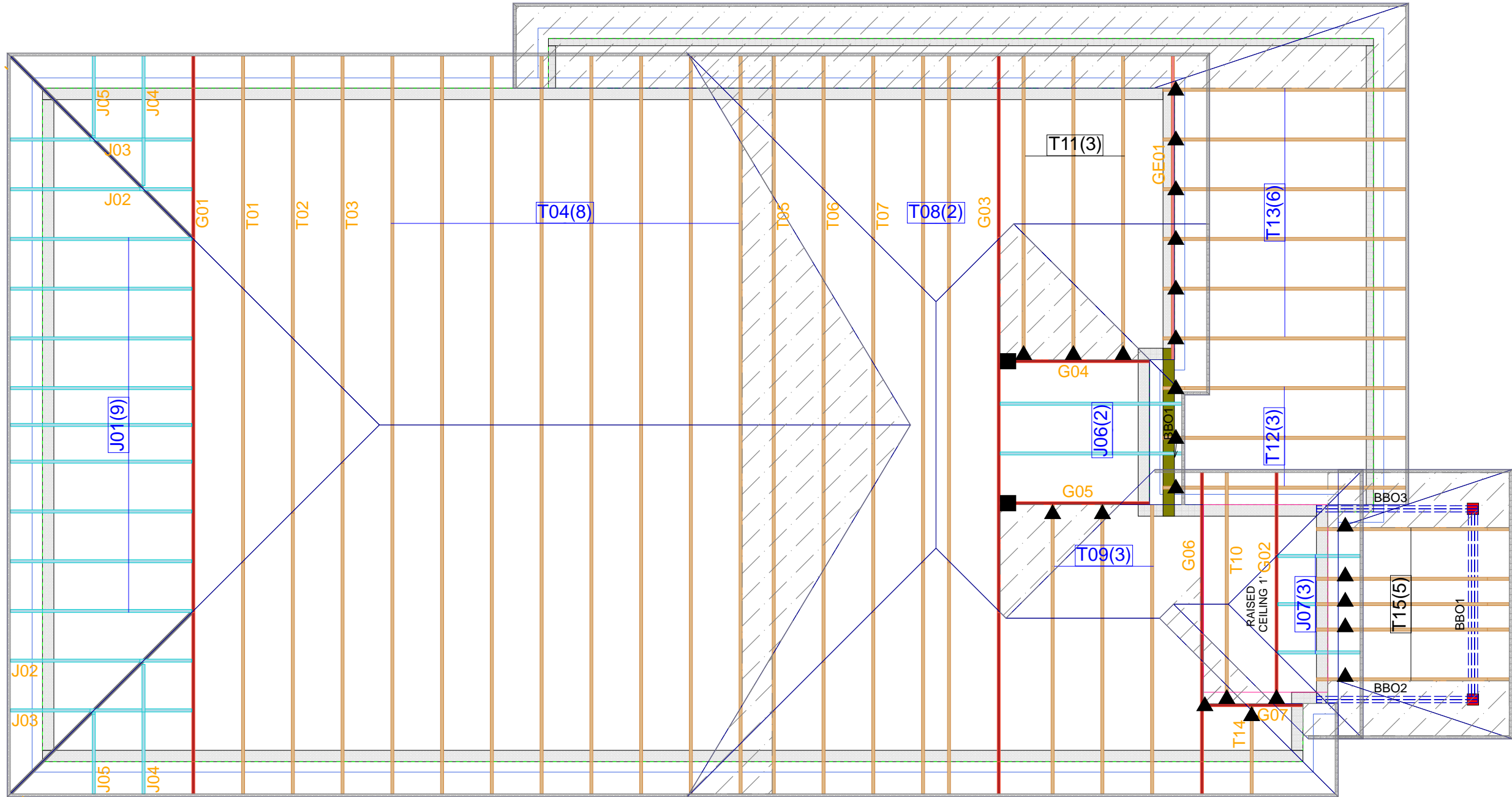


MHP 23034



| Hanger Name | Symbol | QTY |
|-------------|--------|-----|
| LUS24 | ▲ | 23 |
| LJS26DS | ■ | 2 |



CONVENTIONAL
FRAMING BY OTHERS

ALL CONVENTIONAL FRAMING TO CONFORM WITH PART 9 OF THE OBC. ROOF RAFTERS THAT CROSS OVER TRUSSES TO BE MIN. 2x4 SPF @ 24" C/C WITH A 2x4 VERTICAL POST TO THE TRUSS BELOW. VERTICAL POSTS TO BE Laterally BRACED SO THAT UNBRACED LENGTH DOES NOT EXCEED 6'. DESIGN OF CONVENTIONAL FRAMING IS THE RESPONSIBILITY OF THE PROJECT ENGINEER.

JOB INFORMATION

| | |
|-----------|---|
| Customer | GREENPARK HOMES |
| Job # | 23-00105R0 |
| Address | ZADORRA ESTATES OSHAWA, ON |
| Model | VILLA 2 ELEV- 2 |
| Sales Rep | RALPH MIRIGELLO |
| Designer | RB |
| Date | 6/02/23 |
| Path | C:\MITEK\CA\JOBS\GREENPARK\ZADORRA ESTATES\VILLA 2-ELEV 2\VILLA 2 ELEV-2\ |

DESIGN INFORMATION

| | |
|---------------|---|
| Code | NBCC 2015 |
| Bldg | Residential - HSB (NBCC Part 9) |
| TC LL | 34.8 lb/ft ² |
| TC DL | 6.0 lb/ft ² |
| BC LL | 0.0 lb/ft ² |
| BC DL | 7.3 lb/ft ² |
| Deflection | LL=L/360 TL=L/360 |
| Spacing | 24" O/C unless otherwise noted |
| Complies With | OBC 2012 (2019 Amendment) CSA O86-14 and TPIC 2014 |

IMPORTANT INFORMATION

Hangers and Fasteners to be installed as per manufacturer

Refer to truss drawings in the Truss Engineering Package for ply-to-ply attachment notes

For site-framed valleys: top chords of all roof trusses must be laterally supported using 2x4 continuous bracing @24 O/C - all bracing must be anchored at ends as per TPIC Installation Guidelines

Read all notes on this page in addition to those shown on the KOTT Truss Engineering package

Field erection, handling and bracing are not the responsibility of KOTT, or KOTT Engineering

Unless noted otherwise, hurricane ties are to be installed at the bearings of all trusses > 40 ft clear span, and any girder or beam supporting trusses with a clear span >40 ft. See hanger legend for type.

Unless noted otherwise, for Part 9 bldgs, all trusses are to be anchored to the top of supporting walls as follows: trusses with a clear span <40 ft use 3-1/4" nails @ each bearing; trusses with a clear span >40 ft use 3-1/4" nails @ each bearing in addition to the appropriate hurricane tie.

KOTT Inc.
14 Anderson Blvd.
Uxbridge, ON
905.642.4400



Engineering Notes: Trusses

NE0723-088

GREENPARK - ZADORRA

ESTATES - VILLA 2-2

MHP 23034



PLEASE READ TO INSTALLATION OF THE COMPONENT

RESPONSIBILITIES

THE UNDERSIGNED ENGINEER IS ONLY RESPONSIBLE FOR THE STRUCTURAL INTEGRITY OF THIS BUILDING COMPONENT FOR THE CONDITIONS AND LOADS SHOWN ON CALCULATION PAGE. THE STRUCTURAL INTEGRITY OF THE BUILDING AND THE VERIFICATION OF THE DIMENSIONS AND THE DESIGN LOADS USED ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER. THE UNDERSIGNED ENGINEER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES AS A RESULT OF FAULTY OR INCORRECT INFORMATION, SPECIFICATION AND/OR DESIGNS FURNISHED TO THE ENGINEER. IT IS THE RESPONSIBILITY OF KOTT Inc. TO ENSURE THAT TRUSSES ARE MANUFACTURED IN CONFORMANCE WITH THESE DESIGNS AND WITH THE SPECIFICATIONS OUTLINED BELOW. THE UNDERSIGNED ENGINEER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

DESIGN INFORMATION

THIS DESIGN IS FOR AN INDIVIDUAL BUILDING COMPONENT AND HAS BEEN BASED ON INFORMATION PROVIDED BY KOTT DESIGN.

1. THE BUILDING USE AND OCCUPANCY TYPE IS AS INDICATED ON THE DRAWING.
2. GEOMETRY OF THE TRUSS AND DIMENSIONS INDICATED ON THE DRAWING ARE IDENTICAL TO THOSE OF THE INSTALLED TRUSS.
3. THE TRUSS LOADING INTENSITY AND DISTRIBUTION AS WELL AS LOAD TRANSFER MECHANISM IS THAT INDICATED ON THE DRAWING. NO BUILDINGS, TREES, PARAPETS OR OTHER PROJECTIONS HIGHER THAN THE ROOF FOR WHICH THE TRUSSES ARE USED ARE LOCATED WITHIN A DISTANCE LESS THAN TEN (10) TIMES THE DIFFERENCE IN HEIGHT, OR FIVE METERS (16 FT) WHICHEVER IS GREATER, UNLESS THE DRAWING INDICATES THAT THE SNOW DRIFTING HAS BEEN TAKEN INTO ACCOUNT.
4. THE TRUSSES ARE TO BE SUPPORTED AT THE BEARING POINTS INDICATED AND ANCHORED TO THE SUPPORTS WHERE CONSIDERED NECESSARY BY THE DESIGNER OF THE OVERALL STRUCTURE. BEARING SIZES SHOWN ARE THE MINIMUM REQUIRED TO PREVENT CRUSHING OF THE TRUSS MEMBERS AND DO NOT NECESSARILY TAKE INTO ACCOUNT STABILITY OF THE OVERALL BUILDING STRUCTURE. ELEVATION OF BEARINGS MUST BE CAREFULLY CHECKED AND SHIMMED TO ALIGNMENT FOR SOLID BEARINGS. ADEQUATE WOOD TRUSS BEARING IS THE RESPONSIBILITY OF THE BUILDING DESIGNER.

CODE

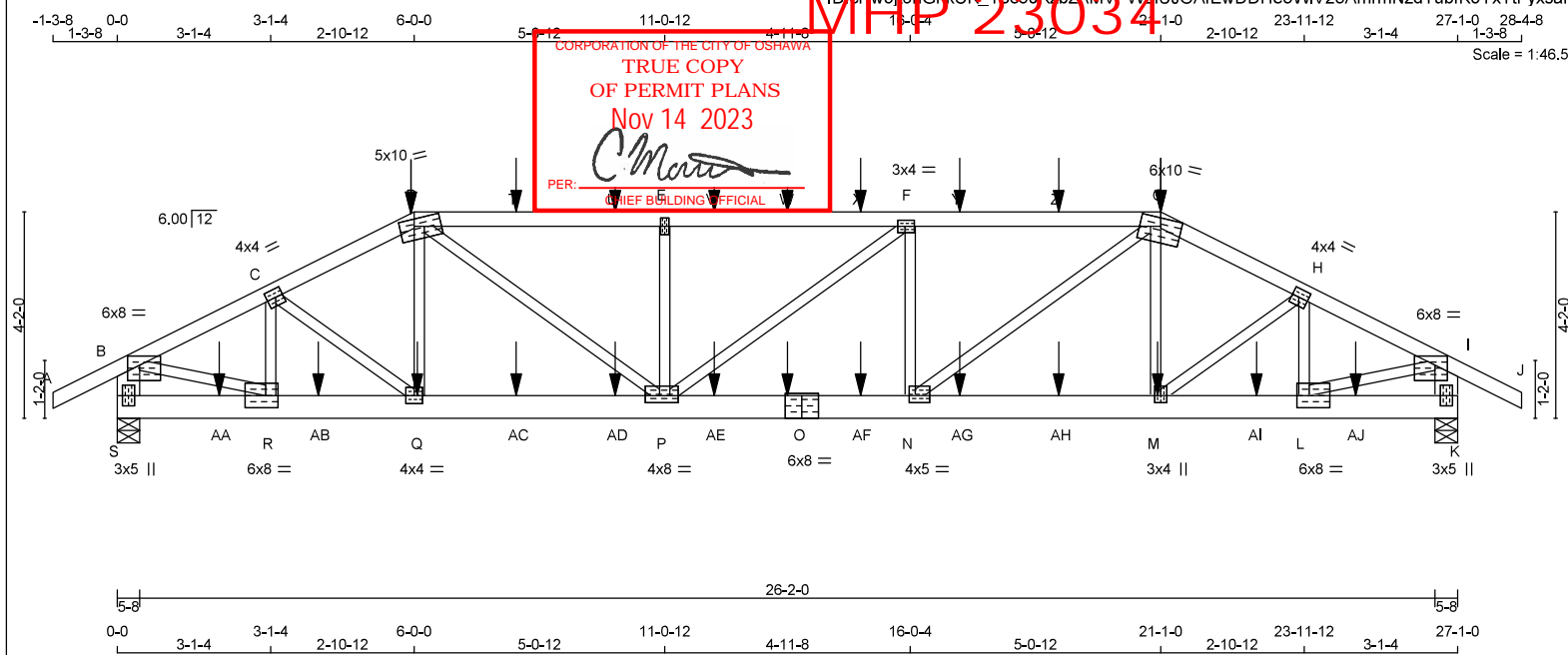
TRUSSES ARE DESIGNED IN CONFORMANCE WITH THE RELEVANT SECTIONS OF THE NATIONAL BUILDING CODE OF CANADA OR THE CANADIAN CODE FOR FARM BUILDINGS, WHICHEVER APPLIES TO THE BUILDING TYPE INDICATED ON THE DRAWING, THE ONTARIO BUILDING CODE, TPIC AND CANADIAN STANDARDS ASSOCIATION GUIDELINES.

HANDLING, INSTALLATION AND BRACING

1. THE TRUSSES MUST BE HANDLED AND INSTALLED BY A QUALIFIED PROFESSIONAL AS PER THE SUPPLIED DOCUMENT TITLED INFORMATION FOR TRUSS INSTALLERS AND THE BCSI-B1 AND BCSI-B3 SUMMARY SHEETS.
2. THE COMPRESSION CHORDS ARE Laterally Braced by Continuous Rigid Diaphragm Sheathing or as Specified on the Drawing.
3. TEMPORARY AND PERMANENT BRACING MUST BE INSTALLED AS INDICATED ON THE TRUSS DRAWING AND ACCORDING TO THE BCSI-B1 AND BCSI-B3 SUMMARY SHEETS. BRACING FOR THE LATERAL STABILITY OF THE TRUSS IS TO BE PROVIDED BY THE BUILDING DESIGNER.
4. IT IS RECOMMENDED THAT A PROFESSIONAL ENGINEER'S ADVICE BE OBTAINED FOR THE BRACING OF TRUSSES SPANNING MORE THAN 12.37M (40'-7").

| | | | | | | |
|------------|------------|----------|-----|-------------|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | DRWG NO. |
| NE0723-088 | G01 | 1 | 1 | TRUSS DESC. | | |

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TOTAL WEIGHT = 125 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-------------------|--------|------|------------|--------|
| A - D | 2x4 | DRY | No.2 | SPF |
| D - G | 2x4 | DRY | 2100F 1.8E | SPF |
| G - J | 2x4 | DRY | No.2 | SPF |
| S - B | 2x6 | DRY | No.2 | SPF |
| K - I | 2x6 | DRY | No.2 | SPF |
| S - O | 2x6 | DRY | No.2 | SPF |
| O - K | 2x6 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|------|------|------|
| B | TMVW-p | MT20 | 6.0 | 8.0 | 2.25 | 3.00 |
| C | TMVW-l | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| D | TTVW-m | MT20 | 5.0 | 10.0 | 1.75 | 3.50 |
| E | TMVW-w | MT20 | 2.0 | 4.0 | | |
| F | TMVW-l | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| G | TTVW-m | MT20 | 6.0 | 10.0 | Edge | |
| H | TMVW-l | MT20 | 4.0 | 4.0 | 2.00 | 1.75 |
| I | TMVW-p | MT20 | 6.0 | 8.0 | 2.25 | 3.00 |
| K | BMV1-p | MT20 | 3.0 | 5.0 | | |
| L | BMVW-l | MT20 | 6.0 | 8.0 | 3.00 | 3.00 |
| M | BMVW-t | MT20 | 3.0 | 4.0 | 1.75 | 1.50 |
| N | BMVW-l | MT20 | 4.0 | 5.0 | 1.75 | 1.50 |
| O | BS-l | MT20 | 6.0 | 8.0 | | |
| Q | BMVW-l | MT20 | 4.0 | 4.0 | 1.75 | 3.50 |
| R | BMVW-l | MT20 | 4.0 | 4.0 | | |
| S | BMVW-l | MT20 | 6.0 | 8.0 | 3.00 | 3.00 |
| R | BMV1-p | MT20 | 3.0 | 5.0 | | |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES
EDGE OF CHORD.**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING****DESIGNER****BEARINGS**

| | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQRD BRG |
|----|-------------------------|---------------------------------|-----------|-----------|
| JT | VERT | HORZ | DOWN | HORZ |
| S | 3335 | 0 | 3335 | 0 |
| K | 3335 | 0 | 3335 | 0 |

UNFACTORED REACTIONS

| | 1ST LCASE | MAX. MIN. COMPONENT REACTIONS | | | | | |
|----|-----------|-------------------------------|-------|------------|-------|---------|-------|
| JT | COMBINED | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
| S | 2329 | 1694 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 635 / 0 | 0 / 0 |
| K | 2329 | 1694 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 636 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) S, K

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 2.78 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | | | | WEBS | | | |
|--------|---------------------------|-------------------------------|---------------|-------------|-------|---------------------------|---------------|
| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. CSI (LC) | MAX. UNBRAC | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
| FR-TO | | FROM | TO | LENGTH | FR-TO | | |
| A-B | 0 / 36 | -119.4 | -119.4 | 0.17 (1) | 10.00 | R-C | -1032 / 0 |
| B-C | -4336 / 0 | -119.4 | -119.4 | 0.43 (1) | 3.00 | C-Q | 0 / 602 |
| C-D | -4898 / 0 | -119.4 | -119.4 | 0.46 (1) | 2.78 | Q-D | -116 / 90 |
| D-T | -5991 / 0 | -119.4 | -119.4 | 0.78 (1) | 2.83 | D-P | 0 / 2035 |
| T-U | -5991 / 0 | -119.4 | -119.4 | 0.78 (1) | 2.83 | P-E | -1084 / 0 |
| U-E | -5991 / 0 | -119.4 | -119.4 | 0.78 (1) | 2.83 | P-F | -19 / 0 |
| E-V | -5991 / 0 | -119.4 | -119.4 | 0.79 (1) | 2.81 | N-F | -1080 / 0 |
| V-W | -5991 / 0 | -119.4 | -119.4 | 0.79 (1) | 2.81 | N-G | 0 / 2057 |
| W-X | -5991 / 0 | -119.4 | -119.4 | 0.79 (1) | 2.81 | M-G | -128 / 88 |
| X-F | -5991 / 0 | -119.4 | -119.4 | 0.79 (1) | 2.81 | M-H | 0 / 597 |
| F-Y | -6006 / 0 | -119.4 | -119.4 | 0.80 (1) | 2.80 | L-H | -1027 / 0 |
| Y-Z | -6006 / 0 | -119.4 | -119.4 | 0.80 (1) | 2.80 | B-R | 0 / 4008 |
| Z-G | -6006 / 0 | -119.4 | -119.4 | 0.80 (1) | 2.80 | L-I | 0 / 4010 |
| G-H | -4895 / 0 | -119.4 | -119.4 | 0.46 (1) | 2.78 | | |
| H-I | -4338 / 0 | -119.4 | -119.4 | 0.43 (1) | 3.00 | | |
| I-J | 0 / 36 | -119.4 | -119.4 | 0.17 (1) | 10.00 | | |
| S-B | -3236 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.84 | | |
| K-I | -3237 / 0 | 0.0 | 0.0 | 0.23 (1) | 5.84 | | |

| | | | | | |
|-------|----------|-------|-------|----------|-------|
| S-AA | 0 / 0 | -18.2 | -18.2 | 0.14 (1) | 10.00 |
| AA-R | 0 / 0 | -18.2 | -18.2 | 0.14 (1) | 10.00 |
| R-AB | 0 / 3889 | -18.2 | -18.2 | 0.65 (1) | 10.00 |
| AB-Q | 0 / 3889 | -18.2 | -18.2 | 0.65 (1) | 10.00 |
| Q-AC | 0 / 4361 | -18.2 | -18.2 | 0.64 (1) | 10.00 |
| AC-AD | 0 / 4361 | -18.2 | -18.2 | 0.64 (1) | 10.00 |
| AD-P | 0 / 4361 | -18.2 | -18.2 | 0.64 (1) | 10.00 |
| P-AE | 0 / 6006 | -18.2 | -18.2 | 0.90 (1) | 10.00 |
| AE-O | 0 / 6006 | -18.2 | -18.2 | 0.90 (1) | 10.00 |
| O-AF | 0 / 6006 | -18.2 | -18.2 | 0.90 (1) | 10.00 |
| AF-N | 0 / 6006 | -18.2 | -18.2 | 0.90 (1) | 10.00 |
| N-AG | 0 / 4358 | -18.2 | -18.2 | 0.63 (1) | 10.00 |
| AG-AH | 0 / 4358 | -18.2 | -18.2 | 0.63 (1) | 10.00 |
| AH-M | 0 / 4358 | -18.2 | -18.2 | 0.63 (1) | 10.00 |
| M-AI | 0 / 3890 | -18.2 | -18.2 | 0.64 (1) | 10.00 |
| AI-L | 0 / 3890 | -18.2 | -18.2 | 0.64 (1) | 10.00 |
| L-AJ | 0 / 0 | -18.2 | -18.2 | 0.14 (1) | 10.00 |
| AJ-K | 0 / 0 | -18.2 | -18.2 | 0.14 (1) | 10.00 |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|----|---------|------|------|------|-------|------|-------|------|-------|
| D | 6-0-0 | -418 | -418 | — | FRONT | VERT | TOTAL | — | C1 |
| G | 21-1-0 | -418 | -418 | — | FRONT | VERT | TOTAL | — | C1 |
| M | 21-0-0 | -22 | -22 | — | FRONT | VERT | TOTAL | — | C1 |
| O | 13-6-8 | -22 | -22 | — | FRONT | VERT | TOTAL | — | C1 |
| Q | 6-0-12 | -22 | -22 | — | FRONT | VERT | TOTAL | — | C1 |
| T | 8-0-12 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |
| U | 10-0-12 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |
| V | 12-0-12 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |
| W | 13-6-8 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |
| X | 15-0-4 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |
| Y | 17-0-4 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |
| Z | 19-0-4 | -102 | -102 | — | FRONT | VERT | TOTAL | — | C1 |

DESIGN CRITERIA*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE**SPECIFIED LOADS:**

| | | | | |
|---------|------|---|------|-----|
| TOP CH. | LL | = | 34.8 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.3 | PSF |
| TOTAL | LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.24")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/790 (0.41")CSI: TC=0.80/1.00 (F-G:1) , BC=0.90/1.00 (N-P:1) ,
WB=0.99/1.00 (L-I:1) , SSI=0.50/1.00 (F-G:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00
SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| | (PSI) | (PLI) | (PLI) |
| MT20 | 650 | 371 | 1747 |
| | 650 | 371 | 1747 |
| | 650 | 371 | 1747 |
| | 650 | 371 | 1747 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (M) (INPUT = 0.90)
JSI METAL= 0.96 (O) (INPUT = 1.00)

CONTINUED ON PAGE 2



READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTES: TRUSSES. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



| | | | | | |
|------------|------------|----------|-----|--|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| NE0723-088 | G01 | 1 | 1 | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | |

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ID: 2FW3J5LgKCK-Tp000Kzb2AMy-WJlUJOAFewDDHeoWV2oAmrmNzdTubfK3YxTtFyxsaf

MHP 23034

| CORPORATION OF THE CITY OF OSHAWA | | | | | | | | | |
|------------------------------------|------|-----|-----|-----|-------|-----|-------|------|-------|
| SPECIFIED CONCENTRATED LOADS (LBS) | | | | | | | | | |
| JT | LOC. | LC1 | MAX | MAX | FACE | DIR | TYPE | HEEL | CONN. |
| AA | 2-0 | 2 | -22 | -22 | FRONT | VER | TOTAL | — | C1 |
| AB | 4-0 | 2 | -22 | -22 | FRONT | VER | TOTAL | — | C1 |
| AC | 8-0 | 2 | -22 | -22 | FRONT | VER | TOTAL | — | C1 |
| AD | 10-0 | 2 | - | - | FRONT | VER | TOTAL | — | C1 |
| AE | 12-0 | 2 | - | - | FRONT | VER | TOTAL | — | C1 |
| AF | 15-0 | 4 | - | - | FRONT | VER | TOTAL | — | C1 |
| AG | 17-0 | 4 | - | - | FRONT | VER | TOTAL | — | C1 |
| AH | 19-0 | 4 | - | - | FRONT | VER | TOTAL | — | C1 |
| AI | 23-0 | 4 | - | - | FRONT | VER | TOTAL | — | C1 |
| AJ | 25-0 | 4 | - | - | FRONT | VER | TOTAL | — | C1 |

CONNECTION REQUIREMENTS

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

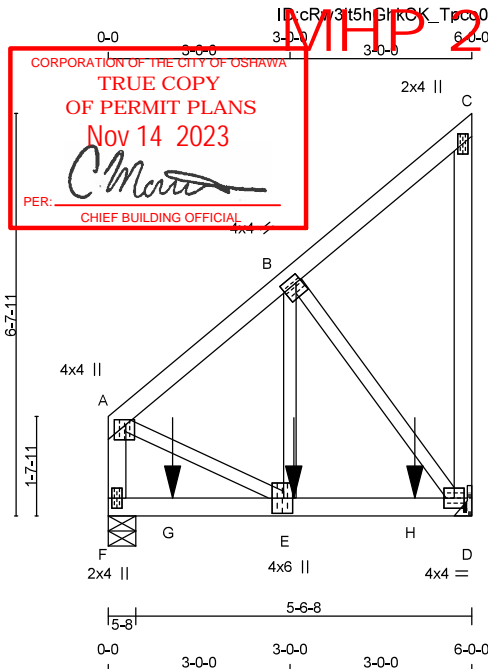


READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTES: TRUSSES. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



| | | | | | | |
|------------|------------|----------|-----|-------------|-------------------------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - | DRWG NO. |
| NE0723-088 | G04 | 1 | 1 | TRUSS DESC. | VILLA 2-2 | |

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Scale = 1:38.0

TOTAL WEIGHT = 33 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-------------------|--------|------|--------|--------|
| A - C | 2x4 | DRY | No.2 | SPF |
| D - C | 2x4 | DRY | No.2 | SPF |
| F - A | 2x4 | DRY | No.2 | SPF |
| F - D | 2x4 | DRY | No.2 | SPF |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 | SPF |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| A | TMVW+p | MT20 | 4.0 | 4.0 | 1.00 | 2.25 |
| B | TMVW-t | MT20 | 4.0 | 4.0 | 1.50 | 1.00 |
| C | TMV+p | MT20 | 2.0 | 4.0 | | |
| D | BMVW-t | MT20 | 4.0 | 4.0 | | |
| E | BMVW-t | MT20 | 4.0 | 6.0 | 3.00 | 1.75 |
| F | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER**

| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
|----|------|------|------|------|--------|------------|-------|
| D | 1529 | 0 | 1529 | 0 | 0 | MECHANICAL | 1-10 |
| F | 1498 | 0 | 1498 | 0 | 0 | 5-8 | 1-10 |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-11.

UNFACTORED REACTIONS

| 1ST LCASE | | MAX. MIN. COMPONENT REACTIONS | | | | | |
|-----------|----------|-------------------------------|-------|------------|-------|---------|-------|
| JT | COMBINED | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
| D | 1066 | 787 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 279 / 0 | 0 / 0 |
| F | 1044 | 771 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 273 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.06 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. CS1 (LC) | MAX. UNBRAC LENGTH FR-TO | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CS1 (LC) |
|-------|---------------------------|---------------------------|---------------|--------------------------|-------|---------------------------|---------------|
| FR-TO | | | | | FR-TO | | |
| A-B | -961 / 0 | -119.4 | -119.4 | 0.20 (1) | E-B | 0 / 1154 | 0.29 (1) |
| B-C | -26 / 0 | -119.4 | -119.4 | 0.18 (1) | B-D | -1224 / 0 | 0.47 (1) |
| D-C | -139 / 0 | 0.0 | 0.0 | 0.12 (1) | A-E | 0 / 827 | 0.20 (1) |
| F-A | -1100 / 0 | 0.0 | 0.0 | 0.13 (1) | | | |
| F-G | 0 / 0 | -18.2 | -18.2 | 0.62 (1) | | | |
| G-E | 0 / 0 | -18.2 | -18.2 | 0.62 (1) | | | |
| E-H | 0 / 758 | -18.2 | -18.2 | 0.72 (1) | | | |
| H-D | 0 / 758 | -18.2 | -18.2 | 0.72 (1) | | | |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|----|--------|------|------|------|-------|------|-------|------|-------|
| E | 3-0-12 | -511 | -511 | | FRONT | VERT | TOTAL | | C1 |
| G | 1-0-12 | -511 | -511 | | FRONT | VERT | TOTAL | | C1 |
| H | 5-0-12 | -511 | -511 | | FRONT | VERT | TOTAL | | C1 |

CONNECTION REQUIREMENTS

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

| | | | | |
|------------------|----|---|------|-----|
| SPECIFIED LOADS: | | | | |
| TOP CH. | LL | = | 34.8 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.3 | PSF |
| TOTAL LOAD | | = | 48.1 | PSF |

SPACING = 24.0 IN. C/C

*** NON STANDARD GIRDER ***
ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/999 (0.03")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/999 (0.05")

CS1: TC=0.20/1.00 (A-B-1), BC=0.72/1.00 (D-E-1), WB=0.47/1.00 (B-D-1), SS1=0.37/1.00 (D-E-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-------|-----------|-------------|---------------|
| MT20 | 650 | 371 | 1747 |
| | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

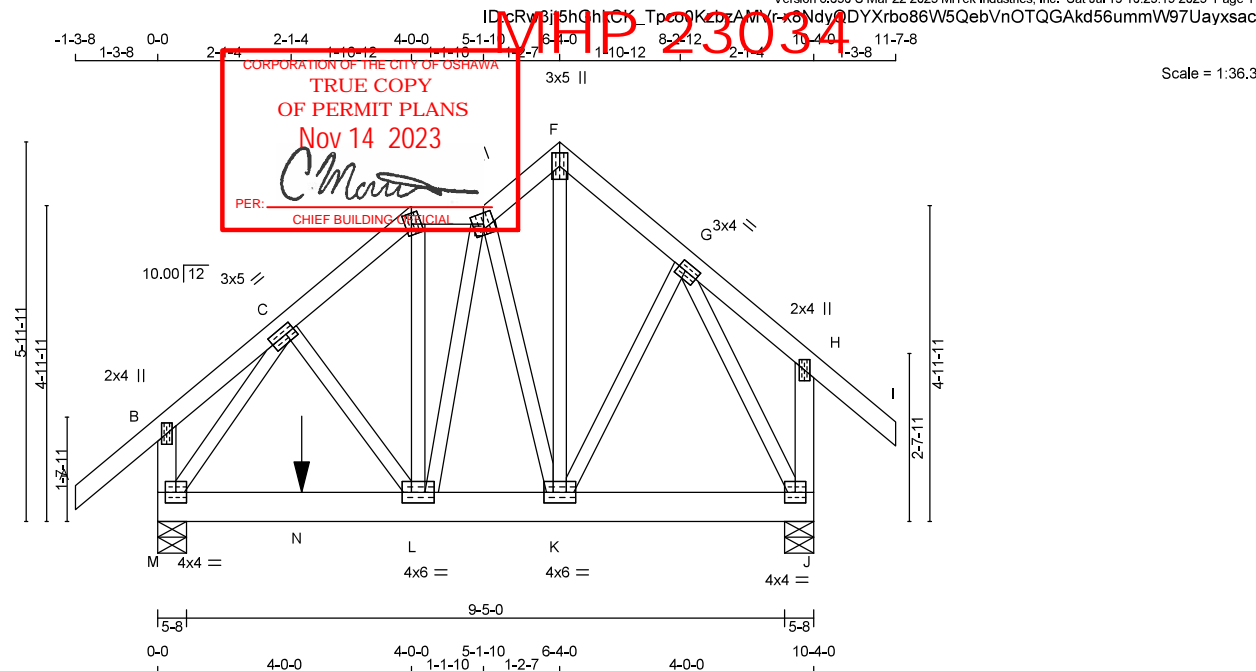
JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL = 0.34 (E) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | | |
|------------|------------|----------|-----|-------------|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | DRWG NO. |
| NE0723-088 | G06 | 1 | 1 | TRUSS DESC. | | |

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TOTAL WEIGHT = 68 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - D | 2x4 | DRY | No.2 |
| D - E | 2x4 | DRY | No.2 |
| E - F | 2x4 | DRY | No.2 |
| F - I | 2x4 | DRY | No.2 |
| M - B | 2x4 | DRY | No.2 |
| J - H | 2x4 | DRY | No.2 |
| M - J | 2x6 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|---------|--------|-----|-----|------|------|
| B | TMV+p | MT20 | 2.0 | 4.0 | | |
| C | TMWW-H | MT20 | 3.0 | 5.0 | 1.50 | 1.75 |
| D | TTWW+m | MT20 | 3.0 | 4.0 | 2.00 | 1.25 |
| E | TTWW+m | MT20 | 4.0 | 4.0 | | |
| F | TTWW+p | MT20 | 3.0 | 5.0 | | |
| G | TMWW-H | MT20 | 3.0 | 4.0 | 1.50 | 1.50 |
| H | TMV+p | MT20 | 2.0 | 4.0 | | |
| J | BMVW1-t | MT20 | 4.0 | 4.0 | | |
| K | BMWW-H | MT20 | 4.0 | 6.0 | | |
| L | BMWW-H | MT20 | 4.0 | 6.0 | | |
| M | BMVW1-t | MT20 | 4.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQRD BRG |
|----|-------------------------|---------------------------------|-----------|-----------|
| JT | VERT | HORZ | DOWN | HORZ |
| M | 1568 | 0 | 1568 | 0 |
| J | 1071 | 0 | 1071 | 0 |

UNFACTORED REACTIONS

| JT | COMBINED | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|----|----------|---------|-------|------------|-------|---------|-------|
| M | 1089 | 824 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 266 / 0 | 0 / 0 |
| J | 745 | 560 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 186 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) M, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.24 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | LC1 | MAX. UNBRACED LENGTH | MEMB. | WEBS | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
|-------|----------|---------------------------|------------------|----------|----------------------|-------|-----------|---------------------------|---------------|
| FR-TO | | | | | | FR-TO | | | |
| A-B | 0 / 53 | -119.4 | -119.4 | 0.18 (1) | 10.00 | C-L | 0 / 94 | 0.02 (1) | |
| B-C | 0 / 11 | -119.4 | -119.4 | 0.07 (1) | 10.00 | L-D | 0 / 444 | 0.11 (1) | |
| C-D | -960 / 0 | -119.4 | -119.4 | 0.08 (1) | 6.24 | L-E | 0 / 335 | 0.08 (1) | |
| D-E | -735 / 0 | -119.4 | -119.4 | 0.04 (1) | 6.25 | E-K | -856 / 0 | 0.32 (1) | |
| E-F | -573 / 0 | -119.4 | -119.4 | 0.04 (1) | 6.25 | K-F | 0 / 563 | 0.14 (1) | |
| F-G | -591 / 0 | -119.4 | -119.4 | 0.06 (1) | 6.25 | K-G | 0 / 118 | 0.03 (1) | |
| G-H | 0 / 12 | -119.4 | -119.4 | 0.07 (1) | 10.00 | M-C | -1173 / 0 | 0.27 (1) | |
| H-I | 0 / 53 | -119.4 | -119.4 | 0.18 (1) | 10.00 | G-J | -849 / 0 | 0.26 (1) | |
| M-B | -268 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 | | | | |
| J-H | -268 / 0 | 0.0 | 0.0 | 0.04 (1) | 7.81 | | | | |
| M-N | 0 / 670 | -18.2 | -18.2 | 0.61 (1) | 10.00 | | | | |
| N-L | 0 / 670 | -18.2 | -18.2 | 0.61 (1) | 10.00 | | | | |
| L-K | 0 / 661 | -18.2 | -18.2 | 0.38 (1) | 10.00 | | | | |
| K-J | 0 / 391 | -18.2 | -18.2 | 0.10 (1) | 10.00 | | | | |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX- | MAX+ | FACE | DIR. | TYPE | HEEL | CONN. |
|----|------|------|------|------|-------|------|-------|------|-------|
| N | 2-34 | -614 | -614 | — | FRONT | VERT | TOTAL | — | C1 |

CONNECTION REQUIREMENTS

1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE**SPECIFIED LOADS:**

| | | | | |
|------------|----|------|------|-----|
| TOP CH. | LL | = | 34.8 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF | |

SPACING = 24.0 IN. C/C

LOADING IN ALL FLAT SECTIONS BASED ON A SLOPE OF 2.00/12 MINIMUM

***** NON STANDARD GIRDER *****

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.34")
 CALCULATED VERT. DEFL.(LL) = $L/999$ (0.04")
 ALLOWABLE DEFL.(TL) = $L/360$ (0.34")
 CALCULATED VERT. DEFL.(TL) = $L/999$ (0.06")

CSI: TC=0.18/1.00 (A-B:1), BC=0.61/1.00 (L-M:1),
 WB=0.32/1.00 (E-K:1), SSI=0.41/1.00 (L-M:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| (PSI) | (PLI) | (PLI) | (PLI) |
| MAX | MIN | MAX | MIN |
| 650 | 371 | 1747 | 788 |
| 1987 | 1873 | | |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.86 (G) (INPUT = 0.90)
 JSI METAL = 0.32 (C) (INPUT = 1.00)

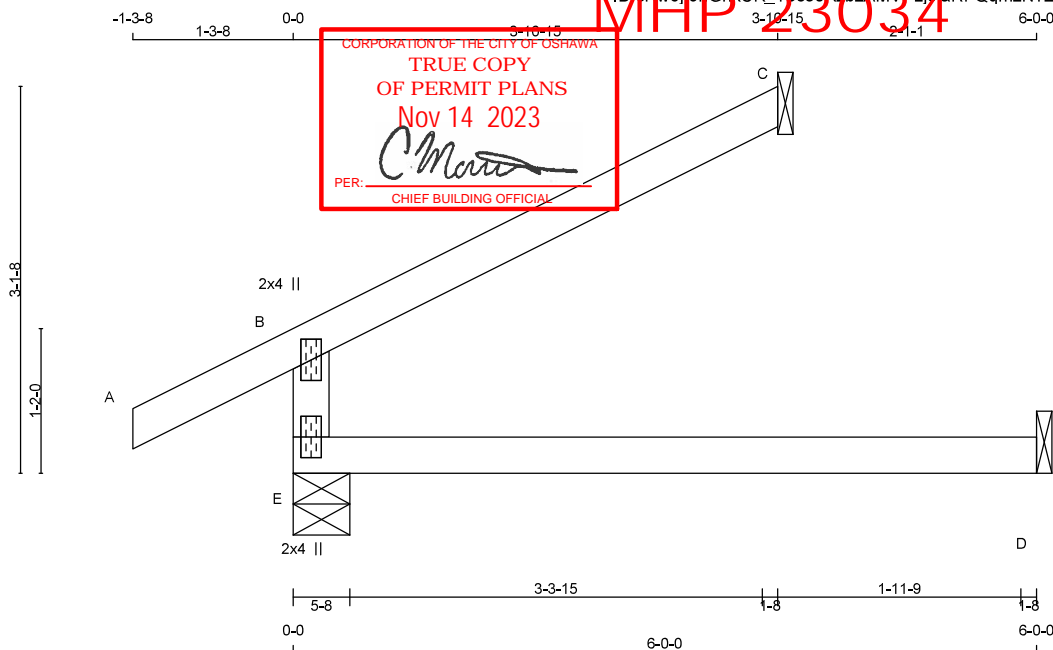


READ ALL NOTES ON THIS PAGE AND ON THE
 ENGINEERING NOTES: TRUSSES. THE NOTE PAGE
 IS AN INTEGRAL PART OF THIS DRAWING AS IT
 CONTAINS SPECIFICATIONS AND CRITERIA USED
 IN THE DESIGN OF THIS COMPONENT.



| | | | | | | |
|------------|------------|----------|-----|-------------|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | DRWG NO. |
| NE0723-088 | J02 | 2 | 1 | TRUSS DESC. | | |

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Scale = 1:18.6

TOTAL WEIGHT = 2 X 14 = 29 lb

LUMBER

| | | | |
|-------------------|------|--------|------|
| N. L. G. A. RULES | | | |
| CHORDS | SIZE | LUMBER | |
| E - B | 2x4 | DRY | No.2 |
| A - C | 2x4 | DRY | No.2 |
| E - D | 2x4 | DRY | No.2 |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| | | | | | | |
|----|--------|--------|-----|-----|---|---|
| JT | TYPE | PLATES | W | LEN | Y | X |
| B | TMV+p | MT20 | 2.0 | 4.0 | | |
| E | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQRD BRG |
|----|-------------------------|---------------------------------|-----------|-----------|
| JT | VERT | HORZ | DOWN | HORZ |
| E | 518 | 0 | 518 | 0 |
| C | 175 | 0 | 175 | 0 |
| D | 45 | 0 | 51 | 0 |

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

| JT | 1ST LCASE | MAX. MIN. COMPONENT REACTIONS | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|----|-----------|-------------------------------|-------|-------|------------|--------|-------|-------|
| E | 362 | 265 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 97 / 0 | 0 / 0 | 0 / 0 |
| C | 120 | 102 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 18 / 0 | 0 / 0 | 0 / 0 |
| D | 36 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 36 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. VERT. LOAD (LC1) | MAX. HORIZ. LOAD (LC2) | MEMB. | WEBS | MAX. FACTORED FORCE (LBS) | MAX. HORIZ. LOAD (LC2) |
|-------|----------|---------------------------|---------------------------|-----------------------|------------------------|-------|------|---------------------------|------------------------|
| FR-TO | | | | | | FR-TO | | | |
| E-B | -454 / 0 | 0.0 | 0.0 | 0.13 (4) | 7.81 | | | | |
| A-B | 0 / 36 | -119.4 | -119.4 | 0.16 (1) | 10.00 | | | | |
| B-C | -26 / 0 | -119.4 | -119.4 | 0.31 (1) | 6.25 | | | | |
| E-D | 0 / 0 | -18.2 | -18.2 | 0.13 (4) | 10.00 | | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | | |
|------------|----|------|------|-----|
| TOP CH. | LL | = | 34.8 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF | |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F., G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.03")CSI: TC=0.31/1.00 (B-C:1) , BC=0.13/1.00 (D-E:4) ,
WB=0.00/1.00 (n/a:0) , SSH=0.20/1.00 (B-C:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP (DRY) | SHEAR | SECTION |
|-------|------------|-------|---------|
| | (PL) | (PL) | (PL) |
| MT20 | 650 | 371 | 1747 |
| | 788 | 1987 | 1873 |

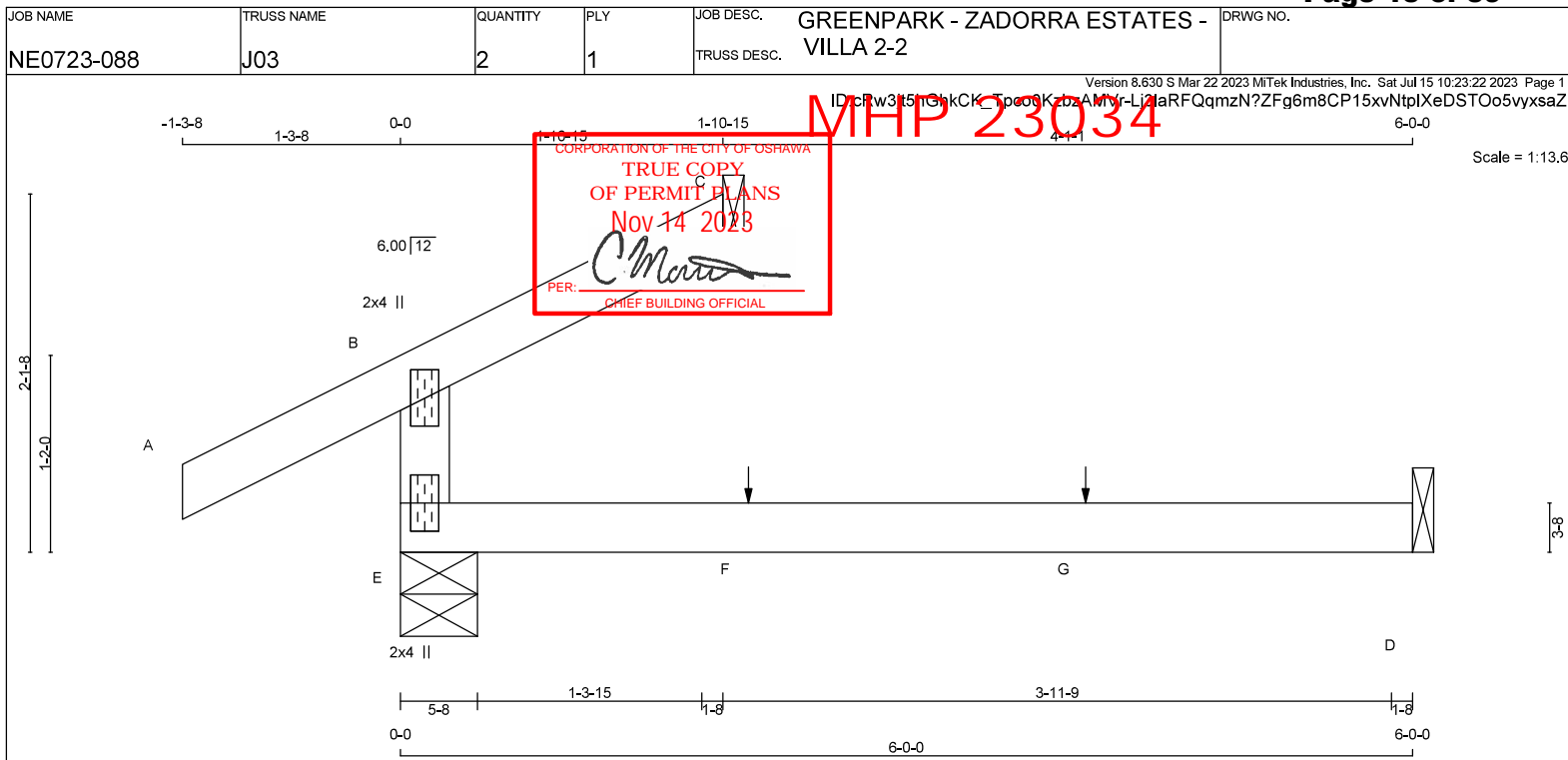
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.25 (B) (INPUT = 0.90)
JSI METAL= 0.19 (B) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



**LUMBER**

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| E - B | 2x4 | DRY | No.2 |
| A - C | 2x4 | DRY | No.2 |
| E - D | 2x4 | DRY | No.2 |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| B | TMV+p | MT20 | 2.0 | 4.0 | | |
| E | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER**

| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
|----|------|------|------|------|--------|-------|-------|
| E | 368 | 0 | 368 | 0 | 0 | 5-8 | 1-8 |
| C | 86 | 0 | 86 | 0 | 0 | 1-8 | 1-8 |
| D | 45 | 0 | 51 | 0 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|----|----------|---------|-------|-----------|-------|--------|-------|
| E | 259 | 177 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 82 / 0 | 0 / 0 |
| C | 59 | 50 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 9 / 0 | 0 / 0 |
| D | 36 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 36 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (LBS) | MAX. UNBRACED LENGTH (FT) | MAX. FACTORED FORCE (LBS) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (FT) |
|-------|---------------------------|---------------------------|---------------------------|---------------------------|-------|---------------------------|---------------------------|
| FR-TO | | FROM TO | | | FR-TO | | |
| E-B | -304 / 0 | 0.0 | 0.0 | 0.13 (4) | 7.81 | | |
| A-B | 0 / 36 | -119.4 | -119.4 | 0.16 (1) | 10.00 | | |
| B-C | -12 / 0 | -119.4 | -119.4 | 0.07 (1) | 6.25 | | |
| E-F | 0 / 0 | -18.2 | -18.2 | 0.13 (4) | 10.00 | | |
| F-G | 0 / 0 | -18.2 | -18.2 | 0.13 (4) | 10.00 | | |
| G-D | 0 / 0 | -18.2 | -18.2 | 0.13 (4) | 10.00 | | |

SPECIFIED CONCENTRATED LOADS (LBS)

| JT | LOC. | LC1 | MAX. | FACE | DIR. | TYPE | HEEL | CONN. |
|----|--------|-----|------|------|------|------|------|-------|
| F | 2-0-12 | 1 | 1 | — | BACK | VERT | — | C1 |
| G | 4-0-12 | 1 | 1 | — | BACK | VERT | — | C1 |

CONNECTION REQUIREMENTS

- 1) C1: A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED.

DESIGN CRITERIA

*** SPECIAL LOADS ANALYSIS ***
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.
LOADS WERE DERIVED FROM USER INPUT
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:

| | | | | |
|------------|----|------|------|-----|
| TOP CH. | LL | = | 34.8 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF | |

SPACING = 24.0 IN. C/C

*** NON STANDARD GIRDER ***

ADDTL USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(LL) = $L/999$ (0.00")
ALLOWABLE DEFL.(TL) = $L/360$ (0.20")
CALCULATED VERT. DEFL.(TL) = $L/999$ (0.03")

CSI: TC=0.16/1.00 (A-B-1), BC=0.13/1.00 (D-E-4),
WB=0.00/1.00 (n/a:0), SSI=0.11/1.00 (A-B-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP (DRY) | SHEAR | SECTION |
|-------|------------|-------|---------|
| | (PSI) | (PLI) | (PLI) |
| | MAX | MIN | MAX |
| MT20 | 650 | 371 | 1747 |
| | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.17 (B) (INPUT = 0.90)
JSI METAL = 0.13 (B) (INPUT = 1.00)



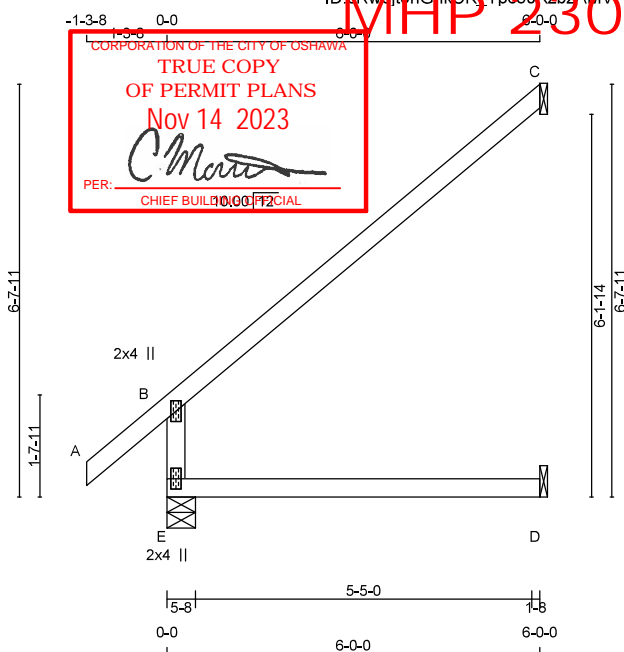
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | |
|------------|------------|----------|-----|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| NE0723-088 | J06 | 2 | 1 | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | |

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ID: RwtjshGnkCK_Tpoo0Kz0zAmV-H63W77GhMOD4FtP2DBBgUSA8LBYDmR8WvntuAnyxsaX



Scale = 1:37.1

TOTAL WEIGHT = 2 X 19 = 39 lb

LUMBER

| | | | |
|-------------------|------|--------|------|
| N. L. G. A. RULES | | | |
| CHORDS | SIZE | LUMBER | |
| E - B | 2x4 | DRY | No.2 |
| A - C | 2x4 | DRY | No.2 |
| E - D | 2x4 | DRY | No.2 |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| | | | | | | |
|----|--------|--------|-----|-----|---|---|
| JT | TYPE | PLATES | W | LEN | Y | X |
| B | TMV+p | MT20 | 2.0 | 4.0 | | |
| E | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| JT | VERT | HORZ | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQRD BRG |
|----|------|------|-------------------------|---------------------------------|-----------|-----------|
| E | 676 | 0 | 676 | 0 | 5-8 | 1-8 |
| C | 269 | 0 | 269 | 0 | 1-8 | 1-8 |
| D | 46 | 0 | 52 | 0 | 1-8 | 1-8 |

SEE MITEK STANDARD DETAIL MSD2015-H FOR CONNECTION TO JOINT(S) C, D

UNFACTORED REACTIONS

| JT | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS | | | | | |
|----|-----------|-------------------------------|-------|-----------|-------|---------|-------|
| E | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| E | 469 | 357 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 112 / 0 | 0 / 0 |
| C | 184 | 157 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 27 / 0 | 0 / 0 |
| D | 37 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 37 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. UNBRACED LENGTH FR-TO | MEMB. | WEBS | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH FR-TO |
|-------|----------|---------------------------|-------------------------------|----------------------------|-------|------|---------------------------|----------------------------|
| FR-TO | | | | | | | | |
| E-B | -613 / 0 | 0.0 | 0.0 | 0.12 (4) | 7.81 | | | |
| A-B | 0 / 53 | -119.4 | -119.4 | 0.16 (1) | 10.00 | | | |
| B-C | -57 / 0 | -119.4 | -119.4 | 0.74 (1) | 6.25 | | | |
| E-D | 0 / 0 | -18.2 | -18.2 | 0.14 (4) | 10.00 | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | | |
|------------|----|---|------|-----|
| TOP CH. | LL | = | 34.8 | PSF |
| | DL | = | 6.0 | PSF |
| BOT CH. | LL | = | 0.0 | PSF |
| | DL | = | 7.3 | PSF |
| TOTAL LOAD | | = | 48.1 | PSF |

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F., G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL)= L/360 (0.20")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.00")
ALLOWABLE DEFL.(TL)= L/360 (0.20")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.04")CSI: TC=0.74/1.00 (B-C:1) , BC=0.14/1.00 (D-E:4) ,
WB=0.00/1.00 (n/a:0) , SSH=0.27/1.00 (B-C:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| | (PL) | (PSI) | (PL) |
| MT20 | 650 | 371 | 1747 |
| | | 788 | 1987 |
| | | | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

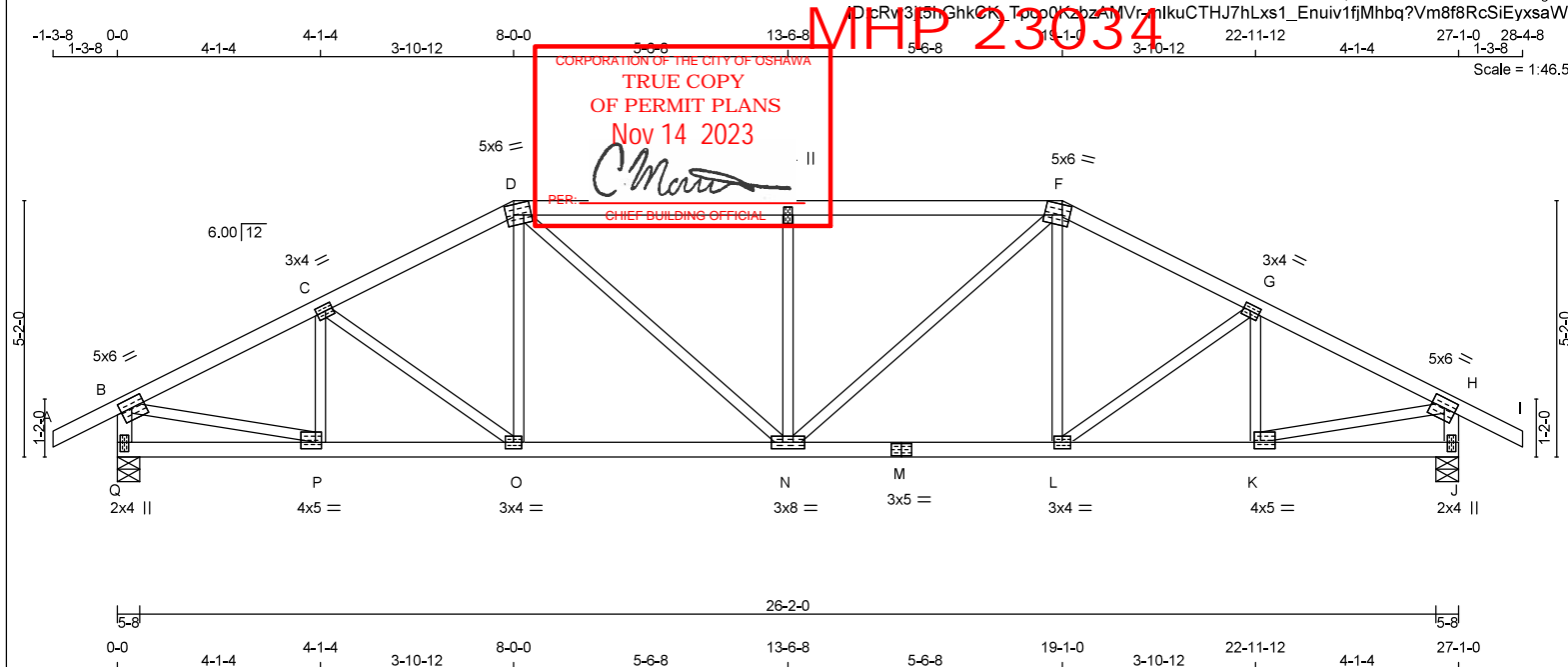
JSI GRIP= 0.42 (B) (INPUT = 0.90)
JSI METAL= 0.33 (B) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | | |
|------------|------------|----------|-----|-------------|-------------------------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - | DRWG NO. |
| NE0723-088 | T01 | 1 | 1 | TRUSS DESC. | VILLA 2-2 | |

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TOTAL WEIGHT = 110 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - D | 2x4 | DRY | No.2 |
| D - F | 2x4 | DRY | No.2 |
| F - I | 2x4 | DRY | No.2 |
| Q - B | 2x4 | DRY | No.2 |
| J - H | 2x4 | DRY | No.2 |
| Q - M | 2x4 | DRY | No.2 |
| M - J | 2x4 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMVW4 | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| C | TMVW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| D | TTVW-m | MT20 | 5.0 | 6.0 | 2.50 | 1.75 |
| E | TMVW-w | MT20 | 2.0 | 4.0 | | |
| F | TTVW-m | MT20 | 5.0 | 6.0 | 2.50 | 1.75 |
| G | TMVW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| H | TMVW4 | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| J | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |
| K | BMVW4 | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| L | BMVW4 | MT20 | 3.0 | 4.0 | | |
| M | BS4 | MT20 | 3.0 | 5.0 | | |
| N | BMVW4 | MT20 | 3.0 | 8.0 | | |
| O | BMVW4 | MT20 | 3.0 | 4.0 | | |
| P | BMVW4 | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| Q | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| | FACTORED | GROSS REACTION | MAXIMUM FACTORED | GROSS REACTION | INPUT | REQD |
|----|----------|----------------|------------------|----------------|--------|-------|
| | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX |
| JT | 2026 | 0 | 2026 | 0 | 0 | 5-8 |
| Q | 2026 | 0 | 2026 | 0 | 0 | 5-8 |
| J | 2026 | 0 | 2026 | 0 | 0 | 5-8 |

UNFACTORED REACTIONS

| | 1ST CASE | MAX. MIN. COMPONENT REACTIONS | | | | | |
|----|----------|-------------------------------|-------|------------|-------|---------|-------|
| | COMBINED | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
| JT | 1414 | 1037 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 376 / 0 | 0 / 0 |
| Q | 1414 | 1037 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 376 / 0 | 0 / 0 |
| J | 1414 | 1037 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 376 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.63 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | | | | WEBS | | | |
|--------|---------------------------|----------------------|-----------------|-------|---------------------------|---------------|----------|
| MEMB. | MAX. FACTORED FORCE (LBS) | VERT. LOAD LC1 (PLF) | MAX. CSI (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) | |
| FR-TO | | | | FR-TO | | | |
| A-B | 0 / 36 | -119.4 | -119.4 0.16 (1) | 10.00 | P-C | -419 / 0 | 0.08 (1) |
| B-C | -2549 / 0 | -119.4 | -119.4 0.30 (1) | 4.06 | C-O | -168 / 0 | 0.07 (1) |
| C-D | -2446 / 0 | -119.4 | -119.4 0.29 (1) | 4.14 | O-D | 0 / 198 | 0.04 (1) |
| D-E | -2685 / 0 | -119.4 | -119.4 0.57 (1) | 3.63 | D-N | 0 / 687 | 0.15 (1) |
| E-F | -2685 / 0 | -119.4 | -119.4 0.57 (1) | 3.63 | N-E | -811 / 0 | 0.32 (1) |
| F-G | -2446 / 0 | -119.4 | -119.4 0.29 (1) | 4.14 | N-F | 0 / 687 | 0.15 (1) |
| G-H | -2549 / 0 | -119.4 | -119.4 0.30 (1) | 4.06 | L-F | 0 / 198 | 0.04 (1) |
| H-I | 0 / 36 | -119.4 | -119.4 0.16 (1) | 10.00 | L-G | -168 / 0 | 0.07 (1) |
| Q-B | -1988 / 0 | 0.0 | 0.0 0.20 (1) | 5.98 | K-G | -419 / 0 | 0.08 (1) |
| J-H | -1988 / 0 | 0.0 | 0.0 0.20 (1) | 5.98 | B-P | 0 / 2350 | 0.53 (1) |
| | | | | | K-H | 0 / 2350 | 0.53 (1) |
| Q-P | 0 / 0 | -18.2 | -18.2 0.07 (4) | 10.00 | | | |
| P-O | 0 / 2301 | -18.2 | -18.2 0.42 (1) | 10.00 | | | |
| O-N | 0 / 2169 | -18.2 | -18.2 0.40 (1) | 10.00 | | | |
| N-M | 0 / 2169 | -18.2 | -18.2 0.40 (1) | 10.00 | | | |
| M-L | 0 / 2169 | -18.2 | -18.2 0.40 (1) | 10.00 | | | |
| L-K | 0 / 2301 | -18.2 | -18.2 0.42 (1) | 10.00 | | | |
| K-J | 0 / 0 | -18.2 | -18.2 0.07 (4) | 10.00 | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55% OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")CSI: TC=0.57/1.00 (D-E:1), BC=0.42/1.00 (K-L:1),
WB=0.53/1.00 (H-K:1), SS=0.32/1.00 (D-E:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| (PL) | (PS) | (PL) | (PL) |
| MAX | MIN | MAX | MIN |
| MT20 | 650 | 371 | 1747 |
| | | 788 | 1987 |

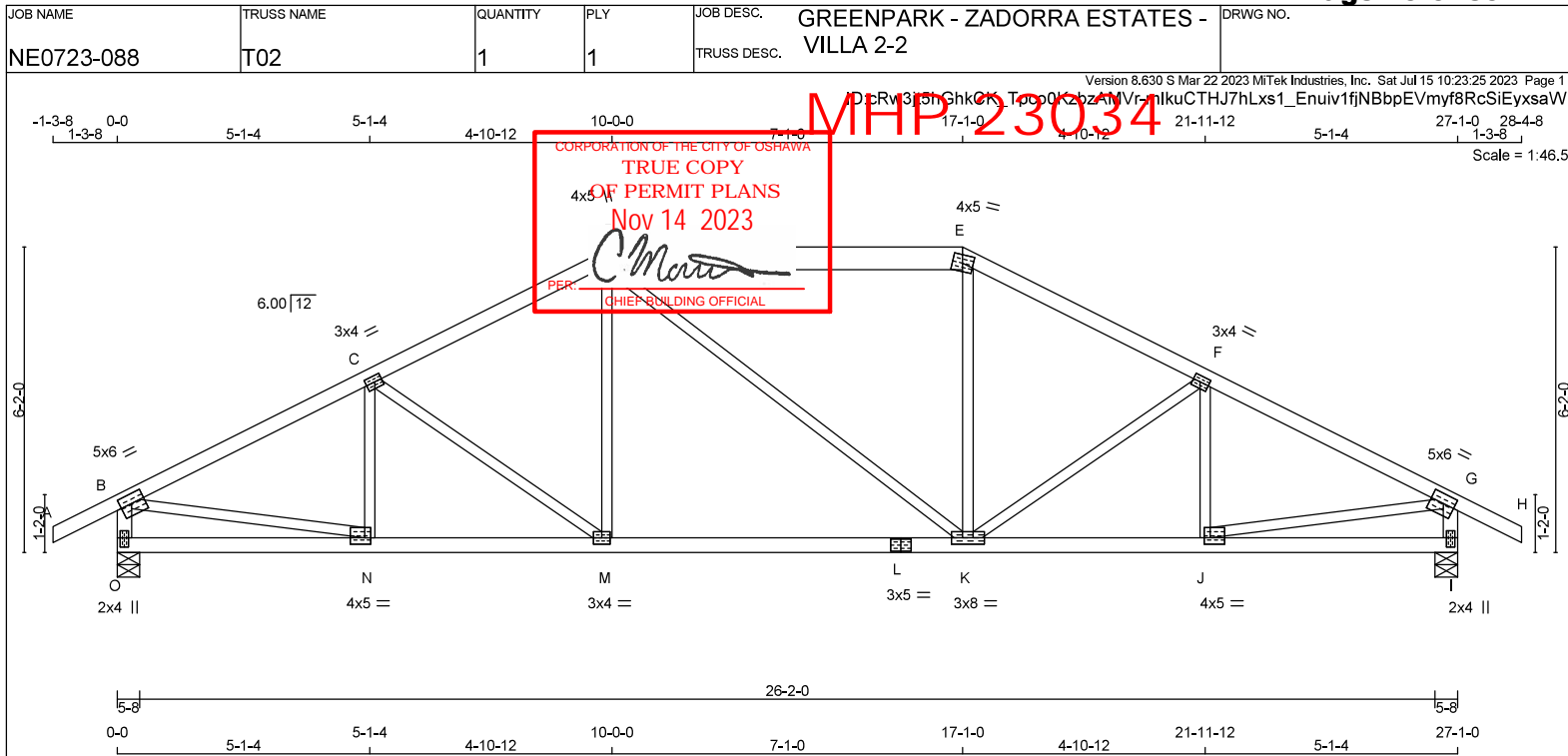
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.88 (P) (INPUT = 0.90)
JSI METAL = 0.69 (M) (INPUT = 1.00)

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LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - D | 2x4 | DRY | No.2 |
| D - E | 2x6 | DRY | No.2 |
| E - H | 2x4 | DRY | No.2 |
| O - B | 2x4 | DRY | No.2 |
| I - G | 2x4 | DRY | No.2 |
| O - L | 2x4 | DRY | No.2 |
| L - I | 2x4 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMVW4 | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| C | TMVW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| D | TTWV+m | MT20 | 4.0 | 5.0 | 2.00 | 1.75 |
| E | TTWV-m | MT20 | 4.0 | 5.0 | | |
| F | TMVW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| G | TMVW4 | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| I | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |
| J | BMVW4 | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| K | BMVW4 | MT20 | 3.0 | 8.0 | | |
| L | BS4 | MT20 | 3.0 | 5.0 | | |
| M | BMVW4 | MT20 | 3.0 | 4.0 | | |
| N | BMVW4 | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| O | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING

DESIGNER

BEARINGS

| | FACTORED | MAXIMUM FACTORED | INPUT | REQD |
|----|----------------|------------------|-------|------|
| | GROSS REACTION | GROSS REACTION | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ |
| O | 2026 | 0 | 2026 | 0 |
| I | 2026 | 0 | 2026 | 0 |

UNFACTORED REACTIONS

| JT | 1ST CASE | MAX. MIN. COMPONENT REACTIONS |
|----|----------|--|
| JT | COMBINED | SNOW LIVE PERM. LIVE WIND DEAD SOIL |
| O | 1414 | 1037 / 0 0 / 0 0 / 0 0 / 0 376 / 0 0 / 0 |
| I | 1414 | 1037 / 0 0 / 0 0 / 0 0 / 0 376 / 0 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, I

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.83 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.
ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED | FACTORED | MAX | WEBS | MAX. FACTORED |
|--------|---------------|------------------------|--------------|-------|---------------|
| MEMB. | FORCE (LBS) | VERT. LOAD LC1 (PLF) | MAX CSI (LC) | MEMB. | FORCE (LBS) |
| FR-TO | | FROM TO | | FR-TO | |
| A-B | 0 / 36 | -119.4 -119.4 0.16 (1) | 10.00 | N-C | -317 / 0 |
| B-C | -2618 / 0 | -119.4 -119.4 0.47 (1) | 3.83 | C-M | -410 / 0 |
| C-D | -2300 / 0 | -119.4 -119.4 0.44 (1) | 4.07 | M-D | 0 / 358 |
| D-E | -2029 / 0 | -119.4 -119.4 0.40 (1) | 5.19 | D-K | 0 / 0 |
| E-F | -2301 / 0 | -119.4 -119.4 0.44 (1) | 4.07 | K-E | 0 / 359 |
| F-G | -2618 / 0 | -119.4 -119.4 0.47 (1) | 3.83 | K-F | -408 / 0 |
| G-H | 0 / 36 | -119.4 -119.4 0.16 (1) | 10.00 | J-F | -318 / 0 |
| O-B | -1982 / 0 | 0.0 0.0 0.20 (1) | 5.99 | B-N | 0 / 2402 |
| I-G | -1982 / 0 | 0.0 0.0 0.20 (1) | 5.99 | J-G | 0 / 2402 |
| O-N | 0 / 0 | -18.2 -18.2 0.10 (4) | 10.00 | | |
| N-M | 0 / 2369 | -18.2 -18.2 0.47 (1) | 10.00 | | |
| M-L | 0 / 2029 | -18.2 -18.2 0.42 (1) | 10.00 | | |
| L-K | 0 / 2029 | -18.2 -18.2 0.42 (1) | 10.00 | | |
| K-J | 0 / 2369 | -18.2 -18.2 0.47 (1) | 10.00 | | |
| J-I | 0 / 0 | -18.2 -18.2 0.10 (4) | 10.00 | | |

DESIGN CRITERIA

SPECIFIED LOADS:

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.10")
ALLOWABLE DEFL.(TL) = L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")

CSI: TC=0.47/1.00 (B-C:1) , BC=0.47/1.00 (J-K:1) ,
WB=0.54/1.00 (B-N:1) , SS=0.26/1.00 (F-G:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PL)
(PSI) (PL) (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (D) (INPUT = 0.90)
JSI METAL = 0.68 (N) (INPUT = 1.00)

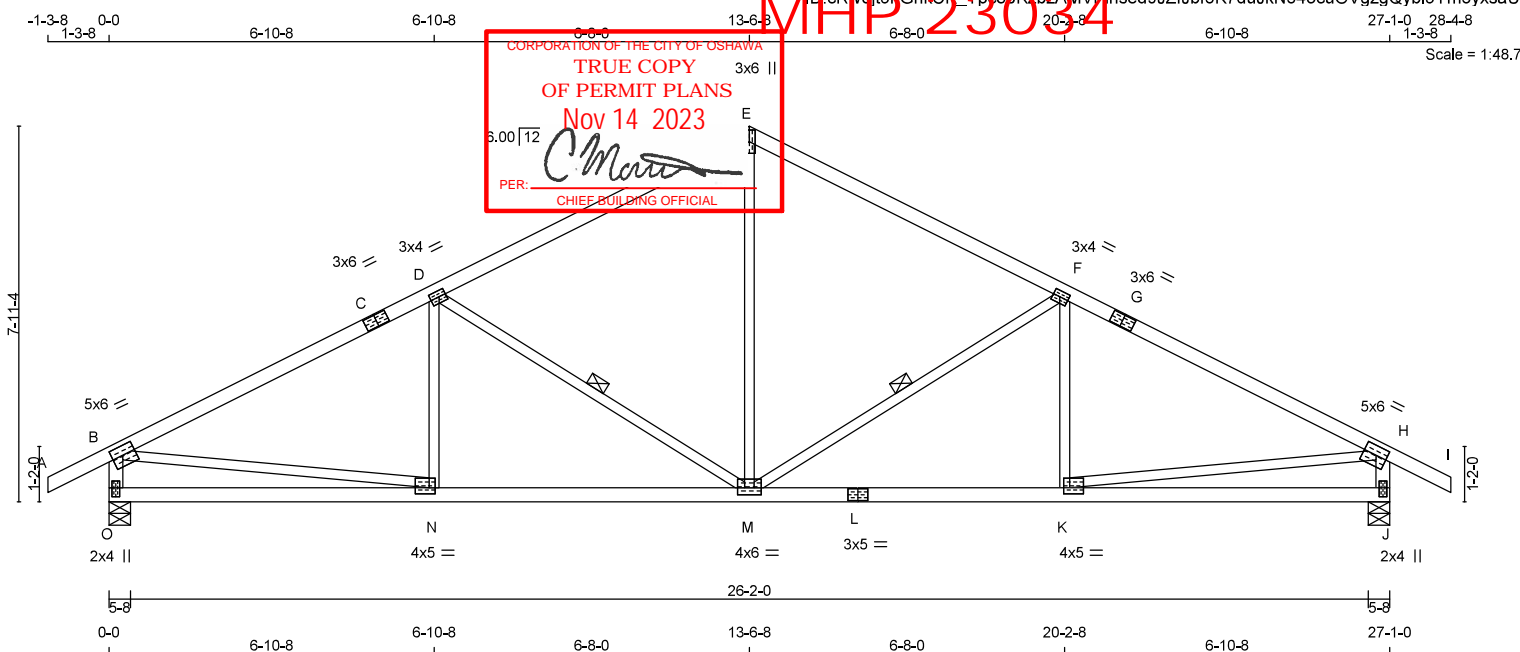


READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | |
|------------|------------|----------|-----|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| NE0723-088 | T04 | 8 | 1 | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | |

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TOTAL WEIGHT = 8 X 106 = 849 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - C | 2x4 | DRY | No.2 |
| C - E | 2x4 | DRY | No.2 |
| E - G | 2x4 | DRY | No.2 |
| G - I | 2x4 | DRY | No.2 |
| O - B | 2x4 | DRY | No.2 |
| J - H | 2x4 | DRY | No.2 |
| O - L | 2x4 | DRY | No.2 |
| L - J | 2x4 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMWW4 | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| C | TS4 | MT20 | 3.0 | 6.0 | | |
| D | TMWW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| E | TTW+p | MT20 | 3.0 | 6.0 | | |
| F | TMWW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| G | TS4 | MT20 | 3.0 | 6.0 | | |
| H | TMWW4 | MT20 | 5.0 | 6.0 | 2.25 | 2.75 |
| J | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |
| K | BMWW4 | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| L | BS4 | MT20 | 3.0 | 5.0 | | |
| M | BMWW4 | MT20 | 4.0 | 6.0 | 1.75 | 3.00 |
| N | BMWW4 | MT20 | 4.0 | 5.0 | 1.50 | 1.50 |
| O | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| FACTORED | MAXIMUM FACTORED | INPUT | REQD |
|----------------|------------------|--------|-------|
| GROSS REACTION | GROSS REACTION | BRG | BRG |
| JT VERT | DOWN | UPLIFT | IN-SX |
| O 2026 | 0 | 0 | 5-8 |
| J 2026 | 0 | 0 | 5-8 |

UNFACTORED REACTIONS

| 1ST CASE | MAX. MIN. | COMPONENT REACTIONS |
|-------------|-----------|---------------------|
| JT COMBINED | SNOW | LIVE |
| O 1414 | 1037 / 0 | 0 / 0 |
| J 1414 | 1037 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, J

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.08 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF F-M, D-M, DBS = 20'-0". CBF = 109 LBS.

DBS = DIAGONAL BRACE SPACING (MAX), CBF = CUMULATIVE BRACING FORCE (PER BRACE), FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | | | | WEBS | | | |
|--------|---------------------------|---------------------------|-------------------|--------------------|-------|---------------------------|---------------|
| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 CSI (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
| FR-TO | | FROM TO | | | FR-TO | | |
| A-B | 0 / 36 | -119.4 -119.4 | 0.16 (1) | 10.00 | M-E | 0 / 1065 | 0.24 (1) |
| B-C | -2634 / 0 | -119.4 -119.4 | 0.91 (1) | 3.08 | M-F | -870 / 0 | 0.37 (1) |
| C-D | -2634 / 0 | -119.4 -119.4 | 0.91 (1) | 3.08 | K-F | -167 / 76 | 0.05 (1) |
| D-E | -1904 / 0 | -119.4 -119.4 | 0.79 (1) | 3.75 | D-M | -870 / 0 | 0.37 (1) |
| E-F | -1904 / 0 | -119.4 -119.4 | 0.79 (1) | 3.75 | N-D | -167 / 76 | 0.05 (1) |
| F-G | -2634 / 0 | -119.4 -119.4 | 0.91 (1) | 3.08 | B-N | 0 / 2413 | 0.54 (1) |
| G-H | -2634 / 0 | -119.4 -119.4 | 0.91 (1) | 3.08 | K-H | 0 / 2413 | 0.54 (1) |
| H-I | 0 / 36 | -119.4 -119.4 | 0.16 (1) | 10.00 | | | |
| O-B | -1973 / 0 | 0.0 | 0.0 | 0.20 (1) | 6.00 | | |
| J-H | -1973 / 0 | 0.0 | 0.0 | 0.20 (1) | 6.00 | | |
| O-N | 0 / 0 | -18.2 -18.2 | 0.20 (4) | 10.00 | | | |
| N-M | 0 / 2394 | -18.2 -18.2 | 0.47 (1) | 10.00 | | | |
| M-L | 0 / 2394 | -18.2 -18.2 | 0.47 (1) | 10.00 | | | |
| L-K | 0 / 2394 | -18.2 -18.2 | 0.47 (1) | 10.00 | | | |
| K-J | 0 / 0 | -18.2 -18.2 | 0.20 (4) | 10.00 | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.21")CSI: TC=0.91/1.00 (B-D:1), BC=0.47/1.00 (K-M:1),
WB=0.54/1.00 (H-K:1), SS=0.35/1.00 (B-D:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE GRIP(DRY) | SHEAR | SECTION |
|-----------------|---------|----------|
| (PSI) | (PLI) | (PLI) |
| MAX MIN | MAX MIN | MAX MIN |
| MT20 | 650 371 | 1747 788 |

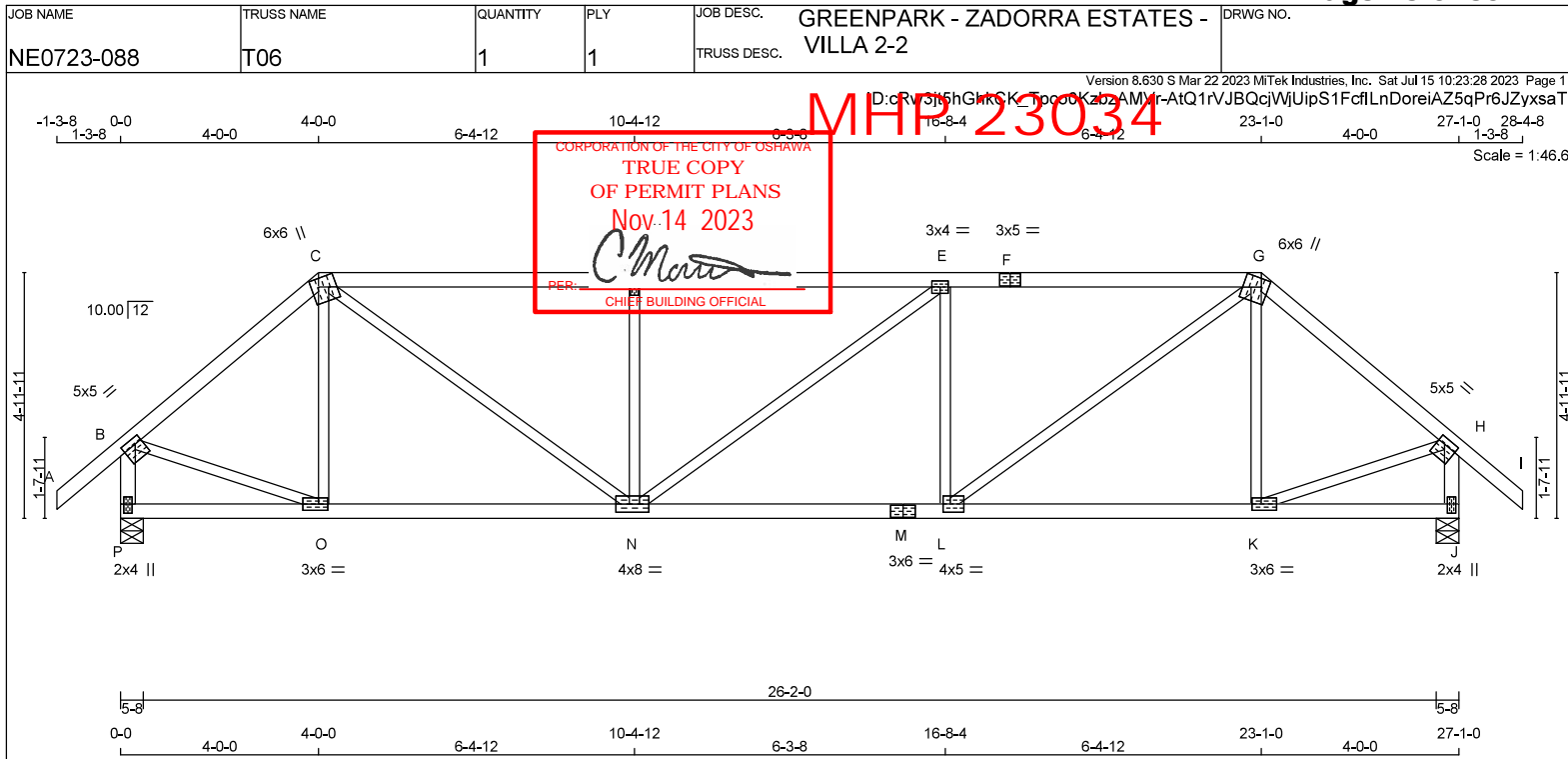
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (B) (INPUT = 0.90)
JSI METAL = 0.74 (L) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - C | 2x4 | DRY | No.2 |
| C - F | 2x4 | DRY | No.2 |
| F - G | 2x4 | DRY | No.2 |
| G - I | 2x4 | DRY | No.2 |
| P - B | 2x4 | DRY | No.2 |
| J - H | 2x4 | DRY | No.2 |
| M - J | 2x4 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMWW4 | MT20 | 5.0 | 5.0 | 1.50 | 1.75 |
| C | TTWW+m | MT20 | 6.0 | 6.0 | 2.00 | 1.75 |
| D | TMWW+w | MT20 | 2.0 | 4.0 | | |
| E | TMWW4 | MT20 | 3.0 | 4.0 | | |
| F | TS4 | MT20 | 3.0 | 5.0 | | |
| G | TTWW+m | MT20 | 6.0 | 6.0 | 2.00 | 1.75 |
| H | TMWW4 | MT20 | 5.0 | 5.0 | 1.50 | 1.75 |
| J | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |
| K | BMWW4 | MT20 | 3.0 | 6.0 | 1.50 | 2.25 |
| L | BMWW4 | MT20 | 4.0 | 5.0 | 2.00 | 1.75 |
| M | BS4 | MT20 | 3.0 | 6.0 | | |
| N | BMWW4 | MT20 | 4.0 | 8.0 | 2.00 | 3.25 |
| O | BMWW4 | MT20 | 3.0 | 6.0 | 1.50 | 2.25 |
| P | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING

DESIGNER

BEARINGS

| | FACTORED | MAXIMUM FACTORED | INPUT | REQRD |
|----|----------------|------------------|-------|-------|
| | GROSS REACTION | GROSS REACTION | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ |
| P | 2030 | 0 | 2030 | 0 |
| J | 2030 | 0 | 2030 | 0 |

UNFACTORED REACTIONS

| | 1ST LCASE | MAX. MIN. COMPONENT REACTIONS |
|----|-----------|-------------------------------|
| JT | COMBINED | SNOW |
| P | 1416 | 1039 / 0 |
| J | 1416 | 1039 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) P, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.14 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED | FACTORED | MAX. UNBRACED | MEMB. | WEBS | MAX. FACTORED |
|-------|-----------|---------------|----------------------|---------------|-------|------|---------------|
| | | FORCE (LBS) | VERT. LOAD LC1 (PLF) | MAX. CSI (LC) | | | FORCE (LBS) |
| FR-TO | | | | | FR-TO | | |
| A-B | 0 / 53 | -119.4 | -119.4 | 0.16 (1) | 10.00 | O-C | -330 / 0 |
| B-C | -1807 / 0 | -119.4 | -119.4 | 0.41 (1) | 4.53 | C-N | 0 / 1586 |
| C-D | -2659 / 0 | -119.4 | -119.4 | 0.93 (1) | 3.14 | N-D | -821 / 0 |
| D-E | -2659 / 0 | -119.4 | -119.4 | 0.92 (1) | 3.14 | N-E | 0 / 0 |
| E-F | -2660 / 0 | -119.4 | -119.4 | 0.93 (1) | 3.15 | L-E | -820 / 0 |
| F-G | -2660 / 0 | -119.4 | -119.4 | 0.93 (1) | 3.15 | L-G | 0 / 1587 |
| G-H | -1807 / 0 | -119.4 | -119.4 | 0.41 (1) | 4.53 | K-G | -331 / 0 |
| H-I | 0 / 53 | -119.4 | -119.4 | 0.16 (1) | 10.00 | B-O | 0 / 1453 |
| P-B | -2005 / 0 | 0.0 | 0.0 | 0.21 (1) | 5.96 | K-H | 0 / 1452 |
| J-H | -2005 / 0 | 0.0 | 0.0 | 0.21 (1) | 5.96 | | |
| P-O | 0 / 0 | -18.2 | -18.2 | 0.12 (4) | 10.00 | | |
| O-N | 0 / 1377 | -18.2 | -18.2 | 0.29 (1) | 10.00 | | |
| N-M | 0 / 2660 | -18.2 | -18.2 | 0.49 (1) | 10.00 | | |
| M-L | 0 / 2660 | -18.2 | -18.2 | 0.49 (1) | 10.00 | | |
| L-K | 0 / 1377 | -18.2 | -18.2 | 0.29 (1) | 10.00 | | |
| K-J | 0 / 0 | -18.2 | -18.2 | 0.12 (4) | 10.00 | | |

DESIGN CRITERIA

SPECIFIED LOADS:

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN./C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL) = L/999 (0.12")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL) = L/999 (0.22")

CSI: TC=0.93/1.00 (C-D:1), BC=0.49/1.00 (L-N:1),
WB=0.36/1.00 (G-L:1), SSI=0.35/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION (PL)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (G) (INPUT = 0.90)
JSI METAL = 0.76 (M) (INPUT = 1.00)



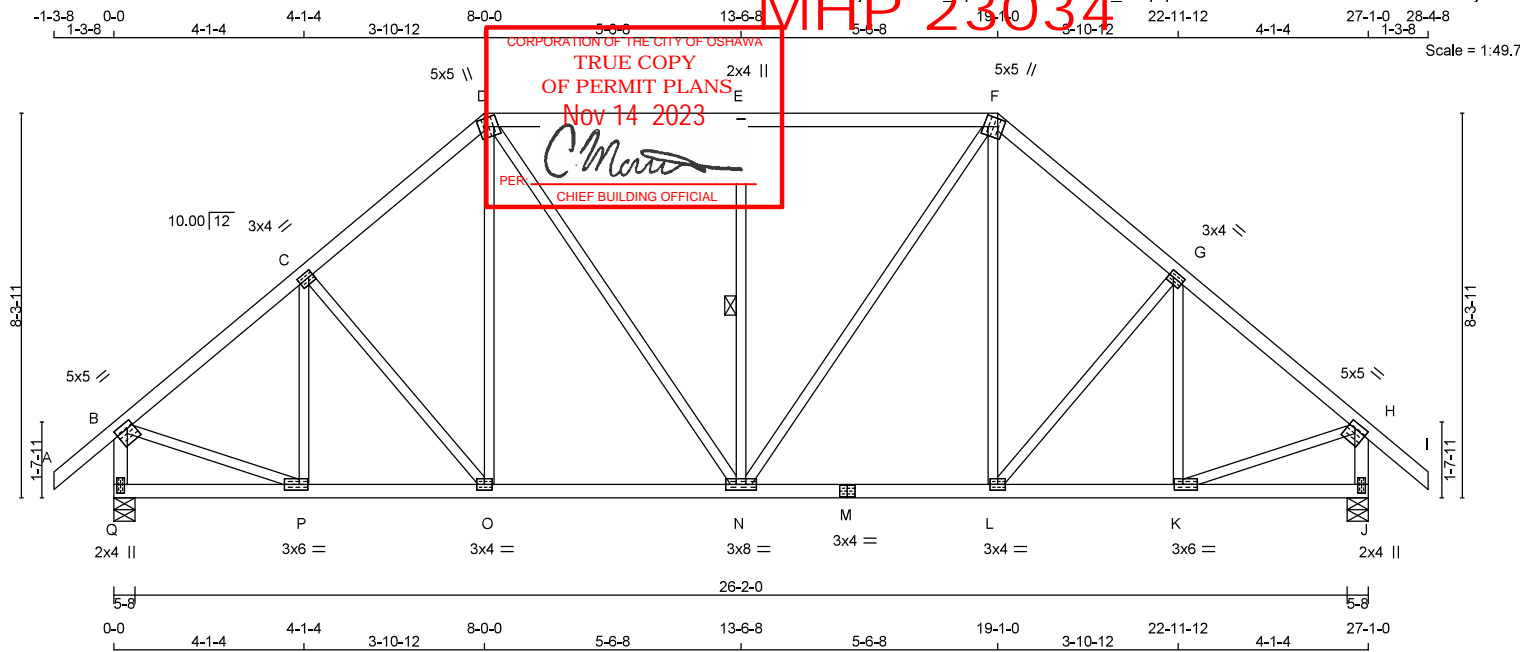
READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | | |
|------------|------------|----------|-----|-------------|-------------------------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - | DRWG NO. |
| NE0723-088 | T08 | 2 | 1 | TRUSS DESC. | VILLA 2-2 | |

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ID: 6Rw3j0nChkCkTpc0Kz6zAM/r-sb_P2qKpBwrNLeH00kmrBVt3iCDCRdsF33afrr?yxsas



TOTAL WEIGHT = 2 X 132 = 263 lb

LUMBER

N. L. G. A. RULES

| CHORDS | SIZE | LUMBER |
|--------|------|----------|
| A - D | 2x4 | DRY No.2 |
| D - F | 2x4 | DRY No.2 |
| F - I | 2x4 | DRY No.2 |
| Q - B | 2x4 | DRY No.2 |
| J - H | 2x4 | DRY No.2 |
| Q - M | 2x4 | DRY No.2 |
| M - J | 2x4 | DRY No.2 |

ALL WEBS 2x3 DRY No.2
EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMVW4 | MT20 | 5.0 | 5.0 | 1.50 | 1.75 |
| C | TMVW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.25 |
| D | TMVW+m | MT20 | 5.0 | 5.0 | 2.00 | 1.50 |
| E | TMVW+w | MT20 | 2.0 | 4.0 | | |
| F | TMVW+m | MT20 | 5.0 | 5.0 | 2.00 | 1.50 |
| G | TMVW4 | MT20 | 3.0 | 4.0 | 1.50 | 1.25 |
| H | TMVW4 | MT20 | 5.0 | 5.0 | 1.50 | 1.75 |
| J | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |
| K | BMVW4 | MT20 | 3.0 | 6.0 | 1.50 | 2.25 |
| L | BMVW4 | MT20 | 3.0 | 4.0 | | |
| M | BS4 | MT20 | 3.0 | 4.0 | | |
| N | BMVW4 | MT20 | 3.0 | 8.0 | | |
| O | BMVW4 | MT20 | 3.0 | 4.0 | | |
| P | BMVW4 | MT20 | 3.0 | 6.0 | 1.50 | 2.25 |
| Q | BMV1+p | MT20 | 2.0 | 4.0 | 2.25 | 1.00 |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| | FACTORED | MAXIMUM FACTORED | INPUT | REQD |
|----|----------------|------------------|-------|------|
| | GROSS REACTION | GROSS REACTION | BRG | BRG |
| JT | VERT | HORZ | DOWN | HORZ |
| Q | 2030 | 0 | 2030 | 0 |
| J | 2030 | 0 | 2030 | 0 |

UNFACTORED REACTIONS

| | 1ST CASE | MAX | MIN | COMPONENT REACTIONS |
|----|----------|----------|-------|---------------------|
| JT | COMBINED | SNOW | LIVE | PERM. LIVE |
| Q | 1416 | 1039 / 0 | 0 / 0 | 0 / 0 |
| J | 1416 | 1039 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.57 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 - 1x4 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N. DBS = 20-0-0. CBF = 101 LBS.

DBS = DIAGONAL BRACE SPACING (MAX). CBF = CUMULATIVE BRACING FORCE (PER BRACE). FASTEN LATERAL BRACE(S) USING (0.122"x3") SPIRAL NAILS: 1 NAIL FOR 2x3 BRACE(S), 2 FOR 1x4, 2x4, 2x5, 3 FOR 2x6, 4 FOR 2x8, 5 FOR 2x10, AND 6 FOR 2x12.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | | | | WEBS | | | |
|--------|---------------------------|------------------|-----------------|-------|---------------------------|--------------|----------|
| MEMB. | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | MAX LC1 (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX LC1 (LC) | |
| FR-TO | | FROM | TO | FR-TO | | | |
| A-B | 0 / 53 | -119.4 | -119.4 0.16 (1) | 10.00 | P-C | -381 / 0 | 0.14 (1) |
| B-C | -1820 / 0 | -119.4 | -119.4 0.29 (1) | 4.69 | C-O | -167 / 0 | 0.11 (1) |
| C-D | -1757 / 0 | -119.4 | -119.4 0.28 (1) | 4.77 | O-D | 0 / 218 | 0.05 (1) |
| D-E | -1635 / 0 | -119.4 | -119.4 0.50 (1) | 4.57 | D-N | 0 / 553 | 0.12 (1) |
| E-F | -1635 / 0 | -119.4 | -119.4 0.50 (1) | 4.57 | N-E | -808 / 0 | 0.35 (1) |
| F-G | -1757 / 0 | -119.4 | -119.4 0.28 (1) | 4.77 | N-F | 0 / 553 | 0.12 (1) |
| G-H | -1820 / 0 | -119.4 | -119.4 0.29 (1) | 4.69 | L-F | 0 / 218 | 0.05 (1) |
| H-I | 0 / 53 | -119.4 | -119.4 0.18 (1) | 10.00 | L-G | -167 / 0 | 0.11 (1) |
| Q-B | -1996 / 0 | 0.0 | 0.0 0.21 (1) | 5.97 | K-G | -381 / 0 | 0.14 (1) |
| J-H | -1996 / 0 | 0.0 | 0.0 0.21 (1) | 5.97 | B-P | 0 / 1495 | 0.34 (1) |
| | | | | | K-H | 0 / 1495 | 0.34 (1) |
| Q-P | 0 / 0 | -18.2 | -18.2 0.06 (4) | 10.00 | | | |
| P-O | 0 / 1425 | -18.2 | -18.2 0.28 (1) | 10.00 | | | |
| O-N | 0 / 1320 | -18.2 | -18.2 0.27 (1) | 10.00 | | | |
| N-M | 0 / 1320 | -18.2 | -18.2 0.27 (1) | 10.00 | | | |
| M-L | 0 / 1320 | -18.2 | -18.2 0.27 (1) | 10.00 | | | |
| L-K | 0 / 1425 | -18.2 | -18.2 0.28 (1) | 10.00 | | | |
| K-J | 0 / 0 | -18.2 | -18.2 0.06 (4) | 10.00 | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 2.00/12 MINIMUM

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F., G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL)= L/360 (0.90")
CALCULATED VERT. DEFL.(LL)= L/999 (0.06")
ALLOWABLE DEFL.(TL)= L/360 (0.90")
CALCULATED VERT. DEFL.(TL)= L/999 (0.11")CSI: TC=0.50/1.00 (D-E:1) , BC=0.28/1.00 (K-L:1) ,
WB=0.35/1.00 (E-N:1) , SS=0.32/1.00 (E-F:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE GRIP(DRY) | SHEAR (PL) | SECTION (PS) |
|-----------------|------------|--------------|
| MT20 | 650 | 371 |
| | 1747 | 788 |
| | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

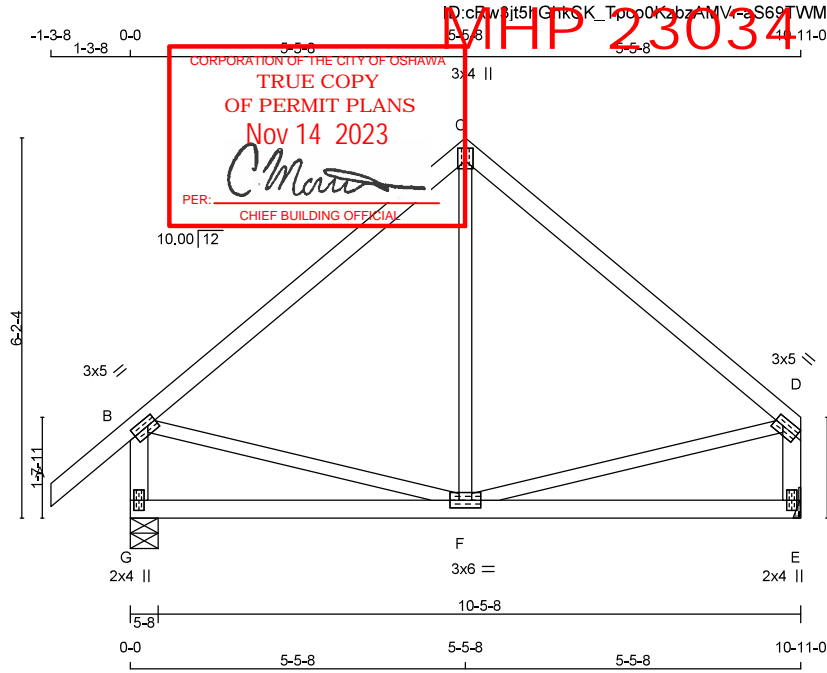
JSI GRIP= 0.88 (P) (INPUT = 0.90)
JSI METAL = 0.59 (B) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | |
|------------|------------|----------|-----|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| NE0723-088 | T11 | 3 | 1 | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | |

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Scale = 1:37.5

TOTAL WEIGHT = 3 X 47 = 141 lb

| LUMBER | | | |
|-------------------|--------|------|------------|
| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
| A - C | 2x4 | DRY | 2100F 1.8E |
| C - D | 2x4 | DRY | 2100F 1.8E |
| G - B | 2x4 | DRY | No.2 |
| E - D | 2x4 | DRY | No.2 |
| G - E | 2x4 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMVW4 | MT20 | 3.0 | 5.0 | 1.50 | 1.75 |
| C | TTW+p | MT20 | 3.0 | 4.0 | 2.50 | 1.50 |
| D | TMVW4 | MT20 | 3.0 | 5.0 | 1.50 | 1.75 |
| E | BMV1+p | MT20 | 2.0 | 4.0 | | |
| F | BMVW4 | MT20 | 3.0 | 6.0 | | |
| G | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING

DESIGNER

| FACTORED | MAXIMUM FACTORED | INPUT | REQD |
|----------------|------------------|-------|------|
| GROSS REACTION | GROSS REACTION | BRG | BRG |
| JT | VERT | HORZ | DOWN |
| G | 917 | 0 | 917 |
| E | 751 | 0 | 751 |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT E. MINIMUM BEARING LENGTH AT JOINT E = 1-8.

UNFACTORED REACTIONS

| JT | 1ST LOASE | MAX./MIN. COMPONENT REACTIONS |
|----------|-----------|-------------------------------|
| COMBINED | SNOW | LIVE |
| G | 638 | 476 / 0 |
| E | 525 | 380 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | | | | WEBS | | | |
|--------|---------------------------|---------------------------|-----------------------|----------|---------------------------|-----------------------|-----------------------|
| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. VERT. LOAD (LC1) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. VERT. LOAD (LC1) | MAX. VERT. LOAD (LC2) |
| FR-TO | | FROM | TO | FR-TO | | FROM | TO |
| A-B | 0 / 53 | -119.4 | -119.4 | 0.11 (1) | 10.00 | F-C | -50 / 87 |
| B-C | -470 / 0 | -119.4 | -119.4 | 0.30 (1) | 6.25 | B-F | 0 / 371 |
| C-D | -470 / 0 | -119.4 | -119.4 | 0.30 (1) | 6.25 | F-D | 0 / 371 |
| G-B | -879 / 0 | 0.0 | 0.0 | 0.09 (1) | 7.81 | | |
| E-D | -713 / 0 | 0.0 | 0.0 | 0.08 (1) | 7.81 | | |
| G-F | 0 / 0 | -18.2 | -18.2 | 0.16 (4) | 10.00 | | |
| F-E | 0 / 0 | -18.2 | -18.2 | 0.16 (4) | 10.00 | | |

DESIGN CRITERIA

SPECIFIED LOADS:
TOP CH. LL = 34.8 PSF
DL = 6.0 PSF
BOT CH. LL = 0.0 PSF
DL = 7.3 PSF
TOTAL LOAD = 48.1 PSF

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018 , NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.36")
CALCULATED VERT. DEFL.(LL) = L/999 (0.00")
ALLOWABLE DEFL.(TL) = L/360 (0.36")
CALCULATED VERT. DEFL.(TL) = L/999 (0.02")

CSI: TC=0.30/1.00 (C-D:1) , BC=0.16/1.00 (E-F:4) ,
WB=0.08/1.00 (B-F:1) , SSI=0.20/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES
PLATE GRIP(DRY) SHEAR SECTION
(PSI) (PLI) (PLI)
MAX MIN MAX MIN MAX MIN
MT20 650 371 1747 788 1987 1873

PLATE PLACEMENT TOL. = 0.250 inches

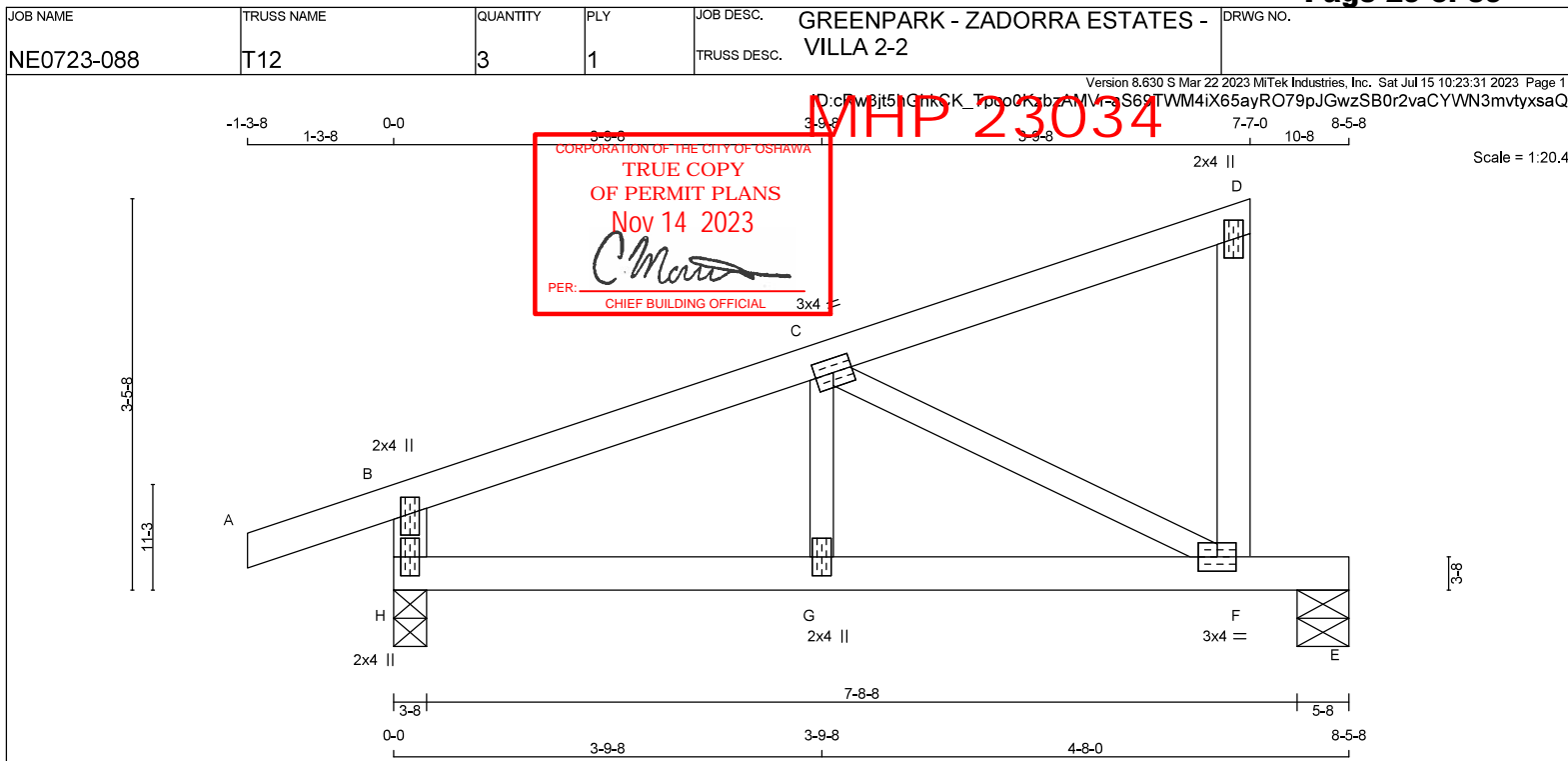
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.74 (D) (INPUT = 0.90)
JSI METAL= 0.22 (B) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.





TOTAL WEIGHT = 3 X 29 = 86 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - D | 2x4 | DRY | No.2 |
| F - D | 2x4 | DRY | No.2 |
| H - B | 2x4 | DRY | No.2 |
| H - E | 2x4 | DRY | No.2 |
| ALL WEBS EXCEPT | 2x3 | DRY | No.2 |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMV+p | MT20 | 2.0 | 4.0 | 1.75 | 1.00 |
| C | TMVW+H | MT20 | 3.0 | 4.0 | | |
| D | TMV+p | MT20 | 2.0 | 4.0 | | |
| F | BMVW+H | MT20 | 3.0 | 4.0 | | |
| G | BMVW+H | MT20 | 2.0 | 4.0 | | |
| H | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
|----|------|------|------|------|--------|-------|-------|
| H | 730 | 0 | 730 | 0 | 0 | 3-8 | 1-8 |
| E | 490 | 0 | 490 | 0 | 0 | 5-8 | 1-8 |

UNFACTORED REACTIONS

| JT | 1ST CASE | MAX. MIN. COMPONENT REACTIONS | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|----|----------|-------------------------------|-------|-------|------------|-------|---------|-------|
| H | 507 | 381 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 126 / 0 | 0 / 0 |
| E | 344 | 240 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 104 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, E

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | LC1 | MAX. FACTORED FORCE (LBS) | W E B S | MAX. FACTORED FORCE (LBS) | MAX. FACTORED FORCE (LBS) |
|-------|----------|---------------------------|------------------|----------|---------------------------|---------|---------------------------|---------------------------|
| FR-TO | | | | | | | | |
| A-B | 0 / 25 | -119.4 | -119.4 | 0.15 (1) | 10.00 | G-C | 0 / 84 | 0.03 (4) |
| B-C | -739 / 0 | -119.4 | -119.4 | 0.25 (1) | 6.25 | C-F | -609 / 0 | 0.17 (1) |
| C-D | -145 / 0 | -119.4 | -119.4 | 0.17 (1) | 6.25 | | | |
| F-D | -200 / 0 | 0.0 | 0.0 | 0.31 (1) | 7.81 | | | |
| H-B | -656 / 0 | 0.0 | 0.0 | 0.31 (1) | 7.81 | | | |
| H-G | 0 / 689 | -18.2 | -18.2 | 0.30 (1) | 10.00 | | | |
| G-F | 0 / 689 | -18.2 | -18.2 | 0.29 (1) | 10.00 | | | |
| F-E | 0 / 0 | -18.2 | -18.2 | 0.57 (1) | 10.00 | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

DESIGN ASSUMPTIONS

-OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/ 999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/ 999 (0.10")

CSI: TC=0.31/1.00 (B-H:1) , BC=0.57/1.00 (E-F:1) ,
WB=0.17/1.00 (C-F:1) , SSI=0.54/1.00 (B-H:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE
FOR QUALITY CONTROL IN THE TRUSS
MANUFACTURING PLANT .

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|---------|-----------|----------|-----------|
| (PL) | (PSI) | (PL) | (PSI) |
| MAX MIN | MAX MIN | MAX MIN | MAX MIN |
| MT20 | 650 371 | 1747 788 | 1987 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.83 (H) (INPUT = 0.90)
JSI METAL= 0.80 (B) (INPUT = 1.00)



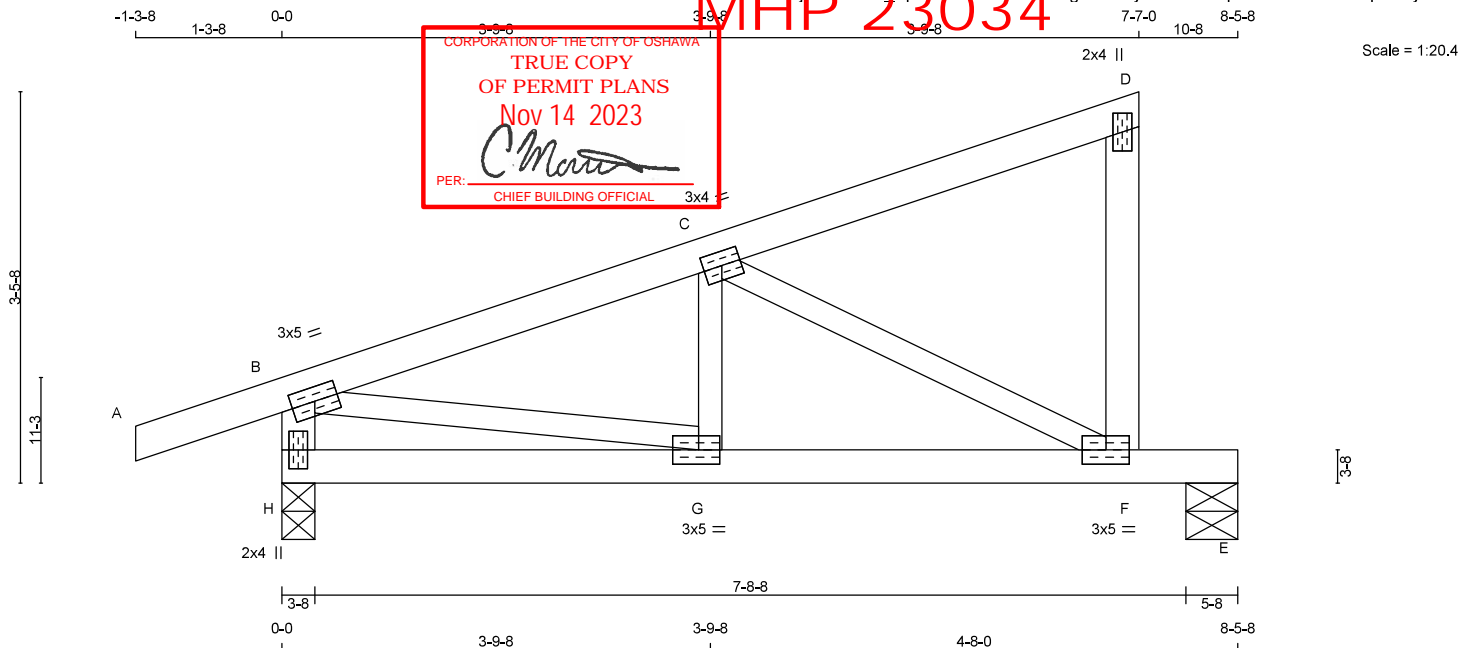
READ ALL NOTES ON THIS PAGE AND ON THE
ENGINEERING NOTES: TRUSSES. THE NOTE PAGE
IS AN INTEGRAL PART OF THIS DRAWING AS IT
CONTAINS SPECIFICATIONS AND CRITERIA USED
IN THE DESIGN OF THIS COMPONENT.



| | | | | | | |
|------------|------------|----------|-----|-------------|-------------------------------|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | GREENPARK - ZADORRA ESTATES - | DRWG NO. |
| NE0723-088 | T13 | 6 | 1 | TRUSS DESC. | VILLA 2-2 | |

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MHP 23034



TOTAL WEIGHT = 6 X 31 = 188 lb

LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - D | 2x4 | DRY | No.2 |
| F - D | 2x4 | DRY | No.2 |
| H - B | 2x4 | DRY | No.2 |
| H - E | 2x4 | DRY | No.2 |

ALL WEBS 2x3 DRY No.2 EXCEPT

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|--------|--------|-----|-----|------|------|
| B | TMVW4 | MT20 | 3.0 | 5.0 | | |
| C | TMVW4 | MT20 | 3.0 | 4.0 | | |
| D | TMV+p | MT20 | 2.0 | 4.0 | | |
| F | BMVW4 | MT20 | 3.0 | 5.0 | | |
| G | BMVW4 | MT20 | 3.0 | 5.0 | 1.50 | 2.25 |
| H | BMV1+p | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER****BEARINGS**

| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
|----|------|------|------|------|--------|-------|-------|
| H | 737 | 0 | 737 | 0 | 0 | 3-8 | 1-8 |
| E | 483 | 0 | 483 | 0 | 0 | 5-8 | 1-8 |

UNFACTORED REACTIONS

| JT | 1ST CASE | MAX./MIN. | COMPONENT REACTIONS |
|----|----------|-----------|---------------------|
| H | 512 | 384 / 0 | 0 / 0 |
| E | 339 | 237 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) H, E

BRACINGTOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | LC1 | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH | MEMB. | WEBS | MAX. FACTORED FORCE (LBS) | MAX. FACTORED FORCE (LBS) |
|-------|----------|---------------------------|------------------|----------|---------------------------|----------------------|----------|----------|---------------------------|---------------------------|
| FR-TO | | | | | | | FR-TO | | | |
| A-B | 0 / 25 | -119.4 | -119.4 | 0.15 (1) | 10.00 | G-C | 0 / 106 | 0.04 (4) | | |
| B-C | -818 / 0 | -119.4 | -119.4 | 0.21 (1) | 6.25 | C-F | -885 / 0 | 0.25 (1) | | |
| C-D | -16 / 0 | -119.4 | -119.4 | 0.20 (1) | 6.25 | B-G | 0 / 803 | 0.18 (1) | | |
| F-D | -176 / 0 | 0.0 | 0.0 | 0.03 (1) | 7.81 | | | | | |
| H-B | -731 / 0 | 0.0 | 0.0 | 0.07 (1) | 7.81 | | | | | |
| H-G | 0 / 0 | -18.2 | -18.2 | 0.15 (1) | 10.00 | | | | | |
| G-F | 0 / 792 | -18.2 | -18.2 | 0.69 (1) | 10.00 | | | | | |
| F-E | 0 / 0 | -18.2 | -18.2 | 0.57 (1) | 10.00 | | | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOADALLOWABLE DEFL.(LL) = L/360 (0.28")
CALCULATED VERT. DEFL.(LL) = L/999 (0.09")
ALLOWABLE DEFL.(TL) = L/360 (0.28")
CALCULATED VERT. DEFL.(TL) = L/628 (0.16")CSI: TC=0.21/1.00 (B-C:1), BC=0.69/1.00 (F-G:1),
WB=0.25/1.00 (C-F:1), SSI=0.38/1.00 (E-F:1)DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-------|-----------|-------------|---------------|
| MT20 | 650 | 371 | 1747 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

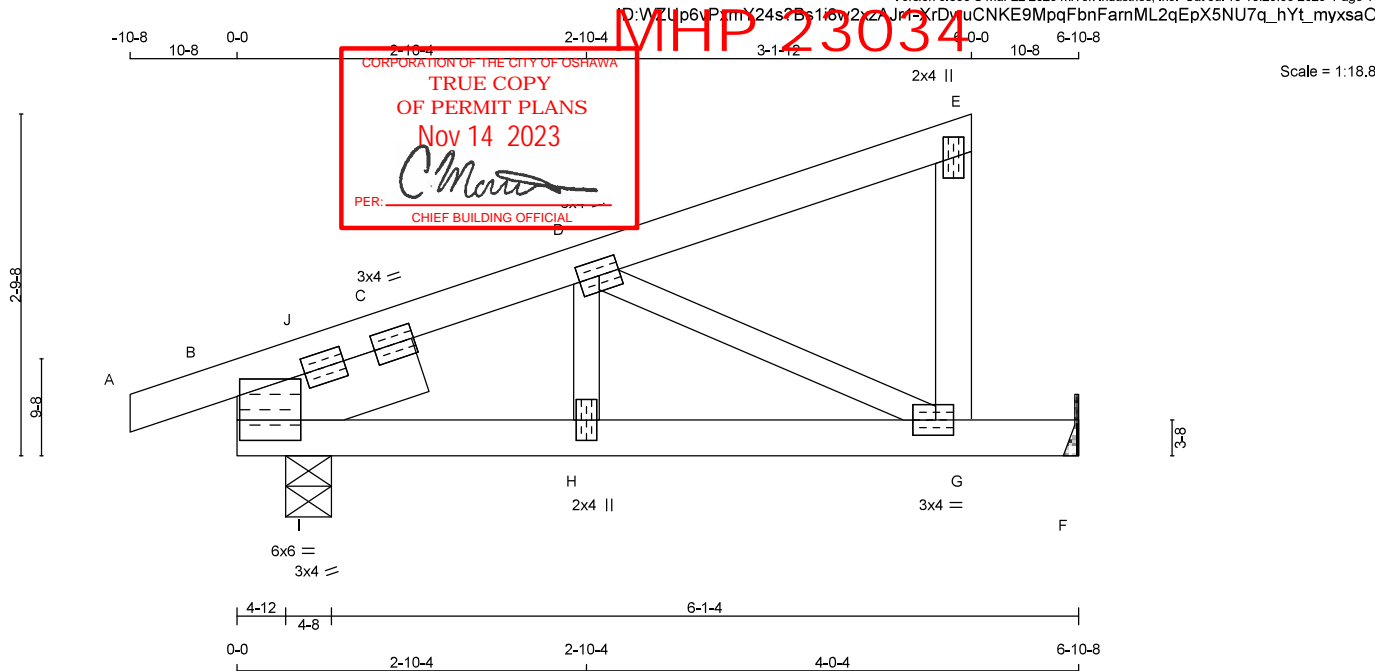
JSI GRIP= 0.83 (F) (INPUT = 0.90)
JSI METAL = 0.27 (B) (INPUT = 1.00)

READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



| | | | | | |
|------------|------------|----------|-----|---|----------|
| JOB NAME | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| NE0723-088 | T15 | 5 | 1 | GREENPARK - ZADORRA ESTATES - VILLA 2-2 | |

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**LUMBER**

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER |
|-------------------|--------|------|--------|
| A - E | 2x4 | DRY | No.2 |
| G - E | 2x4 | DRY | No.2 |
| B - F | 2x4 | DRY | No.2 |

| REINFORCING MEMBERS | SIZE | LUMBER |
|---------------------|------|--------|
| HW1 | 2x6 | DRY |
| | | No.2 |

| ALL WEBS | SIZE | LUMBER |
|----------|------|--------|
| | 2x3 | DRY |
| | | No.2 |

PLATES (table is in inches)

| JT | TYPE | PLATES | W | LEN | Y | X |
|----|----------|--------|-----|-----|------|------|
| B | TMBMR1-I | MT20 | 6.0 | 6.0 | 4.25 | 0.25 |
| B | RT4 | MT20 | 3.0 | 4.0 | | |
| B | RT4 | MT20 | 3.0 | 4.0 | | |
| D | TMVW-H | MT20 | 3.0 | 4.0 | | |
| E | TMV+p | MT20 | 2.0 | 4.0 | | |
| G | BMVW-H | MT20 | 3.0 | 4.0 | 1.50 | 1.75 |
| H | BMV+w | MT20 | 2.0 | 4.0 | | |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING**DESIGNER**

| JT | VERT | HORZ | DOWN | HORZ | UPLIFT | IN-SX | IN-SX |
|----|------|------|------|------|--------|------------|-------|
| B | 577 | 0 | 577 | 0 | 0 | 4-8 | 1-8 |
| F | 375 | 0 | 375 | 0 | 0 | MECHANICAL | |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT F. MINIMUM BEARING LENGTH AT JOINT F = 1-8.

UNFACTORED REACTIONS

| JT | COMBINED | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|----|----------|---------|-------|-----------|-------|---------|-------|
| B | 401 | 300 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 102 / 0 | 0 / 0 |
| F | 264 | 182 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 82 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PL) | MAX. VERT. LOAD (LC1) | MAX. UNBRACED LENGTH FR-TO | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. VERT. LOAD (LC1) |
|-------|---------------------------|--------------------------|-----------------------|----------------------------|-------|---------------------------|-----------------------|
| FR-TO | | | | | FR-TO | | |
| A-B | -11 / 0 | -119.4 | -119.4 | 0.05 (1) | H-D | 0 / 203 | 0.05 (1) |
| B-J | -588 / 0 | -119.4 | -119.4 | 0.02 (1) | D-G | -686 / 0 | 0.14 (1) |
| J-C | -505 / 0 | -119.4 | -119.4 | 0.10 (1) | I-J | 0 / 373 | 0.00 (1) |
| C-D | -505 / 0 | -119.4 | -119.4 | 0.10 (1) | I-C | -428 / 0 | 0.03 (1) |
| D-E | -6 / 0 | -119.4 | -119.4 | 0.15 (1) | | | |
| G-E | -170 / 0 | 0.0 | 0.0 | 0.02 (1) | | | |
| | | | | | | | |
| B-I | 0 / 392 | -18.2 | -18.2 | 0.08 (1) | | | |
| I-H | 0 / 624 | -18.2 | -18.2 | 0.20 (1) | | | |
| H-G | 0 / 624 | -18.2 | -18.2 | 0.54 (1) | | | |
| G-F | 0 / 0 | -18.2 | -18.2 | 0.44 (1) | | | |

DESIGN CRITERIA**SPECIFIED LOADS:**

| | | | |
|------------|---|------|-----|
| TOP CH. LL | = | 34.8 | PSF |
| DL | = | 6.0 | PSF |
| BOT CH. LL | = | 0.0 | PSF |
| DL | = | 7.3 | PSF |
| TOTAL LOAD | = | 48.1 | PSF |

SPACING = 24.0 IN./C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, NBC-2019AE
- PART 9 OF OBC 2012 (2019 AMENDMENT)
- CSA 086-14
- TPIC 2014

(55 % OF 48.1 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD)
EQUALS 34.8 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.23")
CALCULATED VERT. DEFL.(LL) = L/999 (0.05")
ALLOWABLE DEFL.(TL) = L/360 (0.23")
CALCULATED VERT. DEFL.(TL) = L/836 (0.10")

CSI: TC=0.15/1.00 (D-E-1), BC=0.54/1.00 (G-H-1),
WB=0.14/1.00 (D-G-1), SSI=0.29/1.00 (F-G-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10
SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| | (PSI) | (PLI) | (PLI) |
| MT20 | 650 | 371 | 1747 |
| | 788 | 1987 | 1873 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.75 (G) (INPUT = 0.90)
JSI METAL = 0.21 (G) (INPUT = 1.00)



READ ALL NOTES ON THIS PAGE AND ON THE ENGINEERING NOTES: TRUSSES. THE NOTE PAGE IS AN INTEGRAL PART OF THIS DRAWING AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



KOTT TRUSS BEARING CAPACITY TABLE

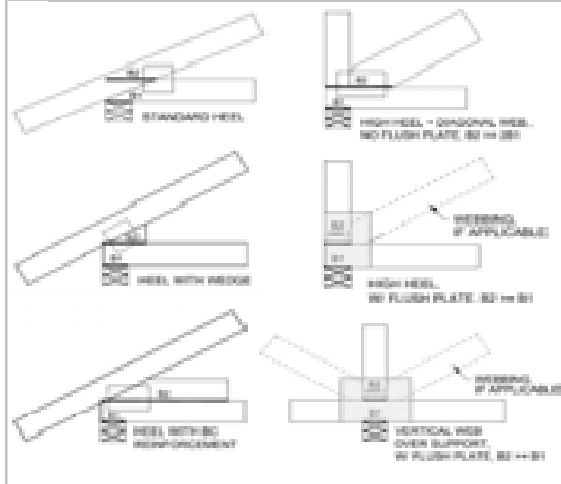
(INTERNAL USE ONLY)

TRUSS BEARING CAPACITIES (LBS.), BY TRUSS LUMBER TYPE (SUPPORTED ON SPF #2 TOP PLATE)

MHP 23034

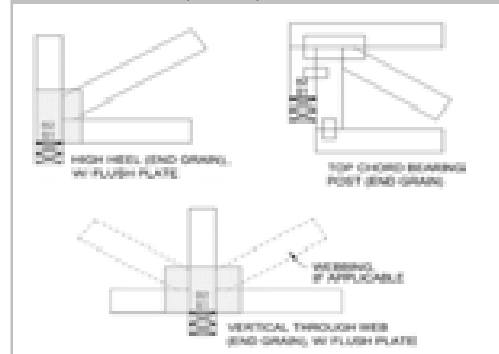
| | BEARING PLATE (B1) | TYPE 1, NO FLUSH PLATE, B2<2B1 | | | | | | | |
|---------------------|--------------------|--|------------------|---------|------------------|---------|------------------|---------|------------------|
| | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 |
| NO BEARING ENHANCER | 1 1/2" | 1383 | | 2767 | | 4151 | | 5534 | |
| | 2x4 | 3712 | 3228 | 7425 | 6457 | 11138 | 14851 | 23337 | 20993 |
| | 2x6 | 5834 | 5073 | 11668 | 10146 | 17503 | 23337 | 35960 | 26750 |
| | 2x8 | 7690 | 6687 | 15381 | 13375 | 23072 | 30763 | | |
| FLUSH PLATE | BEARING PLATE (B1) | TYPE 1, FLUSH PLATE | | | | | | | |
| | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 |
| | | 1 1/2" | 1383 | 2767 | 4151 | 5534 | | | |
| | | 2x4 | 3712 | 7425 | 11138 | 14851 | | | |
| BEARING ENHANCER | 2x6 | 5834 | 5073 | 11668 | 10146 | 17503 | 23337 | 35960 | 26750 |
| | 2x8 | 7690 | 6687 | 15381 | 13375 | 23072 | 30763 | | |
| | BEARING PLATE (B1) | TYPE 1, FLUSH PLATE + BEARING ENHANCER | | | | | | | |
| | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 |
| CPn-4 (Simpson) | 2x4 | 4515 | | 9030 | | 13545 | | 18065 | |
| CPn-6 (Simpson) | 2x6 | 7095 | | 14190 | | 21285 | | 28390 | |
| CP4-9 (KOTT) | 2x4 | 6007 | 4898 | 12014 | 9796 | 18021 | 14694 | 19801 | 19592 |
| CP6-9 (KOTT) | 2x6 | 8677 | 7075 | 17354 | 14150 | 26031 | 21225 | 31117 | 28300 |
| SBP4 (MiTek) | 2x4 | 7288 | | 11001 | | 14714 | | 18427 | |
| SBP6 (MiTek) | 2x6 | 11030 | | 16865 | | 22699 | | 28534 | |
| SBP6 (MiTek) | 2x8 | 12886 | | 20578 | | 28269 | | 35960 | |

TYPE 1 CONFIGURATIONS



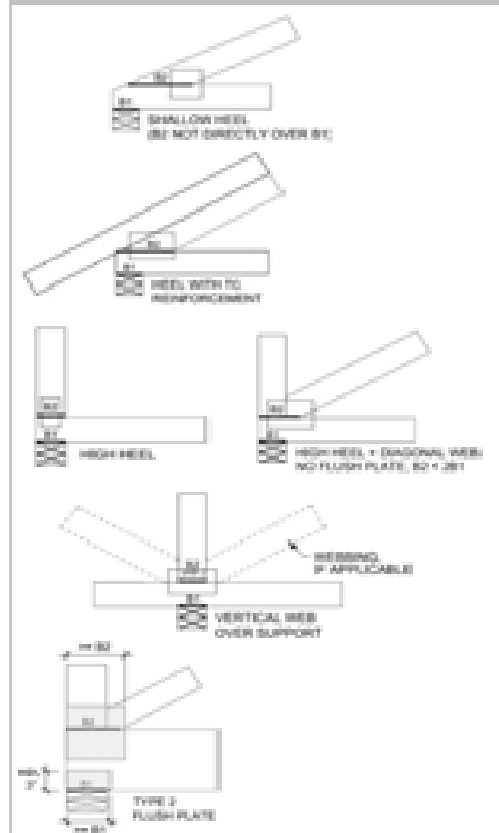
| | BEARING PLATE (B1) | POST (B2) ABOVE BEARING | TYPE 1 (END GRAIN) | | | | | | | |
|-----------------------------|--------------------|-------------------------|--|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
| | | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | | MSR2100 (EG) | SPF No.2 (EG) | MSR2100 (EG) | SPF No.2 (EG) | MSR2100 (EG) | SPF No.2 (EG) | MSR2100 (EG) | SPF No.2 (EG) |
| END GRAIN | 2x4 | 2x4 | 3712 | | 7425 | | 11138 | | 14851 | |
| | 2x6 | 2x6 | 5834 | | 11668 | | 17503 | | 23337 | |
| | | | MSR1950 (EG) | SPF No.2 (EG) | MSR1950 (EG) | SPF No.2 (EG) | MSR1950 (EG) | SPF No.2 (EG) | MSR1950 (EG) | SPF No.2 (EG) |
| | 2x8 | 2x8 | 7690 | | 15381 | | 23072 | | 30763 | |
| END GRAIN, BEARING ENHANCER | BEARING PLATE (B1) | POST (B2) ABOVE BEARING | TYPE 1 (END GRAIN), FLUSH PLATE + BEARING ENHANCER | | | | | | | |
| | | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | | MSR2100 (EG) | SPF No.2 (EG) | MSR2100 (EG) | SPF No.2 (EG) | MSR2100 (EG) | SPF No.2 (EG) | MSR2100 (EG) | SPF No.2 (EG) |
| | | | 2x4 | 2x4 | 4515 | | 9030 | | 13545 | |
| | | | 2x6 | 2x6 | 7095 | | 14190 | | 21285 | |
| CPn-4 (Simpson) | 2x4 | 2x4 | 4515 | | 9030 | | 13545 | | 18065 | |
| CPn-6 (Simpson) | 2x6 | 2x6 | 7095 | | 14190 | | 21285 | | 28390 | |
| CP4-9 (KOTT) | 2x4 | 2x6 | 15585 | 9006 | 19801 | 18013 | 19801 | 19801 | 19801 | 19801 |
| | | | MSR1950 (EG) | SPF No.2 (EG) | MSR1950 (EG) | SPF No.2 (EG) | MSR1950 (EG) | SPF No.2 (EG) | MSR1950 (EG) | SPF No.2 (EG) |
| CP6-9 (KOTT) | 2x6 | 2x8 | 21834 | 13009 | 31117 | 26019 | 31117 | 31117 | 31117 | 31117 |

TYPE 1 (END GRAIN) CONFIGURATIONS



| | BEARING PLATE (B1) | POST (B2) ABOVE BEARING | TYPE 2, NO FLUSH PLATE, B2<2B1 | | | | | | | |
|---------------------|--------------------|-------------------------|--------------------------------|------------------|---------|------------------|---------|------------------|---------|------------------|
| | | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 |
| NO BEARING ENHANCER | 2x4 | 2x4 | 2639 | 2152 | 5279 | 4304 | 7919 | 6457 | 10588 | 8609 |
| | | 2x6 | 3393 | 2767 | 6787 | 5534 | 10181 | 8302 | 13575 | 11069 |
| | | 2x8 | 3393 | 2767 | 6787 | 5534 | 10181 | 8302 | 13575 | 11069 |
| | | 2x10 | 4147 | 3382 | 8296 | 6764 | 12444 | 10146 | 16592 | 13529 |
| | 2x6 | 2x6 | 4808 | 3920 | 9616 | 7840 | 14424 | 11761 | 19232 | 15681 |
| | | 2x8 | 5562 | 4535 | 11124 | 9070 | 16686 | 13606 | 22248 | 18141 |
| | | 2x10 | 3959 | 3228 | 7919 | 6457 | 11878 | 9685 | 15838 | 12914 |
| | | 2x12 | 4808 | 3920 | 9616 | 7840 | 14424 | 11761 | 19232 | 15681 |
| | 2x8 | 2x8 | 5467 | 4458 | 10935 | 8916 | 16403 | 13375 | 21871 | 17833 |
| | | 2x10 | | | | | | | | |
| | | 2x12 | | | | | | | | |
| | | 2x14 | | | | | | | | |
| FLUSH PLATE | BEARING PLATE (B1) | POST (B2) ABOVE BEARING | TYPE 2, FLUSH PLATE | | | | | | | |
| | | | 1-PLY | | 2-PLY | | 3-PLY | | 4-PLY | |
| | | | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 | MSR2100 | SPF No.2 MSR1950 |
| | | | 2x4 | | | | | | | |
| | | | 2x6 | | | | | | | |
| | | | 2x8 | | | | | | | |
| | | | 2x10 | | | | | | | |
| | | | 2x12 | | | | | | | |
| | | | 2x14 | | | | | | | |
| | | | 2x16 | | | | | | | |
| | | | 2x18 | | | | | | | |
| | | | 2x20 | | | | | | | |

TYPE 2 CONFIGURATIONS



NOTES:

- Factored truss reaction shall not exceed bearing capacity corresponding to: configuration type, size of bearing surfaces, truss lumber, # of plies, and applicable enhancers.
- Values in table are in conformance with CSA O86-14 Cl. 6.5.7 and TPIC 2014-Update 2, and may be used for residential or commercial designs.
- Values in table are in conformance with MiTek Canada Detail B37821Q "SPF Bearing Capacities".
- Values in table are in conformance with Simpson Catalogue C-C-CAN2020.
- Conditions for use of table values include: standard duration (K=1), dry lumber (K_{dp}=1), untreated lumber (K_t=1), length of bearing factor not applied (K_e=1).
- Size factor (K_{sz}) applied to support material calculation when acceptable. Flush plate factor (K_p) applied to truss material calculation when acceptable (ie. excludes end grain).
- Flat roof factor (K_r) must applied for trusses making up a flat roof system; to do so, multiply bearing capacity values by 0.75 for this application.
- Bearing plate is to be specified by the project engineer; values in table assume a bearing material of SPF #2 (or better).
- When required, flush plate must not be located further than 1/4" away from bearing surface, and must cover the entire bearing plate length (B1).
- When required, bearing enhancer must be installed as per manufacturer's guidelines.
- Type 2 bearing configurations can be converted to use Type 1 table values as outlined in TPIC 2014-Update 1 Cl. 7.5.9.
- This table is not valid after April 30, 2022.

MHP 23034

CORPORATION OF THE CITY OF OSHAWA
TRUE COPY
OF PERMIT PLANS
Nov 14 2023
PER: *C. Marto*
CHIEF BUILDING OFFICIAL

Issued: MARCH 1, 2022
Expiry: APRIL 30, 2024

TOWN OF OSHAWA CITY DETAILS

LATERAL AND WITHDRAWAL RESISTANCE OF BEARING ANCHORAGE BY TOE-NAILS

| NAIL TYPE | Length (in) | Diameter (in) | LATERAL Resistance per nail (Lbs.) | | WITHDRAWAL Resistance per nail (Lbs.) | |
|----------------|----------------|------------------|---------------------------------------|--------|--|--------|
| | | | SPF | D. FIR | SPF | D. FIR |
| COMMON WIRE | 3.00 | 0.144 | 122 | 139 | 30 | 42 |
| | 3.25 | 0.144 | 127 | 144 | 32 | 45 |
| | 3.50 | 0.160 | 152 | 173 | 38 | 52 |
| COMMON SPIRAL | 3.00 | 0.122 | 96 | 108 | 26 | 36 |
| | 3.25 | 0.122 | 97 | 108 | 28 | 40 |
| | 3.50 | 0.152 | 142 | 161 | 36 | 50 |
| 3.25" Gun nail | 3.25 | 0.120 | 94 | 105 | 28 | 39 |

Note: If using truss with D. Fir lumber and SPF bearing plate, use tabulated SPF values in table.

| Nail type: | Common wire | Common spiral | Common wire | Common spiral | Gun Nail |
|----------------|-----------------------------|---------------|-------------|---------------|----------|
| Diameter (in.) | 0.160 | 0.152 | 0.144 | 0.122 | 0.120 |
| Length (in.) | 3.50 | 3.50 | 3.00 | 3.00 | 3.25 |
| LUMBER | MAXIMUM NUMBER OF TOE-NAILS | | | | |
| 2x4 SPF | 2 | 2 | 3 | 3 | 3 |
| 2x6 SPF | 4 | 4 | 4 | 5 | 5 |
| 2x4 D. FIR | 2 | 2 | 2 | 2 | 2 |
| 2x6 D. FIR | 3 | 3 | 3 | 4 | 4 |

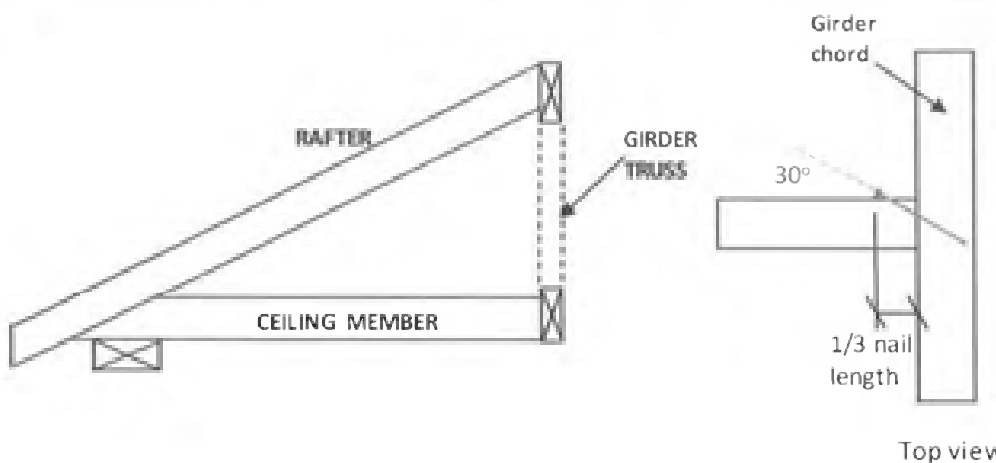
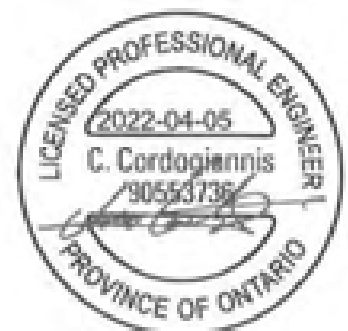


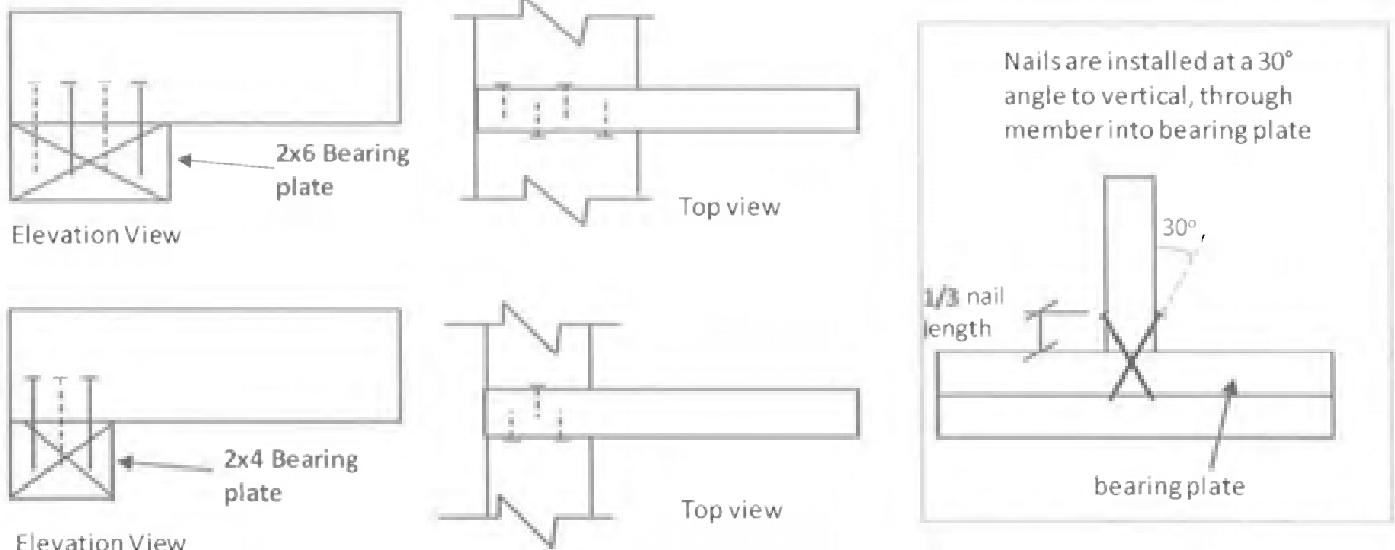
Figure 1: Toe-Nailing Rafter / Ceiling Member to Girder Truss



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Nov 14 2023
PER: *T. C. Martin*
CHIEF BUILDING OFFICIAL

CITY DETAILS

Figure 2: Toe-Nail Anchorage to Bearing Plate for Uplift



NOTES:

1. Rafter and ceiling members may be connected to top and bottom chords of girder truss by toe-nailing the members into the girder chords (see fig. 1), provided the factored vertical reactions of the supported members do not exceed the lateral resistance of the toe-nails. Mechanical connectors (hangers) are required if factored vertical reactions exceed the toe-nail capacity, or if the connection must resist horizontal loads (loads perpendicular to the face of girder or rafter).
2. Trusses, rafters or ceiling members may be anchored to the bearing plate with toe-nails (see fig. 2), provided that the factored uplift reactions due to **wind or earthquake loads** do not exceed the **withdrawal resistance of the toe-nails**. Mechanical anchors (tie-downs) are required for reactions that exceed the toe-nail withdrawal capacity. Toe-nail anchorage to bearing plates is **NOT** permitted if uplift reactions are generated from gravity loads (snow, floor live, dead).
3. Tabulated toe-nail resistances on page 1 are for **one** toe-nail. Multiply unit values by the number of nails used in the connection. Maximum number of nails in a connection shall not exceed the tabulated limits shown on page 1 for a given lumber size /species.
4. Nail values are based on specific gravity of $G = 0.42$ (SPF) and $G = 0.49$ (D. Fir).
5. Toe-nails shall be driven at approximately $1/3$ the nail length from the edge of the joist/truss chord and driven at an angle of 30° to the grain of the member.
6. For wind / earthquake loads, tabulated lateral resistances may be multiplied by 1.15 (K_D factor). No increases are permitted for tabulated withdrawal resistances.
7. Lumber must be dry ($< 19\%$ moisture content) at the time of nail installation.
8. Nail values in this table comply with CSA O86-19, Clause 12.9.

PEO
Certificate No. 10889485



MiTek®

STANDARD DETAIL MSD2015-J

MHP 23034

Issued: MARCH 17, 2021

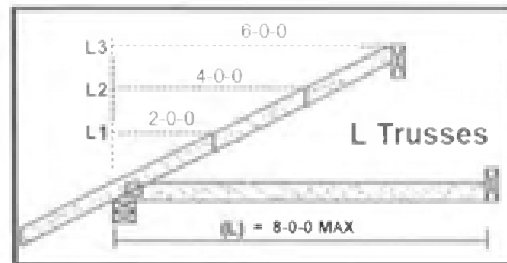
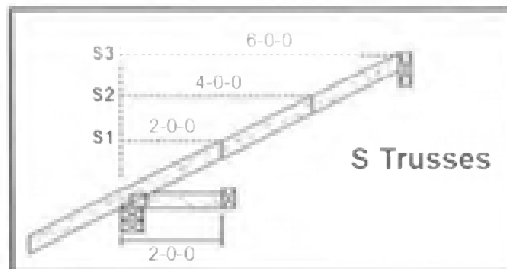
Expiry: APRIL 30, 2023

CORPORATION OF THE CITY OF OSHAWA
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OF PERMIT PLANS
Nov 14 2023

STA END FRAMING

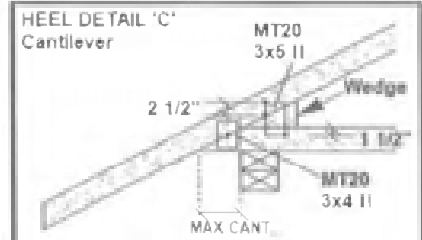
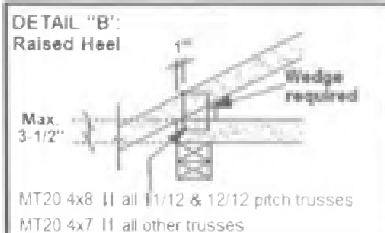
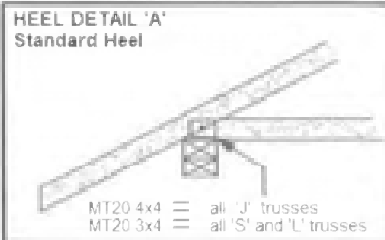
PER: *C. M...*
CHIEF BUILDING OFFICIAL

PLAN VIEW



Specified Load Rating:

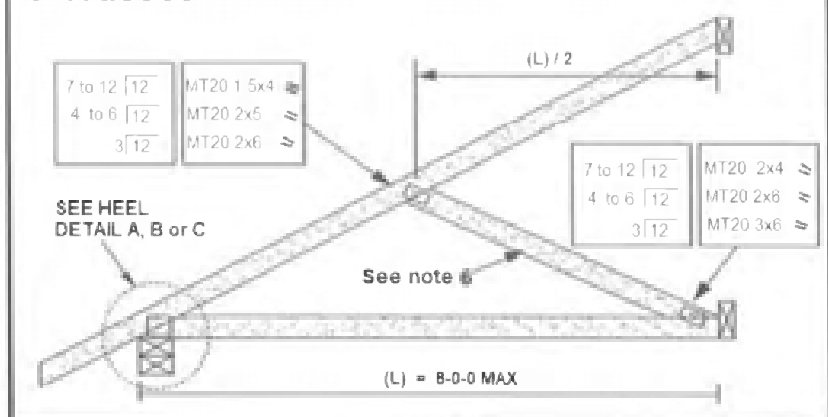
| | |
|--------------------|------------------|
| Top chord Live: | 51.0 PSF or less |
| Top chord Dead: | 6.0 PSF or less |
| Bottom chord Live: | 0.0 PSF |
| Bottom chord Dead: | 7.3 PSF or less |



CANTILEVER DETAIL "C"

| SLOPE | MAX CANT. | WEDGE PLATE | WEDGE SIZE |
|-------|-----------|-------------|------------|
| 3/12 | 17" | 3 x 5 | 2 x 3 |
| 4/12 | 14" | 3 x 5 | 2 x 3 |
| 5/12 | 12" | 3 x 5 | 2 x 4 |
| 6/12 | 10" | 3 x 5 | 2 x 4 |
| 7/12 | 9" | 3 x 5 | 2 x 5 |
| 8/12 | 8 1/2" | 3 x 5 | 2 x 5 |
| 9/12 | 8" | 3 x 5 | 2 x 6 |
| 10/12 | 7 1/2" | 3 x 5 | 2 x 6 |

J Trusses



PEO

Certificate No. 10889485

NOTES:

1. This detail is valid only for projects conforming to **PART 9 NBCC 2015** that do not require a wind analysis to be incorporated into the design of the trusses.
2. Overhang length shall not exceed 24 inches.
3. All lumber shall be 2x4 SPF (or D-Fir) DRY No. 2 grade or better.
4. All plates specified are MITEK MT20, pressed into both faces of each truss. Heel plates of all trusses shall conform to heel details 'A', 'B' or 'C'.
5. Diagonal hip rafter design shall conform to section 9.23.14.6 of NBCC 2015.
6. For 6.0 ft. or less span, diagonal web on truss 'J' is optional. Girder design must reflect choice of partial jack ('J' with diagonal web) or open jack ('J' without diagonal web)
7. All truss-to-rafter and truss-to-truss connections shall be specified as per MITEK standard detail 'MSD2015-H: Toe-Nail Capacity Details'



STANDARD DETAIL GABLE END DETAIL

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Nov 14 2023
PER: *C. M...*
CHIEF BUILDING OFFICIAL

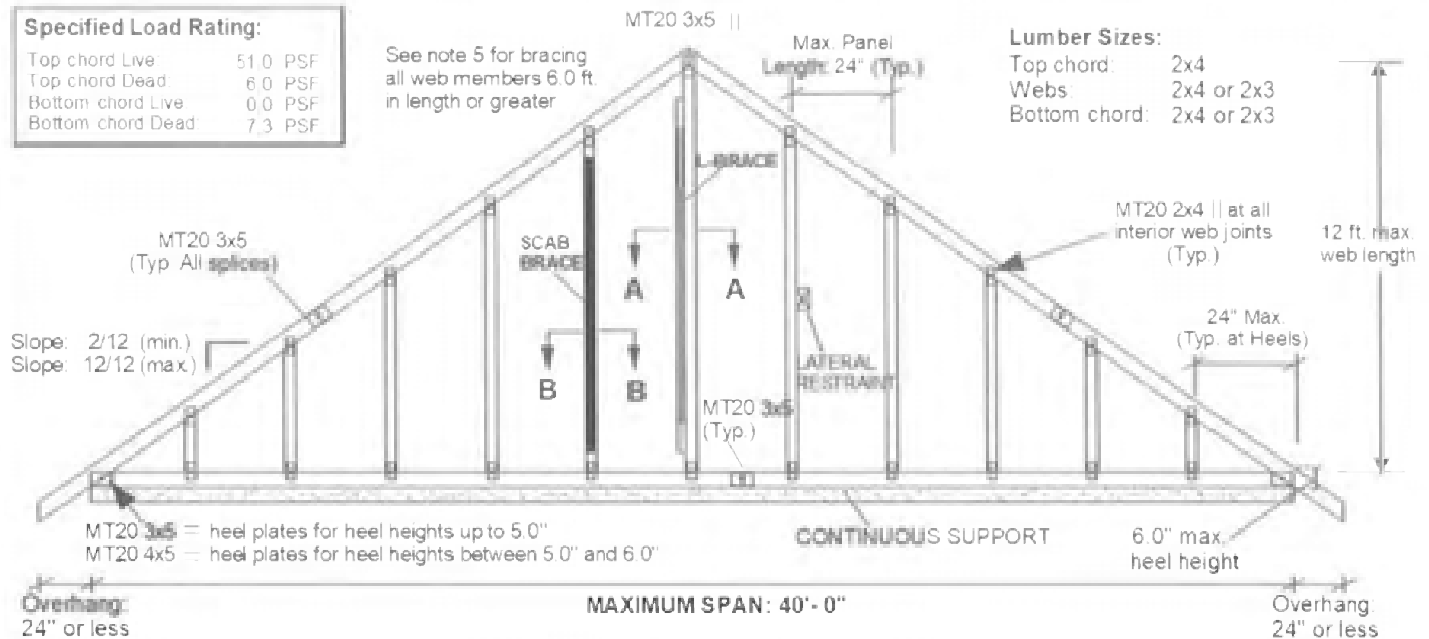
Specified Load Rating:

| | |
|-------------------|----------|
| Top chord Live | 51.0 PSF |
| Top chord Dead | 6.0 PSF |
| Bottom chord Live | 0.0 PSF |
| Bottom chord Dead | 7.3 PSF |

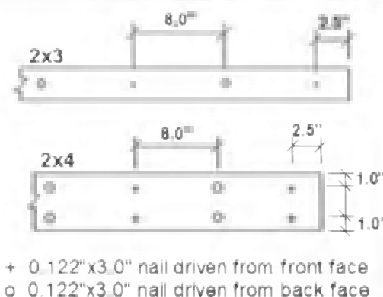
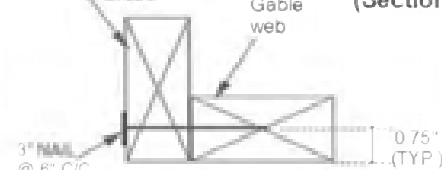
See note 5 for bracing
all web members 6.0 ft.
in length or greater

Lumber Sizes:

| | |
|---------------|------------|
| Top chord: | 2x4 |
| Webs: | 2x4 or 2x3 |
| Bottom chord: | 2x4 or 2x3 |

SCAB BRACE DETAIL
(Section B-B)

SPF No. 2 DRY Scab, same size as web. Scab brace must cover 90% of web length

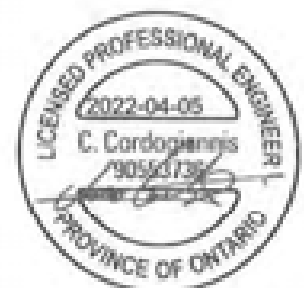
2x4 SPF No. 2
DRY L-BraceL BRACE DETAIL
(Section A-A)

Fasten L-Brace to narrow edge of web with one row of 0.122" x 3.0" nails spaced at 6.0" c/c along entire length of web. Brace must cover 90% of the web length. Respect a 2.5" minimum end distance.

Notes:

1. This detail is only valid for projects conforming to **Part 9, NBCC 2015** that do not require a wind analysis to be incorporated into the design of the truss.
2. This detail is for vertical (gravity) load rating of the truss only. Truss must be continuously supported over the entire length of bottom chord.
3. Maximum web length not to exceed 12.0 ft. Spacing of gable stud webs in the truss not to exceed 24 inches cc.
4. Splice joints shall not be located in the first panel adjacent to the heel joint or peak joint.
5. Lateral restraint required at half-length of all webs over 6.0 ft. long. Alternatively install an L-Brace or scab brace as shown above. Scab braces shall be limited to 10 ft. long webs or less.
6. All plates are MITTEK MT20 pressed into both faces of truss.
7. All lumber to be SPF (or D-Fir) DRY and of No.2 grade or better.
8. Additional building bracing is typically installed to brace the face of the end wall assembly. See BCSI Canada 'Building Designer Responsibilities for Gable End Frame Bracing' for additional information on building bracing for gable-end assemblies.

PEO
Certificate No. 10869485



BCSI-B1C SUMMARY SHEET · GUIDE FOR HANDLING, INSTALLING, RESTRAINING AND BRACING
Spans over 60' may require complex permanent bracing. Please always consult a registered design professional.

Bundles
paquets de ferme



 **WARNING:** Do not over load supporting structure with truss bundles

AVERTISSEMENT: Ne surchargez pas la structure de soutien avec des paquets de ferme

[illegible]

le structure d'appui avec un lot de fermes.
Placez truss bouclée en même position.
Positionnez les lats de manière stable.

Instructions for Single Trusses
lat pour les fermes uniques

Attachez les truss
stable pour

Diagram illustrating the assembly of a single truss structure. The truss is shown in a cross-section view, highlighting the central vertical support and the horizontal base. Labels indicate the 'Truss' and 'Lats' (lateral supports). Dimensions are provided: '100 cm' for the height of the truss and '100 cm' for the width of the base. A note at the bottom states 'LES DIMENSIONS SONT EN CM' (Dimensions are in cm).

Installation – Installation

Tolerances for out-of-plumb
Tolerances pour dénivelé

| 10' (3m) | 9' (2.7m) | Max. Flow | Drain Lengths |
|-----------|-----------|-----------|---------------|
| 10' (3m) | 9' (2.7m) | 1.5 GPM | 1.5m |
| 9' (2.7m) | 8' (2.4m) | 1.0 GPM | 1.0m |
| 8' (2.4m) | 7' (2.1m) | 0.75 GPM | 0.75m |
| 7' (2.1m) | 6' (1.8m) | 0.5 GPM | 0.5m |
| 6' (1.8m) | 5' (1.5m) | 0.3 GPM | 0.3m |
| 5' (1.5m) | 4' (1.2m) | 0.2 GPM | 0.2m |
| 4' (1.2m) | 3' (0.9m) | 0.1 GPM | 0.1m |
| 3' (0.9m) | 2' (0.6m) | 0.05 GPM | 0.05m |
| 2' (0.6m) | 1' (0.3m) | 0.02 GPM | 0.02m |
| 1' (0.3m) | 0' (0m) | 0.01 GPM | 0.01m |

Construction Loading

Chargement de construction

NE never proceed with construction until the lateral is installed and bracing is securely in place.

NE continuer **PAS** la construction sans que l'arbre latéral soit installé et le brayage soit solidement en place.

| 10' (3m) | 9' (2.7m) | Max. Flow | Drain Lengths |
|-----------|-----------|-----------|---------------|
| 10' (3m) | 9' (2.7m) | 1.5 GPM | 1.5m |
| 9' (2.7m) | 8' (2.4m) | 1.0 GPM | 1.0m |
| 8' (2.4m) | 7' (2.1m) | 0.75 GPM | 0.75m |
| 7' (2.1m) | 6' (1.8m) | 0.5 GPM | 0.5m |
| 6' (1.8m) | 5' (1.5m) | 0.3 GPM | 0.3m |
| 5' (1.5m) | 4' (1.2m) | 0.2 GPM | 0.2m |
| 4' (1.2m) | 3' (0.9m) | 0.1 GPM | 0.1m |
| 3' (0.9m) | 2' (0.6m) | 0.05 GPM | 0.05m |
| 2' (0.6m) | 1' (0.3m) | 0.02 GPM | 0.02m |
| 1' (0.3m) | 0' (0m) | 0.01 GPM | 0.01m |

difficile

Le montage jusqu'à ce que le dispositif de levage soit installé et que la femme soit facile sous support.

Mand
individuelles

30" (76 cm) ou 36" (91 cm) de hauteur
pour la femme de 5 ft 6" (168 cm) ou moins
ou 36" (91 cm) de hauteur
pour la femme de 5 ft 6" (168 cm) ou plus

Traverse up to 30"

DO NOT remove the battery slack length. Refer to BCS-B4C for more information.

NE PAS retirer la longueur de jeu de la batterie. Voir BCS-B4C pour plus d'informations.

NEVER attach materials near or inside, or mid-span, on cantilevers or overhangs.

NE REMPLIEZ JAMAIS des matériaux près d'une ou d'une demi portée, au milieu d'une portée, sur des consoles ou des débords.

DO NOT introduce extra joints or single trusses.

NE SURCHARGEZ PAS les poutres uniques ou des formes uniques.


Plusieurs loads over an many trusses are possible. Repartissez la charge sur le plus grand nombre de formes possible.

Plusieurs loads over many beam may be possible. Répartissez les charges sur le plus grand nombre de poutres possible.

Alterations – Modifications

Repartir votre charge sur BCS-B4C


Vous pouvez modifier la charge

DO NOT cut after drill any structural member of a truss unless specifically permitted by the truss design drawing.
NE couple, **NE** modifier or **NE** prefix **PAS** are elements of structure of one sense à moins qu'ils aient été spécifiquement permis par le dessin ou le concepteur des trusses.


Trusses that have been overloaded during construction or altered without the truss manufacturer's prior approval may render the truss manufacturer's limited warranty null and void. La garantie limitée du fabricant des trusses sera annulée si les trusses sont altérées ou surchargées sans l'approbation préalable du fabricant des trusses.
 Trusses that are overloaded, modified or altered without the manufacturer's prior approval may render the truss manufacturer's limited warranty null and void. Les trusses qui sont surchargées, modifiées ou altérées sans l'approbation préalable du fabricant des trusses peuvent rendre la garantie limitée du fabricant des trusses nulle et sans effet.

NOTE: The company reserves the right to make modifications or changes to registered design professional fee schedules. La compagnie se réserve le droit de modifier les honoraires des ingénieurs professionnels enregistrés.
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SBCA
 Structural Building Components Association


structural neoplasms

structure of the
impacts

100% Satisfaction Guarantee

CANADA B3C BCSI-B3C SUMMARY SHEET - PERMANENT RESTRAINT/BRACING OF CHORDS & WEB MEMBERS Page 39 of 39

Truss clear spans of 60' or greater may require complex permanent restraint/bracing. Please always consult a registered design professional.

1. Permanent Restraint/Bracing
Permanent restraint/bracing is a major cause of truss roof performance problems and has been known to fail on roof or floor system collapse.
The lack of proper restraint and bracing can lead to the collapse of the truss system. The designer must ensure that the truss system is properly restrained and braced to prevent collapse.
The designer must ensure that the truss system is properly restrained and braced to prevent collapse.

| Minimum Truss Size | Minimum Truss Size | Minimum Truss Size |
|--------------------|--------------------|--------------------|
| 1. Truss span (ft) | 2. Truss span (ft) | 3. Truss span (ft) |
| 1. Truss span (ft) | 2. Truss span (ft) | 3. Truss span (ft) |
| 1. Truss span (ft) | 2. Truss span (ft) | 3. Truss span (ft) |

2. Permanent Bracing for the Top Chord Plane
Permanent bracing for the top chord plane is required to prevent lateral buckling of the top chord members. The designer must ensure that the top chord members are properly braced to prevent lateral buckling.
The designer must ensure that the top chord members are properly braced to prevent lateral buckling.

3. Permanent Bracing for the Web Member Plane
Permanent bracing for the web member plane is required to prevent lateral buckling of the web members. The designer must ensure that the web members are properly braced to prevent lateral buckling.
The designer must ensure that the web members are properly braced to prevent lateral buckling.

4. Continuous Lateral Restraint (CLR) & Diagonal Bracing
Continuous lateral restraint (CLR) and diagonal bracing are required to prevent lateral buckling of the top chord members. The designer must ensure that the top chord members are properly braced to prevent lateral buckling.
The designer must ensure that the top chord members are properly braced to prevent lateral buckling.

5. Permanent Bracing for the Bottom Chord Plane
Permanent bracing for the bottom chord plane is required to prevent lateral buckling of the bottom chord members. The designer must ensure that the bottom chord members are properly braced to prevent lateral buckling.
The designer must ensure that the bottom chord members are properly braced to prevent lateral buckling.

6. Permanent Bracing for the Web Member Plane
Permanent bracing for the web member plane is required to prevent lateral buckling of the web members. The designer must ensure that the web members are properly braced to prevent lateral buckling.
The designer must ensure that the web members are properly braced to prevent lateral buckling.

7. Permanent Bracing for the Top Chord Plane
Permanent bracing for the top chord plane is required to prevent lateral buckling of the top chord members. The designer must ensure that the top chord members are properly braced to prevent lateral buckling.
The designer must ensure that the top chord members are properly braced to prevent lateral buckling.

8. Permanent Bracing for the Web Member Plane
Permanent bracing for the web member plane is required to prevent lateral buckling of the web members. The designer must ensure that the web members are properly braced to prevent lateral buckling.
The designer must ensure that the web members are properly braced to prevent lateral buckling.

9. Permanent Bracing for the Bottom Chord Plane
Permanent bracing for the bottom chord plane is required to prevent lateral buckling of the bottom chord members. The designer must ensure that the bottom chord members are properly braced to prevent lateral buckling.
The designer must ensure that the bottom chord members are properly braced to prevent lateral buckling.

10. Permanent Bracing for the Top Chord Plane
Permanent bracing for the top chord plane is required to prevent lateral buckling of the top chord members. The designer must ensure that the top chord members are properly braced to prevent lateral buckling.
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11. Permanent Bracing for the Web Member Plane
Permanent bracing for the web member plane is required to prevent lateral buckling of the web members. The designer must ensure that the web members are properly braced to prevent lateral buckling.
The designer must ensure that the web members are properly braced to prevent lateral buckling.

12. Permanent Bracing for the Bottom Chord Plane
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RETENUE ET CONTREVENTEMENT PERMANENTS DES MEMBRURES ET DES MEMBRURES D'ÂME
Les portées de 18,3m (60 pi) et plus peuvent exiger un contreventement permanent complexe. Veuillez toujours consulter un ingénieur professionnel.