Staff Report

PLANNING DIVISION

DEPARTMENT *of* COMMUNITY *and* NEIGHBORHOODS

To: Salt Lake City Planning Commission

From: Caitlyn Tubbs, Principal Planner, caitlyn.tubbs@slcgov.com or 801-535-7706

Date: January 12, 2022

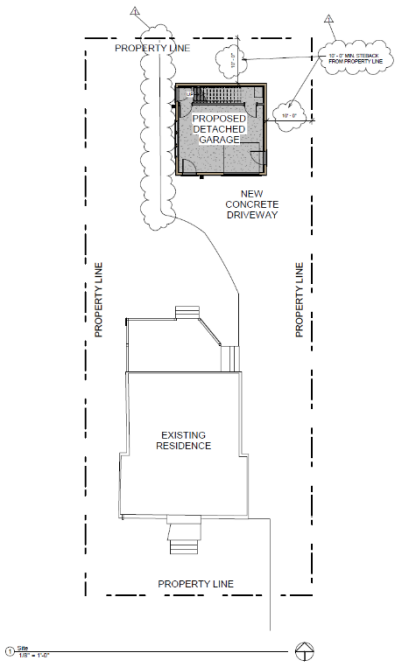
Re: Detached Accessory Dwelling Unit – Conditional Use (PLNPCM2021-00969)

Detached Accessory Dwelling Unit - Conditional Use

PROPERTY ADDRESS: 529 E Sherman Avenue
PARCEL ID: 16-07-478-020-0000
MASTER PLAN: Central Community
ZONING DISTRICT: R-1-5,000 Residential

REQUEST: Angela Wright, the property owner, is requesting the approval of a conditional use permit to establish an accessory dwelling unit (ADU) in a detached garage in the rear yard area of her property at 529 East Sherman Avenue. The property is located in the R-1-5,000 zoning district where the establishment of Accessory Dwelling Units require conditional use approval from the Planning Commission.

CONDITIONAL USE RECOMMENDATION: Planning Staff finds the project generally meets the applicable standards of approval and no detrimental effects are expected, so staff is not recommending any conditions of approval. Staff therefore recommends the Planning Commission approve the Conditional Use for the ADU. Final approval of the conditions of approval, if any are adopted, shall be delegated to Planning Staff.



ATTACHMENTS:

A. Vicinity Map
B. Site Photos
C. Application Materials
D. Zoning Standards for ADUs
E. Conditional Use Standards
F. Public Process & Comments
G. Department Review Comments

PROJECT DESCRIPTION:

The subject property has an existing detached garage in the rear yard. The homeowner wishes to demolish the existing detached garage and replace it with a new garage set farther back from the side and rear property lines. The existing garage is approximately

one to two feet from the eastern side and rear property lines and the proposed garage will be set back ten feet from both property lines.

The size of a detached ADU cannot exceed 50% of a home's footprint or can be up to a maximum of 650 square feet, whichever is less. The Salt Lake County Assessor's Office indicated the primary dwelling has a footprint of approximately 820 square feet; 50% of this area would be 410 square feet so this number applies because it is the smaller number. The proposed ADU is 405 square feet in size and complies with the maximum size standard.

The proposed detached building meets the setback requirements in the underlying R-1-5,000 zone and sits ten feet from the eastern side and rear property lines. The R-1-5,000 Zoning District also has a lot coverage limit of 40%; the subject property is approximately 0.1427 acres in size (6,216 square feet) which would allow a maximum coverage area of approximately 2,486.4 square feet. The total covered area of the property, including the house and the new detached building is 1,225 square feet and is well under the maximum lot coverage amount.

The proposed garage would be approximately nineteen feet (19') in height from grade to the peak of the roof. While ADU structures are typically limited to seventeen feet (17') in height or the height of the primary dwelling (whichever is less) section 21A.40.200(E)(3)(d) allows an exception where ADU structures with a pitched roof may match the height of the primary dwelling up to twenty four feet (24') in height provided the building is ten feet from any property line. The primary dwelling is approximately nineteen feet (19') in height which matches the height of the proposed ADU building. The ADU building has been setback ten feet in compliance with the requirement to gain additional building height.

The proposed building will have windows on the ground and upper floor; since the building will be set ten feet from the side and rear property lines obscured glazing is not required. The proposed entrance will be on the western side of the building and face into the subject property's rear yard. No balconies or decks are proposed as part of the new building. Additionally, the proposed building will be clad in siding similar in dimension and color to the siding found on the primary dwelling.

The proposed detached garage provides one off-street parking stall and additional parking is available along the driveway. Additionally, the proposed ADU is within a quarter-mile of a bus route which qualifies it for a waiver of the off-street parking requirement.

KEY ISSUES FOR ADU REQUEST:

Conditional uses are permitted uses which may have conditions applied to them if there are any anticipated negative impacts. Staff has reviewed this application alongside the detrimental impacts determination section of the ordinances (21a.54.080B, see Attachment E) and does not anticipate any adverse effects of the establishment of this ADU. The most common anticipated negative effects of ADUs are already addressed in the city's ordinances where standards such as parking accommodation, privacy/window locations, and compatible design mitigate these concerns. Staff has no recommended conditions of approval for this request.

PLANNING COMMISSION NEXT STEPS:

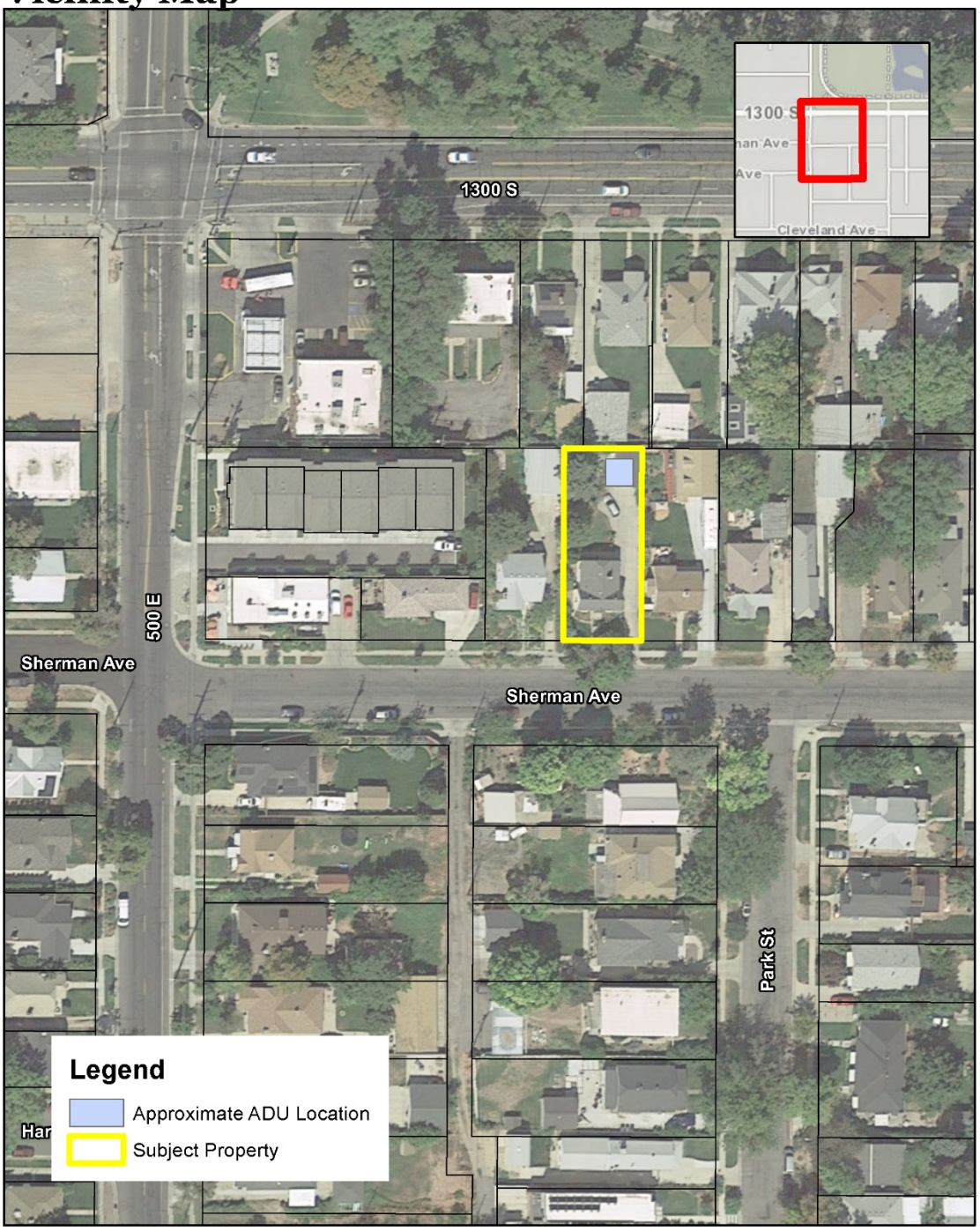
Approval of Conditional Use
If the request is approved, the applicant will need to need to comply with the conditions of approval, if any, including those required by other City departments and any added by the Planning Commission. The applicant will be able to submit plans for building permits and certificates of occupancy for the buildings will only be issued once all the conditions of approval, if any are adopted, are met including the registration process requirements outlined in 21A.40.200.F of the zoning ordinance. All other standards and processes listed by the city's ordinances, including the ADU registration process and any applicable building permits, are still required.

Denial of Conditional Use
State and City code require that a Conditional Use be approved if reasonable conditions can be imposed on the use to mitigate any reasonably anticipated detrimental effects of the use. A conditional use can only be denied if the Planning Commission finds that reasonably anticipated detrimental effects cannot be mitigated with the imposition of reasonable conditions.

If the Planning requests are denied, the applicant would not be able to construct an ADU. The applicants could still utilize the detached garage structure; however, it could not be used as an accessory dwelling.

ATTACHMENT A – VICINITY MAP

Vicinity Map



Salt Lake City Planning Division 12/2/2021

ATTACHMENT B – SITE PHOTOS

Figure 1: View of subject property from Sherman Avenue.

Figure 2: View of neighboring property to the west.

Figure 3: View of neighboring property to the east

Figure 4: View of Sherman Avenue, looking east.

ATTACHMENT C – APPLICATION MATERIALS

STEP PEAK DESIGN SERVICES LLC

Gas Line Drawing

PROJECT NAME

Wright Residence Gas Line Drawing
Salt Lake City, Utah

SUBMITTED TO:

Rolland T. Lee

NOTE: These are Gas Line Schematics the design is illustrative in nature, site conditions will vary & the design may need to be altered to accommodate conditions.

Submitted by:
Step Peak Design Services
Jose Galvan
Phone: (801)-232-8059
jose@steppeakdesignservices.com

6/10/2021

System Configuration: Angela Wright Garage Addition

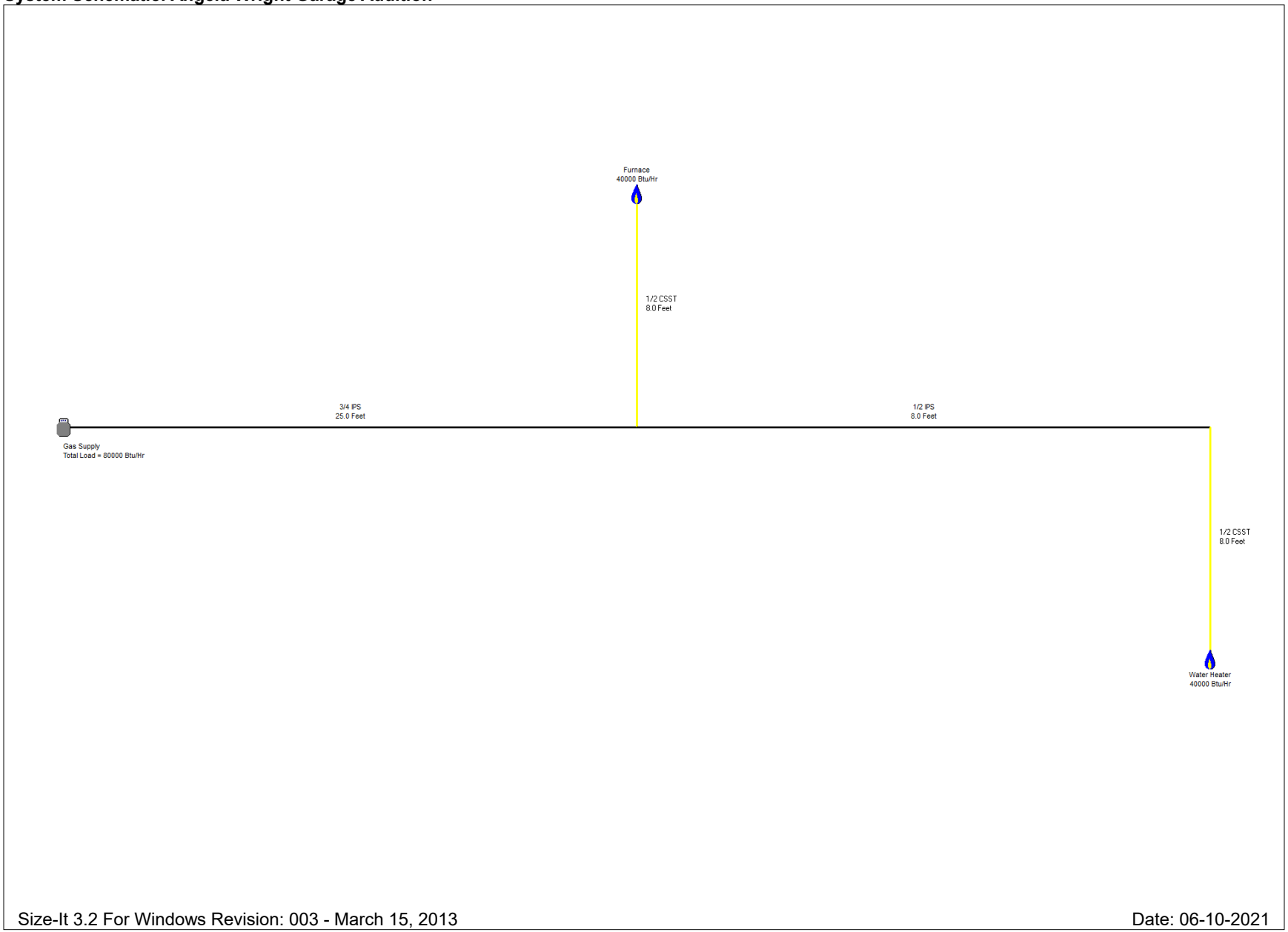
General Information...

Project Name: Angela Wright Garage Addition
Fuel Gas Type: Natural Gas
Supply Pressure Range: Low Pressure - Less Than Or Equal To .5 Psi
System Style: Hybrid - Steel Trunk With CSST Appliance Runs
Design Criteria: 0.5 In WC Overall Pressure Drop

Component List...

Component Name	Load, Cfh	Size, Inches	Length, Feet	Material-P/N
Trunk	80	3/4 IPS	25.0	IPS Schedule 40 Black Iron Pipe
Run To Furnace	40	1/2 CSST	8.0	Gastite CSST P/N-S93-8A4
Trunk	40	1/2 IPS	8.0	IPS Schedule 40 Black Iron Pipe
Run To Water Heater	40	1/2 CSST	8.0	Gastite CSST P/N-S93-8A4

System Schematic: Angela Wright Garage Addition



Size-It 3.2 For Windows Revision: 003 - March 15, 2013

Date: 06-10-2021

STEP PEAK DESIGN SERVICES LLC

PROJECT NAME

Wright Residence Garage Addition
Salt Lake City, Utah

SUBMITTED TO:

Rolland T. Lee

NOTE: These are Load Calculations. The duct design is illustrative in nature, site conditions will vary & the design may need to be altered to accommodate conditions.

Submitted by:
Step Peak Design Services
Jose Galvan
Phone: (801)-232-8059
jose@steppeakdesignservices.com

6/10/2021

REScheck Software Version 4.7.1

Compliance Certificate

Project Angel Wright Detached Garage Addition

Energy Code:	**Utah Energy Conservation Code**
Location:	**Salt Lake City, Utah**
Construction Type:	**Single-family**
Project Type:	**New Construction**
Orientation:	**Bldg. faces 180 deg. from North**
Conditioned Floor Area:	**500 ft2**
Glazing Area	**4%**
Climate Zone:	**5 (5765 HDD)**
Permit Date:	**June 10, 2021**
Permit Number:	

Construction Site:
529 Sherman Avenue
Salt Lake City, Utah 84105

Owner/Agent:
Angela Wright Detached Garage Addition
Rolland T. Lee Architecural Design
529 Sherman Avenue
Salt Lake City, Utah 84105

Designer/Contractor:
Step Peak Design Services
Step Peak Design Services
Herriman, Utah 84096
(801)-232-8059
jose@steppeakdesignservices.com

Compliance: Passes using performance alternative

Compliance: **6.5% Better Than Code**

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Wall 1: Wood Frame, 16" o.c. Orientation: Back	320	19.0	0.0	0.060	19
Wall 2: Wood Frame, 16" o.c. Orientation: Left side	200	19.0	0.0	0.060	11
Window 1: 2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/4" SHGC: 0.30 Orientation: Left side	14			0.320	5
Wall 3: Wood Frame, 16" o.c. Orientation: Front	160	19.0	0.0	0.060	9
Window 1: 2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/4" SHGC: 0.30 Orientation: Front	14			0.320	5
Wall 4: Wood Frame, 16" o.c. Orientation: Right side	40	19.0	0.0	0.060	2
Wall 5: Wood Frame, 16" o.c. Orientation: Right side	160	19.0	0.0	0.060	8
Door 1: Solid Orientation: Right side	20			0.390	8
Window 1: 2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/4" SHGC: 0.30 Orientation: Right side	14			0.320	5
Wall 6: Wood Frame, 16" o.c. Orientation: Right side	160	19.0	0.0	0.060	10

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Floor 1: All-Wood Joist/Truss:Over Unconditioned Space	306	19.0	0.0	0.047	14
Floor 2: All-Wood Joist/Truss:Over Outside Air	14	30.0	0.0	0.033	0
Floor 3: Slab-On-Grade:Unheated Insulation depth: 6.0'	49		10.0	0.684	34
Ceiling 1: Flat Ceiling or Scissor Truss	396	38.0	0.0	0.030	12
Ceiling 2: Cathedral Ceiling	14	38.0	0.0	0.027	0

Mechanical Equipment

Description	Fuel type	Efficiency
Electric Central Air		14 SEER
Forced Hot Air		95 AFUE

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the Utah Energy Conservation Code requirements in RES*check* Version 4.7.1 and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

Step Peak Design
Name - Title

Signature

Date

Project Notes:
Job Number: 21-0172
21-0172

RES*check* Software Version 4.7.1

Inspection Checklist

Energy Code: Utah Energy Conservation Code

Requirements: 100.0% were addressed directly in the RES*check* software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1][1]	Construction drawings and documentation demonstrate energy code compliance for the building envelope.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
302.1, 403.6 [PR2][2]	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr____ Cooling: Btu/hr____	Heating: Btu/hr____ Cooling: Btu/hr____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1 [FO1][1]	Slab edge insulation R-value.	R-____ ☐ Unheated ☐ Heated	R-____ ☐ Unheated ☐ Heated	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2, 402.2.9 [FO2][1]	Slab edge insulation installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.1.1 [FO3][1]	Slab edge insulation depth/length.	____ ft	____ ft	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2.1 [FO11][2]	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.8 [FO12][2]	Snow- and ice-melting system controls installed.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement is not applicable.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1][1]	Door U-factor.	U-_____	U-_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
402.1.1, 402.3.1, 402.3.3, 402.3.6, 402.5 [FR2][1]	Glazing U-factor (area-weighted average).	U-_____	U-_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.1.3 [FR4][1]	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.3 [FR20][1]	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.4.4 [FR16][2]	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
405.2 [FR25][1]	All ducts in unconditioned spaces or outside the building envelope are insulated to ≥R-6.	R-_____	R-_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.2.2 [FR13][1]	All joints and seams of air ducts, air handlers, and filter boxes are sealed.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.3 [FR17][2]	HVAC piping conveying fluids above 105 ºF or chilled fluids below 55 ºF are insulated to ≥R-3.	R-_____	R-_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement is not applicable.
403.3.1 [FR24][2]	Protection of insulation on HVAC piping.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.4.2 [FR18][2]	Hot water pipes are insulated to ≥R-3.	R-_____	R-_____	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.5 [FR19][2]	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13][2]	All installed insulation is labeled or the installed R-values provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.1.1, 402.2.6 [IN1][1]	Floor insulation R-value.	R-____ ☐ Wood ☐ Steel	R-____ ☐ Wood ☐ Steel	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2, 402.2.7 [IN2][1]	Floor insulation installed per manufacturer's instructions, and in substantial contact with the underside of the subfloor.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.1.1, 402.2.5, 402.2.6 [IN3][1]	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R-____ ☐ Wood ☐ Mass ☐ Steel	R-____ ☐ Wood ☐ Mass ☐ Steel	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.2 [IN4][1]	Wall insulation is installed per manufacturer's instructions.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1][1]	Ceiling insulation R-value.	R-____ ☐ Wood ☐ Steel	R-____ ☐ Wood ☐ Steel	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Envelope Assemblies table for values.*
303.1.1.1, 303.2 [FI2][1]	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft².			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
402.2.3 [FI22][2]	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.2.2 [FI4][1]	Duct tightness test result of <=10 cfm/100 ft2 across the system or <=7.5 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	_____ cfm/100 ft²	_____ cfm/100 ft²	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.2.2.1 [FI24][1]	Air handler leakage designated by manufacturer at <=2% of design air flow.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.6 [FI5][1]	Heating and cooling equipment type and capacity as per plans.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.1.1 [FI9][2]	Programmable thermostats installed on forced air furnaces.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.1.2 [FI10][2]	Heat pump thermostat installed on heat pumps.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement is not applicable.
403.4.1 [FI11][2]	Circulating service hot water systems have automatic or accessible manual controls.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
403.5.1 [FI25][2]	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
401.3 [FI7][2]	Compliance certificate posted.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
303.3 [FI18][3]	Manufacturer manuals for mechanical and water heating systems have been provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Utah Energy Conservation Code Energy Efficiency Certificate

Insulation Rating	R-Value	
Above-Grade Wall	19.00	
Below-Grade Wall	0.00	
Floor	19.00	
Ceiling / Roof	38.00	
Ductwork (unconditioned spaces):	_____	
Glass & Door Rating	**U-Factor**	**SHGC**
Window	0.32	0.30
Door	0.39	
Heating & Cooling Equipment	**Efficiency**	
Electric Central Air	14 SEER	
Forced Hot Air	95 AFUE	
Water Heater:_____	_____	

Name: _____ **Date:**_____

Comments

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Load Short Form
Entire House
Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Design Information

	Htg	Clg
Outside db (°F)	9	95
Inside db (°F)	72	75
Design TD (°F)	63	20
Daily range	-	H
Inside humidity (%)	30	50
Moisture difference (gr/lb)	33	-26

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	York
Trade	LX Series
Model	TM9E040A10MP11
AHRI ref	202293706

Efficiency	95 AFUE	
Heating input	40000	Btuh
Heating output	37000	Btuh
Temperature rise	55	°F
Actual air flow	709	cfm
Air flow factor	0.052	cfm/Btuh
Static pressure	0.70	in H2O
Space thermostat		

COOLING EQUIPMENT

Make	York
Trade	LX Series
Cond	YCD18B23S
Coil	CF24AXA1 + TXV
AHRI ref	202293706

Efficiency	12.3 EER, 14 SEER	
Sensible cooling	14705	Btuh
Latent cooling	2595	Btuh
Total cooling	17300	Btuh
Actual air flow	709	cfm
Air flow factor	0.108	cfm/Btuh
Static pressure	0.70	in H2O
Load sensible heat ratio	1.00	

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Stairs 1	90	5069	892	263	96
Loft	120	3860	1735	200	188
Stairs 2	90	0	0	0	0
Bathroom	35	1730	498	90	54
Kitchen	151	2991	3433	155	371
Closet	14	0	0	0	0

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Entire House	500	13650	6558	709	709
Other equip loads		3706	565		
Equip. @ 1.00 RSM			7124		
Latent cooling			0		
TOTALS	500	17356	7124	709	709

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Building Analysis
Entire House
Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Design Conditions

Location:
Salt Lake City IAP, UT, US
Elevation: 4226 ft
Latitude: 41°N

Outdoor:	**Heating**	**Cooling**
Dry bulb (°F)	9	95
Daily range (°F)	-	30 (H)
Wet bulb (°F)	-	63
Wind speed (mph)	30.0	7.5

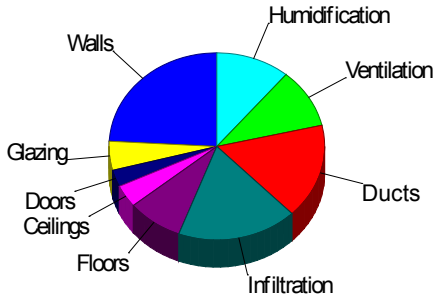
Indoor:	**Heating**	**Cooling**
Indoor temperature (°F)	72	75
Design TD (°F)	63	20
Relative humidity (%)	30	50
Moisture difference (gr/lb)	32.7	-26.1

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	0

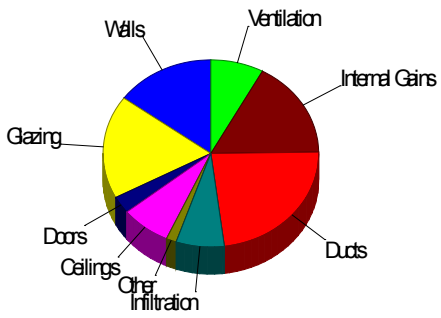
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	4.3	4183	24.1
Glazing	20.2	871	5.0
Doors	24.6	501	2.9
Ceilings	1.6	672	3.9
Floors	3.5	1454	8.4
Infiltration	3.6	3126	18.0
Ducts		2843	16.4
Piping		0	0
Humidification		1925	11.1
Ventilation		1781	10.3
Adjustments		0	
Total		**17356**	**100.0**



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.1	1064	14.9
Glazing	29.4	1272	17.9
Doors	10.3	211	3.0
Ceilings	1.3	533	7.5
Floors	0.3	109	1.5
Infiltration	0.6	515	7.2
Ducts		1654	23.2
Ventilation		565	7.9
Internal gains		1200	16.8
Blower		0	0
Adjustments		0	
Total		**7124**	**100.0**



Latent Cooling Load = 0 Btuh
Overall U-value = 0.071 Btuh/ft²-°F

Data entries checked.

Component Constructions
Entire House
Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Design Conditions

Location:
Salt Lake City IAP, UT, US
Elevation: 4226 ft
Latitude: 41°N

Outdoor:	Heating	Cooling
Dry bulb (°F)	9	95
Daily range (°F)	-	30 (H)
Wet bulb (°F)	-	63
Wind speed (mph)	30.0	7.5

Indoor:	Heating	Cooling
Indoor temperature (°F)	72	75
Design TD (°F)	63	20
Relative humidity (%)	30	50
Moisture difference (gr/lb)	32.7	-26.1

Infiltration:

Method	Simplified
Construction quality	Average
Fireplaces	0

Construction descriptions	Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12E-0sw: Frm wall, wd ext, 1/2" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud	n	320	0.068	19.0	4.28	1371	1.18	379
	e	186	0.068	19.0	4.28	795	1.18	220
	s	146	0.068	19.0	4.28	624	1.18	172
	w	125	0.068	19.0	4.28	536	1.18	148
	all	776	0.068	19.0	4.28	3326	1.18	919
12E-0sw: Frm wall, 5/8" gyp.bd ext, 1/2" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud	w	40	0.068	19.0	4.28	171	1.18	47
Partitions								
12E-0sw: Frm wall, 5/8" gyp.bd ext, 1/2" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm, 16" o.c. stud		160	0.068	19.0	4.28	685	0.61	98
Windows								
2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/4" thk: 2 glazing, clr outr, air gas, wd frm mat, clr innr, 1/4" gap, 1/4" thk; NFRC rated (SHGC=0.30); 6.67 ft head ht	e	14	0.320	0	20.2	290	34.6	499
	s	14	0.320	0	20.2	290	19.1	274
	w	14	0.320	0	20.2	290	34.6	499
	all	43	0.320	0	20.2	871	29.4	1272
Doors								
11D0: Door, wd sc type	w	20	0.390	0	24.6	501	10.3	211
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		396	0.026	38.0	1.64	649	1.30	515
R-49 Asphalt Attic: Attic ceiling, asphalt shingles roof mat, r-49 ceil ins, 1/2" gypsum board int fnsh		14	0.027	49.0	1.68	23	1.33	18
Floors								
19C-19cscp: Flr floor, frm flr, 6" thkns, carpet flr fnsh, r-2 ext ins, r-19 cav ins, tight crwl ovr, r-11 wall insul		306	0.049	30.0	1.07	328	0.34	104
20P-30c: Flr floor, frm flr, 12" thkns, carpet flr fnsh, r-30 cav ins, gar ovr		14	0.035	30.0	2.20	30	0.35	5
22B-10tpm: Bg floor, heavy dry or light damp soil, on grade depth, r-10 edge ins		49	0.355	10.0	22.4	1096	0	0

J1 Form - Worksheet A

Entire House

Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

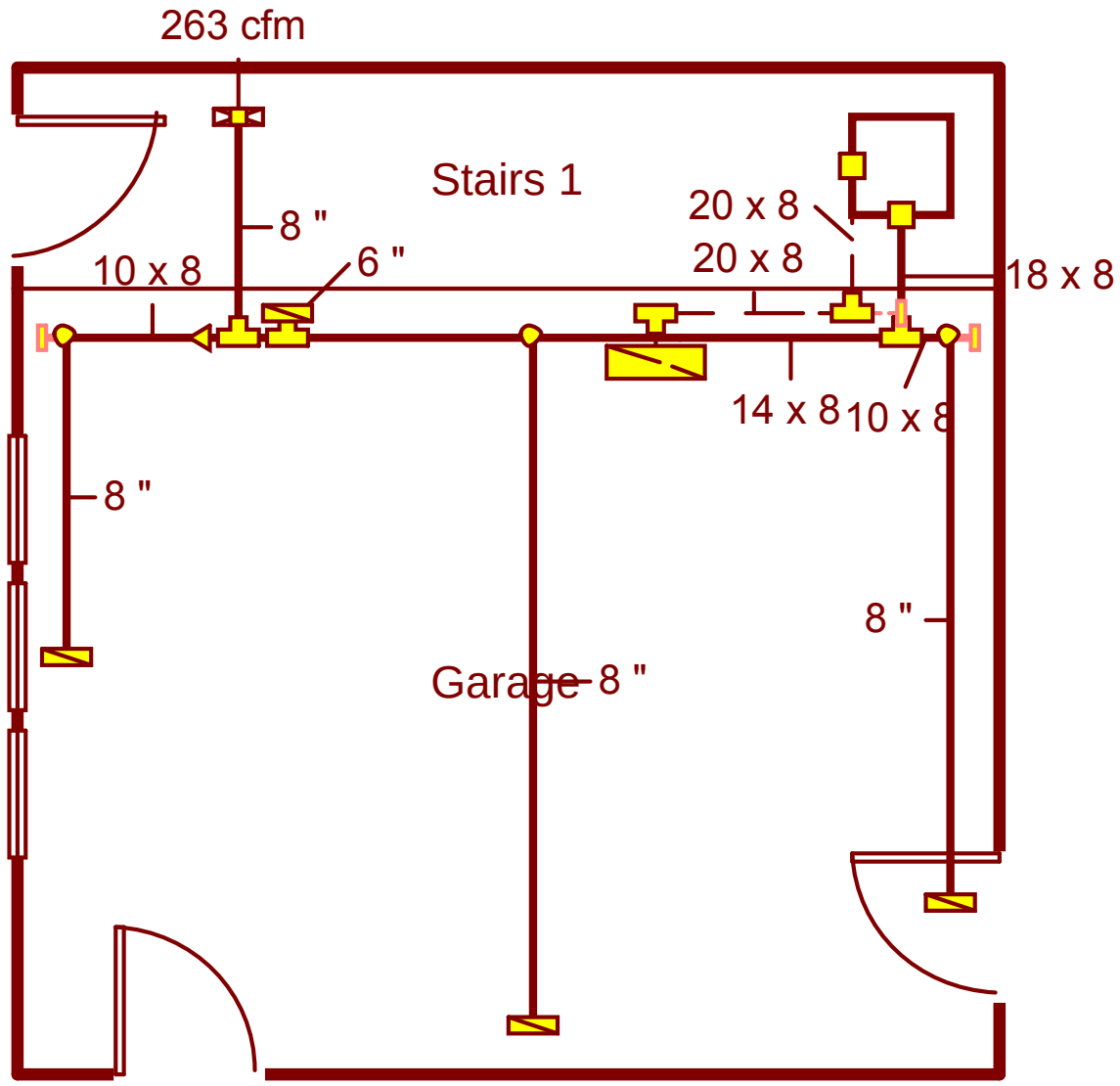
Supporting Detail			
Project Name:	Angel Wright Detached Garage Addition	Date:	Jun 10, 2021
Address:	529 Sherman Avenue, Salt Lake City, Utah 84105		
Phone:		Job ID:	21-0172

Worksheet A
Location and Design Conditions

Weather Location:	Salt Lake City IAP, UT, US		Elevation = 4226	Latitude =	41
Indoor Conditions, Heating:	DB = 72 °F	RH = 30 %	Indoor Conditions, Cooling:	DB = 75 °F	RH = 50 %
Table 1 Conditions	99% DB = 9 °F	1% DB = 95 °F	Grains Difference = -26 gr/lb	Daily Range =	H
Design Temperature Differences			HTD = 63 °F	CTD =	20 °F

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Level 1



Job #: 21-0172
Performed by Jose Galvan for:
Angela Wright Detached Garage Addition
529 Sherman Avenue
Salt Lake City, Utah 84105

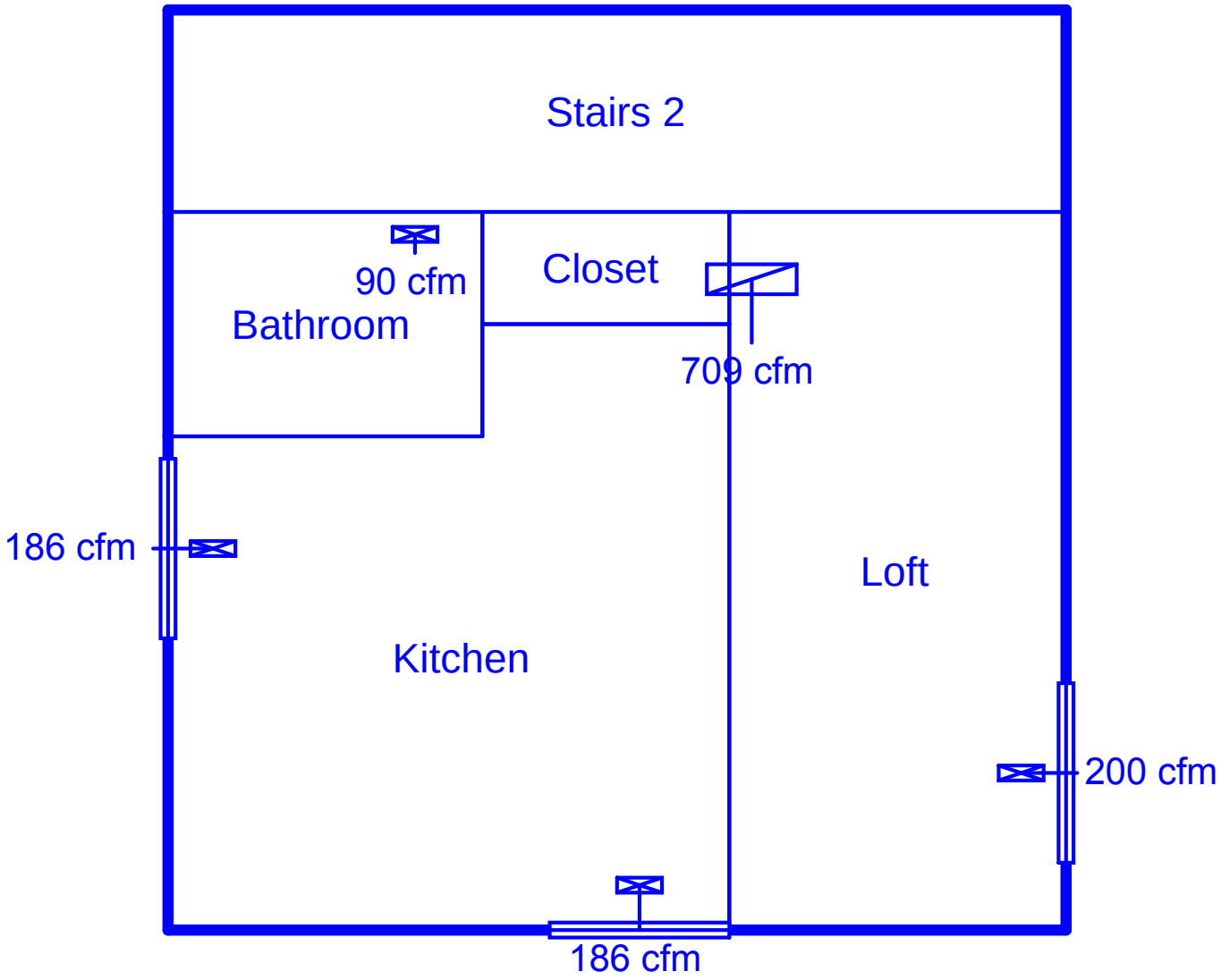
Step Peak Design Services

Herriman, Utah 84096
Phone: (801)-232-8059
jose@steppeakdesignservices.com

Scale: 1 : 46

Right-Suite® Universal 2021
21.0.07 RSU05735
2021-Jun-10 20:05:53
...ght Detached Garage Addition

Level 2



Job #: 21-0172
Performed by Jose Galvan for:
Angela Wright Detached Garage Addition
529 Sherman Avenue
Salt Lake City, Utah 84105

Step Peak Design Services

Herriman, Utah 84096
Phone: (801)-232-8059
jose@steppeakdesignservices.com

Scale: 1 : 46

Right-Suite® Universal 2021
21.0.07 RSU05735
2021-Jun-10 20:05:53
...ght Detached Garage Addition

Duct System Summary

Entire House

Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

	Heating	Cooling
External static pressure	0.70 in H2O	0.70 in H2O
Pressure losses	0.37 in H2O	0.41 in H2O
Available static pressure	0.33 in H2O	0.29 in H2O
Supply / return available pressure	0.186 / 0.144 in H2O	0.164 / 0.126 in H2O
Lowest friction rate	0.088 in/100ft	0.078 in/100ft
Actual air flow	709 cfm	709 cfm
Total effective length (TEL)	374 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Bathroom	h 1730	90	54	0.161	6.0	0x 0	ShMt	15.5	100.0	st3
Kitchen	c 1717	78	186	0.078	8.0	0x 0	ShMt	26.0	185.0	st3A
Kitchen-A	c 1717	78	186	0.082	8.0	0x 0	ShMt	24.0	175.0	st3
Loft	h 1735	200	188	0.096	8.0	0x 0	ShMt	15.0	155.0	st2
Stairs 1	h 5069	263	96	0.143	8.0	0x 0	ShMt	20.5	110.0	st3

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st3	Peak AVF	509	521	0.078	670	11.4	8 x 14	ShtMetl	st1
st3A	Peak AVF	78	186	0.078	334	7.7	8 x 10	ShtMetl	st3
st2	Peak AVF	200	188	0.096	361	7.4	8 x 10	ShtMetl	st1
st1	Peak AVF	709	709	0.078	709	12.7	8 x 18	ShtMetl	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x 0	709	709	163.0	0.078	638	12.7	8x 20		ShMt	rt1

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rt1	Peak AVF	709	709	0.078	638	12.7	8 x 20	ShtMetl	

Duct system multi orientation report

Entire House

Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Group 1: (N, SE, SW, NW) Group 2: (NE, E, W) Group 3: (S)

Duct Name	(N)			(NE)			(E)			(SE)		
	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size
Supply Branches												
Bathroom	90 h	12x4	6	90 h	12x4	6	90 h	12x4	6	90 h	12x4	6
Kitchen	186 c	12x4	8	192 c	12x4	8	196 c	12x4	8	184 c	12x4	8
Kitchen-A	186 c	12x4	8	192 c	12x4	8	196 c	12x4	8	184 c	12x4	8
Loft	200 h	12x4	8	200 h	12x4	8	200 h	12x4	8	200 h	12x4	8
Stairs 1	263 h	12x4	8	263 h	12x4	8	263 h	12x4	8	263 h	12x4	8
Supply Trunks												
st3	521 c		14x8	541 c		16x8	560 c		16x8	524 c		14x8
st3A	186 c		10x8	192 c		10x8	196 c		10x8	184 c		10x8
st2	200 h		10x8	200 h		10x8	200 h		10x8	200 h		10x8
st1	709 c		18x8	709 c		18x8	709 c		18x8	709 c		18x8
Return Branches												
rb1	709 c	24x8	20x8	709 c	24x8	20x8	709 c	24x8	20x8	709 c	24x8	20x8
Return Trunks												
rt1	709 c		20x8	709 c		20x8	709 c		20x8	709 c		20x8
Friction Rates												
Heating FR	0.088			0.088			0.088			0.088		
Cooling FR	0.078			0.078			0.078			0.078		

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Duct Name	(S)			(SW)			(W)			(NW)		
	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size
Supply Branches												
Bathroom	90 h	12x4	6	90 h	12x4	6	90 h	12x4	6	90 h	12x4	6
Kitchen	171 c	12x4	8	177 c	12x4	8	193 c	12x4	8	194 c	12x4	8
Kitchen-A	171 c	12x4	8	177 c	12x4	8	193 c	12x4	8	194 c	12x4	8
Loft	216 c	12x4	8	200 h	12x4	8	200 h	12x4	8	200 h	12x4	8
Stairs 1	263 h	12x4	8	263 h	12x4	8	263 h	12x4	8	263 h	12x4	8
Supply Trunks												
st3	509 h		14x8	509 c		14x8	544 c		16x8	536 c		14x8
st3A	171 c		6x8	177 c		10x8	193 c		10x8	194 c		10x8
st2	216 c		10x8	200 h		10x8	200 h		10x8	200 h		10x8
st1	709 c		18x8	709 c		18x8	709 c		18x8	709 c		18x8
Return Branches												
rb1	709 c	24x8	20x8	709 c	24x8	20x8	709 c	24x8	20x8	709 c	24x8	20x8
Return Trunks												
rt1	709 c		20x8	709 c		20x8	709 c		20x8	709 c		20x8
Friction Rates												
Heating FR	0.088			0.088			0.088			0.088		
Cooling FR	0.078			0.078			0.078			0.078		

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Duct Name	Largest			Smalest		
	Reg CFM	Reg Size	Duct Size	Reg CFM	Reg Size	Duct Size
Supply Branches						
Bathroom	90 h	12x4	6	90 h	12x4	6
Kitchen	196 c	12x4	8	171 c	12x4	8
Kitchen-A	196 c	12x4	8	171 c	12x4	8
Loft	216 c	12x4	8	200 h	12x4	8
Stairs 1	263 h	12x4	8	263 h	12x4	8
Supply Trunks						
st3	560 c		16x8	509 h		14x8
st3A	196 c		10x8	171 c		6x8
st2	216 c		10x8	200 h		10x8
st1	709 c		18x8	709 c		18x8
Return Branches						
rb1	709 c	24x8	20x8	709 c	24x8	20x8
Return Trunks						
rt1	709 c		20x8	709 c		20x8
Friction Rates						
Heating FR	0.088			0.088		
Cooling FR	0.078			0.078		

Static Pressure and Friction Rate

Entire House

Step Peak Design Services

Job: 21-0172
Date: Jun 10, 2021
By: Jose Galvan
Plan: 21-0172

Herriman, Utah 84096 Phone: (801)-232-8059 Email: jose@steppeakdesignservices.com

Project Information

For: Angela Wright Detached Garage Addition, Rolland T. Lee Architecural Design
529 Sherman Avenue, Salt Lake City, Utah 84105

Available Static Pressure

	Heating (in H2O)	Cooling (in H2O)
External static pressure	0.70	0.70
Pressure losses		
Coil	0.17	0.21
Heat exchanger	0	0
Supply diffusers	0.03	0.03
Return grilles	0.03	0.03
Filter	0.14	0.14
Humidifier	0	0
Balancing damper	0	0
Other device	0	0
Available static pressure	0.33	0.29

Total Effective Length

	Supply (ft)	Return (ft)
Measured length of run-out	7	5
Measured length of trunk	20	3
Equivalent length of fittings	185	155
Total length	211	163
Total effective length		374

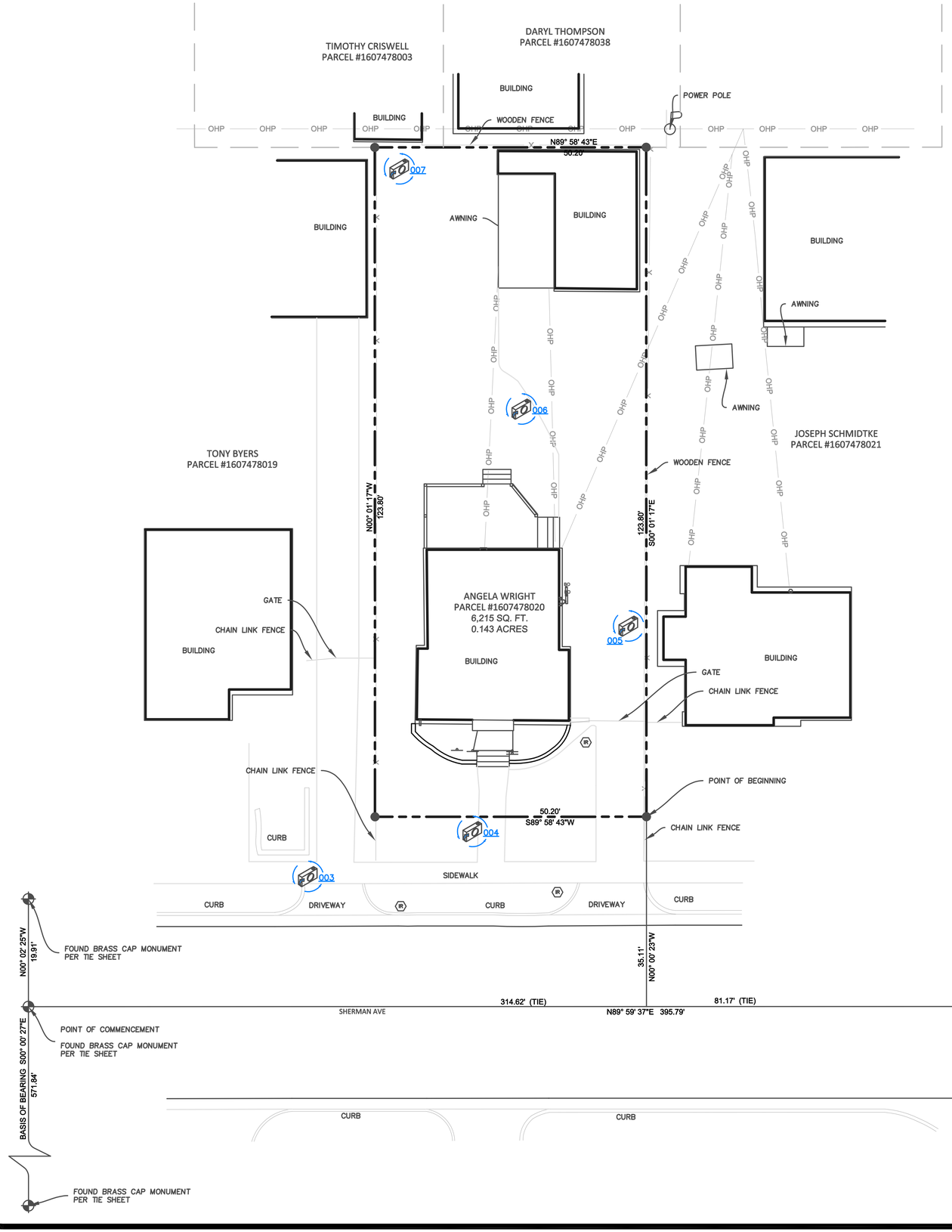
Friction Rate

	Heating (in/100ft)		Cooling (in/100ft)	
Supply Ducts	0.088	OK	0.078	OK
Return Ducts	0.088	OK	0.078	OK

Fitting Equivalent Length Details

Supply 4AD=60, 2I0=65, 9L=20, 12O1=10, 9L=20, 1D=10: TotalEL=185

Return 6M=20, 6C6=115, 10B=10, 5K=10: TotalEL=155



RECORD OF SURVEY

A PORTION OF BLOCK 14, FIVE ACRE PLAT "A", BIG FIELD SURVEY,
LOCATED IN THE SOUTHEAST QUARTER SECTION 7, T1S, R1E,
SLB&M, SALT LAKE COUNTY, UTAH

N

SCALE

HORIZONTAL: 1" = 10'

0 2.5' 5' 10' 20'

NOTES

1. ALL DIMENSIONS SHOWN ARE IN US SURVEY FEET AND DECIMALS THEREOF.

2. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY VARA 3D. ALL INFORMATION REGARDING RECORD EASEMENTS, BOUNDARIES, ADJOINERS AND OTHER DOCUMENTS THAT MIGHT AFFECT THE QUALITY OF TITLE TO TRACT SHOWN HEREON CAN BE OBTAINED FROM THE COUNTY OFFICES. THIS DRAWING DOES NOT GUARANTEE THE EXISTENCE OR ABSENCE OF ADDITIONAL EASEMENTS OR BOUNDARIES WITHIN THE PROJECT AREA.

SURVEYOR'S NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO REESTABLISH PROPERTY CORNERS FOR ANGELA WRIGHT. THE BLOCK MAP, OCCUPATION LINES, AND NEIGHBORING SURVEYS WERE USED TO ESTABLISH THE PROPERTY LINES. STREET MONUMENTS WERE FOUND AND REFERENCED TO HELP REESTABLISH LINES IN THE FUTURE.

MONUMENTS FOUND OR SET, THE BASIS OF BEARING AND ANY ENCROACHMENTS ARE AS SHOWN HERE ON.

SURVEYOR'S CERTIFICATE

I, JAMES V. HEINRITZ, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF UTAH, LICENSE NO. 11072412–2201, DO HEREBY CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME, OR UNDER MY DIRECT SUPERVISION, OF THE HEREON DESCRIBED PROPERTY AND THAT TO THE BEST OF MY KNOWLEDGE IT IS A CORRECT REPRESENTATION OF THE LAND SURVEYED.

PROFESSIONAL LAND SURVEYOR
No. 11072412-2201
JAMES VICTOR HEINRITZ
10-22-2020
STATE OF UTAH

JAMES V. HEINRITZ, PLS 11072412–2201
FOR AND ON BEHALF OF VARA 3D, INC

LEGAL DESCRIPTION:

A PORTION OF BLOCK 14, FIVE ACRE PLAT "A", BIG FIELD SURVEY, ACCORDING TO THE OFFICI/ PLAT THEREOF AS RECORDED IN THE SALT LAKE COUNTY RECORDER'S OFFICE AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND BRASS CAP MONUMENT AT THE INTERSECTION OF 500 EAST AND SHERMAN AVENUE, FROM WHENCE A FOUND BRASS CAP MONUMENT IN 500 EAST BEARS SOUTH 00°00'27" EAST A DISTANCE OF 571.84 FEET, SAID LINE FORMING THE BASIS OF BEARING FOR THIS DESCRIPTION;

THENCE NORTH 89°59'37" EAST A DISTANCE OF 314.62 FEET ;
THENCE NORTH 00°00'23" WEST A DISTANCE OF 35.11 FEET TO THE POINT OF BEGINNING SAID POINT BEING RECORDED AS BEING 33 FEET NORTH AND 478.6 FEET WEST FROM THE SOUTHEAST CORNER OF LOT 11, BLOCK 14, FIVE ACRE PLAT "A", BIG FIELD SURVEY;

THENCE SOUTH 89°58'43" WEST A DISTANCE OF 50.20 FEET;
THENCE NORTH 00°01'17" WEST A DISTANCE OF 123.80 FEET;
THENCE NORTH 89°58'43" EAST A DISTANCE OF 50.20 FEET;
THENCE SOUTH 00°01'17" EAST A DISTANCE OF 123.80 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 6,215 SQUARE FEET OR 0.143 ACRES.

LEGEND:

- LIGHT POLE
- POWER POLE
- FIRE HYDRANT
- PANORAMIC PHOTO LOCATION
- FOUND MONUMENT AS NOTED
- SET REBAR AND CAP UNLESS OTHERWISE NOTED
- NEIGHBOR PROPERTY BOUNDARY
- PROPERTY BOUNDARY

PROJECT INFORMATION

ANGELA WRIGHT

529 SHERMAN AVE, SALT LAKE CITY, UT 84105

BOUNDARY SURVEY

REV.#	REVISION NOTES	DATE

CLIENT INFO

VARA 3D
GEOSPATIAL SOLUTIONS
5693 S 675 E MURRAY, UT 84107
801-707-1012

PROJECT NO.	Sheet
2020-092	1
DATE	
OCTOBER 2020	1
HORIZONTAL SCALE	
1" = 10'	

0 0.5 1

SCALE MEASURES 1-INCH ON FULL SIZE(36x24) SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

Salt Lake County Surveyor's Office
Reid J. Demman, PLS, *Salt Lake County Surveyor*
Phil G. Lanouette, PE, *Chief Deputy*
2001 S State Street. N-1500, PO Box 144575, Salt Lake City, UT 84114-4575
Phone: 385-468-8240 - Fax: 385-468-8258 – Email: Surveyor@slco.org

RECORD OF SURVEY E-FILING FORM

All fields are required - Save and attach to email.

Date: 9/20/21

Surveyor Name: Heinritz, James, V
(Last Name, First Name, Middle Initial)

*Business Name: Vara 3D

*Business Address: 5693 S 675 E Murray, UT
84107

*Email: sam.demann@vara3d.com

Note – The size of files will limit the quantity of ROS and/or sheets that may be sent per email. In the body of the email, indicate if supplemental emails will be sent to complete the transmission of all ROS listed on this form. Attach completed E-Filing Form to all supplemental emails. **A maximum of 10 ROS may be submitted per E-Filing Form.**

	*Client Name (abbreviate)	* Project Reference Name/Number	*Sheet Count	*For County Use Only* DOCUMENT #
1	Angela Wright	2020-092 - Angela Wright _ROS_A	1	S
2		_ROS_B		S
3		_ROS_C		S
4		_ROS_D		S
5		_ROS_E		S
6		_ROS_F		S
7		_ROS_G		S
8		_ROS_H		S
9		_ROS_I		S
10		_ROS_J		S
	*Total Sheets (Tab past last line for correct count):	→	1	
	***Payment Total ($20.00 X Quantity of Sheets):**	→ $	20.00	

*[CLICK for link to OPC payment website]

*OPC Confirmation #: 028088

NOTE – Use these examples to name files: Record of Survey Plat- ***Your Project Reference*_ROS_A.pdf**
AutoCAD Drawing - ***Your Project Reference*_ROS_A.dwg**

(For County Use Only)

NOTES:

Initials _____ Date Pmt Rc'd _____

Initials _____ Date ROS Rc'd _____

Emails Per Pmt _____

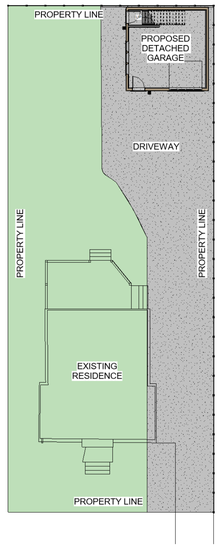
10/12/12

ANGELA WRIGHT DETACHED GARAGE ADDITION

529 Sherman Ave,
Salt Lake City, UT 84105

CONSTRUCTION DOCUMENTS

AERIAL LOCATION



VICINITY MAP

APPLICABLE CODES

2015	INTERNATIONAL RESIDENTIAL CODE
2018	INTERNATIOAL PLUMBING CODE
2018	INTERNATIONAL MECHANICAL CODE
2018	INTERNATIONAL FUEL GAS CODE
2017	NATIONAL ELECTRICAL CODE
2018	INTERNATIONAL FIRE CODE
2015	INTERNATIONAL ENERGY CONSERVATION CODE
1997	UNIFORM CODE FOR BUILDING CONSERVATION

CODE SUMMARY

BEARING WALL INTERIOR:	0
NONBEARING WALL:	0
FLOOR/CEILING:	0
ROOF/CEILING:	0
OCCUPANCY TYPE:	R-3
CONSTRUCTION TYPE:	VB
MAXIMUM NO. STORIES:	2
MAXIMUM HEIGHT:	25'
ALLOWABLE AREA:	
SPRINKLED:	NO
RATING:	
STRUCTURAL FRAME:	0
BEARING WALL EXTERIOR:	0

BUILDING SUMMARY

NO STORIES:	2
MAXIMUM HEIGHT	19'-2"
LEVEL1	405 SF
LEVEL 2	344 SF
SNOW LOAD	30#/S FT
WIND LOAD	90#/SQ FT

INDEX

1

Rolland T. Lee
Residential Design

Contact Information:
Phone: 801-710-4500
Email: rollandtlee555@yahoo.com
rollandtlee5335@gmail.com

629 N. Main Street
ALPINE, 84004

CONSULTANTS

Anglea Wright
Detached
Garage Addition

529 Sherman Ave, Salt Lake City, UT 84105

DATE: June 16, 2021

REVISIONS

MARK	DATE	DESCRIPTION
1	8/7/21	ADJUSTMENT TO SETBACK

PROJECT NO:
MODEL FILE:
DRAWN BY: BG
CHK'D BY: RTL
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SHEET TITLE

Cover Sheet

C - 100

CONSTRUCTION SPECIFICATIONS & NOTES

GENERAL NOTES:

1) All work shall conform to the minimum standards of the International Building Code, any other regulating agencies which have authority over any portion of the work, and the codes and standards listed in these notes and specifications. All specifications noted shall be the latest approved revision or edition. The General Contractor shall review and approve all shop drawings prior to submitting them to the Designer or Engineer. A reviewed copy of all shop drawings shall be kept at the construction site for reference. The shop drawing review shall not relieve the General Contractor of any responsibility for completion of the project according to the contract documents.

2) Structural drawings and specifications represent the finished structure, not the method of construction. The General Contractor shall be responsible for all measures necessary to protect the structure during construction. These measures include, but are not limited to bracing, shoring, etc. Shoring & bracing shall remain in place until all permanent members are in place and connections complete. Observation visits to the site by the Engineer or his representative shall not include inspection of these items.

3) Construction materials shall be spread out if placed on framed floors or roof. Loads shall not exceed the design live load per sq. ft. Provide adequate shoring or bracing where structure has not attained design strength.

4) It shall be the responsibility of the General Contractor to coordinate with all trades, & all items that are to be integrated into the structural system.The civil, structural, mechanical, plumbing, and electrical drawings are supplementary to the architectural drawings. it shall be the responsibility of the contractor to check with the architectural drawings before proceeding withinstallation of civil, structural, mechanical, plumbing, and electrical work. should there be any discrepancies between the architect's and the consulting engineer's drawings and specifications that would cause a conflect. It shall be corrected by the contractor at his expense and at no additional expense to the owner or architect. It is the responsibility of the contractor to examine all conditions prior to submitting bids or commencing with construction. Discrepancies in the drawings or between the drawings and actual field conditions shall be reported to the architect and to the owner.

5) See Architectural drawings for the following: (U.N.O.)
- -Size and location of door, window, floor, and roof openings.
- -Size and location of all interior and exterior non-bearing partitions
- -Size and location of all curbs, drains, depressed areas, slopes, changes in level, grooves, chamfers, inserts, etc.
- -Floor and roof finishes.
- -Dimensions not shown on structural drawings.

6) See Mechanical and Electrical drawings for the following (U.N.O.)
- -Pipe runs, sleeves, trenches, hangers, wall and slabs, openings, etc.
- -Electrical conduits, boxes, and outlets in walls and slabs.
- -Concrete insert requirements for mechanical and electrical.
- -Size and location of machine or equipment bases, anchor bolt requirements, etc.

7) Openings larger than 6" shall not be placed in slabs, decks, walls, etc., unless specifically detailed on the structural drawings. Notify the Structural Engineer when drawing by others who above conditions located in structural members.

8) The engineer shall be notified forty-eight hours in advance prior to any of the following:
- -Placing any concrete.
- -Closing any forms.
- -Grouting any masonry.
- -Completing the nailing of any sheathed wall or deck.
- -Completing the welding of steel decking.

9) Observation visits by the Engineer or his representative shall neither be construed as inspection nor approval of construction.

10) All symbols and abbreviations used on the plans are considered to be construction standards. if the contractor has questions regarding abbreviations of thier exact meaning, the architectect shall be notified for clarification.

11) Details marked shall apply in all cases unless specifically indicated otherwise.

12) All rubbish and debris resulting from demolition and/or new work shall be recycled and/as disposed of off-site and shall not be allowed to accumulate.

13) Offset studs where required so that finish wall surface will be flush. If structural panels are required on a wall plane, the entire wall plane shall be furred or finished flush.

14) Install metal corner beads at all exposed wallboard edges. Install casing beads wherever wallboads, plaster, ect. abuts a dissimilar finish matterial and provide sealant as required.

15) Contractor shall provide and install all stiffeners, bracing, back-up plates, and supporting brackets required for the installation of all casework, stair railing, toilet accessories, partitions, and of all mounted or suspended mechanical, electrical, or misc. equipment.

16) Door sizes shown on plan are opening sizes. allowance for thresolds, ect., shall be taken off the doors. Doors and frames shall be reinforced, where required for closures, stops and hardware.

17) All doors shall be provided with a seal, astral, or baffle at the head and sill to prrevent air leakage

18) All construction shall be preformed in accordance with the state construction safety regulations.

19) All gypsum wall board required by IRC R702.3

20) Pools, spas, wall fences, patio covers, retaining walls, and other freestanding structures require separate review and permits.

21) All "or equal" substitutions must be submitted to, and approved by the city building official prior to installation of the time.

22) Developer/contractor/ owner resonsible for the verification of existing curb location from the property line.

23) Inspection required for Stucco Installation.

24) A permanent certificate shall be posted on or in the electrical distribution panel listing the predominant R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, basement wall, and/or floor) and ducts outside the conditioned spaces; U-factors of windows and the solar heat gain coefficient of windows. The type and efficiency of heating, cooling and service water heating equipment shall also be listed. Per IRC N1101.9

25) Fire block stud spaces at soffits, floor and ceiling joist lines, at 10' vertically and horizontally, and at any other locations not specifically mentioned which could afford passage for flames, Per IRC R302.11

26) All plumbing installations shall comply with 2015 IRC

27) All mechanical installations shall comply with 2015 IRC & IFGC

CONCRETE:

1) All phases of work pertaining to the concrete construction shall conform to the 'Building Code Requirements For Reinforced Concrete' (ACI 318) and the 'Specifications for Structural Concrete For Buildings' (ACI 301) latest approved editions, with modifications as noted in the drawings or specifications.

2) Concrete mixes shall be designed by a qualified testing laboratory and approved by the Structural Engineer. All concrete in contact with the earth shall contain Type I Portland cement unless noted otherwise (U.N.O.). All concrete shall be air entrained by 6% = -1%.

3) Calcium chloride shall not be used.

4) Concrete shall have the following minimum compressive strengths within 28 days after placement (UNO):

Footings	3,000 psi
Foundations	4,000 psi
Interior Flatwork	4,000 psi
All Exterior Concrete	4,000 psi

5) Maximum concrete slump shall not exceed four inches.

6) All concrete shall be thoroughly cured according to ACI recommendations. Follow ACI 306R "Cold Weather Concreting" and ACI 305 "Hot Weather Concreting" for all concrete and masonry work when required by current weather conditions.

7) Conduits and pipes embedded in concrete shall conform to the requirements in Section 1906.3 of Volume, II, Uniform Building Code.

8) No aluminum or product containing aluminum or any metal injurious to concrete shall be embedded in concrete.

9) Interior concrete slabs-on-grade shall be a minimum of 4 inches in thickness UNO, with sawn or preformed joints at maximum 20 foot dimensions each way. Exterior concrete slabs-on-grade shall have construction joints at not more than 10 to 12 feet on center each way. Sawn joints shall be 1/4 slab thickness in depth and shall be cut as soon as surface allows and not more than 12 hours after concrete placement. Construction joints shall be made and located as to least impair the strength of the structure and shall be approved by the Architect/Engineer. Provide 2" x 4" keyway in all vertical and horizontal joints. All reinforcing bars shall be continuous through joints (UNO).

10) Clear coverage of concrete over outer reinforcement bars shall be as follows: (UNO)
- -For concrete placed directly against earth, 3" cover
- -For concrete surfaces exposed to weather, 1 1/2" cover.
- -For concrete surfaces exposed to ground after removal of forms, 2" cover
- -For concrete surfaces exposed to ground or weather: slabs and walls, 3/4" cover; joists or waffle beams, 1" cover; beams, piers, and columns, 1 1/2" cover.

11) Where concrete girths, beams, or walls are continuous around a corner, add corner bars to lap 40 bar diameters from each direction. Reinforcing bars in the interior faces shall extend to within 2" of the outer face and shall terminate in a standard hook or bend.

12) Reinforce all concrete walls as follows: (U.N.O.)

Thickness	Horiz. Reinf.	Vert. Reinf.
6" wall	#4 at 16" o.c.	#4 at 18" o.c.
8" wall	#5 at 15" o.c.	#4 at 18" o.c.
10" wall	#5 at 12" o.c.	#4 at 16" o.c.
12" wall	#4 at 16" o.c. - e.f.	#4 at 18" o.c. - e.f.
14" wall	#5 at 18" o.c. - e.f.	#4 at 18" o.c. - e.f.

13) Place vertical steel in center of wall except 12 in. and larger, then place one curtain of steel at each wall face (e.f.)

14) Reinforcing around openings in concrete walls, unless otherwise noted and in addition to the regular wall reinforcement, to be at least one #5 horizontal bar for each 5" of wall thickness or fraction thereof with a minimum of (2) #5 bar placed 2" above the opening. The minimum depth of wall (in inches) over the opening shall be 1/2 times the span of the opening (in feet) or 12", whichever is greater. At the sides and across the bottom of openings, add two #5 bars that extend 24" beyond the corners of the opening.

15) Bars shall never be smaller than scheduled wall reinforcing. Reinforcing dowels from the footings shall be the same size and spacing as the vertical reinforcement in the wall above. Run dowels 40 bar diameters into wall and same into footings. Position dowels before placing concrete.

16) Around openings in concrete slabs, unless otherwise scheduled, add reinforcing equivalent to bars cut by opening. The bars parallel to the main reinforcement shall run the full length of the span. The bars parallel to the temperature steel shall run 40 bar diameters each way beyond the opening.

17) Provide expansion joints in curb and gutter at 40' on center and at each end of a radiused curb with contraction joints at 10' on center

18) See civil plans for ground elevations, pad elevations, corner elevations, and natural grade.

19) See soils report as prepared by engineer for additional req's during construction

WOOD CONSTRUCTION:

1) All phases of work pertaining to wood framing or wood construction shall conform to the requirements of the 2015 IBC, "INTERNATIONAL BUILDING CODE".

2) All wood beams, joists and columns shall be #2 Douglas Fir (d.f.) grade lumber or better (U.N.O.) Micro-lam beams shall have a minimum allowable bending stress of 2,600 psi.

3) All glue laminated timber members shall have the following minimum stress grade lumber:
1. Bending = 2400 psi
2. Tension = 1200 psi
3. Shear = 190 psi
4. Compression parallel to grain = 1650 psi

4) Glue laminated structural members shall conform to the U.S. Department of Commerce Commercial Standard PS-56 and "AMERICAN INSTITUTE OF TIMBER CONSTRUCTION".

5) All structural plywood shall be Structural I or Structural II grade.

6) All plates or other lumber in contact with concrete or within 6" of earth shall be Foundation redwood all marked or branded by the Redwood Inspection Service or pressure treated for moisture protection.

7) Floor joists shall have all blocking, bracing, bridging, and etc. as recommended by the IBC and the manufacturer.

8) Horizontal edges of wall sheathing shall be blocked with 2" nominal blocking. Edges of floor and roof sheathing shall be blocked and nailed as indicated on drawings.

9) Trusses and/or web joists shall have all blocking, bracing, bridging, and etc. as recommended by the manufacturer.

10) Walls shall run continuous between horizontal support points, unless adequate approved bracing is provided.

11) Nails or other approved sheathing connectors shall be driven flush but shall not break the surface of the sheathing.

REQUIRED MINIMUM NAILING SCHEDULE: (see IBC Table No. 2304.9.1)

Stud to plates	toenail 4-8d or end nail 2-16d
Roof blocking	toenail 5-8d nails or 1-A35
Double top plates	face nail 16" o.c. staggered 1-16d
Double top plates Lap Splice	face nail 8-16d nails
Double studs	face nail 16d @ 24" o.c.
Corner stud and angles	16d @ 24" o.c.
Rim joist to sill	toenail 16d @ 6" o.c.
Joist to sill or girders	2-10d nails
Double sole plates together	face nail 16d @ 8" o.c.
Bridging to joist	2-8d toenailed at each end
Plywood to roof joists, trusses or studs	see nailing schedule

12) Fire and drafts stops shall be provided throughout as required per IRC R502.12

FOUNDATIONS:

1) Footings are designed based on a soil bearing capacity of 1500 psf.

2) The contractor shall provide for the design and installation of all cribbing, sheathing, and shoring required to safely and adequately retain any excavations.

3) Footings shall be placed on undisturbed soil or structural fill. Excavations for footings are to be approved by the Geotechnical Engineer prior to placement of concrete or reinforcing. The Contractor shall give the Geotechnical Engineer 48 hrs notice for site observations. The Geotechnical Engineer shall submit letter of compliance to the Owner and the Structural Engineer. All retaining walls, building walls, pits, etc. must have attained their design strength and/or support prior to backfilling. Exception - if bracing is to be used to support walls and etc. for early backfilling, contractor is responsible for design, permits and installation of such bracing.

4) Excessive wetting or drying of the foundation excavation and the floor slab areas should be avoided during construction.

5) All fill supporting concrete slabs, footings, or etc. shall be moistened and compacted to at least 95% of the maximum dry density as determined by ASTM D-1557 (Modified Proctor). All other fill shall be compacted to a minimum relative compaction of ninety (90) percent of maximum dry density. Compaction testing shall be performed by an approved testing agency and the results submitted to the Structural Engineer. Sufficient field density tests shall be performed to certify building pads as conforming to the specifications.

6) Rebar inspections for foundation walls over 8' high, forms are not to be installed on one side until after the rebar has been inspected and approved.

ARCHITECTURAL SPECIFICATIONS & NOTES

GENERAL NOTES:

1) The contractor shall verify all dimensions & site conditions prior to starting construction. Contractor shall verify verify sizes and locations of all mechanical and electrical pads and bases as well as power or water and drain installations with equipment manifacturers before proceeding with work. changes to accommodate field conditions or substitutions shall be made without additional charge to owner. During construction, the contractor shall field verify all dimensions prior to fabrication or construction in any area. Inouye Design shall be notified of any discrepancies or inconsistencies. All omissions or conflict between the various elements of the working drawings &/or specifications shall be brought to the attention of Inouye Design &/or the structural engineer before proceeding with any work involved. In case of conflict, follow the most stringent requirements as directed by Inouye Design & the engineer without any additional cost to the Owner.
DO NOT SCALE THE WORKING DRAWINGS!

2) The typical details shall be used wherever applicable unless otherwise noted on the drawings. Notes and details on drawings shall take precedence over general notes, typical details, & specifications.

3) The contractor shall investigate the site during clearing, excavation & other earth work operations for filled excavations, buried structures or unnatural soil conditions. If any of these conditions are found, Inouye Design & the geotechnical engineer shall be notified immediately.

4) All construction work shall conform to the minimum standards of locally approved building codes & regulations.

5) Contractor shall be responsible for safety & protection & all rubbish and debris resulting from demolition an/or new work shall be recycled and/or disposed of off-site and shall not be allowed to accumulate.

6) Observation visits to the site by Inouye Design shall neither be construed as inspection nor approval of construction.

7) All fill and back fill shall be compacted to a minimum of 95% of maximum relative density for building construction and 90% for general site work.

8) Grading shall allow for positive drainage (2 percent minimum) away from the building, other footings & foundations, drives, & sidewalks. All downspouts shall drain onto 3 foot long splashblocks sloping away from foundations or into approved storm drain system.

9) All bearing earth to be undisturbed earth or compacted fill. The area on which the fill is placed must be frost-free. The fill shall then be placed in layers not to exceed 8 inches in depth & compacted. All fill & backfill shall be compacted to a minimum of 95% of maximum relative density as per ASTM D depth & compacted. All fill & backfill shall be compacted 1557-78 at optimum moisture.

10) The structure is not stable until all diaphragms, shear walls & associated connections have been made. It is the responsibility of the contractor to design & install all required temporary bracing and shoring. Do not backfill walls until floor at top of walls is in place or adequate temporary bracing is provided.

11) All symbols and abbreviations used on the plans are considered to be construction standards. if the contractor has questions regarding abbreviations of thier exact meaning, the architectect shall be notified for clarification.

12) Minimum headroom clearance at stairs shall be 6'-8" measured vertically from a plane parallel and tangent to the tread nosing to the soffit above at all points.

13) Provide tempered glass as required by IRC code and by other applicable codes.

14) Mechanical ventilation for toilet compartments, bathrooms, and laundry rooms shall be capable of providing 5 air changes per hour per IRC P3201.7

15) Where garage doors with springs occur, the following shall apply: Springs shall be permanently identified, and indicate the maximum recommended stretch. Both springs and containment devices shall bear information stating that they have manufactured in accordance with requirements of the State department of housing and community development.

16) Showers shall be finished to a min. of 72" above drain with surface materials not adversely affected by moisture per IRC P2709. See plans for actual plans.

17) Lighting fixtures in closets are to be a minimum of 18" from shelves.

18) All water heaters shall be provided with seismic straps per IRC P2801.8

19) Pools, spas, wall fences, patio covers, retaining walls, and other freestanding structures require separate review and permits.

20) All "or equal" substitutions must be submitted to, and approved by the city building official prior to installation of the time.

21) Note that all insulation materials shall have a flame-spread rating not to exceed 25 and a smoke density not to exceed 450. IRC R320.2

22) Provide anti-scalding valves at showers and tubs/showers.

23) Developer / Contractor / owner responsible for the verification of existing curb location from property line.

WOOD:

1) All wood beams, joists, and columns shall be #2 Douglas Fir (d.f.) grade lumber or better (U.N.O.)

2) Truss loads shall be as indicated of drawings &/or as shown in structural engineering calculations. Trusses shall be designed for a maximum total load deflection of 1/240 & a maximum live load deflection of 1/360.

3) All truss members shall be #2 Douglas Fir or better.

4) Provide panel joints at all bearing walls and point loads.

5) No joint shall have more than 1/16" average gap between bearing surfaces. All lumber at plates shall be a complete section with no knots or wanes.

6) All trusses are to be engineered by the truss fabricator. Shop drawings are to be submitted to the structural engineer for each truss type. All trusses shall be designed by a registered professional engineer & the Shop drawings must be stamped by the engineer.

7) Truss shop drawings shall include the following:
- A. ICC & C&R 9 certification indicating the allowable plate loads.
- B. Duration factors or stress reduction factors used in the design of the lumber and plates.
- C. Top and bottom chord design loads in psf.
- D. Truss configuration showing lumber species and grades used together with plate size, gauge and location.
- E. Engineer's stamp and signature.
- F. Name and trademark of plate manufacturer, the truss fabricator, and the project name and address.
- G. Computed mid-span deflection for total load and live load.
- H. Forces in each member and indication of whether the member is in tension or compression.

No wood shall be nearer than 8" to earth unless separated by concrete at least 3" in thickness with an impervious membrane installed between the earth and the concrete. This includes decks and siding. Per IRC R317

CONCRETE & REINFORCING:

1) Before concrete is poured, check with all trades to insure proper placement of all openings, sleeves, curbs, conduits, bolts, inserts, etc. relating to work.

2) All reinforcement bars shall be securely anchored to the forms. The minimum spacing of reinforcing bars from surface shall be as follows:
- A. Poured against the earth - 3 inches
- B. Walls - 2 inches
- C. Beams and Columns - 1-1/2 inches
- D. Slabs - 1-1/2 inches

3) All exposed to view concrete shall be stoned smooth while green, or as directed by Inouye Design. No grout plaster shall be permitted.

4) Hardrock aggregates shall conform to ASTM C-33. Their maximum size shall be 3/4" except 1-1/2" may be used for footings.

5) All dowels shall have at least 30 bar diameter embedment. Provide corner bars at ll intersecting corners. Use same size bar & spacing as horizontal wall reinforcing.

6) Formwork not supporting weight of concrete, such as sides of beams, walls columns, & similar parts of the work, may be removed after cumulatively curing at not less than 50 degrees F for 24 hours after placing concrete provided concrete is sufficiently hard to not be damaged by form removal operation, & provided curing & protection operations are maintained.

Formwork supporting weight of concrete, such as beam soffits, joints, slabs & other structural elements, may not be removed in less than 14 days or until concrete has attained 75% of its design minimum compressive strength at 28 days.

Support form facing materials with structural members spaced sufficiently close to prevent deflection. Fit forms placed in successive units for continuous surfaces to be accurately aligned free from irregularities & within allowable tolerances.

7) All concrete shall be properly vibrated in place using internal vibrating rods.

8) Protect freshly placed concrete from premature drying & excessive temperature as per ACI 318 & maintain without drying at a relatively constant temperature for a period of time necessary for hydration of cement & proper hardening.

9) Cold weather curing & protection requirements for concrete shall conform to the requirements of 2015 IRC section R402.2. When depositing concrete at freezing temperature or below, the concrete mix shall have a temperature of at least 50 F but not more than 80 F. The concrete shall be maintained at a temperature of not less than 50 F & in a moist condition for not less than 7 days after placing or as directed by the structural engineer. The use of chemicals or additives to prevent freezing will not be permitted.

Rolland T. Lee
Residential Design

Contact Information:
Phone: 801-710-4500
Email: rollandtlee555@yahoo.com
rollandtlee5335@gmail.com

629 N. Main Street
ALPINE, 84004

CONSULTANTS

Anglea Wright
Detached
Garage Addition

529 Sherman Ave, Salt
Lake City, UT 84105

DATE: June 16, 2021

REVISIONS

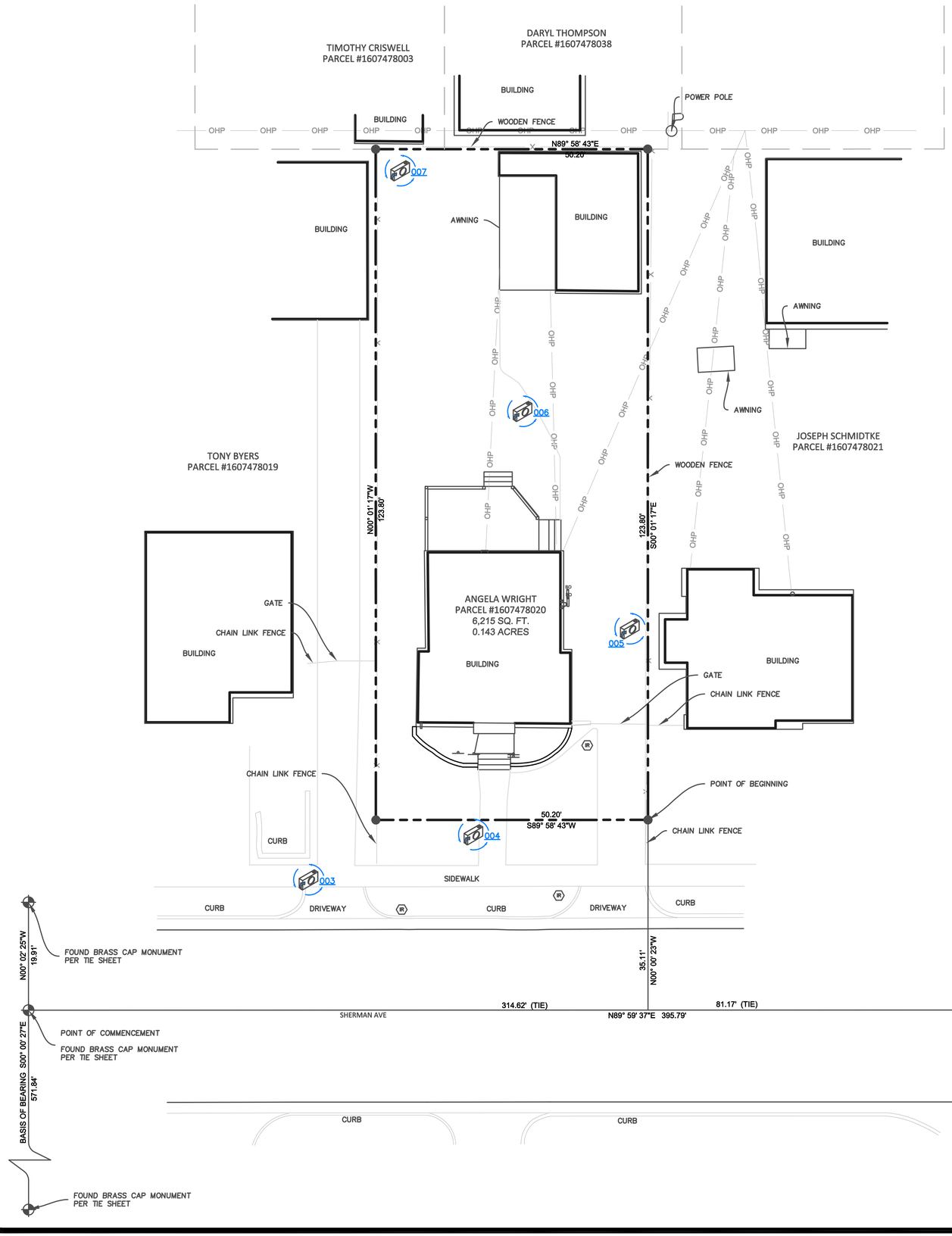
MARK	DATE	DESCRIPTION
1	8/7/21	ADJUSTMENT TO SETBACK

PROJECT NO:	
MODEL FILE:	
DRAWN BY:	BG
CHK'D BY:	RTL
COPYRIGHT	

SHEET TITLE

Project Notes

C - 101



RECORD OF SURVEY

A PORTION OF BLOCK 14, FIVE ACRE PLAT "A", BIG FIELD SURVEY,
LOCATED IN THE SOUTHEAST QUARTER SECTION 7, T1S, R1E,
SLB&M, SALT LAKE COUNTY, UTAH

N

SCALE

HORIZONTAL: 1" = 10'

0 2.5' 5' 10' 20'

NOTES

1. ALL DIMENSIONS SHOWN ARE IN US SURVEY FEET AND DECIMALS THEREOF.

2. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY VARA 3D. ALL INFORMATION REGARDING RECORD EASEMENTS, BOUNDARIES, ADJOINERS AND OTHER DOCUMENTS THAT MIGHT AFFECT THE QUALITY OF TITLE TO TRACT SHOWN HEREON CAN BE OBTAINED FROM THE COUNTY OFFICES. THIS DRAWING DOES NOT GUARANTEE THE EXISTENCE OR ABSENCE OF ADDITIONAL EASEMENTS OR BOUNDARIES WITHIN THE PROJECT AREA.

SURVEYOR'S NARRATIVE

THE PURPOSE OF THIS SURVEY WAS TO REESTABLISH PROPERTY CORNERS FOR ANGELA WRIGHT. THE BLOCK MAP, OCCUPATION LINES, AND NEIGHBORING SURVEYS WERE USED TO ESTABLISH THE PROPERTY LINES. STREET MONUMENTS WERE FOUND AND REFERENCED TO HELP REESTABLISH LINES IN THE FUTURE.

MONUMENTS FOUND OR SET, THE BASIS OF BEARING AND ANY ENCROACHMENTS ARE AS SHOWN HERE ON.

SURVEYOR'S CERTIFICATE

I, JAMES V. HEINRITZ, A LICENSED PROFESSIONAL LAND SURVEYOR IN THE STATE OF UTAH, LICENSE NO. 11072412–2201, DO HEREBY CERTIFY THAT THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME, OR UNDER MY DIRECT SUPERVISION, OF THE HEREON DESCRIBED PROPERTY AND THAT TO THE BEST OF MY KNOWLEDGE IT IS A CORRECT REPRESENTATION OF THE LAND SURVEYED.

PROFESSIONAL LAND SURVEYOR
No. 11072412-2201
JAMES VICTOR HEINRITZ
10-22-2020
STATE OF UTAH

JAMES V. HEINRITZ, PLS 11072412–2201
FOR AND ON BEHALF OF VARA 3D, INC

LEGAL DESCRIPTION:

A PORTION OF BLOCK 14, FIVE ACRE PLAT "A", BIG FIELD SURVEY, ACCORDING TO THE OFFICI/ PLAT THEREOF AS RECORDED IN THE SALT LAKE COUNTY RECORDER'S OFFICE AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND BRASS CAP MONUMENT AT THE INTERSECTION OF 500 EAST AND SHERMAN AVENUE, FROM WHENCE A FOUND BRASS CAP MONUMENT IN 500 EAST BEARS SOUTH 00°00'27" EAST A DISTANCE OF 571.84 FEET, SAID LINE FORMING THE BASIS OF BEARING FOR THIS DESCRIPTION;

THENCE NORTH 89°59'37" EAST A DISTANCE OF 314.62 FEET ;
THENCE NORTH 00°00'23" WEST A DISTANCE OF 35.11 FEET TO THE POINT OF BEGINNING SAID POINT BEING RECORDED AS BEING 33 FEET NORTH AND 478.6 FEET WEST FROM THE SOUTHEAST CORNER OF LOT 11, BLOCK 14, FIVE ACRE PLAT "A", BIG FIELD SURVEY;

THENCE SOUTH 89°58'43" WEST A DISTANCE OF 50.20 FEET;
THENCE NORTH 00°01'17" WEST A DISTANCE OF 123.80 FEET;
THENCE NORTH 89°58'43" EAST A DISTANCE OF 50.20 FEET;
THENCE SOUTH 00°01'17" EAST A DISTANCE OF 123.80 FEET TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 6,215 SQUARE FEET OR 0.143 ACRES.

LEGEND:

- LIGHT POLE
- POWER POLE
- FIRE HYDRANT
- PANORAMIC PHOTO LOCATION
- FOUND MONUMENT AS NOTED
- SET REBAR AND CAP UNLESS OTHERWISE NOTED
- NEIGHBOR PROPERTY BOUNDARY
- PROPERTY BOUNDARY

PROJECT INFORMATION

ANGELA WRIGHT

529 SHERMAN AVE, SALT LAKE CITY, UT 84105

BOUNDARY SURVEY

REV.#	REVISION NOTES	DATE

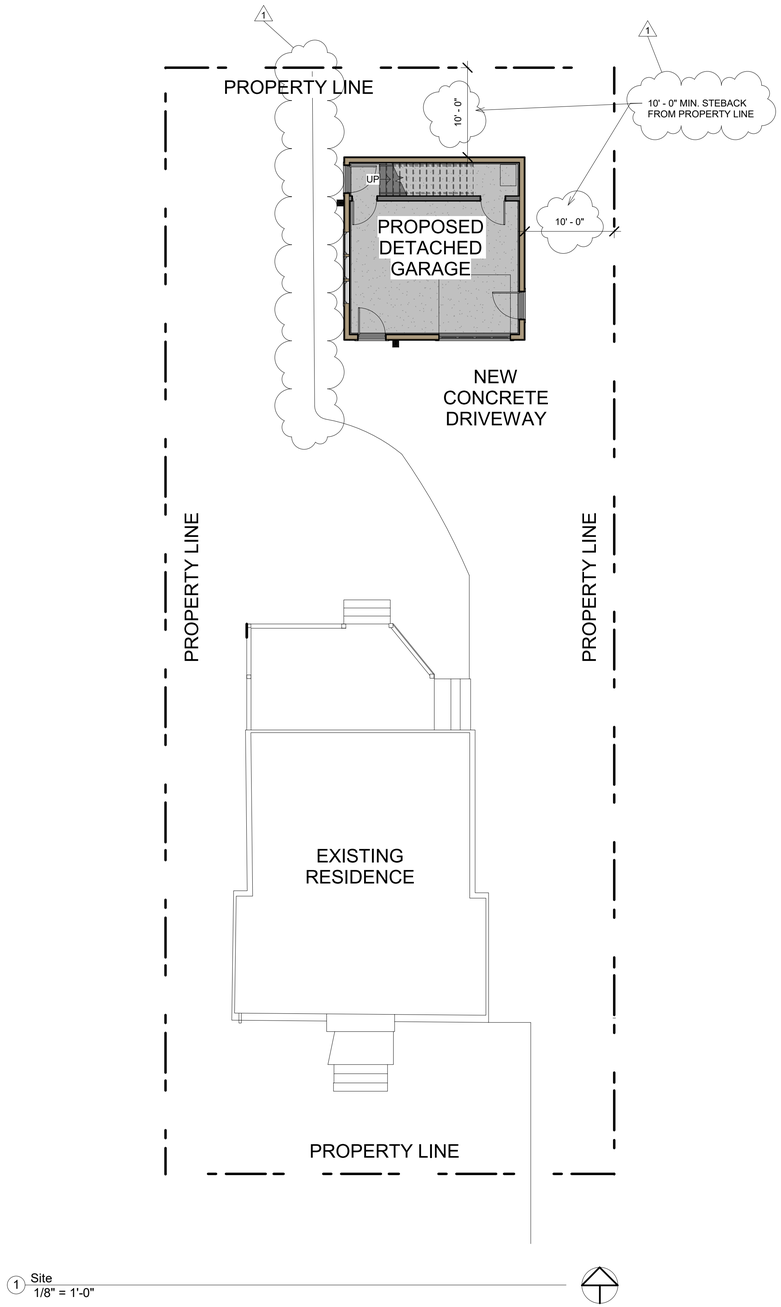
CLIENT INFO

VARA 3D
GEOSPATIAL SOLUTIONS
5693 S 675 E MURRAY, UT 84107
801-707-1012

PROJECT NO.	Sheet
2020-092	1
DATE	
OCTOBER 2020	1
HORIZONTAL SCALE	
1" = 10'	

0 0.5 1

SCALE MEASURES 1-INCH ON FULL SIZE(36x24) SHEETS
ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS



1 Site
1/8" = 1'-0"

GENERAL NOTES

1. FINISH GRADE & ELEVATIONS TO SLOPE AWAY FROM GARAGE @ MIN. 6" (5%) FOR THE FIRST 10'.
2. ALL EXISTING GRADES WILL BE REWORKED DURING CONSTRUCTION TO COMPLY WITH THE 5% GRADE AWAY FROM GARAGE.
3. ALL WOOD ABOVE GROUND SURFACE 6" MIN.

Rolland T. Lee
Residential Design

Contact Information:
Phone: 801-710-4500
Email: rollandtlee555@yahoo.com
rollandtlee5335@gmail.com

629 N. Main Street
ALPINE, 84004

CONSULTANTS

Anglea Wright
Detached
Garage Addition

529 Sherman Ave, Salt Lake City, UT 84105

DATE: June 16, 2021

REVISIONS

MARK	DATE	DESCRIPTION
1	8/7/21	ADJUSTMENT TO SETBACK

PROJECT NO:
MODEL FILE:
DRAWN BY: BG
CHK'D BY: RTL
COPYRIGHT

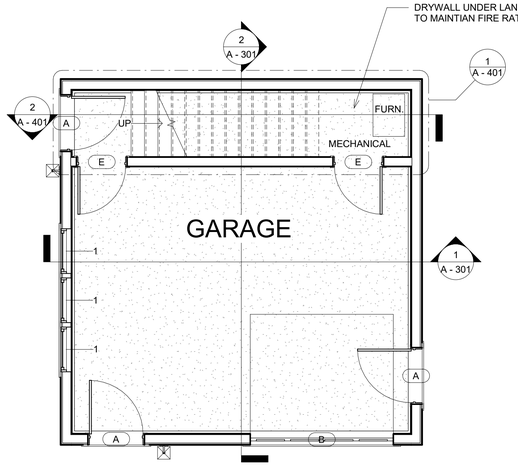
SHEET TITLE

Site Plan

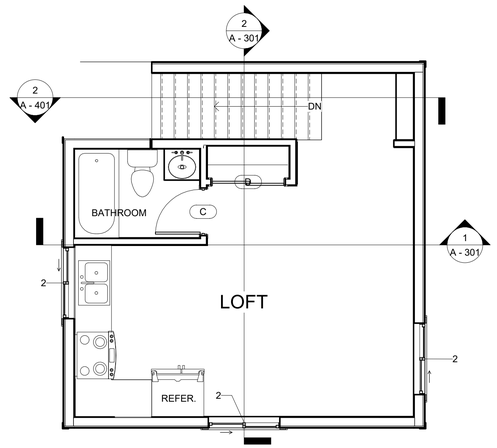
A - 100

WINDOW SCHEDULE	
WINDOW ID	UNIT SIZE
1	2'-6"x4'-0"
2	4'-0"x3'-6"

Door Schedule		
DOOR ID	NOMINAL W x H	TYPE
A	3'-0"x6'-8"	SGL
A	3'-0"x6'-8"	SGL
A	3'-0"x6'-8"	SGL
B	8'-0"x7'-0"	GARAGE
C	2'-6"x6'-8"	SGL
D	4'-0"x6'-8"	SGL
E	2'-8"X6'-8"	
E	2'-8"X6'-8"	



1 Level 1
1/4" = 1'-0"



2 Level 2
1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE HANDRAIL FROM NOSING OF TOP STAIR TO NOSING OF BOTTOM STAIR AS PER IRC.
2. PROVIDE 36" (MIN.) GUARDRAIL AS PER IRC & OWNER.
3. PROVIDE EXTERIOR COMBUSTION AIR AS PER IRC.
4. PROVIDE APPROVED SEISMIC STRAP FOR WATER HEATERS AS PER IRC.
5. PROVIDE 5/8" TYPE 'X' GYP. BD. UNDER STAIRS AS PER IRC.
6. 1HR RATED WALL AT STAIRS BETWEEN STAIRS AND GARAGE.
7. 1HR RATED FLOOR BETWEEN GARAGE AND APARTMENT.
8. ICW IRC R303 NATURAL VENTILATION EQUALING 4% OF THE FLOOR AREA SHALL BE THROUGH WINDOWS, DOORS, OR OTHER APPROVED OPENINGS TO THE OUTDOORS UNLESS A WHOLE HOUSE MECHANICAL VENTILATION SYSTEM WITH OUTSIDE AIR IS INSTALLED AS PER IRC M1507.3
9. PROVIDE 30 MIN. RATED DOOR AS REQ'D.

DEMOLTION NOTES

1. EXISTING GARAGE TO BE DEMOLISHED.
2. VERIFY THAT THE CITY DOES NOT HAVE A SEPERATE DEMO PERMITTING PROCESS.
3. ALL EXISTING HOUSE AND SITE NOT TO BE DEMOLISHED IS TO BE PROTECTED DURING CONSTRUCTION. ANY DAMAGE IS TO BE CORRECTED BY CONTRACTOR OR SUBCONTRACTOR.

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629 N. Main Street
ALPINE, 84004

CONSULTANTS

Anglea Wright Detached Garage Addition

529 Sherman Ave, Salt Lake City, UT 84105

DATE:	June 16, 2021

REVISIONS

MARK	DATE	DESCRIPTION
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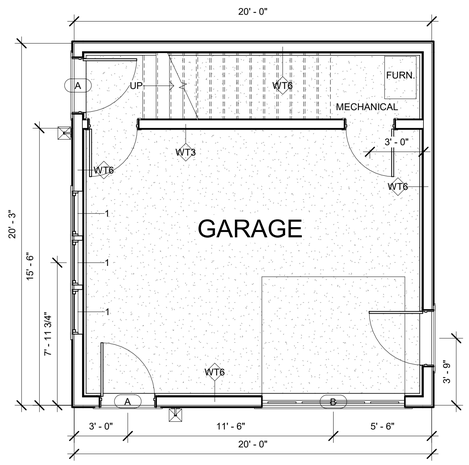
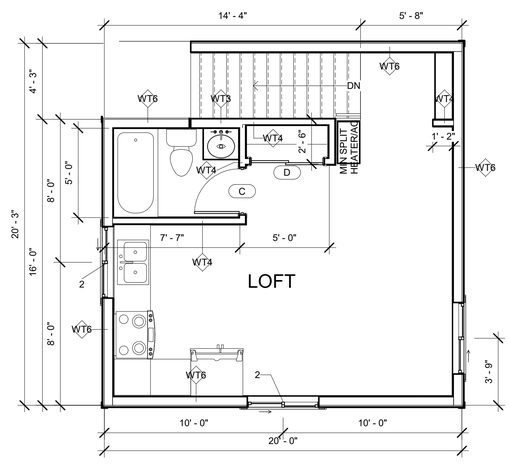
SHEET TITLE

Levels 1 and 2

A - 101



1 Level 1 Dimension Plan
1/4" = 1'-0"



2 Level 2 Dimension Plan
1/4" = 1'-0"

GENERAL NOTES

GENERAL NOTES

1. DIMENSIONS ARE TO EDGE OF STUD U.N.O.
2. DIMENSIONS ARE TO CENTER LINE OF WINDOW/DOOR.

WALL TYPES

WT1 - 8" CONCRETE WALL
WT2 - 8" CONCRETE WALL W/2X4 STUDS @ 16" O.C. W/ R-13 BATT INSUL W/1/2" DRYWALL
WT3 - 2X6 STUDS@ 16" O.C. W/ R-13 BATT INSUL W/ 1/2" DRYWALL
WT4 - 2X4 STUDS @ 16" O.C. W/ 1/2" DRYWALL
WT5 - 1/2" DRYWALL O/2X6 STUDS @ 16" O.C. W/R-19 BATT INSUL O/EXTERIOR SHEATHING O/BRICK VENEER
WT6 - 1/2" DRYWALL O/2X6 STUDS @ 16" O.C. W/R-19 BATT INSUL O/ 7/16" EXTERIOR SHEATHING W/SIDING
WT7 - 2X4 STUDS @ 16" O.C. W/R-13 BATT INSUL W/ 1/2" FIRE RATED DRYWALL EA. SIDE.

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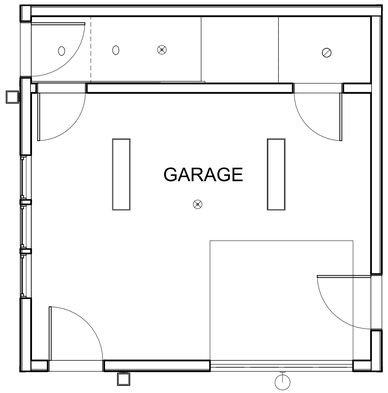
Level 1 and 2
Dimension Plans

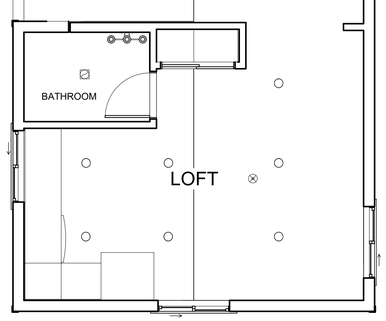
A - 102

LEGEND

- DUPLEX ELECTRICAL OUTLET
- GFI DUPLEX ELECTRICAL OUTLET
- FIXTURE SWITCH
- 3-WAY FIXTURE SWITCH
- RECESSED CAN LIGHT
- SMOKE/ CO2 DETECTOR
- FLUORESCENT BOX LIGHT
- QUAD ELECTRICAL OUTLET
- GFI QUAD ELECTRICAL OUTLET
- EXTERIOR WALL MOUNTED LIGHT
- EXTERIOR WALL MOUNTED LIGHT
- VANITY LIGHT
- EXHAUST FAN AND LIGHT
- CENTERLINE



1 Level 1
1/4" = 1'-0"



2 Level 2
1/4" = 1'-0"

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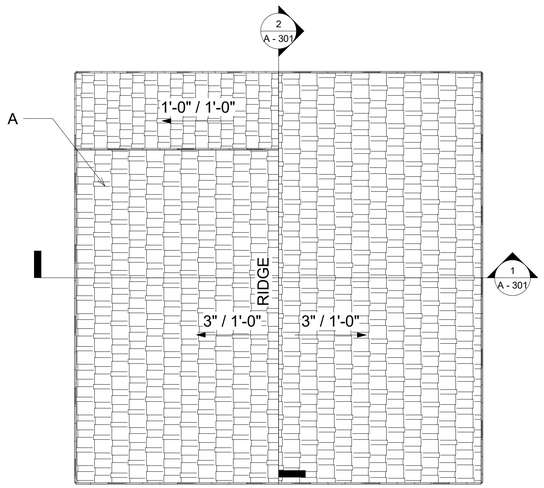
Reflected Ceiling Plan

A - 103



1 Roof Plan
1/4" = 1'-0"

GENERAL NOTES

1. ALL OVERHANGS TO BE . 1'-4" FROM FINISHED WALL.
2. PROVIDE ADEQUATE ATTIC VENTILATION AREA REQ'D BY CODE.
3. PROVIDE ADEQUATE SLOPE FOR WATER DRAINAGE AS REQ'D.
4. PROVIDE ICE & WATER SHIELD @ ALL ROOF EDGES, EAVES OR VALLEYS, & EXTEND 24" UP WARM SIDE OF THE EXTERIOR WALL.
5. TRUSS MANUFACTURER TO SUBMIT ENGINEERED SHOP DRAWINGS TO CITY BUILDING OFFICIALS FOR APPROCAL PRIOR TO FABRICATION.
6. PROVIDE ROOF DRAIN & DOWNSPOUTS AS REQ'D.

KEYED NOTES

A. ARCHITECTURAL SHINGLES, OWNER APPROVED, SAMPLE REQUIRED.

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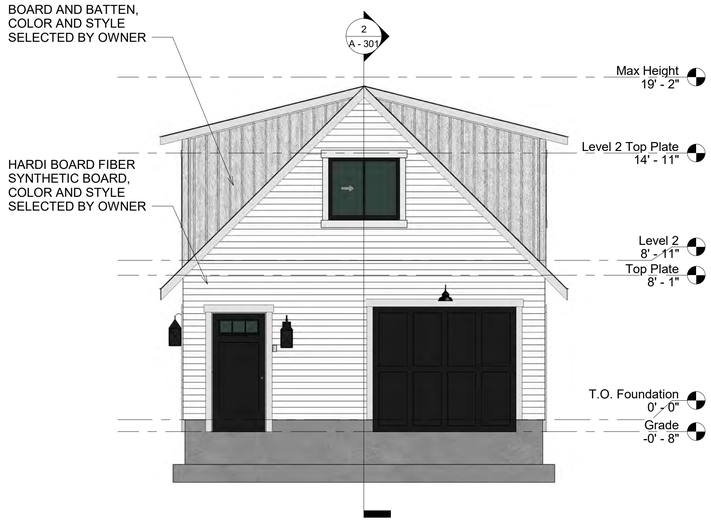
Roof Plan

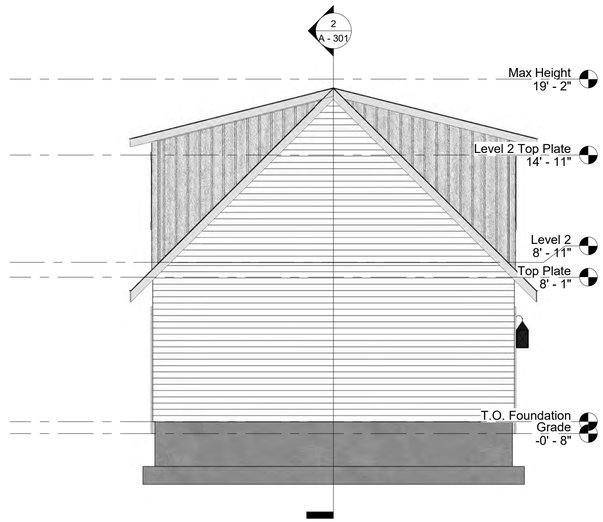
A - 104

GENERAL NOTES

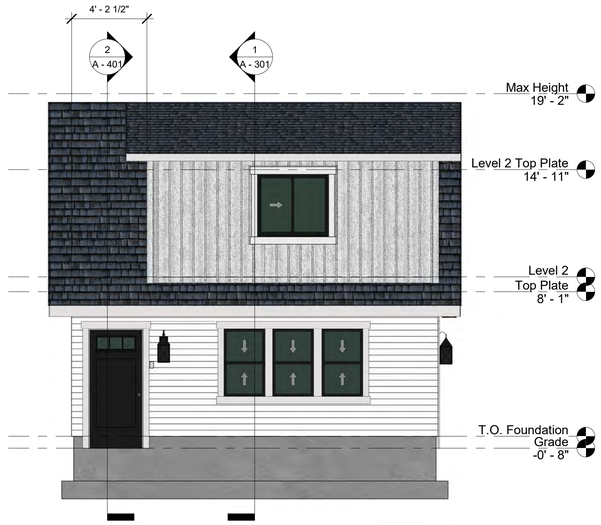
1. ARCHITECTURAL SHINGLES W/MOISTURE BARRIER O/ROOF SHEATHING O/ROOF TRUSS (PER STRUCTURAL DRAWINGS) O/R38 BATT INSUL IN ALL ROOF LOCATIONS. COLOR AND STYLE SELECTED BYOWNER.
2. EXTERIOR FINISH W/MOISTURE BARRIER, EXT. WALL SHEATHING, 2X6 STUDS @ 16" O.C. W/R19 BATT INSUL AND 1/2" PAINTED DRYWALL. COLOR AND MATERIAL SELECTED BY OWNER.
3. DOORS & WINDOWS AS PER FLOOR PLANS, SCHEDULES, & OWNER.
4. ALUMINUM FASCIA W/ VENTED SOFFIT AS PER OWNER.
5. FOOTING, SEE STRUCTURAL.
6. 4" CONCRETE SLAB W/4" GRANULAR BASE W/10 MIL POLYETHYLENE. SEE STRUCTURAL.



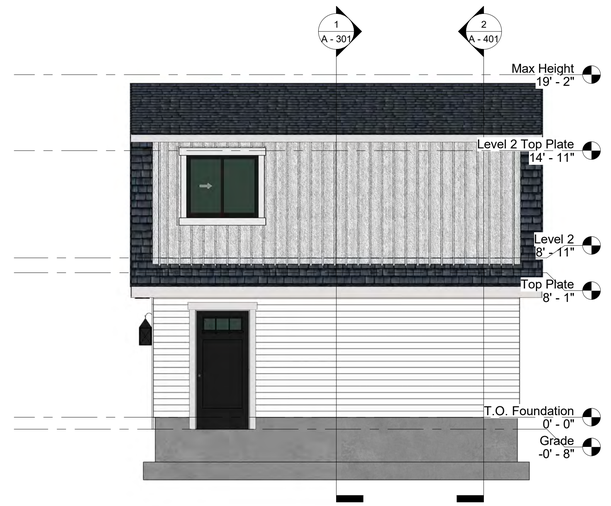
2 South
1/4" = 1'-0"



1 North
1/4" = 1'-0"



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



4 East
1/4" = 1'-0"

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Elevations

A - 201

1

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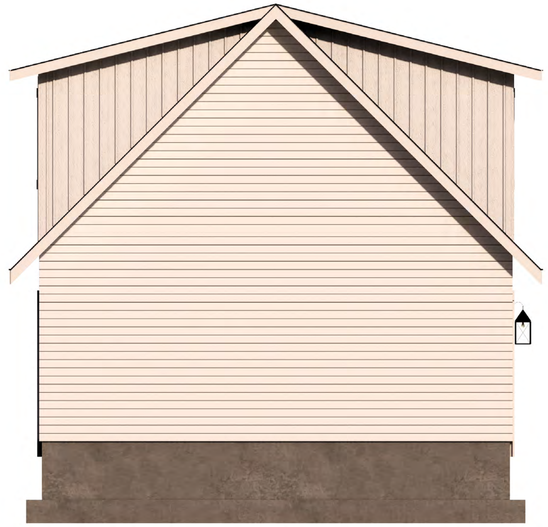
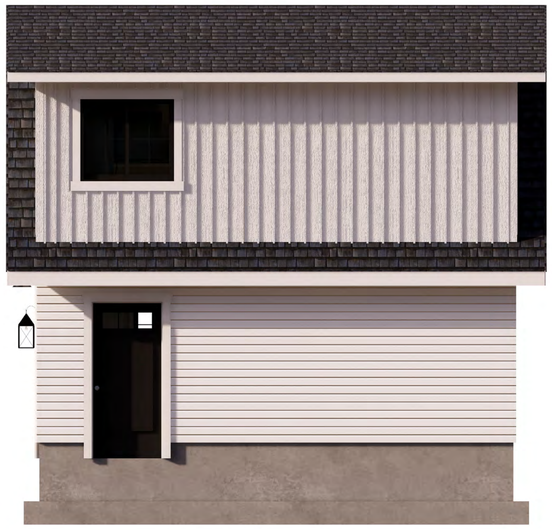
Exterior Renderings

A - 202





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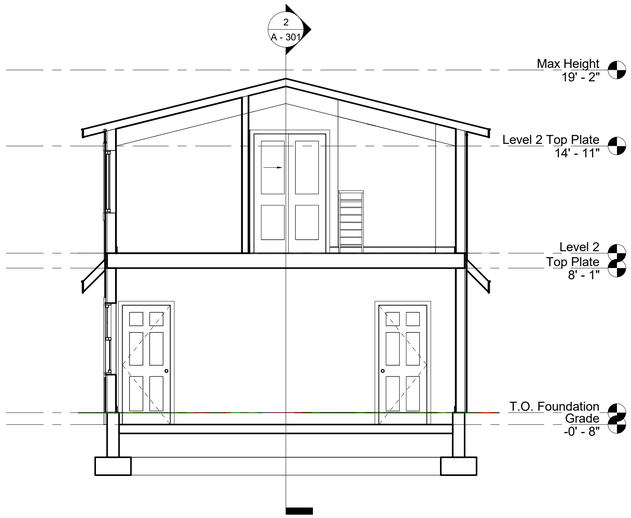
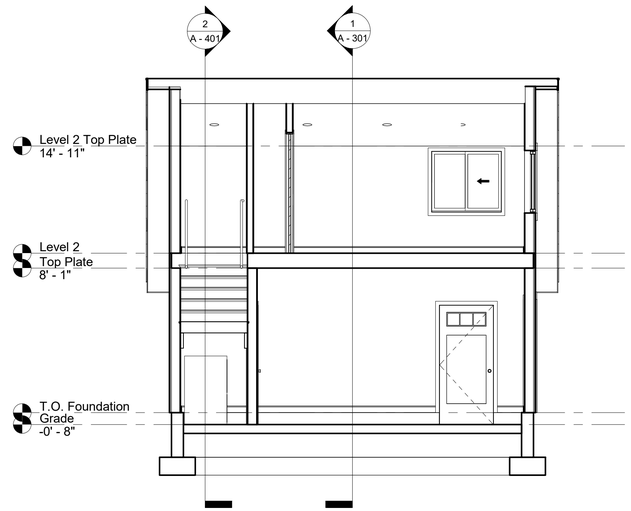
Exterior Renderings

A - 203



1 Section 1
1/4" = 1'-0"



2 Section 2
1/4" = 1'-0"

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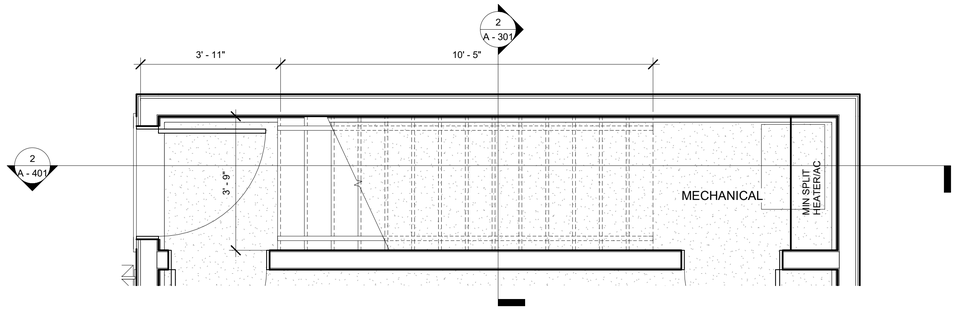
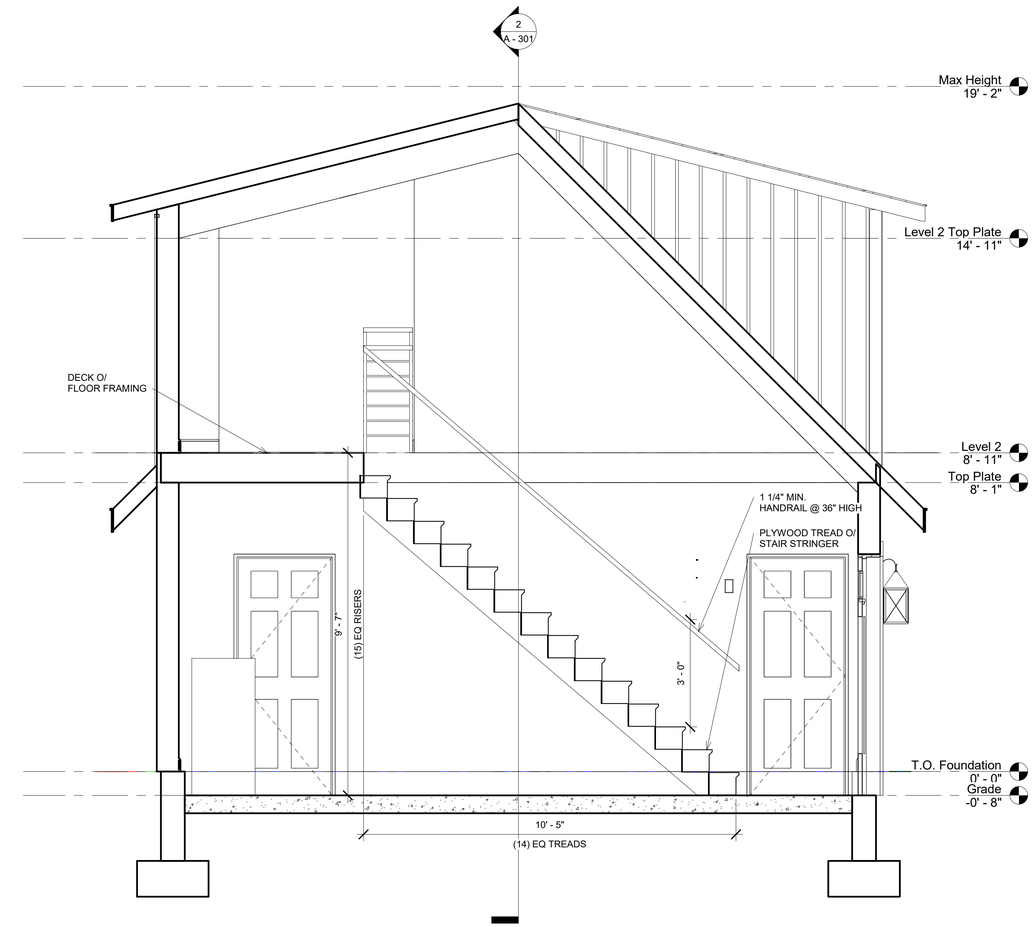
Building Sections

A - 301



1 Enlarged Stair Plan
1/2" = 1'-0"



2 Stair Section
1/2" = 1'-0"

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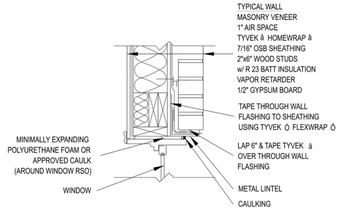
SHEET TITLE

Stair Plan

A - 401

GENERAL NOTES

*SEAL ALL TYVEK â JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK â TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS (ex. DUPONT WRAPCAPS)
*SEAL OR GASKET BRICK TIES AT THE FACE OF TYVEK â
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.

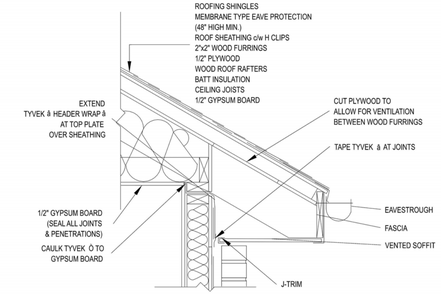


WINDOW HEAD DETAIL 1

RESIDENTIAL WOOD FRAME STRUCTURE w/ MASONRY VENEER (HEATING CLIMATE)

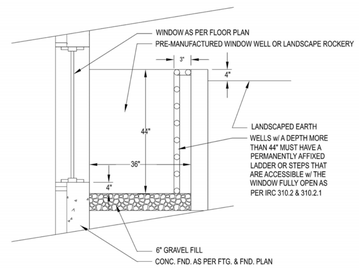
GENERAL NOTES

*SEAL ALL TYVEK â JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK â TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS (ex. DUPONT WRAPCAPS)
*SEAL OR GASKET BRICK TIES AT FACE OF TYVEK â
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.



ROOF/ WALL INTERFACE DETAIL 2

RESIDENTIAL WOOD FRAME STRUCTURE w/ MASONRY VENEER (COOLING CLIMATE)



NOTES:-BARS, GRILLES, GRATES OR SIMILAR DEVICES MAY BE INSTALLED, PROVIDED THEY ARE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

-LADDERS SHALL HAVE AN INSIDE RUNG WIDTH OF 12" (MIN.), SPACED NO FURTHER THAN 18" O.C., AND SHALL PROJECT 3" (MIN.) FROM WALL.

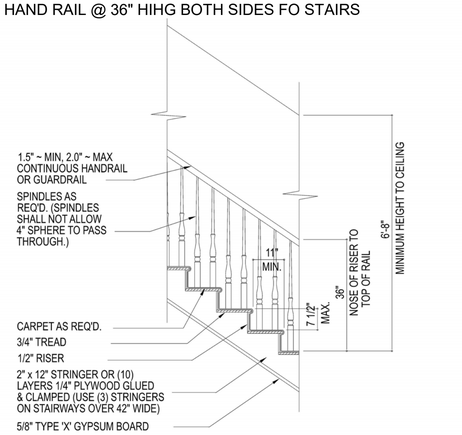
-STEPS SHALL HAVE 12" (MIN.) TREAD WIDTH, 24" (MAX.) RISE, AND SHALL NOT ENCROACH INTO REQUIRED DIMENSION OF WINDOW WELL BY MORE THAN 6".

-WINDOW WELL MUST EXTEND 8" BEYOND EACH SIDE OF THE WINDOW

-WINDOW WELLS LOCATED UNDER A DECK OR PORCH MUST HAVE A CLEAR PATH TO SAFETY NOT LESS THAN 36" IN HEIGHT.

WINDOW WELL DETAIL 3

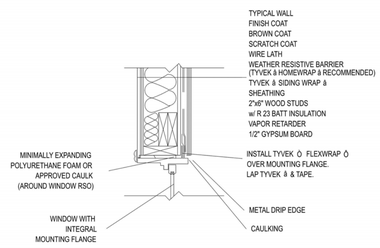
NOTE: THIS PROJECT WILL ONLY REQUIRE 1 1/4" DIAMETER HAND RAIL @ 36" HIHG BOTH SIDES FO STAIRS



STAIR DETAIL 4

SCALE: 1/2" = 1'-0" ST-001

*SEAL ALL TYVEK â JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK â TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS. (ex. DUPONT WRAPCAPS)
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.
*INSTALL STUCCO ACCORDING TO MANUFACTURER S WRITTEN INSTRUCTIONS

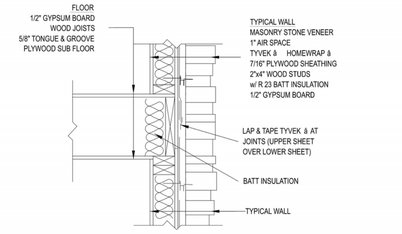


WINDOW HEAD DETAIL 5

RESIDENTIAL WOOD FRAME STRUCTURE w/ STUCCO (HEATING CLIMATE)

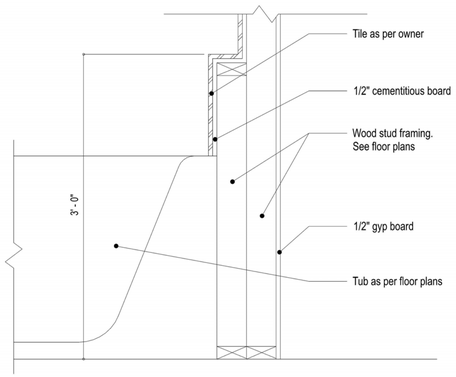
GENERAL NOTES

*SEAL ALL TYVEK â JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK â TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS (ex. DUPONT WRAPCAPS)
*SEAL OR GASKET BRICK TIES AT FACE OF TYVEK â
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.

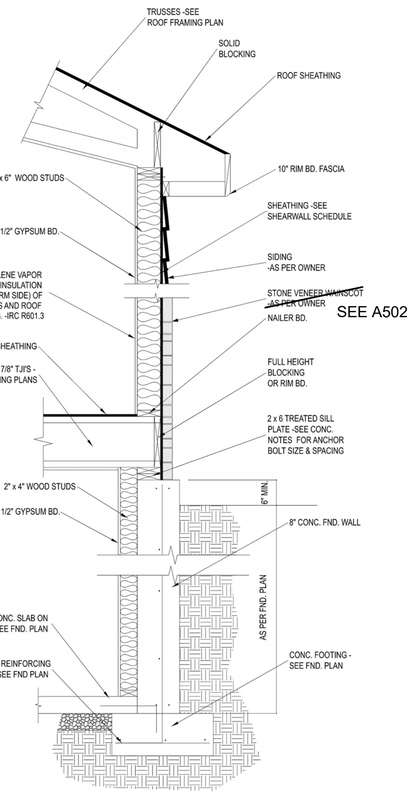


FLOOR/ WALL INTERFACE DETAIL 6

RESIDENTIAL WOOD FRAME STRUCTURE w/ MASONRY VENEER (COOLING CLIMATE)



TUB SHELF DETAIL 7

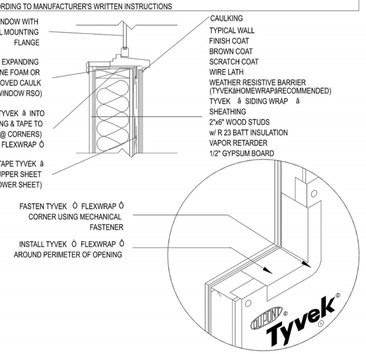


TYP. WALL SECTION 11

NOT TO SCALE

GENERAL NOTES

*SEAL ALL TYVEK â JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK â TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS. (ex. DUPONT WRAPCAPS)
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.
*INSTALL STUCCO ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS

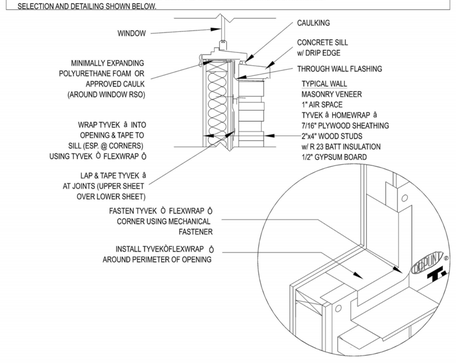


WINDOW SILL DETAIL 8

RESIDENTIAL WOOD FRAME STRUCTURE w/ STUCCO (HEATING CLIMATE)

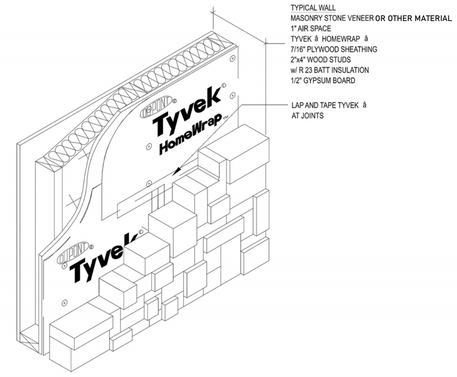
GENERAL NOTES

*SEAL ALL TYVEK â JOINTS AND PENETRATIONS WITH APPROVED TAPE. (ex. DUPONT CONTRACTOR TAPE)
*FASTEN TYVEK â TO SHEATHING WITH LARGE HEAD NAILS OR USE NAILS WITH LARGE PLASTIC WASHER HEADS. (ex. DUPONT WRAPCAPS)
*SEAL OR GASKET BRICK TIES AT FACE OF TYVEK â
*LOCAL LAWS, ZONING, AND BUILDING CODES VARY AND THEREFORE GOVERNS OVER MATERIAL SELECTION AND DETAILING SHOWN BELOW.



WINDOW SILL DETAIL 9

RESIDENTIAL WOOD FRAME STRUCTURE w/ MASONRY VENEER (COOLING CLIMATE)



TYPICAL WALL ISOMETRIC 10

RESIDENTIAL WOOD FRAME STRUCTURE w/ MASONRY VENEER (COOLING CLIMATE)

Rolland T. Lee
Residential Design

Contact Information:
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rollandtlee5335@gmail.com

629 N. Main Street
ALPINE, 84004

CONSULTANTS

Anglea Wright Detached Garage Addition

529 Sherman Ave, Salt Lake City, UT 84105

DATE: June 16, 2021

REVISIONS

MARK	DATE	DESCRIPTION
1	8/7/21	ADJUSTMENT TO SETBACK

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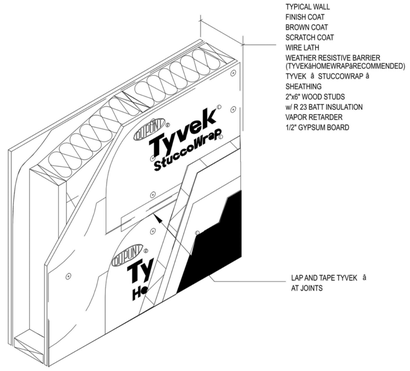
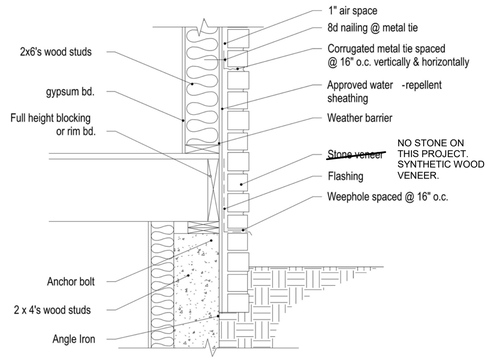
Details

A - 501

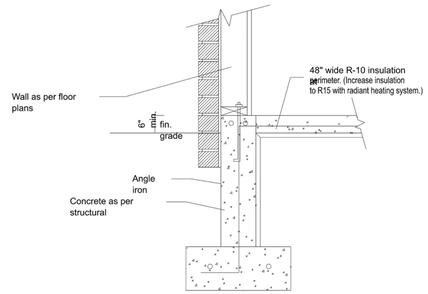


TYPICAL WALL ISOMETRIC 12

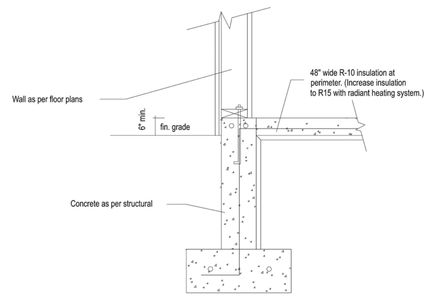
RESIDENTIAL WOOD FRAME STRUCTURE w/ STUCCO (HEATING CLIMATE)



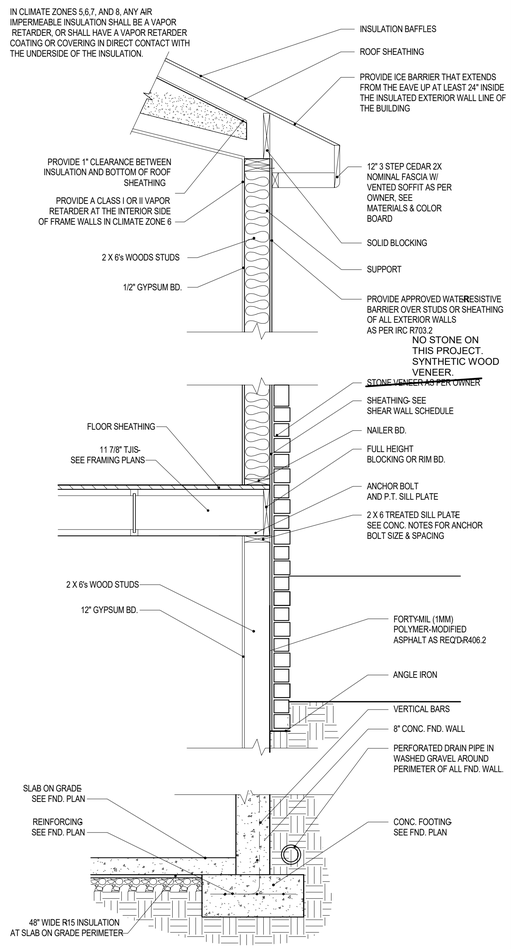
MASONRY W/ ANGLE IRON FLASHING DETAIL 13



WALKOUT BASEMENT STONE DETAIL 14



WALKOUT BASEMENT SIDING DETAIL 15



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629 N. Main Street
ALPINE, 84004

CONSULTANTS

Anglea Wright
Detached
Garage Addition

529 Sherman Ave, Salt
Lake City, UT 84105

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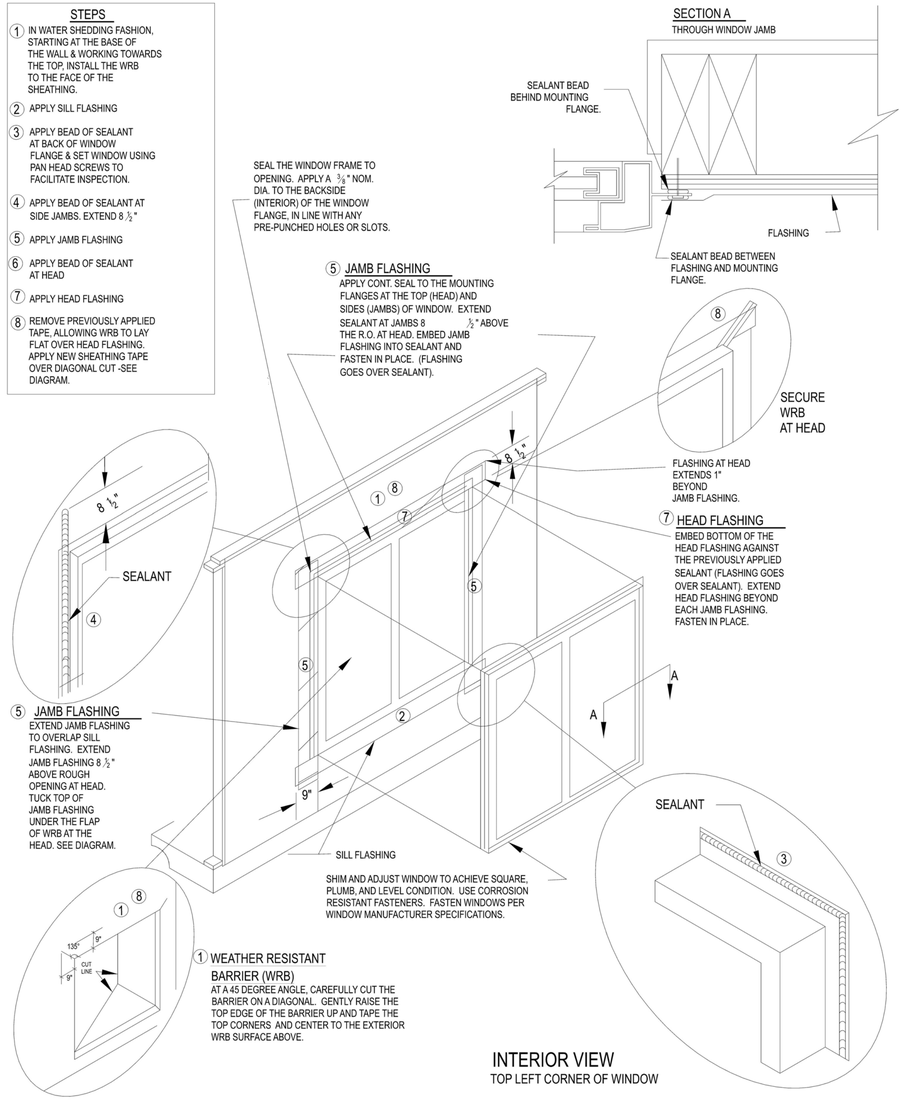
A - 502

WINDOW INSTALLATION (METHOD A-1)

WEATHER RESITIVE BARRIER (WRB) APPLIED PRIOR TO THE WINDOW INSTALLATION.
FLASHING APPLIED OVER THE FACE OF THE MOUNTING FLANGE.

STEPS

1. IN WATER SHEDDING FASHION, STARTING AT THE BASE OF THE WALL & WORKING TOWARDS THE TOP, INSTALL THE WRB TO THE FACE OF THE SHEATHING.
2. APPLY SILL FLASHING
3. APPLY BEAD OF SEALANT AT BACK OF WINDOW FLANGE & SET WINDOW USING PAN HEAD SCREWS TO FACILITATE INSPECTION.
4. APPLY BEAD OF SEALANT AT SIDE JAMBS. EXTEND 8 ½"
5. APPLY JAMB FLASHING
6. APPLY BEAD OF SEALANT AT HEAD
7. APPLY HEAD FLASHING
8. REMOVE PREVIOUSLY APPLIED TAPE, ALLOWING WRB TO LAY FLAT OVER HEAD FLASHING. APPLY NEW SHEATHING TAPE OVER DIAGONAL CUT -SEE DIAGRAM.



INTERIOR VIEW
TOP LEFT CORNER OF WINDOW

Rolland T. Lee
Residential Design

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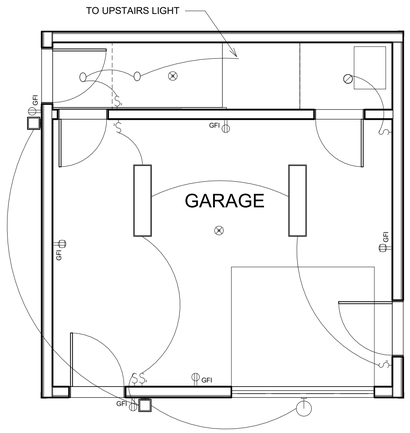
A - 503

LEGEND

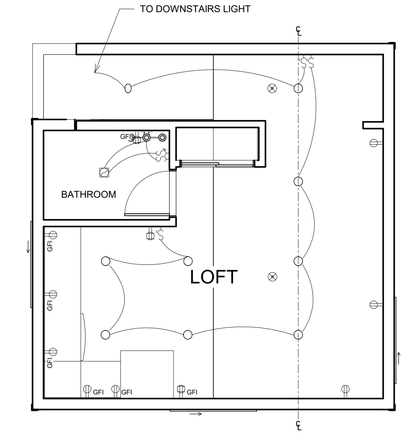
- DUPLEX ELECTRICAL OUTLET
- GFI DUPLEX ELECTRICAL OUTLET
- FIXTURE SWITCH
- 3-WAY FIXTURE SWITCH
- RECESSED CAN LIGHT
- SMOKE/ CO2 DETECTOR
- FLUORESCENT BOX LIGHT
- QUAD ELECTRICAL OUTLET
- GFI QUAD ELECTRICAL OUTLET
- EXTERIOR WALL MOUNTED LIGHT
- EXTERIOR WALL MOUNTED LIGHT
- VANITY LIGHT
- EXHAUST FAN AND LIGHT
- CENTERLINE

GENERAL NOTES

1. All smoke detectors to be hard-wired, interconnected, and have battery backup as per IRC R314.
2. Provide carbon monoxide detectors @ each habitable level of dwelling as per IRC.
3. All receptacles serving kitchen counter tops, in garages, baths, unfinished basements, and outside receptacles shall be GFCI protected per IRC E3902.
4. Outlets are req'd so that no point along walls is more than 6 feet from an outlet.
5. All electrical installations shall comply with the IRC 2015 & NEC 2014.
6. All branch circuits that supply electrical in bedrooms need to be provided with arc-fault protection. Per IRC 3902.12.
7. Provide U-fer ground as per IRC.
8. All electrical installations shall comply with the IRC 2015 & NEC 2014.
9. Outlets are req'd abv. counter space so that no point along the wall is more than 24" from an outlet.
10. Provide outlet @ ceiling for garage door opener.
11. Provide 110v outlet @ eaves for holiday lighting w/ photocell & override switch as per owner.
12. All exterior outlets to be GFCI protected w/ weather proof bubble covers.
13. An outlet is req'd outside the front and rear of the dwelling as per IRC.



1 Level 1 Electrical Plan
1/4" = 1'-0"



2 Level 2 Electrical Plan
1/4" = 1'-0"

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Electrical Plan

E - 01

GENERAL NOTES

1. THE STRUCTURAL NOTES ARE TO COMPLIMENT THE PROJECT SPECIFICATIONS WHICH ARE PART OF THE CONSTRUCTION DOCUMENTS. SPECIFIC NOTES AND DETAILS IN THE DRAWINGS SHALL GOVERN OVER THE STRUCTURAL NOTES AND TYPICAL DETAILS. TYPICAL DETAILS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN.
2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN ON CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
3. OMISSIONS OR CONFLICTS FOUND IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
4. DO NOT SCALE STRUCTURAL DRAWINGS. REFER TO ARCHITECT'S DRAWINGS FOR ALL DIMENSIONS.
5. REVIEW OF CONSTRUCTION SUBMITTALS/SHOP DRAWINGS BY THE ENGINEER OF RECORD IS FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PERTINENT INFORMATION AND ENSURING THAT DESIGN REQUIREMENTS ARE MET.
6. THE CONTRACTOR SHALL VERIFY AND COORDINATE LOCATIONS AND SIZES OF ALL MECHANICAL OR OTHER EQUIPMENT BEFORE FABRICATING OR ERECTING AFFECTED STRUCTURAL ELEMENTS. LOCATIONS AND SIZES THAT DIFFER FROM THOSE INDICATED IN THE CONSTRUCTION DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT.
7. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ENGINEER FOR APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS OR SUBSTITUTIONS AFFECTING ANY STRUCTURAL ELEMENTS.
8. DURING AND AFTER CONSTRUCTION, THE DESIGN LOADS AS INDICATED IN THESE DOCUMENTS SHALL NOT BE EXCEEDED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE TEMPORARY SHORING AND BRACING FOR ALL STRUCTURAL COMPONENTS UNTIL THE ENTIRE STRUCTURAL SYSTEM IS COMPLETED. DESIGN OF SUCH SHORING AND BRACING IS BY OTHERS AT NO ADDITIONAL COST TO THE OWNER.
10. STRUCTURAL OBSERVATIONS SHALL BE CONDUCTED AS NEEDED BY A REPRESENTATIVE OF THE ENGINEER OF RECORD AND WILL CONSIST OF OBSERVING THE CONSTRUCTION OF CRITICAL STRUCTURAL ELEMENTS. THESE STRUCTURAL OBSERVATIONS SHALL NOT BE CONSTRUED AS SPECIAL INSPECTIONS OR APPROVAL OF CONSTRUCTION.
11. ENGINEER SHALL NOT BE RESPONSIBLE FOR ACTIVITIES UNDER CONTROL OF THE CONTRACTOR SUCH AS CONSTRUCTION SITE SAFETY; MEANS, METHODS AND SEQUENCING OF CONSTRUCTION.

FOUNDATION NOTES

1. SOIL PREPARATION UNDER FOOTINGS AND SLABS ON GRADE SHALL BE IN ACCORDANCE WITH THE SOILS REPORT. FOR PROJECTS WITHOUT A SOILS REPORT ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL OR ENGINEERED GRANULAR FILL COMPACTED TO NOT LESS THAN 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557). FOR PROJECTS WITHOUT A SOILS REPORT ALL SLABS ON GRADE SHALL BEAR ON UNDISTURBED NATIVE SOIL OR ENGINEERED GRANULAR FILL COMPACTED TO NOT LESS THAN 90% OF MODIFIED PROCTOR DENSITY (ASTM D-1557).
2. FOOTINGS SHALL NOT BE PLACED ON FROZEN OR UNSTABLE SOILS, OR WHERE WATER OR SNOW ARE PRESENT.
3. UNLESS NOTED OTHERWISE ALL FOOTINGS AT COLUMNS TO BE CENTERED BELOW COLUMNS.
4. ALL FOUNDATION WALLS (EXCEPT CANTILEVERED RETAINING WALLS) SHALL BE ADEQUATELY BRACED AGAINST LATERAL MOVEMENT PRIOR TO BACKFILLING. BRACING SHALL REMAIN IN PLACE UNTIL SUPPORTING STRUCTURAL ELEMENTS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH.
5. UNLESS NOTED OTHERWISE ALL FOOTINGS SHALL HAVE VERTICAL FACES FORMED WITH STANDARD FORMING MATERIALS (WOOD, METAL, ETC.). CONCRETE FOR FOOTINGS MAY BE PLACED IN EXCAVATED "SOIL" FORMS PROVIDED THAT THE DIMENSIONS ARE INCREASED 3 INCHES ON EACH SIDE.
6. TOP OF FOOTING ELEVATIONS WHERE SHOWN ON THE FOOTING AND FOUNDATION PLAN ARE BASED ON PRELIMINARY GRADING INFORMATION AND MUST BE VERIFIED PRIOR TO CONSTRUCTION. STEPS WHERE SHOWN ARE AT APPROXIMATE LOCATIONS. ALL EXTERIOR FOOTINGS MUST BEAR A MINIMUM DIMENSION BELOW LOWEST ADJACENT FINAL GRADE AS NOTED IN THE DESIGN CRITERIA NOTES.

CONCRETE NOTES

1. UNLESS NOTED OTHERWISE ALL CONCRETE SHALL BE NORMAL WEIGHT AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH AS FOLLOWS:
   A. 3000 PSI AT ALL FOOTINGS, FOUNDATION WALLS, INTERIOR SLABS ON GRADE, AND SUSPENDED SLABS ON METAL DECK.
   B. 4000 PSI AT ALL COLUMNS, WALLS, RETAINING WALLS, EXTERIOR SLABS ON GRADE, CURBS, AND GUTTERS.
   C. 5000 PSI AT ALL SUSPENDED SLABS AND BEAMS.
2. NO PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED OR APPROVED BY STRUCTURAL ENGINEER. NO ALUMINUM PRODUCTS SHALL BE EMBEDDED IN CONCRETE. PENETRATIONS THRU STRUCTURAL CONCRETE STRUCTURAL ELEMENTS MUST BE APPROVED BY THE ENGINEER AND SHALL BE BUILT INTO THE ELEMENT PRIOR TO CONCRETE PLACEMENT.
3. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, ETC. TO BE CAST IN TO CONCRETE, AND FOR EXTENT AND LOCATION OF DEPRESSIONS, CURBS, RAMPS, ETC.
4. CONSTRUCTION JOINTS SHALL BE MADE AND LOCATED SO AS TO NOT IMPAIR THE STRENGTH OF THE STRUCTURE. PROVIDE 2 X 4 (SHAPED) KEYWAY IN ALL VERTICAL AND HORIZONTAL JOINTS UNLESS NOTED OR DETAILED OTHERWISE. ALL STEEL REINFORCING SHALL BE CONTINUOUS THROUGH COLD JOINTS UNLESS NOTED OTHERWISE.
5. UNLESS NOTED OTHERWISE AT OPENINGS LARGER THAN 12" IN ANY DIRECTION IN CONCRETE WALLS ADD (2) #5 BARS ALL SIDES IN ADDITION TO REGULAR WALL REINFORCING AND EXTEND 24" EACH WAY BEYOND OPENING. WHERE 24" IS NOT AVAILABLE, EXTEND BARS AS FAR AS POSSIBLE AND TERMINATE WITH A STANDARD HOOK.
6. UNLESS NOTED OTHERWISE SLABS ON GRADE SHALL BE 4 INCHES THICK UNDERLAIN BY FREE DRAINING MATERIAL.
7. FOOTINGS HAVE BEEN DESIGNED AT 2500 PSI AND SPECIFIED AT A HIGHER STRENGTH CONCRETE AS STATED ABOVE. SPECIAL INSPECTIONS ARE NOT REQUIRED PER IBC 1705.3.

REINFORCING STEEL NOTES

1. ALL REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM STANDARD A-185, SHALL BE SUPPLIED IN FLAT SHEETS AND SHALL HAVE A MINIMUM SIDE LAP OF 8 INCHES. ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 315 TO MAINTAIN EXACT REQUIRED POSITION.
2. ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACING INDICATED REDUCED BY 1/3.
3. UNLESS NOTED OTHERWISE CONTINUOUS REINFORCEMENT SHALL BE SPLICED AT POINTS OF MINIMUM STRESS BY LAPPING 44 BAR DIAMETERS IN CONCRETE AND 50 BAR DIAMETERS IN MASONRY.
4. ALL VERTICAL REINFORCING SHALL BE DOWELED TO FOOTINGS BELOW WITH DOWELS TO MATCH. SPLICE LENGTHS SHALL COMPLY WITH THE PRECEDING NOTE. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4" OF THE BOTTOM OF THE FOOTING, BUT NEED NOT EXTEND MORE THAN 20 INCHES INTO THE FOOTING.
5. DO NOT WELD REINFORCING EXCEPT AS NOTED ON PLANS. WHERE REINFORCING IS WELDED, USE ASTM A-706 REINFORCING.
6. REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE:
   A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES
   B. EXPOSED TO EARTH OR WEATHER:
      I. #6 AND LARGER: 2 INCHES
      II. #5 AND SMALLER: 1-1/2 INCHES
   C. NOT EXPOSED TO EARTH OR WEATHER:
      I. SLABS, WALLS, JOISTS, #11 AND SMALLER: 3/4 INCHES
      II. BEAMS, COLUMNS: MAIN REINFORCING OR TIES: 1-1/2 INCHES
   D. SLABS ON GRADE: PLACE REINFORCING AT CENTER OF SLAB UNLESS NOTED OTHERWISE.

LUMBER NOTES

1. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR/LARCH CLEARLY MARKED WITH A STAMP BY WWPA APPROVED AGENCY AND SHALL BE GRADED AS FOLLOWS:
   A. HORIZONTAL MEMBERS: JOISTS & RAFTERS: NO. 2, BEAMS & STRINGERS: NO. 2
   B. VERTICAL MEMBERS: POST & TIMBERS: NO. 2, STUDS: NO. 2
2. ALL FRAMING IN CONTACT WITH FOOTINGS, FOUNDATIONS OR SLABS ON GRADE SHALL BE PRESSURE TREATED OR TIMBERSTRAND LSL TREATED LUMBER WITH EQUIVALENT STRESS GRADES TO TYPICAL FRAMING MEMBERS.
3. GLU-LAMINATED BEAMS SHALL BE DOUGLAS-FIR APPEARANCE GRADE WITH A COMBINATION NUMBER 24F-V4 EXCEPT CANTILEVERED AND CONTINUOUS BEAMS SHALL BE COMBINATION NUMBER 24F-V8
4. ALL LAMINATED VENEER LUMBER (LVL) SHALL BE FURNISHED BY TRUS-JOIST CORPORATION OR EQUAL AS APPROVED BY ENGINEER AND SHALL HAVE A MINIMUM MODULUS OF ELASTICITY OF 1,900,000 PSI WITH A MINIMUM FLEXURAL STRESS RATING OF 2,600 PSI.
5. ALL WOOD "I" JOISTS, AND BRIDGING SHALL BE FURNISHED BY TRUS-JOIST CORPORATION OR EQUAL AS APPROVED BY ENGINEER.
6. BEAM SIZES ARE BASED ON MINIMUM STRENGTH REQUIREMENTS. SIZES MAY BE INCREASED FOR ARCHITECTURAL OR CONSTRUCTION PURPOSES.
7. TYPICAL DOOR/WINDOW HEADERS TO BE (2) 2x8 UNLESS NOTED OTHERWISE.
8. 2-PLY AND 3-PLY PRE-ENGINEERED WOOD BEAMS SHALL BE NAILED TOGETHER PER MANUFACTURER'S SPECIFICATIONS. 4-PLY AND GREATER PRE-ENGINEERED WOOD BEAMS SHALL BE ATTACHED WITH (2) ROWS OF 1/2 INCH DIAMETER THRU-BOLTS AT 12 INCHES ON CENTER SPACED 2 INCHES FROM THE TOP AND BOTTOM OF THE BEAM. SEE MANUFACTURER'S SPECIFICATIONS FOR ALL OTHER CONNECTION CONDITIONS.
9. SOLID BLOCKING OR SQUASH BLOCKS ARE REQUIRED IN THE JOIST SPACE AT ALL COLUMN LOCATIONS TO CREATE A CONTINUOUS LOAD PATH TO THE COLUMN AND FOUNDATION BELOW.
10. ALL FRAMING ANCHORS, POST CAPS, HOLD DOWNS, HANGERS, COLUMN BASES ETC. TO BE PROVIDED BY SIMPSON OR APPROVED EQUAL
11. ROOF SHEATHING SHALL BE 7/16 INCH APA RATED SHEATHING WITH A SPAN RATING OF 24/16.
12. FLOOR SHEATHING SHALL BE 3/4 INCH T&G WAFER BOARD GLUED AND NAILED. GLUE SHALL CONFORM TO AFG-01 ACCORDING TO APA SPECIFICATIONS.
13. WALL SHEATHING SHALL BE 7/16 INCH APA RATED SHEATHING. SEE SHEAR WALL SCHEDULE FOR MORE INFORMATION.
14. UNLESS OTHERWISE NOTED, 8d NAILS SHALL BE USED TO FASTEN ALL ROOF AND WALL SHEATHING, AND 10d NAILS SHALL BE USED TO FASTEN ALL FLOOR SHEATHING TO SUPPORTING FRAMING AS FOLLOWS:
    A. BOUNDARY NAILING "BN": 4 INCHES ON CENTER AT ALL ROOF AND FLOOR SHEATHING INTO BEARING AND/OR SHEAR WALLS, TOP & BOTTOM OF WALLS
    B. PANEL EDGE NAILING "EN" : 6 INCHES ON CENTER AT ALL OTHER PLYWOOD PANEL EDGES
    C. PANEL FIELD NAILING "FN" : 12 INCHES ON CENTER AT INTERIOR SUPPORTS IN FIELD OF PANEL
15. FASTENERS AT EXPOSED LOCATIONS OR IN CONTACT WITH PRESERVATIVE-TREATED AND/OR FIRE-RETARDANT-TREATED WOOD (EXCEPT FOR TIMBERSTRAND LSL TREATED LUMBER) SHALL BE OF G-185 HOT-DIPPED, ZINC-COATED, GALVANIZED STEEL OR 304 OR 316 STAINLESS STEEL. STAINLESS STEEL AND GALVANIZED STEEL SHALL NEVER BE USED IN CONTACT WITH EACH OTHER.
16. ALL BOLTS THRU WOOD SHALL BE ASTM A307 AND SHALL HAVE HARDENED WASHERS UNDER ASTM A563 HEAVY HEX NUTS AND BOLT HEADS.
17. UNLESS NOTED OTHERWISE, ALL WALL BOTTOM PLATES TO BE ANCHORED TO FOUNDATIONS OR FOOTINGS WITH 5/8 INCH DIAMETER ANCHOR BOLTS AT 32" O.C. WITH 8" MINIMUM EMBEDMENT. WALL BOTTOM PLATES AT SHEAR WALLS SHALL INCLUDE 3"x3"x1/4" STEEL PLATE WASHERS. PROVIDE A ROUND CUT WASHER BETWEEN THE NUT OF THE ANCHOR BOLT AND THE PLATE WASHER.
18. PROVIDE DOUBLE JOIST UNDER PARALLEL NONBEARING WALLS AND SOLID BLOCKING UNDER PERPENDICULAR NONBEARING WALLS.
19. AT ALL OVERBUILD LOCATIONS, ROOF SHEATHING SHALL BE COMPLETE BELOW OVERBUILDS PRIOR TO OVERBUILD CONSTRUCTION.
20. PROVIDE SOLID 2" (NOMINAL) FULL DEPTH BLOCKING AT ENDS AND SUPPORT LOCATIONS FOR ALL JOISTS AND RAFTERS. BLOCKING SHALL BE ATTACHED TO SUPPORT FRAMING WITH A MINIMUM OF (1) SIMPSON A35 FRAMING ANCHOR BETWEEN JOISTS UNLESS OTHERWISE NOTED.
21. UNLESS OTHERWISE NOTED, ALL BEARING WALLS SHALL BE SPACED AT 16" ON CENTER. BLOCK ALL NON-SHEATHED BEARING WALLS AT 4'-0" ON CENTER.
22. VERIFY THE STUD SPACING WITH THE ANCHOR BOLT LAY-OUT. WHERE STUDS INTERFERE WITH ANCHOR BOLTS, PROVIDE AN ADDITIONAL FULL-HEIGHT STUD TO ENSURE THAT THE FULL CROSS-SECTIONAL AREA OF THE STUD IS IN CONTACT WITH THE SILL PLATE.
23. EXTERIOR WALLS SHALL HAVE DOUBLE 2x TOP PLATES SPLICED WITH A MINIMUM OF 48 INCHES OF OVERLAP AND SHALL BE CONNECTED WITH A MINIMUM OF (12) 16d NAILS.
24. EXCEPT WHERE OTHERWISE NOTED, THE NUMBER AND SIZE OF NAILS CONNECTING WOOD MEMBERS SHALL NOT BE LESS THAN THAT SET FORTH IN IBC TABLE 2304.10.1.
25. THE DEFERRED DESIGNS OF ALL PRE-MANUFACTURED WOOD TRUSSES, BLOCKING, TRUSS HANGERS, AND RELATED COMPONENTS ARE TO BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO INSTALLATION. DRAWINGS AND CALCULATIONS FOR THESE ITEMS ARE REQUIRED TO BE SEALED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF UTAH.
26. MASONRY VENEER SHALL BE ANCHORED TO WALL STUDS BY USE OF MULTI-PIECE ANCHORS WITH CLIPS TO PROVIDE DIRECT ATTACHMENT TO A HORIZONTAL 9 GAUGE REINFORCING WIRE RUNNING CONTINUOUSLY IN HORIZONTAL MORTAR JOINTS (DUR-O-WAL D/A 213 SEISMIC OR APPROVED EQUAL). WIRE TO BE SPACED VERTICALLY AT 16" O.C. ANCHORS SHALL BE SPACED SO AS TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL AREA, WITH HORIZONTAL SPACING NOT EXCEEDING 18 INCHES.

DESIGN CRITERIA — JLB # 21-108

GOVERNING BUILDING CODE:	2018 IBC
RISK CATEGORY:	II
FLOOR	
DEAD LOAD:	15 PSF
LIVE LOAD:	40 PSF
ROOF	
DEAD LOAD:	15 PSF
LIVE LOAD:	20 PSF
GROUND SNOW LOAD, Pg:	43 PSF
SNOW EXPOSURE FACTOR, Ce:	0.7
SNOW IMPORTANCE FACTOR, Is:	1.0
THERMAL FACTOR, Ct:	1.0
ROOF SNOW LOAD, Pf:	30 PSF
WIND	
ULTIMATE DESIGN WIND SPEED, Vult:	115 MPH
WIND EXPOSURE:	C
EARTHQUAKE	
SEISMIC IMPORTANCE FACTOR, Ie:	1.0
Ss:	1.5
S1:	0.6
SOIL SITE CLASS:	D
Sds:	1
Sd1:	0.6
SEISMIC DESIGN CATEGORY:	D
BASIC SEISMIC FORCE-RESISTING SYSTEM:	WOOD SHEAR WALLS
DESIGN BASE SHEAR:	Cs*W
SEISMIC RESPONSE COEFFICIENT, Cs:	0.154
RESPONSE MODIFICATION COEFFICIENT, R:	6.5
ANALYSIS PROCEDURE USED:	EQUIVALENT LATERAL FORCE
SOIL	
ALLOWABLE SOIL BEARING PRESSURE:	1500 PSF (ASSUMED)
SOIL REPORT BY:	NOT PROVIDED
SOIL REPORT #:	N/A
SOIL REPORT DATE:	N/A
SOIL FROST DEPTH:	30 INCHES

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JOSEPH L. BINGHAM
05/28/2021
STATE OF UTAH

WRIGHT DETACHED GARAGE

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SALT LAKE CITY, UTAH 84105

GENERAL STRUCTURAL NOTES

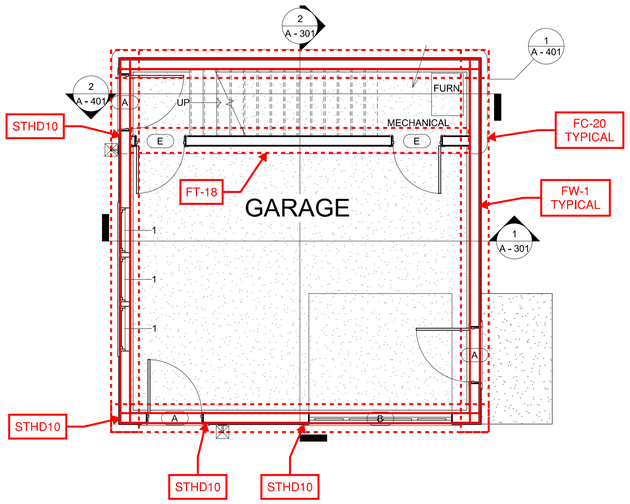
SHEET: S1 OF S4

FLOOR BEAM SCHEDULE

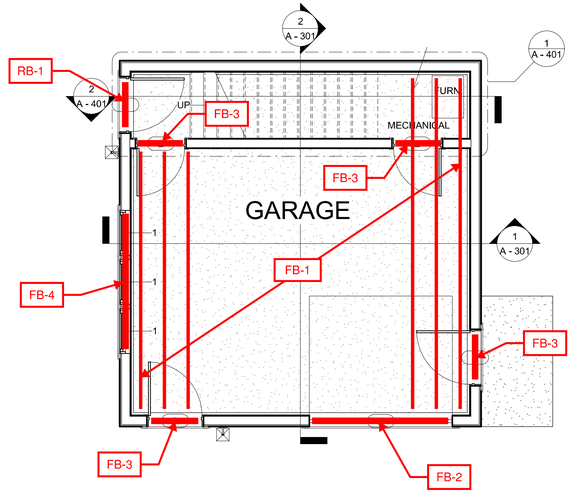
FB-1	9-1/2 TJI 210 AT 16" O.C.
FB-2	3-1/2x9-1/2 LVL
FB-3	(2) 2x8
FB-4	3-1/2x9-1/2 LVL

ROOF BEAM SCHEDULE

RB-1	(2) 2x8

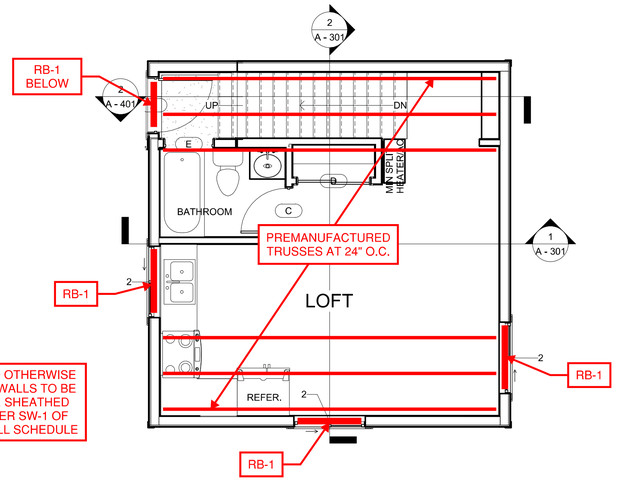


FOUNDATION PLAN



FLOOR FRAMING PLAN

UNLESS NOTED OTHERWISE ALL EXTERIOR WALLS TO BE 2x6 AT 16" O.C. SHEATHED AND NAILED PER SW-1 OF THE SHEAR WALL SCHEDULE



ROOF FRAMING PLAN

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STATE OF UTAH

WRIGHT DETACHED GARAGE

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SALT LAKE CITY, UTAH 84105

FOUNDATION PLAN

FLOOR FRAMING PLAN

ROOF FRAMING PLAN

SHEET:

S2

OF

S4

MINIMUM NAILING SCHEDULE

No.	CONNECTION	FASTENING						LOCATION
		NAILING			STAPLES			
		No.	SIZE	SPACING	No.	SIZE	SPACING	
1	JOIST TO SILL OR GIRDER	3	8d	–	3	3"–14 GA.	–	TOENAIL
2	BRIDGING TO JOIST	2	8d	–	2	3"–14 GA.	–	TOENAIL EA. END
3	BOTTOM PLATE TO JOIST OR BLOCKING	–	16d	16" o.c.	–	3"–14 GA.	12" o.c.	TYP. FACE NAIL
4	BOTTOM PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3	16d	16" o.c.	4	3"–14 GA.	12" o.c.	BRACED WALL PANELS
5	TOP PLATE TO STUD	2	16d	–	3	3"–14 GA.	–	END NAIL
6	STUD TO BOTTOM PLATE	4	8d	–	3	3"–14 GA.	–	TOENAIL
6a	STUD TO BOTTOM PLATE (OPTIONAL)	2	16d	–	3	3"–14 GA.	–	END NAIL
7	DOUBLE STUDS	–	16d	16" o.c.	–	3"–14 GA.	8" o.c.	FACE NAIL
8	DOUBLE TOP PLATES	–	16d	16" o.c.	–	3"–14 GA.	12" o.c.	TYP. FACE NAIL
9	DOUBLE TOP PLATES LAP SPLICES	8	16d	–	12	3"–14 GA.	–	TYP. FACE NAIL
10	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3	8d	–	3	3"–14 GA.	–	TOENAIL
11	RIM JOIST TO TOP PLATE	–	8d	16" o.c.	–	3"–14 GA.	16" o.c.	TOENAIL
12	TOP PLATES, LAPS & INTERSECTIONS	2	16d	–	3	3"–14 GA.	–	FACE NAIL
13	CONTINUOUS HEADER, TWO PIECES	–	16d	16" o.c.	–	–	–	ALONG EDGE
14	CEILING JOISTS TO PLATE	3	8d	–	5	3"–14 GA.	–	TOENAIL
15	CONTINUOUS HEADER TO STUD	4	16d	–	–	–	–	TOENAIL
16	CEILING JOISTS, LAPS OVER PARTITIONS	3	16d	–	4	3"–14 GA.	–	FACE NAIL
17	CEILING JOISTS TO PARALLEL RAFTERS	3	16d	–	4	3"–14 GA.	–	FACE NAIL
18	RAFTER TO PLATE	3	8d	–	3	3"–14 GA.	–	TOENAIL
19	BUILT–UP CORNER STUDS	–	16d	24" o.c.	–	3"–14 GA.	16" o.c.	FACE NAIL
20	BUILT–UP GIRDER AND BEAMS	–	20d	32" o.c.	–	3"–14 GA.	24" o.c.	FACE NAIL @ TOP & BOTTOM, STAGGERED ON OPP. SIDES
20a	BUILT–UP GIRDER AND BEAMS (OPTIONAL)	2	20d	–	3	3"–14 GA.	–	FACE NAIL AT ENDS AND AT EACH SPLICE
21	COLLAR TIE TO RAFTER	3	10d	–	4	3"–14 GA.	–	FACE NAIL
22	JACK RAFTER TO HIP	3	10d	–	4	3"–14 GA.	–	TOENAIL
22a	JACK RAFTER TO HIP (OPTIONAL)	2	16d	–	3	3"–14 GA.	–	FACE NAIL
23	ROOF RAFTER TO 2x RIDGE BEAM	2	16d	–	3	3"–14 GA.	–	TOENAIL OR FACE NAIL
24	JOIST TO RIM JOIST	3	16d	–	5	3"–14 GA.	–	FACE NAIL
25	LEDGER STRIP	3	16d	–	4	3"–14 GA.	–	FACE NAIL

NOTES:
1. COMMON OR BOX NAILS ARE PERMITTED TO BE USED, EXCEPT WHERE OTHERWISE NOTED.
2. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16 INCH.
3. SEE IBC TABLE 2304.9.1 FOR ADDITIONAL NAILING REQUIREMENTS.

TABLE OF EQUIVALENT FASTENERS STAPLES, NAILS AND T–NAILS
(VALID FOR LATERAL LOAD ONLY)

COMMON NAIL SPACING		EQUIV. SPACING OF APR. FASTENERS				
		STAPLES			NAILS/T–NAILS	
	GAUGE	16	15	14	113	131
	PENETRATION	1"	1"	1"	1–1/4"	1/2"
6d AT	4"	3–1/2"	4"	5"	4"	5"
	6"	5"	6"	7"	6"	7–1/2"
	8"	6–1/2"	8"	9–1/2"	8"	10"
	10"	8–1/2"	10"	12"	10"	12"
	12"	10"	12"	14–1/2"	12"	14–1/2"
8d AT	3"	2"	2–1/2"	3"	2–1/2"	3"
	4"	2–1/2"	3–1/2"	4"	3–1/2"	4"
	6"	4"	5"	6"	5"	6"
	8"	5–1/2"	6–1/2"	8"	6–1/2"	8"
	10"	6–1/2"	8"	10"	8"	10"
	12"	8"	10"	12"	9–1/2"	12"
10d AT	4"	2"	2–1/2"	3"	2–1/2"	3–1/2"
	6"	3–1/2"	4"	5"	4"	5"
	8"	4–1/2"	5–1/2"	6–1/2"	5–1/2"	7"
	10"	5–1/2"	7"	8"	6–1/2"	8–1/2"
	12"	6–1/2"	8"	9–1/2"	8–1/2"	10"

NOTE: PENETRATION IS THE DEPTH OF EMBEDMENT OF THE STAPLE OR NAIL INTO THE MAIN MEMBER REQUIRED TO ATTAIN ITS FULL CAPACITY (SHEAR VALUE) FOR LATERAL LOADING.

SIMPSON HOLDOWN SCHEDULE

HOLDOWN	MIN. POST	ANCHOR
LSTHD8	3"	–
STHD10	3"	–
STHD14	3"	–
HD5B	3"	SB5/8x24
HD7B	3"	SB7/8x24
HD9B	4–1/2"	SB7/8x24
HD12	4–1/2"	SB1x30
MST37	3"	–
MST48	3"	–
MST60	3"	–
MST72	3"	–
(2) MST60	6"	–
(2) MST72	6"	–

FOUNDATION WALL SCHEDULE

MARK	MAX HEIGHT	WALL THICKNESS	VERTICAL REINF.		HORIZONTAL REINF.	
			SIZE	SPACING	SIZE	SPACING
FW–1	8'–0"	8"	#4	18" O.C.	#4	18" O.C.
FW–2	9'–0"	8"	#4	15" O.C.	#4	18" O.C.
FW–3	10'–0"	8"	#5	18" O.C.	#4	18" O.C.
FW–4	12'–0"	10"	#5	12" O.C.	#4	18" O.C.

OVERBUILD FRAMING SCHEDULE

@ 24" O.C.	ALLOWABLE SPAN PER ROOF SNOW LOAD					
	≤30 PSF	40 PSF	50 PSF	80 PSF	100 PSF	150 PSF
2x4	5'–6"	5'–0"	4'–6"	4'–0"	3'–6"	3'–0"
2x6	8'–0"	7'–0"	6'–6"	5'–6"	5'–0"	4'–6"
2x8	10'–0"	9'–0"	8'–6"	7'–0"	6'–6"	5'–6"
2x10	12'–6"	11'–6"	10'–6"	9'–0"	8'–0"	6'–6"
11–7/8" TJI 210	16'–6"	15'–0"	13'–6"	10'–0"	8'–0"	5'–6"

NOTES:
1. ROOF SHEATHING SHALL CONTINUE UNDER OVERBUILD AREA.
2. SNOW LOADS ABOVE 150PSF SHALL BE REVIEWED BY THE ENGINEER.

SHEAR WALL SCHEDULE

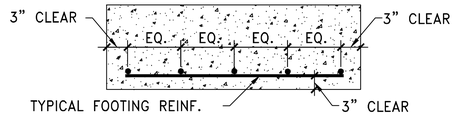
SYM.	SHEATHING		NAILING[3]				STUDS[4]			MIN.[10] SHEAR	ANCHOR[11] BOLT	ANCHOR BOLT SPACING	COMMENTS
	THICK.	TYPE[1]	EDGE (E.N.)		FIELD (F.N.)		EDGE	FIELD					
			SIZE	SPACING	SIZE	SPACING	SIZE	SIZE	SPACING				
SW–1	7/16"	OSB	8d	6" O.C.	8d	12" O.C.	2x	2x	16" O.C.	240 PLF	5/8"ø x10"	32" O.C.	–
SW–2	7/16"	OSB	8d	4" O.C.	8d	12" O.C.	2x	2x	16" O.C.	350 PLF	5/8"ø x10"	32" O.C.	–
SW–3	7/16"	OSB	8d	3" O.C.	8d	12" O.C.	3x[6]	2x	16" O.C.	450 PLF	5/8"ø x10"	16" O.C.	–
SW–4	7/16"	OSB	8d	2" O.C.	8d	12" O.C.	3x[6]	2x	16" O.C.	585 PLF	5/8"ø x10"	16" O.C.	–
SW–5	7/16"	OSB	8d	4" O.C.	8d	12" O.C.	3x[7]	2x	16" O.C.	700 PLF	3/4"ø x12"	16" O.C.	SHEATH BOTH SIDES. 3x SILL PL REQ..
SW–6	7/16"	OSB	8d	3" O.C.	8d	12" O.C.	3x[7]	2x	16" O.C.	900 PLF	3/4"ø x12"	16" O.C.	SHEATH BOTH SIDES. 3x SILL PL REQ..

NOTES:
1. OSB SHEATHING SHALL BE TYPE C–D, C–C STRUCTURAL GRADE. ALL OTHER GRADES SHALL BE COVERED IN IBC SECTION 2303.1.4.
2. SHEATHING MAY BE INSTALLED ON EITHER SIDE OF WALL INDICATED, U.N.O.
3. SEE TABLE OF EQUIVALENT FASTENERS FOR APPROVED SUBSTITUTIONS.
4. STUDS SHALL BE DOUGLAS FIR–LARCH OR SOUTHERN PINE.
5. FASTENERS FOR PRESSURE PRESERVATIVE WOOD SHALL BE HOT–DIPPED, GALVANIZED STEEL OR STAINLESS STEEL.
6. (2) 2x NOMINAL STUDS MAY BE USED IN PLACE OF 3x NOMINAL STUDS PROVIDED THE (2) 2x NOMINAL STUDS ARE NAILED TOGETHER WITH 16d NAILS AT 3" O.C.
7. STUD MAY BE A 2x MINIMAL MEMBER PROVIDED PANEL JOINTS ON BOTH SIDES OF THE WALL ARE STAGGERED AND DO NOT SHARE THE SAME 2x NOMINAL STUD.
8. ALL HOLDOWNS MUST BE ANCHORED AS PER SIMPSON SPECS THROUGH A MIN. OF DOUBLE FULL LENGTH 2x STUDS. HOLDOWNS CAN NOT BE ANCHORED TO TRIMMERS OR CRIPPLES.
9. SIMPSON SET–XP ADHESIVE SYSTEM MAY BE USED AS PER MANUFACTURER'S SPECS TO ANCHOR BOLTS IN CONCRETE.
10. VALUES SHOWN ARE TO BE USED WHEN SEISMIC GOVERNS THE DESIGN AND MAY BE INCREASED 40% IF WIND GOVERNS.
11. USE "J" BOLTS W/ 3"x3"x1/4" STEEL PLATE WASHER AT EACH BOLT. PROVIDE A ROUND CUT WASHER BETWEEN THE NUT OF THE ANCHOR BOLT AND THE PLATE WASHER. INCREASE LENGTH OF BOLT BY 2" IF DOUBLE SILL PLATE IS USED.

FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICK	LENGTHWISE REINF.		CROSSWISE REINF.			
				NO.	SIZE	NO.	SIZE	SPACING	NOTES
FC–20	20"	CONT.	10"	2	#4	–	–	–	REBAR CONTINUOUS
FT–18	18"	CONT.	10"	2	#4	–	–	–	THICKENED SLAB, REBAR CONTINUOUS
FT–24	24"	CONT.	10"	3	#4	–	–	–	THICKENED SLAB, REBAR CONTINUOUS
F–24	24"	24"	10"	3	#4	3	#4	EQ.	–
F–30	30"	30"	10"	3	#4	3	#4	EQ.	–
F–36	36"	36"	10"	4	#4	4	#4	EQ.	–
F–42	42"	42"	12"	4	#5	4	#5	EQ.	–
F–48	48"	48"	12"	5	#5	5	#5	EQ.	–
F–54	54"	54"	12"	5	#5	5	#5	EQ.	–
F–60	60"	60"	12"	6	#5	6	#5	EQ.	–
F–66	66"	66"	12"	6	#5	6	#5	EQ.	–
F–72	72"	72"	12"	7	#5	7	#5	EQ.	–

TYPICAL FOOTING SECTION



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WRIGHT DETACHED GARAGE

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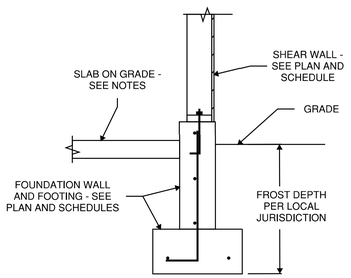
STRUCTURAL SCHEDULES

SHEET:

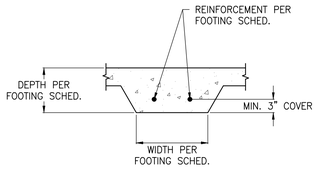
S3

OF

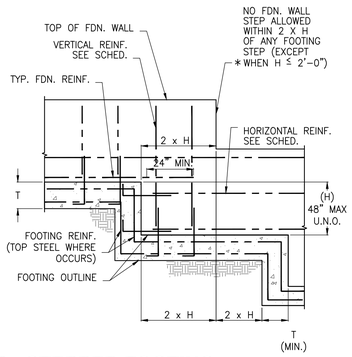
S4



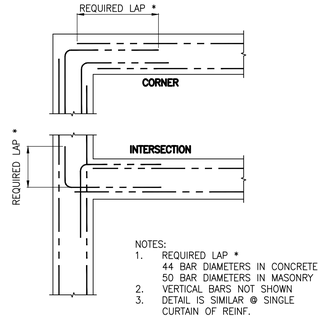
1 - FOOTING/FOUNDATION WALL



2 - THICKENED SLAB



3 - STEPPED FOOTING



NOTES:
1. REQUIRED LAP * 44 BAR DIAMETERS IN CONCRETE 50 BAR DIAMETERS IN MASONRY
2. VERTICAL BARS NOT SHOWN
3. DETAIL IS SIMILAR @ SINGLE CURTAIN OF REINF.

4 - HORIZONTAL REINFORCEMENT

5 - NOT USED

6 - NOT USED

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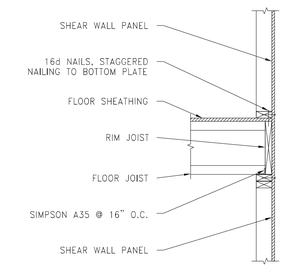
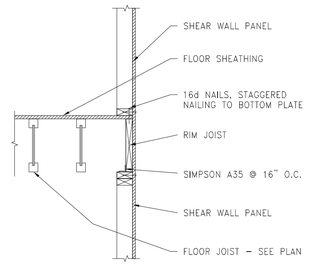
7 - NOT USED

8 - NOT USED



9 - EXTERIOR SHEAR WALL



10 - EXTERIOR SHEAR WALL

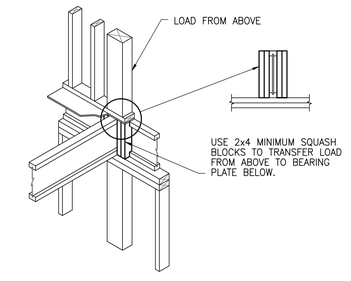
11 - NOT USED

12 - NOT USED

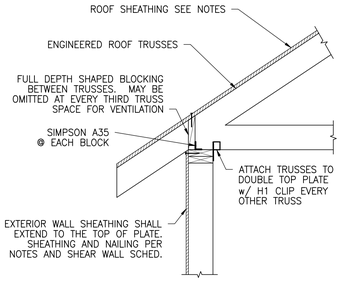
WRIGHT DETACHED GARAGE

529 SHERMAN AVE

SALT LAKE CITY, UTAH 84105

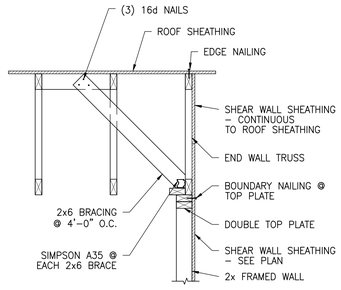


13 - COLUMN/SQUASH BLOCK



14 - EXTERIOR SHEAR WALL

15 - NOT USED

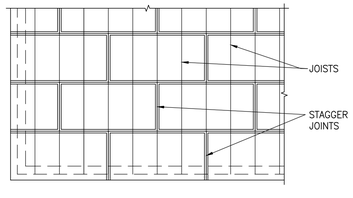


16 - EXTERIOR SHEAR WALL

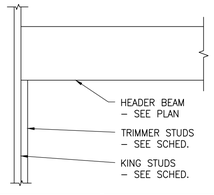
17 - NOT USED

18 - NOT USED

TYPICAL STRUCTURAL DETAILS



19 - SHEATHING LAYOUT



2x4 WALL FRAMING			2x6 WALL FRAMING		
OPENING SIZE	KING STUDS	TRIMMER STUDS	OPENING SIZE	KING STUDS	TRIMMER STUDS
UP TO 6'-0"	(1) 2x4	(2) 2x4	UP TO 6'-0"	(1) 2x6	(2) 2x6
6'-0" TO 12'-0"	(1) 2x4	(2) 2x4	6'-0" TO 12'-0"	(1) 2x6	(2) 2x6
OVER 12'-0"	(2) 2x4	(3) 2x4	OVER 12'-0"	(2) 2x6	(3) 2x6

NOTE: COLUMN SIZES SHOWN ON THE PLANS GOVERN OVER THE COLUMNS SHOWN IN THIS TABLE.

20 - HEADER CONNECTION

21 - NOT USED

22 - NOT USED

23 - NOT USED

24 - NOT USED

SHEET: S4 OF S4

Conditional Use Application

Angela Wright – 529 E Sherman Ave, Salt Lake City UT 84105
Tax ID Parcel Number: 16-07-478-020-0000

1. Project Description (please attach additional sheets electronically) Written description of your proposal

This project replaces the existing garage with a new garage with a 405 sq. ft. ADU unit on the second floor. The existing garage is in need of replacement and the ADU will allow for a studio apartment space. The owner, Angela Wright, resides and will continue to reside in the main home on the property.

This project follows all of the ADU guidelines and should not need any exceptions. The height of the new building (19'2") matches the height of the home and has a square footage that is 50% of the size (405 sq ft) of the home. The existing garage sits ~1 foot from the back and side property line, the new garage/ADU is set with an 11 foot setback from the back property line and a 4 foot setback from east side property line and complies with the front and side yard setbacks. The new building footprint is less than 50% of the rear yard. There is more than one parking slot available via on-street parking and on the driveway.

These designs meet all building and fire code requirements.

2. Conditional Use Information Section 21A.54.080 (please attach additional sheet)

- If applicable, what is the anticipated operating/delivery hours associated with the proposed use: Not Applicable
- What are the land uses adjacent to the property (abutting and across-the-street properties): This property is surrounded by residential homes on both side yards and the back property line. The homes are all more than 10 feet from any residential building including the one on the property.
- How many employees are expected to work on-site during the highest shift: Not Applicable
- If applicable, how many seats will be provided as part of the conditional use: Not Applicable
- Have you discussed the project with nearby property owners? Yes
  If so, what responses have you received? All of the property owners approve of the project.

3. Minimum Plan Requirements A digital (PDF) copy of each plan and elevation drawing: Attached

4. **Site Plan** (see Site Plan Requirements flyer for further details): Attached

5. Elevation Drawing (if applicable)

- Detailed elevation, sections and profile drawings with dimensions drawn to scale: Attached
- Type of construction and list the primary exterior construction materials: Attached
- Number, size, and type of dwelling units in each building, and the overall dwelling unit density: One garage/ADU; details in attached plans

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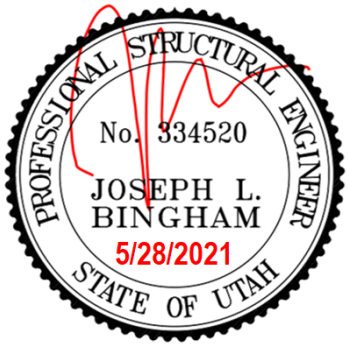
STRUCTURAL CALCULATIONS

FOR

WRIGHT DETACHED GARAGE

529 SHERMAN AVE
SALT LAKE CITY, UT 84105

JLB PROJECT NUMBER:
21-108



DESIGN CRITERIA **JLB # 21-108**

GOVERNING BUILDING CODE:	2018 IBC
RISK CATEGORY:	II

FLOOR

DEAD LOAD:	15 PSF
LIVE LOAD:	40 PSF

ROOF

DEAD LOAD:	15 PSF
LIVE LOAD:	20 PSF
GROUND SNOW LOAD, Pg:	43 PSF
SNOW EXPOSURE FACTOR, Ce:	0.7
SNOW IMPORTANCE FACTOR, Is:	1.0
THERMAL FACTOR, Ct:	1.0
ROOF SNOW LOAD, Pf:	30 PSF

WIND

ULTIMATE DESIGN WIND SPEED, Vult:	115 MPH
WIND EXPOSURE:	C

EARTHQUAKE

SEISMIC IMPORTANCE FACTOR, Ie:	1.0
Ss:	1.5
S1:	0.6
SOIL SITE CLASS:	D
Sds:	1
Sd1:	0.6
SEISMIC DESIGN CATEGORY:	D
BASIC SEISMIC FORCE-RESISTING SYSTEM:	WOOD SHEAR WALLS
DESIGN BASE SHEAR:	Cs*W
SEISMIC RESPONSE COEFFICIENT, Cs:	0.154
RESPONSE MODIFICATION COEFFICIENT, R:	6.5
ANALYSIS PROCEDURE USED:	EQUIVALENT LATERAL FORCE

SOIL

ALLOWABLE SOIL BEARING PRESSURE:	1500 PSF (ASSUMED)
SOIL REPORT BY:	NOT PROVIDED
SOIL REPORT #:	N/A
SOIL REPORT DATE:	N/A
SOIL FROST DEPTH:	30 INCHES

Seismic Calculations

Earthquake Loads-Site Ground Motion

I=	1	h_n=	13.5 ft.	(Building Height)
R=	6.5	C_t=	0.02	
S_s=	1.5	x=	0.75	
S_1=	0.6			
Site Class=	D			

F_a=	1.00	
S_{MS}=	1.500	S_{MS}= F_a*S_S
S_{DS}=	1.000	S_{DS}= 2*S_{MS}/3
F_v=	1.50	
S_{M1}=	0.900	S_{M1}= F_v*S_1
S_{D1}=	0.600	S_{D1}= 2*S_{M1}/3

Earthquake Loads-Minimum Design Lateral Force

C_s=	0.1538		
C_s=	0.6553	T=	0.141
C_s=	0.044		
		ASD Load Factor =	0.7
USE		Rho =	1.3
C_s= 0.1538			
V=C_S*W		**V = ASD Load Factor*Rho*Cs*W =**	**0.14 *W**

Dead Load Effect

0.2*S_{DS}=	0.200
	(+/-) 0.2*S_{DS}*D

Seismic Design Category

SDS => D

SD1 => D

Wind Calculations

Risk Category =	II	
Basic Wind Speed V =	115	mph
Exposue Category =	C	
Topographic Factor Kzt =	1	
ASD Load Factor =	0.6	
Side-to-Side Dim =	20	ft
Front-to-Back Dim =	20	ft
Roof Angle =	45	degrees
Ridge Height =	19	ft
Eave Height =	8	ft
Mean Roof Height =	13.5	ft
Ht & Exposure Coeff λ =	1.21	
10% of least horiz dim =	2	ft
40% of mean roof ht =	5.4	ft
4% of least horiz dim =	0.8	ft
Zone a =	3	ft

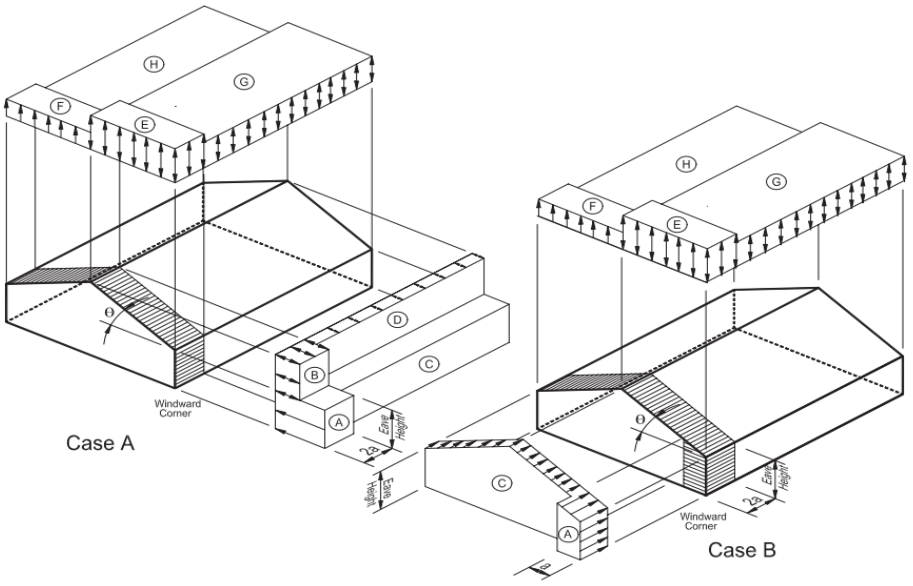
	area (sf)	force (lb)	min force (lb)	max total force (lb)	equiv press (psf)
Case 1A:					
Area A =	48	1133	768	6288	16.5
Area B =	66	1063	528		
Area C =	112	2106	1792		
Area D =	154	1987	1232		
Case 1B:					
Area A =	41	851	648	4320	16.0
Area C =	230	3190	3672		
Case 2A:					
Area A =	48	1133	768	6288	16.5
Area B =	66	1063	528		
Area C =	112	2106	1792		
Area D =	154	1987	1232		
Case 2B:					
Area A =	41	0	648	4320	16.0
Area C =	230	0	3672		

Maximum Equivalent Pressure ps30 = 16.5 psf

Design Pressure ps = λ*Kzt*PS30*ASD Load Factor = 12.0 psf

MAIN WIND FORCE RESISTING SYSTEM, p_{s30} (Exposure B at h=30 ft., Kzt =1.0, with Iw = 1.0) (psf)

BASIC			ZONES									
WIND	ROOF											
SPEED	ANGLE	LOAD	Horizontal Pressures				Vertical Pressures				Overhangs	
(mph)	(degrees)	CASE	A	B	C	D	E	F	G	H	E_{OH}	G_{OH}
115	45	1	23.6	16.1	18.8	12.9	1.8	-14.3	0.6	-12.3	-8.3	-9.5
		2	23.6	16.1	18.8	12.9	9.1	-7.1	7.9	-5.0	-8.3	-9.5
	0	1	21.0	-10.9	13.9	-6.5	-25.2	-14.3	-17.5	-11.1	-35.3	-27.6
		--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0



LATERAL ANALYSIS

Side-to-Side Dim:	20	ft		
Front-to-Back Dim:	20	ft	Height	
Roof Trib:	12	ft	13.5	ft
Floor Trib:		ft		ft
Floor Trib:		ft		ft
Floor Trib:		ft		ft
Roof Seismic DL:	10	psf		
Floor Seismic DL:		psf		
Wall Seismic DL:	10	psf		

Seismic: V = 0.14 *W

F-front-to-back:	V		W	WxHx	Cvx	Fx
Roof	1232	lb	8800	118800	1.00	1232
Floor	0	lb	0	0	0.00	0
Floor	0	lb	0	0	0.00	0
Floor	0	lb	0	0	0.00	0
	1232		8800	118800		1232
F-side-to-side:						
Roof	1232	lb	8800	118800	1.00	1232
Floor	0	lb	0	0	0.00	0
Floor	0	lb	0	0	0.00	0
Floor	0	lb	0	0	0.00	0
	1232		8800	118800		1232

Wind: P = 12.01 psf

F-front-to-back:		
Roof	2883	lb
Floor	0	lb
Floor	0	lb
Floor	0	lb
F-side-to-side:		
Roof	2883	lb
Floor	0	lb
Floor	0	lb
Floor	0	lb

Use for Design:

F-front-to-back:				
Roof	2883	lb	**Wind Governs**	1.4
Floor	0	lb		1
Floor	0	lb		1
Floor	0	lb		1
F-side-to-side:				
Roof	2883	lb	**Wind Governs**	1.4
Floor	0	lb		1
Floor	0	lb		1
Floor	0	lb		1

SW capacities (plf):

	seismic	wind
SW-1	240	336
SW-2	350	490
SW-3	450	630
SW-4	585	819
SW-5	700	980
SW-6	900	1260

Hold Down capacities (lb):

LSTHD8	1610	MST37	1725
STHD10	2175	MST48	3215
STHD14	3500	MST60	5240
HD5B	4505	MST72	6730
HD7B	6645	(2) MST60	10480
HD9B	9920	(2) MST72	13460
HD12	12665		

SHEAR WALLS

Resisting DL: 10 psf

ROOF

Front-to-Back SW:	Line 1	Line 2	Line 3	Line 4	Line 5	Line 6	Line 7	Line 8	Line 9	Line 10
SW Height (ft):	8	8								
SW Trib (ft):	10	10								
SW Forces:	1442	1442	0	0	0	0	0	0	0	0
Total SW Length (ft):	8	15	0	0	0	0	0	0	0	0
Shear (lb/ft):	180	96	0	0	0	0	0	0	0	0
Uplift (lb):	1442	769	0	0	0	0	0	0	0	0
SW Length (ft):	16	15								
Sum Perf Sgmts (ft):	8	15								
Area Openings (sf):	32									
Co:	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:	**SW-1**	**SW-1**								
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1802	769	0	0	0	0	0	0	0	0
Hold Down:	**STHD10**	**NONE**								
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1442	769	0	0	0	0	0	0	0	0
Hold Down:										
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1442	769	0	0	0	0	0	0	0	0
Hold Down:										
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1442	769	0	0	0	0	0	0	0	0
Hold Down:										
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1442	769	0	0	0	0	0	0	0	0
Hold Down:										

ROOF

Side-to-Side SW:	Line A	Line B	Line C	Line D	Line E	Line F	Line G	Line H	Line J	Line K
SW Height (ft):	8	8								
SW Trib (ft):	10	10								
SW Forces:	1442	1442	0	0	0	0	0	0	0	0
Total SW Length (ft):	6	20	0	0	0	0	0	0	0	0
Shear (lb/ft):	240	72	0	0	0	0	0	0	0	0
Uplift (lb):	1922	577	0	0	0	0	0	0	0	0
SW Length (ft):	6	20								
Sum Perf Sgmts (ft):	6	20								
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:	**SW-1**	**SW-1**								
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1922	577	0	0	0	0	0	0	0	0
Hold Down:	**STHD10**	**NONE**								
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1922	577	0	0	0	0	0	0	0	0
Hold Down:										
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1922	577	0	0	0	0	0	0	0	0
Hold Down:										
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1922	577	0	0	0	0	0	0	0	0
Hold Down:										
SW Length (ft):										
Sum Perf Sgmts (ft):										
Area Openings (sf):										
Co:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SW Designation:										
Trib DL (ft):										
2/3 resisting DL (lb):	0	0	0	0	0	0	0	0	0	0
Net Uplift (lb):	1922	577	0	0	0	0	0	0	0	0
Hold Down:										

ROOF FRAMING

Roof DL: 15 psf
Roof LL: 30 psf

FLOOR FRAMING

Floor DL: 15 psf
Floor LL: 40 psf

	span (ft)	roof trib (ft)	point load (lb)	equiv load (plf)	reaction	selection	post	footing
RB-1	4	12		541.2	1082	**(2) 2x8**	(1) 2x4	10
RB-2				0	0		(1) 2x4	0
RB-3				0	0		(1) 2x4	0
RB-4				0	0		(1) 2x4	0
RB-5				0	0		(1) 2x4	0
RB-6				0	0		(1) 2x4	0
RB-7				0	0		(1) 2x4	0
RB-8				0	0		(1) 2x4	0
RB-9				0	0		(1) 2x4	0
RB-10				0	0		(1) 2x4	0
RB-11				0	0		(1) 2x4	0
RB-12				0	0		(1) 2x4	0

	span (ft)	roof trib (ft)	floor trib (ft)	point load (lb)	equiv load (plf)	reaction	selection	post	footing
FB-1	15		1.33		73.15	549	**9-1/2 TJI 210**	(1) 2x4	7
FB-2	8	4	8		620.4	2482	**3-1/2x9-1/2 LVL**	(2) 2x4	15
FB-3	3	4	10		730.4	1096	**(2) 2x8**	(1) 2x4	10
FB-4	8	12	4		761	3045	**3-1/2x9-1/2 LVL**	(2) 2x4	17
FB-5					0	0		(1) 2x4	0
FB-6					0	0		(1) 2x4	0
FB-7					0	0		(1) 2x4	0
FB-8					0	0		(1) 2x4	0
FB-9					0	0		(1) 2x4	0
FB-10					0	0		(1) 2x4	0
FB-11					0	0		(1) 2x4	0
FB-12					0	0		(1) 2x4	0

ATTACHMENT D – ZONING STANDARDS

21A.24.070 – R-1-5,000 ZONING DISTRICT

UNDERLYING ZONING STANDARDS	PROPOSED	COMPLIES ?
MINIMUM LOT AREA: 5,000 square feet	The subject property is approximately 6,216 square feet in size.	**Yes**
MINIMUM LOT WIDTH: 50 feet	The subject property is approximately 50 feet in width.	**Yes**
MAXIMUM BUILDING HEIGHT:	The proposed ADU is approximately nineteen feet (19') in height which is the same height as the primary dwelling. ADU structures may be built to the same height as a primary dwelling but cannot exceed twenty four feet (24') in height.	**Yes**
MINIMUM YARD REQUIREMENTS: • Side Yard: 4 feet • Rear Yard: 4 feet • Distance from residences: 10 feet	The primary dwelling meets the required setbacks and the proposed detached garage/ADU building will be ten feet (10') from the eastern side and rear property lines.	**Yes**
MAXIMUM BUILDING COVERAGE: 40% of total lot size	The proposed ADU building has a footprint of 405 square feet and the primary dwelling has a footprint of approximately 820 square feet. This is approximately 1,225 square feet or 19.7% of the total lot size.	**Yes**

21A.40.200 – ACCESSORY DWELLING UNITS:

ADU STANDARDS	PROPOSED	COMPLIES ?
SIZE: ADU footprint shall not exceed **650 square feet.**	The proposed footprint of the detached building is 405 square feet.	**Yes**
BULK, HEIGHT AND YARD: 1) Accessory building shall comply with underlying bulk, height and yard requirements. 2) Accessory building may not be any larger than 50% of the footprint of the main dwelling.	1) The proposed building meets all height and setback requirements. 2) The proposed building is 405 square feet in footprint and the main dwelling has a footprint of approximately 820 square feet, which is 49.4% of the main dwelling.	**Yes**

ENTRANCE LOCATIONS: The entrance to an ADU attached to a primary building or structure shall be located: 2) Facing a side or rear property line provided the entrance is located a minimum of ten feet (10') from the side or rear property line.	The proposed entrance to the ADU is located on the western side of the proposed building, which faces the interior of the subject property's backyard.	**Yes**
REQUIREMENTS FOR WINDOWS: 1) Windows facing the side or rear property lines within 10' of the property lines must use clerestories, skylights, or obscured glazing. 2) Windows shall be of a similar dimension as those used on the primary dwelling. **3)** Windows on the ground floor may be retained if compliant with Building and Fire Codes. Windows on the second floor must be brought into compliance with this section.	1) The proposed building is not located within ten feet (10') of the side or rear property lines; obscured glazing is not required. 2) The windows proposed on the detached building are similar in size and style as those utilized on the primary dwelling. 3) Building review did not express a concern over the windows on the ground floor; all work will be required to meet adopted standards, codes, and ordinances.	**Yes**
BALCONIES AND DECKS: 1) Shall not exceed 80 square feet in size. 2) Shall not be closer than 10 feet to a side or rear property line, unless adjacent to an alley. **3)** No rooftop decks permitted.	No balconies or decks are proposed as part of this ADU request.	**N/A**
PARKING: Minimum of **one parking space** on site *This requirement may be waived if there is legal on-street parking along the street frontage of the property OR if the property is within ¼ mile of a transit stop.	Legal on-street parking is available and the subject property is within a quarter-mile of a bus route. Additionally, the proposed detached garage has space for one off-street parking space and the driveway can supply additional parking space.	**Yes**

ATTACHMENT E – CONDITIONAL USE STANDARDS

21A.54.080 Standards for Conditional Use

Approval Standards: A conditional use shall be approved unless the planning commission, or in the case of administrative conditional uses, the planning director or designee, concludes that the following standards cannot be met:

1. **The use complies with applicable provisions of this title;**

Analysis: The proposed use is allowed in the underlying zone. The proposed design of the accessory unit is compliant with the ADU standards set forth in section 21A.40.200.

Finding: The proposed use complies with applicable provisions of this title.

2. **The use is compatible, or with conditions of approval can be made compatible, with surrounding uses;**

Analysis: The applicants are looking to establish an attatched ADU in an established single family neighborhood. ADUs are permitted as conditional uses; the homeowner has proposed the construction of a new detached garage to house the proposed accessory dwelling unit. The lot is deeper than it is wide and the location of the proposed ADU minimizes any anticipated impact on the neighboring homes to the east and west of the subject property.

Finding: The use is compatible with surrounding uses.

3. **The use is consistent with applicable adopted city planning policies, documents, and master plans; and**

Analysis:

The purpose of accessory dwelling units are to:

1) Create new housing units while respecting the appearance and scale of single-family residential development;
2) Provide more housing choices in residential districts;
3) Allow more efficient use of existing housing stock, public infrastructure, and the embodied energy contained within existing structures;
4) Provide housing options for family caregivers, adult children, aging parents, and families seeking smaller households;
5) Offer a means for residents, particularly seniors, single parents, and families with grown children, to remain in their homes and neighborhoods, and obtain extra income, security, companionship, and services;
6) Broaden the range of affordable housing throughout the City;
7) Support sustainability objectives by increasing housing close to jobs, schools, and services, thereby reducing greenhouse gas emissions and fossil fuel consumption;
8) Support transit oriented development and reduce auto usage by increasing density near transit; and
9) Support the economic viability of historic properties and the City's historic preservation goals by allowing accessory dwellings in historic structures.

The proposal is also consistent with the goals and policies outlined in *Growing SLC: A Five Year Housing Plan* which aims to increase housing options, promote diverse housing stock, and allow for additional units while minimizing neighborhood impacts.

Finding: The proposed use is consistent with applicable adopted city planning policies, documents, and master plans.

4. **The anticipated detrimental effects of a proposed use can be mitigated by the imposition of reasonable conditions (refer to Detrimental Impacts Chart below for details).**

21a.54.080B Detrimental Effects Determination
In analyzing the anticipated detrimental effects of a proposed use, the Planning Commission shall determine compliance with each of the following:

Criteria	Finding	Rationale
1. This title specifically authorizes the use where it is located	**Complies**	Accessory Dwelling Units are permitted as conditional uses in the R-1-5,000 Zoning District.
2. The use is consistent with applicable policies set forth in adopted citywide, community, and small area master plans and future land use maps	**Complies**	The use is permitted as a conditional use in the underlying zoning district and supports the goal of increasing housing options found in *Growing Salt Lake*. The ADU is not altering the primary dwelling unit and is a residential use in a residential neighborhood.
3. The use is well-suited to the character of the site, and adjacent uses as shown by an analysis of the intensity, size, and scale of the use compared to existing uses in the surrounding area	**Complies**	The proposed building is clad in similar building materials to those found on the primary dwelling. The homes along the block face vary in height; multiple buildings are taller than the proposed structure including the buildings on the lot directly north of the subject property.
4. The mass, scale, style, design, and architectural detailing of the surrounding structures as they relate to the proposed have been considered	**Complies**	The proposed building is clad in similar building materials to those found on the primary dwelling. The homes along the block face vary in height; multiple buildings are taller than the proposed structure including the buildings on the lot directly north of the subject property.
5. Access points and driveways are designed to minimize grading of natural topography, direct vehicular traffic onto major streets, and not impede traffic flows	**Complies**	The proposed building will be sited on an existing driveway and minimal grading is anticipated as part of construction.
6. The internal circulation system is designed to mitigate adverse impacts on adjacent property from motorized, non-motorized, and pedestrian traffic	**Complies**	The proposed building will be sited on an existing driveway; no additional points of vehicular access will be made available and the new building will have minimal impact on pedestrian, cycle, or vehicular travel.

7. The site is designed to enable access and circulation for pedestrian and bicycles	**Complies**	The project does not include additional vehicular access points beyond what is already on site; the paved driveway will allow for easy pederstrian and cycle access to the proposed ADU.
8. Access to the site does not unreasonably impact the service level of any abutting or adjacent street	**Complies**	The proposal does not include an additional access point for vehicles and will not impact the service level of surrounding streets.
9. The location and design of off-street parking complies with applicable standards of this code	**Complies**	Off-street parking will be provided in the proposed detached garage building and on the existing driveway.
10. Utility capacity is sufficient to support the use at normal service levels	**Complies**	No concerns have been presented following Public Utility review.
11. The use is appropriately screened, buffered, or separated from adjoining dissimilar uses to mitigate potential use conflicts	**Complies**	The proposed building is located in the rear yard of the subject property and will be visible from the street from some areas but other structures on the same block face are taller than the proposed building. The proposed use is the same as the uses on the adjacent properties.
12. The use meets City sustainability plans, does not significantly impact the quality of surrounding air and water, encroach into a river or stream, or introduce any hazard or environmental damage to any adjacent property, including cigarette smoke	**Complies**	The proposed use is similar to the existing uses along the same street and in the same area. No detrimental effects on air quality, noise levels, or environmental quality are expected.
13. The hours of operation and delivery of the use are compatible with surrounding uses	N/A	The proposed accessory dwelling unit is not a commercial business and does not have hours of operation.
14. Signs and lighting are compatible with, and do not negatively impact surrounding uses	N/A	No signage or lighting is proposed beyond average residential lighting fixtures.
15. The proposed use does not undermine preservation of historic resources and structures	N/A	The proposed ADU is not located within a local, state or national historic district. The accessory building is not a historic structure and the establishment of an ADU does not affect any surrounding historic structures.

Finding: In analyzing the anticipated detrimental effects of the proposed use, Staff finds that with the conditions identified in the analysis, the request complies with the criteria listed above.

ATTACHMENT F – PUBLIC PROCESS & COMMENTS

Public Notice, Meetings, Comments

To date, staff has not received any comments from the Liberty Wells Community Council or members of the public regarding this item.

Notice of the public hearing for the proposal included:

- Early notification mailed October 5, 2021.
- Notification letter sent to Liberty Wells Community Council on October 11, 2021.
- Early notification period expired November 26, 2021.
- Public hearing notice mailed on December 31, 2021.
- Public notice posted on City and State websites and Planning Division list serve on December 31, 2021.
- Public hearing notice sign posted on January 2, 2022.

Public Input:

Staff has not received any public comments to date.

ATTACHMENT G – DEPARTMENT REVIEW COMMENTS

Building: "Building code- Project when application for permit to be review as a new Residence/Garage all current Utah applicable coded imposed. Flood and Soils reports may be required. Manuals J, D and S for HVAC required." – Jason Rogers

Fire: No comments. – Edward Itchon

Public Utilities: "No objections to the proposed conditional use. The applicant will need to submit for a building and utility development permit. Connection, inspection, survey and impact fees will apply including the storm drain impact fee." - Jason Draper

Engineering: "No objections." – Scott Weiler

Transportation: "The parking requirement for the single family residence is two off street parking spaces and the parking requirement for the ADU is one additional off street parking space.

- The parking requirement for the single family residence is satisfied by two tandem parking spaces in the driveway behind the front face of the house. The dimensions of the garage do not meet the dimensional standards for a parking space. It appears that there is a wall 15'6" from the garage door; the minimum vehicle projection (length) for a parking space is 17'6" per Table 21A.44.020.
- The parking requirement for the ADU may be waived if (1) Legally located on street parking is available along the street frontage of the subject property; or (2) The subject property is located within one-quarter (1/4) mile of transit stop. The subject property satisfies both criteria for waiving the parking requirement for the ADU, therefore the parking requirement for the ADU may be waived. There are two bus stops on 500 E, one northbound at 1300 S and one southbound just north of Sherman Ave." – Michael Barry