Community Services Department

Planning and Building

DETATCHED ACCESSORY DWELLING ADMINISTRATIVE REVIEW APPLICATION

Community Services Department
Planning and Building
1001 E. Ninth St., Bldg. A
Reno, NV 89520

Telephone: 775.328.6100

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information	**Staff Assigned Case No.:**
Project Name: FROST RESIDENCE ADDITION	
Project Description: ADD GARAGE / MOTHER-IN-LAW QUARTERS TO EXISTING HOME	
Project Address: 18200 LAKE VISTA ROAD	
Project Area (acres or square feet): 3.76 AC.	
Project Location (with point of reference to major cross streets **AND** area locator): LAKE VISTA ROAD OFF WILLIAM BRENT ROAD	

Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
055-081-83	3.76		

Section(s)/Township/Range:

Indicate any previous Washoe County approvals associated with this application:
Case No.(s).

Applicant Information (attach additional sheets if necessary)

Property Owner:		**Professional Consultant:**	
Name: PAUL FROST		Name: RICHARD LAPRAIRIE	
Address: 18200 LAKE VISTA RD		Address: 1595 ASHBURY	
WASHOE VALLEY	Zip: 89704	RENO	Zip: 89523
Phone: 775-843-7285	Fax:	Phone: 775-846-1980	Fax:
Email: FTSNOWMAN@@@@YAHOO.COM		Email: RICHARDLAPRAIRIE@ME.COM	
Cell:	Other:	Cell:	Other:
Contact Person: PAUL FROST		Contact Person:	
Applicant/Developer:		**Other Persons to be Contacted:**	
Name: SAME AS OWNER		Name:	
Address:		Address:	
	Zip:		Zip:
Phone:	Fax:	Phone:	Fax:
Email:		Email:	
Cell:	Other:	Cell:	Other:
Contact Person:		Contact Person:	

For Office Use Only

Date Received:	Initial:	Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Property Owner Affidavit

Applicant Name: PAUL FROST

The receipt of this application at the time of submittal does not guarantee the application complies with all requirements of the Washoe County Development Code, the Washoe County Master Plan or the applicable area plan, the applicable regulatory zoning, or that the application is deemed complete and will be processed.

STATE OF NEVADA)
)
COUNTY OF WASHOE)

I, PAUL FROST
(please print name)

being duly sworn, depose and say that I am the owner* of the property or properties involved in this application as listed below and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true, and correct to the best of my knowledge and belief. I understand that no assurance or guarantee can be given by members of Planning and Building.

(A separate Affidavit must be provided by each property owner named in the title report.)

Assessor Parcel Number(s): 055-081-83

Printed Name PAUL FROST

Signed Paul Frost

Address 18200 LAKE VISTA RD.

WASHOE VALLEY, NV 89704

Subscribed and sworn to before me this 24 day of April, 2018.

(Notary Stamp)

State of Nevada Carson City County
Notary Public in and for said county and state

My commission expires: Dec. 4, 2018

CLAUDIA CASTILLO
NOTARY PUBLIC
STATE OF NEVADA
No. 07-1325-3 My Appt. Exp. Dec. 4, 2018

*Owner refers to the following: (Please mark appropriate box.)

- ☑ Owner
- ☐ Corporate Officer/Partner (Provide copy of record document indicating authority to sign.)
- ☐ Power of Attorney (Provide copy of Power of Attorney.)
- ☐ Owner Agent (Provide notarized letter from property owner giving legal authority to agent.)
- ☐ Property Agent (Provide copy of record document indicating authority to sign.)
- ☐ Letter from Government Agency with Stewardship

Administrative Review Permit Application for a Detached Accessory Dwelling Supplemental Information

(All required information may be separately attached)

This application is for proposals to establish a Detached Accessory Dwelling unit in the Low Density Rural, Medium Density Rural, High Density Rural, and Low Density Suburban regulatory zones. Chapter 110 of the Washoe County Code is commonly known as the Development Code. Specific references to the administrative review permit process for Detached Accessory Dwellings may be found in Article 306, Accessory Uses and Structures, Section 25(i). A Detached Accessory Dwelling is also referred to as a "secondary dwelling" in this application. The "main dwelling" is the original or larger dwelling on the property.

1. What is the size (square footage) of the main dwelling unit or proposed main dwelling unit (exclude size of garage)?

   2776 FT²

2. What is the size of the detached accessory dwelling unit or proposed detached accessory dwelling unit (exclude size of garage)?

   824 FT²

3. How are you planning to integrate both the main dwelling and secondary dwelling to provide architectural compatibility and a sense of project integration of the two structures?

   SIMILAR ARCHITECTURE AND MATERIALS

4. How are you planning to provide water and wastewater disposal (sewer or septic) to the secondary dwelling unit?

   WATER FROM EXISTING WELL, SEWER USING A SEPERATE SEPTIC TANK AND TYING INTO EXISTING LEACH FIELD (LEACH FIELD IS SIZED APPROPRIETLY)

5. What additional roadway, driveway, or access improvements are you planning?

NEW DRIVEWAY TO ADDITIONAL GARAGE, TYING INTO EXISTING CIRCULAR DRIVEWAY.

6. A parking space is required. How are you providing the additional parking?

INTERIOR GARAGE AND DRIVEWAY (NEW) IN FRONT OF GARAGE.

7. When do you plan to complete construction of the secondary dwelling and obtain a certificate of occupancy?

ASAP, PENDING PERMIT, DECEMBER 2018

8. What will you do to minimize any potential negative impacts (e.g. increased lighting, obstruction of views, removal of existing vegetation, etc.) your project may have on adjacent properties?

BEING LARGER PARCELS, THERE IS MINIMAL NEGATIVE IMPACTS TO NEIGHBORS, ADDITIONAL LANDSCAPE INCLUDING TREES WILL BE INSTALLED.

9. Is the subject property part of an active Home Owners Association (HOA) or Architectural Control Committee? If yes, please include the name and contact information for the applicable board.

YES. DREW PLUMPTON, 775-790-0044
THE HOA ARCHITECTURAL COMMITTEE HAS APPROVED THE CONSTRUCTION PLANS.

10. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that may prohibit a detached accessory dwelling on your property?

☐ Yes	☑ No	If yes, please attach a copy.

11. Only one accessory dwelling unit, whether attached or detached, is allowed per parcel. Please verify that an accessory dwelling (i.e. secondary dwelling) currently does not exist on the subject property.

THERE ARE NO OTHER DWELLINGS ON THE PROPERTY

12. List the age and size of the unit If you plan to utilize a manufactured or modular home as the secondary dwelling. (Note: manufactured or modular homes must be permanently affixed and converted to real property.)

N/A, CONVENTIONAL FRAMING WILL BE USED

13. List who the service provider will be for the following utilities:

a. Sewer Service	SEPTIC
b. Electrical Service	NV ENERGY
c. Solid Waste Disposal Service	WASTE MANAGEMENT
d. Water Service	WELL (DOMESTIC)

Property Tax Reminder Notice

WASHOE COUNTY
PO BOX 30039
RENO, NV 89520-3039
775-328-2510

PIN: 05508183
AIN:

Balance Good Through:	**04/26/2018**
Current Year Balance:	**$0.00**
Prior Year(s) Balance: (see below for details)	**$0.00**
Total Due:	**$0.00**

AUTO
:897042:
PAUL M & LISA M FROST
18200 LAKE VISTA RD
WASHOE VALLEY NV 89704

Description:

Situs: 18200 LAKE VISTA RD

This is a courtesy notice. If you have an impound account through your lender or are not sure if you have an impound account and need more information, please contact your lender directly. Please submit payment for the remaining amount(s) according to the due dates shown. Always include your PIN number with your payment. Please visit our website: www.washoecounty.us/treas

Current Charges

PIN	Year	Bill Number	Inst	Due Date	Charges	Interest	Pen/Fees	Paid	Balance
05508183	2017	2017138094	1	08/21/2017	1,053.38	0.00	0.00	1,053.38	0.00
05508183	2017		2	10/02/2017	1,053.38	0.00	0.00	1,053.38	0.00
05508183	2017		3	01/01/2018	1,053.37	0.00	0.00	1,053.37	0.00
05508183	2017		4	03/05/2018	1,053.37	0.00	0.00	1,053.37	0.00
Current Year Totals					4,213.50	0.00	0.00	4,213.50	0.00

Prior Years

PIN	Year	Bill Number	Charges	Interest	Pen/Fees	Paid	Balance
Prior Years Total							

Permit #_____

Washoe County

Department of Building & Safety

1001 E. Ninth Street
P.O. Box 11130
Reno, NV 89520-0027
Phone (775) 328-2020
FAX (775) 328-6132 or FAX (775) 325-8016
www.washoecounty.us/bldgsafety

BUILDING & SAFETY

RESIDENTIAL/REMODEL BUILDING PERMIT APPLICATION

Parcel Number: 055-81-83 **Address:** 18200 Lake Vista Road Washoe Valley NV

Unit No._____

Owner Information: Owner/Builder Permit? (✔) Yes ( ) No

Name: Paul Frost PE Phone No: (775) 843-7285
Address: 18200 Lake Vista Road Washoe Valley NV

Contractor Information:

General Contractor: Paul Frost PE Contact Name:_____
Address: 18200 Lake Vista Road Washoe Valley NV
Phone : (775) 843-7285 Fax :_____
Nevada License No. :_____ County Business License No.:_____

Design Professional Information:

Architect's Name:_____ Phone No.:_____
Email:_____ Fax No.:_____
Engineer's Name: Richard LaPrairie PE Phone (775) 746-1980
Email: RichardLaPrairie@me.com Fax No.:_____

Person to contact regarding the permit:

Name: Paul Frost PE Phone No.: (775) 843-7285
Email: ftsnowman000@yahoo.com Fax No.:_____

Permit # _____

Project Information: **(Complete Applicable Items)**

Contract Price: To be determined
Total Project Sq. Footage: 2266 sf
New Living Area Sq. Footage: 22 x 44= 968 sf
Remodel Sq. Footage: _____
Current Living Area Sq. Footage: 2644 sf
New Garage Sq. Footage: 1298 sf
Current Garage Sq. Footage: 1632 sf
New Covered Deck and Porch Sq. Footage: _____
New Deck and Porch Sq. Footage: _____
Patio Cover or Sunroom Sq. Footage: _____
Shed Sq. Footage: _____
Fence Lineal Footage: _____

Water Well: Yes ☑ No ○
Septic System: Yes ☑ No ○
Architectural Committee Yes ☑ No ○

Description of Work:

The project will consist of an addition of 2 garages and a living quarters with kitchen and bathroom facilities. Garage 1 will have a 14' plate height, Garage 2 will have a 10' top plate height. The living quarters will have the same floor elevation as the existing structure. Exterior walls will be 2x6 with R19 insulation. Interior walls will be 2x4.

Applicant (print) Richard LaPrairie PE **Date:** April 18, 2018

Signature Richard G LaPrairie

FOR OFFICE USE ONLY

RTC:
New Single Family Home □ Accessory Dwelling (second kitchen on site) □ N/A □

Park Tax Determination:

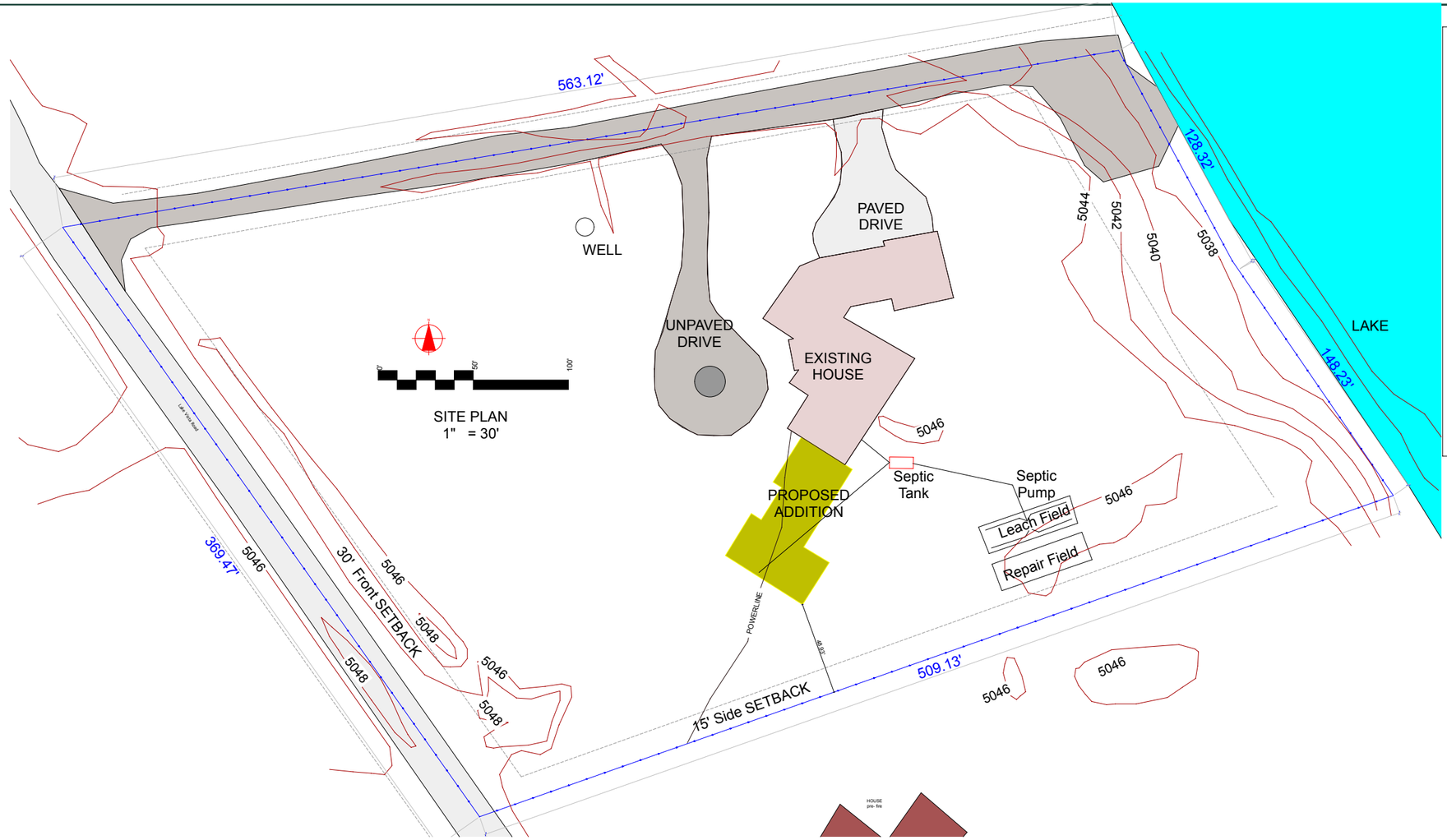
New Dwelling on Vacant Lot □ Replace Existing Dwelling Built Prior To 1974 □ N/A □

Building Code Information:

Edition of Code: _____ Building Code used: _____

Type of Construction: Wood Framing ☑ ~ Steel Framing □ Occupancy Use _____

Occupancy Group: Single Family Home ☑ ~ Townhouse □ ~ Duplex □



PROJECT SUMMARY
New Addition
18200 Lake Vista Road

APN 055-081-83
Acerage 3.76

Wahoe Valley NV 89704

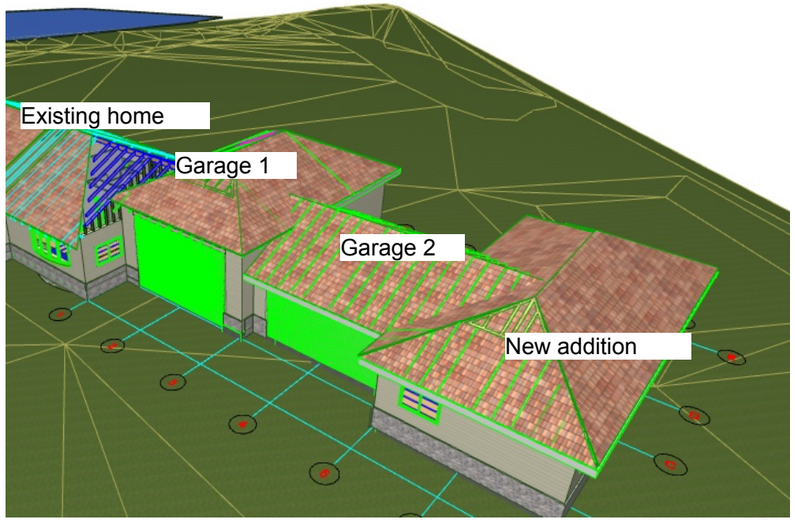
Plans and calculations bases on original drawings for home constructed in 2003. Roof slope 6/16. New construction to match original construction.

Garage No 1. – 24' x 36' (832 ft²)
Garage No 2. – 24' x 22' (497 ft²)
New living Quarters 44 x 22 (843 ft²)

Owner- Paul Frost (775) 843-7285
Ftsnowman000@yahoo.com

Engineer- LMI Engineering (775) 746-1980
RichardLaPrairie@me.com

Well- Yes
Septic- Yes
FEMA Flood Zone **32031C3350G**
Flood Zone X
Zoning HDR

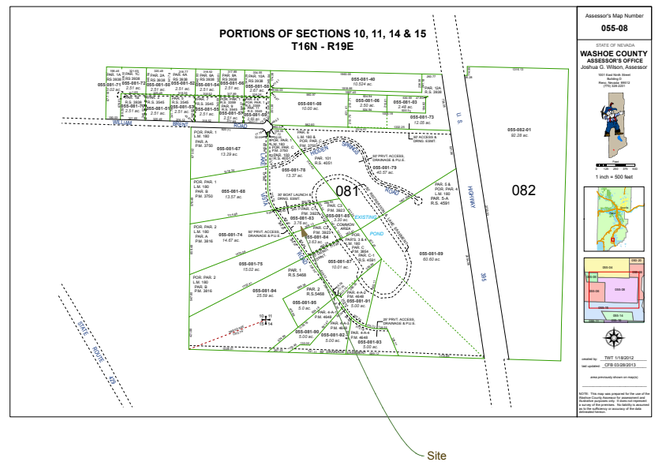


All work must conform to local Codes, City, County, and the

2012 International Residential Code - "IRC"
2012 International Existing Building Code - "IEBC"
2012 International Energy Conservation Code - "IECC"
2012 International Fuel Gas Code - "IFGC"
2012 International Mechanical Code - "IMC"
2012 Uniform Plumbing Code - "UPC"
2012 Uniform Mechanical Code - "UMC"
2011 National Electric Code - "NEC"
And Washoe County Codes

Wind Speed 130 mph Vult
Seismic zone D
Ground Snow load 30 psf
Soil type
Frost depth 24"
Fire hazard Moderate
Flood Zone X

OWNER PAUL FROST (775) 843-8285
CONTRACTOR TBD
ENGINEER- LMI ENGINEERING



LMI ENGINEERING
1595 Ashbury Lane
Reno NV 89523
Phone (775) 746-1980
EMAIL
RichardLaPrairie@me.com

PROFESSIONAL ENGINEER STATE OF NEVADA
RICHARD G. LaPRAIRIE
4-6-18
CIVIL
No. 12970
Exp 12/31/2019

Addition
for Paul Frost
18200 Lake Vista Road
Washoe Valley Nevada
APN 055-081-83

MARK	DATE	DESCRIPTION
4	4/18/18	for Permit
3	2/11/18	for HOA
2	1/01/18	redo elevations
1	12/09/17	for discussion

PROJECT NO: 2450
DRAWN BY: R.G. LaPrairie,PE
CHK'D BY: R.G. LaPrairie,PE

Cover Page/
Site Plan

C-1

SHEET 1

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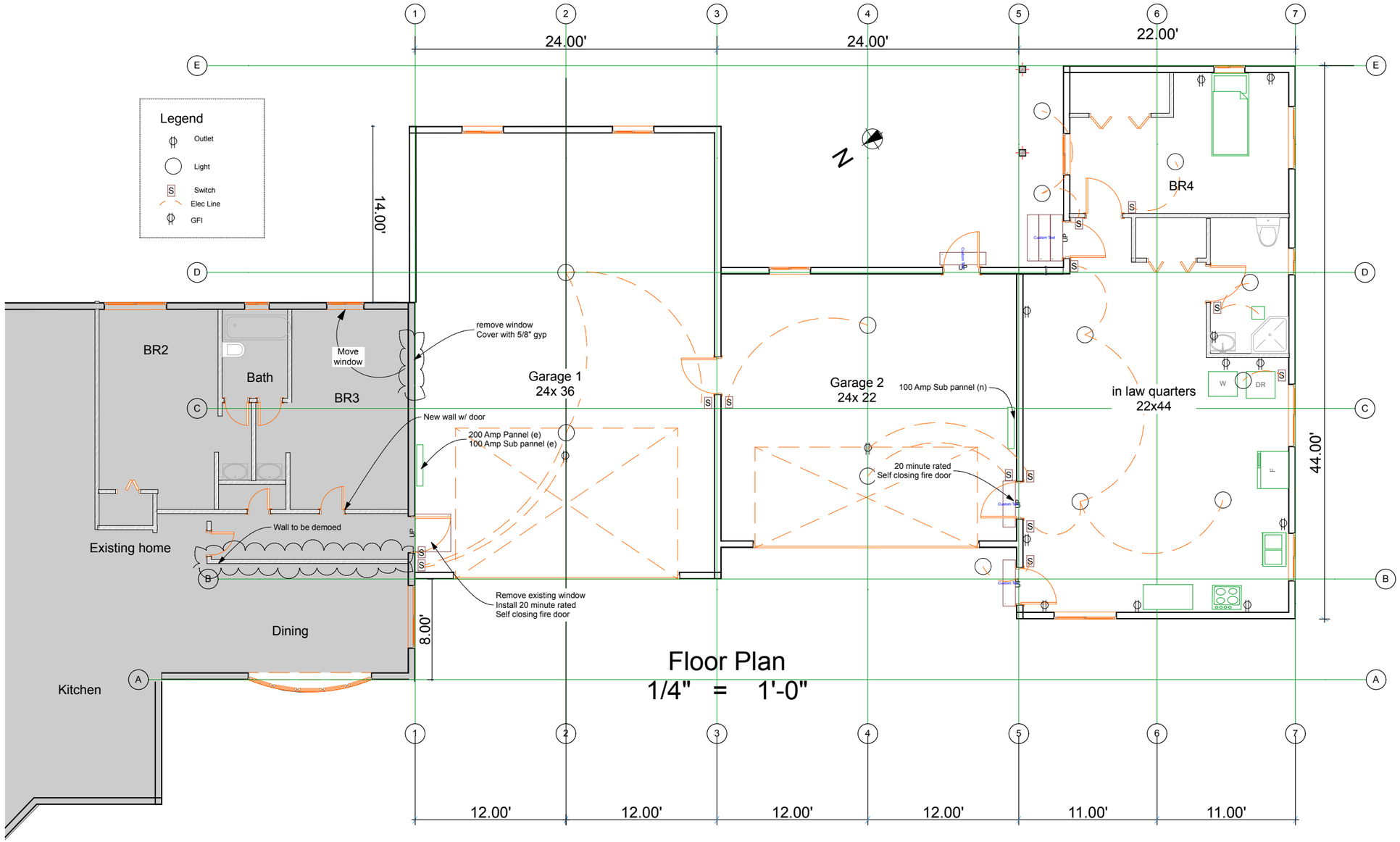

Floor Plan
1/4" = 1'-0"

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Reno NV 89523
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CHK'D BY: R.G. LaPrairie,PE

Floor Plan

C-2

SHEET 2

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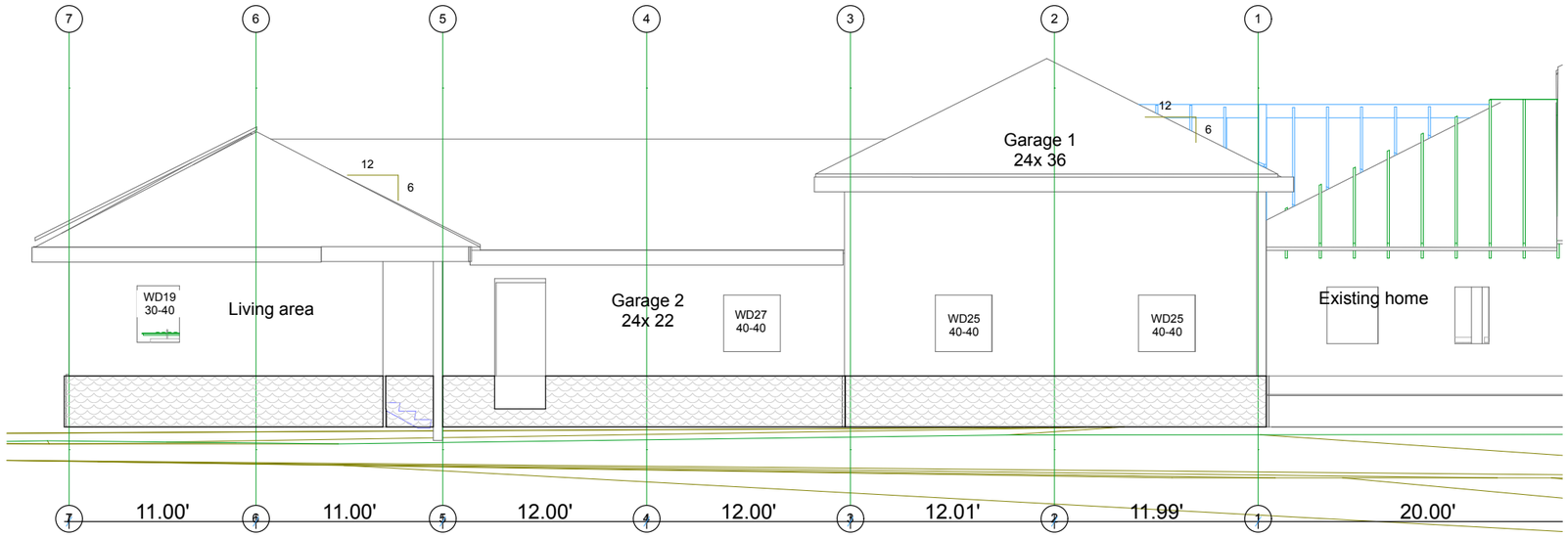
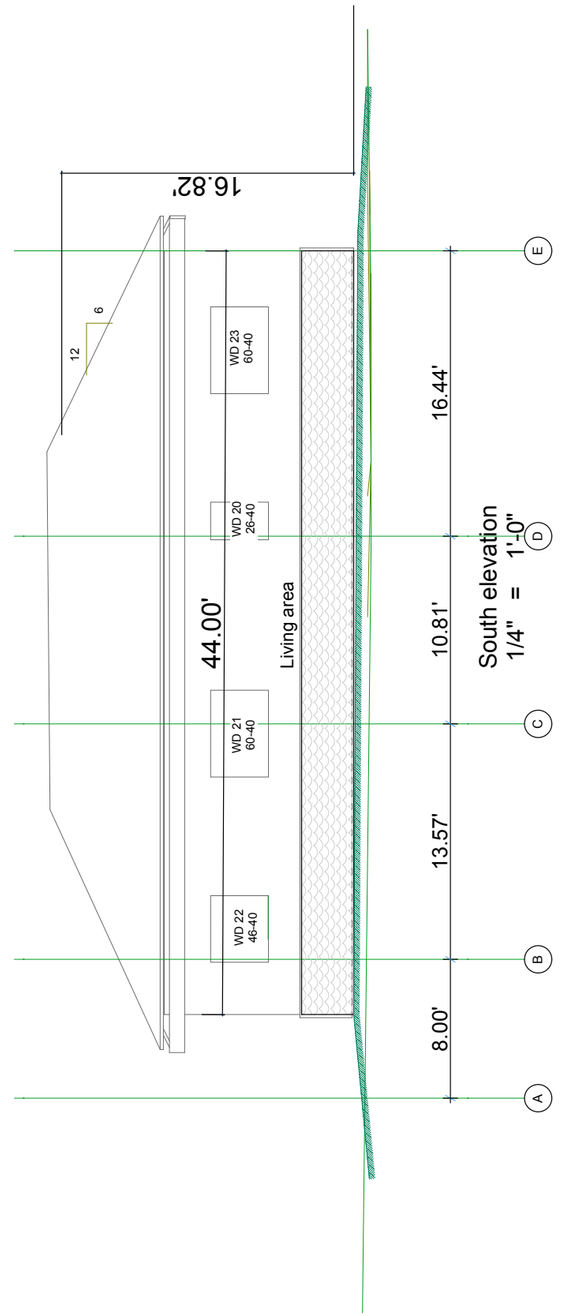
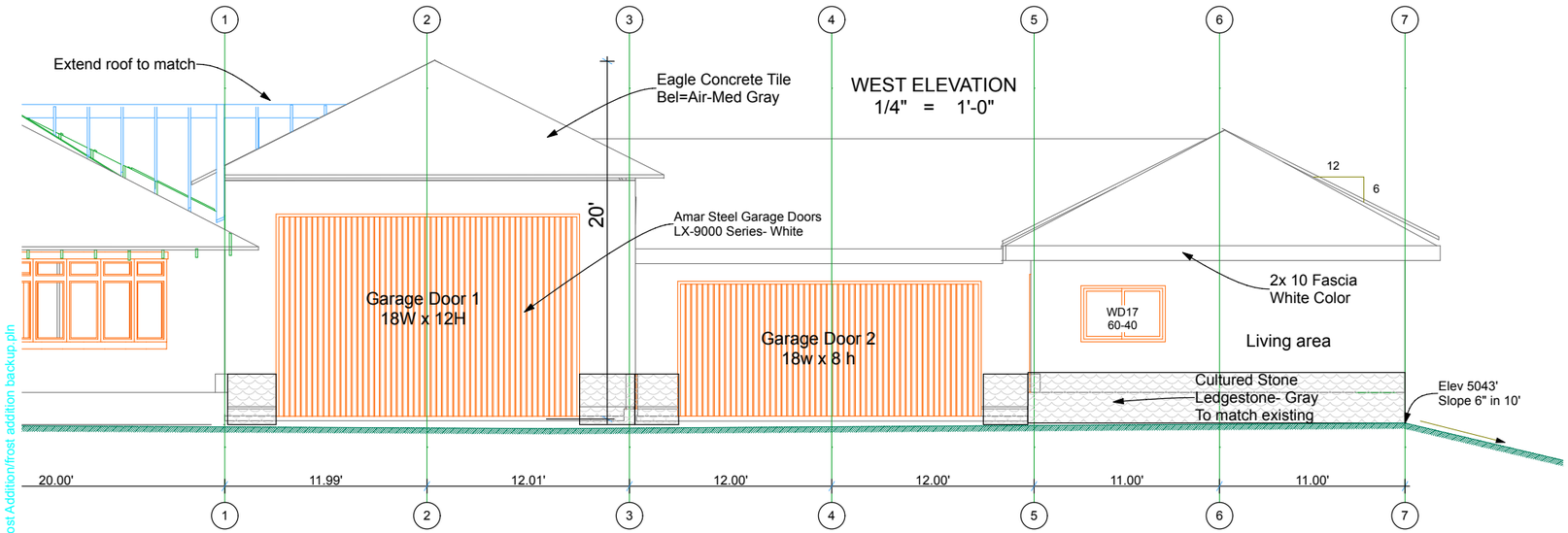


East elevation
1/4" = 1'-0"



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



WEST ELEVATION
1/4" = 1'-0"

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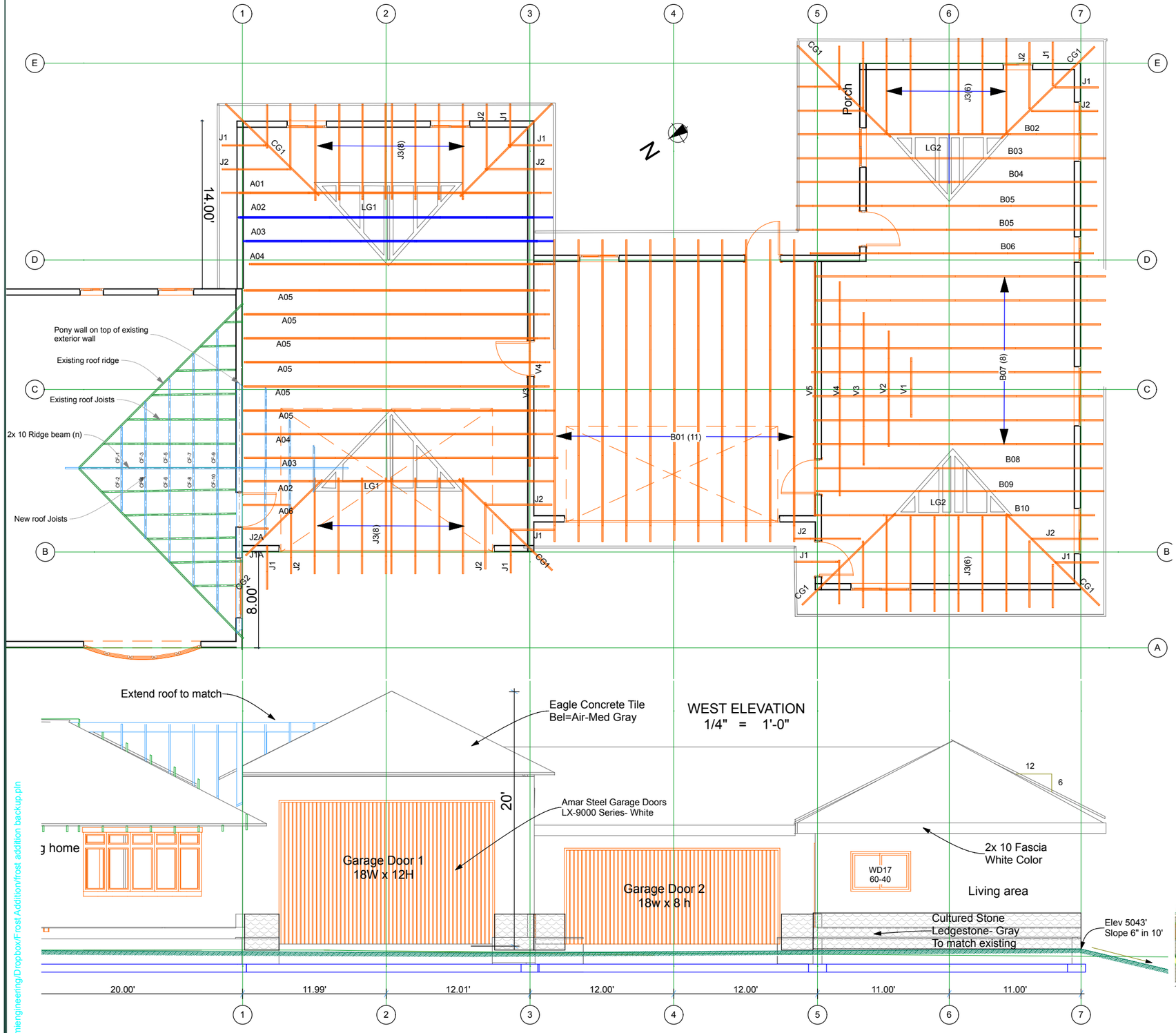
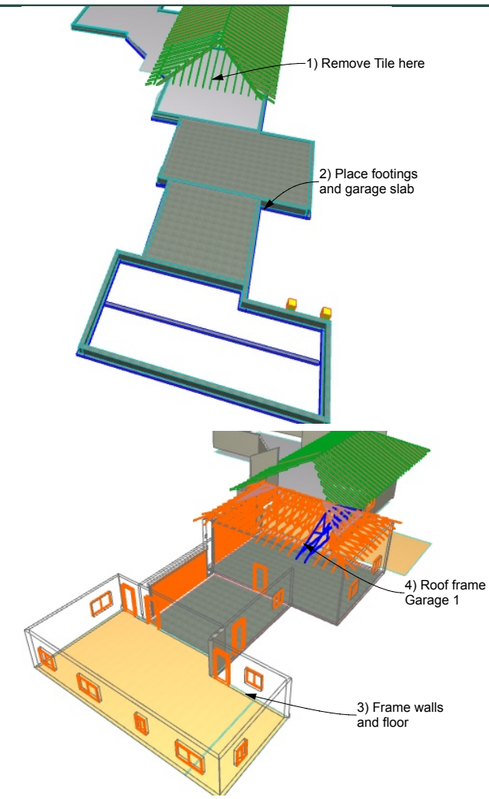
ELEVATIONS

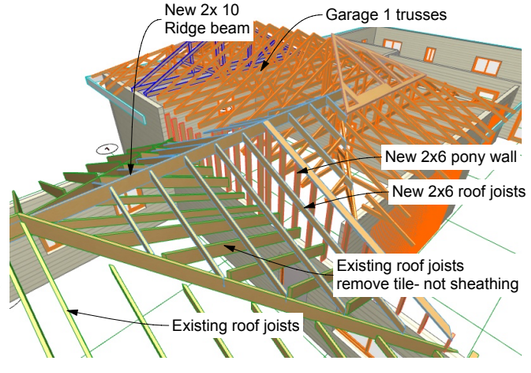
C-3

SHEET 3



WEST ELEVATION
1/4" = 1'-0"





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roof framing

C-4

SHEET 4

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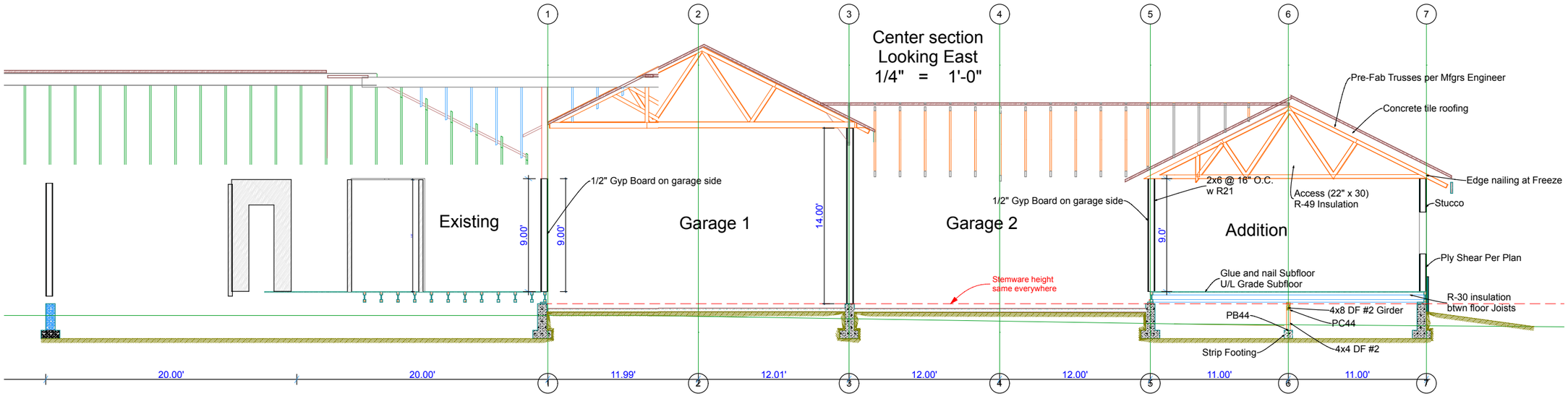

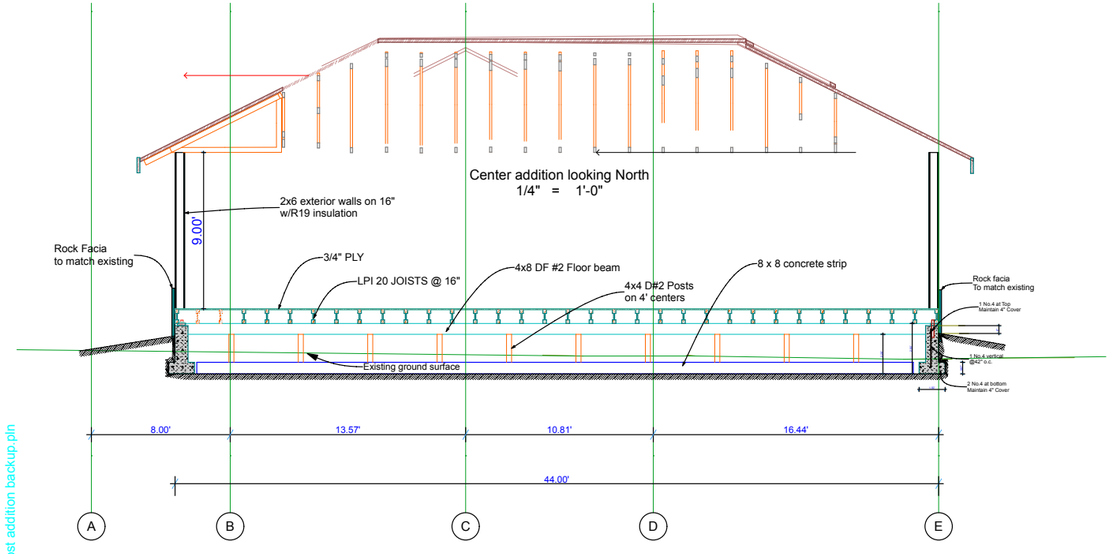

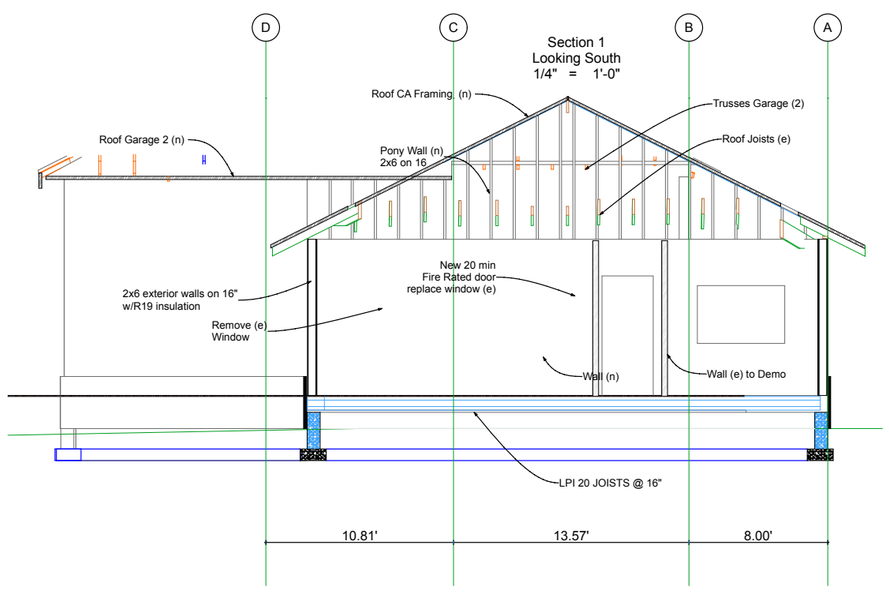

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Sections

C-5

SHEET 5

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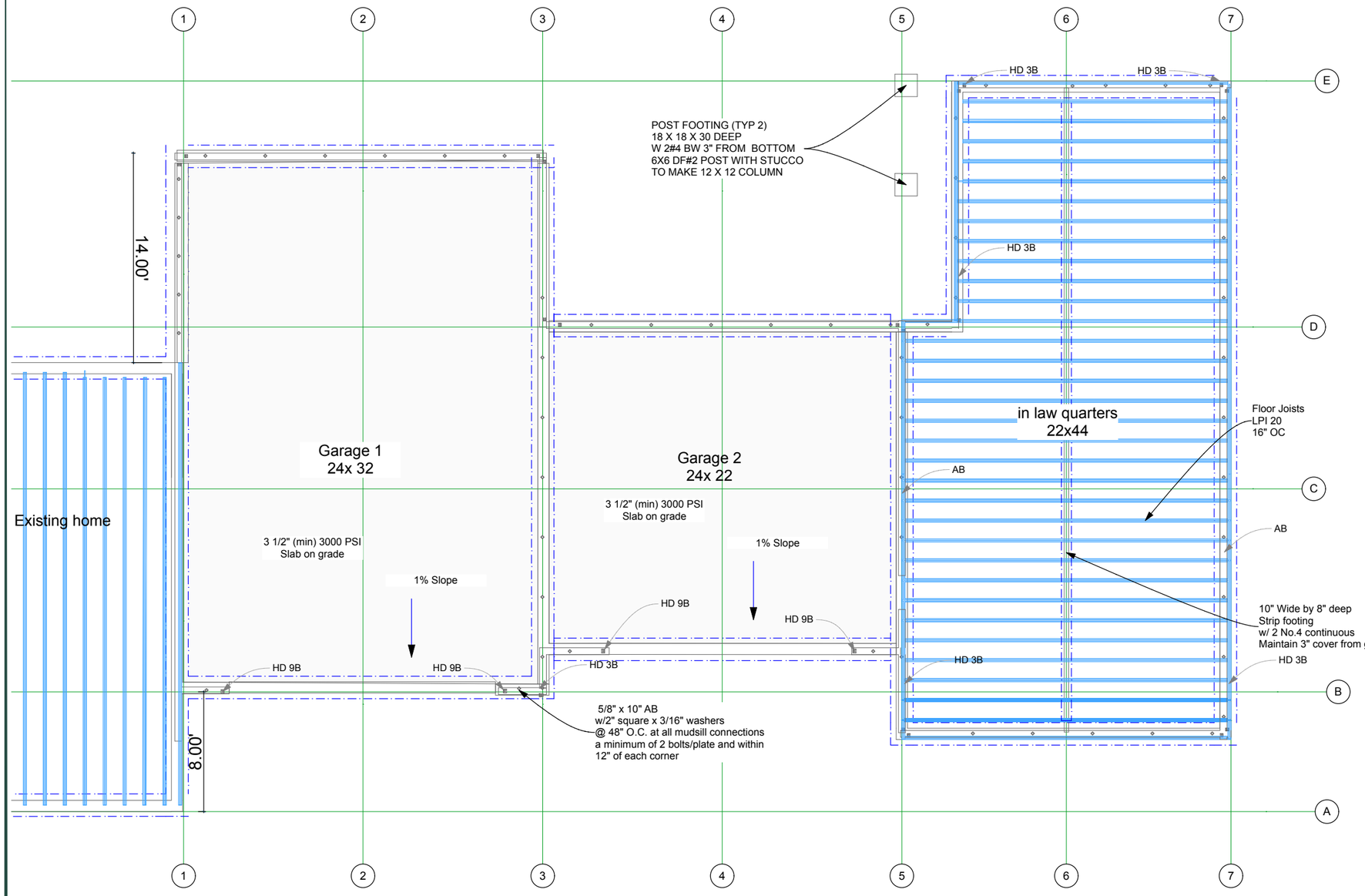

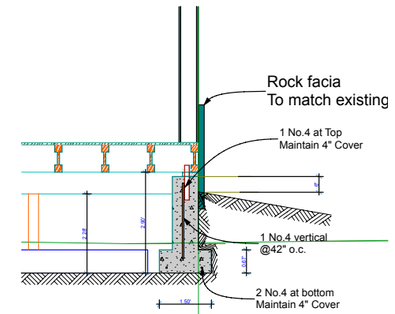

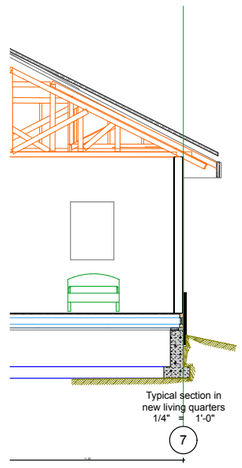

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footings

C-6

SHEET 6

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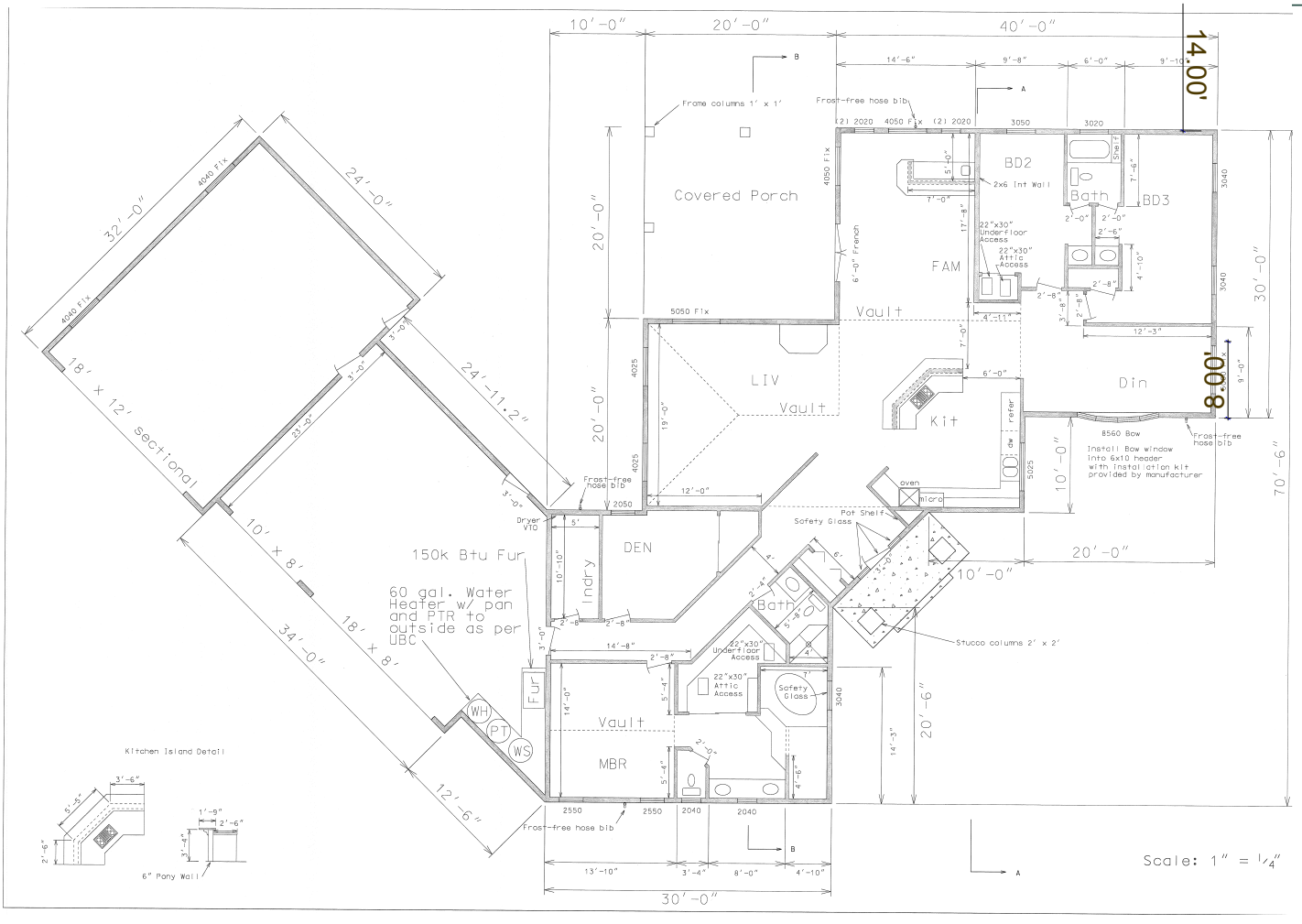

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RICHARD G. LaPRAIRIE 4-6-18 CIVIL
PROFESSIONAL ENGINEER STATE OF NEVADA No. 12970
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DRAWN BY: R.G. LaPrairie,PE
CHK'D BY: R.G. LaPrairie,PE

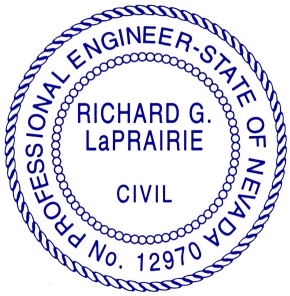
original floor plan

15

SHEET 15

Client: Paul Frost Job No.: 2485 Date: April 18, 2018
Project: Paul Frost Home addition
Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670

STRUCTURAL CALCULATIONS
Paul Frost Addition



EXP 12/31/2019

Project Description

The project will consist of an addition of 2 garages and living quarters with kitchen and bathroom facilities. Garage 1 will have a 14' plate height, Garage 2 will have a 10' top plate height. The living quarters will have the same floor elevation as the existing structure. Exterior walls will be 2x6 with R19 insulation. Interior walls will be 2x4.

The addition will be constructed on the South end of the home and the existing roof tile will be removed and a new roof will be framed on top so no significant additional loading will be added to the structure.

The electric supply line will have to be relocated and the new toilet facilities will be plumbed in to the existing "On site" disposal system.

New construction will be done to closely match the existing home exterior.

Client: Paul Frost Job No.: 2485 Date: April 18, 2018
Project: Paul Frost Home addition
Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670

GENERAL CONSTRUCTION NOTES

GENERAL

1. The scope of this construction notes is limited to the typical low-rise wood structures on concrete footings in the western United States.
2. All work shall conform to the 2012 IBC or the building codes which are currently adopted by the local building department. The local building department is defined as the local government department by which the building permit of the project will be issued.
3. Unless noticed otherwise, allowable stresses method is used for the structural analysis.
4. The Engineer is responsible for the structural items in the plans only. Should any changes be made from the design as detailed in these calculations without written approval from the Engineer then the Engineer assumes no responsibility for the entire structure or any portion thereof. Should the results of the calculations not be fully or properly transferred to the plans, the Engineer assumes no responsibility for the structure.
5. These calculations are based upon a completed structure. Should an unfinished structure be subjected to loads, the Engineer should be consulted for an interim design or if not, will assume no responsibility.
6. The details shown on the drawings are typical. Similar details apply to similar conditions.

SITE WORK

1. Soil bearing pressure shall be determined in accordance with soil report for the project. Wherever soil report is not available, the soil bearing pressure shall be in accordance with 2012 IBC Table 1804.2 or current local building codes.
2. Building sites are assumed to be drained and free of clay or expansive soil. These calculations assume stable, undisturbed soils and level or stepped footings. Any other conditions should be reported to this Engineer.
3. Foundations shall bear on non-expansive native soil or compacted structural back fill. Any loose soil in the bottom of the footing excavations shall be compacted to at least 90% relative compaction or removed to expose firm, unyielding material.
4. All footings shall bear on undisturbed soil with a footing depth below frost line.
5. All finished grade shall slope a minimum of 2% away from foundation for a minimum of 10 ft.
6. This Engineer has not made a geotechnical review of the building site and is not responsible for general site stability or soil suitability for the proposed project.

FILL & BACKFILL

Fill and back fill material shall be prepared in accordance with the geotechnical report for the project. Wherever the geotechnical report is not available, the fill and back fill material shall satisfy following minimum requirement:

1. Fill material shall be free from debris, vegetation, and other foreign substances.
2. Backfill trenches shall be compacted to 90% density per ASTM D1557 to within 12" of finished grade. The top 12" shall be landscape fill.
3. Backfill at pipe trenches shall be compacted on both sides of pipe in 6" lifts.
4. Waterproof exterior faces of all foundation walls adjacent to usable spaces.
5. Backfill at foundation walls shall be compacted to 90% relative density.
6. Use 4" diameter PVC, perforated pipe sub-drain behind all retaining walls. Slope pipe to drain to daylight and drywell.

CONCRETE AND MASONRY

1. Unless noted otherwise, Concrete shall have a minimum 28 day compressive strength of 2500 PSI.
2. Concrete shall be air entrained to not less than 5% and not more than 7%.

3. All slabs on grade shall have a minimum thickness of 4" and be reinforced with 6x6x10WW mesh at centerline as per ASTM A185, or with fiber-mesh as per manufacturers specifications.

4. All slabs on grade shall be placed over 4" minimum of free draining aggregate base compacted to a minimum of 95% relative compaction. Provide 2" sand above and below a 6 mil (min.) vapor barrier at all living areas and areas requiring moisture protection.

5. Slab sub-grade (upper six inches) shall be scarified. Moisture conditioned to within 2% of optimum, and uniformly compacted to at least 90% of maximum dry density as determined by ASTM D1557. This will not be required if slabs are to be placed directly on undisturbed compacted structural fill.

6. Water proofing of foundations and retaining walls is the responsibility of the owner.

7. Reinforcement shall be grade 60 as per ASTM A615 UNO.

8. Concrete stem walls and footings are to be a monolithic pour. Provide vertical #4's @ spacing no more than 16" o.c. in stem wall developed into footing for two-poured stem wall / footing assemblies.

9. All masonry units shall conform to ASTM C90 grade N.

10. All masonry cells are to be solid grouted with mortar conforming to ASTM C279 Type S, with a 28 day compressive strength of 2000 psi min.

11. Reinforcement cover in cast-in-place concrete shall be as follows: 3" concrete cast against and permanently exposed to earth; 1-1/2" concrete exposed to earth or weather with #5 bars or smaller. 1-1/2" concrete not exposed to weather or in contact with ground with #11 bars and smaller; 1 -1/2" beams, columns, and pilaster, cover over ties; 1-1/2" clear to top for reinforcement in slabs on grade.

12. Provide slab control joints (saw cut or plastic inserts) at 20'-0" maximum spacing each way for 4" slab. Control Joint to be 1/4 of slab depth.

13. Vertical steel placement in masonry stem walls to be #4 bars at 32" o.c. maximum UNO.

14. Horizontal steel placement in masonry stem walls to be #4 bars at 24" o.c. maximum spacing, UNO.

15. Reinforced concrete shall conform to applicable requirements of ACI Standard 318-89.

16. Aggregate shall conform to ASTM C33 for stone aggregate.

17. Use normal weight concrete (145 pcf) for all concrete U.N.O. Use Type II cement, U.N.O. Use Type V cement if soil contains sulfate concentrations of 0.2% or more.

18. Weather protection: In hot weather, follow "Recommended Practice for Hot Weather Concreting", ACI 305. 2) In cold weather, follow "Recommended Practice for Cold Weather Concreting", ACI 306.

19. All reinforcing steel and anchor bolts shall be accurately located and adequately secured in position before and during placement of concrete.

20. All details of fabrication and installation of reinforcing steel shall be in accordance with the ACI Manual of Standard Practice.

21. Client shall level completed foundation before commencing framing and record any variations in the foundation of 1/2" or greater.

WOOD FRAMING

1. Roof plywood thickness is per APA load tables based upon roof live load and framing spacing. Apply face grain perpendicular to framing, stagger panels and nail per plan.

2. Floor plywood shall be APA rated plywood and glued and nailed per plan.

3. Plywood shall conform to APA, PS 1. Shear plywood shall be 'Exposure 1' C-D, C-C, or 303 (T-1-11). Alternate sheathing may be substituted for floors, roofs, and shear walls provided they are structurally equivalent to the plywood specified. Plywood permanently exposed to weather and/or moisture shall be rated 'Exterior'.

4. Wood structural panel diaphragms and shear walls shall be constructed with wood structural panel sheets not less than 4 feet by 8 feet, except at boundaries and changes in framing where minimum sheet dimensions shall be 2 feet by 4 feet. Framing members or blocking shall be provided at the edges of all sheets in shear walls.

5. Headers that are not specifically addressed in the calculations shall be typical header specified on the plans. (OK by observation). Use (2) trimmers on all openings 5'-0" and larger, U.N.O.

6. Floor joists shall be Douglas Fir #2 min. Size and space in accordance with building code tables using E = 1.6 max. Engineer recommends using E less than 1.2. Manufactured "I" joists (such as Truss Joists) may be substituted for sawn lumber, size and spacing as per manufacturer's recommendations. Use manufactured rim joist (such as Timber Strand) with all "I" joists.

7. All foundation sill plates, nailers, and ledgers in direct contact with concrete and within 6" of ground shall be pressure treated Douglas Fir or Hem Fir.

8. Studs shall be stud grade or better. In no instance shall a stud wall be used to retain soil or resist lateral pressure due to snow loading. In the case of snow build up against a stud wall the owner shall be responsible to eliminate snow to stud wall contact.

9. All framing lumber shall be Douglas Fir Larch with moisture content less than 19%, UNO.

10. Glu-lams shall be 24F-V4 UNO. Glu-lams exposed to weather must be rated for exterior use by the manufacturer or approved protection from exposure to be provided. In beams for floor applications, zero camber shall be provided.

11. Laminated veneer lumber and parallel strand lumber specified shall have the following minimum design strengths: 1[" wide : Fb=2600 psi, Fv=285 psi, E=1,800,000 psi and 2-11/16" wide & up: Fb=2900 psi, Fv=290 psi, E=2,000,000 psi.

12. Splice all beams over supports or sawcut top 1/3 at support (not @ cantilevers), uno.

13. Where multiple trimmers or studs are specified, those trimmers are to be stacked in all wall framing and solid vertical grain blocking shall be provided @ all floor levels down to the foundation, uno.

14. Where posts with column caps, straps, or bearing plates are called out for, the load is to be transferred to the foundation with posts as specified and solid vertical grain blocking shall be provided @ all floor levels down to the foundation, uno.

15. All built up, laminated double or multiple 2X joists and beams shall be nailed together with (3) rows of 16d nails at 12" oc. staggered, uno. Three piece members shall be nailed from each side.

16. All 4x and 6x posts, columns, and headers shall be D.F. #1 or better, uno. All other 4x and 6x framing members shall be D.F. #2 or better, uno.

17. All framing members specified in these calculations are minimums, and larger members may be substituted.

18. All floor openings shall be between joists, uno.

19. DO NOT drill holes, notch, or cut into beams, studs, and joists, unless detailed on the plans.

20. Provide double joists below all parallel partition walls.

21. When using "green" lumber, care shall be taken to allow for the effects of shrinkage. If necessary to avoid sagging, joists, rafters, and beams shall be braced at mid span until lumber has dried out and reached a stable moisture content.

22. Where feasible manufactured options have been specified, engineer recommends the use of manufactured lumber products in lieu of dimensional lumber in all cases to control shrinkage related problems.

23. Use galvanized metal fasteners, hangers, straps etc. for all pressure treated wood products.

HARDWARE / STRUCTURAL STEEL

1. All hardware specified shall be Simpson Strong-Tie Co. (or equal) installed per manufacturer's specifications, uno.

2. Structural steel shall conform to ASTM A992 GR50, uno. Pipe columns shall conform to ASTM A53, Type E or S, uno. Hollow structural steel sections shall conform to ASTM 500, Grade B, uno.

3. All welding shall conform to the American Welding Society specifications. All welding shall be done by welders certified by the local building authority. All shop welding shall be in an approved fabricators shop authorized by the local building authority or specific inspection per the building codes shall be provided. All field welding shall require special inspection per building codes.

4. All welding electrodes shall be E7OXX or shielded wires with Fy greater than 70ksi.

5. All nails specified are common nails. Nails for sheathing may be differ from commons as specified in the shear nail specifications table. No substitutions unless specified on plans or in these calculations or approved in writing by Engineer.

6. The minimum nailing for all framing shall conform to the tables in current building codes.

7. All bolts specified must meet ASTM A307. Bolt holes shall be 1/32" to 1/16" larger than the specified bolt. Washers shall be used at each bolt head and nut next to wood. All washers to be not less than standard cut washers.

8. Provide 2" x 2" x 3/16" plate washers on all foundation anchor bolts.

9. In steel to steel connections thread shall be excluded from shear plane.

TRUSSES

1. A complete process of the truss producing requires the involvement of multiple parties. In addition to the close cooperation and communications among each member of the parties, which including but not limited to, the truss designer, the engineering of record, and the contractor, each individual or organization should fully understand his/her responsibilities during the entire process of truss producing including but not limited to, building dimension, building elevation, roof framing type, ceiling type, truss design, truss review, field storage, handling, installation, temporary and permanent truss bracing.

2. Unless an alternate agreement among the parties has been made, each party shall agree the guide line TWCA 1-1995, “Standard Responsibilities in the Design Process Involving Metal Plate Connected Wood Trusses”.

3. All prefabricated trusses shall be fabricated by a code approved manufacturer. The manufacturer shall be responsible for the design and certification of the trusses.

4. All trusses shall be designed in according to the requirements set forth in the latest approved edition of ANSI/TPI, "National Design Standard for Metal Plate Connected Wood Truss Construction."

7. Truss design loads shall be in accordance with the latest local approved building codes and ordinances for all loads imposed, including but not limited to, dead loads, live loads, snow loads, wind loads, seismic loads, attic loads and mechanical equipment loads. Truss designer shall review all architectural drawings and meet architectural profiles as indicated.

4. It is the responsibility of the manufacturer to conform the truss design according to the loading conditions as called for in these calculations, such as live and dead loads, truss spacing, spans and eave overhangs, roof pitch, bearing points and drag loads.

5. Truss manufacturer shall supply to the building designer the calculations and shop drawings for final reviewing and approval prior to fabrication. The building designer will review and approve the trusses from the national certified manufacturers only.

6. All calculations and shop drawings shall be carefully reviewed and signed by a registered engineer in the state in which the structure is being built.

7. While the building designer shall make all his/her effort to find the flaws or design errors for each individual truss and notify the truss designer to correct the problems he/she may have found, the engineer who signs the truss calculations shall be ultimately responsible for the structural behavior of each individual truss.

8. Shop drawings shall also include the following information: 1) Project name and location. 2) All design loads as set forth in these calculations. 3) Member stresses, deflections, type of joint plates, and allowable design values. Truss joints shall be designed per current version of ANSI/TPI standard. 4) Type, size, and location of hangers to be used for the project. Hangers shall be designed to support the full vertical load and a lateral load equal to 20% of the vertical reaction. All connectors shall be code approved and of adequate strength to resist stresses due to the loading involved.

9. The truss manufacturer shall be responsible for all truss to truss connections, all trusses to girder connections, and if the girder truss is made up of more than one truss, all connections between these trusses.

10. The truss manufacturer shall insure that the truss package meets the profile as required by the contract documents.

11. Total load deflection shall be limited to L/240. Live load deflection shall be limited to L/360.

12. Trusses are to be handled, installed, and braced (temporarily or permanently) in accordance with HIB-91 of the TPI. Cross bridging and/or bracing shall be provided for and detailed by truss manufacturer as required to adequately brace all trusses.

13. Where truss blocking is called out, the blocking piece shall be the same depth as the adjoining members and capable of resisting a lateral load equal to 500 pounds in its plane, or be sheathed with 1/2" CDX plywood and nailed with 10d common nails at 6" o.c. edge nailing.

14. The truss manufacturer shall be responsible for the design of all trusses used as drag or chord members and shall insure that such trusses are placed as required on the framing plans. The amount of load to be

laterally transmitted by the member shall be a minimum of 2000 pounds unless otherwise shown on the framing plans.

15. The truss manufacturer shall provide a means of attic access when spacing is 16" oc or less.
16. Gable end trusses shall be structural, designed to support overhang and to allow a top chord notch of 1 1/2"
17. Girder trusses are to be supported by multiple trimmers or posts.
18. All non-bearing walls are to have a 1/2" gap to the bottom chord of trusses.
19. When snow loads exceed 50 psf the trusses shall be stacked over wall studs at bearing points.

DESIGN LOADS

1. All floor and roof systems shall be designed per 2012 IBC or the current local building codes.
2. Where snow loads occur that are in excess of the design conditions, the structural systems shall be designed for such loads as determined by the local building official.
3. Every building or structure and every portion thereof shall be designed to resist wind effects in accordance with current building codes.
4. Every building or structure and every portion thereof shall be designed to resist the effects of seismic ground motions in accordance with 2012 IBC or the current local building codes.
5. Design snow loads of 30 psf or less need not be combined with seismic loads. Where design snow loads exceed 30 psf the design snow load shall be included with seismic loads, but may be reduced up to 75% where consideration of sitting, configuration and load duration warrant when approved by the building official.

Client: Paul Frost Job No.: 2485 Date: April 18, 2018
Project: Paul Frost Home addition
Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670

Structural DESIGN

Ground snow load
30 psf
Roof snow load 21 psf

Wind velocity 130 mph vult
Frost Depth 24”

Seismic design for site D

Address	18200 Lake Vista				
	Degrees	Min	Sec	Degrees Decimal	
N	39	15	44.94	39.2624833	
W	119	49	28.39	-119.82455	
					$V = C_s W$
S_{DS}	1.532				$C_s = \frac{S_{DS}}{\left(\frac{R}{I_e}\right)}$
R	6.5				
I_e	1				
C_s	0.2357				
V=	21,898	lb	Seismic shear		
W					
Garage 1					
Roof	958	sf	16,166		
Walls 14'	88	lf	13,552	12 psf	
Garage 2					
Roof	513	sf	8,657		
walls 10'	48	lf	5,760	12 psf	
Addition					
Roof	1197	sf	20,199		
Walls 9'	110	lf	11,880	12 psf	
Ceiling	968	sf	1,936	2 psf	
Walls int 8'	58	lf	9,280	20 psf	
Trusses			5,479		
Total weight			92,909	lb	
SHEAR E-W	203	PLF			
SHEAR N-S	279	PLF			
Ave	241				
Tile roof (psf)	15.00	psf			
Plywood lb/in	1.88	psf			
Seismic wt	16.88				

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USGS Design Maps Summary Report

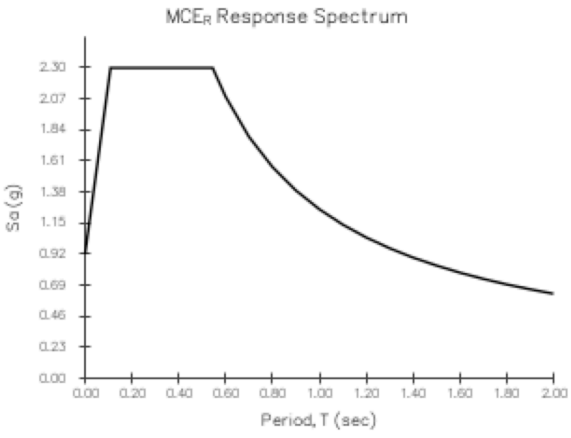
User–Specified Input

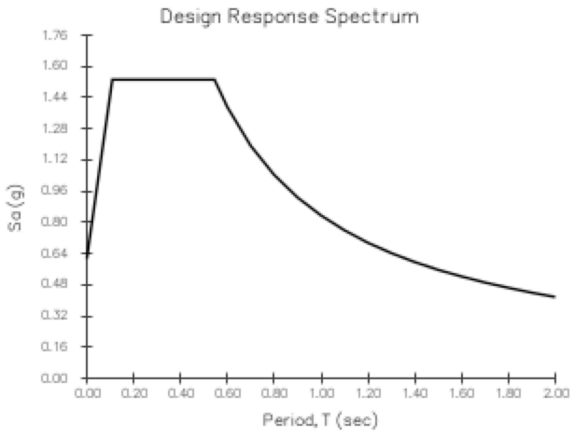
Report Title	18200 Lake Vista Road Wed March 14, 2018 14:45:51 UTC
Building Code Reference Document	2012/2015 International Building Code (which utilizes USGS hazard data available in 2008)
Site Coordinates	39.26248°N, 119.82455°W
Site Soil Classification	Site Class D – "Stiff Soil"
Risk Category	I/II/III

USGS–Provided Output

S_S =	2.298 g	S_{MS} =	2.298 g	S_{DS} =	1.532 g
S_1 =	0.835 g	S_{M1} =	1.252 g	S_{D1} =	0.835 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.





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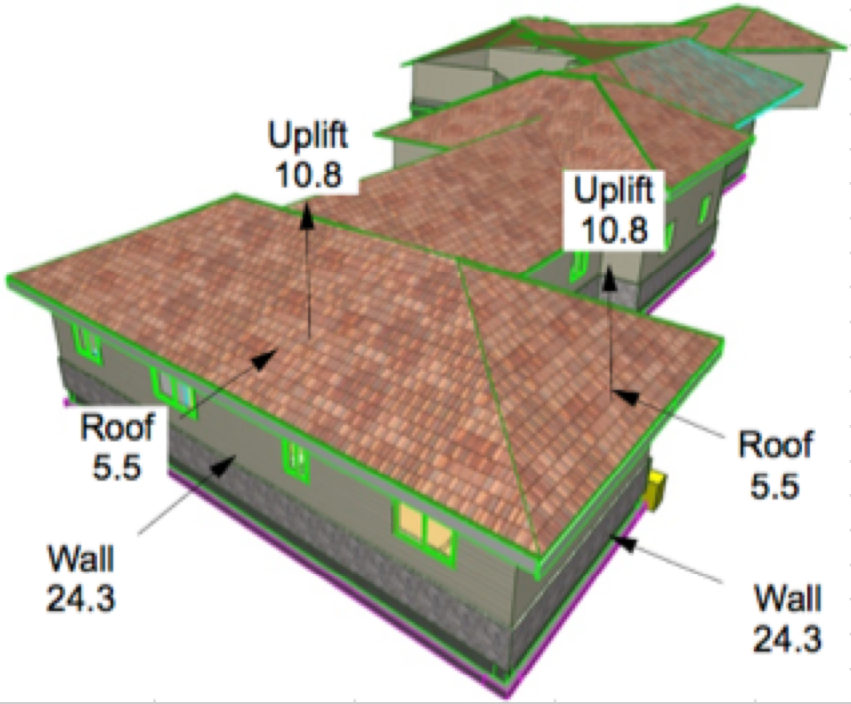
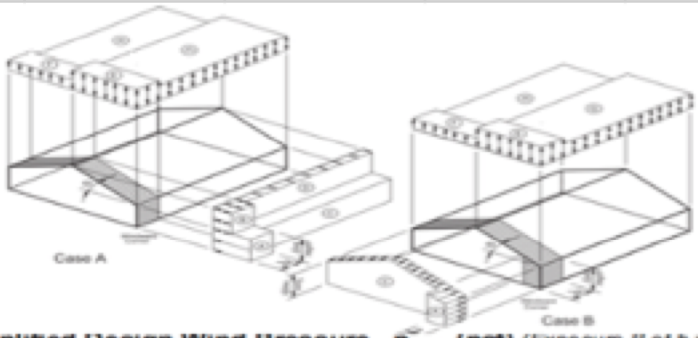
WIND

Wind	130	mph





Simplified Design Wind Pressure , p_{S30} (psf) *(Exposure B at h = 30 ft. with I = 1.0)*

Basic Wind Speed (mph)	Roof Angle (degrees)	Load Case	Zones									
			Horizontal Pressures				Vertical Pressures				Overhangs	
			A	B	C	D	E	F	G	H	E_{OH}	G_{OH}
130	0 to 5°	1	26.8	-13.9	17.8	-8.2	-32.2	-18.3	-22.4	-14.2	-45.1	-35.3
	10°	1	30.2	-12.5	20.1	-7.3	-32.2	-19.7	-22.4	-15.1	-45.1	-35.3
	15°	1	33.7	-11.2	22.4	-6.4	-32.2	-21.0	-22.4	-16.1	-45.1	-35.3
	20°	1	37.1	-9.8	24.7	-5.4	-32.2	-22.4	-22.4	-17.0	-45.1	-35.3
	25°	1	33.6	5.4	24.3	5.5	-14.9	-20.4	-10.6	-16.4	-27.8	-23.7
		2	------	------	------	------	-5.7	-11.1	-1.5	-7.1	------	------
	30 to 45	1	30.1	20.6	24.0	16.5	2.3	-18.3	0.8	-15.7	-10.6	-12.1
		2	30.1	20.6	24.0	16.5	11.6	-9.0	10.0	-6.4	-10.6	-12.1

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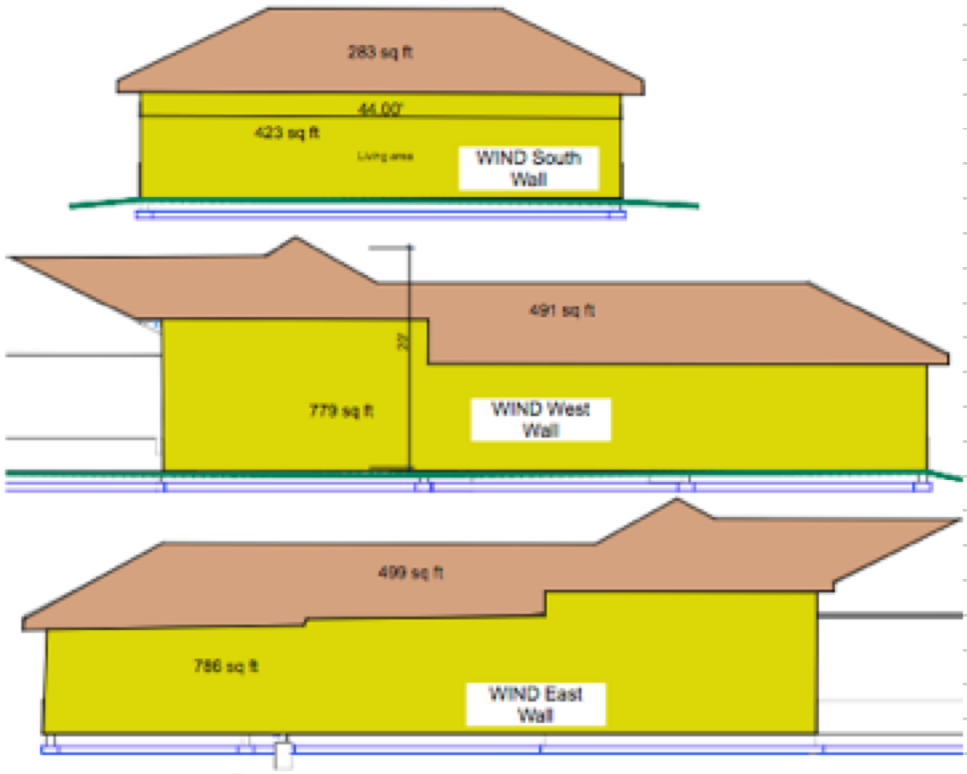

	SF	P	F	
South wall	423	24.3	10,279	
South roof	283	5.5	1,557	
			11,835	Total N/S
Uplift	283	10.8	3,056	
West wall	779	24.3	18,930	
West roof	491	5.5	2,701	
			21,630	Total West
Uplift	491	10.8	5,303	
East Wall	786	24.3	19,100	
East roof	499	5.5	2,745	
			21,844	Total East
Uplift	499	10.8	5,389	

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f_t = *actual* stress = $\frac{P}{A}$

F_t = Tabulated stress

F'_t = *Allowable* Stress = $F_t(C_D C_r)$

IF $f_t \le F'_t$ OK

Wood Density (pcf)	30.00		E=	1,900,000	C_D =	1.15					
Snow Load psf	21.00	psf	F_b=	2750	C_r=	1					
Live load (psf)	18.00	psf	F_c=	625	F'_b=	3162.5					
Tile roof (psf)	15.00	psf									
Plywood lb/in (3/4)	1.88	psf			E'=	2,185,000					
	56	psf									
Garage 1 Header									f_t		f'_t check
Gluelam (6x8)		weight each	154.69	$M = \frac{wl^2}{8}$	1.0	ft-lb	fb=M/S	2092	psi	3163	OK
Header H (in)	7.5	A=	41.25		392	in-lb					
Header w (in)	5.5	S=	51.56				Fv=1.5V/A	49.9	psi	180	OK
Joist L (ft)	18.00	I=	193.4	$V = \frac{wl}{2}$	8.0	lb	l/240= (in)	0.90		0.83	OK
		w (plf)=	222								
								$\Delta_{max} = \frac{5wl^4}{384EI}$			
Garage 2 header	1	weight each	237.19	$M = \frac{wl^2}{8}$	3.3	ft-lb	fb=M/S	2592	psi	3163	OK
Glulam H (in)	11.5	A=	63.25		199	in-lb					
Glulam W (in)	5.5	S=	121.23				Fv=1.5V/A	138.0	psi	180	OK
Glulam L (ft)	18	I=	697.1	$V = \frac{wl}{2}$	8.5	lb	l/240= (in)	0.90		0.67	OK
		w (plf)=	647								
			size								
Posts Garage 1	1998	lb ea	4x4	163.102	psi	OK					
Posts garage 2	5818.5	lb ea	4x4	474.98	psi	OK					

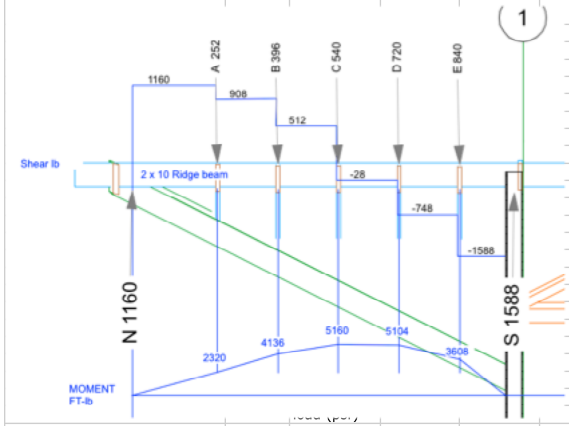
f_t = *actual* stress = $\frac{P}{A}$

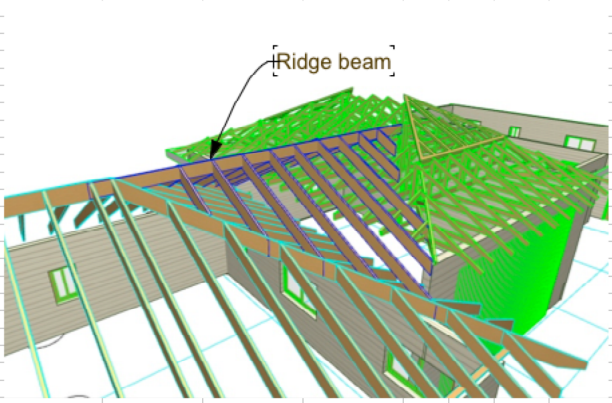
F_t = Tabulated stress

F'_t = *Allowable* Stress = $F_t(C_D C_r)$

IF $f_t \le F'_t$ OK

Wood Density (pcf)	30.00		E=	1,900,000	C_D =	1.15					
Snow Load psf	21.00	psf	F_b=	2750	C_r=	1					
Live load (psf)	0.00	psf	F_c=	625	F'_b=	3162.5					
Tile roof (psf)	15.00	psf									
Plywood lb/in (3/4)	0.00	psf			E'=	2,185,000					
	36	psf									
Ridge beam									f_t		f'_t check
ridge (2x10) no 1		weight each	35.63	M max	5160.0	ft-lb	fb=M/S	2744	psi	3163	OK
Header H (in)	9.5	A=	14.25	M max	61920	in-lb					
Header w (in)	1.5	S=	22.56				Fv=1.5V/A	95.0	psi	180	OK
Joist L (ft)	12.00	I=	107.2		1332.0	lb	l/240= (in)	0.60		0.44	OK
		w (plf)=	222								





	depth in	36.00				
A	42	252	68			
B	66	396	1,584			
C	90	540	3,240	total wt	2748	
D	120	720	5,760	Total mor	19052	
E	140	840	8,400	L ft	12	
S Σ Moments about N			19,052	1587.7	lb on south	
				1160.3	lb on North	
				2748		

SHEAR

Wind and Seismic almost the same

Table 4.3A Nominal Unit Shear Capacities for Wood-Frame Shear Walls[1,3,6,7]

Sheathing Material	Minimum Nominal Panel Thickness (in.)	Minimun Fastener Penetration in Framing Member or Blocking (in.)	Fastener Type & Size	A SEISMIC								
				Wood-based Panels[4]								
				Panel Edge Fastener Spacing (in.)								
				6			4			3		
				v_s (plf)	G_a (kips/in.)		v_s (plf)	G_a (kips/in.)		v_s (plf)	G_a (kips/in.)	
			Nail (common or galvanized box)		OSB	PLY		OSB	PLY		OSB	PLY
Wood Structural Panels - Structural I[4,5]	5/16	1-1/4	6d	400	13	10	600	18	13	780	23	16
	3/8[2]	1-3/8	8d	460	19	14	720	24	17	920	30	20
	7/16[2]			510	16	13	790	21	16	1010	27	19
	15/32			560	14	11	860	18	14	1100	24	17
	15/32	1-1/2	10d	680	22	16	1020	29	20	1330	36	22
Wood Structural Panels – Sheathing[4,5]	5/16	1-1/4	6d	360	13	9.5	540	18	12	700	24	14
	3/8			400	11	8.5	600	15	11	780	20	13
	3/8[2]	1-3/8	8d	440	17	12	640	25	15	820	31	17
	7/16[2]			480	15	11	700	22	14	900	28	17
	15/32			520	13	10	760	19	13	980	25	15
	15/32	1-1/2	10d	620	22	14	[illegible]	30	17	1200	37	19
	19/32			680	19	13	[illegible]	26	16	1330	33	18
Plywood Siding			Nail (galvanized casing)									
	5/16	1-1/4	6d	280	13		420	16		550	17	
	3/8	1-3/8	8d	320	16		480	18		620	20	
Particleboard Sheathing - (M-S "Exterior Glue" and M-2 "Exterior Glue")			Nail (common or galvanized box)									
	3/8		6d	240	15		360	17		460	19	
	3/8		8d	260	18		380	20		480	21	
	1/2			280	18		420	20		540	22	
	1/2		10d	370	21		550	23		720	24	
	5/8			400	21		610	23		790	24	

MINIMUM

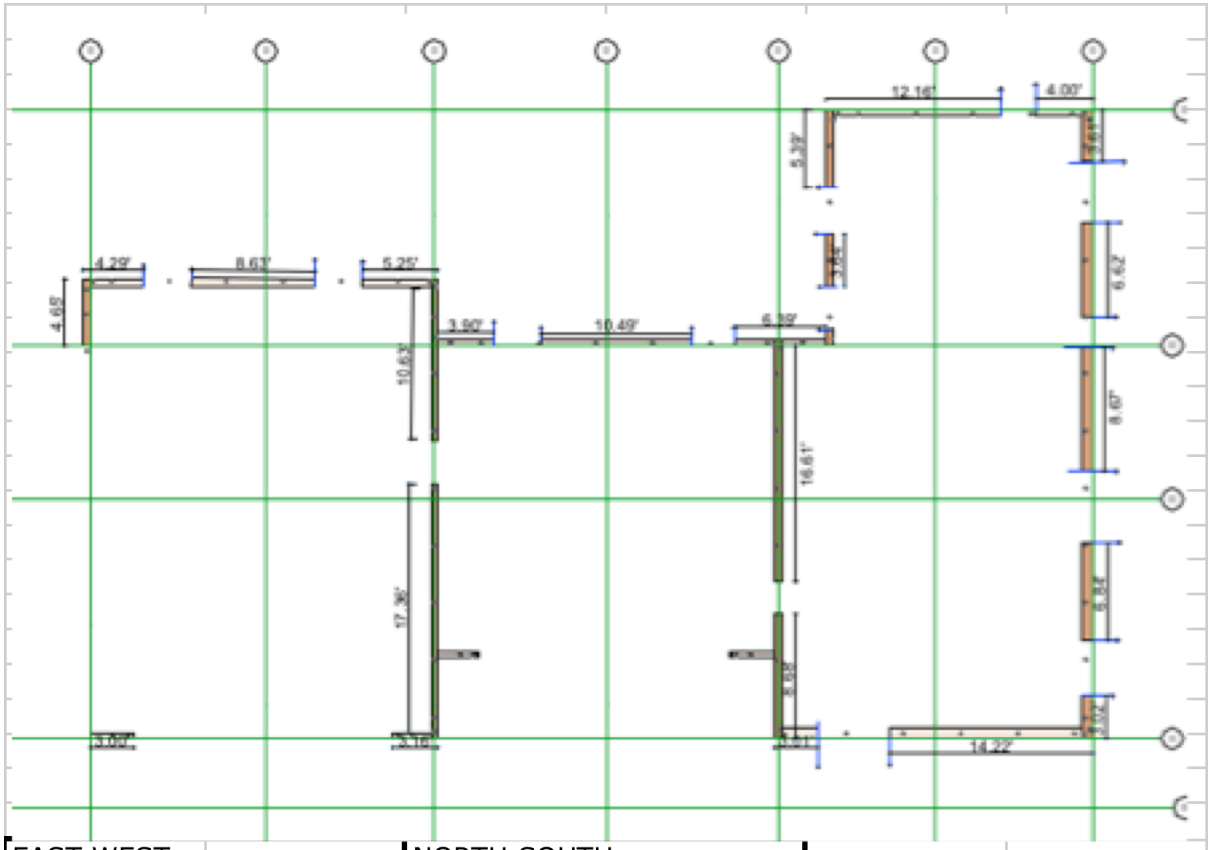
Shear all walls with minimum 6d on 6”

Client: Paul Frost Job No.: 2485 Date: April 18, 2018

Project: Paul Frost Home addition

Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670

Shear



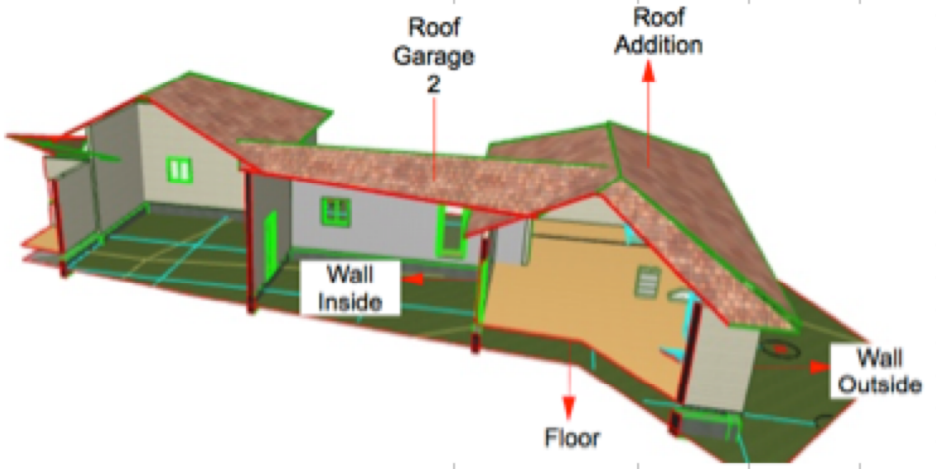
EAST WEST		NORTH SOUTH			
LINE 1	10.65	LINE B	3		
LINE 3	16.63		3.16		
	17.36		3.01		
LINE 5	5.39		14.22		
	3.64	LINE D	4		
	16.61		12.16		
	8.68		6.39		
LINE 7	3.61		10.49		
	6.62		3.9		
	8.67		5.25		
	6.84		8.63		
	3.02		4.29		
TOTAL	107.72		78.5		
Seismic Plf	203		279		
Wind N Plf			151		
Wind W Plf	201				
Wind E Plf	203				

Client: Paul Frost Job No.: 2485 Date: April 18, 2018
Project: Paul Frost Home addition
Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670

TRUSSES

Truss	Page	ft	in	frac	L (in)	No	wt	total wt lb
A01	2	24	5	1	293.063	1	138	138
A02	3	24	5	1/8	293.008	2	117	234
A03	4	24	5	1/8	293.008	5	120	600
A04	5	24	5	1/8	293.008	2	125	250
A05	6	24	5	1/8	293.008	6	115	690
A06	7	24	2	2.00	290.125	1	134	134
B01	8	22			264.000	1	109	109
B02	9	18	3	1.000	219.063	1	131	131
B03	10	18	3	1.000	219.063	1	109	109
B04	11	18	3	1.000	219.063	1	123	123
B05	12	18	3	1.000	219.063	2	117	234
B06	13	18	3	1.000	219.063	1	115	115
B07	14	22			264.000	8	106.4	851.2
B08	15	22			264.000	1	113	113
B09	16	22			264.000	1	97	97
B10	17	22			264.000	1	120	120
V1	18	5	6		66.000	1	18	18
V2	19	9	8		116.000	2	37	74
V3	20	13	6		162.000	2	49	98
V4	21	17	6	1	210.063	1	76	76
V5	22	21	6	1	258.063	1	91	91
LG1	23	12	5	3	149.188	2	84	168
LG2	24	9	11	11	119.688	2	60	120
CG1	25	8	3	4	99.250	7	48	336
CG2	26	8	3	4	99.250	1	45	45
J1	27	1	6		18.000	15	8.5	127.5
J1A	28	1	10	15	22.938	1	7	7
J2	29	3	10	15	46.938	15	15.4	231
J2A	30	3	10	15	46.938	1	13	13
J3	31	5	11	4	71.250	1	26	26
								5478.7

Client: Paul Frost Job No.: 2485 Date: April 18, 2018
Project: Paul Frost Home addition
Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670



	Area (sf)	R	U	ΔT °F		
Outside T °F	53					
Garage T °F	55					
Addition Temp °F	72					
Crawspace T °F	50					
Addition total Walls Outside (sf)	954					
Triple pain Windows Outside (sf)	127.2	2.56	0.3906	19	944	
Addition Walls Outside (sf)	826.8	19	0.0526	19	827	
Addition Walls Inside (sf)	198	16	0.0625	17	210	
Addition Roof (sf) 5.5" blown	740	17.88	0.0559	19	787	
Addition Floor (sf) 9.5" ins.	968	30	0.0333	22	710	
Garage Roof (sf)	528	17.88	0.0559	19	561	
Garage Walls Outside (sf)	480					
Garage Slab (sf)	528			Total	4,039	BTU/hr
Wall insulation only	Area (sf)	R	U	ΔT °F		
Outside T °F	53					
Garage T °F	55					
Addition Temp °F	72					
Crawspace T °F	50					
Addition total Walls Outside (sf)	954					
Triple pain Windows Outside (sf)	0.0	1	1.0000	19	0	
Addition Walls Outside (sf)	954.0	16	0.0625	19	1,133	
Addition Walls Inside (sf)	198	16	0.0625	17	210	
Addition Roof (sf) 0" blown	740	1.00	1.0000	19	14,060	
Addition Floor (sf) 0" ins.	968	1	1.0000	22	21,296	
Garage Roof (sf)	528	17.88	0.0559	19	561	
Garage Walls Outside (sf)	480					
Garage Slab (sf)	528			Total	37,260	BTU/hr
System Efficiency	89.16%					

Client: Paul Frost Job No.: 2485 Date: April 18, 2018
Project: Paul Frost Home addition
Address: 18200 Lake Vista Rd. Carson City, NV 89704-9670

Generated by RES*check-Web* Software

Compliance Certificate

Project Frost addition

Energy Code:	**2012 IECC**
Location:	**Reno, Nevada**
Construction Type:	**Single-family**
Project Type:	**Addition**
Climate Zone:	**5 (5674 HDD)**
Permit Date:	
Permit Number:	

Construction Site: 18200 Lake Vista Road

Owner/Agent: Paul Frost

Designer/Contractor: LMI ENGINEERING

Compliance: Passes using UA trade-off

Compliance: **18.9% Better Than Code** Maximum UA: **132** Your UA: **107**

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules.
It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling: Raised or Energy Truss	740	17.9	16.0	0.028	21
Wall: Wood Frame, 16" o.c.	826	19.0	17.8	0.028	20
Window: Other	127			0.390	50
Floor: All-Wood Joist/Truss	968	30.0	28.0	0.017	16

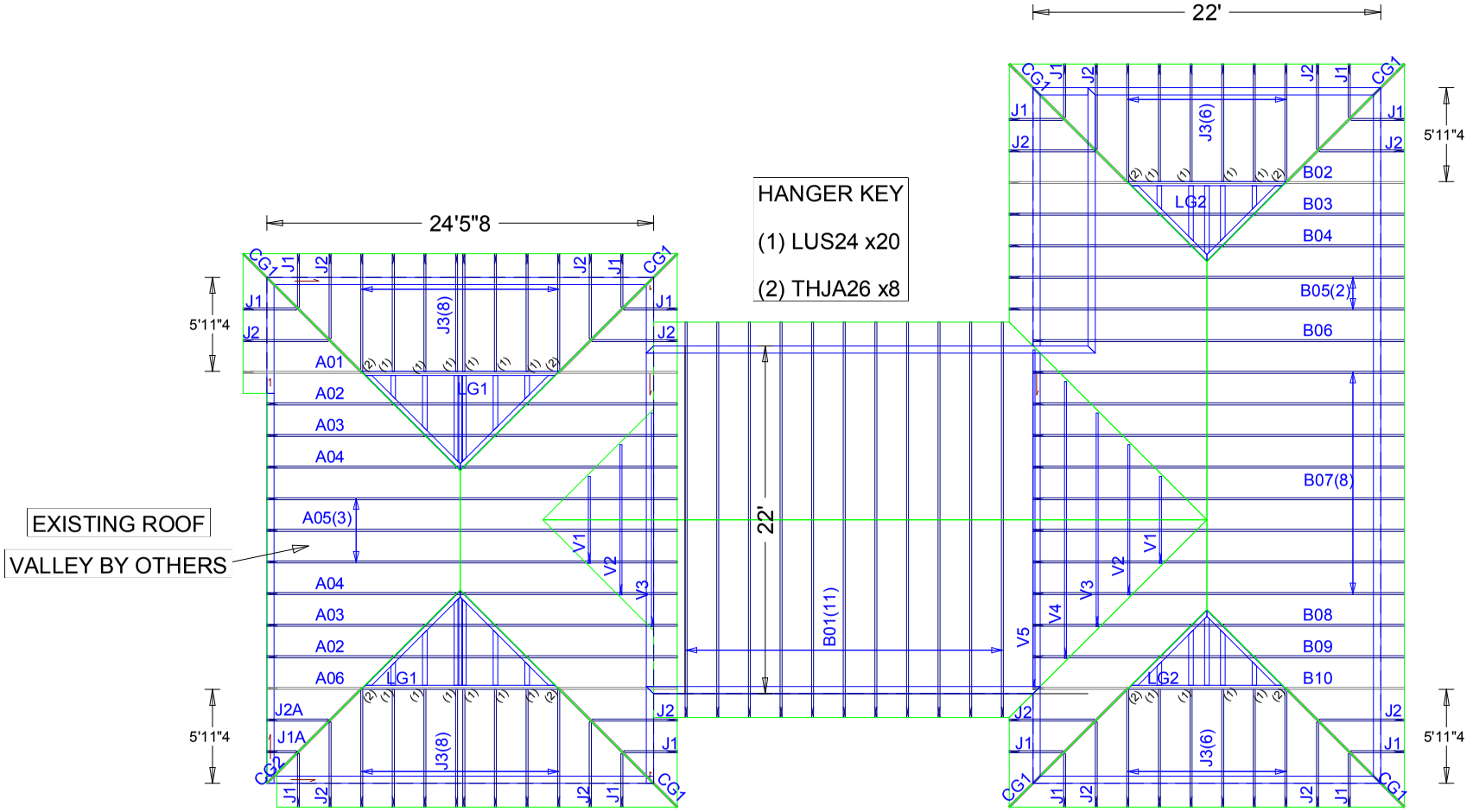
Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the 2012 IECC requirements in RES*check* Version : REScheck-Web and to comply with the mandatory requirements listed in the RES*check* Inspection Checklist.

Richard LaPrairie,PE — Name - Title

Signature

4/8/2018 — Date

LMI ENGINEERING
1595 Ashbury Lane, Reno NV 89523 Phone (775) 746-1980



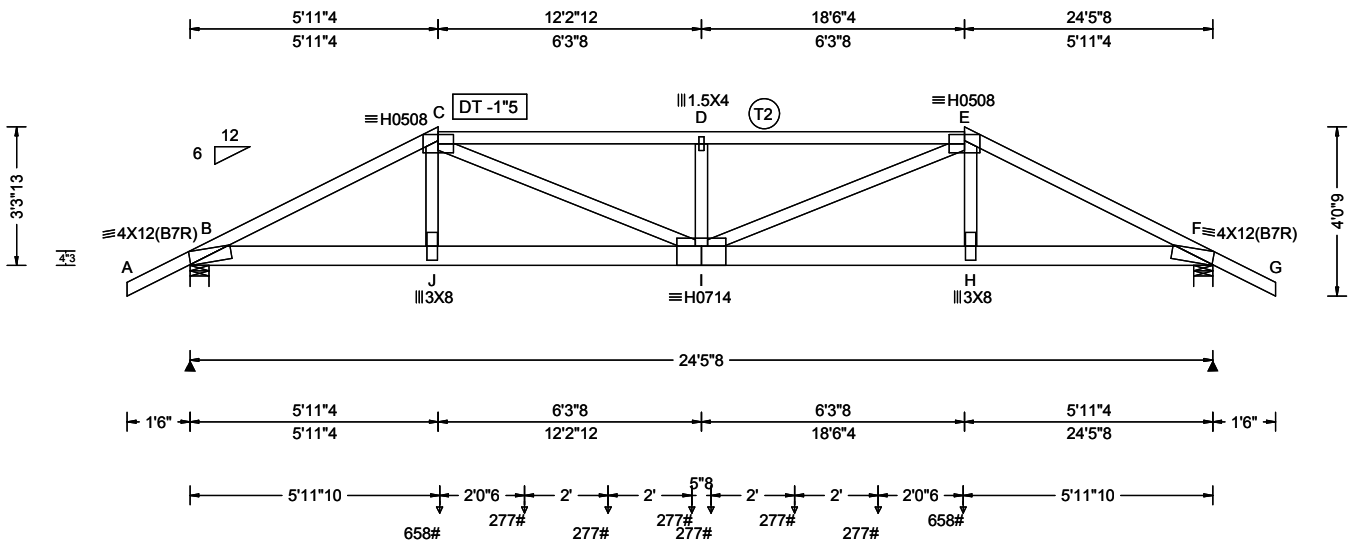
Reno Truss, Inc.

NAME: FROST ADDITION
ADDR: 18200 LAKE VISTA RD
PLAN:
ELEV:
L / R:

JOB NO:
180336

PAGE NO:
1 OF 1

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** A01	Ply: 1 Qty: 1 Wgt: 138.6 lbs	SEQN: 4075 / T5 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.197	D	999	360
VERT(TL): 0.596	D	486	240
HORZ(LL): 0.039	C	-	-
HORZ(TL): 0.118	C	-	-

Creep Factor: 1.5
Max TC CSI: 0.970
Max BC CSI: 0.855
Max Web CSI: 0.957
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	2541	/ 281	/ -	/ -	/ -	/ 5.5
F	2541	/ 281	/ -	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
B Min Brg Width Req = 2.7
F Min Brg Width Req = 2.7
Bearings B & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	- 14	D - E	661	- 5992
B - C	525	- 4925	E - F	525	- 4925
C - D	661	- 5992	F - G	83	- 14

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	4336	- 450	I - H	4283	- 447
J - I	4283	- 447	H - F	4336	- 450

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
J - C	1046	- 42	I - E	1877	- 235
C - I	1877	- 235	E - H	1046	- 42
D - I	73	- 582			

Lumber

Top chord 2x4 HF #1&Bet. :T2 2x4 DF-L #1&Bet.:
Bot chord 2x6 DF-L #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Special Loads

------(Lumber Dur.Fac.=1.15 / Plate Dur.Fac.=1.15)
TC: From 82 plf at -1.50 to 82 plf at 5.94
TC: From 41 plf at 5.94 to 41 plf at 18.52
TC: From 82 plf at 18.52 to 82 plf at 25.96
BC: From 20 plf at 0.00 to 20 plf at 5.97
BC: From 10 plf at 5.97 to 10 plf at 18.49
BC: From 20 plf at 18.49 to 20 plf at 24.46
BC: 658 lb Conc. Load at 5.97,18.49
BC: 277 lb Conc. Load at 8.00,10.00,12.00,12.46 14.46,16.46

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads and reactions based on MWFRS.

Uplifts based on an elevation at or above 3000 ft.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

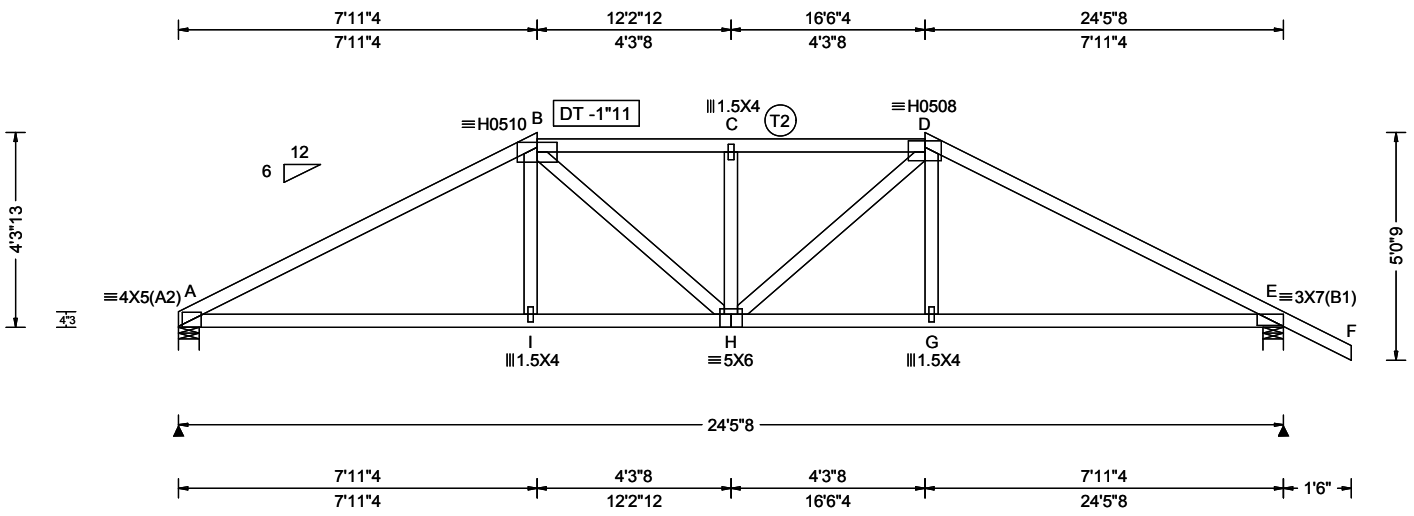
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise,top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** A02	Ply: 1 Qty: 2 Wgt: 117.6 lbs	SEQN: 4078 / T2 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.061	C	999	360
VERT(TL): 0.216	C	999	240
HORZ(LL): 0.027	G	-	-
HORZ(TL): 0.081	G	-	-

Creep Factor: 1.5
Max TC CSI: 0.992
Max BC CSI: 0.660
Max Web CSI: 0.209
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1352	/ 92	/ 779	/ -	/ 115	/ 5.5
E	1509	/ 114	/ 890	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.2
E Min Brg Width Req = 2.5
Bearings A & E are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	548	-2145	D - E	558	-2127
B - C	569	-2040	E - F	83	0
C - D	569	-2040			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - I	1768	-334	H - G	1740	-356
I - H	1760	-334	G - E	1747	-356

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - B	301	0	C - H	73	-500
B - H	394	-72	D - G	294	0
H - D	410	-79			

Lumber

Top chord 2x4 DF-L 1800f-1.5E :T2 2x4 HF #1&Bet.:
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise,top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

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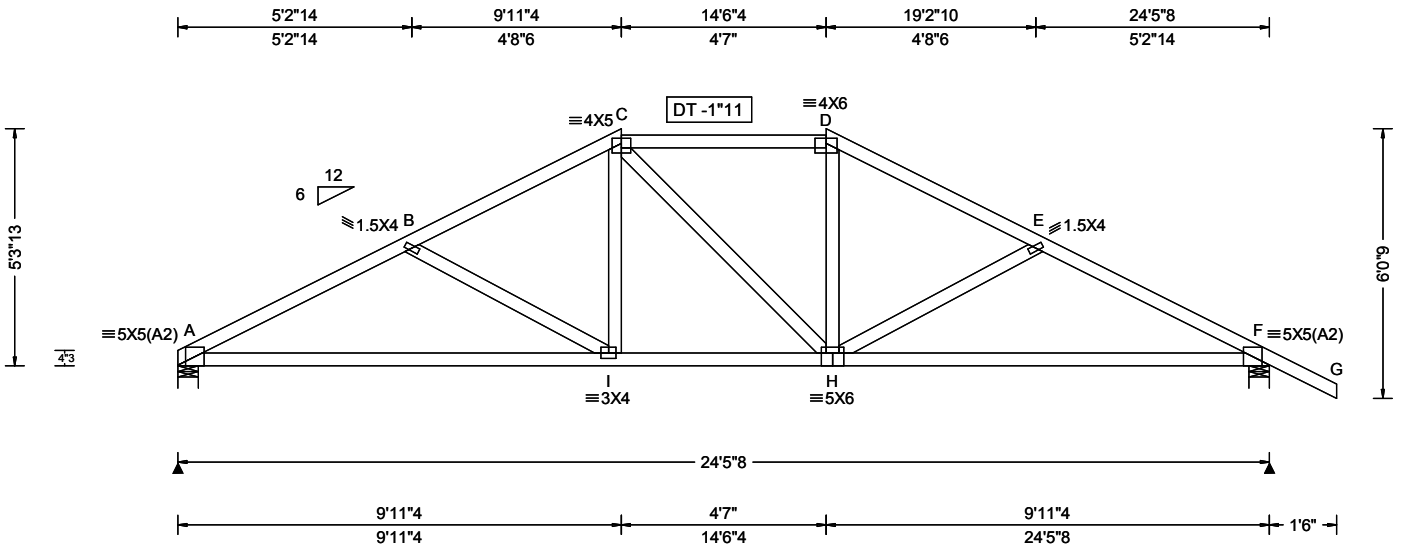
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** A03	Ply: 1 Qty: 2 Wgt: 120.4 lbs	SEQN: 4081 / T3 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.079	I	999	360
VERT(TL): 0.203	I	999	240
HORZ(LL): 0.035	H	-	-
HORZ(TL): 0.091	H	-	-

Creep Factor: 1.5
Max TC CSI: 0.378
Max BC CSI: 0.574
Max Web CSI: 0.358
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1435	/ 90	/ 789	/ -	/ 139	/ 5.5
F	1567	/ 112	/ 899	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.4
F Min Brg Width Req = 2.6
Bearings A & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	629	- 2533	D - E	523	- 1954
B - C	530	- 1975	E - F	617	- 2507
C - D	532	- 1631	F - G	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - I	2183	- 433	H - F	2153	- 450
I - H	1634	- 227			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - I	235	- 605	D - H	433	- 91
I - C	454	- 86	H - E	223	- 586
C - H	159	- 166			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

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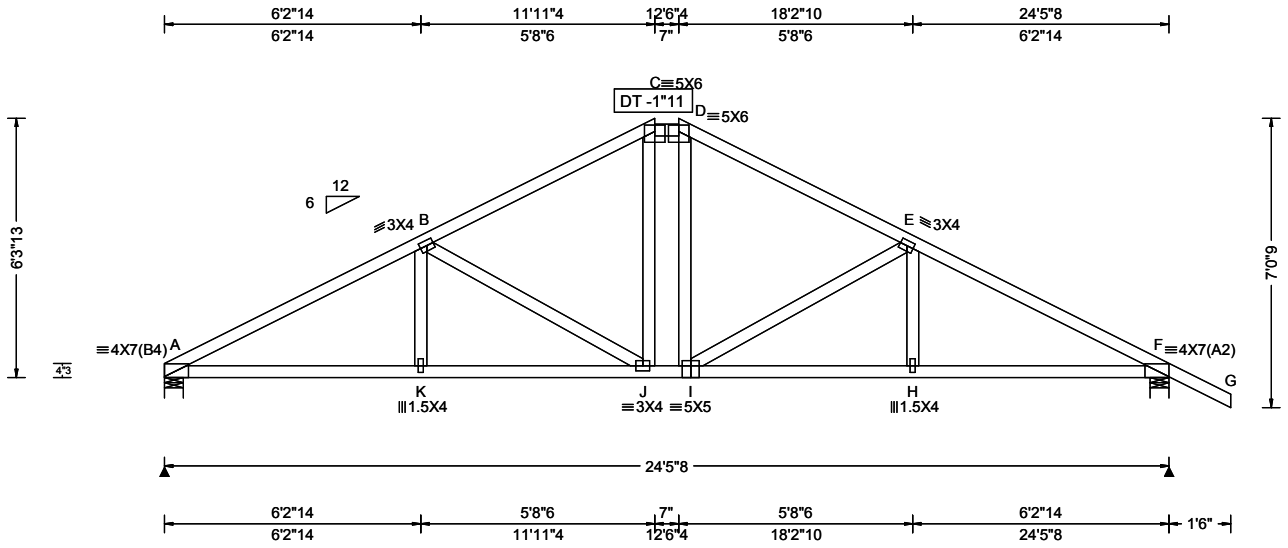
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** A04	Ply: 1 Qty: 2 Wgt: 124.6 lbs	SEQN: 4084 / T4 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL):	0.092 I	999	360
VERT(TL):	0.226 I	999	240
HORZ(LL):	0.041 H	-	-
HORZ(TL):	0.101 H	-	-

Creep Factor: 1.5
Max TC CSI: 0.497
Max BC CSI: 0.442
Max Web CSI: 0.682
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1494	/ 87	/ 793	/ -	/ 162	/ 5.5
F	1626	/ 109	/ 904	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.1
F Min Brg Width Req = 2.3
Bearings A & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	620	- 2694	D - E	510	- 1939
B - C	531	- 1941	E - F	579	- 2670
C - D	508	- 1587	F - G	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - K	2314	- 410	I - H	2285	- 406
K - J	2311	- 410	H - F	2288	- 405
J - I	1587	- 189			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
K - B	243	0	D - I	475	- 118
B - J	261	- 822	I - E	249	- 791
J - C	485	- 139	E - H	237	0

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

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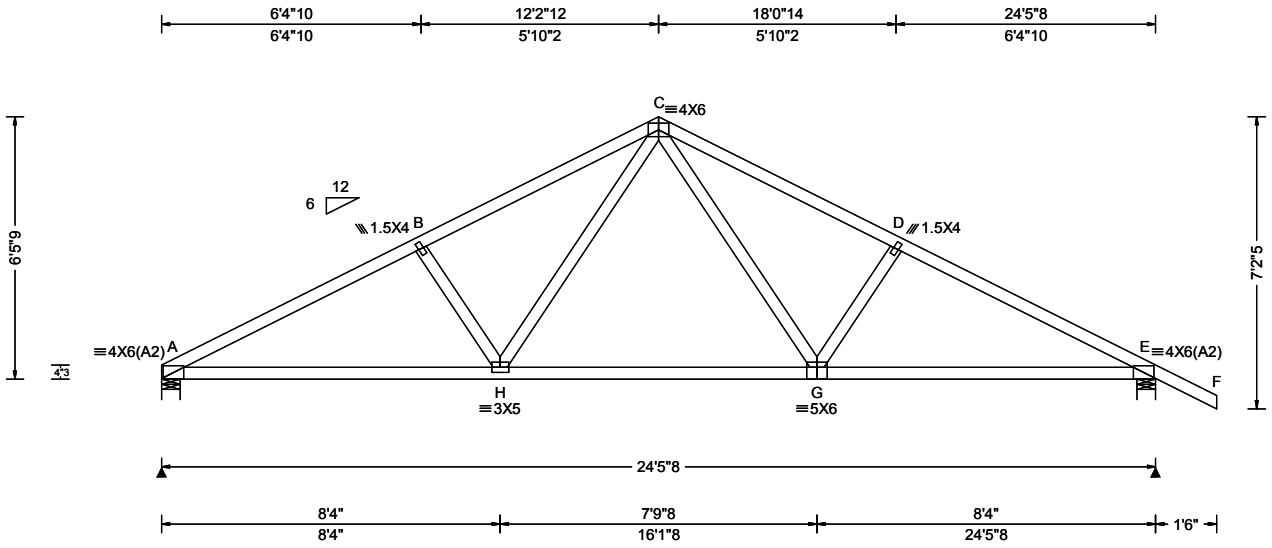
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** A05	Ply: 1 Qty: 3 Wgt: 114.8 lbs	SEQN: 4087 / T1 / COMN FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.069	G	999	360
VERT(TL): 0.206	G	999	240
HORZ(LL): 0.027	G	-	-
HORZ(TL): 0.078	G	-	-

Creep Factor: 1.5
Max TC CSI: 0.521
Max BC CSI: 0.599
Max Web CSI: 0.426
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1334	/ 87	/ 793	/ -	/ 166	/ 5.5
E	1465	/ 109	/ 904	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.2
E Min Brg Width Req = 2.4
Bearings A & E are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	629	- 2374	D - E	587	- 2351
B - C	642	- 2104	E - F	83	0
C - D	599	- 2083			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - H	2041	- 417	G - E	2016	- 412
H - G	1313	- 189			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - H	243	- 562	C - G	809	- 180
H - C	836	- 194	G - D	238	- 548

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance.

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

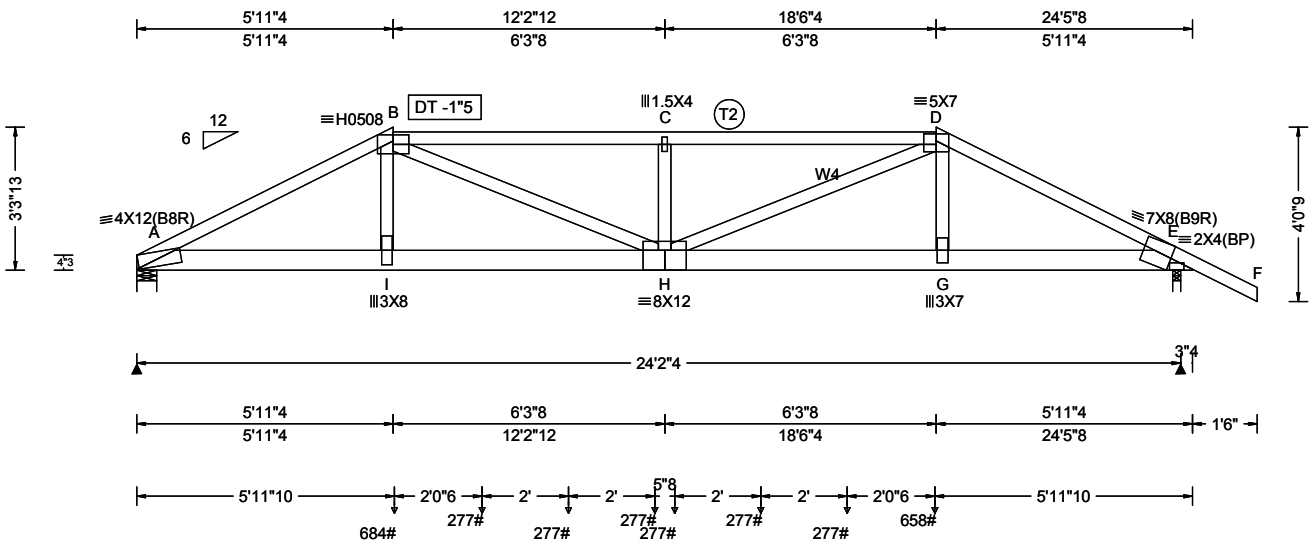
Truss designed for unbalanced snow loads.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** A06	Ply: 1 Qty: 1 Wgt: 134.4 lbs	SEQN: 4099 / T11 / COMN FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.211	C	999	360
VERT(TL): 0.640	C	450	240
HORZ(LL): 0.043	B	-	-
HORZ(TL): 0.129	B	-	-

Creep Factor: 1.5
Max TC CSI: 0.883
Max BC CSI: 0.881
Max Web CSI: 0.920
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	2419	/ 252	/ -	/ -	/ -	/ 5.5
E	2565	/ 285	/ -	/ -	/ -	/ 2.3

Wind reactions based on MWFRS
A Min Brg Width Req = 2.6
E Min Brg Width Req = 2.0
Bearings A & E are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	543	-4980	D - E	518	-4834
B - C	666	-5975	E - F	83	-14
C - D	666	-5975			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - I	4388	-467	H - G	4199	-441
I - H	4332	-464	G - E	4249	-443

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - B	1097	-55	H - D	1952	-247
B - H	1806	-222	D - G	989	-36
C - H	73	-582			

Lumber

Top chord 2x4 HF #1&Bet. :T2 2x4 DF-L 1800f-1.5E:
Bot chord 2x6 DF-L #1&Bet.
Webs 2x4 :HF Standard + HF Stud: :W4 2x4 HF #2:

Special Loads

------(Lumber Dur.Fac.=1.15 / Plate Dur.Fac.=1.15)
TC: From 82 plf at 0.00 to 82 plf at 5.94
TC: From 41 plf at 5.94 to 41 plf at 18.52
TC: From 82 plf at 18.52 to 82 plf at 25.96
BC: From 20 plf at 0.00 to 20 plf at 5.97
BC: From 10 plf at 5.97 to 10 plf at 18.49
BC: From 20 plf at 18.49 to 20 plf at 24.46
BC: 684 lb Conc. Load at 5.97
BC: 277 lb Conc. Load at 8.00,10.00,12.00,12.46 14.46,16.46
BC: 658 lb Conc. Load at 18.49

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

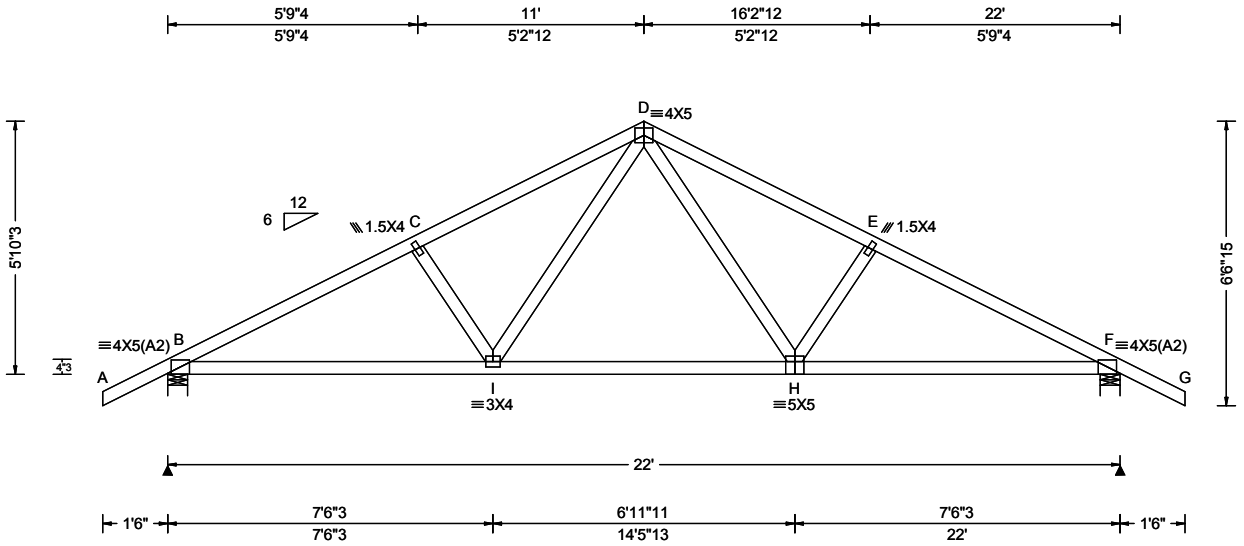
Wind

Wind loads and reactions based on MWFRS.

Right cantilever is exposed to wind

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B01	Ply: 1 Qty: 11 Wgt: 109.2 lbs	SEQN: 4090 / T13 / COMN FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.049	I	999	360
VERT(TL): 0.157	I	999	240
HORZ(LL): 0.019	H	-	-
HORZ(TL): 0.059	H	-	-

Creep Factor: 1.5
Max TC CSI: 0.396
Max BC CSI: 0.424
Max Web CSI: 0.343
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	1293	/ 99	/ 823	/ -	/ 165	/ 5.5
F	1293	/ 99	/ 823	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
B Min Brg Width Req = 2.1
F Min Brg Width Req = 2.1
Bearings B & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	D - E	530	-1757
B - C	514	-2000	E - F	515	-1999
C - D	529	-1758	F - G	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - I	1711	-340	H - F	1710	-354
I - H	1089	-151			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - I	216	-507	D - H	671	-167
I - D	672	-166	H - E	216	-507

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

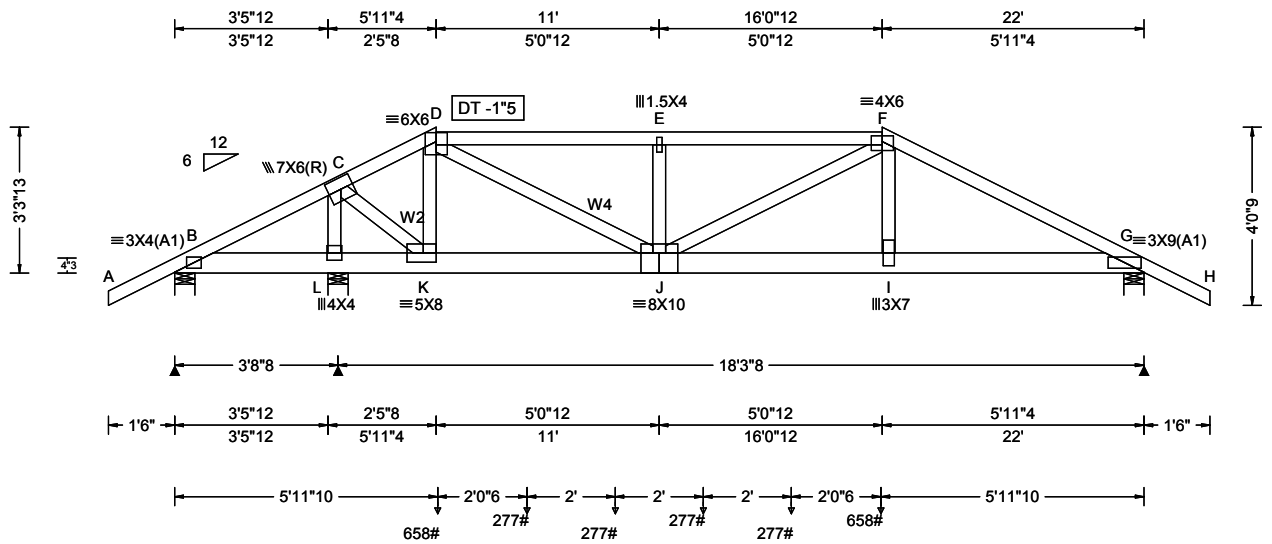
Truss designed for unbalanced snow loads.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B02	Ply: 1 Qty: 1 Wgt: 131.6 lbs	SEQN: 4102 / T20 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.067	E	999	360
VERT(TL): 0.205	E	999	240
HORZ(LL): 0.013	D	-	-
HORZ(TL): 0.041	D	-	-

Creep Factor: 1.5
Max TC CSI: 0.480
Max BC CSI: 0.582
Max Web CSI: 0.598
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	167	/ 467	/ 12	/ -	/ -	/ 5.5
L	2996	/ 297	/ -	/ -	/ -	/ 5.5
G	1723	/ 190	/ -	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
L Min Brg Width Req = 2.8
G Min Brg Width Req = 1.8
Bearings B, L, & G are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	- 14	E - F	294	- 2708
B - C	1311	- 145	F - G	316	- 3044
C - D	101	- 954	G - H	83	- 14
D - E	294	- 2708			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - L	118	- 1121	J - I	2599	- 260
L - K	103	- 995	I - G	2647	- 262
K - J	907	- 94			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
L - C	324	- 2871	E - J	57	- 462
C - K	2488	- 253	J - F	156	- 38
K - D	120	- 805	F - I	944	- 34
D - J	2075	- 229			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x6 DF-L #1&Bet.
Webs 2x4 :HF Standard + HF Stud: :W2, W4 2x4 HF #2:

Special Loads

------(Lumber Dur.Fac.=1.15 / Plate Dur.Fac.=1.15)

TC: From	82 plf at	-1.50 to	82 plf at	5.94
TC: From	41 plf at	5.94 to	41 plf at	16.06
TC: From	82 plf at	16.06 to	82 plf at	23.50
BC: From	20 plf at	0.00 to	20 plf at	5.97
BC: From	10 plf at	5.97 to	10 plf at	16.03
BC: From	20 plf at	16.03 to	20 plf at	22.00

BC: 658 lb Conc. Load at 5.97,16.03
BC: 277 lb Conc. Load at 8.00,10.00,12.00,14.00

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads and reactions based on MWFRS.

Uplifts based on an elevation at or above 3000 ft.

Additional Notes

Negative reaction(s) of -467# MAX. from a non-wind load case requires uplift connection. See Maximum Reactions.

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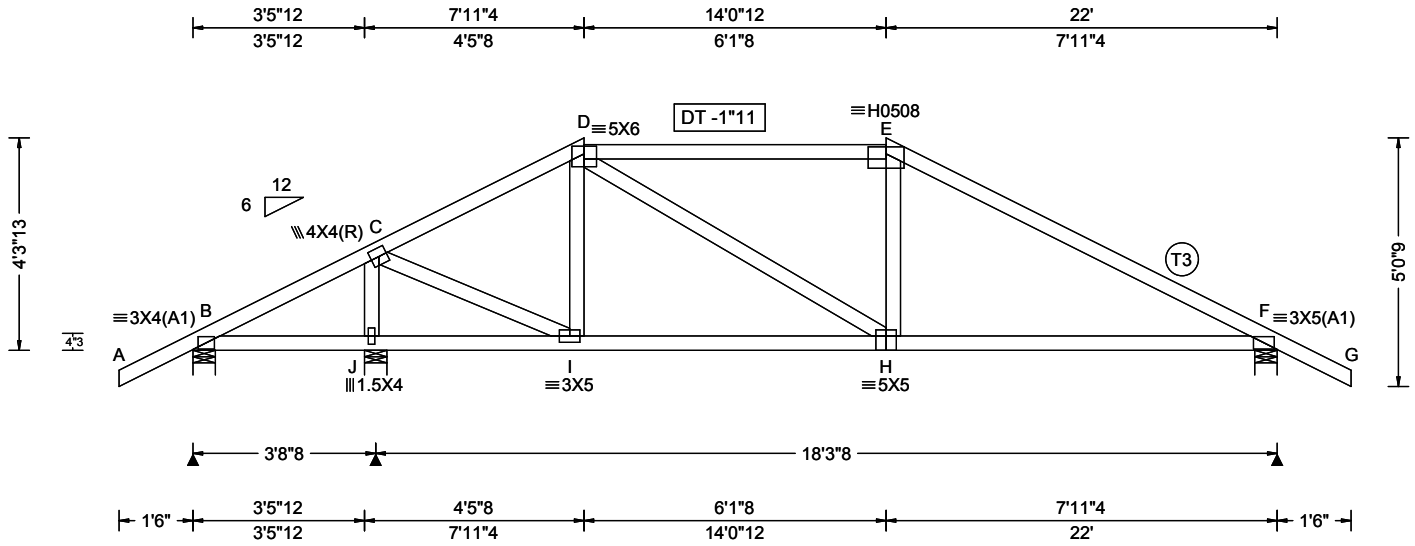
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B03	Ply: 1 Qty: 1 Wgt: 109.2 lbs	SEQN: 4105 / T18 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.026	H	999	360
VERT(TL): 0.073	E	999	240
HORZ(LL): 0.009	H	-	-
HORZ(TL): -0.026	H	-	-

Creep Factor: 1.5
Max TC CSI: 0.934
Max BC CSI: 0.514
Max Web CSI: 0.476
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	315	/ 41	/ 165	/ -	/ 129	/ 5.5
J	1270	/ 74	/ 774	/ -	/ -	/ 5.5
F	1178	/ 91	/ 716	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
J Min Brg Width Req = 1.7
F Min Brg Width Req = 1.9
Bearings B, J, & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	D - E	435	-1141
B - C	199	-61	E - F	383	-1445
C - D	279	-883	F - G	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - J	92	-142	I - H	766	-64
J - I	80	-108	H - F	1141	-199

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
J - C	317	-1178	D - H	555	-177
C - I	935	-137	E - H	183	-100
I - D	111	-313			

Lumber

Top chord 2x4 HF #1&Bet. :T3 2x4 DF-L #1&Bet.:
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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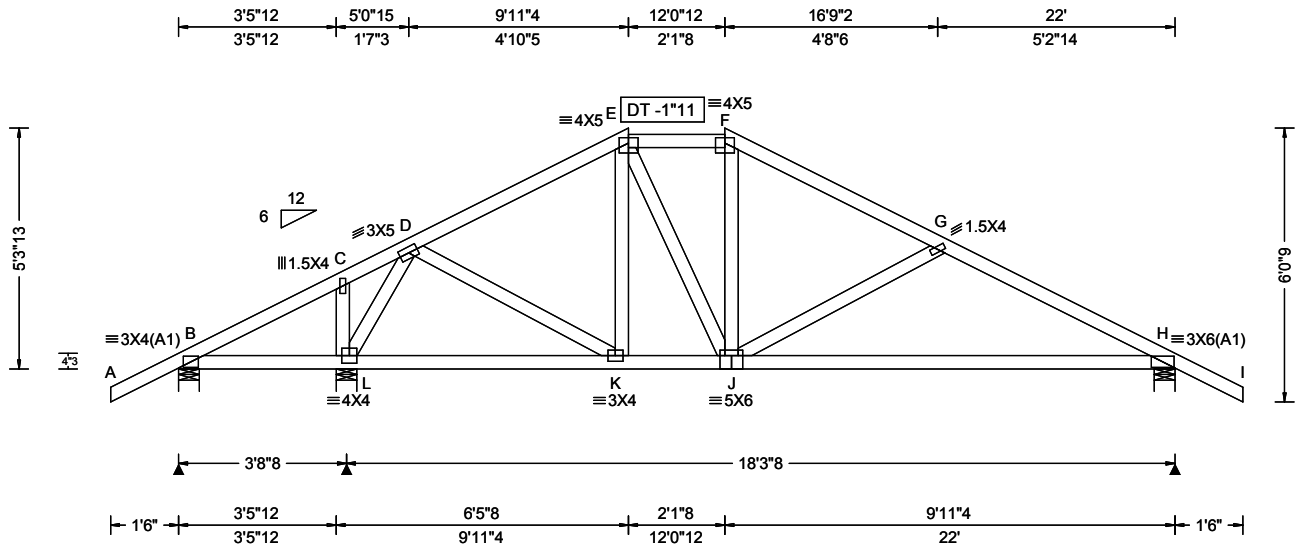
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B04	Ply: 1 Qty: 1 Wgt: 123.2 lbs	SEQN: 4108 / T19 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.034	G	999	360
VERT(TL): 0.087	G	999	240
HORZ(LL): 0.012	J	-	-
HORZ(TL): 0.030	J	-	-

Creep Factor: 1.5
Max TC CSI: 0.407
Max BC CSI: 0.550
Max Web CSI: 0.358
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	221	/ 28	/ 133	/ -	/ 152	/ 5.5
L	1549	/ 89	/ 827	/ -	/ -	/ 5.5
H	1182	/ 85	/ 707	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
L Min Brg Width Req = 2.2
H Min Brg Width Req = 1.9
Bearings B, L, & H are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	E - F	350	-919
B - C	427	-88	F - G	320	-1154
C - D	443	-58	G - H	420	-1709
D - E	300	-985	H - I	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - L	186	-314	K - J	787	-34
L - K	281	-58	J - H	1451	-275

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - L	46	-162	E - J	401	-103
L - D	361	-1399	F - J	216	-61
D - K	562	-78	J - G	234	-606
K - E	48	-234			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

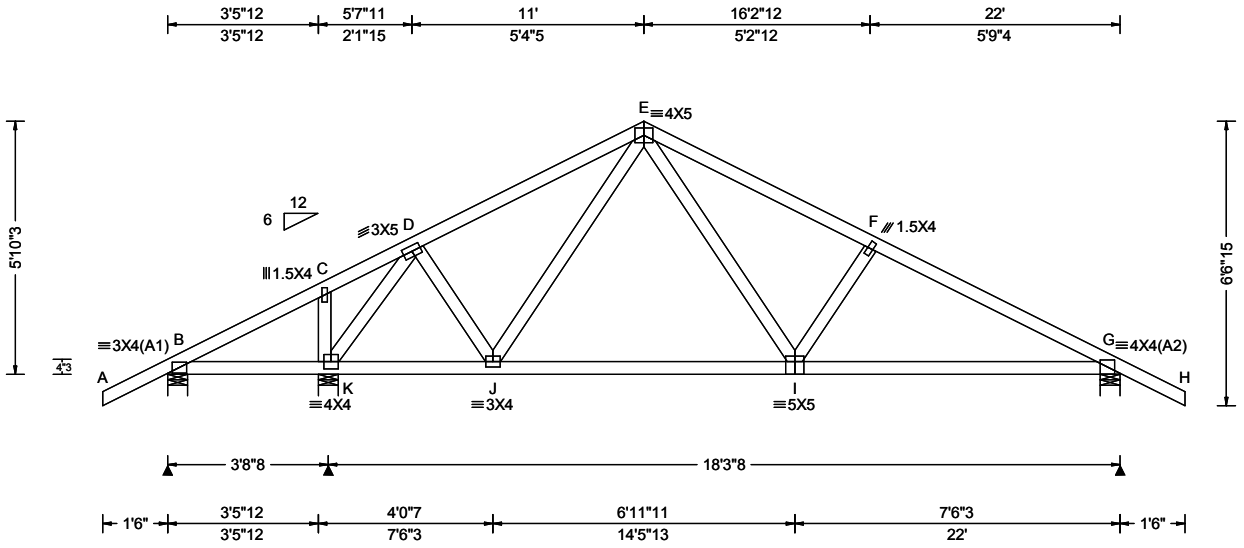
In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B05	Ply: 1 Qty: 2 Wgt: 117.6 lbs	SEQN: 4111 / T31 / COMN FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.027	F	999	360
VERT(TL): 0.092	F	999	240
HORZ(LL): 0.009	E	-	-
HORZ(TL): 0.030	E	-	-

Creep Factor: 1.5
Max TC CSI: 0.479
Max BC CSI: 0.400
Max Web CSI: 0.402
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	219	/ 29	/ 132	/ -	/ 165	/ 5.5
K	1324	/ 91	/ 830	/ -	/ -	/ 5.5
G	1095	/ 84	/ 706	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
K Min Brg Width Req = 1.8
G Min Brg Width Req = 1.8
Bearings B, K, & G are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	E - F	409	- 1334
B - C	390	- 97	F - G	394	- 1577
C - D	392	- 56	G - H	83	0
D - E	288	- 811			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
B - K	194	- 312	J - I	696	- 43
K - J	459	- 59	I - G	1334	- 246

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - K	67	- 163	J - E	87	- 295
K - D	350	- 1343	E - I	688	- 166
D - J	435	- 36	I - F	217	- 513

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

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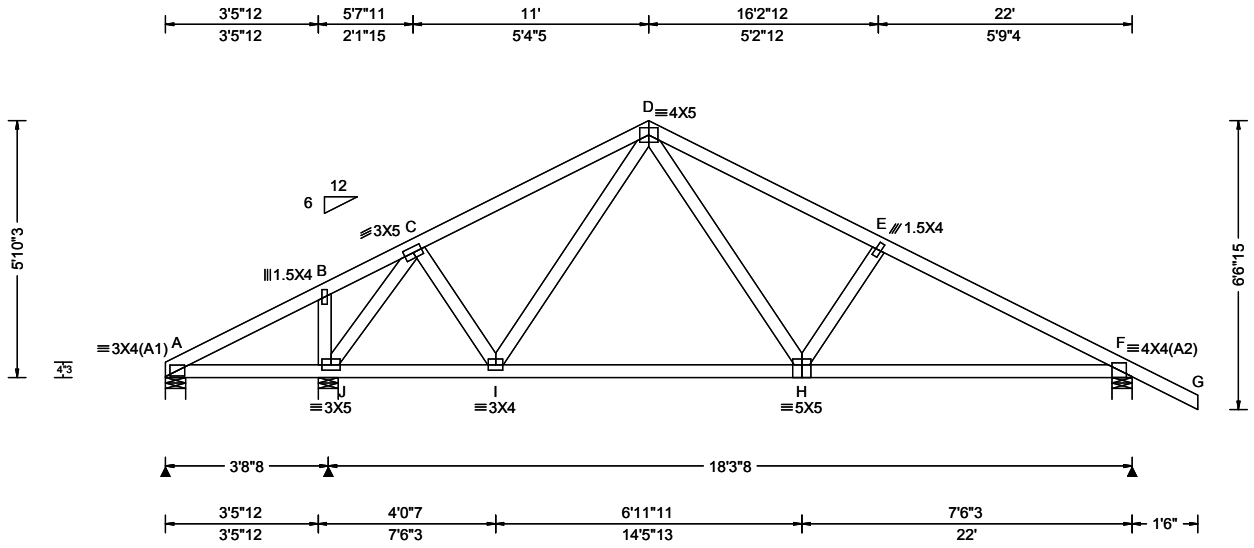
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B06	Ply: 1 Qty: 1 Wgt: 114.8 lbs	SEQN: 4114 / T30 / COMN FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.027	E	999	360
VERT(TL): 0.092	E	999	240
HORZ(LL): 0.009	D	-	-
HORZ(TL): 0.031	D	-	-

Creep Factor: 1.5
Max TC CSI: 0.468
Max BC CSI: 0.436
Max Web CSI: 0.387
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	54	/ 42	/ 25	/ -	/ 152	/ 5.5
J	1333	/ 93	/ 838	/ -	/ -	/ 5.5
F	1098	/ 85	/ 707	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 1.5
J Min Brg Width Req = 1.8
F Min Brg Width Req = 1.8
Bearings A, J, & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	360	- 72	D - E	413	- 1339
B - C	355	- 33	E - F	401	- 1582
C - D	303	- 826	F - G	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - J	140	- 279	I - H	701	- 51
J - I	481	- 61	H - F	1339	- 254

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - J	141	- 194	I - D	75	- 288
J - C	330	- 1296	D - H	688	- 166
C - I	425	- 19	H - E	217	- 512

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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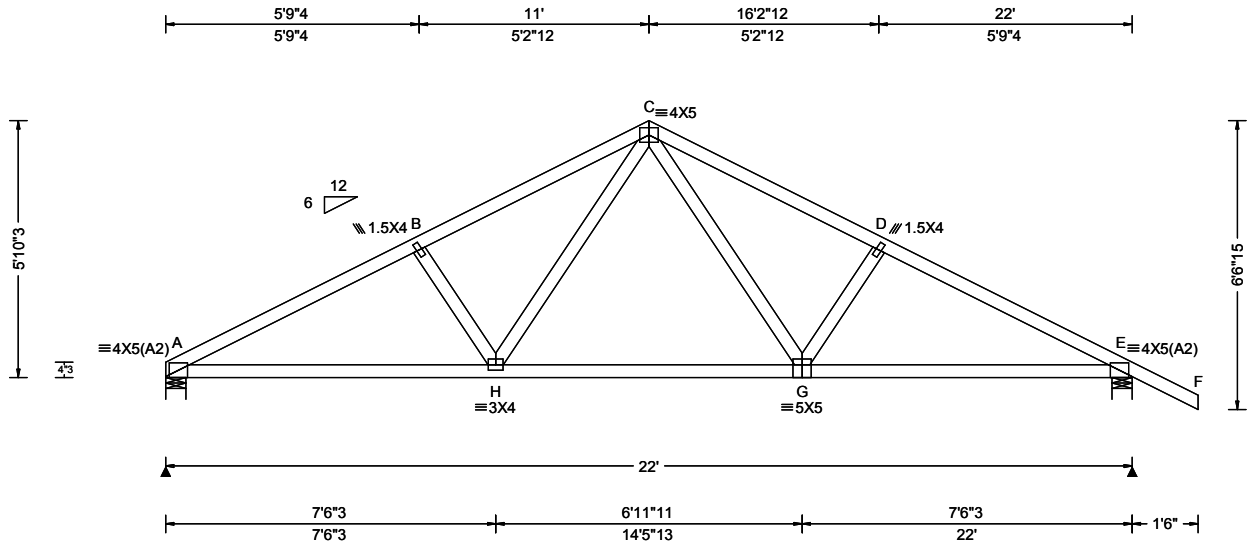
For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B07	Ply: 1 Qty: 8 Wgt: 106.4 lbs	SEQN: 4117 / T14 / COMN FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.048	G	999	360
VERT(TL): 0.157	G	999	240
HORZ(LL): 0.019	G	-	-
HORZ(TL): 0.059	G	-	-

Creep Factor: 1.5
Max TC CSI: 0.404
Max BC CSI: 0.438
Max Web CSI: 0.357
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1165	/ 78	/ 713	/ -	/ 152	/ 5.5
E	1296	/ 100	/ 824	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 1.9
E Min Brg Width Req = 2.1
Bearings A & E are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	578	- 2031	D - E	536	- 2006
B - C	589	- 1787	E - F	83	0
C - D	547	- 1763			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - H	1745	- 380	G - E	1716	- 374
H - G	1099	- 172			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - H	223	- 524	C - G	670	- 164
H - C	700	- 179	G - D	218	- 508

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

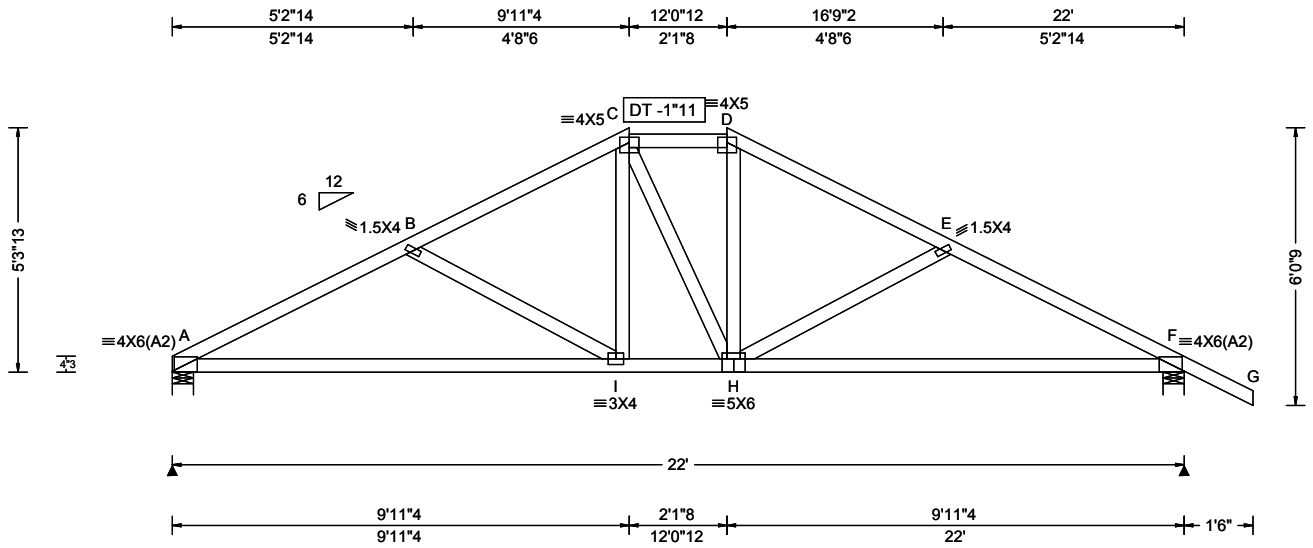
Truss designed for unbalanced snow loads.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B08	Ply: 1 Qty: 1 Wgt: 113.4 lbs	SEQN: 4120 / T24 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.067	I	999	360
VERT(TL): 0.168	I	999	240
HORZ(LL): 0.030	H	-	-
HORZ(TL): 0.075	H	-	-

Creep Factor: 1.5
Max TC CSI: 0.369
Max BC CSI: 0.565
Max Web CSI: 0.356
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1312	/ 79	/ 712	/ -	/ 139	/ 5.5
F	1445	/ 101	/ 823	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.2
F Min Brg Width Req = 2.4
Bearings A & F are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	582	- 2294	D - E	460	- 1731
B - C	480	- 1750	E - F	557	- 2271
C - D	475	- 1432	F - G	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - I	1977	- 391	H - F	1949	- 396
I - H	1433	- 178			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - I	241	- 601	D - H	403	- 112
I - C	431	- 100	H - E	228	- 581
C - H	158	- 161			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

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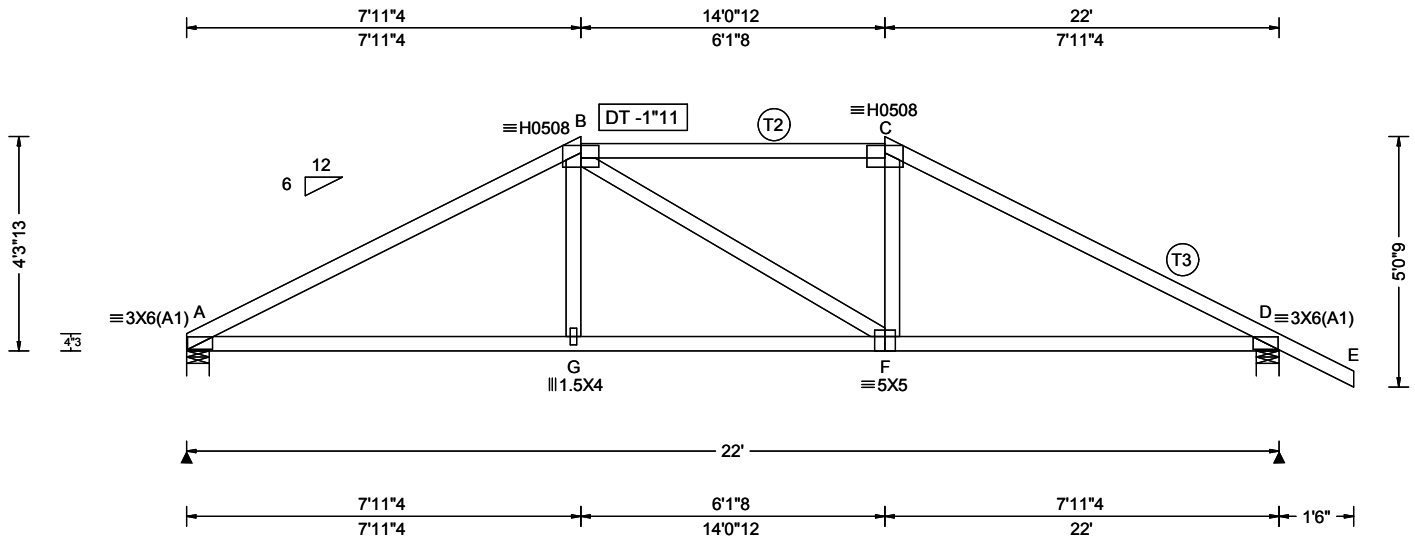
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B09	Ply: 1 Qty: 1 Wgt: 96.6 lbs	SEQN: 4123 / T23 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE, HS

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.038	F	999	360
VERT(TL): 0.127	F	999	240
HORZ(LL): 0.021	F	-	-
HORZ(TL): 0.060	F	-	-

Creep Factor: 1.5
Max TC CSI: 0.961
Max BC CSI: 0.623
Max Web CSI: 0.251
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	1247	/ 81	/ 705	/ -	/ 115	/ 5.5
D	1387	/ 104	/ 816	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.1
D Min Brg Width Req = 2.3
Bearings A & D are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	482	- 1903	C - D	491	- 1890
B - C	530	- 1536	D - E	83	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - G	1551	- 270	F - D	1536	- 294
G - F	1544	- 271			

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
G - B	295	0	C - F	293	- 11
B - F	205	- 221			

Lumber

Top chord 2x4 DF-L 2100f-1.8E :T2 2x4 HF #1&Bet.:
:T3 2x4 DF-L 1800f-1.5E:
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Truss designed for unbalanced snow loads.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
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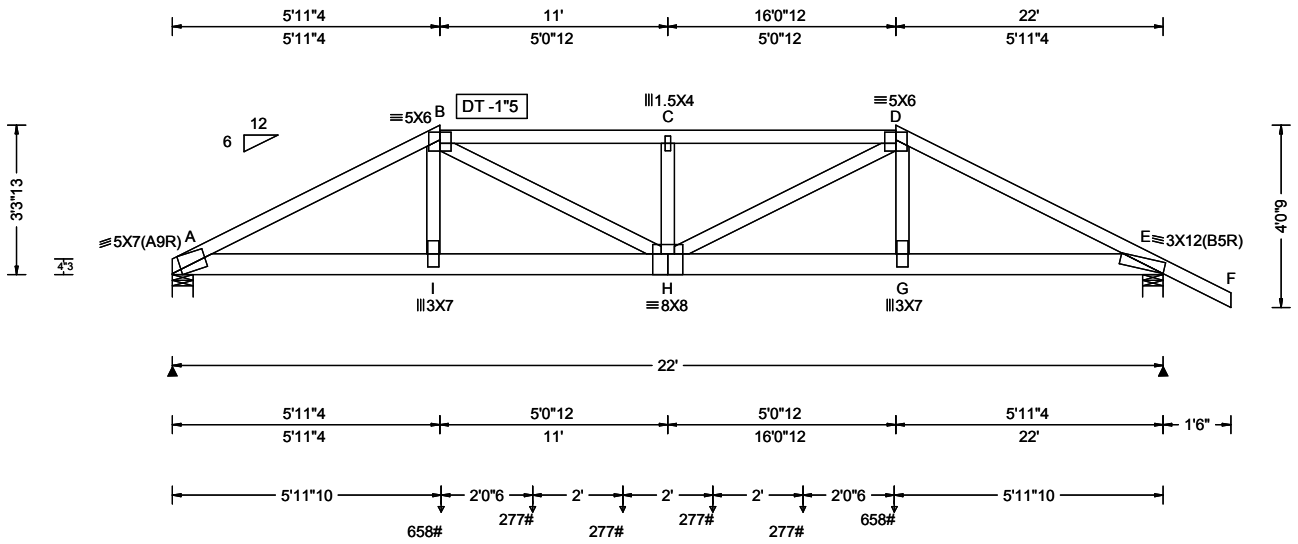
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** B10	Ply: 1 Qty: 1 Wgt: 120.4 lbs	SEQN: 4126 / T12 / HIPS FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)

TCLL:	21.00
TCDL:	18.00
BCLL:	0.00
BCDL:	10.00
Des Ld:	49.00
NCBCLL:	10.00
Soffit:	0.00

Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.134	C	999	360
VERT(TL): 0.408	C	637	240
HORZ(LL): 0.029	B	-	-
HORZ(TL): 0.088	B	-	-

Creep Factor: 1.5
Max TC CSI: 0.693
Max BC CSI: 0.707
Max Web CSI: 0.567
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	2073	/ 205	/ -	/ -	/ -	/ 5.5
E	2207	/ 239	/ -	/ -	/ -	/ 5.5

Wind reactions based on MWFRS
A Min Brg Width Req = 2.2
E Min Brg Width Req = 2.4
Bearings A & E are a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	433	-4154	D - E	425	-4125
B - C	479	-4538	E - F	83	-14
C - D	479	-4538			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - I	3645	-367	H - G	3570	-358
I - H	3596	-365	G - E	3617	-360

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
I - B	965	-38	H - D	1113	-138
B - H	1083	-131	D - G	942	-33
C - H	55	-455			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x6 DF-L #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Special Loads

------(Lumber Dur.Fac.=1.15 / Plate Dur.Fac.=1.15)

TC: From	82 plf at	0.00 to	82 plf at	5.94
TC: From	41 plf at	5.94 to	41 plf at	16.06
TC: From	82 plf at	16.06 to	82 plf at	23.50
BC: From	20 plf at	0.00 to	20 plf at	5.97
BC: From	10 plf at	5.97 to	10 plf at	16.03
BC: From	20 plf at	16.03 to	20 plf at	22.00

BC: 658 lb Conc. Load at 5.97,16.03
BC: 277 lb Conc. Load at 8.00,10.00,12.00,14.00

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Purlins

In lieu of structural panels use purlins to brace all flat TC @ 24" oc.

Wind

Wind loads and reactions based on MWFRS.

Uplifts based on an elevation at or above 3000 ft.

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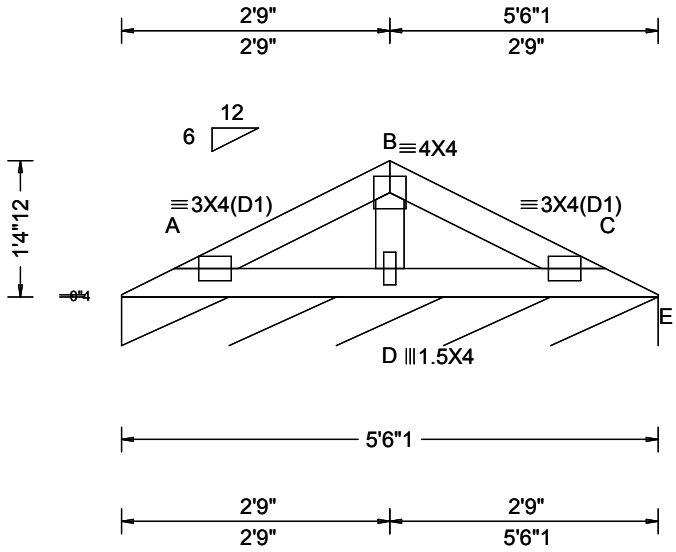
Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** V1	Ply: 1 Qty: 2 Wgt: 18.2 lbs	SEQN: 4128 / T39 / VAL FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.003	D	999	360
VERT(TL): 0.010	D	999	240
HORZ(LL): -0.001	D	-	-
HORZ(TL): -0.004	D	-	-

Creep Factor: 1.5
Max TC CSI: 0.103
Max BC CSI: 0.074
Max Web CSI: 0.063
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
E*	104	/ 3	/ 54	/ -	/ 4	/ 66.0

Wind reactions based on MWFRS
E Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	151	- 52	B - C	151	- 52

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - D	97	- 91	D - C	97	- 91

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
B - D	172	- 249

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Truss designed for unbalanced snow loads.

Wind

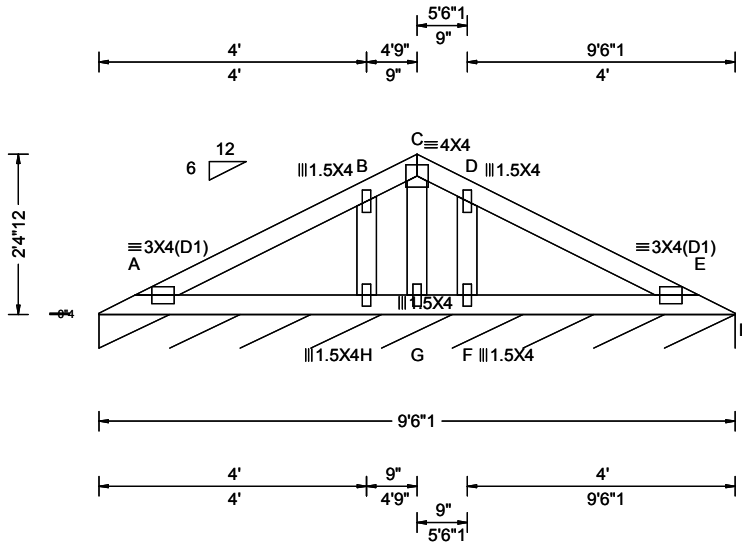
Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Additional Notes

See DWG VAL160101014 for valley details.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** V2	Ply: 1 Qty: 2 Wgt: 36.4 lbs	SEQN: 4130 / T38 / VAL FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.009	F	999	360
VERT(TL): 0.026	F	999	240
HORZ(LL): -0.003	F	-	-
HORZ(TL): -0.010	F	-	-

Creep Factor: 1.5
Max TC CSI: 0.229
Max BC CSI: 0.121
Max Web CSI: 0.087
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
I*	105	/ 5	/ 57	/ -	/ 5	/ 114

Wind reactions based on MWFRS
I Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	286	- 124	C - D	189	- 10
B - C	189	- 10	D - E	286	- 124

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - H	156	- 178	G - F	165	- 185
H - G	165	- 185	F - E	156	- 178

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - H	238	- 385	F - D	238	- 385
C - G	0	- 105			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Truss designed for unbalanced snow loads.

Wind

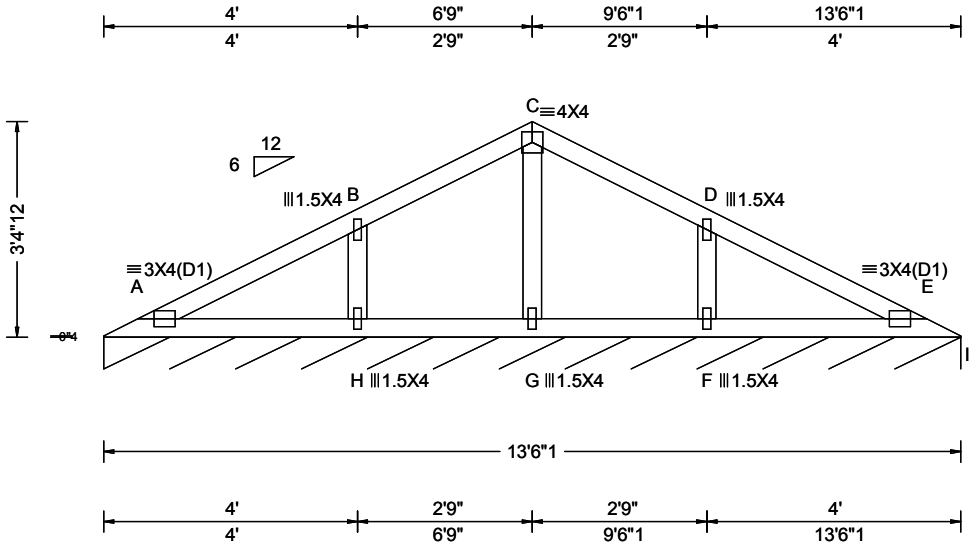
Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Additional Notes

See DWG VAL160101014 for valley details.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** V3	Ply: 1 Qty: 2 Wgt: 49.0 lbs	SEQN: 4132 / T37 / VAL FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.008	F	999	360
VERT(TL): 0.024	F	999	240
HORZ(LL): -0.003	F	-	-
HORZ(TL): -0.010	F	-	-

Creep Factor: 1.5
Max TC CSI: 0.264
Max BC CSI: 0.109
Max Web CSI: 0.090
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
I*	103	/ 6	/ 58	/ -	/ 5	/ 162

Wind reactions based on MWFRS
I Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	192	-76	C - D	164	-9
B - C	164	0	D - E	192	-76

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - H	94	-91	G - F	102	-102
H - G	102	-102	F - E	94	-91

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - H	214	-431	F - D	214	-431
C - G	51	-271			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Truss designed for unbalanced snow loads.

Wind

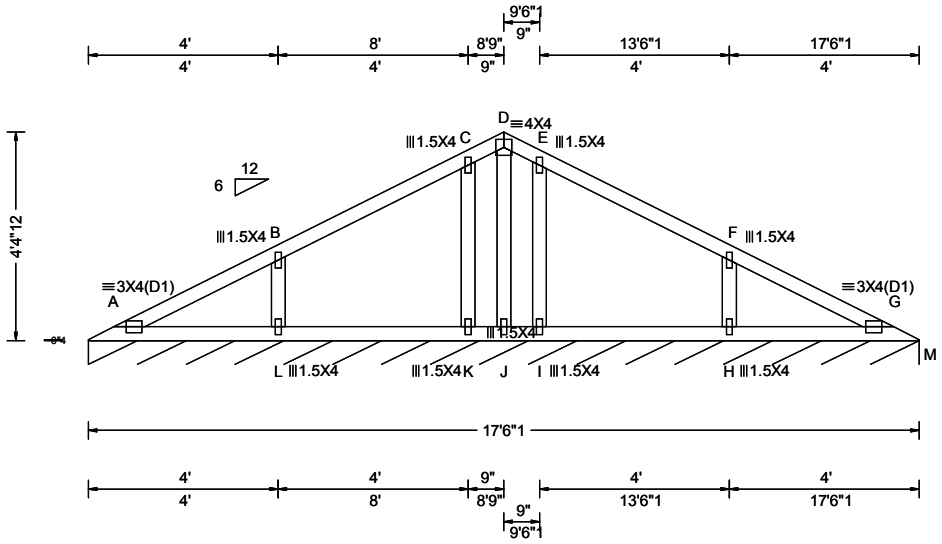
Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Additional Notes

See DWG VAL160101014 for valley details.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** V4	Ply: 1 Qty: 1 Wgt: 75.6 lbs	SEQN: 4134 / T36 / VAL FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.005	L	999	360
VERT(TL): 0.017	L	999	240
HORZ(LL): -0.002	H	-	-
HORZ(TL): -0.007	H	-	-

Creep Factor: 1.5
Max TC CSI: 0.294
Max BC CSI: 0.109
Max Web CSI: 0.139
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
M*	102	/ 6	/ 59	/ -	/ 5	/ 210

Wind reactions based on MWFRS
M Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	167	- 93	D - E	162	0
B - C	190	- 22	E - F	190	- 30
C - D	162	- 2	F - G	167	- 93

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - L	106	- 81	J - I	116	- 100
L - K	114	- 95	I - H	114	- 95
K - J	116	- 100	H - G	106	- 81

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - L	204	- 439	I - E	233	- 414
C - K	233	- 414	H - F	204	- 439
D - J	43	- 164			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Truss designed for unbalanced snow loads.

Wind

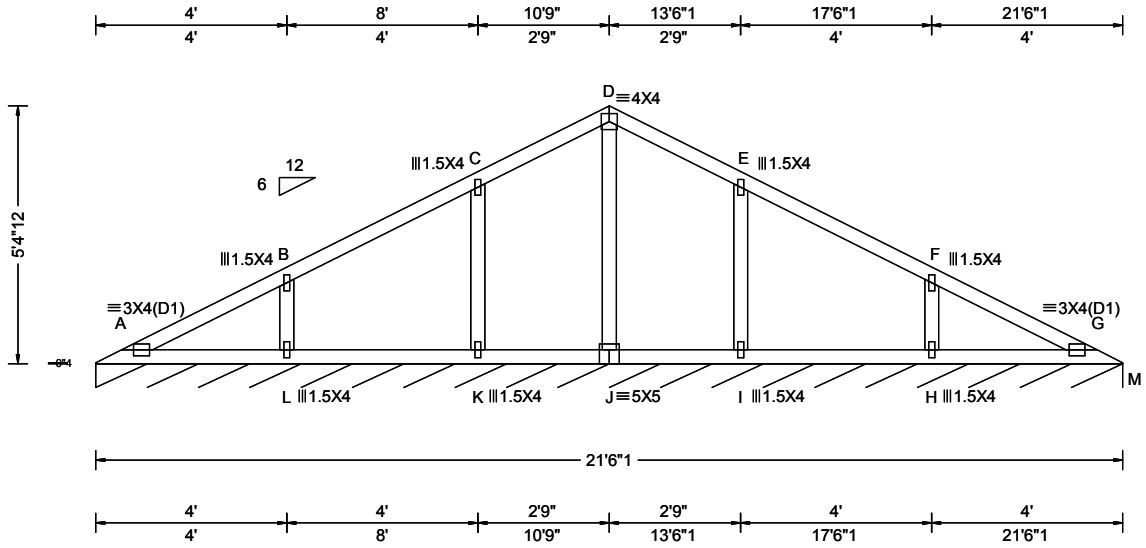
Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Additional Notes

See DWG VAL160101014 for valley details.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** V5	Ply: 1 Qty: 1 Wgt: 91.0 lbs	SEQN: 4137 / T35 / VAL FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.006	L	999	360
VERT(TL): 0.018	L	999	240
HORZ(LL): 0.002	L	-	-
HORZ(TL): 0.006	L	-	-

Creep Factor: 1.5
Max TC CSI: 0.251
Max BC CSI: 0.109
Max Web CSI: 0.148
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
M*	102	/ 6	/ 59	/ -	/ 6	/ 258

Wind reactions based on MWFRS
M Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	119	-83	D - E	183	-46
B - C	143	-46	E - F	143	-46
C - D	183	-46	F - G	119	-83

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - L	99	-73	J - I	108	-84
L - K	106	-80	I - H	106	-80
K - J	108	-84	H - G	99	-73

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - L	199	-362	I - E	209	-440
C - K	209	-440	H - F	199	-362
D - J	0	-222			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Truss designed for unbalanced snow loads.

Wind

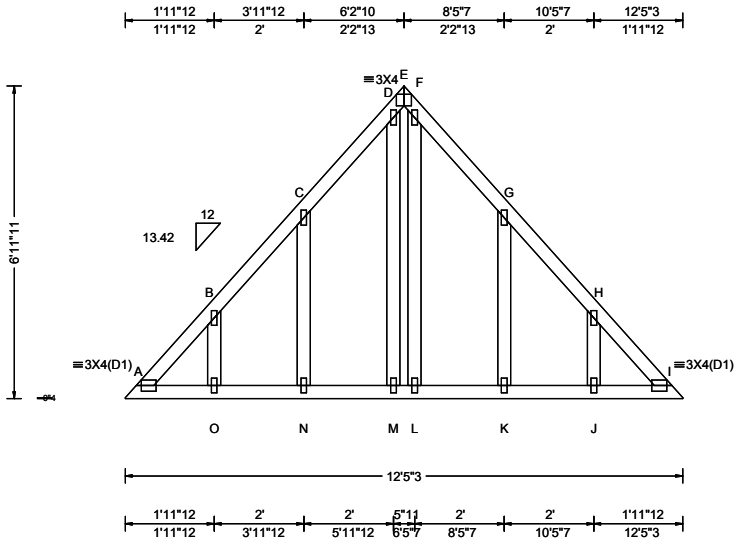
Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Additional Notes

See DWG VAL160101014 for valley details.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** LG1	Ply: 1 Qty: 2 Wgt: 84.0 lbs	SEQN: 4139 / T9 / HIP_ FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 0.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: NA
Speed: NA mph
Enclosure: NA
Category: NA
EXP: NA
Mean Height: NA ft
TCDL: NA psf
BCDL: NA psf
MWFRS Parallel Dist: NA
C&C Dist a: NA ft
Loc. from endwall: NA
I: NA GCpi: NA
Wind Duration: NA

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: - CAT: -
Pf: 21.0 Ce: -
Lu: - Cs: -
Snow Duration: -

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: No
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.000	-	-	360
VERT(TL): 0.000	O	999	240
HORZ(LL): 0.000	-	-	-
HORZ(TL): -0.000	J	-	-

Creep Factor: 1.5
Max TC CSI: 0.001
Max BC CSI: 0.001
Max Web CSI: 0.001
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A*	2	/ -	/ -	/ -	/ -	/ 149

A Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	1	0	E - F	0	0
B - C	1	-1	F - G	1	-1
C - D	1	-1	G - H	1	-1
D - E	0	0	H - I	1	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - O	0	0	L - K	0	0
O - N	0	0	K - J	0	0
N - M	0	0	J - I	0	0
M - L	0	0			

Maximum Gable Forces Per Ply (lbs)

Gables	Tens.	Comp.	Gables	Tens.	Comp.
B - O	0	-2	L - F	0	-1
C - N	0	-2	K - G	0	-2
D - M	0	-1	J - H	0	-2

Lumber
Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Plating Notes
All plates are 1.5X4 except as noted.

Additional Notes
This "Hip Frame" may be used in place of purlins on the hip plane to brace the flat top chord of hip trusses. See detail drawing HIPFRAME1014 or HIPFR1801014 for additional information.

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS DRAWING!
****IMPORTANT**** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

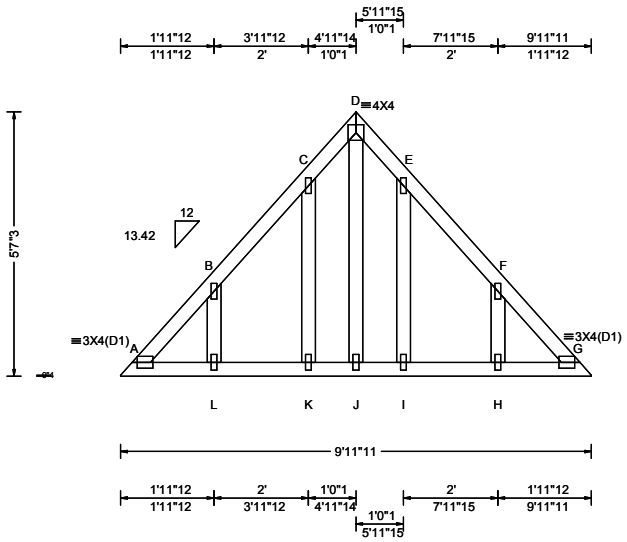
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise,top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing,any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses**A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.**

For more information see this job's general notes page and these web sites: ALPINE: www.alpineitw.com; TPI: www.tpinst.org; SBCA: www.sbcindustry.com; ICC: www.iccsafe.org

Reno Truss, Inc.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** LG2	Ply: 1 Qty: 2 Wgt: 60.2 lbs	SEQN: 4141 / T22 / HIP_ FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 0.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: NA
Speed: NA mph
Enclosure: NA
Category: NA
EXP: NA
Mean Height: NA ft
TCDL: NA psf
BCDL: NA psf
MWFRS Parallel Dist: NA
C&C Dist a: NA ft
Loc. from endwall: NA
I: NA GCpi: NA
Wind Duration: NA

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: - CAT: -
Pf: 21.0 Ce: -
Lu: - Cs: -
Snow Duration: -

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: No
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria
PP Deflection in loc L/defl L/#
VERT(LL): 0.000 - - 360
VERT(TL): 0.000 L 999 240
HORZ(LL): 0.000 - - -
HORZ(TL): -0.000 H - -
Creep Factor: 1.5
Max TC CSI: 0.001
Max BC CSI: 0.001
Max Web CSI: 0.001
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs), or *=PLF

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A*	2	/ -	/ -	/ -	/ -	/ 119

A Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	1	0	D - E	0	0
B - C	1	-1	E - F	1	-1
C - D	0	0	F - G	1	0

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - L	0	0	J - I	0	0
L - K	0	0	I - H	0	0
K - J	0	0	H - G	0	0

Maximum Gable Forces Per Ply (lbs)

Gables	Tens.	Comp.	Gables	Tens.	Comp.
B - L	0	-2	I - E	0	-2
C - K	0	-2	H - F	0	-2
D - J	0	-1			

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

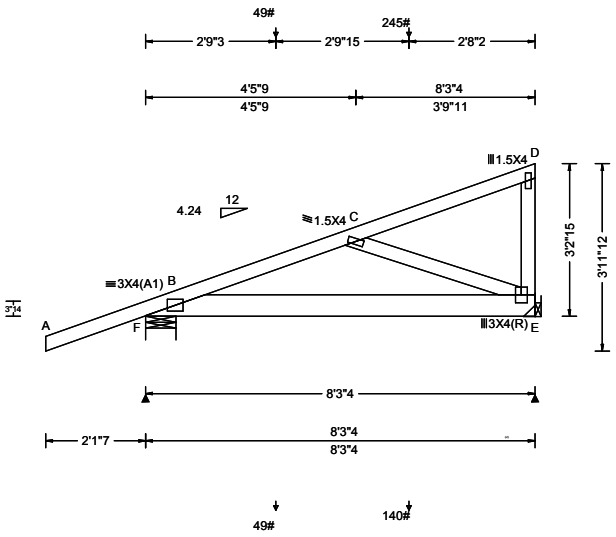
Plating Notes

All plates are 1.5X4 except as noted.

Additional Notes

This "Hip Frame" may be used in place of purlins on the hip plane to brace the flat top chord of hip trusses. See detail drawing HIPFRAME1014 or HIPFR1801014 for additional information.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** CG1	Ply: 1 Qty: 7 Wgt: 47.6 lbs	SEQN: 4072 / T10 / SPEC FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.007	E	999	360
VERT(TL): 0.041	E	999	240
HORZ(LL): 0.002	E	-	-
HORZ(TL): 0.013	E	-	-

Creep Factor: 1.5
Max TC CSI: 0.478
Max BC CSI: 0.260
Max Web CSI: 0.184
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
F	617	/ 39	/ -	/ -	/ -	/ 7.8
E	382	/ 19	/ -	/ -	/ -	/ -

Wind reactions based on MWFRS
F Min Brg Width Req = 1.5
E Min Brg Width Req = -
Bearing F is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	86	- 7	C - D	36	- 74
B - C	64	- 535			

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - E	476	- 60

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
C - E	64	- 504	D - E	10	- 125

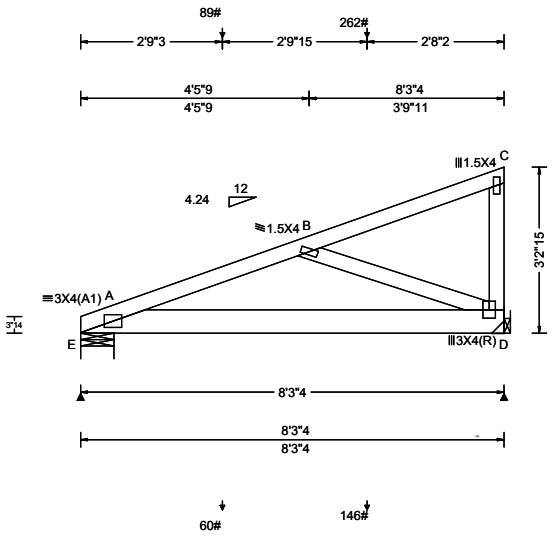
Lumber
Top chord 2x4 HF #1&Bet.
Bot chord 2x6 DF-L #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Hangers / Ties
(J) Hanger Support Required, by others

Loading
Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.
Overhang designed for 2.00X Pf.

Wind
Wind loads and reactions based on MWFRS.
Right end vertical not exposed to wind pressure.
Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** CG2	Ply: 1 Qty: 1 Wgt: 44.8 lbs	SEQN: 4096 / T17 / SPEC FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): 0.013	D	999	360
VERT(TL): 0.050	D	999	240
HORZ(LL): 0.004	D	-	-
HORZ(TL): 0.016	D	-	-

Creep Factor: 1.5
Max TC CSI: 0.246
Max BC CSI: 0.302
Max Web CSI: 0.198
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
E	422	/ 17	/ -	/ -	/ -	/ 7.8
D	407	/ 25	/ -	/ -	/ -	/ -

Wind reactions based on MWFRS
E Min Brg Width Req = 1.5
D Min Brg Width Req = -
Bearing E is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	78	- 566	B - C	34	- 81

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
A - D	513	- 72

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.	Webs	Tens.	Comp.
B - D	77	- 543	C - D	10	- 120

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x6 DF-L #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

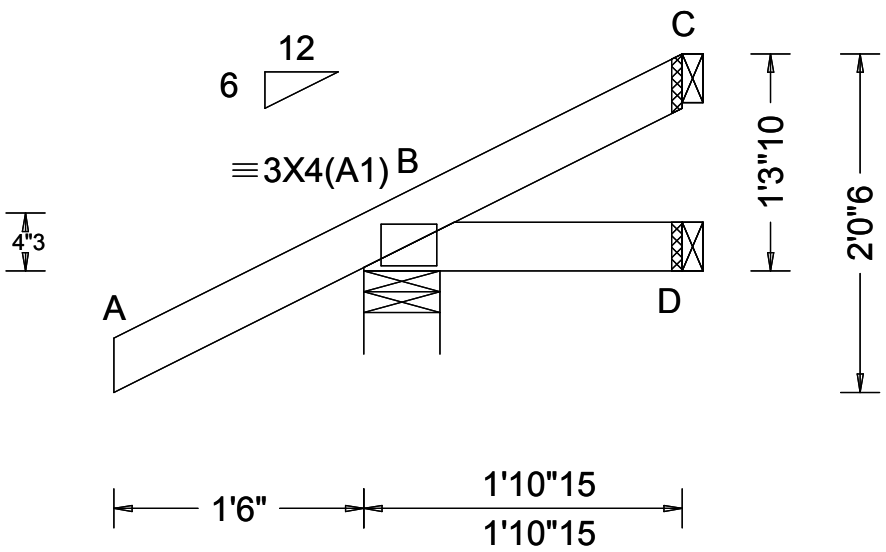
Wind

Wind loads and reactions based on MWFRS.

Right end vertical not exposed to wind pressure.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** J1	Ply: 1 Qty: 15 Wgt: 8.4 lbs	SEQN: 4066 / T7 / JACK FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria
PP Deflection in loc L/defl L/#
VERT(LL): NA
VERT(TL): NA
HORZ(LL): -0.001 D - -
HORZ(TL): -0.003 D - -
Creep Factor: 1.5
Max TC CSI: 0.237
Max BC CSI: 0.053
Max Web CSI: 0.000
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	343	/ 31	/ 233	/ -	/ 45	/ 5.5
D	24	/ 14	/ 22	/ -	/ -	/ 1.5
C	24	/ 27	/ 24	/ -	/ -	/ 1.5

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
D Min Brg Width Req = -
C Min Brg Width Req = -
Bearing B is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	B - C	11	-42

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - D	0	0

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

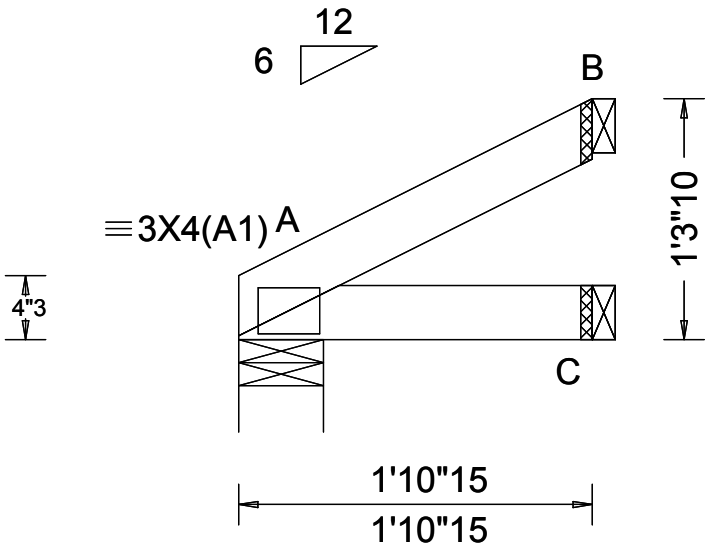
Overhang designed for 2.00X Pf.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** J1A	Ply: 1 Qty: 1 Wgt: 7.0 lbs	SEQN: 4092 / T16 / JACK FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): NA			
VERT(TL): NA			
HORZ(LL): 0.000	C	-	-
HORZ(TL): 0.001	C	-	-

Creep Factor: 1.5
Max TC CSI: 0.036
Max BC CSI: 0.026
Max Web CSI: 0.000
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	106	/ -	/ 72	/ -	/ 25	/ 5.5
C	36	/ -	/ 26	/ -	/ -	/ 1.5
B	64	/ 15	/ 39	/ -	/ -	/ 1.5

Wind reactions based on MWFRS
A Min Brg Width Req = 1.5
C Min Brg Width Req = -
B Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
A - B	29	-50

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
A - C	0	0

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.

Loading

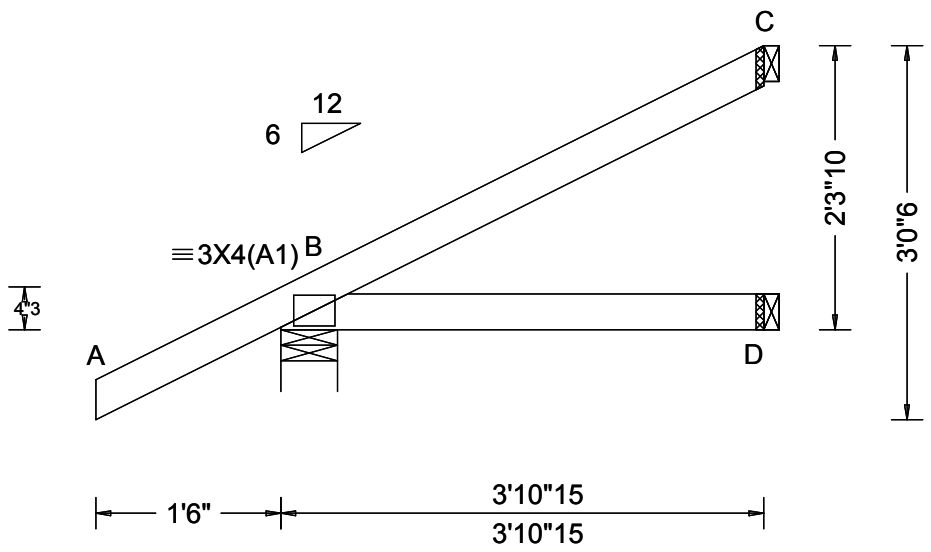
Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** J2	Ply: 1 Qty: 15 Wgt: 15.4 lbs	SEQN: 4068 / T6 / JACK FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): NA			
VERT(TL): NA			
HORZ(LL): 0.001	D	-	-
HORZ(TL): 0.005	D	-	-

Creep Factor: 1.5
Max TC CSI: 0.263
Max BC CSI: 0.101
Max Web CSI: 0.000
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	360	/ 25	/ 274	/ -	/ 71	/ 5.5
D	70	/ -	/ 50	/ -	/ -	/ 1.5
C	123	/ 28	/ 69	/ -	/ -	/ 1.5

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
D Min Brg Width Req = -
C Min Brg Width Req = -
Bearing B is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	B - C	55	-110

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - D	0	0

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

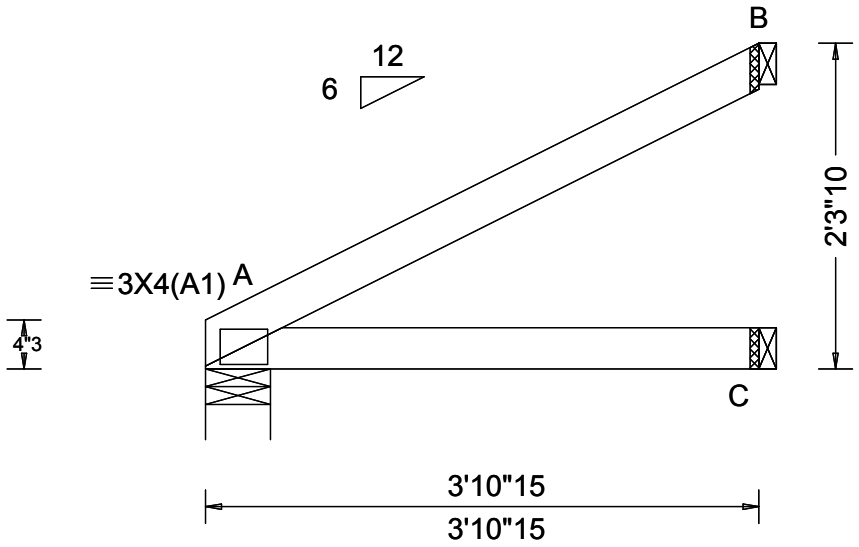
Overhang designed for 2.00X Pf.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** J2A	Ply: 1 Qty: 1 Wgt: 12.6 lbs	SEQN: 4094 / T15 / JACK FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria

PP Deflection in	loc	L/defl	L/#
VERT(LL): NA			
VERT(TL): NA			
HORZ(LL): 0.003	C	-	-
HORZ(TL): 0.009	C	-	-

Creep Factor: 1.5
Max TC CSI: 0.194
Max BC CSI: 0.127
Max Web CSI: 0.000
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
A	208	/ -	/ 143	/ -	/ 51	/ 5.5
C	76	/ -	/ 55	/ -	/ -	/ 1.5
B	139	/ 32	/ 84	/ -	/ -	/ 1.5

Wind reactions based on MWFRS
A Min Brg Width Req = 1.5
C Min Brg Width Req = -
B Min Brg Width Req = -
Bearing A is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
A - B	62	- 112

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
A - C	0	0

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.

Loading

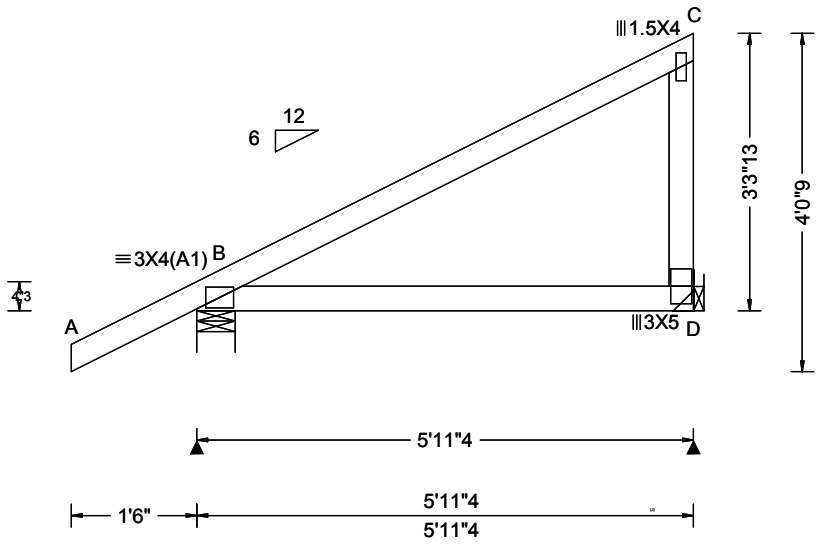
Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Wind

Wind loads based on MWFRS with additional C&C member design.

Uplifts based on an elevation at or above 3000 ft.

Job Number: 180336 FROST ADDITION APN#055-081-83 **Truss Label:** J3	Ply: 1 Qty: 28 Wgt: 26.6 lbs	SEQN: 4070 / T8 / EJAC FROM: DW	DRW: ... / ... 02/26/2018



Loading Criteria (psf)
TCLL: 21.00
TCDL: 18.00
BCLL: 0.00
BCDL: 10.00
Des Ld: 49.00
NCBCLL: 10.00
Soffit: 0.00
Load Duration: 1.15
Spacing: 24.0 "

Wind Criteria
Wind Std: ASCE 7-10
Speed: 130 mph
Enclosure: Closed
Risk Category: II
EXP: C
Mean Height: 15.00 ft
TCDL: 6.0 psf
BCDL: 6.0 psf
MWFRS Parallel Dist: 0 to h/2
C&C Dist a: 3.00 ft
Loc. from endwall: Any
GCpi: 0.18
Wind Duration: 1.60

Snow Criteria (Pg,Pf in PSF)
Pg: 30.0 Ct: 1.0 CAT: II
Pf: 21.0 Ce: 1.0
Lu: - Cs: not used
Snow Duration: 1.15

Code / Misc Criteria
Bldg Code: IBC 2012
TPI Std: 2007
Rep Factors Used: Yes
FT/RT/PT:10(0)/3(0)/1(0)
Plate Type(s):
WAVE

Defl/CSI Criteria
PP Deflection in loc L/defl L/#
VERT(LL): NA
VERT(TL): NA
HORZ(LL): 0.007 D - -
HORZ(TL): 0.021 D - -
Creep Factor: 1.5
Max TC CSI: 0.415
Max BC CSI: 0.245
Max Web CSI: 0.229
Mfg Specified Camber:

VIEW Ver: 17.02.02C.0211.17

▲Maximum Reactions (lbs)

Loc	R	/ U	/ Rw	/ Rh	/ RL	/ W
B	454	/ 24	/ 337	/ -	/ 98	/ 5.5
D	277	/ 38	/ 197	/ -	/ -	/ -

Wind reactions based on MWFRS
B Min Brg Width Req = 1.5
D Min Brg Width Req = -
Bearing B is a rigid surface.

Maximum Top Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.	Chords	Tens.	Comp.
A - B	83	0	B - C	72	-160

Maximum Bot Chord Forces Per Ply (lbs)

Chords	Tens.	Comp.
B - D	20	-16

Maximum Web Forces Per Ply (lbs)

Webs	Tens.	Comp.
C - D	220	-202

Lumber

Top chord 2x4 HF #1&Bet.
Bot chord 2x4 HF #1&Bet.
Webs 2x4 :HF Standard + HF Stud:

Hangers / Ties

(J) Hanger Support Required, by others

Loading

Bottom chord checked for 10.00 psf non-concurrent bottom chord live load applied per IBC-12 section 1607.

Overhang designed for 2.00X Pf.

Wind

Wind loads based on MWFRS with additional C&C member design.

Right end vertical not exposed to wind pressure.

Uplifts based on an elevation at or above 3000 ft.

Address	18200 Lake Vista				
	Degrees		Min	Sec	Degrees Decimal
N		39	15	44.94	39.2624833
W		119	49	28.39	-119.82455

$$V = C_s W$$

$$C_s = \frac{S_{DS}}{\left(\frac{R}{I_e}\right)}$$

S_{DS}	1.532	
R	6.5	
I_e	1	
C_s	0.2357	
V=	21,670 lb	Seismic shear

W				
Garage 1				
Roof	958	sf	16,166	
Walls 14'	88	lf	12,584	12 psf
Garage 2				
Roof	513	sf	8,657	
walls 10'	48	lf	5,760	12 psf
Addition				
Roof	1197	sf	20,199	
Walls 9'	110	lf	11,880	12 psf
Ceiling	968	sf	1,936	2 psf
Walls int 8'	58	lf	9,280	20 psf
Trusses			5,479	
Total weight			91,941	lb

SHEAR E-W	201	PLF
SHEAR N-S	276	PLF
Ave	239	

Tile roof (psf)	15.00	psf
Plywood lb/in	1.88	psf
Seismic wt	16.88	

USGS Design Maps Summary Report

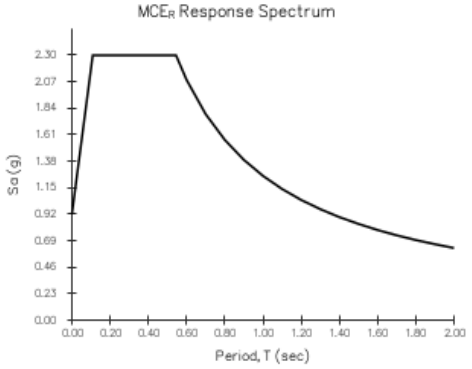
User–Specified Input

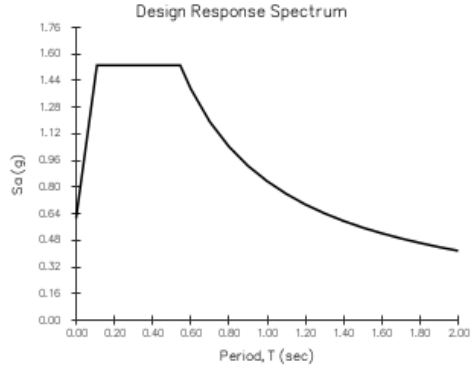
Report Title	18200 Lake Vista Road Wed March 14, 2018 14:45:51 UTC
Building Code Reference Document	2012/2015 International Building Code (which utilizes USGS hazard data available in 2008)
Site Coordinates	39.26248°N, 119.82455°W
Site Soil Classification	Site Class D – "Stiff Soil"
Risk Category	I/II/III

USGS–Provided Output

S_S =	2.298 g	S_{MS} =	2.298 g	S_{DS} =	1.532 g
S_1 =	0.835 g	S_{M1} =	1.252 g	S_{D1} =	0.835 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.





LMI ENGINEERING

EIN 14-1906538

R.G. LaPrairie, PE
Sr. Engineer/Manager

TRUSS SUBMITTAL CERTIFICATION LETTER

Date: April 18, 2018

Project: 18200 Lake Vista Road, Washoe Valley NV
Frost Addition

TO: The Building Department

This letter is to certify that I have reviewed the attached truss calculations prior to submittal to the Building Department for the above named address and find them to be in compliance with the proposed plans and specifications including but not limited to connections, truss loads, load paths, bearing points and span lengths.

A NOTE: Since the Truss Calcs were made the building length on Garage 1 has been increased by 6 feet in the East/West direction this means that the number of trusses A05 will increase from 3 to 6 units. The Owner has also requested that the length of the truss overhang be increased from 18” to 24”. This will have minimal effect on the structure and is already accounted for in the structural calculations.

Sincerely

Richard G. LaPrairie,PE

Truss dims

Truss	Page	ft	in	frac	
A01	2	24	5	1	293.063
A02	3	24	5	1/8	293.008
A03	4	24	5	1/8	293.008
A04	5	24	5	1/8	293.008
A05	6	24	5	1/8	293.008
A06	7	24	2	2.00	290.125
B01	8	22			264.000
B02	9	18	3	1.000	219.063
B03	10	18	3	1.000	219.063
B04	11	18	3	1.000	219.063
B05	12	18	3	1.000	219.063
B06	13	18	3	1.000	219.063
B07	14	22			264.000
B08	15	22			264.000
B09	16	22			264.000
B10	17	22			264.000
V1	18	5	6		66.000
V2	19	9	8		116.000
V3	20	13	6		162.000
V4	21	17	6	1	210.063
V5	22	21	6	1	258.063
LG1	23	12	5	3	149.188
LG2	24	9	11	11	119.688
CG1	25	8	3	4	99.250
CG2	26	8	3	4	99.250
J1	27	1	6		18.000
J1A	28	1	10	15	22.938
J2	29	3	10	15	46.938
J2A	30	3	10	15	46.938
J3	31	5	11	4	71.250