

GENERAL NOTES

- G1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION ADOPTED 2001, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 16TH EDITION, DATED 1996, AND THEIR LATEST REVISIONS.
- G2. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND COORDINATION OF OTHER TRADES.
- G3. THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SITE SAFETY SHALL SOLELY BE THE CONTRACTORS RESPONSIBILITY.
- G4. ALL DIMENSIONS, ELEVATIONS AND CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR OR RESPONSIBLE TRADES PRIOR TO COMMENCING WITH THE WORK, FABRICATION OR ORDERING MATERIALS. DO NOT SCALE DRAWINGS, USE DIMENSIONS SHOWN.
- G5. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND AS-BUILT CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH THE WORK.
- G6. THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
- G7. ALL APPLICABLE UTILITY DEPARTMENTS AND COMPANIES SHALL BE NOTIFIED BEFORE EXCAVATION IS STARTED. UTILITIES WITHIN 50 FEET OF AN EXCAVATION SHALL BE MARKED IN THE FIELD
- G8. HOYLE, TANNER & ASSOCIATES, INC. WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE DUE TO THE FAILURE OF THE CONTRACTOR:
 - TO FOLLOW THESE DRAWINGS AND SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY
 - TO NOTIFY HTA OF ANY DISCREPANCIES, ERRORS, OMISSIONS OR CONFLICTS AND OBTAIN THEIR GUIDANCE TO RESOLVE.
- G9. SPECIFICATIONS:
 - THE BOCA NATIONAL BUILDING CODE 1999
 - STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2001
 - AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 16TH EDITION, DATED 1996 PLUS INTERIMS THROUGH 2002
 - AITC TIMBER CONSTRUCTION MANUAL, FOURTH EDITION
 - 1997 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION AND SUPPLEMENT
- G10. IN THE PREPARATION OF THESE DRAWINGS, HTA HAS RELIED UPON INFORMATION OBTAINED FROM THE FOLLOWING REPORTS, DRAWINGS, TESTS OR OTHER DOCUMENTATION AS FOLLOWS:
 1. FINAL SCOPING REPORT: BRIGHTON PEDESTRIAN BRIDGE; TOWN OF BRIGHTON, VERMONT; SUBMITTED BY DUFRESNE-HENRY, INC.; JANUARY 1999
 2. SURVEY BY DANIELS SURVEY, JUNE 1995

THIS INFORMATION IS AVAILABLE FOR REVIEW DURING NORMAL BUSINESS HOURS AT THE FOLLOWING LOCATION:

BRIGHTON TOWN HALL
 MAIN STREET P.O. BOX 377
 ISLAND POND, VT 05846
 TEL. (802) 828-3975

FOUNDATION TRADE NOTES

- F1. THE BOTTOM ELEVATION OF FOOTINGS SHALL BE A MINIMUM OF 5'-0" BELOW OUTSIDE GRADE. LOWER FOOTINGS AS REQUIRED TO REACH GOOD BEARING.
- F2. THE BOTTOM OF EXCAVATIONS SHALL BE THOROUGHLY COMPACTED TO 95% OF MODIFIED PROCTOR PRIOR TO FORMING FOOTINGS.
- F3. ALL CONCRETE SHALL BE PLACED IN DRY EXCAVATIONS. PUMP AWAY WATER AS REQUIRED.

STRUCTURAL STEEL TRADE NOTES

- S1. ALL STRUCTURAL STEEL, INCLUDING VERTICAL RODS, LATERAL BRACING RODS AND MISCELLANEOUS STEEL SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM AASHTO 232M/M232, ASTM A153/A153M (FY-36 KS) EXCEPT FOR PLATES WHICH SHALL BE GALVANIZED PER AASHTO M 11M/M11 AND PAID FOR UNDER ITEM 506.75. THE USE OF UNGALVANIZED STEEL COMPONENTS WILL NOT BE ALLOWED.
- S2. THE CONTRACTOR SHALL SUBMIT CUT SHEETS FOR ALL CONNECTION HARDWARE TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ORDERING.

WOOD NOTES

- W1. ALL WOOD CONSTRUCTION SHALL COMPLY WITH THE LATEST AASHTO SPECIFICATIONS, THE NATIONAL DESIGN SPECIFICATIONS (NDS), SUPPLEMENT FOR WOOD CONSTRUCTION AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) SPECIFICATIONS.
- W2. MOISTURE CONTENT OF WOOD USED SHALL NOT EXCEED 16% AT THE TIME OF USE EXCEPT FOR MEMBERS 5"x5" AND LARGER WHICH SHALL NOT EXCEED 19%. THE MOISTURE CONTENT OF THE WHITE OAK DECKING MAY BE GREEN AT THE TIME OF INSTALLATION.
- W3. EACH PIECE OF WOOD OR TIMBER SHALL BE GRADED BY A RECOGNIZED LUMBER GRADING AGENCY. A CERTIFICATE OF COMPLIANCE SHALL BE SUBMITTED FOR ALL WOOD.
- W4. ALL NUTS, BOLTS LAG SCREWS, PREMANUFACTURED STEEL CONNECTIONS, WASHERS, SPIKES AND SCREWS SHALL CONFORM TO ASTM 307, AND BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM AASHTO 232M/M232, A153/A153M AND PAID FOR UNDER ITEM 506.75.
- W5. ALL WOOD SHALL BE SOUTHERN PINE No. 1 OR BETTER WHERE THE SPECIES IS NOT NOTED.
- W6. ALL JOB SITE FABRICATION CUTS AND BORINGS OF WOOD TO BE TREATED SHALL HAVE TWO COATS OF AN APPROVED PRESERVATIVE LIBERALLY APPLIED. THE PRESERVATIVE SHALL BE COMPATIBLE WITH THE PRESSURE TREATMENT PRESERVATIVE USED IN ACCORDANCE WITH AWPA STANDARD M4.

CONCRETE AND REINFORCING STEEL TRADE NOTES

- C1. ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE" (CRSI).
- C2. REINFORCING PLACEMENT TOLERANCES SHALL BE:

SPACING	+/- 1"
CLEARANCE	+/- 1/4"
- C3. REINFORCING COVER SHALL BE:

	MINIMUM COVER, IN.
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
CONCRETE EXPOSED TO EARTH OR WEATHER: *6 THROUGH *18 BARS *5 BARS, W31 OR D31 WIRE, AND SMALLER	2 1/2
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:	
SLABS, WALLS, JOISTS: *14 AND *18 BARS *11 BARS AND SMALLER	1/2 3/4
- C4. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2" BY 1/2".
- C5. WATER REPELLENT SHALL BE APPLIED TO ALL NEW AND EXISTING EXPOSED CONCRETE SURFACES.

MINIMUM ALLOWABLE WOOD STRESSES

SPECIES	SIZE	GRADE	F _b (PSI)	F _t (PSI)	F _v (PSI)	F _c (PSI)	E (10 ⁶ PSI)
SOUTHERN PINE	2"-4" THICK, 2"-4" WIDE	No. 1	1850	1050	100	1850	1.7
SOUTHERN PINE	2"-4" THICK, 10" WIDE	No. 1	1300	725	90	1600	1.7
SOUTHERN PINE	5"x5" & LARGER	DS65	2000	1300	115	1500	1.8
SOUTHERN PINE GLULAM	X - X AXIS	A.I.T.C COMB. No. 24F-V5	2400	1150	240	1700	1.7
WHITE OAK	2"-4" THICK, 2" & WIDER	No. 1	875	500	110	900	1.1

TIMBER MATERIALS LIST

COMPONENT	PROPOSED (ACTUAL SIZE IN INCHES)	PROPOSED SPECIES & GRADE
BEARING BLOCK	VARIABLES	BLACK LOCUST No. 1
FLOOR BEAMS	3 1/2 x 9 1/4	SOUTHERN PINE No. 1
FLOOR DECKING	3" THICK BRIDGE	WHITE OAK No. 1
	2 1/2" THICK STAIRS TREADS	
KNEE BRACING	3 1/2 x 3 1/2	SOUTHERN PINE No. 1
PIER COLUMN	12 x 12	P.T. SOUTHERN PINE No. 1
PIER CAP BEAM	12 x 15	P.T. SOUTHERN PINE No. 1
PIER DIAGONAL	4 x 8	P.T. SOUTHERN PINE No. 1
PURLINS	1 1/2 x 3 1/2	SOUTHERN PINE No. 1
RAFTERS	3 1/2 x 9 1/4	SOUTHERN PINE No. 1
RAFTER SUPPORT BEAM	5 1/2 x 11 1/2	SOUTHERN PINE No. 1
RAFTER SUPPORT COLUMN	5 1/2 x 5 1/2	SOUTHERN PINE No. 1
SIDING	1" THICK	EASTERN WHITE PINE No. 1
STAIR STRINGERS	5 x 15 1/8	SOUTHERN PINE A.I.T.C. GLULAM COMB. 24F-V5
TOP CROSS BEAM	5 1/2 x 9 1/2; 7 1/2 x 9 1/2 (TRUSS ONLY)	SOUTHERN PINE No. 1
TOP LATERAL BRACING	4 1/2 x 4 1/2	SOUTHERN PINE No. 1
TRUSS CHORD	8 1/4 x 14 1/4	SOUTHERN PINE A.I.T.C. GLULAM COMB. 24F-V5
TRUSS DIAGONALS	6x10, 6x6, 5x8	SOUTHERN PINE No. 1

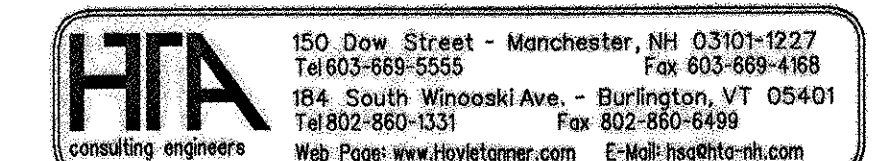
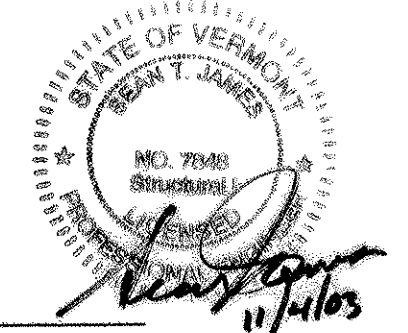
NOTE: P.T. = PRESSURE TREATED

PROPOSED STRUCTURE:

STRUCTURE TYPE: SINGLE SPAN TIMBER COVERED BRIDGE WITH STAIRS
 CLEAR SPAN: ~~116 FT (35.062 M)~~ **104.09 FT (31.727 M)**
 VERTICAL CLEARANCE ABOVE RAILROAD TRACKS: 23'-0" (7.010M)
 WATERWAY OF FULL OPENING: N/A

DESIGN CRITERIA:

1. DESIGN LIVE LOAD AASHTO 85 PSF (PEDESTRIAN)
2. DESIGN SNOW LOAD P_g = 60PSF, P_f = 36PSF (ROOF APPLIED)
2. DESIGN SPAN 112 FEET
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 3500 PSF (ASSUMED) ON LEDGE N/A
4. ALLOWABLE LOAD FOR PILING N/A TYPE N/A ESTIMATED LENGTH N/A
5. STRUCTURAL STEEL AASHTO GRADE N/A
6. REINFORCING STEEL GRADE 60
7. CONCRETE CLASS A f_c: 4000 PSI
 CONCRETE CLASS B f_c: 3500 PSI
 SILICA-FUME CONCRETE f_c: 5000 PSI



RECORD COPY REVISIONS DR BY JBM CHK BY STJ

Town Of	BRIGHTON	Bridge No.	
Highway No.		Log Sta.	
		Surv. Sta.	
BRIGHTON PEDESTRIAN BRIDGE			
PRELIMINARY INFORMATION & NOTES			
Designed By	S.T. JAMES	Drawn By	J.D. GEER
Checked By	R.H. DURFEE	Date	MAY. 2002
PROJECT	BRIGHTON	Bridge Design Supervisor	
		Date	
I.G.C. Info.	Z9068Det.dgn	PROJECT NO.	STP BIKE (14)S
Bridge Sheet No.	2	Sheet 2 of	14