GENERAL NOTES:

G-1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2006, AND ITS LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 17TH EDITION, DATED 2002, AND ITS LATEST REVISIONS.

G-2. DESIGN OF THE REHABILITATED STRUCTURE IS FOR AN AASHTO H10 LIVE LOAD.

G-3. THE CONTRACTOR SHALL TAKE SPECIAL CARE AND PRECAUTION TO INSURE THAT NO DEBRIS FALLS INTO THE SOUTH BRANCH TROUT RIVER DURING CONSTRUCTION. ALL MATERIAL FALLING IN THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE STATE.

G-4. ALL WORK SHALL BE COMPLETED WITHIN THE EXISTING R.O.W AND TEMPORARY CONSTRUCTION EASEMENT LIMITS SHOWN IN THESE PLANS.

G-5. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME OF BIDDING. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE CHECKED BY THE CONTRACTOR IN THE FIELD PRIOR TO COMMENCING THE WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE DIMENSIONS AND DETAILS OF EXISTING BRIDGE FEATURES AND COMPONENTS PRIOR TO THE FABRICATION OF NEW BRIDGE COMPONENTS. ACTUAL WORK SHALL MATCH FIELD CONDITIONS. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

G-6. EXCEPT AS NOTED OTHERWISE, ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE SHALL INCLUDE ANY WORK NECESSARY TO FACILITATE AND ACCOMPLISH THE SCOPE OF PROJECT WORK AS INDICATED BY THE CONTRACT DOCUMENTS AND DIRECTED BY THE ENGINEER: REMOVING AND DISPOSING SUPERSTRUCTURE MEMBERS AND PORTIONS OF MEMBERS; AS WELL AS REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR RE-USE, INCLUDING REMOVING AND STOCKPILING MEMBERS AND PORTIONS OF MEMBERS FOR THE CONTRACTOR'S METHODS OF REHABILITATION. NO BURNING OF REMOVED MATERIALS AT THE PROJECT SITE WILL BE ALLOWED. THE EXISTING COVERED BRIDGE TIMBERS AND LUMBER MAY CONTAIN HAZARDOUS WOOD PRESERVATIVES. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS AND EMPLOYEES HARMLESS REGARDING THE CONTRACTOR'S HANDLING OF THESE MATERIALS AND SUBSEQUENT USE, RE-USE, OR DISPOSAL OF THESE MATERIALS.

G-7. THE STEEL I-BEAMS THAT SUPPORT THE EXISTING COVERED BRIDGE WERE INSTALLED BY THE TOWN OF MONTGOMERY AND SHALL BE DELIVERED TO:

A & L ST. ONGE CONSTRUCTION
1711 NORTH MAIN STREET
MONTGOMERY, VT
CONTACT: ARTIE ST. ONGE, (802) 326-3000

THE CONTRACTOR SHALL UNLOAD THE I-BEAMS FROM THE TRUCK AND PLACE THEM AT A LOCATION AS DIRECTED BY THE OWNER. PROVIDE A MINIMUM OF ONE (1) WEEK NOTICE PRIOR TO DELIVERING THE STEEL I-BEAMS. THESE STEEL BEAMS THAT SUPPORT THE EXISTING COVERED BRIDGE ARE COATED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S MOVING OF THESE STEEL BEAMS. ALL COSTS ASSOCIATED WITH THE REMOVAL, HANDLING AND DELIVERY OF STEEL BEAMS ARE PAID UNDER ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE. ALL OTHER REMOVED ITEMS PAID UNDER ITEM 529.20, SHALL BE DISPOSED OF BY THE CONTRACTOR.

G-8. THE COST OF INSTALLING AND MAINTAINING ALL TEMPORARY CONSTRUCTION SIGNS SHALL BE INCLUDED IN ITEM 641.10, TRAFFIC CONTROL. THE REMOVAL AND/OR RESETTING OF TRAFFIC SIGNS, AS DEEMED NECESSARY BY THE RESIDENT ENGINEER SHALL ALSO BE INCLUDED IN THE TRAFFIC CONTROL ITEM.

G-9. SPECIAL CARE SHALL BE TAKEN TO AVOID DAMAGE TO MEMBERS THAT ARE TO REMAIN AND TO AVOID MOVEMENT OF THE TRUSS THAT COULD RESULT IN DISTORTION OR MISALIGNMENT OF THE TRUSS AND ITS JOINTS. MEMBERS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AS DIRECTED BY THE ENGINEER AT CONTRACTOR'S EXPENSE.

G-10. ALL JOINTS IN REPLACED MEMBERS SHALL MATCH THE EXISTING JOINT, INCLUDING ALL NAILS, BOLTS OR SCREWS REQUIRED UNLESS NOTED OTHERWISE.

G-11. ALL EXISTING MEMBERS SHOWN TO BE REPLACED ARE TO BE REPLACED "IN-KIND" WITH NEW MEMBERS IDENTICAL IN DIMENSIONS AND CONFIGURATIONS AS THE MEMBERS ORIGINALLY USED IN THE COVERED BRIDGE (INCLUDING MORTISES, TENONS, NOTCHES, HOLES, ETC.) UNLESS NOTED OTHERWISE IN THESE PLANS.

STRUCTURAL STEEL NOTES:

S-1. EXCEPT AS NOTED OTHERWISE IN THE CONTRACT PLANS, ITEM 506.75, STRUCTURAL STEEL SHALL INCLUDE THE FOLLOWING:

- THE NEW LOWER LATERAL BRACING TIE RODS (INCLUDING NUTS, PLATES, WASHERS AND TURNBUCKLES)
- ALL NEW STEEL THROUGH BOLTS (INCLUDING NUTS, WASHERS AND BEVELED WASHERS) THAT ARE TO CONNECT THE SPLIT ENDS OF TRUSS LATTICE MEMBERS
- ALL REPLACED STEEL THROUGH BOLTS THAT ARE TO CONNECT CHORD 4 WITH TRUSS LATTICE MEMBERS OF BOTH TRUSSES
- NEW CARRIAGE BOLTS WITH HEAVY SQUARE NUTS AND OGEE WASHERS THAT ARE TO CONNECT THE UPPER X-BRACING MEMBERS
- NEW LAG SCREWS TO CONNECT EXISTING WOOD MEMBERS
- FLOOR BEAM HOLD DOWN STRAPS

FABRICATION DRAWINGS AND ERECTION PLAN SUBMITTALS ARE NOT REQUIRED FOR ITEM 506.75, STRUCTURAL STEEL.

S-2. ALL NEW STRUCTURAL STEEL SHOWN IN THE PLANS INCLUDING PLATES, BOLTS, LAG BOLTS, TURNBUCKLES, NUTS, WASHERS, RODS, ANGLES AND MISCELLANEOUS STEEL, SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M 232M/M 232 EXCEPT FOR PLATES WHICH SHALL BE GALVANIZED PER AASHTO M 111M/ M 111. ALL STEEL PLATES AND RODS SHALL BE ASTM A36.

RECOMMENDED SEQUENCE OF WORK:

RS-1. INSTALL TEMPORARY ONE LANE BRIDGE AS SHOWN IN THE PLANS AND OPEN IT TO TRAFFIC.

RS-2. REMOVE THE EXISTING FLOOR DECKING, FLOOR BEAMS AND SIDING AS SHOWN IN THE PLANS. PROVIDE TEMPORARY SUPPORT OF THE LOWER CHORDS AS REQUIRED.

RS-3. DEPENDING ON WHICH ALTERNATE WAS CHOSEN, INSTALL TEMPORARY SHORING TO SUPPORT THE EXISTING BRIDGE OR MOVE THE EXISTING BRIDGE TO A STAGING AREA TO COMPLETE THE REPAIRS. THE CONTRACTOR SHALL SUBMIT PLANS AND DESIGN CALCULATIONS FOR THE PROPOSED WORK, TO THE STRUCTURES ENGINEER IN ACCORDANCE WITH SECTION 105 OF STANDARD SPECIFICATIONS, TWO (2) WEEKS PRIOR TO COMMENCEMENT OF THE WORK.

RS-4. THE EXISTING BRIDGE SHALL BE JACKED AND BRACED AS REQUIRED TO STRAIGHTEN, RELEASE STRESSES, PLUMB AND RE-ALIGN THE TRUSSES. THE CONTRACTOR SHALL SUBMIT THE PROPOSED METHOD OF WORK TO THE RESIDENT ENGINEER PRIOR TO THE START OF REALIGNMENT OPERATIONS. (SEE ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE)).

RS-5. REPLACE BRIDGE MEMBERS AS DETAILED IN CONTRACT DRAWINGS AND COMPLETE SUBSTRUCTURE WORK.

RS-6. DEPENDING ON WHICH ALTERNATE WAS CHOSEN, REMOVE TEMPORARY SHORING TO SUPPORT STRUCTURE, OR RE-INSTALL THE BRIDGE SUPERSTRUCTURE, COMPLETE REMAINING WORK ITEMS AS DETAILED ON DRAWINGS, REOPEN BRIDGE TO TRAFFIC AND REMOVE TEMPORARY ONE LANE BRIDGE AND TEMPORARY ROADWAY APPROACHES.

WOOD NOTES:

W-1. ALL WOOD CONSTRUCTION SHALL COMPLY WITH THE LATEST AASHTO SPECIFICATIONS, THE NATIONAL DESIGN SPECIFICATION (NDS) AND SUPPLEMENT FOR WOOD CONSTRUCTION, AND THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) SPECIFICATION, 5TH EDITION.

W-2. THE MAXIMUM IN PLACE MOISTURE CONTENT OF THE WOOD USED SHALL BE AS FOLLOWS:

MEMBERS LESS THAN 5" THICK	16%
MEMBERS GREATER THAN 5" THICK	19%
TRUNNELS	10%
ALL HARDWOOD 2.5" AND THICKER MAY BE GREEN	

W-3. ALL NEW WOOD TRUNNELS SHALL BE MADE OF WHITE OAK. TRUNNELS SHALL BE DRIVEN IN A MANNER WHICH AVOIDS SPLITTING THE TRUNNELS OR THE MEMBER CONNECTED BY THEM. HOLES SHALL BE SIZED 1/16" IN DIAMETER SMALLER THAN THE TRUNNEL TO PROVIDE A FRICTION FIT. TRUNNELS SHALL BE DIPPED IN BOILED LINSEED OIL, MINERAL OIL OR AN APPROVED WAX PRIOR TO DRIVING. ALL NEW OR EXISTING WOOD TRUNNELS IN SOUND CONDITION THAT ARE TO BE RE-USED WITH PERMISSION OF THE RESIDENT ENGINEER FOR CONNECTING NEW OR REPLACED MEMBERS ARE CONSIDERED INCIDENTAL TO ITEM 522.20, STRUCTURAL LUMBER AND TIMBER, UNTREATED. MATERIAL AND WORK OF 5 NEW TRUNNELS TO CONNECT EXISTING MEMBERS AS SHOWN ON SHEETS 37 AND 38 ARE PAID FOR UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE). TRUNNELS WHICH ARE SALVAGED AND REUSED IN CONJUNCTION WITH EXISTING MEMBERS THAT ARE TO REMAIN ARE PAID FOR UNDER ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE).

W-4. DOWEL HOLES IN EXISTING MEMBERS THAT ARE OVERSIZED OR DISTORTED SHALL BE PLUGGED WITH AN APPROVED WOOD EPOXY AND REDRILLED AS APPROVED BY THE ENGINEER (COST OF SUCH REPAIRS IS INCLUDED UNDER ITEM 900.620, SPECIAL PROVISION (WOOD EPOXY REPAIRS). APPROXIMATELY 10 LOCATIONS HAVE BEEN IDENTIFIED. AN ADDITIONAL 5 DOWEL HOLE REPAIRS ARE INCLUDED FOR BIDDING PURPOSES.

W-5. THE REPAIR OF APPROXIMATELY 31 SPLITS AND CHECKS IN EXISTING LATTICE, CHORD 2D OF NORTH TRUSS AND 5 LOCATIONS IN CROSS BEAMS SHALL BE MADE WITH AN APPROVED WOOD EPOXY TO ACHIEVE FULL STRENGTH OF THE REPAIRED MEMBER (PAY ITEM 900.620, SPECIAL PROVISION (WOOD EPOXY REPAIRS)). AN ADDITIONAL 5 ROTTED MEMBER REPAIRS (AS SHOWN ON "EPOXY REPAIR DETAIL" ON SHEET 39) ARE INCLUDED FOR BIDDING PURPOSES. SEE THE RECOMMENDED REPAIR SEQUENCE NOTES ON SHEET 39 FOR MORE INFORMATION.

W-6. EACH PIECE OF NEW LUMBER AND TIMBER SHALL BE GRADED, BY A RECOGNIZED LUMBER GRADING AGENCY. INDIVIDUAL PIECES SHOULD NOT BE STAMPED WITH A GRADE STAMP. MATERIAL CERTIFICATIONS SHALL BE SUBMITTED FOR ALL WOOD IN ACCORDANCE WITH SECTION 709.

W-7. THE FOLLOWING MEMBERS ARE INCLUDED IN THE ESTIMATED LUMBER AND TIMBER QUANTITIES OF:

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

- RAFTERS (0.155 MFBM)
- TOP LATERAL BRACING, KNEE BRACES, CROSS BEAMS AND RIDGE POST BRACE (0.655 MFBM)
- TRUSS LATTICE AND CHORD (3.010 MFBM)
- END POSTS (0.350 MFBM)
- NAILERS (0.055 MFBM)
- TIE ROD CAPS AND HARDWOOD BED & BLOCKING TIMBERS (0.255 MFBM)

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

- SAWN DECK (4.530 MFBM)
- CURB AND CURB BLOCKING (1.200 MFBM)
- PORTAL TRIM LUMBER (0.030 MFBM)
- SLEEPER BEAMS (0.490 MFBM)
- FLOOR BEAMS (5.455 MFBM)

C. ITEM 522.30, NONSTRUCTURAL LUMBER, UNTREATED:

- NEW SIDING (2.420 MFBM)

W-8. THE QUANTITIES OF ITEM 522.20 STRUCTURAL LUMBER AND TIMBER, UNTREATED GIVEN ABOVE ASSUME REPLACEMENT OF 40 ADDITIONAL FEET OF 3"X11" CHORD, 4 ADDITIONAL LATTICE MEMBERS (2 ON SOUTH TRUSS AND 2 ON NORTH TRUSS) AND 2 ADDITIONAL SUPPLEMENTAL RAFTERS FOR BIDDING PURPOSES THAT HAVE NOT BEEN IDENTIFIED IN THE PLANS. THE CONTRACTOR AND RESIDENT ENGINEER SHALL JOINTLY INSPECT ALL TRUSS CHORDS, LATTICE MEMBERS AND ALL ROOF RAFTERS AT THE TIME OF CONSTRUCTION TO IDENTIFY ADDITIONAL CHORD, LATTICE MEMBERS AND RAFTERS TO BE REPLACED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LUMBER AND TIMBER DIMENSIONS AND SIZES REQUIRED FOR CONSTRUCTION.

W-9. ITEM 900.645, SPECIAL PROVISION (REHABILITATING COVERED BRIDGE SUPERSTRUCTURE) SHALL INCLUDE ALL COSTS ASSOCIATED WITH RE-INSTALLING STOCKPILED COMPONENTS (FROM ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE) ON THE SUPERSTRUCTURE; ALTERATIONS TO IN-PLACE MEMBERS REQUIRED FOR RE-USE/REHABILITATION OF THE SUPERSTRUCTURE; TEMPORARY BRACING AND BLOCKING; ALL LABOR, MATERIALS AND SUBMITTALS REQUIRED FOR THE REHABILITATION WORK (EXCEPT AS SPECIFIED BY OTHER CONTRACT ITEMS); STRAIGHTENING, PLUMBING, AND RE-ALIGNING THE TRUSSES; CAMBER RESTORATION; AND FURNISHING AND INSTALLING NEW TRUNNELS WHERE NONE EXIST.

W-10. ALL NUTS, BOLTS, WASHERS, AND SCREWS SHALL CONFORM TO ASTM A307, ALL NAILS AND SPIKES SHALL CONFORM TO ASTM F1667 AND BE DOUBLE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO M 232M/M 232. THE USE OF ELECTRO GALVANIZED NAILS WILL NOT BE ALLOWED.

W-11. ALL STRUCTURAL LUMBER AND TIMBER NOT SHOWN ON THE WOOD MATERIALS LIST TABLE ON SHEET 28 SHALL BE DOUGLAS FIR NO.1 OR BETTER. LIKEWISE, ALL HARDWOOD SHALL BE WHITE OAK NO.1 OR BLACK LOCUST NO.1 OR BETTER WHERE THE SPECIES IS NOT NOTED.

W-12. ALL FIELD CUTS AND BORINGS OF TREATED WOOD SHALL BE TREATED WITH TWO COATS OF COPPER NAPHTHENATE LIBERALLY APPLIED PER SPECIFICATION SECTION 522.

W-13. EXISTING TRUSS, ROOF RAFTER, KNEE BRACING, CROSSBEAMS AND UPPER LATERAL BRACING JOINTS SHALL BE RERLICATED ON ALL STRUCTURE MEMBERS TO BE REPLACED UNLESS NOTED OTHERWISE IN THE CONTRACT DRAWINGS.

MODEL	det2
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Hoyle, Tanner & Associates, Inc.

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GENERAL NOTES SHEET (1 OF 2)