



AS-BUILT DOCUMENTS

AUGUST 11, 2011

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SOLAR DECATHLON 2011
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 KATIE ROMANOV - COMMUNICATIONS AND OUTREACH LEAD

GENERAL SHEET NOTES

1. ALL CONSTRUCTION, MATERIALS INSTALLATIONS SHALL CONFORM TO THE 2011 SOLAR DECATHLON BUILDING CODE.



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SHEET TITLE
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ROOM NAME
 150 SF AREA TAG

1 SIM
 A101 CALL OUT TAG

0 GRID TAG

A4
 A101 SECTION TAG

1 Ref
 A101 ELEVATION TAG

0 2' 4' 8'
 GRAPHIC SCALE

ELEVATION LEVEL

USAGE FLOOR AREA
 MASS FLOOR TAG

SHEET KEYNOTE REFERENCE TAG

1L WALL TAG

11 WINDOW TAG

1i FURNITURE TAG

NORTH ARROW

0 DOOR TAG

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

Overview

Inspired by the iconic New England farmhouse, Self-Reliance is an environmentally-friendly, net-zero energy home for a family of four. Farmhouses have always been rooted in place and history. They were designed to be durable, easily constructable, and made of local, natural materials. We have adopted and modernized these most defining qualities to create a contemporary house that is still recognizable as "home." The timeless gable form maximizes space while shedding rain and snow and providing an ideal angle for a solar array. Self-Reliance renewably produces all of the energy it uses while providing all the comforts and conveniences for 21st century living.

Public / Private Divide

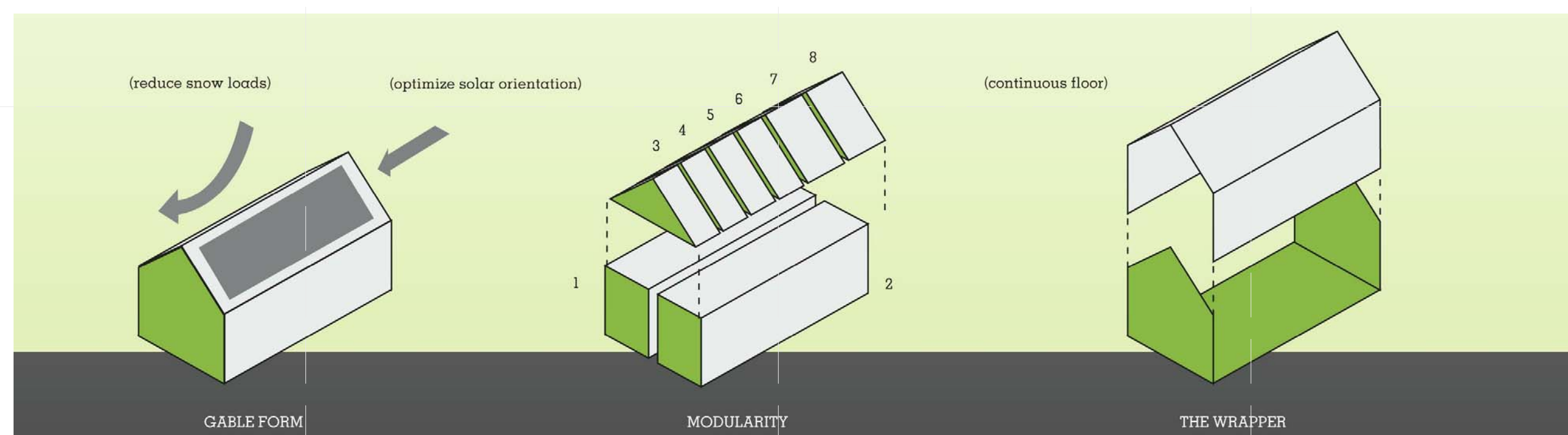
While Self-Reliance is smaller than the average American home, its design maximizes square footage and provides a comfortable functional space that fosters community. The open kitchen, dining, and living spaces are designed to encourage a family to make dinner, do homework, and spend time together. The public space visually and literally opens up to the natural landscape, extending onto the deck during the warmer months. A central bathroom and mechanical closet separate the public zone from the two private bedrooms. A continuous floor wraps up the gable walls to bridge the gap between public and private spaces, creating a unified home with distinct zones.

Local Materials

From our floors to our finishes, Self-Reliance makes use of locally harvested natural materials whenever possible. Our sugar maple hardwood flooring was sustainably harvested from College-owned forests. White oak, known for its natural rot-resistant properties and longevity, was harvested less than a mile away from the College for our outdoor decking. The kitchen countertop and flooring, as well as the bathroom and mudroom flooring, consist of naturally finished heathermore slate, quarried in southern Vermont.

Modularity

Self-Reliance splits into two floor modules and six roof modules so that it can be transported from Middlebury, Vermont to Washington D.C. Each house module is structurally independent of the others, minimizing the risk of damage during disassembly and reassembly. We intentionally accentuate the seams between modules to convey how our home is assembled. We've also introduced a conceptual wrapper, or continuous floor, that runs up the east and west gable walls to bridge the gaps between modules and create a visually unified interior space.



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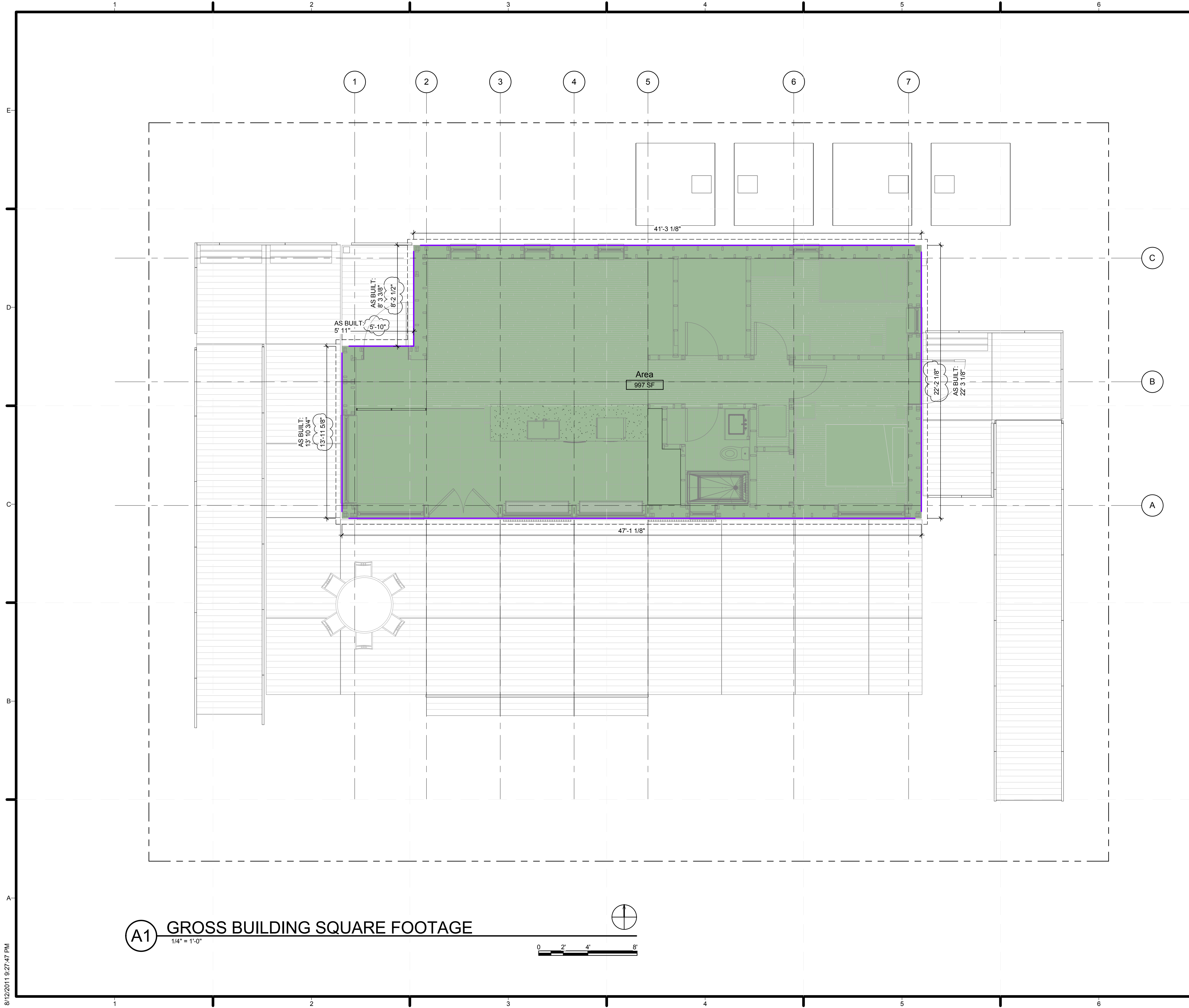
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SHEET TITLE

DESIGN INTENT AND
 TARGET MARKET
 DESCRIPTION

G-011



GENERAL SHEET NOTES

1. COMPLIANT WITH ANSI Z765-2003
2. ALL DIMENSIONS SHOWN ARE TO THE FINISHED FACE OF EXTERIOR WALLS
3. SHOWN IS SQUARE FOOTAGE OF FINISHED AREA
4. MECHANICAL ROOM IS FINISHED WITH 3/4" PLYWOOD AND SO INCLUDED IN THIS CALCULATION
5. THE POINT AT WHICH THE CEILING BEGINS TO SLOPE IS 7' 3 5/16" ABOVE THE FINISHED FLOOR LEVEL, THUS WITHIN THE ANSI CEILING HEIGHT REQUIREMENTS
6. REFER TO SHEET L-502 FOR WATER TANK DETAILS
7. NOTE THAT AS BUILT DIMENSIONS ADD EXTRA 2.5SF TO THE TOTAL SQUARE FOOTAGE, MEANING THAT THE TOTAL SQUARE FOOTAGE OF FINISHED AREA IS JUST UNDER 1000SF REQUIRED BY THE RULE 6.2

REFERENCE KEYNOTES

SHEET KEYNOTES



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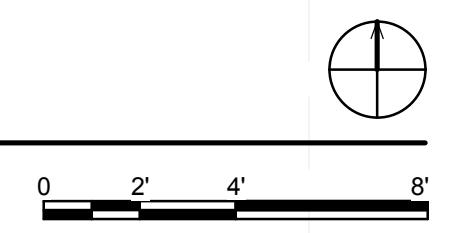
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SHEET TITLE
 FINISHED SQUARE FOOTAGE COMPLIANCE PLAN

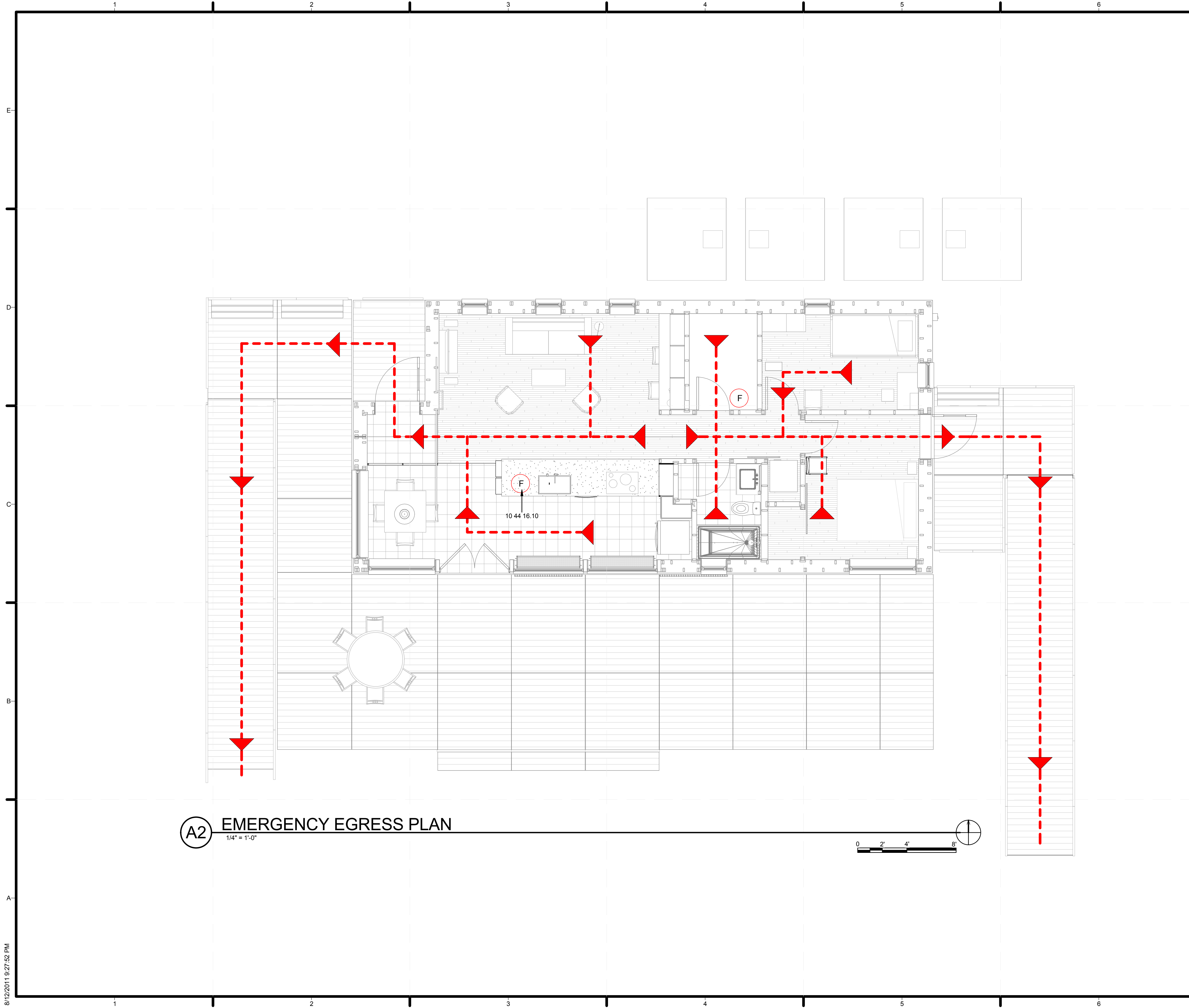
G-101

A1 GROSS BUILDING SQUARE FOOTAGE

1/4" = 1'-0"



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

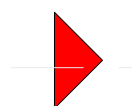


GENERAL SHEET NOTES

REFERENCE KEYNOTES

10 44 16.10 PORTABLE MECHANICAL FIRE EXTINGUISHER 2-A:10-B:C 2.5 LB

SHEET KEYNOTES

EGRESS LEGEND

-  MOVEMENT DIRECTION
-  PRIMARY MOVEMENT PATH
-  FIRE EXTINGUISHER



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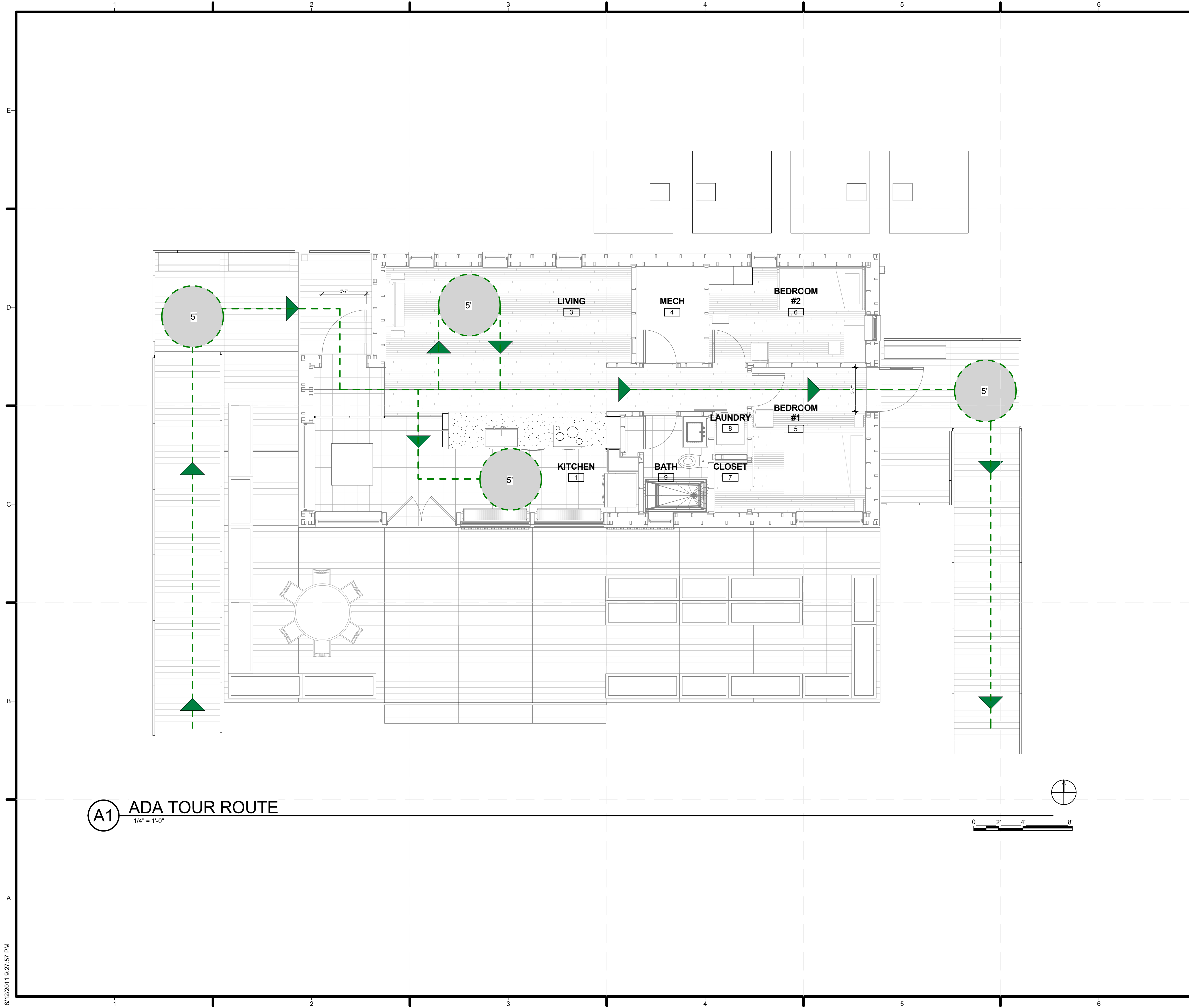
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SHEET TITLE
EGRESS PLAN

G-102

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A1 ADA TOUR ROUTE
1/4" = 1'-0"

GENERAL SHEET NOTES

1. ALL RAMP SLOPE EQUAL TO OR GREATER THAN 36" WIDE
2. RAMP SLOPE DOES NOT EXCEED 1:12
3. DOOR PARTS OF ACCESSIBLE ROUTE HAVE 32" MIN CLEARANCE

REFERENCE KEYNOTES

SHEET KEYNOTES

ADA LEGEND

- MOVEMENT DIRECTION
- PRIMARY MOVEMENT PATH
- 5' X 5' LANDING FOR DIRECTION CHANGE

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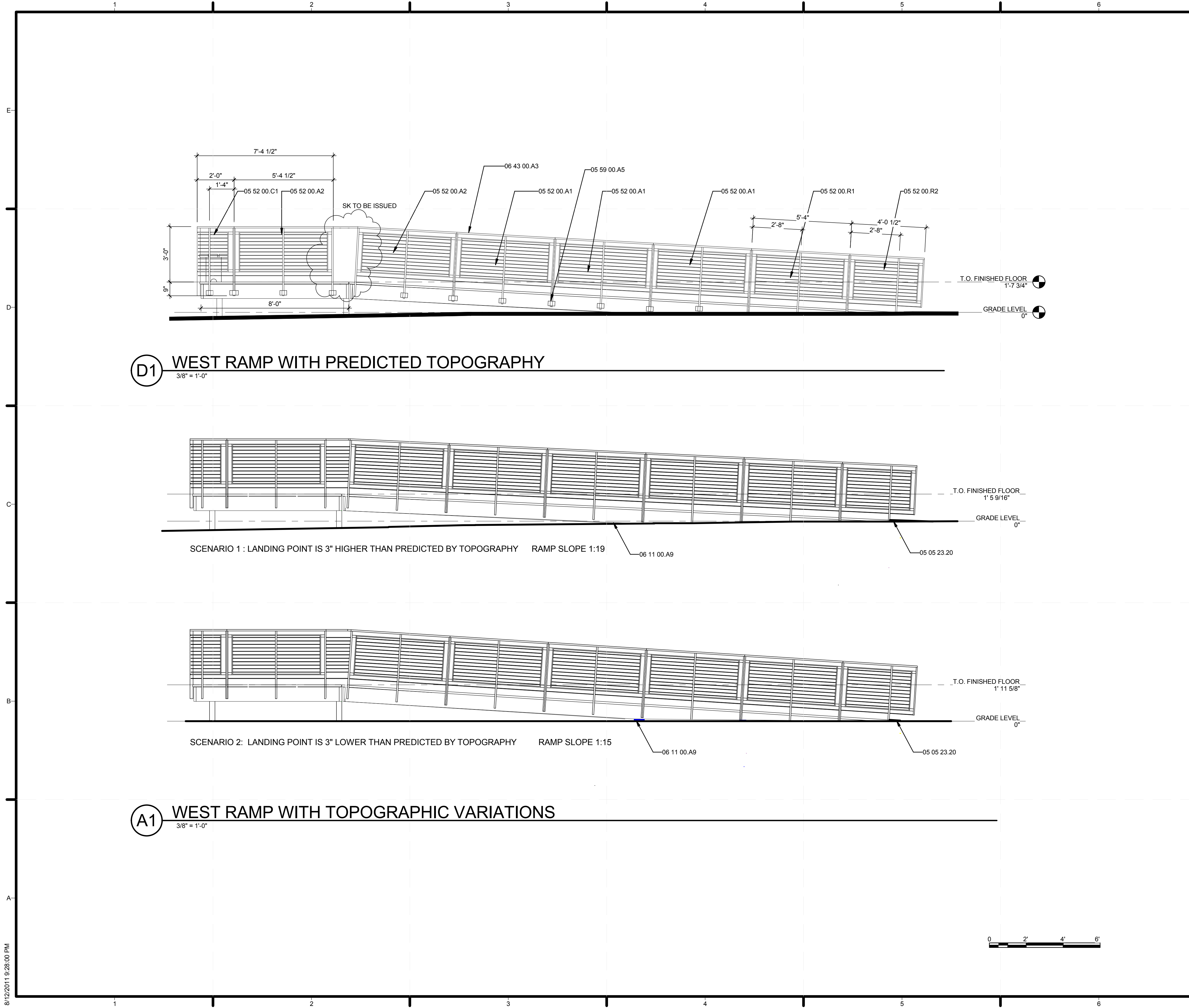


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SHEET TITLE
ADA TOUR ROUTE COMPLIANCE PLAN

G-103



D1 WEST RAMP WITH PREDICTED TOPOGRAPHY
3/8" = 1'-0"

A1 WEST RAMP WITH TOPOGRAPHIC VARIATIONS
3/8" = 1'-0"

GENERAL SHEET NOTES

1. ALL RAMP SLOPE EQUAL TO OR GREATER THAN 36" WIDE
2. RAMP SLOPE DOES NOT EXCEED 1:12
3. OAK HANDRAIL EXTENDS UNBROKEN
4. LEVEL LANDING USING SAND AND GEOTEXTILE FABRIC

REFERENCE KEYNOTES

- 05 05 23.20 METAL TRANSITION PLATE BETWEEN RAMP AND GRADE, SLOPE 1:20
- 05 52 00.A1 FABRICATED METAL RAILING, TYPE A1
- 05 52 00.A2 FABRICATED METAL RAILING, TYPE A2
- 05 52 00.C1 FABRICATED METAL RAILING, TYPE C1
- 05 52 00.R1 FABRICATED METAL RAILING, TYPE R1
- 05 52 00.R2 FABRICATED METAL RAILING, TYPE R2
- 05 59 00.A5 RAILING RECEPTACLES SECURED TO DECK
- 06 11 00.A9 WOOD SHIMS, BEVELED TO RAMP ANGLE
- 06 43 00.A3 WHITE OAK HANDRAIL

SHEET KEYNOTES



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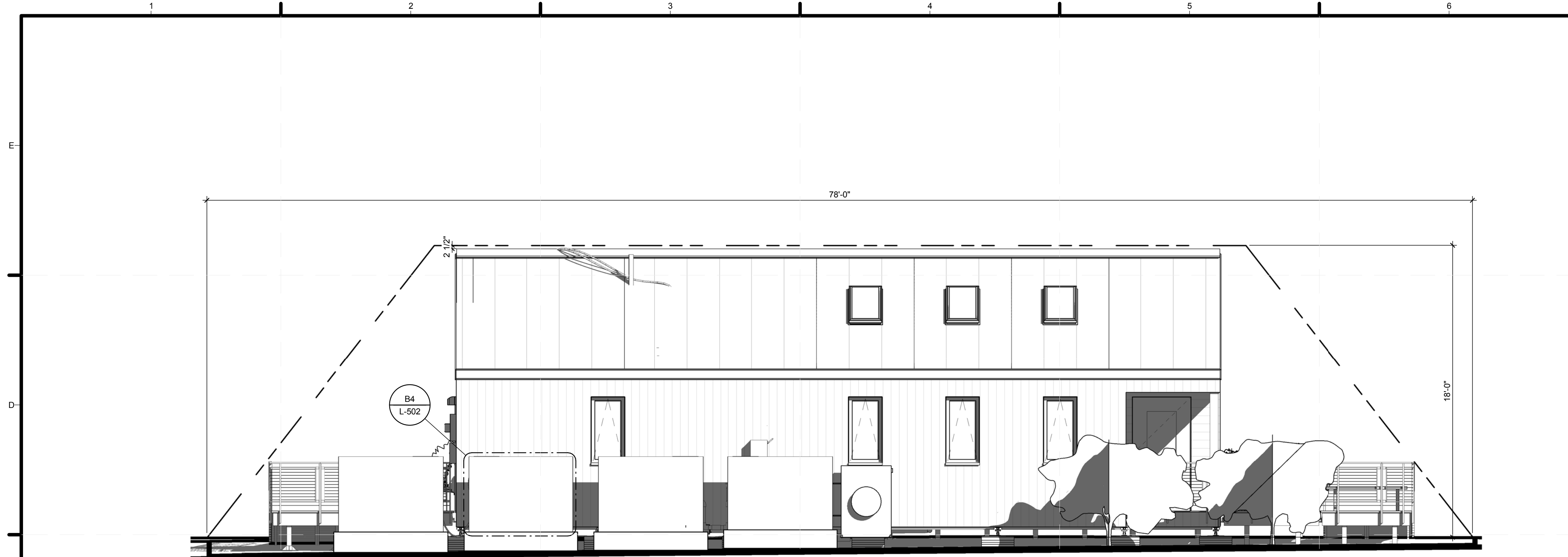
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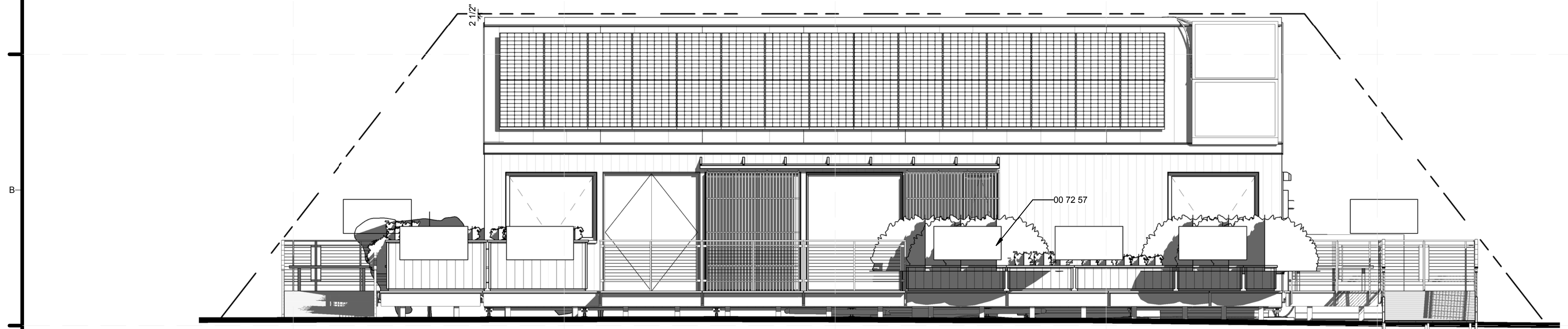
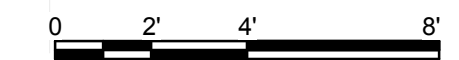
SHEET TITLE
ADA RAMP COMPLIANCE ELVATIONS

G-104

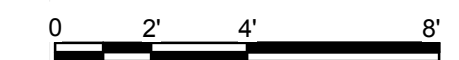
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C1 SOLAR ENVELOPE COMPLIANCE - NORTH
1/4" = 1'-0"



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



GENERAL SHEET NOTES

1. A VALVE IN THE SOLAR HW SYSTEM WILL PROTRUDE ABOVE THE SOLAR ENVELOPE <2". EMAIL TO FOLLOW

REFERENCE KEYNOTES

00 72.57 4' WIDE DISPLAY BOARDS

SHEET KEYNOTES



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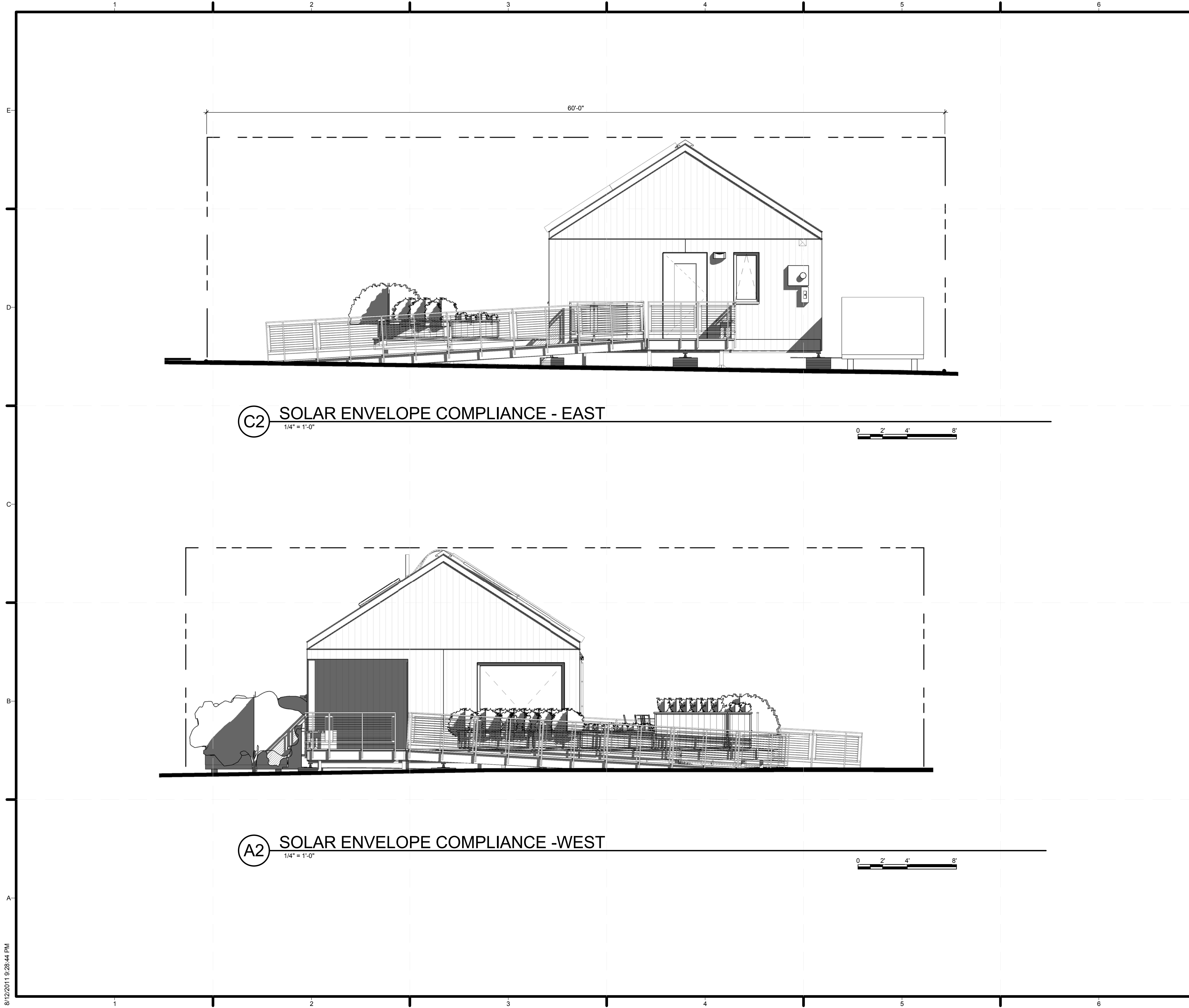


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SHEET TITLE
SOLAR ENVELOPE COMPLIANCE ELEVATIONS

G-201



GENERAL SHEET NOTES

1. A VALVE IN THE SOLAR HW SYSTEM WILL PROTRUDE ABOVE THE SOLAR ENVELOPE <2". EMAIL TO FOLLOW

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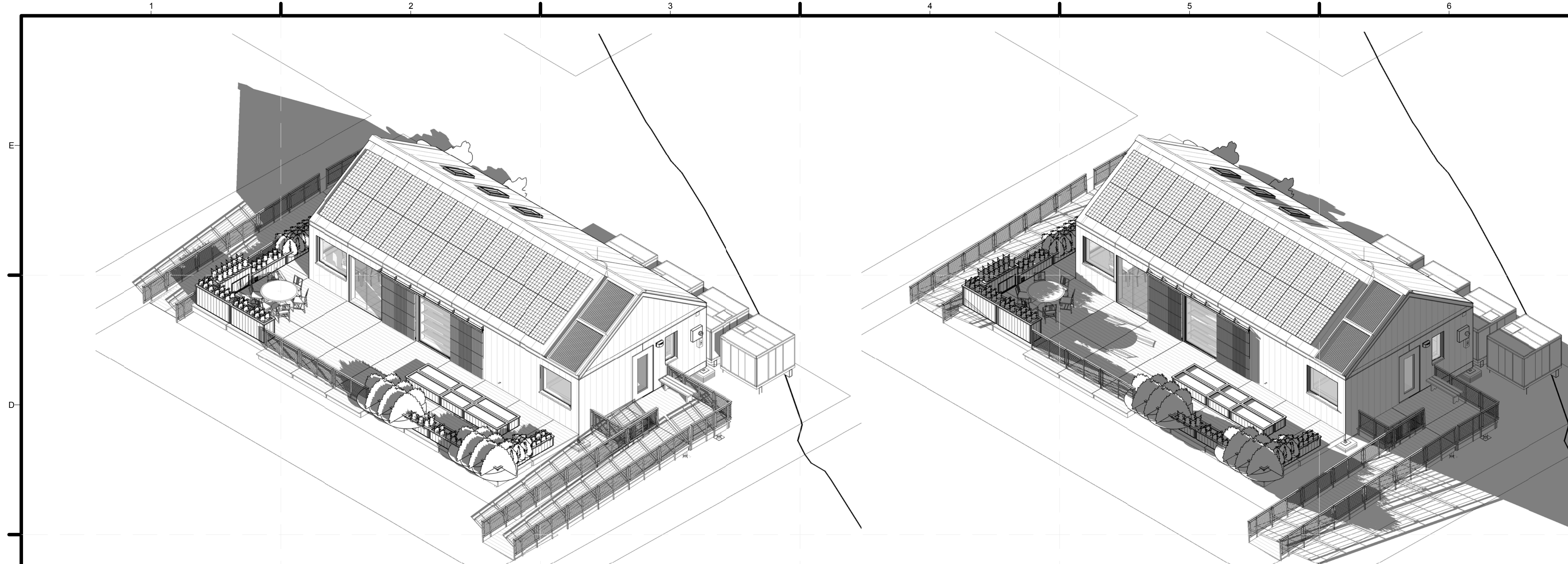


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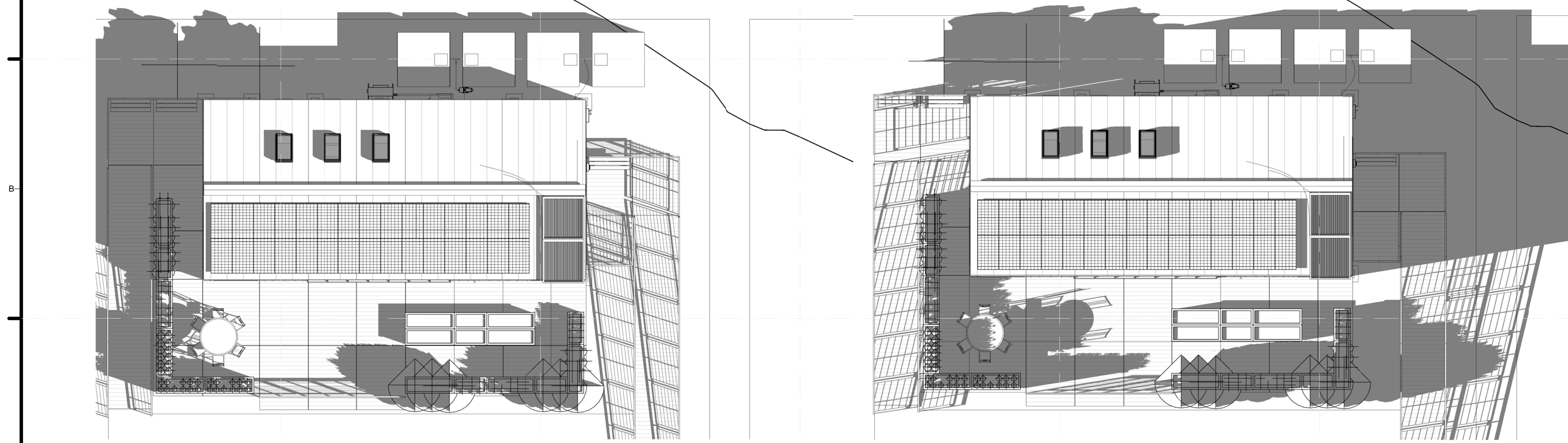
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 SOLAR ENVELOPE
 COPMLIANCE
 ELEVATIONS

G-202



C1 SHADING - WASHINGTON D.C. 0900 9/20

C4 SHADING - WASHINGTON D.C. 1700 9/20



A1 PLAN - WASHINGTON D.C. 0900 9/20

A4 PLAN - WASHINGTON D.C. 1700 9/20

GENERAL SHEET NOTES

1. REFER TO SHEET G-101 FOR THE LOCATION OF POTABLE AND NON-POTABLE WATER CONTAINERS
2. REFER TO SHEET L-503 FOR WATER TANK DETAILS

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SHEET TITLE
SHADING DIAGRAMS

G-601



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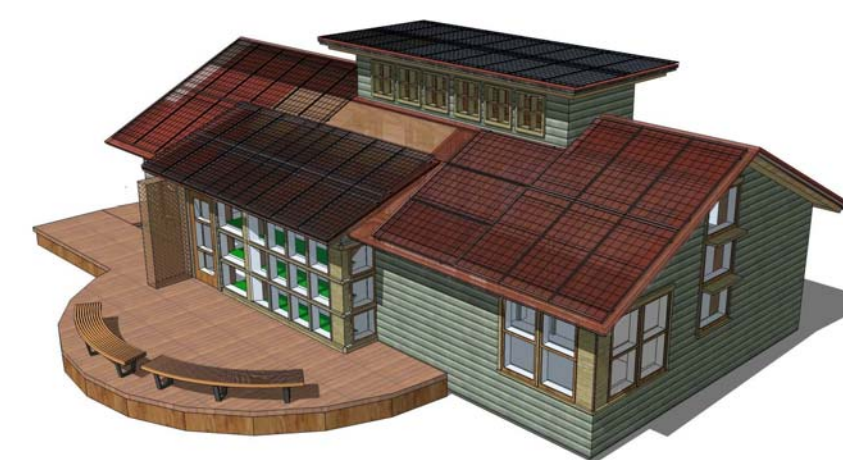


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G-901



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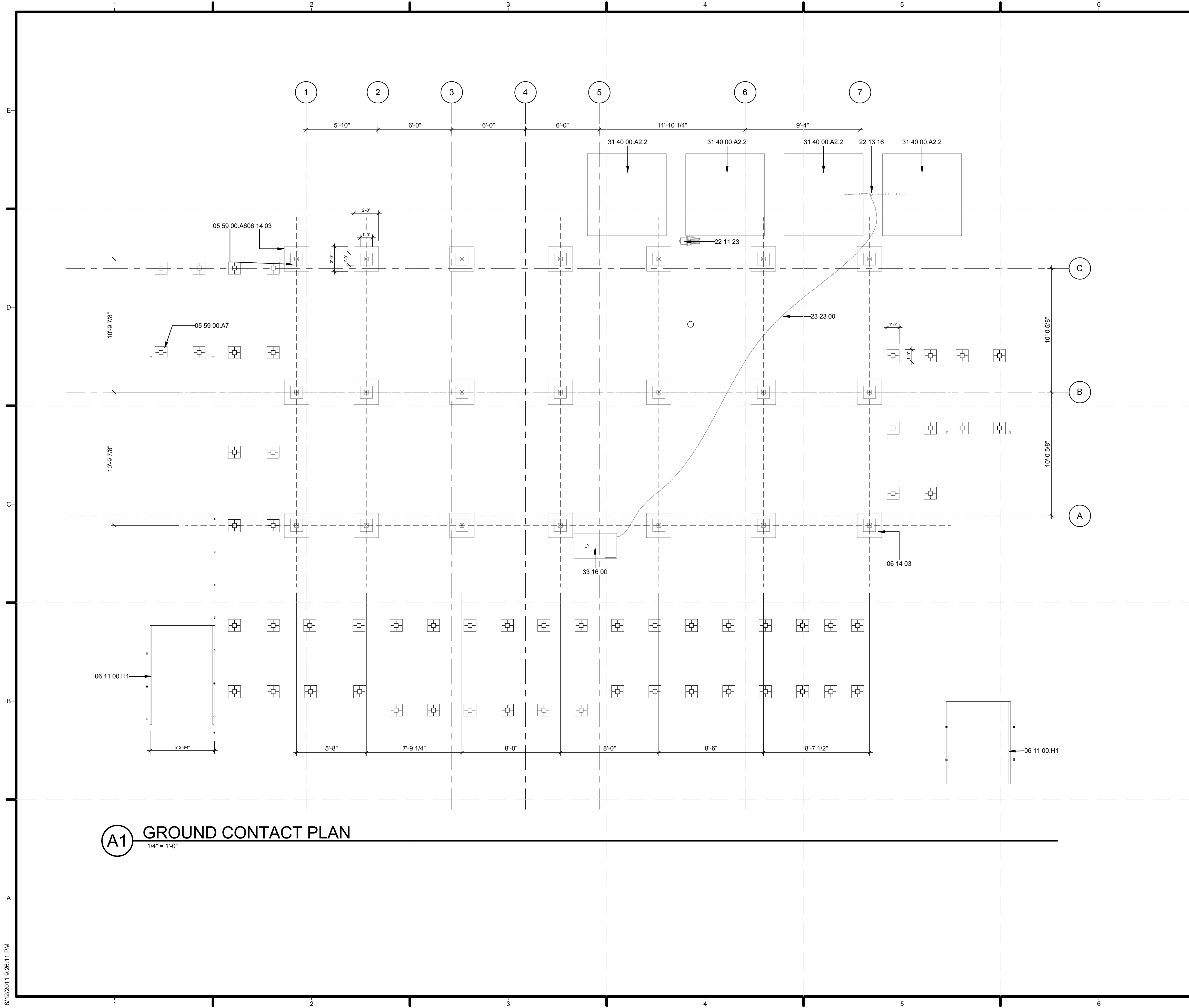


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SHEET TITLE
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 THROUGH
 RENDERINGS

G-902



GENERAL SHEET NOTES

- REFER TO STRUCTURAL DRAWINGS FOR LOADS AND FURTHER INFORMATION
- REFER TO SHEET L-502 FOR CRIBBING DETAILS BENEATH ELEVATED WATER TANKS

REFERENCE KEYNOTES

- 05 59 00.A6 12" X 12" STEEL FOOTING
- 05 59 00.A7 5" X 5" STEEL FOOTING
- 06 11 00.H1 2X10 WOOD FRAMING
- 06 14 03 2X2' WOODEN FOUNDATION PLATE
- 06 40 13.A3 DESIGNATED SPACE FOR REMOVABLE SLATS
- 09 63 40.A1 12" X 12" HEATHERMORE SLATE TILES
- 12 58 29.A2 BED BY MAPLE CORNER
- 22 11 23 DOMESTIC WATER PUMPS
- 22 13 16 SANITARY WASTE AND VENT PIPING
- 23 23 00 REFRIGERANT PIPING
- 31 40 00.A2.2 2x4 WATER STORAGE CRIBBING
- 33 16 00 WATER UTILITY STORAGE TANKS

SHEET KEYNOTES

- 1 SEE STRUCTURAL DRAWINGS



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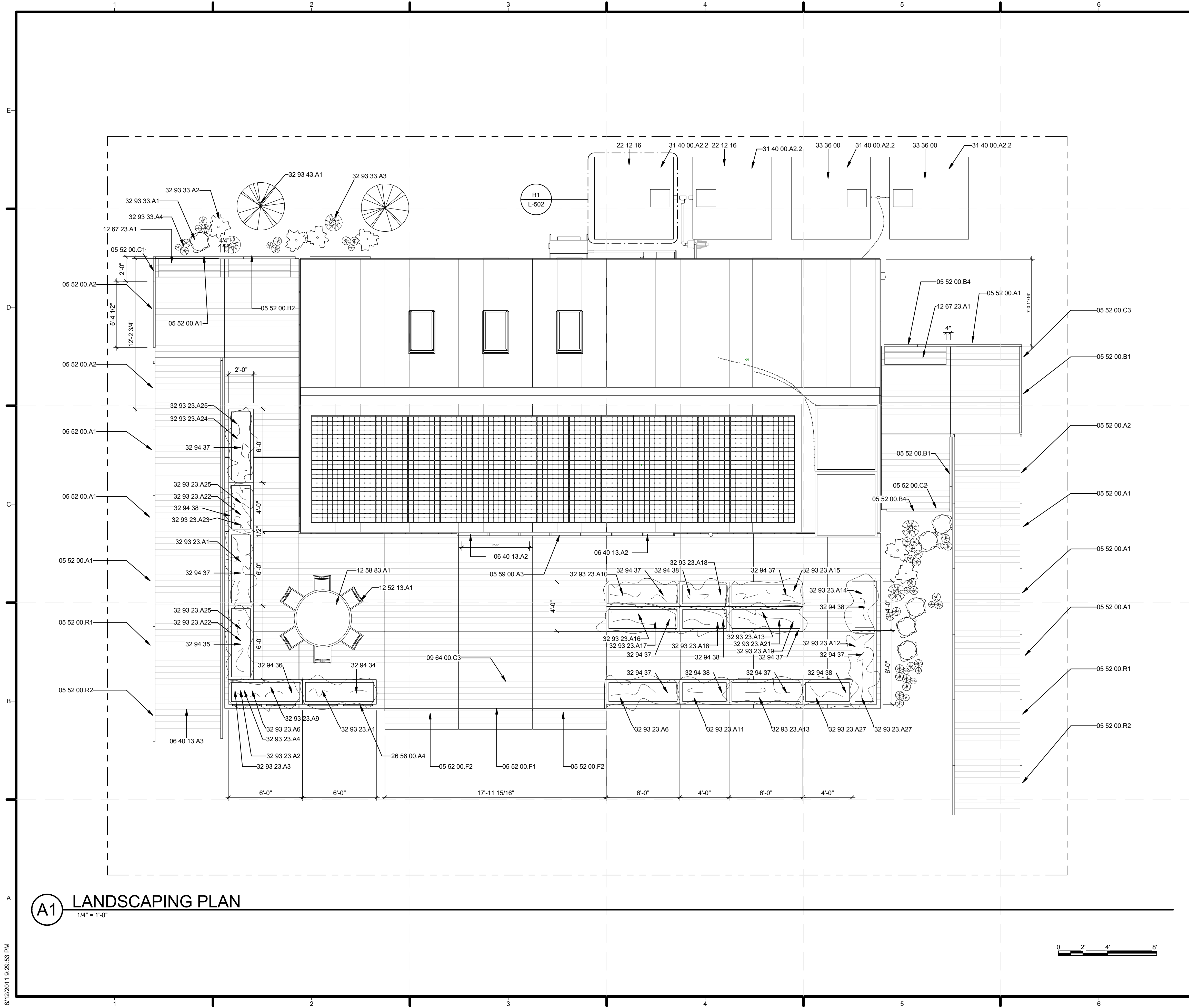


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SHEET TITLE
GROUND CONTACT PLAN

C-101



GENERAL SHEET NOTES


- REFER TO SHEET L-501 FOR PLANTERS AND BENCHES DETAILS
- REFER TO SHEET L-502 FOR WATER TANK DETAILS
- REFER TO SHEET L-501 FOR SLAT WALL DIMENSIONS AND OTHER DETAILS
- REFER TO PROJECT MANUAL SPECIFICATIONS FOR EXTERIOR LED LIGHTING BUILT IN RAILING
- WATER TANKS ARE TEMPORARY FOR COMPETITION PURPOSES

REFERENCE KEYNOTES

- 05 52 00.A1 FABRICATED METAL RAILING, TYPE A1
- 05 52 00.A2 FABRICATED METAL RAILING, TYPE A2
- 05 52 00.B1 FABRICATED METAL RAILING, TYPE B1
- 05 52 00.B2 FABRICATED METAL RAILING, TYPE B2
- 05 52 00.B4 FABRICATED METAL RAILING, TYPE B4
- 05 52 00.C1 FABRICATED METAL RAILING, TYPE C1
- 05 52 00.C2 FABRICATED METAL RAILING, TYPE C2
- 05 52 00.C3 FABRICATED METAL RAILING, TYPE C3
- 05 52 00.F1 FABRICATED METAL RAILING, TYPE F1
- 05 52 00.F2 FABRICATED METAL RAILING, TYPE F2
- 05 52 00.R1 FABRICATED METAL RAILING, TYPE R1
- 05 52 00.R2 FABRICATED METAL RAILING, TYPE R2
- 05 59 00.A3 BOXTRACK GREENHOUSE SHADE TRACK
- 06 40 13.A2 GREENHOUSE SUN SHADES
- 06 40 13.A3 DESIGNATED SPACE FOR REMOVABLE SLATS
- 09 64 00.C3 1" WHITE OAK DECKING, CUT AT VARYING SIZES
- 12 52 13.A1 EMECO NAVY CHAIR 111
- 12 58 83.A1 CUSTOM OUTDOOR STEEL TABLE
- 12 67 23.A1 WHITE OAK BENCHES
- 22 12 16 FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS
- 26 56 00.A4 LED SITE LIGHT
- 31 40 00.A2.2 2x4 WATER STORAGE CRIBBING
- 32 93 23.A1 MARGOLD
- 32 93 23.A2 NASTURTIUM
- 32 93 23.A3 THYME
- 32 93 23.A4 BASIL
- 32 93 23.A6 OREGANO
- 32 93 23.A9 PARSLEY
- 32 93 23.A10 CABBAGE
- 32 93 23.A11 STRAWBERRIES
- 32 93 23.A12 GREEN BEANS
- 32 93 23.A13 SOY BEANS
- 32 93 23.A14 CUCUMBERS
- 32 93 23.A15 SWEET POTATOES
- 32 93 23.A16 CARROTS
- 32 93 23.A17 SCALLIONS
- 32 93 23.A18 LETTUCE
- 32 93 23.A19 BEETS
- 32 93 23.A21 RADISHES
- 32 93 23.A22 KALE
- 32 93 23.A23 SWISS CHARD
- 32 93 23.A24 EGGPLANT
- 32 93 23.A25 PEPPERS
- 32 93 23.A27 CHERRY TOMATO
- 32 93 33.A1 BLUEBERRY BUSH
- 32 93 33.A2 HYDRANGEA
- 32 93 33.A3 ROSA RUGOSA
- 32 93 33.A4 POTTED FLOWERS
- 32 93 43.A1 DWARF FRUIT TREES
- 32 94 34 PLANTERS A, D (2'x6'x3'), WITH DOOR
- 32 94 35 PLANTERS B (2'x6'x3'), WITH DOOR
- 32 94 36 PLANTERS C (2'x6'x3'), WITH DOOR
- 32 94 37 PLANTERS 2'x6'x1.5', WITHOUT DOOR
- 32 94 38 PLANTERS 2'x4'x1.5', WITHOUT DOOR
- 33 36 00 UTILITY SEPTIC TANKS

SHEET KEYNOTES

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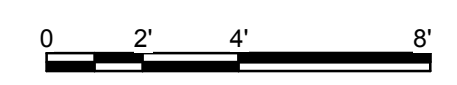
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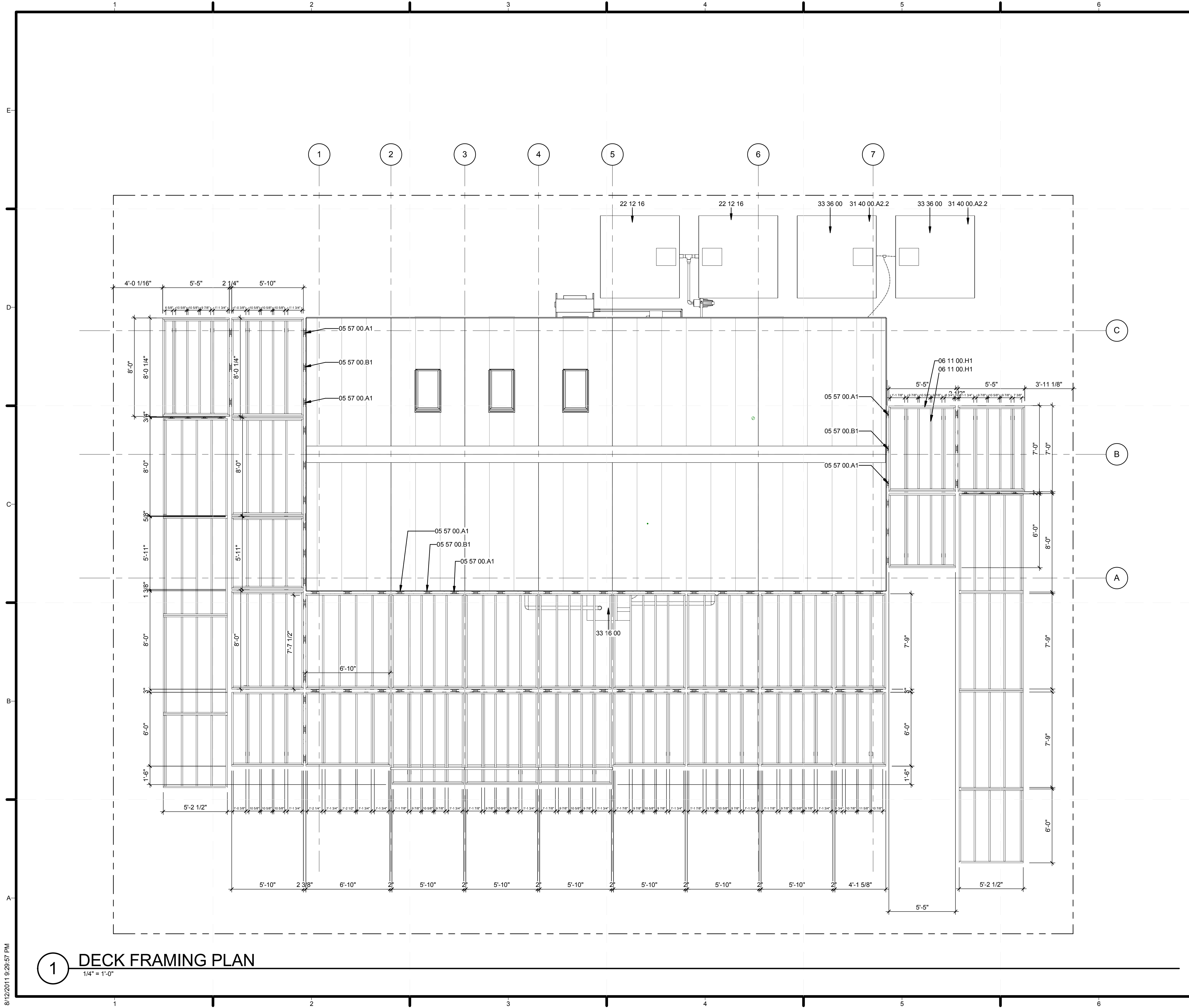
**LANDSCAPE,
 PLANTING, AND
 LIGHTING SITE PLAN**

L-101

(A1) LANDSCAPING PLAN
 1/4" = 1'-0"



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GENERAL SHEET NOTES

1. REFER TO STRUCTURAL DRAWINGS FOR LOADS AND FURTHER INFORMATION
2. REFER TO SHEET L-502 FOR WATER TANK DETAILS
3. REFER TO SHEET L-503 FOR DECK MOD JOINT DETAILS
4. DECK (INCLUDING RAMPS) IS ABOUT 1330 SF

REFERENCE KEYNOTES

- | | |
|---------------|--|
| 05 57 00.A1 | DECK MOD JOINTS A1, B1 |
| 05 57 00.B1 | DECK MOD JOINTS A2, B2 |
| 06 11 00.H1 | 2X10 WOOD FRAMING |
| 22 12 16 | FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS |
| 31 40 00.A2.2 | 2x4 WATER STORAGE CRIBBING |
| 33 16 00 | WATER UTILITY STORAGE TANKS |
| 33 36 00 | UTILITY SEPTIC TANKS |

SHEET KEYNOTES



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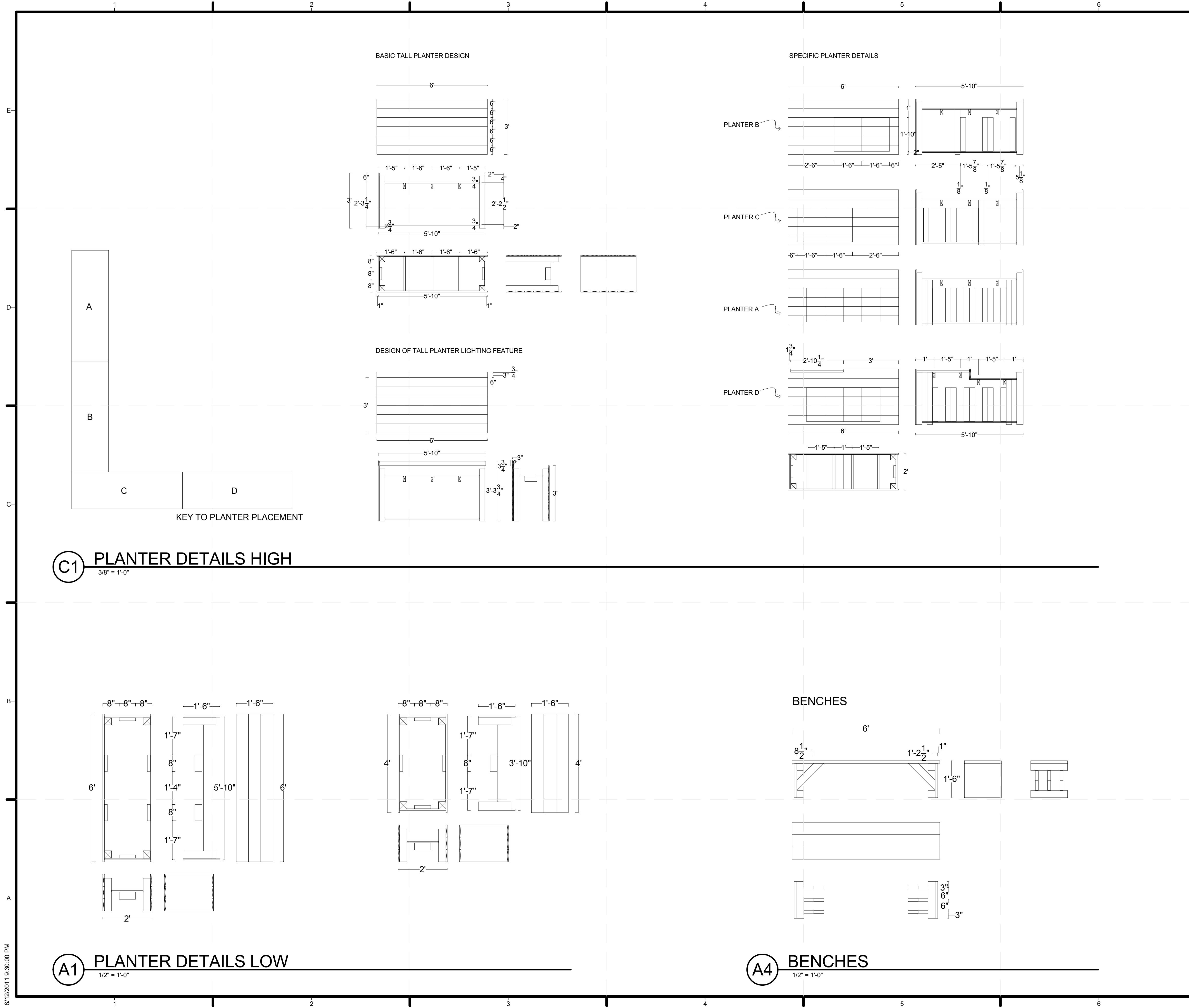
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SHEET TITLE
DECK FRAMING PLAN

L-102

1 DECK FRAMING PLAN
 1/4" = 1'-0"

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GENERAL SHEET NOTES

1. 1/8" GAP ALLOWED BETWEEN ALL HINGED JOINTS
2. WIDE CABINET DOORS ARE DOUBLE HINGED. EACH DOOR OPENING IS 4'. WITH 2' DOORS. EACH 2' DOOR IS HINGED IN THE MIDDLE.

REFERENCE KEYNOTES

SHEET KEYNOTES

C1 PLANTER DETAILS HIGH
3/8" = 1'-0"

A1 PLANTER DETAILS LOW
1/2" = 1'-0"

A4 BENCHES
1/2" = 1'-0"



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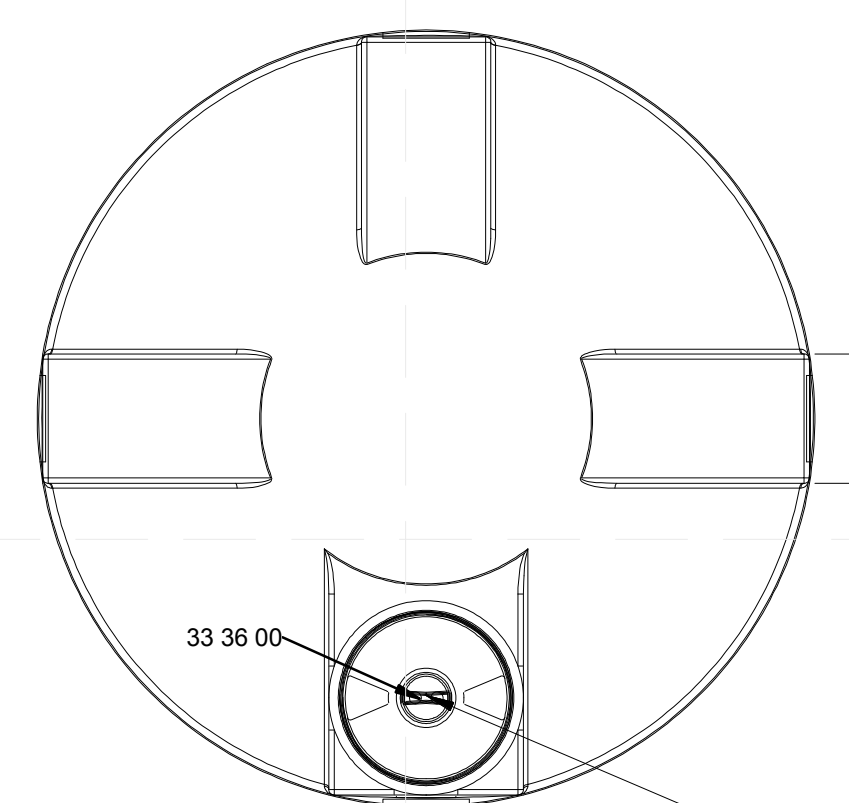
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SHEET TITLE
 PLANTER AND BENCH DETAILS

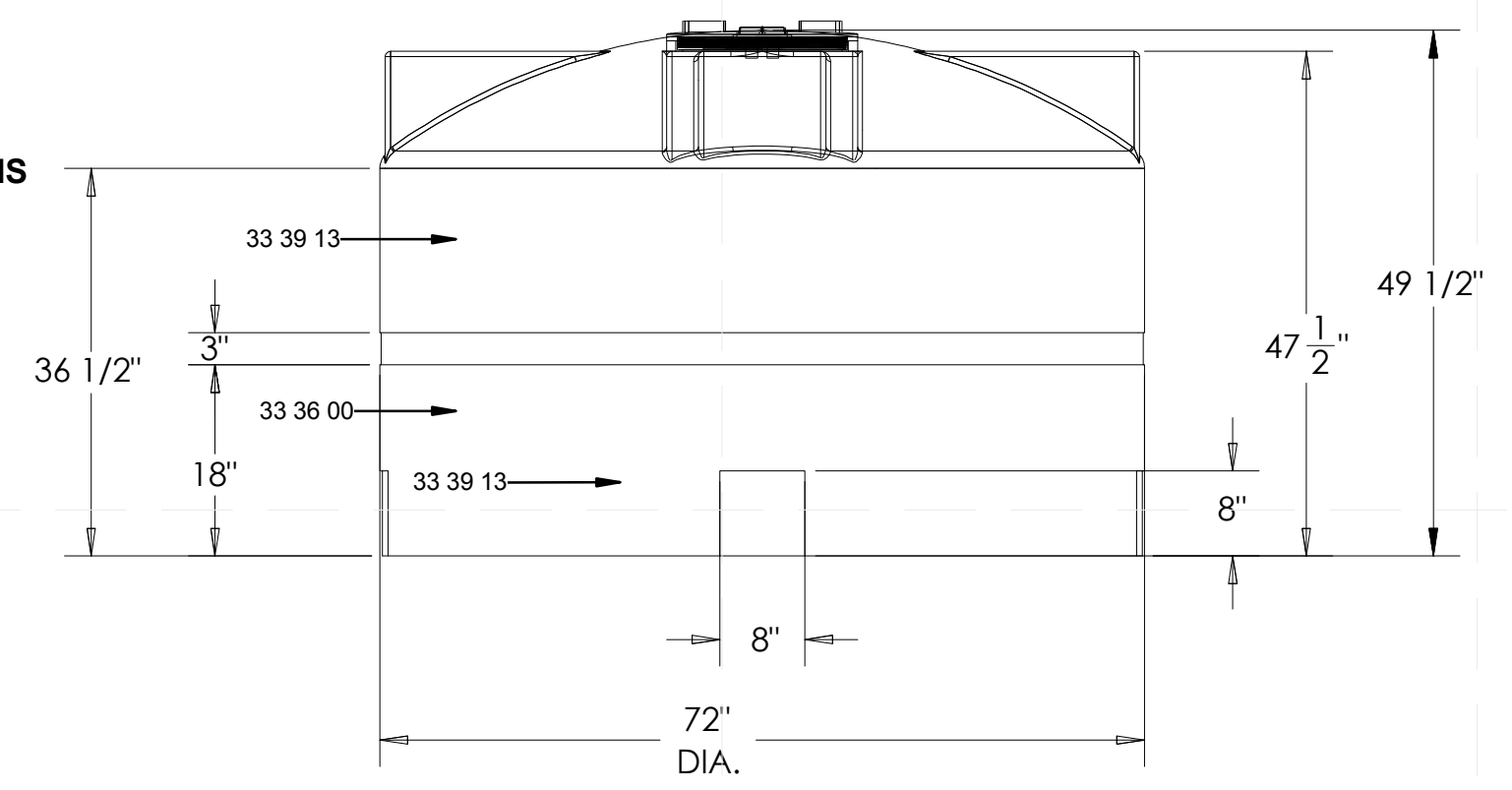
L-501

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1 2 3 4 5 6 7



750 GAL LOOMIS WATER TANKS



GENERAL SHEET NOTES

1. WATER TANKS ARE ENCASED IN WEATHER PROOF CANVAS SHELLS DURING THE COMPETITION
2. POTABLE WATER TANKS ARE SHADED BY A BUILT COVER DURING THE COMPETITION. TANK LIDS ACCESSIBLE THROUGH HATCH IN CRIBBING
3. THE MANWAY IS 24"
4. ALL TANKS ARE MORE THAN 3.5' OFF THE GROUND

REFERENCE KEYNOTES

06 01 10.B2	2X4R
31 40 00.A2.2	2x4 WATER STORAGE CRIBBING
33 36 00	UTILITY SEPTIC TANKS
33 39 13	SANITARY UTILITY SEWERAGE MANHOLES, FRAMES, AND COVERS

SHEET KEYNOTES



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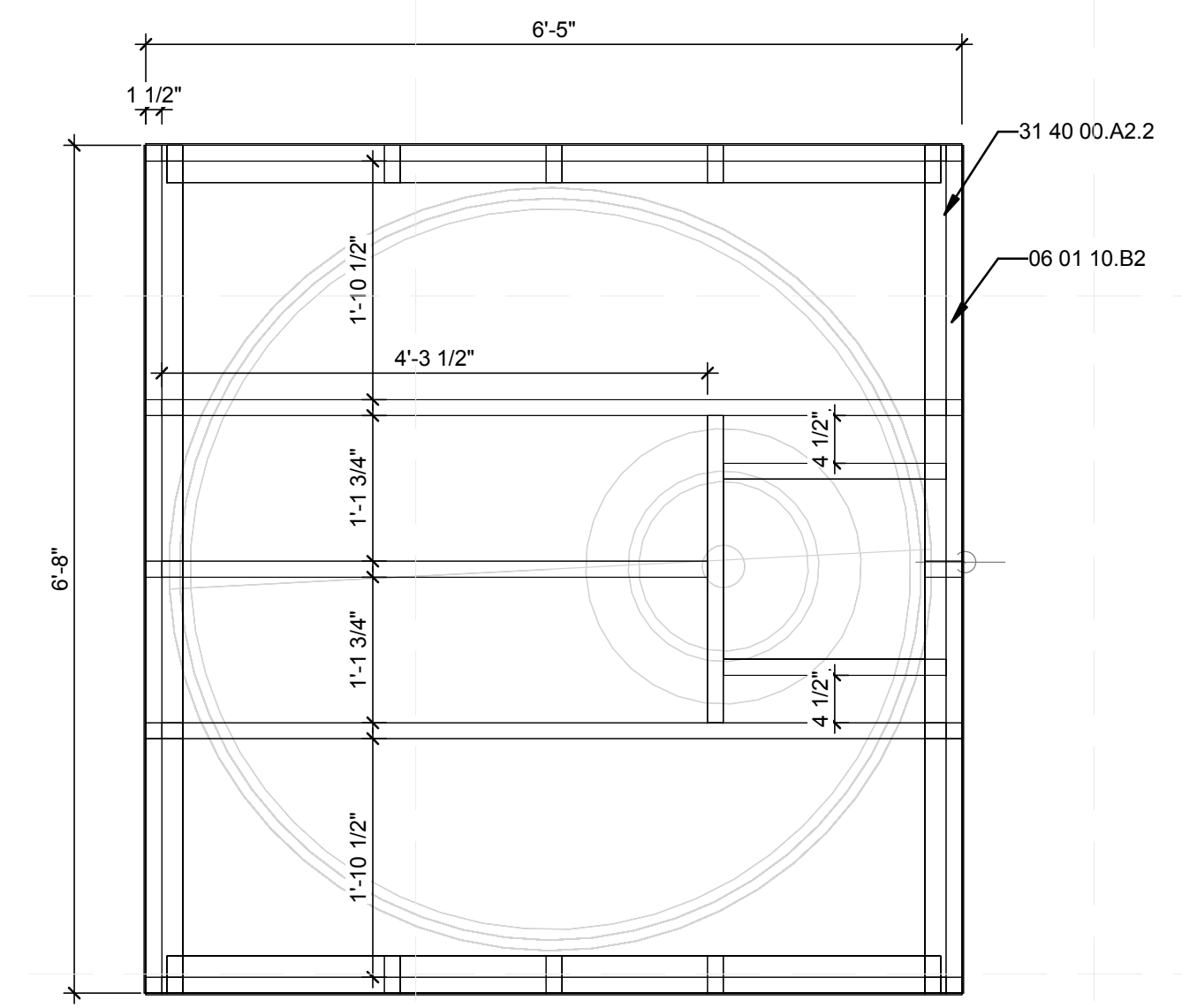


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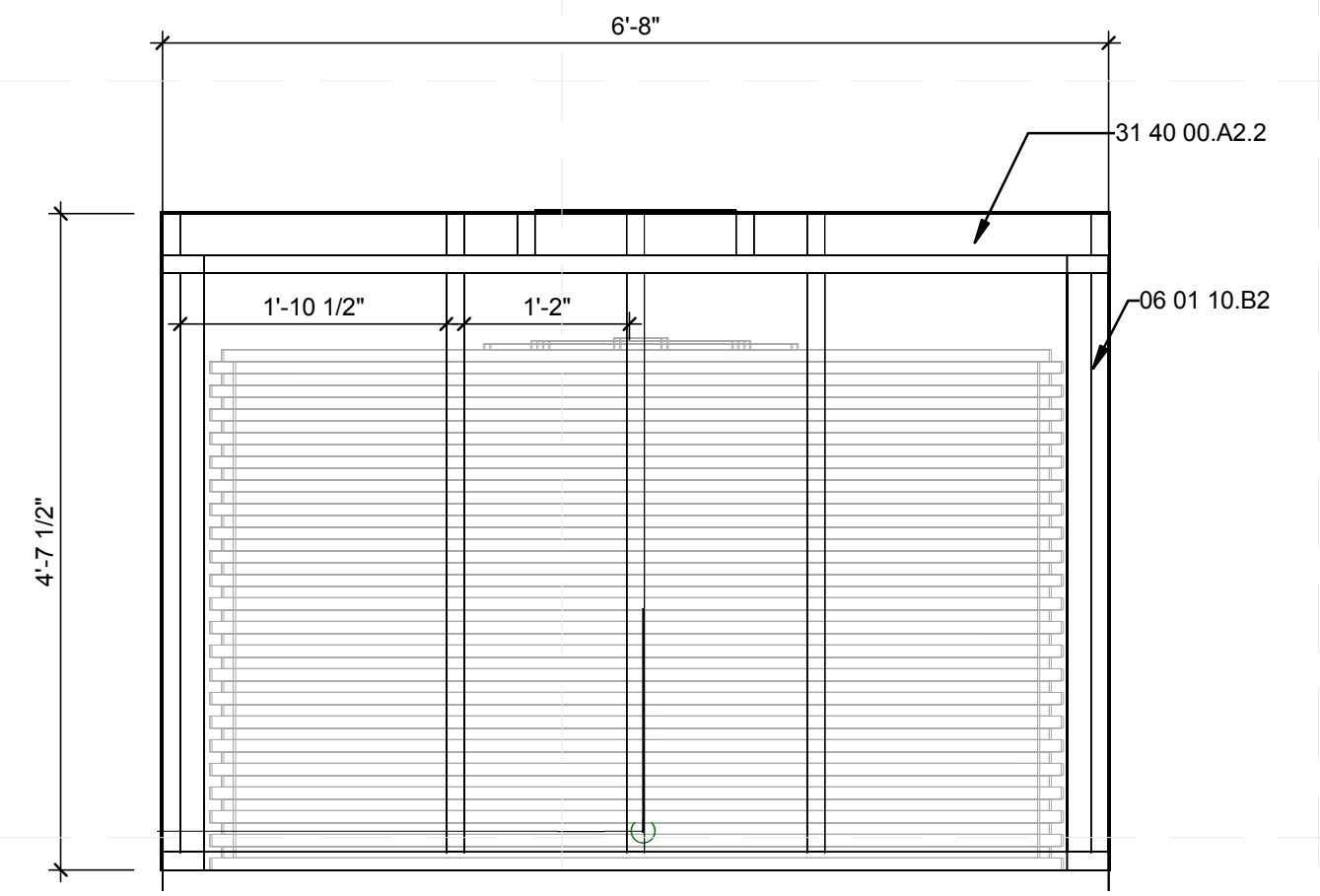
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SHEET TITLE
**WATER TANK,
 OUTDOOR TABLE, AND
 CASING DETAILS**

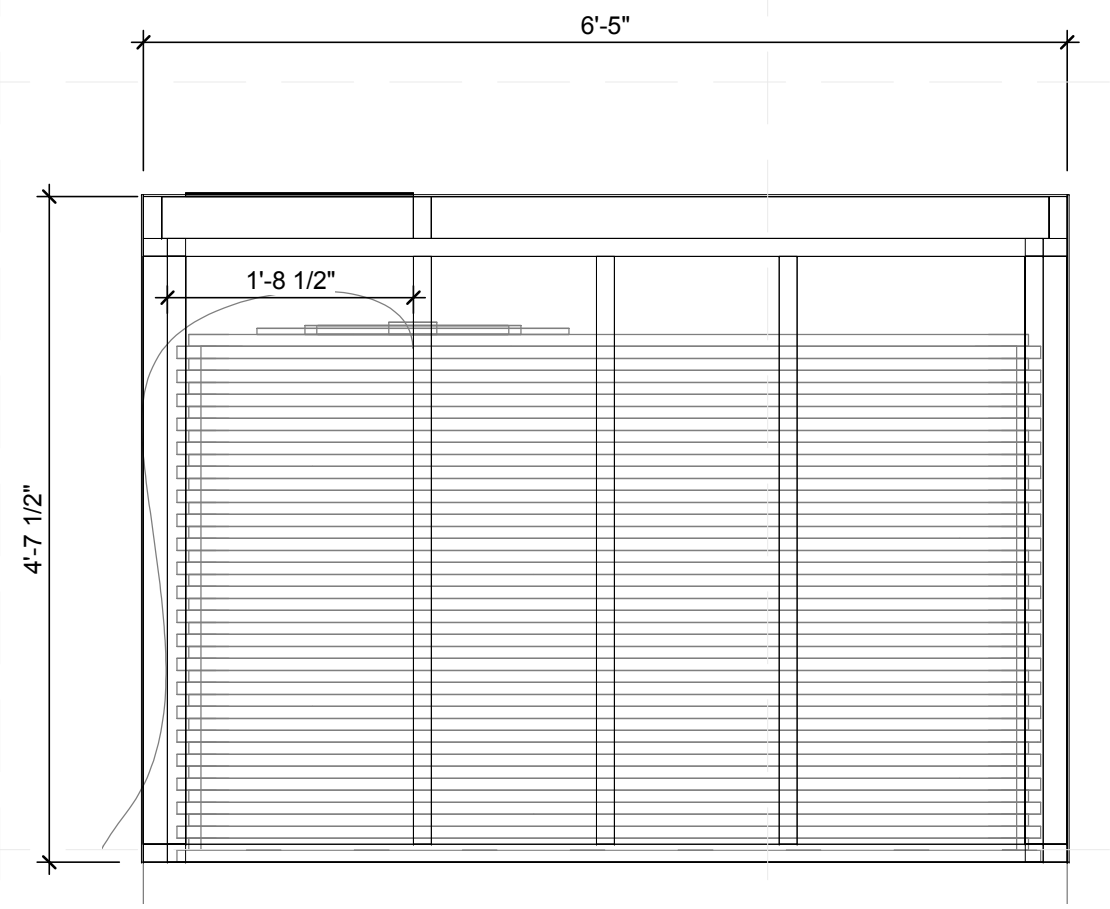
L-502



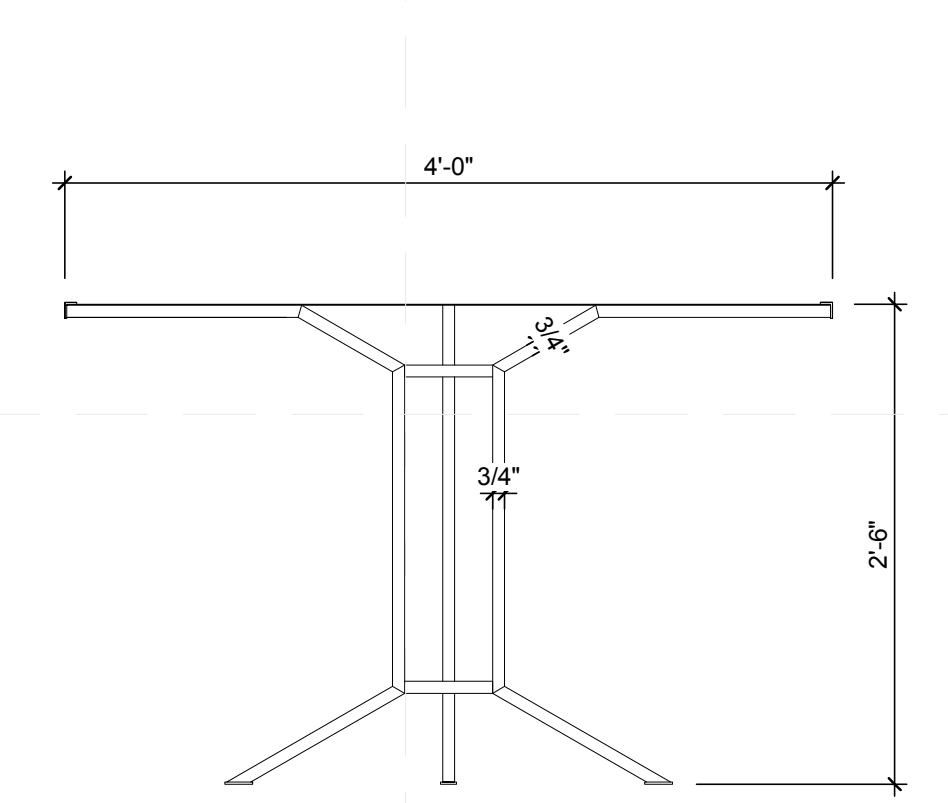
B1 CRIBBING PLAN VIEW
 3/4" = 1'-0"



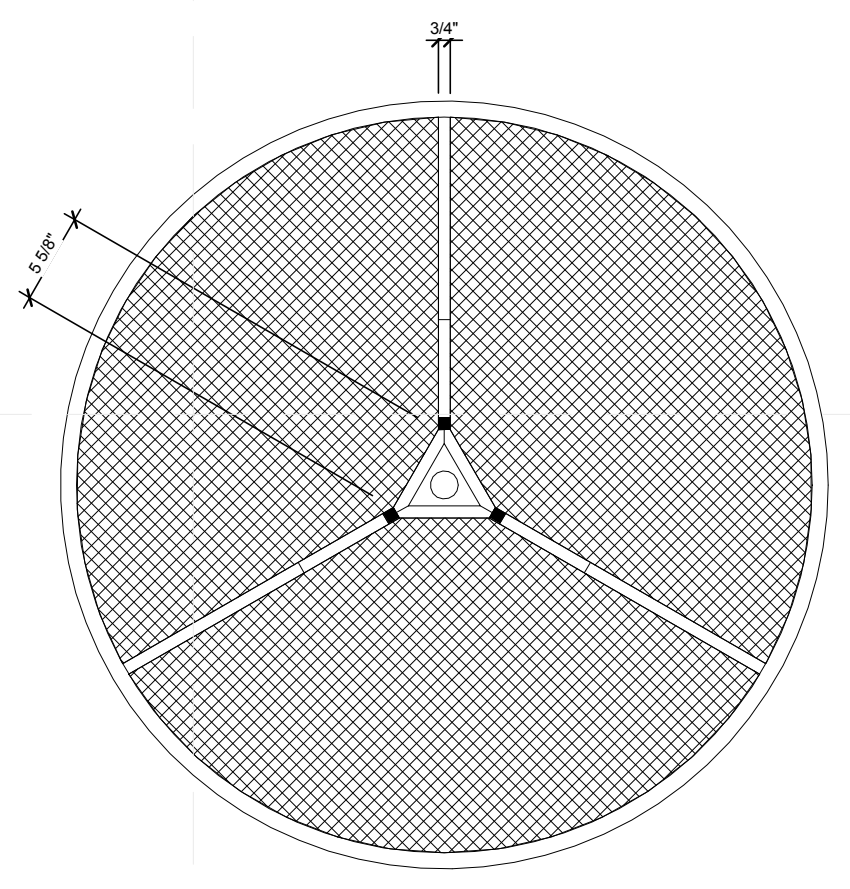
B3 CRIBBING ELEV 1
 3/4" = 1'-0"



B4 CRIBBING ELEV 2
 3/4" = 1'-0"

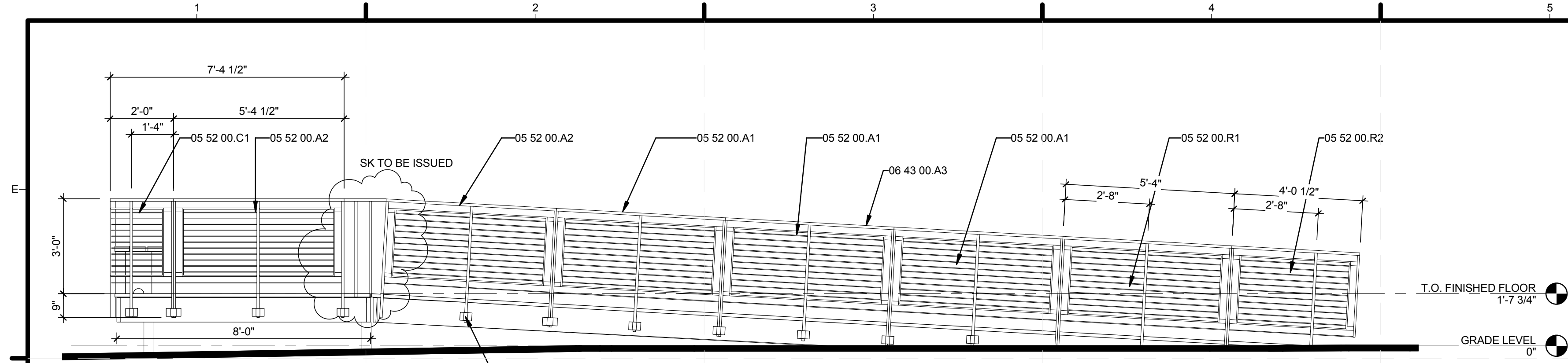


A1 OUTDOOR TABLE
 1" = 1'-0"

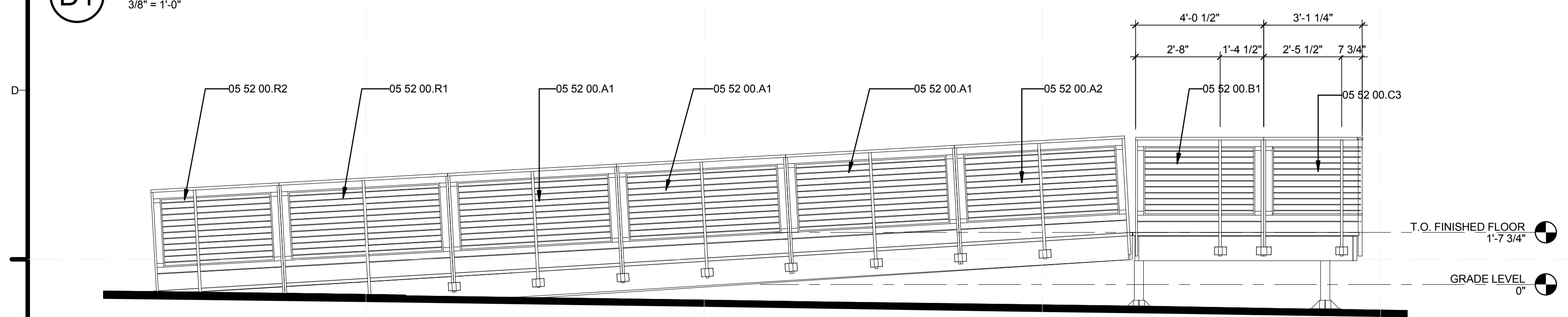


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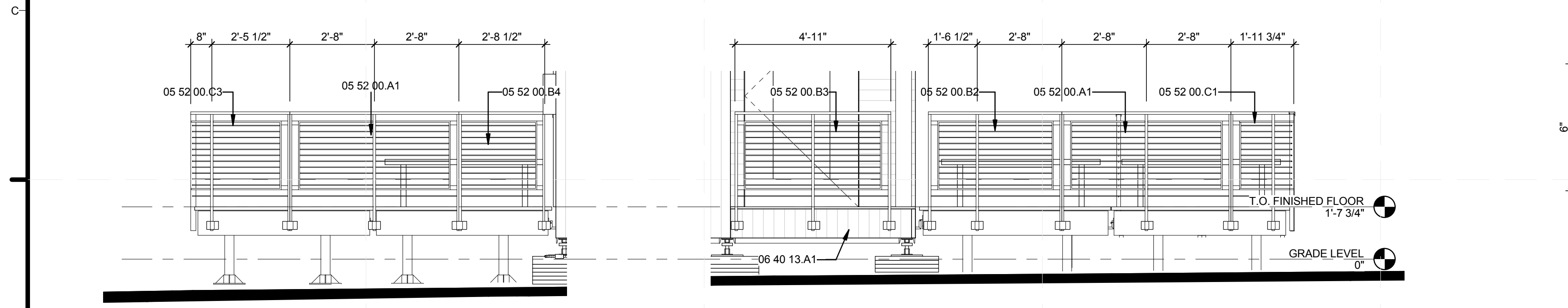
1 2 3 4 5 6 7



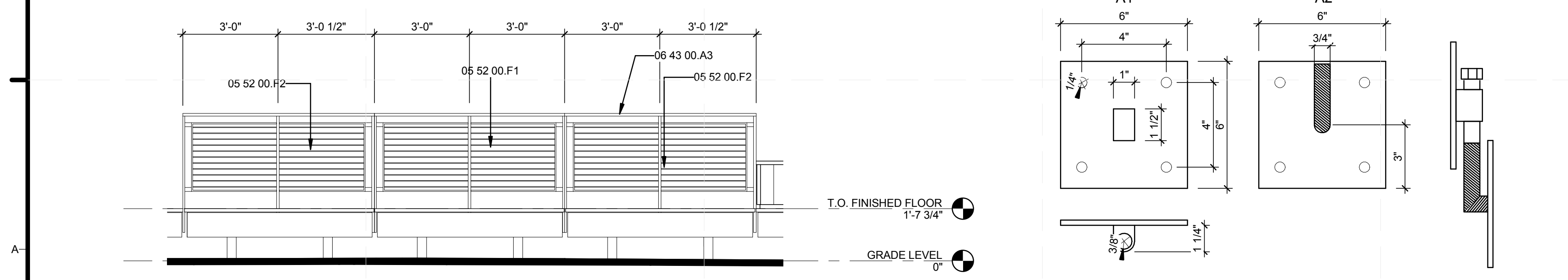
(D1) WEST RAILING ELEVATION
3/8" = 1'-0"



(C1) BUILDING ELEVATION - EAST
3/8" = 1'-0"

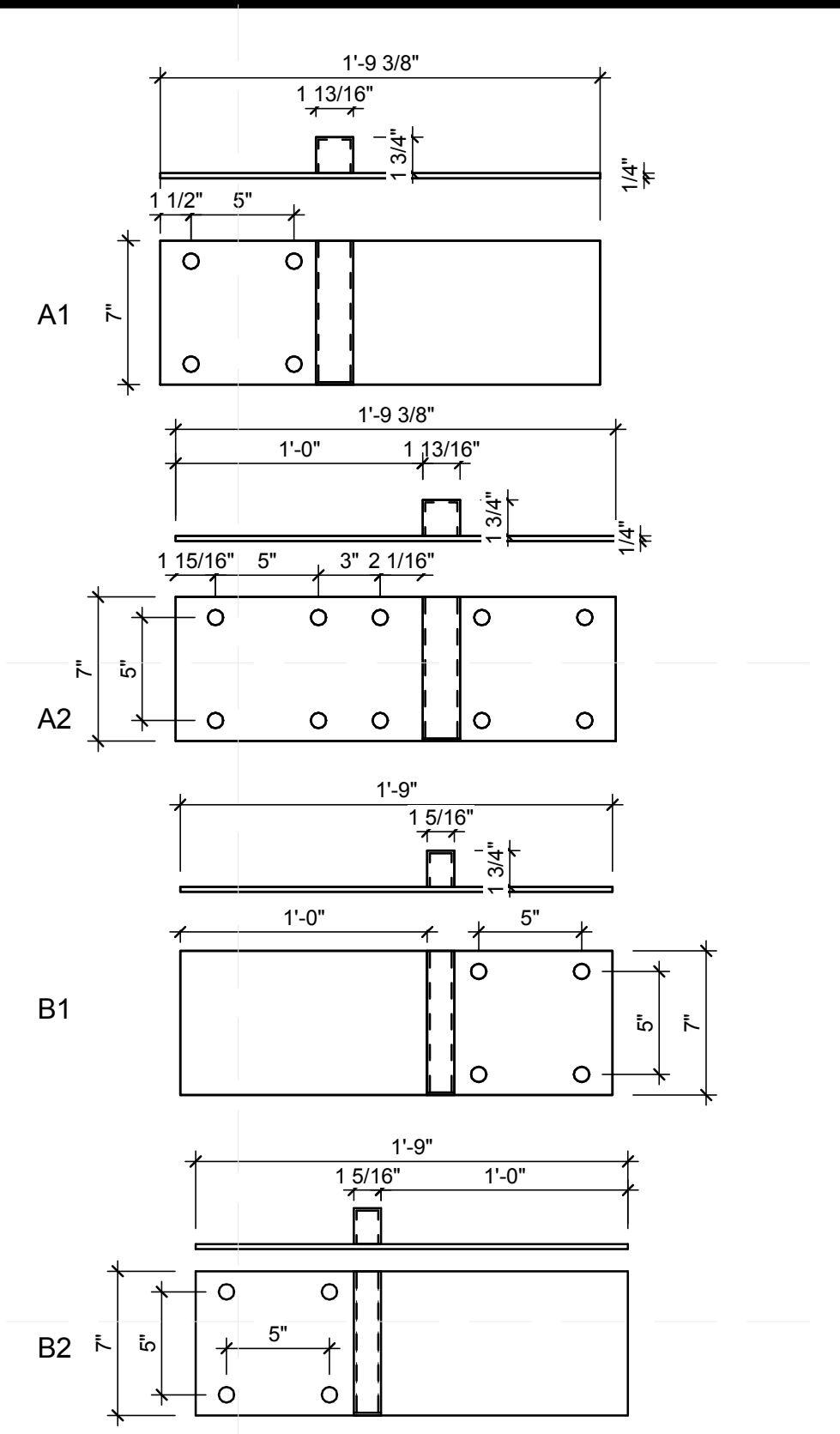


(B1) BUILDING ELEVATION - NORTH
3/8" = 1'-0"

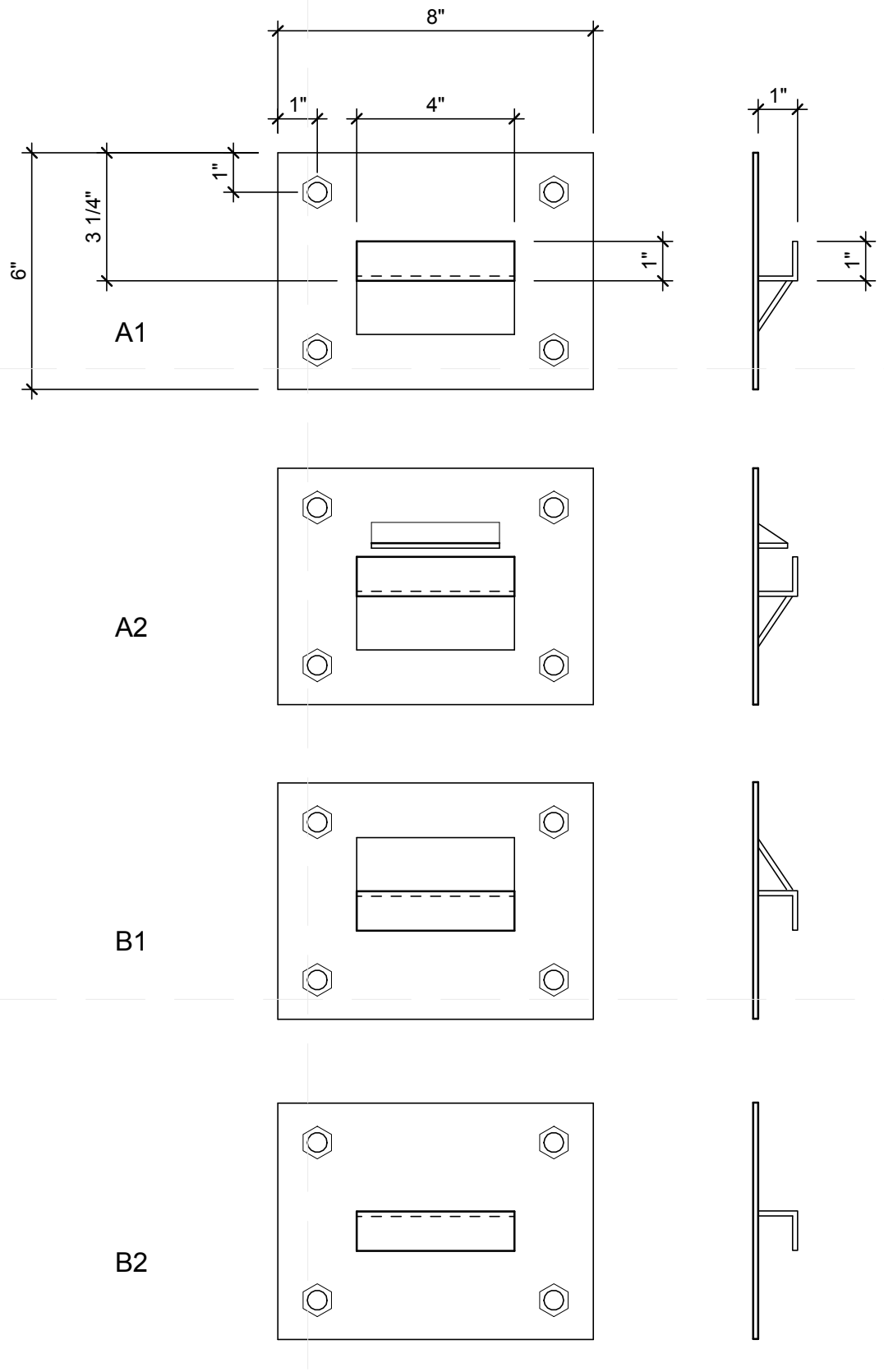


(A1) SOUTH RAILING ELEVATION
3/8" = 1'-0"

(A4) GATE HINGE FABRICATIONS
3" = 1'-0"



(C5) RAMP MOD JOINTS
1 1/2" = 1'-0"



(A5) DECK MOD JOINTS
3" = 1'-0"

- GENERAL SHEET NOTES**
- 8 RAMP MOD JOINTS USED PER RAMP. SECURE ACCORDINGLY, USING A1 AND A2 TO RECEIVE TWO RAILING LEGS AND B1 AND B2 TO RECEIVE 1 RAILING LEG.
 - GATE HINGE FABRICATIONS SIT 3 WIDE BETWEEN DECK MOD AND RAMP MOD.
 - DECK MOD JOINTS PLACED ON CONNECTING ENDS OF DECK MODS. A1 AND A2 RECEIVE LOAD FROM B1 AND B2. THREE JOINTS PER SIDE OF EACH CONNECTING MOD. REFER TO L-102 FOR LAYOUT DETAILS
 - RAILINGS AT BOTTOM OF RAMP ARE MOUNTED TO RAMP WITH CROSS BRACING INSTEAD OF RAILING MOUNTS.
 - REFER TO G-104 FOR RAMP VARIATIONS

- REFERENCE KEYNOTES**
- | | |
|-------------|---|
| 05 52 00.A1 | FABRICATED METAL RAILING, TYPE A1 |
| 05 52 00.A2 | FABRICATED METAL RAILING, TYPE A2 |
| 05 52 00.B1 | FABRICATED METAL RAILING, TYPE B1 |
| 05 52 00.B2 | FABRICATED METAL RAILING, TYPE B2 |
| 05 52 00.B3 | FABRICATED METAL RAILING, TYPE B3 |
| 05 52 00.B4 | FABRICATED METAL RAILING, TYPE B4 |
| 05 52 00.C1 | FABRICATED METAL RAILING, TYPE C1 |
| 05 52 00.C3 | FABRICATED METAL RAILING, TYPE C3 |
| 05 52 00.F1 | FABRICATED METAL RAILING, TYPE F1 |
| 05 52 00.F2 | FABRICATED METAL RAILING, TYPE F2 |
| 05 52 00.R1 | FABRICATED METAL RAILING, TYPE R1 |
| 05 52 00.R2 | FABRICATED METAL RAILING, TYPE R2 |
| 05 59 00.A5 | RAILING RECEPTACLES SECURED TO DECK |
| 06 40 13.A1 | 1X8 T&G EASTERN WHITE CEDAR STAINED BLACK |
| 06 43 00.A3 | WHITE OAK HANDRAIL |

SHEET KEYNOTES

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SHEET TITLE
RAILING AND DECK DETAILS

L-503

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

PLANT	VARIETY	SOURCE	BUYING (SEEDS, SEEDLINGS, OTHER?)	QUANTITY: ORIGINAL PLANTING - REPLACEMENTS - TOTAL	PLANTER ID	PLANT SPACING (IN)	DAYS TO MATURITY	START DATE
BASIL		*SOURCE WILL DEPEND ON NURSURIES WE SIGN ON WITH	SEED	3	Ba	2-8	60-75	7/28
BEANS			SEED	29	G	3-4	50-60	8/7
BEETS			SEED	16	V	2	45-50	8/12
CABBAGE			SEED	3	C	14-20	90-104	6/28
CALENDULA			SEED	3	Ca	18	55	8/2
CARROTS			SEED	22	t	1-2	65-75	7/23
CHIVES			SEED	3	Ch	6	75-85	7/13
CORN			SEED	5	N	8-14	70	7/18
CUCUMBER			SEED	3	u	12	48-52	8/9
DILL			SEED	4	Di	4-8	40-55	8/17
EGGPLANT			SEED	3	EG	18	60-65	7/28
KALE			SEED	3	K	8-12	55	8/2
LETTUCE			SEED	3	E	12	50	8/7
MINT			SEED	3	Mint	60	7/28	
NASTURTIUMS			SEED	2	Na	8-12	55-65	8/2
ONIONS			SEED	18	O	3-4	100-114	6/18
ORANGE AND LEMON JEM MARIGOLD			SEED	36	M	2-3	60	7/28
OREGANO			SEEDLING	4	Or	4-6	80-90	7/8
PARSLEY			SEED	2	Sh	3-6	70-80	7/18
PEPPERS	NUMEX TWILIGHT (JOHNNY'S)		SEED	5	PP	15-18	65 (PURPLE) 85 (RED RIPE)	7/23
POTATOES			TUBERS	5	W	12	60-70	7/28
RADISHES			SEED	8	R	1-2	26-30	9/2
ROSEMARY			SEEDED	3	ROSEMARY	STAND ALONE POT	80-100	7/8
SALAD MIX			SEED	2 PACKETS	SALAD MIX	3 INCH BAND	28	8/31
SCALLIONS			SEED	11	t	4	50-60	8/7
SOYBEANS			SEED	16	B	3-4	90	6/28
STRAWBERRIES			SEED	10	S	3-4		
SWISS CHARD			SEED	12	D	4-8	28 (BABY) 55 (BUNCHING)	8/31 (BABY) 8/7
THYME			SEED	2	Th	8-12	90-95	6/28
TOMATOES			SEEDLING	3	T	18-36	70-74 (INTERMEDIATE)	7/18
TURNIP			SEED	8	P	1-3	38-43	8/19
VIOLA			SEED	2	Vi	6-9	60-70	7/28
TOMATOES(CHERRY)			SEEDLING	6	T'	18-36	60	7/28



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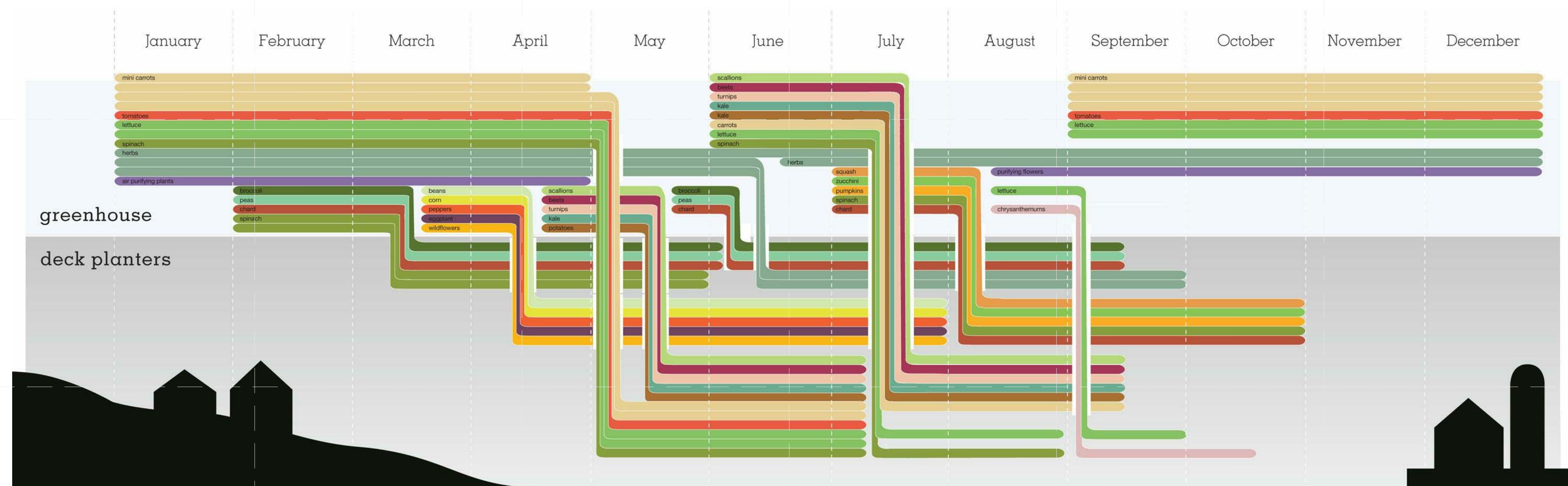
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SHEET TITLE
 PLANTING SCHEDULES

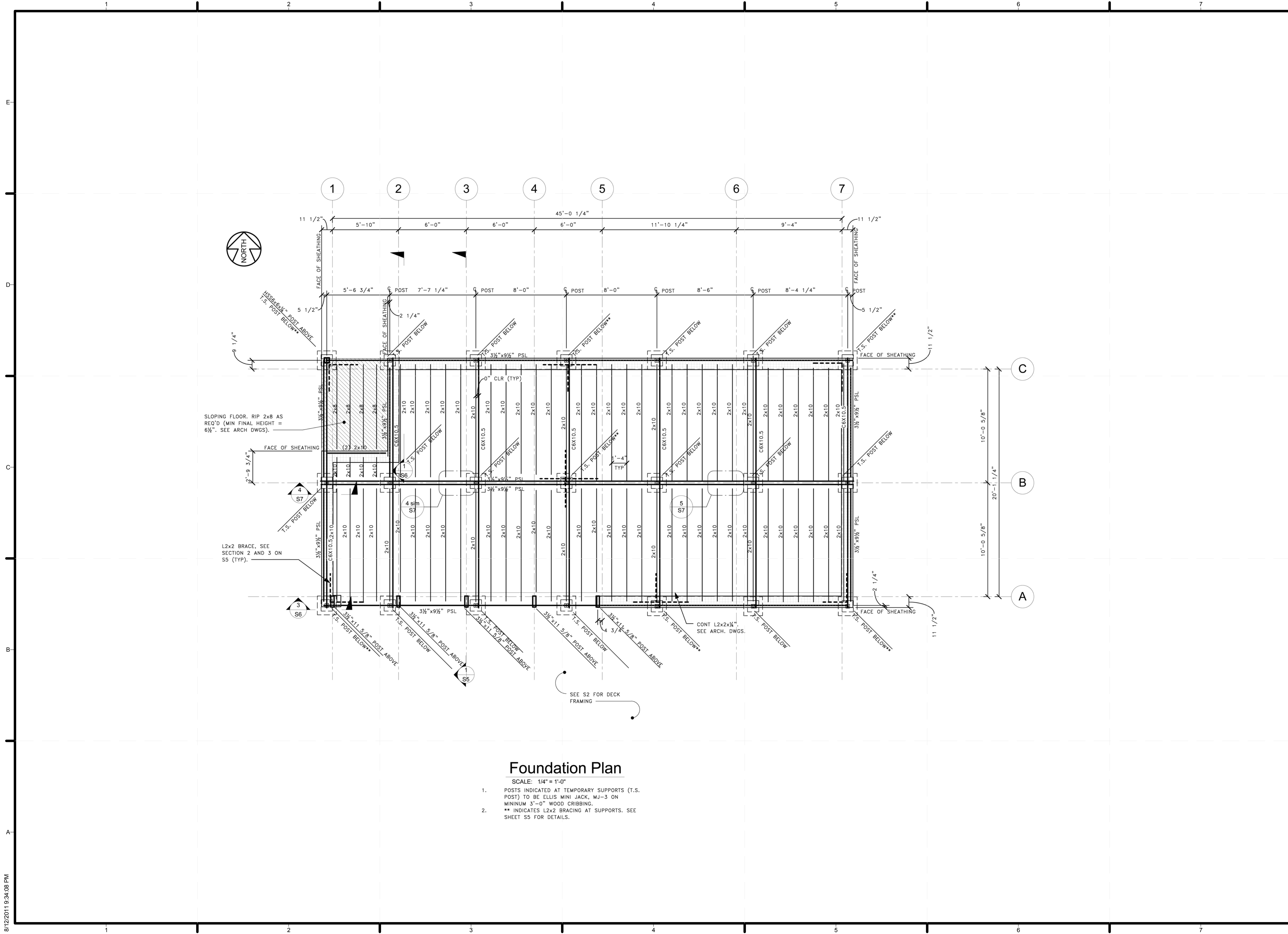
L-601

C1 Planting Schedules
 1" = 1'-0"



Our Growing Schedule





Foundation Plan

- SCALE: 1/4" = 1'-0"
1. POSTS INDICATED AT TEMPORARY SUPPORTS (T.S. POST) TO BE ELLIS MINI JACK, MJ-3 ON MINIMUM 3'-0" WOOD CRIBBING.
 2. ** INDICATES L2x2 BRACING AT SUPPORTS. SEE SHEET S5 FOR DETAILS.

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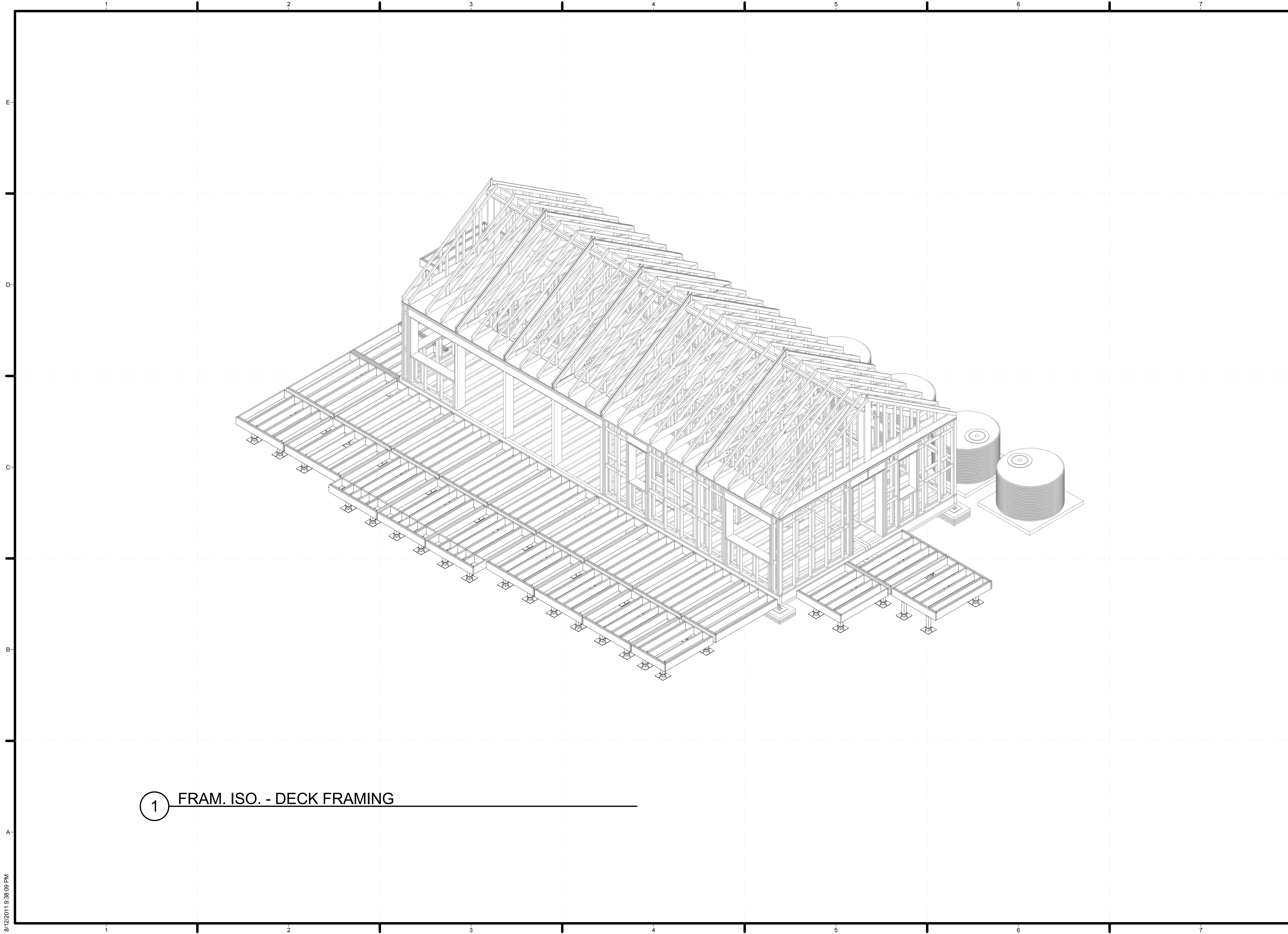


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SHEET TITLE
FOUNDATION PLAN

S-1



1 FRAM. ISO. - DECK FRAMING

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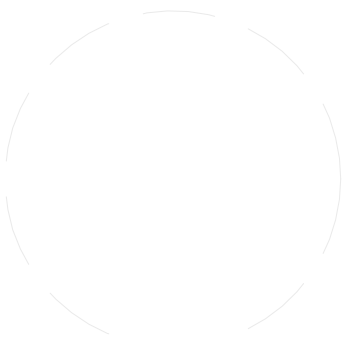
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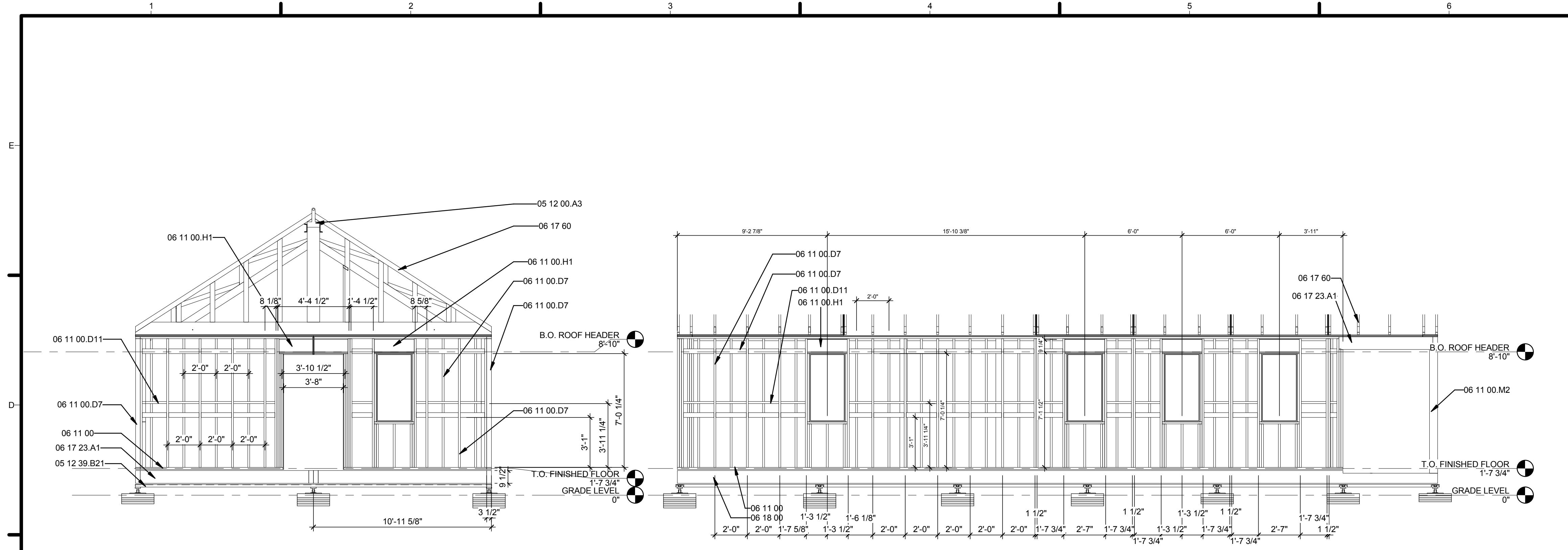


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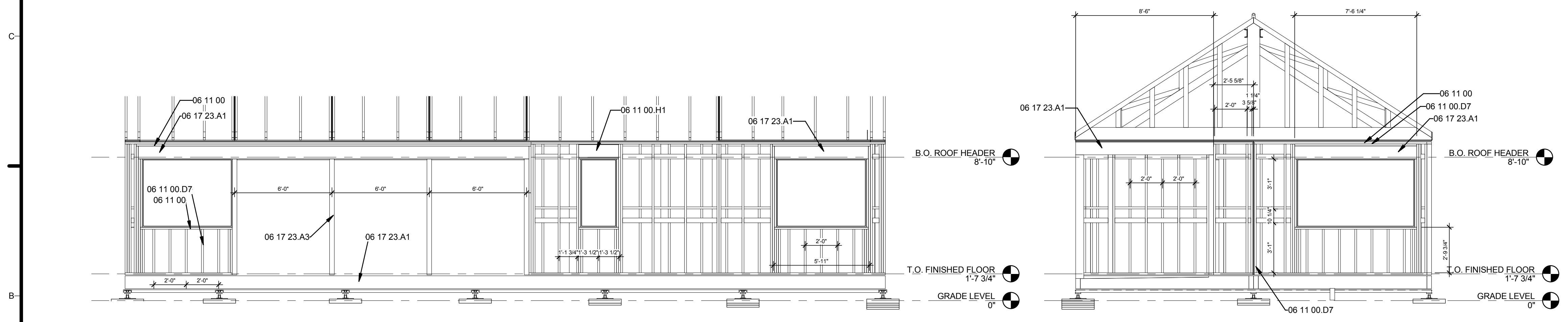
SHEET TITLE
 FRAMING ISOMETRICS

S-10



C1 BUILDING ELEVATION - EAST
 1/4" = 1'-0"

C3 BUILDING ELEVATION - NORTH
 1/4" = 1'-0"



B1 FRAMING ELEVATION SOUTH
 1/4" = 1'-0"

B5 FRAMING ELEVATION WEST
 1/4" = 1'-0"
 0 2' 4' 8'

GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 12 00.A3	STEEL LIFTING PLATE
05 12 39.B21	C6X10.5
06 11 00	WOOD FRAMING
06 11 00.D7	2X4 STUDS
06 11 00.D11	2X6 LUMBER RIPPED TO 4"
06 11 00.H1	2X10 WOOD FRAMING
06 11 00.M2	6X6 POST
06 17 23.A1	3 1/2" X 9 1/2" PSL
06 17 23.A3	3 1/2" X 11 5/8" TIMBER
06 17 60	METAL PLATE CONNECTED WOOD TRUSSES
06 18 00	GLUED-LAMINATED CONSTRUCTION

SHEET KEYNOTES



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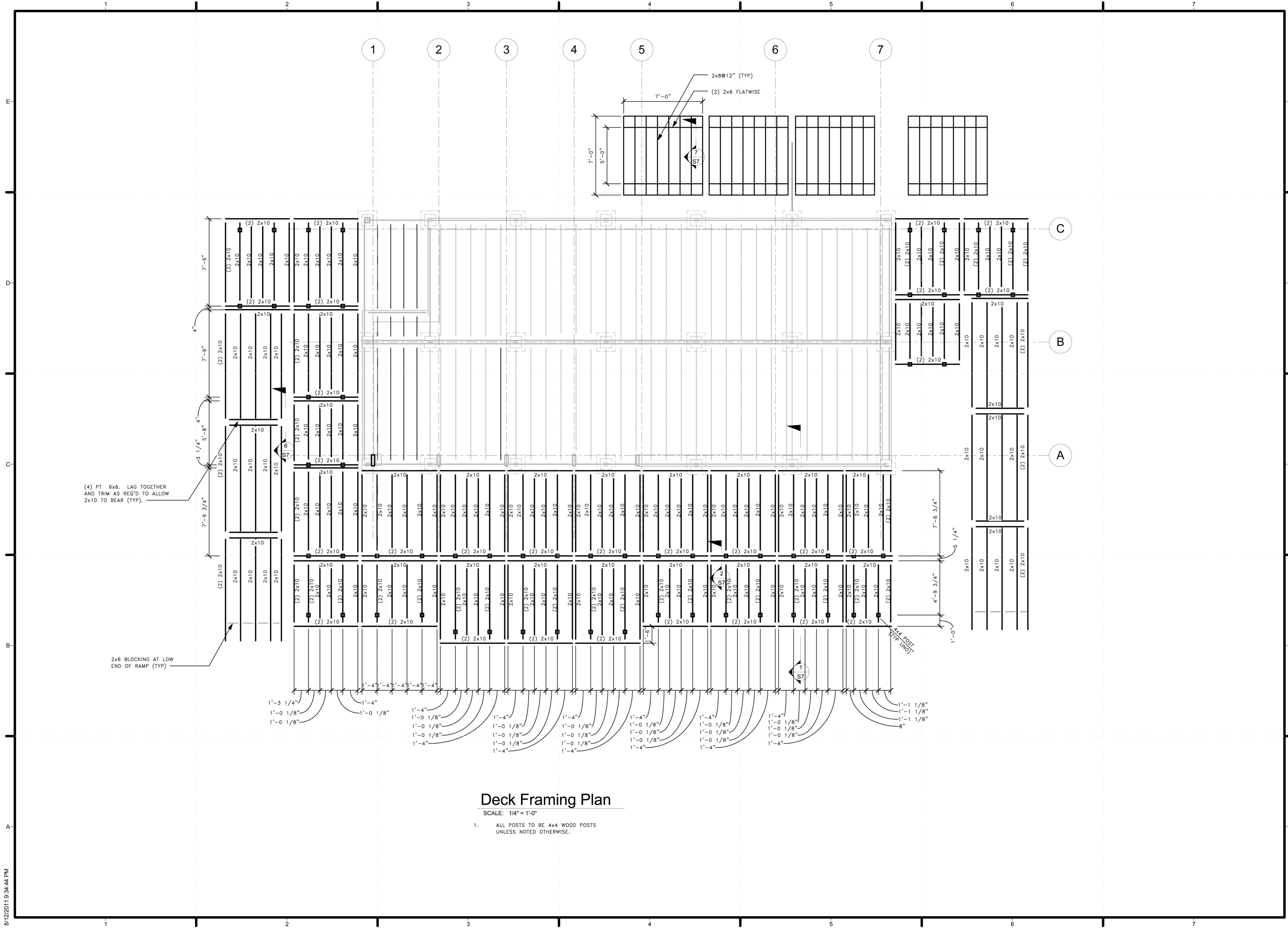


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SHEET TITLE
FRAMING ELEVATIONS

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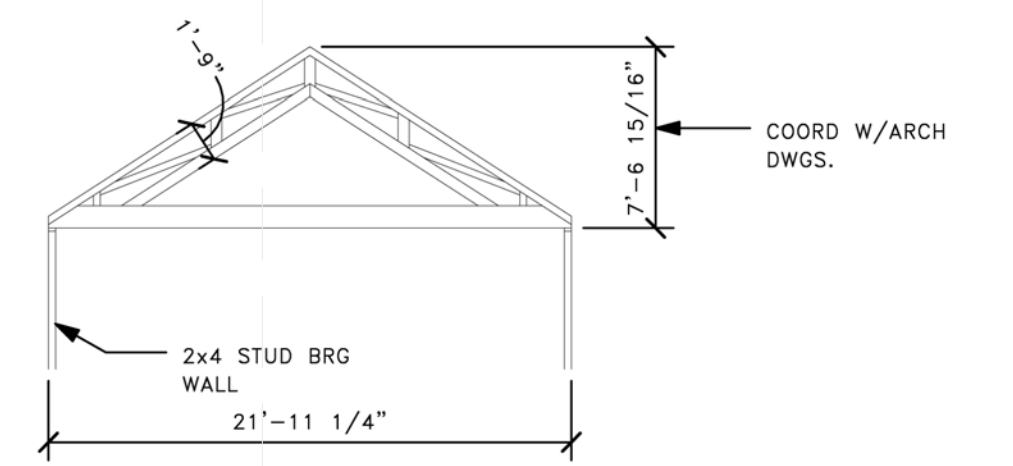
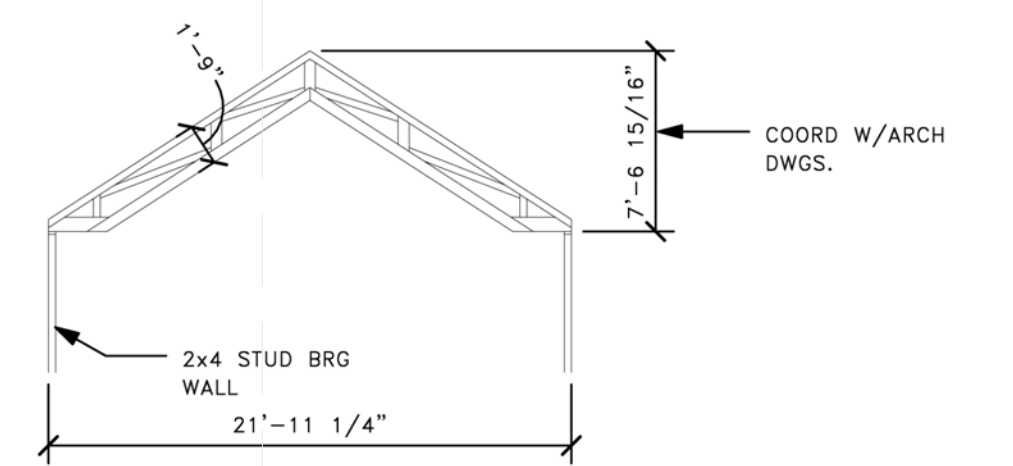
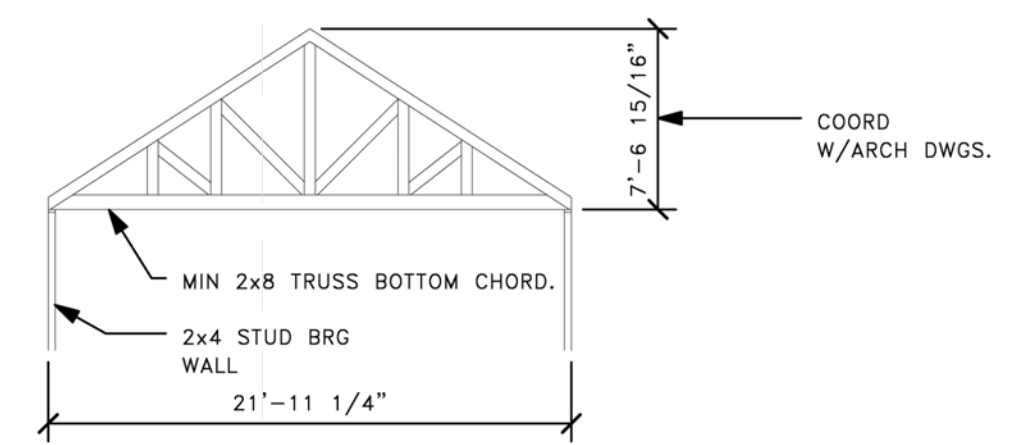
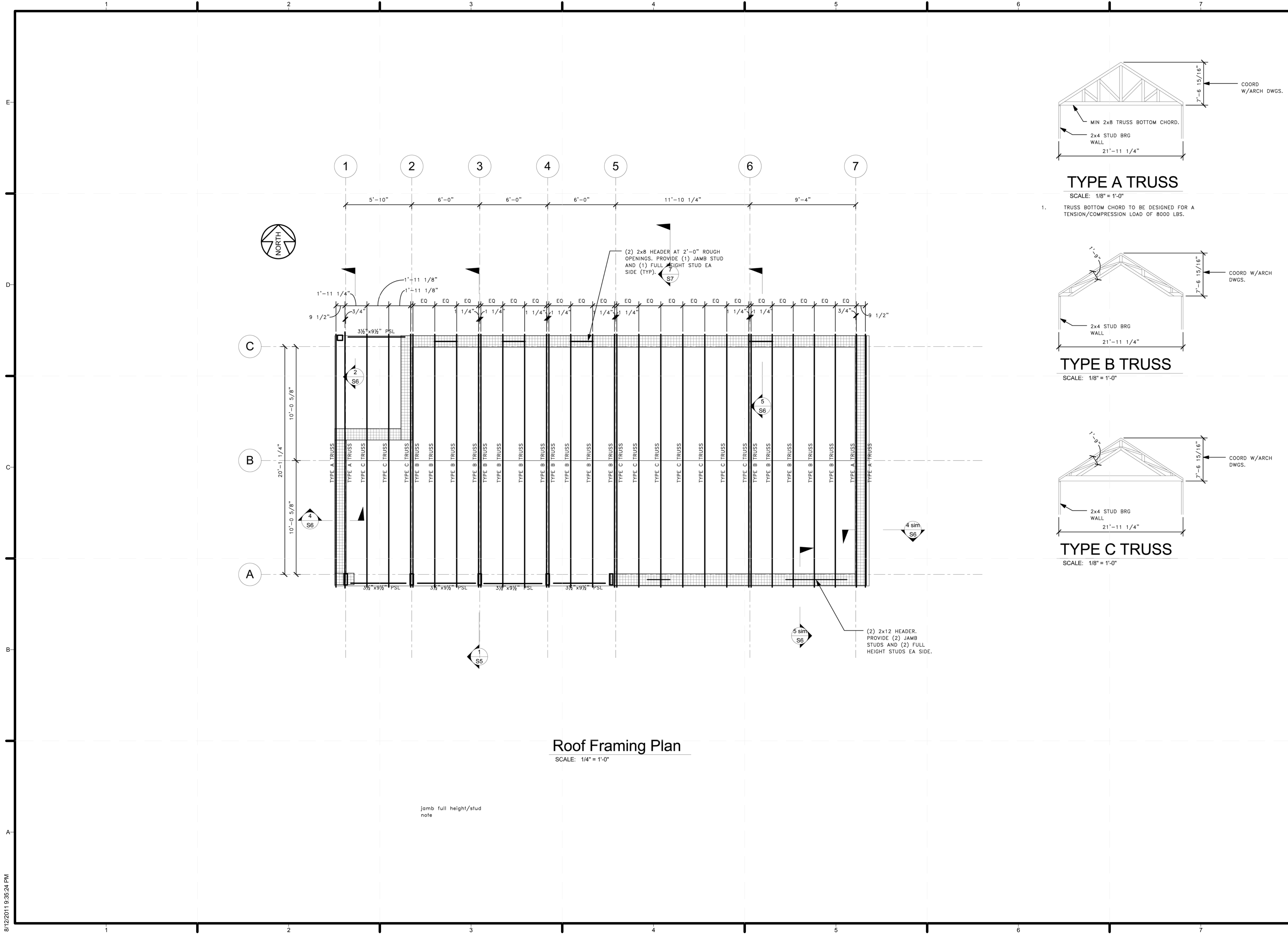
SHEET TITLE
 DECK FRAMING PLAN

S-2

Deck Framing Plan

SCALE: 1/4" = 1'-0"

- ALL POSTS TO BE 4x4 WOOD POSTS UNLESS NOTED OTHERWISE.



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SHEET TITLE
ROOF FRAMING PLAN



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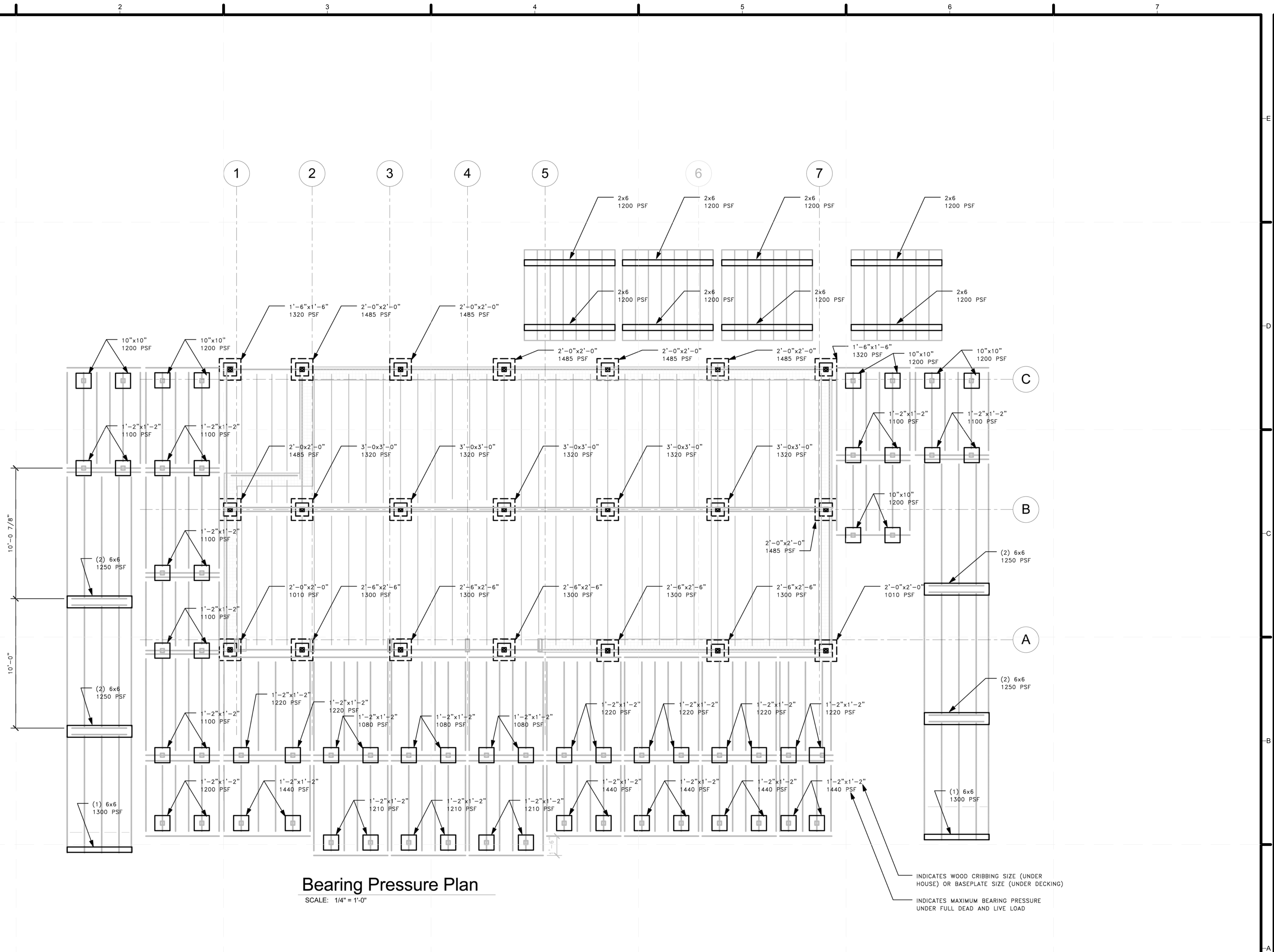


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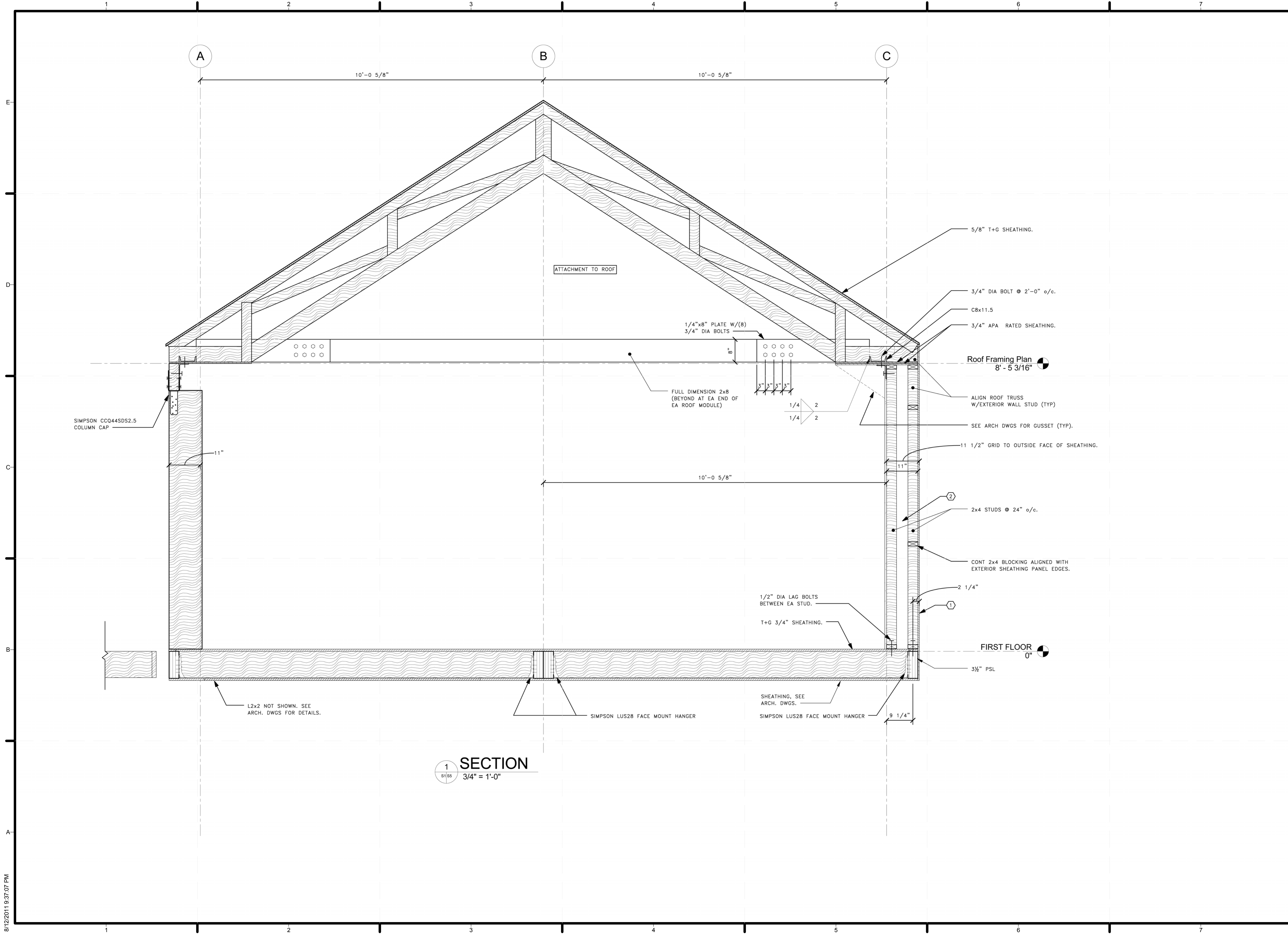
SHEET TITLE
BEARING PRESSURE PLAN

S-4



Bearing Pressure Plan
 SCALE: 1/4" = 1'-0"

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1 SECTION
 3/4" = 1'-0"



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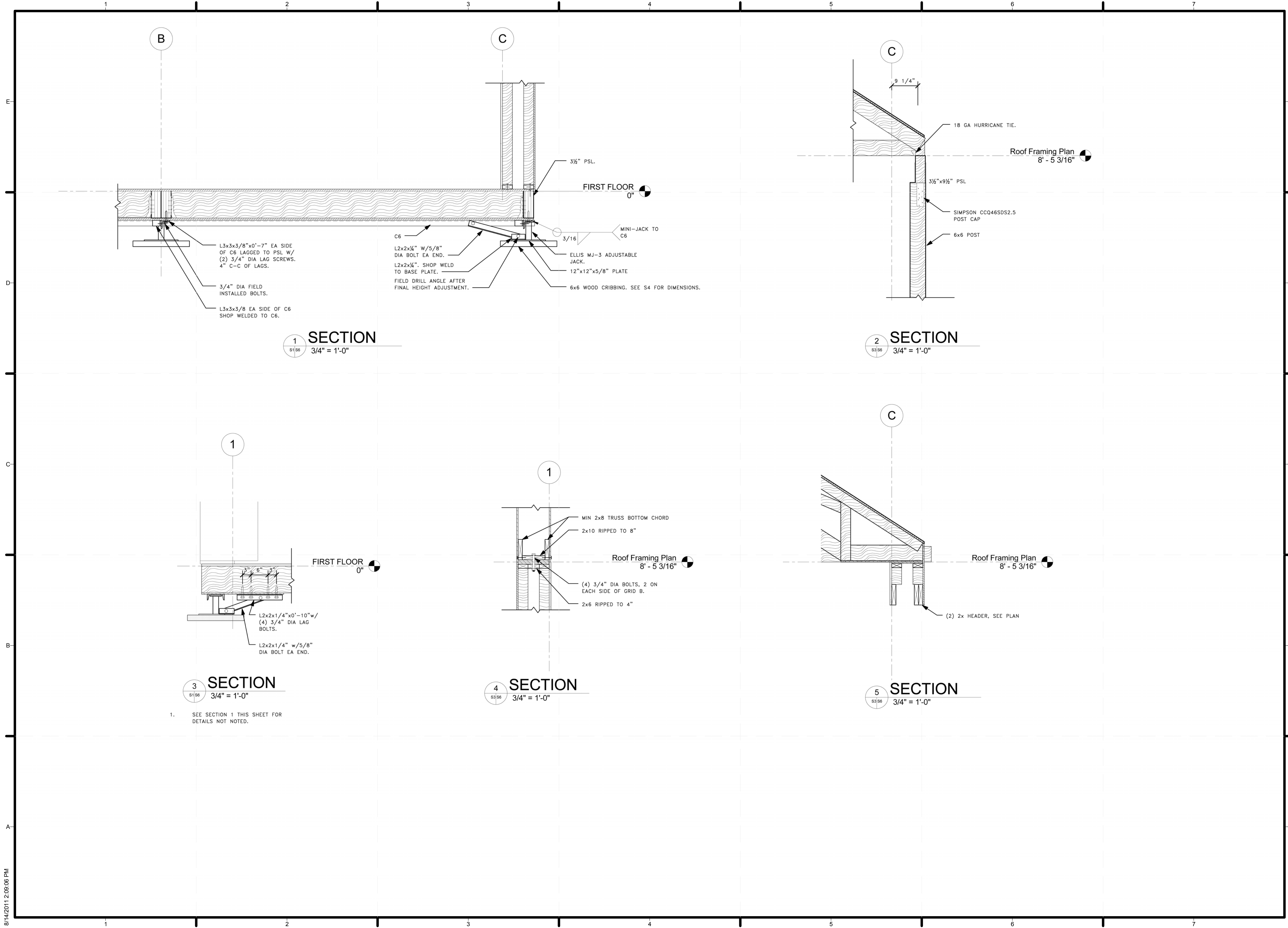
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SHEET TITLE
 SECTIONS

S-5

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SHEET TITLE
 SECTIONS

S-6

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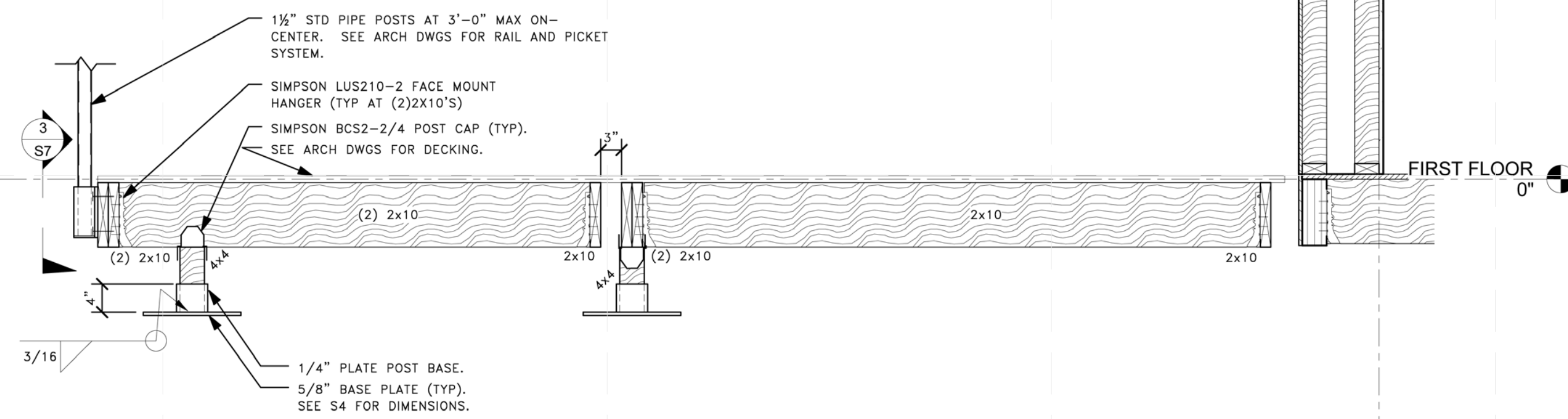


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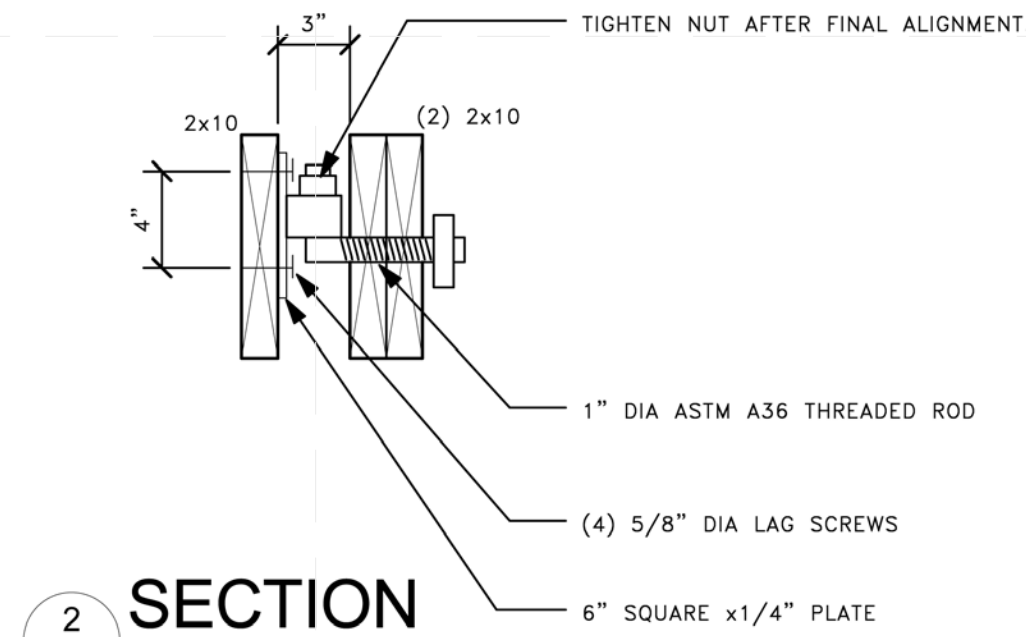
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SHEET TITLE
 SECTIONS

S-7

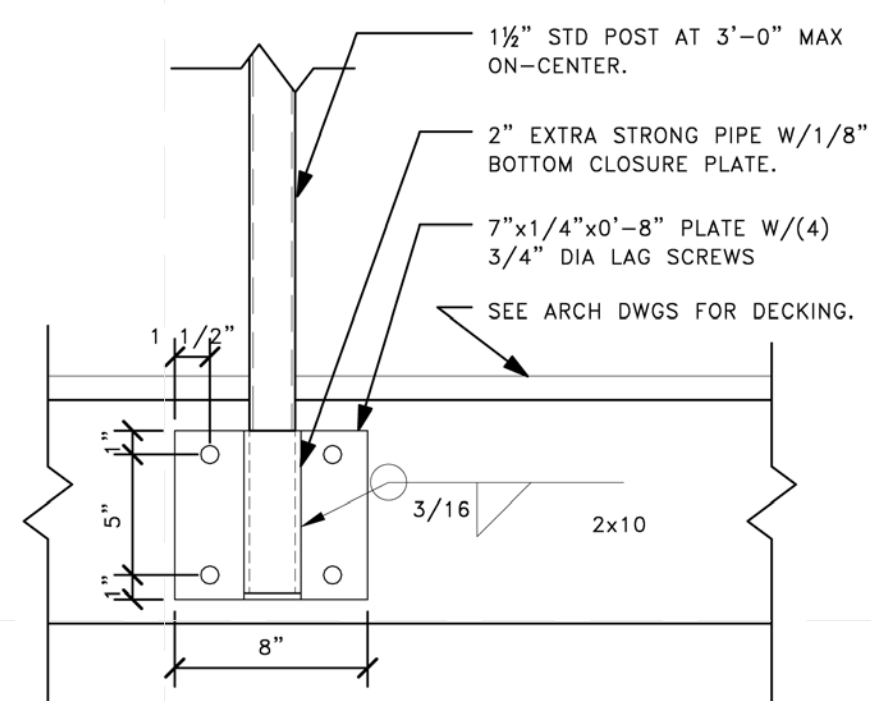


1 SECTION
 3/4" = 1'-0"

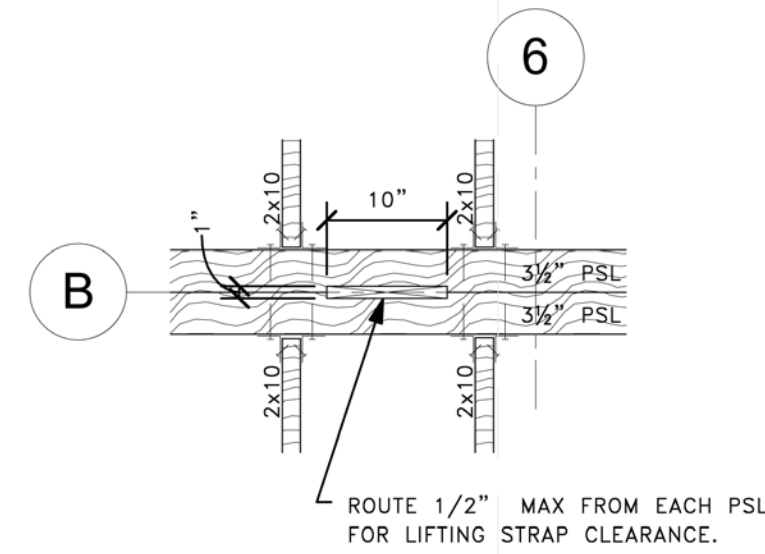


2 SECTION
 1 1/2" = 1'-0"

1. DETAIL TYPICAL AT NORTH EDGE OF ALL DECKS.

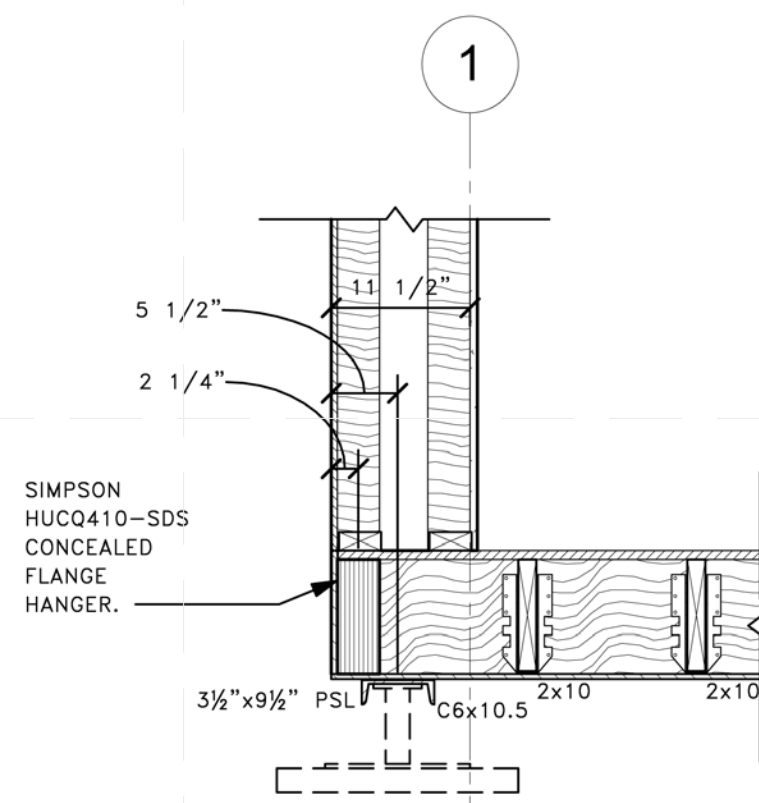


3 SECTION
 1 1/2" = 1'-0"

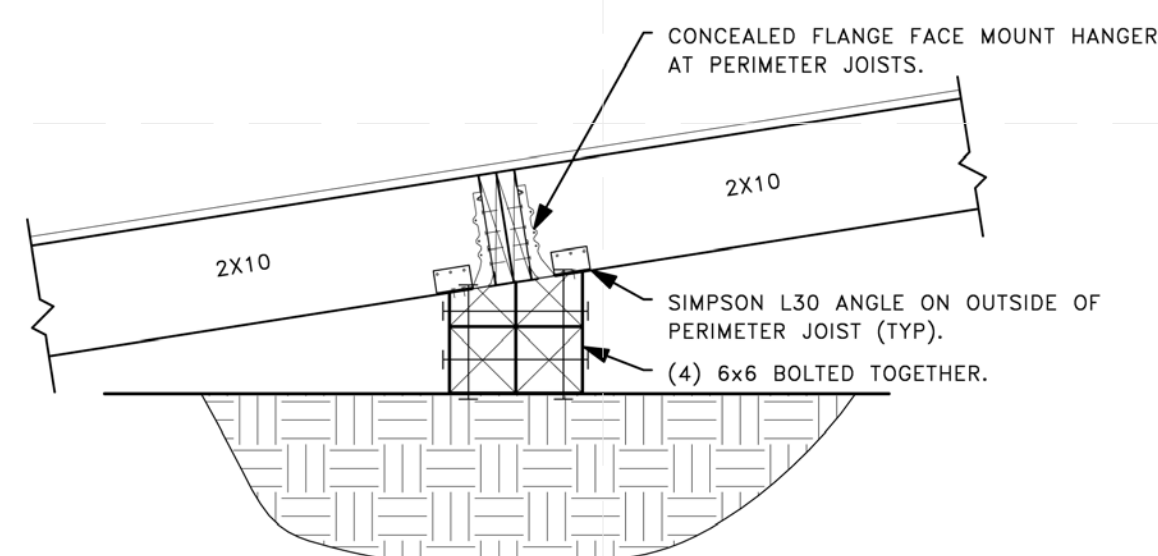


5 SECTION
 3/4" = 1'-0"

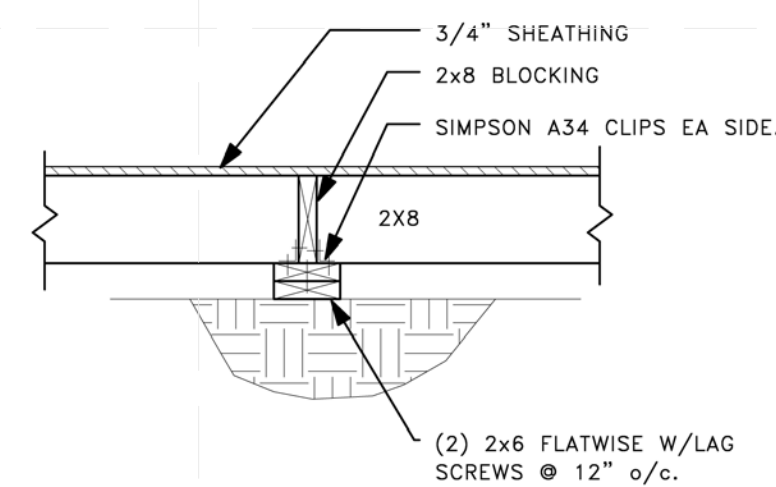
1. COORDINATE LOCATION WITH LIFTING STRAPS. LOCATE AT APPROXIMATELY 1/3 POINT OF PSL'S BETWEEN FOUNDATION JACK LOCATIONS.



4 SECTION
 3/4" = 1'-0"



6 SECTION
 1/4" = 1'-0"



7 SECTION
 1/4" = 1'-0"

WOOD TRUSS NOTES

1. ALL WOOD TRUSSES SHALL COMPLY WITH THE FOLLOWING CODES AND REGULATIONS:
 - A. "TIMBER CONSTRUCTION MANUAL" BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
 - B. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
 - C. "DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES" BY THE TRUSS PLATE INSTITUTE.

2. CHORD MEMBERS SHALL BE:

- A. 2X6 MINIMUM SIZE.
- B. NO. 1 SOUTHERN PINE WITH MODULUS OF ELASTICITY (E) = 1,700,000 PSI AND MINIMUM BENDING STRESS (Fb), FOR SINGLE MEMBER USE, AS FOLLOWS:

SIZE	Fb(Psi)
2X6	1650
2X8	1500
2X10	1300
2X12	1250
- C. MACHINE STRESS RATED (MSR) STRUCTURAL LUMBER, WITH MODULUS OF ELASTICITY (E) = 1,500,000 PSI AND A MINIMUM BENDING STRESS (Fb), FOR SINGLE MEMBER USE = 1650 PSI.
- D. APPROVED EQUIVALENT, OR BETTER, THAN ABOVE.

WEB MEMBERS SHALL BE:

- A. 2X4 MINIMUM SIZE
- B. NO. 2 SOUTHERN PINE WITH MODULUS OF ELASTICITY (E) = 1,600,000 PSI AND MINIMUM BENDING STRESS (Fb), FOR SINGLE MEMBER USE, AS FOLLOWS:

SIZE	Fb(Psi)
2X4	1500
2X6	1250
2X8	1200
2X10	1050
- C. NO. 1/NO. 2 SPRUCE-PINE-FIR WITH MODULUS OF ELASTICITY (E) = 1,400,000 PSI AND MINIMUM BENDING STRESS (Fb), FOR SINGLE MEMBER USE = 875 PSI.
- D. APPROVED EQUIVALENT, OR BETTER, THAN ABOVE.

3. ALL LUMBER SHALL BE STRAIGHT AND NEW, IN SOUND CONDITION, SURFACED DRIED WITH A MAXIMUM MOISTURE CONTENT OF 19%. ALL DIMENSION LUMBER SHALL BEAR THE GRADE AND MARK OF THE ASSOCIATION UNDER WHOSE RULES IT IS PRODUCED AND A MARK OF MILL IDENTIFICATION.

4. THE TRUSS FABRICATOR SHALL DESIGN THE TRUSSES BASED ON THE DESIGN LOADS AND THE CONFIGURATION GIVEN ON PLANS. SHOP DRAWINGS SHALL SHOW TRUSS CONFIGURATION, MEMBER SIZES, MEMBER FORCES AND SPECIES, GRADE AND STRESSES OF LUMBER. A DIMENSIONED PLACEMENT PLAN SHALL BE SUBMITTED WITH THE TRUSS SHOP DRAWINGS SHOWING TRUSSES AND TRUSS BRACING (SHOP DRAWINGS WILL BE REJECTED IF PLACEMENT PLAN IS NOT PROVIDED). THE TRUSS FABRICATOR SHALL SELECT THE GUSSET PLATE TO BE USED AT EACH JOINT. THESE GUSSET PLATES MUST HAVE A WORKING CAPACITY OF AT LEAST 125% OF THE DESIGN LOADS.

5. PREFABRICATED WOOD TRUSSES SHALL BE FABRICATED IN AN ENCLOSED STRUCTURE UNDER CONTROLLED CONDITIONS BY AN EXPERIENCED FABRICATOR. THE TRUSS FABRICATOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING FABRICATION. TRUSSES SHALL NOT BE FABRICATED UNTIL ALL SHOP DRAWINGS HAVE BEEN APPROVED. ALL SHOP DRAWINGS MUST BEAR THE STAMP OF A WELL QUALIFIED STATE OF VERMONT REGISTERED PROFESSIONAL ENGINEER.

6. WOOD TRUSSES SHALL BE HANDLED, INSTALLED AND BRACED IN ACCORDANCE WITH BSCI 1-03: "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" OF THE TRUSS PLATE INSTITUTE. THE TRUSS FABRICATOR SHALL FURNISH A COPY OF THIS MANUAL AND SHALL SHIP IT IN A WATERTIGHT CONTAINER WITH THE TRUSSES.

7. THE CONTRACTOR SHALL INSTALL ALL TEMPORARY BRACING AS RECOMMENDED BY BSCI 1-03. THIS TEMPORARY BRACING SHALL BECOME PERMANENT BRACING WHEREVER POSSIBLE. PERMANENT BRACING SHALL MEET ALL REQUIREMENTS OF BSCI 1-03 AND THE WORKING DRAWINGS AND SPECIFICATIONS, WHICHEVER ARE THE MORE STRINGENT.

8. DESIGN LOADS:

FLAT ROOF SNOW LOAD=40 PSF*
DEAD LOAD = 15 PSF
CEILING LIVE LOAD = 20 PSF (TYPE C TRUSSES ONLY)
CEILING DEAD LOAD = 5 PSF
TOTAL 60 PSF

*ADJUST PER CODE REQUIREMENTS FOR SLOPED ROOF REDUCTION AND UNBALANCED AND DRIFING REQUIREMENTS.

DESIGN LOADS

ROOF LOAD

Pf = 40 PSF
 Ce = 1.0
 I = 1.0
 Ct = 1.1

WIND LOAD

BASIC WIND SPEED = 90 MPH
 Iw = 1.0
 EXPOSURE = C

FLOOR LIVE LOAD=50 PSF EXCEPT 100 PSF AT RAMPS.

WOOD CONSTRUCTION NOTES

1. ALL WOOD CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING CODES AND REGULATIONS:

- A. "TIMBER CONSTRUCTION MANUAL" BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
- B. "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
- C. "AMERICAN SOFTWOOD LUMBER STANDARD" BY THE NATIONAL BUREAU OF STANDARDS, VOLUNTARY PRODUCT STANDARD PS 20-70.
- D. "PLYWOOD DESIGN SPECIFICATION" BY THE AMERICAN PLYWOOD ASSOCIATION.
- E. "U.S. PRODUCT STANDARD PS 1-83 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD".
- F. "AMERICAN NATIONAL STANDARD FOR WOOD PRODUCTS - STRUCTURAL GLUE LAMINATED TIMBER", ANSI/AITC A190.1-1983.

2. LUMBER FOR MISCELLANEOUS WOOD FRAMING AND BLOCKING SHALL BE SPRUCE-PINE-FIR, CONSTRUCTION GRADE AND BETTER WITH A MINIMUM ALLOWABLE BENDING STRESS OF 975 PSI (SINGLE MEMBER USE) AND A MODULUS OF ELASTICITY OF 1,300,000 PSI.

3. LUMBER FOR WOOD BEAMS, COLUMNS, STUDS AND JOISTS SHALL BE SPRUCE-PINE-FIR, NO. 1/NO. 2 GRADE WITH A MINIMUM ALLOWABLE BENDING STRESS OF 875 PSI (SINGLE MEMBER USE) AND A MODULUS OF ELASTICITY OF 1,400,000 PSI.

4. ALL DIMENSION LUMBER SHALL BE STRAIGHT AND NEW, IN SOUND CONDITION, KILN DRIED OR SURFACED DRY, WITH A MAXIMUM MOISTURE CONTENT OF 19%. ALL LUMBER SHALL BEAR THE GRADE AND MARK OF THE ASSOCIATION UNDER WHOSE RULES IT IS PRODUCED AND A MARK OF MILL IDENTIFICATION.

5. PROTECTION FROM THE ELEMENTS: THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO KEEP THE WOOD DECKING AND STRUCTURAL MEMBERS DRY DURING CONSTRUCTION. ANY STAINING OR DAMAGE SHALL BE CORRECTED TO THE ARCHITECT'S SATISFACTION AT THE EXPENSE OF THE GENERAL CONTRACTOR.

6. ALL WALL, FLOOR AND ROOF SHEATHING SHALL BE APA RATED SHEATHING.

STRUCTURAL STEEL NOTES

1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SITE, ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND THE SPECIFICATIONS.

2. ALL STRUCTURAL STEEL WORK SHALL, UNLESS OTHERWISE INDICATED, CONFORM TO THE "STEEL CONSTRUCTION MANUAL 13TH EDITION", SPECIFICALLY INCLUDING THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND THE CODE OF STANDARD PRACTICE OF THE A.I.S.C. AND TO THE REQUIREMENTS OF THE LOCAL BUILDING CODES.

3. ALL WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE - ANSI/AWS D1.1" OF THE AMERICAN WELDING SOCIETY.

4. STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING:

STRUCTURAL SHAPES
 ASTM A36, FY = 36,000 PSI (ANGLES, CHANNELS, S-SHAPES, ETC.)
 BOLTS
 ASTM A325

5. ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED (MINIMUM 1.5 MILS DRY FILM THICKNESS) WITH AN APPROVED RUST INHIBITIVE PRIME PAINT. STEEL SHALL BE THOROUGHLY CLEANED PRIOR TO PAINTING. FIELD TOUCH UP WITH THE SAME PAINT WILL BE REQUIRED.



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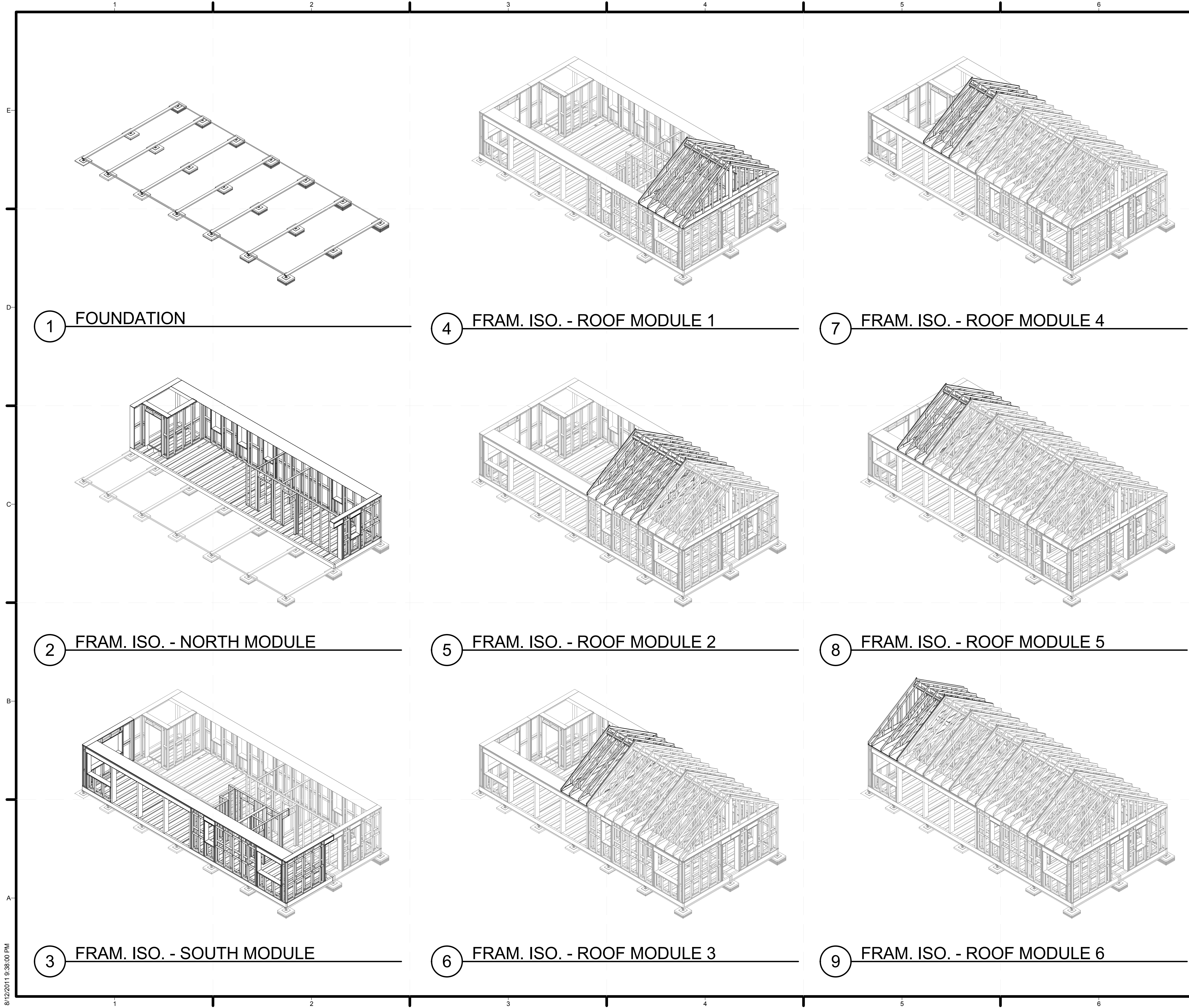
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SHEET TITLE

STRUCTURAL NOTES
 AND SYMBOLS

S-8



1 FOUNDATION

4 FRAM. ISO. - ROOF MODULE 1

7 FRAM. ISO. - ROOF MODULE 4

2 FRAM. ISO. - NORTH MODULE

5 FRAM. ISO. - ROOF MODULE 2

8 FRAM. ISO. - ROOF MODULE 5

3 FRAM. ISO. - SOUTH MODULE

6 FRAM. ISO. - ROOF MODULE 3

9 FRAM. ISO. - ROOF MODULE 6

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES



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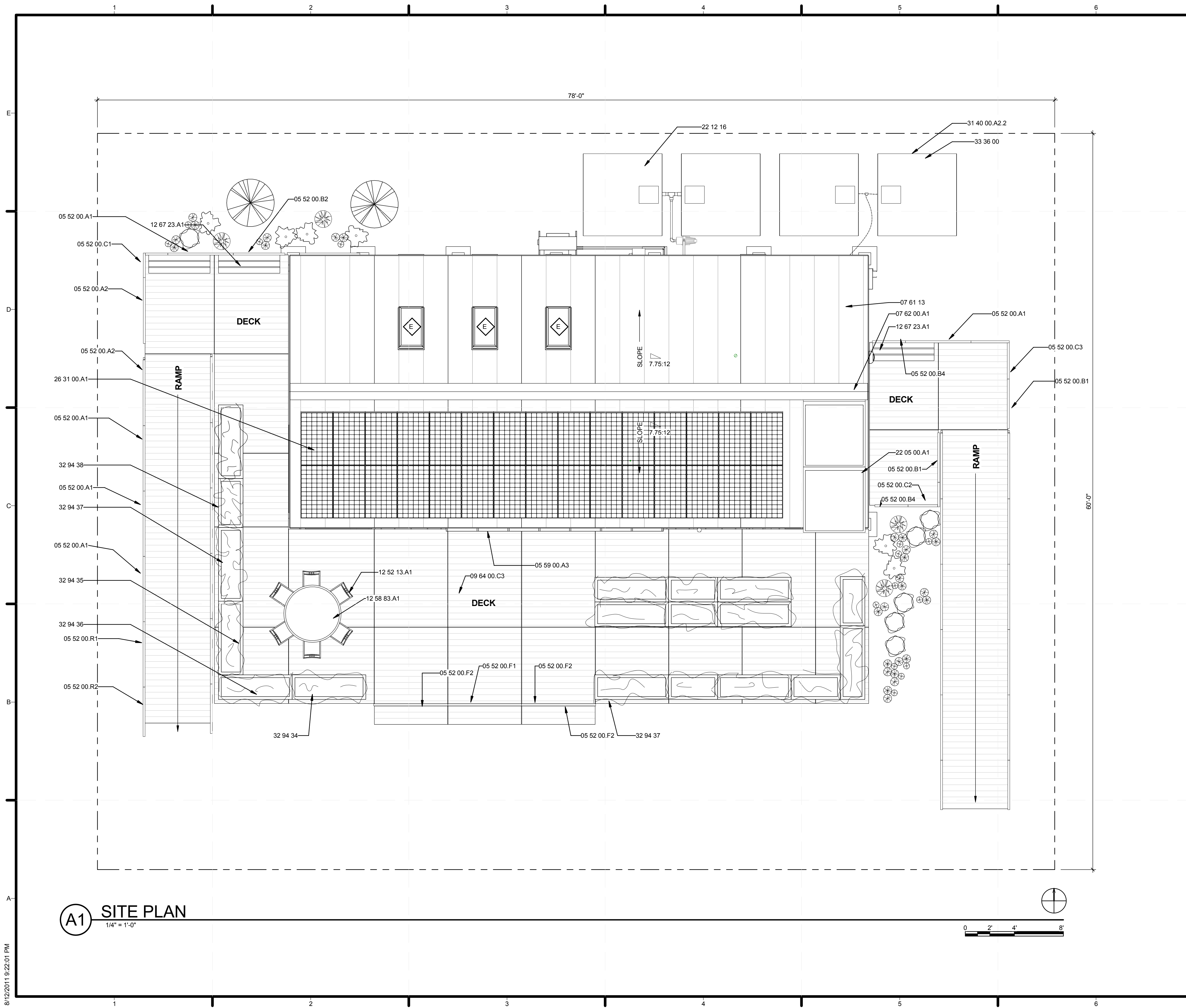
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SHEET TITLE
 FRAMING ISOMETRICS

S-9

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GENERAL SHEET NOTES


1. RAMPS ARE ADA COMPLIANT AND ADJUSTABLE
2. REFER TO SHEET L-101 FOR LANDSCAPING DESIGN
3. REFER TO SHEET L-104 FOR DECK FRAMING PLAN
4. REFER TO SHEET G-104 FOR DECK RAMP DETAILS
5. TEMPORARY WATER TANKS FOR COMPETITION PURPOSES ONLY

REFERENCE KEYNOTES

- 05 52 00.A1 FABRICATED METAL RAILING, TYPE A1
- 05 52 00.A2 FABRICATED METAL RAILING, TYPE A2
- 05 52 00.B1 FABRICATED METAL RAILING, TYPE B1
- 05 52 00.B2 FABRICATED METAL RAILING, TYPE B2
- 05 52 00.B4 FABRICATED METAL RAILING, TYPE B4
- 05 52 00.C1 FABRICATED METAL RAILING, TYPE C1
- 05 52 00.C2 FABRICATED METAL RAILING, TYPE C2
- 05 52 00.C3 FABRICATED METAL RAILING, TYPE C3
- 05 52 00.F1 FABRICATED METAL RAILING, TYPE F1
- 05 52 00.F2 FABRICATED METAL RAILING, TYPE F2
- 05 52 00.R1 FABRICATED METAL RAILING, TYPE R1
- 05 52 00.R2 FABRICATED METAL RAILING, TYPE R2
- 05 59 00.A3 BOXTRACK GREENHOUSE SHADE TRACK
- 07 61 13 STANDING SEAM SHEET METAL ROOFING
- 07 62 00.A1 ALUMINUM RIDGE CAP
- 09 64 00.C3 1" WHITE OAK DECKING, CUT AT VARYING SIZES
- 12 52 13.A1 EMECO NAVY CHAIR 111
- 12 58 83.A1 CUSTOM OUTDOOR STEEL TABLE
- 12 67 23.A1 WHITE OAK BENCHES
- 22 05 00.A1 SOLAR HOT WATER COLLECTOR
- 22 12 16 FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS
- 26 31 00.A1 SUNPOWER 225 PHOTOVOLTAIC COLLECTORS
- 31 40 00.A2.2 2x4 WATER STORAGE CRIBBING
- 32 94 34 PLANTERS A, D (2x6'x3'), WITH DOOR
- 32 94 35 PLANTERS B (2x6'x3'), WITH DOOR
- 32 94 36 PLANTERS C (2x6'x3'), WITH DOOR
- 32 94 37 PLANTERS 2x6'x1.5', WITHOUT DOOR
- 32 94 38 PLANTERS 2x4'x1.5', WITHOUT DOOR
- 33 36 00 UTILITY SEPTIC TANKS

SHEET KEYNOTES

MARK	DATE	DESCRIPTION



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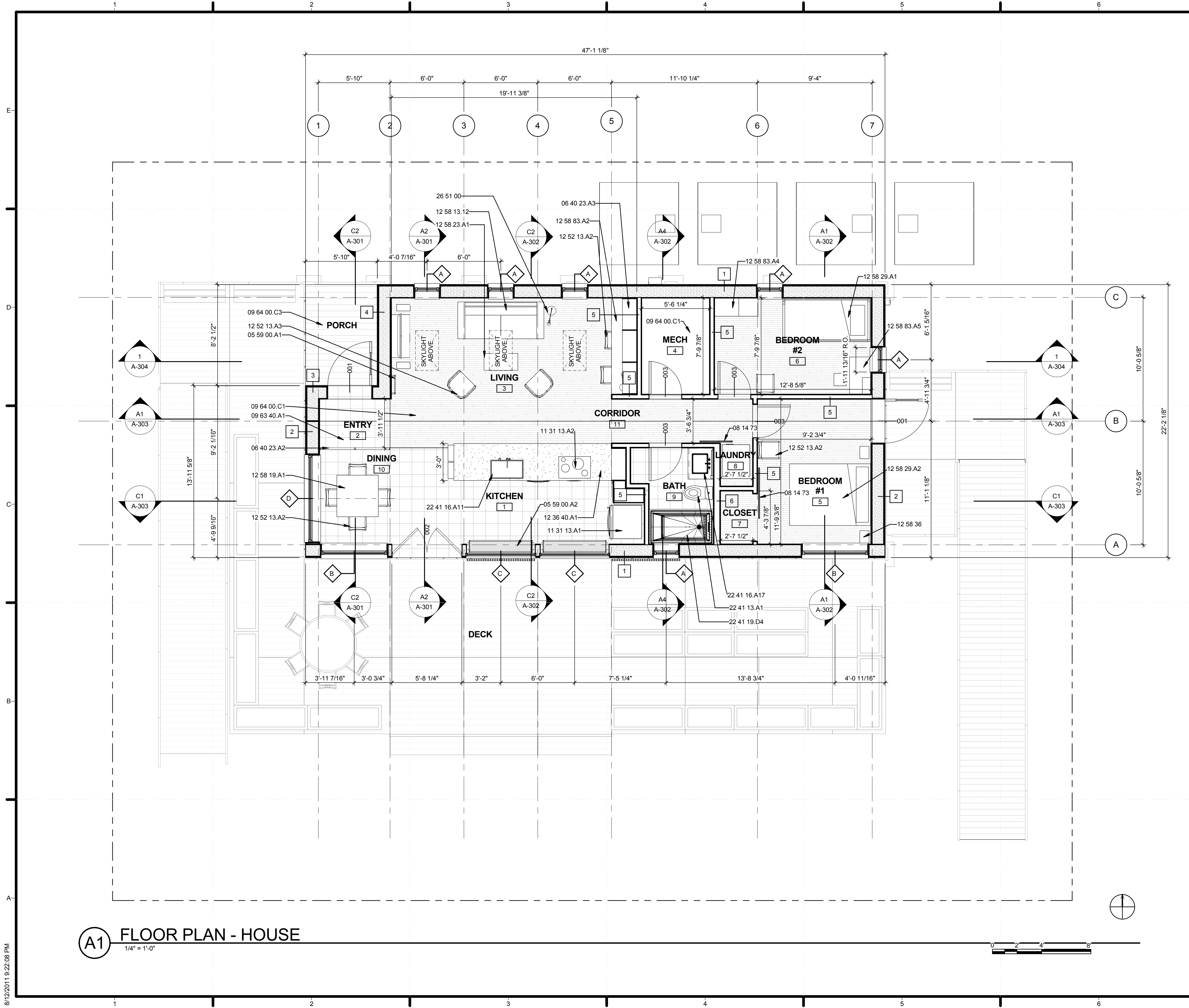
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SHEET TITLE
SITE PLAN

A-101

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(A1) SITE PLAN
 1/4" = 1'-0"



GENERAL SHEET NOTES

- GREENHOUSE EXISTS ON THE INTERIOR SOUTH WALL IN THE KITCHEN
- BEDROOM 2 CONTAINS TWO RESCUE EGRESS SIZED OPENINGS @ 23 13/16" WIDE. SEE WINDOW SCHEDULE FOR MORE DETAIL.
- REFER TO SHEET L-101 FOR LANDSCAPING DESIGN
- REFER TO ENLARGED FLOOR PLANS FOR INTERIOR ELEVATION KEYS
- REFER TO ENLARGED FLOOR PLANS FOR COMPLETE DIMENSIONS

REFERENCE KEYNOTES

05 59 00.A1	FABRICATED STEEL LADDER AND UPPER RAIL
05 59 00.A2	GREENHOUSE SHELVING, MOUNTED TO WD POSTS
06 40 23.A2	MAPLE PARTITION WALL WITH 3/4" SLATS
06 40 23.A3	3/4" FINISHED PLYWOOD SHELVING
08 14 73	SLIDING WOOD DOORS
09 63 40.A1	12" x 12" HEATHERMORE SLATE TILES
09 64 00.C1	MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
09 64 00.C3	1" WHITE OAK DECKING, CUT AT VARYING SIZES
11 31 13.A1	REFRIGERATOR
11 31 13.A2	BOSCH INDUCTION COOKTOP
12 36 40.A1	SLATE COUNTERTOP
12 52 13.A2	WOOD CHAIR
12 52 13.A3	CAPTAIN CHAIR
12 58 13.12	VISSO BRENNEM COUCH
12 58 19.A1	ACCORDIAN-FOLD DINING TABLE, SEATS 4-8 PEOPLE
12 58 23.A1	SALVAGED ANTIQUE COFFEE TABLE
12 58 29.A1	VERMONT MODERN FURNITURE CHILDRENS BUNK BED
12 58 29.A2	BED BY MAPLE CORNER
12 58 36	NIGHTSTANDS
12 58 83.A2	3" ASH BUILT-IN DESK
12 58 83.A4	VERMONT MODERN FURNITURE CHILDRENS DRESSER
12 58 83.A5	VERMONT MODERN FURNITURE CHILDRENS DESK
22 41 13.A1	WATER CLOSET
22 41 16.A11	PREP SINK
22 41 16.A17	FREE-STANDING SINK WITH ASH CABINETS BELOW
22 41 19.D4	WHIRLPOOL TUB
26 51 00	INTERIOR LIGHTING

SHEET KEYNOTES

MARK	DATE	DESCRIPTION



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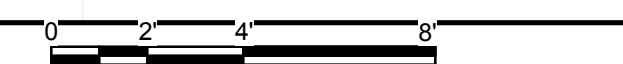
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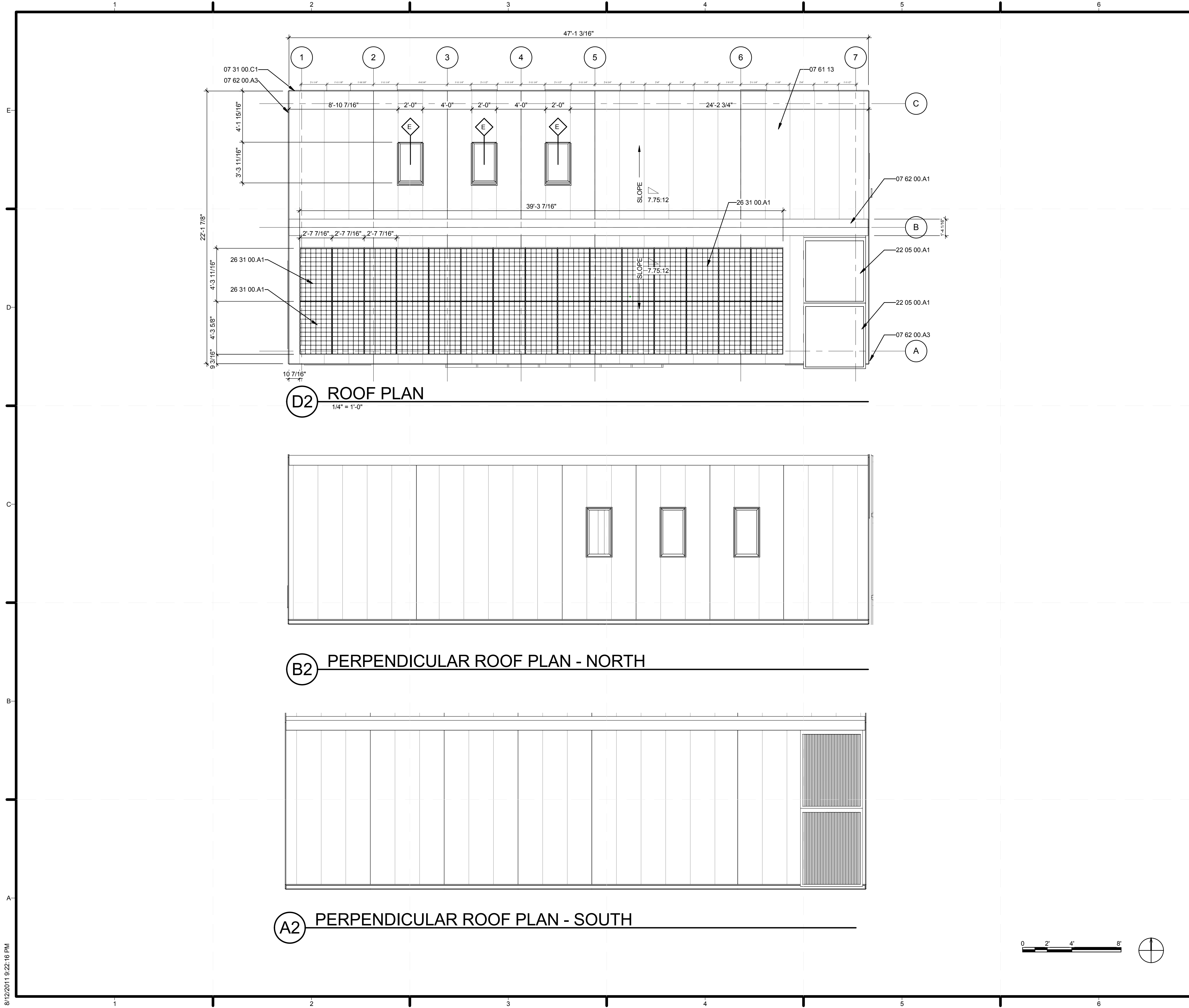
SHEET TITLE
FLOOR PLAN - HOUSE

A-111

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A1 FLOOR PLAN - HOUSE
 1/4" = 1'-0"





D2 ROOF PLAN
1/4" = 1'-0"

B2 PERPENDICULAR ROOF PLAN - NORTH

A2 PERPENDICULAR ROOF PLAN - SOUTH




GENERAL SHEET NOTES

1.

REFERENCE KEYNOTES

- 07 31 00.C1 METAL DRIP EDGE
- 07 61 13 STANDING SEAM SHEET METAL ROOFING
- 07 62 00.A1 ALUMINUM RIDGE CAP
- 07 62 00.A3 STAINLESS STEEL FLASHING
- 22 05 00.A1 SOLAR HOT WATER COLLECTOR
- 26 31 00.A1 SUNPOWER 225 PHOTOVOLTAIC COLLECTORS

SHEET KEYNOTES



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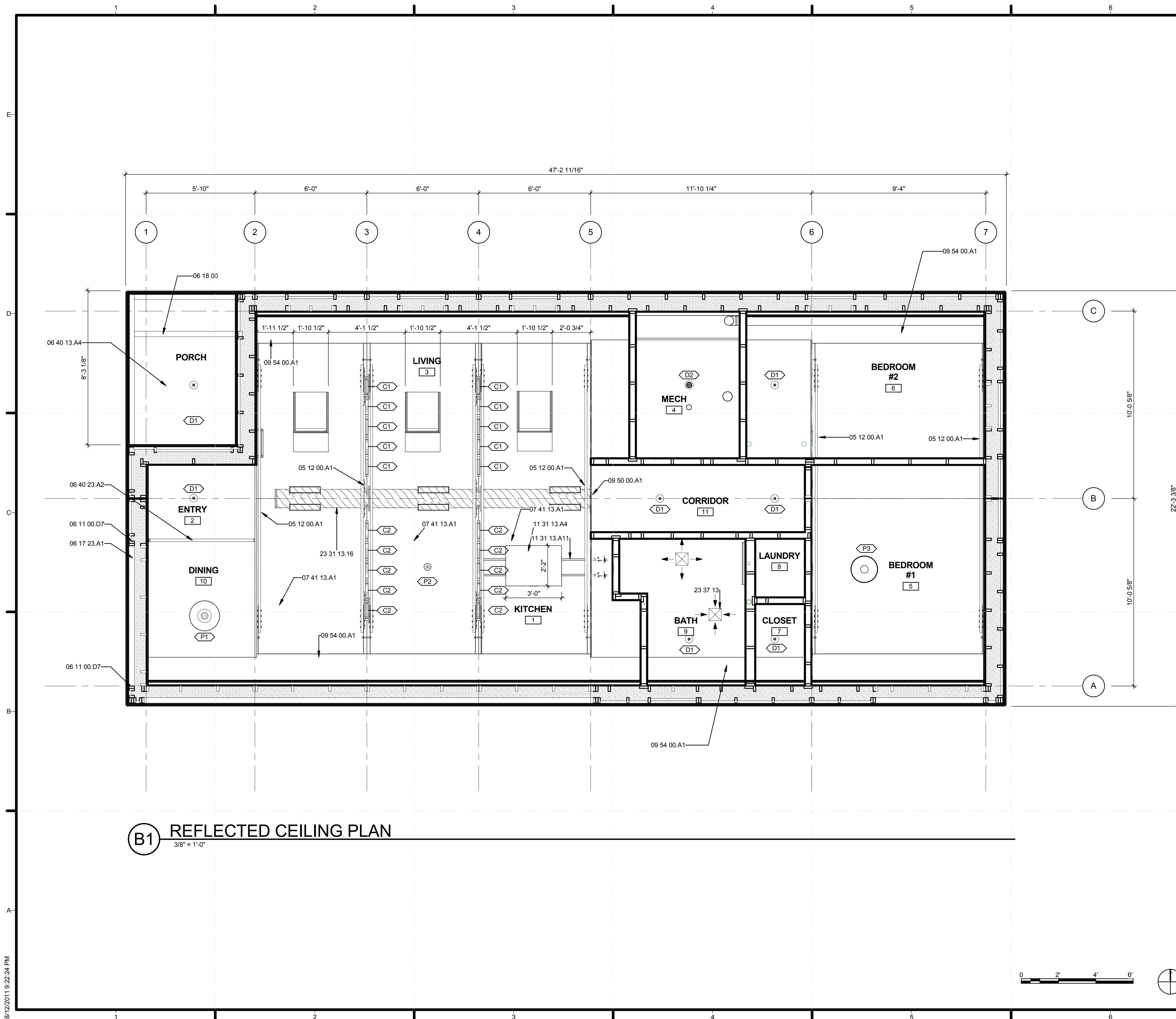


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SHEET TITLE
ROOF PLAN

A-112



B1 REFLECTED CEILING PLAN
3/8" = 1'-0"

GENERAL SHEET NOTES

1. FOR DETAILED LIGHTING PLAN, SEE SHEET E-104

REFERENCE KEYNOTES

- 05 12 00.A1 STEEL BRACING WITH WOOD CROSS TIES
- 06 11 00.D7 2X4 STUDS
- 06 17 23.A1 3 1/2" X 9 1/2" PSL
- 06 18 00 GLUED-LAMINATED CONSTRUCTION
- 06 40 13.A4 1X8 T&G EASTERN WHITE CEDAR STAINED CLEAR
- 06 40 23.A2 MAPLE PARTITION WALL WITH 3/4" SLATS
- 07 41 13.A1 ROOF MODULES WITH GWB AND WHITE PAINT FINISH
- 09 50 00.A1 FLAT CEILING, GWB W/ PAINT
- 09 54 00.A1 GUSSET TO COVER WALL/CEILING JOINT, GWB AND PAINT FINISH
- 11 31 13.A4 RANGE HOOD
- 11 31 13.A11 STAINLESS STEEL BAR TUBE
- 23 31 13.16 ROUND AND FLAT-OVAL SPIRAL DUCTS
- 23 37 13 DIFFUSERS, REGISTERS AND GRILLES

SHEET KEYNOTES



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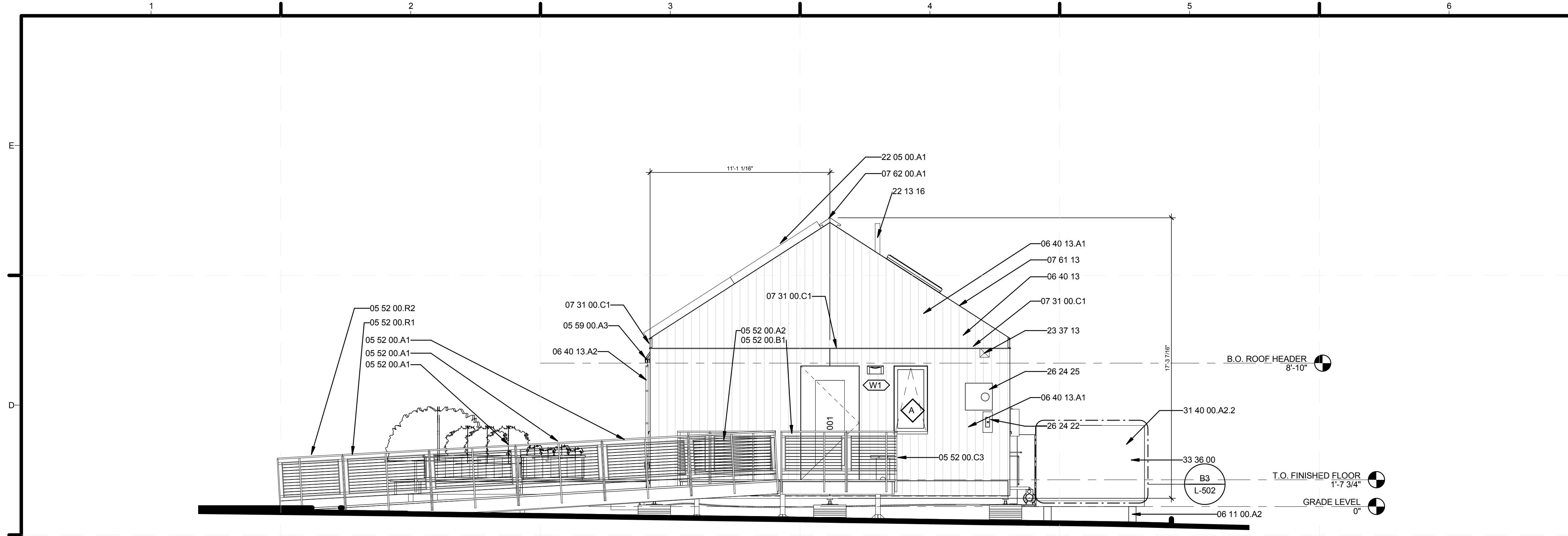


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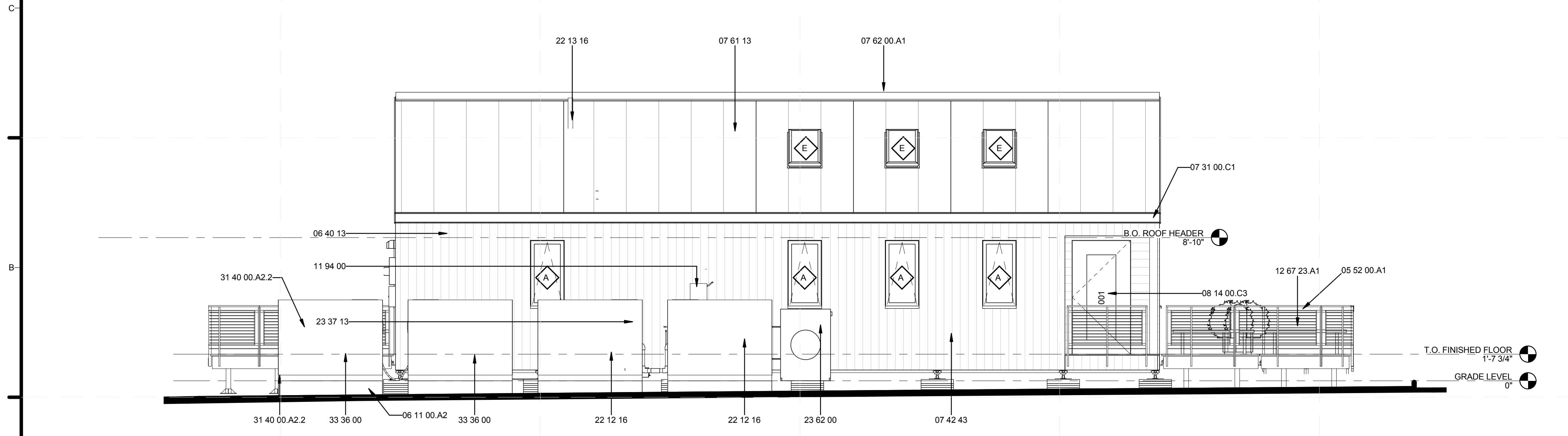
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SHEET TITLE
REFLECTED CEILING PLAN

A-121



(C2) BUILDING ELEVATION - EAST
1/4" = 1'-0"



(A2) BUILDING ELEVATION - NORTH
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 52 00.A1	FABRICATED METAL RAILING, TYPE A1
05 52 00.A2	FABRICATED METAL RAILING, TYPE A2
05 52 00.B1	FABRICATED METAL RAILING, TYPE B1
05 52 00.C3	FABRICATED METAL RAILING, TYPE C3
05 52 00.R1	FABRICATED METAL RAILING, TYPE R1
05 52 00.R2	FABRICATED METAL RAILING, TYPE R2
05 59 00.A3	BOXTRACK GREENHOUSE SHADE TRACK
06 11 00.A2	WOOD BLOCKING AS REQUIRED
06 40 13	EXTERIOR ARCHITECTURAL WOODWORK
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
06 40 13.A2	GREENHOUSE SUN SHADES
07 31 00.C1	METAL DRIP EDGE
07 42 43	COMPOSITE WALL PANELS
07 61 13	STANDING SEAM SHEET METAL ROOFING
08 14 00.A1	ALUMINUM RIDGE CAP
08 14 00.C3	WOOD DOOR FRAME
11 94 00	DISSIPATOR FOR SHW
12 67 23.A1	WHITE OAK BENCHES
22 05 00.A1	SOLAR HOT WATER COLLECTOR
22 12 16	FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS
22 13 16	SANITARY WASTE AND VENT PIPING
23 37 13	DIFFUSERS, REGISTERS AND GRILLES
23 62 00	PACKAGED COMPRESSOR AND CONDENSER UNITS
26 24 22	AC DISCONNECT
26 24 25	METER HOUSING / UTILITY DISCONNECT
31 40 00.A2.2	2x4 WATER STORAGE CRIBBING
33 36 00	UTILITY SEPTIC TANKS

SHEET KEYNOTES



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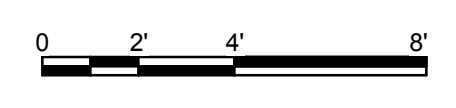
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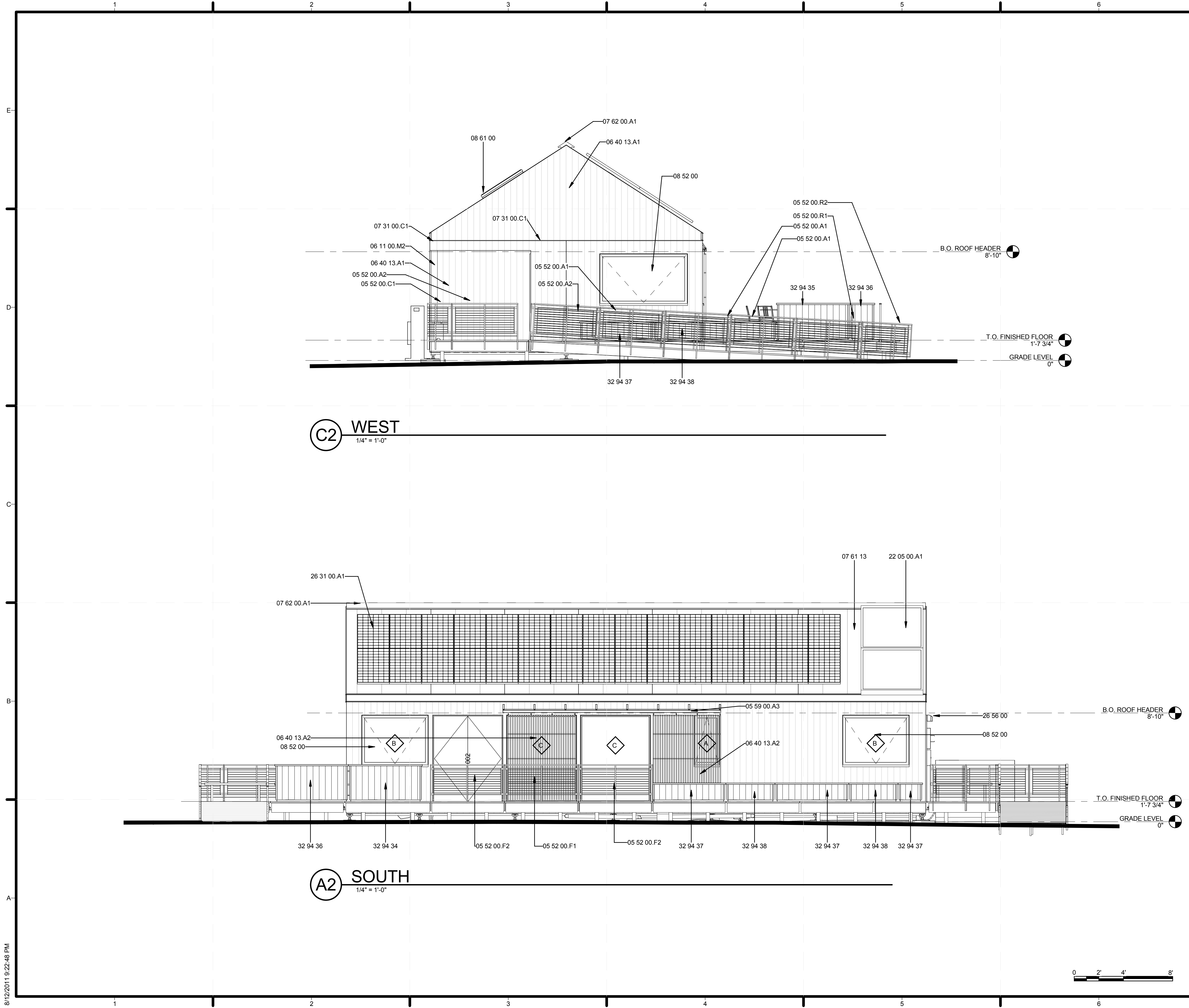
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ELEVATIONS

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 52 00.A1	FABRICATED METAL RAILING, TYPE A1
05 52 00.A2	FABRICATED METAL RAILING, TYPE A2
05 52 00.C1	FABRICATED METAL RAILING, TYPE C1
05 52 00.F1	FABRICATED METAL RAILING, TYPE F1
05 52 00.F2	FABRICATED METAL RAILING, TYPE F2
05 52 00.R1	FABRICATED METAL RAILING, TYPE R1
05 52 00.R2	FABRICATED METAL RAILING, TYPE R2
05 59 00.A3	BOXTRACK GREENHOUSE SHADE TRACK
06 11 00.M2	6X6 POST
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
06 40 13.A2	GREENHOUSE SUN SHADES
07 31 00.C1	METAL DRIP EDGE
07 61 13	STANDING SEAM SHEET METAL ROOFING
07 62 00.A1	ALUMINUM RIDGE CAP
08 52 00	WOOD WINDOWS
08 61 00	ROOF WINDOWS
22 05 00.A1	SOLAR HOT WATER COLLECTOR
26 31 00.A1	SUNPOWER 225 PHOTOVOLTAIC COLLECTORS
26 56 00	EXTERIOR LIGHTING
32 94 34	PLANTERS A, D (2'x6'x3'), WITH DOOR
32 94 35	PLANTERS B (2'x6'x3'), WITH DOOR
32 94 36	PLANTERS C (2'x6'x3'), WITH DOOR
32 94 37	PLANTERS 2'x6'x1.5', WITHOUT DOOR
32 94 38	PLANTERS 2'x4'x1.5', WITHOUT DOOR

SHEET KEYNOTES



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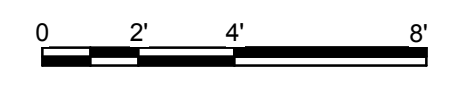
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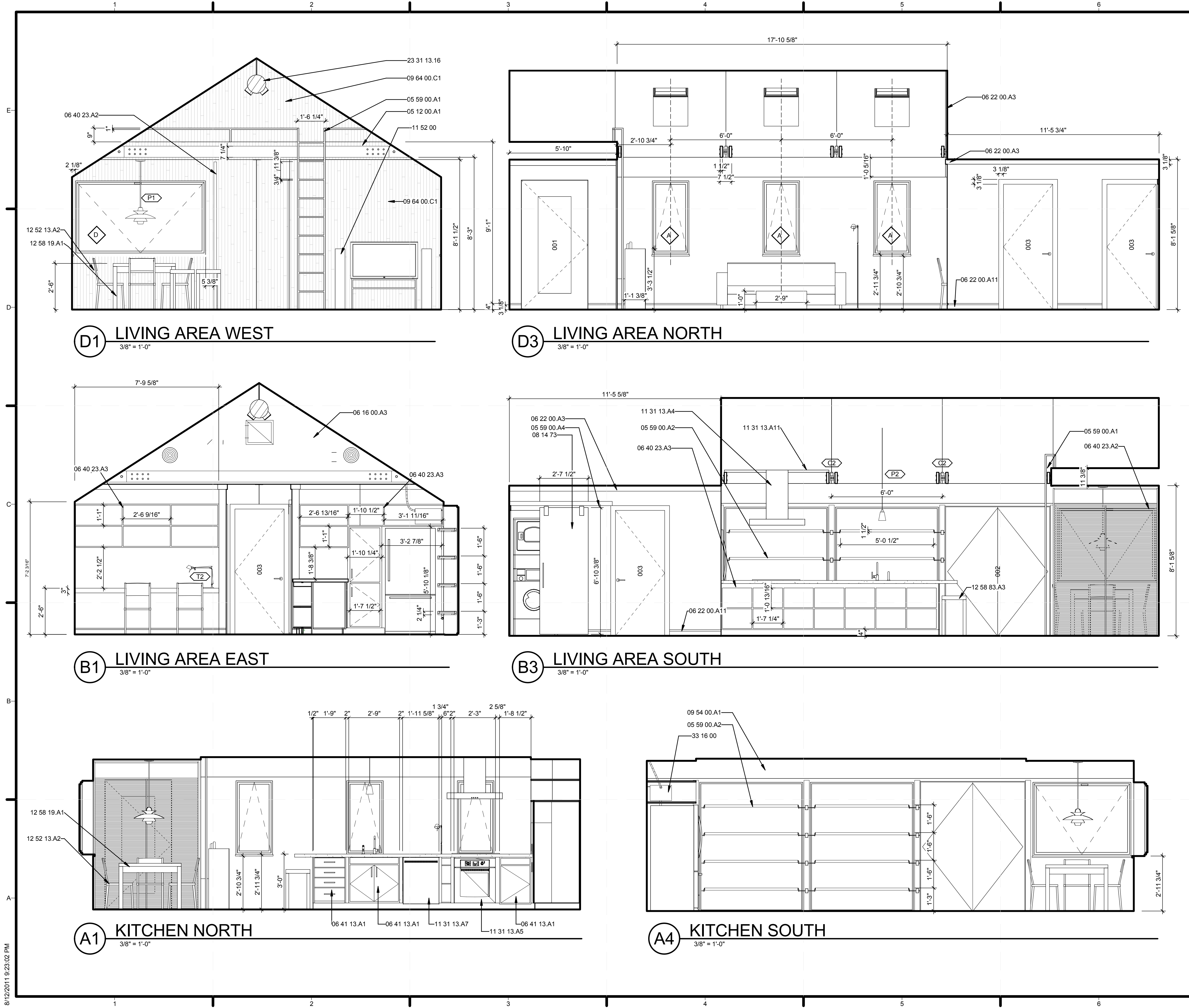
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 ELEVATIONS

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00.A1 STEEL BRACING WITH WOOD CROSS TIES
- 05 59 00.A1 FABRICATED STEEL LADDER AND UPPER RAIL
- 05 59 00.A2 GREENHOUSE SHELVING, MOUNTED TO WD POSTS
- 05 59 00.A4 TRACK FOR SLIDING BARN DOOR
- 06 16 00.A3 1/2" GYPSUM SHEATHING
- 06 22 00.A3 1X3 WOOD TRIM
- 06 22 00.A11 3 1/8" MAPLE KICK W/ 7/8" REVEAL ABV
- 06 40 23.A2 MAPLE PARTITION WALL WITH 3/4" SLATS
- 06 40 23.A3 3/4" FINISHED PLYWOOD SHELVING
- 06 41 13.A1 CUSTOM ASH CABINETS
- 08 14 73 SLIDING WOOD DOORS
- 09 54 00.A1 GUSSET TO COVER WALL/CEILING JOINT. GWB AND PAINT FINISH
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 11 31 13.A4 RANGE HOOD
- 11 31 13.A5 OVEN
- 11 31 13.A7 DISHWASHER
- 11 31 13.A11 STAINLESS STEEL BAR TUBE
- 11 52 00 AUDIO-VISUAL EQUIPMENT
- 12 52 13.A2 WOOD CHAIR
- 12 58 19.A1 ACCORDIAN-FOLD DINING TABLE, SEATS 4-8 PEOPLE
- 12 58 83.A3 15 3/4" x 15 3/4" x 26" STOOLS
- 23 31 13.16 ROUND AND FLAT-OVAL SPIRAL DUCTS
- 33 16 00 WATER UTILITY STORAGE TANKS

SHEET KEYNOTES



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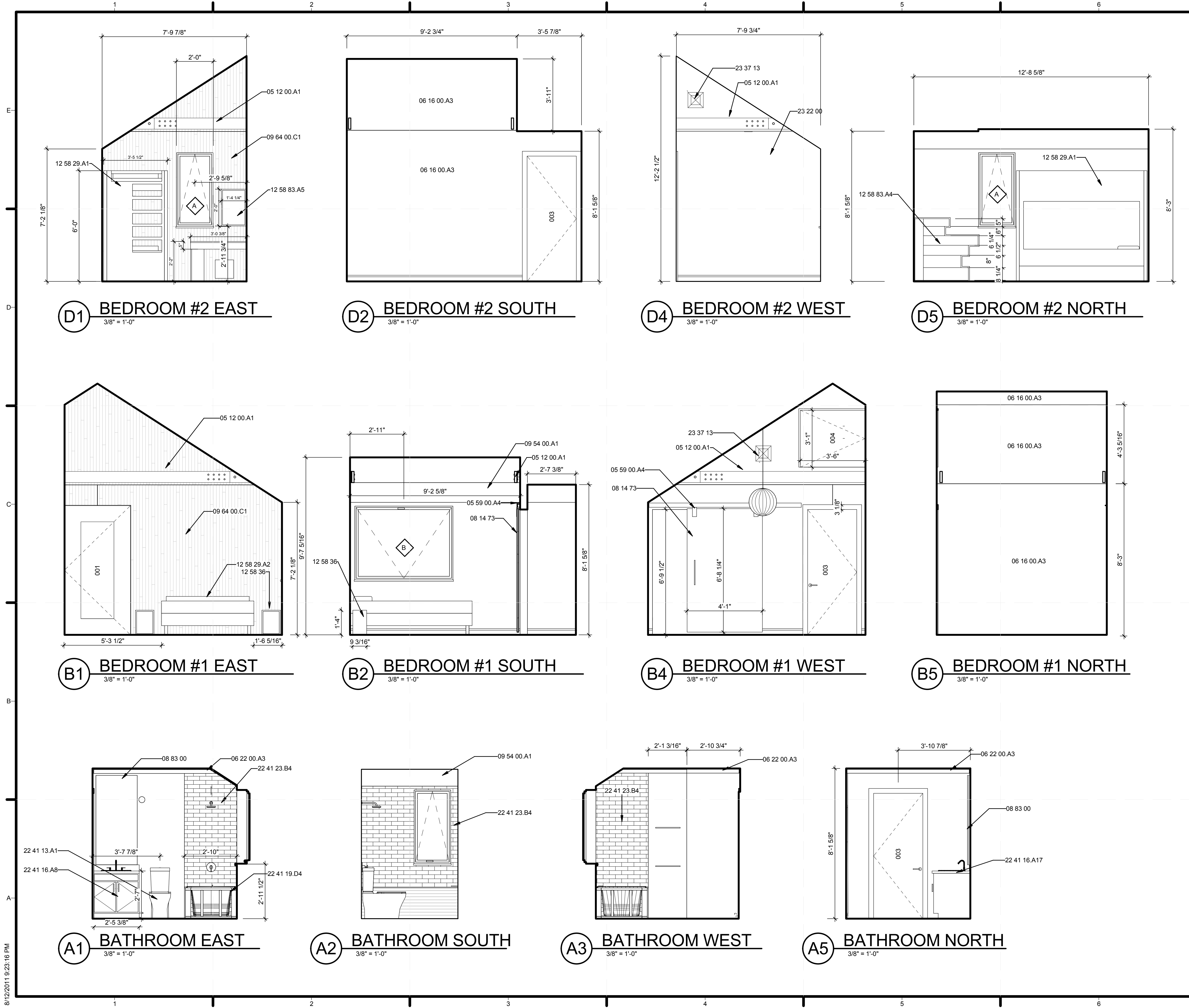


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SHEET TITLE
 INTERIOR ELEVATIONS
 PUBLIC SPACE

A-213



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00.A1 STEEL BRACING WITH WOOD CROSS TIES
- 05 59 00.A4 TRACK FOR SLIDING BARN DOOR
- 06 16 00.A3 1/2" GYPSUM SHEATHING
- 06 22 00.A3 1X3 WOOD TRIM
- 08 14 73 SLIDING WOOD DOORS
- 08 83 00 MIRRORS
- 09 54 00.A1 GUSSET TO COVER WALL/CEILING JOINT. GWB AND PAINT FINISH
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 12 58 29.A1 VERMONT MODERN FURNITURE CHILDRENS BUNK BED
- 12 58 29.A2 BED BY MAPLE CORNER
- 12 58 36 NIGHTSTANDS
- 12 58 83.A4 VERMONT MODERN FURNITURE CHILDRENS DRESSER
- 12 58 83.A5 VERMONT MODERN FURNITURE CHILDRENS DESK
- 22 41 13.A1 WATER CLOSET
- 22 41 16.A8 CORNER SINK
- 22 41 16.A17 FREE-STANDING SINK WITH ASH CABINETS BELOW
- 22 41 19.D4 WHIRLPOOL TUB
- 22 41 23.B4 CERAMIC TILE SHOWER
- 23 22 00 STEAM AND CONDENSATE PIPING AND PUMPS
- 23 37 13 DIFFUSERS, REGISTERS AND GRILLES

SHEET KEYNOTES



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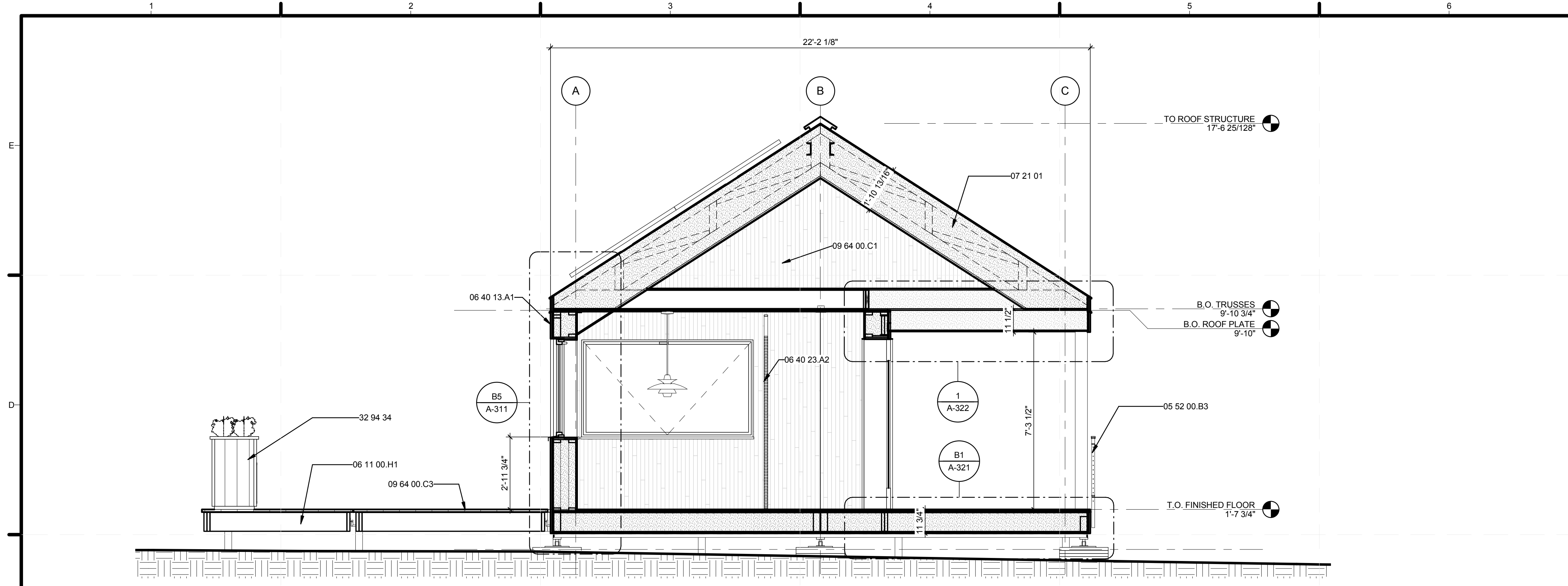


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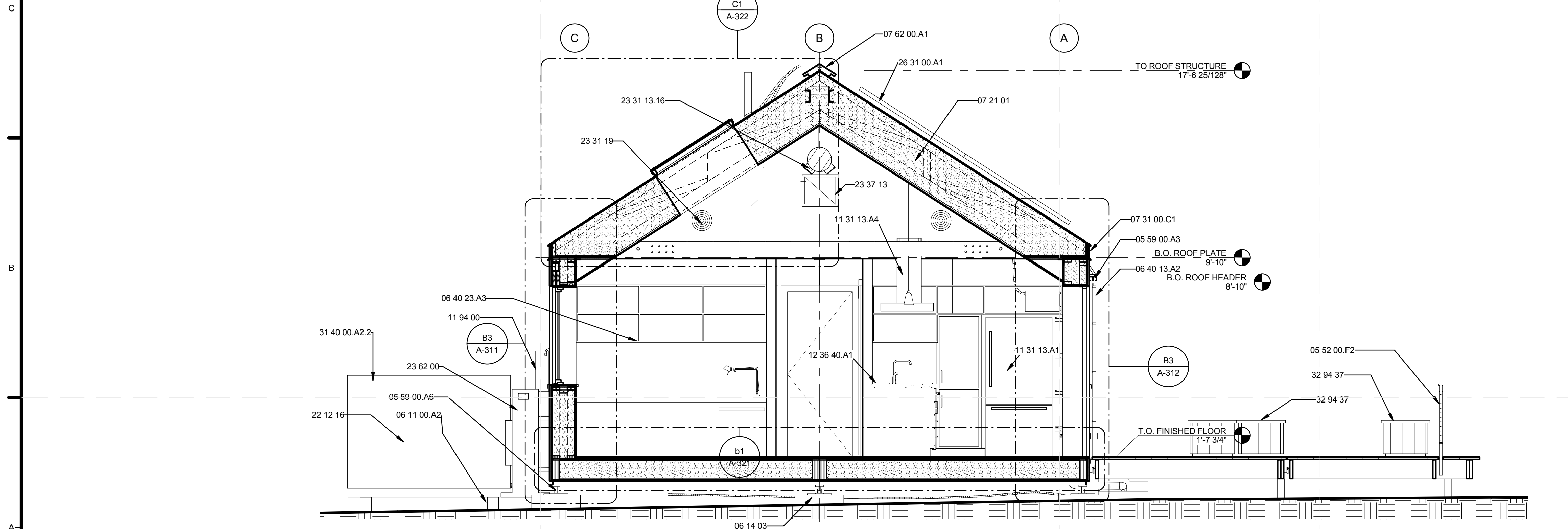
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SHEET TITLE
 INTERIOR ELEVATIONS
 PRIVATE SPACE

A-214



C2 BLDG. SCT. AT ROOF MODULE 6
3/8" = 1'-0"



A2 BLDG. SCT. AT ROOF MODULE 5
3/8" = 1'-0"



GENERAL SHEET NOTES

1. FOR TRIM AND OTHER FINE DETAILS REFER TO INTERIOR ELEVATIONS

REFERENCE KEYNOTES

- 05 52 00.B3 FABRICATED METAL RAILING, TYPE B3
- 05 52 00.F2 FABRICATED METAL RAILING, TYPE F2
- 05 59 00.A3 BOXTRACK GREENHOUSE SHADE TRACK
- 05 59 00.A6 12" X 12" STEEL FOOTING
- 06 11 00.A2 WOOD BLOCKING AS REQUIRED
- 06 11 00.H1 2X10 WOOD FRAMING
- 06 14 03 2X2 WOODEN FOUNDATION PLATE
- 06 40 13.A1 1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
- 06 40 13.A2 GREENHOUSE SUN SHADES
- 06 40 23.A2 MAPLE PARTITION WALL WITH 3/4" SLATS
- 06 40 23.A3 3/4" FINISHED PLYWOOD SHELVING
- 07 21 01 CELLULOSE INSULATION
- 07 31 00.C1 METAL DRIP EDGE
- 07 62 00.A1 ALUMINUM RIDGE CAP
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 09 64 00.C3 1" WHITE OAK DECKING, CUT AT VARYING SIZES
- 11 31 13.A1 REFRIGERATOR
- 11 31 13.A4 RANGE HOOD
- 11 94 00 DISSIPATOR FOR SHW
- 12 36 40.A1 SLATE COUNTERTOP
- 22 12 16 FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS
- 23 31 13.16 ROUND AND FLAT-OVAL SPIRAL DUCTS
- 23 31 19 HVAC CASINGS
- 23 37 13 DIFFUSERS, REGISTERS AND GRILLES
- 23 62 00 PACKAGED COMPRESSOR AND CONDENSER UNITS
- 26 31 00.A1 SUNPOWER 225 PHOTOVOLTAIC COLLECTORS
- 31 40 00.A2.2 2x4 WATER STORAGE CRIBBING
- 32 94 34 PLANTERS A, D (2'x6'x3'), WITH DOOR
- 32 94 37 PLANTERS 2'x6'x1.5', WITHOUT DOOR

SHEET KEYNOTES



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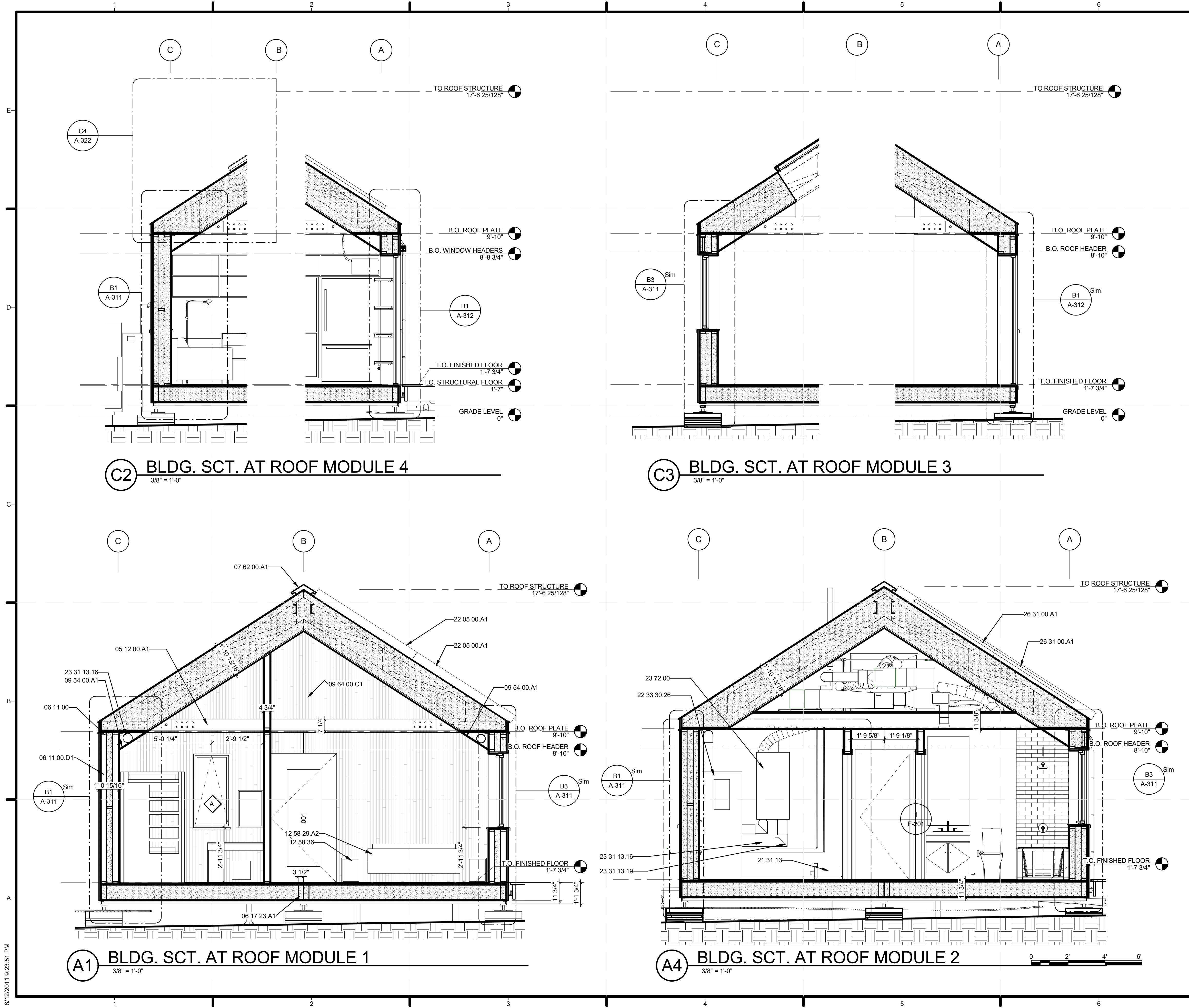


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SHEET TITLE
 BUILDING SECTIONS -
 NORTH-SOUTH

A-301



GENERAL SHEET NOTES

- FOR TRIM AND OTHER FINE DETAILS REFER TO INTERIOR ELEVATIONS

REFERENCE KEYNOTES

- | | |
|-------------|--|
| 05 12 00.A1 | STEEL BRACING WITH WOOD CROSS TIES |
| 06 11 00 | WOOD FRAMING |
| 06 11 00.D1 | 2X4 |
| 06 17 23.A1 | 3 1/2" X 9 1/2" PSL |
| 07 62 00.A1 | ALUMINUM RIDGE CAP |
| 09 54 00.A1 | GUSSET TO COVER WALL/CEILING JOINT. GWS AND PAINT FINISH |
| 09 64 00.C1 | MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER |
| 12 58 29.A2 | BED BY MAPLE CORNER |
| 12 58 36 | NIGHTSTANDS |
| 21 31 13 | ELECTRIC-DRIVE, CENTRIFUGAL FIRE PUMPS |
| 22 05 00.A1 | SOLAR HOT WATER COLLECTOR |
| 22 33 30.26 | RESIDENTIAL COLLECTOR-TO-TANK HEAT-EXCHANGER-COIL, SOLAR-ELECTRIC DOMESTIC WATER HEATERS |
| 23 31 13.16 | ROUND AND FLAT-OVAL SPIRAL DUCTS |
| 23 31 13.19 | METAL DUCT FITTINGS |
| 23 72 00 | AIR-TO-AIR ENERGY RECOVERY EQUIPMENT |
| 26 31 00.A1 | SUNPOWER 225 PHOTOVOLTAIC COLLECTORS |

SHEET KEYNOTES



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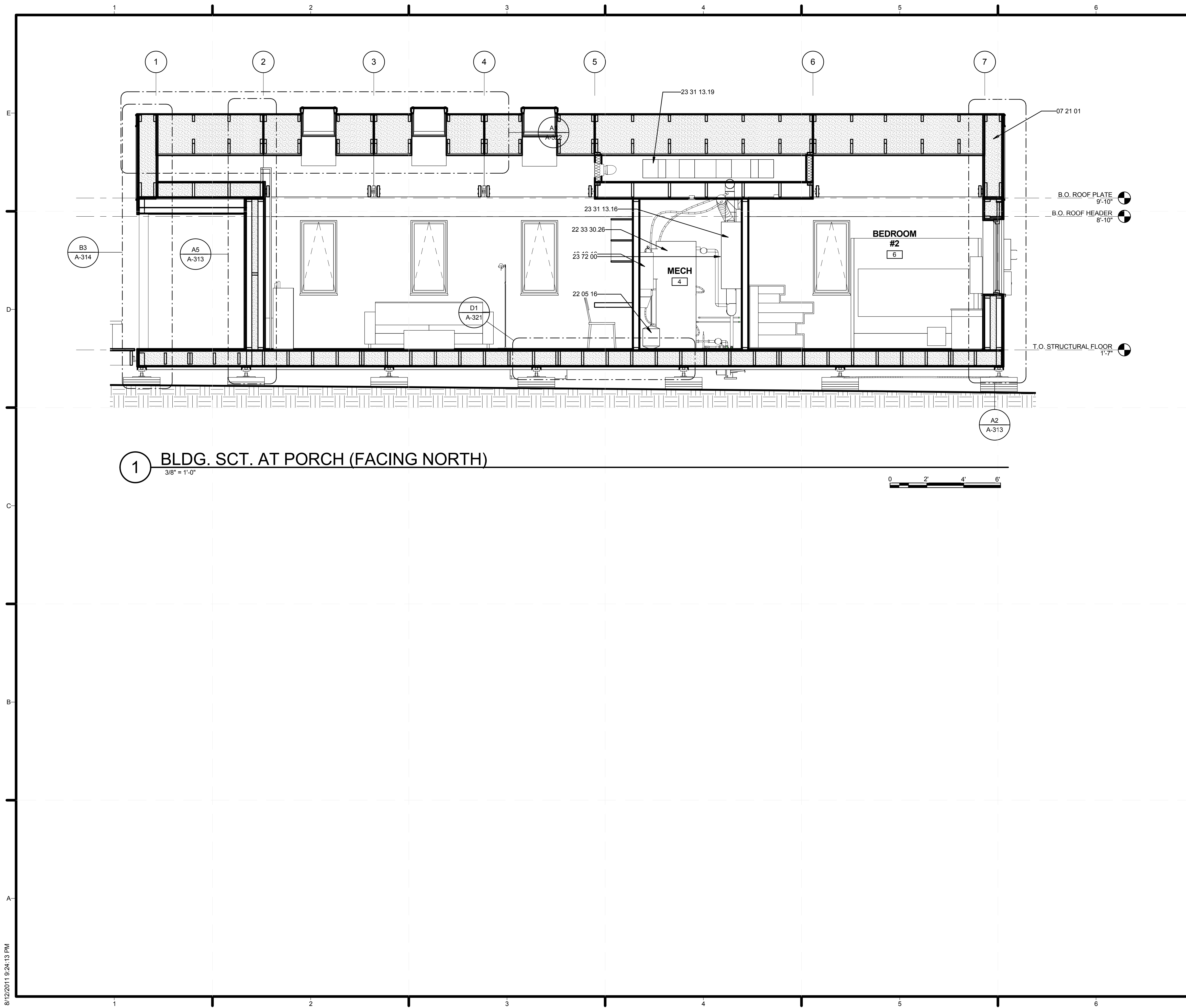


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SHEET TITLE
 BUILDING SECTIONS -
 NORTH-SOUTH

A-302



1 BLDG. SCT. AT PORCH (FACING NORTH)
3/8" = 1'-0"



GENERAL SHEET NOTES

1. FOR TRIM AND OTHER FINE DETAILS REFER TO INTERIOR ELEVATIONS

REFERENCE KEYNOTES

- 07 21 01 CELLULOSE INSULATION
- 22 05 16 EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING
- 22 33 30.26 RESIDENTIAL COLLECTOR-TO-TANK, HEAT-EXCHANGER-COIL, SOLAR-ELECTRIC DOMESTIC WATER HEATERS
- 23 31 13.16 ROUND AND FLAT-OVAL SPIRAL DUCTS
- 23 31 13.19 METAL DUCT FITTINGS
- 23 72 00 AIR-TO-AIR ENERGY RECOVERY EQUIPMENT
- 48 19 16 ELECTRICAL POWER GENERATION INVERTERS

SHEET KEYNOTES



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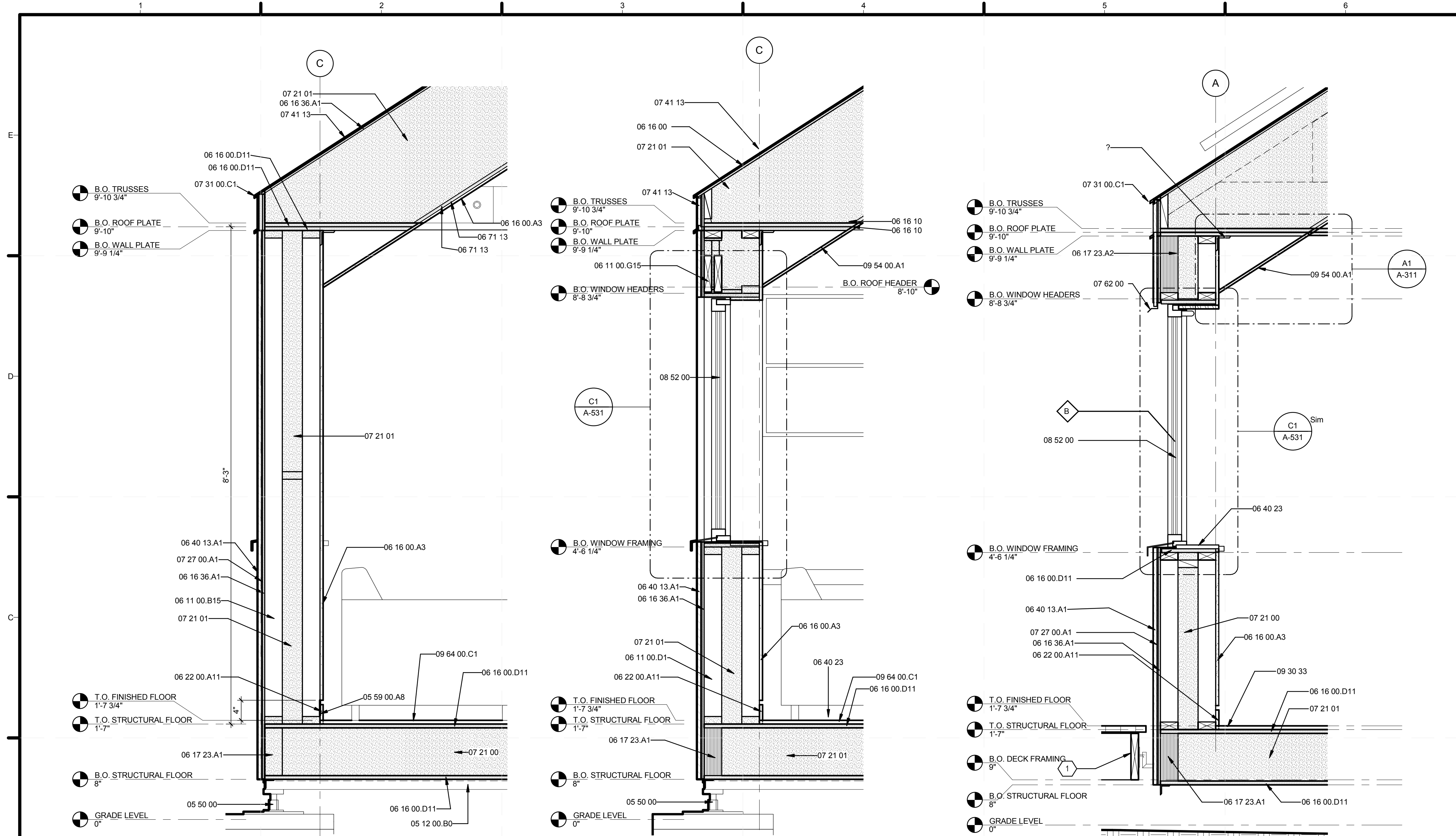


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SHEET TITLE
 BUILDING SECTIONS - EAST - WEST

A-304



B1 WALL SCT. - TYPICAL
1" = 1'-0"

B3 WALL SCT. - TYPICAL WINDOW
1" = 1'-0"

B5 WALL SCT. - EXT. WALL AT DINING AREA
1" = 1'-0"

A1 SECT. DET. - TYP. GUSSET W/ NO DUCT
1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. STUDS IN DOUBLE STUD WALL ARE STAGGERED, SHOWN AS ALIGNED FOR REPRESENTATIONAL PURPOSES.
2. FOR WIN DETAILS REFER TO SHEET A-531

REFERENCE KEYNOTES

05 12 00.A2	3" X 3" STEEL BRACING
05 12 00.B0	C6X10.5 AICS CHANNEL
05 50 00	METAL FABRICATIONS
05 59 00.A8	ALUMINUM STRIP
06 11 00.B15	2x4 LUMBER
06 11 00.D1	2X4
06 11 00.G15	DBL 2X8 HEADER
06 16 00	SHEATHING
06 16 00.A3	1/2" GYPSUM SHEATHING
06 16 00.D11	3/4" PLYWOOD
06 16 10	
06 16 36.A1	HUBER ZIP SYSTEM PANEL
06 17 23.A1	3 1/2" X 9 1/2" PSL
06 17 23.A2	3 1/2" X 11 1/4" PSL
06 22 00.A11	3 1/8" MAPLE KICK W/ 7/8" REVEAL ABV
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
06 40 23	INTERIOR ARCHITECTURAL WOODWORK
06 71 13	COMPOSITE LUMBER
07 21 00	THERMAL INSULATION
07 21 01	CELLULOSE INSULATION
07 27 00.A1	HOME SLICKER
07 31 00.C1	METAL DRIP EDGE
07 41 13	METAL ROOF PANELS
07 62 00	SHEET METAL FLASHING AND TRIM
08 52 00	WOOD WINDOWS
09 29 00.D1	5/8" GYPSUM WALLBOARD
09 30 33	STONE TILING
09 54 00.A1	GUSSET TO COVER WALL/CEILING JOINT. GWB AND PAINT FINISH
09 64 00.C1	MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER

SHEET KEYNOTES

- 1 SEE STRUCTURAL DRAWINGS



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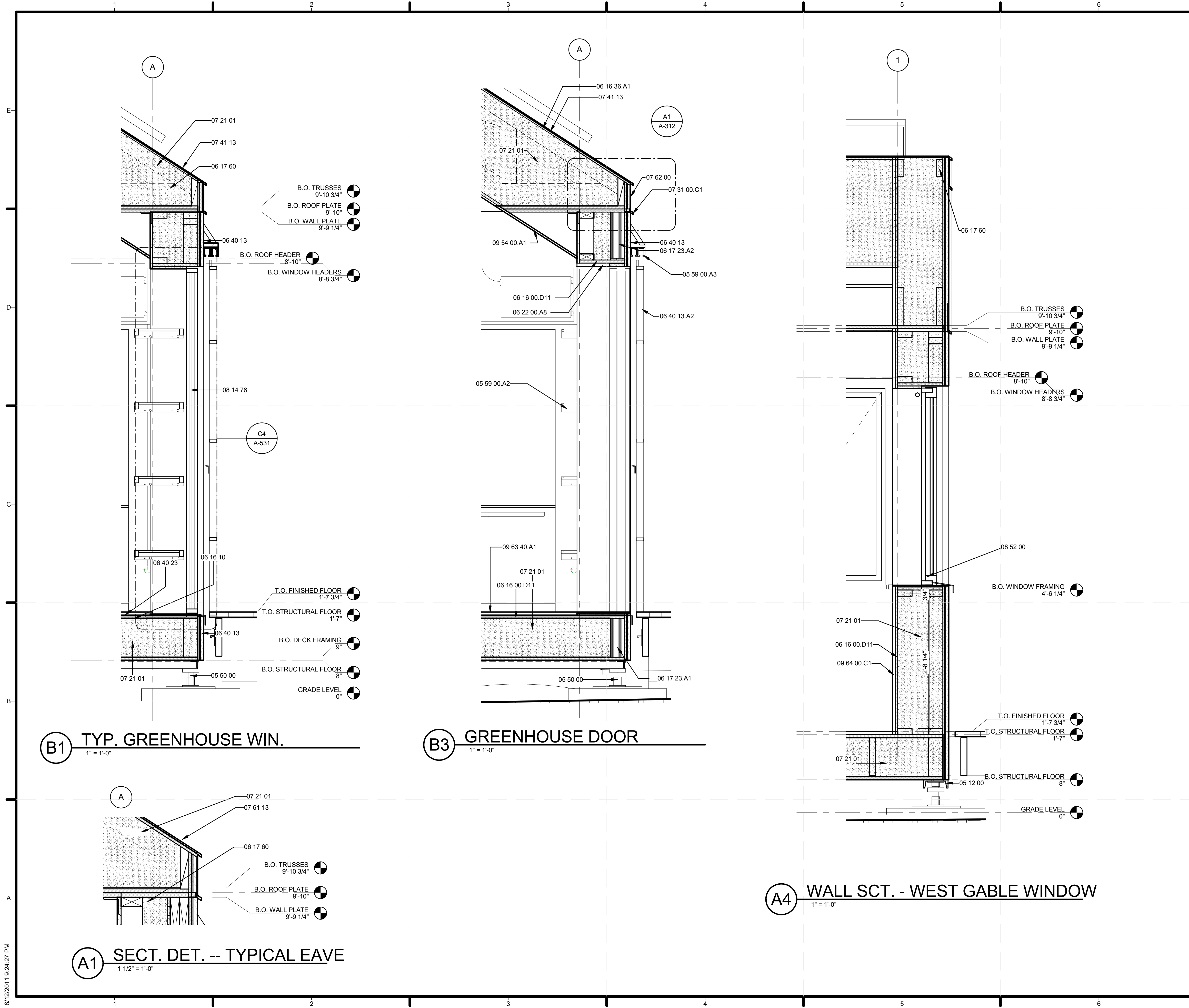


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SHEET TITLE
 WALL SECTIONS AND DETAILS

A-311



GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 12 00	STRUCTURAL STEEL FRAMING
05 50 00	METAL FABRICATIONS
05 59 00.A2	GREENHOUSE SHELVING, MOUNTED TO WD POSTS
05 59 00.A3	BOXTRACK GREENHOUSE SHADE TRACK
06 16 00.D11	3/4" PLYWOOD
06 16 10	HUBER ZIP SYSTEM PANEL
06 16 36.A1	3 1/2" X 9 1/2" PSL
06 17 23.A1	3 1/2" X 11 1/4" PSL
06 17 23.A2	METAL PLATE CONNECTED WOOD TRUSSES
06 17 60	1X10 WOOD TRIM
06 22 00.A8	EXTERIOR ARCHITECTURAL WOODWORK
06 40 13	GREENHOUSE SUN SHADES
06 40 13.A2	INTERIOR ARCHITECTURAL WOODWORK
06 40 23	CELLULOSE INSULATION
07 21 01	METAL DRIP EDGE
07 31 00.C1	METAL ROOF PANELS
07 41 13	STANDING SEAM SHEET METAL ROOFING
07 61 13	SHEET METAL FLASHING AND TRIM
07 62 00	BIFOLDING WOOD DOORS
08 14 76	WOOD WINDOWS
08 52 00	GUSSET TO COVER WALL/CEILING JOINT, GWB AND PAINT FINISH
09 54 00.A1	12" x 12" HEATHERMORE SLATE TILES
09 63 40.A1	MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
09 64 00.C1	

SHEET KEYNOTES



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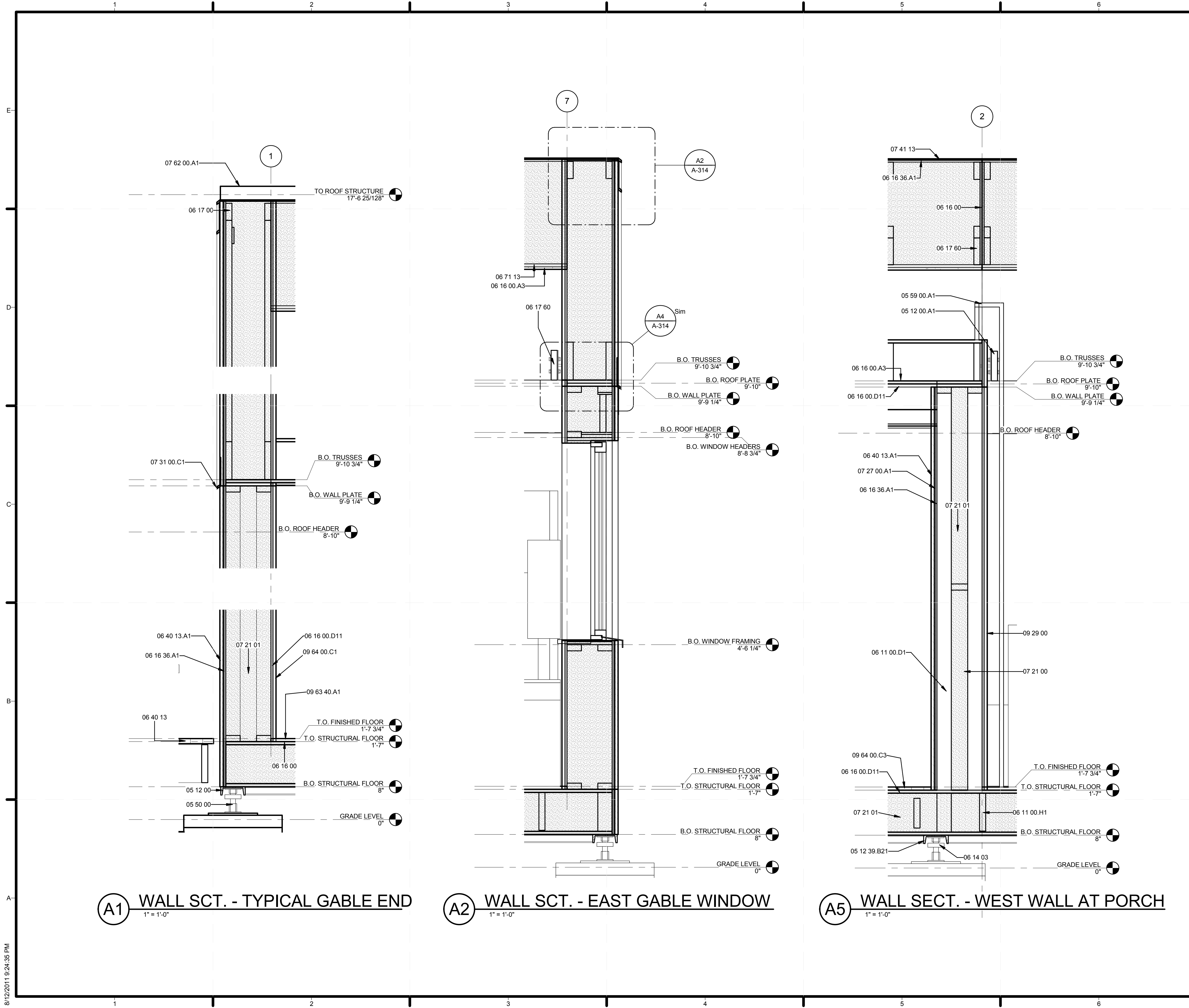


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WALL SECTIONS AND DETAILS

A-312



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 STRUCTURAL STEEL FRAMING
- 05 12 00.A1 STEEL BRACING WITH WOOD CROSS TIES
- 05 12 39.B21 C6X10.5
- 05 50 00 METAL FABRICATIONS
- 05 59 00.A1 FABRICATED STEEL LADDER AND UPPER RAIL
- 06 11 00.D1 2X4
- 06 11 00.H1 2X10 WOOD FRAMING
- 06 14 03 2X2' WOODEN FOUNDATION PLATE
- 06 16 00 SHEATHING
- 06 16 00.A3 1/2" GYPSUM SHEATHING
- 06 16 00.D11 3/4" PLYWOOD
- 06 16 36.A1 HUBER ZIP SYSTEM PANEL
- 06 17 00 SHOP-FABRICATED STRUCTURAL WOOD
- 06 17 60 METAL PLATE CONNECTED WOOD TRUSSES
- 06 40 13 EXTERIOR ARCHITECTURAL WOODWORK
- 06 40 13.A1 1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
- 06 71 13 COMPOSITE LUMBER
- 07 21 00 THERMAL INSULATION
- 07 21 01 CELLULOSE INSULATION
- 07 27 00.A1 HOME SLICKER
- 07 31 00.C1 METAL DRIP EDGE
- 07 41 13 METAL ROOF PANELS
- 07 62 00.A1 ALUMINUM RIDGE CAP
- 09 29 00 GYPSUM BOARD
- 09 63 40.A1 12" x 12" HEATHERMORE SLATE TILES
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 09 64 00.C3 1" WHITE OAK DECKING, CUT AT VARYING SIZES

SHEET KEYNOTES



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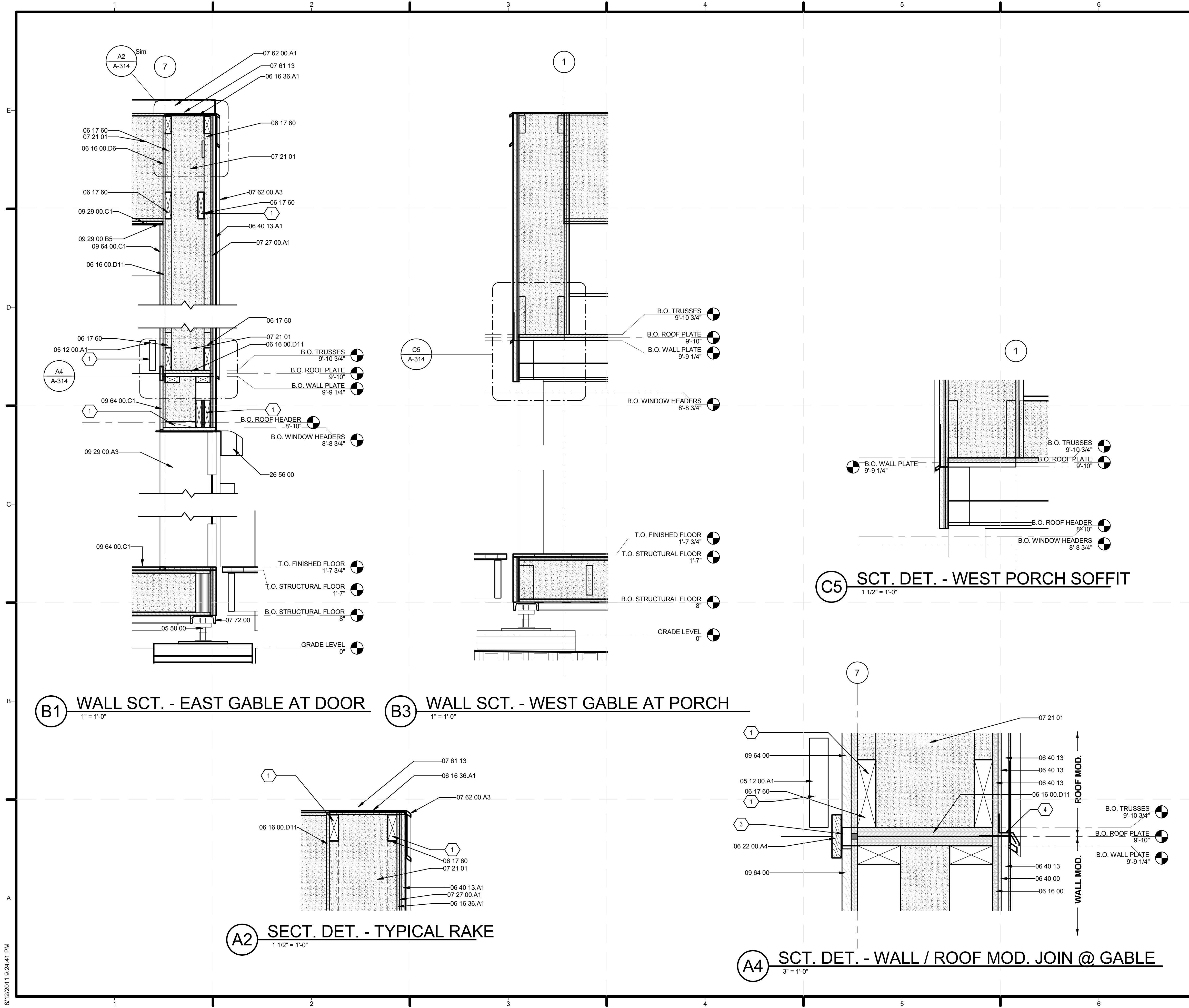


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SHEET TITLE
WALL SECTIONS AND DETAILS

A-313



GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 12 00.A1	STEEL BRACING WITH WOOD CROSS TIES
05 50 00	METAL FABRICATIONS
06 10 00	ROUGH CARPENTRY
06 16 00	SHEATHING
06 16 00.D6	1/2" PLYWOOD
06 16 00.D11	3/4" PLYWOOD
06 16 36.A1	HUBER ZIP SYSTEM PANEL
06 17 60	METAL PLATE CONNECTED WOOD TRUSSES
06 22 00.A4	1X4 WOOD TRIM
06 40 00	ARCHITECTURAL WOODWORK
06 40 13	EXTERIOR ARCHITECTURAL WOODWORK
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
07 21 01	CELLULOSE INSULATION
07 27 00.A1	HOME SLICKER
07 61 13	STANDING SEAM SHEET METAL ROOFING
07 62 00.A1	ALUMINUM RIDGE CAP
07 62 00.A3	STAINLESS STEEL FLASHING
07 72 00	ROOF ACCESSORIES
09 29 00.A3	1/2" GYPSUM WALLBOARD
09 29 00.B5	1/2" J CASING BEAD
09 29 00.C1	1/2" GYPSUM WALLBOARD
09 64 00	WOOD FLOORING
09 64 00.C1	MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
26 56 00	EXTERIOR LIGHTING

SHEET KEYNOTES

1	SEE STRUCTURAL DRAWINGS
3	CAULK JOINT
4	SHEET METAL FLASHING AT JOINT



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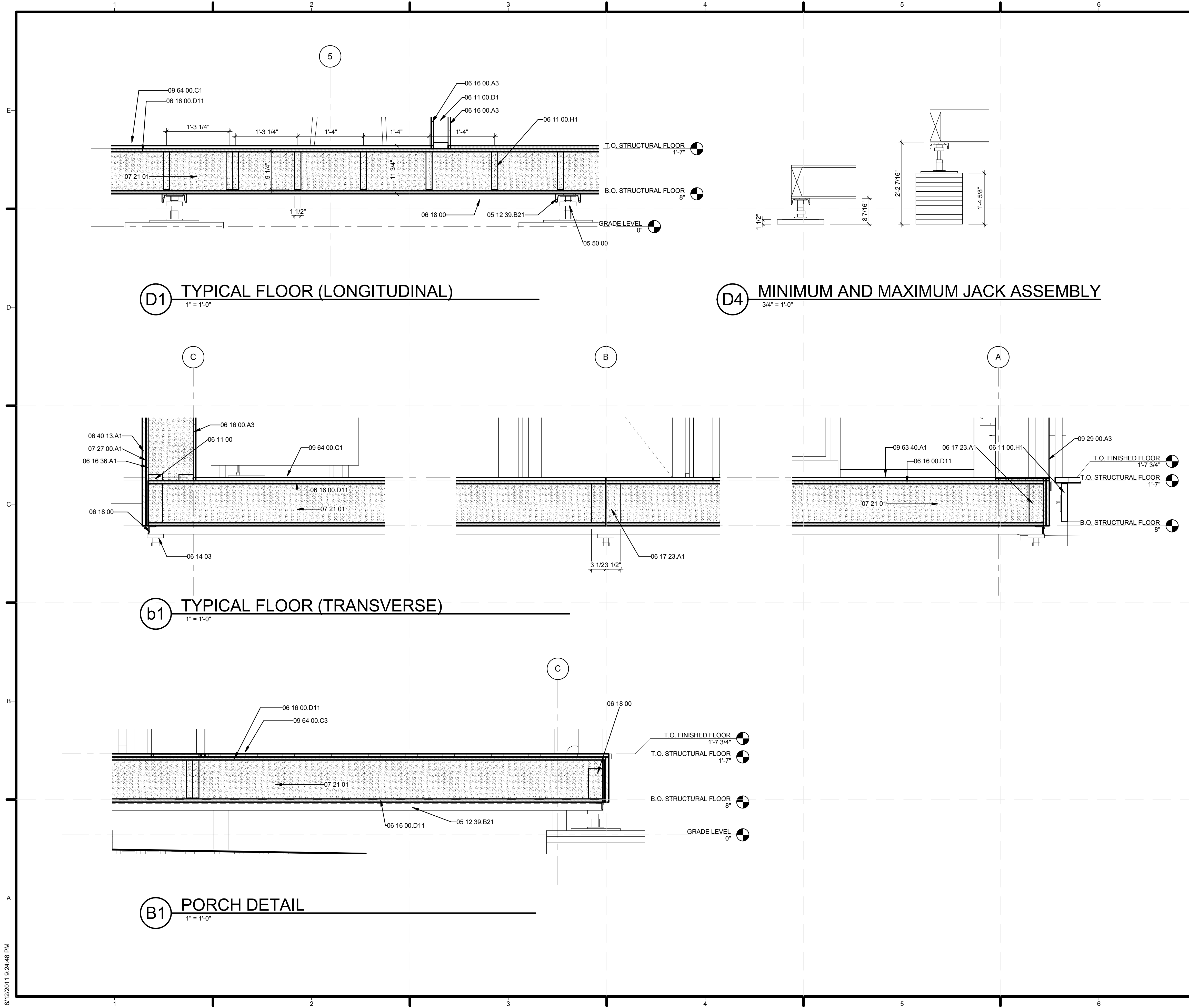
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SHEET TITLE
 WALL SECTIONS AND DETAILS

A-314

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 39.B21 C6X10.5
- 05 50 00 METAL FABRICATIONS
- 06 11 00 WOOD FRAMING
- 06 11 00.D1 2X4
- 06 11 00.H1 2X10 WOOD FRAMING
- 06 14 03 2X2 WOODEN FOUNDATION PLATE
- 06 16 00.A3 1/2" GYPSUM SHEATHING
- 06 16 00.D11 3/4" PLYWOOD
- 06 16 36.A1 HUBER ZIP SYSTEM PANEL
- 06 17 23.A1 3 1/2" X 9 1/2" PSL
- 06 18 00 GLUED-LAMINATED CONSTRUCTION
- 06 40 13.A1 1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
- 07 21 01 CELLULOSE INSULATION
- 07 27 00.A1 HOME SLICKER
- 09 29 00.A3 1/2" GYPSUM WALLBOARD
- 09 63 40.A1 12" x 12" HEATHERMORE SLATE TILES
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 09 64 00.C3 1" WHITE OAK DECKING, CUT AT VARYING SIZES

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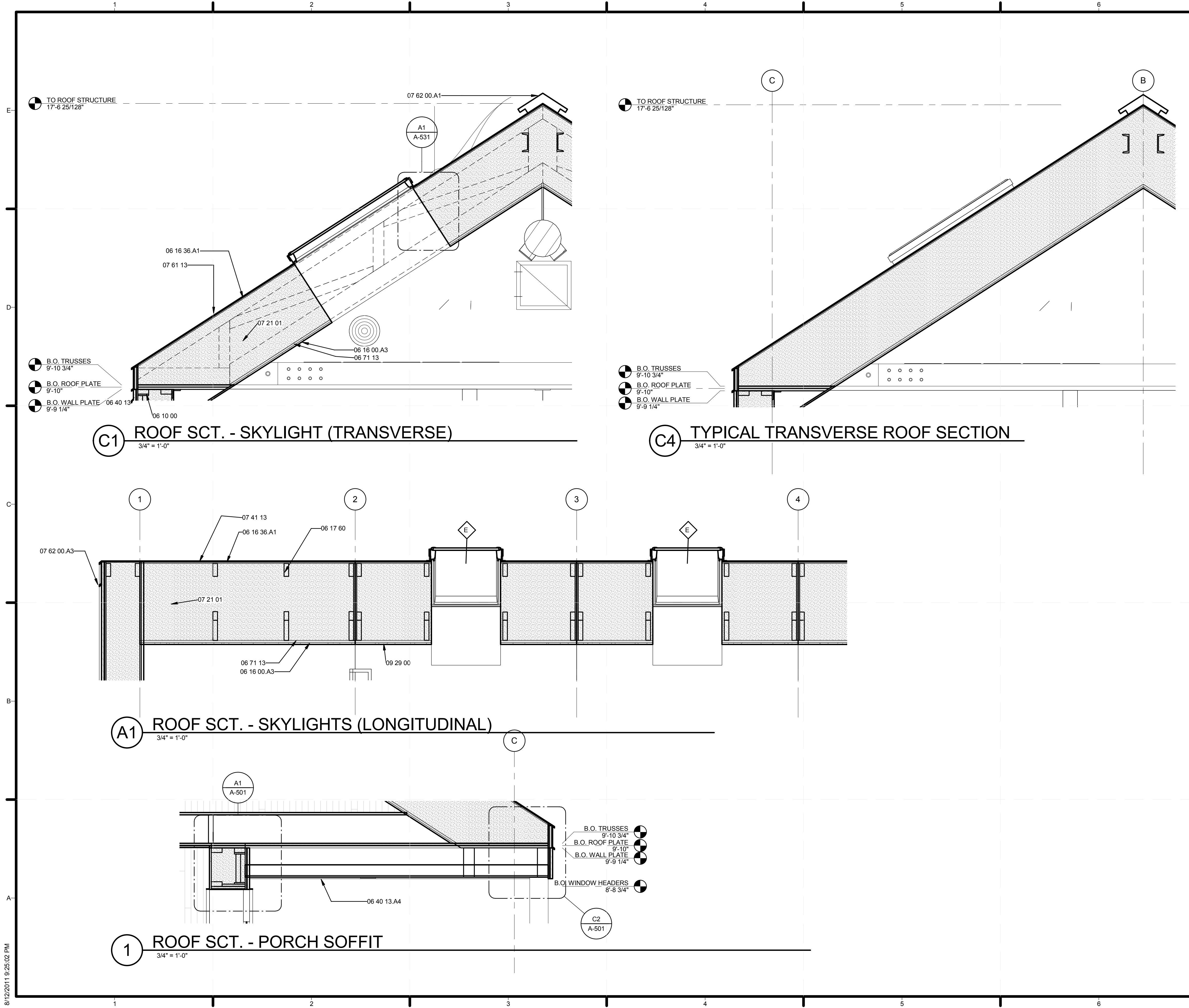


MARK	DATE	DESCRIPTION

LOT NUMBER: 107
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SHEET TITLE
 FLOOR SECTIONS

A-321



GENERAL SHEET NOTES

REFERENCE KEYNOTES

06 10 00	ROUGH CARPENTRY
06 16 00.A3	1/2" GYPSUM SHEATHING
06 16 36.A1	HUBER ZIP SYSTEM PANEL
06 17 60	METAL PLATE CONNECTED WOOD TRUSSES
06 40 13	EXTERIOR ARCHITECTURAL WOODWORK
06 40 13.A4	1X8 T&G EASTERN WHITE CEDAR STAINED CLEAR
06 71 13	COMPOSITE LUMBER
07 21 01	CELLULOSE INSULATION
07 41 13	METAL ROOF PANELS
07 61 13	STANDING SEAM SHEET METAL ROOFING
07 62 00.A1	ALUMINUM RIDGE CAP
07 62 00.A3	STAINLESS STEEL FLASHING
09 29 00	GYPSUM BOARD

SHEET KEYNOTES



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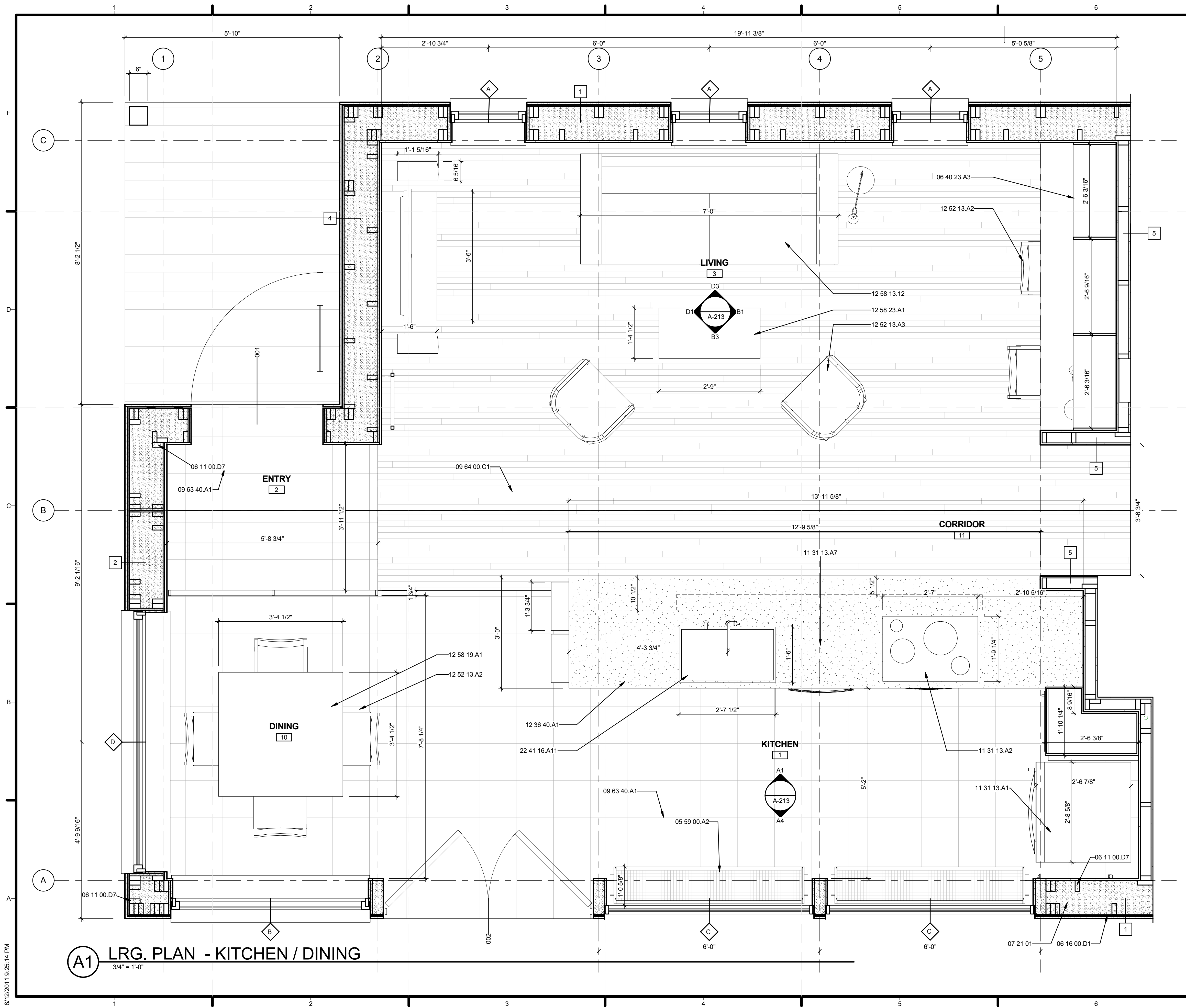


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SHEET TITLE
 ROOF SECTIONS AND DETAILS

A-322



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 59 00.A2 GREENHOUSE SHELVING, MOUNTED TO WD POSTS
- 06 11 00.D7 2X4 STUDS
- 06 16 00.D1 PLYWOOD SHEATHING
- 06 40 23.A3 3/4" FINISHED PLYWOOD SHELVING
- 07 21 01 CELLULOSE INSULATION
- 09 63 40.A1 12" x 12" HEATHERMORE SLATE TILES
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 11 31 13.A1 REFRIGERATOR
- 11 31 13.A2 BOSCH INDUCTION COOKTOP
- 11 31 13.A7 DISHWASHER
- 12 36 40.A1 SLATE COUNTERTOP
- 12 52 13.A2 WOOD CHAIR
- 12 52 13.A3 CAPTAIN CHAIR
- 12 58 13.12 VIESSO BRENNEM COUCH
- 12 58 19.A1 ACCORDIAN-FOLD DINING TABLE, SEATS 4-8 PEOPLE
- 12 58 23.A1 SALVAGED ANTIQUE COFFEE TABLE
- 22 41 16.A11 PREP SINK

SHEET KEYNOTES

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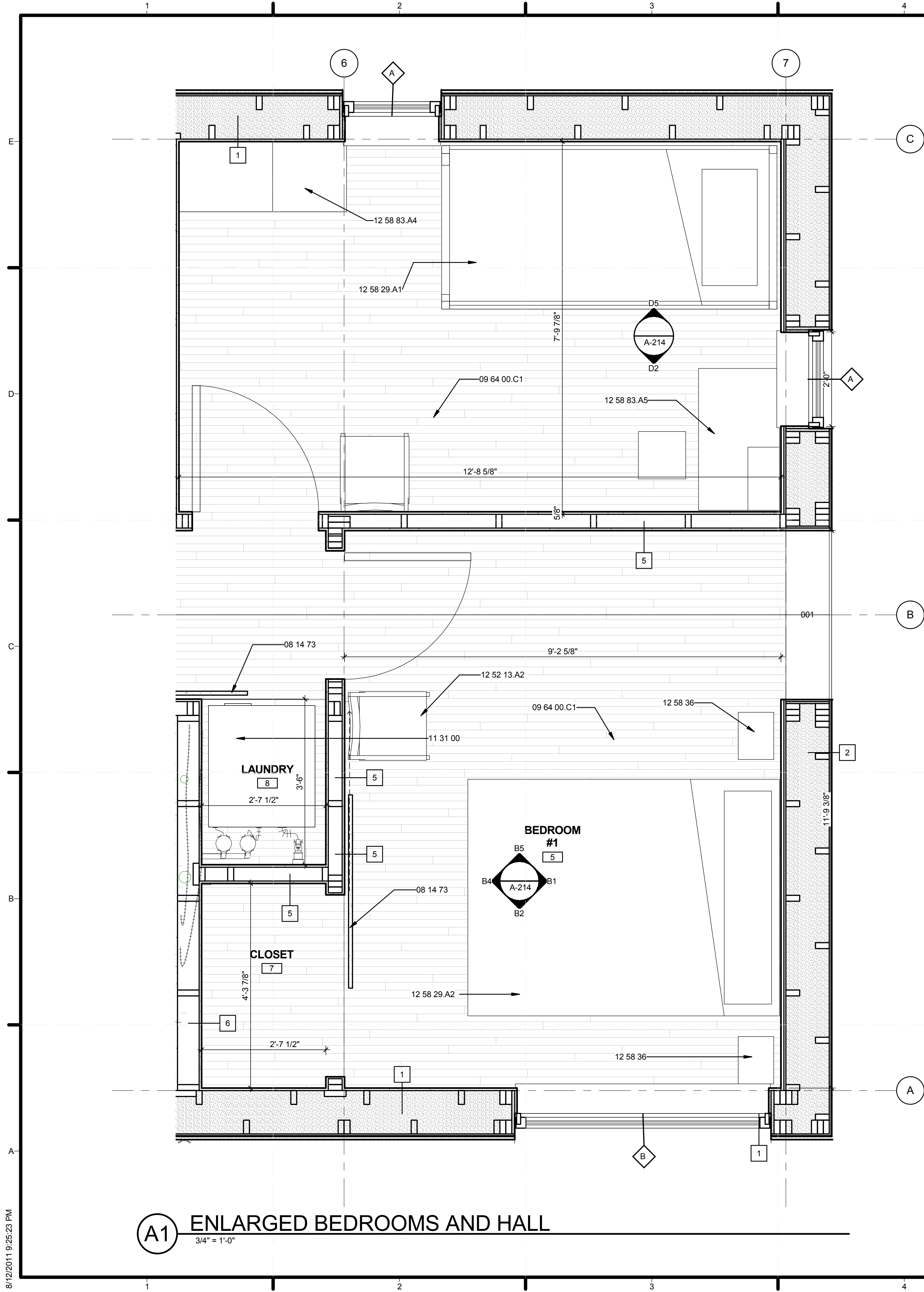
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SHEET TITLE
 LARGE SCALE PLANS

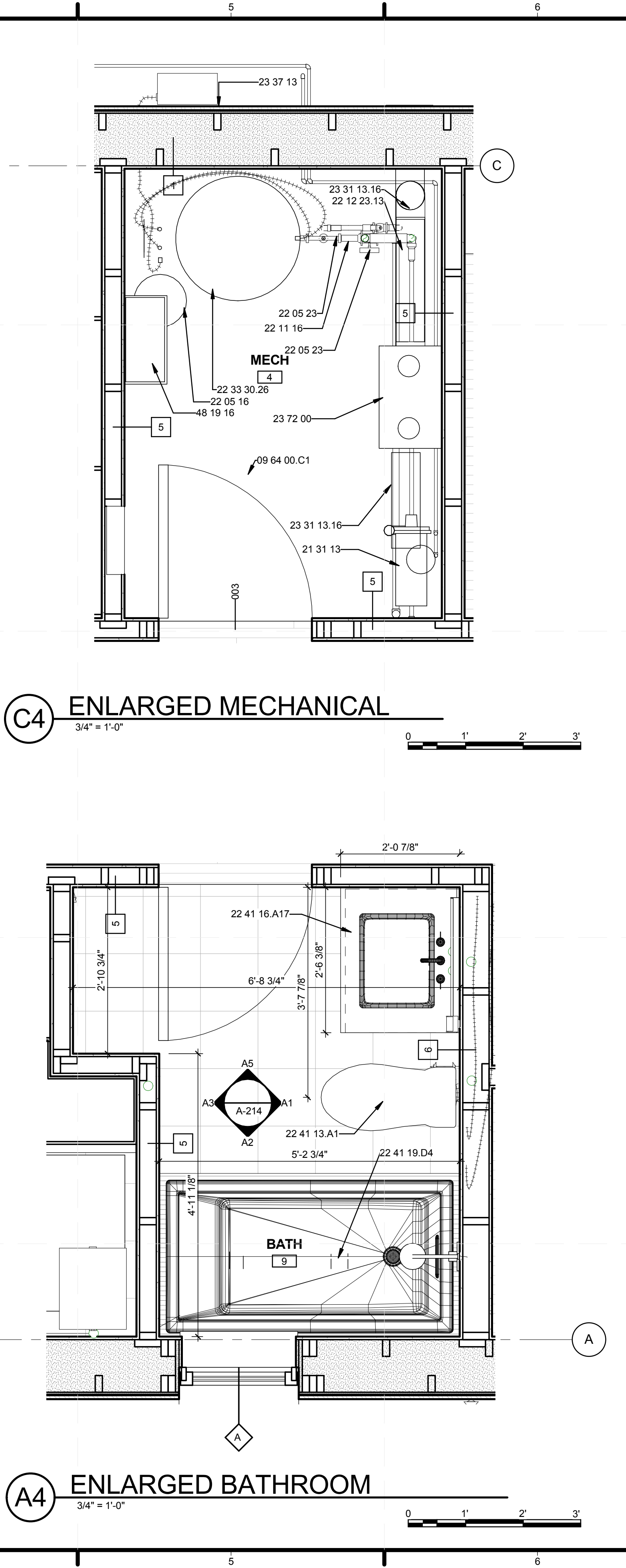
A-401

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(A1) LRG. PLAN - KITCHEN / DINING
 3/4" = 1'-0"



A1 ENLARGED BEDROOMS AND HALL
3/4" = 1'-0"



A4 ENLARGED BATHROOM
3/4" = 1'-0"

C4 ENLARGED MECHANICAL
3/4" = 1'-0"

GENERAL SHEET NOTES

1. TOILET IS NOT TO BE PLUMBED DURING THE SOLAR DECATHLON COMPETITION AT THE NATIONAL MALL

REFERENCE KEYNOTES

- 08 14 73 SLIDING WOOD DOORS
- 09 64 00.C1 MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER
- 11 31 00 RESIDENTIAL APPLIANCES
- 12 52 13.A2 WOOD CHAIR
- 12 58 29.13 DAYBEDS
- 12 58 29.A1 VERMONT MODERN FURNITURE CHILDRENS BUNK BED
- 12 58 29.A2 BED BY MAPLE CORNER
- 12 58 36 NIGHTSTANDS
- 12 58 83.A4 VERMONT MODERN FURNITURE CHILDRENS DRESSER
- 12 58 83.A5 VERMONT MODERN FURNITURE CHILDRENS DESK
- 21 31 13 ELECTRIC-DRIVE, CENTRIFUGAL FIRE PUMPS
- 22 05 16 EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING
- 22 05 23 GENERAL-DUTY VALVES FOR WATER-BASED PLUMBING PIPING
- 22 11 16 DOMESTIC WATER PIPING
- 22 12 23.13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS
- 22 33 30.26 RESIDENTIAL, COLLECTOR-TO-TANK, HEAT-EXCHANGER-COIL, SOLAR-ELECTRIC DOMESTIC WATER HEATERS
- 22 41 13.A1 WATER CLOSET
- 22 41 16.A8 CORNER SINK
- 22 41 16.A17 FREE-STANDING SINK WITH ASH CABINETS BELOW
- 22 41 19.D4 WHIRLPOOL TUB
- 23 31 13.16 ROUND AND FLAT OVAL SPIRAL DUCTS
- 23 37 13 AIR-TO-AIR ENERGY RECOVERY EQUIPMENT
- 23 72 00 ELECTRICAL POWER GENERATION INVERTERS

SHEET KEYNOTES



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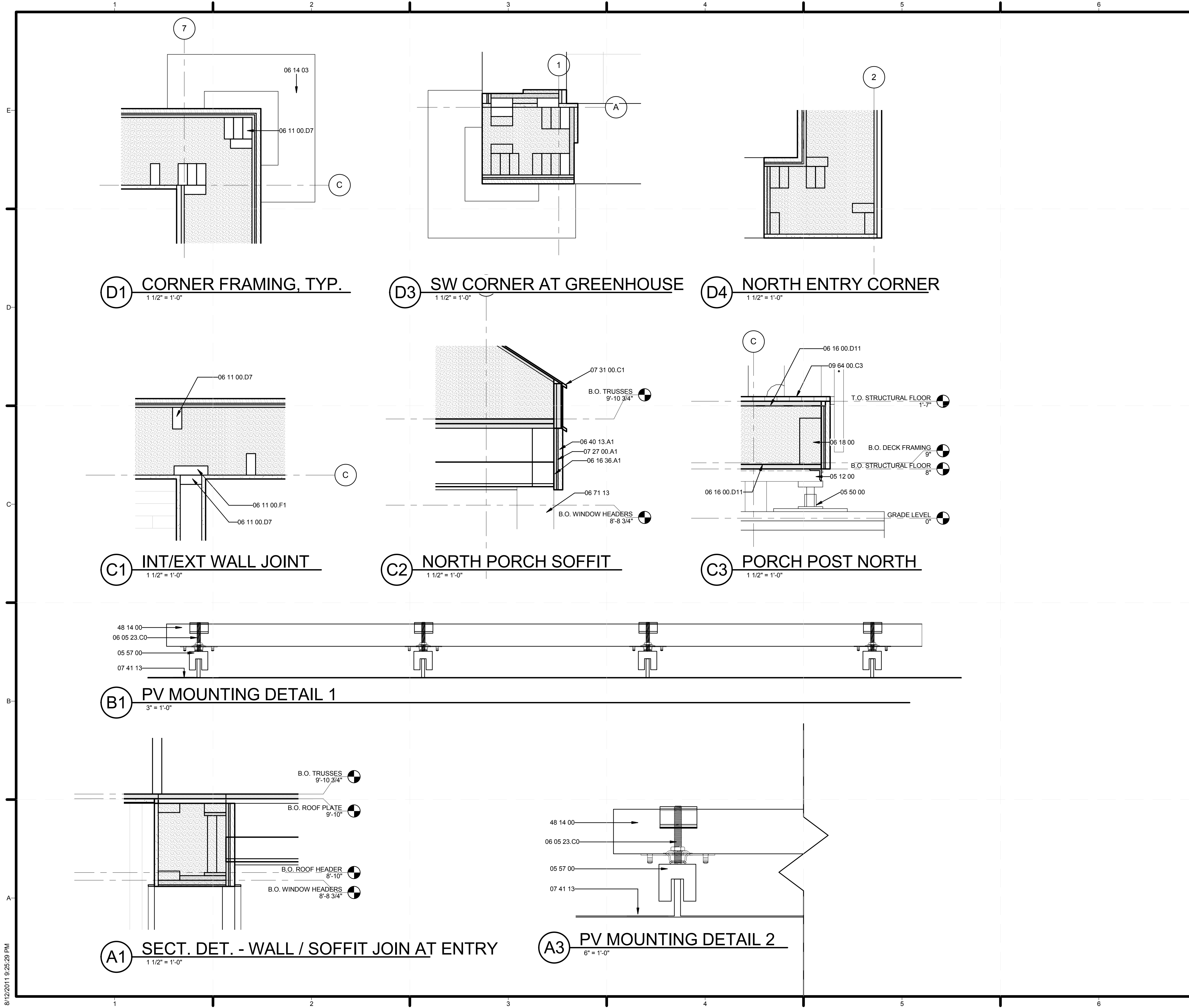


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SHEET TITLE
LARGE SCALE PLANS

A-402



GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 12 00	STRUCTURAL STEEL FRAMING
05 50 00	METAL FABRICATIONS
05 57 00	METAL MOUNT
06 05 23.C0	ANGLES AND CLIPS
06 11 00.D7	2X4 STUDS
06 11 00.F1	2X6
06 14 03	2X2' WOODEN FOUNDATION PLATE
06 16 00.D11	3/4" PLYWOOD
06 16 36.A1	HUBER ZIP SYSTEM PANEL
06 18 00	GLUED-LAMINATED CONSTRUCTION
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
06 71 13	COMPOSITE LUMBER
07 27 00.A1	HOME SLICKER
07 31 00.C1	METAL DRIP EDGE
07 41 13	METAL ROOF PANELS
09 64 00.C3	1" WHITE OAK DECKING, CUT AT VARYING SIZES
48 14 00	SOLAR ENERGY ELECTRICAL POWER GENERATION EQUIPMENT

SHEET KEYNOTES



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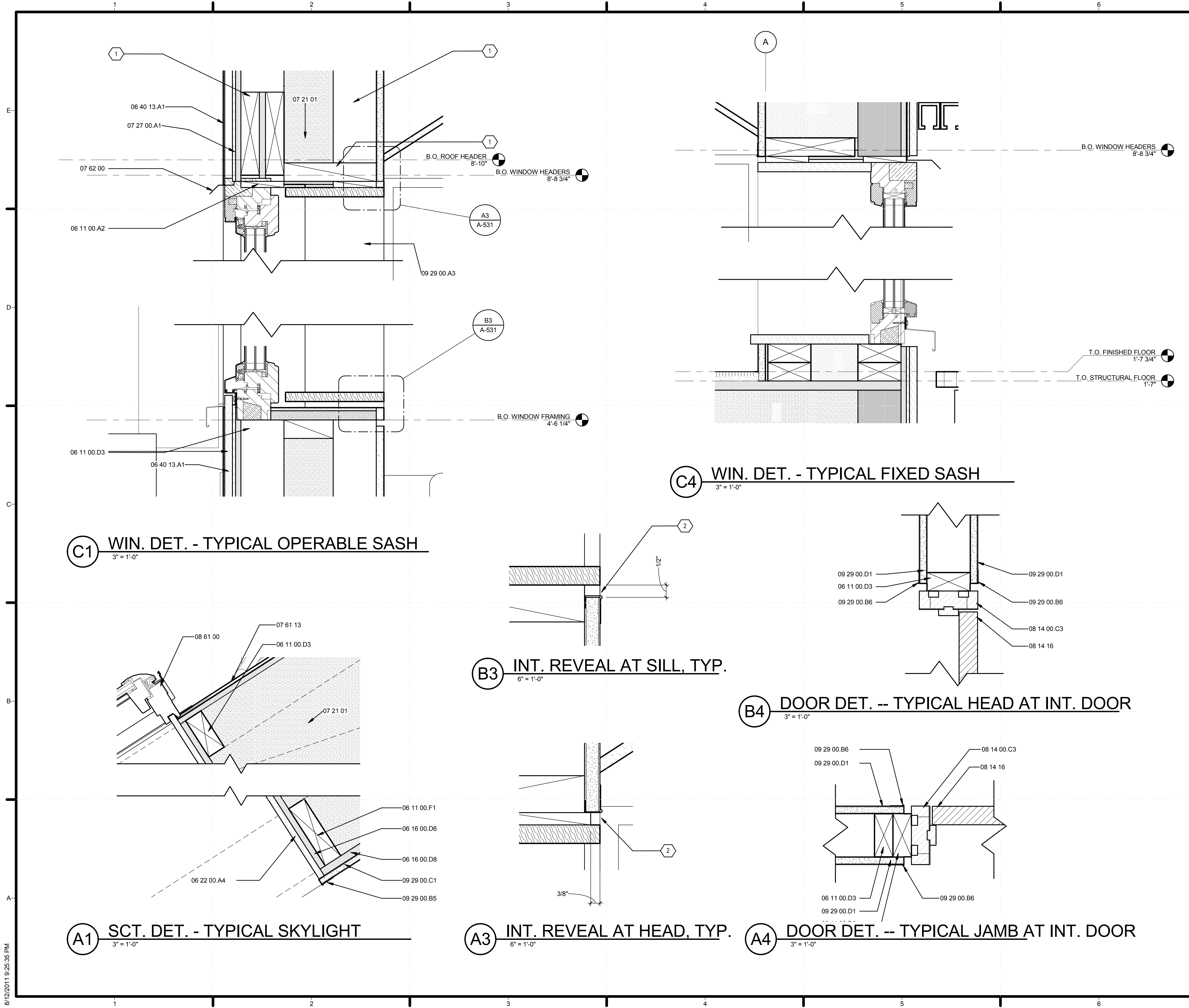
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SHEET TITLE
 PLAN, SECTION, AND PV DETAILS

A-501

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

06 11 00.A2	WOOD BLOCKING AS REQUIRED
06 11 00.D1	2X4
06 11 00.D3	2X4 FRAMING
06 11 00.F1	2X6
06 11 00.G1	2X8
06 16 00	SHEATHING
06 16 00.D6	1/2" PLYWOOD
06 16 00.D8	5/8" PLYWOOD
06 16 00.D11	3/4" PLYWOOD
06 17 23.A1	3 1/2" X 9 1/2" PSL
06 22 00	MILLWORK
06 22 00.A4	1X4 WOOD TRIM
06 26 00	BOARD PANELING
06 40 00	ARCHITECTURAL WOODWORK
06 40 13	EXTERIOR ARCHITECTURAL WOODWORK
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
07 21 01	CELLULOSE INSULATION
07 27 00.A1	HOME SLICKER
07 61 13	STANDING SEAM SHEET METAL ROOFING
07 62 00	SHEET METAL FLASHING AND TRIM
08 14 00.C3	WOOD DOOR FRAME
08 14 16	FLUSH WOOD DOORS
08 52 13	METAL-CLAD WOOD WINDOWS
08 61 00	ROOF WINDOWS
09 29 00.A3	1/2" GYPSUM WALLBOARD
09 29 00.B5	1/2" J CASING BEAD
09 29 00.B6	5/8" J CASING BEAD
09 29 00.C1	1/2" GYPSUM WALLBOARD
09 29 00.D1	5/8" GYPSUM WALLBOARD
09 30 33	STONE TILING

SHEET KEYNOTES

- SEE STRUCTURAL DRAWINGS
- 1/2" REVEAL ALL AROUND WINDOWS AT INTERIOR.



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SHEET TITLE
WINDOW AND DOOR DETAILS

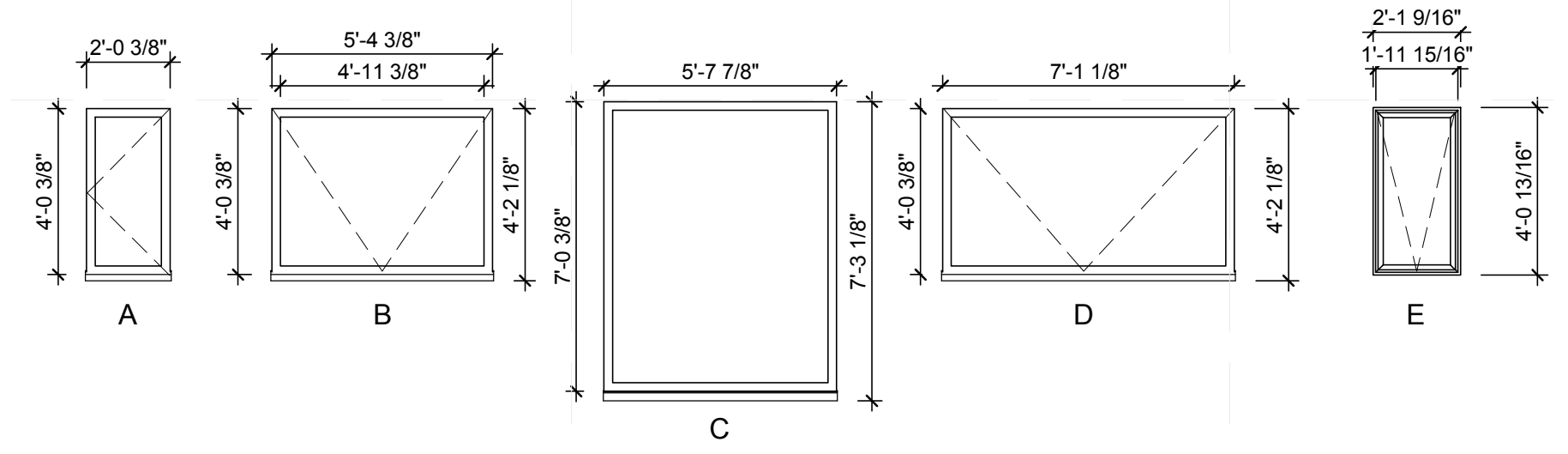
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GENERAL SHEET NOTES

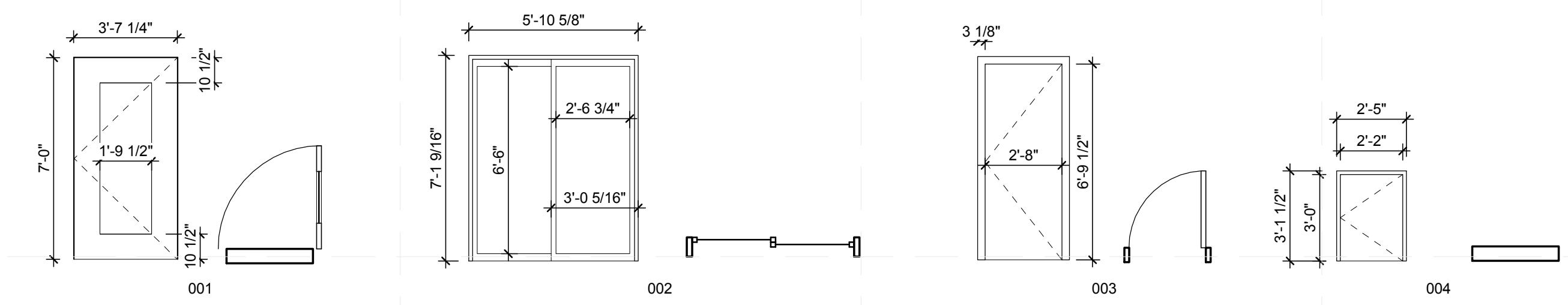
WINDOW SCHEDULE										
MARK	MANUFACTURER	MODEL	OPERATION	WIDTH	HEIGHT	R.O. WIDTH	R.O. HEIGHT	HEAD HEIGHT	COUNT	Comments
A	OPTIWIN	ALUCLAD 2 WOOD	HOPPER	2'-0"	4'-0"	2'-1"	4'-1"	7'-0 1/4"	6	INTERIOR WOOD FINISH; EXTERIOR CLADDING GREY
B	OPTIWIN	ALUCLAD 2 WOOD	HOPPER	5'-4"	4'-0"	5'-5"	4'-1"	7'-0 1/4"	2	INTERIOR WOOD FINISH; EXTERIOR CLADDING GREY
C	OPTIWIN	ALUCLAD 2 WOOD	FIXED	5'-7 1/2"	7'-0"	5'-8 1/2"	7'-1"	6'-11 1/2"	2	SAFETY GLASS INCLUDED; INTERIOR WOOD FINISH; EXTERIOR CLADDING GREY
D	OPTIWIN	ALUCLAD 2 WOOD	HOPPER	7'-0 3/4"	4'-0"	7'-1 3/4"	4'-1"	7'-0 1/4"	1	INTERIOR WOOD FINISH; EXTERIOR CLADDING GREY
E	VELUX	D06	FIXED	1'-11 1/4"	3'-10 1/4"	1'-10 1/2"	3'-9 3/4"		3	OPERABLE SKYLIGHT

WINDOW TYPES



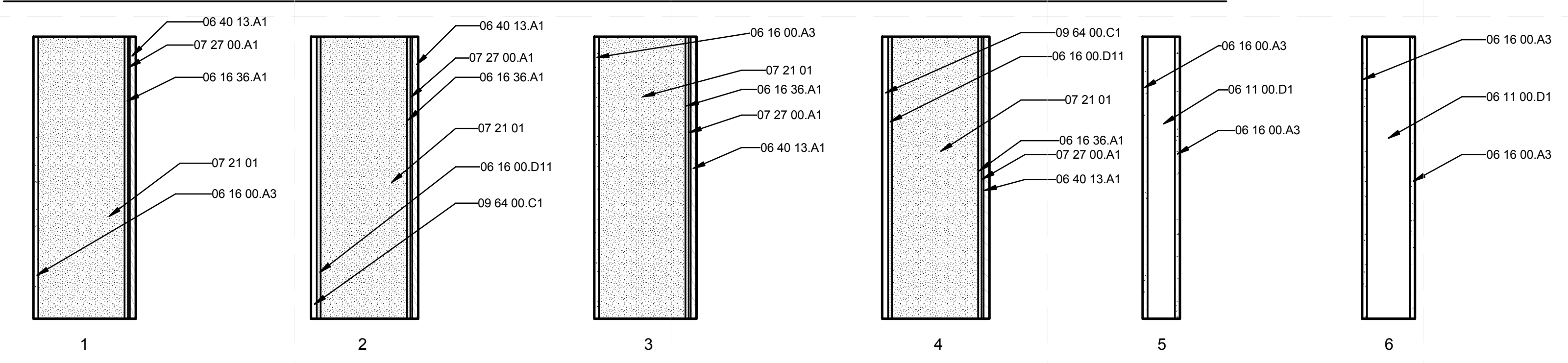
DOOR SCHEDULE										
MARK	MANUFACTURER	MODEL	DESCRIPTION	WIDTH	HEIGHT	R.O. WIDTH	R.O. HEIGHT	HEAD HEIGHT	COUNT	COMMENTS
001	OPTIWIN	ALUCLAD 2 WOOD	SWING DOOR	3'-7"	7'-0"	3'-8"	7'-1"	7'-0"	2	SAFETY GLASS INCLUDED
002	OPTIWIN		FRENCH PATIO					-1/4"	1	SAFETY GLASS INCLUDED
003	BROSCO		SWING DOOR	2'-8"	6'-9 1/2"	2'-10"	6'-10 1/2"	6'-9 1/2"	4	
004	BROSCO		SWING DOOR	3'-6"	3'-1"	3'-8"	3'-2"	3'-11"	1	

DOOR TYPES



WALL TYPES					
TYPE MARK	DESCRIPTION	STRUCTURAL USAGE	FIRE RATING	Width	COMMENTS
1	TYPICAL EXTERIOR WALL	Bearing		1'-1 1/16"	
2	GABLE END WALLS	Bearing		1'-1 11/16"	
3	EXTERIOR WALLS AT ENTRY	Bearing		1'-1 1/16"	
4	EXTERIOR WALLS ABOVE ENTRY	Bearing		1'-1 11/16"	
5	TYPICAL INTERIOR WALL	Non-bearing		4 3/4"	
6	TYPICAL INTERIOR WALL	Non-bearing		6 3/4"	

WALL TYPES



REFERENCE KEYNOTES

06 11 00.D1	2X4
06 16 00.A3	1/2" GYPSUM SHEATHING
06 16 00.D11	3/4" PLYWOOD
06 16 36.A1	HUBER ZIP SYSTEM PANEL
06 40 13.A1	1X8 T&G EASTERN WHITE CEDAR STAINED BLACK
07 21 01	CELLULOSE INSULATION
07 27 00.A1	HOME SLICKER
09 64 00.C1	MAPLE FLOORING/INT SIDING CUT AT VARYING WIDTHS AND SET IN RANDOM ORDER

SHEET KEYNOTES



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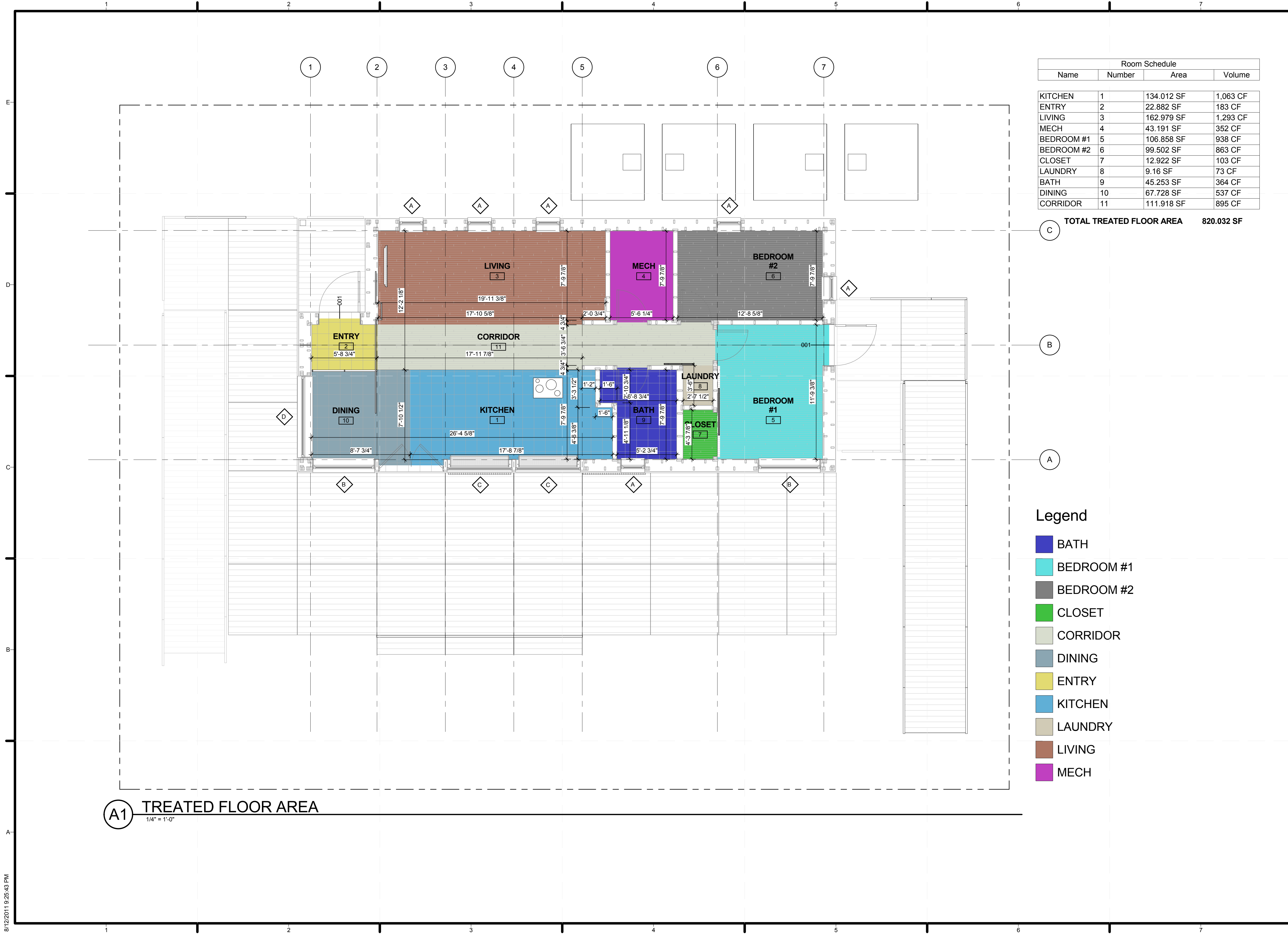


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SHEET TITLE
 SCHEDULES

A-601



Room Schedule			
Name	Number	Area	Volume
KITCHEN	1	134.012 SF	1,063 CF
ENTRY	2	22.882 SF	183 CF
LIVING	3	162.979 SF	1,293 CF
MECH	4	43.191 SF	352 CF
BEDROOM #1	5	106.858 SF	938 CF
BEDROOM #2	6	99.502 SF	863 CF
CLOSET	7	12.922 SF	103 CF
LAUNDRY	8	9.16 SF	73 CF
BATH	9	45.253 SF	364 CF
DINING	10	67.728 SF	537 CF
CORRIDOR	11	111.918 SF	895 CF

TOTAL TREATED FLOOR AREA 820.032 SF

Legend

- BATH
- BEDROOM #1
- BEDROOM #2
- CLOSET
- CORRIDOR
- DINING
- ENTRY
- KITCHEN
- LAUNDRY
- LIVING
- MECH

A1 TREATED FLOOR AREA
1/4" = 1'-0"



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SHEET TITLE
TREATED FLOOR AREA

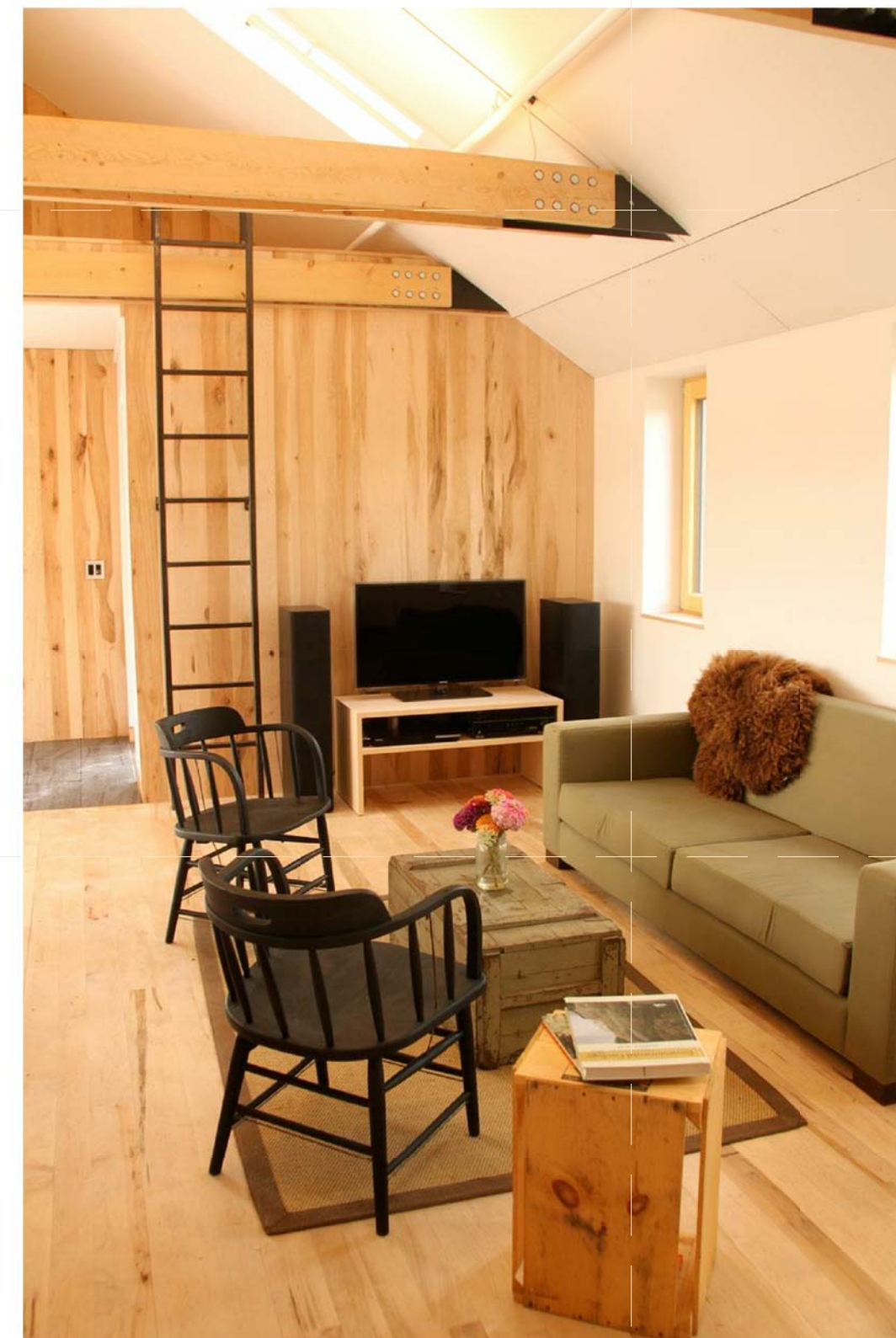
A-603



1 INT - Gable View



3 INT - Kitchen/Living View



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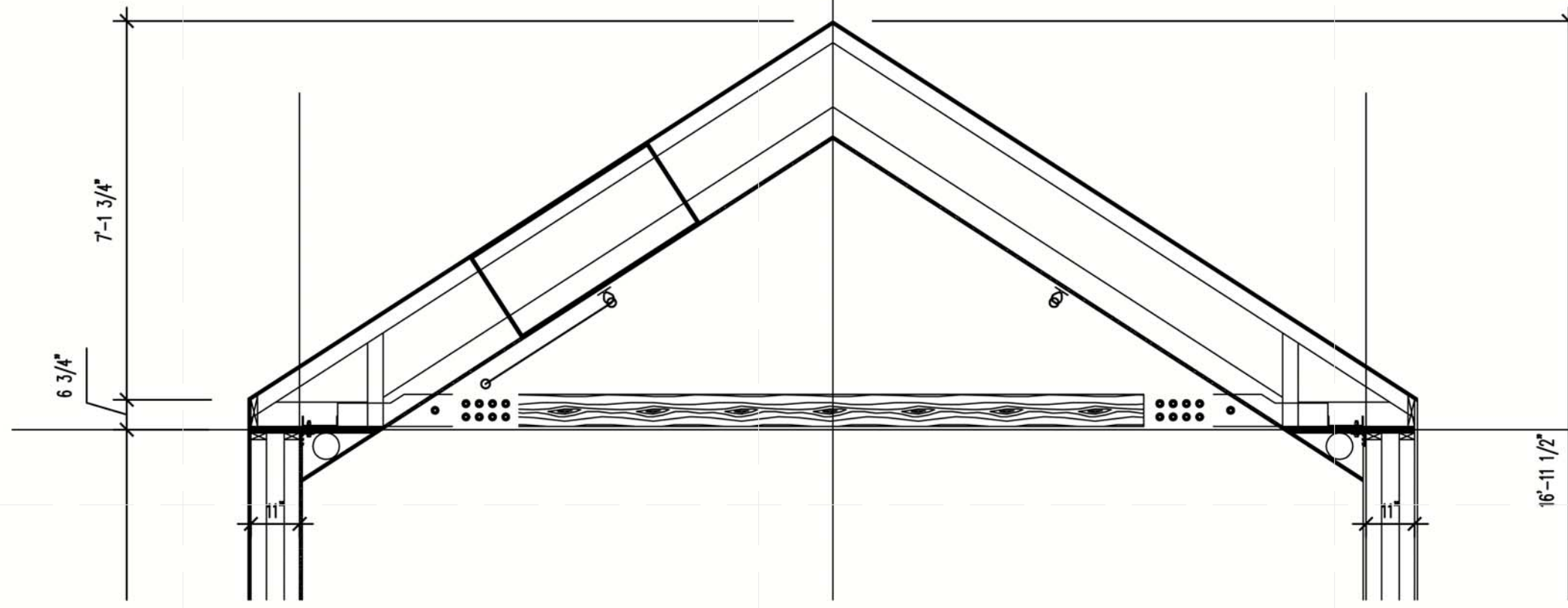
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SHEET TITLE
 INTERIOR VIEWS

A-901

REMOTE AREA # 1 - SOLAR HOUSE

CALC FILENAME: MC SD FP1REV AREA 1.WXF
 LIGHT HAZARD (NFPA 13, FM 3-26)
 DENSITY: 0.10 GPM/SQ-FT
 AREA: 850 SQ-FT (ENTIRE HOUSE)
 HOSE STREAM ALLOWANCE: 250 GPM
 TOTAL WATER REQUIREMENT: 500.408 GPM
 PRESSURE REQUIREMENT @ SOURCE: 57.951 PSI
 PRESSURE MARGIN: 54.873 PSI (48%)
 BASE OF RISER DEMAND: 250 GPM @ 37 PSI



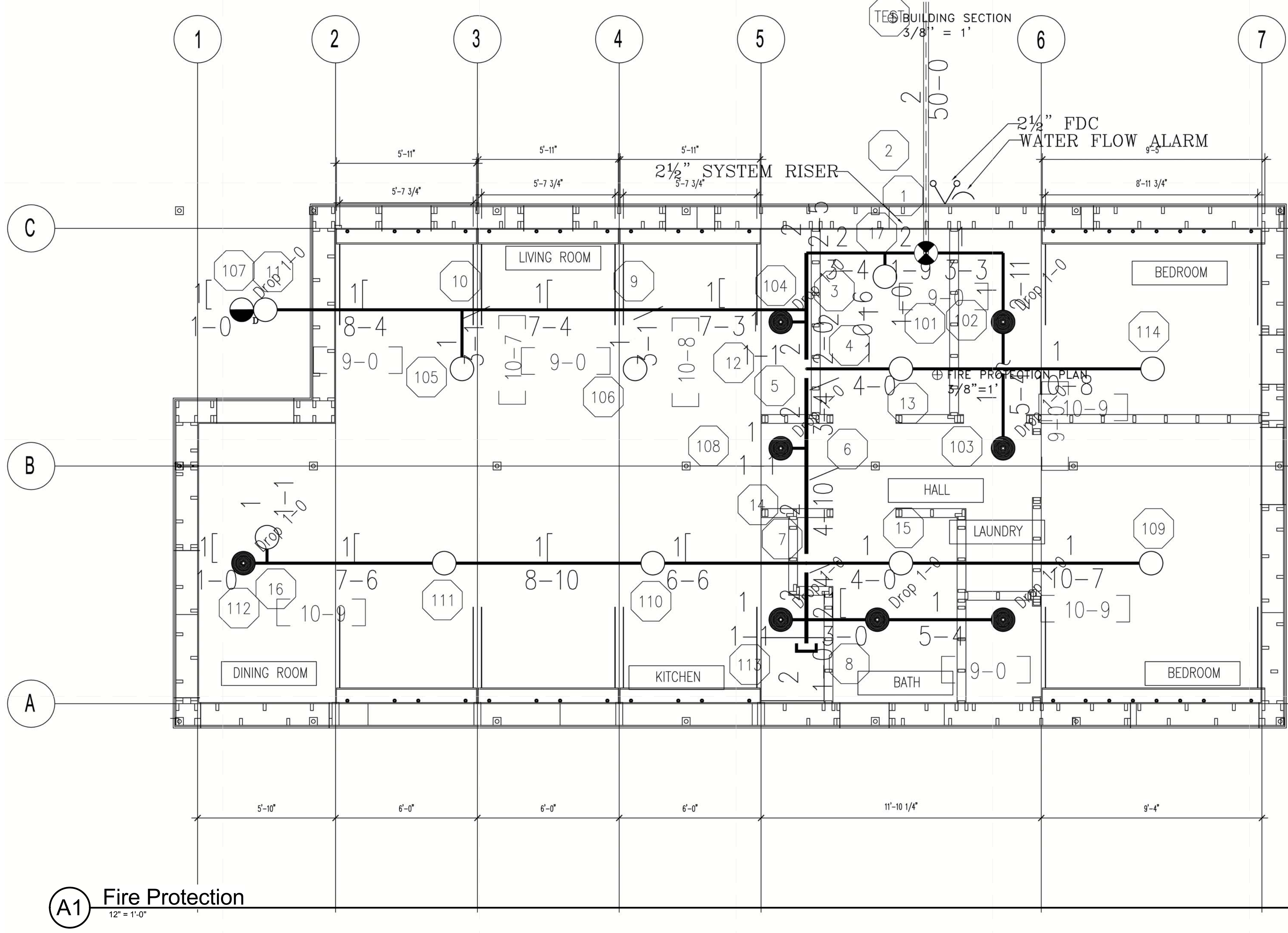
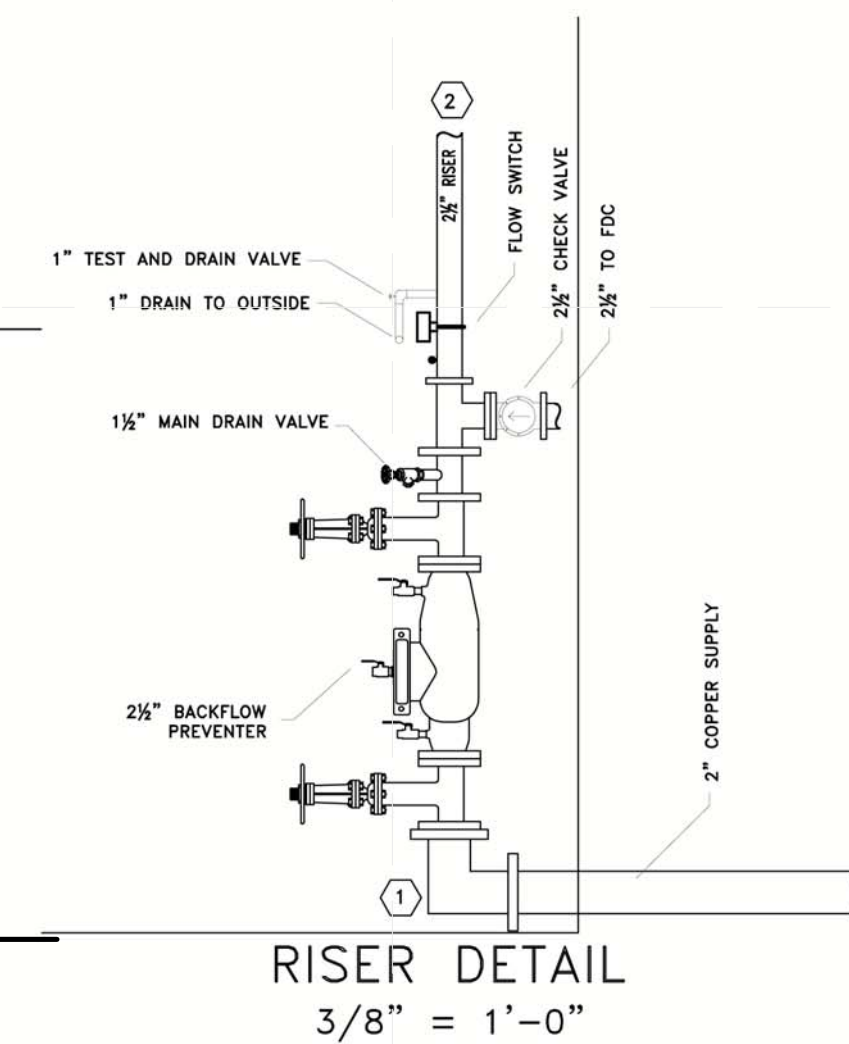
NOTES

1. THE EQUIPMENT AND INSTALLATION SHALL BE IN CONFORMITY WITH ALL CITY, STATE AND FEDERAL CODES, LAWS AND REGULATION AS WELL AS NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS NFPA 13-2002 AND FACTORY MUTUAL DATA SHEETS 2-0 AND 3-26.
2. EQUIPMENT, MATERIALS, DEVICES SHALL BE LISTED BY UNDERWRITERS LABORATORIES, INC. AND FACTORY MUTUAL APPROVED FOR USE IN AUTOMATIC SPRINKLER SYSTEMS.
3. WATER SUPPLY IS BASED ON THE FOLLOWING
 7/22/08 HYDRANT FLOW TEST FROM PROCTOR HALL:
 STATIC: 115 PSI
 RESIDUAL: 98 PSI
 FLOW: 1520 GPM.
4. SPRINKLER PIPE SHALL BE NEW, DESIGNED FOR 175 PSI WORKING PRESSURE, CONFORMING TO ASTM SPECIFICATIONS. SPRINKLER PIPE SHALL BE SCHEDULE 40 BLACK STEEL. PIPE SIZE 2 1/2 INCH AND LARGER SHALL BE JOINED BY ROLLED GROOVED RUBBER-GASKETED FITTINGS IN ACCORDANCE WITH ASTM-A47. PIPE SIZE 2 INCH AND SMALLER SHALL BE JOINED BY SCREWED JOINTS IN ACCORDANCE WITH ANSI/ASTM B1.20.1. WELDED OUTLETS MAY ALSO BE USED AND SHALL COMPLY WITH AWS D10.9.
5. ALL PIPE SHALL BE SUPPORTED BY MEANS OF UL LISTED HANGERS. SPACING AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13 AND FM GLOBAL.
6. ATTACH PROPERLY LETTERED APPROVED METAL SIGNS CONFORMING TO NFPA 13 TO EACH VALVE AND ALARM DEVICE. PERMANENTLY AFFIX HYDRAULIC SPRINKLER DESIGN DATA NAMEPLATE TO THE RISER.
7. ADDITIONAL SPRINKLER HEADS AND SPRINKLER HEAD WRENCHES SHALL BE PROVIDED IN A CABINET INSTALLED NEAR THE SPRINKLER RISER.
8. UPRIGHT SPRINKLER HEADS SHALL BE WITHIN 12 INCHES OF THE CEILING AND SHALL BE INSTALLED PARALLEL TO THE SLOPE. SIDEWALL SPRINKLER HEADS SHALL BE INSTALLED 4" - 12" DOWN FROM CEILING WITH THE DEFLECTOR PARALLEL TO THE CEILING.
9. FLOW SWITCH SHALL BE WIRED BY OTHERS TO SEND AN ALARM SIGNAL TO THE BUILDING FIRE ALARM PANEL. ALL CONTROL VALVES SHALL BE PROVIDED WITH TAMPER SWITCHES WIRED BY OTHERS TO THE FIRE ALARM PANEL FOR SUPERVISION.
10. FIRE DEPARTMENT CONNECTION SHALL COORDINATED WITH THE LOCAL FIRE DEPARTMENT FOR LOCATION AND TYPE.
11. BACKFLOW PREVENTER SHALL BE EQUAL TO A WATTS 709 DOUBLE CHECK ASSEMBLY WITH OS&Y VALVES ON THE SUPPLY AND DISCHARGE SIDES.
12. CONTRACTOR SHALL FIELD VERIFY BUILDING CONDITIONS PRIOR TO PIPE FABRICATION.
13. IF CHANGES ARE MADE TO THE SYSTEM THAT EFFECT THE HYDRAULIC CALCULATION, THE SYSTEM SHALL BE RECALCULATED AND AS-BUILT DRAWINGS SHALL BE ISSUED.

LEGEND

- QUICK RESPONSE UPRIGHT SPRINKLER HEAD, 1/2 INCH ORIFICE, 1/2 INCH THREAD, 155° F, K = 5.6, PAINTED WHITE. VICTAULIC MODEL V27 UPRIGHT SPRINKLER. (SIN V2704) (QUANTITY 11)
- QUICK RESPONSE DRY PENDENT SPRINKLER HEAD, 1/2 INCH ORIFICE, 1 INCH THREAD, 155° F, K = 5.6, PAINTED WHITE. VICTAULIC MODEL V36 DRY PENDENT SPRINKLER. (SIN V3606) (QUANTITY 1)
- QUICK RESPONSE SEMIRECESSED PENDENT SPRINKLER HEAD, 1/2 INCH ORIFICE, 1/2 INCH THREAD, 155° F, K = 5.6, PAINTED WHITE. VICTAULIC MODEL V27 PENDENT SPRINKLER. (SIN V2708) (QUANTITY 6)

REFER TO THE PROJECT MANUAL, SECTION 211000 FOR FIRE SUPPRESSION CALCULATIONS



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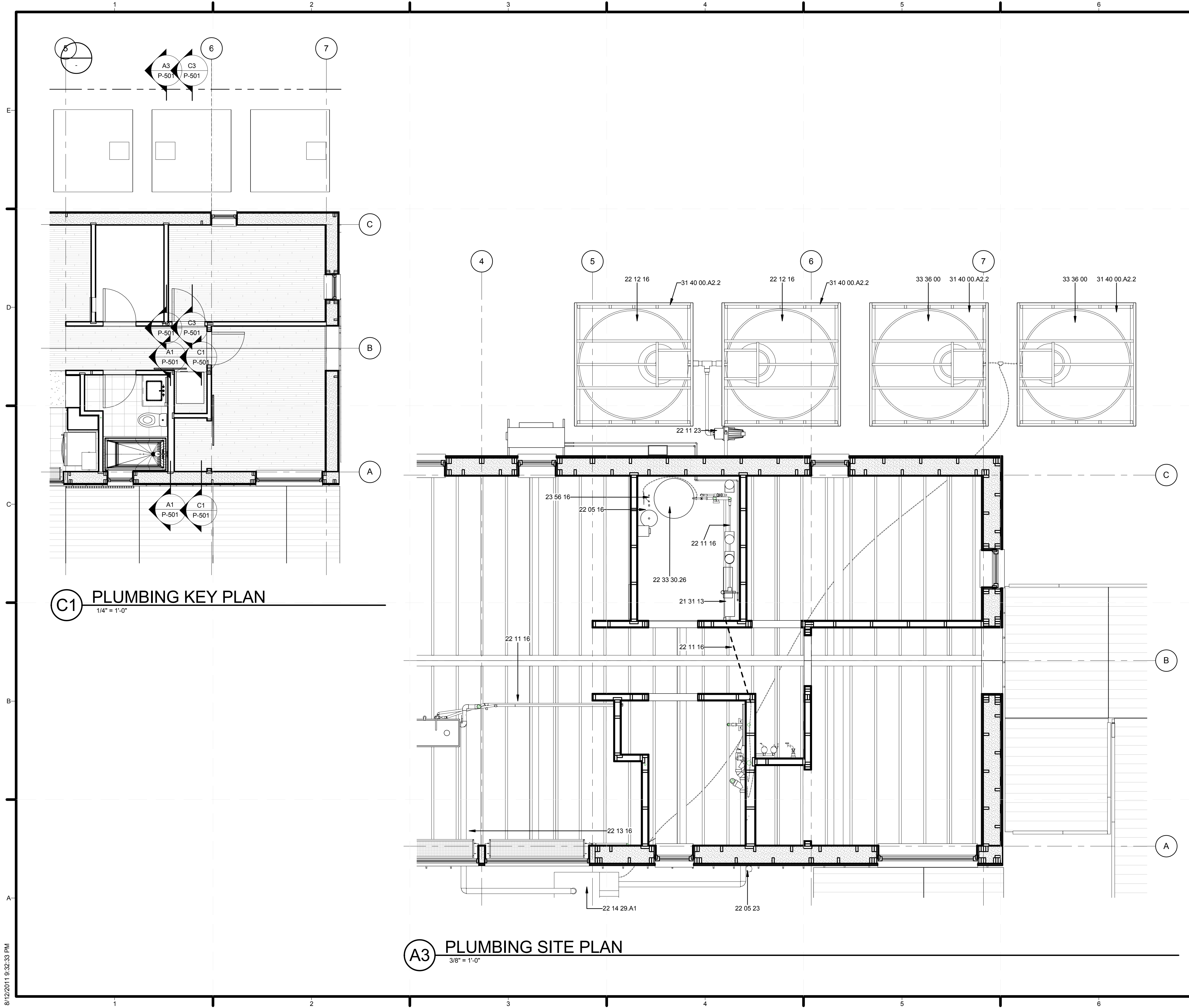


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SHEET TITLE
FIRE SUPPRESSION

F-101



C1 PLUMBING KEY PLAN
1/4" = 1'-0"

A3 PLUMBING SITE PLAN
3/8" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO SHEET G-001 FOR SYMBOLS
2. REFER TO SHEET P-102 FOR PLUMBING EQUIPMENT
3. REFER TO SHEET L-502 FOR WATER TANK COVER ACCESS DETAILS
4. WATER TANKS TEMPORARY FOR COMPETITION PURPOSES

REFERENCE KEYNOTES

- | | |
|---------------|--|
| 21 31 13 | ELECTRIC-DRIVE, CENTRIFUGAL FIRE PUMPS |
| 22 05 16 | EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING |
| 22 05 23 | GENERAL-DUTY VALVES FOR WATER-BASED PLUMBING PIPING |
| 22 11 16 | DOMESTIC WATER PIPING |
| 22 11 23 | DOMESTIC WATER PUMPS |
| 22 12 16 | FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS |
| 22 13 16 | SANITARY WASTE AND VENT PIPING |
| 22 14 29.A1 | SEWAGE PUMP |
| 22 33 30.26 | RESIDENTIAL, COLLECTOR-TO-TANK, HEAT-EXCHANGER-COIL, SOLAR-ELECTRIC DOMESTIC WATER HEATERS |
| 23 56 16 | PACKAGED SOLAR HEATING EQUIPMENT |
| 31 40 00.A2.2 | 2x4 WATER STORAGE CRIBBING |
| 33 36 00 | UTILITY SEPTIC TANKS |

SHEET KEYNOTES



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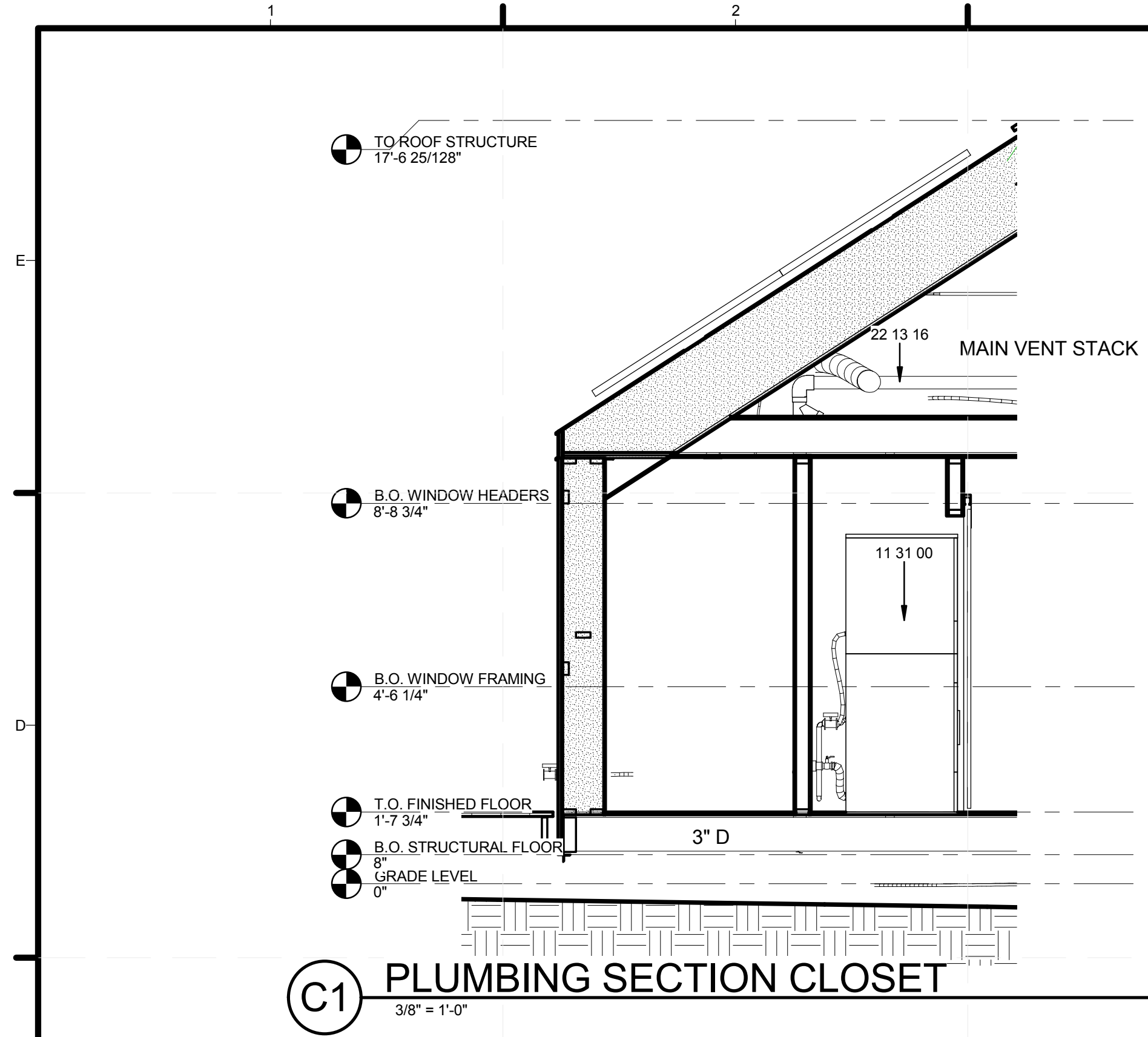


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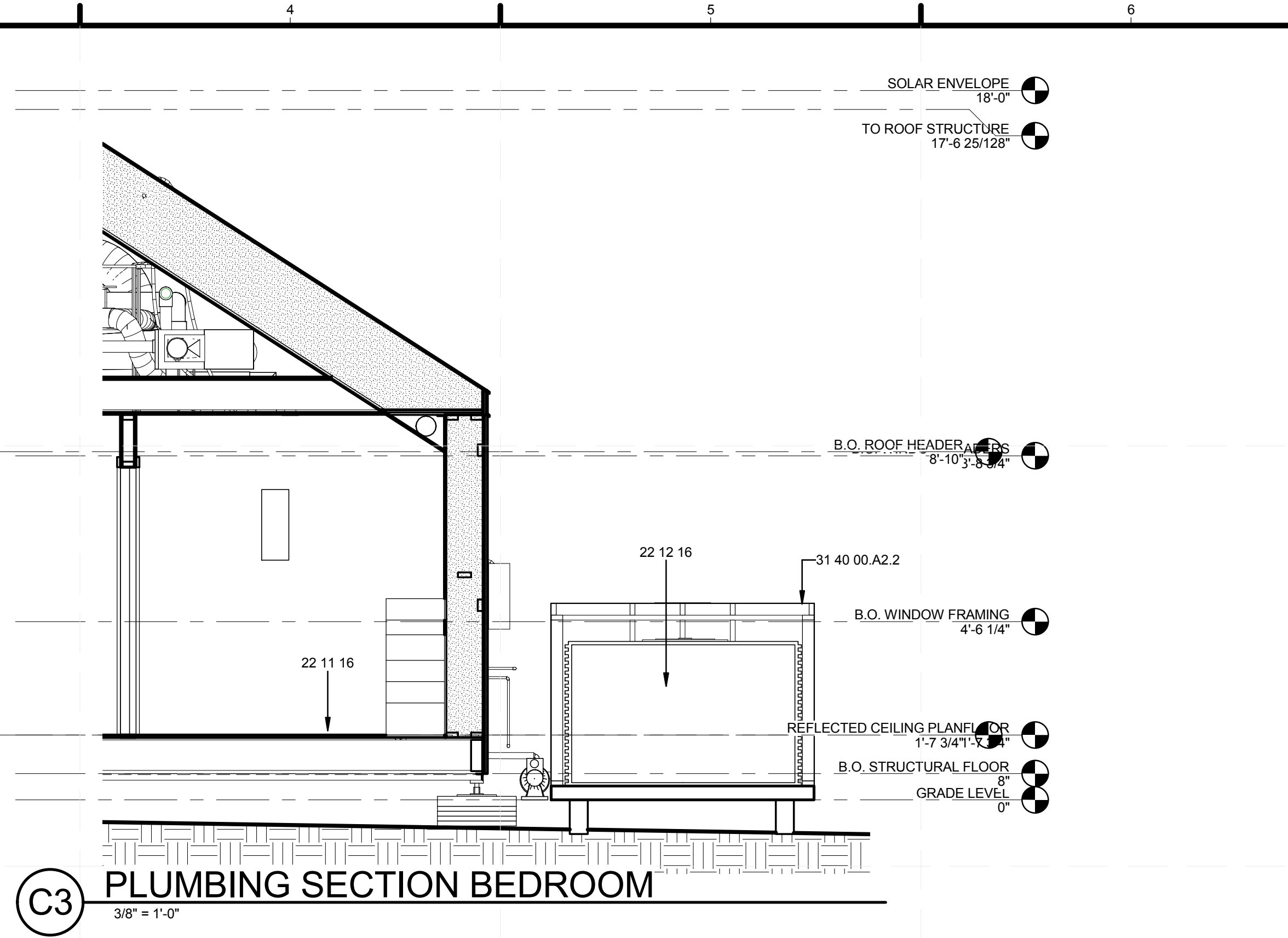
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SHEET TITLE
 PLUMBING PLANS

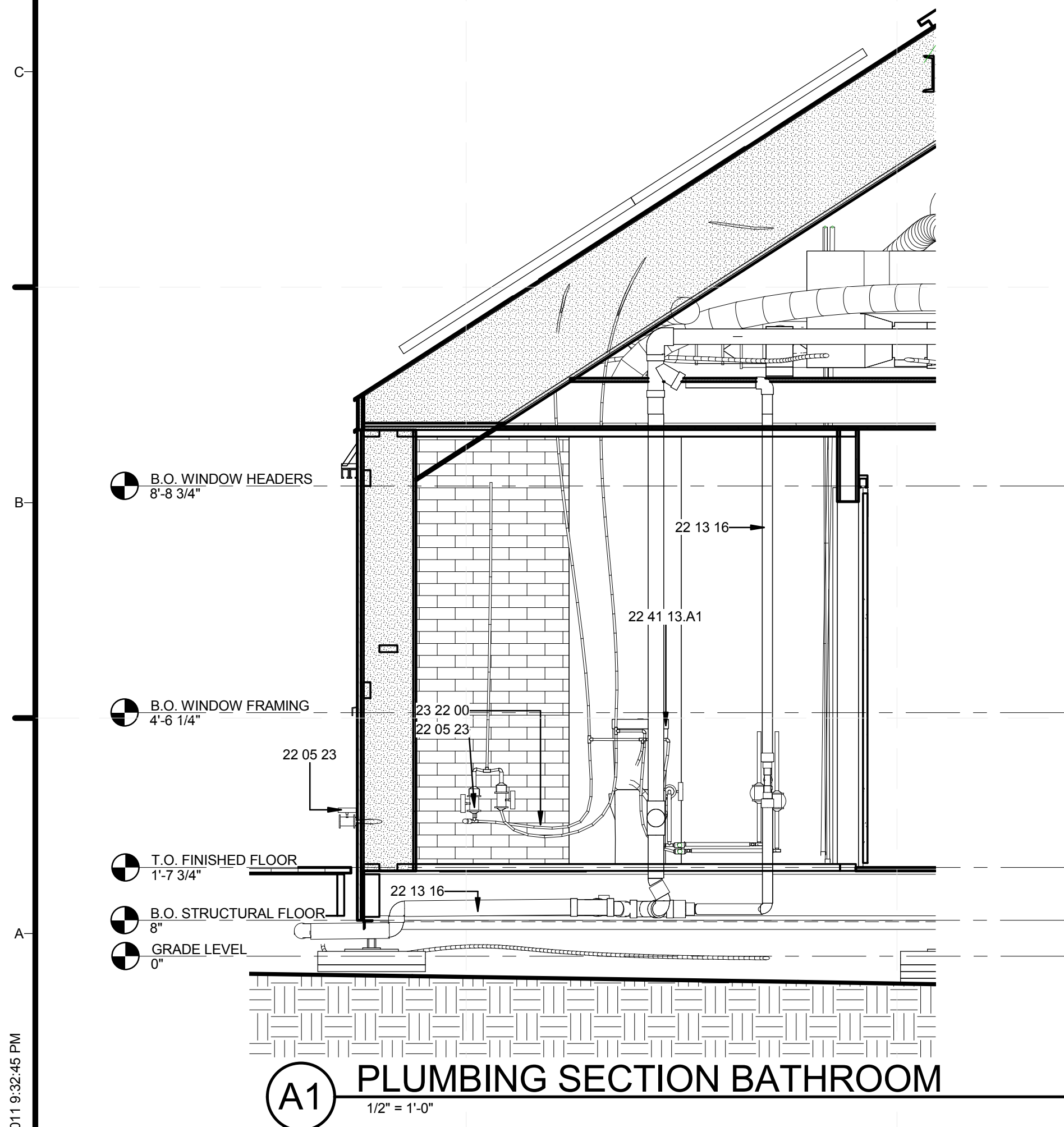
P-101



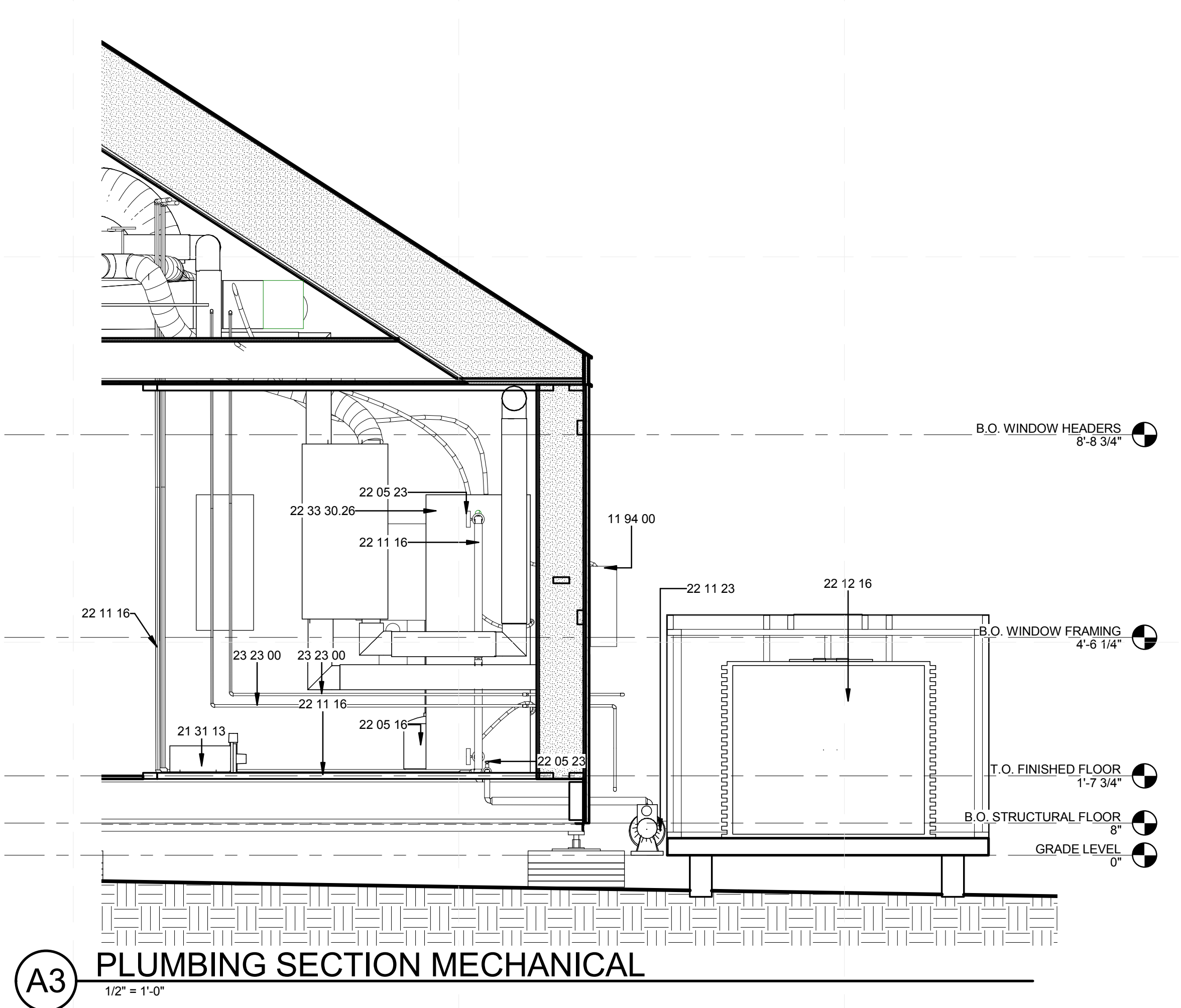
C1 PLUMBING SECTION CLOSET
3/8" = 1'-0"



C3 PLUMBING SECTION BEDROOM
3/8" = 1'-0"



A1 PLUMBING SECTION BATHROOM
1/2" = 1'-0"



A3 PLUMBING SECTION MECHANICAL
1/2" = 1'-0"

GENERAL SHEET NOTES

- REFER TO SHEET L-503 FOR WATER TANK DETAILS

REFERENCE KEYNOTES

- 11 31 00 RESIDENTIAL APPLIANCES
- 11 94 00 DISSIPATOR FOR SHW
- 21 31 13 ELECTRIC-DRIVE, CENTRIFUGAL FIRE PUMPS
- 22 05 16 EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING
- 22 05 23 GENERAL-DUTY VALVES FOR WATER-BASED PLUMBING PIPING
- 22 11 16 DOMESTIC WATER PIPING
- 22 11 23 DOMESTIC WATER PUMPS
- 22 12 16 FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS
- 22 13 16 SANITARY WASTE AND VENT PIPING
- 22 33 30.26 RESIDENTIAL, COLLECTOR-TO-TANK, HEAT-EXCHANGER-COIL, SOLAR-ELECTRIC DOMESTIC WATER HEATERS
- 22 41 13.A1 WATER CLOSET
- 23 22 00 STEAM AND CONDENSATE PIPING AND PUMPS
- 23 23 00 REFRIGERANT PIPING
- 31 40 00.A2.2 2x4 WATER STORAGE CRIBBING

SHEET KEYNOTES



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SHEET TITLE
 PLUMBING DETAILS

P-501

PIPE SCHEDULE						
Family	Count	Keynote	Length	Material	Size	Comments
Pipe Types	1	22 13 16	13/16"	Plastic	3"ø	
Pipe Types	1	22 13 16	11 29/32"	Plastic	3"ø	
Pipe Types	1	22 13 16	2 21/32"	Plastic	3"ø	
Pipe Types	1	22 13 16	1 57/128"	Plastic	2"ø	
Pipe Types	1	22 13 16	2'-11 31/32"	Plastic	2"ø	
Pipe Types	1	22 11 16	10 75/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	1 7/16"	Plastic	1"ø	
Pipe Types	1	22 11 16	3/4"	Plastic	2"ø	
Pipe Types	1	22 11 16	11/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-5 83/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	9 3/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	23/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	8 9/16"	Plastic	1"ø	
Pipe Types	1	22 11 16	6'-2 1/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	3/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	5/32"	Plastic	1"ø	
Pipe Types	1	22 11 16	7/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-7 1/16"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-3 39/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	25/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	8 15/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	5 7/32"	Plastic	2"ø	
Pipe Types	1	22 11 16	2'-3 1/4"	Plastic	2"ø	
Pipe Types	1	22 11 16	6'-4 1/2"	Plastic	1"ø	
Pipe Types	1	22 11 16	1 23/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	3'-2 37/128"	Plastic	2"ø	
Pipe Types	1	22 11 16	5 21/32"	Plastic	1"ø	
Pipe Types	1	22 11 16	1 3/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	5/8"	Plastic	1"ø	
Pipe Types	1	22 11 16	1/8"	Plastic	2"ø	
Pipe Types	1	22 11 16	3"	Plastic	2"ø	
Pipe Types	1	22 11 16	1 51/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	2 13/32"	Plastic	1"ø	
Pipe Types	1	22 11 16	3 37/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	11 25/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-1 9/64"	Plastic	1"ø	
Pipe Types	1	22 13 16	4 21/64"	Plastic	1"ø	
Pipe Types	1	22 13 16	1"	Plastic	2"ø	
Pipe Types	1	22 13 16	9 9/16"	Plastic	3"ø	
Pipe Types	1	22 13 16	7-2 3/16"	Plastic	3"ø	
Pipe Types	1	22 11 16	2 5/16"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-7 51/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	1 3/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-9 87/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	2'-1 17/32"	Plastic	1"ø	
Pipe Types	1	22 13 16	6 7/128"	Plastic	1"ø	
Pipe Types	1	22 13 16	6'-3 1/2"	Plastic	2"ø	
Pipe Types	1	22 11 16	2'-7 37/64"	Plastic	1"ø	
Pipe Types	1	22 11 16	2'-6"	Plastic	1"ø	
Pipe Types	1	22 13 16	4 1/4"	Plastic	2"ø	
Pipe Types	1	22 13 16	6 15/16"	Plastic	2"ø	
Pipe Types	1	22 13 16	1 67/128"	Plastic	2"ø	
Pipe Types	1	22 13 16	5 3/4"	Plastic	2"ø	
Pipe Types	1	22 13 16	3'-1"	Plastic	3"ø	
Pipe Types	1	22 13 16	5 57/128"	Plastic	2"ø	
Pipe Types	1	22 13 16	1 17/32"	Plastic	1"ø	
Pipe Types	1	22 13 16	7'-10"	Plastic	3"ø	
Pipe Types	1	22 13 16	4'-3"	Plastic	3"ø	
Pipe Types	1	22 11 16	2 11/32"	Plastic	1"ø	
Pipe Types	1	23 23 00	6'-6 1/8"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	6'-7 3/8"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	1'-11"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	1'-9"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	2'-2 27/64"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	2'-1 5/32"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	6'-0 7/64"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	6'-4 89/128"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	4'-5 21/32"	Carbon Steel	1"ø	

PIPE SCHEDULE						
Family	Count	Keynote	Length	Material	Size	Comments
Pipe Types	1	23 23 00	3'-10 3/4"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	2 81/128"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	3/8"	Carbon Steel	1"ø	
Pipe Types	1	22 13 16	2'-3 59/128"	Plastic	3"ø	
Pipe Types	1	22 13 16	1'-9 39/128"	Plastic	2"ø	
Pipe Types	1	22 11 16	1'-6 1/4"	Plastic	1"ø	
Pipe Types	1	23 23 00	7 11/64"	Carbon Steel	1"ø	
Pipe Types	1	23 23 00	1 1/4"	Carbon Steel	1"ø	
Pipe Types	1	22 11 16	2 1/16"	Plastic	1"ø	
Pipe Types	1	22 13 16	1 3/16"	Plastic	3"ø	
Pipe Types	1	22 13 16	11 29/32"	Plastic	3"ø	
Pipe Types	1	22 13 16	2 9/32"	Plastic	3"ø	
Pipe Types	1	22 11 16	7'-2 37/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	1'-2 1/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	3'-0 25/128"	Plastic	1"ø	
Pipe Types	1	22 11 16	5'-8 3/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	2'-9 7/16"	Plastic	2"ø	
Pipe Types	1	22 11 16	7 3/4"	Plastic	2"ø	
Pipe Types	1	22 11 16	3 49/128"	Plastic	1"ø	
Pipe Types	1	22 13 16	1"	Plastic	2"ø	
Pipe Types	1	22 13 16	1 17/32"	Plastic	1"ø	
Pipe Types	1	22 13 16	3 3/4"	Plastic	3"ø	
Pipe Types	1	22 13 16	4 3/8"	Plastic	2"ø	
Pipe Types	1	22 11 16	1'-7 3/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	5'-1 1/4"	Plastic	1"ø	
Pipe Types	1	22 11 16	10 105/128"	Plastic	0"ø	3/4" D
Pipe Types	1	22 11 16	6 49/128"	Plastic	0"ø	3/4" D
Pipe Types	1	22 11 16	1 1/2"	Plastic	0"ø	3/4" D
Pipe Types	1	22 13 16	5 3/4"	Plastic	2"ø	
Pipe Types	1	22 11 16	1'-1 19/32"	Plastic	1"ø	
Pipe Types	1	22 11 16	25/128"	Plastic	1"ø	
Pipe Types	1	22 13 16	2 1/4"	Plastic	3"ø	
Pipe Types	1	22 13 16	6'-8 17/128"	Plastic	3"ø	
Pipe Types	1	22 13 16	1'-3 19/32"	Plastic	2"ø	
Pipe Types	1	22 13 16	1'-3 67/128"	Plastic	2"ø	
Pipe Types	1	22 13 16	1'-0 21/32"	Plastic	2"ø	
Pipe Types	1	22 13 16	5 1/8"	Plastic	3"ø	
Pipe Types	1	22 13 16	1 25/64"	Plastic	3"ø	
Pipe Types	1	22 13 16	5'-8"	Plastic	3"ø	
Pipe Types	1	22 13 16	6'-8 107/128"	Plastic	3"ø	
Pipe Types	1	22 13 16	8 1/4"	Plastic	3"ø	
Pipe Types	1	22 13 16	11 1/4"	Plastic	2"ø	
Pipe Types	1	22 13 16	3 5/32"	Plastic	3"ø	
Pipe Types	1	22 13 16	1'-10"	Plastic	3"ø	
Pipe Types	1	22 13 16	1'-5 1/2"	Plastic	3"ø	
Pipe Types	1	22 11 16	4'-4 1/2"	Plastic	1"ø	
Pipe Types	1	22 11 16	4'-6 1/8"	Plastic	1"ø	
Pipe Types	1	22 13 16	6'-11 1/2"	Plastic	1"ø	
Pipe Types	1	22 13 16	7'-2 21/32"	Plastic	1"ø	
Pipe Types	1	22 11 16	1"	Plastic	1"ø	
Pipe Types	1	22 11 16	1 17/32"	Plastic	2"ø	
Pipe Types	1	22 11 16	1 17/32"	Plastic	2"ø	

PIPE ACCESSORY SCHEDULE		
Family and Type	Count	Keynote
Venturi Flow Meter - 6-48 Inch: 6"	1	
Ball Valve - 2-6 Inch: 2"	1	22 05 23
3 Way Valve - 0.75-4 Inch: 3/4"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Ball Valve - 2-6 Inch: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 2"	1	22 05 23
Globe Valve - 2-18 Inch - Flanged: 1"	1	
Multi-Purpose Valve - Straight - 1.5 - Threaded: 1 1/2"	1	

PLUMBING FIXTURE SCHEDULE				
Mark	Description	Count	Manufacturer	Model
4	Persuade® Circ comfort height two-piece elongated toilet	1	Kohler	K-3753
21	Solar HW Panel	1	Solar US	SL-20
22	Solar HW Panel	1	Solar US	SL-20
26		1		
27	Purist® Primary Swing Spout with Spray	1	Kohler	K-7508
28		1		
29		1		
30	Persuade® Circ comfort height two-piece elongated toilet	1	Kohler	K-3753
32		1		
33		1		

PLUMBING FIXTURE SCHEDULE		
Count	Family and Type	Keynote
1	SD Toilet: Vitreous_China-0-White	22 41 13.A1
1	SD - Solar Hot Water: SD - Solar Hot Water	22 05 00.A1
1	SD - Solar Hot Water: SD - Solar Hot Water	22 05 00.A1
1	Kohler 8 Degree Sink: Kohler 8 Degree Sink	22 41 16.A11
1	Faucet-8inch_With_Sprayer-Kohler-Purist-7508: Steel-Vibrant_Stainless-VS	
1	Kathryn undercounter sink: Kathryn undercounter sink	
1	Bathroom Faucet: Bathroom Faucet	
1	SD Bathhub: SD	22 41 19.D4
1	Fire Pump Placeholder: Fire Pump Placeholder	
1	SD Shower Head: SD Shower Head	

PIPING SYSTEM SCHEDULE		
System Name	Count	Number of Elements
Default Domestic Cold Water 2	1	2
Default Domestic Hot Water (sccranton)	1	1
Default Hydronic Supply	1	10
Default Other	1	2
Default Sanitary 2	1	1
Default Sanitary 3	1	1



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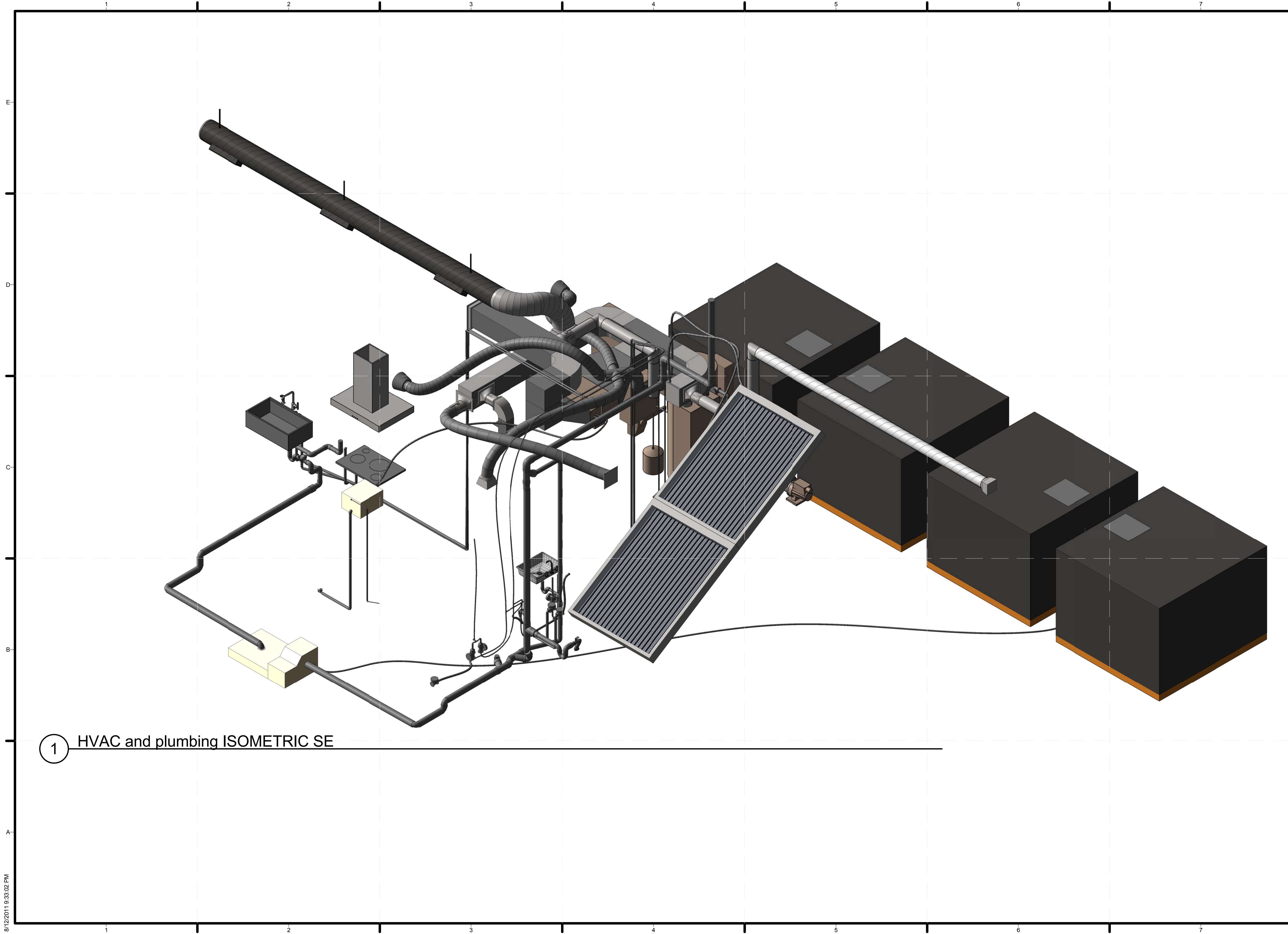


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SHEET TITLE
PLUMBING SCHEDULES

P-601



1 HVAC and plumbing ISOMETRIC SE



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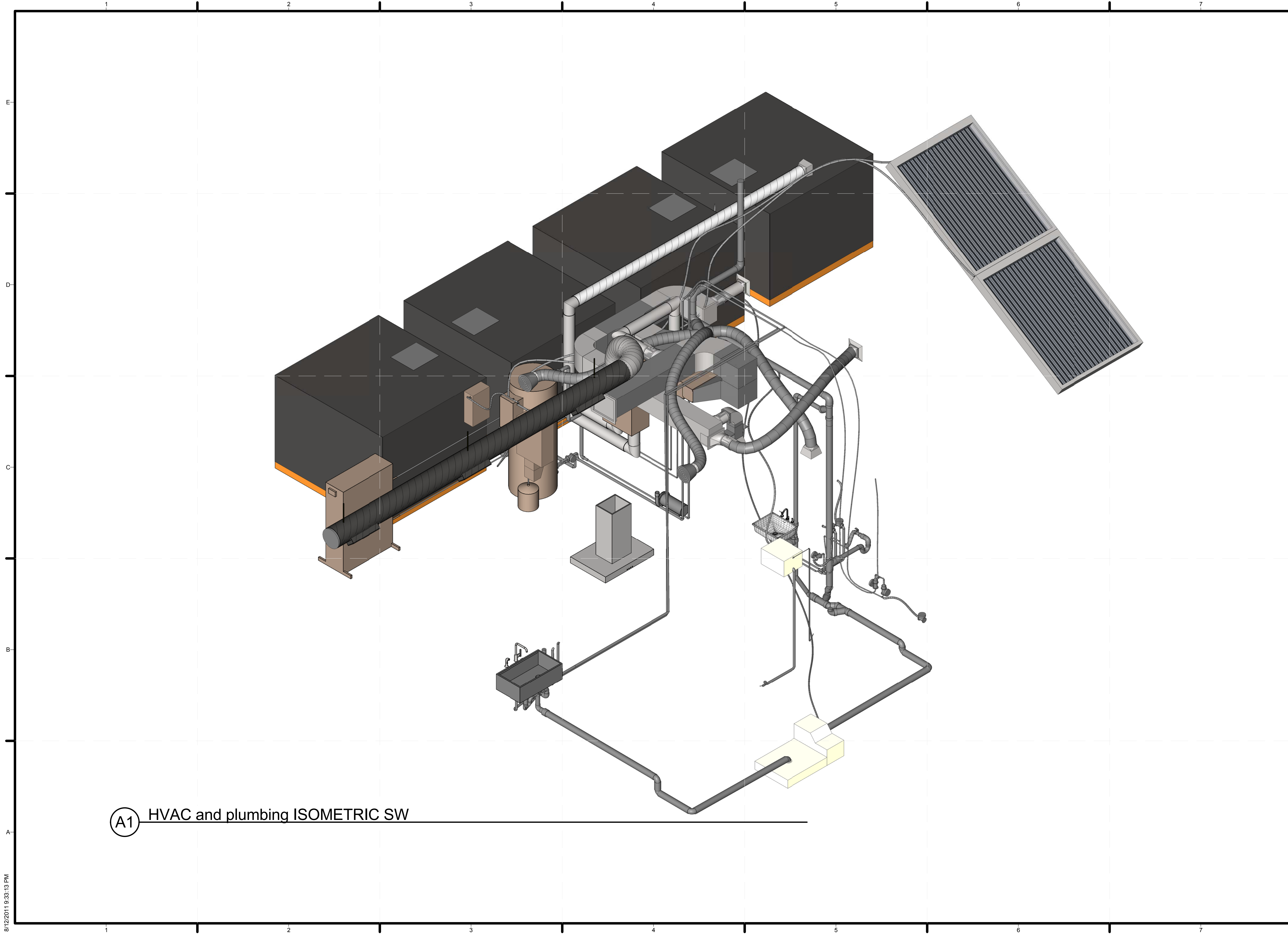


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SHEET TITLE
 PLUMBING AND HVAC
 ISOMETRICS SE

P-901



(A1) HVAC and plumbing ISOMETRIC SW



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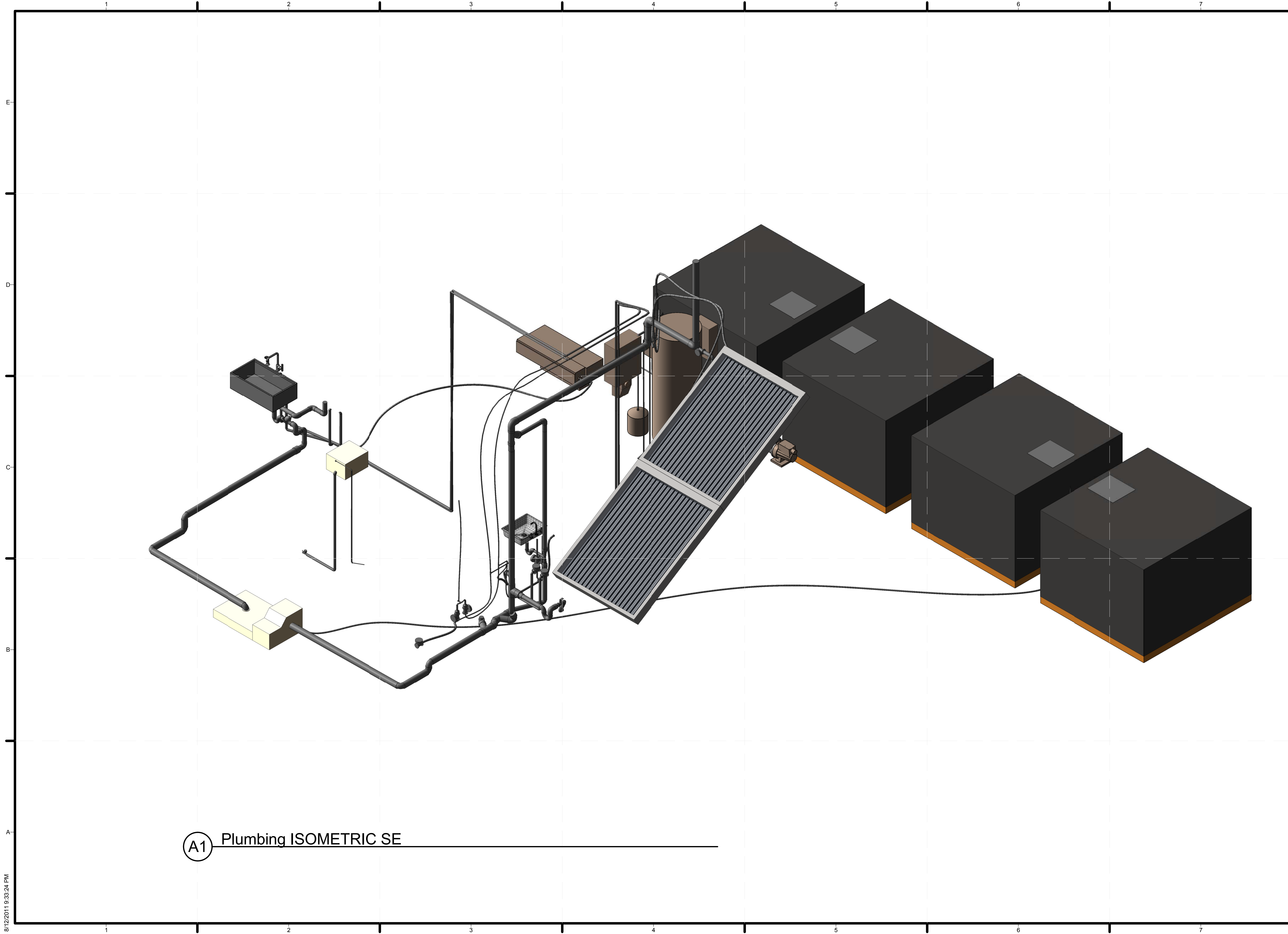


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SHEET TITLE
 PLUMBING AND HVAC
 ISOMETRICS SW

P-902



(A1) Plumbing ISOMETRIC SE



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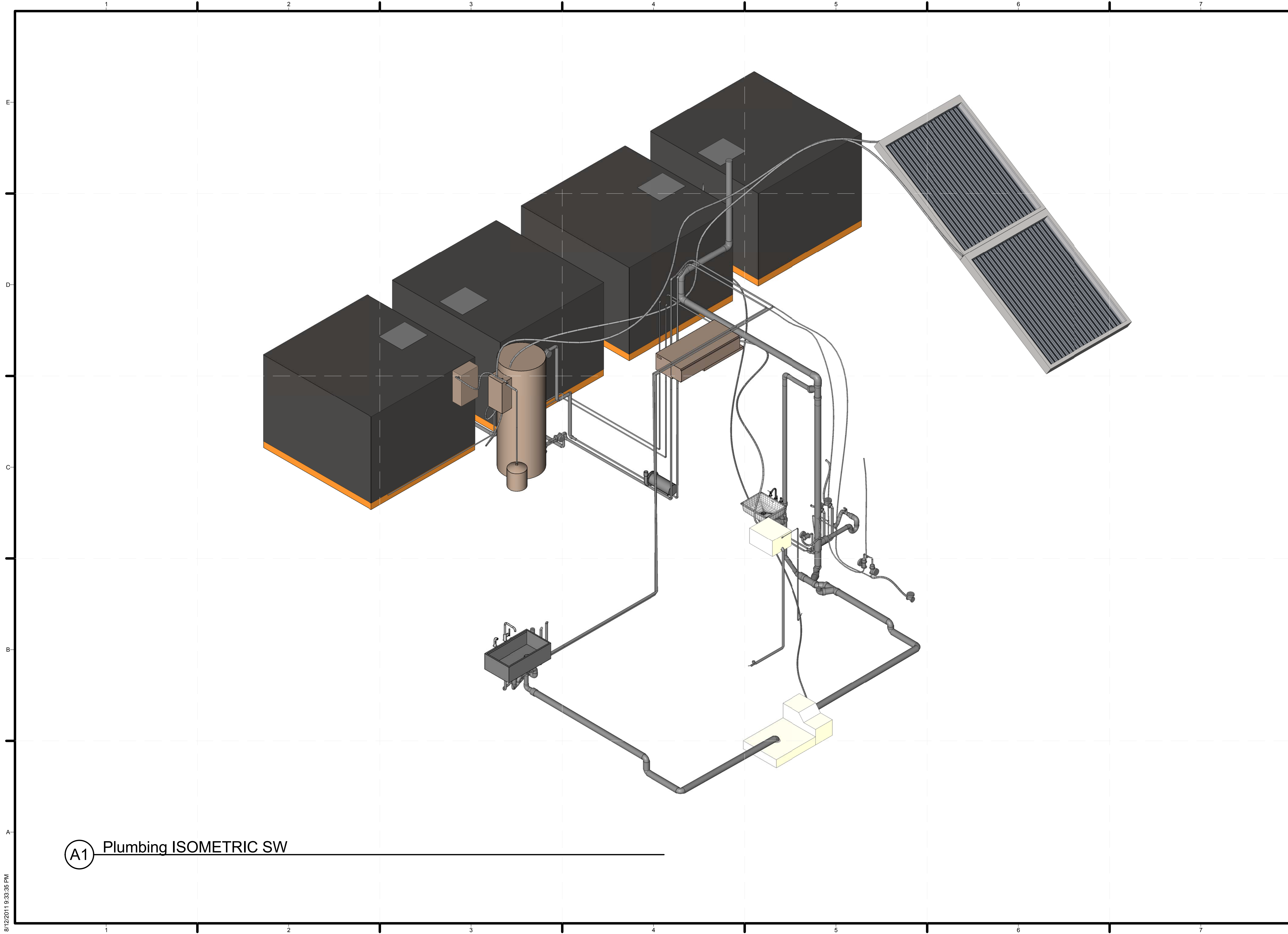


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 PLUMBING
 ISOMETRICS SE

P-903



(A1) Plumbing ISOMETRIC SW

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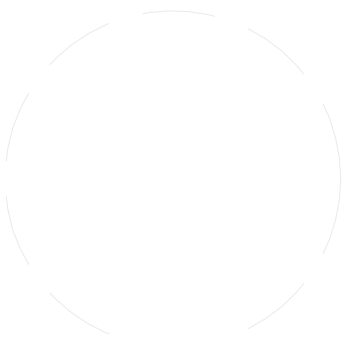
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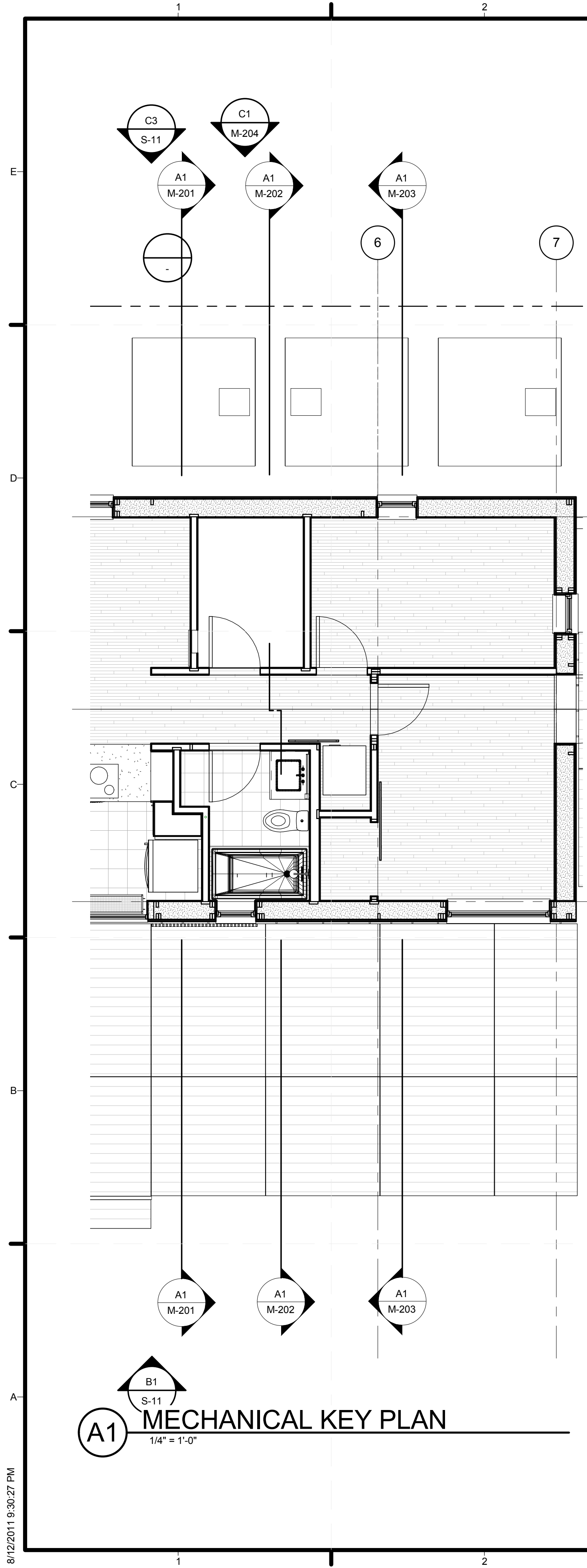


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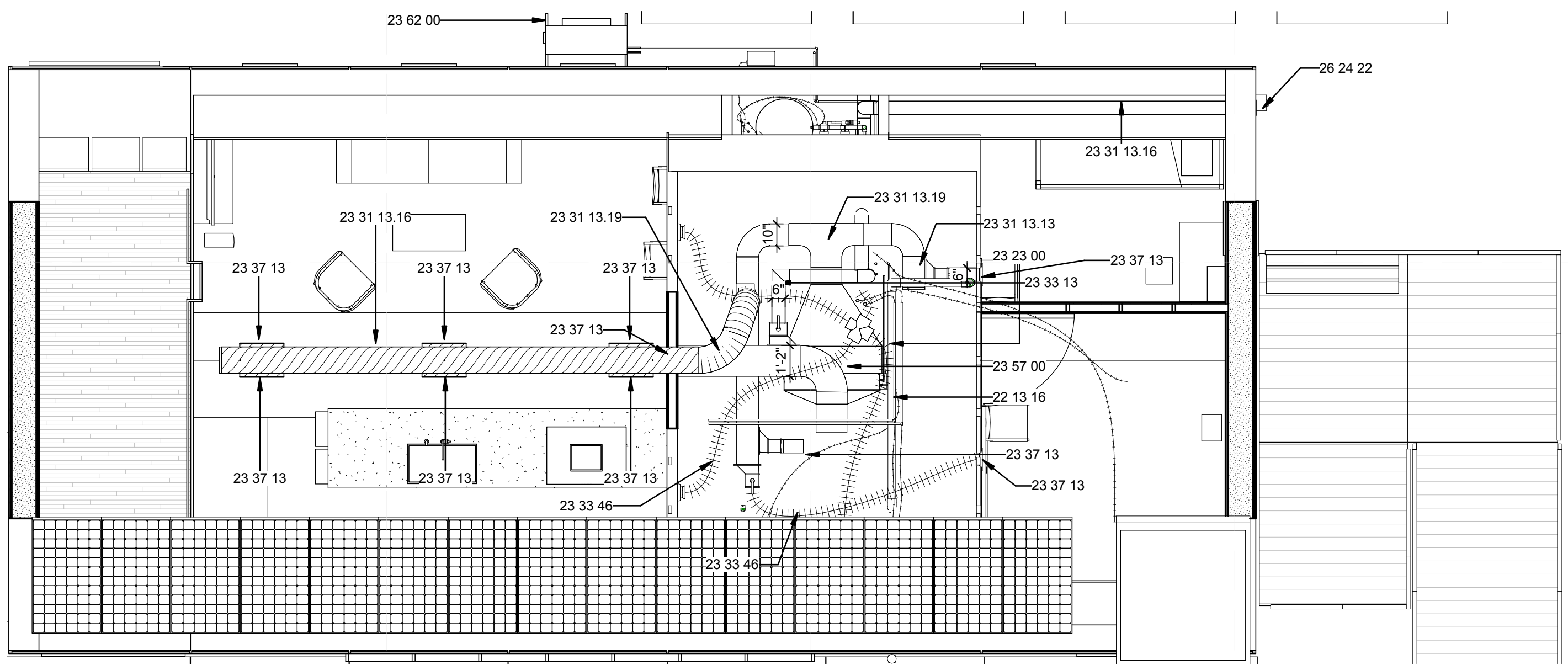
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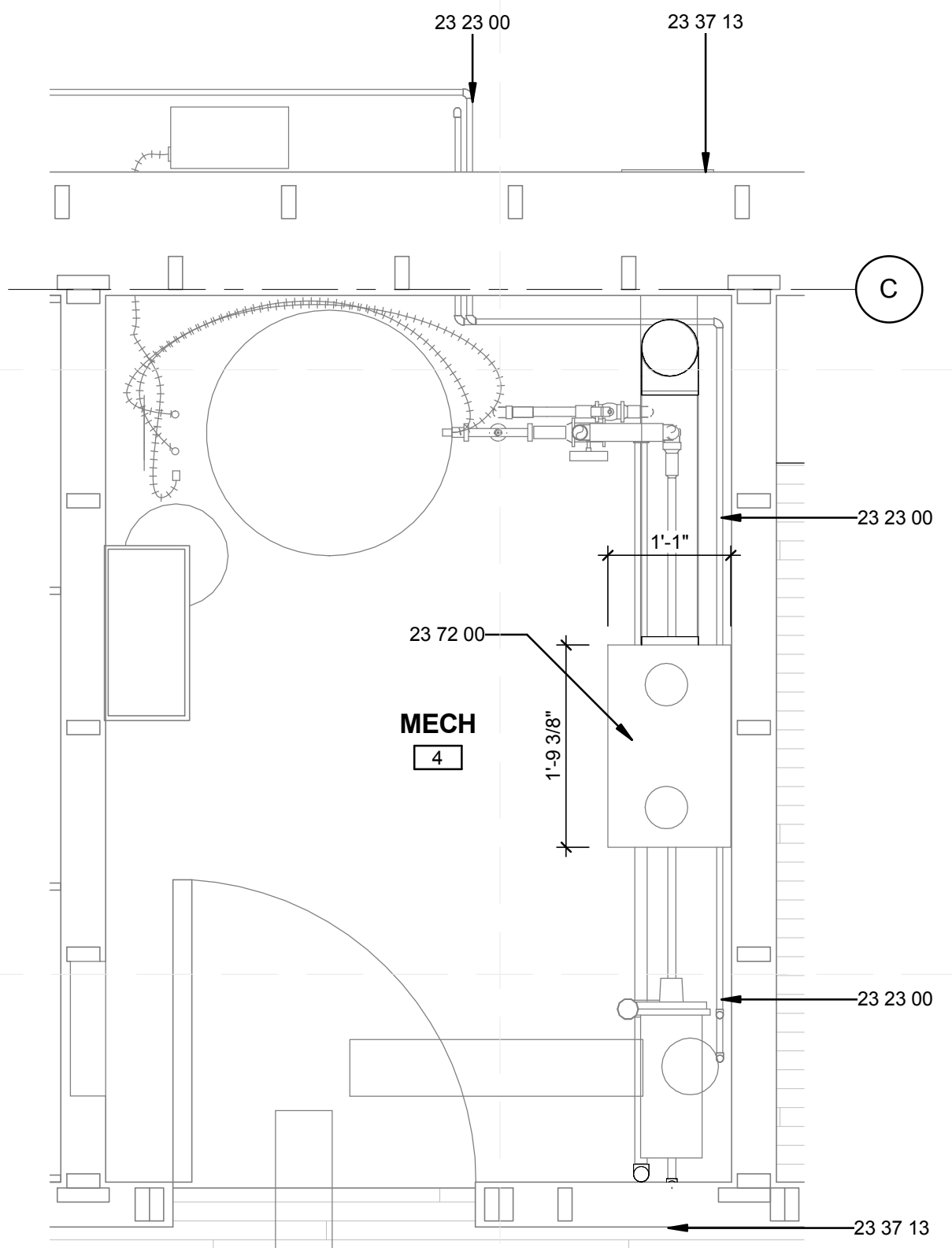
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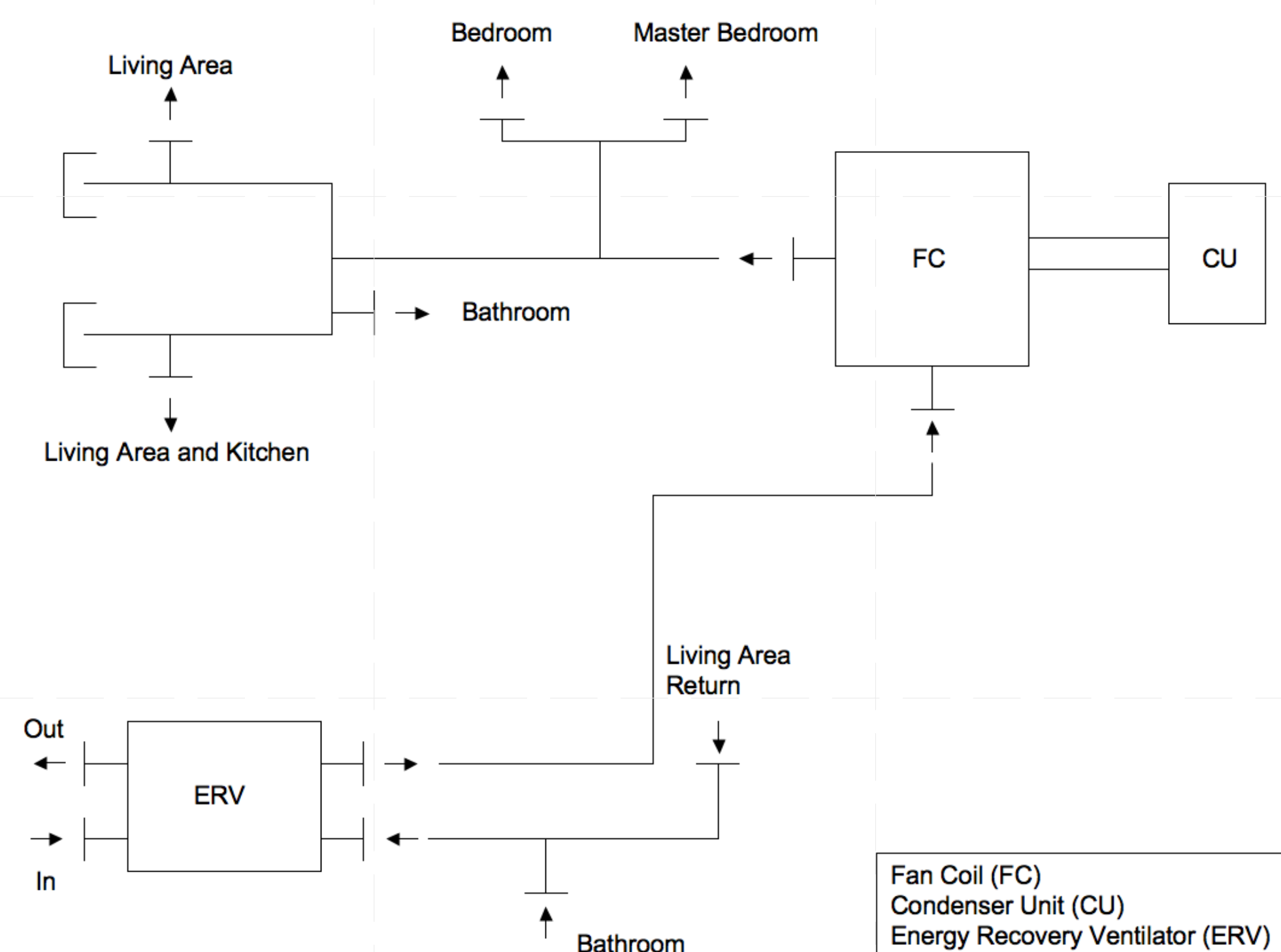
A1 MECHANICAL KEY PLAN
1/4" = 1'-0"



C2 MECH DISTRIBUTION PLAN
1/4" = 1'-0"



B3 ENLARGED MECH
3/4" = 1'-0"



B5 HVAC DIAGRAM
6" = 1'-0"

GENERAL SHEET NOTES

- REFER TO SHEET G-001 FOR SYMBOLS
- REFER TO SHEET M-102 FOR MECHANICAL EQUIPMENT

REFERENCE KEYNOTES

22 13 16	SANITARY WASTE AND VENT PIPING
23 23 00	REFRIGERANT PIPING
23 31 13.13	RECTANGULAR METAL DUCTS
23 31 13.16	ROUND AND FLAT-OVAL SPIRAL DUCTS
23 31 13.19	METAL DUCT FITTINGS
23 33 00.80	DIFFUSERS
23 33 13	DAMPERS
23 33 46	FLEXIBLE DUCTS
23 37 13	DIFFUSERS, REGISTERS AND GRILLES
23 38 13	COMMERCIAL-KITCHEN HOODS
23 57 00	HEAT EXCHANGERS FOR HVAC
23 62 00	PACKAGED COMPRESSOR AND CONDENSER UNITS
23 72 00	AIR-TO-AIR ENERGY RECOVERY EQUIPMENT
26 24 22	AC DISCONNECT



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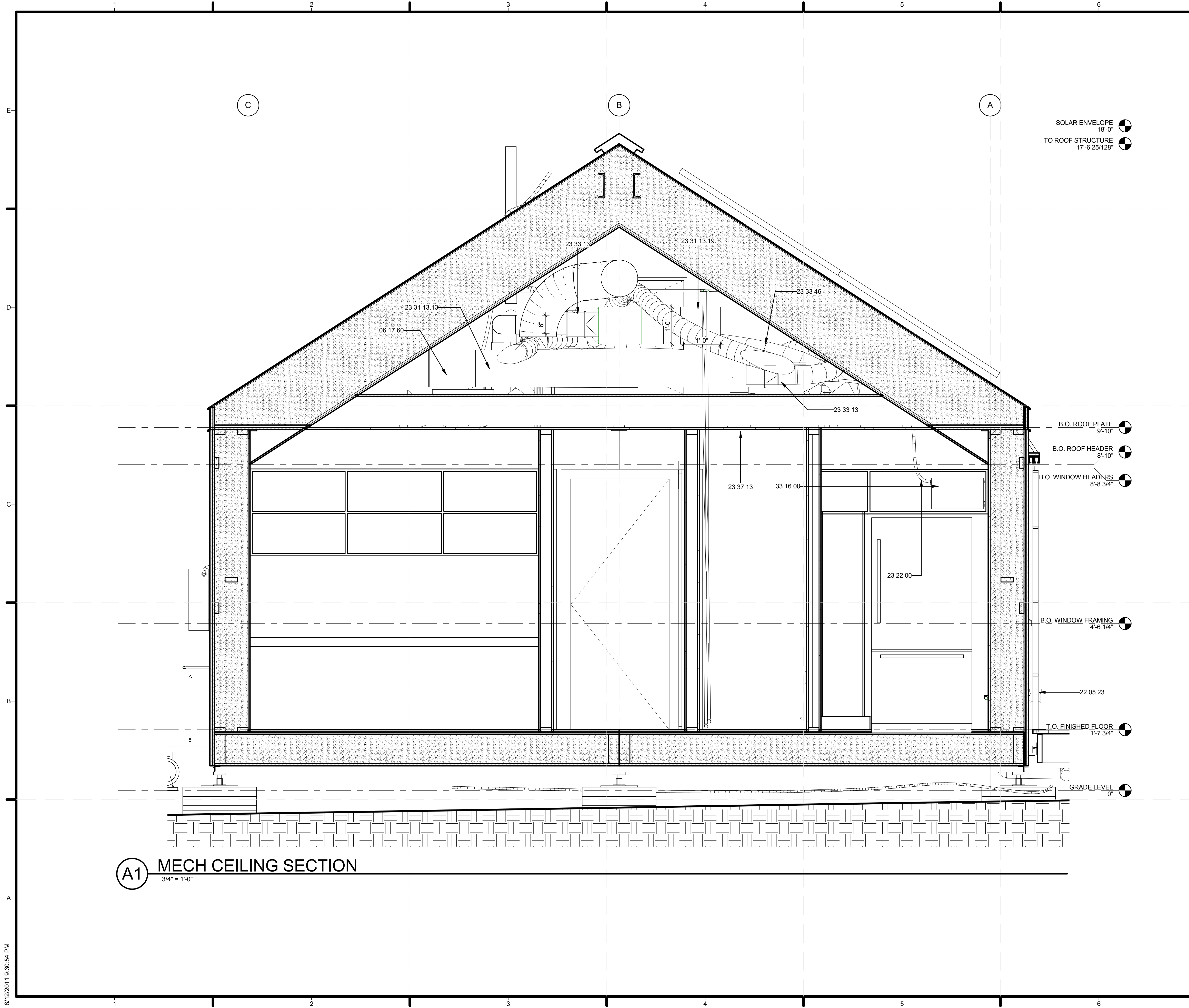


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SHEET TITLE
 HVAC PLANS AND DIAGRAMS

M-101



A1 MECH CEILING SECTION
3/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

06 17 60	METAL PLATE CONNECTED WOOD TRUSSES
22 05 23	GENERAL-DUTY VALVES FOR WATER-BASED PLUMBING PIPING
23 22 00	STEAM AND CONDENSATE PIPING AND PUMPS
23 31 13.13	RECTANGULAR METAL DUCTS
23 31 13.19	METAL DUCT FITTINGS
23 33 13	DAMPERS
23 33 46	FLEXIBLE DUCTS
23 37 13	DIFFUSERS, REGISTERS AND GRILLES
33 16 00	WATER UTILITY STORAGE TANKS

SHEET KEYNOTES



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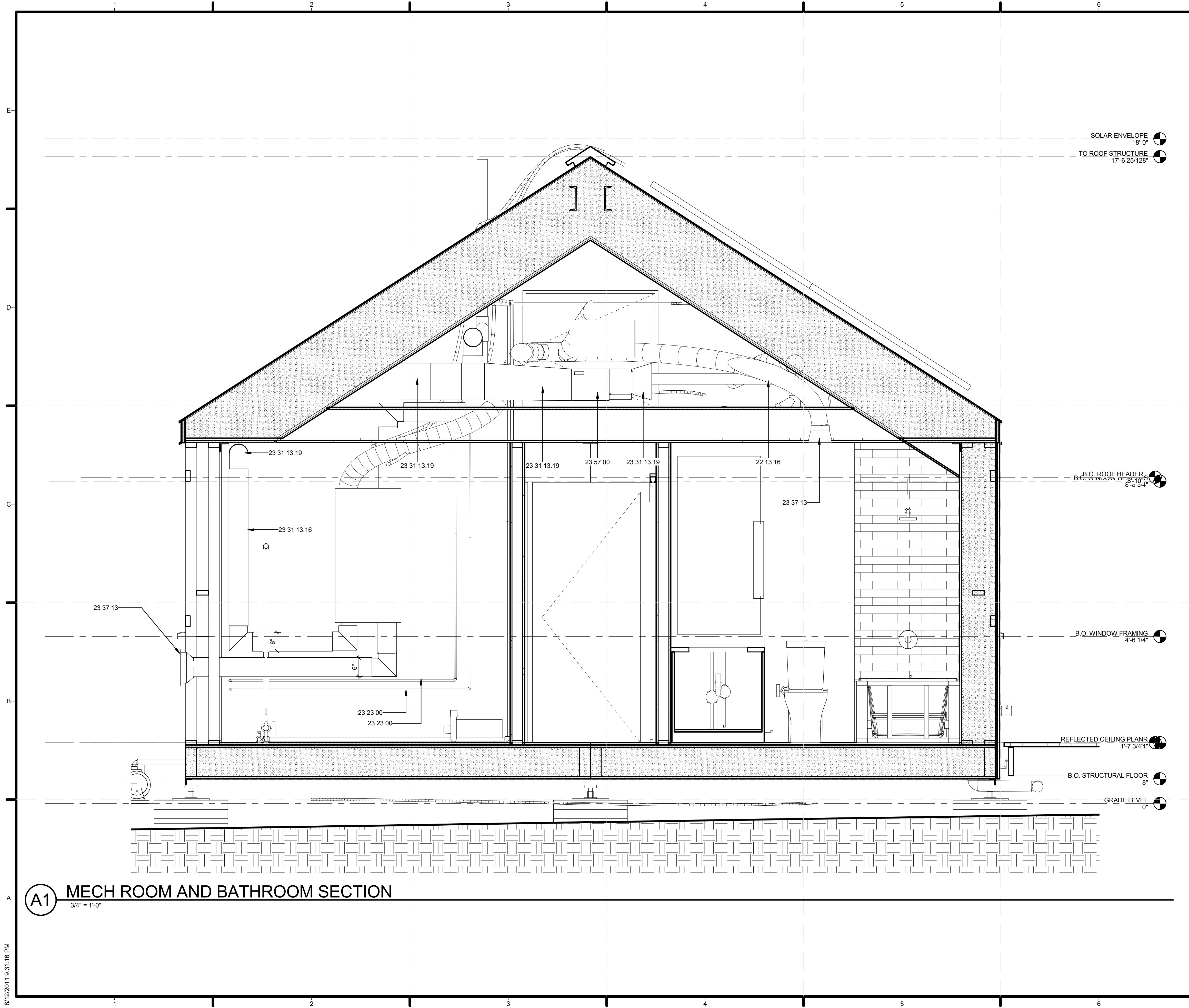


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SHEET TITLE
MECHANICAL INTERIOR ELEVATION

M-201



GENERAL SHEET NOTES

SOLAR ENVELOPE
18'-0"
TO ROOF STRUCTURE
17'-6 25/128"

REFERENCE KEYNOTES

- 22 13 16 SANITARY WASTE AND VENT PIPING
- 23 23 00 REFRIGERANT PIPING
- 23 31 13.16 ROUND AND FLAT-OVAL SPIRAL DUCTS
- 23 31 13.19 METAL DUCT FITTINGS
- 23 37 13 DIFFUSERS, REGISTERS AND GRILLES
- 23 57 00 HEAT EXCHANGERS FOR HVAC

SHEET KEYNOTES

B.O. ROOF HEADER
B.O. WINDOW HEADER
8'-10 3/4"
6'-2 3/4"

B.O. WINDOW FRAMING
4'-6 1/4"

REFLECTED CEILING PLANE
1'-7 3/4"

B.O. STRUCTURAL FLOOR
8"

GRADE LEVEL
0"

A1 MECH ROOM AND BATHROOM SECTION
3/4" = 1'-0"



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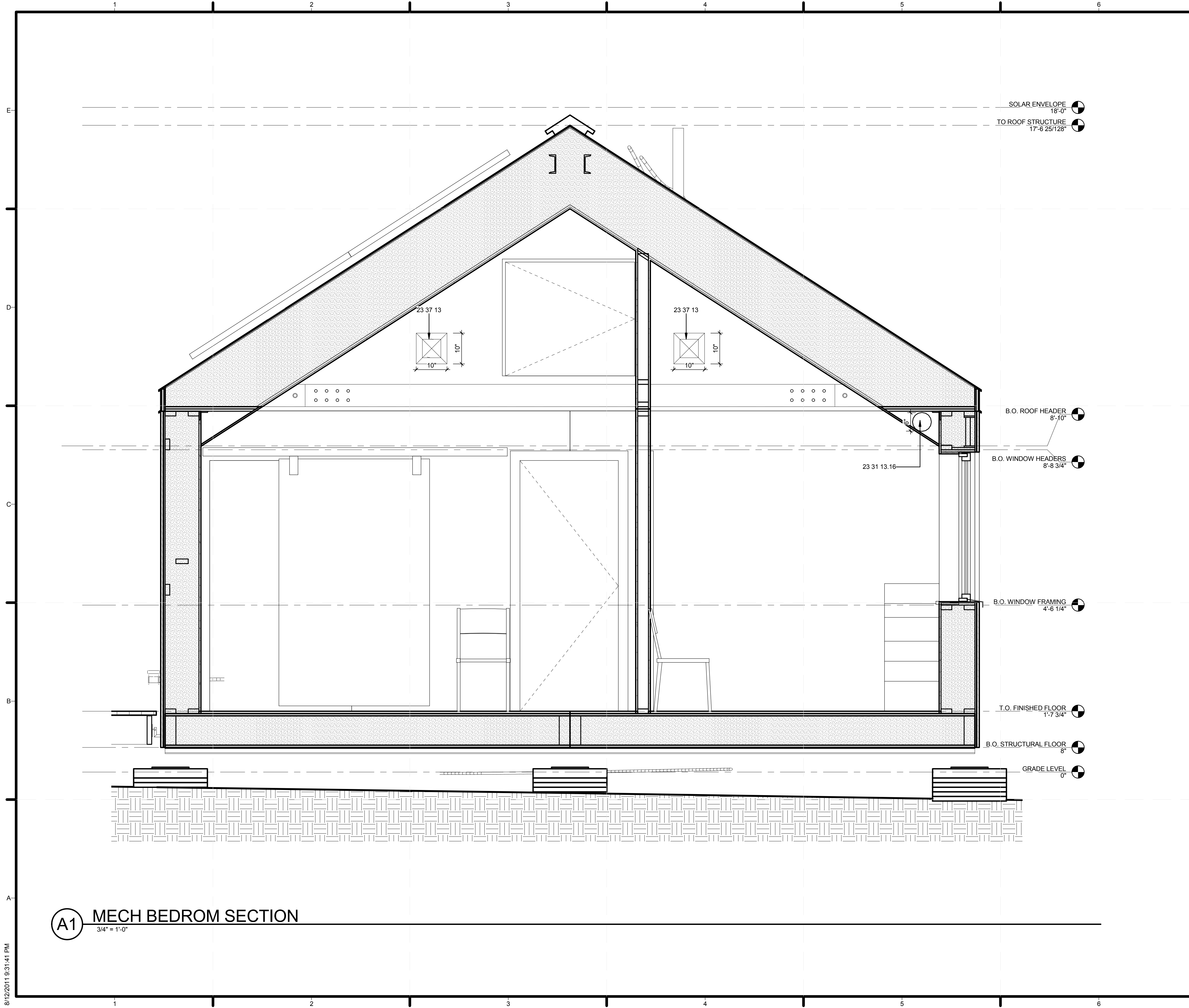


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SHEET TITLE
MECH ROOM AND BATHROOM SECTION

M-202



(A1) MECH BEDROM SECTION
3/4" = 1'-0"

GENERAL SHEET NOTES

- REFER TO SHEET L-502 FOR WATER TANK DETAILS

REFERENCE KEYNOTES

- 23 31 13.16 ROUND AND FLAT-OVAL SPIRAL DUCTS
23 37 13 DIFFUSERS, REGISTERS AND GRILLES

SHEET KEYNOTES



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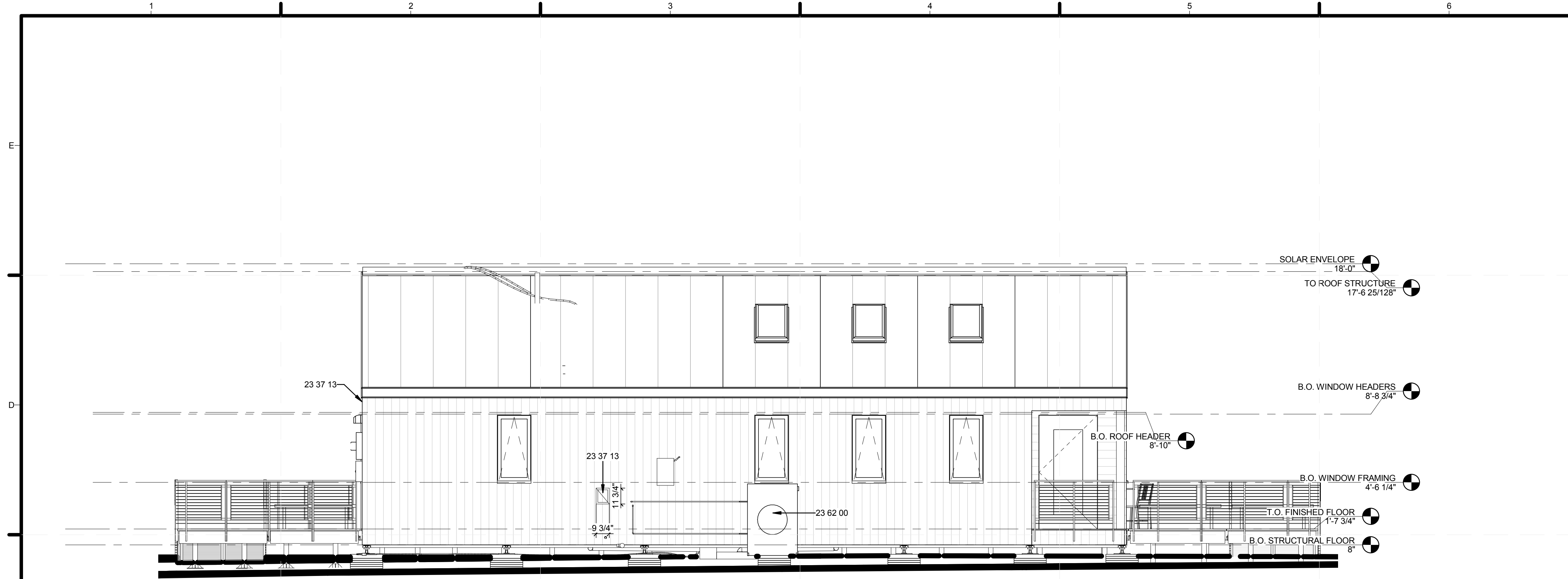
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SHEET TITLE
MECH BEDROOM

M-203

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

23 37 13 DIFFUSERS, REGISTERS AND GRILLES
 23 62 00 PACKAGED COMPRESSOR AND CONDENSER UNITS

SHEET KEYNOTES

C1 BUILDING ELEVATION - NORTH
 1/4" = 1'-0"

MECHANICAL EQUIPMENT SCHEDULE

Count	DUCT DIAMETER	Family	Family and Type	HEIGHT	Keynote	LENGTH	Manufacturer	Mark	Model	System Type	Type
1		Fan Coil Unit with Plenum - Horizontal - DX - Rear Return	Fan Coil Unit with Plenum - Horizontal - DX - Rear Return: 200 CFM		23 57 00		Mitsubishi	1	PEAD-A30AA	Supply Air, Return Air, Other, Power, Sanitary	200 CFM
1	6"	Spiral_Duct_3367	Spiral_Duct_3367: 6" DIAMETER		23 31 13.16	14'-0"		14			6" DIAMETER
1		Condenser - Air Cooled - Horizontal - 17-265 MBH	Condenser - Air Cooled - Horizontal - 17-265 MBH: 17 MBH		23 62 00		Mitsubishi	22	PUZ-HA30NHA 2	Other, Power	17 MBH
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	1'-1"		42			6" DIAMETER
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	1'-5"		54			6" DIAMETER
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	2'-7"		55			6" DIAMETER
1		Water Heater	Water Heater: 80 Gallon		22 33 30.26		Vaillant	3	auroTANK	Hydronic Supply	80 Gallon
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	2'-2"		10			6" DIAMETER
1	6"	Round_Duct_Vertical_Piece_43	Round_Duct_Vertical_Piece_43: 6" DIAMETER		23 31 13.16	4'-3"		12			6" DIAMETER
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	4'-10"		34			6" DIAMETER
1		Expansion Tank - Inline	Expansion Tank - Inline: 2 Gallon		22 05 16		Amtrrol	38	ST-12	Undefined	2 Gallon
1		SD flow based pressure boosting system	SD flow based pressure boosting system: 1.5"		22 11 23		Grundfos	39	MQ	Hydronic Supply	1.5"
1		SD ComfoAir ERV	SD ComfoAir ERV: ComfoAir 200		23 72 00			53			ComfoAir 200
1		Spiral_Duct_-_Parametric_5318 Option 2	Spiral_Duct_-_Parametric_5318 Option 2: 20" N		23 31 13.16			58			20" N
1		SD Fire Pump	SD Fire Pump: SD Fire Pump		21 31 13			60			SD Fire Pump
1	6"	Round_Duct_Vertical_Piece_43	Round_Duct_Vertical_Piece_43: 6" DIAMETER		23 31 13.16	1'-10"		37			6" DIAMETER
1		Hood	Hood: Hood		11 31 13.A4			40			Hood
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	1'-8"		41			6" DIAMETER
1	6"	Round_Duct_Horizontal_Piece_42	Round_Duct_Horizontal_Piece_42: 6" DIAMETER		23 31 13.16	1'-8"		43			6" DIAMETER
1	6"	Round_Duct_Vertical_Piece_43	Round_Duct_Vertical_Piece_43: 6" DIAMETER		23 31 13.16	10"		44			6" DIAMETER

DUCT FITTING SCHEDULE

Family and Type	Count	Keynote	Size
Rectangular to Round Transition - Angle: 45 Degree	1	23 31 13.19	6"x6"-6"ø
Rectangular to Round Transition - Angle: 60 Degree	1	23 31 13.19	6"x6"-6"ø
Rectangular Elbow - Radius: 1 W	1	23 31 13.19	10"x12"-10"x12"
Rectangular Elbow - Radius: 1 W	1	23 31 13.19	6"x6"-6"x6"
Rectangular to Round Takeoff with Damper - High Efficiency: Standard	1	23 33 13	6"ø-6"ø
Rectangular to Round Takeoff with Damper - High Efficiency: Standard	1	23 33 13	6"ø-6"ø
Rectangular to Round Takeoff with Damper - High Efficiency: Standard	1	23 33 13	8"ø-8"ø
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø
Rectangular to Round Transition - Angle: 45 Degree	1	23 31 13.19	8"x10"-6"ø
Rectangular Elbow - Radius: 1 W	1	23 31 13.19	14"x12"-14"x12"
SD VERTICAL Rectangular to Round Takeoff with Damper - High Efficiency: Standard	1	23 33 13	6"ø-6"ø
Rectangular Union: Standard	1		6"x6"-6"x6"
Rectangular Union: Standard	1		6"x6"-6"x6"
Rectangular Cross: Standard	1		6"x6"-6"x6"-1"x6"-1"x6"
Rectangular Transition - Angle: 45 Degree, shorter one	1	23 31 13.19	43"x8"-14"x12"
Rectangular Elbow - Mitered: Standard	1	23 31 13.19	12"x14"-12"x14"
Rectangular Elbow - Mitered: Standard	1	23 31 13.19	12"x14"-12"x14"
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø
Rectangular to Round Transition - Angle: 45 Degree	1	23 31 13.19	6"x6"-6"ø
Round Cross: Standard	1		6"ø-6"ø-6"ø-5"ø
Round Transition - Angle: 45 Degree	1	23 31 13.19	6"ø-5"ø
Round Transition - Angle: 45 Degree	1	23 31 13.19	6"ø-5"ø
Round Endcap: Standard	1		12"ø
Round Elbow - Pleated: Standard	1	23 31 13.19	12"ø-12"ø
Round Elbow - Pleated: Standard	1	23 31 13.19	12"ø-12"ø

DUCT FITTING SCHEDULE

Family and Type	Count	Keynote	Size
Rectangular Tee - Fillet: Standard	1	23 31 13.19	14"x12"-10"x12"-10"x12"
Rectangular Endcap: Standard	1	23 31 13.19	10"x12"
Rectangular Transition - Angle: 45 Degree, longer one	1	23 31 13.19	43"x10"-14"x12"
Rectangular Elbow - Radius: 1 W	1	23 31 13.19	10"x12"-10"x12"
Rectangular to Round Takeoff with Damper - High Efficiency: Standard	1	23 33 13	6"ø-6"ø
Rectangular to Round Transition - Angle: 45 Degree	1	23 31 13.19	6"x6"-6"ø
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø
Round Mitered Elbow - DTL: Standard	1	23 31 13.19	6"ø-6"ø

DUCT SCHEDULE

Family and Type	Count	Keynote	Size	Length
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	10"x12"	8 23/32"
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	14"x12"	4-11 51/128"
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	14"x12"	5 83/128"
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	14"x12"	7 59/128"
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	10"x12"	7-10 3/16"
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	10"x12"	1'-2"
Rectangular Duct: Mitered Elbows / Tees	1	23 31 13.13	10"x12"	1'-0 9/16"



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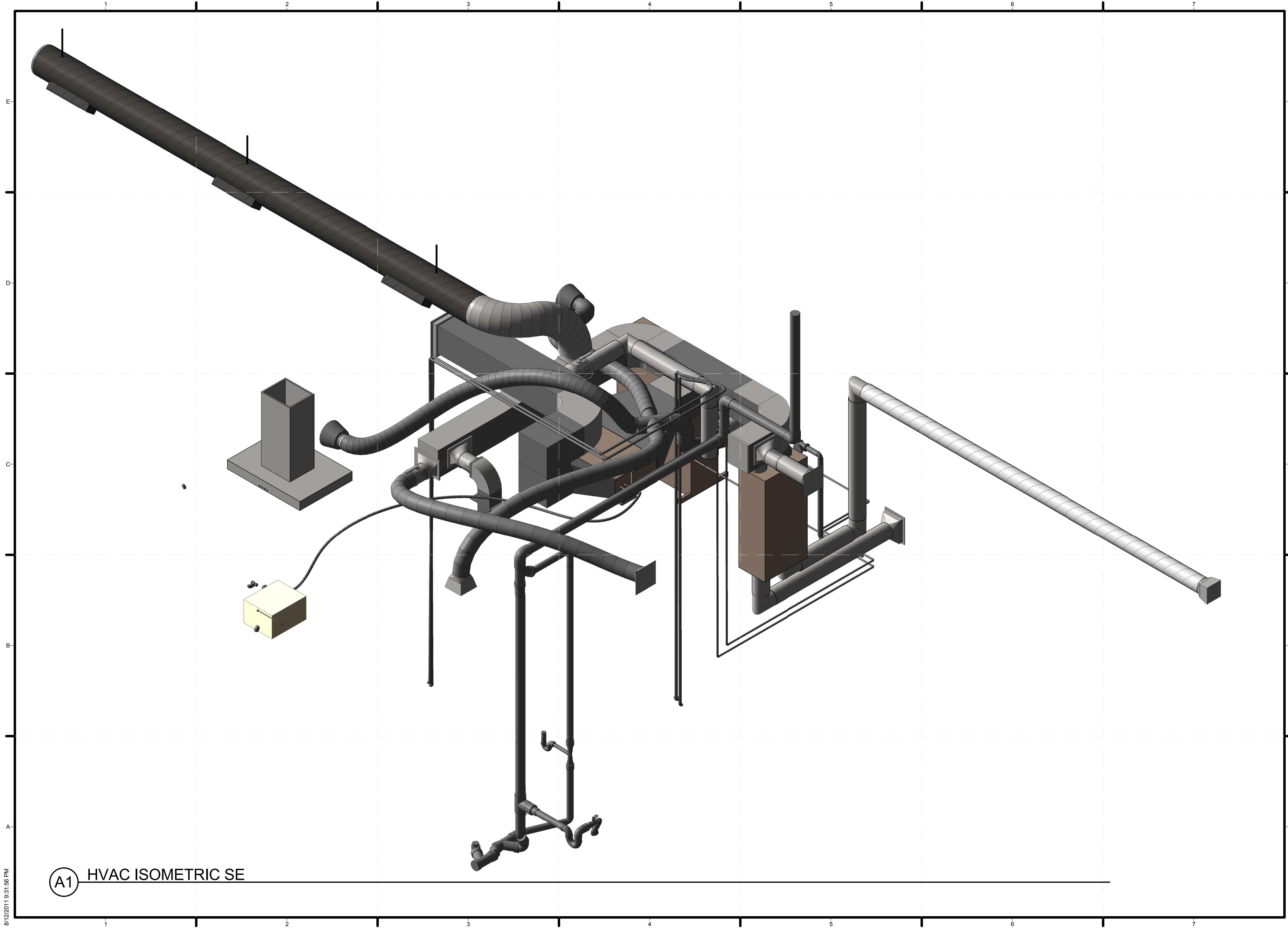


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SHEET TITLE
ELEVATION AND SCHEDULES

M-204



(A1) HVAC ISOMETRIC SE

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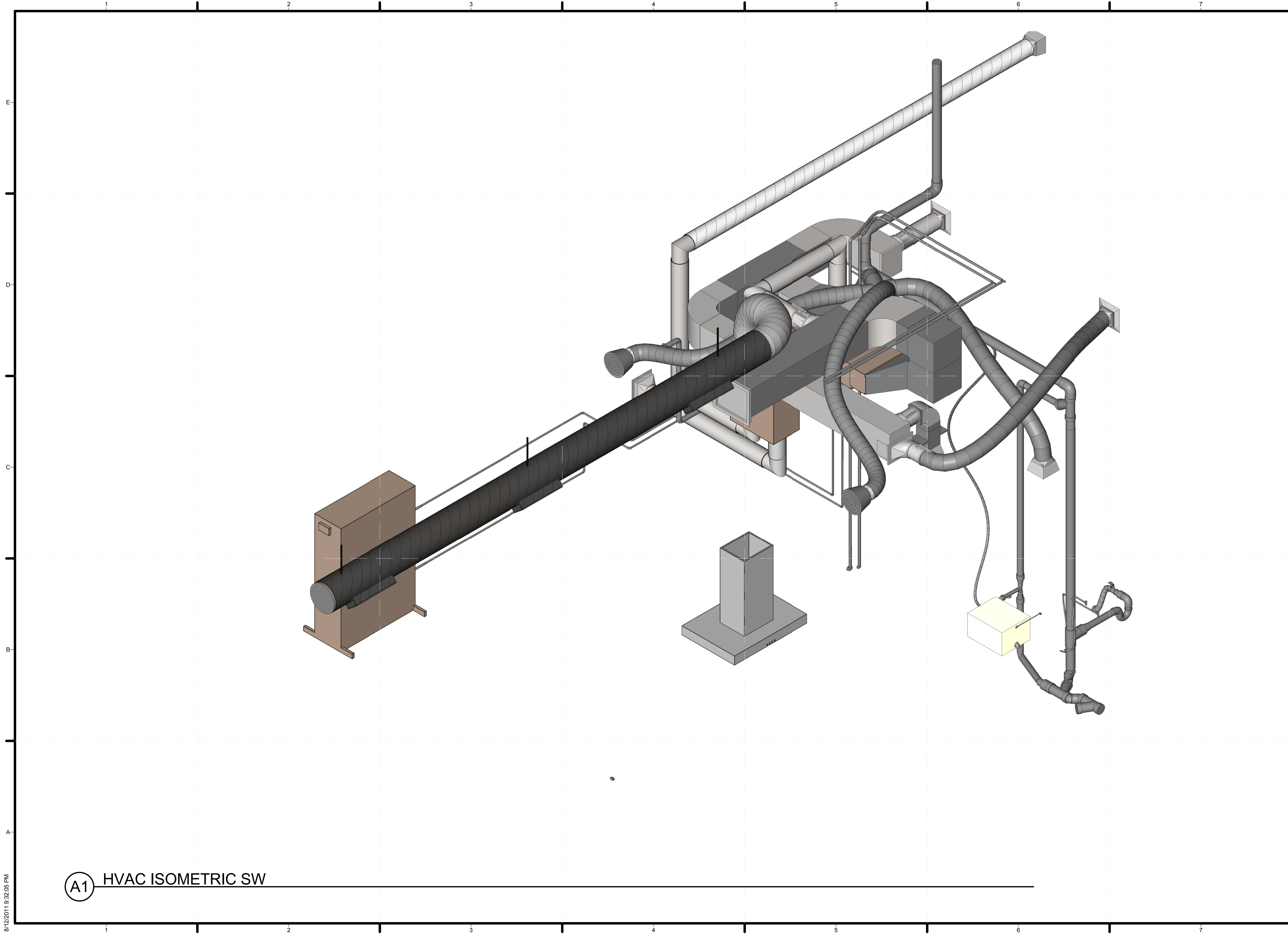


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SHEET TITLE
 HVAC ISOMETRIC SE

M-901



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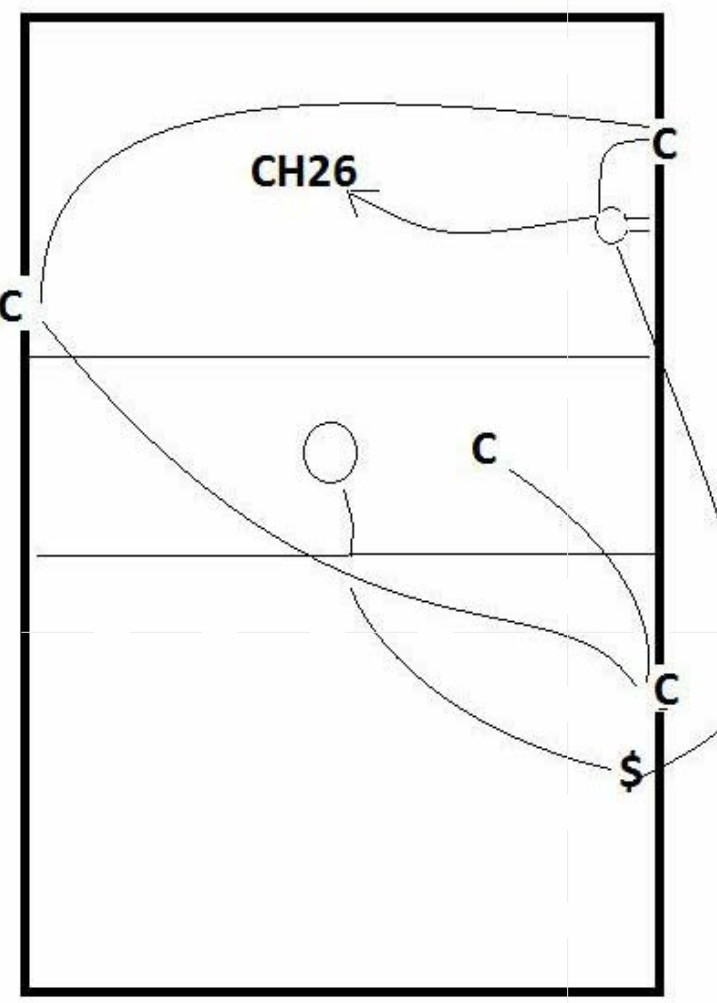
SHEET TITLE
 HVAC ISOMETRIC SW

M-902

(A1) HVAC ISOMETRIC SW

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This is a plan view of the mechanical mod (above hallway)



C - CO/Smoke Detector
○ - Receptacle
⌘ - Lightswitch

GENERAL SHEET NOTES

- CH5 TO HEAT PUMP IN ATTIC
- GROUNDING ELECTRODE IS NEAR MECHANICAL ROOM AS INDICATED
- ALL OUTLETS ARE TAMPER-RESISTANT
- ALL OUTSIDE RECEPTACLES ARE WEATHER-RESISTANT
- ALL KITCHEN, BATHROOM, AND OUTDOOR OUTLETS ARE GCFI PROTECTED (SEE LEGEND)
- ALL OUTLETS ARE AFCI PROTECTED
- REFER TO SHEET E-103 FOR LIGHTING CIRCUIT PLAN
- REFER TO SHEET E-603 FOR SCHEDULE OF CIRCUITS

REFERENCE KEYNOTES

- CH #1 - PV PANELS
- CH #2 - INDUCTION COOKTOP
- CH #3 - OVEN
- CH #4 - DRYER
- CH #5 - HEAT PUMP (OUTDOOR UNIT POWERS INDOOR)
- CH #6 - DOMESTIC WATER PUMP
- CH #7 - H2O HEATER
- CH #8 - ERV
- CH #9 - SOLAR THERMAL PUMP
- CH #10 - SEWAGE PUMP
- CH #11 - DISHWASHER
- CH #12 - WASHER
- CH #13 - KITCHEN RECEPTACLES 1
- CH #14 - KITCHEN RECEPTACLES 2
- CH #15 - SECOND BEDROOM RECEPTACLES
- CH #16 - MASTER BEDROOM RECEPTACLES
- CH #17 - LIVING-ROOM RECEPTACLES
- CH #18 - BATHROOM RECEPTACLES
- CH #19 - OUTDOOR RECEPTACLES
- CH #20 - LIGHTING CIRCUIT 1
- CH #21 - LIGHTING CIRCUIT 2
- CH #22 - LIGHTING CIRCUIT 3
- CH #23 - RANGE HOOD
- CH #24 - REFRIGERATOR
- CH #25 - LANDSCAPING LIGHTS
- CH #26 - MECHANICAL LIGHT/SMOKE DETECTORS
- CH #27 - DINING RECEPTACLES
- CH #28 - FIRE PUMP
- CH #29 - FIRE BELL/LIGHT

SHEET KEYNOTES

LEGEND	
SYMBOL	DESCRIPTION
⌘	DISCONNECT SWITCH
⌘	WALL SWITCH
⊙	OCCUPANCY SENSOR
⊙	ORGANIZER ENCLOSURE
⊕	NORMAL POWER GCFI RECEPTACLE
⊕	NORMAL POWER DUPLEX RECEPTACLE
⊕	220V RECEPTACLE
⊙	JUNCTION BOX
⊕	HOME RUN: 1 GROUND, 1 NEUTRAL, 1 CONDUCTOR
⊕	HOME RUN: 1 GROUND, 2 CONDUCTORS
⊕	EDP ELECTRICAL DISTRIBUTION PANEL (ELEV: 4 FT 6 IN)
⊕	INV INVERTER (ELEV: 4 FT)
⊕	GROUNDING ROD
⊕	ORGANIZER'S UTILITY PANEL
⊕	SMOKE DETECTOR
⊕	METER (ELEV: 3 FT)
⊕	UTILITY DISCONNECT (ELEV: 4 FT 10 IN)



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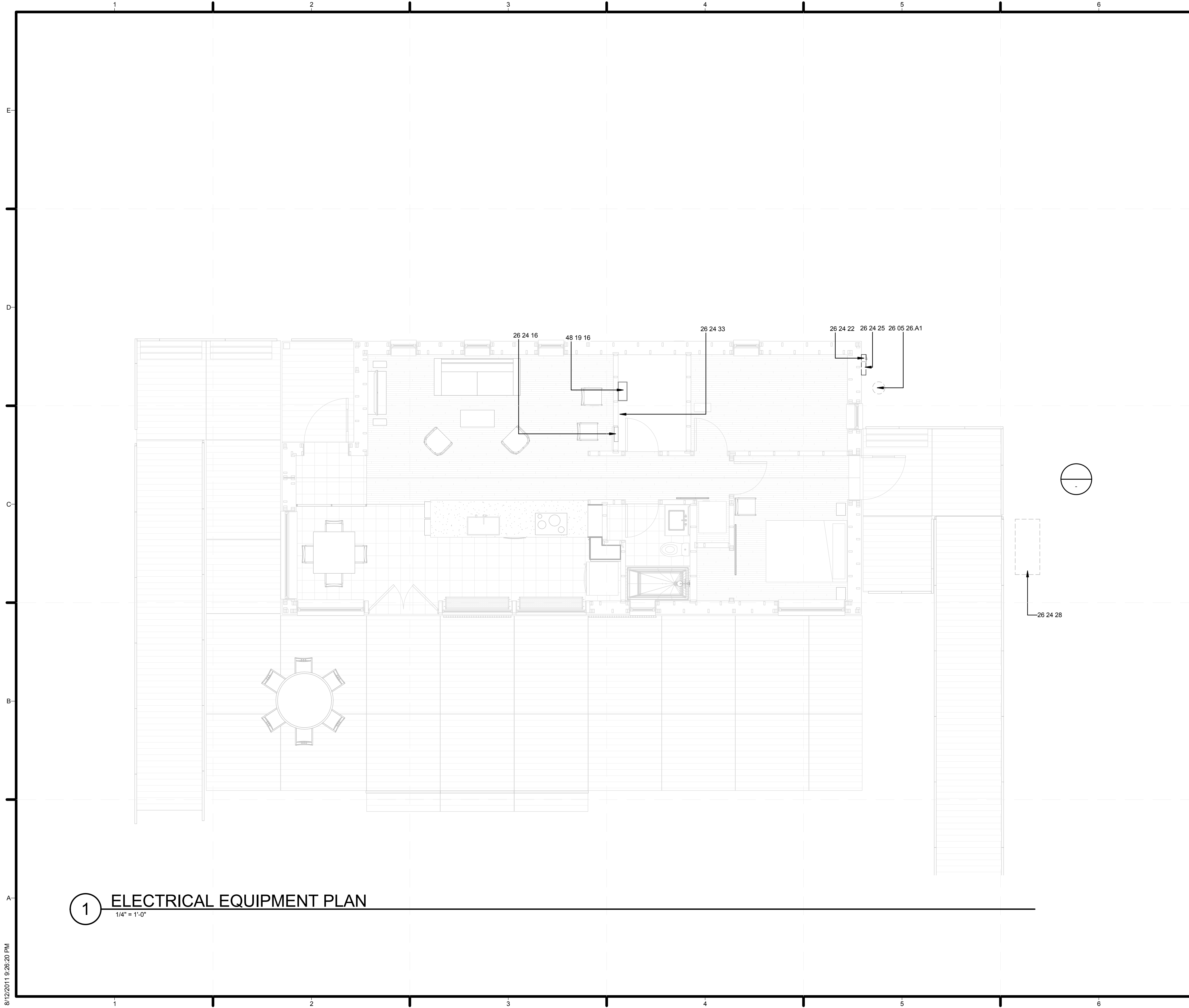
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ELECTRICAL DISTRIBUTION PLAN

E-101

(A1) ELECTRICAL DISTRIBUTION PLAN

1/4" = 1'-0"

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

26 05 26.A1	GROUNDING ELECTRODE SYSTEM
26 24 16	PANEL BOARDS
26 24 22	AC DISCONNECT
26 24 25	METER HOUSING / UTILITY DISCONNECT
26 24 28	ORGANIZER UTILITY PANEL
26 24 33	ORGANIZER ENCLOSURE
48 19 16	ELECTRICAL POWER GENERATION INVERTERS

SHEET KEYNOTES



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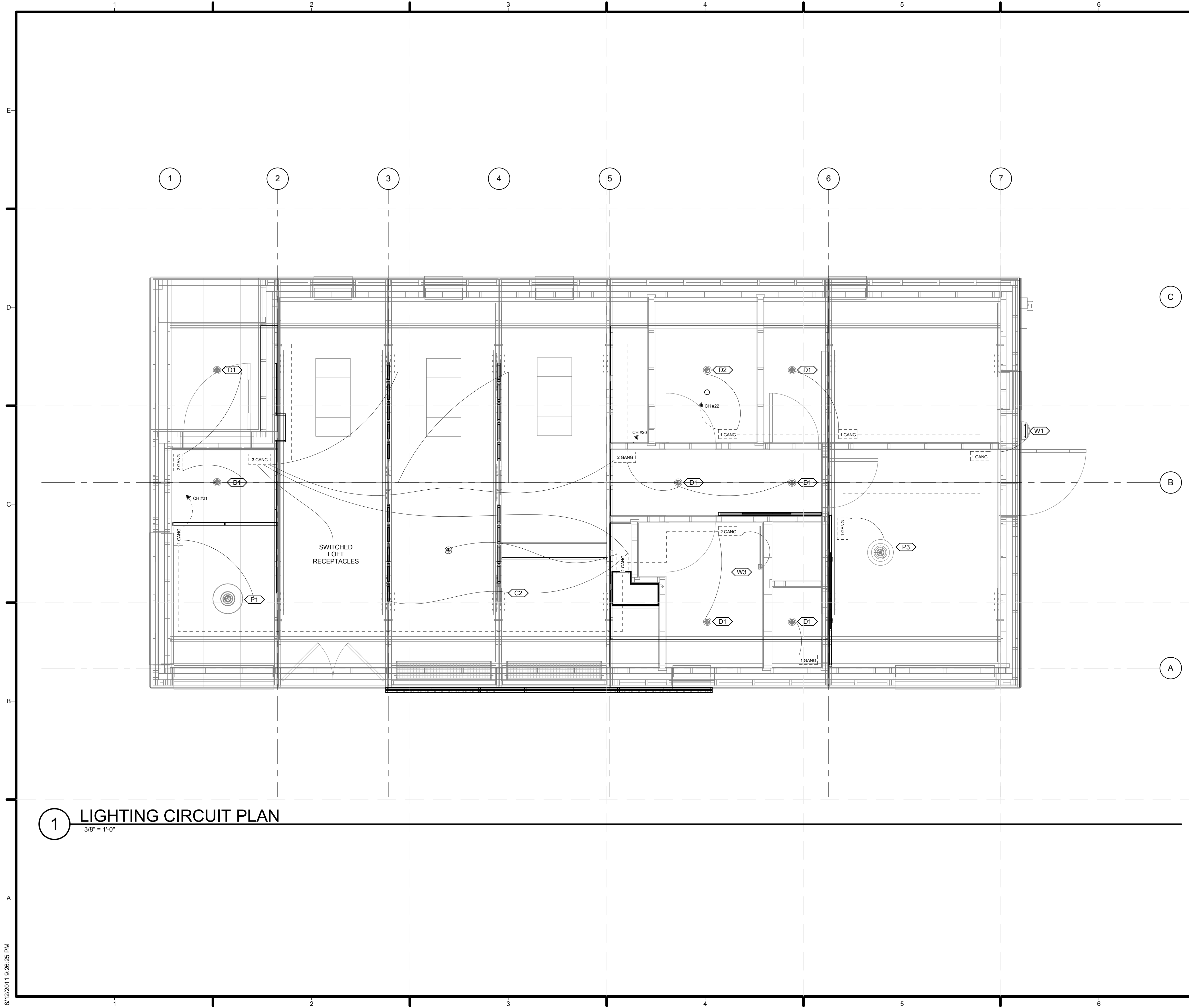
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SHEET TITLE
ELECTRICAL EQUIPMENT PLAN

E-102

1 ELECTRICAL EQUIPMENT PLAN
 1/4" = 1'-0"



GENERAL SHEET NOTES

1. URL - CIRCUIT FOR UNDERRAIL LIGHTING
2. REFER TO SHEET L-103 FOR EXTERIOR UNDERRAIL LIGHTING PLAN
3. REFER TO SHEET E-604 FOR LIGHT FIXTURE SCHEDULE

REFERENCE KEYNOTES

SHEET KEYNOTES



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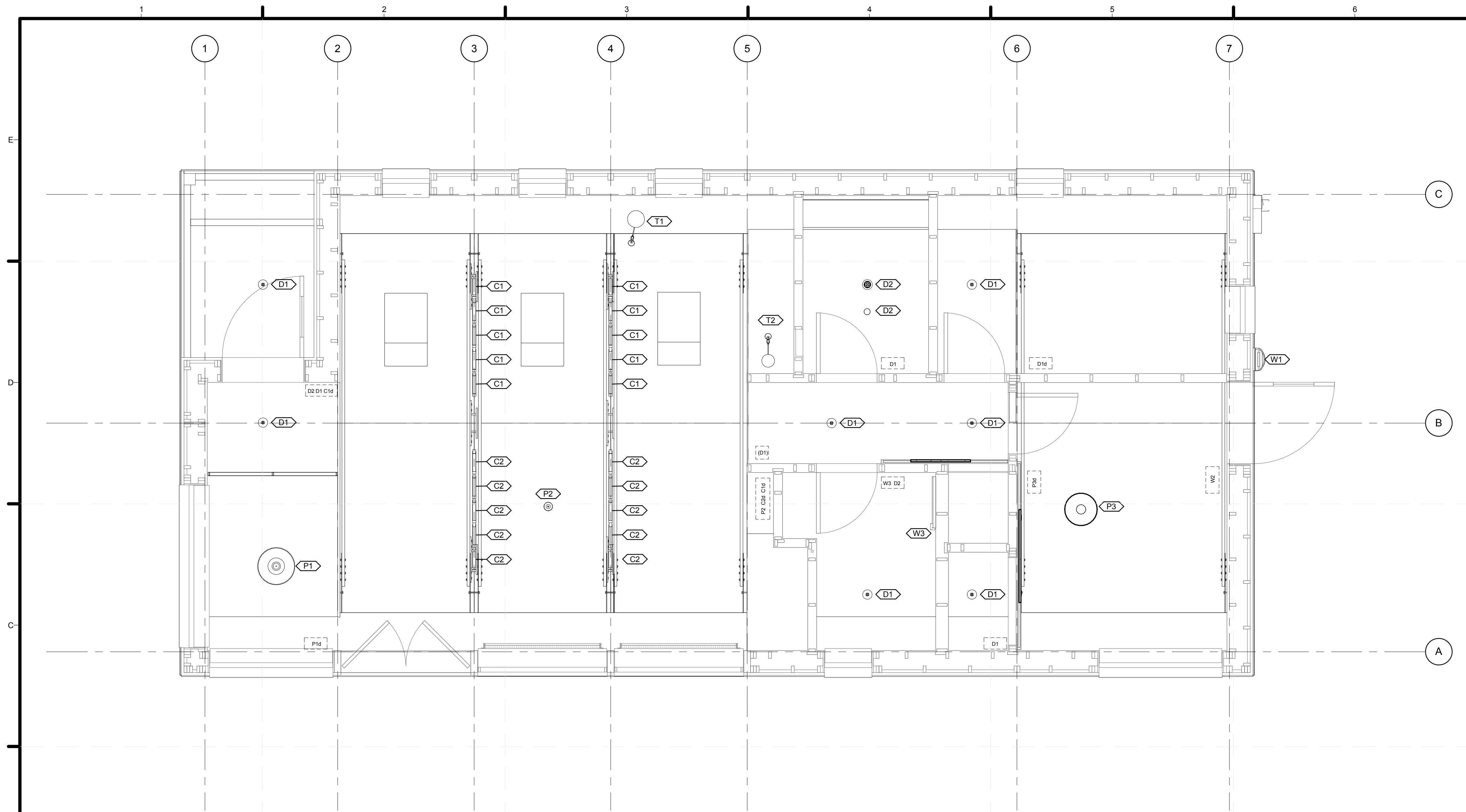
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SHEET TITLE
LIGHTING CIRCUIT PLAN

E-103

1 LIGHTING CIRCUIT PLAN
 3/8" = 1'-0"



GENERAL SHEET NOTES

- FOR C1 & C2: Fixture mounts continuously end-to-end, concealed inbetween collar ties above diffusion glass. See manufacturer's website for all connection cables and mounting hardware.
- WALL SWITCH NOTES
 - LETTERS = LIGHT SWITCH
 - SPACE INDICATES SEPARATE SWITCH
 - PARENTHESES INDICATE MULTI-LIGHT CONTROL
 - LOWER CASE "d" INDICATES DIMMER

REFERENCE KEYNOTES

05 12 00.A1 STEEL BRACING WITH WOOD CROSS TIES
 06 01 10.A1 1X3R

SHEET KEYNOTES



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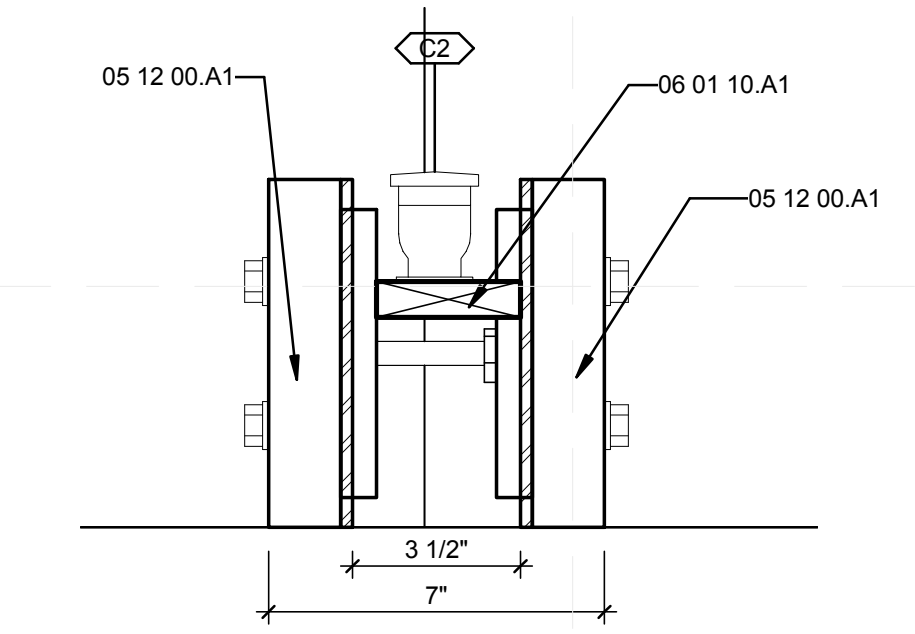
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SHEET TITLE
 LIGHTING PLAN,
 SCHEDULE, AND
 DETAILS

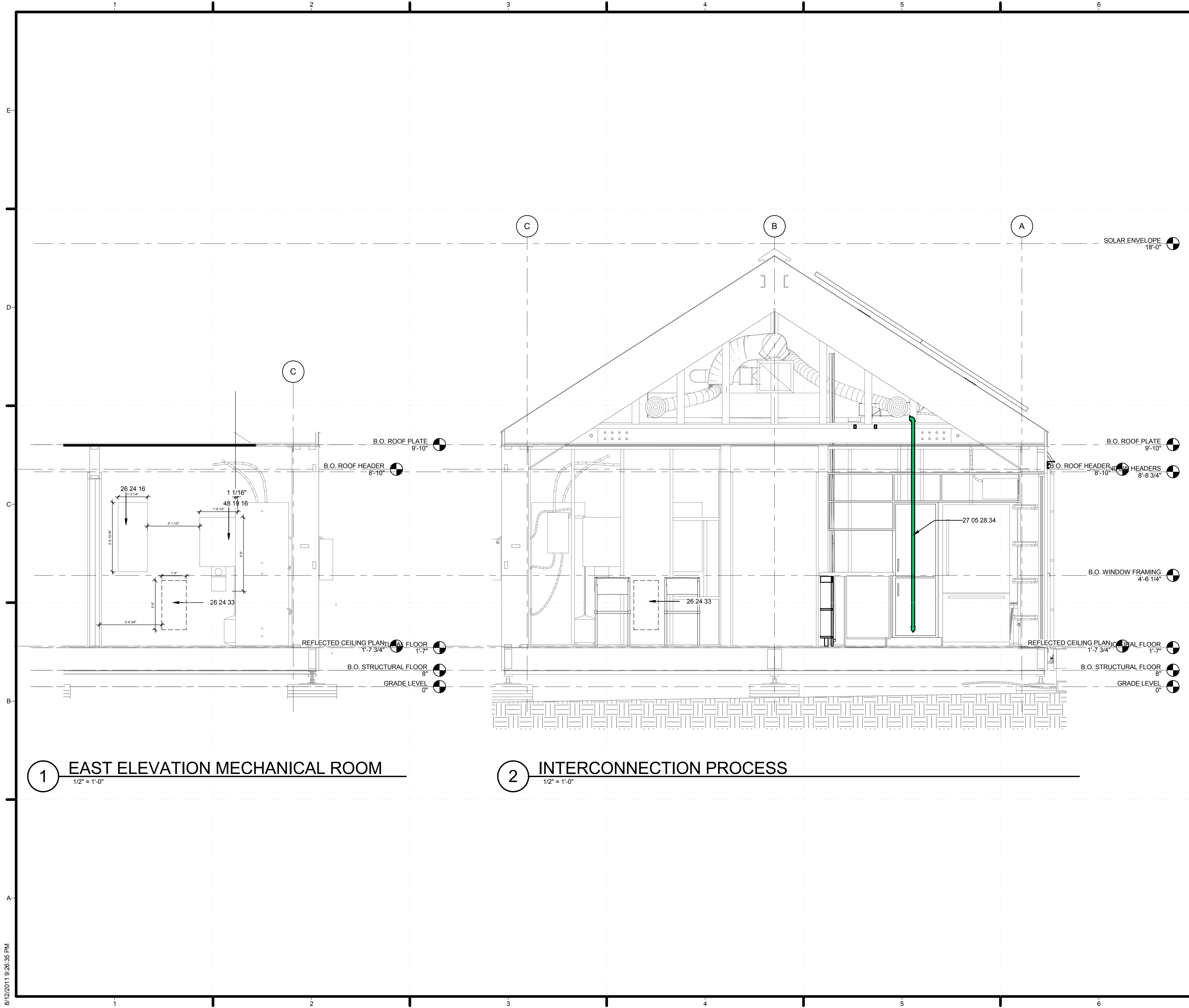
E-104

B1 LIGHTING PLAN
 3/8" = 1'-0"

LIGHTING SCHEDULE				
TYPE MARK	COUNT	MODEL	WATTAGE	DESCRIPTION
C1	10	COLOR KINETICS # 523-000050-06	13 W	Surface mounted, 12 inch linear LED fixture with wide beam distribution and 3000K color temperature at 12 watts per foot.
C2	10	SAME AS C1	13 W	SAME AS C1
D1	7	HALO RECESSED CAN	4 W	Recessed, wet location LED downlight fixture with 5 inch diameter faceplate, medium flood optics and integral driver for use with one (1) 13 watt LED at 3000K CCT. Satin White finish.
D2	2	LIGHTING SCIENCE GROUP LED BULB	4 W	13.5 WATTS
P1	1	POULSEN # PH5-1/23/CF MEDIUM-120V-WHT	125 W	Pendant (white cord) mounted decorative fixture with spun aluminum components for use with one (1) 23 watt self-ballasted compact fluorescent lamp with medium base. White finish. 13.5 WATTS
P2	1	CARAVAGIO PENDANT	12 W	40 WATTS
P3	1		100 W	
T1	1	ARTEMIDE 'Tolomeo Micro LED Floor'	60 W	Floor lamp with adjustable arm and task light for use with five (5) 2 watt LEDs. Chromed steel finish. LEDs are included in fixture part number.
T2	1	ARTEMIDE 'Itis Table'	60 W	Desk lamp with adjustable arm and task light for use with seven (7) .57 watt LEDs. Gloss White finish. Integral dimmer switch at base.
W3	1	FLOS MINI BALL	16 W	35 WATTS



A5 TRUSS LIGHT DETAIL
 3" = 1'-0"



GENERAL SHEET NOTES

REFERENCE KEYNOTES

26 24 16	PANEL BOARDS
26 24 33	ORGANIZER ENCLOSURE
27 05 28.34	PLASTIC CONDUIT FOR CLIMATE SENSORS
48 19 16	ELECTRICAL POWER GENERATION INVERTERS

SHEET KEYNOTES



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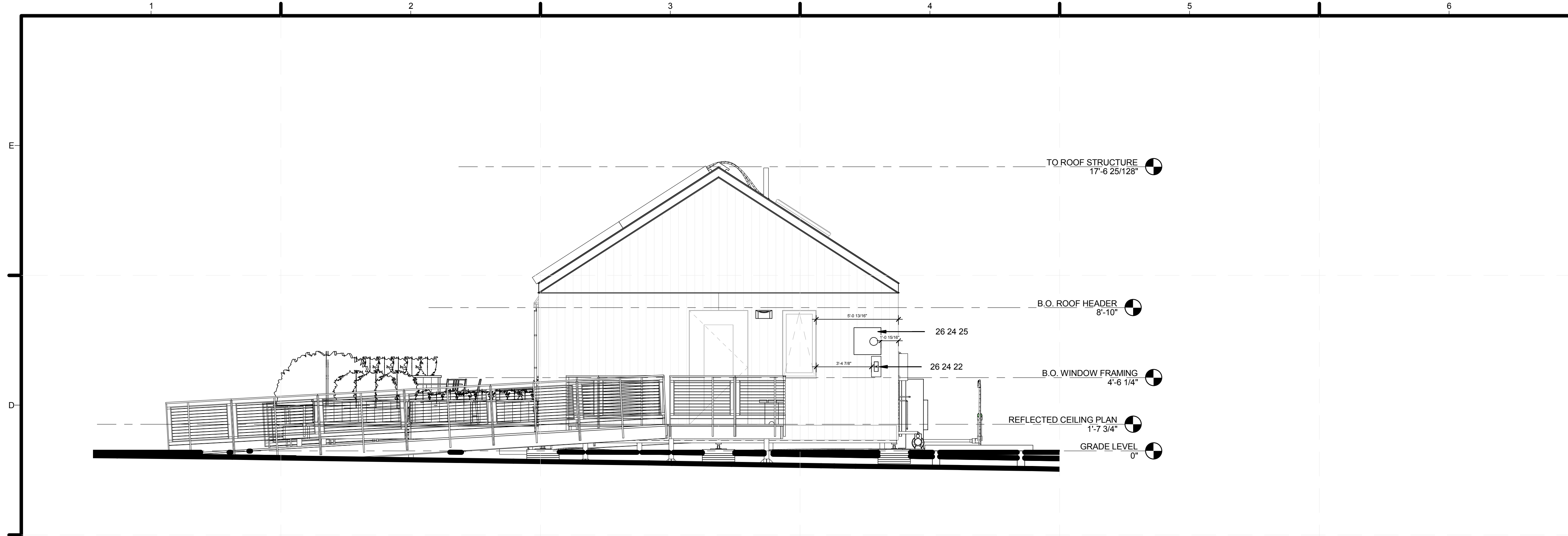
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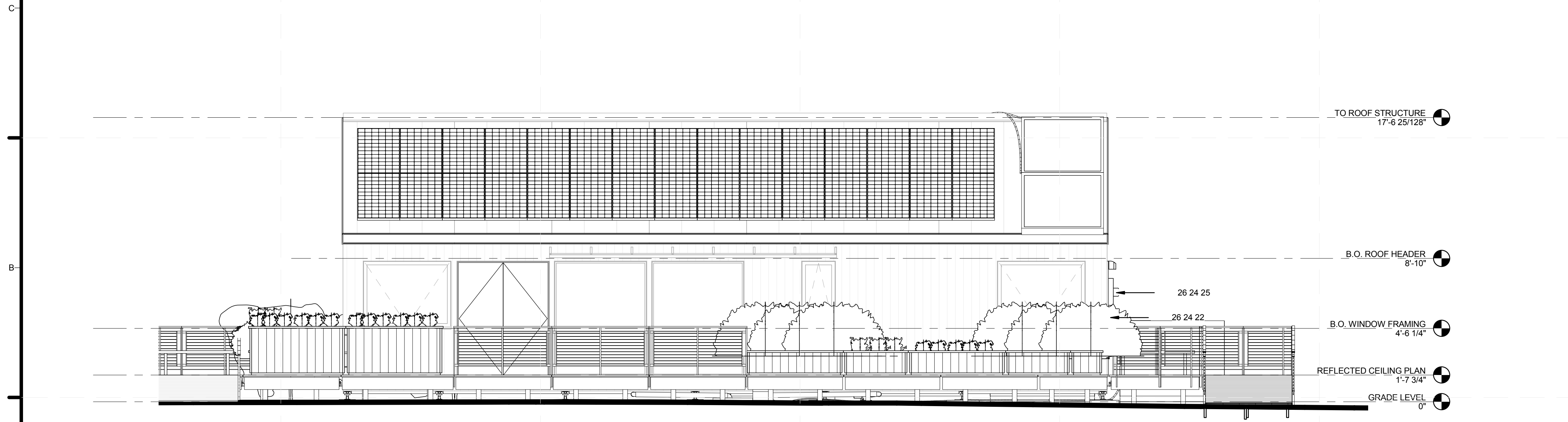
SHEET TITLE
 ELECTRICAL ELEVATIONS

E-201

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C1 BUILDING ELEVATION - EAST
1/4" = 1'-0"



A1 ELECTRICAL ELEVATION SOUTH
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

26 24 22 AC DISCONNECT
26 24 25 METER HOUSING / UTILITY DISCONNECT

SHEET KEYNOTES



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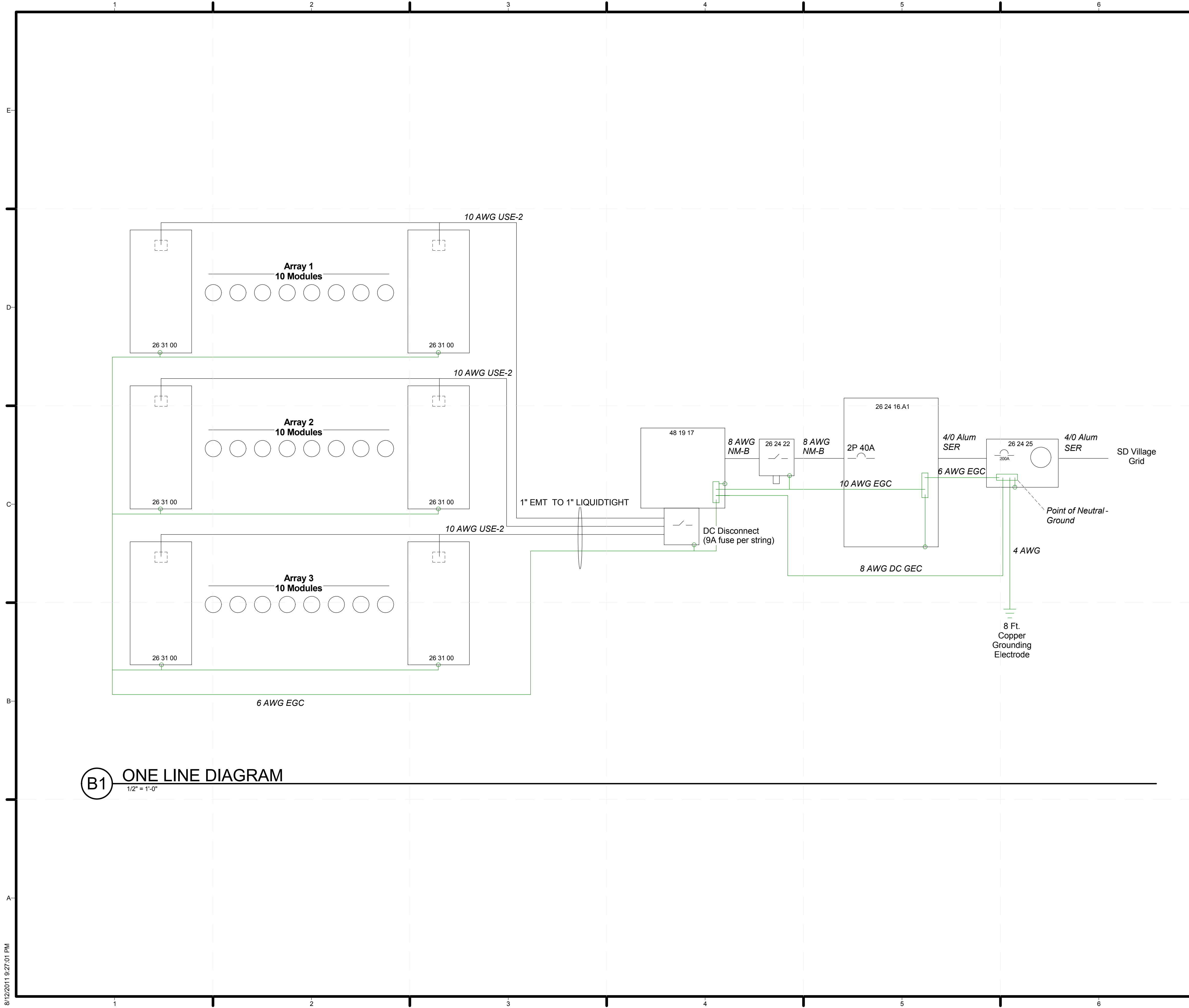


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SHEET TITLE
ELECTRICAL ELEVATIONS

E-202



GENERAL SHEET NOTES

1. REFER TO THE PROJECT MANUAL, ELECTRICAL SECTION 260500 FOR SPECIFIC INFORMATION ABOUT THE EQUIPMENT
2. 200A BREAKER PANEL (26 24 16.A1): SQUARE D QO140M200
3. AC DISCONNECT (26 24 22): CUTLER HAMMER DG322URB RATED 60A
4. METER HOUSING / UTILITY DISCONNECT (26 24 22): MILBANK U3990-XL-200
5. PHOTOVOLTAIC COLLECTORS (26 31 00): SUNPOWER 225 BK
6. ELECTRICAL SOLAR POWER INVERTER (48 19 17): SUNPOWER 7000M

REFERENCE KEYNOTES

26 24 16.A1	200A BREAKER PANEL
26 24 22	AC DISCONNECT
26 24 25	METER HOUSING / UTILITY DISCONNECT
26 31 00	PHOTOVOLTAIC COLLECTORS
48 19 17	ELECTRICAL SOLAR POWER INVERTER

SHEET KEYNOTES



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SHEET TITLE
ONE-LINE DIAGRAM

E-601

B1 ONE LINE DIAGRAM
 1/2" = 1'-0"

PV Output Circuit
 Current Carrying Conductor Sizing:
 $I_{SC} = 11.02 \times 20 = 220.4 \text{ A}$
 $I_{L1} = 7.5 \times 20 = 150 \text{ A}$
 $I_{L2} = 7.5 \times 20 = 150 \text{ A}$
 $I_{L3} = 7.5 \times 20 = 150 \text{ A}$
 Voltage Drop Calculations:
 $V_{drop} = I \times R$
 $R = \frac{2 \times L \times K}{CM}$
 NEC Chapter 9 Table 9 suggests #14 AWG or larger wire to minimize VD.
 Conclusions: Use #14 AWG copper to reduce VD and because disconnect tag accepts 10 AWG 6 AWG wires.
Equipment Grounding (NEC 690.47(C)):
 #6 AWG minimum according to NEC 690.45.
 Use #6 AWG solid bare copper to reduce risk of physical damage (NEC 250.64(D), 250.120(D)).
Conduit Sizing (NEC Annex Table C.1):
 EMT w/ 7 conductors
 Cross-Sectional Area of EMT (Chapter 9 Table 4):
 1 1/4" = 132.2 mm² @ 40% fill
 1" = 76.4 mm² @ 40% fill
 10 AWG USE-2 Area: (28.19 mm) x (8) = 225.52 mm² (Chapter 9 Table 9)
 6 AWG bare Area: 17.09 mm² (Chapter 9 Table 8)
 Total Area of wiring: 186.23 mm²
 Conclusions: 1 1/4" conduit is too small. Choose 1" EMT Conduit instead.
 EMT transitions to LFMC for disassembly purposes. Sizing LFMC:
 EMT w/ 7 conductors
 Cross-Sectional Area of EMT (Chapter 9 Table 4):
 1 1/4" = 132.2 mm² @ 40% fill
 1" = 76.4 mm² @ 40% fill
 10 AWG USE-2 Area: (28.19 mm) x (8) = 225.52 mm² (Chapter 9 Table 9)
 6 AWG bare Area: 17.09 mm² (Chapter 9 Table 8)
 Total Area of wiring: 186.23 mm²
 Conclusions: 1" LFMC conduit is too small. Choose 1" LFMC Conduit instead.

Additional PV Calculations (NEC 690.7)
 Midd VT Record Low = -32°F = -35.6°C
 Washington D.C. Record Low = -15°F
 $T_{corrected} = -132.5 \text{ mV/K}$
 $STC = 25^\circ\text{C}$ ΔT from $STC = 25^\circ\text{C} + 35.6^\circ\text{C} = 60.6^\circ\text{C}$
 $Temp Correction = 8.1 \text{ V higher at } -32^\circ\text{F than STC}$
 $(VOC = 48.5 \text{ V}) + 8.1 = 56.6 \text{ V} = \text{max output circuit Voltage per panel}$
 $x 10 = 566.3 \text{ max Voc} < 600 \text{ V max}$
 DC Disconnect Fuse Sizing:
 $1.56 \times 5.97 \text{ (In)} = 9.3 \text{ A minimum fuse}$
 Use 10A fuse per string (NEC 690.8(B)(1), 240.3(B), 240.6)
 Use of Array = 27.9A
 DC Disconnect is rated for up to 38A max ISC

Inverter Output Circuit
Circuit Sizing (NEC 690.8(B)(1)):
 Max inverter output current = 29A AC (inverter specs)
 $29 \times 1.25 = 36.25 \text{ A}$
40A Circuit Breaker located opposite utility input, suitable for backfeed
#8-3 NM-B w/ GG copper wire per Table 310.16
Panel Suitability:
 PV OCPD = Main OCPD $\leq 120\%$ of service-panel rating
 120% of panel rating = $1.2 \times 200 \text{ A} = 240$
 $PV \leq 240 \text{ A} = 200 \text{ A or } 40 \text{ A}$
 A 40A Circuit Breaker can be used in the breaker panel (690.64(B))
Grounding
 Equipment Grounding Conductor = 10 AWG copper for a 40A breaker per NEC Table 250.122
 Grounding Electrode Conductor = 8 AWG copper for an 8 AWG ungrounded conductor per NEC 690.47(B) & Table 250.66

Service Entrance
 200A Service Entrance (see E-603 for calculations)
 NEC Table 310.15(B)(6)
 Conclusion: **XHHW Aluminum 4/0 SE** wiring for ungrounded conductors
Neutral Calculation
 Total Calculated Neutral Load = 77.8A (see E-603 for calculations)
 NEC Table 310.15(B)(6)
 Conclusion: **2 AWG Aluminum** wiring for grounded conductor
Grounding
 Equipment Grounding Conductor = 6 AWG copper for a 200A breaker per NEC Table 250.122
 Grounding Electrode Conductor = 4 AWG copper for a 4/0 AWG Aluminum ungrounded conductor per NEC Table 250.66
Conduit Sizing (NEC Annex Table C.1)
 EMT w/ 4 conductors (2 current carrying)
 Cross-Sectional Area of EMT (Chapter 9 Table 4):
 1.5" = 526 mm² @ 40% fill
 1" = 76.4 mm² @ 40% fill
 4/0 XHHW Area: (206.3 mm) x (2) = 412.6 mm² (Chapter 9 Table 5)
 2 AWG XHHW Area: 73.54 mm² (Chapter 9 Table 5)
 6 AWG bare Area: 27.19 mm² (Chapter 9 Table 8)
 Total Area of wiring: 513.8 mm²
 Choose 1.5" EMT Conduit for ease of wire pull.

CIRCUIT BREAKER LAYOUT

1R	1	PV PANELS	40A	2	INDUCTION COOKTOP	40A	2R
3R	5	OVEN	40A	6	DRYER	30A	4R
5R	11	HEAT PUMP	40A	8	DOMESTIC WATER PUMP	20A	6R
7G	13	H2O HEATER	30A	14	ERV	20A	8R
9R	17	SOLAR THERMAL PUMP	20A	18	SEWAGE PUMP	20A	10R
11G	19	DISHWASHER	20A	20	WASHER CIRCUT	20A	12G
13R	21	KITCHEN 1 RECEPTICAL	20A	22	KITCHEN 2	20A	14R
15A	23	BEDROOM 1	20A	24	BEDROOM 2	20A	16A
17A	25	LIVING/DINING RECEPTICALS	20A	26	BATHROOM	20A	18R
19R	27	OUTDOOR RECEPTICALS	20A	28	LIGHTING	20A	20A
21A	29	LIGHTING	20A	30	LIGHTING	20A	22A
23A	31	RANGE HOOD	20A	32	REFRIGERATOR	20A	24G
25A	33	EXTERIOR LIGHTS	20A	34	MECHANICAL ROOM LIGHTS/CO DETECTOR	20A	26A
27A	35	DINING ROOM RECEPTICALS	20A				

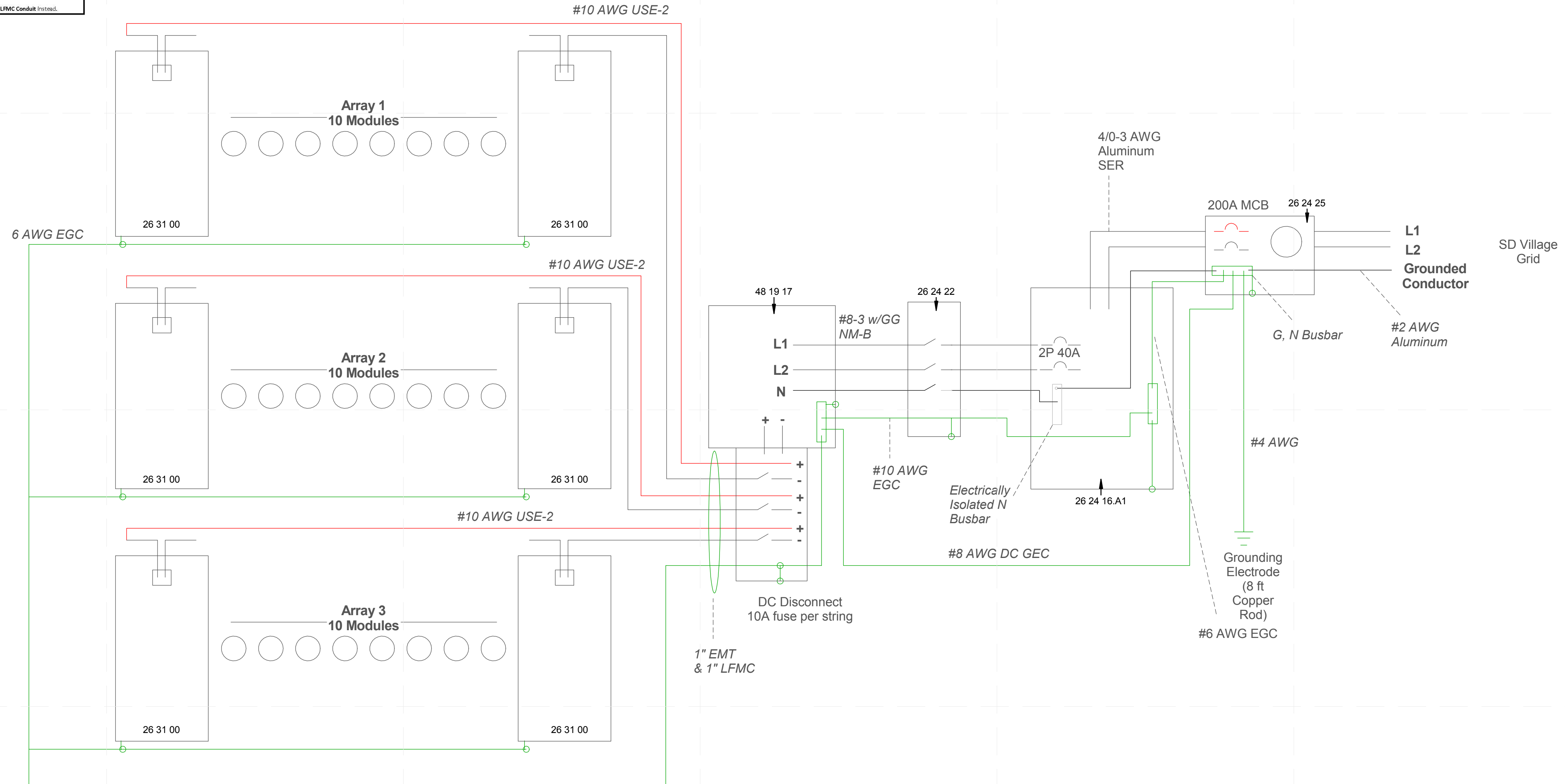
BOTTOM FED BREAKER PANEL

GENERAL SHEET NOTES

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- ELECTRICAL SOLAR POWER INVERTER (48 19 17): SUNPOWER 7000M

REFERENCE KEYNOTES

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26 24 22	AC DISCONNECT
26 24 25	METER HOUSING / UTILITY DISCONNECT
26 31 00	PHOTOVOLTAIC COLLECTORS
48 19 17	ELECTRICAL SOLAR POWER INVERTER



(A1) THREE LINE DIAGRAM
 1/2" = 1'-0"

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SHEET TITLE
THREE-LINE DIAGRAM

E-602

Service Entrance Calculations -Standard Method

Heat Pump			
Indoor Unit	655 VA		
Outdoor unit	6720 VA		
Heating Total	7375 VA	=	30.7 A

25% of Largest Motor: (6720)(.25) = 1680 VA = 7.0 A

General Loads

Lighting: 1000 ft ² @ 3VA/ft ² (Table 220.3(A))	3000 VA		
2 20A kitchen Appliance Circuits @1500VA	3000 VA		
Laundry Circuit	1500 VA		
	7500		
NEC Table 220.42			
3000 VA@ 100% Demand Factor	3000		
3001-120,000 VA @ 35% Demand Factor	1575		
	4575 VA	=	19.1 A

Fixed Equipment

Induction Cooktop (Range)	7200 VA		
Oven	5800 VA		
65% Demand Factor (NEC Table 220.55)	8450 VA	=	35.208 A

Dryer (NEC 220.54 - 100%DF) 5760 VA = 24 A

Domestic Water Pump	1152 VA		
H2O Heater	4500 VA		
ERV	68 VA		
Solar Thermal Pump	1127 VA		
Sewage Pump	1127 VA		
Dishwasher	1400 VA		
Refrigerator	1440 VA		
Microwave	1500 VA		
Range Hood	500 VA		
75% Demand Factor (NEC 220.53)	9610.5 VA	=	40.0 A

Minimum Ampacity Required for Ungrounded SE Conductors = 156.0 A

Conclusion: **Install 200A Service Entrance** and Main Panel
Use: SER Aluminum 4/0 SE wiring (Table 310.15(B)(6))

Neutral Load Calculations (NEC 220.61)

General Loads Total	4575 VA		
Range & Oven (70% maximum unbalanced load)	5915 VA		
Dryer (70% maximum unbalanced load)	4032 VA		
120V Appliances (w/ 75% DF)	5320.5 VA		
25% Largest 120V motor load (refrigerator)	360 VA		

Total Neutral Load 20202.5 VA = 84.2 A

Use 2 AWG Aluminum Wire (Table 310.15(B)(6))

Electrical Equipment Schedule

	Description	Voltage	Amp (breaker)	Amp (real)	VA (Volt-amps)	Model	Wire Specification
1	PV Panels (Inverter Output Circuit)	240	40	29	6960	Sunpower 7000-m	#8-3 w/ GG
2	Induction Cooktop	240	40	30	7200	Bosch - NIT3065UC 30"	#8-2 w/ GG
3	Oven	240	40	24.2	5800	Bosch - HBN3450UC 27"	#8-3 w/ GG
4	Dryer	240	40	24	5760	LG DLE2301W Dryer	#8-3 w/ GG
	Heat Pump - Indoor Unit	230		2.73	655	PEAD-A30AA	#12-2 w/ GG from Outdoor to Indoor
	Heat Pump - Outdoor Unit			28	6720	PUZ-HA30NHA2	#8-2 W/ GG from BB to Outdoor
5	Heat Pump Circuit	230	40	28	7375	Mitsubishi Mr. Slim (PEAD-A30AA and PUZ-HA30NHA2)	Outdoor Unit Powers Indoor Unit
6	Domestic Water Pump	240	30	4.8	1152	Grundfos MQ	#10-2 w/ GG
7	H2O Heater	240	40	18.75	4500	Vaillant Aurotank 80	#8-2 w/ GG
8	ERV	230	20	0.3	68	Zehnder ComfoAir 200	#12-3 w/ GG
9	Solar Thermal Pump (.5HP)	115	20	9.8	1127	SolUS Art S011	#12-2 w/ GG
10	Sewage Pump (.4HP)	115	20	9.8	1127	Liberty LowPro41LP	#12-2 w/ GG
11	Dishwasher	120	20	11.7	1400	Bosch SHX4AP05UC	#12-2 w/ GG
12	Washer Circuit	120	20	12.5	1500	LG WM2101HW Washer	#12-2 w/ GG
13	Kitchen 1 (receptacles)	120	20	12.5	1500	3 Receptacles (at 180VA)	#12-2 w/ GG
14	Kitchen 2 (receptacles)	120	20	12.5	1500	3 Receptacles (at 180VA)	#12-2 w/ GG
15	Second Bedroom (receptacles)	120	20	12.0	1440	8 x 180VA	#12-2 w/ GG
16	Master Bedroom (receptacles)	120	20	6	720	4 x 180VA	#12-2 w/ GG
17	Living Room Receptacles	120	20	6	720	4 x 180VA	#12-2 w/ GG
18	Bathroom Receptacle Circuit	120	20	12.5	1500	1 x 180VA	#12-2 w/ GG
19	Outdoor Receptacles	120	20	4.5	540	3 x 180VA	#12-2 w/ GG
20	Lighting Circuit 1	120	20	4.4	532	13+13+(180*2)+(12*10)+(13*2)	#12-2 w/ GG
21	Lighting Circuit 2	120	20	1.8	221.5	13.5+40+(12*10)+35+13	#12-2 w/ GG
22	Lighting Circuit 3	120	20	0.5	63.5	13.5+13+10+13.5+13.5	#12-2 w/ GG
23	Range Hood	120	20	4.2	500	Zephyr ZRm-E36BS	#12-2 w/ GG
24	Refrigerator	120	20	12	1440	KitchenAid KBL522KWMS	#12-2 w/ GG
25	Landscaping Lighting Receptacle	120	20	16	1920		#12-2 w/ GG
26	Attic Light/Smoke Det.	120	20	1.8	213.5	13.5+180+(5*4)	#12-2 w/ GG
27	Dining Receptacles	120	20	7.5	900	5 x 180VA	#12-2 w/ GG
28	Fire Pump, Bell, Horn, Strobe	240	40	32	7680		#8-3 w/ GG



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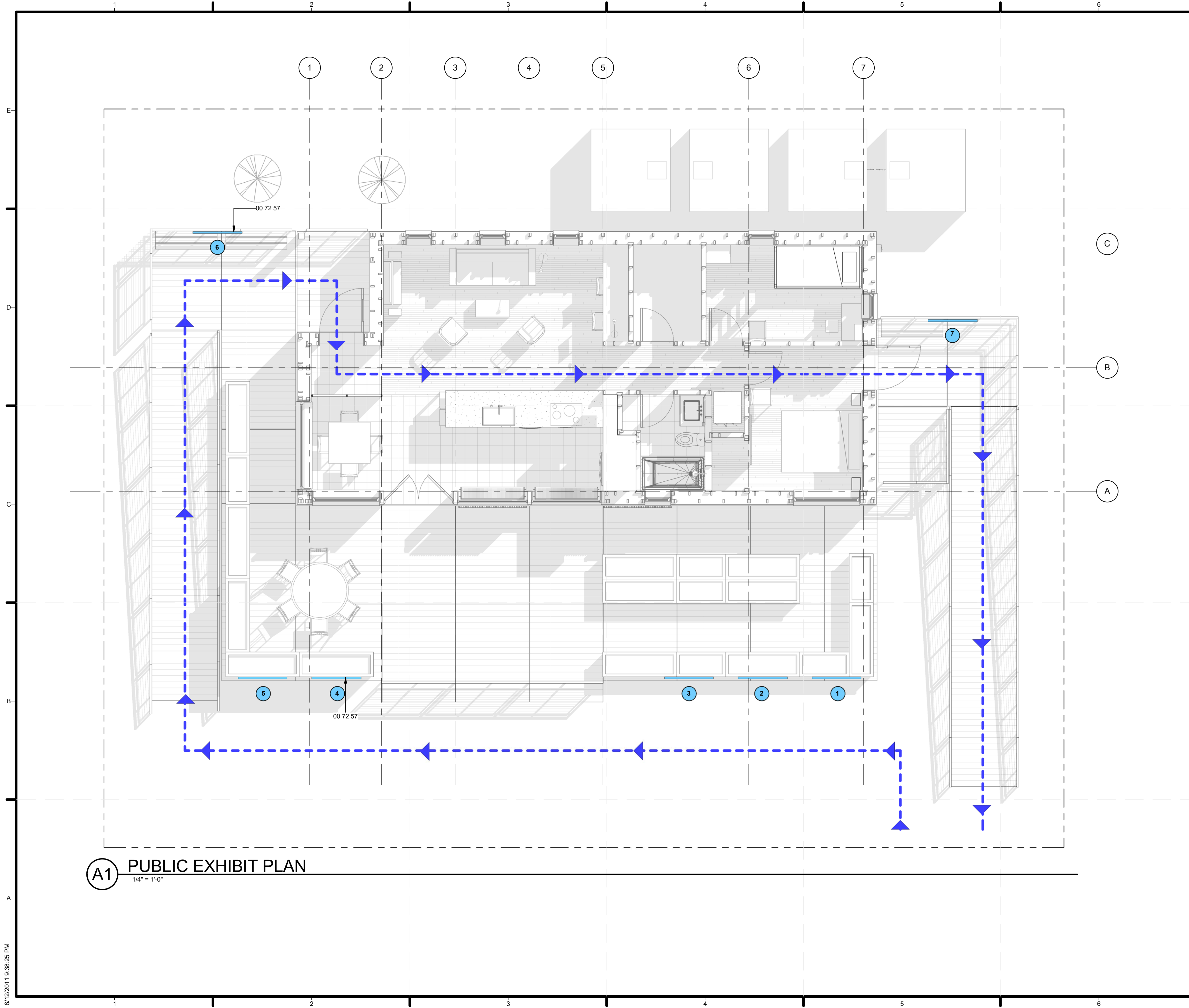
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SHEET TITLE

SCHEDULES AND SERVICE ENTRANCE SIZING

E-603



GENERAL SHEET NOTES

1. ALL RAMPES EQUAL TO OR GREATER THAN 36" WIDE
2. RAMP SLOPE DOES NOT EXCEED 1:12
3. DOOR PARTS OF ACCESSIBLE ROUTE HAVE 32" MIN CLEARANCE
4. ROUTE AT POINT 'A' WILL BE DIRECTED BY A PERSONNEL IN INTERVALS

REFERENCE KEYNOTES

00 72 57 4' WIDE DISPLAY BOARDS

SHEET KEYNOTES



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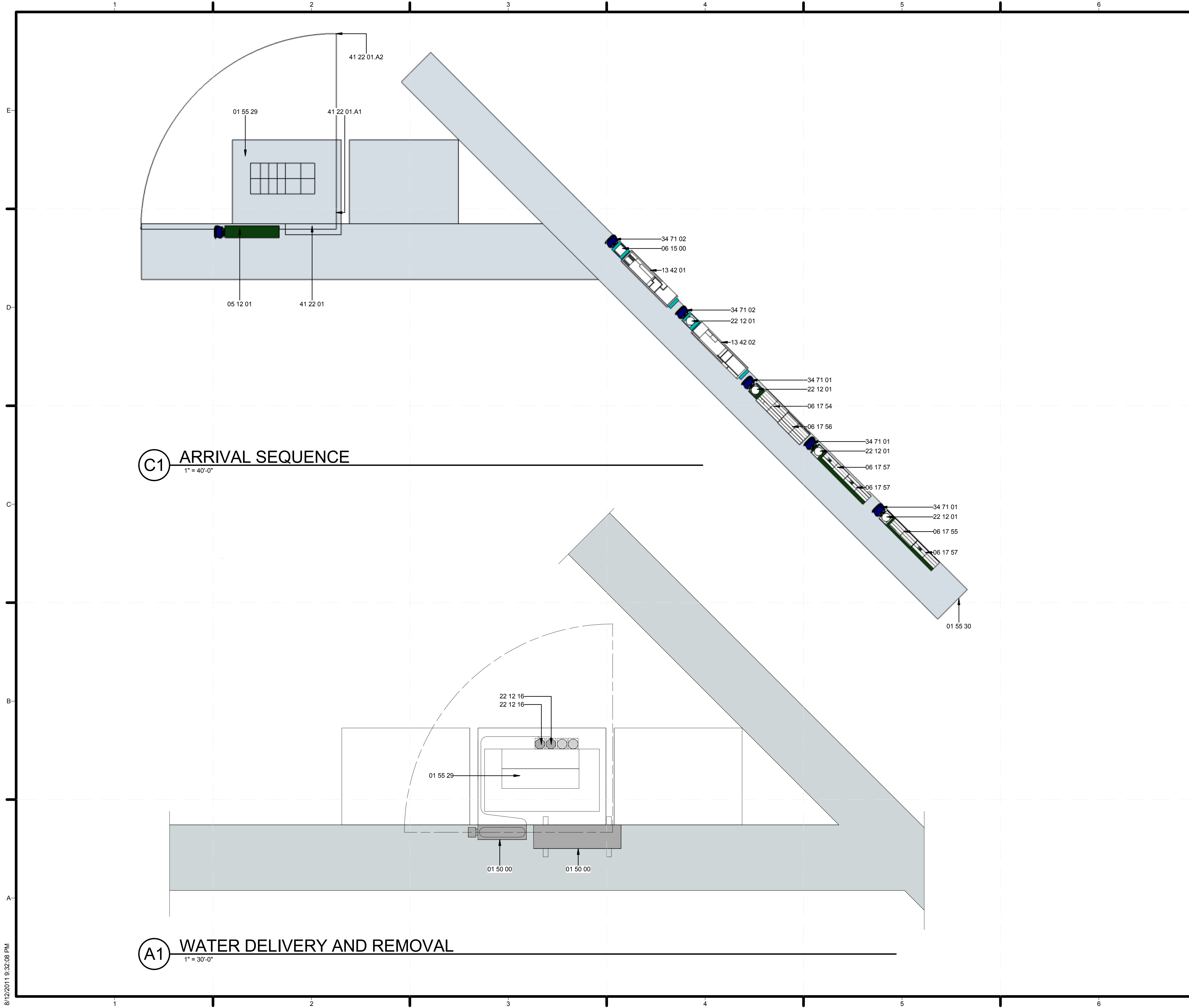
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SHEET TITLE
 PUBLIC EXHIBIT PLAN

X-101

A1 PUBLIC EXHIBIT PLAN
 1/4" = 1'-0"



C1 ARRIVAL SEQUENCE
1" = 40'-0"

A1 WATER DELIVERY AND REMOVAL
1" = 30'-0"

GENERAL SHEET NOTES

1. THE NUMBER OF "ROUNDS" NECESSARY TO FILL/DRAIN DEPENDS ON HOW MUCH THE WATER TRUCK GIVES/TAKES PER ROUND. THE TWO POTABLE TANKS EACH HOLD 750 GALLONS AND WILL BOTH BE FILLED TO CAPACITY MAKING TOTAL WATER DELIVERED 1500 GAL. AMOUNT REMOVED WILL DEPEND ON EXCESS.
2. WE REQUIRE DELIVERY TO BOTH POTABLE WATER TANKS. WATER WILL BE REMOVED FROM TWO POTABLE TANKS AND TWO WASTEWATER TANKS AT THE END OF THE COMPETITION.
3. PROPER PROTECTIVE MATS WILL BE PUT DOWN IF THE FORKLIFT NEEDS TO MOVE ON THE GRASS
4. REFER TO SHEET L-502 FOR WATER TANK DETAILS
5. THERE WILL BE SIX DECATHLETES AVAILABLE AT WATER DELIVERY AND REMOVAL TIMES TO ASSIST IN MOVING THE HOSE TO THE PROPER FILL AND REMOVAL LOCATIONS.
6. WATER TANKS ARE TEMPORARY FOR COMPETITION PURPOSES

REFERENCE KEYNOTES

01 50 00	TEMPORARY FACILITIES AND CONTROLS
01 55 29	STAGING AREAS
01 55 30	ENTERING STAGING AREA
05 12 01	STEEL FOUNDATION CHANNELS
06 15 00	WOOD DECKING
06 17 54	10' 11 3/4" WIDE TRUSS
06 17 55	6' 10 3/8" WIDE TRUSS
06 17 56	11' 1 3/4" WIDE TRUSS
06 17 57	6" MODULE
13 42 01	NORTHERN MIDD SD MODULE
13 42 02	SOUTHERN MIDD SD MODULE
22 12 01	6" DIAMETER, 38" HEIGHT WATER TANK
22 12 16	FACILITY ELEVATED, POTABLE-WATER STORAGE TANKS
34 71 01	53' FLAT TRUCK BED
34 71 02	60' OVERSIZED AND STEP DECK TRUCK BED
41 22 01	GROVE TMS 900E CRANE
41 22 01.A1	MIN BOOM LENGTH
41 22 01.A2	MAX BOOM LENGTH

SHEET KEYNOTES



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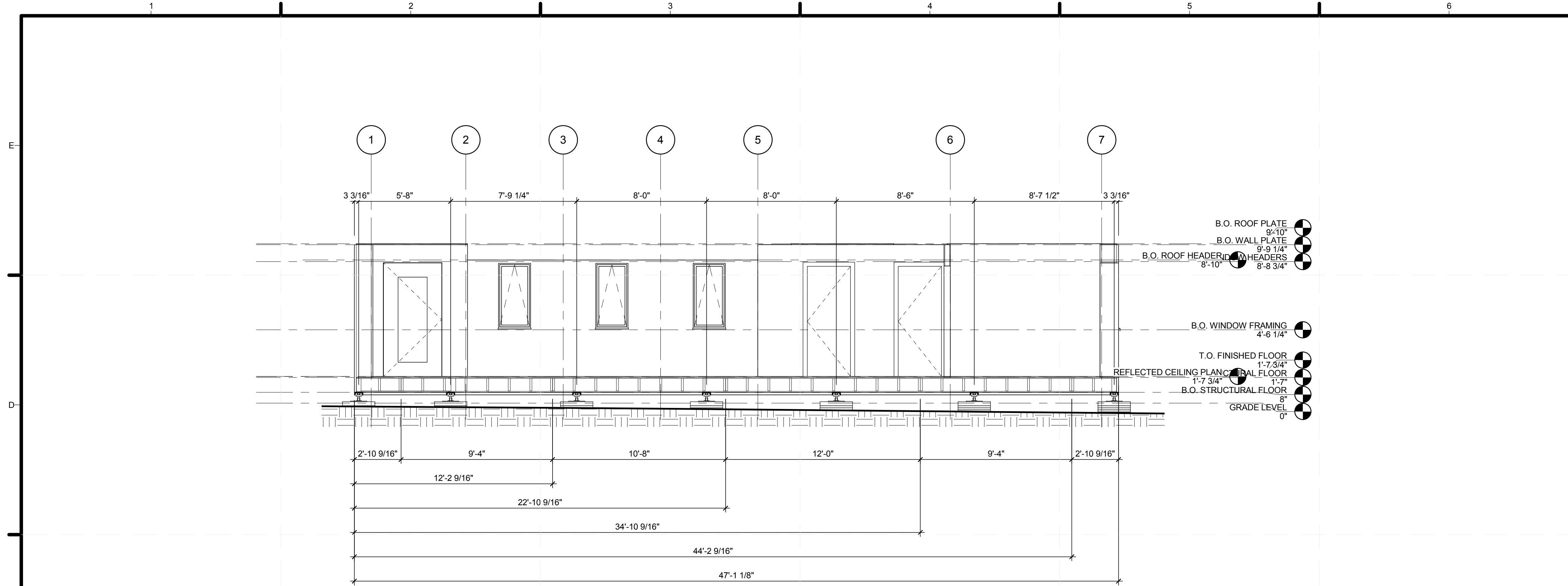


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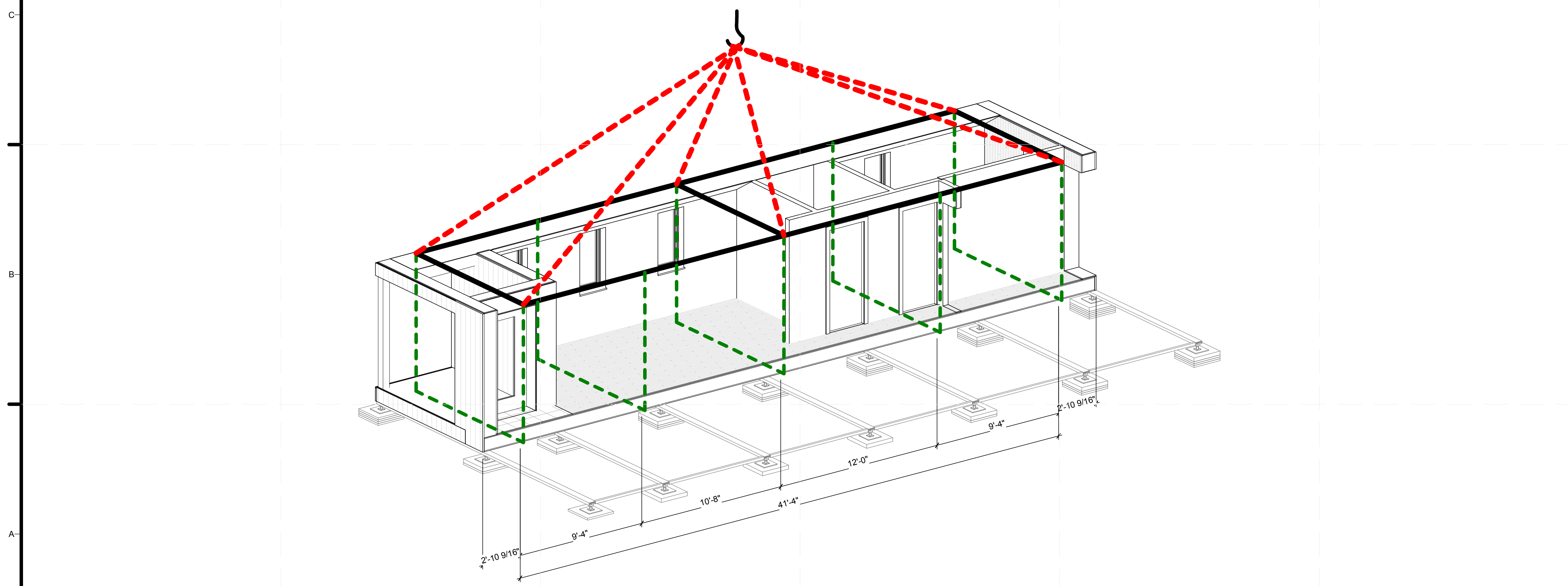
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SHEET TITLE
 ARRIVAL SEQUENCE
 PLANS AND WATER
 DELIVERY/REMOVAL

O-101



C2 NORTH MODULE SECTION
1/4" = 1'-0"



A2 LIFTING FRAMING

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

- I BEAM STEEL CHANNEL
- STEEL CABLE
- CRANE LIFTING SLING



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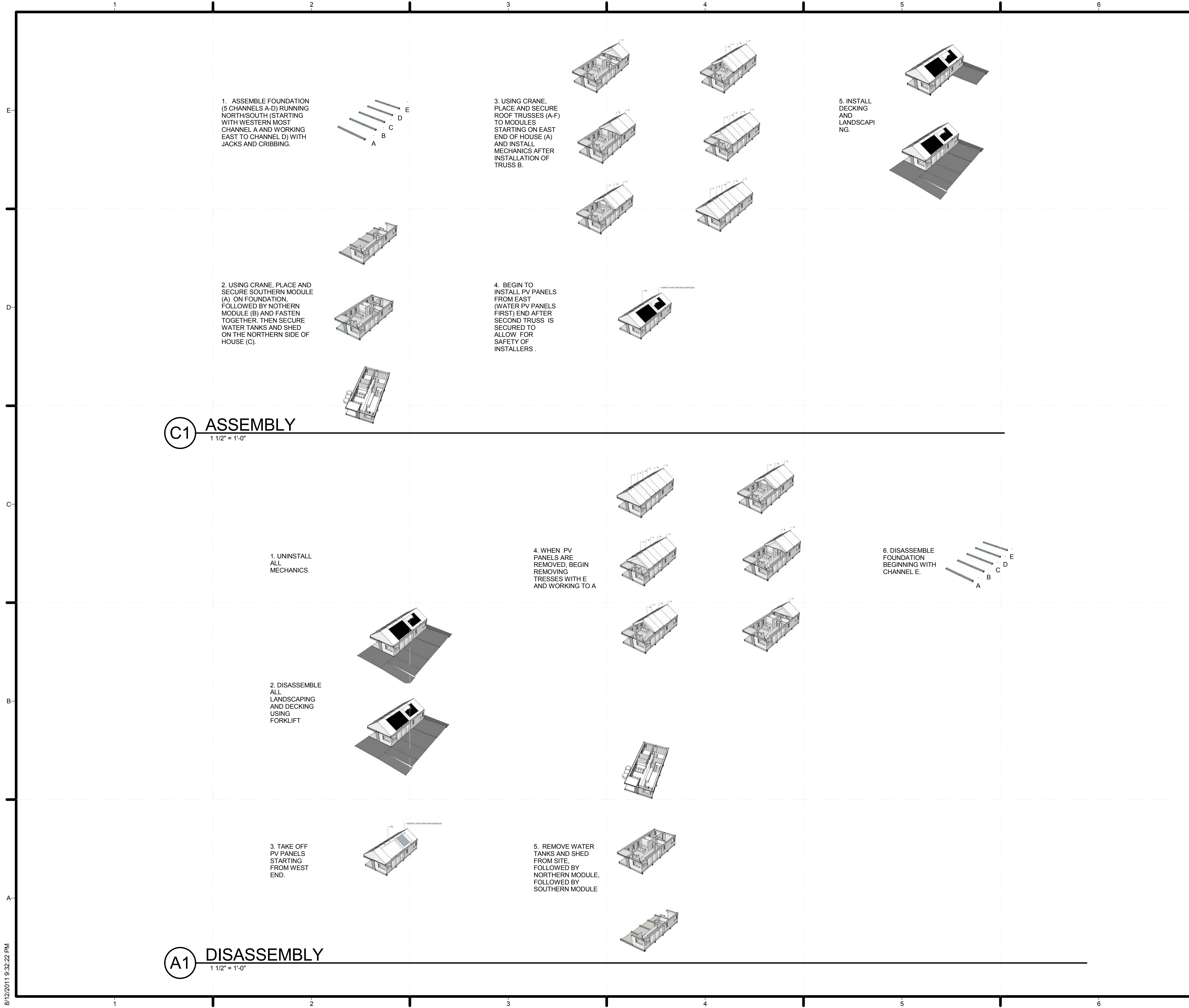


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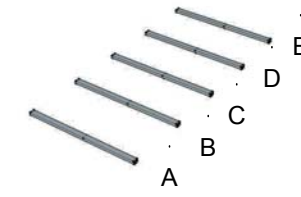
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SHEET TITLE
 LIFTING OPERATIONS

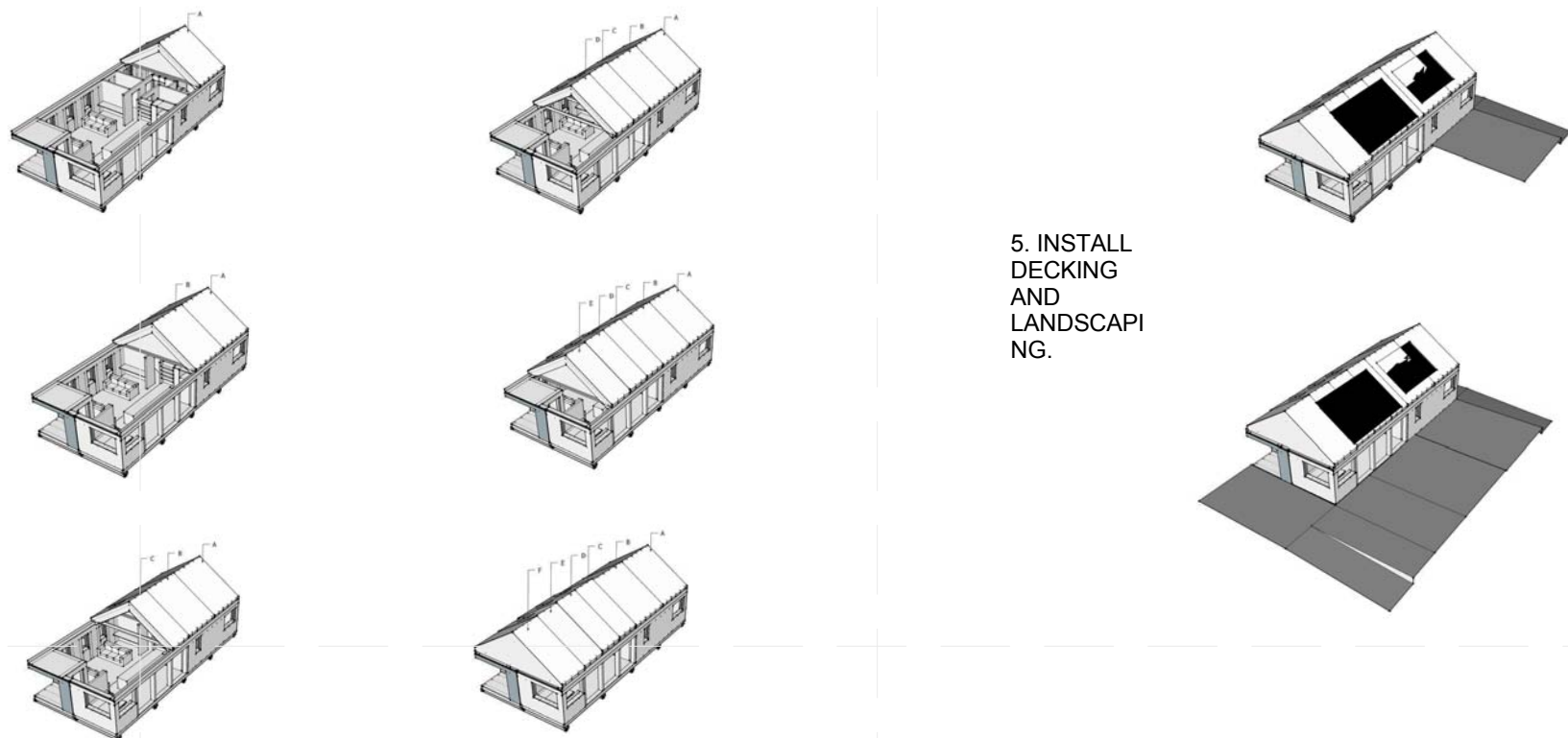
O-102



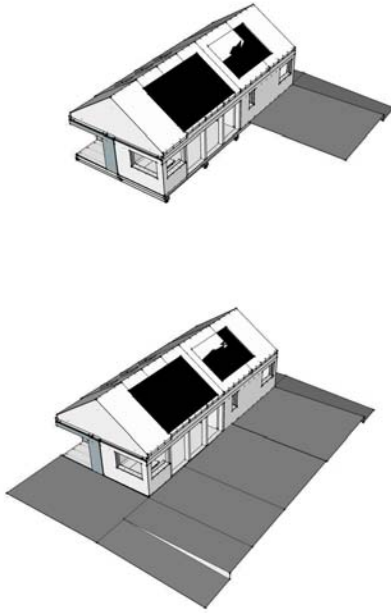
1. ASSEMBLE FOUNDATION (5 CHANNELS A-D) RUNNING NORTH/SOUTH (STARTING WITH WESTERN MOST CHANNEL A AND WORKING EAST TO CHANNEL D) WITH JACKS AND CRIBBING.



3. USING CRANE, PLACE AND SECURE ROOF TRUSSES (A-F) TO MODULES STARTING ON EAST END OF HOUSE (A) AND INSTALL MECHANICS AFTER INSTALLATION OF TRUSS B.



5. INSTALL DECKING AND LANDSCAPING.



2. USING CRANE, PLACE AND SECURE SOUTHERN MODULE (A) ON FOUNDATION, FOLLOWED BY NORTHERN MODULE (B) AND FASTEN TOGETHER. THEN SECURE WATER TANKS AND SHED ON THE NORTHERN SIDE OF HOUSE (C).



4. BEGIN TO INSTALL PV PANELS FROM EAST (WATER PV PANELS FIRST) END AFTER SECOND TRUSS IS SECURED TO ALLOW FOR SAFETY OF INSTALLERS.

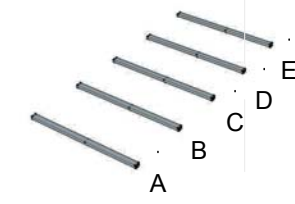


C1 ASSEMBLY
1 1/2" = 1'-0"

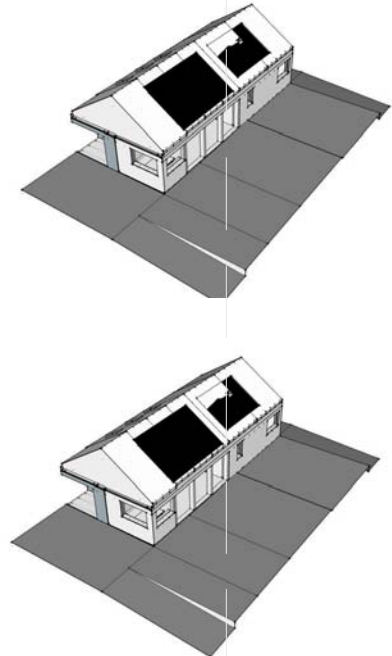
1. UNINSTALL ALL MECHANICS.

4. WHEN PV PANELS ARE REMOVED, BEGIN REMOVING TRUSSES WITH E AND WORKING TO A

6. DISASSEMBLE FOUNDATION BEGINNING WITH CHANNEL E.



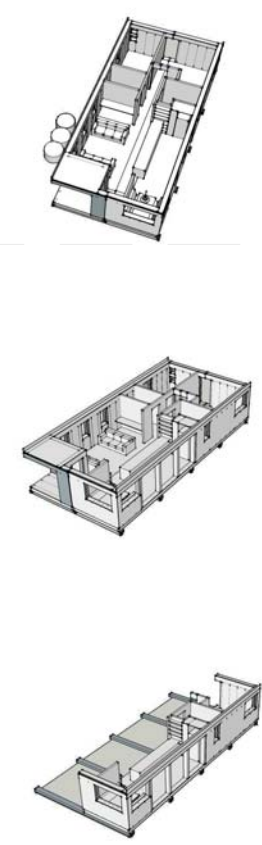
2. DISASSEMBLE ALL LANDSCAPING AND DECKING USING FORKLIFT



3. TAKE OFF PV PANELS STARTING FROM WEST END.



5. REMOVE WATER TANKS AND SHED FROM SITE, FOLLOWED BY NORTHERN MODULE, FOLLOWED BY SOUTHERN MODULE



A1 DISASSEMBLY
1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. ALL LIQUID EXCEPT GASOLINE IS STORED IN A LARGE STORAGE CONTAINER ON SITE
2. STORED FUEL CONTAINERS SHALL BE LOCATED TO MINIMIZE EXPOSURE TO EXCESSIVE TEMPERATURES AND PHYSICAL DAMAGE
3. CONTAINERS SHALL NOT BE STORED NEAR EXITS, STAIRWAYS OR AREAS NORMALLY USED OR INTENDED FOR EGRESS
4. PORTABLE TANKS SHALL NOT BE NEARER THAN 20 FEET FROM ANY BUILDING
5. REFER TO SHEET O-601 FOR CONSTRUCTION SCHEDULE

REFERENCE KEYNOTES

SHEET KEYNOTES



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SHEET TITLE
ASSEMBLY AND DISASSEMBLY

O-103



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SHEET TITLE
CONSTRUCTION EQUIPMENT SCHEDULE

O-601

Proposed Schedule for Washington D.C. Build Site: 9/13-9/20.

9/13 Tuesday (Day 0)
 3:00pm On-site registration/exchange front door key for parking pass.
 5:00pm Kickoff team/organizer meeting.
 11:00pm **Stand-alone house assembly begins:**
 11:00pm Two support vehicles with construction trailer arrive with generator, lights, survey equipment and foundations.
 11:05pm A) Unloading of support vehicles begins.
 B) Set-up for generator and lights begin. Survey equipment and foundations installed on the construction site.
 C) Survey site and spray paint house outline.
 11:40pm Support vehicles leave.
 11:50pm A) Safety inspections and checklist of completed, generator, and light installations.
 B) Set up of support tent begins.
 C) Find true south.
 D) Begin the assembly of the foundations relative to proper orientation.

9/14 Wednesday (Day 1)
 12:00am A) Use geo-tech fabric.
 B) To do: gravel, cribbing, starts the seven channels.
 C) Assemble foundation (7 Channels A-G) running North/South (starting with western most Channel A and working east to Channel G) with jacks and cribbing.
 8:00am A) Inspections for completed foundations.
 B) Crane arrives.
 8:15am Crane set up begins and tender truck arrives.
 8:40am A) Flatbed truck with North Module arrives (also includes decking and water catchers).
 8:45am A) Protection/Packaging, Cross-bracing, Anchoring
 B) Use crane to lift and attach North Module to the foundation.
 C) Electrical connections
 1:00pm A) Flatbed truck that carried North Module leaves.
 B) Completion of North Module set-up.
 C) Safety inspections.
 1:30pm Work continues on Northern Module before connection to Southern Module can begin.
 5:30pm Clean up/weather-proofing begins.
 6:30pm Rest period begins.

9/15 Thursday (Day 2)
 5:45am De-weather proofing begins.
 A) Group-debriefing. Generator and lights (if necessary) set-up.
 B) Crane operation set-up begins.
 C) Crane safety inspections.
 6:15am A) Truck #2 arrives with the Southern Module and decking.
 B) Using crane, place and secure southern module (A) on foundation, followed by northern module (B) and fasten together. Then secure water tanks (C) and shed on the northern side of the house.
 10:30am A) Truck #2 that had the Southern Module and decking leaves.
 B) Southern Module is completed.
 C) Safety inspections.
 10:45am Man-lift arrives.
 11:00am A) Truck #3 arrives with 1st set of roof modules (with more decking and water container).
 B) Using crane, unload and place 1st set of roof modules onto the house.
 2:00pm A) Truck #3 that had the 1st set of roof modules leaves.
 B) Safety inspections.
 2:15pm A) Truck #4 with the 2nd set of roof modules arrives (with more decking and water container).
 B) Using crane, unload and place 2nd set of roof modules onto the house.
 4:30pm Water delivery truck Arrives to fill water tanks
 5:15pm A) Truck #4 that had the 2nd set of roof modules leaves.
 B) Safety inspections.
 5:30pm Clean up/weather-proofing begins.
 6:30pm Rest period begins.

9/16 Friday (Day 3)
 5:45am De-weather proofing begins.
 6:00am A) Group-debriefing. Generator and lights (if necessary) set-up.
 B) Crane operation set-up begins.
 6:15am A) Truck # 5 with the 3rd set of roof modules arrives (with more decking and water container).
 6:30am A) Using crane, place and secure roof trusses (A-F) to modules starting on east end of house (A) and install mechanics after installation of truss B.
 10:00am A) 3rd set roof modules are completed and set.
 B) Safety inspections.
 C) Roof sheathing and zip-taping begins.
 10:30am A) Truck #4 that had the 3rd set of roof modules leaves.
 B) Safety protection for fall protection and scissor lift.
 11:00am A) Truck #4 with PV panels arrives and begins to unload.
 B) Begin to install PV panels from east (water PV panels first) end after second truss is secured to allow for safety of installers.
 3:30pm A) Inspection for damage begins.
 B) Begin interior work of the house.
 5:30pm Clean up/weather-proofing begins.
 6:30pm Rest period begins.

9/17 Saturday (Day 4)
 5:45am De-weather proofing begins.
 6:00am Group-debriefing. Generator and lights (if necessary) set-up.
 6:30am A) Continue with unfinished work on PV panels.
 B) Continue with the interior work of the house.
 C) Begin installing landscaping and decking.
 3:00pm Micro grid, network, and village infrastructure installation.
 6:00pm Clean up/weather-proofing begins.

9/18 Sunday (Day 5)
 5:45am De-weather proofing begins.
 6:00am A) Fork-Lift Arrives
 B) Group-debriefing. Generator and lights (if necessary) set-up.
 6:15am A) Finish landscaping and decking.
 B) Finish interior work of the house.
 C) Energy and performance modeling.
 D) Review checklist of things to be completed and inspected.
 6:00pm De-weather proofing begins.

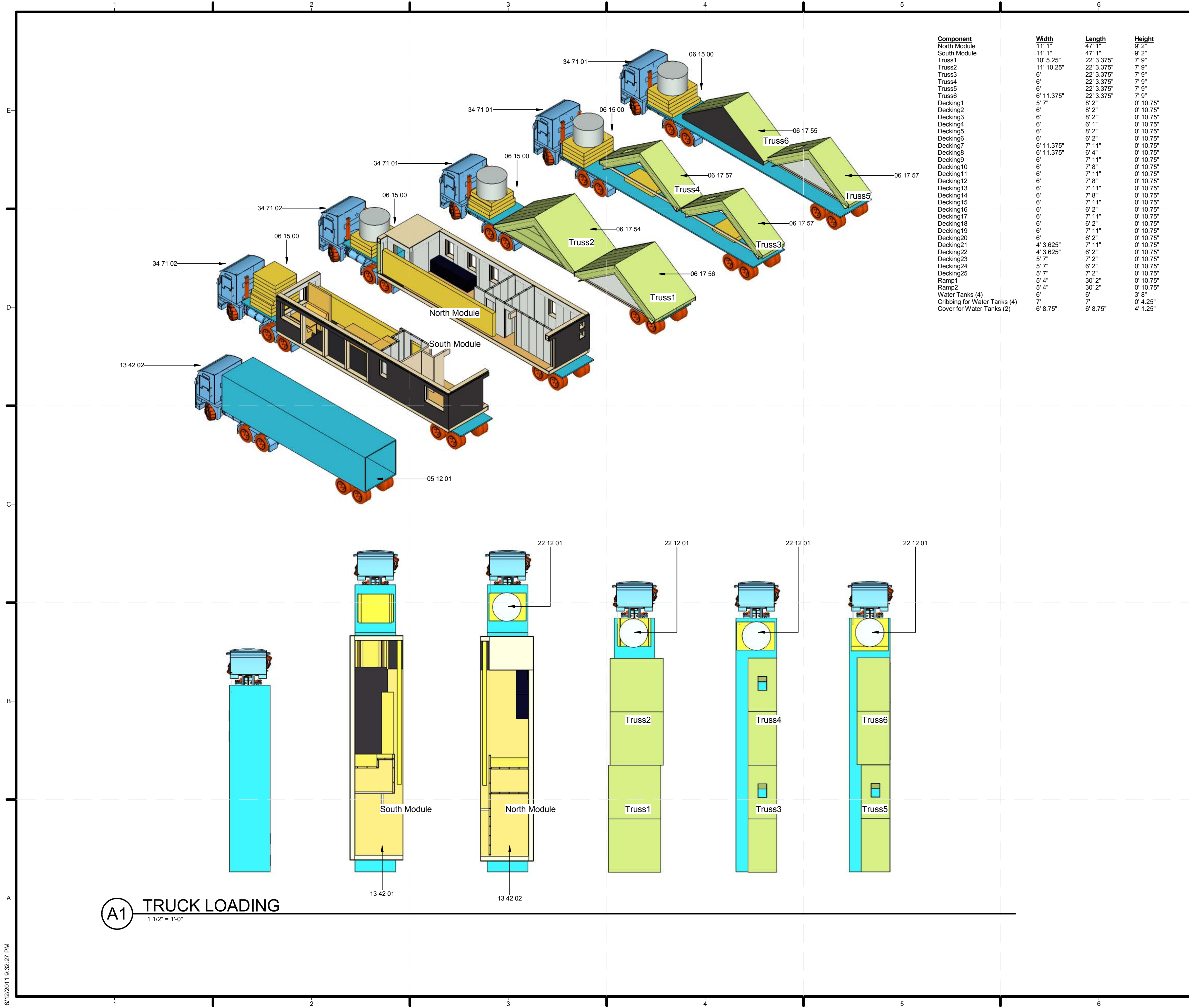
9/19 Monday (Day 6)
 7:00am A) Complete any unfinished work/inspections.
 B) Check and inspect for proper PV set-ups/plumbing and electrical set-up.

Event (September 23 – Oct. 2 2011)

Disassembly Sequence (10/3-10/6):
10/3 Monday (Day 19)
 6:00am Remove ancillary items from house (Interior Decoration and Appliances). Package and move to storage containers (6 hours).
 12:00pm Uninstall mechanics and utilities and compartmentalize in storage containers. (6 hours)
 6:00pm Disassemble and package all decking using forklift (4 hours).
 10:00pm Rest Period.
10/4 Tuesday (Day 20)
 6:00am Remove landscaping using forklift (4 hours)
 6:00am Take off PV panels and package for transportation starting from west end. (9 hours)
 3:00pm Remove trusses (from E working to A. (9 hours)
 12:00am Cover for weather protection. (trusses & modules ~ 30 minutes)
 12:30am Rest Period Begins.
10/5 Wednesday (Day 21)
 6:00am Remove water tanks and shed from site. (3 hours)
 9:00am Crane and flatbed trucks #1,2,3 arrive to load modules/water tanks/trusses/decking.
 4:00pm Load and package northern module. (7 hours)
 4:00pm Load and package southern module. (6 hours)
 8:45pm Load and package trusses/deck and water tanks.
 9:00pm Flatbed trucks #1, 2, 3 leave with south/north module and water tanks/trusses/decking.
 12:00pm Remove and load foundation channels/jacks in storage trailers. (3 hours)
 Final rest period begins. (3 hours)

10/6 Thursday (Day 22)
 6:00am Remove Cribbing/Gravel/Geo-fabric. (3.5 hours)
 9:30am Final clean up and comprehensive checklist completed. (1.5 hours)
 11:00pm Storage trailers and containers leave with interior items, PV panels, foundations, lights, generator, liquids, survey equipment and other supporting items.
 1:00pm Support tent is deconstructed.
 3:00pm Final trucks and personnel vans leave site.

B1 CONSTRUCTION SCHEDULE
 3/4" = 1'-0"



Component	Width	Length	Height
North Module	11' 1"	47' 1"	9' 2"
South Module	11' 1"	47' 1"	9' 2"
Truss1	10' 5.25"	22' 3.375"	7' 9"
Truss2	11' 10.25"	22' 3.375"	7' 9"
Truss3	6'	22' 3.375"	7' 9"
Truss4	6'	22' 3.375"	7' 9"
Truss5	6'	22' 3.375"	7' 9"
Truss6	6' 11.375"	22' 3.375"	7' 9"
Decking1	5' 7"	8' 2"	0' 10.75"
Decking2	6'	8' 2"	0' 10.75"
Decking3	6'	8' 2"	0' 10.75"
Decking4	6'	6' 1"	0' 10.75"
Decking5	6'	8' 2"	0' 10.75"
Decking6	6'	6' 2"	0' 10.75"
Decking7	6' 11.375"	7' 11"	0' 10.75"
Decking8	6' 11.375"	6' 4"	0' 10.75"
Decking9	6'	7' 11"	0' 10.75"
Decking10	6'	7' 8"	0' 10.75"
Decking11	6'	7' 11"	0' 10.75"
Decking12	6'	7' 8"	0' 10.75"
Decking13	6'	7' 11"	0' 10.75"
Decking14	6'	7' 8"	0' 10.75"
Decking15	6'	7' 11"	0' 10.75"
Decking16	6'	6' 2"	0' 10.75"
Decking17	6'	7' 11"	0' 10.75"
Decking18	6'	6' 2"	0' 10.75"
Decking19	6'	7' 11"	0' 10.75"
Decking20	6'	6' 2"	0' 10.75"
Decking21	4' 3.625"	7' 11"	0' 10.75"
Decking22	4' 3.625"	6' 2"	0' 10.75"
Decking23	5' 7"	7' 2"	0' 10.75"
Decking24	5' 7"	6' 2"	0' 10.75"
Decking25	5' 7"	7' 2"	0' 10.75"
Ramp1	5' 4"	30' 2"	0' 10.75"
Ramp2	5' 4"	30' 2"	0' 10.75"
Water Tanks (4)	6'	6'	3' 8"
Cribbing for Water Tanks (4)	7'	7'	0' 4.25"
Cover for Water Tanks (2)	6' 8.75"	6' 8.75"	4' 1.25"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 12 01	STEEL FOUNDATION CHANNELS
06 15 00	WOOD DECKING
06 17 54	10' 11 3/4" WIDE TRUSS
06 17 55	6' 10 3/8" WIDE TRUSS
06 17 56	11' 1 3/4" WIDE TRUSS
06 17 57	6' MODULE
13 42 01	NORTHERN MIDD SD MODULE
13 42 02	SOUTHERN MIDD SD MODULE
22 12 01	6' DIAMETER, 38" HEIGHT WATER TANK
34 71 01	53' FLAT TRUCK BED
34 71 02	60' OVERSIZED AND STEP DECK TRUCK BED

SHEET KEYNOTES

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SHEET TITLE
TRUCK LOADING DIAGRAM

O-602

(A1) TRUCK LOADING
1 1/2" = 1'-0"

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