

# GENERAL SHOP NOTES


## SPECIFICATIONS:

DESIGN SPECIFICATIONS:  
 -AASHTO STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES 17th EDITION.  
 -VTRANS 2006 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

MATERIAL SPECIFICATIONS:  
 -VTRANS 2006 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

FABRICATION SPECIFICATIONS:  
 -VTRANS 2006 STANDARD SPECIFICATIONS FOR CONSTRUCTION.  
 -AASHTO BRIDGE CONSTRUCTION SPECIFICATIONS (MOST CURRENT)

## MATERIAL:

-ALL STEEL TO BE OF DOMESTIC ORIGIN.  
 -ALL STEEL SHALL BE ASTM A709 GR 50 UNLESS NOTED OTHERWISE ON THE INDIVIDUAL SHOP DRAWINGS.  
 -ALL STEEL SUBJECT TO TENSILE STRESS AS INDICATED BY "T2" IN THE MATERIAL DESIGNATION SHALL BE FURNISHED TO MINIMUM CHARPY V-NOTCH TOUGHNESS REQUIREMENTS IN ACCORDANCE WITH ASTM A673.  
 -(FCM) DENOTES FRACTURE CRITICAL MATERIAL. ALL FRACTURE CRITICAL STRUCTURAL STEEL DESIGNATED "FCM" ON THE SHOP DRAWINGS AND IN THE MATERIAL DESIGNATION AS "F2" SHALL BE FURNISHED TO MINIMUM CHARPY V-NOTCH TOUGHNESS REQUIREMENTS IN ACCORDANCE WITH ASTM A673.  
 - INDICATES MILL ROLLING DIRECTION IF REQUIRED ON DETAILS.

## FASTENERS:

ALL BOLTS FOR THIS PROJECT TO BE GALVANIZED


-GALVANIZED BOLTS: ASTM A325 TYPE 1.  
 -GALVANIZED NUTS: ASTM A563 GR DH OR A194 GR 2H.  
 -GALVANIZED WASHERS: ASTM F436.

NOTE: ALL GALV BOLTS, NUTS, AND WASHERS WILL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH ASTM B695-CLASS 50. INSTALL WASHER UNDER HEAD OF BOLT AS WELL AS NUT.

## SHOP PROCEDURE:

- ALL DIMENSIONS ARE IN IMPERIAL UNITS.  
 - ALL SHIPPING WEIGHTS ARE IN POUNDS  
 - FRACTURE CRITICAL MATERIAL (FCM) SHALL BE CLEANED PER SSPC-SP6 (COMMERCIAL BLAST CLEANING) PRIOR TO FABRICATION FOR INSPECTION.  
 - ALL RE-ENTRANT CUTS TO HAVE 1" MIN RADIUS.  
 - REMOVE ANY BURRS, AND EASE ALL SHARP EDGES  
 - ALL STRUCTURAL STEEL MEMBERS SHALL BE STAMPED WITH LOW STRESS STEEL STENCILS WITH IDENTIFICATION MARKS (THE SAME AS NOTED ON THE ASSEMBLY DRAWINGS). THE IDENTIFICATION MARKS SHALL BE IN A CONSPICUOUS LOCATIONS WHERE THEY CAN BE EASILY READ.  
 - ALL SHIPPING MARKS ARE TO BE LOCATED AT THE LEFT END OF EACH ASSEMBLY, AS THE ASSEMBLY IS ILLUSTRATED ON THE DETAILS.

## BOLTING:

-ALL BOLTING SHALL BE SUPPLIED AND INSTALLED WITH ONE NUT, ONE WASHER UNDER THE HEAD AND ONE WASHER UNDER THE NUT.  
 -ALL BOLTS SHALL BE  $\frac{7}{8}$ " IN  $\frac{13}{16}$ " HOLES UNLESS NOTED OTHERWISE.  
 -ALL BOLTS SHALL BE INSTALLED WITH THE NUTS PROTECTED FROM THE WEATHER OR OTHER CORROSIVE ELEMENTS UNLESS CLEARANCE RESTRICTIONS DICTATE OTHERWISE.  
 -BOLTS INSTALLED WITH THE STEM VERTICAL SHALL HAVE THE HEADS UP.  
 -BOLTS INSTALLED WITH THE STEM HORIZONTAL SHALL HAVE THE HEADS OUT TOWARDS THE WEATHER.  
 -ALL SHOP BOLTS TO BE INSTALLED TO SLIP CRITICAL CONDITION U.N.O.. 

## HOLES:

-ALL DRILLED HOLES ARE TO BE DRILLED FROM THE SOLID.  
 -ALL HOLES TO BE  $\frac{1}{8}$ " DIA FOR  $\frac{3}{4}$ " DIA BOLTS UNLESS SPECIFICALLY NOTED OTHERWISE.  
 -ALL FLOOR SYSTEM HOLES ARE TO BE DRILLED.  
 -WHENEVER HOLES ARE TO BE USED AS A TEMPLATE IN NEW OR EXISTING STEEL A HOUGAN, JANCY OR APPROVED EQUAL SHALL BE USED TO DRILL THE MATING PIECES.  
 -ALL PARTS CONNECTING DIRECTLY TO ANY TRUSS TOP CHORD OR BOTTOM CHORD ARE TO BE DRILLED.

## INSPECTION:

-SHOP INSPECTION TO BE PROVIDED AND SPECIFIED BY THE VERMONT DEPARTMENT OF TRANSPORTATION.  
 -ALL NON DESTRUCTIVE TESTING AS REQUIRED PER SPECIFICATIONS AND TO BE PROVIDED BY THE VERMONT DEPARTMENT OF TRANSPORTATION.


## WELDING:

-ALL WELDING IF REQUIRED TO BE IN ACCORDANCE WITH AWS D1.5

## FINISH:

CLEANING:  
 - ALL STEEL SHALL BE PREPARED FOR BLASTING BY REMOVING OIL, GREASE, DIRT, SALT OR OTHER CONTAMINANTS BY THE METHODS SPECIFIED IN SSPC-SP1, SOLVENT CLEANING.  
 - BLAST CLEAN ALL STEEL TO BE PAINTED TO SSPC-SP10 (NEAR WHITE) BEFORE PAINTING.

FLOOR SYSTEM SHOP PAINT;  
 - PAINT ALL STEEL AS FOLLOWS:  
 - BLAST CLEAN PER SSPC-SP10 ALL FAYING SURFACES OF BOLTED CONNECTIONS AND PRIME WITH CARBOZINC 11 HS PRIOR TO ASSEMBLY.

- PRIME COAT: CARBOZINC 11 HS @ 2 TO 3 MILS D.F.T. COLOR 0300 GREEN (SINGLE COAT NOT TO EXCEED 10 MILS).  
 - INTER. COAT: CARBOGUARD 893 @ 4 TO 6 MILS D.F.T. COLOR 0800 WHITE (SINGLE COAT NOT TO EXCEED 10 MILS).  
 - FINISH COAT: CARBOTHANE 133 LH @ 3 TO 5 D.F.T. FINISH COAT COLOR TO BE 14062 GREEN (PER FEDERAL STANDARD NO. 595) (SINGLE COAT NOT TO EXCEED 7 MILS)  
 -NO INTERMEDIATE OR FINISH COAT IS TO BE APPLIED WITHIN 3" OF OPEN HOLES OR NUTS AND BOLTS U.N.O..  
 -NO PAINT ON SHOP BOLTS OR NUTS THAT ARE INSTALLED SNUG TIGHT. TORQUED BOLTS SHALL RECEIVE PAINT.  
 - ALL SURFACES INDICATED AS "BARE STEEL NO PAINT NO PRIMER " (TOP FLANGE OF FLOOR BEAMS AND STRINGERS) ON DETAIL DRAWINGS 1 THROUGH 7 SHALL RECEIVE A MIST COAT, 1.5 MILS OF PRIMER ONLY. 

UPPER STEEL SHOP PAINT:  
 (ALL STEEL ABOVE FLOOR SYSTEM IN ELEVATION)

- PAINT ALL STEEL AS FOLLOWS:  
 - BLAST CLEAN PER SSPC-SP10 ALL FAYING SURFACES OF BOLTED CONNECTIONS AND PRIME WITH CARBOZINC 11 HS PRIOR TO ASSEMBLY.

- PRIME COAT: CARBOZINC 11 HS @ 3 TO 5 MILS D.F.T. COLOR 0300 GREEN (SINGLE COAT NOT TO EXCEED 10 MILS).  
 - INTER. COAT: CARBOGUARD 893 @ 4 TO 6 D.F.T. COLOR 0800 WHITE (SINGLE COAT NOT TO EXCEED 10 MILS) TO BE FIELD APPLIED BY OTHERS.  
 -NO INTERMEDIATE COAT IS TO BE APPLIED WITHIN 3" OF OPEN HOLES OR NUTS AND BOLTS U.N.O..  
 -NO PAINT ON SHOP BOLTS OR NUTS THAT ARE INSTALLED SNUG TIGHT. TORQUED BOLTS SHALL RECEIVE PAINT.  
 - FINISH COAT: CARBOTHANE 133 LH TO BE FIELD APPLIED BY OTHERS.

## FIELD DRILLED HOLES:

-ALL HOLES TO BE FIELD DRILLED WILL BE IDENTIFIED AT APPROVAL.  
 -ALL ERECTION DRAWINGS AND DETAILS WILL BE UPDATED, ILLUSTRATING ALL FIELD DRILLED HOLES.  
 -ALL HOLES TO BE FIELD DRILLED WILL BE ILLUSTRATED ON THE ERECTION DRAWINGS AND DETAILS AS  $\otimes$  OR  $\otimes$ .

## LIFTING WEIGHTS:

-ALL WEIGHTS ARE APPROX.  
 -MINOR ITEMS SUCH AS BOLTS, NUTS, WASHERS AND COATINGS NOT INCLUDED.  
 -THE LIFTING WEIGHTS ARE FOR REFERENCE ONLY, CRANE OPERATOR / ERECTOR IS RESPONSIBLE FOR THEIR OWN INDEPENDENT WEIGHT CALCULATION.

NO EXCEPTION TAKEN  
 REJECTED  
 MAKE CORRECTIONS NOTED  
 REVISE AND RESUBMIT  
 SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

DATE 6/8/12 BY 

5	06/05/12	RC	NOTES UPDATED PER INSTRUCTIONS
4	05/23/12	RC	NOTES UPDATED PER INSTRUCTIONS
3	05/08/12	RC	PAINT NOTES UPDATED PER INSTRUCTIONS
2	05/02/12	RC	FOR CONSTRUCTION
1	03/28/12	RC	FOR FINAL APPROVAL
D	03/15/12	RC	BOLTS REVISED TO A325 GALV
C	03/06/12	RC	FOR APPROVAL
B	03/05/12	RC	FOR STS REVIEW
A	02/28/12	RC	FOR STS REVIEW
NO.	DATE	BY	REVISION



**STS STEEL, INC.**  
 ENGINEERS \* FABRICATORS \* ERECTORS  
 PH: (518) 370-2693 FAX: (518) 370-2696

## DRAWING TITLE

GENERAL NOTES			
PROJECT No.	US RT 2 BRIDGE No 24	FEDERAL AID No.	
ENGINEER :	CHA		
CUSTOMER :	Harrison & Burrows Bridge Constructors, Inc.		
PROJECT :	RICHMOND, VT - TRUSS BRIDGE REHAB		
RICHMOND, VT			
HOLES:	15/16" U.N.O.	PAINT:	PER SPEC
BOLTS:	A325 GALV U.N.O.	DR.BY:	RC
WELDS:	AWS D1.5	CHK.BY:	SDS/STS
		JOB NO.	1156
		DWG NO.	GN1
		DATE:	03/06/12