

Base Details

Building Size & Style
 Sundance Ranch Garage - 16' wide by 20' long

Door
 Overhead Garage Door (8' x 7'),

Door
 6-Panel Residential Door (Left Hand Inswing),

Paint Selection
 Base: Tundra Frost, Trim: Delicate White
 Customer to apply 2nd coat

Roof Selection
 Charcoal 3 Tab

Drip Edge
 White

Options Details

Special Instructions
 This is a Historic District

Windows
 3'x2' Horizontal Sliding Window

Vents
 2 Ea 12"x12" Gable End Vent, White

Jobsite/Installer Details

Do you plan to insulate this building after Tuff Shed installs it?
 No

Is there a power outlet within 100 feet of installation location?
 Yes

The building location must be level to properly install the building. How level is the install location?
 Slab provided by customer will be within 1/2" tolerance on square, level, exterior dimensions to match the building size (per customer agreement).

Will there be 18" of unobstructed workspace around the perimeter of all four walls?
 Yes

Can the installers park their pickup truck & trailer within approximately 200' of your installation site?
 Yes

Substrate Shed will be installed on?
 Concrete without Shed Floor

Customer Signature: _____ Date: _____

45

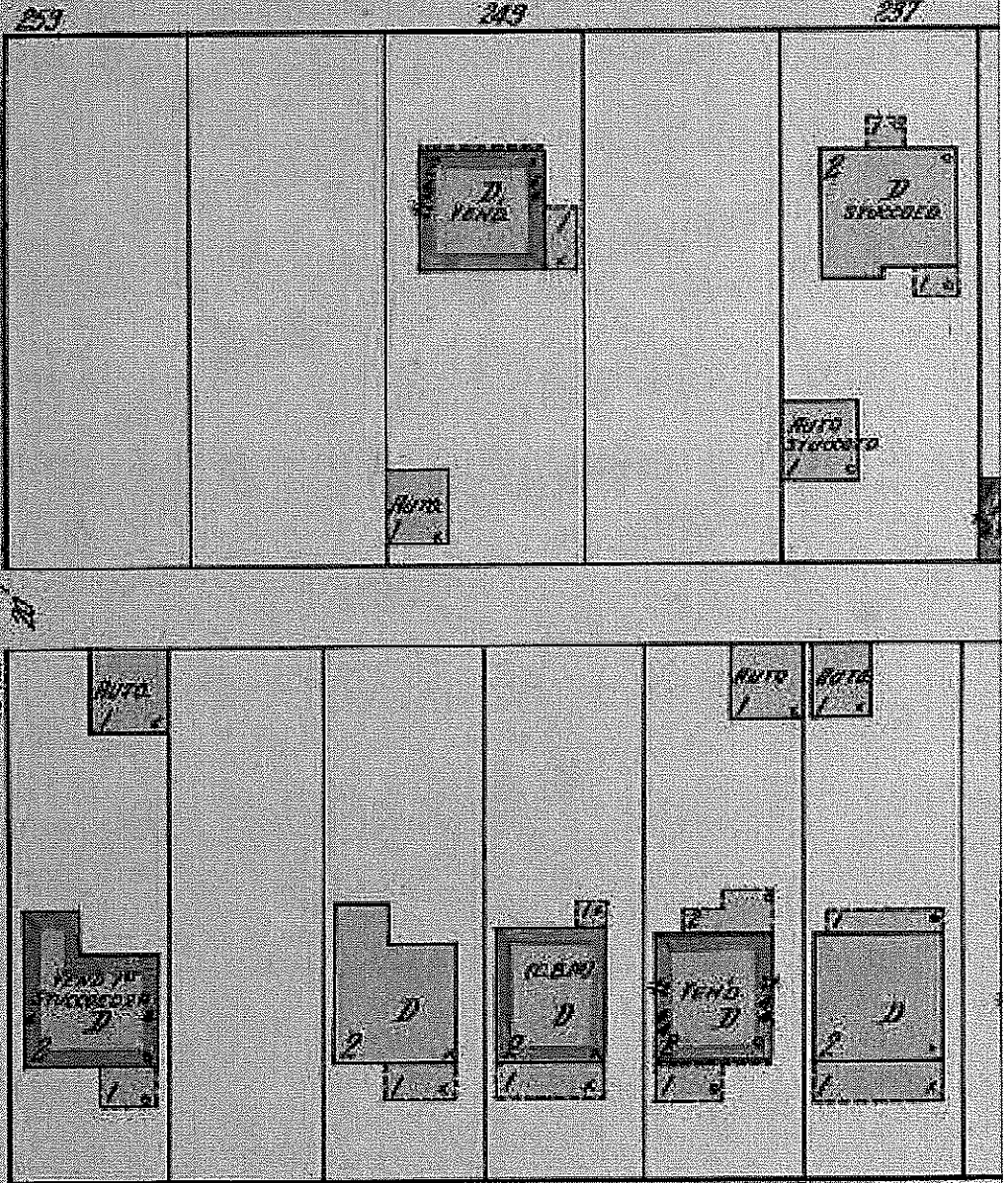
(3 Vol. 6)

6" W. PIPE

6" W. PIPE

6" W. PIPE

6" W. PIPE



253

249

237

260

252

248

244

240

16.03

16.42

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10'







867 Edison Street

Google

Imagery ©2020 Google, Imagery ©2020 Maxar Tech



867 Edison

5' from alley

20'

3' off side

16'

North



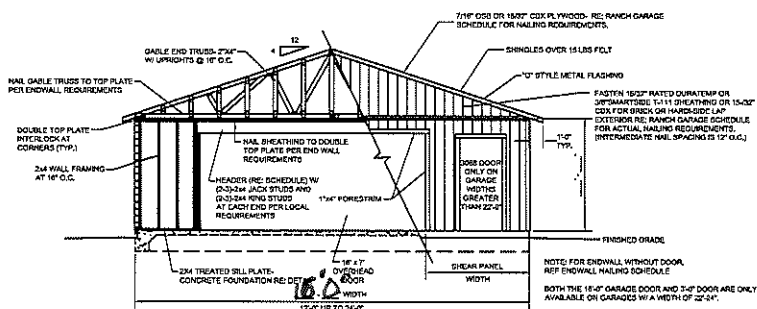
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Google Earth

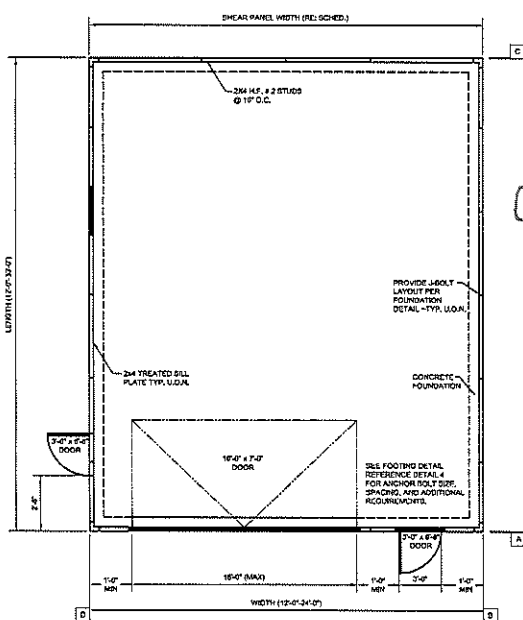
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RANCH GARAGE 12'-24' x 12'-30'
16' x 20' = 320 SQ FT

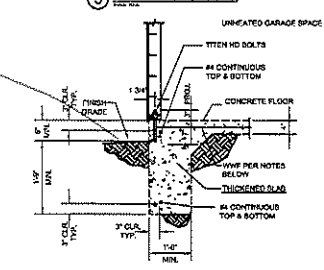


2 END WALL ELEVATION WITH OPENING



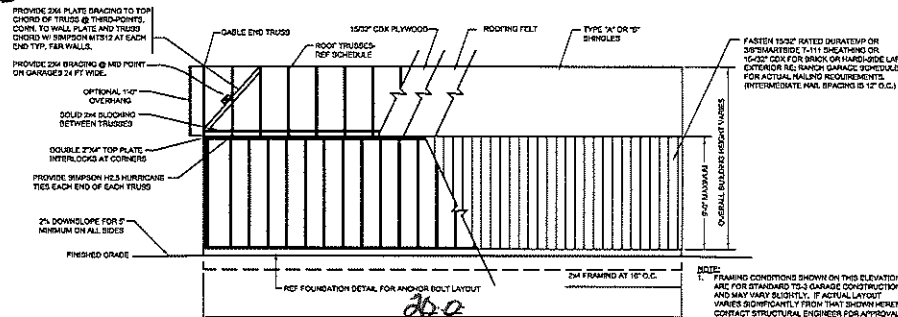
1 FOUNDATION/FLOOR FRAMING PLAN

3 SHEAR TRANSFER DETAIL

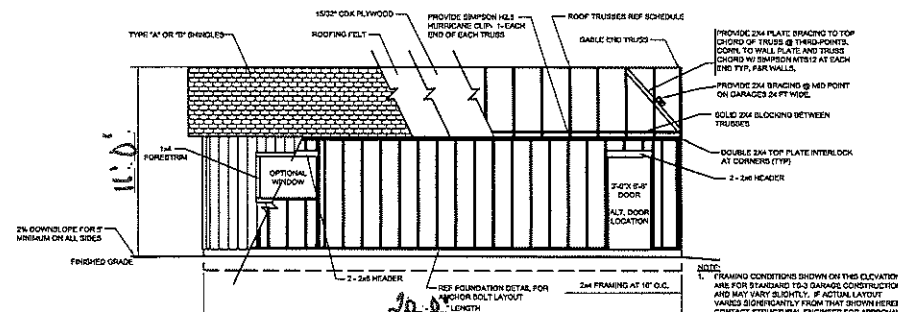


4 MONOLITHIC FOUNDATION

- CONTINUOUS FOOTING NOTES**
- TOP OF SLAB TO BE 6" MIN. ABOVE GRADE. SLAB REINFORCEMENT SHALL BE WWP (80% W/10% W/10) PER ASTM A118. LOCATE AT MID-DEPTH OF SLAB.
 - ALL FOOTING FORMS SHALL BE INSPECTED FOR SIZE AND REINFORCING BEFORE POURING CONCRETE.
 - FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL, COMPETENT SOIL, OR PROPERLY COMPACTED STRUCTURAL FILL. PRESCRIPTIVE ALLOWABLE SOIL BEARING PRESSURE IS 1000 PSF AT 12" BELOW GRADE.
 - CONCRETE MINIMUM 28 DAY COMPRESSIVE STRENGTH, $f_c = 2500$ PSI.
 - REINFORCING STEEL #415, GRADE 40 OR GRADE 60. ALL REINFORCING STEEL SHOWN TO BE CONTINUOUS MAY BE LAPPED A MINIMUM OF 38 BAR DIAMETERS OR 24" MINIMUM, WHICHEVER IS LARGER.
- SEISMIC ZONE D:**
- ATTACH PRESSURE TREATED SOLE PLATE TO THE FOOTING USING 12" x 8 TITEN HD BOLTS.
 - TITEN HD BOLTS SHALL BE EMBEDDED AT LEAST 3 1/4" INTO THE CONCRETE AND SHALL BE SPACED NOT MORE THAN 4' O.C.
 - THERE SHALL BE A MINIMUM OF 2 BOLTS PER SOLE PLATE PIECE WITH 1" BOLT LOCATED NOT MORE THAN 12" NOR LESS THAN 7" BOLT DIAMETERS FROM EACH END OF EACH PIECE.
 - 2" x 2" x 3/8" THICK PLATE WASHERS SHALL BE USED ON BOTH BOLTS.



5 SIDE WALL ELEVATION DETAIL



6 ALTERNATIVE SIDE WALL ELEVATION DETAIL WITH OPENING

STRUCTURAL NOTES:

- DESIGN TO BE IN ACCORDANCE WITH AMENDMENTS PER LOCAL BUILDING DEPARTMENT HAVING JURISDICTION OVER THIS PROJECT.
 - DESIGN LOADING: WIND SPEEDS & EXPOSURE: 90C ROOF LIVE LOAD: 40 PSF ROOF DEAD LOAD: 10 PSF
- LUMBER:**
- ALL LUMBER SHALL BE 1848-FR GRADE NO. 2 OR BETTER, WITH A GRADE MINIMUM ALLOWABLE EXTREME FIBER BENDING STRESS FOR MEMBERS PER OF 800 PSI EXCLUDING ADJUSTMENT FACTORS FOR USE, SIZE, LOAD DURATION, ENVIRONMENT, ETC., UNLESS OTHERWISE SPECIFIED.
- ROOFING:**
- 20 YEAR FIBERGLASS SHINGLES (TYPE 'A' OR TYPE 'B')
 - 1/2 LB ROOFING FELT
 - TYPE 'D' METAL FLASHING AND DWP EDGES REQUIRED ALL SIDES.

GENERAL:

- ERECTOR PROCEDURES SHALL CONFORM TO OSHA STANDARDS. BUILDER SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES, STREETS, UTILITIES, ETC.
- BUILDER IS RESPONSIBLE FOR SAFETY OF BUILDING DURING CONSTRUCTION. PROVIDE ALL SHORING OR BRACING AS REQUIRED AND PER ENGINEERING REGULATIONS.

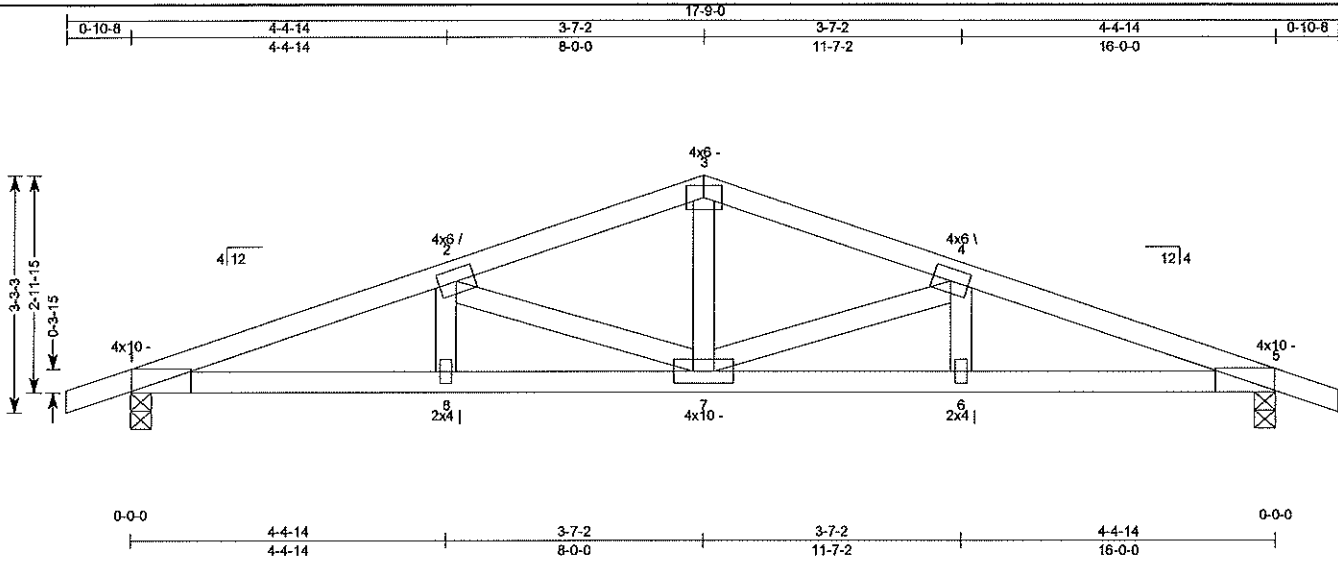
RANCH GARAGE SCHEDULE

OVERALL DIMENSIONS		SHEAR PANEL HAIRING		ROOF SHEATHING	END HEADER	SOLE HEADERS	CHORD BRACE HAIRING
WIDTH	MAX. HEIGHT	MAX. HEIGHT	MAX. HEIGHT				
12'-0"	20'-0"	12'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
12'-0"	20'-0"	12'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
12'-0"	20'-0"	12'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
14'-0"	20'-0"	14'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
18'-0"	20'-0"	18'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
18'-0"	20'-0"	18'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
20'-0"	20'-0"	20'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
24'-0"	20'-0"	24'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
24'-0"	20'-0"	24'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE
24'-0"	20'-0"	24'-0"	20'-0"	3/4" @ 6" O.C.	3/4" @ 6" O.C.	3/4" @ 6" O.C.	10 - 156 NAILS EACH SIDE OF SPLICE

- NOTES:**
1. END WALLS PROVIDE A MINIMUM OF 6 CORNERED FULL HEIGHT SHEAR WALLS, WITH FULL HEIGHT SHEAR WALL CORNERS NOT TO BE LESS THAN 2'-0".
 2. NO CORNERS ON THE UPPER TWO WALLS OF THE GARAGE BODY.
 3. MAX. THE END WALL WITH THE GARAGE DOOR OPENING WITH 36" @ 6" O.C.
 4. ALL NAIL (D) HEADS SHALL BE COMMON NAILS U.S.A.

TUFF SHED SHEDS • BUNGALOWS • GARAGES TUFF SHED, INC. 1515 W. 10th St., Suite 100 Oklahoma City, OK 73106 Phone: (405) 948-7777 Fax: (405) 948-7778 Email: info@tuffshed.com	Proj. # _____ Owner: _____ Site Address: _____ Building Use: _____	P.O. # _____ Drawn By: SWM Date: 10/20/20 Checked By: _____ Date: _____ Scale: N.T.S.	THESE DRAWINGS AND DESIGN ARE THE PROPERTY OF TUFF SHED, INC. THEY ARE TO BE USED ONLY AS SHOWN AND NOT TO BE REPRODUCED, COPIED, OR IN ANY MANNER FOR ANY OTHER PROJECT. FOUNDATION SHALL BE PER THE FOUNDATION SCHEDULE AND THE PROVISIONS OF LOCAL BUILDING DEPARTMENT.	Richard Webb Registered Professional Engineer No. 61377 State of Oklahoma 1515 W. 10th St., Suite 100 Oklahoma City, OK 73106 Phone: (405) 948-7777 Fax: (405) 948-7778 Email: info@tuffshed.com	TITLE STANDARD RANCH GARAGE END WALL OVERHEAD DOOR	DRAWING NO. 2020-03 REV. LEVEL: 01 SHEET 1 SHEET 1 OF 1
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SPAN 16-0-0	PITCH 4/12	QTY 10	OHL 0-10-8	OHR 0-10-8	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 24 in	WGT/PLY 56 lbs
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Loading	General	CSI Summary	Deflection	L/	(loc)	Allowed
Load (psf): 105	Bldg Code: IRC 2006/ TPI 1-2002	TC: 0.94 (1-2)	Vert TL: 0.35 in	L / 524	(6-7)	L / 180
TCCL: 10	Rep Mbr Increase: Yes	BC: 0.93 (8-1)	Vert LL: 0.29 in	L / 629	(6-7)	L / 240
BCLL: 0	D.O.L.: 11.5%	Web: 0.42 (2-7)	Horz TL: 0.12 in		5	
BCDL: 10						

Reaction Summary

JT	Type	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	Pin (Wall)	I	3.5 in	3.62 in	2,201 lbs		-59 lbs	-51.5 lbs	-51.5 lbs	6 lbs
5	H Roll (Wall)	I	3.5 in	3.62 in	2,201 lbs		-59 lbs	-51.5 lbs	-51.5 lbs	

Bearing enhancers may be required at the following bearings:

Brg #	Brg Area	Rqd Brg Area	Rqd Truss Width
1	5.25 in ²	5.44 in ²	1.55 in
5	5.25 in ²	5.44 in ²	1.55 in

Material Summary	Bracing Summary
TC: HF #2 2 x 4	TC Bracing: Sheathed
BC: HF #2 2 x 4	BC Bracing: Sheathed or purlins at 72" OC, Purlin design by Others.
Webs: HF #2 2 x 4	

- Loads Summary**
- This truss has been designed for the effects of wind loads in accordance with ASCE 7 - 05 with the following user defined input: 105 mph, Exposure C, Enclosed, Gable/Hip, Building Category II (I = 1.00), Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered, DOL = 1.60
 - Unbalanced roof live loads have not been considered.
 - Minimum storage attic loading has been applied in accordance with IRC 301.5

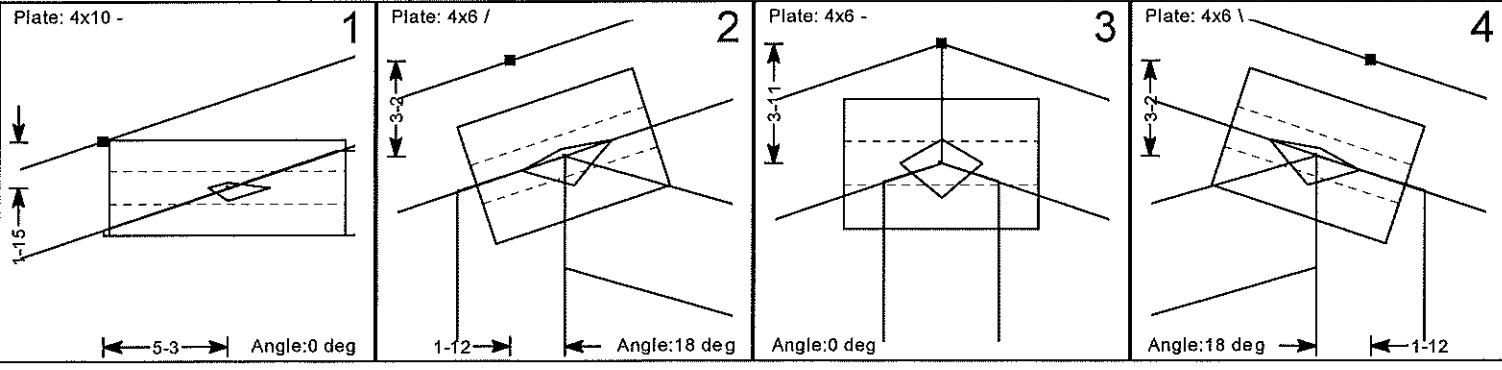
Member Forces Summary

Table indicates Member ID, max CSI, max axial force, (max compr. force if different from max axil force)

TC	9-1	0.170	64 lbs	2-3	0.755	-3,265 lbs	4-5	0.935	-4,743 lbs							
	1-2	0.935	-4,743 lbs	3-4	0.755	-3,265 lbs	5-10	0.170	64 lbs							
BC	5-6	0.933	4,387 lbs	(-816 lbs)	6-7	0.931	4,391 lbs	(-816 lbs)	7-8	0.931	4,391 lbs	(-816 lbs)	8-1	0.933	4,387 lbs	(-818 lbs)
Webs	2-8	0.030	154 lbs	3-7	0.268	1,276 lbs	4-6	0.030	154 lbs							
	2-7	0.418	-1,555 lbs	4-7	0.418	-1,555 lbs										

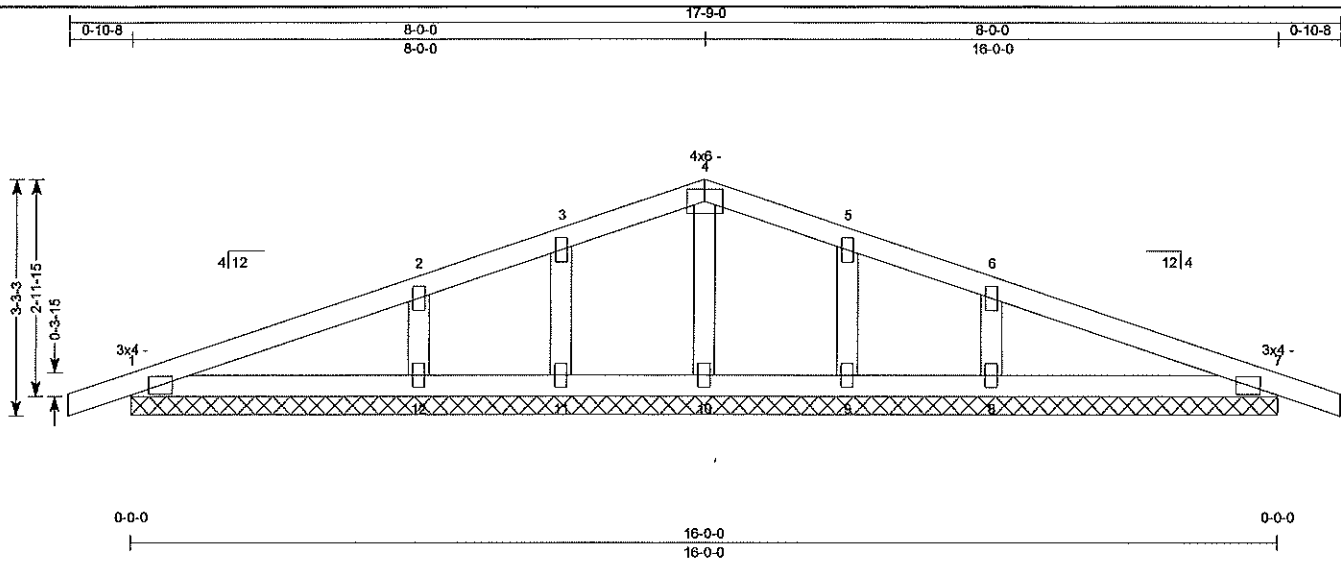
Notes:

- This truss has been chosen for quality assurance inspection, the Plate Placement Method per TPI 1-2002/A3.2 shall be used.



A copy of this design shall be furnished to the erection contractor. This design is for an individual building component (a truss). It is based on specifications provided by the Truss Designer and performed in accordance with TPI 1-2002 and the 2001 MDS design standard. No responsibility is assumed for the accuracy of information provided by the Truss Designer. Dimensions shall be verified by building designer. Creep deflection is not automatically accounted for by the software. The building designer shall review loading, truss configuration and initial deflection data shown to ensure that this design meets or exceeds minimum loading required by applicable building codes. Compression chords shall be laterally braced by the roof or floor sheathing, directly attached, unless otherwise noted. Bracing chosen is for lateral support of individual truss components only to reduce buckling length. It is not wind or lateral loading or overall building design bracing which is by others. Refer to BC-B3 for recommended truss handling and erection. Do not apply loads beyond weight of erection until all permanent bracing is in place. Concentration of construction loads greater than the design loads shall not be applied to the trusses at any time. Trusses shall be handled with care prior to erection to avoid damage. Lumber moisture content shall be 19% or less at the time of fabrication, unless noted otherwise (U.N.C.). Connector plates shall be manufactured by Eagle Metal Products (E-M-P). Plates shall be applied on both faces of truss at each joint. Plate dimensions are listed width x length. Slots (holes) in plate shall run parallel to the plate length. The plate shall be centered on joint and/or placed in accordance with the current version of TPI. Design assumes adequate anchorage will be provided to resist uplift at supports. The seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any particular building design is the responsibility of the building designer, per ANSI/PTI 1-2002 Chapter 2.

SPAN 16-0-0	PITCH 4/12	QTY 2	OHL 0-10-8	OHR 0-10-8	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 24 in	WGT/PLY 49 lbs
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Loading	General	CSI Summary	Deflection	L/	(loc)	Allowed
Load (psf) TCLL : 105 TCDL : 10 BCLL : 0 BCDL : 10	Bldg Code : IRC 2006/ TPI 1-2002 Rep Mbr Increase : No D.O.L. : 115 %	TC : 0.66 (6-7) BC : 0.19 (7-8) Web : 0.13 (2-12)	Vert TL: 0 in Vert LL: 0 in Horz TL: 0 in	L / 999 L / 999	(12-1) (7-7) 7	L / 180 L / 240

Reaction Summary

JT	Type	Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	Continuous	1		813 lbs	275 plf		-48 lbs	-239 lbs	-239 lbs	6 lbs

Material Summary

TC	HF #2 2 x 4
BC	HF #2 2 x 4
Webs	HF Stud 2 x 4

Bracing Summary

TC Bracing:	Sheathed or Purlins at 6'-3-0, Purlin design by Others.
BC Bracing:	Sheathed or purlins at 72" OC, Purlin design by Others.

Loads Summary

- This truss has been designed for the effects of wind loads in accordance with ASCE7 - 05 with the following user defined input: 105 mph, Exposure C, Enclosed, Gable/Hip, Building Category II (I = 1.00), Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered, DOL = 1.60
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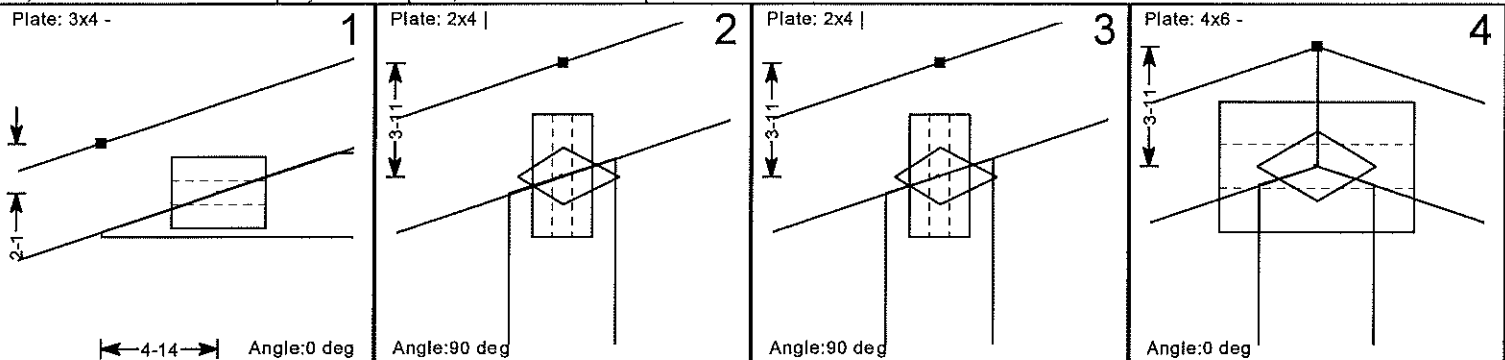
Member Forces Summary

Table indicates Member ID, max CSI, max axial force, (max compr. force if different from max axial force)

Member	Force 1	Force 2	Force 3	Force 4	Force 5	Force 6	Force 7	Force 8	Force 9	Force 10	Force 11	Force 12
TC	11-1 0.219 64 lbs	2-3 0.422 -115 lbs	4-5 0.215 117 lbs	6-7 0.664 516 lbs	7-14 0.249 64 lbs							
BC	7-8 0.189 -525 lbs	9-10 0.030 108 lbs	10-11 0.030 108 lbs	11-12 0.059 108 lbs	12-1 0.189 -525 lbs							
Webs	2-12 0.128 -634 lbs	4-10 0.088 -366 lbs	5-9 0.098 -457 lbs	6-8 0.128 -634 lbs								

Notes:

- Gable requires continuous bottom chord bearing.
- Gable webs placed at 24" OC, U.N.O.
- Attach gable webs with 2x4 20ga plates, U.N.O.
- For out-of-plane wind loading, refer to BCSI-B6 published by the WTCA.
- When this truss has been chosen for quality assurance inspection, the Plate Placement Method per TPI 1-2002/A3.2 shall be used.



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