

CUSD³

CORNELL UNIVERSITY SOLAR DECATHLON



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909 MITCHELL STREET

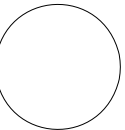
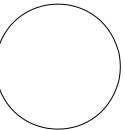
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ENERGY



SOLAR DECATHLON 2009

SHEET LIST

Subset	Type	Number	Title	Scale	Subset	Type	Number	Title	Scale	Subset	Type	Number	Title	Scale	
General	General	G-001	Sheet List	not to scale	Elevations	A-105	PV Array Plan	1/4" = 1'0"	Fire Protection	General	I-510	Kitchen Island Structural Plan	1/2" = 1'0"		
		G-002	General Symbols	not to scale		A-106	Exploded Module Plan	1/8" = 1'0"			I-511	Kitchen Island Millwork Details	1 1/2" = 1'0"		
		G-003	Abbreviations	not to scale		A-107	Footprint Area Plan	1/4" = 1'0"			I-512	Millwork Details	varies		
		G-004	Design Criteria Summary	not to scale		A-108	Conditioned Area Plan	1/4" = 1'0"			I-513	Millwork Details	varies		
		G-005	Design Narrative	not to scale		A-201	South Elevation	1/4" = 1'0"			I-601	Finish Schedule	not to scale		
	Plans	G-006	Target Market Description	not to scale	A-202	North Elevation	1/4" = 1'0"	I-602	Door and Hardware Schedule	not to scale					
		G-101	Diagrammatic Mall Plan	not to scale	A-203	West Elevation	1/4" = 1'0"	I-603	Window Schedule	not to scale					
		G-102	Solar Envelope Plan	1/8" = 1'0"	A-204	East Elevation	1/4" = 1'0"	I-901	Interior Renderings	not to scale					
		Elevations	G-201	Solar Envelope Elevations	1/8" = 1'0"	Sections	A-301	Courtyard Section	1/4" = 1'0"	I-902		not to scale			
			G-901	Exterior Rendering	not to scale		A-302	Longtudinal Mechanical Closet Section	1/4" = 1'0"	F-001	Symbols and Notes	not to scale			
G-902	Exterior Rendering		not to scale	A-303	Transversal Mechanical Closet Section		1/4" = 1'0"	F-101	Detection, Alarm, Suppression Plan	1/4" = 1'0"					
Landscape	Renderings	G-902	Exterior Rendering	not to scale	A-304	Kitchen - Bedroom Section	1/4" = 1'0"	78	Plumbing	Plans	F-102	Egress Plan	1/8" = 1'0"		
		G-903	Exterior Rendering	not to scale	A-305	Bedroom - Kitchen Section	1/4" = 1'0"	79			F-601	Fire Protection Equipment Schedule	not to scale		
		G-904	Exterior Rendering	not to scale	A-306	Kitchen - Livingroom Section	1/4" = 1'0"	80			P-001	Symbols and Notes	not to scale		
		G-905	Exterior Rendering	not to scale	A-307	Livingroom - Kitchen Section	1/4" = 1'0"	81			P-101	Plumbing Domestic Supply Plan	1/4" = 1'0"		
		G-906	Exterior Rendering	not to scale	A-308	Livingroom - Courtyard Section	1/4" = 1'0"	82			P-102	Plumbing Domestic Drainage Plan	1/4" = 1'0"		
	General	L-001	Symbols and Notes	not to scale	A-309	Kitchen - Bathroom Section	1/4" = 1'0"	83	Mechanical	General	P-103	Solar Thermal Plumbing Plan	1/4" = 1'0"		
		Plans	L-101	Site Plan	1/8" = 1'0"	A-310	Courtyard - Bathroom Section	1/4" = 1'0"			84	P-104	HVAC Plumbing Plan	1/4" = 1'0"	
			L-102	Ramp Plan	1/8" = 1'0"	A-501	Wall Section 1, 1a	1 1/2" = 1'0"			85	P-201	Mechanical Closet Plumbing Elevation	1/2" = 1'0"	
			L-103	Scaffolding Plan	1/8" = 1'0"	A-502	Hallway Section Enlarged	1/2" = 1'0"			86	P-202	Solar Thermal West Elevation	1/4" = 1'0"	
			L-104	Plywood Plan	1/8" = 1'0"	A-503	Hallway WD 65 Section	1 1/2" = 1'0"			87	Sections	P-301	Solar Thermal Sections	1/2" = 1'0"
L-105	Rainwater Plan	1/8" = 1'0"	A-504	Hallway WD 68 F Section	1 1/2" = 1'0"	88	P-601	Plumbing Schematic	not to scale						
L-106	Mechanical Plan	1/8" = 1'0"	A-505	Modular Connection Section	1 1/2" = 1'0"	89	P-602	Solar Thermal Schematic	not to scale						
Structural	Plans	L-107	Landscape Controls Plan	1/8" = 1'0"	A-506	Details (varies)	1 1/2" = 1'0"	90	Electrical	Plans	P-603	Solar Thermal Control Schematic	not to scale		
		L-108	Planting Plan	1/8" = 1'0"	A-507	Cylinder Window Section	1 1/2" = 1'0"	91			P-604	Fixture Schedule	not to scale		
		L-109	Spill Containment Plan	1/8" = 1'0"	A-508	Entry Door Section	1 1/2" = 1'0"	92			P-901	Plumbing Domestic Supply Isometric	not to scale		
		L-201	Ramp Elevation	1/4" = 1'0"	A-509	Hallway Window Plan	1 1/2" = 1'0"	93			P-902	Plumbing Domestic Drainage Isometric	not to scale		
		L-202	Rail Elevation	1" = 1'0"	A-510	Entry Door Pad Out	1 1/2" = 1'0"	94			P-903	Solar Thermal Plumbing Isometric	not to scale		
	Elevations	L-203	Skirting Elevation	1 1/2" = 1'0"	A-511	Cylinder Window Plan	1/2" = 1'0"	95	Other Disciplines	General	P-904	Mechanical Closet Plumbing Isometric	not to scale		
		L-301	Ramp Section	1 1/2" = 1'0"	A-512	Mechanical Closet Façade	1/2" = 1'0"	96			M-001	Symbols and Notes	not to scale		
		L-302	Ramp Section	1 1/2" = 1'0"	A-513	Mechanical Closet Transverse Section Enlarged	1/2" = 1'0"	97			M-101	HVAC Equipment and Distribution	1/4" = 1'0"		
		L-303	Scaffolding Section	varies	A-514	Mechanical Closet - House Connection	1 1/2" = 1'0"	98			M-102	Ventilation Equipment and Distribution	1/4" = 1'0"		
		L-304	Scaffolding Secion	1/4" = 1'0"	A-515	Mechanical Closet - Duct Section	1 1/2" = 1'0"	99			Elevations	M-201	Mechanical Closet Elevation (HVAC)	1/2" = 1'0"	
L-305	Skirting Section	1 1/2" = 1'0"	A-516	Mechanical Closet Door Section	1 1/2" = 1'0"	100	M-601	HVAC Schematic	not to scale						
L-306	NFT Plan and Section	1/4" = 1'0"	A-517	Mechanical Closet Module Connection	1 1/2" = 1'0"	101	M-602	HVAC Control Diagram	not to scale						
Architectural	General	L-307	Front Aquablox Plan and Section	1/2" = 1'0"	A-518	Skylight Section	1" = 1'0"	102	Operations	Plans	M-603	HVAC Schedule	not to scale		
		L-308	Rear Aquablox Plan and Section	1/2" = 1'0"	I-001	Symbols and Notes	not to scale	103			M-604	HVAC Control Schedule	not to scale		
		L-501	Details (varies)	1 1/2" = 1'0"	I-101	Interior Finish Plan	1/4" = 1'0"	104			E-001	Symbols and Notes	not to scale		
		L-502	Details (varies)	1 1/2" = 1'0"	I-102	Enlarged Bedroom and Bathroom Plan	1/4" = 1'0"	105			E-101	Grid Interconnection	1/4" = 1'0"		
		L-503	Details (varies)	1" = 1'0"	I-103	Bed and Bathroom RCP	1/4" = 1'0"	106			E-102	PV Wiring	1/4" = 1'0"		
	Details	L-504	Details (varies)	1 1/2" = 1'0"	I-104	Enlarged Kitchen Plan	1/4" = 1'0"	107	General	Plans	E-103	Bedroom Electrical Plan	1/4" = 1'0"		
		L-505	Details (varies)	varies	I-105	Kitchen RCP	1/4" = 1'0"	108			E-104	Kitchen Electrical Plan	1/4" = 1'0"		
		L-506	Details (varies)	1" = 1'0"	I-106	Enlarged Living Room Plan	1/4" = 1'0"	109			E-105	Living Room Electrical Plan	1/4" = 1'0"		
		S-001	Symbols and Notes	not to scale	I-107	Living Room RCP	1/4" = 1'0"	110			E-106	Lighting RCP	1/4" = 1'0"		
		S-101	Framing Floor Plan	1/4" = 1'0"	Elevations	I-201	Bathroom Unfolded Elevation	1/4" = 1'0"			111	E-107	Landscape Lighting Plan	1/8" = 1'0"	
Architectural	Plans	S-102	Footer Plan	1/4" = 1'0"	I-202	Bathroom Elevation	1/4" = 1'0"	112	Elevations	Schedules	E-201	Electrical Closet Elevation	1 1/2" = 1'0"		
		S-103	Floor Framing Plan	1/4" = 1'0"	I-203	Kitchen Unfolded Elevation	1/4" = 1'0"	113			E-601	System One-Line Diagram	not to scale		
		S-104	Exploded Floor Framing Plan	1/4" = 1'0"	I-204	Living Room Millwork Elevation	1/4" = 1'0"	114			E-602	System Three-Line Diagram	not to scale		
		S-105	Floor SIP Plan	1/4" = 1'0"	I-205	Kitchen Island Elevation	1/2" = 1'0"	115			E-603	NEC 220 Calculation	not to scale		
		S-106	Steel Roof Framing Plan	1/4" = 1'0"	I-206	Kitchen Island Elevation	1/2" = 1'0"	116			E-604	Electrical Panelboard Schedule	not to scale		
	Details	S-107	Exploded Roof Framing Plan	1/4" = 1'0"	Sections	I-301	Bathroom Transverse Section	1/2" = 1'0"	117	Renderings	General	E-605	Lighting Schedule	not to scale	
		S-108	Roof SIP Plan	1/4" = 1'0"	I-302	Bathroom Transverse Section	1/2" = 1'0"	118	E-901			Daylighting Analysis	not to scale		
		S-109	Roof Framing Plan	1/4" = 1'0"	I-303	Bathroom Longitudinal Section	1/2" = 1'0"	119	E-902			Electric Lighting Analysis	not to scale		
		S-110	PV Steel Framing Plan	1/4" = 1'0"	I-304	Bedroom Transverse Section	1/2" = 1'0"	120	Other Disciplines			General	X-001	Symbols and Notes	not to scale
		S-501	Details (varies)	1 1/2" = 1'0"	I-305	Bedroom Longitudinal Section	1 1/2" = 1'0"	121					X-101	Site Accessibility	1/8" = 1'0"
S-502	Adjustable Foundation Footer	1 1/2" = 1'0"	I-306	Kitchen Island Sections	1 1/2" = 1'0"	122	X-102	Public Exhibit Plan		1/4" = 1'0"					
S-503	Details (varies)	1 1/2" = 1'0"	I-307	Partition Type 1	1 1/2" = 1'0"	123	Elevations	Plans		X-201	Public Exhibit Elevation		1/4" = 1'0"		
S-504	Details (varies)	1 1/2" = 1'0"	I-308	Partition Type 2	1 1/2" = 1'0"	124				X-202	Public Exhibit Elevation		1/4" = 1'0"		
S-505	Details (varies)	varies	Details	I-501	Sink Details	1 1/2" = 1'0"			125	X-901	Public Exhibition Rendering	not to scale			
S-506	Details (varies)	1" = 1'0"		I-502	Bathroom Floor Details	1 1/2" = 1'0"	126	General	Plans	O-001	Symbols and Notes	not to scale			
S-507	Details (varies)	1 1/2" = 1'0"		I-503	Bed Details	1/2" = 1'0"	127			O-101	Assembly Sequence	not to scale			
S-508	Mechanical Closet Plan	1/2" = 1'0"	I-504	Bed Details	1/2" = 1'0"	128	O-102			Disassembly Sequence	not to scale				
Architectural	Plans	A-001	Symbols and Notes	not to scale	I-505	Bedroom Millwork Details	varies	129	Schedules	General	O-601	Construction Equipment Schedule	not to scale		
		A-101	Floor Plan	1/4" = 1'0"	I-506	Bed Couterweight Details	varies	130							
		A-102	Reflected Ceiling Plan	1/4" = 1'0"	I-507	Bedroom Millwork Details	varies	131							
		A-103	Roof Plan	1/4" = 1'0"	I-508	Bedroom Millwork Details	4" = 1'0"	132							
		A-104	Reflected PV Array Plan	1/4" = 1'0"	I-509	Kitchen Island Details	1/4" = 1'0"	133							

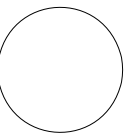
A vertical line with five points labeled A, B, C, D, and E from bottom to top.

1.	THE 2009 CUSD CONSTRUCTION DRAWING SET SATISFIES THE 2009 SOLAR DECATHLON BUILDING CODE, 2006 INTERNATIONAL RESIDENTIAL CODE (IRC), AND THE 2008 NATIONAL ELECTRIC CODE (NEC).
2.	ALL REFERENCES TO UPSTATE NY OR ITHACA, NY WILL REQUIRE LOCAL COMPLIANCE NEITHER FOLLOWED NOR IMPLIED IN THE DOCUMENT.
3.	SINGLE- FAMILY TYPE 1 A STEEL STUD CONSTRUCTION
4.	BEDROOM WINDOW EGRESS FOR HABITABLE SPACE
5.	NEC-2 DEDICATED GFCI FROM THE KITCHEN TO ELECTRICAL PANE
6.	SMOKE DETECTOR IN CEILING WITHIN 3 FEET OF BEDROOM
7.	LOCAL ZONING FOR FUTURE SITE APPLIES



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SOLAR
DECATHLON
2009

DATE: JUNE 2, 2009

SHEET TITLE

G-002

SHEET 2 OF 196

A vertical double-headed arrow is positioned between two horizontal lines. The label $1/2$ is placed to the left of the arrow.

XX XX XX ————

XX XX XX ————

0'-0"




0



PLAN
NORTH




ELEVATION 
+0'-0"

A diagram showing a 2x3 grid of squares. The top row consists of a white square, a black square, and a white square. The bottom row consists of a black square, a white square, and a black square. The columns are labeled X' at the top.

A diagram showing a 2x3 grid of squares. Above the columns are labels X' , X' , and X'' . The grid contains black and white squares with dashed diagonal lines. The top row has a white square, a black square, and a white square. The bottom row has a black square, a white square, and a black square. Dashed diagonal lines run from the top-left to the bottom-right in the first and third columns, and from the top-right to the bottom-left in the second column.

- THERMAL BREAK



X-XXX

$$X'' = 1'-0''$$

1

3

4

5

6

7

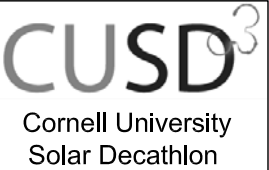
ABBREVIATIONS

AAD	Automatic Air Damper	CIRC	Circumference
AB	Anchor Bolt	CJ	Control Joint
AC	Alternating Current	CK	Cork
ACU	Air Conditioning Unit	CL	Center Line
AD	Area Drain	CLG	Ceiling
ADA	American Disabilities Act	CLKG	Caulking
ADD	Addendum	CLR	Clear (ing)
ADDL	Additional	CMP	Corrugated Metal Panel
ADH	Adhesive	CO	Clean Out
ADJ	Adjacent	COL	Column
ADR	Access Door	COMB	Combination
AESS	Arch. Exposed Structural Steel	COMP	Compress (ed) (ion) (ible)
AFF	Above Finish Floor	CONC	Concrete
AHU	Air Handling Unit	COND	Condensate
AIB	Air Infiltration Barrier	CONN	Connection
ALT	Alternate	CONST	Construction
ALTN	Alteration	CONT	Continuous
ALUM	Aluminum	CONTR	Contract (or)
ANOD	Anodized	COORD	Coordinate
AP	Access Panel	CORR	Corrugated
APPROX	Approximate (ly)	COWP	Clean Out Wall Plate
ARCH	Architect (ural)	CR	Ceiling Register
A/S	Air Separator	CSK	Countersink
AUTO	Automatic	CSMT	Casement
AVG	Average	CT	Computer Terminal
		CTD	Coated
		CTOP	Counter Top
BAT	Battery Cell	CTR	Center
BD	Board	CU	Cubic
BDD	Backdraft Damper	CW	Cold Water
BFP	Back Flow Preventer	CWR	Chilled Water Return
BG	Bottom Grille	CWS	Chilled Water Supply
BIT	Bituminous		
BLDG	Building		
BLK	Block	DB	Dry Bulb
BLKG	Blocking	DC	Direct Current
BM	Beam	DDC	Direct Digital Control
BO	By Others	DEG	Degrees
BOD	Bottom of Duct	DEP	Depress (ed) (ion)
BOF	Bottom of Footing	DET	Detail
BOS	Bottom of Steel	DHU	Dehumidification Unit
BOT	Bottom	DIA	Diameter
BPL	Bearing Plate	DIAG	Diagonal
BR	Bottom Register	DIM	Dimension
BRDG	Bridging	DIST	Distance
BRG	Bearing	DIV	Division
BS	Both Sides, Bottom of Stair	DL	Dead Load
BSPL	Backsplash	DN	Down
BT	Bent	DO	Ditto
BTU	British Thermal Units	DP	Dampproof (ing)
BTUH	British Thermal Units Per Hour	DPR	Damper
BUR	Built-Up Roofing	DR	Door
BW	Bottom of Wall	DWG	Drawing
BWC	Back Water Check Valve	DS	Downspout, Drainage Structure
C1	Carpet Type 1	DTA	Dovetail Anchor
CA	Compressed Air	DW	Dishwasher
CAB	Cabinet	DWR	Drawer
CATV	Cable Television		
CB	Circuit Breaker	E	East
CC	Charge Controller	EA	Exhaust Air
CCTV	Closed Circuit Television	EAT	Entering Air Temperature
CD	Ceiling Diffuser	EB	Expansion Bolt
CEM	Cement	EF	Each Face
CER	Ceramic	EJ	Expansion Joint
CF	Cubic Feet	ELEC	Electric (al)
CFM	Cubic Feet Per Minute	ELEM	Element
CFT	Ceramic Floor Tile	ELEV	Elevation
CG	Ceiling Grille	EMT	Electrical Metal Tubing
CHAN	Channel	ENC	Enclosure

EOD	Edge of Deck	INCL	Include (d) (ing)
EQ	Equal, Equivalent	INS	Insulate (d) (ion)
EQUIP	Equipment	INT	Interior
ES	Exposed Surface	INV	Inverter (charge)
EW	Each Way		
EWI	Entering Water Temperature	JB	Junction Box
EXH	Exhaust	JCT	Junction
EXG	Existing	JT	Joint
EXP	Expansion	KW	Kilowatt
EXT	Exterior, External	KWH	Kilowatt Per Hour
F	Fahrenheit	L	Length, Long
FA	Fire Alarm	LAM	Laminate (d)
FAI	Fresh Air Intake	LAT	Leaving Air Temperature
FCU	Fan Cooling Unit	LAV	Lavatory
FD	Floor Drain, Fire Damper	LB	Pound
FE	Fire Extinguisher	LBL	Label
FF	Finish Floor	LDR	Leader
FFE	Finish Floor Elevation	LEV	Level
FFL	Finish Floor Line	LF	Linear Foot
FG	Floor Grille	LPMC	Liquid-Tight Flexible Metal Conduit
FIN	Finish (ed)	LFNC	Liquid-Tight Flexible Nonmetallic Conduit
FIXT	Fixture	LIN	Linear
FL	Flush	LL	Live Load
FLD	Floor Duct	LM	Landscape Module
FLEX	Flexible	LP	Low Pressure
FLG	Flashing	LPS	Low Pressure Steam
FLR	Floor (ing)	LPT	Low Point
FLUOR	Fluorescent	LS	Linoleum Sheet
FM	Floor Mounted	LT	Light, Linoleum Tile
FMC	Flexible Metal Conduit	LV	Low Voltage
FND	Foundation	LVR	Louver
FOB	Flat on Bottom	LWT	Leaving Water Temperature
FOT	Flat on Top	MAN	Manual
FP	Fireproof (ing)	MAT	Material
FPM	Feet Per Minute	MAU	Make Up Air Unit
FR	Frame, Floor Register	MAX	Maximum
FRA	Fresh Air	MBR	Member
FS	Floor Sink	ME	Mechanical Equipment
FSD	Fire and Smoke Damper	MECH	Mechanical
FT	Feet	MED	Medium
FTG	Footing	MF	Mixing Faucet
FV	Flush Valve	MFR	Manufacture (r)
		MIN	Minimum
GA	Gauge	MIR	Mirror
GAL	Gallon	MISC	Miscellaneous
GALV	Galvanized	MOD	Module, Model
GASK	Gasket (ed)	MT	Mount
GCO	Grade Cleanout	MTD	Mounted
GF	Ground Face	MTL	Metal
GL	Glass, Glazing	MTR	Meter
GND	Ground	MULL	Mullion
GPM	Gallons Per Minute		
GR	Grade (ing)	N	North
GVL	Gravel	NAT	Natural
GWB	Gypsum Wall Board	NC	Normally Closed
GYP	Gypsum	NEC	National Electric Code
		NEG	Negative
H	Height	NO	Number, Normally Open
HBD	Hard Board	NOM	Nominal
HCR	Hot/Chilled Return	NTS	Not to Scale
HCS	Hot/Chilled Supply		
HD	Heavy Duty	OA	Overall, Outside Air
HDR	Header	OC	On Center
HDW	Hardware	OD	Outside Diameter
HM	Hollow Metal	OH	Overhead
HORZ	Horizontal	OPNG	Opening
HP	Heat Pump	OPP	Opposite
HR	Hand Rail		
HT	Height		
HVAC	Heating/Ventilating/Air Conditioning		
HVU	Heating and Ventilating Unit		
HW	Hot Water		
HWH	Hot Water Heater		
HWP	Hot Water Pump		
HWR	Hot Water Return		
HWS	Hot Water Supply		
ID	Inside Diameter		
IN	Inches		

INCL	Include (d) (ing)	P	Paint
INS	Insulate (d) (ion)	PAR	Parallel
INT	Interior	PART	Partition
INV	Inverter (charge)	PERF	Perforate (d) (ion)
		PERI	Perimeter
		PERP	Perpendicular
		PL	Plate
		PLAM	Plastic Laminate
		PLAS	Plaster, Plastic
		PLF	Pounds Per Linear Foot
		PLY	Plywood
		PNL	Panel
		POC	Point of Connection
		POS	Positive
		POT	Point of Tangency
		PR	Pair
		PREP	Prepare (ation)
		PRF	Preformed
		PROJ	Project
		PSF	Pounds Per Square Foot
		PSI	Pounds Per Square Inch
		PT	Point
		PTD	Painted
		PTP	Pressure Treated Preservative
		PV	Photovoltaic Cell
		PWE	Power Wall Exhauster
		RA	Return Air
		RAF	Return Air Fan
		RCU	Remote Condensing Unit
		RD	Roof Drain
		RECEPT	Receptacle
		REF	Reference
		REFL	Reflect (ed) (ive) (or)
		REFR	Refrigerator
		REG	Register
		REINF	Reinforce (d) (ing)
		REQD	Required
		RESIL	Resilient
		RET	Retaining, Return
		REV	Revision, Revised
		RF	Rubber Floor
		RFG	Roofing
		RFH	Roof Hatch
		RG	Return Grille
		RHC	Reheat Coil
		RI	Rough-In
		RL	Rain Leader
		RLG	Rail (ing)
		RM	Room
		RMC	Rigid Metal Conduit
		RNC	Rigid Nonmetallic Conduit
		RNT	Running Trap
		RO	Receptacle Outlet, Rough Opening
		RPM	Revolutions Per Minute
		RTH	Roof Top Hood
		RTU	Roof Top Unit
		RW	Raw Water
		S	South, Supply
		SA	Supply Air
		SAN	Sanitary
		SAS	Smooth All Sides
		SC	Solid Core
		SCHED	Schedule
		SD	Smoke Damper
		SEC	Section
		SF	Square Feet
		SH	Shelf, Shelving
		SHR	Shower
		SHT	Sheet
		SHTHG	Sheathing
		SIM	Similar
		SK	Sink
		SLC	Silcock
		SLV	Sleeve
		SLVR	Storm Louver
		SPEC	Specification (s)
		SPKR	Sprinkler
		SPL	Special
		SQ	Square

SS	Stainless Steel		
SST	Structural Steel Tubing		
ST	Storage		
STA	Station		
STC	Shower Temperature Controller		
		STD	Standard
		STG	Seating
		STL	Steel
		STN	Stain (ed)
		STOR	Storage
		STRU	Structural
		SURF	Surface
		SUSP	Suspended
		SV	Sheet Vinyl
		SW	Switch
		SYM	Symmetrical
		SYN	Synthetic
		SYS	System
		T	Tread, Top, Tile
		TB	Top and Bottom
		TBD	To Be Determined
		TC	Temperature Control
		TEL	Telephone
		TEMP	Temperature
		TG	Tongue and Groove
		THK	Thickness
		THR	Threshold
		TMV	Thermostatic Mixing Valve
		TOD	Top of Duct
		TOF	Top of Fascia
		TOL	Tolerance
		TOP	Top of Pipe
		TOS	Top of Steel
		TR	Top Register
		TRN	Transom
		TV	Television
		TW	Top of Wall
		TYP	Typical
		UC	Undercut
		UD	Underdrain
		UNF	Unfinished
		UNIF	Uniform
		UON	Unless Otherwise Noted
		UV	Unit Ventilator
		V	Volt
		VAR	Varies, Variable
		VARN	Varnish
		VAV	Variable Air Volume
		VAB	Vapor Retarder Barrier
		VCT	Vinyl Composite Tile
		VD	Volume Damper
		VERT	Vertical
		VIF	Verify in Field
		VNR	Veneer
		VOL	Volume
		VTR	Vent Through Roof
		W	West, Width, Watt
		WB	Wet Bulb
		WC	Water Closet
		WD	Wood
		WDW	Window
		WG	Wall Grille
		WH	Wall Hung
		WP	Water Proofing, Working Point
		WS	Water Stop
		W/	With
		W/O	Without

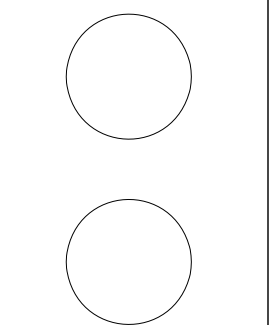


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ABBREVIATIONS

G-003

CLIMATIC AND GEOGRAPHIC CRITERIA

	GROUND SNOW LOAD	WIND SPEED	SEISMIC DESIGN CATEGORY	RISK OF DAMAGE COMMITTED BY:				WINTER DESIGN TEMP	AIR FREEZING INDEX	MEAN DAILY MAX TEMP.	MEAN DAILY MIN TEMP.
				WEATHERING	FROST LINE DEPTH	TERMITE	DECAY				
Washington, D.C.	25 psf	90 mph	A	Severe		Moderate to Heavy	Slight to Moderate	17° F	250° Days	66.5°	48.9°
Ithaca, NY	35 psf	90 mph	A	Severe		Moderate to Heavy	Slight to Moderate	0° F	1000° Days	57.3°	38.5°

CODE ANALYSIS

	APPLICABLE DESIGN CODES	APPLICABLE HANDICAPPED CODE	APPLICABLE FIRE CODE	GROUP CLASSIFICATION	TYPE OF CONSTRUCTION	BUILDING AREA	BUILDING HEIGHT ABOVE GRADE
Washington, D.C.	2006 International Residential Code	Solar Decathlon Accessibility Requirements and Guidelines	2005 National Electric Code	Residential	V	790.75 Square Feet	16'-10-3/8" Feet
Ithaca, NY	2006 International Residential Code	Solar Decathlon Accessibility Requirements and Guidelines	2005 National Electric Code	Residential	V	790.75 Square Feet	16'-10-3/8" Feet

STRUCTURAL DESIGN LOADS

	WIND	RAILINGS	INTERIOR FLOOR, DECK, RAMPS	ROOF	SOIL	SNOW LOAD
Minimum Design Loads	60 mph (3 second gust), Exposure Category C	200-lb Concentrated Load	50-psf Live Load	20-psf Live Load	1500-psf Load Bearing Pressure on Top of the Soil	20-psf Live Load

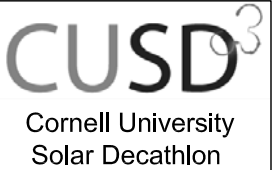
THERMAL DESIGN CRITERIA

CLIMATE ZONE	FENESTRATION <i>U</i> -FACTOR	SKYLIGHT** <i>U</i> -FACTOR	GLAZED FENESTRATION SHGC	CEILING <i>R</i> VALUE	WOOD FRAME WALL <i>R</i> -VALUE	FLOOR <i>R</i> VALUE
4 Washington, D.C.	0.4	0.6	NR	38	13	19
6 Ithaca, NY	0.35	0.6	NR	49	19 or 13 + 5***	30

* *R*-values are minimums. *U*-factors and SHGC are maximums. R-19 insulation shall be permitted to be compressed into a 2 x 6 cavity.

** The fenestration *U*-factor column excludes skylights. The solar heat gain coefficient (SHGC) column applies to all glazed fenestration.

*** "13 + 5" means R-13 cavity insulation sheathing. If the structural sheathing covers 25% or less of the exterior, R-5 sheathing is not required where structural sheathing is used. If structural sheathing covers more than 25% or exterior, structural sheathing shall be supplemented with insulated sheathing of at least R-2.

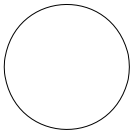
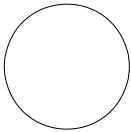


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DESIGN
CRITERIA
SUMMARY

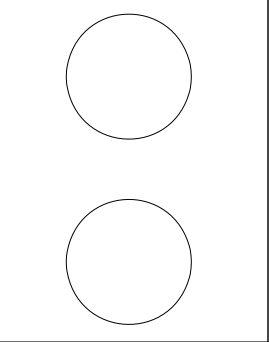
G-004

DESIGN NARRATIVE

The 2009 Cornell University Solar Decathlon House engages sustainable, modular design with a unique assembly of circular and orthogonal elements, formally similar to the vernacular architecture found in upstate New York. The house is composed of a central square courtyard surrounded by three conditioned “living” cylinders with a rectilinear array of photovoltaics floating above the entire structure. The open courtyard serves as the focal point of the house, defined by perimeter columns and a photovoltaic canopy as an independent cube. The adjoining cylinders - bedroom, kitchen, and living room - direct views centrally to the courtyard. Though there are few windows along the circumference of each cylinder, large operable NanaWalls, proprietary, wood-framed glass walls, completely open the space between the cylinders and the courtyard. This exchange is encouraged with flexible furniture that can be moved between interior and exterior and an outdoor fireplace built into the courtyard.

The solar house combines bold aesthetic features with creative sustainable applications. The cylinders are inspired by industrial agricultural materials, employing a Cor-Ten corrugated steel cladding and exposed steel beams on the interior. The house takes advantage of solar gain from the steel envelope through an innovative skin-integrated solar thermal system that pre-heats hot water. To allow additional diffuse light and to promote stack ventilation, each cylinder has two operable skylights. The house's landscape pioneers grey water filtration research with its Nutrient Film Technique (NFT) System, treating waste through a thin film of water that flows over plant roots with no soil medium.

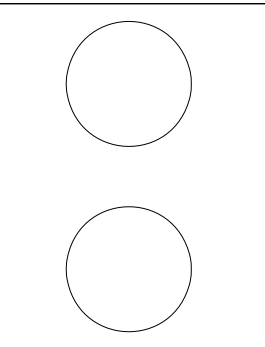
Through its novel approach to modular design, interplay between conditioned and unconditioned space, and creative applications of university research, the 2009 CUSD team hopes to redefine the solar-powered home.



TARGET MARKET

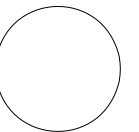
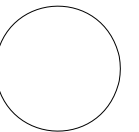
Our house is designed to suit the outdoor, dynamic lifestyle of a modern couple residing in or visiting Ithaca, N.Y. The potential buyers are intended to be a 50-year old, active couple with an average household income of \$100,000. The 800 SF house might be small for full-time habitation, but would be ideal for a getaway in the rural wine country of upstate New York.

MARKET I.D. PARAMETER	TARGET MARKET
Location of Permanent Site	Cayuga Lake, Ithaca, NY
Housing Type	Vacation Retreat
No. of Occupants	2
Occupant Demographic	Empty nesters, age 50
Homeowner Annual Incom	\$100,000
No. of Bedrooms	1



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PLAN

G-101

SHEET 7 OF 196

E

D

C

B

A

G-101

DIAGRAMMATIC MALL PLAN

not to scale

PLAN
NORTH

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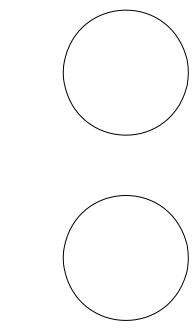


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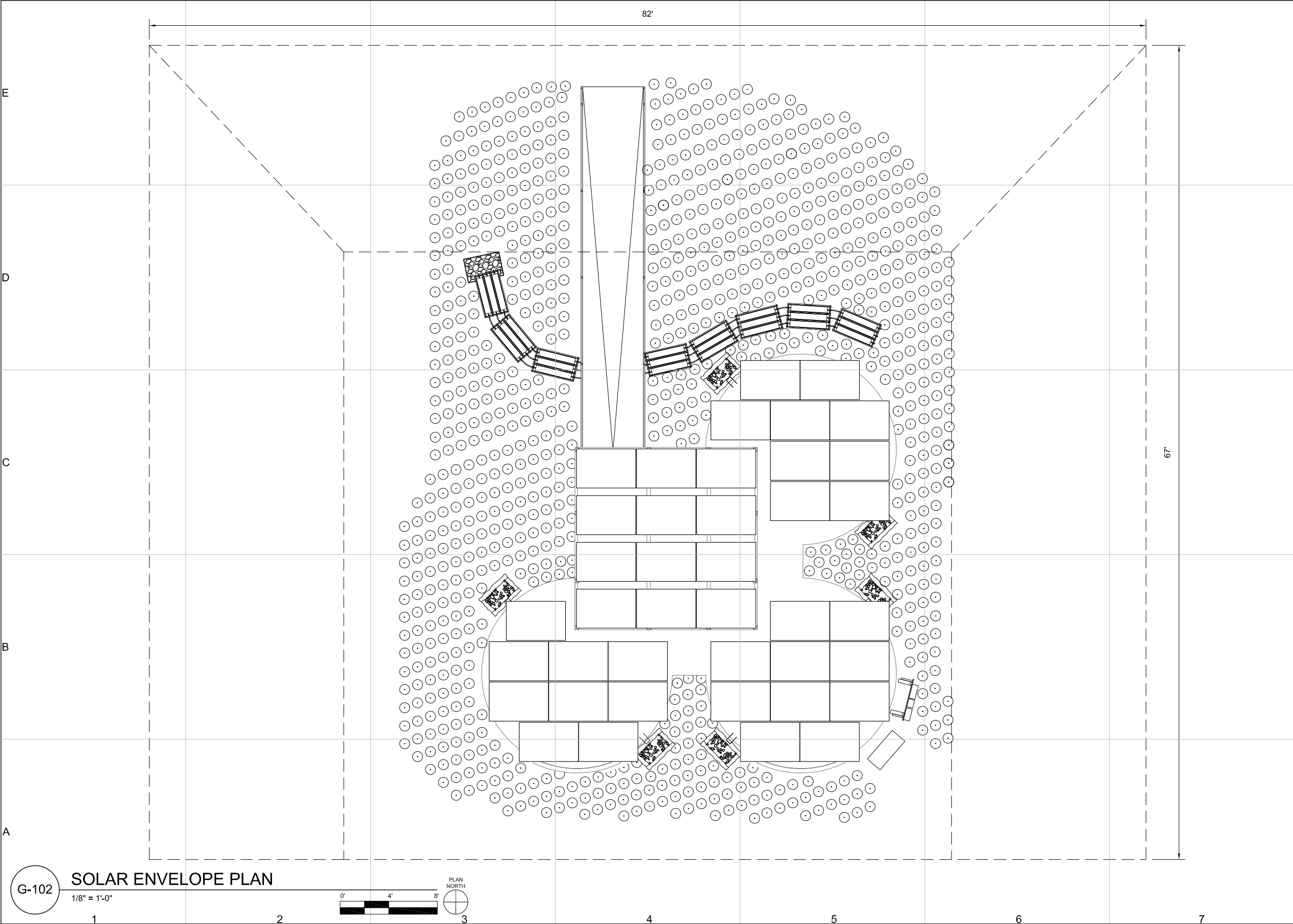
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PLAN

G-102

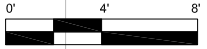
SHEET 8 OF 196



G-102

SOLAR ENVELOPE PLAN

1/8" = 1'-0"



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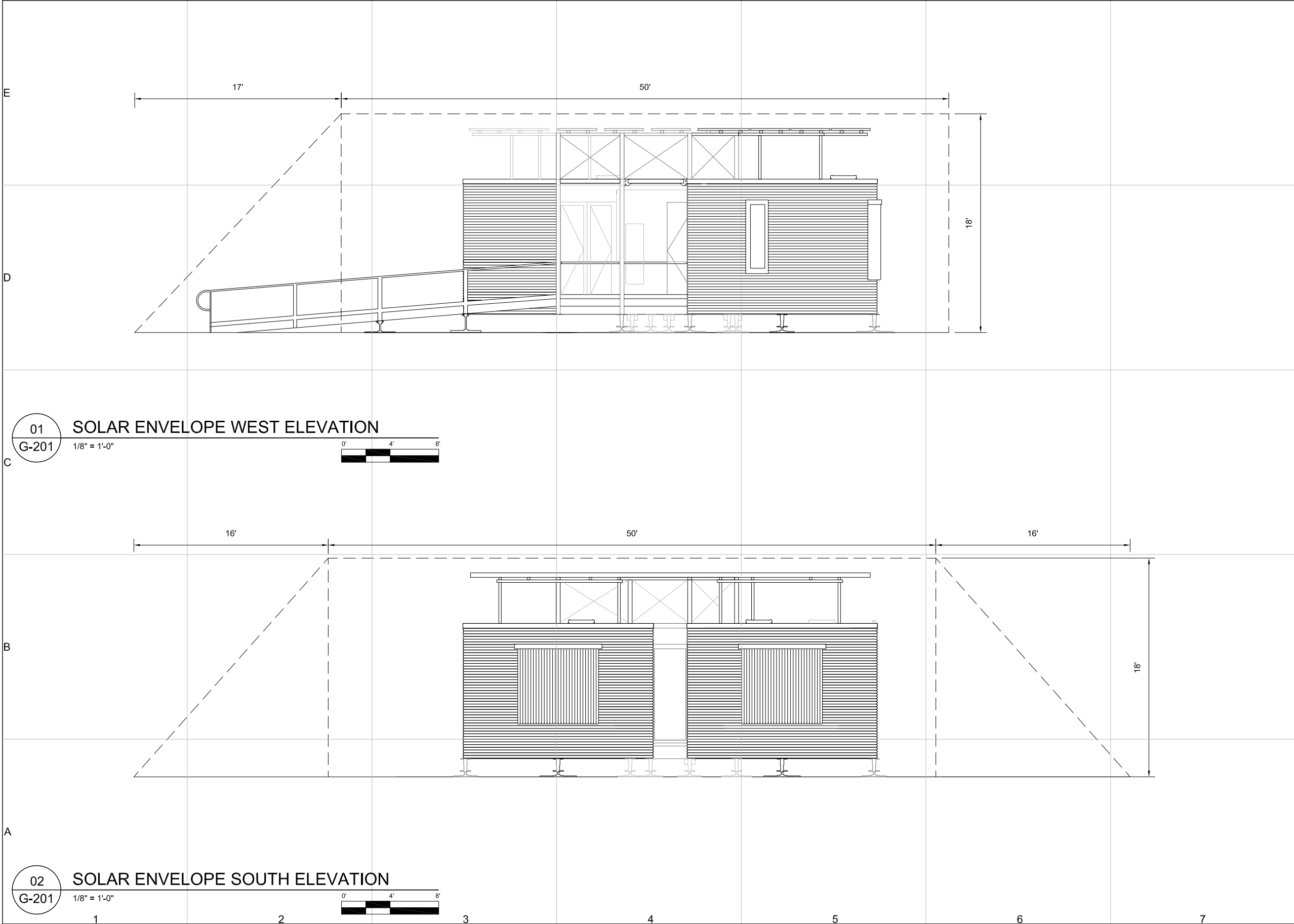
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SHEET TITLE

ELEVATIONS

G-201

SHEET 9 OF 196



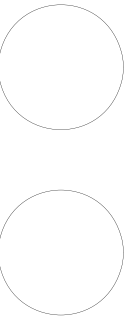


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RENDERING

G-901

SHEET 10 OF 190

G-901
EXTERIOR RENDERING
not to scale

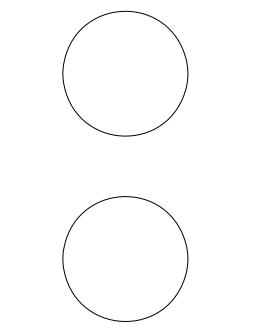
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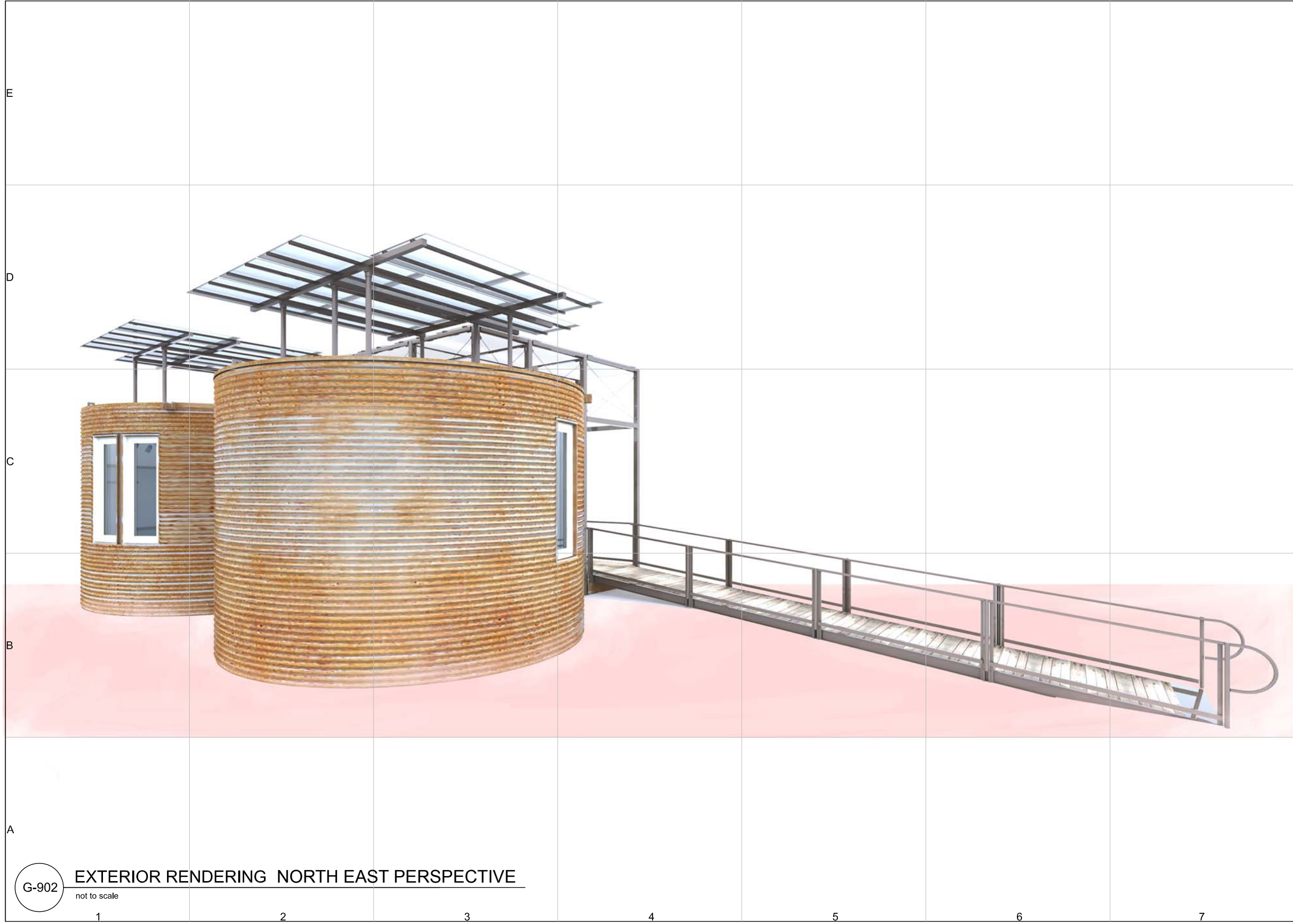
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RENDERING

G-902

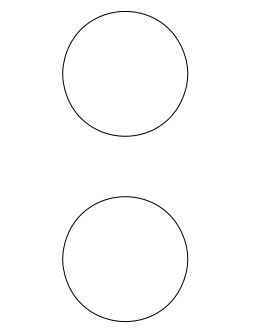


G-902

EXTERIOR RENDERING NORTH EAST PERSPECTIVE
not to scale

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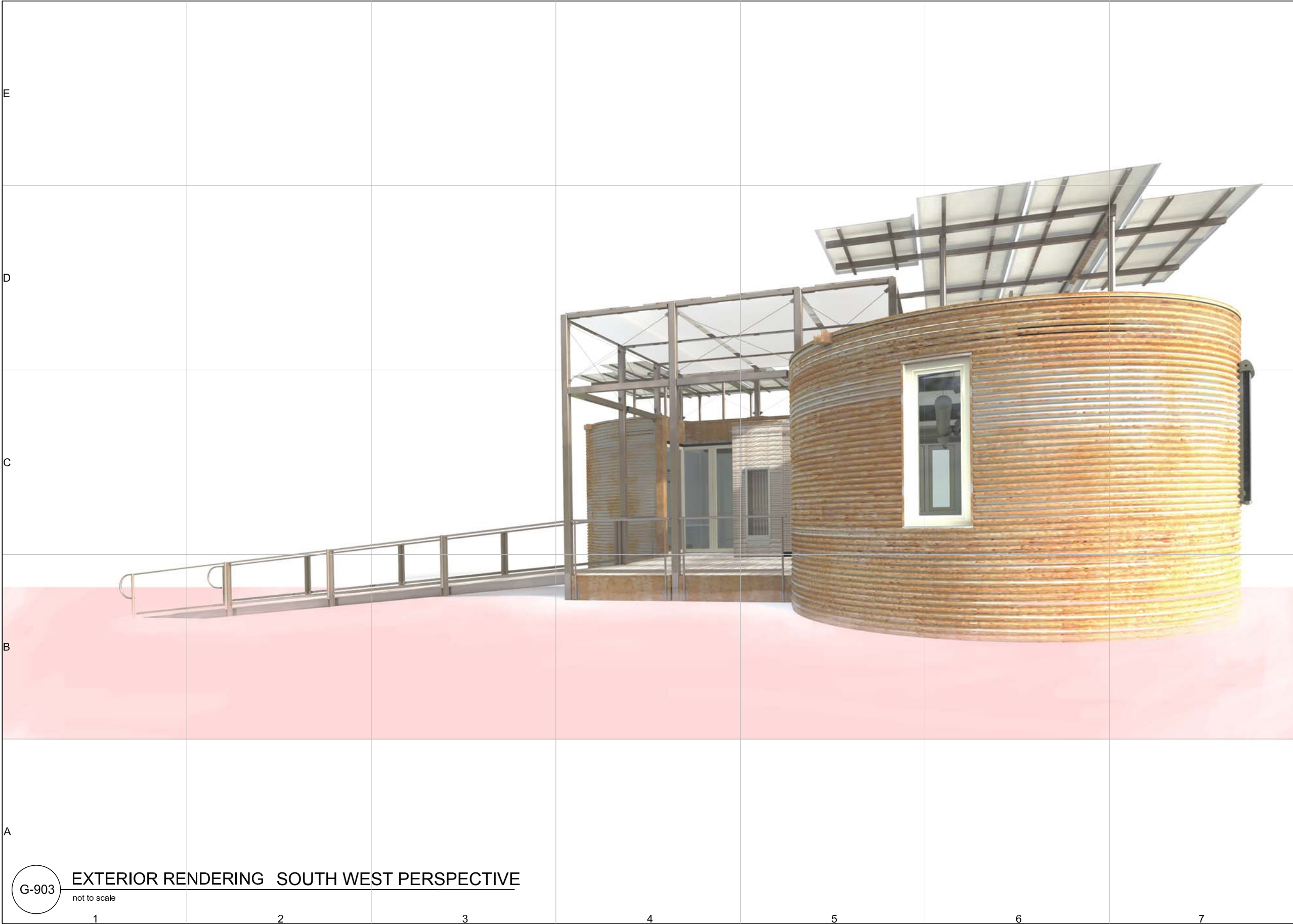


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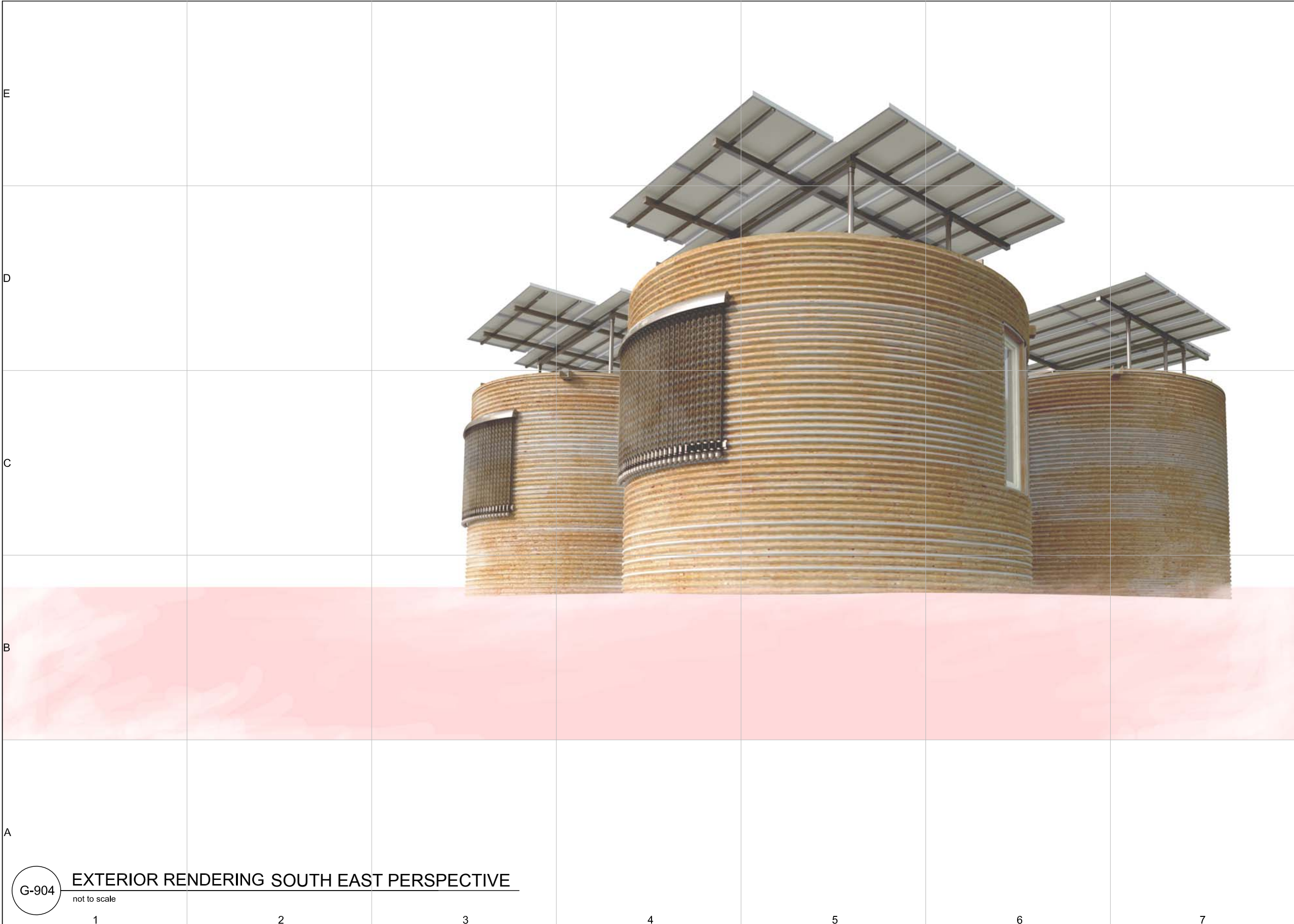
RENDERING

G-903



G-903

EXTERIOR RENDERING SOUTH WEST PERSPECTIVE
not to scale

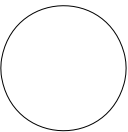
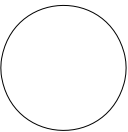


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RENDERING

G-904

G-904

EXTERIOR RENDERING SOUTH EAST PERSPECTIVE
not to scale

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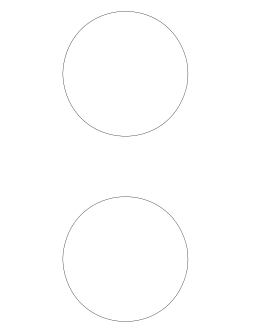
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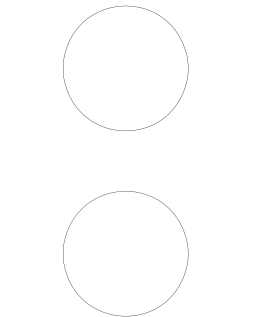
G-905



G-905
not to scale
EXTERIOR RENDERING NORTH ELEVATION

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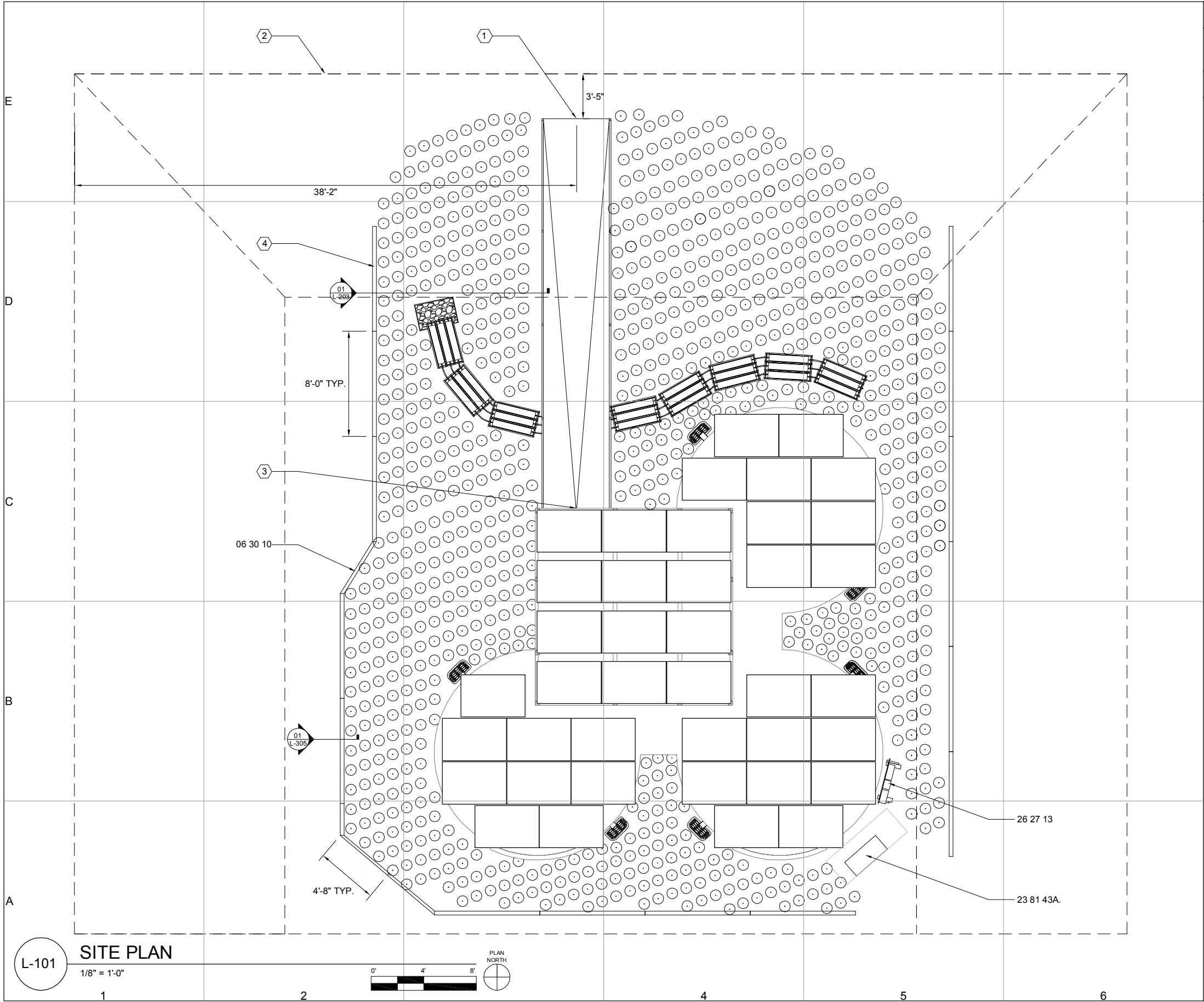
SHEET TITLE
RENDERING

G-906



G-906 **EXTERIOR RENDERING WEST ELEVATION**
not to scale

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E							
D							
C							
B							
A	1	2	4	5	6	<div><div><div><div></div><div></div><div></div></div><div>- ELECTRICAL PLUG</div></div><div><div><div></div><div></div></div><div>- 3 GALLON PLANT</div></div><div><div><div></div><div></div><div></div></div><div>- NFT TROUGHS</div></div><div><div><div></div><div></div></div><div>- AQUABLOX</div></div><div><div><div></div><div></div></div><div>- DOWNSPOUT FILTER</div></div><div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>- SCAFFOLDING</div></div></div> <div><div><div><div>1</div><div>L xxx</div></div><div></div></div><div>- SECTION CALLOUT</div><div><div><div>1</div><div>L xxx</div></div><div></div></div><div>- DETAIL CALLOUT</div></div>	<div>SYMBOLS AND NOTES</div> <div>L-001</div> <div>SHEET 16 OF 196</div>



GENERAL SHEET NOTES:

1. GROUNDING ROD LOCATION TO BE DETERMINED BY COMPETITION ORGANIZERS UPON ARRIVAL TO THE NATIONAL MALL.

REFERENCE KEYNOTES:

- DIVISION 06 - WOOD, PLASTICS, & COMPOSITES
06 30 10 SKIRTING FOR LANDSCAPE
DIVISION 23 - HVAC
23 81 43.A AIR-SOURCE UNITARY HEAT PUMPS
DIVISION 26 - ELECTRICAL
26 27 13 ELECTRICITY METERING- METER AND TERMINAL BOX

SHEET KEYNOTES:

1. 0'-0" FFE
2. SOLAR ENVELOPE
3. 2'-6" FFE
4. SEE L-503 FOR ASSEMBLY INSTRUCTIONS

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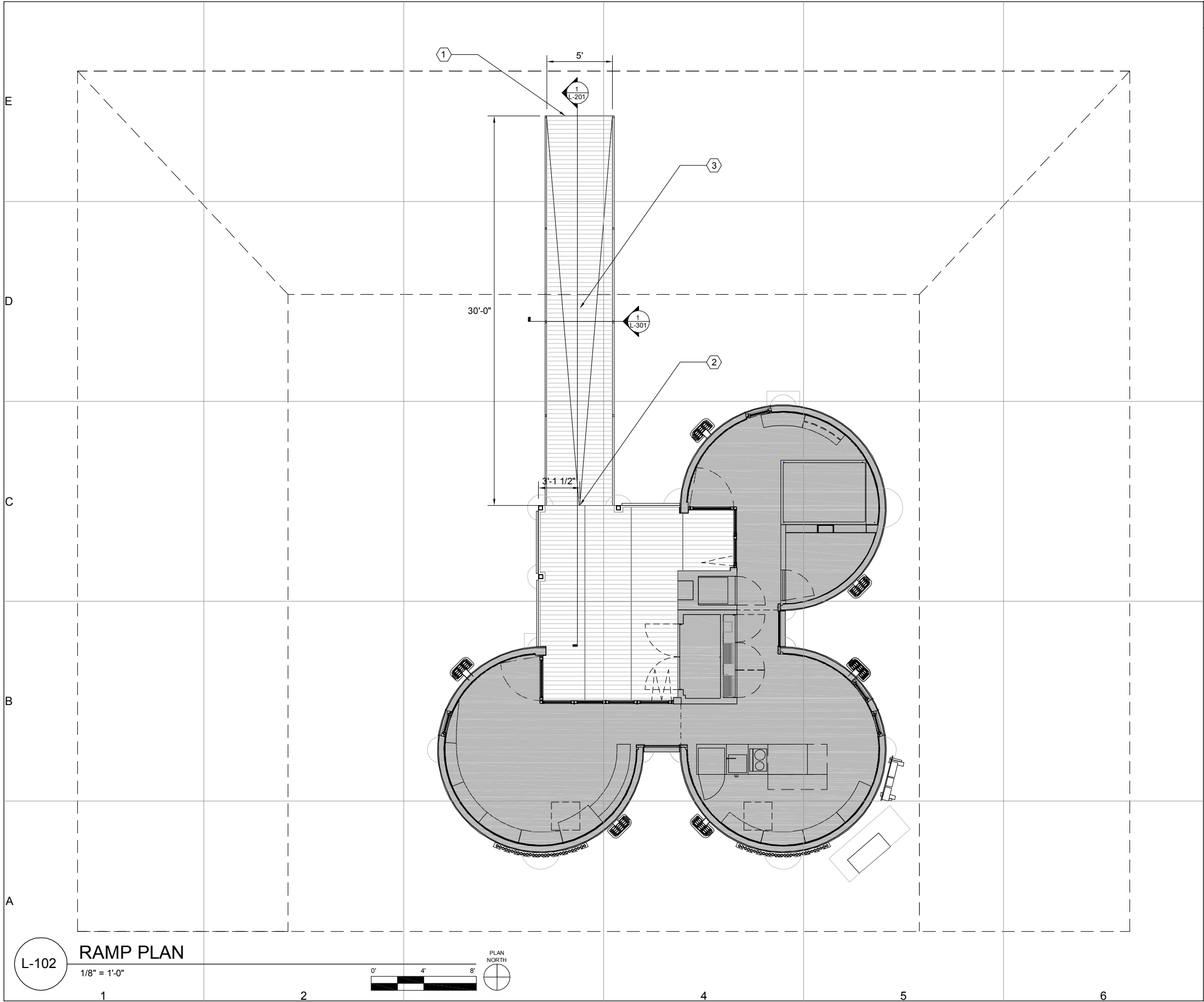
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SHEET TITLE

PLAN

L-101

SHEET 17 OF 196



SHEET KEYNOTES:	
1.	0'-0" FFE
2.	2'-6" FFE
3.	RAMP SLOPES AT 8.33%

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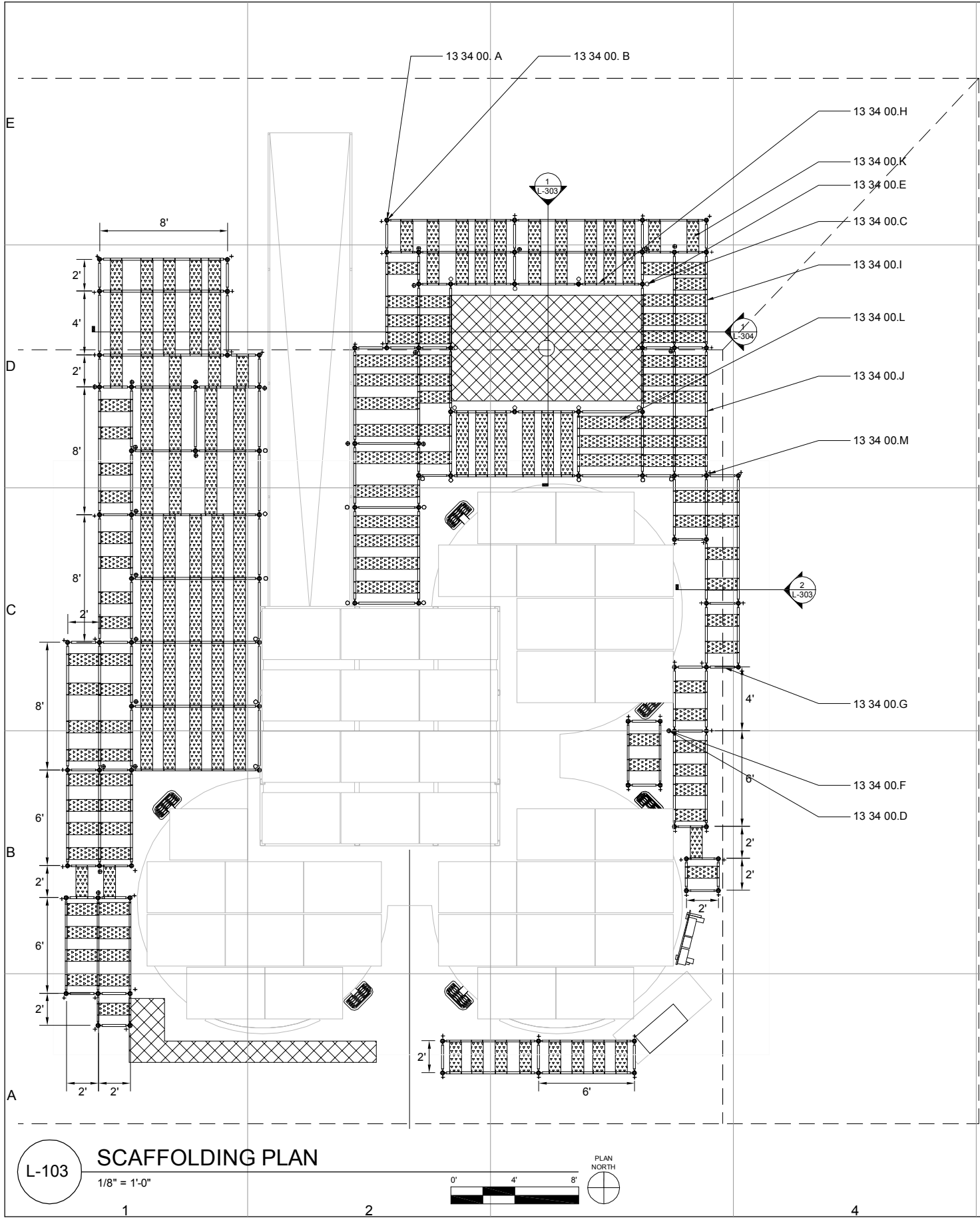
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PLAN

L-102

SHEET 18 OF 196



SCAFFOLDING SCHEDULE		
SYMBOL	NES PART NUMBER	QUANTITY
+	UBC	58
	UBP	58
•	US 17 T	21
	US J 20 CUSTOM	21
°	US J 20	13
	US 17 T	13
	UH20	62
	UH40	70
	UH60	37
	UH80	23
	USP 20	138
	USP 40	72

GENERAL SHEET NOTES:

1. ANY PART DENOTED WITH CUSTOM MEANS THE PART NEEDS TO BE BOUGHT SO MODIFICATIONS MAY BE MADE TO IT

REFERENCE KEYNOTES:

DIVISION 13 - SPECIAL CONSTRUCTION

- 13 34 00.A FABRICATED ENGINEERED STRUCTURES- UBC
13 34 00.B FABRICATED ENGINEERED STRUCTURES- UBP
13 34 00.C FABRICATED ENGINEERED STRUCTURES- US 17 T
13 34 00.D FABRICATED ENGINEERED STRUCTURES- US J 20 CUSTOM
13 34 00.E FABRICATED ENGINEERED STRUCTURES- US J 20
13 34 00.F FABRICATED ENGINEERED STRUCTURES- US 17 T CUSTOM
13 34 00.G FABRICATED ENGINEERED STRUCTURES- UH 20
13 34 00.H FABRICATED ENGINEERED STRUCTURES- UH 40
13 34 00.I FABRICATED ENGINEERED STRUCTURES- UH 60
13 34 00.J FABRICATED ENGINEERED STRUCTURES- UH 80
13 34 00.K FABRICATED ENGINEERED STRUCTURES- USP 20
13 34 00.L FABRICATED ENGINEERED STRUCTURES- USP 40
13 34 00.M FABRICATED ENGINEERED STRUCTURES- ROSETTE



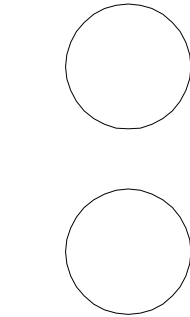
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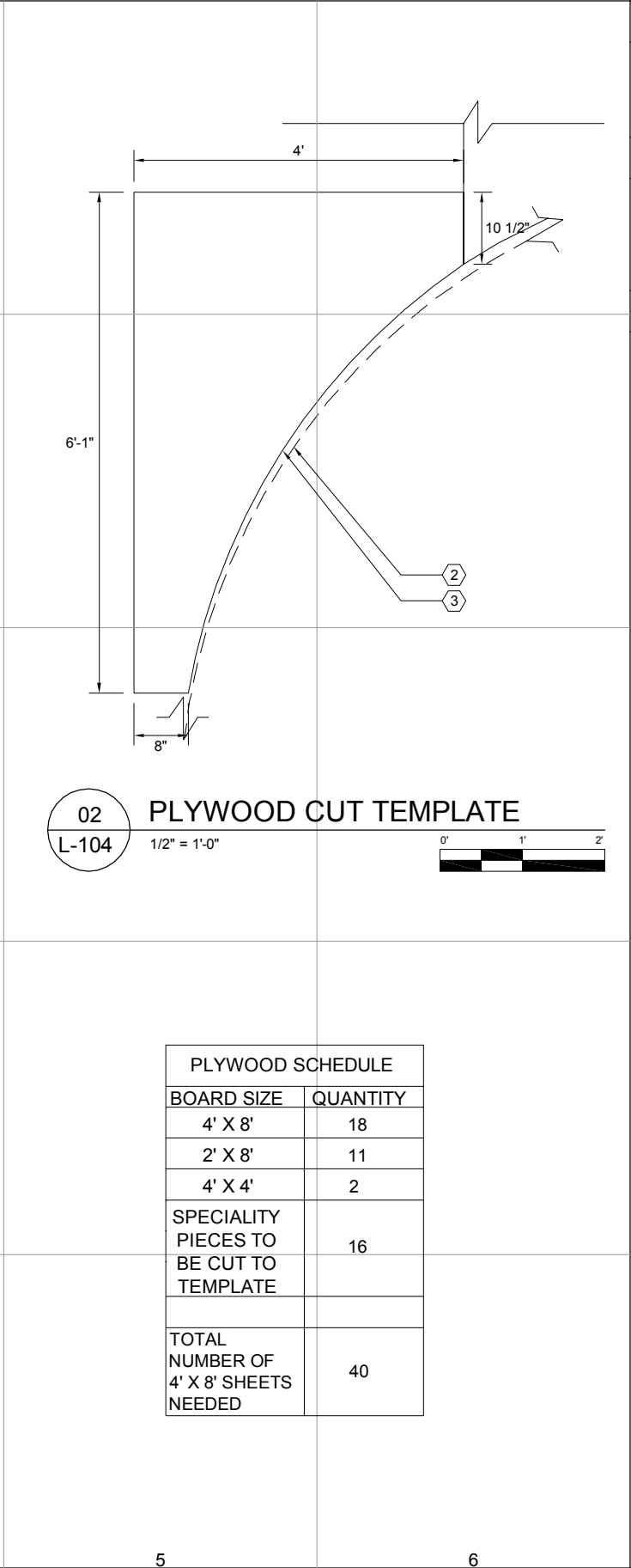
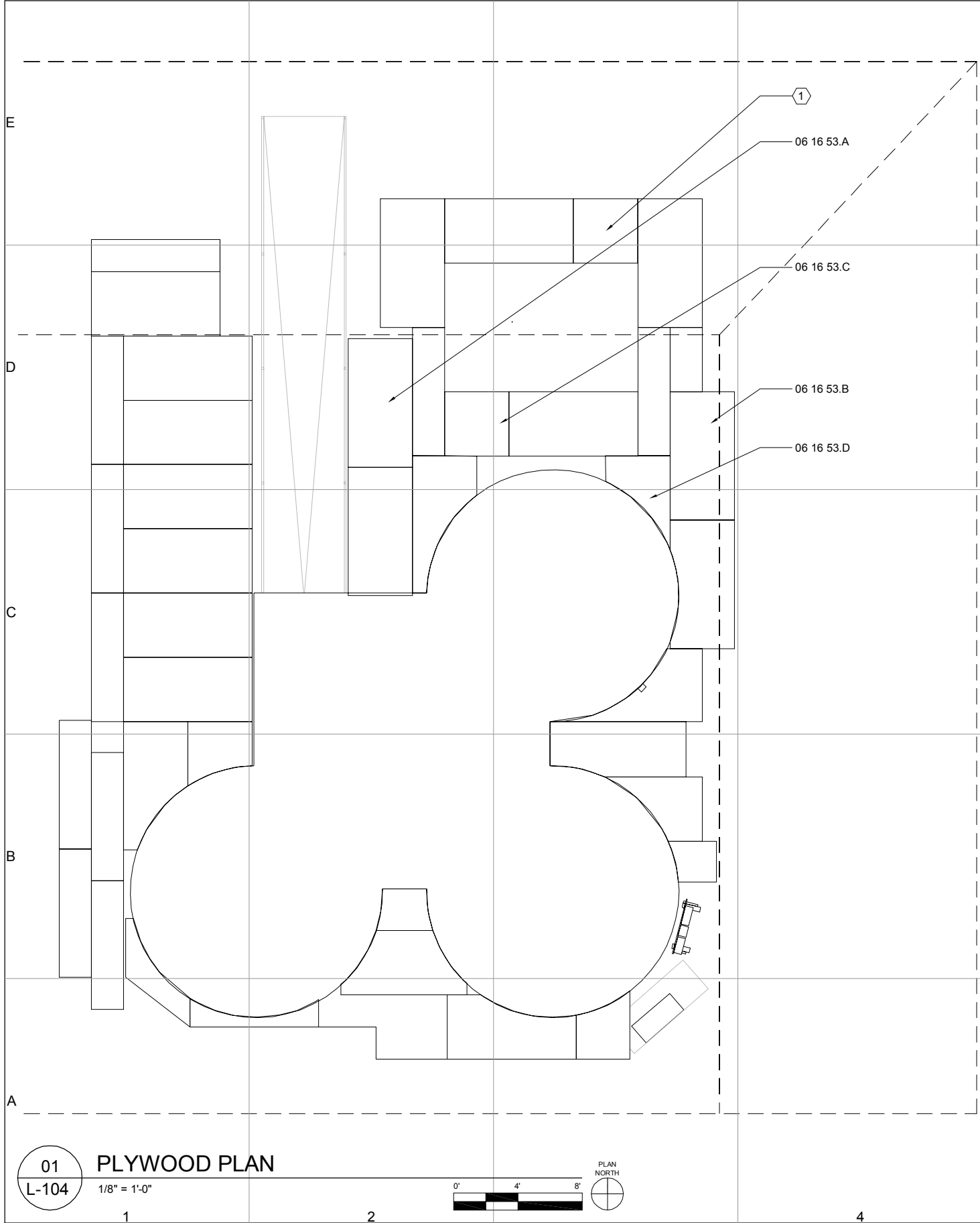
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L-103

SHEET 19 OF 196



PLYWOOD SCHEDULE	
BOARD SIZE	QUANTITY
4' X 8'	18
2' X 8'	11
4' X 4'	2
SPECIALITY PIECES TO BE CUT TO TEMPLATE	16
TOTAL NUMBER OF 4' X 8' SHEETS NEEDED	40

GENERAL SHEET NOTES:

1. ALL PLYWOOD TO BE TONGUE AND GROOVE (T&G)
4' X 8' X 1/2" EXTERIOR GRADE
2. ALL CUTS ALONG THE HOUSE TO FOLLOW CUT
TEMPLATE

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, &
COMPOSITES
06 16 53.A SHEATHING- 4x8' 1/2" PLYWOOD
06 16 53.B SHEATHING- 2x8' 1/2" PLYWOOD
06 16 53.C SHEATHING- 4x4' 1/2" PLYWOOD
06 16 53.D SHEATHING- SPECIAL CUT PIECES

SHEET KEYNOTES:

1. CUT LINE
2. CORTEN CLADDING OF HOUSE
3. R 7'-11"



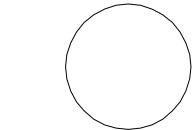
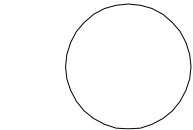
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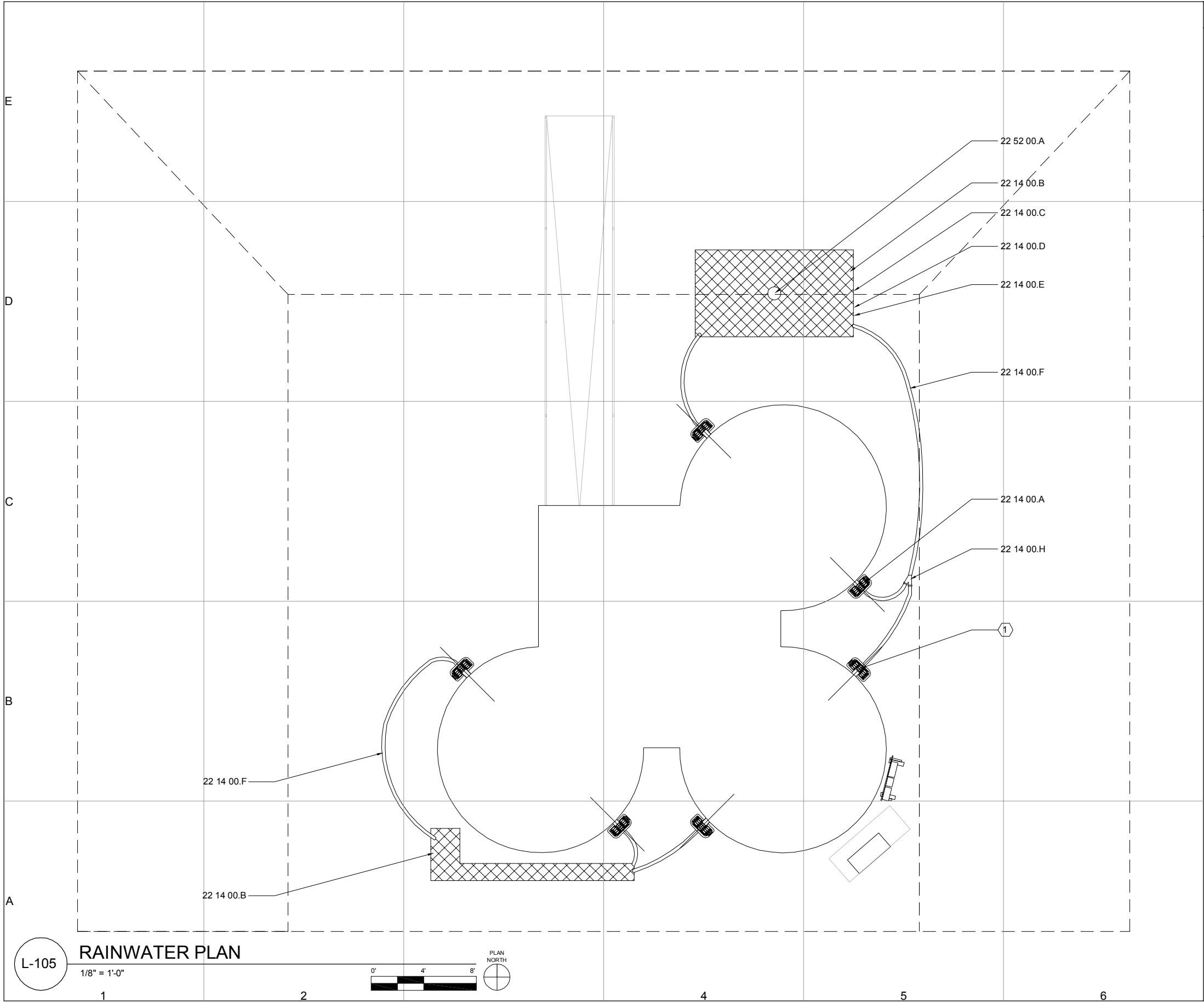
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PLAN

L-104



REFERENCE KEYNOTES:	
DIVISION 22 - PLUMBING	
22 14 00.A	FACILITY STORM DRAINAGE- CATCH BASIN
22 14 00.B	FACILITY STORM DRAINAGE- AQUABLOCKS
22 14 00.C	FACILITY STORM DRAINAGE- POND LINER
22 14 00.D	FACILITY STORM DRAINAGE- SUB-LINER
22 14 00.E	FACILITY STORM DRAINAGE- 2"x4" CONVENTIONAL LUMBER
22 14 00.F	FACILITY STORM DRAINAGE- 3" PLASTIC PVC PIPE
22 14 00.H	FACILITY STORM DRAINAGE- PVC Y CONNECTION
22 52 00.A	FOUNTAIN

SHEET KEYNOTES:
1. CENTER CATCH BASIN ON SCUPPER

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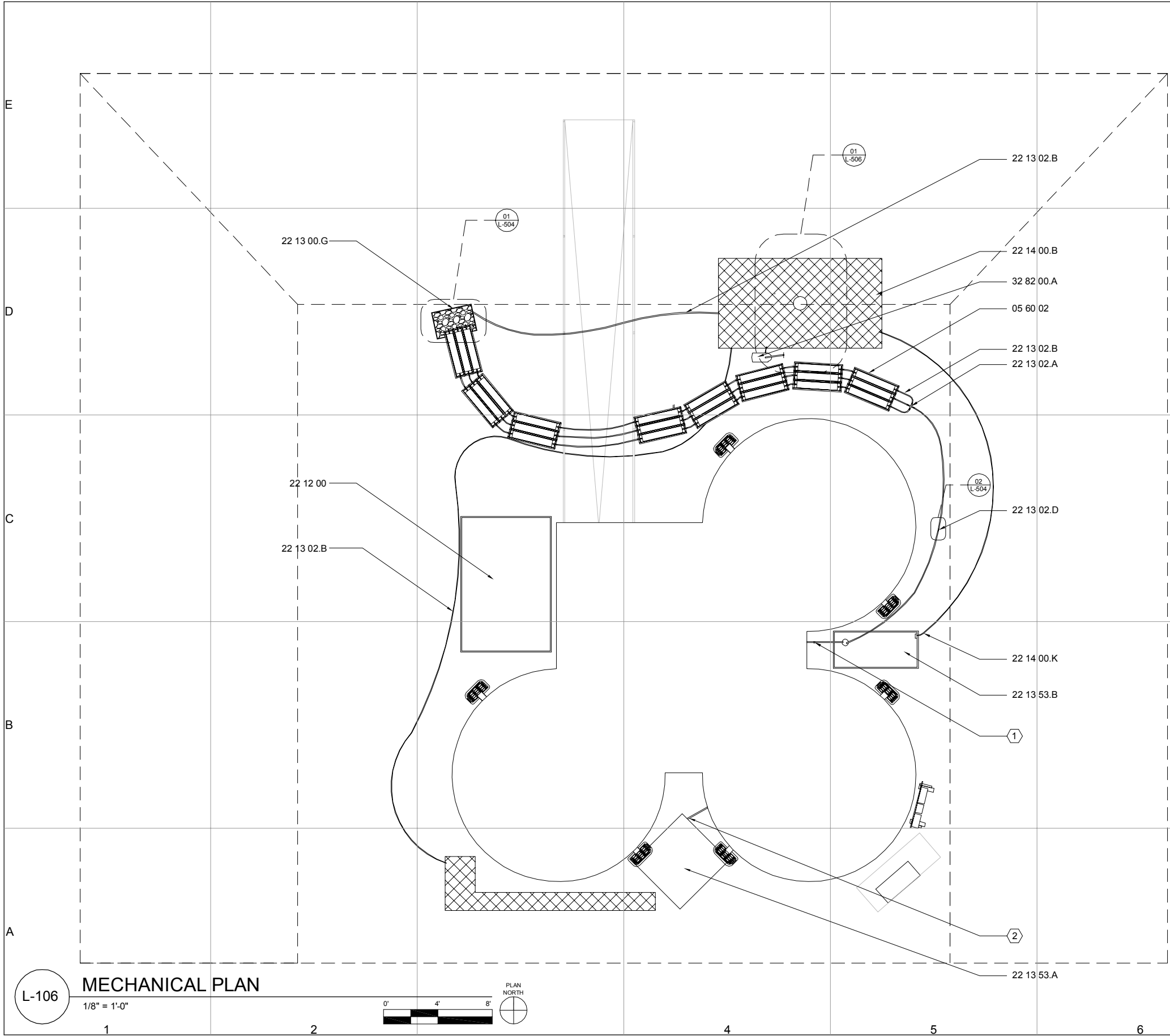
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PLAN

L-105

SHEET 21 OF 196



REFERENCE KEYNOTES:

- DIVISION 05 - METALS
05 60 02 NFT TROUGHS
- DIVISION 22 - PLUMBING
22 12 00 POTABLE LOAF TANK
22 13 00.G NFT END TANK
22 13 02.A 4 WAY PVC SPLITTER
22 13 02.B 1" PLASTIC FLEX PIPE
22 13 02.D FLOW RESTRICTOR
22 13 53.A BLACKWATER TANK
22 13 53.B GRAYWATER TANK
22 14 00.B FACILITY STORM DRAINAGE- AQUABLOCKS
22 14 00.K FACILITY STORM DRAINAGE- 1/2" PLASTIC FLEX PVC PIPE
- DIVISION 32 - EXTERIOR IMPROVEMENTS
32 82 00.A IRRIGATION PUMPS- BOOSTER PUMP

SHEET KEYNOTES:

- GRAYWATER OUTLET FROM HOUSE; SEE ARCHITECTURAL DRAWINGS
- BLACKWATER OUTLET FROM HOUSE; SEE ARCHITECTURAL DRAWINGS

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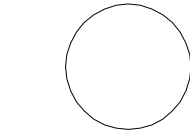
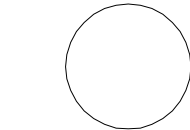
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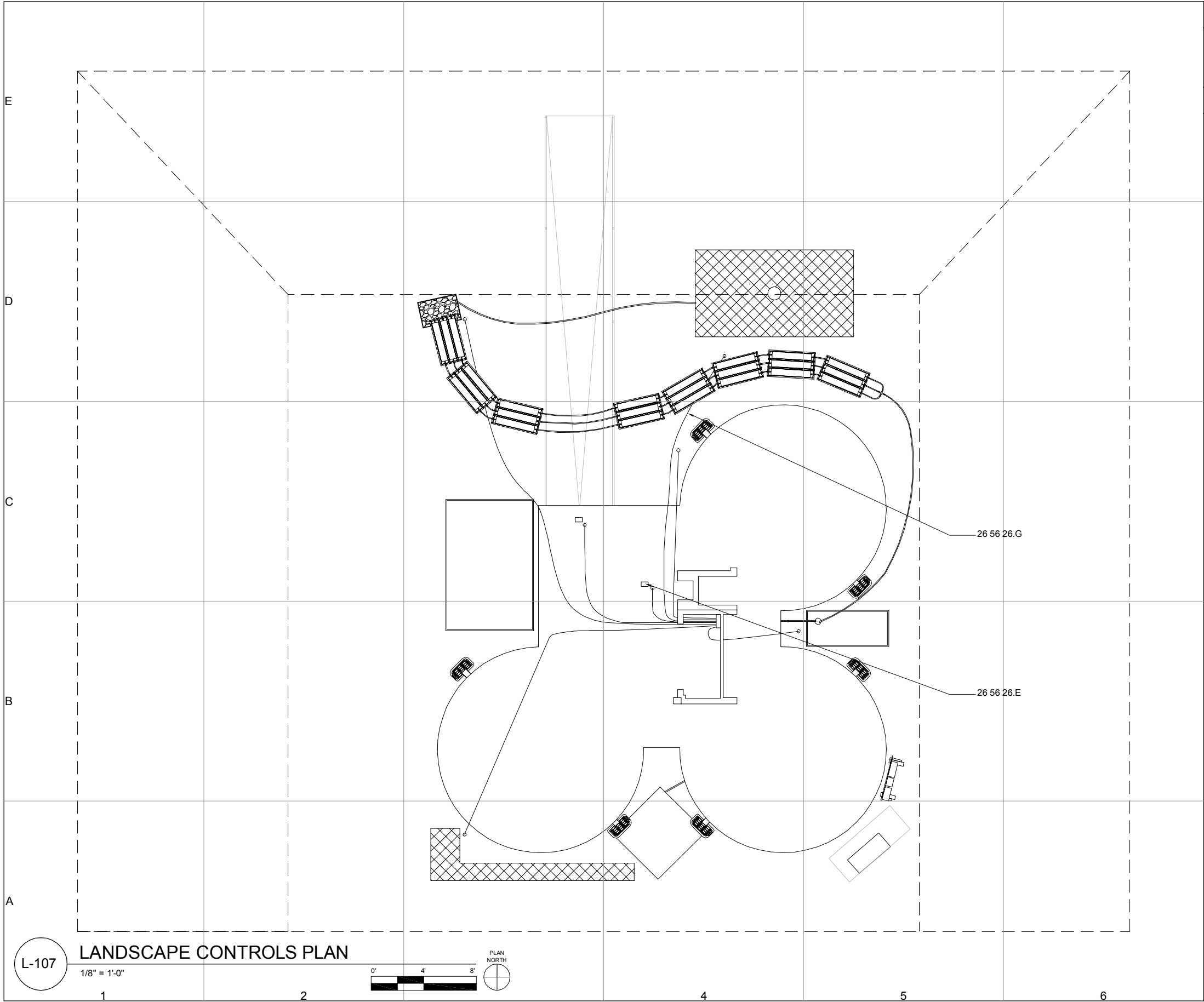
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PLAN

L-106

SHEET 22 OF 196



GENERAL SHEET NOTES:

1. ALL ELECTRICAL EXTENSION CORDS TO BE UL APPROVED EXTERIOR GRADE EXTENSION CORDS
2. LANDSCAPE ARCHITECTS TO DETERMINE WHICH PLUGS ARE TO REMAIN CONTINUOUSLY RUNNING

REFERENCE KEYNOTES:

DIVISION 26 - ELECTRICAL
26 56 26.E LANDSCAPE LIGHTING- TRANSFORMER
26 56 26.G LANDSCAPE LIGHTING- EXTENSION CORD



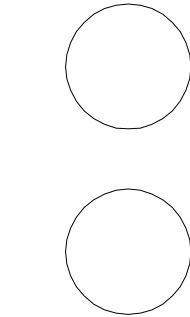
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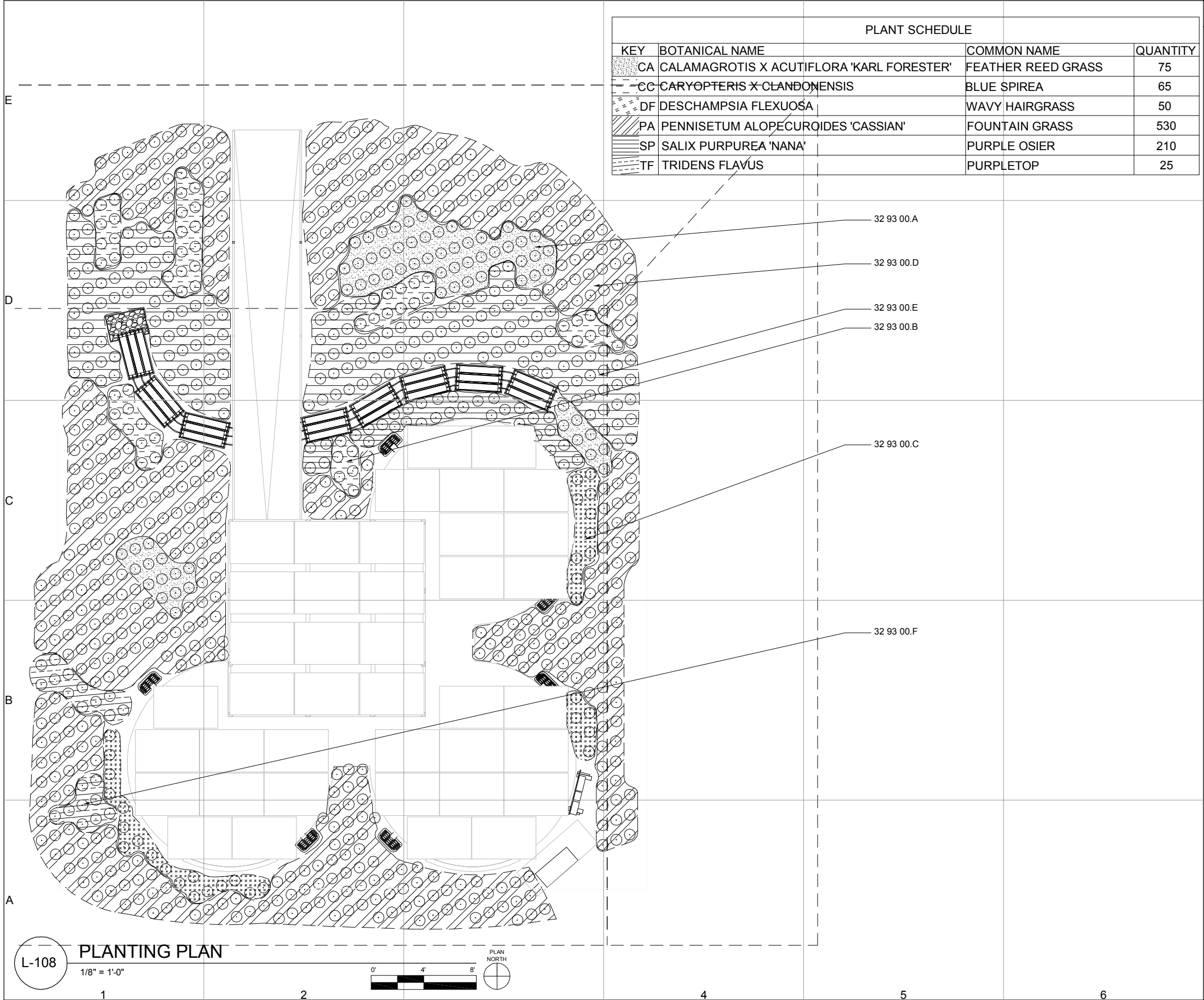
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PLAN

L-107



REFERENCE KEYNOTES:

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 93 00.A PLANTS AND BULBS- FEATHER REED GRASS - C ALAMAGROTIS X ACUTIFLORA 'KARL FORESTER'

32 93 00.B PLANTS AND BULBS- BLUE SPIREA- CARYOPERIS X CLANDONENSIS

32 93 00.C PLANTS AND BULBS- WAVY HAIRGRASS- DESCHAMPSIA FLEXUOSA

32 93 00.D PLANTS AND BULBS- FOUNTAIN GRASS- PENNISETUM ALOPECUROIDES 'CASSIAN'

32 93 00.E PLANTS AND BULBS- PURPLE OSIER- SALIX PURPUREA 'NANA'

32 93 00.F PLANTS AND BULBS- PURPLETOP- TRIDENS FLAVUS



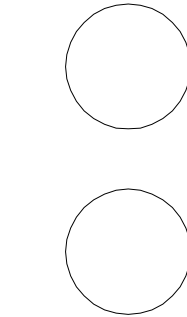
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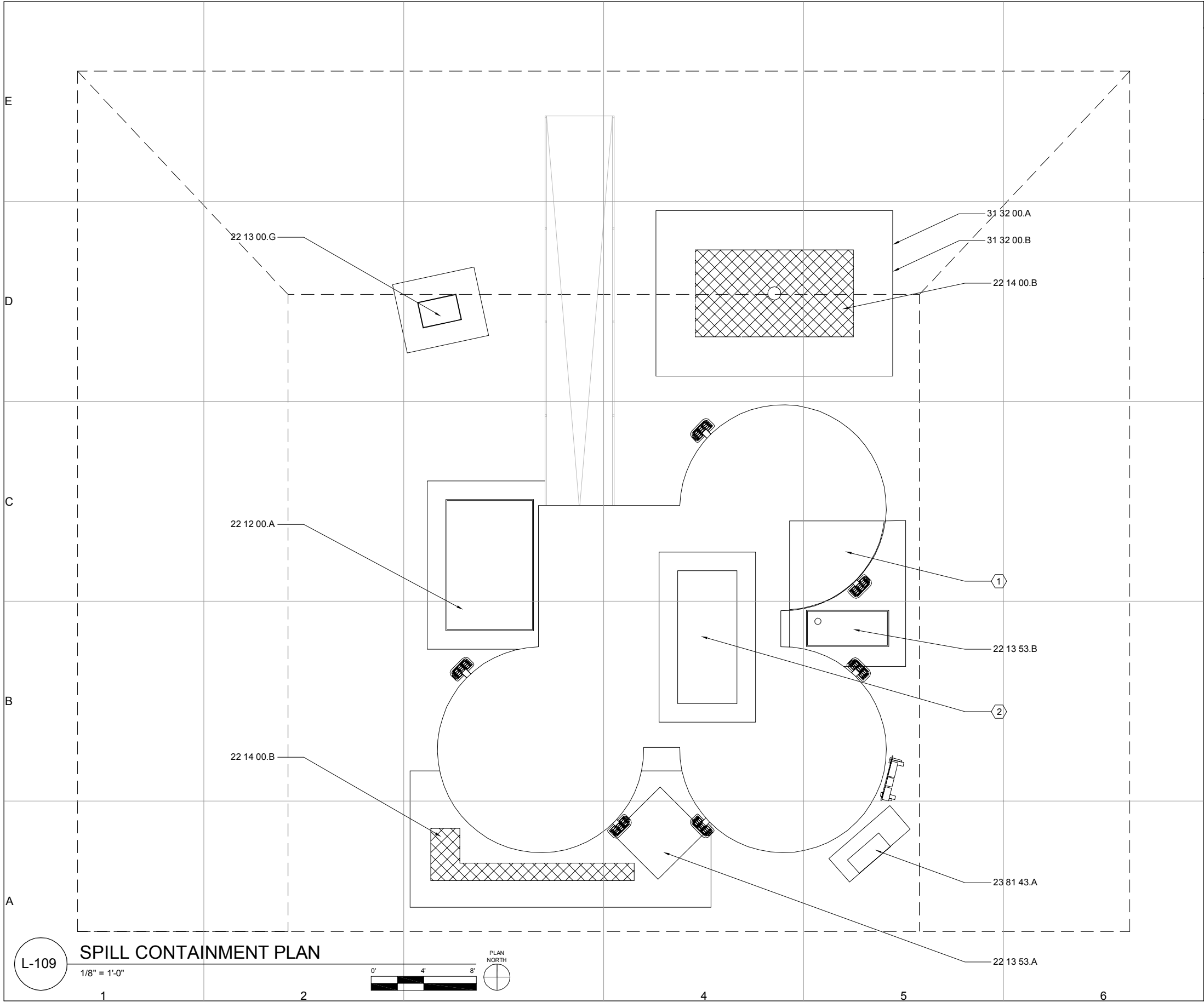
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PLAN

L-108



GENERAL SHEET NOTES:

1. ALL PLASTIC SHEETING TO BE 4MM.

2. ALL PLASTIC SHEETING TO BE LAID WITHIN WADDLE AND PLACED BEFORE STRUCTURAL JACKS SET IN PLACE WHERE APPLICABLE ALONG HOUSE

REFERENCE KEYNOTES:

DIVISION 22 - PLUMBING

22 12 00.A POTABLE LOAF TANK

22 13 00.G END TANK

22 13 53.A BLACK WATER TANK

22 13 53.B GRAY WATER TANK

22 14 00.B FACILITY STORM DRAINAGE-AQUABLOCKS

DIVISION 23 - HVAC

23 81 43.A AIR SOURCE UNITARY HEAT PUMPS

DIVISION 31 - EARTHWORKS

31 32 00.A PLASTIC SHEETING

31 32 00.B STRAW WADDLE

SHEET KEYNOTES:

1. BATHROOM

2. MECHANICAL CLOSET

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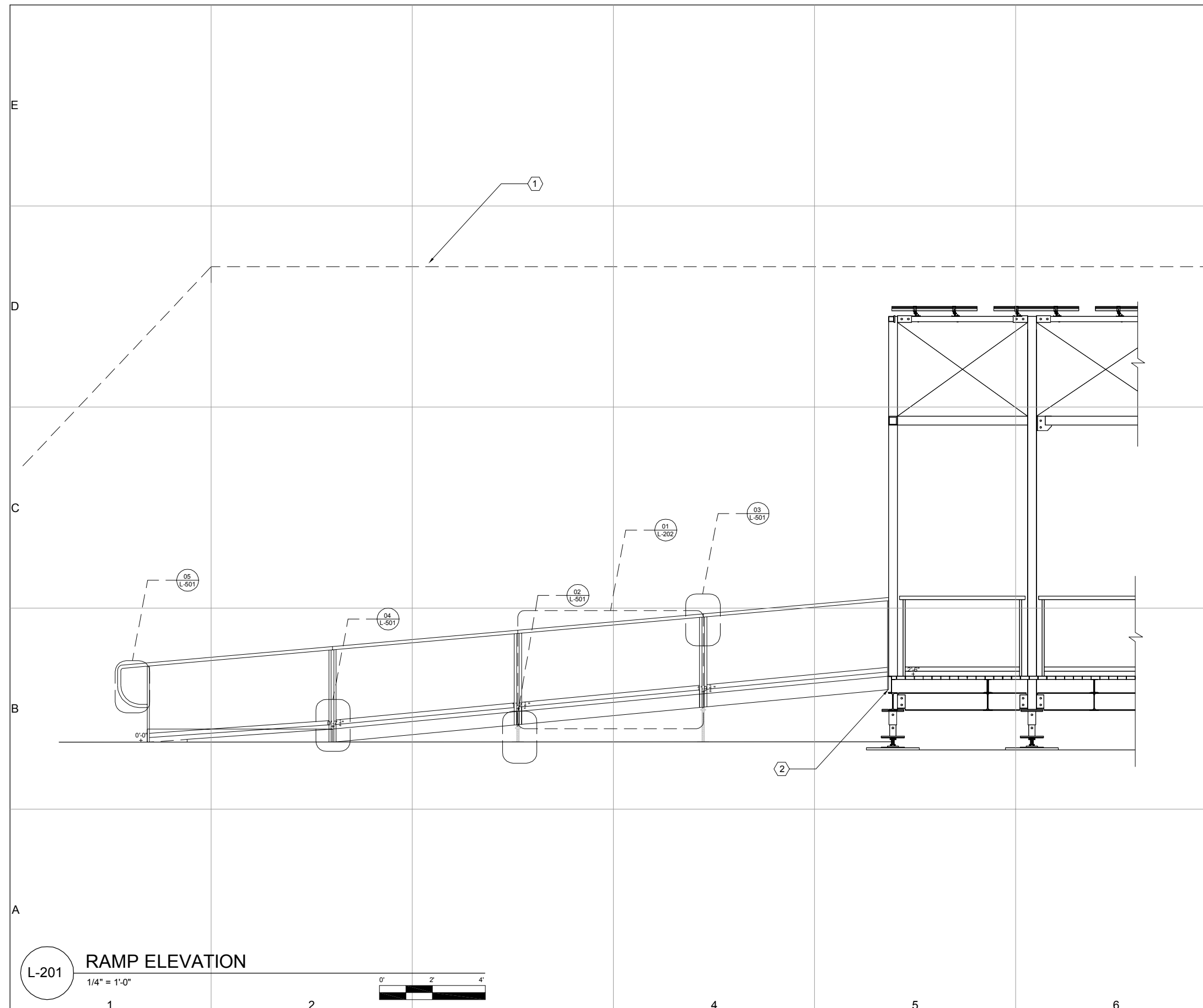
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PLAN

L-109

SHEET 25 OF 196



 SHEET KEYNOTES:

1. SOLAR ENVELOPE
2. RAMP TO COURTYARD CONNECTION T.B.D. BY METAL FABRICATOR

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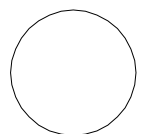
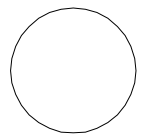
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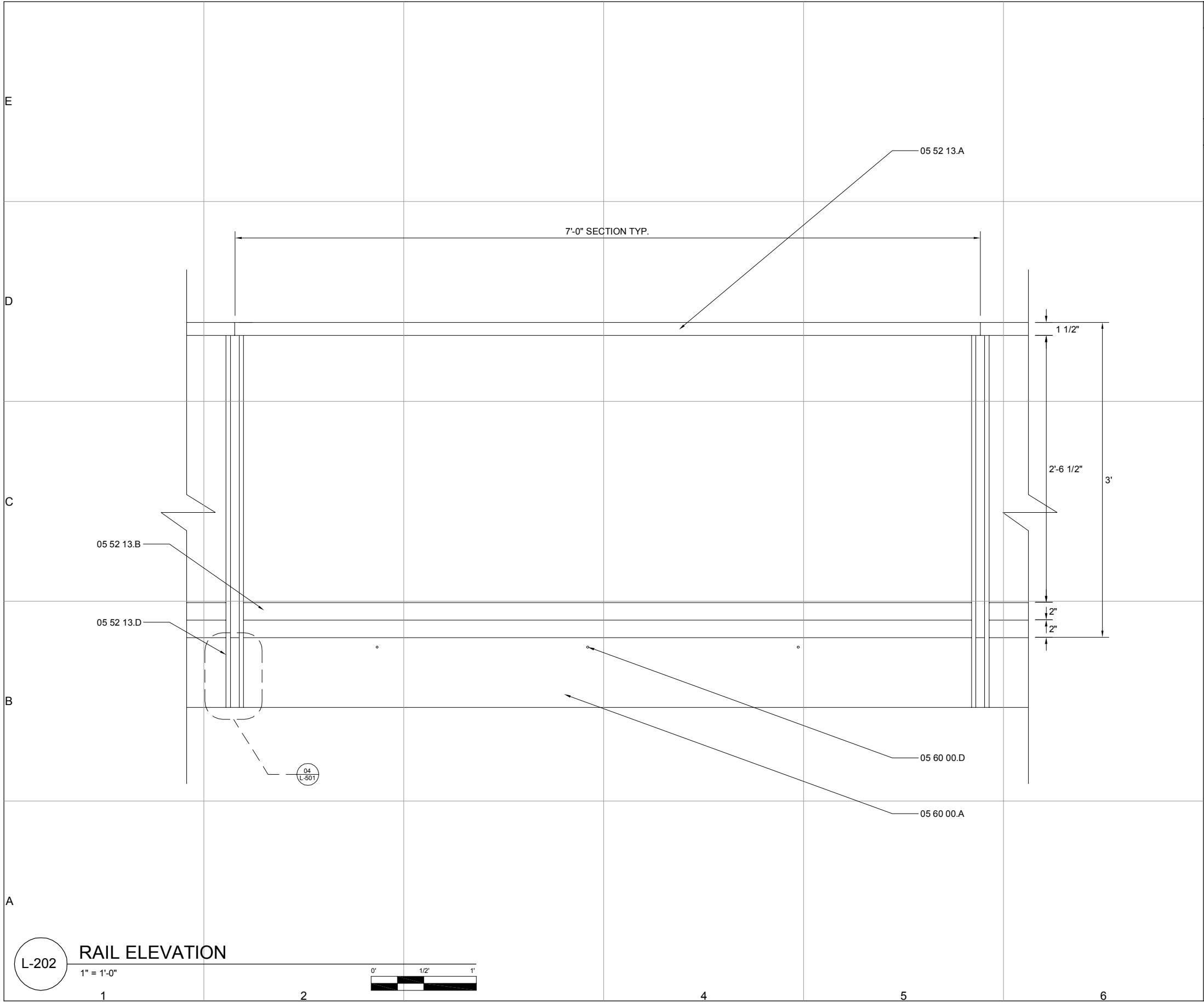
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SHEET TITLE

ELEVATION

L-201

SHEET 26 OF 196



GENERAL SHEET NOTES:

- 1. ALL RAIL SECTIONS TO BE 7'-0" IN LENGTH UNLESS OTHERWISE SPECIFIED
- 2. ALL CONNECTIONS BETWEEN THE RAILING AND THE RAMP TO BE HIDDEN FROM VIEW
- 3. ALL HANDRAIL SPLICES TO BE OUT OF PLAIN SIGHT AND SPLICE CONNECTIONS TO OCCUR UNDERNEATH

REFERENCE KEYNOTES:

DIVISION 05 - METALS	
05 52 13.A	PIPE AND TUBE RAILINGS- 1 1/2" O.D. ROUND STEEL TUBE
05 52 13.B	PIPE AND TUBE RAILINGS- SQUARE STEEL TUBE
05 52 13.D	PIPE AND TUBE RAILINGS- ANGLE IRON
05 60 00.A	ENTRANCE RAMP- STEEL C-CHANNEL
05 60 00.D	ENTRANCE RAMP- CARRIAGE BOLT



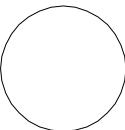
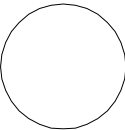
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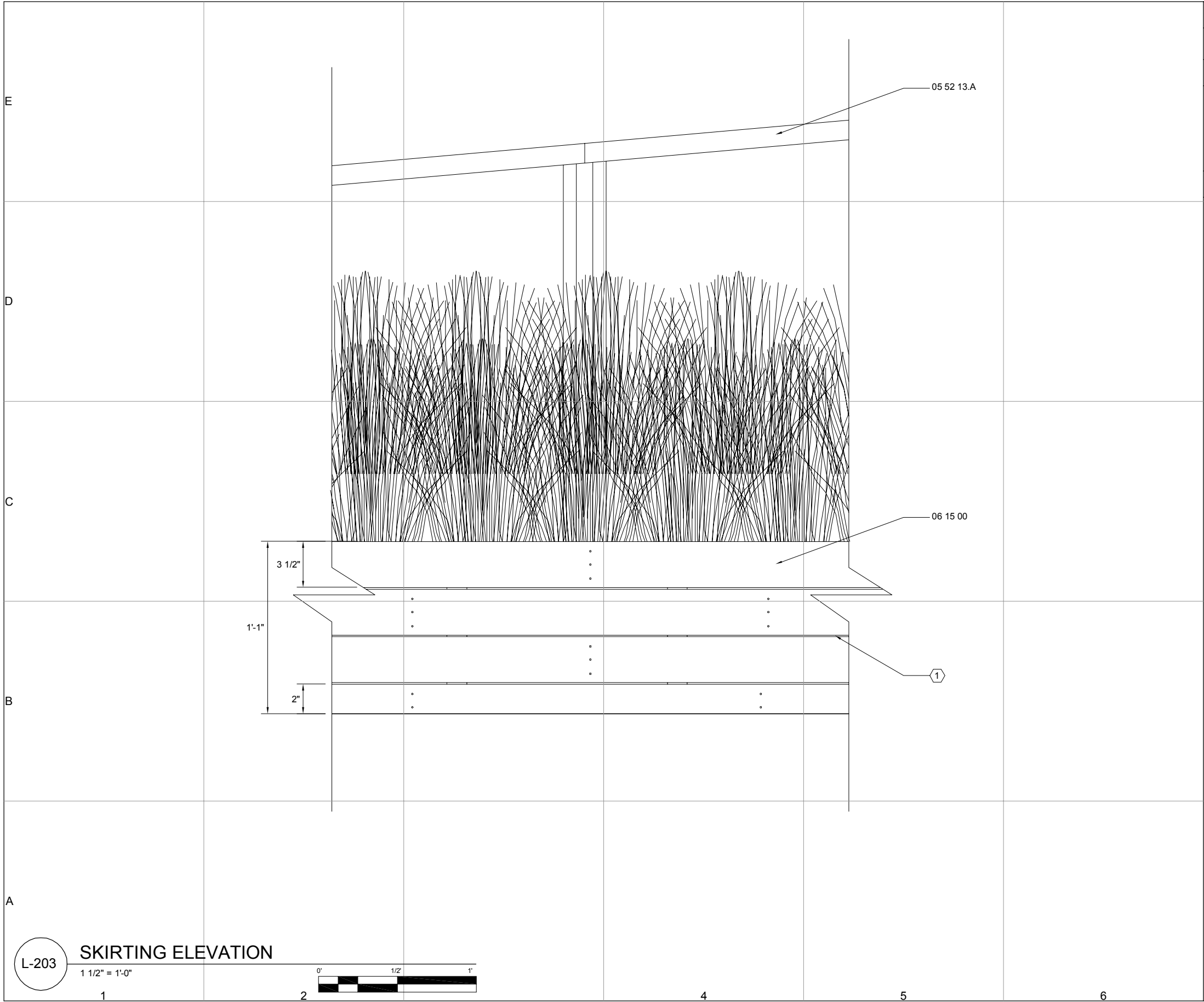
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ELEVATION

L-202



GENERAL SHEET NOTES:

- SEE L-503 FOR PLAN AND DETAILS ABOUT HOW SKIRTING COMES TOGETHER

REFERENCE KEYNOTES:

DIVISION 05 - METALS

05 52 13.A PIPE AND TUBE RAILINGS-1 1/2" O.D. ROUND STEEL TUBE

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES

06 15 00 WOOD DECKING- BLACK LOCUST

SHEET KEYNOTES:

- 1/8" SPACING TYP. BETWEEN PLANKS

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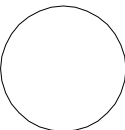
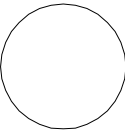
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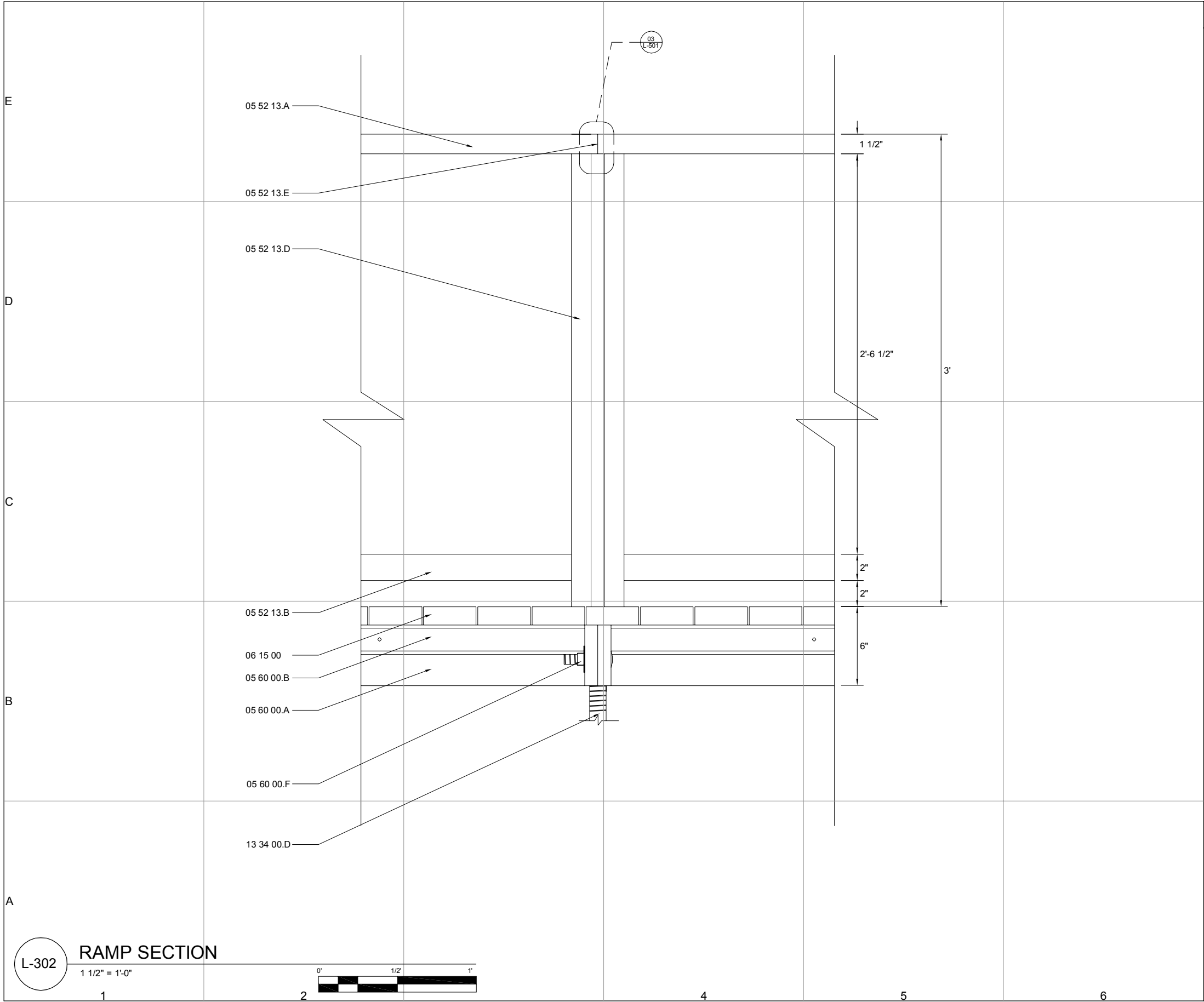
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ELEVATION

L-203

SHEET 28 OF 196



REFERENCE KEYNOTES:

DIVISION 05 - METALS

- | | |
|------------|---|
| 05 52 13.A | PIPE AND TUBE RAILINGS- 1 1/2" O D ROUND TUBE |
| 05 52 13.B | PIPE AND TUBE RAILINGS- SQUARE STEEL TUBE |
| 05 52 13.D | PIPE AND TUBE RAILINGS- ANGLE IRON |
| 05 52 13.E | PIPE AND TUBE RAILINGS- SPLICE |
| 05 60 00.A | ENTRANCE RAMP- STEEL C-CHANNEL |
| 05 60 00.B | ENTRANCE RAMP - ANGLE IRON |
| 05 60 00.F | ENTRANCE RAMP- CARRIAGE BOLT |

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES

- | | |
|----------|----------------------------|
| 06 15 00 | WOOD DECKING- BLACK LOCUST |
|----------|----------------------------|

DIVISION 13 - SPECIAL CONSTRUCTION

- | | |
|------------|--|
| 13 34 00.D | FABRICATED ENGINEERED STRUCTURES- SCAFFOLDING JACK |
|------------|--|

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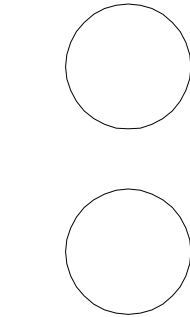
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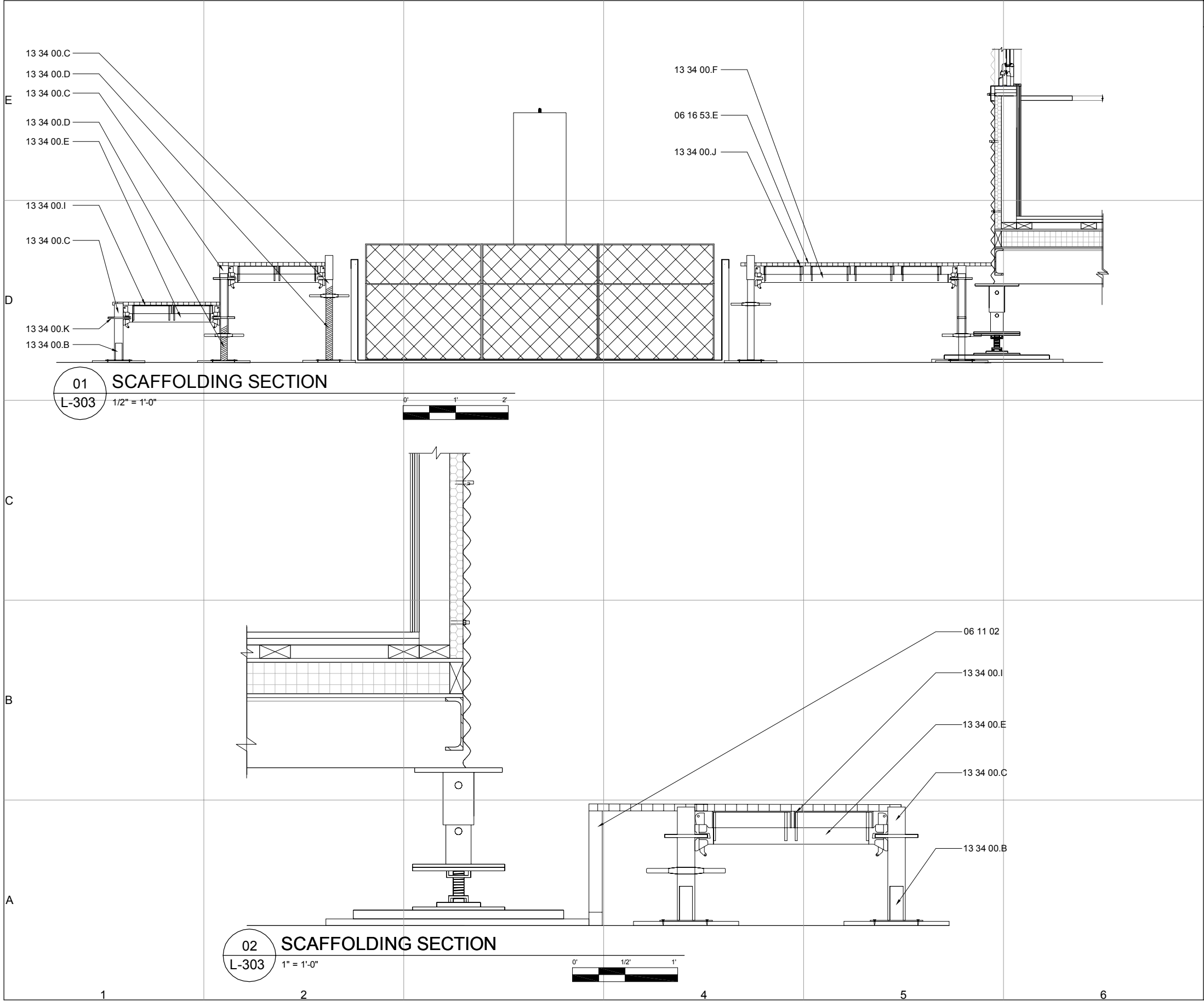
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SHEET TITLE

SECTION

L-302

SHEET 30 OF 196



REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES

06 11 02 WOOD FRAMING PROP
06 16 53.E PLYWOOD

DIVISION 13 - SPECIAL CONSTRUCTION

13 34 00.A FABRICATED ENGINEERED STRUCTURES- UBC
13 34 00.B FABRICATED ENGINEERED STRUCTURES- UBP
13 34 00.C FABRICATED ENGINEERED STRUCTURES- US 17 T
13 34 00.D FABRICATED ENGINEERED STRUCTURES- US J 20
13 34 00.E FABRICATED ENGINEERED STRUCTURES- UH 20
13 34 00.F FABRICATED ENGINEERED STRUCTURES- UH 40
13 34 00.I FABRICATED ENGINEERED STRUCTURES- USP 20
13 34 00.J FABRICATED ENGINEERED STRUCTURES- USP 40
13 34 00.K FABRICATED ENGINEERED STRUCTURES- ROSETTE



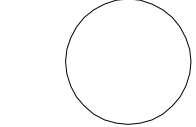
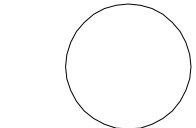
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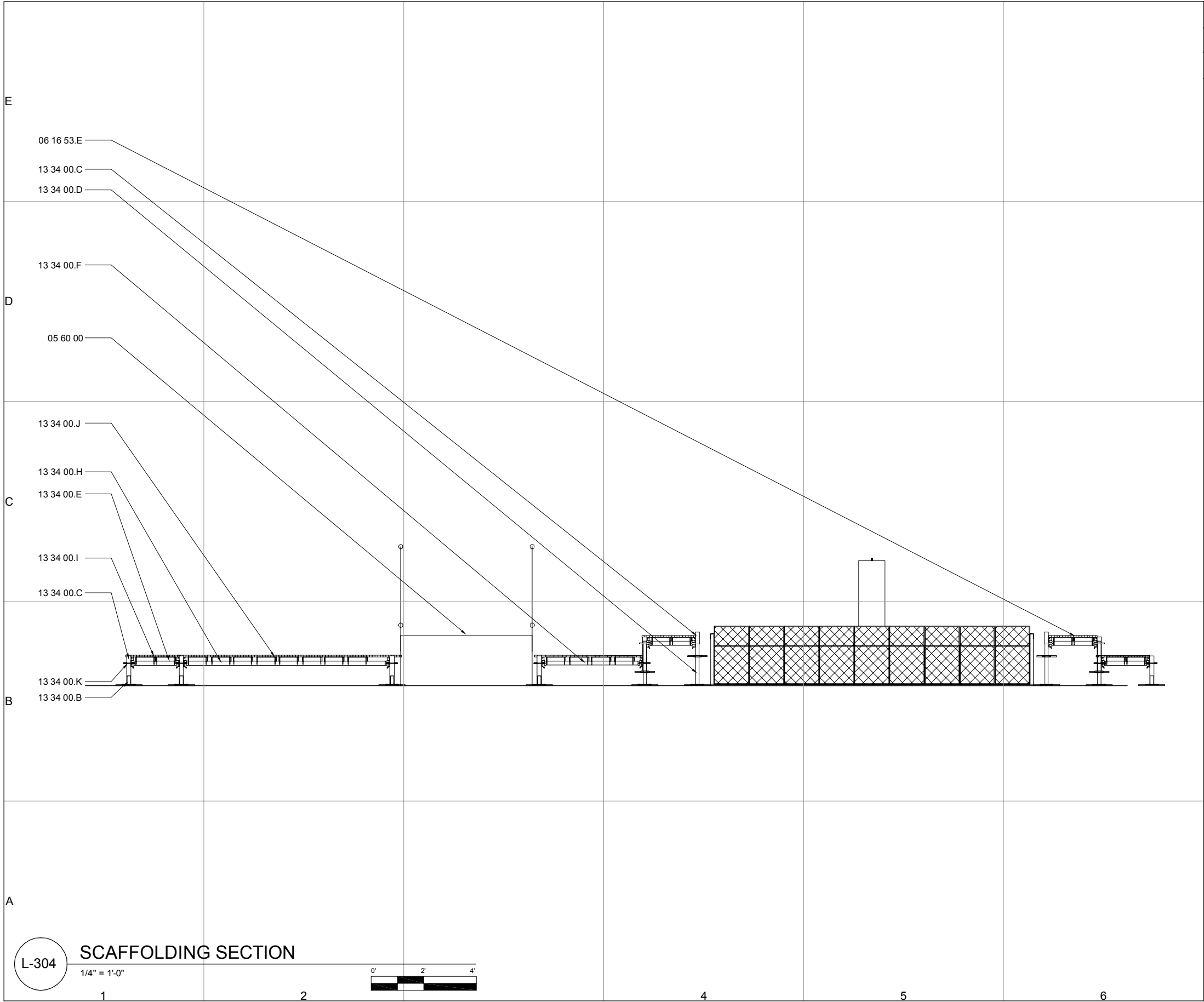
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SECTION

L-303



GENERAL SHEET NOTES:

1. SEE L-103 FOR SCAFFOLDING SCHEDULE

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES

06 16 53.E PLYWOOD

DIVISION 13 - SPECIAL CONSTRUCTION

13 34 00.A FABRICATED ENGINEERED STRUCTURES- UBC

13 34 00.B FABRICATED ENGINEERED STRUCTURES- UBP

13 34 00.C FABRICATED ENGINEERED STRUCTURES- US 17 T

13 34 00.D FABRICATED ENGINEERED STRUCTURES- US J 20

13 34 00.E FABRICATED ENGINEERED STRUCTURES- UH 20

13 34 00.F FABRICATED ENGINEERED STRUCTURES- UH 40

13 34 00.H FABRICATED ENGINEERED STRUCTURES- UH 80

13 34 00.I FABRICATED ENGINEERED STRUCTURES- USP 20

13 34 00.J FABRICATED ENGINEERED STRUCTURES- USP 40

13 34 00.K FABRICATED ENGINEERED STRUCTURES- ROSETTE

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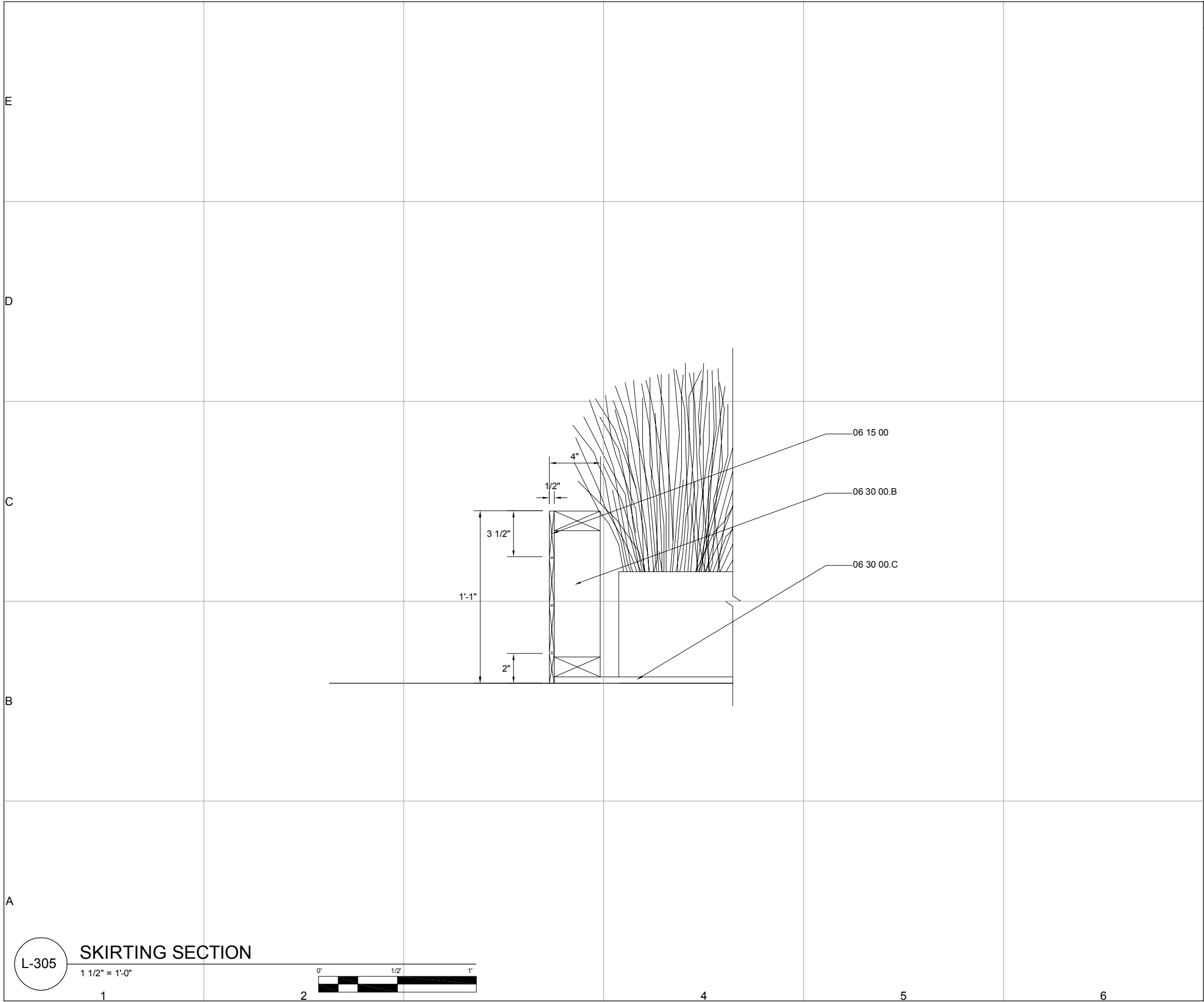
L-304

L-304

SCAFFOLDING SECTION

1/4" = 1'-0"





REFERENCE KEYNOTES:	
DIVISION 06 - WOOD, PLASTICS, & COMPOSITES	
06 15 00	WOOD DECKING- BLACK LOCUST
06 30 00.B	SKIRTING FOR LANDSCAPE- 2"x4" CONVENTIONAL LUMBER
06 30 00.C	SKIRTING FOR LANDSCAPE- PLYWOOD BASE

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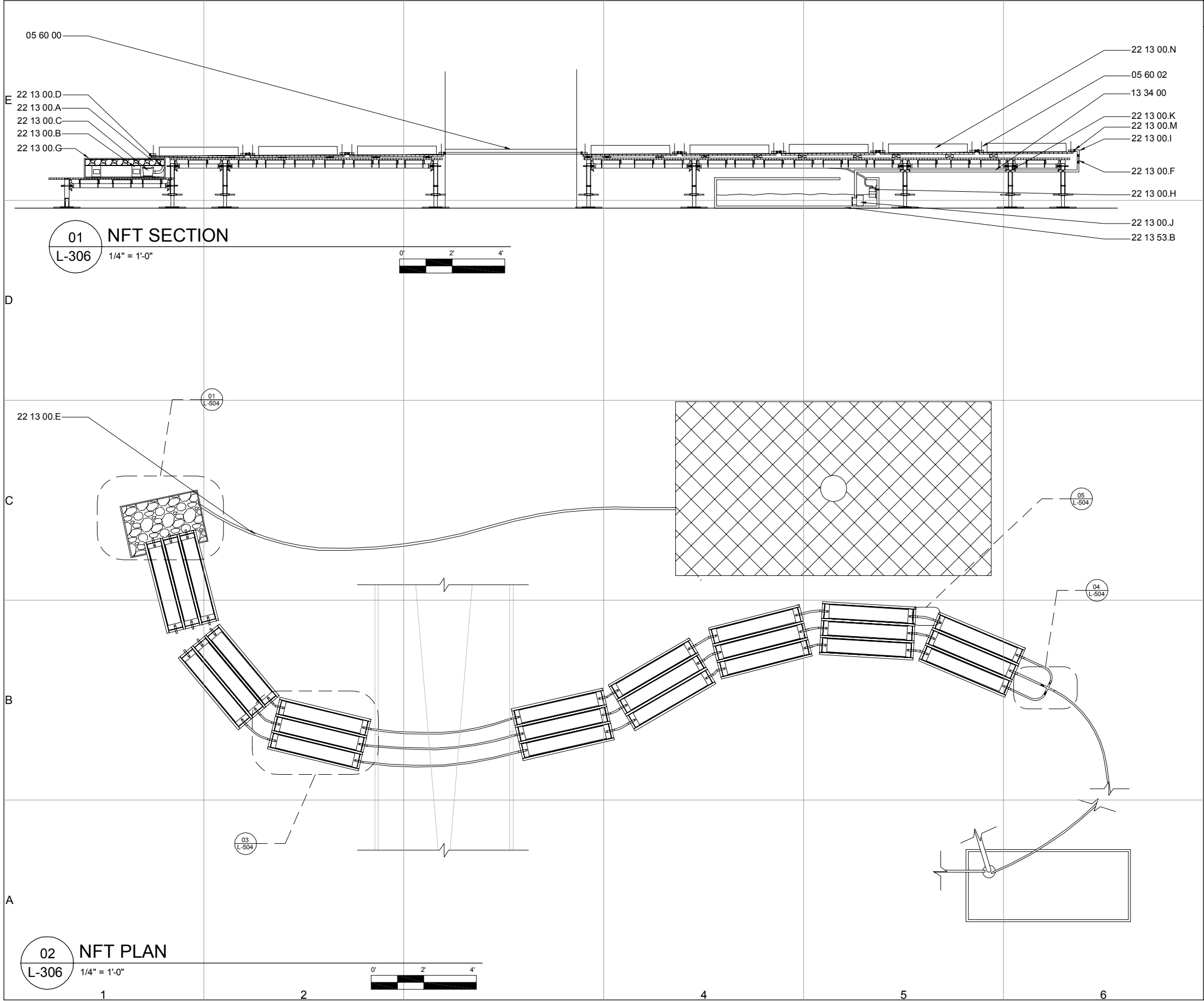
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SECTION

L-305

SHEET 33 OF 196



REFERENCE KEYNOTES:

- DIVISION 05 - METALS**
05 60 00 ENTRANCE RAMP
05 60 02 NFT TROUGH
- DIVISION 13 - SPECIAL CONSTRUCTION**
13 34 00 FABRICATED ENGINEERED STRUCTURES- SCAFFOLDING
- DIVISION 22 - PLUMBING**
22 13 00.A RIVER ROCK
22 13 00.B CINDER BLOCK
22 13 00.C BILGE PUMP
22 13 00.D PVC PIPE
22 13 00.E GARDEN HOSE
22 13 00.F FLOW RESTRICTOR
22 13 00.G END TANK
22 13 00.H FILL VALVE
22 13 00.I PLASTIC FLEX PIPE
22 13 00.J GRAY WATER PUMP
22 13 00.K ZIP TIES
22 13 00.M HOSE CLAMP
22 13 00.N ROCKWOOL
22 13 53.B GRAY WATER TANK



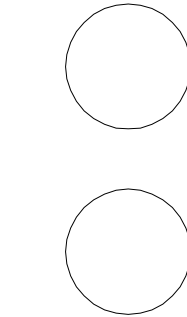
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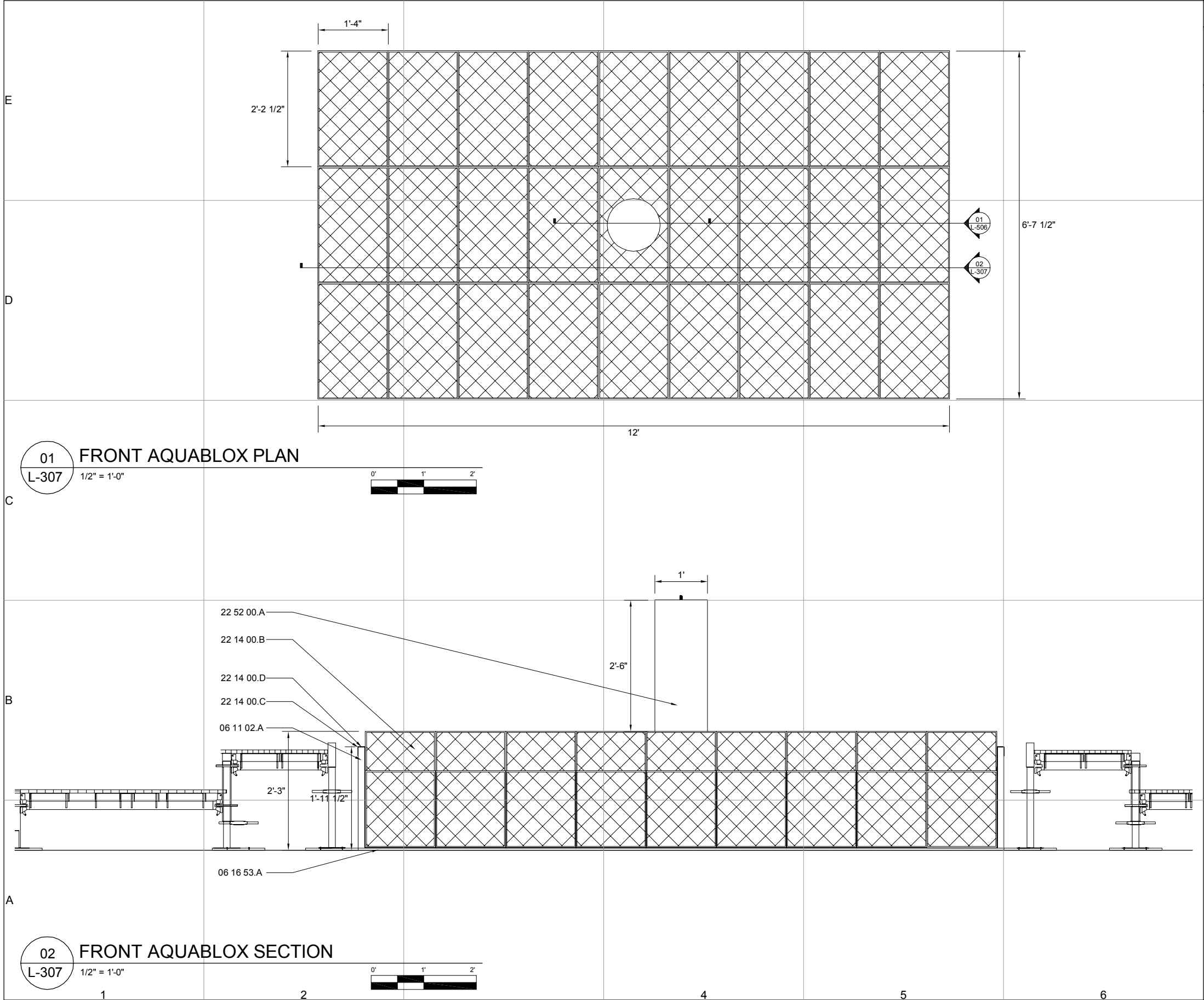
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SECTION

L-306



GENERAL SHEET NOTES:

1. ALL AQUABLOCKS TO BE CONTAINED IN A WATER TIGHT OPEN BOX.
2. ALL OPEN BOXES TO BE LINED WITH UNDERLINER AND POND LINER.

REFERENCE KEYNOTES:

- DIVISION 06 - WOOD, PLASTICS, & COMPOSITES
- 06 11 02.A 2"x4" CONVENTIONAL LUMBER
06 16 53.A 4"x8" 1/2" PLYWOOD
- DIVISION 22 - PLUMBING
- 22 14 00.B FACILITY STORM DRAINAGE-AQUABLOCKS
22 14 00.C FACILITY STORM DRAINAGE-POND LINER
22 14 00.D FACILITY STORM DRAINAGE-SUB-LINER
22 52 00.A FOUNTAIN

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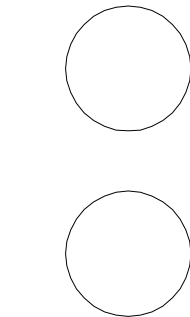
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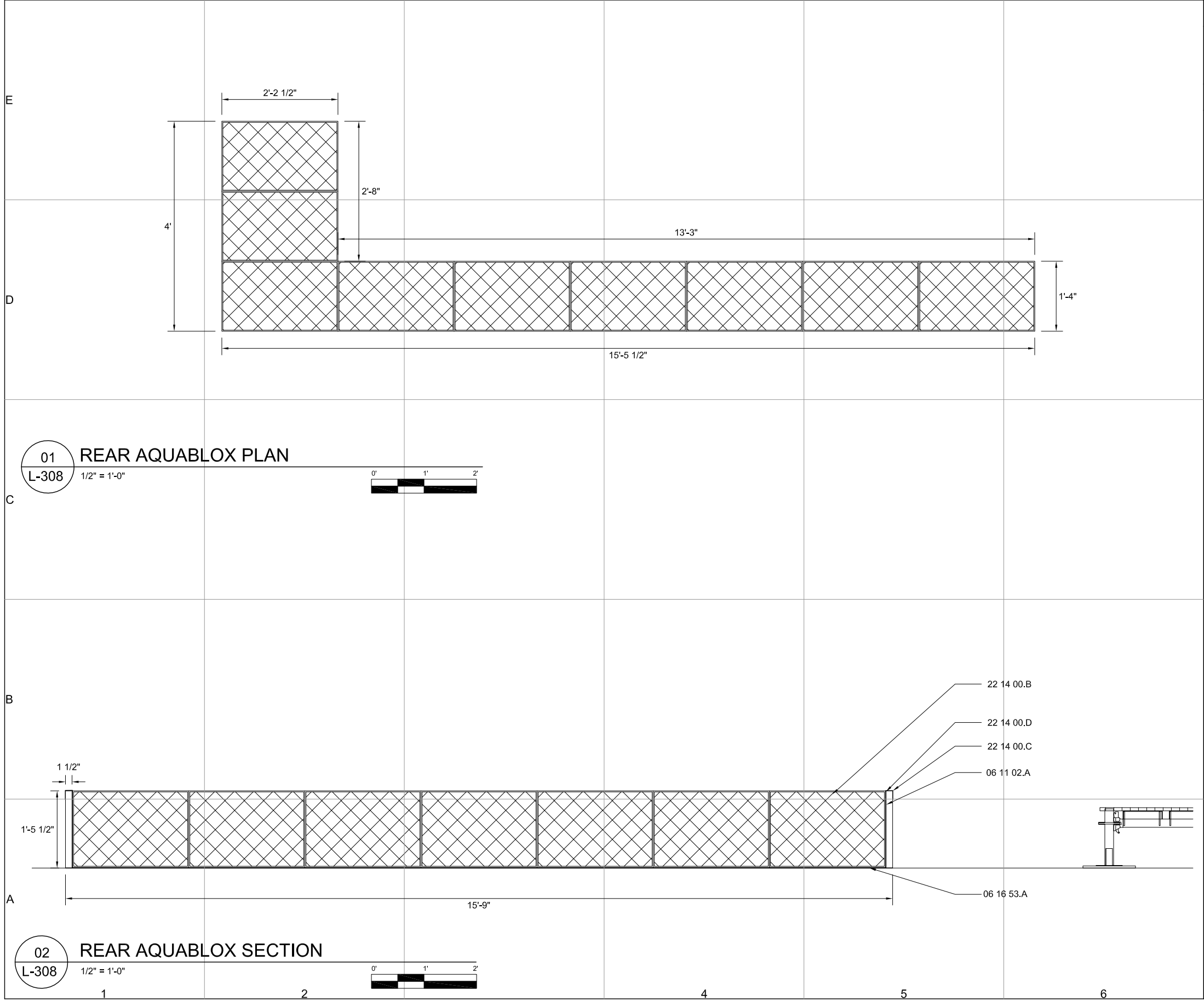
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SHEET TITLE

SECTION

L-307



GENERAL SHEET NOTES:

1. ALL AQUABLOCKS TO BE CONTAINED IN A WATER TIGHT OPEN BOX.

2. ALL OPEN BOXES TO BE LINED WITH UNDERLINER AND POND LINER.

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES

06 11 02.A 2"x4" CONVENTIONAL LUMBER

06 16 53.A 4"x8" 1/2" PLYWOOD

DIVISION 22 - PLUMBING

22 14 00. B FACILITY STORM DRAINAGE-AQUABLOCKS

22 14 00. C FACILITY STORM DRAINAGE-POND LINER

22 14 00. D FACILITY STORM DRAINAGE-SUB-LINER

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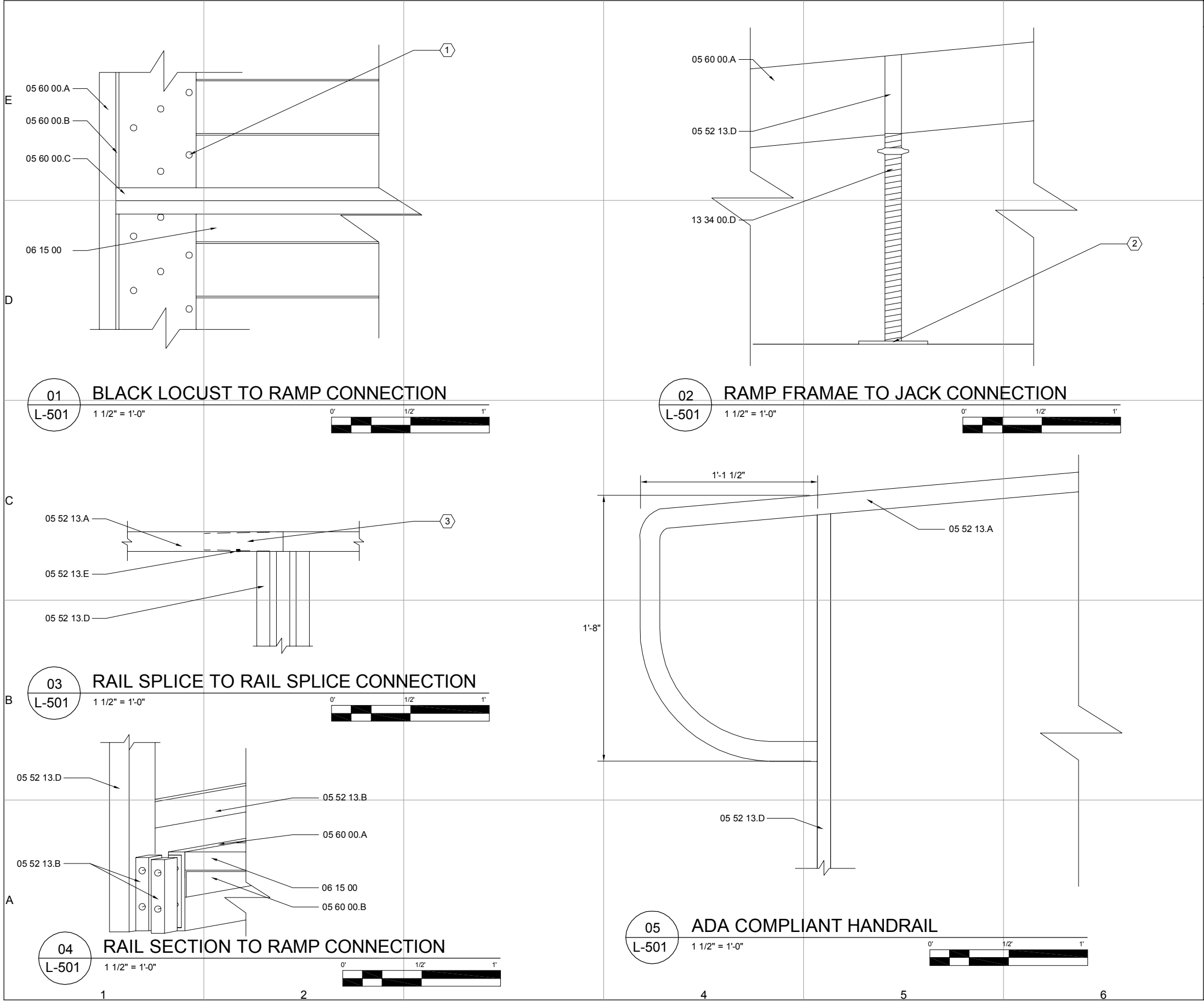
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SHEET TITLE

SECTION

L-308

SHEET 36 OF 196



REFERENCE KEYNOTES:

- DIVISION 05 - METALS
- 05 52 13.A PIPE AND TUBE RAILINGS- 1 1/2" O.D. ROUND TUBE
 - 05 52 13.B PIPE AND TUBE RAILINGS- SQUARE STEEL TUBE
 - 05 52 13.C PIPE AND TUBE RAILINGS- RAIL CONNECTION
 - 05 52 13.D PIPE AND TUBE RAILINGS- ANGLE IRON
 - 05 52 13.E PIPE AND TUBE RAILINGS- SPLICE
 - 05 52 13.F PIPE AND TUBE RAILINGS- SCREW FOR SPLICE
 - 05 52 13.G PIPE AND TUBE RAILINGS- CARRIAGE BOLT
 - 05 60 00.A ENTRANCE RAMP- STEEL C-CHANNEL
 - 05 60 00.B ENTRANCE RAMP- ANGLE IRON
 - 05 60 00.C ENTRANCE RAMP- SQUARE STEEL TUBE
 - 05 60 00.D ENTRANCE RAMP- CARRIAGE BOLT
- DIVISION 06 - WOOD, PLASTICS, & COMPOSITES
- 06 15 00 WOOD DECKING- BLACK LOCUST
- DIVISION 13 - SPECIAL CONSTRUCTION
- 13 34 00.D FABRICATED ENGINEERED STRUCTURES- SCAFFOLD JACK

SHEET KEYNOTES:

- 2" WOOD SCREWS TYP.
- METAL BASE PLATE AS PROVIDED BY METAL FABRICATOR
- SPLICE CONNECTION BETWEEN SECTIONS



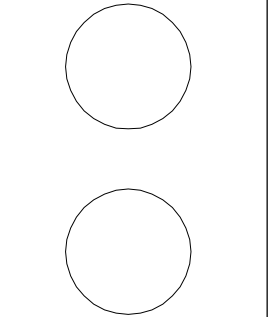
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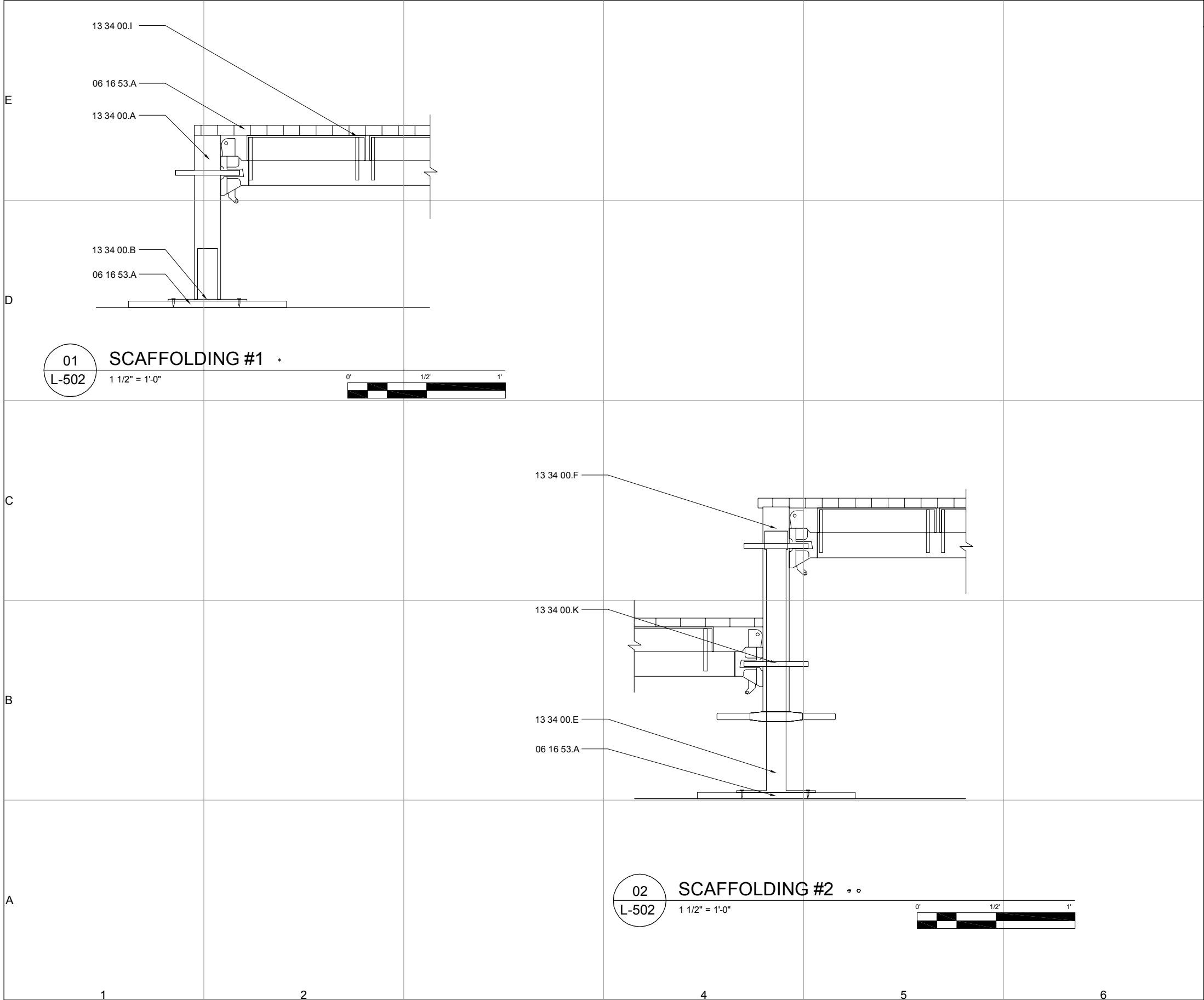
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DETAILS

L-501



REFERENCE KEYNOTES:

- DIVISION 06 - WOOD, PLASTICS, & COMPOSITES
- 06 16 53. A 4'x8' 1/2" PLYWOOD
06 16 53. E FOOTERS
- DIVISION 13 - SPECIAL CONSTRUCTION
- 13 34 00.A FABRICATED ENGINEERED STRUCTURES- UBC
13 34 00.B FABRICATED ENGINEERED STRUCTURES- UBP
13 34 00.E FABRICATED ENGINEERED STRUCTURES- US J 20
13 34 00.F FABRICATED ENGINEERED STRUCTURES- US 17 T CUSTOM
13 34 00.I FABRICATED ENGINEERED STRUCTURES- USP 20
13 34 00.K FABRICATED ENGINEERED STRUCTURES- ROSETTE



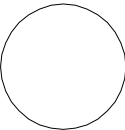
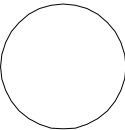
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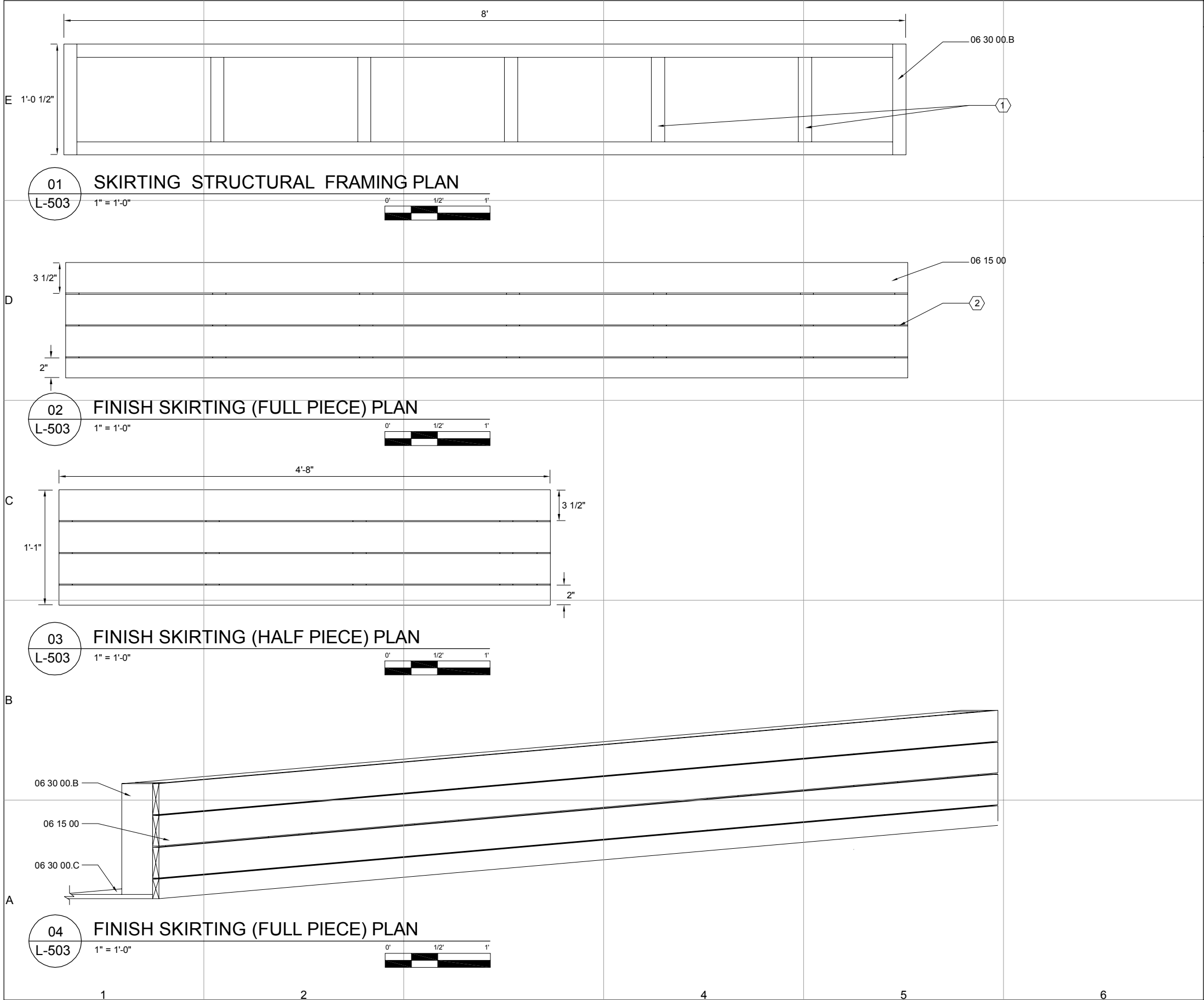
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SHEET TITLE

DETAILS

L-502



GENERAL SHEET NOTES:

- 1. ALL WOOD TO BE FASTENED BY WOOD SCREWS.
- 2. ALL FRAMES TO BE CONSTRUCTED OUT OF STOCK 2" X 4" X 8'
- 3. ALL BLACK LOCUST TO MATCH BLACK LOCUST USED ON DECK
- 4. ALL BLACK LOCUST TO BE FASTENED DISCREETLY AND FASTENERS TO BE FILLED IN

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, & COMPOSITES	
06 15 00	WOOD DECKING- BLACK LOCUST
06 30 00.B	SKIRTING FOR LANDSCAPE- 2"x4" CONVENTIONAL LUMBER
06 30 00.C	SKIRTING FOR LANDSCAPE- PLYWOOD BASE

SHEET KEYNOTES:

- 1. SPACING BETWEEN 2" X 4" TO BE 16" O.C.
- 2. 3/8" SPACING BETWEEN BLACK LOCUST PLANKS TYP.



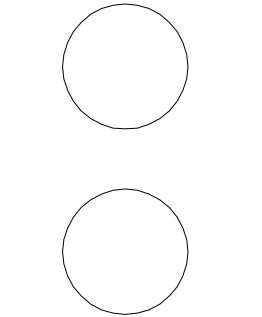
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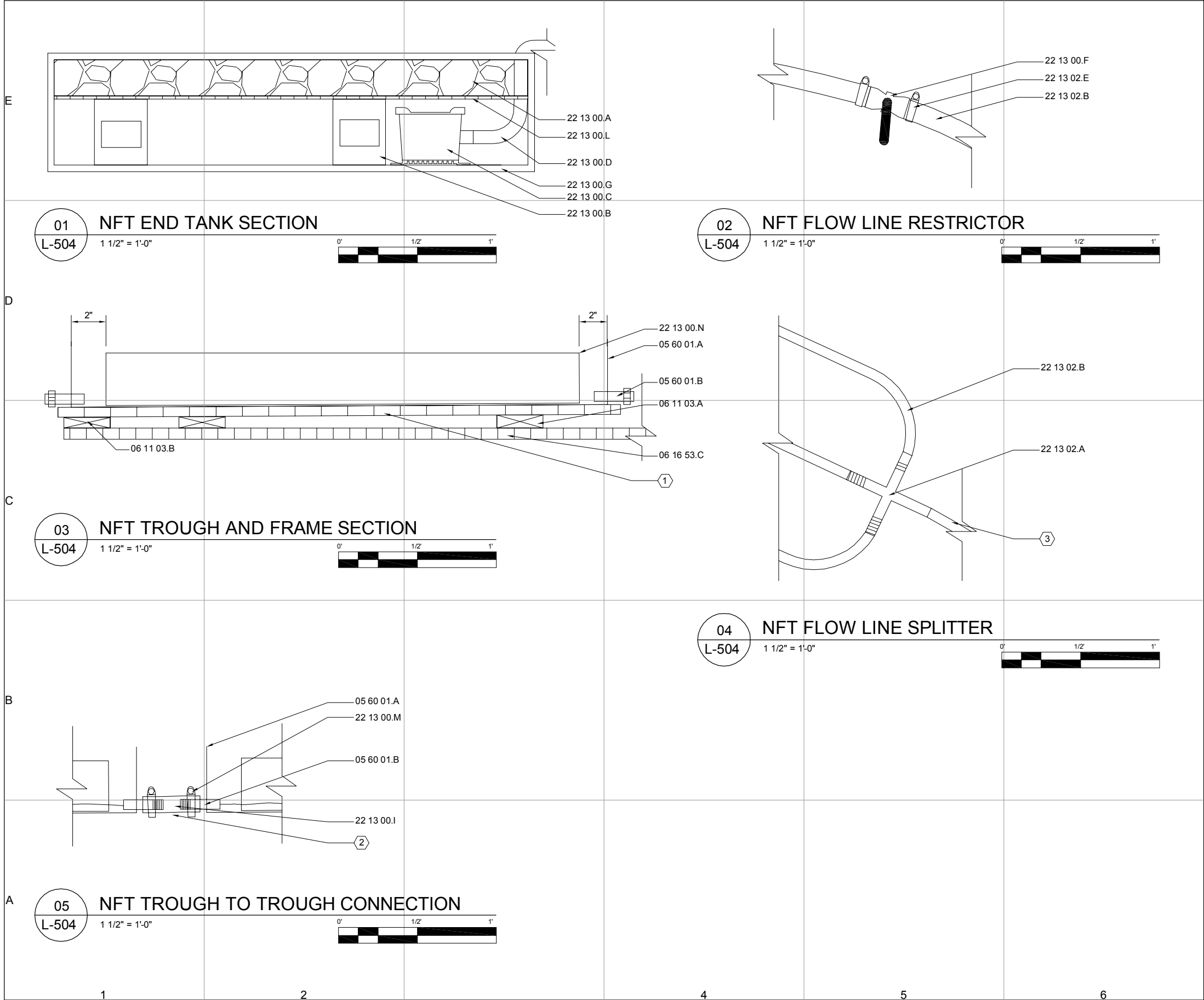
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DETAILS

L-503



REFERENCE KEYNOTES:

- DIVISION 05 - METALS
05 60 01.A 1/8" SHEET METAL
05 60 01.B 1" METAL PIPE
- DIVISION 06 - WOOD, PLASTICS, & COMPOSITES
06 11 03.A 2"x4" CONVENTIONAL SHAVED
06 11 03.B 1"x1" CONVENTIONAL LUMBER
06 16 53.C 4"x4" 1/2" PLYWOOD
- DIVISION 22 - PLUMBING
22 13 00.A RIVER ROCK
22 13 00.B CINDER BLOCK
22 13 00.C BILGE PUMP
22 13 00.D PVC PIPE
22 13 00.E GARDEN HOSE
22 13 00.F FLOW RESTRICTOR
22 13 00.G END TANK
22 13 00.H FILL VALVE
22 13 00.I PLASTIC FLEX PIPE
22 13 00.L WIRE MESH
22 13 00.M HOSE CLAMP
22 13 00.N ROCKWOOL
22 13 02.A 4-WAY PVC SPLITTER
22 13 02.B PLASTIC FLEX PIPE
22 13 02.C HOSE COUPLING
22 13 02.D RESTRICTOR
22 13 02.E HOSE CLAMP

SHEET KEYNOTES:

- 2" X 4" BLOCKING TO BE CUT IN ACCORDANCE WITH SLOPE AND HEIGHT DETERMINED FROM HORTICULTURAL TESTING TO MAINTAIN PROPER FLOW FOR NUTRIENT FILM TECHNIQUE TO BE ACHIEVED PROPERLY
- DISTANCE BETWEEN TROUGHS VARIES SEE PLAN FOR EXACT DISTANCES
- PIPING FROM GRAYWATER TANK



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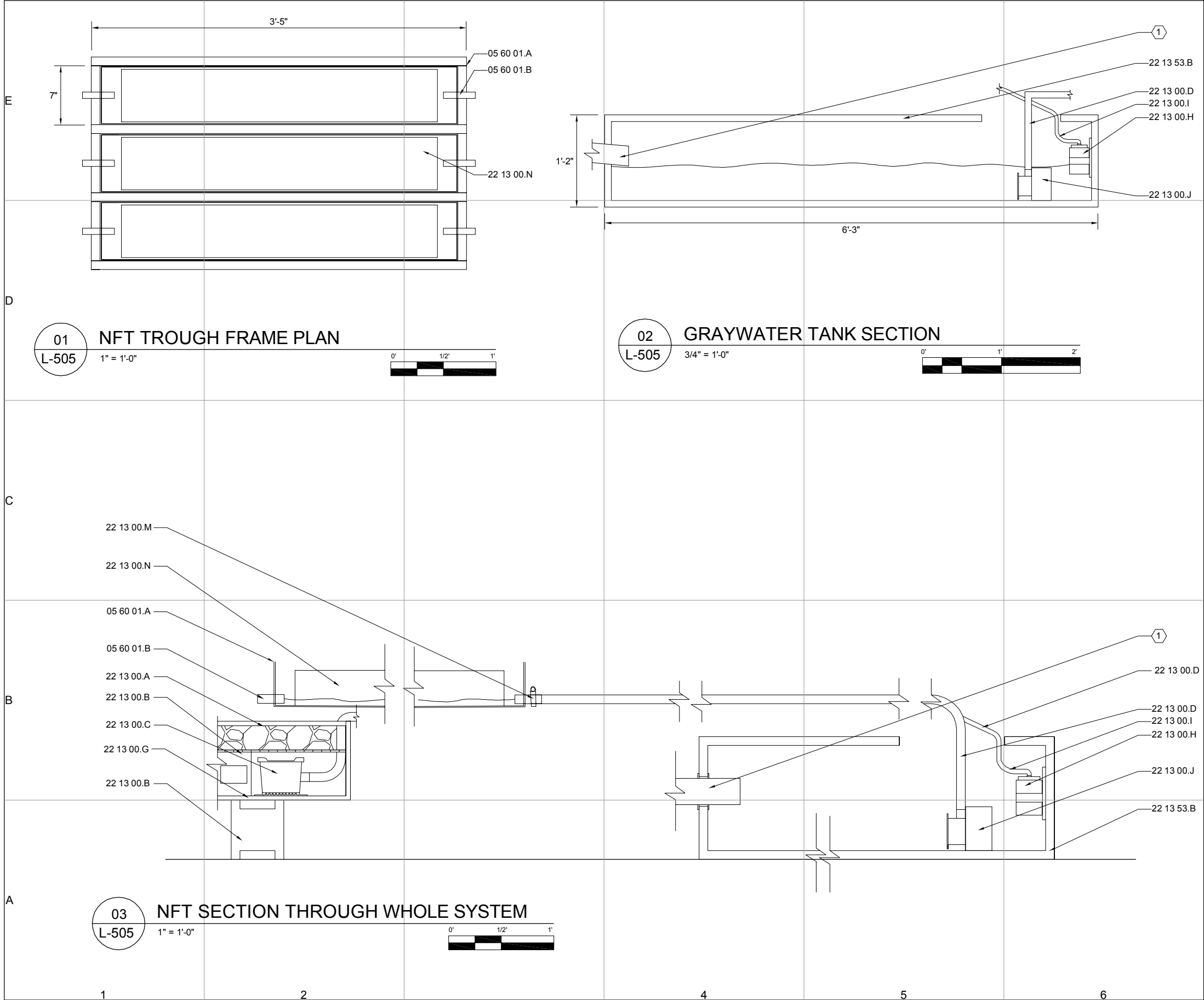
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DETAILS

L-504



REFERENCE KEYNOTES:

- DIVISION 05 - METALS**
05 60 01.A 1/8" SHEET METAL
05 60 01.B 1" METAL PIPE
- DIVISION 22 - PLUMBING**
22 13 00.A RIVER ROCK
22 13 00.B CINDER BLOCK
22 13 00.C BILGE PUMP
22 13 00.D PVC PIPE
22 13 00.E GARDEN HOSE
22 13 00.F FLOW RESTRICTOR
22 13 00.G END TANK
22 13 00.H FILL VALVE
22 13 00.I PLASTIC FLEX PIPE
22 13 00.J GRAY WATER PUMP
22 13 00.K ZIP TIES
22 13 00.L WIRE MESH
22 13 00.M HOSE CLAMP
22 13 00.N ROCKWOOL
22 13 53.B GRAY WATER TANK

SHEET KEYNOTES:

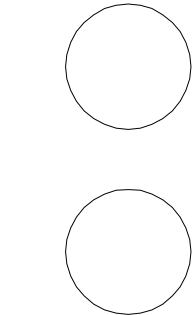
- GRAYWATER INLET FROM HOUSE
- DASHED LINE INDICATES SOFFIT ABOVE
- ALIGN FACE OF NEW WALL WITH FACE OF EXISTING



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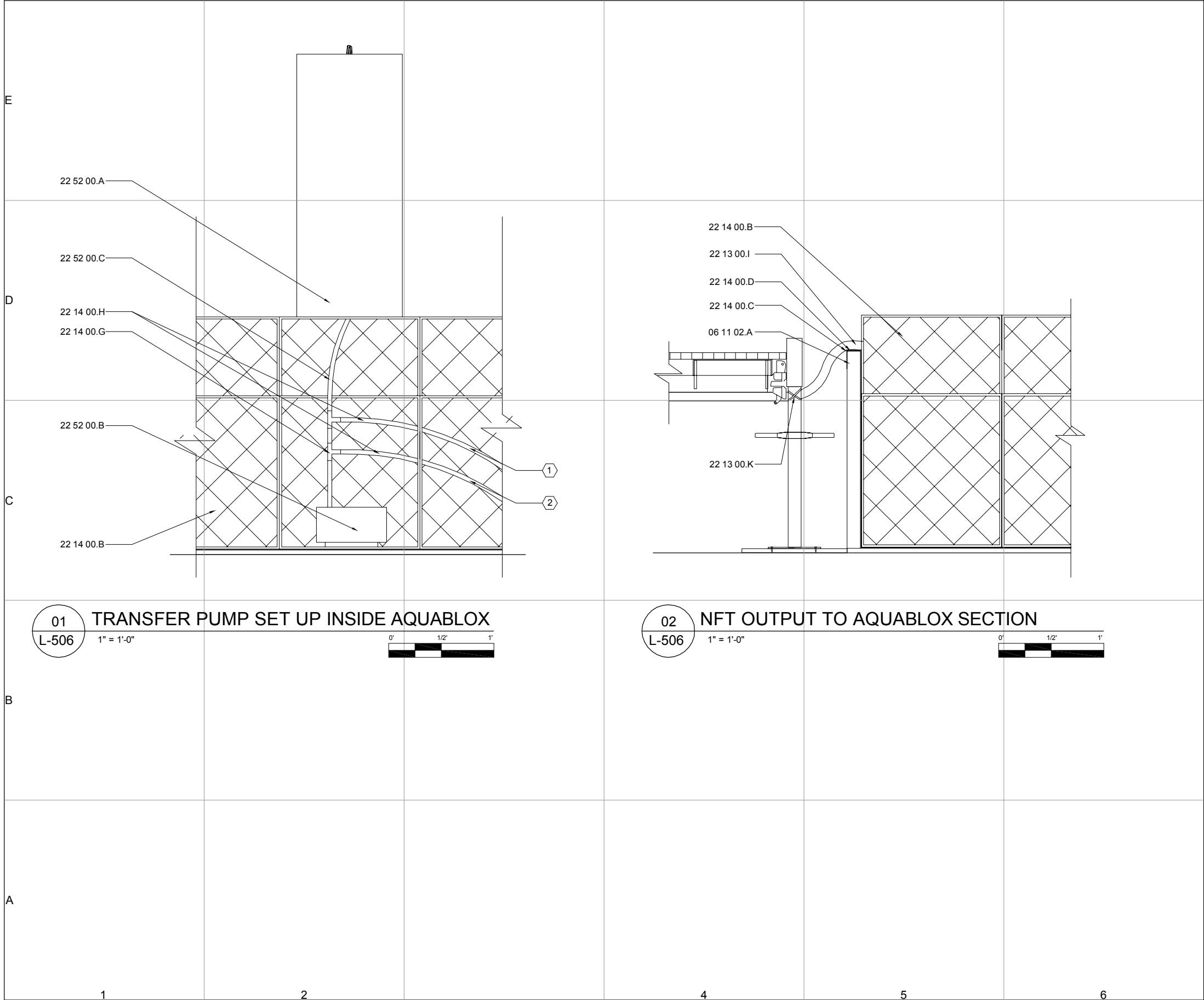


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L-505



REFERENCE KEYNOTES:

- DIVISION 06 - WOODS, PLASTICS, & COMPOSITES
- 06 11 02.A 2"x4" CONVENTIONAL LUMBER
- 06 16 53.A 4"x8" 1/2" PLYWOOD
- DIVISION 22 - PLUMBING
- 22 13 00.I PLASTIC FLEX PIPE
- 22 13 00.K ZIP TIES
- 22 14 00.B FACILITY STORM DRAINAGE-AQUABLOCKS
- 22 14 00.C FACILITY STORM DRAINAGE-POND LINER
- 22 14 00.D FACILITY STORM DRAINAGE-SUB-LINER
- 22 14 00.F FACILITY STORM DRAINAGE-TRANSFER PUMP
- 22 14 00.G FACILITY STORM DRAINAGE-PVC T CONNECTION
- 22 14 00.H FACILITY STORM DRAINAGE- 1/2" PLASTIC FLEX PVC PIPE
- 22 52 00.A FOUNTAIN
- 22 52 00.B PUMP
- 22 52 00.C PVC TUBING

SHEET KEYNOTES:

- TO BOOSTER PUMP FOR IRRIGATION
- TO HUDSON FILL VALVE INSIDE GRAYWATER TANK



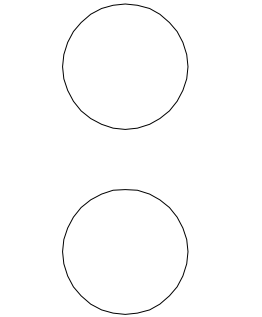
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L-506

E

D

|C

|B

A

1

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6

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3. ALL PLANS UNLESS OTHERWISE SPECIFIED ARE AT SCALES $AT \frac{1}{4}'' = 1'-0''$

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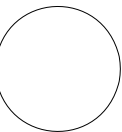
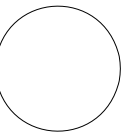
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DATE: JUNE 2, 2009

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SHEET TITLE

SYMBOLS AND NOTES

S-001

SHEET 43 OF 19

SYMBOLS:



3/12 TYP - WELD THICKNESS



- SECTION CALLOUT



- DETAIL CALLOUT

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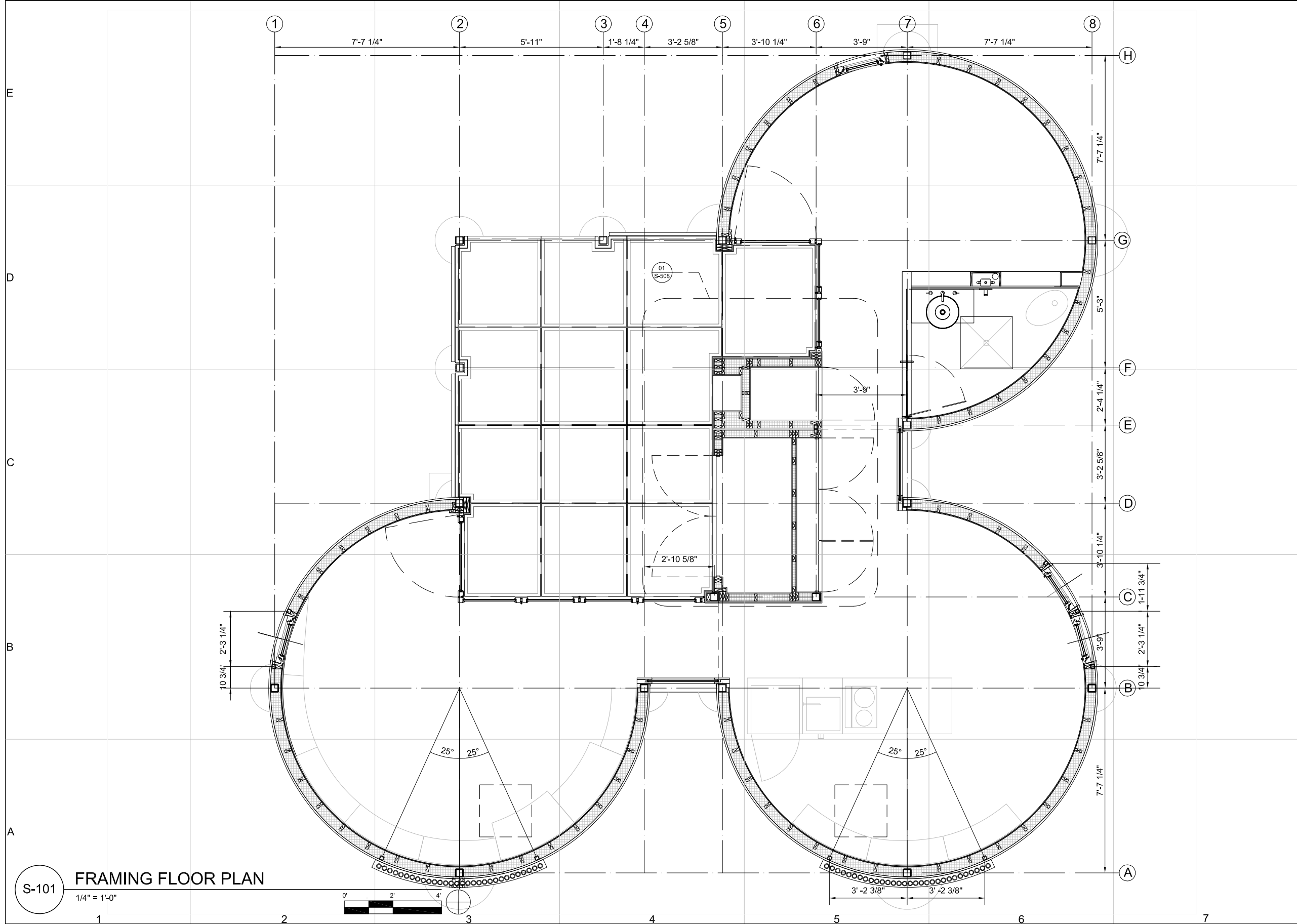
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PLAN

S-101

SHEET 44 OF 196

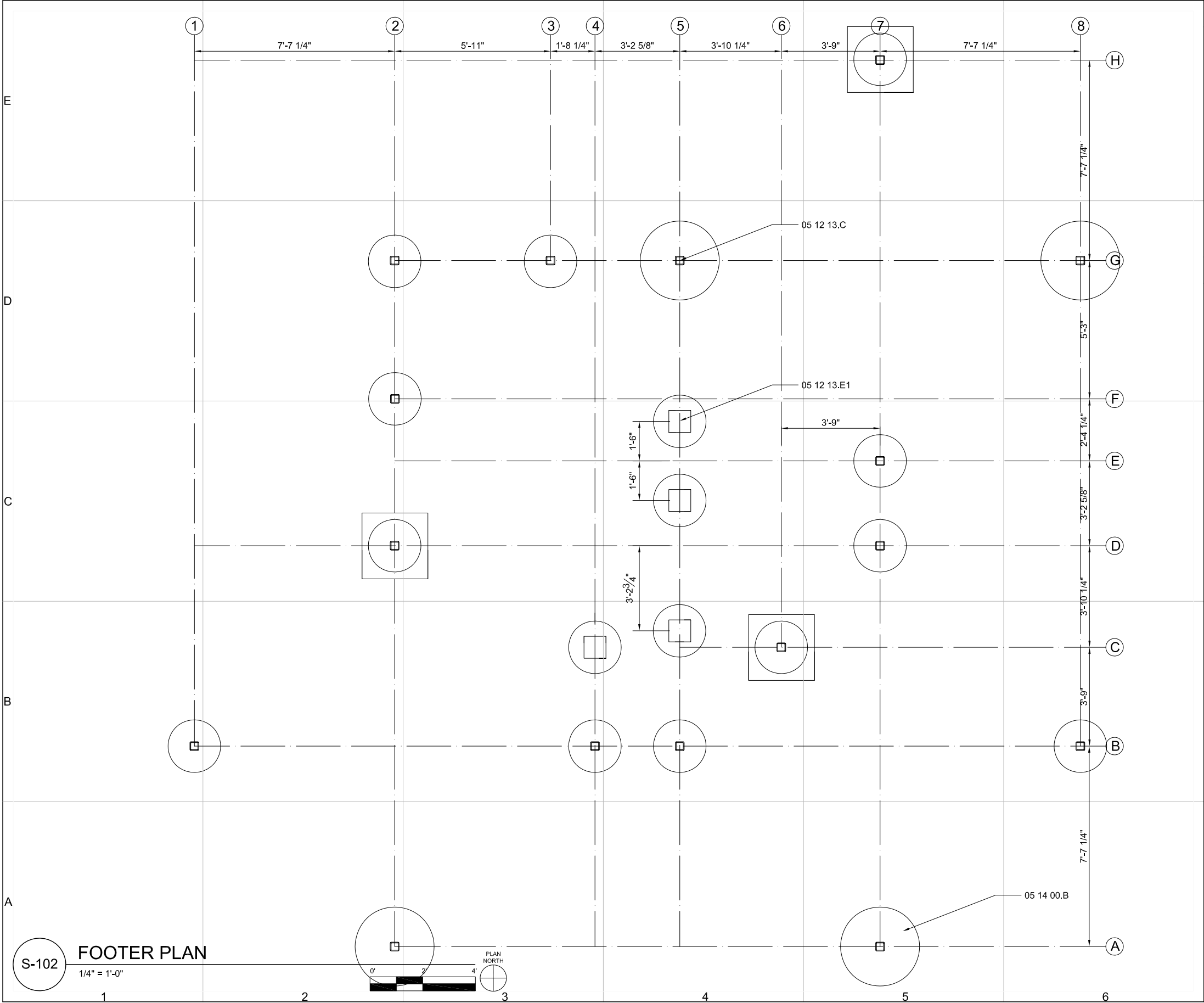


S-101

FRAMING FLOOR PLAN

1/4" = 1'-0"



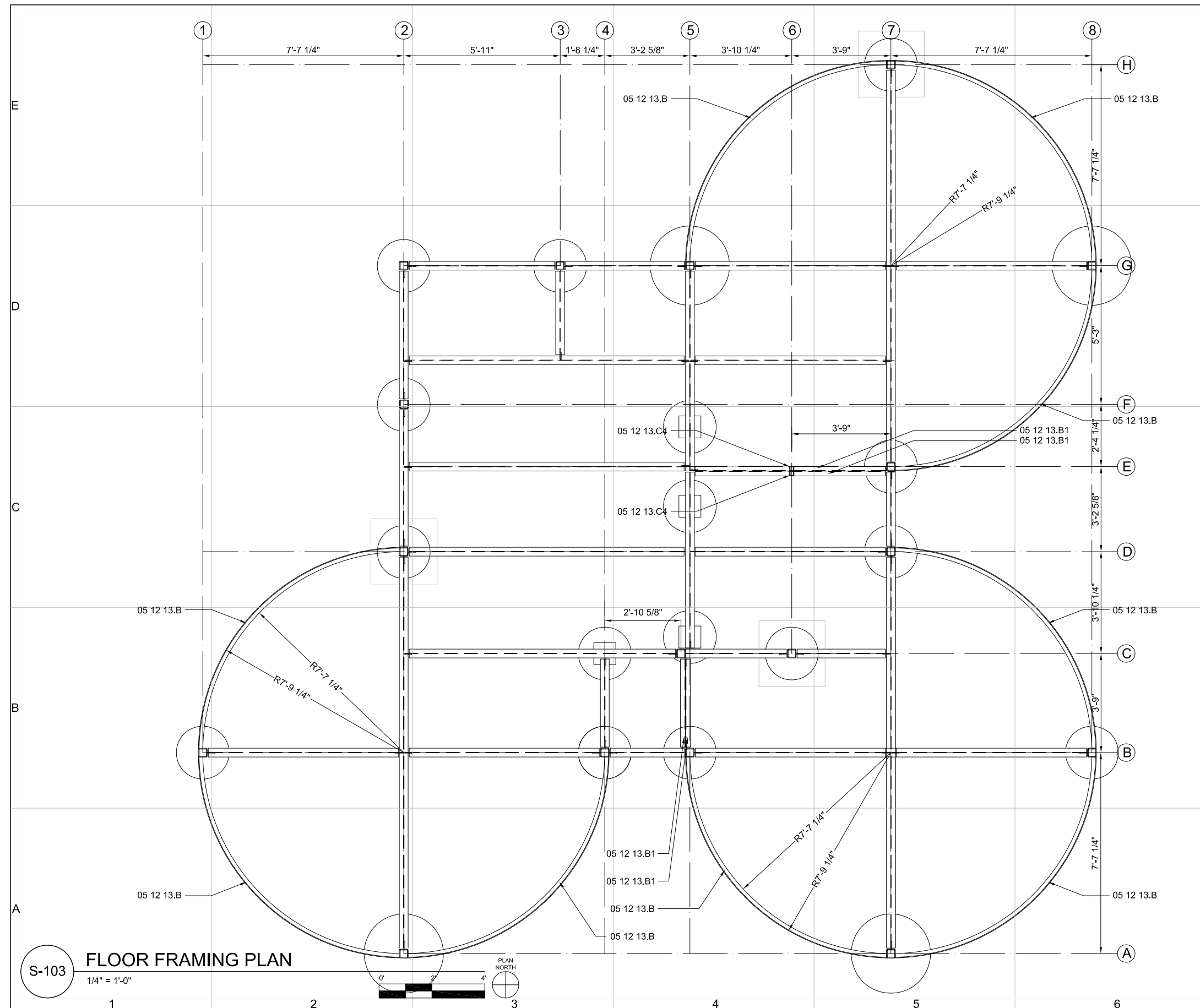


GENERAL SHEET NOTES:

1. DRAWING S-102 REFERENCES HARD COPY OF RSA 1/S1.0
2. IN ACCORDANCE WITH SOLAR DECATHLON BUILDING CODE, ALL FOOTERS ARE TEMPORARY FOR THE COMPETITION; UPON PERMANENT SITING, REQUIRED PIERS OR FOUNDATION WILL BE LOCATED BELOW THE FROST LINE IN ACCORDANCE WITH LOCAL CODE
3. ALL 2'-0" DIAMETER FOOTERS WILL USE ELLIS TIMBERJACKS TJ4 SCREW JACKS
4. ALL 3'-0" DIAMETER FOOTERS WILL USE ELLIS TIMBERJACKS TJ6 SCREW JACKS
5. FOOTERS D2, C6, H7 TO INCLUDE 3'X3'X $\frac{3}{8}$ " PLYWOOD BELOW ALUMINUM FOOTER
6. GEOTEXTAL FABRIC WITH SAND TO BE PLACED UNDER FOOTERS AS NECESSARY
7. SOIL BEARING CAPACITY FOR ALL FOOTERS IS 1500 psf

REFERENCE KEYNOTES:

- DIVISION 05 - METALS
- | | |
|-------------|---|
| 05 14 00.B | STRUCTURAL ALUMINUM
24" OR 36" DIAMETER FOOTER PLATE |
| 05 12 13.C | STRUCTURAL STEEL FRAMING
HSS 4" x 4" x $\frac{3}{8}$ " |
| 05 12 13.E1 | STRUCTURAL STEEL FRAMING-
1/2"x10"x10" BASE PLATE |



SHEET 46 OF 196

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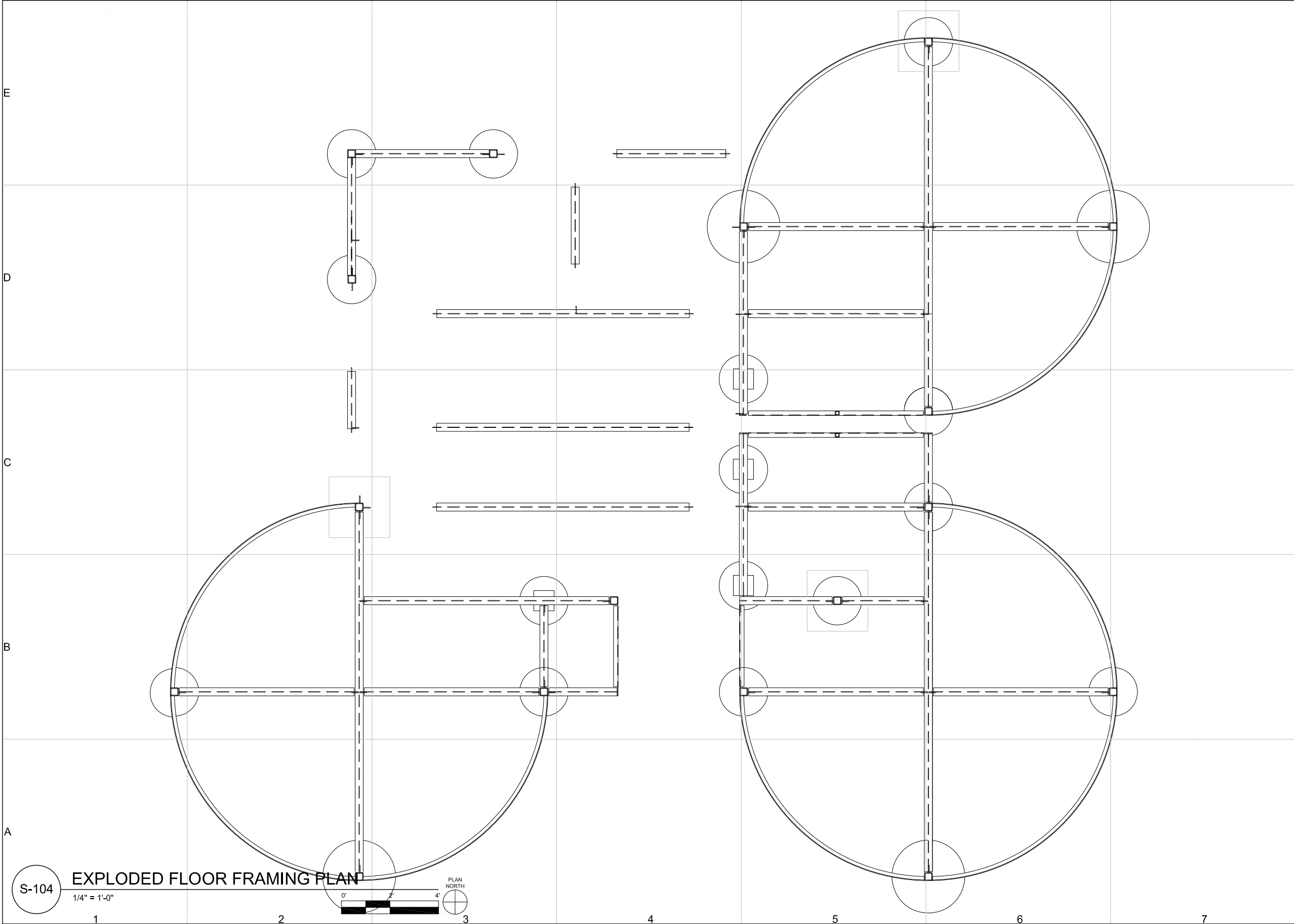
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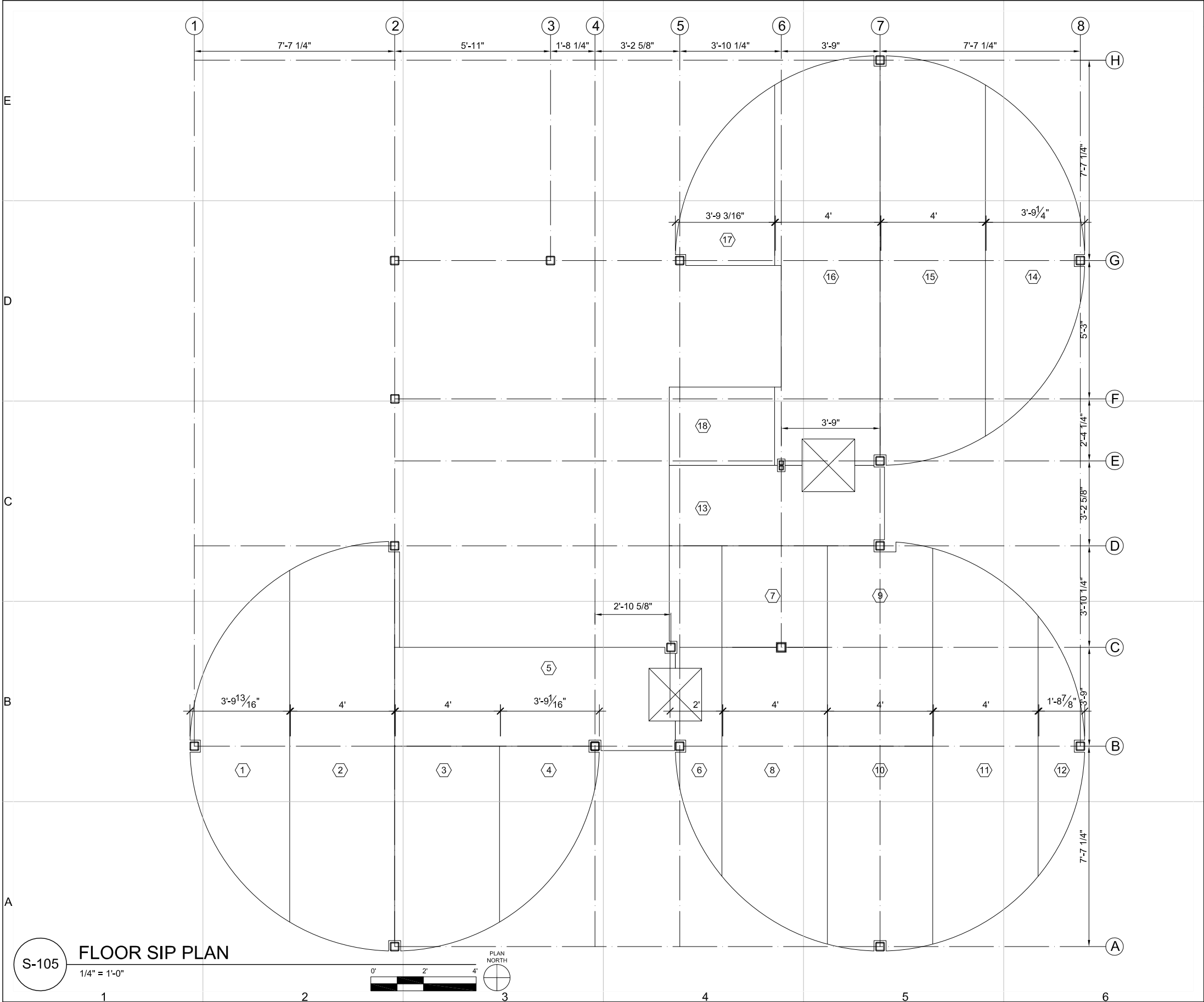
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PLAN

S-104

SHEET 47 OF 196



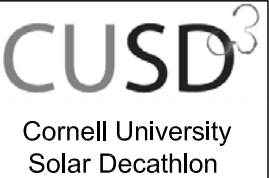


GENERAL SHEET NOTES:

1. ALL FLOOR SIPs ARE 4 1/2" THICK, R-26
2. ICC EVALUATION SERVICES REPORT NUMBER 97-36

SHEET KEYNOTES:

1. SIP A1
2. SIP A2
3. SIP A3
4. SIP A4
5. SIP A5
6. SIP B1
7. SIP B2
8. SIP B3
9. SIP B4
10. SIP B5
11. SIP B6
12. SIP B7
13. SIP B8
14. SIP C1
15. SIP C2
16. SIP C3
17. SIP C4
18. SIP C5



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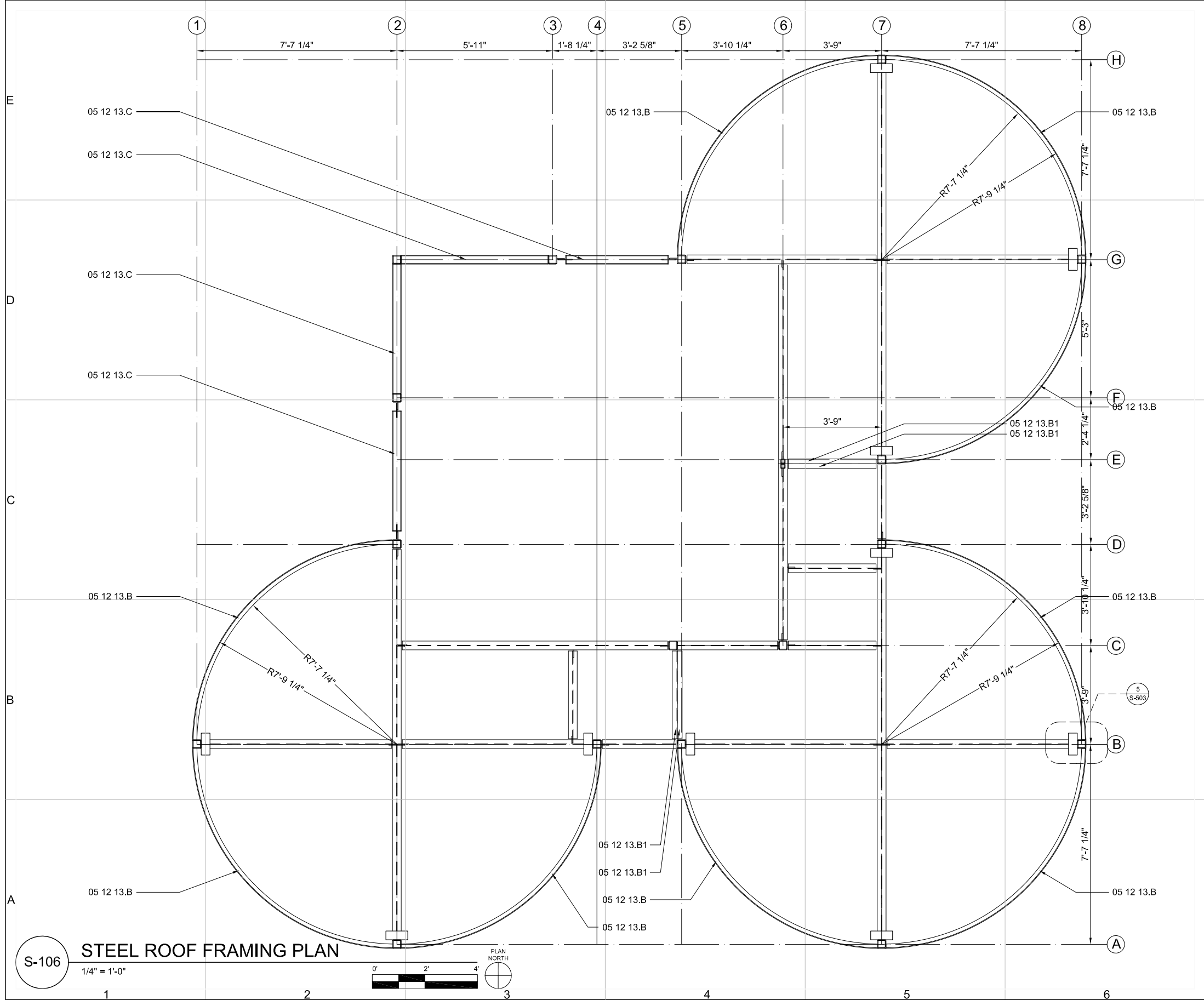
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PLAN

S-105

SHEET 48 OF 196



GENERAL SHEET NOTES:

1. DRAWING S-106 REFERENCES HARD COPY OF RSA 1/S1.1
2. ALL STEEL BEAMS W 8" x 13" UNLESS OTHERWISE NOTED
2. ALL STEEL COLUMNS HSS 4" x 4" x 3/8" UNLESS OTHERWISE NOTED

REFERENCE KEYNOTES:

DIVISION 05 - METALS
05 12 13.B STRUCTURAL STEEL FRAMING
C 6" x 10.5" CURVED
05 12 13.B1 STRUCTURAL STEEL FRAMING
C 8" x 11.5"
05 12 13.C STRUCTURAL STEEL FRAMING
HSS 4" x 4" x 3/8"

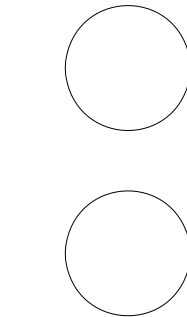


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S-106



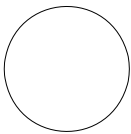
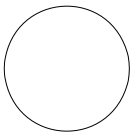
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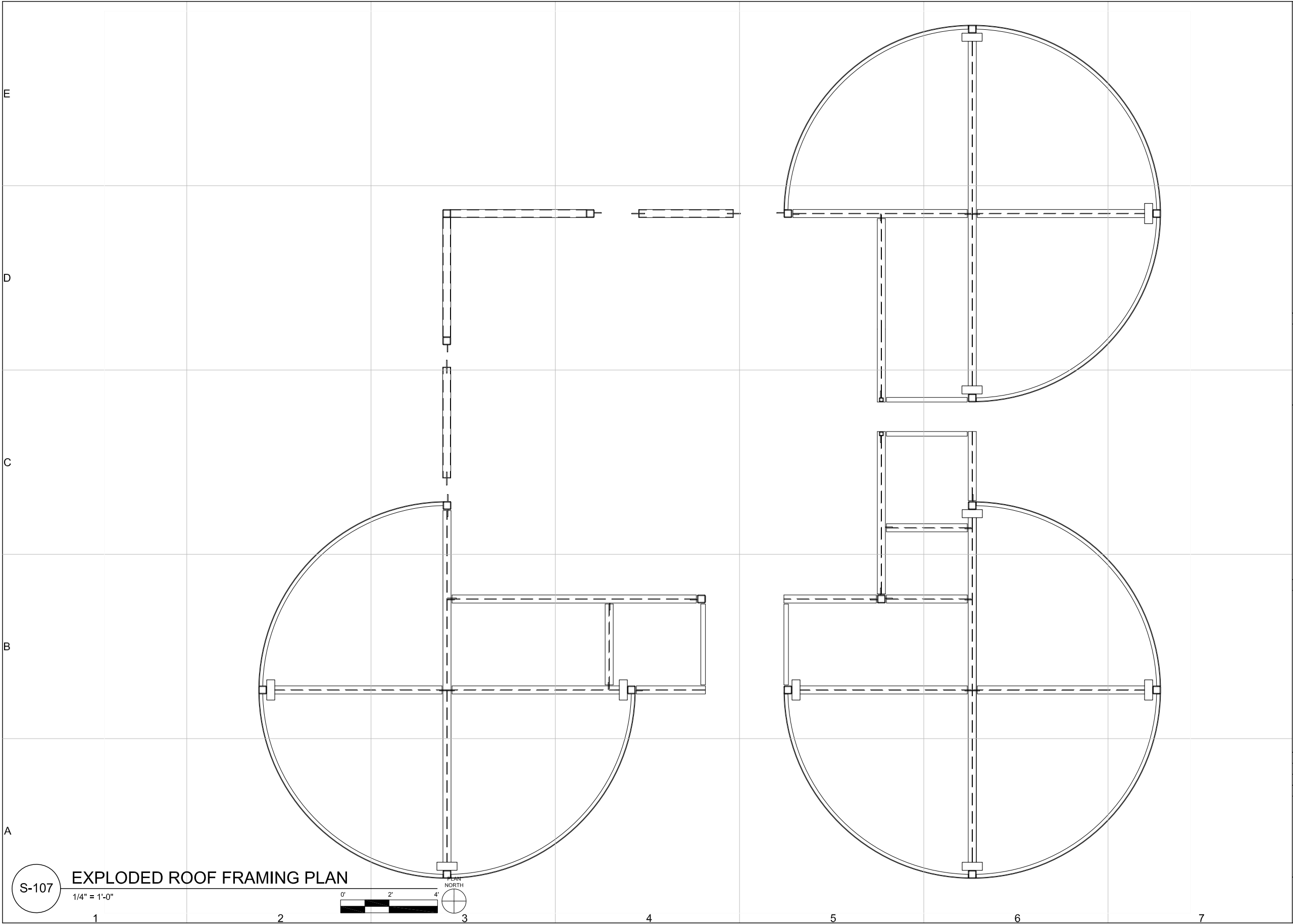
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S-107

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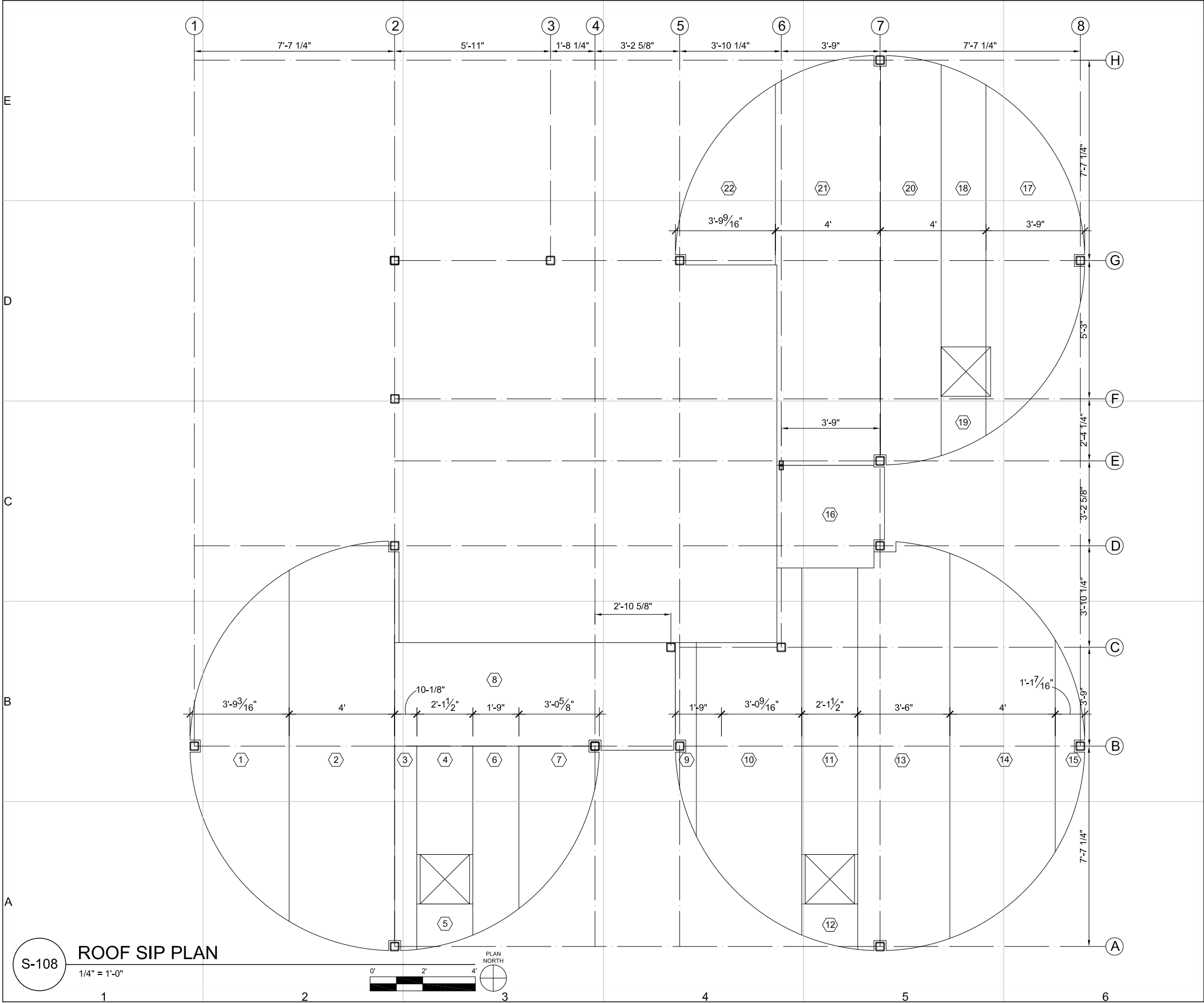


S-107

EXPLODED ROOF FRAMING PLAN

1/4" = 1'-0"





GENERAL SHEET NOTES:

1. ALL ROOF SIPs ARE 5 1/2 " THICK, R-33
2. ICC EVALUATION SERVICES REPORT NUMBER 97-36

SHEET KEYNOTES:

1. SIP A1
2. SIP A2
3. SIP A3
4. SIP A4
5. SIP A5
6. SIP A6
7. SIP A7
8. SIP A8
9. SIP B1
10. SIP B2
11. SIP B3
12. SIP B4
13. SIP B5
14. SIP B6
15. SIP B7
16. SIP B8
17. SIP C1
18. SIP C2
19. SIP C3
20. SIP C4
21. SIP C5
22. SIP C6

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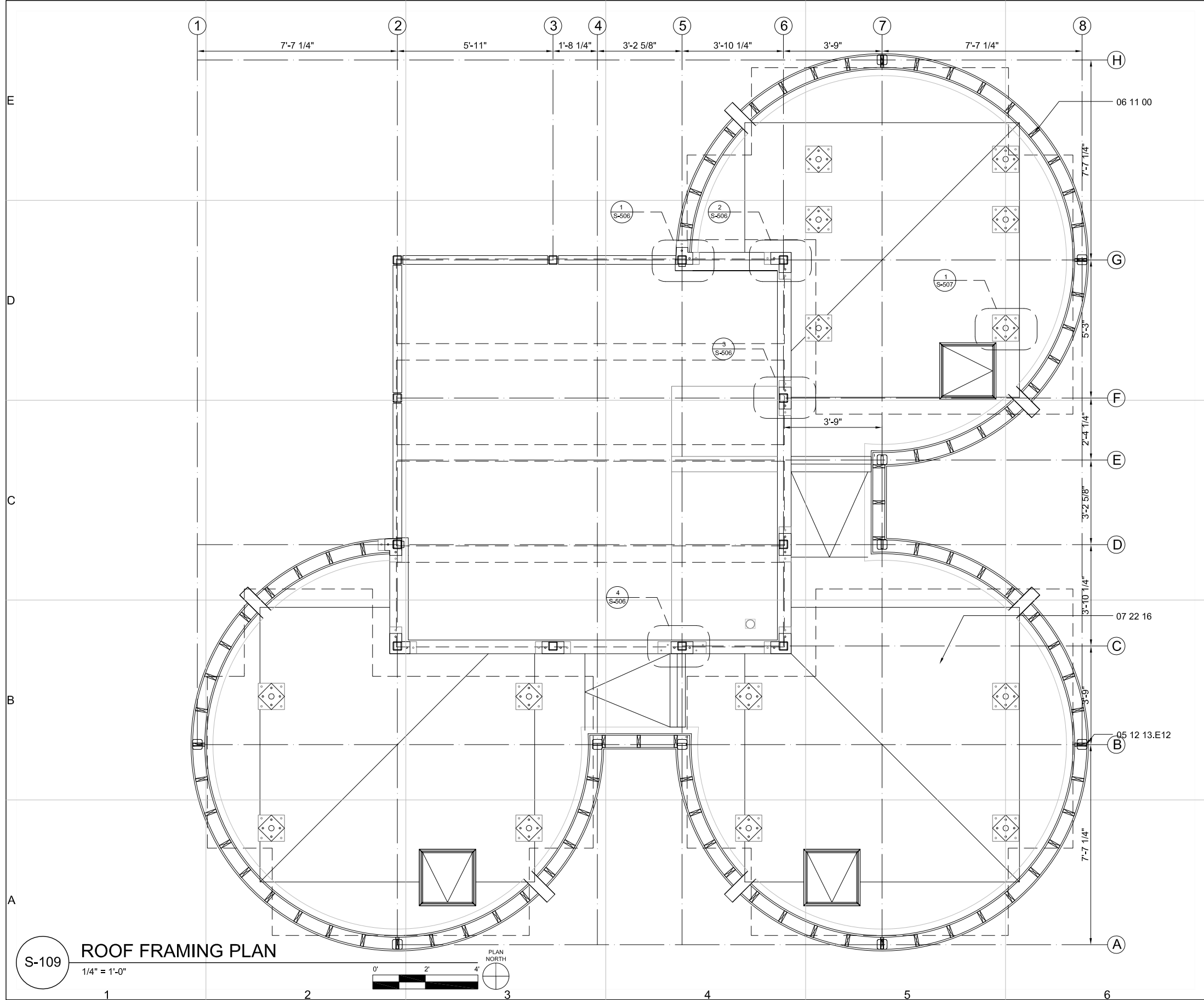
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SHEET TITLE

PLAN

S-108

SHEET 51 OF 196



GENERAL SHEET NOTES:

1. OPEN-TOPPED SCUPPER DIMENSION OF 5-1/2"x4 1/2" EXCEEDS IPC 2006, CHAPTER 11 REQUIREMENTS FOR EMERGENCY DRAINAGE
2. PERSONAL FALL ARREST TO BE SECURED TO LIFTING RINGS

REFERENCE KEYNOTES:

DIVISION 05 - METALS

05 12 13.E12 STRUCTURAL STEEL FRAMING-
4"x3"x1" PLATE

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 11 00 WOOD FRAMING
2x BLOCKING

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 22 16 ROOF BOARD INSULATION
TAPERED CLOSED CELL
POLYISOCYANURATE



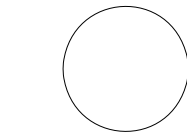
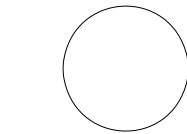
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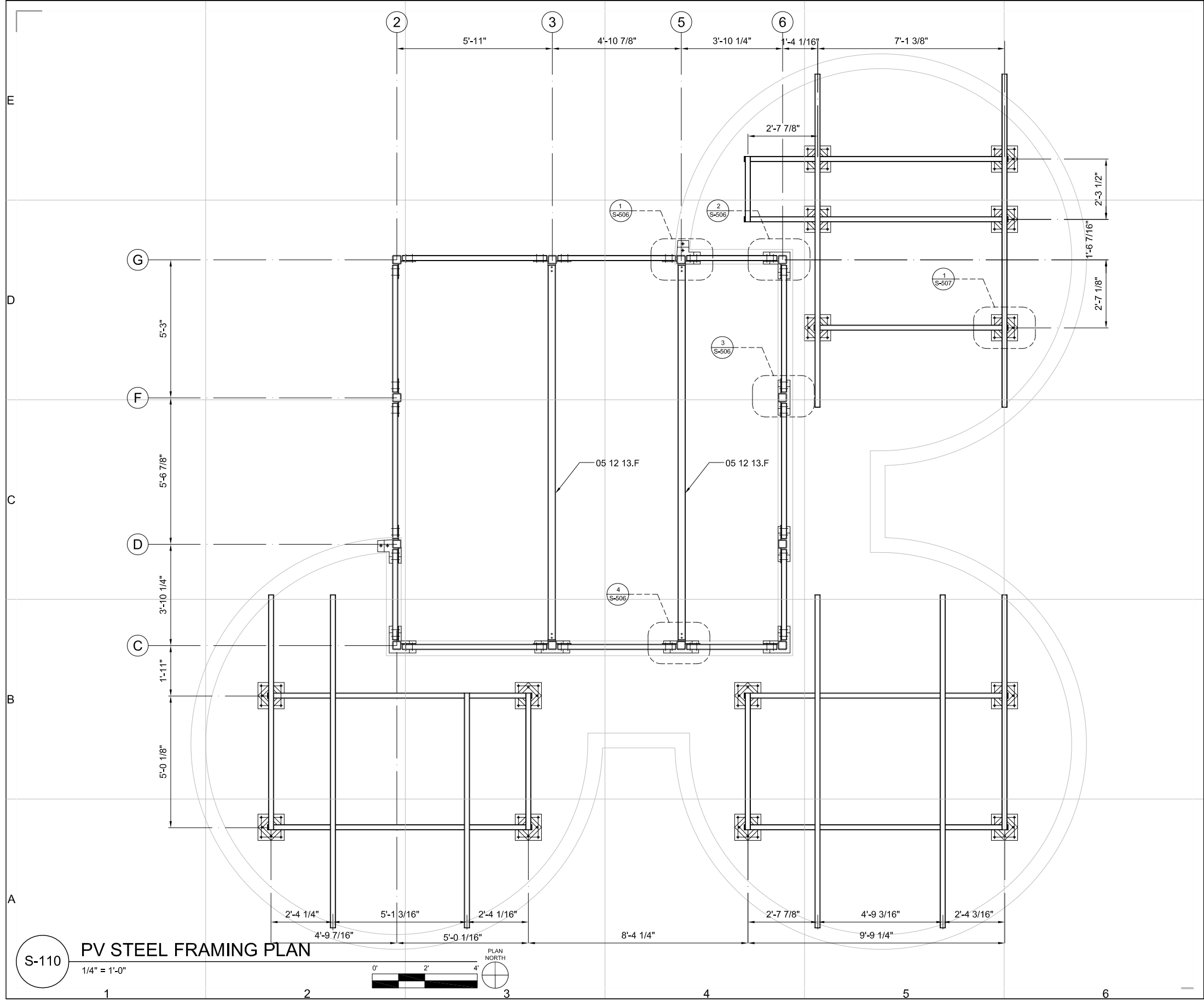
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PLAN

S-109

SHEET 52 OF 196



GENERAL SHEET NOTES:

1. DRAWING S-110 REFERENCES HARD COPY OF RSA 2/S1.1
2. ALL STEEL BEAMS HSS 2 1/2" x 2 1/2" x 1/4" UNLESS OTHERWISE NOTED
3. ALL HSS 2 1/2" x 2 1/2" x 1/4" HAVE 3/16" CAPS AT ENDS
4. BASE PLATE DETAIL 501 TYPICAL FOR 2 LOCATIONS
5. BASE PLATE DETAIL 502 TYPICAL FOR 3 LOCATIONS
6. BASE PLATE DETAIL 503 TYPICAL FOR 4 LOCATIONS
7. ALL PV ARRAY COLUMNS 2" SCH40 PIPE, BASE PLATE DETAIL 504 TYPICAL FOR ALL LOCATIONS

REFERENCE KEYNOTES:

DIVISION 05 - METALS
05 12 13.C3 STRUCTURAL STEEL FRAMING
HSS 3 1/2" x 3 1/2" x 1/4"



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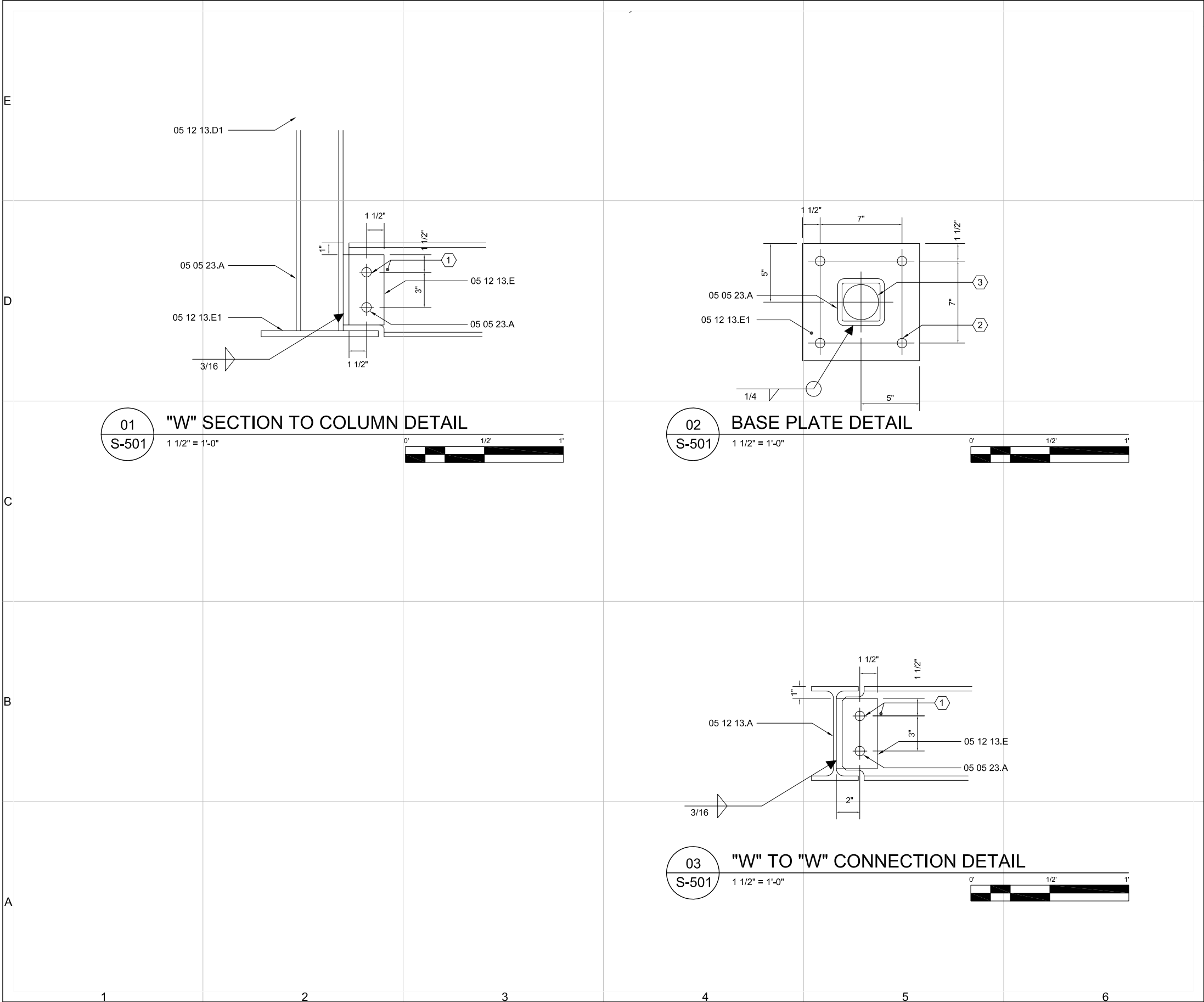
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PLAN

S-110

SHEET 53 OF 196



REFERENCE KEYNOTES:

DIVISION 05 - METALS	
05 12 13.A	STRUCTURAL STEEL FRAMING- W8x13
05 12 13.C	STRUCTURAL STEEL FRAMING- 4"x4"x3/8" HSS
05 12 13.D1	STRUCTURAL STEEL FRAMING- 1/4" CAP
05 12 13.E	STRUCTURAL STEEL FRAMING- 3/8"x3-1/2"x6-1/2" PLATE
05 12 13.E1	STRUCTURAL STEEL FRAMING- 1/2"x10"x10" BASE PLATE
05 05 23.A	METAL FASTENINGS 3/4" A325 STRUCTURAL BOLTS (TYP)

SHEET KEYNOTES:

- (2) 3/16" DIAMETER HOLES
- (4) 13/16" DIAMETER HOLES
- (1) 3" DIAMETER HOLE AT CENTER

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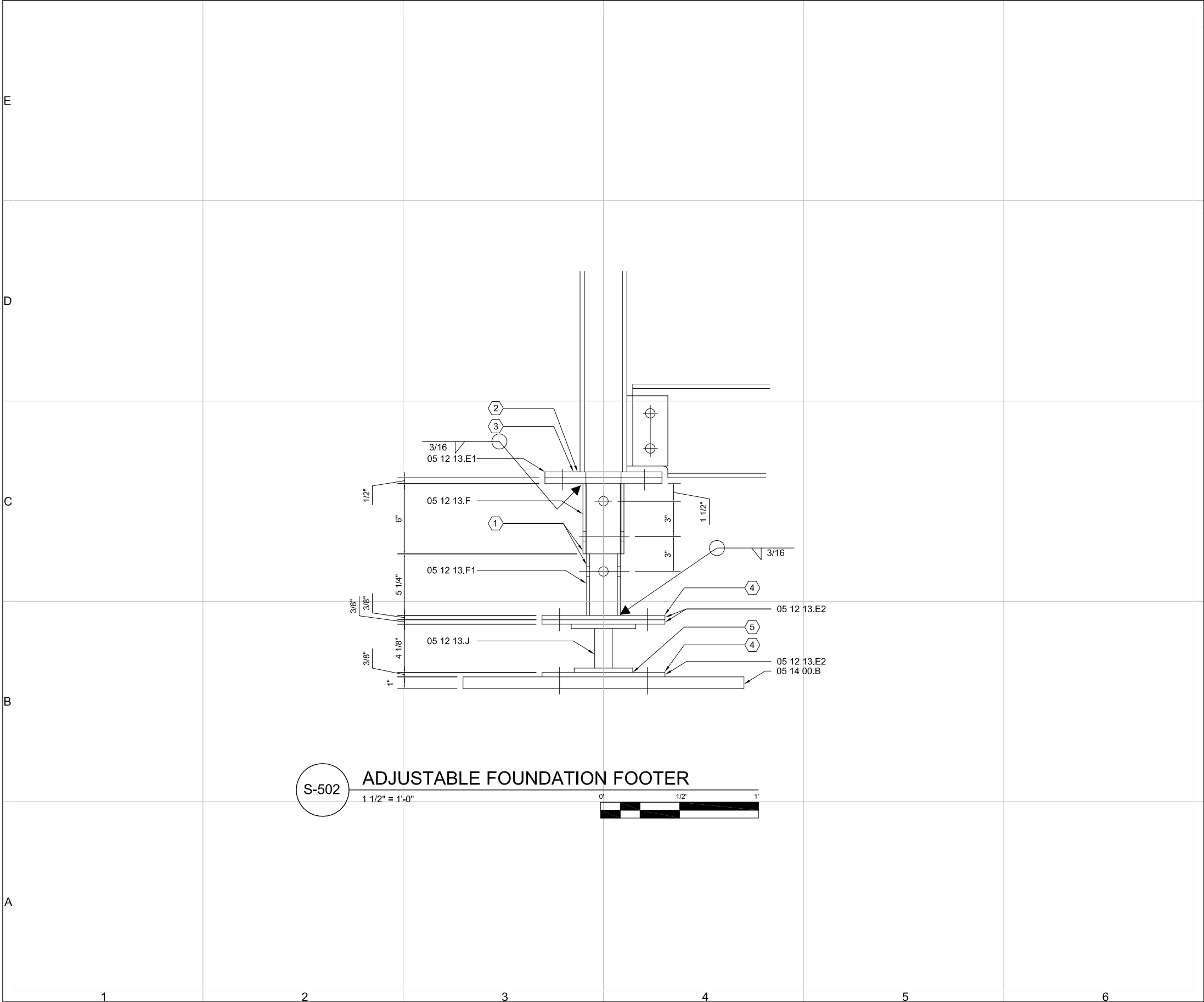
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SHEET TITLE

DETAILS

S-501

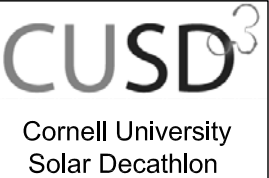


REFERENCE KEYNOTES:

DIVISION 05 - METALS	
05 14 00.B	STRUCTURAL ALUMINUM- 24" OR 36" DIAMETER FOOTER PLATE
05 12 13.E1	STRUCTURAL STEEL FRAMING- 1/2"x10"x10" BASE PLATE
05 12 13.E2	STRUCTURAL STEEL FRAMING- 3/8"x10-1/2"x10-1/2" PLATE
05 12 13.F	STRUCTURAL STEEL FRAMING- 3-1/2" O.D. TUBE
05 12 13.F1	STRUCTURAL STEEL FRAMING- 3" O.D. TUBE
05 12 13.J	STRUCTURAL STEEL FRAMING - ELLIS TIMBERJACK

SHEET KEYNOTES:

- 3/16" DIAMETER HOLES STAGGERED 90°
- (4) 13/16" DIAMETER HOLES
- (1) 3" DIAMETER HOLE AT CENTER
- (4) 3/16" DIAMETER HOLES
- 3/16" WELD (TYP.)

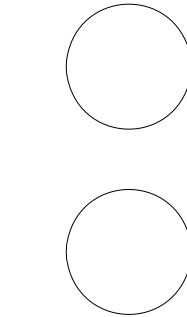


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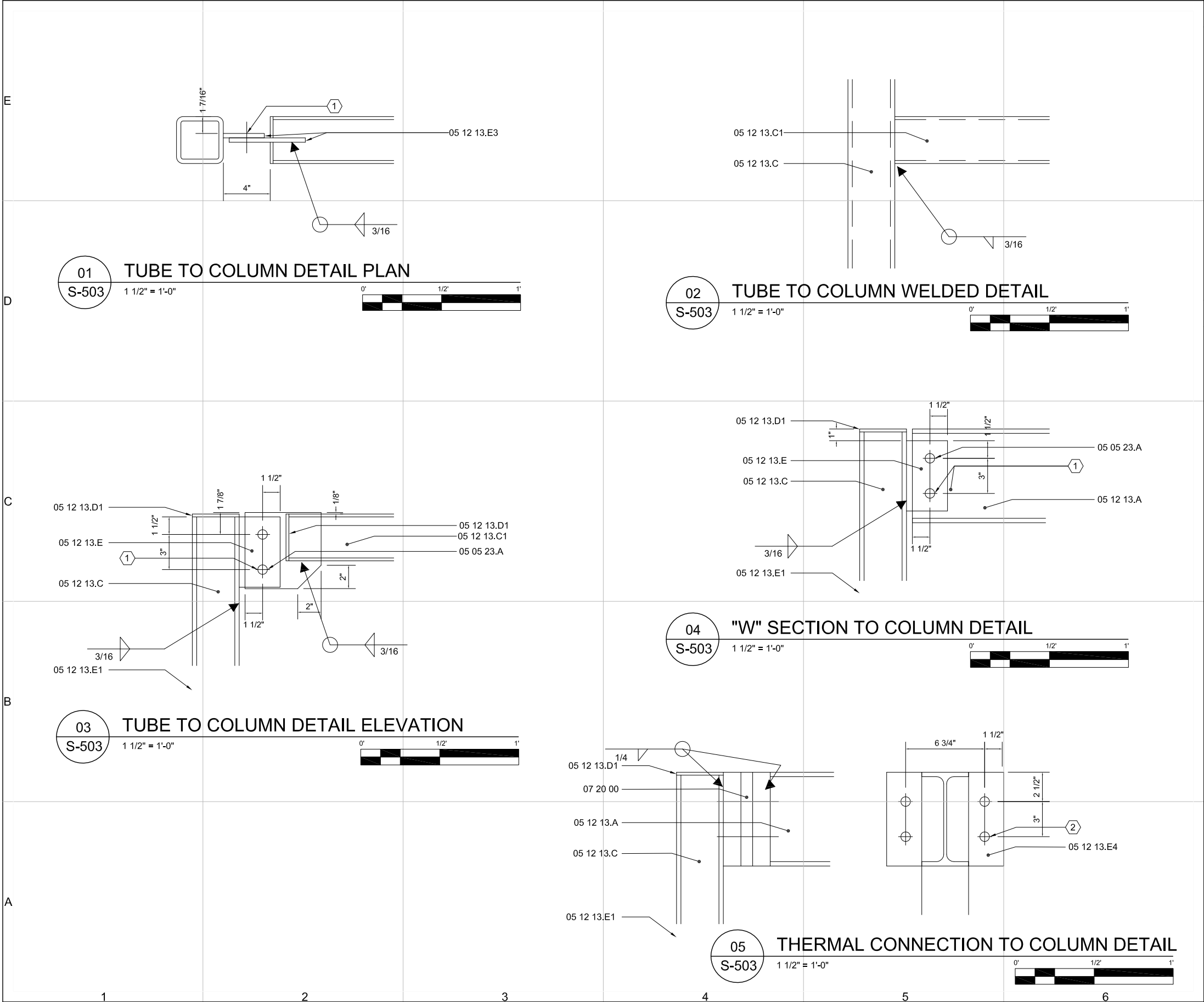
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SHEET TITLE

DETAILS

S-502



REFERENCE KEYNOTES:

DIVISION 05 - METALS	
05 12 13.A	STRUCTURAL STEEL FRAMING- W8x13
05 12 13.C	STRUCTURAL STEEL FRAMING- 4"x4"x3/8" HSS
05 12 13.C1	STRUCTURAL STEEL FRAMING- 4"x4"x1/4" HSS
05 12 13.D1	STRUCTURAL STEEL FRAMING- 1/4" CAP
05 12 13.E	STRUCTURAL STEEL FRAMING- 3/8"x3-1/2"x6-1/2" PLATE
05 12 13.E1	STRUCTURAL STEEL FRAMING- 1/2"x10"x10" BASE PLATE
05 12 13.E3	STRUCTURAL STEEL FRAMING- 3/8"x6-1/2"x6-1/2" PLATE
05 12 13.E4	STRUCTURAL STEEL FRAMING- 1-1/2"x10"x8" PLATE
05 05 23.A	METAL FASTENINGS 3/4" A325 STRUCTURAL BOLTS (TYP)

DIVISION 07- THERMAL & MOISTURE PROTECTION	
07 20 00	THERMAL PROTECTION- 1" THERMAL BREAK

SHEET KEYNOTES:

- (2) 3/16" DIAMETER HOLES
- (4) 13/16" DIAMETER HOLES

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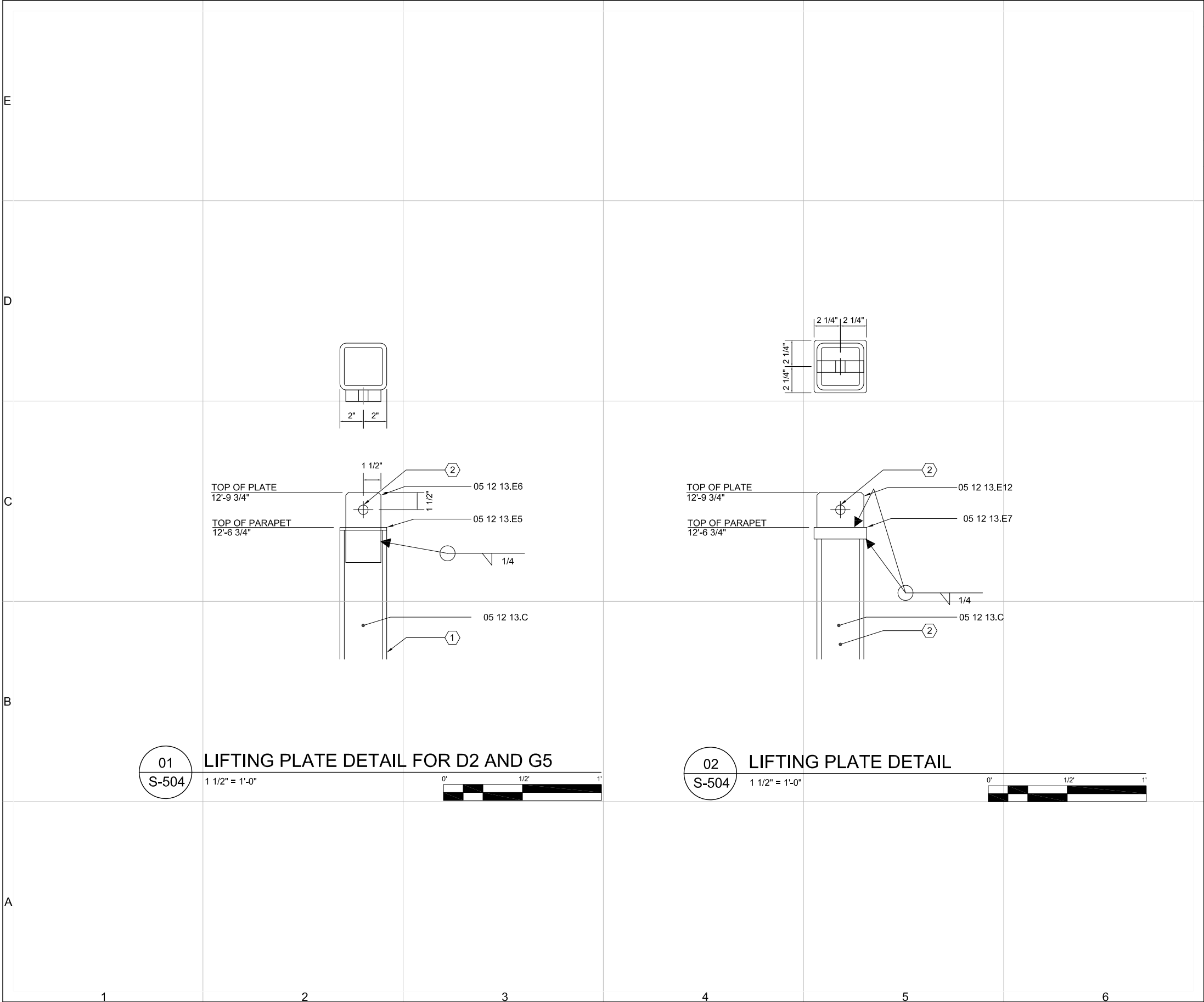
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SHEET TITLE

DETAIL

S-503



REFERENCE KEYNOTES:

DIVISION 05 - METALS

05 12 13.C STRUCTURAL STEEL FRAMING-
4"x4"x3/8" HSS

05 12 13.E5 STRUCTURAL STEEL FRAMING-
4"x4"x1/4" TOP PLATE

05 12 13.E6 STRUCTURAL STEEL FRAMING-
6"x3"x1" PLATE

05 12 13.E7 STRUCTURAL STEEL FRAMING-
4-1/2"x4-1/2"x1" TOP PLATE

05 12 13.E12 STRUCTURAL STEEL FRAMING-
4"x3"x1" PLATE

SHEET KEYNOTES:

1. COURTYARD FACE OF COLUMN
2. 13/16" DIAMETER HOLE
3. CURVED CHANNEL LOCATIONS ONLY (TYP FOR 10)

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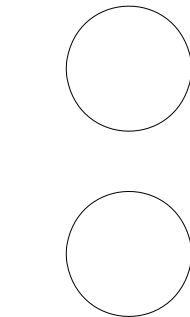
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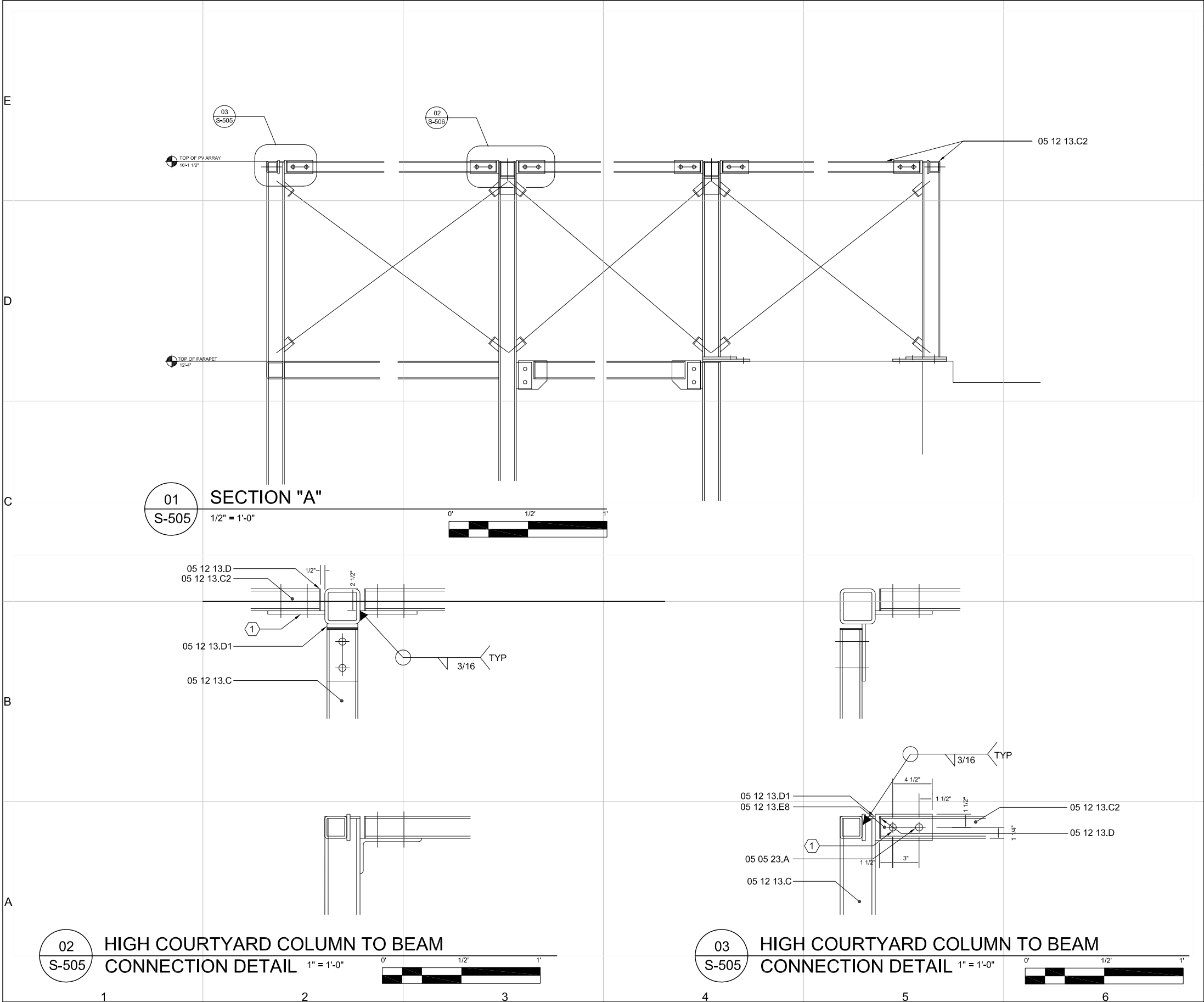
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S-504



REFERENCE KEYNOTES:

DIVISION 05 - METALS	
05 12 13.C	STRUCTURAL STEEL FRAMING- 4"x4"x3/8" HSS
05 12 13.C2	STRUCTURAL STEEL FRAMING- 2-1/2"x2-1/2"x1/4" HSS
05 12 13.D1	STRUCTURAL STEEL FRAMING- 1/4" CAP
05 12 13.D	STRUCTURAL STEEL FRAMING- 1/8" CAP
05 12 13.E8	STRUCTURAL STEEL FRAMING- 3/8"x3"x6-1/2" PLATE
05 05 23.A	METAL FASTENINGS 3/4" A325 STRUCTURAL BOLTS (TYP)

SHEET KEYNOTES:

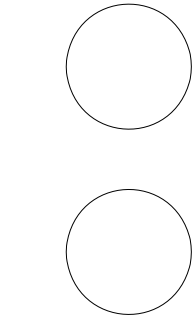
1. (2) 13/16" DIAMETER HOLES

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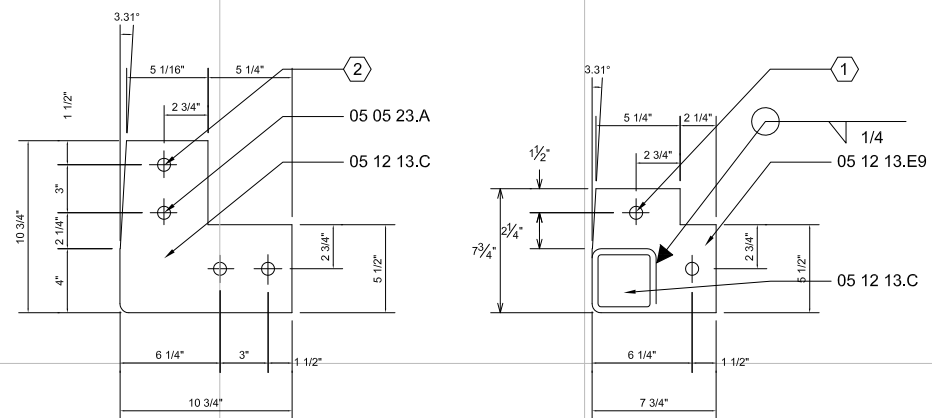
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DETAIL

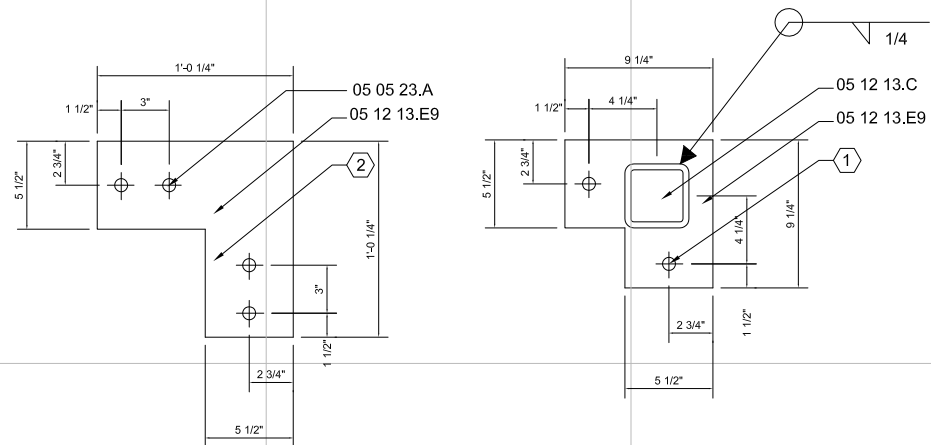
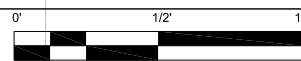
S-505



01
S-506

DETAIL "A"

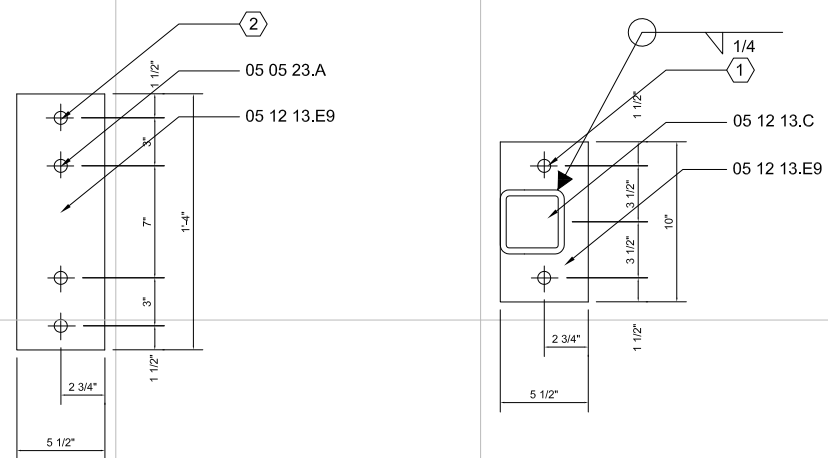
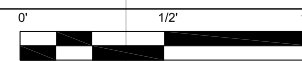
1" = 1'-0"



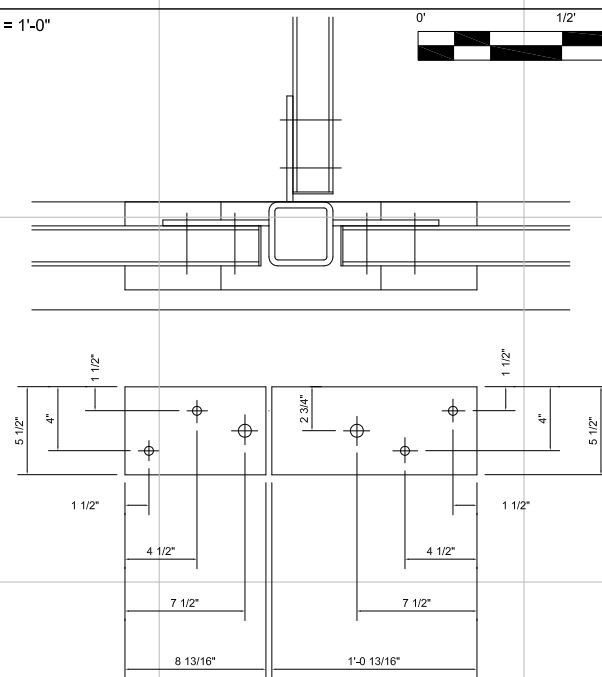
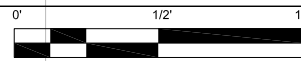
02
S-506

DETAIL "B"

1" = 1'-0"



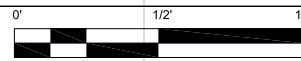
03	DETAIL "C"
S-506	1" = 1'-0"



04
S-506

DETAIL "D"

1" = 1'-0"



REFERENCE KEYNOTES:

DIVISION 05 - METALS	
05 12 13.C	STRUCTURAL STEEL FRAMING
	HSS 4" x 4" x 3/8"
05 12 13.E9	STRUCTURAL STEEL FRAMING
	1/2" PLATE
05 05 23.A	METAL FASTENINGS
	3/4" A325 STRUCTURAL BOLTS (TYP)

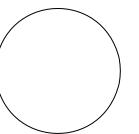
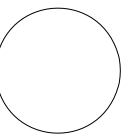
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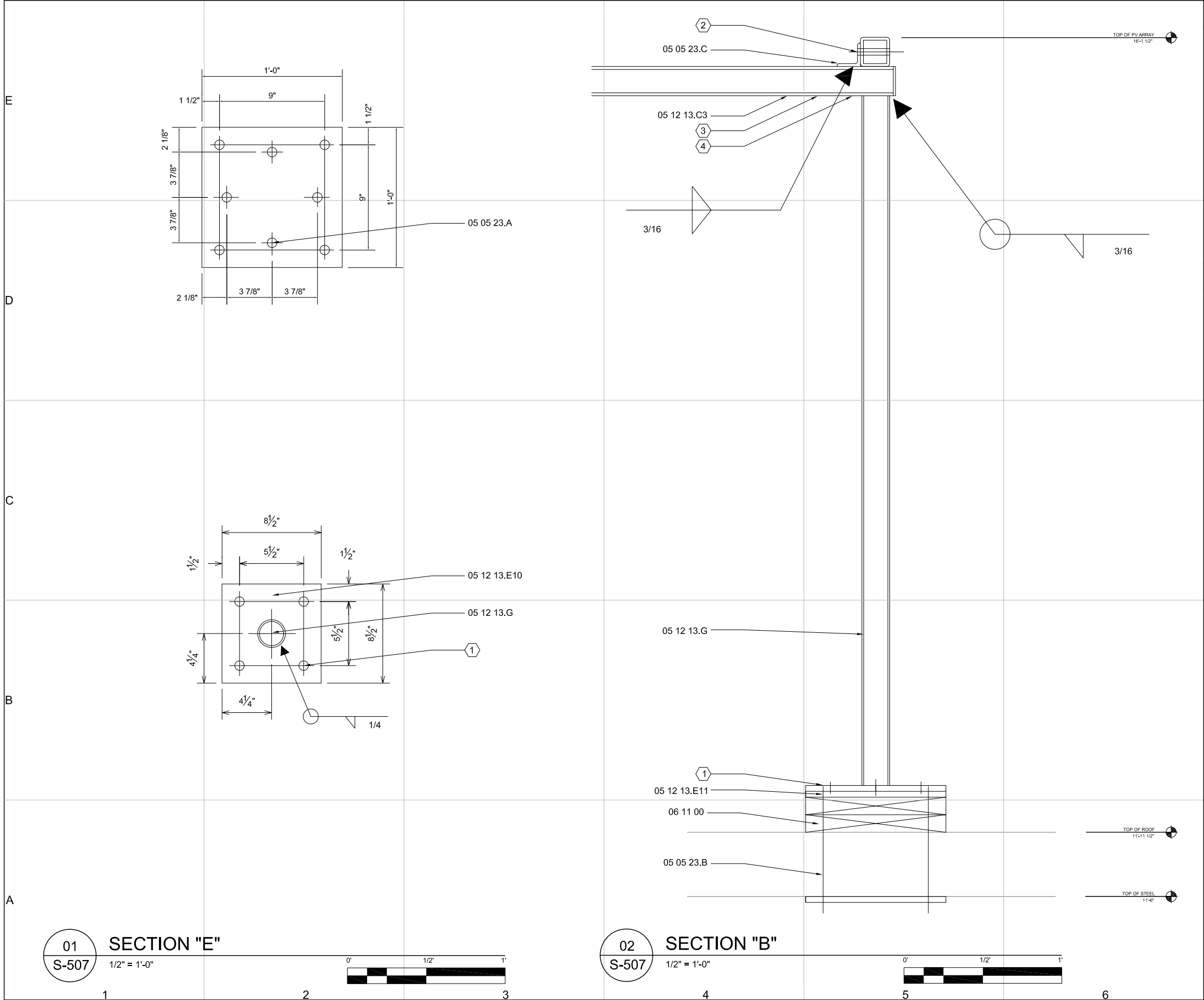
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DETAIL

S-506

SHEET 59 OF 196



REFERENCE KEYNOTES:

DIVISION 05 - METALS

- 05 12 13.C3 STRUCTURAL STEEL FRAMING HSS 3 1/2" x 3 1/2" x 1/4"
- 05 12 13.E10 STRUCTURAL STEEL FRAMING 3/4" PLATE
- 05 12 13.E11 STRUCTURAL STEEL FRAMING 3/8" x 12" x 12" SANDWICH PLATE
- 05 12 13.G STRUCTURAL STEEL FRAMING 2"Ø SCH 40 PIPE COLUMN
- 05 05 23.A METAL FASTENINGS 3/4" A325 STRUCTURAL BOLTS (TYP)
- 05 05 23.B METAL FASTENINGS 3/4"Ø THREADED ROD THRU BOLTS (TYP)
- 05 05 23.C METAL FASTENINGS L2" x 2" x 1/4" x 2" LONG CLIP

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITS

- 06 11 00 WOOD FRAMING

SHEET KEYNOTES:

- 1 1/8"Ø HOLES
- 3/8"Ø HOLE
- 3/8" CAP EACH END
- 1/2"Ø BOLT AT EACH CONNECTION LOCATION



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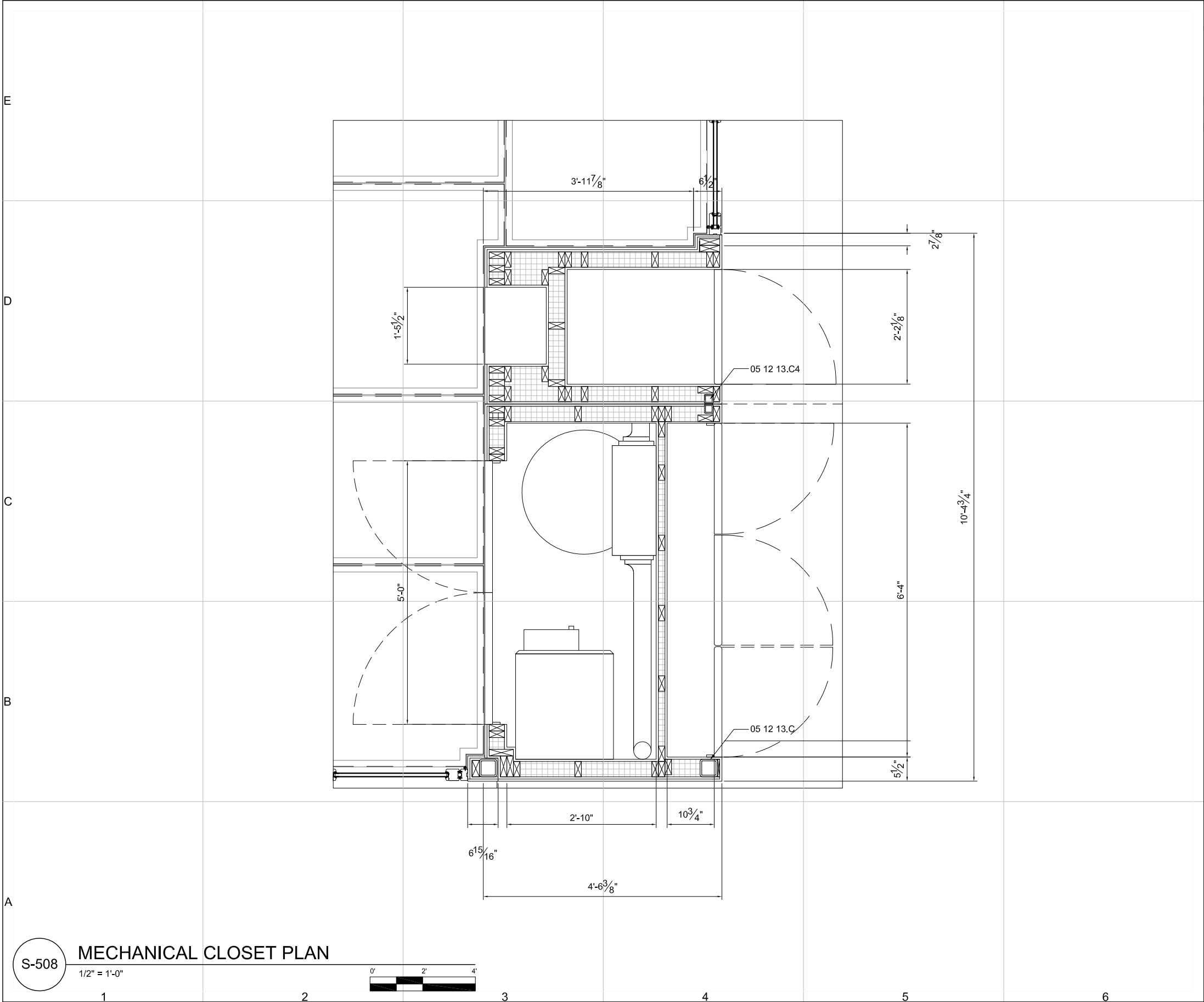
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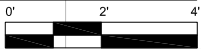
S-507



S-508

MECHANICAL CLOSET PLAN

1/2" = 1'-0"



GENERAL SHEET NOTES:

1. MECH CLOSET MUST HAVE 2X4 BLOCKING BETWEEN STUDS AT $\frac{1}{3}$ ELEVATIONS
2. STUD WALL TO HAVE $\frac{1}{2}$ " SHEATHING
3. STUDS LOCATED 16 O.C.

REFERENCE KEYNOTES:

DIVISION 05 - METALS
05 12 13.C STRUCTURAL STEEL FRAMING
HSS 4" x 4" x 3/8"
05 12 13.C4 STRUCTURAL STEEL FRAMING
HSS 2" x 2" x 3/8"

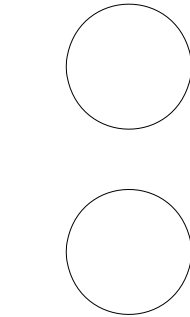
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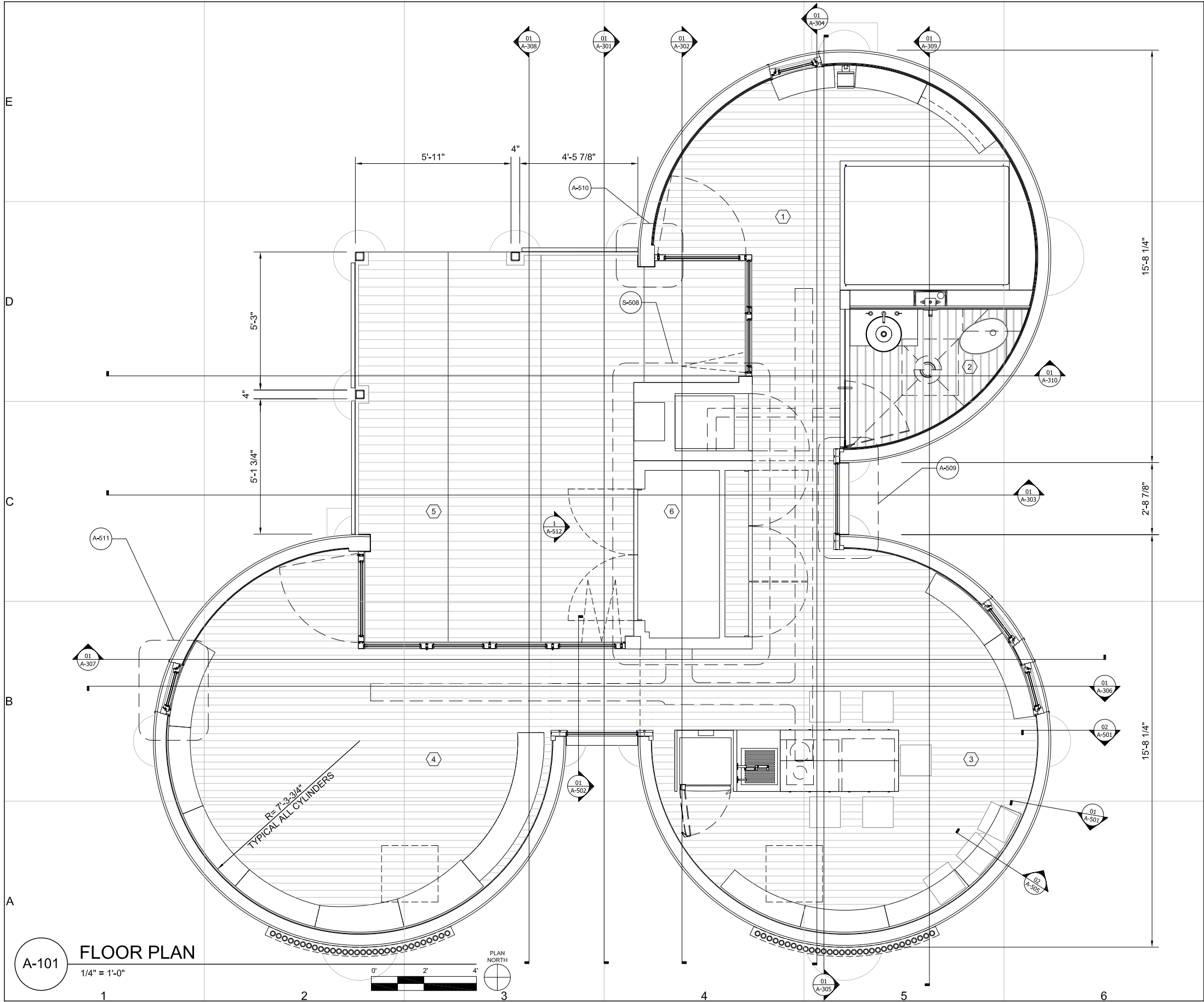
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						1. ALL PLANS UNLESS OTHERWISE SPECIFIED ARE SCALED AT $\frac{1}{4}" = 1'-0"$			
						2. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECTURE TEAM AND CLARIFICATION MUST BE MADE AND SIGNED OFF ON BEFORE CONSTRUCTION MAY BEGIN			



SHEET KEYNOTES:

1. BEDROOM

2. BATHROOM

3. KITCHEN

4. LIVING ROOM

5. EXTERIOR COURTYARD

6. MECHANICAL CLOSET

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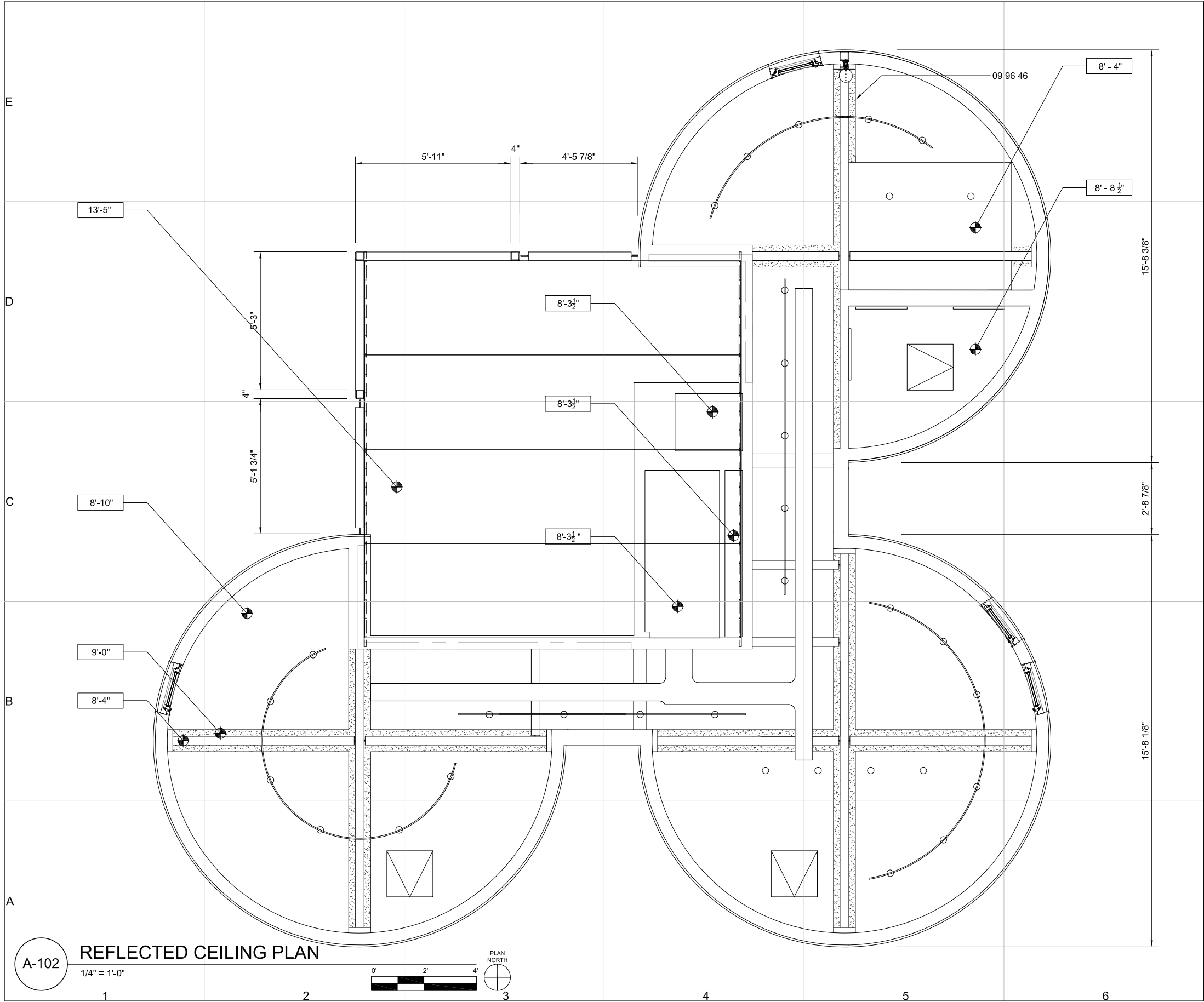
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PLAN

A-101

SHEET 63 OF 196



GENERAL SHEET NOTES:

1. ALIGN TOP OF DUCT TO BOTTOM OF BEAM

REFERENCE KEYNOTES:

DIVISION 09- FINISHES
09 96 46 INTUMESCENT PAINTING

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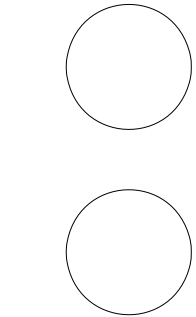
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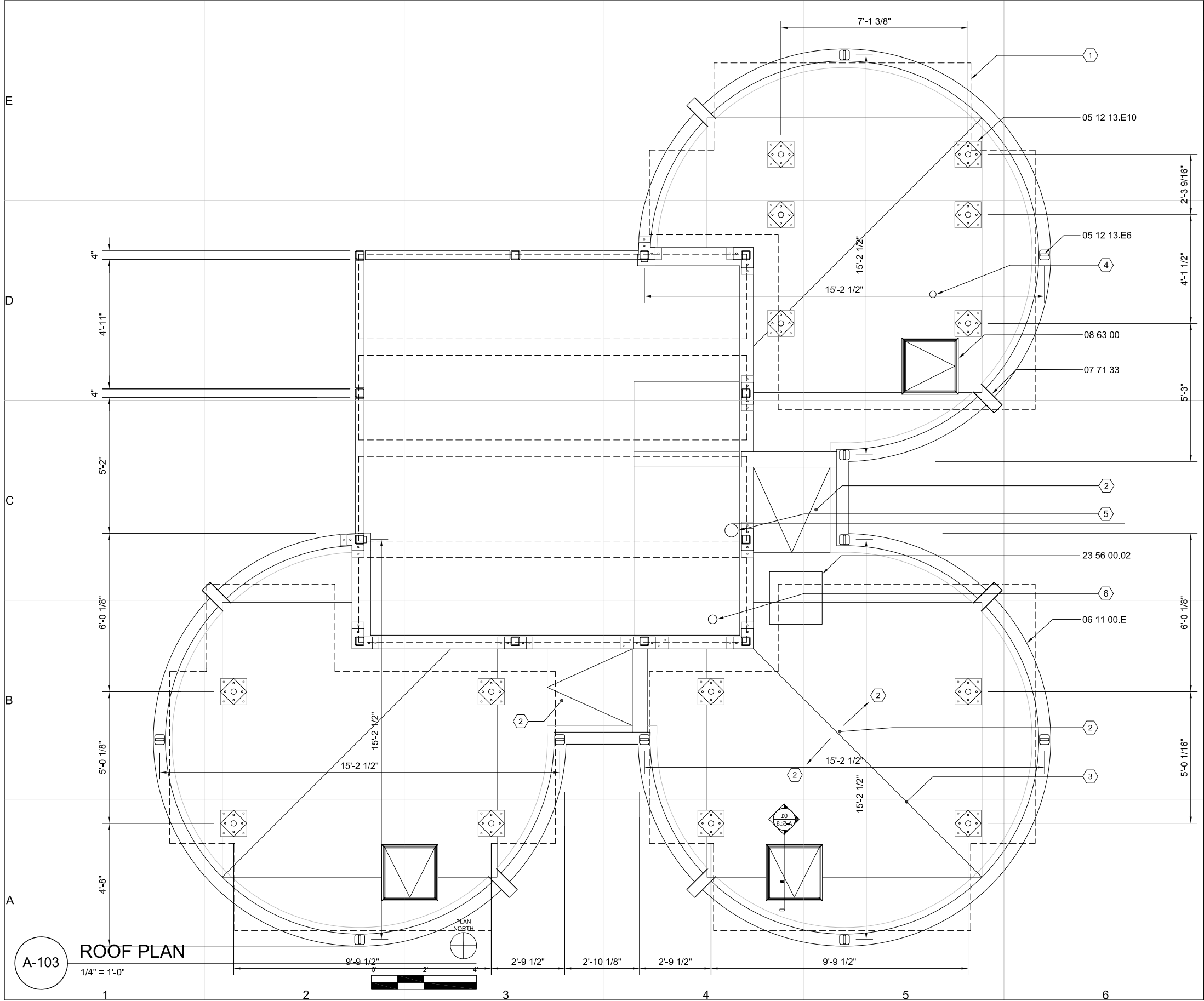
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PLAN

A-102

SHEET 64 OF 196



GENERAL SHEET NOTES:	
1. OPEN-TOPPED SCUPPER DIMENSION OF 5'-1/2"x4'-1/2" EXCEEDS IPC 2006, CHAPTER 11 REQUIREMENTS FOR EMERGENCY DRAINAGE	
REFERENCE KEYNOTES:	
DIVISION 05 - METALS	
05 12 13.E10	STRUCTURAL STEEL FRAMING- PV ARRAY FOOTER PLATE (TYP) 12x12x3/8
05 12 13.E6	STRUCTURAL STEEL FRAMING- LIFTING RING (TYP)
DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES	
06 11 00.E	WOOD FRAMING- PARAPET
DIVISION 07 - THERMAL AND MOISTURE PROTECTION	
07 71 33	SCUPPER (TYP)
DIVISION 08 - OPENINGS	
08 63 00	METAL-FRAMED SKYLIGHTS (TYP)
DIVISION 23- HVAC	
23 56 00.02	HEAT SINK
SHEET KEYNOTES:	
1. PV ARRAY ABOVE (TYP)	
2. SLOPE TO DRAIN (TYP)	
3. ROOF RIDGE 2-3/4" ABOVE ROOF SIP	
4. 3" PVC VENT PIPE	
5. ELECTRICAL CLOSET IN LINE DUCT VENT	
6. ERV EXHAUST AIR OUTLET	

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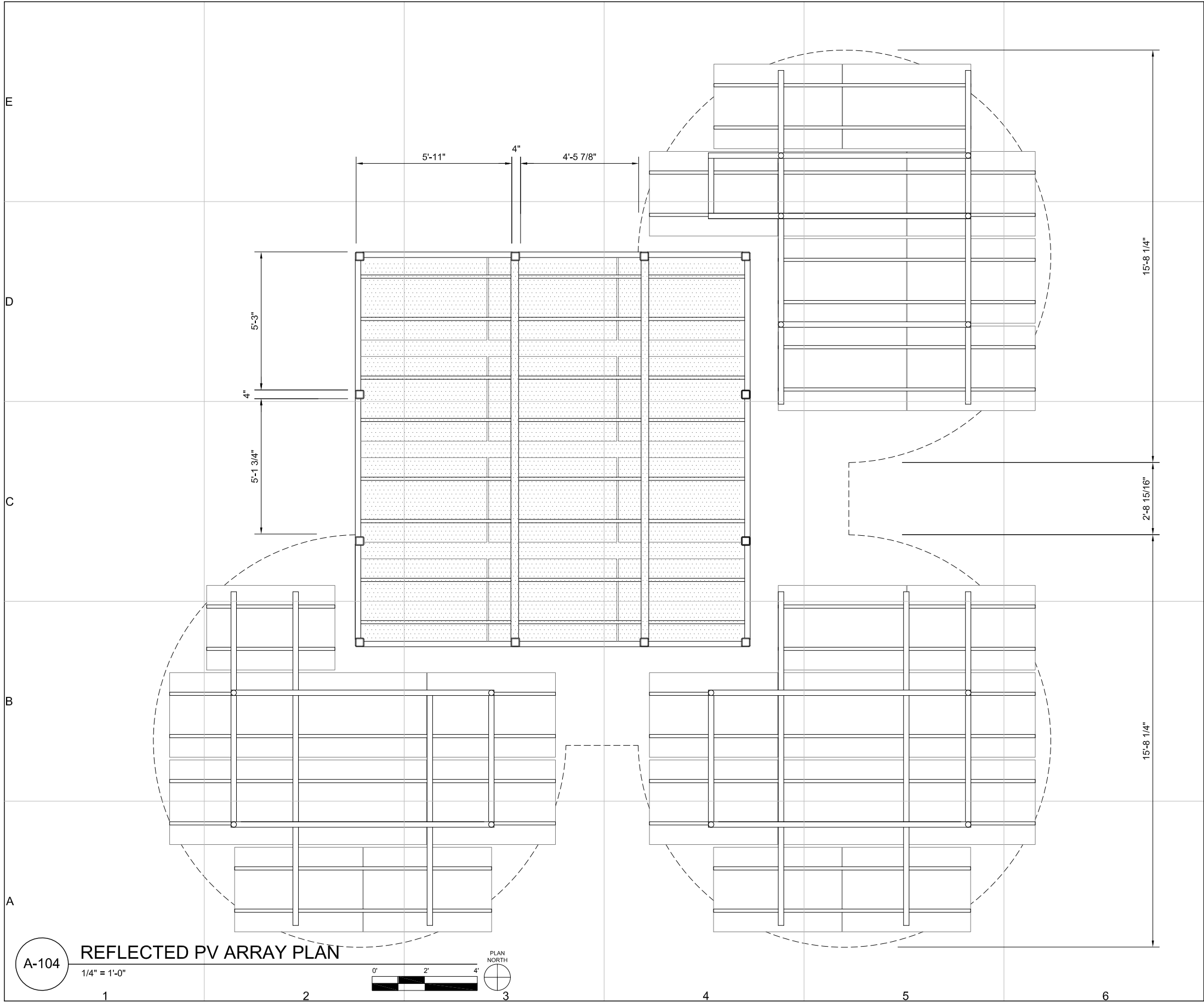
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A-103

SHEET 65 OF 196



GENERAL SHEET NOTES:

1. ALL HEIGHTS ARE FROM GROUND TO BOTTOM OF STEEL

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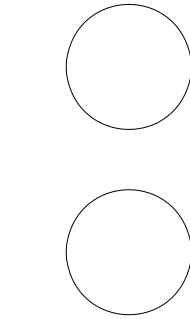
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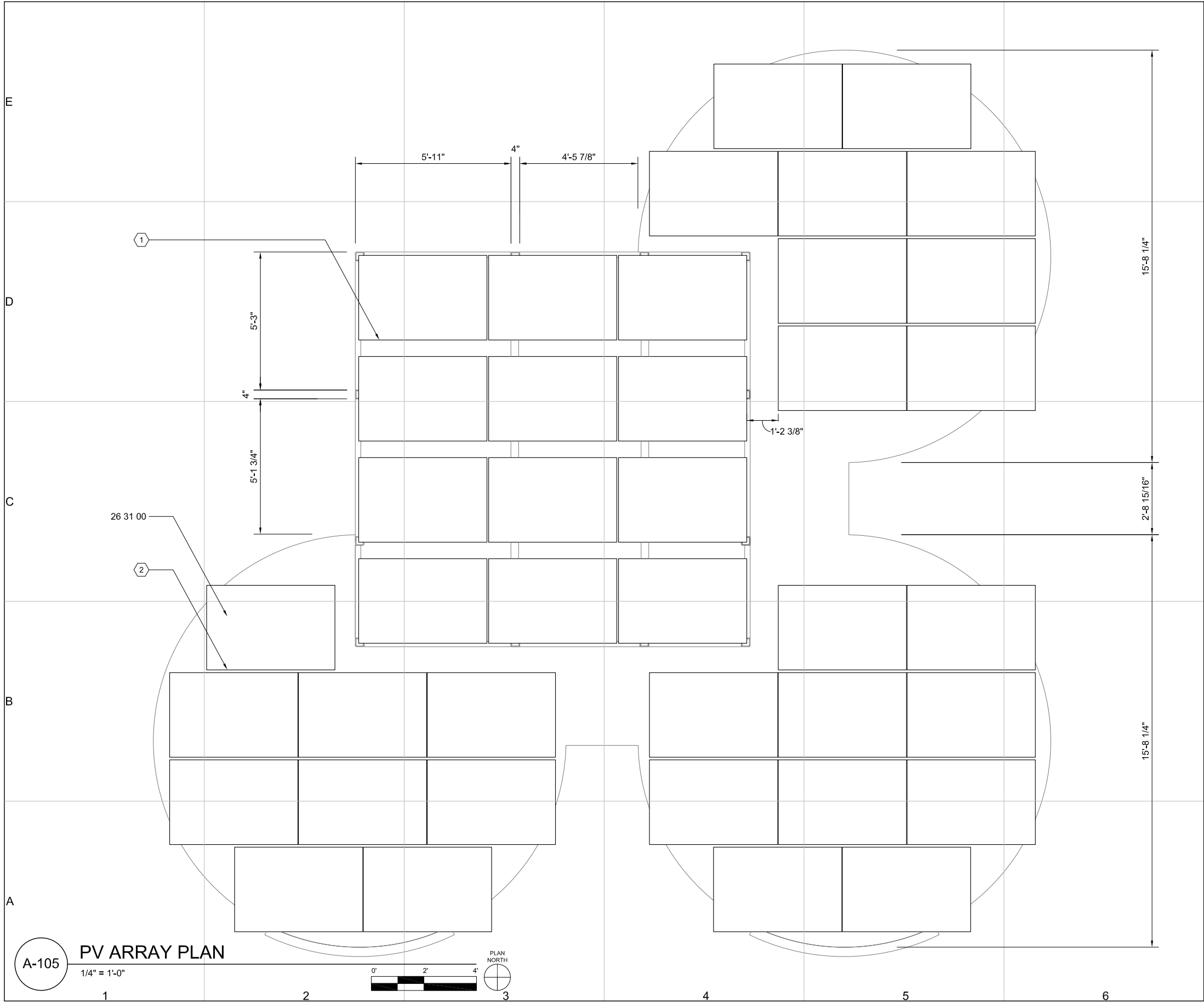
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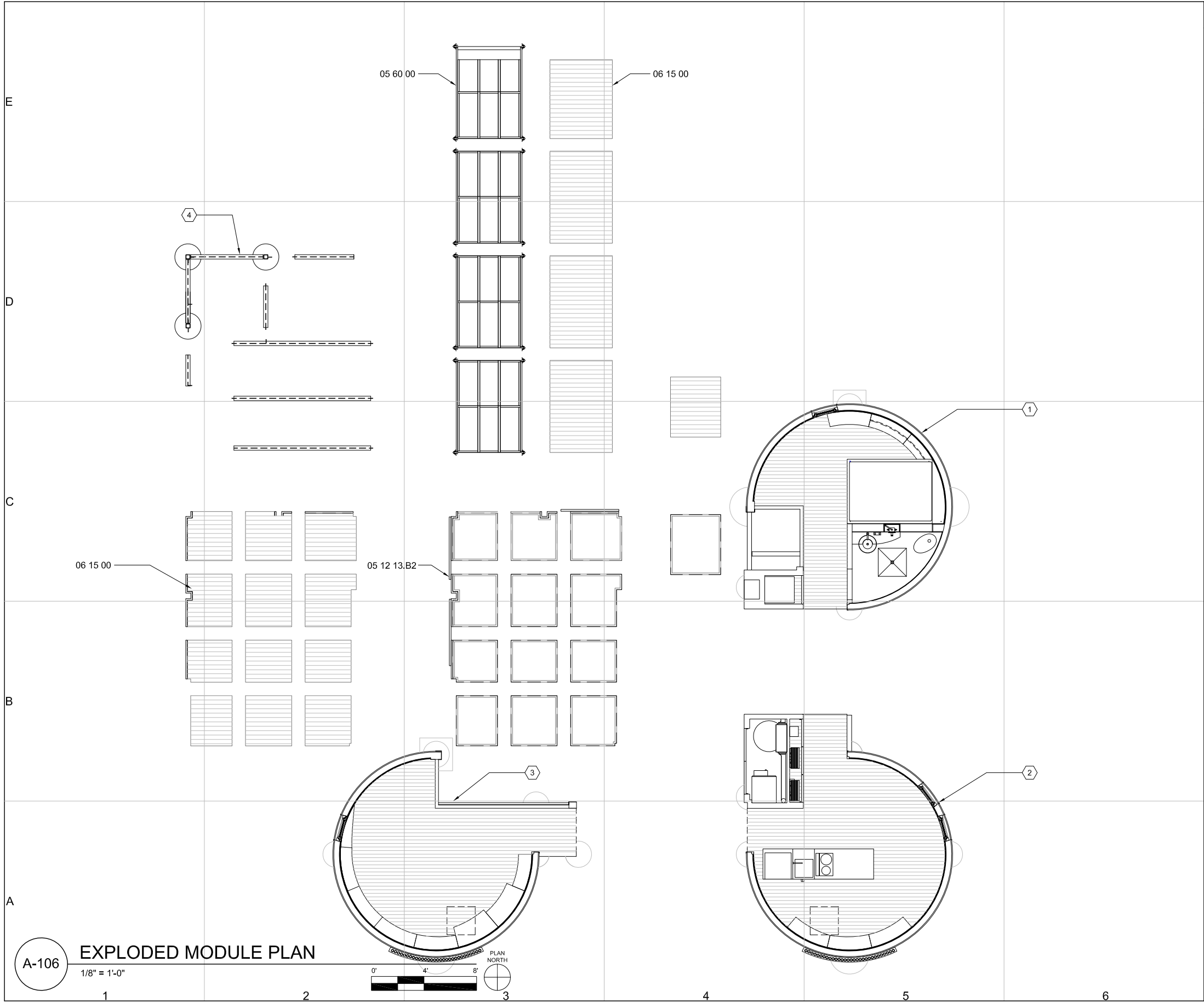
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A-104

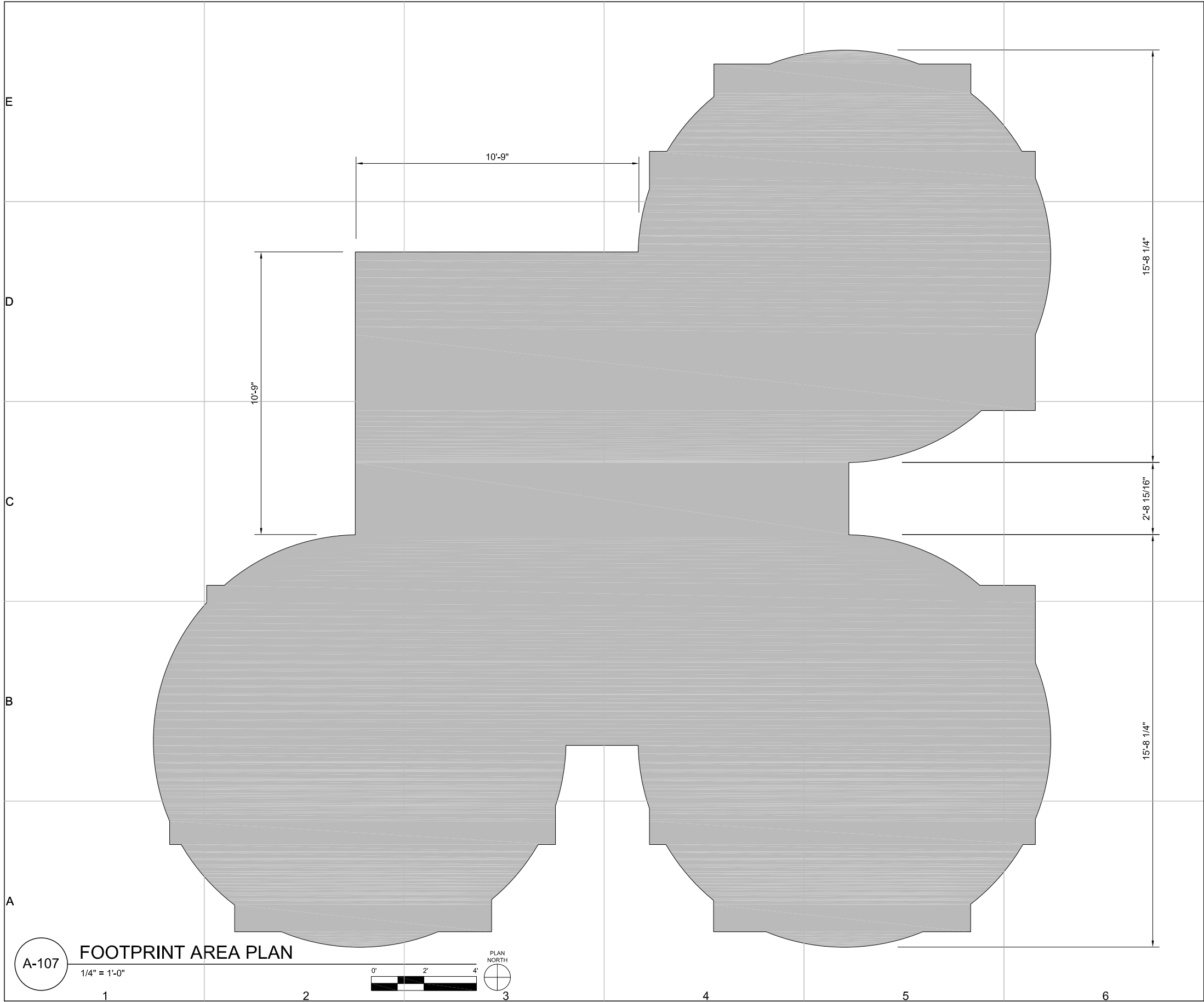
SHEET 66 OF 196



GENERAL SHEET NOTES:	
1. 40 GE 200W PHOTOVOLTAIC PANELS, DIMENSIONS: 38 5/8" X 58 1/2"	
REFERENCE KEYNOTES:	
DIVISION 26 - ELECTRICAL 26 31 00 PHOTOVOLTAIC COLLECTORS- ROOF MOUNTED	
SHEET KEYNOTES:	
1. REQUIRED GAP: 7 1/2" 2. REQUIRED GAP: 1 1/4"	
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A-105	
SHEET 67 OF 196	



<div><div><div><div></div><div>SHEET KEYNOTES:</div></div><div><div>1. BEDROOM MODULE</div><div>2. KITCHEN MODULE</div><div>3. LIVING ROOM MODULE</div><div>4. COURTYARD FRAMING</div></div></div></div>		<div><div>CUSD³</div><div>Cornell University Solar Decathlon</div></div> <div>CORNELL UNIVERSITY SOLAR DECATHLON 909 MITCHELL STREET ITHACA, NY 14850 (607) 277-7475</div> <div>WWW.CUSD.CORNELL.EDU</div>
<div>REFERENCE KEYNOTES:</div> <div><div>DIVISION 05 - METALS</div><div>05 60 00 ENTRANCE RAMP</div><div>05 12 13.B2 STRUCTURAL STEEL FRAMING- STEEL PALLETS- 18 GA C CHANNEL</div><div>DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES</div><div>06 15 00 WOOD DECKING - BLACK LOCUST</div></div>		
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<div>A-106</div> <div>1/8" = 1'-0"</div>		<div>A-106</div> <div>SHEET 68 OF 196</div>



GENERAL SHEET NOTES:

1. TOTAL AREA 792 s.f.

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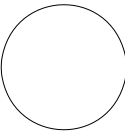
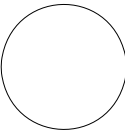
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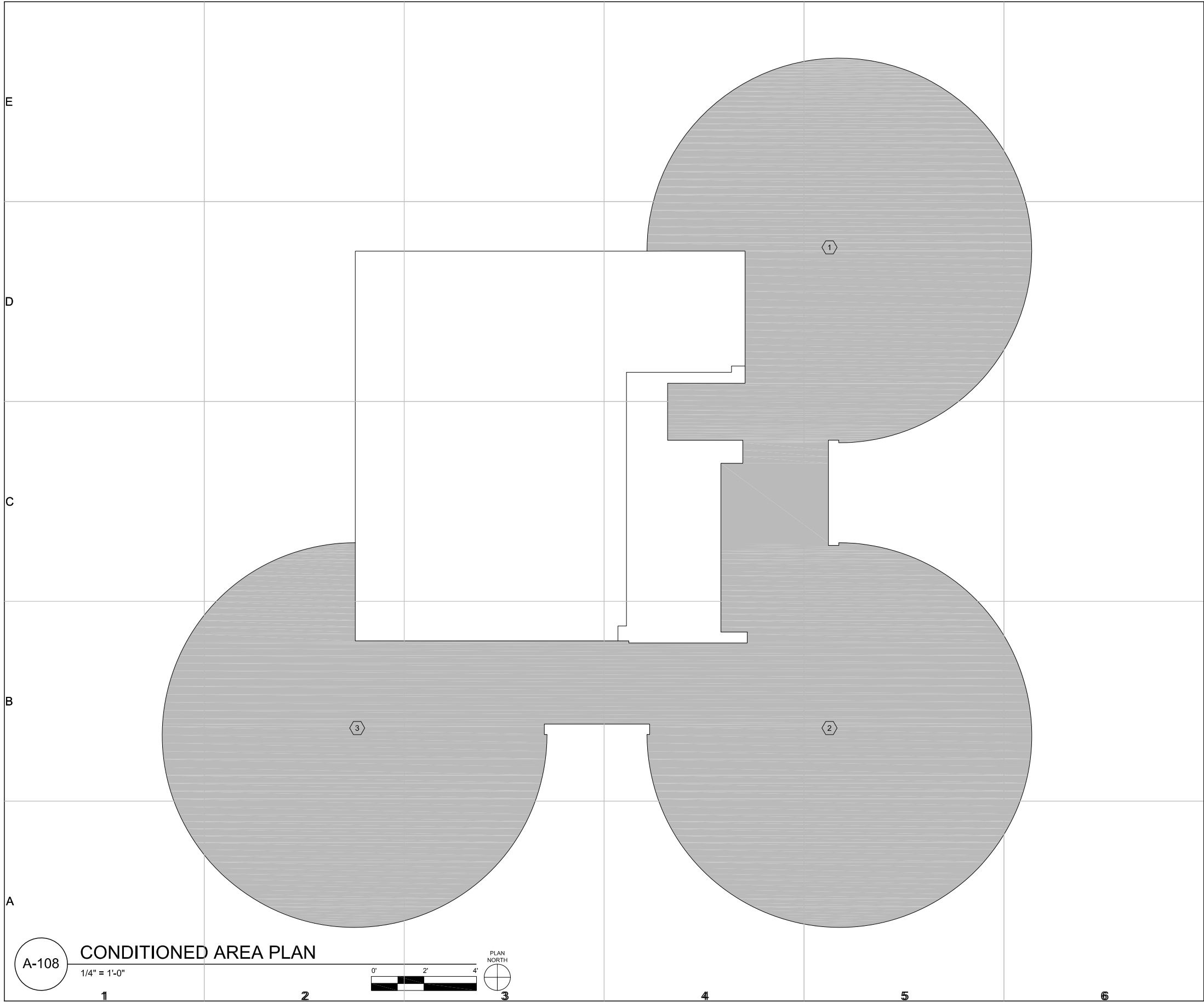
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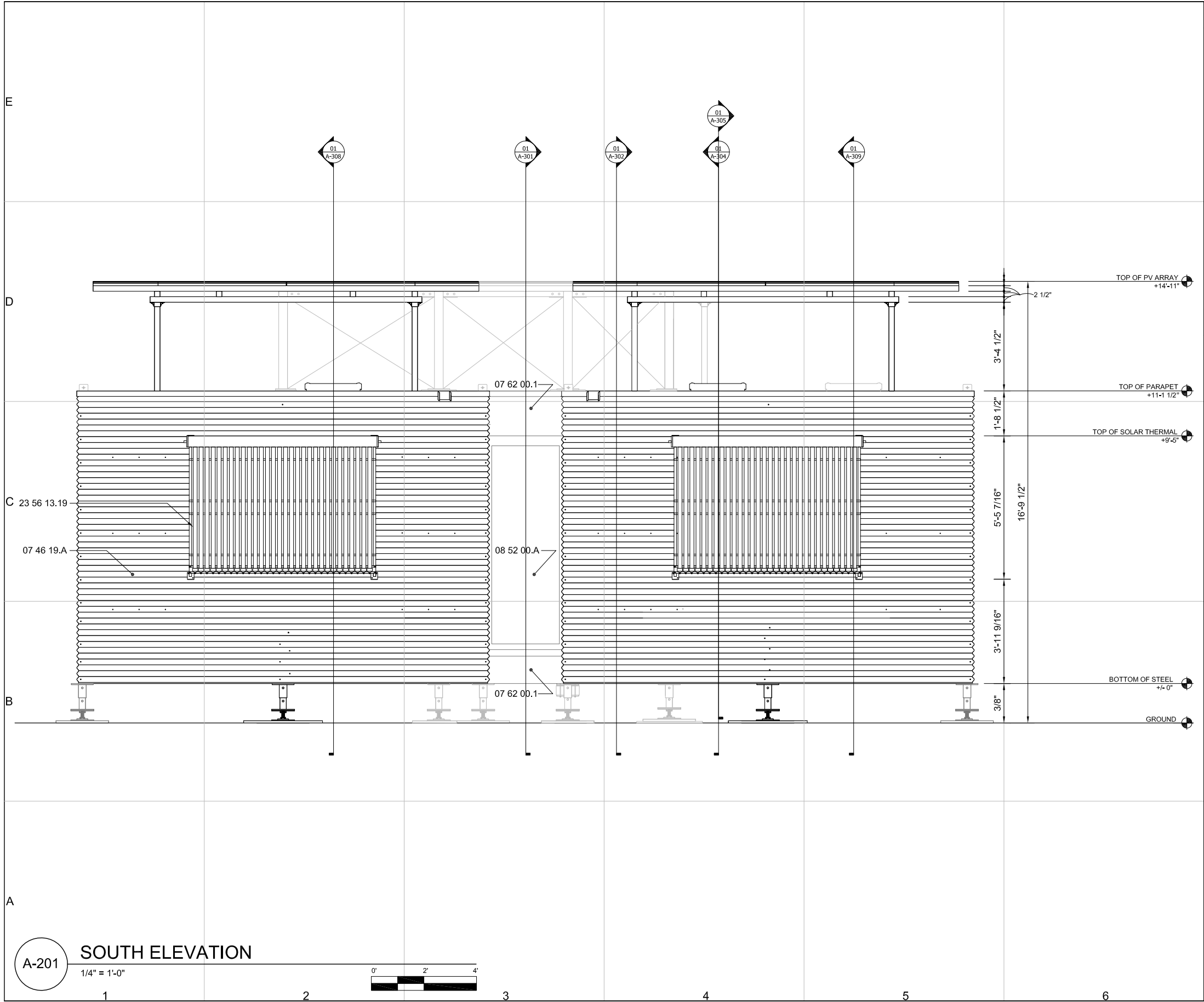
SHEET TITLE

PLAN

A-107



GENERAL SHEET NOTES:	
1. TOTAL CONDITIONED AREA 506 s.f. 2. DECK NOT CONDITIONED	
SHEET KEYNOTES:	
1. BEDROOM 2. KITCHEN 3. LIVING ROOM	
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SHEET 70 OF 196	

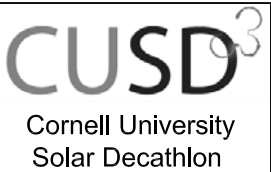


GENERAL SHEET NOTES:

1. BOTTOM OF STEEL ADJUSTABLE TO 18"
2. ALIGN TOP OF SOLAR THERMAL, TOP OF WD65 F HALLWAY WINDOW
3. BOTTOM OF STEEL TO TOP OF STRUCTURE (EXCLUDING PV ARRAY STRUCTURE) NOT TO EXCEED 11'-6"
4. CLADDING ABOVE AND BELOW WD68 F HALLWAY WINDOW TO BE ASTM A606 18 GA STEEL
5. CYLINDER CLADDING TO BE CURVED, CORRUGATED ASTM A606 18 GA STEEL WITH RADIUS 93 $\frac{1}{4}$ "
SHEET DIMENSION:
39 $\frac{5}{8}$ " X 151 $\frac{1}{2}$ "
PROFILE: 2 $\frac{3}{8}$ " X $\frac{7}{8}$ "
6. CORRUGATED CLADDING TO SPAN COLUMN 148 $\frac{1}{2}$ " WITH 4" ENDLAP
7. CORRUGATED CLADDING TO HAVE SIDELAP OF 1 CORRUGATION
8. CORRUGATED CLADDING TO SPAN VERTICALLY FROM BOTTOM OF C6 X 10.5 FLOOR FRAMING TO TOP OF PARAPET
9. PARAPET FLASHING TO OVERLAP CORRUGATED CLADDING BY 2 $\frac{1}{2}$ "

REFERENCE KEYNOTES:

- DIVISION 07 - THERMAL AND MOISTURE PROTECTION**
- 07 46 19.A STEEL SIDING- COR-10 CORRUGATED 18 GA ASTM A606
07 62 00.1 SHEET METAL FLASHING - 18 GA ASTM A606
- DIVISION 08 - OPENINGS**
- 08 52 00.A WOOD WINDOWS- WD65 F, FIXED
- DIVISION 23 - HVAC**
- 23 56 13.19 HEATING SOLAR VACUUM-TUBE COLLECTORS

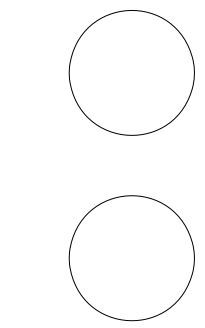


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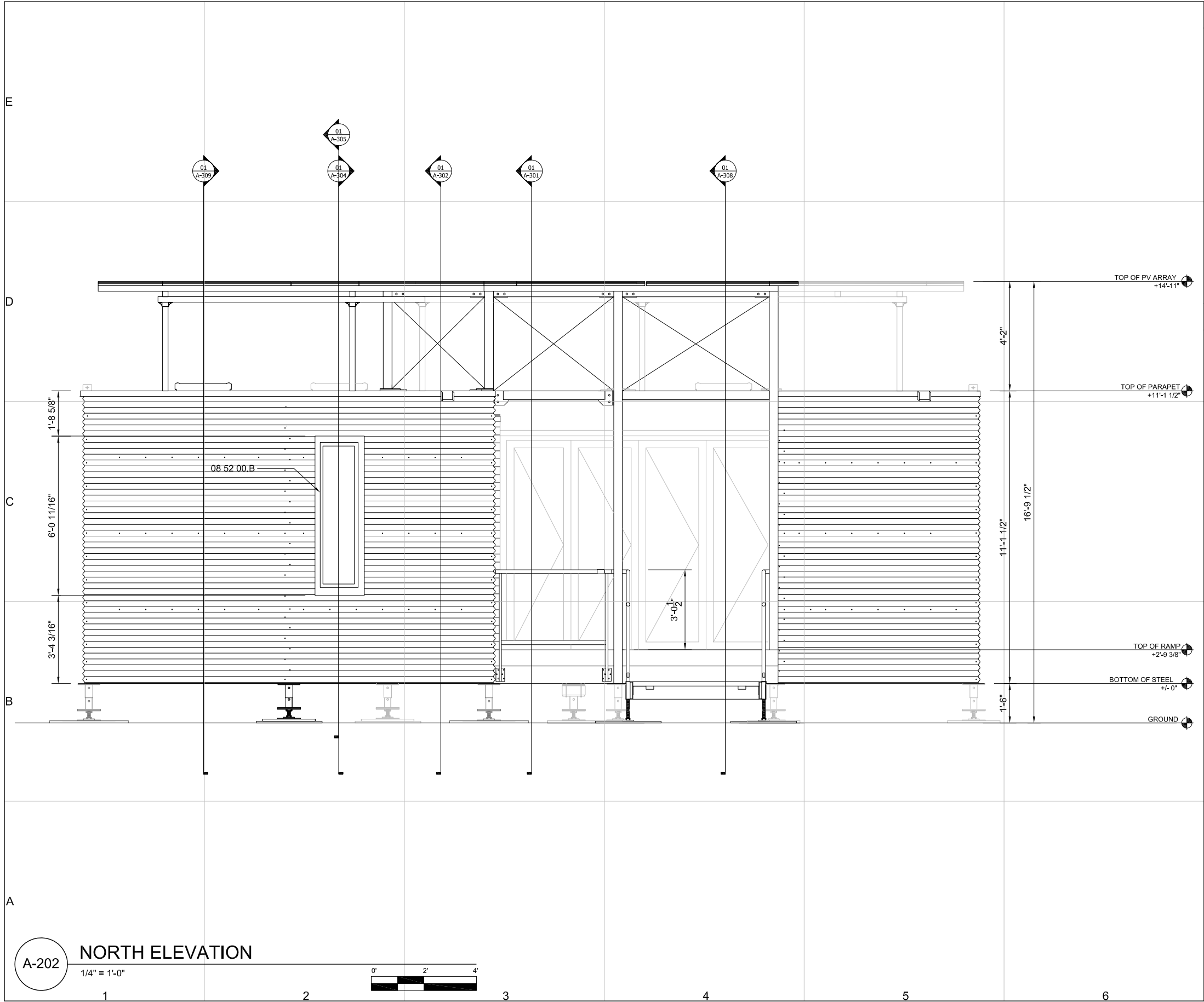
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ELEVATION

A-201



GENERAL SHEET NOTES:

1. ALIGN TOP OF WD65 NANAWALL, TOP OF WD68 TT CYLINDER WINDOW
2. TOP OF DECK TO BE 30" ABOVE GRADE
3. BOTTOM OF STEEL TO TOP OF STRUCTURE (EXCLUDING PV ARRAY STRUCTURE) NOT TO EXCEED 11'-6"
4. CLADDING ABOVE AND BELOW WD65 HALLWAY WINDOW TO BE ASTM A606 18 GA STEEL
5. CYLINDER CLADDING TO BE CURVED, CORRUGATED ASTM A606 18 GA STEEL WITH RADIUS 93 $\frac{1}{2}$ "
SHEET DIMENSION:
39 $\frac{1}{2}$ " X 151 $\frac{1}{2}$ "
PROFILE: 2 $\frac{5}{8}$ " X $\frac{5}{8}$ "
6. CORRUGATED CLADDING TO SPAN COLUMN 148 $\frac{1}{2}$ " WITH 4" ENDLAP
7. CORRUGATED CLADDING TO HAVE SIDELAP OF 1 CORRUGATION"
8. CORRUGATED CLADDING TO SPAN VERTICALLY FROM BOTTOM OF C6 X 10.5 FLOOR FRAMING TO TOP OF PARAPET
9. PARAPET FLASHING TO OVERLAP CORRUGATED CLADDING BY 2 $\frac{1}{2}$ "

REFERENCE KEYNOTES:

DIVISION 08- OPENINGS

08 52 00.B WOOD WINDOWS- WD68 TT, TILT-TURN OPERABLE

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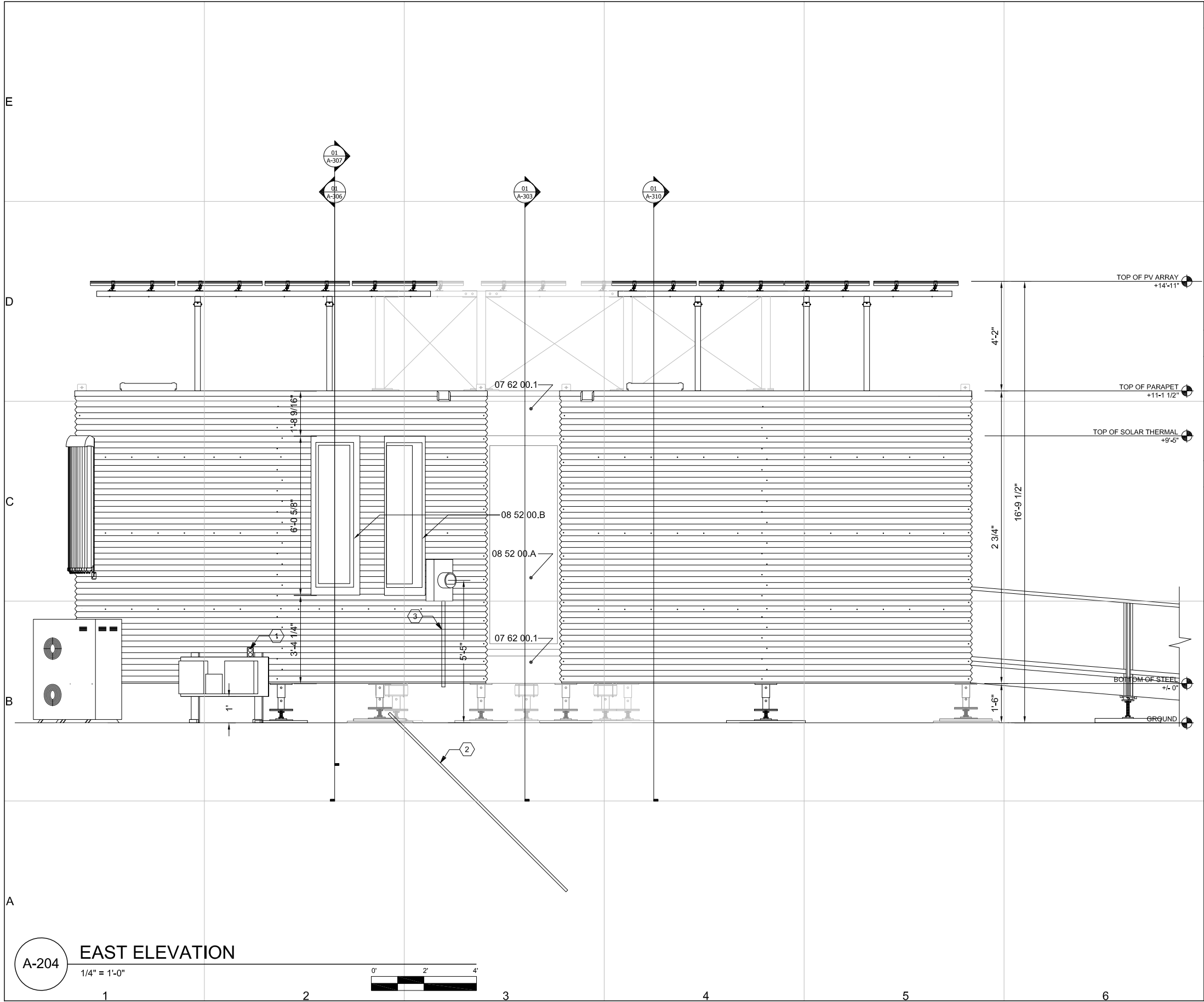
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ELEVATION

A-202

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GENERAL SHEET NOTES:

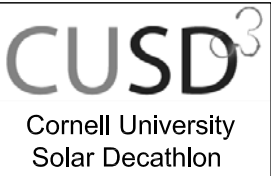
1. ALIGN TOP OF WD65 F HALLWAY WINDOW, TOP OF WD65 TT CYLINDER WINDOW, TOP OF SOLAR THERMAL
2. RAMP MEETS FINISHED DECK AT 30" ABOVE GRADE
3. BOTTOM OF STEEL TO TOP OF STRUCTURE (EXCLUDING PV ARRAY STRUCTURE) NOT TO EXCEED 11'-6"
4. CLADDING ABOVE AND BELOW WD65 F HALLWAY WINDOW TO BE ASTM A606 18 GA STEEL
5. CYLINDER CLADDING TO BE CURVED, CORRUGATED ASTM A606 18 GA STEEL WITH RADIUS 93 $\frac{1}{2}$ "
SHEET DIMENSION:
39 $\frac{1}{2}$ " X 151 $\frac{1}{2}$ "
PROFILE: 2 $\frac{5}{8}$ " X $\frac{1}{4}$ "
6. CORRUGATED CLADDING TO SPAN COLUMN 148 $\frac{1}{2}$ " WITH 4" ENDLAP
7. CORRUGATED CLADDING TO HAVE SIDELAP OF 1 CORRUGATION
8. CORRUGATED CLADDING TO SPAN VERTICALLY FROM BOTTOM OF C6 X 10.5 FLOOR FRAMING TO TOP OF PARAPET
9. PARAPET FLASHING TO OVERLAP CORRUGATED CLADDING BY 2 $\frac{1}{2}$ "

REFERENCE KEYNOTES:

- DIVISION 07 - THERMAL AND MOISTURE PROTECTION**
- 07 62 00.1 SHEET METAL FLASHING - 18 GA ASTM A606
- DIVISION 08 - OPENINGS**
- 08 52 00.B WOOD WINDOWS- WD68 TT, TILT-TURN OPERABLE
08 52 00.A WOOD WINDOWS- WD68 F, FIXED

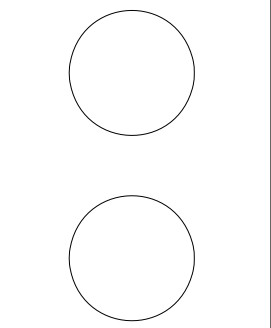
SHEET KEYNOTES:

1. NEC 210.52(E) BACK OUTSIDE RECEPTACLE. MOUNTED INTO SIP.
2. 8' GROUNDING ROD AT 45°, LOCATION TO BE DETERMINED BY ORGANIZERS
3. 1-1/2" RIGID CONDUIT. INSTALLED ACCORDING TO NEC 338.10(B)(4).



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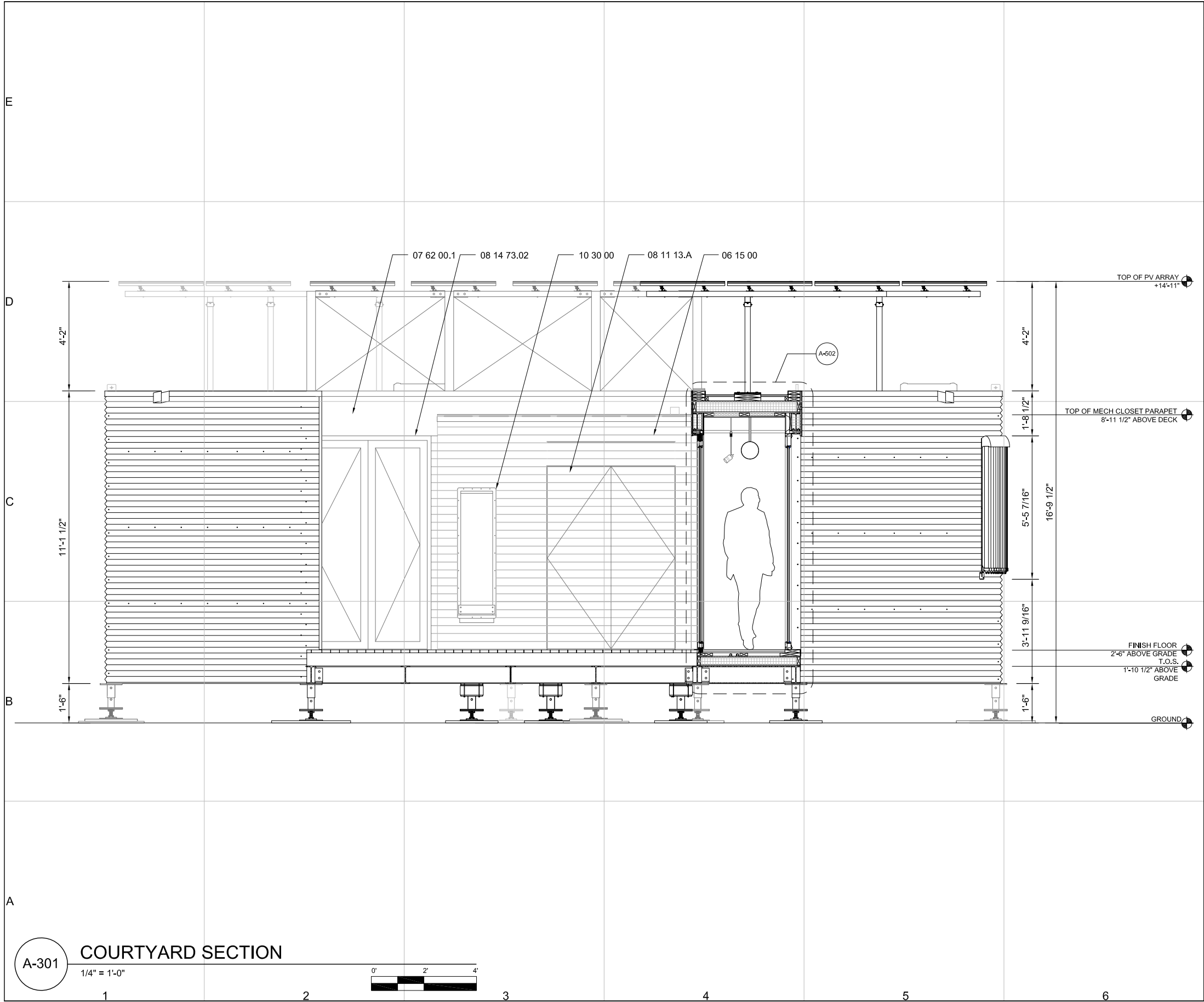


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ELEVATION

A-204



REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 15 00 WOOD DECKING - BLACK LOCUST

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 62 00.1 SHEET METAL FLASHING - 18 GA ASTM A606

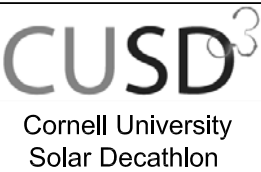
DIVISION 08 - OPENINGS

08 11 13.A HOLLOW METAL DOORS AND FRAMES- 607 SERIES, COMPOSITE, FLUSH

08 14 73.02 SLIDING WOOD DOORS- WD65, 3 PANEL CORNERLESS UNIT

DIVISION 10 - SPECIALTIES

10 30 00 FIREPLACES AND STOVES- FIREBOX

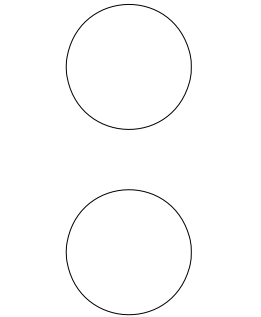


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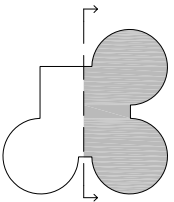
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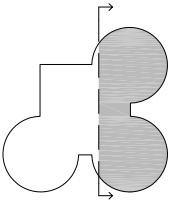
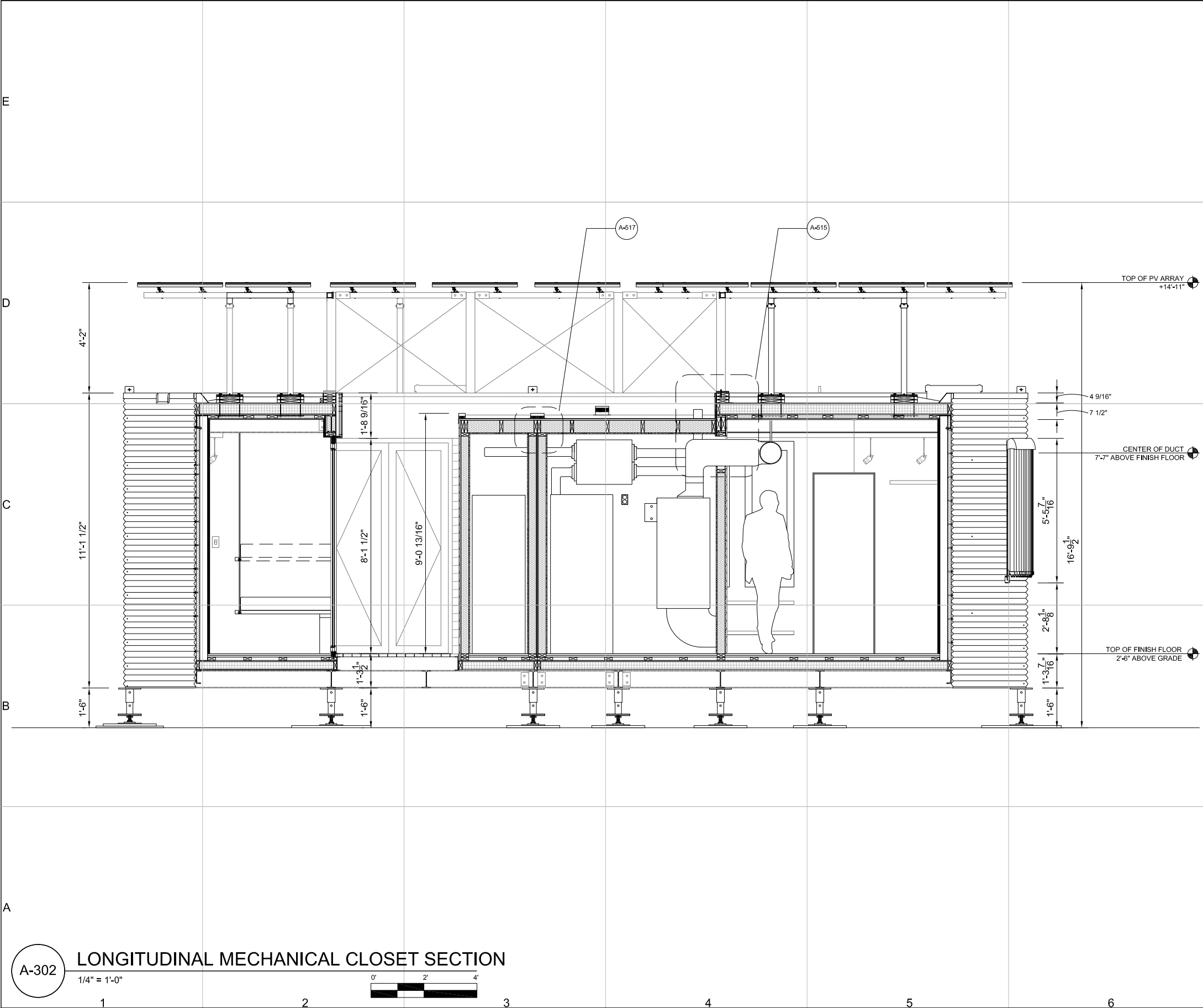
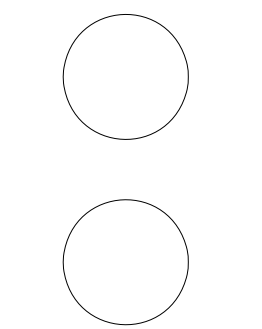
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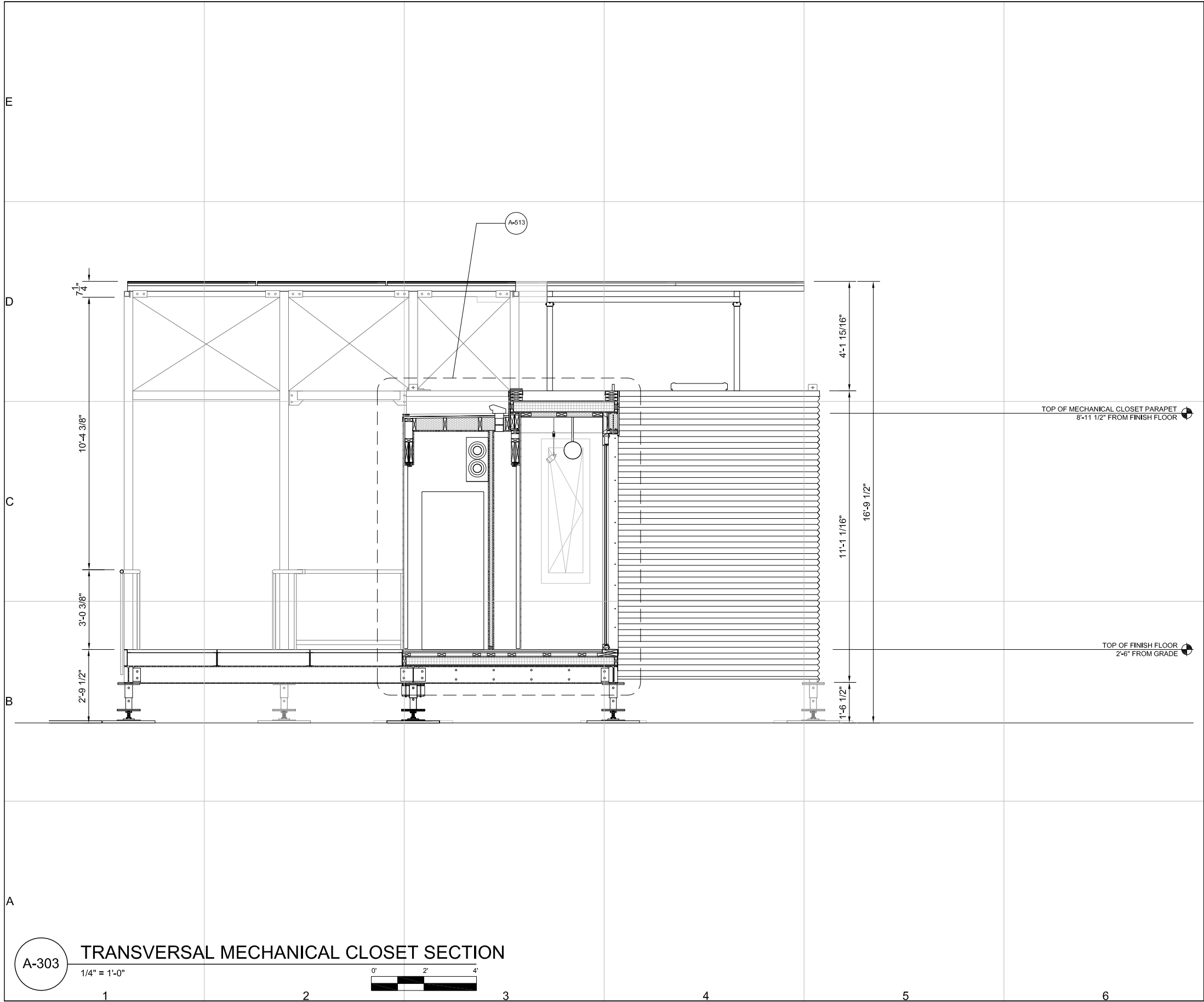
SECTION

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GENERAL SHEET NOTES:

1. MECHANICAL CLOSET ROOF SLOPES FROM HOUSE FRAMING AT 8'-10 1/2" TO 8'-10" AT CLOSET FACADE

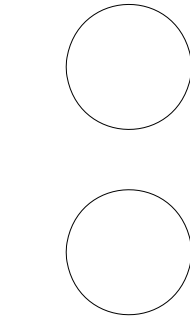
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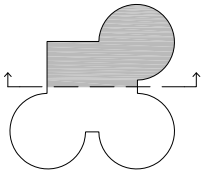
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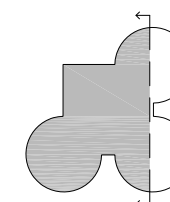
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








SECTION

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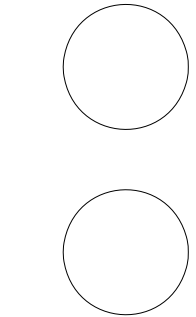




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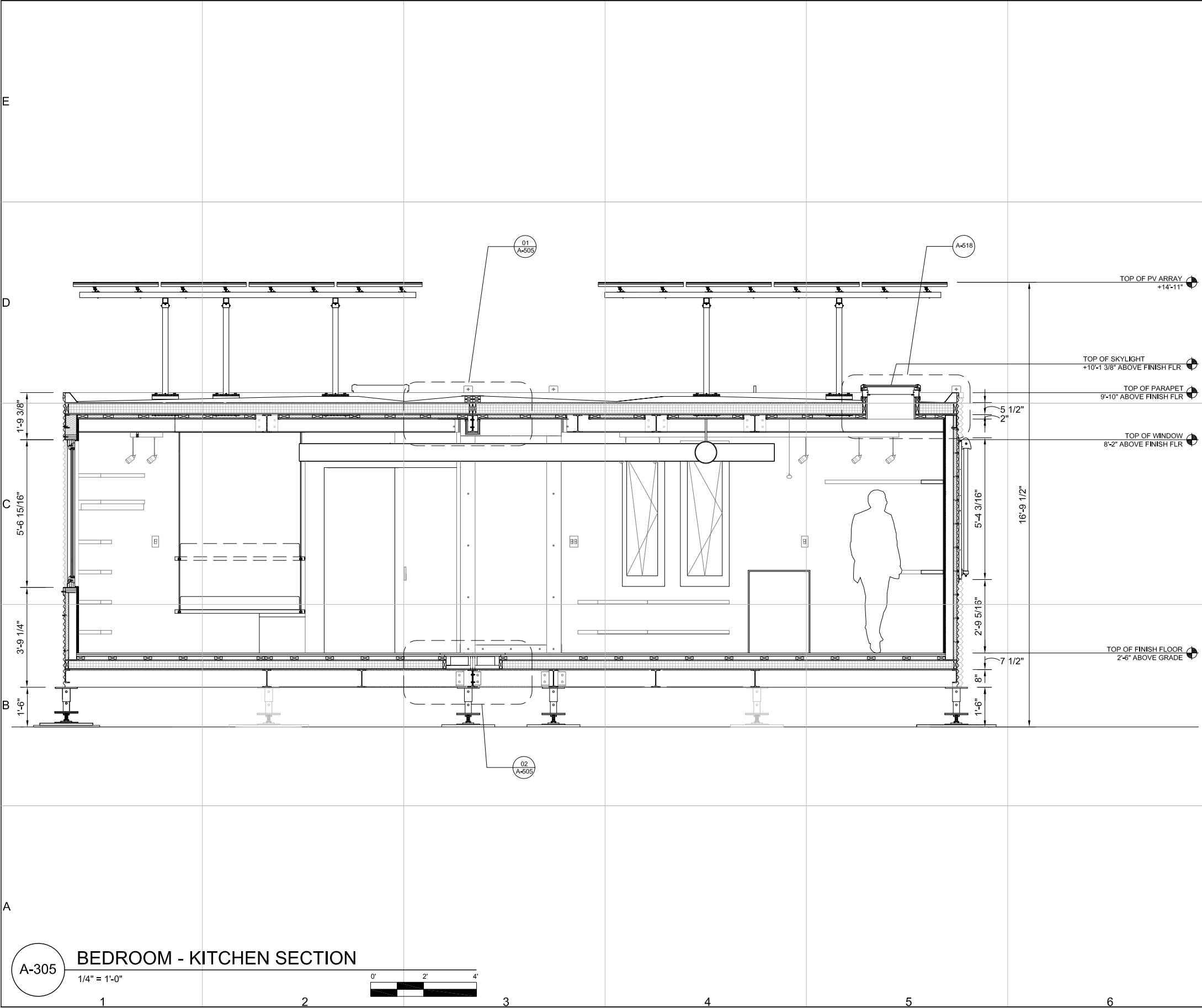
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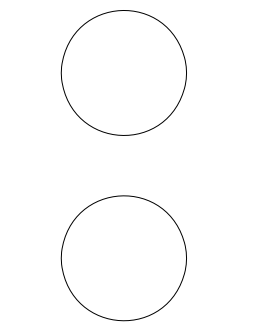
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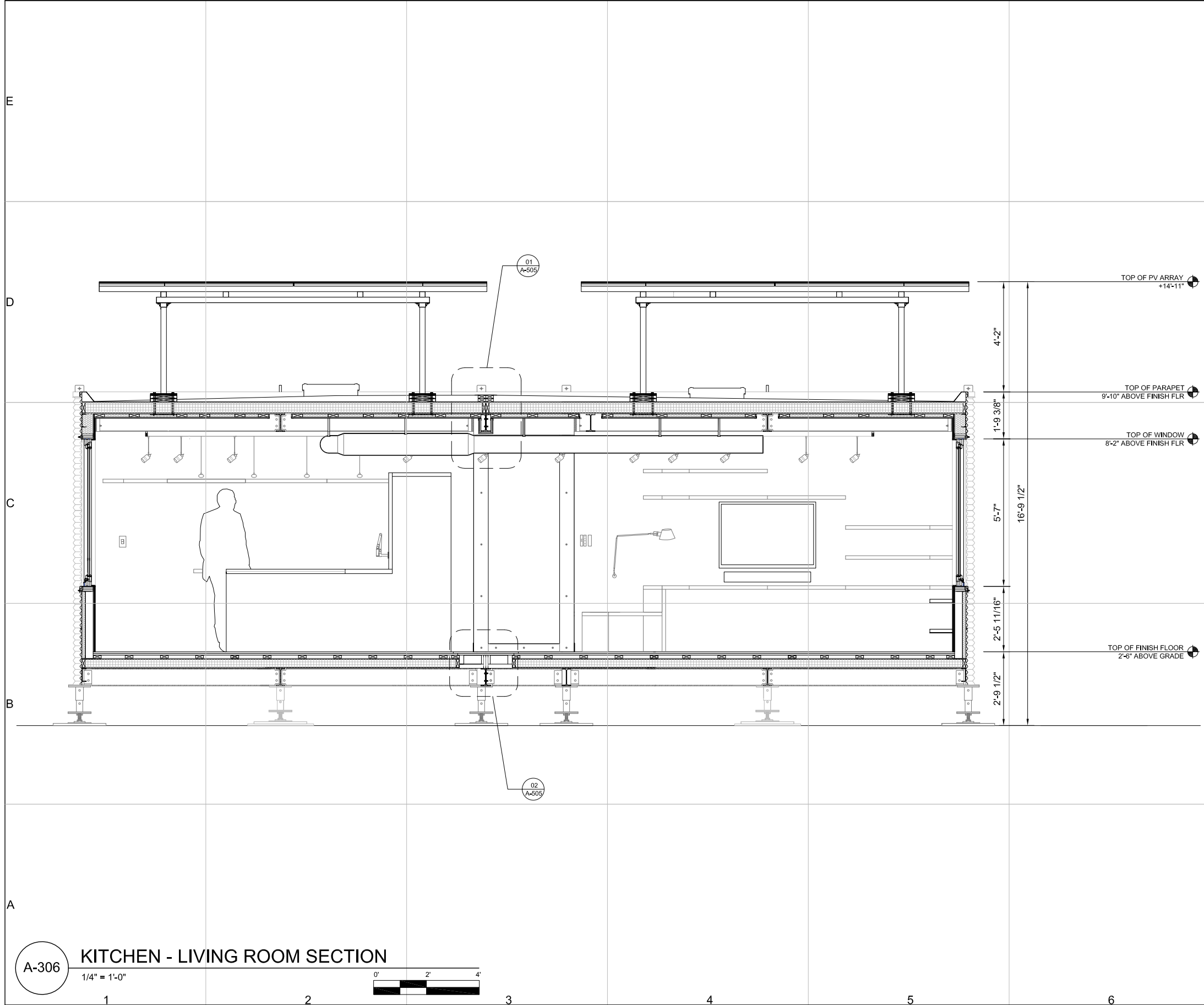
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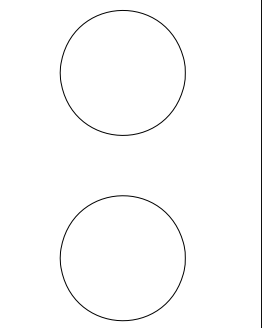
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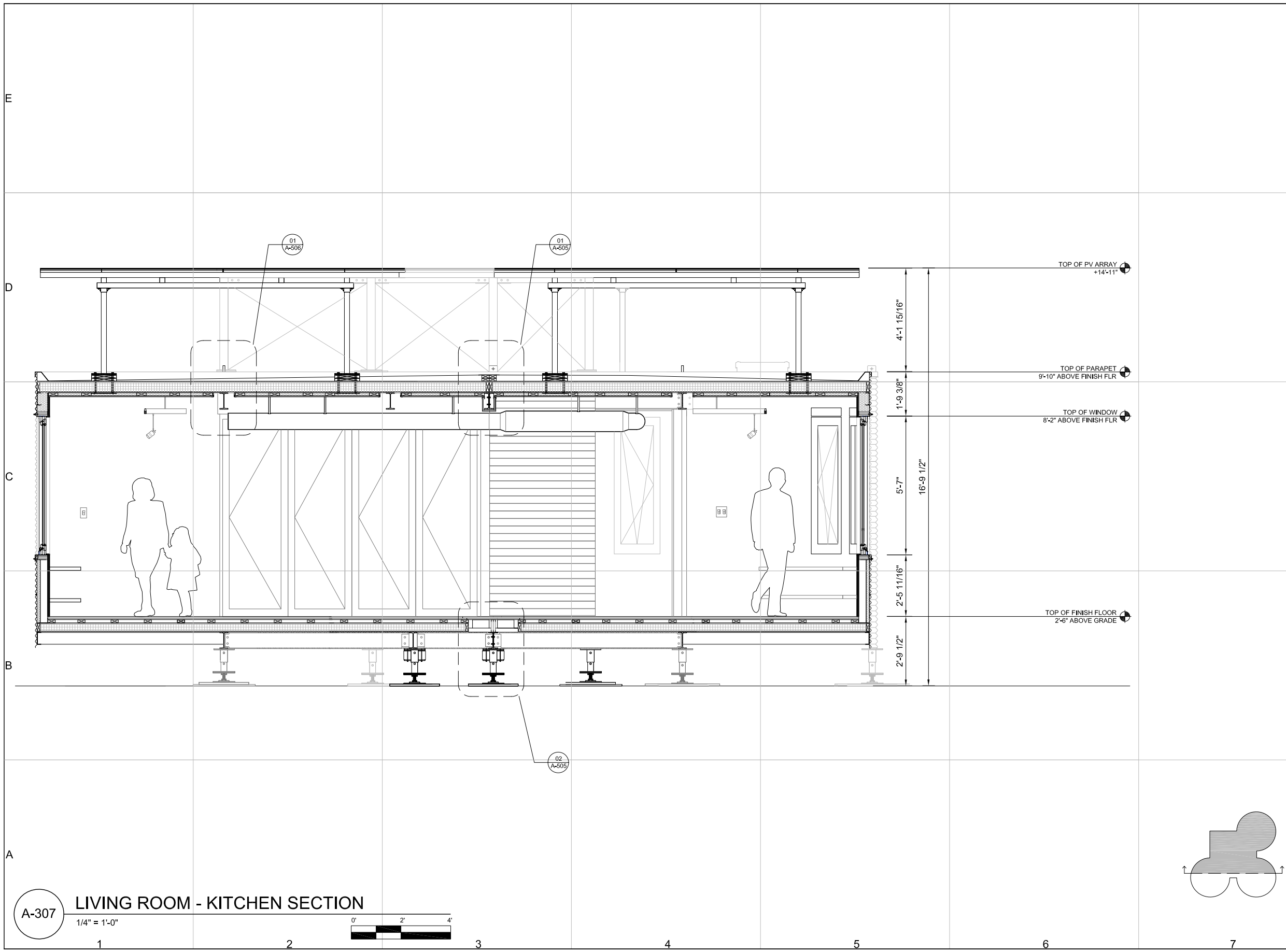


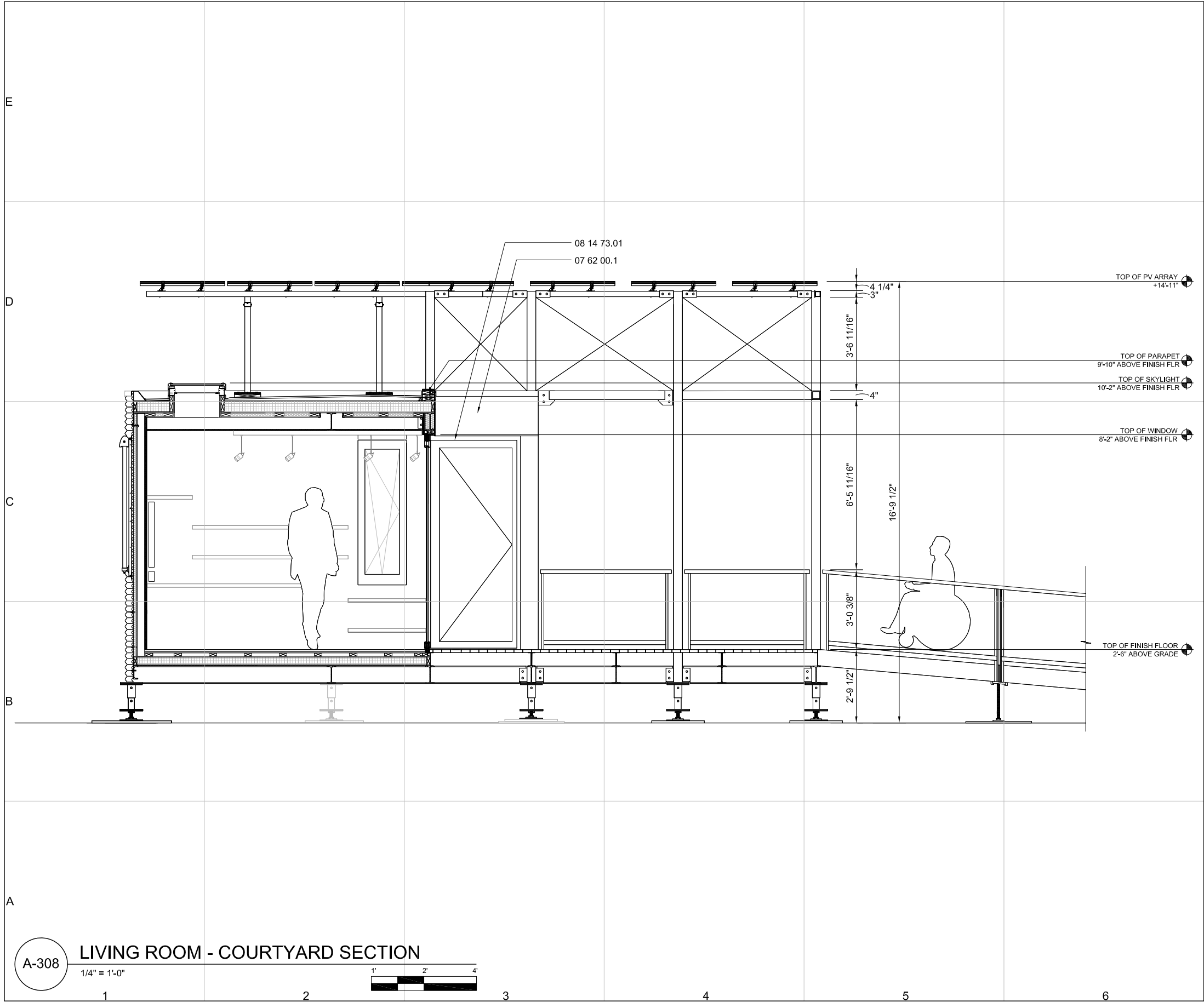
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A-307





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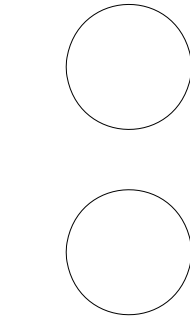
DIVISION 07 - THERMAL AND MOISTURE PROTECTION
07 62 00.1 SHEET METAL FLASHING - 18 GA ASTM A606
DIVISION 08- OPENINGS
08 14 73.01 SLIDING WOOD DOORS- WD65, 5 PANEL CORNERLESS UNIT

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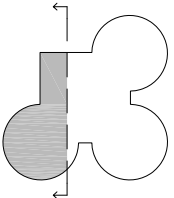
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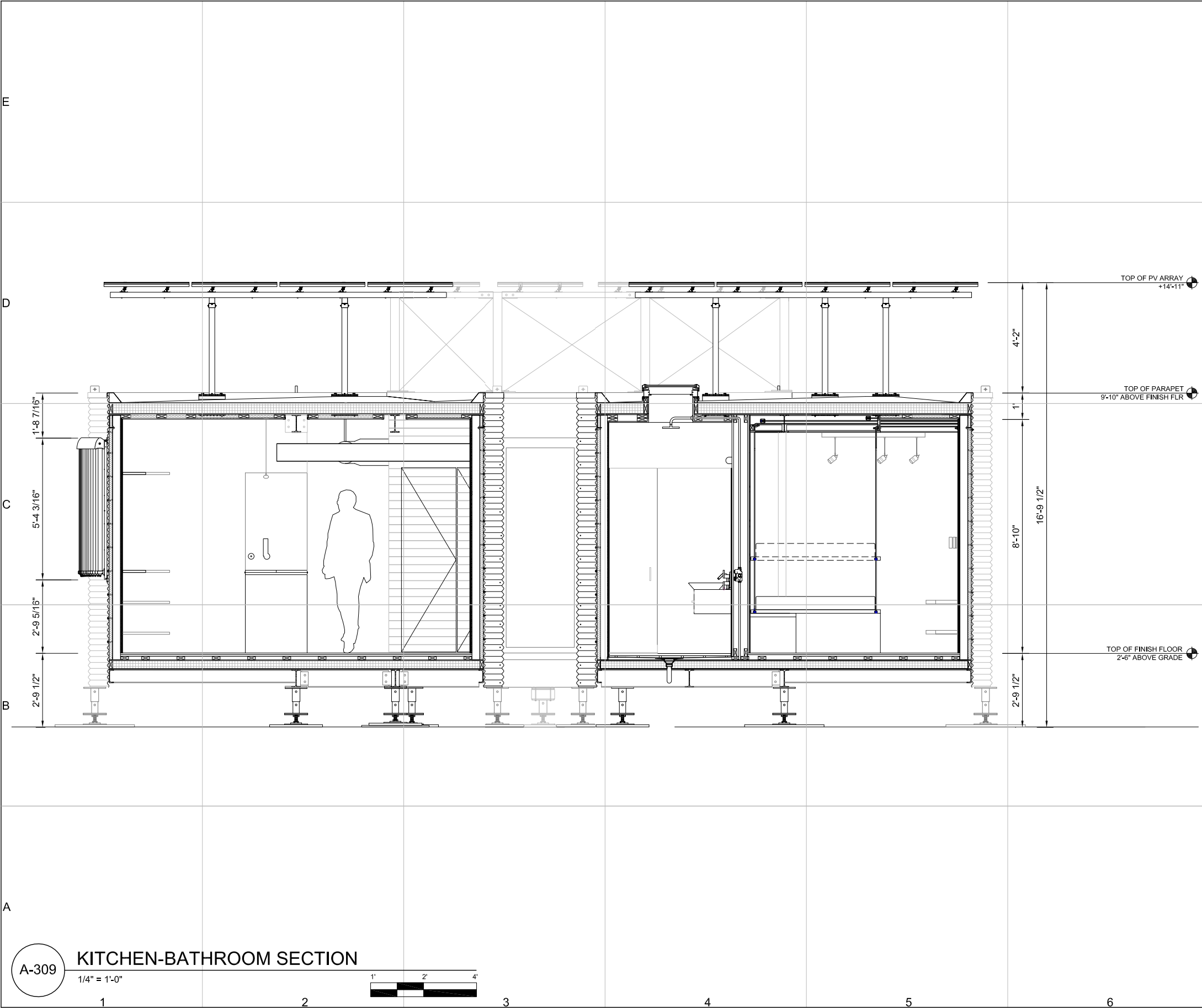
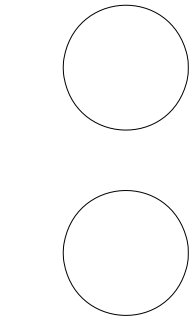
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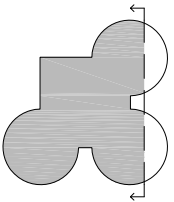
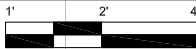
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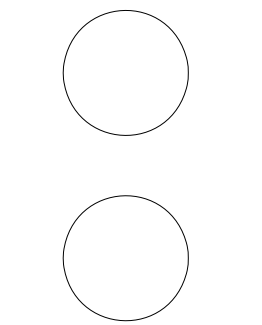
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KITCHEN-BATHROOM SECTION
1/4" = 1'-0"



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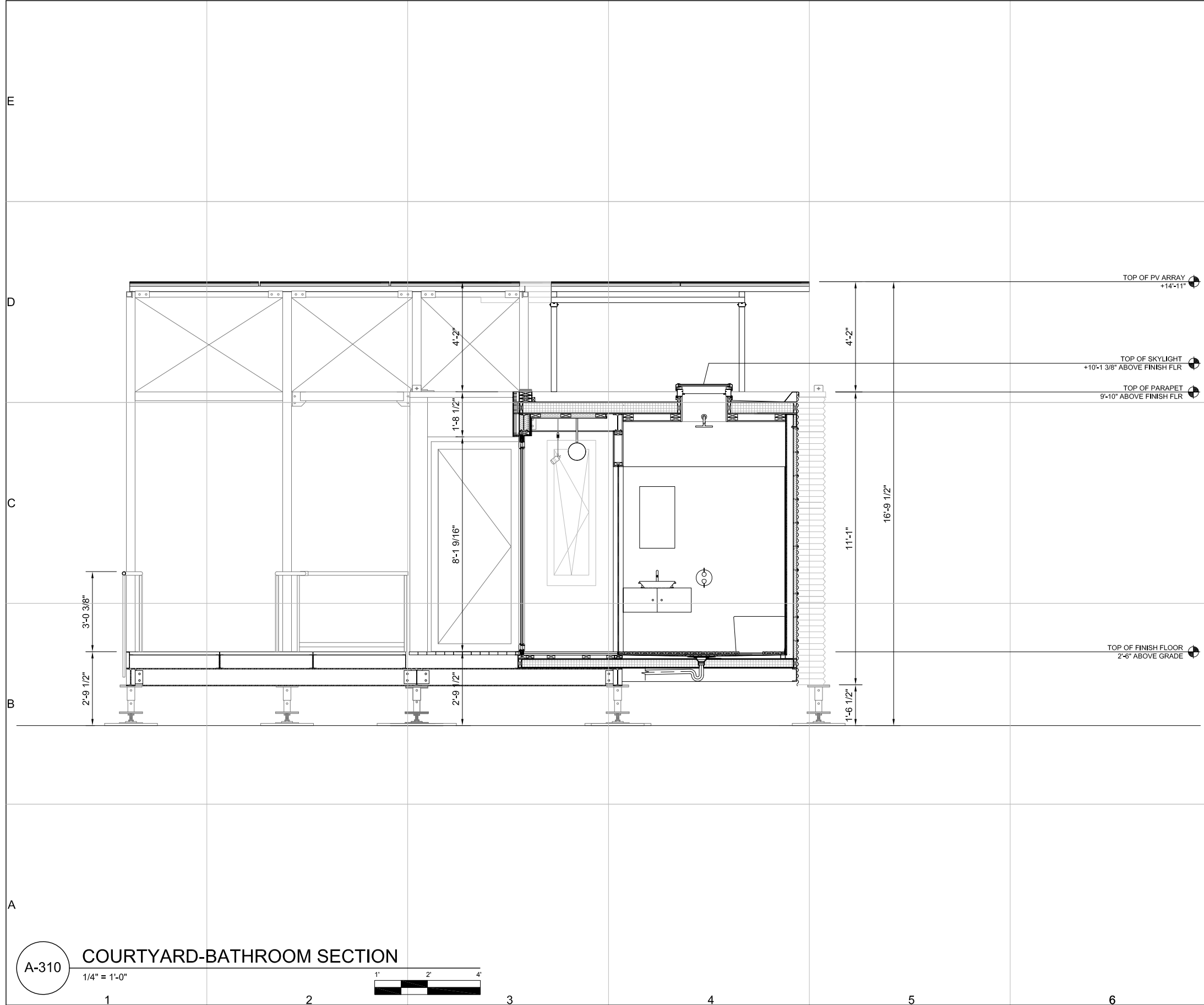
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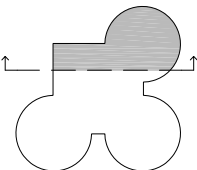
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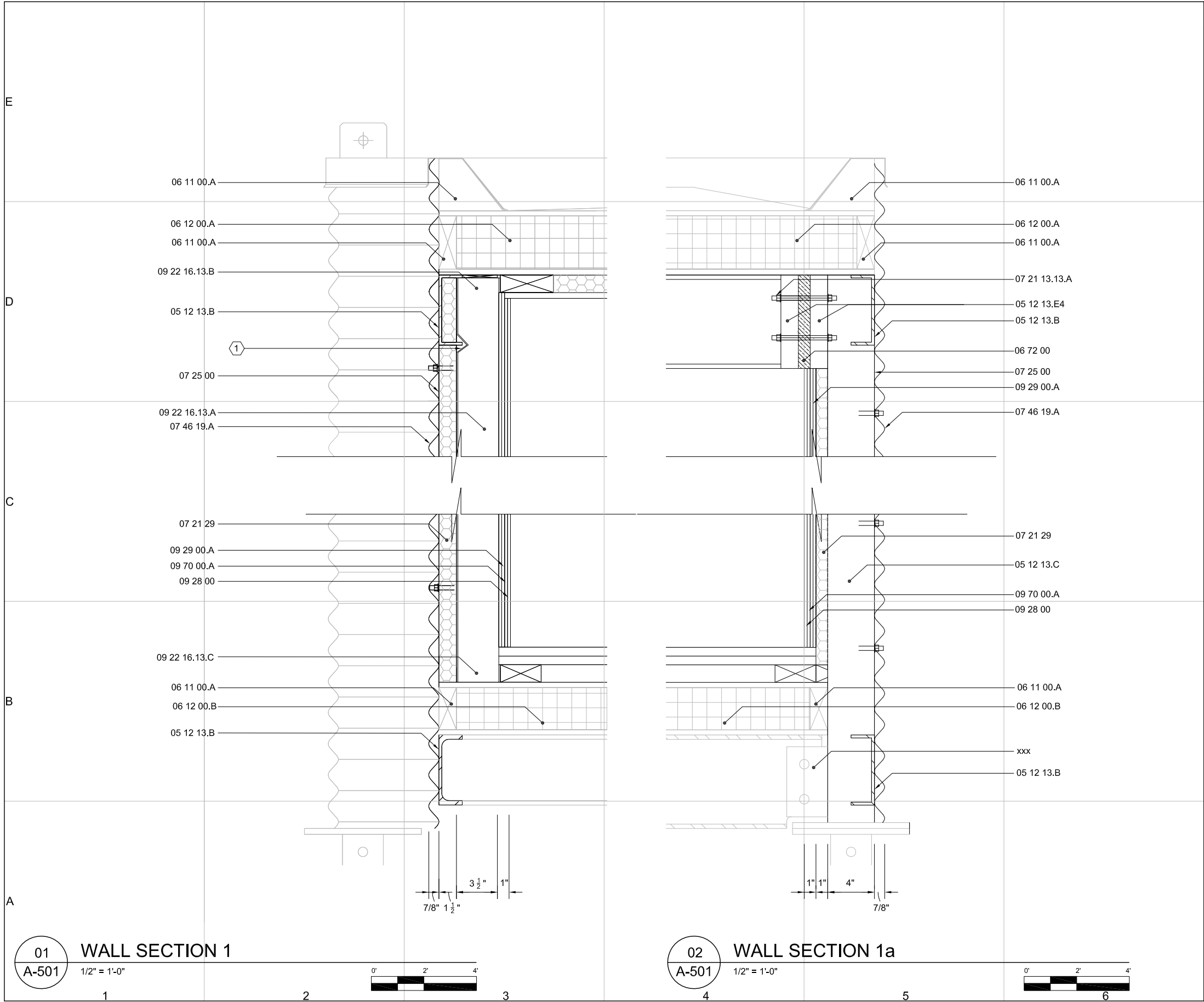
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SHEET 64 OF 196



A-310 COURTYARD-BATHROOM SECTION
1/4" = 1'-0"



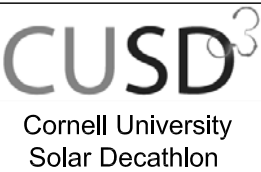


REFERENCE KEYNOTES:

- DIVISION 05- METALS**
05 12 13.B STRUCTURAL STEEL FRAMING- C6x10.5
05 12 13.C STRUCTURAL STEEL FRAMING- 4"x4x3/8" HSS TUBE
05 12 13.E4 10"x8"x1" STEEL PLATE
- DIVISION 06- WOOD, PLASTICS, AND COMPOSITES**
06 11 00.A WOOD FRAMING- 2x_ BLOCK
06 12 00.A STRUCTURALLY INSULATED PANELS- ROOF
06 12 00.B STRUCTURALLY INSULATED PANELS- FLOOR
- DIVISION 07- THERMAL AND MOISTURE PROTECTION**
07 21 13.13.A FOAM BOARD INSULATION- 1/2" POLYISOCYANURATE
07 21 29 SPRAY FOAM INSULATION- CLOSED CELL
07 46 19.A STEEL SIDING- COR-10 18 GA CORRUGATED ASTM A606 CURVED
07 25 00 WEATHER BARRIERS- TYVEK
06 72 00 COMPOSITE STRUCTURAL ASSEMBLIES- 1" THERMAL BREAK
- DIVISION 09- FINISHES**
09 22 16.13.A METAL STUDS AND TRACK- 2x4 STUD (TYP)
09 22 16.13.B METAL STUDS AND TRACK- FLEX-C-TRAC- TOP
09 22 16.13.C METAL STUDS AND TRACK- FLEX-C-TRAC- BTM
09 28 00 BACKING BOARDS & UNDERLAYMENTS- 1/4" MASONITE
09 29 00.A GYPSUM BOARD- 2@1/4"
09 70 00.A WALL FINISHES- 3/16" ASH PANELS

SHEET KEYNOTES:

1. NOTCHED STUD (TYP)



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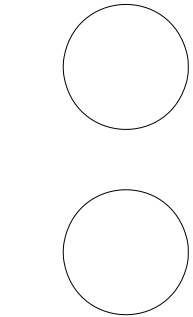
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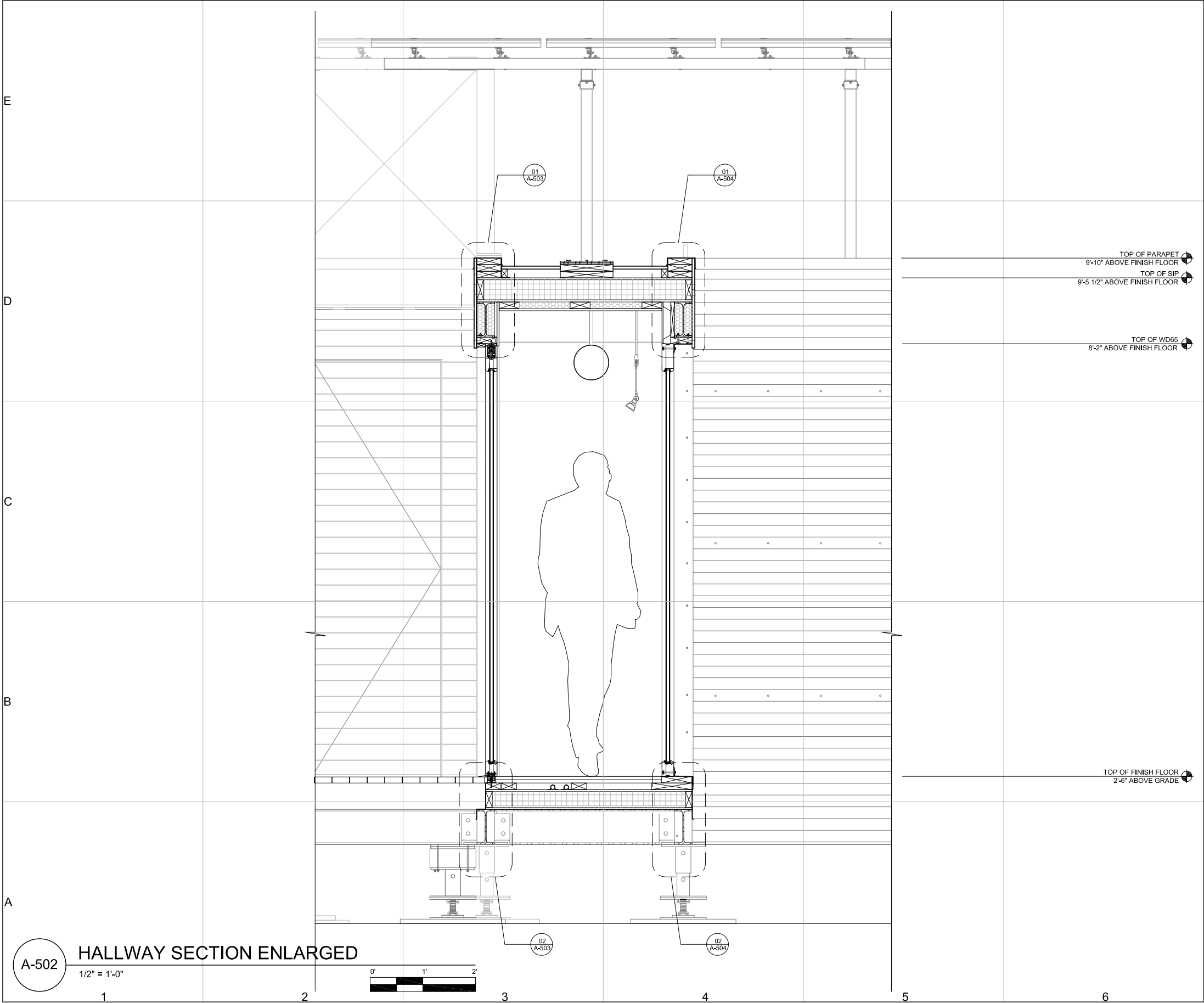
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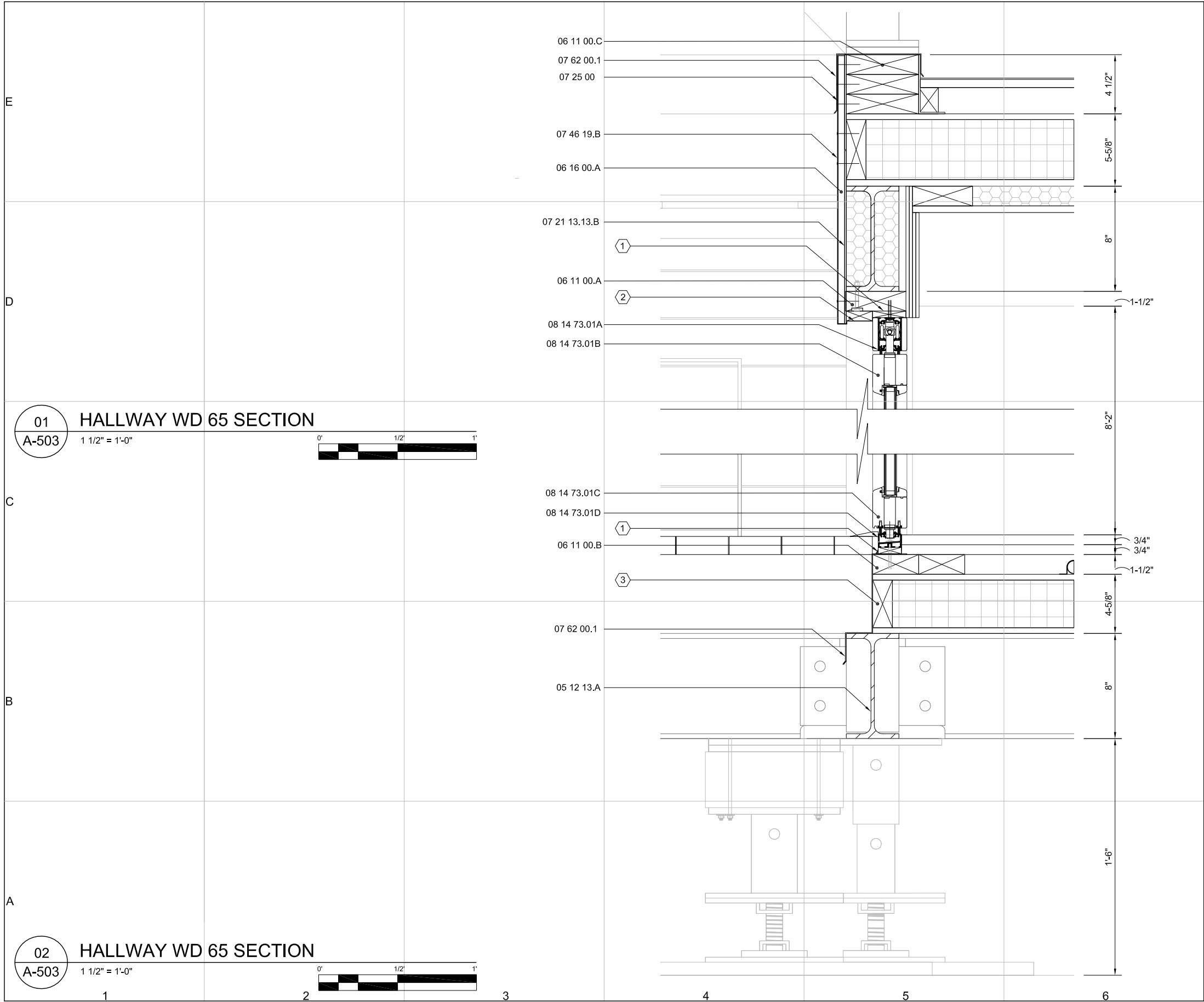
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REFERENCE KEYNOTES:

DIVISION 05- METALS

05 12 13.A STRUCTURAL STEEL FRAMING- W8x13

DIVISION 06- WOOD, PLASTICS, AND COMPOSITES

06 11 00.C WOOD FRAMING- 2X6

06 11 00.A 2X BLOCK

06 11 00.B 2X4 SLEEPER

06 16 00.A SHEATHING- 1/2" PLYWOOD

DIVISION 07- THERMAL AND MOISTURE PROTECTION

07 21 13.13.B FOAM BOARD INSULATION- 1-1/2" POLYISOCYANURATE

07 46 19.B STEEL SIDING- COR-10 18 GA FLAT SHEET ASTM A606 CLADDING

07 62 00.1 SHEET METAL FLASHING- 22 GA FLASHING ASTM A606 CURVED TO RADIUS

07 25 00 WEATHER BARRIERS- TYVEK

DIVISION 08- OPENINGS

08 14 73.01A WOOD WINDOWS- WD65 TOP TRACK

08 14 73.01B WOOD WINDOWS- WD65 TOP FRAME

08 14 73.01C WOOD WINDOWS- WD65 BTM FRAME

08 14 73.01D WOOD WINDOWS- WD65 BTM TRACK

SHEET KEYNOTES:

1. SHIM AS NECESSARY

2. TRIM AS NECESSARY

3. SIP SPLINE

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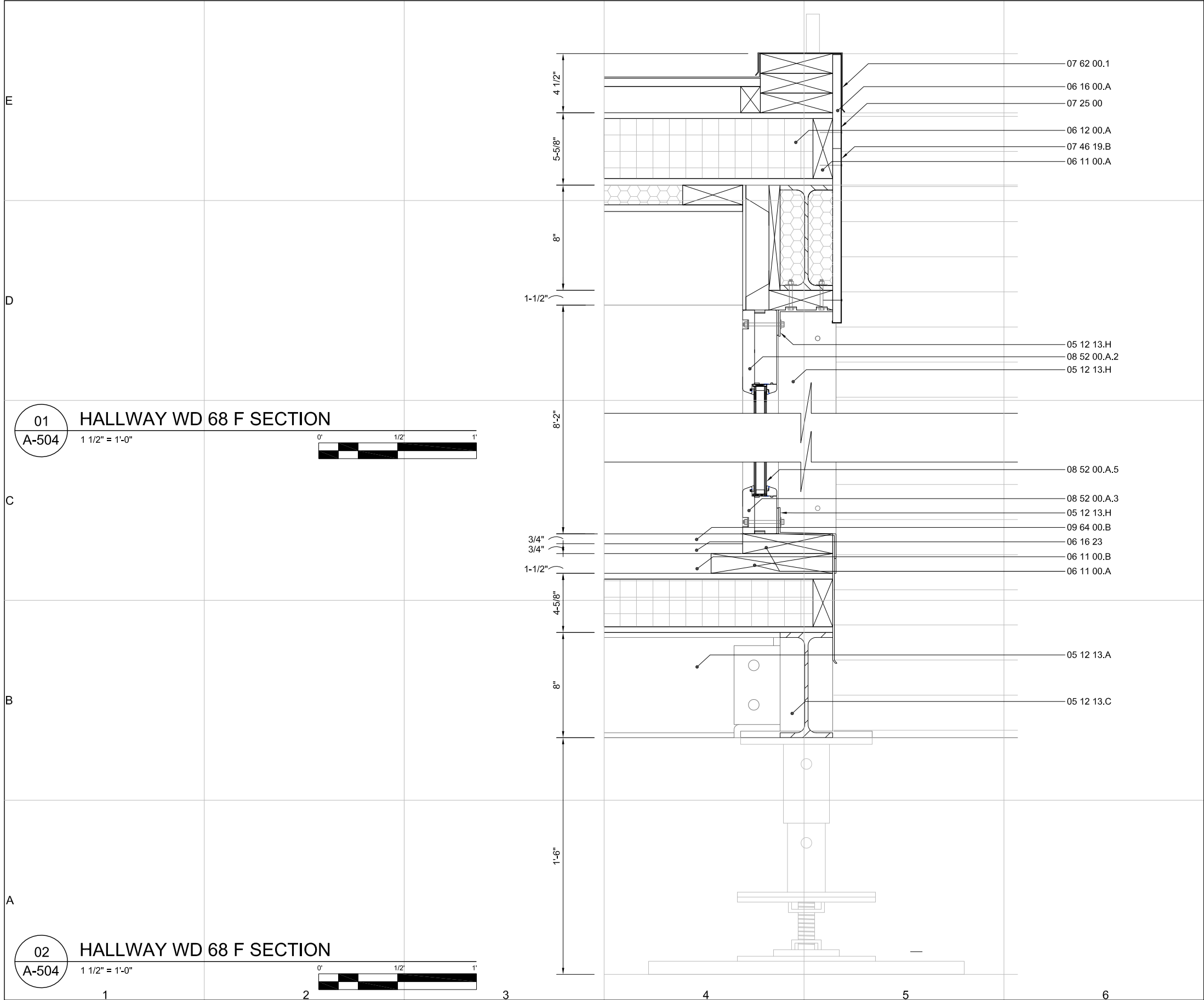
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REFERENCE KEYNOTES:

DIVISION 05- METALS

- 05 12 13.A STRUCTURAL STEEL FRAMING- W8x13
05 12 13.C STRUCTURAL STEEL FRAMING- 4"x4"x3/8" HSS
05 12 13.H STRUCTURAL STEEL FRAMING- 18 GA ASTM A606 ANGLE

DIVISION 06- WOOD, PLASTICS, AND COMPOSITES

- 06 11 00.A WOOD FRAMING- 2x BLOCK
06 11 00.B WOOD FRAMING- 2x4 SLEEPER
06 12 00.A STRUCTURALLY INSULATED PANELS- ROOF
06 16 00.A SHEATHING- 1/2" PLYWOOD
06 16 23 SUBFLOORING- T/G

DIVISION 07- THERMAL AND MOISTURE PROTECTION

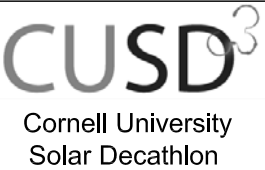
- 07 25 00 WEATHER BARRIERS- TYVEK
07 46 19.B STEEL SIDING- COR-10 18 GA FLAT SHEET ASTM A606
07 62 00.1 SHEET METAL FLASHING- 22 GA ASTM A606 CURVED TO RADIUS

DIVISION 08- OPENINGS

- 08 52 00.A.5 WOOD WINDOWS- WD68 F, FIXED, GLAZING
08 52 00.A.2 WOOD WINDOWS- WD68 F, FIXED, TOP FRAME
08 52 00.A.3 WOOD WINDOWS- WD68 F, FIXED, BTM FRAME

DIVISION 09- FINISHES

- 09 64 00.B WOOD FLOORING- RECLAIMED ASH, T/G

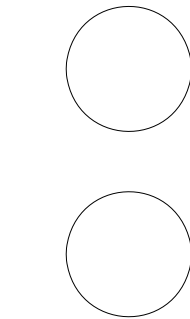


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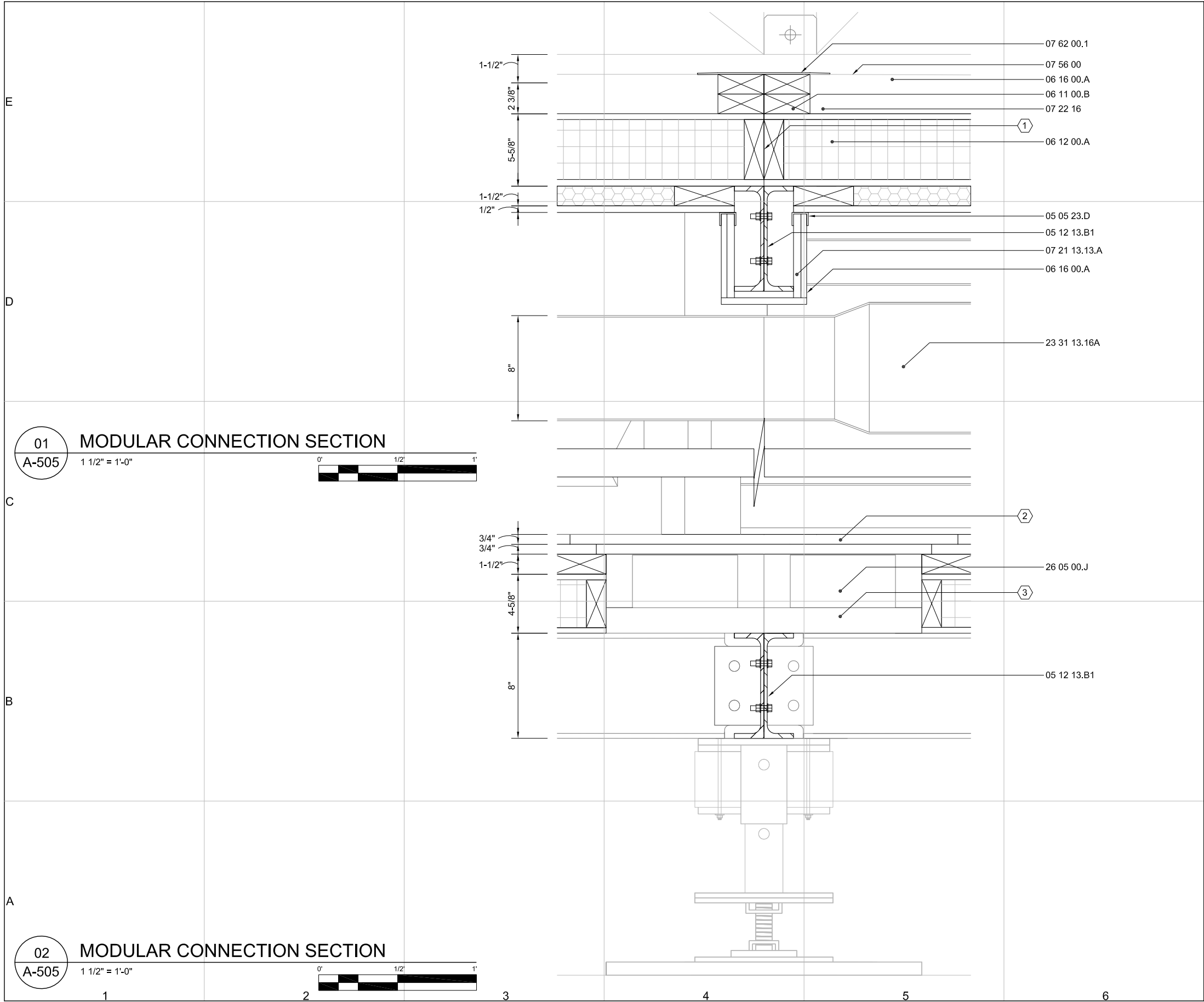
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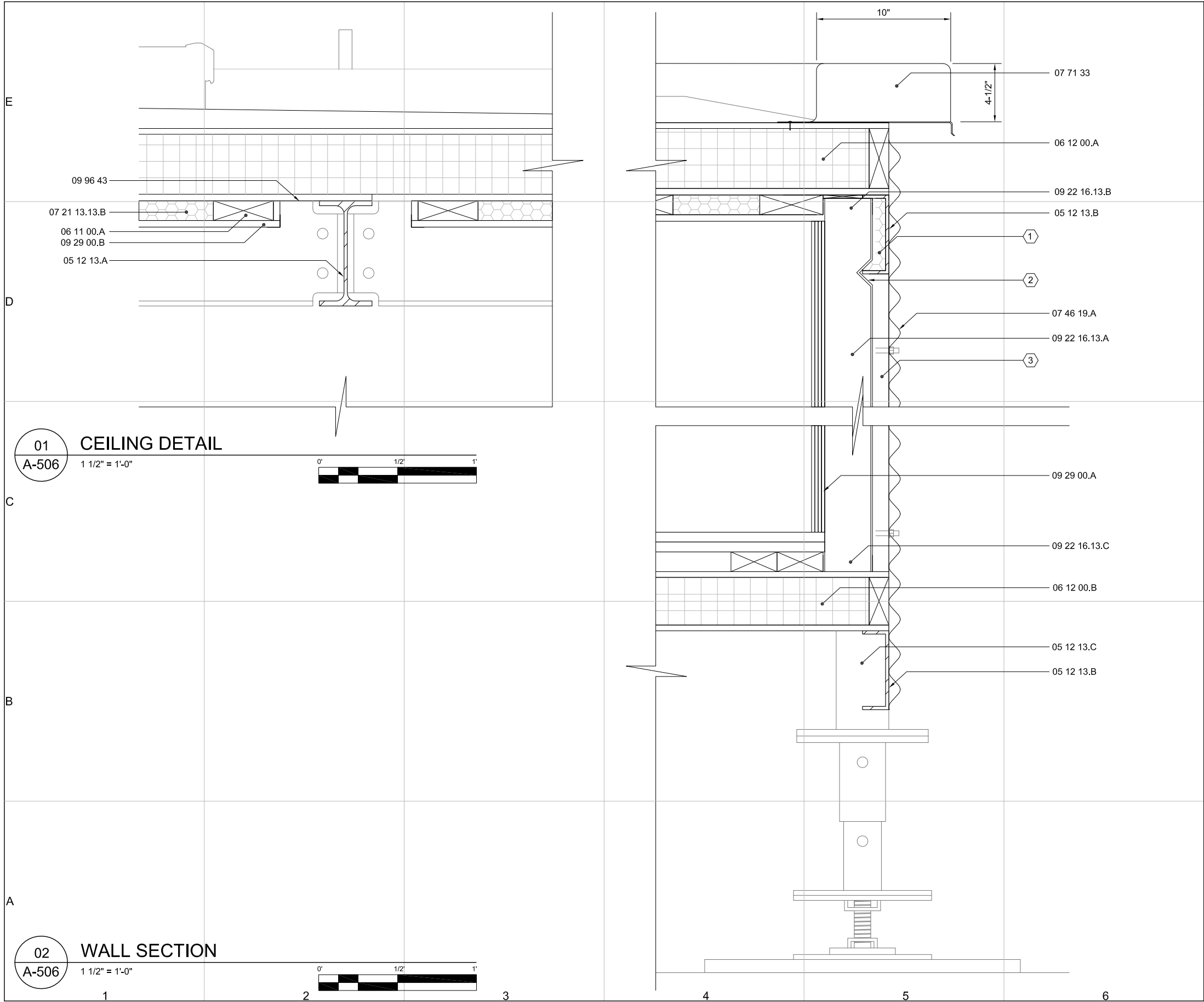
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A-504



REFERENCE KEYNOTES:	
DIVISION 05- METALS 05 05 23.D METAL FASTENINGS- ANGLE CLIP 05 12 13.B1 STRUCTURAL STEEL FRAMING- C8x11.5 BOLTED	
DIVISION 06- WOOD, PLASTICS, AND COMPOSITES 06 11 00.B WOOD FRAMING- 2x4 BLOCK 06 12 00.A STRUCTURALLY INSULATED PANELS- ROOF 06 16 00.A SHEATHING- 1/2" PLYWOOD	
DIVISION 07- THERMAL AND MOISTURE PROTECTION 07 56 00 FLUID-APPLIED ROOFING 07 62 00.1 SHEET METAL FLASHING- 22 GA ASTM A606 CAP 07 22 16 ROOF BOARD INSULATION- TAPERED CLOSED-CELL POLYISOCYANURATE FOAM 07 21 13.13.A FOAM BOARD INSULATION- 1/2" POLYISOCYANURATE RIGID FOAM	
DIVISION 23- HVAC 23 31 13.16A ROUND AND FLAT-OVAL SPIRAL DUCTS	
DIVISION 26- ELECTRICAL 26 05 00.J COMMON WORK RESULTS FOR ELECTRICAL- JUNCTION BOX	
SHEET KEYNOTES: 1. SPLINE BUTT JOINT 2. REMOVABLE FLOOR PANEL 3. BLOCK AS NECESSARY	
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GENERAL SHEET NOTES:

1. FLOOR SIP IS R26; ROOF SIP IS R33
2. FLOOR LL VALUE IS 50 LB./SF, SPECIFIED IN STRUCTURAL ENGINEERING CALCULATIONS

REFERENCE KEYNOTES:

DIVISION 05 - METALS

- 05 12 13.A STRUCTURAL STEEL FRAMING- W8x13
- 05 12 13.B STRUCTURAL STEEL FRAMING- C6x10.5
- 05 12 13.C STRUCTURAL STEEL FRAMING- 4"x4"x3/8" HSS

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

- 06 11 00.A WOOD FRAMING- 2x_ BLOCK
- 06 12 00.A STRUCTURALLY INSULATED PANELS- ROOF
- 06 12 00.B STRUCTURALLY INSULATED PANELS- FLOOR

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

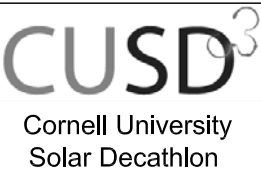
- 07 21 13.13.B FOAM BOARD INSULATION- 1-1/2"
- 07 46 19.A STEEL SIDING- COR-10 18 GA
- 07 71 33 COURREGATED ASTM A606 CURVED MANUFACTURED SCUPPERS

DIVISION 09 - FINISHES

- 09 22 16.13.A METAL STUDS AND TRACK- 2x4 STUD (TYP)
- 09 22 16.13.B METAL STUDS AND TRACK- FLEX-C-TRAC- TOP
- 09 22 16.13.C METAL STUDS AND TRACK- FLEX-C-TRAC- BTM
- 09 29 00.B GYPSUM BOARD- 1/2"
- 09 29 00.A GYPSUM BOARD- 2@ 1/4"
- 09 96 43 FIRE RETARDENT COATINGS

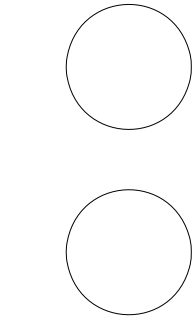
SHEET KEYNOTES:

1. INSULATE AS NECESSARY
2. NOTCH TOP OF STUD AROUND C6x10.5
3. INSULATE CAVITY



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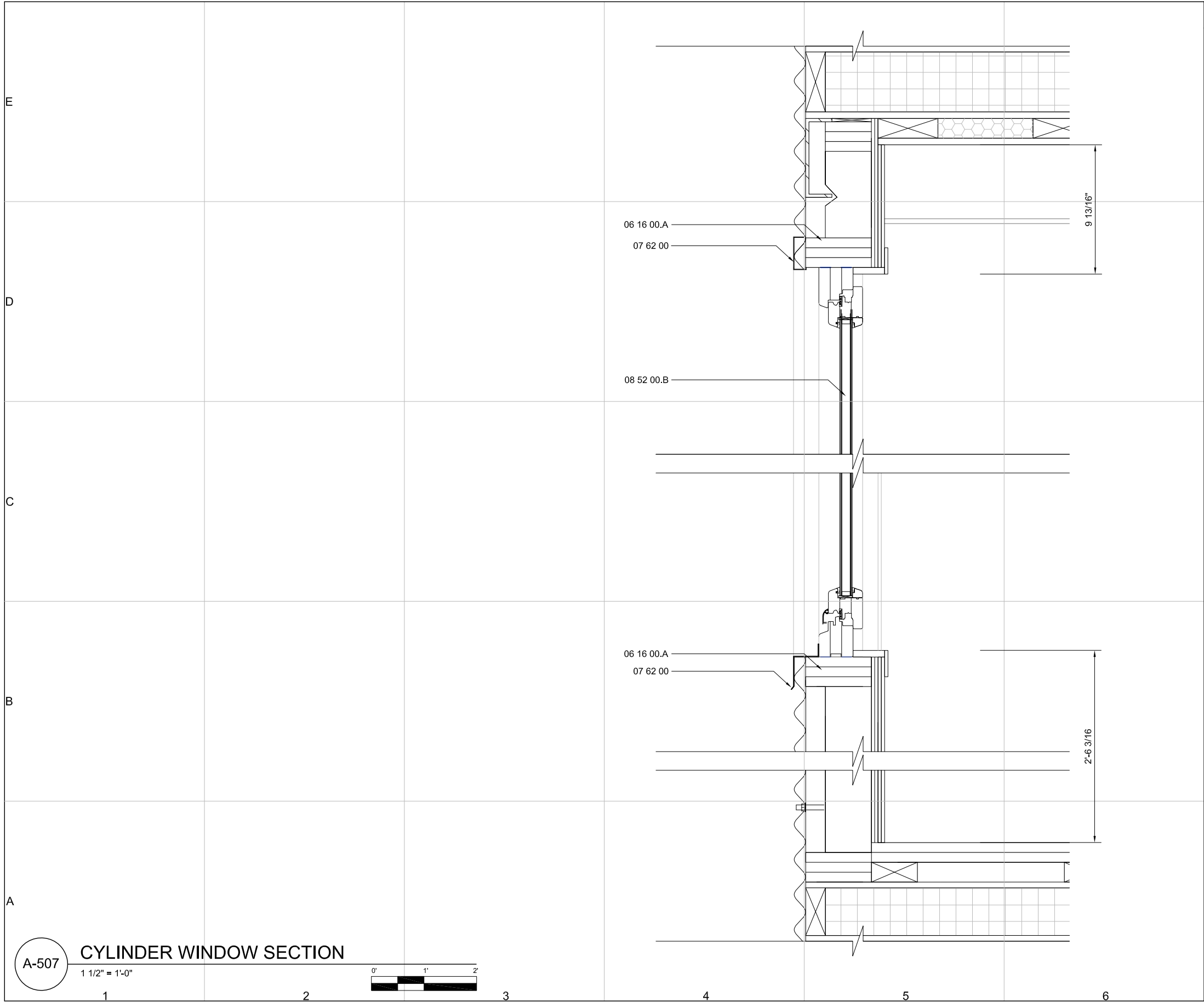


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REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
06 16 00.A SHEATHING- ½" PLYWOOD

DIVISION 07 - THERMAL AND MOISTURE PROTECTION
07 62 00.1 SHEET METAL FLASHING

DIVISION 08 - OPENINGS
08 52 00.B WOOD WINDOWS - TILT-TURN OPERABLE

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REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 11 00.A WOOD FRAMING- 2x_ LUMBER

06 16 00.A SHEATHING- ½ " PLYWOOD

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 46 19.B STEEL SIDING- COR-10 18 GA FLAT SHEET ASTM A606

DIVISION 08 - OPENINGS

08 14 73.01.B SLIDING WOOD DOORS -5 PANEL CORNERLESS UNIT, TOP FRAME

08 14 73.01E SLIDING WOOD DOORS -5 PANEL CORNERLESS UNIT, GLAZING

08 14 73.01C WOOD WINDOW - BTM FRAME

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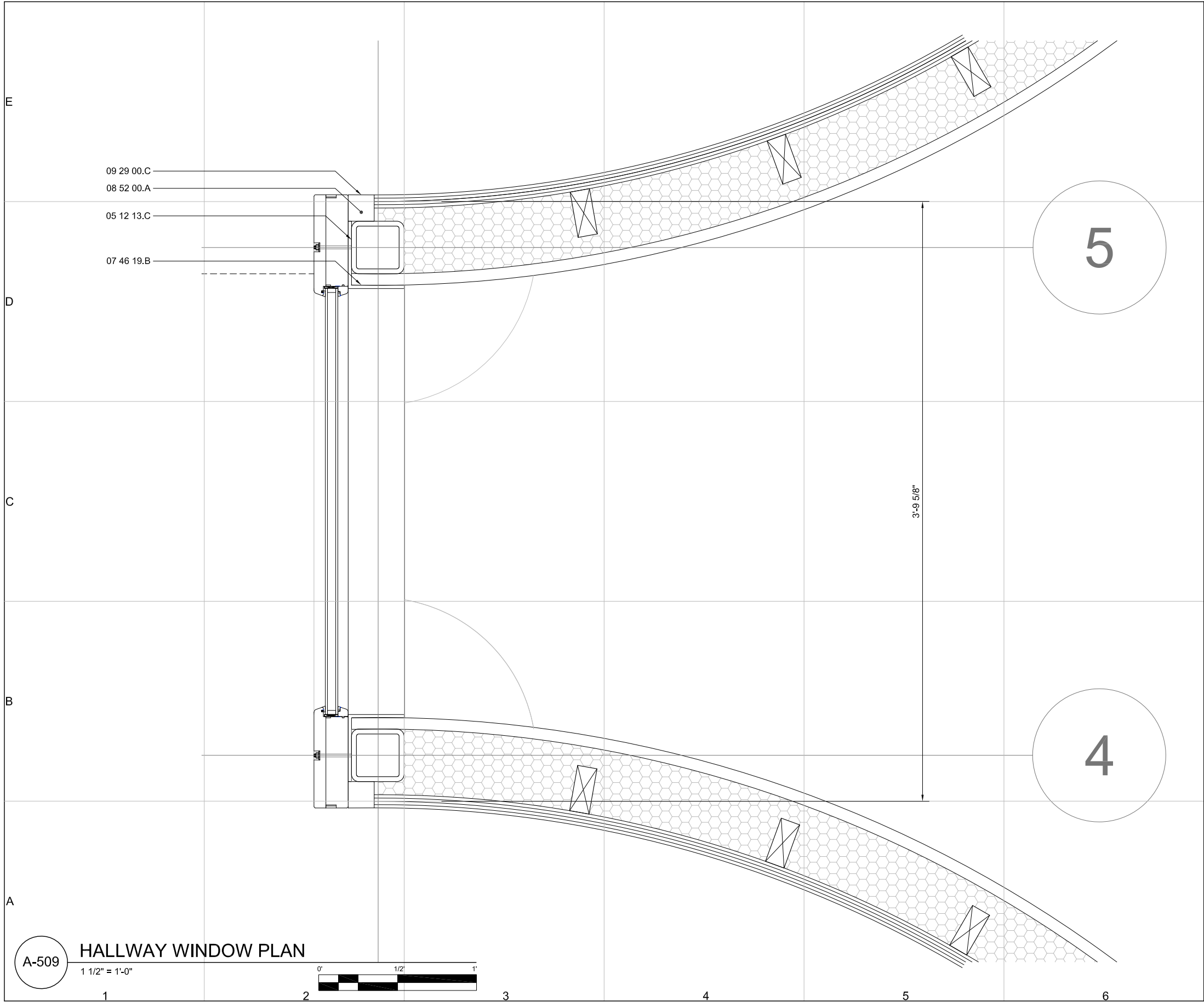
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GENERAL SHEET NOTES:

1. WD 68F INSTALLED ON SITE AFTER MODULES ARE CONNECTED

REFERENCE KEYNOTES:

DIVISION 05- METALS

05 12 13.C STRUCTURAL STEEL FRAMING- HSS 4x4x3/8

DIVISION 07- THERMAL AND MOISTURE PROTECTION

07 46 19.B STEEL SIDING- COR-10 18 GA FLAT SHEET ASTM A606 90°

DIVISION 08- OPENINGS

08 52 00.A WOOD WINDOWS- WD68 F, FIXED

DIVISION 09- FINISHES

09 29 00.C GYPSUM BOARD- END BLK

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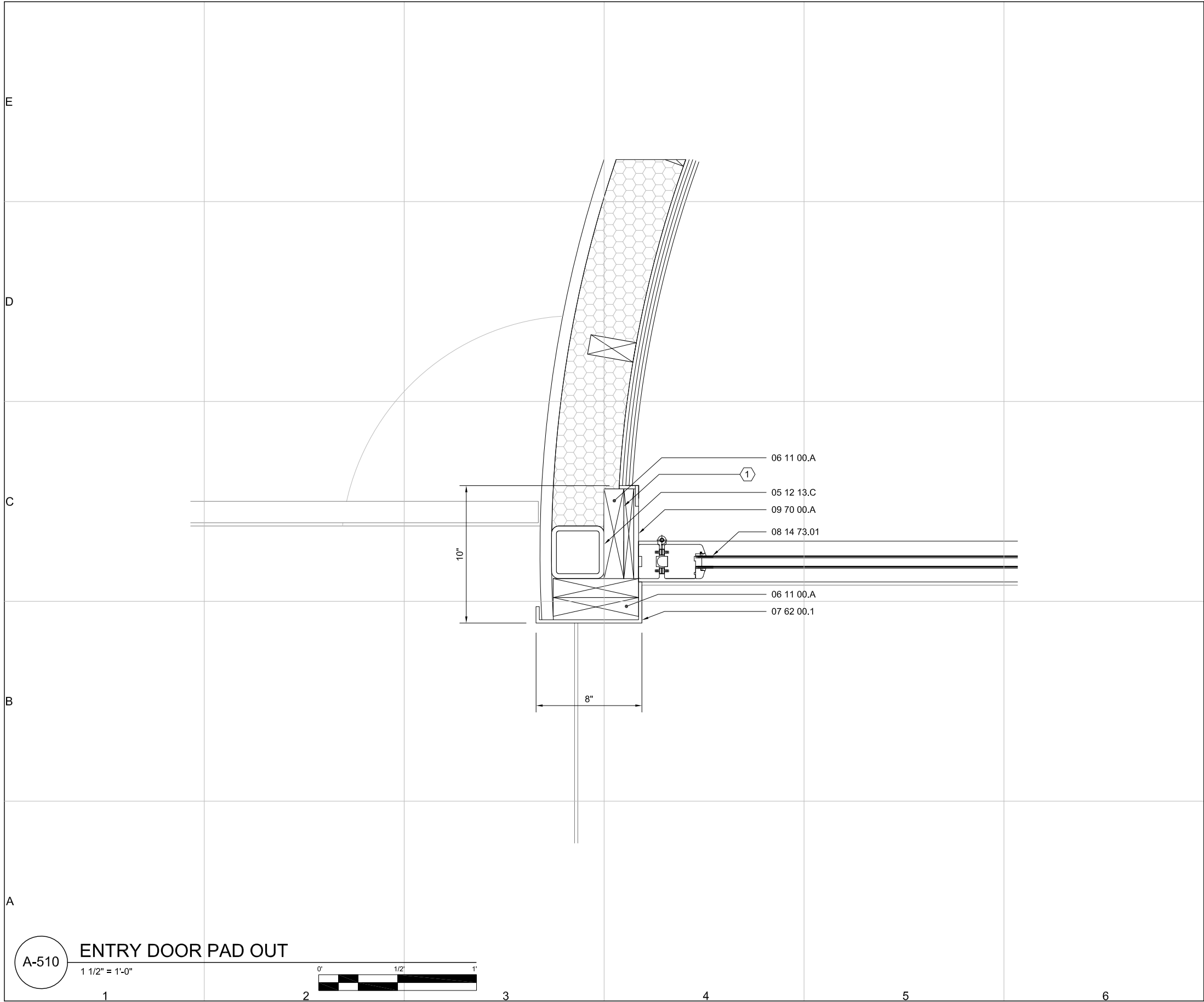
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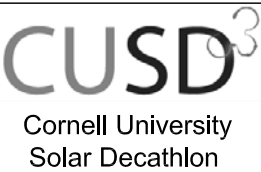


REFERENCE KEYNOTES:

- DIVISION 05 - METALS
05 12 13.C STRUCTURAL STEEL FRAMING- HSS
4"x4"x3/8"
- DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
06 11 00.A WOOD FRAMING- 2x_ BLOCKING
- DIVISION 07- THERMAL AND MOISTURE PROTECTION
07 62 00.1 SHEET METAL FLASHING- 22 GA FLAT SHEET ASTM A606
- DIVISION 08- OPENINGS
08 14 73.01 SLIDING WOOD DOORS- 5 PANEL CORNERLESS UNIT
- DIVISION 09- FINISHES
09 70 00.A WALL FINISHES- 3/16" ASH PANEL

SHEET KEYNOTES:

1. SHIM AS NECESSARY

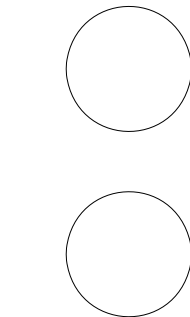


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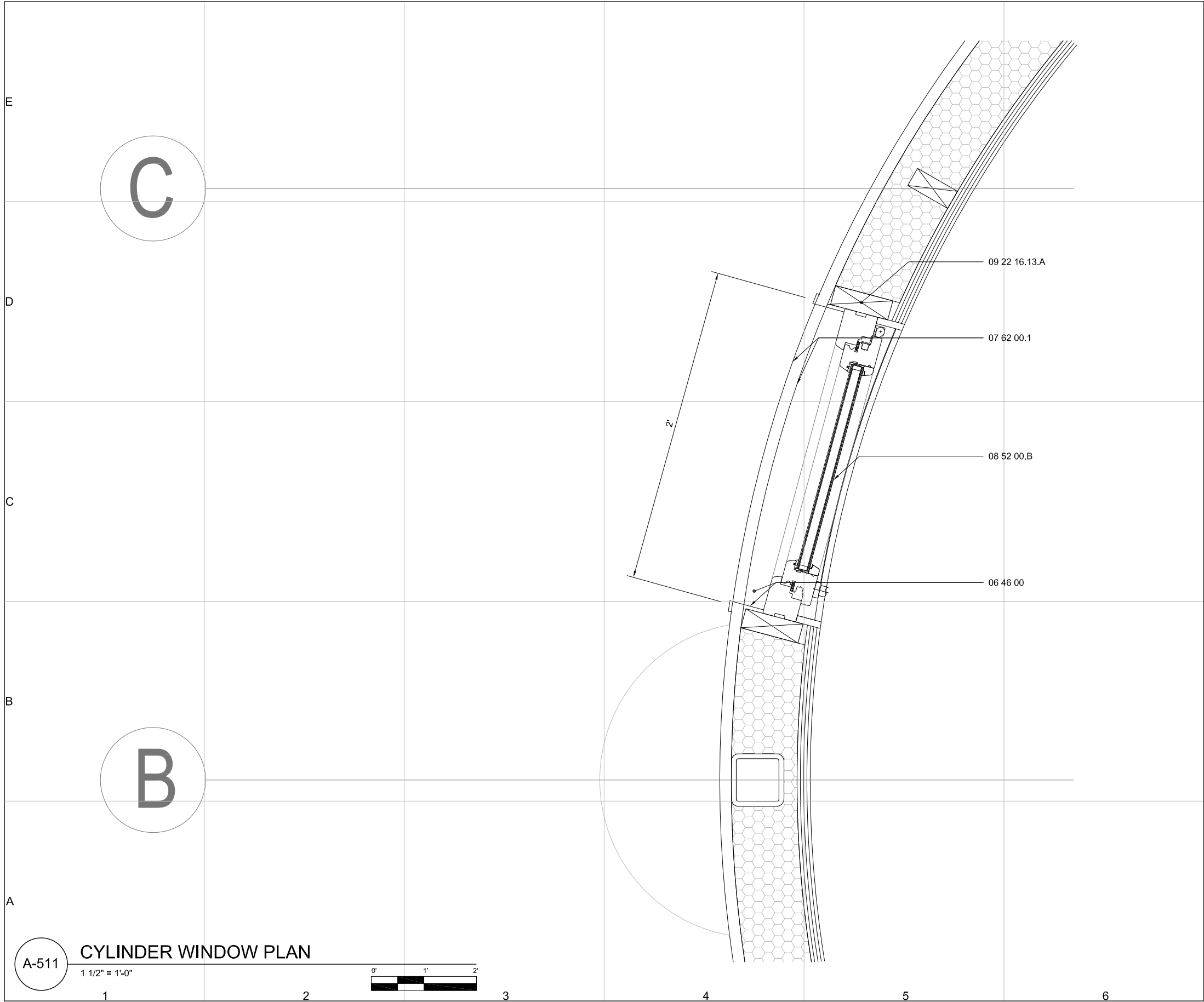
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REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
06 46 00 WOOD TRIM

DIVISION 07 - THERMAL AND MOISTURE PROTECTION
07 62 00.1 SHEET METAL FLASHING- 18 GA FLAT SHEET ASTM A606

DIVISION 08 - OPENINGS
08 52 00.B WOOD WINDOWS- WD68TT, TILT-TURN OPERABLE WINDOW

DIVISION 09- FINISHES
09 22 16.13.A METAL STUDS AND TRACK- 2x4 STUD WINDOW FRAMING

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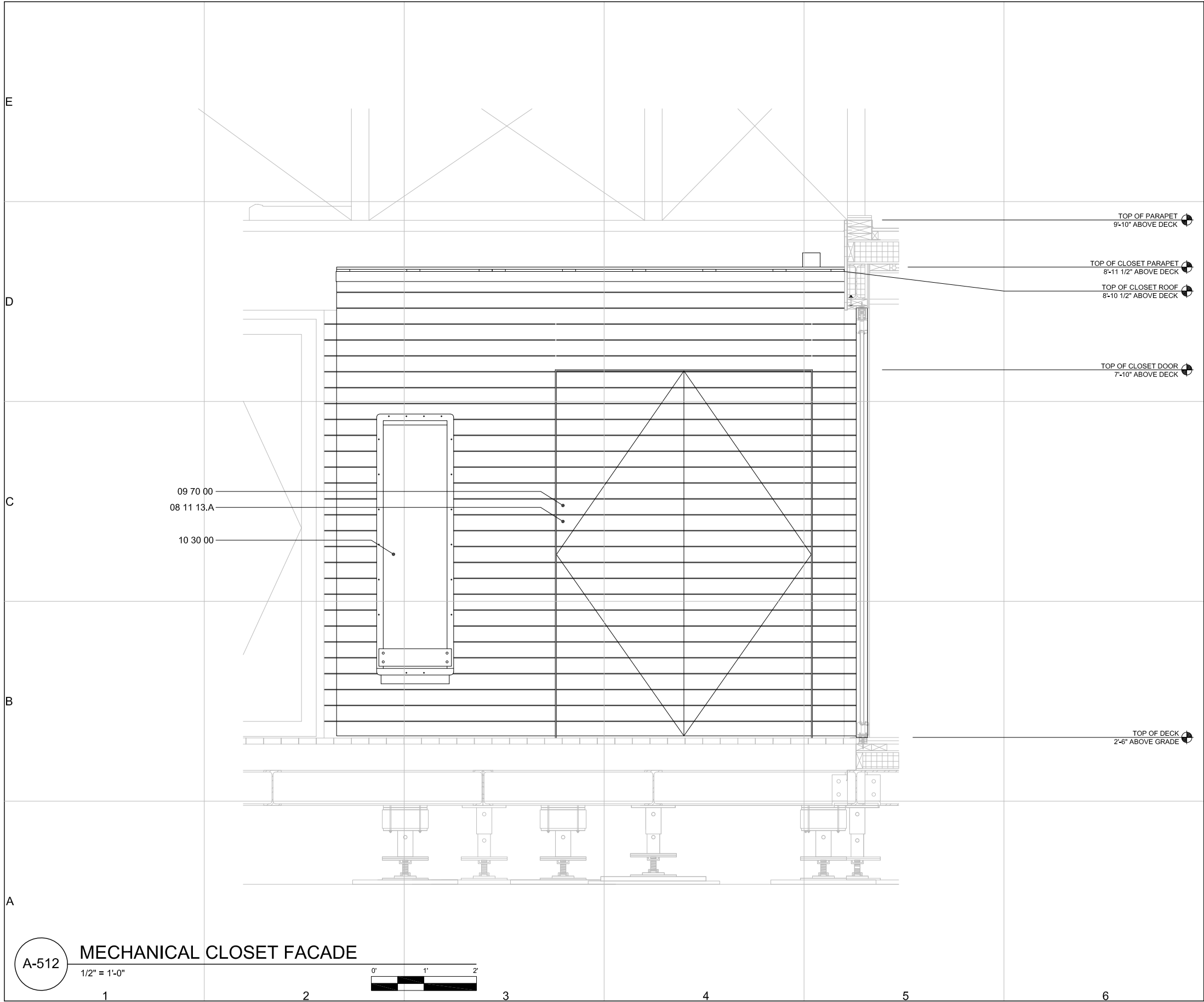
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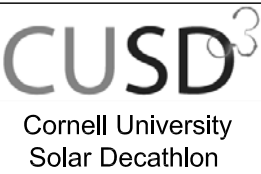
A-511

SHEET 95 OF 196



REFERENCE KEYNOTES:

- DIVISION 08 - OPENINGS
08 11 13.A HOLLOW METAL DOORS & FRAMES-
607 SERIES, COMPOSITE,
FLUSH
- DIVISION 09- FINISHES
09 70 00 WALL FINISHES- 1/2" SHIPLAP BLACK
LOCUST
- DIVISION 10 - SPECIALTIES
10 30 00 FIREPLACES AND STOVES- FIREBOX

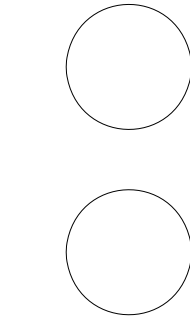


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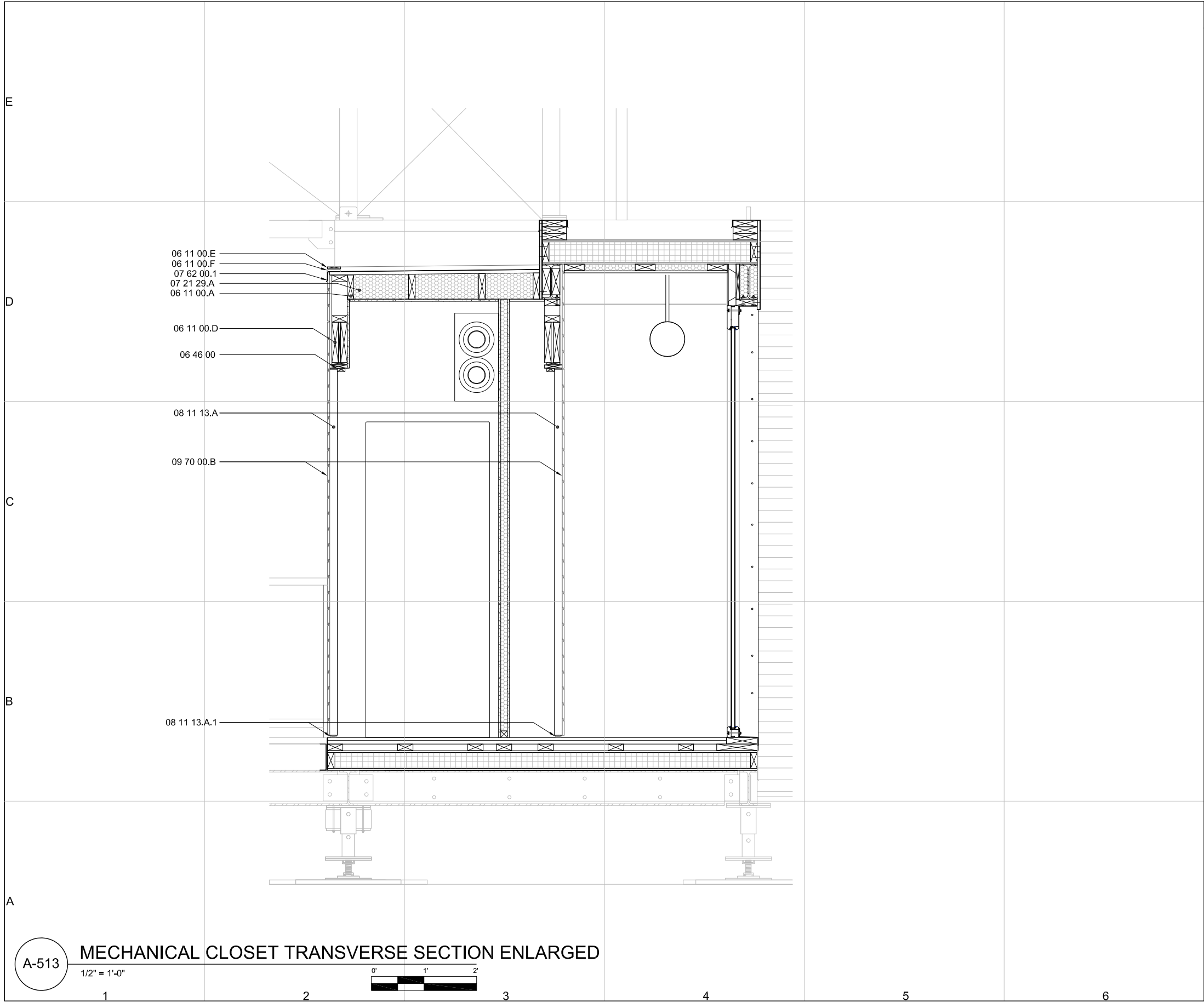
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SHEET TITLE

DETAIL

A-512

SHEET 96 OF 196



REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 11 00.A WOOD FRAMING- 2x
06 11 00.D WOOD FRAMING- 2x10 HEADER
06 11 00.E WOOD FRAMING- 3/4" PARAPET
06 11 00.F WOOD FRAMING- 1/4" SPACER
06 46 00 WOOD TRIM

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 21 29.A SPRAY FOAM INSULATION
07 62 00.1 SHEET METAL FLASHING- COR-10
CORRUGATED 18 GA ASTM A606

DIVISION 08 - OPENINGS

08 11 13.A HOLLOW METAL DOORS & FRAMES-
607 SERIES, COMPOSITE, FLUSH
08 11 13.A.1 HOLLOW METAL DOORS & FRAMES-
607 SERIES- RIXSON HINGE

DIVISION 09- FINISHES

09 70 00.B WALL FINISHES- 1/2" SHIPLAP BLACK
LOCUST



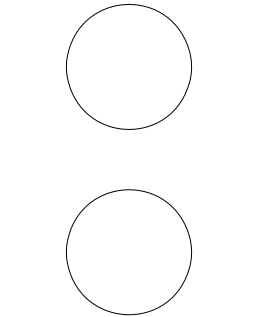
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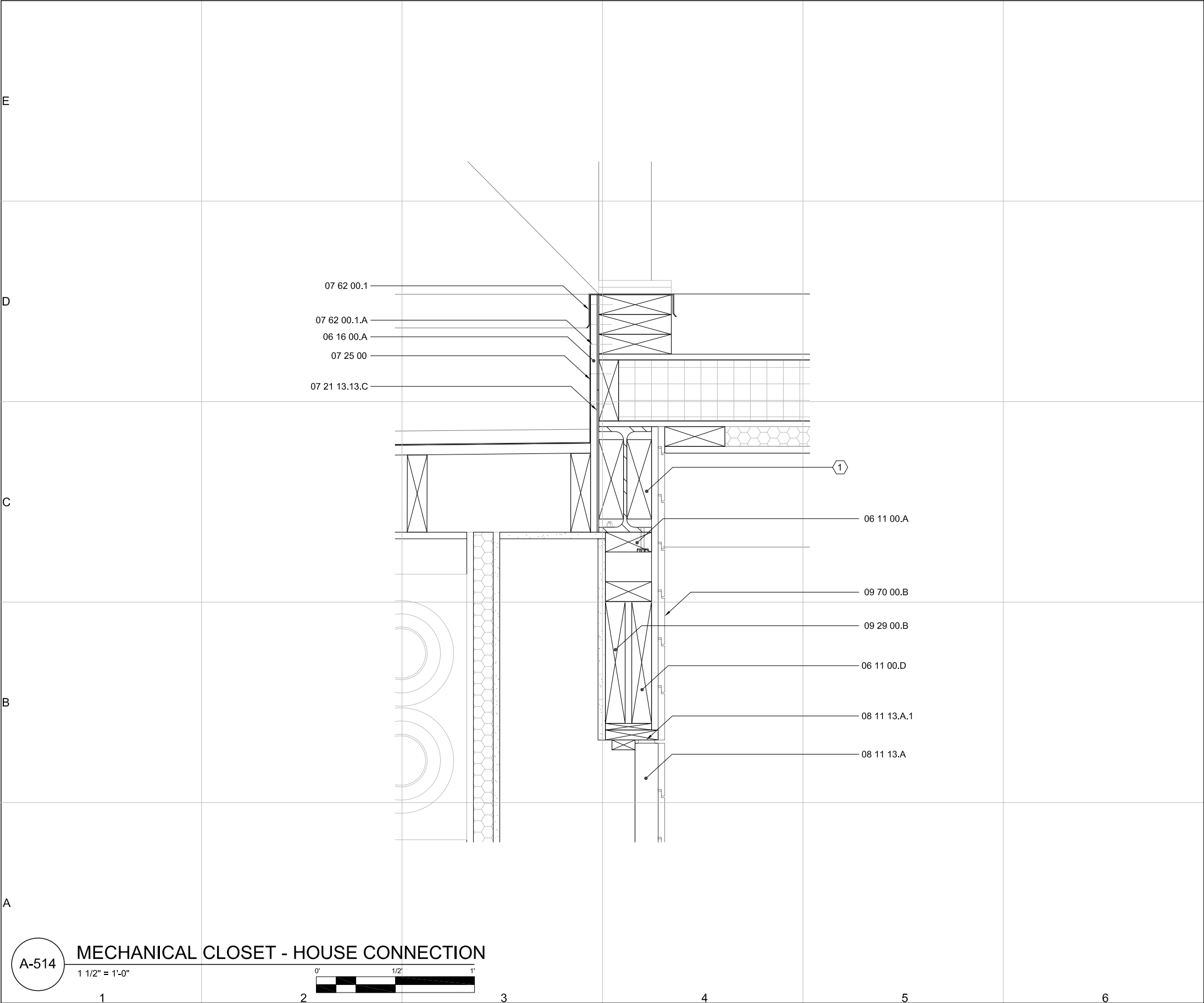
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SECTION

A-513



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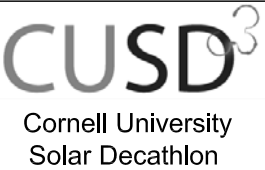
1. 1/8" REVEAL BETWEEN SHIPLAP BLACK LOCUST BOARDS

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
06 11 00.A WOOD FRAMING- 2x_ BLOCK
06 11 00.D WOOD FRAMING- 2x10 HEADER
06 16 00.A SHEATHING- 1/2" PLYWOOD
DIVISION 07 - THERMAL AND MOISTURE PROTECTION
07 62 00.1 SHEET METAL FLASHING- 22 GA ASTM A606 CURVED
07 62 00.1.A SHEET METAL FLASHING- SIMPSON T-STRAP
07 25 00 WEATHER BARRIERS- TYVEK
07 21 13.13.C FOAM BOARD INSULATION- 1/8"
DIVISION 08 - OPENINGS
08 11 13.A HOLLOW METAL DOORS & FRAMES- 607 SERIES
08 11 13.A.1 HOLLOW METAL DOORS & FRAMES- 607 SERIES- RIXSON HINGE
DIVISION 09- FINISHES
09 29 00.B GYPSUM BOARD- 1/2"
09 70 00.B WALL FINISHES- 1/2" SHIPLAP BLACK LOCUST

SHEET KEYNOTES:

1. BLOCK AS NECESSARY

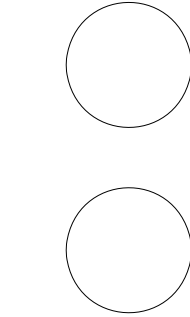


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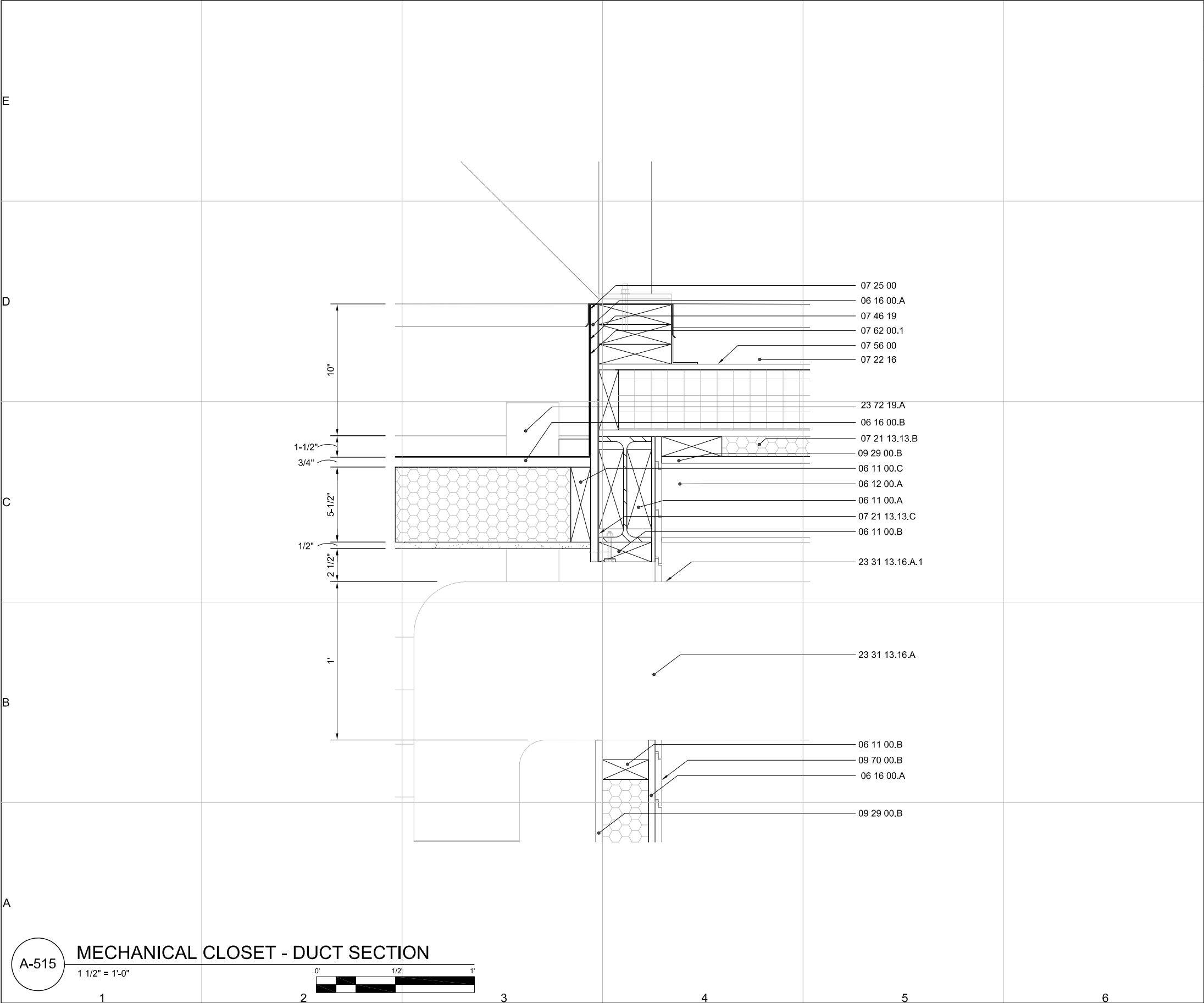
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A-514

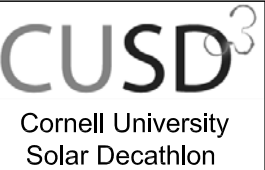


GENERAL SHEET NOTES:

1. 1/8" REVEAL BETWEEN SHIPLAP BLACK LOCUST BOARDS

REFERENCE KEYNOTES:

- DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
- 06 11 00.A WOOD FRAMING- 2x_ BLOCKING
06 11 00.B WOOD FRAMING- 2x4
06 11 00.C WOOD FRAMING- 2x6 JOIST
06 12 00.A STRUCTURALLY INSULATED PANELS- ROOF
06 16 00.A SHEATHING- 1/2" PLYWOOD
06 16 00.B SHEATHING- 3/4" PLYWOOD
- DIVISION 07- THERMAL AND MOISTURE PROTECTION
- 07 21 13.13.B FOAM BOARD INSULATION- 1-1/2" POLYISOCYANURATE FOAM
07 22 16 ROOF BOARD INSULATION- TAPERED CLOSED-CELL POLYISOCYANURATE FOAM
07 25 00 WEATHER BARRIERS- TYVEK
07 46 19 STEEL SIDING- COR-10 CORRUGATED ASTM A606 18 GA
07 56 00 FLUID-APPLIED ROOFING
07 62 00.1 SHEET METAL FLASHING
07 21 13.13.C FOAM BOARD INSULATION- 1/8"
- DIVISION 09- FINISHES
- 09 29 00.B GYPSUM BOARD- 1/2"
09 70 00.B WALL FINISHES- 1/2" SHIPLAP BLACK LOCUST
- DIVISION 23- HVAC
- 23 72 19.A FIXED PLATE AIR-TO-AIR ENERGY RECOVERY VENTILATOR- EXHAUST STACK
23 31 13.16.A ROUND AND FLAT-OVAL SPIRAL DUCTS
23 31 13.16.A.1 ROUND AND FLAT-OVAL SPIRAL DUCTS- ESCUTCHEON

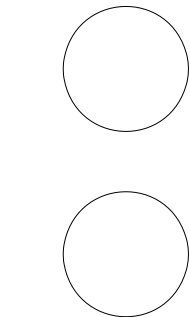


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A-515



REFERENCE KEYNOTES:	
DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES 06 11 00.D WOOD FRAMING - 2"x10" HEADER 06 11 00.E WOOD FRAMING - 3/4" PARAPET 06 11 00.F WOOD FRAMING - 1/4" SPACER 06 15 00 WOOD DECKING - BLACK LOCUST DIVISION 07 - THERMAL AND MOISTURE PROTECTION 07 62 00.1 SHEET METAL FLASHING - 18 GA ASTM A606 FLAT SHEET DIVISION 08 - OPENINGS 08 11 13.A HOLLOW METAL DOORS AND FRAMES- 607 SERIES, COMPOSITE, FLUSH 08 11 13.A.2 HOLLOW METAL DOORS AND FRAMES- DOOR JAMB	
SHEET KEYNOTES: 1. SHIM AS NECESSARY	
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A-516 SHEET 100 OF 196	



GENERAL SHEET NOTES:

1. NOTCH TOP OF STUD AROUND C6X10.5

REFERENCE KEYNOTES:


DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES
06 16 00.A SHEATHING- 1/2" PLYWOOD

DIVISION 07 - THERMAL AND MOISTURE PROTECTION
07 62 00.1 SHEET METAL FLASHING- CAP
06 11 00.D WOOD FRAMING- PARAPET

DIVISION 09 - FINISHES
09 22 16.13.A METAL STUDS AND TRACK- 2x4 STUD (TYP)

SHEET KEYNOTES:

1. SIP SPLINE



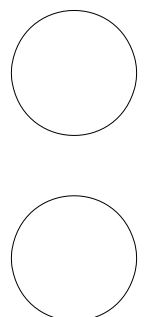
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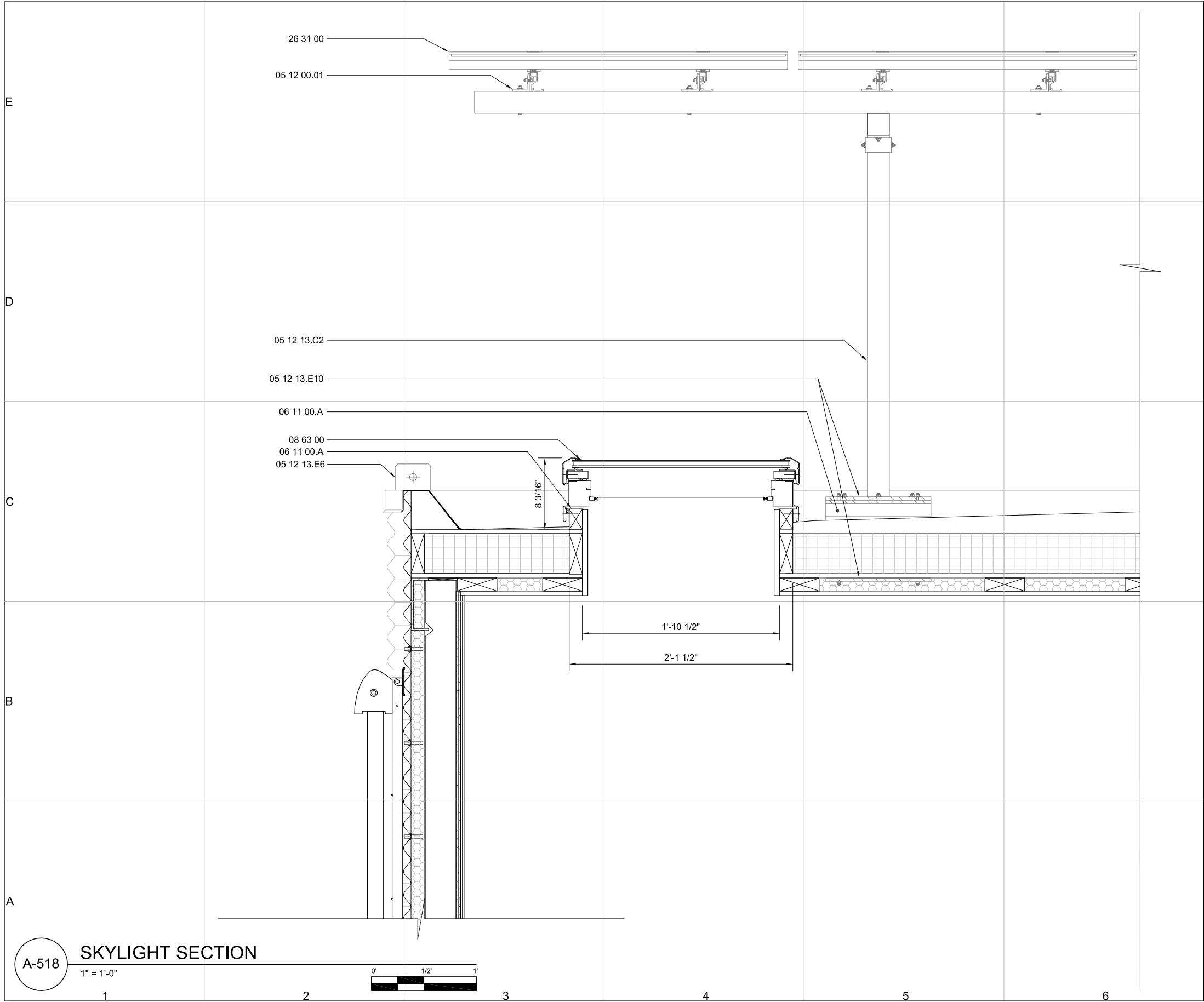
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A-517

SHEET 101 OF 196



REFERENCE KEYNOTES:

DIVISION 05 - METALS

- 05 12 00.01 STRUCTURAL ALUMINUM- POWER STRUT RACK
- 05 12 13.C2 STRUCTURAL STEEL FRAMING- HSS 2-1/2x2-1/2x1/4
- 05 12 13.E6 STRUCTURAL STEEL FRAMING- LIFTING RING (TYP)
- 05 12 13.E10 STRUCTURAL STEEL FRAMING- PV ARRAY FOOTER PLATE (TYP) 12x12x3/8

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

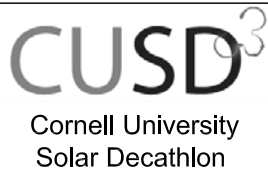
- 06 11 00.A WOOD FRAMING- 2x_ BLOCKING

DIVISION 08 - OPENINGS

- 08 63 00 METAL FRAMED SKYLIGHTS

DIVISION 26 - ELECTRICAL

- 26 31 00 PHOTOVOLTAIC COLLECTORS- ROOF MOUNTED

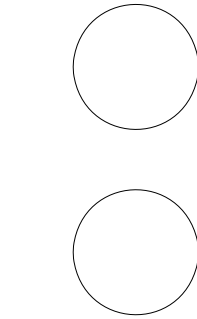


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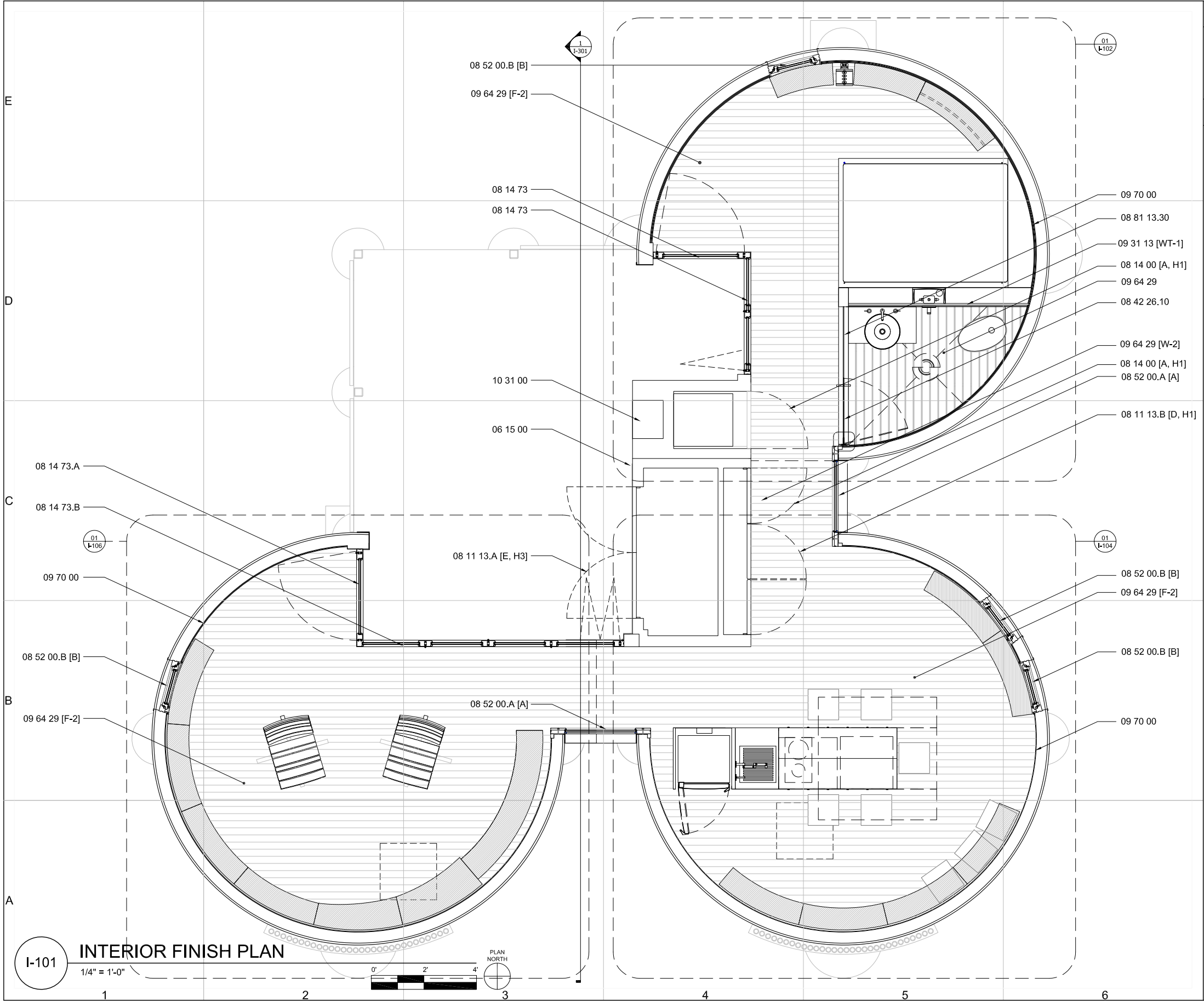
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A-518

CORNELL UNIVERSITY SOLAR DECATHLON 2009 INTERIORS SERIES						<div>GENERAL INTERIOR NOTES</div> <div><div>1. BED (SEE I-102), MILLWORK WALL (SEE I-102), KITCHEN ISLAND (SEE I-104), AND SEATING ARE CUSTOM BUILT.</div><div>2. WHEREVER REFERENCE KEYNOTES ARE FOLLOWED BY [XXX], [XXX] INDICATES TYPE ON SCHEDULES IN I-600 DRAWINGS</div><div>3. ALL XP WALLBOARD (09 28 00) IN BATHROOM TO BE COATED IN WATERPROOF PRIMER AND PAINT (09 91 00.01)</div></div>	<div><div>CUSD³</div><div>Cornell University Solar Decathlon</div></div> <div><div>CORNELL UNIVERSITY SOLAR DECATHLON 909 MITCHELL STREET ITHACA, NY 14850 (607) 277-7475</div><div>WWW.CUSD.CORNELL.EDU</div></div> <div>CONSULTANTS</div> <div><div>ROBERT SILMAN ASSOCIATES</div><div>STRUCTURAL ENGINEERS 88 UNIVERSITY PLACE NEW YORK, NY 10003 (212) 620-7970</div></div> <div><div></div><div></div></div> <div>PROJECT</div> <div><div>SOLAR DECATHLON 2009</div></div> <div>DRAWN BY: IC DATE: JUNE 2, 2009 COPYRIGHT: CORNELL UNIVERSITY 2009 SHEET TITLE</div> <div><div>SYMBOLS AND NOTES</div></div> <div><div>I-001</div><div>SHEET 103 OF 196</div></div>
E							
D							
C							
B							
A					<div><div><div><div>01</div><div>I-XXX</div></div><div></div></div><div>- SECTION CALLOUT</div><div><div><div>01</div><div>I-XXX</div></div><div></div></div><div>- DETAIL CALLOUT</div></div>		
	1	2	3	4	5	6	



GENERAL SHEET NOTES:

- SEE I-601 FOR FINISH SCHEDULE
- SEE I-602 FOR DOOR SCHEDULE
- SEE I-603 FOR WINDOW SCHEDULE

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 15 00 WOOD DECKING - BLACK LOCUST

DIVISION 08 - OPENINGS

08 11 13.A HOLLOW METAL DOORS [E, H3]
08 11 13.B HOLLOW METAL DOORS [D, H1]
08 14 00 WOOD DOORS [A, H1]
08 14 73 SLIDING WOOD DOORS - NANAWALL DOOR
08 42 26.10 ALL-GLASS ENTRANCES - SWINGING GLASS DOOR
08 52 00.A WOOD WINDOW [A]
08 52 00.B WOOD WINDOW [B]
08 81 13.30 DECORATIVE GLASS GLAZING - SANDBLASTED GLASS

DIVISION 09 - FINISHES

09 31 13 THIN-SET CERAMIC TILING [WT-1]
09 64 29 WOOD STRIP AND PLANK FLOORING - RECLAIMED ASH ENGINEERED FLOORING [F-2]
09 70 00 WALL FINISH [W-2]

DIVISION 10 - SPECIALTIES

10 31 00 MANUFACTURED FIREPLACE

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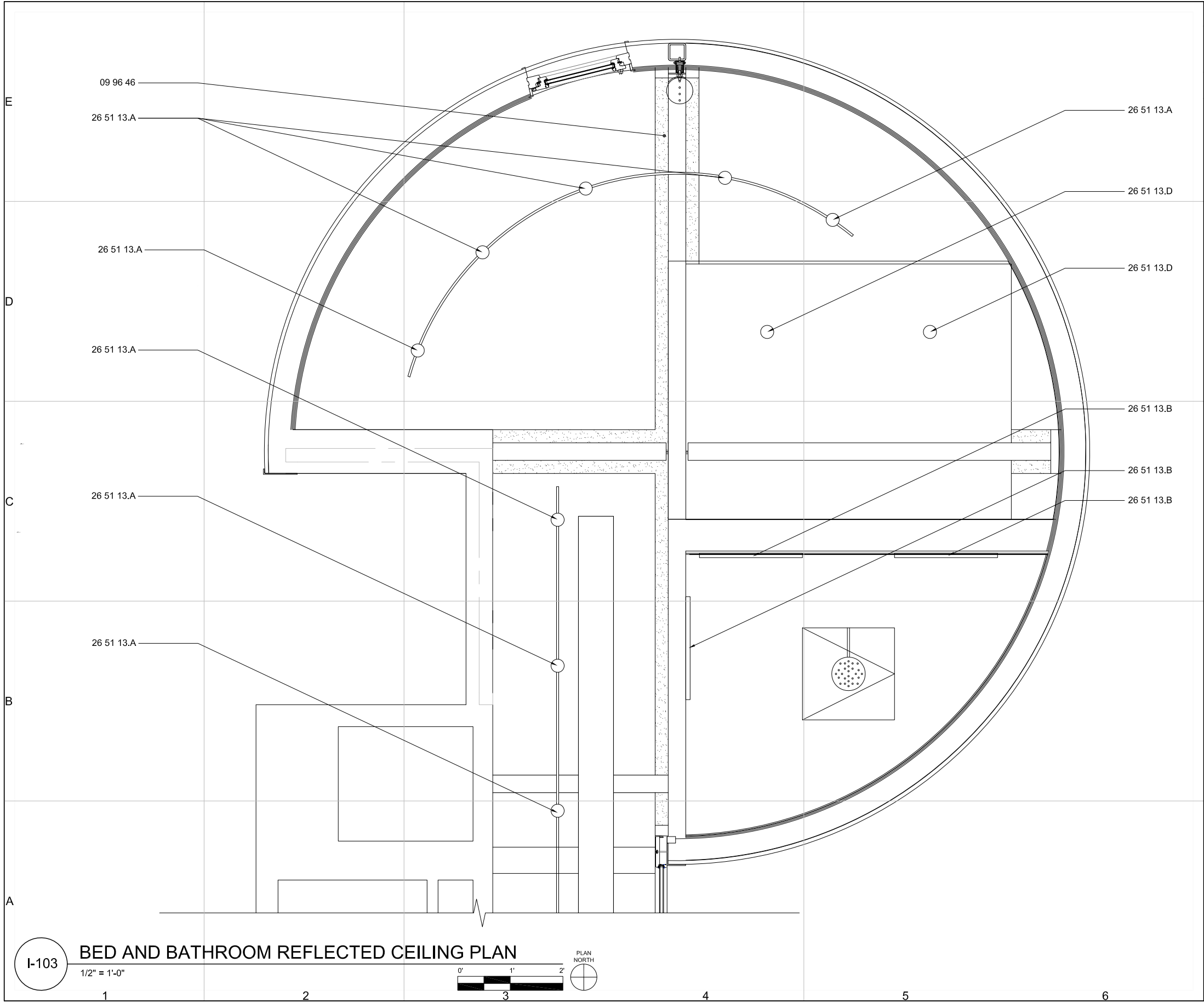
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I-101

SHEET 104 OF 196



GENERAL SHEET NOTES:

1. SEE I-305 FOR TRACK LIGHTING HEIGHT
2. SEE E-605 FOR LIGHTING SCHEDULE

REFERENCE KEYNOTES:

DIVISION 09 - FINISHES

09 96 46 INTUMESCENT PAINTING

DIVISION 26 - ELECTRICAL

26 51 13.A INTERIOR LIGHTING - TRACK LIGHT
26 51 13.B INTERIOR LIGHTING - FLUORESCENT
26 51 13.D WALL MOUNTED LIGHT
26 51 13.D INTERIOR LIGHTING - LED RECESSED DOWNLIGHT

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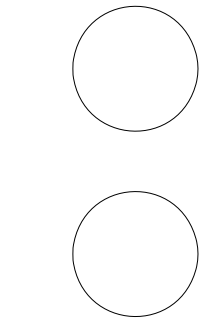
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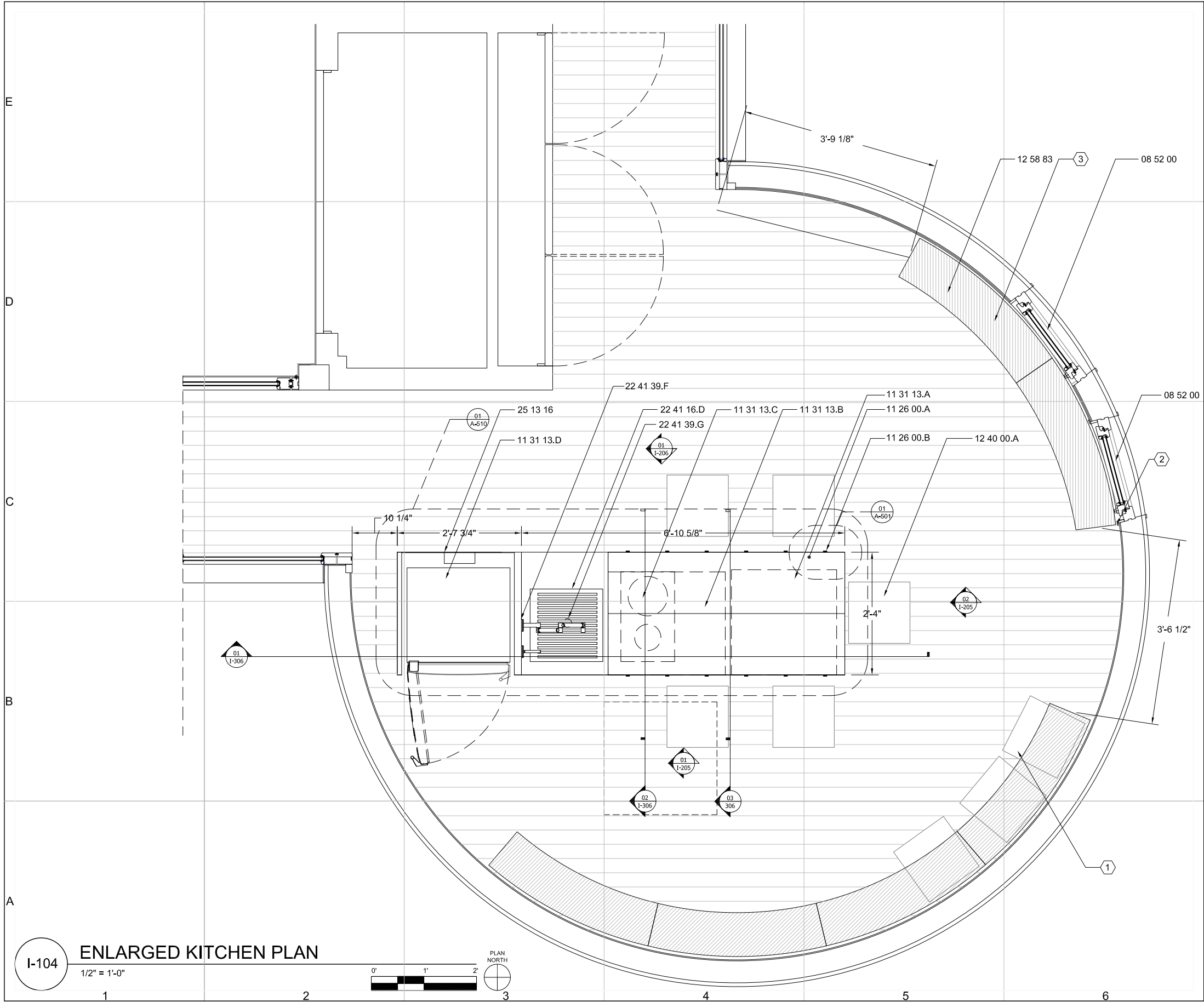
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I-103

SHEET 108 OF 196



GENERAL SHEET NOTES:

1. ALL SHELVING TYPICAL 12 58 83.A CUSTOM RESIDENTIAL FURNITURE - SHELVING TYPE A

REFERENCE KEYNOTES:

DIVISION 08 - OPENINGS

08 52 00 WOOD WINDOWS
08 63 00 METAL FRAMED SKYLIGHTS

DIVISION 08 - EQUIPMENT

11 26 00.A UNIT KITCHENS - 2" LAMINATED BEECH COUNTERTOP
11 26 00.B UNIT KITCHENS - SOSS 208 INVISIBLE HINGE
11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER
11 31 13.B RESIDENTIAL KITCHEN APPLIANCES - ELECTRIC BUILT-IN OVEN
11 31 13.C RESIDENTIAL KITCHEN APPLIANCES - DIVA STOVETOP
11 31 13.D RESIDENTIAL KITCHEN APPLIANCES - REFRIGERATOR

DIVISION 12 - FURNISHINGS

12 40 00.A DINING TABLES AND CHAIRS - BAR STOOLS

DIVISION 22 - PLUMBING

22 41 16.D RESIDENTIAL LAVATORIES AND SINKS - STAINLESS STEEL SINK
22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES AND TRIM - WALL MOUNT SINK - FAUCET
22 41 39.G RESIDENTIAL FAUCETS, SUPPLIES AND TRIM - SINK STRAINER

DIVISION 25 - INTEGRATED AUTOMATION

25 13 16 INTEGRATED AUTOMATION CONTROL AND MONITORING NETWORK INTEGRATION PANELS -mPANEL

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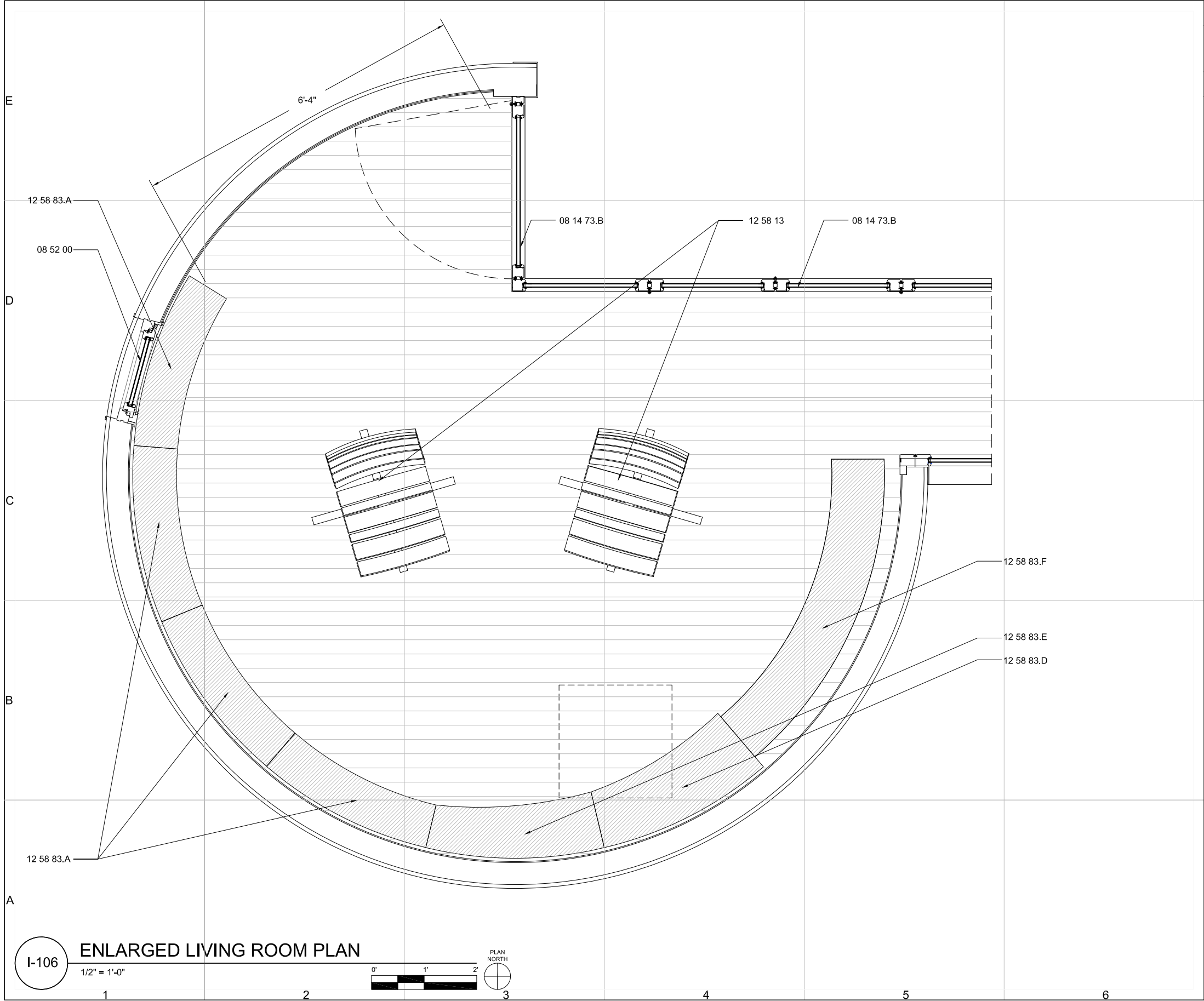
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SHEET 107 OF 196



GENERAL SHEET NOTES:

1. SEE I-512 AND I-513 FOR SHELVING TYPES

REFERENCE KEYNOTES:

DIVISION 08 - OPENINGS

08 14 73.A WOOD DOOR
08 52 00 WOOD WINDOW

DIVISION 12 - FURNISHINGS

12 58 13 RESIDENTIAL CHAIRS
12 58 83.A RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE A
12 58 83.D RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE D
12 58 83.E RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE E
12 58 83.F RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE F

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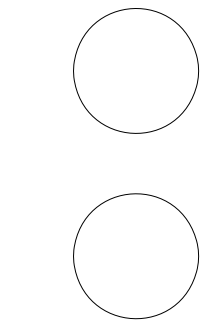
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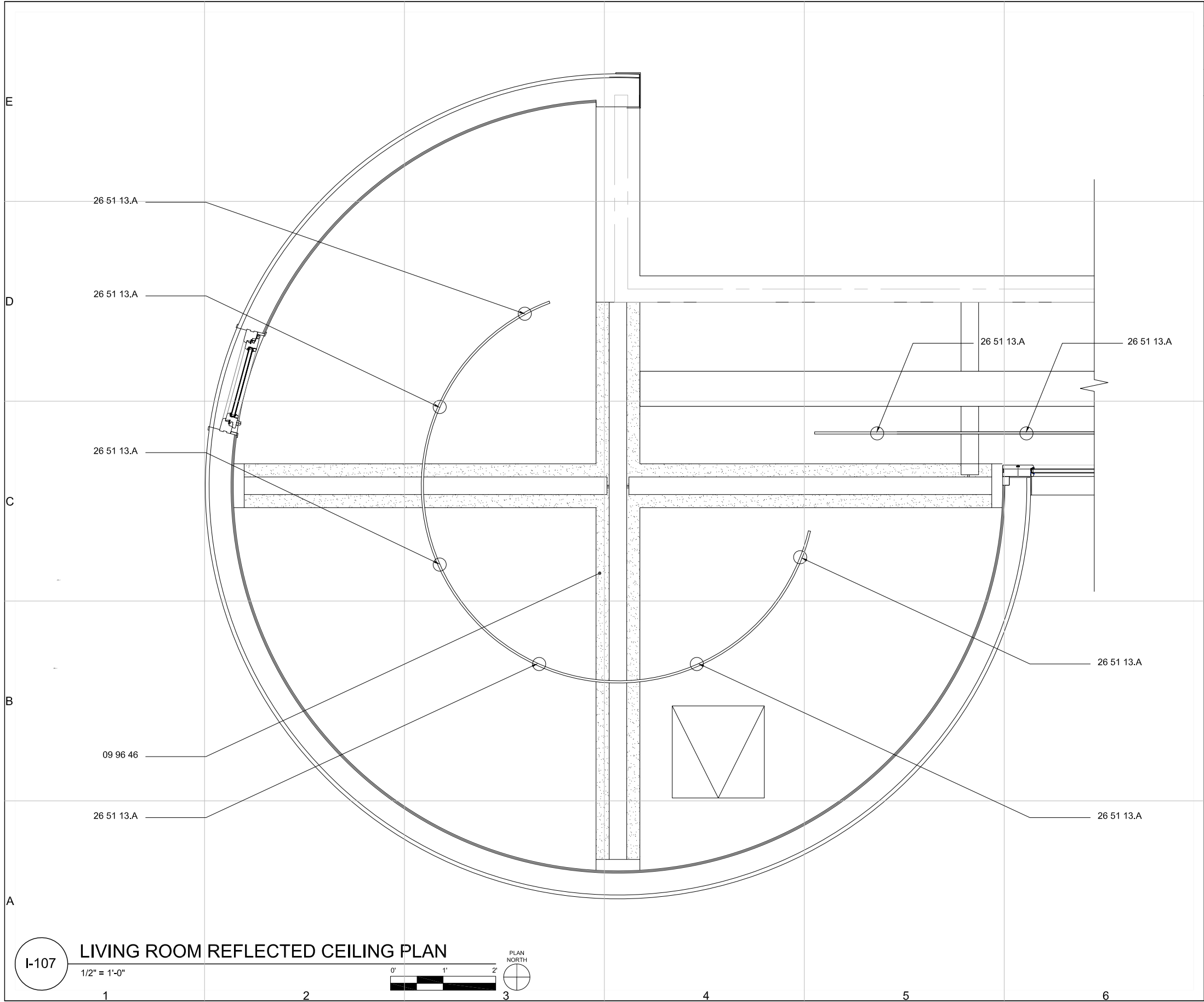
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I-106

SHEET 109 OF 196



GENERAL SHEET NOTES:

1. SEE I-305 FOR TRACK LIGHTING HEIGHT
2. SEE E-605 FOR LIGHTING SCHEDULE

REFERENCE KEYNOTES:

DIVISION 09 - FINISHES
09 96 46 INTUMESCENT PAINTING
DIVISION 26 - ELECTRICAL
26 51 13.A INTERIOR LIGHTING - TRACK LIGHT
26 56 23 EXTERIOR LIGHTING - AREA LIGHT



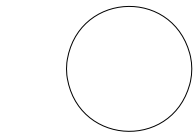
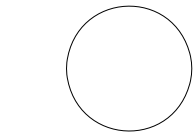
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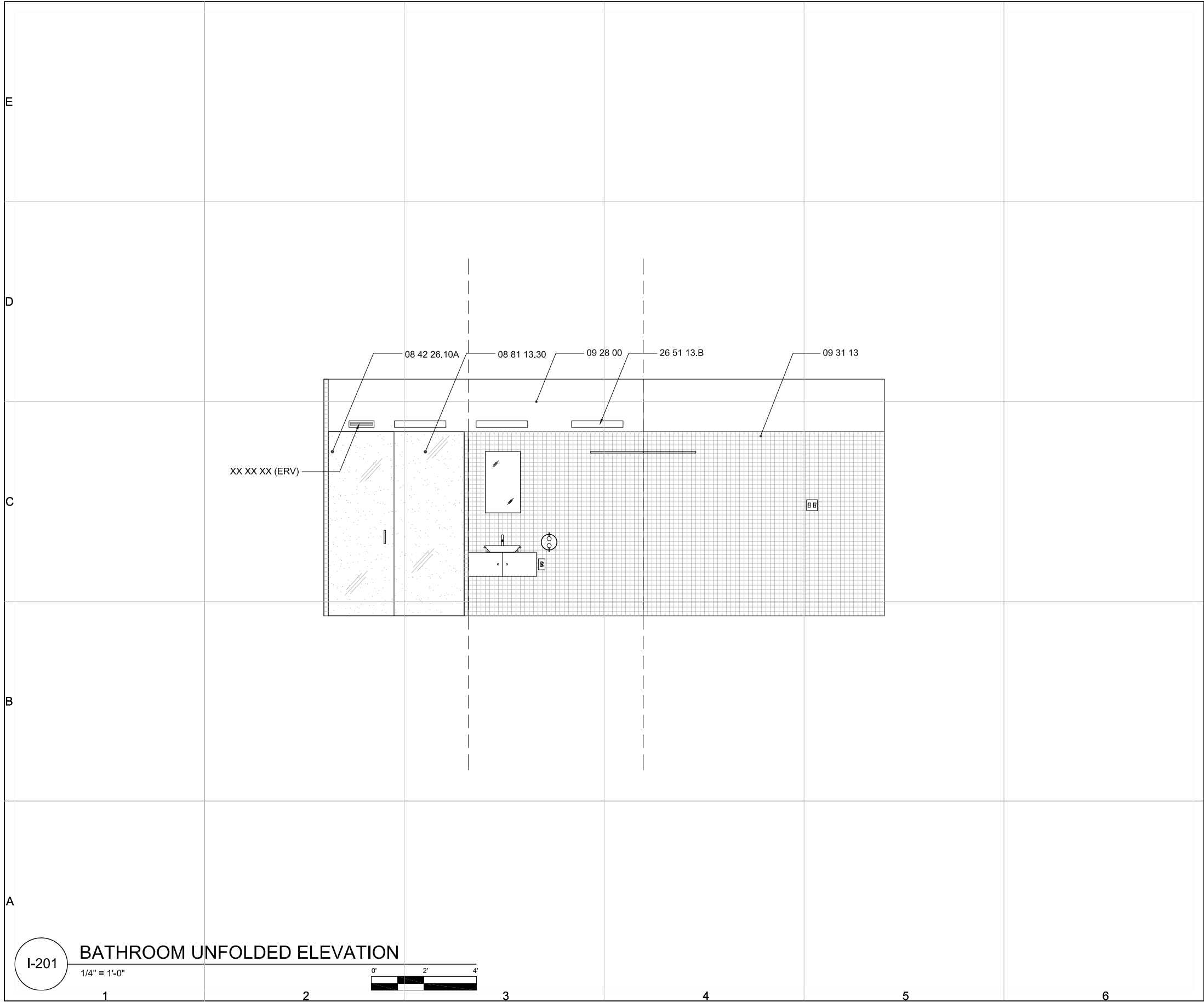
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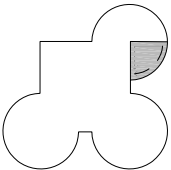
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I-107

SHEET 110 OF 196



GENERAL SHEET NOTES:	
1.	UNFOLDED ELEVATION TO SHOW WALL SHELVING LAYOUT WITHING ITS CONTEXT
2.	SEE I-601 FOR FINISH SCHEDULE
REFERENCE KEYNOTES:	
DIVISION 08 - OPENINGS	
08 14 73.A	SLIDING DOORS - NANAWALL DOOR
08 42 26.10	ALL-GLASS ENTRANCES - SWINGING GLASS DOOR
08 81 13.30	DECORATIVE GLASS GLAZING - SANDBLASTED GLASS
DIVISION 09 - FINISHES	
09 28 00	BACKING BOARDS AND UNDERLAYMENTS - XP WALLBOARD
09 31 13	THIN SET CERAMIC TILING [WT-1]
DIVISION 26 - ELECTRIC	
26 56 13.B	INTERIOR LIGHTING - FLUORESCENT WALL MOUNTED LIGHT



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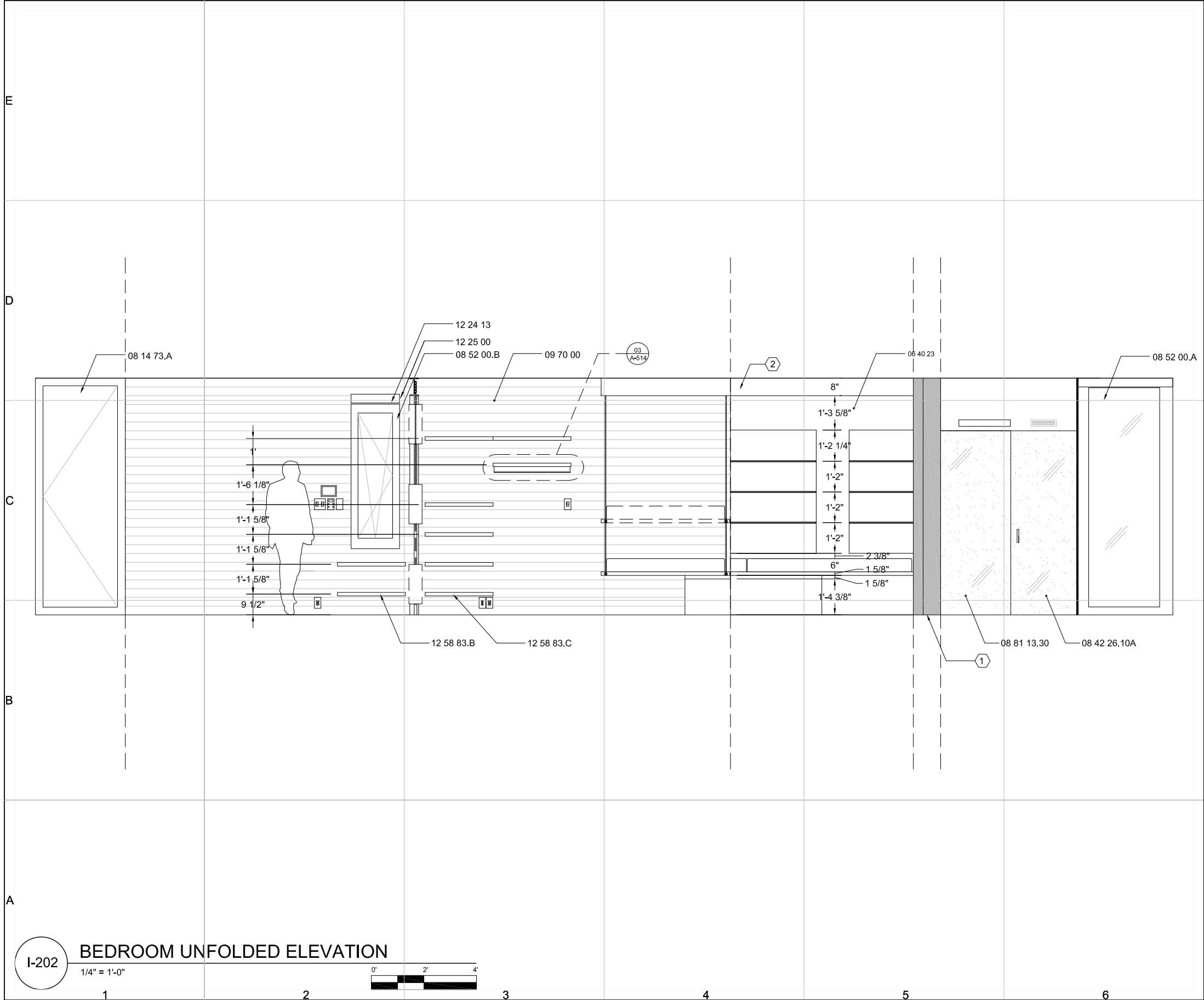
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ELEVATION

I-201

SHEET 111 OF 196



GENERAL SHEET NOTES:

1. UNFOLDED ELEVATION TO SHOW WALL SHELVING LAYOUT WITHING ITS CONTEXT

2. SEE I-512 FOR SHELVING DETAILS

3. SEE I-601 FOR FINISH SCHEDULE

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES

06 40 23 INTERIOR ARCHITECTURAL WOODWORK

DIVISION 08 - OPENINGS

08 14 73.A SLIDING WOOD DOORS - NANAWALL DOOR

08 46 22.10A ALL-GLASS ENTRANCES - SWINGING GLASS DOOR

08 52 00.A WOOD WINDOW [A]

08 52 00.B WOOD WINDOW [B]

DIVISION 09 - FINISHES

09 70 00 WALL FINISH -3/16" ASH PANELS

DIVISION 12 - FURNISHINGS

12 24 13 ROLLER WINDOW SHADES

12 25 00 WINDOW TREATMENT OPERATING HARDWARE

12 58 83.A RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE A

12 58 83.B RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE B

12 58 83.C RESIDENTIAL CUSTOM FURNITURE - SHELVING TYPE C

SHEET KEYNOTES:

1. MILLWORK WALL

2. BED FRAME

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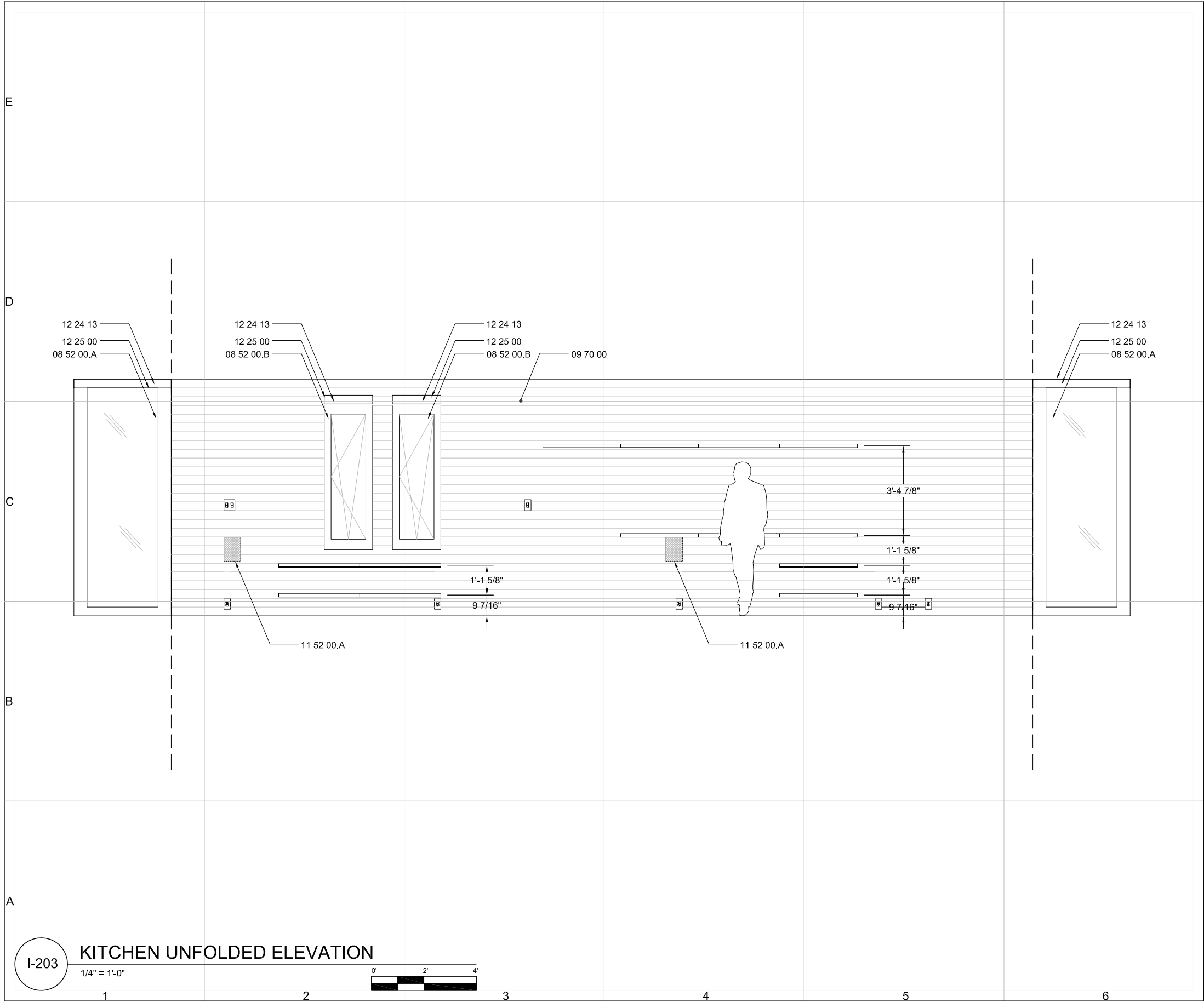
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SHEET TITLE

ELEVATION

I-202

SHEET 112 OF 196



GENERAL SHEET NOTES:

1.

UNFOLDED ELEVATION TO SHOW WALL
SHELVING LAYOUT WITHING ITS CONTEXT

2.

ALL SHELVING TYPICAL 12 58 83.A SHELVING
TYPE A

3.

SEE I-601 FOR FINISH SCHEDULE

REFERENCE KEYNOTES:

DIVISION 08 - OPENINGS

08 14 73.A

SLIDING WOOD DOORS -
NANAWALL DOOR

08 52 00.A

WOOD WINDOW [A]

08 52 00.B

WOOD WINDOW [B]

DIVISION 09 - FINISHES

09 70 00

WALL FINISH - $\frac{3}{8}$ " ASH PANELS

DIVISION 11 - EQUIPMENT

11 52 00.A

AUDIO VISUAL EQUIPMENT - IN-ROOM
SPEAKERS

DIVISION 12 - FURNISHINGS

12 24 13

ROLLER WINDOW SHADES

12 25 00

WINDOW TREATMENT

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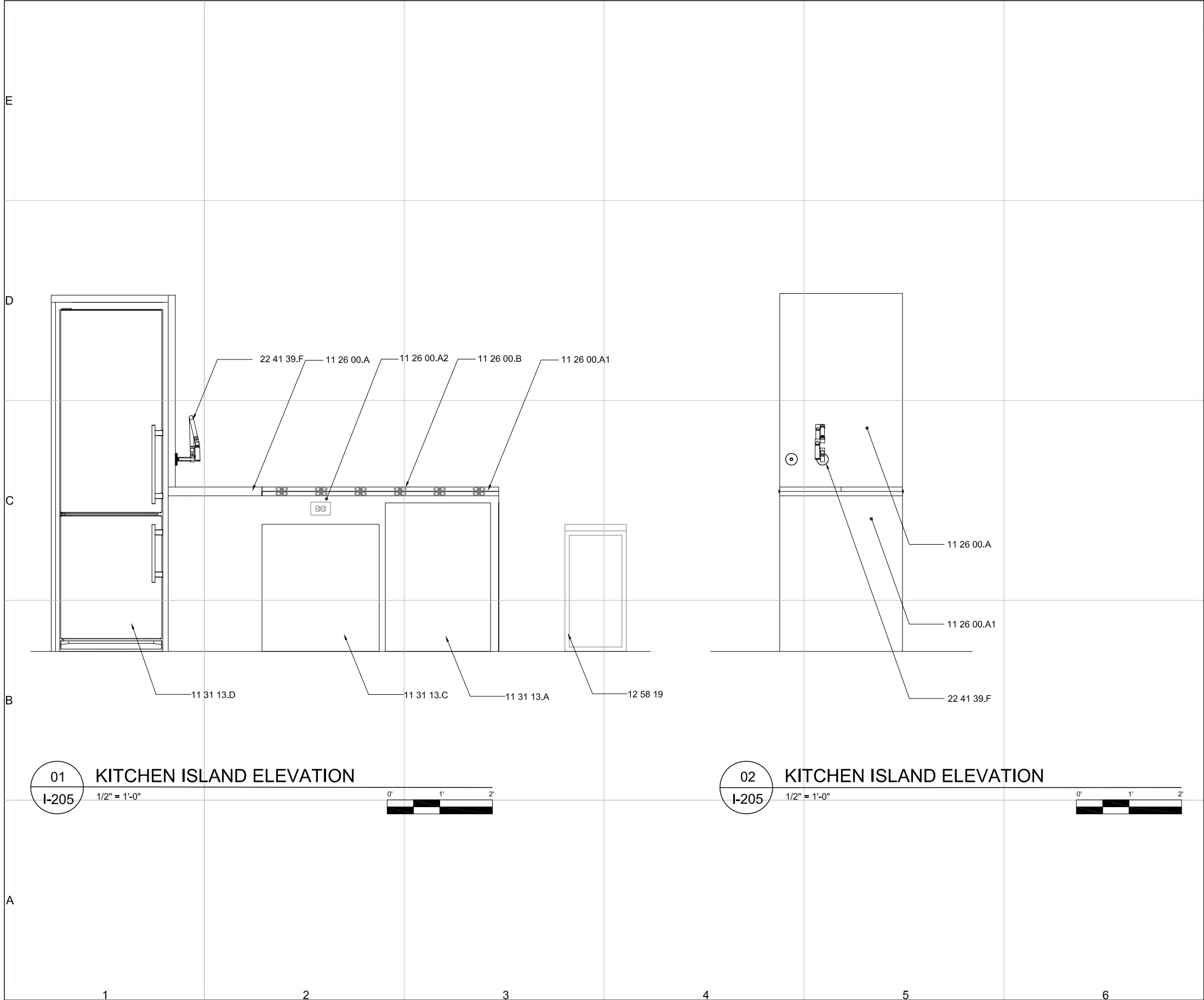
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ELEVATION

I-203

SHEET 113 OF 196



REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

- 11 26 00.A UNIT KITCHENS - 2" LAMINATED BEECH COUNTERTOP
- 11 26 00.A1 UNIT KITCHENS - 1" LAMINATED BEECH EXTENDING TABLE
- 11 26 00.A2 UNIT KITCHENS 16 GA. COLD ROLLED STEEL SHEET
- 11 26 00.B UNIT KITCHENS - SOSS 208 INVISIBLE HINGES
- 11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER
- 11 31 13.B RESIDENTIAL KITCHEN APPLIANCES- ELECTRIC BUILT-IN OVEN
- 11 31 13.C RESIDENTIAL KITCHEN APPLIANCES - DIVA STOVETOP
- 11 31 13.D RESIDENTIAL KITCHEN APPLIANCES - REFRIGERATOR

DIVISION 12 - FURNISHINGS

- 12 58 19 DINING TABLES AND CHAIRS - BAR STOOLS

DIVISION 22 - PLUMBING

- 22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - WALL MOUNT KITCHEN SINK FAUCET



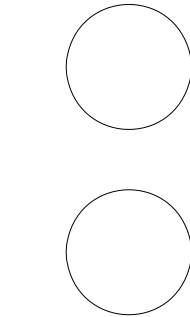
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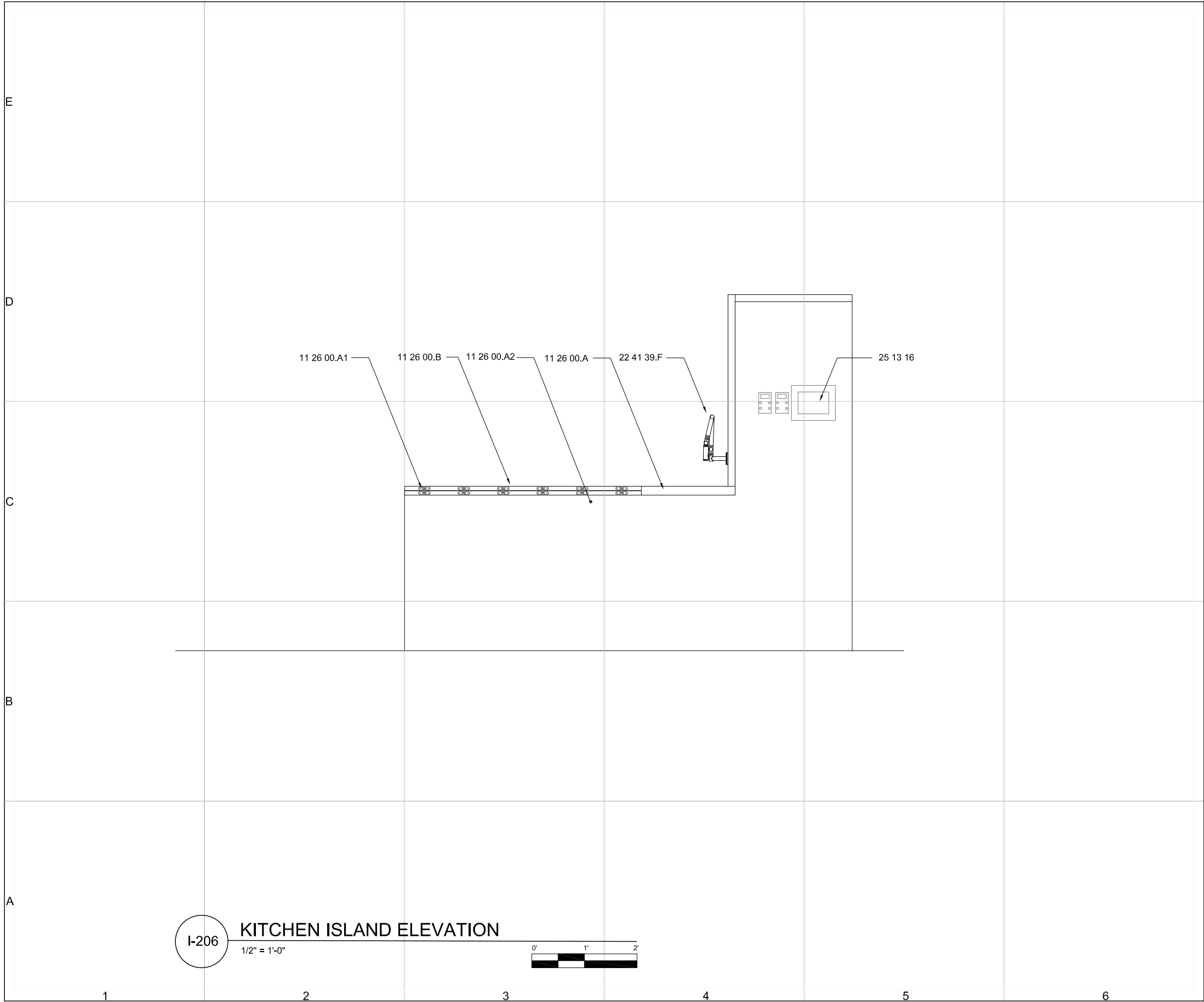
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ELEVATION

I-205



REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

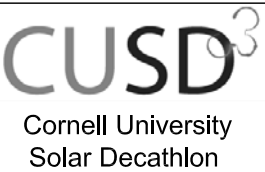
- 11 26 00.A UNIT KITCHENS - 2" LAMINATED BEECH COUNTERTOP
- 11 26 00.A1 UNIT KITCHENS - 1" LAMINATED BEECH EXTENDING TABLE
- 11 26 00.A2 UNIT KITCHENS 16 GA. COLD ROLLED STEEL SHEET
- 11 26 00.B UNIT KITCHENS - SOSS 208 INVISIBLE HINGES

DIVISION 22 - PLUMBING

- 22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - WALL MOUNT KITCHEN SINK FAUCET

DIVISION 25 - INTEGRATED AUTOMATION NETWORK EQUIPMENT

- 25 13 16 INTEGRATED AUTOMATION CONTROL AND MONITORING NETWORK INTEGRATION PANELS - mPANEL

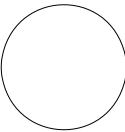
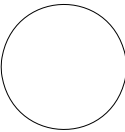


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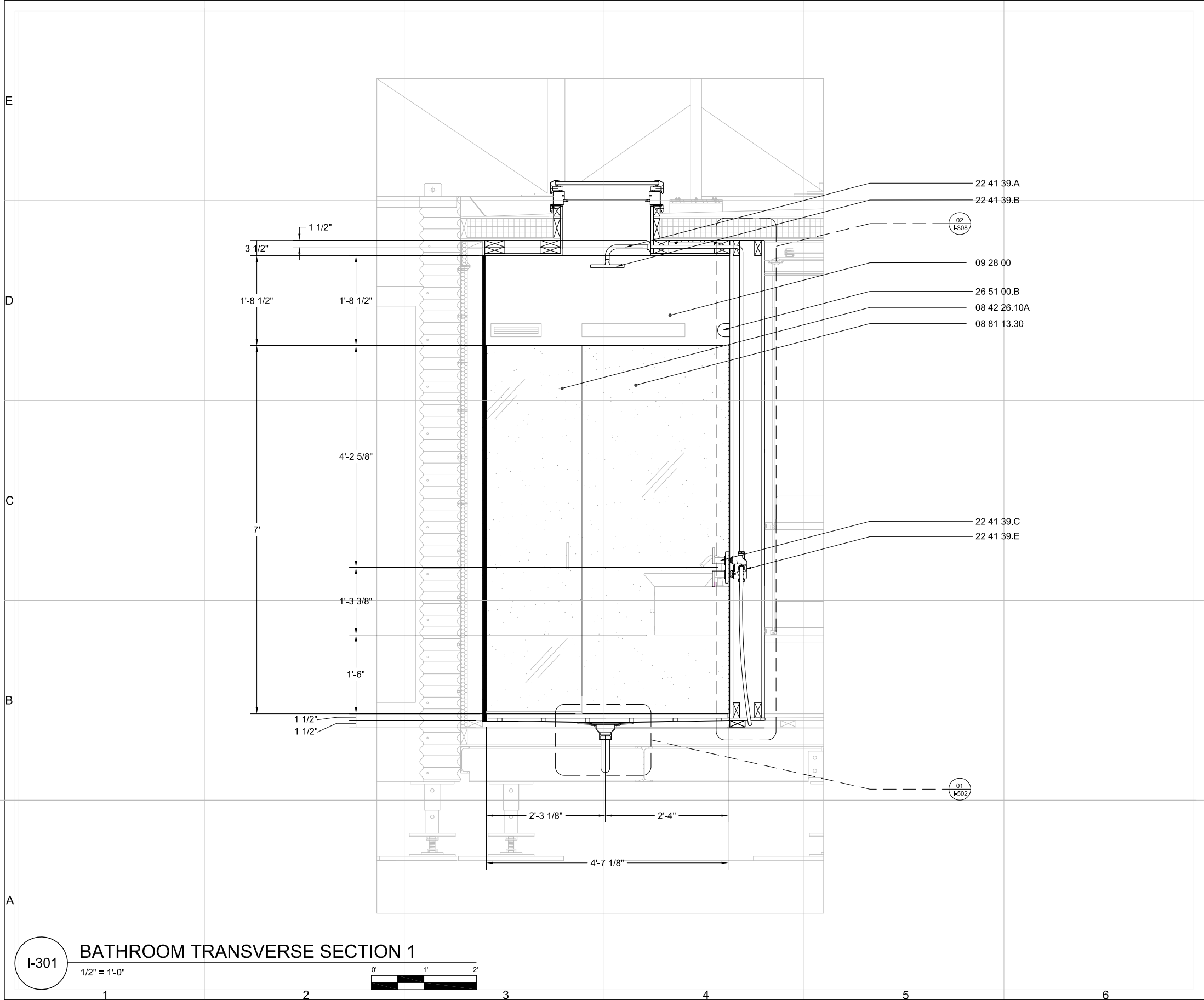
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SHEET TITLE

ELEVATION

I-206



GENERAL SHEET NOTES:

1. IN COMPLIANCE WITH SOLAR DECATHLON BUILDING CODE, WATER CLOSETS ARE INSTALLED FOR DEMONSTRATION ONLY AND SHALL NOT BE CONNECTED TO ANY PORTION OF THE SEWAGE DISPOSAL SYSTEM. THE WATER CLOSET SHALL BE ATTACHED TO A PVC OR ABS 4-IN TO 3-IN WATER CLOSET FLANGE PROVIDED WITH A CAPPED END. UPON PERMANENT SITING, THE WATER CLOSET WILL BE PLUMBED IN ACCORDANCE TO LOCAL CODE
2. IN COMPLIANCE WITH SOLAR DECATHLON BUILDING CODE, DRAINAGE PIPES WILL BE MOUNTED ON SITE AT THE COMPETITION AND CONNECTED TO PORTABLE TANKS; DRAINAGE PIPES WILL BE REMOVED FOLLOWING THE COMPETITION. UPON PERMANENT SITING, ALL DRAINAGE PIPES WILL BE INSULATED IN ACCORDANCE TO LOCAL CODE
3. WET BATHROOM, NO SHOWER STALL PROVIDED

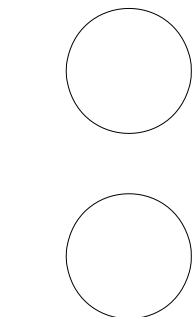
REFERENCE KEYNOTES:

- DIVISION 08 - OPENINGS**
- 08 42 26.10A ALL-GLASS ENTRANCES - SWINGING GLASS DOOR
08 81 13.30 DECORATIVE GLASS GLAZING - SANDBLASTED GLASS
- DIVISION 09 - FINISHES**
- 09 28 00 BACKING BOARDS AND UNDERLAYMENTS - XP WALLBOARD
09 31 13 THIN-SET CERAMIC TILING [W-T1]
- DIVISION 22 - PLUMBING**
- 22 41 39.A RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - RIGHT-ANGLE SHOWER ARM AND FLANGE
22 41 39.B RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - RAIN SHOWERHEAD
22 41 39.C RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - STACKED THERMOSTATIC VALVE TRIM AND ACCESSORIES
22 41 39.E RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - VALVES, THERMOSTATIC MIXER WITH VOLUME CONTROL
- DIVISION 26 - ELECTRICAL**
- 26 51 00.B INTERIOR LIGHTING - FLUORESCENT WALL MOUNTED LIGHT



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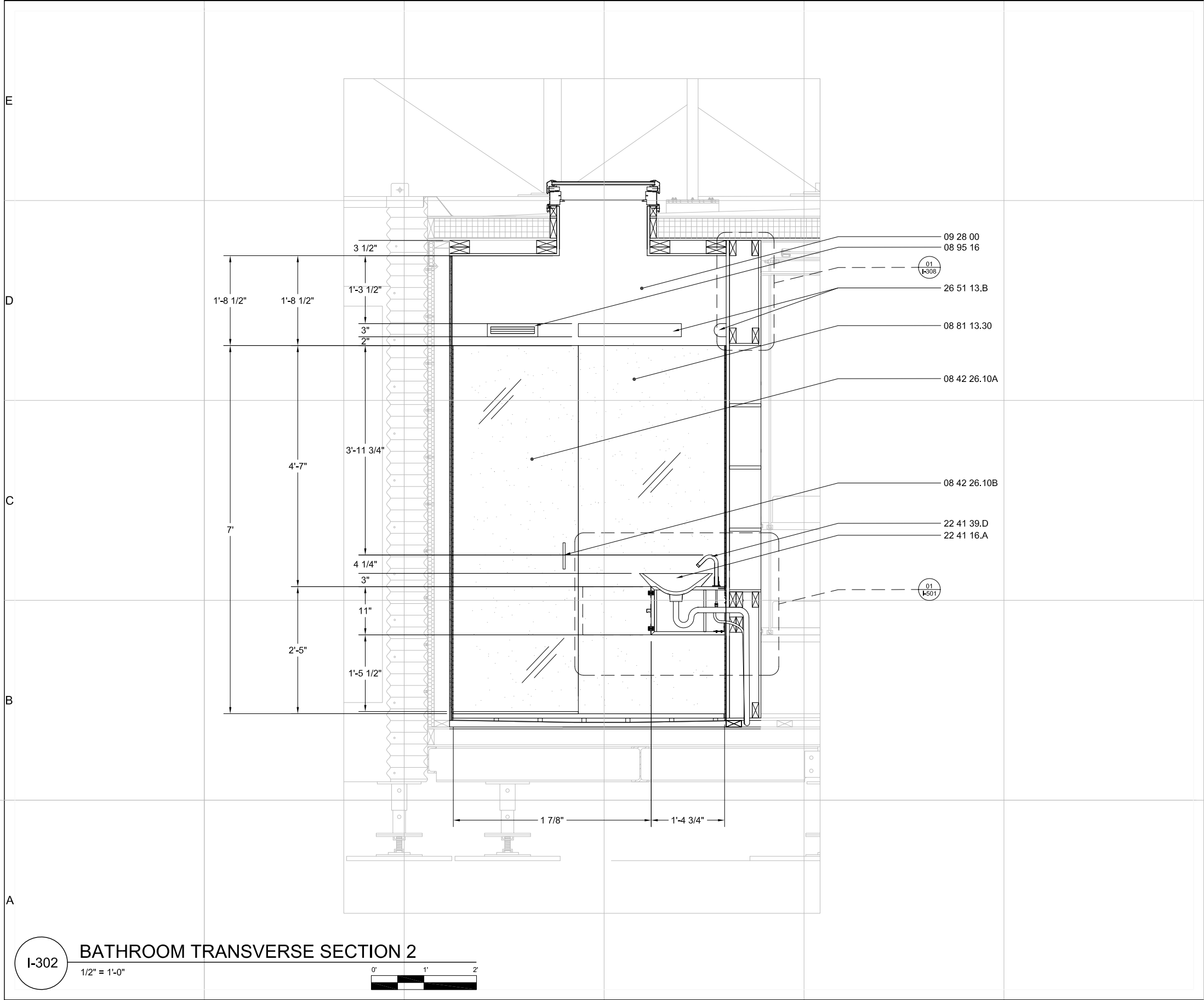


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SECTION

I-301



GENERAL SHEET NOTES:

1. IN COMPLIANCE WITH SOLAR DECATHLON BUILDING CODE, WATER CLOSETS ARE INSTALLED FOR DEMONSTRATION ONLY AND SHALL NOT BE CONNECTED TO ANY PORTION OF THE SEWAGE DISPOSAL SYSTEM. THE WATER CLOSET SHALL BE ATTACHED TO A PVC OR ABS 4-IN TO 3-IN WATER CLOSET FLANGE PROVIDED WITH A CAPPED END. UPON PERMANENT SITING, THE WATER CLOSET WILL BE PLUMBED IN ACCORDANCE TO LOCAL CODE

2. IN COMPLIANCE WITH SOLAR DECATHLON BUILDING CODE, DRAINAGE PIPES WILL BE MOUNTED ON SITE AT THE COMPETITION AND CONNECTED TO PORTABLE TANKS; DRAINAGE PIPES WILL BE REMOVED FOLLOWING THE COMPETITION. UPON PERMANENT SITING, ALL DRAINAGE PIPES WILL BE INSULATED IN ACCORDANCE TO LOCAL CODE

3. WET BATHROOM, NO SHOWER STALL PROVIDED

REFERENCE KEYNOTES:

DIVISION 08 - OPENINGS

08 42 26.10A ALL GLASS ENTRANCES - SWINGING GLASS DOOR

08 42 26.10B ALL GLASS ENTRANCES - SWINGING GLASS DOOR HARDWARE

08 81 13.30 DECORATIVE GLASS GLAZING - SANDBLASTED GLASS

08 95 16 WALL VENTS - CUSTOM RETURN AIR VENT PLATE

DIVISION 09 - FINISHES

09 70 00.A WALL FINISH [W-1]

DIVISION 22 - PLUMBING

22 41 16.A RESIDENTIAL LAVATORIES AND SINKS ABOVE-THE-COUNTER VESSELS

22 41 39.D LAVATORY

22 41 39.D RESIDENTIAL FAUCETS, SUPPLIES AND TRIM - WIDESPREAD LAVATORY FAUCET

DIVISION 26 - ELECTRICAL

26 51 13.B INTERIOR LIGHTING - FLUORESCENT WALL MOUNTED LIGHT

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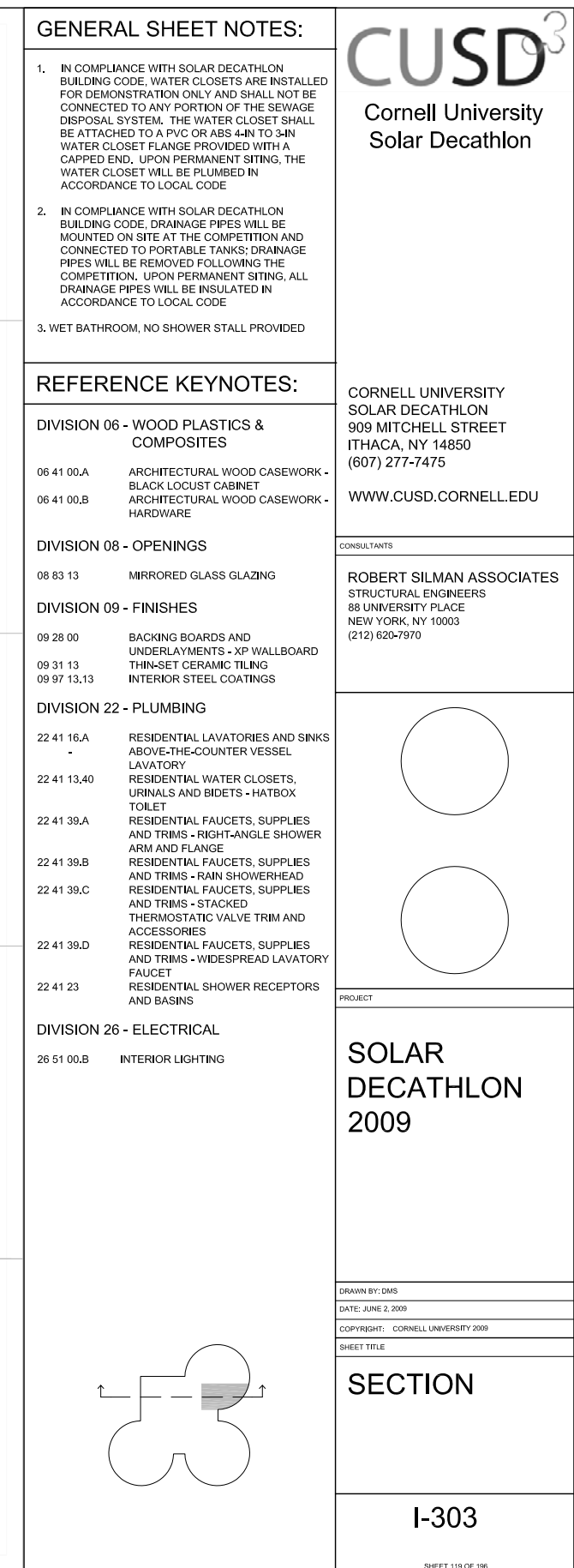
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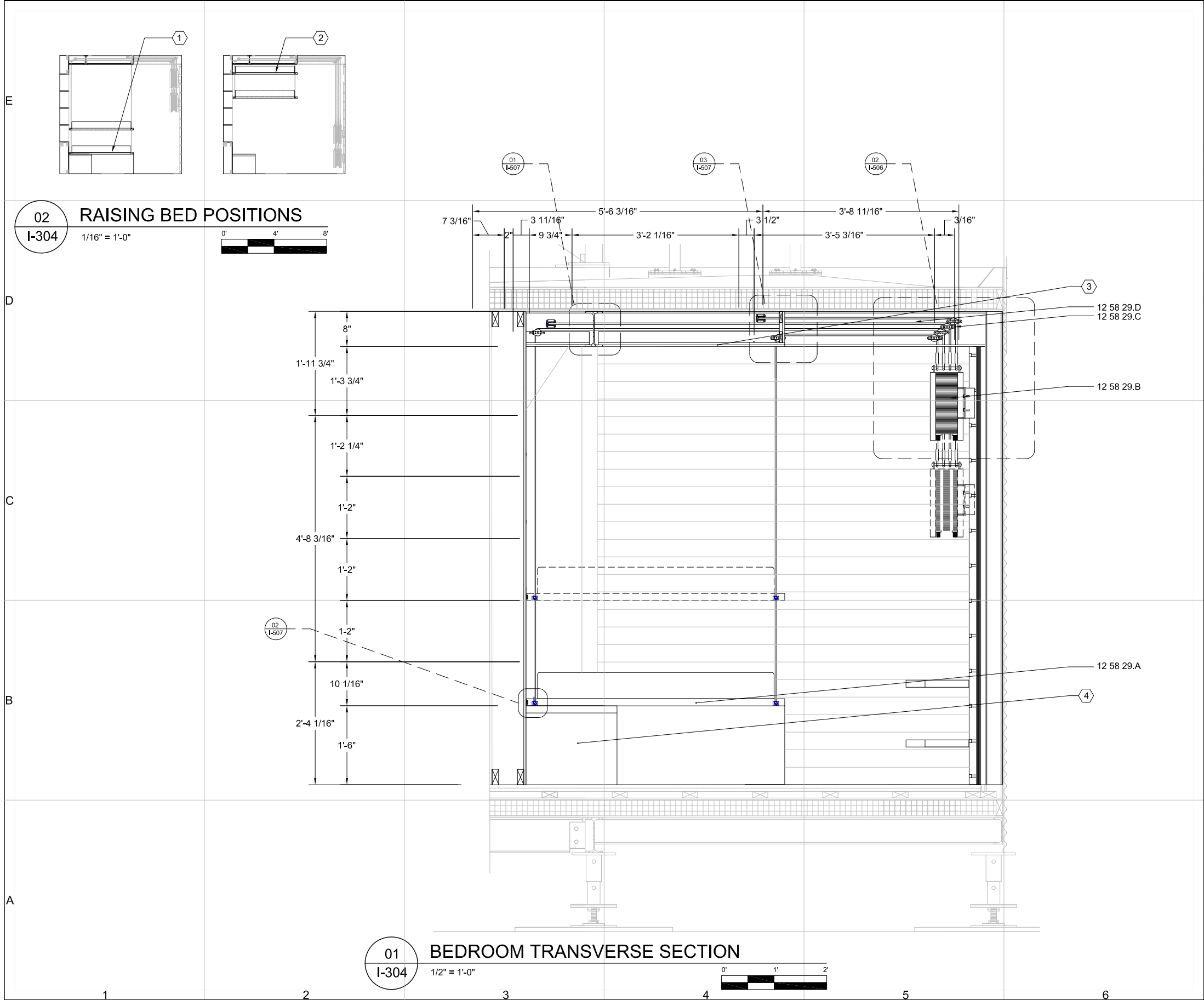
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SECTION

I-302

SHEET 118 OF 196





GENERAL SHEET NOTES:

1.

BED RESTS ON A PLATFORM THAT CAN RAISE AND LOWER WITH THE ASSISTANCE OF A COUNTERWEIGHT CONNECTED BY CABLES AND PULLEYS

2.

DIMENSIONS BETWEEN SHELVES IN MILLWORK WALL ARE FROM SHELF CENTERS

REFERENCE KEYNOTES:

DIVISION 12 - FURNISHINGS

12 58 29.A

BEDS - BED PLATFORM AND FRAME

12 58 29.B

BEDS - BED COUNTERWEIGHT

12 58 29.C

BEDS - BED ACCESSORIES AND HARDWARE

12 58 29.D

BEDS - TENEX ROPE

SHEET KEYNOTES:

1.

BED IN LOWERED POSITION

2.

BED IN RAISED POSITION

3.

SOFFIT

4.

BLANKETCHEST

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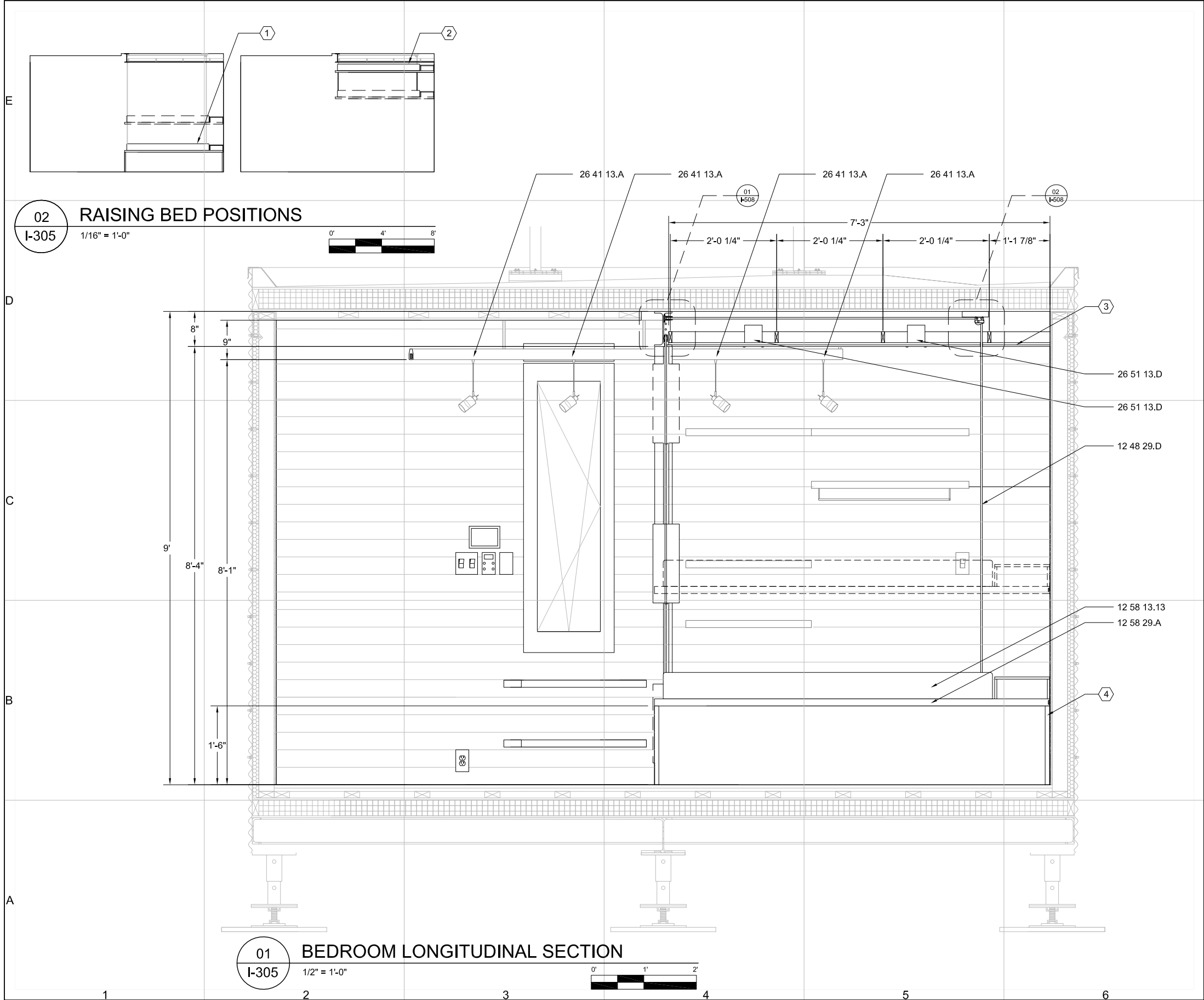
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SECTION

I-304

SHEET 130 OF 196



GENERAL SHEET NOTES:

1. BED RESTS ON A PLATFORM THAT CAN RAISE AND LOWER WITH THE ASSISTANCE OF A COUNTERWEIGHT CONNECTED BY CABLES AND PULLEYS
2. FLOOR TO TRACK HEIGHT AND TRACK TO CEILING HEIGHT FOR TRACK LIGHTING SYSTEM TYPICAL FOR ALL TRACK LIGHT LOCATIONS
3. SEE E-605 FOR LIGHTING SCHEDULE

REFERENCE KEYNOTES:

DIVISION 12 - FURNISHINGS

- | | |
|------------|-------------------------------------|
| 12 58 29.A | BEDS - BED PLATFORM AND FRAME |
| 12 58 29.B | BEDS - BED COUNTERWEIGHT |
| 12 58 29.C | BEDS - BED ACCESSORIES AND HARDWARE |
| 12 58 29.D | BEDS - TENEX ROPE |
| 12 58 14 | MATTRESS - FULL SIZE " |

DIVISION 26 - ELECTRIC

- | | |
|------------|--|
| 26 41 13.A | INTERIOR LIGHTING - TRACK LIGHT |
| 26 51 13.D | INTERIOR LIGHTING - RECESSED LED LIGHT |

SHEET KEYNOTES:

1. BED IN LOWERED POSITION
2. BED IN RAISED POSITION
3. SOFFIT
4. HINGED BED SUPPORTS

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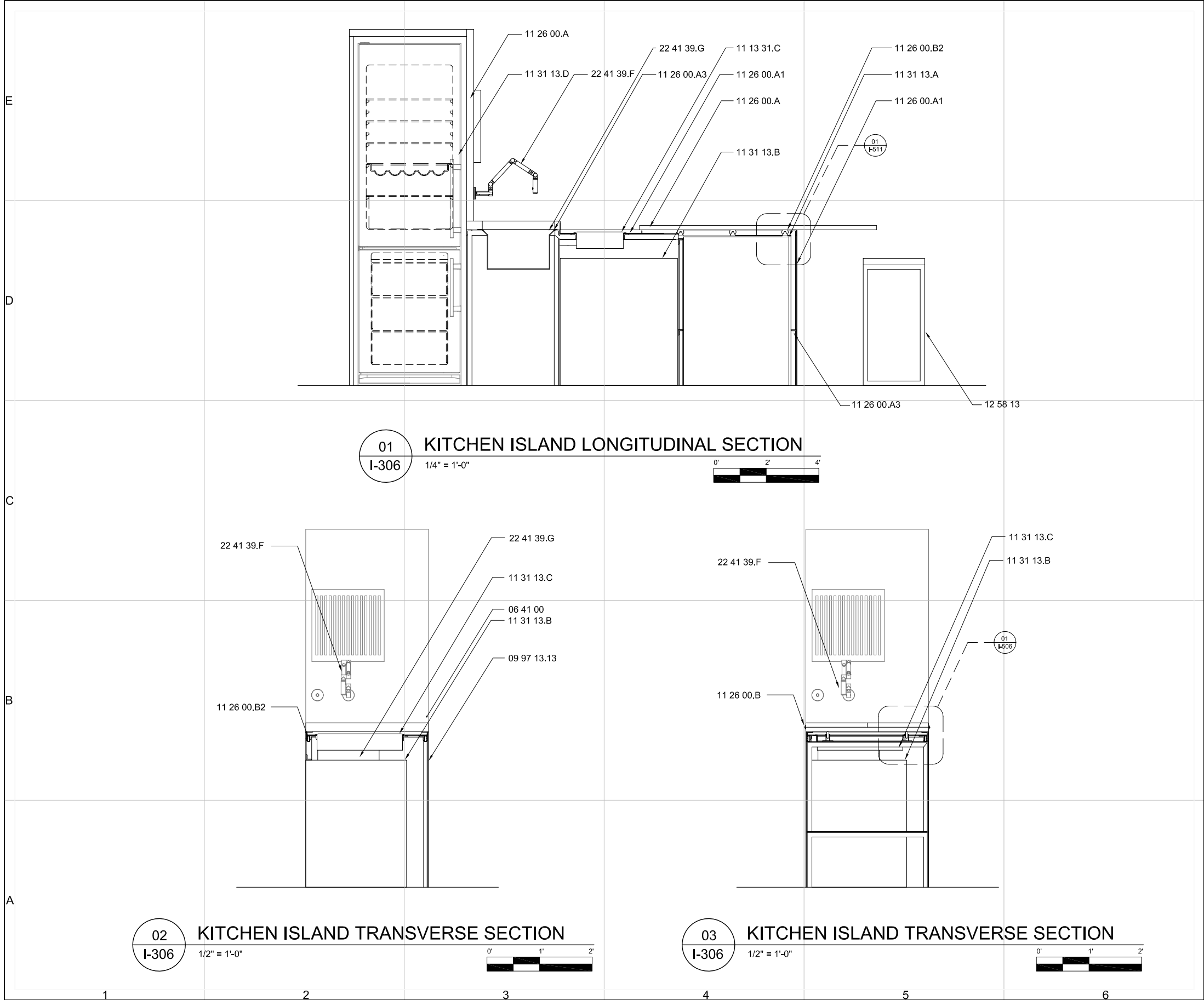
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SECTION

I-305



REFERENCE KEYNOTES:

- DIVISION 06 - WOOD, PLASTICS AND COMPOSITES
06 41 00 ARCHITECTURAL WOOD CASEWORK - BEECH
- DIVISION 09 - FINISHES
09 97 13.13 INTERIOR STEEL COATING
- DIVISION 11 - EQUIPMENT
11 26 00.A UNIT KITCHENS - 2" LAMINATED BEECH COUNTERTOP
11 26 00.B UNIT KITCHENS - 1" BEECH EXTENDING TABLE
11 26 00.A2 UNIT KITCHENS - 16 GA. COLD ROLLED STEEL SHEET
11 26 00.A3 UNIT KITCHENS - 1½"x1½" STEEL ANGLE STOCK
11 26 00.B UNIT KITCHENS - SOSS 208 INVISIBLE HINGES
11 26 00.B1 UIT KITCHENS - ¾" DRAWER ROLLERS
11 26 00.B2 UNIT KITCHENS - 18" EXTENDING DRAWER SLIDES
11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - DISHWASHER
11 31 13.B RESIDENTIAL KITCHEN APPLIANCES - OVEN
11 31 13.C RESIDENTIAL KITCHEN APPLIANCES - DVA STOVETOP
11 31 13.D RESIDENTIAL KITCHEN APPLIANCES - REFRIGERATOR
- DIVISION 12 - FURNISHINGS
12 58 19 DINING TABLES AND CHAIRS - BAR STOOLS
- DIVISION 22 - PLUMBING
22 41 16.D RESIDENTIAL LAVATORIES AND SINKS - STAINLESS STEEL SINK
22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - WALL MOUNT KITCHEN SINK FAUCET

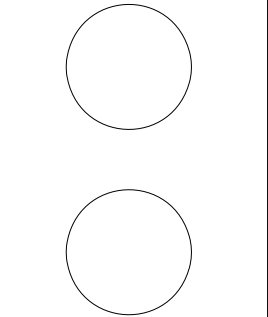


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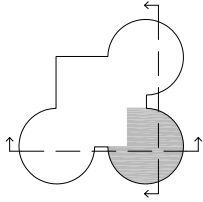


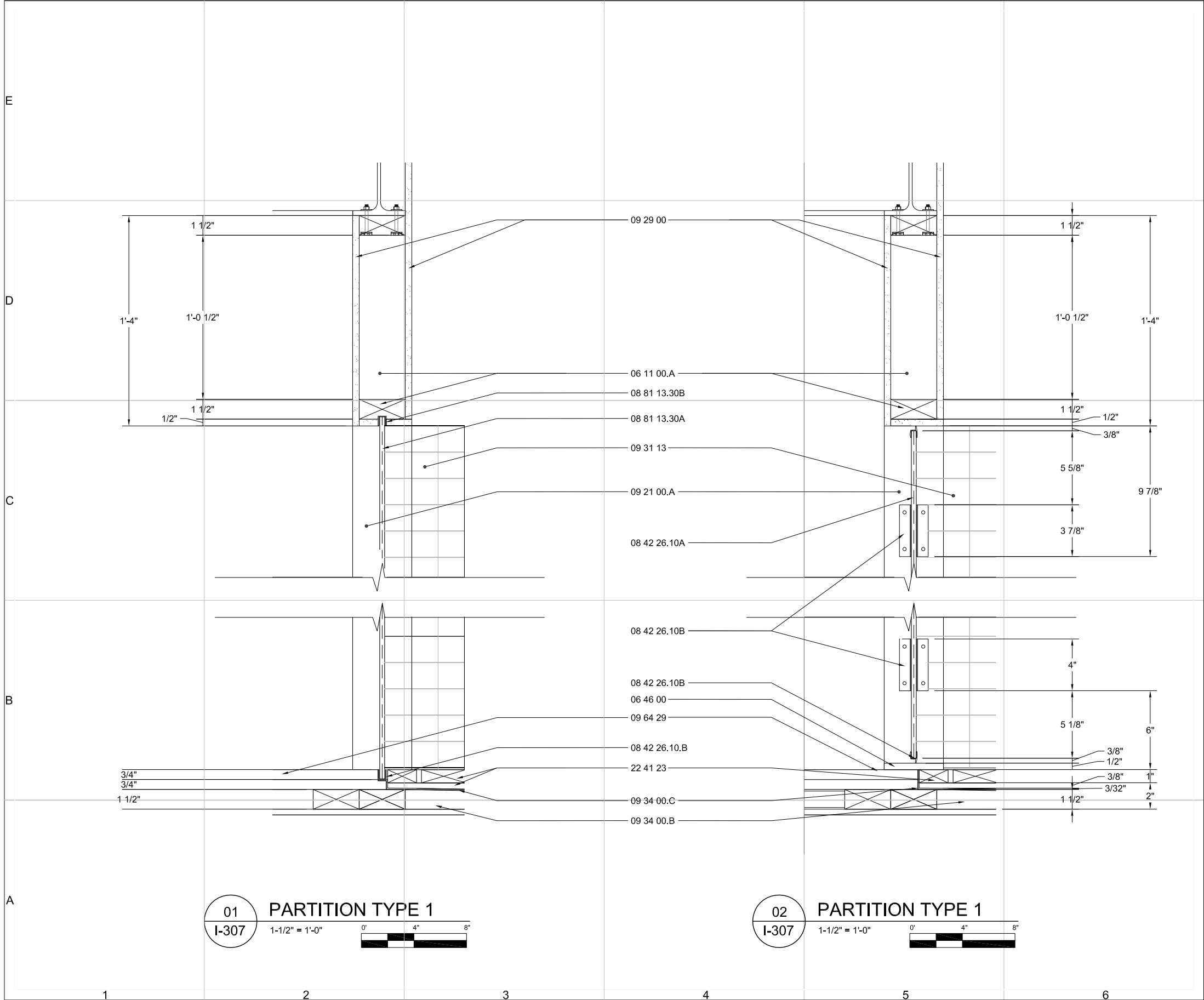
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SECTION

I-306





GENERAL SHEET NOTES:

1. ALL GLASS 3/8" THICK

REFERENCE KEYNOTES:

DIVISION 06 - WOODS PLASTICS & COMPOSITES

- 06 11 00.A WOOD FRAMING - 2x4 STUD
06 46 00 WOOD TRIM - BLACK LOCUST

DIVISION 08 - OPENINGS

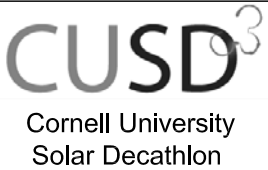
- 08 42 26.10A ALL-GLASS ENTRANCES - SWINGING GLASS DOOR
08 42 26.10B ALL-GLASS ENTRANCES - SWINGING GLASS DOOR HARDWARE
08 81 13.30A DECORATIVE GLASS GLAZING - SANDBLASTED GLASS
08 81 13.30B DECORATIVE GLASS GLAZING - SANDBLASTED GLASS HARDWARE

DIVISION 09 - FINISHES

- 09 29 00.A GYPSUM BOARD - 1/2" HIGH FLEX WALLBOARD
09 31 13 THIN-SET CERAMIC TILING
09 34 00.B WATERPROOFING-MEMBRANE TILING - SLOPED SHOWER TRAY
09 34 00.C WATERPROOFING-MEMBRANE TILING - KERDI MEMBRANE
09 64 29 WOOD STRIP AND PLANK FLOORING - RECLAIMED ASH ENGINEERED FLOORING [F-2]

DIVISION 22 - PLUMBING

- 22 41 23 RESIDENTIAL SHOWER RECEPTORS AND BASINS - BLACK LOCUST WOOD SHOWER GRATE

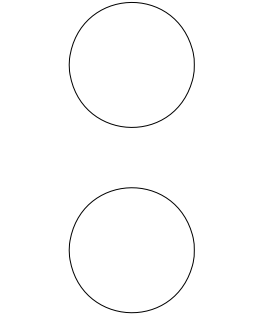


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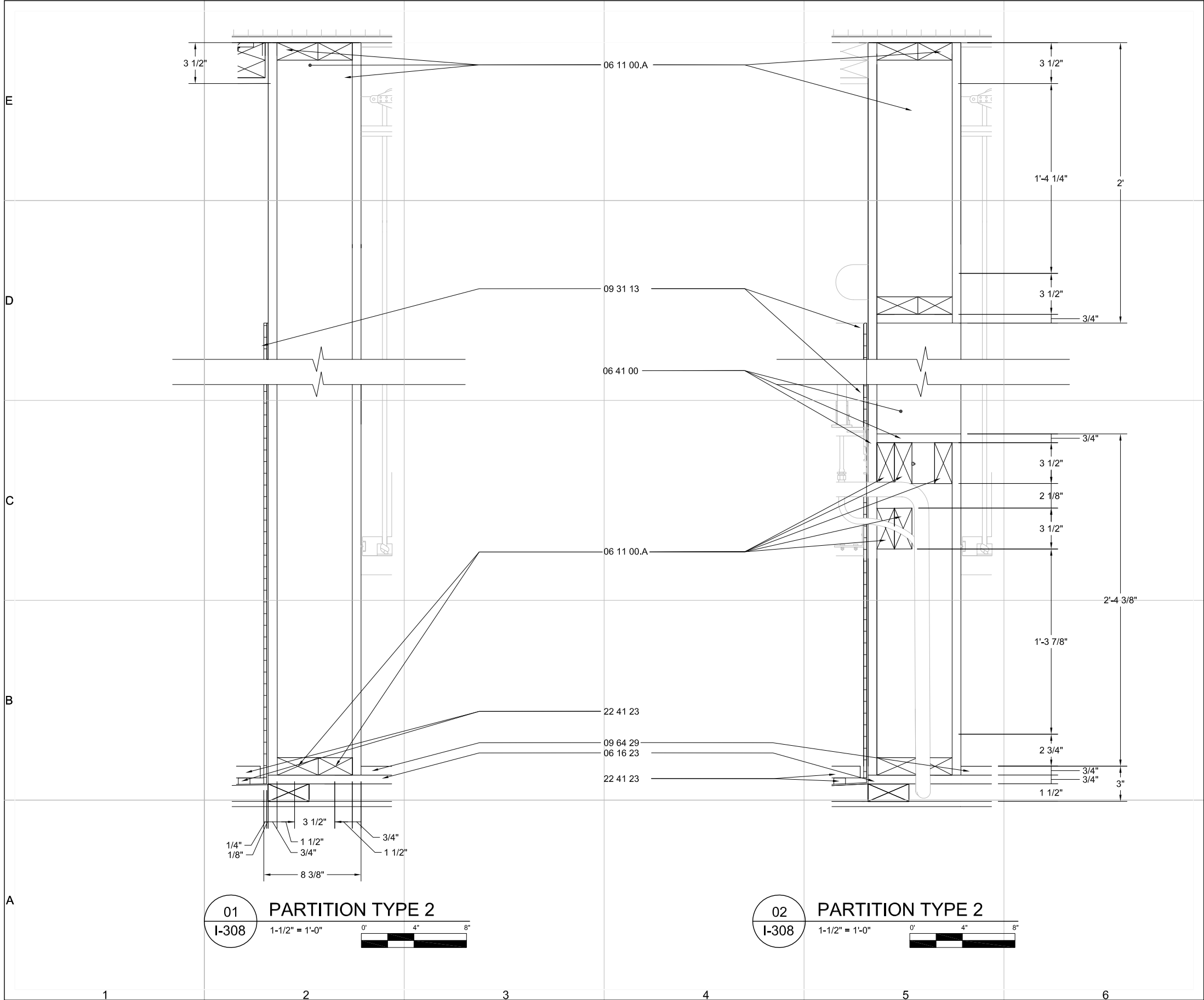
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SECTION

I-307



REFERENCE KEYNOTES:

DIVISION 06 - WOODS PLASTICS & COMPOSITES

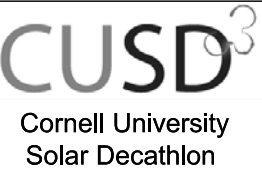
06 11 00.A WOOD FRAMING - 2x4 STUD
06 16 23 SUBFLOORING
06 41 00 ARCHITECTURAL WOOD CASEWORK
06 46 00 WOOD TRIM - BLACK LOCUST

DIVISION 09 - FINISHES

09 70 00 WALL FINISH - 3/8" ASH PANELS
09 31 13 THIN-SET CERAMIC TILING
09 34 00.A WATERPROOFING-MEMBRANE TILING - DRAIN
09 34 00.B WATERPROOFING-MEMBRANE TILING - SLOPED SHOWER TRAY
09 64 29 WOOD STRIP AND PLANK FLOORING - RECLAIMED ASH ENGINEERED FLOORING

DIVISION 22 - PLUMBING

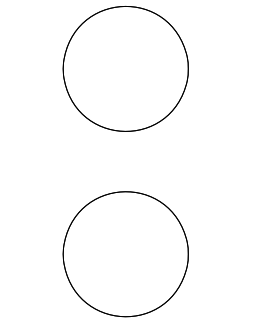
22 41 23 RESIDENTIAL SHOWER RECEPTORS AND DRAINS - BLACK LOCUST WOOD SHOWER GRATE



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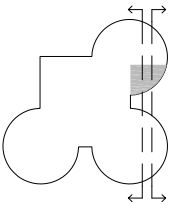
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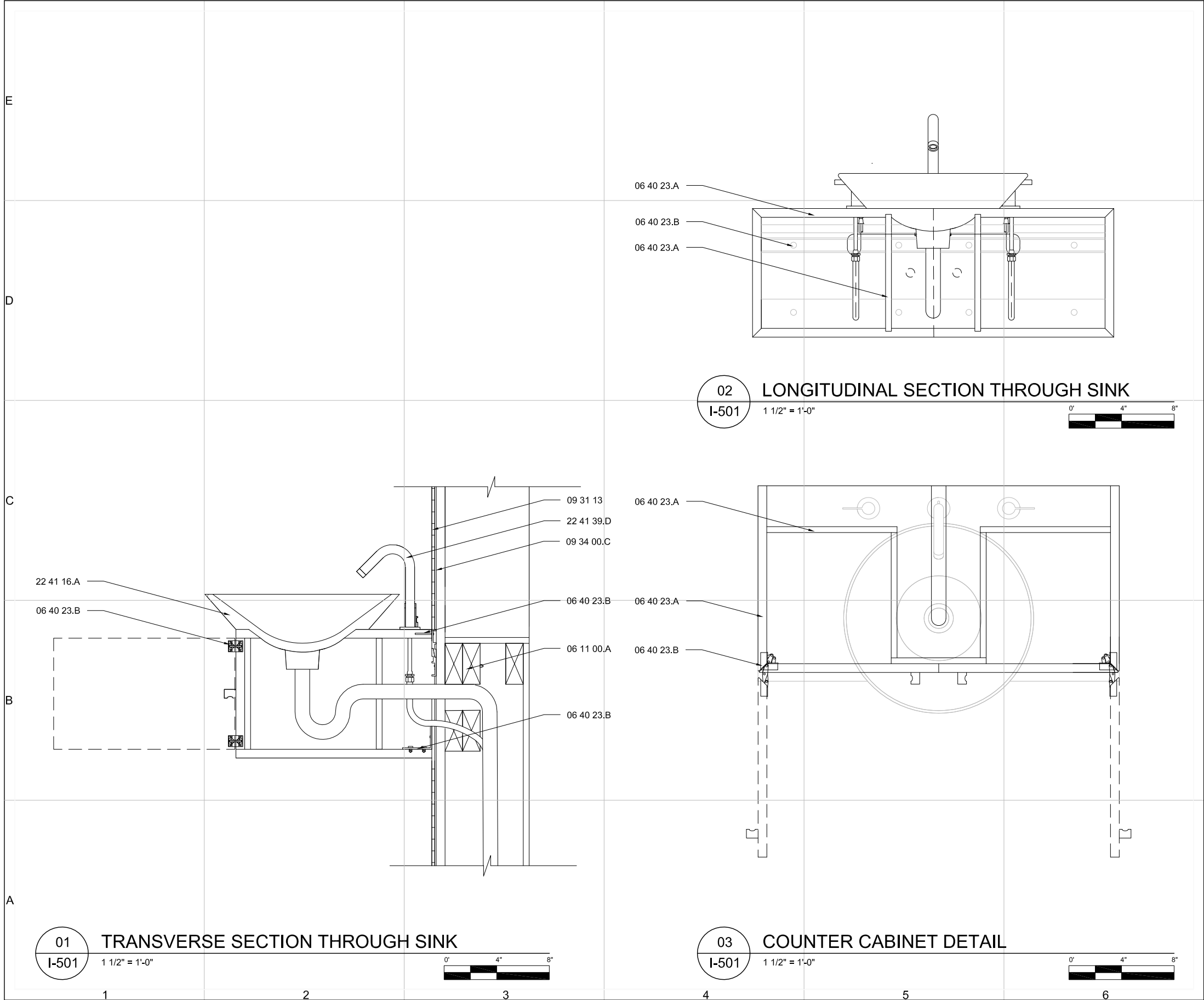
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SECTION

I-308





REFERENCE KEYNOTES:

DIVISION 06 - WOODS PLASTICS & COMPOSITES

- 06 11 00.A WOOD FRAMING - 2x4 STUD
- 06 40 23.A INTERIOR ARCHITECTURAL WOODWORK - BLACK LOCUST
- 06 40 23.B BATHROOM CABINET
- INTERIOR ARCHITECTURAL WOODWORK - BATHROOM CABINET HARDWARE

DIVISION 09 - FINISHES

- 09 31 13 THIN-SET CERAMIC TILING
- 09 34 00.C WATERPROOFING-MEMBRANE TILING - KERDI MEMBRANE

DIVISION 22 - PLUMBING

- 22 41 16.A RESIDENTIAL LAVATORIES AND SINKS - ABOVE THE COUNTER VESSEL LAVATORY
- 22 41 39.D RESIDENTIAL FAUCETS, SUPPLIES AND TRIM - LAVATORY FAUCET

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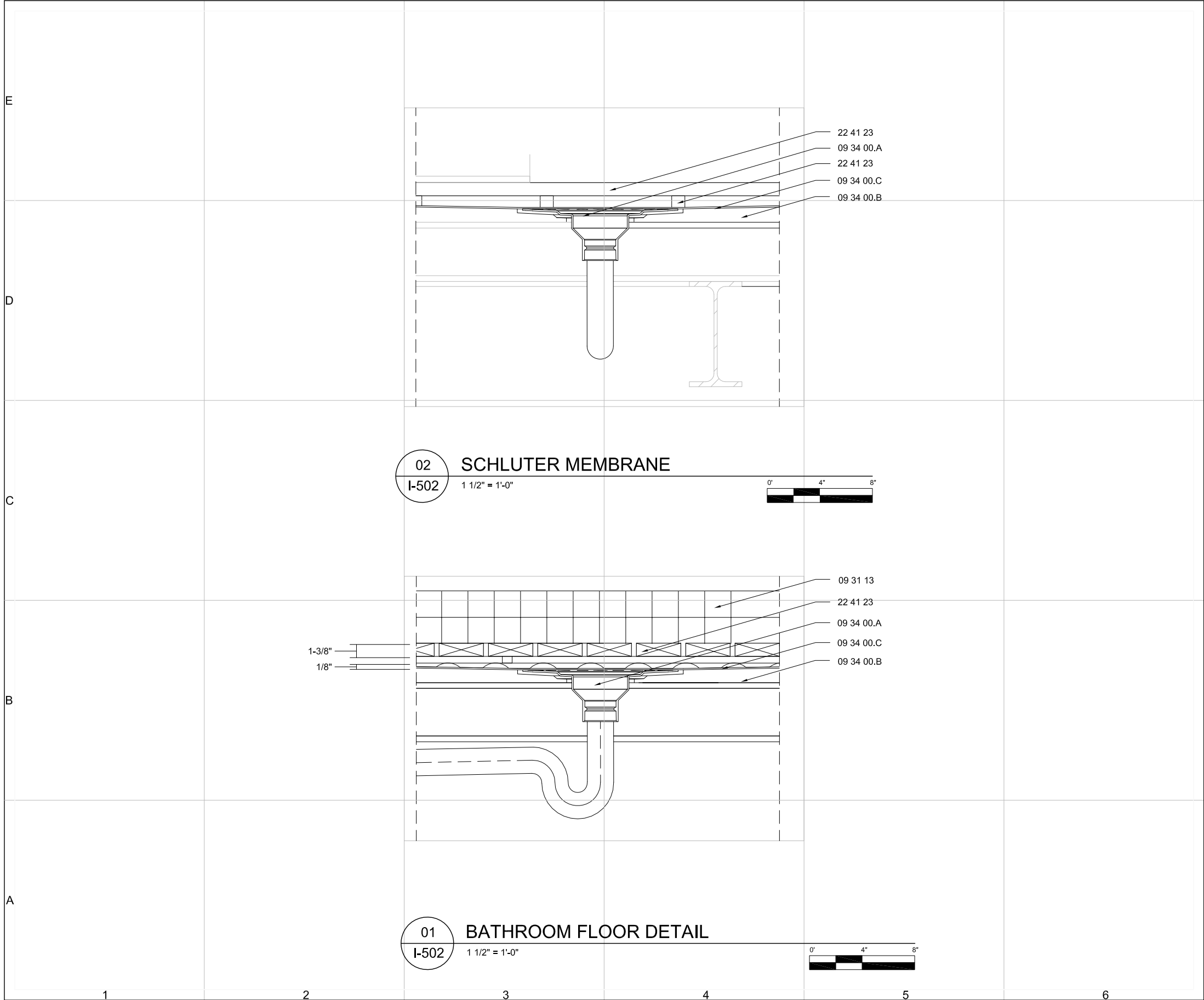
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DETAILS

I-501



REFERENCE KEYNOTES:

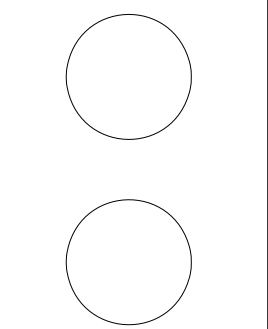
- DIVISION 09 - FINISHES**
- 09 31 13 THIN-SET CERAMIC TILING [VT-1]
 - 09 34 00.A WATERPROOFING-MEMBRANE TILING
 - DRAIN
 - 09 34 00.B WATERPROOFING-MEMBRANE TILING
 - SLOPED SHOWER TRAY
 - 09 34 00.C WATERPROOFING-MEMBRANE TILING
 - KERDI MEMBRANE
- DIVISION 22 - PLUMBING**
- 22 41 23 RESIDENTIAL SHOWER RECEPTORS AND BASINS - BLACK LOCUST WOOD SHOWER GRATE



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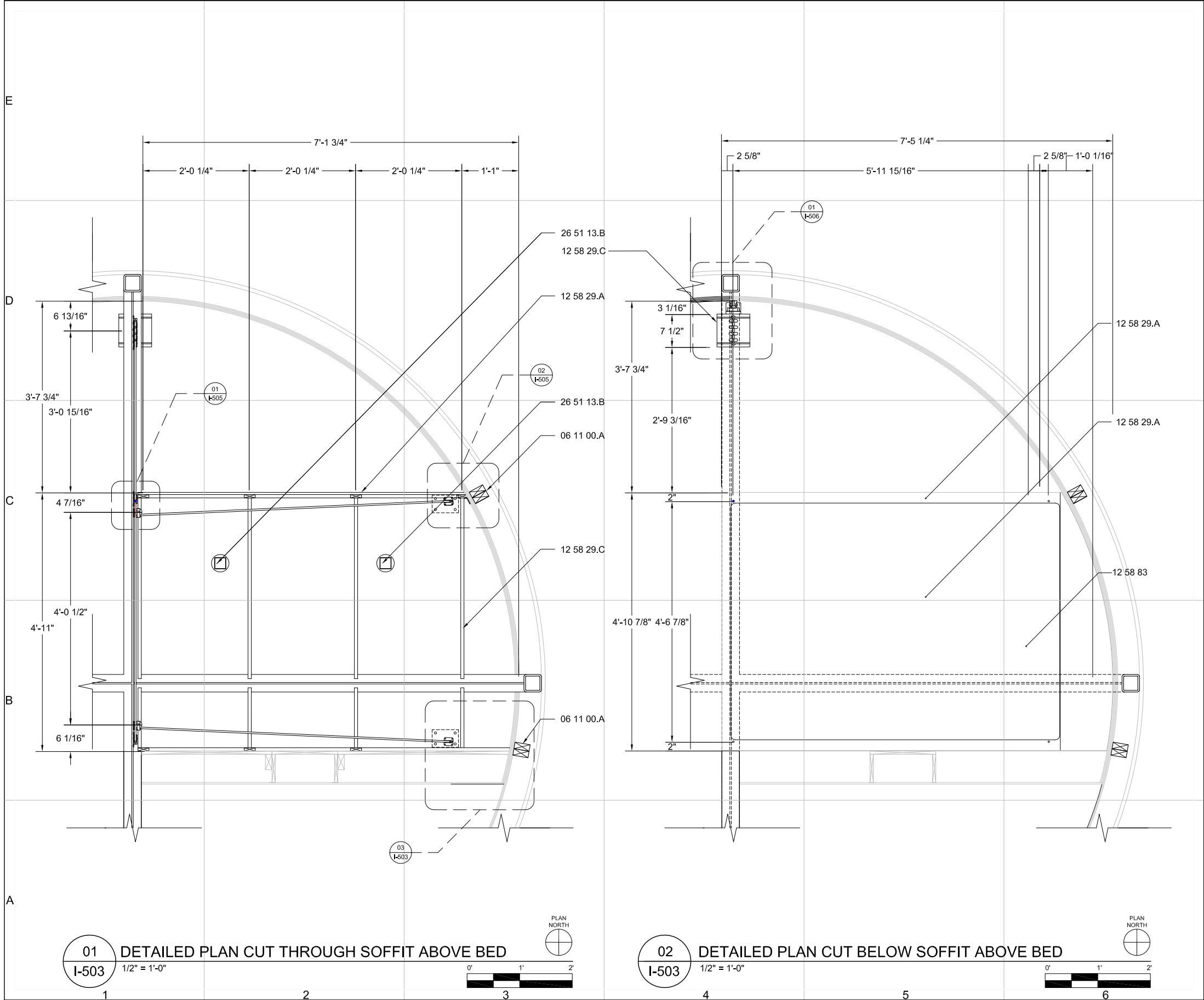
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I-502



GENERAL SHEET NOTES:

1. THE BED RESTS ON A RAISING AND LOWERING PLATFORM WHICH IS ATTACHED TO A COUNTERWEIGHT THROUGH FOUR CABLES
2. THE SOFFIT ABOVE THE BED ENCLOSES THE CABLES AND PULLEYS FOR THE COUNTERWEIGHT SYSTEM

REFERENCE KEYNOTES:

DIVISION 06 - WOODS PLASTICS & COMPOSITES

06 11 00.A WOOD FRAMING - 2x4 STUD

DIVISION 12 - FURNISHINGS

12 58 29.A BEDS - BED PLATFORM AND FRAME
12 58 29.B BEDS - BED COUNTERWEIGHT
12 58 29.C BEDS - BED ACCESSORIES AND HARDWARE
12 58 29.D BEDS - TENEX ROPE
12 58 83 CUSTOM RESIDENTIAL FURNITURE - CUSTOM SHELVING

DIVISION 26 - ELECTRIC

26 51 13.B INTERIOR LIGHTING - RECESSED LED LIGHT



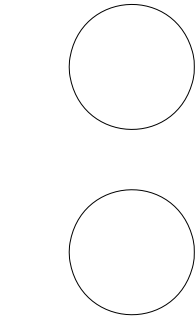
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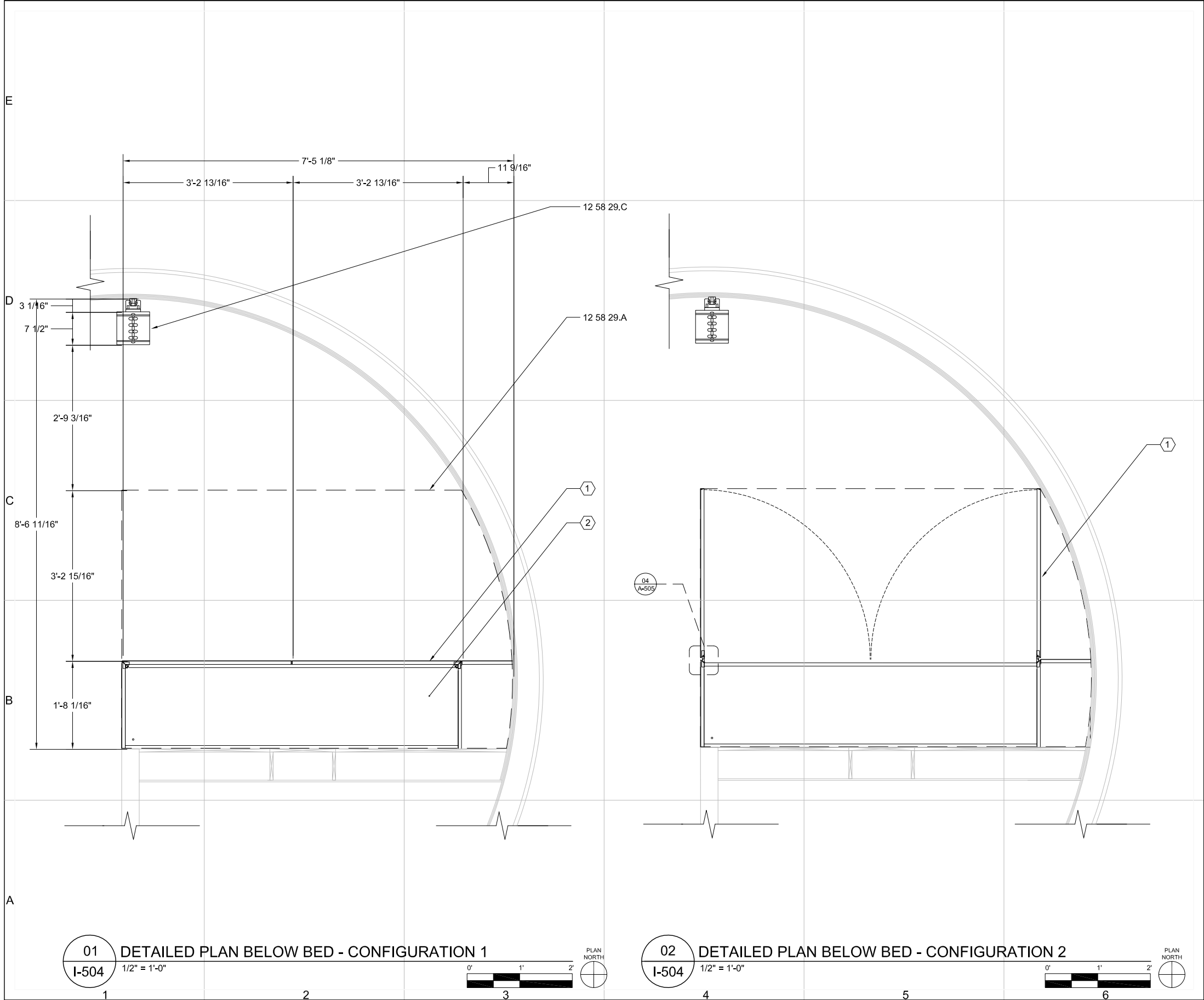
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PLAN

I-503



GENERAL SHEET NOTES:

1. THE BED RESTS ON A RAISING AND LOWERING PLATFORM WHICH IS ATTACHED TO A COUNTERWEIGHT THROUGH FOUR CABLES
2. A BLANKET CHEST WITH OPERABLE HINGED PANELS SUPPORTS THE BED PLATFORM WHEN IN THE DOWN POSITION

REFERENCE KEYNOTES:

DIVISION 12 - FURNISHINGS

- | | |
|------------|-------------------------------------|
| 12 58 29.A | BEDS - BED PLATFORM |
| 12 58 29.C | BEDS - BED ACCESSORIES AND HARDWARE |

SHEET KEYNOTES:

1. BLANKET CHEST
2. HINGED BED SUPPORT PANELS



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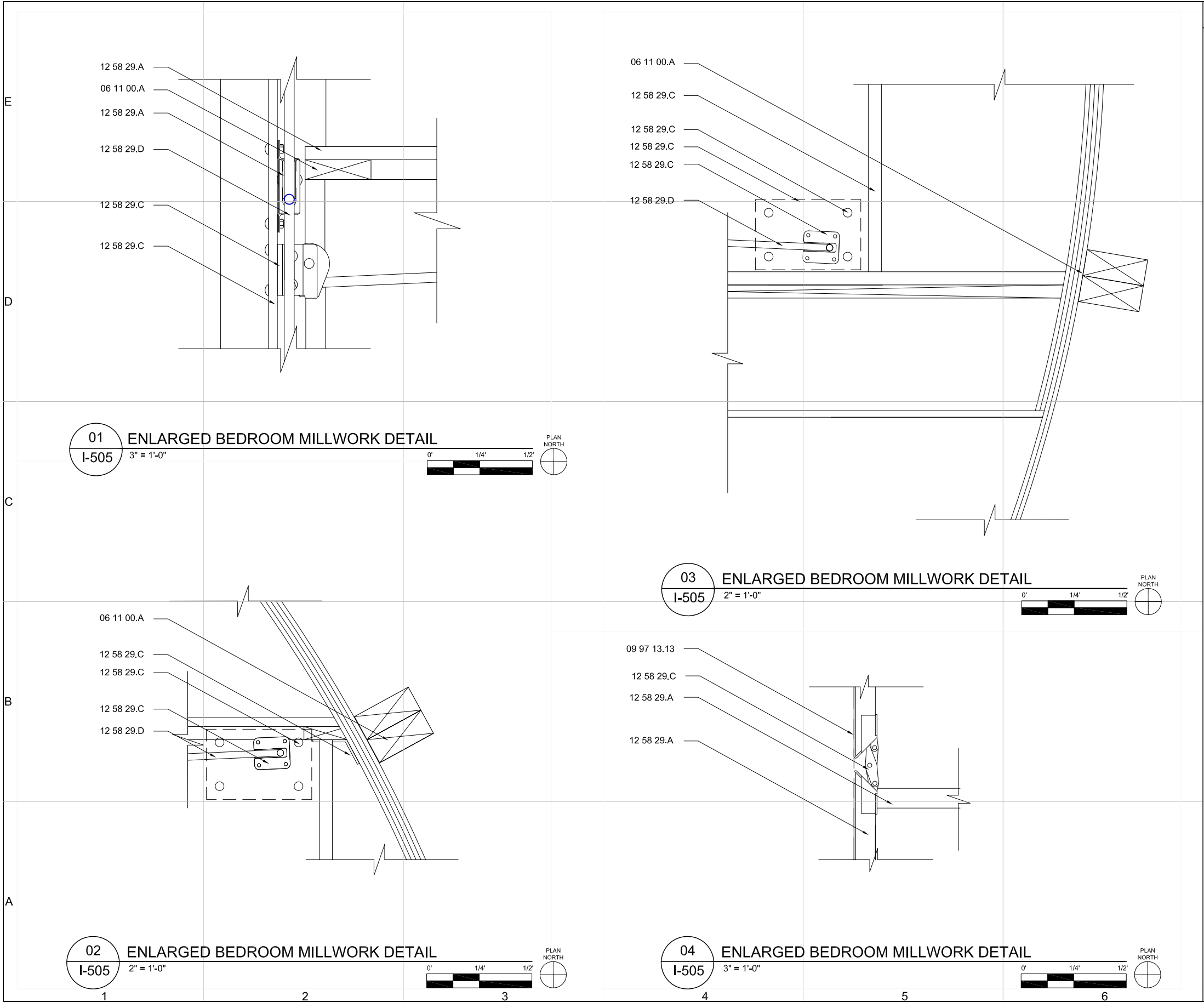
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PLAN

I-504



REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 11 00.A WOOD FRAMING - 2X4 STUDS

DIVISION 09 - FINISHES

09 97 13.13 INTERIOR STEEL COATING

DIVISION 12 - FURNISHINGS

12 58 29.A BEDS - BED PLATFORM AND FRAME

12 58 29.C BEDS - BED ACCESSORIES AND HARDWARE

12 58 29.D BEDS - TENEX ROPE

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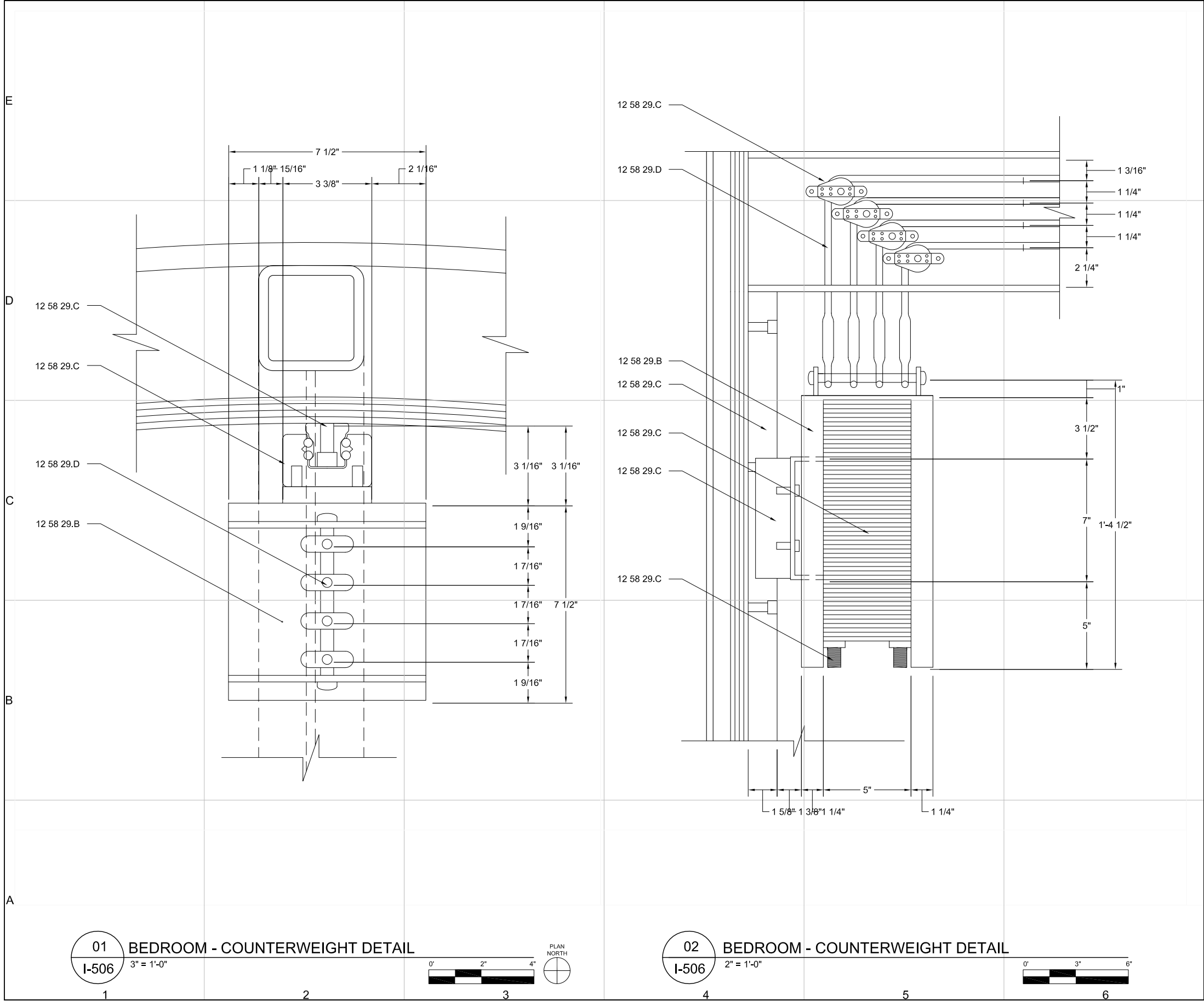
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I-505

SHEET 129 OF 196



REFERENCE KEYNOTES:

DIVISION 12 - FURNISHINGS	
12 58 29. B	BEDS - BED COUNTERWEIGHT
12 58 29. C	BEDS - BED ACCESSORIES AND HARDWARE
12 58 29. D	BEDS - TENEX ROPE



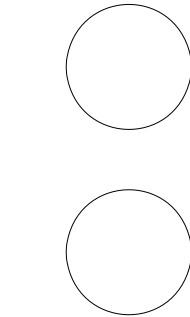
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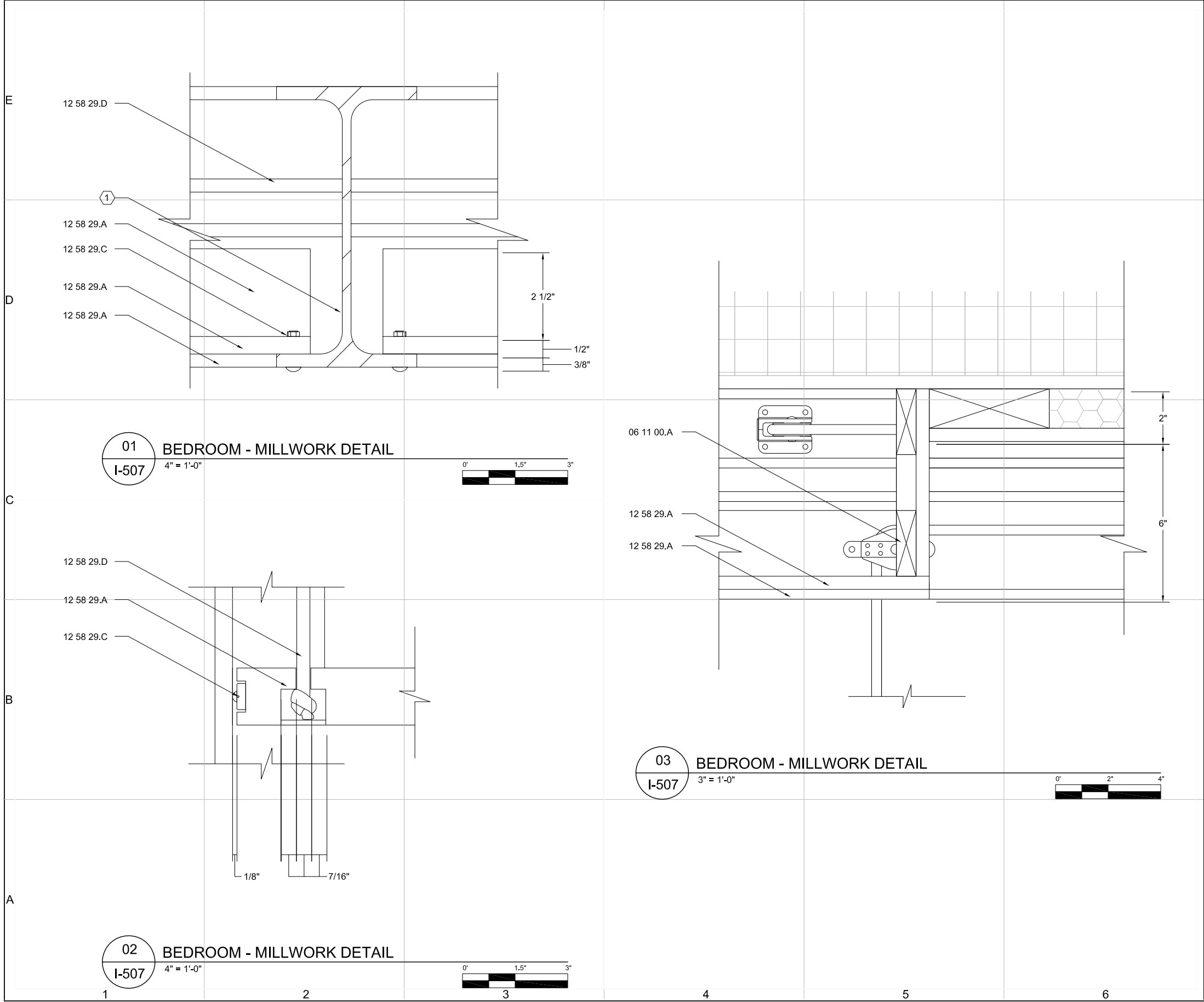
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REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 11 00.A WOOD FRAMING - 2X4 STUDS

DIVISION 12 - FURNISHINGS

12 58 29.A BEDS - BED PLATFORM AND FRAME
12 58 29.C BEDS - BED ACCESSORIES AND HARDWARE
12 58 29.D BEDS - TENEX ROPE

SHEET KEYNOTES:

1. EXISTING I-BEAM

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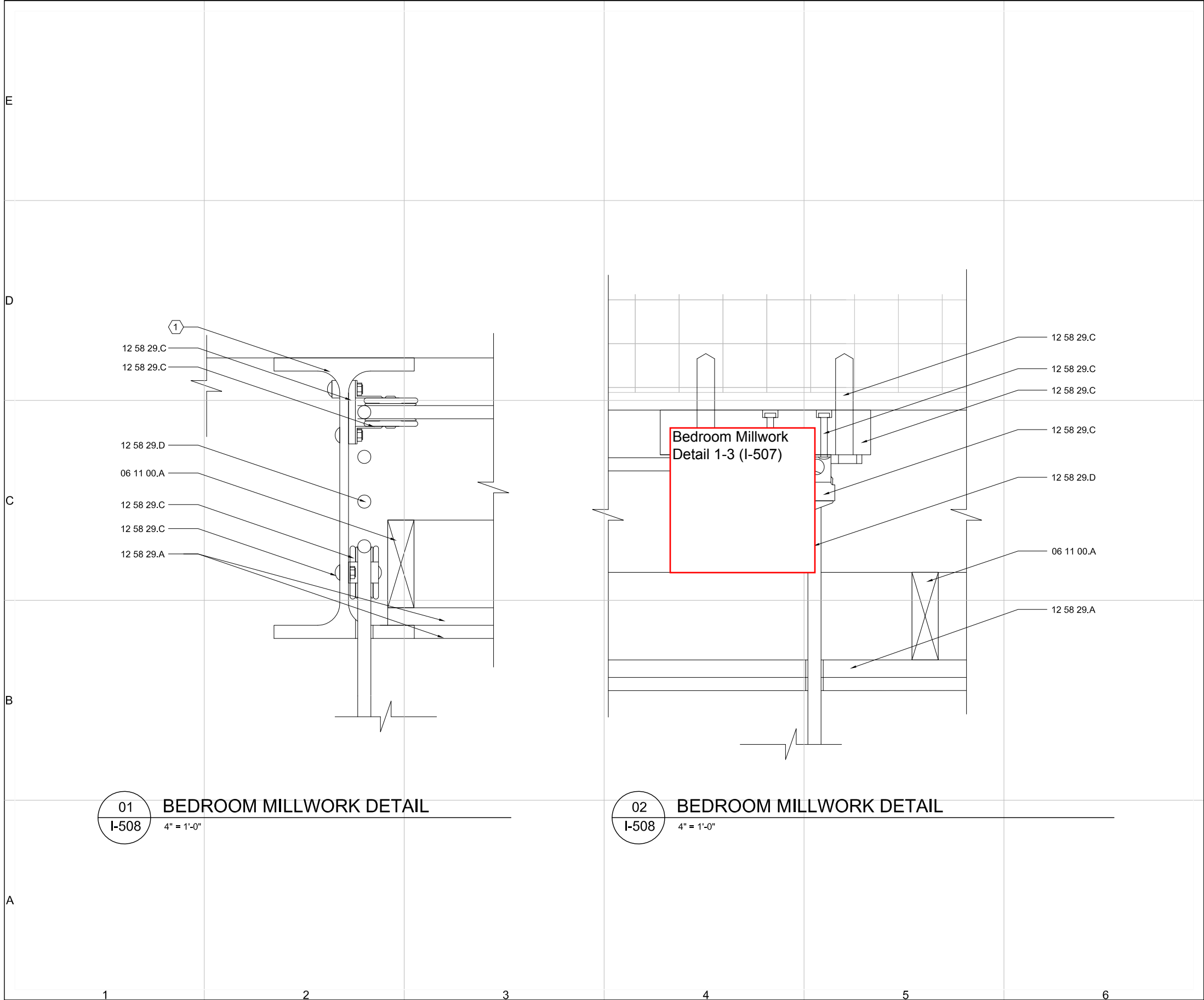
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SHEET TITLE

DETAIL

I-507

SHEET 131 OF 196



01
I-508
BEDROOM MILLWORK DETAIL
4" = 1'-0"

02
I-508
BEDROOM MILLWORK DETAIL
4" = 1'-0"

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 11 00.A WOOD FRAMING - 2X4

DIVISION 12 - FURNISHINGS

12 58 29.A BEDS - BED PLATFORM AND FRAME
12 58 29.C BEDS - BED ACCESSORIES AND HARDWARE
12 58 29.D BEDS - TENEX ROPE

SHEET KEYNOTES:

1. EXISTING I-BEAM

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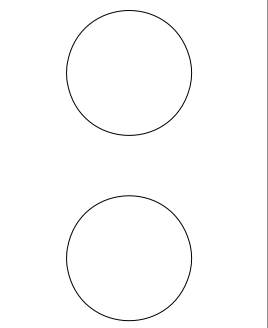
I-508

SHEET 132 OF 196



GENERAL SHEET NOTES:

- TRANSFORMATION OF KITCHEN ISLAND FOR DIAGRAMATIC PURPOSES ONLY
 - STAGE 1. CLOSED COUNTER
 - FAUCET PUSHED AGAINST WALL, COUNTER TOP APPLIANCES HIDDEN
 - STAGE 2. EXTENDED COUNTER
 - SINK AND STOVETOP REVEALED; SURFACE AREA OF COUNTER REMAINS THE SAME
 - STAGE 3. UNFOLDED TABLE
 - COUNTER IS UNFOLDED TO ACCOMMODATE LARGE NUMBERS



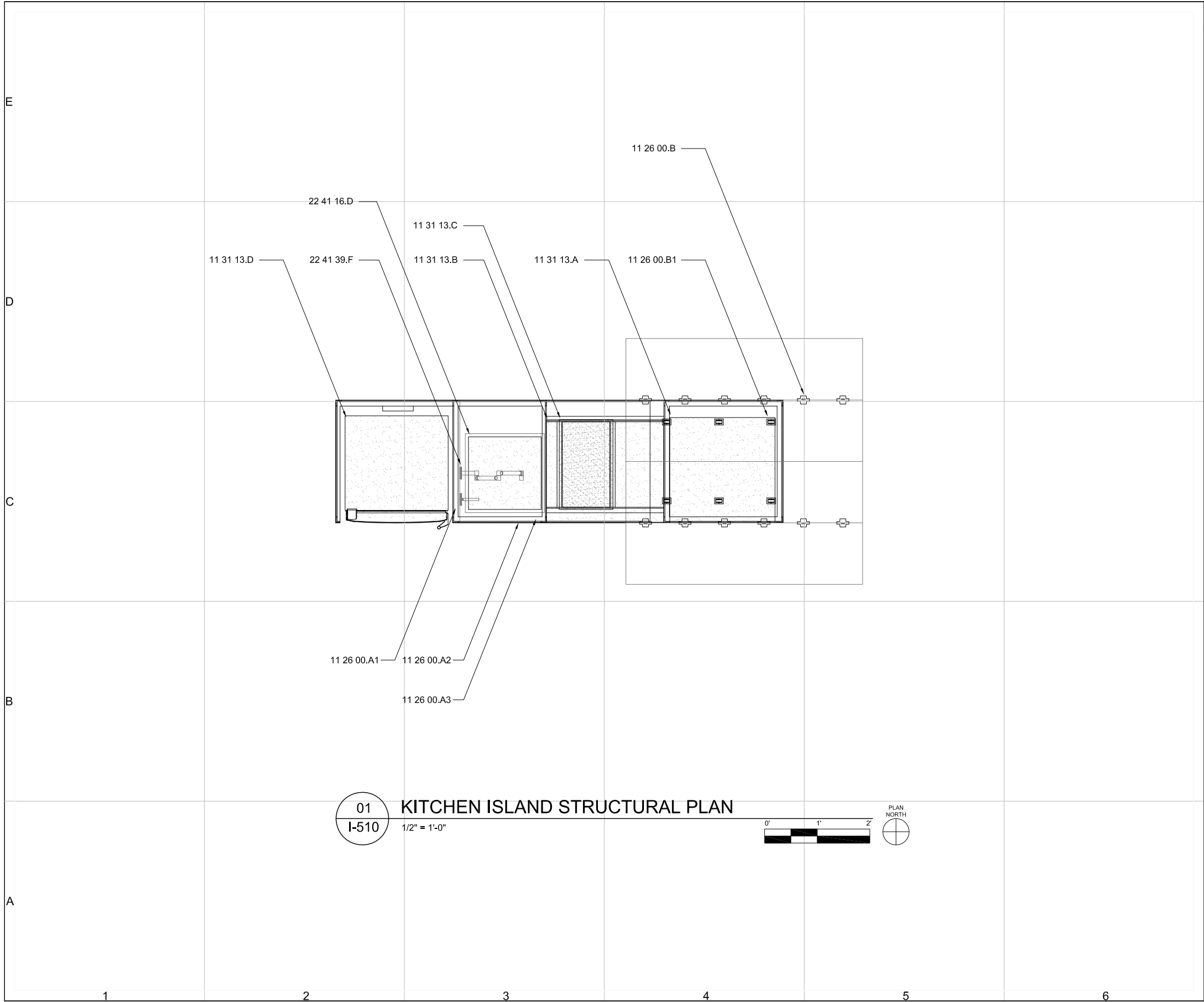
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PLANS &
ELEVATIONS

I-509



GENERAL SHEET NOTES:

DIVISION 11 - EQUIPMENT

- | | |
|-------------|--|
| 11 26 00.A | KITCHEN UNITS - 2" LAMINATED BEECH COUNTERTOP |
| 11 26 00.A2 | KITCHEN UNITS - 16 GA, COLD ROLLED STEEL SHEET |
| 11 26 00.A3 | KITCHEN UNITS - 1 3/4" X 1 3/4" STEEL ANGLE STOCK |
| 11 26 00.B | KITCHEN UNITS - SOSS 208 INVISIBLE HINGES |
| 11 26 00.B1 | KITCHEN UNITS - 3/8" DRAWER ROLLERS |
| 11 31 13.A | RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER |
| 11 31 13.B | KITCHEN RESIDENTIAL APPLIANCES - ELECTRIC BUILT-IN OVEN |
| 11 31 13.C | RESIDENTIAL KITCHEN APPLIANCES - DVA STOVETOP |
| 11 31 13.D | RESIDENTIAL KITCHEN APPLIANCES - REFRIGERATOR |

DIVISION 22 - PLUMBING

- | | |
|------------|--|
| 22 41 16.D | RESIDENTIAL LAVATORIES AND SINKS - STAINLESS STEEL SINK |
| 22 41 39.F | RESIDENTIAL FAUCETS, SUPPLIES AND TRIMS - WALL MOUNT KITCHEN SINK FAUCET |



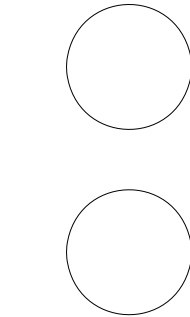
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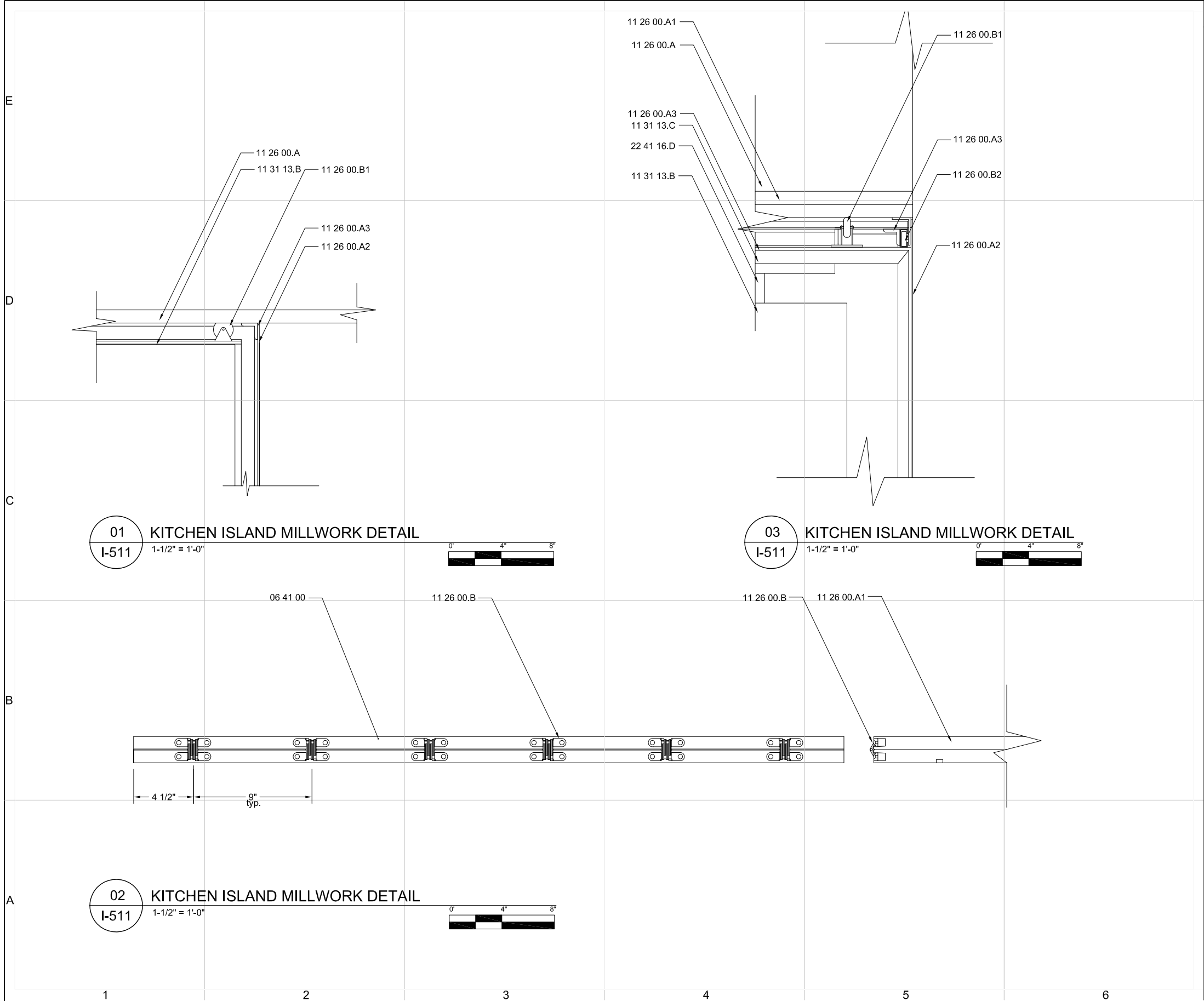
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I-510



REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

11 26 00.A	KITCHEN UNITS - 2" LAMINATED BEECH COUNTERTOP
11 26 00.A1	KITCHEN UNITS - 1" LAMINATED BEECH EXTENDING TABLE
11 26 00.A2	KITCHEN UNITS - 16 GA. COLD ROLLED STEEL SHEET
11 26 00.A3	KITCHEN UNITS - 1 1/2" X 1 1/2" STEEL ANGLE STOCK
11 26 00.B	KITCHEN UNITS - SOSS 208 INVISIBLE HINGES
11 26 00.B1	KITCHEN UNITS - 3/8" DRAWER ROLLERS
11 26 00.B2	KITCHEN UNITS - 18" EXTENDING DRAWER SLIDES
11 31 13.B	KITCHEN RESIDENTIAL APPLIANCES - ELECTRIC BUILT-IN OVEN
11 31 13.C	RESIDENTIAL KITCHEN APPLIANCES - DVA STOVETOP
11 31 13.D	RESIDENTIAL KITCHEN APPLIANCES - REFRIGERATOR

DIVISION 22 - PLUMBING

22 41 16.D	RESIDENTIAL LAVATORIES AND SINKS - STAINLESS STEEL SINK
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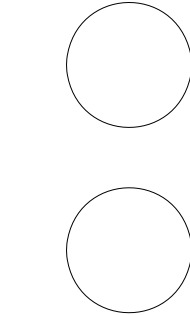
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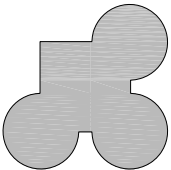
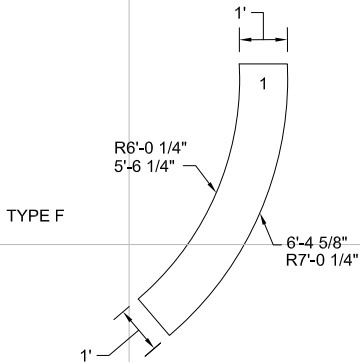
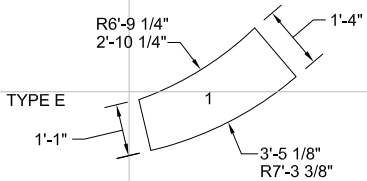
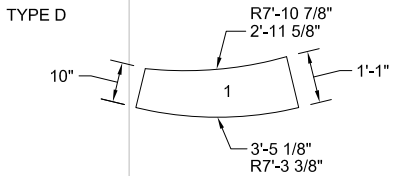
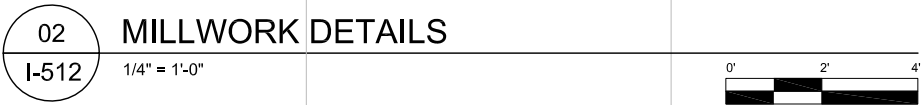
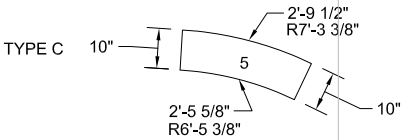
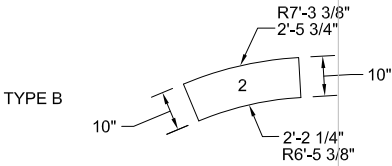
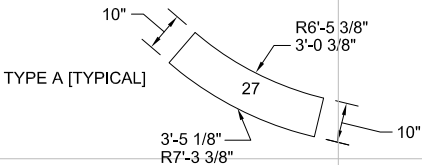
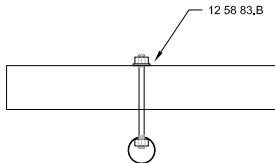
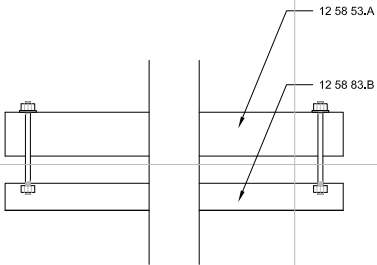
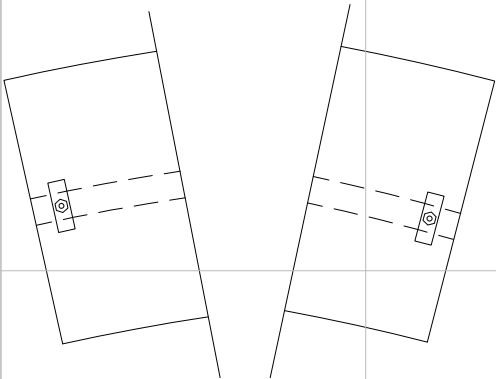
E

D

C

B

A



GENERAL SHEET NOTES:

- REFER TO I-201 - I-204 FOR VERTICAL LAYOUT
- ALL SHELVING TO BE CNC-MILLED

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

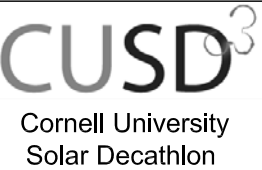
06 11 00.A WOOD FRAMING - 2X4 STUDS

DIVISION 12 - FURNISHINGS

12 58 83.A CUSTOM RESIDENTIAL FURNITURE - BEECH SHELIVING
12 58 83.B CUSTOM RESIDENTIAL FURNITURE - BEECH SHELIVING HARDWARE

SHEET KEYNOTES:

- STEEL RODS MUST BE PARALLEL TO EACH OTHER PER SHELF

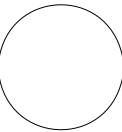
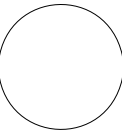


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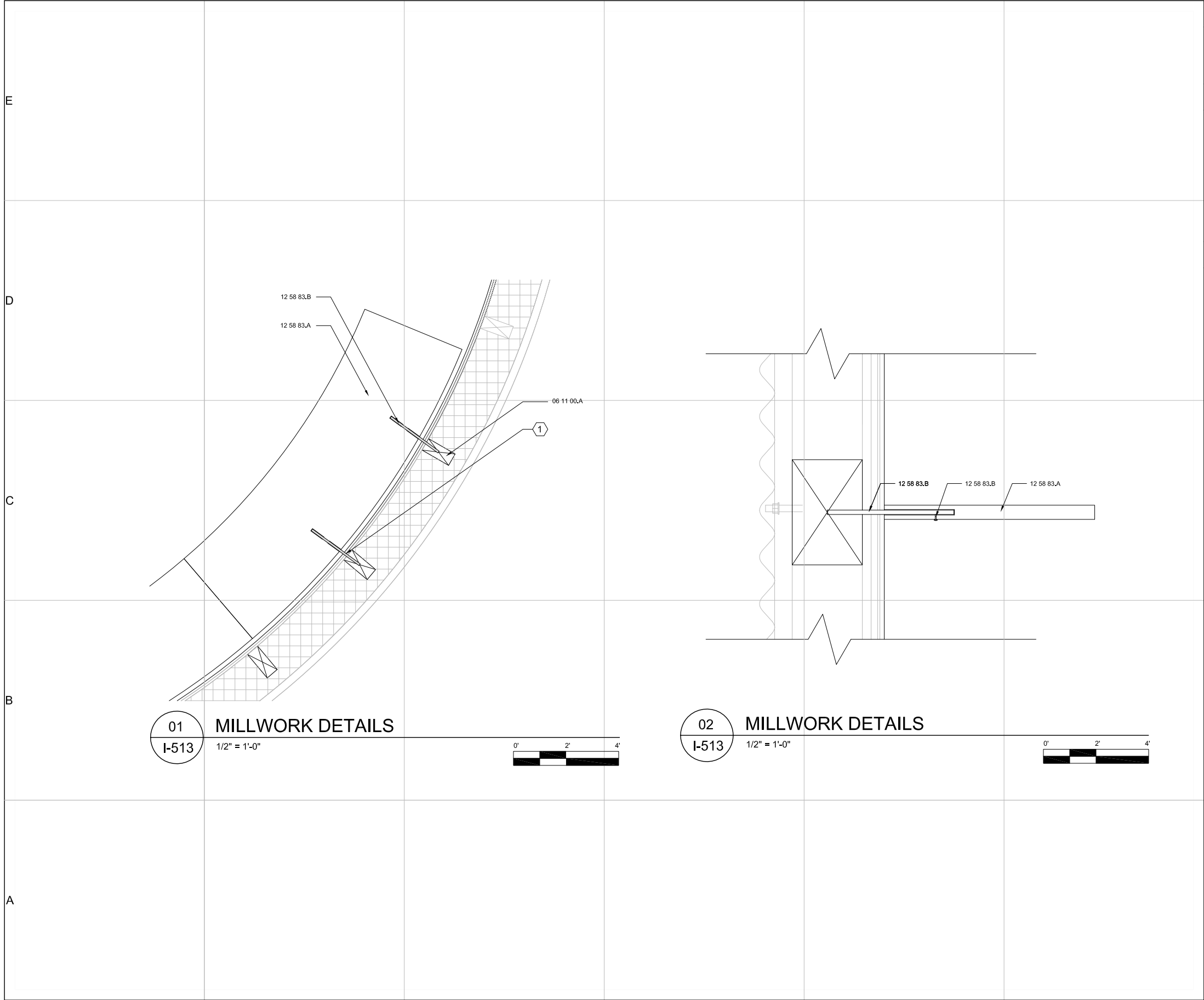
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GENERAL SHEET NOTES:

1. REFER TO I-201 - I-204 FOR VERTICAL LAYOUT
2. ALL SHELIVING TO BE CNC-MILLED

REFERENCE KEYNOTES:

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 11 00.A WOOD FRAMING - 2X4 STUDS

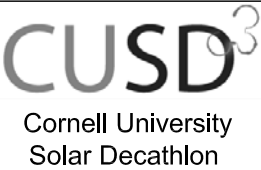
DIVISION 12 - FURNISHINGS

12 58 83.A CUSTOM RESIDENTIAL FURNITURE - BEECH SHELIVING

12 58 83.B CUSTOM RESIDENTIAL FURNITURE - BEECH SHELIVING HARDWARE

SHEET KEYNOTES:

1. STEEL RODS MUST BE PARALLEL TO EACH OTHER PER SHELF

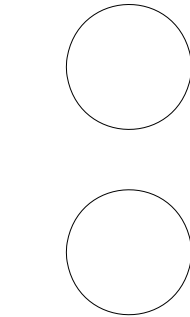


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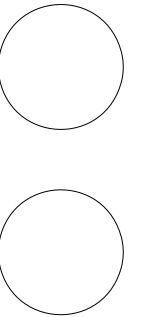
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SCHEDULE

I-601

SHEET 138 OF 196

D	PAINTING AND COATING	MATERIAL	DESCRIPTION	MANUFACTURER	MODEL/PART	COLOR	NOTES
		TYPE 1	PAINT	SHERWIN-WILLIAMS	HARMONY INTERIOR LATEX EGGSHELL PRIMER	WHITE	
		TYPE 2	WHITWASH	ALLBACK	ORGANIC LINSEED OIL PAINT	WHITE	TO BE MIXED WITH TYPE 3
		TYPE 3	STAIN	ALLBACK	ORGANIC LINSEED OIL	CLEAR	
		TYPE 4	WATER-BASED FINISH	PALLMAN	PALL-X 98	CLEAR	
		TYPE 5	POLYURETHANE	TBD	TBD	CLEAR	
		TYPE 6	UNFINISHED				
C	FLOOR FINISH	TYPE F-1	BLACK LOCUST	N/A		6	
		TYPE F-2	RECLAIMED ASH	PIONEER MILLWORKS	AMERICAN GOTHIC ASH ENGINEERED FLOORING	4	
		TYPE SB-1	SHOWER TRAY SYSTEM	SCHLUTER		6	INCLUDES SHOWER TRAY, DRAIN, AND WATERPROOFING MEMBRANE
B	WALL FINISH	W-1	1/4" GYPSUM	NATIONAL GYPSUM	09 29 00	1	2 LAYERS
		W-2	1/4" ASH SLATS WITH 1/4" MASONITE BACKBOARD	N/A		2	4"-6" WIDE SLATES
		W-3	BLACK LOCUST	N/A		6	
		WT-1	2" x 2" PORCELAIN TILE	DALTILE	KEYSTONE 2 X 2 D617 ARCTIC WHITE	6	
A							
<div>I-601</div> <div>FINISH SCHEDULE</div> <div>NOT TO SCALE</div>		1	2	3	4	5	6

E	DOOR TYPE	F.O. SIZE	NUMBER	DESCRIPTION	NOTES		
	TYPE A	2'X2" X 7'-0" X 1-3/4"	(2) SINGLE DOORS	FLUSH HOLLOW WOOD DOOR WITH BIRCH VENEER	TO BE PAINTED WHITE TO BE FACED ON HALLWAY SIDE WITH 1/2" BLACK LOCUST WOOD		
	TYPE D	6'-4" X 7'-0" X 1-3/4"	(1) PAIR OF DOORS		TO BE PAINTED WHITE TO BE FACED ON HALLWAY SIDE WITH 1/2" BLACK LOCUST WOOD		
	TYPE C	2'X6" X 6'-8" X 10mm	(1) SINGLE DOOR	FROSTED TEMPERED GLASS DOOR	FROSTED TO MATCH ADJACENT WALL		
	TYPE E	2'X6" X 7'-0" X 1-3/4"	(1) PAIR OF DOORS	POLYSTYRENE CORE HOLLOW METAL DOOR	TO BE PAINTED WHITE TO BE FACED ON HALLWAY SIDE WITH 1/2" BLACK LOCUST WOOD TO BE FACED ON CLOSET SIDE WITH RIGID FOAM INSULATION		
D							
C	HARDWARE TYPE	DESCRIPTION	QUANTITY	MANUFACTURER	FUNCTION/NUMBER	FINISH	REMARKS
	1	PIVOTS	1 SET/DOOR	RIXSON	128 3/4	US26D	
		EDGE PULL	1/DOOR	TRIMCO	1062	US26D	
		MAGNETIC CATCHES	1/DOOR	IVES	326	AL	BUILD OUT BLOCKING AT HEADER TO SUPPORT CATCH AND FORM LIP TO KEEP DOOR SINGLE-ACTING
	2	HINGES	2	CR LAURENCE	FA044 or 544	CHROME	SQUARE EDGE OFFSET
B		PULL	1	CR LAURENCE	SQ12x12BS	BRUSHED SS	
		DOOR STOP	1				MOUNT TO WALL INSIDE BATHROOM
	3	HINGES	6	MCKINNEY	TA2714 4 1/2 X 4 1/2 NRP	US26D	
		DEADLOCK	1	SARGENT	487 (ACTIVE LEAF)	US26D	NOTCH WOOD TO ALLOW ACCESS
		FLUSH BOLT	2	DCI	780F (INACTIVE LEAF)	US26D	NOTCH WOOD TO ALLOW ACCESS
A		FLUSH PULL	1	BURNS	459 (ACTIVE LEAF)	US32D	NOTCH WOOD TO ALLOW ACCESS
		PERIMETER SEAL	1 SET	NG	134N - 60" X 84"	AL	
		SILL SWEEP	2	NG	C607A - 30"	AL	
		THRESHOLD	1	NG	410-60" X 2 1/2"	AL	THRESHOLD SHOULD EXTEND 1/4" BEYOND EXTERIOR FACE OF DOOR

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SHEET TITLE

SCHEDULE

I-602

I-602

1234567

I-602

DOOR & HARDWARE SCHEDULE

NOT TO SCALE

1234567

SHEET 139 OF 196

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SCHEDULE

I-602

SHEET 139 OF 196

E

D

C

B

A

1

2

3

4

5

6

7

WINDOW TYPE

F.O. SIZE

NUMBER

DESCRIPTION

NOTES

A TYPE: WD 68 F)

3' 9 5/8" X 8' 2" X ---

2 UNITS

WOOD: DOUGLAS FIR, PEFC CERTIFIED
GLAZING: LOW E INSULATED

B (TYPE: WD 68 TT)

2' X 5'-7" X ---

4 UNITS

WOOD: DOUGLAS FIR, PEFC CERTIFIED
GLAZING: LOW E INSULATED

HARDWARE FINISH: GREY

C1 (NANAWALL WD 65)

13'6 9/16" X 8' 3 15/16" X ---

1 UNITS

3'-5 1/16" X 8' 3 15/16"
GLAZING: LOW E INSULATED
WOOD: PEFC CERTIFIED DOUGLAS FIR

CONFIGURATION: 1L4R
CORNERLESS UNIT
HARDWARE: STAINLESS STEEL

4 UNITS

10'-1 1/2" X 8' 3 15/16"
GLAZING: LOW E INSULATED
WOOD: PEFC CERTIFIED DOUGLAS FIR

C2 (NANAWALL WD 65)

8' 0 5/16" X 8' 3 15/16" X ---

1 UNITS

3'-5 1/16" X 8' 3 15/16"
GLAZING: LOW E INSULATED
WOOD: PEFC CERTIFIED DOUGLAS FIR

CONFIGURATION: 1L4R
CORNERLESS UNIT
HARDWARE: STAINLESS STEEL

2 UNITS

4'-7 1/4" X 8' 3 15/16"
GLAZING: LOW E INSULATED
WOOD: PEFC CERTIFIED DOUGLAS FIR

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SHEET TITLE

SCHEDULE

I-603

I-603

WINDOW SCHEDULE

NOT TO SCALE

1

2

3

4

5

6

7

SHEET 140 OF 196



A

I-901

INTERIOR RENDERING COURTYARD LIVINGROOM
NOT TO SCALE

1

2

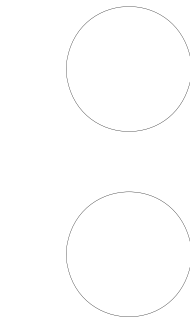
3

4

5

6

7



I-902 INTERIOR RENDERING KITCHEN BEDROOM
NOT TO SCALE

E	CORNELL UNIVERSITY SOLAR DECATHLON 2009 FIRE PROTECTION SERIES					<div>GENERAL SERIES NOTES:</div> <div>1. ALL PLANS UNLESS OTHERWISE SPECIFIED ARE SCALED AT $\frac{1}{4}" = 1'-0"$</div> <div>2. ALL DRAWINGS ARE SUBJECT TO CHANGE BASED ON REVISIONS MADE BY ARCHITECTURAL SET</div> <div>3. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE HEALTH AND SAFETY TEAM AND CLARIFICATION MUST BE MADE AND SIGNED OFF ON BEFORE CONSTRUCTION MAY BEGIN</div>	<div>CUSD³</div> <div>Cornell University Solar Decathlon</div> <div>CORNELL UNIVERSITY SOLAR DECATHLON 909 MITCHELL STREET ITHACA, NY 14850 (607) 277-7475 WWW.CUSD.CORNELL.EDU</div> <div>CONSULTANTS</div> <div>ROBERT SILMAN ASSOCIATES STRUCTURAL ENGINEERS 88 UNIVERSITY PLACE NEW YORK, NY 10003 (212) 620-7970</div> <div>PROJECT</div> <div>SOLAR DECATHLON 2009</div> <div>DRAWN BY: MW</div> <div>DATE: JUNE 2, 2009</div> <div>COPYRIGHT: CORNELL UNIVERSITY 2009</div> <div>SHEET TITLE</div> <div>SYMBOLS AND NOTES</div> <div>F-001</div> <div>SHEET 143 OF 196</div>
D							
C							
B							
A	1	2	3	4	5	6	

SYMBOLS:



- SMOKE DETECTOR



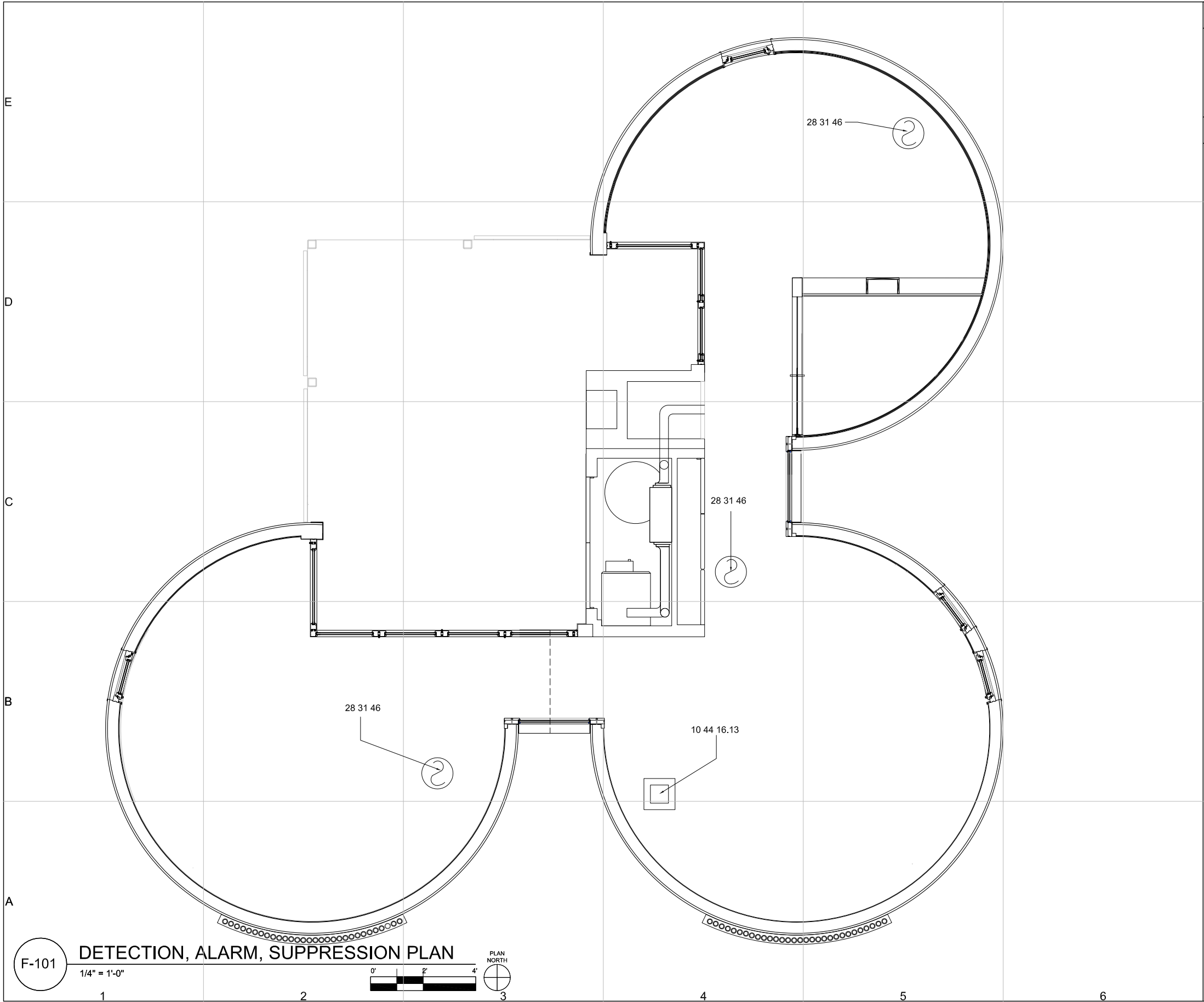
- FIRE EXTINGUISHER



- SECTION CALLOUT




- DETAIL CALLOUT



- GENERAL SHEET NOTES:**
1. FIRE WATCH CAPTAIN: DARA PERL - CONTACT DMP229@CORNELL.EDU
 2. REFER TO HEALTH AND SAFETY PLAN FOR FIRE OPERATIONS PLAN
 3. SMOKE ALARMS WILL BE INTERCONNECTED AS PER IRC, SEC. R313

- REFERENCE KEYNOTES:**
- DIVISION 10 - SPECIALTIES**
10 44 16.13 PORTABLE FIRE EXTINGUISHERS - FIRE EXTINGUISHER
- DIVISION 28 - ELECTRONIC DETECTION AND ALARM**
28 31 46 SMOKE DETECTION SENSORS - SMOKE DETECTOR



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PLAN

F-101

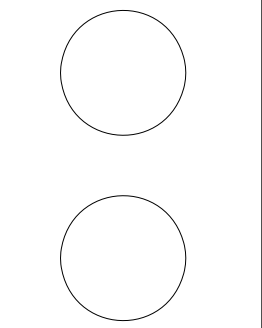
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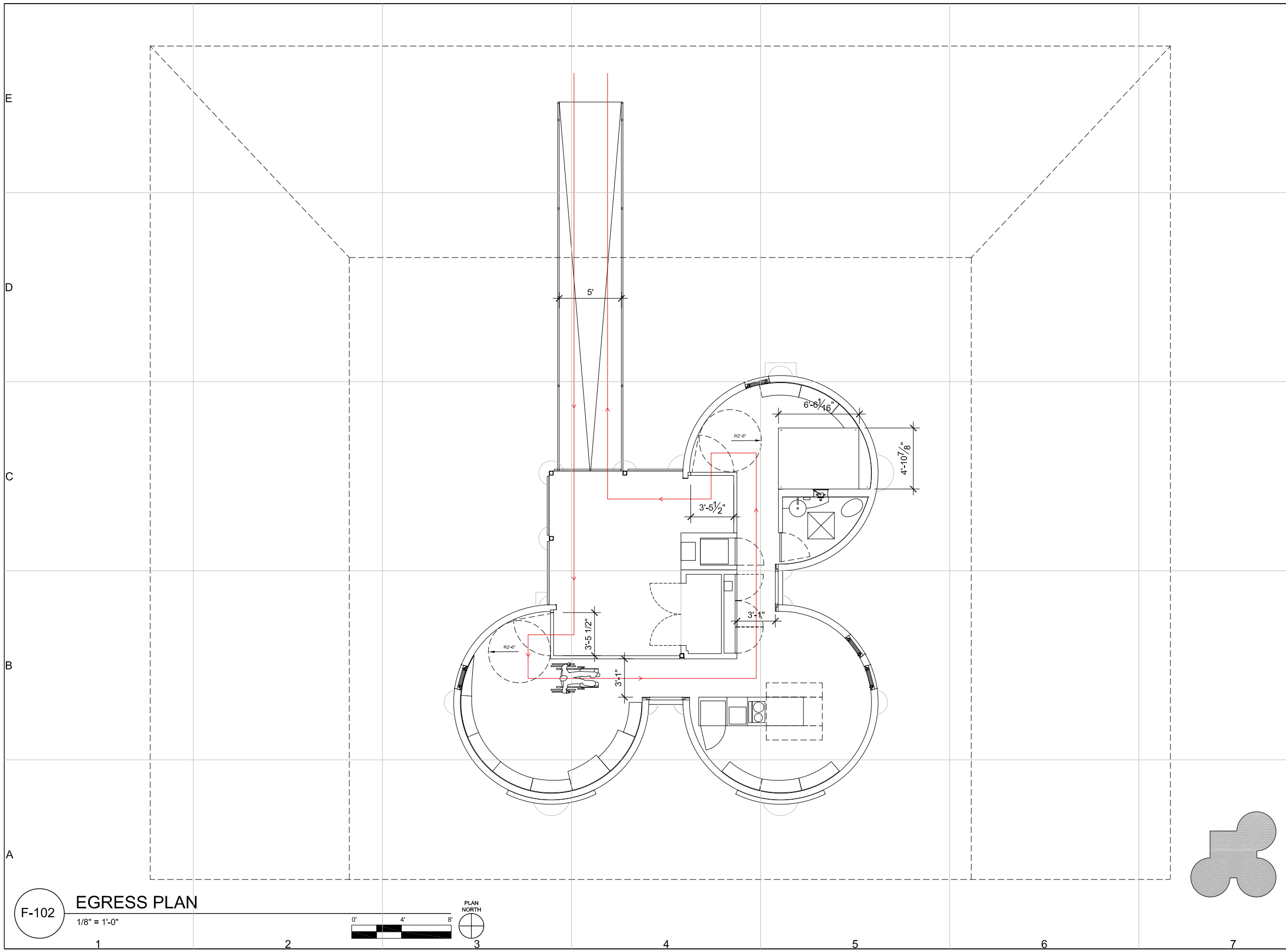
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PLAN

F-102



E

D

C

B

A

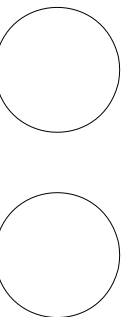
A	B	C	D	E
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1. ALL PLANS UNLESS OTHERWISE SPECIFIED ARE SCALED AT $\frac{1}{4"} = 1'-0"$
2. ALL DRAWINGS ARE SUBJECT TO CHANGE BASED ON REVISIONS MADE BY ARCHITECTURAL SET
3. ALL DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEERING TEAM AND CLARIFICATION MUST BE MADE AND SIGNED OFF ON BEFORE CONSTRUCTION MAY BEGIN



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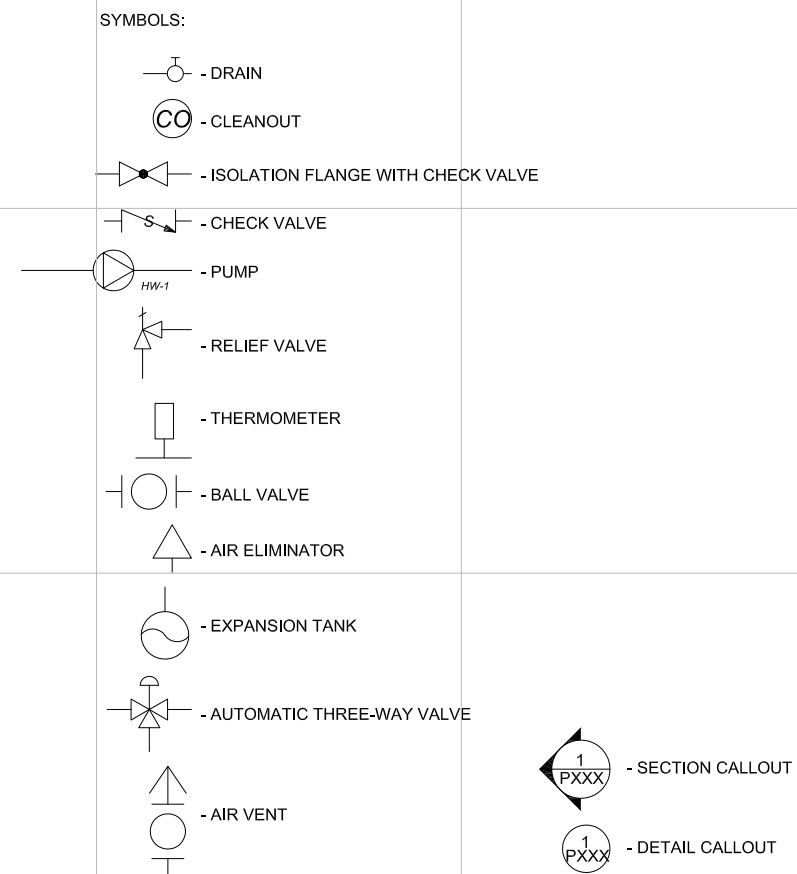
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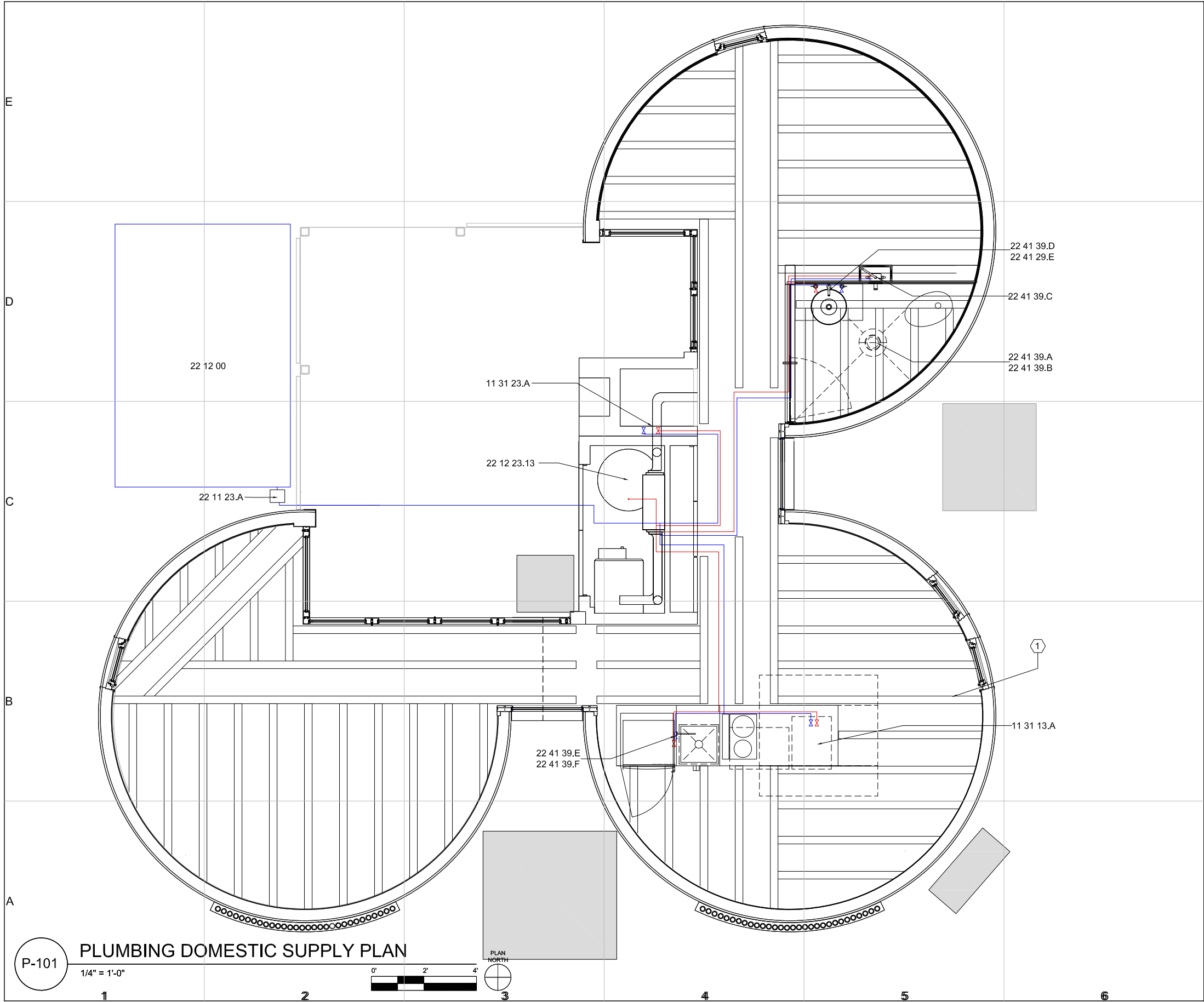
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EET TITLE

P-001

SHEET 147 OF 196





GENERAL SHEET NOTES:

LEGEND:

COLD LINE

HOT LINE

GREYWATER/BLACKWATER

VENT PIPES

1. COLD AND HOT DOMESTIC SUPPLY RUN NEXT TO SLEEPERS

2. COLD AND HOT WATER MANIFOLDS IN MECHANICAL CLOSET

3. ALL MAIN BRANCHES 1/2" COPPER PIPING

4. ALL FIXTURES 1/2" PEX TUBING

5. FOR SOLAR THERMAL PLUMBING, SEE P-103

6. FOR GREYWATER AND BLACKWATER LINES UNDER SIP, SEE P-102

7. FOR HVAC PLUMBING, SEE P-104

8. SHOWER MIXING VALVE TO COMPLY WITH IRC, SEC. P2802.3 AND P2708.3

REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER

11 31 23.A RESIDENTIAL LAUNDRY APPLIANCES - FRONT LOADING WASHER

DIVISION 22 - PLUMBING

22 11 13.A DOMESTIC WATER PIPING - HARD COPPER TUBING

22 11 16 DOMESTIC WATER PIPING - PEX TUBING AND FITTINGS

22 11 23.A DOMESTIC WATER PUMPS, SUPPLY PUMP, P-5

22 12 00 FACILITY POTABLE-WATER STORAGE TANKS - POTABLE WATER SUPPLY TANK

22 12 23.13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)

22 41 16.A RESIDENTIAL LAVATORIES & SINKS - ABOVE-THE-COUNTER VESSELS LAVATORY

22 41 39.A RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RIGHT-ANGLE SHOWER ARM AND FLANGE

22 41 39.B RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RAIN SHOWERHEAD

22 41 39.C RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - STACKED THERMOSTATIC VALVE TRIM AND ACCESSORIES

22 41 39.D RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WIDESPREAD LAVATORY FAUCET

22 41 39.E RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - VALVES, THERMOSTATIC MIXER WITH VOLUME CONTROL

22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WALL-MOUNT KITCHEN SINK FAUCET

SHEET KEYNOTES:

1. TYPICAL SLEEPER, 2"X4"

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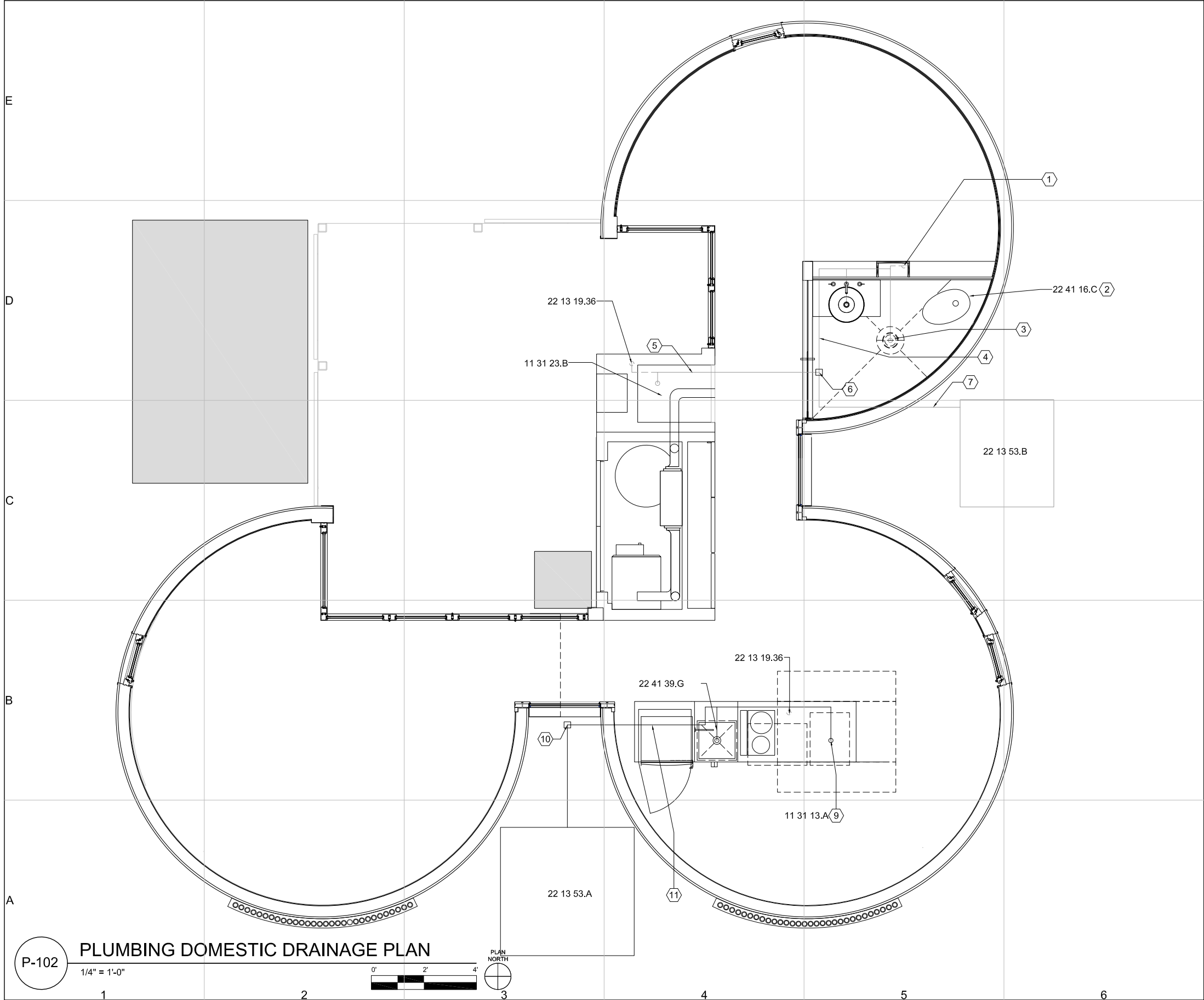
PROJECT

SOLAR DECATHLON 2009

PLAN

P-101

SHEET 148 OF 196



GENERAL SHEET NOTES:

LEGEND:

COLD LINE

HOT LINE

GREYWATER/BLACKWATER

VENT PIPES

1. ALL DRAINAGE PIPING IS PVC

2. VERTICAL VENTS THROUGH WALLS, PROTRUDE 18" ABOVE ROOF

3. GREYWATER AND BLACKWATER LINES CUT THROUGH SIPS, MEETS DRAINAGE REQUIREMENTS OF 1/4" PER FOOT

4. KITCHEN AND DRYER VENTED USING AN AIR EMITTANCE VALVE

REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER

11 31 23.B RESIDENTIAL LAUNDRY APPLIANCES - DRYER

DIVISION 22 - PLUMBING

22 05 76 FACILITY DRAINAGE PIPING CLEANOUTS

22 11 13.74 DOMESTIC WATER PIPING - PVC PIPE

22 13 56.A FACILITIES SANITARY SEWERAGE - BLACKWATER TANK

22 13 56.B FACILITIES SANITARY SEWERAGE - GREYWATER TANK

22 41 16.C RESIDENTIAL LAVATORIES AND SINKS - HATBOX TOILET

22 41 16.D RESIDENTIAL LAVATORIES & SINKS - UNDERCOUNTER ENTERTAINMENT STAINLESS STEEL SINK

22 41 39.G RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - KITCHEN SINK

SHEET KEYNOTES:

1. BATHROOM - 3" PVC VENT PIPE

2. TOILET NOT CONNECTED FOR COMPETITION, W.C. FLANGE WILL BE CAPPED

3. SHOWER DRAIN - 2" PVC

4. LAVATORY - 1-1/2" PVC

5. WASHER - 2" PVC

6. CLEANOUT

7. GREYWATER LINE - 2" PVC

8. KITCHEN SINK - 1-1/2" PVC

9. DISHWASHER - 1-1/2" PVC

10. CLEANOUT

11. BLACKWATER LINE - 3" PVC

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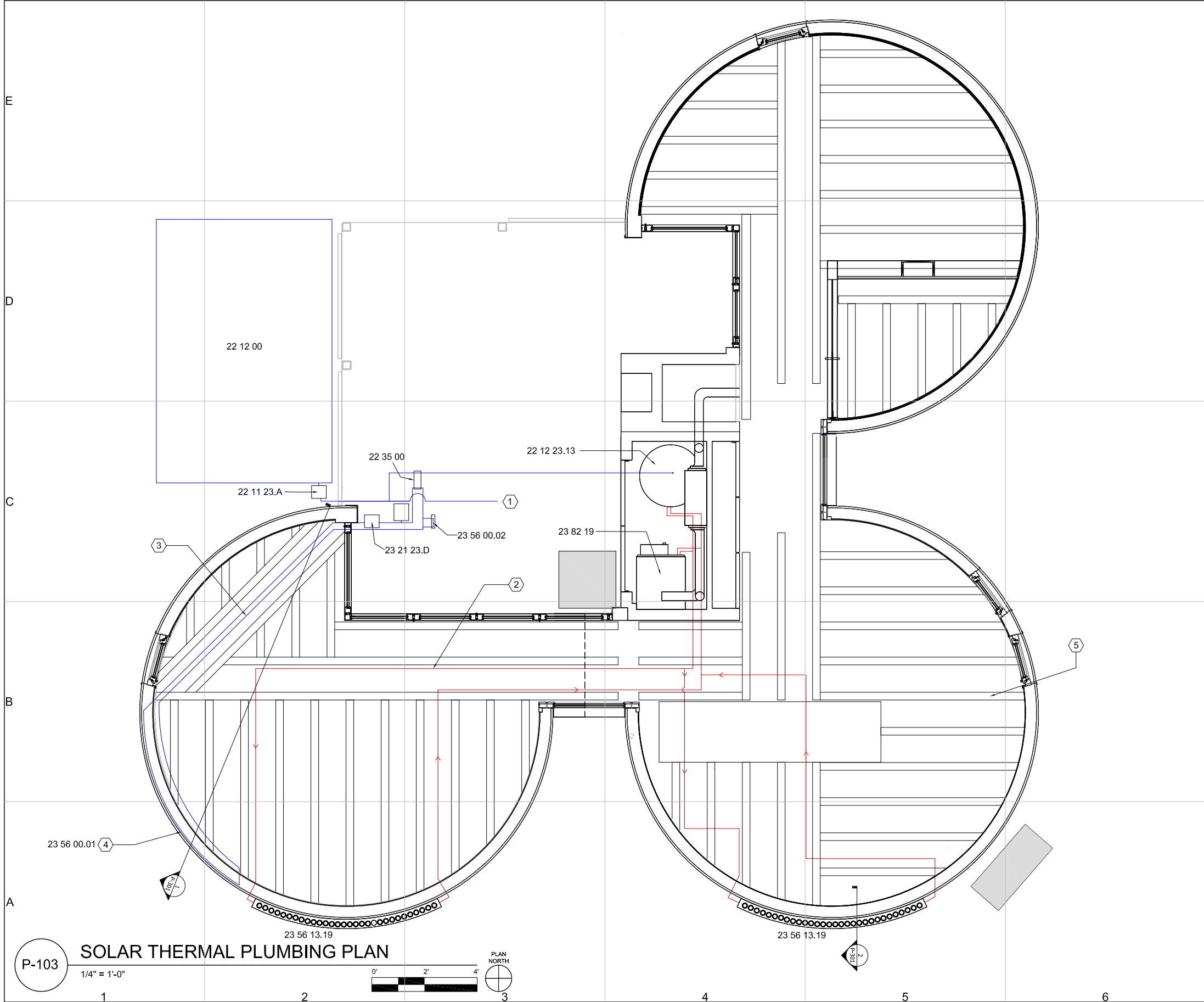
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SHEET TITLE

PLAN

P-102

SHEET 149 OF 196



GENERAL SHEET NOTES:

LEGEND:

COLD LINE

HOT LINE

GREYWATER/BLACKWATER

VENT PIPES

1. ALL SOLAR THERMAL PIPING HAS FIBERGLASS INSULATION

2. BUILDING INTEGRATED SOLAR THERMAL SYSTEM RUNS CLOSED LOOP 40% PROPYLENE GLYCOL SOLUTION - SEE MSDS SHEET

3. HEAT EXCHANGER HAS SECONDARY CONTAINMENT FOR SAFETY IN CASE OF LEAKS TO POTABLE WATER SUPPLY

4. SOLAR THERMAL LOOP THROUGH EVACUATED TUBES RUNS 40% PROPYLENE GLYCOL SOLUTION

5. SOLAR THERMAL EVACUATED TUBE SYSTEM COMPRISED OF SILICON SOLAR SUNMAXX U-PIPES, 30 ON EACH CYLINDER

6. COMPONENTS OF SOLAR THERMAL SYSTEM ACCESSIBLE FOR MAINTENANCE AND REPAIR, MEETS IRC, SEC. M2301.2.1

7. REFER TO SPECIFICATIONS FOR DETAILS ABOUT COLLECTORS AND STORAGE UNITS, IRC, SEC. 2301.3

8. REFER TO P-602 FOR SOLAR THERMAL PLUMBING SCHEMATIC DETAILING LOCATION OF VALVES AND PUMPS

9. REFER TO P-603 FOR SOLAR THERMAL CONTROLS SCHEMATIC

10. REFER TO P-903 FOR SOLAR THERMAL PLUMBING ISOMETRIC

11. REFER TO P-201 FOR DETAILED MECHANICAL CLOSET PLUMBING ELEVATION, AND P-904 FOR DETAILED MECHANICAL CLOSET PLUMBING ISOMETRIC

12. REFER TO P-202 FOR SOLAR THERMAL WEST ELEVATION

13. REFER TO P-301 FOR BUILDING INTEGRATED SOLAR THERMAL SECTION

REFERENCE KEYNOTES:

DIVISION 22 - PLUMBING

22 11 13.23A DOMESTIC WATER PIPING - HARD COPPER

22 11 13.23B DOMESTIC WATER PIPING - SOFT COPPER

22 11 23.A DOMESTIC WATER PUMPS - SUPPLY PUMP, P-6

22 12 00 FACILITY POTABLE-WATER STORAGE TANKS - POTABLE WATER SUPPLY TANK

22 12 23.13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)

22 35 00 DOMESTIC WATER HEAT EXCHANGERS - BUILDING INTEGRATED SOLAR THERMAL HEAT EXCHANGER

DIVISION 23 - HVAC

23 21 23.D HYDRONIC PUMPS - ALT. SOLAR THERMAL PUMP, P-4

23 56 00.01 BUILDING INTEGRATED SOLAR THERMAL SYSTEM

23 56 00.02 HEAT SINK

23 56 13.19 HEATING SOLAR VACUUM-TUBE COLLECTORS - SILICON SOLAR SUNMAXX U-30 EVACUATED TUBES

23 82 19 FAN COIL UNIT (FCU)

SHEET KEYNOTES:

1. TO DOMESTIC COLD WATER MANIFOLD

2. SOLAR THERMAL SYSTEM - 3/4" COPPER PIPING

3. BUILDING INTEGRATED SOLAR THERMAL SYSTEM - 3/4" COPPER PIPING

4. BUILDING INTEGRATED SOLAR THERMAL SYSTEM, USES 7/8" REFRIGERANT TUBING FOR SECTION IN WALLS, REFER TO P-202

5. TYPICAL SLEEPER, 2"X4"

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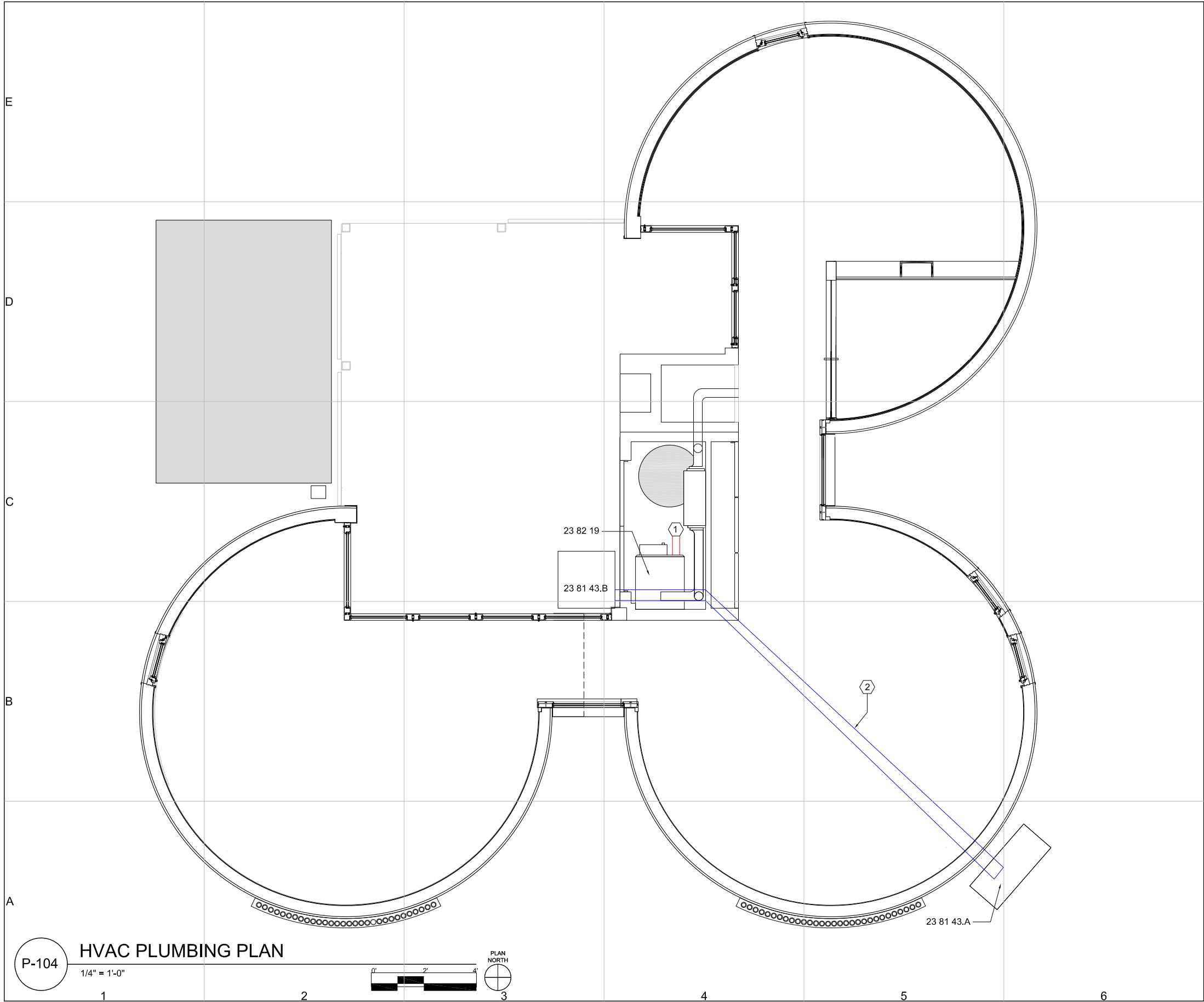
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SHEET TITLE

PLAN

P-103

SHEET 150 OF 196



GENERAL SHEET NOTES:

LEGEND:

COLD LINE

HOT LINE

GREYWATER/BLACKWATER

VENT PIPES

1. REVERSE CYCLE CHILLER LOOP TO RUN 40% PROPYLENE GLYCOL SOLUTION

2. REVERSE CYCLE CHILLER LOOP RUNS THROUGH COOLING COIL IN FAN COIL UNIT

3. HOT WATER FROM SOLAR THERMAL SYSTEM LOOPS THROUGH HEATING COIL IN FAN COIL UNIT WHEN HEATING IS CALLED

4. REFER TO P-201 FOR DETAILED MECHANICAL CLOSET PLUMBING ELEVATION

5. REFER TO P-904 FOR DETAILED MECHANICAL CLOSET PLUMBING ISOMETRIC

REFERENCE KEYNOTES:

DIVISION 22 - PLUMBING

22 11 13.A DOMESTIC WATER PIPING - HARD COPPER

DIVISION 23 - HVAC

23 81 43.A UNITARY AIR-SOURCE HEAT PUMP - REVERSE CYCLE CHILLER (RCC)

23 81 43.B UNITARY AIR-SOURCE HEAT PUMP ACCESSORY - CHILLER WATER TANK (CW)

23 82 19 FAN COIL UNIT (FCU)

SHEET KEYNOTES:

1. HEAT FROM SOLAR THERMAL SYSTEM GOES INTO HEATING COIL OF FAN COIL UNIT

2. REVERSE CYCLE CHILLER (RCC) LOOP - 1-1/4" PIPE

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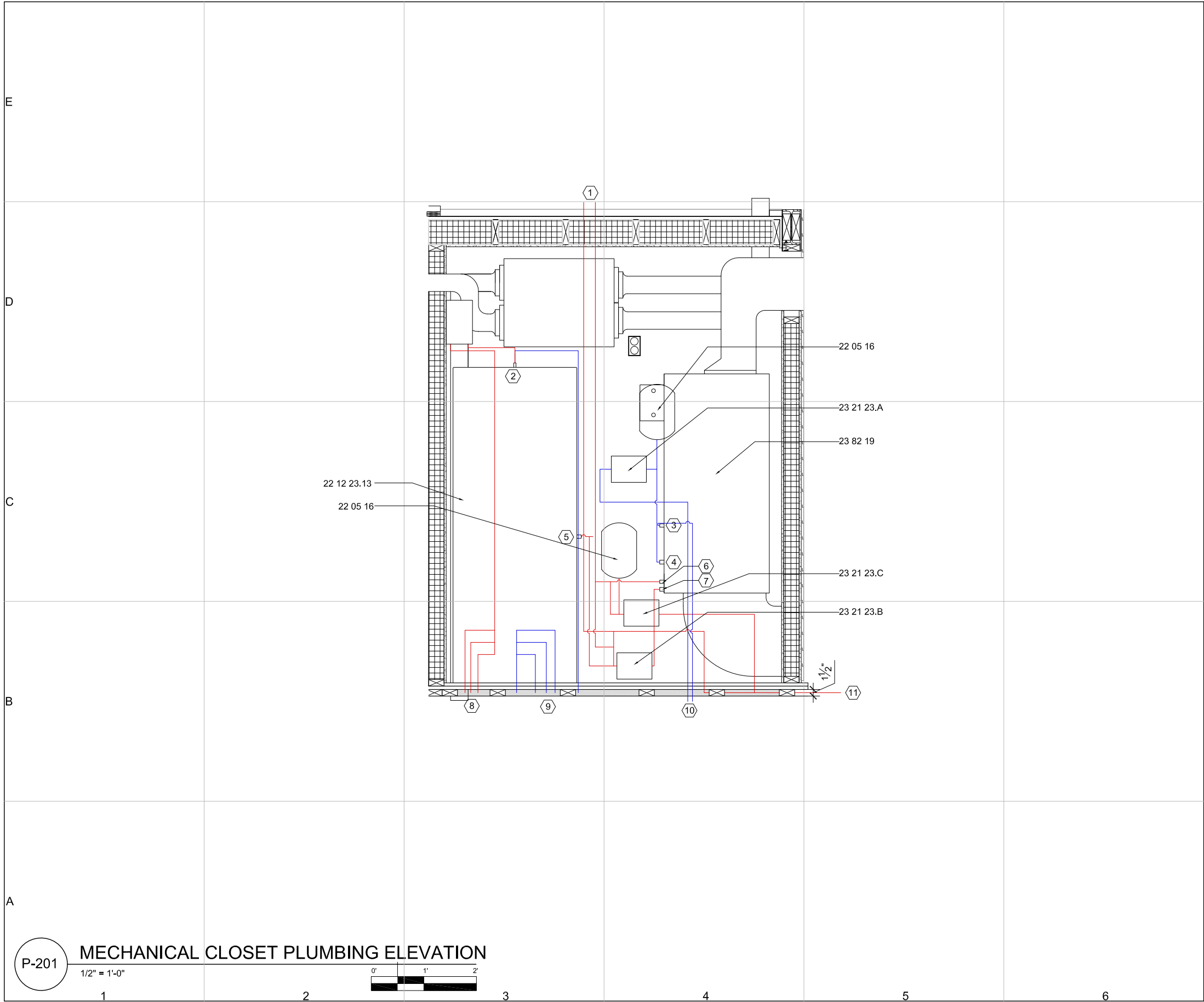
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PLAN

P-104

SHEET 151 OF 196



GENERAL SHEET NOTES:

LEGEND:

- COLD WATER SUPPLY
- HOT WATER SUPPLY

1. REFER TO P-904 FOR MECHANICAL CLOSET PLUMBING ISOMETRIC

REFERENCE KEYNOTES:

DIVISION 22 - PLUMBING

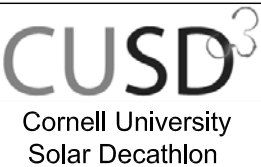
- 22 05 16 EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING - EXPANSION TANK
- 22 12 23.13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)

DIVISION 23 - HVAC

- 23 21 23.A HYDRONIC PUMPS - RCC LOOP PUMP, P-1
- 23 21.23.B HYDRONIC PUMPS - HEATING PUMP, P-2
- 23 21.23.C HYDRONIC PUMPS - SOLAR THERMAL PUMP, P-3
- 23 82 19 FAN COIL UNITS (FCU)
- 22 56 00.02 HEAT SINK

SHEET KEYNOTES:

- TO SOLAR THERMAL HEAT SINK ON ROOF
- DOMESTIC COLD WATER IN FRONT DOMESTIC HOT OUT BACK
- COLD SUPPLY IN
- COLD RETURN OUT
- GLYCOL IN FRONT GLYCOL OUT BACK
- HOT SUPPLY IN
- HOT RETURN OUT
- DOMESTIC COLD WATER PIPES TO KITCHEN, BATHROOM, WASHER
- DOMESTIC HOT WATER PIPES TO KITCHEN, BATHROOM, WASHER
- TO REVERSE CYCLE CHILLER OUTSIDE
- SOLAR THERMAL LINES TO SLEEPERS IN HOUSE



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SHEET TITLE

ELEVATION

P-201



GENERAL SHEET NOTES:

1. BUILDING INTEGRATED SOLAR THERMAL SYSTEM CONSISTS OF COPPER TUBING, WRAPPED FLOOR-TO-CEILING INSIDE STEEL CORRUGATED SKIN
2. RUNS IN 8' x 8' SECTION IN SOUTH-WEST CORNER OF LIVING ROOM MODULE
3. PIPING CONSISTS OF 7/8" COPPER TUBING, BENT TO RADIUS OF STEEL SKIN AND CONNECTORS ON EACH SIDE
4. SYSTEM RUNS CLOSED LOOP PROPYLENE GLYCOL SOLUTION THROUGH HEAT EXCHANGER WITH DOMESTIC SUPPLY WATER INLET TO DOMESTIC HOT WATER TANK
5. PIPING PENETRATES FLOOR AND CONNECTS TO PUMP, HEAT EXCHANGER, HEAT SINK, VALVE AND DRAIN UNDER DECK

REFERENCE KEYNOTES:

- DIVISION 07 - THERMAL AND MOISTURE PROTECTION
07 46 19 STEEL SIDING
- DIVISION 23 - HVAC
23 56 00.01 BUILDING INTEGRATED SOLAR THERMAL SYSTEM
23 56 13.19 HEATING SOLAR VACUUM-TUBE COLLECTORS - SILICON SOLAR SUNMAXX U-30 EVACUATED TUBES

SHEET KEYNOTES:

1. SYSTEM CONNECTS TO HEAT EXCAHNGER, PUMP, HEAT SKIN, VALVE AND DRAIN UNDER DECK

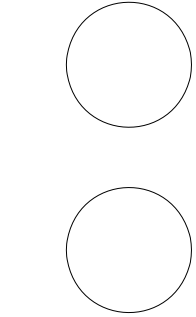
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PROJECT

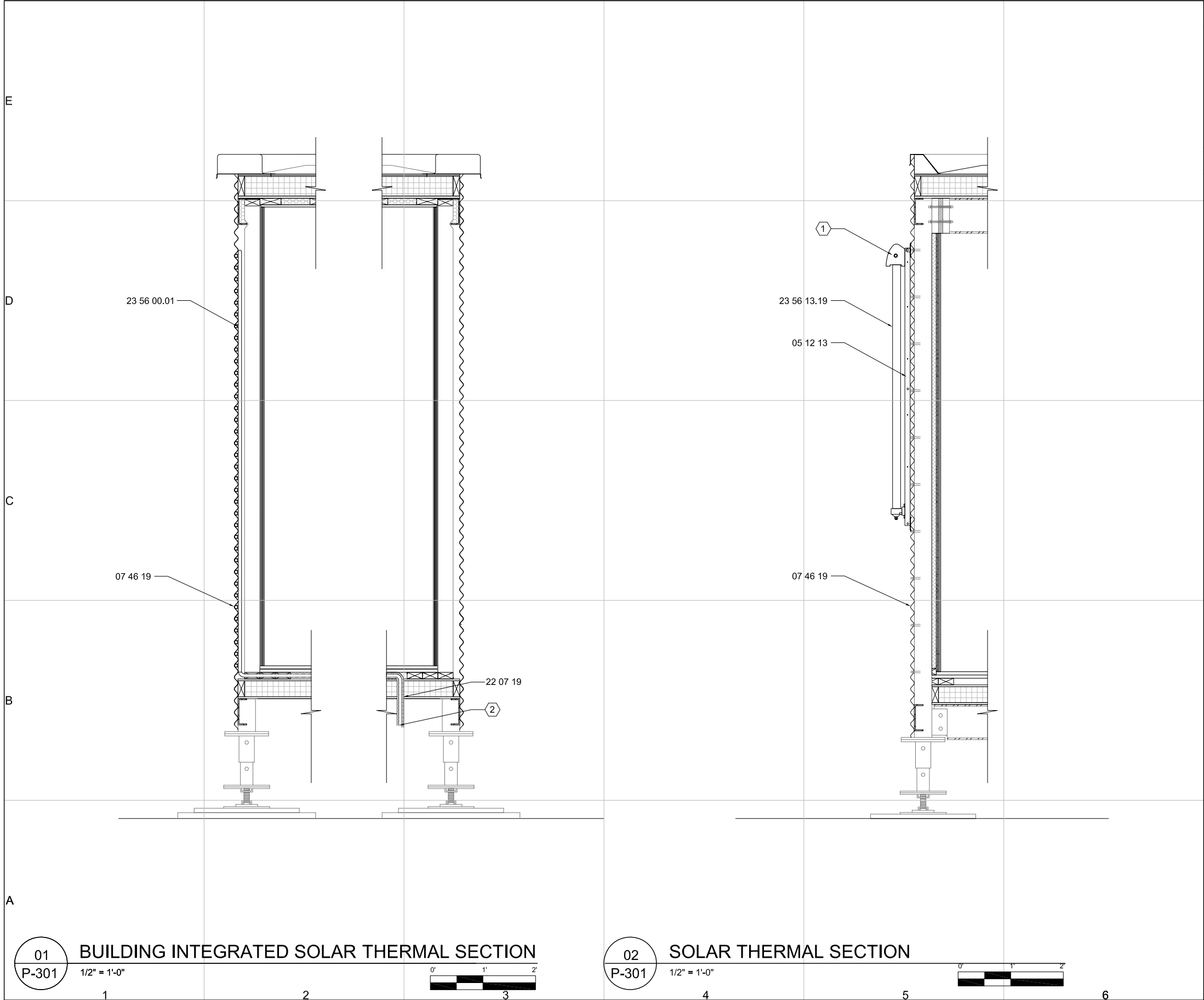
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ELEVATION

P-201

SHEET 153 OF 196



GENERAL SHEET NOTES:

1. ALTERNATIVE SYSTEM RUNS CLOSED LOOP 40% PROPYLENE GLYCOL SOLUTION THROUGH HEAT EXCHANGER WITH DOMESTIC SUPPLY WATER INLET TO DOMESTIC HOT WATER TANK.

2. ALTERNATIVE SYSTEM PIPING CONSISTS OF 7/8" COPPER PIPING WRAPPED FLOOR-TO-CEILING INSIDE STEEL CORRUGATED SKIN IN 8' SECTION IN LIVING ROOM MODULE.

3. REFER TO P-103 FOR SOLAR THERMAL PLUMBING PLAN

REFERENCE KEYNOTES:

DIVISION 05 - METAL

05 12 13 STRUCTURAL STEEL FRAMING

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 46 19 STEEL SIDING

DIVISION 22 - PLUMBING

22 07 19 PLUMBING PIPING INSULATION - FIBERGLASS INSULATION

DIVISION 23 - HVAC

23 56 00.01 BUILDING INTEGRATED SOLAR THERMAL SYSTEM

23 56 13.19 HEATING SOLAR VACUUM-TUBE COLLECTORS - SILICON SOLAR SUNMAXX U-30 EVACUATED TUBES

SHEET KEYNOTES:

1. CUSTOMIZED MANFOLD SOLAR VACUUM-TUBE COLLECTORS

2. SYSTEM CONNECTS TO HEAT EXCAHNGER, PUMP, HEAT SKIN, VALVE AND DRAIN UNDER DECK

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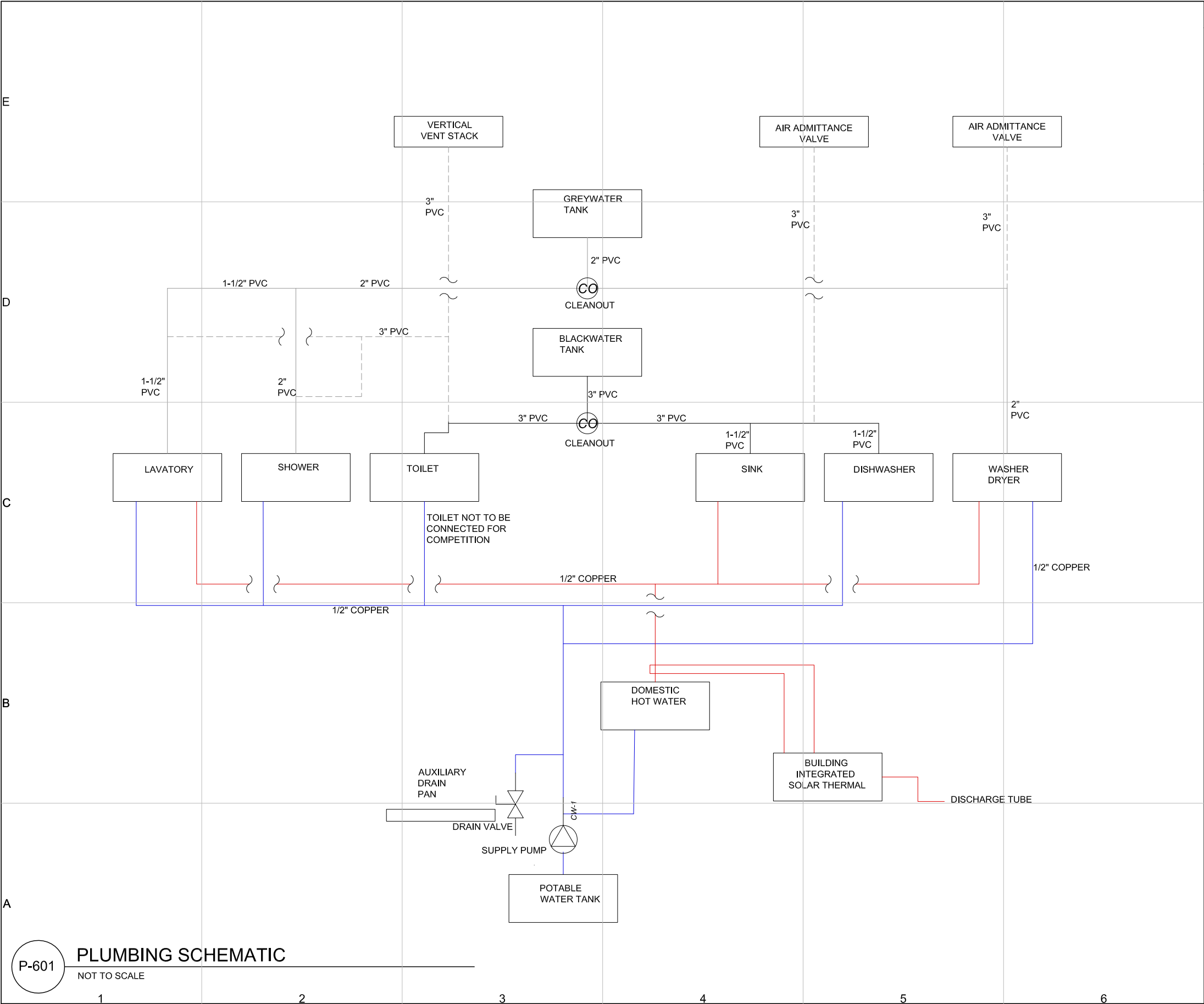
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SHEET TITLE

SECTION

P-301

SHEET 154 OF 196



GENERAL SHEET NOTES:

- LEGEND:
- COLD WATER SUPPLY
 - HOT WATER SUPPLY
 - GREYWATER/BLACKWATER
 - VENT PIPES

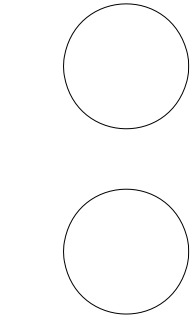
REFERENCE KEYNOTES:

- DIVISION 11 - EQUIPMENT
- 11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER
 - 11 31 23.A RESIDENTIAL LAUNDRY APPLIANCES - FRONT LOADING WASHER
 - 11 31 23.B RESIDENTIAL LAUNDRY APPLIANCES - DRYER
- DIVISION 22 - PLUMBING
- 22 05 76 FACILITY DRAINAGE PIPING CLEANOUTS
 - 22 11 13.23A DOMESTIC WATER PIPING - HARD COPPER
 - 22 11 16 DOMESTIC WATER PIPING - PEX TUBING AND FITTINGS
 - 22 11 13.74 DOMESTIC WATER PIPING - PVC PIPE
 - 22 11 23.A DOMESTIC WATER PUMPS - SUPPLY PUMP, P-5
 - 22 12 00 FACILITY POTABLE-WATER STORAGE TANKS - POTABLE WATER SUPPLY TANK
 - 22 12 23.13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)
 - 22 13 56.A FACILITIES SANITARY SEWERAGE - BLACKWATER TANK
 - 22 13 56.B FACILITIES SANITARY SEWERAGE - GREYWATER TANK
 - 22 41 16.A RESIDENTIAL LAVATORIES & SINKS - ABOVE-THE-COUNTER VESSELS LAVATORY
 - 22 41 16.C RESIDENTIAL LAVATORIES & SINKS - HATBOX TOILET
 - 22 41 16.D RESIDENTIAL LAVATORIES & SINKS - UNDERCOUNTER ENTERTAINMENT STAINLESS STEEL SINK
 - 22 41 39.A RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RIGHT-ANGLE SHOWER ARM AND FLANGE
 - 22 41 39.B RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RAIN SHOWERHEAD
 - 22 41 39.C RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - STACKED THERMOSTATIC VALVE TRIM AND ACCESSORIES
 - 22 41 39.D RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WIDESPREAD LAVATORY FAUCET
 - 22 41 39.E RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - VALVES, THERMOSTATIC MIXER WITH VOLUME CONTROL
 - 22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WALL-MOUNT KITCHEN SINK FAUCET



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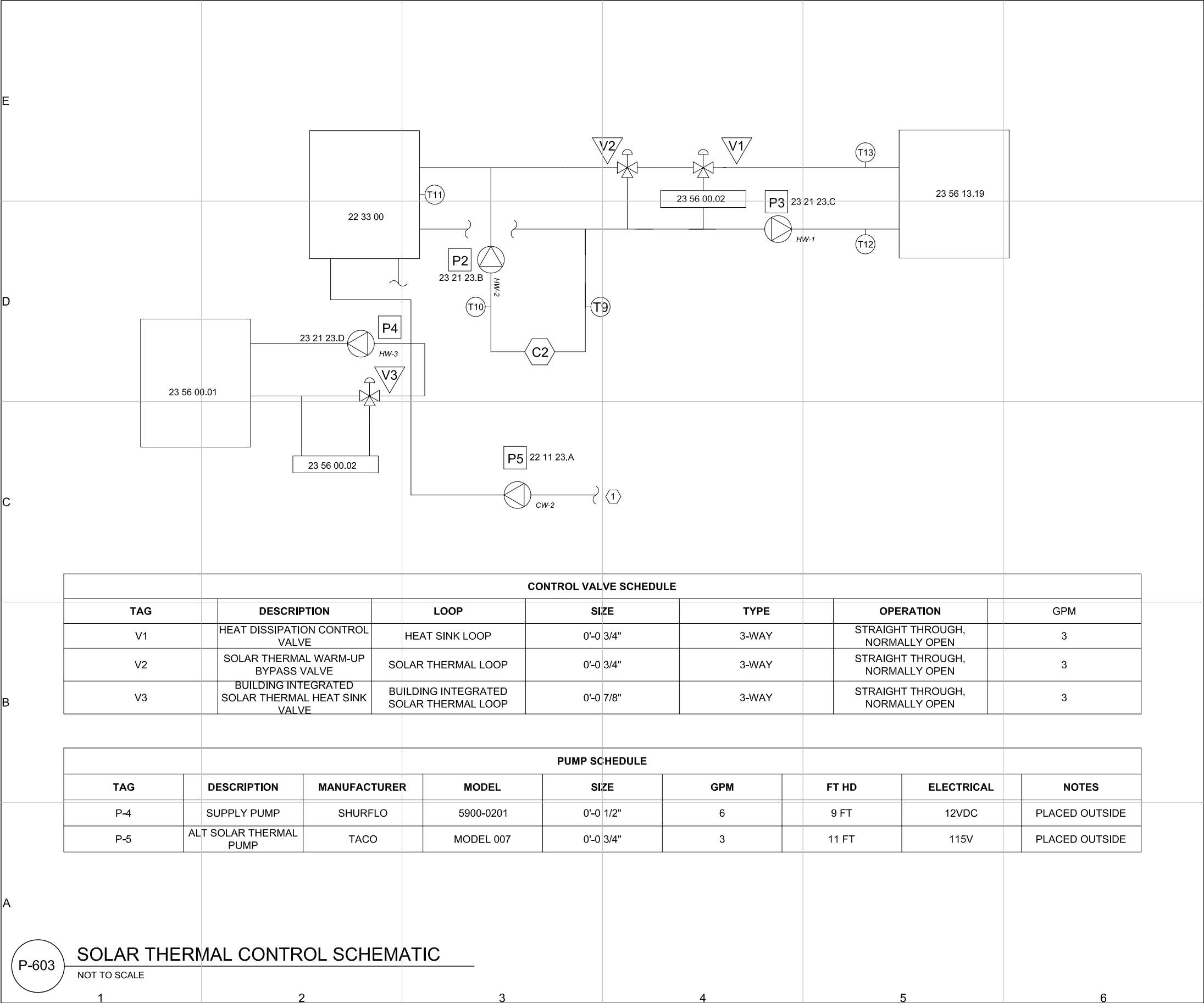
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SCHEMATIC

P-601

SHEET 155 OF 196



SOLAR THERMAL CONTROL SCHEMATIC
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GENERAL SHEET NOTES:

- LEGEND:
- TEMPERATURE SENSOR
 - PUMP
 - CONTROL VALVE
 - HYDRONIC COIL

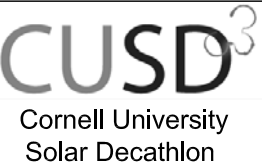
- TAGS CORRESPOND TO THE SAME DEVICES DESIGNATED IN M-602, M-603
- SENSORS ARE LINKED TO AUTOMATED LOGIC CONTROLLER
- CONTROL LOGIC OUTLINED IN M-604

REFERENCE KEYNOTES:

- DIVISION 22 - PLUMBING**
- 22 11 23.A DOMESTIC WATER PUMPS - SUPPLY PUMP, P-5
 - 22 12 23.13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANK - DOMESTIC HOT WATER TANK (DHW)
- DIVISION 23 - HVAC**
- 23 21 23.B HYDRONIC PUMPS - HEATING PUMP, P-2
 - 23 21 23.C HYDRONIC PUMPS - SOLAR THERMAL PUMP, P-3
 - 23 21 23.D HYDRONIC PUMPS - ALT. SOLAR THERMAL PUMP, P-4
 - 23 56 00.01 BUILDING INTEGRATED SOLAR THERMAL SYSTEM
 - 23 56 00.02 HEAT SINK
 - 23 36 13.19 HEATING SOLAR-VACUUM TUBE COLLECTORS - SILICON SOLAR SUNMAXX U-30 EVACUATED TUBES

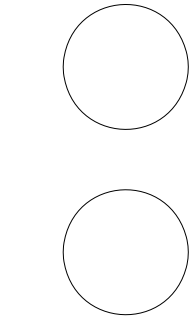
SHEET KEYNOTES:

- WATER FROM POTABLE SUPPLY TANK



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SCHEMATIC

P-603

E									REFERENCE KEYNOTES:	<div>CUSD³</div> <div>Cornell University Solar Decathlon</div>
									<div>DIVISION 11 - EQUIPMENT</div> <div>11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER</div> <div>11 31 23.A RESIDENTIAL LAUNDRY APPLIANCES - FRONT LOADING WASHER</div> <div>DIVISION 22 - PLUMBING</div> <div>22 12 00 FACILITY POTABLE-WATER STORAGE TANKS - POTABLE WATER SUPPLY TANK</div> <div>22 12 23,13 FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)</div> <div>22 13 56.A FACILITIES SANITARY SEWERAGE - BLACKWATER TANK</div> <div>22 13 56,B FACILITIES SANITARY SEWERAGE - GREYWATER TANK</div> <div>22 41 16.A RESIDENTIAL LAVATORIES & SINKS - ABOVE-THE-COUNTER VESSELS LAVATORY</div> <div>22 41 16.C RESIDENTIAL LAVATORIES & SINKS - HATBOX TOILET</div> <div>22 41 16,D RESIDENTIAL LAVATORIES & SINKS - UNDERCOUNTER ENTERTAINMENT STAINLESS STEEL SINK</div> <div>22 41 39.A RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RIGHT-ANGLE SHOWER ARM AND FLANGE</div> <div>22 41 39,B RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RAIN SHOWERHEAD</div> <div>22 41 39.C RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - STACKED THERMOSTATIC VALVE TRIM AND ACCESSORIES</div> <div>22 41 39,D RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WIDESPREAD LAVATORY FAUCET</div> <div>22 41 39,E RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - VALVES, THERMOSTATIC MIXER WITH VOLUME CONTROL</div> <div>22 41 39.F RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WALL-MOUNT KITCHEN SINK FAUCET</div>	
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C										<div>CONSULTANTS</div> <div>ROBERT SILMAN ASSOCIATES</div> <div>STRUCTURAL ENGINEERS</div> <div>88 UNIVERSITY PLACE</div> <div>NEW YORK, NY 10003</div> <div>(212) 620-7970</div>
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										<div>P-604</div>
										<div>SHEET 158 OF 196</div>



FIXTURE SCHEDULE

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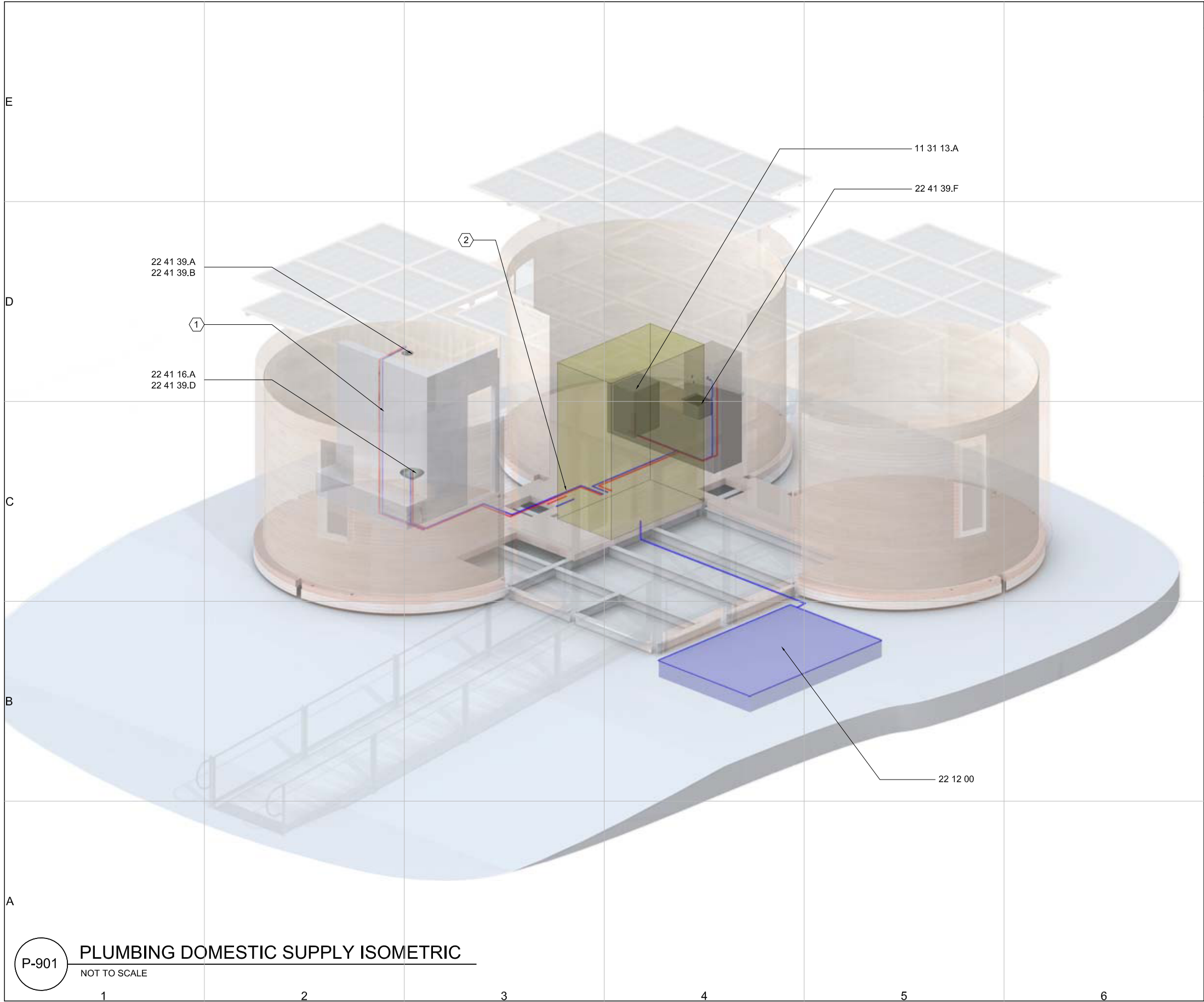
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GENERAL SHEET NOTES:	
1.	REFER TO P-101 FOR PLUMBING DOMESTIC SUPPLY PLAN
2.	REFER TO P-201 AND P-904 FOR MECHANICAL CLOSET PLUMBING
REFERENCE KEYNOTES:	
DIVISION 11 - EQUIPMENT	
11 31 13.A	RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER
11 31 23.A	RESIDENTIAL LAUNDRY APPLIANCES - FRONT LOADING WASHER
DIVISION 22 - PLUMBING	
22 11 16.A	DOMESTIC WATER PIPING - HARD COPPER TUBING
22 11 16.C	DOMESTIC WATER PIPING - PEX TUBING AND FITTINGS
22 11 23.A	DOMESTIC WATER PUMPS, SUPPLY PUMP, P-5
22 12 00	FACILITY POTABLE-WATER STORAGE TANKS - POTABLE WATER SUPPLY TANK
22 12 23.13	FACILITY STEEL, INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)
22 41 16.A	RESIDENTIAL LAVATORIES & SINKS - ABOVE-THE-COUNTER VESSELS
22 41 39.A	LAVATORY
22 41 39.B	RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RIGHT-ANGLE SHOWER ARM AND FLANGE
22 41 39.C	RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - RAIN SHOWERHEAD
22 41 39.D	RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - STACKED THERMOSTATIC VALVE TRIM AND ACCESSORIES
22 41 39.E	RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WIDESPREAD LAVATORY FAUCET
22 41 39.F	RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - VALVES, THERMOSTATIC MIXER WITH VOLUME CONTROL
22 41 39.F	RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - WALL-MOUNT KITCHEN SINK FAUCET
SHEET KEYNOTES:	
1.	1/2" PEX TUBING TO FIXTURES
2.	1/2" COPPER PIPING IN MAIN BRANCHES

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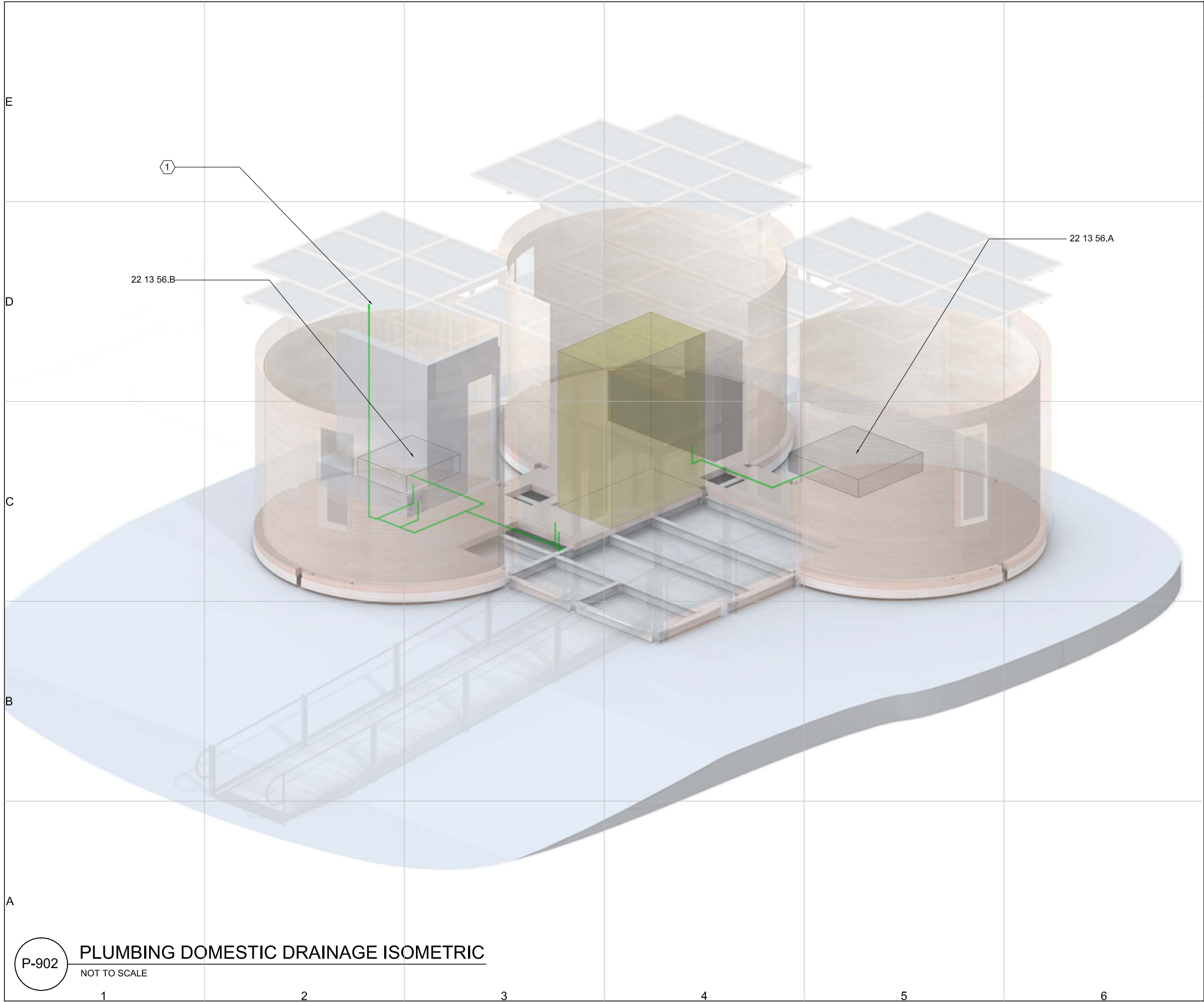
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ISOMETRIC

P-901

SHEET 159 OF 196



GENERAL SHEET NOTES:

1. REFER TO P-102 FOR PLUMBING DOMESTIC DRAINAGE PLAN

2. REFER TO P-601 FOR PLUMBING SCHEMATIC WITH PIPE SIZES

REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

11 31 13.A RESIDENTIAL KITCHEN APPLIANCES - UNDERCOUNTER DISHWASHER

11 31 23.B RESIDENTIAL LAUNDRY APPLIANCES - DRYER

DIVISION 22 - PLUMBING

22 11 16.D DOMESTIC WATER PIPING - PVC PIPE

22 13 56.A FACILITIES SANITARY SEWERAGE - BLACKWATER TANK

22 13 56.B FACILITIES SANITARY SEWERAGE - GREYWATER TANK

22 41 16.C RESIDENTIAL LAVATORIES AND SINKS - HATBOX TOILET

22 41 16.D RESIDENTIAL LAVATORIES & SINKS - UNDERCOUNTER ENTERTAINMENT STAINLESS STEEL SINK

22 41 39.G RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM - KITCHEN SINK

1. 3" VENT PIPE, EXTENDS 18" ABOVE ROOF

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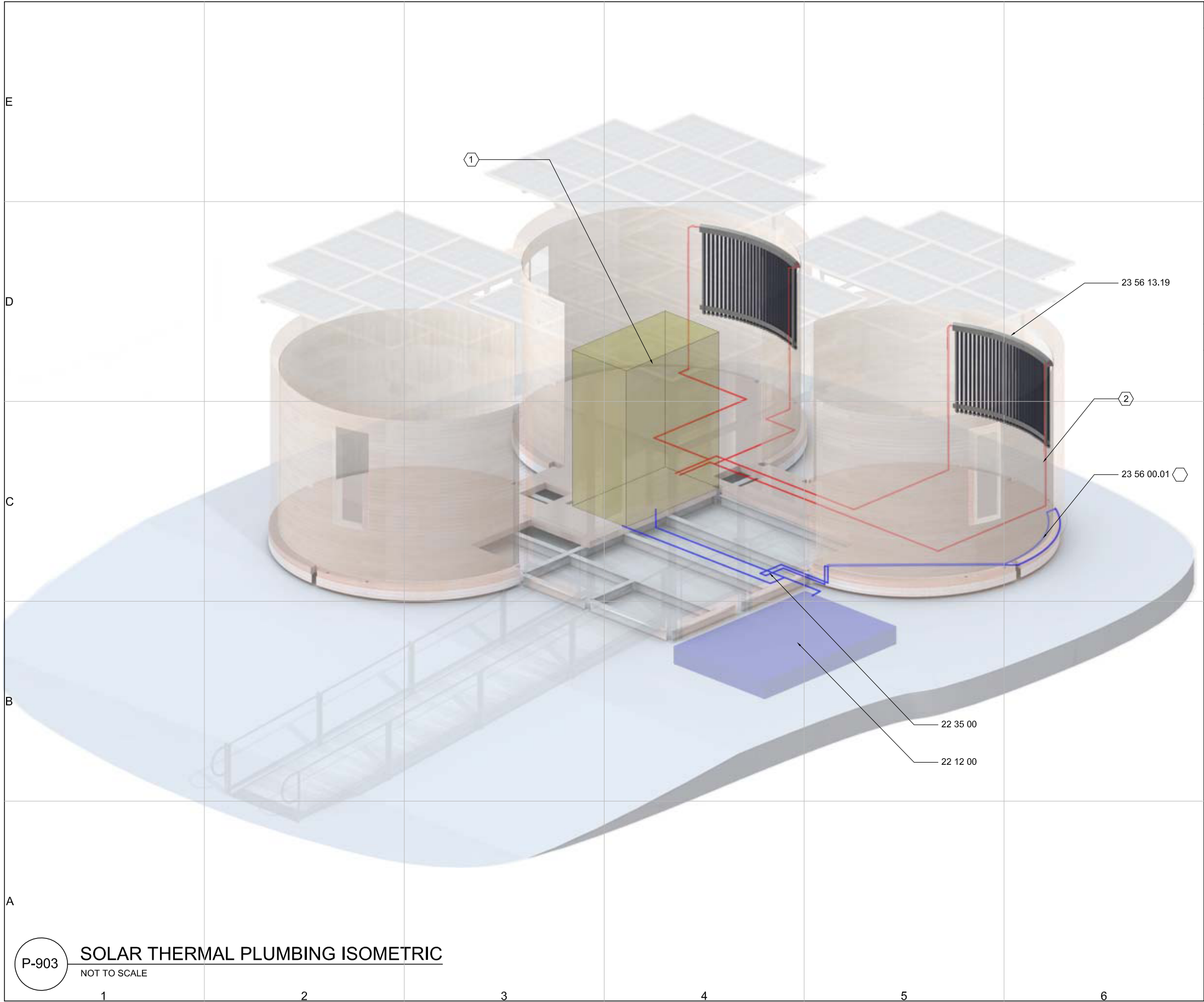
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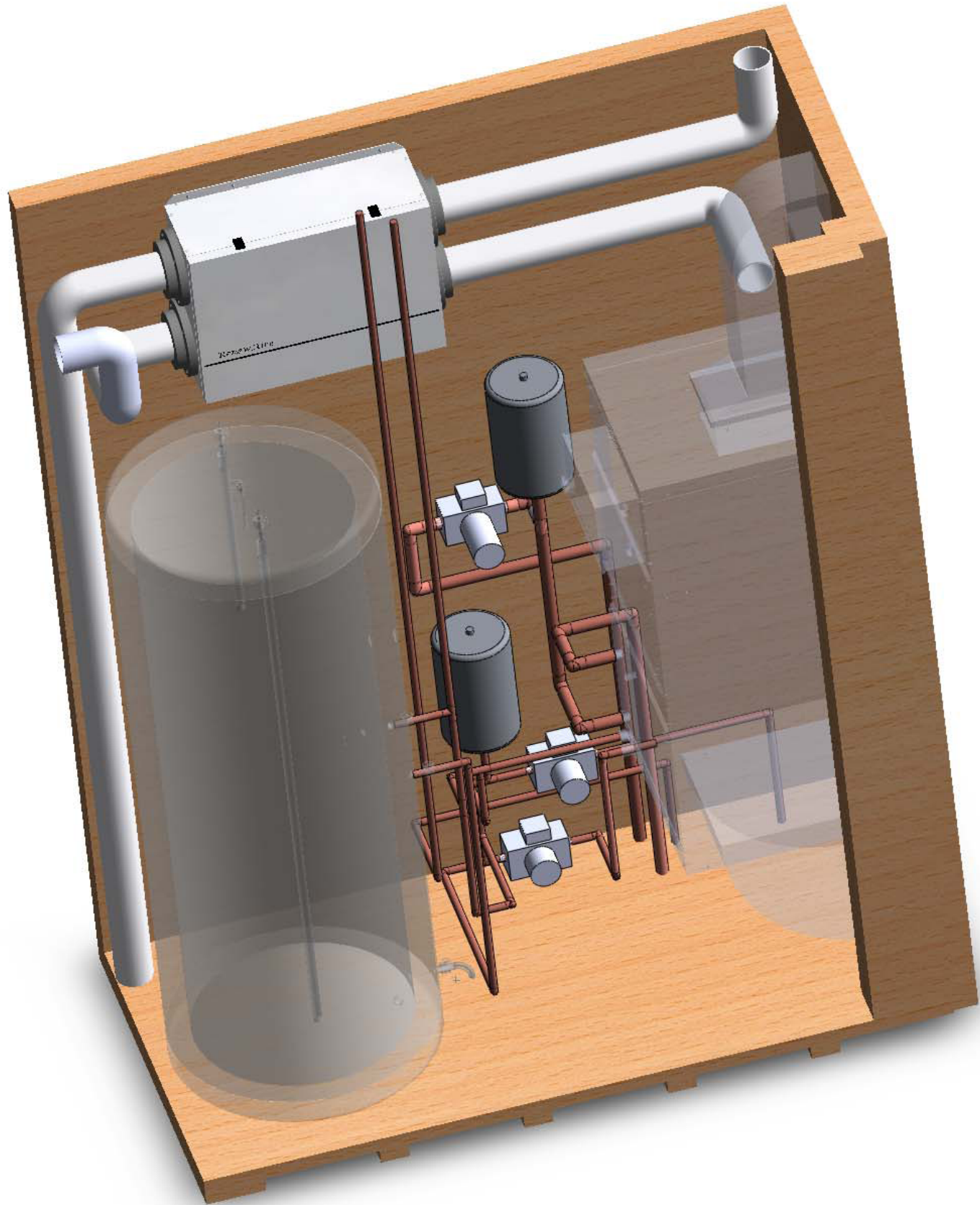
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SHEET 160 OF 196



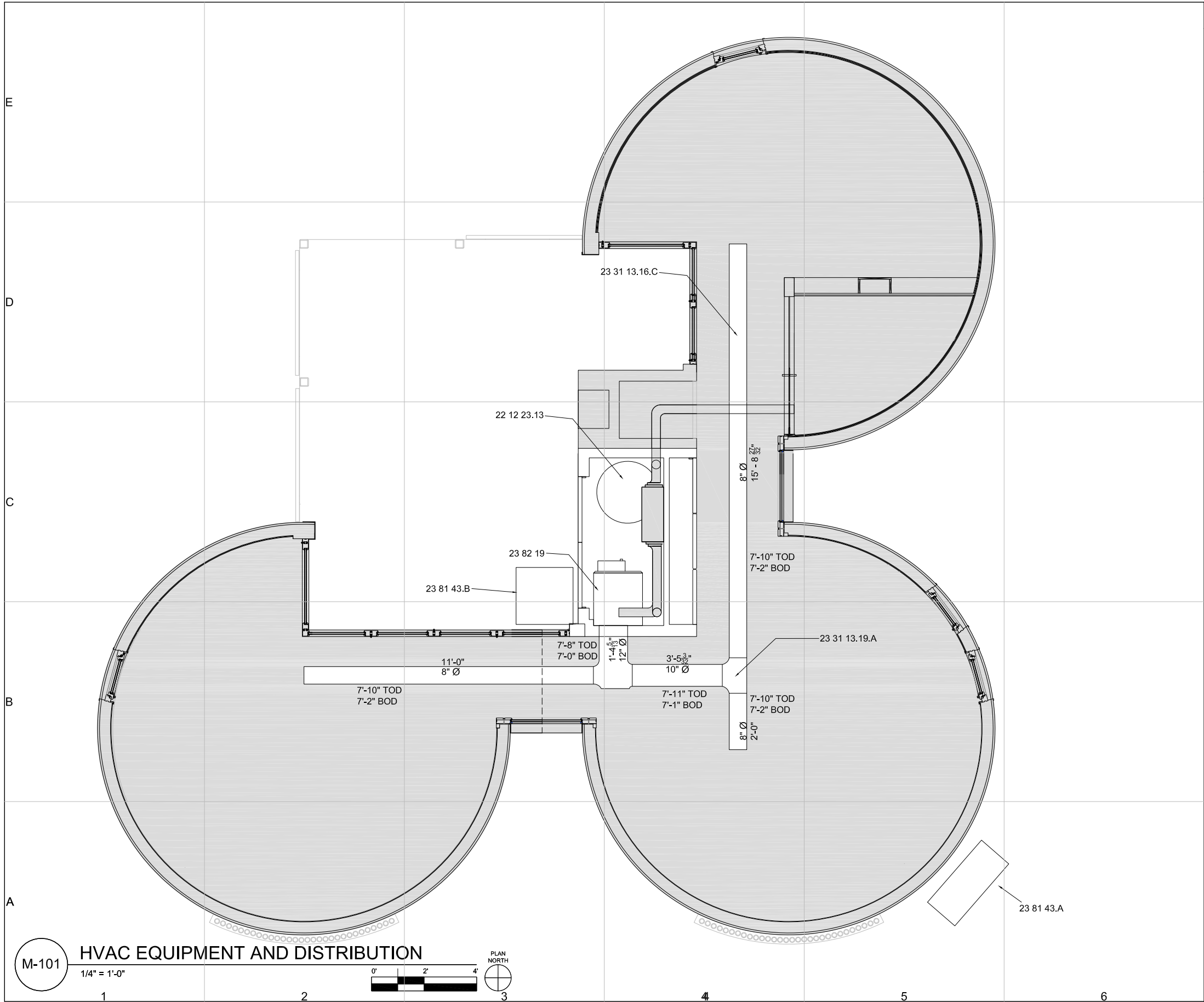
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REFERENCE KEYNOTES:		
DIVISION 22 - PLUMBING		
DIVISION 23 - HVAC		
SHEET KEYNOTES:		<div>CONSULTANTS</div> <div>ROBERT SILMAN ASSOCIATES STRUCTURAL ENGINEERS 88 UNIVERSITY PLACE NEW YORK, NY 10003 (212) 620-7970</div> <div>PROJECT</div> <div>SOLAR DECATHLON 2009</div> <div>DRAWN BY: MW</div> <div>DATE: JUNE 2, 2009</div> <div>COPYRIGHT: CORNELL UNIVERSITY 2009</div> <div>SHEET TITLE</div> <div>ISOMETRIC</div> <div>P-903</div>
1. REFER TO P-103 FOR SOLAR THERMAL PLUMBING PLAN		
2. REFER TO P-201 FOR MECHANICAL CLOSET PLUMBING ELEVATION AND P-904 FOR MECHANICAL CLOSET PLUMBING ISOMETRIC		
22 11 16.A DOMESTIC WATER PIPING - HARD COPPER		
22 11 16.B DOMESTIC WATER PIPING - SOFT COPPER		
22 12 00 FACILITY POTABLE-WATER STORAGE TANKS - POTABLE WATER SUPPLY TANK		
22 35 00 DOMESTIC WATER HEAT EXCHANGERS - BUILDING INTEGRATED SOLAR THERMAL HEAT EXCHANGER		
23 56 00.01 ALTERNATIVE SOLAR THERMAL SYSTEM		
23 56 00.02 HEAT SINK		
23 56 13.19 HEATING SOLAR VACUUM-TUBE COLLECTORS - SILICON SOLAR SUNMAXX U-30 EVACUATED TUBES		
1. MECHANICAL CLOSET PLUMBING DETAIL SHOWN IN P-201 AND P-904		
2. SOLAR THERMAL LOOP - 3/4" COPPER		
3. BUILDING INTEGRATED SOLAR THERMAL LOOP - 7/8" REFRIGERANT TUBING IN WALLS		

P-903 SOLAR THERMAL PLUMBING ISOMETRIC
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SHEET TITLE	ISOMETRIC
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SHEET 162 OF 196	

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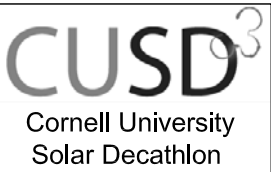


GENERAL SHEET NOTES:

1. TOD - TOP OF DUCT
2. BOD - BOTTOM OF DUCT
3. DUCT SPLITS 3 WAYS; AUTOMATED DAMPERS CONTROLLED BY ACTUATORS IN EACH DUCT RUN
4. DUCTS MADE OF ALUMINUM SHEET METAL
5. MESH DIFFUSERS TO BE USED AT THE END OF DUCT RUNS FOR DISTRIBUTION
6. RETURN AIR NOT TAKEN FROM BATHROOM, KITCHEN, OR MECHANICAL ROOM - TAKEN FROM HALLWAY, PER IRC, SEC. M1602.2, ITEMS 2 & 4

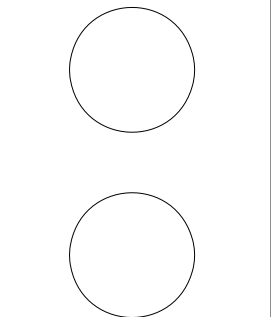
REFERENCE KEYNOTES:

- DIVISION 22 - PLUMBING**
- 22 12 23.13 FACILITY STEEL, INDOOR
POTABLE-WATER STORAGE
PRESSURE TANKS - DOMESTIC
WATER TANK (DHW)
- DIVISION 23 - HVAC**
- 23 31 13.16.C ROUND SPIRAL DUCTS
23 31 13.19.A METAL DUCT FITTINGS - FLANGELESS
ELBOW
23 81 43.A AIR-SOURCE UNITARY HEAT PUMP
- REVERSE CYCLE CHILLER (RCC)
23 81 43.B AIR-SOURCE UNITARY HEAT PUMP
ACCESSORY - CHILLED WATER TANK
(CW)
23 82 19 FAN COIL UNIT (FCU)



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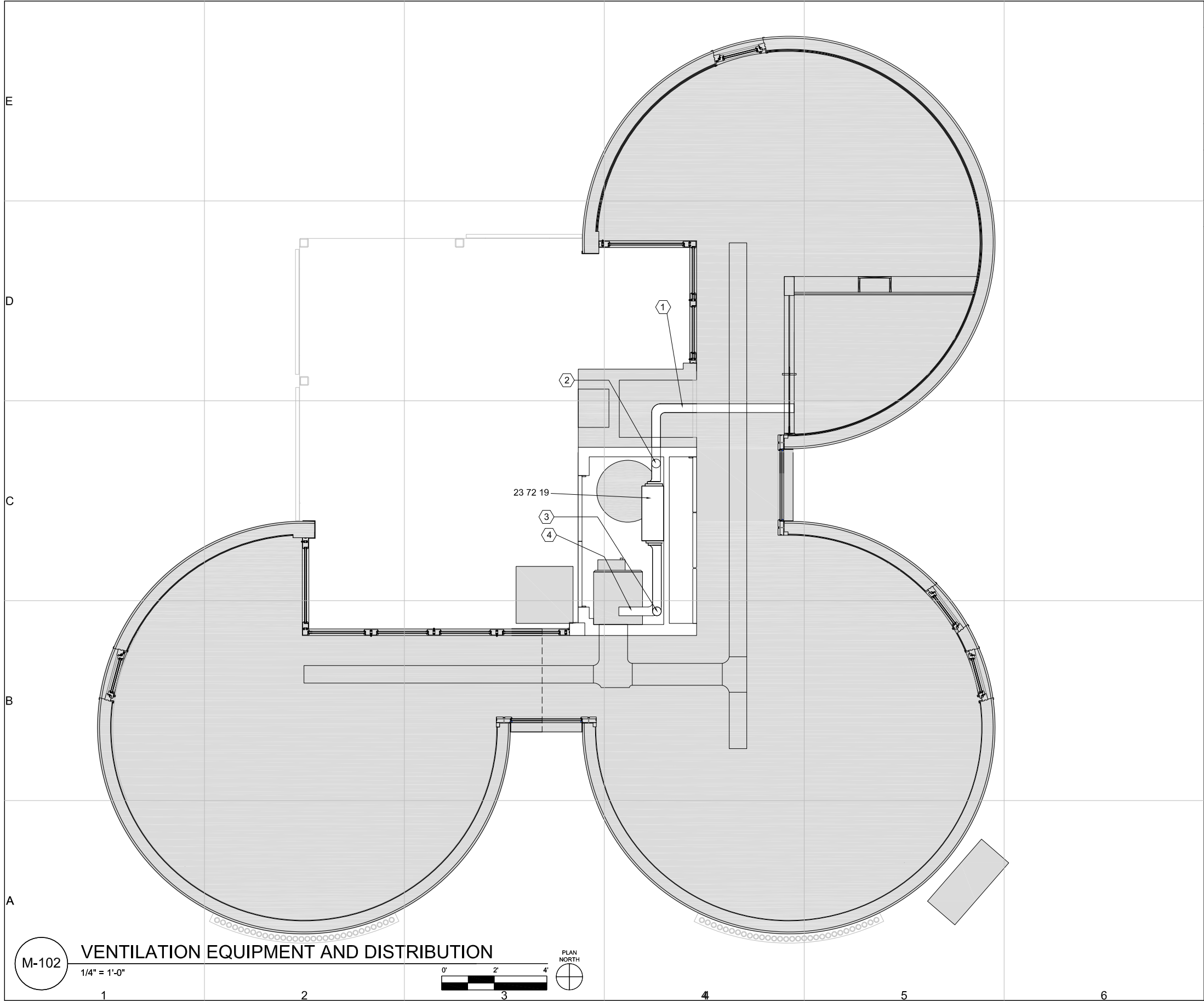


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PLAN

M-101



GENERAL SHEET NOTES:


1. ERV PROVIDES 40-70 CFM CONTINUOUSLY FOR BATHROOM VENTILATION, IRC SEC. R303.3
2. KITCHEN MEETS IRC KITCHEN VENTILATION REQUIREMENTS, AIR SYSTEM PROVIDES 200 CFM TO KITCHEN MODULE CONTINUOUSLY
3. OUTSIDE AIR TAKEN FARTHER THAN 10 FT FROM EXHAUST AIR OUTLET (IRC SEC. M1602.2, ITEM 1)

REFERENCE KEYNOTES:

DIVISION 23 - HVAC
23 72 19 FIXED-PLATE AIR-TO-AIR RECOVERY EQUIPMENT - ENERGY RECOVERY VENTILATOR (ERV)

SHEET KEYNOTES:

1. RETURN AIR
2. INTAKE AIR
3. EXHAUST HAIR
4. SUPPLY AIR



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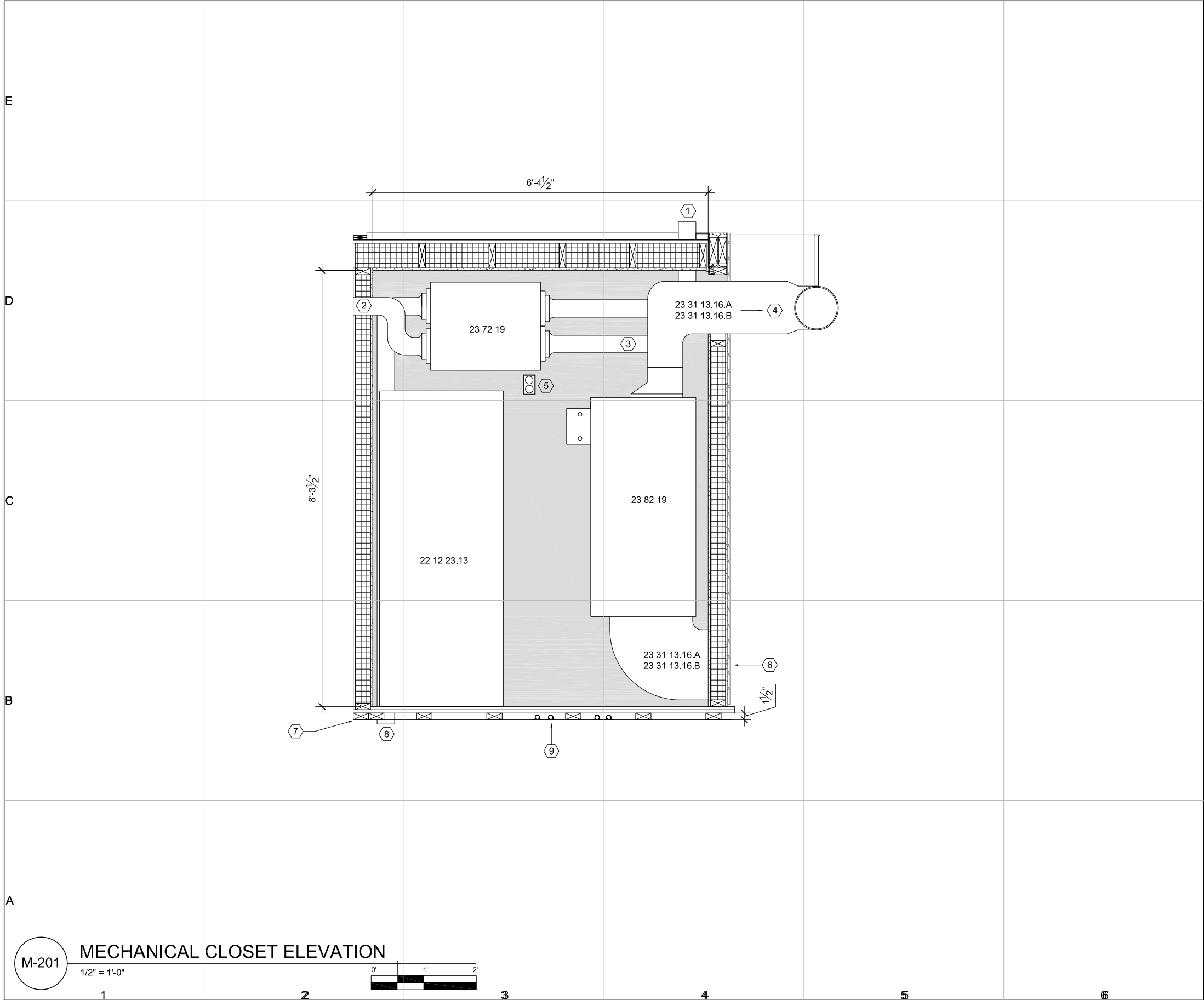
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PLAN

M-102

SHEET 165 OF 196



GENERAL SHEET NOTES:

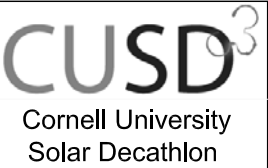
- 1. REFER TO P-201 FOR PLUMBING IN MECHANICAL CLOSET
- 2. RETURN AIR MEETS IRC, SEC. M1602.2 ITEMS 2 & 4
- 3. OUTSIDE AIR INTAKE FARTHER THAN 10 FT FROM VENT, MEETS IRC, SEC. M1602.2 ITEM 1

REFERENCE KEYNOTES:

- DIVISION 22 - PLUMBING**
22 12 23.13 FACILITY STEEL INDOOR POTABLE-WATER STORAGE PRESSURE TANKS - DOMESTIC WATER TANK (DHW)
- DIVISION 23 - HVAC**
23 31 13.16.A ROUND SPIRAL DUCTS - GALVANIZED-STEEL SHEETS
23 31 13.16.B ROUND SPIRAL DUCTS - CARBON-STEEL SHEETS
23 72 19 FIXED-PLATE AIR-TO-AIR RECOVERY EQUIPMENT - ENERGY RECOVERY VENTILATOR (ERV)
23 82 19 FAN COIL UNIT (FCU)

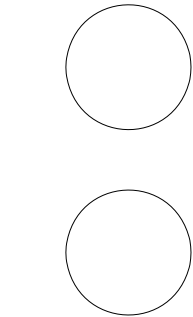
SHEET KEYNOTES:

- 1. EXHAUST AIR
- 2. RETURN AIR
- 3. SUPPLY AIR FROM ERV
- 4. SUPPLY AIR TO HOUSE
- 5. ELECTRICAL OUTLET
- 6. RETURN AIR FROM HOUSE
- 7. 2X4 WOOD SLEEPERS, TYPICALLY 16" O.C.
- 8. INLET AIR
- 9. PLUMBING PIPING RUNS IN BETWEEN SLEEPERS



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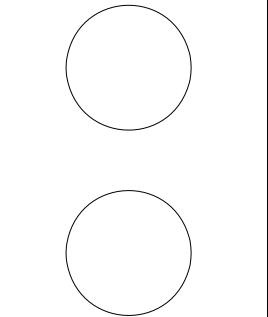
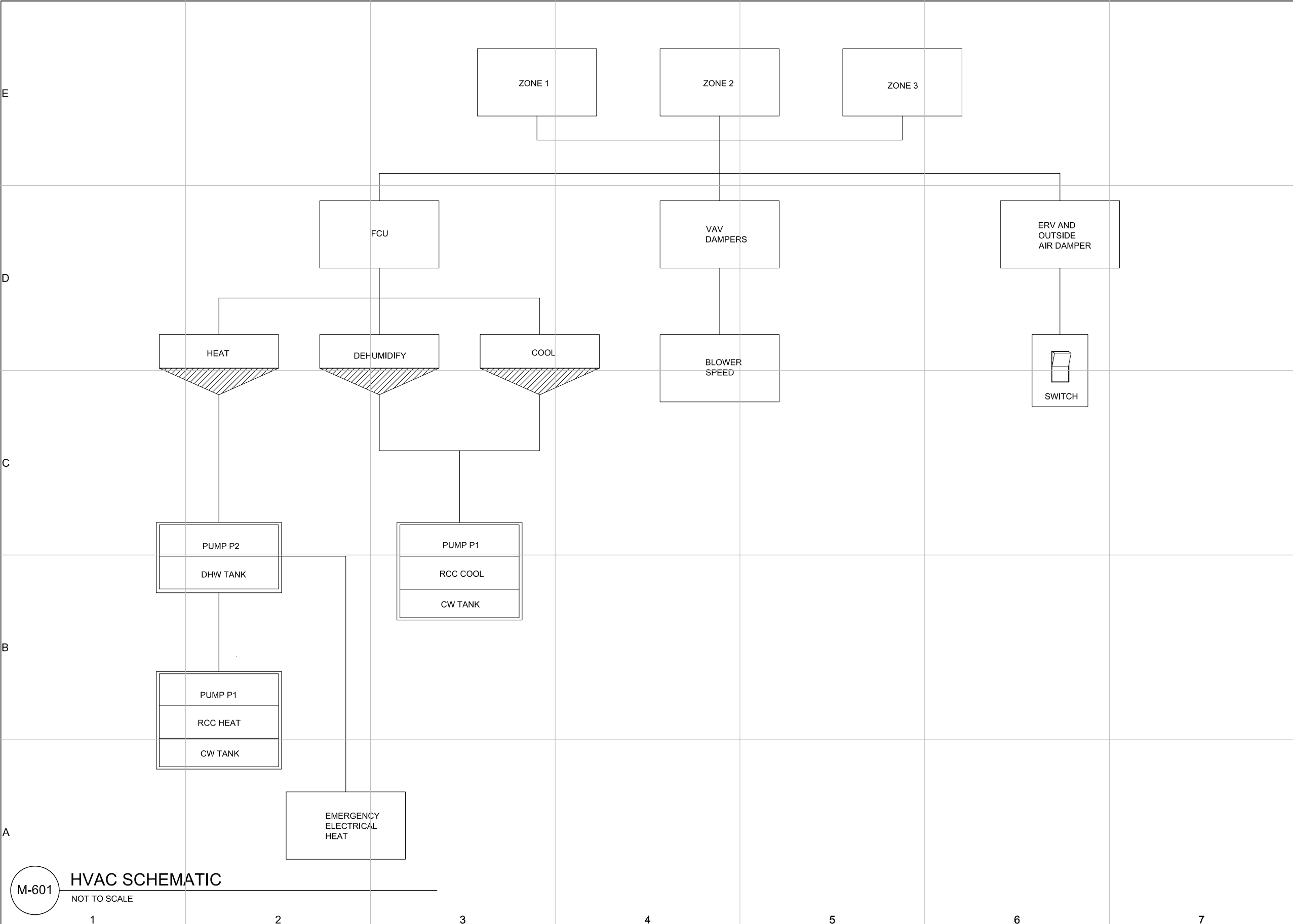


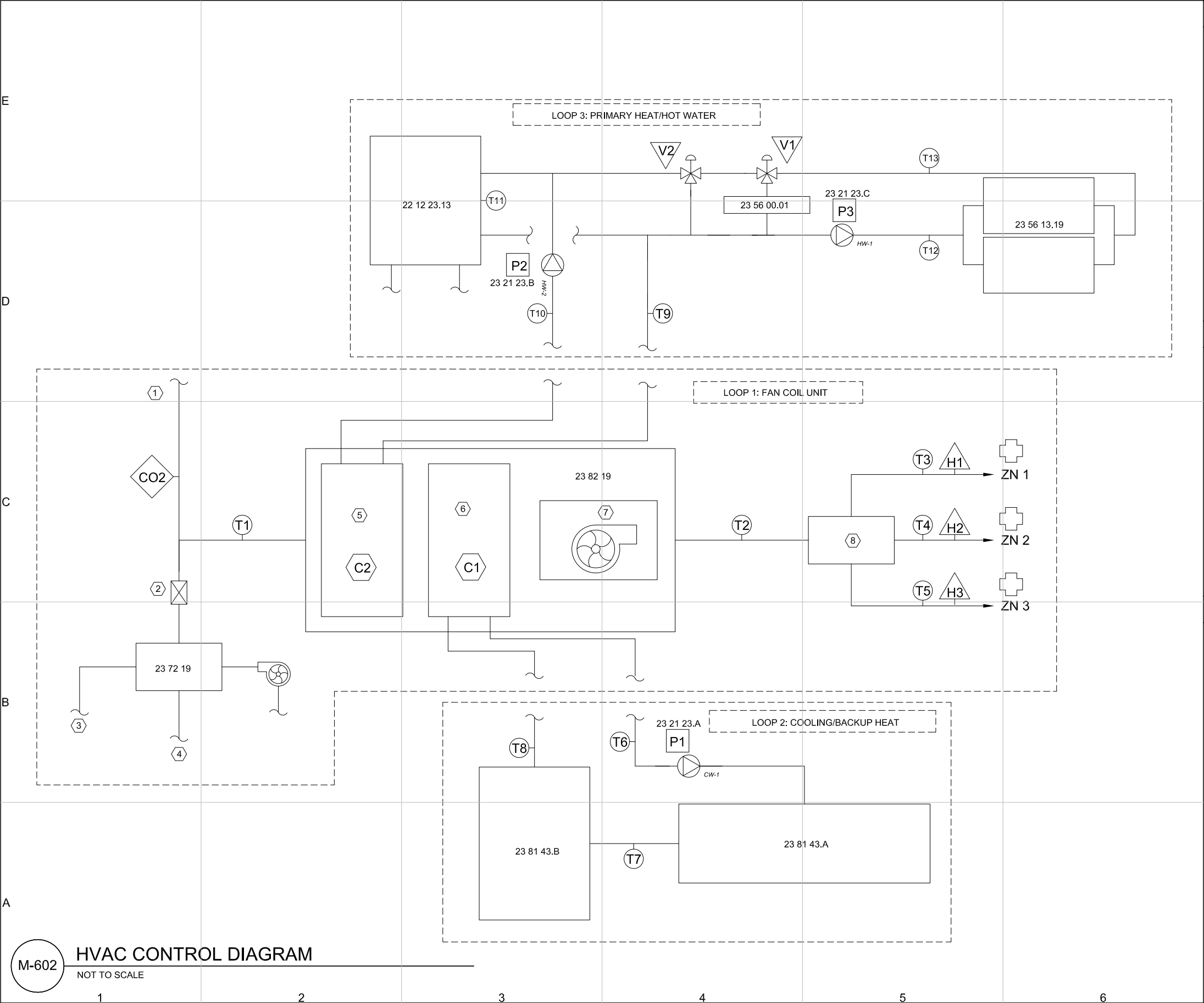
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SHEET TITLE

ELEVATION

M-201





M-602

HVAC CONTROL DIAGRAM
NOT TO SCALE

1

2

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4

5

6

GENERAL SHEET NOTES:

LEGEND:

- TEMPERATURE SENSOR
- CO2 SENSOR
- CONTROL VALVE
- HUMIDITY SENSOR
- PUMP
- HYDRONIC COIL
- AUTOMATED DAMPER

REFERENCE VALUES FOR CONTROL LOGIC (REFER TO M-604):

T2 - T1 = AIR TEMP GAIN
T7 - T6 = RCC LIQUID TEMP GAIN
T10 - T9 = DHW LIQUID TEMP LOSS
T12 - T13 = SOLAR THERMAL TEMP GAIN

T8 REFERENCE VALUE FOR MAINTAINING TEMP RANGE

T11 REFERENCE VALUE FOR VALVING

REFERENCE KEYNOTES:

DIVISION 22 - PLUMBING

22 12 23.13 FACILITY STEEL, INDOOR
POTABLE-WATER STORAGE
PRESSURE TANKS - DOMESTIC
WATER TANK (DHW)

DIVISION 23 - HVAC

23 21 23.A HYDRONIC PUMPS - RCC LOOP PUMP
P-1
23 21 23.B HYDRONIC PUMPS - HEATING LOOP
PUMP P-2
23 21 23.C HYDRONIC PUMPS - SOLAR THERMAL
LOOP P-3
23 82 19 FAN COIL UNIT (FCU)
23 56 00.02 HEAT SINK
23 56 13.19 HEATING SOLAR-VACUUM TUBE
COLLECTORS - SILICON SOLAR
SUNMAXX U-30 EVACUATED TUBES
FIXED-PLATE AIR-TO-AIR
ENERGY-RECOVERY EQUIPMENT -
ENERGY RECOVERY VENTILATOR
23 72 19 UNITARY AIR-SOURCE HEAT PUMP -
REVERSE CYCLE CHILLER (RCC)
23 81 43.A UNITARY AIR-SOURCE HEAT PUMP
ACCESSORY - CHILLED WATER TANK
(CW)
23 81 43.B

SHEET KEYNOTES:

- COMMON INSIDE AIR
- OUTSIDE AIR DAMPER
- EXHAUST AIR
- OUTSIDE AIR
- HEATING COIL
- COOLING COIL
- BLOWER
- INTEGRATED DUCT DAMPERS

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SHEET TITLE

SCHEMATIC

M-602

SHEET 168 OF 196

E

D

C

B

A

PUMP SCHEDULE											
TAG	DESCRIPTION	MANUFACTURER	MODEL	SIZE	GPM	FT HD	ELECTRICAL	NOTES			
P-1	REVERSE CYCLE CHILLER PUMP	BELL & GOSSETT	PL-36	0'-1 1/4"	8	35 FT	120V				
P-2	HEATING PUMP	BELL & GOSSETT	NRF-22	0'-1 1/4"	3	14FT	120V				
P-3	SOLAR THERMAL PUMP	BELL & GOSSETT	NRF-36	0'-0 3/4"	3	20 FT	115V				

FAN SCHEDULE											
TAG	DESCRIPTION	MANUFACTURER	MODEL	CFM	ELECTRICAL	NOTES					
FCU-1	FAN COIL UNIT	MAGICAIRE	BV08-20	800	230V						
ERV-1	ENERGY RECOVERY VENTILATOR	RENEWAIRE	EV70	40-70	120V						

HYDRONIC COIL SCHEDULE											
TAG	DESCRIPTION	ROWS	EDB	EWB	TLD	SLD	LDB	GPM	EWT	LWT	WPD
C-1	FCU COLD	4	76.0	63.0	18430	13350	62.51	8.0	45.0	49.61	9.62
C-2	FCU HOT	2	68.0	-	17540	-	85.72	2.7	120.0	107.00	2.69

WATER STORAGE TANK SCHEDULE											
TAG	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS	SIZE	INSULATION					
DHW	DOMESTIC HOT WATER	SILICON SOLAR	CUSTOM	DIA 28" X 72" H	120 GAL	R-18.75					
CW	CHILLED WATER	SILICON SOLAR	CUSTOM	36"W X 36"L X 18"D	50 GAL	R-15					

HEAT PUMP SCHEDULE											
TAG	DESCRIPTION	MANUFACTURER	MODEL	NOMINAL SIZE	COOLING EER	HEATING COP					
RCC	REVERSE CYCLE CHILLER	UNICO	UCHR-036-1-1-P0	3 TONS	11.0	3.2					

REFERENCE KEYNOTES:

DIVISION 22 - PLUMBING
22 12 23.13
FACILITY STEEL, INDOOR
POTABLE-WATER STORAGE
PRESSURE TANKS - DOMESTIC
WATER TANK (DHW)

DIVISION 23 - HVAC
23 21 23.A
HYDRONIC PUMPS - RCC LOOP PUMP, P-1
23 21 23.B
HYDRONIC PUMPS - HEATING LOOP PUMP, P-2
23 21 23.C
HYDRONIC PUMPS - SOLAR THERMAL PUMP, P-3
23 72 19
FIXED-PLATE AIR-TO-AIR
ENERGY-RECOVERY EQUIPMENT -
ENERGY RECOVERY VENTILATOR (ERV)
23 81 43.A
AIR-SOURCE UNITARY HEAT PUMP -
REVERSE CYCLE CHILLER (RCC)
23 81 43.B
AIR-SOURCE UNITARY HEAT PUMP
ACCESSORY - CHILLED WATER TANK (CW)
23 82 19
FAN COIL UNIT (FCU)

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SHEET TITLE

SCHEDULE

M-603

SHEET 169 OF 196

M-603

HVAC SCHEDULE

NOT TO SCALE

1

2

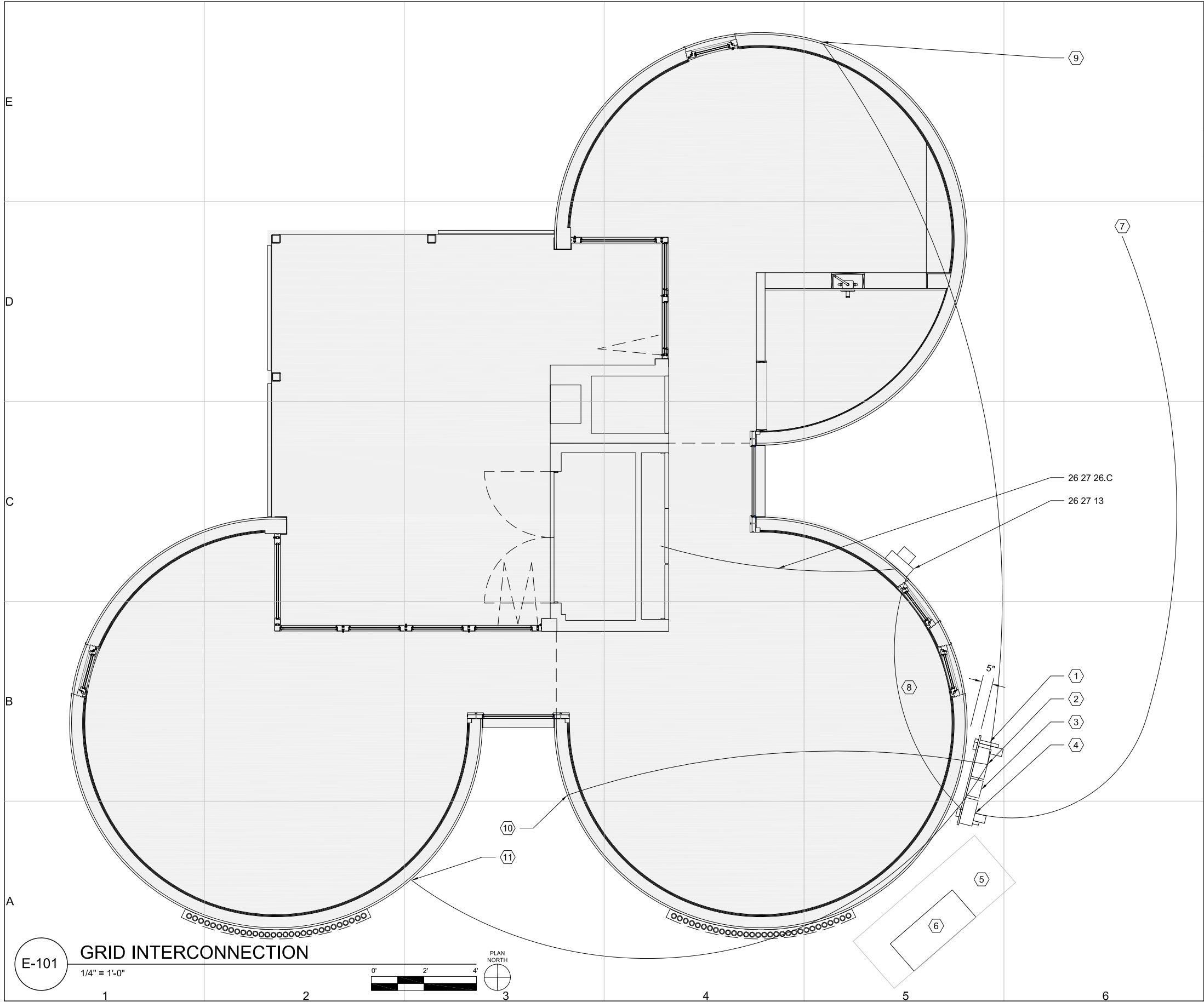
3

4

5

6

E	CORNELL UNIVERSITY SOLAR DECATHLON 2009 ELECTRICAL SERIES					<div>GENERAL SHEET NOTES:</div> <div>1. ALL PLANS UNLESS OTHERWISE SPECIFIED ARE SCALED AT 1/4" = 1'-0"</div> <div>2. ALL RECEPTACLES ARE TAMPER RESISTANT</div>	<div><div>CUSD³</div><div>Cornell University Solar Decathlon</div></div> <div>CORNELL UNIVERSITY SOLAR DECATHLON 909 MITCHELL STREET ITHACA, NY 14850 (607) 277-7475</div> <div>WWW.CUSD.CORNELL.EDU</div> <div>CONSULTANTS</div> <div></div> <div><div></div><div></div></div> <div>PROJECT</div> <div>SOLAR DECATHLON 2009</div> <div>DRAWN BY: CD</div> <div>DATE: JUNE 2, 2009</div> <div>COPYRIGHT: CORNELL UNIVERSITY 2009</div> <div>SHEET TITLE</div> <div>SYMBOLS AND NOTES</div> <div>E-001</div> <div>SHEET 171 OF 196</div>
	D						
	C						
	B				<div>SYMBOLS:</div> <div><div><div> - GROUNDING</div><div> - DUPLEX RECEPTACLE</div><div> - SPECIAL PURPOSE RECEPTACLE</div><div> - SINGLE RECEPTACLE</div><div> - GFCI DUPLEX</div><div> - QUADRAPLEX</div><div> - SWITCHED DUPLEX</div><div> - FLOOR RECEPTACLE</div><div> - CEILING PULL SWITCH</div><div> - ELECTRICAL, SWITCH, SINGLE POLE</div><div> - ELECTRICAL, SWITCH, THREE WAY</div><div> - TRANSFORMER</div><div> - LIGHTING, CEILING MOUNTED</div><div> - LIGHTING, WALL MOUNTED</div><div> - INSTRUMENTATION SENSOR</div></div><div><div> - CIRCUIT NUMBER</div><div> - SECTION CALLOUT</div><div> - DETAIL CALLOUT</div></div></div>		
	A						
	1	2	4	5	6		



GENERAL SHEET NOTES:

1. REFERENCE KEYNOTE ITEM 26 27 13 IS PROVIDED BY THE TEAM

2. SHEET KEYNOTE ITEMS 3 THROUGH 5 ARE PROVIDED BY THE ORGANIZERS

3. SHEET KEYNOTE ITEMS 9 THROUGH 11 INDICATE WIRE RUNS COMPLETED BY THE ORGANIZERS FOR THE INSTRUMENTATION SENSORS IN THE HOUSE

REFERENCE KEYNOTES:

DIVISION 26 - ELECTRICAL

26 27 13 METER HOUSING

26 27 26.C VIA SE SERVICE ENTRANCE CABLE

SHEET KEYNOTES:

1. TERMINAL BOX MOUNTING PANEL

2. DATA LOGGER

3. SQUARE-D SERVICEPAK

4. TERMINAL BOX

5. CLEARANCE FOR REVERSE CYCLE CHILLER

6. REVERSE CYCLE CHILLER

7. SERVICE FROM GRID

8. SERVICE RUNS IN 1-1/2" LFMC UNDER HOUSE TO 1-1/2" RIGID CONDUIT ALONG THE SIDE OF THE HOUSE; 2 SEPARATE 2/0 WIRES WITH #1 GROUND

9. T&RH INSTRUMENTATION SENSOR WIRED INTO HOUSE THROUGH 1" GREENFIELD IN THE WALL

10. T&RH AND FRIDGE & FREEZER SENSORS WIRED INTO THE HOUSE THROUGH 1-1/4" GREENFIELD IN THE WALL

11. T&RH AND PHOTOMETER SENSORS WIRED INTO THE HOUSE THROUGH 1-1/4" GRENFIELD IN THE WALL

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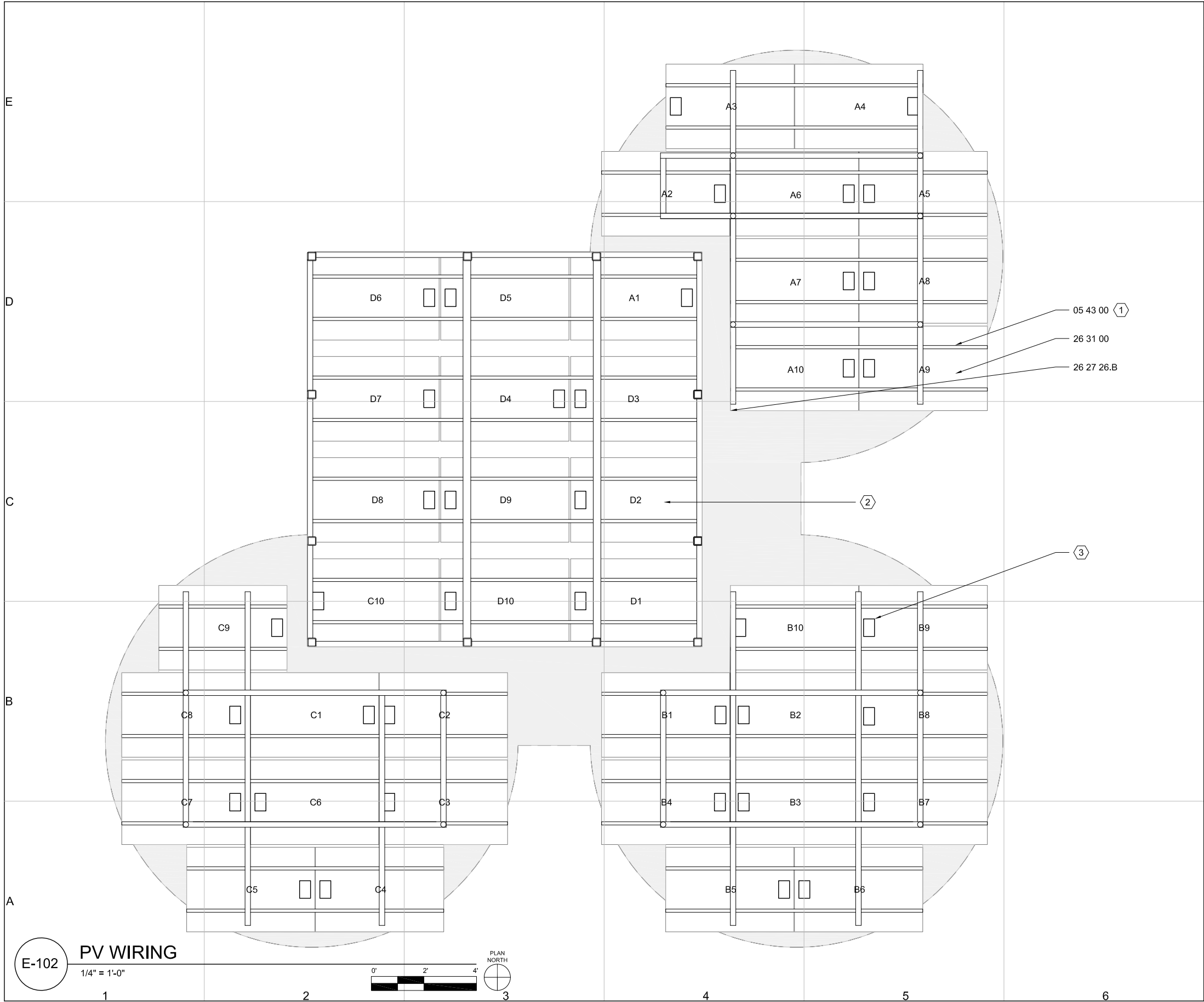
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SHEET TITLE

PLAN

E-101

SHEET 172 OF 196



GENERAL SHEET NOTES:

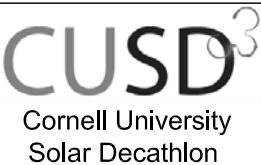
1. THIS DRAWING ILLUSTRATES THE WIRING ORDER FOR THE PHOTOVOLTAIC PANELS

REFERENCE KEYNOTES:

- DIVISION 05 - SLOTTED CHANNEL FRAMING
05 43 00 POWER STRUT RACK
DIVISION 26 - ELECTRICAL
26 27 26.B OMNI USE-2/RHW-2 SERVICE ENTRANCE WIRE
26 31 00 PHOTOVOLTAIC COLLECTORS

SHEET KEYNOTES:

1. PHOTOVOLTAICS MOUNTED TO STRUTS WITH HOLES ON ONE SIDE AT 1-7/8" SPACING ON CENTER
2. CONDUCTORS ENTER ELECTRICAL CLOSET UNDER THIS PHOTOVOLTAIC PANEL
3. JUNCTION BOX MOUNTED TO PHOTOVOLTAICS BY MANUFACTURER

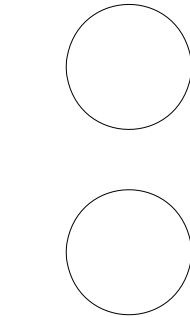


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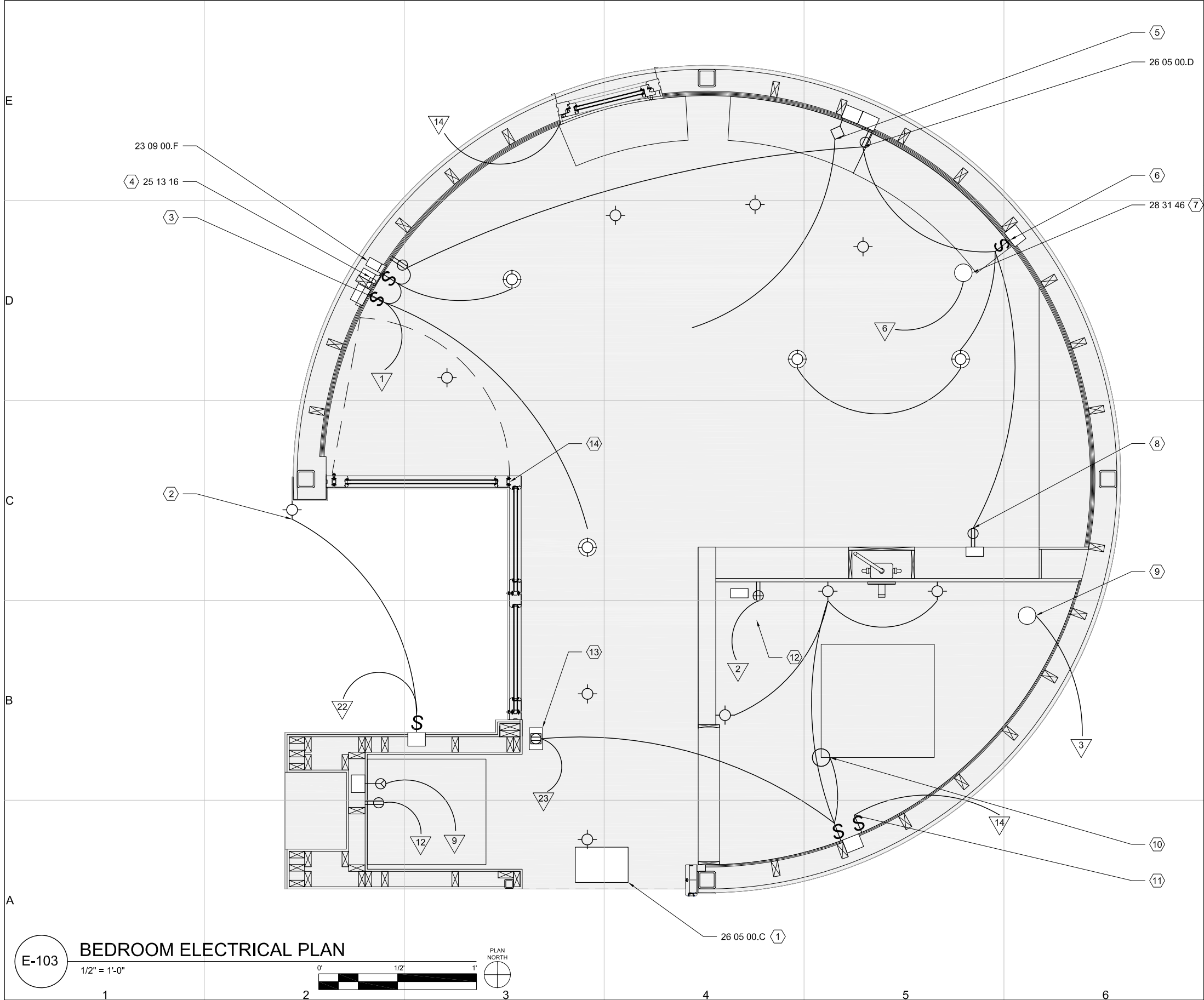
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PLAN

E-102

SHEET 173 OF 196



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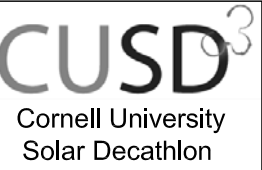
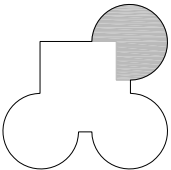
1. BOXES ARE DRAWN IN
2. TYPICAL WIRING IS ACHIEVED WITH 12-2 OR 14-2 ROMEX
3. WALL RECEPTACLES OCCUR AT LEAST EVERY 12 FEET ALONG THE WALL, AND ARE LOCATED WITHIN 6 FEET OF THE END OF A WALL
4. CIRCUITS #1, #14, AND #23 ARE AFCI PROTECTED
5. SWITCHES ARE LOCATED SENSIBLY AT THE "HINGE" SIDE OF DOORS, WITH A FEW EXCEPTIONS

REFERENCE KEYNOTES:

- DIVISION 23 - HVAC
23 09 00.F REMOTE SENSORS AND PROBES
- DIVISION 25 - INTEGRATED AUTOMATION
25 13 16 MPANEL
- DIVISION 26 - ELECTRICAL
26 05 00.C JUNCTION BOX
26 05 00.D TAMPER-RESISTANT RECEPTACLE
- DIVISION 28 - ELECTRONIC DETECTION & ALARM
28 31 46 SMOKE DETECTION SENSOR

SHEET KEYNOTES:

1. JUNCTION BOX CONTAINS THE FOLLOWING RUNS:
BEDROOM CIRCUIT
BATHROOM RECEPTACLE CIRCUIT
BATHROOM LIGHTING CIRCUIT
COURTYARD LIGHTING SWITCH
LAUNDRY CIRCUIT
DRYER CIRCUIT
ETHERNET CABLE
AUTOMATED LOGIC TEMPERATURE CABLE
AUTOMATED LOGIC HUMIDITY CABLE
ERV SWITCH WIRING
ALARM DOOR SENSOR WIRE
SMOKE ALARM CABLE
WINDOW SHADE CABLE
2. COURTYARD LIGHTING: 4 FLUORESCENT LAMPS
3. THIS SWITCH IS HARD-WIRED TO THE TRACK LIGHTING IN THE HALLWAY. KITCHEN SWITCH CONTROLS THE SAME LIGHTS USING INSTONTECH TECHNIQUES. INTEGRATED TRANSFORMER
4. MPANEL AND AUTOMATED LOGIC SENSOR ARE MOUNTED TO THE WALL. THE MPANEL IS AT A HEIGHT OF 4'-6" AND THE AUTOMATED LOGIC SENSOR IS AT A HEIGHT OF 4'
5. T&RH INSTRUMENTATION SENSOR ENTERS WALL FROM UNDER HOUSE IN A 1" GREENFIELD CONDUIT AND OPEN TO A BOX BELOW THE SHELVING IN THE ROOM. T&RH SENSOR IS LOCATED NEAR CENTER OF ROOM ON A 3.5 FOOT STAND
6. THIS SWITCH IS HARD-WIRED TO THE MONOPOINT LIGHTING ABOVE THE BED. THE TRANSFORMERS FOR THESE LIGHTS ARE INTEGRATED
7. OCTAGON BOX FOR SMOKE ALARM, WIRED WITH 14-3 ROMEX COMING FROM THE SMOKE ALARM LOCATED IN THE KITCHEN
8. THIS RECEPTACLE IS MOUNTED IN SHELVING
9. BOX IN FLOORING PROVIDES GFCI-PROTECTED CIRCUIT TO TOILET LOAD
10. SKYLIGHT COMES PREWIRED WITH A 20 FOOT CABLE. MUST BE ON A 15-A CIRCUIT
11. THIS SWITCH CONTROLS THE ERV
12. THIS GFCI RECEPTACLE IS LOCATED IN THE FAUCET CABINETRY IN ACCORDANCE WITH NEC 210
13. THIS FLOOR-MOUNTED RECEPTACLE SATISFIES NEC 210.60(H) FOR HALLWAY RECEPTACLES
14. ALARM DOOR SENSOR



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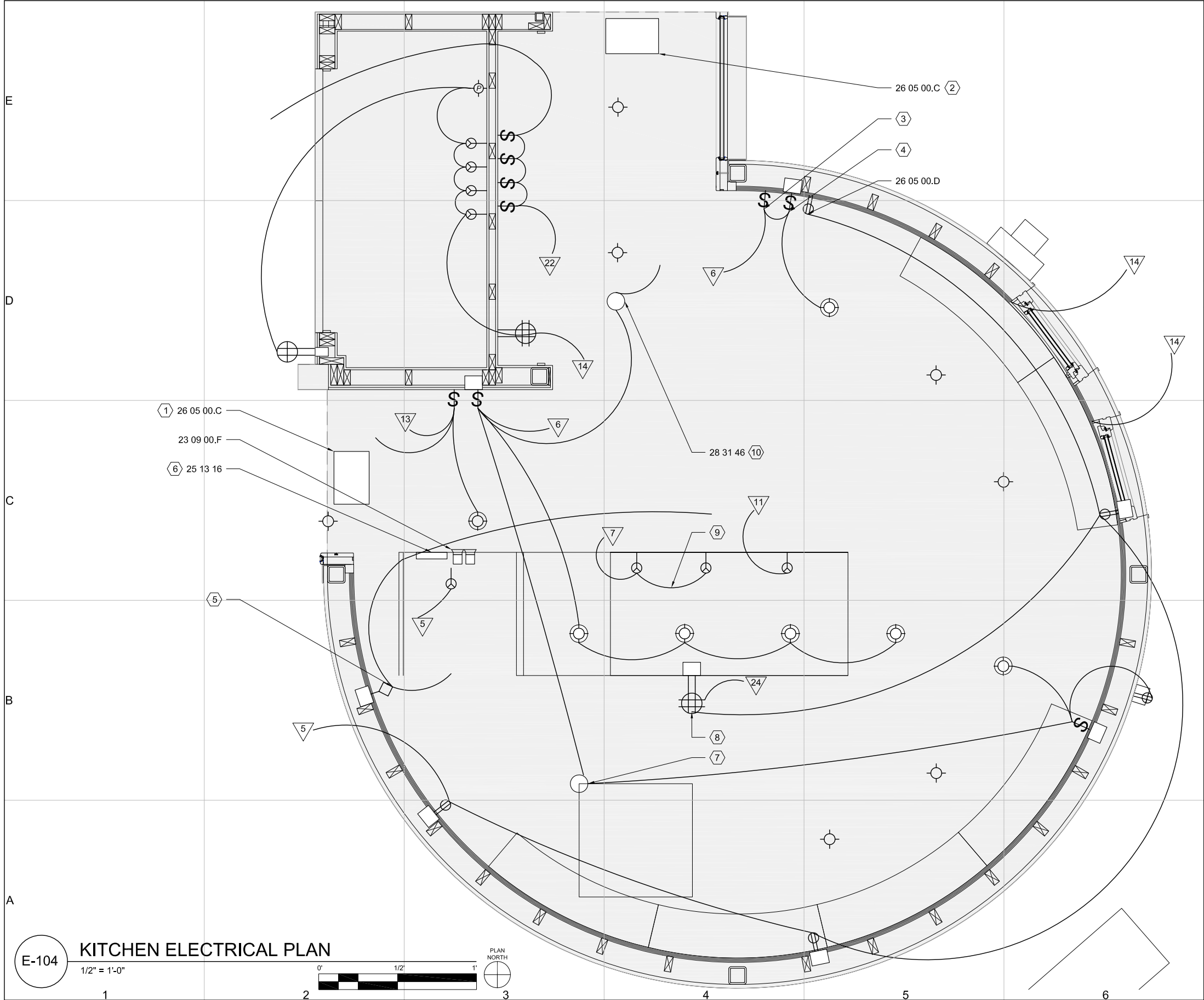
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PLAN

E-103



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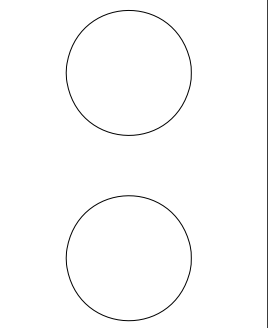
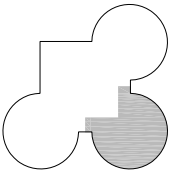
1. BOXES ARE DRAWN IN
2. TYPICAL WIRING IS ACHIEVED WITH 12-2 OR 14-2 ROMEX
3. WALL RECEPTACLES OCCUR AT LEAST EVERY 12 FEET ALONG THE WALL, AND ARE LOCATED WITHIN 6 FEET OF THE END OF A WALL
4. CIRCUIT #22 IS AFCI PROTECTED

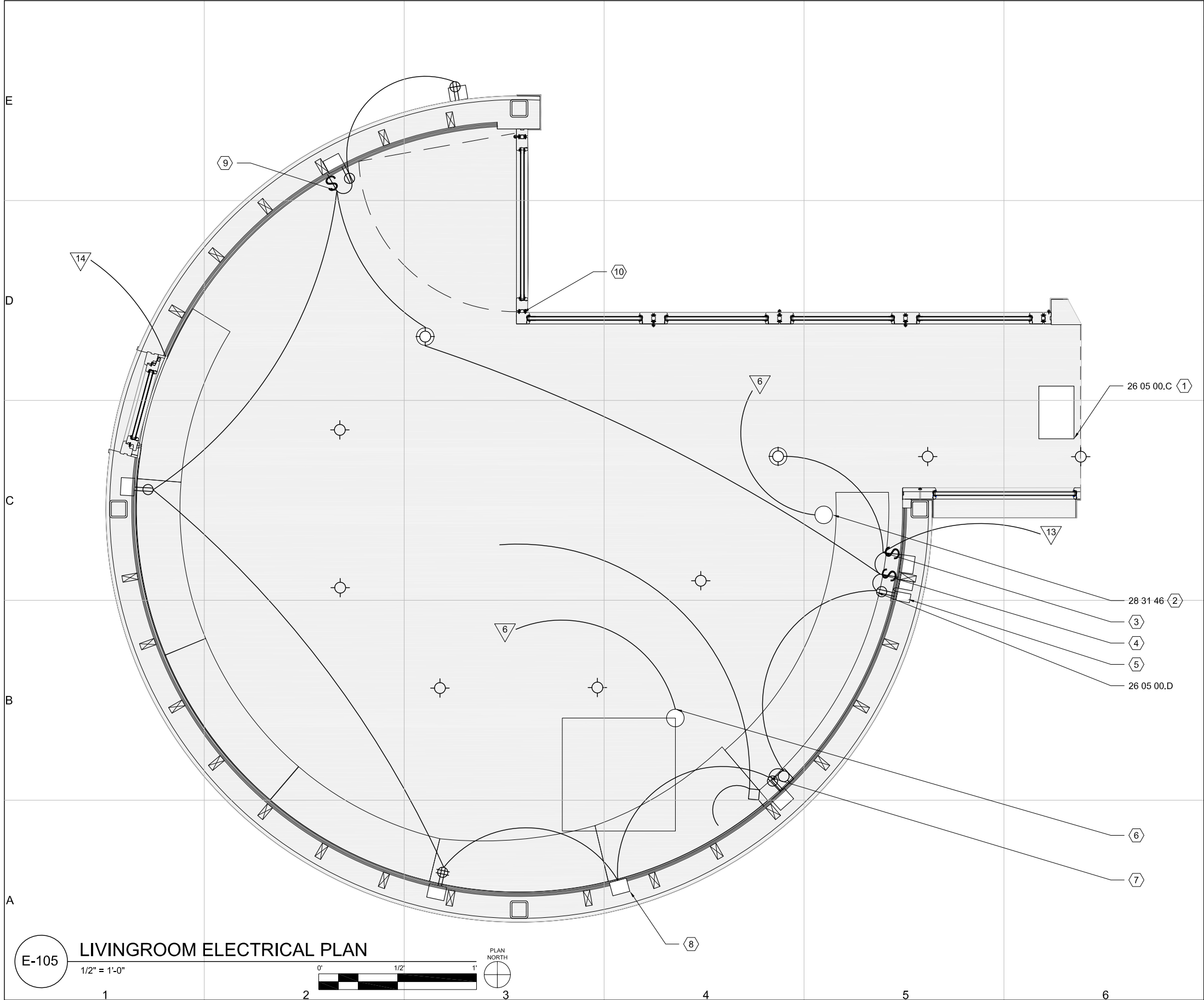
REFERENCE KEYNOTES:

- DIVISION 23 - HVAC
23 09 00.F REMOTE SENSORS AND PROBES
- DIVISION 25 - INTEGRATED AUTOMATION
25 13 16 MPANEL
- DIVISION 26 - ELECTRICAL
26 05 00.C JUNCTION BOX
26 05 00.D TAMPER-RESISTANT RECEPTACLE
- DIVISION 28 - ELECTRONIC DETECTION & ALARM
28 31 46 SMOKE DETECTION SENSOR

SHEET KEYNOTES:

1. JUNCTION BOX CONTAINS THE FOLLOWING RUNS:
LIVING ROOM CIRCUIT
ETHERNET CABLES (3)
AUTOMATED LOGIC TEMPERATURE CABLE
AUTOMATED LOGIC HUMIDITY CABLE
KITCHEN CIRCUIT PORTION (SKYLIGHT)
ALARM DOOR SENSOR WIRE
SMOKE ALARM CABLE
WINDOW SHADE CABLE 1
2. JUNCTION BOX CONTAINS THE FOLLOWING RUNS:
BEDROOM CIRCUIT
BATHROOM RECEPTACLE CIRCUIT
BATHROOM LIGHTING CIRCUIT
COURTYARD LIGHTING SWITCH
LAUNDRY CIRCUIT
DRYER CIRCUIT
ETHERNET CABLE
AUTOMATED LOGIC TEMPERATURE CABLE
AUTOMATED LOGIC HUMIDITY CABLE
ERV SWITCH WIRING
ALARM DOOR SENSOR WIRE
SMOKE ALARM WIRE
WINDOW SHADE CABLE
3. THIS SWITCH CONTROLS TRACK LIGHTING IN BEDROOM HALLWAY USING INSTEON TECHNIQUES; NOT HARD-WIRED
4. THIS SWITCH IS HARD-WIRED TO THE TRACK LIGHTING IN THE NORTH EAST KITCHEN. THE TRANSFORMERS FOR THESE LIGHTS ARE INTEGRATED
5. T&RH AND FRIDGE & FREEZER INSTRUMENTATION SENSORS ENTER WALL FROM UNDER HOUSE IN A 1-1/4" GREENFIELD CONDUIT AND OPEN TO A BOX NEAR THE FLOOR NEXT TO THE REFRIGERATOR. T&RH SENSOR IS LOCATED NEAR CENTER OF ROOM ON A 3.5 FOOT STAND. FRIDGE & FREEZER SENSOR RUNS ALONG FLOOR INTO THE APPLIANCE
6. MPANEL AND AUTOMATED LOGIC SENSOR ARE MOUNTED TO THE BACK OF THE REFRIGERATOR COMPARTMENT
7. SKYLIGHT COMES PREWIRED WITH A 20 FOOT CABLE. MUST BE ON A 15-A CIRCUIT
8. TWO GFCI RECEPTACLES LAID LAZY, ON SEPARATE CIRCUITS, SERVE THE KITCHEN UNIT
9. SPLICED ACCORDING TO NEC 210.19(3)
10. OCTAGON BOX FOR SMOKE ALARM, WIRED WITH 14-2 ROMEX, 14-3 ROMEX CONNECTS SMOKE ALARM TO BOX IN ELECTRICAL CLOSET THAT COMBINES ALL SMOKE ALARMS





GENERAL SHEET NOTES:

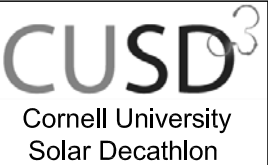
- 1. BOXES ARE DRAWN IN
- 2. TYPICAL WIRING IS ACHIEVED WITH 12-2 OR 14-2 ROMEX
- 3. WALL RECEPTACLES OCCUR AT LEAST EVERY 12 FEET ALONG THE WALL, AND ARE LOCATED WITHIN 6 FEET OF THE END OF A WALL
- 4. CIRCUIT #13 IS AFCI PROTECTED
- 5. SWITCHES ARE LOCATED SENSIBLY AT THE "HINGE" SIDE OF DOORS, WITH A FEW EXCEPTIONS

REFERENCE KEYNOTES:

- DIVISION 23 - HVAC
23 09 00.F REMOTE SENSORS AND PROBES
- DIVISION 26 - ELECTRICAL
26 05 00.C JUNCTION BOX
26 05 00.D TAMPER-RESISTANT RECEPTACLE
- DIVISION 28 - ELECTRONIC DETECTION & ALARM
28 31 46 SMOKE DETECTION SENSOR

SHEET KEYNOTES:

- 1. JUNCTION BOX CONTAINS THE FOLLOWING RUNS:
LIVING ROOM CIRCUIT
ETHERNET CABLES (3)
AUTOMATED LOGIC CABLE
KITCHEN CIRCUIT PORTION (SKYLIGHT)
ALARM DOOR SENSOR WIRE
SMOKE ALARM WIRE
- 2. OCTAGON BOX FOR SMOKE ALARM, WIRED WITH 14-3 ROMEX TO SMOKE ALARM IN KITCHEN
- 3. THIS SWITCH IS HARD-WIRED TO THE TRACK LIGHTING IN THE HALLWAY, THE TRANSFORMERS FOR THESE LIGHTS ARE INTEGRATED
- 4. THIS SWITCH CONTROLS LIVING ROOM LIGHTING USING INSTEON TECHNIQUES; NOT HARD-WIRED
- 5. AUTOMATED LOGIC SENSOR IS MOUNTED TO THE WALL
- 6. SKYLIGHT COMES PREWIRED WITH A 20 FOOT CABLE, MUST BE ON A 15-A CIRCUIT
- 7. T&RH AND PHOTOMETER INSTRUMENTATION SENSORS ENTER WALL FROM UNDER HOUSE IN A 1-1/4" GREENFIELD CONDUIT AND OPEN TO A BOX IN THE WALL UNDER THE BENCH. T&RH SENSOR STAND IS LOCATED NEAR CENTER OF ROOM ON A 3.5 FOOT STAND. THE PHOTOMETER WIRE DOES NOT TOUCH THE FLOOR; RUNS ALONG SHELVING TO ADJACENT DESK
- 8. ETHERNET PORTS SERVE ENTERTAINMENT SYSTEM AND WORKSPACE
- 9. THIS SWITCH IS HARD-WIRED TO THE LIVING ROOM LIGHTING, THE TRANSFORMER FOR THESE LIGHTS ARE INTEGRATED
- 10. ALARM DOOR SENSOR

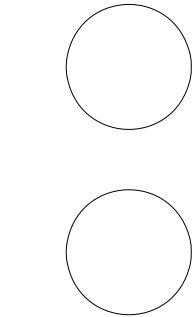


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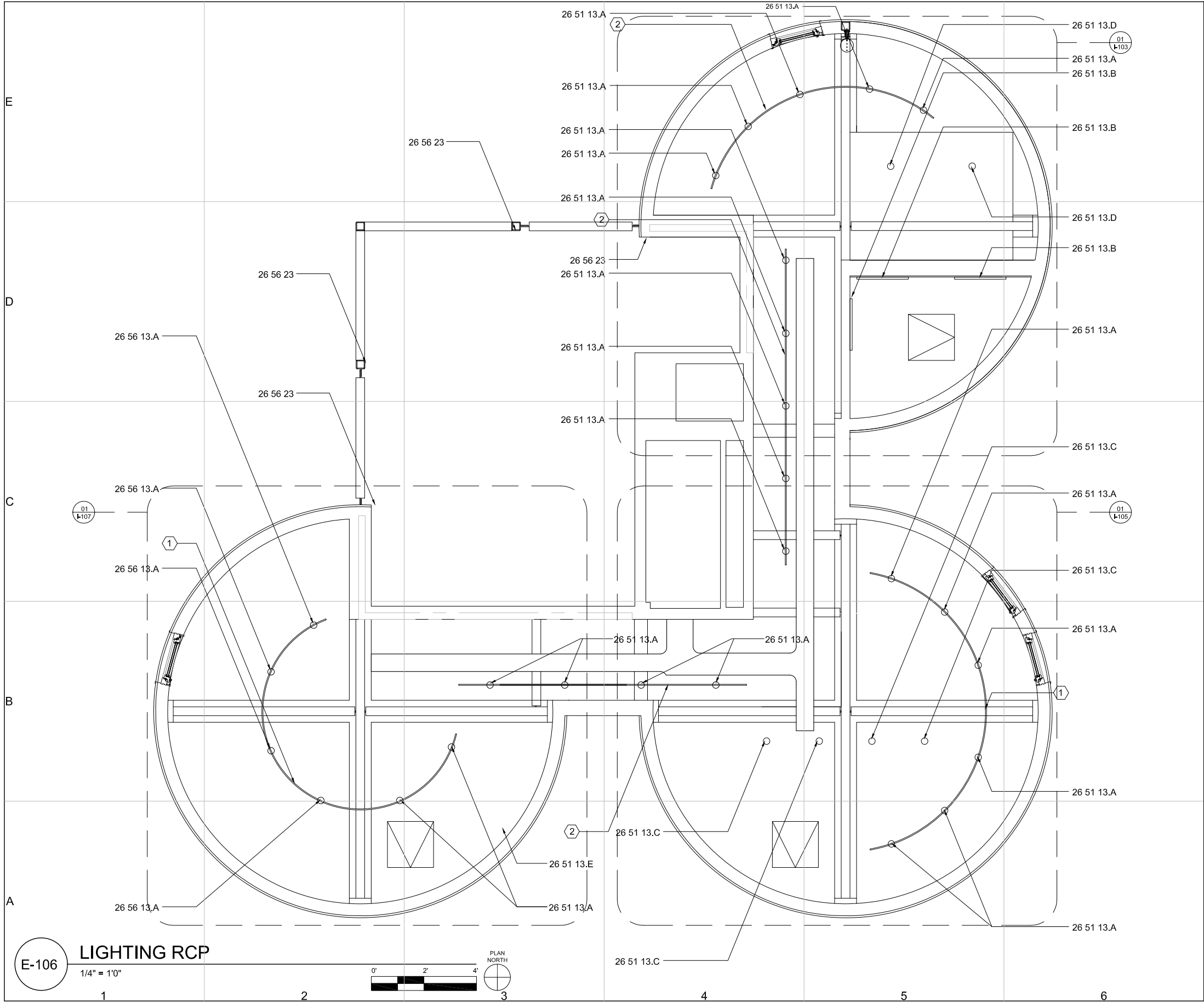
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SHEET TITLE

PLAN

E-105



GENERAL SHEET NOTES:

- SEE E-405 FOR FULL SCHEDULE OF ALL LIGHTING FIXTURES AND COMPONENT PARTS

REFERENCE KEYNOTES:

DIVISION 26 - ELECTRICAL

26 51 13.A	INTERIOR LIGHTING TRACK LIGHT
26 51 13.B	INTERIOR LIGHTING FLUORESCENT WALL MOUNTED LIGHT
26 51 13.C	INTERIOR LIGHTING PENDANT LIGHT
26 51 13.D	INTERIOR LIGHTING RECESSED LED DOWNLIGHT
26 51 13.E	INTERIOR LIGHTING TASK LIGHT
26 56 23	AREA LIGHTING

SHEET KEYNOTES:

- NO ELECTRIC CONTINUITY CONNECTION BETWEEN RAILS
- ELECTRIC CONTINUITY CONNECTION BETWEEN RAILS



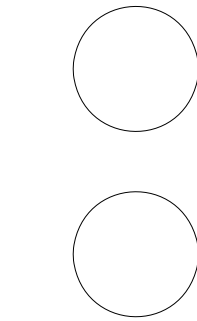
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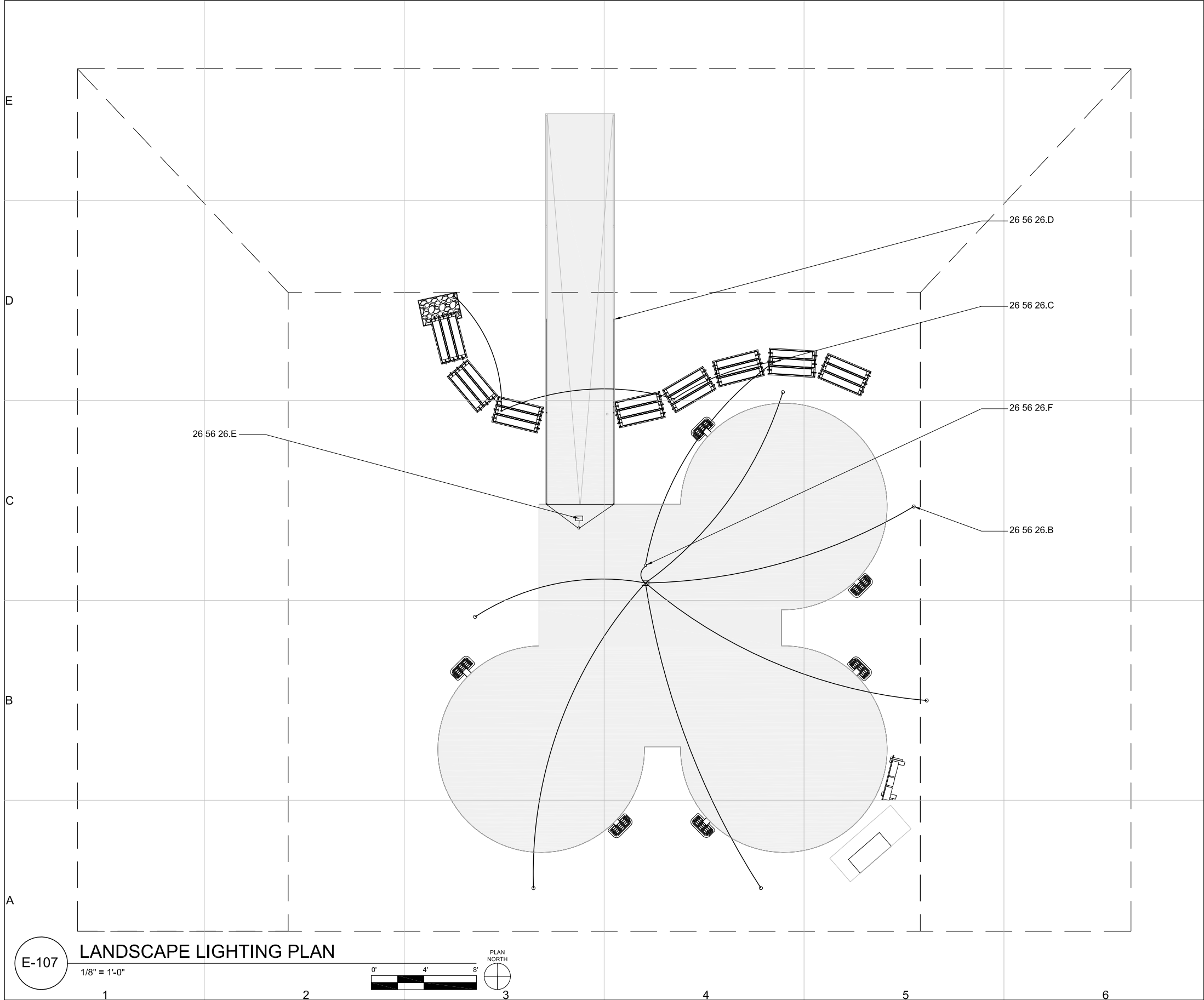
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SHEET TITLE

RCP

E-106

SHEET 177 OF 196



GENERAL SHEET NOTES:

1.

ALL LIGHTS SHALL BE ADJUSTED ON SITE TO OBTAIN DESIRED LIGHTING AFFECT

2.

ALL ELECTRICAL WIRING TO BE 18 GAUGE WEATHERPROOF ELECTRICAL CABLE

3.

LIGHTS TO BE SEPARATED BY AREA AND CONTROLLED PER SPECIFICATION BY LANDSCAPE ARCHITECT

REFERENCE KEYNOTES:

DIVISION 26 - ELECTRICAL

26 56 26.B

ACCENT LIGHT

26 56 26.C

UNDERWATER LIGHT

26 56 26.D

RAMP LIGHTING

26 56 26.E

TRANSFORMER

26 56 26.F

DRIVER

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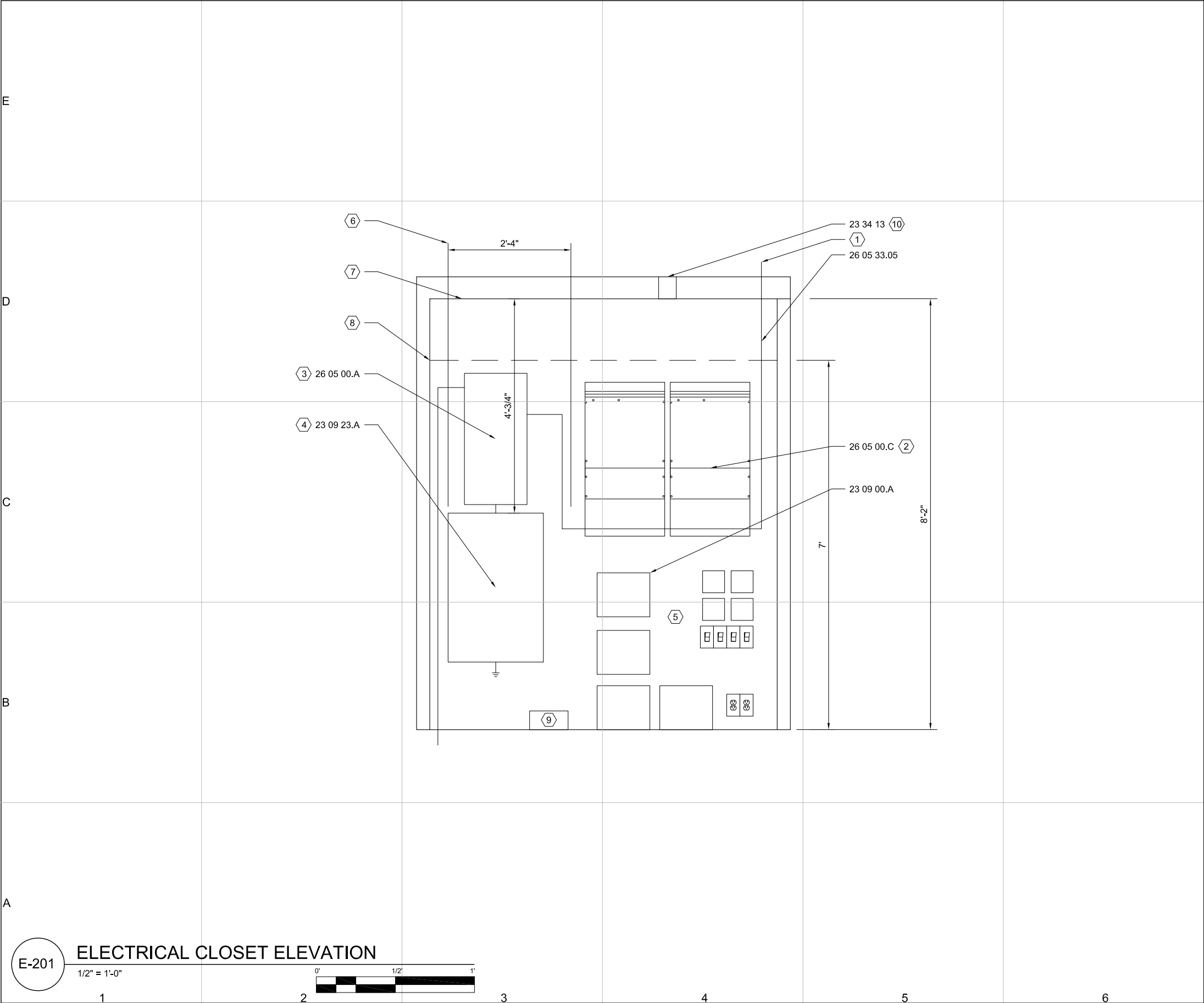
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PLAN

E-107

SHEET 178 OF 196

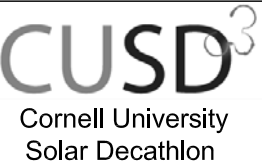


REFERENCE KEYNOTES:

DIVISION 23 - HVAC
23 09 00.A AUTOMATED LOGIC
MULTI-EQUIPMENT CONTROLLER
23 34 13 AXIAL HVAC FAN
DIVISION 26 - ELECTRICAL
26 05 00.A INVERTER
26 05 33.05 ELECTRICAL METALLIC TUBING
26 24 16.A HOMELINE LOAD PANEL
26 24 16.B CES DISTRIBUTION PANEL

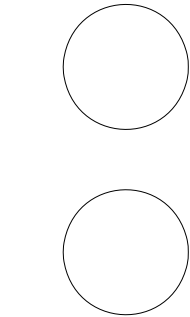
SHEET KEYNOTES:

1. FROM PV ARRAY, 1-1/4" EMT
2. INVERTERS 35"H X 18 1/8"W X 8 5/8"D. CLEARANCES OBEY MANUAL SPECIFICATIONS
3. INTERCONNECTION LOAD PANEL 29.86"H X 14-1/4"W
4. CES LOAD PANEL 33 7/8"H X 21 1/8"W
5. THIS AREA CONTAINS ELK CONTROL PANEL, AUTOMATED LOGIC CONTROL PANEL, INSTEON CONTROL PANEL, WINDOW SHADE TRANSFORMER, JUNCTION BOXES FOR HOUSE CIRCUITS (COURTYARD, KITCHEN, LIVING ROOM SKYLIGHT, SMOKE ALARMS), SWITCHES FOR LANDSCAPE PUMPS AND LIGHTING, AND RECEPTACLES FOR CONTROLS EQUIPMENT
6. TRANSFORMER FOR KITCHEN LIGHTING. 8-3/4" X 4-1/2" X 3-3/4"
7. NEC 110.26(A)(2) 30 INCHES WIDTH CLEARANCE
8. NEC 408.18(A) 3-FOOT CLEARANCE TO CEILING
9. CEILING HEIGHT IS 7 FEET FOR THE FIRST 3 INCHES DEEP INTO THE CLOSET.
10. 4 INCH VENTILATION DUCT WITH 85 CFM IN-LINE FAN TO CLOSET CEILING



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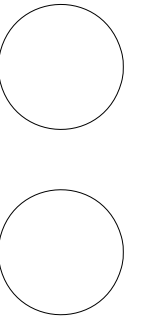
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ELEVATION

E-201

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LOAD CALCULATION

E-603

[illegible]

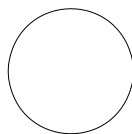
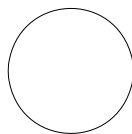
							ELECTRICAL PANELBOARD SCHEDULE				
CIRCUIT #	AREA SERVED		V	TRIP	LOAD(A)	1.25*LOAD	WIRE	BREAKER	DESCRIPTION		
1	BEDROOM		120	20	10	12.5	#12	1-P 20A AF2	3 RCPTLE., LIGHTING, OUTDOOR GFCI RCPTLE		
2	BATHROOM RECEPTACLE		120	20	3	3.8	#12	1-P 20A	GFCI RCPTLE.		
3	TOILET		120	15	5	6.25	#14	1-P 15A GFCI	TOILET		
4	KITCHEN SA I		120	20	11	13.8	#12	1-P 20A	SMALL APPLIANCE: 1 GFCI (ISLAND), 4 WALL RCPTLE. (210.52(B))		
5	KITCHEN SA II		120	20	10	13	#12	1-P 20A	SMALL APPLIANCE: REFRIGERATION EQUIPMENT (210.52(B))		
6	KITCHEN		120	15	10	13	#12	1-P 15A AF2	LIGHTING, OUTDOOR GFCI RCPTLE., SKYLIGHTS, SMOKE ALARMS		
7-8	STOVE & OVEN		240	50	30	37	#8	2-P 50A	210.19(3) FOR STOVE		
9-10	DRYER		240	30	13	16.3	#10	2-P 30A	DEDICATED		
11	DISHWASHER		120	15	12	15	#14	1-P 15A	DEDICATED		
12	LAUNDRY		120	20	12.5	15.5	#12	1-P 20A AF2	1 RECEPTACLE, CONTAINS WASHER. NOT NEAR SINK (210.11(B))		
13	LIVING, ENTERTAINMENT		120	15	11	14	#14	1-P 15A AF2	5 RCPTLE., LIGHTING, OUTDOOR GFCI RCPTLE		
14	MECHANICAL CLOSET		120	20	5	6.3	#12	1-P 20A AF2	2 RCPTLE. 1 OUTDOOR GFCI RCPTLE., LIGHTING, ERV, PUMPS		
15-16	WATER HEATER		240	30	19	23.8	#10	2-P 30A	DEDICATED		
17-18	REVERSE CYCLE CHILLER		240	30	19	23.8	#10	2-P 30A	DEDICATED		
19-20	FAN COIL UNIT		240	15	10	12.5	#14	2-P 15A	DEDICATED		
21	AUTOMATED LOGIC		120	15	5	6.25	#14	1-P 15A	AUTOMATED LOGIC TRANSFORMER, DEDICATED		
22	COURTYARD & LANDSCAPE		120	30	19	23.8	#10	1-P 30A	LANDSCAPE, COURTYARD LIGHTING; LANDSCAPE, PLUMBING, SOLAR THERMAL PUMPS		
23	BATHROOM LIGHTING		120	15	4	5	#14	1-P 15A AF2	HALLWAY RECEPTACLE, LIGHTING, SKYLIGHT		
24	KITCHEN COUNTER		120	15	3	3.75	#14	1-P 20A	1 GFCI RCPTLE		

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SCHEDULE

E-605

SHEET 184 OF 196

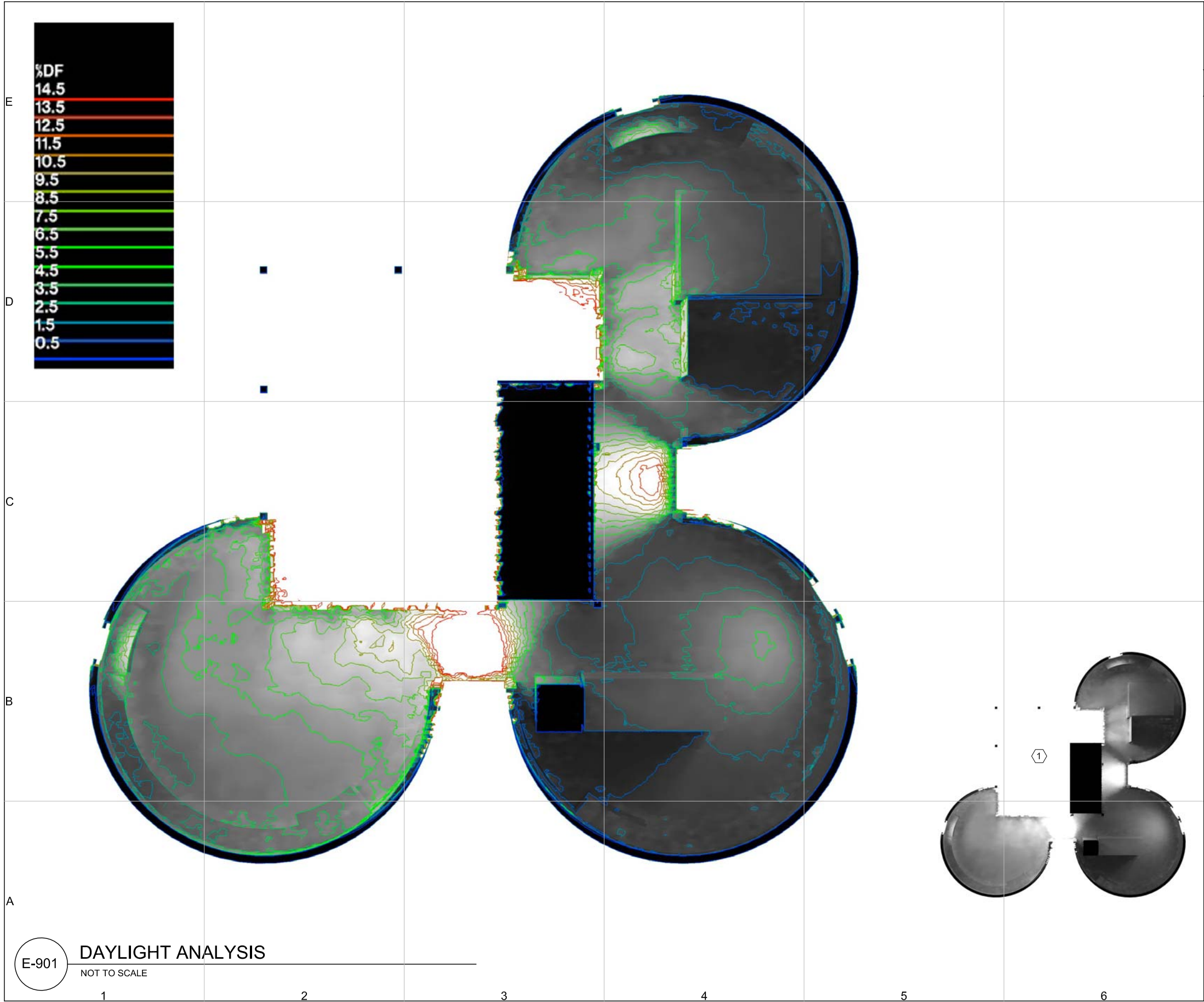
				LIGHTING SCHEDULE				
TYPE			LAMP			WATTAGE	FIXTURE	
INTERIOR CEILING HUNG TRACK LIGHTING			LED MR-16			3.6W	WAC LIGHTING TELAS QF-182X6-CH	
LIVING ROOM TASK LIGHT			LED GEO BULB			7.5W	TOLOMEIO WALL MOUNT LAMP	
BATHROOM WALL MOUNTED FLUORESCANT BATH LIGHT			TYPE T5 HIGH OUTPUT FLUORESCENT TUBE, MINI BI-PIN BASE			8W	FORECAST LIGHTING EDGE SLIM F3506-36U	
KITCHEN CEILING HUNG PENDANT LIGHT			INCADNESCENT MR-16			50W MAX	WAC LIGHTING MINNI QP 912	
BEDROOM RECESSED 6" APERTURE DOWNLIGHT			ENCASED LED			50W	WAC LIGHTING MINNI QP 912	
COURTYARD COLUMN MOUNTED AREA LIGHT			INCANDESCENT T5 WEDGE			17W	VISTA PROFESSIONAL 2222	
EXTERIOR FLOODLIGHT			ENCASED LED			8.7W	KICHLER 15753 AZT	
EXTERIOR RAMP WALKWAY LIGHT			ENCASED LED			3.5W	KICHLER 17515 BK	
EXTERIOR UNDERWATER LIGHT			ENCASED LED			3.5W	KICHLER 15700 BK	

		LIGHTING ACCESSORIES		SCHEDULE			
ITEM			DIMENSIONS		MANUFACTURER AND PRODUCT NUMBER		
STANDARD CEILING STANDOFF			5 3/4"x1 1/4"D		WAC LIGHTING LM-X5 CH		
INTERIOR CEILING HUNG MONORAIL SECTION			4'X1 1/2"X1/4" OR 8'X1.5"X1/4"		WAC LIGHTING LM-T4, LM-T8 CH		
"I" DEAD END CONNECTOR			5/8"X2"		WAC LIGHTING LM-DEC CH		
"I" CONNECTOR			5/8"X2"		WAC LIGHTING LM-I CH		
THREADED MALE ADAPTER			4" x .75"D		WAC LIGHTING LM-QADP CH		
12 V CEILING MOUNTED MAGNETIC TRANSFORMER			7 5/8"D		WAC LIGHTING LM-QADP CH		
SURFACE MOUNT CANOPY (METAL)			3/8" X 4 1/4"D		WAC LIGHTING LM-QADP CH		
12 V REMOTE MAGNETIC TRANSFORMER			8 3/4" x 4 1/4" x 3 3/4"		WAC LIGHTING SRT-300M-12V		
EXTERIOR LIGHTING TRANSFORMER			7.62" x 4.5" x 3.75"		KICHLER 15PR75SS		
LED DRIVER DC LANDSCAPE			2.5" x 1.5" x 2"		KICHLER 157060 BK		

E-605

LIGHTING SCHEDULE

NOT TO SCALE



GENERAL SHEET NOTES:	
1. DAYLIGHT FACTOR ANALYSIS: TOTAL INTERIOR AREA ABOVE 2% DAYLIGHT FACTOR : 82%	
SHEET KEYNOTES:	
1. INTERIOR RENDERING	

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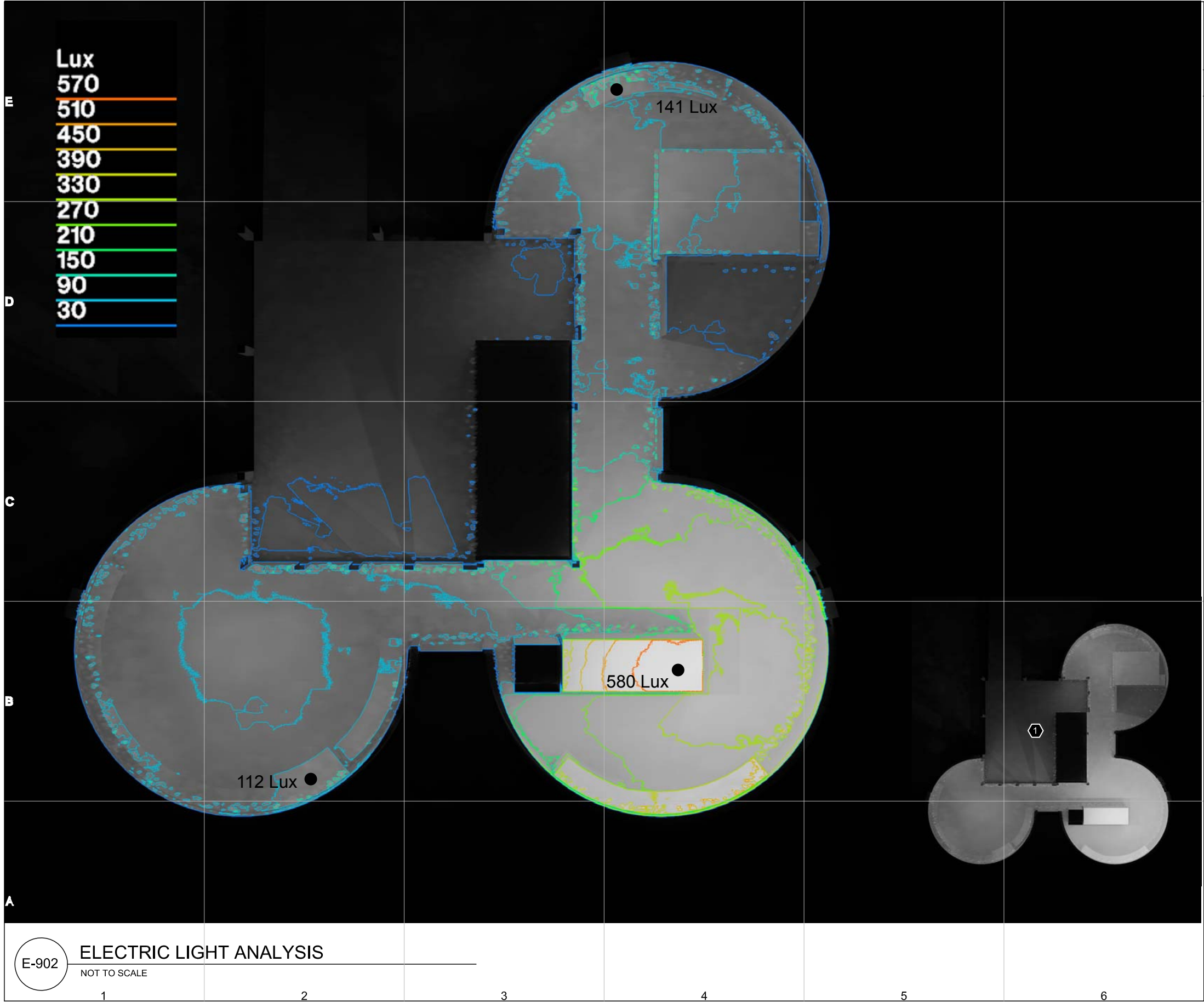
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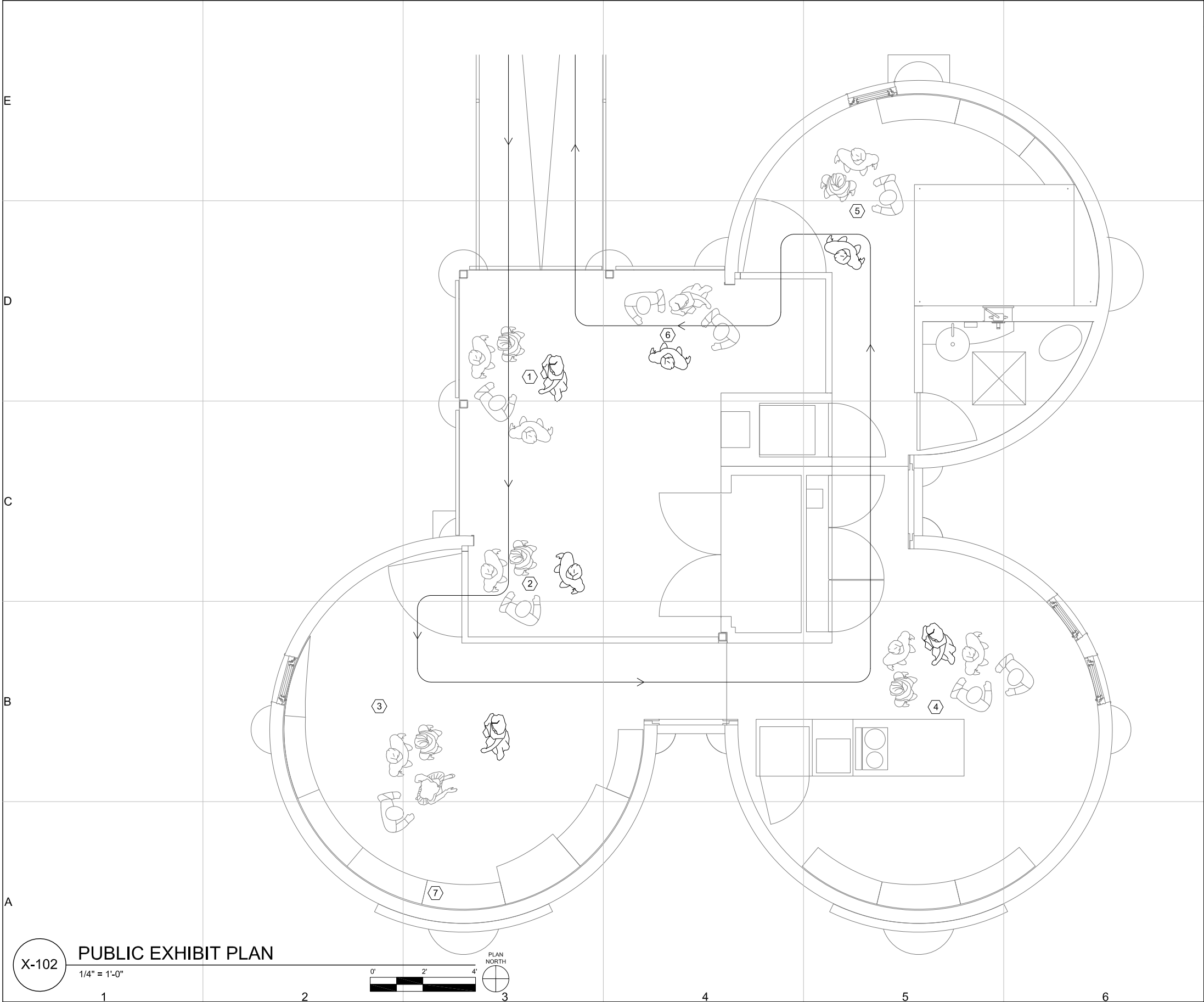
E-901

SHEET 185 OF 196



GENERAL SHEET NOTES:		<div>CUSD³</div> <div>Cornell University Solar Decathlon</div> <div>CORNELL UNIVERSITY SOLAR DECATHLON 909 MITCHELL STREET ITHACA, NY 14850 (607) 277-7475 WWW.CUSD.CORNELL.EDU</div> <div>CONSULTANTS</div> <div>ROBERT SILMAN ASSOCIATES STRUCTURAL ENGINEERS 88 UNIVERSITY PLACE NEW YORK, NY 10003 (212) 620-7970</div> <div><div><div></div><div></div></div></div> <div>PROJECT</div> <div>SOLAR DECATHLON 2009</div> <div>DRAWN BY: DB</div> <div>DATE: JUNE 2, 2009</div> <div>COPYRIGHT: CORNELL UNIVERSITY 2009</div> <div>SHEET TITLE</div> <div>RENDERING</div> <div>E-902</div> <div>SHEET 186 OF 196</div>
1. NIGHT TIME ELECTRIC LIGHTING LEVELS		
SHEET KEYNOTES:		
1. INTERIOR RENDERING		

CORNELL UNIVERSITY SOLAR DECATHLON 2009 OTHER DISCIPLINES SERIES						<div>GENERAL OTHER DISCIPLINES NOTES:</div> <div>1. COMMUNICATIONS MATERIAL FOR HOUSE TOURS IS REPRESENTED IN THE FOLLOWING SERIES</div>	<div><div>CUSD³</div><div>Cornell University Solar Decathlon</div></div> <div>CORNELL UNIVERSITY SOLAR DECATHLON 909 MITCHELL STREET ITHACA, NY 14850 (607) 277-7475 WWW.CUSD.CORNELL.EDU</div> <div>CONSULTANTS</div> <div>ROBERT SILMAN ASSOCIATES STRUCTURAL ENGINEERS 88 UNIVERSITY PLACE NEW YORK, NY 10003 (212) 620-7970</div> <div><div></div><div></div></div> <div>PROJECT</div> <div>SOLAR DECATHLON 2009</div> <div>DRAWN BY: CW DATE: JUNE 2, 2009 COPYRIGHT: CORNELL UNIVERSITY 2009 SHEET TITLE</div> <div>SYMBOLS AND NOTES</div> <div>X-001</div> <div>SHEET 187 OF 196</div>

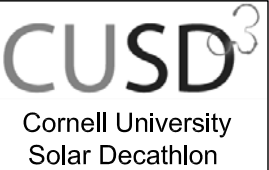


GENERAL SHEET NOTES:

- TOURS GUIDED BY STUDENT TOUR GUIDE (DARKER LINE WEIGHT IN PLAN)
- INFORMATION DISPLAYED ON LABELS THROUGHOUT HOUSE, REFER TO ELEVATION X-201

SHEET KEYNOTES:

- STUDENT TOUR GUIDE WILL CREATE FIRST GROUP, WELCOME VISITORS TO THE CORNELL HOME, AND GIVE A BRIEF INTRODUCTION TO THE TEAM, ITS PHILOSOPHY, AND ITS GOALS.
- GROUP WILL CONTINUE FURTHER INTO THE COURTYARD, GUIDE WILL SPEAK ABOUT THE CONCEPT OF THE HOUSE, METHODOLOGY, AND INTEGRATIVE PROCESSES.
- HOUSE HIGHLIGHTS, MARKET VIABILITY, ZONING, BASIC SYSTEMS
- STUDENT INVOLVEMENT, FURNITURE, MATERIALS
- QUESTIONS
- GOODBYES, HANDOUT POSTCARDS INCLUDING INFORMATION ON CONCEPTS AND SYSTEMS, AS WELL AS SPONSOR RECOGNITION
- LOCATION OF TELEVISION, CONTINUOUS LOOP FLY-THROUGH OF HOME, INCLUDING INFORMATION ABOUT CONCEPTS AND SYSTEMS



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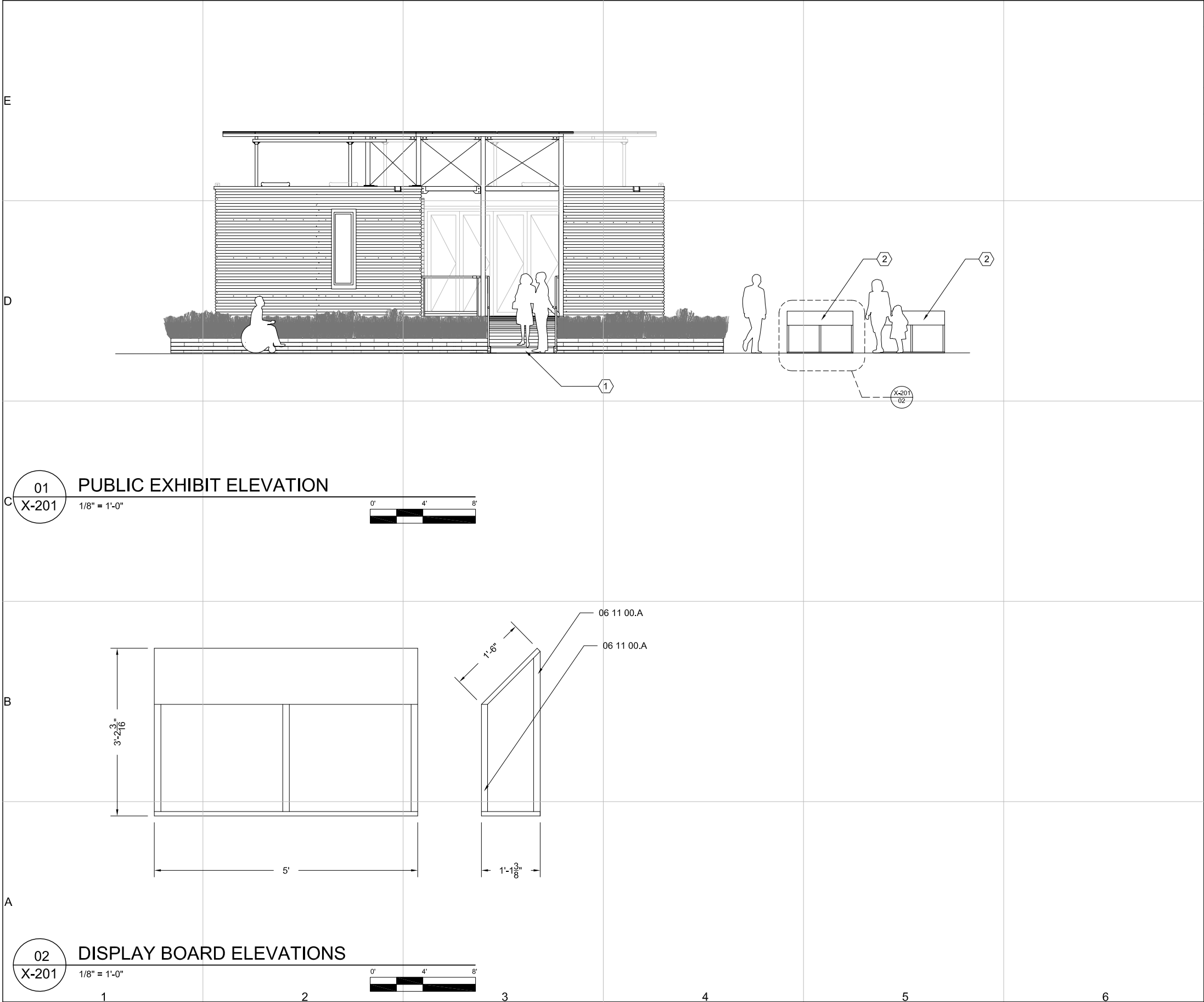
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PLAN

X-102

SHEET 189 OF 196



GENERAL SHEET NOTES:	
1. DISPLAY BOARDS TO BE CUSTOM CONSTRUCTED FROM WOOD FRAMING AND PLYWOOD FOR DISPLAY OF CUSD POSTERS	
REFERENCE KEYNOTES:	
DIVISION 06 - WOOD, PLASTICS AND COMPOSITES	
06 11 00.A WOOD FRAMING - 2X4	
SHEET KEYNOTES:	
1. RAMP ENTRANCE	
2. INFORMATIVE POSTER DISPLAY SURFACE	

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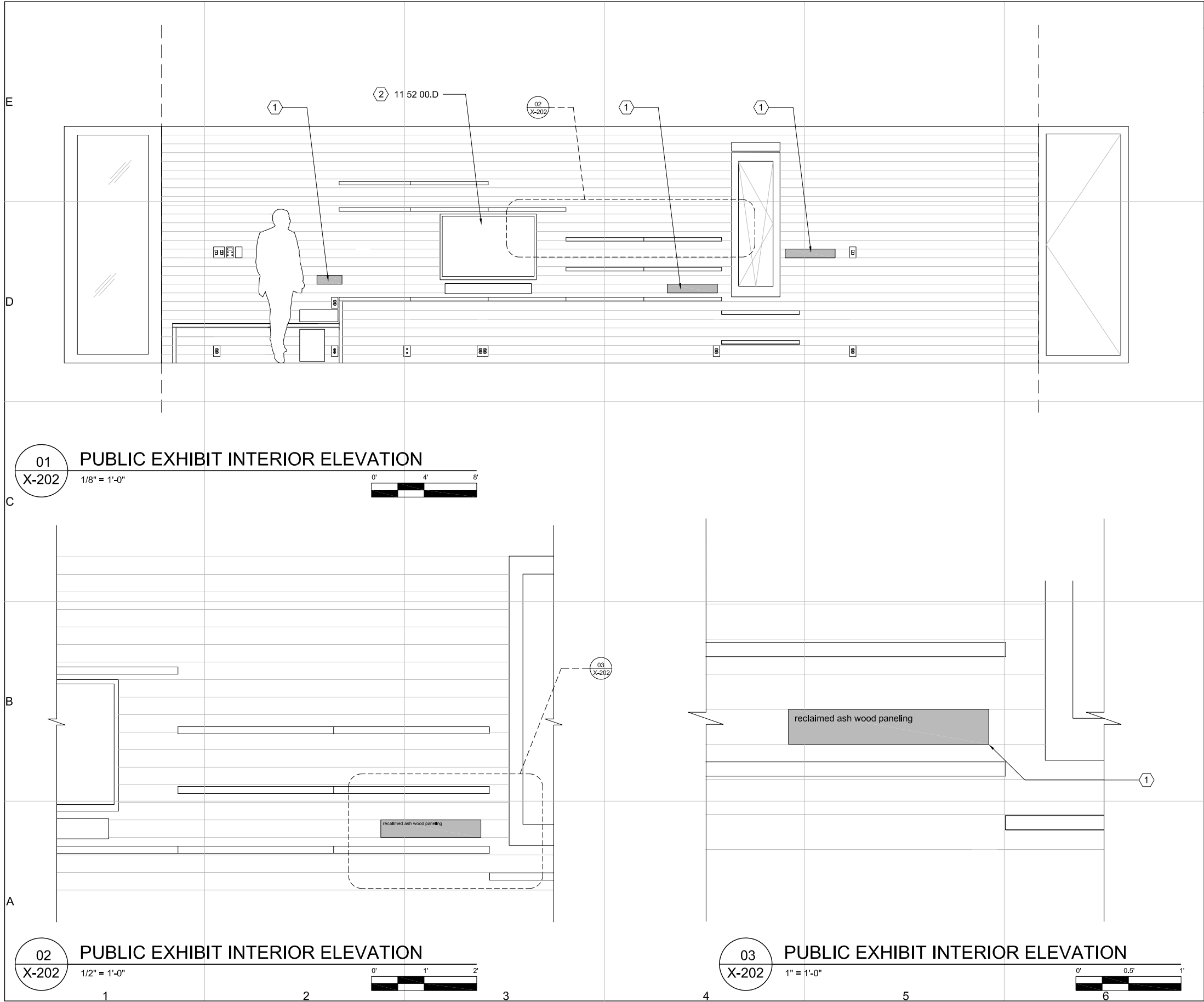
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ELEVATION

X-201

SHEET 190 OF 196



REFERENCE KEYNOTES:

DIVISION 11 - EQUIPMENT

11 52 00.D AUDIO VISUAL EQUIPMENT - TV

SHEET KEYNOTES:

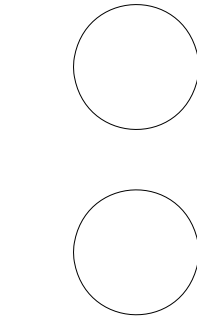
1. 3/8" THICK ASH WOOD INFORMATIVE LABEL, LASER CUT TEXT DESCRIBES SUSTAINABLE FEATURES; ATTACHED WITH REMOVABLE TAPE ADHESIVE
2. CONTINUOUS LOOP FLY-THROUGH OF HOME, INCLUDING INFORMATION ABOUT CONCEPTS AND SYSTEMS

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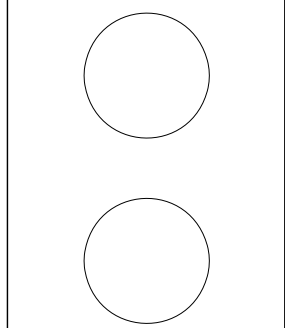
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X-202



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RENDERING

X-901
SHEET 192 OF 196

X-901 PUBLIC EXHIBITION RENDERING
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CORNELL UNIVERSITY SOLAR DECATHLON 2009 OPERATIONS SERIES						<div>GENERAL OPERATIONS NOTES:</div> <div>1. ALL ON-SITE OPERATIONS TO BE OVERSEEN BY CONSTRUCTION MANAGER AND HEALTH AND SAFETY OFFICER</div>	<div><div>CUSD³</div><div>Cornell University Solar Decathlon</div></div>
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							<div>PROJECT</div> <div>SOLAR DECATHLON 2009</div> <div>DRAWN BY: CW</div> <div>DATE: JUNE 2, 2009</div> <div>COPYRIGHT: CORNELL UNIVERSITY 2009</div> <div>SHEET TITLE</div> <div>SYMBOLS AND NOTES</div> <div>O-001</div> <div>SHEET 193 OF 196</div>



REFERENCE KEYNOTES:

DIVISION 02 - EXISTING CONDITIONS

02 43 13.13A1 STRUCTURE RELOCATION TRUCK 1

02 43 13.13A2 STRUCTURE RELOCATION TRUCK 2

02 43 13.13A3 STRUCTURE RELOCATION TRUCK 3

02 43 13.13B STRUCTURE RELOCATION CRANE

02 43 16.A STRUCTURE RAISING BOOM FORKLIFT

02 43 16.B STRUCTURE RAISING GENERATOR

SHEET KEYNOTES:

1. MODULE 1

2. MODULE 2

3. MODULE 3

4. COURTYARD ASSEMBLY

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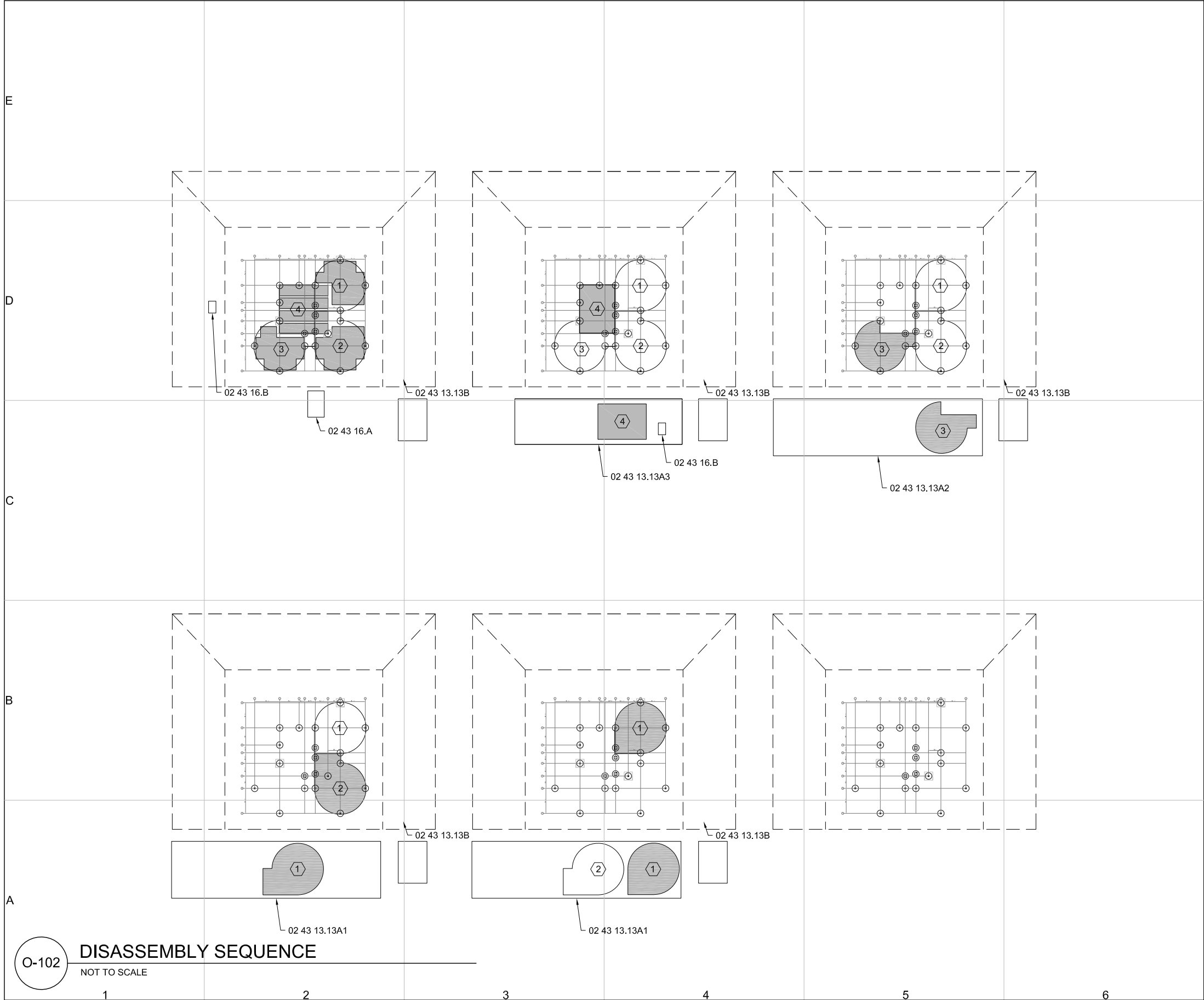
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REFERENCE KEYNOTES:	
DIVISION 02 - EXISTING CONDITIONS	
02 43 13.13A1	STRUCTURE RELOCATION TRUCK 1
02 43 13.13A2	STRUCTURE RELOCATION TRUCK 2
02 43 13.13A3	STRUCTURE RELOCATION TRUCK 3
02 43 13.13B	STRUCTURE RELOCATION CRANE
02 43 16.A	STRUCTURE RAISING BOOM FORKLIFT
02 43 16.B	STRUCTURE RAISING GENERATOR

SHEET KEYNOTES:

1. MODULE 1
2. MODULE 2
3. MODULE 3
4. COURTYARD ASSEMBLY



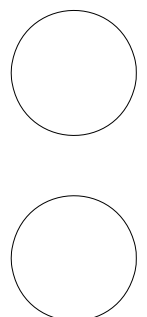
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CONSTRUCTION EQUIPMENT SCHEDULE

NOT TO SCALE

CONSTRUCTION SCHEDULE			
EQUIPMENT	MANUFACTURER	MAKE	MODEL
DOUBLE DROP LOW BOY	FOUNTAIN TRAILER COMPANY	RENEGADE	LX 40
DOUBLE DROP LOW BOY	FOUNTAIN TRAILER COMPANY	RENEGADE	LX 40
DIESEL GENERATOR	MQ POWER	WHISPER WATT	DC25USI
TRUCK CRANE	TEREX CORPORATION	TRUCK CRANE 40 TON	T340-1
TELEHANDLER	JLG INDUSTRIES	LULL	0.00E-01

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