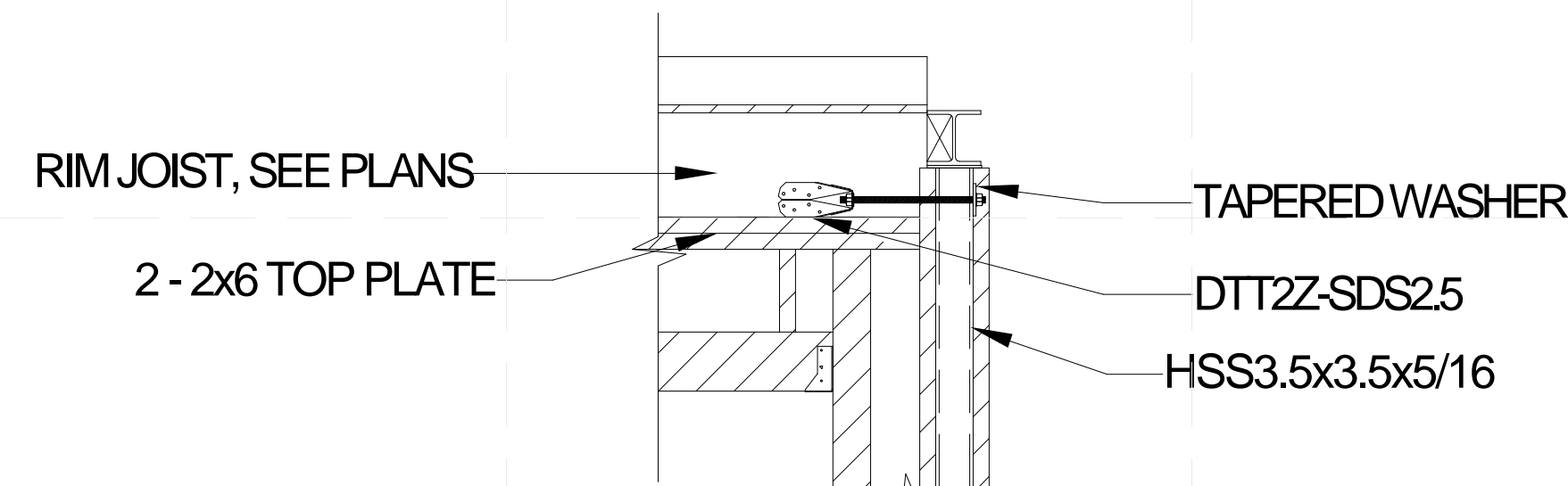
**D2 ROOF TIMBER TO ANGLE CONNECTION**  
 1" = 1'-0" 0 1/2 1 2



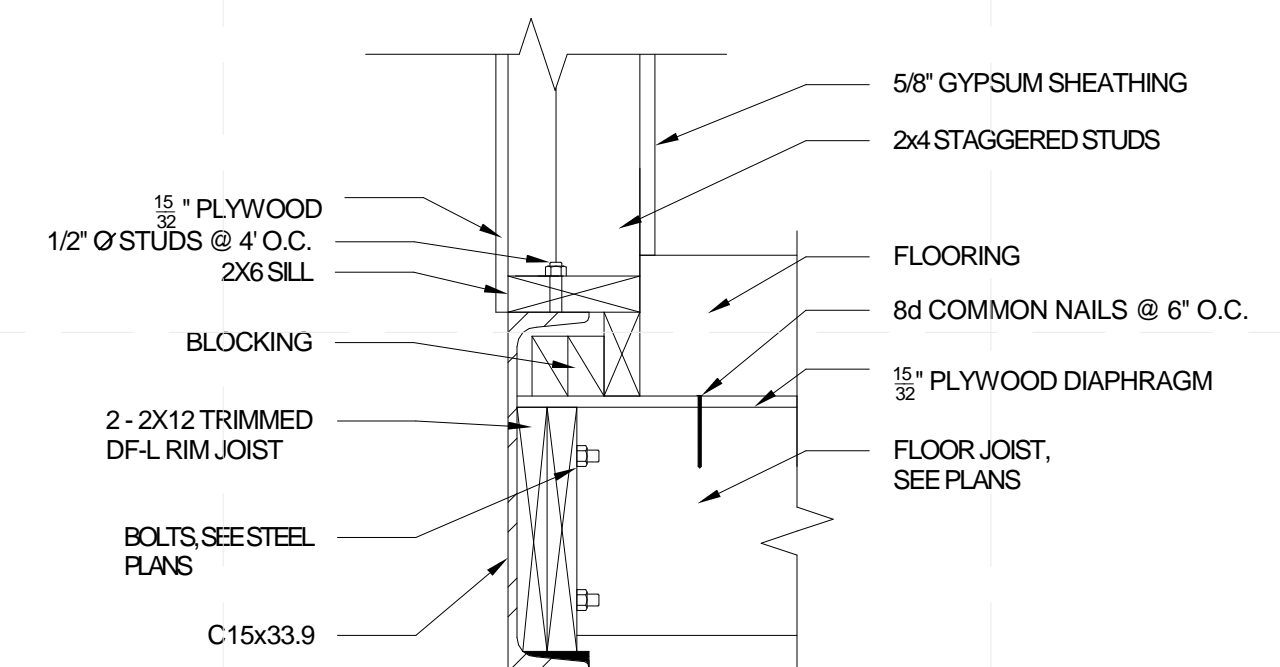
**D3 ROOF STEEL CONNECTIONS**  
 1" = 1'-0" 0 1/2 1 2



**D4 ROOF TIMBER TO CHANNEL CONNECTION**  
 1" = 1'-0" 0 1/2 1 2



**D5 COLUMN TO TOP PLATE CONNECTION**  
 3/4" = 1'-0" 0 1 2 3

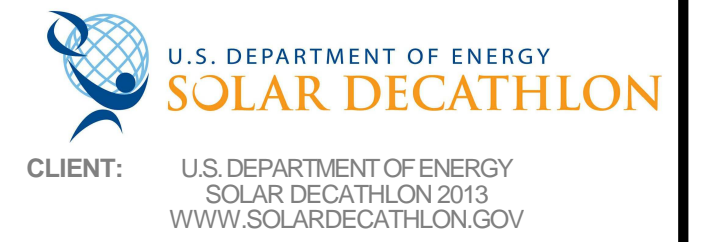


**D6 SILL PLATE TO STEEL CONNECTION**  
 1 1/2" = 1'-0" 0 1/2 1 1 1/2

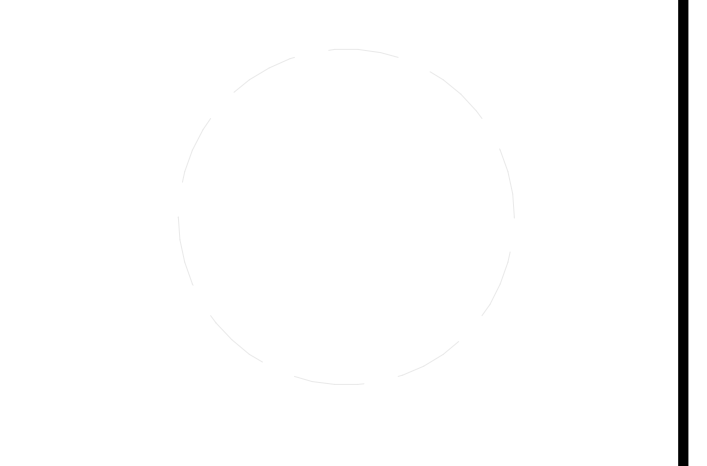


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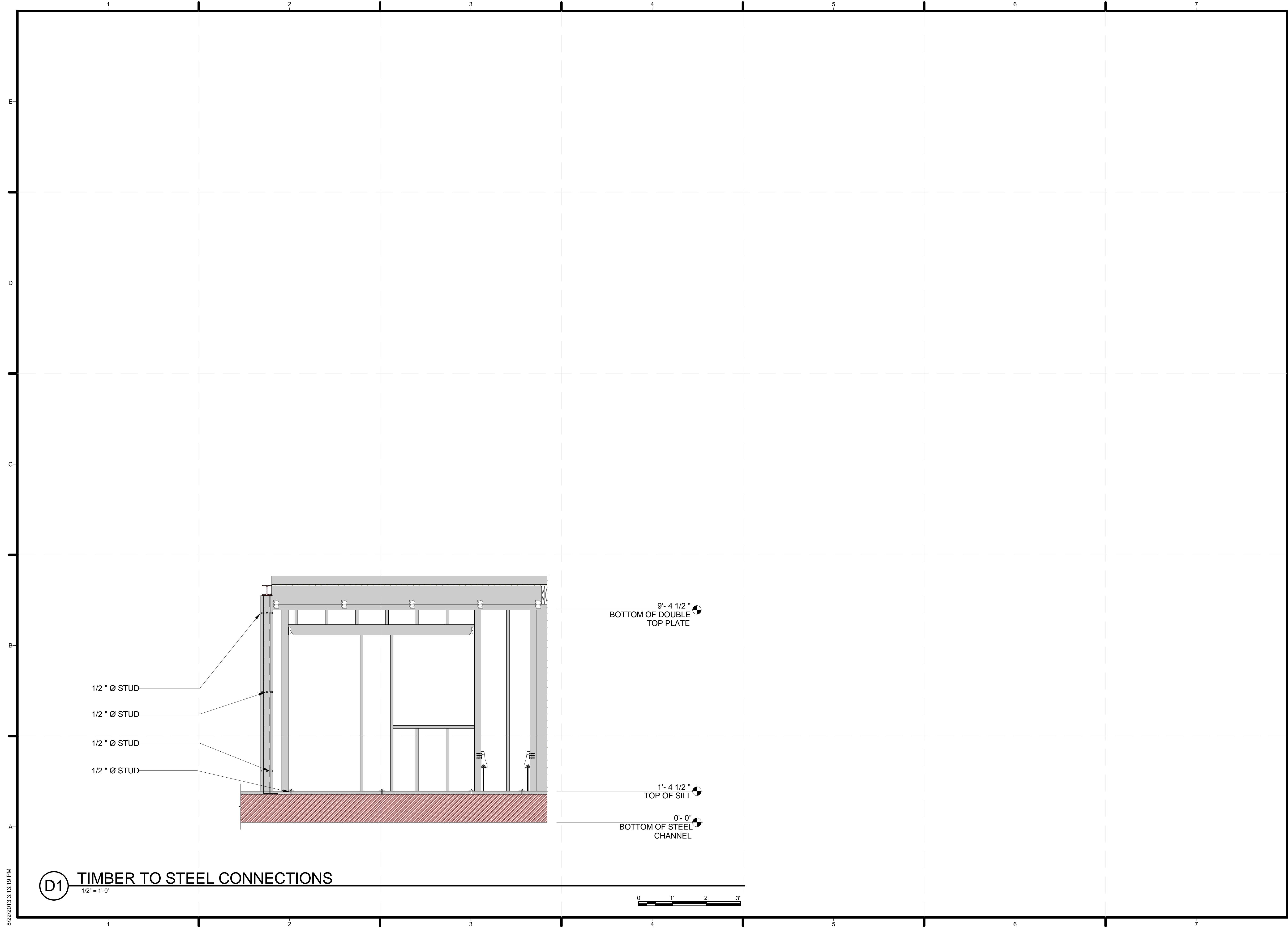
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
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SHEET TITLE:  
**TIMBER TO STEEL CONNECTIONS**  
**S-532**



**D1** TIMBER TO STEEL CONNECTIONS

1/2" = 1'-0"




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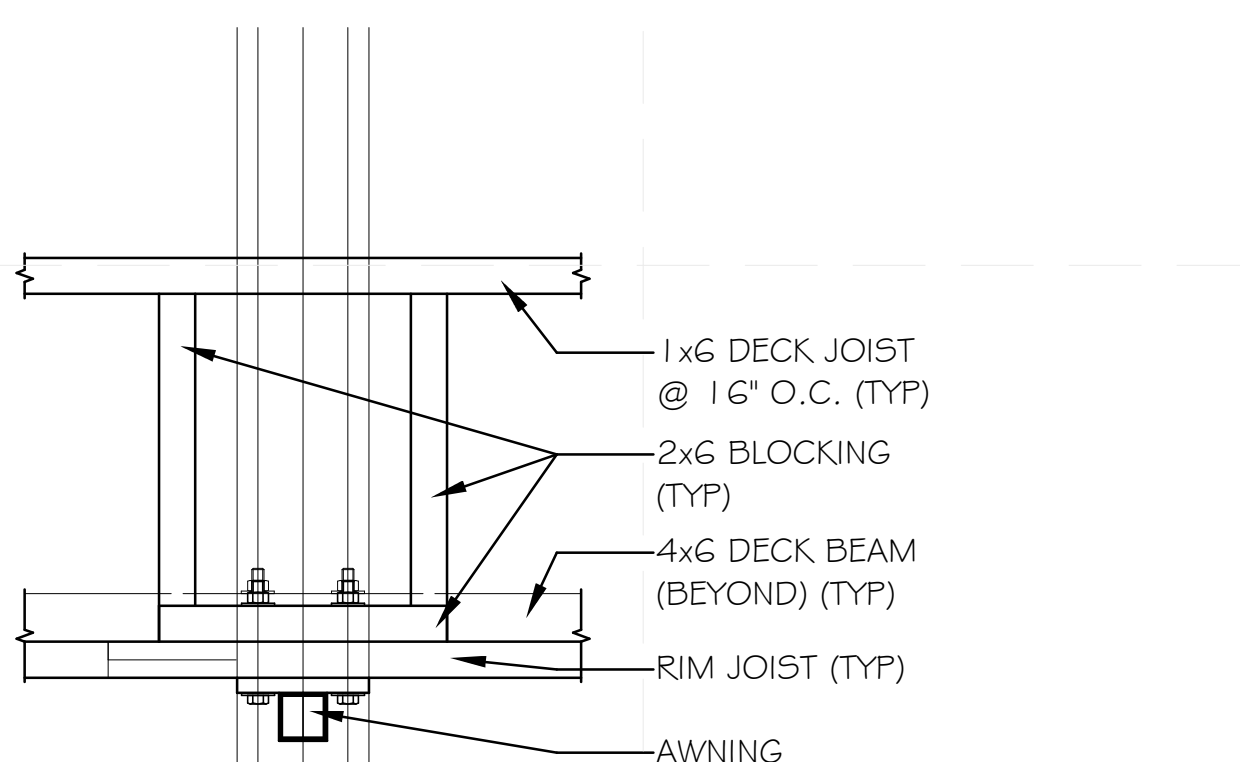
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	11/20/12	DD SUBMISSION
	10/11/12	DD SUBMISSION

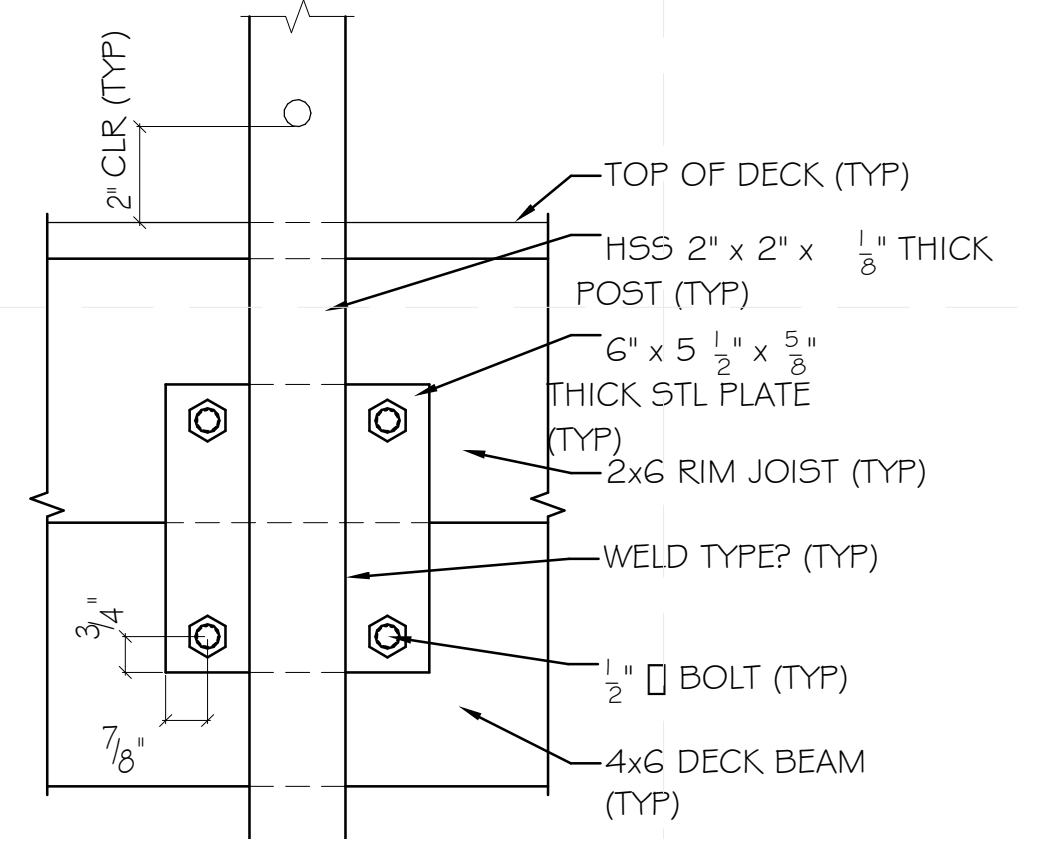
LOT NUMBER: 118  
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SHEET TITLE:  
**RAILING DETAILS**

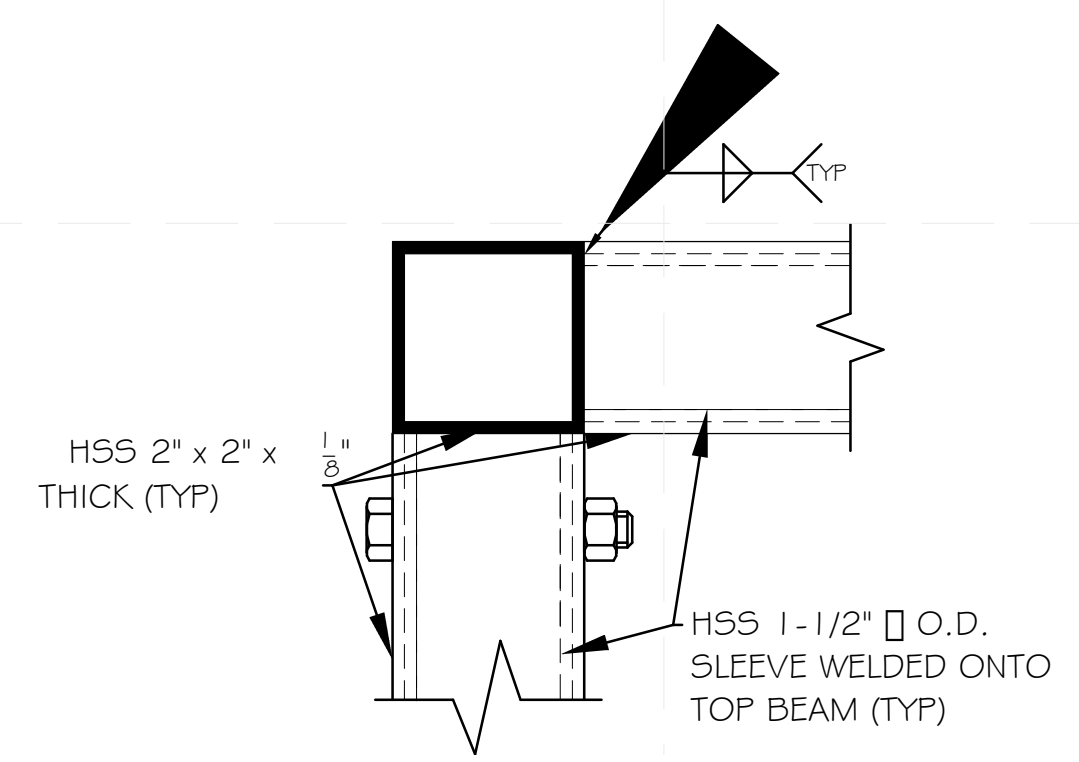
**S-541**



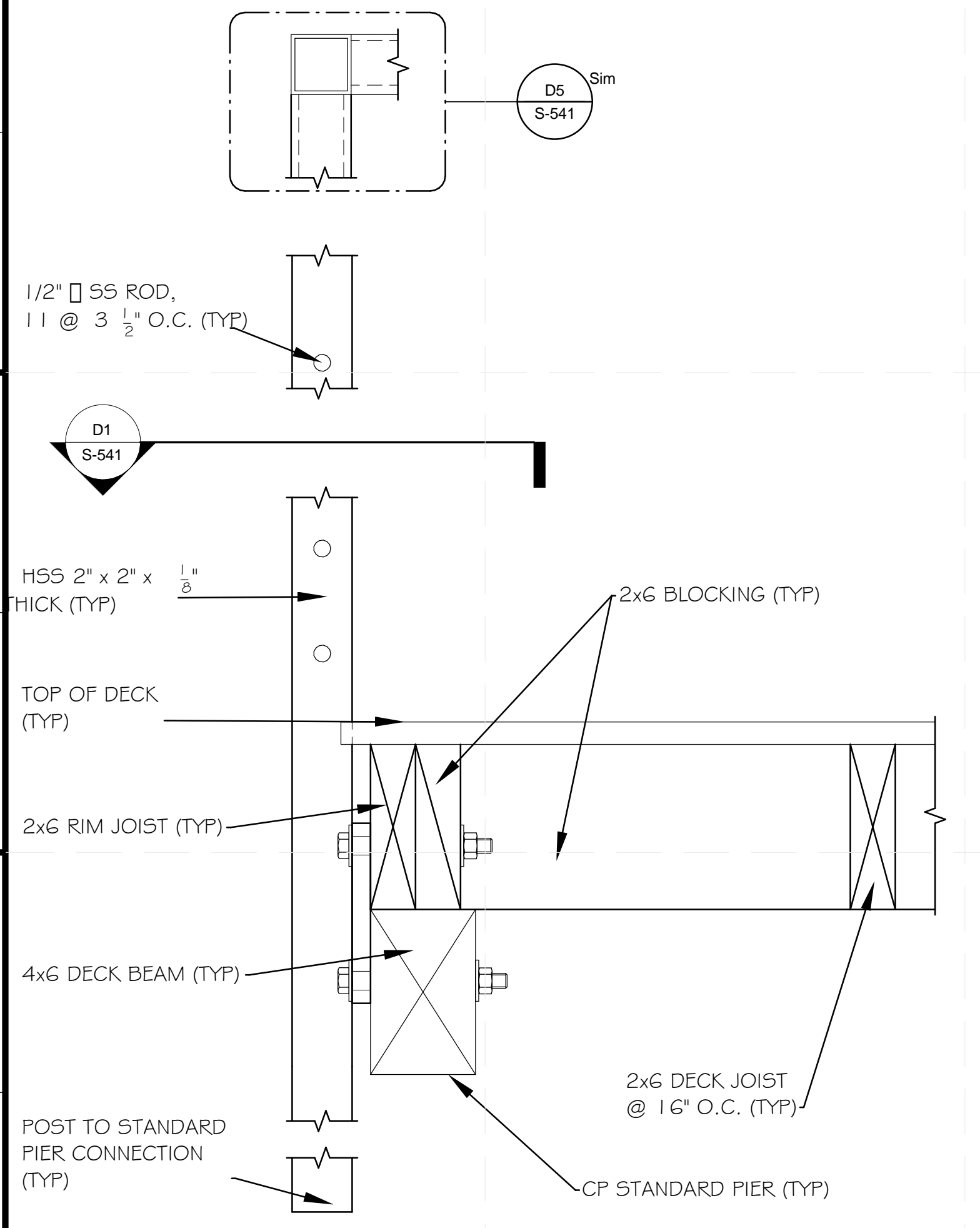
**D1** TYP. AWNING POST CONNECTION W/  
 PARALLEL JOISTING PLAN DETAIL  
 1 1/2" = 1'-0"



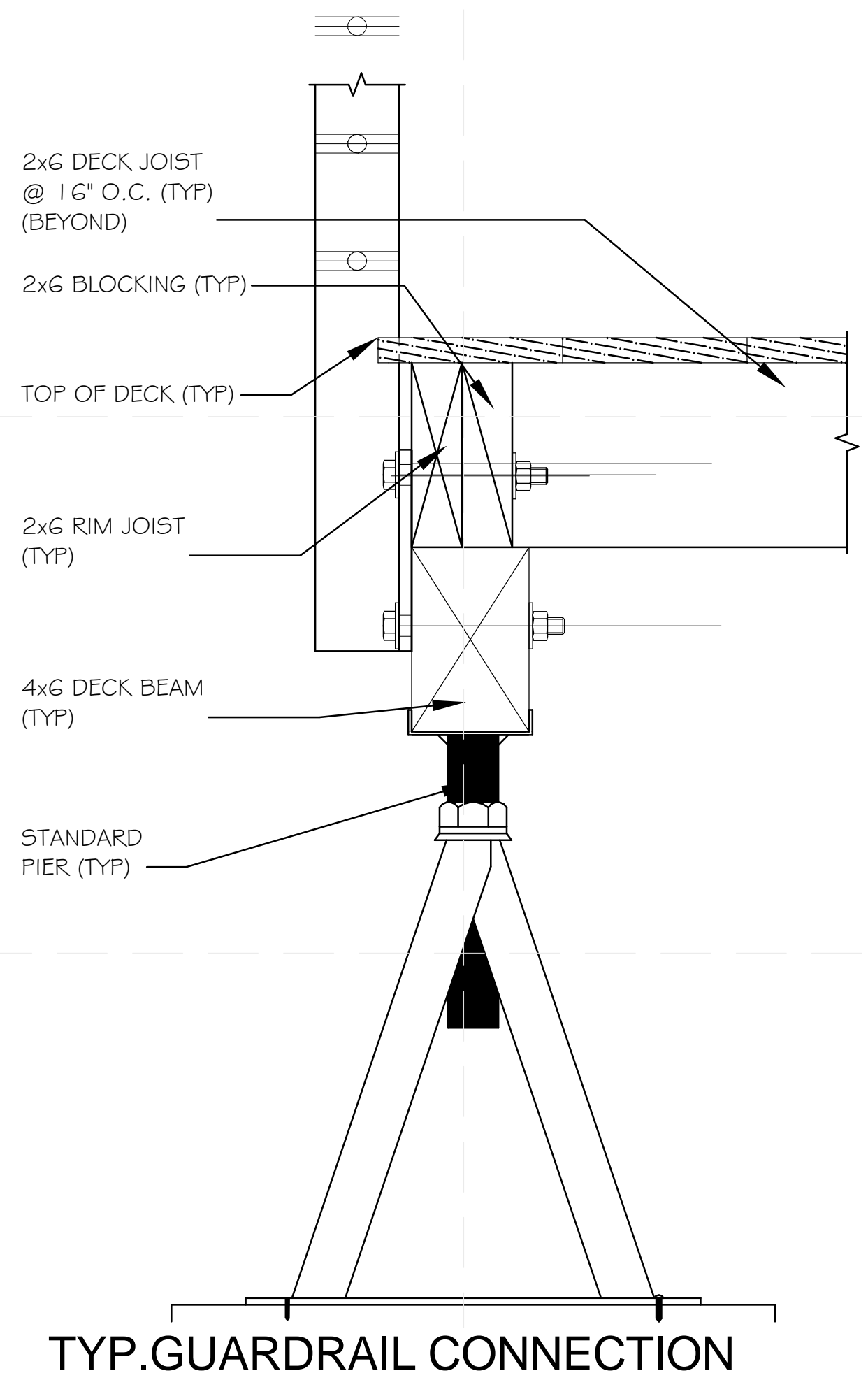
**D3** TYP. AWNING POST TO DECK  
 CONNECTION  
 3" = 1'-0"



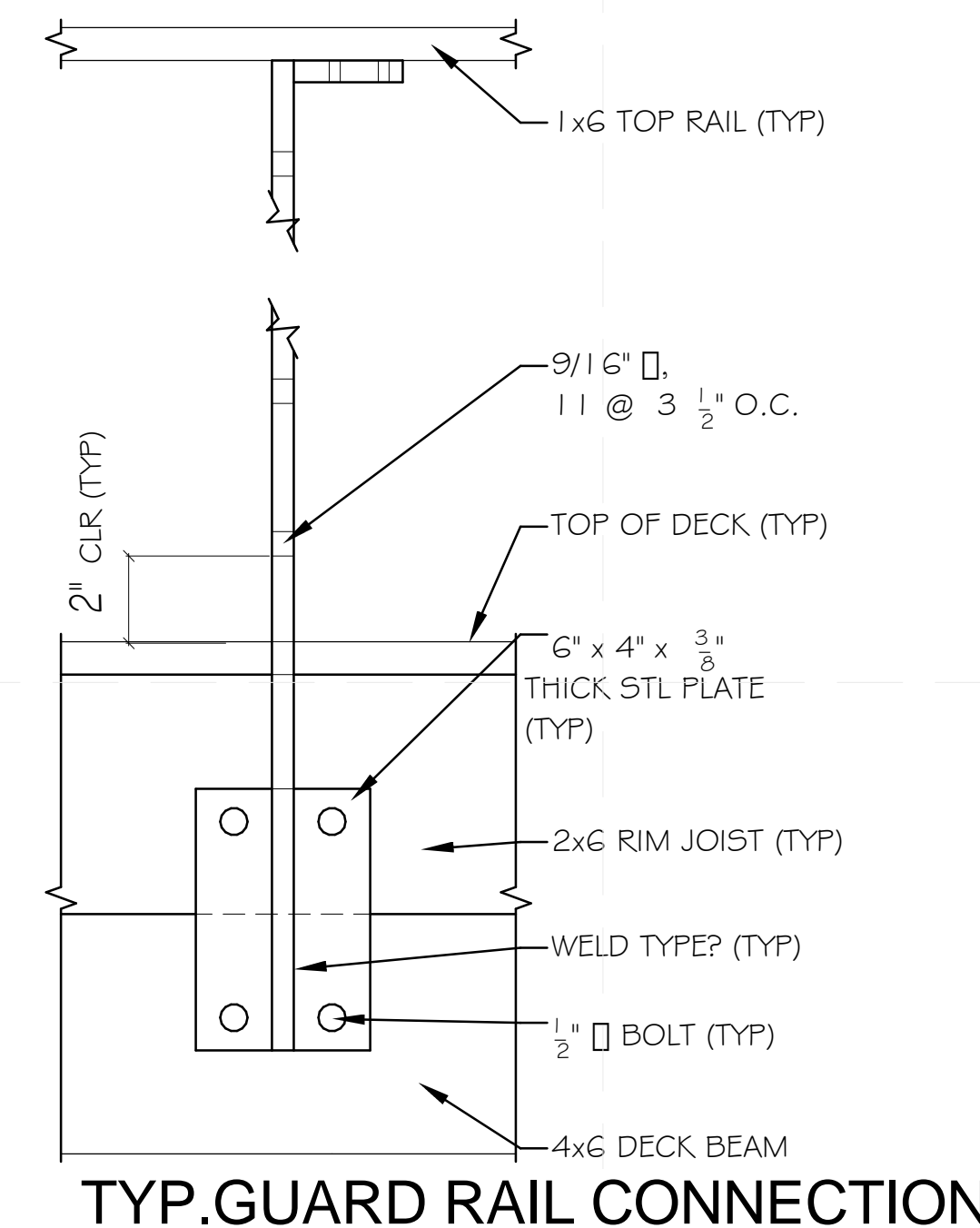
**D5** AWNING POST TO TOP BEAM  
 CONNECTION SECTION DETAIL  
 6" = 1'-0"



**A1** AWNING POST SECTION W/  
 PARALLEL JOISTING  
 3" = 1'-0"

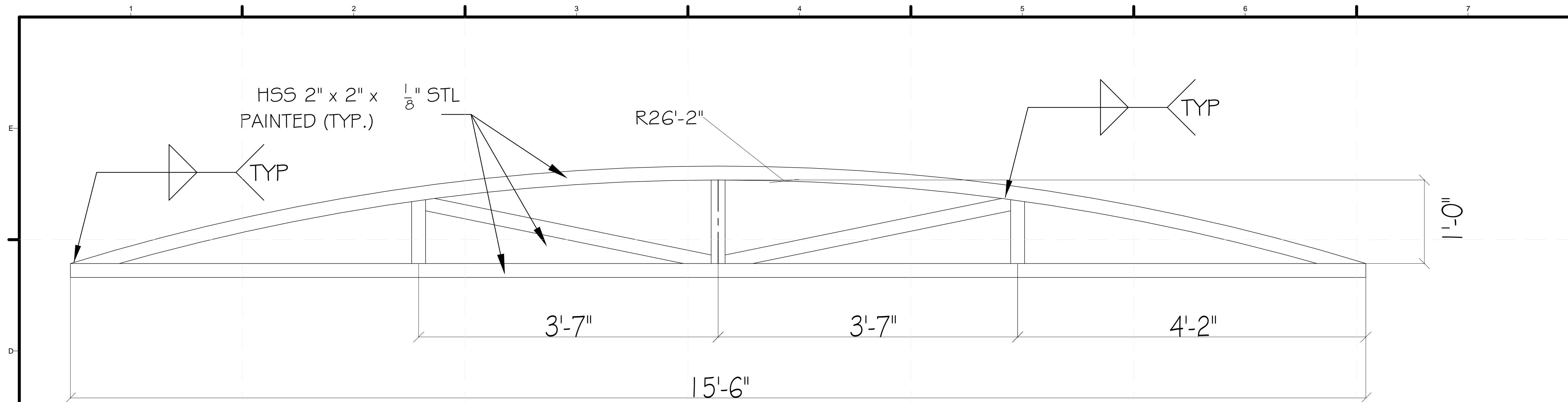


**A3** TYP. GUARDRAIL CONNECTION  
 W/ PERPENDICULAR  
 3" = 1'-0"

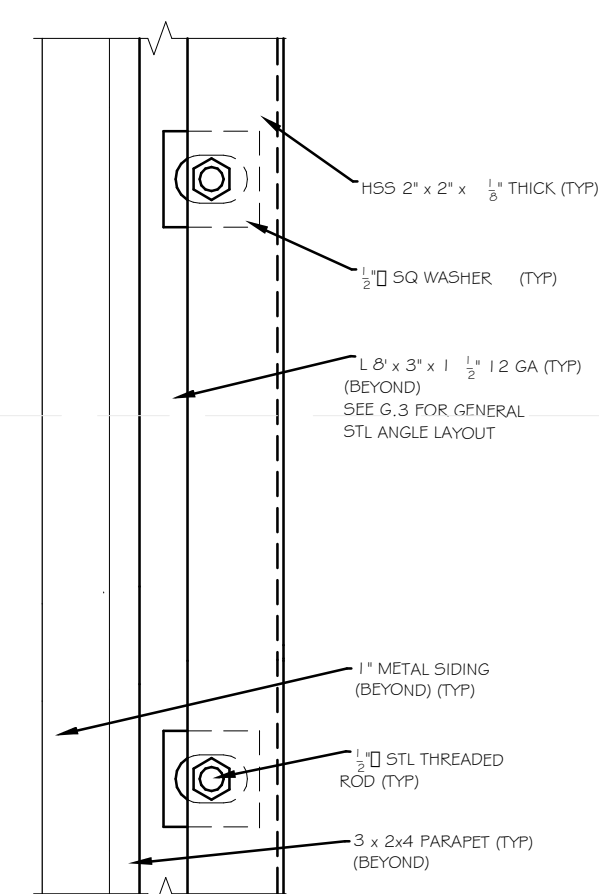


**A5** TYP. GUARD RAIL CONNECTION  
 ELEVATION  
 3" = 1'-0"

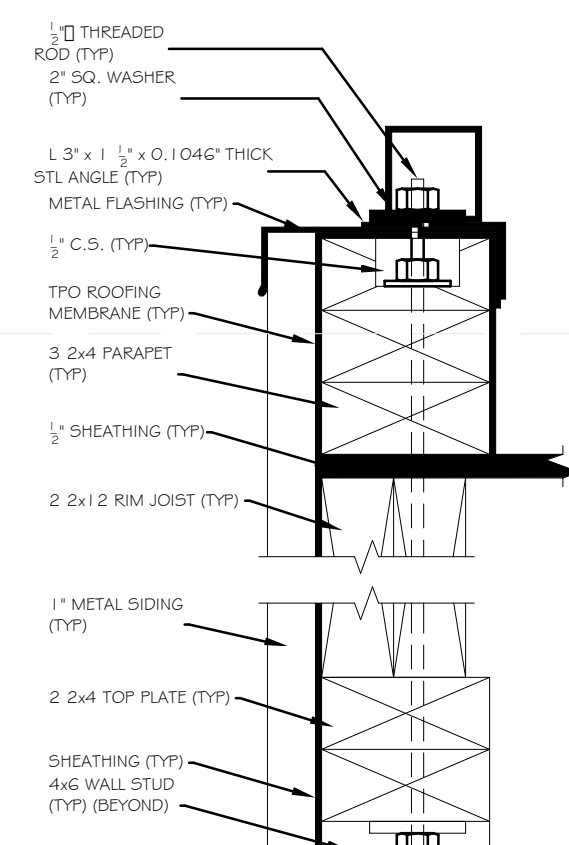
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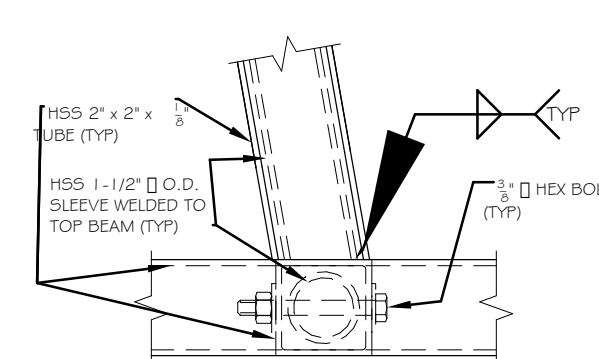
**D1 TRUSS ELEVATION**  
1 1/2" = 1'-0"



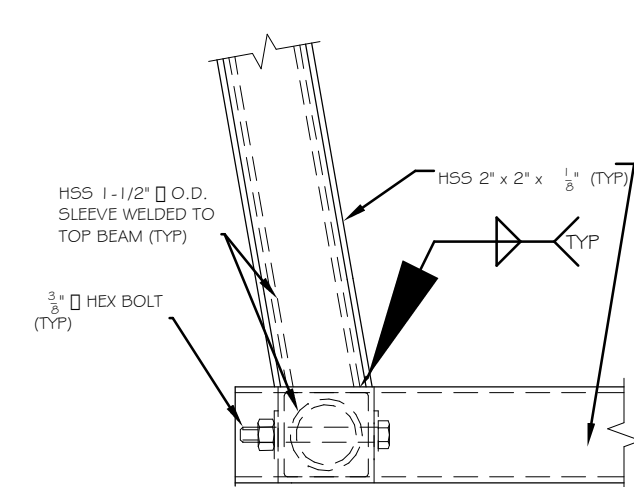
**B1 TRUSS TO STL ANGLE  
CONNECTION PLAN DETAIL**  
3" = 1'-0"



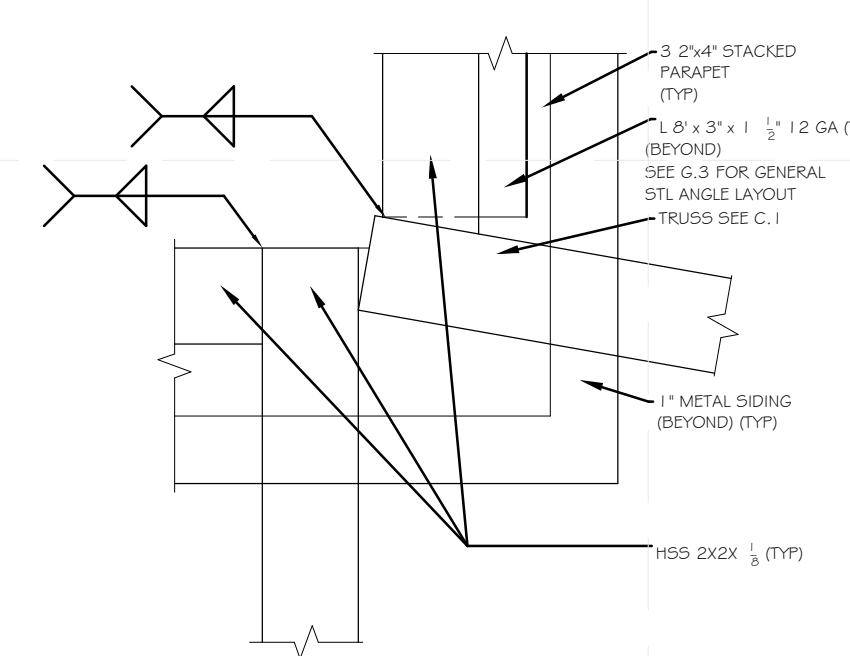
**B3 SECTION DETAIL TYPICAL STEEL ANGLE  
CONNECTION TO ROOF STRUCTURE**  
3" = 1'-0"



**A1 TYPICAL BRACE MEMBER TO TOP  
BEAM CONNECTION PLAN DETAIL**  
3" = 1'-0"



**A3 TYPICAL END CONNECTION OF BRACE  
MEMBER AND TOP BEAM PLAN DETAIL**  
3" = 1'-0"



**A5 BRACE MEMBER CONNECTION TO  
HOUSE PLAN DETAIL**  
3" = 1'-0"



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LOT NUMBER: 118  
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SHEET TITLE:  
AWNING DETAILS

**S-551**





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LOT NUMBER: 118  
 DRAWN BY: ML/KM  
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SHEET TITLE:  
**SCHEDULES**

**S-601**

WALL	MIN. BASE WIDTH	CAPACITY (PLF)	SHEATHING	EDGE NAILING	SHEAR CLIPS	VERTICAL HOLDOWN
A	2'-10 1/8"	475.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 27" O.C.	HDU2-SDS2.5
B	2'-10 1/8"	475.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 27" O.C.	HDU2-SDS2.5
C	2'-10 1/8"	475.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 27" O.C.	HDU2-SDS2.5
D	2'-10 1/8"	475.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 27" O.C.	HDU2-SDS2.5
E	2'-9"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 26" O.C.	HDU2-SDS2.5
F	7'-5"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 30" O.C.	HDU2-SDS2.5
G	12'-0"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 48" O.C.	HDU2-SDS2.5
H	4'-0"	665.0	15/32" STRUCTURAL 1	10d @ 3"	-	HDU8-SDS2.5
I	4'-0"	665.0	15/32" STRUCTURAL 1	10d @ 3"	-	HDU8-SDS2.5
J	2'-8 1/2"	510.0	15/32" STRUCTURAL 1	10d @ 4"	A35 CLIPS @ 30" O.C.	HDU4-SDS2.5
K	10'-9 1/4"	715.0	15/32" STRUCTURAL 1	10d @ 4"	A35 CLIPS @ 21" O.C.	HDU5-SDS2.5
L	2'-8 3/4"	475.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 26" O.C.	HDU2-SDS2.5
M	2'-8 3/4"	475.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 26" O.C.	HDU2-SDS2.5
N	4'-0"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 24" O.C.	HDU2-SDS2.5
O	4'-0"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 24" O.C.	HDU2-SDS2.5
P	4'-0"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 24" O.C.	HDU2-SDS2.5
Q	7'-8"	340.0	15/32" STRUCTURAL 1	10d @ 6"	A35 CLIPS @ 30" O.C.	HDU2-SDS2.5

**NOTES**  
 1. INTERMEDIATE (FIELD) NAILING SHALL BE 10d @ 12" O.C.  
 2. ALL NAILS SHALL BE COMMON WIRE GAUGE.  
 3. SHEAR WALL PLYWOOD SHALL BE FULL HEIGHT.

TYPE	MIN HEIGHT	MAX HEIGHT	ADJUSTABILITY
SEISMIC PIER	7"	11"	4"
SEISMIC PIER	11"	18"	7"
STANDARD PIER A	4"	6"	2"
STANDARD PIER B	6"	8"	2"
STANDARD PIER C	8"	10"	2"
STANDARD PIER D	10"	12"	2"
STANDARD PIER E	12"	14"	2"
STANDARD PIER F	14"	16"	2"
STANDARD PIER G	16"	18"	2"

**NOTES**  
 1. VARIOUS SIZED PIERS PROVIDED TO ACCOMMODATE 18" SITE VARIABILITY.  
 2. SEE S-101 FOR FOUNDATION PLAN.  
 3. REFER TO FOOTING SCHEDULE.

AREA	SHEATHING	EDGE NAILING	INTERMED. STAPLING	REMARKS
A	3/4" T&G	8d @ 6" O.C.	15gauge at 12" O.C.	UNBLOCKED
B	3/4" T&G	8d @ 6" O.C.	15gauge at 12" O.C.	UNBLOCKED
C	3/4" T&G	8d @ 6" O.C.	15gauge at 12" O.C.	UNBLOCKED
Top	3/4" T&G	8d @ 6" O.C.	15gauge at 12" O.C.	UNBLOCKED

**NOTES**  
 1. PLYWOOD IS TO BE GLUED TO JOISTS USING LOCTITE PREMIUM ADHESIVE.

MARK	TYPE	SIZE	MOUNTING OBJECT
F1	STANDARD PIER	16" X 16"	STEEL CHANNEL
F2	SEISMIC PIER	24" X 24"	STEEL CHANNEL

**NOTES**  
 1. FOR TYPICAL DETAILS SEE S-501 FOUNDATION DETAILS.  
 2. SEE S-101 FOR FOUNDATION PLAN.  
 3. SEE FOOTING ADJUSTABILITY SCHEDULE FOR FOOTING SIZES AND GRADE VARIABILITY.

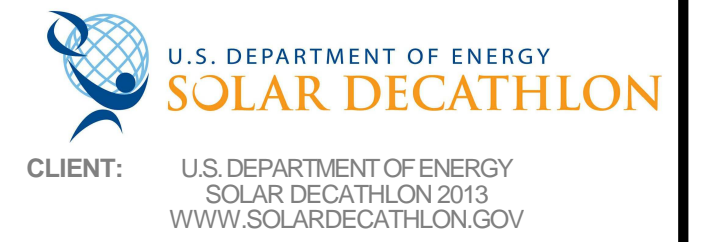
LOCATION	MEMBER SIZE	SUPPORT	HANGER SERIES	REMARKS	ATTACHMENT
ROOF	TJI 230 (9.5"), BAMBOO JOISTS	TOP PLATE & RIM JOIST	IUS 2.37/9.5	-	8 - SD#9X1.5 INTO FACE
ROOF	TJI 230 (9.5")	STEEL BEAM & LEDGER	LSSUI35	FOR SKEWED JOISTS	9 - 10d INTO TOP & 7 - 10dX1.5 INTO FACE
ROOF	TJI 230 (9.5")	2X12 TRIMMED JOIST	ITS2.37/9.5	FOR SKEWED JOISTS	4 - 10d INTO TOP & 2 - 10dX1.5 INTO FACE
ROOF	TRIMMED 2X12	TOP PLATE & RIM JOIST	LUS28	FOR USE ON SIDE	6 - 10d INTO HEADER & 4 - 10d INTO JOIST
ROOF	TRIMMED 2X12	STEEL BEAM & LEDGER	LUS210	-	8 - 8d INTO HEADER & 4 - 10d INTO JOIST
TOP ROOF	TJI 230 (9.5"), BAMBOO JOISTS	4X12 TRIMMED RIM JOIST	LSSUI35	FOR SLOPED JOISTS	9 - 10d INTO TOP & 7 - 10dX1.5 INTO FACE STIFFENER REQUIRED
TOP ROOF	2-2X10 EDGE JOISTS	4X12 TRIMMED RIM JOIST	HUC210-2	FOR SLOPED EDGE JOISTS	18-16d INTO HEADER & 10-10d INTO JOIST
FLOOR	TJI 230 (9.5")	2- 2X12 TRIMMED RIM JOIST	IUS 2.37/9.5	RIM JOIST RUNS INSIDE THE C15X33.9	8 - 10d INTO FACE
FLOOR	2X4	TJI 230 OR 2x4 LEDGER	JPF24	2X4 LEDGER RUNS OVER THE C8X11.5	2 - 10d INTO TOP & 2 - 10d INTO JOIST
WALLS	6X6 HEADER	2x6 STUD OR 4x6 POST	HUC66	FOR 6X6 HEADERS OVER OPENINGS	MIN. 8 - 16d INTO HEADER & 4 - 16d INTO JOIST

**NOTES**  
 1. ACTUAL SIZE OF THE TRIMMED 2X12 IS 1.5X9.5.  
 2. FOR SKEWED LSSUI HANGERS, THE INNER MOST FASTENERS ON THE ACUTE ANGLE SIDE ARE NOT INSTALLED.  
 3. OK TO SUBSTITUTE FASTENERS WITH FASTENERS OF EQUAL OR GREATER STRENGTH.



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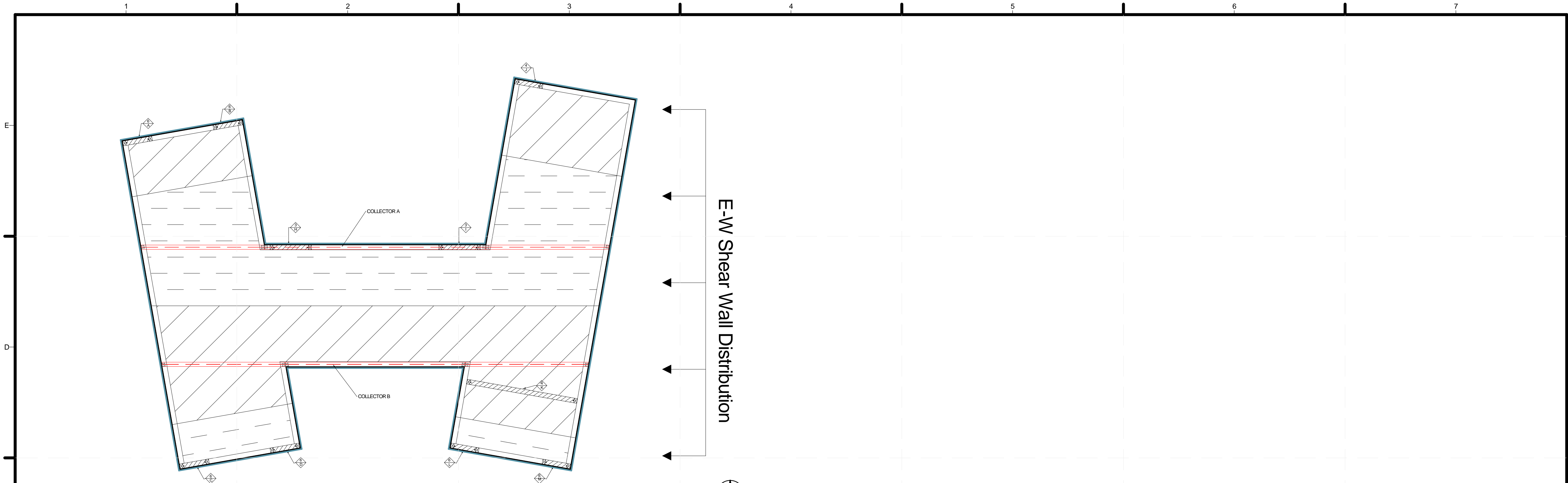


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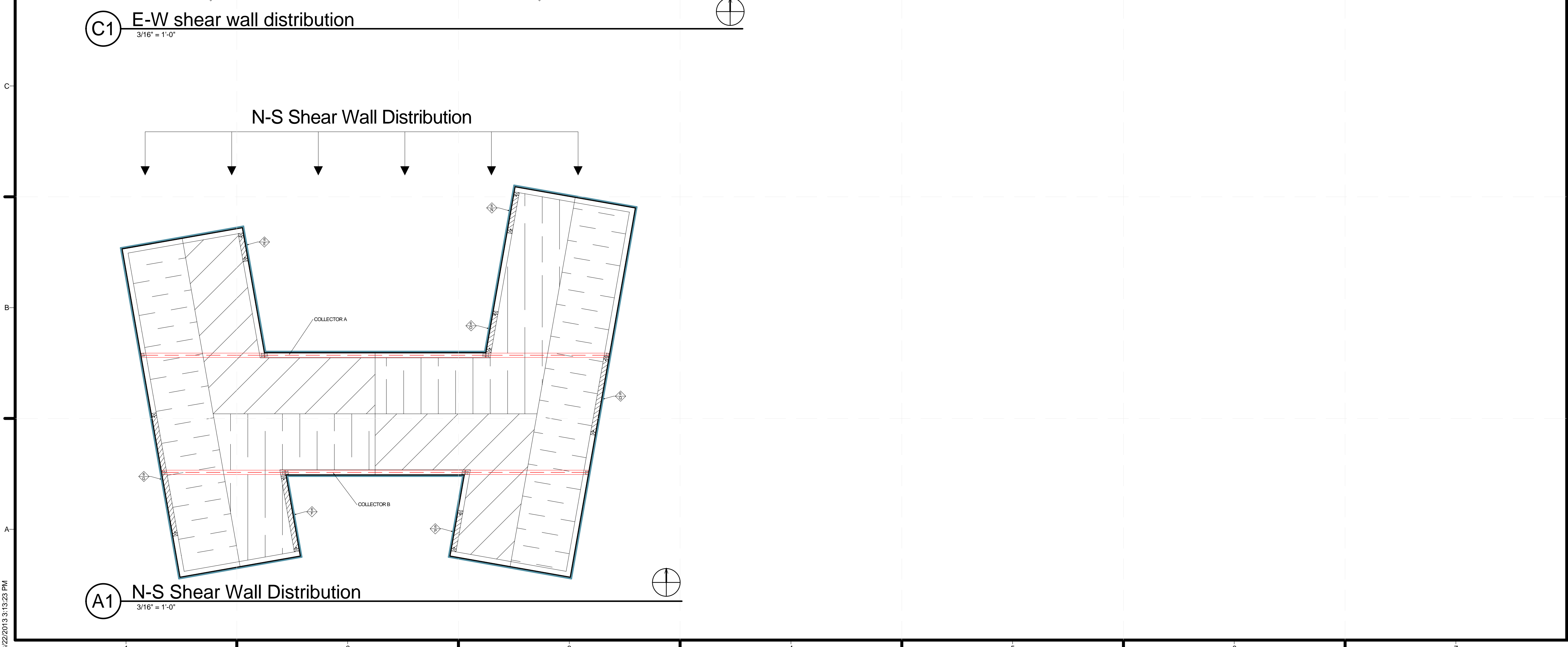
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	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
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SHEET TITLE:  
 SHEAR WALL  
 DISTRIBUTION  
**S-650**



**C1** E-W shear wall distribution  
 3/16" = 1'-0"



**A1** N-S Shear Wall Distribution  
 3/16" = 1'-0"

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# GENERAL ARCHITECTURE NOTES

1. ALL PIPING, DUCTS, ETC THAT PENETRATE FLOOR SLABS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE INDICATED STRUCTURAL INTEGRITY OF THE HOUSE
2. ALL JOINTS AND PENETRATIONS IN INSULATION BARRIER SHALL BE FULLY SEALED WITH ADHESIVE SEALANT TO PROVIDE CONTINUOUS AIR TIGHT INSULATION
3. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED
4. ALL SILLS, WINDOW HEADS, AND SHELF ANGLES SHALL HAVE FLASHING EXTENDED TO THE OUTSIDE OF THE WALL WHETHER OR NOT SHOWN ON THE DRAWINGS
5. WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS OF THE VARIOUS TRADES, CONSULT THE ENGINEER PRIOR TO PROCEEDING WITH WORK
6. ALL GLAZING SHALL BE SAFETY GLAZED WHEN WITHIN 18" OF THE FLOOR OR WITHIN 3'-0" HORIZONTAL DISTANCE FROM ANY DOOR



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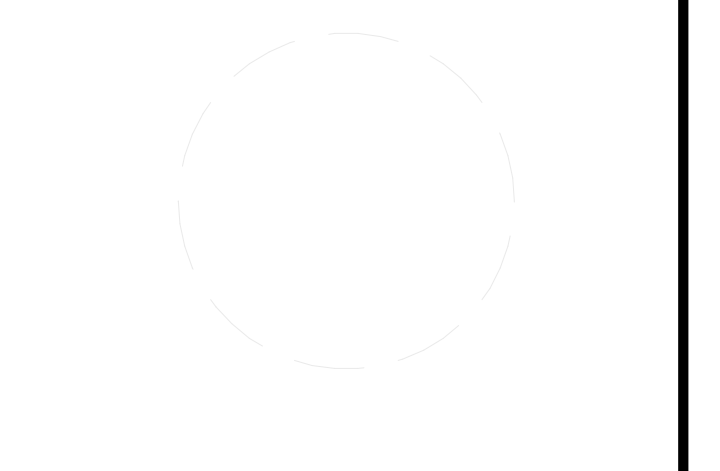
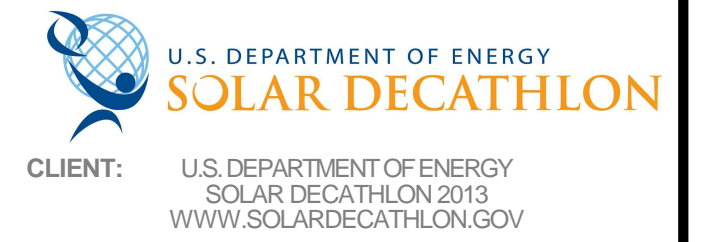
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	10/11/12	DD SUBMISSION

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**ARCHITECTURAL SYMBOLS AND NOTES**

**A-001**

### ABBREVIATIONS

- ADJ. ADJUSTABLE
- ALUM. ALUMINUM
- BLDG. BUILDING
- BOS. BOTTOM OF STEEL
- CTR. CENTER
- DN. DOWN
- DR. DOOR
- DS. DOWNSPOUT
- EL. ELEVATION
- EXT. EXTERIOR
- FLASH. FLASHING
- FT. FOOT OR FEET
- GALV. GALVANIZED
- GND. GROUND
- GYP. GYPSUM
- HT. HEIGHT
- INSUL. INSULATION
- INT. INTERIOR
- MFR. MANUFACTURER
- MECH. MECHANICAL
- MTL. METAL
- MTD. MOUNTED
- NTS. NOT TO SCALE
- PLYWD. PLYWOOD
- PNL. PANEL
- RD. ROOF DRAIN
- SCHED. SCHEDULE
- SECT. SECTION
- STOR. STORAGE
- TYP. TYPICAL
- U-PVS. UNPLASTICIZED-POLYVINYL CHLORIDE
- WD. WOOD
- WP. WATER PROOF

### ARCHITECTURAL SYMBOLS

**(C4) DRAWING BLOCK TITLE**  
 1 1/2" = 1'-0"

**1** SIM  
 A101 CALLOUT HEAD

**Room name**  
 101 ROOM FINISH TAG  
 F | B | W | C

**101** DOOR TAG

**1**  
 A101 EXTERIOR ELEVATION

**1 Ref**  
**1**  
 A101 INTERIOR ELEVATION

**1 Ref**  
**1**  
 A101

0 1/2" 1' 1 1/2" SCALE

**↑** NORTH ARROW

**A4**  
 A101 SECTION HEAD

**11** WINDOW TAG

**⊙** SPOT ELEVATION

### FINISH PATTERNS

- GYP BOARD
- PLYWOOD
- WOOD FINISH
- STEEL

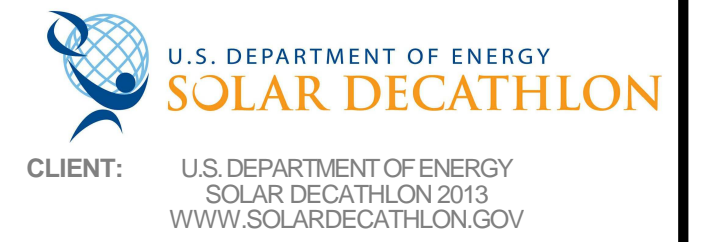
### SITE REGION PATTERNS

- VISITOR WALKWAY
- TEAM CONSTRUCTION AREA
- ORGANIZER UTILITY SPACE



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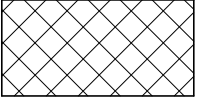
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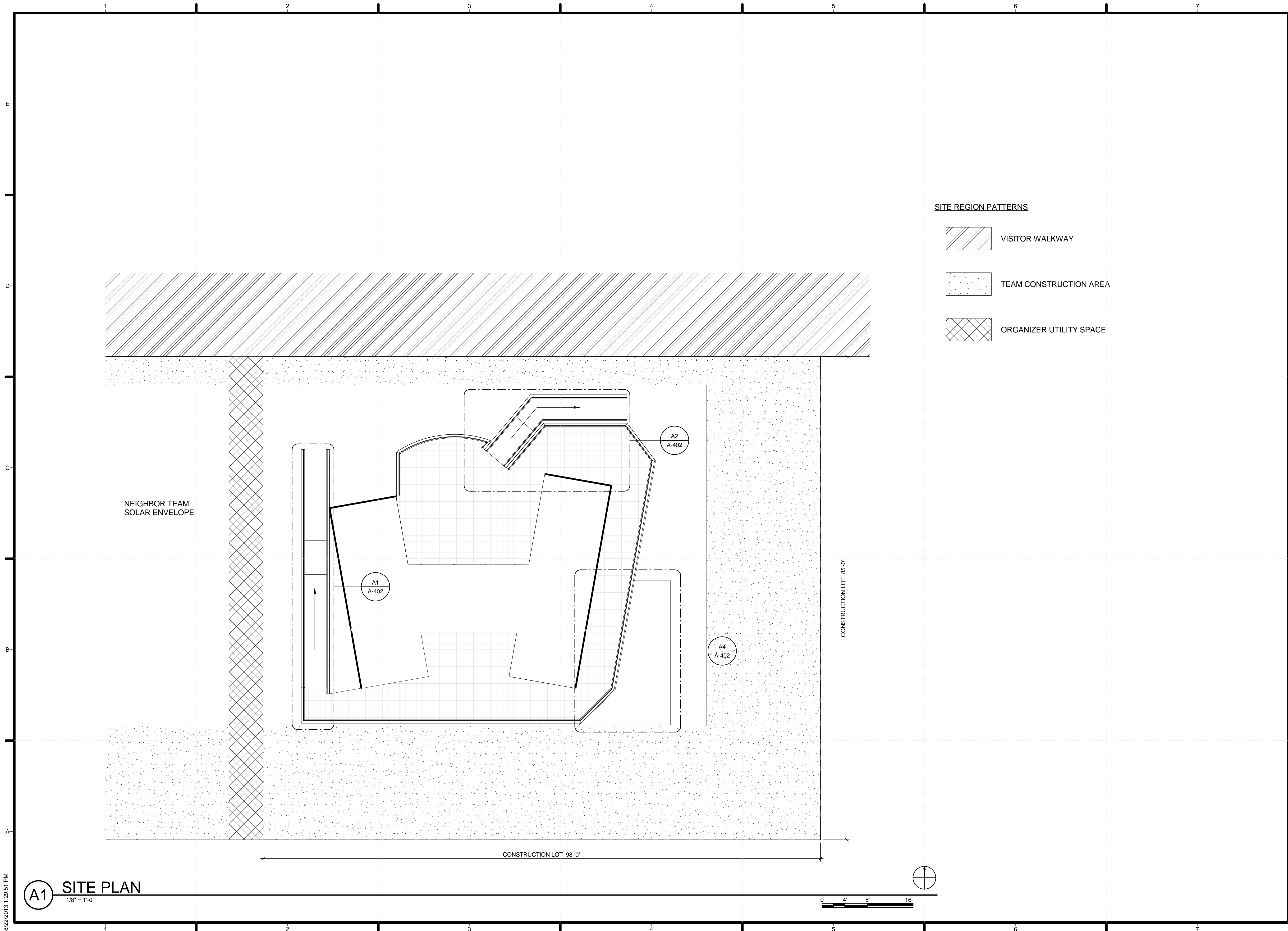
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SHEET TITLE:  
 SITE PLAN

A-101

SITE REGION PATTERNS

-  VISITOR WALKWAY
-  TEAM CONSTRUCTION AREA
-  ORGANIZER UTILITY SPACE

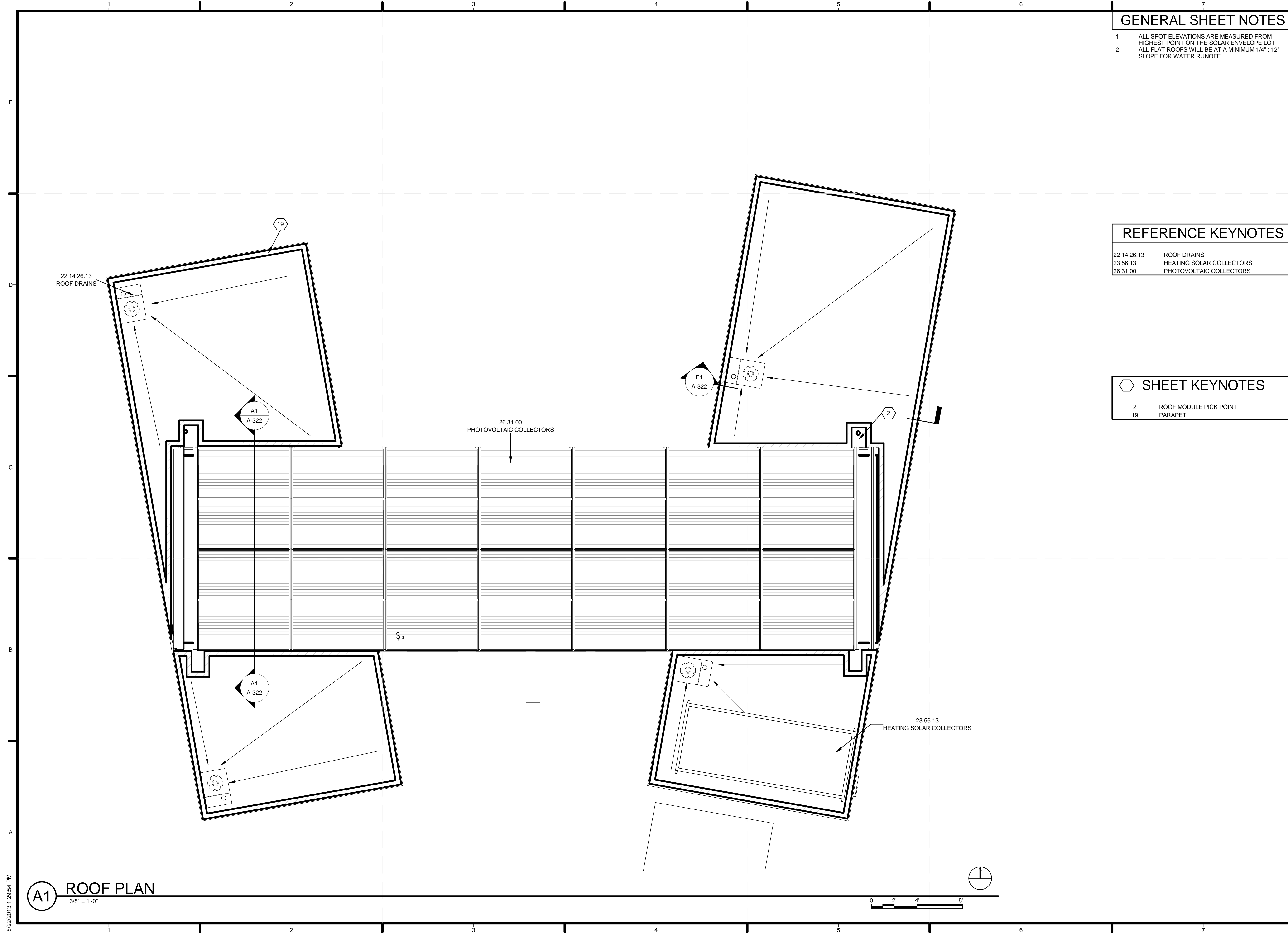


**A1** SITE PLAN  
 1/8" = 1'-0"

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**GENERAL SHEET NOTES**

1. ALL SPOT ELEVATIONS ARE MEASURED FROM HIGHEST POINT ON THE SOLAR ENVELOPE LOT
2. ALL FLAT ROOFS WILL BE AT A MINIMUM 1/4" : 12" SLOPE FOR WATER RUNOFF

**REFERENCE KEYNOTES**

22 14 26.13	ROOF DRAINS
23 56 13	HEATING SOLAR COLLECTORS
26 31 00	PHOTOVOLTAIC COLLECTORS

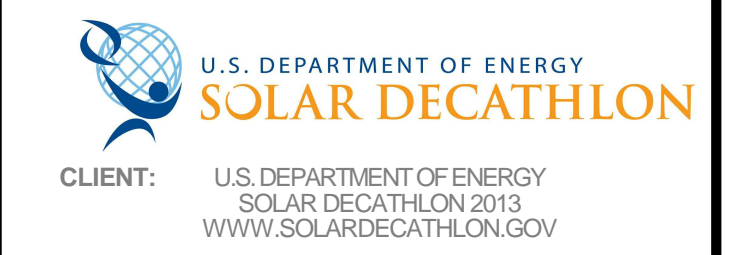
**SHEET KEYNOTES**

2	ROOF MODULE PICK POINT
19	PARAPET



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	02/14/13	CD SUBMISSION
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SHEET TITLE:  
**ROOF PLAN**  
**A-112**

**A1** ROOF PLAN  
 3/8" = 1'-0"

8/22/2013 1:29:54 PM



**GENERAL SHEET NOTES**

- SECTIONS OF THE ACCESS FLOOR COVERED BY ACCESS PANELS ARE NOT TO BE INSULATED



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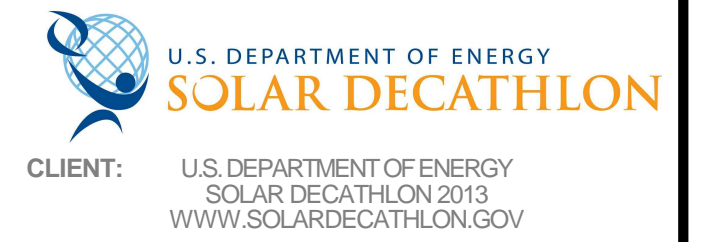
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**SHEET KEYNOTES**

- 5 FRAMING TO BE INSTALLED 16" ON CENTER
- 46 REMOVABLE ACCESS PANEL
- 47 SPACE TO BE USED FOR MEP DISTRIBUTION EQUIPMENT. SEE M & P SHEETS FOR DETAILS



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SHEET TITLE:  
**ACCESS FLOOR FRAMING PLAN**

**A-113**



**(A1) ACCESS FLOOR FRAMING PLAN**  
 3/8" = 1'-0"

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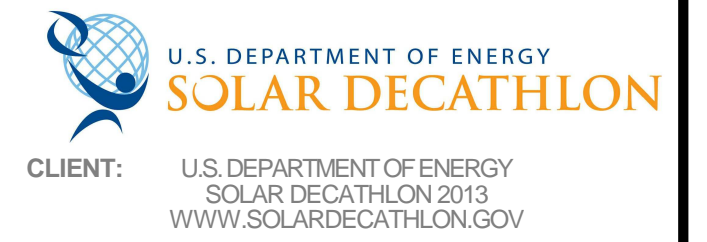


**REFERENCE KEYNOTES**

08 51 13.A3	ALUMINUM FIXED WINDOW
08 51 13.A4	ALUMINUM AWNING WINDOW
23 83 16	RADIANT-HEATING HYDRONIC PANELS W/ GYP BOARD FINISH
26 51 00.A1	2" LED LINEAR LIGHT
26 51 00.A2	2" LED DOWNLIGHT
26 51 00.A4	LED PENDANT LIGHT
26 51 00.A5	RECESSED FAN AND LIGHT

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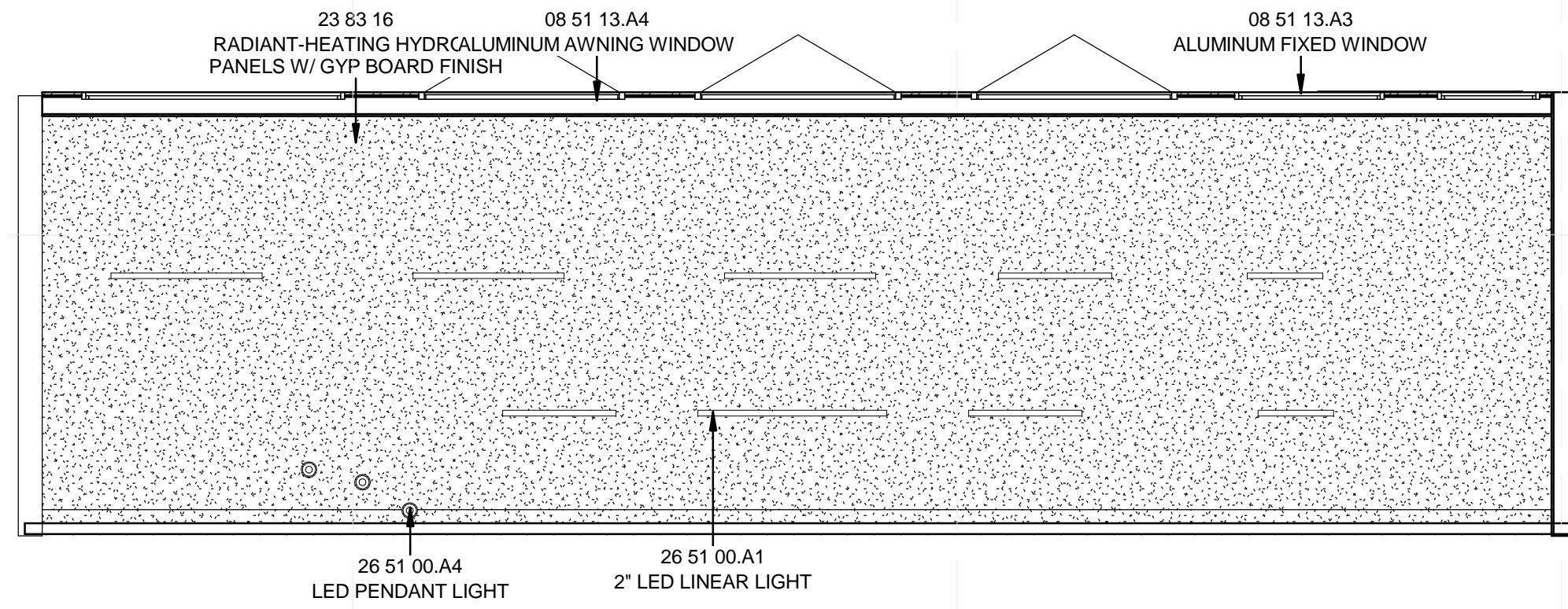
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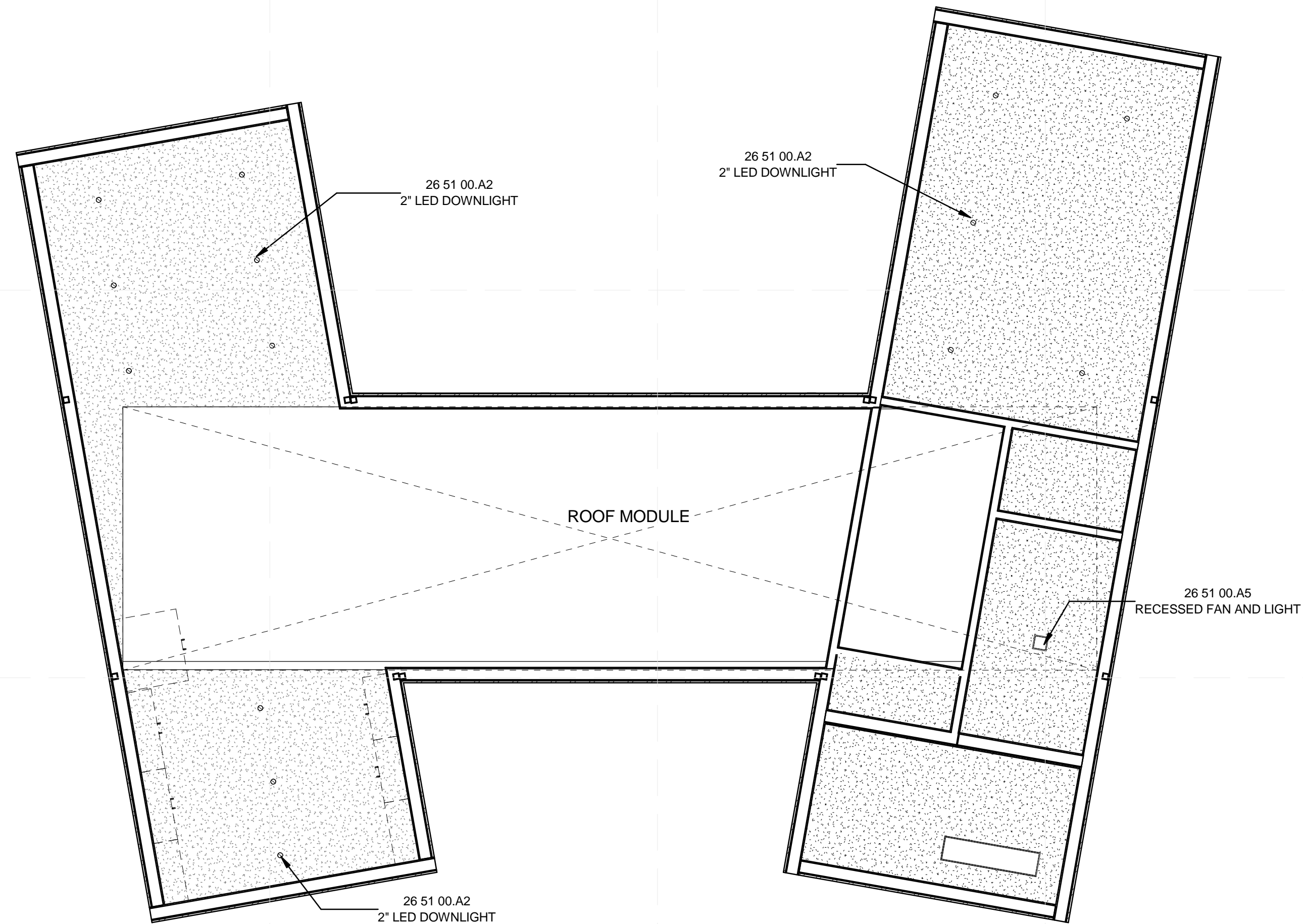
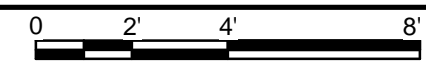
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 DRAWN BY: PT  
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SHEET TITLE:  
**FIRST FLOOR REFLECTED CEILING PLAN**

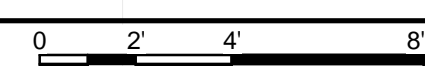
**A-121**



**D1** ROOF MODULE REFLECTED CEILING PLAN  
 1/4" = 1'-0"



**A1** REFLECTED CEILING PLAN  
 1/4" = 1'-0"



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**GENERAL SHEET NOTES**

1. ALL ELEVATIONS MEASURED FROM FINISHED FLOOR
2. TOP OF GRADE LEVEL LOCATED UNDER THE NORTH EAST CORNER OF THE HOUSE

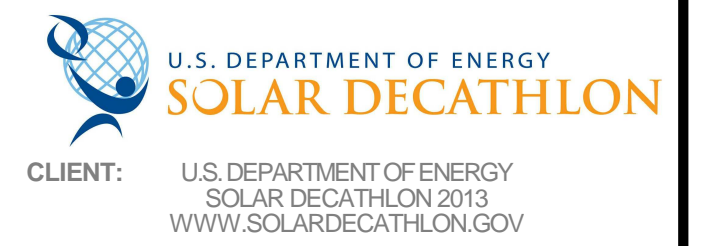


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**SHEET KEYNOTES**

3 SOLAR ENVELOPE

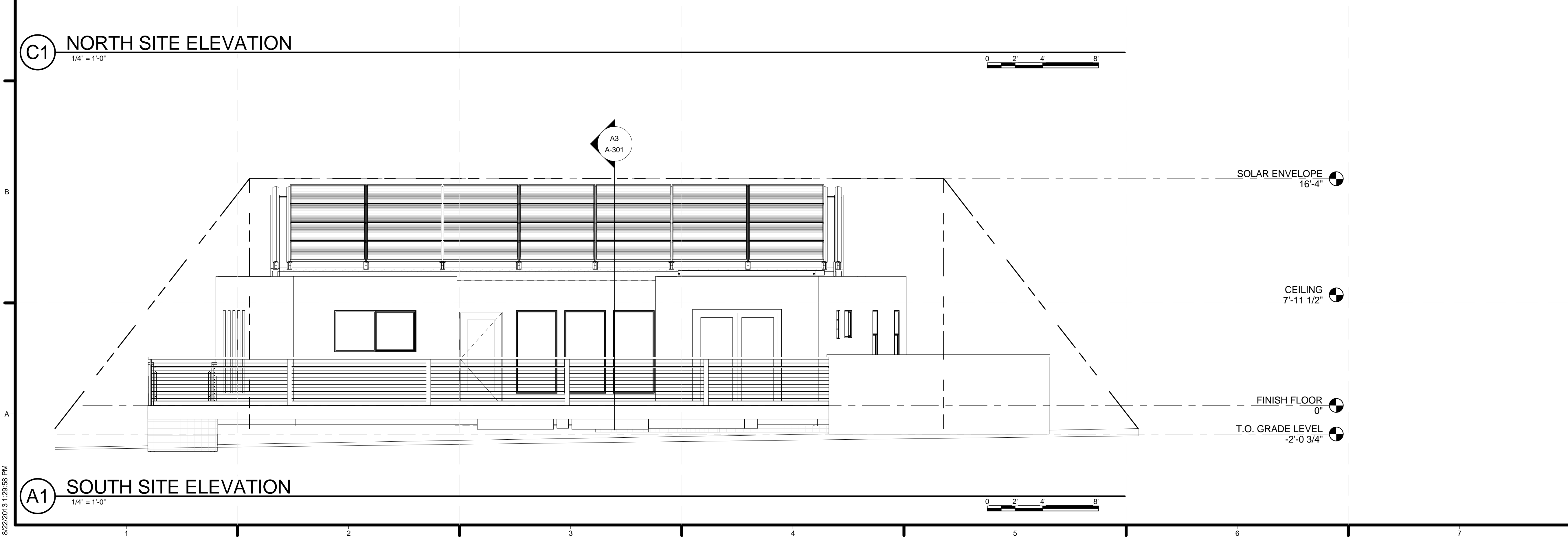
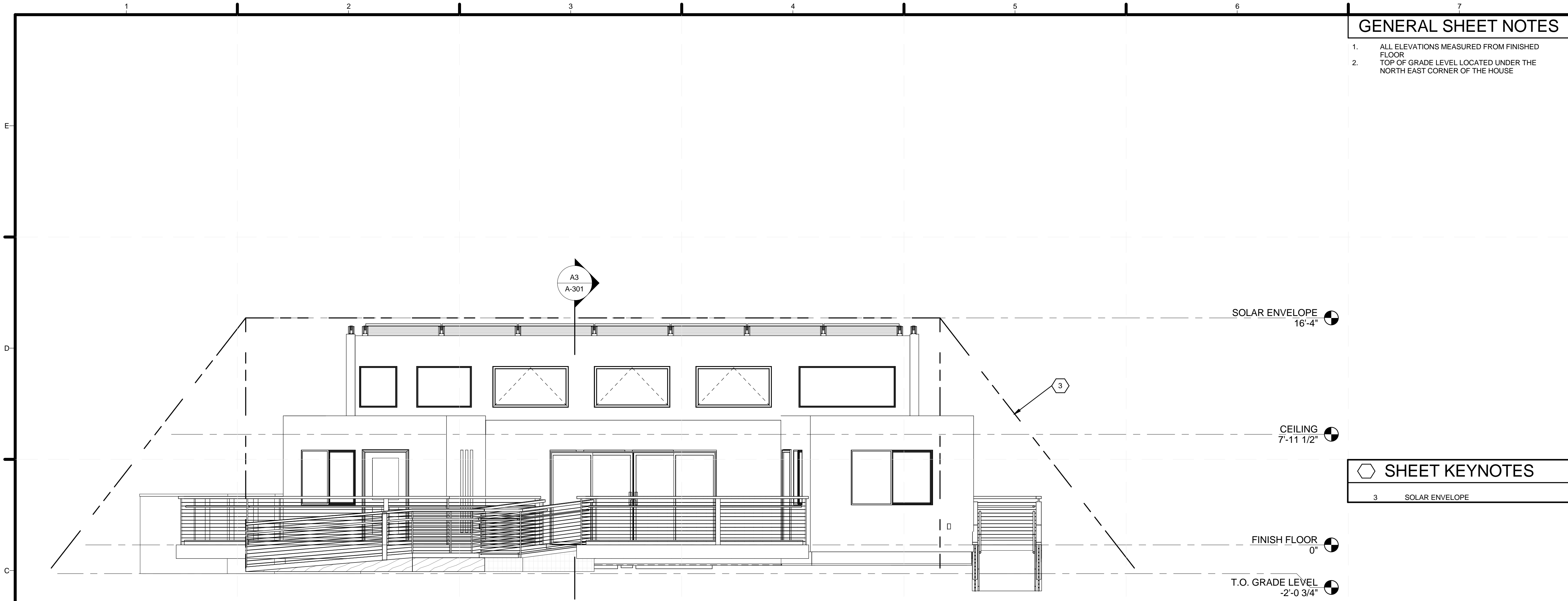


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	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**SITE ELEVATIONS**

**A-201**



**GENERAL SHEET NOTES**

1. ALL ELEVATIONS MEASURED FROM FINISHED FLOOR
2. TOP OF GRADE LEVEL LOCATED UNDER THE NORTH EAST CORNER OF THE HOUSE

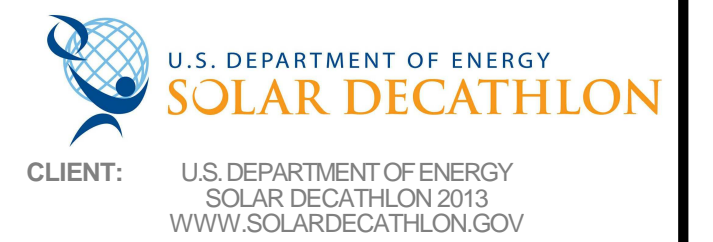


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**SHEET KEYNOTES**

3 SOLAR ENVELOPE

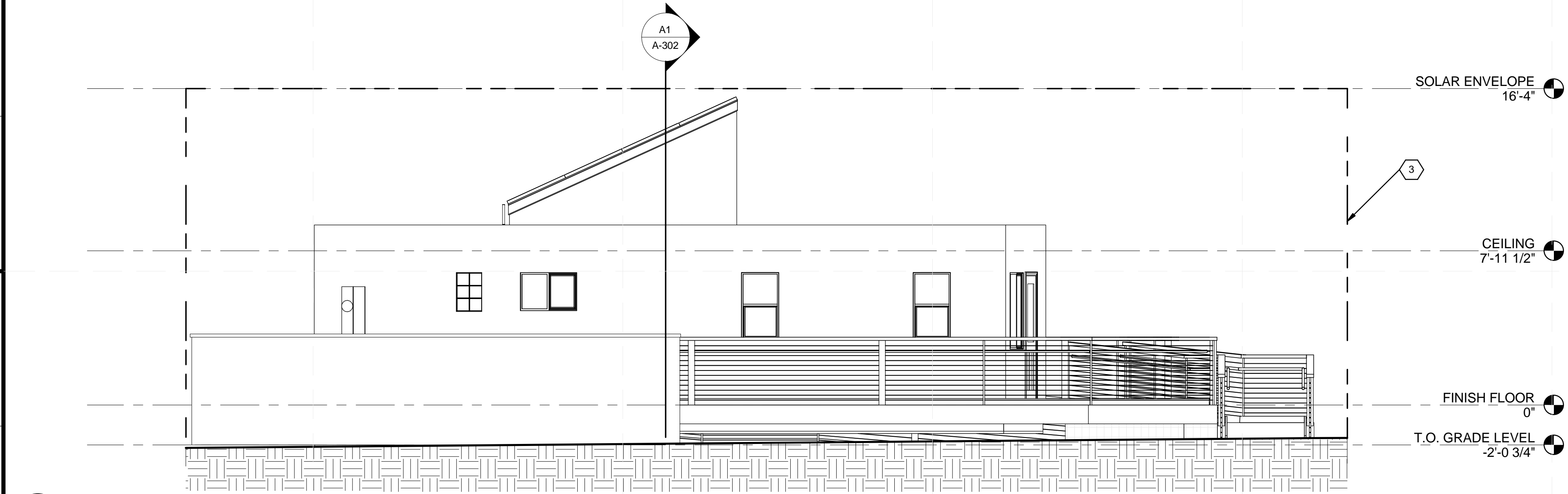


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	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
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	10/11/12	DD SUBMISSION

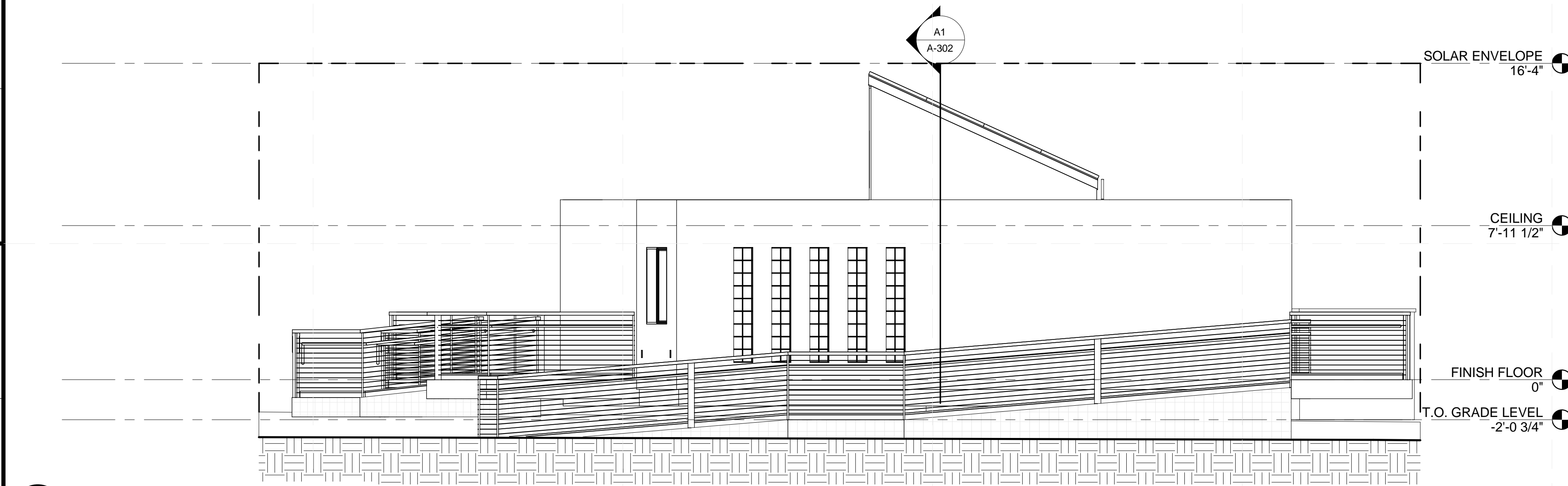
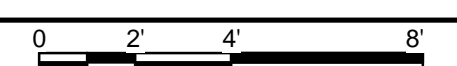
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SHEET TITLE:  
**SITE ELEVATIONS**

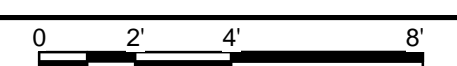
**A-202**



**C1 EAST SITE ELEVATION**  
 1/4" = 1'-0"



**A1 WEST SITE ELEVATION**  
 1/4" = 1'-0"



8/22/2013 1:30:01 PM



**GENERAL SHEET NOTES**

1. WINDOW AND DOOR HEAD HEIGHT IS MEASURED FROM FINISHED FLOOR

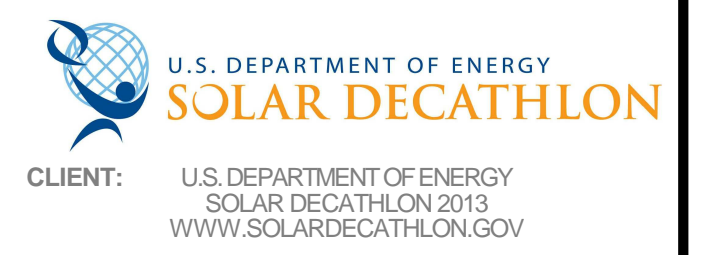


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**SHEET KEYNOTES**

19 PARAPET



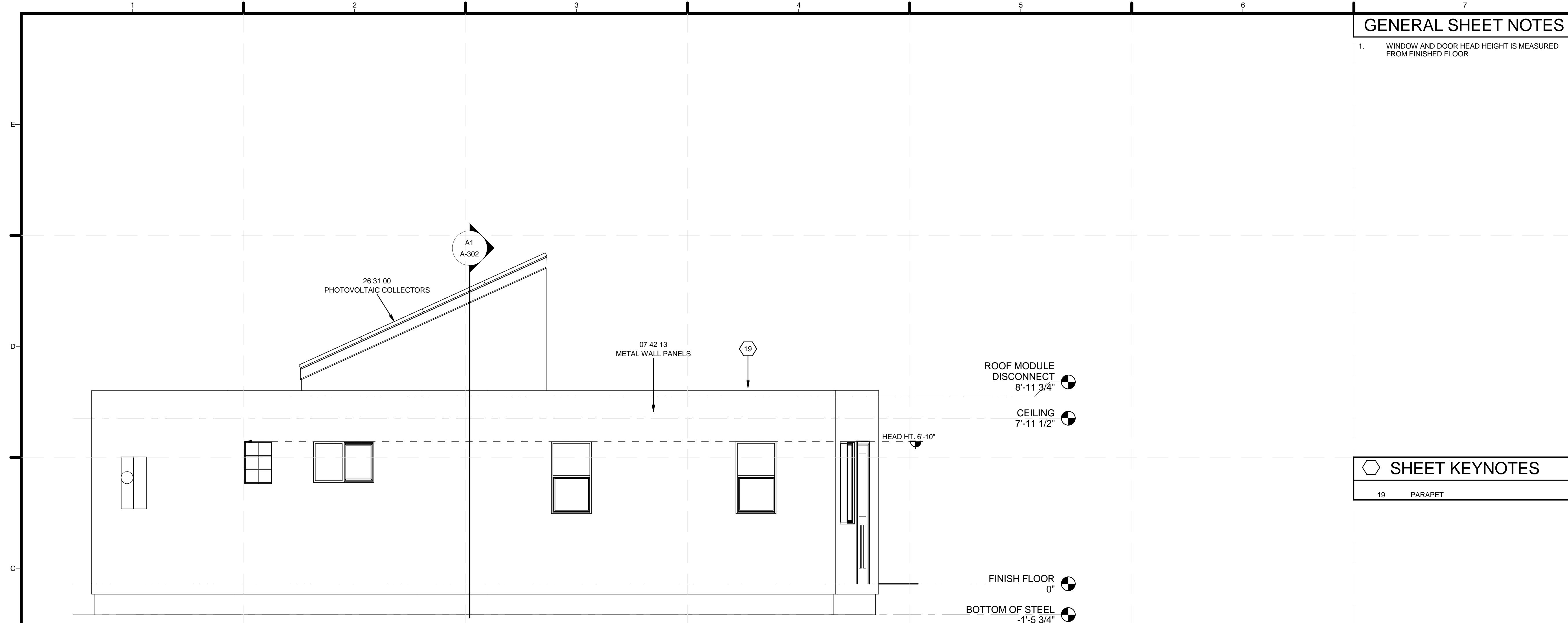
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MARK	DATE	DESCRIPTION
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	02/14/13	CD SUBMISSION
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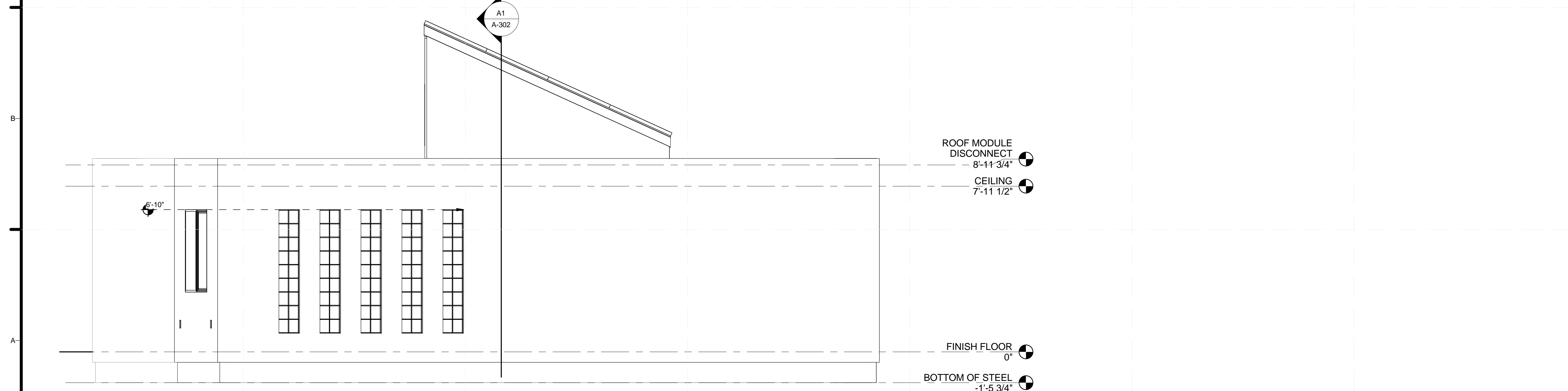
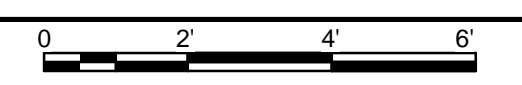
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SHEET TITLE:  
**BUILDING ELEVATIONS**

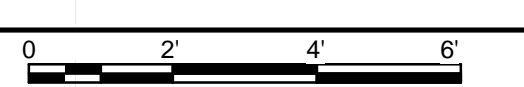
**A-211**



**C1 EAST ELEVATION**  
 3/8" = 1'-0"



**A1 WEST ELEVATION**  
 3/8" = 1'-0"



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**GENERAL SHEET NOTES**

1. WINDOW AND DOOR HEAD HEIGHT IS MEASURED FROM FINISHED FLOOR



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**SHEET KEYNOTES**

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	10/11/12	DD SUBMISSION

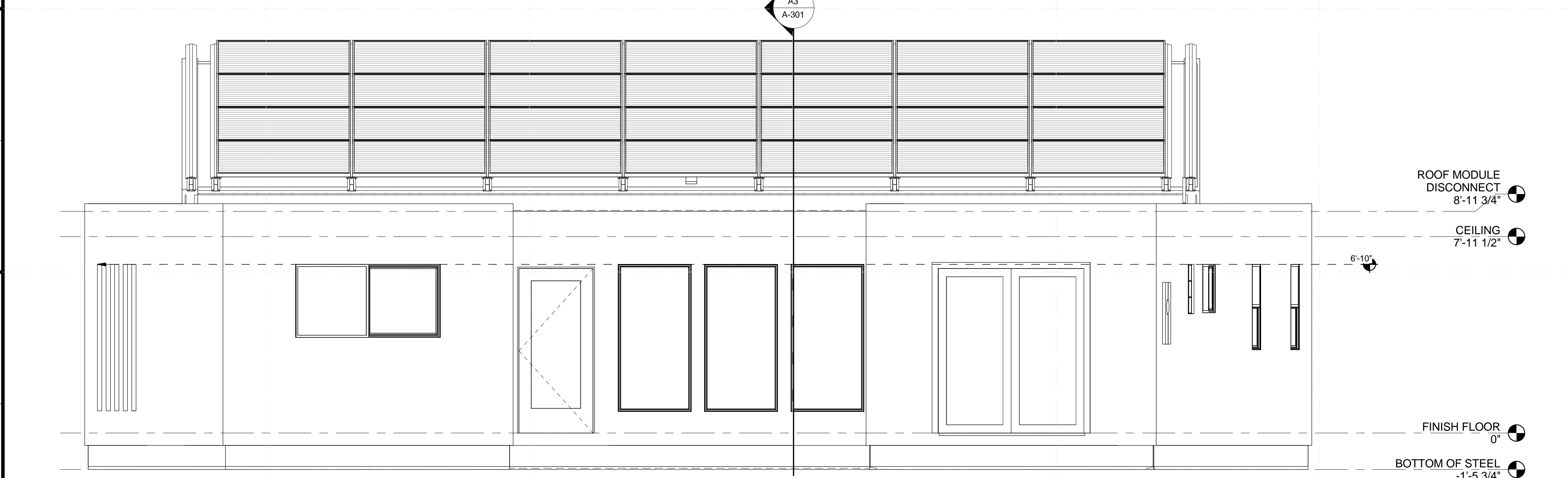
LOT NUMBER: 118  
 DRAWN BY: PT  
 CHECKED BY: SCU  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**BUILDING ELEVATIONS**

**A-212**



**C1 NORTH ELEVATION**  
 3/8" = 1'-0"



**A1 SOUTH ELEVATION**  
 3/8" = 1'-0"

8/22/2013 1:30:04 PM



**REFERENCE KEYNOTES**

08 51 13.A1	ALUMINUM HORIZONTAL SLIDING WINDOW
08 57 00	GLASS BLOCK WINDOW
09 29 00.D1	5/8" GYPSUM WALLBOARD
11 31 13.A1	REFRIGERATOR AND FREEZER
11 31 13.A2	30" INDUCTION STOVE COOKTOP
11 31 13.A5	30" SINGLE WALL OVEN
11 31 13.A7	24" BAR HANDLE DISHWASHER
26 09 23.A2	SINGLE POLE SWITCH
26 30 00.A1	120V DUPLEX RECEPTACLE
26 30 00.A2	GFCI DUPLEX RECEPTACLE
26 51 00.A4	LED PENDANT LIGHT



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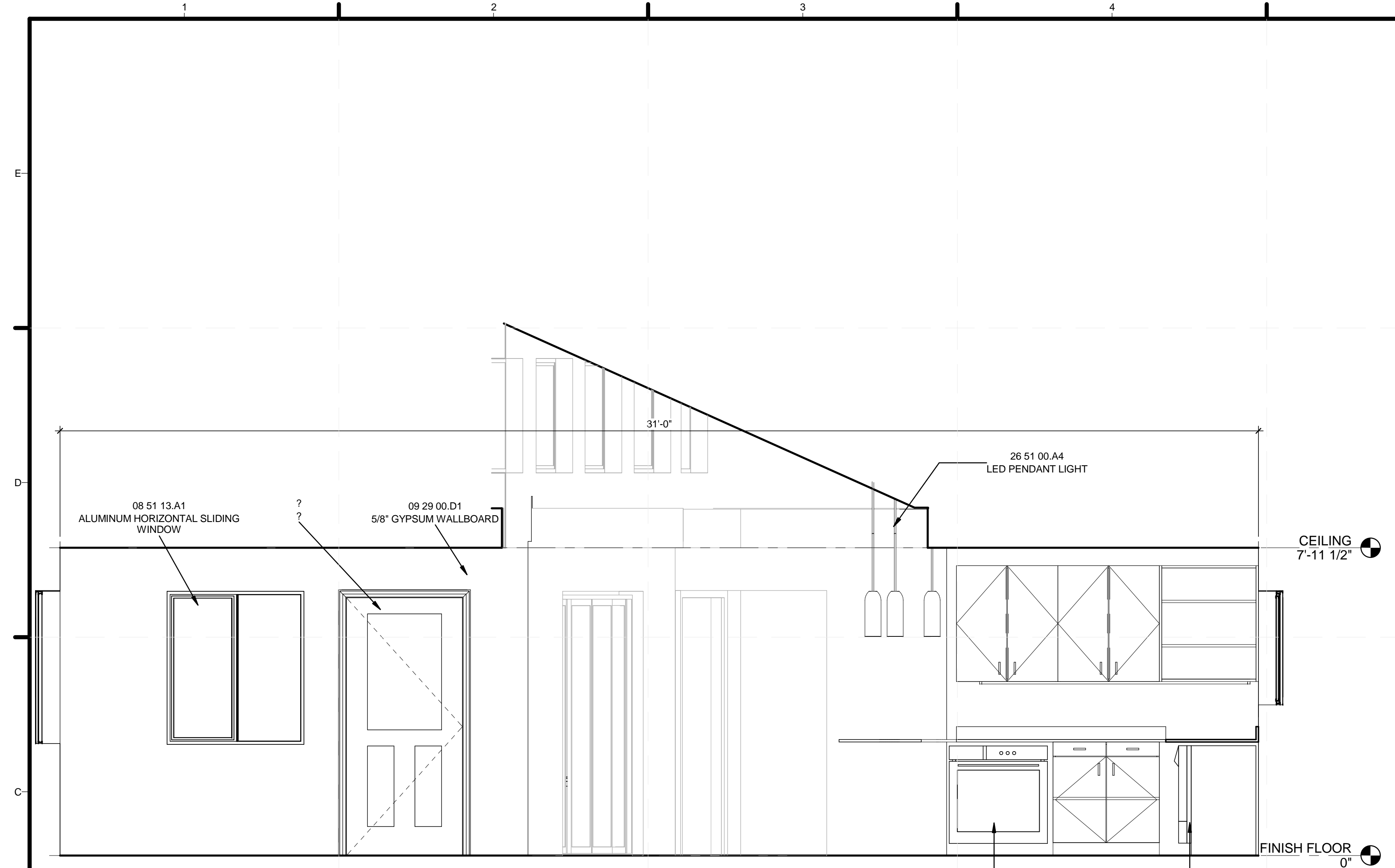
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	10/11/12	DD SUBMISSION

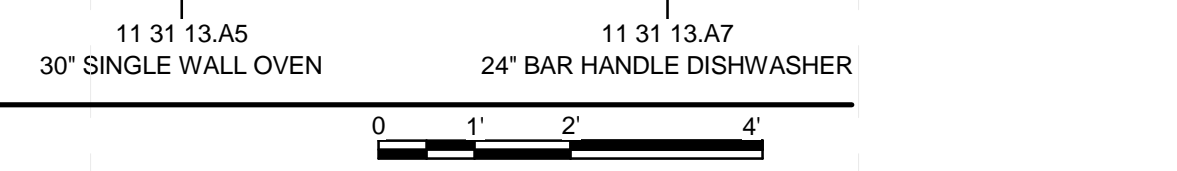
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SHEET TITLE:  
**INTERIOR ELEVATIONS**

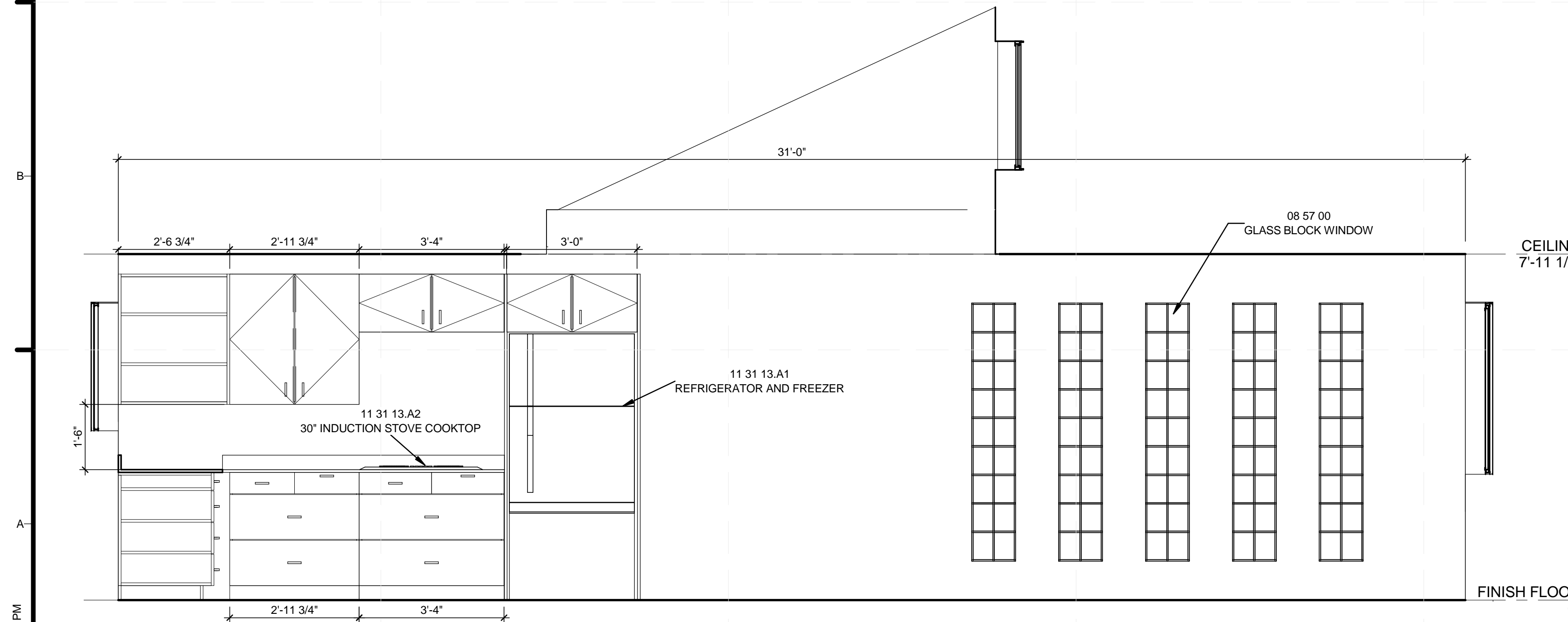
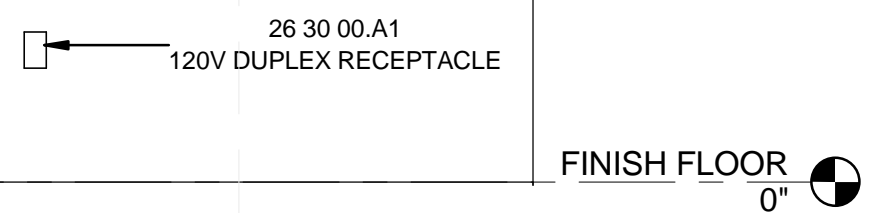
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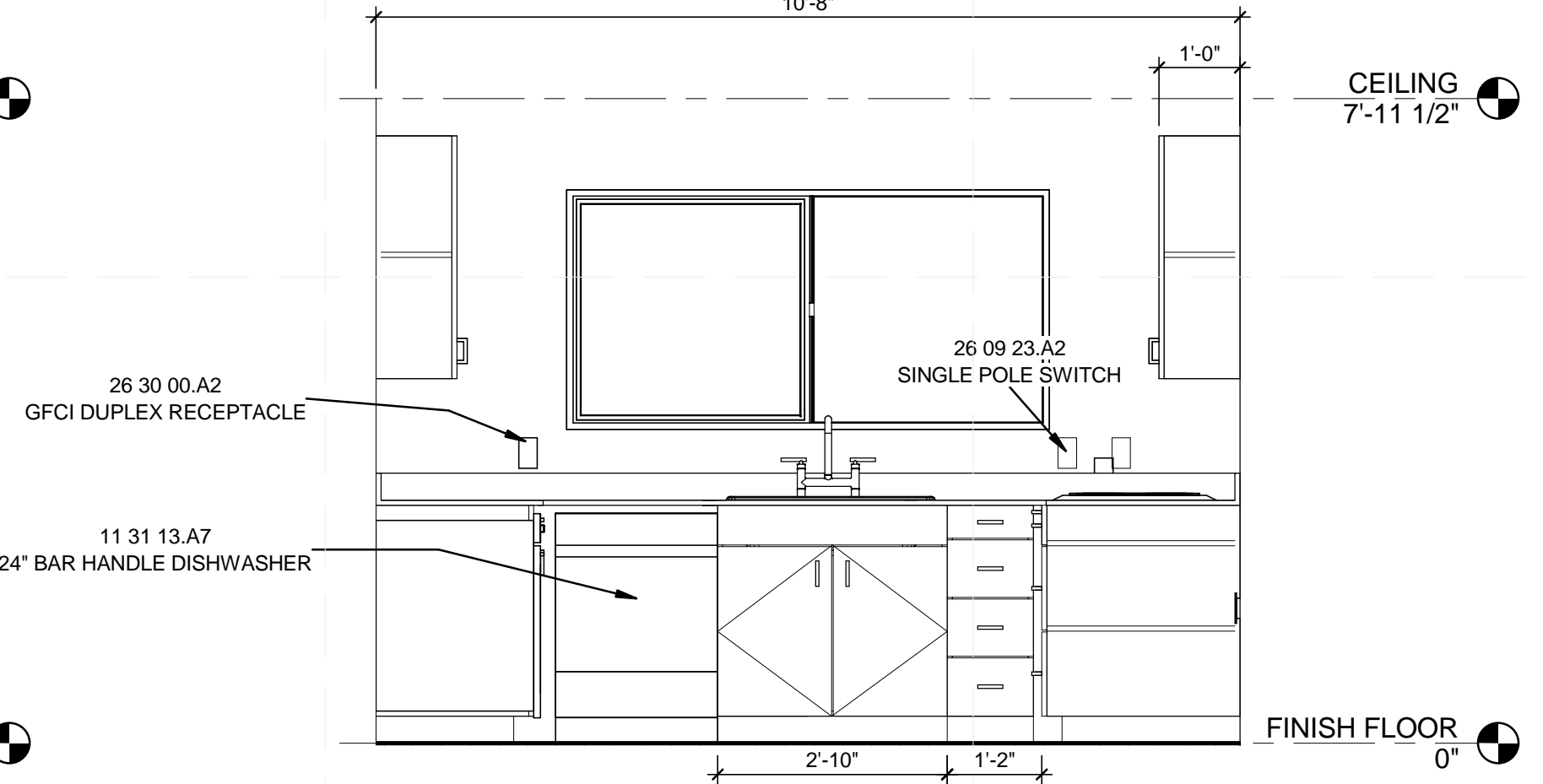
**C1 KITCHEN MODULE EAST ELEVATION**  
 1/2" = 1'-0"



**C5 KITCHEN MODULE NORTH ELEVATION**  
 1/2" = 1'-0"



**A1 KITCHEN MODULE WEST ELEVATION**  
 1/2" = 1'-0"




**A6 KITCHEN MODULE SOUTH ELEVATION**  
 1/2" = 1'-0"

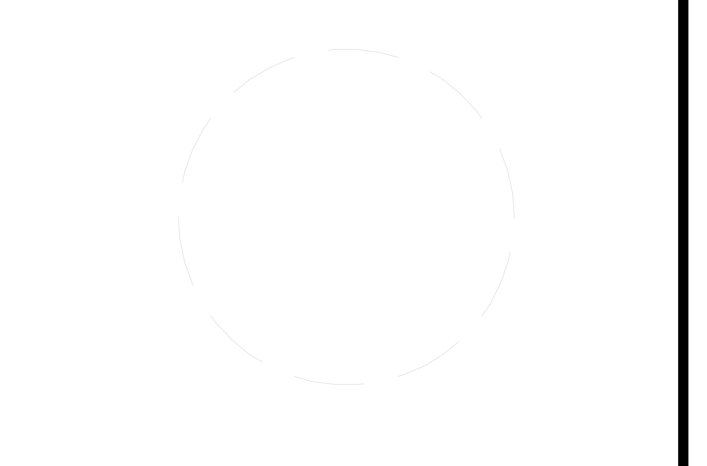
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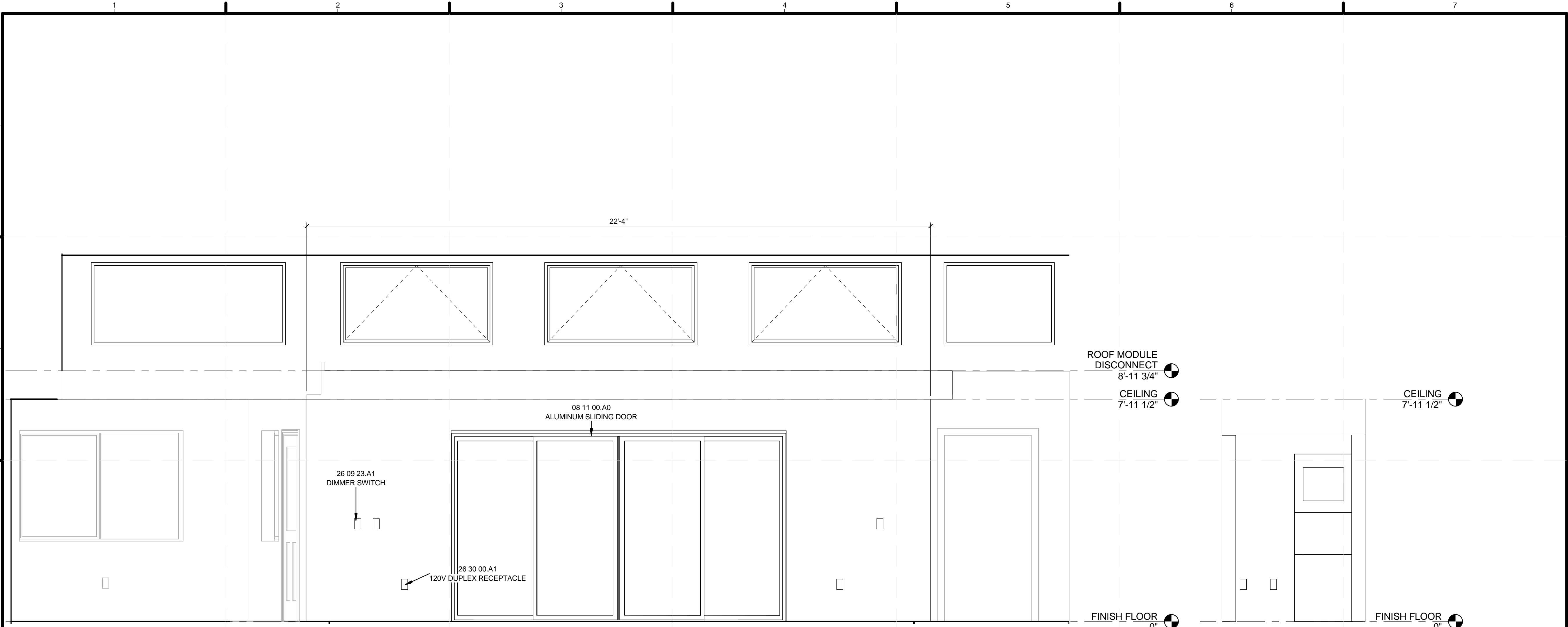


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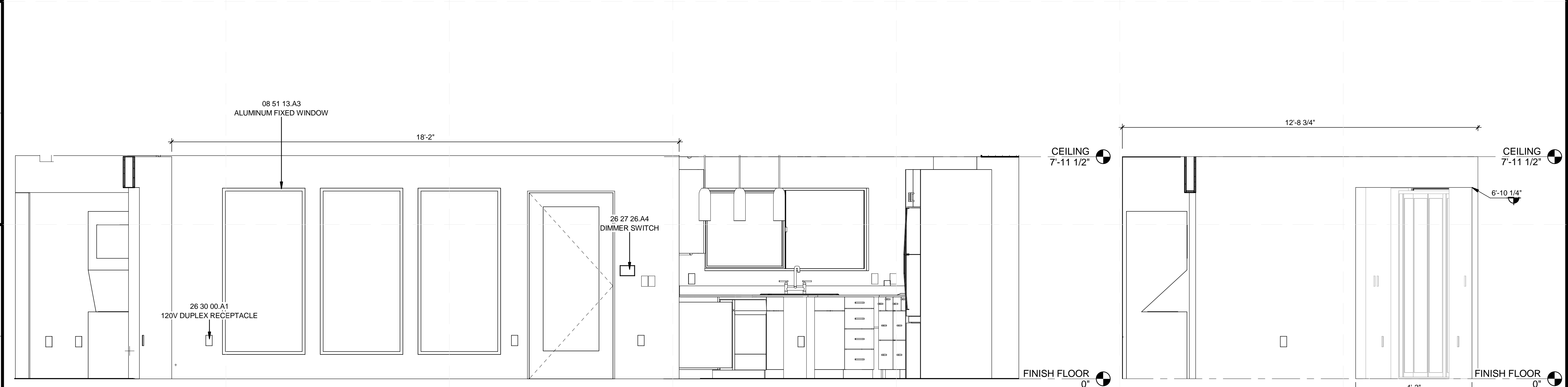
SHEET TITLE:  
**INTERIOR ELEVATIONS**

**A-214**



**C1** MODULE B NORTH ELEVATION  
 1/2" = 1'-0"

**C6** HALLWAY SOUTH ELEVATION  
 1/2" = 1'-0"



**A1** MODULE B SOUTH ELEVATION  
 1/2" = 1'-0"

**A6** HALLWAY WEST ELEVATION  
 1/2" = 1'-0"

8/22/2013 1:30:08 PM




**REFERENCE KEYNOTES**

08 14 17	INTERIOR WOOD POCKET DOORS
08 57 00	GLASS BLOCK WINDOW
08 83 00	MIRRORS
10 28 00.A2	TOILET TISSUE HOLDER
22 41 13.A1	WATER CLOSET
22 41 23.B1	SHOWER
26 09 23.A2	SINGLE POLE SWITCH
26 30 00.A1	120V DUPLEX RECEPTACLE
26 51 00.A5	RECESSED FAN AND LIGHT

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 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
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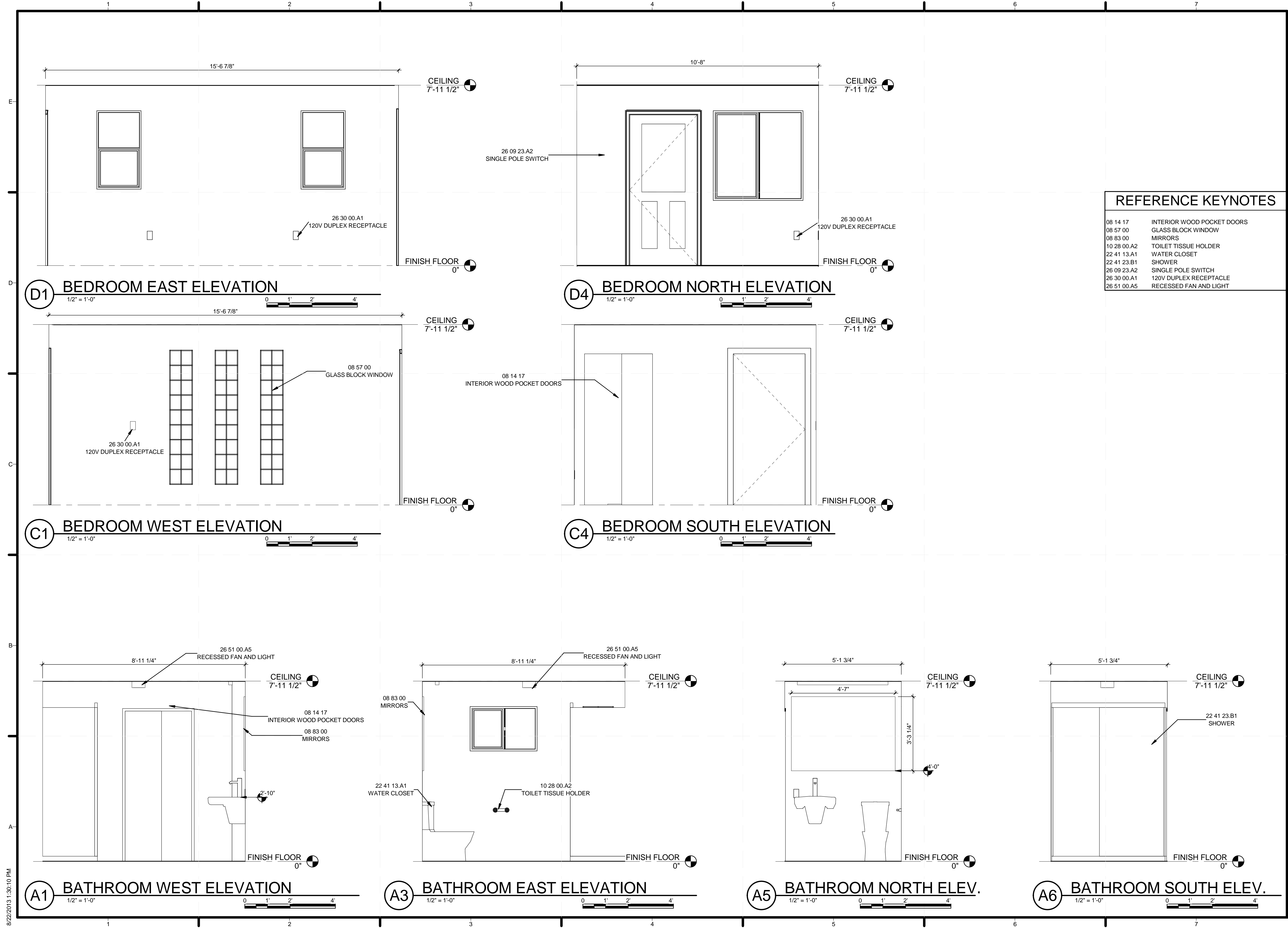
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	11/20/12	DD SUBMISSION
	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**INTERIOR ELEVATIONS**

**A-215**





**REFERENCE KEYNOTES**

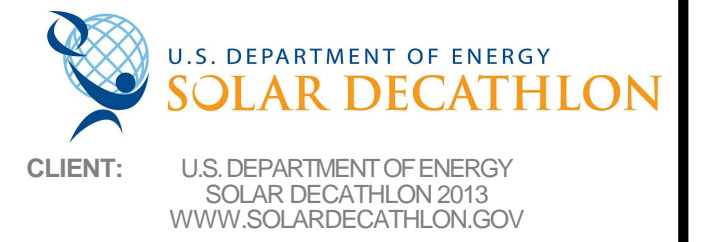
05 12 00	STRUCTURAL STEEL FRAMING
06 17 00.C0	WOOD I JOIST
07 21 26	SPRAYED INSULATION
07 42 13	METAL WALL PANELS
07 55 52.A1	TPO ULTRAPLY ROOF MEMBRANE
08 11 00.A0	ALUMINUM SLIDING DOOR
08 51 13.A3	ALUMINUM FIXED WINDOW
23 83 16	RADIANT-HEATING HYDRONIC PANELS W/ GYP BOARD FINISH
26 31 00	PHOTOVOLTAIC COLLECTORS

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**SHEET KEYNOTES**

19 PARAPET



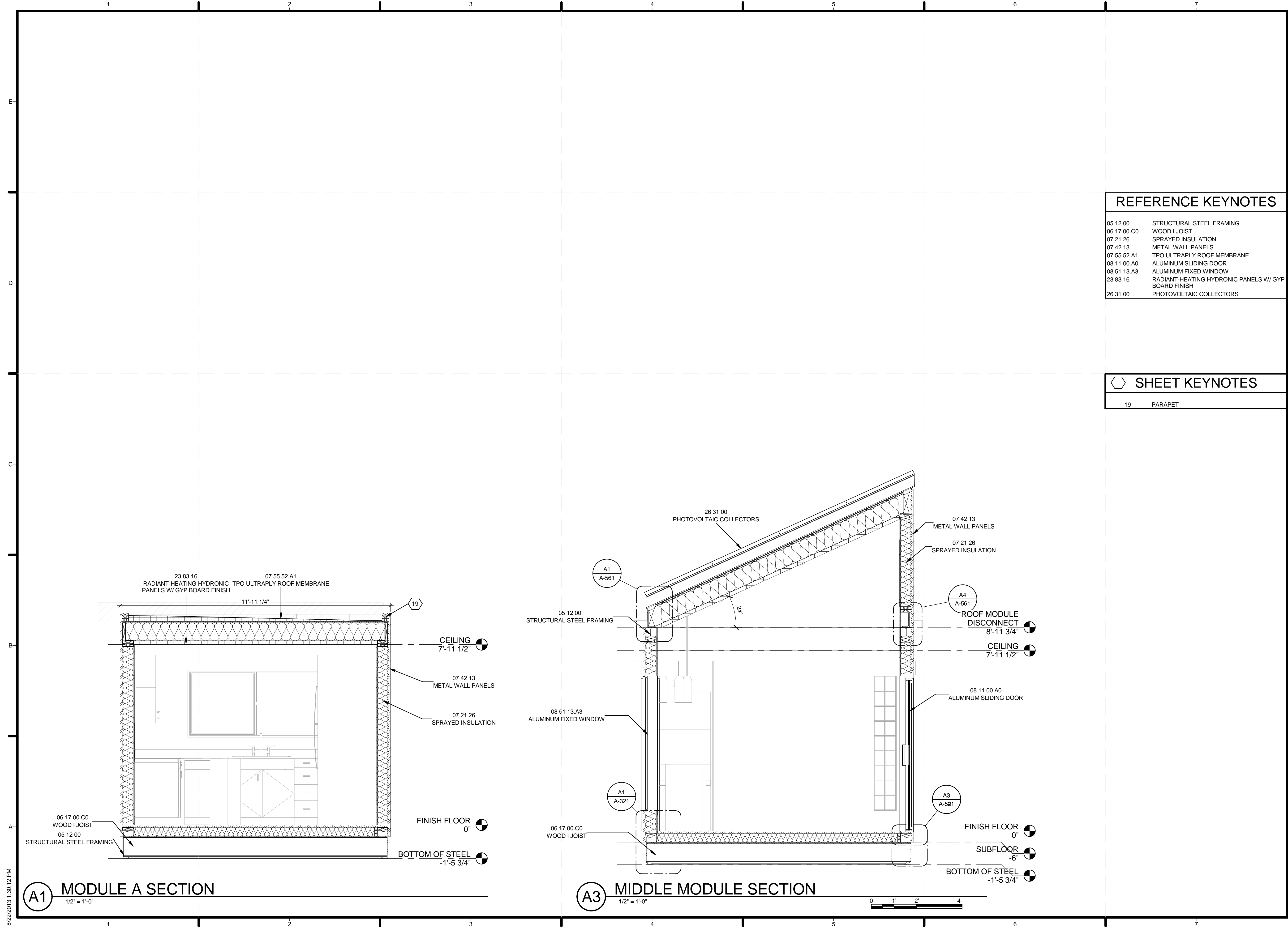
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	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**BUILDING SECTIONS**

**A-301**



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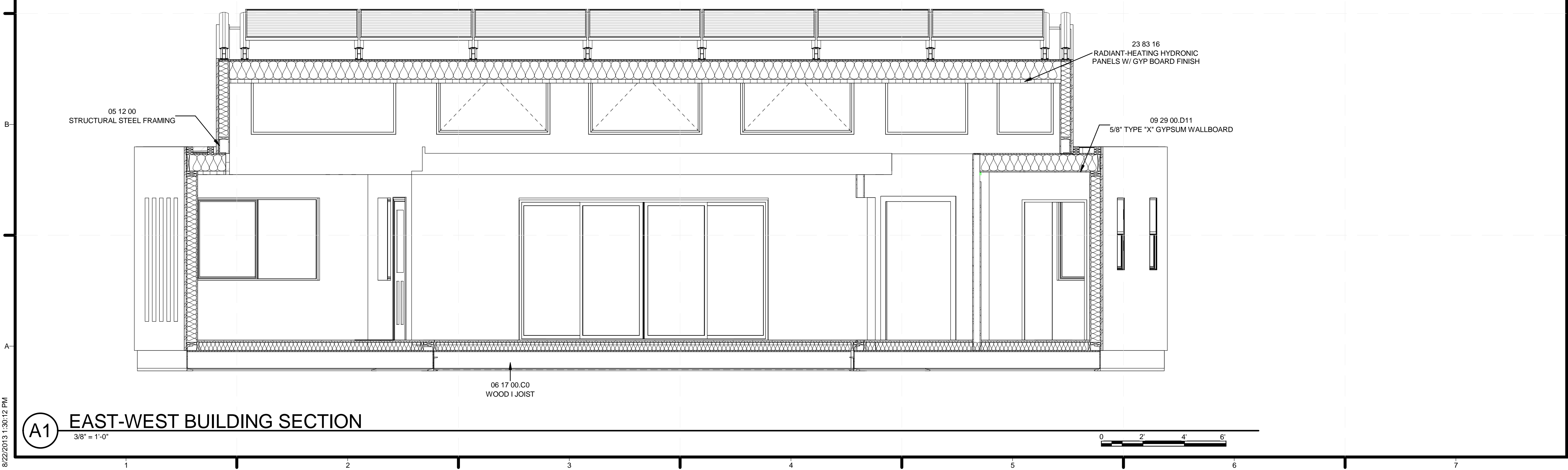
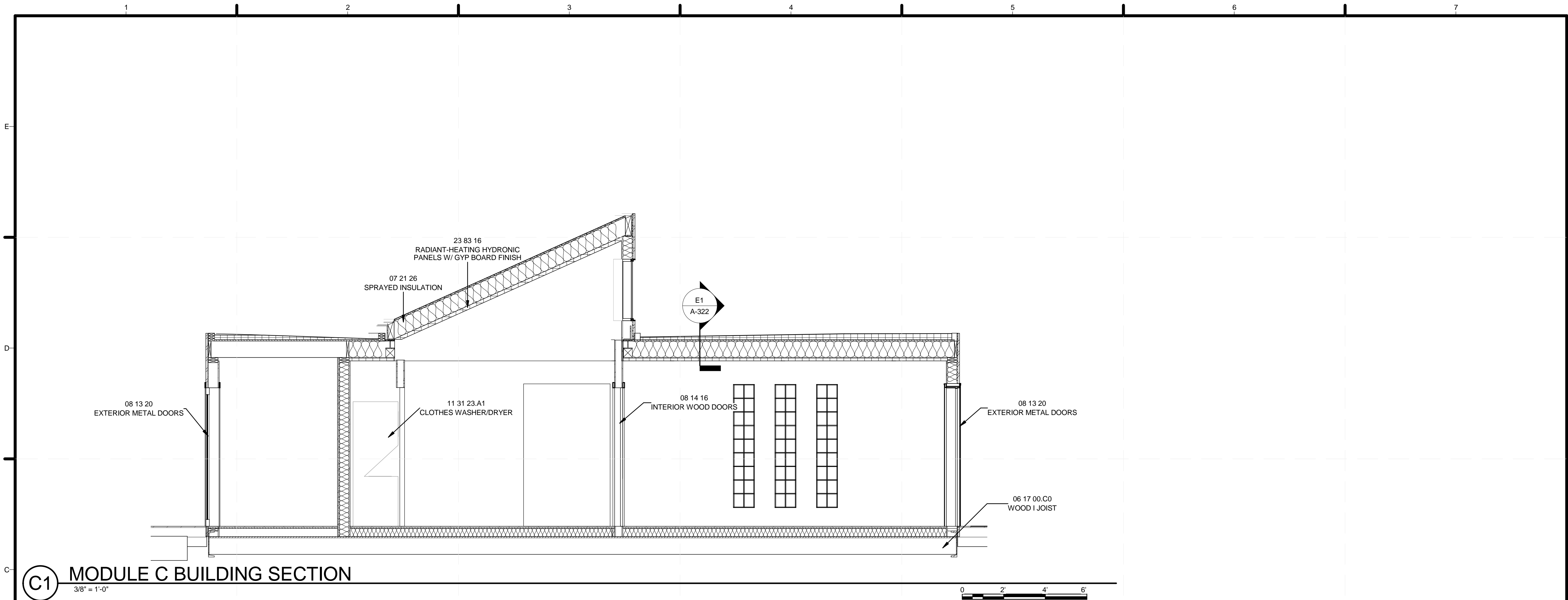
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: PT  
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SHEET TITLE:  
**BUILDING SECTIONS**

**A-302**



8/22/2013 1:30:12 PM

**GENERAL SHEET NOTES**

1. UNDERFLOOR AIRSPACE TO BE SEALED FOR USE AS A PLENUM



**REFERENCE KEYNOTES**

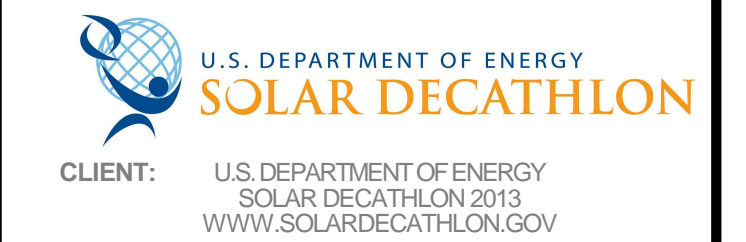
- 05 12 00 STRUCTURAL STEEL FRAMING
- 06 11 00.D1 2X4
- 06 11 00.F1 2X6
- 06 11 00.F2 2X6 FRAMING
- 06 11 00.L5 4X6 GIRDER
- 06 15 33.A1 BAMBOO DECKING
- 06 16 00.D17 15/32" PLYWOOD SHEATHING
- 06 16 00.E3 5/8" T&G STRAND BOARD DECKING
- 06 16 00.E4 3/4" T&G STRAND BOARD DECKING
- 06 17 00.C0 WOOD I JOIST
- 06 40 23.A1 5/8" FLOOR FINISH
- 06 46 00.H1 1" X 1" QUARTER ROUND
- 07 42 13 METAL WALL PANELS
- 07 42 13.A3 Z MOLDING TRIM
- 09 64 29.A1 BAMBOO STRIP AND PLANK FLOORING

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**SHEET KEYNOTES**

- 46 REMOVABLE ACCESS PANEL



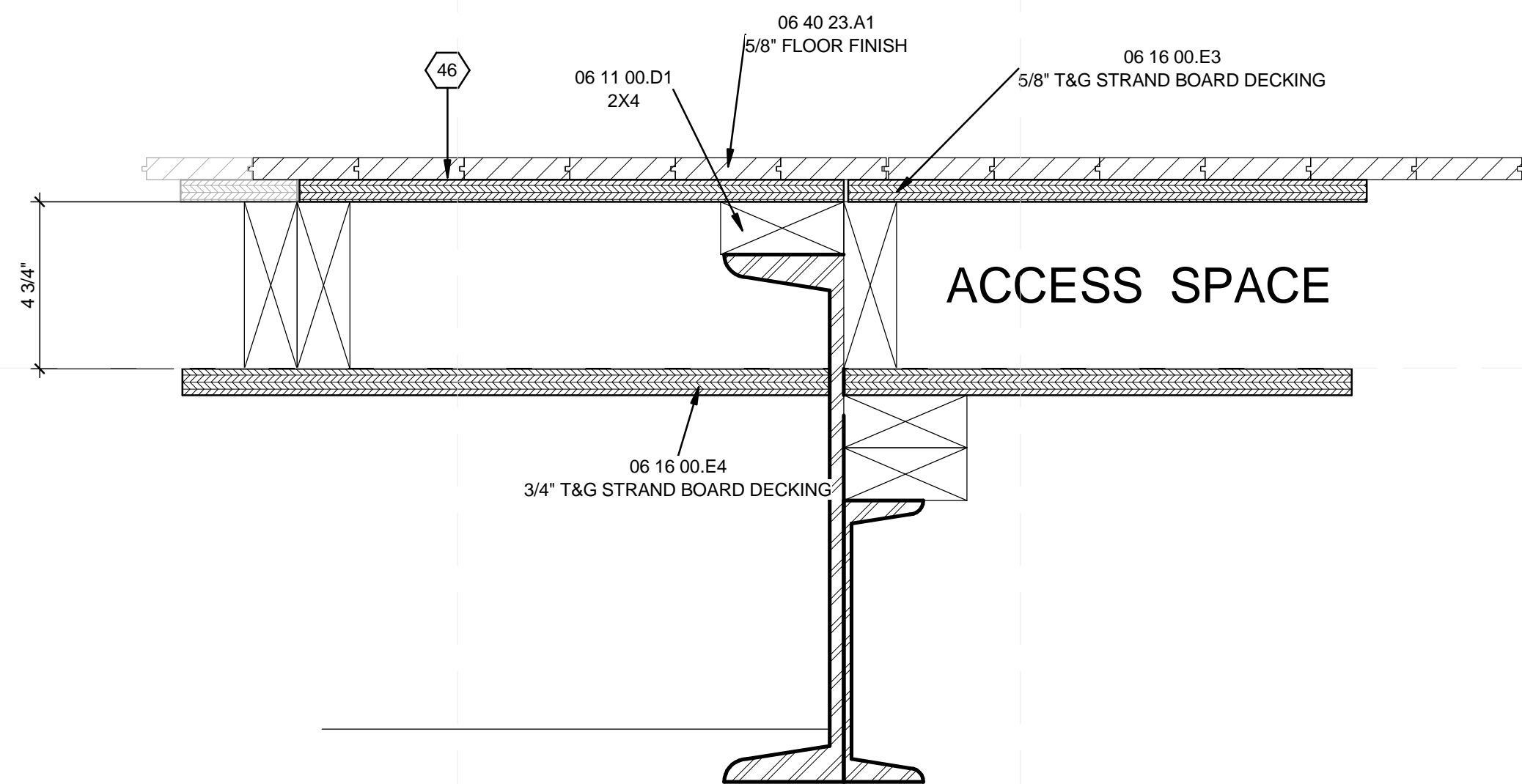
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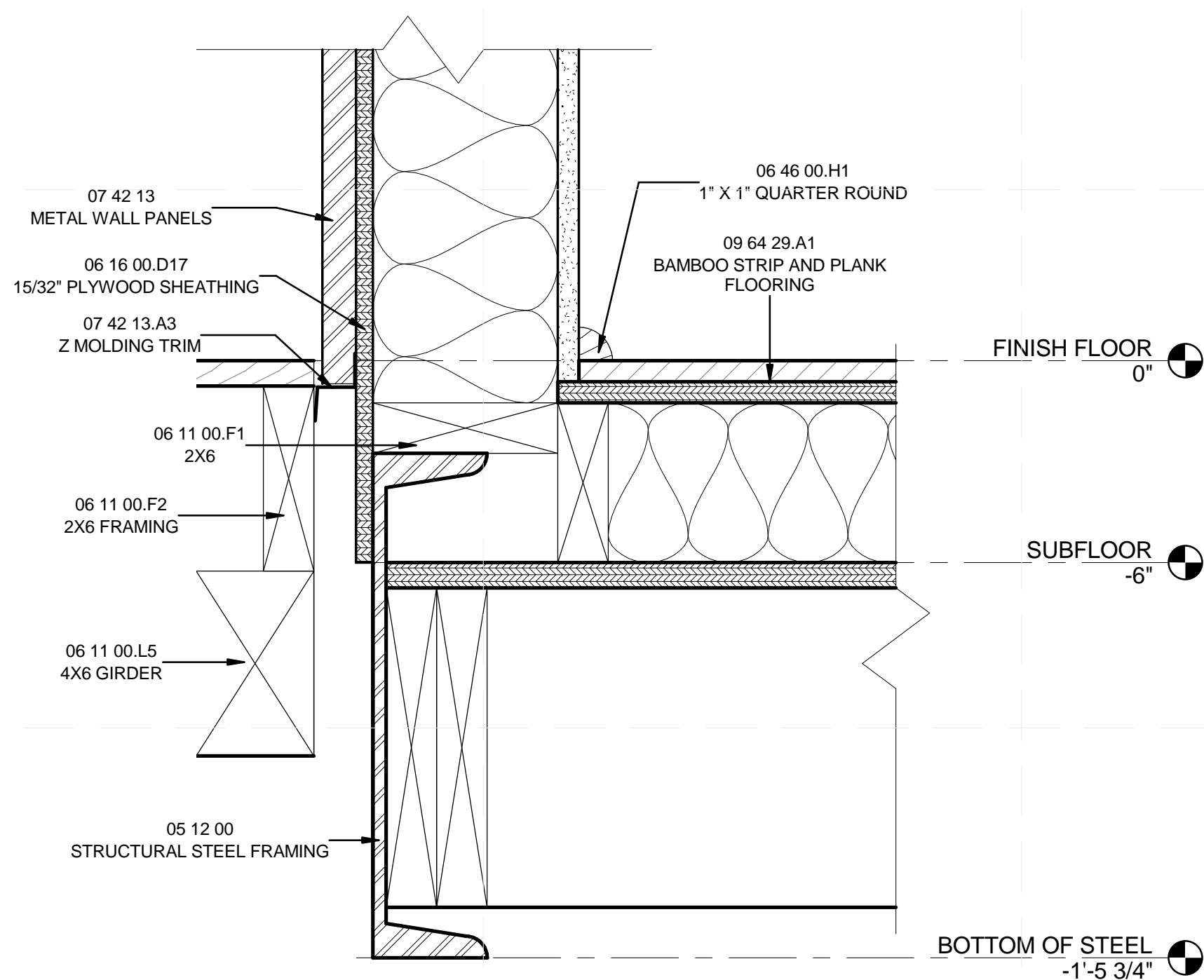
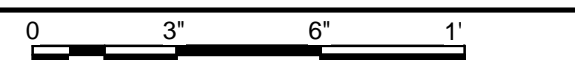
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SHEET TITLE:  
**FLOOR SECTIONS**

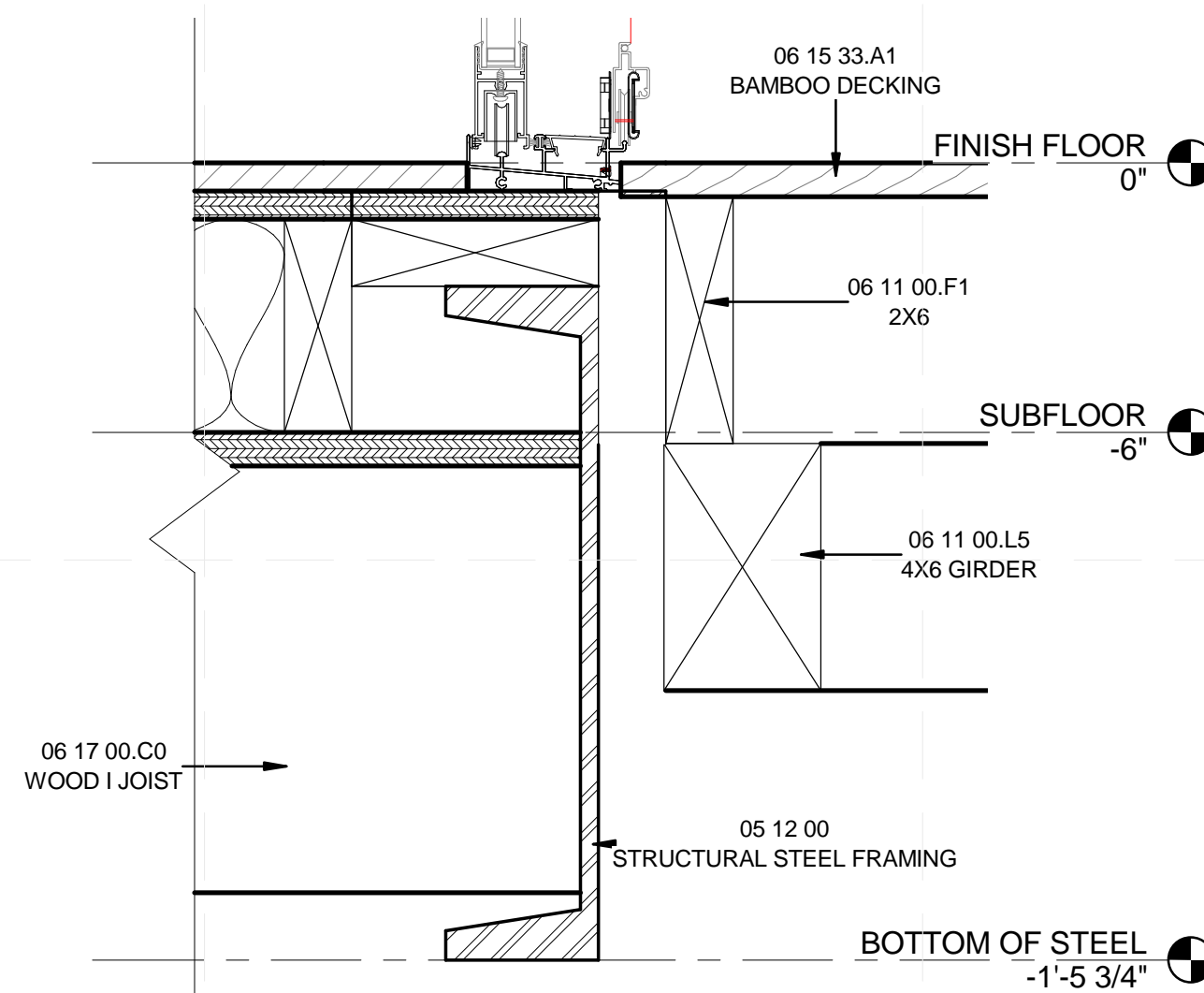
**A-321**



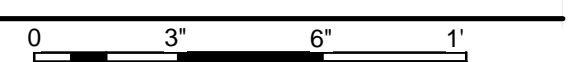
**D1 ACCESS FLOOR FRAMING DETAIL**  
 3" = 1'-0"



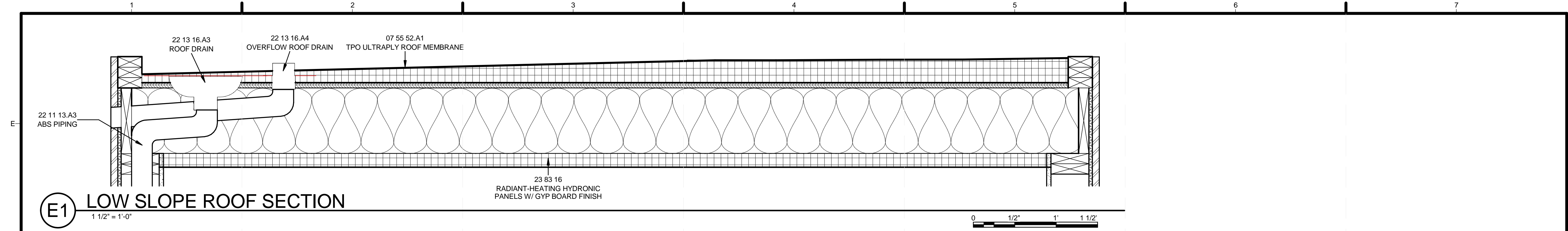
**A1 FLOOR TO WALL CONNECTION**  
 3" = 1'-0"



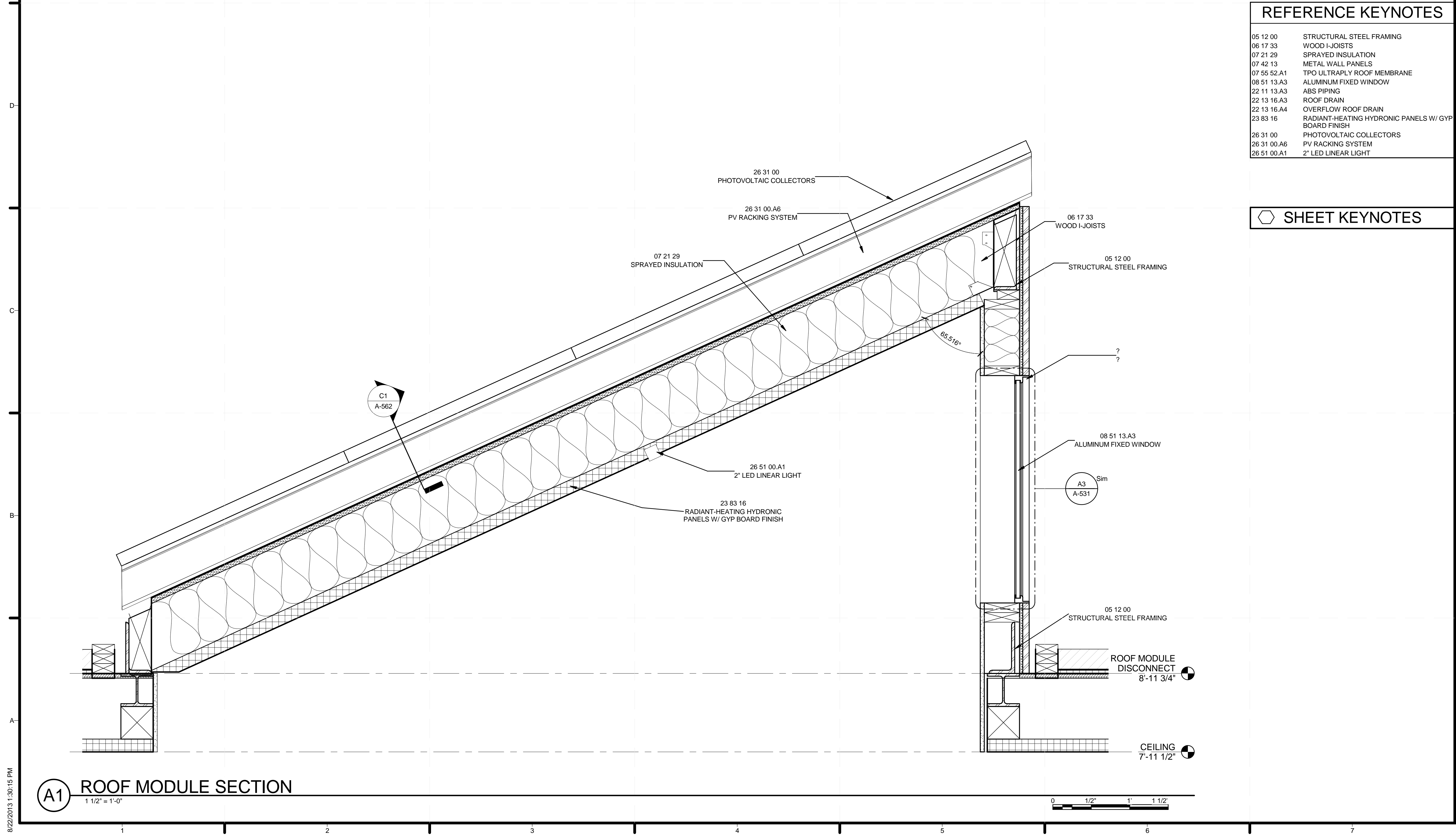
**A3 MODULE B NORTH FLOOR DETAIL**  
 3" = 1'-0"







**E1 LOW SLOPE ROOF SECTION**  
1 1/2" = 1'-0"



**A1 ROOF MODULE SECTION**  
1 1/2" = 1'-0"



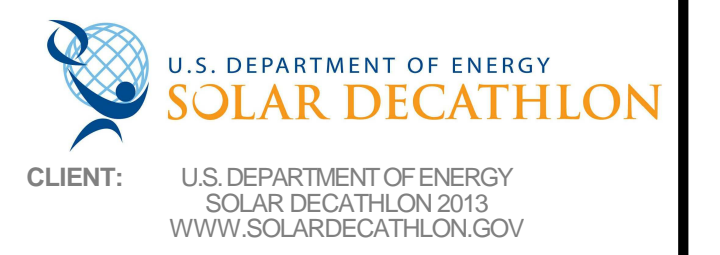
**REFERENCE KEYNOTES**

05 12 00	STRUCTURAL STEEL FRAMING
06 17 33	WOOD I-JOISTS
07 21 29	SPRAYED INSULATION
07 42 13	METAL WALL PANELS
07 55 52.A1	TPO ULTRAPLY ROOF MEMBRANE
08 51 13.A3	ALUMINUM FIXED WINDOW
22 11 13.A3	ABS PIPING
22 13 16.A3	ROOF DRAIN
22 13 16.A4	OVERFLOW ROOF DRAIN
23 83 16	RADIANT-HEATING HYDRONIC PANELS W/ GYP BOARD FINISH
26 31 00	PHOTOVOLTAIC COLLECTORS
26 31 00.A6	PV RACKING SYSTEM
26 51 00.A1	2" LED LINEAR LIGHT

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**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

**SHEET KEYNOTES**



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	08/12/13	AS BUILT REVISIONS
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
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SHEET TITLE:  
**ROOF SECTIONS**

**A-322**

8/22/2013 1:30:15 PM

**REFERENCE KEYNOTES**


05 12 00	STRUCTURAL STEEL FRAMING
08 14 00.B1	1 3/8" HOLLOW CORE DOOR
11 31 13.A1	REFRIGERATOR AND FREEZER
11 31 23.A1	CLOTHES WASHER/DRYER
22 41 13.A1	WATER CLOSET
22 41 16.A2	TOP-MOUNT SINGLE SINK

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**SHEET KEYNOTES**

7	TOILET PAPER HOLDER IS 26" ABOVE FINISH FLOOR
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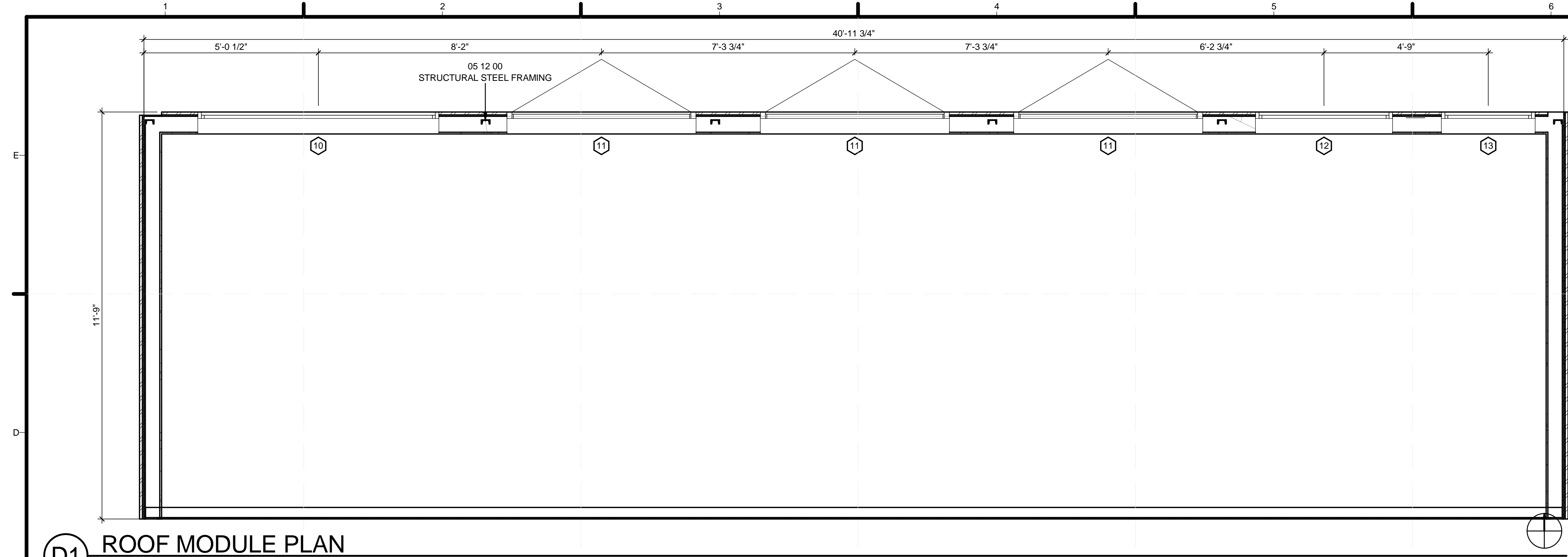
  
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	10/11/12	DD SUBMISSION

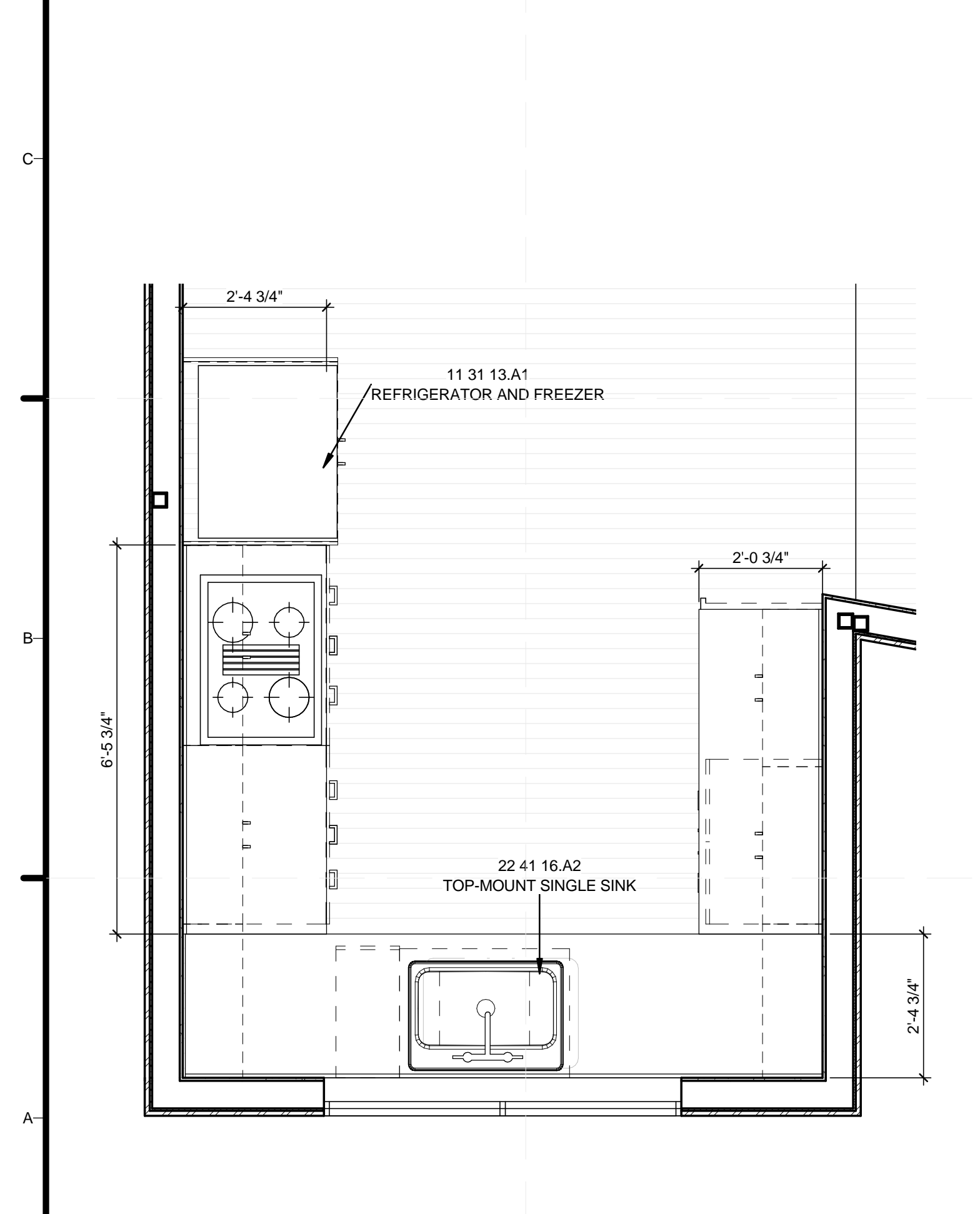
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 CHECKED BY: SCU  
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SHEET TITLE:  
**INT. LARGE SCALE PLAN**

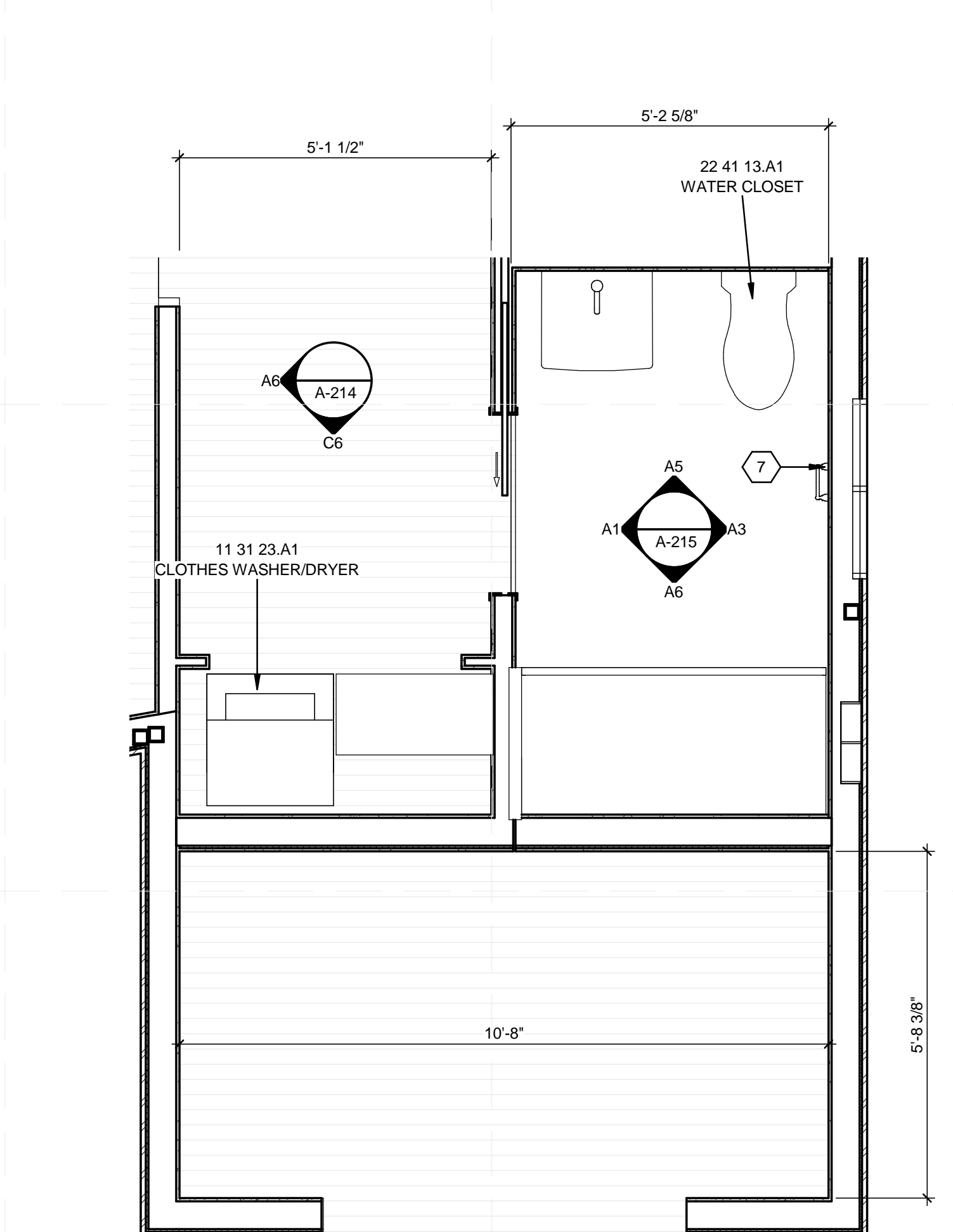
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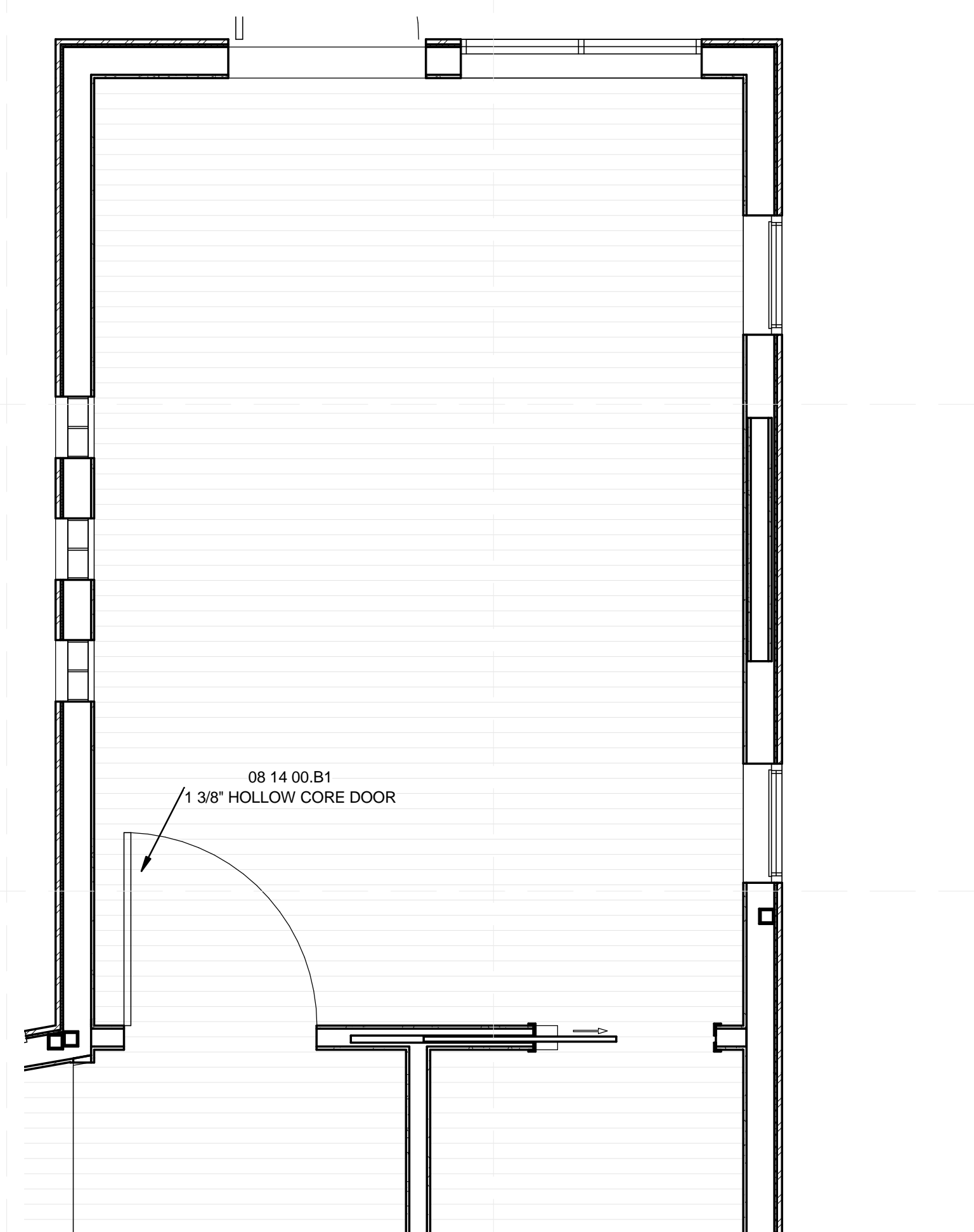
**(D1) ROOF MODULE PLAN**  
 1/2" = 1'-0"



**(A1) KITCHEN PLAN**  
 1/2" = 1'-0"



**(A3) BATHROOM/ MECH ROOM PLAN**  
 1/2" = 1'-0"



**(A5) BEDROOM PLAN**  
 1/2" = 1'-0"



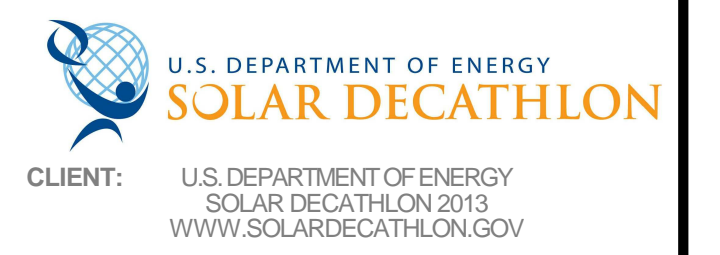
GENERAL SHEET NOTES

1. RAMP SLOPE TO NOT EXCEED A 1:12 SLOPE



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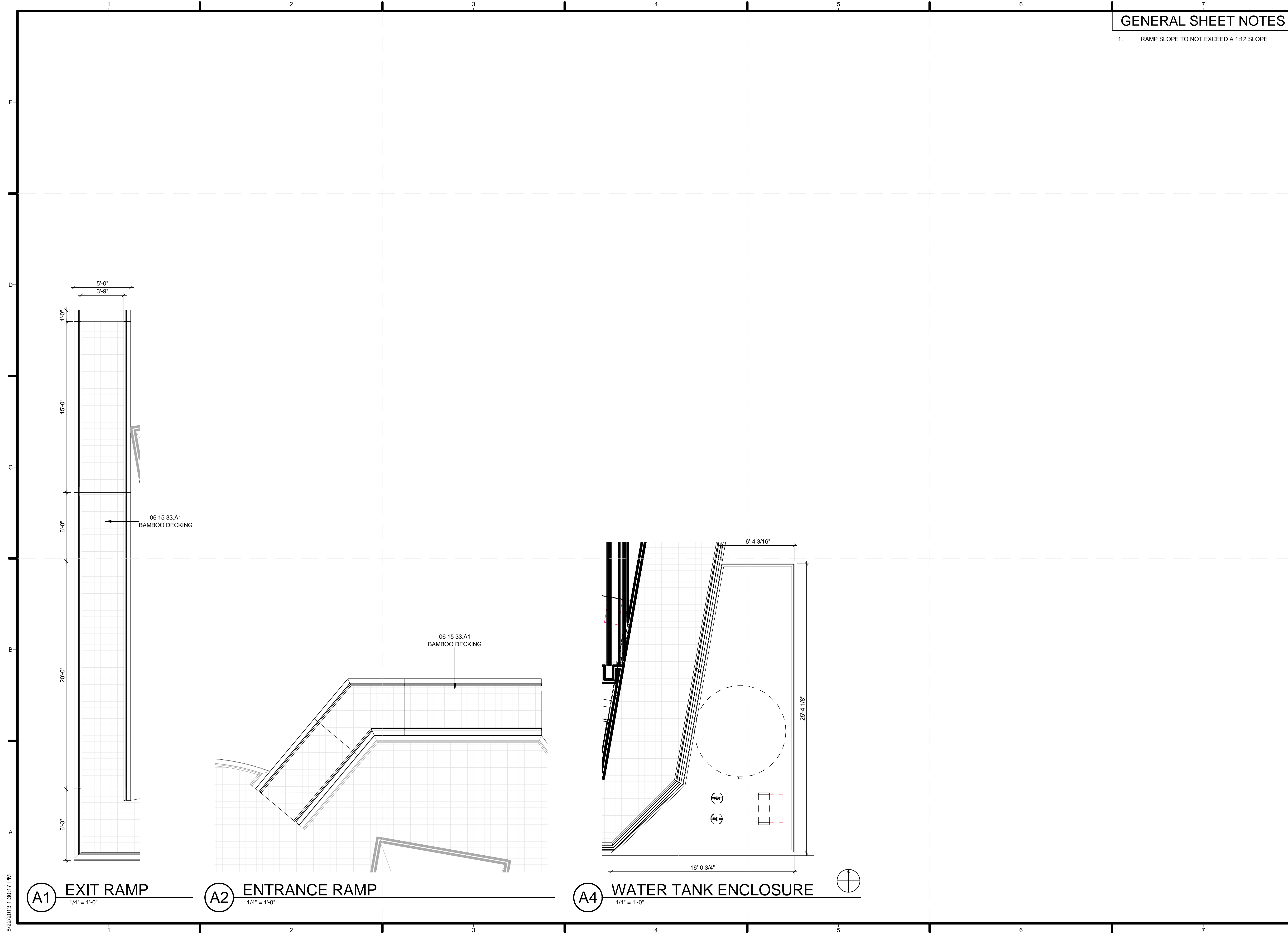
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	10/11/12	DD SUBMISSION

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SHEET TITLE:  
 EXT. LARGE SCALE PLANS

A-402



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1. WINDOW DETAILS REMAIN CONSISTENT AMONG ALL WINDOWS



REFERENCE KEYNOTES

06 11 00.F1	2X6
06 16 00.A4	5/8" GYPSUM SHEATHING
06 16 00.D6	1/2" PLYWOOD
07 13 00.A6	GRACE WEATHERPROOFING
07 21 26	SPRAYED INSULATION
07 42 13.A1	STEEL WALL PANEL 24 GA'
07 42 13.A2	SOFFIT JAMB
08 51 13.A1	ALUMINUM HORIZONTAL SLIDING WINDOW
08 51 13.A2	ALUMINUM VERTICAL SLIDING WINDOW
08 51 13.A3	ALUMINUM FIXED WINDOW
08 51 13.A4	ALUMINUM AWNING WINDOW
08 51 13.A5	ALUMINUM SINGLE HUNG WINDOW JAMB
08 51 13.B1	ALUMINUM SINGLE HUNG WINDOW JAMB
08 57 00	GLASS BLOCK WINDOW

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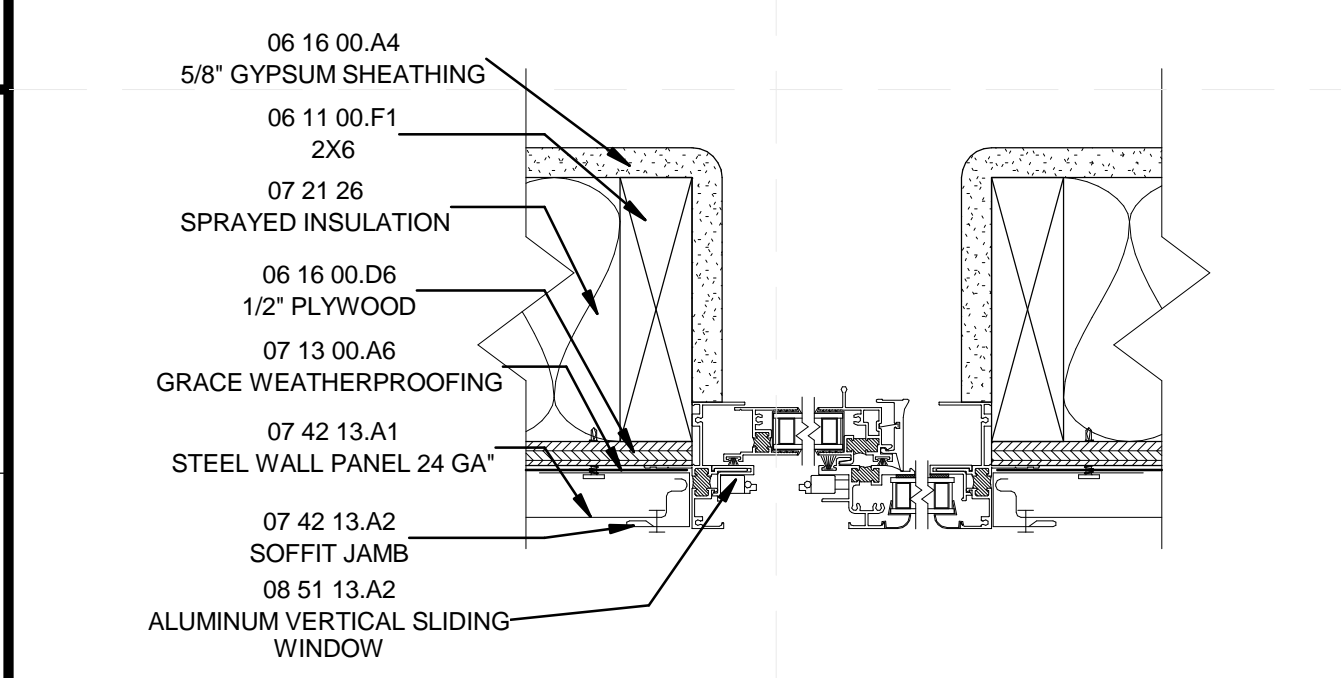
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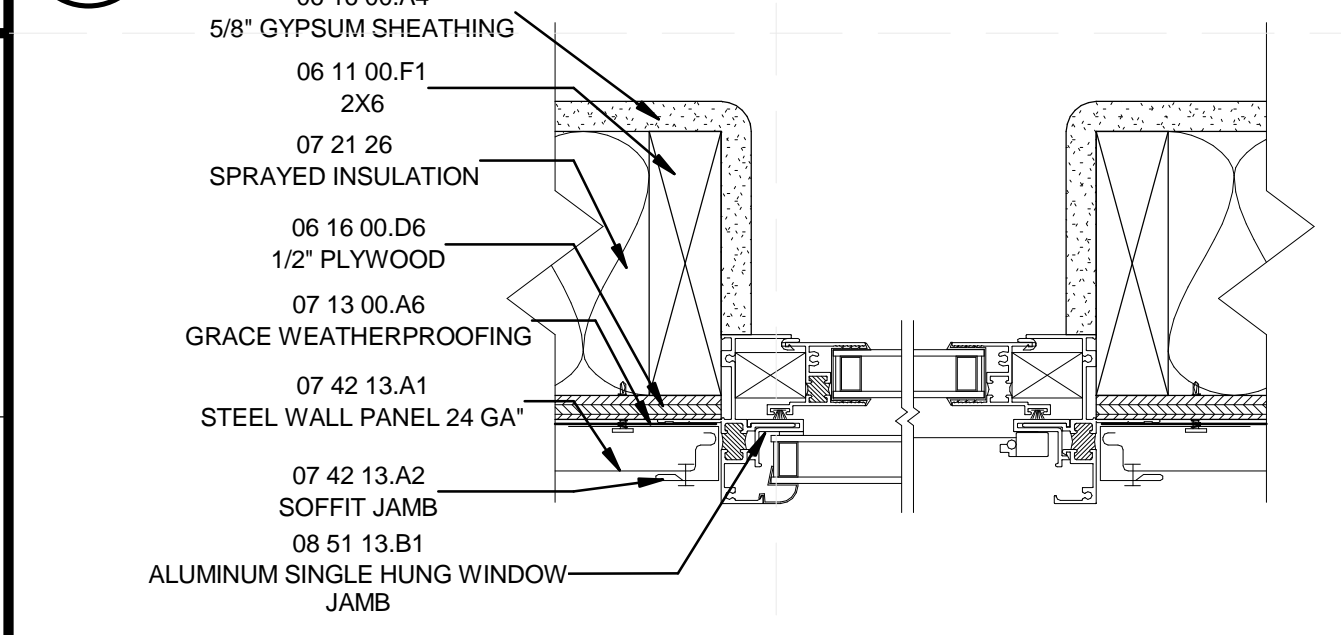
SHEET TITLE:  
**WINDOW DETAILS**

**A-531**

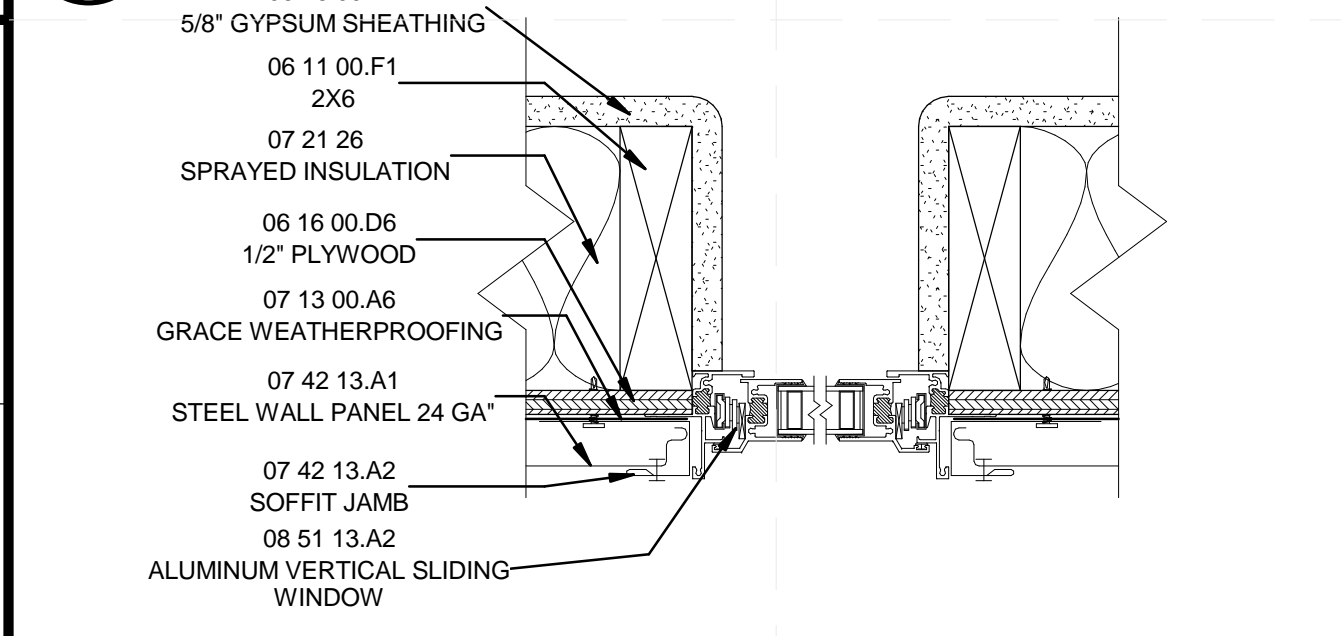
E  
D  
C  
B  
A  
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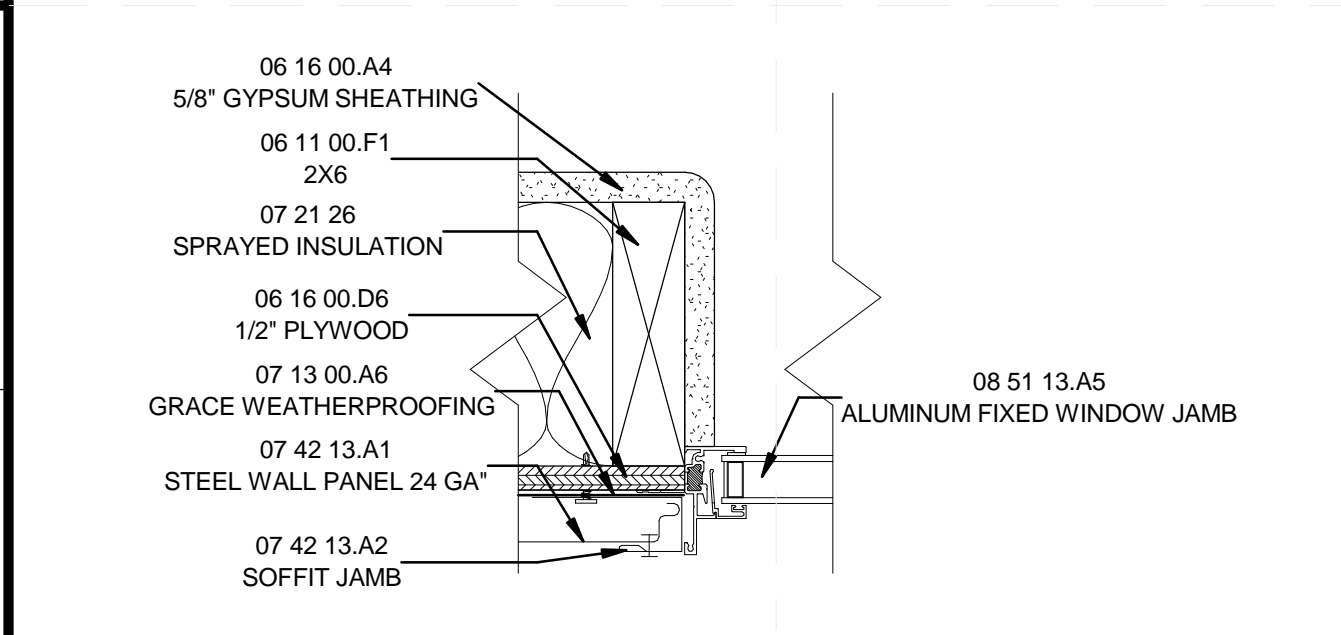
**D1 HALF VENT WINDOW JAMB**  
 3" = 1'-0"



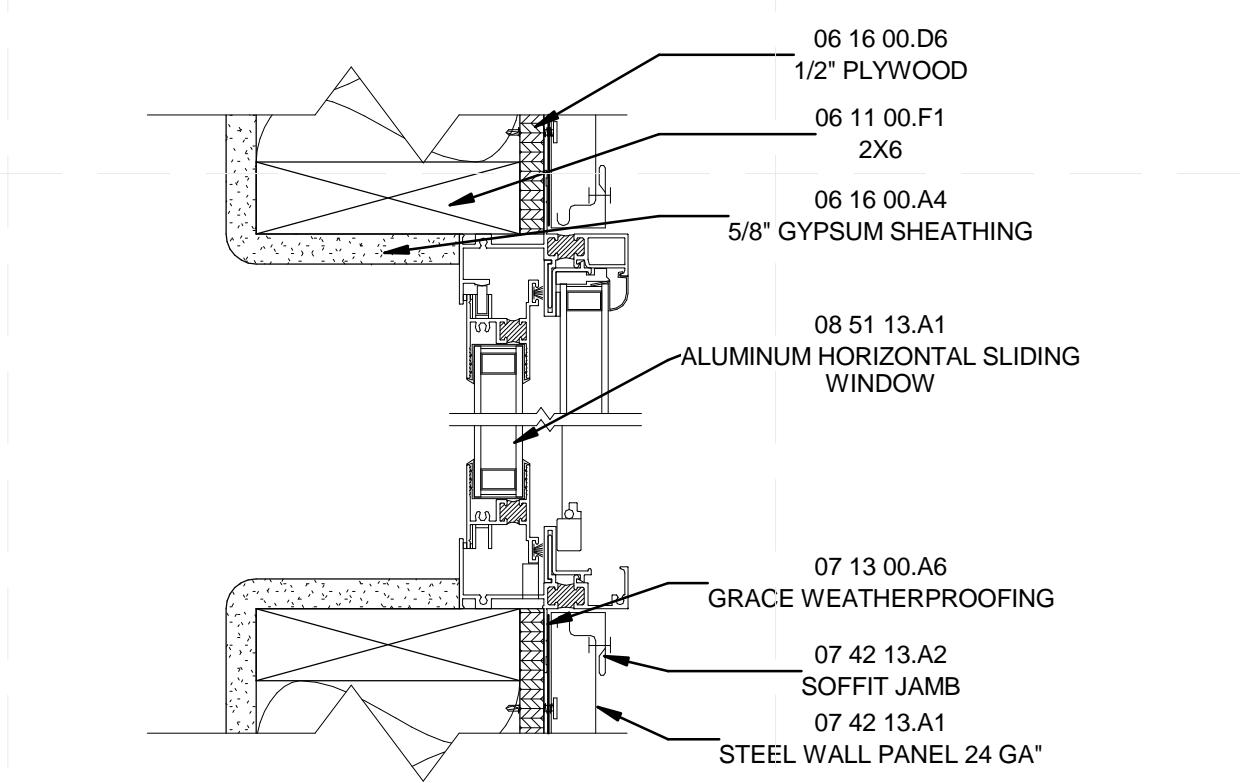
**C1 SINGLE HUNG WINDOW JAMB**  
 3" = 1'-0"



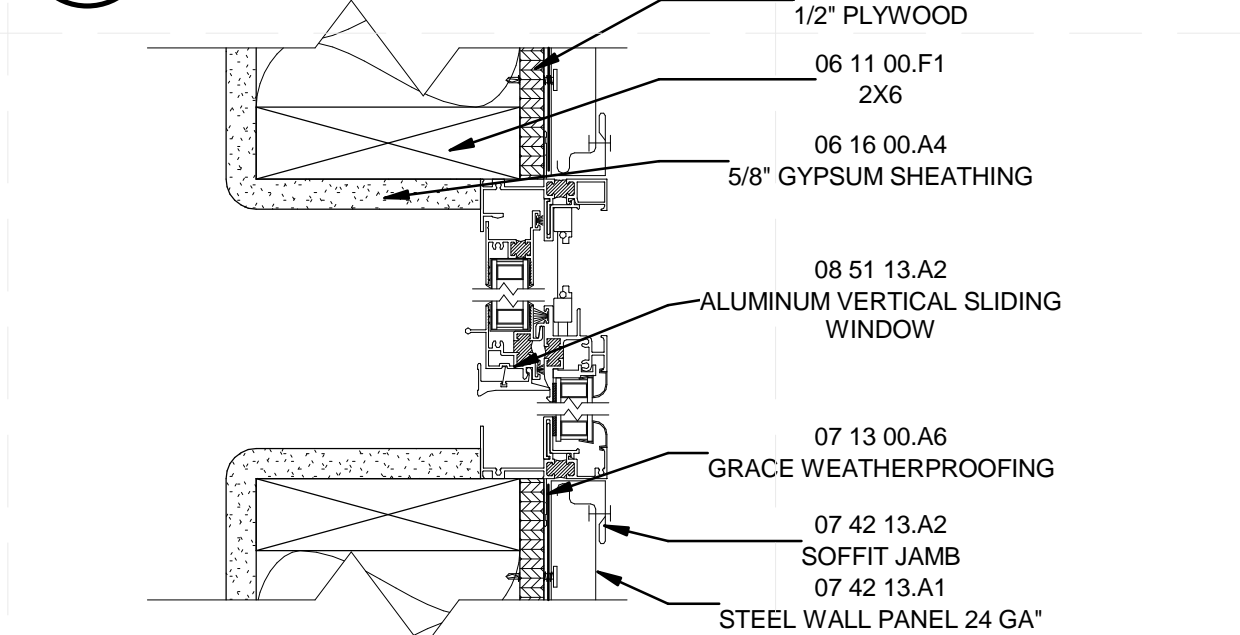
**B1 AWNING WINDOW JAMB**  
 3" = 1'-0"



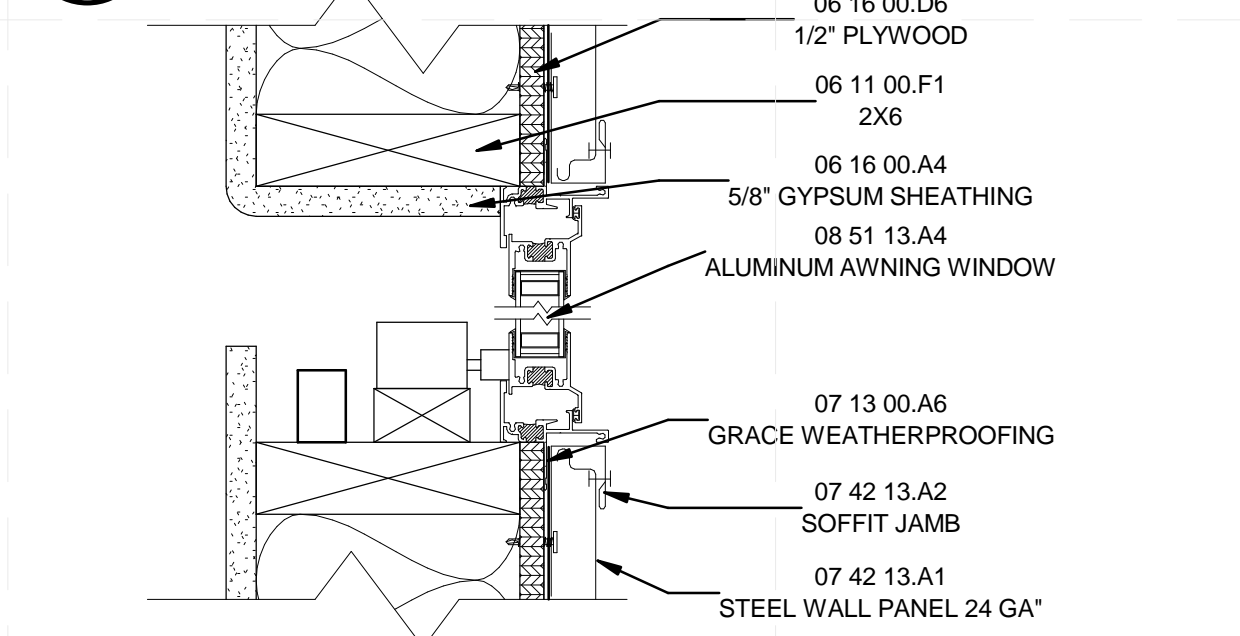
**A1 FIXED WINDOW JAMB**  
 3" = 1'-0"



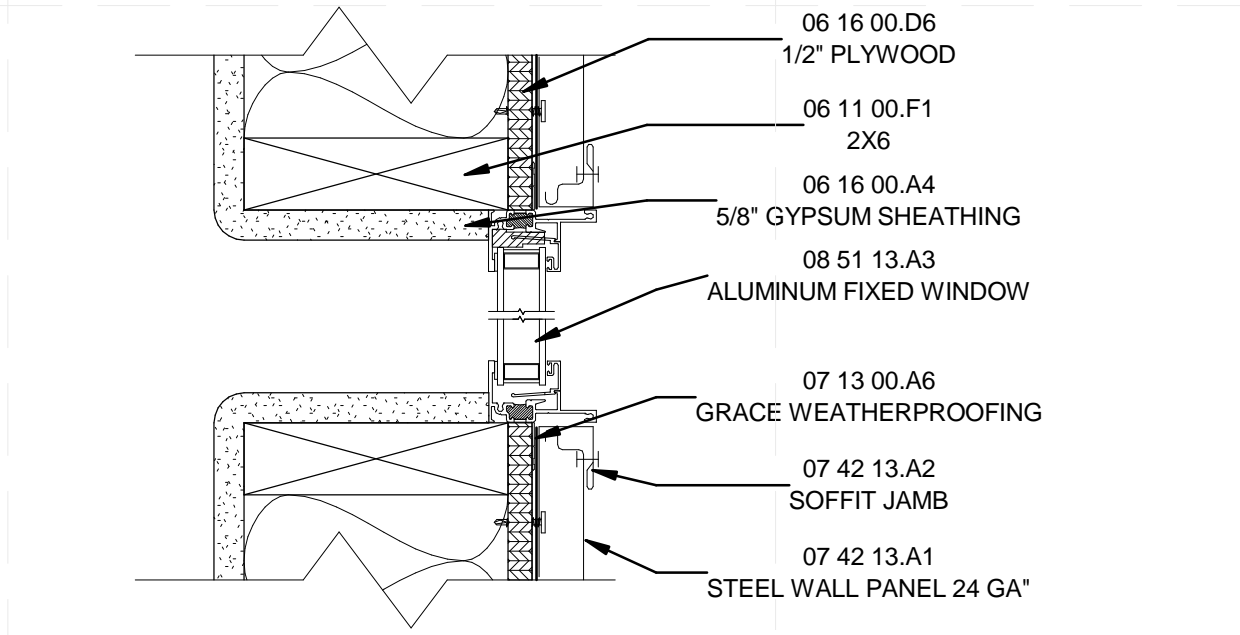
**D3 HALF VENT WINDOW HEAD/SILL**  
 3" = 1'-0"



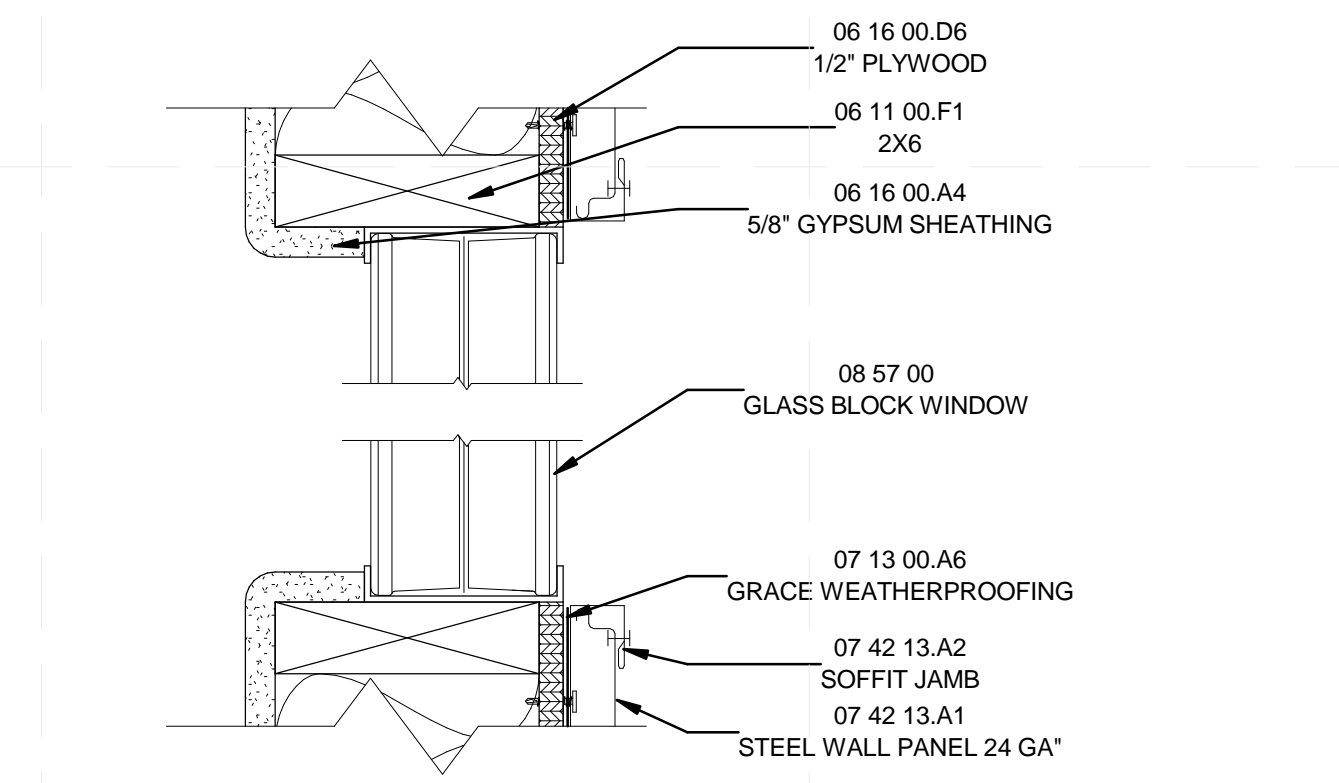
**C3 SINGLE HUNG WINDOW HEAD/SILL**  
 3" = 1'-0"



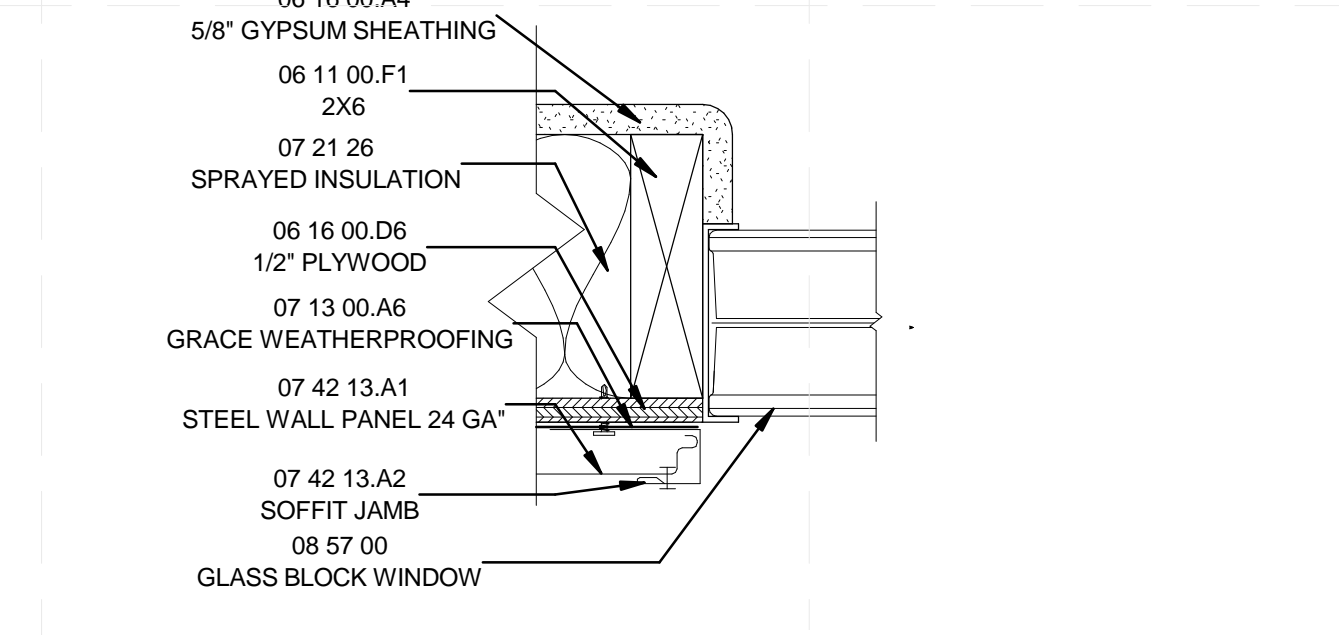
**B3 AWNING WINDOW HEAD/SILL**  
 3" = 1'-0"



**A3 FIXED WINDOW HEAD/SILL**  
 3" = 1'-0"



**B5 GLASS BLOCK WINDOW HEAD/SILL**  
 3" = 1'-0"



**A5 GLASS BLOCK WINDOW JAMB**  
 3" = 1'-0"

1 2 3 4 5 6 7



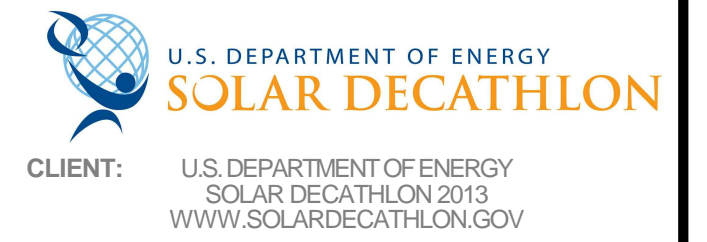


**REFERENCE KEYNOTES**

06 11 00.F1	2X6
06 11 00.L5	4X6 GIRDER
06 15 33.A1	BAMBOO DECKING
06 16 00.A4	5/8" GYPSUM SHEATHING
06 16 00.D6	1/2" PLYWOOD
07 13 00.A6	GRACE WEATHERPROOFING
07 21 26	SPRAYED INSULATION
07 42 13.A1	STEEL WALL PANEL 24 GA"
07 42 13.A2	SOFFIT JAMB
08 11 00.A0	ALUMINUM SLIDING DOOR
09 64 29.A1	BAMBOO STRIP AND PLANK FLOORING

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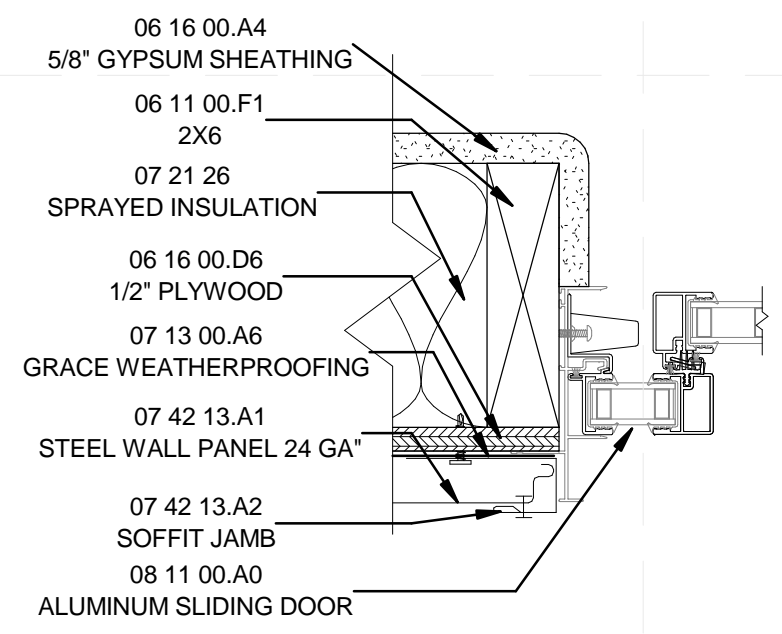
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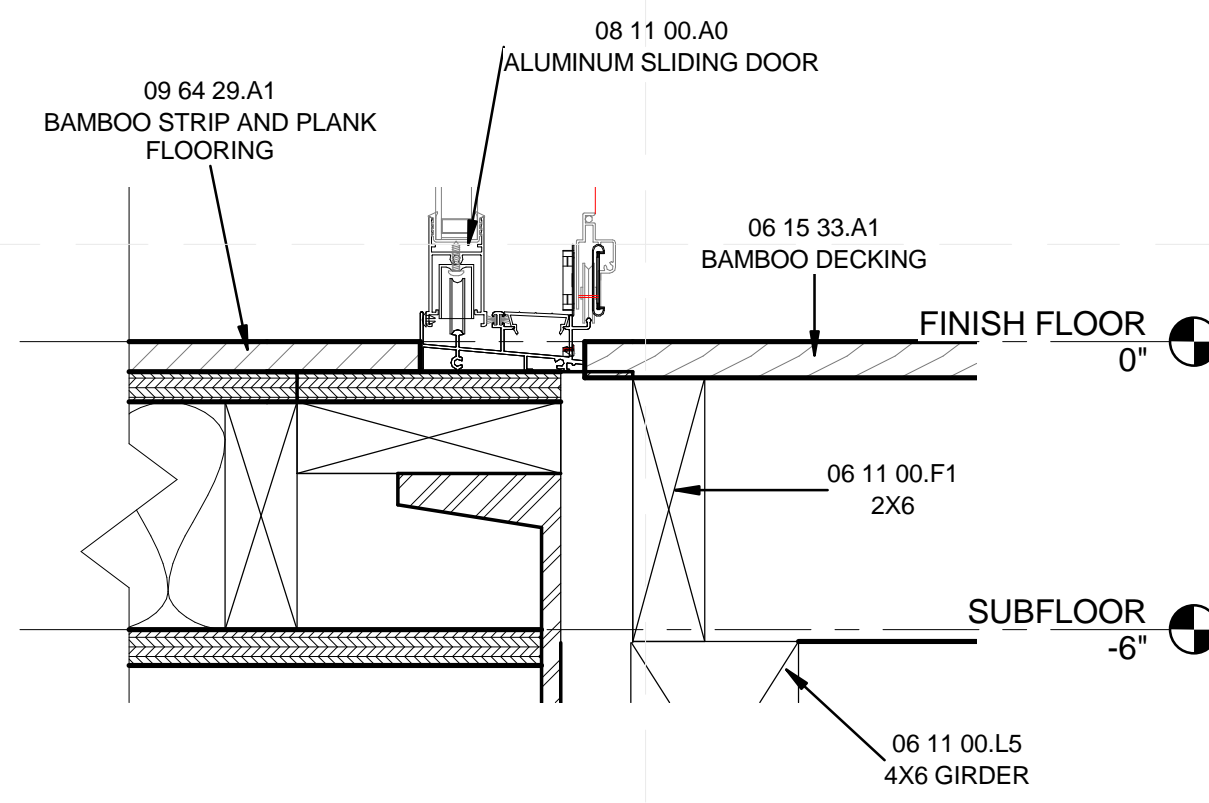
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**DOOR DETAILS**

**A-541**



**A1 SLIDING DOOR JAMB**  
 3" = 1'-0"



**A3 SLIDING DOOR SILL**  
 3" = 1'-0"

8/22/2013 1:30:19 PM

**REFERENCE KEYNOTES**


06 11 00.D1	2X4
06 11 00.F1	2X6
06 11 00.L10	4X6 WEDGE CUT
06 16 00.D17	15/32" PLYWOOD SHEATHING
07 21 26	SPRAYED INSULATION
07 42 13	METAL WALL PANELS
07 42 13.A4	J MOLDING TRIM
09 29 00.D1	5/8" GYPSUM WALLBOARD
23 83 16	RADIANT-HEATING HYDRONIC PANELS W/ GYP BOARD FINISH
26 31 00	PHOTOVOLTAIC COLLECTORS
26 31 00.A6	PV RACKING SYSTEM

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**SHEET KEYNOTES**

21 CRIPPLE STUDS



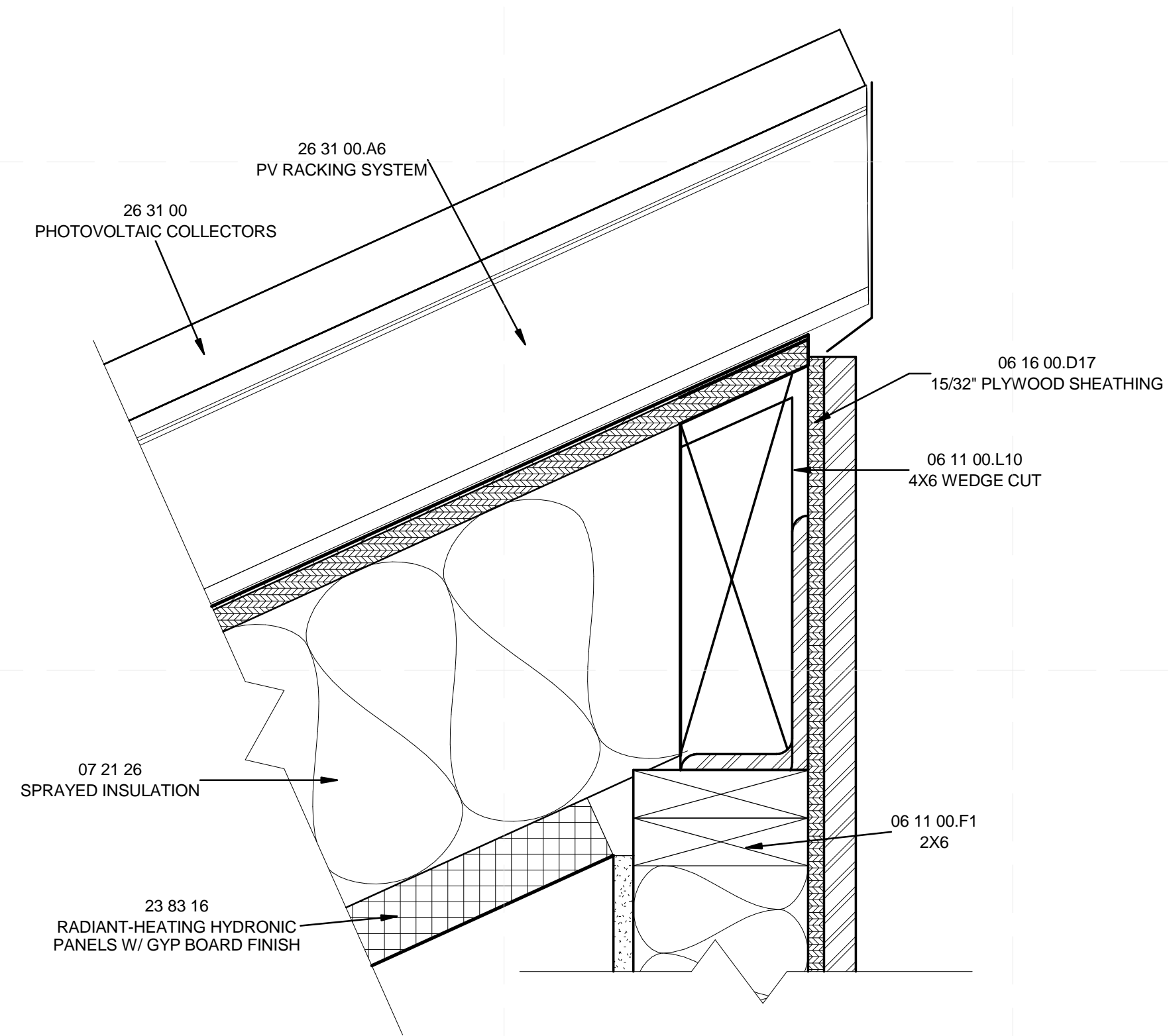
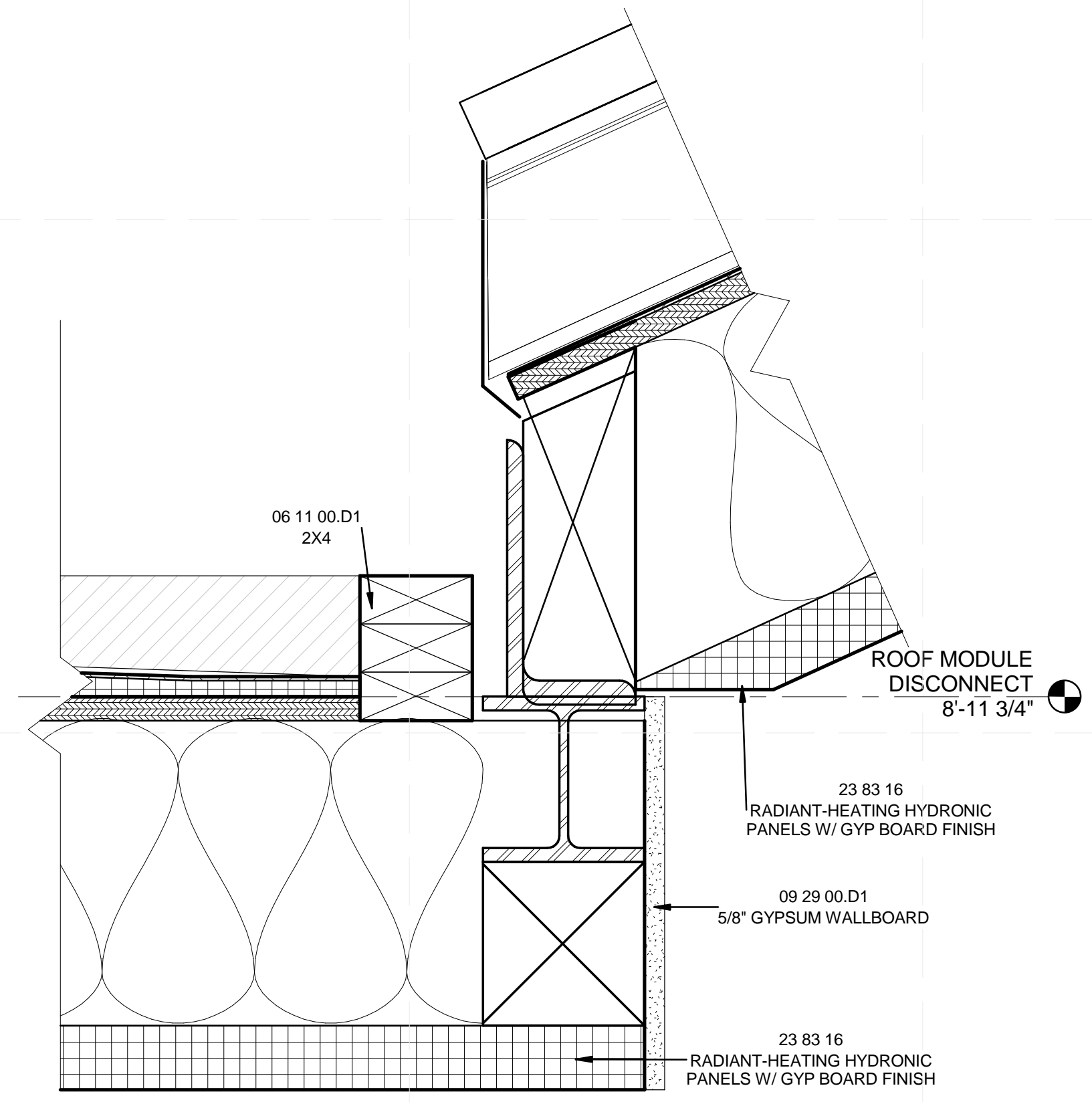
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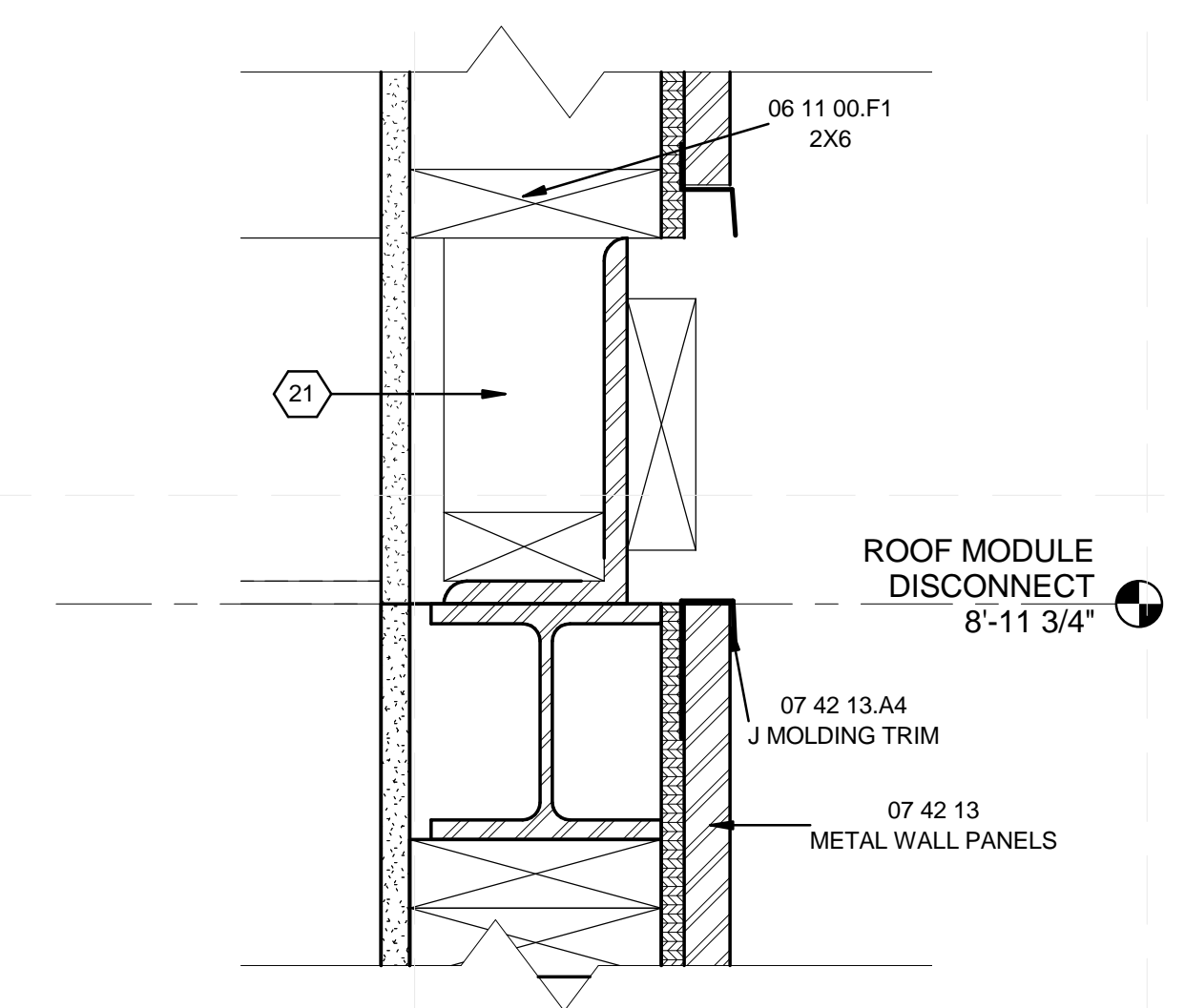
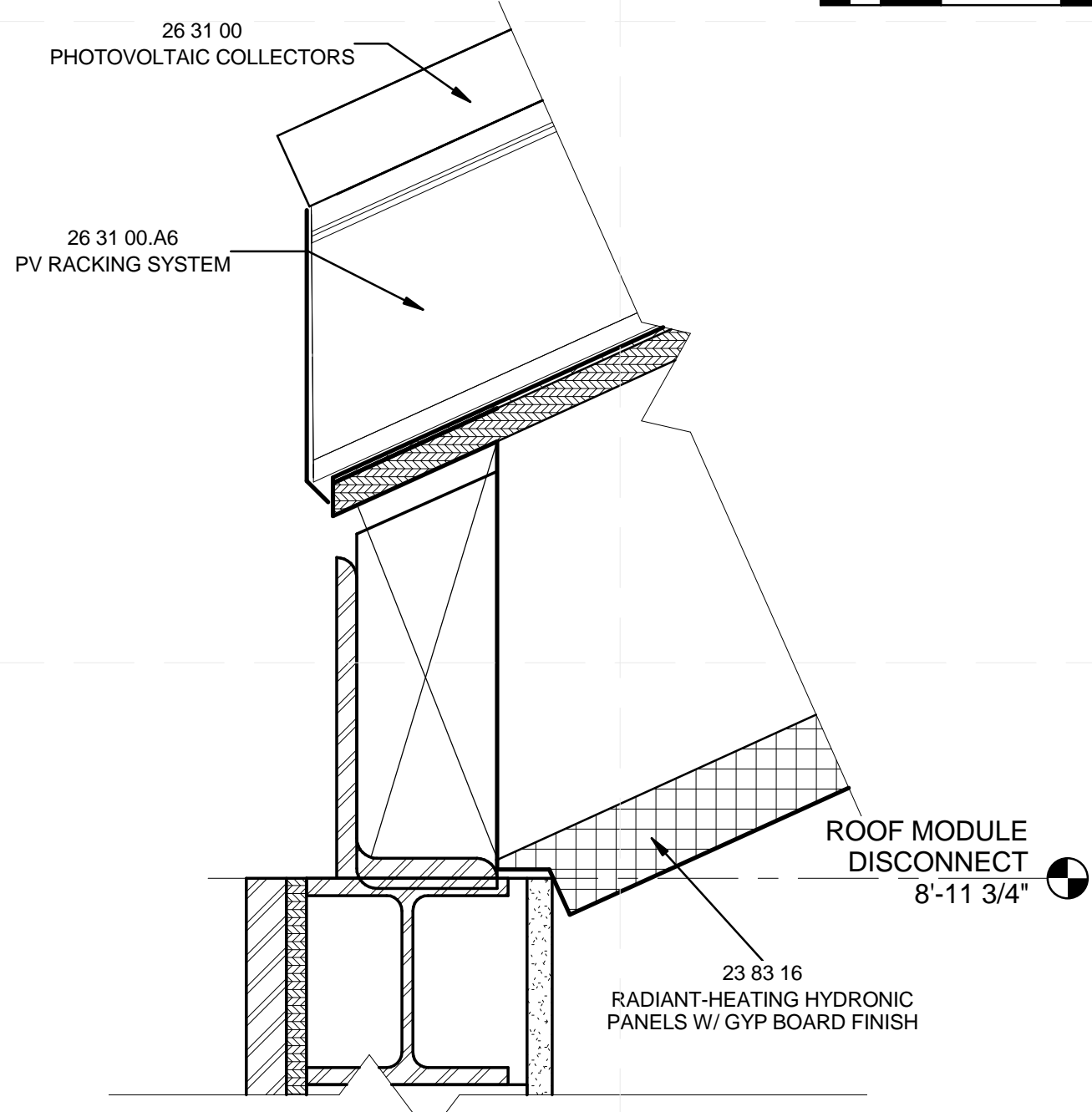
SHEET TITLE:  
**ROOF DETAILS**

**A-561**



**C1** ROOF TO FLAT ROOF CONNECTION  
 3" = 1'-0"

**C4** ROOF MODULE PEAK  
 3" = 1'-0"



**A1** ROOF TO WALL CONNECTION  
 3" = 1'-0"

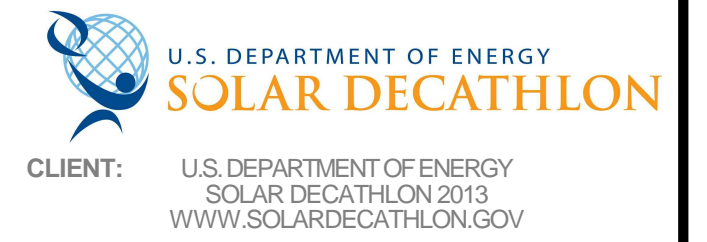
**A4** ROOF MODULE FRONT CONNECTION  
 3" = 1'-0"





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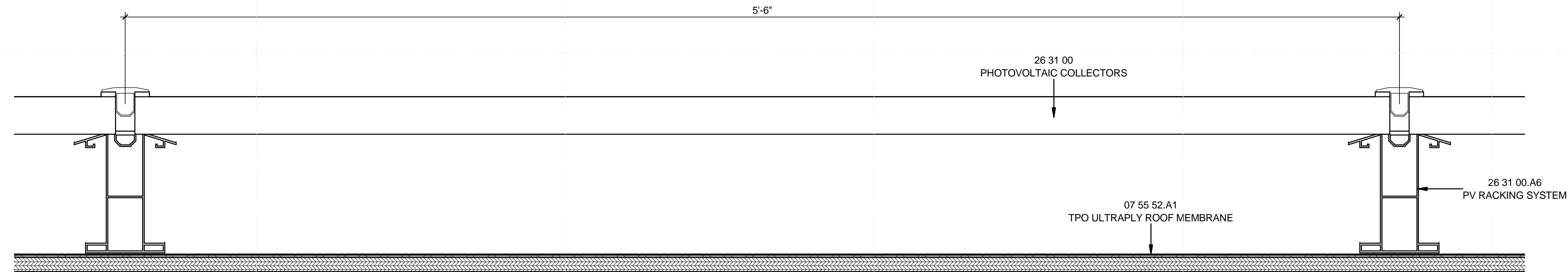
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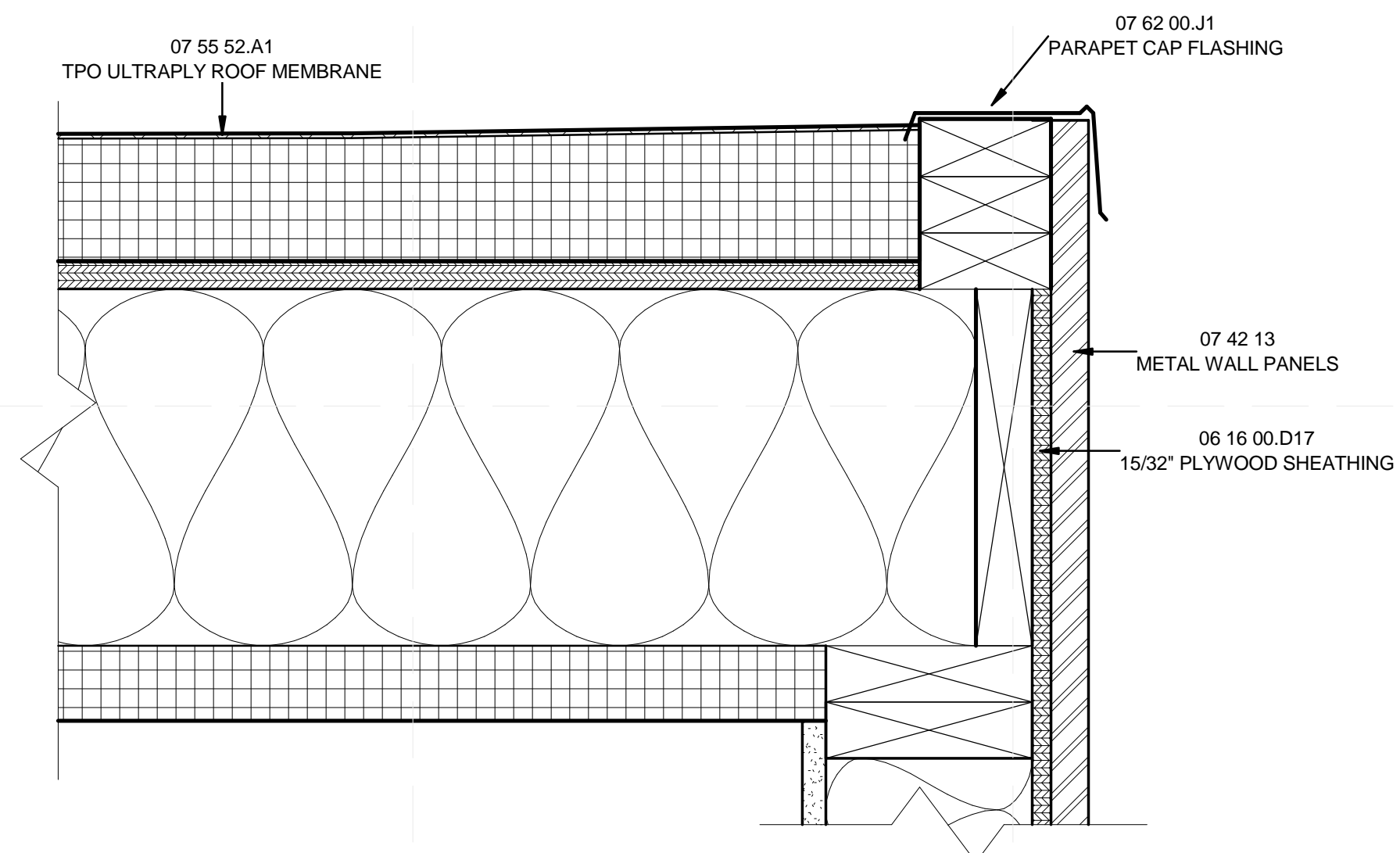
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SHEET TITLE:  
**ROOF DETAILS**

**A-562**



**(C1) PV ARRAY CONNECTION DETAIL**  
 3" = 1'-0"



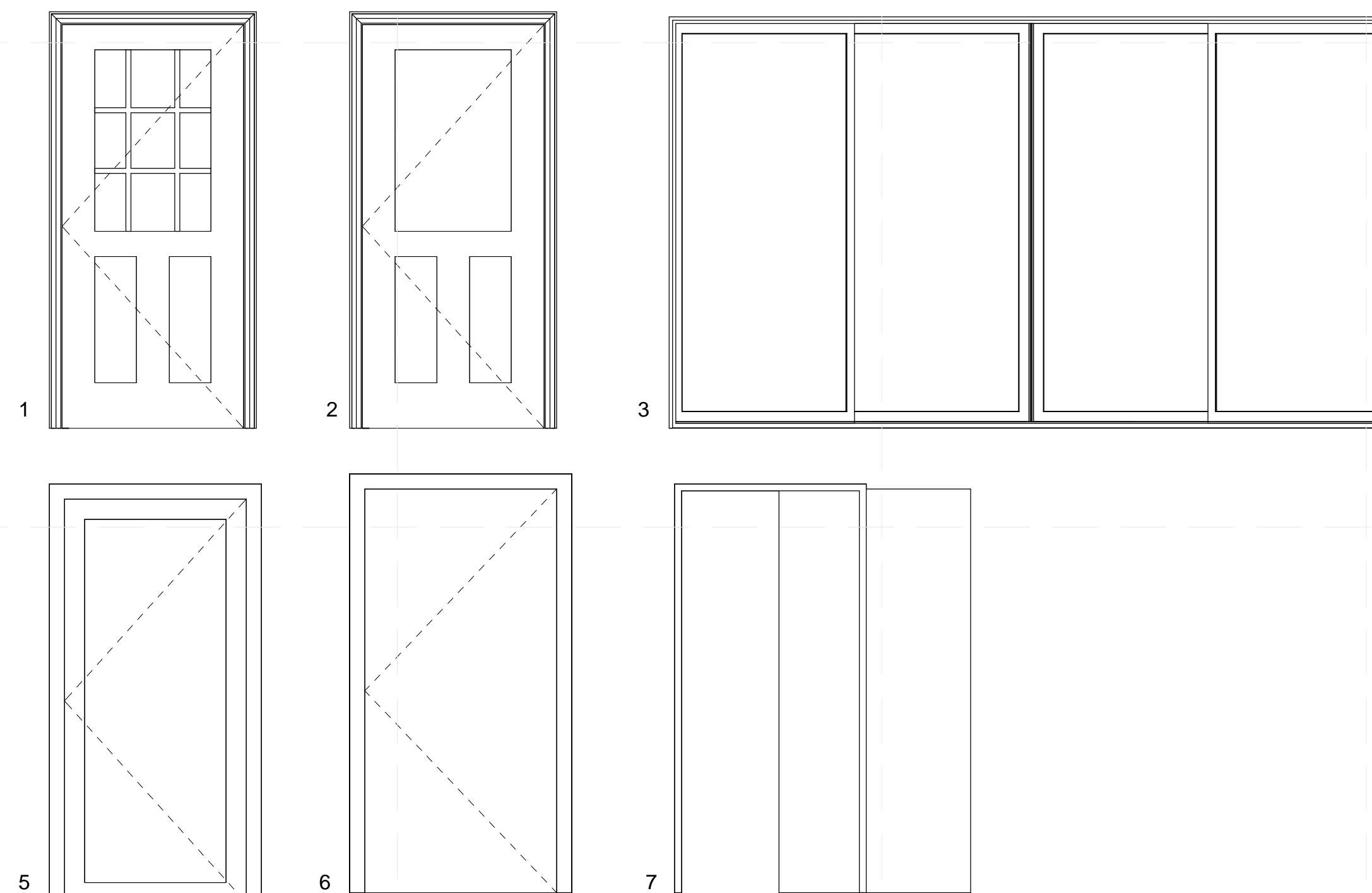
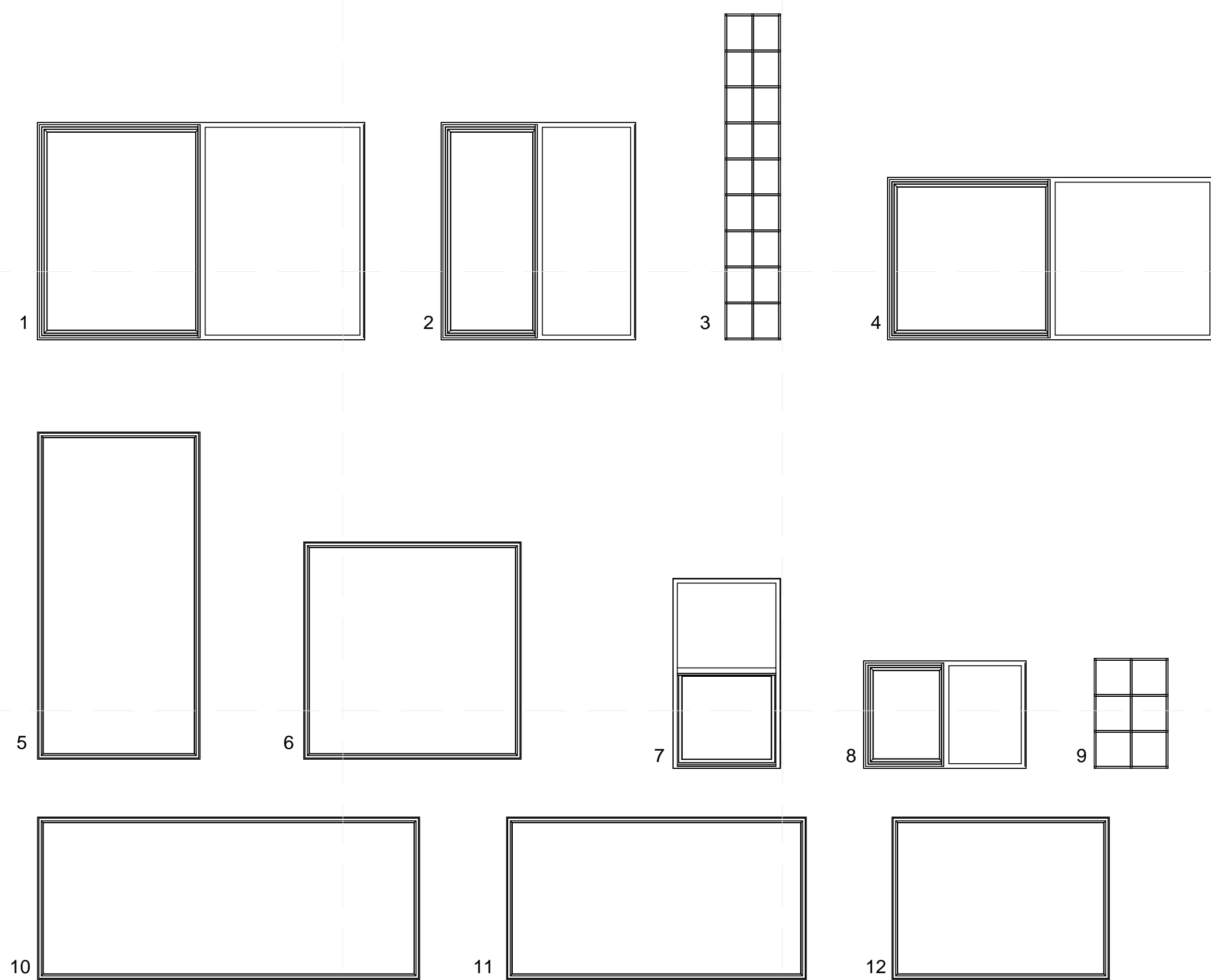
**(A1) ROOF DRAIN DETAIL**  
 3" = 1'-0"



8/22/2013 1:30:20 PM

DOOR SCHEDULE								
MARK	LOCATION	FRAME TYPE	DIMENSIONS		MANUFACTURER	MODEL	MATERIALS	
			WIDTH	HEIGHT			DOOR	FRAME
1	MODULE A EAST	SWING	3'-0"	6'-8"	MASONITE	HALF LITE ENTRY DOOR	STEEL	WOOD
2	MODULE B NORTH	SLIDING	11'-11 1/2"	6'-9 1/2"	MILGARD	4 PANEL SLIDING DOOR	ALUMINUM	ALUMINUM
3	MODULE B SOUTH	SWING	3'-0"	6'-8"	MASONITE	FULL LITE ENTRY DOOR	STEEL	STEEL
4	BEDROOM INT.	SWING	3'-2"	6'-8"	MASONITE	HARDBOARD VENEERED FLUSH BIRCH DOOR	WOOD	WOOD
5	BATHROOM CLOSET	POCKET	3'-0"	6'-8"	MASONITE	HARDBOARD VENEERED FLUSH BIRCH DOOR	WOOD	WOOD
6	BEDROOM EXT.	SWING	3'-0"	6'-8"	MASONITE	HALF LITE ENTRY DOOR	WOOD	WOOD
7	MECH ROOM SOUTH	DOUBLE SWING	6'-0"	6'-8"	MASONITE	FULL LITE STEEL PATIO DOOR	STEEL	WOOD

WINDOW SCHEDULE											
MARK	ROUGH OPENING		QUANTITY	WINDOW TYPE	MANUFACTURER	MODEL	FRAME MATERIAL	DETAILS		GLAZING TYPE	HEAD HEIGHT
	WIDTH	HEIGHT						HEAD/SILL	JAMB		
1	6'-0"	4'-0"	1	HALF VENT	MILGARD	1120 HV	ALUMINUM	D3/A-531	D1/A-531	DOUBLE PANED	6'-10"
2	3'-7"	4'-0"	1	HALF VENT	MILGARD	1120 HV	ALUMINUM	D3/A-531	D1/A-531	DOUBLE PANED	6'-10"
3	1'-0 1/8"	63'-0 3/8"	8	GLASS BLOCK	PITTSBURGH CORNING			B5/A-531	A5/A-531	GLASS BLOCK	6'-10"
4	6'-0"	3'-0"	1	HALF VENT	MILGARD	1120 HV	ALUMINUM	D3/A-531	D1/A-531	DOUBLE PANED	6'-10"
5	3'-0"	6'-0"	3	FIXED	MILGARD	920 PW	ALUMINUM	A3/A-531	A1/A-531	DOUBLE PANED	6'-10"
6	4'-0"	4'-0"	1	HALF VENT	MILGARD	1120 HV	ALUMINUM	D3/A-531	D1/A-531	GLASS BLOCK	6'-10"
7	2'-0"	3'-6"	2	SINGLE HUNG	MILGARD	1520 SH	ALUMINUM	C3/A-531	C1/A-531	DOUBLE PANED	6'-10"
8	3'-0"	2'-0"	1	HALF VENT	MILGARD	1120 HV	ALUMINUM	D3/A-531	D1/A-531	DOUBLE PANED	6'-10"
9	1'-4 1/8"	2'-0"	1	GLASS BLOCK	PITTSBURGH CORNING			B5/A-531	A5/A-531	DOUBLE PANED	6'-10"
10	7'-0"	3'-0"	1	FIXED	MILGARD	920 PW	ALUMINUM	A3/A-531	A1/A-531	DOUBLE PANED	12'-10 3/4"
11	5'-6"	3'-0"	3	FULL AWNING	MILGARD	920 FA	ALUMINUM	B3/A-531	B1/A-531	DOUBLE PANED	12'-10 3/4"
12	4'-0"	3'-0"	1	FIXED	MILGARD	920 PW	ALUMINUM	A3/A-531	A1/A-531	DOUBLE PANED	12'-10 3/4"
13	2'-9"	3'-0"	1	FIXED	MILGARD	920 PW	ALUMINUM	A3/A-531	A1/A-531	DOUBLE PANED	12'-10 3/4"



**A1** WINDOW ELEVATIONS  
1/2" = 1'-0"

**A4** DOOR ELEVATIONS  
1/2" = 1'-0"



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MARK	DATE	DESCRIPTION
	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

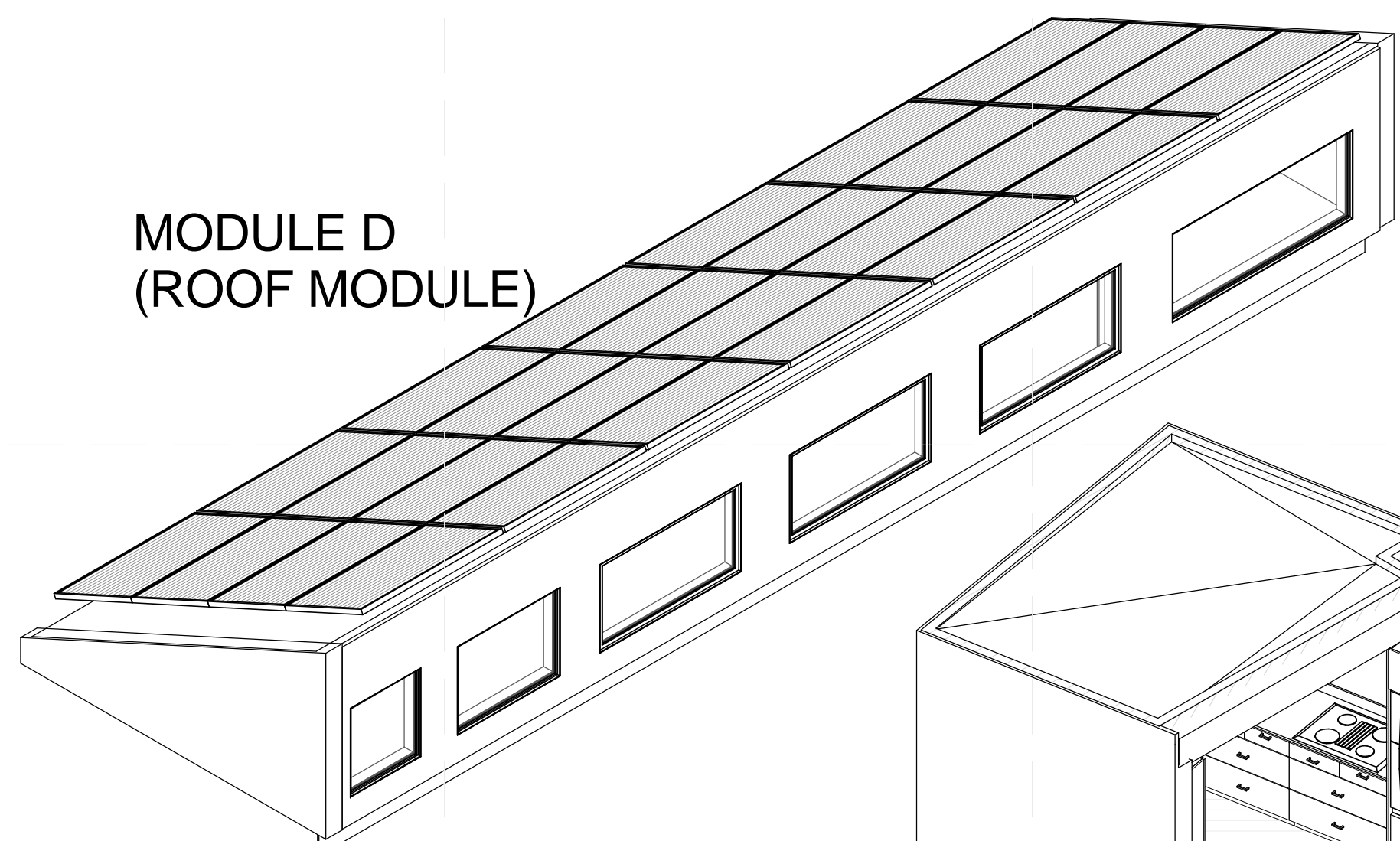
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SHEET TITLE:  
**SCHEDULES**

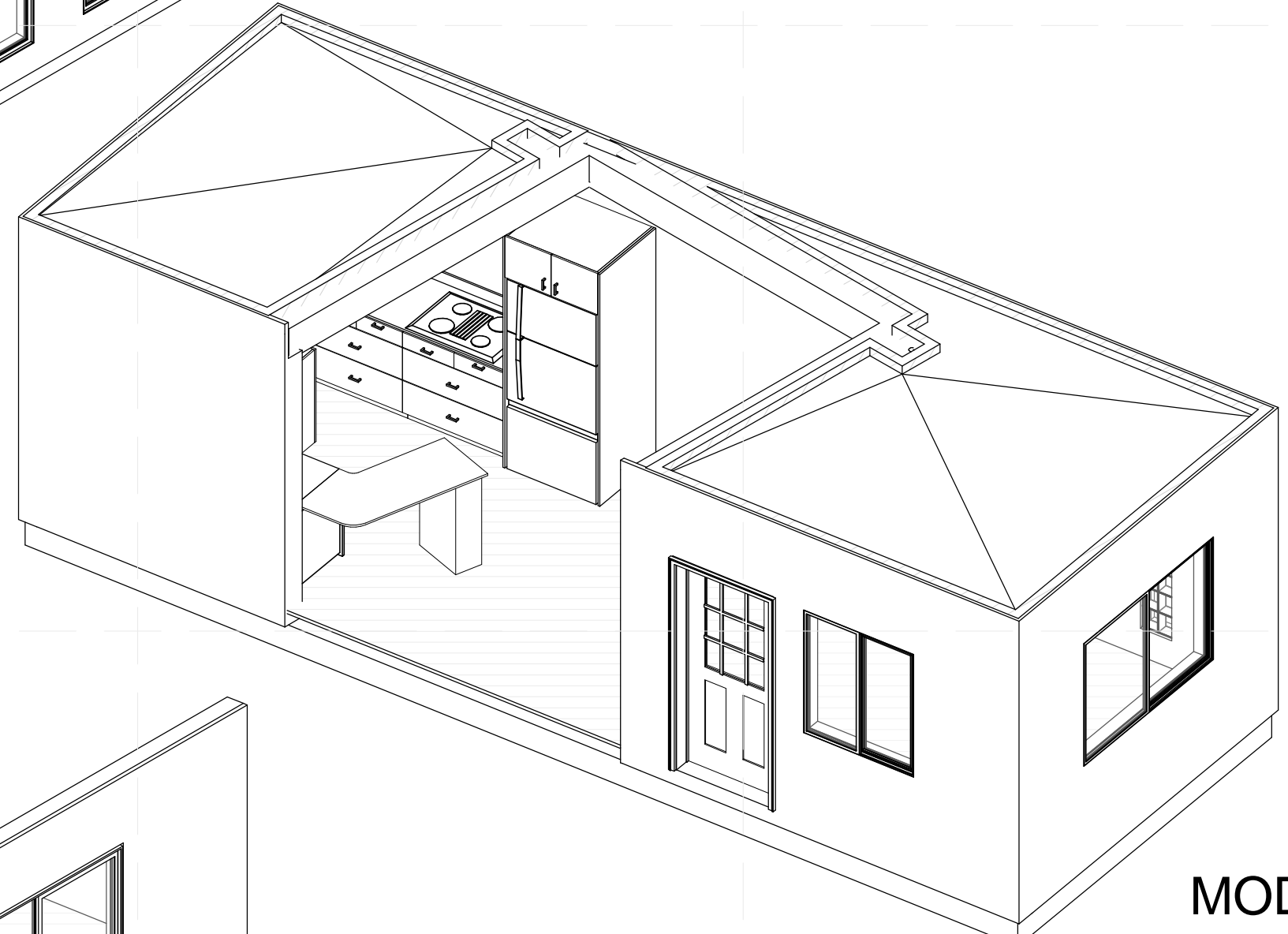
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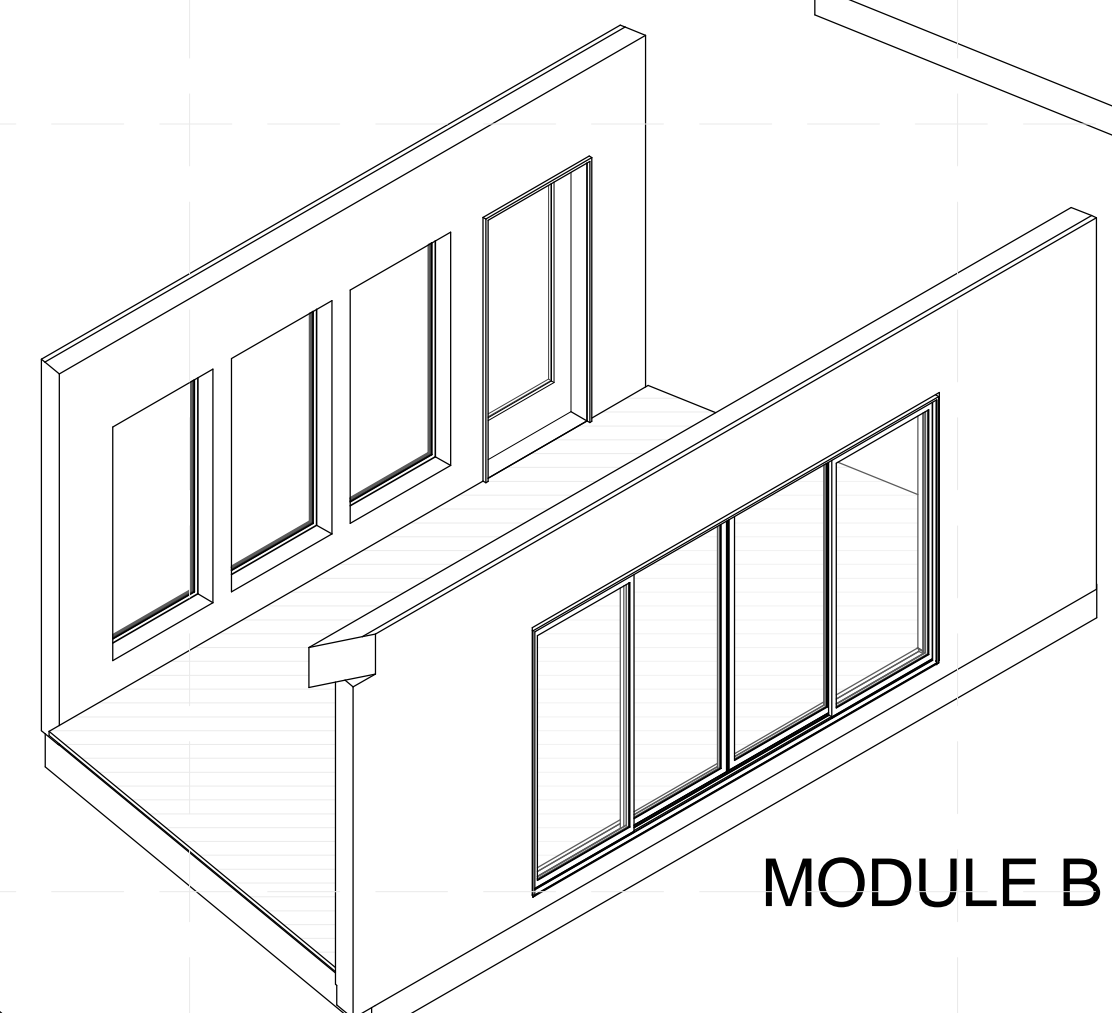
MODULE D  
(ROOF MODULE)



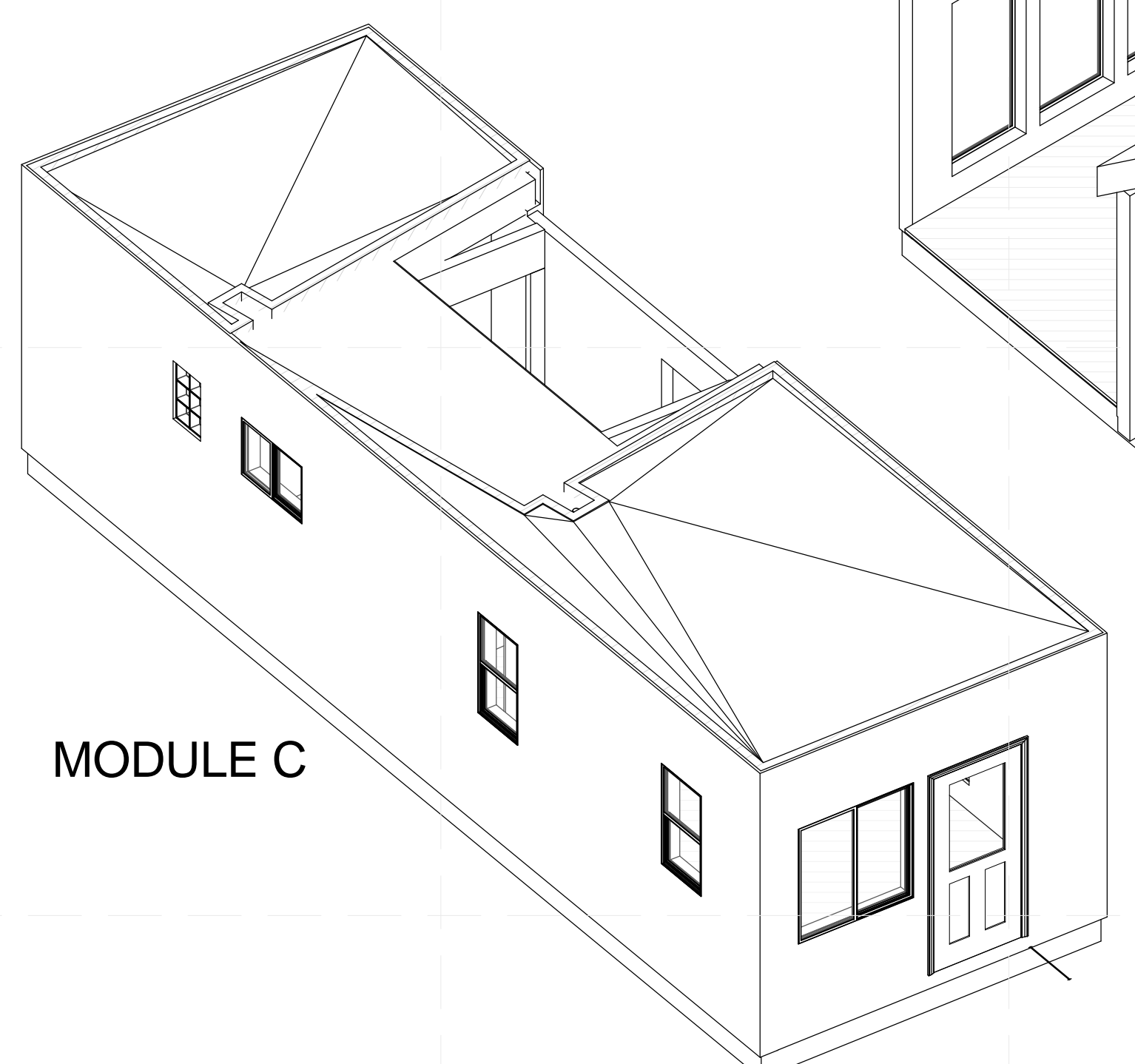
MODULE A



MODULE B



MODULE C



(A2) MODULE BREAKDOWN ISOMETRIC



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	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**MODULE BREAKDOWN ISOMETRIC**  
**A-901**

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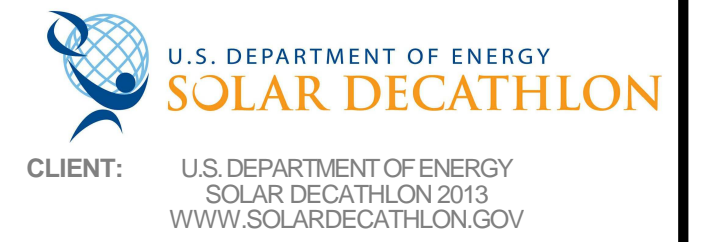
CONSULTANTS:

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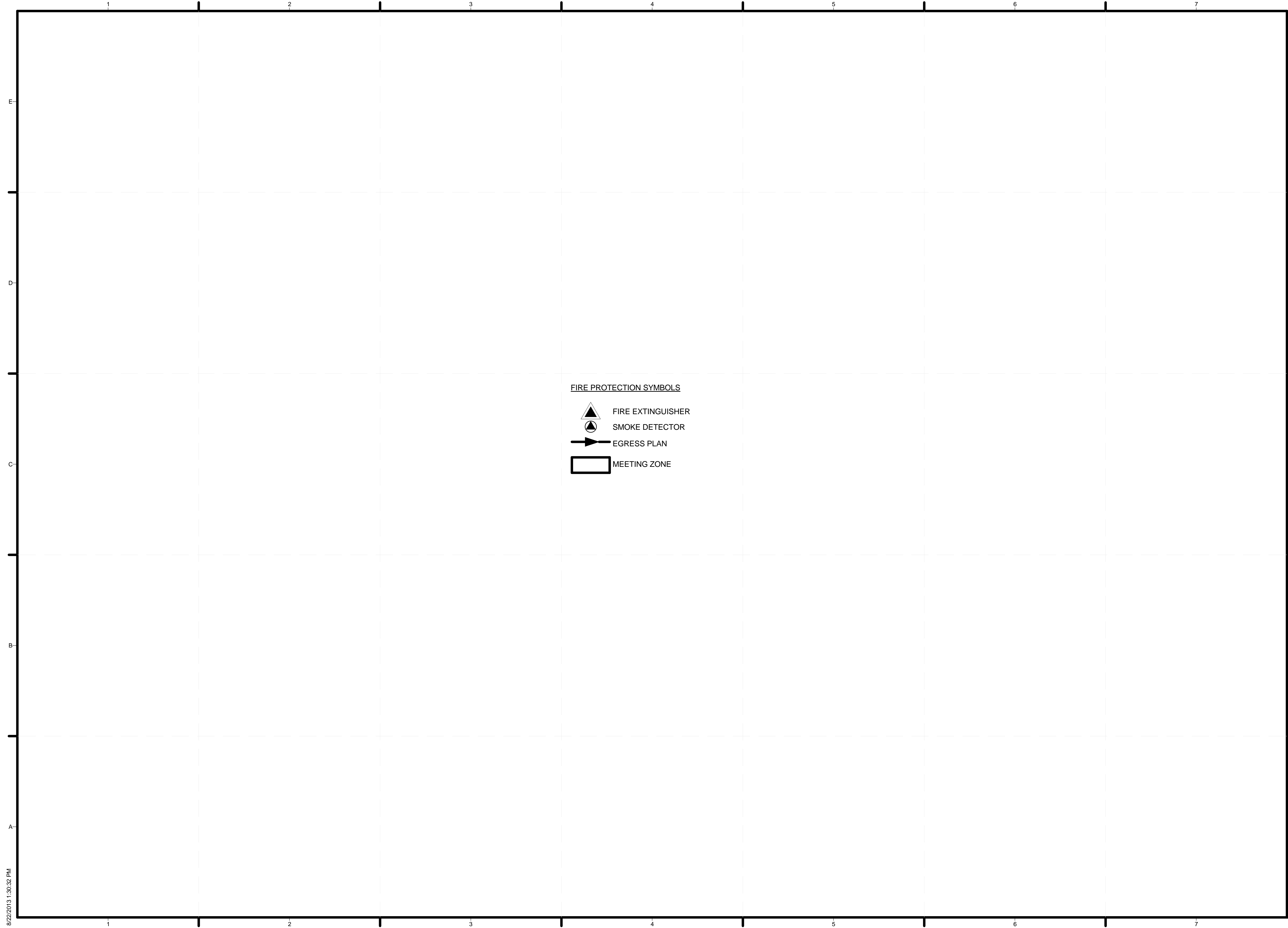
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	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**FIRE PROTECTION NOTES  
 AND SYMBOLS**  
**F-001**

**FIRE PROTECTION SYMBOLS**

-  FIRE EXTINGUISHER
-  SMOKE DETECTOR
-  EGRESS PLAN
-  MEETING ZONE



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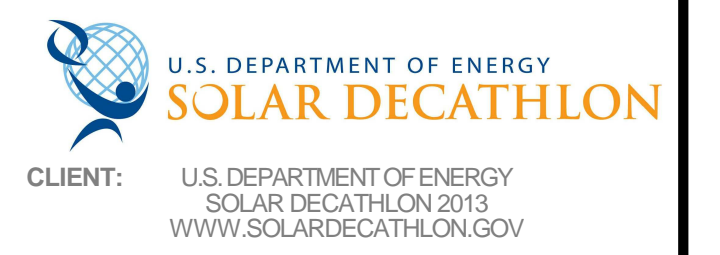
**GENERAL SHEET NOTES**

- REFER TO FP-01 FOR SUBCONTRACTOR DRAWINGS OF FIRE SUPPRESSION PIPING



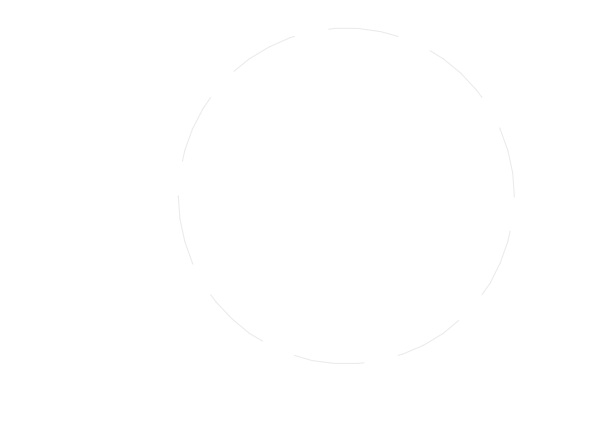
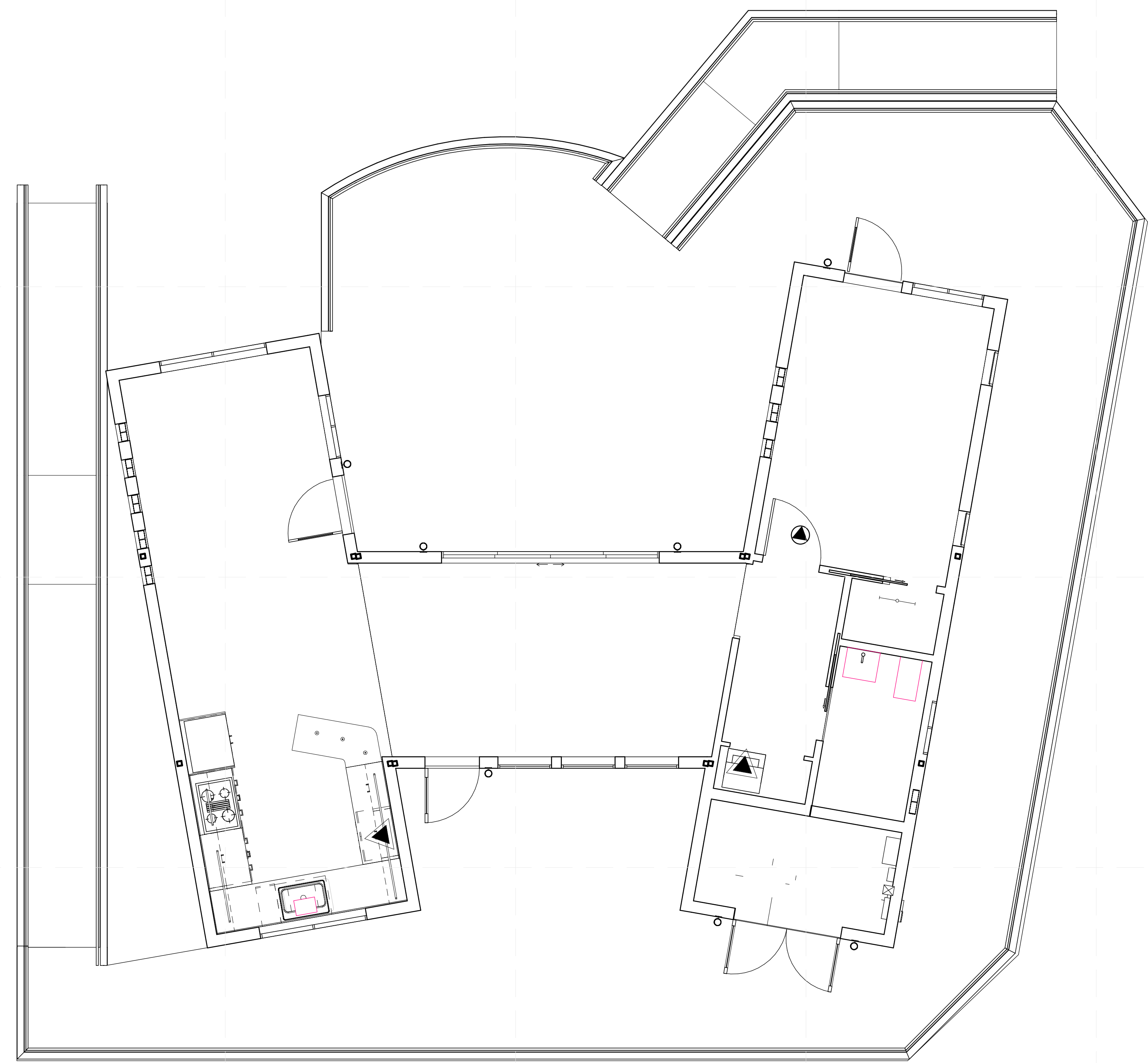
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**FIRE PROTECTION SYMBOLS**

- FIRE EXTINGUISHER
- SMOKE DETECTOR
- EGRESS PLAN
- MEETING ZONE



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SHEET TITLE:  
**FIRE DETECTION AND ALARM**  
**F-101**

**A2 FIRE DETECTION PLAN**  
 1/4" = 1'-0"

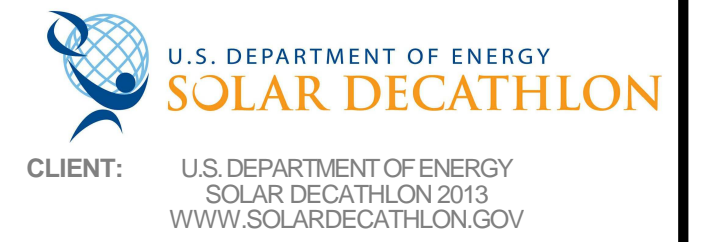


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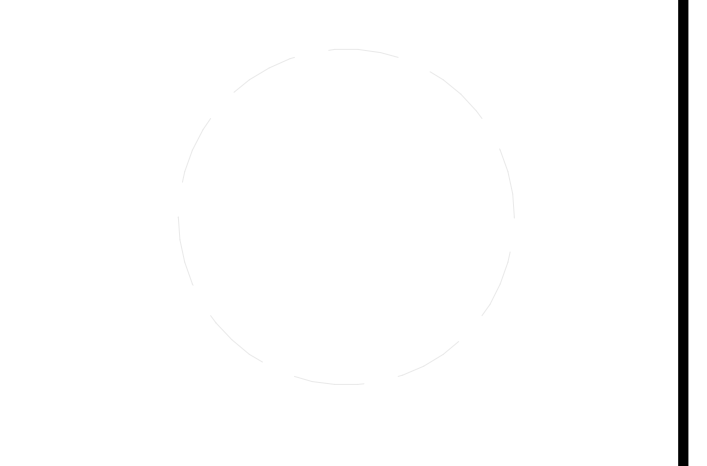


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









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SHEET TITLE:  
**PLUMBING SYMBOLS AND NOTES**

**P-001**

**SYMBOLS**

-  PLUMBING EQUIPMENT TAG
-  DOMESTIC HOT WATER
-  DOMESTIC COLD WATER
-  HYDRONIC SUPPLY
-  HYDRONIC RETURN
-  SANITARY
-  PUMP
-  PEX TEE
-  P TRAP
-  FLOW METER





**REFERENCE KEYNOTES**

22 13 53 FACILITY GREYWATER TANKS

**SHEET KEYNOTES**

22 WATER DELIVERY VEHICLE

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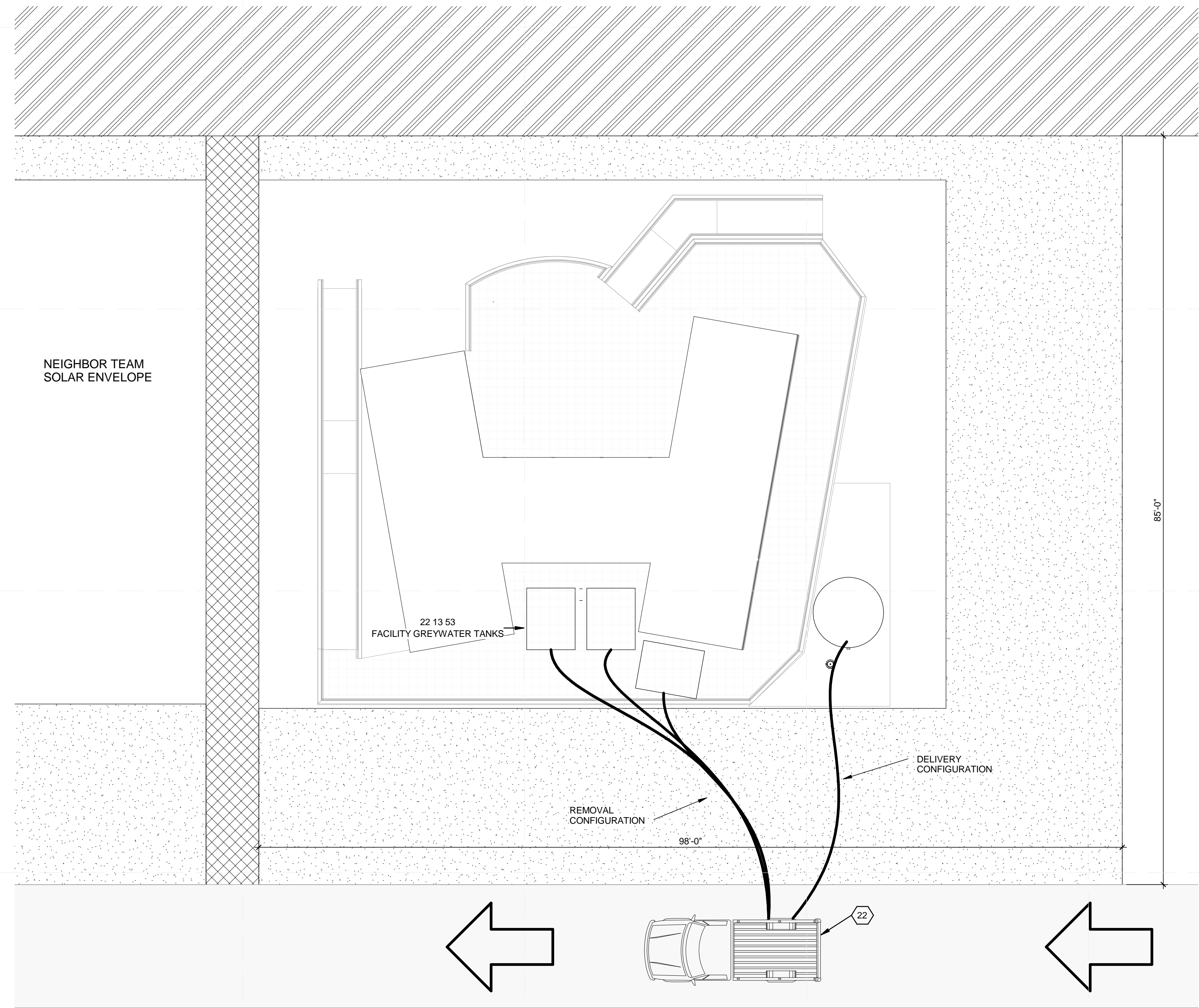
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SHEET TITLE:  
**WATER DELIVERY/REMOVAL PLAN**  
**P-101**



**(A2) WATER DELIVERY PLAN**  
 1/8" = 1'-0"

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**GENERAL SHEET NOTES**

1. THE TOILET IS NOT TO BE CONNECTED TO ANY PLUMBING SUPPLY OR WASTE SYSTEMS DURING THE COMPETITION

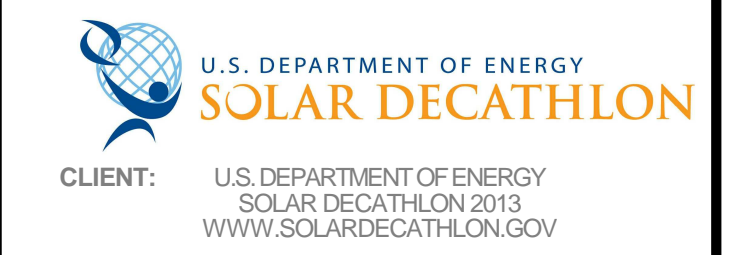


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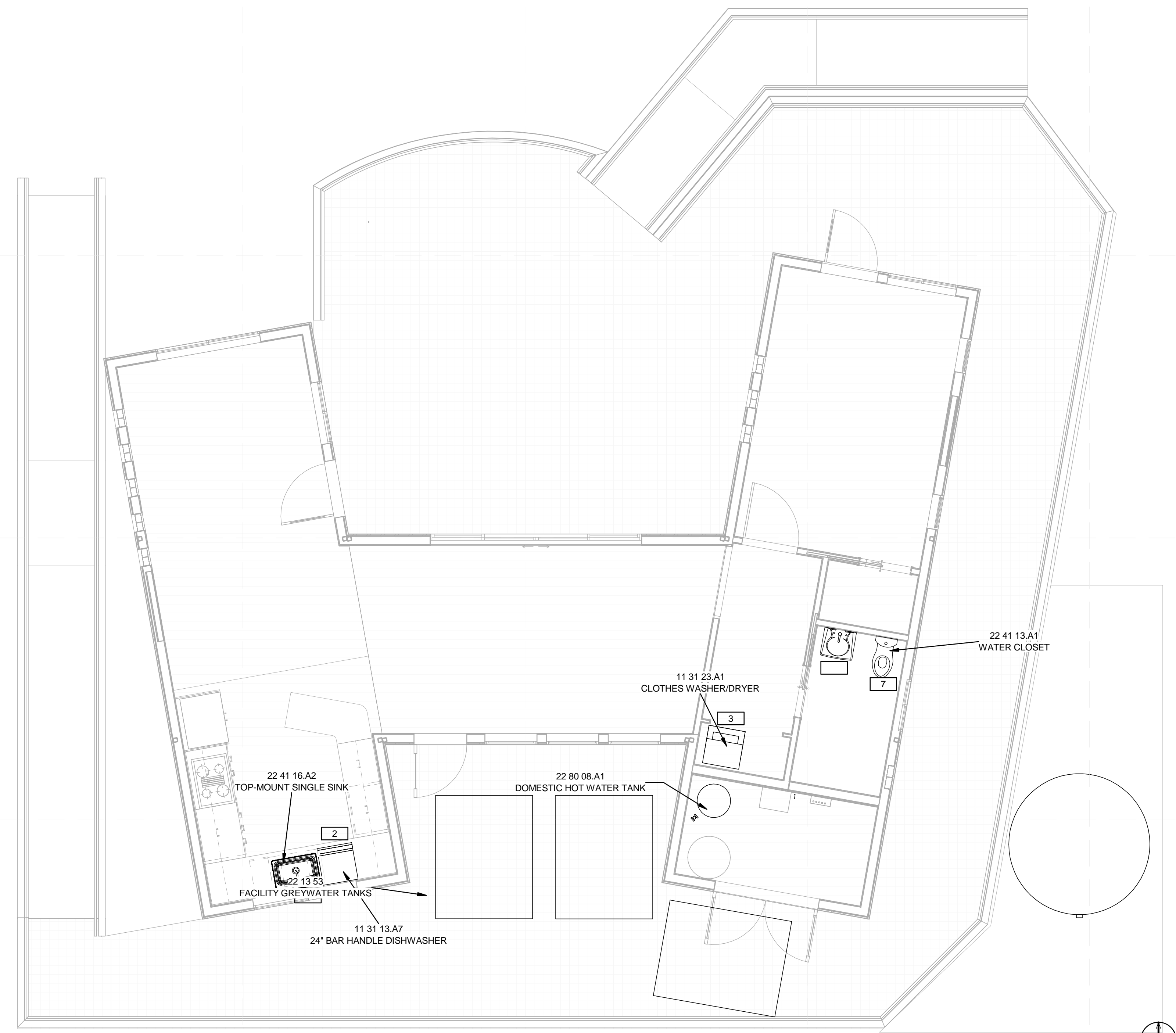
11 31 13.A7	24" BAR HANDLE DISHWASHER
11 31 23.A1	CLOTHES WASHER/DRYER
22 13 53	FACILITY GREYWATER TANKS
22 41 13.A1	WATER CLOSET
22 41 16.A2	TOP-MOUNT SINGLE SINK
22 80 08.A1	DOMESTIC HOT WATER TANK

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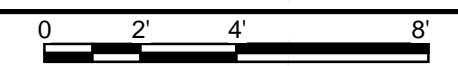
CONSULTANTS:  
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**A2 PLUMBING FIXTURE PLAN**  
 1/4" = 1'-0"



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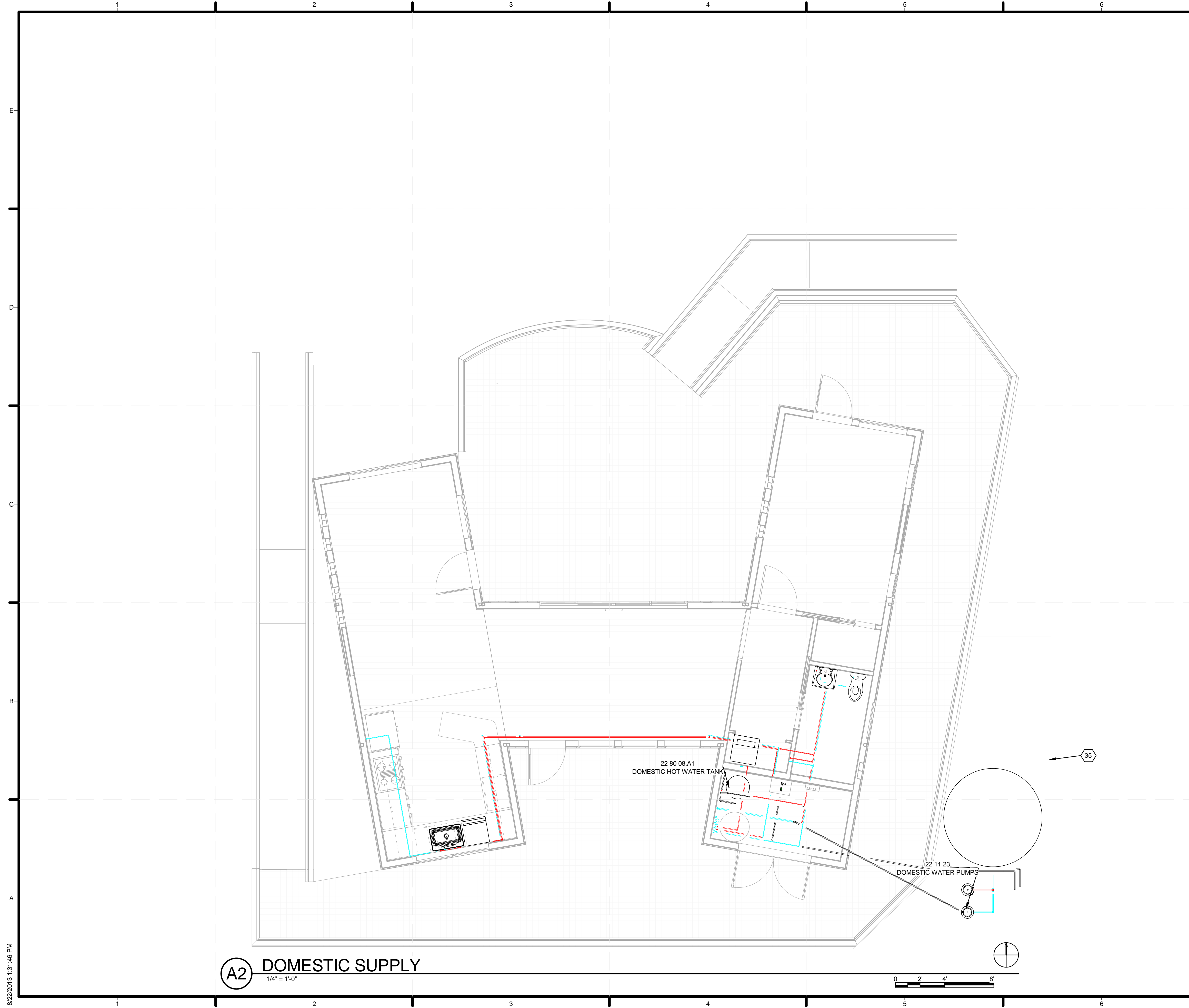
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SHEET TITLE:  
**PLUMBING FIXTURE PLAN**

**P-102**

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**GENERAL SHEET NOTES**

1. THE TOILET WILL NOT BE CONNECTED TO ANY PLUMBING SUPPLY OR WASTE SYSTEMS DURING THE COMPETITION
2. ALL PIPING TO BE ROUTED UNDER ACCESS FLOOR

**REFERENCE KEYNOTES**

22 11 23	DOMESTIC WATER PUMPS
22 80 08.A1	DOMESTIC HOT WATER TANK

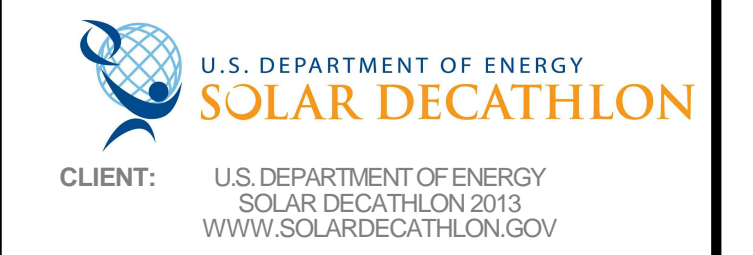
**SHEET KEYNOTES**

35	PLUMBING EQUIPMENT ENCLOSURE
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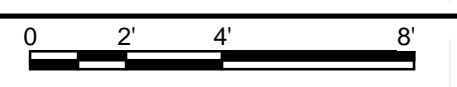
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SHEET TITLE:  
**DOMESTIC SUPPLY**

**P-103**

**A2** DOMESTIC SUPPLY  
 1/4" = 1'-0"



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GENERAL SHEET NOTES

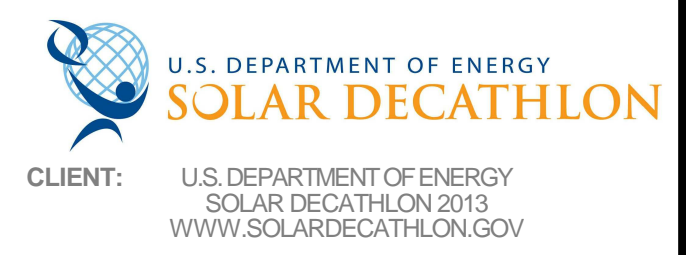


REFERENCE KEYNOTES

11 31 13.A7	24" BAR HANDLE DISHWASHER
11 31 23.A1	CLOTHES WASHER/DRYER
22 13 53	FACILITY GREYWATER TANKS
22 41 16.A2	TOP-MOUNT SINGLE SINK

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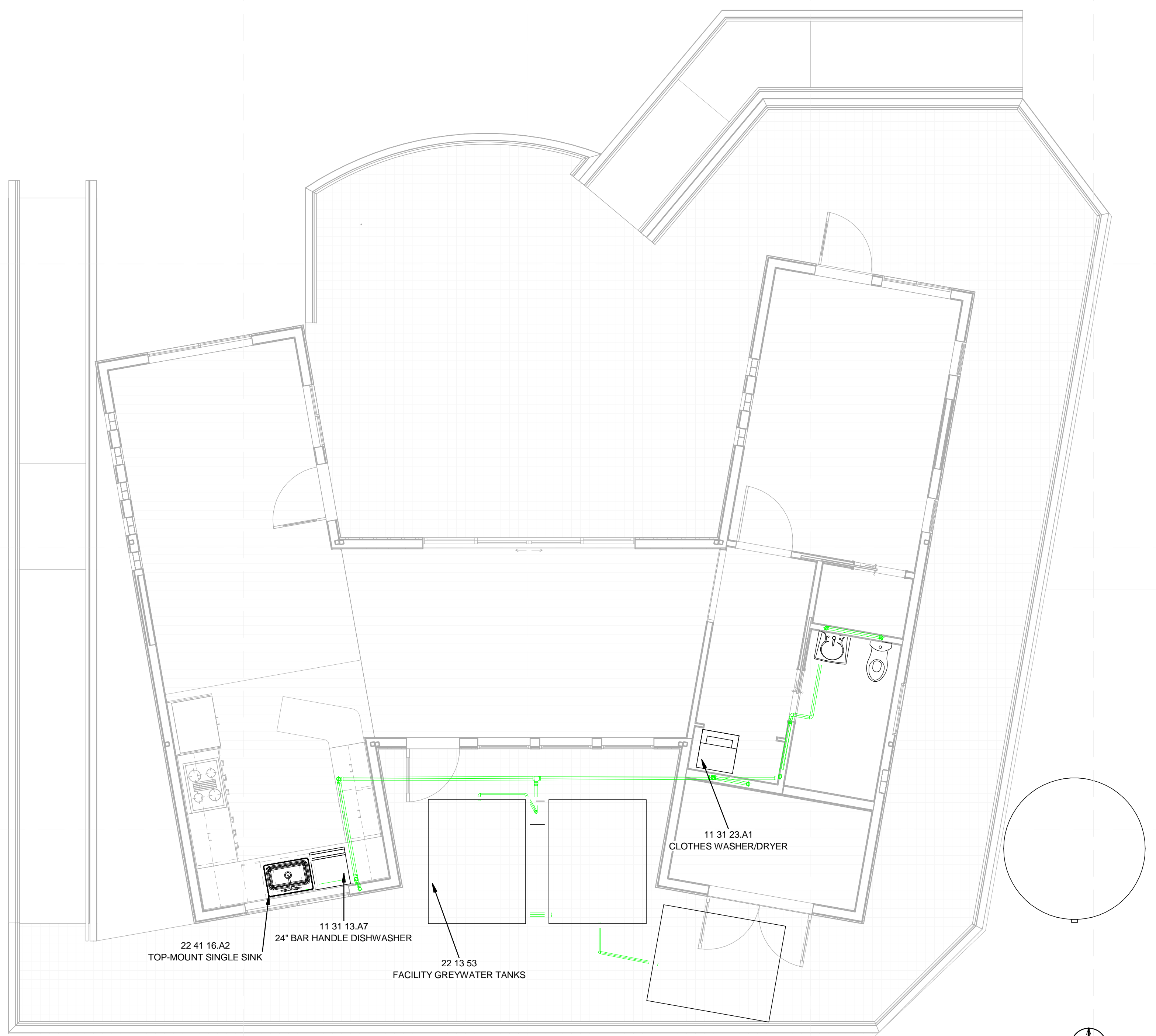
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	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

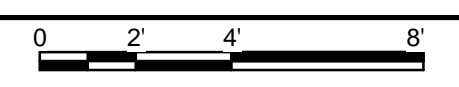
LOT NUMBER: 118  
 DRAWN BY: JS/PH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**DOMESTIC RETURN**

**P-104**



**A2** DOMESTIC RETURN  
 1/4" = 1'-0"



8/22/2013 1:31:49 PM



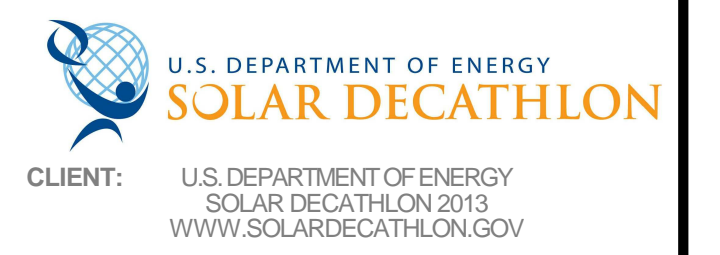
**GENERAL SHEET NOTES**

1. THE VENTING METHOD SHOWN IN DRAWING A1 IS REPRESENTATIVE OF ALL VENTING FOR OTHER SINKS AND FIXTURES THAT REQUIRE VENTING



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**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

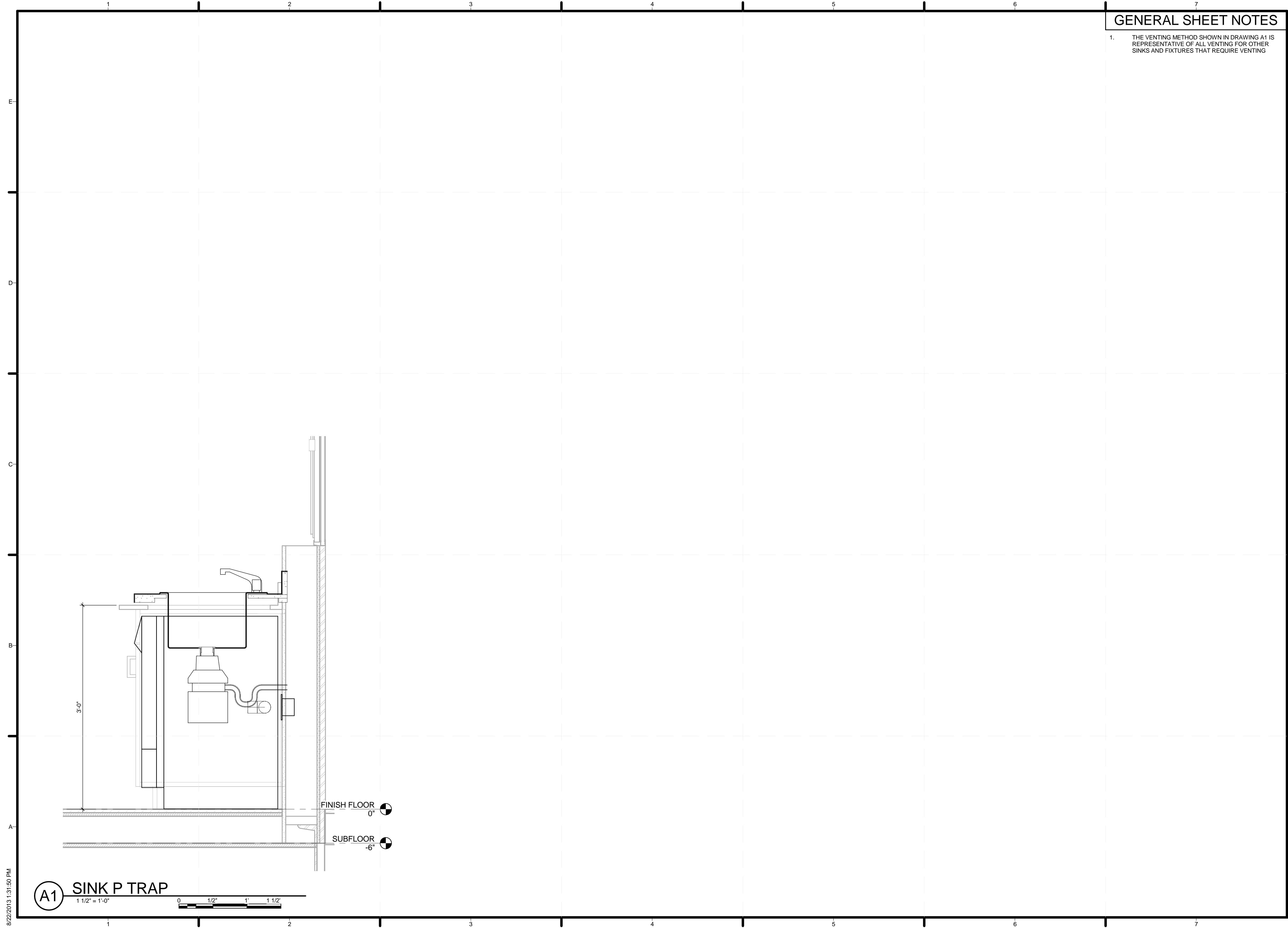


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MARK	DATE	DESCRIPTION
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SHEET TITLE:  
**PLUMBING DETAILS**  
**P-501**



**A1 SINK P TRAP**  
 1 1/2" = 1'-0"  
 0 1/2 1 1 1/2

8/22/2013 1:31:50 PM

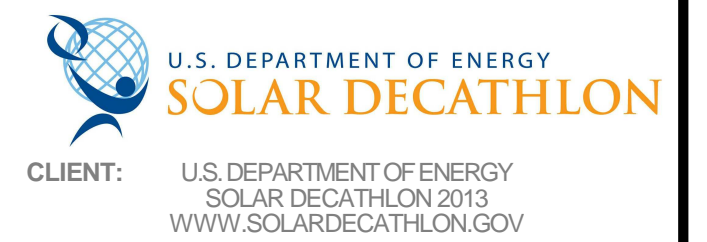
SYSTEM TYPE	PIPE SCHEDULE		NOTES
	DIAMETER	LENGTH	
DOMESTIC COLD WATER	2"	5"	
DOMESTIC COLD WATER	1 1/2"	1'-7"	
DOMESTIC COLD WATER	1"	16'-8"	
DOMESTIC COLD WATER	1/2"	106'-2"	
DOMESTIC HOT WATER	1 1/2"	2'-0"	
DOMESTIC HOT WATER	1/2"	144'-0"	
HYDRONIC RETURN	1"	11"	
HYDRONIC RETURN	3/4"	182'-1"	
HYDRONIC RETURN	1/2"	22'-8"	
HYDRONIC SUPPLY	2"	5'-3"	
HYDRONIC SUPPLY	1"	37'-4"	
HYDRONIC SUPPLY	3/4"	56'-5"	
HYDRONIC SUPPLY	1/2"	49'-1"	
OTHER	1"	30'-9"	
OTHER	3/4"	30'-4"	
OTHER	1/2"	8'-1"	
SANITARY	2"	107'-6"	
SANITARY	1 1/2"	10'-11"	
Undefined	3/4"	2"	
Undefined	1/2"	17'-9"	

PIPE FITTING SCHEDULE		
NOTES	SIZE	COUNT
COUPLING	1"ø-1"ø	14
COUPLING	2"ø-2"ø	3
ELBOW	1"ø-1"ø	167
ELBOW	2"ø-2"ø	26
REDUCER	2"ø-2"ø	2
TEE	1"ø-1"ø-1"ø	20
TEE	2"ø-2"ø-2"ø	8
TRANSITION	1"ø-1"ø	19
TRANSITION	2"ø-1"ø	4
TRANSITION	2"ø-2"ø	4



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	02/14/13	CD SUBMISSION
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
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 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**SCHEDULES**  
**P-601**





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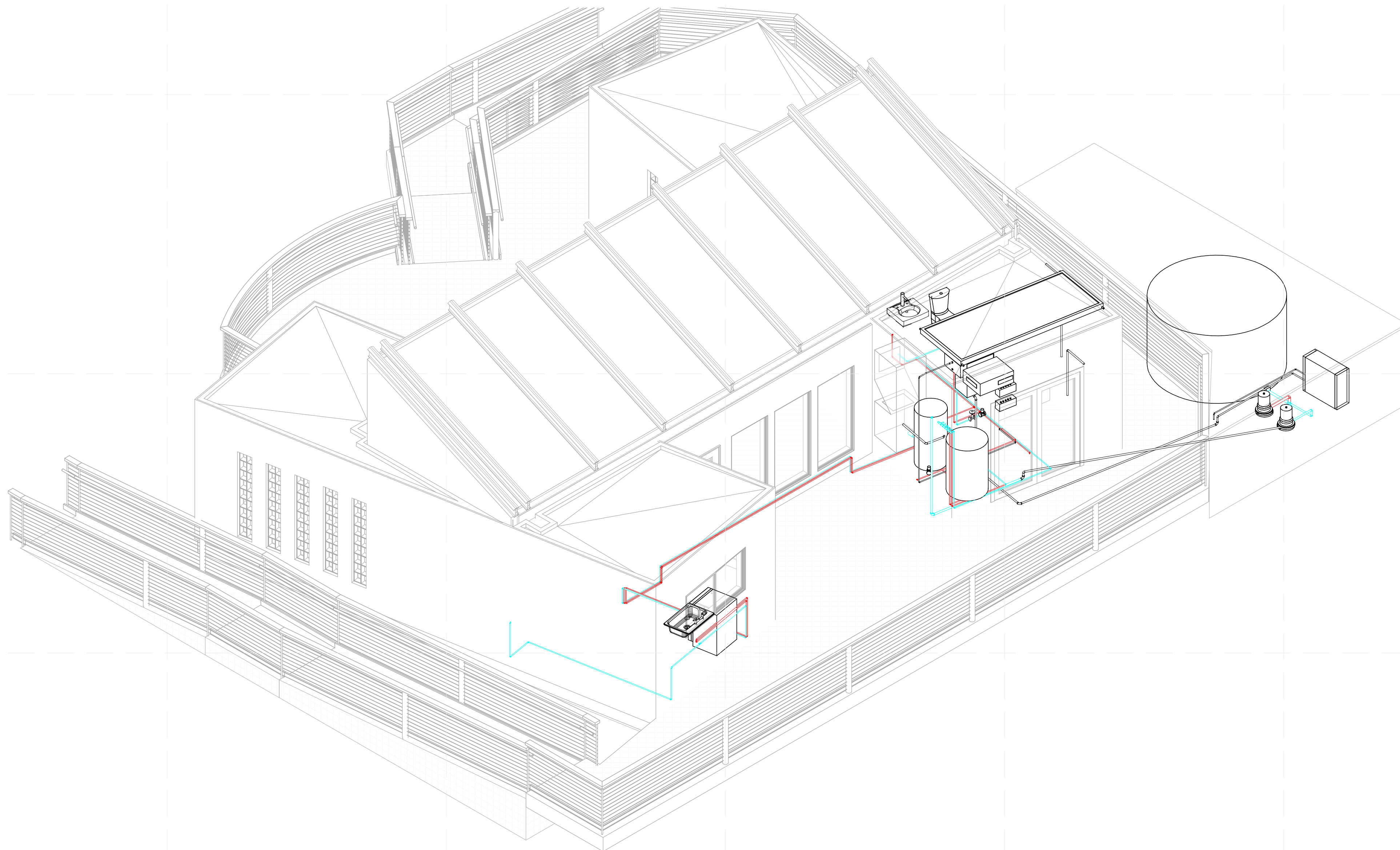
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	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: JS/PH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**SUPPLY ISOMETRIC**

**P-901**



**(A1) SUPPLY ISOMETRIC**

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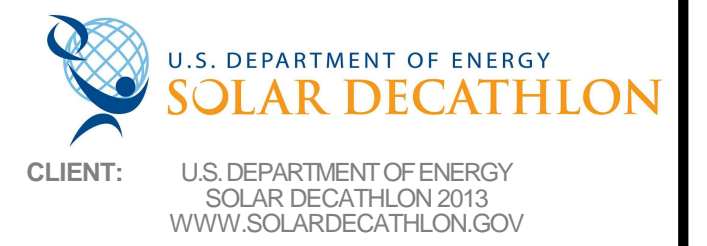
CONSULTANTS:

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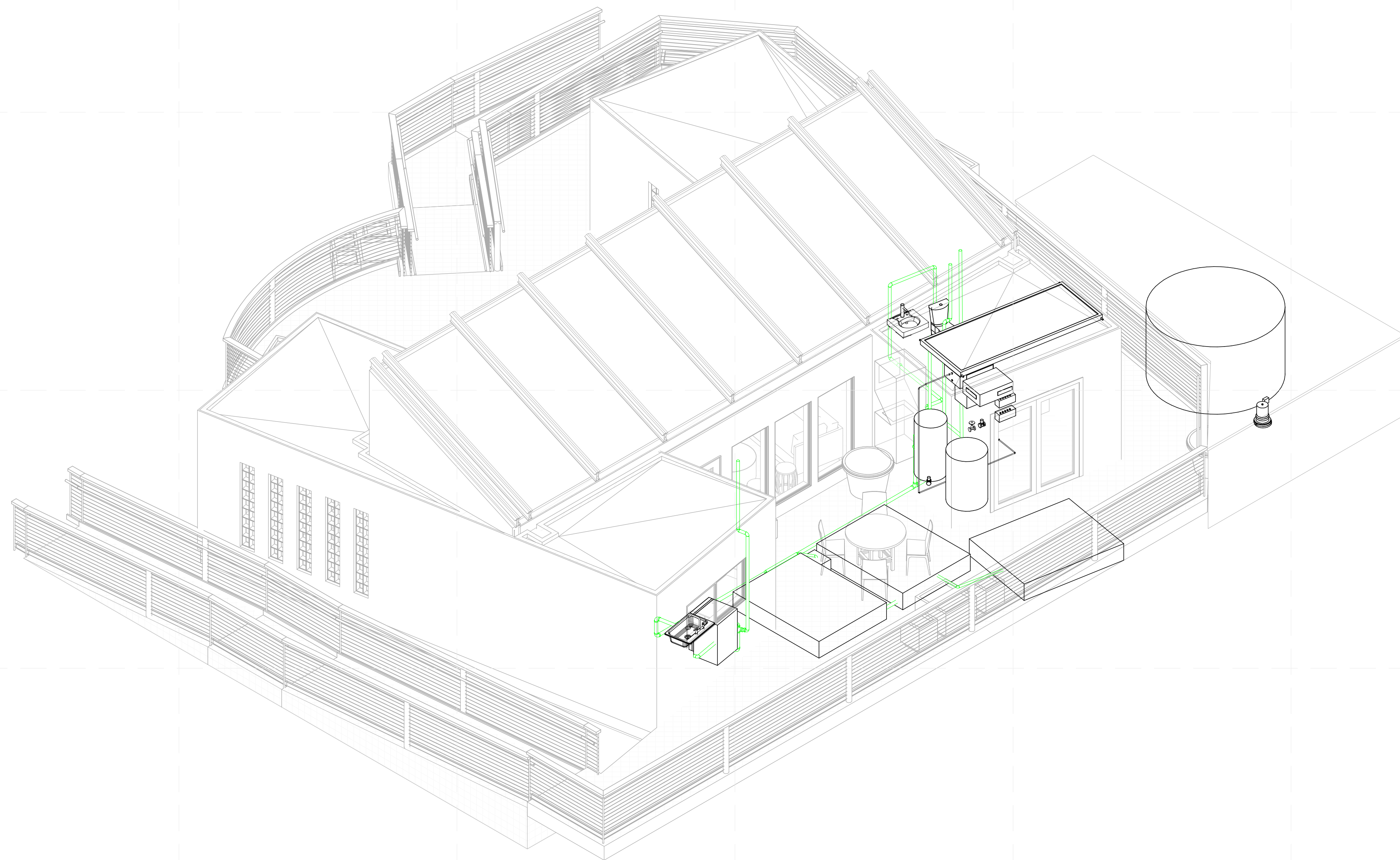


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LOT NUMBER: 118  
 DRAWN BY: JS/PH  
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SHEET TITLE:  
**RETURN ISOMETRIC**

**P-902**



8/22/2013 1:32:07 PM

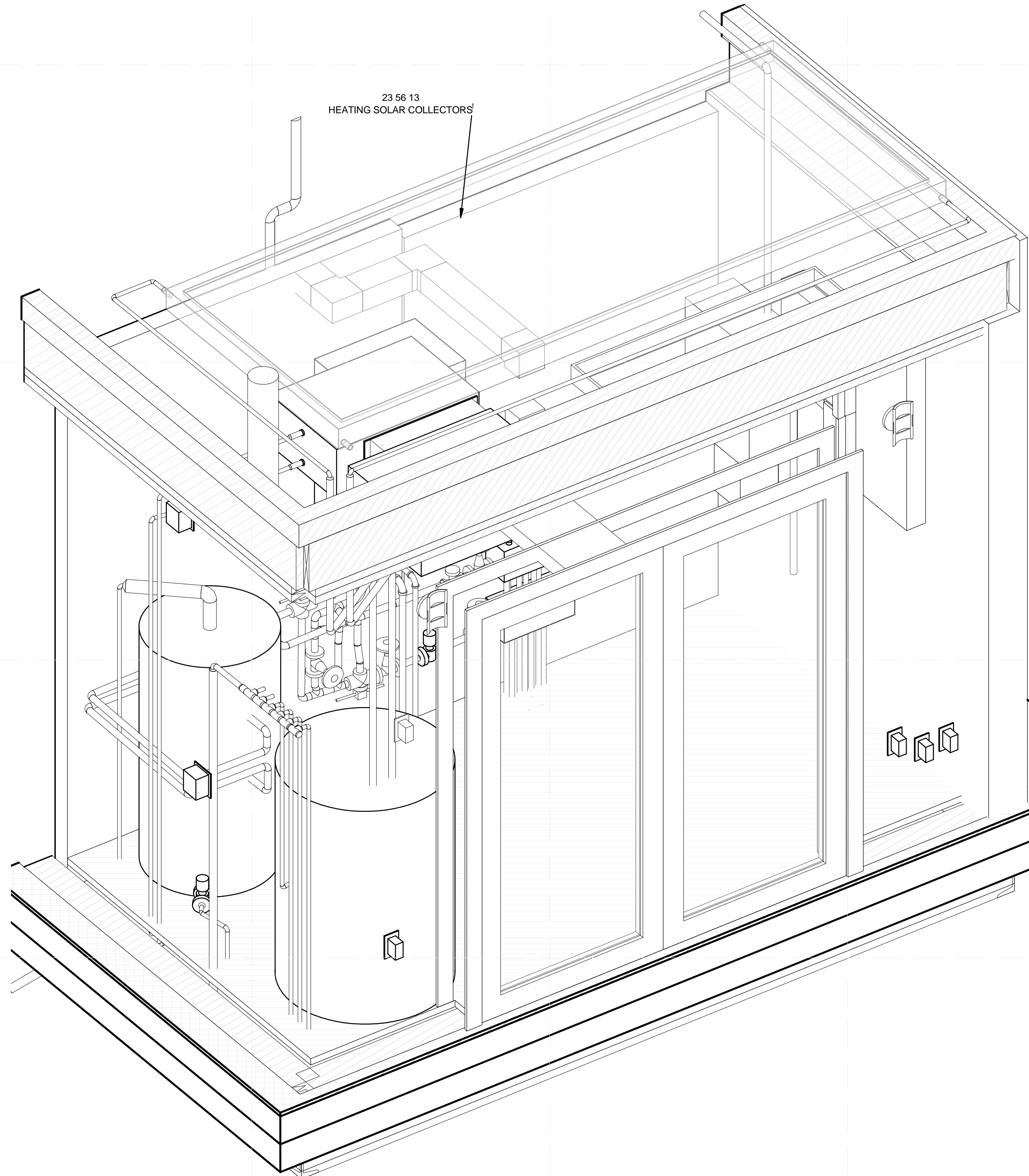
**(A1) RETURN ISOMETRIC**





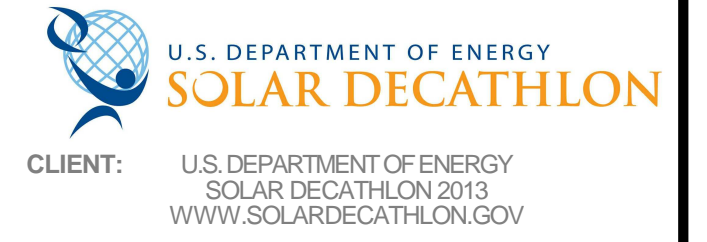
**REFERENCE KEYNOTES**

23 56 13 HEATING SOLAR COLLECTORS



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	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: JS/PH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE; PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**SOLAR WATER HEATING  
 ISOMETRIC  
 P-903**

**(A2) SOLAR THERMAL ISOMETRIC**

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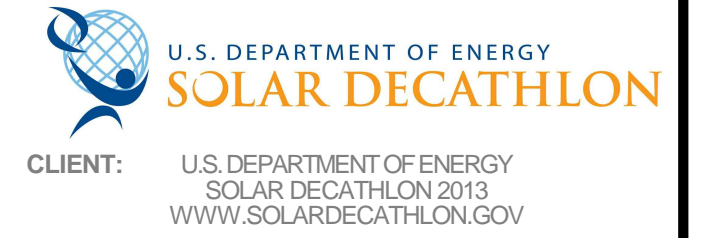


**REFERENCE KEYNOTES**

22 80 08.A2	AIR TO WATER HEAT PUMP
23 33 00.B0	DIFFUSERS
23 72 00	AIR-TO-AIR ENERGY RECOVERY EQUIPMENT
23 84 16	DEHUMIDIFIER

TEAM NAME: SANTA CLARA  
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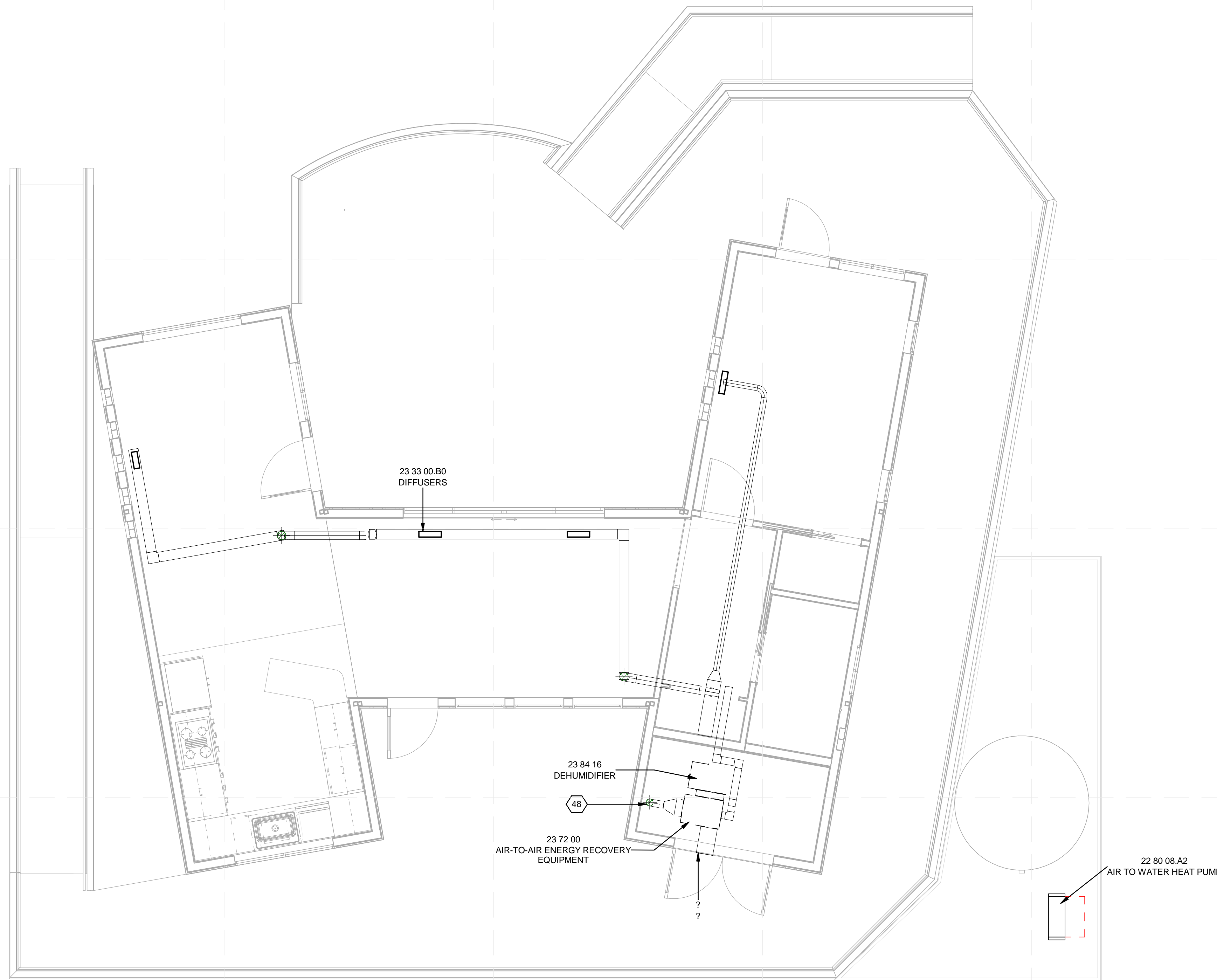


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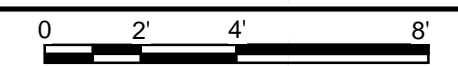
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: JS/MH  
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 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**HVAC EQUIPMENT AND DISTRIBUTION PLAN**  
**M-101**

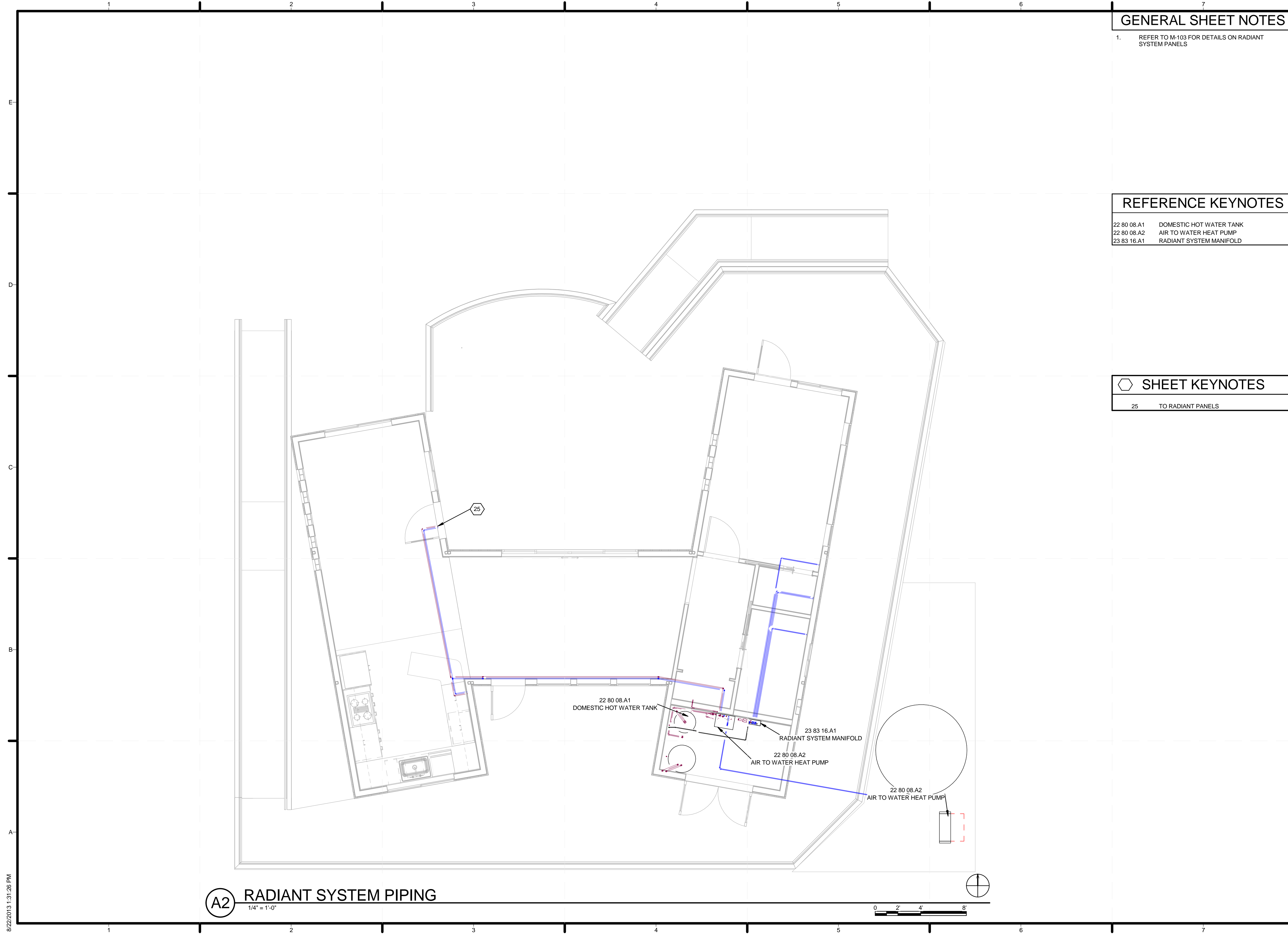


**A2 AIR DISTRIBUTION PLAN**  
 1/4" = 1'-0"



8/22/2013 1:31:24 PM





**GENERAL SHEET NOTES**

- 1. REFER TO M-103 FOR DETAILS ON RADIANT SYSTEM PANELS

**REFERENCE KEYNOTES**

22 80 08.A1	DOMESTIC HOT WATER TANK
22 80 08.A2	AIR TO WATER HEAT PUMP
23 83 16.A1	RADIANT SYSTEM MANIFOLD

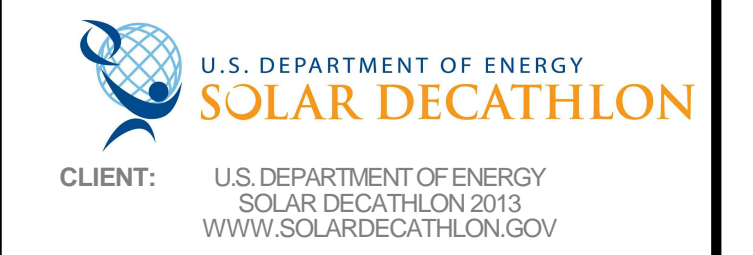
**SHEET KEYNOTES**

25	TO RADIANT PANELS
----	-------------------



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LOT NUMBER: 118  
 DRAWN BY: JS/MH  
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SHEET TITLE:  
**RADIANT PLUMBING SYSTEM**  
**M-102**

**(A2) RADIANT SYSTEM PIPING**  
 1/4" = 1'-0"

8/22/2013 1:31:26 PM



TEAM NAME: SANTA CLARA  
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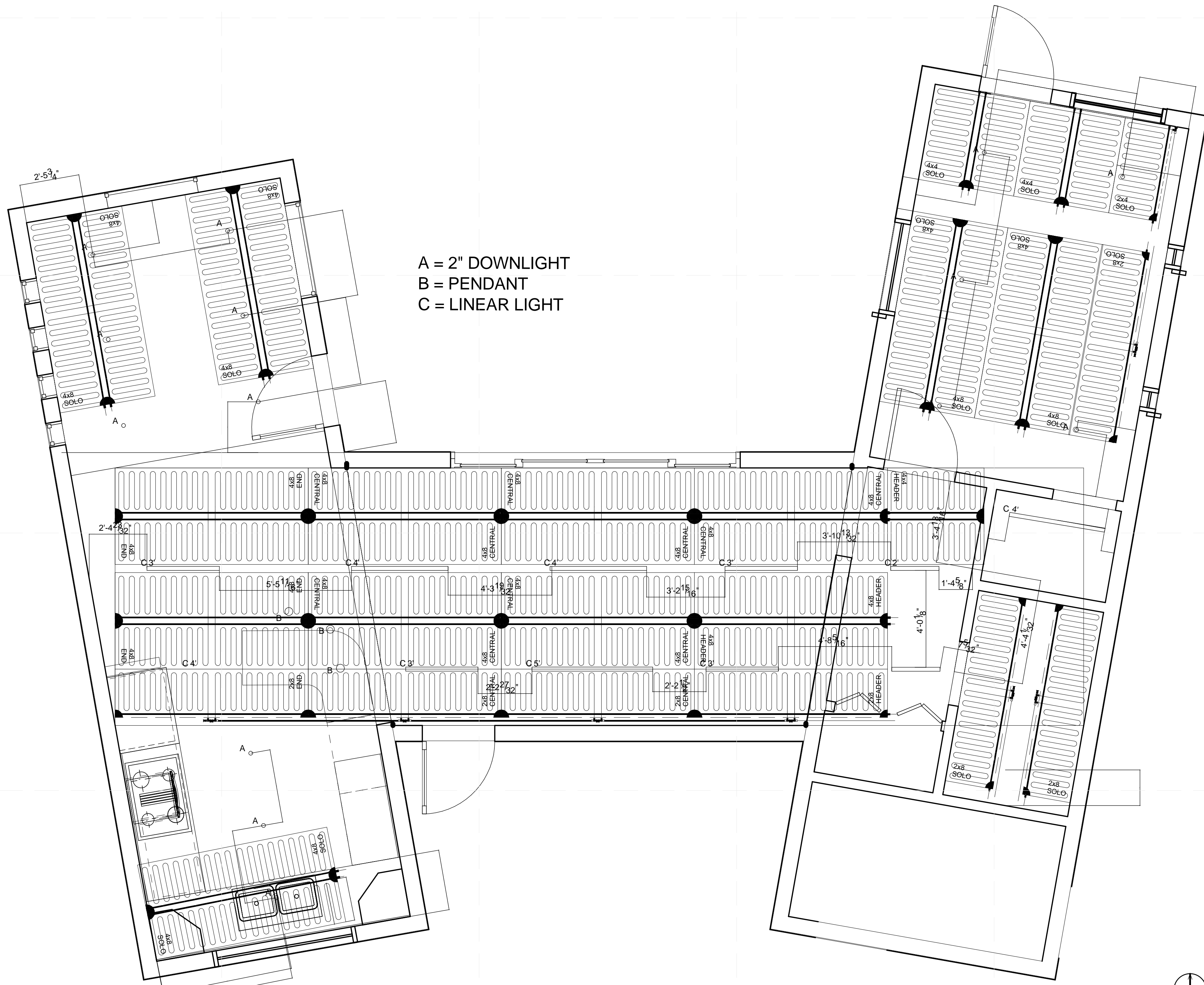
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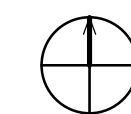
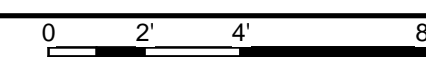
SHEET TITLE:  
**RADIANT PANEL SYSTEM**

**M-103**



A = 2" DOWNLIGHT  
 B = PENDANT  
 C = LINEAR LIGHT

**A2** RADIANT PANEL PLAN  
 3/8" = 1'-0"



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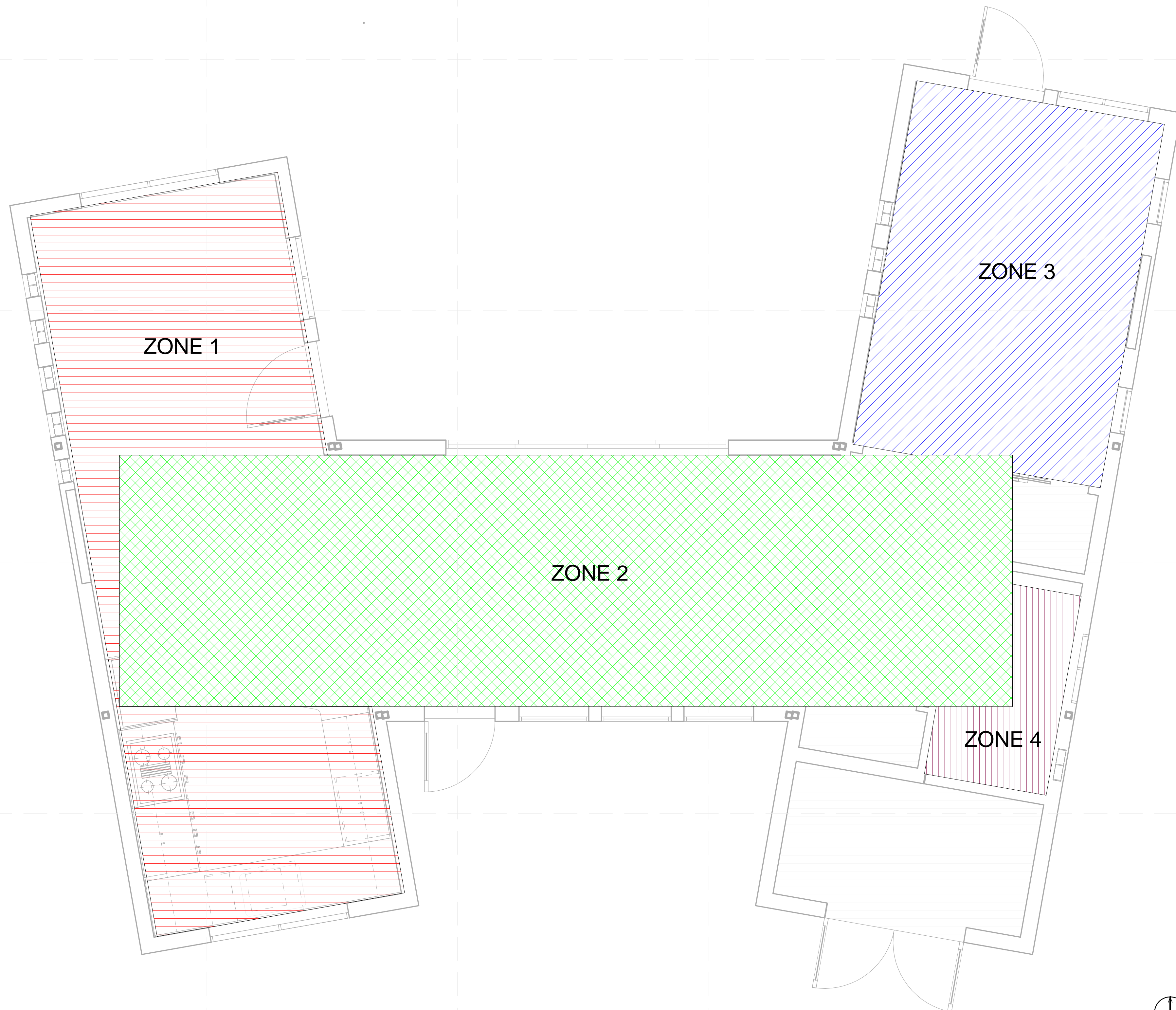
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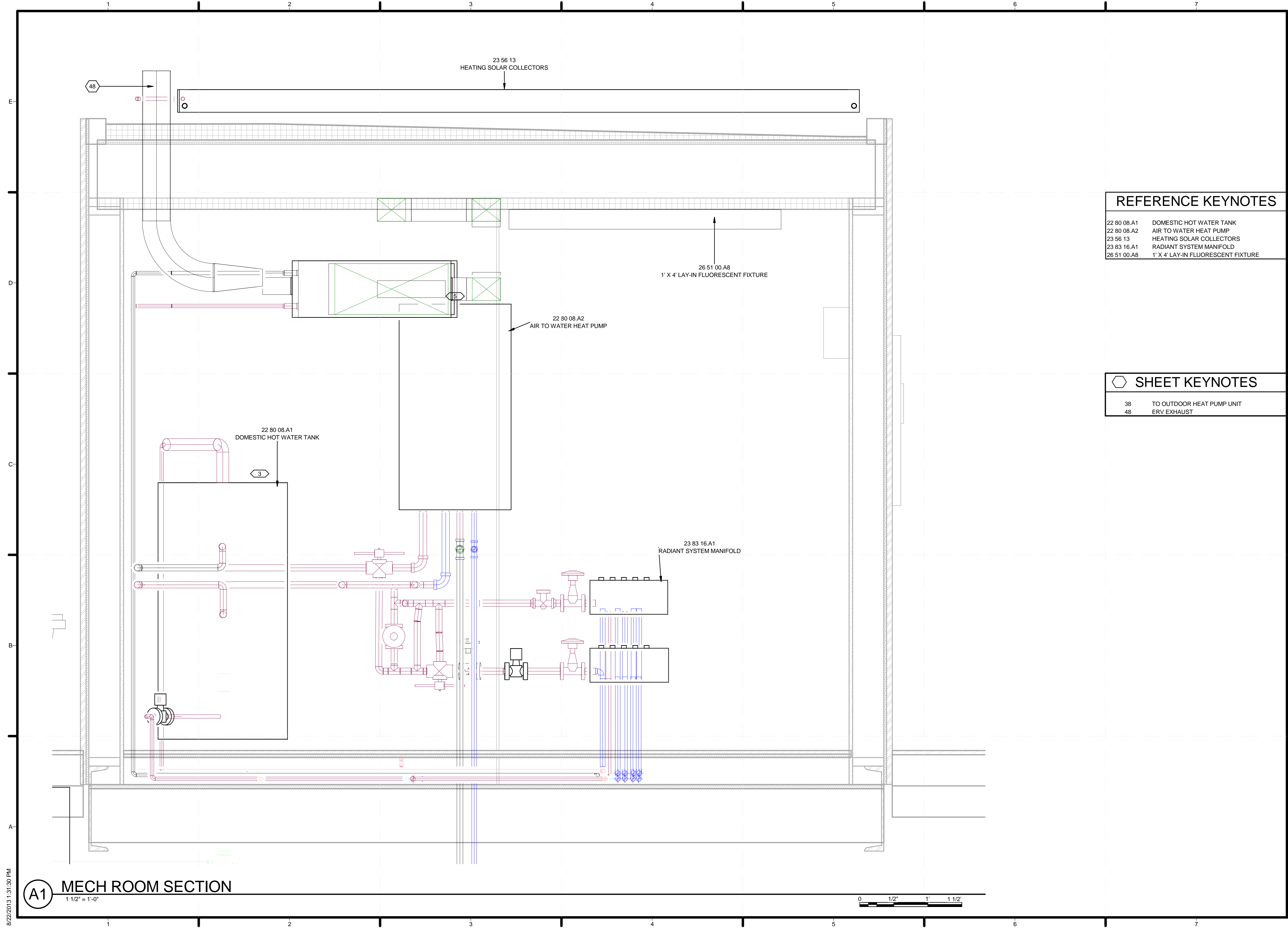
SHEET TITLE:  
 HVAC ZONES

**M-104**



**(A1) HVAC ZONES**  
 3/8" = 1'-0"

8/22/2013 1:31:29 PM



**REFERENCE KEYNOTES**

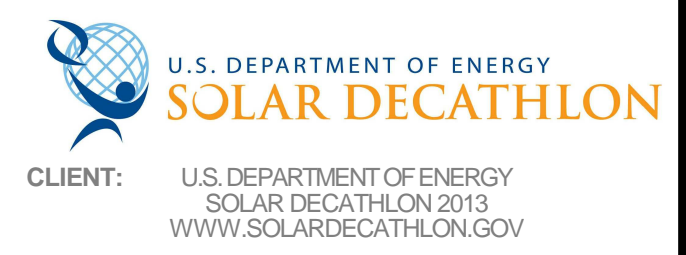
22 80 08.A1	DOMESTIC HOT WATER TANK
22 80 08.A2	AIR TO WATER HEAT PUMP
23 56 13	HEATING SOLAR COLLECTORS
23 83 16.A1	RADIANT SYSTEM MANIFOLD
26 51 00.A8	1' X 4' LAY-IN FLUORESCENT FIXTURE

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**SHEET KEYNOTES**

38	TO OUTDOOR HEAT PUMP UNIT
48	ERV EXHAUST

CONSULTANTS:  
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: JS/MH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE-PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**MECH ROOM SECTION**

**M-301**

**(A1) MECH ROOM SECTION**  
 1 1/2" = 1'-0"

8/22/2013 1:31:30 PM





**REFERENCE KEYNOTES**

22 80 08.A1 DOMESTIC HOT WATER TANK  
 22 80 08.A2 AIR TO WATER HEAT PUMP  
 23 83 16.A1 RADIANT SYSTEM MANIFOLD

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**WALSCHON FIRE PROTECTION INC.**  
 1015 TERMINAL WAY  
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**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

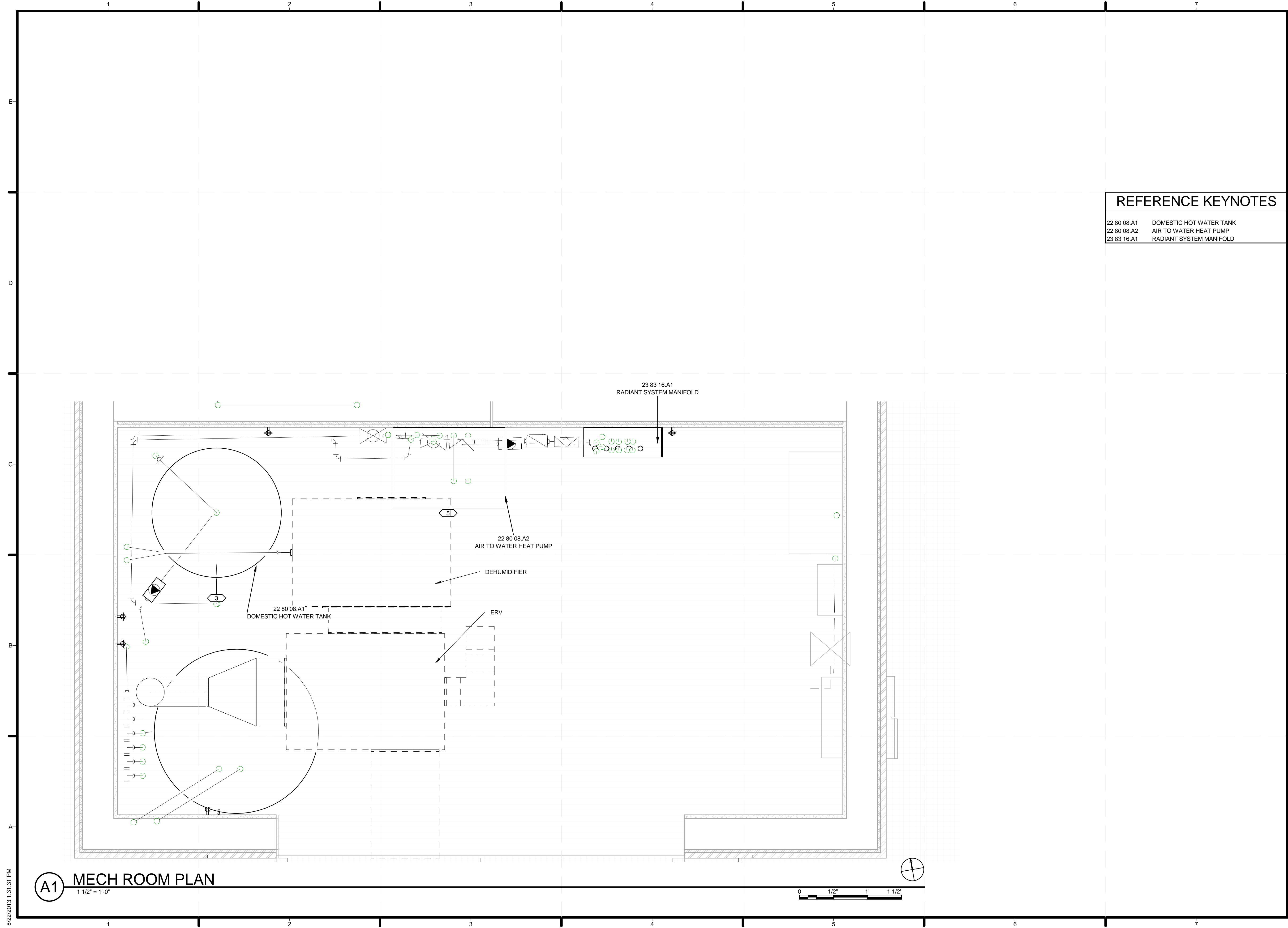
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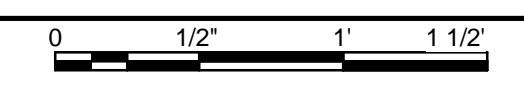
LOT NUMBER: 118  
 DRAWN BY: JS/MH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**MECH ROOM PLAN**

**M-401**



**A1 MECH ROOM PLAN**  
 1 1/2" = 1'-0"



8/22/2013 1:31:31 PM



TEAM NAME: SANTA CLARA  
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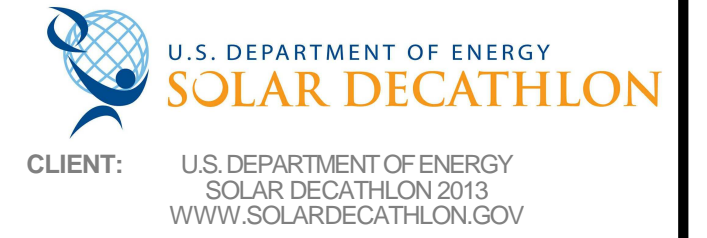
CONSULTANTS:

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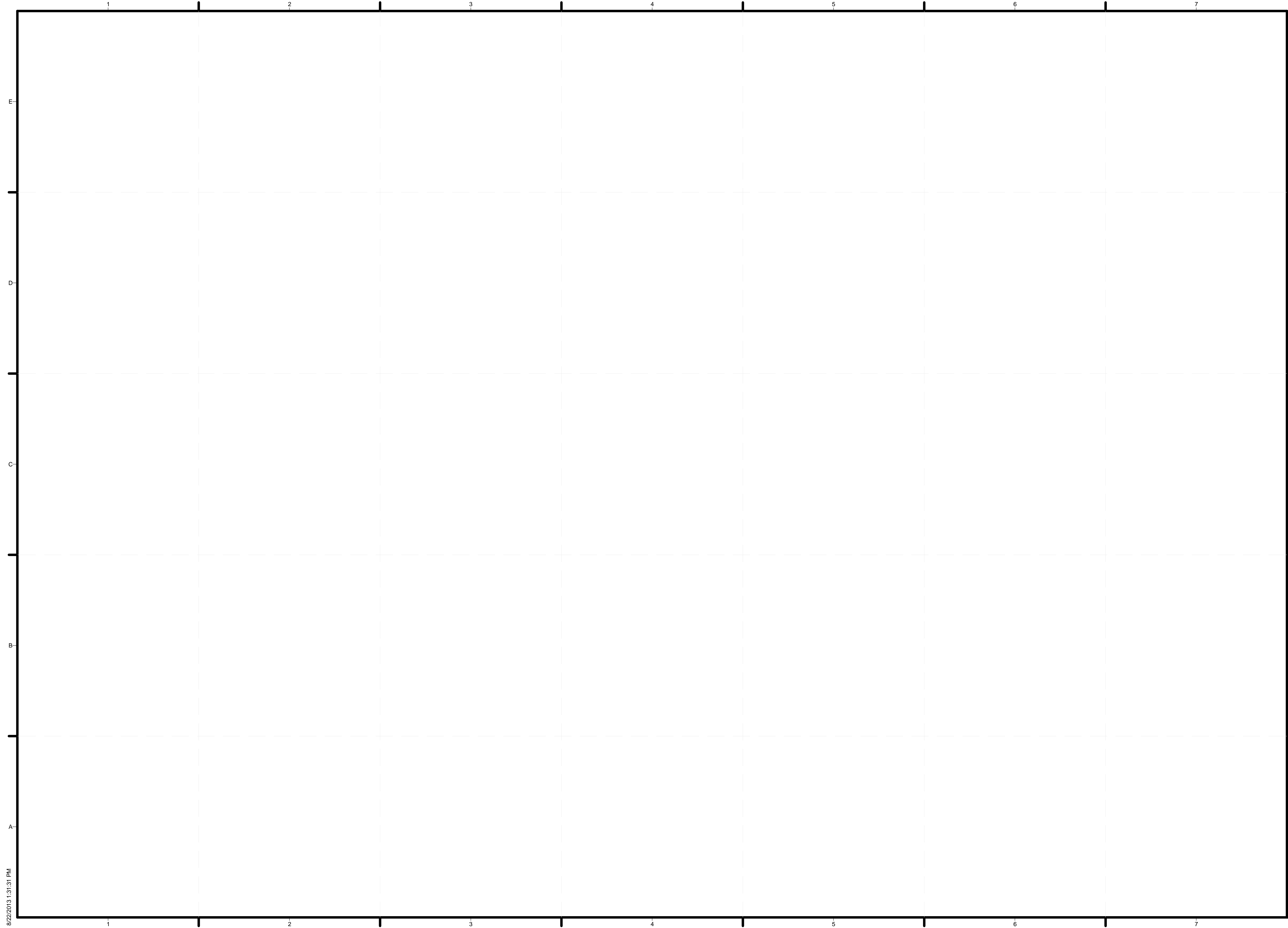
**SUMMERS & SONS ELECTRIC, INC.**  
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 MILPITAS, CA 95035



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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: JS/MH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**SCHEDULES**  
**M-601**



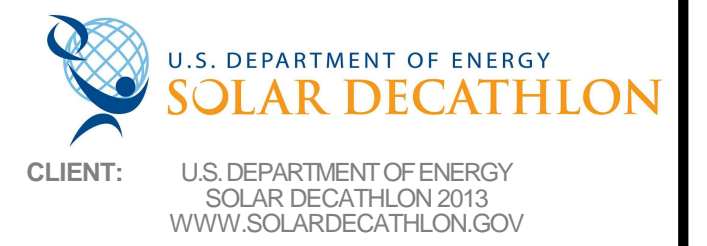
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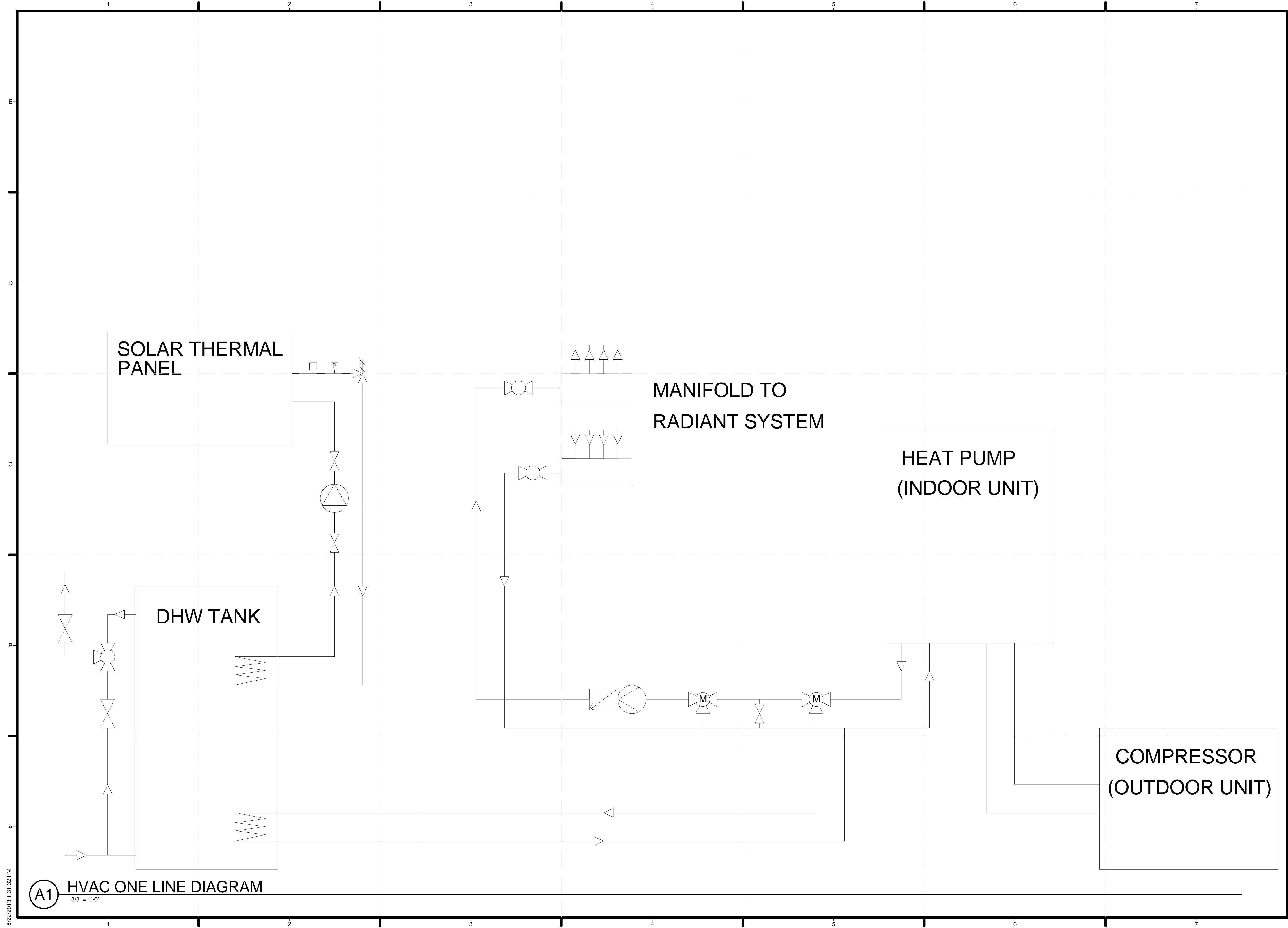
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: JS/MH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE: PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
 HVAC DIAGRAMS

**M-602**



**(A1) HVAC ONE LINE DIAGRAM**  
 3/8" = 1'-0"

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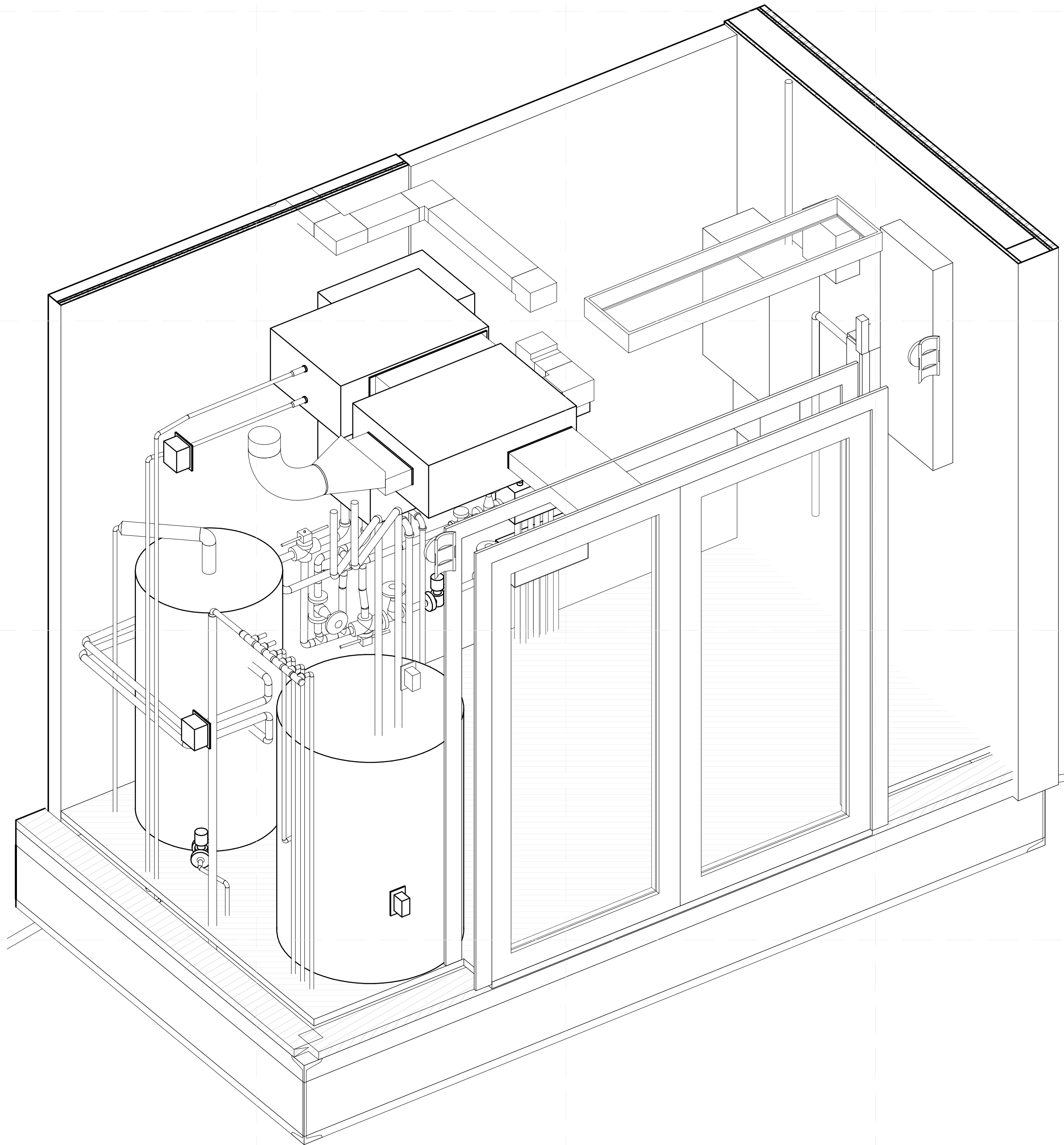
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LOT NUMBER: 118  
 DRAWN BY: JS/MH  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**HVAC ISOMETRICS**

**M-901**



**A2** MECH ROOM ISOMETRIC

8/22/2013 1:31:33 PM



**GENERAL SHEET NOTES**

1. ALL ELECTRICAL SYSTEMS FOLLOW THE NFPA 2011 NATIONAL ELECTRIC CODE (NEC).



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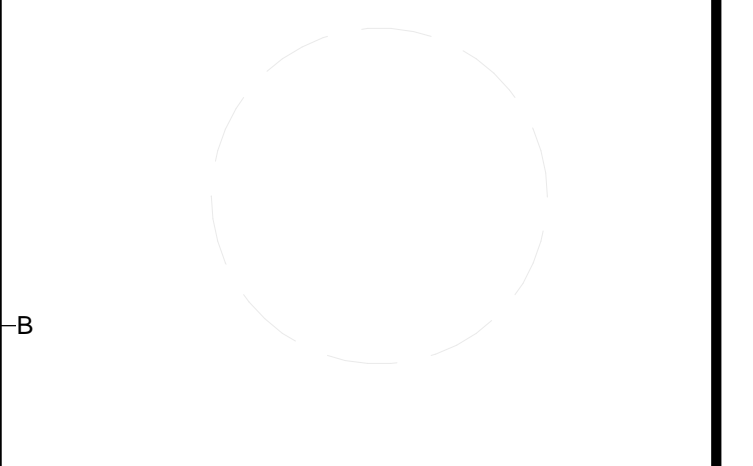
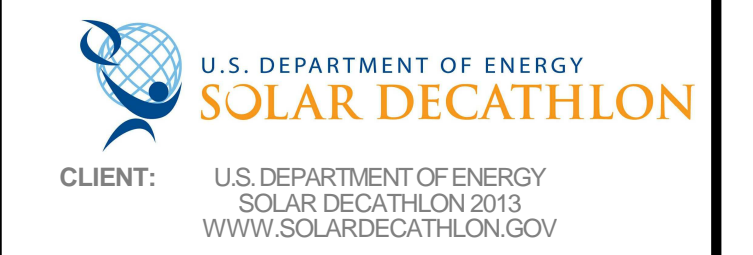
CONSULTANTS:

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LOT NUMBER: 118  
 DRAWN BY: MJ  
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 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**ELECTRICAL SYMBOLS  
 AND NOTES**  
**E-001**

- SYMBOLS**
- 120V DUPLEX RECEPTACLE
  - 240V RECEPTACLE
  - GFCI DUPLEX RECEPTACLE
  - WEATHER RESISTANT DUPLEX RECEPTACLE
  - 120V QUADRUPLEX RECEPTACLE
  - SWITCHED DUPLEX RECEPTACLE
  - SWITCH
  - DIMMER SWITCH
  - 2' LED CEILING LIGHT
  - LED UNDERCABINET LIGHT
  - 2' LED LINEAR LIGHT
  - EXTERIOR WALL LIGHT
  - SOLAR-POWERED LANDSCAPE LIGHT
  - SOLAR-POWERED LANDSCAPE ROPE LIGHT

**GENERAL SHEET NOTES**

1. ALL KITCHEN AND BATHROOM OUTLETS ARE GFCI PROTECTED. ALL OTHER INTERIOR OUTLETS ARE AFCI UNLESS OTHERWISE NOTED.
2. ALL INTERIOR WALL OUTLETS ARE LOCATED AT 16" ABOVE FINISHED FLOOR. ALL COUNTER RECEPTACLES IN KITCHEN ARE LOCATED AT 40" ABOVE FINISHED FLOOR.
3. ALL EXTERIOR OUTLETS ARE GFCI PROTECTED AND WEATHERPROOF.
4. ALL EXTERIOR OUTLETS ARE MOUNTED AT 18" ABOVE THE FINISHED FLOOR.
5. ALL OUTLETS ARE TAMPER RESISTANT.
6. REFER TO E-601 FOR CIRCUIT BREAKER PANEL SCHEDULE.
7. L1 REFERS TO MAIN ELECTRIC PANEL BOARD. NUMBERS REPRESENT CIRCUIT NUMBER.

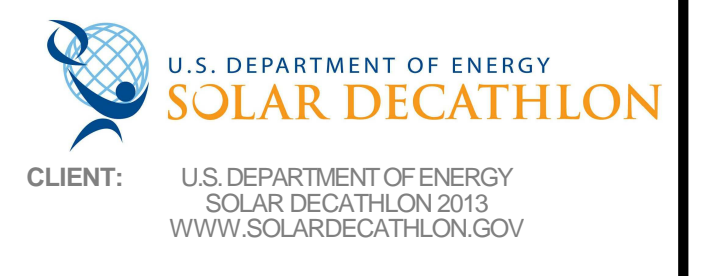


**REFERENCE KEYNOTES**

22 11 23	DOMESTIC WATER PUMPS
22 80 08.A2	AIR TO WATER HEAT PUMP
26 24 16.A1	MAIN ELECTRIC PANELBOARD
26 30 00.A1	120V DUPLEX RECEPTACLE
26 30 00.A3	240V DUPLEX RECEPTACLE

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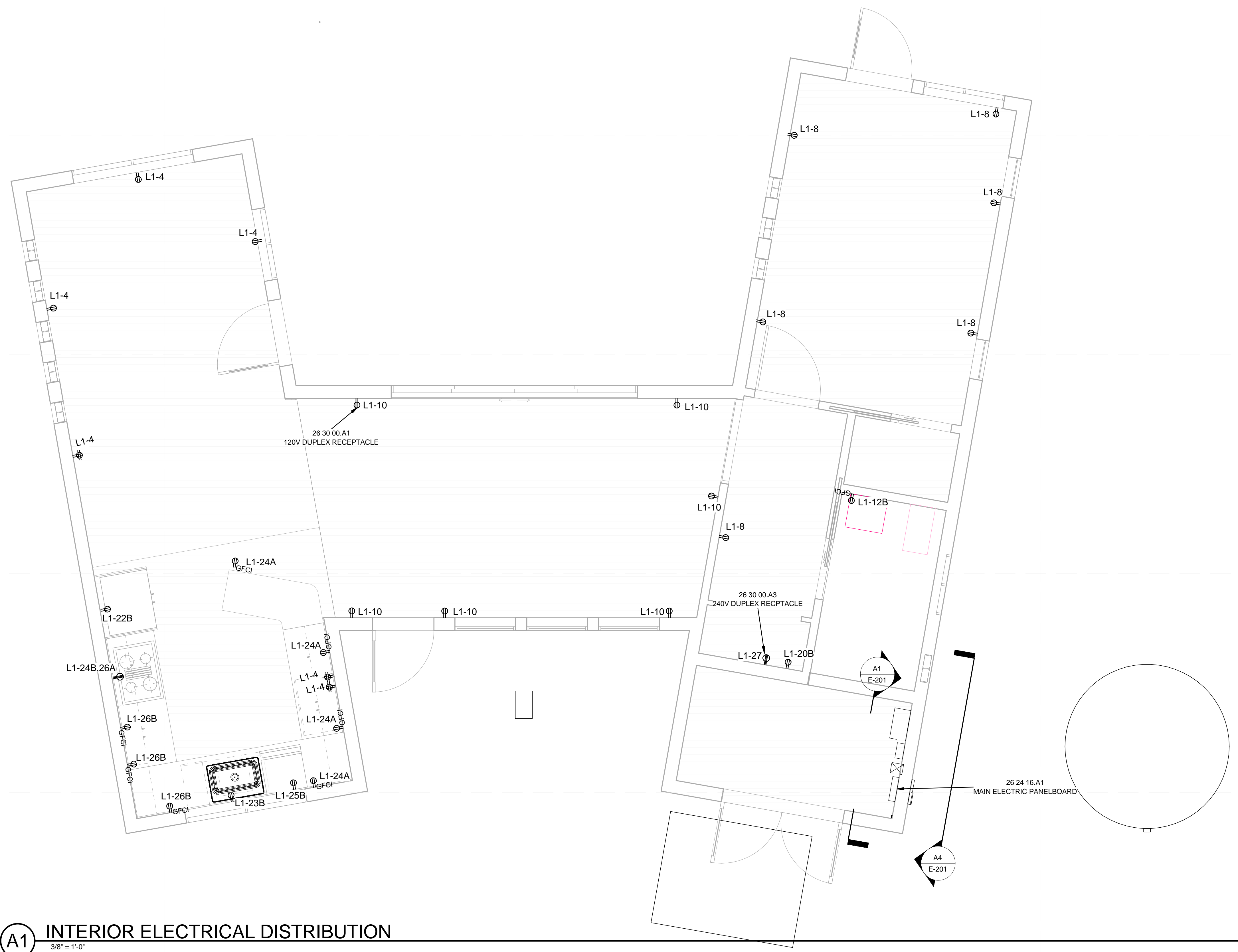


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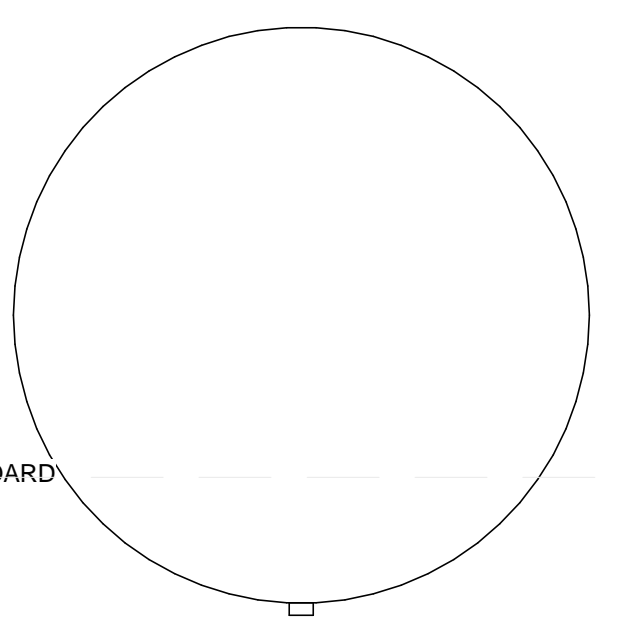
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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: MJ  
 CHECKED BY: SCU  
 COPYRIGHT: NONE. PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**INTERIOR ELECTRICAL DISTRIBUTION PLAN**  
**E-101**



**(A1) INTERIOR ELECTRICAL DISTRIBUTION**  
 3/8" = 1'-0"



8/22/2013 1:30:24 PM





**REFERENCE KEYNOTES**

22 11 23	DOMESTIC WATER PUMPS
22 80 08.A2	AIR TO WATER HEAT PUMP
26 30 00.A4	WEATHER RESISTANT DUPLEX RECEPTACLE

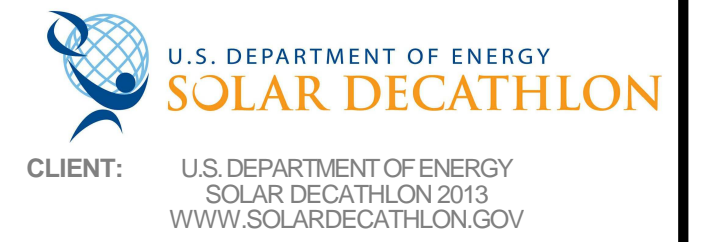
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**SHEET KEYNOTES**

13	WEATHER RESISTANT RECEPTACLE PER NEC 406.9(A) AND (B) WITH WEATHERPROOF ENCLOSURE
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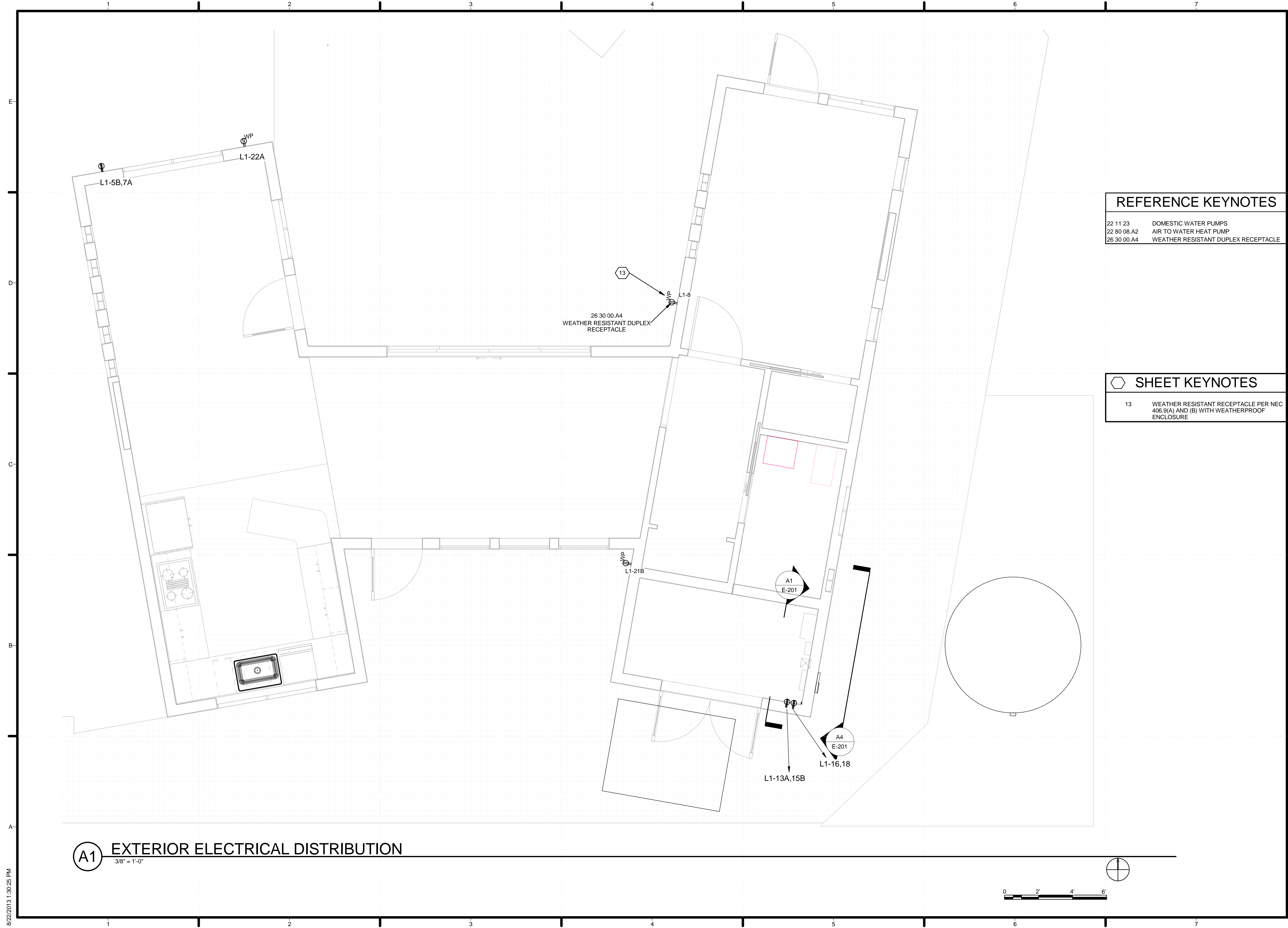
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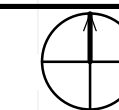
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 CHECKED BY: Checker  
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SHEET TITLE:  
 EXTERIOR ELECTRICAL  
 DISTRIBUTION PLAN

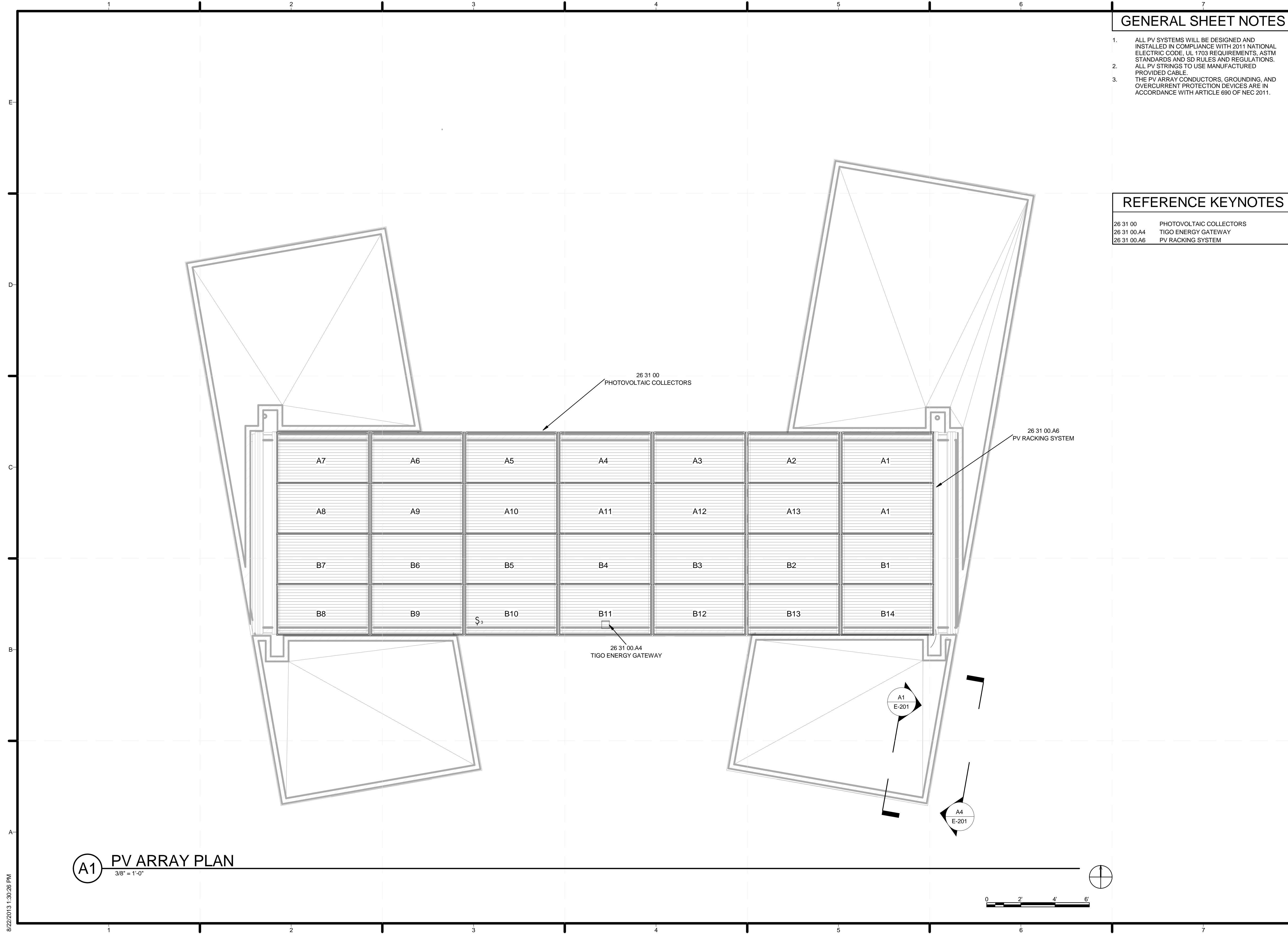
**E-102**



**A1 EXTERIOR ELECTRICAL DISTRIBUTION**  
 3/8" = 1'-0"



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**GENERAL SHEET NOTES**

1. ALL PV SYSTEMS WILL BE DESIGNED AND INSTALLED IN COMPLIANCE WITH 2011 NATIONAL ELECTRIC CODE, UL 1703 REQUIREMENTS, ASTM STANDARDS AND SD RULES AND REGULATIONS.
2. ALL PV STRINGS TO USE MANUFACTURED PROVIDED CABLE.
3. THE PV ARRAY CONDUCTORS, GROUNDING, AND OVERCURRENT PROTECTION DEVICES ARE IN ACCORDANCE WITH ARTICLE 690 OF NEC 2011.

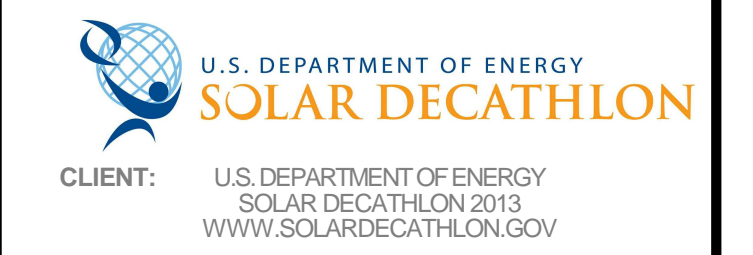
**REFERENCE KEYNOTES**

26 31 00	PHOTOVOLTAIC COLLECTORS
26 31 00.A4	TIGO ENERGY GATEWAY
26 31 00.A6	PV RACKING SYSTEM



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	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: MJ  
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SHEET TITLE:  
**PHOTOVOLTAIC ARRAY PLAN**  
**E-103**

8/22/2013 1:30:26 PM



FUNCTION	MANUFACTURER	MODEL	LAMP	WATTS	QTY
2" DOWN LIGHTS	EST	DL 2 BL	LED	10	11
2" LINEAR LIGHTS	EST	M109/M110	LED	5/FT	50 FT
BATHROOM VANITY LIGHT	OXYGEN LIGHTING	ZENITH VANITY	FLUORESCENT	28	1
BATHROOM FAN LIGHT	NUTONE	769RL	INCANDESCENT	100	1
KITCHEN PENDANTS	EST	P 38	LED	5	3
TABLE LAMPS	LAMPS PLUS	84182	INCANDESCENT	60	2
MECH ROOM LIGHT	LITHONIA	LB 2 54T5HO	FLUORESCENT	108	1
EXTERIOR WALL LIGHT	POSSINI	R7825	LED	35	7
DECK LIGHTS	HAMPTON BAY	667347	LED	10	24

**GENERAL SHEET NOTES**

- ALL LED INTERIOR LIGHTS ARE DRIVEN BY TRANSFORMERS MANUFACTURED BY EST LIGHTING. TRANSFORMERS FOR LIGHTS IN MODULE A ARE LOCATED ABOVE KITCHEN UPPER CABINETS AND ARE POWERED BY SWITCHED OUTLETS.
- TRANSFORMERS FOR LIGHTS IN MODULE C AND D ARE LOCATED IN THE MECHANICAL ROOM. CURVED ARROWS REPRESENT HOMERUN TO TRANSFORMER.

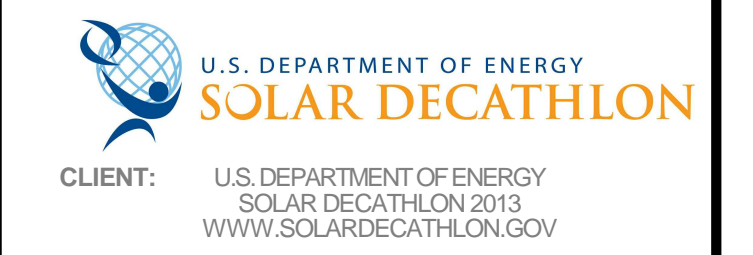


**REFERENCE KEYNOTES**

- |             |                                    |
|-------------|------------------------------------|
| 26 09 23.A1 | DIMMER SWITCH                      |
| 26 09 23.A2 | SINGLE POLE SWITCH                 |
| 26 51 00.A1 | 2" LED LINEAR LIGHT                |
| 26 51 00.A2 | 2" LED DOWNLIGHT                   |
| 26 51 00.A4 | LED PENDANT LIGHT                  |
| 26 51 00.A5 | RECESSED FAN AND LIGHT             |
| 26 51 00.A8 | 1' X 4' LAY-IN FLUORESCENT FIXTURE |

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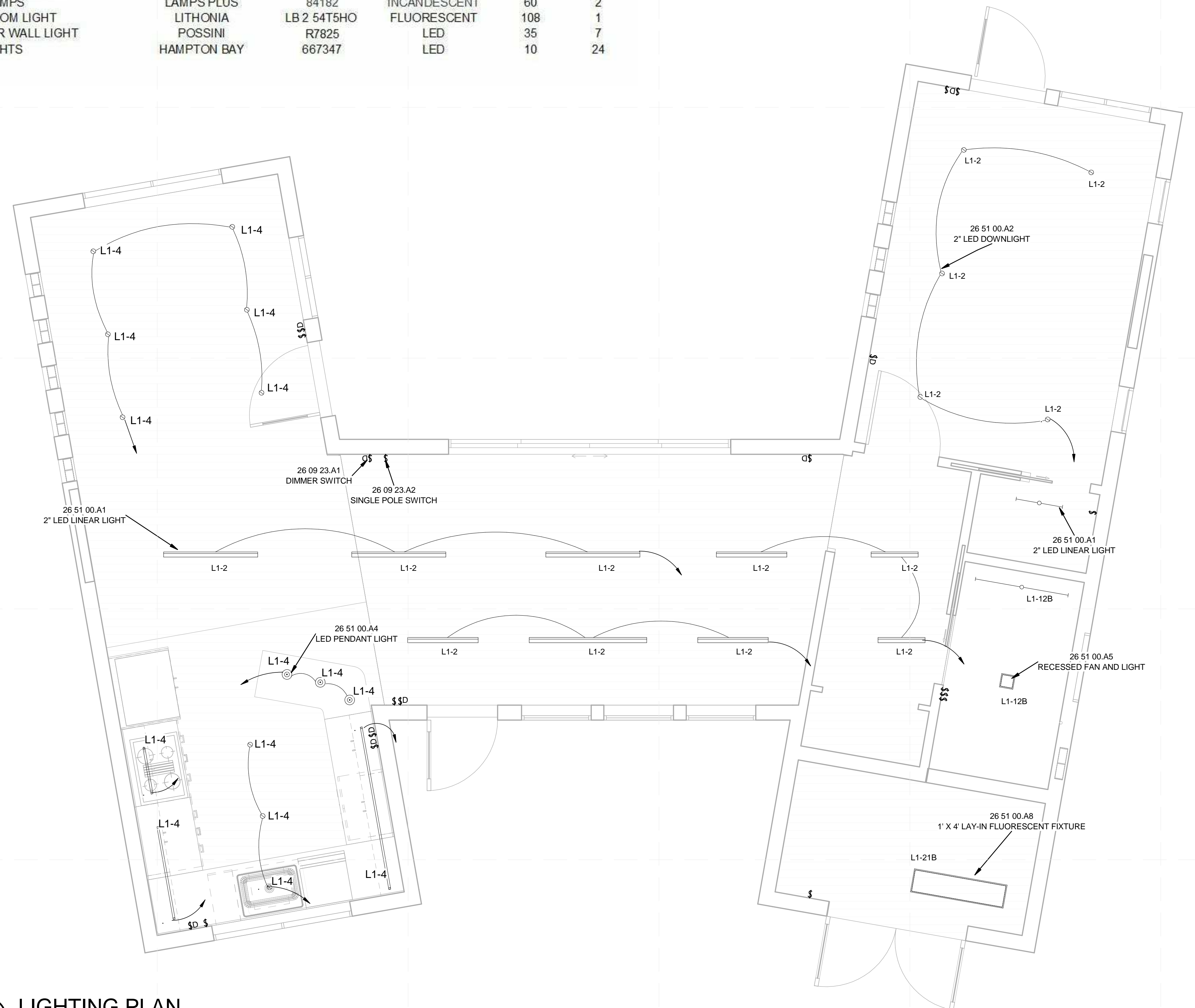
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LOT NUMBER: 118  
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 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**INTERIOR LIGHTING PLAN**

**E-104**



**(A1) LIGHTING PLAN**  
 3/8" = 1'-0"



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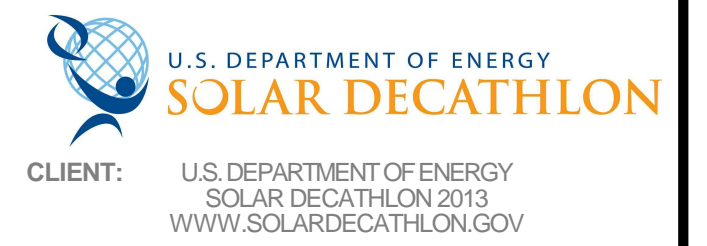


**REFERENCE KEYNOTES**

26 05 33.A4	METER LOAD CENTER
26 05 33.A6	AC DISCONNECT
26 24 16.A1	MAIN ELECTRIC PANELBOARD
26 30 00.A3	240V DUPLEX RECPTACLE
26 31 00.A5	MAXIMIZER MANAGEMENT UNIT
48 19 16	INVERTER

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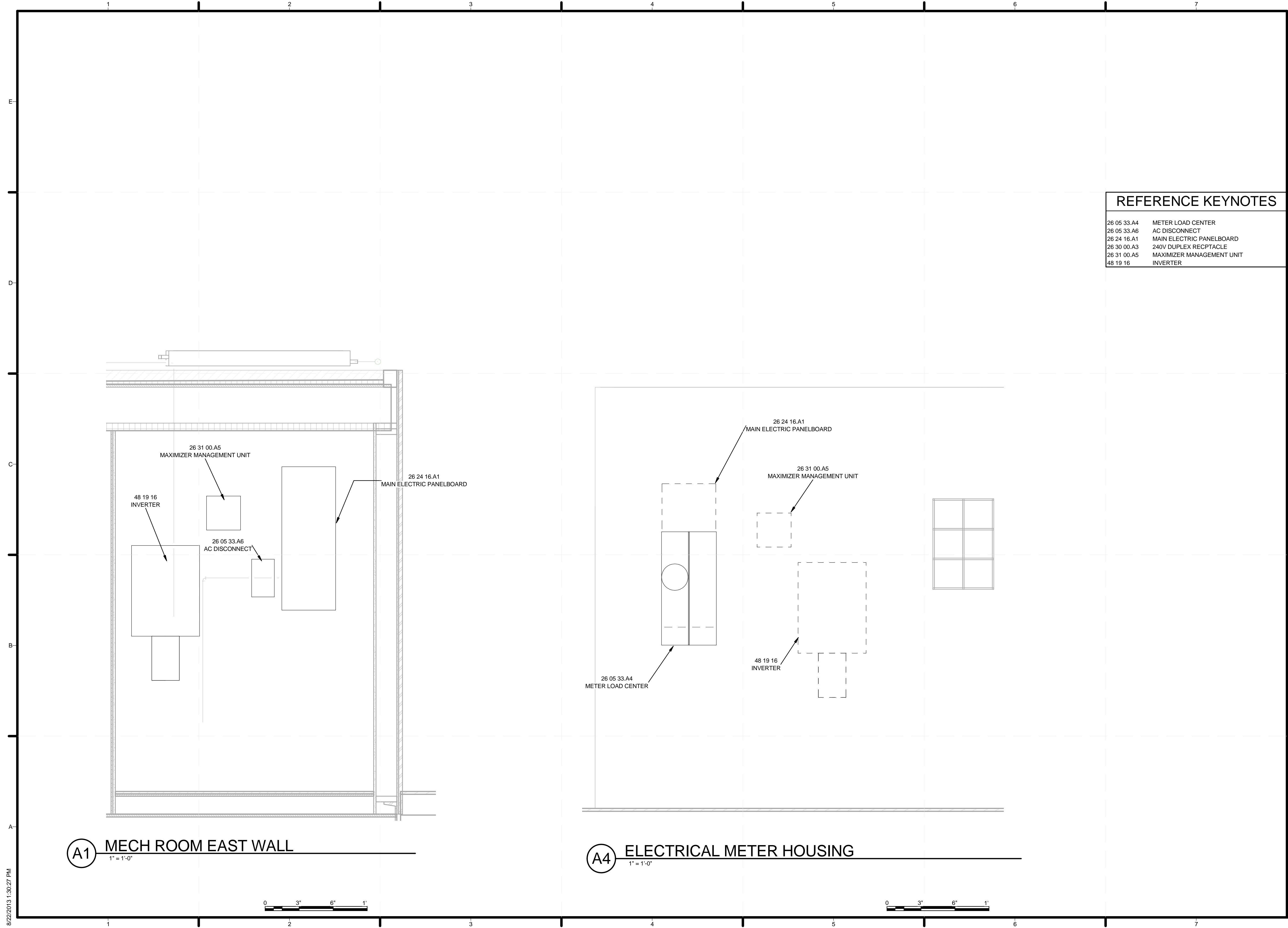
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	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

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SHEET TITLE:  
**ELECTRICAL ELEVATIONS**

**E-201**



**A1** MECH ROOM EAST WALL  
 1" = 1'-0"

**A4** ELECTRICAL METER HOUSING  
 1" = 1'-0"



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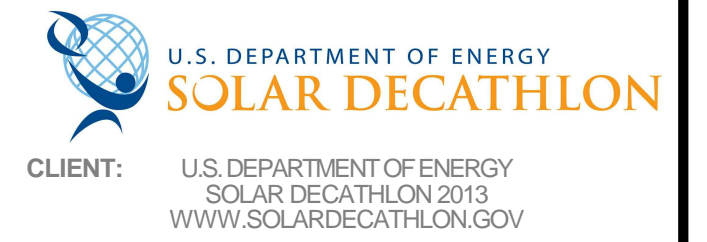


**REFERENCE KEYNOTES**

26 05 33.A4	METER LOAD CENTER
26 05 33.A6	AC DISCONNECT
26 24 16.A1	MAIN ELECTRIC PANELBOARD
26 31 00.A5	MAXIMIZER MANAGEMENT UNIT
48 19 16	INVERTER

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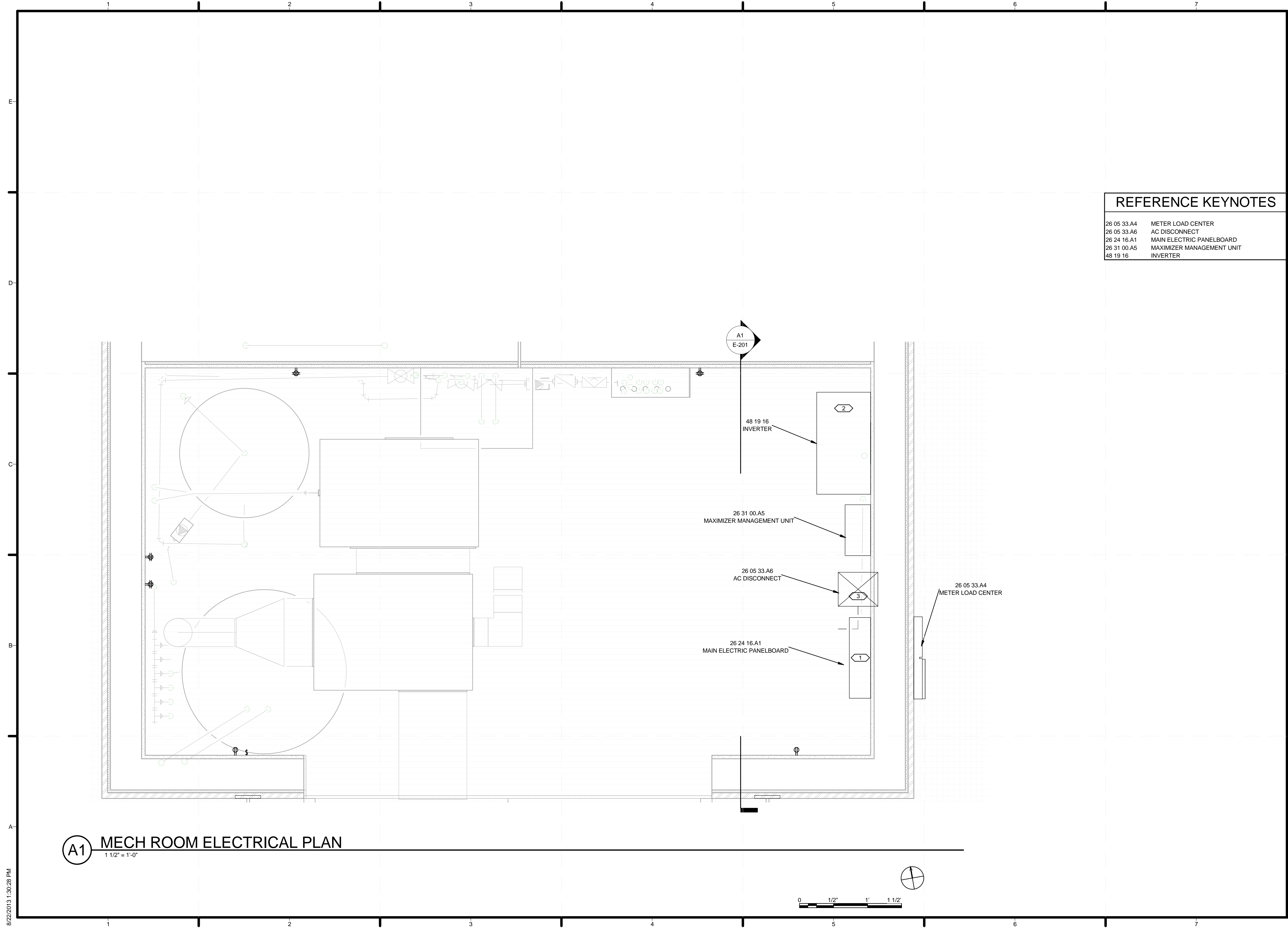
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SHEET TITLE:  
 MECH ROOM ELECTRICAL PLAN

**E-401**



**(A1) MECH ROOM ELECTRICAL PLAN**  
 1 1/2" = 1'-0"

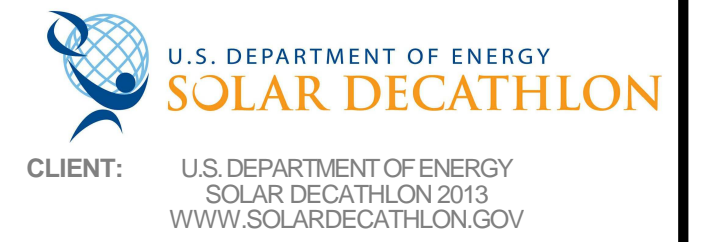


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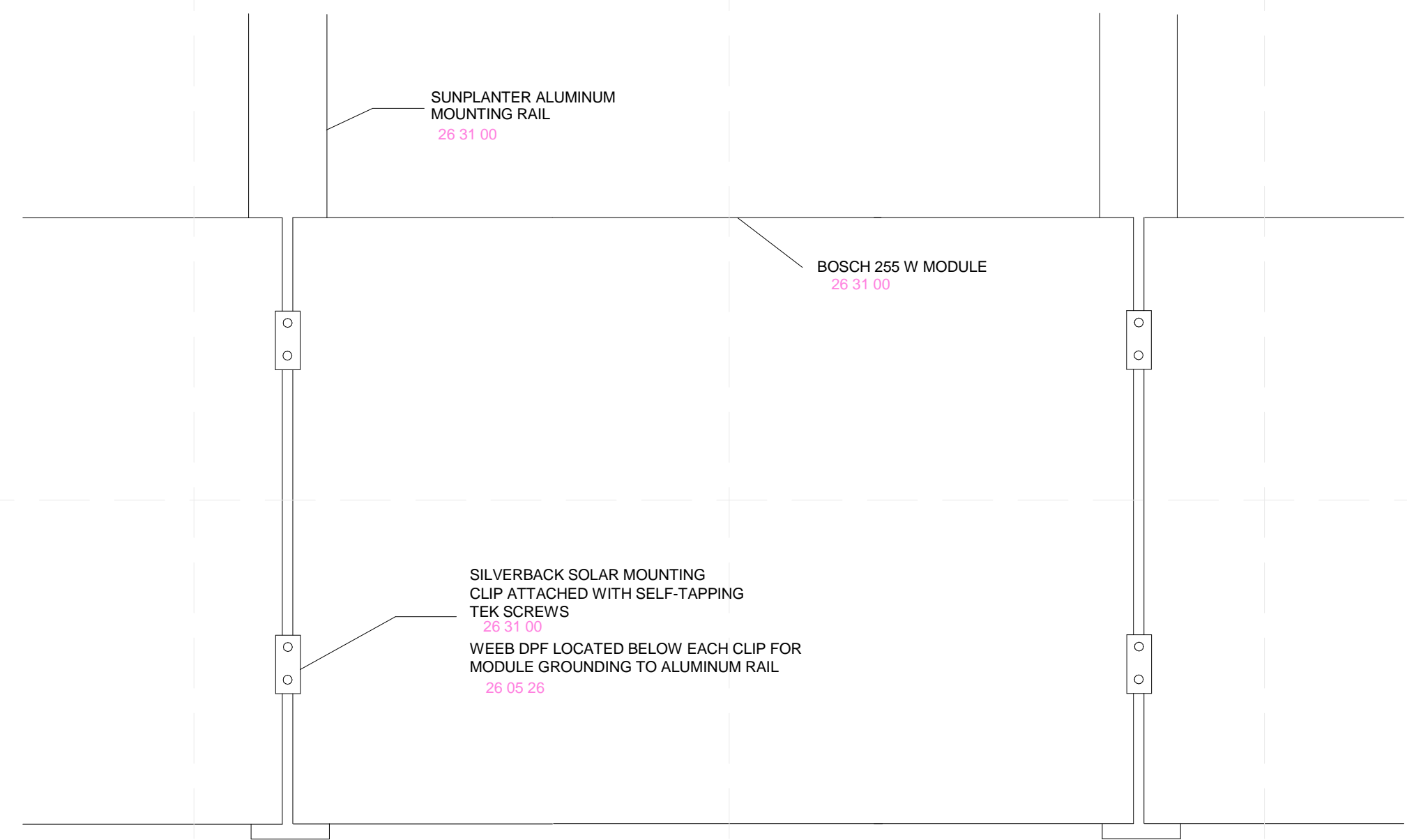
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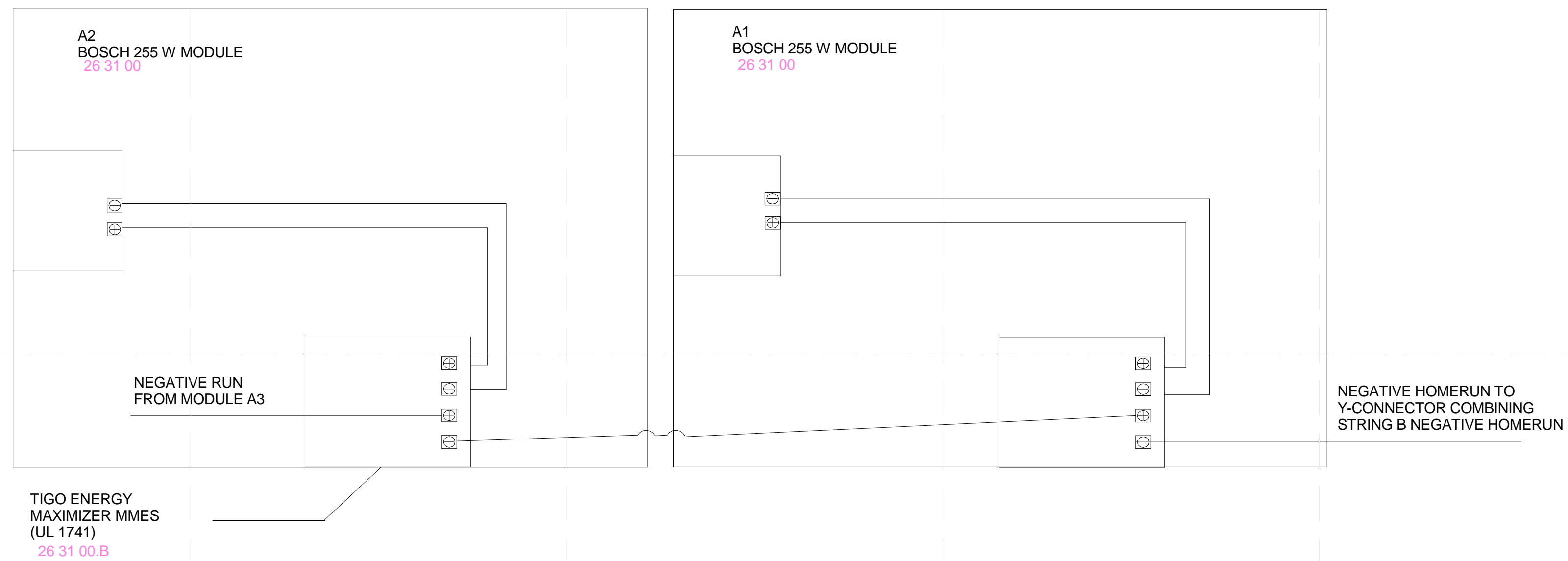
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SHEET TITLE:  
**PV DETAILS**

**E-501**



**D1** GROUNDING METHOD



**A1** TIGO MAXIMIZER DETAILING

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**SERVICE FEEDER CALCULATIONS**

**GENERAL LOADS (NEC 220.10 (C))**

LIGHTING: 1000 SQ.FT AT 3 VA/SQ.FT (TABLE 220.3 (A))  
 TWO 20A SMALL APPLIANCE BRANCH CIRCUITS AT 1500 VA EACH  
 LAUNDRY BRANCH CIRCUIT

DEMAND FACTOR	VA
100%	3000 VA
100%	3000 VA
100%	1500 VA
<b>TOTAL:</b>	<b>7500 VA</b>

**PER NEC TABLE 220.42**

FIRST 3000 VA AT 100% DEMAND FACTOR  
 REMAINING 4500 VA AT 35% DEMAND FACTOR

100%	3000 VA
35%	1575 VA
<b>TOTAL:</b>	<b>4575 VA = 19.1 A</b>

**FASTENED, IN-PLACE APPLIANCES**

LAUNDRY DRYER (NEC 22.54)

100%	5000 VA	= 20.8 A
------	---------	----------

INDUCTION COOKTOP (NEC TABLE 220.55, NOTE 3, COLUMN B)  
 OVEN (NEC TABLE 220.55, NOTE 3, COLUMN B)

7200 VA	65%	4680 VA
5800 VA	65%	3770 VA
<b>TOTAL:</b>		<b>8450 VA = 35.2 A</b>

DISHWASHER (NEC 220.53)  
 COOKTOP DOWNDRAFT (NEC 220.53)  
 DOMESTIC HOT WATER HEATER (NEC 220.53)  
 MESSANA PUMP (NEC 220.53)  
 ERV (NEC 220.53)  
 DEHUMIDIFIER (NEC 220.53)  
 SOLAR THERMAL PUMP (NEC 220.53)  
 OUTDOOR COMPRESSOR UNIT (NEC 220.82 (C))  
 FIRE SPRINKLER PUMP (NEC 430.24)

1440 VA	75%	1080 VA
330 VA	75%	248 VA
3000 VA	75%	2250 VA
130 VA	75%	130 VA
120 VA	75%	90 VA
800 VA	75%	600 VA
46 VA	75%	35 VA
2870 VA	100%	2870 VA
800 VA	125%	1000 VA
<b>TOTAL:</b>		<b>8303 VA = 34.6 A</b>

**LARGEST MOTOR**

HEAT PUMP (NEC 430.24 (1))

4280 VA		
125%	5350 VA	= 22.3 A
<b>TOTAL:</b>		<b>132 A</b>

THEREFORE THIS DWELLING UNIT IS PERMITTED TO BE SERVICED BY A 200 A MAIN SERVICE PANEL

**NEUTRAL LOAD CALCULATIONS**

GENERAL LIGHTING AND RECEPTACLES (NEC 220.61 (A))  
 COOKING (NEC 220.61 (B))  
 FIXED APPLIANCES (NEC 220.61 (A))  
 DRYER (NEC 22.61 (B))

DEMAND FACTOR	VA	AMPS
100%	4575 VA	19.1 A
70%	8450 VA	35.2 A
100%	8303 VA	34.6 A
70%	5000 VA	20.8 A
<b>TOTAL:</b>	<b>22293 VA</b>	<b>= 92.8 A</b>
<b>CALCULATED LOAD FOR NEUTRAL:</b>		<b>93 A</b>

**D1 FEEDER CALCULATIONS**

**MAIN SERVICE PANEL SCHEDULE**

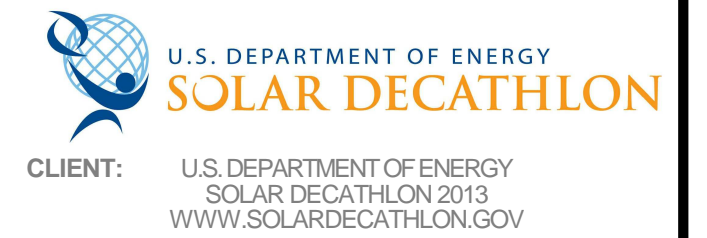
CKT. NO.	SERVING	TYPE: 120/240 VOLT, 1 PHASE, 3W				MOUNTING: SURFACE				SERVING	CKT. NO.	
		CIRCUIT LOAD		BRKR. TRIP	GFCI/AFCI	CIRCUIT LOAD		BRKR. TRIP	GFCI/AFCI			
		A	B			A	B					
1A	SPARE	-	-	20/1	-	-	-	-	-	-	-	-
1B	PV INVERTER OUTPUT CURRENT	-	2000	30/2	-	180	-	15/1	AFCI	LIGHTING CONTROL	2	
3A		2000	-	-	-	720	-	20/1	AFCI	KITCHEN & LIVING ROOM LIGHTS	4	
3B	SPARE	-	-	20/1	-	-	-	20/1	AFCI	SPARE	6	
5A	SPARE	-	-	20/1	-	-	-	20/1	AFCI	SPARE	6	
5B	ELECTRIC CAR CHARGING STATION	-	3000	40/2	-	-	-	-	-	-	-	
7A		3000	-	-	-	900	-	15/1	AFCI	BEDROOM RECEPTACLES	8	
7B	SPARE	-	-	20/1	-	-	-	-	-	-	-	
9A	INDOOR HEAT PUMP	25	-	20/2	-	-	-	20/1	AFCI	FAMILY ROOM RECEPTALES	10	
9B	DOMESTIC HOT WATER	-	1500	20/2	-	-	-	-	-	-	-	
11A		1500	-	-	-	250	-	20/1	-	HOOD	12A	
11B	INDOOR HEAT PUMP	-	25	20/2	-	180	-	20/1	GFCI	BATHROOM RECEPTACLES	12B	
13A	OUTDOOR HEAT PUMP	1180	-	20/2	-	360	-	20/1	-	SOLAR THERMAL/MESSANA CONTROLS	14A	
13B	SPARE	-	-	30/2	-	-	-	20/1	-	DHW PRESSURE PUMP	14B	
15A		-	-	30/2	-	1000	-	20/2	-	FIRE SUPPRESSION PUMP	16	
15B	OUTDOOR HEAT PUMP	-	1180	20/2	-	-	-	-	-			
17A	MESSANA PUMP	50	-	20/1	-	-	-	-	-		-	
17B	DEHUMIDIFIER	-	600	20/1	-	1000	-	20/1	-	-	18	
19A	SPARE	-	-	20/1	-	-	-	20/1	-	SPARE	20A	
19B	SPARE	-	-	20/1	-	240	-	20/1	-	CLOTHES WASHER	20B	
21A	SPARE	-	-	20/1	-	180	-	20/1	GFCI	CAR PORT ADDITIONAL OUTLET	22A	
21B	UTILITY RECEPTACLES	-	720	20/1	-	20	-	20/1	-	REFRIGERATOR	22B	
23A	GARBAGE DISPOSAL	360	-	20/1	-	720	-	20/1	GFCI	KITCHEN RECEPTACLES 1	24A	
23B	OVEN	-	2600	30/2	-	3400	-	40/2	-	INDUCTION COOKTOP	24B	
25A		2600	-	-	-	3400	-	-	-	-	26A	
25B	DISHWASHER	-	1440	15/1	-	540	-	20/2	GFCI	KITCHEN RECEPTACLES 2	26B	
27A	CLOTHES DRYER	2200	-	30/2	-	-	-	-	-	SPARE	28A	
27B		-	2200	-	-	-	-	-	-	SPARE	28B	
<b>TOTAL A (VA):</b>		20445		<b>TOTAL CONNECTED VA:</b>		42530						
<b>TOTAL B (VA):</b>		22085		<b>TOTAL AMPS:</b>		177						
[N]: PANEL SHALL BE EATON TYPE "BR3040L200"												

**A1 PANEL SCHEDULE**



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SHEET TITLE: SERVICE FEEDER CALCULATIONS

**E-601**

ELECTRICAL EQUIPMENT SCHEDULE			
DESCRIPTION	MANUFACTURER	MODEL	QTY
MAIN PANEL BOARD	EATON	BR3040L200	1
AC DISCONNECT	MILBANK	U3832	1
METER LOAD CENTER COMBO	SIEMENS	MC0816B1 SOOESN	1



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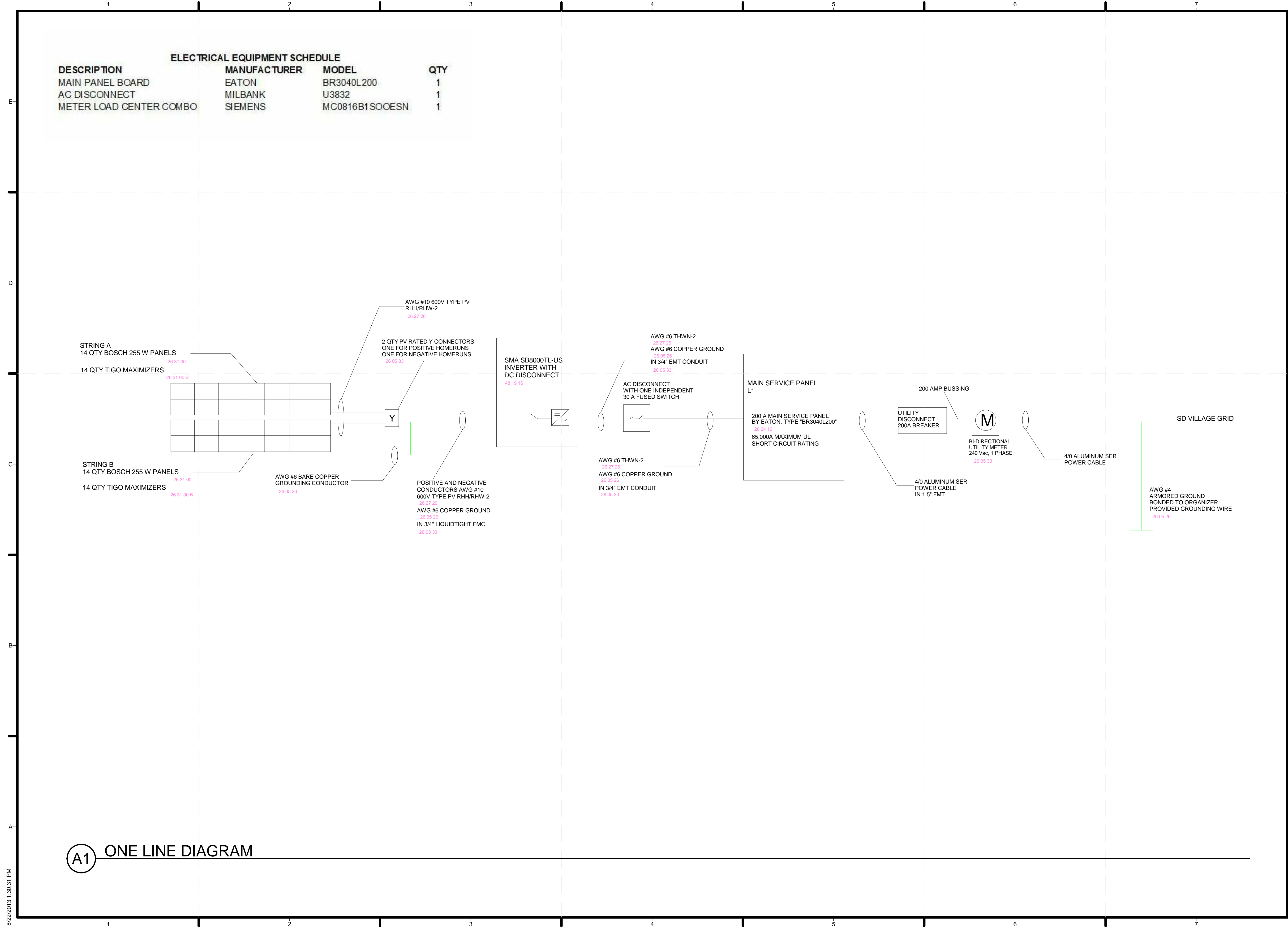
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SHEET TITLE:  
**ONE-LINE DIAGRAM**

**E-611**



**(A1) ONE LINE DIAGRAM**

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SHEET TITLE:  
**THREE-LINE DIAGRAM**

**E-612**

**1 MAXIMUM VOLTAGE CALCULATIONS (NEC 690.7)**  
 SANTA CLARA, CA RECORD LOW TEMPERATURE = -7 °C = 266 K  
 IRVINE, CA RECORD LOW TEMPERATURE = 2 °C = 275 K  
 -7°C IS LESS THAN 2 °C AND WILL THEREFORE BE USED IN CALCULATING THE MAX DC VOLTAGE.  
 VOC AT STP = 38.0V  
 VOC TEMPERATURE COEFFICIENT = -0.31 %/K  
 (0.0031 %/K) \* 38.0 V = 0.1178 V/K  
 STC TEMPERATURE = 25 °C = 298 K  
 THE DIFFERENCE BETWEEN THE STANDARD OPERATING TEMPERATURE AT STC AND THE LOWEST OPERATING TEMPERATURE IN SANTA CLARA IS:  
 $\Delta T = 298 - 266 = 32 \text{ K}$   
 $32 \text{ K} * 0.1178 \text{ V/K} = 3.77 \text{ V}$   
 THE MAXIMUM OPEN CIRCUIT VOLTAGE IS:  $V(\text{DC})_{\text{MAX}} = 38.0 \text{ V} + 3.77 \text{ V} = 41.8 \text{ V}$   
 (41.8 V/PANEL) \* (14 PANELS/STRING) = 585.2V < 600V MAX

**MAXIMUM CURRENT CALCULATIONS**  
 SHORT-CIRCUIT CURRENT (ISC) = MODULE ISC X # OF STRINGS  
 $8.92 \text{ A} * 1.25 = 11.15 \text{ A}$  MAX ISC PER STRING  
 $11.15 \text{ A} * 2 = 22.3 \text{ A}$  MAX ISC FOR THE ARRAY

**3 CALCULATIONS FOR SOLAR ARRAY CONDUCTORS AND GROUND CONDUCTOR SIZING**  
 AMPACITY RATING FOR AWG #10 PV TYPE RHH/RHW-2 PER NEC TABLE 310.15(B)(17): 55A  
 AMBIENT TEMPERATURE CORRECTION FACTOR PER NEC TABLE 310.15(B)(2)(a) = 0.82  
 $55 \text{ A} * 0.82 = 45.1 \text{ A} > 11.15 \text{ A}$  PER STRING

EQUIPMENT GROUNDING:  
 PER NEC 690.47(C), NEC 250.64, 250.120, AND TABLE 250.122  
 #10AWG MINIMUM FOR TOTAL ARRAY AMPERAGE OF 22.3A  
 WE WILL USE AWG #6 BARE COPPER GROUND

**5 WIRE RUN 5: Y-CONNECTORS TO LIQUIDTIGHT J-BOX ABOVE MECHANICAL ROOM**  
 CONDUCTOR & CONDUIT SIZING  
 AWG #10 PV TYPE RHH/RHW-2 RATING IN CONDUIT PER NEC TABLE 310.15(B)(16) = 40A  
 NUMBER OF STRANDS: 7 THICKNESS: 0.075 IN  
 PER NEC TABLE 310.15(B)(3)(a), NO CONDUIT ADJUSTMENT FACTOR IS REQUIRED  
 PER NEC TABLE C.3, A MAX OF 6 CONDUCTORS IS ALLOWED IN 3/4" LIQUIDTIGHT FMC  
 WE WILL HAVE 2 CONDUCTORS PLUS GROUND, WHICH IS LESS THAN THE 10 ALLOWED.

LIQUIDTIGHT JUNCTION BOX:  
 VOLUME = 17 CU IN  
 PER NEC TABLE 314.16(A) AND 314.16(B), MAX NUMBER OF CONDUCTORS IS 7 WHICH IS LESS THAN THE 2 WE WILL USE.

**7 SERVICE ENTRANCE**  
 200A SERVICE ENTRANCE  
 NEC TABLE 310.15(B)(7)  
 CONCLUSION: XHHW ALUMINUM 4/0 SE WIRING FOR UNGROUNDED CONDUCTORS

NEUTRAL CALCULATION:  
 TOTAL CALCULATED NEUTRAL LOAD = 93A  
 NEC TABLE 310.15(B)(7)  
 CONCLUSION: AWG #2 ALUMINUM WIRING FOR GROUNDED CONDUCTOR

**8 MAIN PANEL SUITABILITY**  
 PER NEC 705.12(D)  
 UTILITY BREAKER + SOLAR BREAKER ≤ 120% OF SERVICE-PANEL  
 A 200A UTILITY BREAKER WILL BE USED  
 $200 \text{ A} * \text{SOLAR BREAKER} \leq 1.2 * 200 \text{ A} = 240 \text{ A}$   
 THEREFORE, A 40A SOLAR-BREAKER IS THE MAXIMUM ALLOWABLE.  
 FOR CONVENIENCE, A 30A BREAKER WILL BE USED AS BACK-FED SOLAR BREAKER.

**4 COMBINING THE STRINGS**  
 PER NEC 690.8 OVERCURRENT PROTECTION  
 EXCEPTION: AN OVERCURRENT DEVICE SHALL NOT BE REQUIRED FOR PV MODULES OR PV SOURCE CIRCUIT CONDUCTORS SIZED IN ACCORDANCE WITH 690.8(B) WHERE ONE OF THE FOLLOWING APPLIES.  
 (A) THERE ARE NO EXTERNAL SOURCES SUCH AS PARALLEL-CONNECTED SOURCE CIRCUITS, BATTERIES, OR BACKFEED FROM INVERTERS.  
 (B) THE SHORT-CIRCUIT CURRENTS FROM ALL SOURCES DO NOT EXCEED THE AMPACITY OF THE CONDUCTORS OR THE MAXIMUM OVER-CURRENT PROTECTIVE DEVICE SIZE SPECIFIED ON THE PV MODULE.  
 THEREFORE, THE TWO STRINGS WILL BE COMBINED USING Y-CONNECTORS- ONE FOR POSITIVE AND ONE FOR NEGATIVE.  
 PER MANUFACTURER SPECIFICATIONS FOR Y-CONNECTORS, MAXIMUM CURRENT ALLOWED THROUGH CONNECTORS IS 30A AND SUITABLE CABLE IS AWG #14/12/10.  
 $30 \text{ A} > 2 \text{ STRINGS} * \text{ISC PER STRING} = 2 * 11.15 \text{ A} = 22.3 \text{ A}$

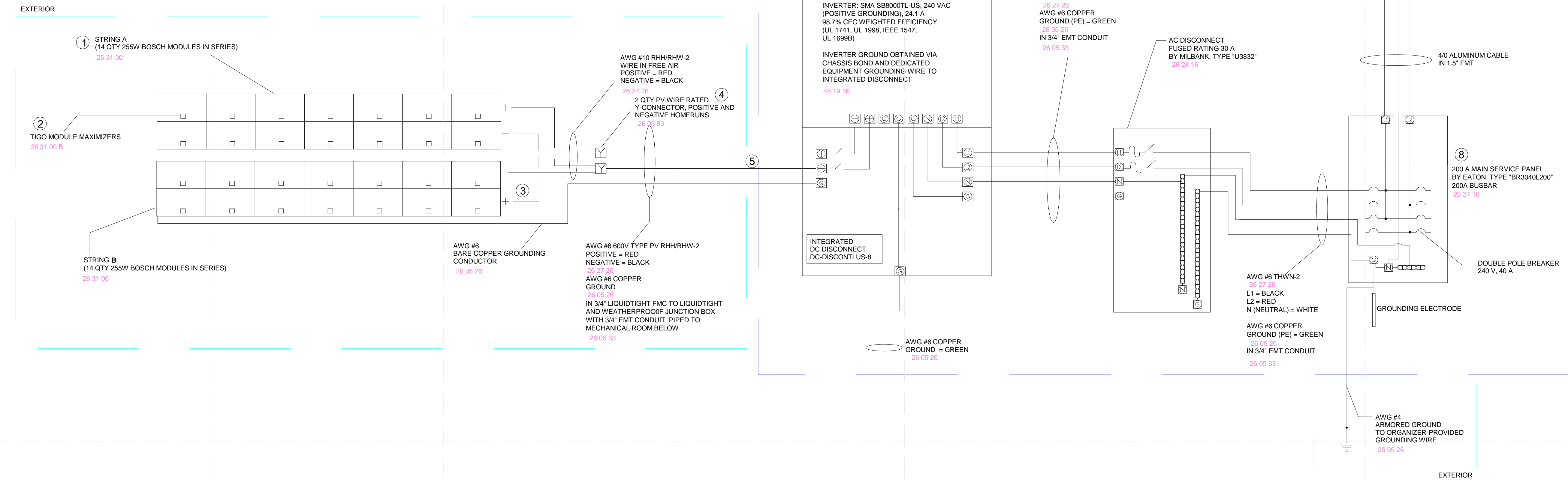
CONDUCTOR SIZING:  
 AWG #10 PV TYPE RHH/RHW-2 RATING PER NEC TABLE 310.15(B)(17) = 55A  
 2 STRINGS \* 11.15A = 22.3A < 30A ALLOWED BY MANUFACTURER < 55A CONDUCTOR RATING  
 AWG #10 IS THEREFORE SUITABLE FOR THIS USE.

**6 INVERTER SUITABILITY**  
 MAX CURRENT INPUT PER STRING = 24.1A > 22.3A OF THE ARRAY

OUTPUT CURRENT:  
 CIRCUIT SIZING NEC 690.8(A) AND (B)  
 TOTAL INVERTER OUTPUT = 800W/240V = 33.4A  
 (TOTAL INVERTER OUTPUT) \* (CORRECTION FACTOR) = NEC RATING  
 $33.4 \text{ A} * 1.25 = 41.75 \text{ A}$

GROUNDING:  
 EQUIPMENT GROUNDING CONDUCTOR: AWG #6 COPPER FOR A 60 A BREAKER PER NEC TABLE 250.122  
 GROUNDING ELECTRODE CONDUCTOR: AWG #6 PER NEC 690.47(B) AND TABLE 250.66

**2 TIGO MODULE MAXIMIZERS**  
 EACH BOSCH 255W PANEL WILL HAVE ONE MODULE MAXIMIZER MM-ESS0 ATTACHED FOR A TOTAL OF 28 MAXIMIZERS.  
 ACCORDING TO SPECIFICATIONS, MAXIMUM POWER PER MODULE IS 300W (WHICH EXCEEDS MAX POWER FOR BOSCH 255W MODULES), AND MAX CONTINUOUS CURRENT ISC IS 10A (WHICH ALSO EXCEEDS BOSCH 255W ISC OF 8.92A).  
 COMPLIANCE PER UL1741  
 PANEL CONNECTOR: NEC 2008 COMPLIANT, MC4 COMPATIBLE  
 BUS CONNECTOR: NEC 2008 COMPLIANT 40AMP



**(A1) THREE LINE DIAGRAM**  
 3" = 1'-0"

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**REFERENCE KEYNOTES**

25 35 16.A1 TEMPERATURE/HUMIDITY SENSOR

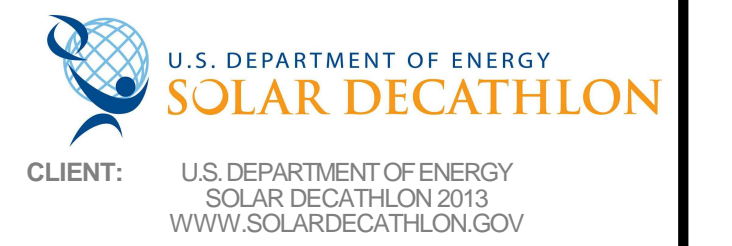
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**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

**SHEET KEYNOTES**

49 SENSORS BUILT IN TO THERMOSTAT



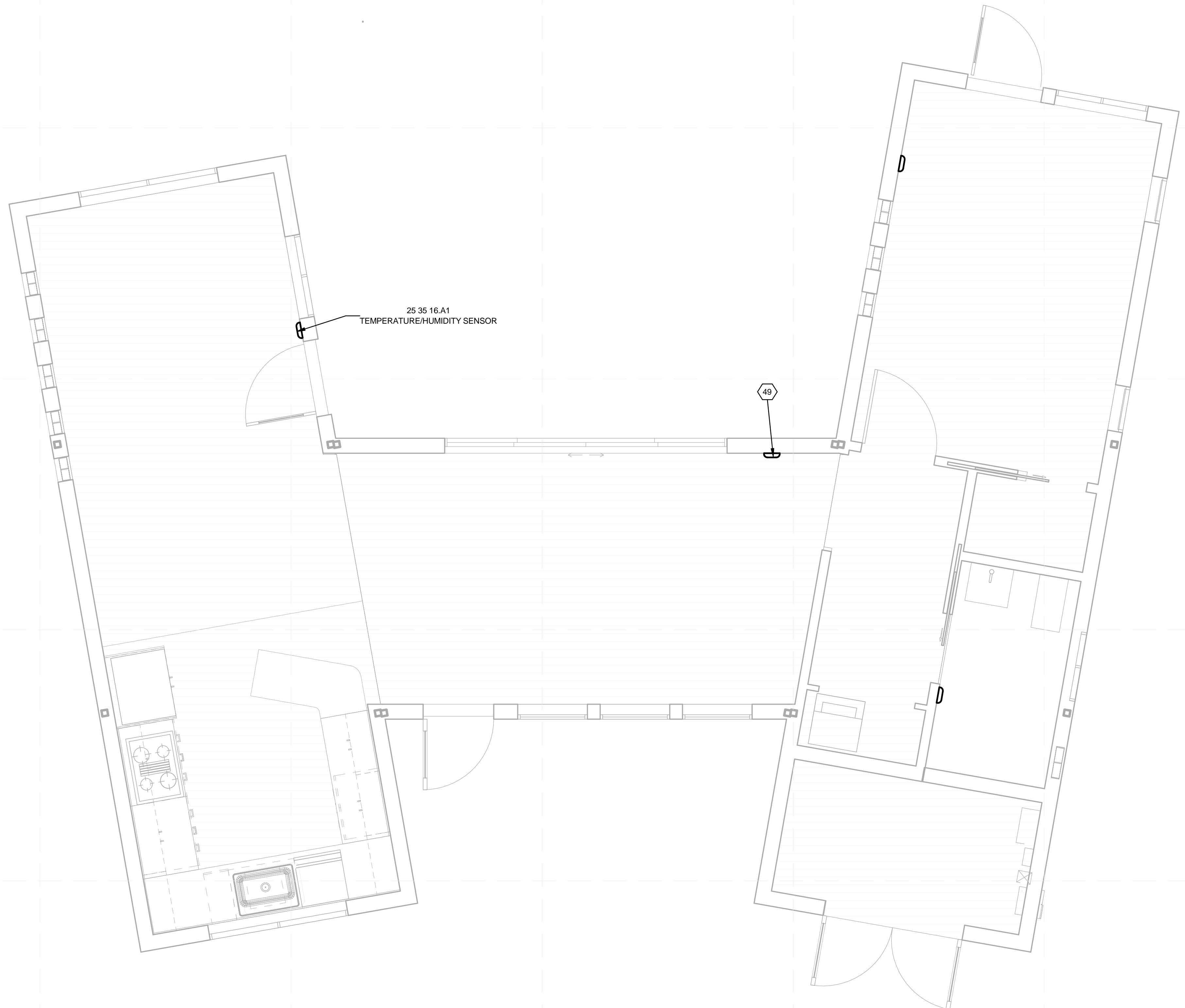
CLIENT: U.S. DEPARTMENT OF ENERGY  
 SOLAR DECATHLON 2013  
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08/22/13	DOE AS BUILT SUBMISSION
08/12/13	AS BUILT REVISIONS
08/06/13	CD CITY INSPECTION 3
07/26/13	CD CITY INSPECTION 2
07/19/13	CD CITY INSPECTION
05/10/13	CD RESUBMISSION 2
04/04/13	CD RESUBMISSION
02/14/13	CD SUBMISSION
11/20/12	DD RESUBMISSION
10/11/12	DD SUBMISSION

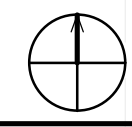
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 LOT NUMBER: 118  
 DRAWN BY: PT  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**SENSOR LOCATIONS**

**T-101**



**A2** SENSOR LOCATION  
 3/8" = 1'-0"



8/22/2013 1:32:36 PM





**REFERENCE KEYNOTES**

25 13 00.A2	RASPBERRY PI SERVER
25 13 00.A5	MOTORIZED AWNING WINDOW
25 13 00.A6	MOTORIZED SLIDING DOOR
25 13 00.A7	MOTORIZED ROLLER BLINDS

TEAM NAME: SANTA CLARA  
 ADDRESS: 500 EL CAMINO REAL  
 SANTA CLARA, CA  
 95051  
 CONTACT: SCUSOLAR13@GMAIL.COM  
 WWW.SD13.SCU.EDU

CONSULTANTS:  
**MESSANA**  
 2224 ALBERTA LANE  
 CAPITOLA CA 95010  
**WALSCHON FIRE PROTECTION INC.**  
 1015 TERMINAL WAY  
 SAN CARLOS, CA 94070  
**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

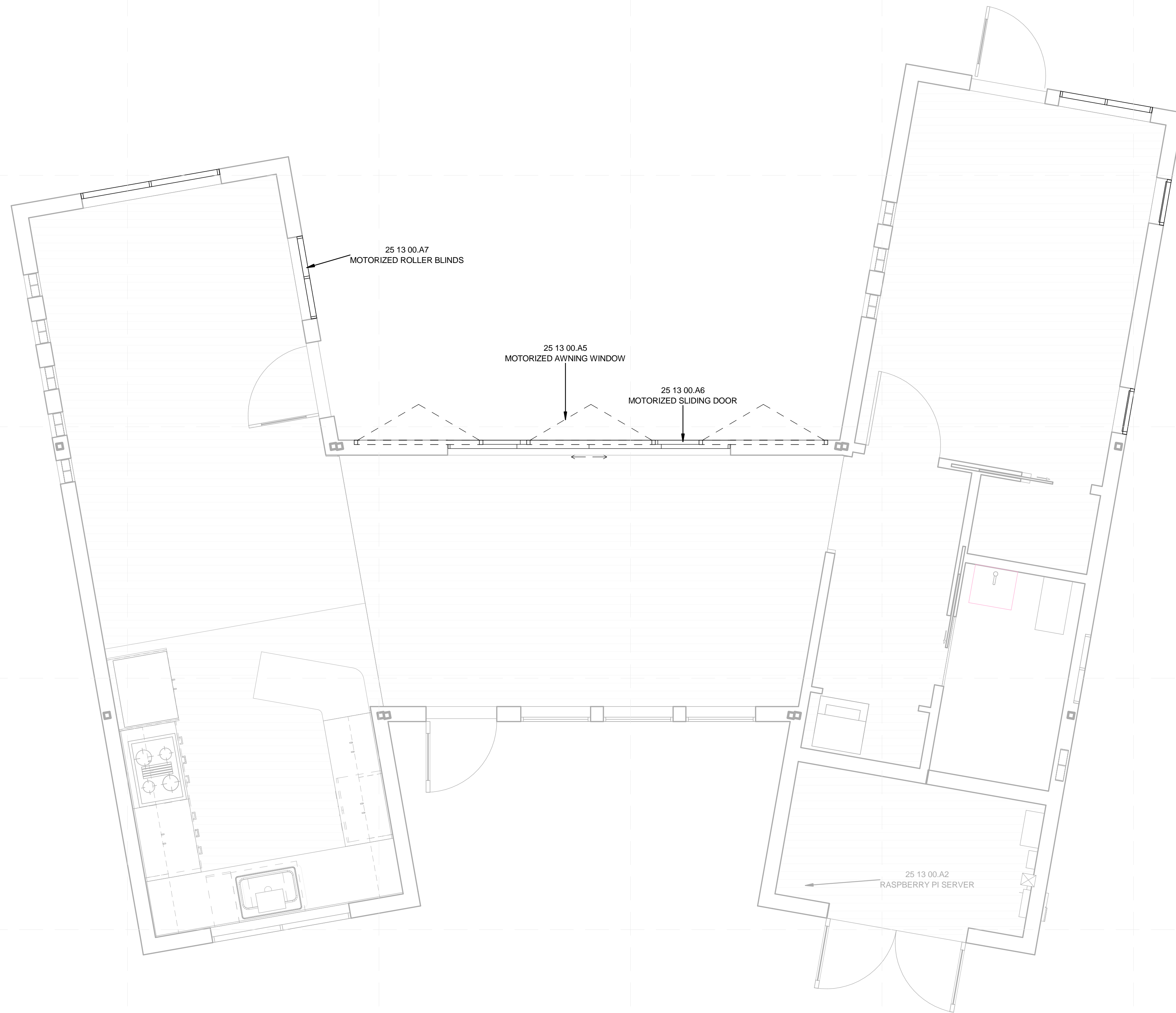
U.S. DEPARTMENT OF ENERGY  
**SOLAR DECATHLON**  
 CLIENT: U.S. DEPARTMENT OF ENERGY  
 SOLAR DECATHLON 2013  
 WWW.SOLARDECATHLON.GOV

MARK	DATE	DESCRIPTION
	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: PT  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**CONTROL SYSTEM  
 HARDWARE LOCATION**

**T-102**



**(A1) CONTROL SYSTEM PLAN**  
 3/8" = 1'-0"

8/22/2013 1:32:37 PM

**GENERAL SHEET NOTES**

1. PUBLIC EXHIBIT SIGNAGE IS TO NOT EXTEND BEYOND THE SOLAR ENVELOPE



TEAM NAME: SANTA CLARA  
 ADDRESS: 500 EL CAMINO REAL  
 SANTA CLARA, CA  
 95051  
 CONTACT: SCUSOLAR13@GMAIL.COM  
 WWW.SD13.SCU.EDU

CONSULTANTS:  
**MESSANA**  
 2224 ALBERTA LANE  
 CAPITOLA CA 95010  
**WALSCHON FIRE PROTECTION INC.**  
 1015 TERMINAL WAY  
 SAN CARLOS, CA 94070  
**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

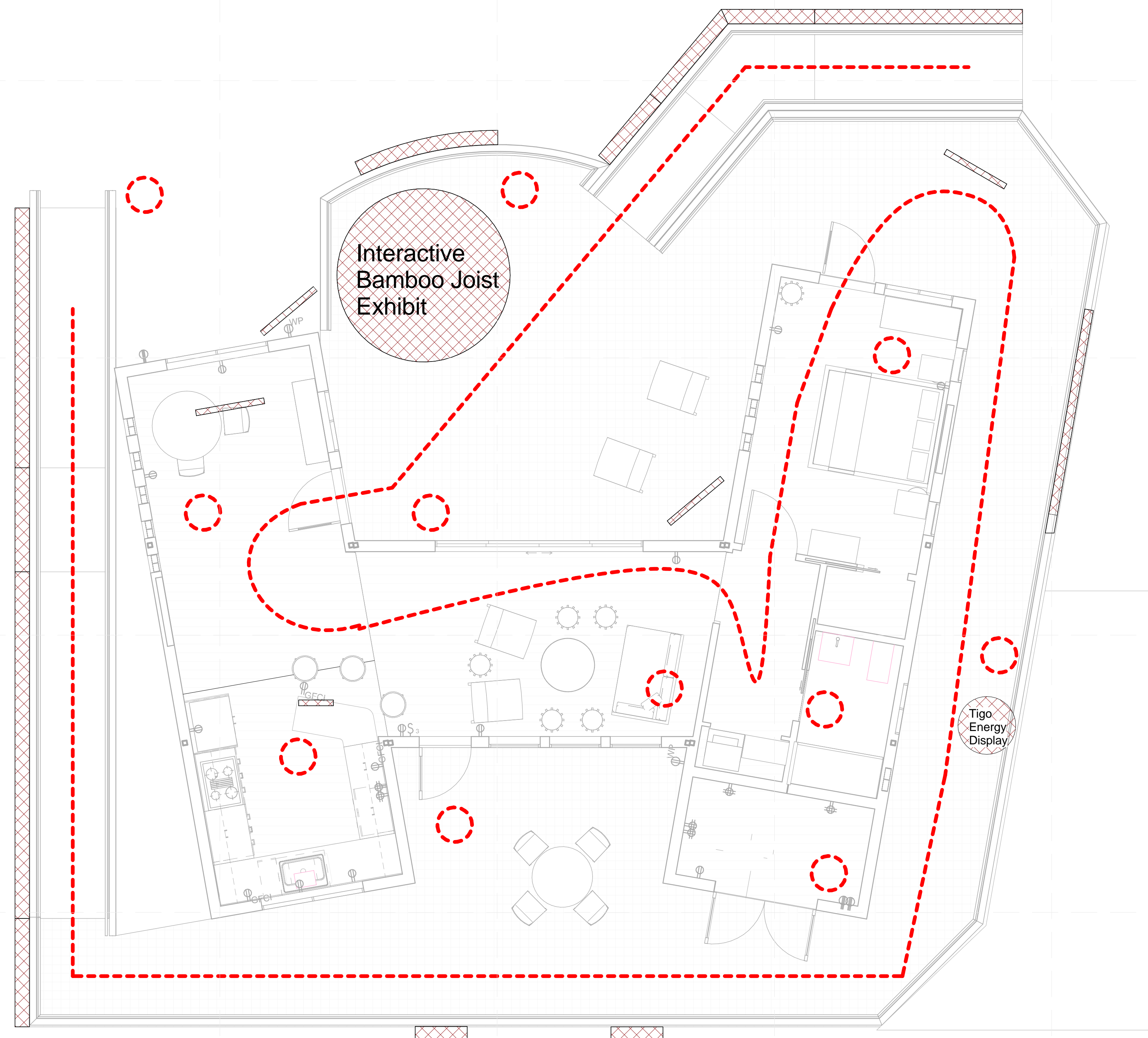
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**SOLAR DECATHLON**  
 CLIENT: U.S. DEPARTMENT OF ENERGY  
 SOLAR DECATHLON 2013  
 WWW.SOLARDECATHLON.GOV

MARK	DATE	DESCRIPTION
	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

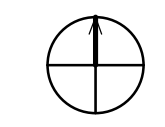
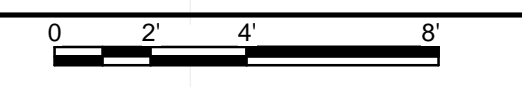
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 DRAWN BY: PT  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

SHEET TITLE:  
**PUBLIC EXHIBIT SIGNAGE**

**X-101**

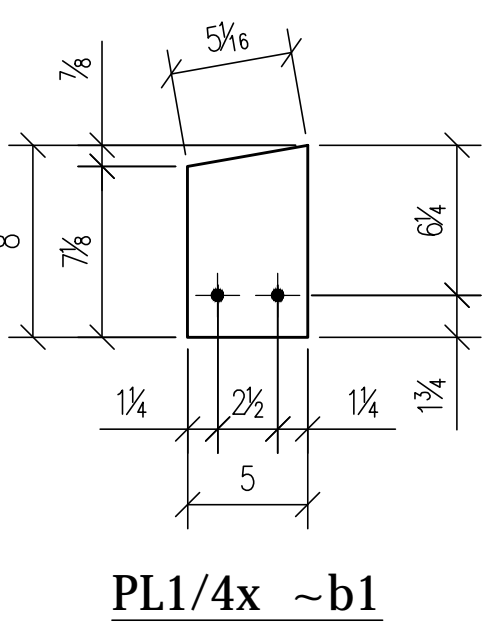
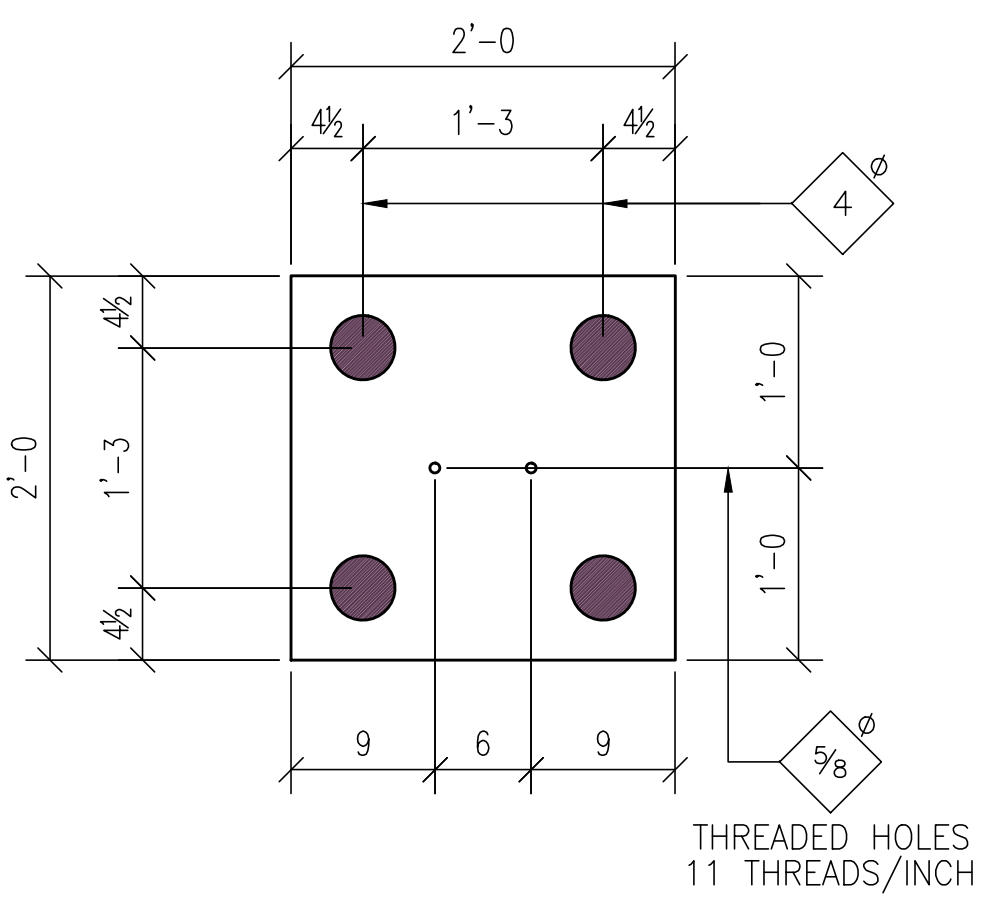
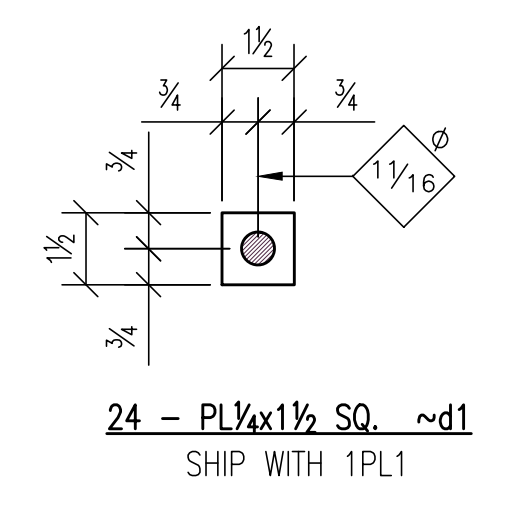
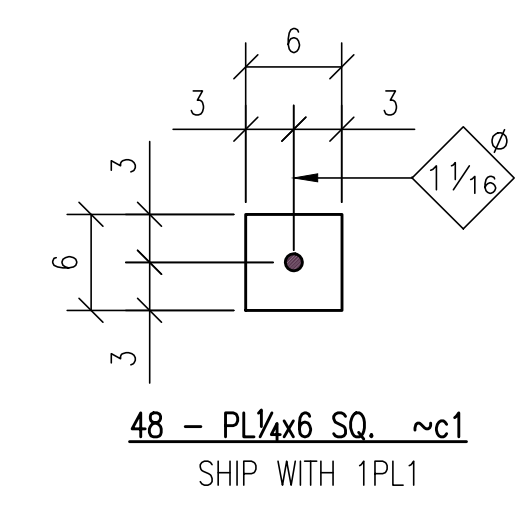
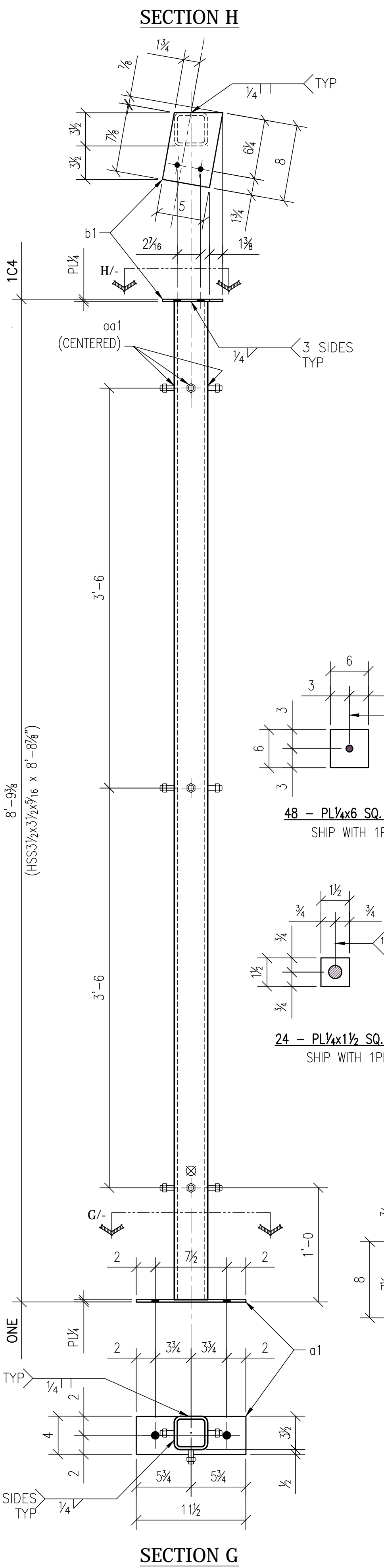
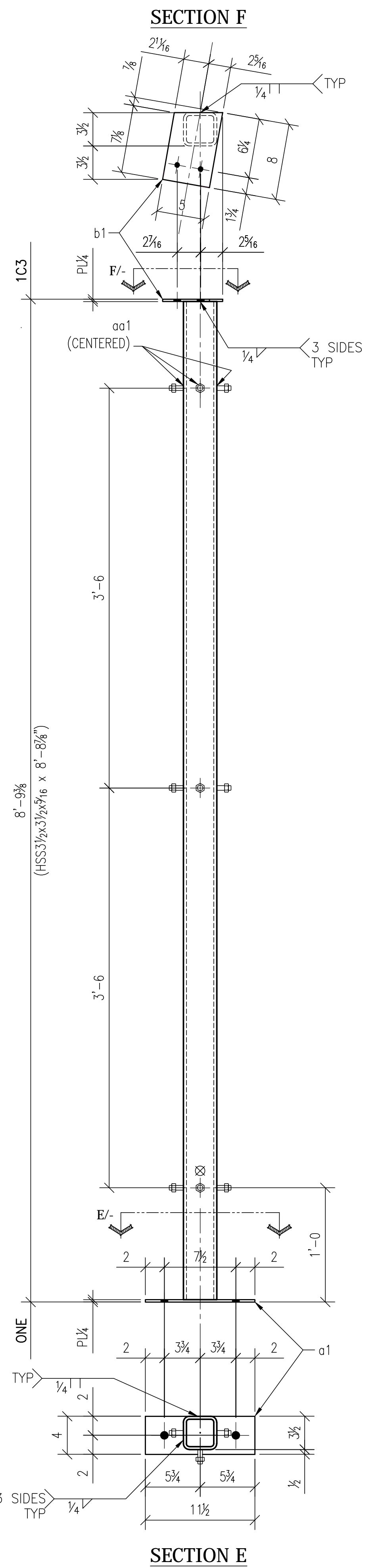
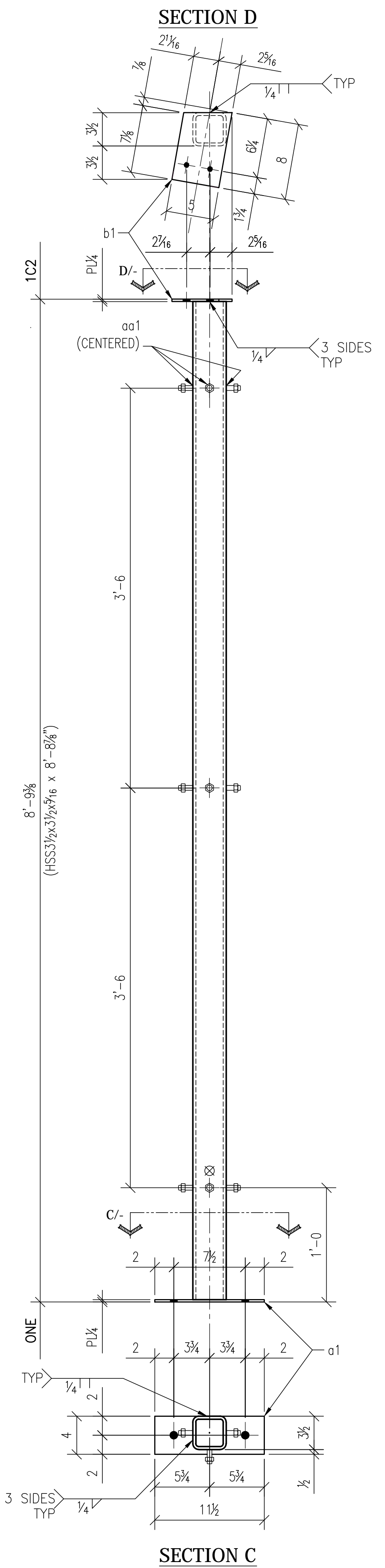
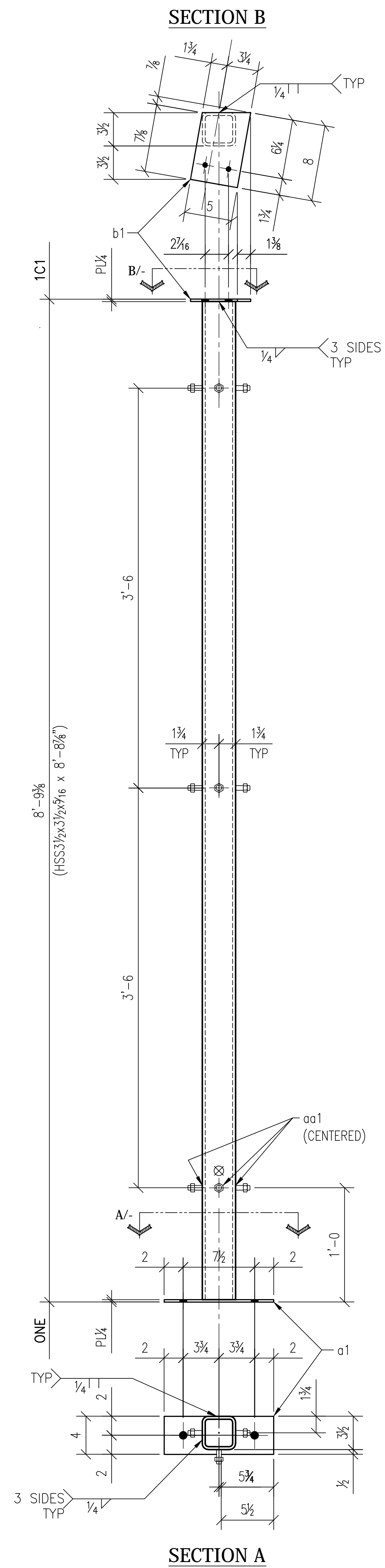


**A2 PUBLIC EXHIBIT SIGNAGE**  
 1/4" = 1'-0"



8/22/2013 1:32:41 PM





BILL OF MATERIAL						
SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
1C1		1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	9	1/2 x STUDS	0'-1 1/2	A307	NELSON
1C2		1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	9	1/2 x STUDS	0'-1 1/2	A307	NELSON
1C3		1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	9	1/2 x STUDS	0'-1 1/2	A307	NELSON
1C4		1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	9	1/2 x STUDS	0'-1 1/2	A307	NELSON
	1PL1	12	PL 1/2 x 24	2'-0	A36	SHIP LOOSE
	c1	48	PL 1/4 x 6	0'-6	A36	SHIP LOOSE
	d1	24	PL 1/4 x 1 1/2	0'-1 1/2	A36	SHIP LOOSE
FIELD BOLTS						
		8	1/2 x M.B.	0'-1 1/2	A307	
		8	1/2 x WASHER			HILLSIDE WASHER
	1PL1	24	9/8 x M.B.	0'-3/4	A307	



FOR FABRICATION

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/17	CGA	4/17
2	REVISIONS PER SCU DATED 4/10	CGA	4/10
3	REVISIONS PER SCU DATED 4/8	CGA	4/9

PAINT: S/C PRIMER

9/16 HOLES TYP. UNLESS OTHERWISE NOTED

CHECKED BY: SB DATE: 4/17

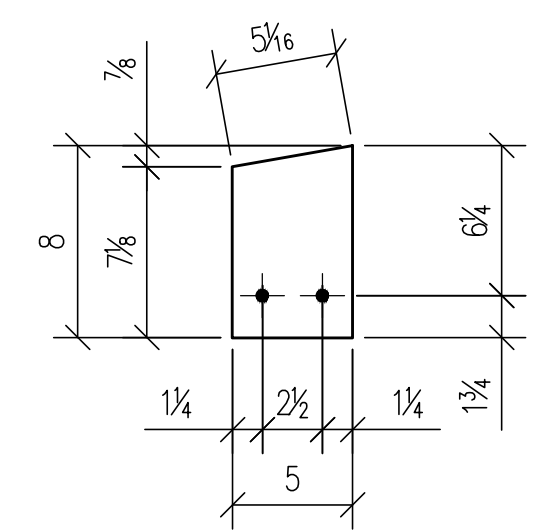
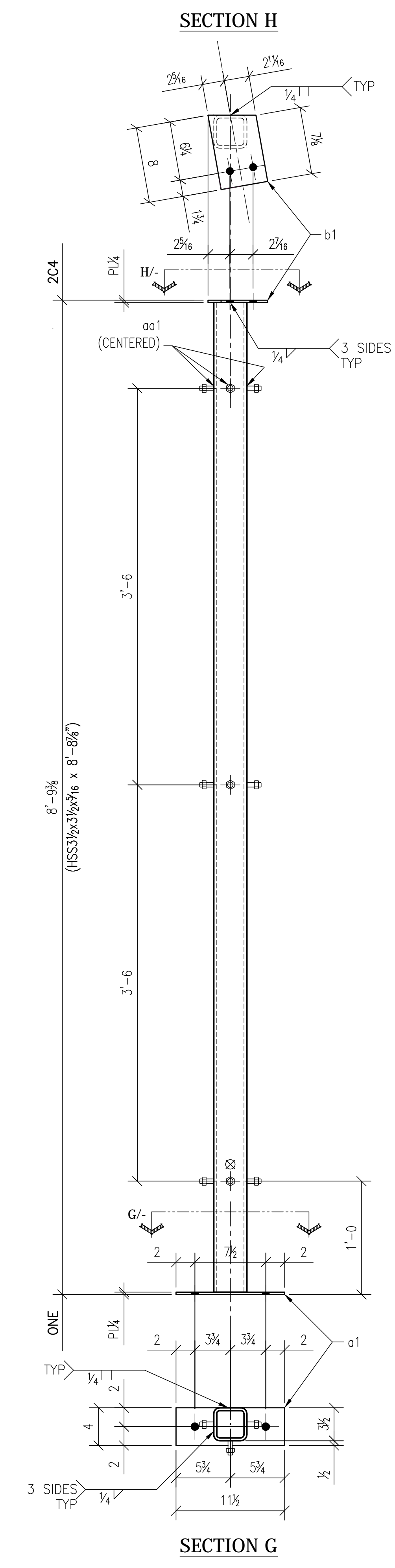
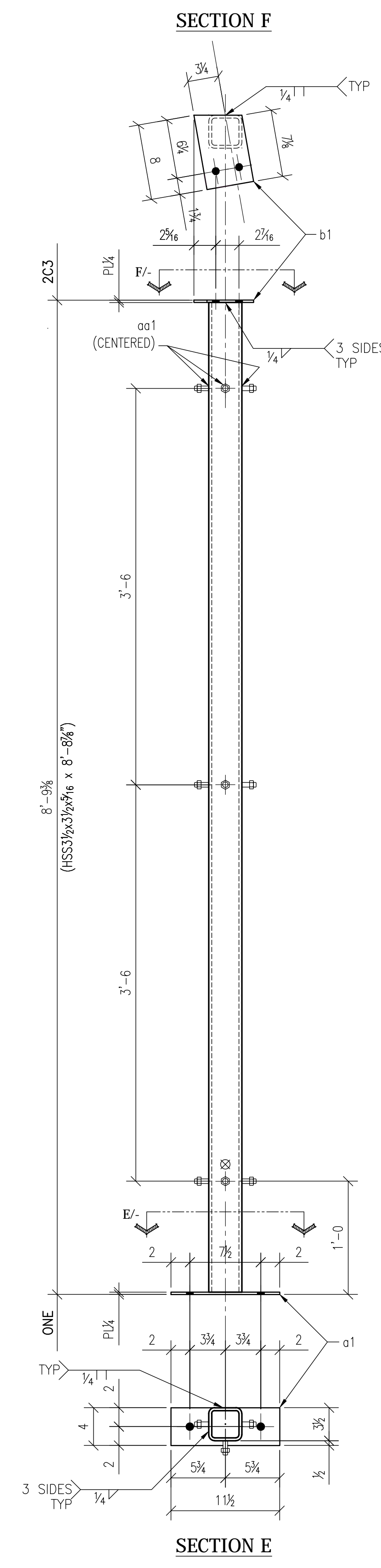
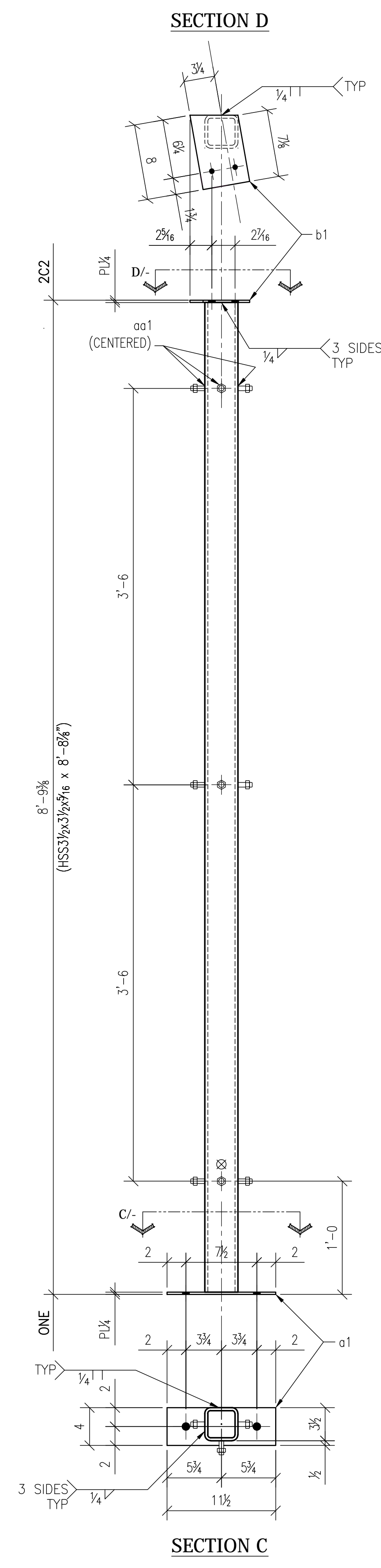
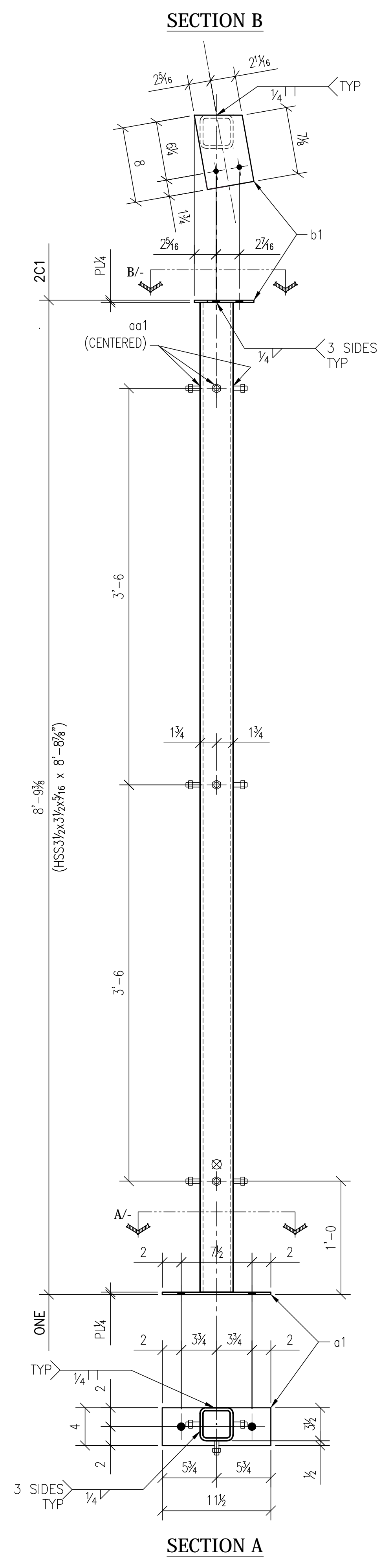


1160 RICHARD AVE. SANTA CLARA CA. 95050  
 PHONE (408) 727-6363 FAX (408) 727-1372

SUBMITTED	4/11
SHOP-FAB	4/17

**BILL OF MATERIAL**

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
2C1		1	HSS3 1/2 x 3 1/2 x 9/16	8'-8 7/8"	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2"	A36	
	b1	1	PL 1/4 x 5	0'-8"	A36	
	aa1	9	1/2" STUDS	0'-1 1/2"	A307	NELSON
2C2		1	HSS3 1/2 x 3 1/2 x 9/16	8'-8 7/8"	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2"	A36	
	b1	1	PL 1/4 x 5	0'-8"	A36	
	aa1	9	1/2" STUDS	0'-1 1/2"	A307	NELSON
2C3		1	HSS3 1/2 x 3 1/2 x 9/16	8'-8 7/8"	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2"	A36	
	b1	1	PL 1/4 x 5	0'-8"	A36	
	aa1	9	1/2" STUDS	0'-1 1/2"	A307	NELSON
2C4		1	HSS3 1/2 x 3 1/2 x 9/16	8'-8 7/8"	A500	
	a1	1	PL 1/4 x 4	0'-11 1/2"	A36	
	b1	1	PL 1/4 x 5	0'-8"	A36	
	aa1	9	1/2" STUDS	0'-1 1/2"	A307	NELSON
<b>FIELD BOLTS</b>						
--		8	1/2" M.B.	0'-1 1/2"	A307	
		8	1/2" WASHER			HILLSIDE WASHER



PL 1/4 x ~b1



**FOR FABRICATION**

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

NO. 05/13  
 DRAWN BY: CGA  
 DRW. NO.: D2  
 JOB NO.: 9732



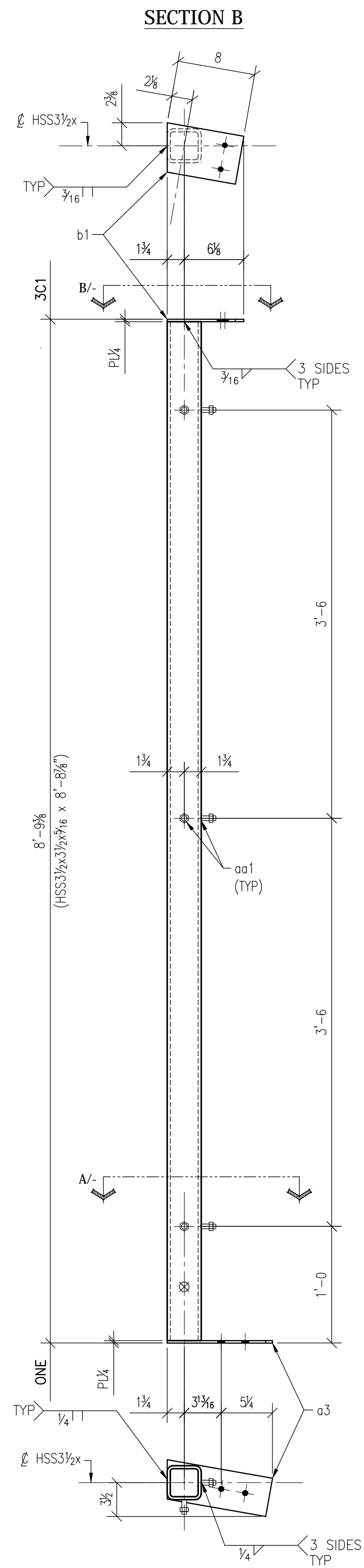
1160 RICHARD AVE. SANTA CLARA CA. 95050  
 PHONE: (408) 727-6363 FAX: (408) 727-1372

NO.	REVISION	BY	DATE

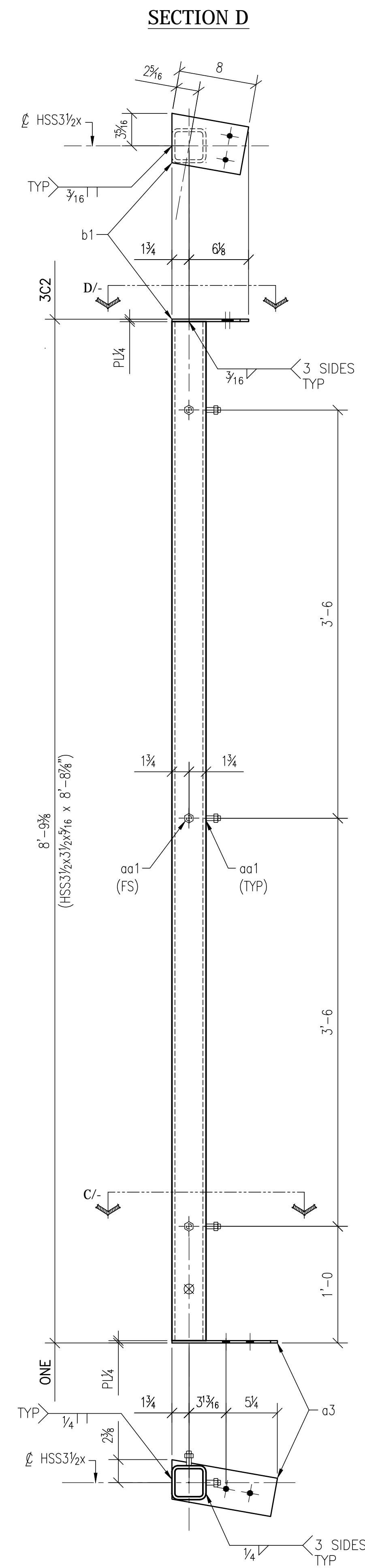
SUBMITTED	4/11
SHOP-FAB	4/17

9/16 Ø HOLES TYP. UNLESS OTHERWISE NOTED  
 CHECKED BY: SB DATE: 4/17

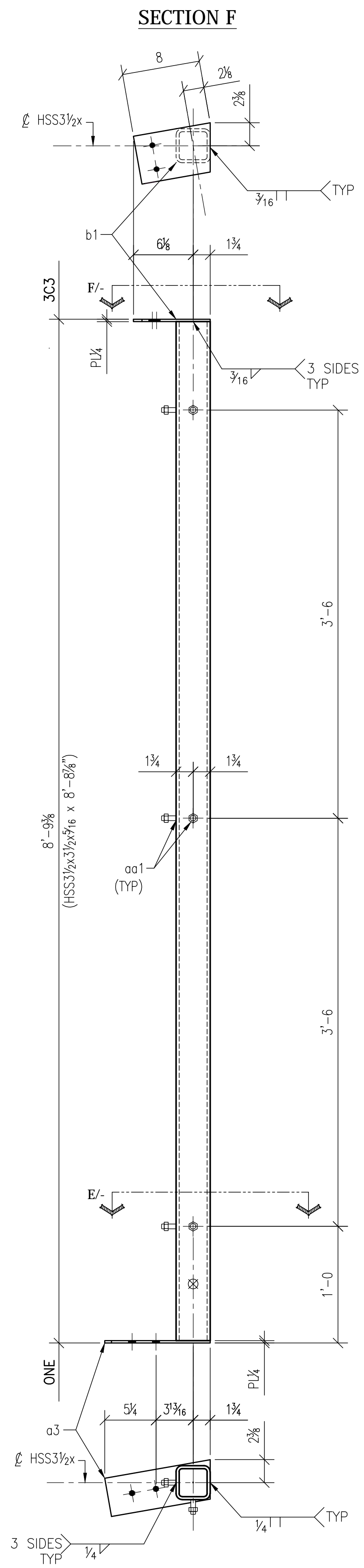




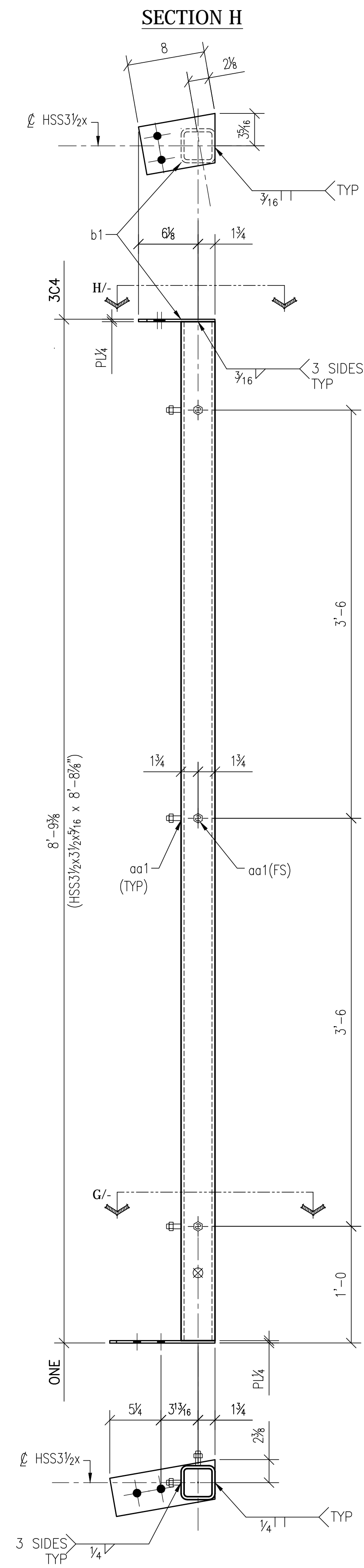
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SECTION C



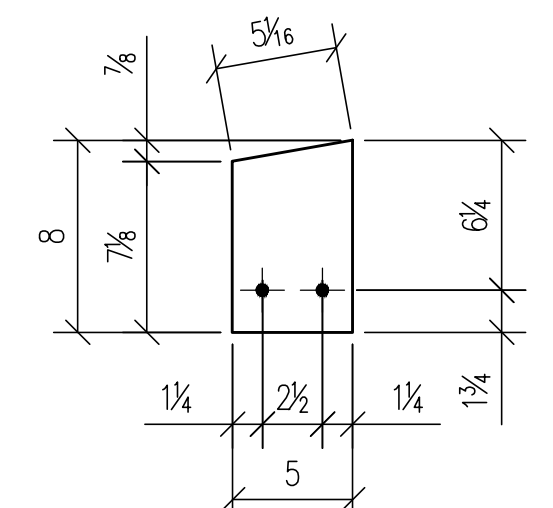
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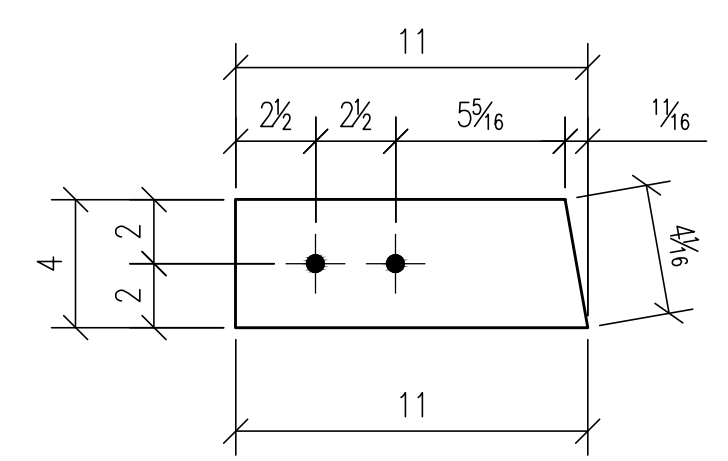
SECTION G

BILL OF MATERIAL

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
	3C1	1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a3	1	PL 1/4 x 4	0'-11	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	6	1/2" STUDS	0'-1 1/2	A307	NELSON
	3C2	1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a3	1	PL 1/4 x 4	0'-11	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	6	1/2" STUDS	0'-1 1/2	A307	NELSON
	3C3	1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a3	1	PL 1/4 x 4	0'-11	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	6	1/2" STUDS	0'-1 1/2	A307	NELSON
	3C4	1	HSS 3 1/2 x 3 1/2 x 3/16	8'-8 7/8	A500	
	a3	1	PL 1/4 x 4	0'-11	A36	
	b1	1	PL 1/4 x 5	0'-8	A36	
	aa1	6	1/2" STUDS	0'-1 1/2	A307	NELSON
<b>FIELD BOLTS</b>						
	--	8	1/2" M.B.	0'-1 1/2	A307	
		8	1/2" WASHER			HILLSIDE WASHER



PL 1/4 x ~b1



PL 1/4 x ~a3



FOR FABRICATION

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

DETAILED: 05/13  
 DRAWN BY: CGA  
 DRW. NO.: D3  
 JOB NO.: 9732



1160 RICHARD AVE. SANTA CLARA, CA. 95050  
 PHONE: (408) 727-6363 FAX: (408) 727-1372

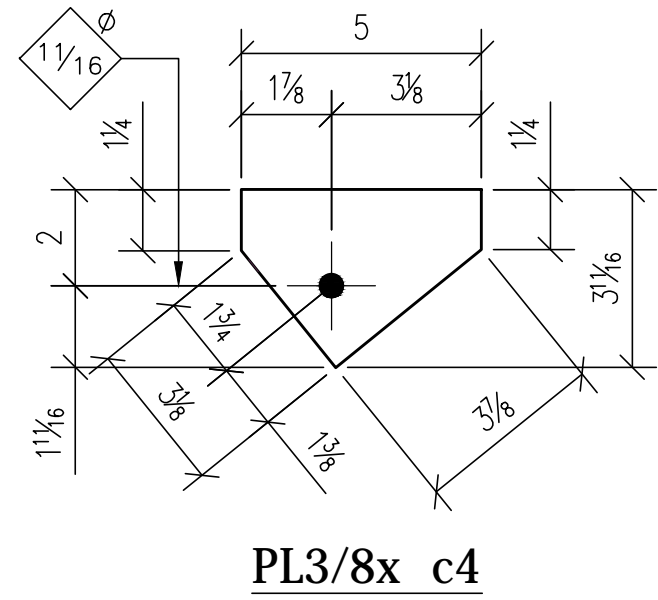
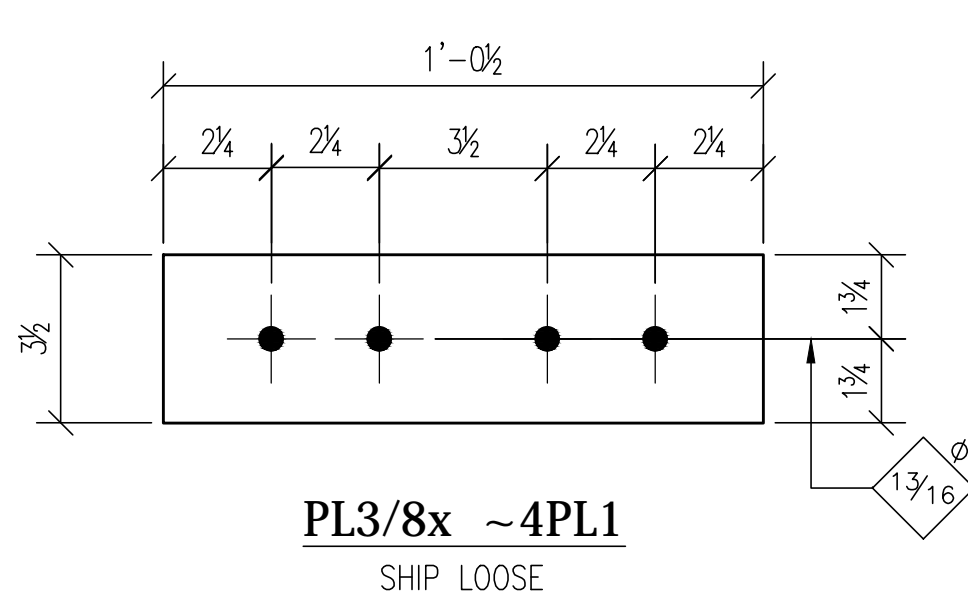
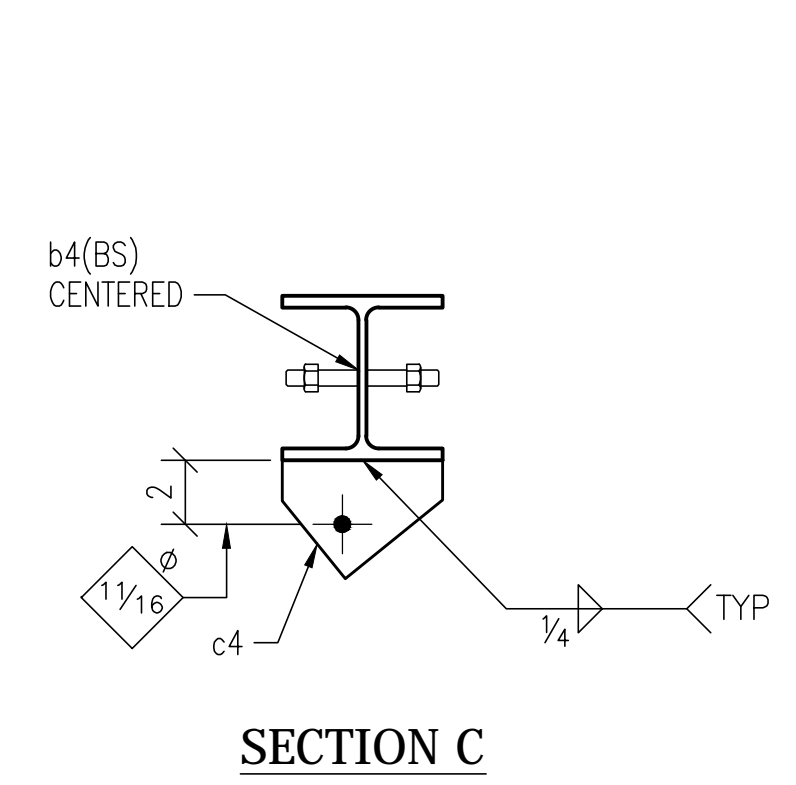
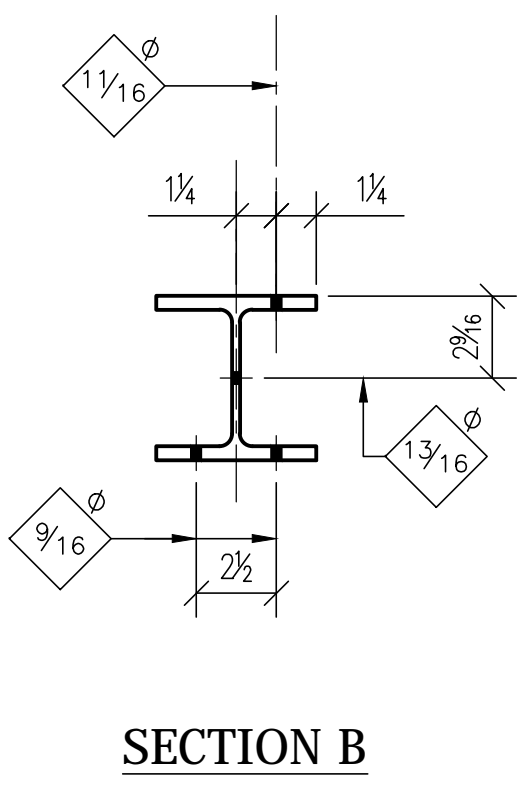
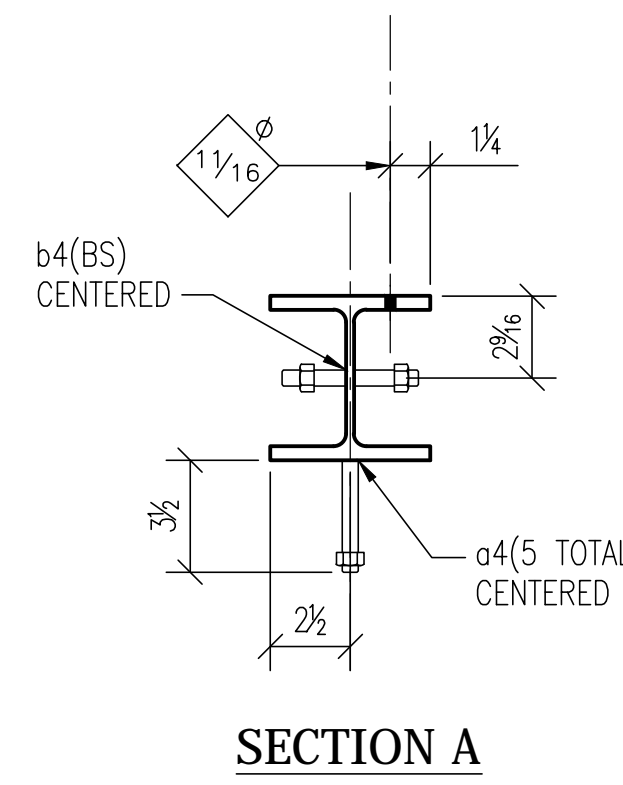
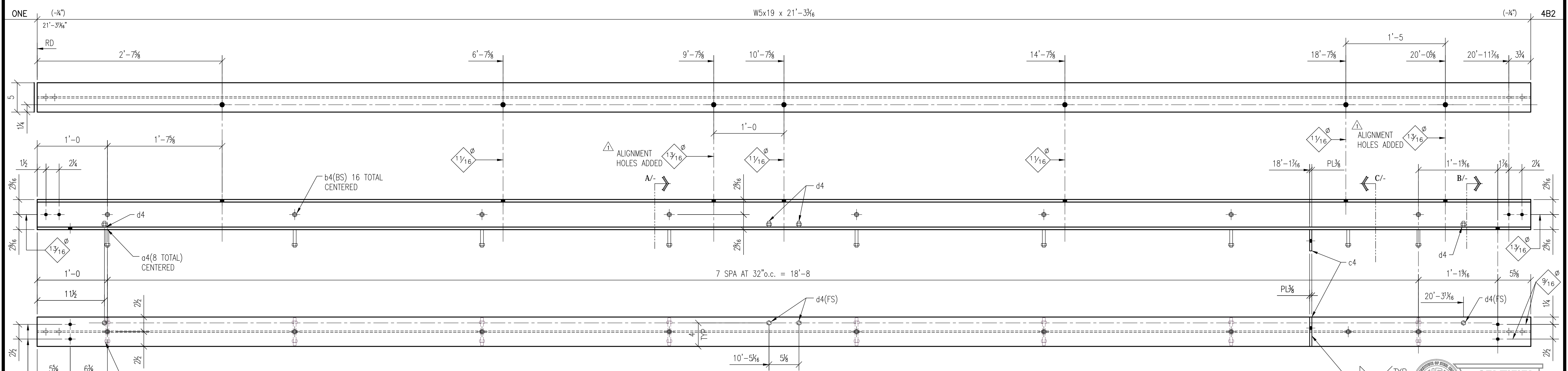
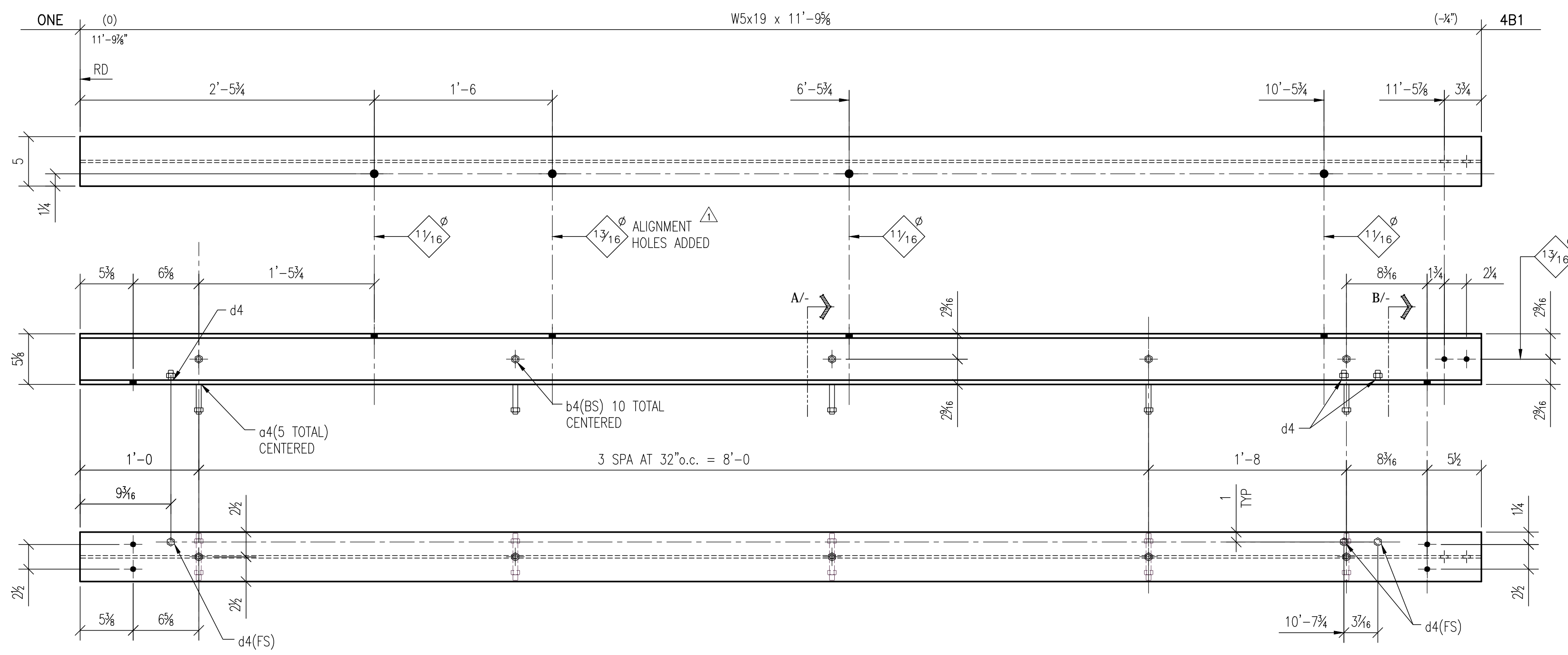
NO.	REVISION	BY	DATE

S/C PRIMER

9/16 Ø HOLES TYP. UNLESS OTHERWISE NOTED

CHECKED BY: SB DATE: 4/17

SUBMITTED	4/11
SHOP-FAB	4/17



**BILL OF MATERIAL**

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
4B1		1	W5x19	11'-9 5/8"	A992	
	a4	5	1/2" STUDS	0'-3 1/2"	A307	NELSON
	b4	10	1/2" STUDS	0'-2"	A307	NELSON
	d4	3	1/2" STUDS	0'-1"	A307	NELSON
4B2		1	W5x19	21'-3 5/8"	A992	
	a4	8	1/2" STUDS	0'-3 1/2"	A307	NELSON
	b4	16	1/2" STUDS	0'-2"	A307	NELSON
	c4	1	PL 3/8x3 1/16"	0'-5"	A36	
	d4	4	1/2" STUDS	0'-1"	A307	NELSON
4PL1		2	PL 3/8x3 1/2"	1'-0 1/2"	A36	SHIP LOOSE

**FIELD BOLTS**

4B1		4	1/2" M.B.	0'-1 1/2"	A307	
4B2		4	1/2" M.B.	0'-1 1/2"	A307	
4PL1		8	7/4" M.B.	0'-1 1/2"	A490	

W5x19  
W 5 7/8 x 1/4 ( 1/8 )  
F 5 x 7/16

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/8	CGA	4/9
PANT S/C PRIMER			
1 1/16" HOLES TYP. UNLESS OTHERWISE NOTED			

**FOR FABRICATION**

JOB NAME: RADIANT HOUSE  
SANTA CLARA UNIVERSITY  
ADDRESS: SANTA CLARA, CA  
CONTRACTOR: SANTA CLARA UNIVERSITY

DETAILED: 05/13  
DRAWN BY: CGA  
DRW. NO.: D4  
JOB NO.: 9732

**SOMERS O'REAR STEPHAN**  
**S.O.S. STEEL CO. INC.**  
ESTABLISHED 1946

1160 RICHARD AVE. SANTA CLARA CA. 95050  
PHONE:(408)727-6363 FAX:(408)727-1372

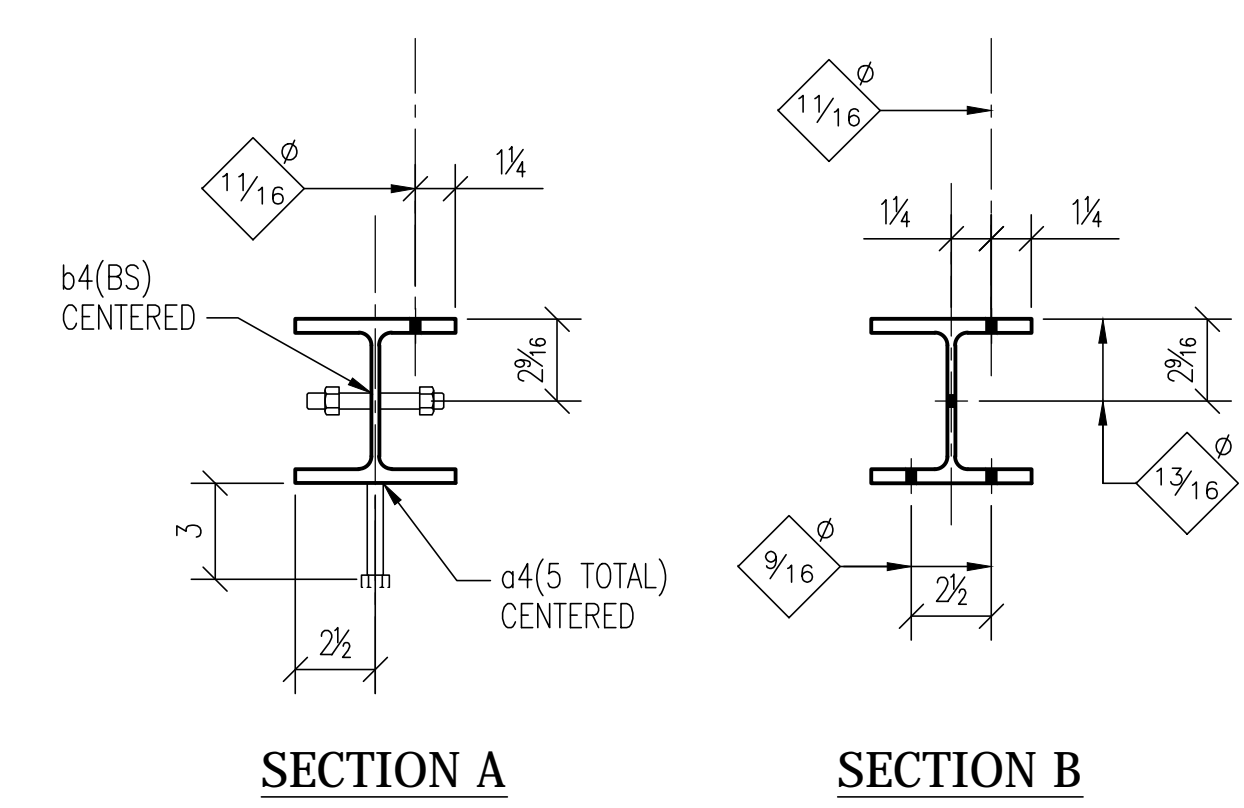
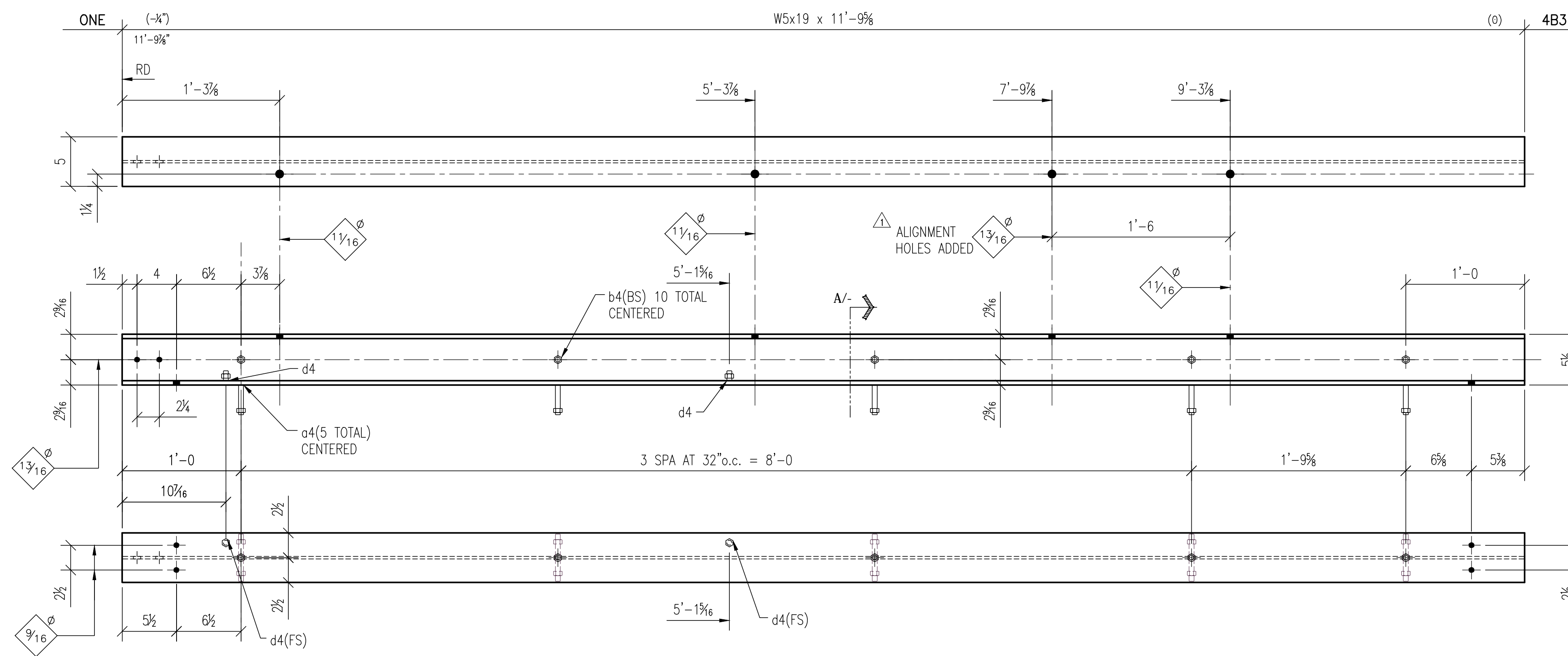
SUBMITTED 4/11  
SHOP-FAB 4/17

CHECKED BY: SB DATE: 4/17



**BILL OF MATERIAL**

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
4B3		1	W5x19	11'-9 $\frac{3}{8}$ "	A992	
	a4	5	1/2" x STUDS	0'-3 1/2"	A307	NELSON
	b4	10	1/2" x STUDS	0'-2"	A307	NELSON
	d4	2	1/2" x STUDS	0'-1"	A307	NELSON
<b>FIELD BOLTS</b>						
4B3		2	3/4" M.B.	0'-1 1/2"	A490	
		4	1/2" x M.B.	0'-1 1/2"	A307	



**FOR FABRICATION**

W5x19  
 W 5/8 x 1/4 ( 1/8 )  
 F 5 x 7/16

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/8	CGA	4/9
PAINT: S/C PRIMER			
1 1/16" HOLES TYP. UNLESS OTHERWISE NOTED			



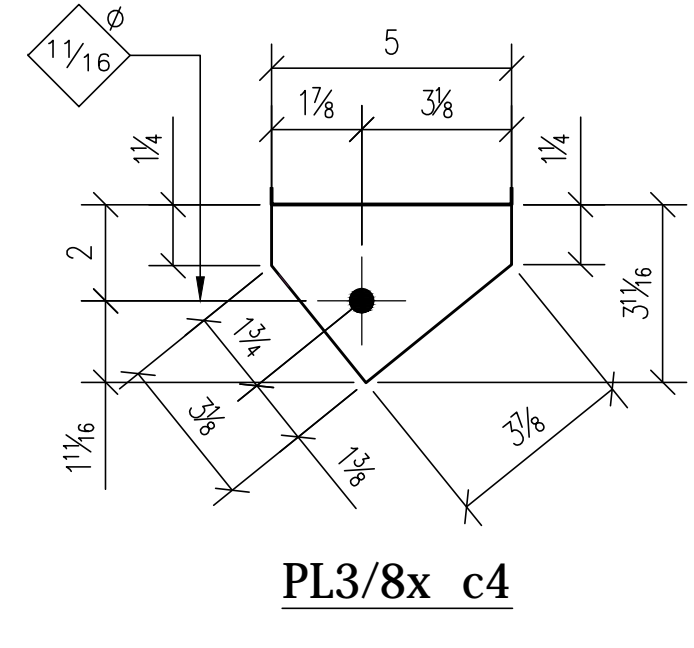
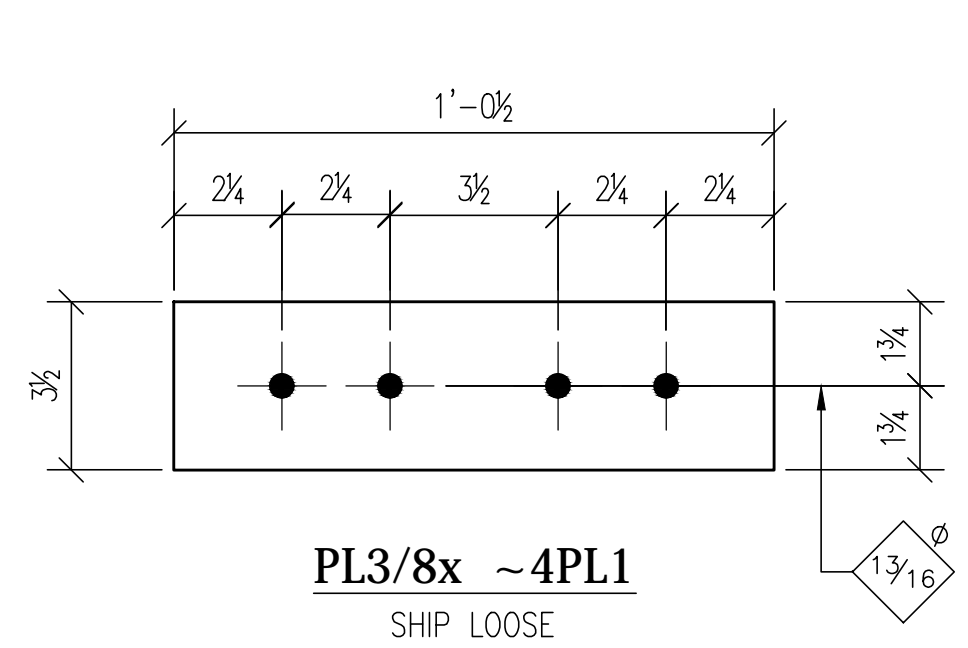
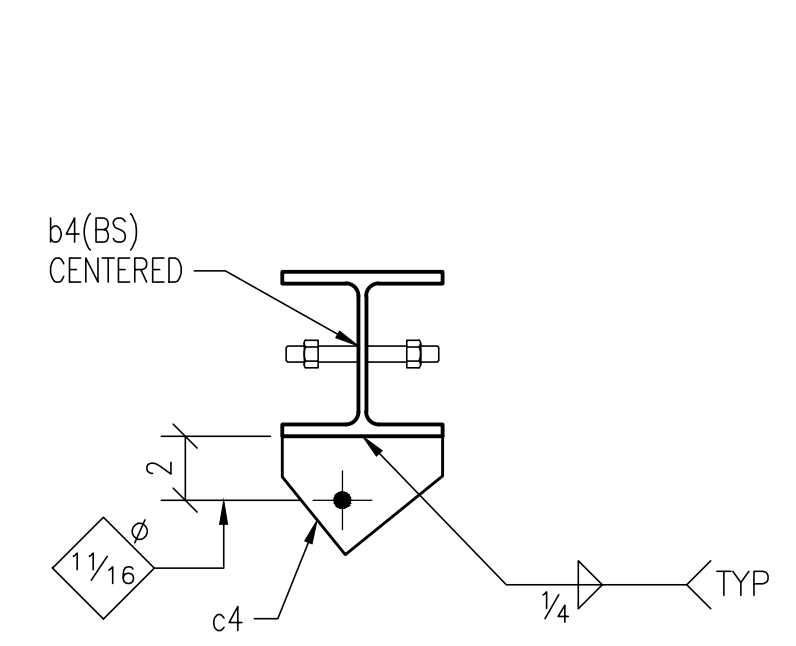
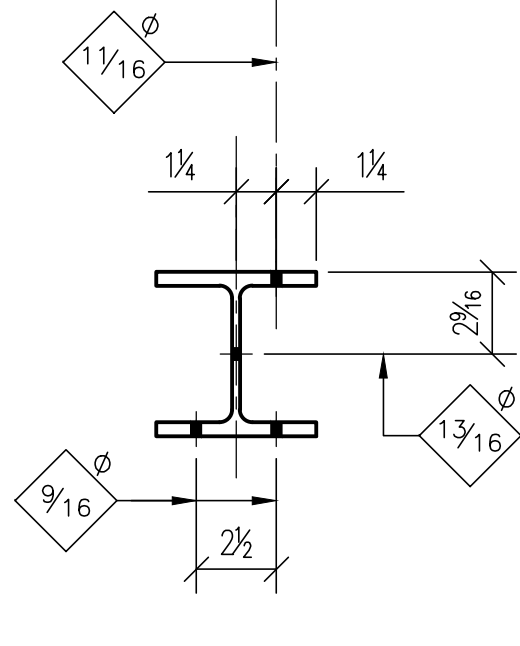
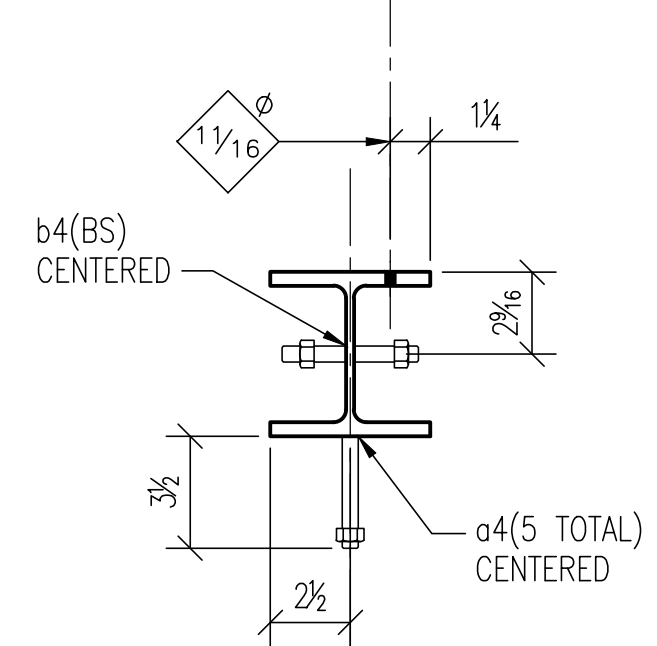
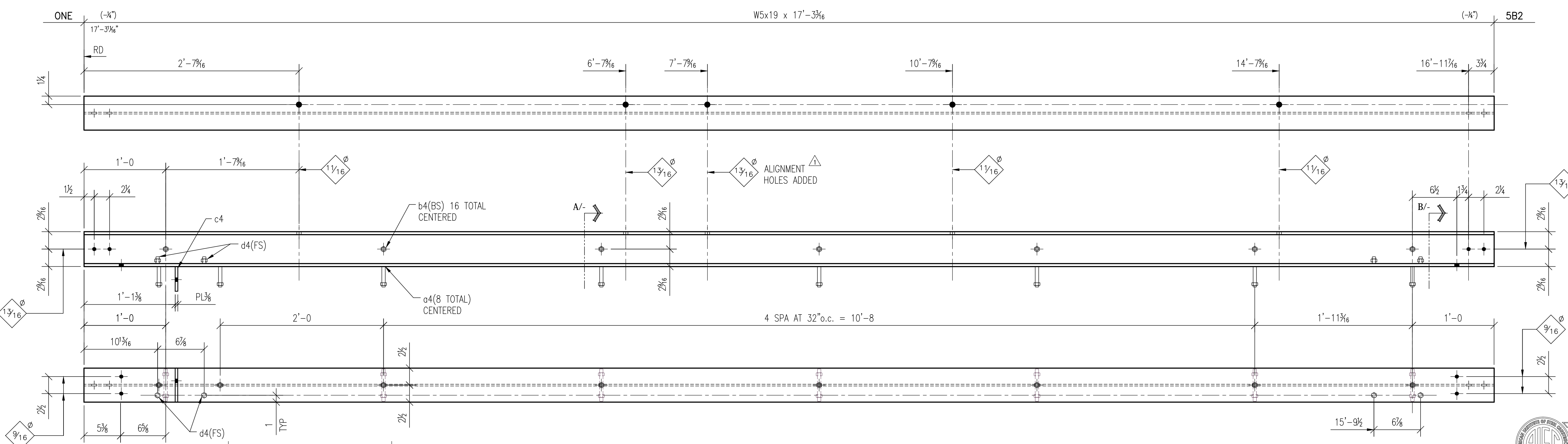
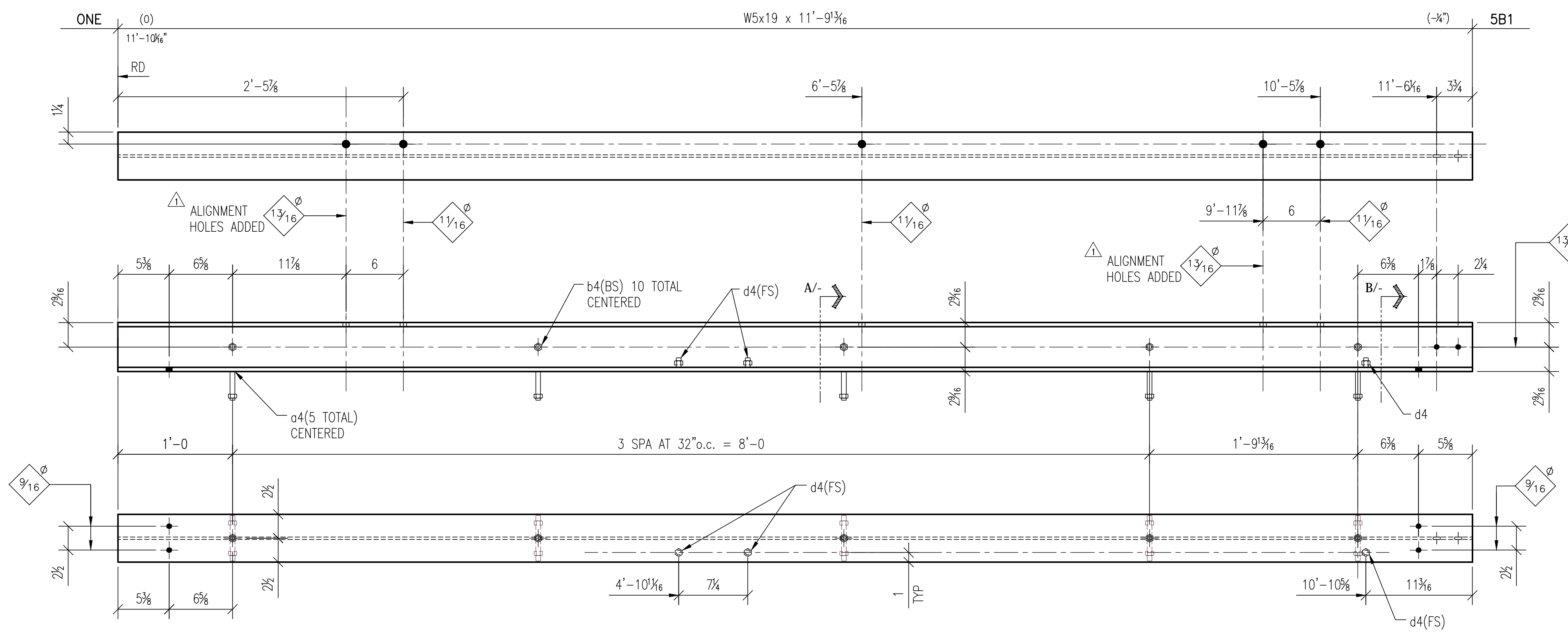
SUBMITTED	4/11
SHOP-FAB	4/17

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**BILL OF MATERIAL**

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
5B1		1	W5x19	11'-9 1/16"	A992	
	a4	5	1/2" STUDS	0'-3 1/2"	A307	NELSON
	b4	10	1/2" STUDS	0'-2"	A307	NELSON
	d4	4	1/2" STUDS	0'-1"	A307	NELSON
5B2		1	W5x19	17'-3 7/16"	A992	
	a4	8	1/2" STUDS	0'-3 1/2"	A307	NELSON
	b4	16	1/2" STUDS	0'-2"	A307	NELSON
	c4	1	PL 3/8x3 1/16"	0'-5"	A36	
	d4	4	1/2" STUDS	0'-1"	A307	NELSON
4PL1		2	PL 3/8x3 1/2"	1'-0 1/2"	A36	SHIP LOOSE
<b>FIELD BOLTS</b>						
5B1		4	1/2" M.B.	0'-1 1/2"	A307	
5B1		4	1/2" M.B.	0'-1 1/2"	A307	
4PL1		8	3/4" M.B.	0'-1 1/2"	A490	

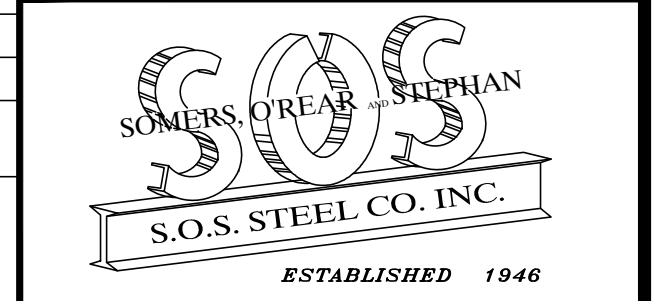


**FOR FABRICATION**

W5x19	
W	5 1/8 x 1/4 ( 1/8 )
F	5 x 7/16

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/8	CGA	4/9
PANT S/C PRIMER			
1 1/16" HOLES TYP. UNLESS OTHERWISE NOTED			



SUBMITTED	4/11
SHOP-FAB	4/17

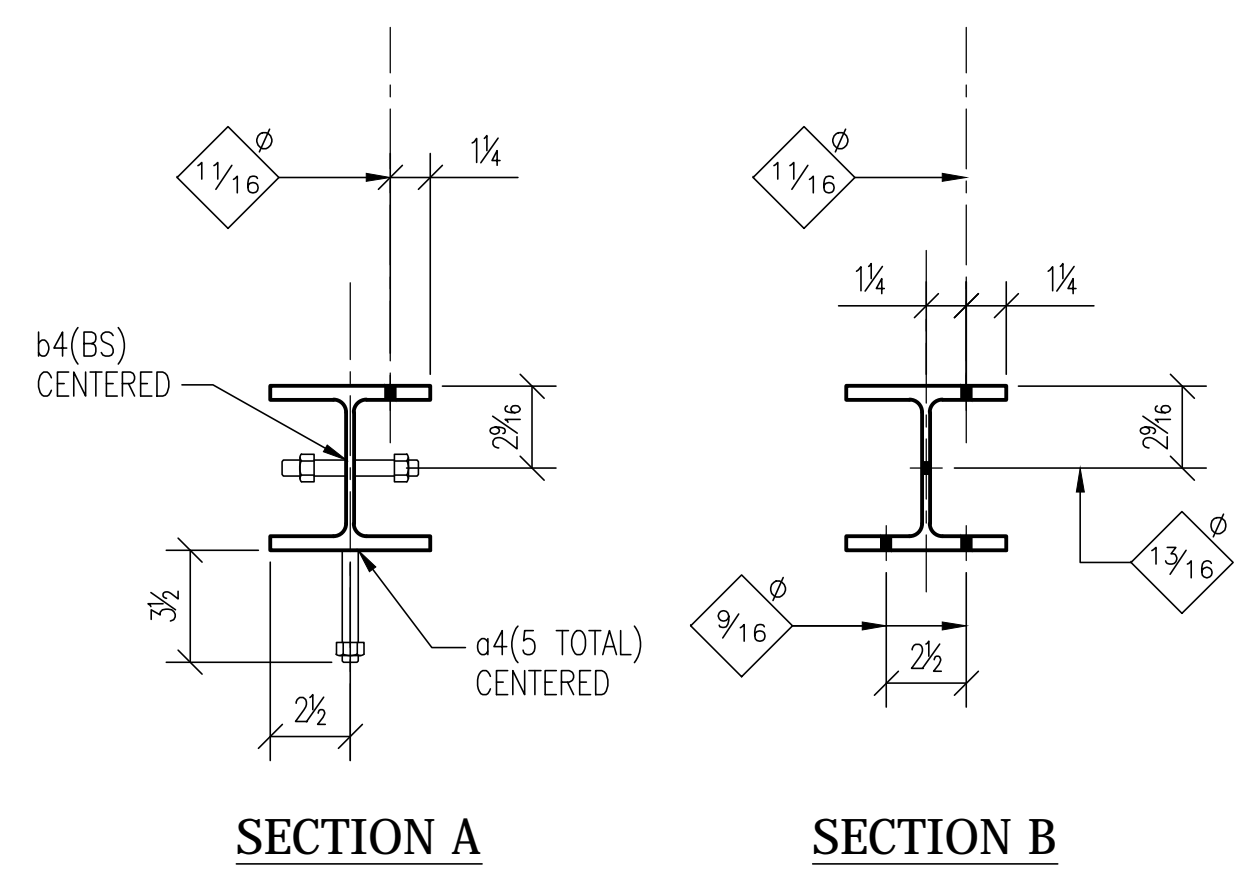
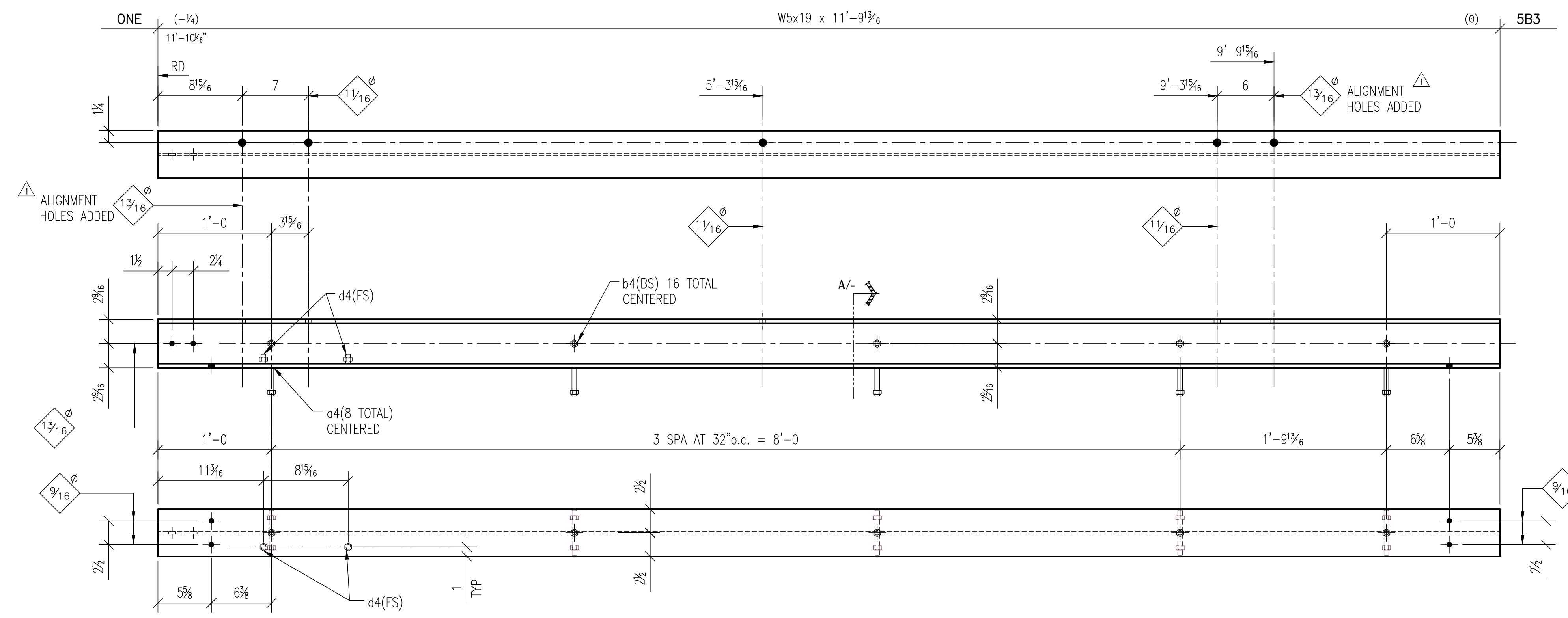
CHECKED BY	SB	DATE	4/17
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 PHONE:(408)727-6363 FAX:(408)727-1372



**BILL OF MATERIAL**

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
5B3		1	W5x19	11'-9 <sup>1</sup> / <sub>16</sub> "	A992	
	a4	5	1/2" STUDS	0'-3 <sup>1</sup> / <sub>2</sub> "	A307	NELSON
	b4	10	1/2" STUDS	0'-2 <sup>1</sup> / <sub>4</sub> "	A307	NELSON
	d4	2	1/2" STUDS	0'-1"	A307	NELSON
<b>FIELD BOLTS</b>						
5B3		4	1/2" M.B.	0'-1 <sup>1</sup> / <sub>2</sub> "	A307	



**FOR FABRICATION**

W5x19  
 W 5<sup>1</sup>/<sub>8</sub> x 1/4 ( 1/8 )  
 F 5 x 7/16

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

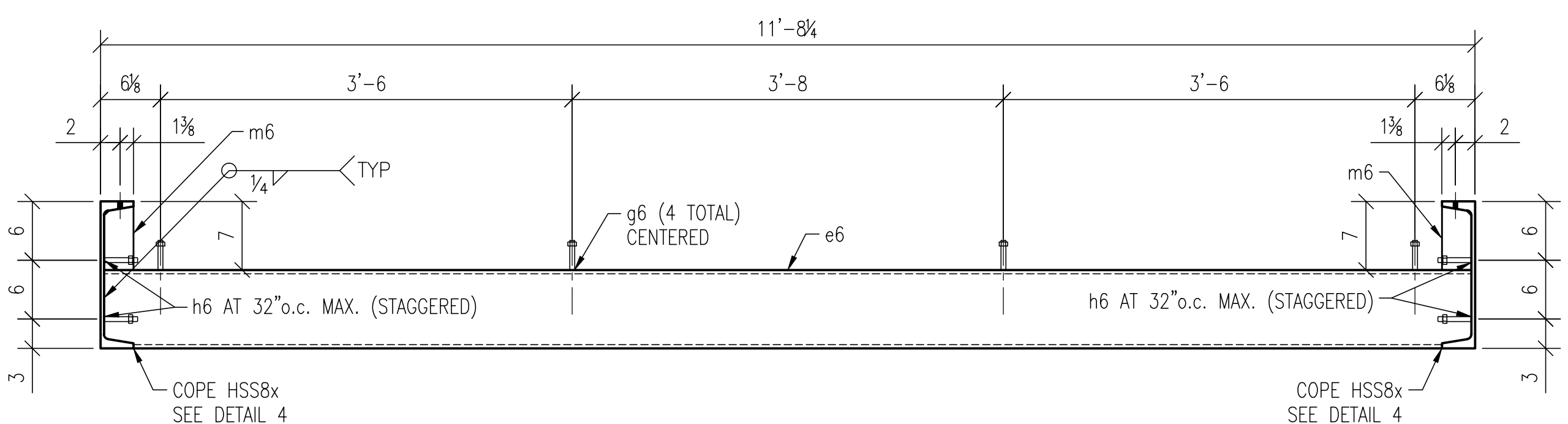
NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/8	CGA	4/9
PAINT: S/C PRIMER			



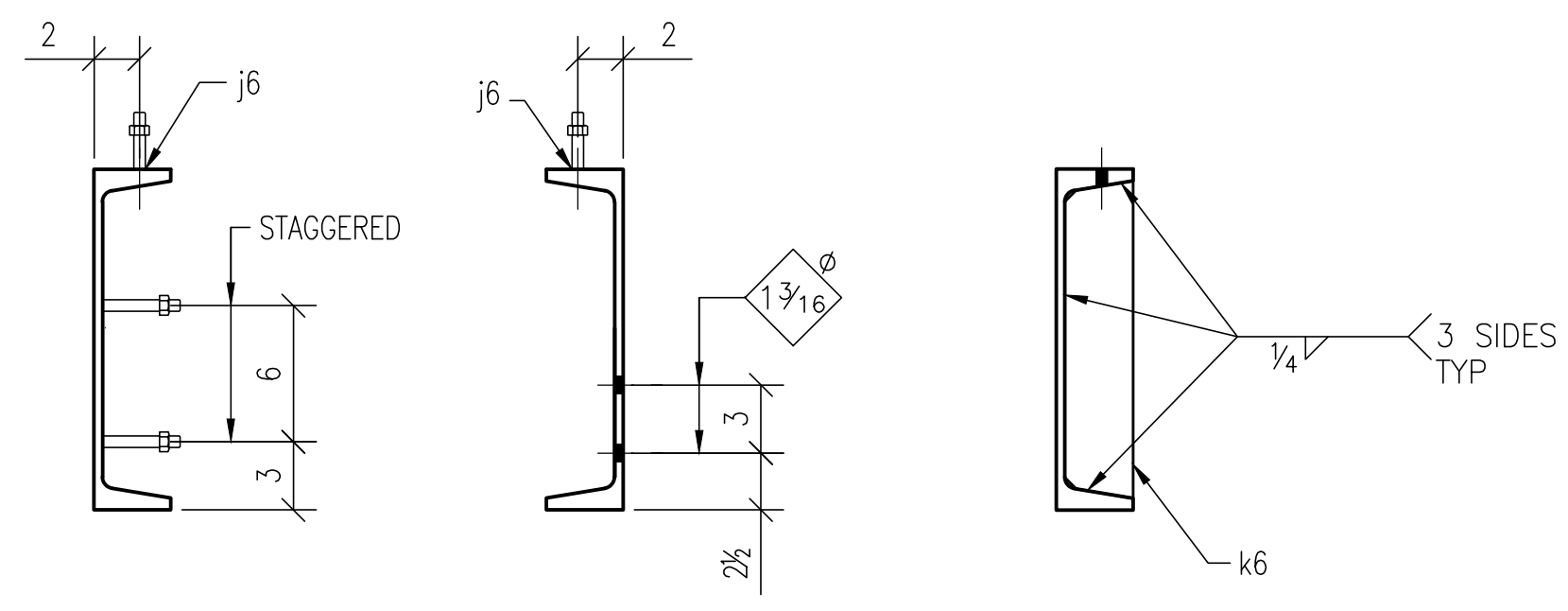
9/16 Ø HOLES TYP. UNLESS OTHERWISE NOTED  
 CHECKED BY: SB DATE: 4/17

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SHOP-FAB	4/17

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SECTION A

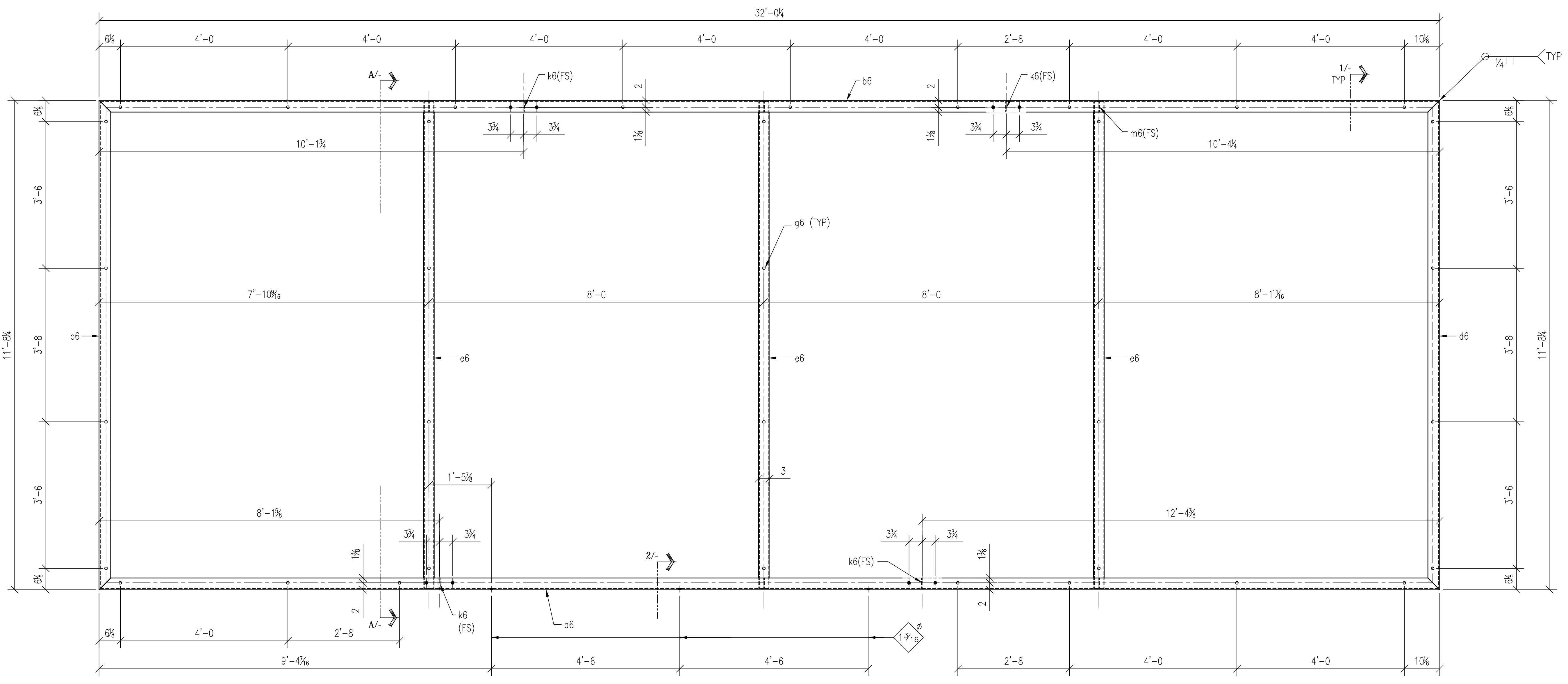


DETAIL 1

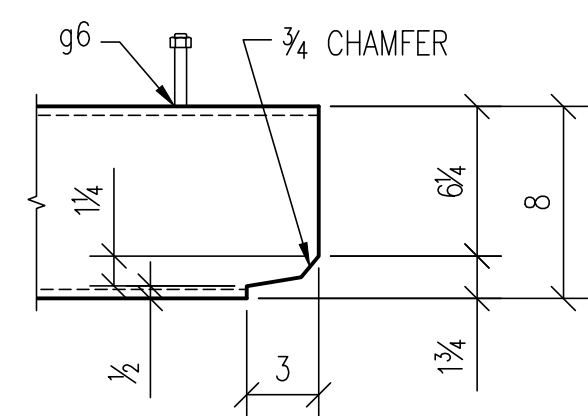
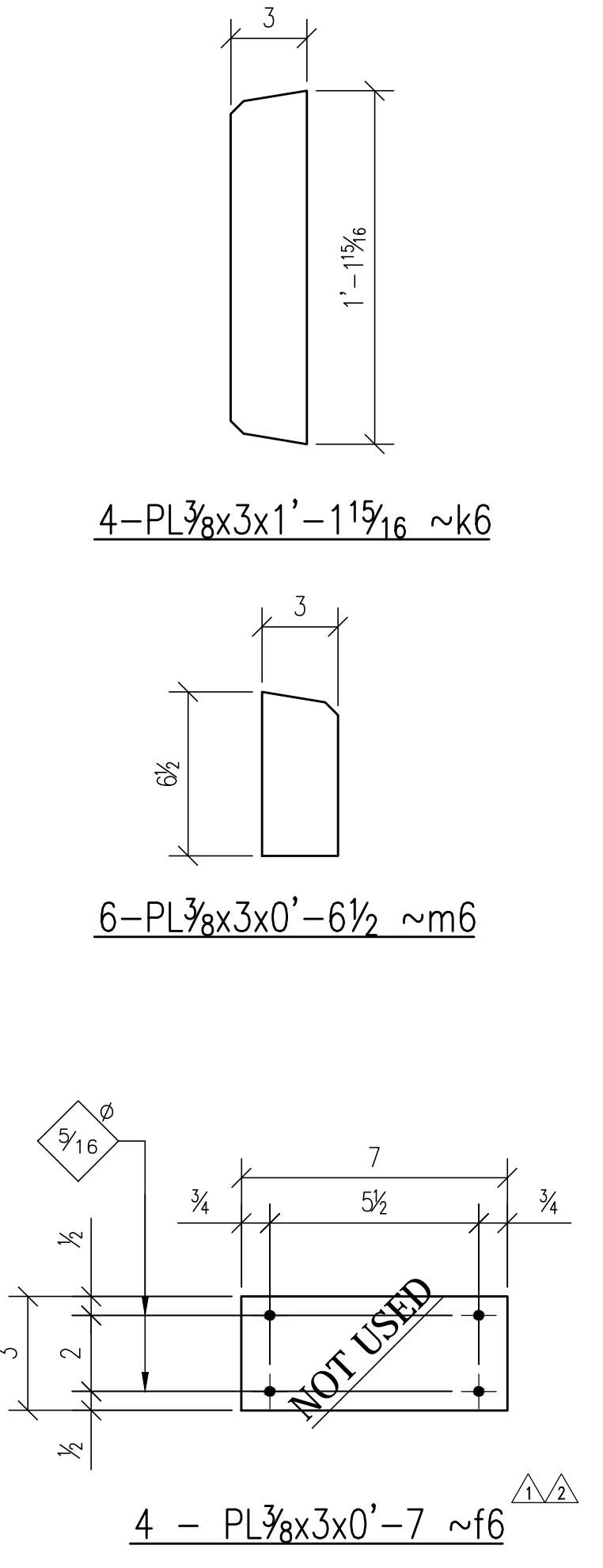
DETAIL 2

DETAIL 3

BILL OF MATERIAL						
SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
6FR1		1	STEEL FRAME			
	a6	1	C15x33.9	32'-0 1/4"	A36	
	b6	1	C15x33.9	32'-0 1/4"	A36	
	c6	1	C15x33.9	11'-8 1/4"	A36	
	d6	1	C15x33.9	11'-8 1/4"	A36	
	e6	3	HSS8x3x3/8	11'-7 1/2"	A500	
	f6	4	PL 3/8x3	0'-7"	A36	
	g6	12	1/2" STUDS	0'-3"	A307	NELSON
	h6	24	1/2" STUDS	0'-3 1/2"	A307	NELSON
	j6	24	1/2" STUDS	0'-2 1/2"	A307	NELSON
	k6	4	PL 3/8x3	1'-11 5/16"	A36	
	m6	6	PL 3/8x3	0'-6 1/2"	A36	
FIELD BOLTS						
		6	1" M.B.	0'-2 1/2"	A307	



ONE FRAME ~6FR1



DETAIL 4



FOR FABRICATION

JOB NAME	RADIANT HOUSE		
	SANTA CLARA UNIVERSITY		
ADDRESS	SANTA CLARA, CA		
CONTRACTOR	SANTA CLARA UNIVERSITY		

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/10	CGA	4/10
2	REVISIONS PER SCU DATED 4/8	CGA	4/9

PAINT: S/C PRIMER

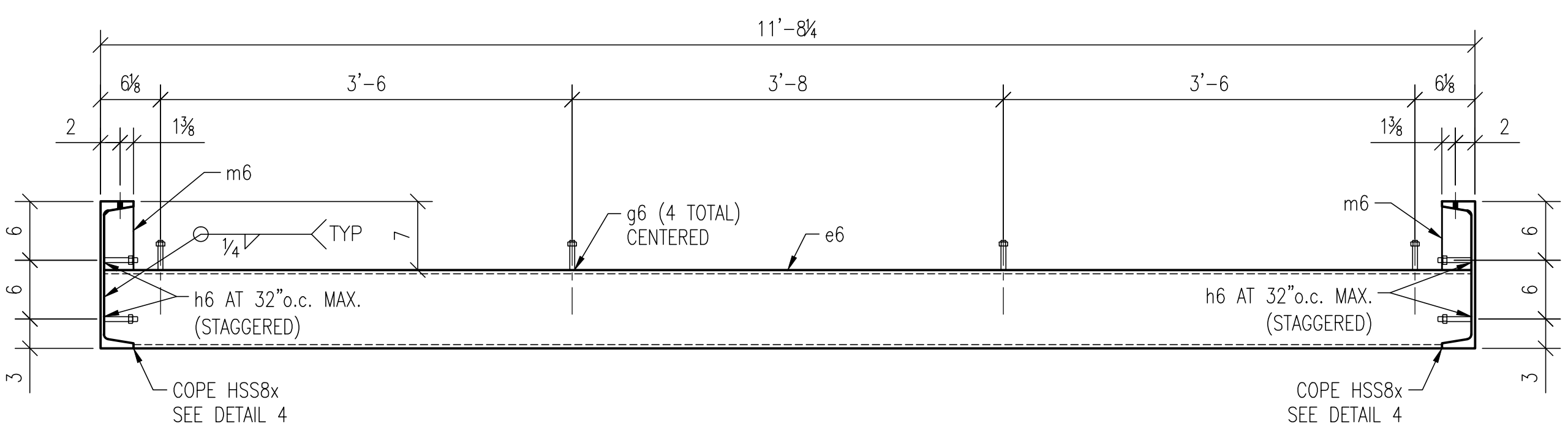
9/16 Ø HOLES TYP. UNLESS OTHERWISE NOTED

CHECKED BY: SB DATE: 4/17

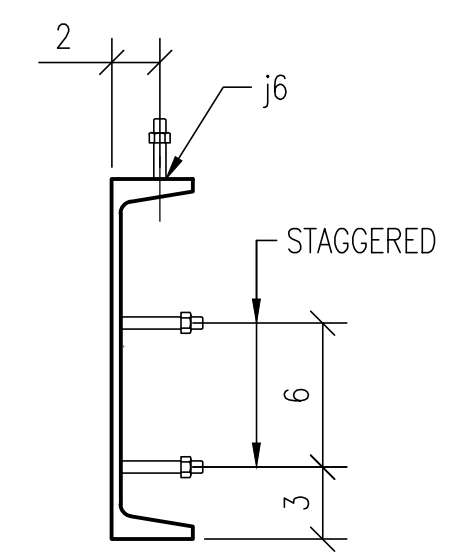


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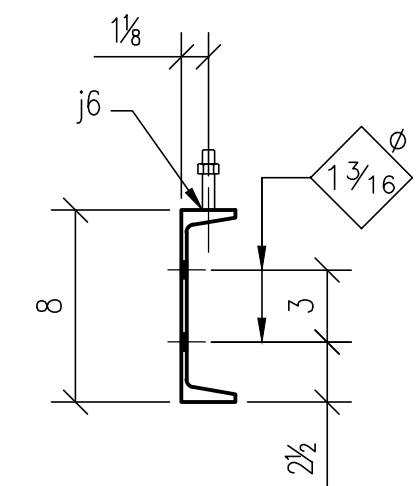




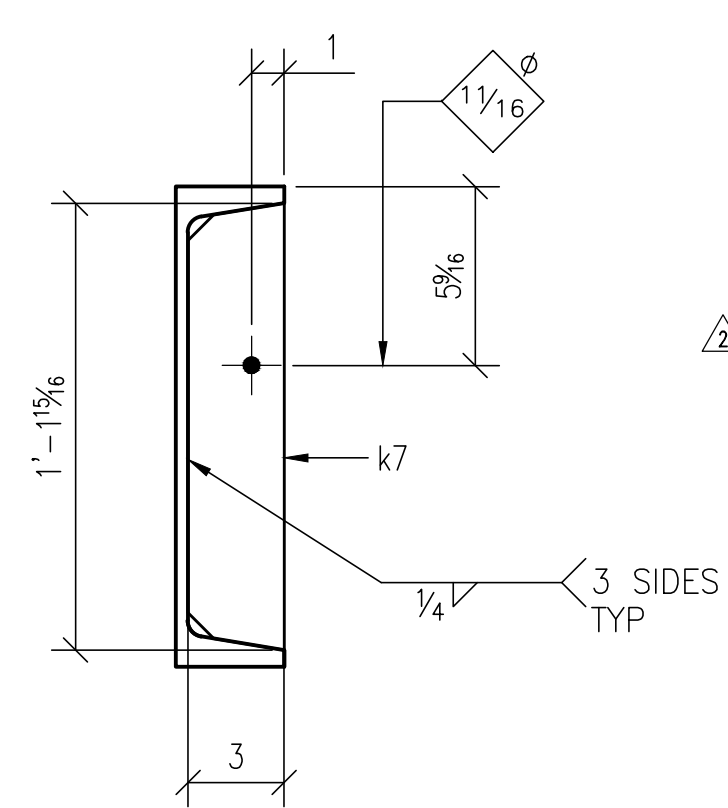
SECTION A



DETAIL 1



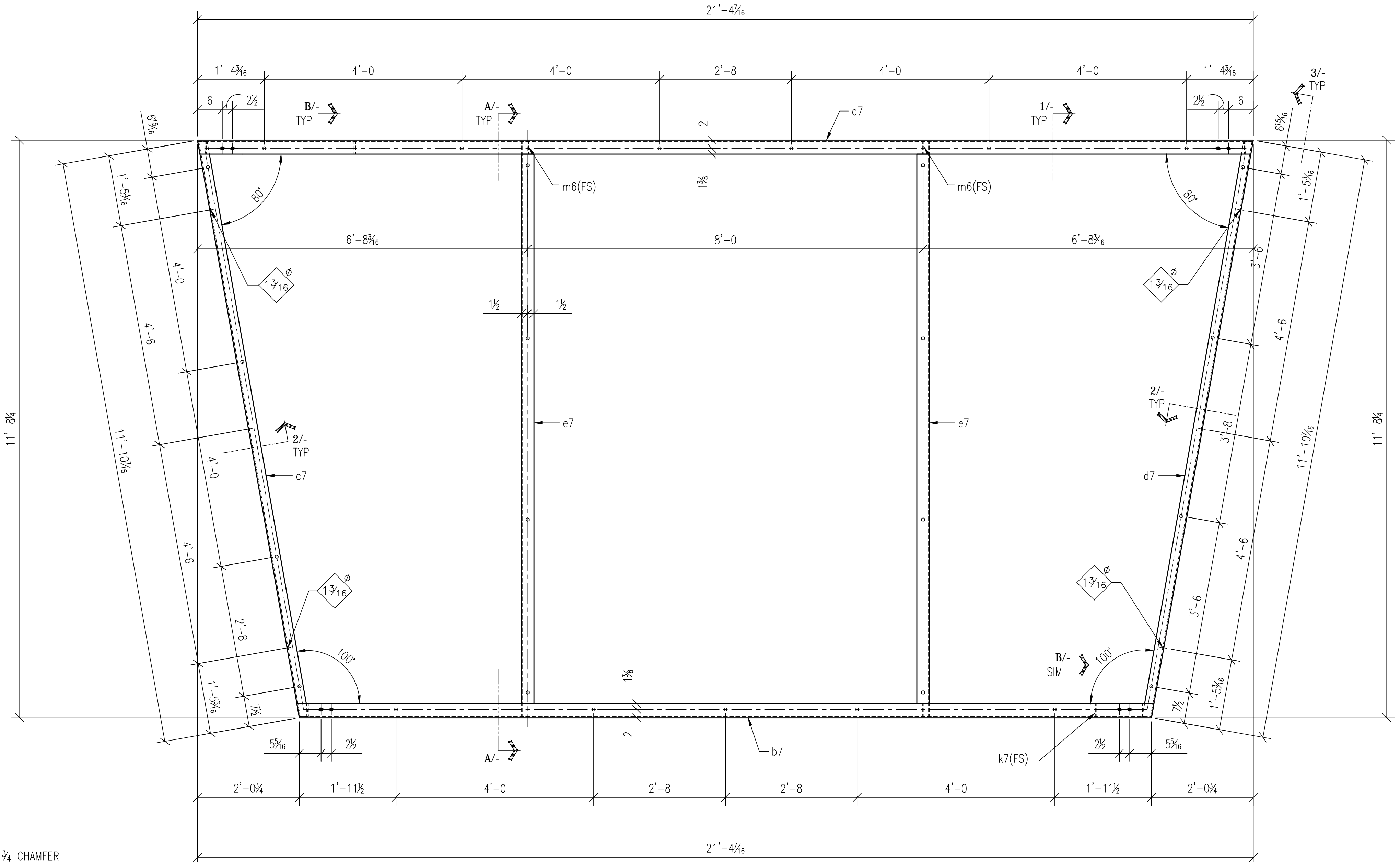
DETAIL 2



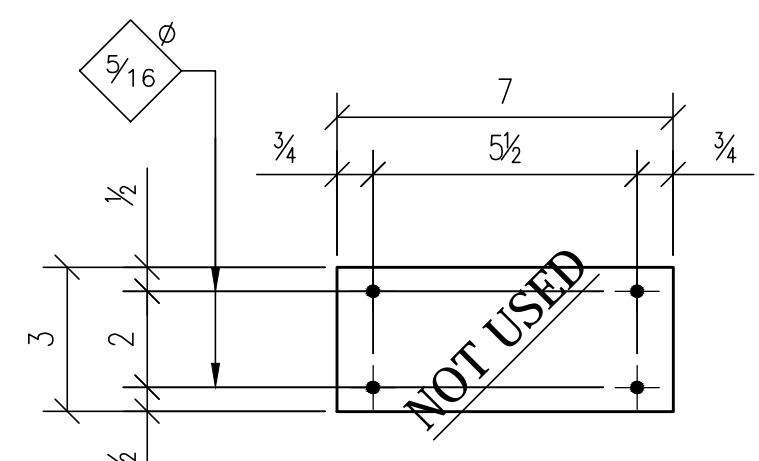
SECTION B

BILL OF MATERIAL						
SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
	7FR1	1	STEEL FRAME			
	a7	1	C15x33.9	21'-4 1/16	A36	
	b7	1	C15x33.9	17'-4 1/8	A36	
	c7	1	C8x11.5	11'-10	A36	
	d7	1	C8x11.5	11'-10	A36	
	e7	2	HSS8x3x3/8	11'-7 1/2	A500	
	f6	4	PL 3/8x3	0'-6	A36	
	g6	12	1/2x STUDS	0'-3	A307	NELSON
	h6	19	1/2x STUDS	0'-3 1/2	A307	NELSON
	j6	19	1/2x STUDS	0'-2 1/2	A307	NELSON
	k7	1	PL 3/8x3	1'-11 1/16	A36	
	k6	4	PL 3/8x3	1'-11 1/16	A36	
	m6	4	PL 3/8x3	0'-6 1/2	A36	

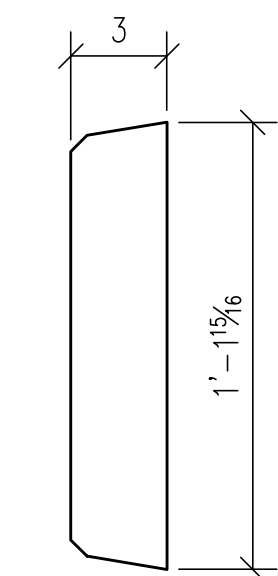
FIELD BOLTS



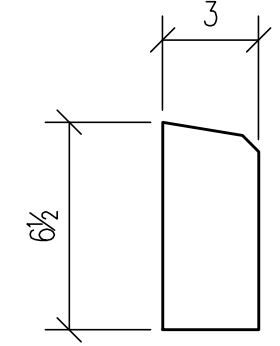
ONE FRAME ~ 7FR1



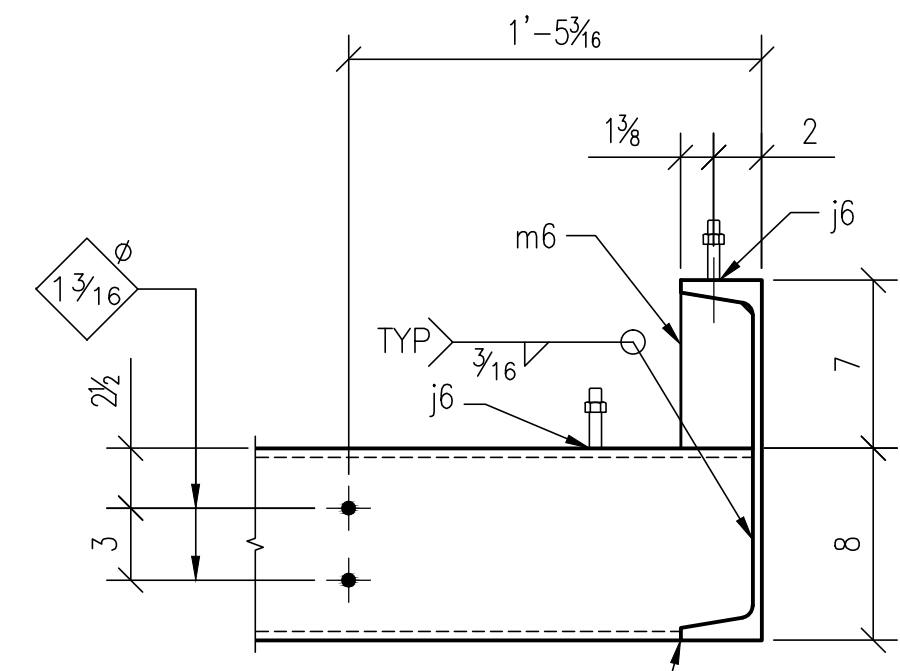
4 - PL 3/8x3x0'-7 ~f6



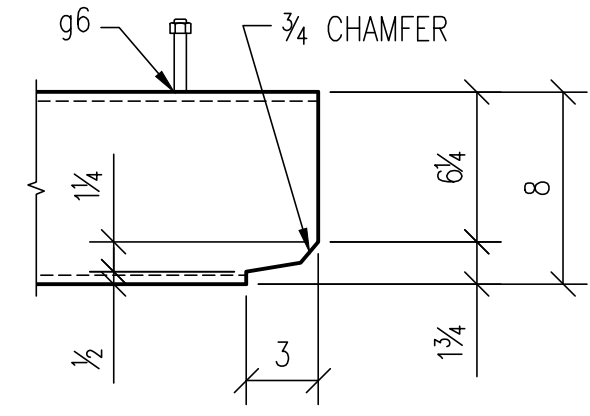
4-PL 3/8x3x1'-11 1/16 ~k6



4-PL 3/8x3x0'-6 1/2 ~m6



DETAIL 3



DETAIL 4



FOR FABRICATION

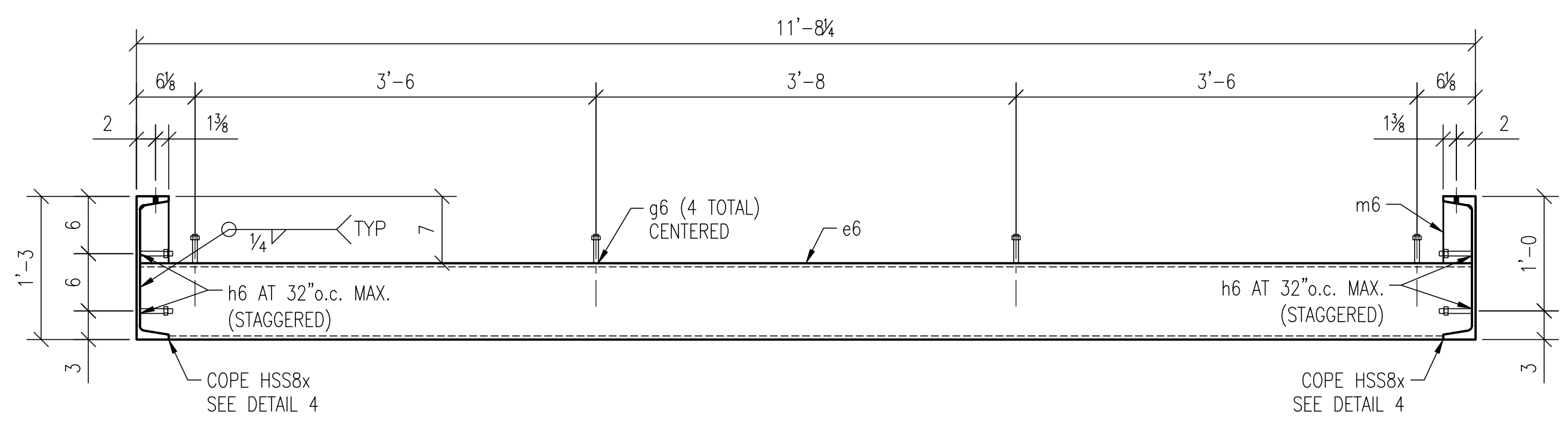
JOB NAME	RADIANT HOUSE		
	SANTA CLARA UNIVERSITY		
ADDRESS	SANTA CLARA, CA		
CONTRACTOR	SANTA CLARA UNIVERSITY		

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/10	CGA	4/10
2	REVISIONS PER SCU DATED 4/8	CGA	4/9

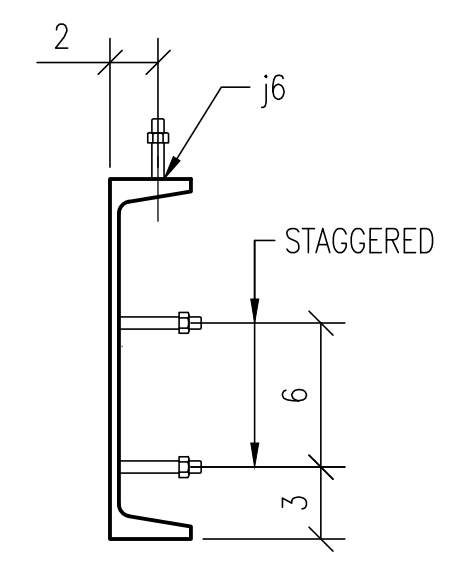


SUBMITTED			
SHOP-FAB	4/17		
CHECKED BY	SB	DATE	4/17

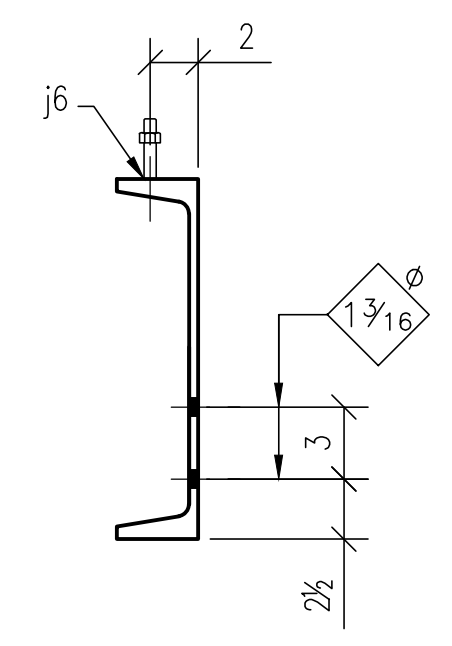
ESTABLISHED 1946  
1160 RICHARD AVE. SANTA CLARA CA. 95050  
PHONE:(408)727-6363 FAX:(408)727-1372



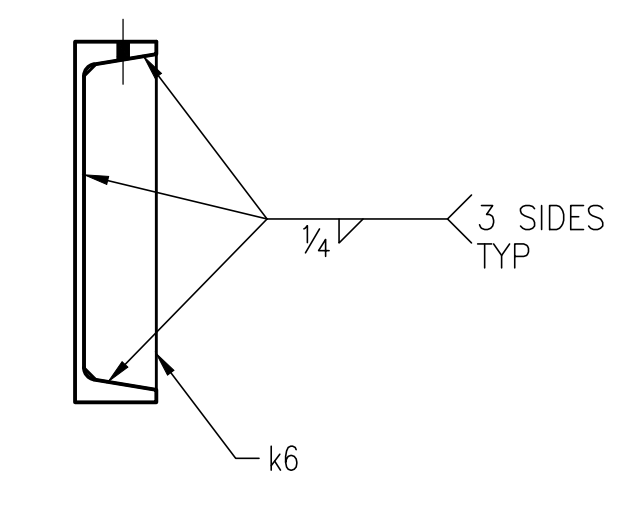
SECTION A



DETAIL 1



DETAIL 2

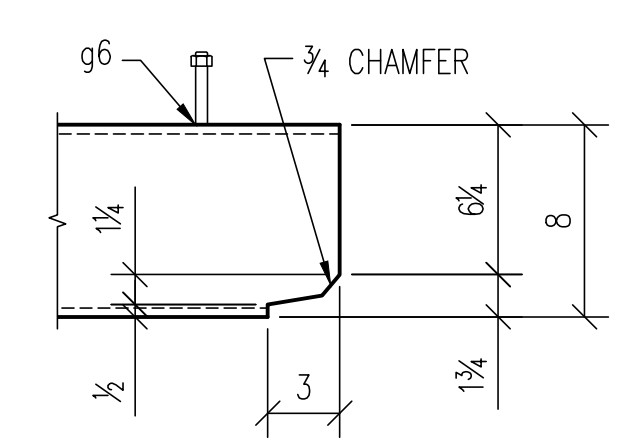
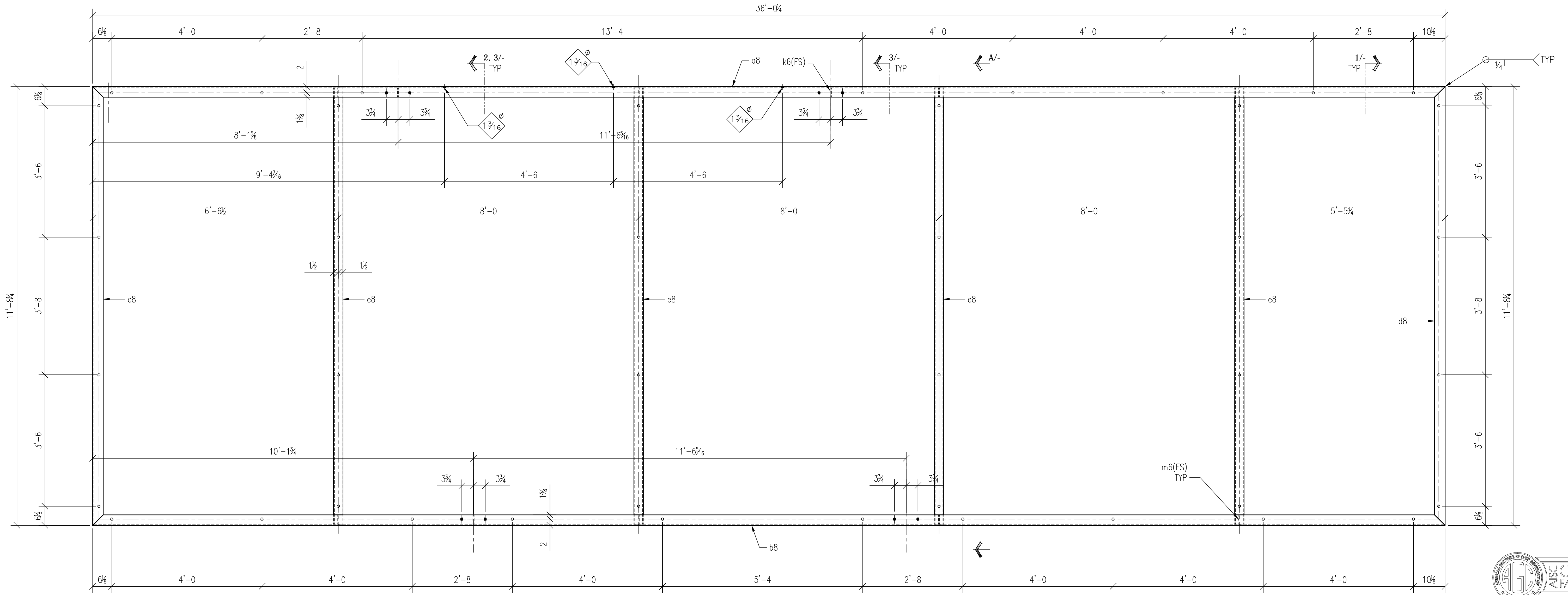


DETAIL 3

BILL OF MATERIAL						
SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
8FR1		1	STEEL FRAME			
	a8	1	C15x33.9	36'-0 1/4"	A36	
	b8	1	C15x33.9	36'-0 1/4"	A36	
	c8	1	C15x33.9	11'-8 1/4"	A36	
	d8	1	C15x33.9	11'-8 1/4"	A36	
	e8	4	HSS8x3x3/8	11'-7 1/2"	A500	
	f6	6	PL 3/8x3x0'-7		A36	
	g6	16	1/2\"/>			

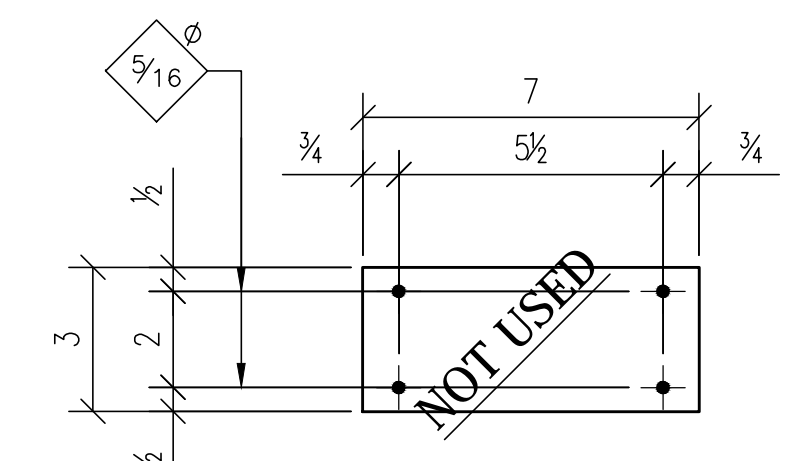
FIELD BOLTS

		6	1\"/>
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DETAIL 4

ONE FRAME ~8FR1



6 - PL 3/8x3x0'-7 ~f6



FOR FABRICATION

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/10	CGA	4/10
2	REVISIONS PER SCU DATED 4/8	CGA	4/9

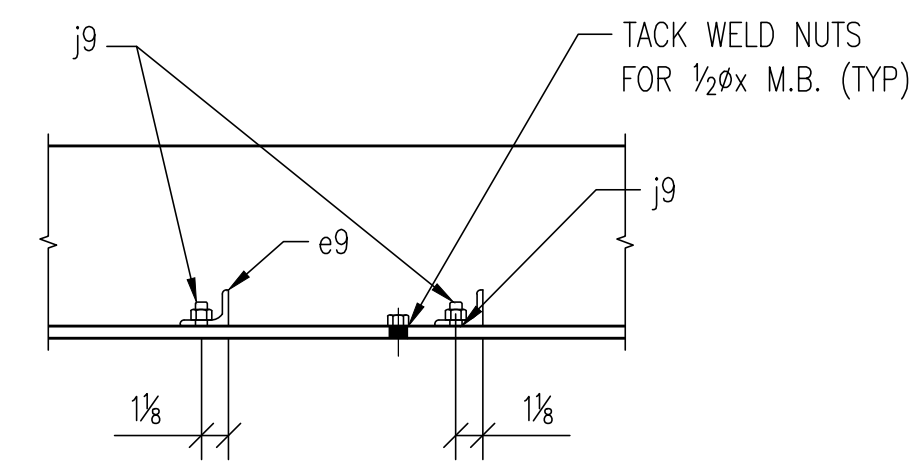
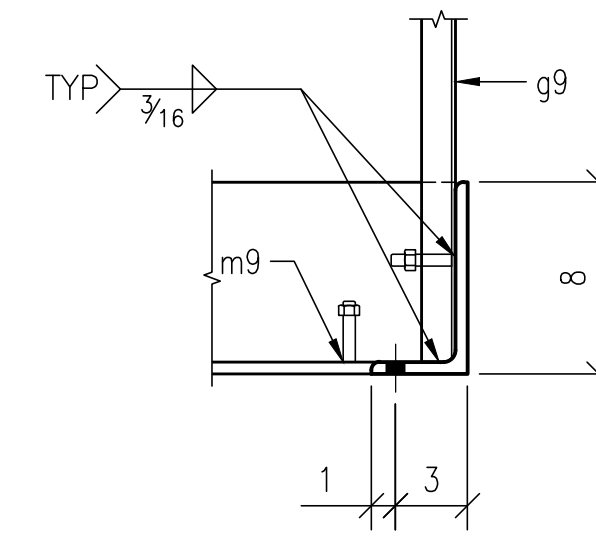
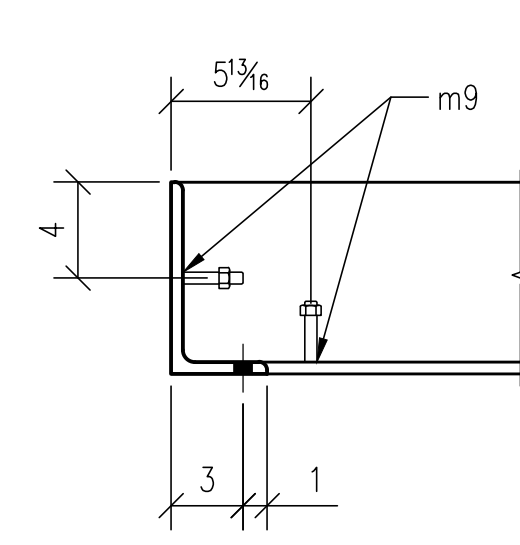
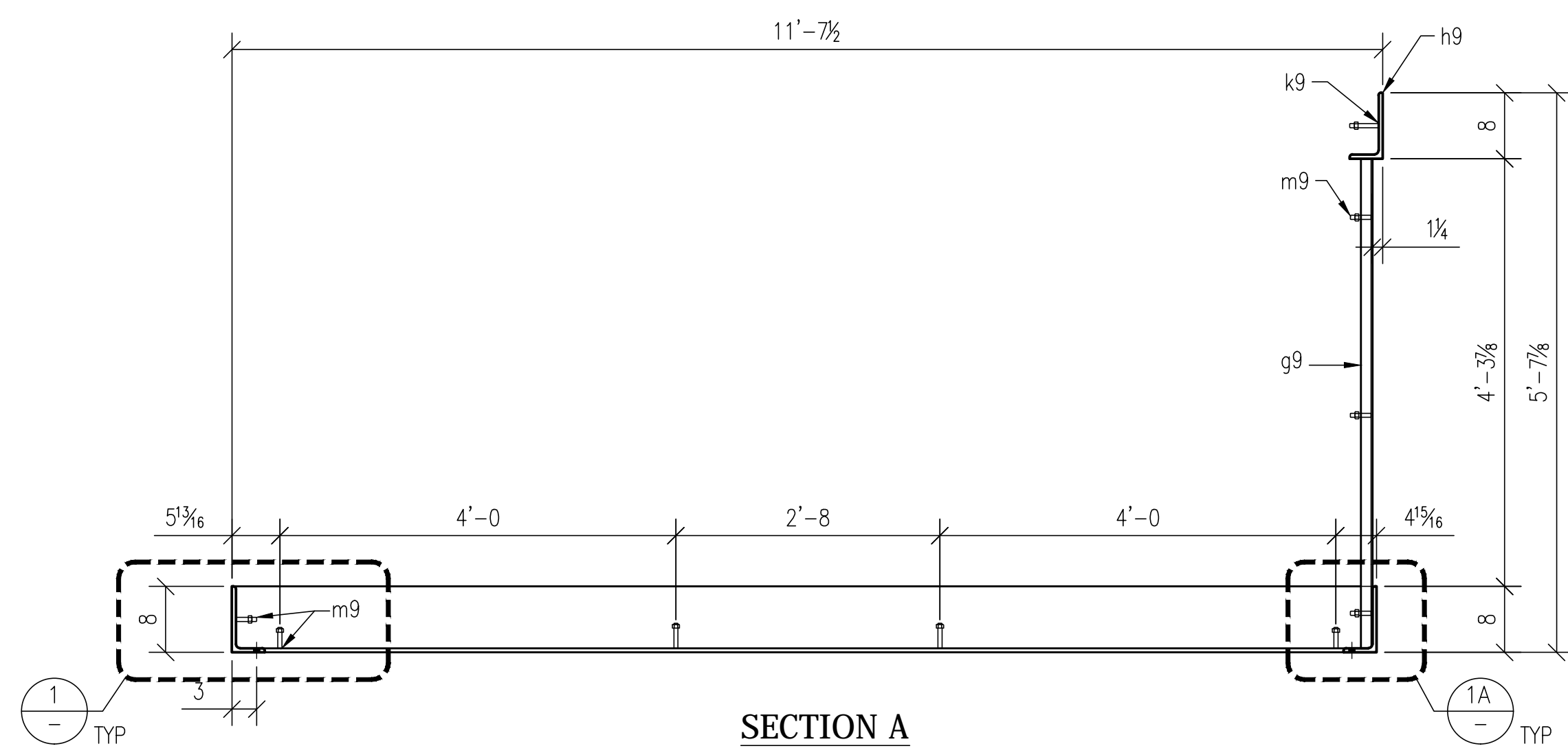


SUBMITTED	4/11
SHOP-FAB	4/17

CHECKED BY	SB	DATE	4/17
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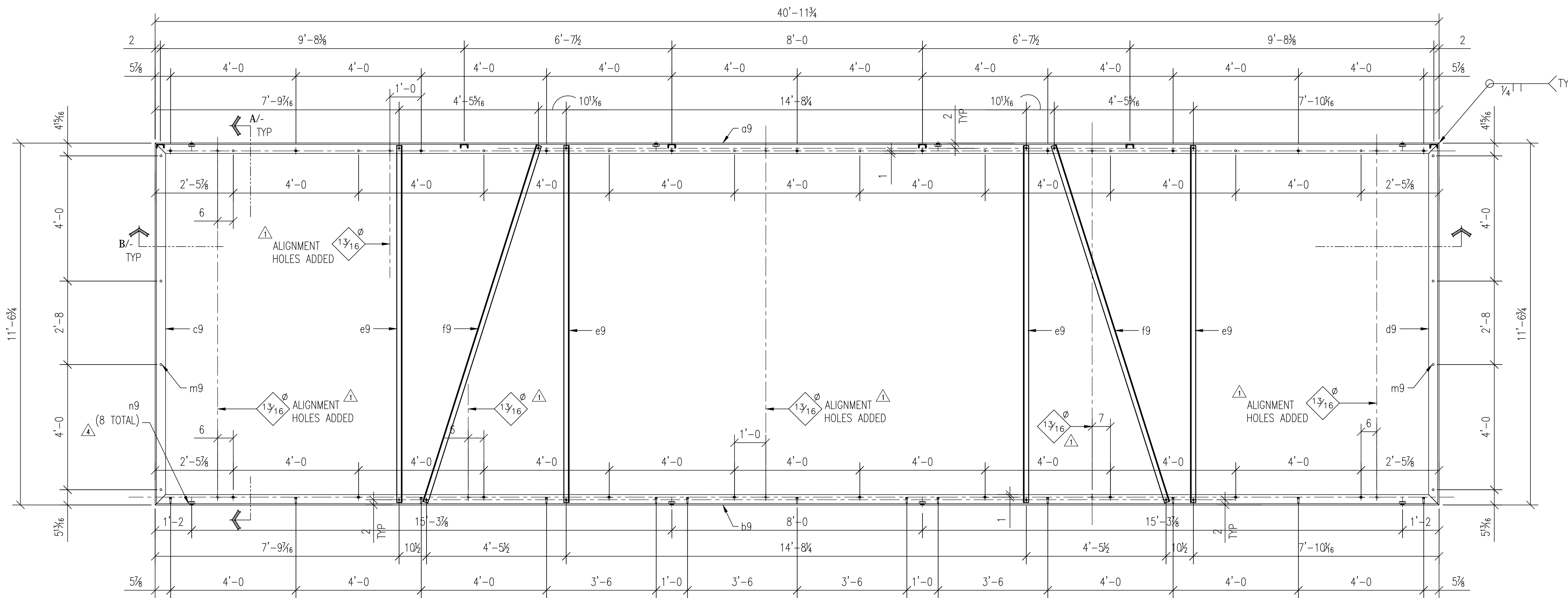




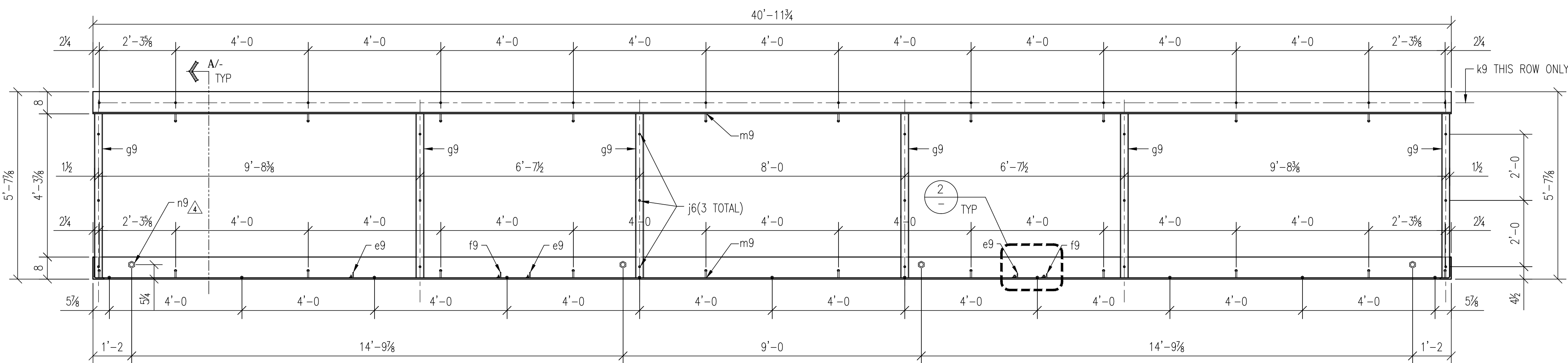
DETAIL 1

DETAIL 1A

DETAIL 2

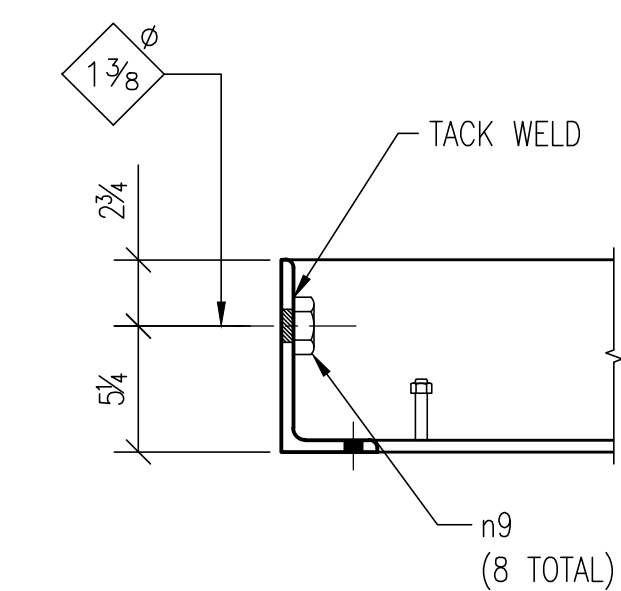
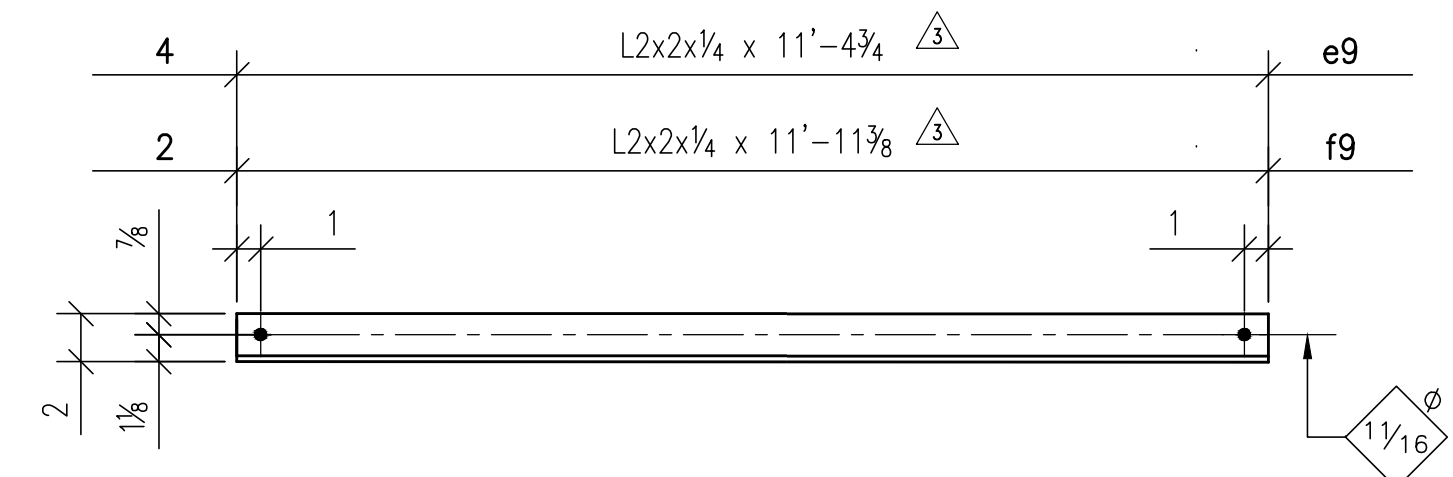


ONE FRAME ~9FR1



SECTION B

BILL OF MATERIAL						
SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
9FR1		1	STEEL FRAME			
	o9	1	L8x4x1/2	40'-11 3/4	A36	
	b9	1	L8x4x1/2	40'-11 3/4	A36	
	c9	1	L8x4x1/2	11'-6 3/4	A36	
	d9	1	L8x4x1/2	11'-6 3/4	A36	
	e9	4	L2x2x1/4	11'-4 3/4	A36	ERECTION BRACE
	f9	2	L2x2x1/4	11'-11 3/8	A36	ERECTION BRACE
	g9	6	C3x4.1	4'-11 3/8	A36	
	h9	1	L8x4x1/2	40'-11 3/4	A36	
	j9	12	1/2x STUDS	0'-1	A307	NELSON
	k9	12	1/2x STUDS	0'-3 1/2	A307	NELSON
	m9	48	1/2x STUDS	0'-2 1/2	A307	NELSON
	n9	8	1 3/8x NUTS		A307	HEX
FIELD BOLTS						
9FR1		22	1/2x M.B.	0'-1 1/2	A307	



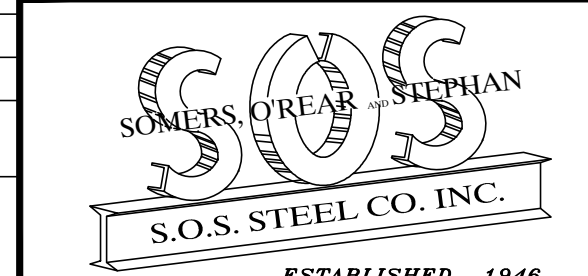
DETAIL AT PICKPOINTS



FOR FABRICATION

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/17	CGA	4/17
2	REVISIONS PER SHOP DATED 4/17	CGA	4/17
3	REVISIONS PER SCU DATED 4/10	CGA	4/10
4	REVISIONS PER SCU DATED 4/8	CGA	4/9



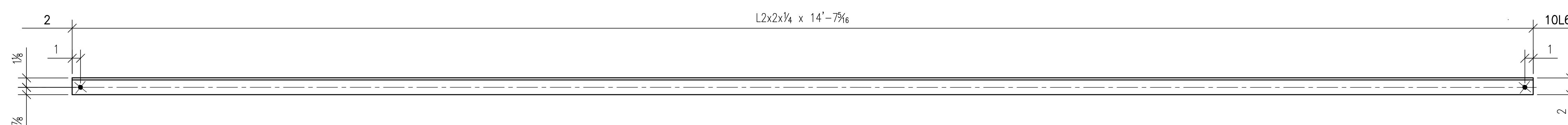
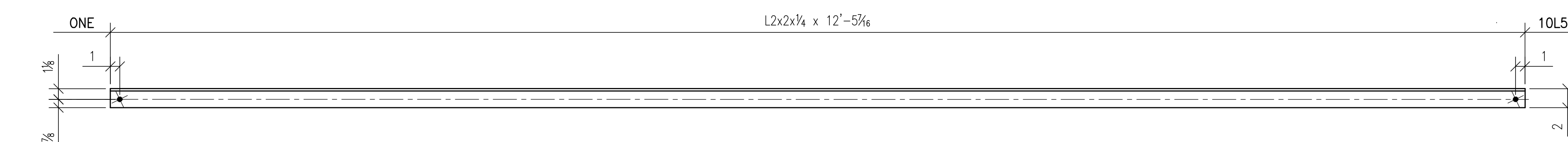
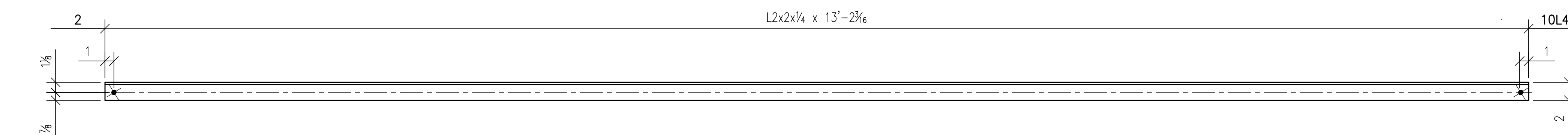
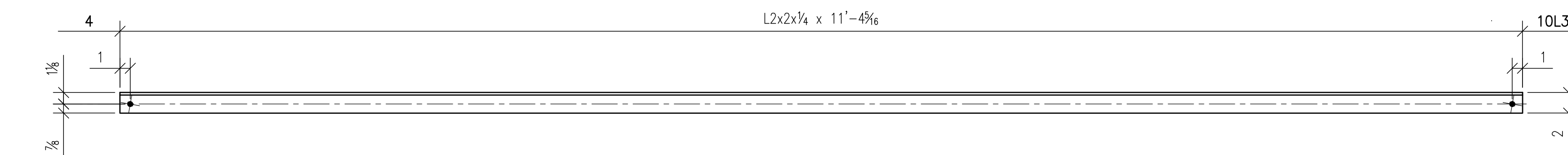
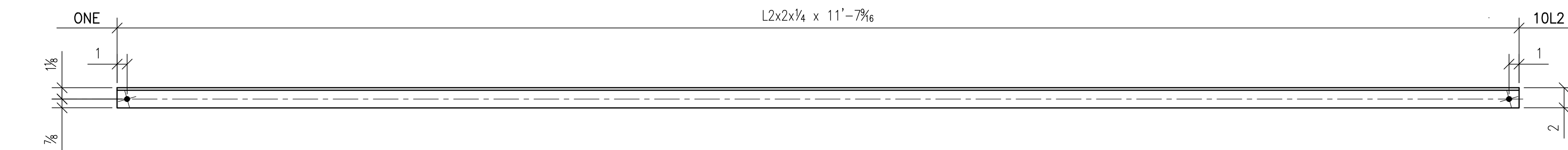
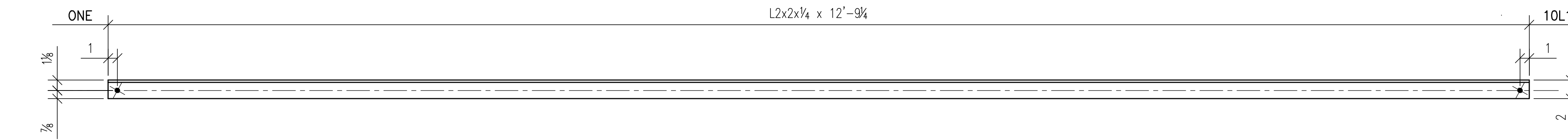
PAINT: S/C PRIMER  
 9/16 HOLES TYP. UNLESS OTHERWISE NOTED  
 CHECKED BY: SB DATE: 4/17

SUBMITTED	4/11
SHOP-FAB	4/17

1160 RICHARD AVE. SANTA CLARA CA. 95050  
 PHONE:(408)727-6363 FAX:(408)727-1372

**BILL OF MATERIAL**

SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
10L1		1	L2x2x¼	12'-9¼"	A36	
10L2		1	L2x2x¼	11'-7¾"	A36	
10L3		4	L2x2x¼	11'-4¾"	A36	
10L4		2	L2x2x¼	13'-2¾"	A36	
10L5		1	L2x2x¼	12'-5¾"	A36	
10L6		2	L2x2x¼	14'-7¾"	A36	
<b>FIELD BOLTS</b>						



**FOR FABRICATION**

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

DETAILED: 05/13  
 DRAWN BY: CGA  
 DRW. NO.: D10  
 JOB NO.: 9732

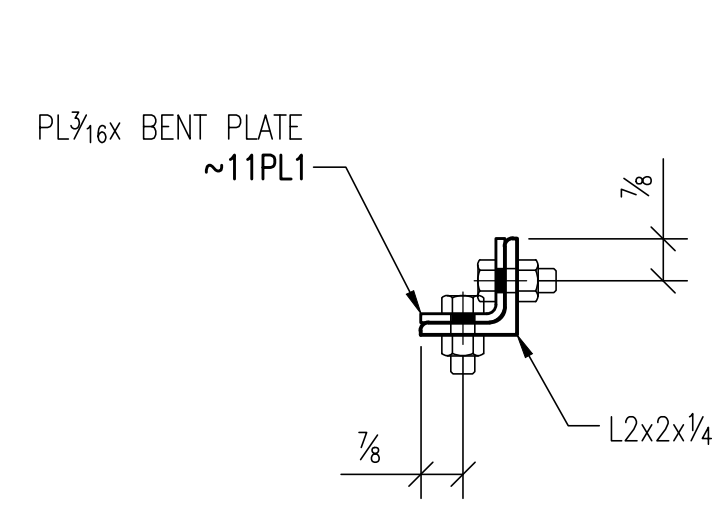
NO.	REVISION	BY	DATE
	REVISIONS PER SCU DATED 4/8	CGA	4/9
	PAINT: S/C PRIMER		
	1 1/16" Ø HOLES TYP. UNLESS OTHERWISE NOTED		
	CHECKED BY: SB	DATE:	4/17



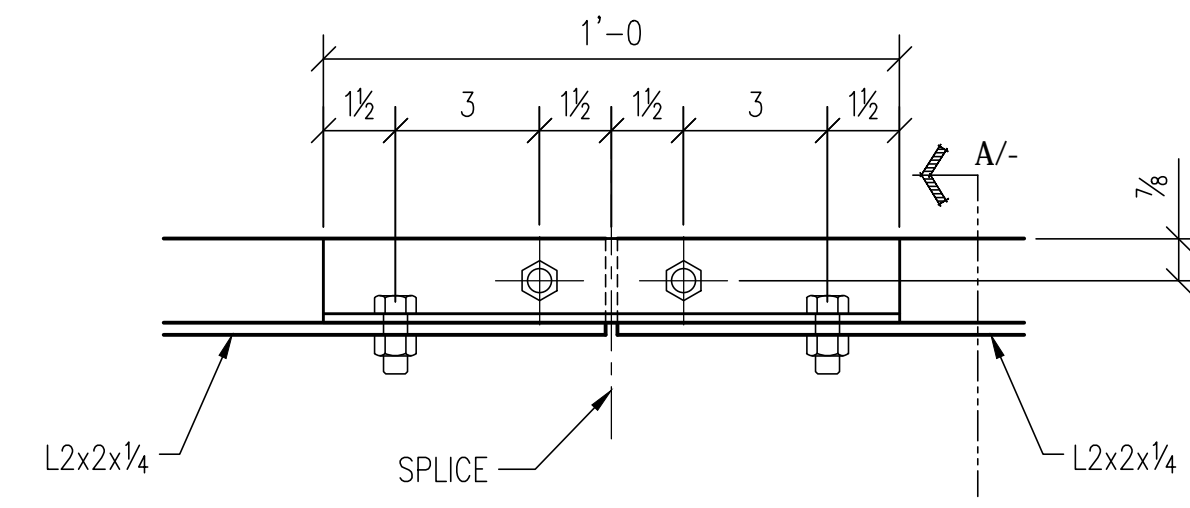
1160 RICHARD AVE. SANTA CLARA CA. 95050  
 PHONE:(408)727-6363 FAX:(408)727-1372

SUBMITTED	4/11		
SHOP-FAB	4/17		





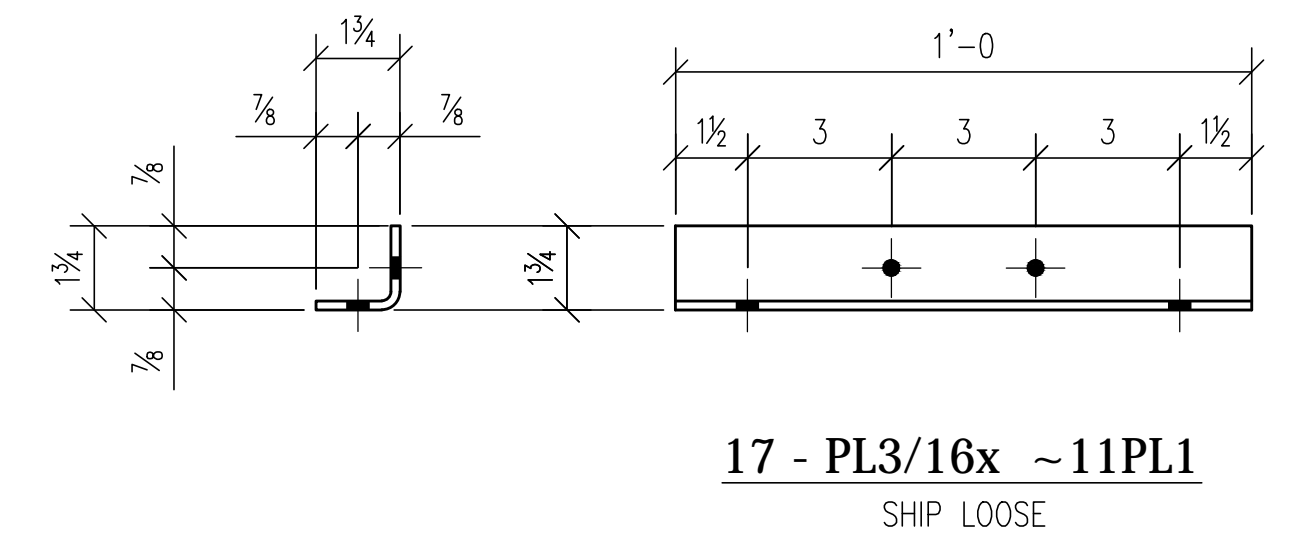
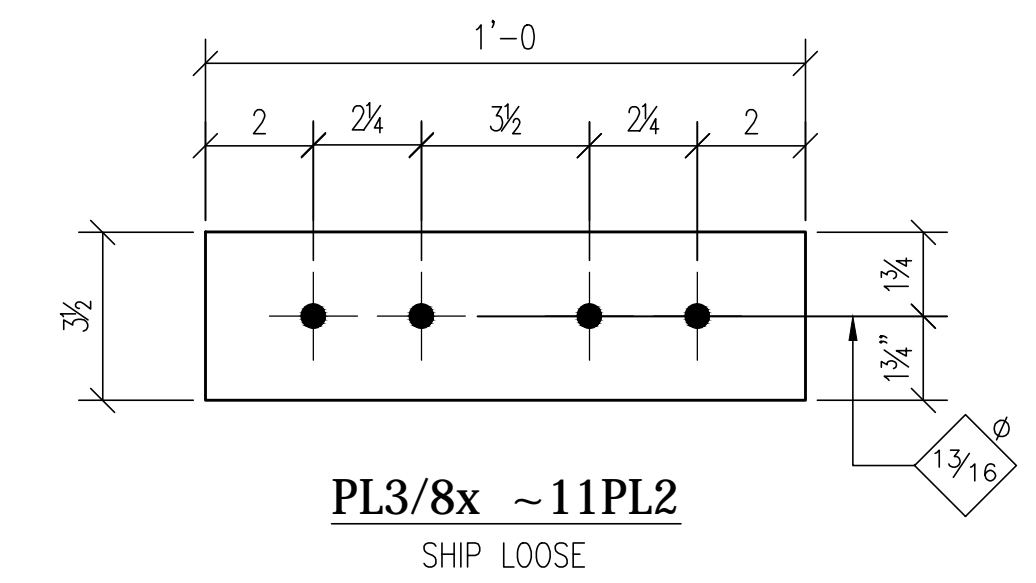
SECTION



TYPICAL DETAIL

BILL OF MATERIAL

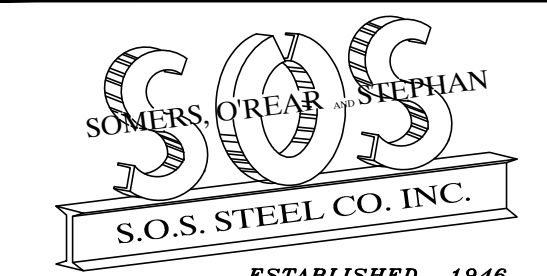
SHIP MARK	PIECE MARK	QTY.	DESCRIPTION	LENGTH	GRADE	REMARKS
11PL1		17	PL 3/16x3 3/8	1'-0	A36	BENT
11PL2		4	PL 3/8x3 1/2	1'-0	A36	SHIP LOOSE
<b>FIELD BOLTS</b>						
11PL1		68	1/2" M.B.	0'-1	A307	
11PL2		16	3/4" M.B.	0'-2	A490	



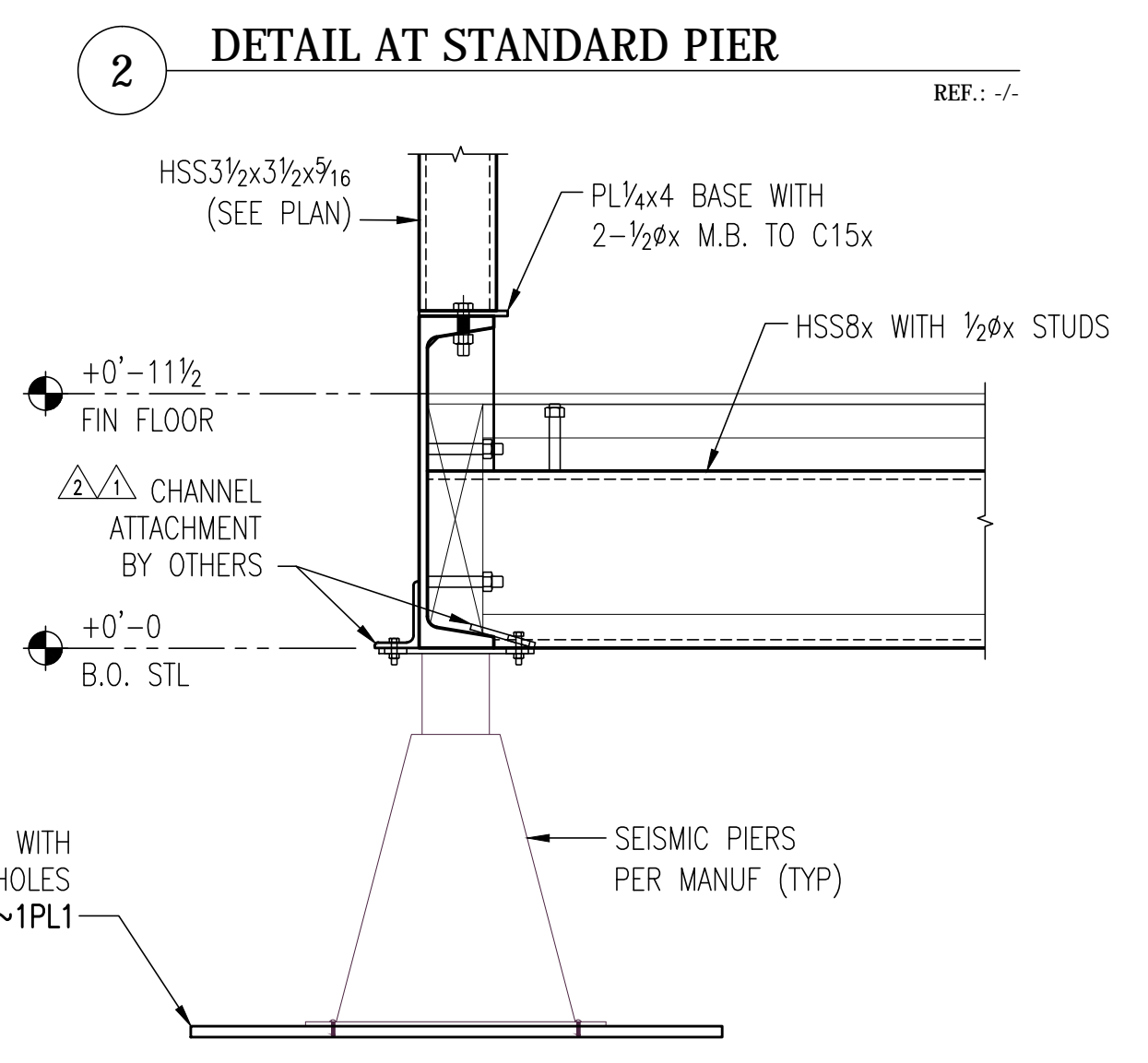
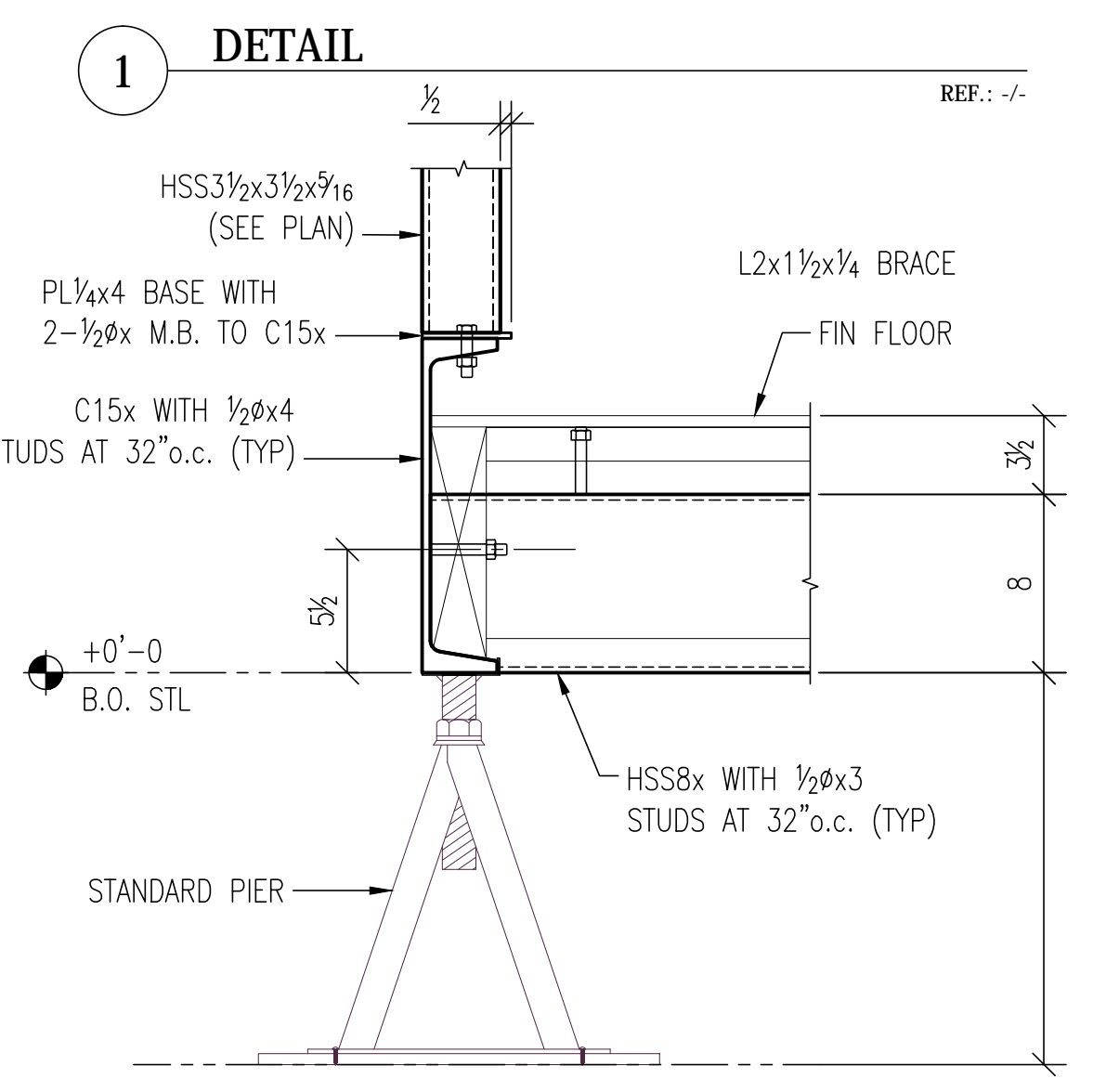
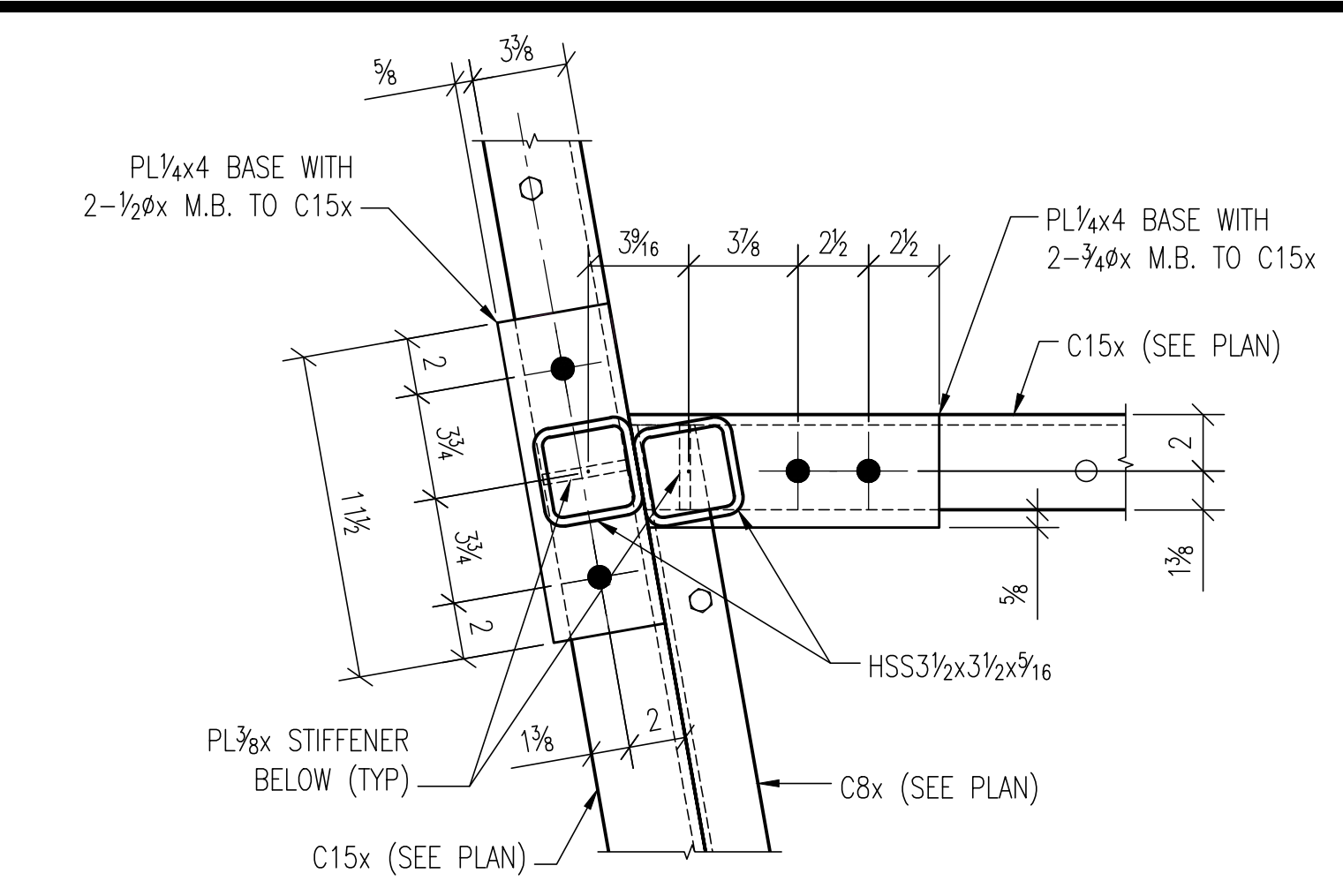
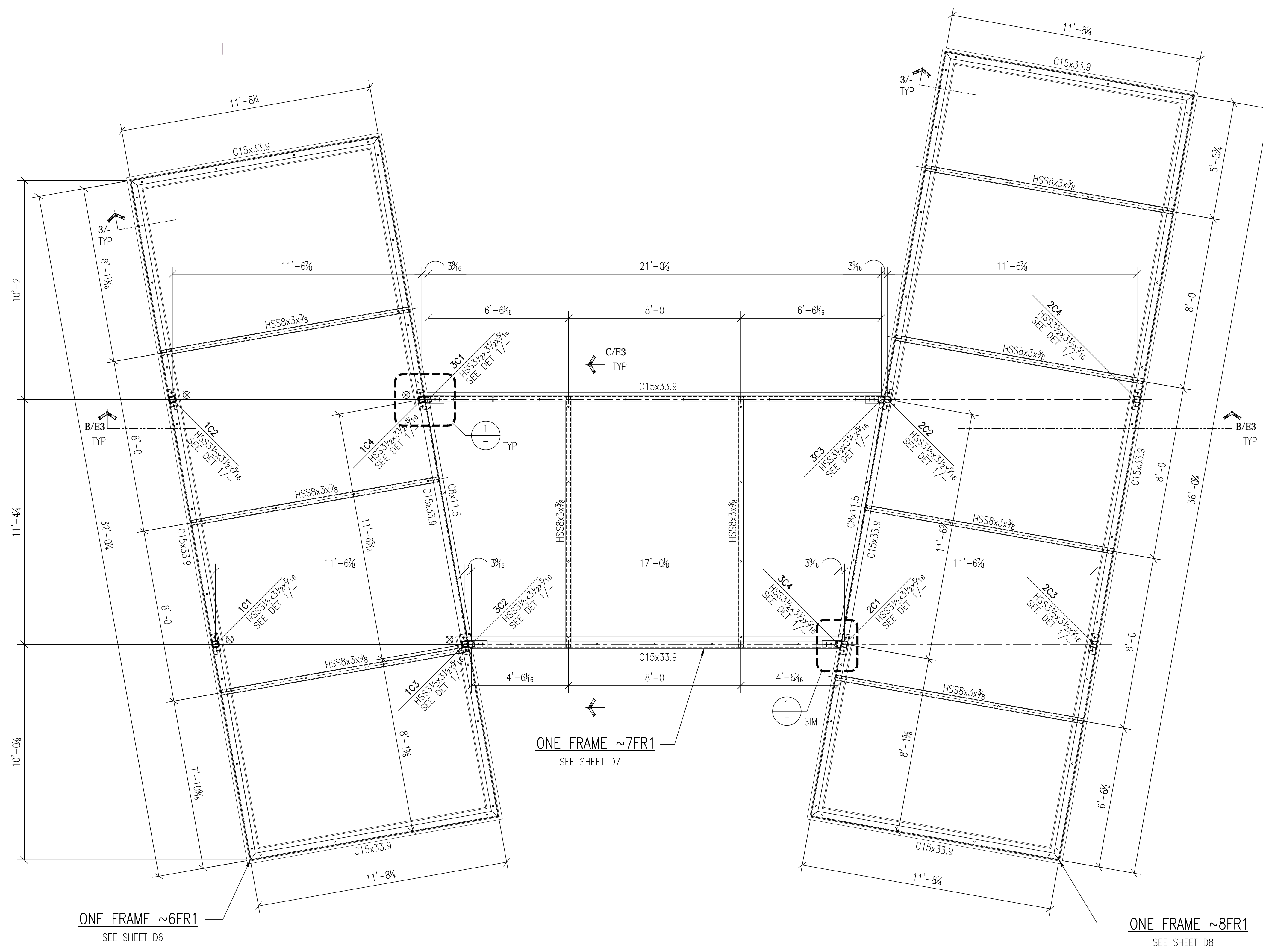
FOR FABRICATION

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

△			
△			
△			
△	NEW SHEET	CGA	6/19
NO.	REVISION	BY	DATE
PAINT: RED OXIDE RUST - INHIBITIVE PRIMER DFT: 1.5 - 2 mils			
9/16 ∅ HOLES TYP. UNLESS OTHERWISE NOTED			
SUBMITTED		N/A	
SHOP-FAB		6/19	
CHECKED BY	SB	DATE	6/19



1160 RICHARD AVE. SANTA CLARA CA. 95050  
 PHONE (408) 727-6363 FAX (408) 727-1372



**A STEEL FRAMING PLAN**

REF.: A1/S-103

**SOS CO. DISCLAIMER**  
 STRUCTURAL ENGINEER AND/OR ARCHITECT  
 TO REVIEW & APPROVE SHOP DRAWINGS BASED  
 ON DESIGN DRAWINGS DATED:  
 8/17/12 FOR S-SHEETS &  
 8/17/12 FOR A-SHEETS  
 PLEASE VERIFY CLOUDED DIMENSIONS

**GENERAL NOTES:**  
 1. WF SHAPES - ASTM A992 GR. 50  
 2. PL'S - ASTM A36 TYP. UNO  
 3. BASE & CONTINUITY PL'S - ASTM A572 GR. 50  
 4. TUBE - ASTM A500 GR. B UNO  
 5. PIPE - ASTM A53, GR. B, U.S.I.N.  
 6. WELDING - E70XX ELECTRODES PER AWS.

**FOR CONSTRUCTION**

JOB NAME: RADIANT HOUSE  
 SANTA CLARA UNIVERSITY  
 ADDRESS: SANTA CLARA, CA  
 CONTRACTOR: SANTA CLARA UNIVERSITY

DATE	BY	NO.	REVISION
03/13	CGA	E1	9732



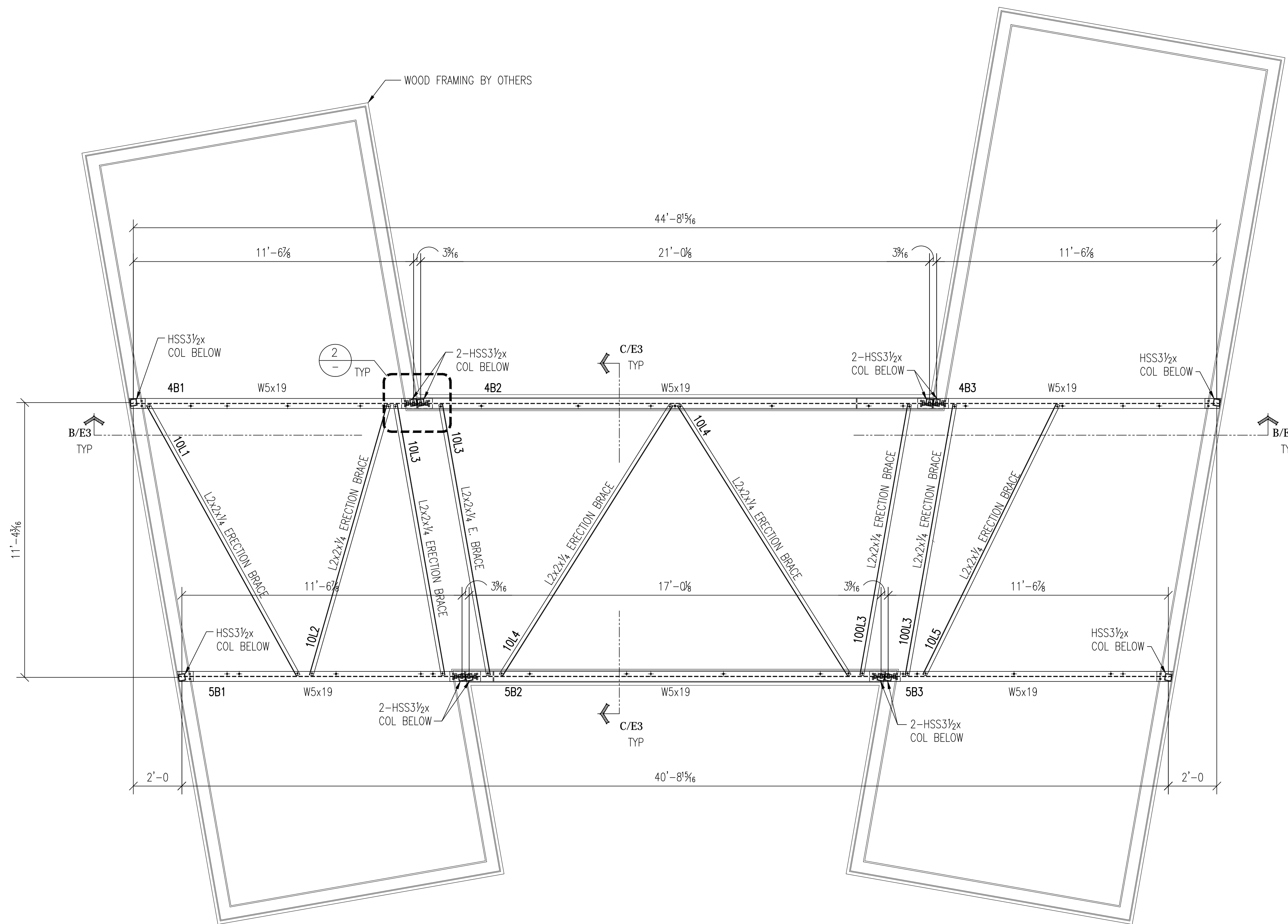
NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/10	CGA	4/10
2	REVISIONS PER SCU DATED 4/8	CGA	4/9

SUBMITTED 4/11

CHECKED BY SB DATE 4/17

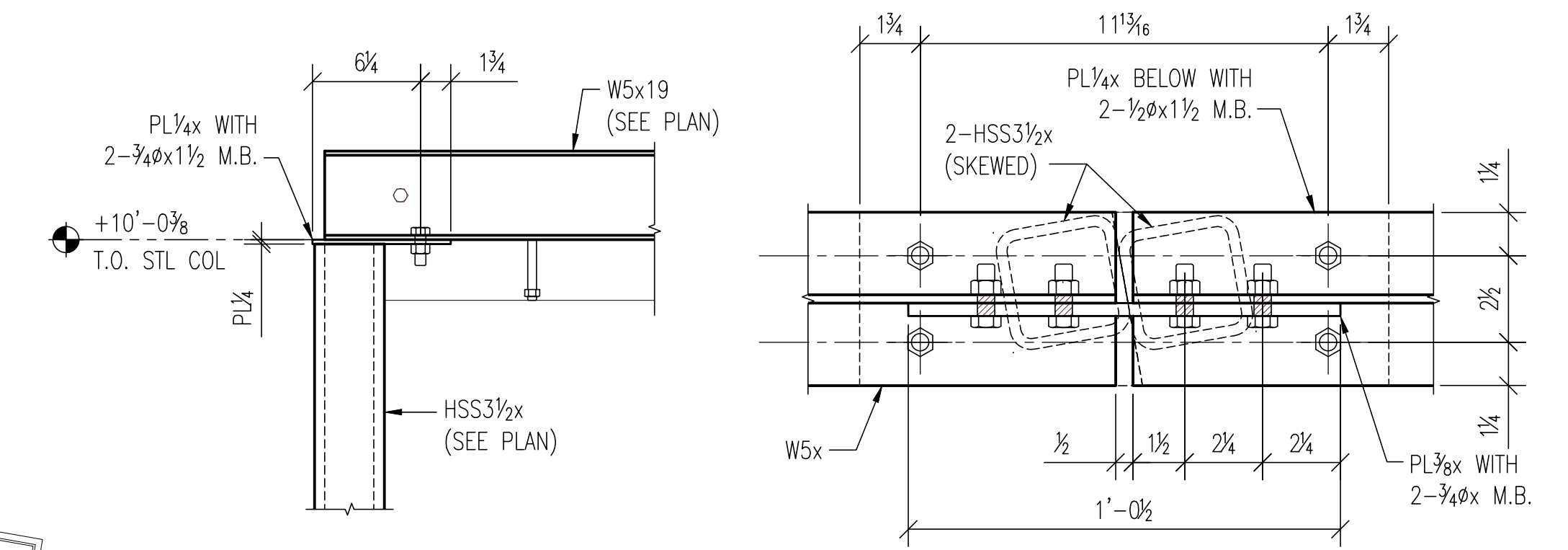




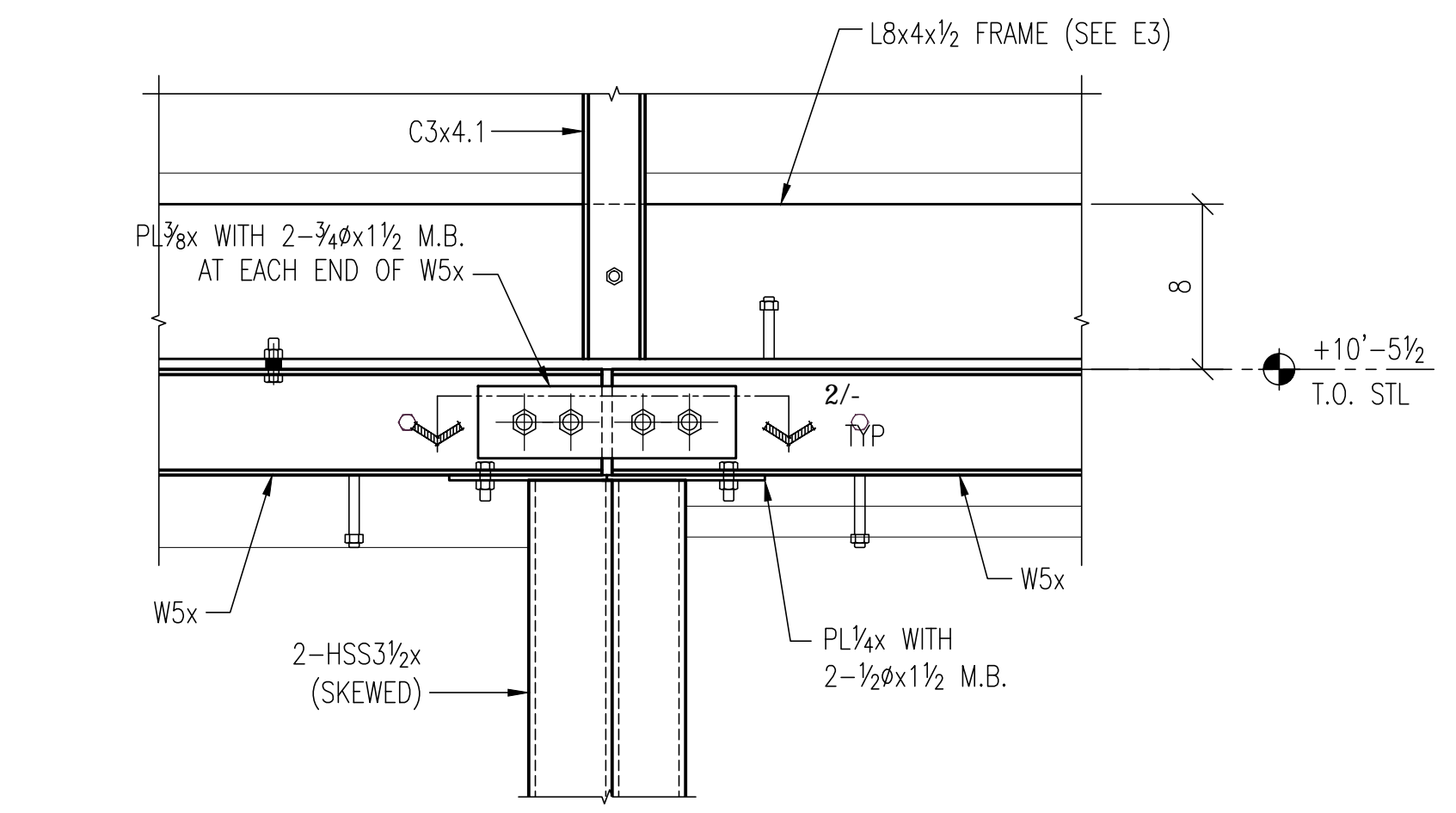


**A LOWER ROOF FRAMING PLAN**

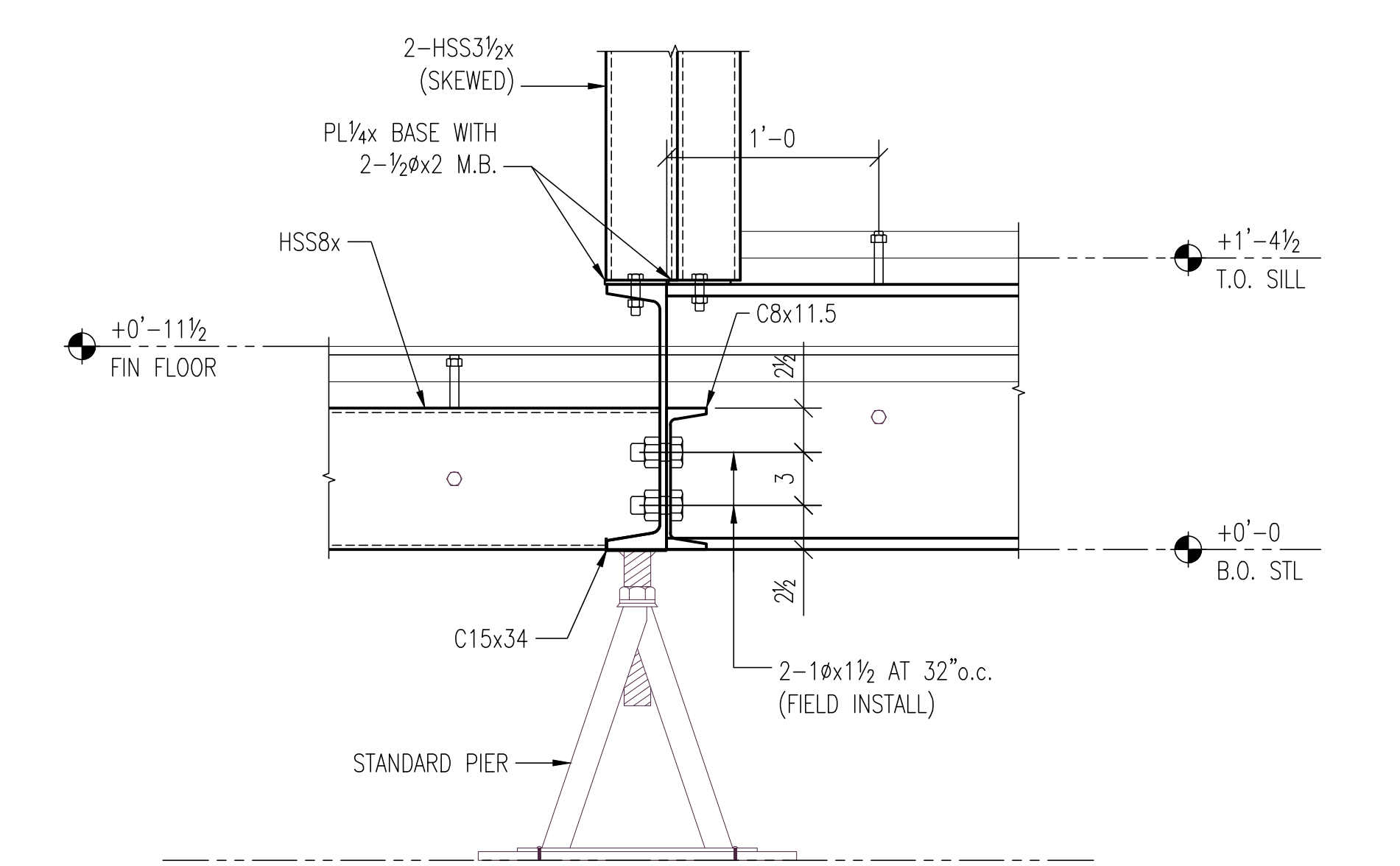
REF.: A1/S-107



**1 DETAIL** REF.: -/  
**2 DETAIL** REF.: -/



**3 DETAIL** REF.: -/



**4 DETAIL** REF.: -/

**SOS CO. DISCLAIMER**  
STRUCTURAL ENGINEER AND/OR ARCHITECT  
TO REVIEW & APPROVE SHOP DRAWINGS BASED  
ON DESIGN DRAWINGS DATED:  
8/17/12 FOR S-SHEETS &  
8/17/12 FOR A-SHEETS  
PLEASE VERIFY CLOUDED DIMENSIONS

**GENERAL NOTES:**  
1. WF SHAPES - ASTM A992 GR. 50  
2. PL'S - ASTM A36 TYP. UNO  
3. BASE & CONTINUITY PL'S - ASTM A572 GR. 50  
4. TUBE - ASTM A500 GR. B UNO  
5. PIPE - ASTM A53, GR. B, U.S.I.N.  
6. WELDING - E70XX ELECTRODES PER AWS.



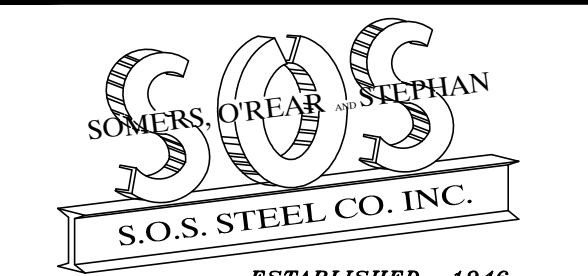
NO.	REVISION	BY	DATE

SUBMITTED 4/10  
CHECKED BY SB DATE 4/17

**FOR CONSTRUCTION**

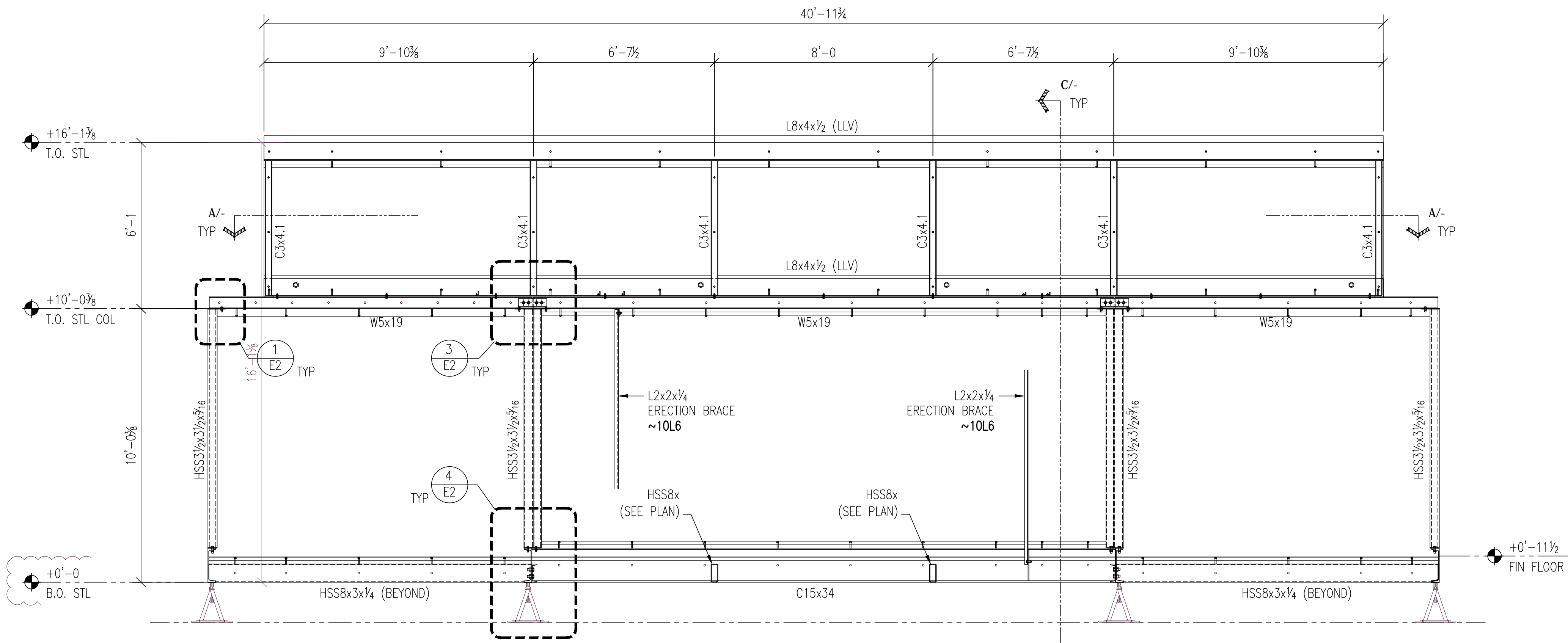
**JOB NAME** RADIANT HOUSE  
**ADDRESS** SANTA CLARA, CA  
**CONTRACTOR** SANTA CLARA UNIVERSITY

DETAILED 03/13  
DRAWN BY CGA  
DRW. NO. E2  
JOB NO. 9732



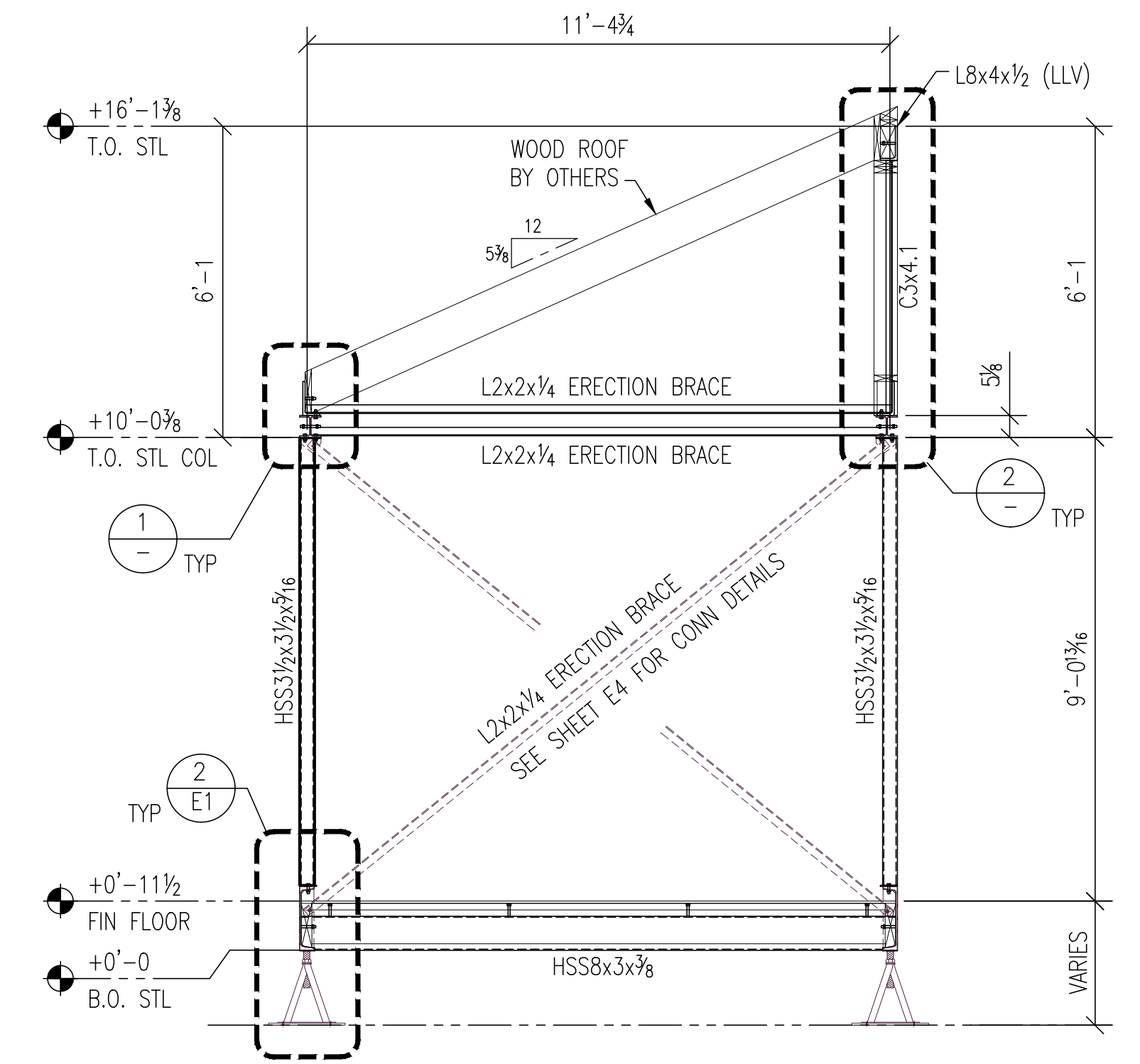
ESTABLISHED 1946  
1160 RICHARD AVE. SANTA CLARA CA. 95050  
PHONE(408)727-6363 FAX(408)727-1372





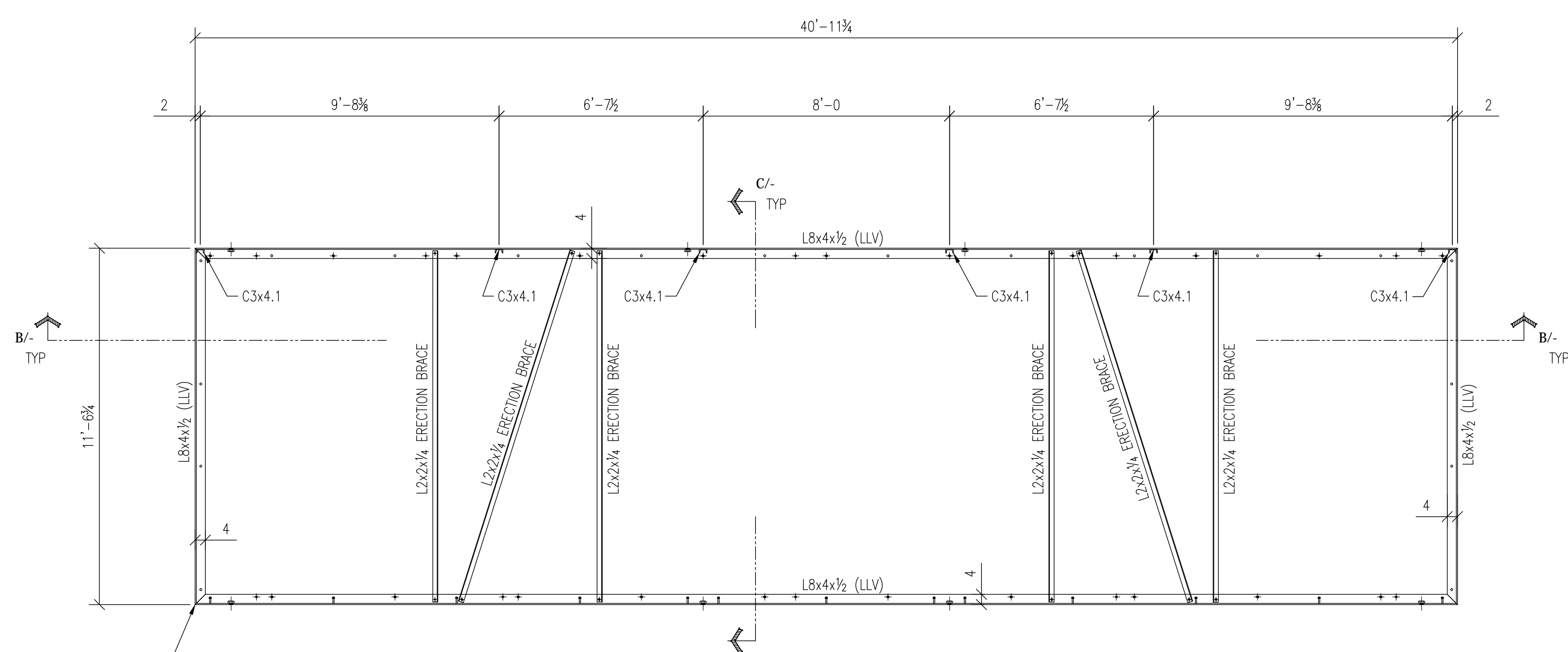
**B SECTION**

REF.: -/-



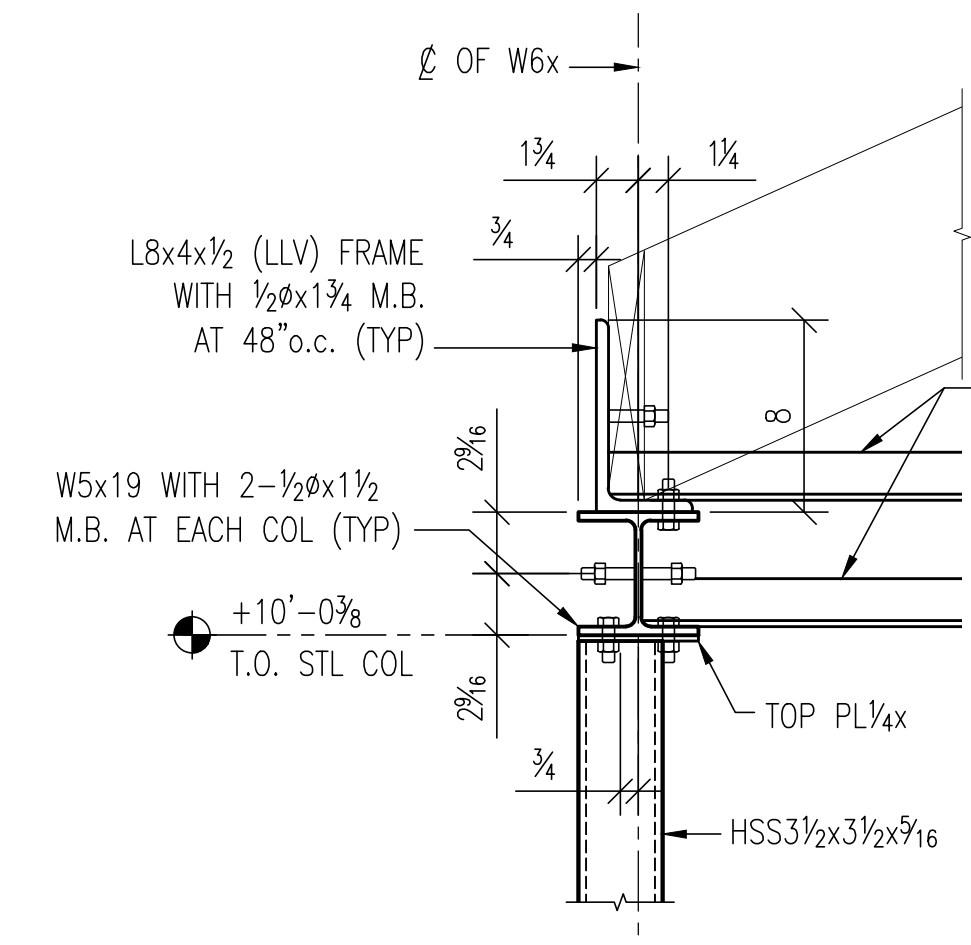
**C SECTION**

REF.: -/-



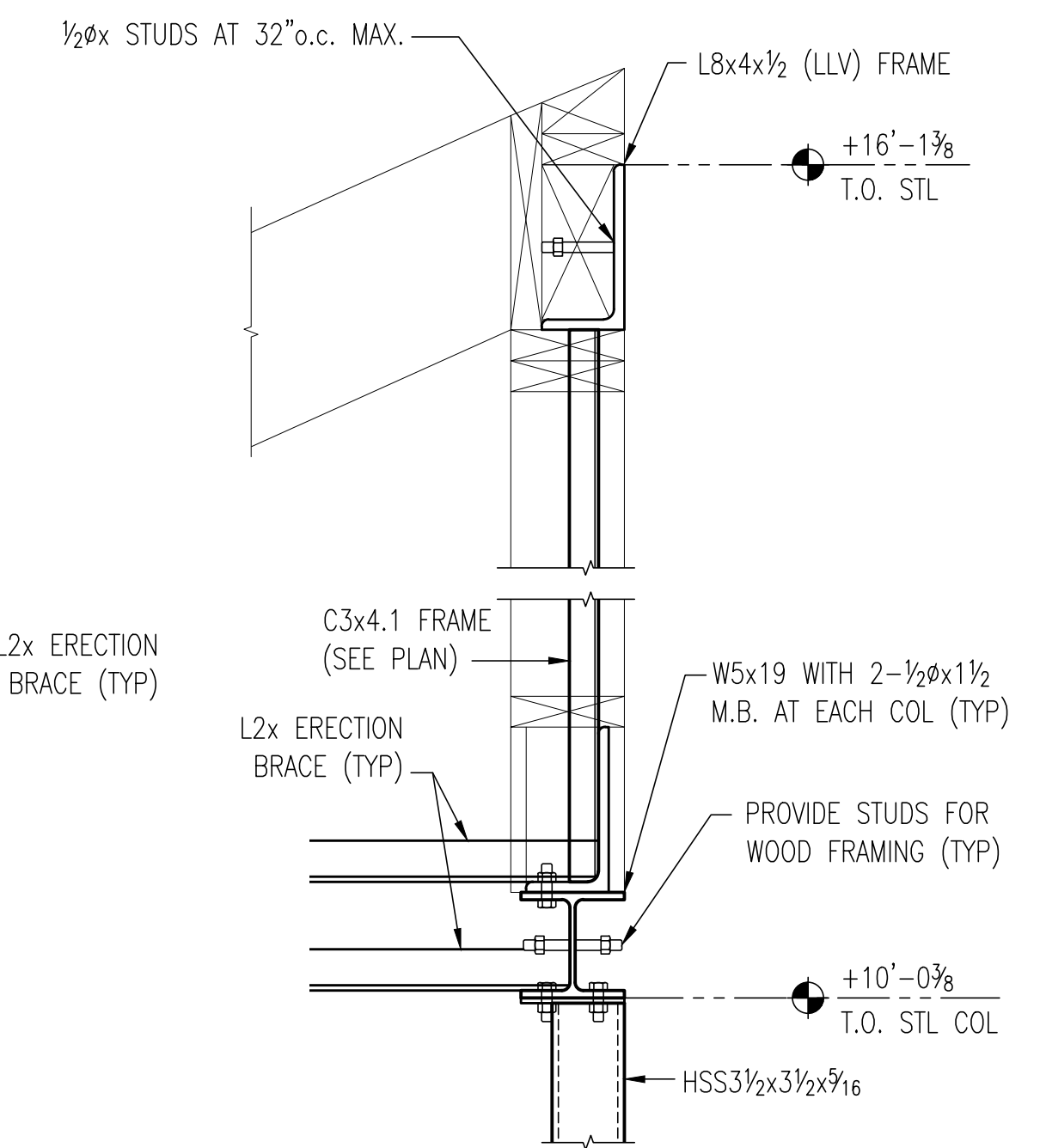
**A UPPER ROOF FRAMING PLAN**

REF.: A1/S-107



**1 DETAIL**

REF.: -/-



**2 DETAIL**

REF.: -/-

ONE FRAME ~9FR1  
SEE SHEET D9

**SOS CO. DISCLAIMER**  
STRUCTURAL ENGINEER AND/OR ARCHITECT  
TO REVIEW & APPROVE SHOP DRAWINGS BASED  
ON DESIGN DRAWINGS DATED:  
8/17/12 FOR S-SHEETS &  
8/17/12 FOR A-SHEETS  
PLEASE VERIFY CLOUDED DIMENSIONS

**GENERAL NOTES:**  
1. WF SHAPES - ASTM A992 GR. 50  
2. PL'S - ASTM A36 TYP. UNO  
3. BASE & CONTINUITY PL'S - ASTM A572 GR. 50  
4. TUBE - ASTM A500 GR. B UNO  
5. PIPE - ASTM A53, GR. B, U.S.I.N.  
6. WELDING - E70XX ELECTRODES PER AWS.

**FOR CONSTRUCTION**

JOB NAME: **RADIANT HOUSE**  
SANTA CLARA UNIVERSITY  
ADDRESS: **SANTA CLARA, CA**  
CONTRACTOR: **SANTA CLARA UNIVERSITY**

DETAILED: **03/13** DRAWN BY: **CGA** DRW. NO.: **E3** JOB NO.: **9732**



NO.	REVISION	BY	DATE
1	REVISIONS PER SCU DATED 4/8	CGA	4/9
2			
3			

SUBMITTED: **4/11** CHECKED BY: **SB** DATE: **4/17**

1160 RICHARD AVE. SANTA CLARA CA. 95050  
PHONE#(408)727-6363 FAX#(408)727-1372

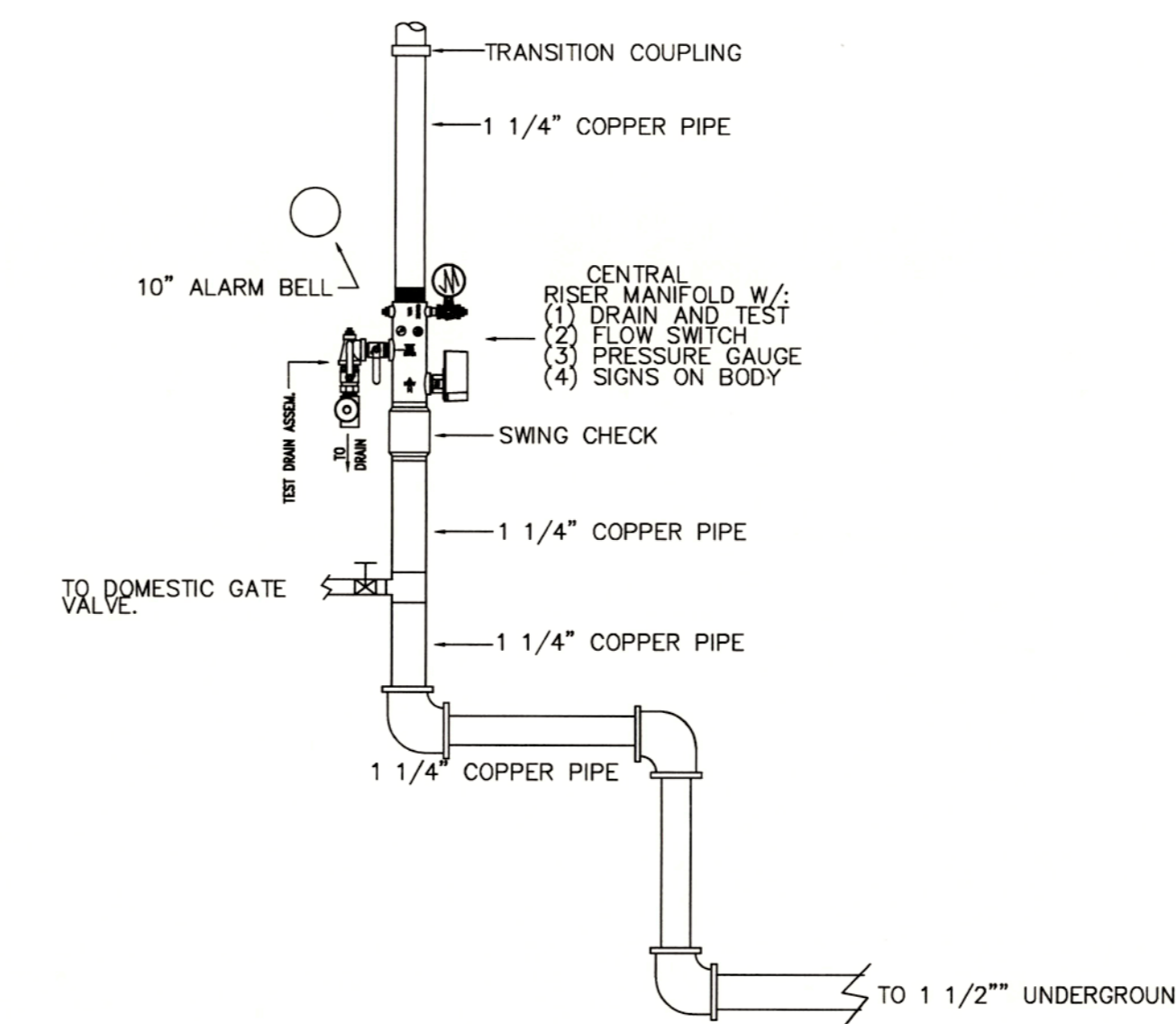
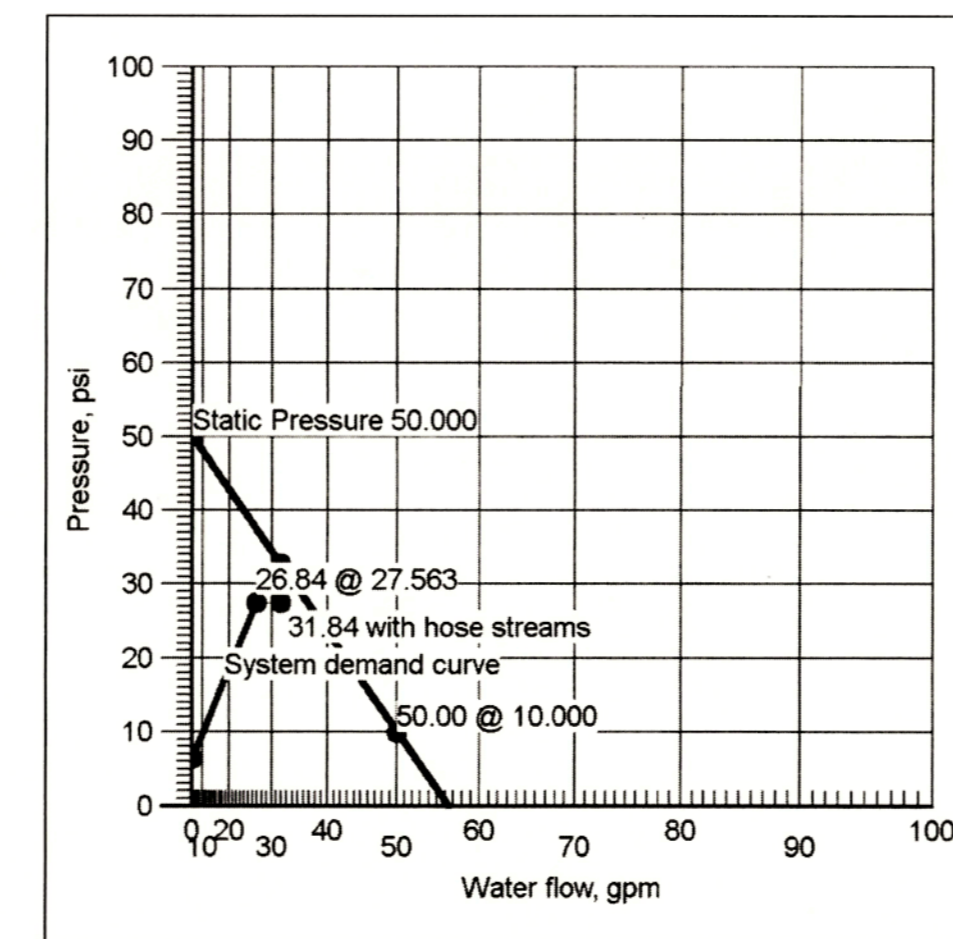




GENERAL NOTES

1. ALL DESIGN, MATERIAL AND INSTALLATION TO CONFORM TO CURRENT NFPA #13 STANDARDS AS AMENDED BY SOLAR DECATHLON RULES AND REGULATIONS.
2. ALL MATERIAL TO BE UL OR FM LISTED.
3. ALL EXPOSED PIPE TO BE COPPER AND ALL CONCEALED PIPE TO BE CPVC.
4. ALL PIPE SHALL BE PROVIDED WITH HANGERS AND SHALL BE SUPPORTED PER CODE AND MANUFACTURER'S SPECIFICATIONS.  
- 6 FT, 0.0 FOR 1" - 1 1/4" PIPE SIZE
5. ALL REQUIRED TESTING AND INSPECTIONS TO BE PERFORMED AND APPROVED PRIOR TO CONCEALMENT.
6. EXISTING FLOW SWITCH SHALL HAVE AN ADJUSTABLE 30 SECOND MINIMUM DELAY.
7. EXISTING ELECTRICAL BELL MUST BE CENTRALLY LOCATED AND WILL HAVE SUFFICIENT INTENSITY TO BE CLEARLY AUDIBLE IN ALL SLEEPING AREAS. POWER SUPPLY MUST BE 110 VOLT.
8. SPRINKLERS TO BE OMITTED FROM BATHROOMS THAT DO NOT EXCEED 55 SQUARE FEET AND CLOSETS NOT EXCEEDING 24 SQUARE FEET.
9. MAXIMUM HEAD SPACING 16' x 16'.
10. MINIMUM DISTANCE BETWEEN HEADS 8'-0".
11. ONLY LISTED AND APPROVED DEVICES SHALL BE INSTALLED IN THIS SYSTEM.
12. ONLY NEW SPRINKLERS SHALL BE USED IN THE INSTALLATION OF THIS PROJECT.
13. MINIMUM OF 2 SPARE SPRINKLER OF EACH TYPE, TEMPERATURE RATING AND ORIFICE SIZE ALONG WITH WRENCH SHALL BE IN THE HEAD BOX IN THE MECHANICAL ROOM.
14. ALL PIPE SHALL BE HUNG FROM STRUCTURE MEMBERS.

Hydraulic Overview		Job Number: SCU-3	Report Description: Residential
Job No: SCU-3	Design Engineer: Christina daSilva	Phone: 650-594-1588	FAX: 650-594-1613
Job Name: SCU Solar Decathlon 2013	Address 1: 500 El Camino Real	Address 2: Santa Clara, CA	Address 3:
System	Area of Application: 900.00ft <sup>2</sup> (Actual 198.19ft <sup>2</sup> )	Design Density: 0.100gpm/ft <sup>2</sup>	Number of Sprinklers Calculated: 2
Min. Demand: 27.563	Static Pressure: 50.00	Residual Pressure: 10.000	Pressure Loss: +5.077 (15.6%)
Total Demand: 31.84 @ 27.563	Supply Flow: 50.00	Hose Flow: 5.00	Static: 50.000
Supplies	Name	Flow (gpm)	Hose Flow (gpm)
8	Tank Supply	50.00	5.00



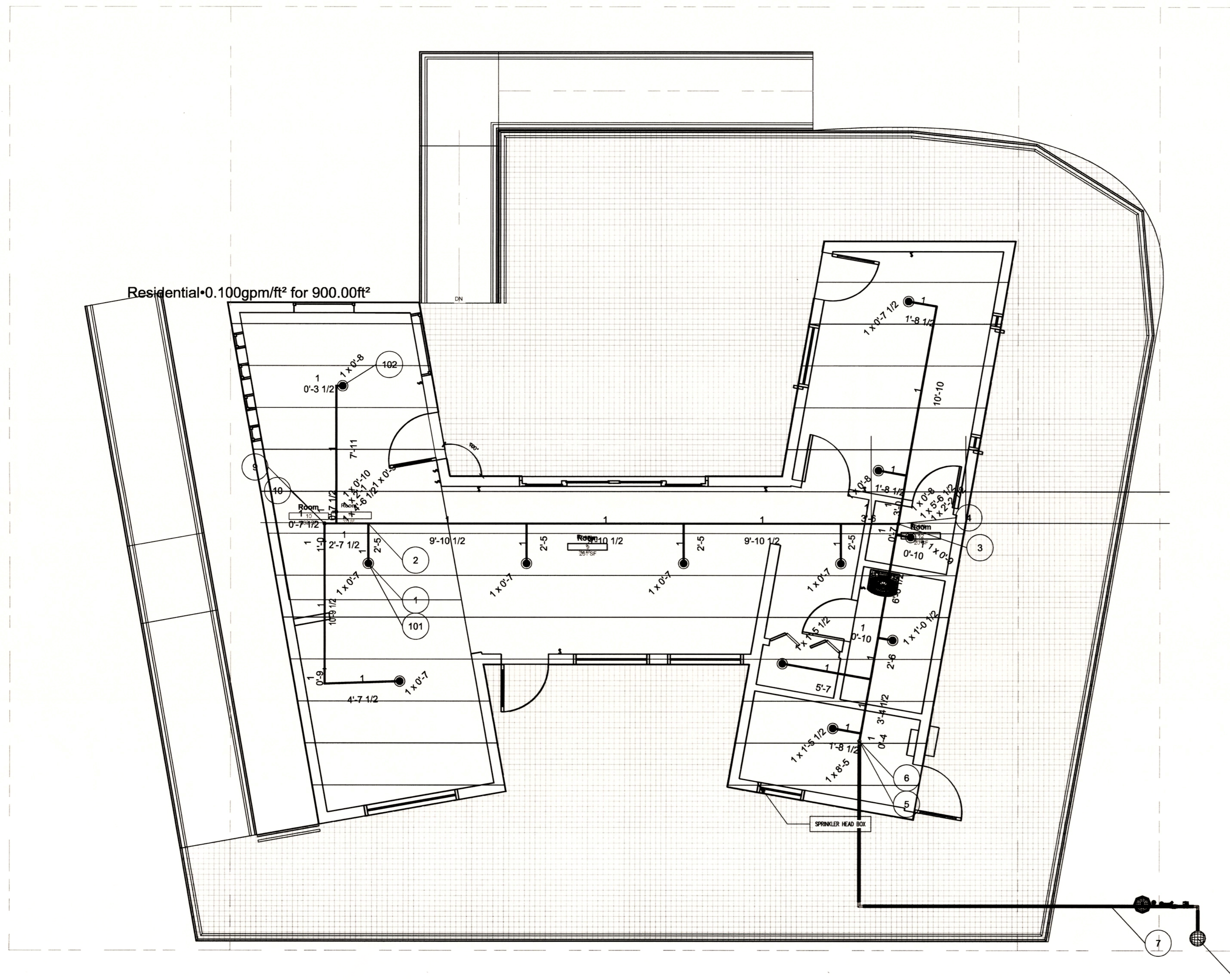
HYDRAULIC OVERVIEW  
NTS

HYDRAULIC GRAPH  
NTS

(E) RISER DETAIL  
SCALE 1/8"=1'-0"

LEGEND

- NEW PIPING
- HYDRAULIC REF. POINT
- PIPE HANGER SEE HANGER DETAIL
- RESIDENTIAL FIRE SPRINKLER PENDENT HEAD



Riser Tag	
Design Basis	Residential
Occupancy:	12
Total Sprinklers:	2
Number Of Sprinklers Calculated:	4.9
K-Factor:	0.5
Office Size:	0.100gpm/ft <sup>2</sup>
Design Density:	900.00ft <sup>2</sup> (Actual 198.19ft <sup>2</sup> )
Area of Application:	
Demand at Base Of Riser or Point Of Connection	
Total Demand Flow (gpm):	26.84
Pressure (psi):	27.563
Water Supply Information At Time Of Design	
Static Pressure (psi):	50.000
Residual Pressure (psi):	10.000
Supply Flow (gpm):	50.00
Total Demand Flow (gpm):	31.84
Total Demand Pressure (psi):	27.563

RISER TAG  
NTS

CPVC HANGER		CPVC HANGER	
27	28	27	28
① NIL	0	① NIL	0
② TOLCO CPVC SINGLE FASTENER STRAP	1	② TOLCO CPVC DOUBLE FASTENER STRAP	1
③ NIL	0	③ NIL	0
④ SELF THREADING SCREW	1	④ SELF THREADING SCREW	2
⑤ NIL	0	⑤ NIL	0

HANGER DETAIL  
NTS

RISER HYDRAULIC CALC NODES  
NTS

PIPING PLAN WITH HYDRAULIC CALC NODES  
SCALE: 1/4"=1'-0"

As Built Drawing  
AUGUST 15, 2013



<b>Revisions</b> THIS PLAN IS RESTRICTED TO DESIGN LAYOUT OF AUTOMATIC FIRE SPRINKLERS ONLY. INFORMATION GIVEN ON THIS DRAWING REMAINS THE PROPERTY OF WALSCHEON FIRE PROTECTION, INC. AND IS FOR THE USE OF WALSCHEON FIELD PERSONNEL. ANY OTHER USE OF THE WORK DEPICTED HEREON IS PROHIBITED. INSTALLATION SHALL CONFORM TO NFPA 13 (1999 EDITION) AND CURRENT CITY CODE. OCCUPANCY CLASS OF AREA BEING PROTECTED: SPRINKLER HEADS AT CEILING WILL BE LOCATED IN CEILING TILE CENTERLINES. CEILING TILE TYPE TO BE 2x4 STD. TEGULAR OFFICER BOARD WORK PERFORMED ON THIS DRAWING WILL BE HYDROSTATICALLY TESTED. THE FOLLOWING ITEMS ARE NOT PROVIDED BY WALSCHEON FIRE PROTECTION, INC. - ELECTRICAL WIRING OR ALARM WORK - CLEANING, PRIMING OR PAINTING OF PIPE - STRUCTURAL CALCULATIONS OF BUILDING SUPPORT SYSTEM(S) - REPAIR OR REPLACEMENT OF EXISTING CEILING		(E) = EXISTING ITEM C.T.F. = CUT-TO-FIT U.D.N. = UNLESS NOTED F.O.W. = FACE OF WALL N.I.C. = NOT IN CONTRACT	OVERHEAD SYSTEM CONFIGURATION: NEW	HANGER NOTES: HANG PIPING IN ACCORDANCE WITH NFPA 13, Sect. 8.2 HANG ALL ARM OVERS UNDER 1/2" HANGER RODS SHALL NOT BE FORMED OR BENT. DO NOT HANG TO ROOF STIFFENERS. DO NOT HANG TO BLUETED CHANNEL UNLESS NOTED HERE. PER NFPA 13, TABLE 8.2.2.1, FOR 1" AND 1-1/4" PIPE, 12'-0" BETWEEN HANGERS; 12'-0" MAX. FOR 1-1/2" AND UP. PER NFPA 13, 8.2, INSTALL A HANGER ON EACH PIPE. MAINTAIN MIN. 2" BETWEEN HANGER & UPRIGHT SPRINKLER. MAXIMUM UNSUPPORTED ENG. FROM HANGER TO SPRINKLER: 1" x 2-1/2", 1-1/2" x 4-1/2", 1-1/2" x 8'-0" IF STATIC - 100 PSI + Max. 12" FROM ANY PENDENT	MATERIALS: ALL MATERIALS SHALL CONFORM TO NFPA 13 CHAPTER 8. SYSTEM COMPONENTS AND MATERIALS TO BE UL/FM APPROVED WHERE APPLICABLE. PIPE 2" AND SMALLER TO BE BLACK STEEL, SCH. 40 WITH BROWNS FITTINGS (LONG SCREWED FITTINGS TO BE 125 B. CAST IRON). PIPE 2-1/2" AND LARGER TO BE BLACK STEEL, SCH. 40 WITH BROWNS FITTINGS (LONG SCREWED FITTINGS TO BE 300 B. CAST IRON UNLESS OTHERWISE NOTED). FITTINGS TO BE 125 B. CAST IRON UNLESS OTHERWISE NOTED. FITTINGS TO BE 300 B. CAST IRON UNLESS OTHERWISE NOTED. FITTINGS TO BE 125 B. CAST IRON UNLESS OTHERWISE NOTED. FITTINGS TO BE 300 B. CAST IRON UNLESS OTHERWISE NOTED.	SPRINKLERS: TYCO RAPID RESPONSE-LFII RESIDENTIAL CONCEALED SPRINKLER TOTAL SPRINKLERS THIS FLOOR: 11 PENDENT HEADS TO HAVE WHITE ESCUTCHEONS	PROJECT SUPERINTENDENT: SCU SOLAR DECATHLON 2013 CONTRACT WITH: ANDY TRUONG 650-868-6424			SCU SOLAR DECATHLON 2013 500 EL CAMINO REAL SANTA CLARA, CA APPROVALS: <input type="checkbox"/> CITY <input type="checkbox"/> CSFM <input type="checkbox"/> INSURER <input type="checkbox"/> OSHPD <input type="checkbox"/> OWNER	JOB # SCU 2013 DATE: 1/18/2013 SCALE: AS NOTED DRAWN BY: C. daSilva Total # Heads: 9 DRAWING NUMBER: FP-01 SHEET 1 OF 1
		Walschon Fire Protection, Inc. 1015 TERMINAL WAY SAN CARLOS, CA 94070 LIC. # C-16 568438 TELEPHONE: (650) 594-1588 FAX: (650)594-1613 christina@walschon.com									





TEAM NAME: SANTA CLARA  
 ADDRESS: 500 EL CAMINO REAL  
 SANTA CLARA, CA  
 95051  
 CONTACT: SCUSOLAR13@GMAIL.COM  
 WWW.SD13.SCU.EDU

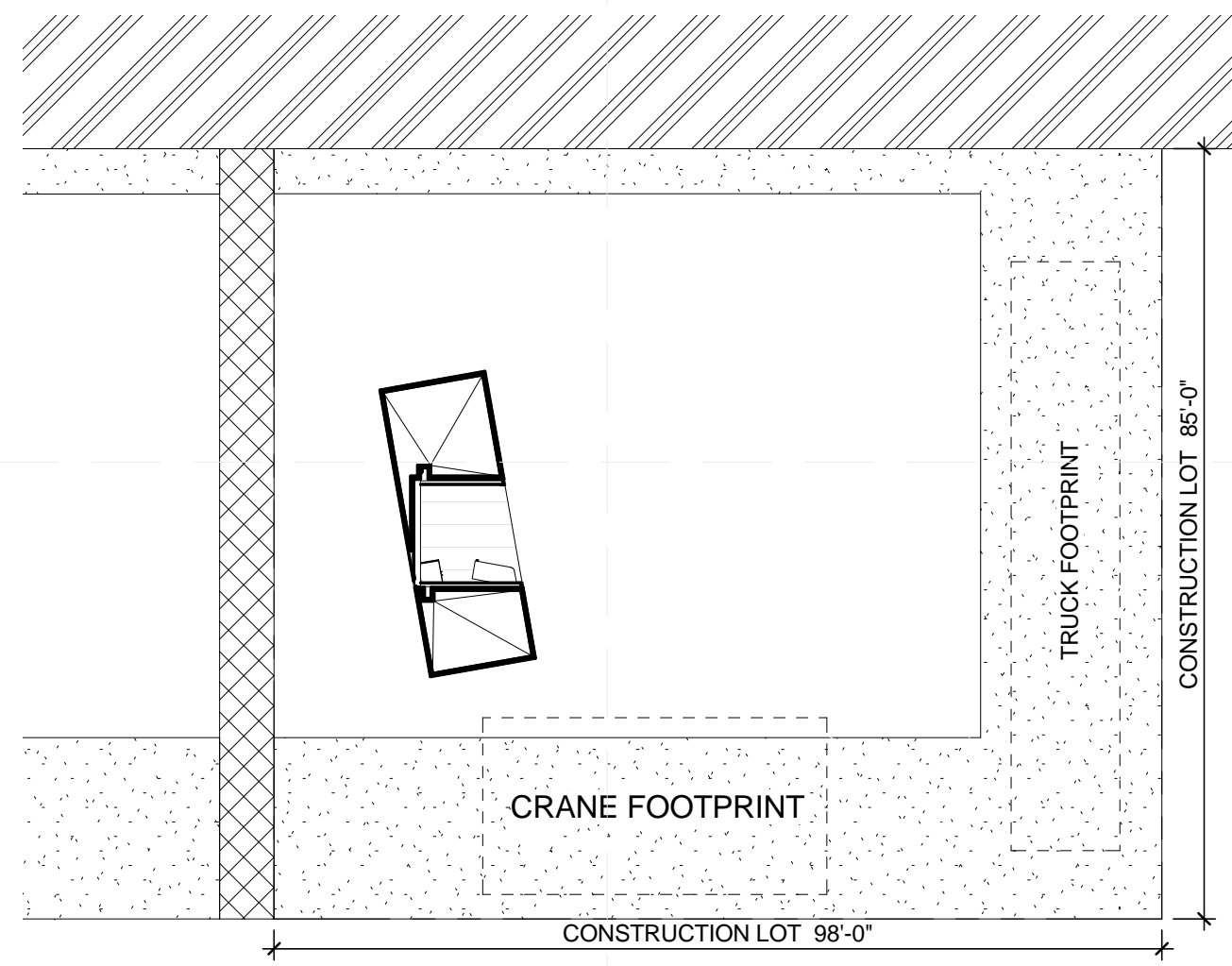
CONSULTANTS:  
**MESSANA**  
 2224 ALBERTA LANE  
 CAPITOLA CA 95010  
**WALSCHON FIRE PROTECTION INC.**  
 1015 TERMINAL WAY  
 SAN CARLOS, CA 94070  
**S.O.S. STEEL CO., INC.**  
 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

U.S. DEPARTMENT OF ENERGY  
**SOLAR DECATHLON**  
 CLIENT: U.S. DEPARTMENT OF ENERGY  
 SOLAR DECATHLON 2013  
 WWW.SOLARDECATHLON.GOV

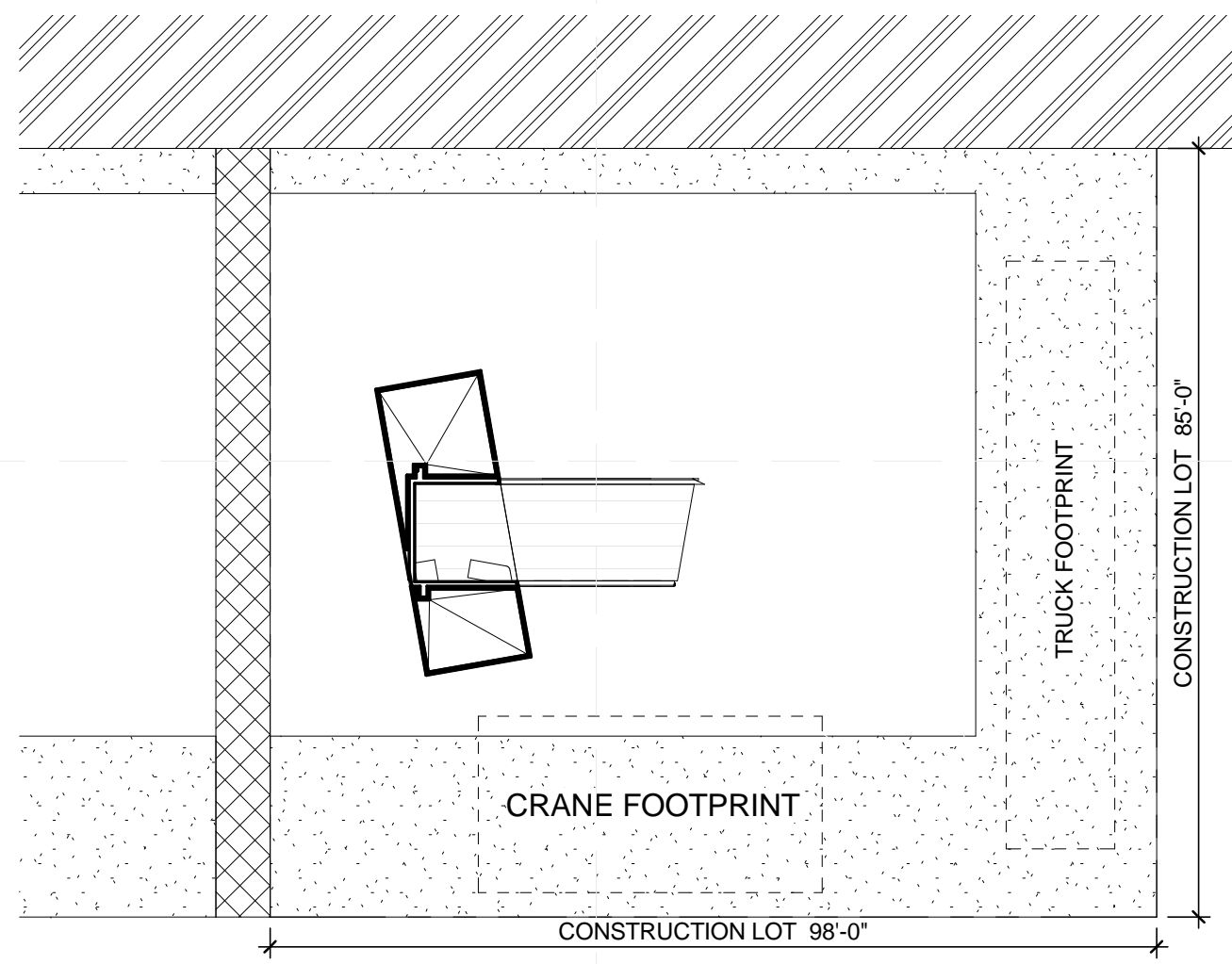
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	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: CC  
 CHECKED BY: SCU  
 COPYRIGHT: NONE- PROJECT IS PUBLIC DOMAIN

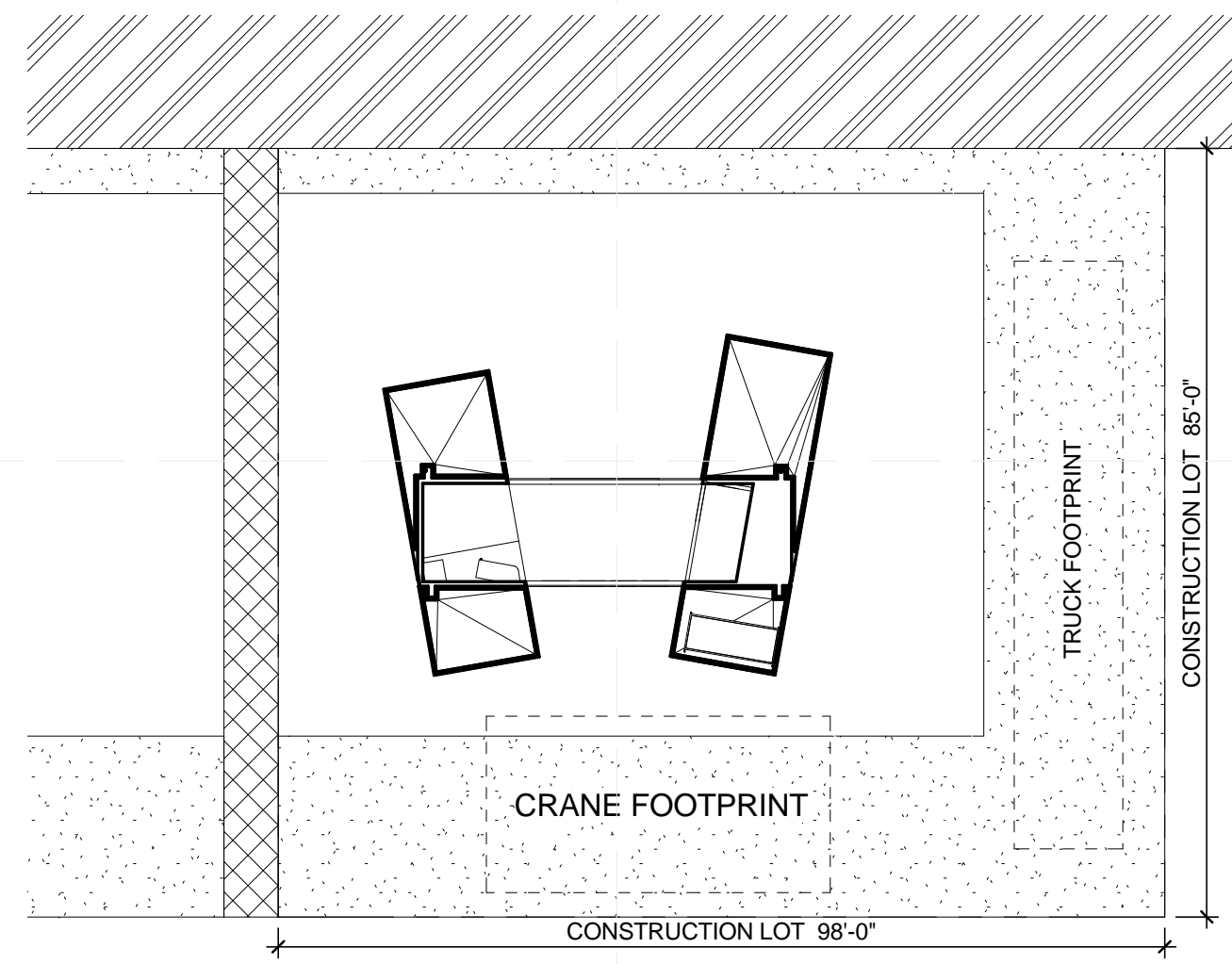
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**ARRIVAL SEQUENCE  
 PLANS**  
**O-101**



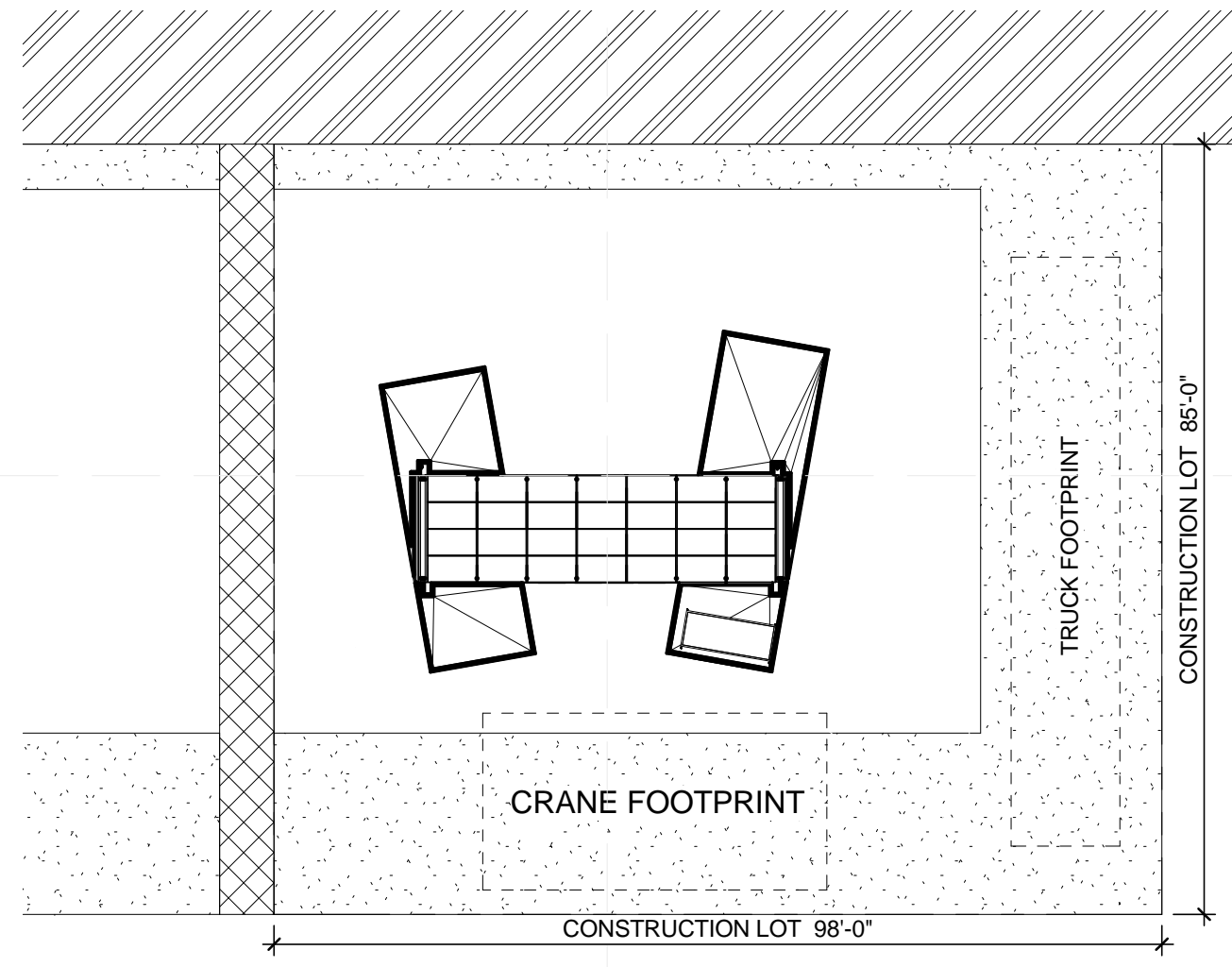
**D1 PLACE MODULE A**  
 1" = 20'-0"



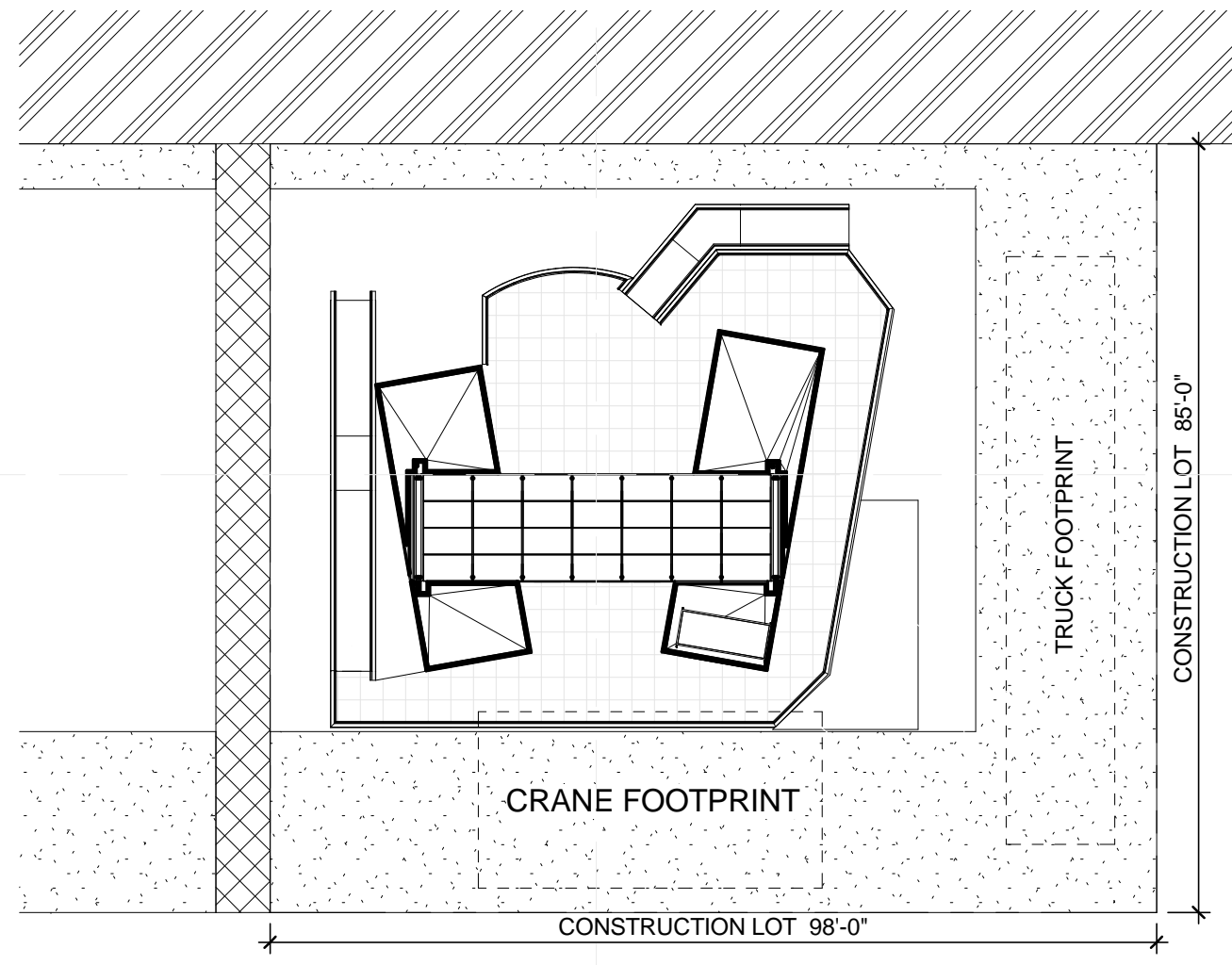
**D3 PLACE MODULE B**  
 1" = 20'-0"



**D5 PLACE MODULE C**  
 1" = 20'-0"



**B1 PLACE MODULE D**  
 1" = 20'-0"



**B3 PLACE DECK**  
 1" = 20'-0"





TEAM NAME: SANTA CLARA  
 ADDRESS: 500 EL CAMINO REAL  
 SANTA CLARA, CA  
 95051  
 CONTACT: SCUSOLAR13@GMAIL.COM  
 WWW.SD13.SCU.EDU

CONSULTANTS:  
**MESSANA**  
 2224 ALBERTA LANE  
 CAPITOLA CA 95010  
**WALSCHON FIRE PROTECTION INC.**  
 1015 TERMINAL WAY  
 SAN CARLOS, CA 94070  
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 1160 RICHARD AVENUE  
 SANTA CLARA, CA 95050  
**SUMMERS & SONS ELECTRIC, INC.**  
 808 S. MAIN STREET  
 MILPITAS, CA 95035

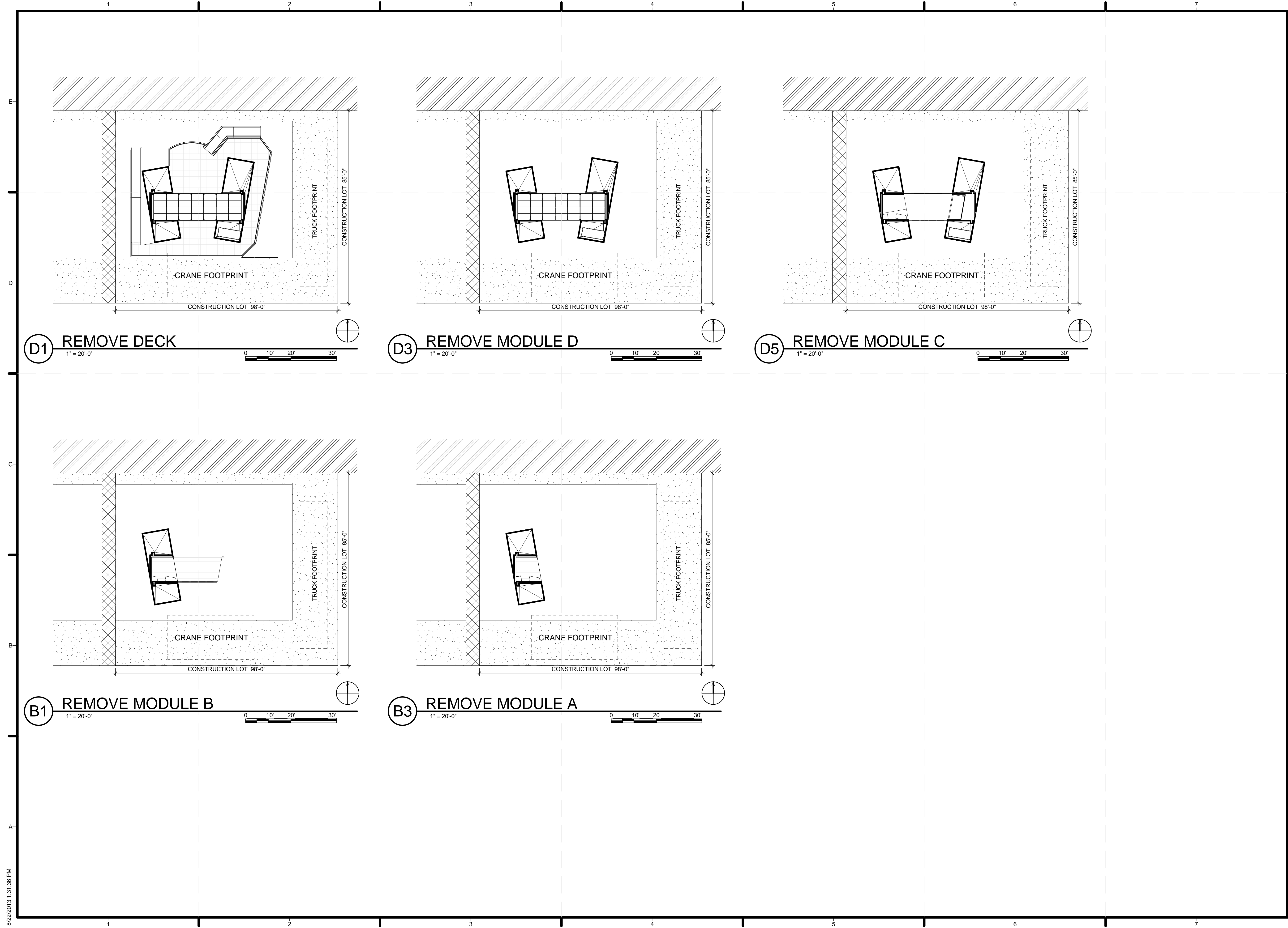
U.S. DEPARTMENT OF ENERGY  
**SOLAR DECATHLON**  
 CLIENT: U.S. DEPARTMENT OF ENERGY  
 SOLAR DECATHLON 2013  
 WWW.SOLARDECATHLON.GOV

MARK	DATE	DESCRIPTION
	08/22/13	DOE AS BUILT SUBMISSION
	08/12/13	AS BUILT REVISIONS
	08/06/13	CD CITY INSPECTION 3
	07/26/13	CD CITY INSPECTION 2
	07/19/13	CD CITY INSPECTION
	05/10/13	CD RESUBMISSION 2
	04/04/13	CD RESUBMISSION
	02/14/13	CD SUBMISSION
	11/20/12	DD RESUBMISSION
	10/11/12	DD SUBMISSION

LOT NUMBER: 118  
 DRAWN BY: CC  
 CHECKED BY: SCU  
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SHEET TITLE:  
 DEPARTURE SEQUENCE  
 PLAN

**O-102**



8/22/2013 1:31:36 PM