

MINIMUM ALLOWABLE WOOD STRESSES								
SPECIES	SIZE	GRADE	F _b (psi)	F _t (psi)	F _v (psi)	F _c (psi)	F _c ⊥ (psi)	E (x10 ⁶ psi)
DOUGLAS FIR	2" - 4" THICK	NO. 1	1000	675	180	1500	625	1.7
DOUGLAS FIR	2" - 4" THICK	SEL. STR.	1500	1000	180	1700	625	1.9
DOUGLAS FIR	BEAMS & STRINGERS *	NO. 1	1350	675	170	925	625	1.6
DOUGLAS FIR	BEAMS & STRINGERS *	SEL. STR.	1600	950	170	1100	625	1.6
DOUGLAS FIR	POSTS & TIMBERS **	SEL. STR.	1500	1000	170	1150	625	1.6
DOUGLAS FIR	POSTS & TIMBERS **	NO. 1	1200	825	170	1000	625	1.6
SPRUCE PINE FIR	2" - 4" THICK	NO. 1	875	450	135	1150	425	1.4
WHITE OAK	2" - 4" THICK	NO. 1	875	500	220	900	800	1.0
WHITE OAK	POSTS & TIMBERS **	NO. 1	1050	700	205	825	800	1.0

* 5" & THICKER AND MORE THAN 2 IN. GREATER THAN THICKNESS (E.G. 12x18)

** 5" & THICKER AND NOT MORE THAN 2 IN. GREATER THAN THICKNESS (E.G. 7x8 $\frac{3}{4}$)

WOOD MATERIALS LIST				
COMPONENT	EXISTING AVERAGE SIZE	PROPOSED ACTUAL SIZE	PROPOSED SPECIES & GRADE	FINISH
DECK	2 LAYERS OF 2 3/8" THICK	1 1/2" x 7 1/4"	DOUGLAS FIR NO. 1	S4S
ROOF BOARDS	3/4" THICK	3/4" THICK	EASTERN HEMLOCK COMMON PREMIUM	ROUGH SAWN
SIDING	3/4" THICK	1" THICK	EASTERN WHITE PINE COMMON PREMIUM	S4S ROUGH SAWN
KING POST SPAN				
BLOCKING AND BEDDING TIMBERS	VARIES	VARIES	WHITE OAK NO. 1 OR BLACK LOCUST +	ROUGH SAWN
BOTTOM CHORD	12" x 12 1/2"	12" x 12 1/2"	DOUGLAS FIR SEL. STR.	ROUGH SAWN
CHECK BRACES	4" x 4"	4" x 4"	DOUGLAS FIR SEL. STR.	ROUGH SAWN
CROSS BEAM KNEE BRACE	3" x 5"	3" x 5"	DOUGLAS FIR NO. 1	ROUGH SAWN
CROSS BEAMS	8" x 8"	8" x 8"	DOUGLAS FIR NO. 1	ROUGH SAWN
END CROSS BEAMS	5 3/4" x 5 3/4"	5 3/4" x 5 3/4"	DOUGLAS FIR NO. 1	ROUGH SAWN
FLOOR BEAMS	10" x 14"	10" x 14"	DOUGLAS FIR NO. 1	ROUGH SAWN
INTERMEDIATE CROSS BEAMS	4" x 4"	4" x 4"	DOUGLAS FIR NO. 1	ROUGH SAWN
LOWER LATERAL BRACING	6" x 6"	6" x 6"	DOUGLAS FIR NO. 1	ROUGH SAWN
NAILERS	4" x 4"	4" x 4"	SPRUCE PINE FIR NO. 1	S1S
RAFTER KNEE BRACE	1 3/4" x 5"	1 3/4" x 5"	DOUGLAS FIR NO. 1	ROUGH SAWN
RAFTER SUPPORT BEAMS	8" x 8"	8" x 8"	DOUGLAS FIR NO. 1	ROUGH SAWN
RAFTERS	2 1/2" x 5"	2 1/2" x 5"	SPRUCE PINE FIR NO. 1	ROUGH SAWN
SLEEPER BEAMS	---	16" x 12"	P.T. DOUGLAS FIR NO. 1	S4S
STRINGERS	VARIES	5" x 8"	DOUGLAS FIR NO. 1	S1S - TOP FACE
SUPPLEMENTAL BEARING RAFTERS	---	1 1/2" x 5 1/2"	SPRUCE PINE FIR NO. 1	ROUGH SAWN
SUPPLEMENTAL RAFTERS	---	1 1/2" x 5 1/2"	SPRUCE PINE FIR NO. 1	ROUGH SAWN
VERTICAL POSTS	7 3/4" x 7 3/4"	7 3/4" x 7 3/4"	DOUGLAS FIR NO. 1	ROUGH SAWN
TOWN LATTICE SPAN				
BEDDING TIMBERS	VARIES	12"x12"	P.T. DOUGLAS FIR NO. 1	ROUGH SAWN
BLOCKING AND BEDDING TIMBERS	VARIES	VARIES	WHITE OAK NO. 1 OR BLACK LOCUST +	ROUGH SAWN
CHORD 1*	3" x 14"	3" x 14"	DOUGLAS FIR SEL. STR.	S2S - WIDE AND NARROW FACES
CHORD 2*	4" x 6"	4" x 6"	DOUGLAS FIR SEL. STR.	ROUGH SAWN
CHORD 3 AND 4*	3" x 12"	3" x 12"	DOUGLAS FIR SEL. STR.	S2S - WIDE AND NARROW FACES
CHORD 3 AND 4 NAILERS	---	2" x 3"	SPRUCE PINE FIR NO. 1	S1S - NARROW FACE
CROSS BEAMS	6" x 8"	6" x 8"	DOUGLAS FIR NO. 1	ROUGH SAWN
FLOOR BEAMS	4" x 14"	4" x 14"	DOUGLAS FIR NO. 1	S1S - TOP FACE
KNEE BRACES	4" x 4"	4" x 4"	DOUGLAS FIR NO. 1	ROUGH SAWN
LATTICE MEMBERS*	3" x 12"	3" x 12"	DOUGLAS FIR SEL. STR.	S1S - WIDE FACE
LOWER LATERAL BRACING	3" x 5"	4 1/2" x 4 1/2"	DOUGLAS FIR SEL. STR.	ROUGH SAWN
LOWER NAILERS	2" x 6"	2" x 7"	SPRUCE PINE FIR NO. 1	S1S - NARROW FACE
RAFTERS	2" x 6"	2" x 6"	SPRUCE PINE FIR NO. 1	ROUGH SAWN
SISTER RAFTERS	---	1 1/2" x 5 1/2"	SPRUCE PINE FIR NO. 1	ROUGH SAWN
SLEEPER BEAMS	---	9" x 16"	P.T. DOUGLAS FIR NO. 1	S4S
UPPER LATERAL BRACING	4" x 5"	4" x 6"	DOUGLAS FIR SEL. STR.	ROUGH SAWN
UPPER NAILERS	2" x 6"	2" x 6"	SPRUCE PINE FIR NO. 1	S1S - NARROW FACE

* LATTICE AND CHORD MEMBERS SHALL BE FREE OF HEART CENTER. P.T. - PRESSURE TREATED

+ MATERIAL CERTIFICATION IS NOT REQUIRED FOR BLACK LOCUST. SEE NOTE W-5 ON SHEET 7.

SEE NOTE W-2 ON SHEET 7 FOR MAXIMUM IN PLACE MOISTURE CONTENT.

NOTES

1. THE FOLLOWING MEMBERS ARE INCLUDED IN THE ESTIMATED LUMBER AND TIMBER QUANTITIES OF:

A. ITEM 522.20, STRUCTURAL LUMBER AND TIMBER, UNTREATED:

KING POST TRUSS:

- ROOF RAFTERS, SUPPLEMENTAL RAFTERS AND BEARING RAFTERS (0.490 MFBM)
- KNEE BRACES AND CHECK BRACES (0.097 MFBM)
- RAFTER SUPPORT BEAMS, CROSS BEAMS AND VERTICAL POSTS (0.770 MFBM)
- CHORD MEMBERS (0.896 MFBM)
- STRINGERS (1.304 MFBM)
- FLOOR BEAMS (0.940 MFBM)
- LOWER LATERAL BRACING (0.057 MFBM)
- HARDWOOD BLOCKING AND BEDDING TIMBERS (0.176 MFBM)
- NAILERS (0.220 MFBM)

TOWN LATTICE TRUSS:

- ROOF RAFTERS AND SUPPLEMENTAL RAFTERS (0.420 MFBM)
- KNEE BRACES (0.191 MFBM)
- UPPER LATERAL BRACING (0.128 MFBM)
- CROSS BEAMS (0.168 MFBM)
- CHORD MEMBERS (5.823 MFBM)
- LATTICE MEMBERS (3.750 MFBM)
- FLOOR BEAMS AND LEDGER BOARDS (4.989 MFBM)
- LOWER LATERAL BRACING (1.239 MFBM)
- HARDWOOD BLOCKING AND BEDDING TIMBERS (0.260 MFBM)
- NAILERS (0.853 MFBM)

TOTAL BRIDGE (KING POST AND TOWN LATTICE SPANS):

- DIAGONAL DECKING (9.924 MFBM)

B. ITEM 522.25, STRUCTURAL LUMBER AND TIMBER, TREATED:

KING POST TRUSS:

- SLEEPER BEAMS (0.288 MFBM)

TOWN LATTICE TRUSS:

- SLEEPER BEAMS (2.027 MFBM)

TOTAL BRIDGE (KING POST AND TOWN LATTICE SPANS):

- PORTAL TRIM BOARD (0.016 MFBM)

C. ITEM 522.30, NONSTRUCTURAL LUMBER, UNTREATED:

TOTAL BRIDGE (KING POST AND TOWN LATTICE SPANS):

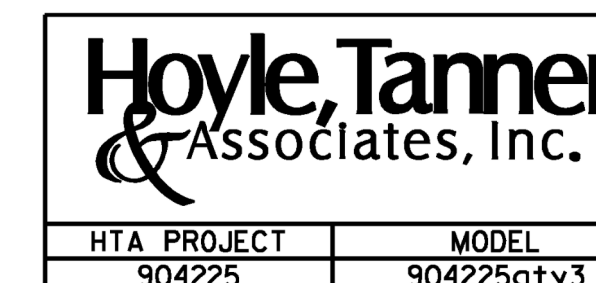
- ROOF BOARDS (1.112 MFBM)
- SIDING (7.185 MFBM)

PROJECT NAME: TOWNSHEND

PROJECT NUMBER: STP SCTT(I)

FILE NAME: 904225qty.dgn
PROJECT LEADER: M.D.SARGENT
DESIGNED BY: J.C.RIPLEY
TIMBER MEMBER SUMMARY

PLOT DATE: 8/13/2015
DRAWN BY: T.A.GELINAS
CHECKED BY: S.T.JAMES
SHEET II OF 60



HTA PROJECT	MODEL
904225	904225qty3