



SOLAR DECATHLON

CONSTRUCTION DOCUMENTATION

7 AUGUST 2007

AS-BUILTS

8 JANUARY 2008

THIRD TIMES THE CHARM

As an experienced decathlon participant, the 2007 Carnegie Mellon Solar Decathlon team is dedicated to expanding from the past experiences in order to push the solar housing boundary and create innovative solutions for sustainable home design.

OUR VISION

This year, the team will offer a new way of looking at sustainable solar design by creating a modular “plug and play” housing product that answers the question: How does a maximum energy efficient home react and grow with the occupants living inside? Plug and play achieves flexibility by clustering utilities into one central space while additional pre-fabricated living units attach to it through a grid of connection points.

New units can be added or exchanged to allow the house to expand or modify with the home owner’s needs. In addition to adaptability, this design provides a comfortable living environment which allows for close interactions between the occupant, the house, and nature.

LOOKING TOWARD THE FUTURE

The 2007 Carnegie Mellon Solar House will become a permanent addition to the facilities in Powder Mill Nature Reserve. Located 40 minutes outside of Pittsburgh in Westmoreland County, Powder Mill Nature Reserve is an outdoor educational center and natural field station affiliated with the Carnegie Museum of Natural History, which hosts more than 40,000 people annually with a series of public programs and workshops for educational institutions.



DECATHLETE WAY																			
LTU	MTL	PSU	GT	COLO	UNR	UMD	UT	UPR	SCU	119	117	115	113	111	109	107	105	103	101
120	118	116	112	110	108	106	104	102											
NYIT	UNCG	MIT	CMU	TUD	KSU	CORNELL	CINCY	TAMU	UPM										

trippod

ARCHITECTURAL

#	DRAWING NAME:	SCALE:
A0.0	LAYOUT DIAGRAMS	NO SCALE
A0.1	SITE PLAN	1/8" = 1'-0"
A0.2	SITE ELEVATIONS NORTH & SOUTH	1/8" = 1'-0"
A0.3	SITE ELEVATIONS EAST & WEST	1/8" = 1'-0"
A1.0	HOUSE PLAN	1/4" = 1'-0"
A1.1	FOOTPRINT & CONTAINED AREA PLAN	1/4" = 1'-0"
A1.2	REFLECTED CEILING PLAN	1/4" = 1'-0"
A1.3	ROOF PLAN w/ PV & SOLAR THERMAL	1/4" = 1'-0"
A1.4	ROOF PLAN w/ DRAINAGE	1/4" = 1'-0"
A2.0	EXTERIOR ELEVATION UPPER CORE	1/4" = 1'-0"
A2.1	EXTERIOR ELEVATION LOWER CORE	1/4" = 1'-0"
A2.A	EXTERIOR ELEVATIONS POD-A	1/4" = 1'-0"
A2.B	EXTERIOR ELEVATIONS POD-B	1/4" = 1'-0"
A2.C	EXTERIOR ELEVATIONS POD-C	1/4" = 1'-0"
A3.0	CORE SECTION AA	1/4" = 1'-0"
A3.1	CORE SECTION BB	1/4" = 1'-0"
A3.2	CORE SECTION CC & DD	1/4" = 1'-0"
A3.A	POD-A SECTIONS	1/4" = 1'-0"
A3.B	POD-B SECTIONS	1/4" = 1'-0"
A3.C	POD-C SECTIONS	1/4" = 1'-0"
A4.1	WALL SECTIONS IN CORE	1" = 1'-0"
A4.2	CLOSET WALL SECTIONS	1" = 1'-0"
A4.3	WALL SECTIONS IN POD	1" = 1'-0"
A4.4	CORE/POD CONNECTION SECTIONS	1-1/2" = 1'-0"
A4.5	WINDOW SCHEDULE, DETAILS	1/4" = 1'-0"
A4.6	SKYLIGHT & SOLAR THERMAL DETAILS	3/4" = 1'-0"
A4.7	ROOF DETAILS	3" = 1'-0"
A4.8	INTERIOR WALL SYSTEM	1/2" = 1'-0"
A4.9	INTERIOR WALL SYSTEM DETAIL	1" = 1'-0"
A4.10	INTERIOR WALL SYSTEM DETAIL	1" = 1'-0"
A4.11	BULKHEAD	1/2" = 1'-0"
A4.12	BULKHEAD DETAIL	1/4" = 1'-0"
A4.13	RAINSCREEN & SHADING DETAIL	3" = 1'-0"

ADA

#	DRAWING NAME:	SCALE:
ADA1	SITE PLAN	1/8" = 1'-0"
ADA2	PLAN	1/4" = 1'-0"
ADA3	SECTION	1/2" = 1'-0"

FIRE PROTECTION

#	DRAWING NAME:	SCALE:
F1	FIRE PROTECTION PLAN	1/4" = 1'-0"

STRUCTURAL

#	DRAWING NAME:	SCALE:
S1.0	FOOTER PLAN	1/4" = 1'-0"
S1.1	FLOOR JOIST & STEEL PLAN	1/4" = 1'-0"
S1.2	ROOF JOIST & STEEL PLAN	1/4" = 1'-0"
S1.3	TOP OF CORE PLAN	1/4" = 1'-0"
S1.4	CENTRIA FLOOR LAYOUT	1/4" = 1'-0"
S1.5	CENTRIA ROOF LAYOUT	1/4" = 1'-0"
S2.0	CORE LONG ELEVATIONS	1/4" = 1'-0"
S2.1	CORE SHORT ELEVATIONS	1/4" = 1'-0"
S2.A	POD-A ELEVATIONS	1/4" = 1'-0"
S2.B	POD-B ELEVATIONS	1/4" = 1'-0"
S2.C	POD-C ELEVATIONS	1/4" = 1'-0"
S3.0	CORE SECTIONS	1/4" = 1'-0"
S3.1	CORE & POD SECTIONS	1/4" = 1'-0"
S3.AB	PODS-A &-B SECTIONS	1/4" = 1'-0"
S3.C	POD-C SECTIONS	1/4" = 1'-0"
S4.0	STRUCTURAL AXON	NO SCALE
S4.1	STEEL SCHEDULE	NO SCALE
S4.2	STEEL MEMBERS	3/4" = 1'-0"
S4.3	STEEL MEMBERS	VARIES
S4.4	STEEL MEMBERS	3/4" = 1'-0"
S4.5	STEEL MEMBERS	3/4" = 1'-0"
S4.6	STEEL MEMBERS	3" = 1'-0"
S4.7	STEEL MEMBERS	3" = 1'-0"
S4.8	CORE FRAMING DETAIL	3" = 1'-0"
S4.9	STEEL CONNECTION DETAILS	VARIES
S4.10	LGS SCHEDULE	1/4" = 1'-0"
S4.11	LGS SCHEDULE	1/4" = 1'-0"
S4.12	LGS DETAIL	NO SCALE
S4.13	VERSAWALL SCHEDULE	NO SCALE
S4.14	PANEL FRAMING	VARIES
S4.15	POD/CORE CONNECTION	VARIES
S4.16	GREENSCAPE STRUCTURE	1/4" = 1'-0"
S4.17	DECK SCHEDULE	1/4" = 1'-0"
S4.18	DECK SCHEDULE	VARIES
S4.19	DECK CONSTRUCTION DETAILS	1" = 1'-0"
S4.20	GLOBAL GARDENS STRUCTURE	1/4" = 1'-0"
S5.0	FRAMING SEQUENCE	NO SCALE
S5.1	FRAMING SEQUENCE	NO SCALE
S5.2	FRAMING SEQUENCE	NO SCALE

MECHANICAL

#	DRAWING NAME:	SCALE:
M1	HVAC SCHEMATIC / SCHEDULE	NO SCALE
M2	HVAC PLAN	1/4" = 1'-0"
M3	VENTILATION PLANS	1/4" = 1'-0"
M4	RADIANT HEATING PLAN	1/4" = 1'-0"
M5	HVAC INSTALLATION DETAILS	VARIES

ELECTRICAL

#	DRAWING NAME:	SCALE:
E1.0	PV/BOS WIRING DIAGRAM	NO SCALE
E1.1	AC PANEL LAYOUT	NO SCALE
E1.2	HOUSE ELECTRICAL PLANS	1/4" = 1'-0"
E2.0	ELECTRICAL LIGHTING PLAN	1/4" = 1'-0"
E2.1	LIGHTING DETAILS	VARIES
E3.0	DATA AQ. SCHEMATIC	NO SCALE
E3.1	DATA & COMM. SCHEDULE	1/4" = 1'-0"
E3.2	DATA WIRING PLAN	NO SCALE
E3.3	WEATHER STATION SCHEM.	NO SCALE
E3.4	WATER METERING SCHEM.	NO SCALE
E4.0	KIOSK & BATTERY DETAILS	1/4" = 1'-0"
E4.1	MECHANICAL CLOSET PLAN	3/4" = 1'-0"

PLUMBING

#	DRAWING NAME:	SCALE:
P1	WATER SCHEMATIC	NO SCALE
P2	PLUMBING ISOMETRIC	NO SCALE
P3	PLUMBING - WASTE WATER	1/4" = 1'-0"
P4	SOLAR THERMAL / CONTESTS	

CONSTRUCTION

#	DRAWING NAME:	SCALE:
C1.0	ASSEMBLY SEQUENCE	NO SCALE
C1.1	ASSEMBLY SEQUENCE	NO SCALE
C1.2	ASSEMBLY SEQUENCE	NO SCALE
C2.0	DISASSEMBLY SEQUENCE	NO SCALE
C2.1	DISASSEMBLY SEQUENCE	NO SCALE
C2.2	DISASSEMBLY SEQUENCE	NO SCALE

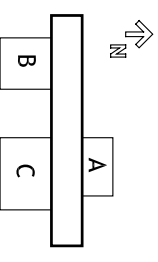


CARNEGIE MELLON
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Carnegie Institute of
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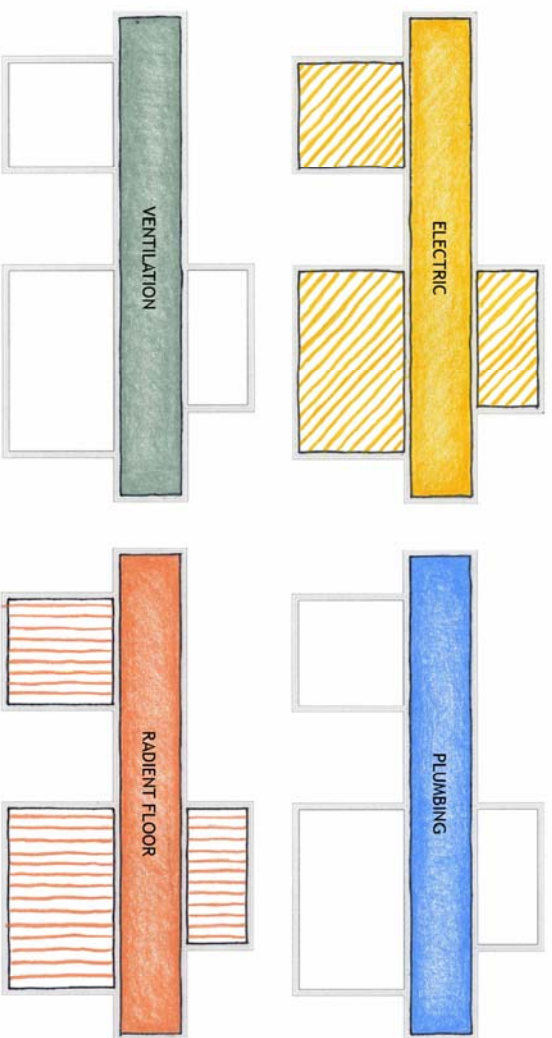
**UNIVERSITY OF
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School of
Engineering

**ART INSTITUTE OF
PITTSBURGH**

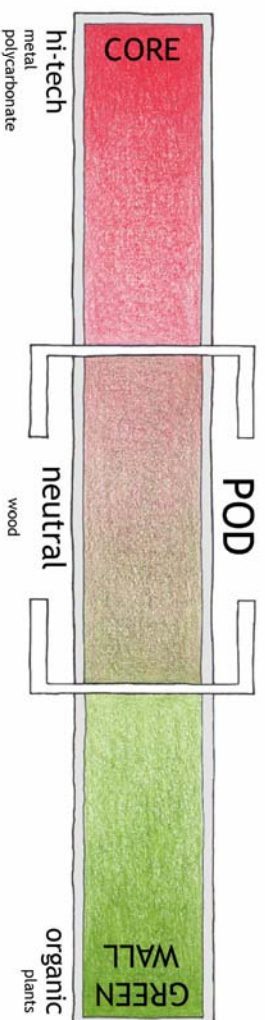
CONTACT:
Steve Lee
p:412.726.6503
f:412.268.7819



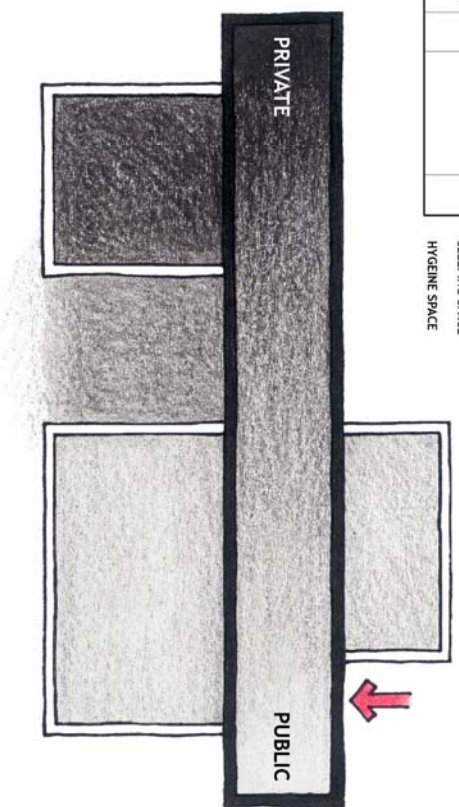
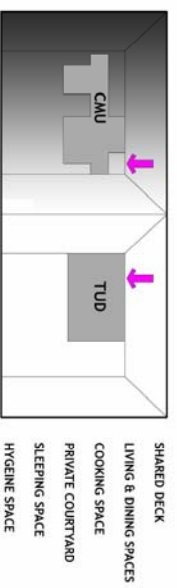
DRAWN BY: EMMA DAVISON
DATE: 08/07/2007
TITLE: DRAWING INDEX



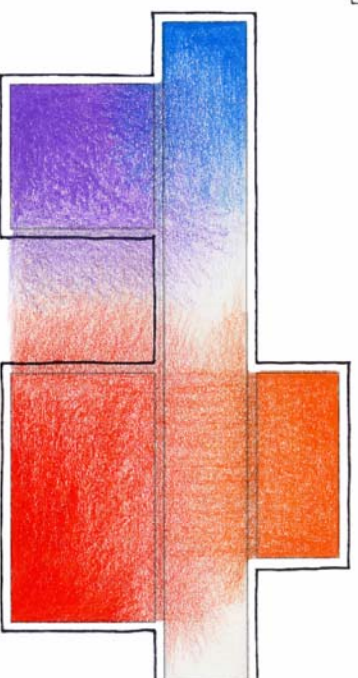
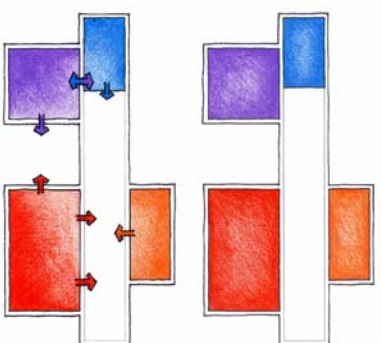
4 MECHANICAL SYSTEMS:
LOCATIONS AND CONNECTIONS



3 MATERIALITY:
FROM MACHINE TO NATURE



2 COMMUNAL SPACE VS
INDIVIDUAL SPACE



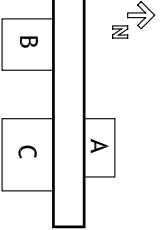
1 SPACE USAGE:
BLURRING THE BOUNDARIES

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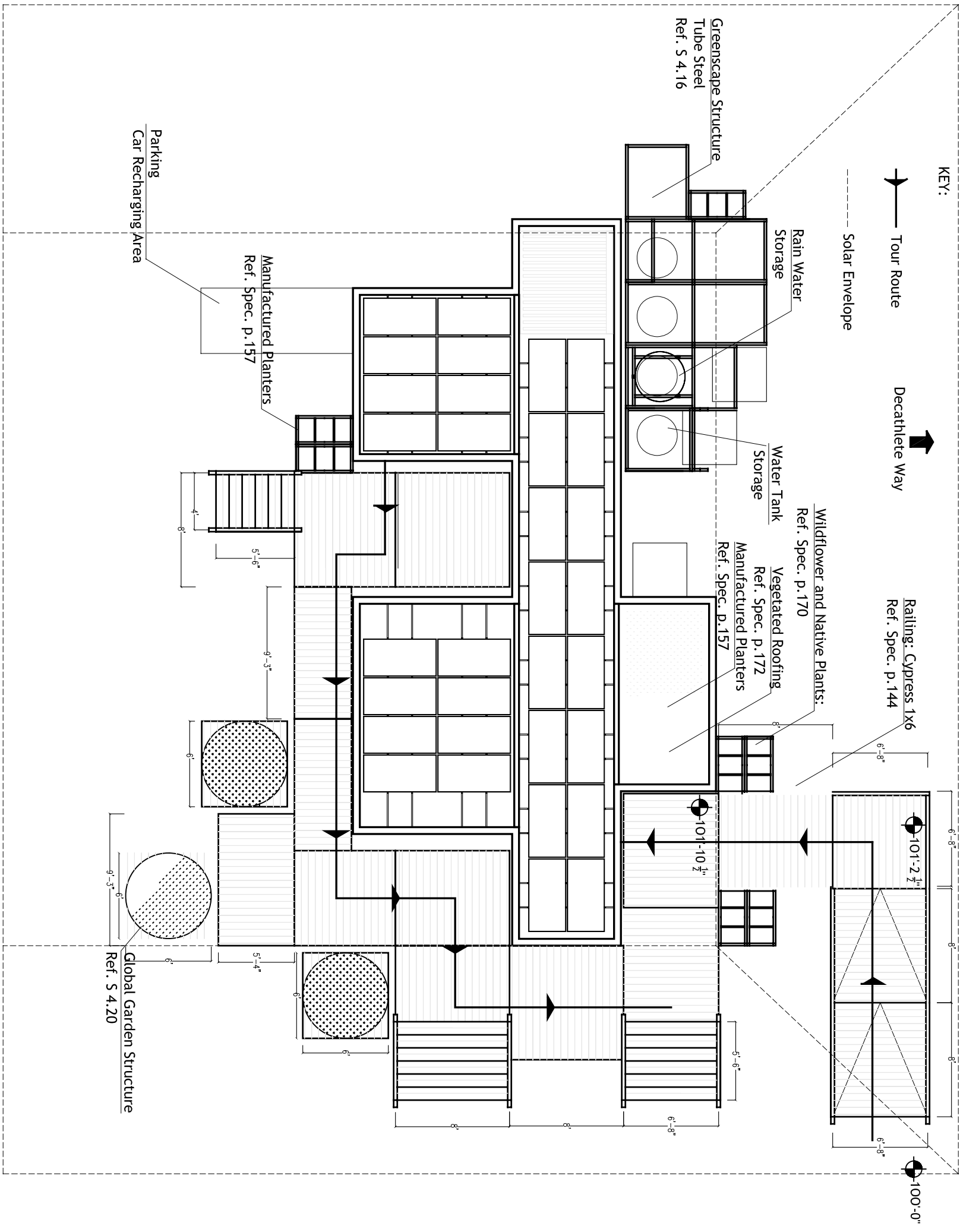
ART INSTITUTE OF PITTSBURGH

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

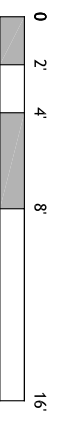


DRAWN BY: MEREDITH MAGNIN
DATE: 08/07/2007
TITLE: SITE PLAN

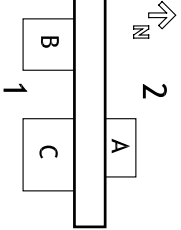
A0.1



1 SITE PLAN
 1/8"=1'



CONTACT:
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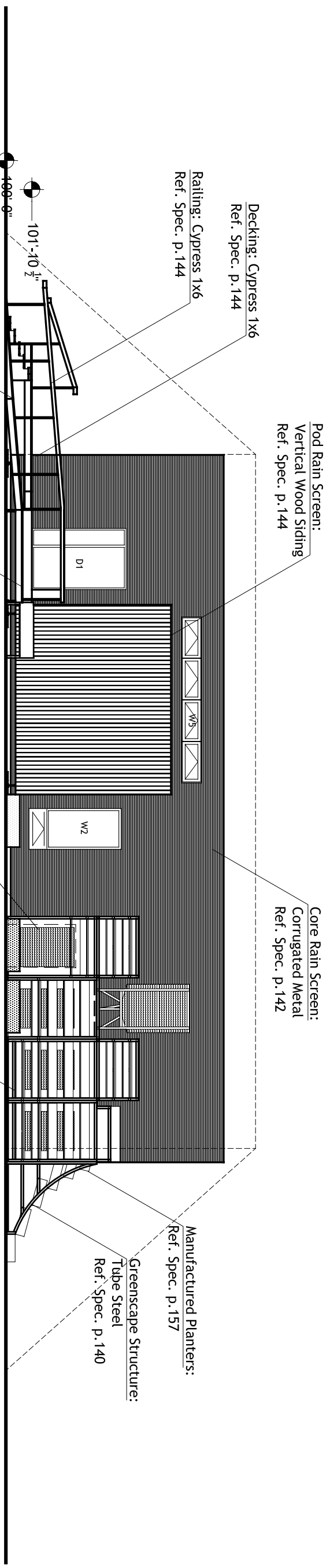


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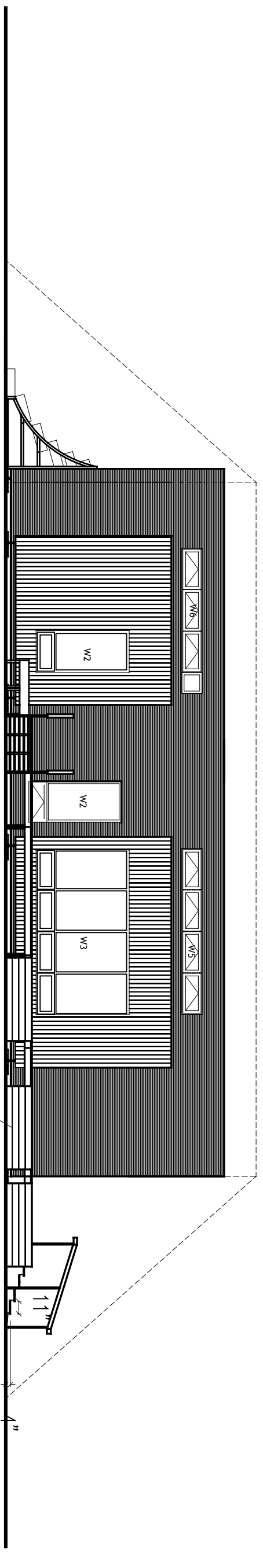
DATE: 08/07/2007

TITLE: SITE ELEVATIONS N & S

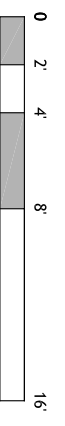
A 0.2



2 NORTH ELEVATION
 1/8"=1'



1 SOUTH ELEVATION
 1/8"=1'

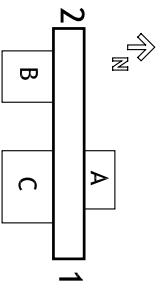


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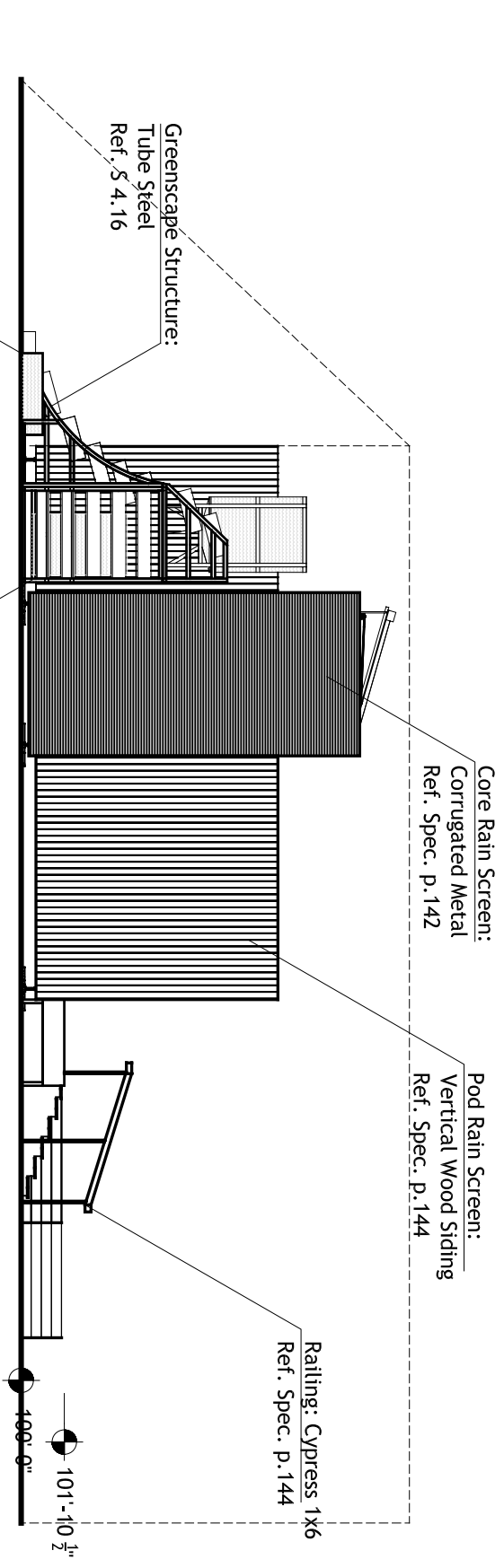


DRAWN BY: MERENTH MAGIN

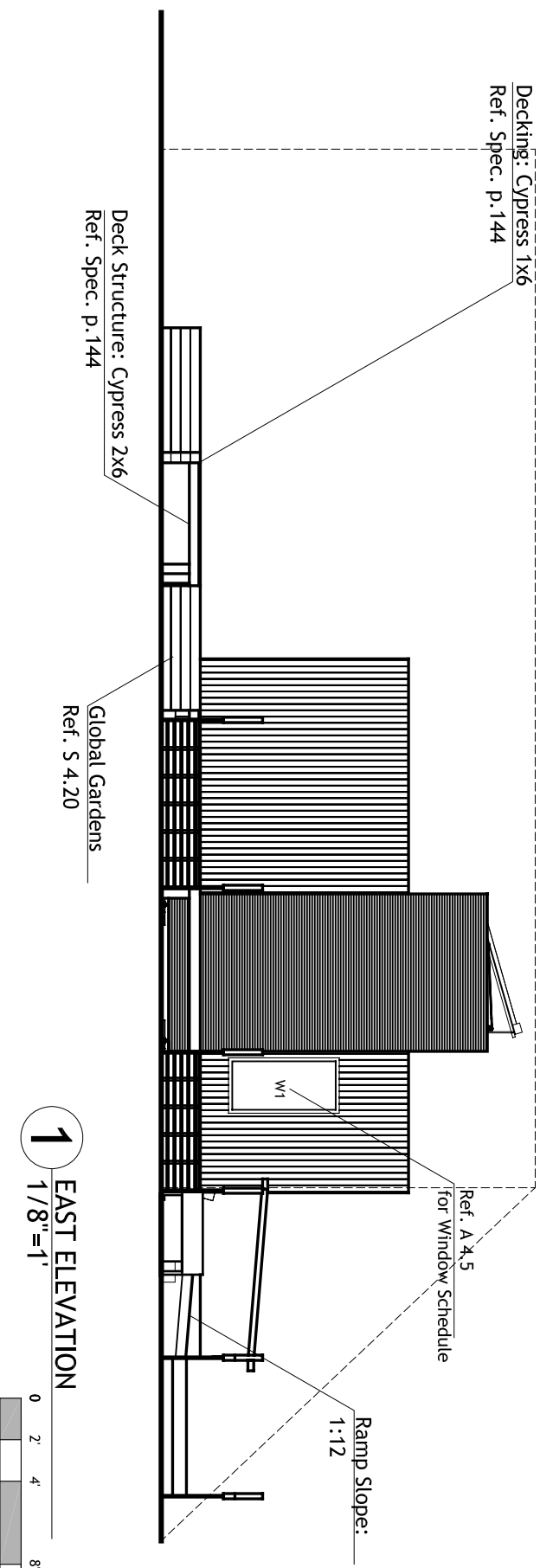
DATE: 08/07/2007

TITLE: SITE ELEVATIONS E & W

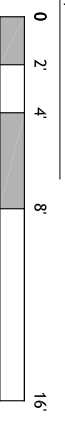
A 0.3



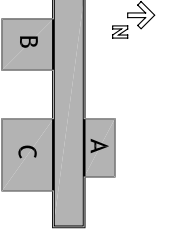
2 WEST ELEVATION
1/8"=1'



1 EAST ELEVATION
1/8"=1'

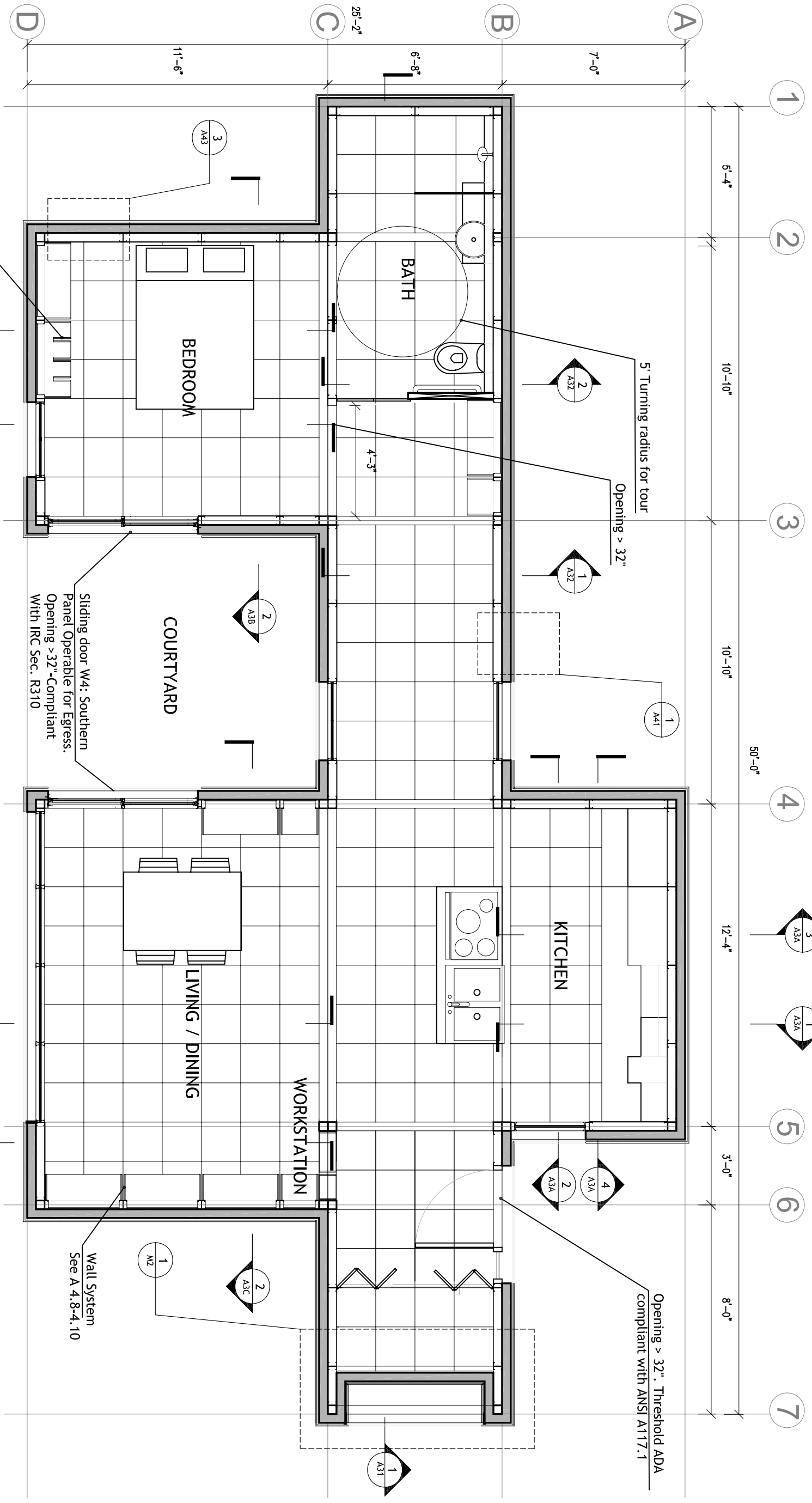


CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: DAVID WALDRON
DATE: 08/07/2007
TITLE: HOUSE PLAN

A 1.0

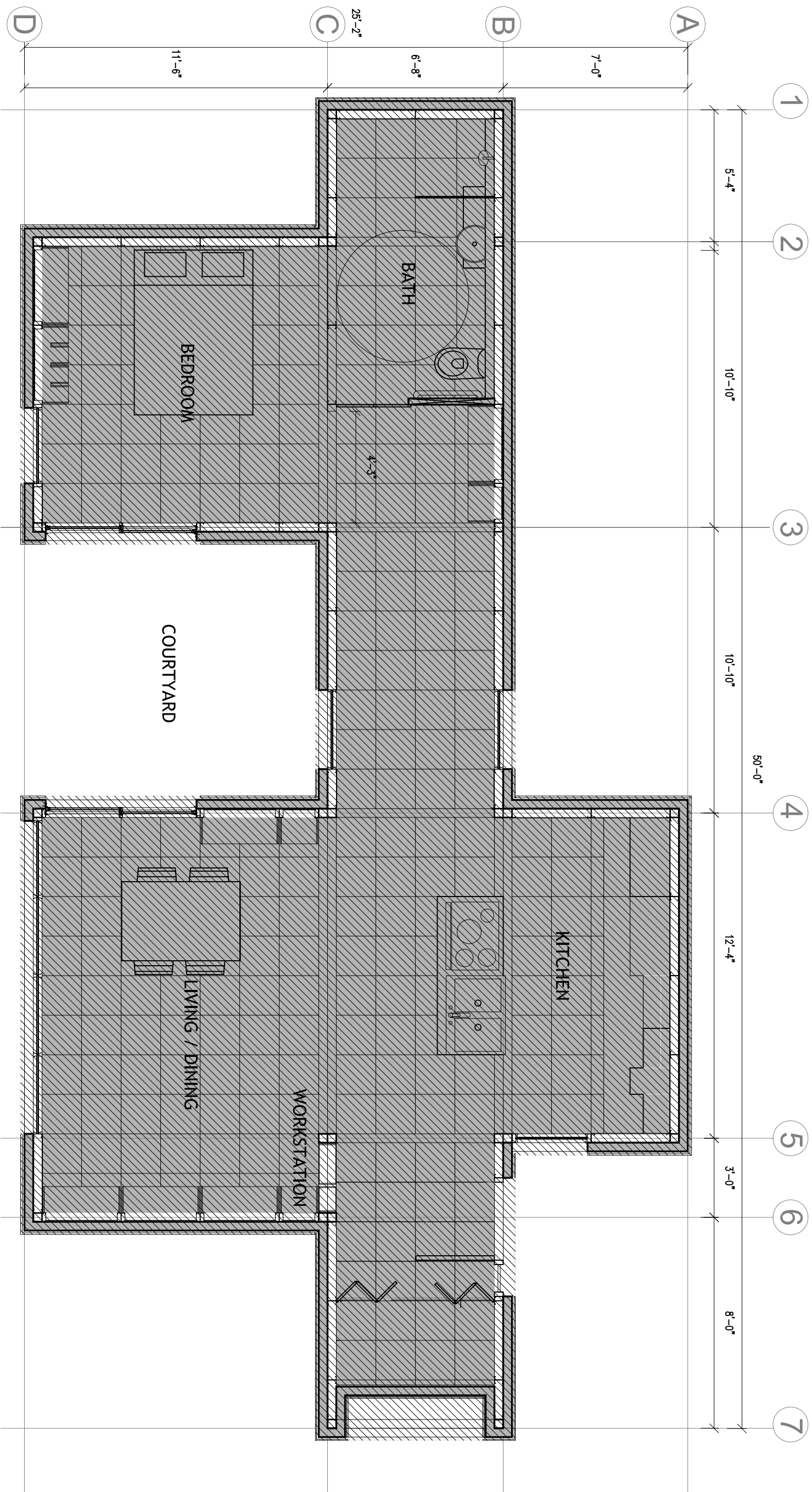


1 HOUSE PLAN
 1/4"=1'



NOTES:

Building Footprint (hatched)
 798.85 SQ. FT. Including enclosure and rainscreen
 Total area is under the 800 SQ. FT. maximum.
Conditioned Area (shaded)
 650.88 SQ. FT.
 Total conditioned interior space exceeds 450 SQ. FT. minimum.



1 HOUSE PLAN
 1/4"=1'
 0 1' 2' 4' 8'



2007 National Solar Decathlon - Washington, D.C.

CARNEGIE MELLON

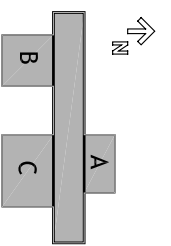
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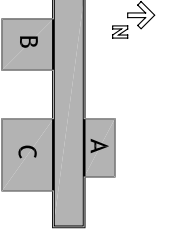
DRAWN BY: DAVID WALDRON

DATE: 08/07/2007

TITLE:FOOTPRINT/COND.AREA

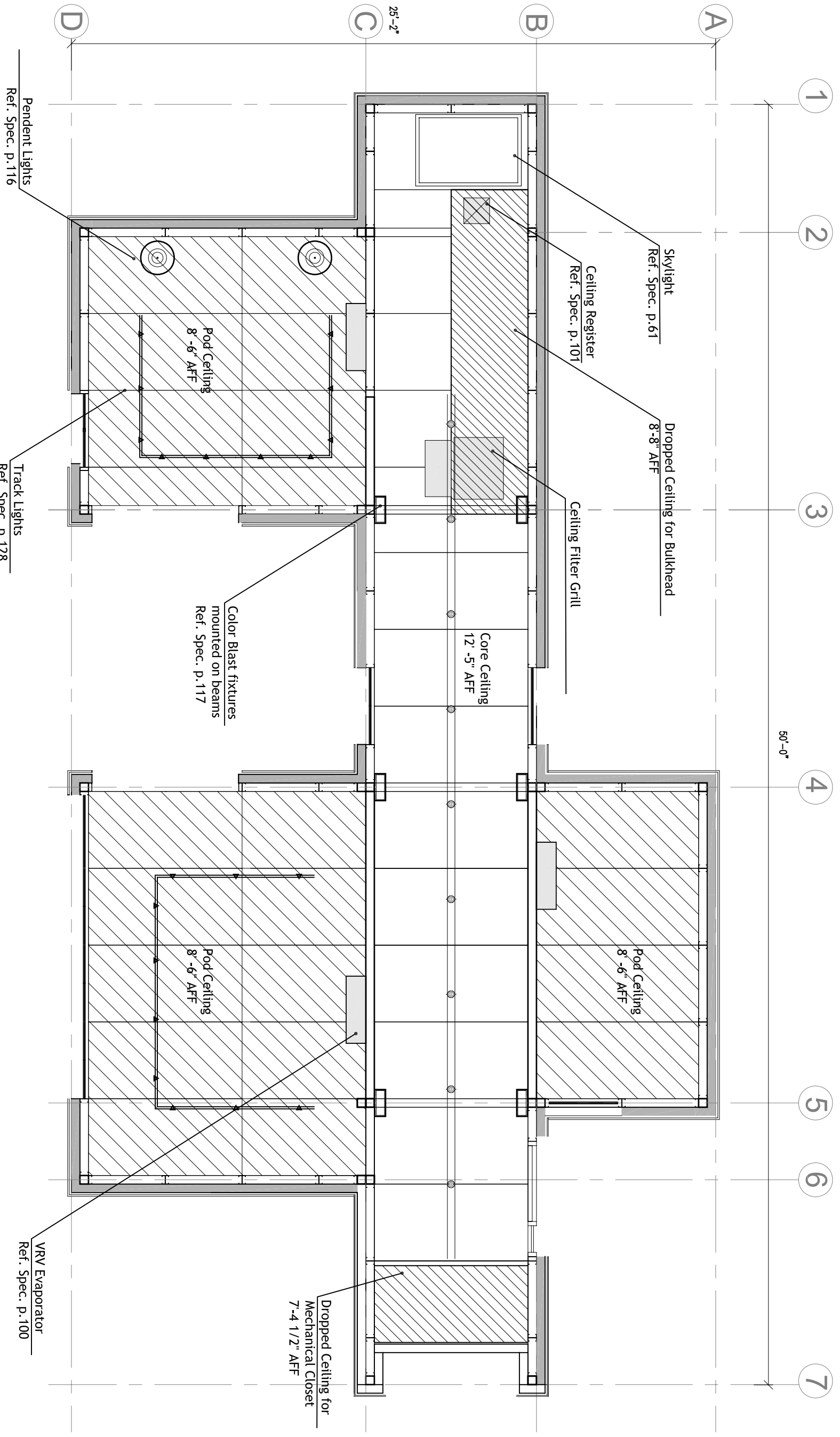
A 1.1

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

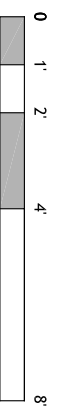


DRAWN BY: CATHY CHUNG
DATE: 08/07/2007
TITLE: REFLECTED CEILING PLAN

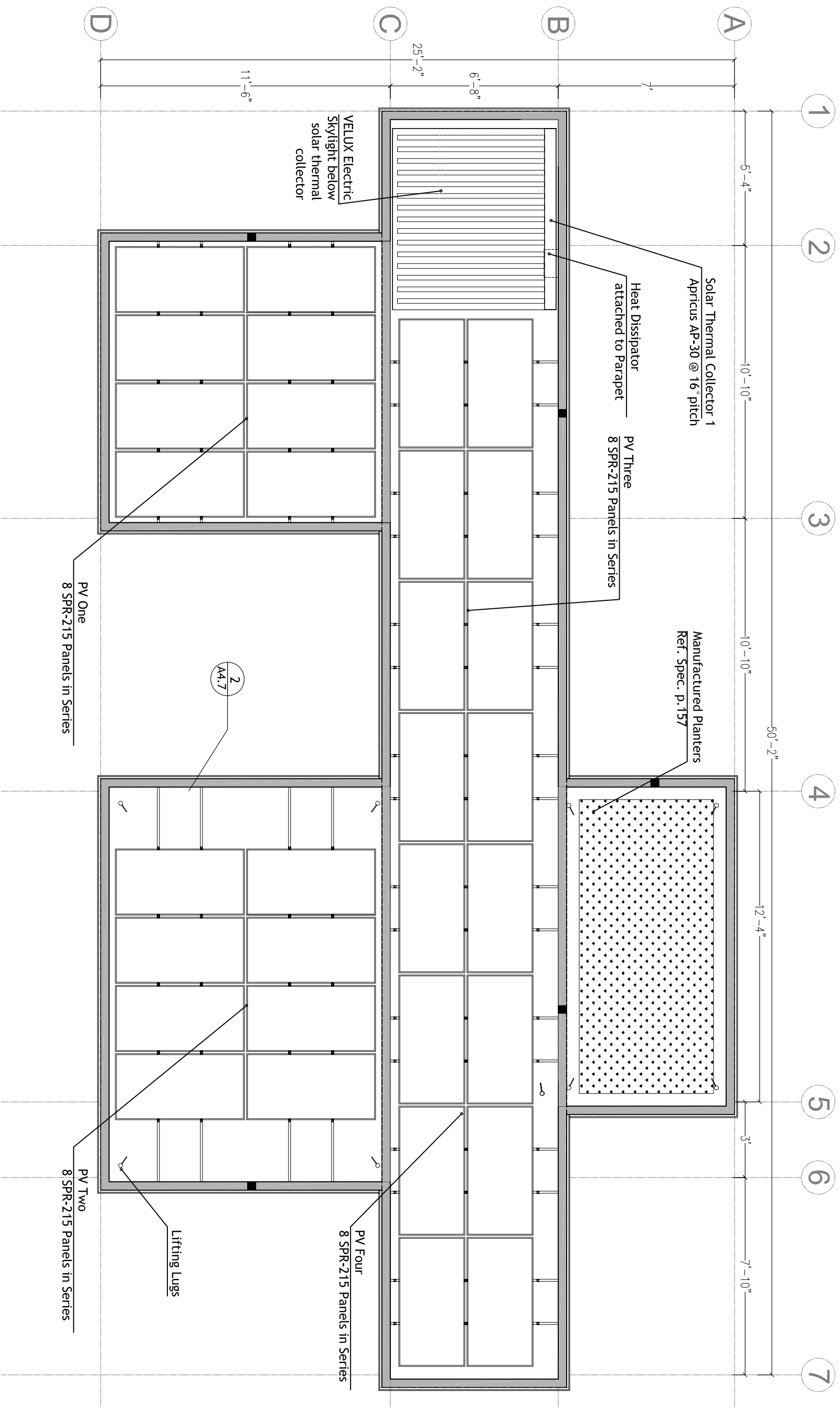
A1.2



1 REFLECTED CEILING PLAN
 1/4"=1'



NOTE:
 1 solar thermal collector with 30 evacuated tubes is mounted with mid-angle stainless steel frame above skylight at 16° pitch



1 ROOF PLAN
 1/4"=1'

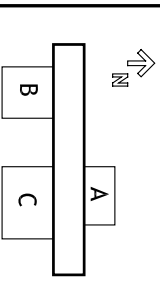


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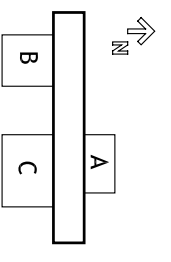
CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: ADAM LACKETT
 DATE: 08/07/2007
 TITLE: ROOF PLAN

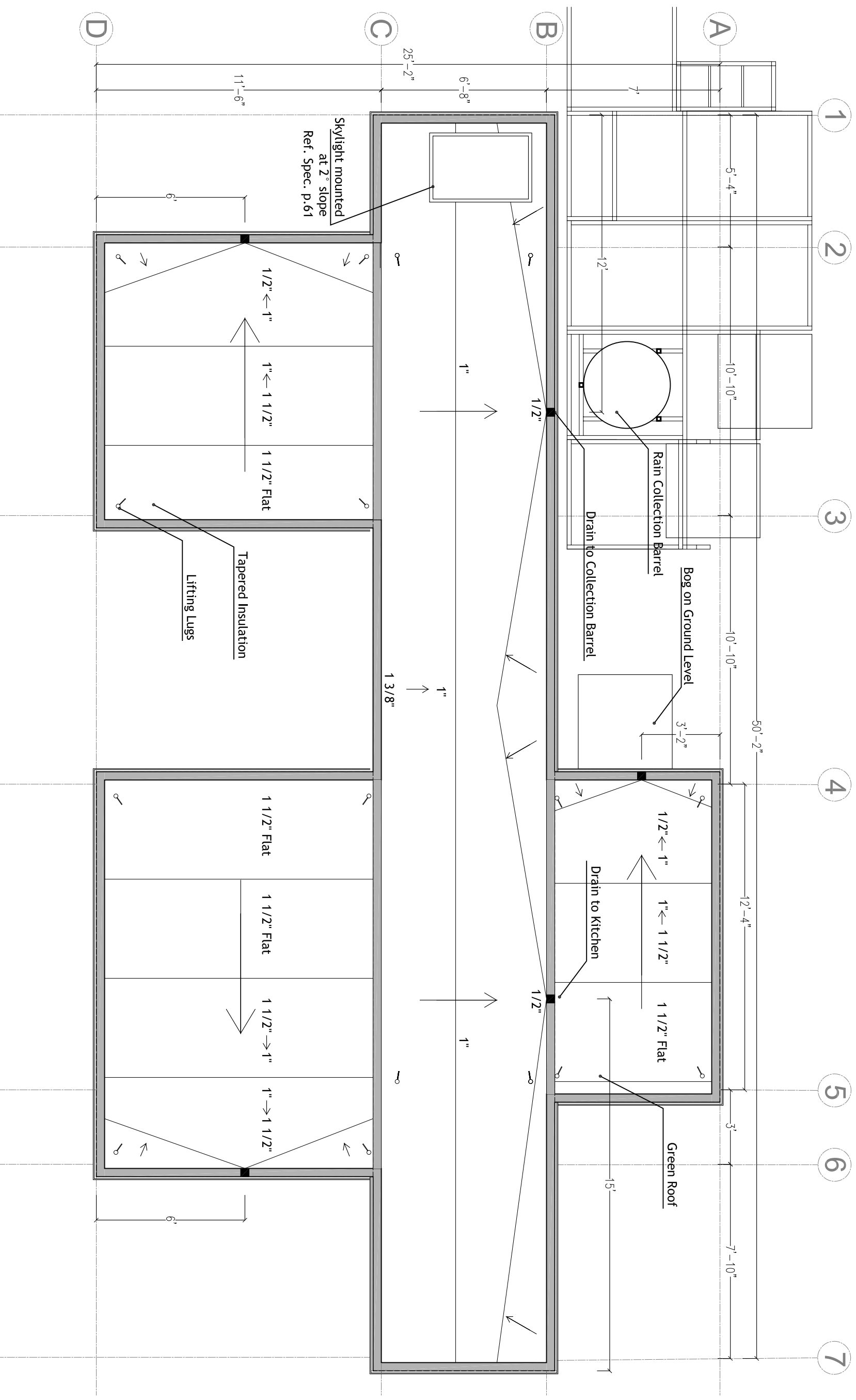
A 1.3

CONTACT:
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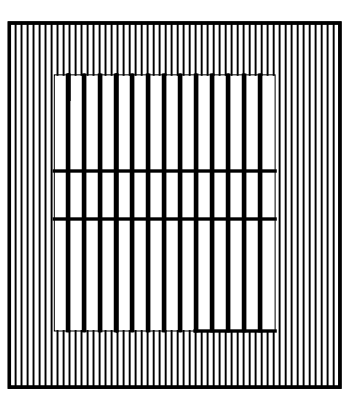
DRAWN BY: CATHY CHUNG
DATE: 08/07/2007
TITLE: ROOF DRAINAGE PLAN

A 1.4



1 ROOF DRAINAGE PLAN
 1/4"=1'

7'-7"
5'-4"

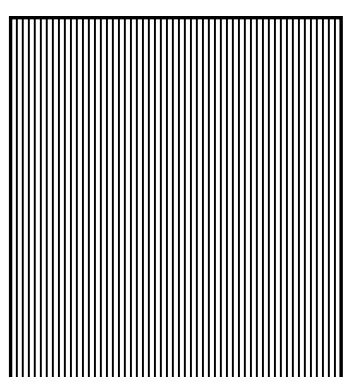


6'-10 5/8"

3 EAST ELEVATION UPPER CORE
1/4"=1'

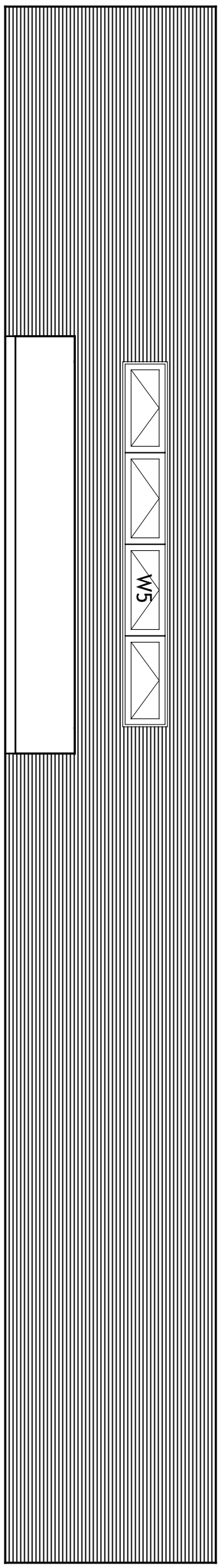
50'-11 1/2"

4 WEST ELEVATION UPPER CORE
1/4"=1'



6'-10 5/8"

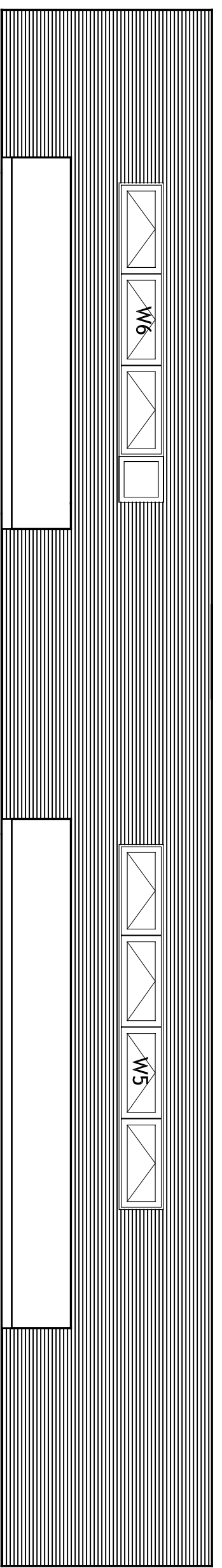
7'-7"



6'-10 5/8"

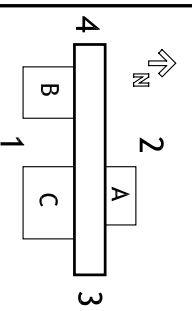
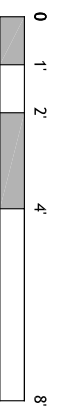
2 NORTH ELEVATION UPPER CORE
1/4"=1'

50'-11 1/2"



6'-10 5/8"

1 SOUTH ELEVATION UPPER CORE
1/4"=1'



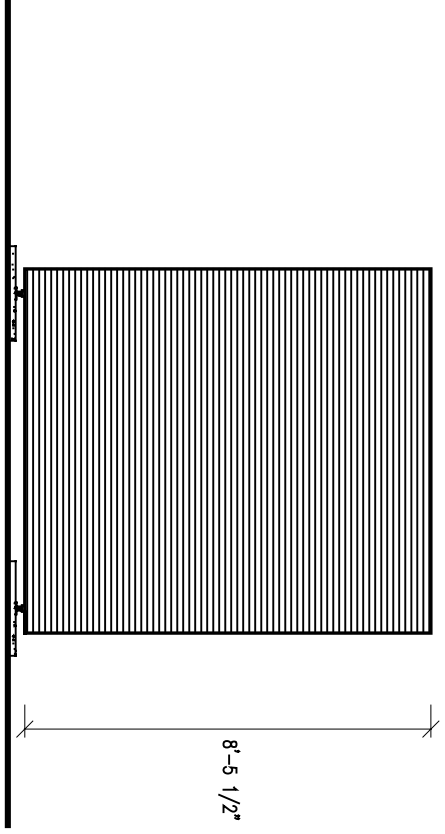
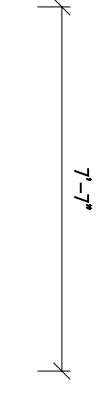
DRAWN BY: MEREDITH MAGNIN

DATE: 08/07/2007

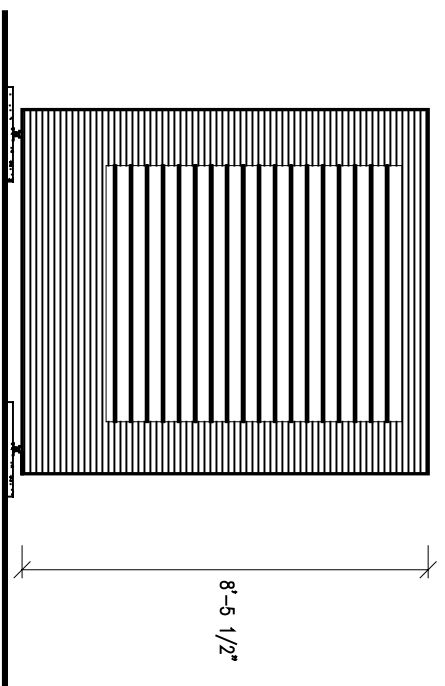
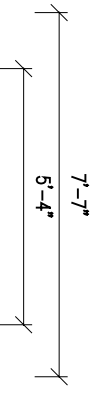
TITLE: UPPER CORE EXTERIOR ELEVATIONS

A 2.0

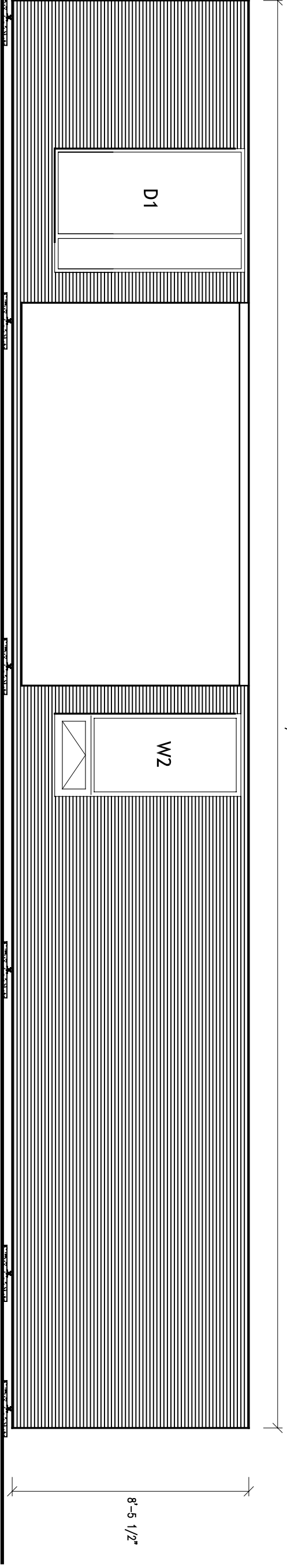
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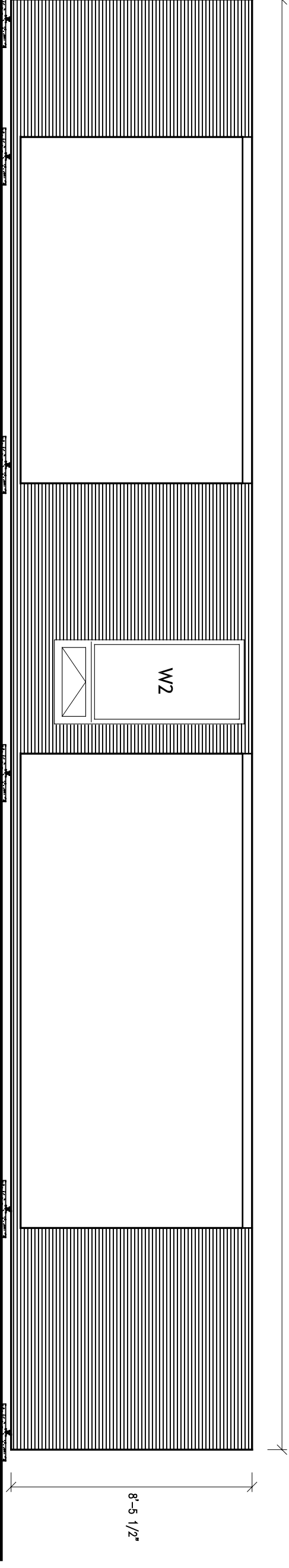
4 WEST ELEVATION LOWER CORE
 1/4"=1'
 50'-11 1/2"



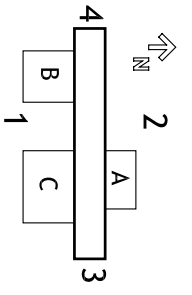
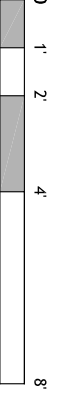
3 EAST ELEVATION LOWER CORE
 1/4"=1'



2 NORTH ELEVATION LOWER CORE
 1/4"=1'



1 SOUTH ELEVATION LOWER CORE
 1/4"=1'



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 f:412.268.7819

DRAWN BY: MEREDITH MAGNIN
DATE: 08/07/2007
TITLE: LOWER CORE EXTERIOR ELEVATIONS

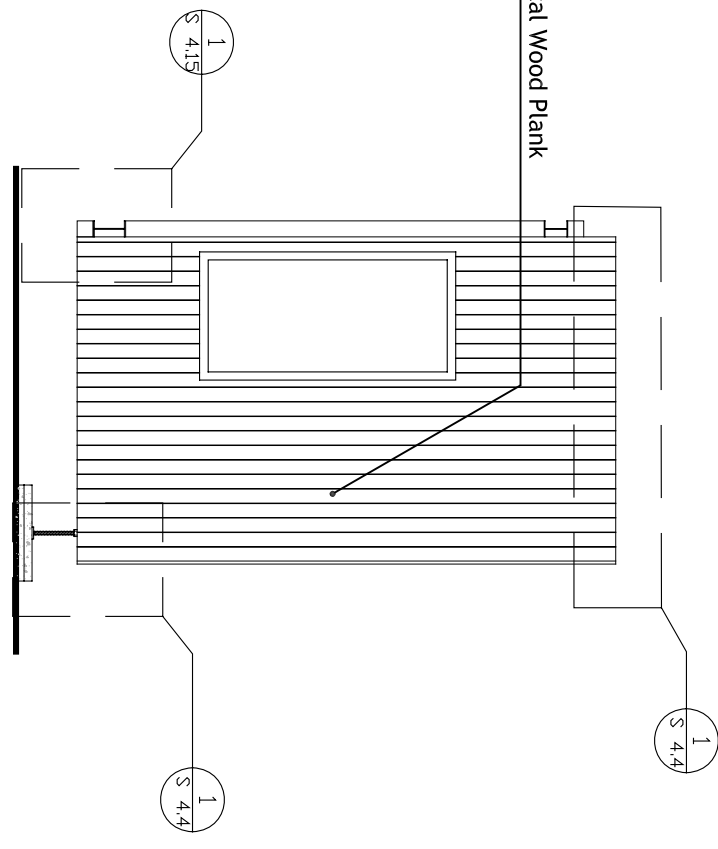
A 2.1

CARNEGIE MELLON
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 Carnegie Institute of
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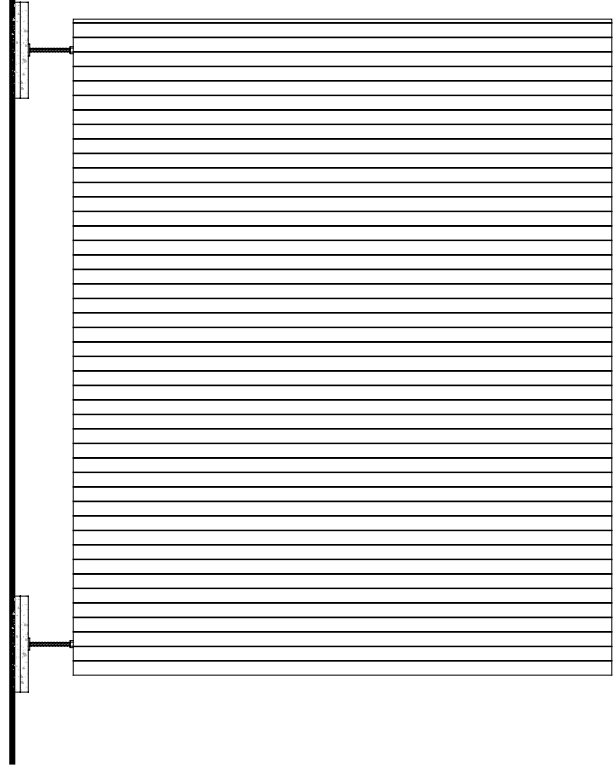
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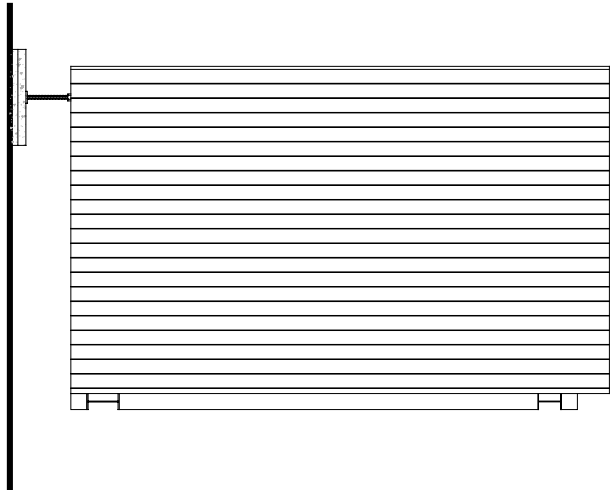
Rainscreen: Vertical Wood Plank
 Spec. Ref p. 152



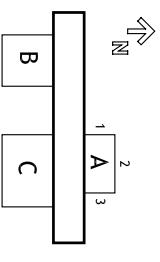
3 POD A - EAST ELEVATION
 1/4"=1'



2 POD A - NORTH ELEVATION
 1/4"=1'



1 POD A - WEST ELEVATION
 1/4"=1'



CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

DRAWN BY: EMMA DAVISON
 DATE: 08/07/2007
 TITLE: POD A ELEVATIONS

A 2.A

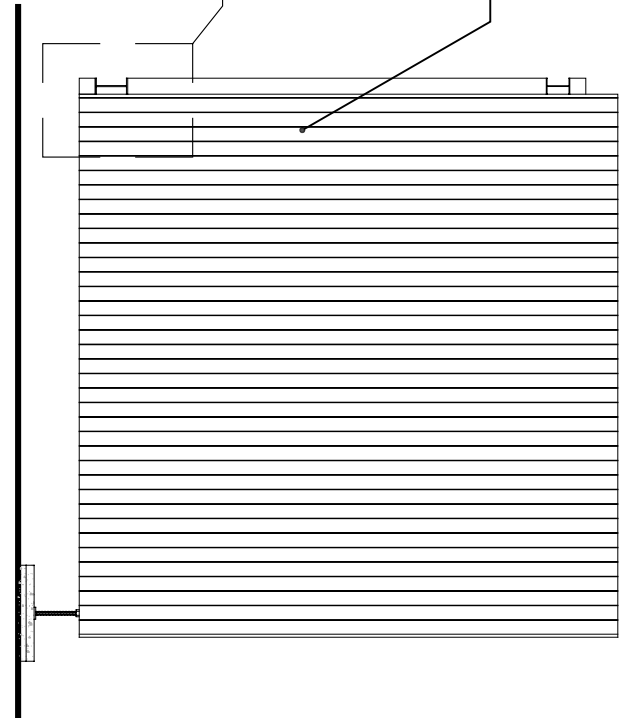
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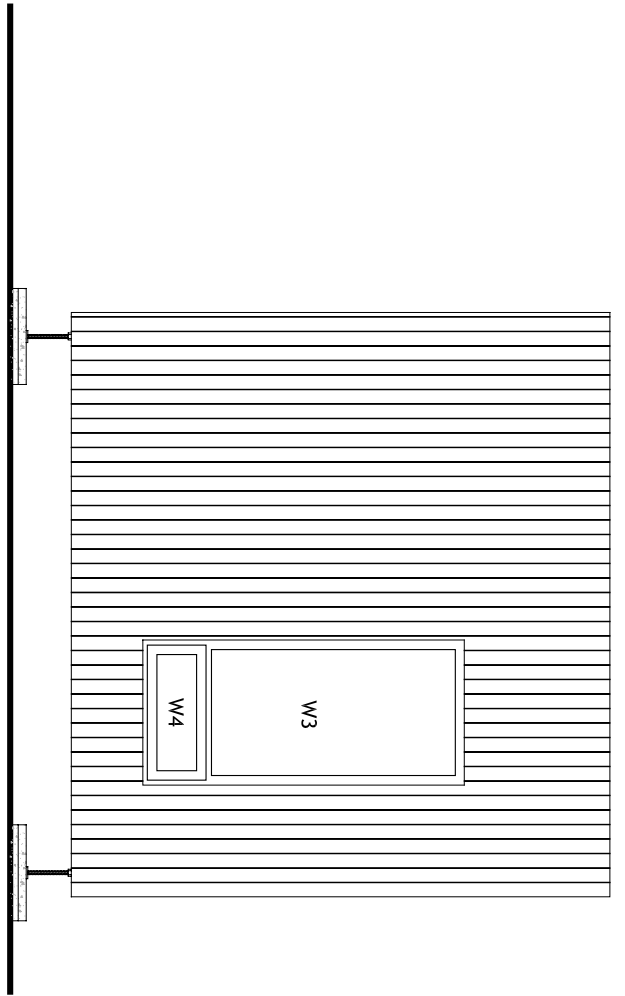
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Rainscreen
 Vertical Wood Plank:
 Spec. Ref p. 152

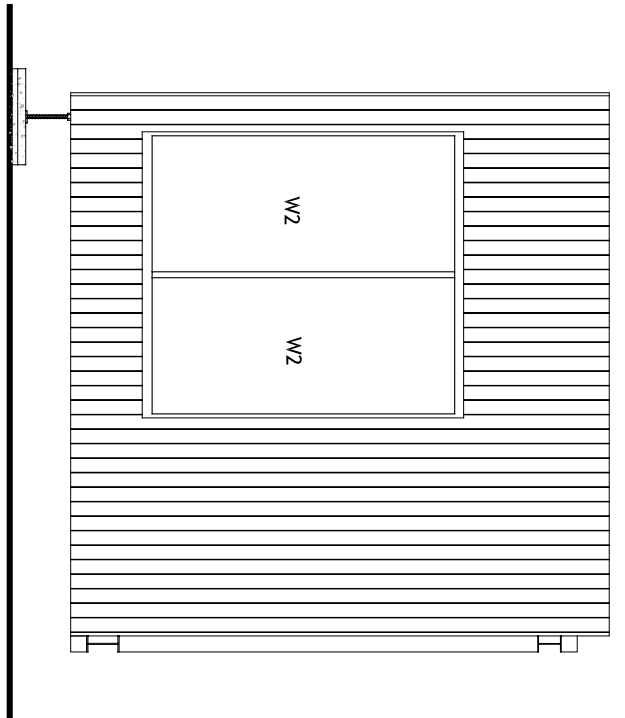
1
 S 4.15



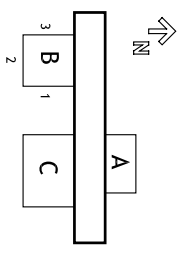
3 POD B - WEST ELEVATION
 1/4"=1'



2 POD B - SOUTH ELEVATION
 1/4"=1'



1 POD B - EAST ELEVATION
 1/4"=1'

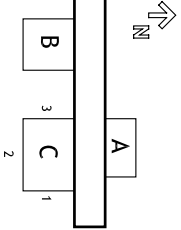


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 f:412.268.7819

DRAWN BY: EMMA DAVISON
 DATE: 08/07/2007
 TITLE: POD B ELEVATIONS

A 2.B

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

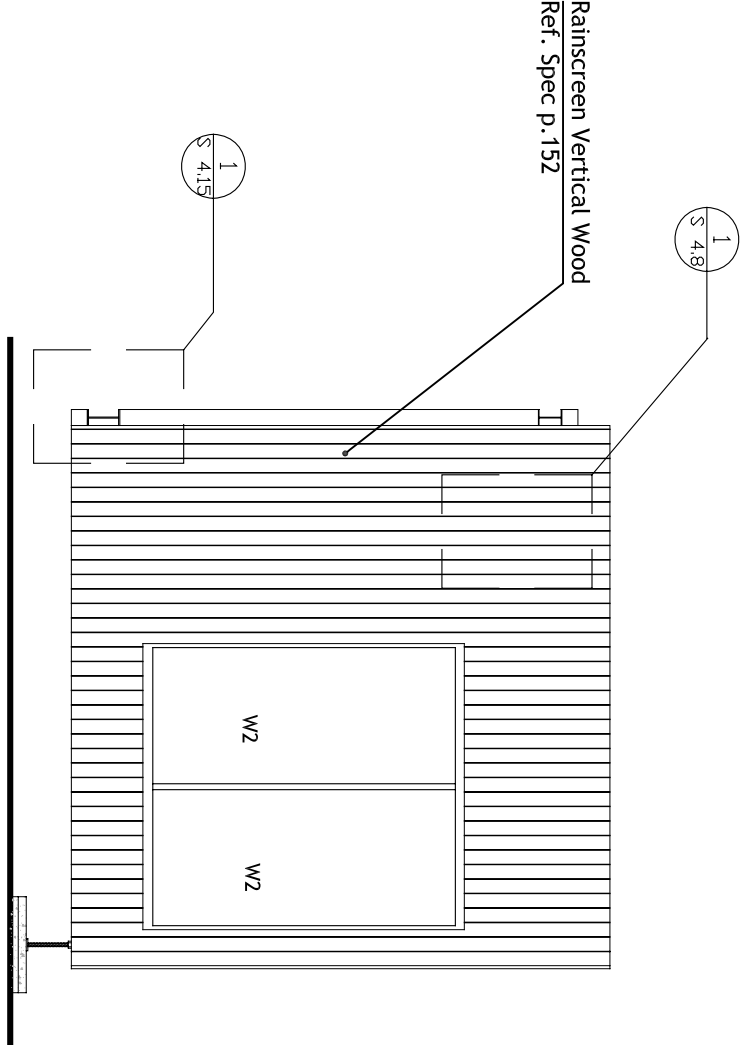


DRAWN BY: EMMA DAVISON

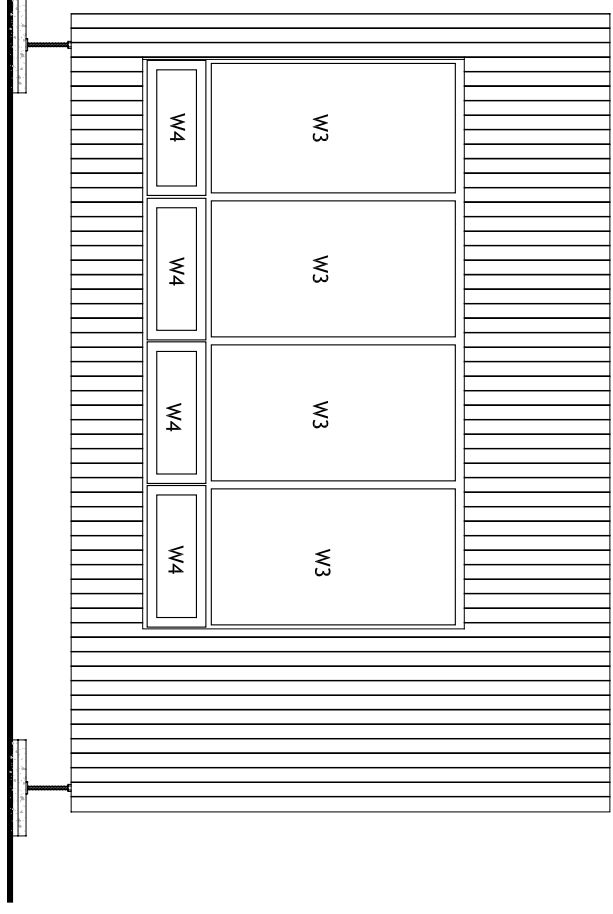
DATE: 08/07/2007

TITLE: POD C ELEVATIONS

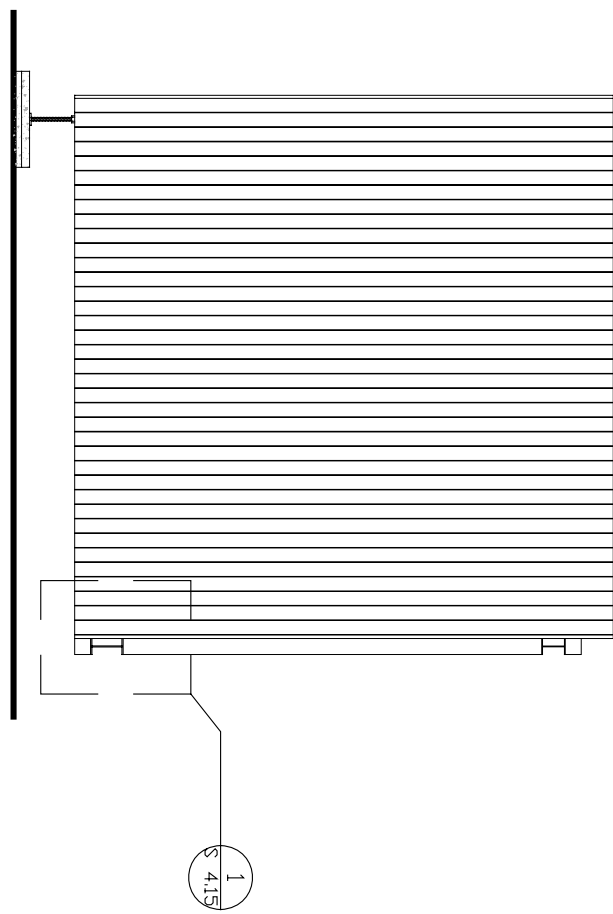
A 2.C



3 POD C - WEST ELEVATION
 1/4"=1'



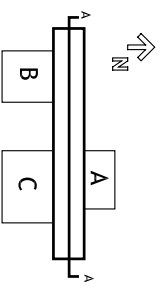
2 POD C - SOUTH ELEVATION
 1/4"=1'



1 POD C - EAST ELEVATION
 1/4"=1'

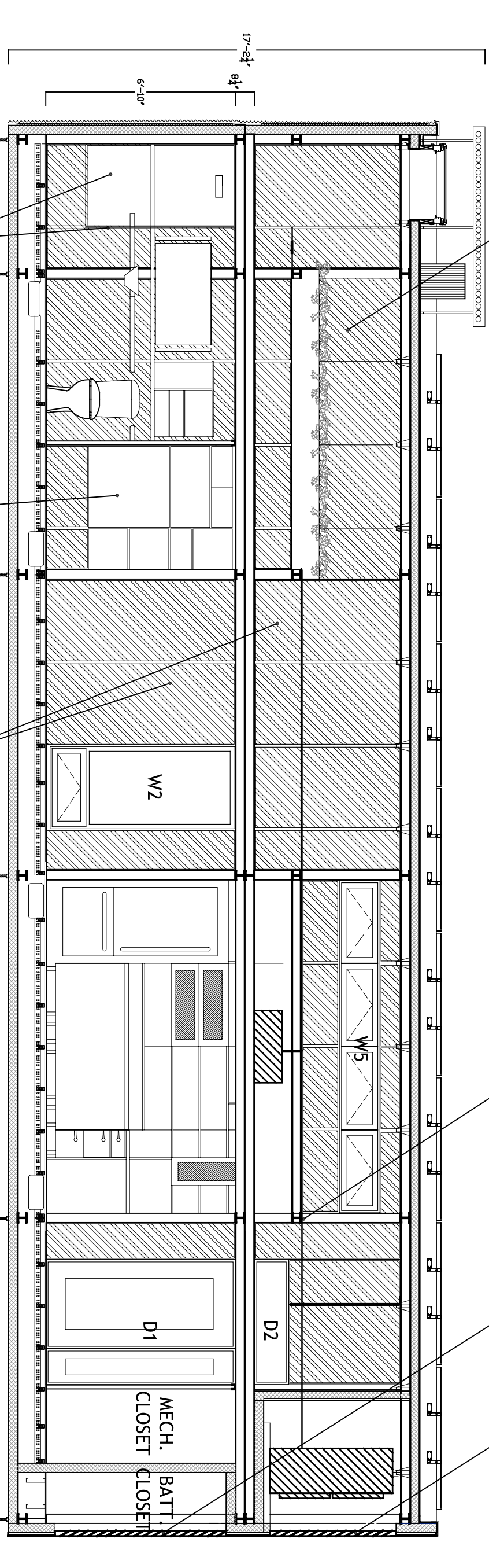


CONTACT:
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 p:412.726.6503
 f:412.268.7819



DRAWN BY: REBECCA SHORE
 DATE: 08/07/2007
 TITLE: CORE SECTION AA

A 3.0



See Sheet A4.2 for Detailed View of Upper Plenum Mechanical Space

Refrigerant Lines Supported from below every 3ft

Louvered Panel - open spaces 3'-4"
 Fixed but removable

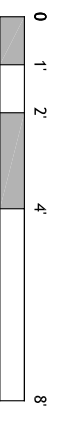
Louvered Panel - open spaces 3'-4" operable

Translucent Resin Panel
 Ref. Spec. p.154

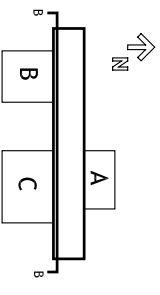
Wall System

Aluminum Composite Board
 Ref. Spec. p.150

1 CORE SECTION - AA
 1/4"=1'

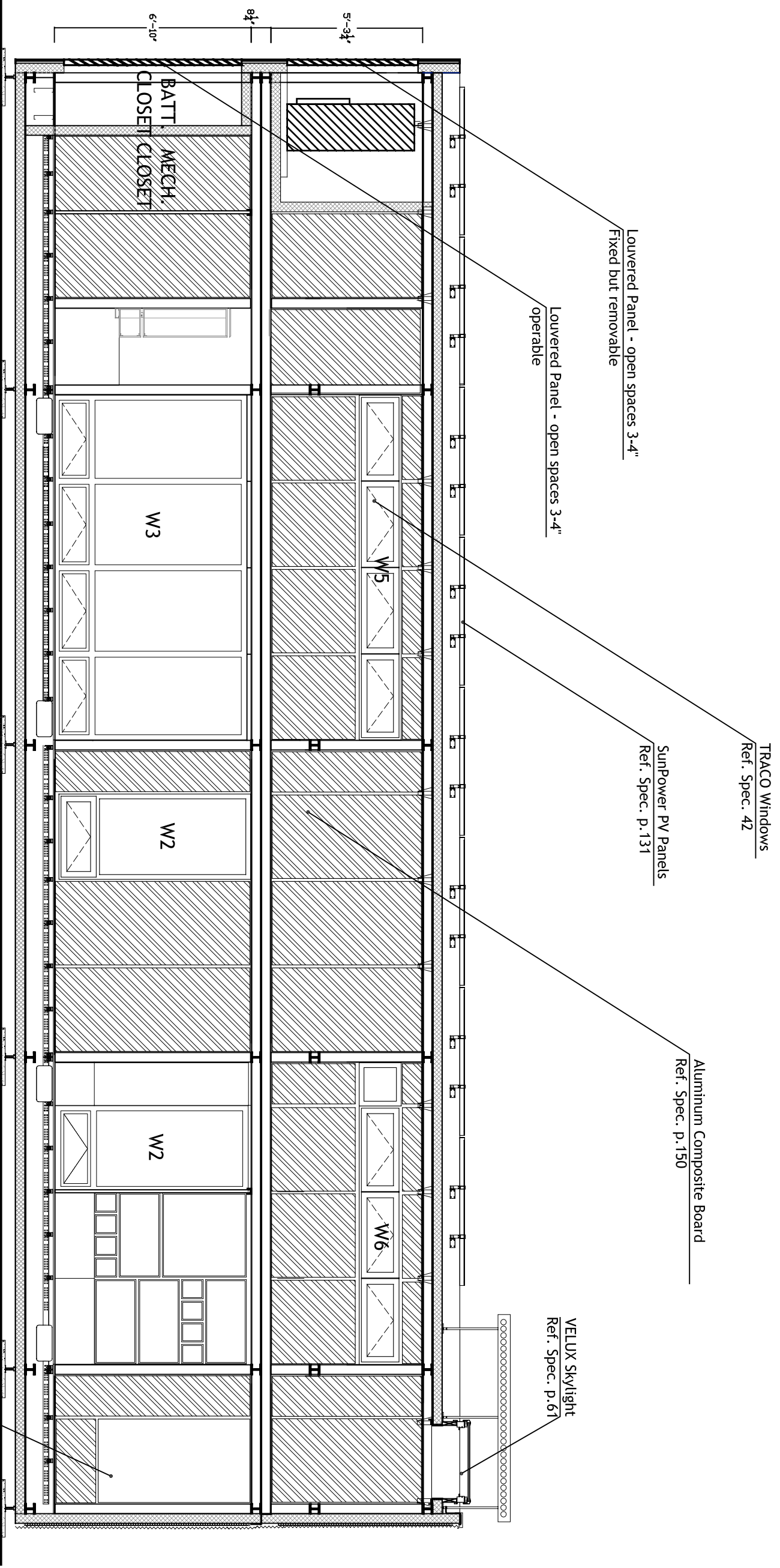


CONTACT:
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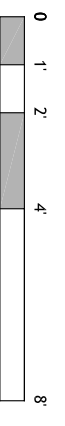


DRAWN BY: REBECCA SHORE
 DATE: 08/07/2007
 TITLE: CORE SECTION BB

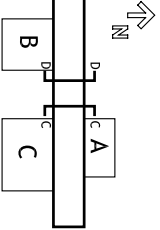
A 3.1



1 CORE SECTION - BB
 1/4"=1'

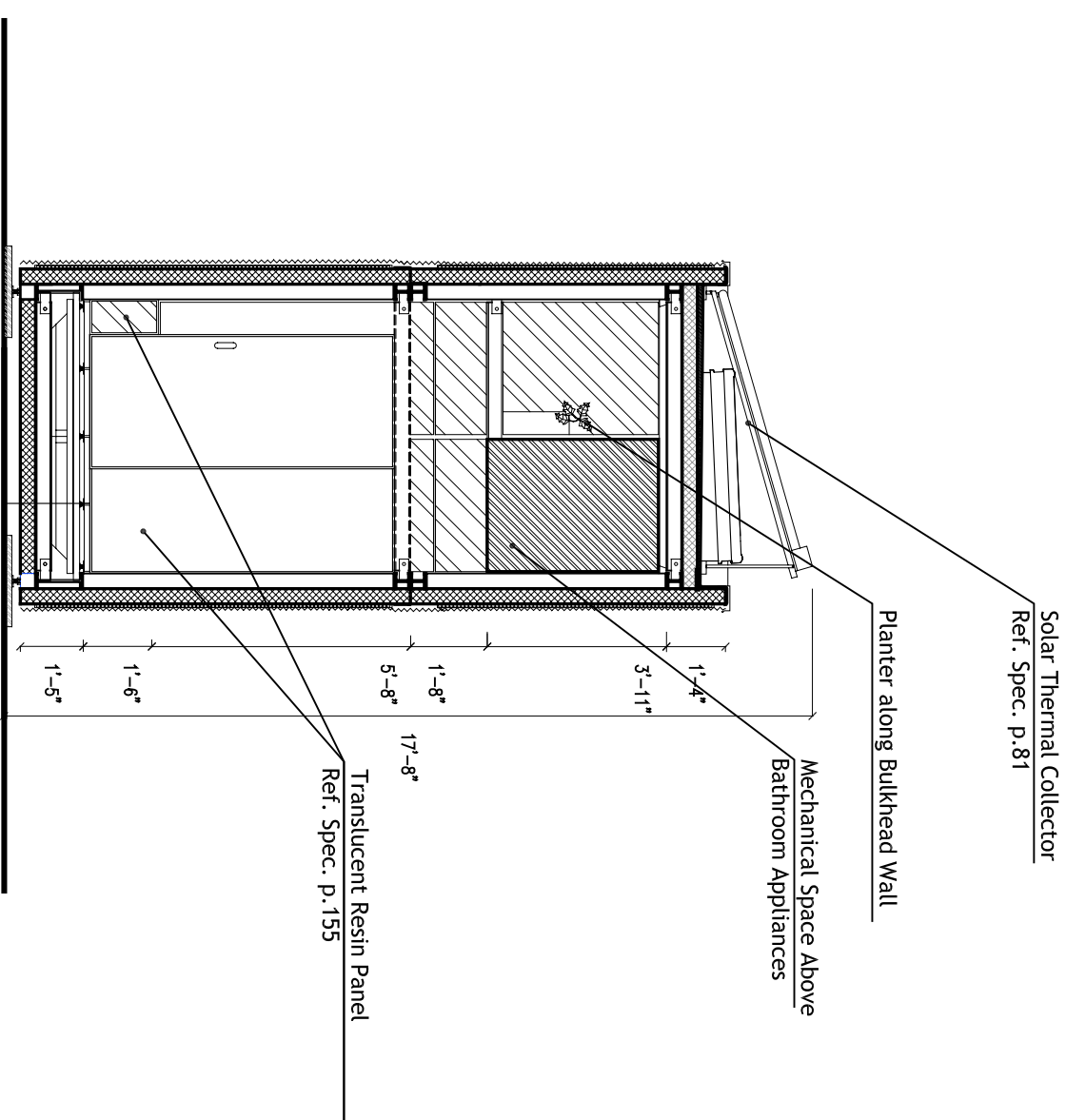


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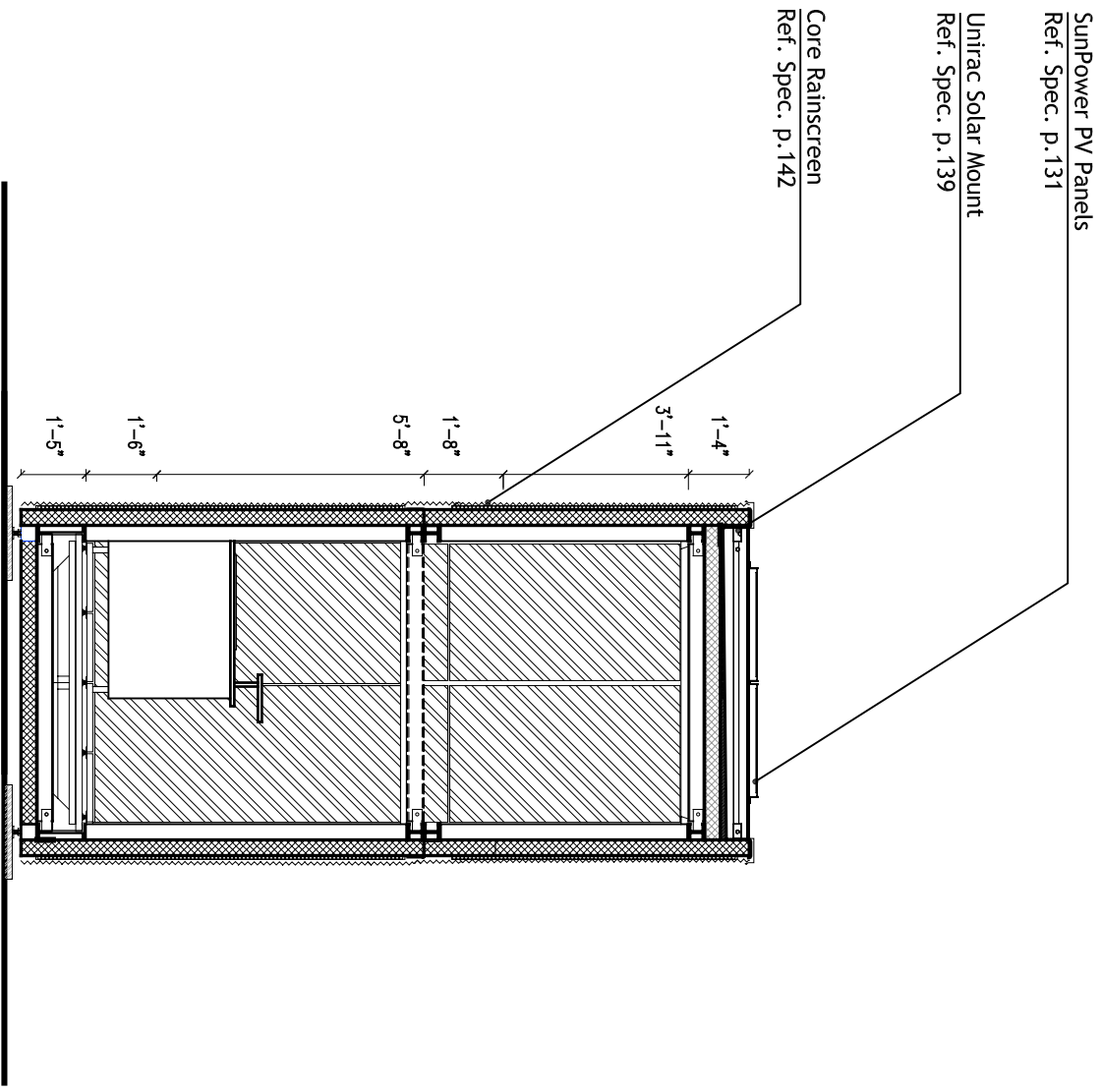


DRAWN BY: REBECCA SHORE
 DATE: 08/07/2007
 TITLE: CORE SECTIONS CC & DD

A 3.2

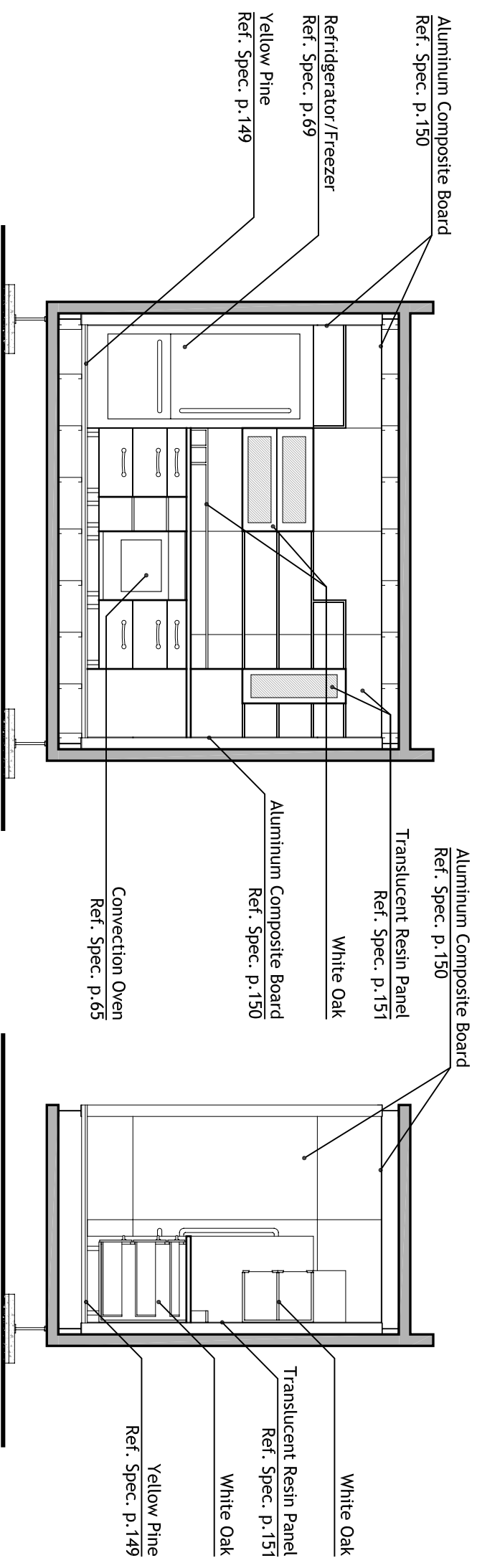


2 CORE SECTION - DD
 1/4"=1'



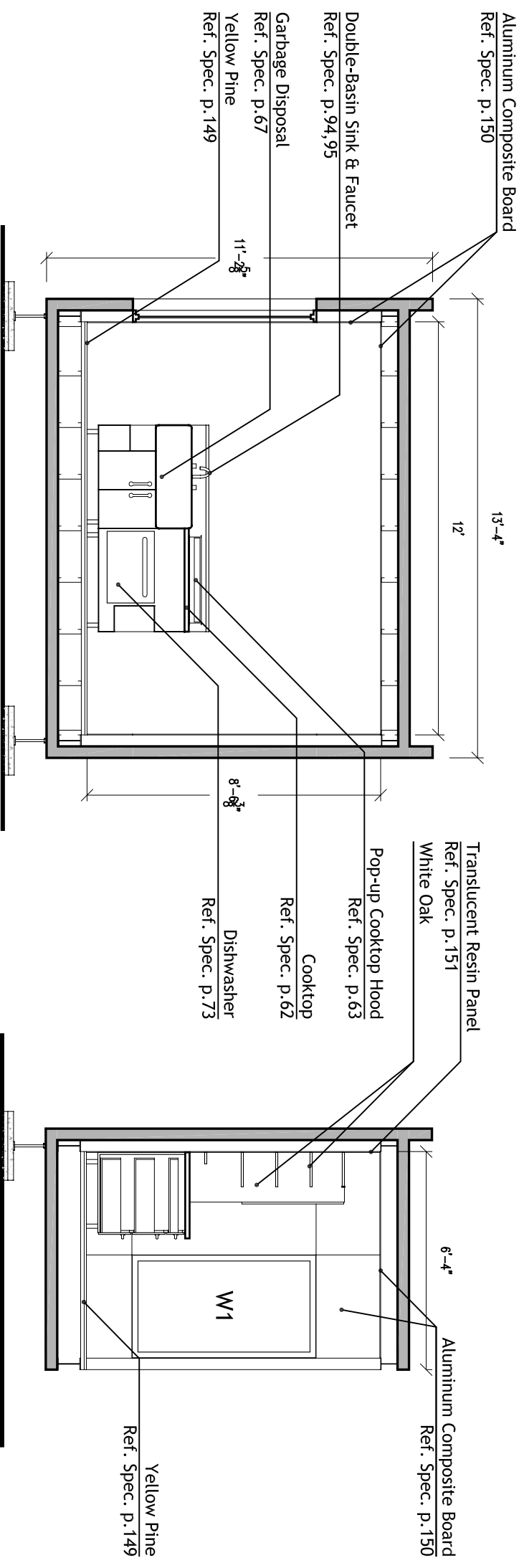
1 CORE SECTION - CC
 1/4"=1'





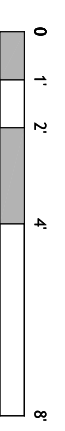
4 POD A - SECTION DD
1/4"=1'

3 POD A - SECTION CC
1/4"=1'



2 POD A - SECTION BB
1/4"=1'

1 POD A - SECTION AA
1/4"=1'

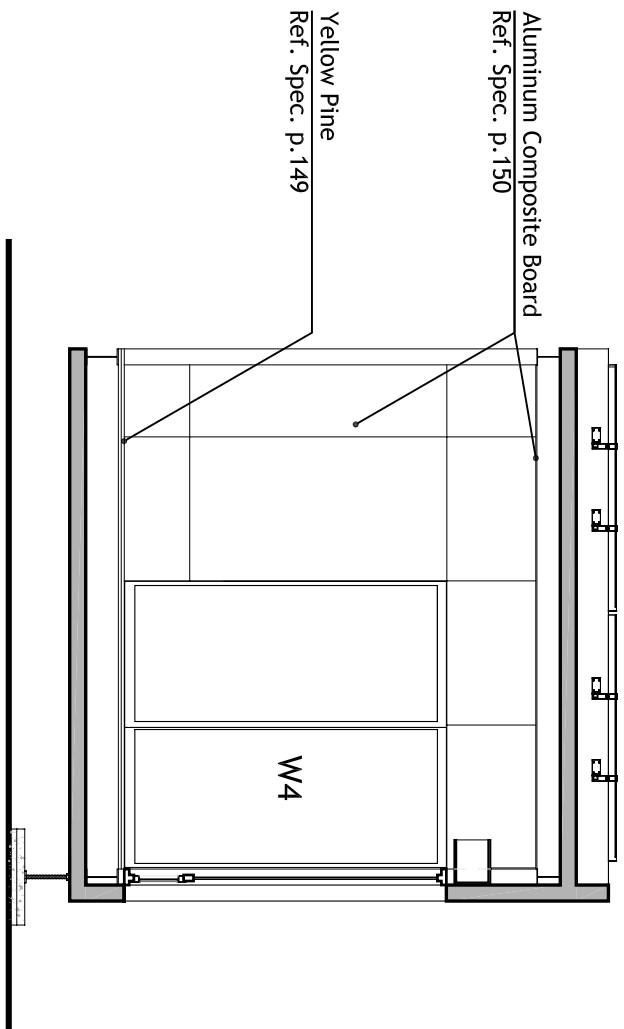


	<p>CARNEGIE MELLON School of Architecture School of Design School of Drama School of Art Tepper School of Business Carnegie Institute of Technology</p>	<p>UNIVERSITY OF PITTSBURGH School of Engineering</p>	<p>ART INSTITUTE OF PITTSBURGH</p>	<p>CONTACT: Steve Lee p:412.726.6503 f:412.268.7819</p>	<p>DRAWN BY: EMMA DAVISON DATE: 08/07/2007 TITLE: POD A SECTIONS</p>	<p>A 3.A</p>
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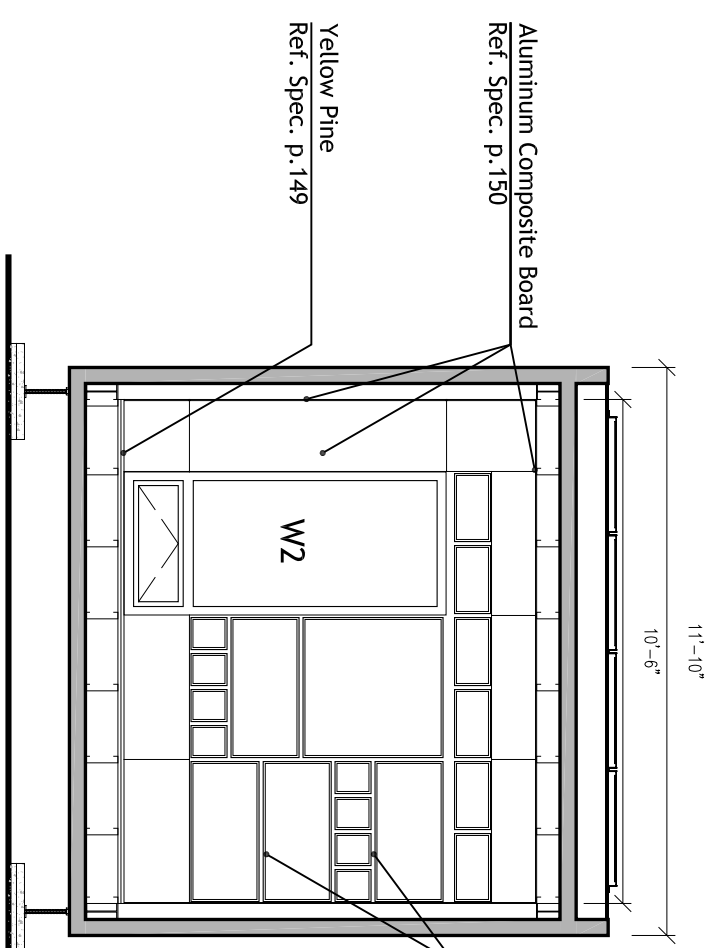
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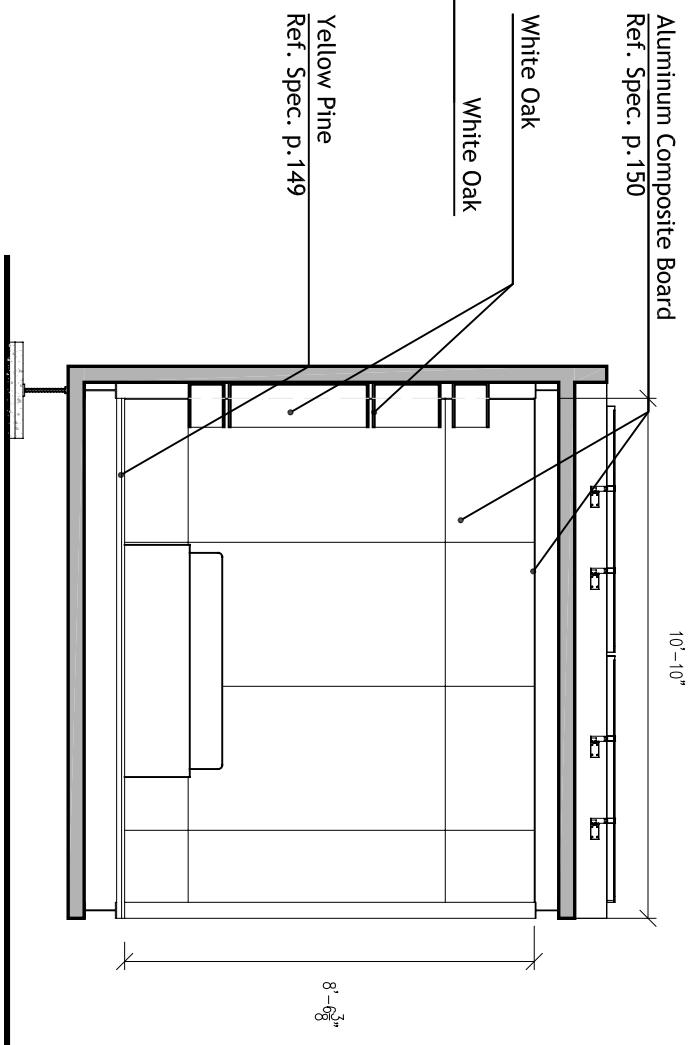
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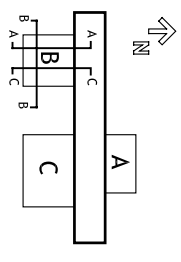
3 POD B - SECTION CC
1/4"=1'



2 POD B - SECTION BB
1/4"=1'



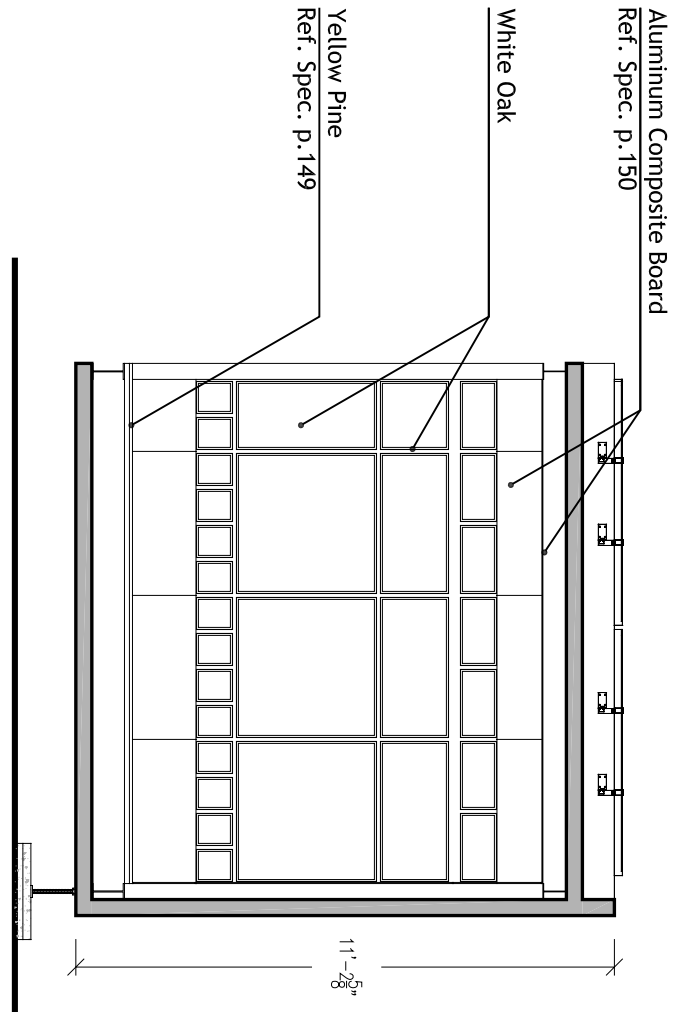
1 POD B - SECTION AA
1/4"=1'



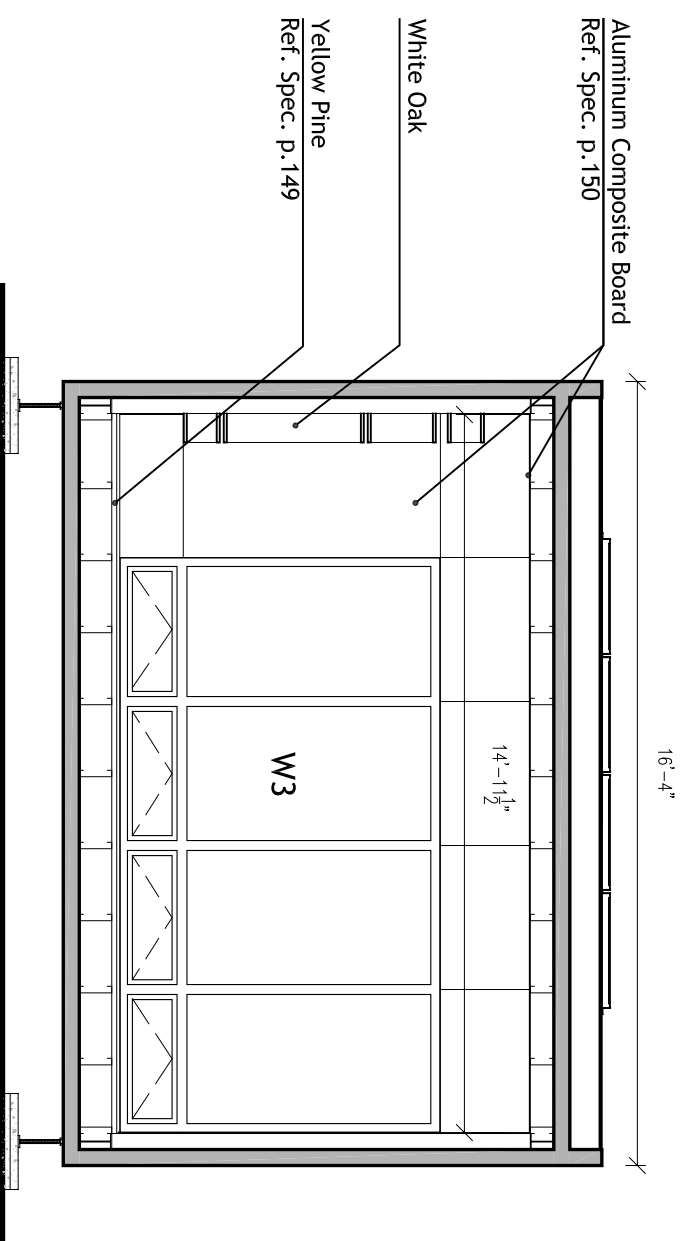
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DATE: 08/07/2007
TITLE: POD B SECTIONS

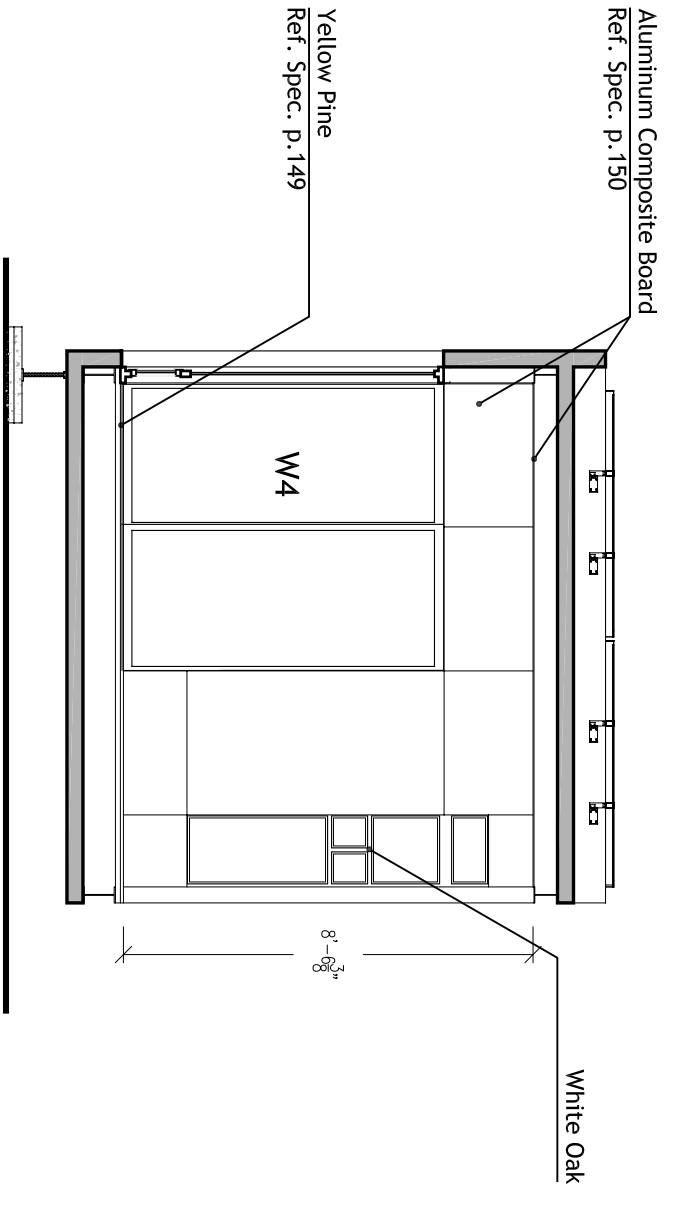
A 3.B



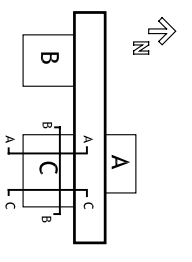
3 POD C - SECTION CC
 1/4"=1'



2 POD C - SECTION BB
 1/4"=1'



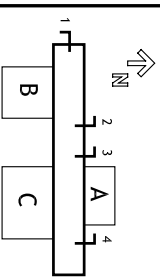
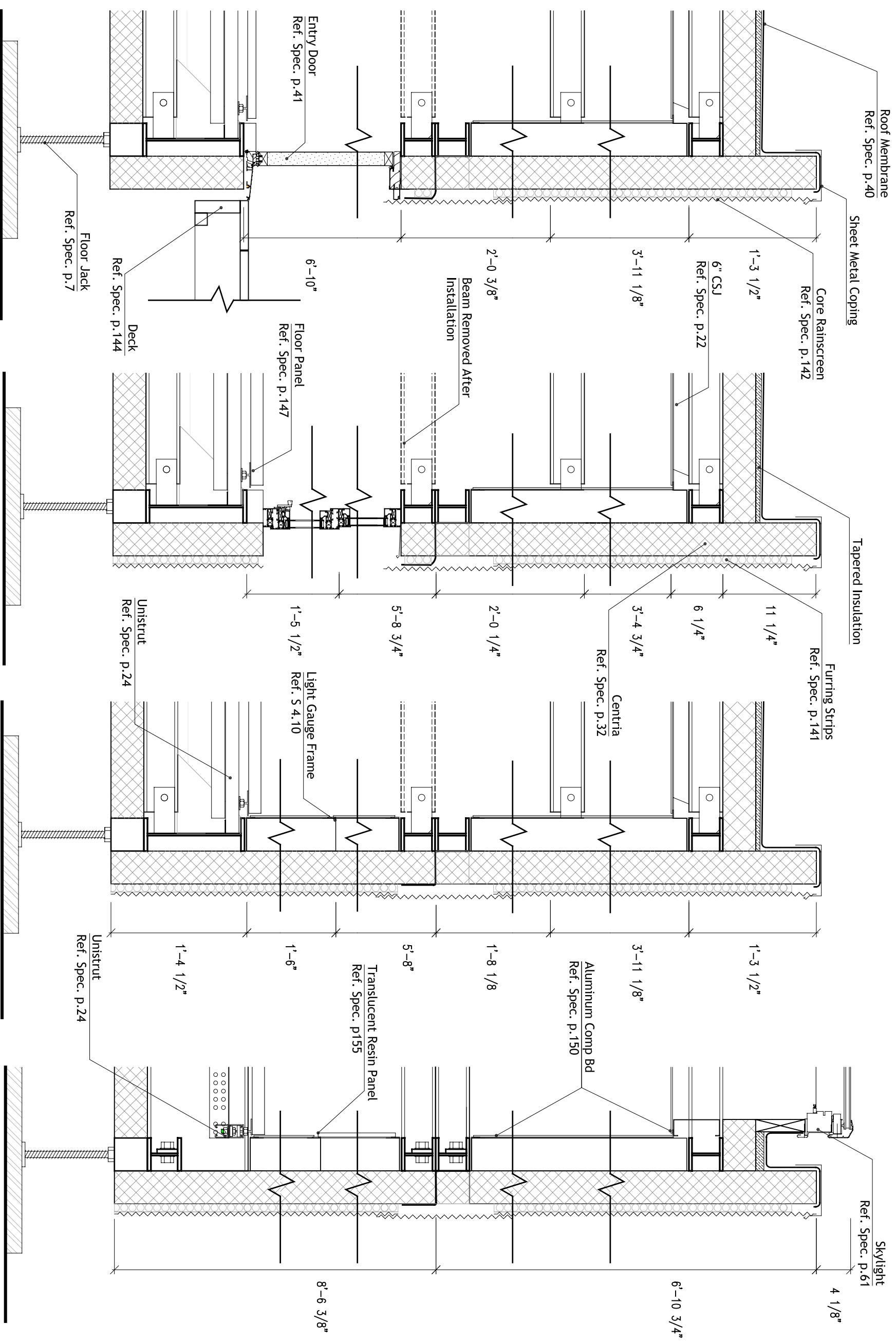
1 POD C - SECTION AA
 1/4"=1'



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DRAWN BY: EMMA DAVISON
DATE: 08/07/2007
TITLE: POD C SECTIONS

A 3.C



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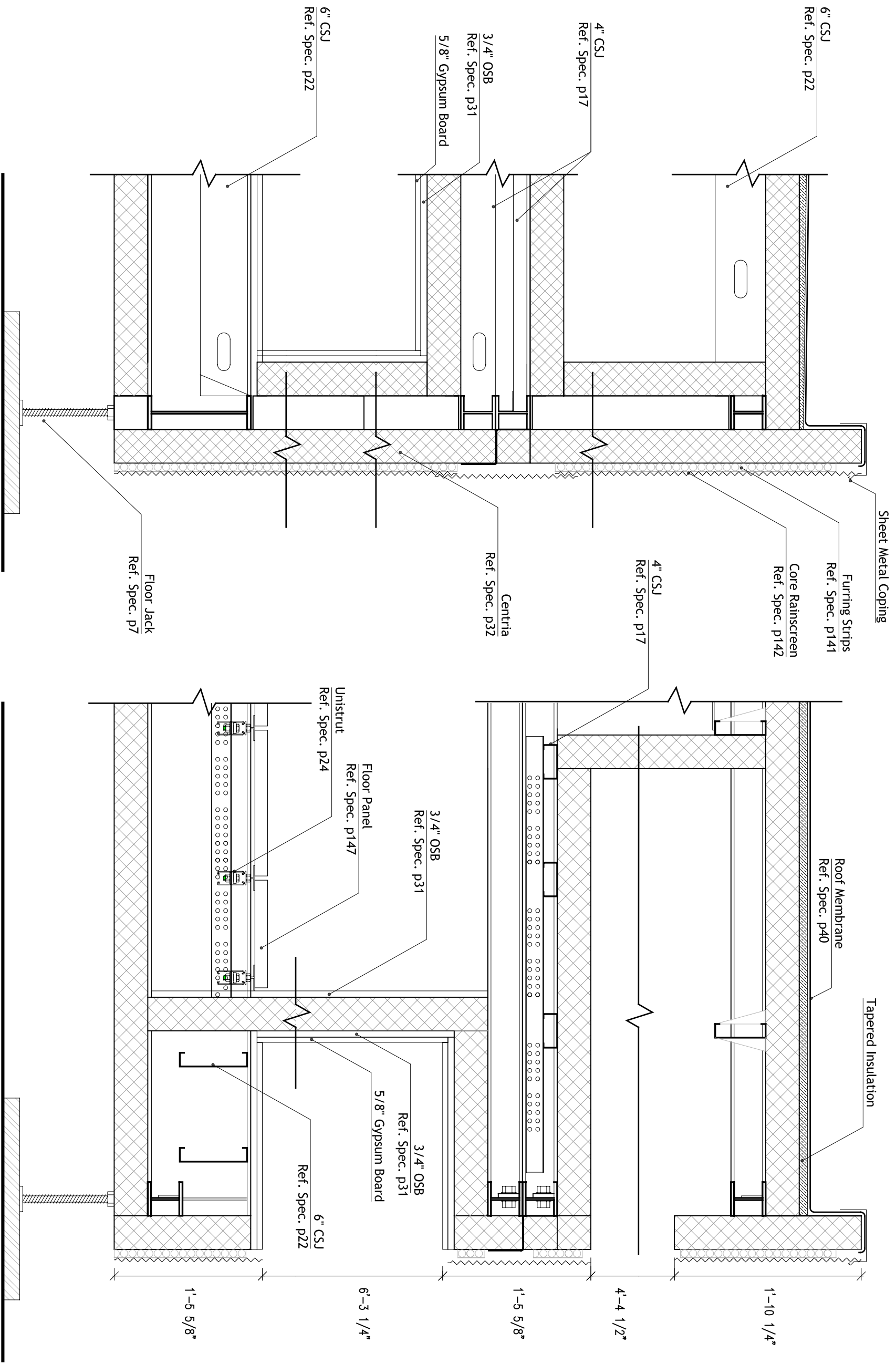
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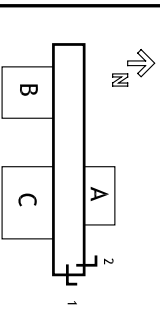
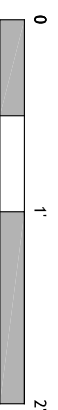
DRAWN BY: CATHY CHUNG
 DATE: 08/07/2007
 TITLE: CORE WALL SECTIONS

A 4.1



2 CORE WALL SECTION THROUGH CLOSET
1"=1'

1 CORE EAST WALL SECTION
1"=1'



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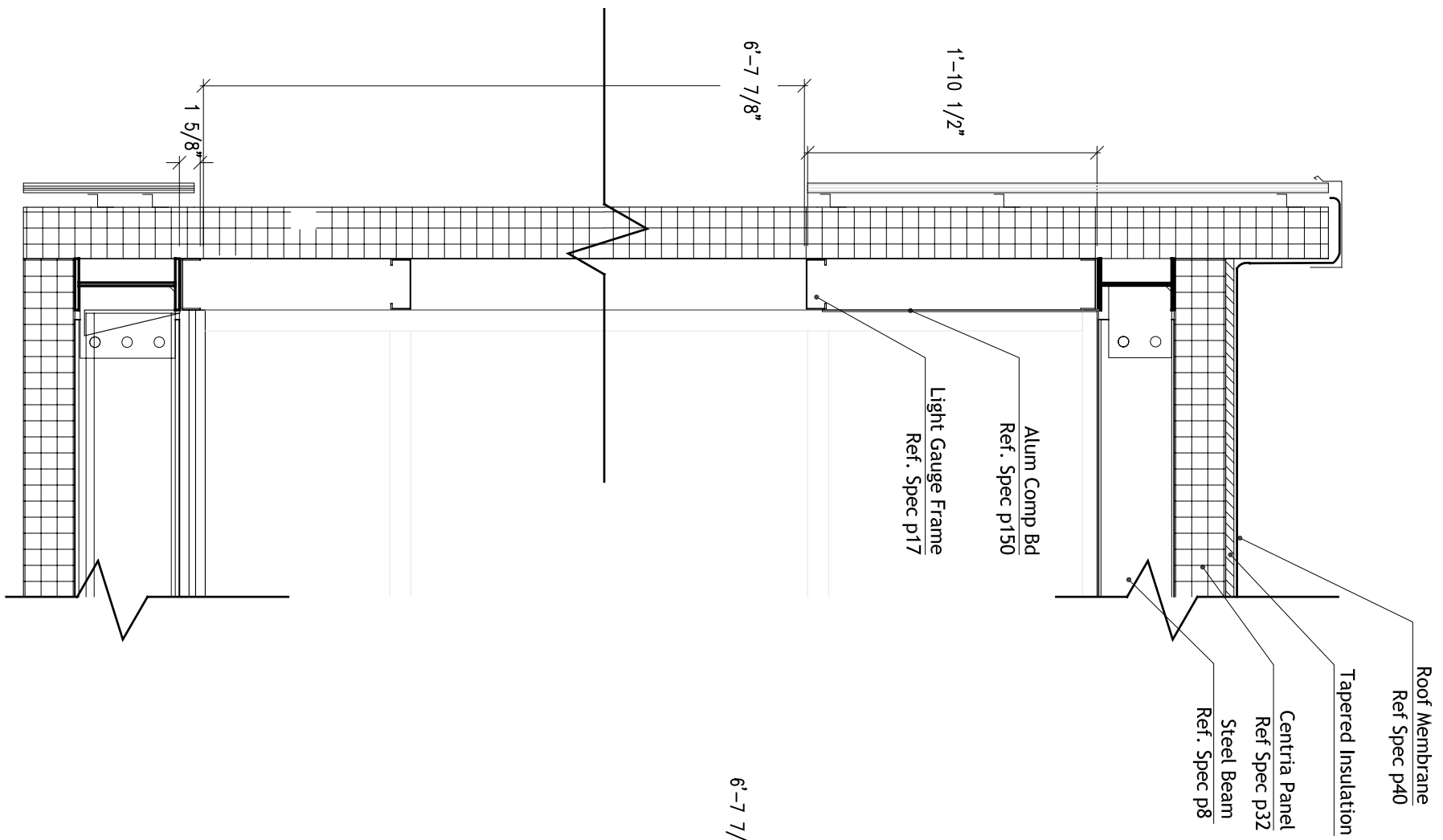
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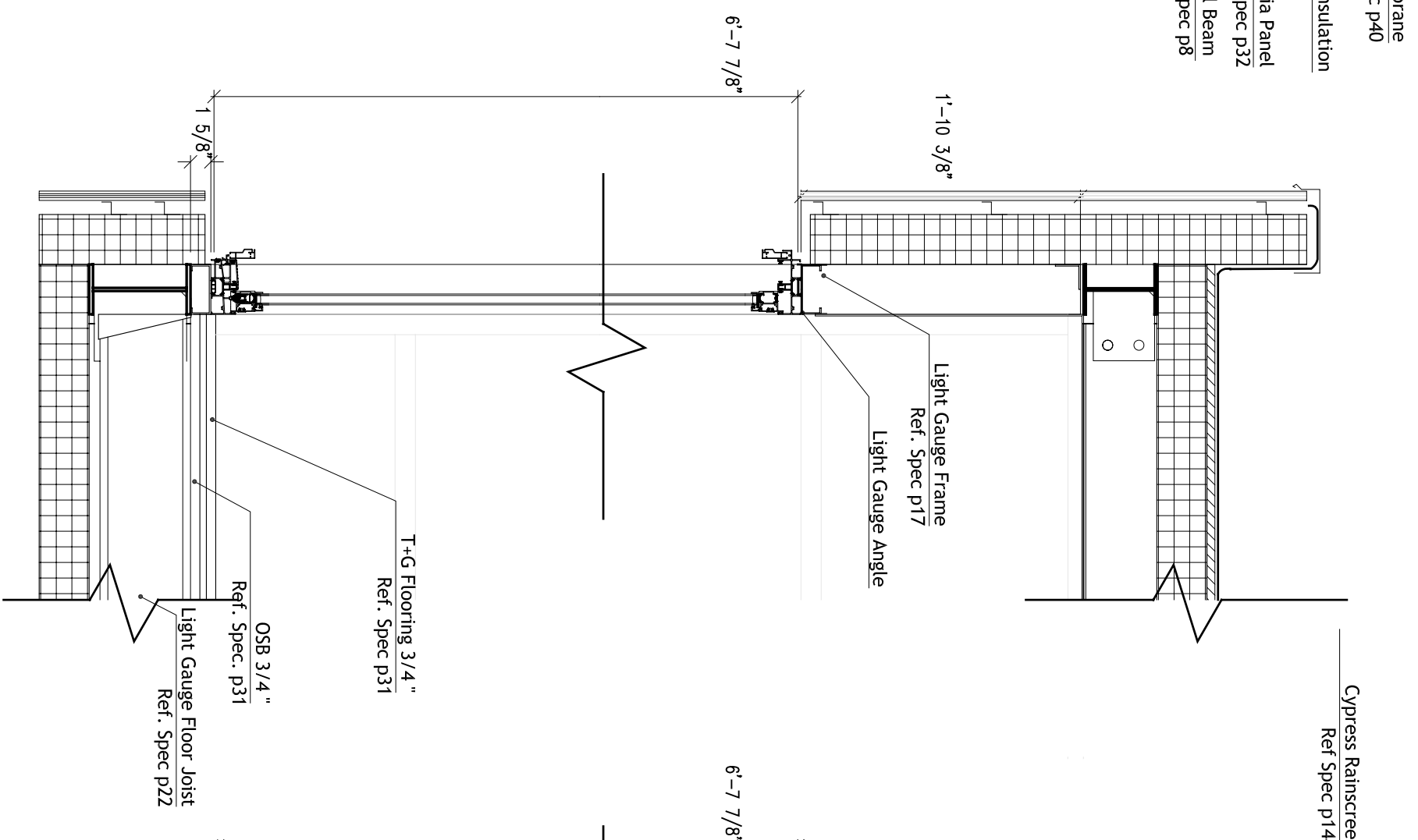


DRAWN BY: CATHY CHUNG
DATE: 08/07/2007
TITLE: CORE WALL SECTIONS

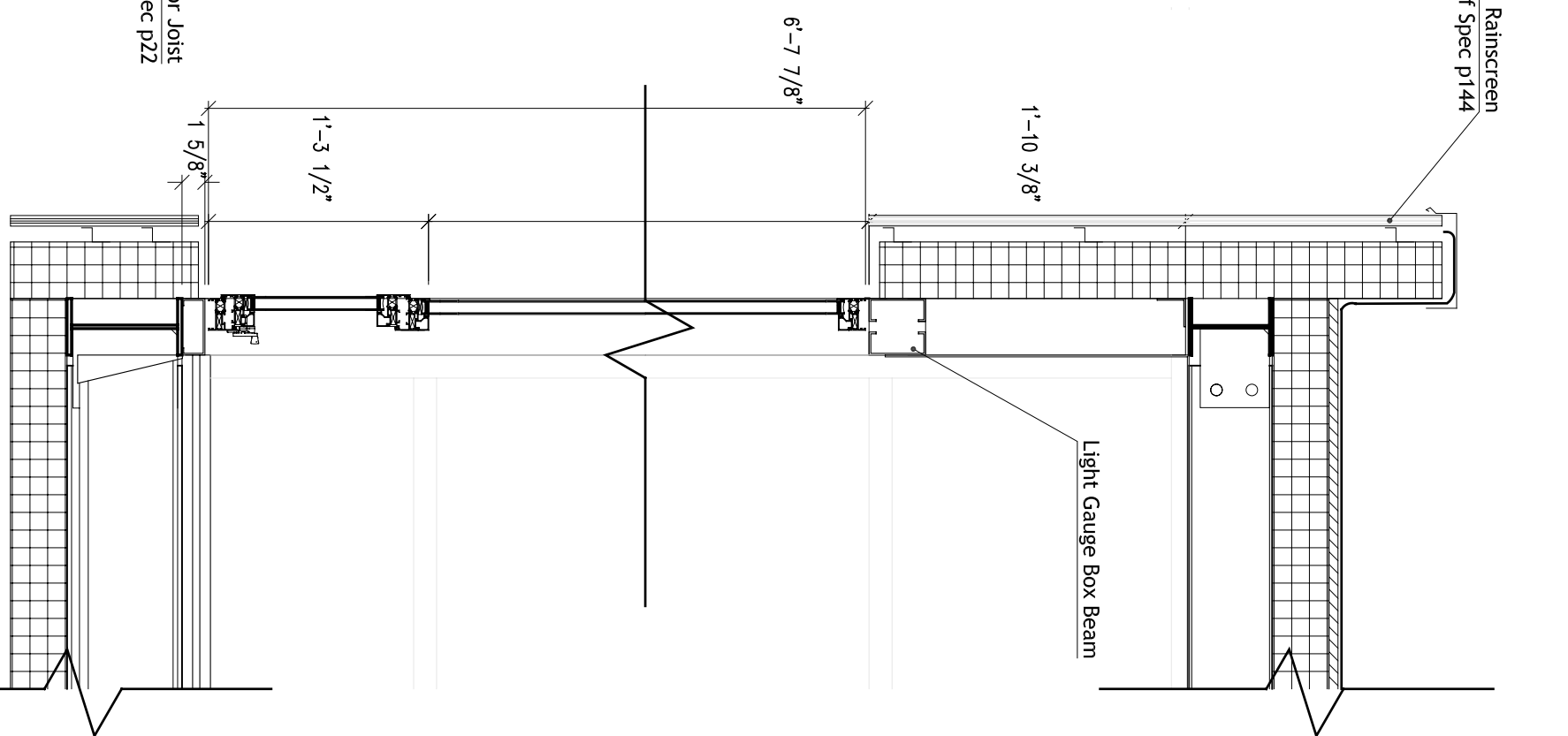
A 4.2



3 SECTION THROUGH POD WALL
1"=1'



2 SECTION THROUGH W4
1"=1'



1 SECTION THROUGH W2 IN POD
1"=1'

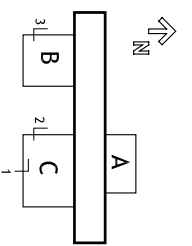


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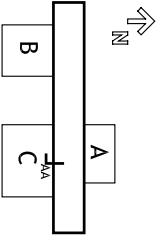
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DRAWN BY: CATHY CHUNG
DATE: 08/07/2007
TITLE: POD WALL SECTIONS

A 4.3

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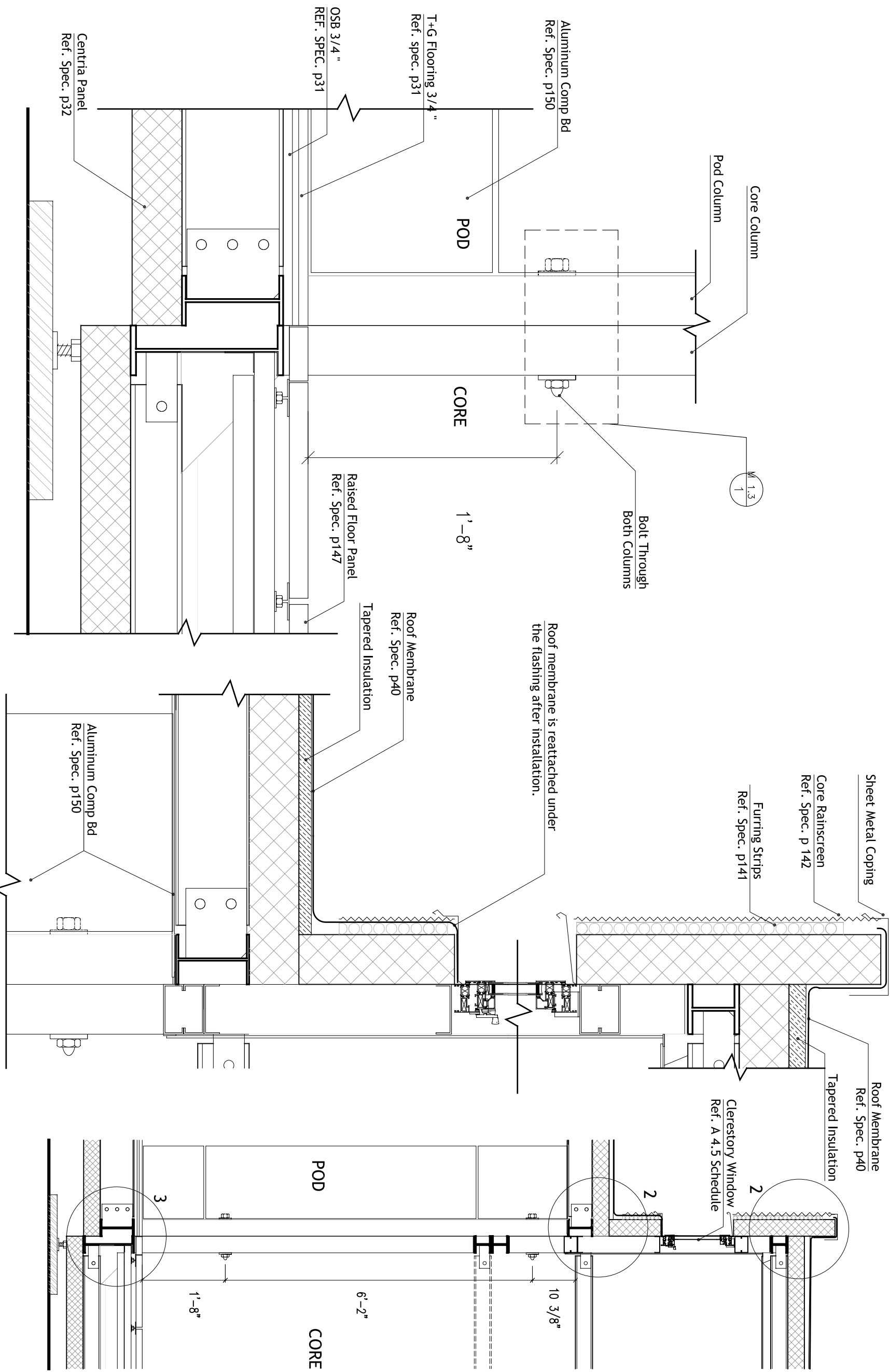


DRAWN BY: CATHY CHUNG

DATE: 08/07/2007

TITLE: CORE / POD CONNECTION DETAIL

A 4.4



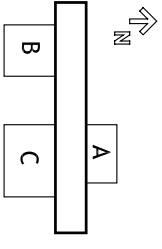
3 1 1/2"=1'
 DETAIL OF TYPICAL FLOOR CONNECTION

2 1 1/2"=1'
 DETAIL OF TYPICAL ROOF CONN.

1 1/2"=1'
 SECTION THROUGH CONNECTION



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DRAWN BY: CATHY CHUNG

DATE: 08/07/2007

TITLE: WINDOW SCHEDULE

A 4.5

WINDOW SCHEDULE

MARK	UNIT	MODEL #	R. O.	UNIT DIM. *	IGM GL	MULLION COLOR OUTER / INNER	QUANTITY	Ref. Spec.
W1	FIXED	NX-380	32 1/2" X 64"	32" X 63 1/2"	SOLARBAN XL70 ARGON (TEMPERED)	UC 95934XL / UC 43350	1	1
W2	FIXED (TOP) PROJECTED (BOTTOM)	NX-350	36" X 80 3/8"	35 1/2" X 79 7/8"	SOLARBAN XL70 ARGON (TEMPERED)	UC 95934XL / UC 43350	3	1
W3	FIXED (TOP) PROJECTED (BOTTOM)	NX-350	144" X 80 3/8"	143 1/2" X 79 7/8"	SOLARBAN XL70 ARGON (TEMPERED)	UC 95934XL / UC 43350	1	1
W4	SLIDING	NX-840	72" X 82 3/8"	71 1/2" X 81 1/4"	ARGON (TEMPERED)	UC 95934XL / UC 43350	2	1
W5	PROJECTED	NX-350	144" X 18"	143 1/2" X 17 1/2"	SOLARBAN XL70 ARGON (TEMPERED)	UC 95934XL / UC 43350	2	1
W6	PROJECTED/ FIXED	NX-350	126" X 18"	125 1/2" X 17 1/2"	SOLARBAN XL70 ARGON (TEMPERED)	UC 95934XL / UC 43350	1	1

*1/4" TOLERANCE ON ALL SIDES EXCEPT W4 FOR ADA COMPLIANCE

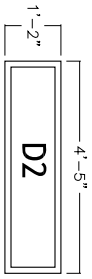
SKYLIGHT SCHEDULE

MARK	UNIT	MODEL #	INT. DIM.	EXT DIM.	GLAZING	CLADDING	QUANTITY	Ref. Spec.
S1	PROJECTED	VELUX CURB-MOUNTED ELECTRIC VCE 3046	30 1/2" X 46 1/4"	33 1/2" X 49 1/2"	COMPLUS PLUS (TEMPERED)	BLACK ALUMINIUM	1	p 61

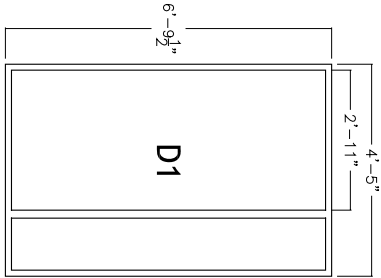
ENTRY SYSTEM SCHEDULE

MARK	UNIT	MODEL #	R. O.	UNIT DIM.	GLAZING	CLADDING	QUANTITY	Ref. Spec.
D1	FIXED / INSWING	FIXED	53 3/4" X 82"	53" X 81 1/2"	LOW E COATING ARGON (TEMPERED) LOW E COATING ARGON (TEMPERED)	BROWN	1	p 41
D2	FIXED	FIXED	53 3/4" X 14 3/4"	53" X 14"	LOW E COATING ARGON (TEMPERED)	BROWN	1	p 41

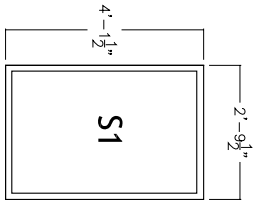
Note:
 All Glazing Products are Unit Dimensioned



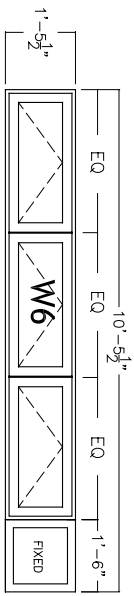
9 D2 ELEVATION
 1/4"=1'



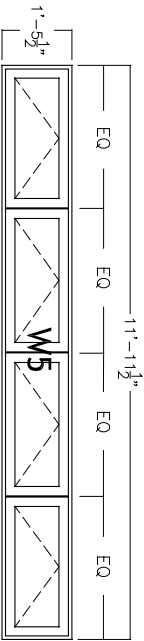
8 D1 ELEVATION
 1/4"=1'



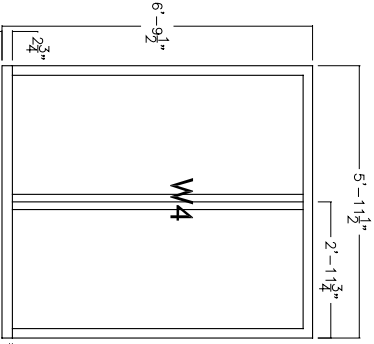
7 S1 PLAN
 1/4"=1'



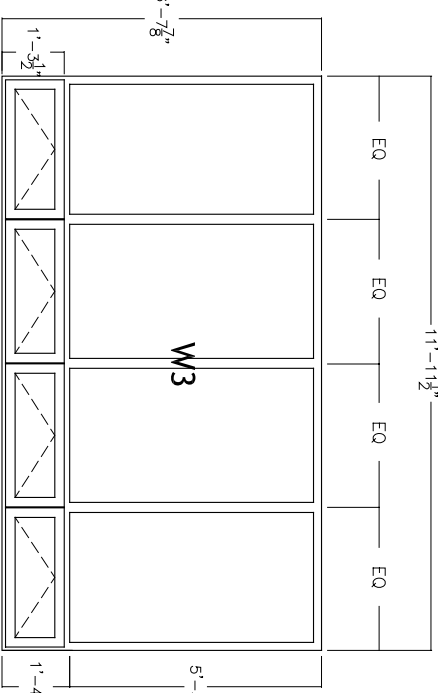
6 W6 ELEVATION
 1/4"=1'



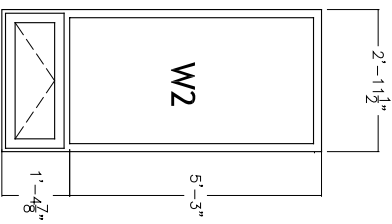
5 W5 ELEVATION
 1/4"=1'



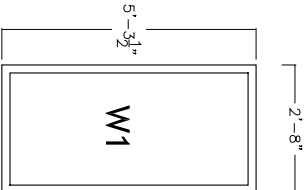
4 W4 ELEVATION
 1/4"=1'



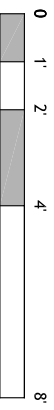
3 W3 ELEVATION
 1/4"=1'



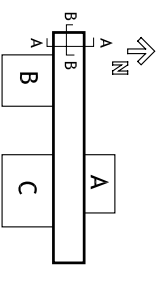
2 W2 ELEVATION
 1/4"=1'



1 W1 ELEVATION
 1/4"=1'



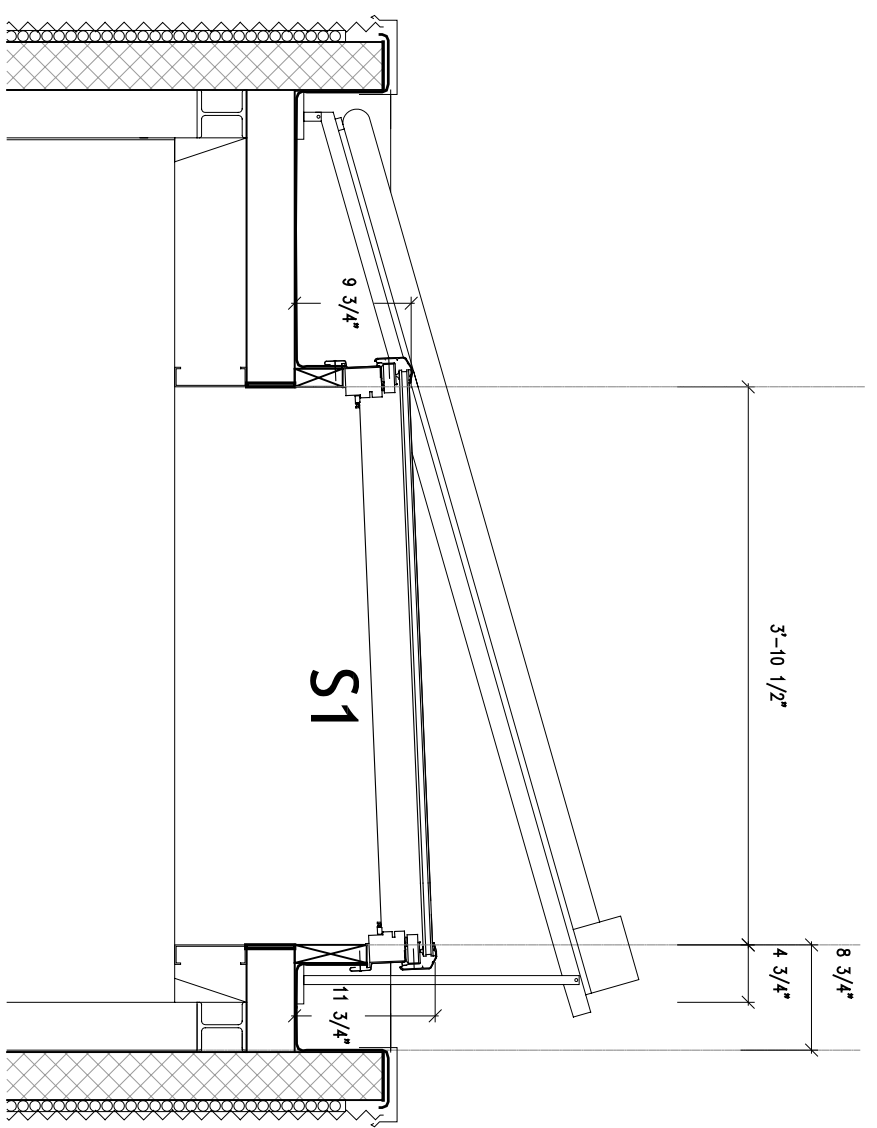
CONTACT:
 Steve Lee
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 f:412.268.7819



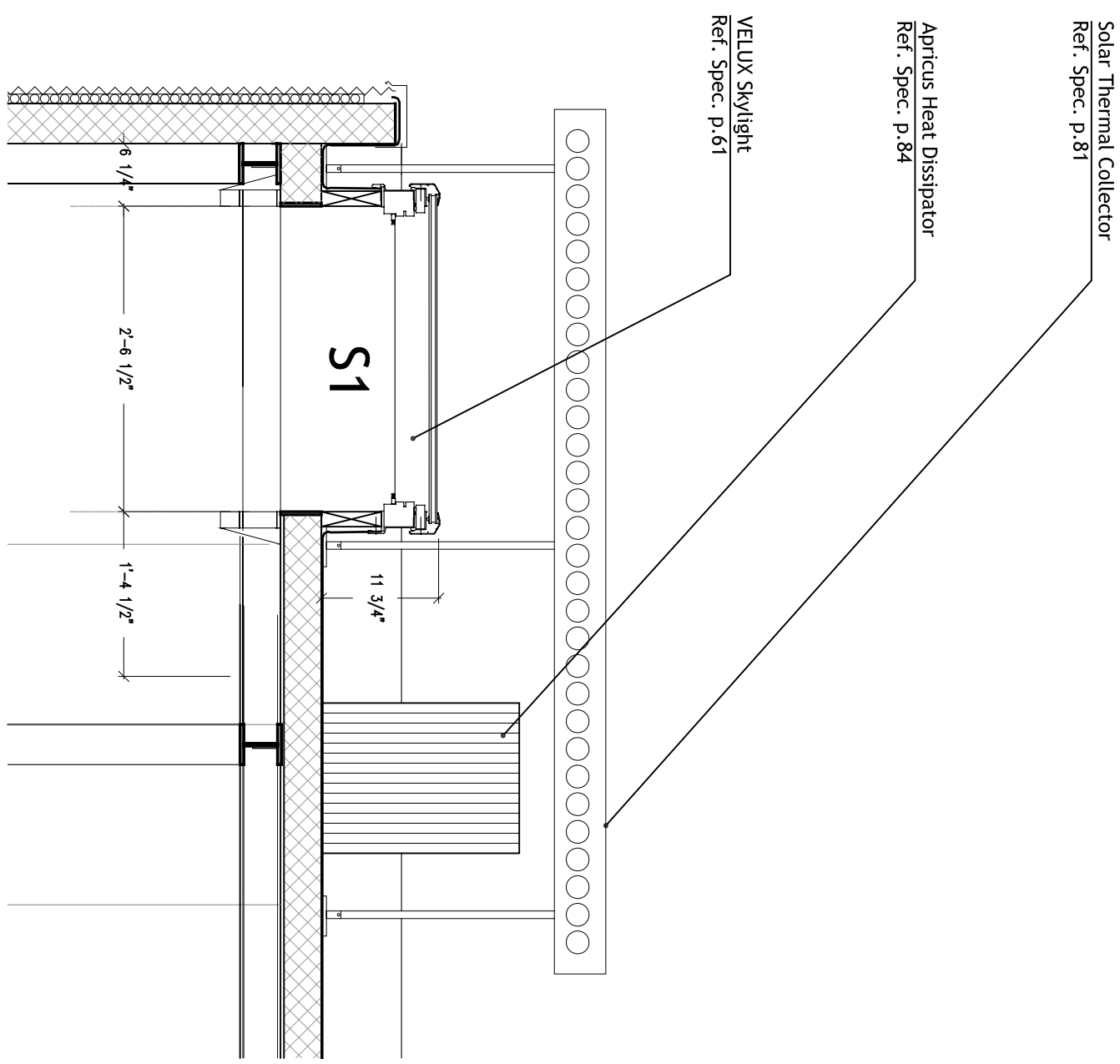
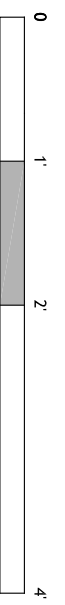
DRAWN BY: REBECCA SHORE
 DATE: 08/07/2007
 TITLE: SKYLIGHT SECTIONS

A 4.6

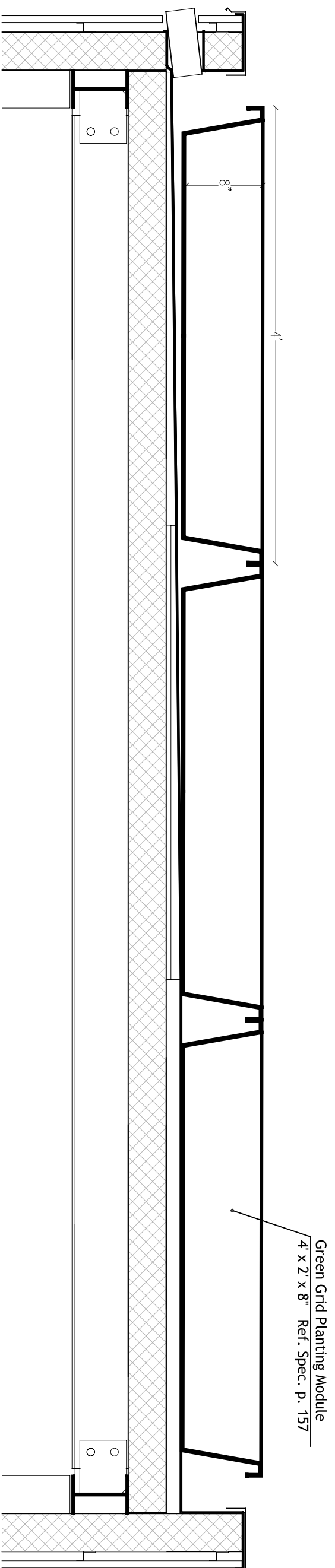
Note:
 Skylight is mounted on light-gauge steel curb.
 Curb is 4" tall at lower side, 6" at higher side
 for slope of 2.5°.



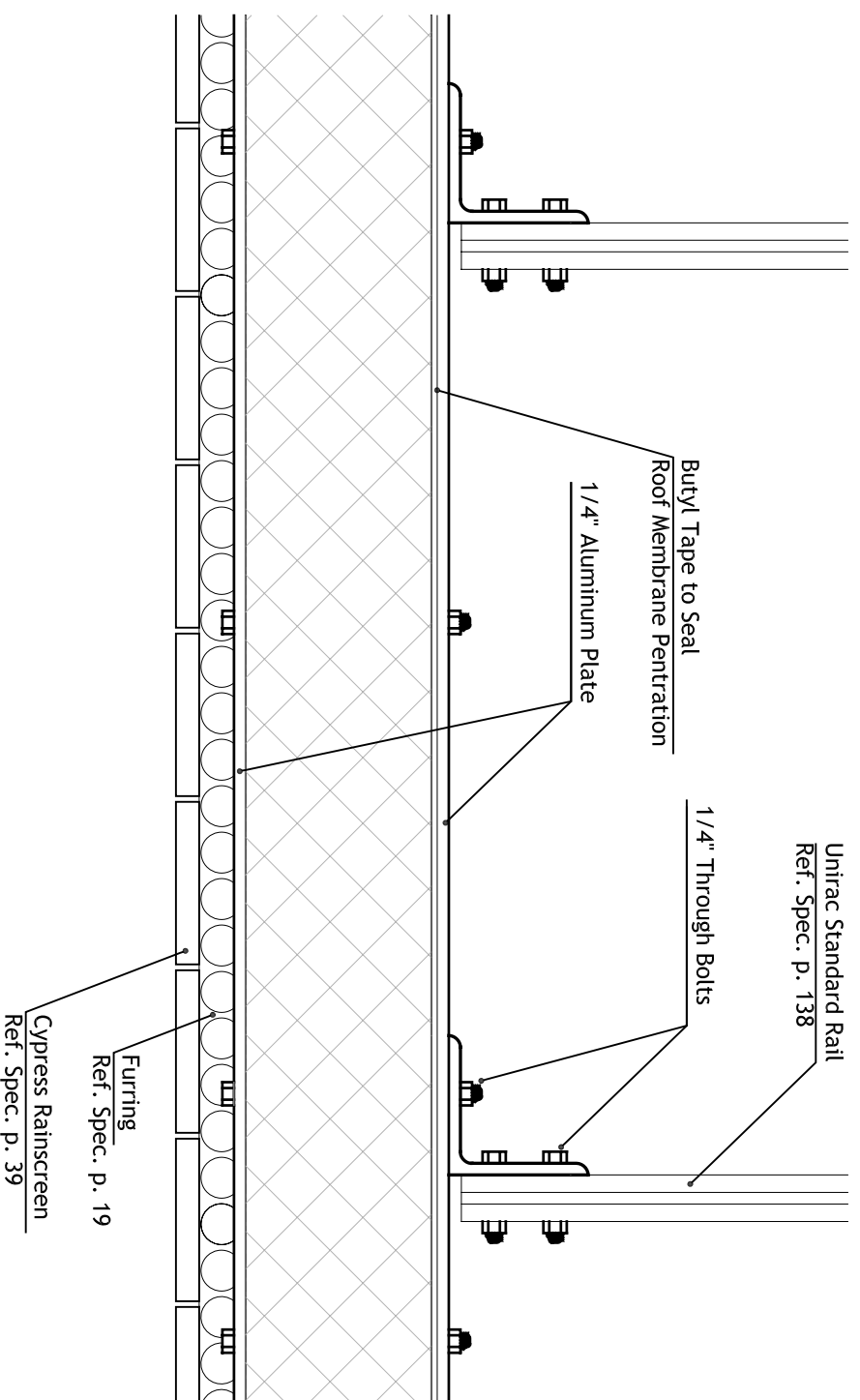
1 AA - SKYLIGHT DETAIL SECTION
 3/4"=1'



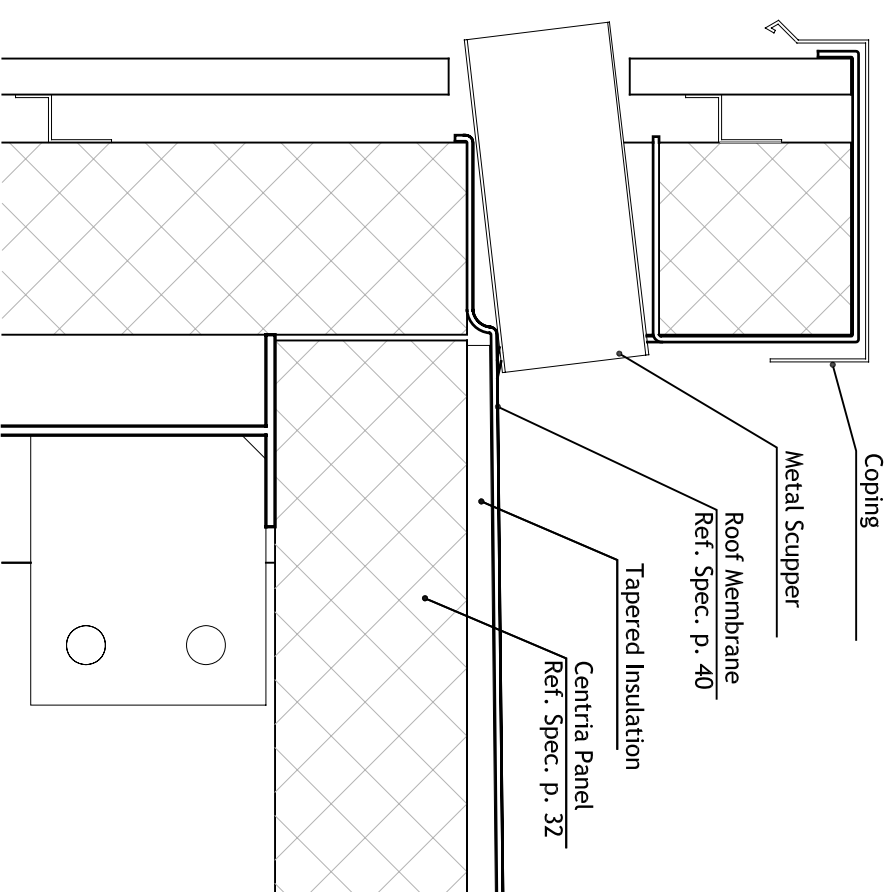
2 BB - SKYLIGHT DETAIL SECTION
 3/4"=1'



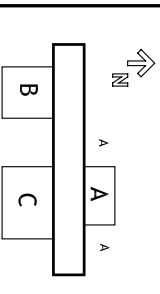
3 GREEN ROOF DETAIL - SECTION
1"=1'-0"



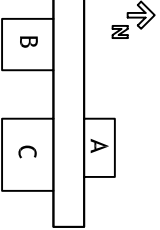
2 ROOF PV MOUNTING DETAIL - PLAN
3"=1'-0"



1 ROOF DRAINAGE DETAIL - SECTION
3"=1'-0"



CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



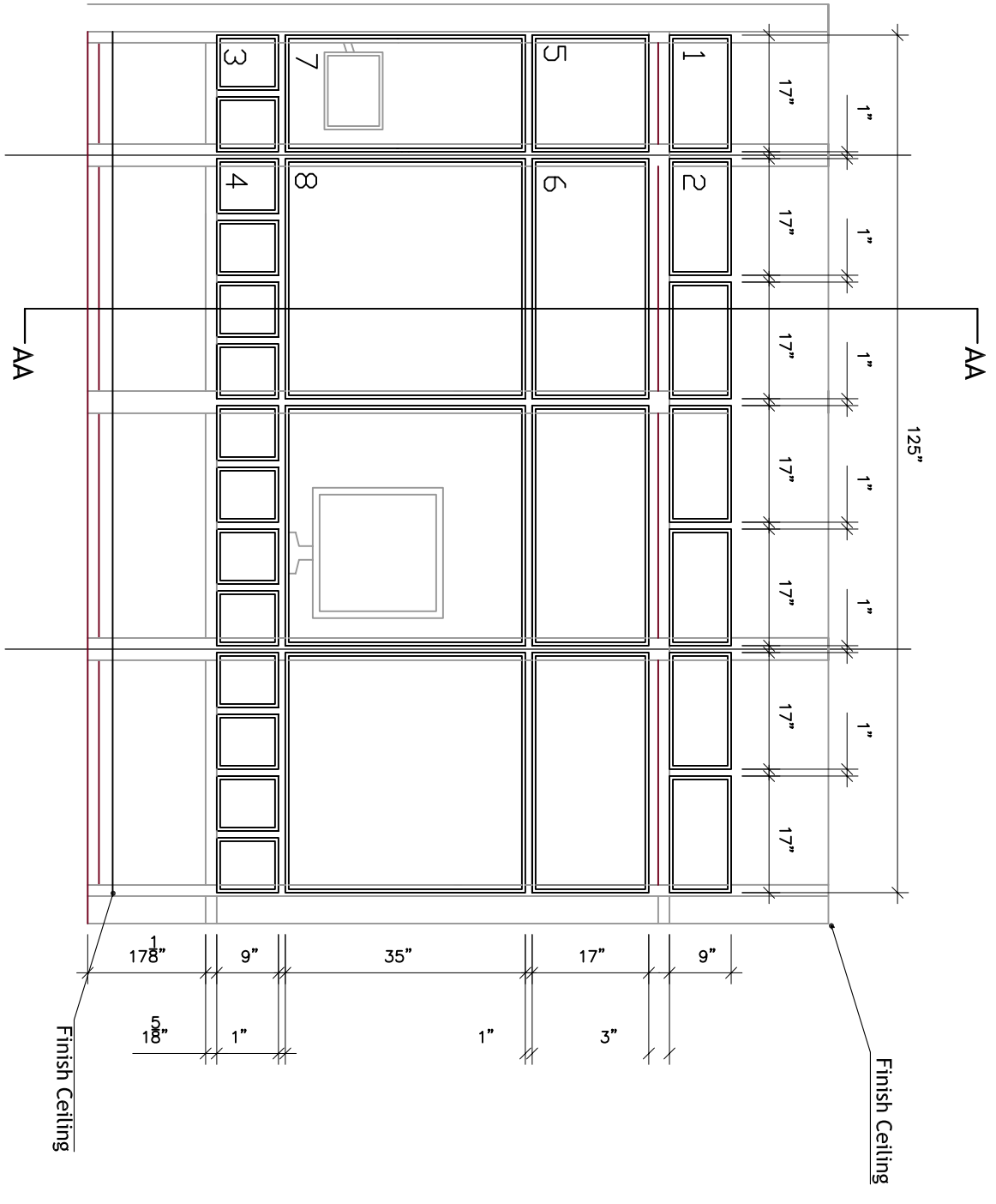
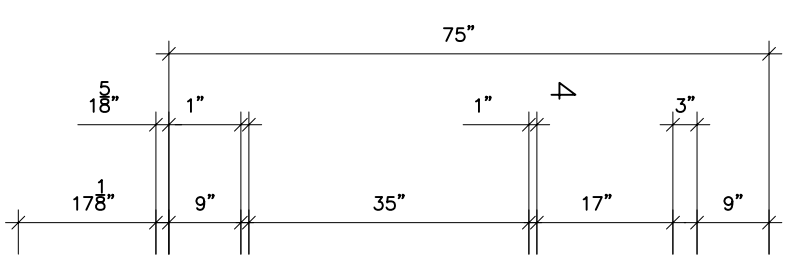
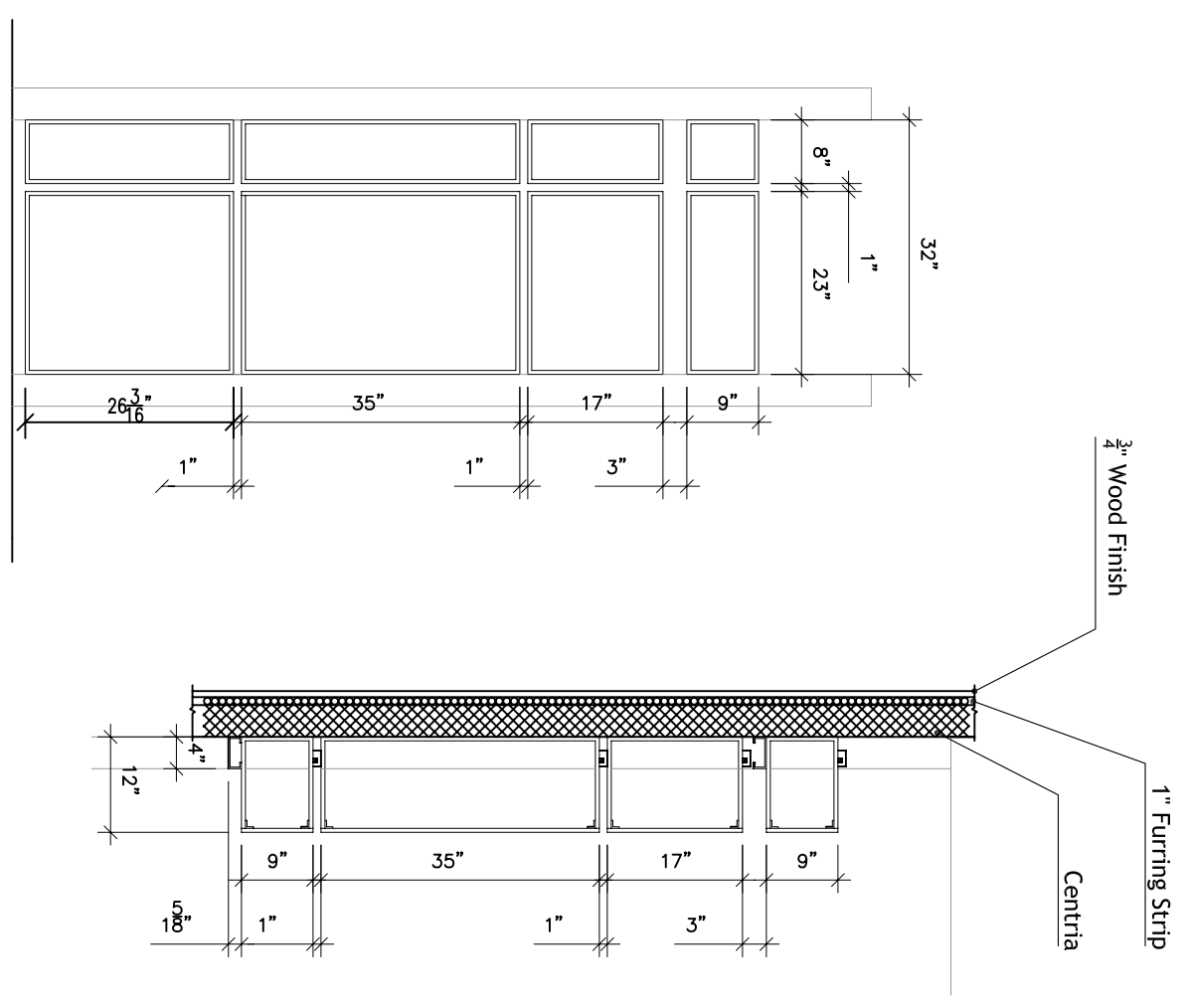
DRAWN BY: KINO RESTREPO
 DATE: 08/07/2007
 TITLE: WALL SYSTEM

A4.8

WALL SYSTEM SCHEDULE

WALL SYSTEM SCHEDULE *	QTY.
WS 1	3
WS 2	7
WS 3	1
WS 4	7
WS 5	4
WS 6	12
WS 7	1
WS 8	8

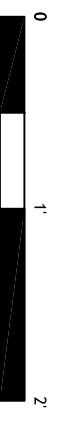
* Dimensions are nominal and refer to the overall dimensions of the box



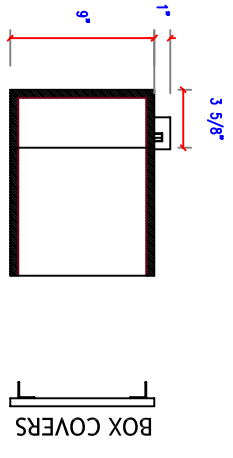
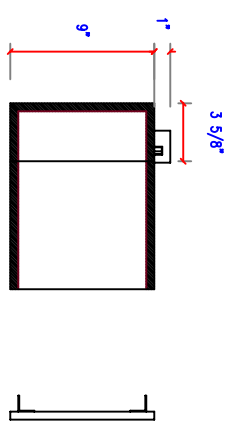
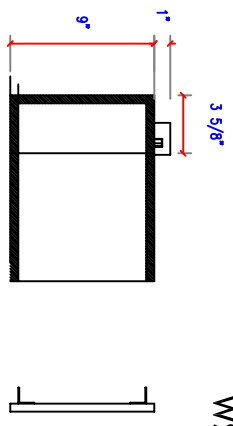
3 KIOSK LAYOUT
 1/2"=1'

2 SECTION AA
 1/2"=1'

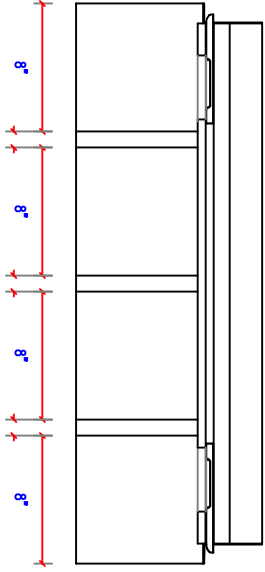
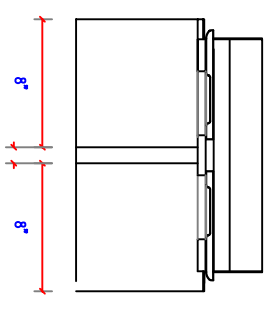
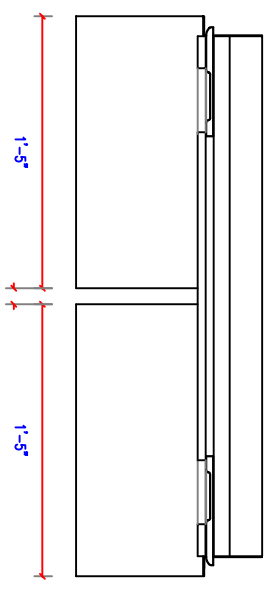
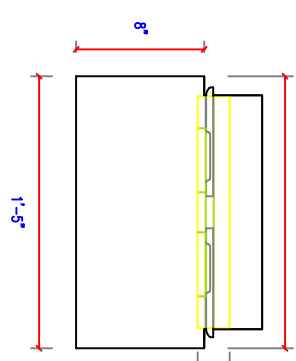
1 LIVINGRM EAST WALL LAYOUT
 1/2"=1'



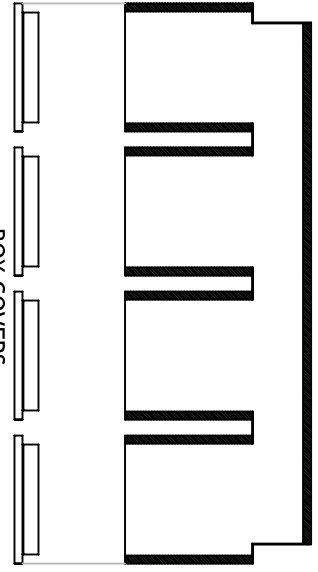
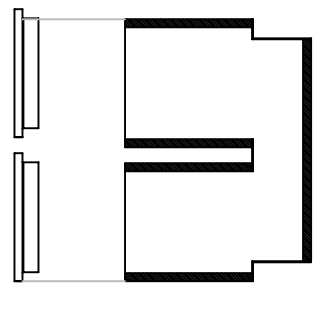
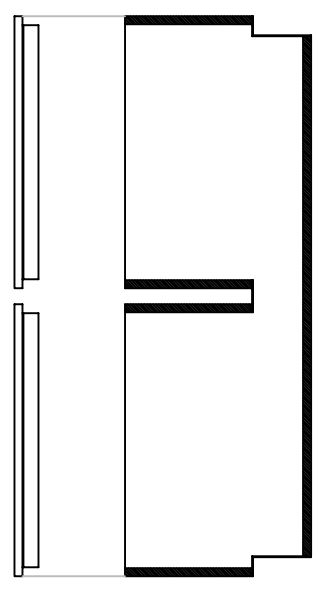
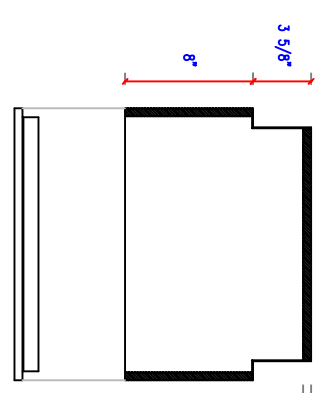
WS SIDE ELEVATION



WS BOX TOP



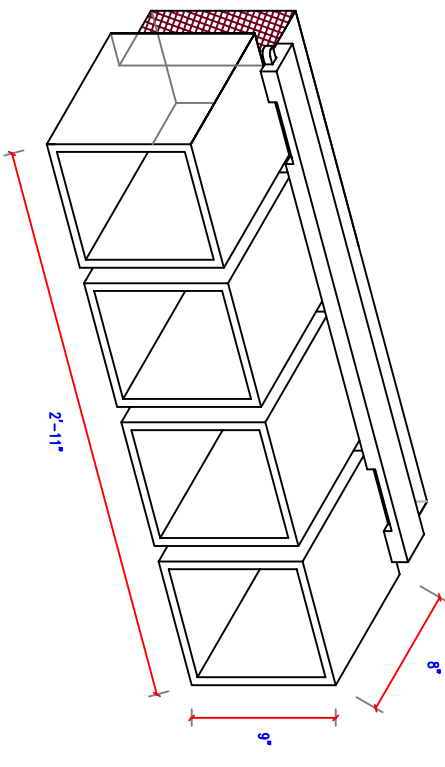
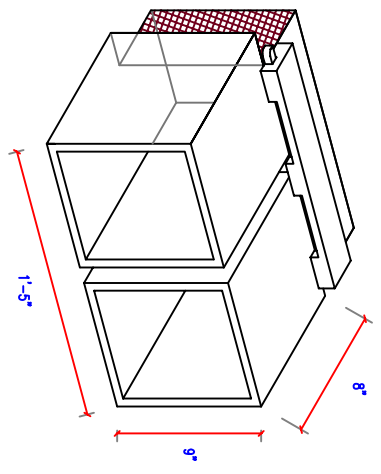
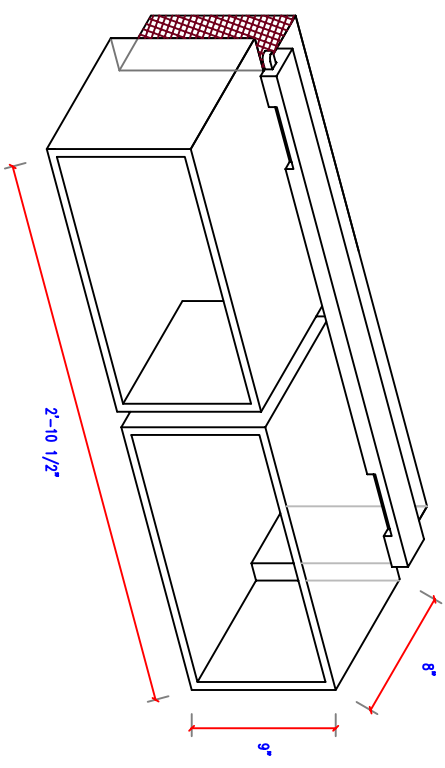
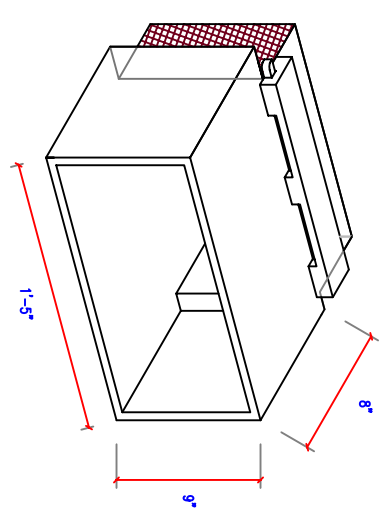
WS PLAN



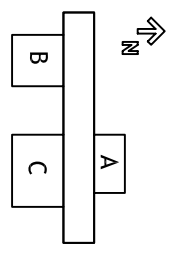
BOX COVERS



WS AXON



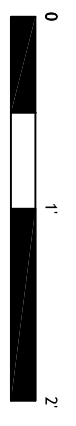
1 WS1 DETAIL
 1" = 1'-0"



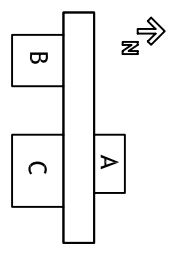
2 WS2 DETAIL
 1" = 1'-0"

3 WS3 DETAIL
 1" = 1'-0"

4 WS4 DETAIL
 1" = 1'-0"



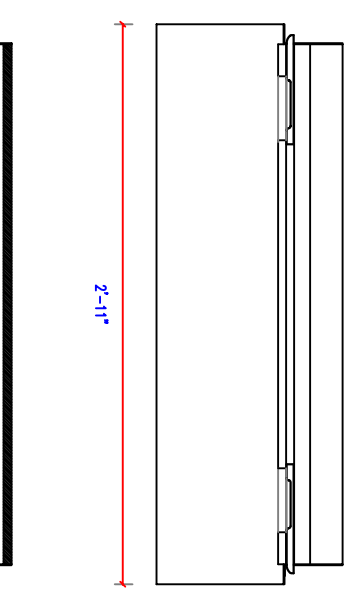
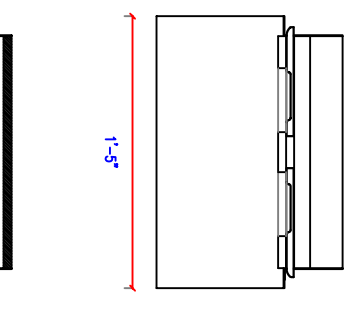
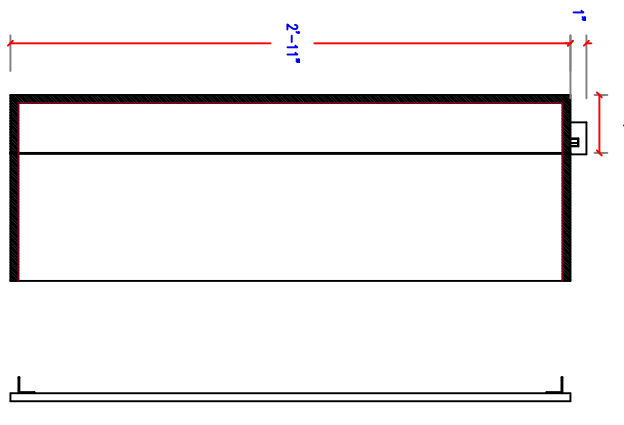
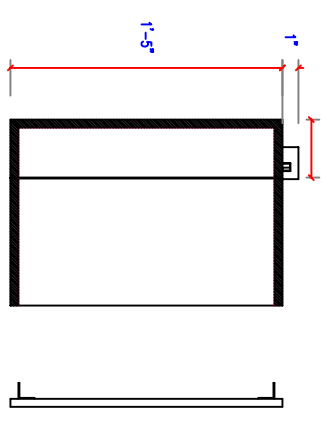
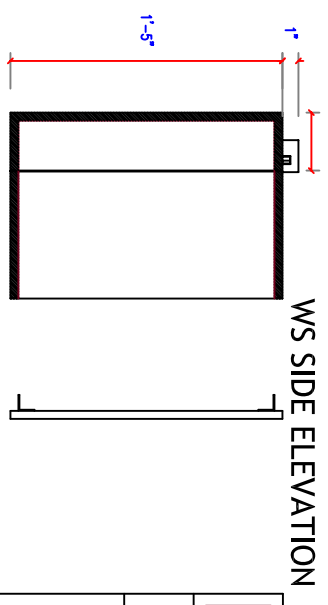
CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



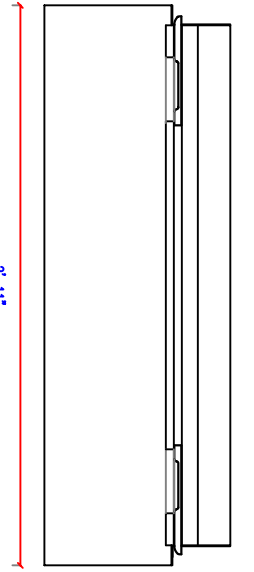
DRAWN BY: KIKO RESTREPO
 DATE: 08/07/2007

TITLE: WALL SYSTEM DETAILS

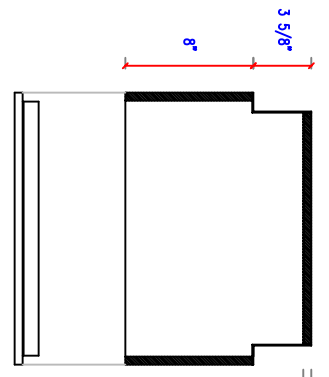
A4.10



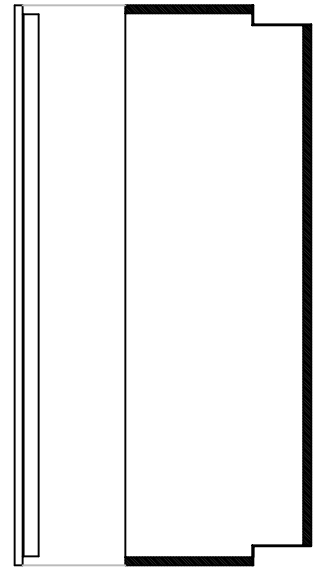
WS SIDE ELEVATION



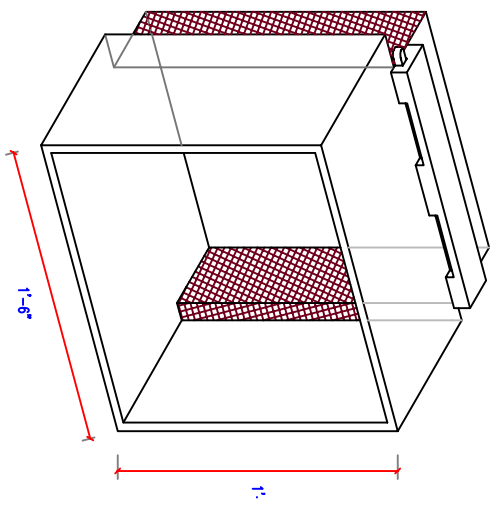
WS BOX TOP



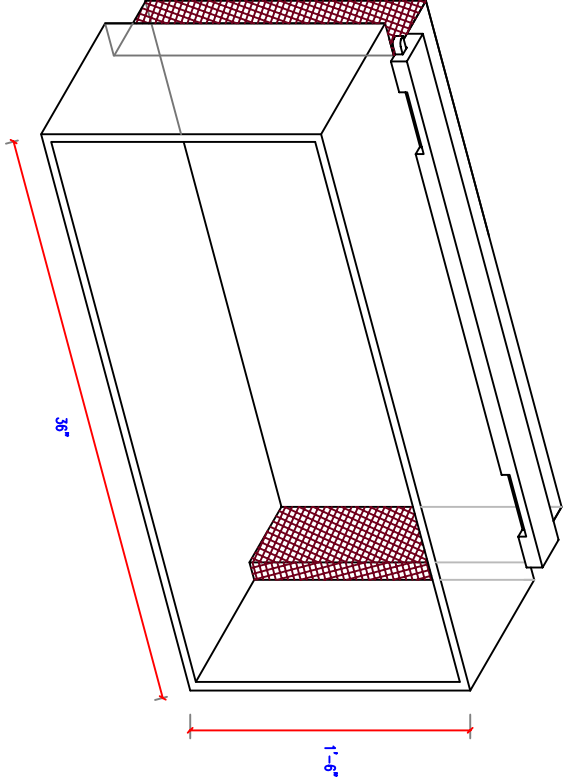
WS PLAN



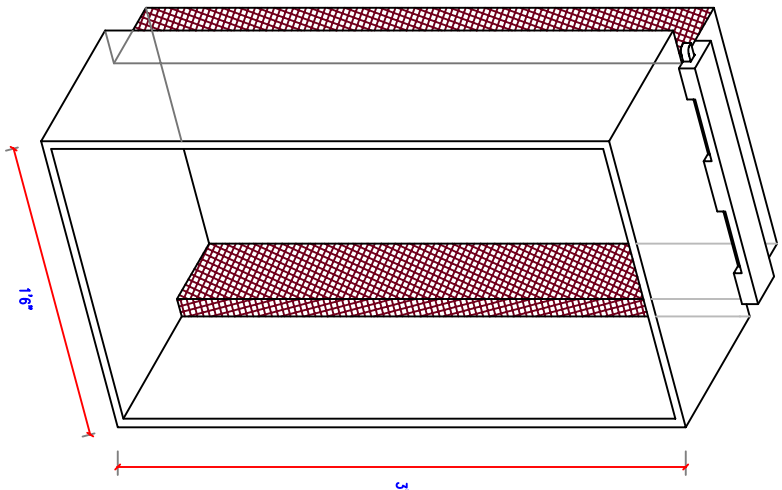
WS PLAN



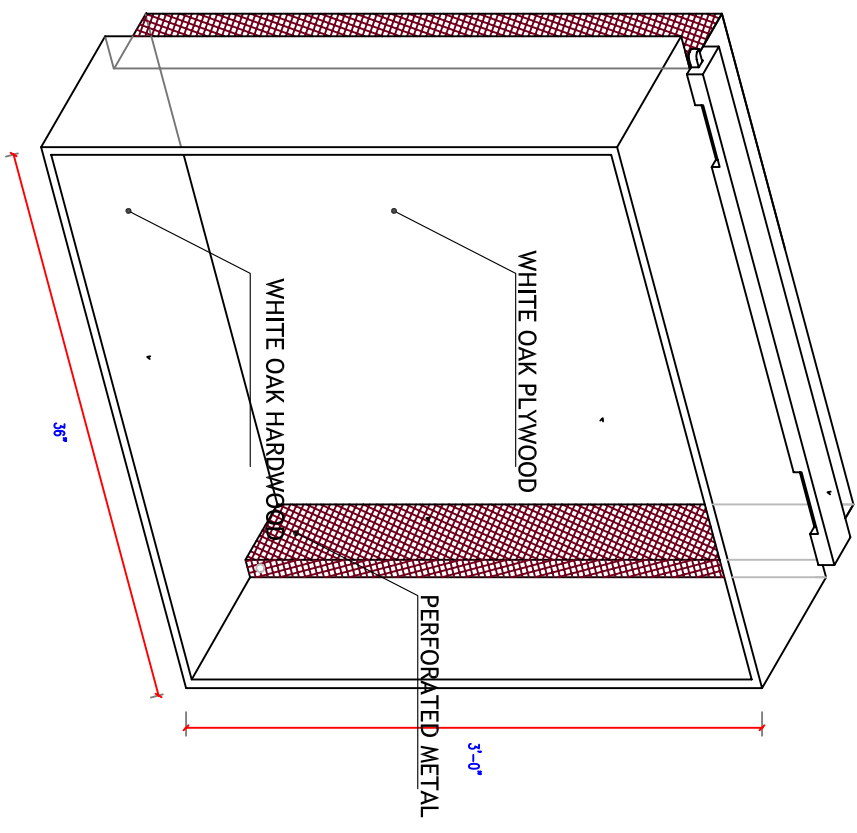
WS AXON



WS AXON



WS AXON



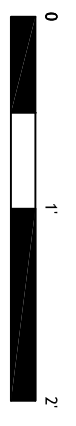
WS AXON

5 WS5 DETAIL
 1"=1'

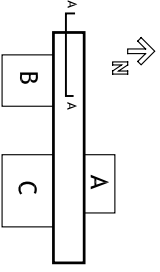
6 WS 6 DETAIL
 1"=1'

7 WS7 DETAIL
 1"=1'

8 WS8 DETAIL
 1"=1'



CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: REBECCA SHORE

DATE: 08/07/2007

TITLE: BULKHEAD MECHANICAL

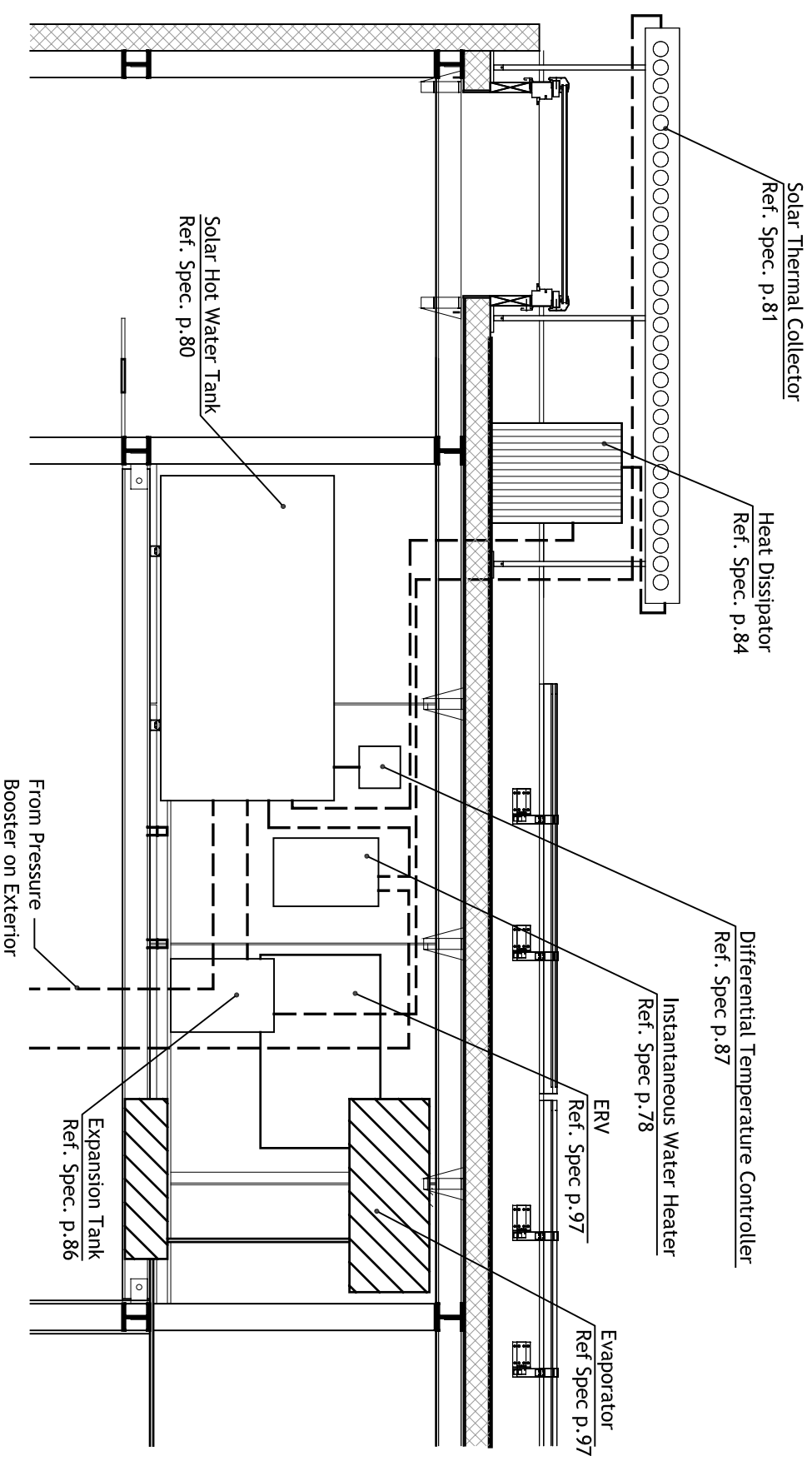
A4.11

KEY:

--- Plumbing Connections

Note:

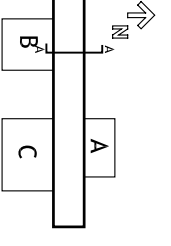
For Layout Diagram Of Water Distribution Path, Refer To Sheet P2.
 All Plumbing Is Maintained In Core. Systems In Upper Plenum And Distribution/Manifolds Under Tiled/Accessible Floor



1 MECHANICAL SYSTEMS IN UPPER PLENUM - SECTION AA
 1/2" = 1'-0"



CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: REBECCA SHORE
DATE: 08/07/2007
TITLE: BULKHEAD DETAIL

A4.12

Calculations for Solar Hot Water Structure

Main Supporting structure Unistrut 812 series Specifications:

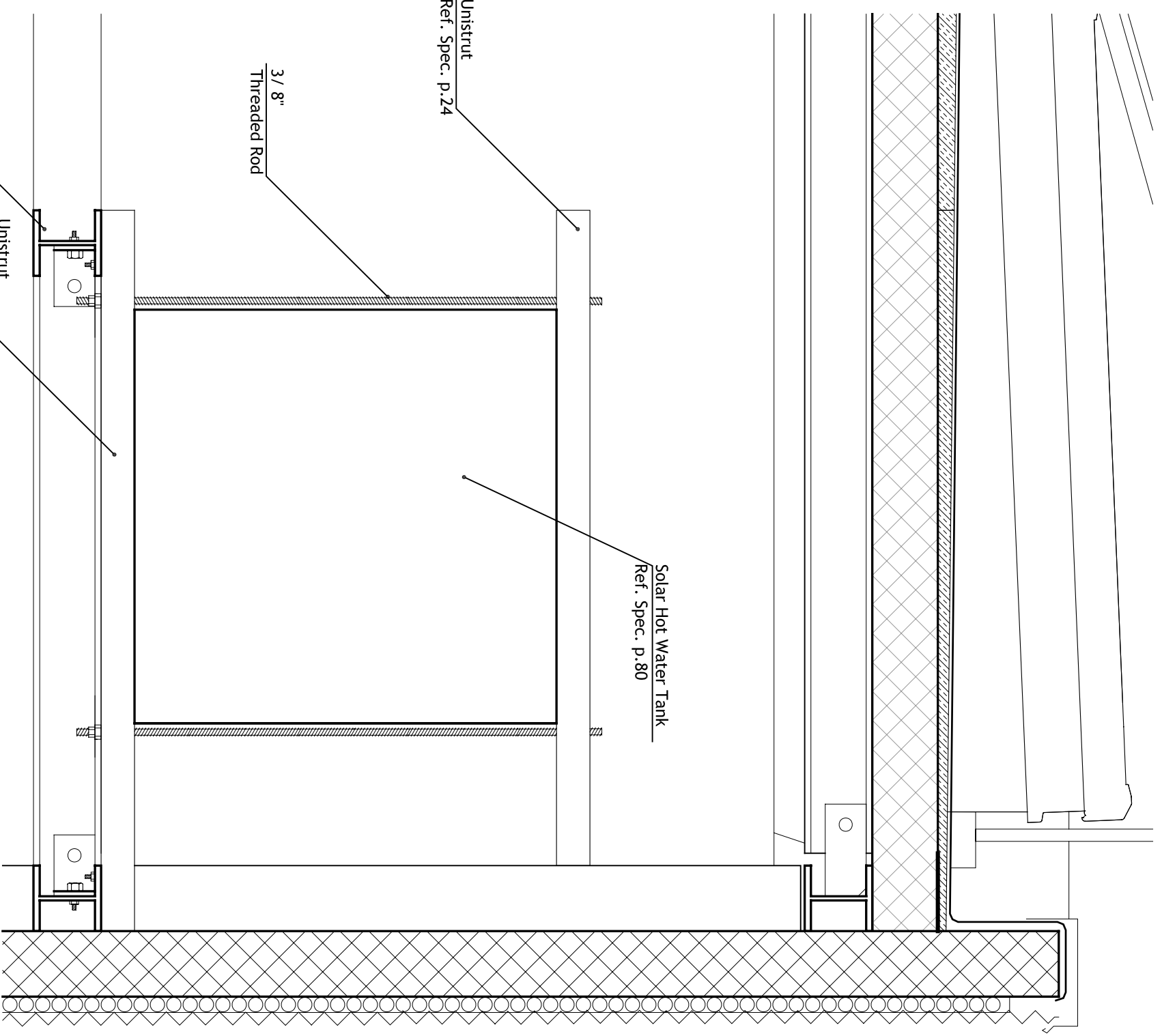
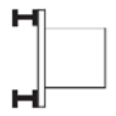
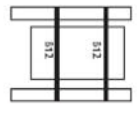
Dimensions- 2'7/16" x 1 5/8" x 6'
 I- 0.5349 in³
 S_x- 0.4061 in²

Span - 2.67 ft
 Weight = 650 lbs
 Regulations require 50 psf
 W= 9 sq.ft. x 55 PSF = 495 lbs

M = WL/8 = (650lbs x 32") / 8 = 2.6K-in

S_x = 2.6 K-in / 25 ksi = 0.104 in³

0.406 in² > 0.104 in³ OK



1 STRUCTURE SUPPORTING SOLAR HOT WATER TANK DETAIL AA
 1 1/2" = 1'



3'-0"

Light Gauge Steel Channel 4" Depth
Ref. Spec. P. 142

Interior Finishing Panel
Ref. Spec. P. 142

4" Centria Panels
Ref. Spec. P. 142

Cypress planks $\frac{3}{4}$ " x 3-1/4"

2 3"=1'
POD RAINSCREEN DETAIL TYPICAL

INTERIOR

3'-0"

Light Gauge Steel Channel 4" Depth
Ref. Spec. P. 17

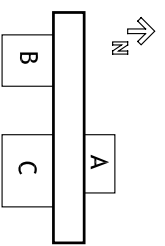
Interior Finishing Panel
Ref. Spec. P. 150

4" Centria Panels
Ref. Spec. P. 32

EXTERIOR

Core Rainscreen
Ref. Spec. P. 142

1 3"=1'
CORE RAINSCREEN DETAIL TYPICAL

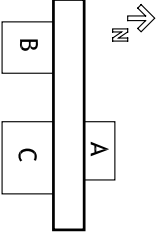


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School of Architecture
School of Design
School of Drama
School of Art
Tepper School of Business
Carnegie Institute of Technology

UNIVERSITY OF PITTSBURGH
School of Engineering

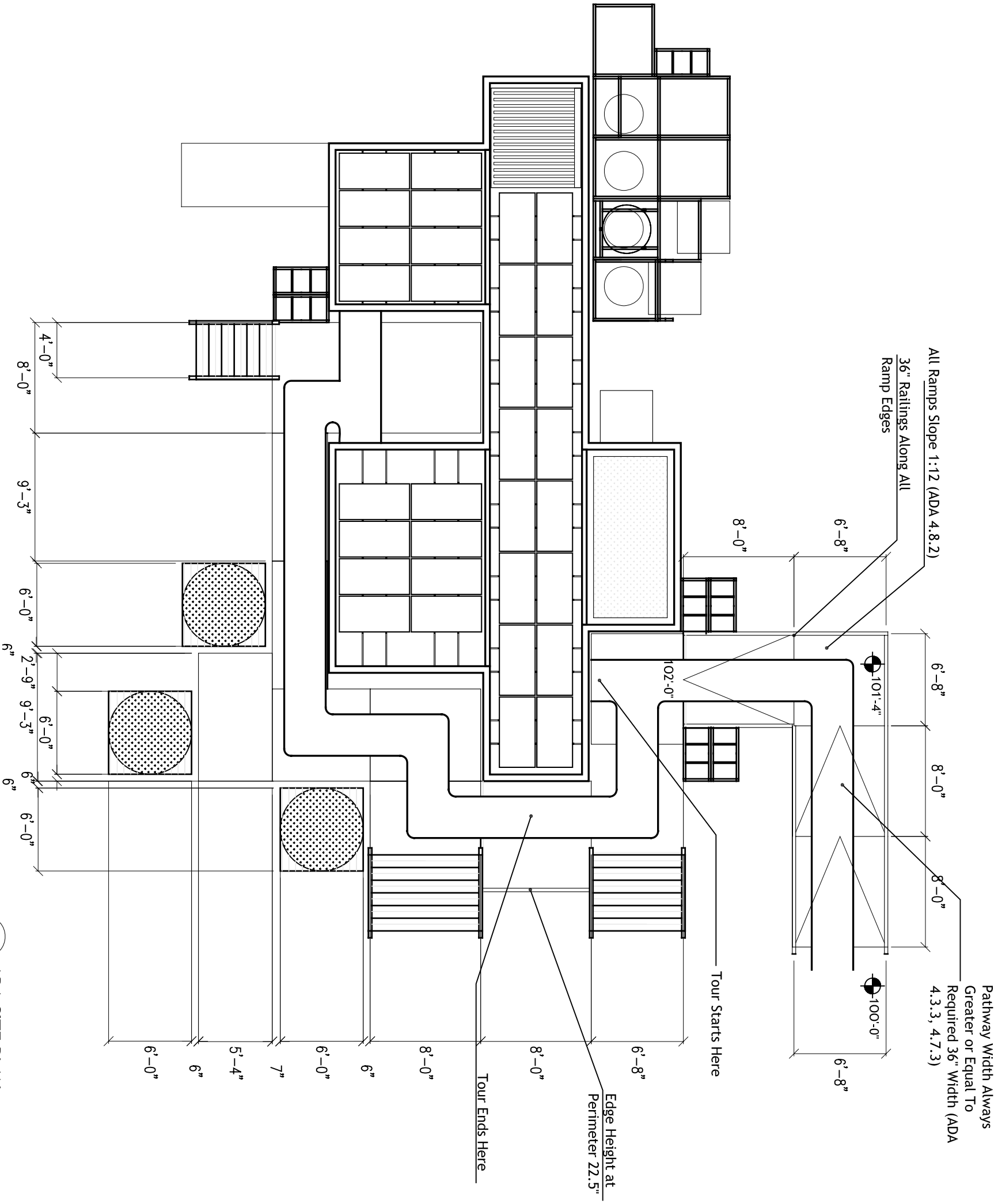
ART INSTITUTE OF PITTSBURGH

CONTACT:
Steve Lee
p:412.726.6503
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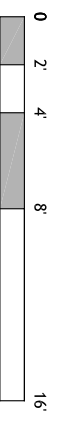


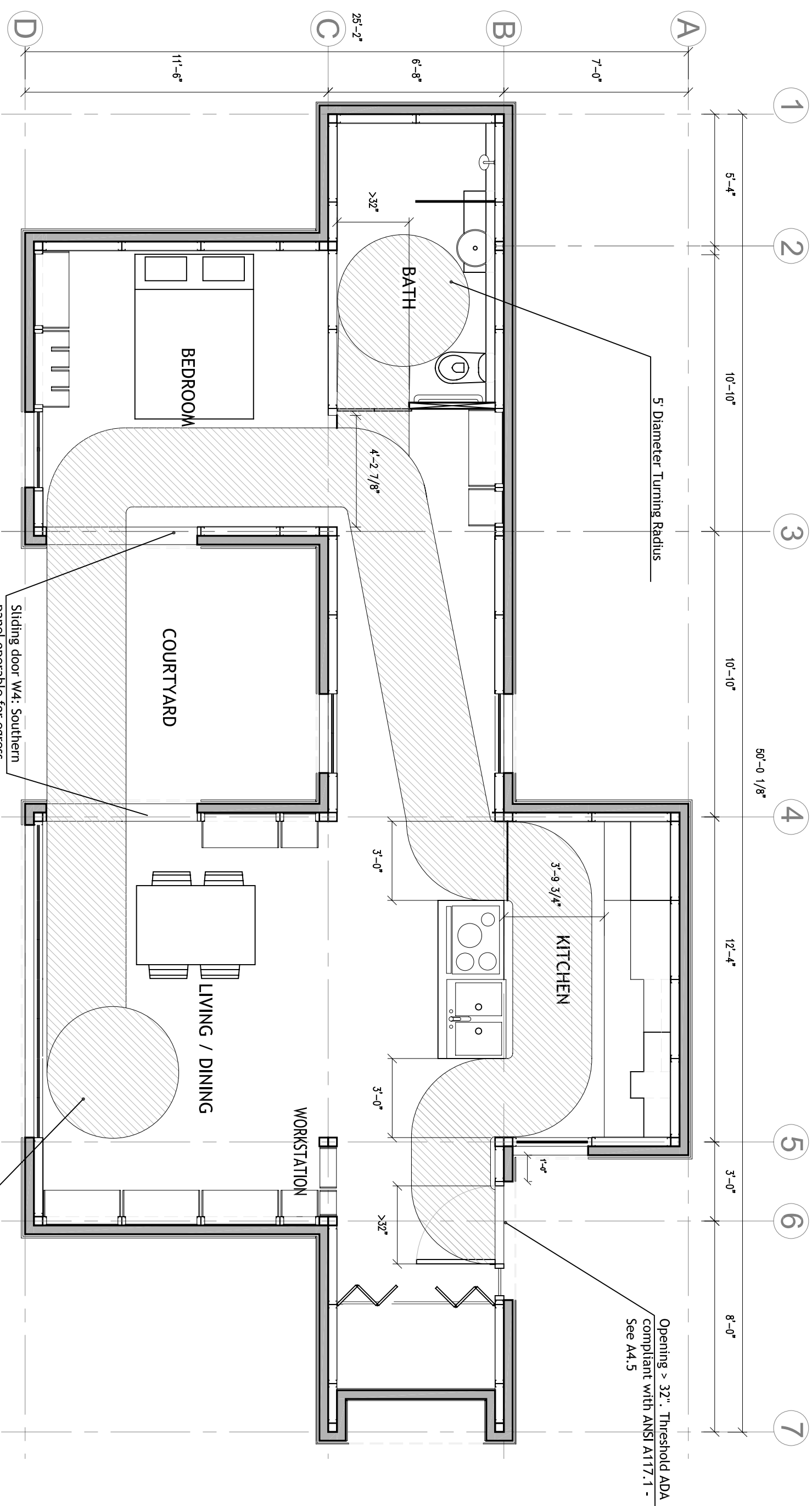
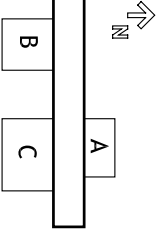
DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: ADA SITE PLAN

ADA1



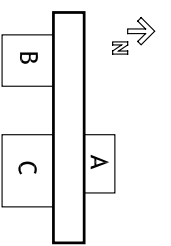
1 ADA SITE PLAN
1/8"=1'





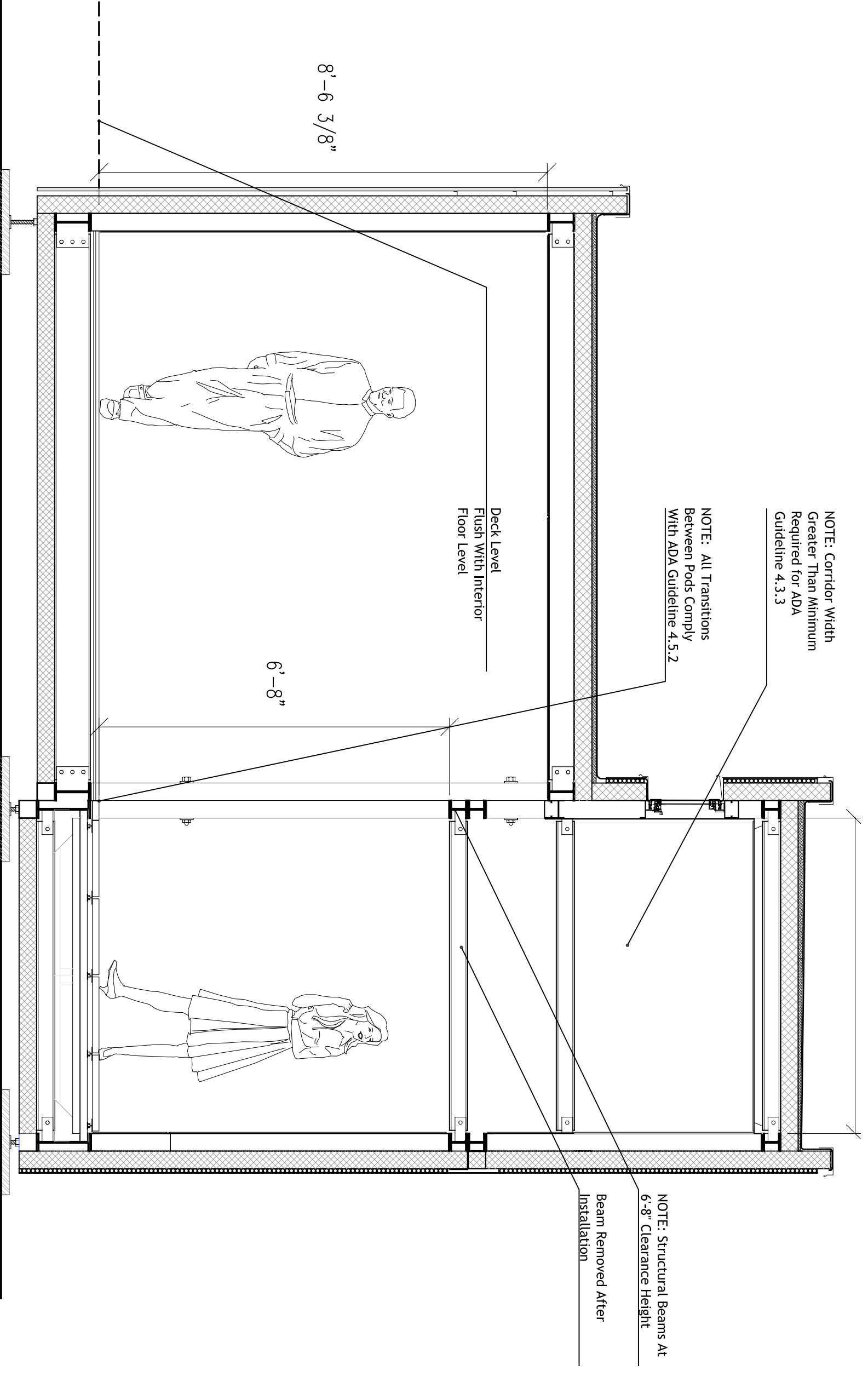
1 ADA HOUSE PLAN
1/4" = 1'
0 1' 2' 4' 8'

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: ADA SECTION

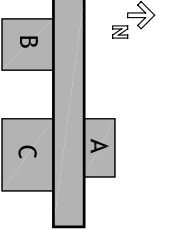
ADA3



1 PARTIAL HOUSE SECTION
 1/2"=1'

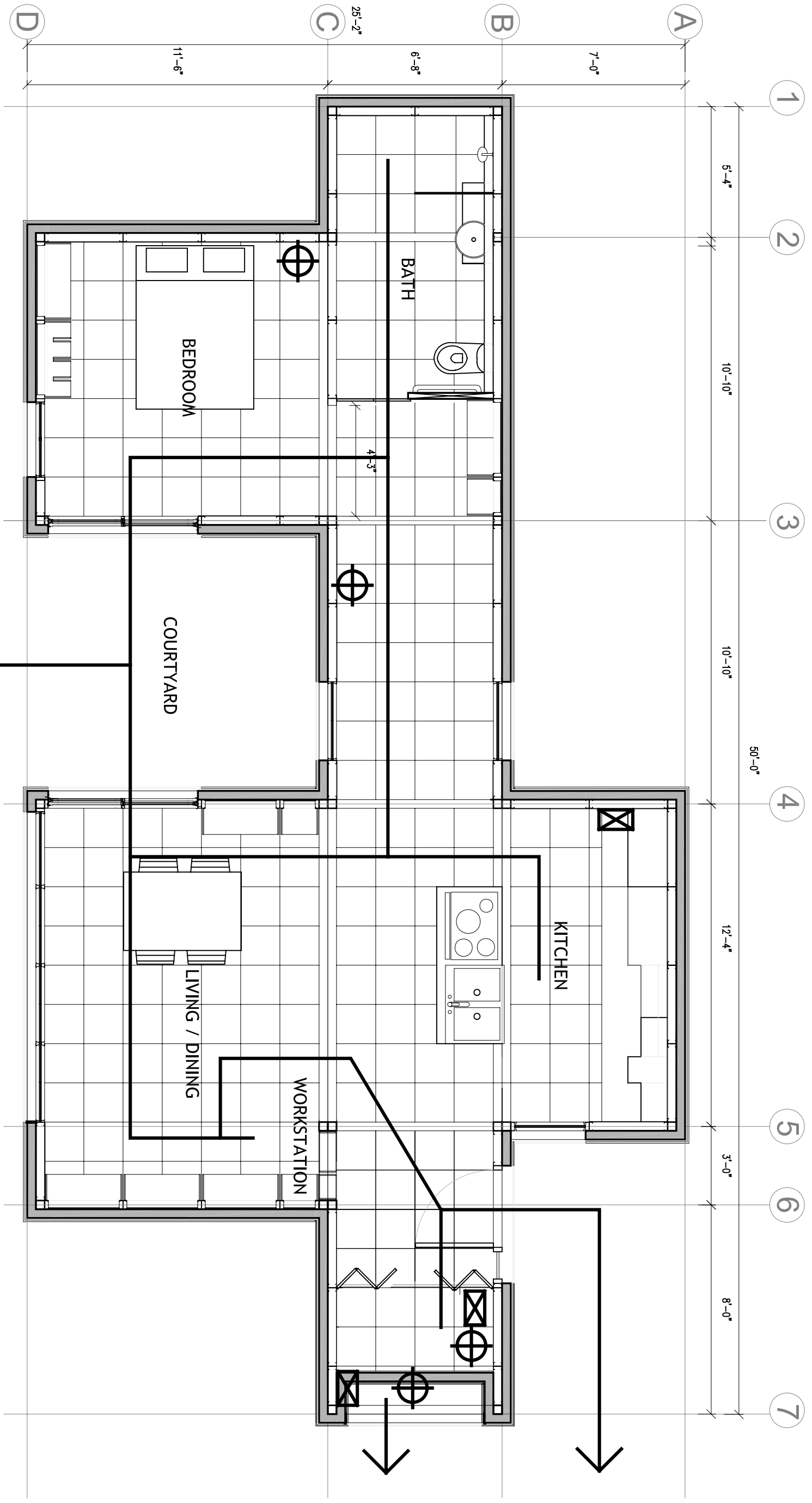


CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: HOUSE PLAN

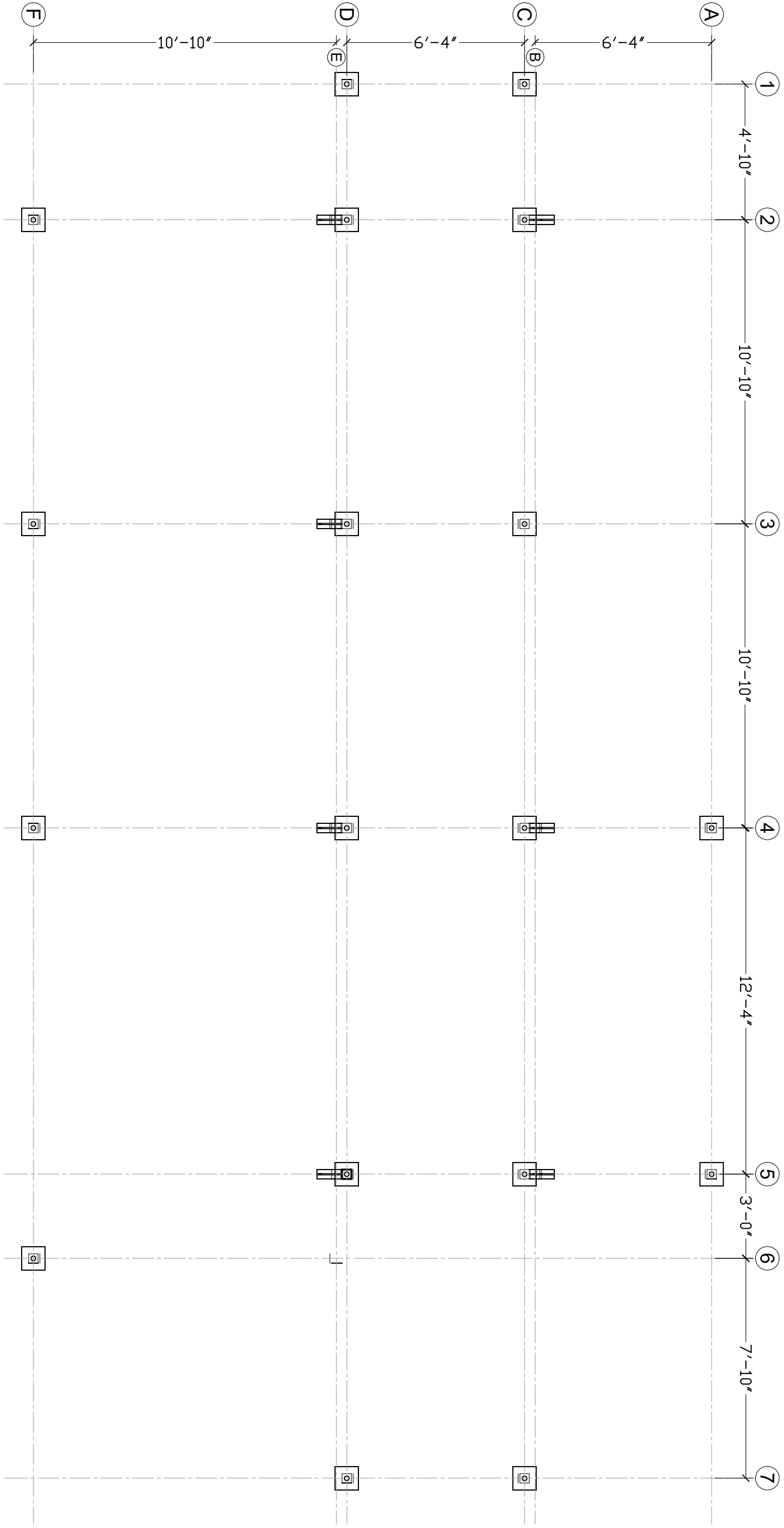
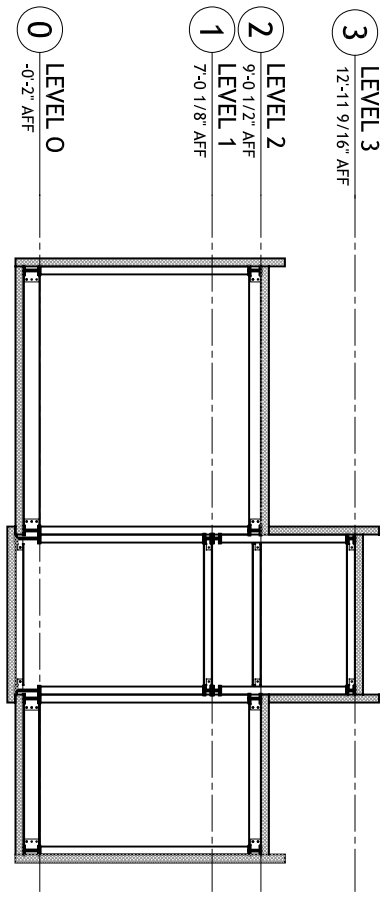
F1



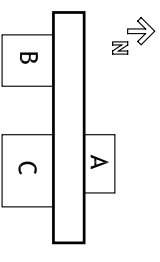
- KEY**
- FIRE EXTINGUISHER
 - SMOKE DETECTOR
 - ESCAPE ROUTES

1 HOUSE PLAN
 1/4"=1'





1 FOOTERS PLACEMENT PLAN
 1/4"=1'-0"

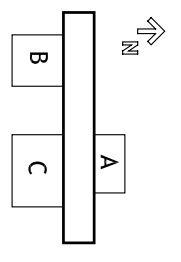


CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

DRAWN BY: JEFF BOJUNKE
 DATE: 08/07/2007
 TITLE: FOOTER PLAN

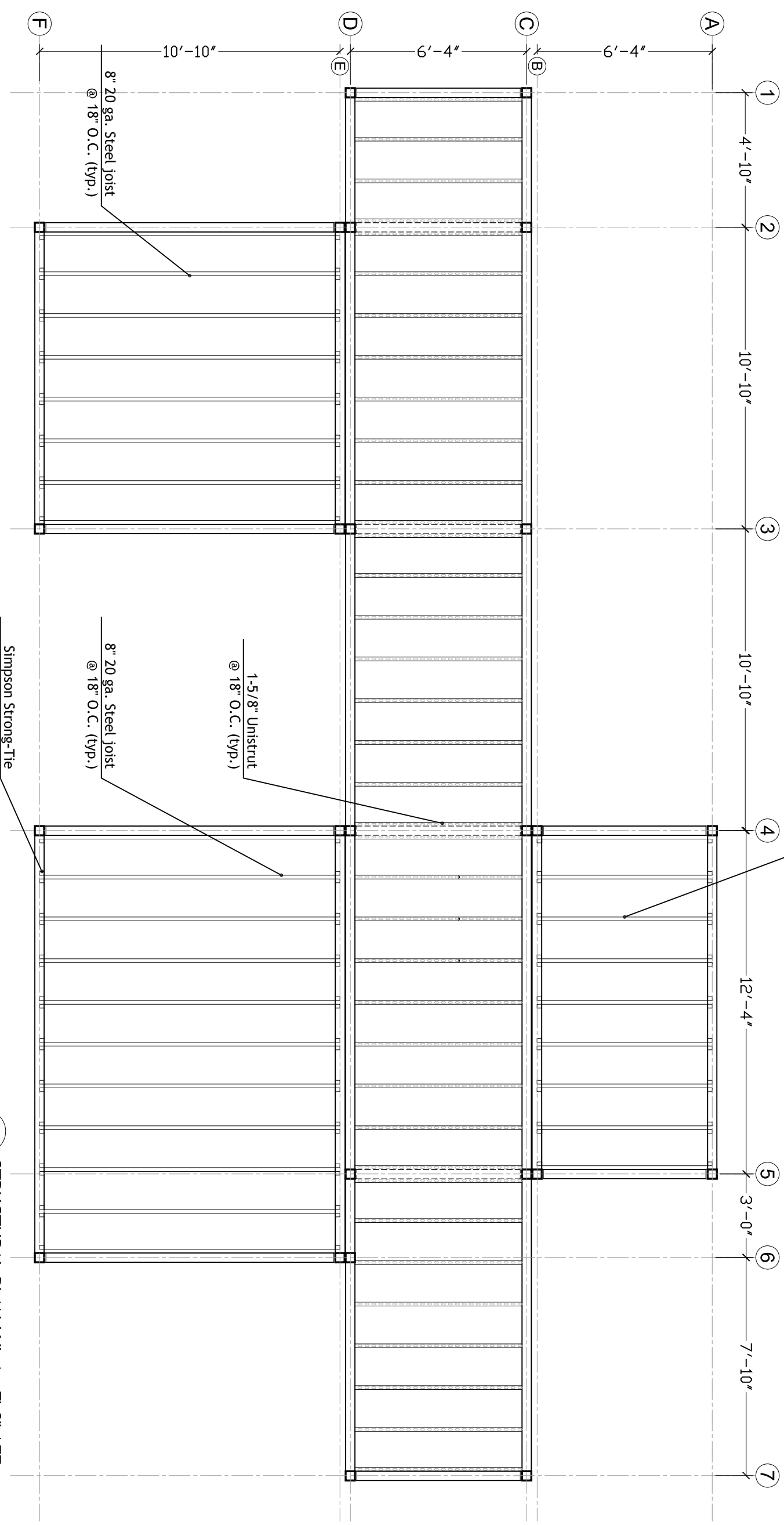
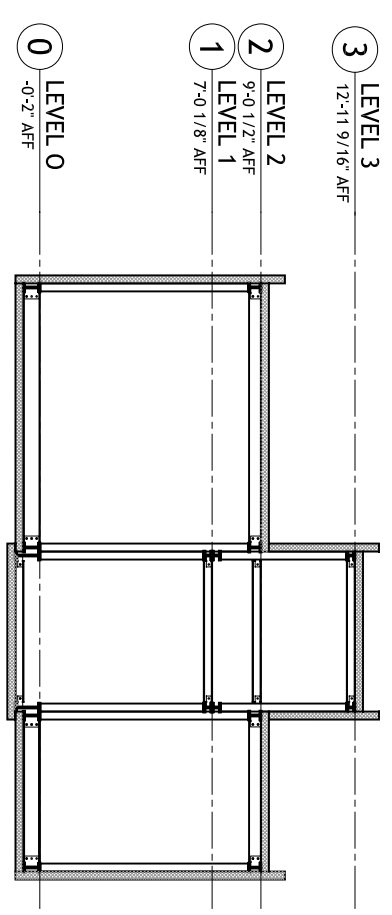
S 1.0

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: JEFF BOJURKE
 DATE: 08/07/2007
 TITLE: STRUCTURAL PLANS

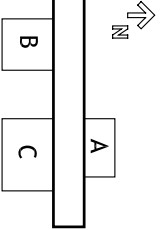
S 1.1



1 STRUCTURAL PLAN LVL 1 - 7'-0" AFF
 1/4"=1'-0"



CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

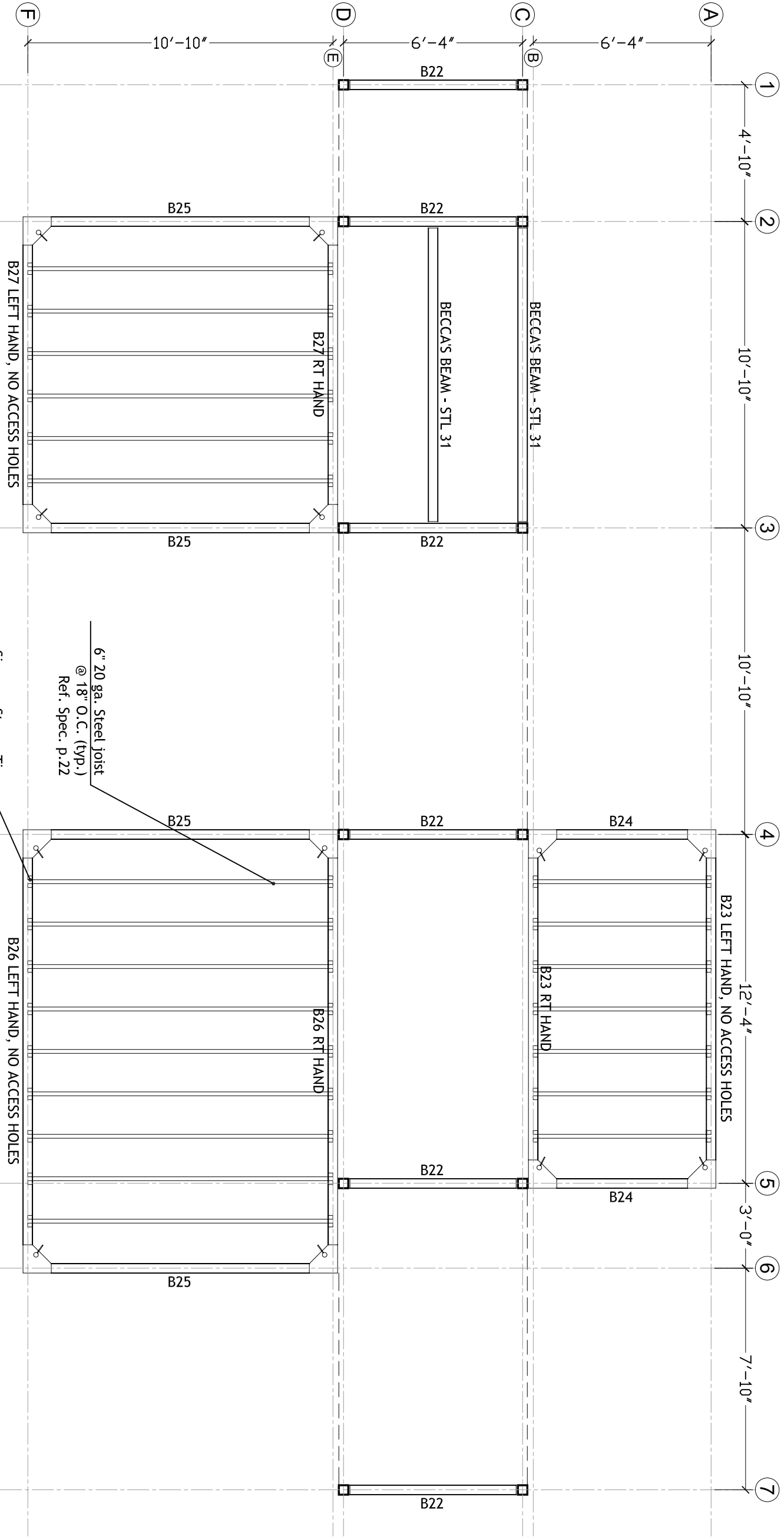
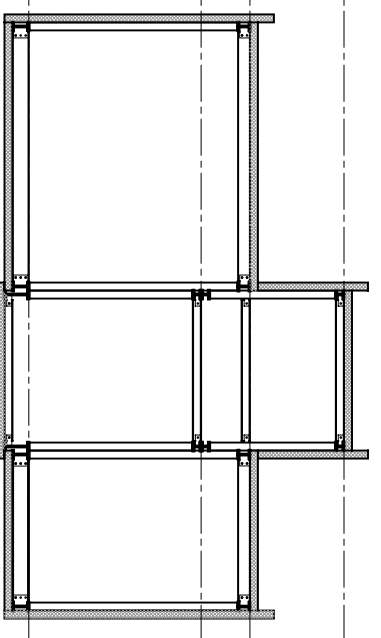


DRAWN BY: JEFF BOJURKE
 DATE: 08/07/2007
 TITLE: STRUCTURAL PLANS

S 1.2

- 3 LEVEL 3
12'-11 9/16" AFF
- 2 LEVEL 2
9'-0 1/2" AFF
- 1 LEVEL 1
7'-0 1/8" AFF
- 0 LEVEL 0
-0'-2" AFF

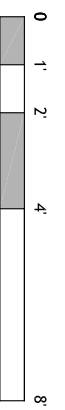
KEY



6" 20 ga. Steel Joist @ 18" O.C. (typ.)
 Ref. Spec. p.22

Simpson Strong-Tie
 6" Bridle Joist Hanger
 Ref. Spec. p.12

1 STRUCTURAL PLAN LVL 2 - 9'-1" AFF
 1/4"=1'-0"

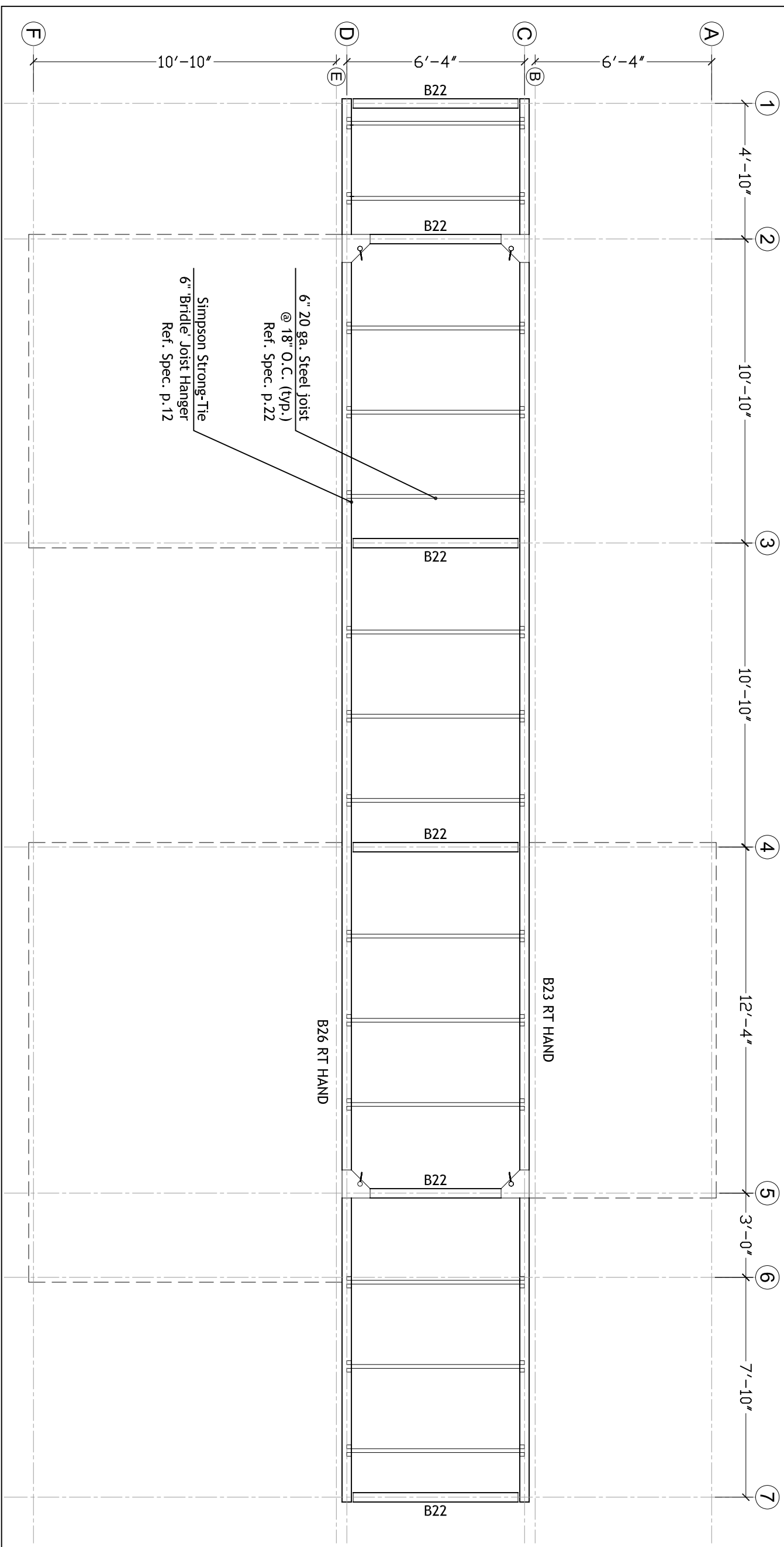
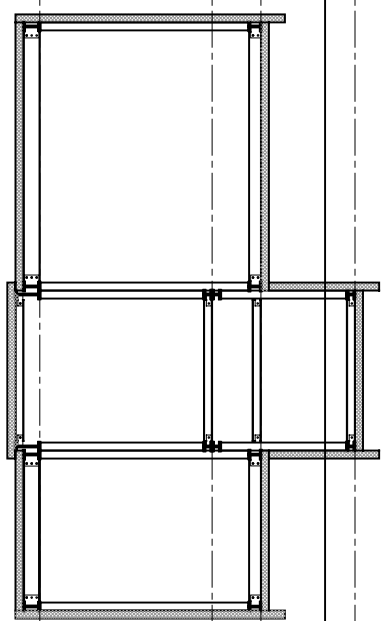


3 LEVEL 3
12'-11 9/16" AFF

2 LEVEL 2
9'-0 1/2" AFF
1 LEVEL 1
7'-0 1/8" AFF

0 LEVEL 0
-0'-2" AFF

KEY



6" 20 ga. Steel joist
@ 18" O.C. (typ.)
Ref. Spec. p.22

Simpson Strong-Tie
6" Bridle Joist Hanger
Ref. Spec. p.12

1 STRUCTURAL PLAN LVL 3 - 12'-11 9/16" AFF
1/4"=1'-0"



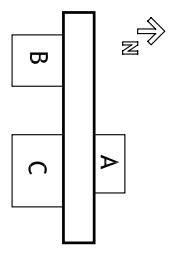
CARNEGIE MELLON
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PITTSBURGH**
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Engineering

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PITTSBURGH**

REVISED 7/19 DMW

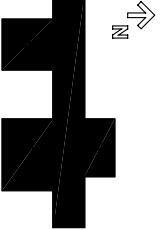
CONTACT:
Steve Lee
p:412.726.6503
f:412.268.7819



DRAWN BY: JEFF BOJURKE
DATE: 08/07/2007
TITLE: STRUCTURAL PLANS

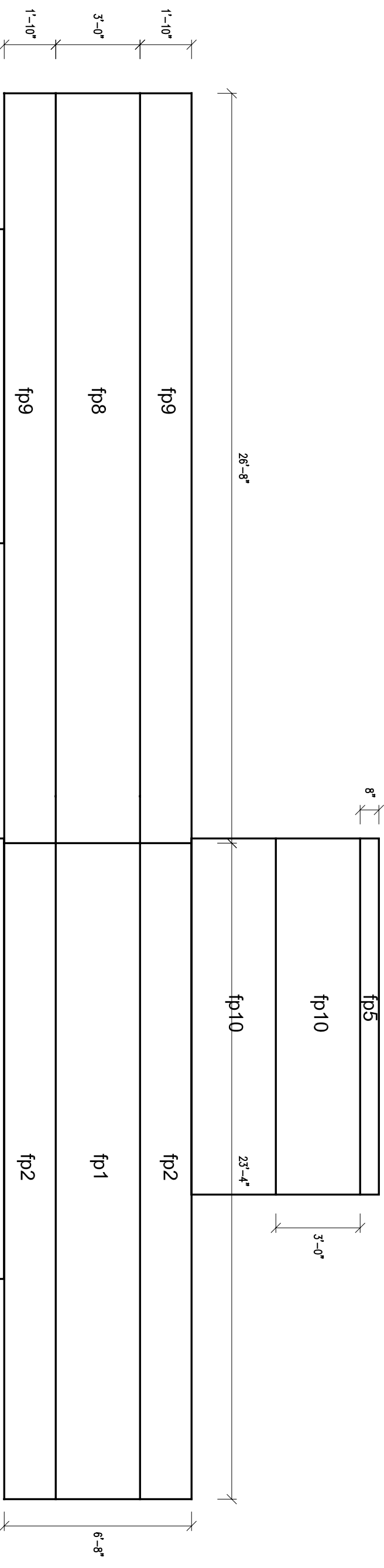
S 1.3

CONTACT:
Steve Lee
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f:412.268.7819



DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: FLOOR PANEL PLAN

S 1.4



SEE S4.13 FOR SCHEDULE

1 PANEL LAYOUT FLOOR PLAN
1/4"=1'-0"

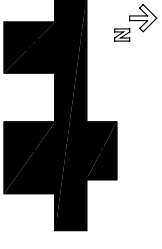


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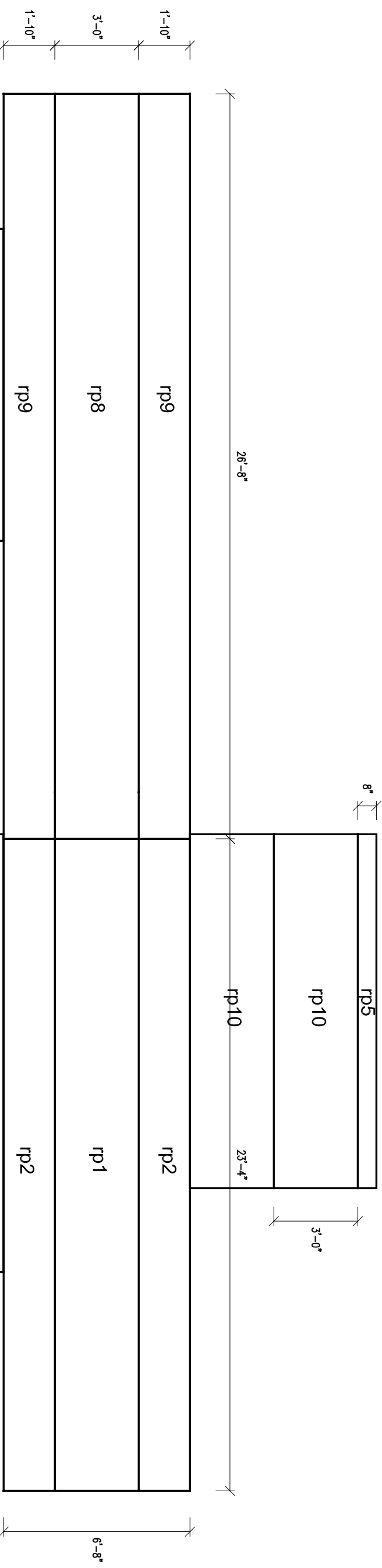
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CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: JOHN ESTRIDGE
DATE: 08/07/2007
TITLE: ROOF PANEL PLAN

S 1.5

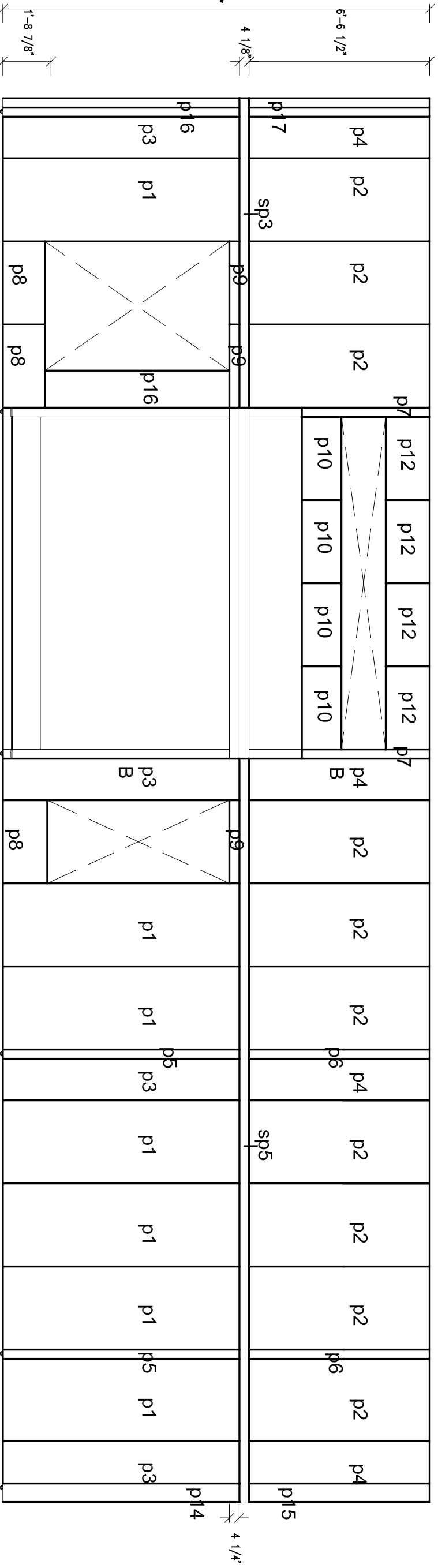


SEE S4.13 FOR SCHEDULE

1 PANEL LAYOUT ROOF PLAN
 1/4"=1'-0"



4" 1'-6" 3'-0"

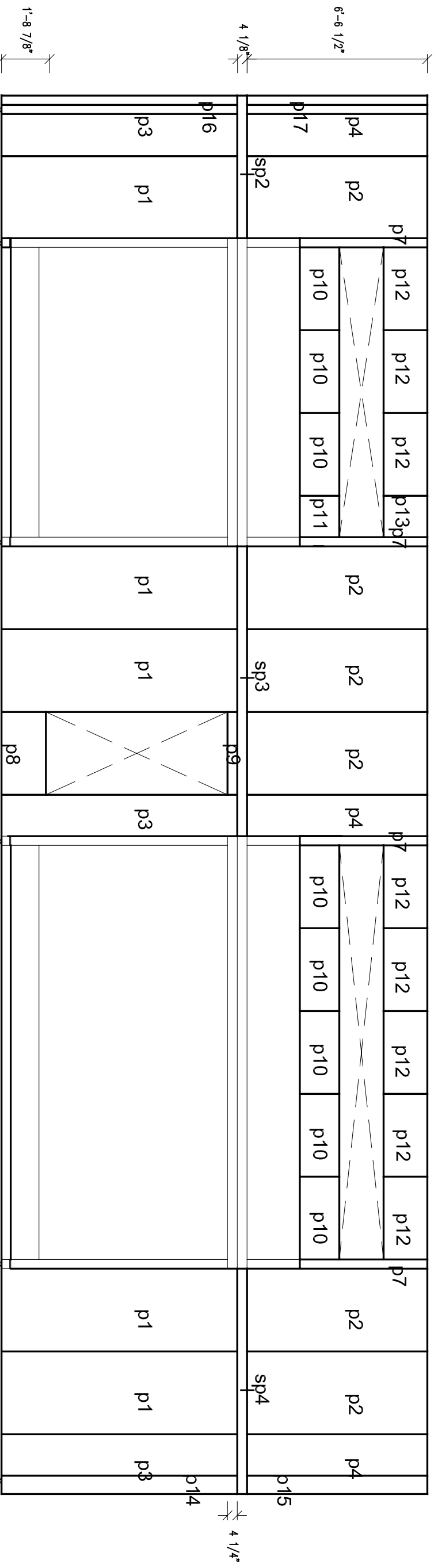


4" 1'-6" 3'-0"

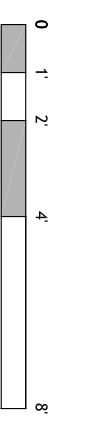
4"

4"

2 CORE - NORTH EXT. ELEVATION
1/4"=1'



SEE S4.13 FOR SCHEDULE



1 CORE - SOUTH EXT. ELEVATION
1/4"=1'

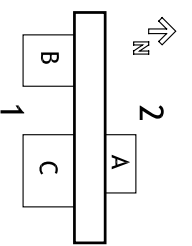


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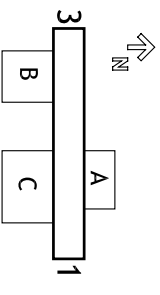
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S 2.0

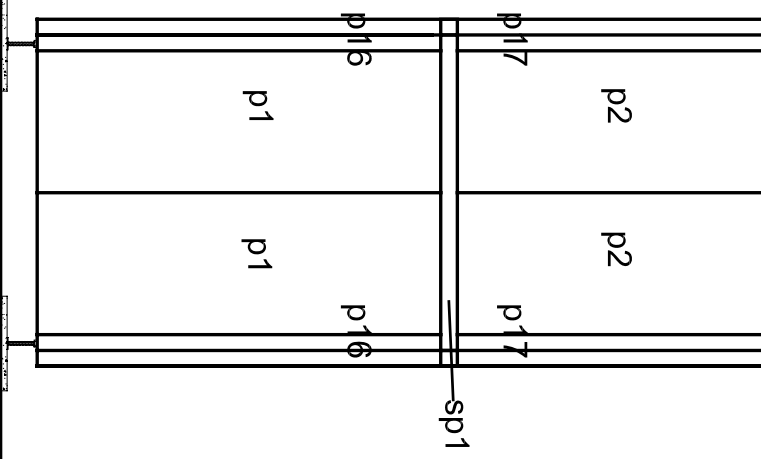
DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: CORE N+S PANEL ELEVATIONS

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

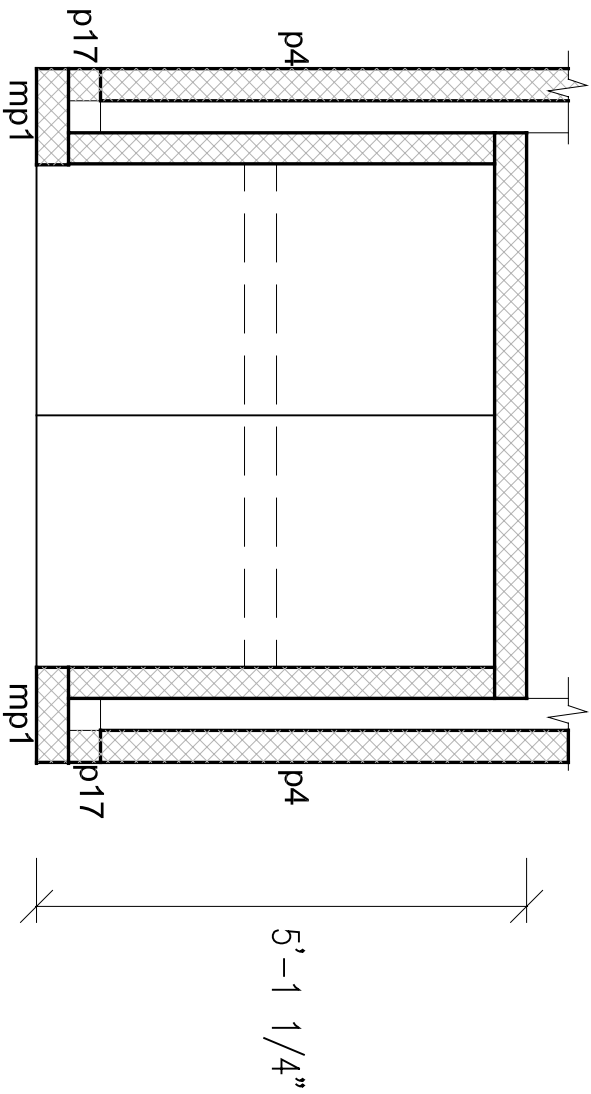


DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: CORE E-W PANEL ELEVATIONS

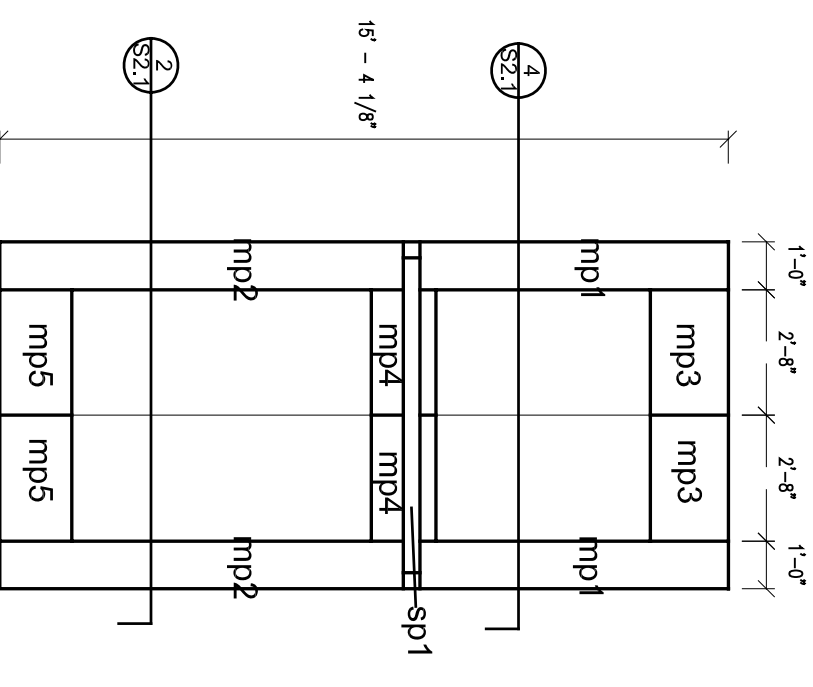
S 2.1



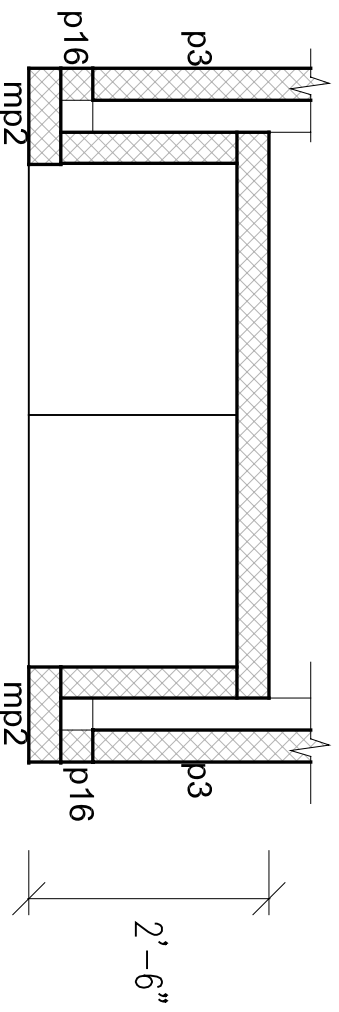
3 CORE - WEST EXT. ELEVATION
 1/4"=1'



4 CORE - EAST PLAN DETAIL
 1/2"=1'



1 CORE - EAST EXT. ELEVATION
 1/4"=1'



2 CORE - EAST PLAN DETAIL
 1/2"=1'

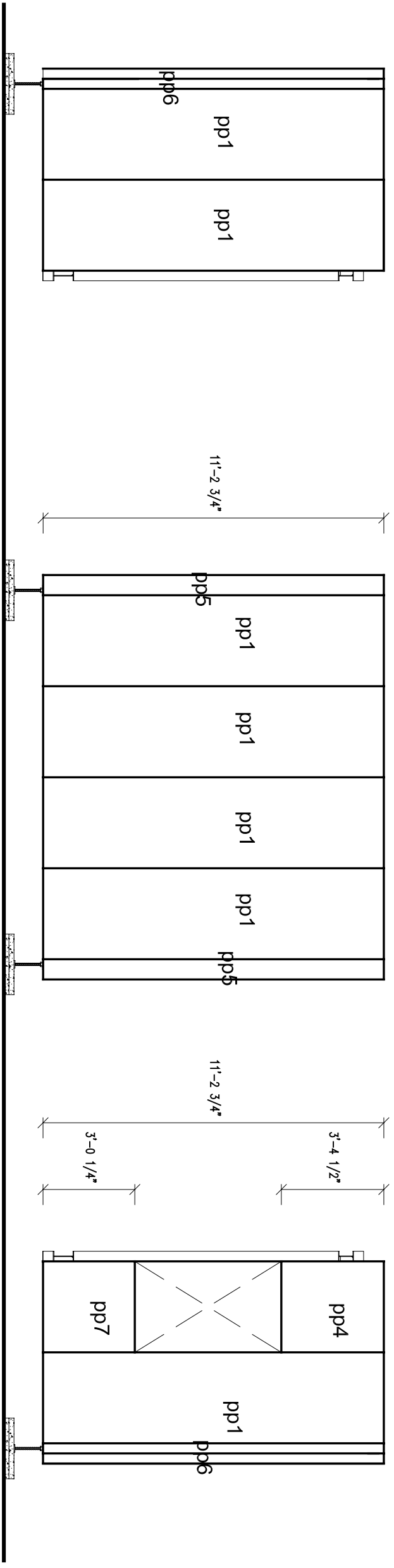


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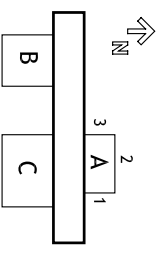
SEE S4.13 FOR SCHEDULE



3 POD A - WEST EXT. ELEVATION
1/4"=1'

2 POD A - NORTH EXT. ELEVATION
1/4"=1'

1 POD A - EAST EXT. ELEVATION
1/4"=1'

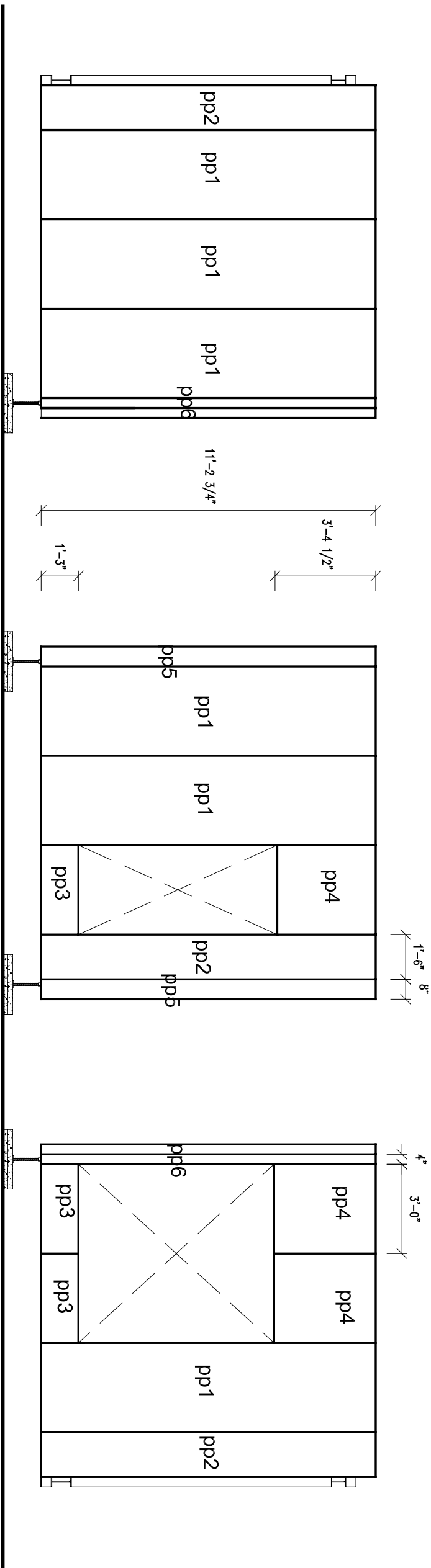


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p:412.726.6503
f:412.268.7819

DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: POD A PANEL ELEVATION

S 2.A

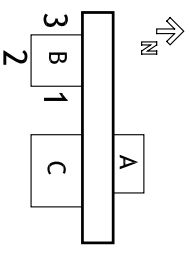
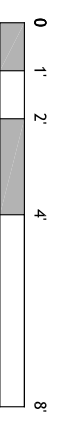
SEE S4.13 FOR SCHEDULE



3 POD B - WEST EXT. ELEVATION
 1/4"=1'

2 POD B - SOUTH EXT. ELEVATION
 1/4"=1'

1 POD B - EAST EXT. ELEVATION
 1/4"=1'



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 p:412.726.6503
 f:412.268.7819

DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: POD B PANEL ELEVATIONS

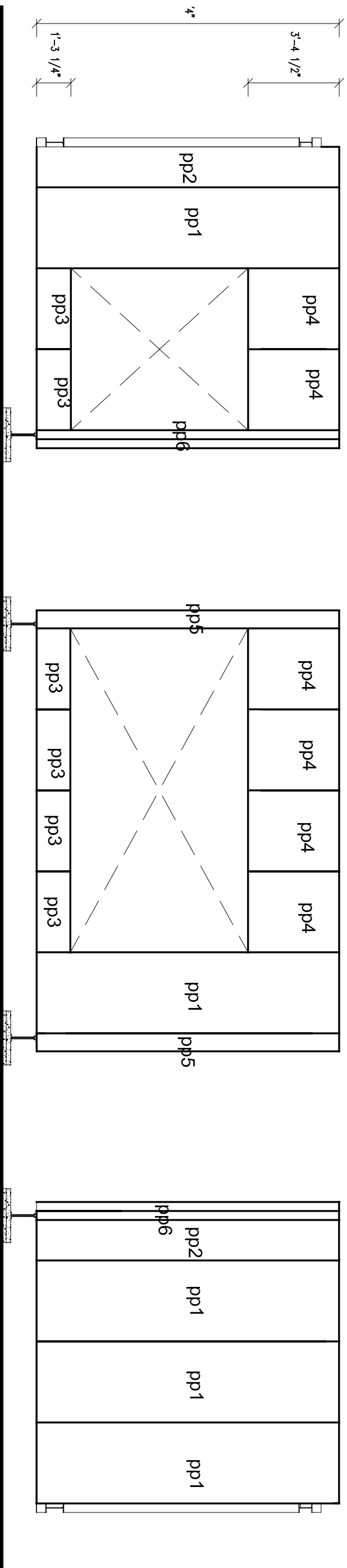
S 2.B

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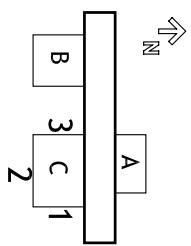
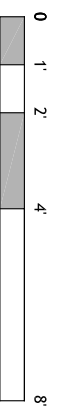
SEE S4.13 FOR SCHEDULE



3 POD C - WEST EXT. ELEVATION
 1/4"=1'

2 POD C - SOUTH EXT. ELEVATION
 1/4"=1'

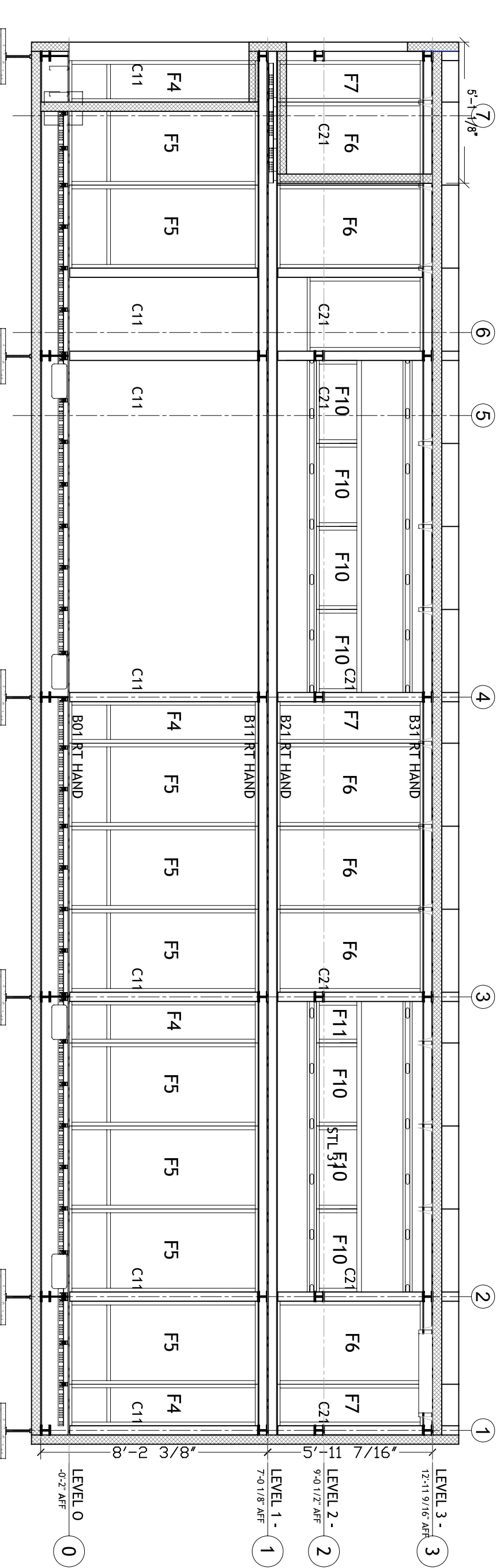
1 POD C - EAST EXT. ELEVATION
 1/4"=1'



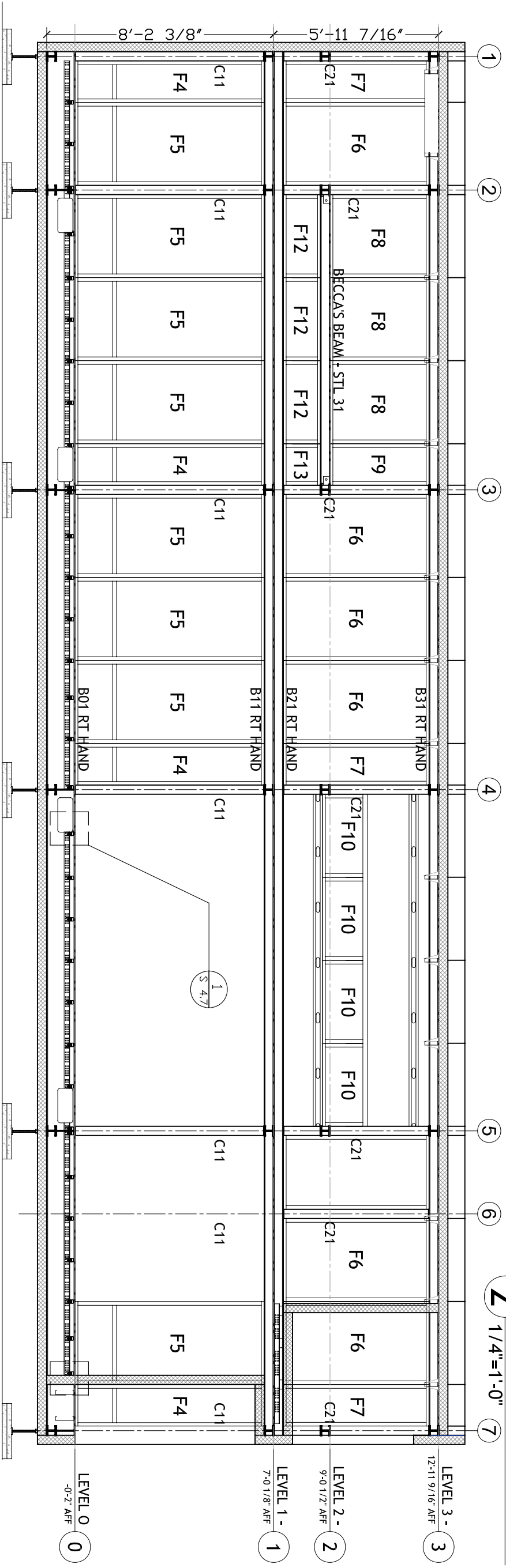
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DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: POD C PANEL ELEVATION

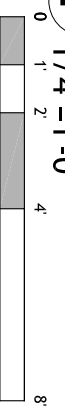
S 2.C



2 STRUCTURAL SECTION BB
1/4"=1'-0"



1 STRUCTURAL SECTION AA
1/4"=1'-0"



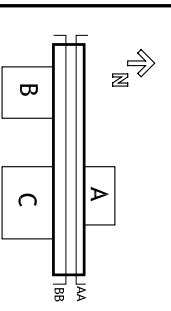
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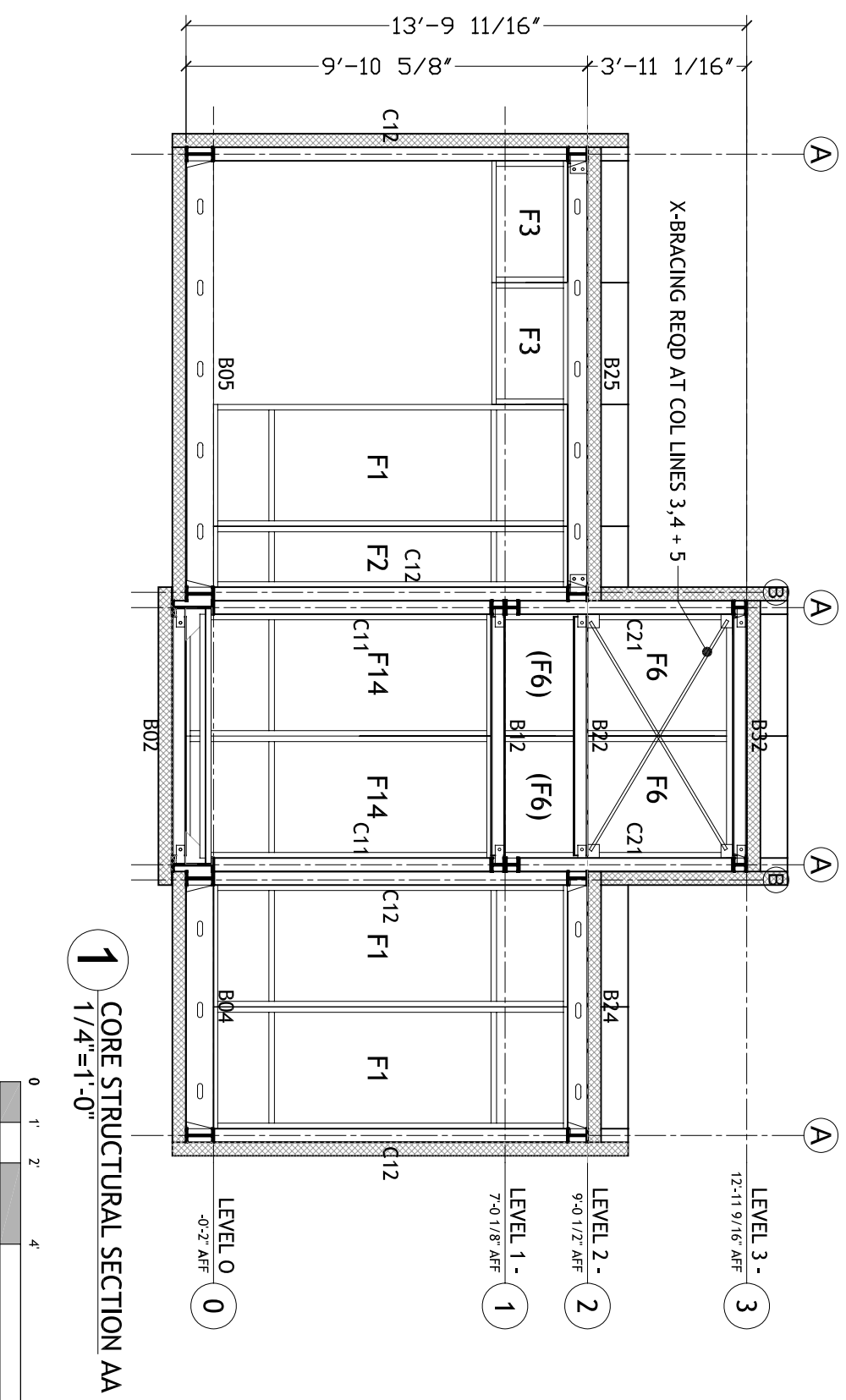
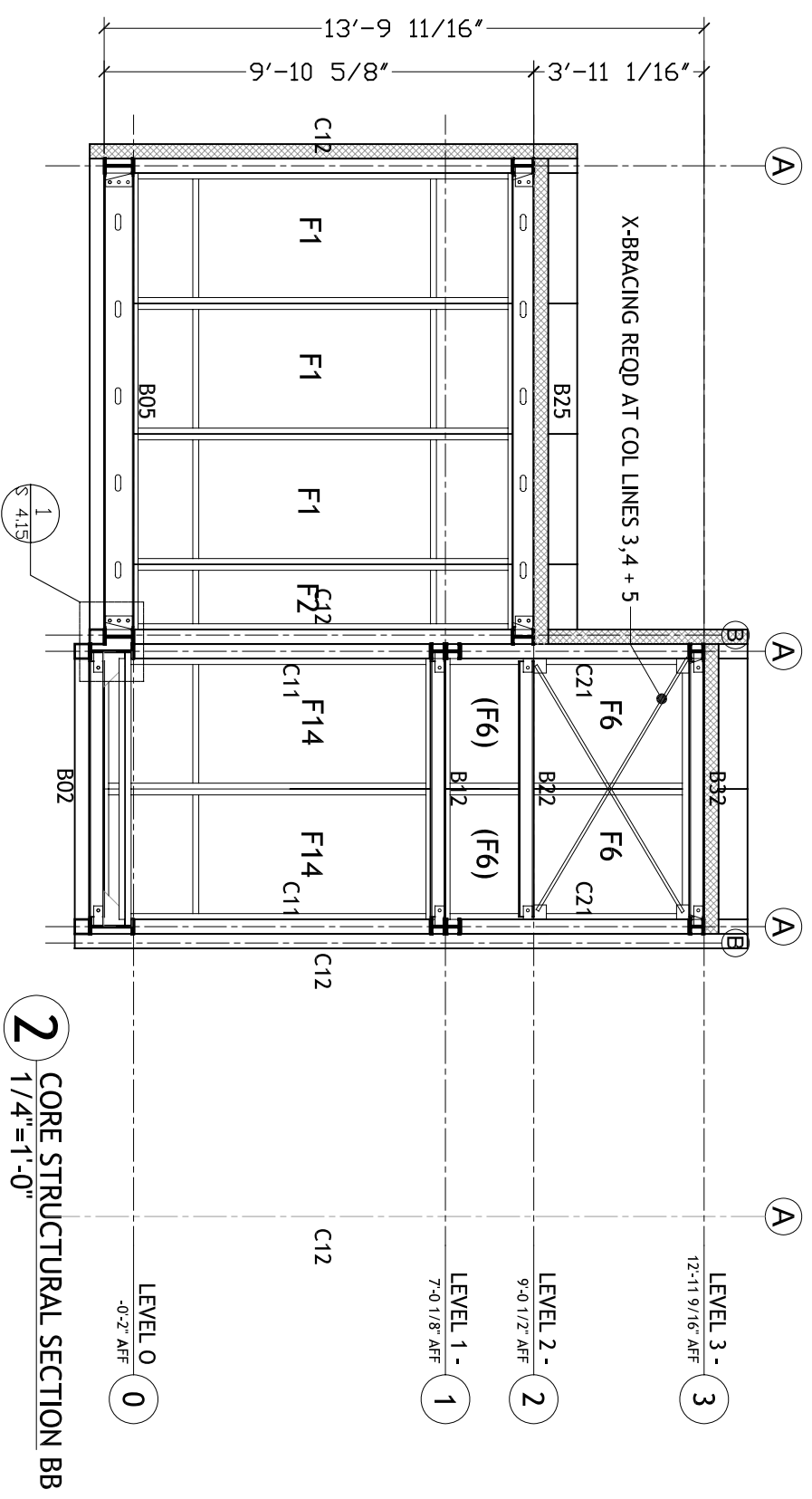
REVISED 7/19 DMW
REVISED 8/05 DMW

CONTACT:
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DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: STEEL FRAMING-CORE

S 3.0



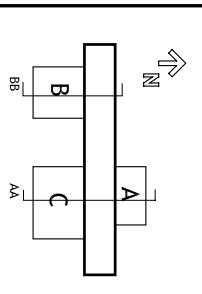
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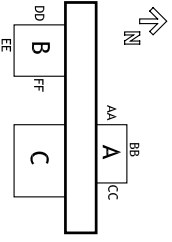
CONTACT:
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 p:412.726.6503
 f:412.268.7819



DRAWN BY: DAVID WALDRON
DATE: 08/07/2007
TITLE: STRUCTURAL SECTION- CORE

S 3.1

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

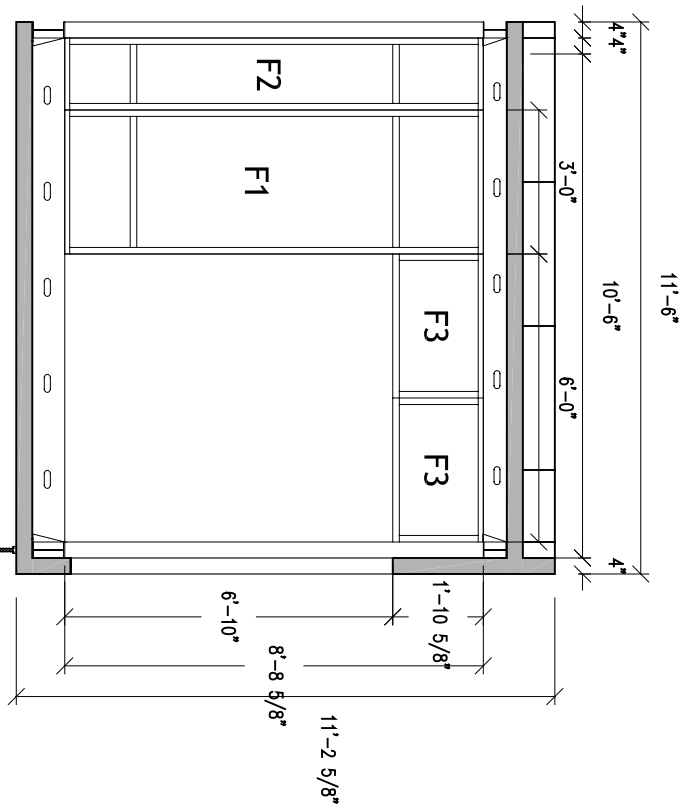


DRAWN BY: DAVID WALDRON

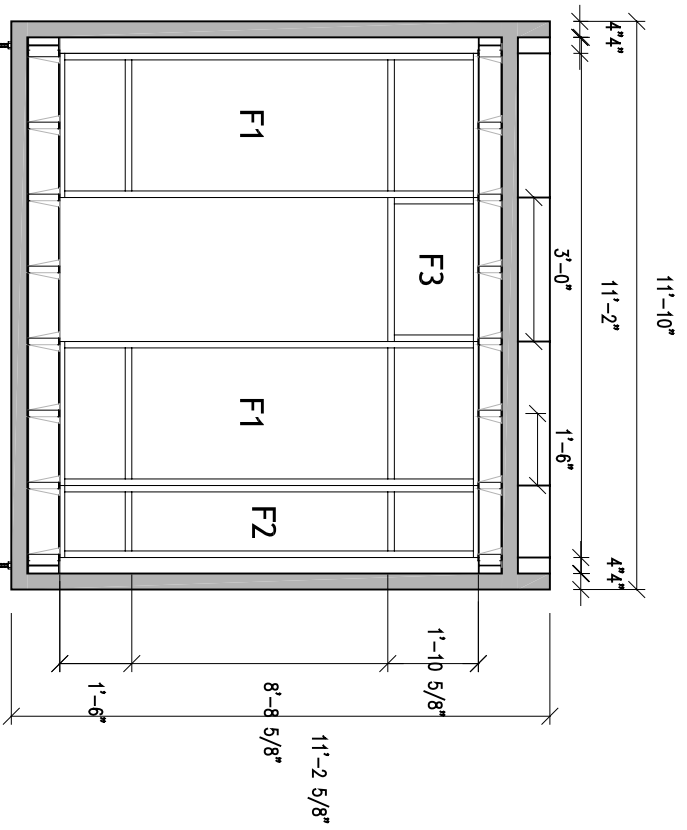
DATE: 08/07/2007

TITLE: POD FRAMING- LIGHT GAUGE STEEL

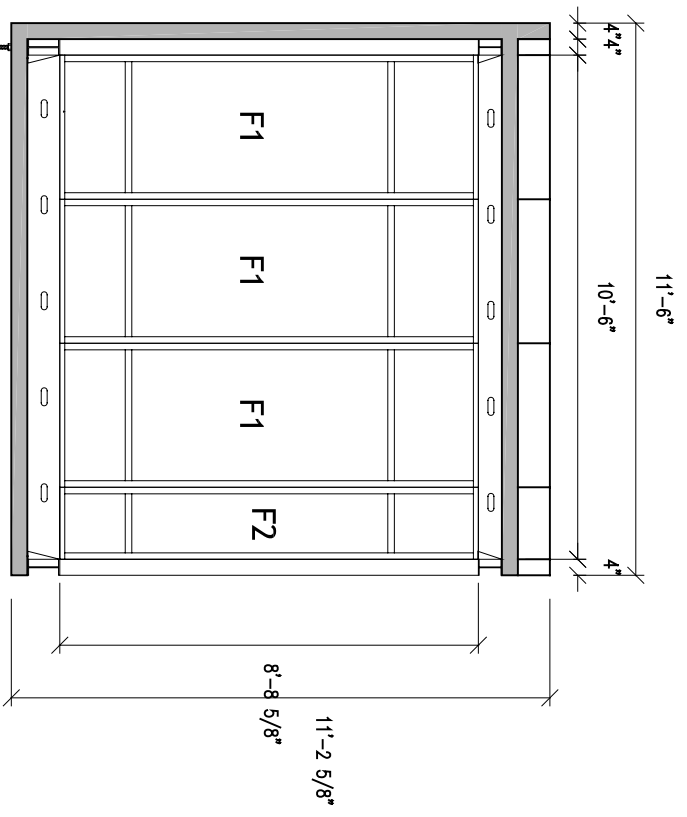
S 3.AB



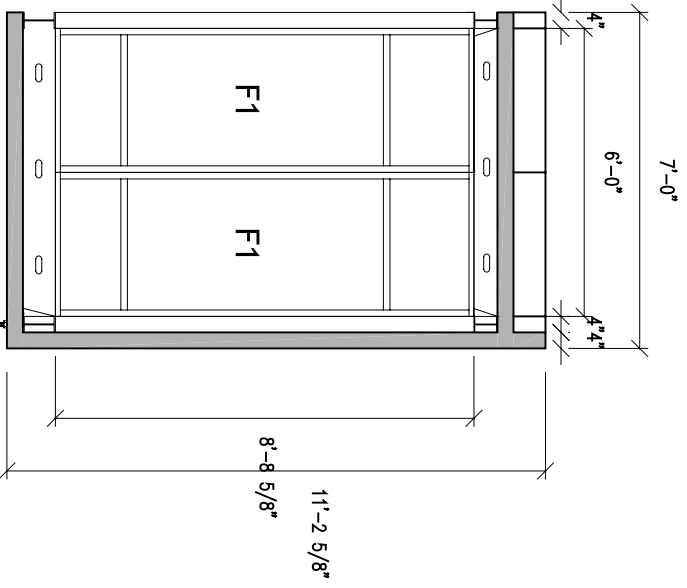
6 POD B FRAMING SECTION FF
 1/4"=1'-0"



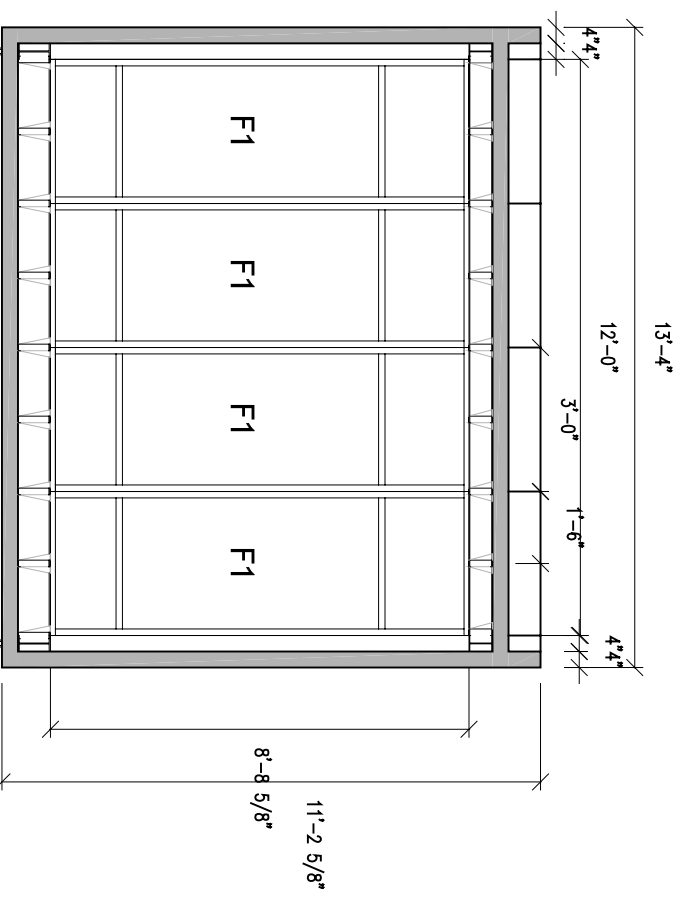
5 POD B FRAMING SECTION EE
 1/4"=1'-0"



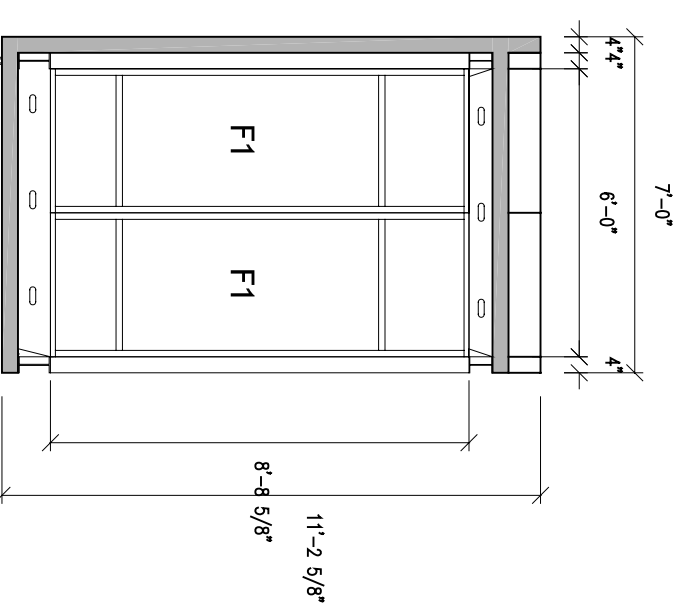
4 POD B FRAMING SECTION DD
 1/4"=1'-0"



3 POD A FRAMING SECTION CC
 1/4"=1'-0"

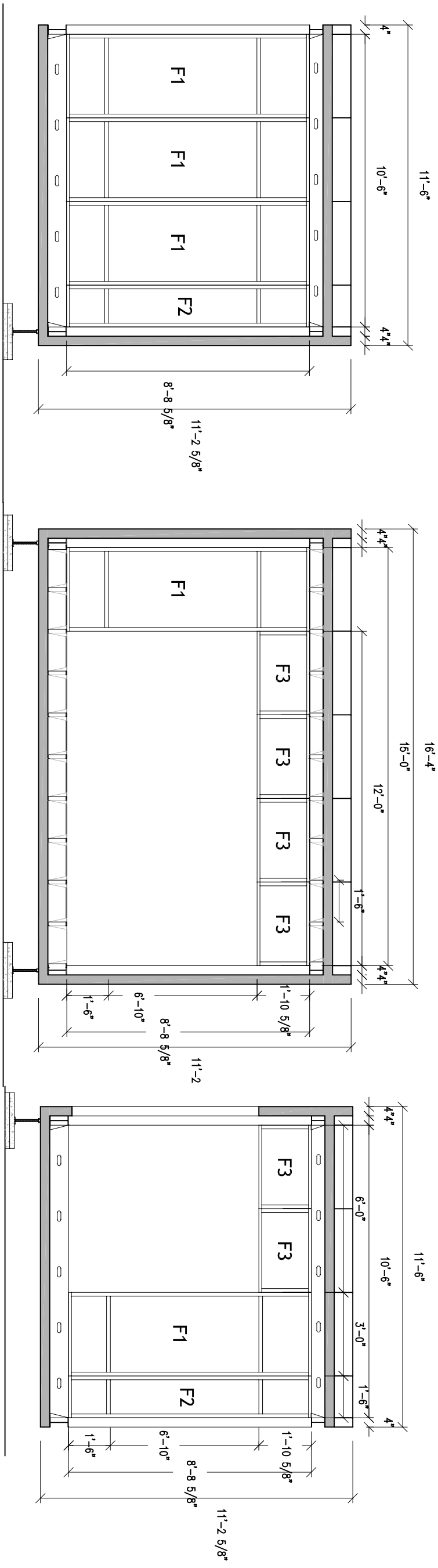


2 POD A FRAMING SECTION BB
 1/4"=1'-0"



1 POD A FRAMING SECTION AA
 1/4"=1'-0"

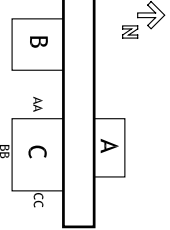
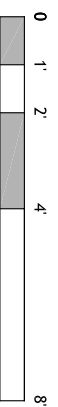




3 Pod C Framing Section East CC
 1/4"=1'-0"

2 POD C FRAMING SECTION BB
 1/4"=1'-0"

1 POD C FRAMING SECTION AA
 1/4"=1'-0"

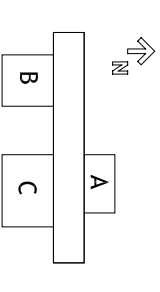


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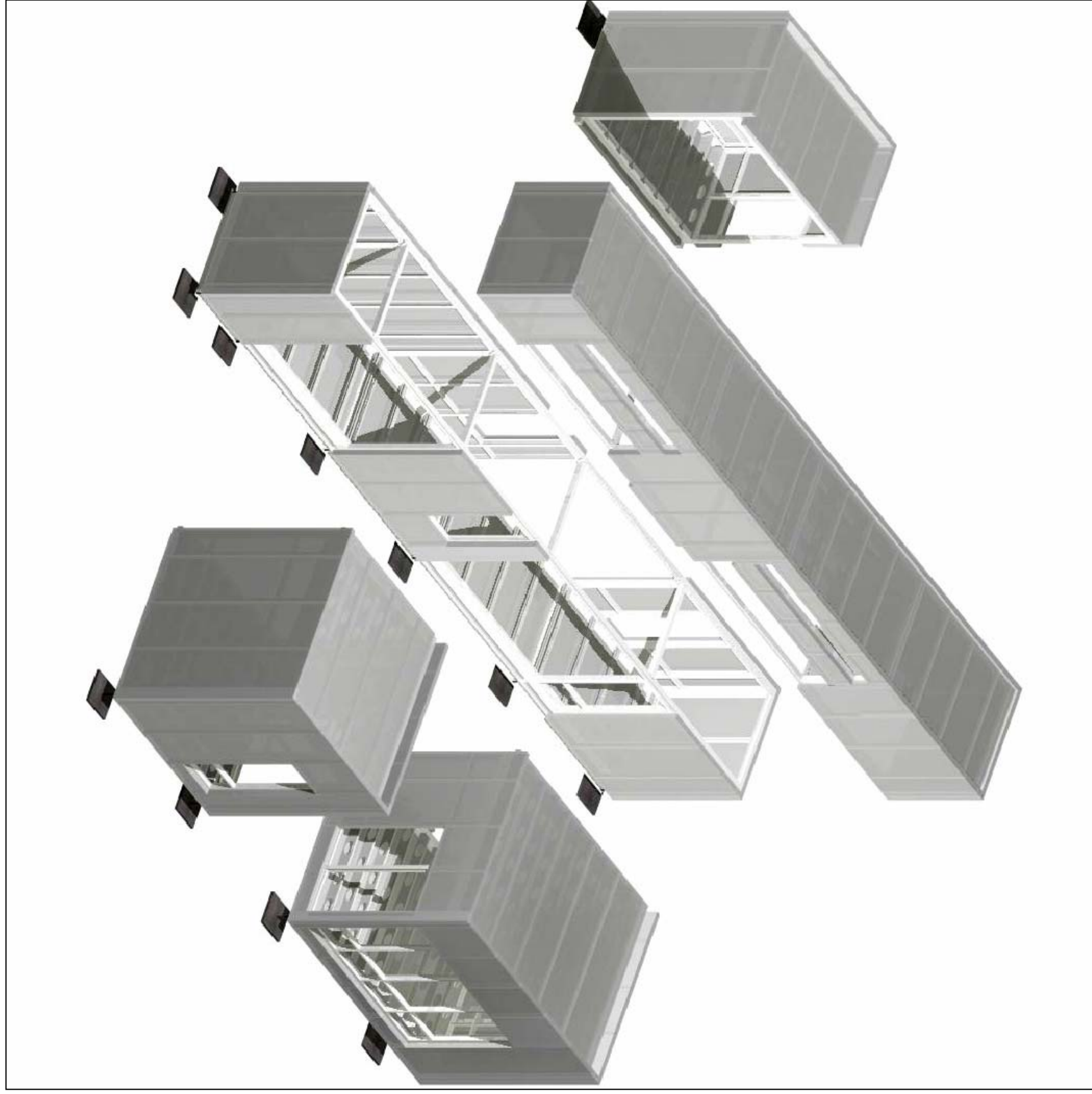
DRAWN BY: DAVID WALDRON
DATE: 08/07/2007
TITLE: POD FRAMING- LIGHT GAUGE STEEL

S 3.C

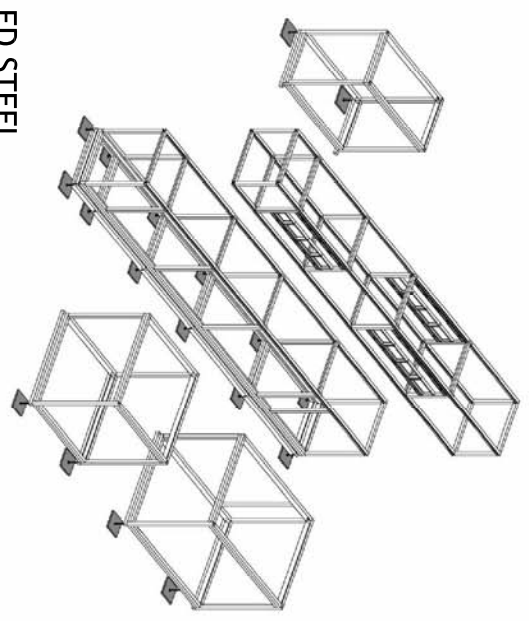
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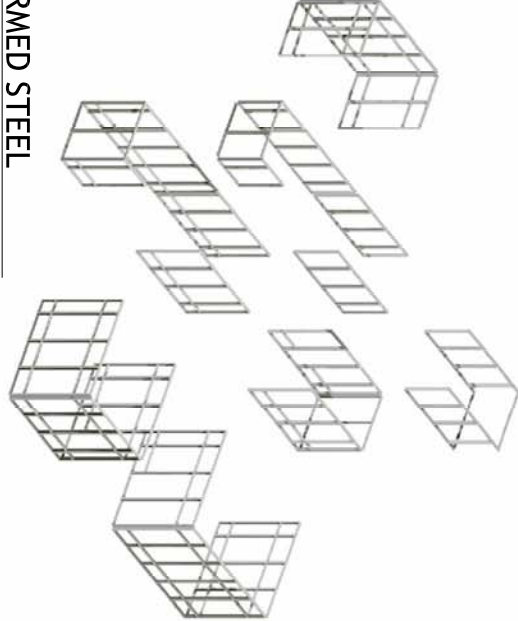
DRAWN BY: KIKO RESTREPO
DATE: 08/07/2007
TITLE: STRUCTURAL AXON



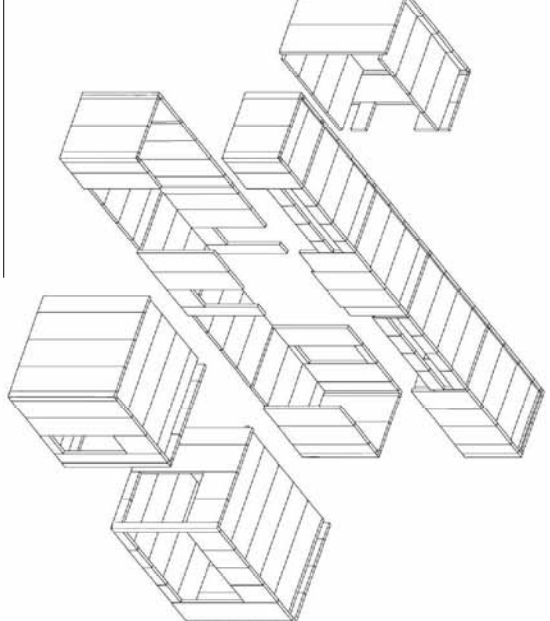
4 HOT ROLLED STEEL
NOT TO SCALE



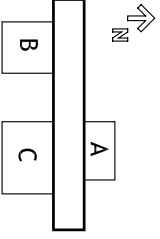
3 COLD FORMED STEEL
NOT TO SCALE



2 CENTRAL
NOT TO SCALE

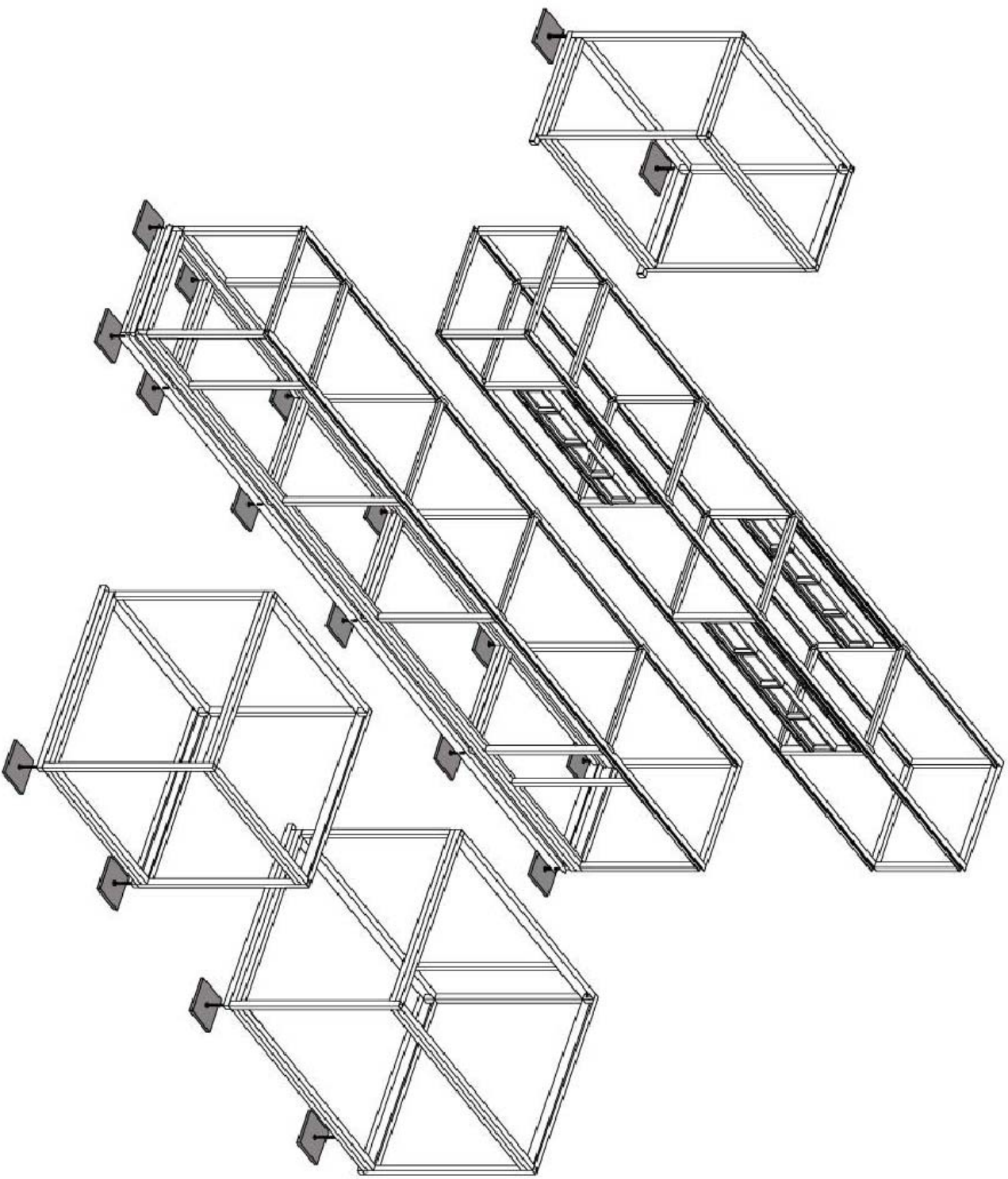


CONTACT:
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 p:412.726.6503
 f:412.268.7819



DRAWN BY: JEFF BOJURKE
 DATE: 08/07/2007
 TITLE: STEEL SCHEDULE

S 4.1



BEAM SCHEDULE	TYPE	SIZE	LENGTH	QUANTITY
B01	W4 x 13		50'-0"	2
B02, B12, B22, B32	W4 x 13		5'-10 1/2"	24
B03	W8 x 15		12'-8"	2
B04	W8 x 15		5'-10 1/2"	2
B05	W8 x 15		10'-4 1/2"	4
B06	W8 x 15		15'-8"	2
B07	W8 x 15		11'-2"	2
B11, B31	W4 x 13		50'-0"	4
B21	W4 x 13		50'-0"	2
B23	W6 x 9		12'-8"	2
B24	W6 x 9		5'-10 1/2"	2
B25	W6 x 9		10'-4 1/2"	4
B26	W6 x 9		15'-8"	2
B27	W6 x 9		11'-2"	2
COLUMN SCHEDULE				
C01	TUBE COLUMN		4 1/8"	19
C11	TUBE COLUMN		6'-10"	13
C12	TUBE COLUMN		8'-8 5/8"	12
C21	TUBE COLUMN		5'-3 1/16"	13
LOOSE STEEL				
MOMENT BRACE	1/4" PLATE STL	8" x 12"		12
LEDGE COLUMN	SEE STL 24			6
LIFTING BRACKET	SEE STL 30			16
LIFTING PLATE	1/4" PLATE STL	12" x 12"		16
THREADED ROD	1/4" DIA ROD		6'-10"	6

2 EXPLODED AXON NOT TO SCALE

1 STEEL SCHEDULE NOT TO SCALE

W4 X 13

HEIGHT: 4 1/8"

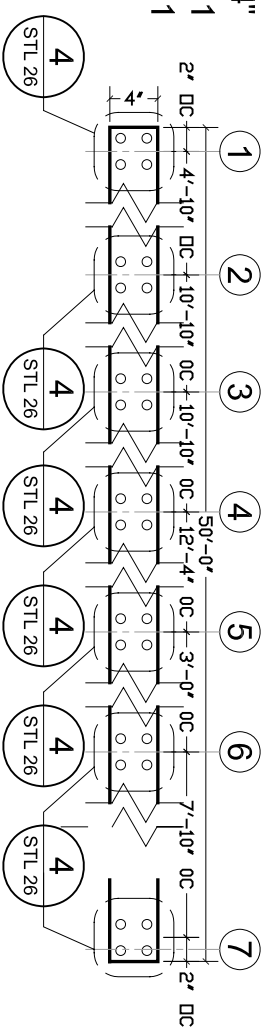
FLANGE: 3/8"

WEB: 1/4"

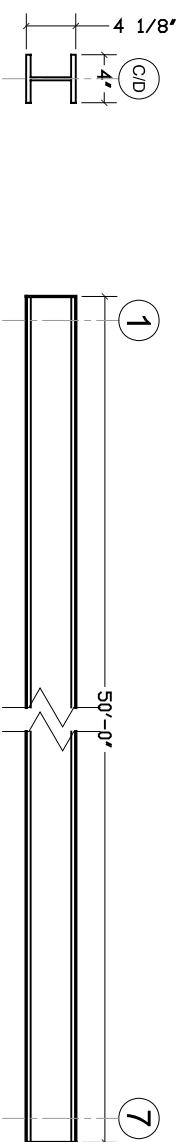
QUANTITY: RT 1

LEFT 1

**B21 RIGHT HAND DRAWN. LEFT
HAND IS MIRRORED.**



**3 B21 PLAN
3/4"=1'-0"**



**1 B21 FRONT ELEVATION
3/4"=1'-0"**

**2 B21 SIDE ELEVATION
3/4"=1'-0"**

W4 X 13

HEIGHT: 4 1/8"

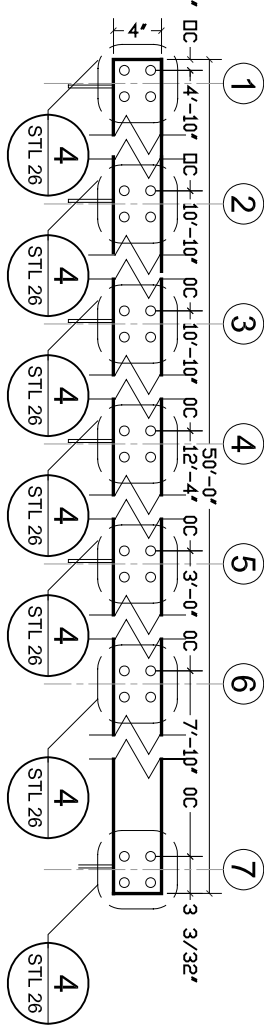
FLANGE: 3/8"

WEB: 1/4"

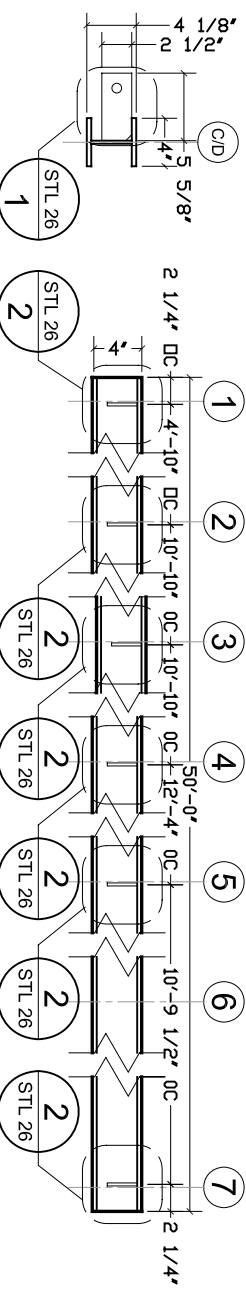
QUANTITY: RT 2

LEFT 2

**B11 AND B31 RIGHT HAND DRAWN.
LEFT HAND IS MIRRORED.**

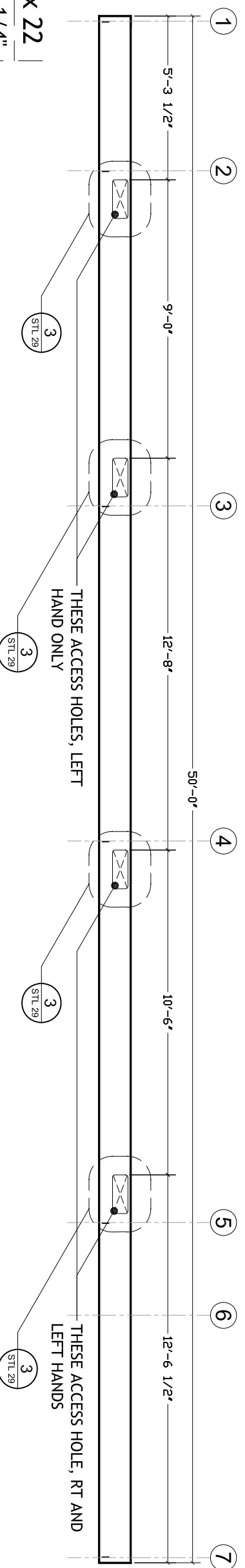


**3 B11, B31 PLAN
3/4"=1'-0"**



**1 B11, B31 FRONT ELEVATION
3/4"=1'-0"**

**2 B11, B31 SIDE ELEVATION
3/4"=1'-0"**



W12 X 22

HEIGHT: 12 1/4"

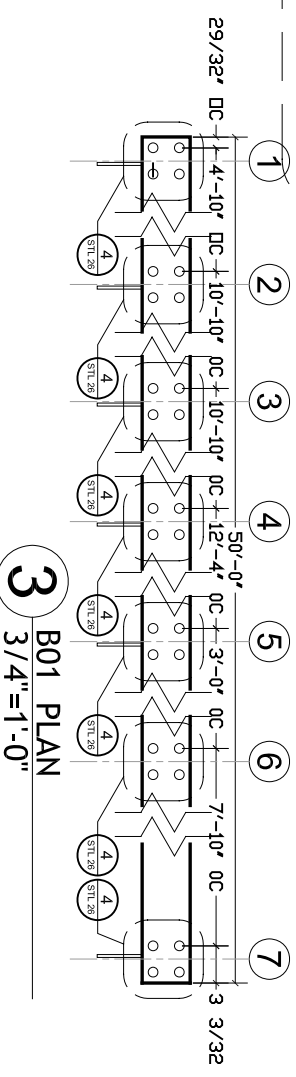
FLANGE: 7/16"

WEB: 1/4"

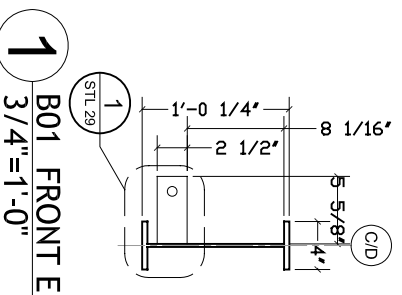
QUANTITY: RT 1

LEFT 1

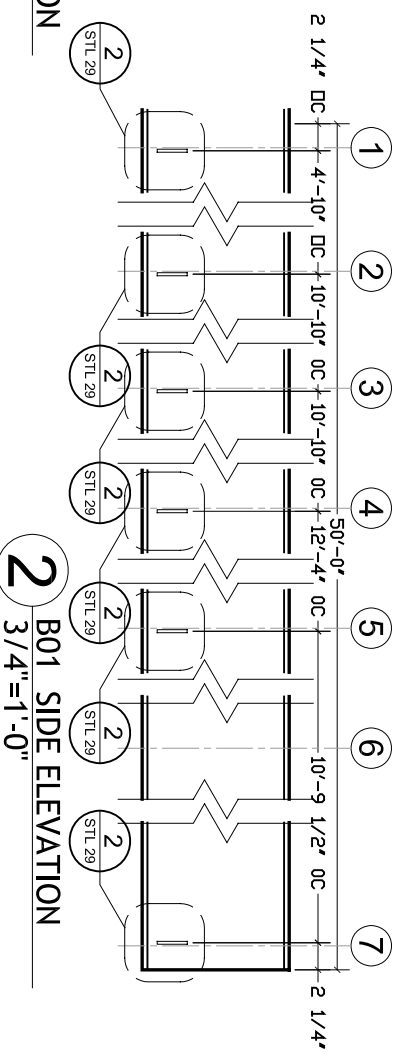
**B01 RIGHT HAND DRAWN. LEFT
HAND IS MIRRORED.**



**3 B01 PLAN
3/4"=1'-0"**



**1 B01 FRONT ELEVATION
3/4"=1'-0"**



**2 B01 SIDE ELEVATION
3/4"=1'-0"**

**4 B01 SIDE ELEVATION
1/4"=1'-0"**

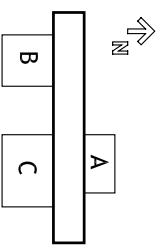


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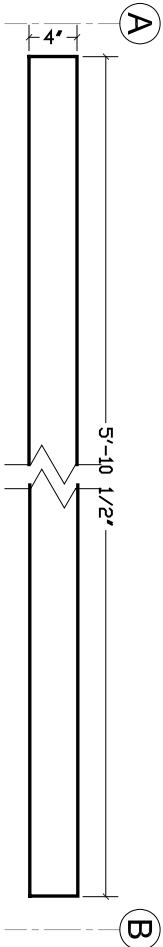


DRAWN BY: JEFF BOJURKE
 DATE: 08/07/2007
 TITLE: STEEL FABRICATION

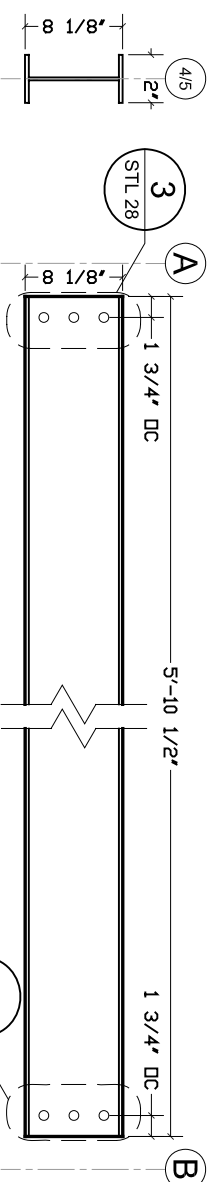
S 4.2

W8 x 15

HEIGHT: 8 1/8"
FLANGE: 5/16"
WEB: 1/4"
QUANTITY: 2



3 B04 PLAN
1 1/2"=1'-0"



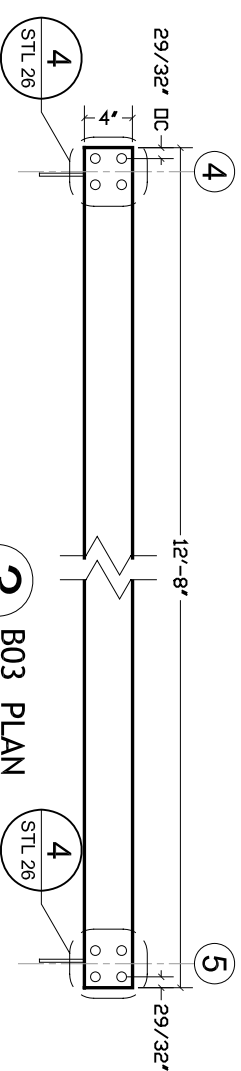
1 B04 FRONT ELEVATION
1 1/2"=1'-0"

2 B04 SIDE ELEVATION
1 1/2"=1'-0"

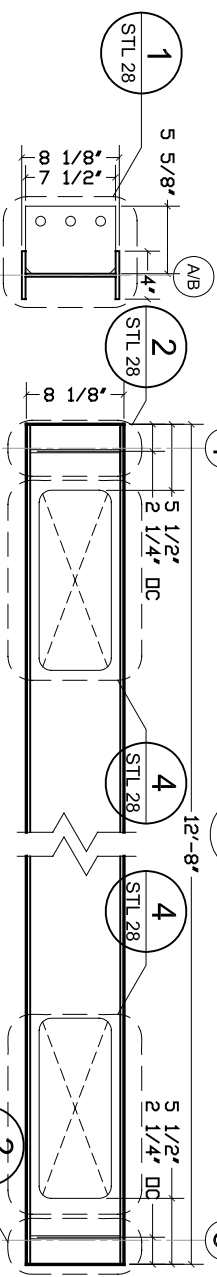
W8 x 15

HEIGHT: 8 1/8"
FLANGE: 5/16"
WEB: 1/4"
QUANTITY: RT 1
LEFT 1

B03 RIGHT HAND DRAWN. LEFT
HAND HAS NO ACCESS HOLES IN
THE WEB.



3 B03 PLAN
1 1/2"=1'-0"



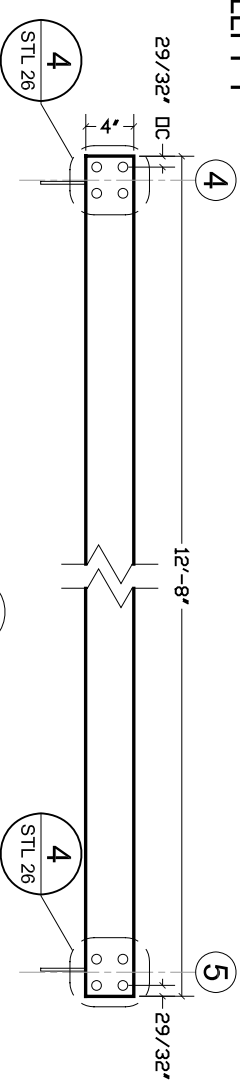
1 B03 FRONT ELEVATION
1 1/2"=1'-0"

2 B03 SIDE ELEVATION
1 1/2"=1'-0"

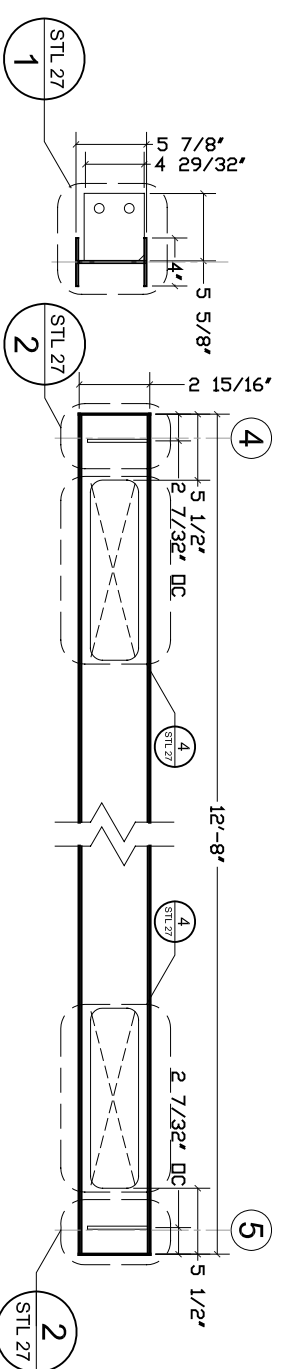
W6 x 9

HEIGHT: 6 1/4"
FLANGE: 3/16"
WEB: 3/16"
QUANTITY: RT 1
LEFT 1

B23 RIGHT HAND DRAWN. LEFT
HAND HAS NO ACCESS HOLES IN
THE WEB.



3 B23 PLAN
1 1/2"=1'-0"



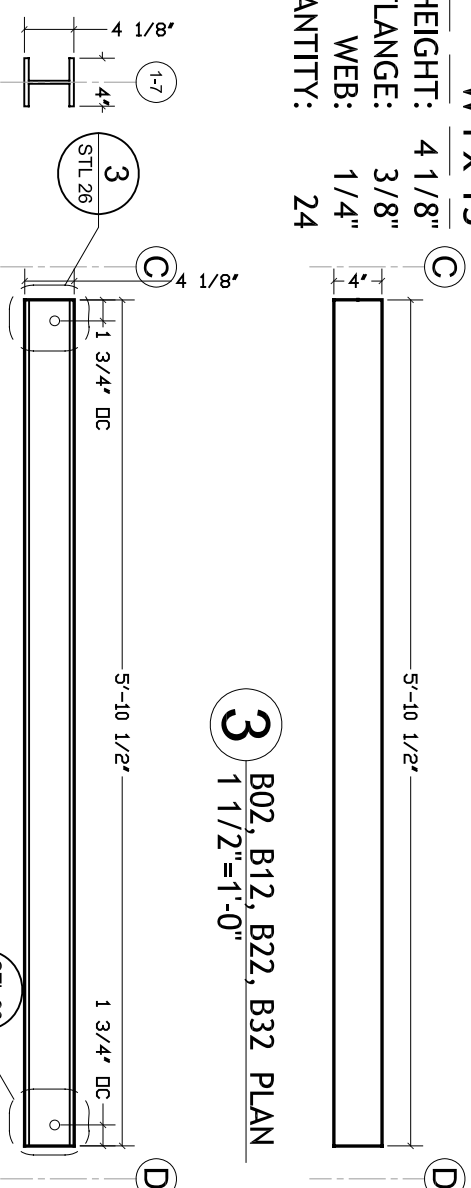
1 B23 FRONT ELEVATION
1 1/2"=1'-0"

2 B23 SIDE ELEVATION
1 1/2"=1'-0"

W4 x 13

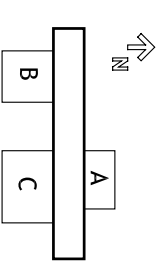
HEIGHT: 4 1/8"
FLANGE: 3/8"
WEB: 1/4"
QUANTITY: 24

3 B02, B12, B22, B32 PLAN
1 1/2"=1'-0"



1 B02, B12, B22, B32 FRONT ELE
1 1/2"=1'-0"

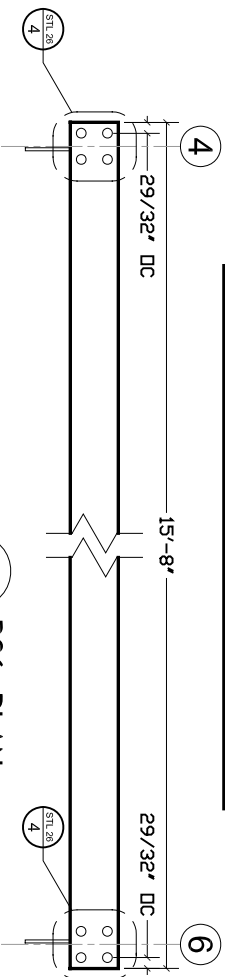
2 B02, B12, B22, B32 SIDE ELE
3/4"=1'-0"



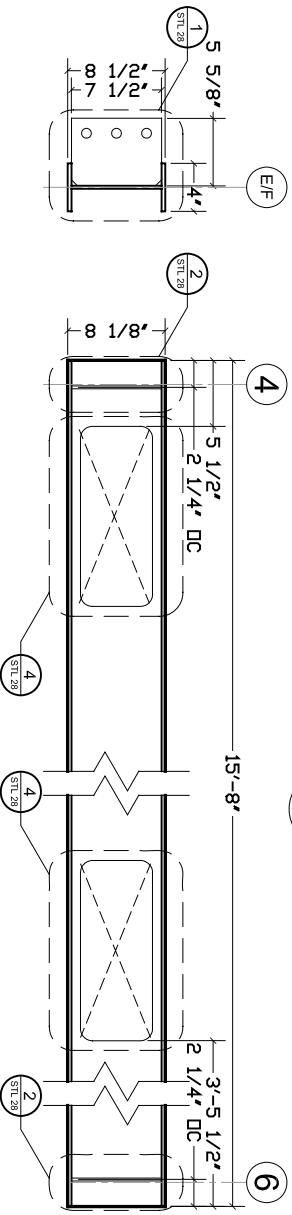
W8 x 15

HEIGHT: 8 1/8"
 FLANGE: 5/16"
 WEB: 1/4"
 QUANTITY: RT 1
 LEFT 1

B06 RIGHT HAND DRAWN. LEFT HAND HAS NO ACCESS HOLES IN THE WEB.



3 B06 PLAN
 3/4"=1'-0"

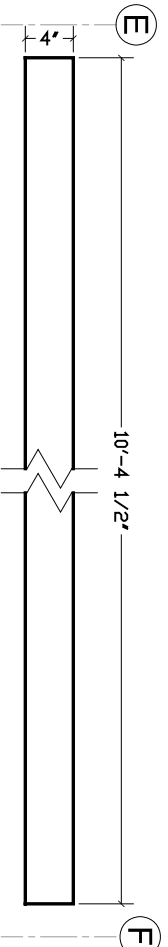


1 B06 FRONT ELEVATION
 3/4"=1'-0"

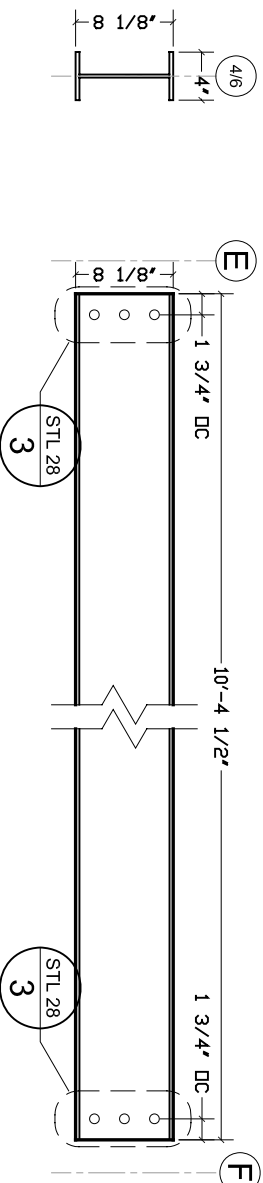
2 B06 SIDE ELEVATION
 3/4"=1'-0"

W8 x 15

HEIGHT: 8 1/8"
 FLANGE: 5/16"
 WEB: 1/4"
 QUANTITY: 4



3 B05 PLAN
 3/4"=1'-0"

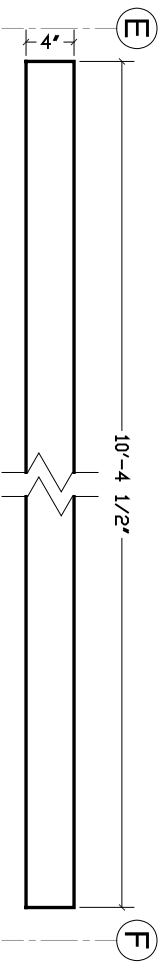


1 B05 FRONT ELEVATION
 3/4"=1'-0"

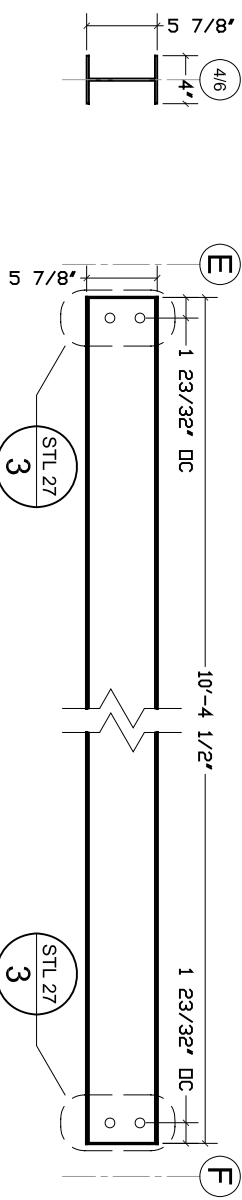
2 B05 SIDE ELEVATION
 3/4"=1'-0"

W6 x 9

HEIGHT: 6 1/4"
 FLANGE: 3/16"
 WEB: 3/16"
 QUANTITY: 4



3 B25 PLAN
 3/4"=1'-0"

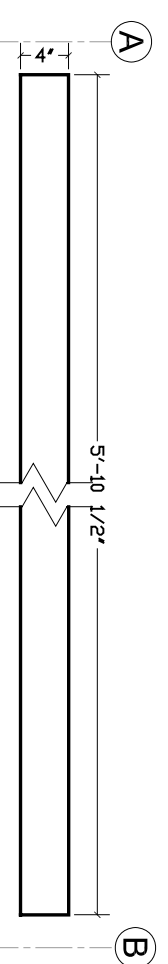


1 B25 FRONT ELEVATION
 3/4"=1'-0"

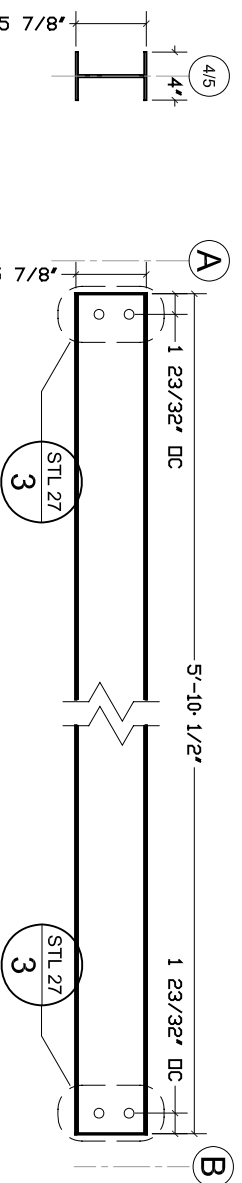
2 B25 SIDE ELEVATION
 3/4"=1'-0"

W6 x 9

HEIGHT: 6 1/4"
 FLANGE: 3/16"
 WEB: 3/16"
 QUANTITY: 2

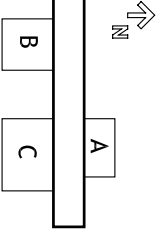


3 B24 PLAN
 3/4"=1'-0"



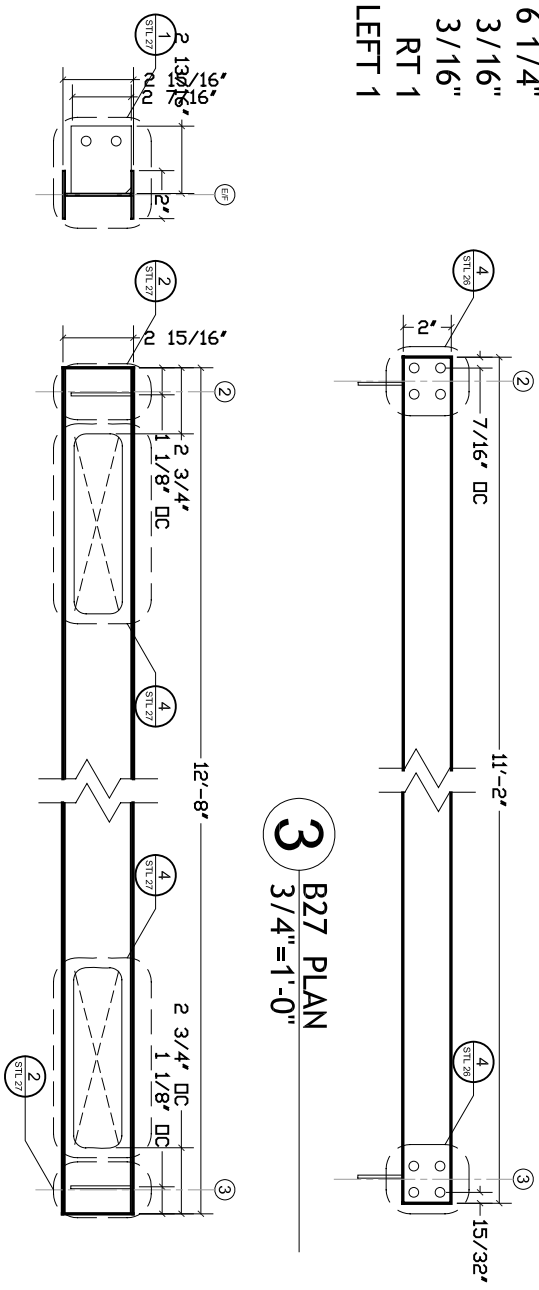
1 B24 FRONT ELEVATION
 3/4"=1'-0"

2 B24 SIDE ELEVATION
 3/4"=1'-0"



**B27 RIGHT HAND DRAWN. LEFT
 HAND HAS NO ACCESS HOLES IN
 THE WEB.**

W6 x 9
 HEIGHT: 6 1/4"
 FLANGE: 3/16"
 WEB: 3/16"
 QUANTITY: RT 1
 LEFT 1



1 B27 FRONT ELEVATION
 3/4"=1'-0"

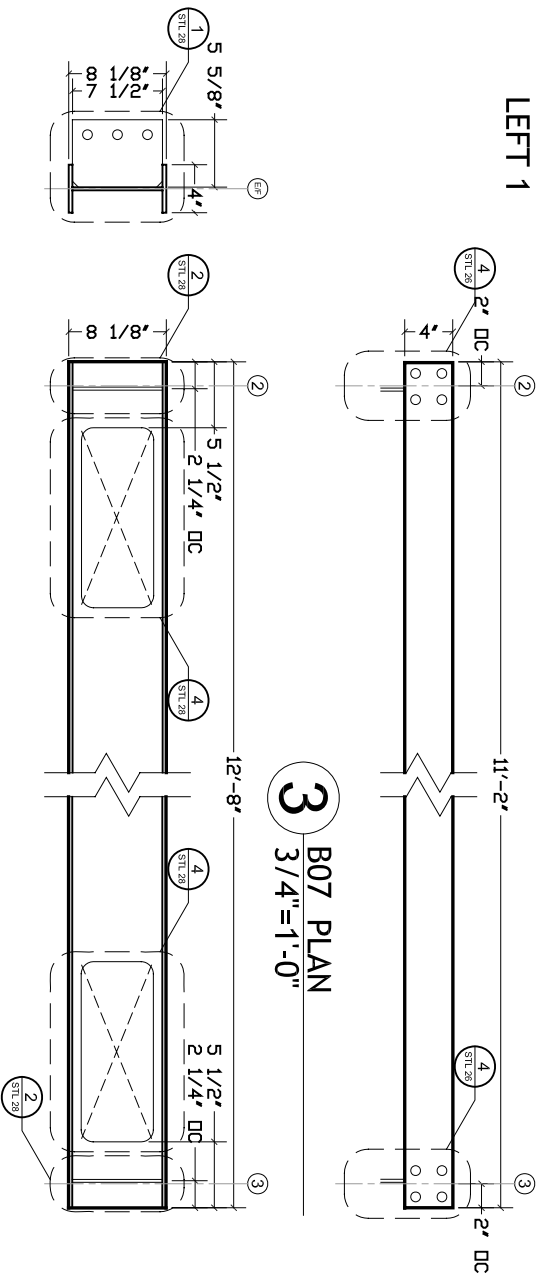
2 B27 SIDE ELEVATION
 3/4"=1'-0"

3 B27 PLAN
 3/4"=1'-0"

W8 x 15

HEIGHT: 8 1/8"
 FLANGE: 5/16"
 WEB: 1/4"
 QUANTITY: RT 1
 LEFT 1

**B07 RIGHT HAND DRAWN. LEFT
 HAND HAS NO HOLES IN THE WEB.**



1 B07 FRONT ELEVATION
 3/4"=1'-0"

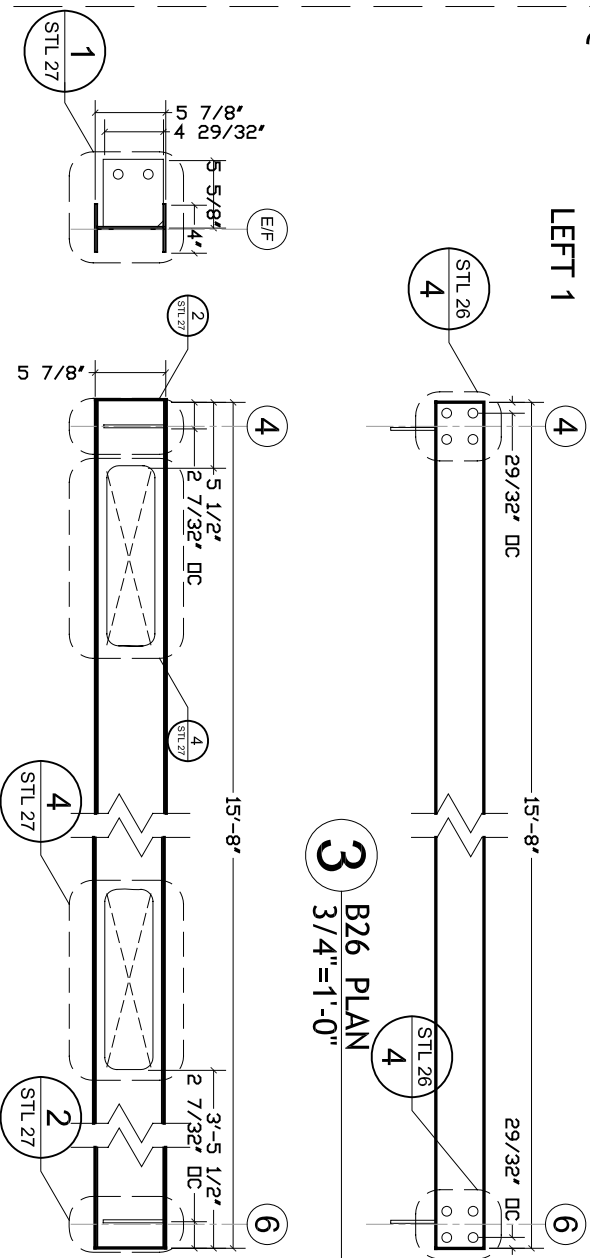
2 B07 SIDE ELEVATION
 3/4"=1'-0"

3 B07 PLAN
 3/4"=1'-0"

W6 x 9

HEIGHT: 6 1/4"
 FLANGE: 3/16"
 WEB: 3/16"
 QUANTITY: RT 1
 LEFT 1

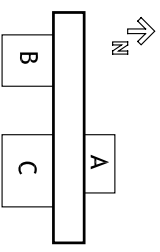
**B26 RIGHT HAND DRAWN. LEFT
 HAND HAS NO ACCESS HOLES IN
 THE WEB.**



1 B26 FRONT ELEVATION
 3/4"=1'-0"

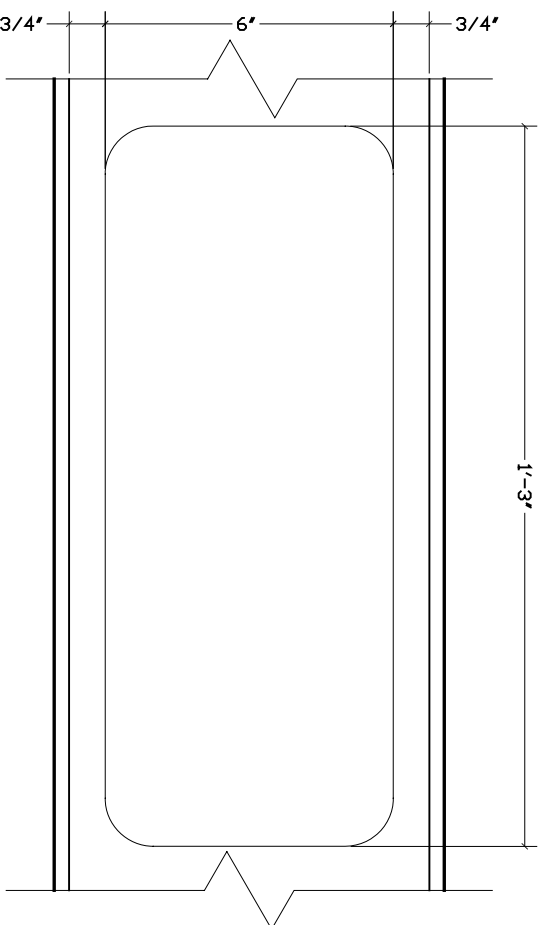
2 B26 SIDE ELEVATION
 3/4"=1'-0"

3 B26 PLAN
 3/4"=1'-0"

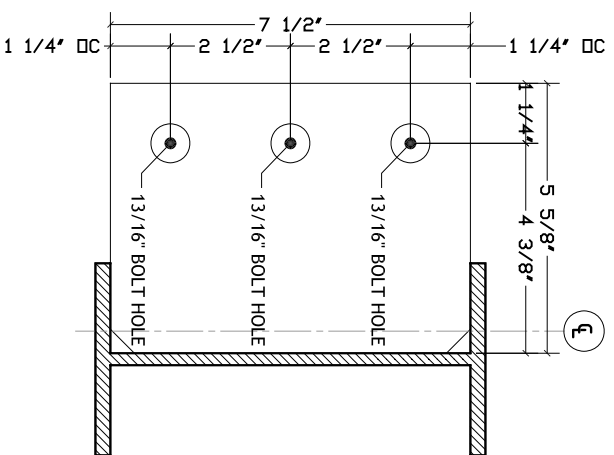


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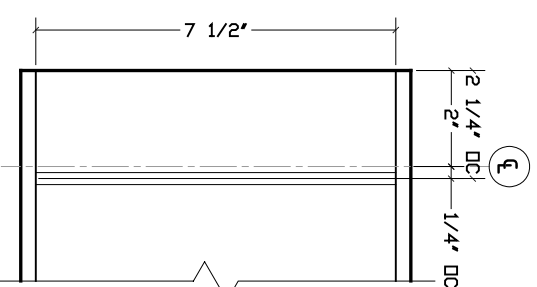
DRAWN BY: JEFF BOJURKE
 DATE: 08/07/2007
 TITLE: STEEL FABRICATION



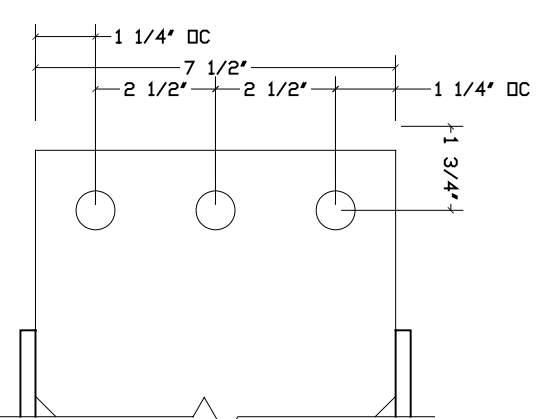
12
8" BEAM - ACCESS HOLE
3"=1'-0"



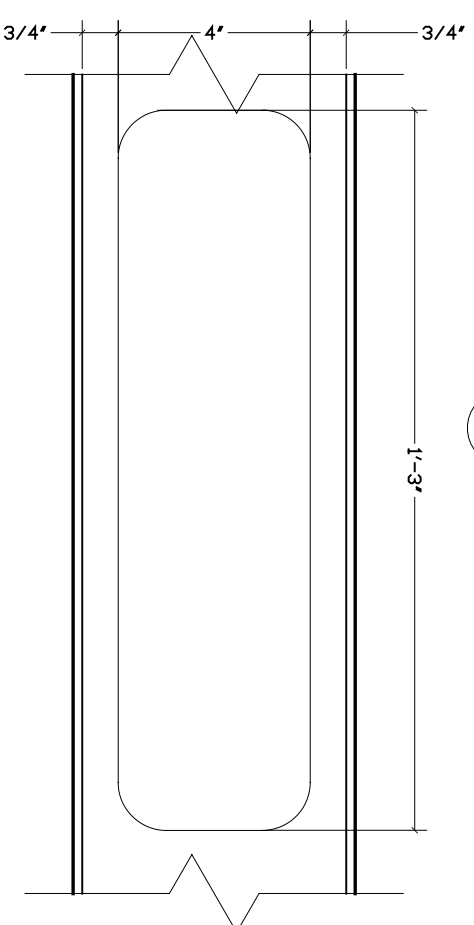
11
8" BEAM - FRONT ELEVATION
3"=1'-0"



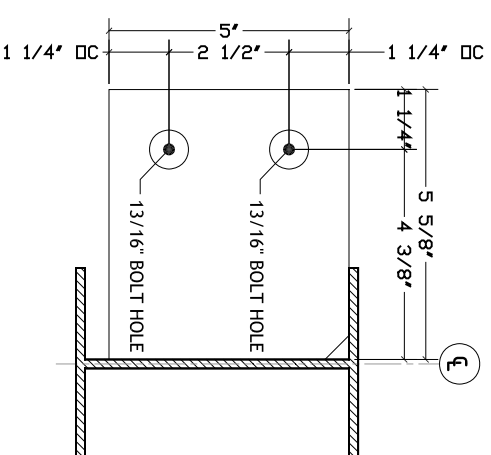
10
8" BEAM - SIDE ELEVATION
3"=1'-0"



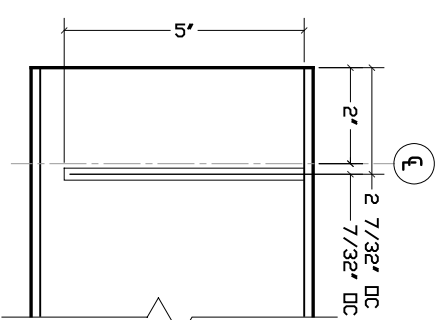
9
8" BEAM - SIDE ELEVATION
3"=1'-0"



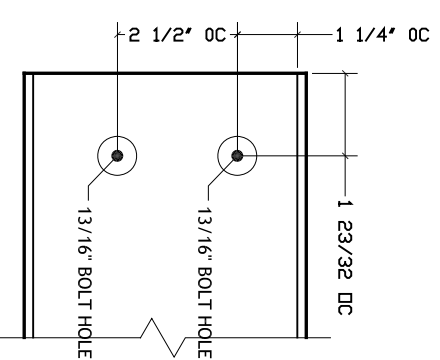
8
6" BEAM - SIDE ELEVATION
3"=1'-0"



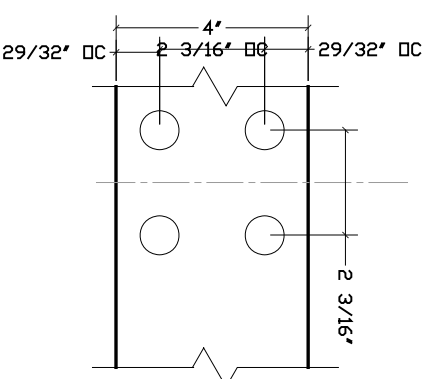
7
6" BEAM - FRONT ELEVATION
3"=1'-0"



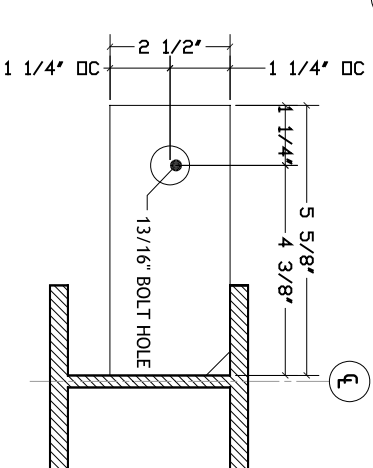
6
6" BEAM - SIDE ELEVATION
3"=1'-0"



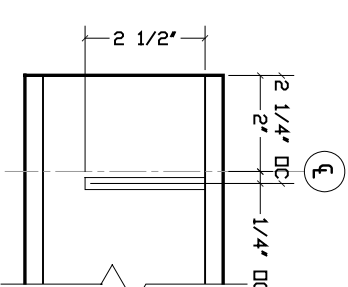
5
6" BEAM - SIDE ELEVATION
3"=1'-0"



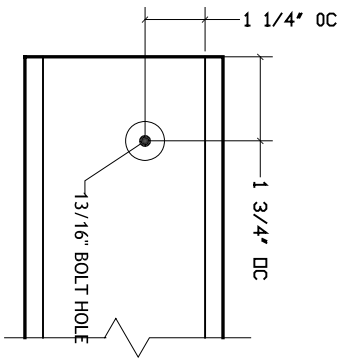
4
4", 6", 8", 12" BEAMS - PLAN
3"=1'-0"



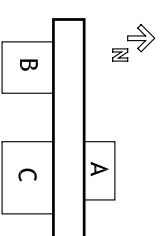
3
4" BEAM - FRONT ELEVATION
3"=1'-0"



2
4" BEAM - SIDE ELEVATION
3"=1'-0"



1
4" BEAM - SIDE ELEVATION
3"=1'-0"



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DRAWN BY: JEFF BOLJAK
DATE: 08/07/2007
TITLE: STEEL FABRICATION

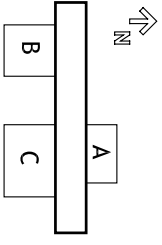
S 4.6



CARNEGIE MELLON
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School of Design
School of Drama
School of Art
Tepper School of Business
Carnegie Institute of Technology

UNIVERSITY OF PITTSBURGH
School of Engineering

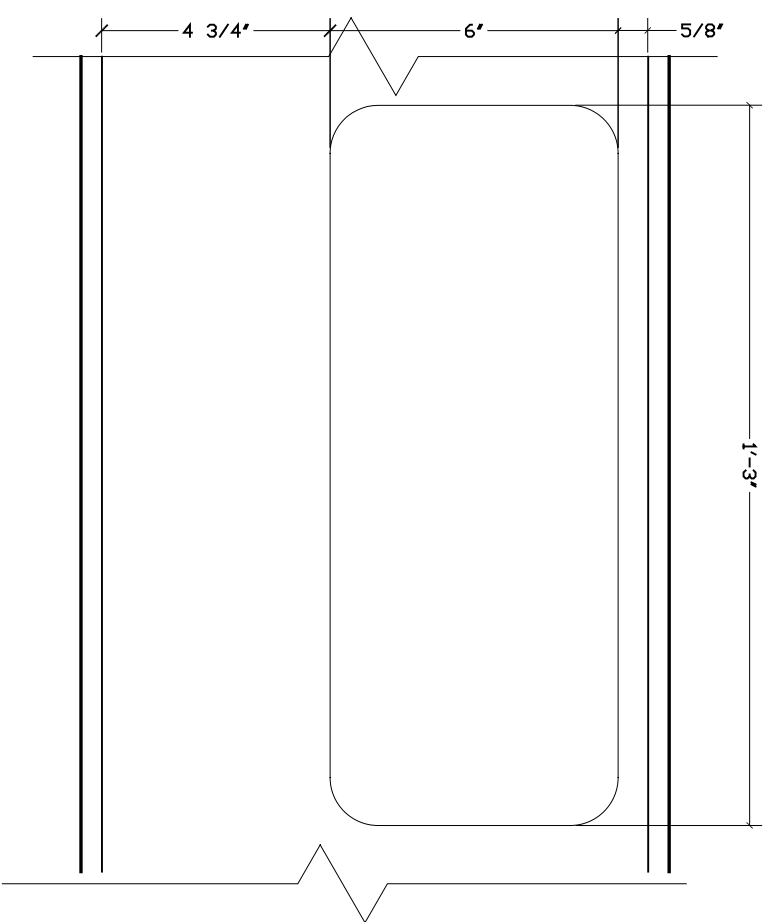
ART INSTITUTE OF PITTSBURGH



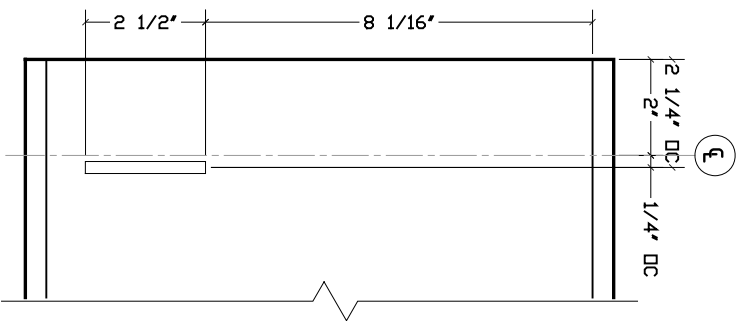
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 p:412.726.6503
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DRAWN BY: JEFF BOLJAK
 DATE: 08/07/2007
 TITLE: STEEL FABRICATION

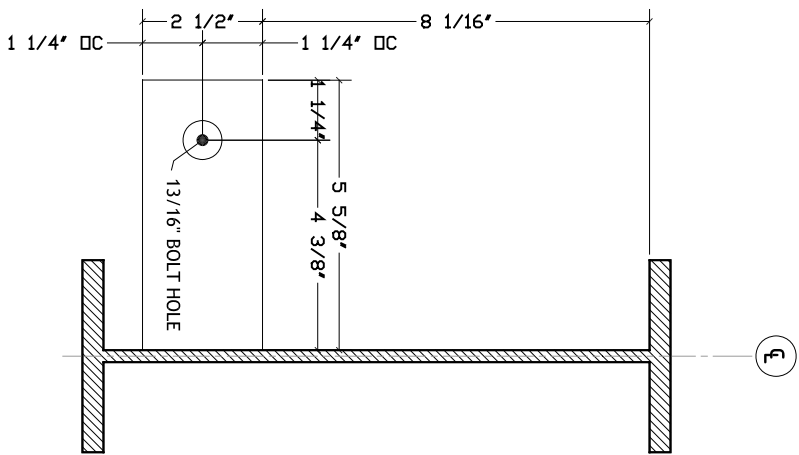
S 4.7



1 12" BEAM - ACCESS HOLE
 3"=1'-0"

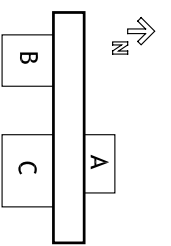


2 12" BEAM - SIDE ELEVATION
 3"=1'-0"



3 12" BEAM - FRONT ELEVATION
 3"=1'-0"

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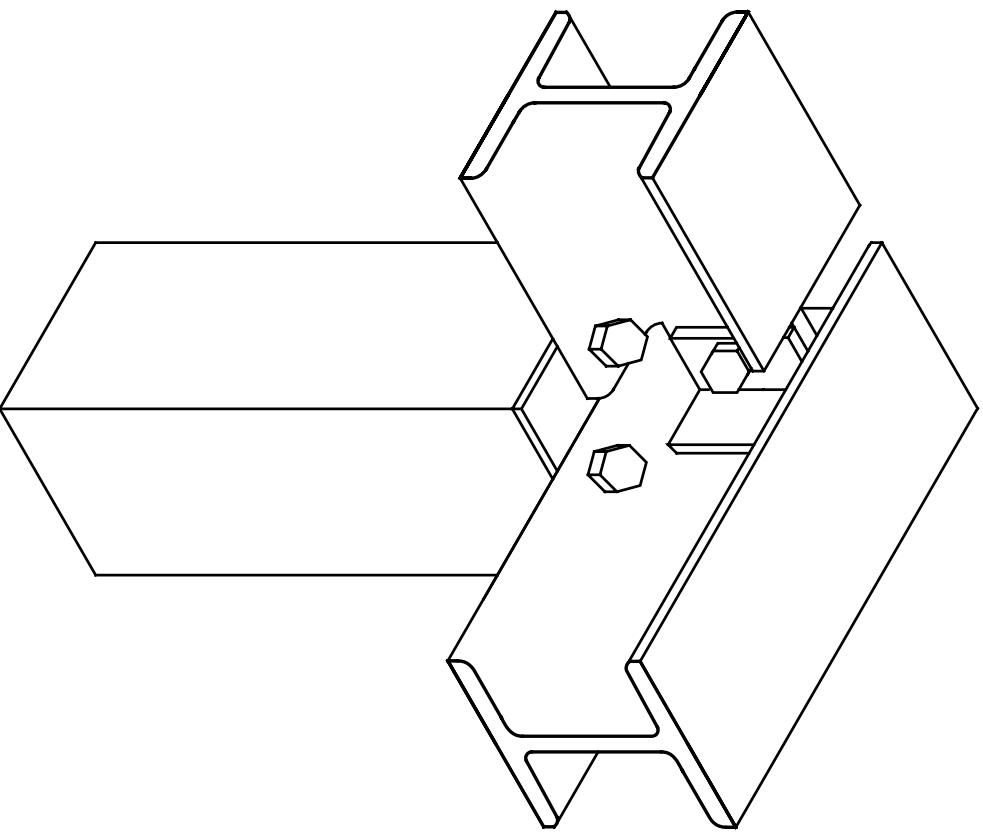


DRAWN BY: JOHN EASTRIDGE

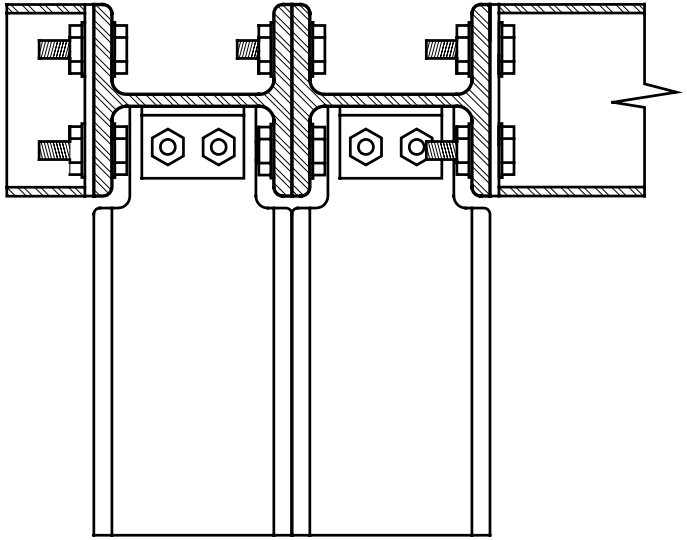
DATE: 08/07/2007

TITLE: CORE FRAMING DETAIL

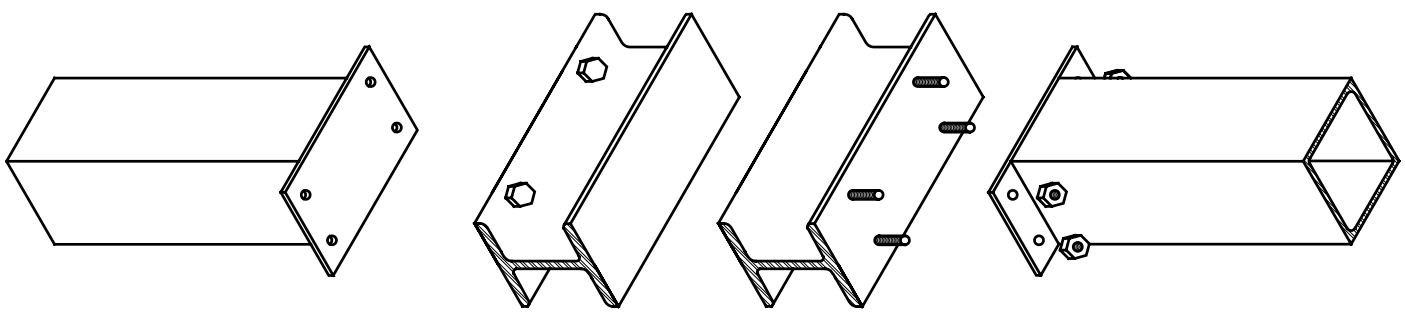
S 4.8



1 TYP. EXPLODED AXON
3"=1'

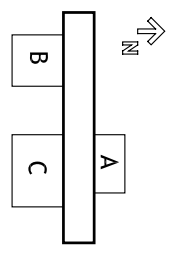


2 BEAM TIE SECTION
3"=1'

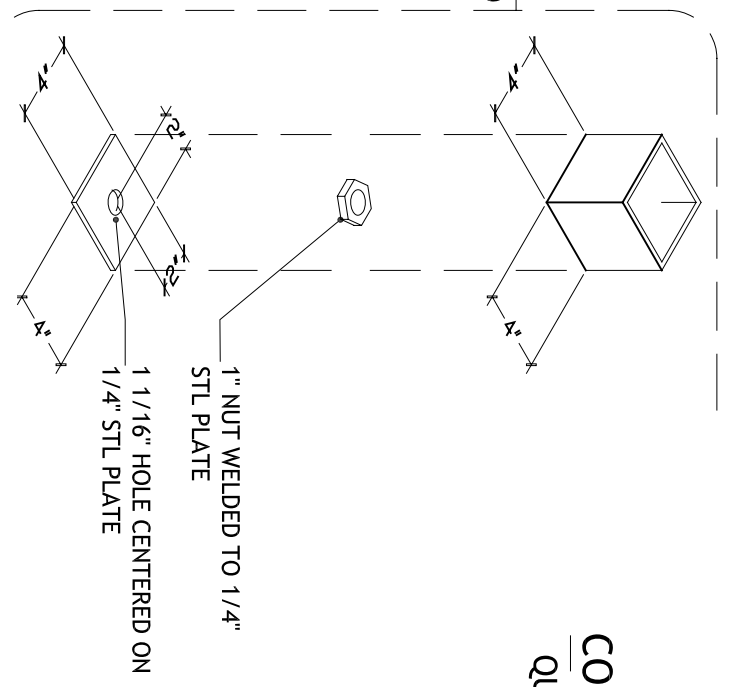


3 TYP. CORNER AXON
1"=1'



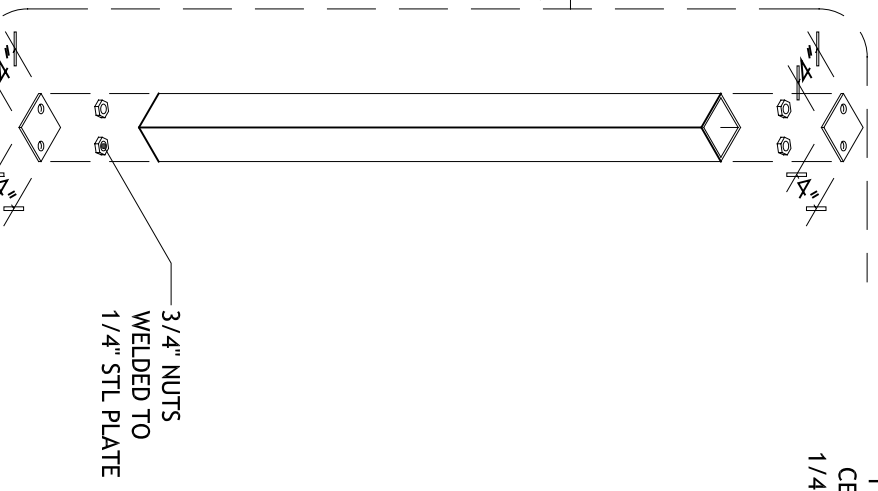


Footer
 QUANTITY: 19



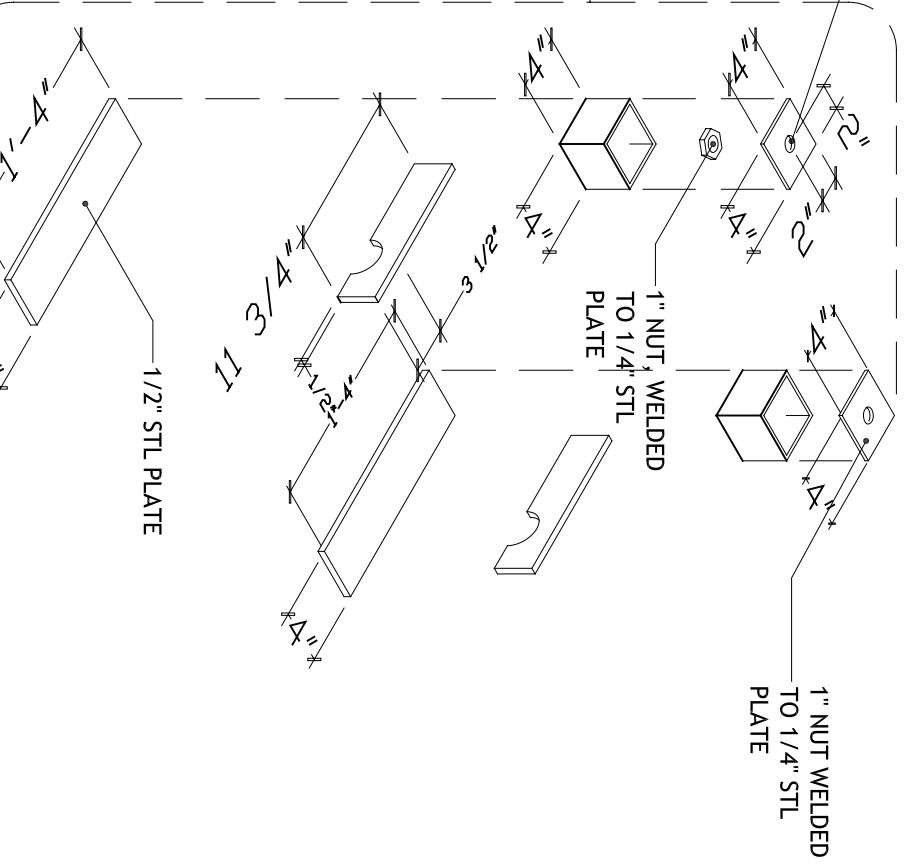
COLUMN C11
 QUANTITY: 13

5 Column C01
 1 1/2" = 1'



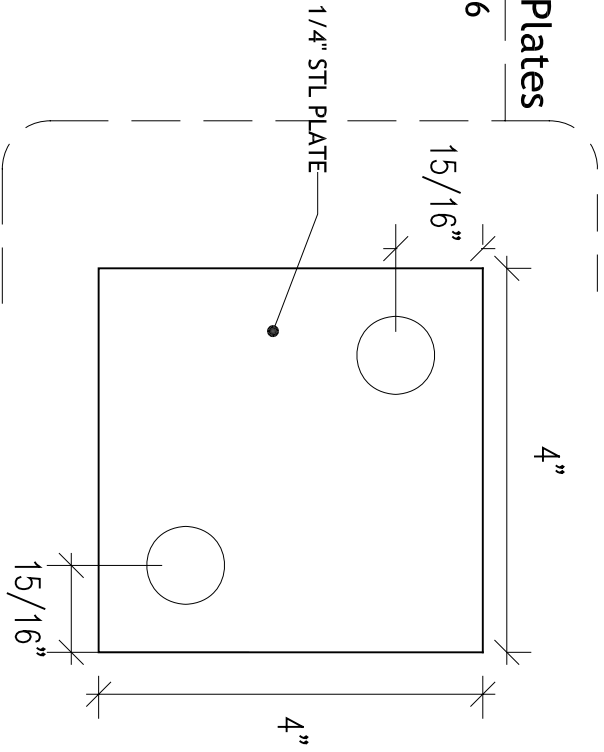
Shared Footer
 QUANTITY: 6

4 Column C11
 3/4" = 1'



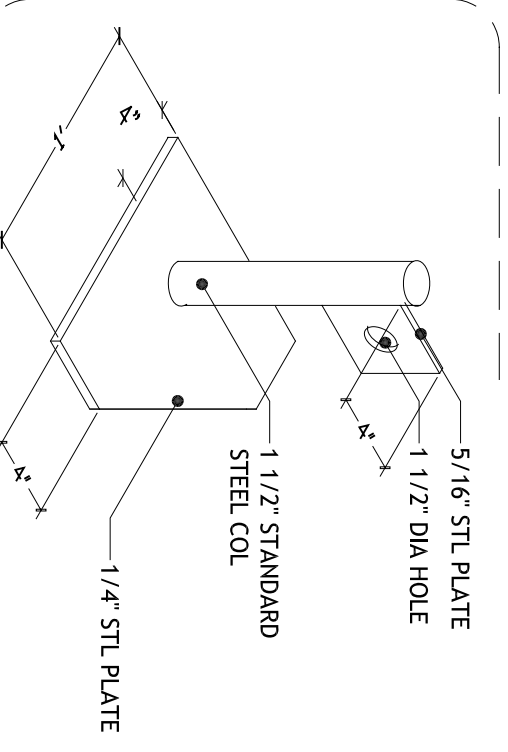
3 LEDGE COLUMNS
 1" = 1'

Connecting Plates
 QUANTITY: 76



1 DETAIL - COLUMN CAP
 6" = 1'-0"

Lifting Assembly
 QUANTITY: 16



2 Steel Framing Plan - 1'-4"
 1 1/2" = 1'

LIGHT GAUGE STEEL FRAME COMPONENT SCHEDULE

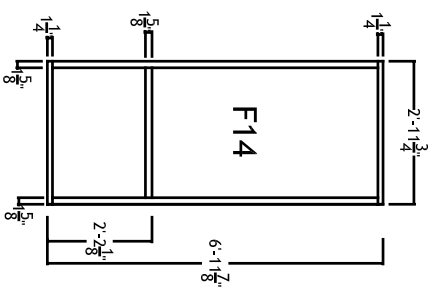
SSMA REF.	PRODUCT NAME	DEPTH	FLANGE	RETURN	THICKNESS	APPROX. LINEAL FEET
1-T100-33	TSA	4"	1-1/4"	-	20 ga.	552
C-STUD	400S162-33 CSJ	4"	1-5/8"	1/2"	20 ga.	1140

LIGHT GAUGE STEEL JOIST SCHEDULE

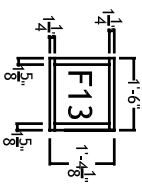
SSMA REF.	PRODUCT	DEPTH	FLANGE	RETURN	THICKNESS	LENGTH	QTY.
TYPE F1	CSJ Joist	8"	1-5/8"	5/8"	18 ga.	5'-11-1/2"	9
TYPE F2	CSJ Joist	8"	1-5/8"	5/8"	18 ga.	10'-5-1/2"	19
TYPE C1	600S162-33 CSJ Joist	6"	1-5/8"	1/2"	20 ga.	10'-5-1/2"	19
TYPE C2	600S162-33 CSJ Joist	6"	1-5/8"	1/2"	20 ga.	5'-11-1/2"	39
	Bridle Joist Hangar	6"					134
	Bridle Joist Hangar	8"					60

LIGHT GAUGE STEEL FRAME SCHEDULE

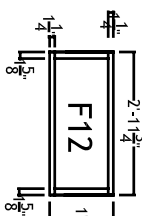
LIGHT GAUGE STEEL FRAME SCHEDULE	QTY.
F 1	19
F 2	5
F 3	9
F 4	8
F 5	17
F 6	12
F 7	6
F 8	3
F 9	1
F 10	11
F 11	1
F 12	3
F 13	1
F 14	2



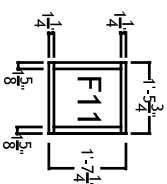
14 CORE: FRM TYPE 14
1/4"=1'



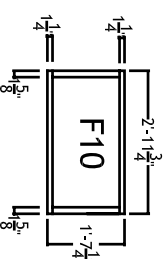
13 CORE: FRM TYPE 13
1/4"=1'



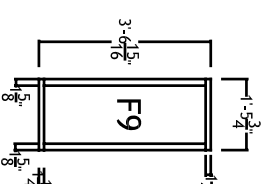
12 CORE: FRM TYPE 12
1/4"=1'



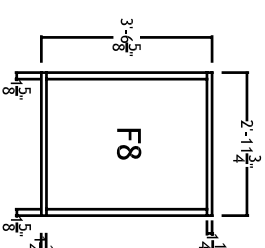
11 CORE: FRM TYPE 11
1/4"=1'



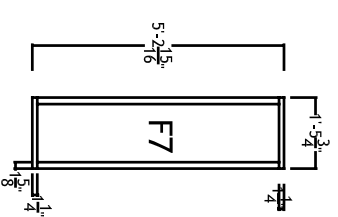
10 CORE: FRM TYPE 10
1/4"=1'



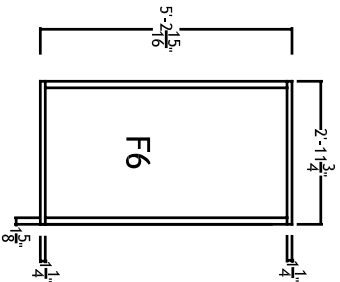
9 CORE: FRM TYPE 9
1/4"=1'



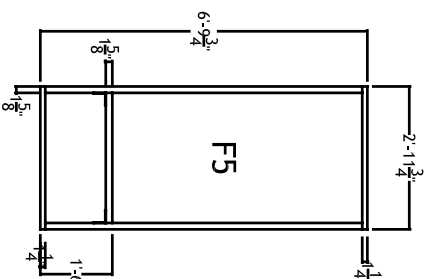
8 CORE: FRM TYPE 8
1/4"=1'



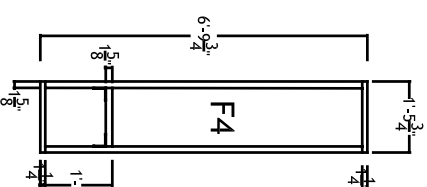
7 CORE: FRM TYPE 7
1/4"=1'



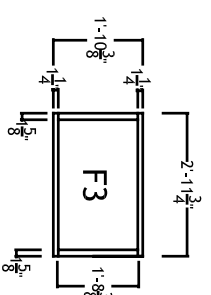
6 CORE: FRM TYPE 6
1/4"=1'



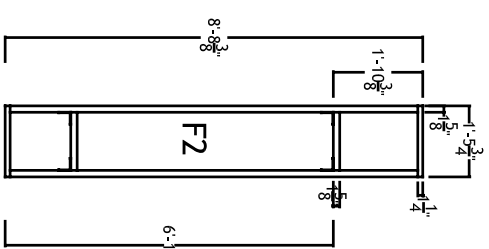
5 CORE: FRM TYPE 5
1/4"=1'



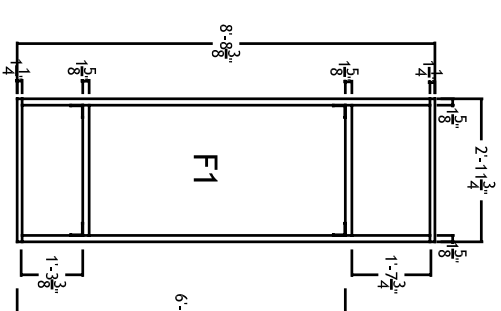
4 CORE: FRM TYPE 4
1/4"=1'



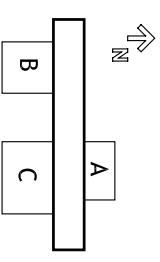
3 POD: FRM TYPE 3
1/4"=1'



2 POD: FRM TYPE 2
1/4"=1'



1 POD: FRM TYPE 1
1/4"=1'



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DRAWN BY: DAVID WALDRON
DATE: 08/07/2007
TITLE: LIGHT GAUGE STEEL SCHEDULES

S4.10



CARNEGIE MELLON

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School of Drama
School of Art
Tepper School of Business
Carnegie Institute of Technology

UNIVERSITY OF PITTSBURGH

School of Engineering

ART INSTITUTE OF PITTSBURGH

CARNEGIE MELLON

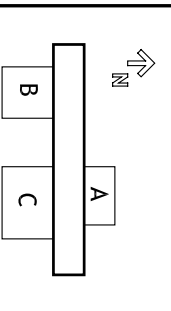
School of Architecture
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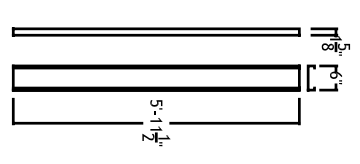
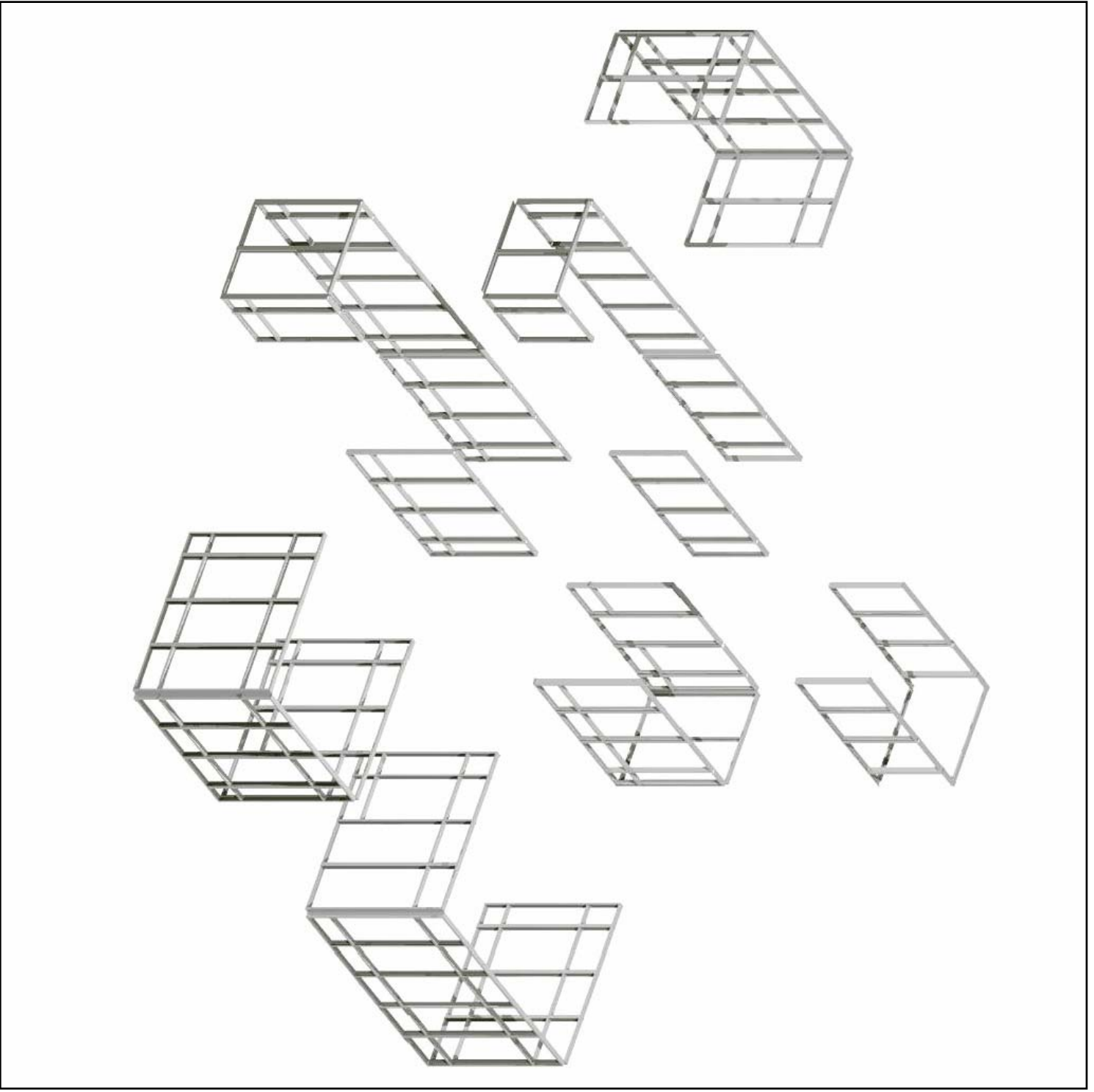
ART INSTITUTE OF PITTSBURGH

CONTACT:
 Steve Lee
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 f:412.268.7819

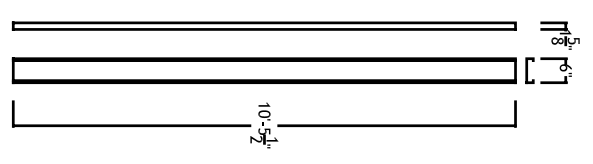


DRAWN BY: DAVID WALDRON
DATE: 08/07/2007
TITLE: JOISTS

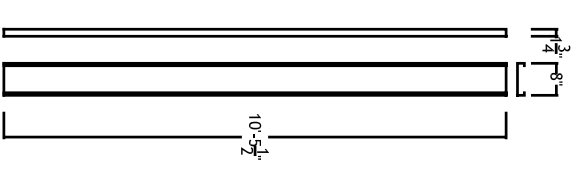
S4.11



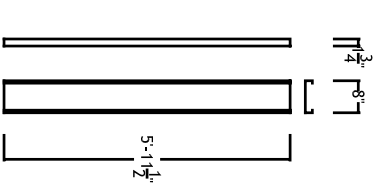
4 C2 CLG JOIST: CORE & POD A
 1/4"=1'



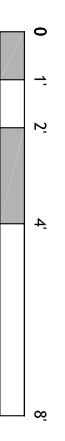
3 C1 CLG JOIST: POD B & C
 1/4"=1'



2 F2 FLR JOIST: POD B & C
 1/4"=1'



1 F1 FLR JOIST: POD A
 1/4"=1'

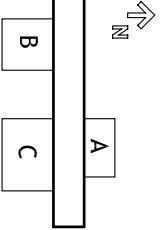


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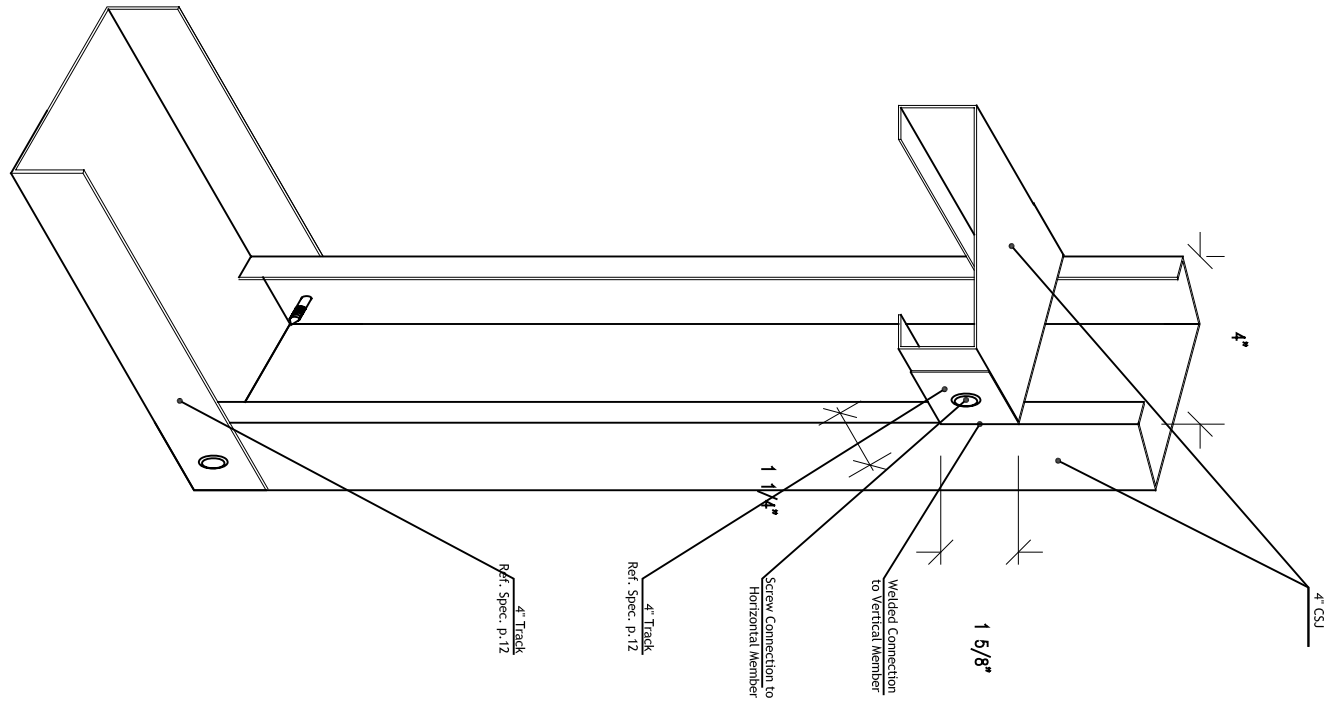
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DRAWN BY: DAVID WALDRON
DATE: 08/07/2007
TITLE: DETAIL - HORIZONTAL MEMBERS

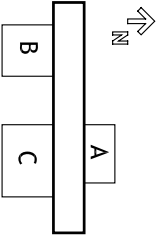
S4.12



1 DETAIL: FRAME CORNER & CROSS PIECE (TYP.)
 3" = 1'-0"



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DRAWN BY: JOHN ESTRIDGE

DATE: 08/07/2007

TITLE: VERSAWALL SCHEDULE

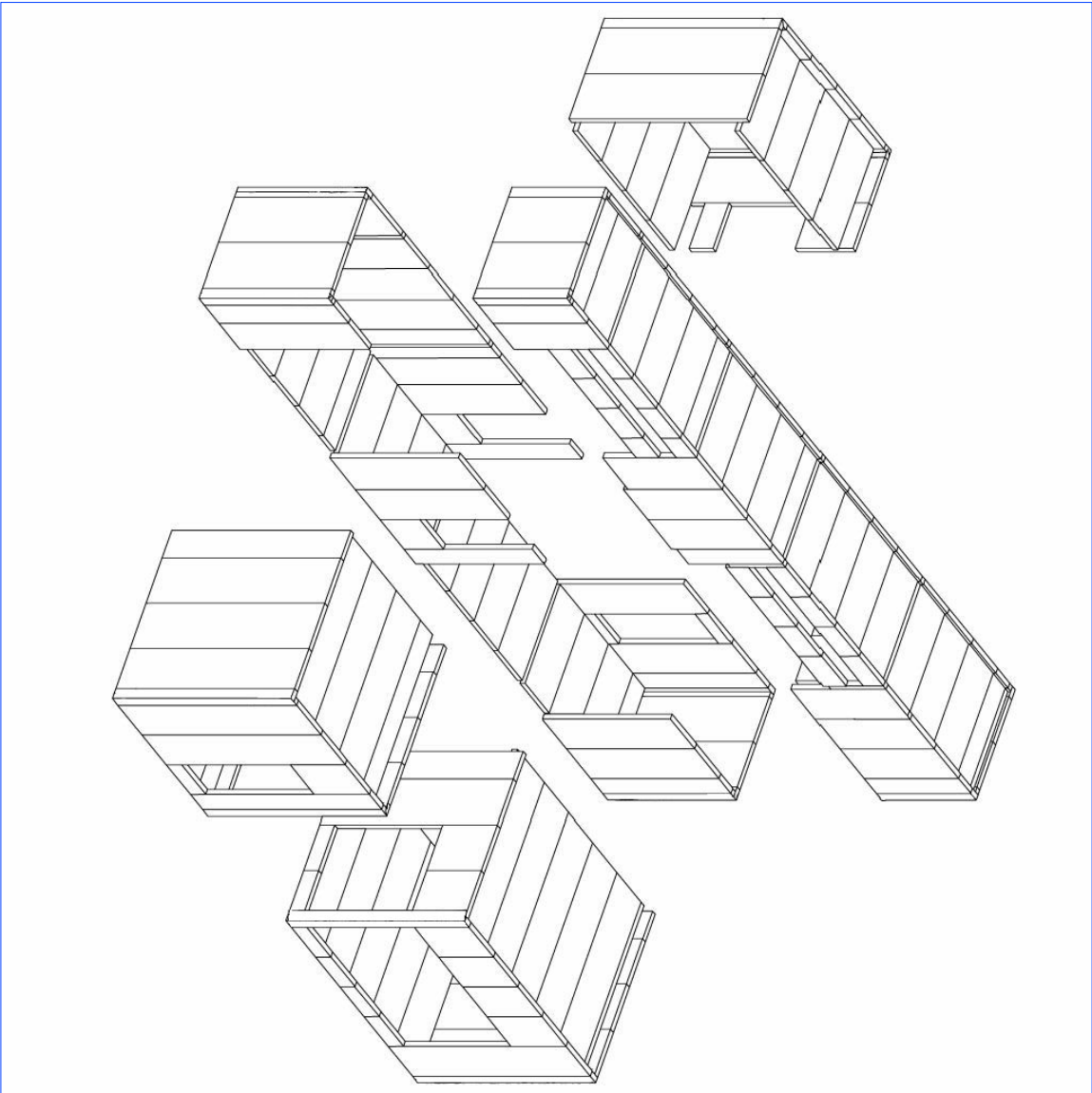
S 4.13

Versawall Schedule cont'd

panel des.	width	length	total quantity
rp1	36"	23'4"	1
rp2	22"	23'4"	2
rp3	36"	11'-2"	3
rp4	36"	15'-8"	3
rp5	8"	12'-8"	1
rp6	26"	11'-2"	1
rp7	26"	15'-8"	1
rp8	36"	26'-8"	1
rp9	22"	26'-8"	2
rp10	36"	12'-8"	2
mp1	12"	6'-6 1/2"	2
mp2	12"	8'-6"	2
mp3	32"	19 1/2"	2
mp4	32"	8"	2
mp5	32"	18"	2
sp1	6'-8"	4"	2
sp2	5'-2"	4"	1
sp3	10'-6"	4"	1
sp4	8'-2"	4"	1
sp5	26'-10"	4"	1

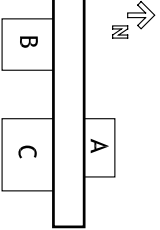
Versawall Schedule

panel des.	width	length	total quantity
p1	36"	8'-8"	16
p2	36"	6'-6.25"	20
p3	18"	8'-8"	7
p4	18"	6'-6.25"	7
p5	4"	8'-8"	6
p6	4"	6'-6.25"	6
p7	4"	4'-3.25"	6
p8	36"	1'-6.25"	4
p9	36"	4"	4
p10	36"	1'-5.125"	12
p11	18"	1'-5.125"	1
p12	36"	1'-4.125"	12
p13	18"	1'-4.125"	1
p14	8"	8'-8"	4
p15	8"	6'-6.25"	4
pp1	36"	11'-6.75"	18
pp2	18"	11'-6.75"	5
pp3	36"	1'-6.25"	9
pp4	36"	3'-1.75"	10
pp5	8"	11'-6.75"	6
pp7	36"	3'-0.25"	1
fp1	36"	23'-4"	1
fp2	22"	23'-4"	2
fp3	36"	11'-2"	3
fp4	36"	15'-8"	3
fp5	8"	12'-8"	1
fp6	26"	11'-2"	1
fp7	26"	15'-8"	1
fp8	36"	26'-8"	1
fp9	22"	26'-8"	2
fp10	36"	12'-8"	2



1 EXPLODED PANEL AXON
 NOT TO SCALE

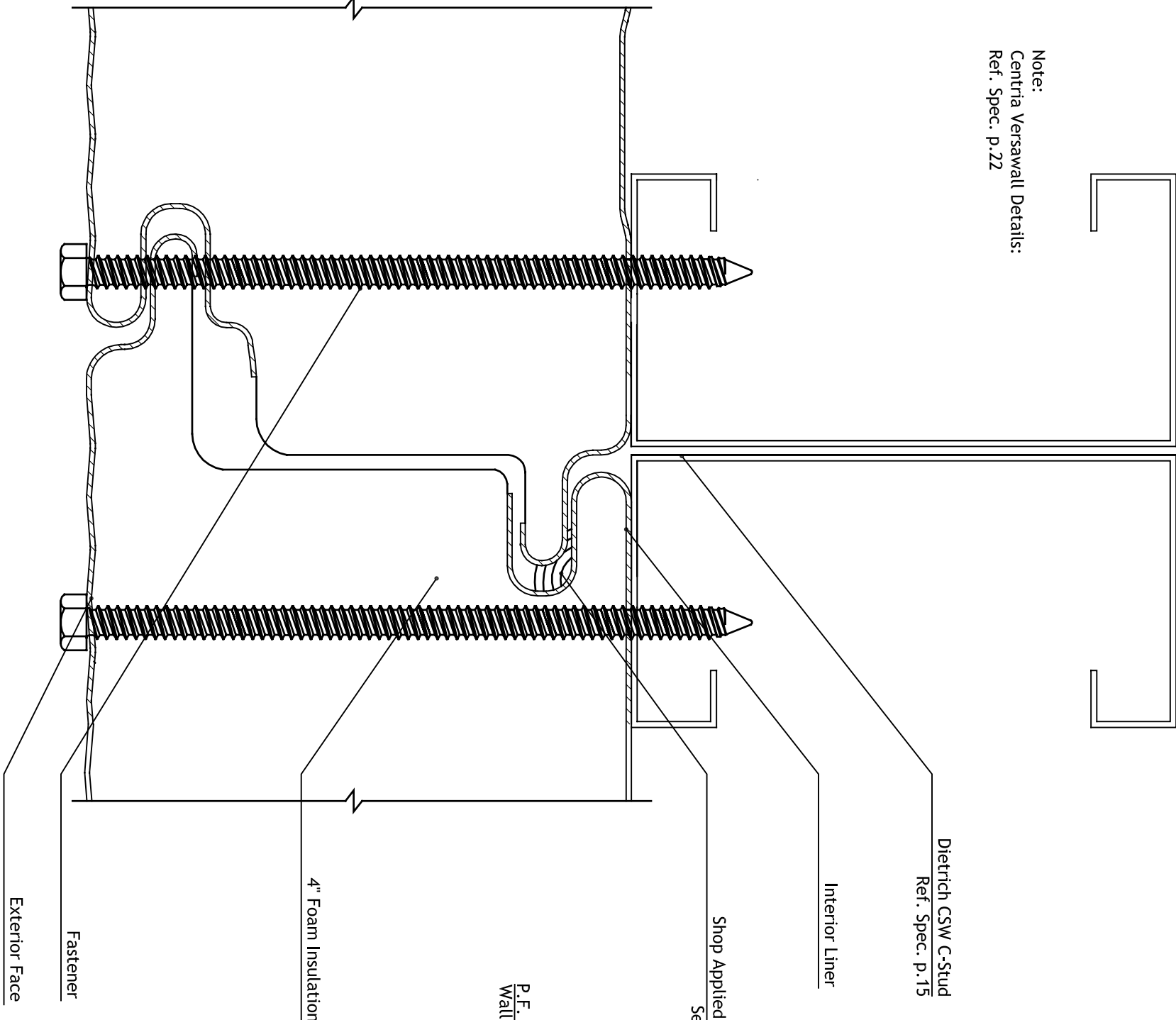
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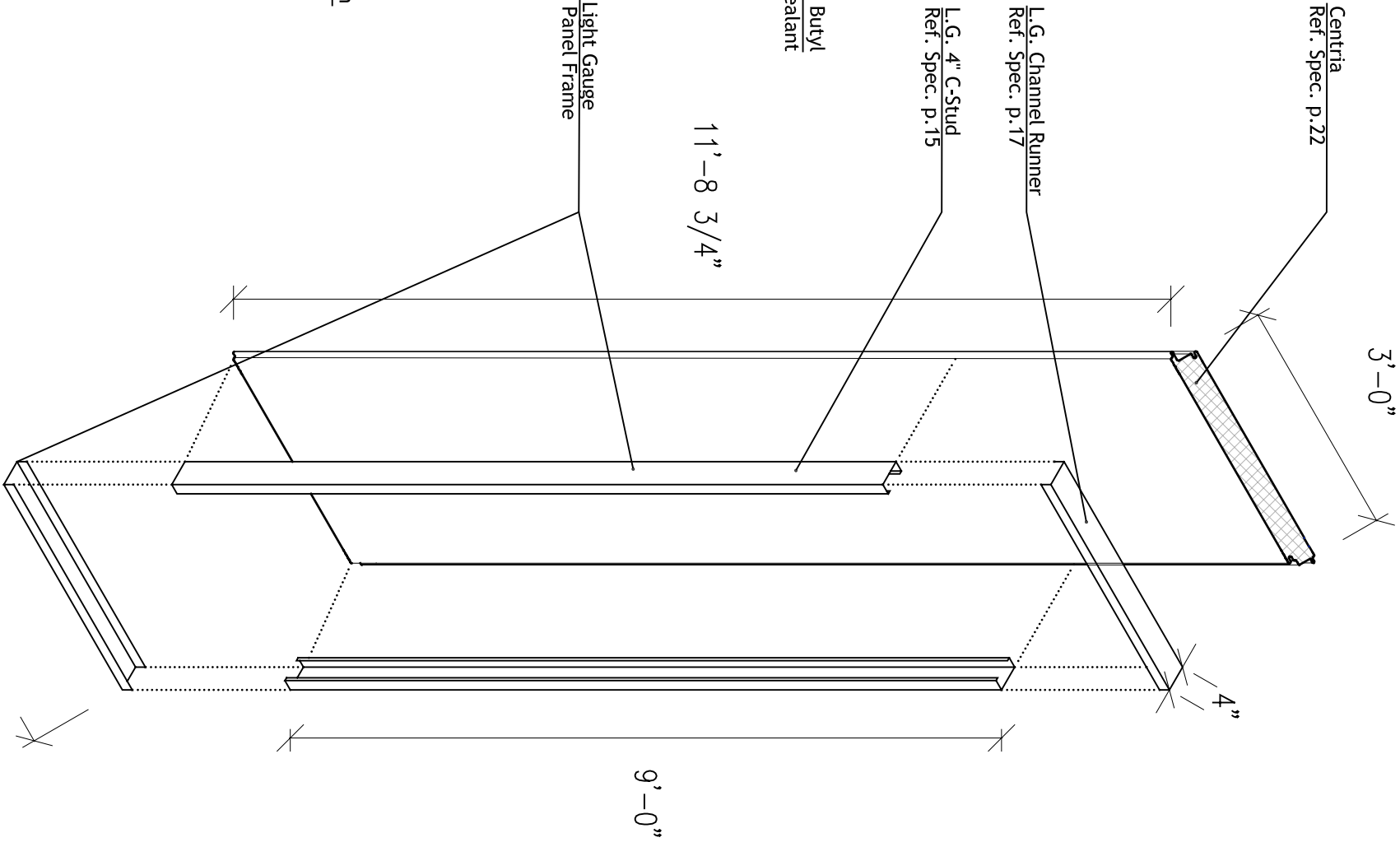
DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: PANEL FRAMING

S4.14

Note:
Centria Versawall Details:
Ref. Spec. p.22



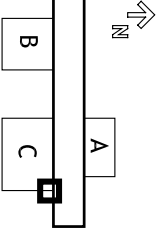
2 TYP. VERSAWALL JOINT
1/2"=1'



1 TYP. WALL PANEL - EXPL. AXON.
1/2"=1'

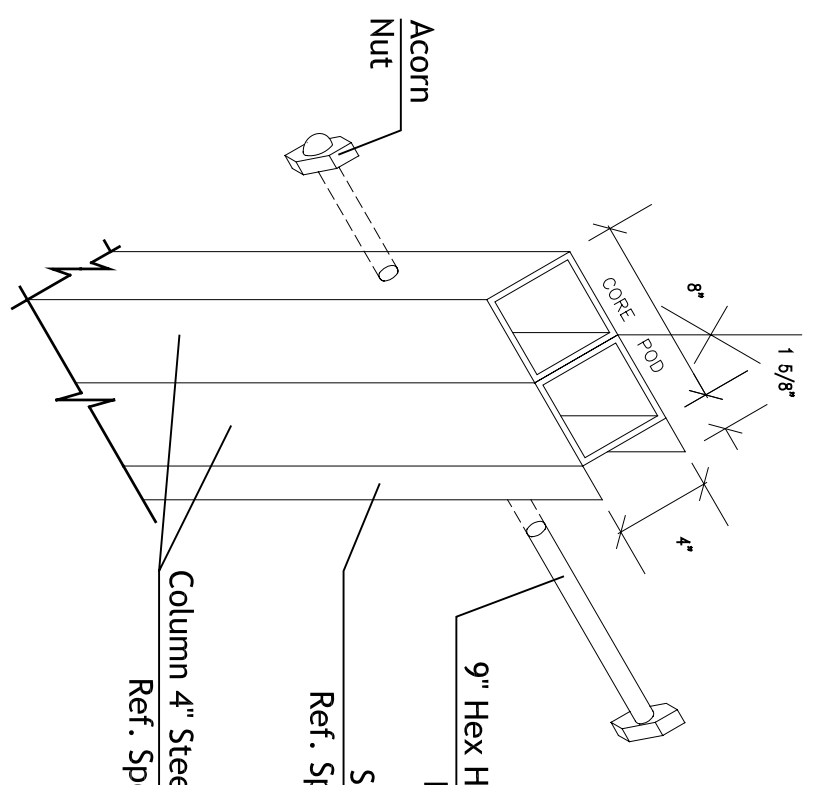


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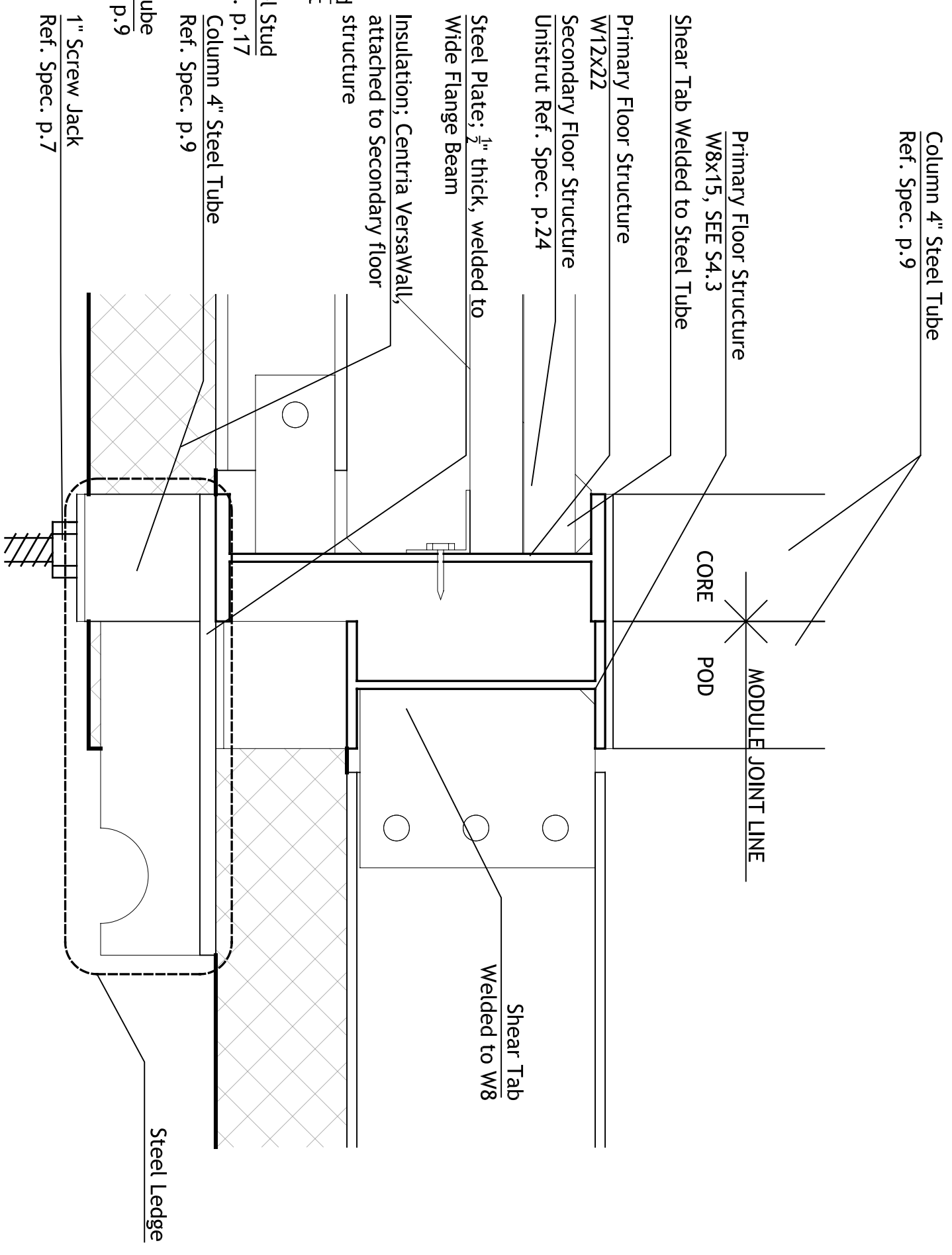


DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: POD-CORE CONNECT.

S4.15



2 CORE TO POD COLUMN CONNECTION
 1 1/2" = 1'

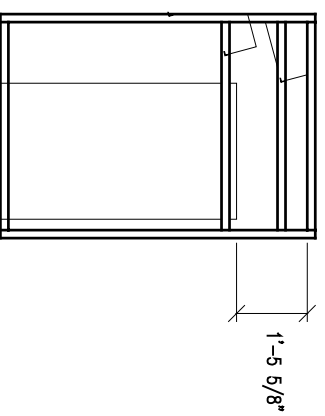
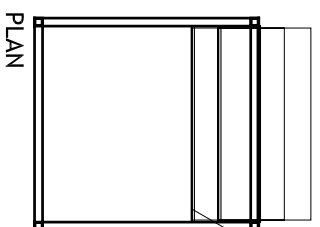


1 CORE TO POD FLOOR CONNECTION
 3" = 1'

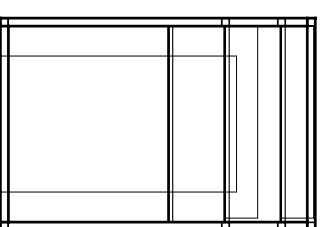


Note:
The structure allows for over a foot of clearance above the lid of the water tanks in order for access to fill or empty the tanks.

Tube Steel
Ref. Spec. p.140
Steel Angle
Ref. Spec. p.140

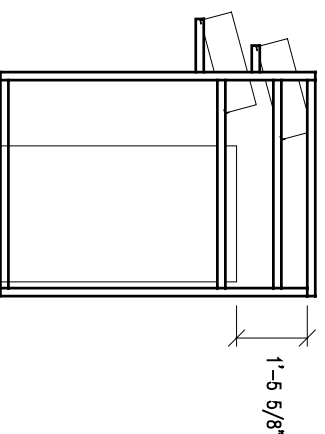


NS ELEVATION

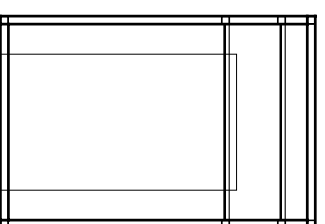


EW ELEVATION

7 SEGMENT A
1/4"=1'

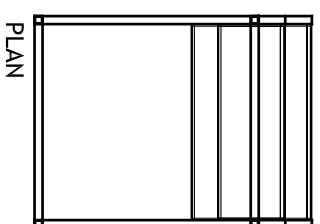


NS ELEVATION



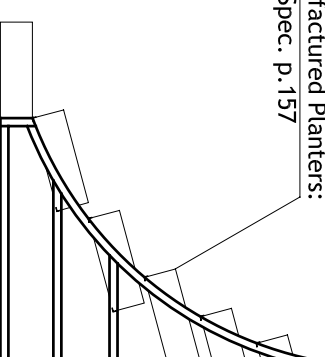
EW ELEVATION

6 SEGMENT B
1/4"=1'

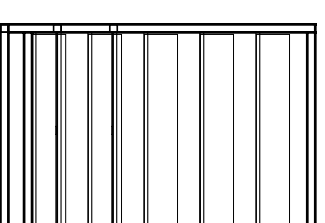


PLAN

Manufactured Planters:
Ref. Spec. p.157

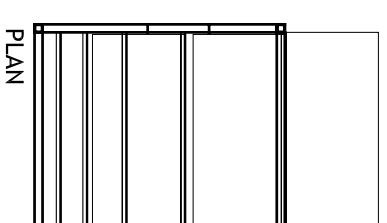


NS ELEVATION



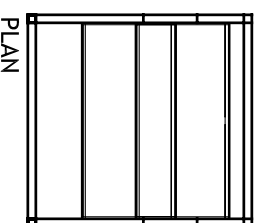
EW ELEVATION

5 SEGMENT C
1/4"=1'

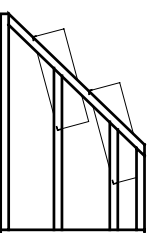


PLAN

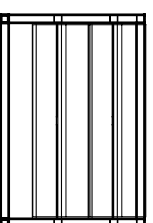
1' Deep Bog
Used for rainwater collection



PLAN

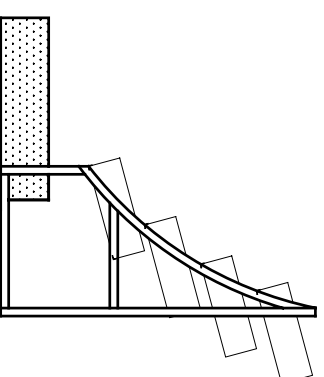


NS ELEVATION

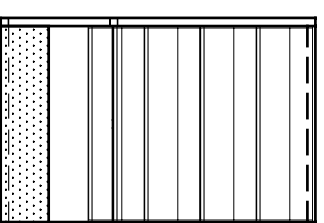


EW ELEVATION

4 SEGMENT D
1/4"=1'

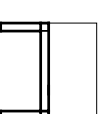


NS ELEVATION

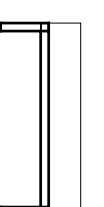


EW ELEVATION

3 SEGMENT E
1/4"=1'

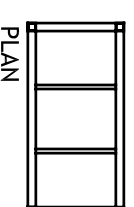


NS ELEVATION

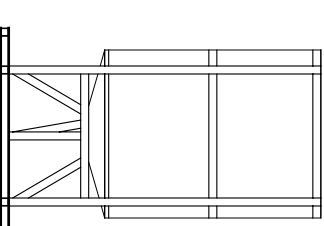


EW ELEVATION

2 SEGMENT F
1/4"=1'

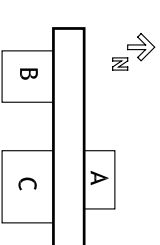


PLAN



ELEVATION

1 SEGMENT G
1/4"=1'



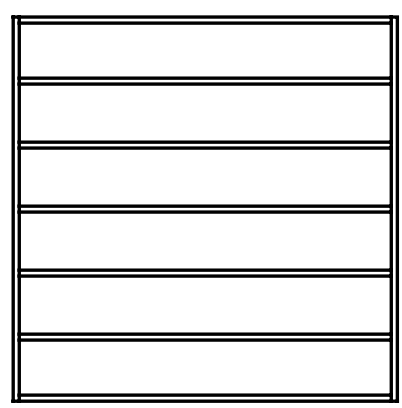
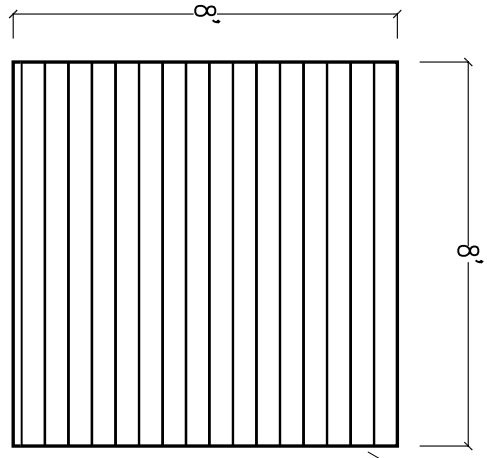
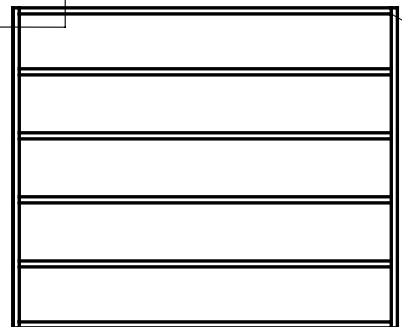
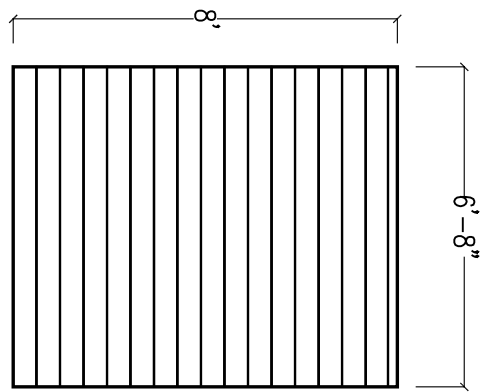
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DRAWN BY: MEREDITH MAGN
DATE: 08/07/2007
TITLE: GREENSCAPE STRUCTURE

S4.16

Deck Structure:
Cypress 2x6
Ref. Spec. p. 144

Decking:
Cypress 1x6
Ref. Spec. p. 144



1
S 4.17

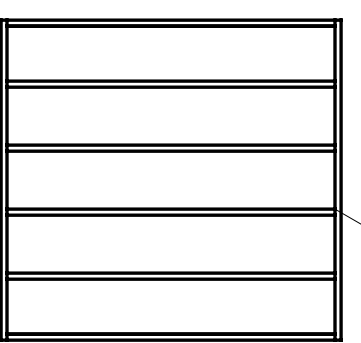
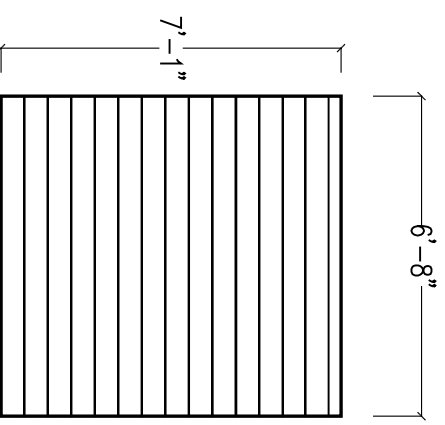
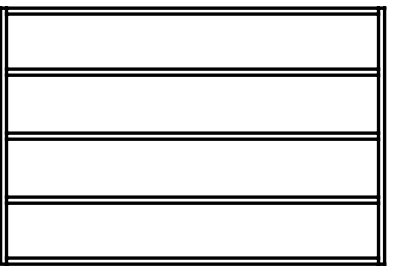
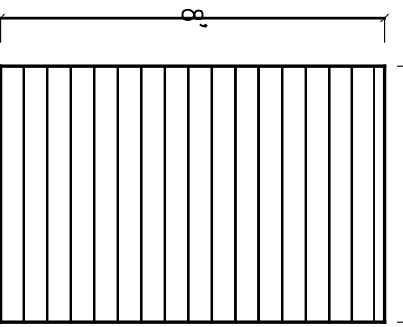
4 DECK SCHEDULE A Qty: 3
1/4"=1'

Quantity: 3

3 DECK SCHEDULE B Qty: 2
1/4"=1'

Quantity: 2

5'-4"

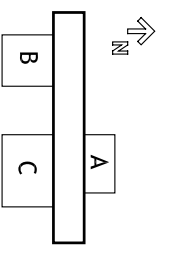


Spacing 18" o.c.

Quantity: 1

2 DECK SCHEDULE C Qty: 1
1/4"=1'

1 DECK SCHEDULE D - Qty: 1
1/4"=1'

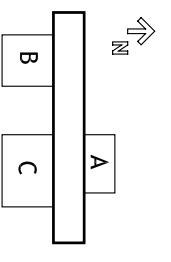


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DRAWN BY: MEREDITH MAGNIN
DATE: 08/07/2007
TITLE: DECK SCHEDULE

S 4.17

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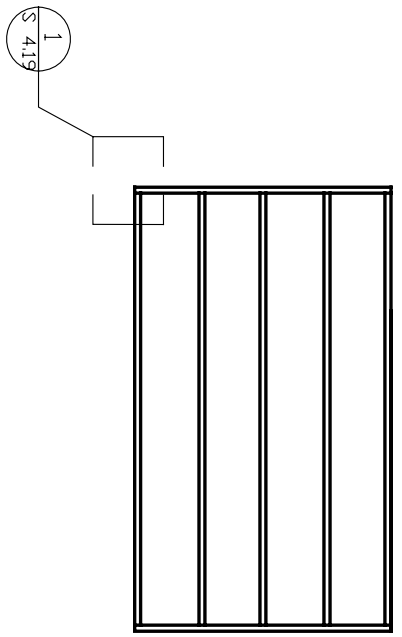
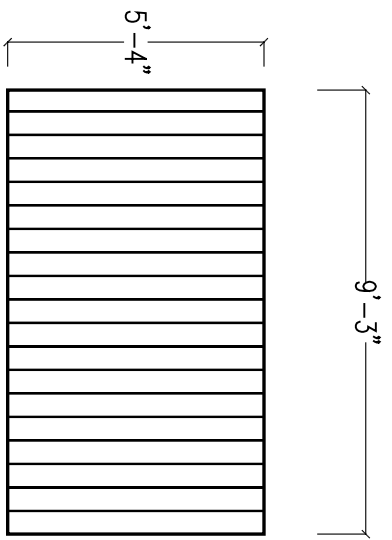


DRAWN BY: MEREDITH MAGNIN

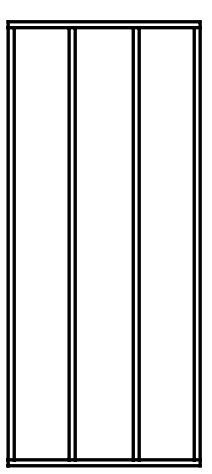
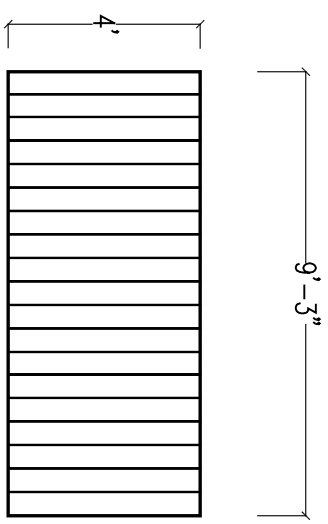
DATE: 08/07/2007

TITLE: DECK SCHEDULE

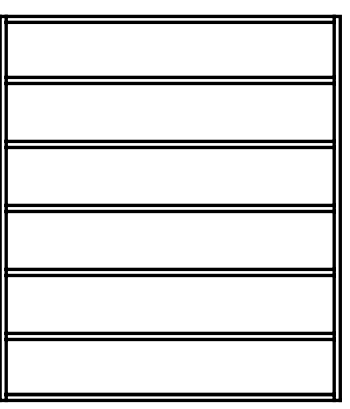
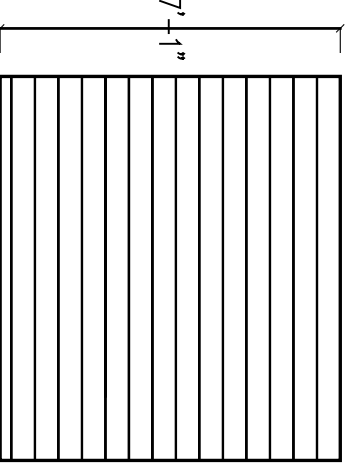
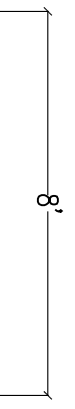
S 4.18



4 DECK SCHEDULE E Qty: 1
 1/4"=1'

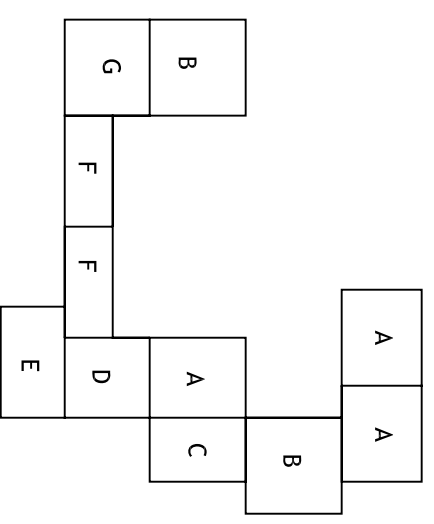


3 DECK SCHEDULE F Qty: 2
 1/4"=1'



2 DECK SCHEDULE G Qty: 2
 1/4"=1'

1 DECK PLAN
 1/16"=1'



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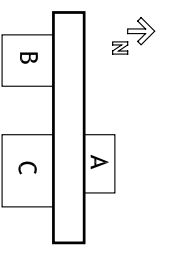
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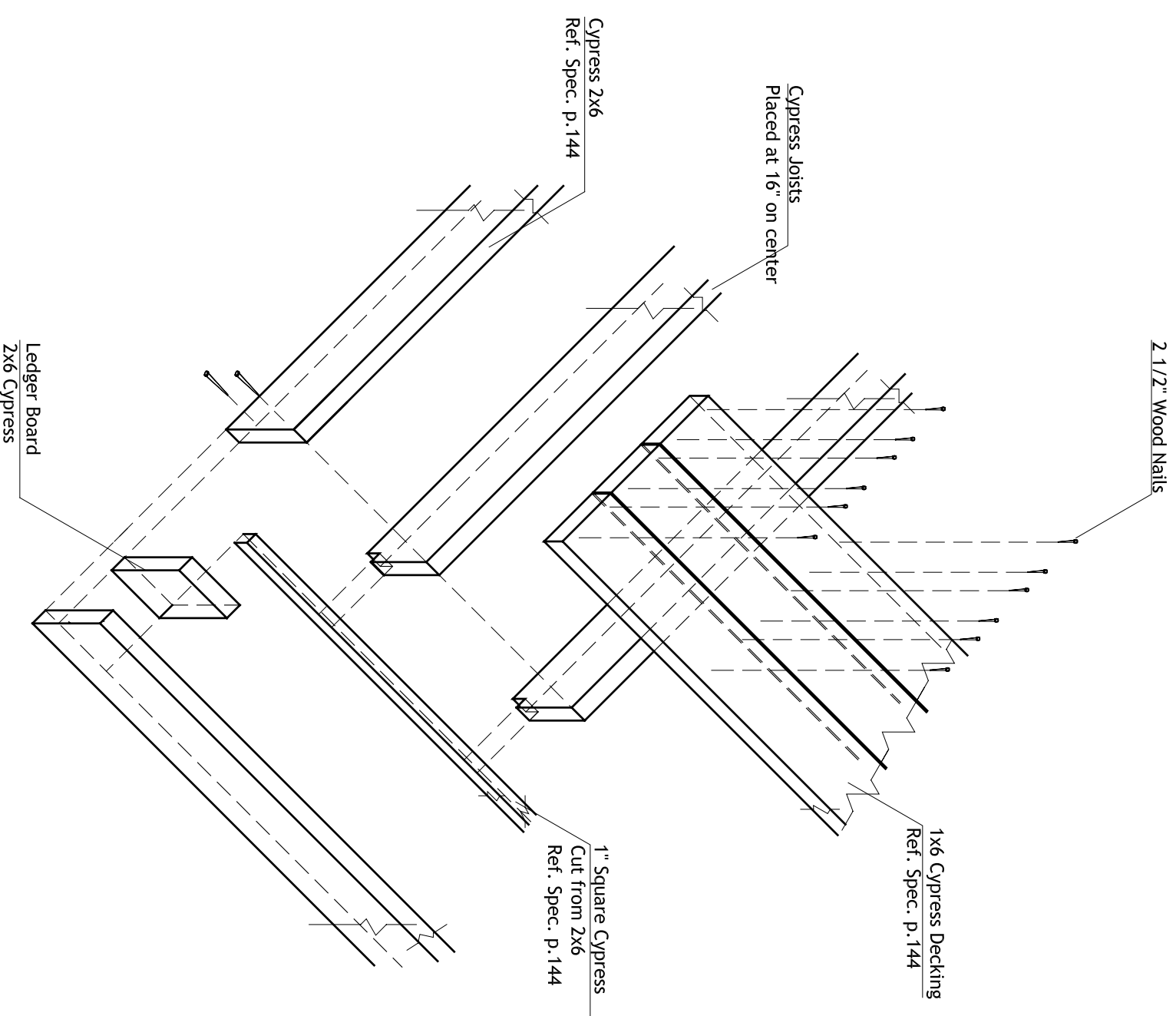
DRAWN BY: MEREDITH MAGNIN

DATE: 08/07/2007

TITLE: DECK CONSTRUCTION DETAIL

S4.19

The inner 2x6 joists have 1" notches cut out of them, these joists then sit on a 1" square piece of cypress. The joists are also toenailed into the outer cypress framing. A piece of 2x6 serves as a ledger board in order to prevent nailing into the end grain.

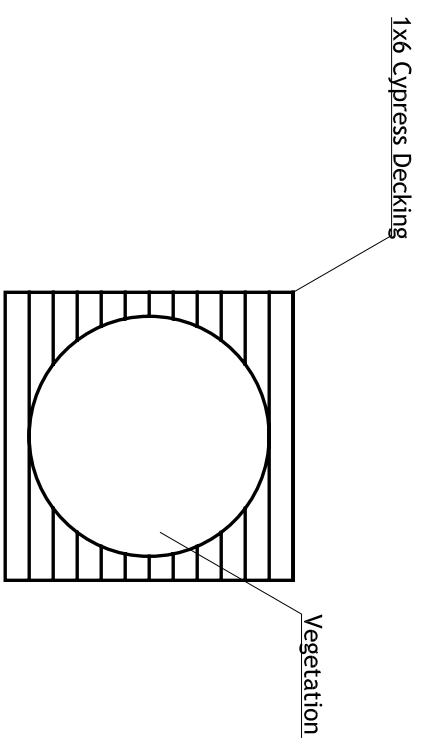


1 DECK CONSTRUCTION DETAIL
 1"=1'

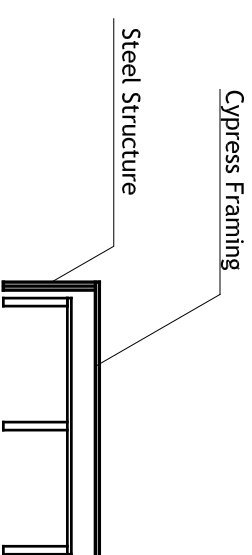


Note:

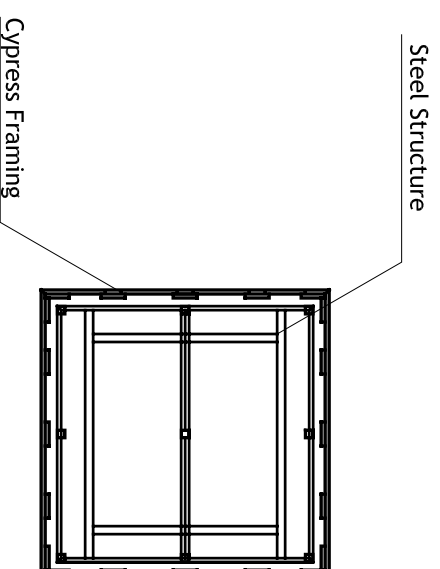
The global gardens are made up of inner steel structures which support the weight of planters, as well as outer structures of cypress which match the material of the decks. The steel structure utilized 2" square tube steel as well as 1" steel angle. The wood exterior is made of 1x6 cypress decking.



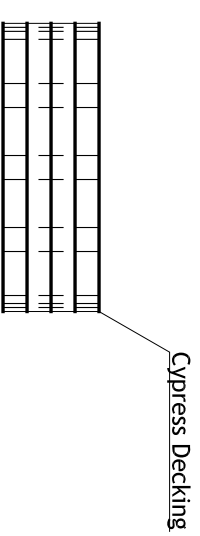
4 GLOBAL GARDEN UPPER PLAN
1/4"=1'



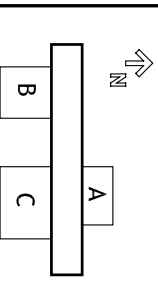
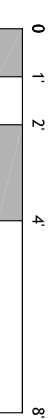
3 GLOBAL GARDEN SECTION
1/4"=1'



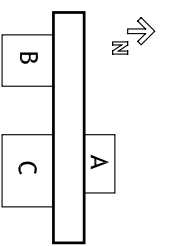
2 GLOBAL GARDEN LOWER ELEVATION
1/4"=1'



1 GLOBAL GARDEN ELEVATION
1/4"=1'

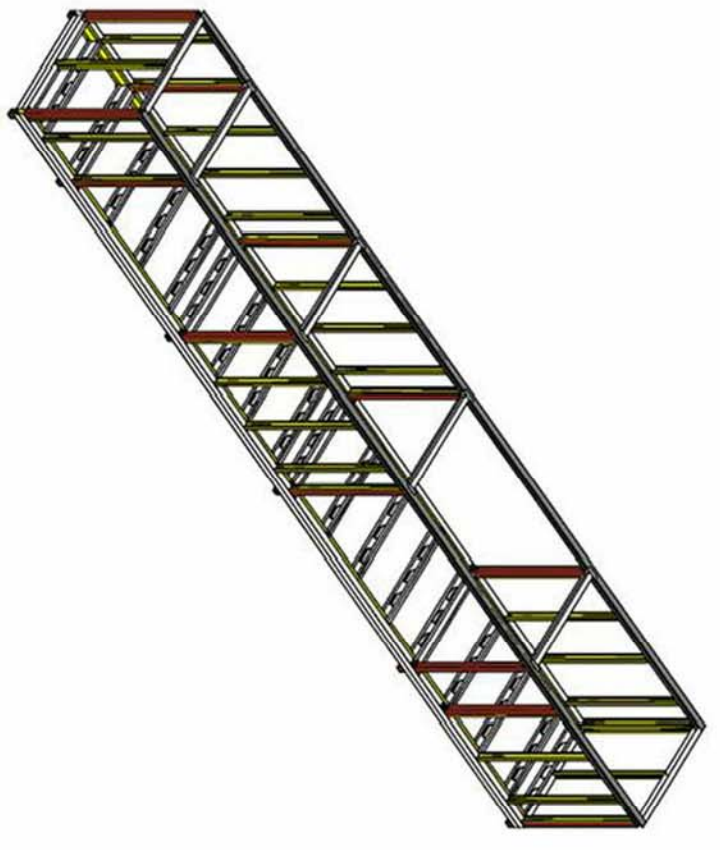


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 f:412.268.7819

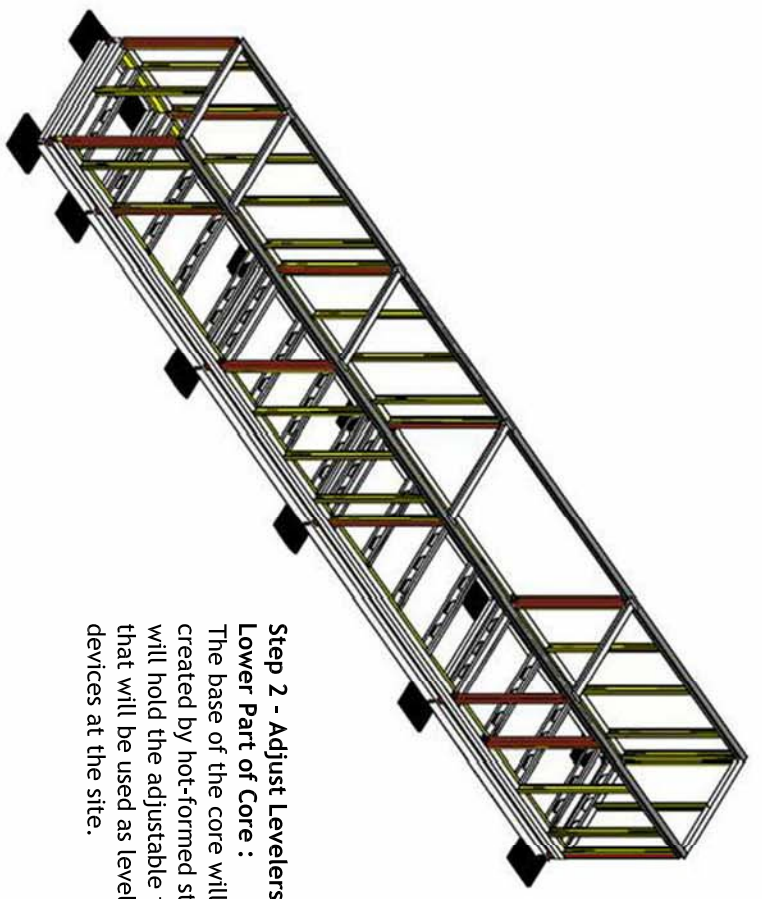


DRAWN BY: MIKO RESTREPO
DATE: 08/07/2007
TITLE: FRAMING SEQUENCE

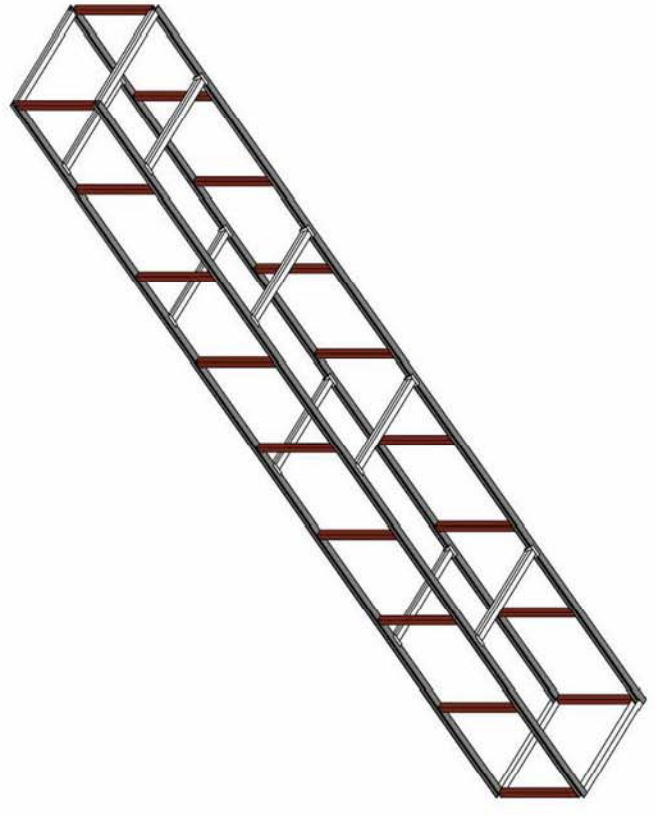
S 5.0



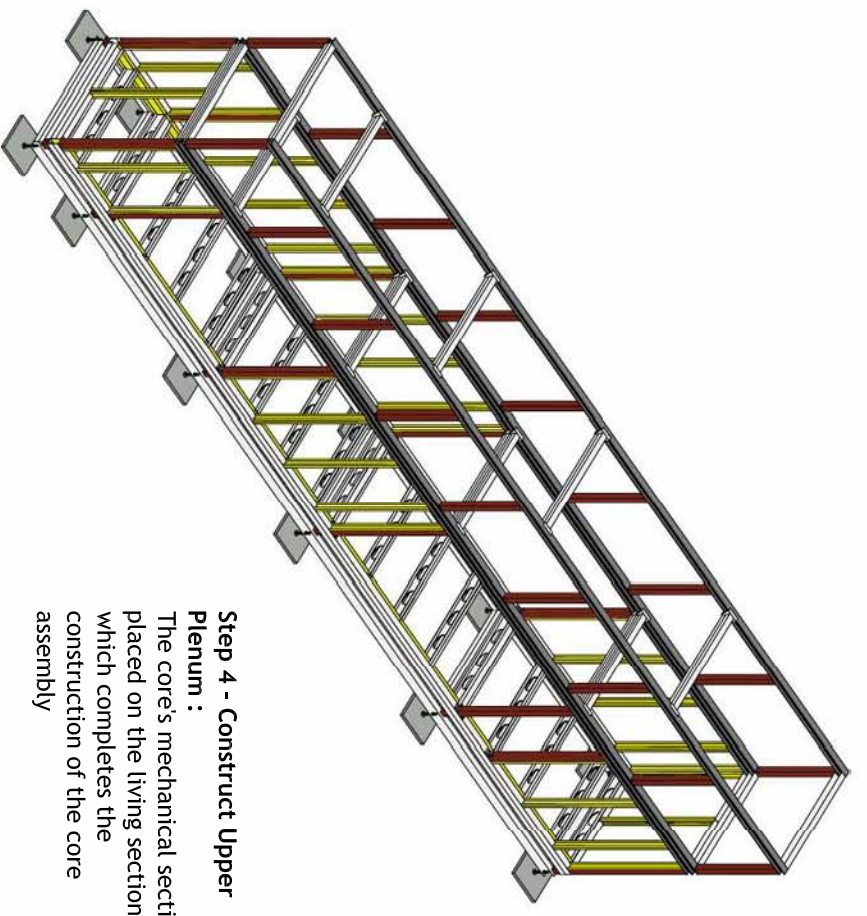
Step 1 - Construct Core Frame :
 A steel cage will form the outer frame using hot-formed MC channels. Cold-formed C channels will support the floor system and hang from joist-hangers of the outer frame.



Step 2 - Adjust Levelers on Lower Part of Core :
 The base of the core will be created by hot-formed steel and will hold the adjustable footers that will be used as leveling devices at the site.

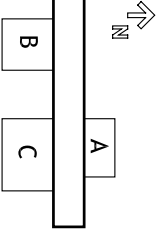


Step 3 - Construct Upper Plenum :
 The core's mechanical section above the living section will be a box truss constructed in steel tubes and hot formed MC channels



Step 4 - Construct Upper Plenum :
 The core's mechanical section is placed on the living section which completes the construction of the core assembly

CONTACT:
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 f:412.268.7819

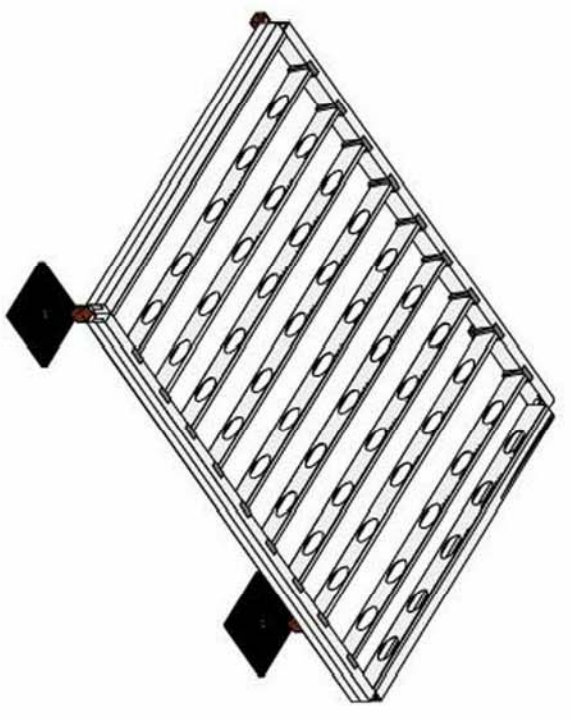


DRAWN BY: MIKO RESTREPO

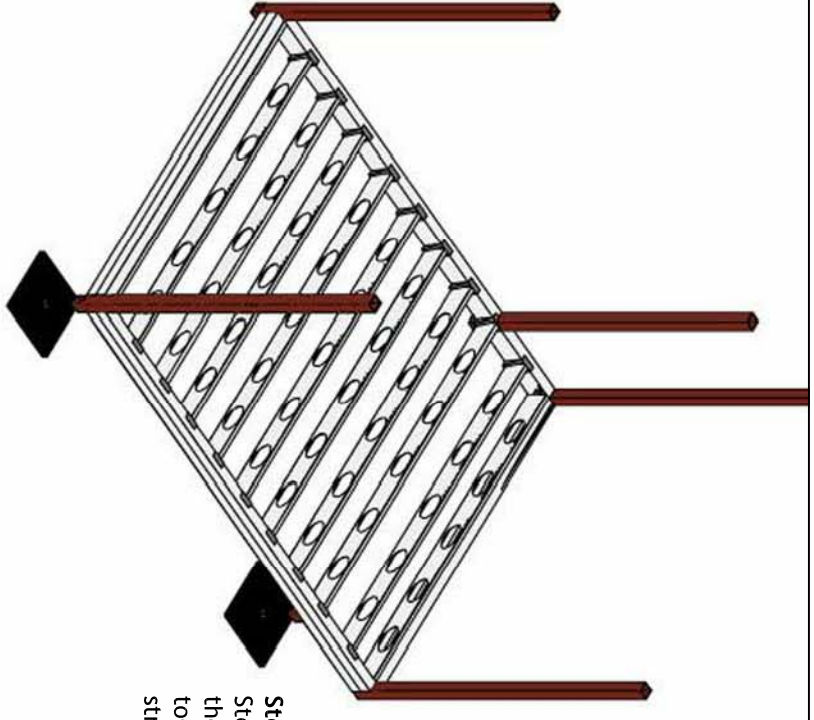
DATE: 08/07/2007

TITLE: FRAMING-SEQUENCE

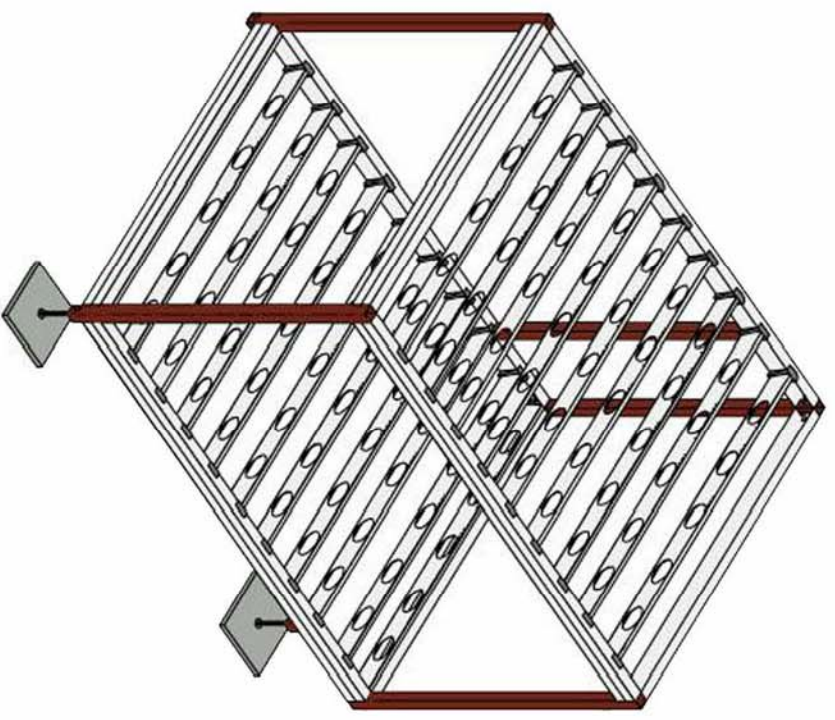
S 5.1



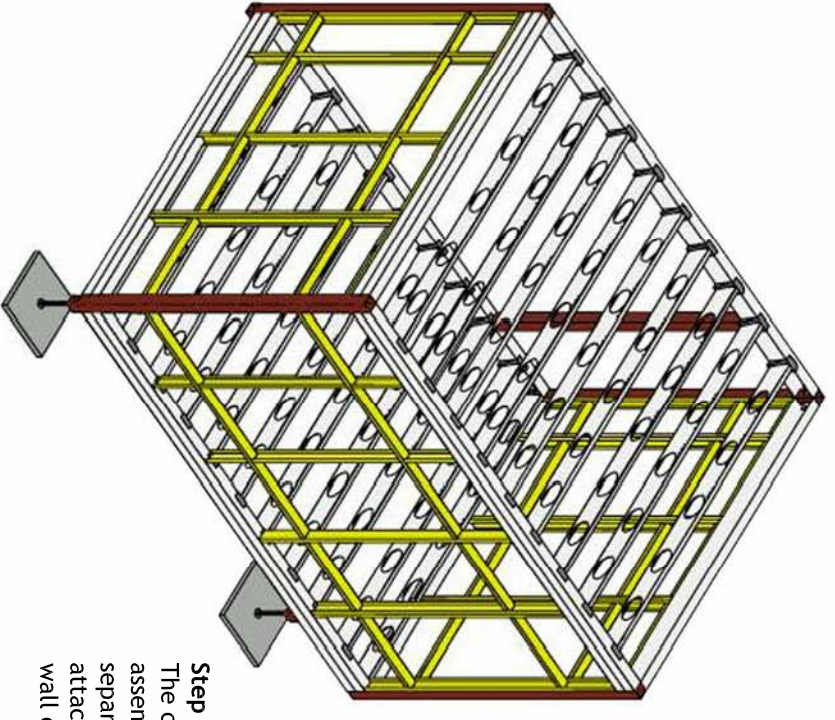
Step 5 - Construct Pod C Base :
 Framed by hot-formed MC channels, the base will have joist hangers holding the cold-formed trade-ready steel pieces.



Step 6 - Assemble Columns :
 Steel tube columns will support the roof structure and bring together the frame of the floor structure.

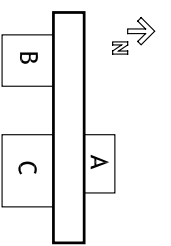


Step 7 - Assemble Roof
Structure :
 Like the base, the roof structure is framed by hot-formed MC channels that will have joist hangers holding the cold-formed trade-ready steel pieces.



Step 8 - Assemble Wall Sections:
 The cold formed C channels are assembled back to back to form separate frames that can be attached or detached to create wall openings.

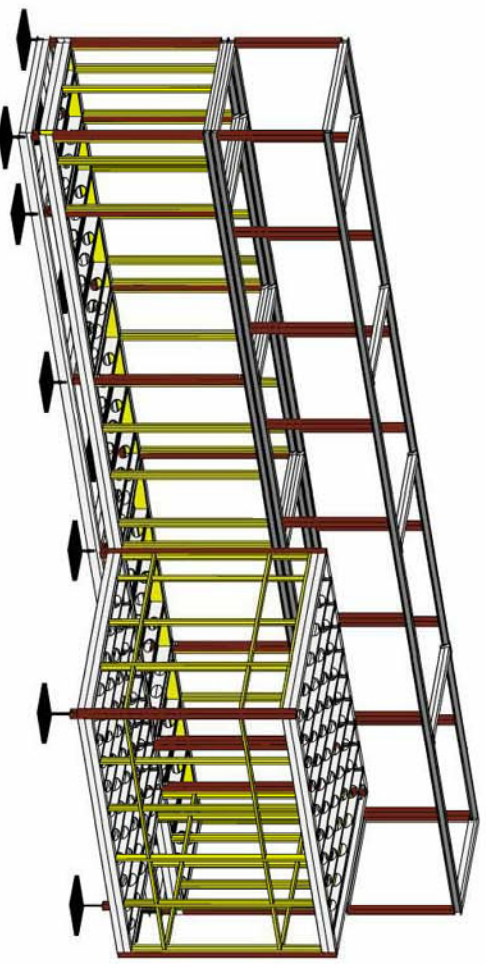
CONTACT:
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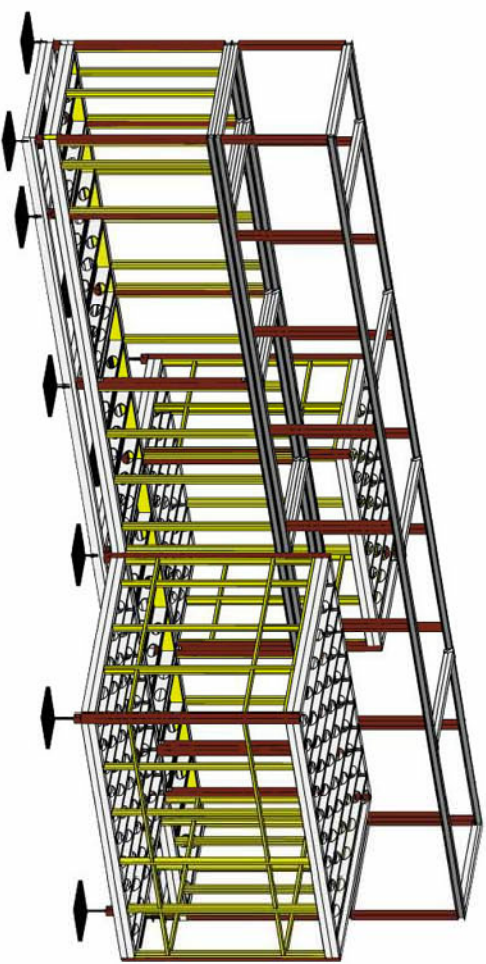
DRAWN BY: MIKO RESTREPO
DATE: 08/07/2007

TITLE: FRAMING SEQUENCE

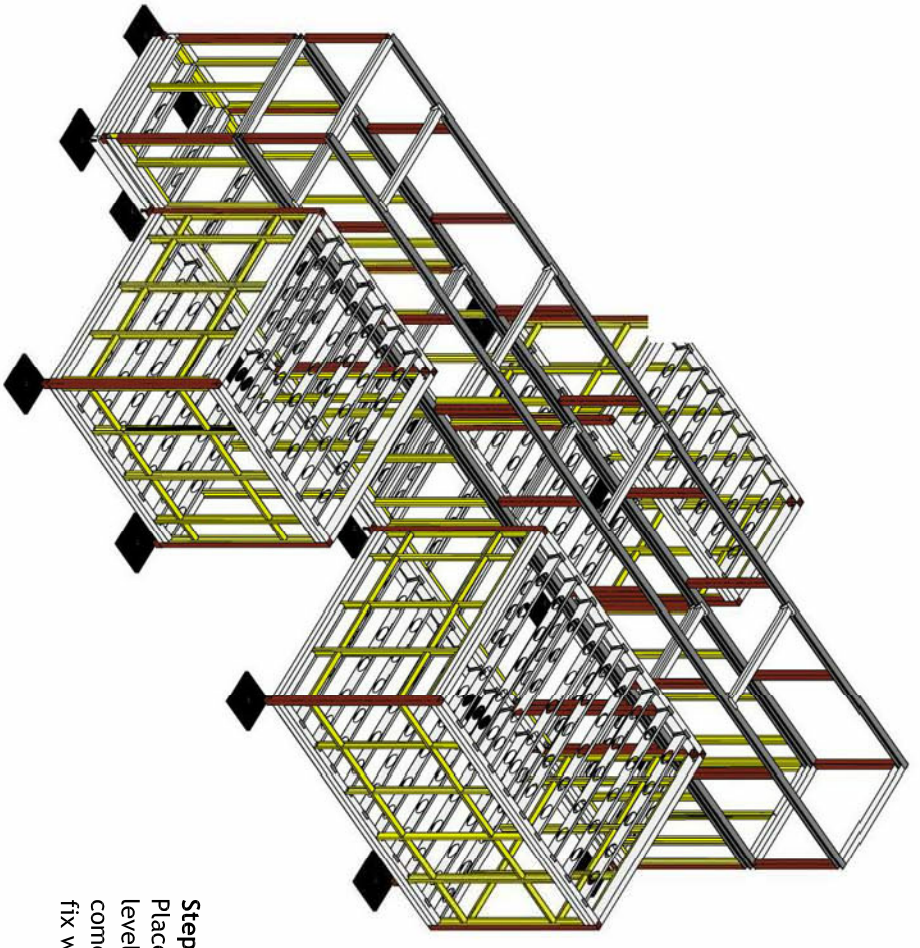
S 5.2



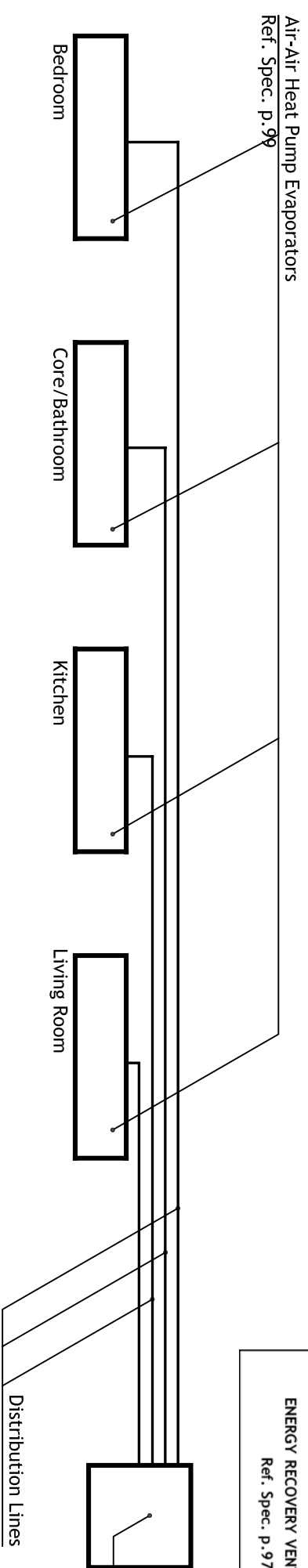
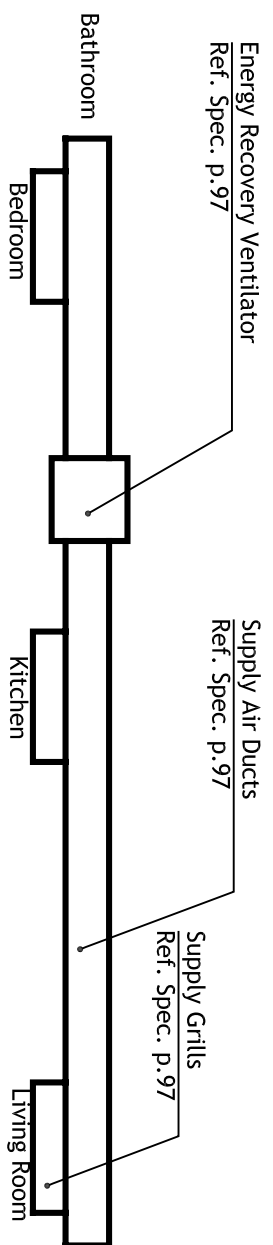
Step 9 - Place Pod C
 Place Pod C upon MC primary leveling structure. Using a come-along draw pod to core and fix with steel plate wedges.



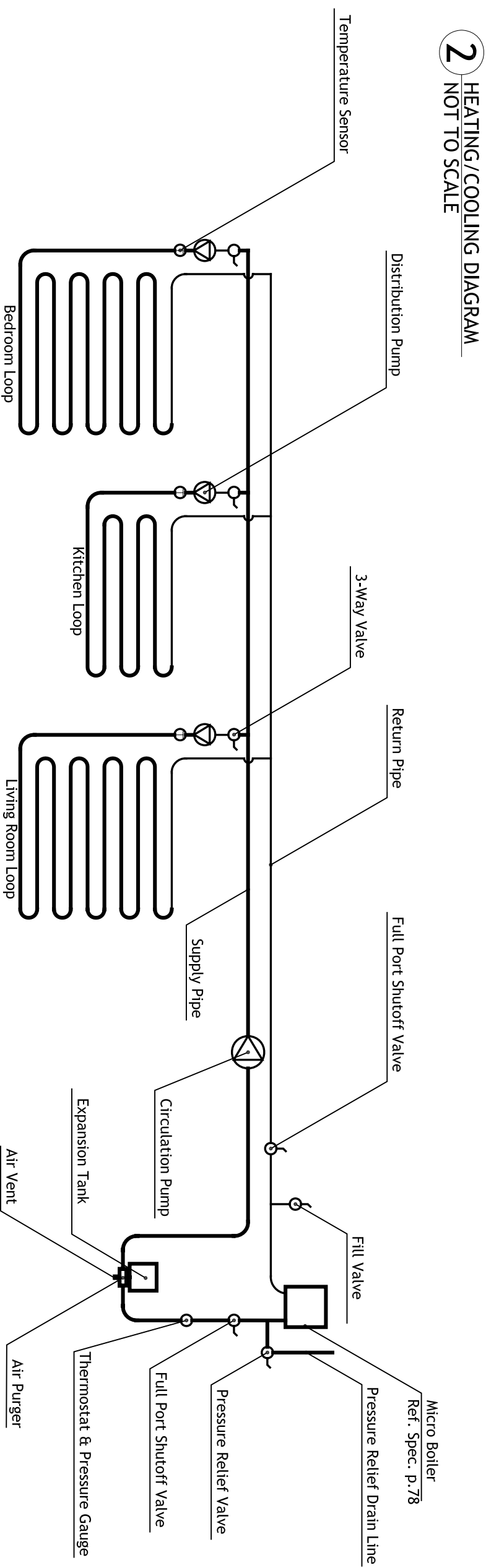
Step 10 - Place Pod A
 Place Pod A upon MC primary leveling structure. Using a come-along draw pod to core and fix with steel plate wedges.



Step 11 - Place Pod B
 Place Pod B upon MC primary leveling structure. Using a come-along draw pod to core and fix with steel plate wedges.



HVAC EQUIPMENT SCHEDULE	
VRV-HEAT PUMP CONDENSER Ref. Spec. p.99	(1) Daikin VRV heat pump condenser - RXYMQ36MWJU Overall size: 35 7/16" x 13 3/4" x 52 15/16" Weight: 310 lbs Scroll Compressor
WALL-MOUNTED EVAPORATOR Ref. Spec. p.99	(3) Daikin wall-mounted Evaporators - FXA009MWJU Overall Size: 31 1/4" x 91/8" x 11 3/8"
CEILING EVAPORATOR Ref. Spec. p.99	(3) Daikin Ceiling-mounted Evaporators - FXDQ09MWJU Overall Size: 27 9/16" x 24 7/16" x 7 7/8"
INSTANTANEOUS WATER HEATER Ref. Spec. p.78	(1) SEISCO SH-5 Tankless Water Heater Overall Size: 10.25" x 15.75" x 6.25" Weight: 15 lbs 240V, 2.5 KW Max temp increase: 25 °F @ 1.4 GPM
PEX TUBING FOR RADIANT FLOOR HEATING	HePex Tubing Diameter: 5/8"
THERMOSTAT Ref. Spec. p.99	(4) Daikin 7 Day Programmable Controller - BRC1D71 60 degrees to 90 degrees set-point range 7-Day time clock 5-Temp Settings set-back function
ENERGY RECOVERY VENTILATOR Ref. Spec. p.97	(1) RenewAir® ERV - EV130 Overall size: 21" x 32" x 17 1/2" 130 CFM 80% Efficiency



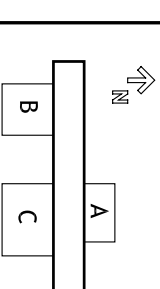
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UNIVERSITY OF PITTSBURGH
School of Engineering

ART INSTITUTE OF PITTSBURGH

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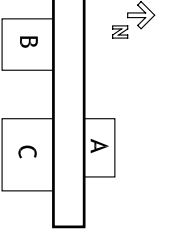


DRAWN BY: LEAH WOLKOVICH
DATE: 08/07/2007
TITLE: HVAC SCHEMATIC

1 RADIANT HEATING DIAGRAM
NOT TO SCALE

M1

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

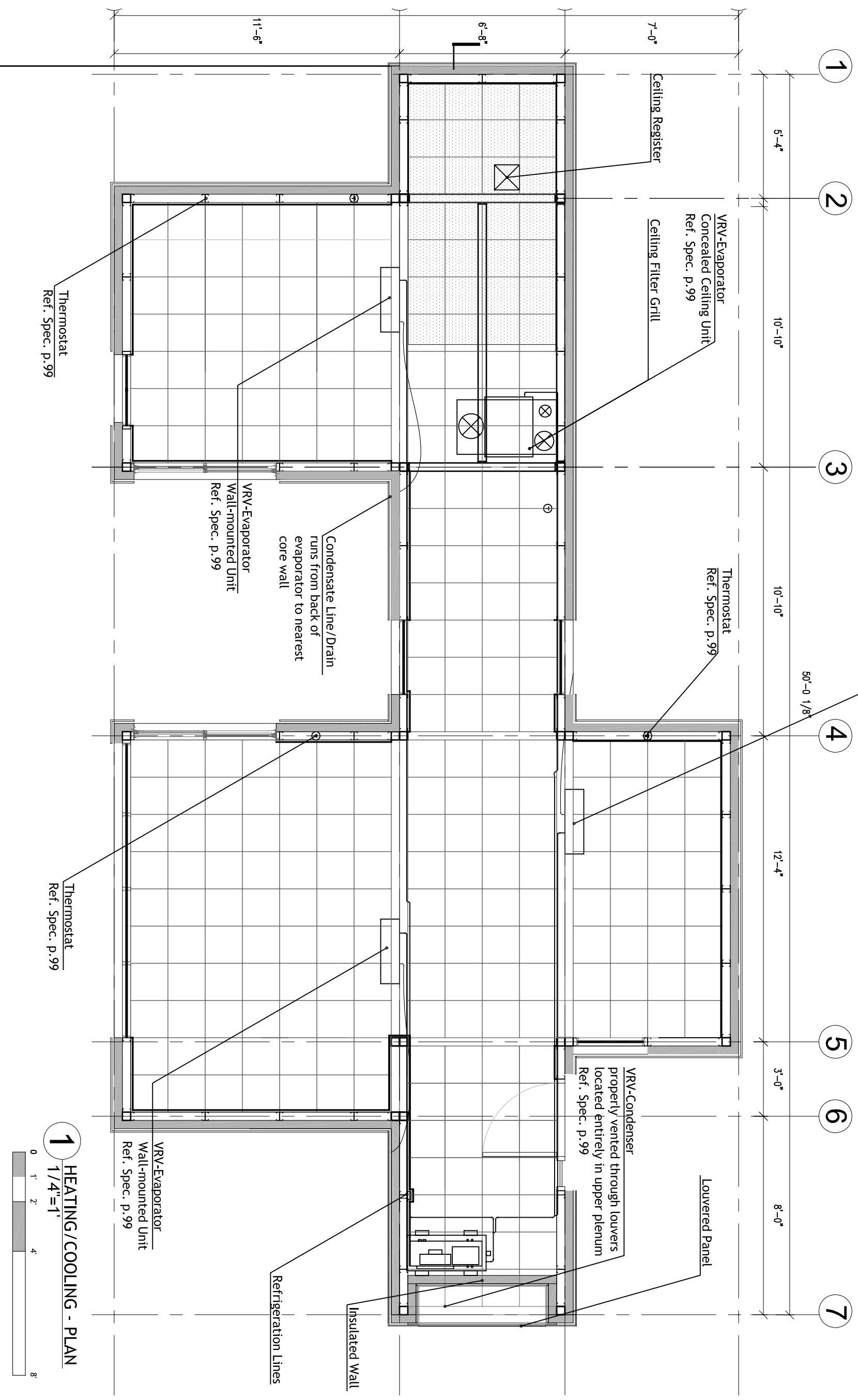


DRAWN BY: LEAH WOLKOVICH

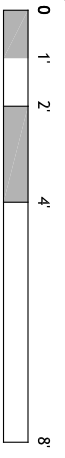
DATE: 08/07/2007

TITLE: HEATING/COOLING

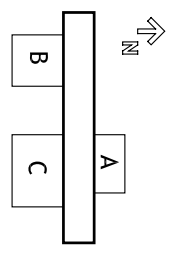
M2



1 HEATING/COOLING - PLAN
 1/4"=1'

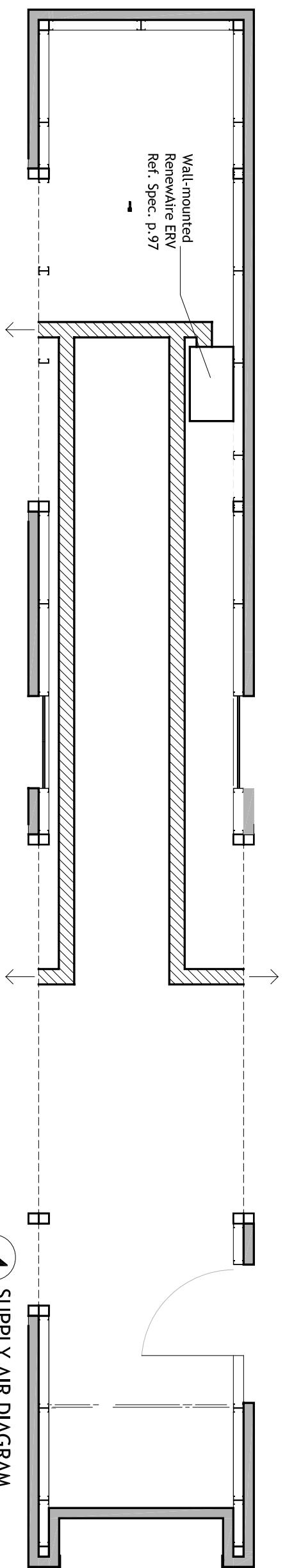


CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

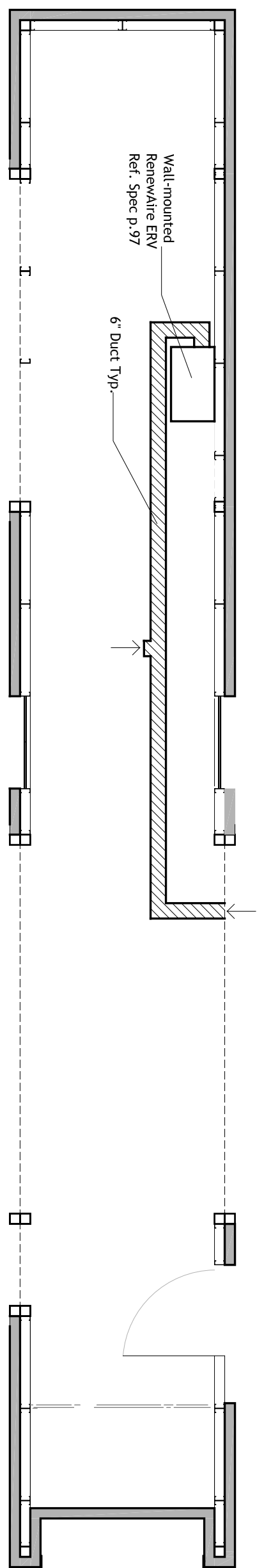


DRAWN BY: JOHN EASTRIDGE
DATE: 08/07/2007
TITLE: VENTILATION PLANS

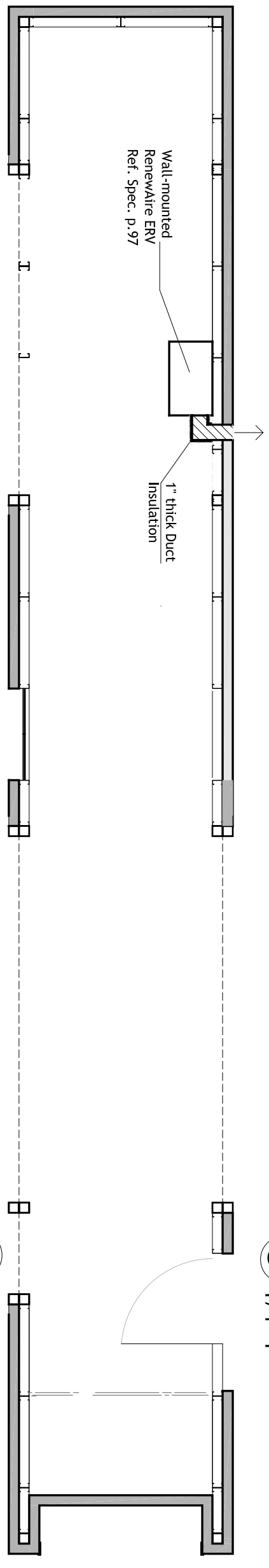
M3



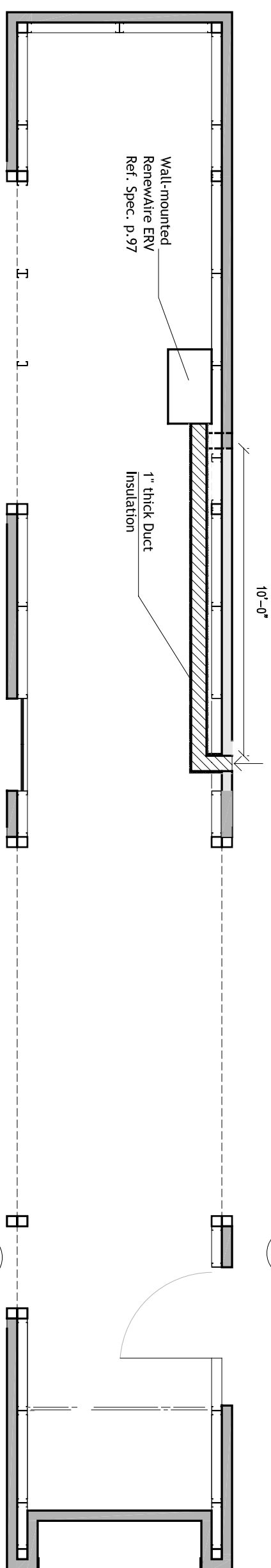
4 SUPPLY AIR DIAGRAM
 1/4"=1'



3 RETURN AIR DIAGRAM
 1/4"=1'



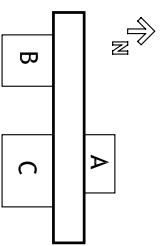
2 EXHAUST AIR DIAGRAM
 1/4"=1'



1 OUTSIDE AIR INTAKE DIAGRAM
 1/4"=1'



CONTACT:
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 p:412.726.6503
 f:412.268.7819

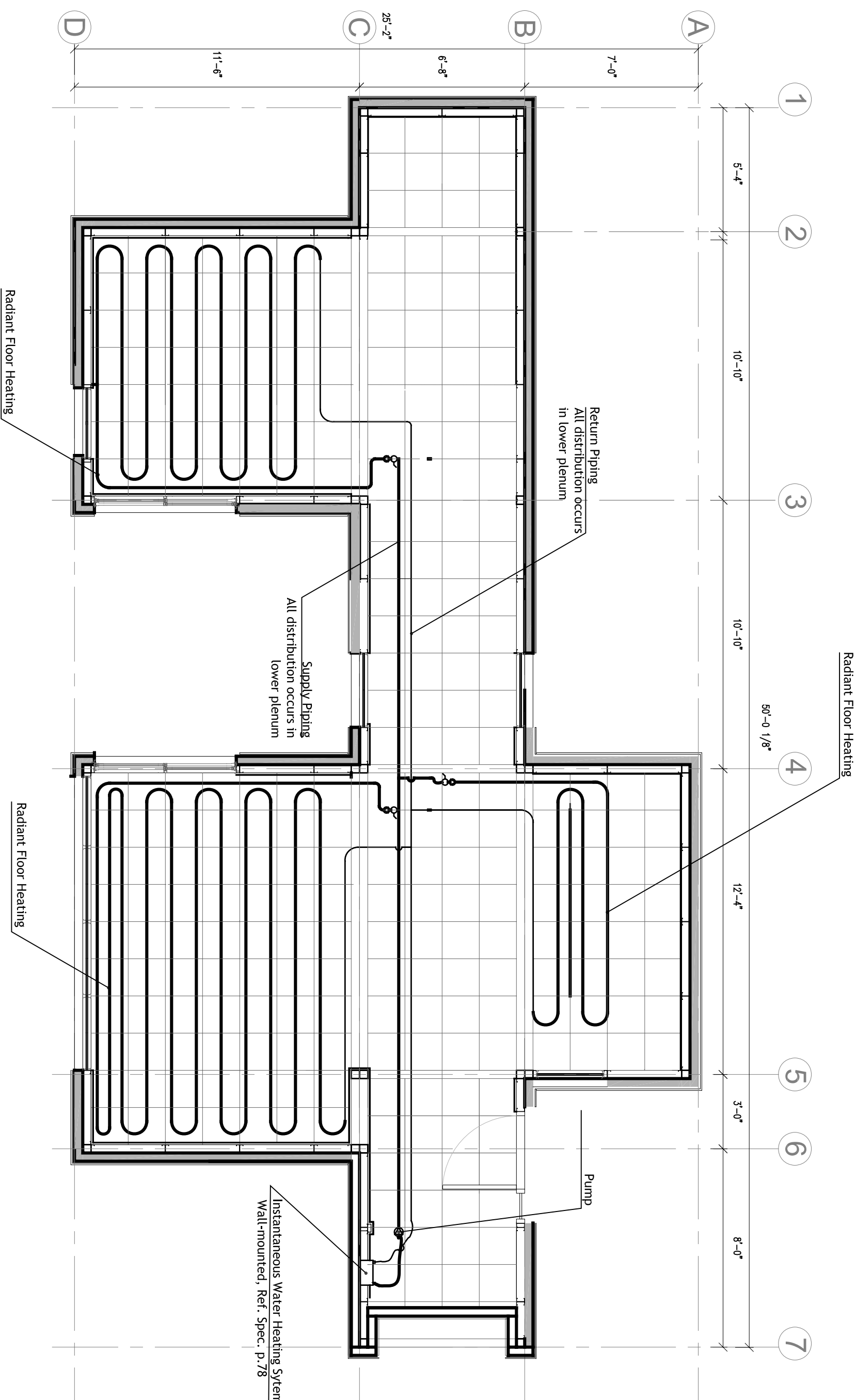


DRAWN BY: LEAH WOLKONICH

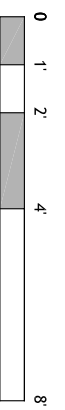
DATE: 08/07/2007

TITLE: RADIANT HEATING

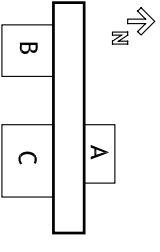
M4



1 RADIANT HEATING PLAN
 1/4"=1'

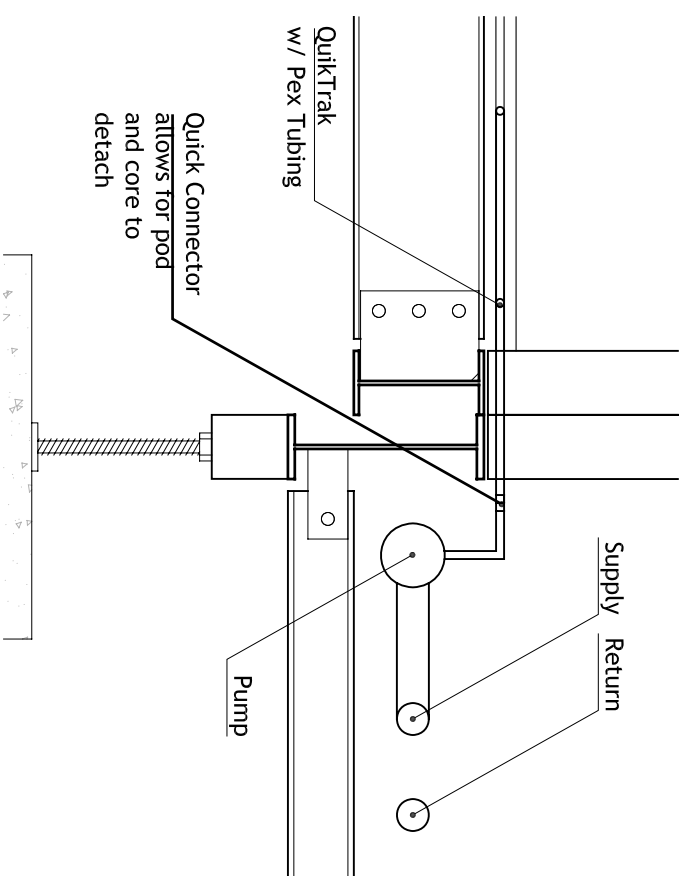


CONTACT:
Steve Lee
p:412.726.6503
f:412.268.7819

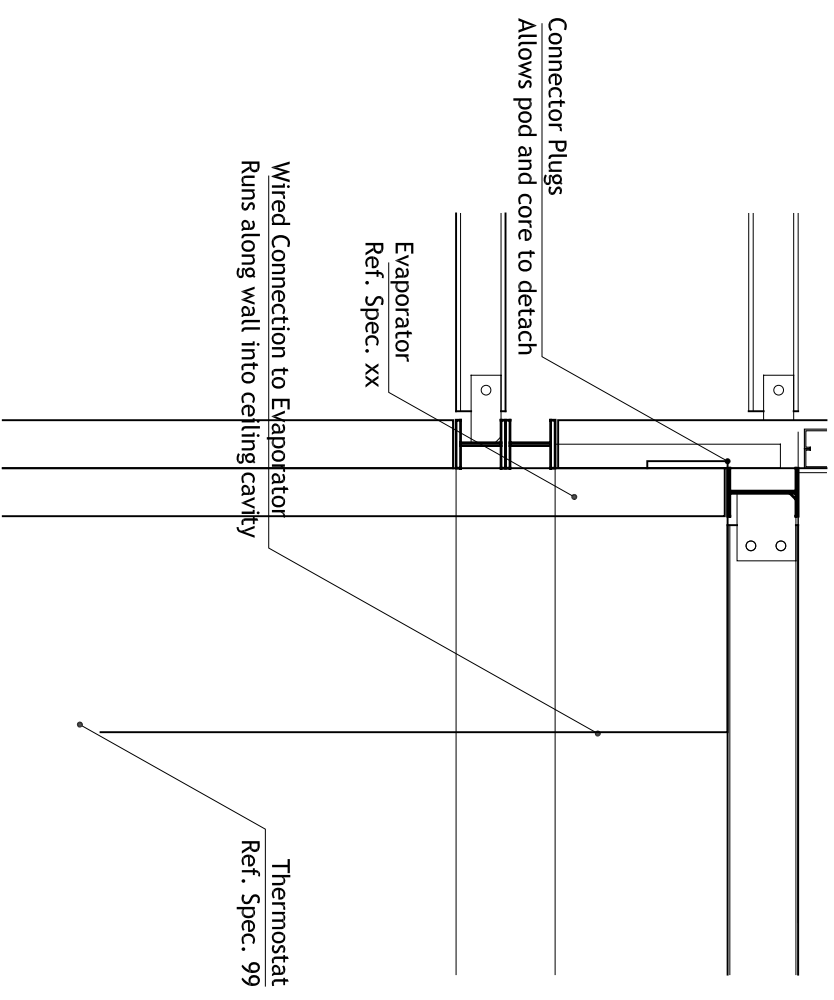


DRAWN BY: CATHY CHUNG
DATE: 08/07/2007
TITLE: CORE / POD CONNECTION DETAIL

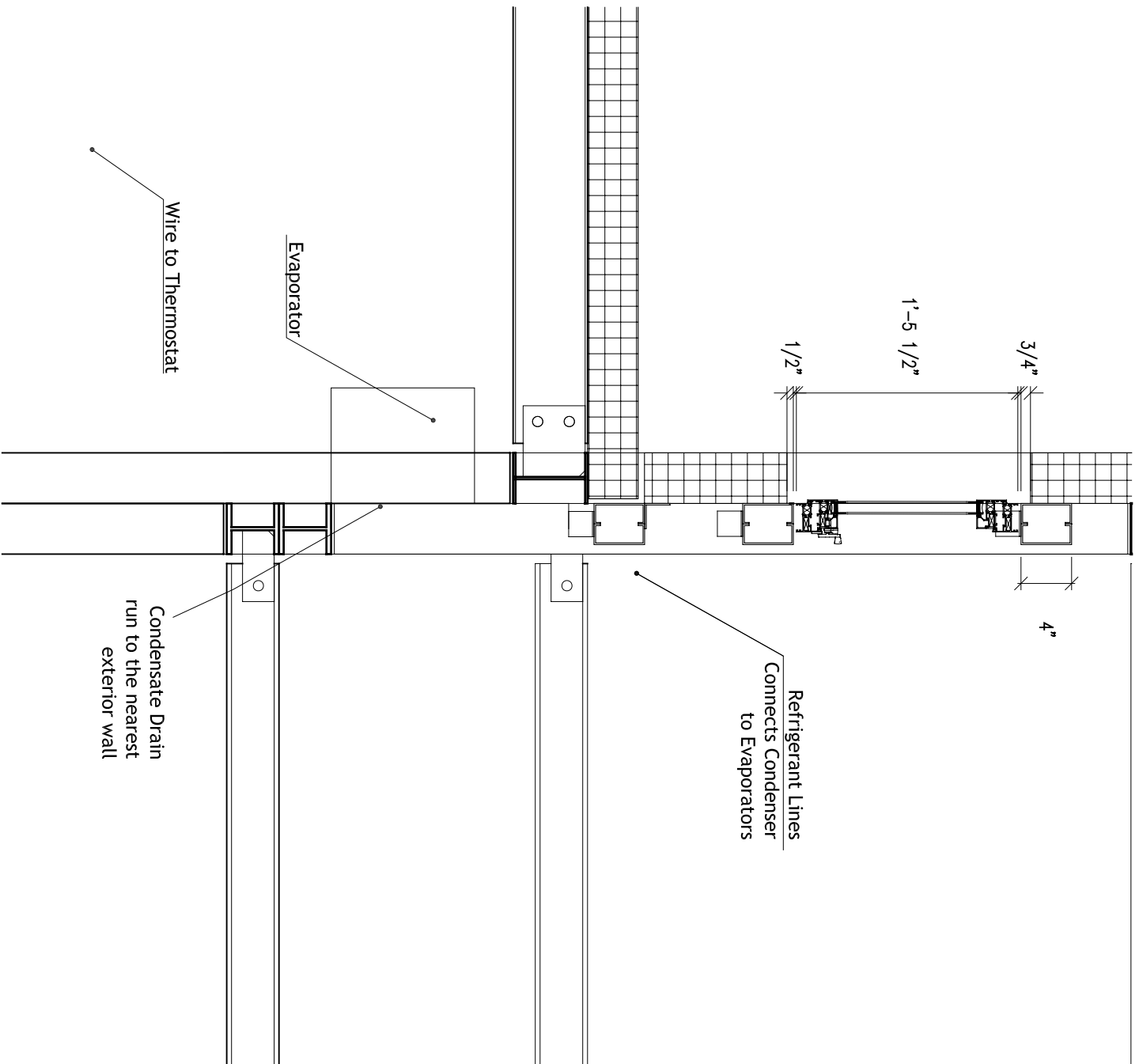
M5



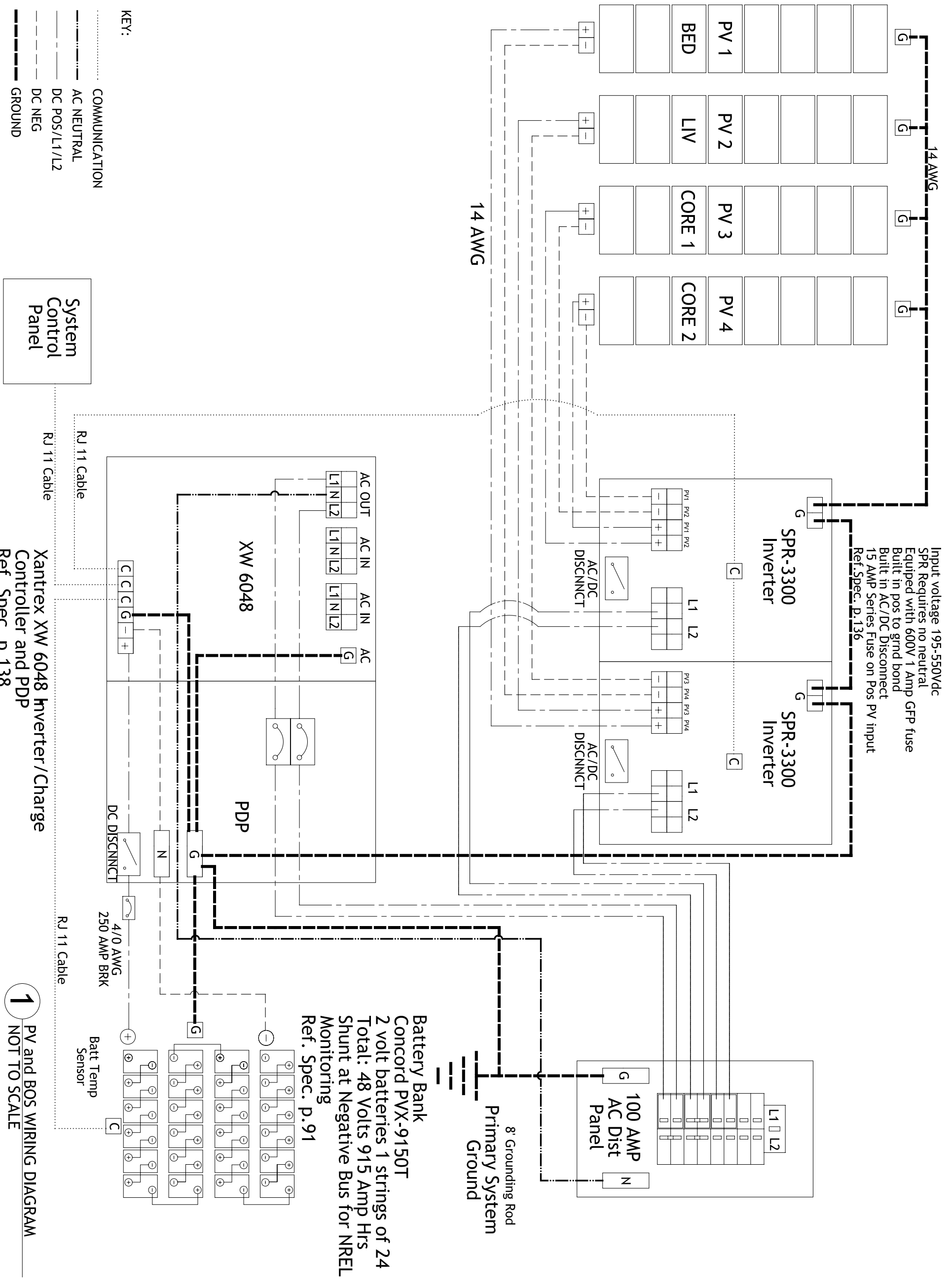
3 1"=1'
DETAIL OF RADIANT FLOOR CONNECTIONS



1 3/4"=1'
DETAIL OF THERMOSTAT CONNECTION



2 1"=1'
DETAIL OF VRV CONNECTIONS



Input voltage 195-550Vdc
 SPR Requires no neutral
 Equipped with 600V 1 Amp GFP fuse
 Built in pos to grd bond
 Built in AC/DC Disconnect
 15 AMP Series Fuse on Pos PV input
 Ref. Spec. p. 136

Battery Bank
 Concord PVX-9150T
 2 volt batteries 1 strings of 24
 Total: 48 Volts 915 Amp Hrs
 Shunt at Negative Bus for NREL
 Monitoring
 Ref. Spec. p. 91

System
 Control
 Panel

Xantrex XW 6048 Inverter/Charge
 Controller and PDP
 Ref. Spec. p. 138

CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819

DRAWN BY: ADAM LUCKETT
 DATE: 08/07/2007
 TITLE: PV/BOS WIRING

E 1.0

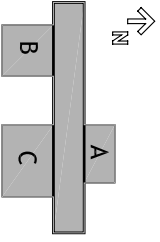
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 Technology

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 School of
 Engineering

**ART INSTITUTE OF
 PITTSBURGH**

Panel Slot	Realistic Max Current (A)	Breaker Current Rating (A)	Circuit Description	Phase		Circuit Description	Breaker Current Rating (A)	Realistic Max Current (A)	Panel Slot
				A	B				
Utility Mains									
Mains				AC Distribution Panel		Mains			
LEFT				A	B				RIGHT
1	15	15	Living room receptacles #1	A		Upper core, lower core, outdoor lights	15		2
3	15	15	Bedroom receptacles #1	B		Outside receptacles	20	20	4
5	15	15	Living room receptacles #2	A		Living room, bedroom, kitchen lights	15		6
7	15	15	Bedroom receptacles #2	B		Lower core, bathroom, miscellaneous GFCI	20	20	8
9	20	20	Kitchen receptacles #1	A		Microwave	20		10
11	20	20	Kitchen receptacles #2	B		Refrigerator	20		12
13			Heat pump	A		Oven range	30		14
15		30		B					16
17				A		Dishwasher	20		18
19	26	30	Instantaneous water heater (space heating)	B		Clothes washer	15		20
21		15	ERV	A		Clothes dryer	30		22
23		15	Radiant floor pump and controls	B					24
25		15	Well pump, SWH pump	A		SPARE			26
27			SPARE	B		SPARE			28
29				A		SunPower Inverter #1		13.8	30
31	26	30	Instantaneous water heater (DHW)	B					32
33			SPARE	A		SunPower Inverter #2		13.8	34
35			SPARE	B					36
37				A		Xantrex inverter/charger		25	38
39	<1	15	WattNodes	B					40

CONTACT:
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DRAWN BY: ADAM LACKETT

DATE: 08/07/2007

TITLE: AC PANEL LAYOUT

E 1.1

1 AC PANEL LAYOUT
 NOT TO SCALE

240 JWB_{29,31} IHW
 WELL PUMP
 SOL COLL PUMP

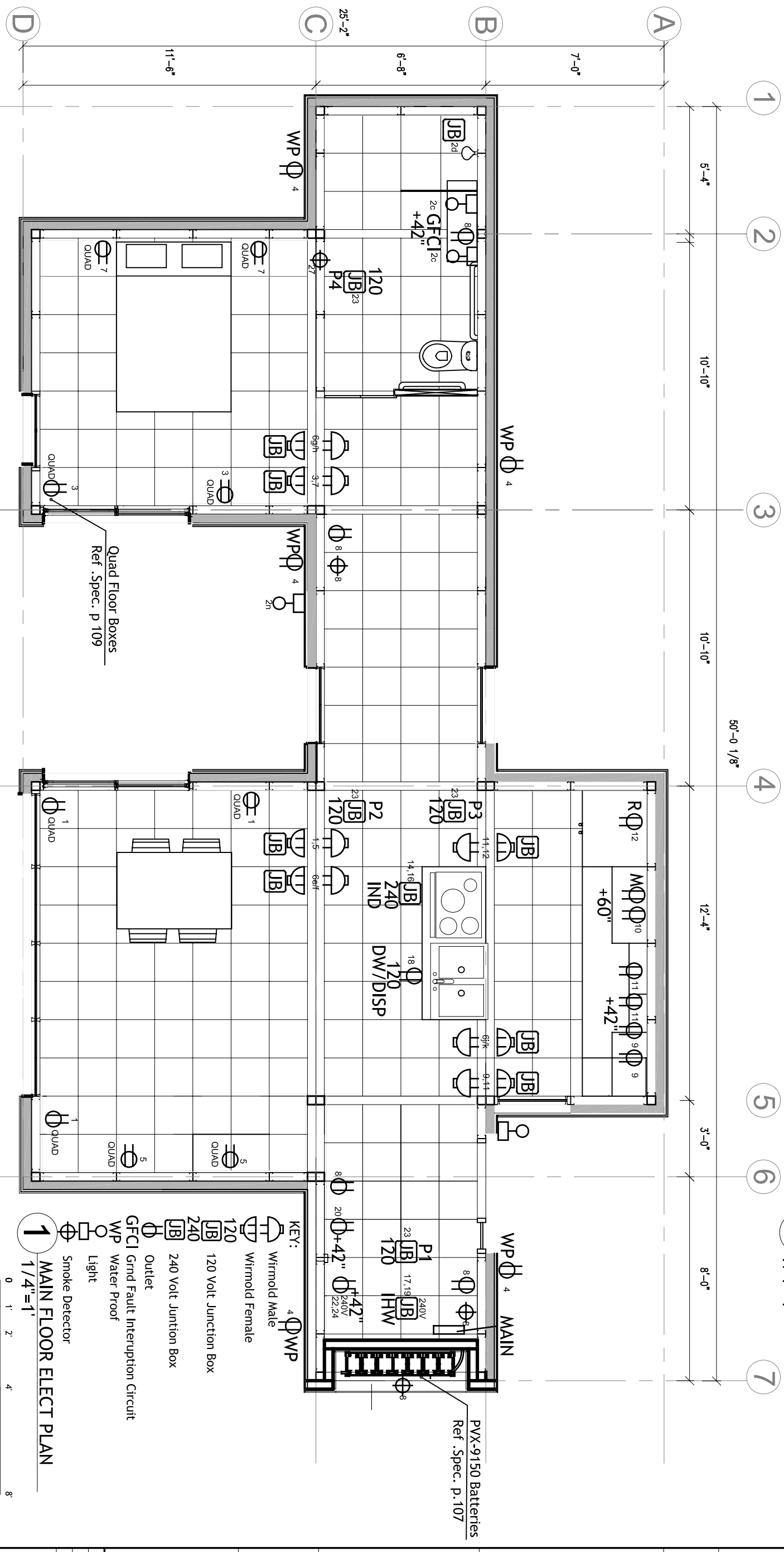
ERV

HP
 JWB_{13,15} 240

Wiremold Connectors
 Ref. Spec. p.104

JWB₆₋₇
 JWB_{2a/b}

2 UPPER CORE ELECT 9'-0" AFF
 1/4"=1'

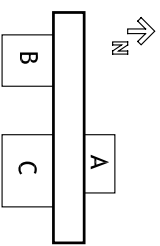


PVX-9150 Batteries
 Ref. Spec. p.107

KEY:

- Wiremold Male
- Wiremold Female
- 120 Volt Junction Box
- 240 Volt Junction Box
- Outlet
- GFCI Grnd Fault Interruption Circuit
- Water Proof
- Light
- Smoke Detector

1 MAIN FLOOR ELECT PLAN
 1/4"=1'



CONTACT:
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 p:412.726.6503
 f:412.268.7819

DRAWN BY: ADAM LUCKETT

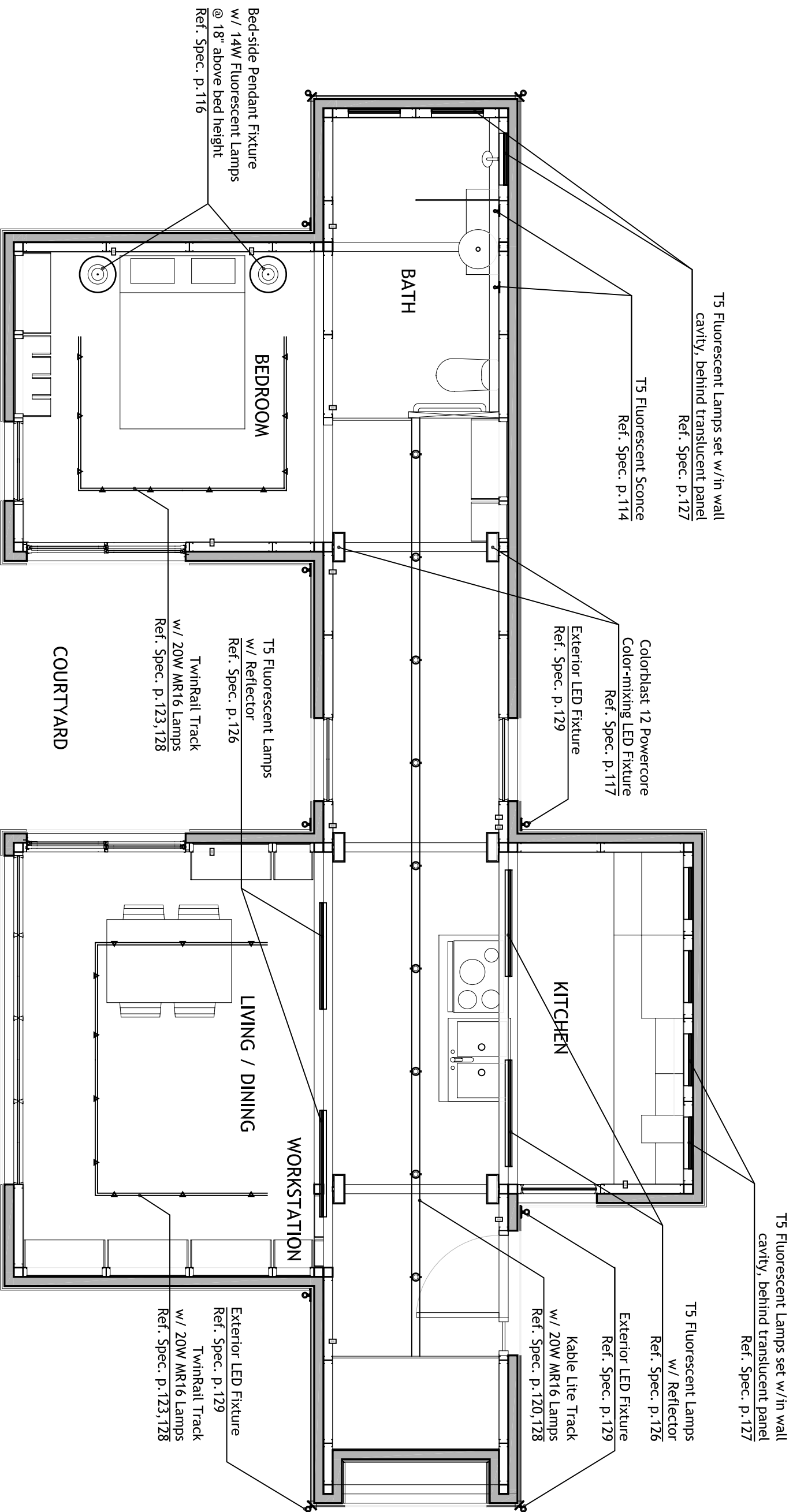
DATE: 08/07/2007

TITLE: HOUSE ELECTRICAL

E 1.2

KEY:

- ▣ Lutron Wallstation Entry Panel
- ▣ Color Kinetics Colorial

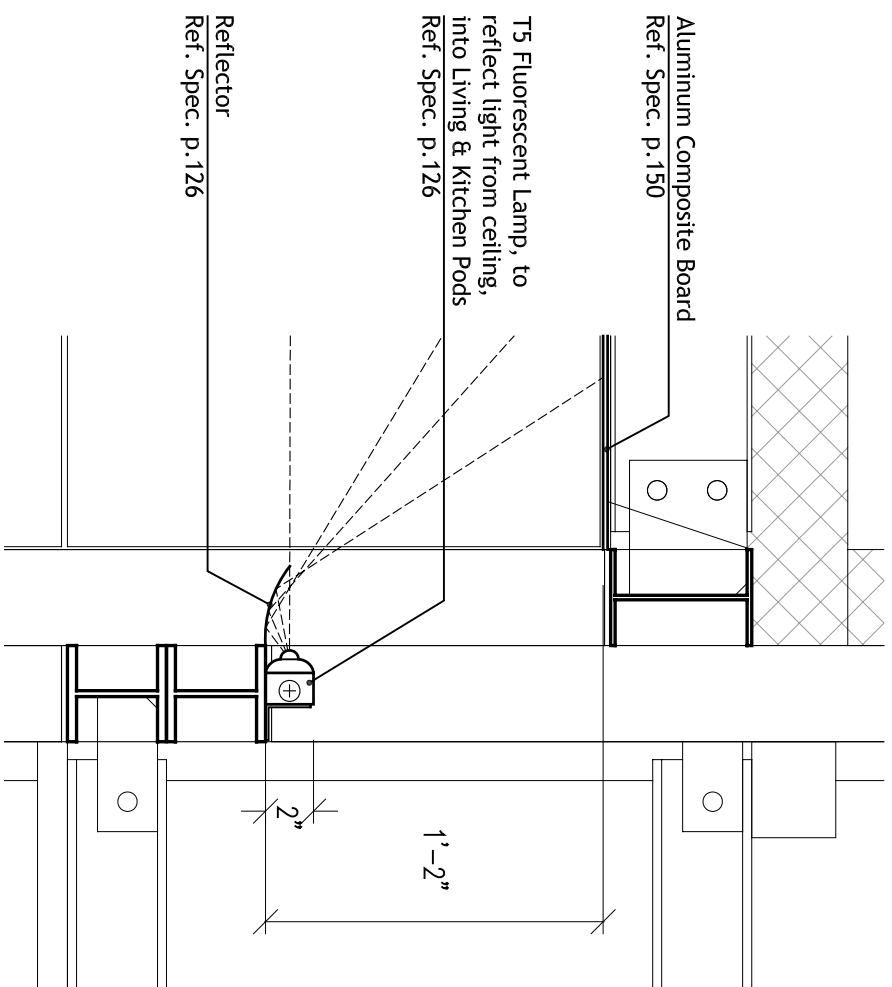


1 ELECTRICAL LIGHTING PLAN
1/4"=1'

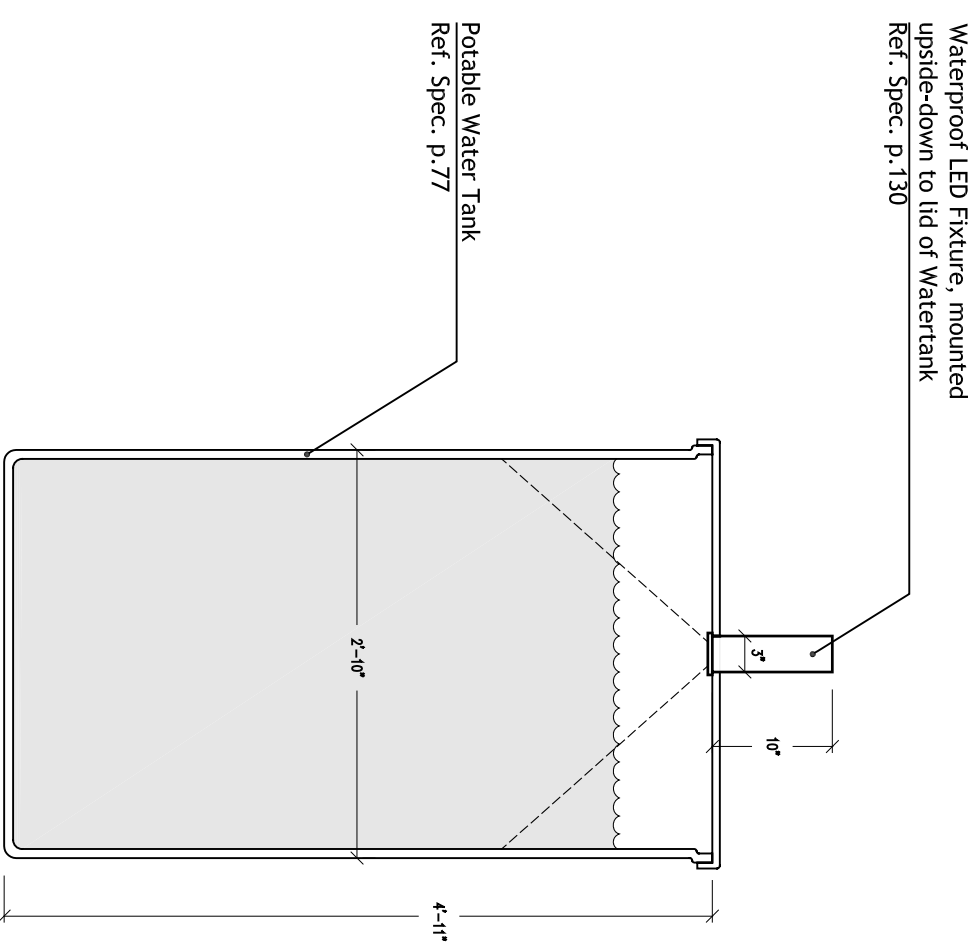


<p>SOLAR DECATHLON 2007 National Solar Decathlon - Pittsburgh, PA</p>	<p>CARNEGIE MELLON School of Architecture School of Design School of Drama School of Art Tepper School of Business Carnegie Institute of Technology</p>
<p>UNIVERSITY OF PITTSBURGH School of Engineering</p>	<p>ART INSTITUTE OF PITTSBURGH</p>
<p>CONTACT: Steve Lee p:412.726.6503 f:412.268.7819</p>	
<p>DRAWN BY: EMMA DAVISON DATE: 08/07/2007 TITLE: LIGHTING PLAN</p>	
<p>E 2.0</p>	

LIGHT FIXTURE SCHEDULE									
<i>Company</i>	<i>Fixture</i>	<i>Ref. Spec.</i>	<i>Lamp</i>	<i>Location</i>	<i># Lamps</i>	<i>Watts/Lamp</i>			
COLOR KINETICS	ColorBlast 12 Powercore	p.117	LED	Upper Core	6	50			300
LOUIS POULSON	P1 Poul PH 4/3P/100A19/120/WHT	p.116	Fluorescent	Bedroom Nightstands	2	14			28
TECH LIGHTING	Kable Lite System (1 track)	p.120	Halogen	Upper Core	9	20			180
	TwinRail System (2 tracks)	p.123	Halogen	Bedroom & Living Pods	20	20			400
SYSTEMALUX	Freelight 0841-14-120	p.114	Fluorescent	Bathroom Vanity	2	14			28
LITHONIA	ST4 LITH MSS5 1 14T5 MVOLT	p.126	Fluorescent	Kitchen & Living Pods	4	14			56
WINONA	geLED-3001-12V-LO-BKT-FO-SH6-C2-STD	P.130	LED	Core Exterior	10	9			90
	UP WINO BI LED LO BKT FO SHO	p.130	LED	Water Tanks	5	9			45
						TOTAL WATTS:			1127
						WATTS/ft²:			1.41



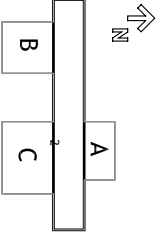
2 FLUORESCENT MOUNTING DETAIL
 1"=1'



1 WATERTANK LIGHTING DETAIL
 3/4"=1'



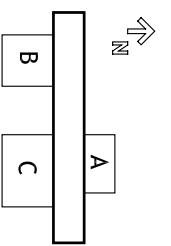
CONTACT:
 Steve Lee
 p:412.726.6503
 f:412.268.7819



DRAWN BY: EMMA DAVISON
 DATE: 08/07/2007
 TITLE: LIGHT FIXTURE DETAILS

E 2.1

CONTACT:
Steve Lee
p:412.726.6503
f:412.268.7819

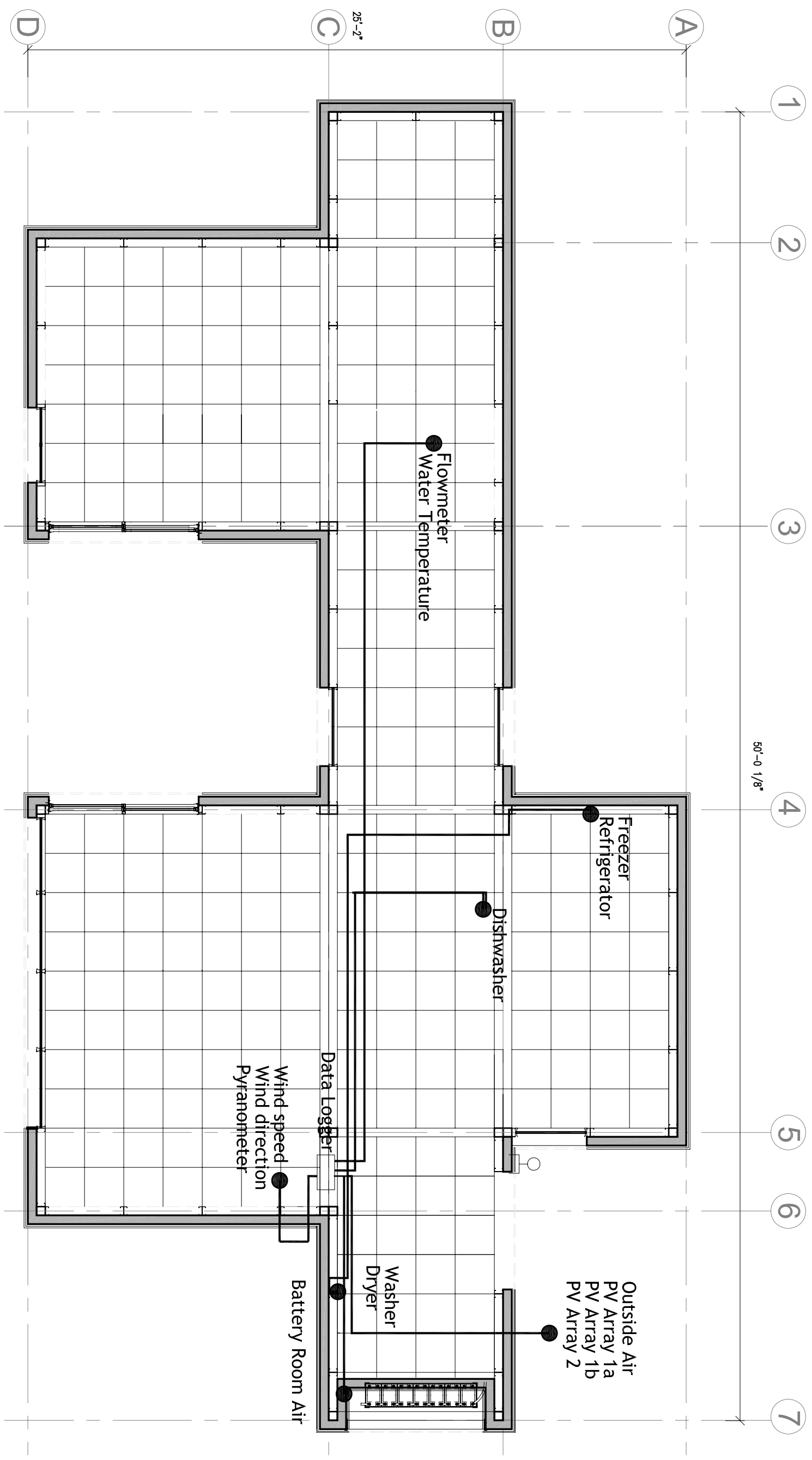


DRAWN BY: STEPHANIE CHU

DATE: 08/07/2007

TITLE: D & A - Installation of Thermocouple Wire

E 3.2

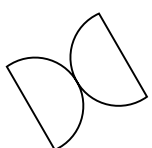


1 MAIN FLOOR WIRING PLAN
1/4"=1'



WEATHER STATION SCHEDULE		Ref. Spec. p. 113	
Pyranometer		Global Horizontal LI-200SZ-50	
PV Main array (Perimeter)		Thermocouple Wire SA1 - T - 72	
PV Main array (Center)		" "	
PV SE array (Perimeter)		" "	
Wine Vane		Wind Sentry Set R.M. Young 03001	
Wine Anemometer		" "	

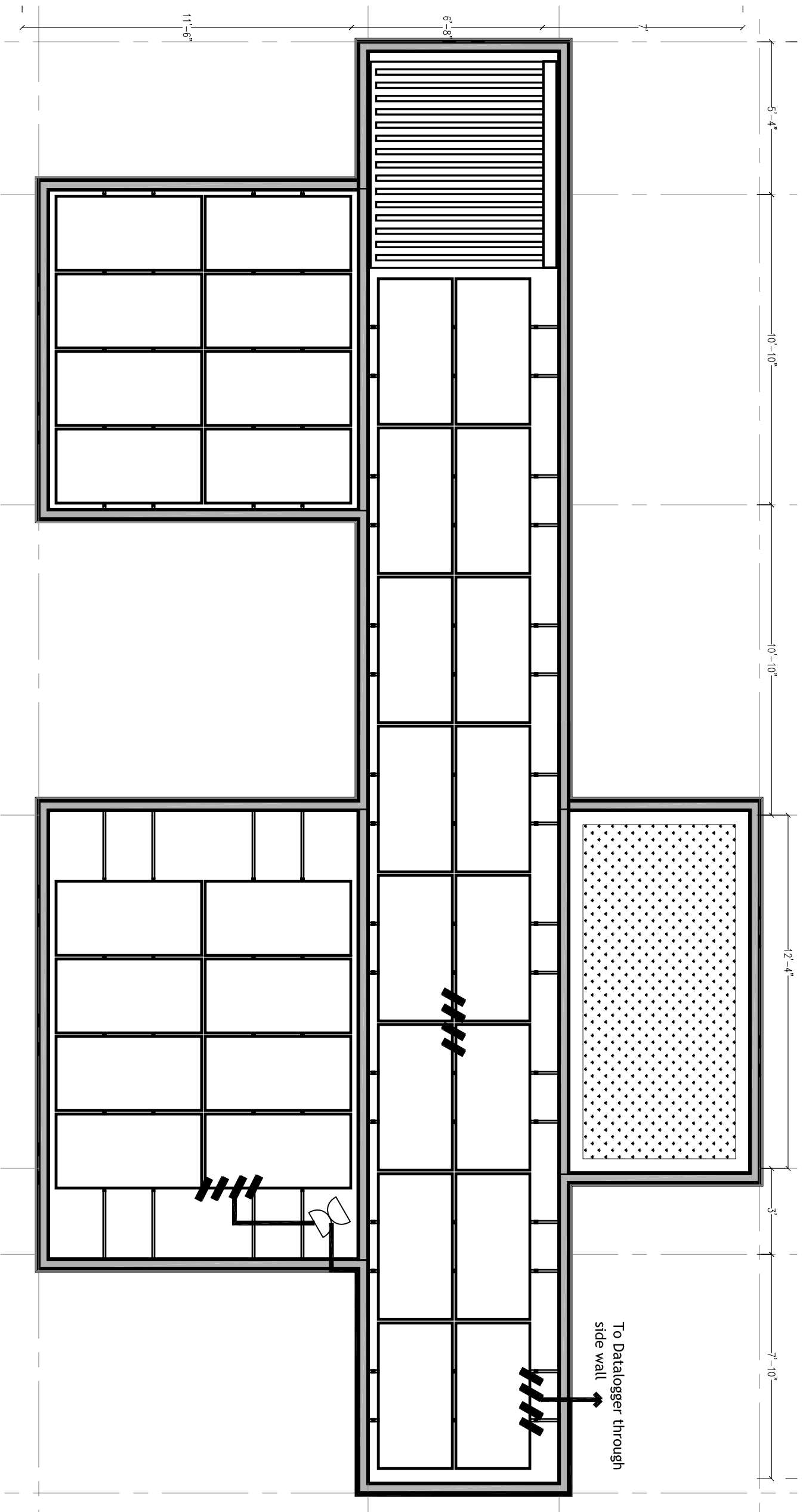
Key



Wind Vane & Anemometer



Thermocouple Wire



1 WEATHER STATION DIAGRAM
NOT TO SCALE

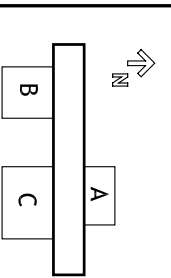


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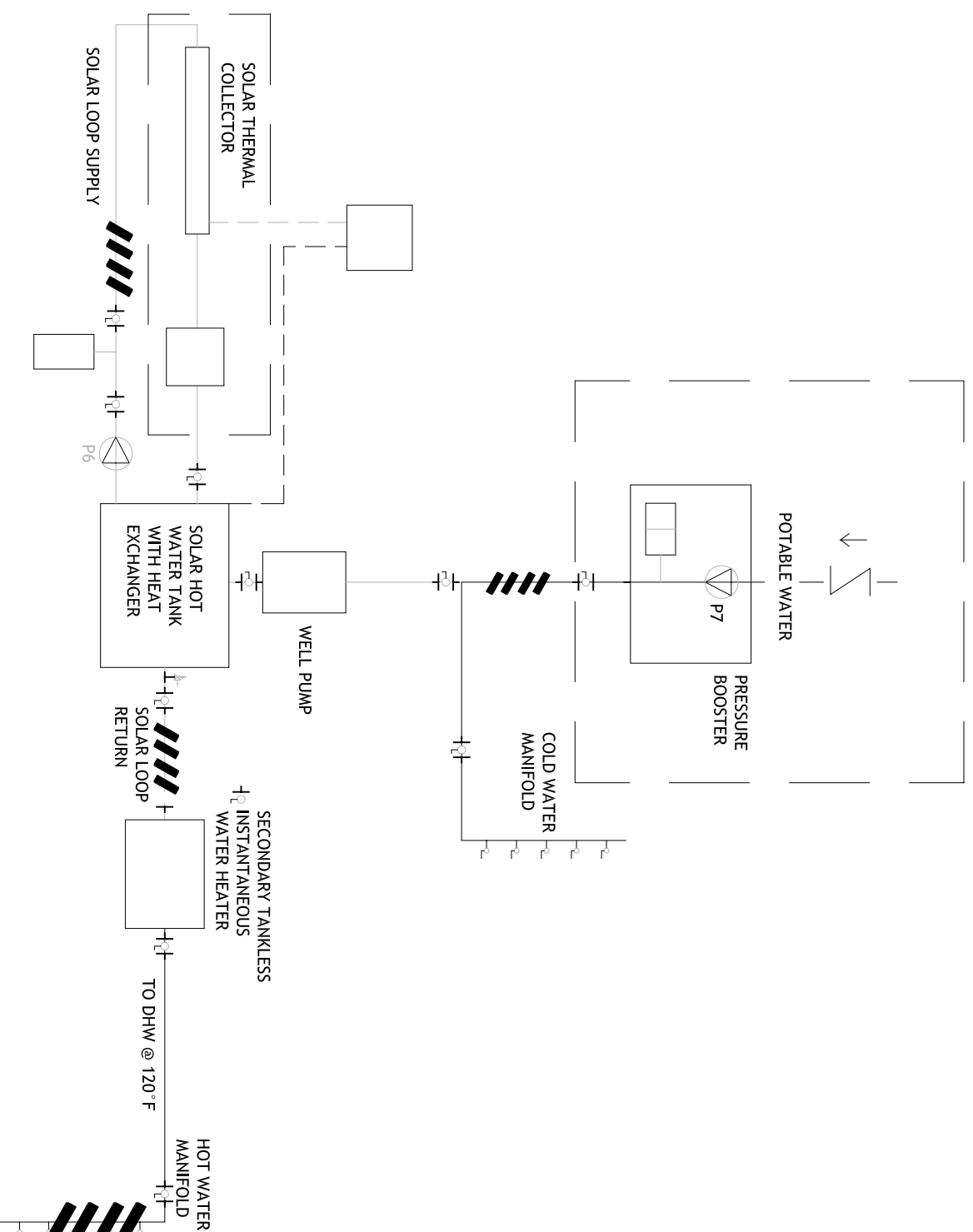
CONTACT:
Steve Lee
p:412.726.6503
f:412.268.7819



DRAWN BY: STEPHANIE CHU
DATE: 08/07/2007
TITLE: WEATHER STATION SCHEMATIC

E 3.3

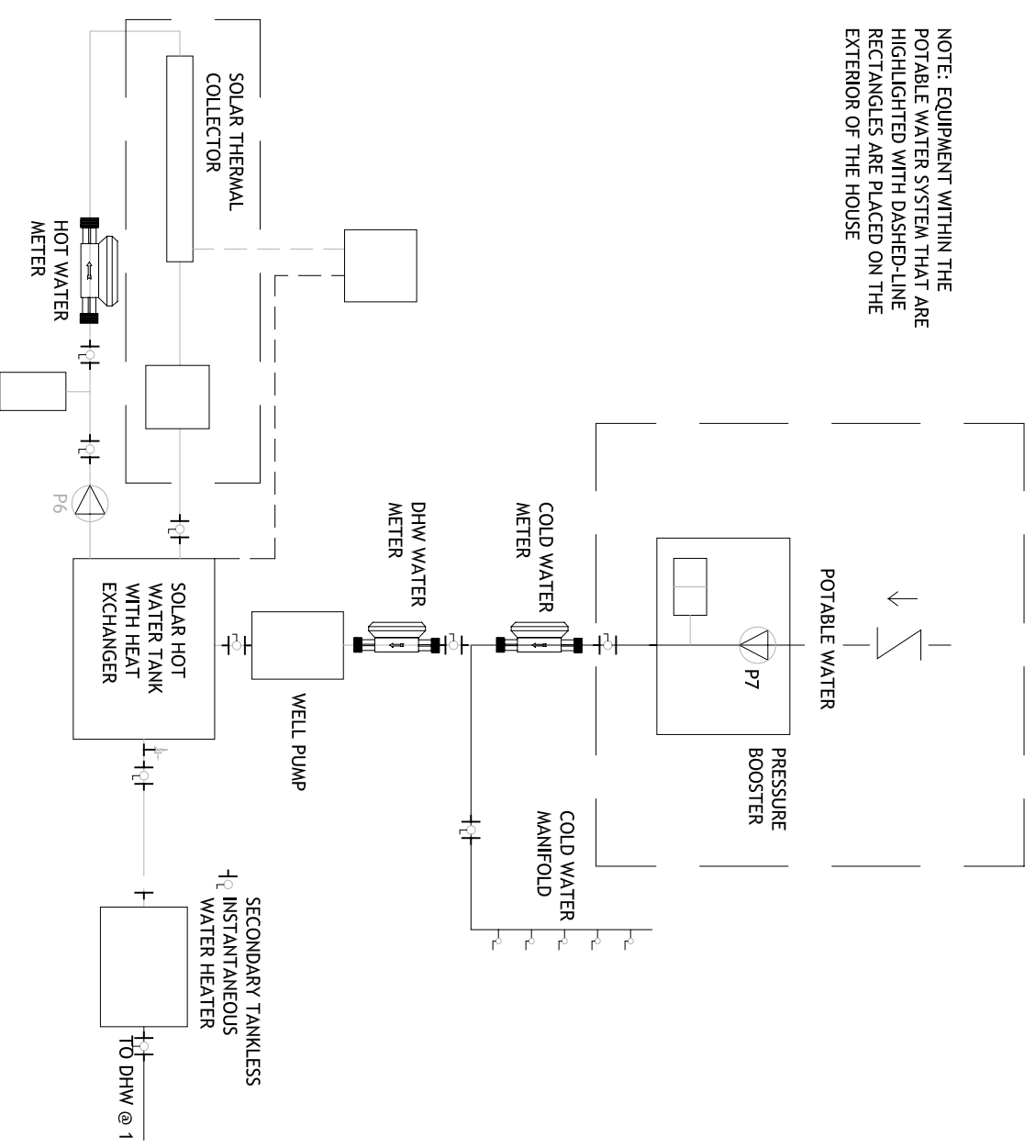
WATER METERING SCHEDULE	Ref. Spec. p. XX
SOLAR HOT WATER LOOP FLOW METER	(1) OMEGA 3/4" Pulse Flow meter FTB4607
COLD WATER SUPPLY FLOW METER	Ditto
HOT WATER SUPPLY FLOW METER	Ditto
Cold water supply	(2) Surface-mount (adhesive) SA1-T-72
Hot water supply	Ditto
Solar water heater supply	Ditto



2 TEMPERATURE METERING DIAGRAM
NOT TO SCALE

- KEY:
- WATER
 - - - - - ELECTRIC
 - ⚡ TEMP/PRESSURE RELIEF VALVE
 - ⊘ ISOLATION BALL VALVE
 - ⊘ PRESSURE PUMP
 - ⊘ Flow Meter
 - ▨ Thermocouple

NOTE: EQUIPMENT WITHIN THE POTABLE WATER SYSTEM THAT ARE HIGHLIGHTED WITH DASHED-LINE RECTANGLES ARE PLACED ON THE EXTERIOR OF THE HOUSE



1 FLOW RATE METERING DIAGRAM
NOT TO SCALE



2007 RHEINLAND WEST PHOENIX - WINSTON-SALEM, N.C.

CARNEGIE MELLON

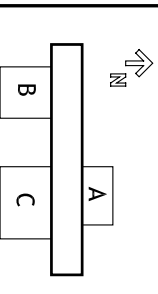
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ART INSTITUTE OF PITTSBURGH

CONTACT:
Steve Lee
p:412.726.6503
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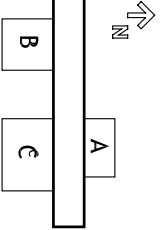
DRAWN BY: STEPHANIE CHU

DATE: 08/07/2007

TITLE: WATER METERING SCHEMATIC

E 3.4

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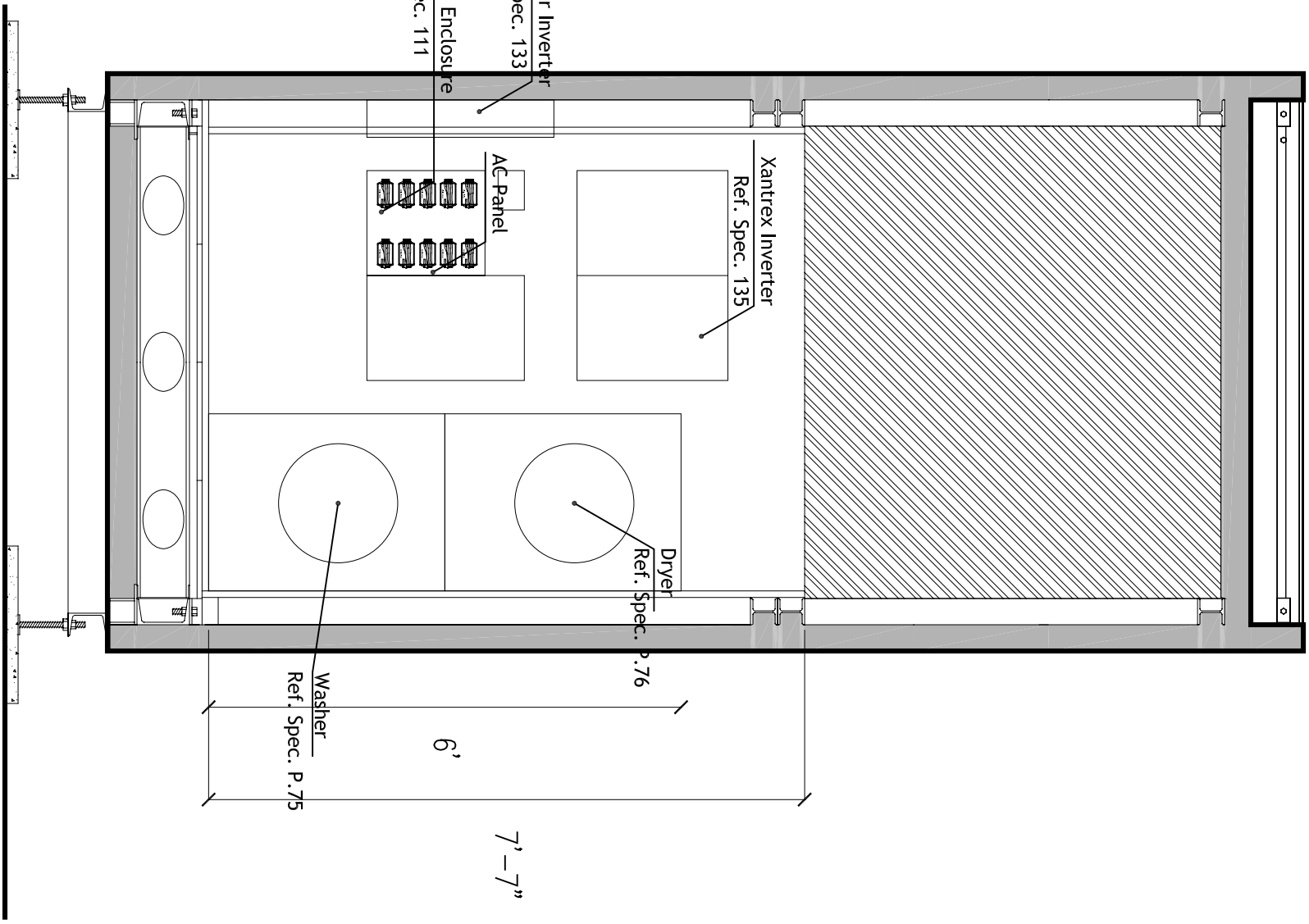
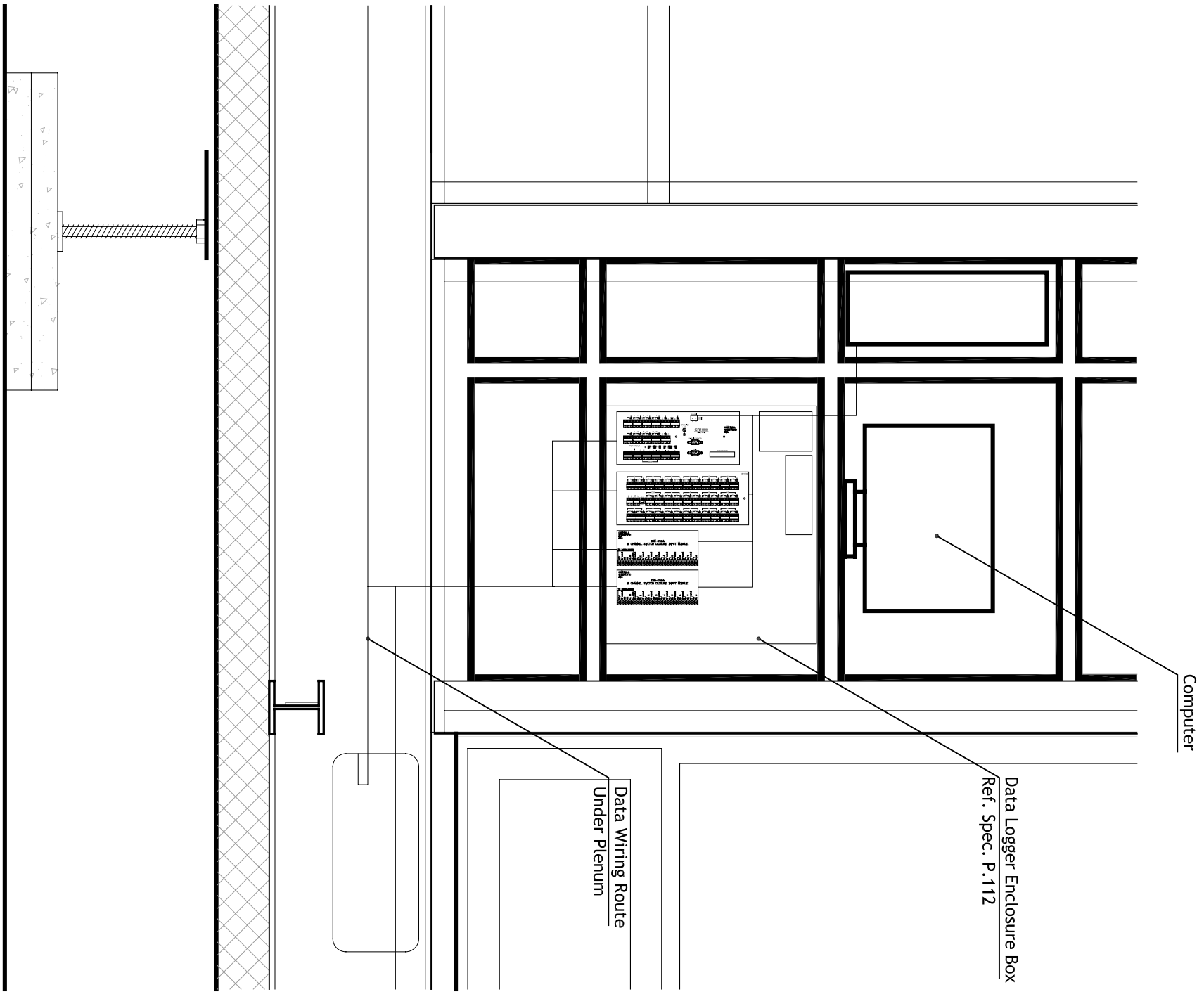


DRAWN BY: STEPHANIE CHU

DATE: 08/07/2007

TITLE: DATA ACQUISITION AND COMMUNICATION - INSTALLATION

E 4.0

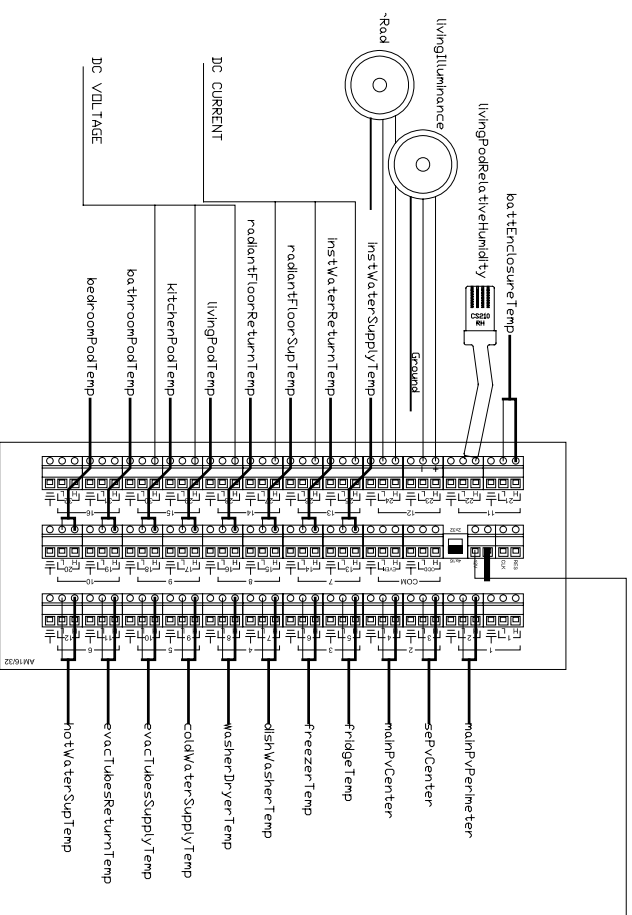


2 End wall elevation - Data system installation
 1/4"=1'

1 WORK STATION ELEVATION - SYSTEM INSTALLATION
 NOT TO SCALE

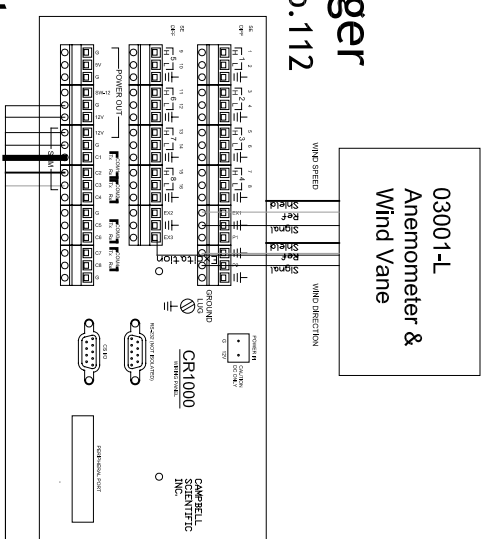
Multiplexer

Ref. Spec. p. 112



Various Sensors

Ref. Spec. p.113



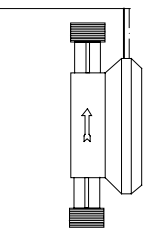
Datalogger

Ref. Spec. p.112

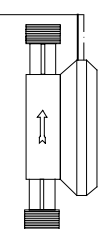
Flow Meters

Ref. Spec. p.113

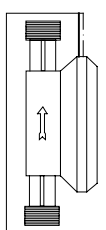
solarThermalFlow



hotWaterSupplyFlow

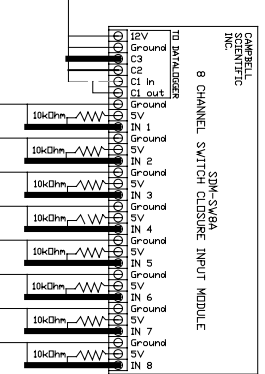


coldWaterSupplyFlow



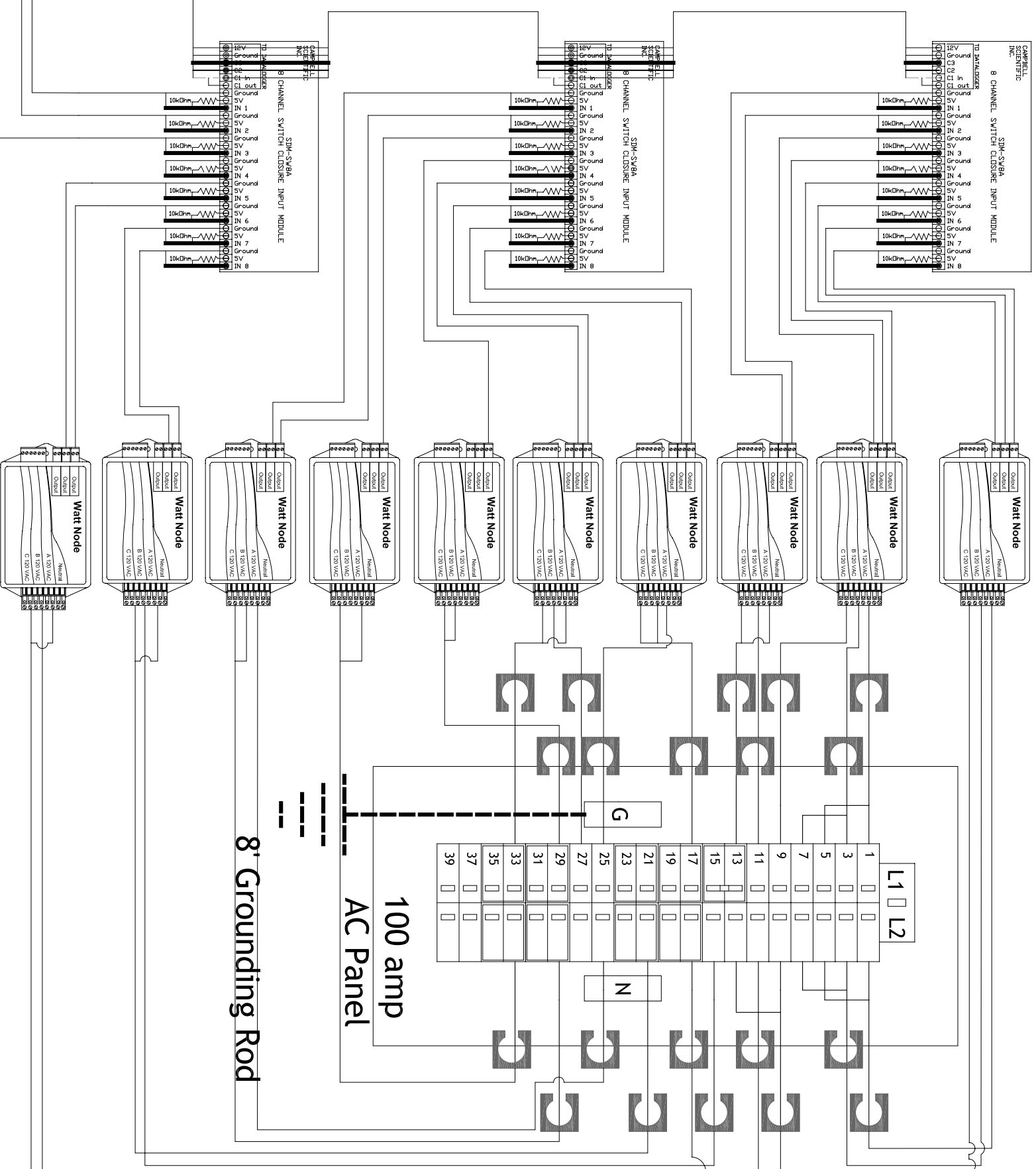
Switch Closures Modules

Ref. Spec. p. 112



Watt nodes

Ref. Spec. p.111



Current Transducers

Ref. Spec. p.111

1 DATA ACQUISITION & COMMUNICATION WIRING SCHEMATIC
Not to Scale

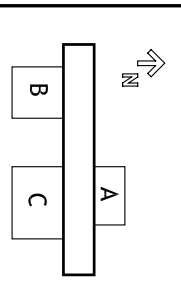


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DRAWN BY: Stephanie Chu
DATE: 08/07/2007
TITLE: DATA ACQUISITION & COMMUNICATION SCHEMATIC
E4.1

**Carnegie Mellon University
2007 Solar Decathlon Team
Pittsburgh, PA
INSTRUMENTATION LIST**

Datta Logger Eqpmnt.		Unit	Model	Description	Manufacturer/Type/Setting	Notes/Action		
		CR1000		Datalogger	Campbell Scientific	Datalogger CR1000 w/ 4MB Mem/Phone #.		
		AM16/32 (2X32 mode)		MUX	Campbell Scientific	Multiplexer AM25T 16/32 Date Installed:		
		Unit "0"	SDM-SW6A	8 Channel Switch Closure Module	Campbell Scientific	Switch Closure "0"		
		Unit "1"	SDM-SW6A	8 Channel Switch Closure Module	Campbell Scientific	Switch Closure "1"		
		Unit "2"	SDM-SW6A	8 Channel Switch Closure Module	Campbell Scientific	Switch Closure "2"		
Weather		Unit	Channel	Measuring	Channel Description	Sensor	Manufacturer/Type/Setting	Notes/Action
		AM16/32	1H	Temp (deg F)	Outdoor temp	HMP-F50	Campbell Scientific	
		AM16/32	1L	Temp (deg F)	Outdoor RH	LI-200X Pyranometer	Campbell Scientific	
		AM16/32	24H&L	W/m ²	Solar Radiation	3001-L Anemometer	Campbell Scientific	
		CR1000	P1	m/s	Wind Speed	3001-L Wind Vane	Campbell Scientific	
		CR1000	P2	deg	Wind Direction			
Environment & Comfort		Unit	Channel	Measuring	Channel Description	Sensor	Manufacturer/Type/Setting	Notes/Action
		AM16/32	2H &L	Temp (deg F)	Back of main PV array (surface mounted - array perimeter)	Type-T TC	Omega	mainPV/PerimeterTemp
		AM16/32	3H&L	Temp (deg F)	Back of southeast PV array (surface mounted - array center)	Type-T TC	Omega	setV/CenterTemp
		AM16/32	4H &L	Temp (deg F)	Back of main PV array (surface mounted - array center)	Type-T TC	Omega	mainPV/CenterTemp
		AM16/32	5H &L	Temp (deg F)	Refrigerator (exposed)	Type-T TC	Omega	fridgeTemp
		AM16/32	6H&L	Temp (deg F)	Freezer (exposed)	Type-T TC	Omega	freezerTemp
		AM16/32	7H &L	Temp (deg F)	Dishwasher (exposed)	Type-T TC	Omega	dishWasherTemp
		AM16/32	8H&L	Temp (deg F)	Clothes washer/dryer (exposed)	Type-T TC	Omega	washerDryerTemp
		AM16/32	9H &L	Temp (deg F)	Cold water supply (thermowell submersed or copper surface mounted)	Type-T TC	Omega	coldWaterSupplyTemp
		AM16/32	10H&L	Temp (deg F)	Evac tubes supply (thermowell or surface mounted)	Type-T TC	Omega	evacTubesSupplyTemp
		AM16/32	11H&L	Temp (deg F)	Evac tubes return (thermowell or surface mounted)	Type-T TC	Omega	evacTubesReturnTemp
		AM16/32	12H&L	Temp (deg F)	Hot water tank supply (thermowell or surface mounted)	Type-T TC	Omega	hotWaterSupTemp
		AM16/32	13H&L	Temp (deg F)	Instantaneous water heater supply (thermowell or surface mounted)	Type-T TC	Omega	insWaterSupplyTemp
		AM16/32	14H&L	Temp (deg F)	Instantaneous water heater return (thermowell or surface mounted)	Type-T TC	Omega	insWaterReturnTemp
		AM16/32	15H&L	Temp (deg F)	Radiant floor supply (thermowell or surface mounted)	Type-T TC	Omega	radiantFloorSupTemp
		AM16/32	16H&L	Temp (deg F)	Radiant floor return (thermowell or surface mounted)	Type-T TC	Omega	radiantFloorReturnTemp
		AM16/32	17H&L	Temp (deg F)	Living module (inside radiation shield)	Type-T TC	Omega	livingPodTemp
		AM16/32	18H&L	Temp (deg F)	Kitchen module (inside radiation shield)	Type-T TC	Omega	kitchenPodTemp
		AM16/32	19H&L	Temp (deg F)	Bathroom module (inside radiation shield)	Type-T TC	Omega	bathroomPodTemp
		AM16/32	20H&L	Temp (deg F)	Bedroom module (inside radiation shield)	Type-T TC	Omega	bedroomPodTemp
		AM16/32	21H&L	Temp (deg F)	Battery enclosure (inside radiation shield) Thermocouple (Type)	Type-T TC	Omega	battEnclosureTemp
		AM16/32	22H&L	RH (%)	Exhibition module (inside radiation shield)	CS210/10162 (Capacitive RH chip)	Campbell Scientific	livingPodRelativeHumidity
		AM16/32	23H&L	Lux	Illuminance in Living Module	LI-210 Lux Sensor	LI-Cor	livingIlluminance
Electrical Power		Unit	Channel	Measuring	Channel Description	Sensor	Manufacturer/Type/Setting	Notes/Action
		SDM-SW6A "0"		4 Watt	All Lights	WNB-3Y-208-P3-050-Hz	CTS-0750-15	Continental Control Systems
		SDM-SW6A "0"		5 Watt	Living module receptacles	WNB-3Y-208-P3-050-Hz	CTS-0750-15	Continental Control Systems
		SDM-SW6A "0"		6 Watt	Kitchen module receptacles	WNB-3Y-208-P3-050-Hz	CTS-0750-15	Continental Control Systems
		SDM-SW6A "0"		7 Watt	Bedroom module receptacles	WNB-3Y-208-P3-050-Hz	CTS-0750-15	Continental Control Systems
		SDM-SW6A "0"		8 Watt	Dishwasher	WNB-3Y-208-P3-050-Hz	CTS-0750-15	Continental Control Systems
		SDM-SW6A "1"		1 Watt	Well Pump, SDHW Pump, ERV, Wattnode Circuit			Continental Control Systems
		SDM-SW6A "1"		2 Watt	Microwave			Continental Control Systems
		SDM-SW6A "1"		3 Watt	Refrigerator			Continental Control Systems
		SDM-SW6A "1"		4 Watt	Dryer			Continental Control Systems
		SDM-SW6A "1"		5 Watt	Washer			
		SDM-SW6A "1"		6 Watt	Oven Range and Cook Top Hood			
		SDM-SW6A "1"		7 Watt	Instant H2O Heater (SDHW)			
		SDM-SW6A "1"		8 Watt	HVAC Heat Pump			
		SDM-SW6A "2"		1 Watt	Outside outlet			
		SDM-SW6A "2"		2 Watt	SunPower Inverter 1			
		SDM-SW6A "2"		3 Watt	SunPower Inverter 2			
		SDM-SW6A "2"		4 Watt	Xantrex Inverter / Charger			
		SDM-SW6A "2"		5 Watt	Radiant Floor Heat Pump			
		SDM-SW6A "2"		6 Watt				
		SDM-SW6A "2"		7 Watt				
		SDM-SW6A "2"		8 Watt				
Water Flow		Unit	Channel	Measuring	Channel Description	Sensor	Manufacturer/Type/Setting	Notes/Action
		SDM-SW6A "0"		1 Gallons	Cold Water Supply	FTB-460x	Omega	coldWaterSupplyFlow
		SDM-SW6A "0"		2 Gallons	Hot water Supply	FTB-460x	Omega	hotWaterSupplyFlow
		SDM-SW6A "0"		3 Gallons	Solar Thermal Loop	FTB-460x	Omega	solarThermalFlow
DC		Unit	Channel	Measuring	Channel Description	Sensor	Manufacturer/Type/Setting	Notes/Action
		AM16/32	25H&L	DC Current	PV array #1, 2 -> SPR-3300 #1 tied together	Shunt	Canadian Shunt Industries	pv1/pv2Shunt
		AM16/32	26H&L	DC Current	PV array #3, 4 -> SPR-3300 #2 tied together	Shunt	Canadian Shunt Industries	pv3/pv4Shunt
		AM16/32	27H&L	DC Current	Batteries -> XW 6048 will remain	Shunt	Canadian Shunt Industries	battShunt
		AM16/32	28H&L	DC Voltage	PV array #1, 2 -> SPR-3300 #1	Voltage Divider	NREL	pv1/pv2Volt
		AM16/32	29H&L	DC Voltage	PV array #3, 4 -> SPR-3300 #2	Voltage Divider	NREL	pv3/pv4Volt
		AM16/32	30H&L	DC Voltage	Batteries -> XW 6048	Voltage Divider	NREL	battVolt



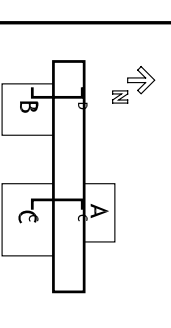
2007 PITTSBURGH SOLAR DECATHLON TEAM

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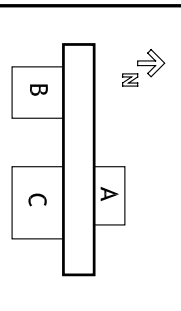
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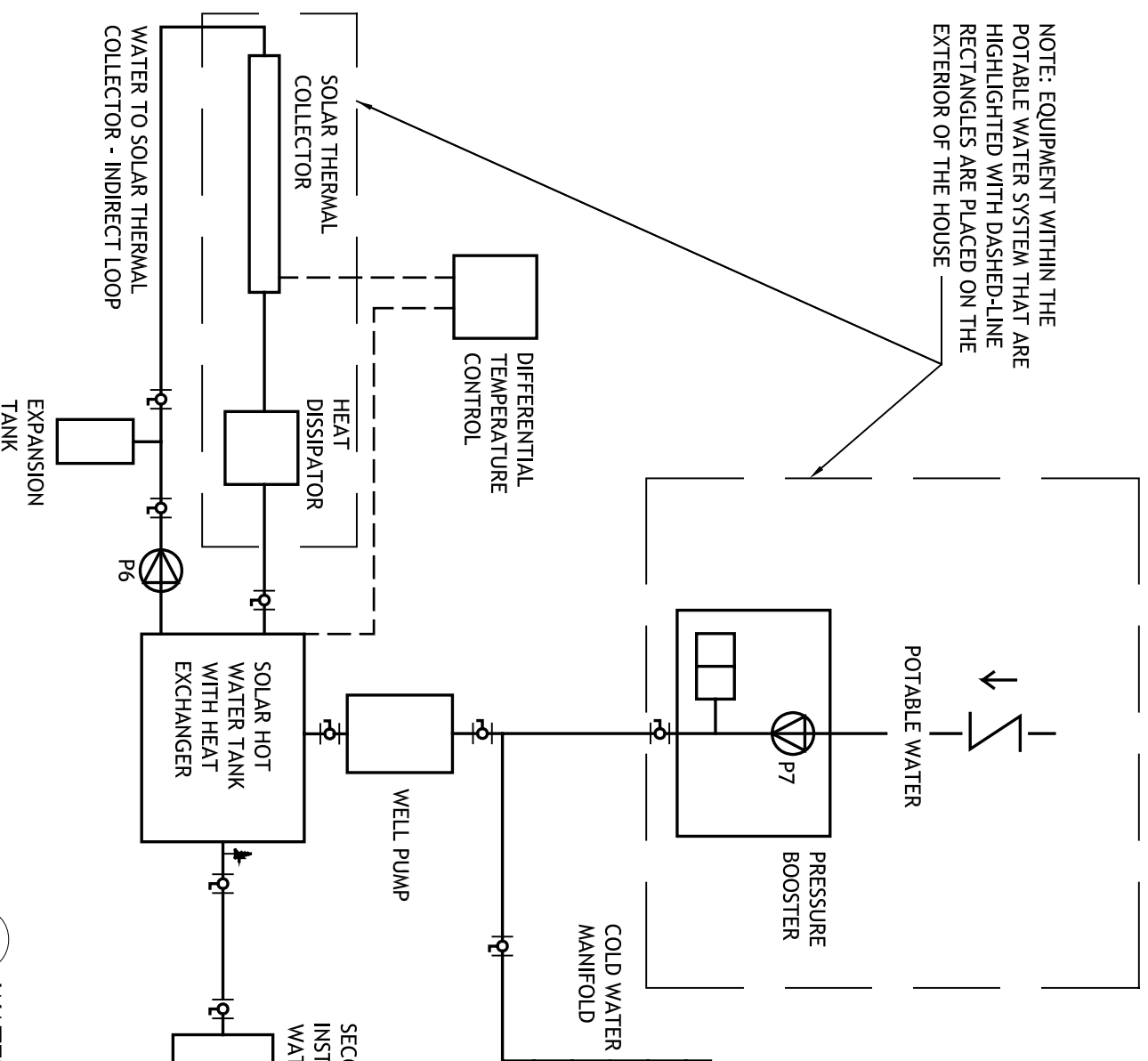


DRAWN BY: STEPHANIE CHU
DATE: 08/07/2007
TITLE: Data Acquisition and Communication - Schedule
E 4.2.1



PLUMBING EQUIPMENT SCHEDULE	
SOLAR THERMAL COLLECTOR Ref. Spec. p. 81	(1) Apricus AP-30 Solar Collector - 30 evacuated tubes Overall size: 77.9"x86.4"x6.1 Collector Size: 43.1 ft ² Weight: 209 lbs Fluid Capacity: 28.2 fl. oz.
HEAT DISSIPATOR	Apricus Heat Dissipator - 1.3kW heat dissipation capacity Overall Size: 13 1/4"x 6 3/4"x 19 3/4"
SOLAR HOT WATER STORAGE Ref. Spec. p. 80	Viessmann Vitocell-H 300 Model No. EHA-200 Overall Size: 48.75"x25.25"x25.75" Storage Capacity: 53 gal Weight: 185 lbs Internal Heat Exchanger
INSTANTANEOUS WATER HEATER Ref. Spec. p. 78	SEISCO SH-5 Tankless Water Heater Overall Size: 10.25"x15.75"x6.25" Weight: 15 lbs 240V, 2.5 kW Max temp increase: 25 °F @ 1.4 GPM
PRESSURE BOOSTER Ref. Spec. p. 85	Flexcon PBS-8 16"x10"x16", 30 lbs, 5 GPM @ 30 psi Max inlet pressure: 40 psi, Max outlet pressure: 80 psi
EXPANSION TANK Ref. Spec. p. 86	Flexcon HTX 30 Hydronic Expansion Tank, 4.5 Gallon Max working pressure: 100PSI Max operation temp: 212 °F 11" diameter x14" tall Weight: 10 lbs
DIFFERENTIAL TEMPERATURE CONTROL Ref. Spec. p. 87	SunEarth Model SETR 0301U Solar Water Heating System Control 6.3"x6.18"x1.85" 120V 60HZ Weight: 1 lb 5 oz Temperature Range: 32 °F - 205 °F
CIRCULATION PUMP Ref. Spec. p. 84	Grundfos Model 32-160.1 100mm x400 mm x 357 mm 5.5kW

NOTE: EQUIPMENT WITHIN THE POTABLE WATER SYSTEM THAT ARE HIGHLIGHTED WITH DASHED-LINE RECTANGLES ARE PLACED ON THE EXTERIOR OF THE HOUSE



KEY:

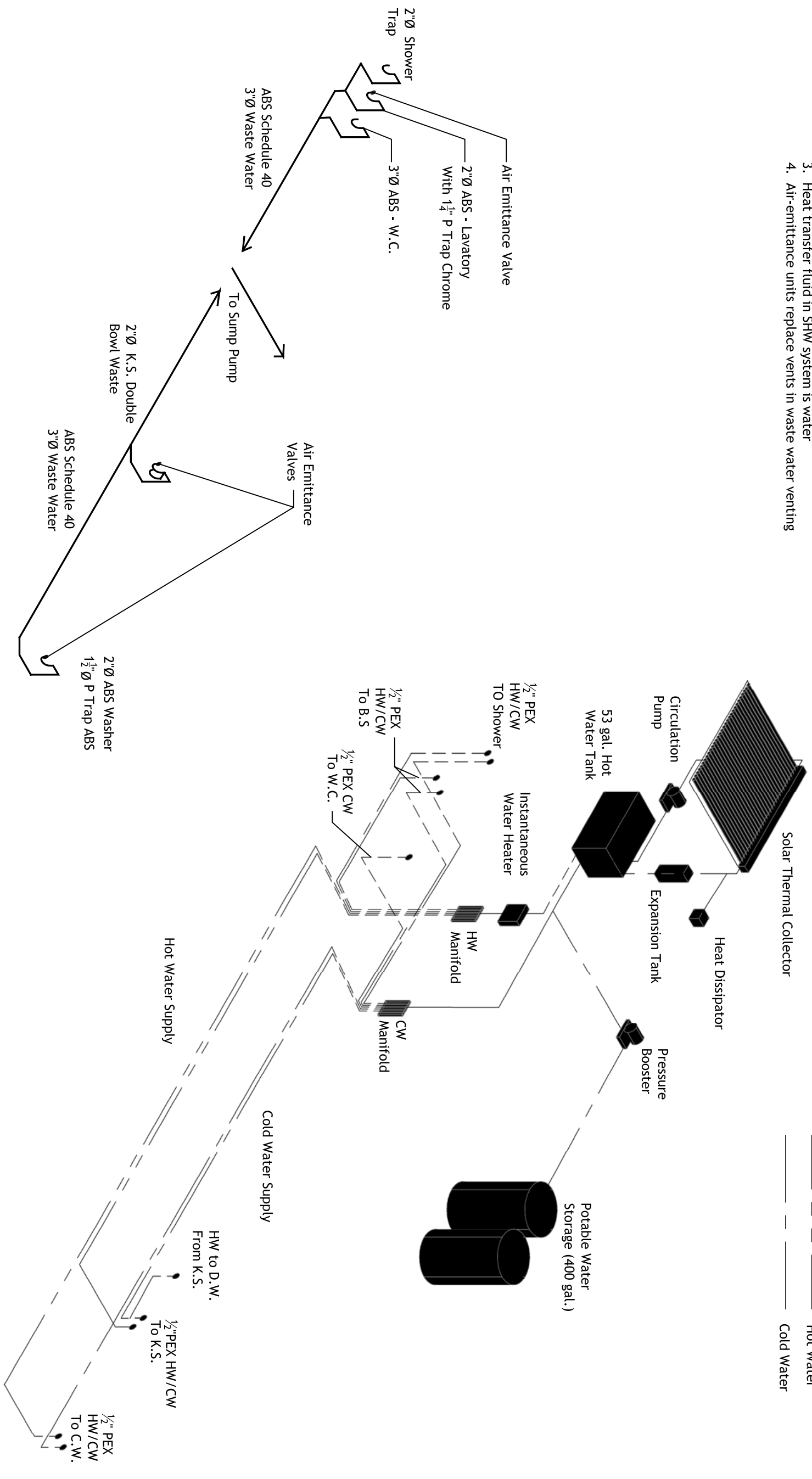
- WATER
- - - - - ELECTRIC
- ⬇️ TEMP/PRESSURE RELIEF VALVE
- ⊘ ISOLATION BALL VALVE
- ⊙ PRESSURE PUMP

1 WATER SCHEMATIC DIAGRAM
 NOT TO SCALE

KEY:

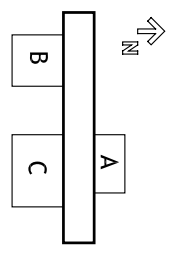
- _____ Waste water
- _____ Vent
- _____ Hot Water
- _____ Cold Water

- Note:
1. Plumbing systems comply with All IRC codes.
 2. Isometric drawing is a diagram and does not represent actual slope of waste pipes.
 3. Heat transfer fluid in SHW system is water
 4. Air-emitance units replace vents in waste water venting



2 WASTE WATER DIAGRAM
NOT TO SCALE

1 POTABLE WATER DIAGRAM
NOT TO SCALE



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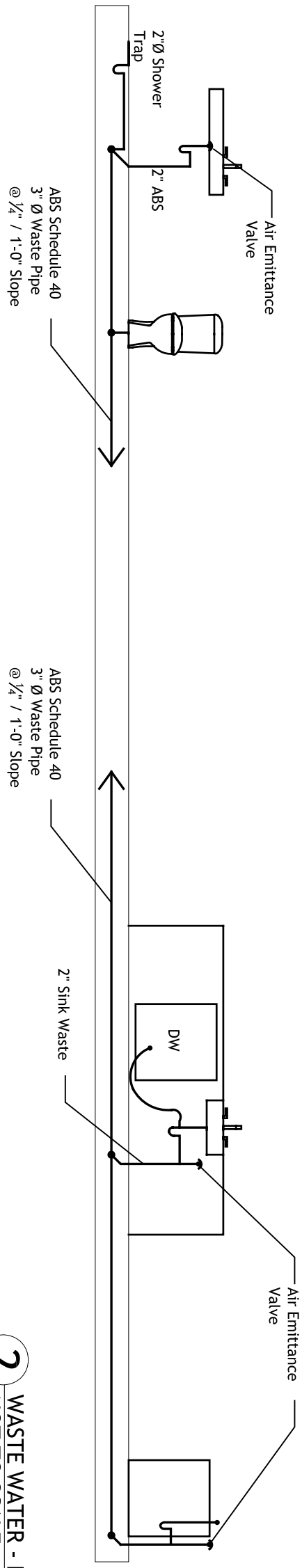
DRAWN BY: REBECCA SHORE

DATE: 08/07/2007
TITLE: PLUMBING ISOMETRIC

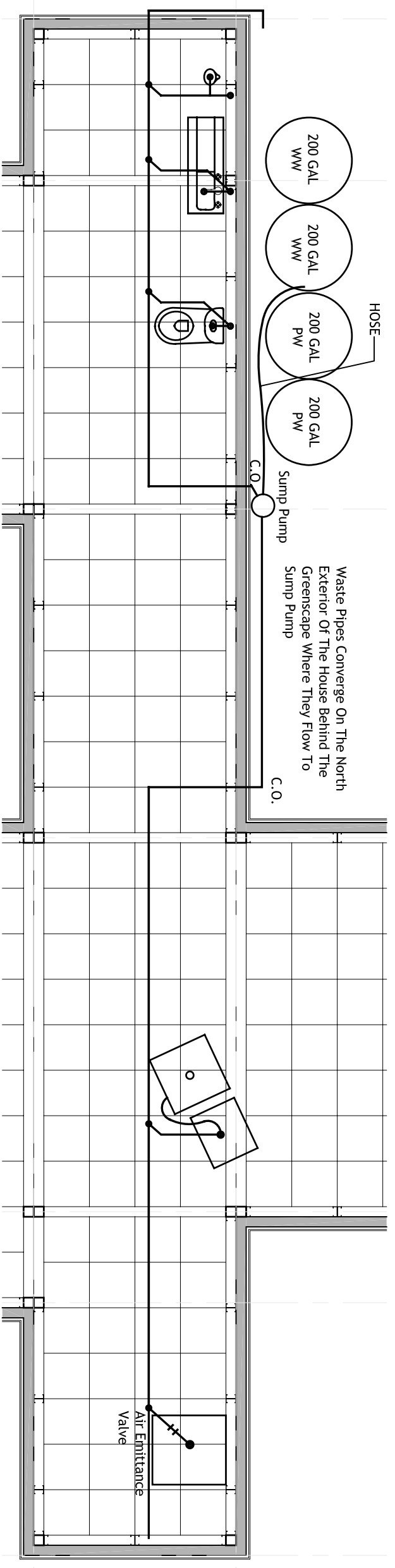
- Note:
1. Air-Emittance Units Replace Venting Pipes
 2. Two Separate Waste Pipes Converge On The Exterior To Minimize Height Of Lower Plenum

KEY:

_____ Waste Water



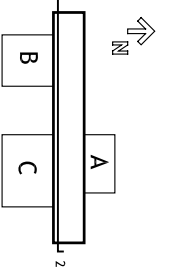
2 WASTE WATER - DIAGRAM
 NOT TO SCALE



1 WASTE WATER - PLAN
 1/4"=1'

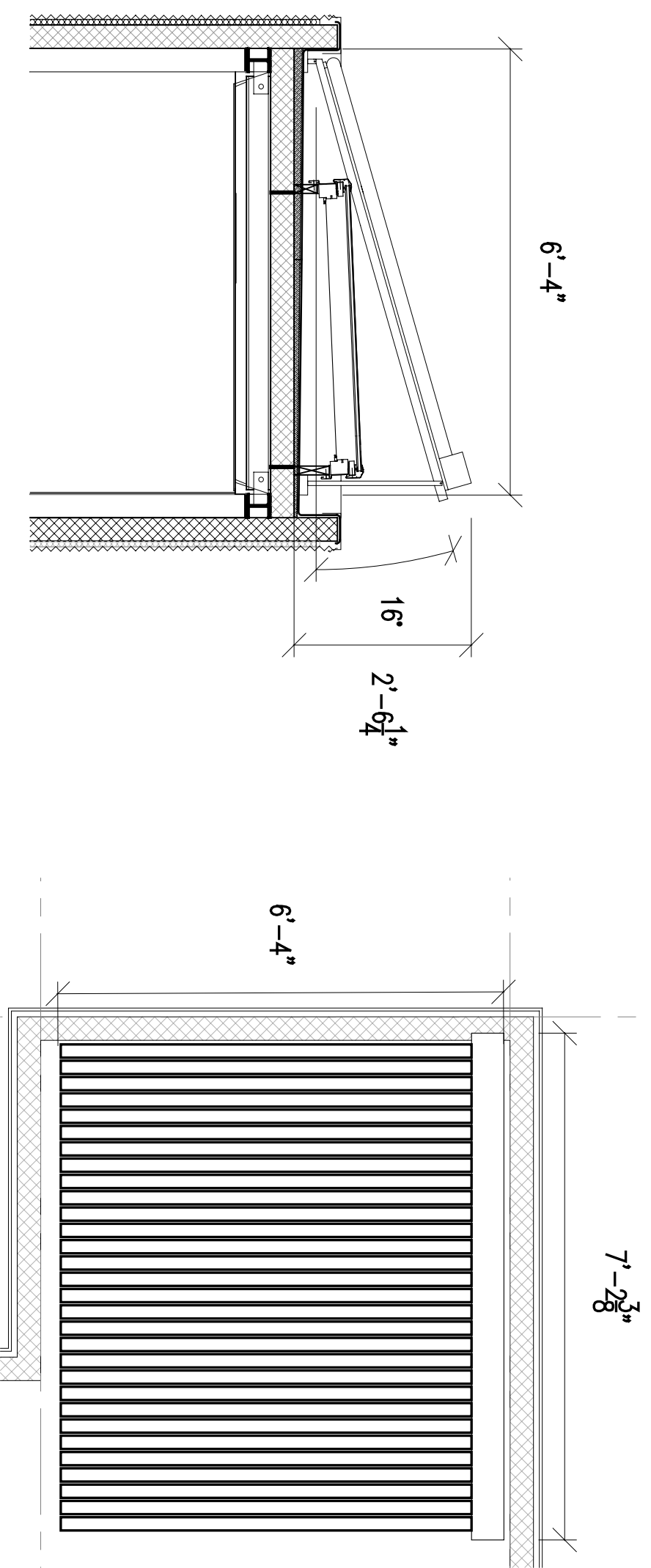
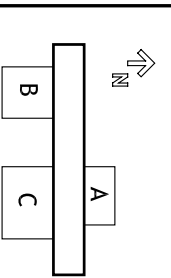


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DRAWN BY: REBECCA SHORE
 DATE: 08/07/2007
 TITLE: PLUMBING - WASTE

P3



4 SOLAR THERMAL PANEL - SECTION
 1/2" = 1'-0"

3 SOLAR THERMAL PANEL - ROOF PLAN
 1/2" = 1'-0"

- NOTES:
1. The total amount of water necessary for competition requirements is 340.6 gallons.
 2. Two 200 gallon tanks are available for supply water storage, and two 200 gallon tanks are available for waste water storage. Both supply tanks will be filled to capacity (200 gallons). One will be used initially to fill up the 53 gallon tank.

SOLAR HOT WATER SYSTEM -DETAILS
Solar Collector:
 Apricus AP-30. Ref. Spec. p. 65
 30 evacuated tubes
 71.7% initial efficiency
 80" x 86.4" X 6.14"
 46.8 ft gross area
 208.5 lbs
 Optimal flow rate: 1.8 gallons/tube/hour

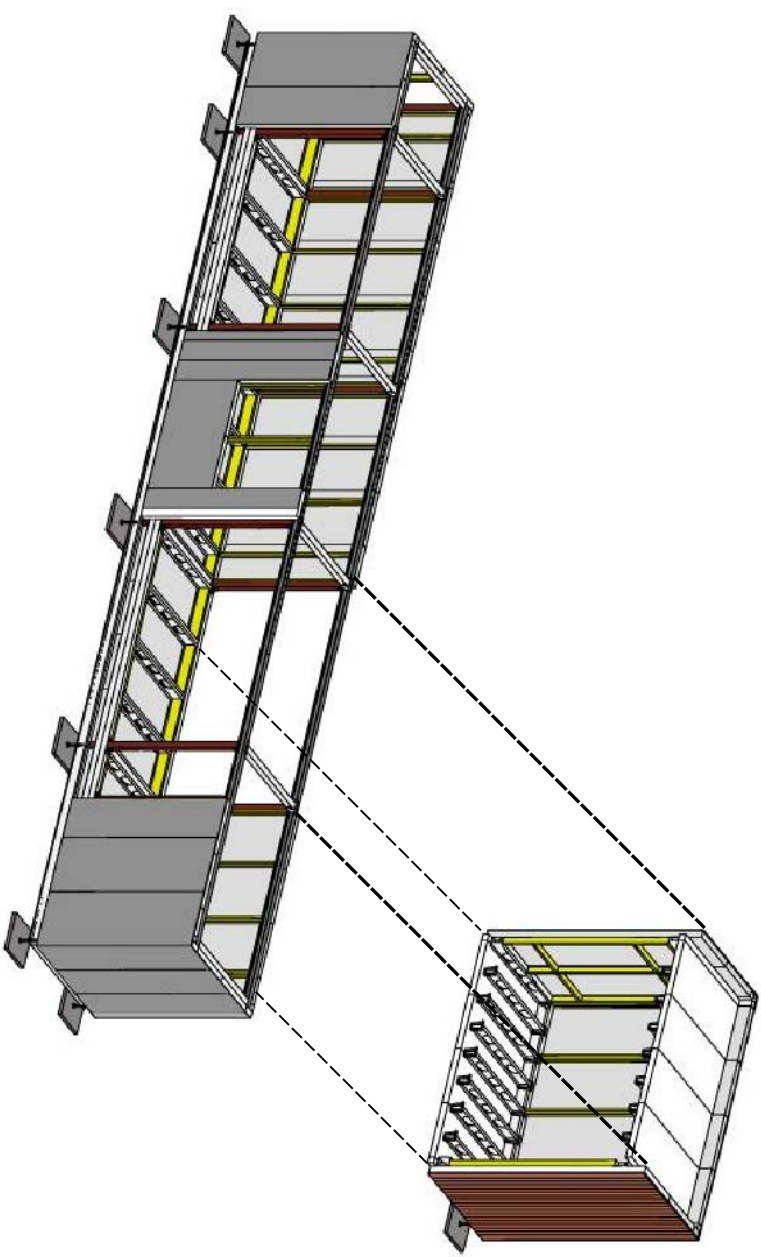
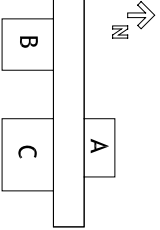
Storage Tank:
 Viessmann Vitocell-H 300. Ref. Spec. p. 64
 Storage Capacity: 53 gallons
 48.75" x 25.25" x 25.75"
 185 lbs
 Tubular heat exchanger coil
 Heat up time (ΔT) 50 - 140°F: 18 min
 Domestic hot water draw rate: 2.6 GPM

Contest	Volume (gall) for Contest	Estimated Volume/Day	Comments
Shower	150	30.0	Total of 10 contests, 15 gallons in less than 10 minutes per test. Max points for T... >110°F. 0 points for T... <100°F
Clotheswash	64	12.8	Total of 2 tests washing 12 bath-sized towels. Temperature must reach 110°F at some point during cycle
Dishwash	23.6	4.7	Total of 4 tests where temperature must reach 120°F at one point
Miscellaneous	50	10.0	Handwashing / Cooking / Gardening. Total of 1 dinner prepared
Water Tank	53		Initial fill-up for solar thermal storage tank
TOTAL	340.6	68.1	400 gallons of water storage available > 340.6 gallons needed

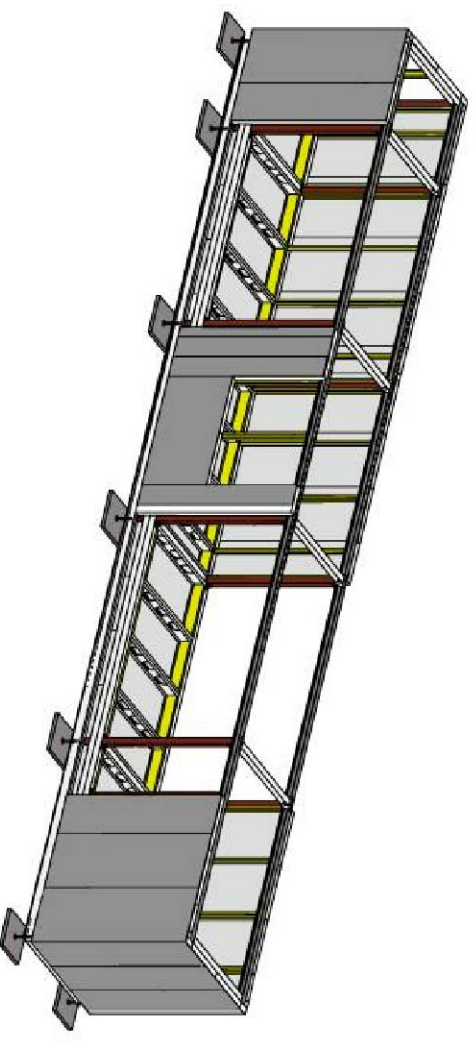
2 SOLAR HOT WATER EQUIPMENT DETAILS

1 CONTEST REQUIREMENTS WATER USAGE





2 KITCHEN POD PLACEMENT
 NO SCALE



1 CORE and LEVELLING PLATFORM
 NO SCALE

POD-A PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE LOWERED BY CRANE ONTO CRIBBING AND LEVELLED.

THE POD WILL BE ANGLED SO THAT ITS UPPER EDGE IS 6 INCHES FROM THE CORE WHEN IT IS SET DOWN. THIS WILL ALLOW FOR THE UPPER PLENUM OF THE CORE TO BE LOWERED INTO PLACE. WE ARE ABLE TO ACHIEVE THIS ANGLE BY USING ADJUSTABLE FEET WHICH HAVE A RANGE OF 4 INCHES.

2HRS: 60 TON GROVE CRANE

BOTTOM CORE PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE LOWERED BY CRANE ONTO CRIBBING AND LEVELLED.

2HRS: 60 TON GROVE CRANE

CONCRETE FOOTING STONES WILL BE LEVELLED

2 HRS: MANUAL LABOR

POD-C PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE LOWERED BY CRANE ONTO CRIBBING AND LEVELLED.

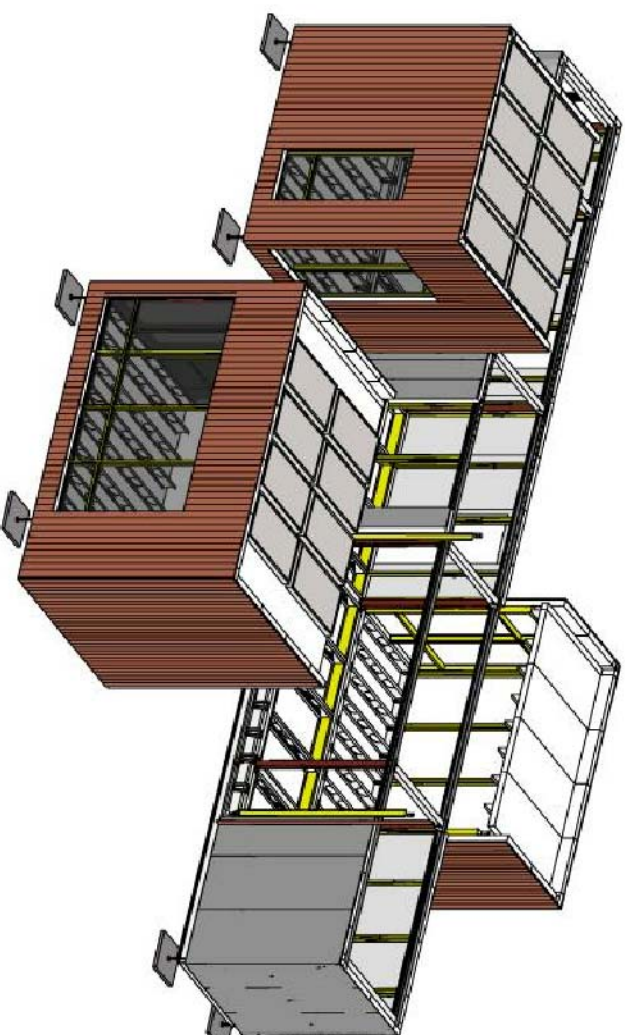
THE POD WILL BE ANGLED SO THAT ITS UPPER EDGE IS 6 INCHES FROM THE CORE WHEN IT IS SET DOWN. THIS WILL ALLOW FOR THE UPPER PLENUM OF THE CORE TO BE LOWERED INTO PLACE. WE ARE ABLE TO ACHIEVE THIS ANGLE BY USING ADJUSTABLE FEET WHICH HAVE A RANGE OF 4 INCHES.

2HRS: 60 TON GROVE CRANE

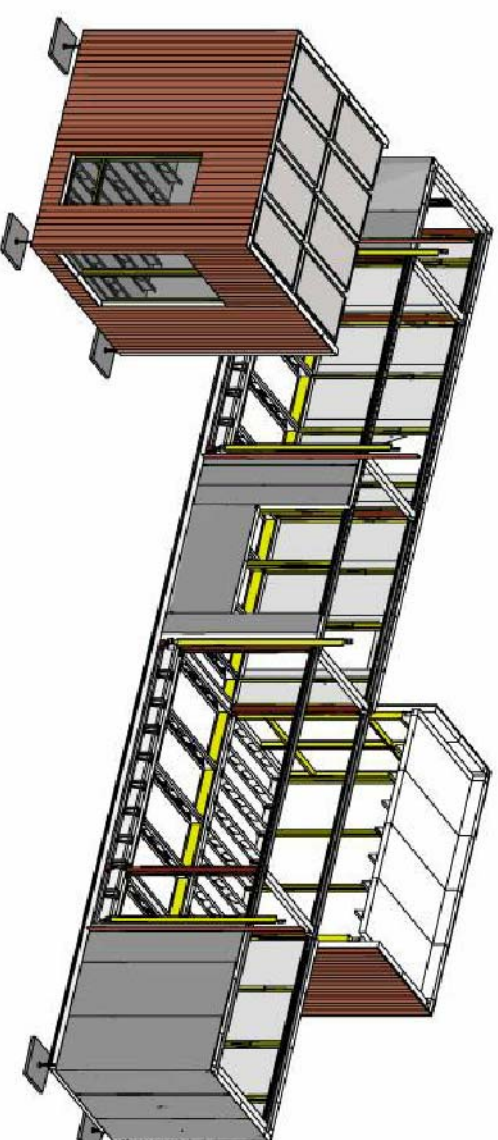
POD-B PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE LOWERED BY CRANE ONTO CRIBBING AND LEVELLED.

THE POD WILL BE ANGLED SO THAT ITS UPPER EDGE IS 6 INCHES FROM THE CORE WHEN IT IS SET DOWN. THIS WILL ALLOW FOR THE UPPER PLENUM OF THE CORE TO BE LOWERED INTO PLACE. WE ARE ABLE TO ACHIEVE THIS ANGLE BY USING ADJUSTABLE FEET WHICH HAVE A RANGE OF 4 INCHES.

2HRS: 60 TON GROVE CRANE

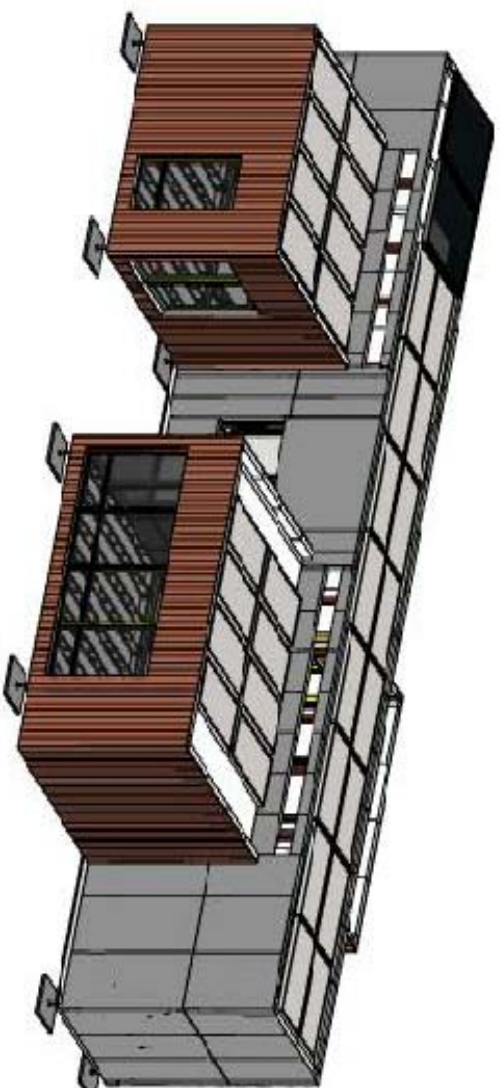


4 POD-B PLACEMENT
NO SCALE



3 POD-A PLACEMENT
NO SCALE

ALL CONNECTION POINTS WILL BE FLASHED AND SEALED.
 POD PIECES WILL BE LEVELED USING THE THREADED
 ADJUSTABLE FOOTERS .
 2HRS

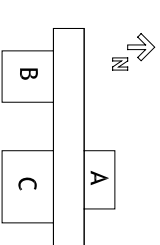


6 LEVEL and SEAL
 NO SCALE

UPPER CORE PIECE WITH ALL FINISHES, WINDOWS, DOORS,
 FIXTURES AND FITTINGS WILL BE LOWERED BY CRANE ONTO
 THE LEVEL PLATFORM
 2HRS: 60 TON GROVE CRANE



5 CORE TOP PLACEMENT
 NO SCALE



UPPER CORE PIECE WITH ALL FINISHES, WINDOWS, DOORS,
FIXTURES AND FITTINGS WILL BE LOWERED BY CRANE ONTO
THE LEVEL PLATFORM

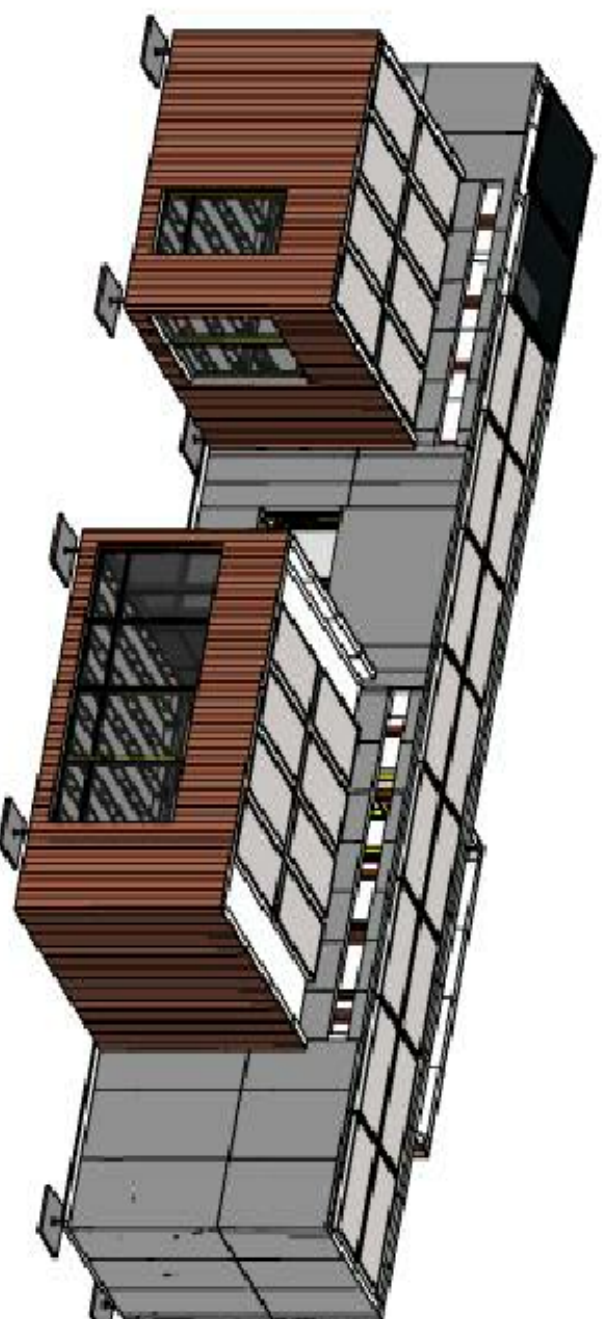
ZHRS: 60 TON GROVE CRANE



2 CORE TOP DETACHMENT
NO SCALE

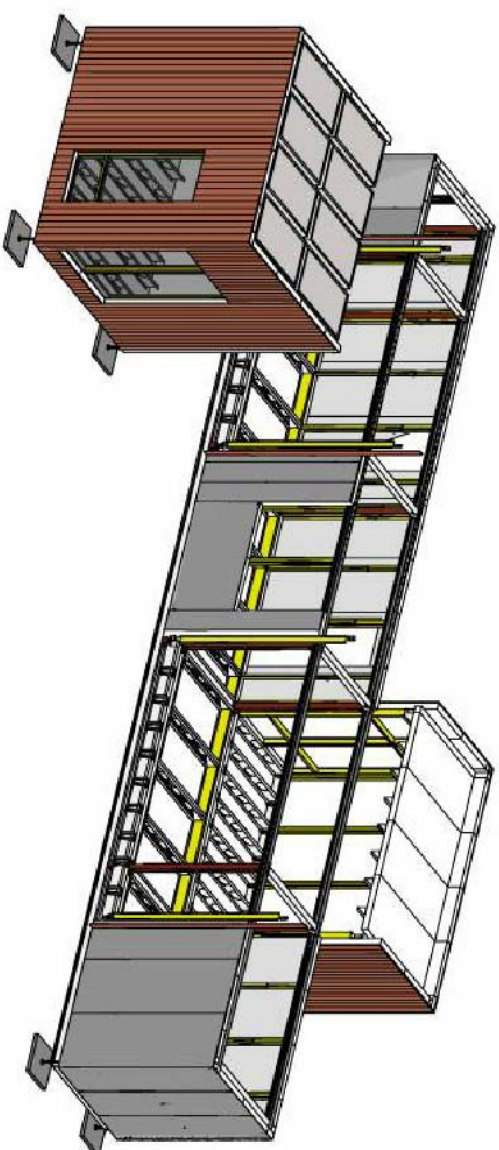
FLASHINGS AND ALL SEALS WILL BE REMOVED.

PODS WILL BE ANGLED ONCE AGAIN 6 INCHES AWAY FROM THE
CORE AT THE TOP TO LET THE UPPER PLENUM BE REMOVED.
ZHRS



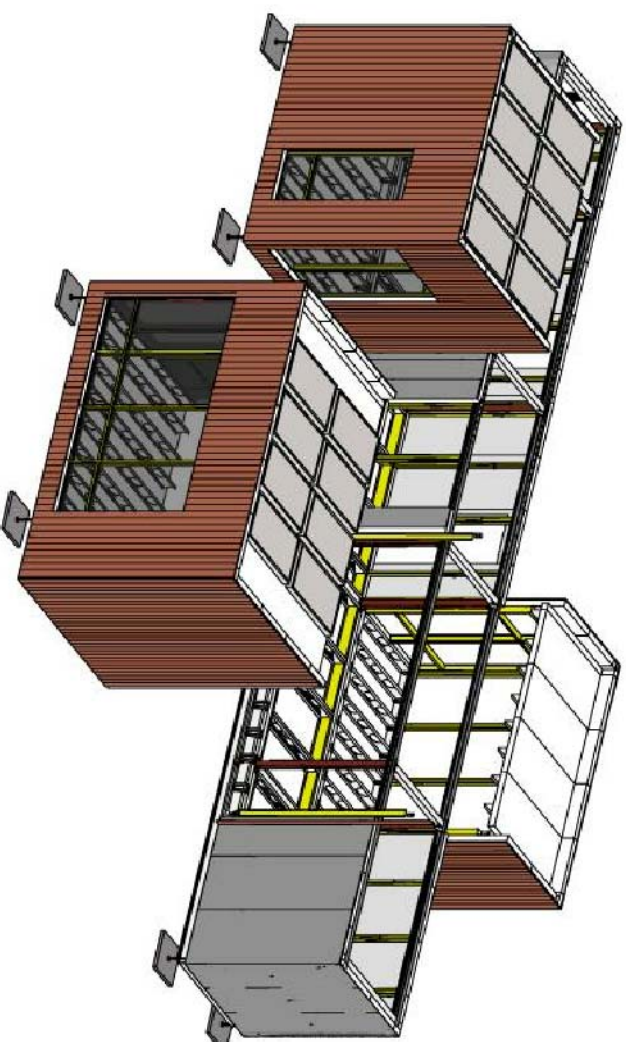
1 DE-LEVEL and REMOVE SEAL
NO SCALE

POD-C PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE RAISED BY CRANE ONTO THE TRAILER 2HRS: 60 TON GROVE CRANE



4 POD-C DETACHMENT
NO SCALE

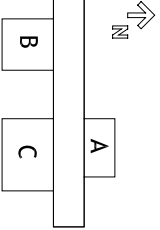
POD-B PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE RAISED BY CRANE ONTO THE TRAILER 2HRS: 60 TON GROVE CRANE



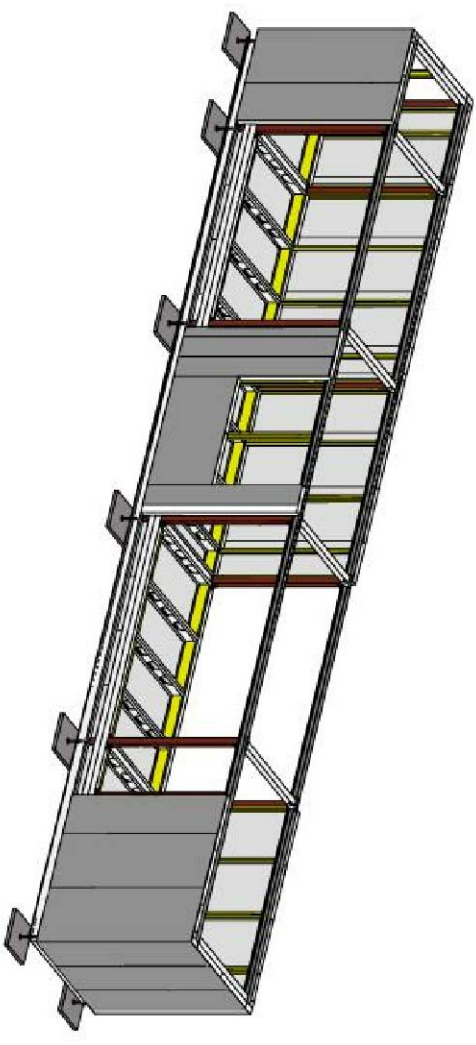
3 POD-B DETACHMENT
NO SCALE

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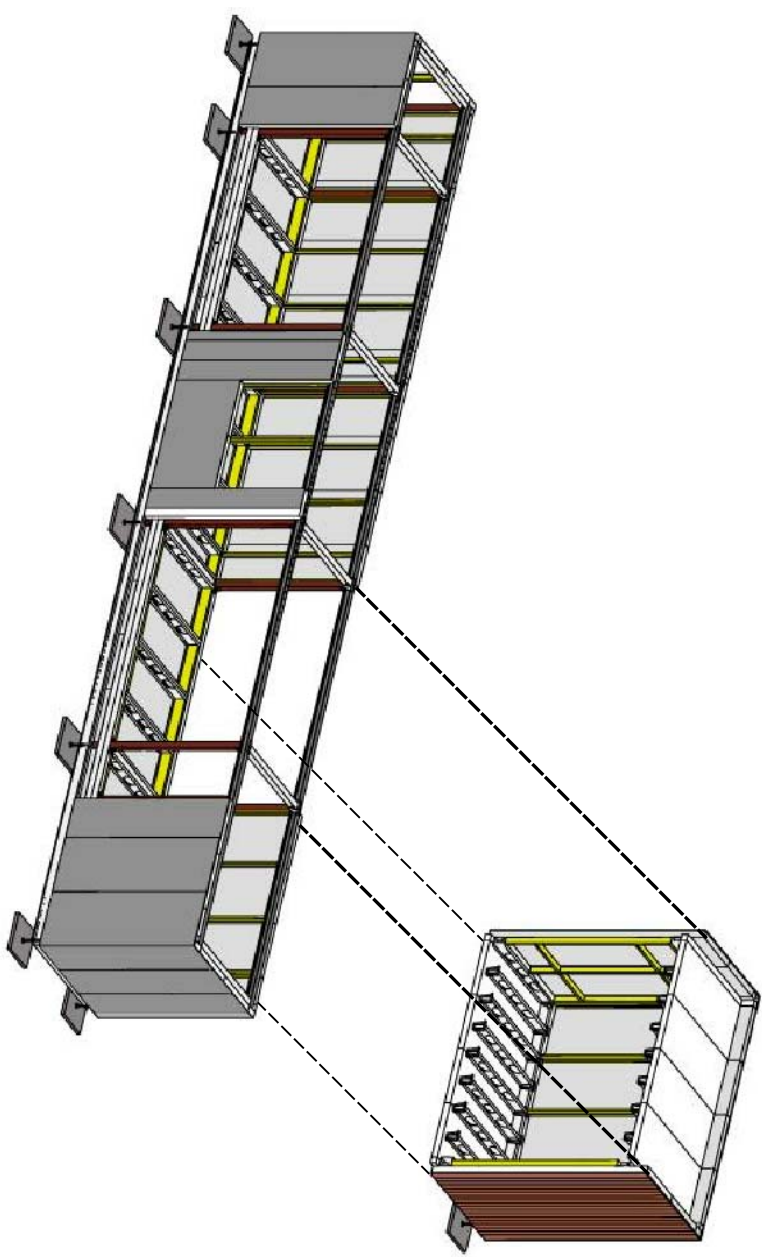


CORE PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE RAISED BY CRANE ONTO THE TRAILER 24HRS: 60 TON GROVE CRANE



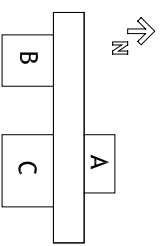
6 CORE and LEVELING PLATFORM
NO SCALE

POD-A PIECE WITH ALL FINISHES, WINDOWS, DOORS, FIXTURES AND FITTINGS WILL BE RAISED BY CRANE ONTO THE TRAILER 24HRS: 60 TON GROVE CRANE



5 KITCHEN POD DETACHMENT
NO SCALE

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DRAWN BY: KIKO RESTREPO
DATE: 08/07/2007
TITLE: DISASSEMBLY SEQUENCE

C2.2