

GENERAL NOTES:

1. DIMENSIONS, ANGLES, BEARINGS, AND ELEVATIONS SHOWN ON THESE CONTRACT PLANS HAVE BEEN OBTAINED FROM LIMITED FIELD INVESTIGATION AND FIELD SURVEY, AND MAY NOT ACCURATELY REFLECT ACTUAL FIELD CONDITIONS. ACCORDINGLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING CONDITIONS AFFECTING OR IMPACTED BY THE NEW WORK TO ASSURE CONSISTENCY WITH THE PROPOSED CONSTRUCTION. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE ADVANCING THE WORK. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS SHOWN IN THESE PLANS PRIOR TO ANY FABRICATION.
2. THE GENERAL SCOPE OF THE PROJECT INCLUDES, BUT IS NOT LIMITED TO:
 - IMPROVEMENTS TO THE APPROACH ROADWAYS AT BOTH ENDS OF BRIDGE
 - REHABILITATION OF THE EXISTING STEEL TRUSS, INCLUDING BOTTOM CHORD REPLACEMENT AND END POST AND SELECTIVE DIAGONAL REPLACEMENT
 - REPLACEMENT OF THE BRIDGE FLOOR SYSTEM
 - CLEANING AND PAINTING THE EXISTING STEEL TRUSS
 - INSTALLATION OF NEW STEEL BRIDGE RAIL
 - REMOVAL OF EXISTING BACKWALLS AND CONSTRUCTION OF NEW CONCRETE BACKWALLS AT BOTH ABUTMENTS
 - CONSTRUCTION OF NEW DECK END JOINTS AT BOTH ABUTMENTS
 - REPAIRS TO END SECTIONS OF BOTH EXISTING STONE MASONRY WINGWALLS AT ABUTMENT 1
 - MINOR CHINKING OF JOINTS IN BOTH DRY-LAID STONE MASONRY ABUTMENTS
3. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND ITS LATEST REVISIONS, AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 17TH EDITION, INCLUDING INTERIMS, BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO).
4. DESIGN LIVE LOAD FOR EXISTING STRUCTURE IS UNKNOWN. DESIGN LIVE LOAD FOR NEW COMPONENTS OF STRUCTURE IS AASHTO M9 (H10) UNLESS OTHERWISE NOTED.
5. NO PLANS ARE AVAILABLE OF THE EXISTING BRIDGE.
6. WORKING DRAWINGS REQUIRED FOR VARIOUS ITEMS OF THE WORK SHALL BE BASED ON ACTUAL FIELD MEASUREMENTS TAKEN BY THE CONTRACTOR, AND THE DRAWINGS SHALL BE SO NOTED.
7. THE BRIDGE IS CURRENTLY CLOSED TO TRAFFIC. TRAFFIC ON VT 30 AND TH 62 (RICE FARM ROAD) AND TH 40 (QUARRY ROAD) SHALL BE MAINTAINED AS SHOWN ON SHEET 7.
8. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT DEBRIS FROM FALLING INTO THE WEST RIVER DURING CONSTRUCTION.
9. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 20 DEGREES CELSIUS UNLESS OTHERWISE NOTED.
10. THE METHOD OF SHORING AND THE SEQUENCING OF TRUSS MEMBER REMOVAL PROPOSED BY THE CONTRACTOR SHALL BE SUBSTANTIATED WITH DESIGN CALCULATIONS PERFORMED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF VERMONT. DETAILS AND CALCULATIONS OF PROPOSED SHORING, INCLUDING THE PROPOSED TRUSS MEMBER REMOVAL SEQUENCE, SHALL BE SUBMITTED TO THE STRUCTURES ENGINEER AT LEAST TWO WEEKS PRIOR TO INSTALLATION OF THE SHORING. ALL COSTS FOR DESIGN, MATERIALS, INSTALLATION, AND REMOVAL OF SHORING SHALL BE INCLUDED IN ITEM 502.10, SHORING SUPERSTRUCTURE.
11. ITEM 529.20, PARTIAL REMOVAL OF STRUCTURE, SHALL INCLUDE REMOVAL AND PROPER DISPOSAL OF:
 - STEEL BRIDGE RAIL
 - STEEL GRID DECK
 - FLOORBEAMS
 - BOTTOM LATERAL BRACING
 - BOTTOM CHORD AND END POSTS OF BOTH TRUSSES
 - TRUSS BEARINGS
 - THE LOWER SECTION OF THE TRUSS ENDPOST AT ALL 4 CORNERS OF THE BRIDGE
 - SELECTED TRUSS DIAGONAL MEMBERS FROM BOTH TRUSSES
 - RIVETS
 - TOP PLATE OF TOP CHORD SPLICE PLATE AT PANEL POINT U13 ON THE DOWNSTREAM TRUSS ONLY

12. THE EXISTING STRUCTURAL STEEL ON THIS PROJECT WAS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE STRUCTURAL STEEL.
13. ITEM 529.25, REMOVAL OF CONCRETE OR MASONRY, SHALL INCLUDE:
 - REMOVAL AND PROPER DISPOSAL OF THE EXISTING CONCRETE AND STONE MASONRY BACKWALLS AT BOTH ABUTMENTS
 - REMOVAL AND STOCKPILING OF STONE MASONRY FROM PORTIONS OF WINGWALLS #1 AND #2 IF THEY ARE RECONSTRUCTED
14. OPERATIONS SHALL BE PERFORMED SO THAT ALL PORTIONS OF THE EXISTING STRUCTURE THAT ARE TO REMAIN ARE NOT DAMAGED. ANY PORTION OF THE EXISTING STRUCTURE THAT IS TO REMAIN THAT IS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
15. EXCAVATION BEHIND EXISTING ABUTMENT BACKWALLS TO THE LIMITS SHOWN IN THE PLANS SHALL BE PAID AS ITEM 204.25, STRUCTURE EXCAVATION. THIS ITEM SHALL ALSO BE USED TO PAY FOR THE EXCAVATION REQUIRED TO REMOVE AND RECONSTRUCT PORTIONS OF WINGWALLS #1 AND #2.
16. THE EXISTING ABUTMENTS AND WINGWALLS ARE CONSTRUCTED OF DRY-LAID STONE MASONRY. STONES AT THE TOPS OF THE WINGWALLS AND BRIDGE SEATS THAT HAVE SHIFTED OUT FROM THE FACE OF WINGWALL OR ABUTMENT SHALL BE RESET AS DIRECTED BY THE ENGINEER. LARGE (APPROXIMATELY 50mm OR GREATER) JOINTS AND GAPS BETWEEN STONES SHALL BE FILLED WITH CHINKING STONES AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID UNDER ITEM 602.20, DRY MASONRY. MORTAR MAY BE USED SELECTIVELY, WITH THE APPROVAL OF THE ENGINEER, TO SEAT CHINKING STONES, BUT IT SHALL NOT BE USED TO REPOINT THE EXISTING OPEN JOINTS. THE ESTIMATED QUANTITY FOR ITEM 602.20 ASSUMES 10% OF THE EXPOSED AREA WILL REQUIRE REPAIR. WINGWALL AREAS SPECIFICALLY IDENTIFIED FOR REPAIR IN THESE PLANS ARE NOT INCLUDED IN THIS QUANTITY.
17. RIVETS SHALL BE REMOVED BY MECHANICAL MEANS (NO FLAME CUTTING ALLOWED) THAT SHALL NOT DAMAGE OR SCORE MEMBERS TO REMAIN.
18. ONLY A TWO ROD (33 FEET) RIGHT-OF-WAY (R.O.W.) IS AVAILABLE FOR CONSTRUCTION AT THE EAST END OF THE PROJECT ALONG TH 62 AND TH 40. IF ADDITIONAL R.O.W. IS NEEDED FOR CONSTRUCTION OR STAGING PURPOSES, THE CONTRACTOR SHALL SECURE ALL NECESSARY EASEMENTS. COST SHALL BE INCIDENTAL TO ALL CONTRACT ITEMS.
19. A TEMPORARY WORK PLATFORM AREA HAS BEEN INCLUDED IN THE PERMITS FOR THIS PROJECT AND IS SCHEMATICALLY SHOWN IN THE PLANS. THIS PLATFORM IS INTENDED TO FUNCTION AS STAGING AREA AND TO FACILITATE THE TRUSS REHABILITATION BY ALLOWING THE CONTRACTOR THE OPTION OF TEMPORARILY MOVING THE EXISTING TRUSS TO THIS WORK PLATFORM. ONCE THE REHABILITATION IS COMPLETE, THE TRUSS MUST BE RELOCATED TO THE POSITION SHOWN IN THE PLANS AND THE TEMPORARY WORK PLATFORM, ASSOCIATED TEMPORARY SUPPORTS, AND STONE FILL BERMS MUST BE COMPLETELY REMOVED. ALL COSTS FOR THE TEMPORARY WORK PLATFORM INCLUDING STRUCTURAL DESIGN, EXISTING BRIDGE DISPLACEMENT PROCEDURES, PLATFORM CONSTRUCTION, AND REMOVAL SHALL BE INCLUDED IN ITEM 900.645, SPECIAL PROVISION (TEMPORARY WORK PLATFORM). IF A TEMPORARY WORK PLATFORM IS NOT CONSTRUCTED, THIS ITEM SHALL NOT BE USED OR MEASURED FOR PAYMENT AND NO COMPENSATION WILL BE PROVIDED FOR THIS ALTERATION IN THE CONTRACT.

STRUCTURAL STEEL NOTES:

1. ALL NEW STRUCTURAL STEEL SHALL BE AASHTO M 270M, GRADE 345 PAINTED UNLESS OTHERWISE NOTED AND SHALL CONFORM TO ALL APPLICABLE SUBSECTIONS OF SECTION 506.
2. ITEM 506.50 STRUCTURAL STEEL, ROLLED BEAM, SHALL INCLUDE NEW FLOORBEAMS AND REQUIRED FASTENERS. THESE MEMBERS SHALL BE GALVANIZED AND PAINTED PER SECTION 513.
3. ITEM 506.60, STRUCTURAL STEEL, SHALL INCLUDE:
 - NEW BOTTOM LATERAL BRACING AND CONNECTION PLATES
 - NEW BOTTOM CHORD FOR BOTH TRUSSES, INCLUDING SPLICES
 - NEW TRUSS END POSTS
 - SELECTED NEW TRUSS DIAGONAL MEMBERS IN BOTH TRUSSES AS IDENTIFIED ON SHEET 17
 - NEW TOP PLATE OF TOP CHORD SPLICE PLATE AT PANEL POINT U13 ON THE DOWNSTREAM TRUSS ONLY
 - REPLACEMENT OF RIVETS WITH BOLTS IN TRUSS DIAGONAL MEMBER CONNECTIONS TO TOP CHORD AT LOCATIONS IDENTIFIED ON SHEET 17
 - ALL REQUIRED FASTENERS FOR THE ABOVE ITEMS.
4. THE NEW GALVANIZED STEEL GRID FLOORING SHALL BE PAID UNDER ITEM 900.675 SPECIAL PROVISION (STEEL GRID FLOORING).
5. ALL BOLTED CONNECTIONS IN NEW AND EXISTING STEEL SHALL BE MADE WITH 19 mm DIAMETER AASHTO M 164M TYPE I HEX HEAD BOLTS UNLESS OTHERWISE NOTED. BOLT HOLES IN NEW MATERIAL SHALL BE 21mm DIAMETER STANDARD HOLES UNLESS OTHERWISE NOTED. ORIENT BOLTS AS SHOWN IN THE PLANS UNLESS OTHERWISE PERMITTED BY THE ENGINEER.

6. FIELD CONNECTION BOLTS FOR ALL STRUCTURAL COMPONENTS THAT HAVE BEEN PAINTED PRIOR TO BEING ERRECTED SHALL BE ZINC COATED IN ACCORDANCE WITH AASHTO M298, CLASS 50, TYPE 1. FIELD PAINTING OF BOLTS SHALL INCLUDE BOTH THE INTERMEDIATE AND FINAL COATING SYSTEMS AFTER APPROVAL OF THE CONNECTIONS.
7. DIMENSIONS OF STRUCTURAL STEEL SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE PREPARATION OF FABRICATION DRAWINGS TO ENSURE THAT THE NEW TRUSS MEMBERS CONNECT PROPERLY TO THE EXISTING TRUSS MEMBERS. FABRICATION DRAWINGS REQUIRED FOR VARIOUS ITEMS OF WORK SHALL INDICATE THE ACTUAL FIELD MEASUREMENTS AND SHALL BE SO NOTED. TO ENSURE PROPER FIT ALL HOLES REQUIRING FIELD DRILLING AND MEMBERS REQUIRING FIELD CUTTING SHALL BE CLEARLY SHOWN. FABRICATION DRAWINGS SUBMITTED WITHOUT THE CONTRACTOR'S FIELD MEASUREMENTS CLEARLY NOTED ARE NOT ACCEPTABLE AND WILL BE RETURNED WITHOUT REVIEW. ALL COSTS FOR FIELD MEASUREMENTS REQUIRED TO PREPARE THE STRUCTURAL STEEL FABRICATION DRAWINGS SHALL BE INCLUDED IN ITEMS 506.50 AND 506.60 AND WILL NOT BE PAID SEPARATELY.
8. ALL REQUIRED CONNECTIONS NOT DESIGNATED IN THESE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
9. SOME CONNECTIONS HAVE LIMITED CLEARANCE WHICH MAY REQUIRE CLIPPED WASHERS AND PRECLUDE TIGHTENING OF BOLTS WITH POWER TOOLS OR TORQUE WRENCHES.
10. IF THE CONTRACTOR CAN DEMONSTRATE TO THE AGENCY THAT HE/SHE CAN PROPERLY CUT AND DRILL/PUNCH NEW TRUSS STEEL MEMBERS IN THE FIELD TO IMPROVE FIT-UP AND ALIGNMENT DURING REHABILITATION, THIS WILL BE PERMITTED.

STRUCTURAL STEEL PAINTING NOTES:

1. ALL NEW AND EXISTING STRUCTURAL STEEL SHALL BE PAINTED UNLESS OTHERWISE NOTED. SURFACE PREPARATION, CONTAINMENT, AND PAINTING SHALL BE IN CONFORMANCE WITH SECTION 513. THE SURFACE PREPARATION FOR THE REPAINTING OF THE EXISTING STEEL SHALL INCLUDE 100% REMOVAL OF THE EXISTING PAINT SYSTEM.
2. PAINTING OF NEW STEEL SHALL BE PAID FOR UNDER ITEM 513.40, SURFACE PREPARATION, SHOP, AND ITEM 513.25, STRUCTURAL PAINTING, SHOP APPLIED. ALL AREAS OF SHOP PAINTED ELEMENTS THAT ARE DAMAGED FROM TRANSPORTATION, HANDLING, OR ERECTION SHALL BE REPAINTED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
3. PAINTING OF EXISTING STEEL SHALL BE PAID FOR UNDER ITEM 513.36, CONTAINMENT & ENVIRONMENTAL PROTECTION, FIELD; ITEM 513.41, SURFACE PREPARATION, FIELD; AND ITEM 513.30, STRUCTURAL PAINTING, FIELD APPLIED.
4. THE COLOR OF THE FINAL COAT OF PAINT SHALL BE GREEN AND SHALL CONFORM TO FEDERAL COLOR STANDARD NO. 595, COLOR CHIP NO. 14062 IN ACCORDANCE WITH SUBSECTION 708.03.
5. THE CONTRACTOR SHALL ENSURE THAT CONTAINMENT AND ENVIRONMENTAL PROTECTION MEASURES USED FOR PAINTING AND PAINT REMOVAL DO NOT COMPROMISE THE STABILITY OF THE BRIDGE OR OVERSTRESS ANY OF THE TRUSS MEMBERS OR CONNECTIONS. AS SUCH, IT MAY BE NECESSARY TO PERFORM THE PROTECTIVE COATING WORK IN DISCRETE AREAS AND LIMIT THE AMOUNT OF BRIDGE SUBJECT TO CONTAINMENT AT ANY ONE TIME. IN ADDITION TO THE REQUIREMENTS OF SUBSECTION 513.03, THE CONTRACTOR'S CONTAINMENT AND ENVIRONMENTAL PROTECTION PROPOSAL SHALL INCLUDE NECESSARY PLANS AND CALCULATIONS PERFORMED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF VERMONT THAT SUBSTANTIATE THE STABILITY OF THE BRIDGE AND TRUSS MEMBER STRESSES DURING THE CONTAINMENT AND ENVIRONMENTAL PROTECTION OPERATIONS. ALL COST SHALL BE INCLUDED IN ITEM 513.36, CONTAINMENT AND ENVIRONMENTAL PROTECTION, FIELD.

DECK END JOINT NOTES:

1. ITEM 516.11, BRIDGE EXPANSION JOINT, VERMONT, SHALL INCLUDE THE FABRICATION AND ERECTION OF COMPLETE JOINT ASSEMBLIES AT BOTH ENDS OF THE BRIDGE DECK. ITEM 516.11 SHALL INCLUDE ALL STEEL PLATES, ANGLES, ANCHOR STUDS, EXTRUSIONS, BOLTS, ELASTOMERIC STRIP SEAL AND ANY OTHER MISCELLANEOUS MATERIAL NECESSARY TO INSTALL THE JOINT.
2. THE FINAL FINISH OF THE JOINT SHALL BE COVERED AND PROTECTED DURING PLACEMENT OF CONCRETE IN THE STEEL GRID DECK.
3. ALL STEEL COMPONENTS SHALL BE AASHTO M 270M GRADE 250 GALVANIZED OR METALIZED PER SECTION 506.
4. NO 'LOW PROFILE' STEEL EXTRUSIONS SHALL BE ALLOWED.
5. THE ELASTOMERIC STRIP SEAL SHALL BE FURNISHED AS ONE CONTINUOUS PIECE AT EACH JOINT. NO SPLICES WILL BE ALLOWED.
6. THE ANGLES AND VERTICAL PLATES FOR THE JOINTS SHALL BE FURNISHED AS CONTINUOUS PIECES.
7. EACH DECK END JOINT SHALL BE SHOP ASSEMBLED AND SHIPPED AS ONE UNIT.

CONCRETE NOTES:

1. CONCRETE IN GRID DECK SHALL BE ITEM 501.32, CONCRETE, HIGH PERFORMANCE CLASS AA, WITH A DESIGN STRENGTH OF $f'c = 30$ MPa. CONCRETE IN ABUTMENT BACKWALLS SHALL BE ITEM 501.34, CONCRETE, HIGH PERFORMANCE CLASS B, WITH A DESIGN STRENGTH OF $f'c = 25$ MPa.
2. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 25 MILLIMETERS BY 25 MILLIMETERS, UNLESS OTHERWISE NOTED.
3. ITEM 514.10, WATER REPELLENT, SILANE, SHALL BE APPLIED TO THE TOP AND FRONT FACE OF EACH ABUTMENT BACKWALL.
4. MINIMUM CLEAR COVER FOR REINFORCING STEEL IN THE ABUTMENT BACKWALLS SHALL BE 80 MILLIMETERS.
5. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE +/- 25 MILLIMETERS FOR SPACING, AND +/- 5 MILLIMETERS FOR CLEARANCE.
6. REINFORCING STEEL IN THE ABUTMENT BACKWALLS SHALL BE EPOXY COATED AND SHALL BE PAID AS ITEM 507.17, EPOXY COATED REINFORCING STEEL. DRILL AND GROUT BARS SHALL BE UNCOATED AND SHALL BE PAID AS ITEM 507.15, REINFORCING STEEL.

BEARING NOTES:

1. BEARINGS SHALL BE PERFORMED FABRIC PAD TYPE AS DETAILED, AND SHALL BE PAID AS ITEM 531.0, BEARING DEVICE ASSEMBLY, PREFORMED FABRIC PAD.
2. ALL STEEL IN BEARING DEVICES, EXCEPT STAINLESS STEEL SLIDING SURFACES, SHALL BE AASHTO M 270M, GRADE 250.
3. DRILL AND SET ANCHOR BOLTS WITH A MINIMUM OF 400 MILLIMETERS EMBEDMENT INTO EXISTING STONE MASONRY BRIDGE SEATS. HOLES SHALL BE 25 MILLIMETERS LARGER IN DIAMETER THAN THE ANCHOR BOLTS. BOLTS SHALL BE SET IN A TYPE IV MORTAR. ALL COSTS FOR ANCHOR BOLTS, DRILLING OR CORING HOLES, AND MORTAR SHALL BE INCLUDED UNDER ITEM 531.0.
4. ANCHOR BOLTS SHALL BE SWEDGED WITH 100 MILLIMETERS OF THREAD. EXPANSION BEARING NUTS ARE TO BE DRAWN UP FINGER TIGHT AND THEN BACKED OFF 5 MILLIMETERS. THREADS SHALL BE BURRED ABOVE NUT TO PREVENT NUT REMOVAL. TOUCH UP ANY DAMAGED AREAS WITH A ZINC-RICH PAINT AS NECESSARY.

STATE OF VERMONT AGENCY OF TRANSPORTATION			
Town Of	DUMMERSTON	Bridge No.	37
Highway No.	TH 62	Log Sta.	
		Surv. Sta.	
TH 62 OVER WEST RIVER			
CONSTRUCTION NOTES			
Designed By	T. S. BRYANT	Drawn By	C. L. CILLEY
Checked By	Date	Bridge Design Supervisor	
S. M. HODGDON	4/09	S. M. HODGDON	Date 4/09
PROJECT	DUMMERSTON	PROJECT NO.	BHO 1442 (28)
I.G.C. Info.			
Bridge Sheet No.	ZJ080CN	Sheet	16 of 49