

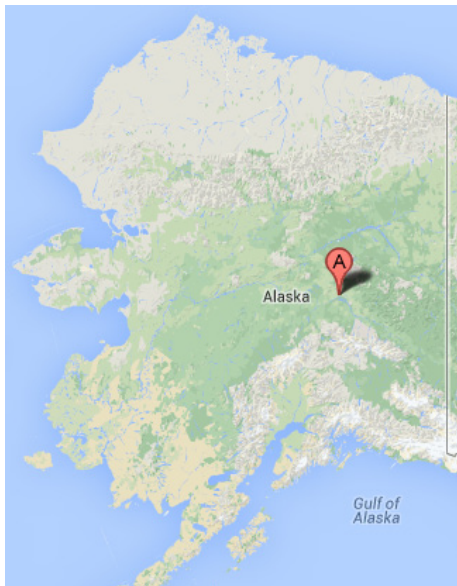


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Design for UAF Sustainable Village: **TAMARACK HOUSE**

REMOTE wall with piling foundation



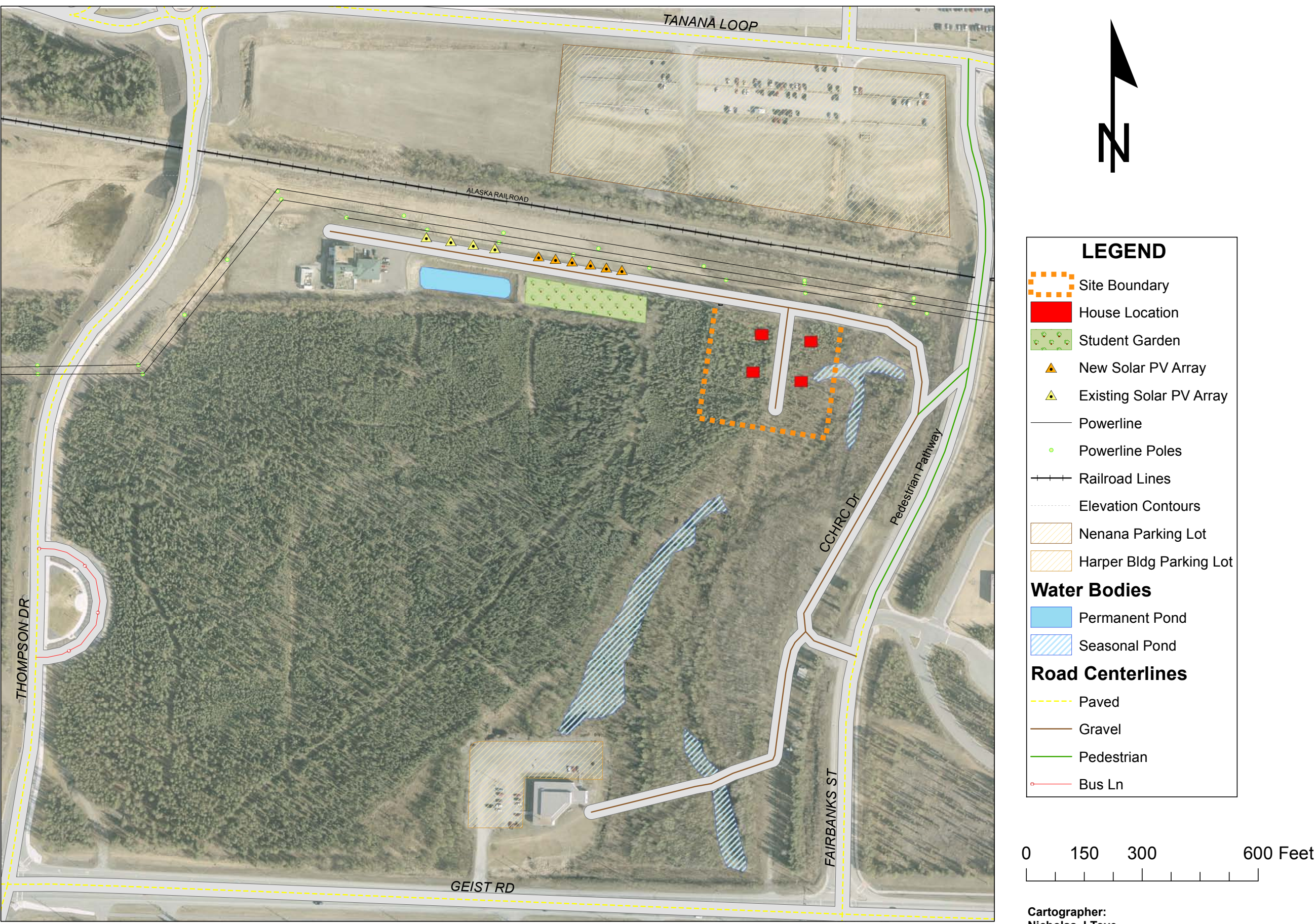
NOTE: The information contained in these documents was developed and published as a reference for specific climatic and site conditions. These documents are not a substitute for a detailed architectural plan set or site-specific engineering.

Any application of knowledge contained in this manual will need to consider site-specific issues including but not limited to applicable codes and structural design considerations for soil type, weather, and wind and snow load conditions. It is essential that a structural engineer review the plans to ensure they meet design criteria appropriate to the site.

This home has many elements that require specialized knowledge. We strongly recommend that skilled tasks, plumbing and electric work be done by professionals.

SUSTAINABLE VILLAGE AT UAF

NORTHEAST PROTOTYPE HOME



1 Northeast Prototype

2 Sustainable Village Location



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STRUCTURAL ENGINEERING
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CODE REFERENCE

IRC 2006
UPC 2009
NEC 2011

LIST OF DRAWINGS	
A0.0	COVER SHEET
C1.0	SITE PLAN
A1.0	1st FLOOR PLAN
A1.1	2nd FLOOR PLAN
A1.2	Roof Plan
A2.2	EAST ELEVATION
A2.3	WEST ELEVATION
A2.4	NORTH ELEVATION
A3.0	BUILDING SECTIONS
A3.1	BUILDING SECTIONS
A4.2	DOOR SCHEDULE
S3.0	STRUCTURAL
S3.1	STRUCTURAL
S3.2	STRUCTURAL
A6.0	EXTERIOR WALL SECTION
E1.0	ELECTRICAL 1ST FLOOR
E1.1	ELECTRICAL 2ND FLOOR
E1.2	ELECTRICAL SERVICE
P1.1	PLUMBING PLAN
F100	FIRE SUPPRESSION
F101	FIRE SUPPRESSION
M1.0	MECHANICAL VENTILATION ...
M1.1	MECHANICAL VENTILATION ...
M1.2	MECHANICAL SCHEMATIC P...

DESIGNED BY: CCHRC		
DRAWN BY: Aa		
REVISION NOTES		
No.	Rev./Issue	Date

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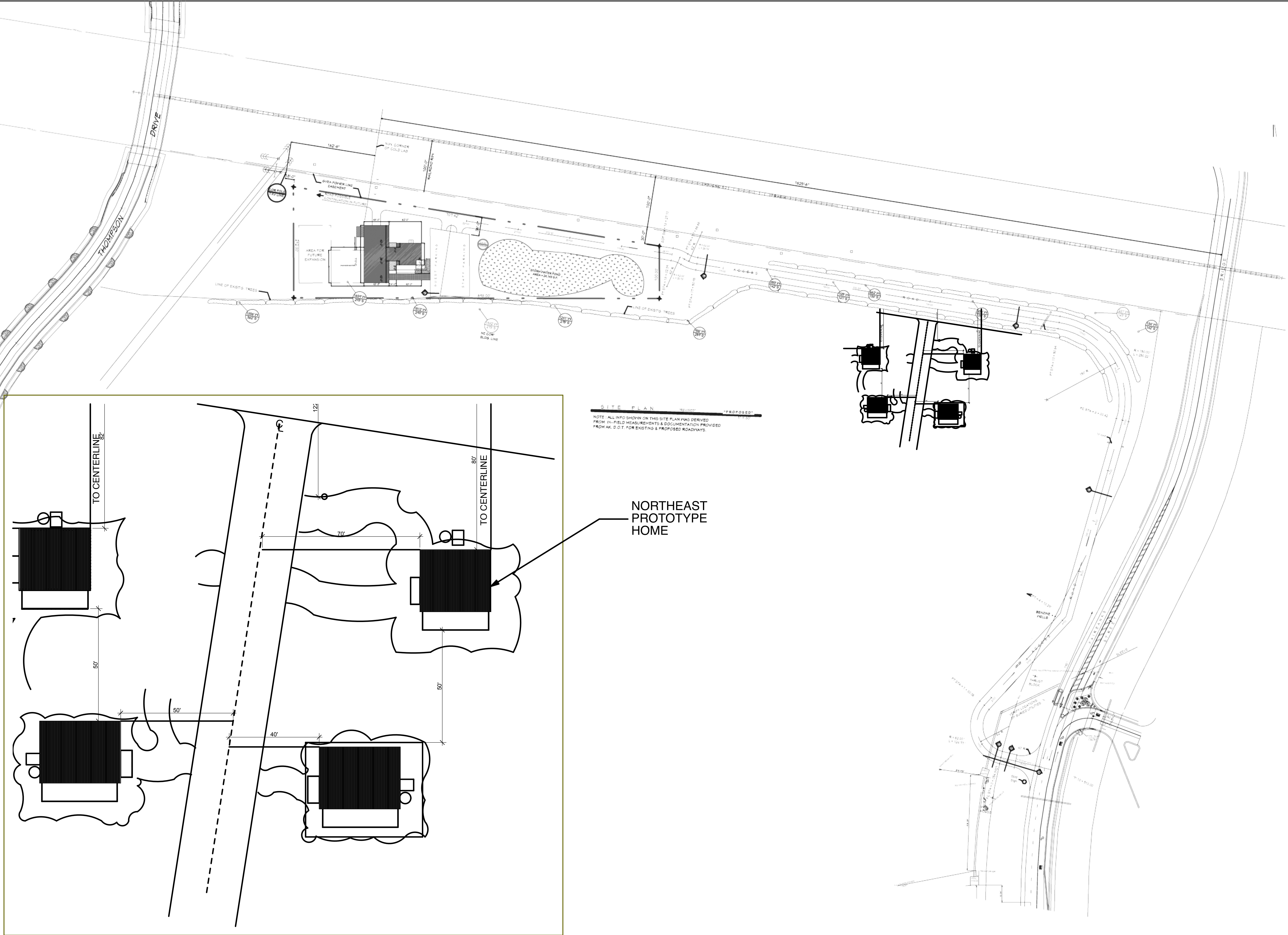


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COVER SHEET

A0.0

SHEET 1 OF total



4 SITE PLAN
SCALE: 1" = 20'

1 Site Map Entire Plat
SCALE: 1:0.30

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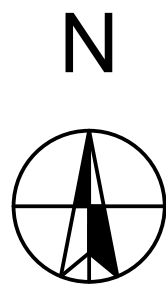
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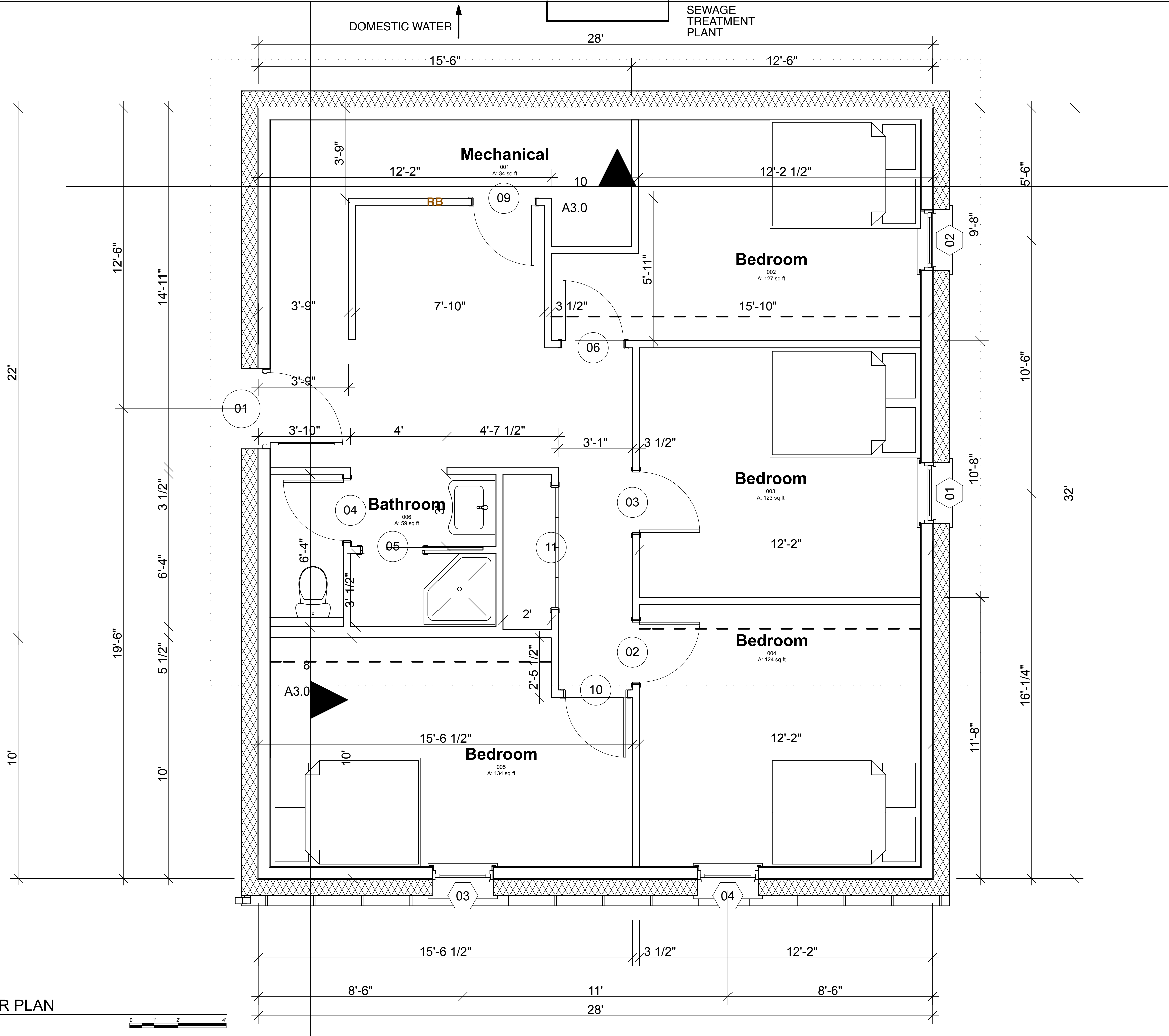
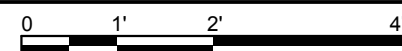
SITE PLAN

C1.0

SHEET 3 OF total



1 1st FLOOR PLAN



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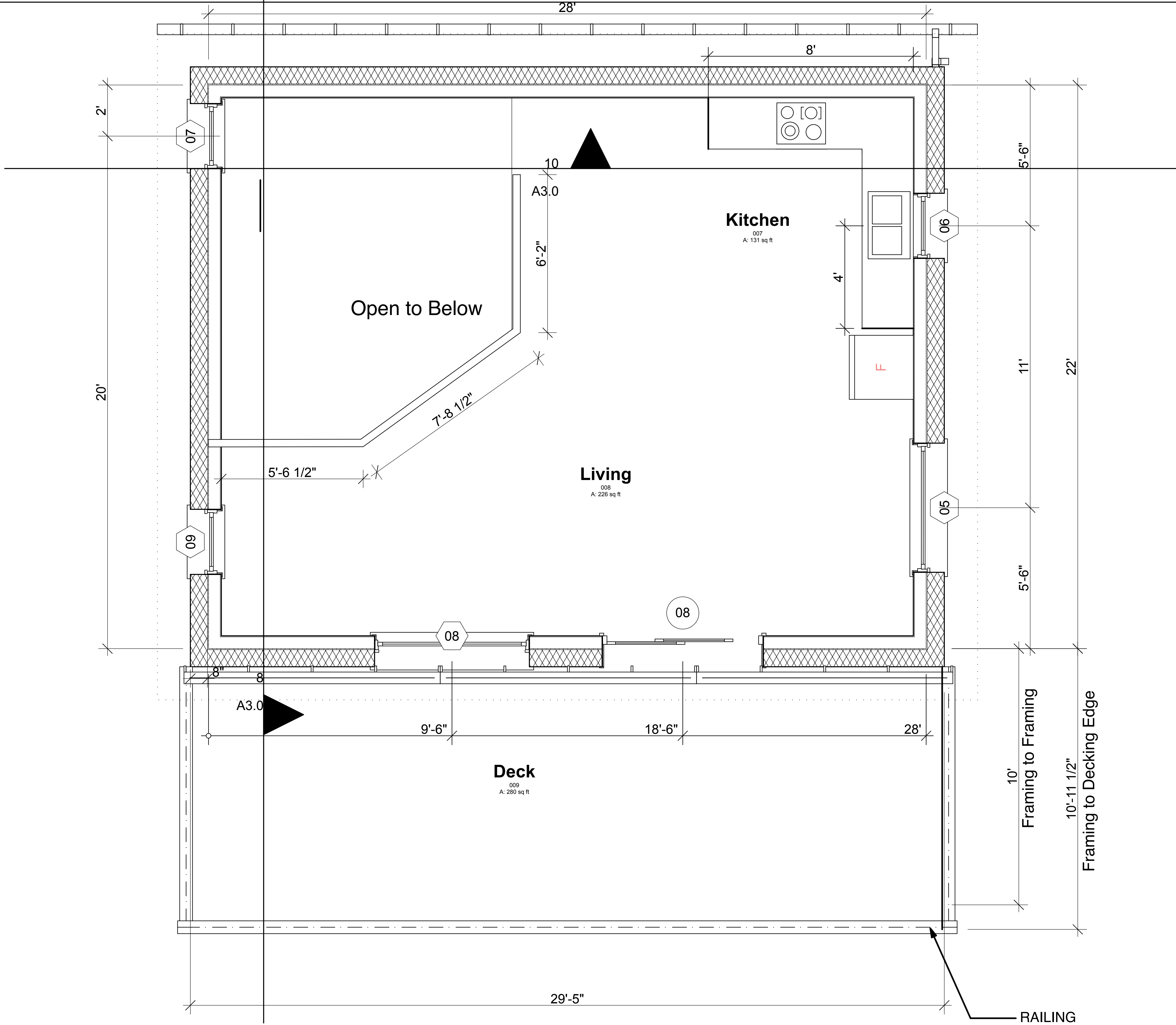
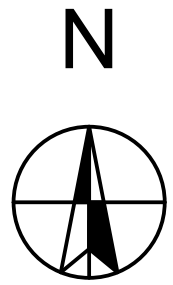
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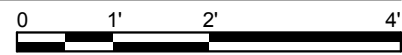
1st FLOOR PLAN

A1.0

SHEET 5 OF total



1 2nd FLOOR PLAN



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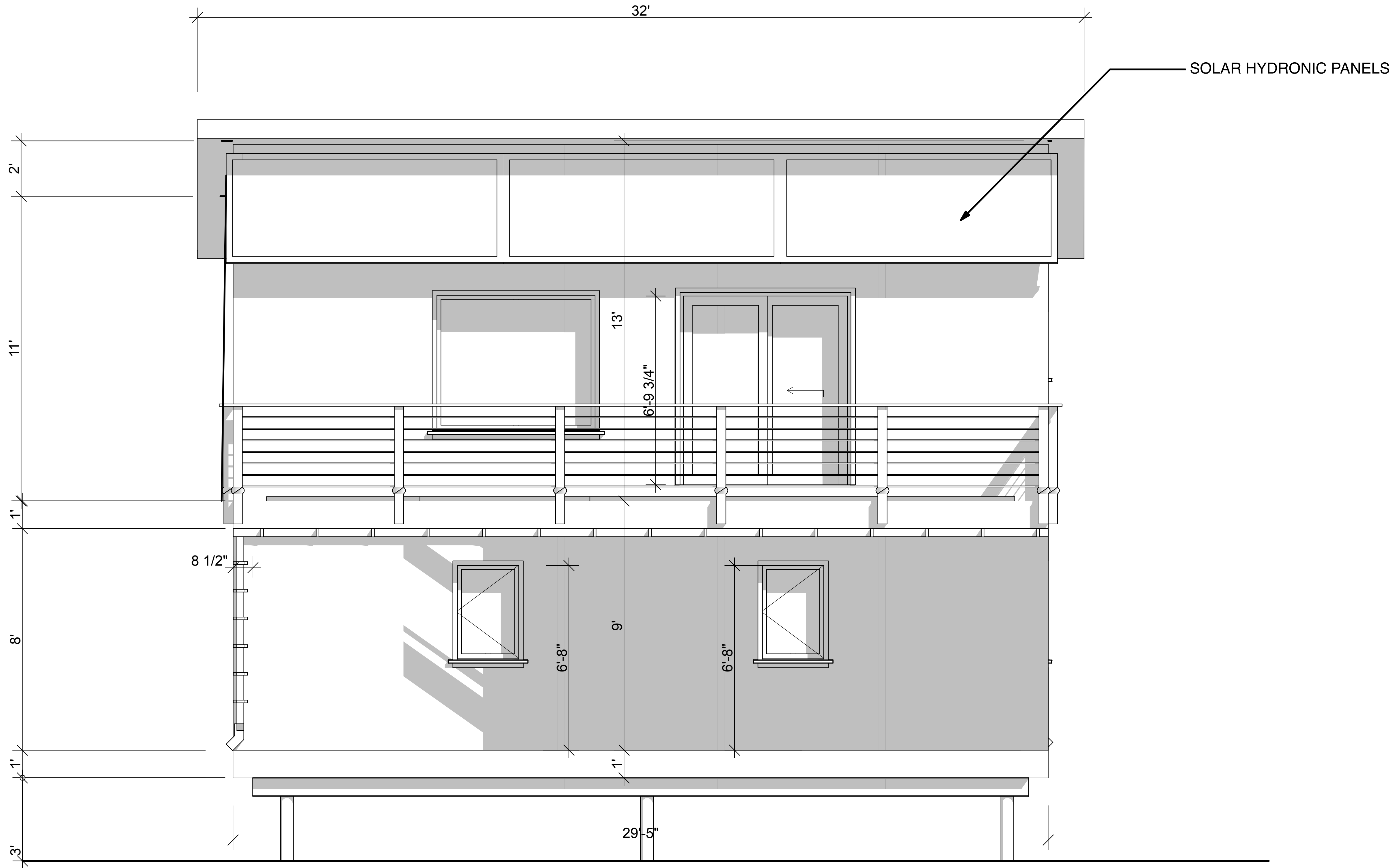
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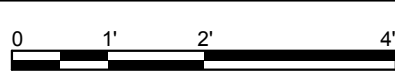
2nd FLOOR PLAN

A1.1

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1 SOUTH ELEVATION



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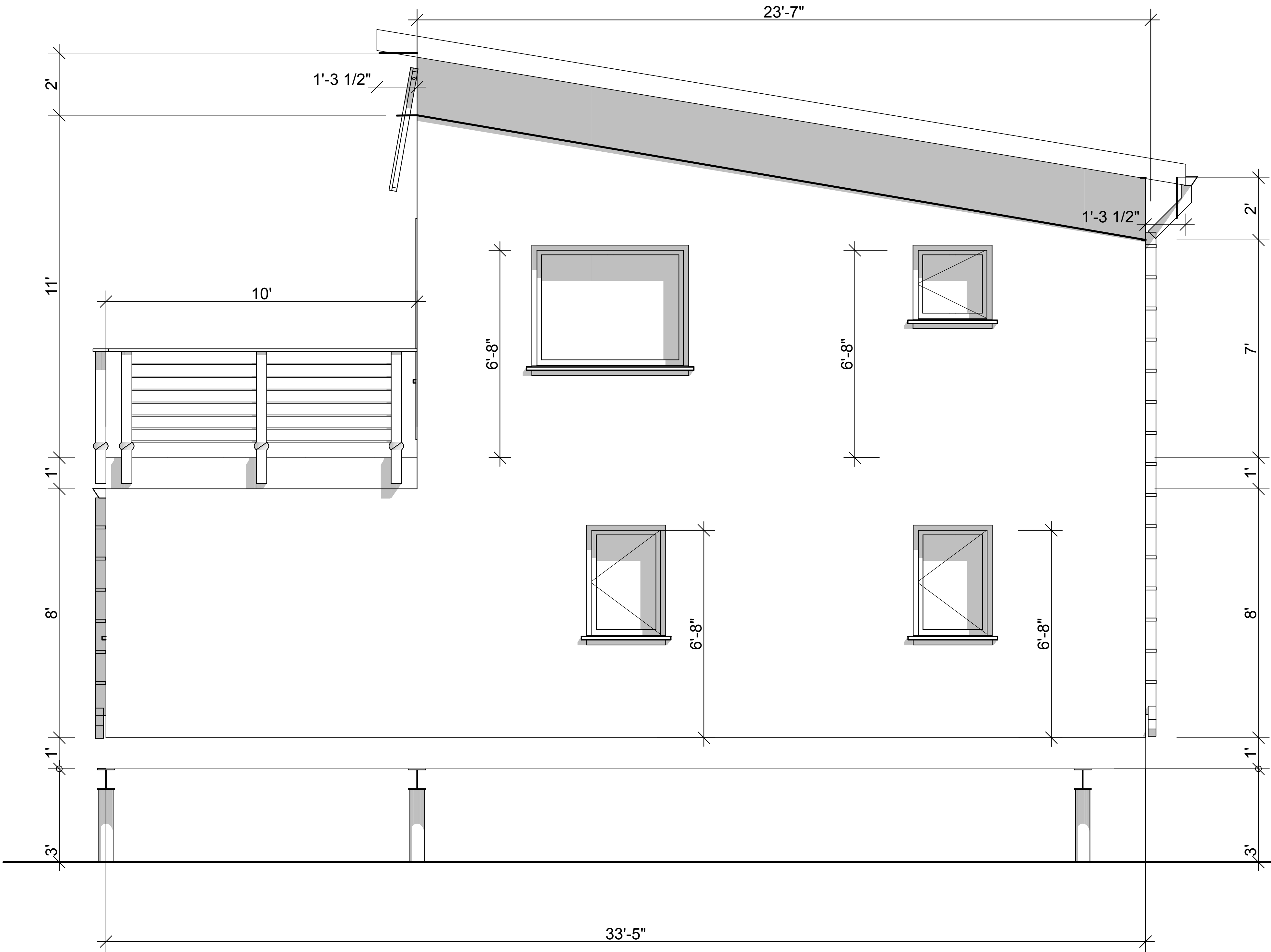
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SOUTH ELEVATION

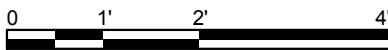
A2.1

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1

EAST ELEVATION



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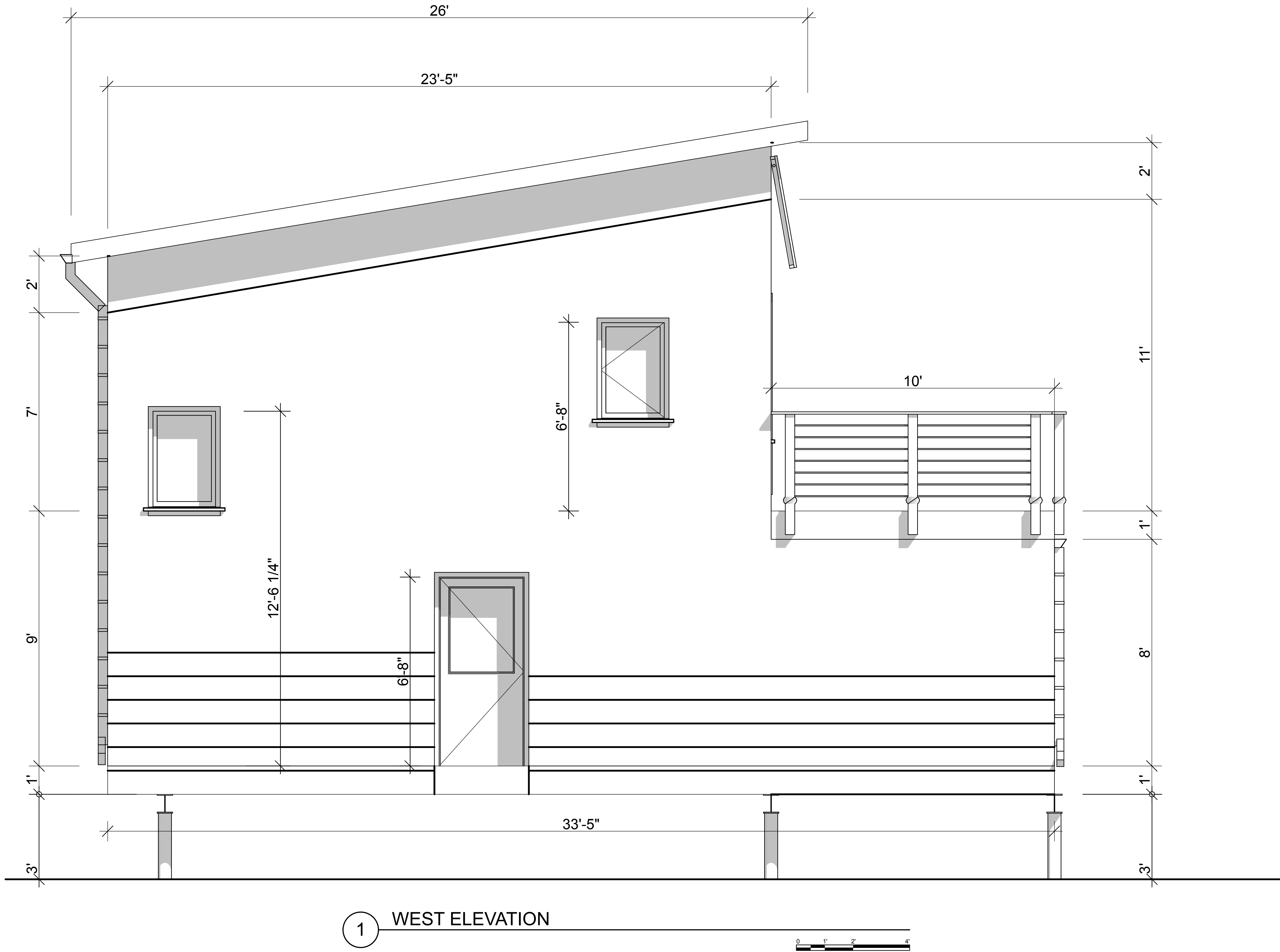
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EAST ELEVATION

A2.2

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1 WEST ELEVATION

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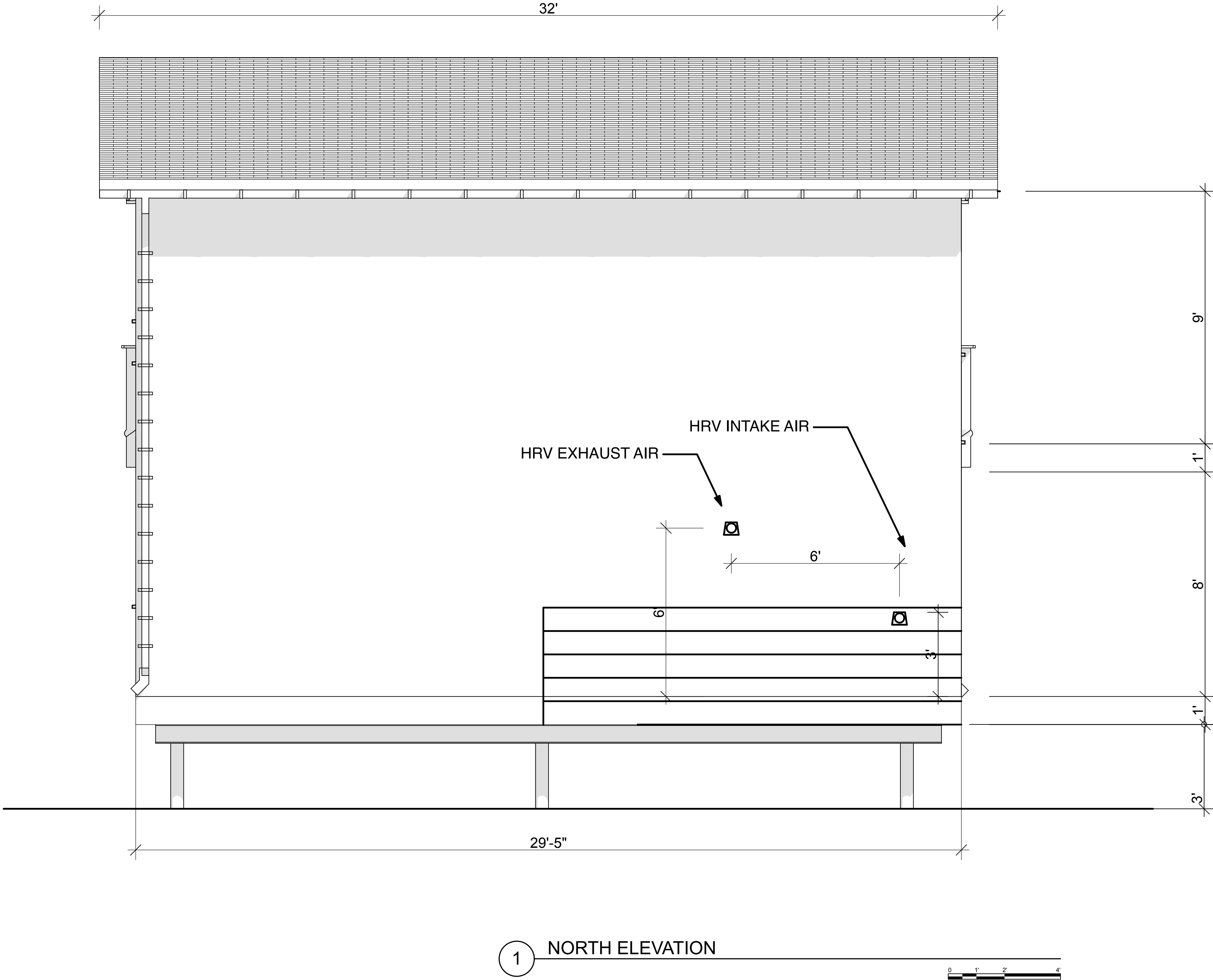
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WEST ELEVATION

A2.3

SHEET 11 OF total



1 NORTH ELEVATION

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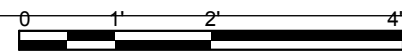
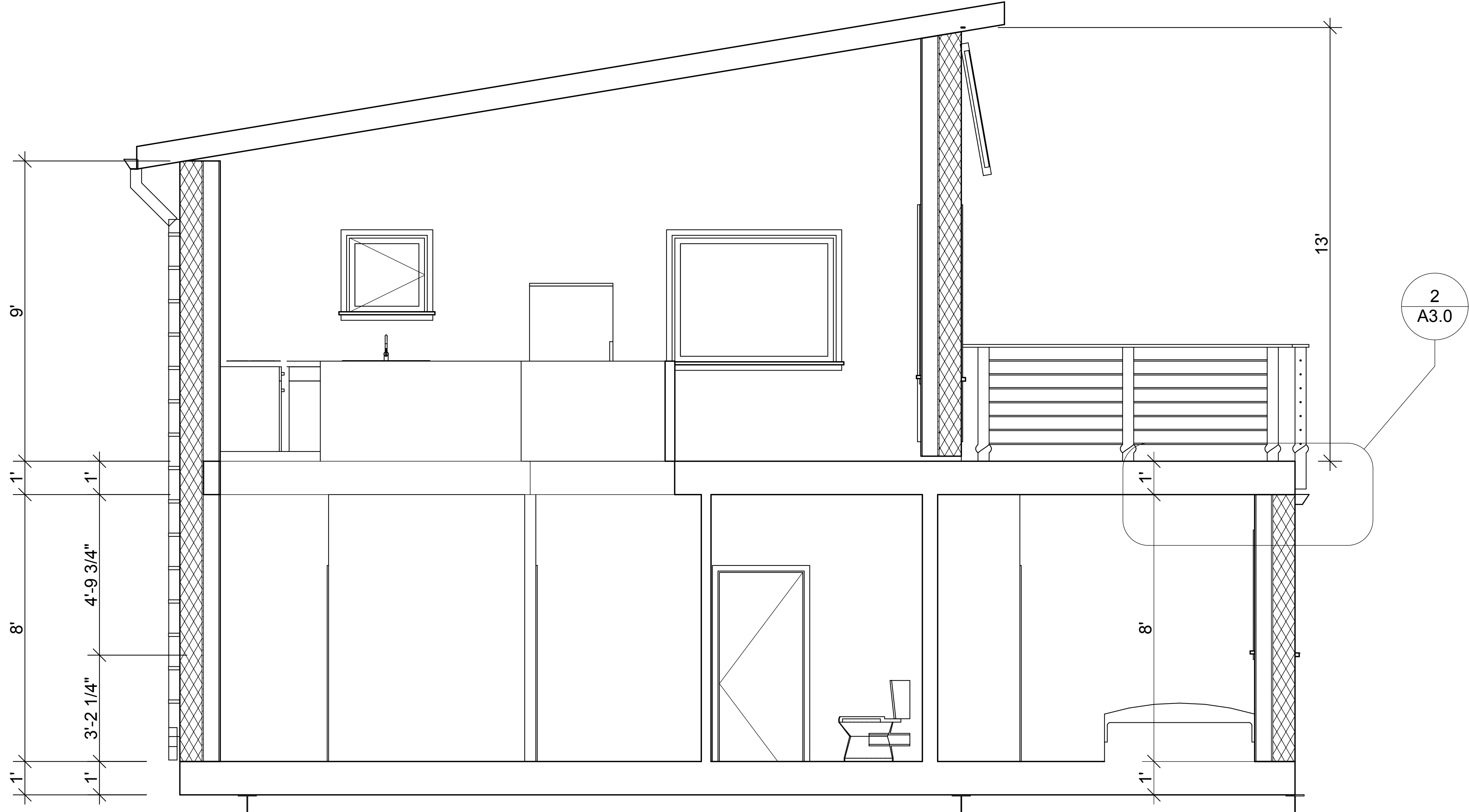
Design Development

NORTH ELEVATION

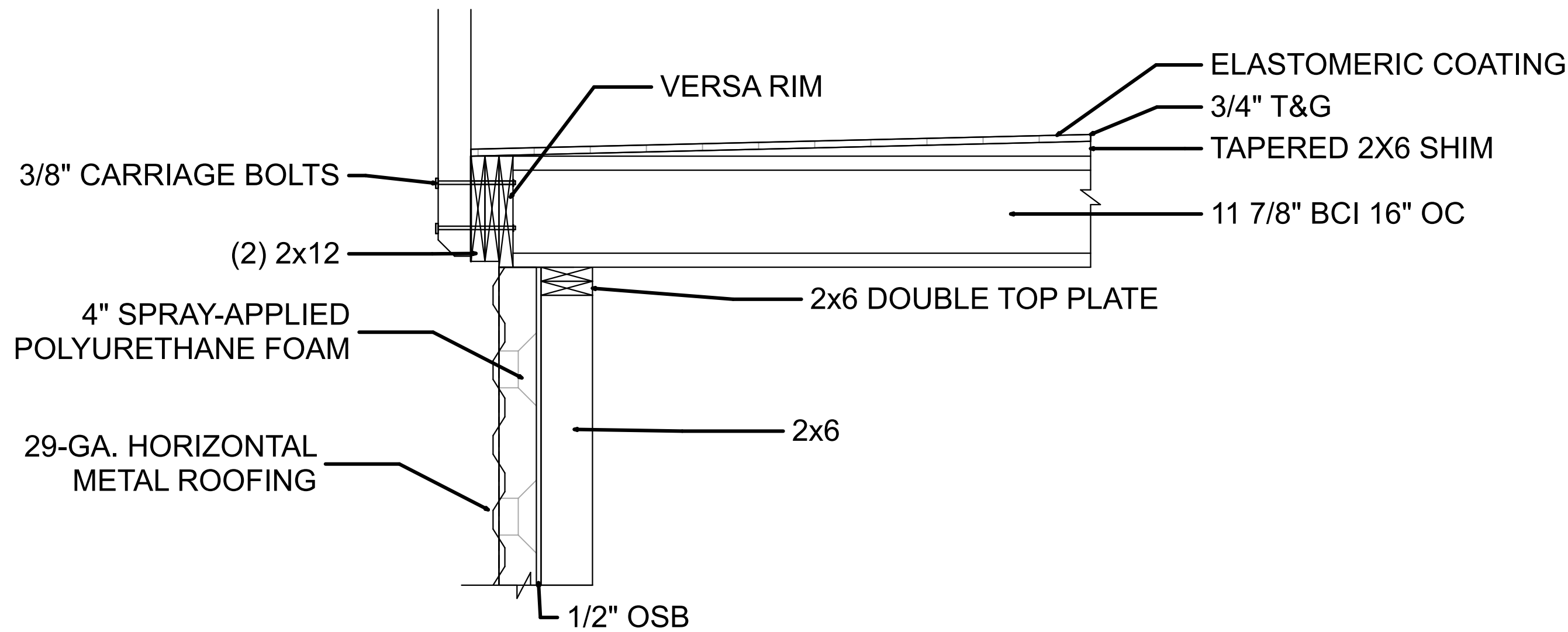
A2.4

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1 BUILDING SECTION



2 UPPER DECK RAILING DETAIL



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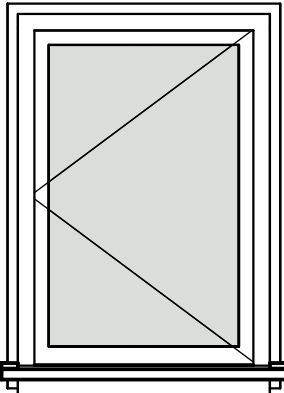
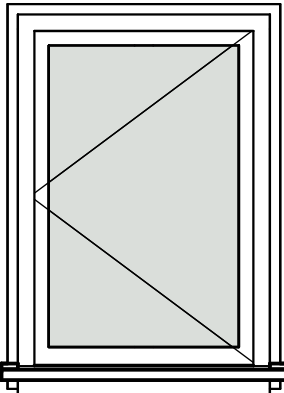
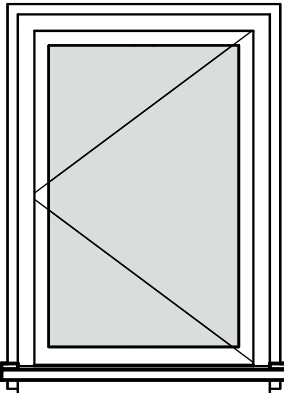
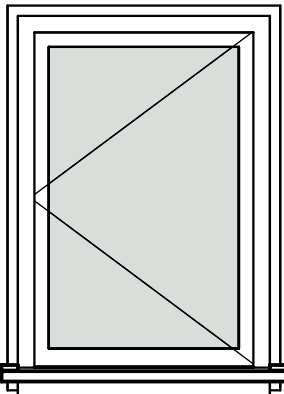
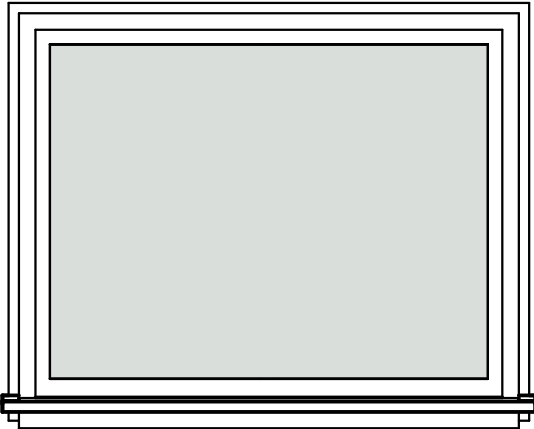
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BUILDING
SECTIONS

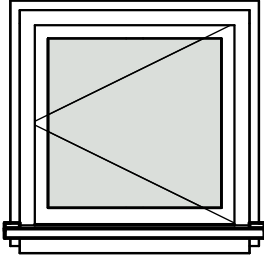
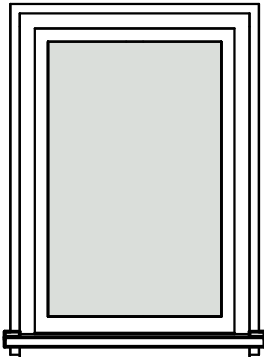
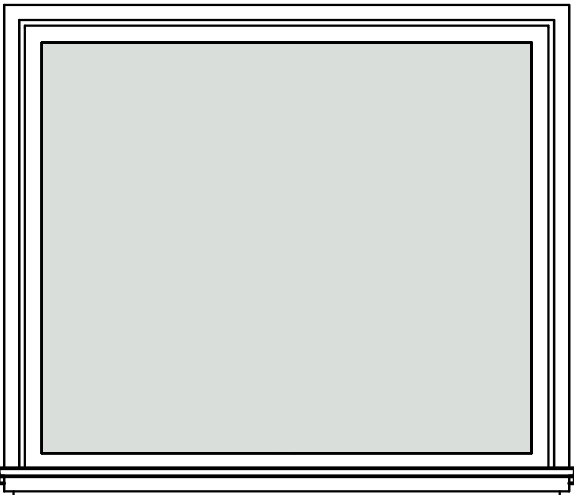
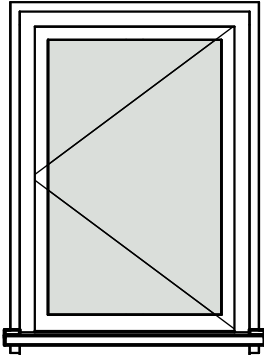
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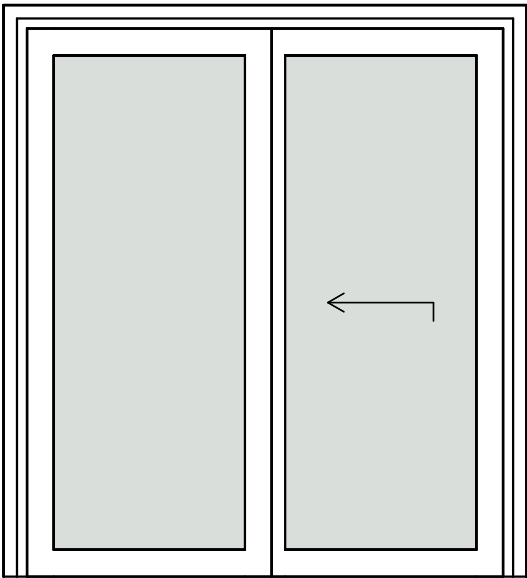
SHEET 13 OF total

WINDOW SCHEDULE						
LABEL	TYPE	WIDTH	HEIGHT	HINGE	3D Front View	Quantity
01	EGRESS	2'-6"	3'-8"	RIGHT		1
02	EGRESS	2'-6"	3'-8"	RIGHT		1
03	EGRESS	2'-6"	3'-8"	RIGHT		1
04	EGRESS	2'-6"	3'-8"	RIGHT		1
05		5'	4'	FIXED		1

1

NORTHEAST HOME WINDOW SCHEDULE

06		2'-6"	2'-6"	RIGHT		1
07		2'-6"	3'-8"	FIXED		1
08		6'	5'-2"	FIXED		1
09	EGRESS	2'-6"	3'-8"	RIGHT		1

DOOR SCHEDULE						
DOOR NO.	TYPE	WIDTH	HEIGHT	SWING	Quantity	3D Front View
08		5'-11"	6'-9 3/4"		1	


SPECIFICATIONS

PVC, CASEMENT, TRIPLE-GLAZE WITH ARGON GAS
TOTAL THICKNESS 15-3/8" WITH 8-3/4" DISTANCE FROM FLANGE TO OUTSIDE AND 6-1/2"
DISTANCE FROM FLANGE TO INSIDE
INTERIOR RETURN AND EXTERIOR BOX-OUT TO BE PROVIDED
ROUGH OPENINGS 1/2" AROUND ENTIRE WINDOW FOR A TOTAL OF 1" IN BOTH DIMENSIONS
ROUGH OPENING ON GLASS DOOR IS 72" BY 82-1/4"

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REVISION NOTES

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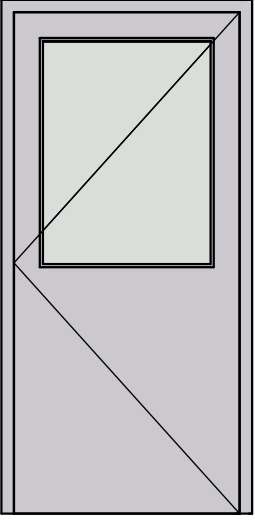
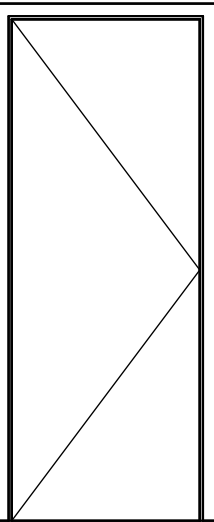
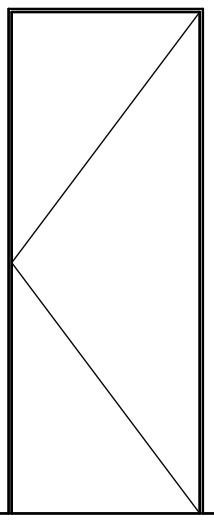
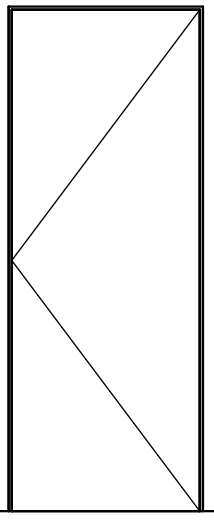
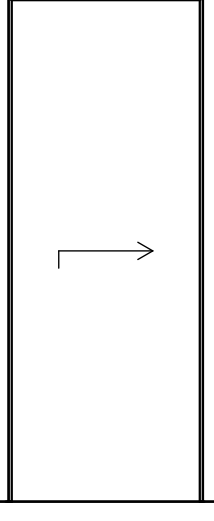
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WINDOW SCHEDULE

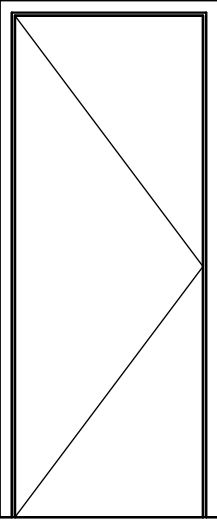
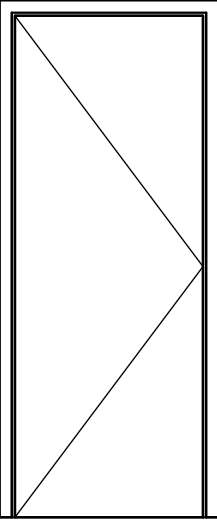
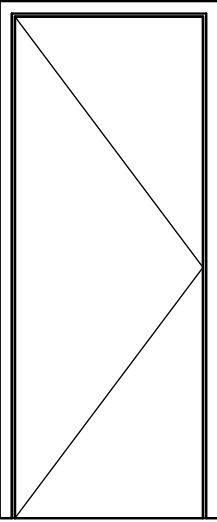
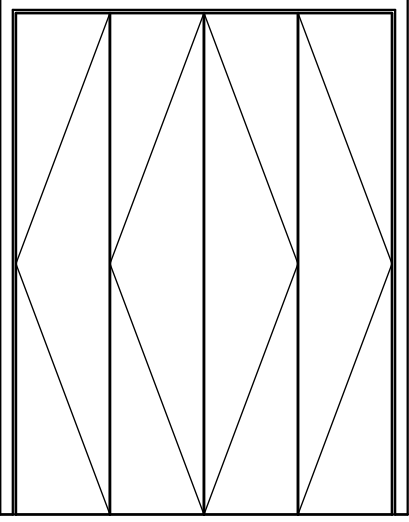
A4.1

SHEET 15 OF total

DOOR SCHEDULE						
DOOR NO.	TYPE	WIDTH	HEIGHT	SWING	Quantity	3D Front View
01	FIBERGLASS INSULATED	3'	6'-8"	RHIS	1	
02	SOLID CORE INTERIOR DOOR	2'-6"	6'-8"	LHIS	1	
03	SOLID CORE INTERIOR DOOR	2'-6"	6'-8"	RHIS	1	
04	SOLID CORE INTERIOR DOOR	2'-6"	6'-8"	RHIS	1	
05	POCKET DOOR LEAF	2'-6"	6'-8"		1	

1

NORTHEAST DOOR SCHEDULE

06	SOLID CORE INTERIOR DOOR	2'-6"	6'-8"	LHIS	1	
09	SOLID CORE INTERIOR DOOR	2'-6"	6'-8"	RHOS	1	
10	SOLID CORE INTERIOR DOOR	2'-6"	6'-8"	LHIS	1	
11	BIFOLD CLOSET DOORS	5'	6'-8"		1	

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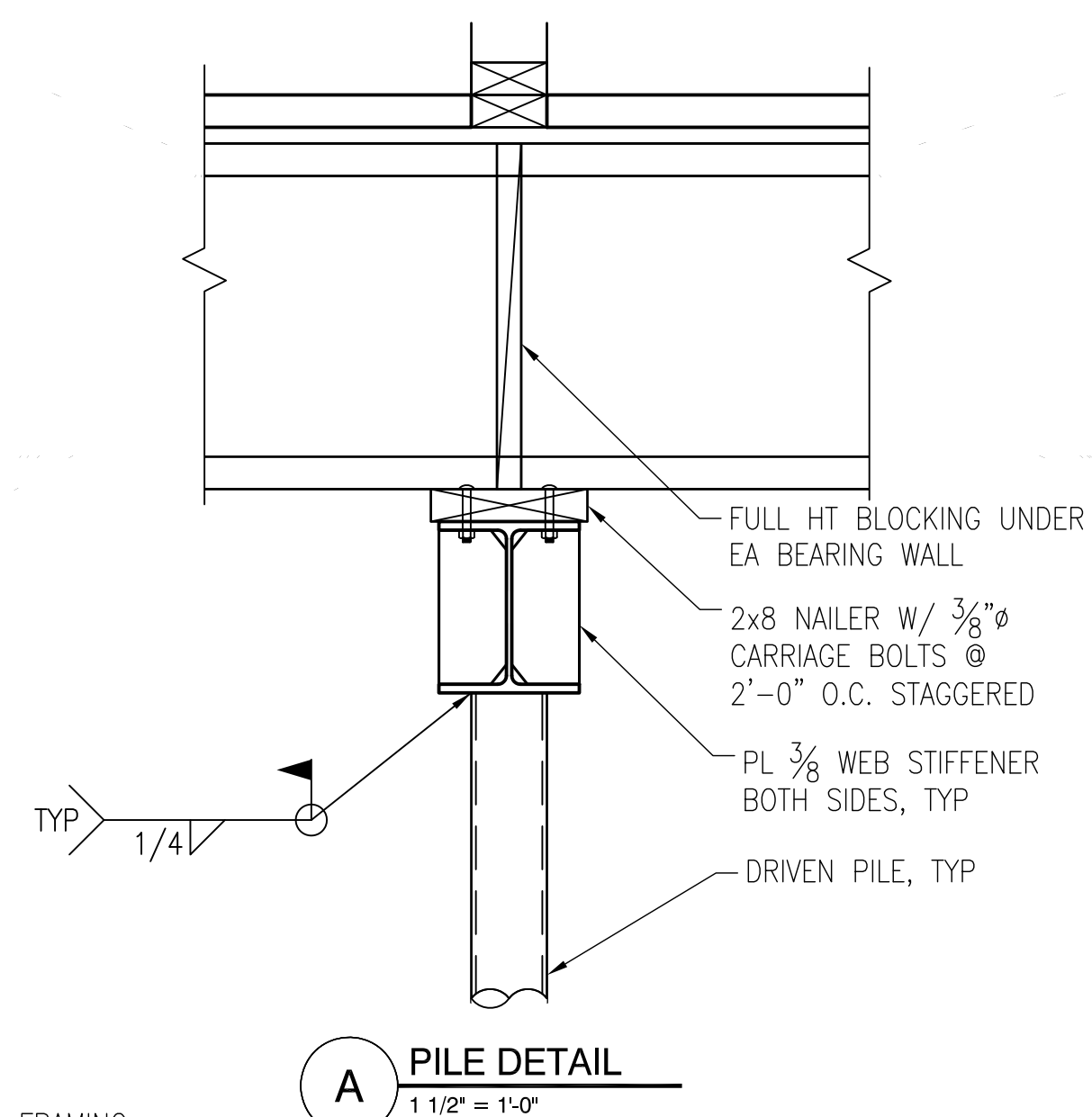
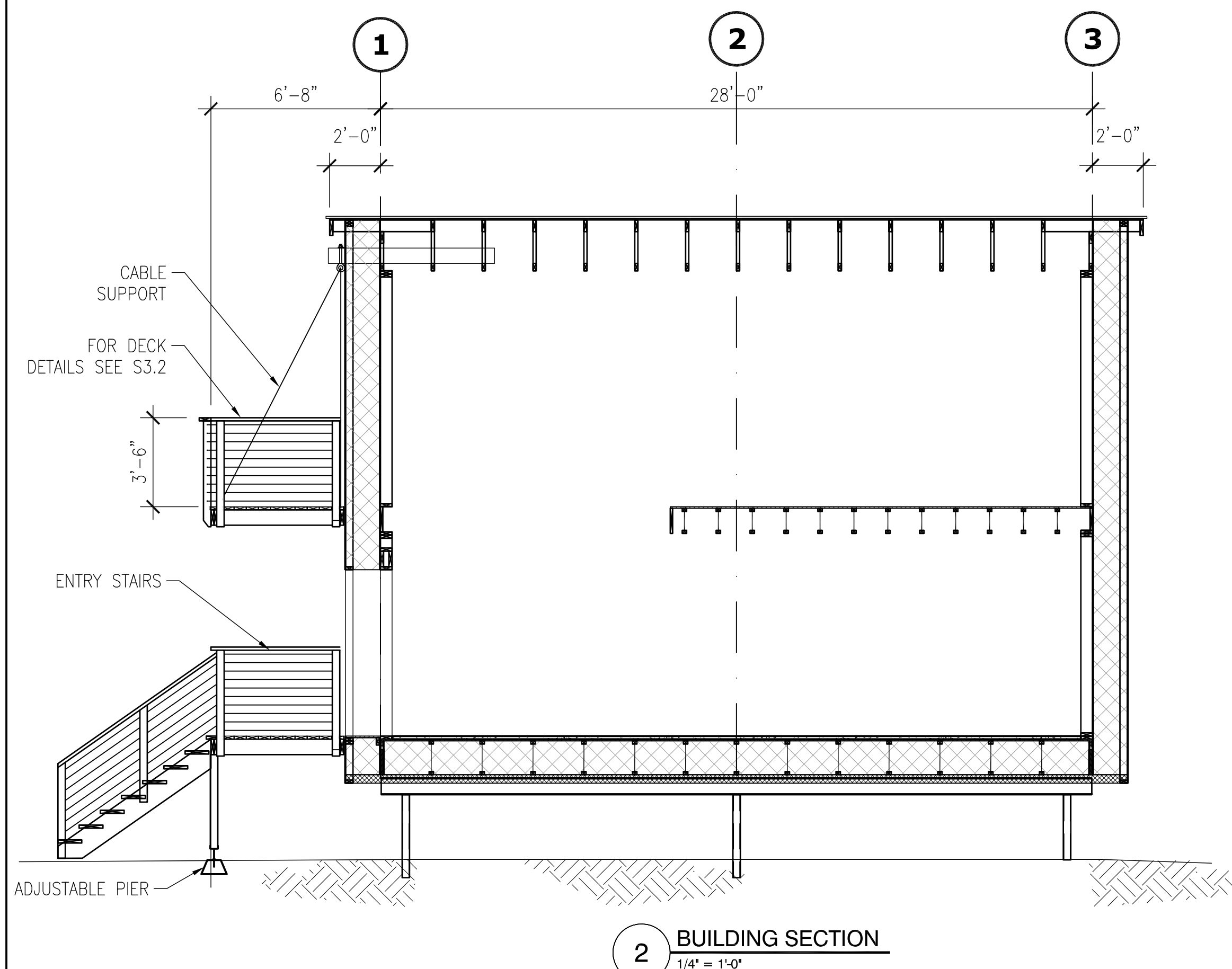
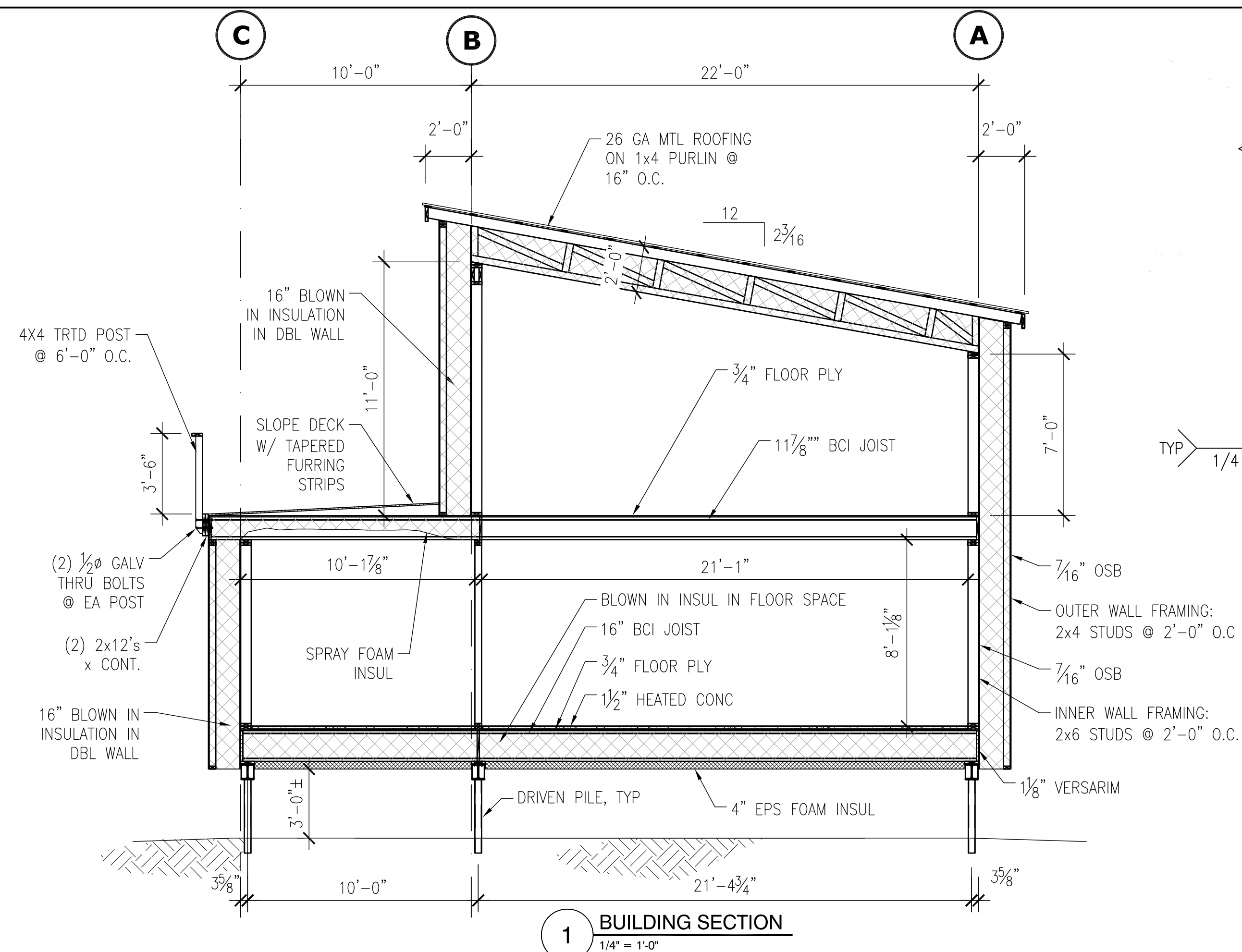
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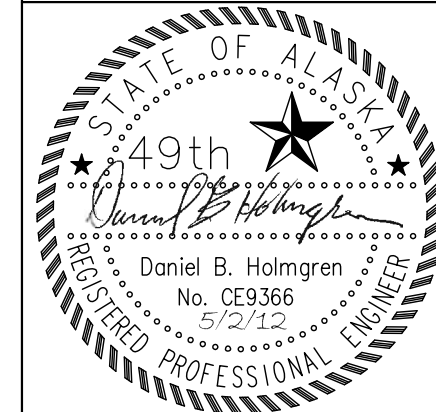
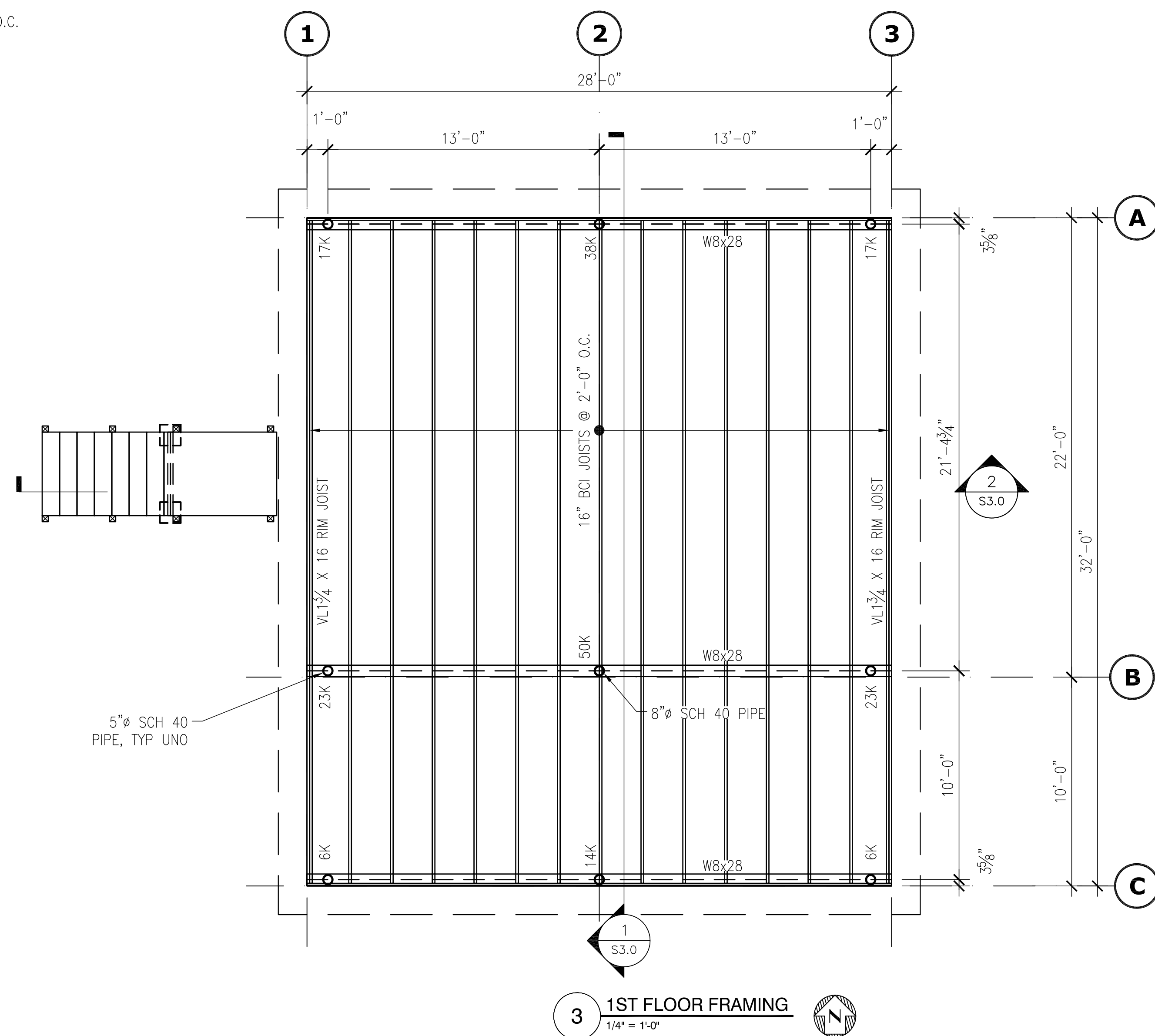
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- GENERAL NOTES:
- 1) STRUCTURAL DESIGN DATA
- | | |
|--|----------|
| CODE: | IBC 2006 |
| LIVE LOADS: | |
| SNOW (FAIRBANKS) | 50 PSF |
| RESIDENTIAL | 40 PSF |
| WIND LOADS: | |
| IN ACCORDANCE WITH THE IBC | |
| BASIC WIND SPEED | 90 MPH, |
| EXPOSURE | B |
| SEISMIC LOADS: | |
| IN ACCORDANCE WITH THE IBC, 20% SNOW INCLUDED. | |
| SITE CLASS: | D |
| IMPORTANCE: | 1.0 |
| Ss: | 1.1 g |
| S1 | 0.3 g |
| SEISMIC USE GROUP: | 1 |
| SEISMIC DESIGN CATEGORY: | D |
- 2) DRIVEN PILES: (REFER TO 3/S3.0 FOR PILE LOADS)
- A. DRIVE ALL PILES A MINIMUM OF 30FT DEEP.
 - B. ALL PILES TO BE 5"Ø SCH 40 PIPE UNO.
 - C. DRIVE PILES FOR LOADS SHOWN USING THE ENR FORMULA TO PROVE BEARING CAPACITY. PROVIDE TO ENGINEER OF RECORD A LOG OF BLOW COUNTS AND ENERGY OF DRIVING HEAD USED TO DRIVE PILES
 - D. ALL SNOW AND LIVE LOADS HAVE BEEN REDUCE PER IBC.



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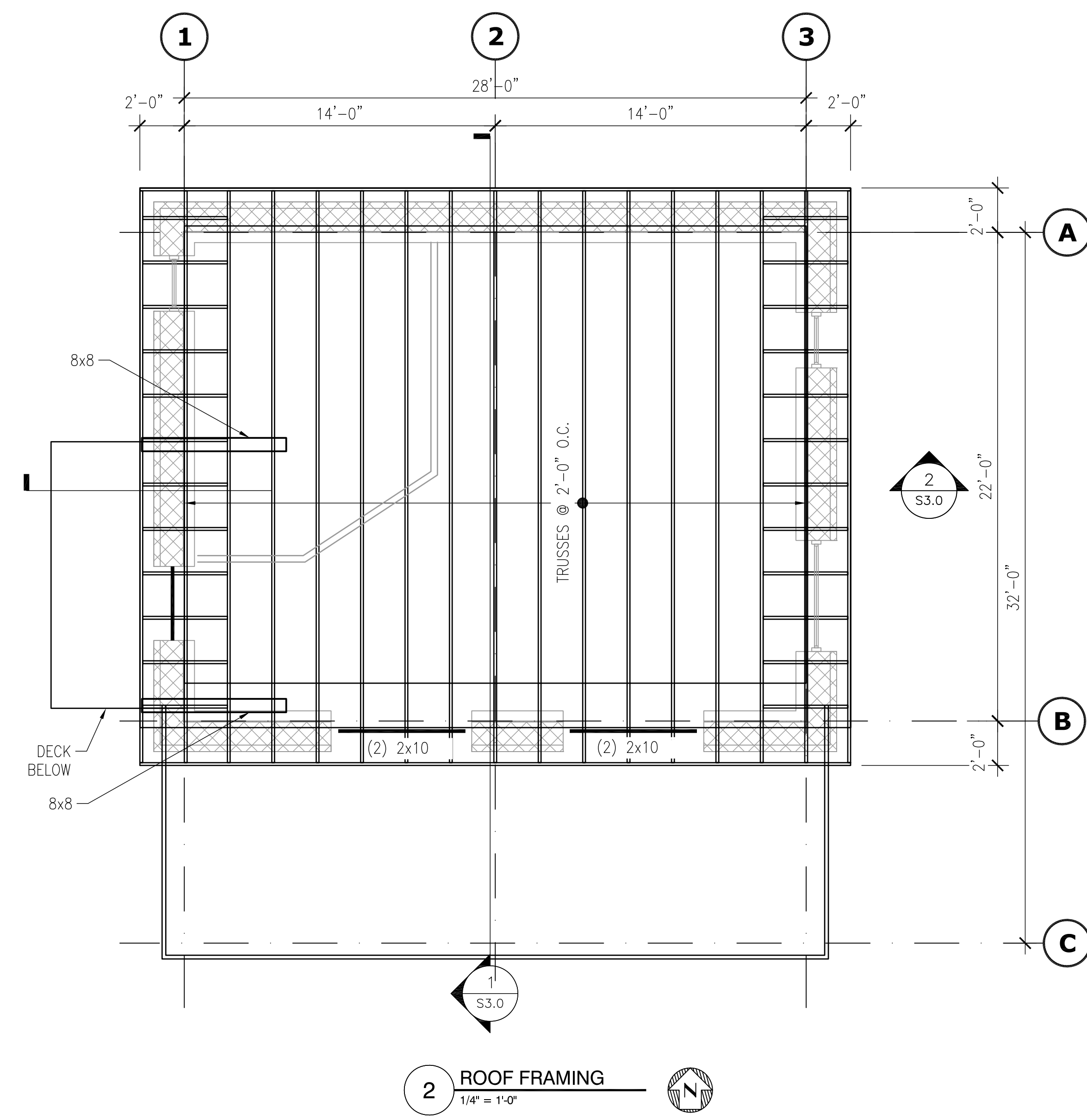
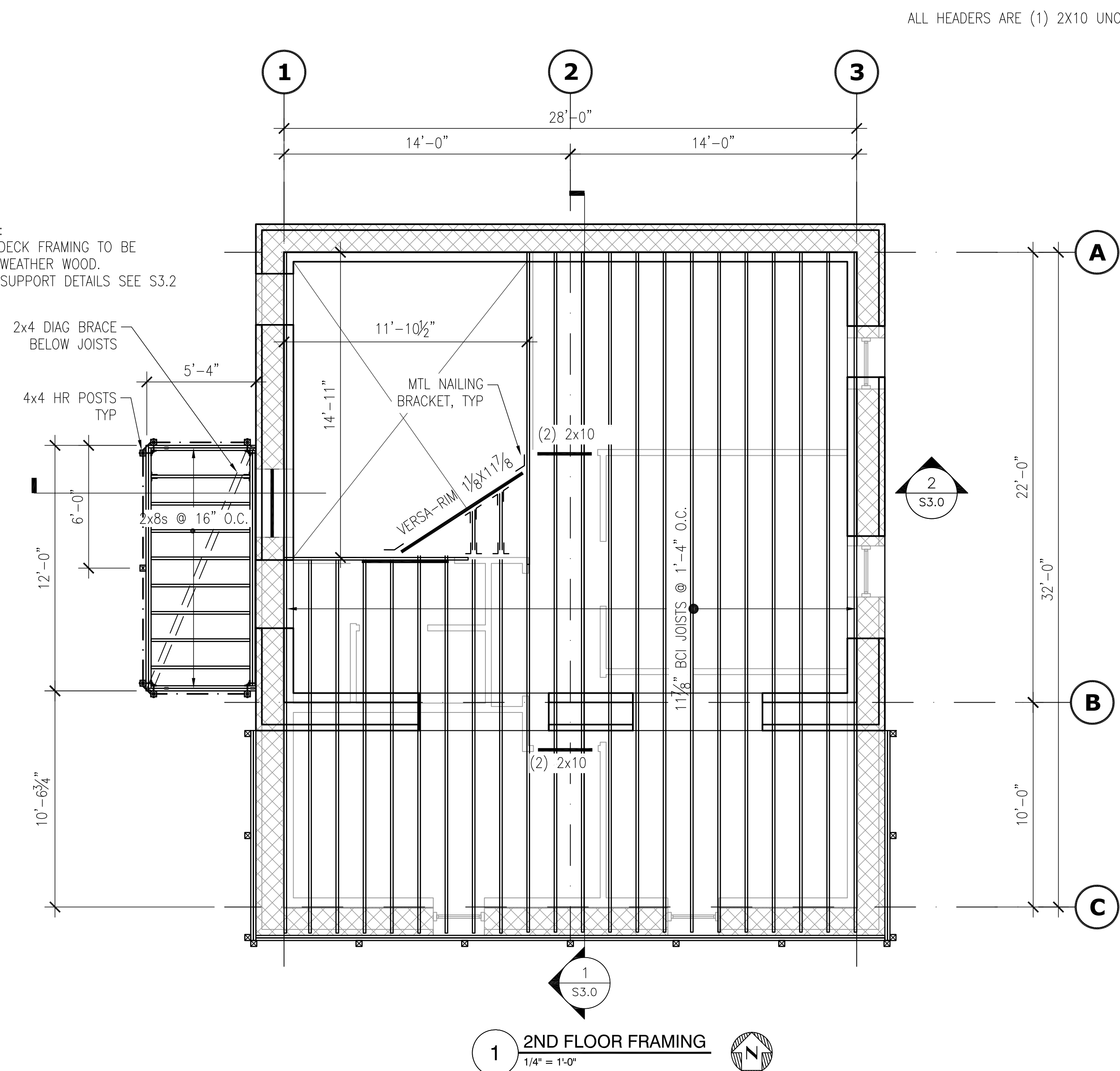
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STRUCTURAL SECTIONS & PLANS

S3.0

SHEET OF

NOTE:
ALL DECK FRAMING TO BE
ALL-WEATHER WOOD.
FOR SUPPORT DETAILS SEE S3.2



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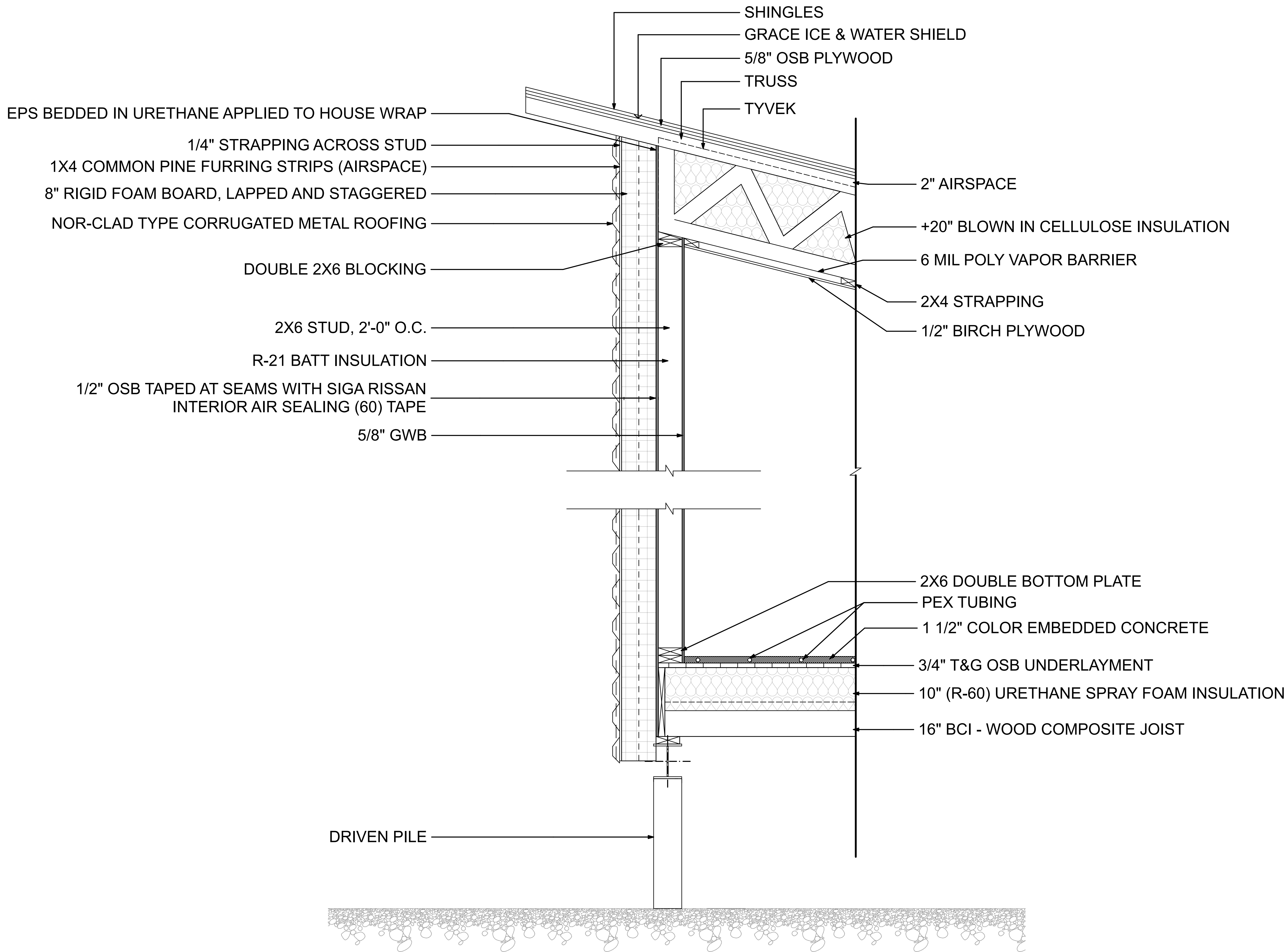
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STRUCTURAL PLANS

S3.1

SHEET ____ OF ____



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EXTERIOR WALL
SECTION

A6.0

SHEET 20 OF total



2 NE PANEL SCHEDULE

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	RECEPTACLE
	GFI RECEPTACLE
	SWITCH
	3-WAY SWITCH
	SMOKE DETECTOR
	TELEVISION
	TELEPHONE
	OUTDOOR LIGHT
	SCONCE LIGHT
	DOORBELL
	T8 FIXTURE
	EMERGENCY EXIT LIGHT
	CAN LIGHT

WATER

PROJECT
Sustainable Village at
UAF
North East Home
FS441
Fairbanks, Alaska
ISSUED
03/08/2012
Design Development

ELECTRICAL 1ST FLOOR

SHEET 21 OF total

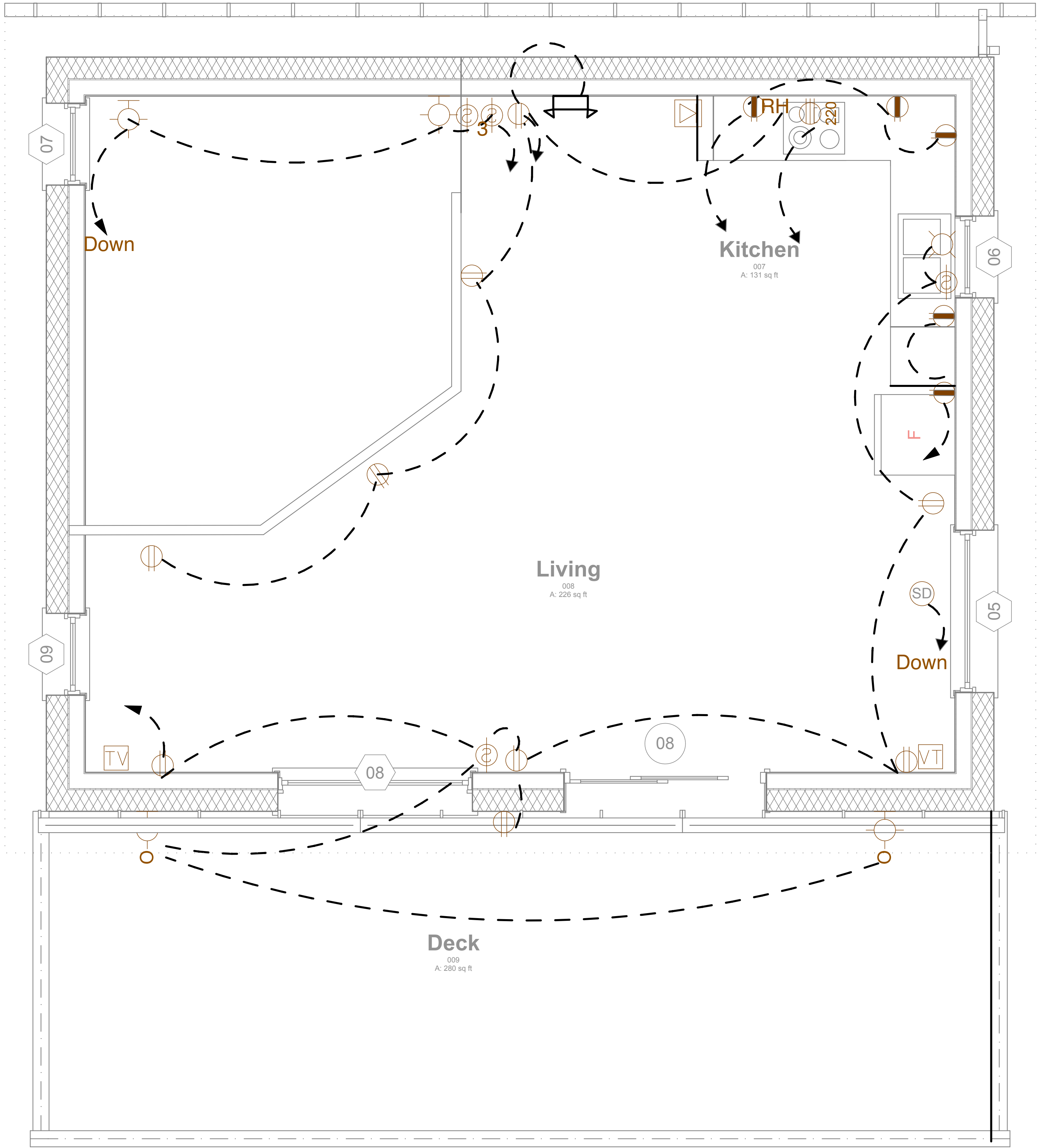
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N



2nd FLOOR ELECTRICAL PLAN

SCALE: 1/2" = 1'-0"



KEY

- RECEPTACLE
- GFI RECEPTACLE
- SWITCH
- 3-WAY SWITCH
- SMOKE DETECTOR
- TELEVISION
- TELEPHONE
- OUTDOOR LIGHT
- SCONCE LIGHT
- DOORBELL
- CAN LIGHT


DESIGNED BY: CCHRC

DRAWN BY: Aa

REVISION NOTES

No.	Rev./Issue	Date

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Sustainable Village at UAF

North East Home

FS441

Fairbanks, Alaska

ISSUED

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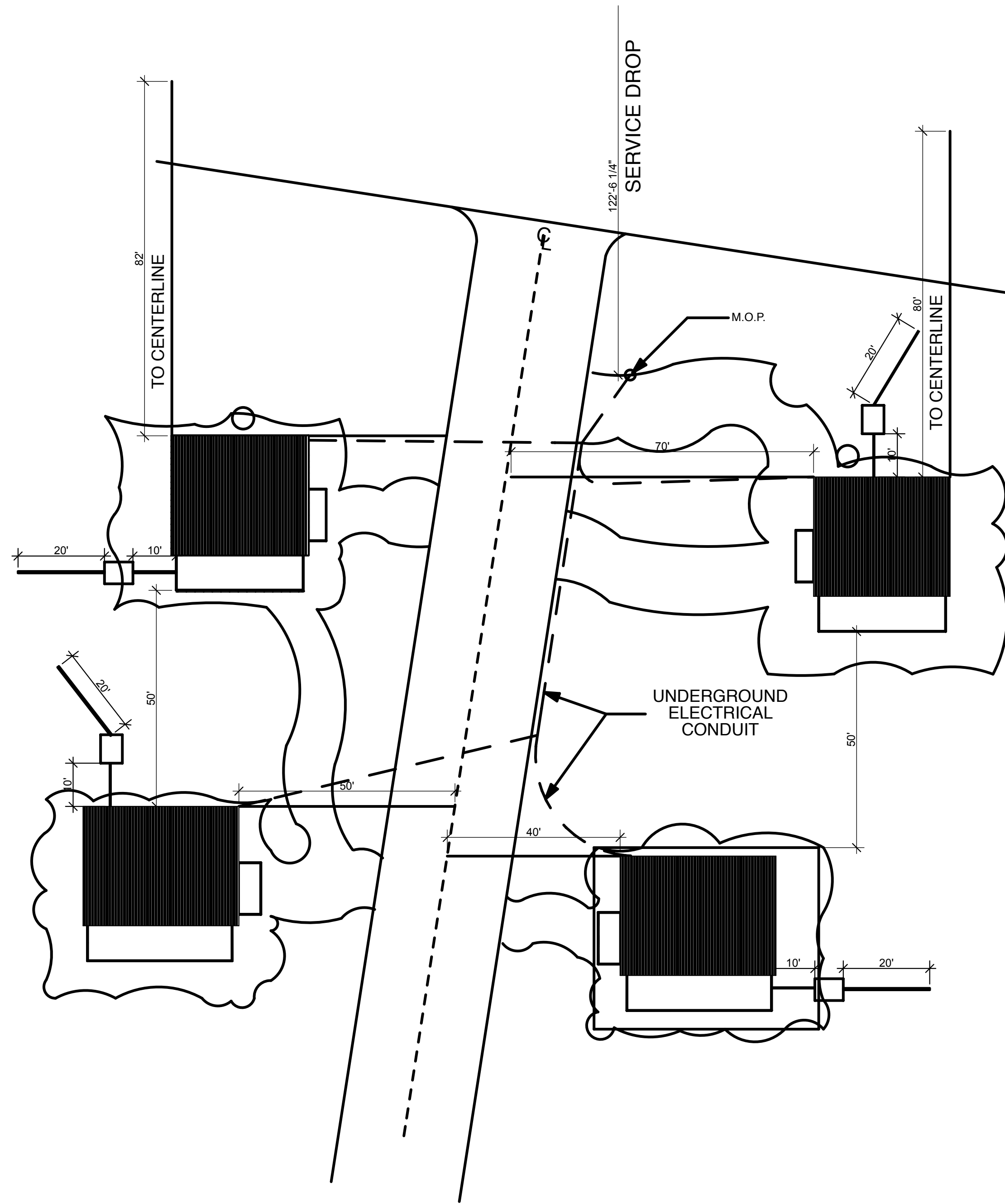
Design Development

ELECTRICAL 2ND FLOOR

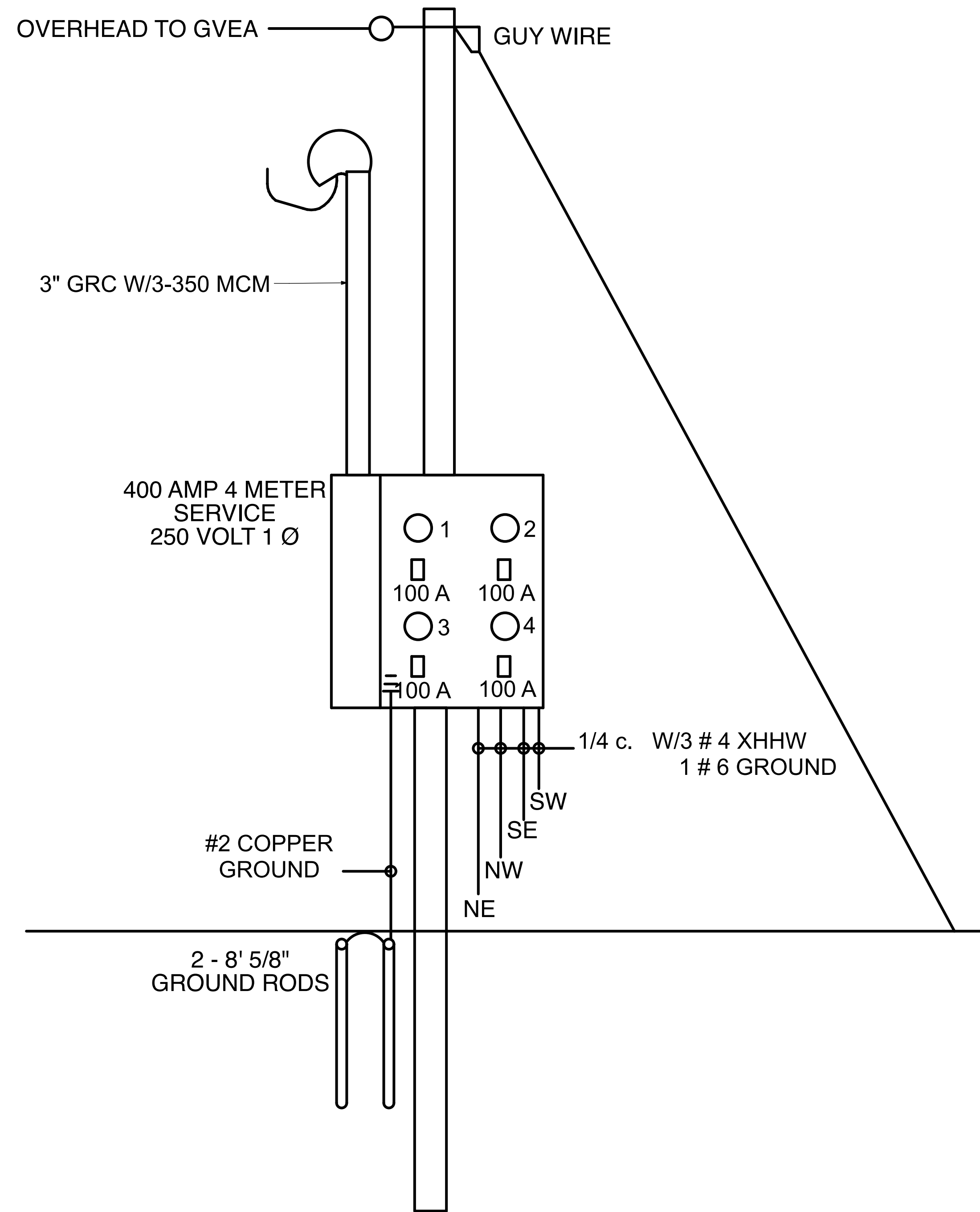
E1.1

SHEET 22 OF total

2 SITE PLAN



1 ELECTRICAL SERVICE



DESIGNED BY: CCHRC		
DRAWN BY: Aa		
REVISION NOTES		
No.	Rev./Issue	Date



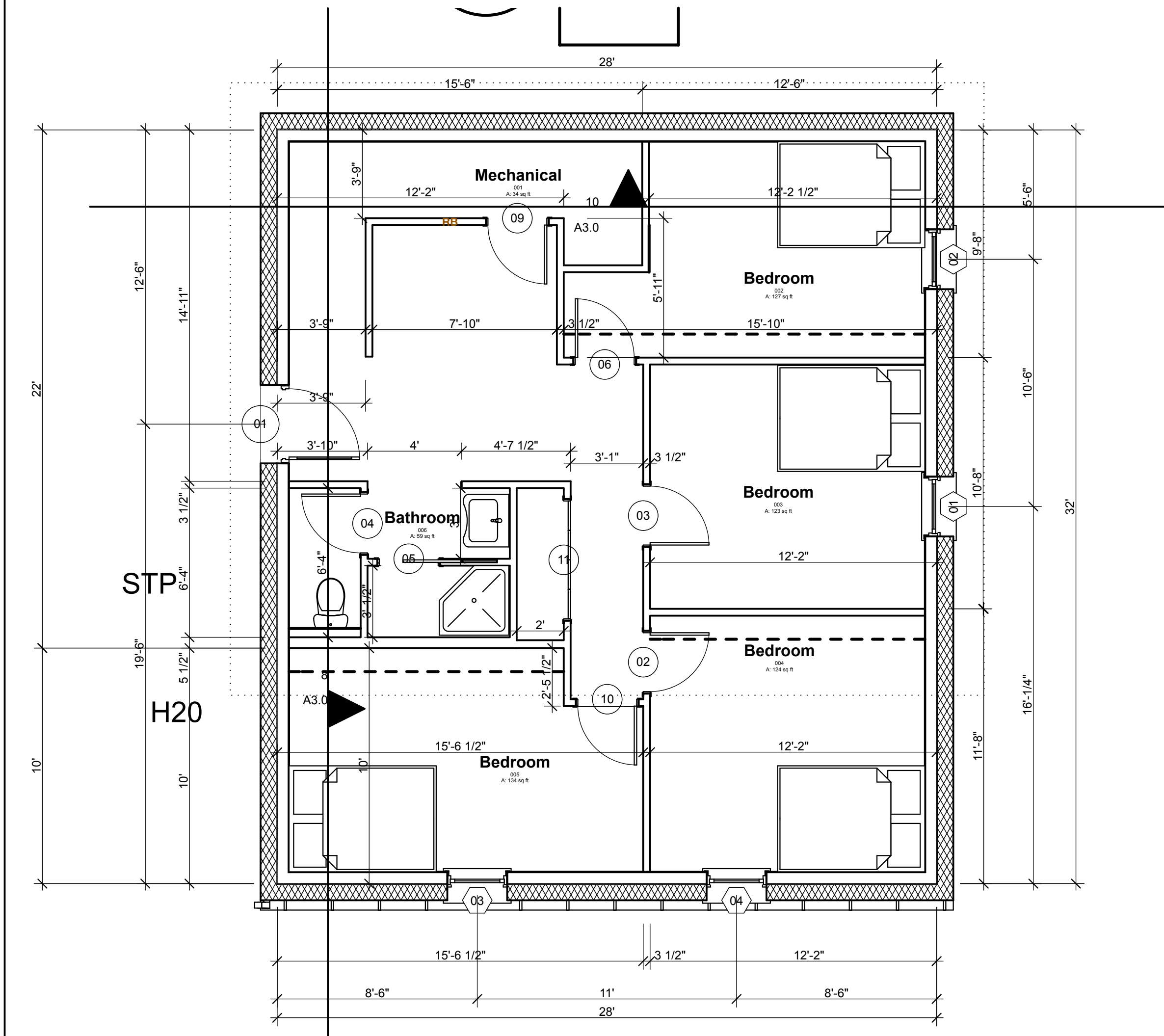
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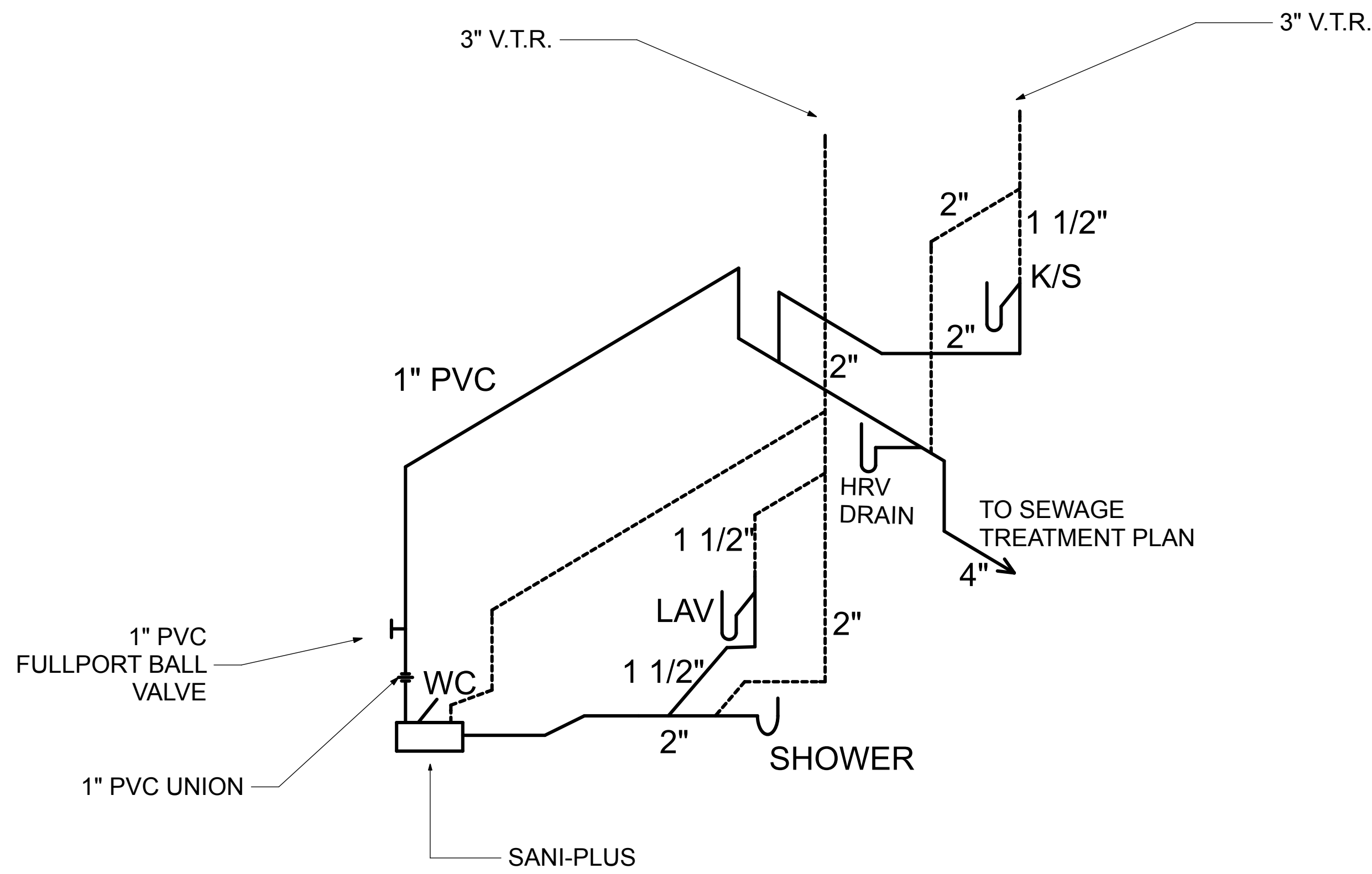
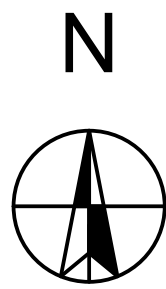
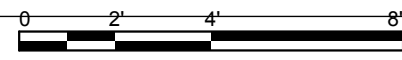
ELECTRICAL
SERVICE

E1.2

SHEET 23 OF total



1 1st FLOOR PLAN



2 PLUMBING DWV

DESIGNED BY:	CCHRC
DRAWN BY:	Aa
REVISION NOTES	
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	Date



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P.O. BOX 82489
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Design Development

PLUMBING PLAN

P1.1

SHEET 24 OF total

AquaSAFE™ GENERAL NOTES:

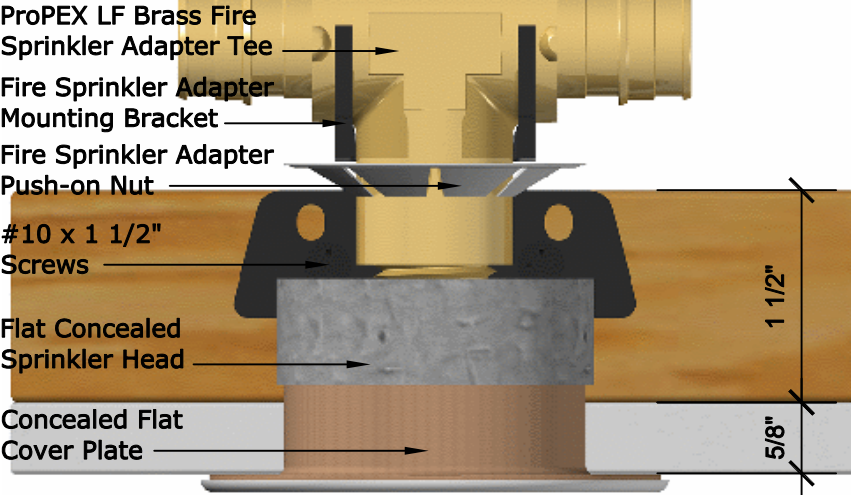
- THIS SYSTEM IS DESIGNED AS PER NFPA 13D 2010 EDITION AS A RESIDENTIAL MULTIPURPOSE SYSTEM. SECTION 3.3.9.3
- UPONOR COMPANY RESERVES THE EXCLUSIVE RIGHTS TO ALL DETAILS AND DRAWINGS AS SHOWN ON THIS SHEET. THESE DETAILS AND DRAWINGS ARE PROPRIETARY INFORMATION OF UPONOR COMPANY AND UNAUTHORIZED USE MAY BE SUBJECT TO PROSECUTION TO THE FULL EXTENT OF THE LAW.
- THE DESIGN OF THIS SYSTEM IS DICTATED BY SPECIFIC CEILING HEIGHTS AND ROOM SIZES. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO ENSURE THAT THE CONDITIONS SHOWN ON THESE PLANS ARE EXACTLY AS THEY EXIST IN THE FIELD. DEVIATIONS FROM THE DESIGN MAY CAUSE THE SYSTEM TO BE UNABLE TO CONTROL A FIRE. IF THE BUILDING CONSTRUCTION DIFFERS FROM THE FIRE SPRINKLER PLAN, CONTACT THE SYSTEM DESIGNER IMMEDIATELY.
- THIS SYSTEM AND THE ACCOMPANYING HYDRAULIC CALCULATIONS ARE DESIGNED IN COMPLIANCE WITH NFPA 13D 2010 EDITION.
- "STAND ALONE" OR "MULTIPURPOSE, WET PIPE" SYSTEMS ARE NOT PERMITTED TO USE ANTI-FREEZE.
- MODIFICATIONS ARE PROHIBITED. SPRINKLERS THAT HAVE BEEN PAINTED, CAULKED, MODIFIED OR DAMAGED MUST BE REPLACED.
- WATER SHUT OFF VALVE IS NOT PERMITTED.
- OWNERS MANUAL MUST BE PROVIDED TO THE OWNER.

- AT THE MAIN SHUT OFF VALVE, A TAG OR A SIGN STATING THE FOLLOWING IS REQUIRED; "WARNING, THE WATER SYSTEM FOR THIS HOME SUPPLIES FIRE SPRINKLERS THAT REQUIRE CERTAIN FLOWS AND PRESSURES TO FIGHT A FIRE. DEVICES THAT RESTRICT THE FLOW OR DECREASE THE PRESSURE OR AUTOMATICALLY SHUT OFF THE WATER TO THE FIRE SPRINKLER SYSTEM, SUCH AS WATER SOFTENERS, FILTRATION SYSTEMS AND AUTOMATIC SHUT OFF VALVES, **SHALL NOT** BE ADDED TO THIS SYSTEM WITHOUT REVIEW OF THE FIRE SPRINKLER SYSTEM BY A FIRE PROTECTION SPECIALIST. **DO NOT REMOVE THIS SIGN**".
- ALL INTERIOR PIPING TO BE UPONOR "AquaPEX®" UNLESS NOTED.
- UPONOR "AquaPEX" TUBING TO BE SUPPORTED PER NFPA 13D AND MANUFACTURER'S RECOMMENDATIONS.
- MINIMUM SPACING BETWEEN SPRINKLERS IS 8'-0" REFER TO SPACING CHARTS FOR MAXIMUM SPACING BETWEEN SPRINKLERS AND FROM WALLS.
- SPRINKLERS ARE NOT NECESSARILY CENTERED IN ROOMS DUE TO LIGHT FIXTURES OR OTHER CEILING MOUNTED OBSTRUCTIONS.
- THE PLUMBING TIE IN CONNECTIONS ARE SCHEMATIC IN NATURE AND CAN BE INSTALLED OFF THE SPRINKLER LOOP ANYWHERE BETWEEN SPRINKLER TO SPRINKLER CONNECTION.
- THIS SUGGESTED LAYOUT IS BASED UPON INFORMATION PROVIDED BY OTHERS. CHANGES IN CONSTRUCTION OR FIELD CONDITIONS MAY OCCUR WHICH MAY REQUIRE CHANGES TO THE LAYOUT. IT IS THE RESPONSIBILITY OF THE INSTALLER TO NOTIFY UPONOR TECHNICAL SERVICES OF SUCH CHANGES.

- INSULATION GUIDE LINES PER NFPA 13D.
 - 8.3.1* WET PIPE SYSTEMS. A WET PIPE SYSTEM SHALL BE PERMITTED TO BE TO BE USED WHERE ALL PIPING IS INSTALLED IN AREAS MAINTAINED ABOVE 40°F, INCLUDING AREAS PROPERLY INSULATED TO MAINTAIN 40°F.
 - A.8.3.1 IN AREAS SUBJECT TO FREEZING, CARE SHOULD BE TAKEN IN UNHEATED ATTIC SPACES TO COVER SPRINKLER PIPING COMPLETELY WITH INSULATION. INSTALLATION SHOULD FOLLOW THE GUIDELINES OF THE INSULATION MANUFACTURER. FIGURE A.8.3.1(A) THROUGH FIGURE A.8.3.1(E) SHOW SEVERAL METHODS THAT CAN BE CONSIDERED.
- NFPA 13D 8.6 LOCATION OF SPRINKLERS.
 - 8.6.1 SPRINKLERS SHALL BE INSTALLED IN ALL AREAS EXCEPT WHERE OMISSION IS PERMITTED BY 8.6.2 THROUGH 8.6.7.
 - 8.6.2 SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS OF 55 FT² (5.1 M²) AND LESS
 - 8.6.3 SPRINKLERS SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRIES THAT MEET ALL OF THE FOLLOWING CONDITIONS:
 - (1) THE AREA OF THE SPACE DOES NOT EXCEED 24 FT² (2.2 M²).
 - (2) THE LEAST DIMENSION DOES NOT EXCEED 3 FT (0.9 M).
 - (3) THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS AS DEFINED IN NFPA 220, STANDARD ON TYPES OF BUILDING CONSTRUCTION.
 - 8.6.4* SPRINKLERS SHALL NOT BE REQUIRED IN GARAGES, OPEN ATTACHED PORCHES, CARPORTS, AND SIMILAR STRUCTURES
 - A.8.6.4 ALTHOUGH NFPA 13D DOES NOT REQUIRE GARAGES TO BE SPRINKLERED, SOME AUTHORITIES HAVING JURISDICTION TAKE IT UPON THEMSELVES TO ADD THIS REQUIREMENT LOCALLY. IN SUCH CIRCUMSTANCES, RESIDENTIAL OR QUICK-RESPONSE SPRINKLERS WITH A TWO-SPRINKLER DESIGN IN THE GARAGE WITH THE SAME PIPING USED IN THE REST OF THE DWELLING MAY BE USED. IT IS RECOGNIZED THAT RESIDENTIAL SPRINKLERS HAVE NOT BEEN TESTED SPECIFICALLY FOR FIRES IN GARAGES, BUT FIELD EXPERIENCE HAS SHOWN THAT THE SPRINKLERS HELP TO ALERT OCCUPANTS TO THE FACT THAT THERE IS A FIRE, CAN REDUCE THE POSSIBILITY OF FLASHOVER, AND CAN IMPROVE THE CHANCES FOR OCCUPANTS TO ESCAPE.
 - 8.6.5 SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS, PENTHOUSE EQUIPMENT ROOMS, ELEVATOR MACHINE ROOMS, CONCEALED SPACES DEDICATED EXCLUSIVELY TO AND CONTAINING ONLY DWELLING UNIT VENTILATION EQUIPMENT, FLOOR/CEILING SPACES, ELEVATOR SHAFTS CRAWL SPACES, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING PURPOSES AND DO NOT CONTAIN FUEL-FIRED EQUIPMENT.
 - 8.6.6 SPRINKLERS SHALL NOT BE REQUIRED IN COVERED UNHEATED PROJECTIONS OF THE BUILDING AT ENTRANCES/EXITS AS LONG AS THERE IS ANOTHER MEANS OF EGRESS FROM THE DWELLING UNIT.
 - 8.6.7 SPRINKLERS SHALL NOT BE REQUIRED FOR CEILING POCKETS THAT MEET THE FOLLOWING CONDITIONS:
 - (1) THE TOTAL VOLUME OF UNPROTECTED CEILING POCKET DOES NOT EXCEED 100 FT³ (2.83 M³).
 - (2) THE ENTIRE FLOOR UNDER THE UNPROTECTED CEILING POCKET IS PROTECTED BY THE SPRINKLERS AT THE LOWER CEILING ELEVATION.
 - (3) EACH UNPROTECTED CEILING POCKET IS SEPERATED FROM ANY ADJACENT UNPROTECTED CEILING POCKET BY A MINIMUM 10 FT (3.05 M) HORIZONTAL DISTANCE.
 - (4) THE INTERIOR FINISH OF THE UNPROTECTED CEILING POCKET IS NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIAL.
 - (5) SKYLIGHTS NOT EXCEEDING 32 FT² (2.97 M²) SHALL BE PERMITTED TO HAVE A PLASTIC COVER.

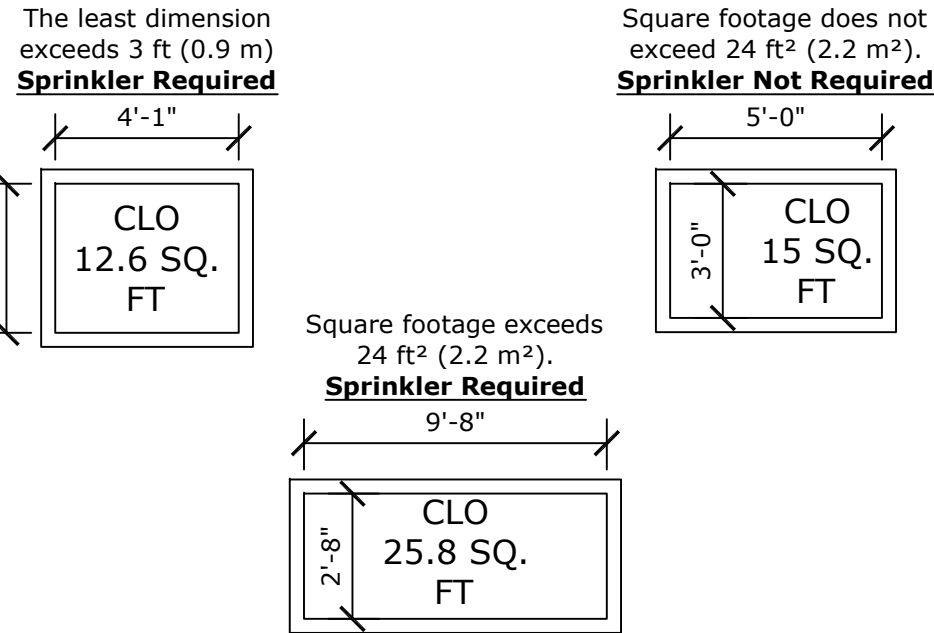
Flat Concealed Assembly Sprinkler Placement

Align top of fire sprinkler mounting bracket 1 1/2" from bottom of mounting member surface for typical concealed installation. Use Bottom screw holes.



Caution: Do not paint over the sprinklers cover plates. Paint may interfere with the heat sensitivity of the sprinkler, and disturbances may damage the sprinkler.

See General Notes 8.6.3 for Closet Requirements



Insulation Recommendations

In areas subject to freezing, care should be taken in unheated attic spaces to cover Uponor AquaPEX tubing completely with insulation. Insulation should follow the guidelines of the insulation manufacturer. See Uponor Document "Uponor AquaSAFE Attic Insulation Guidelines" for attic installation guidelines (Provided in Contractors Documents package or online at www.Uponorpro.com).

Extreme Temperature Installations

AquaSAFE Residential Fire Safety systems are often installed in attics or other areas exposed to temperature extremes of heat and/or cold. Follow the recommended extreme weather installation instructions to isolate and protect system components from extreme temperatures. Because this system also delivers domestic cold water directly to plumbing fixtures, Uponor highly recommends that you protect the tubing with adequate insulation in warm weather areas to minimize heating of the cold water supply.

Installation methods include, but are not limited to:

- Tenting over the fire sprinkler piping.
- Additional layers of batt insulation.
- Increased depth of blown-in insulation.

Caution: If you will be installing spray foam insulation, make sure to protect all components during application. Consult with the spray foam manufacturer to ensure compatibility with all products before application.

Consultation with local building officials is encouraged to ensure compliance with local building codes.

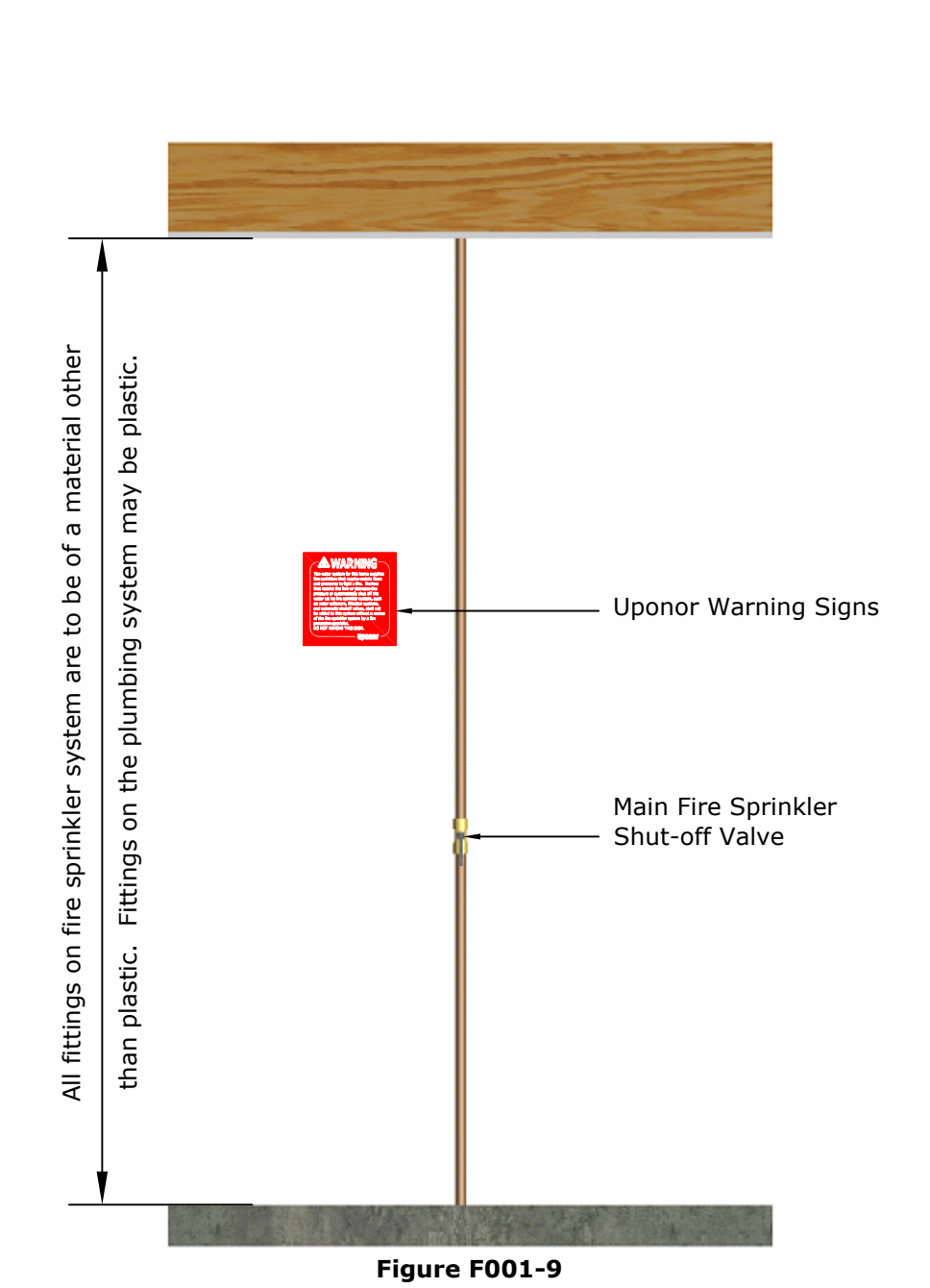
Bending PEX Tubing

The minimum bend radius of Uponor PEX tubing in any direction is six times the outside diameter (**6 x OD**). Bend supports are available for 3/8", 1/2", 3/4" and 1" Uponor AquaPEX tubing to facilitate 90-degree rigid bends.

Recommended Tubing Length Between Fittings	
Fitting Size	Minimum Tubing Length
3/8" ProPEX Fitting	2"
1/2" ProPEX Fitting	2 1/2"
3/4" ProPEX Fitting	3 1/2"
1" ProPEX Fitting	4 1/2"
1 1/4" ProPEX Fitting	5 1/2"

Standard Riser Assembly

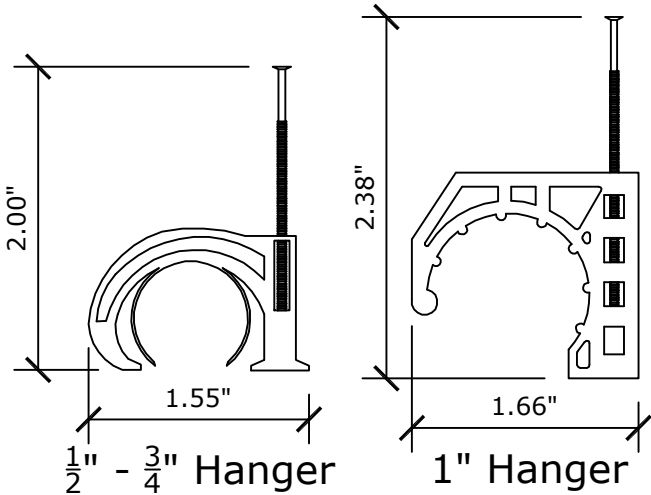
In a multi-purpose system a single control valve controls both domestic and fire safety needs (see **Figure F001-9**).



Slope Guide			
Slope: Rise/Run	Pitch: Degrees	Slope: Rise/Run	Pitch: Degrees
0/12	0°	9/12	36.87°
1/12	4.76°	10/12	39.81°
2/12	9.46°	11/12	42.51°
3/12	14.04°	12/12	45°
4/12	18.43°	13/12	47.29°
5/12	22.62°	14/12	49.40°
6/12	26.57°	15/12	51.34°
7/12	30.26°	16/12	53.13°
8/12	33.69°	17/12	54.78°
		18/12	56.31°

NFPA 13D Table 7.5.5.3 Distances From Heat Sources

Heat Source	Ordinary Temp. 135°-170°	Intermediate Temp. 175°-225°
Side of Fireplace	36"	12"
Front of Fireplace	60"	36"
Wood Burning Stove	42"	12"
Kitchen Range	18"	9"
Wall Oven	18"	9"
Hot Air Flues	18"	9"
Uninsulated Heat Ducts	18"	9"
Uninsulated Hot Water Pipes	12"	6"
Side of Hot Air Diffuser	24"	12"
Front of Hot Air Diffuser	36"	18"
Hot Water Heater	6"	3"
Furnace	6"	3"
50W-250W Light Fixture	6"	3"
250W-499W Light Fixture	12"	6"



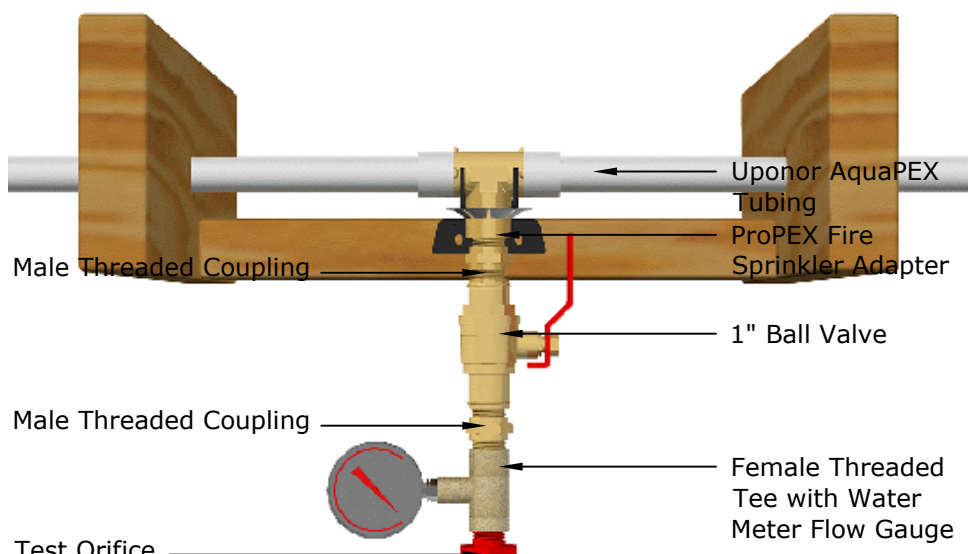
Tubing Support Spacing:

(Anchor AquaPEX Tubing Securely Enough to Support the Tubing, Yet Relaxed Enough to Allow the Tubing to Expand and Contract)

- Along Horizontal Runs, Install Supports Every 32", if Horizontal Runs are Continuously Supported, Place Tubing Supports at Six-Foot Intervals.
- Along Vertical Runs, Install Supports Every Four to Five Feet, at Each Floor and at a Mid-story Guide.

In-line Flow Test

The In-line Flow Test can be constructed on site. It performs a flow test to ensure proper system operation and flow (see **Figure F001-8**).



Flow Test

To ensure the system provides enough water for proper fire sprinkler performance, you should conduct a flow verification test.

Note: The NFPA 13D Installation Standard does not require flow verification.

Before performing a flow verification test, confirm the water pressures by contacting the Water and Sewer Department of your local city. Ensure the available water pressure matches the pressure used in the system design.

Note: The sprinkler plan indicates the most hydraulically remote sprinkler (or pair of sprinklers). For test requirements on other sprinklers, consult your local code.

Note: It is a good idea to notify the fire inspector at least 24 hours prior to performing a flow verification test. This may speed up the inspection process and eliminate the need to repeat the test for the inspector.

Note: See AquaSAFE Flow Test Instruction Sheet provided in the job packet submittal or online for more information on Flow Test Setup, Assembly, Performing the Test and Troubleshooting. If there are any questions please contact Uponor.

uponor

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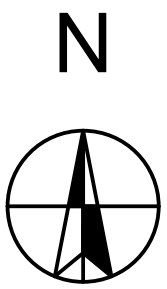
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GENERAL NOTES
AND DETAILS

SHEET NUMBER

F001

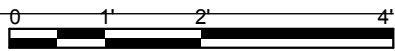
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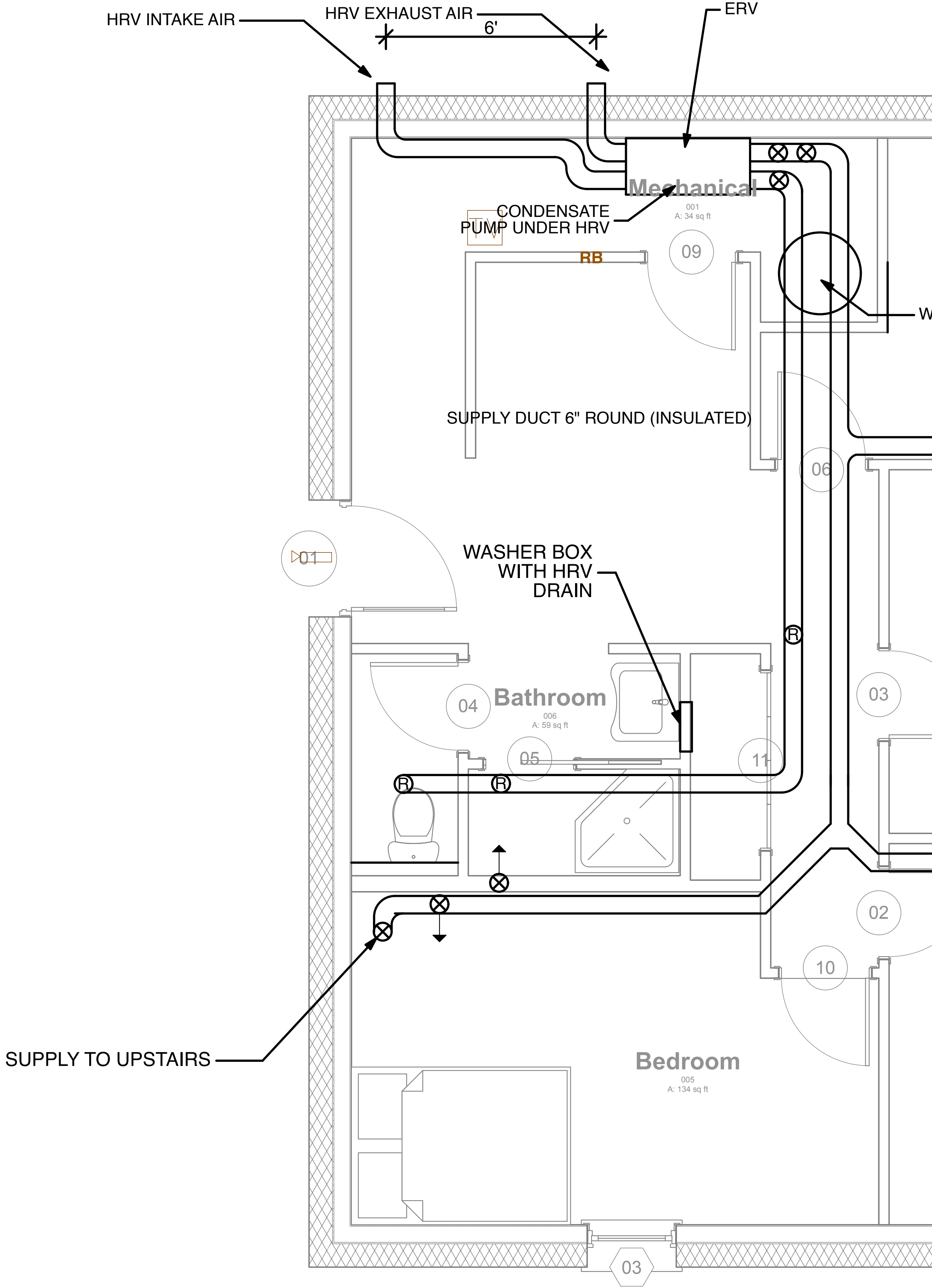
1st FLOOR

SCALE: 1/2" = 1'-0"



SUPPLY TO UPSTAIRS




SUPPLY TO UPSTAIRS



NOTES

1. VENMAR EKO ERV
2. UNDERCUT ALL BEDROOM DOORS 2"
3. ALL SUPPLY REGISTERS 12" FROM FLOOR
4. MAXIMUM DUCT HANGER SPACING: 8'

KEY

-  RETURN AIR DIFFUSER
-  SUPPLY AIR
-  GRILLE DIRECTION

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DRAWN BY:	Aa
REVISION NOTES	
No.	Rev./Issue
	Date



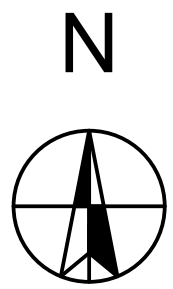
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Fairbanks, Alaska
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03/08/2012
Design Development

MECHANICAL
VENTILATION PLAN

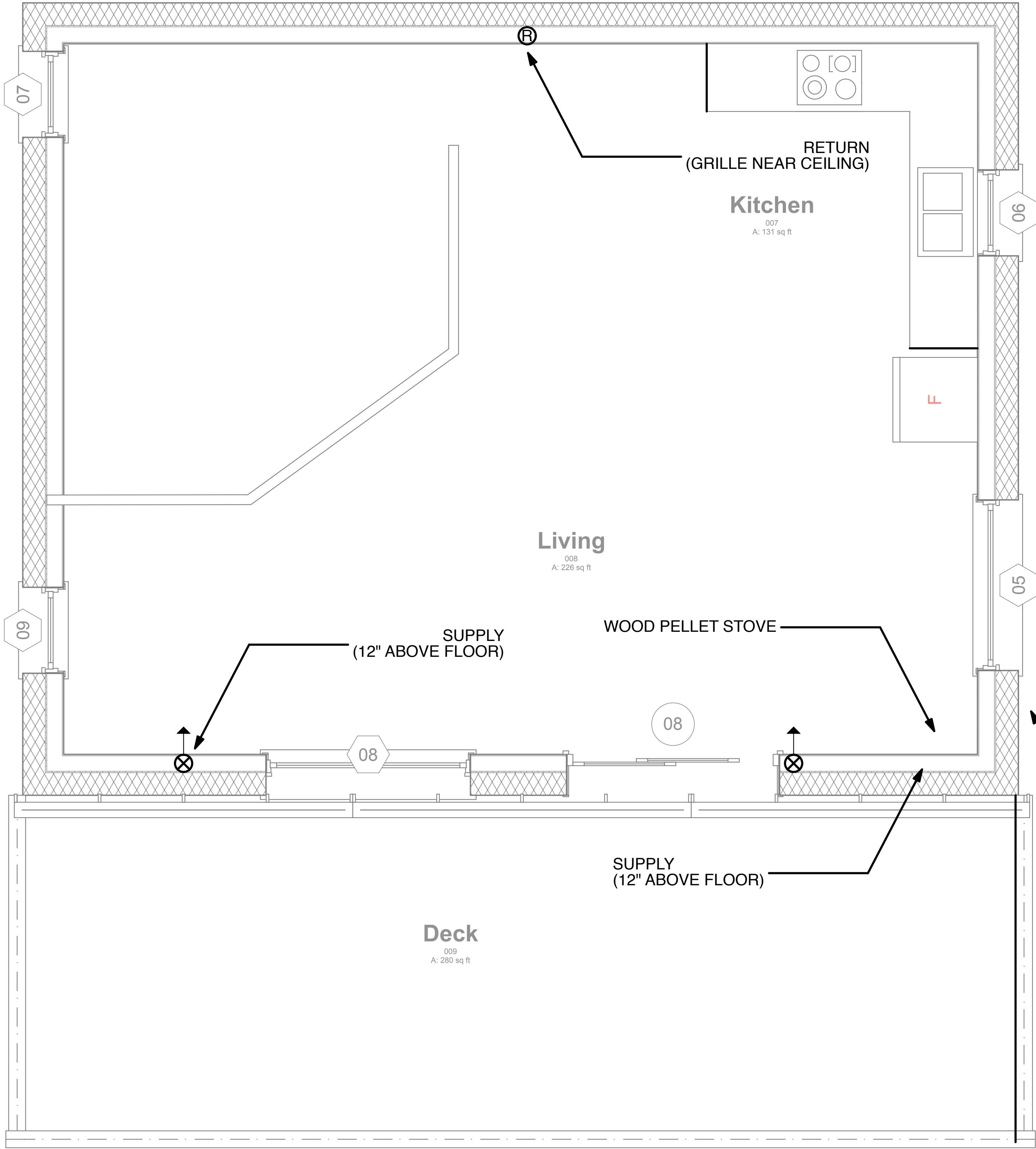
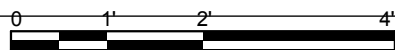
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SHEET 27 OF total



1

2nd FLOOR



KEY

RETURN AIR DIFFUSER

SUPPLY AIR

GRILLE DIRECTION

4" VENT FOR PELLEST STOVE EXHAUST



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Design Development

MECHANICAL
VENTILATION PLAN

M1.1

SHEET 28 OF total

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DRAWN BY: Aa		
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MECHANICAL SCHEMATIC PLAN

M1.2