

**GENERAL NOTES**

**CONSTRUCTION SPECIFICATIONS**

ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011 WITH LATEST REVISIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS FOR HIGHWAY BRIDGES DATED 2012, AND ITS LATEST REVISIONS.

**MATERIAL SPECIFICATIONS**

- 1) ALL STEEL TO BE UNPAINTED AASHTO M270 (ASTM A708) GRADE 50W (UM).
- 2) MATERIAL NOTED "CVM" OR "T2" ON DETAIL DRAWINGS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS SECTION 714.01.
- 3) HIGH STRENGTH BOLTS:  
-ASTM A325 (AASHTO M164) TYPE 3 W/ A563 GRADE C3 NUTS, F959 (TYPE 3) DIRECT TENSION INDICATOR (DTI) & F436W WASHERS.  
BOLTS & NUTS SHALL BE ROTATIONAL CAPACITY TESTED. DO NOT MIX NUTS & BOLTS FROM DIFFERENT CONTAINERS UNLESS ALL BOLTS & NUTS HAVE THE SAME LOT NUMBER.
- 4) DIRECT TENSION INDICATOR WASHERS CONFORMING TO ASTM F959 SHALL BE INSTALLED WITH ALL HIGH STRENGTH BOLTS.

**FABRICATION**

- 1) ALL HOLES SHALL BE DRILLED FULL SIZE UNLESS NOTED.
- 2) ALL FINIS, SLIVERS AND TEARS SHALL BE REMOVED.
- 3) ALL ROUGH SURFACES SHALL BE GROUND SMOOTH.
- 4) FLAME CUT EDGES SHALL BE GROUND OVER THEIR ENTIRE SURFACE SUCH THAT ANY HARDENED SURFACE LAYER IS REMOVED.

**WELDING**

- 1) THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH THE CURRENT AASHTO/AWS D1.5 BRIDGE WELDING CODE AND IN ADDITION TO SPECIFICATIONS SHOWN ABOVE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.
- 2) WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESSES. ALL WELDS ARE CONTINUOUS U.N.
- 3) NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.
- 4) SEE DETAIL "WT1" ON THIS DRAWING FOR WELD TERMINATION DETAIL.
- 5) SHOP APPLIED STUDS SHALL BE AUTO END WELDED. SEE DETAIL "SSI".

**WELD PROCEDURE**

THE FOLLOWING CASCO WELDING PROCEDURES SHALL BE USED:

	WELD DESCRIPTION	MAT'L GRADE	MP	CASCO WELD PROC.
GIRDERS	GIRDER WEB TO FLANGE FILLET WELD	M270-50W TO M270-50W	MP1	201
	GIRDER STIFFENER TO WEB FILLET WELDING	M270-50W TO M270-50W	MP4	250
	GIRDER STIFFENER TO FLANGE FILLET WELDING	M270-50W TO M270-50W	MP5	480
	DRAIN PLATES TO GIRDER FLANGE	M270-50W TO M270-50W	MP8	480 or 610

**CONNECTIONS**

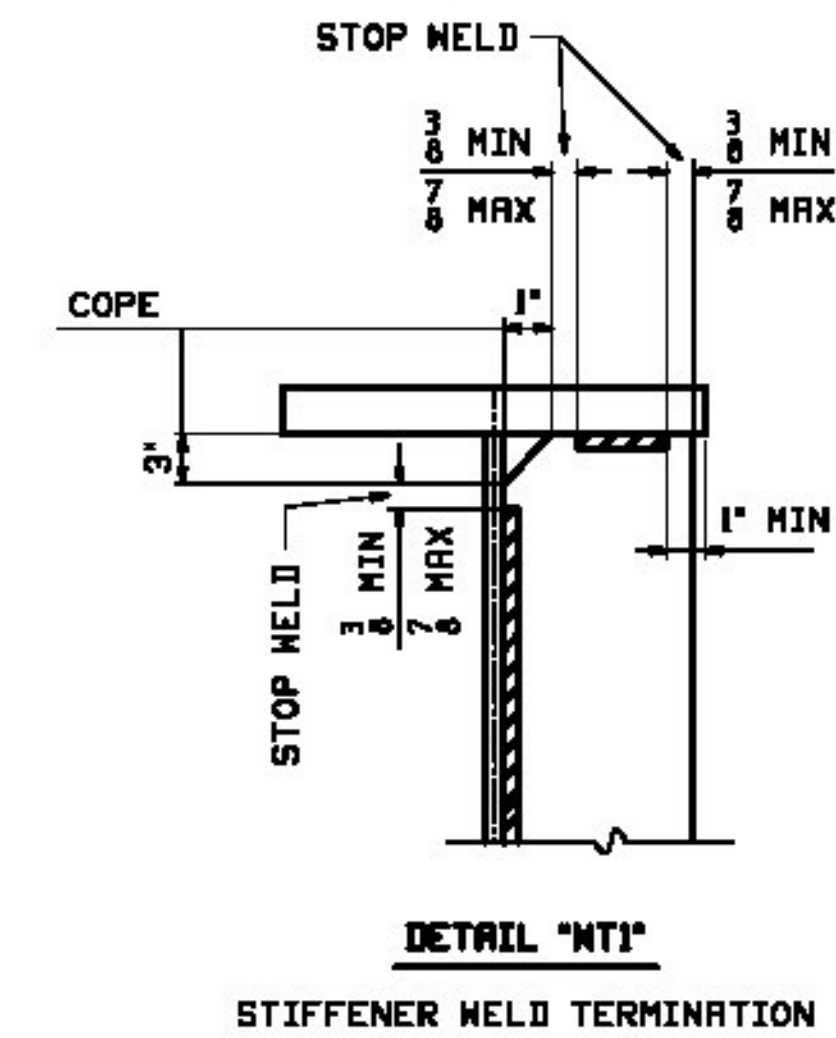
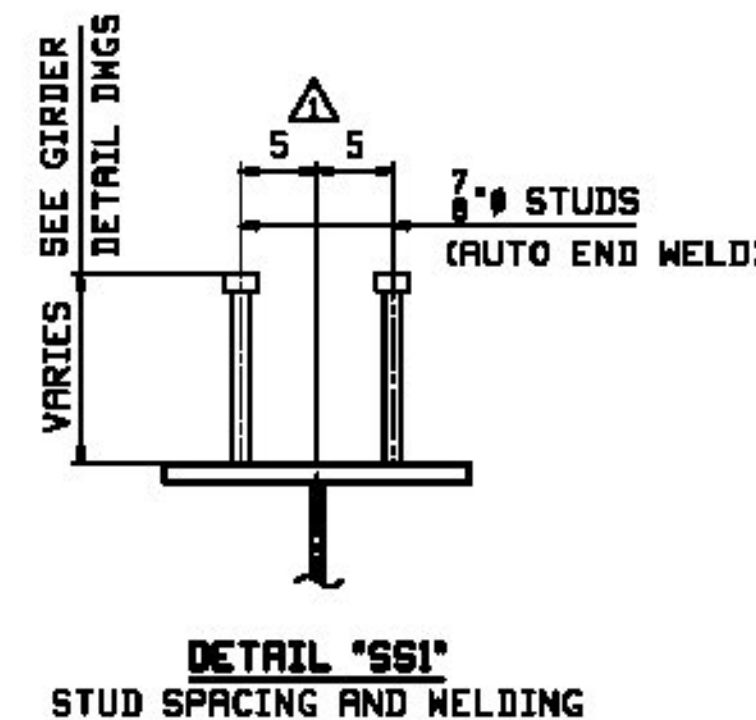
- 1) ALL CONNECTIONS SHALL BE MADE WITH A-325 HS BOLTS, INSTALLED PER SECTION 506.19(c). BOLTED CONNECTIONS SHALL BE INSTALLED USING DIRECT TENSION INDICATORS. REFER TO SECTION 506.19 OF THE GENERAL SPECIAL PROVISIONS. (SEE BOLT DETAILS THIS DRAWING).
- 2) BOLTS SHALL HAVE HEAVY HEX NUT, HEAVY HEX HEAD, DTI, AND AT LEAST ONE FLAT WASHER EACH. WASHER TO BE PLACED UNDER TURNED ELEMENT.
- 3) PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS.

**CLEANING & PAINTING**

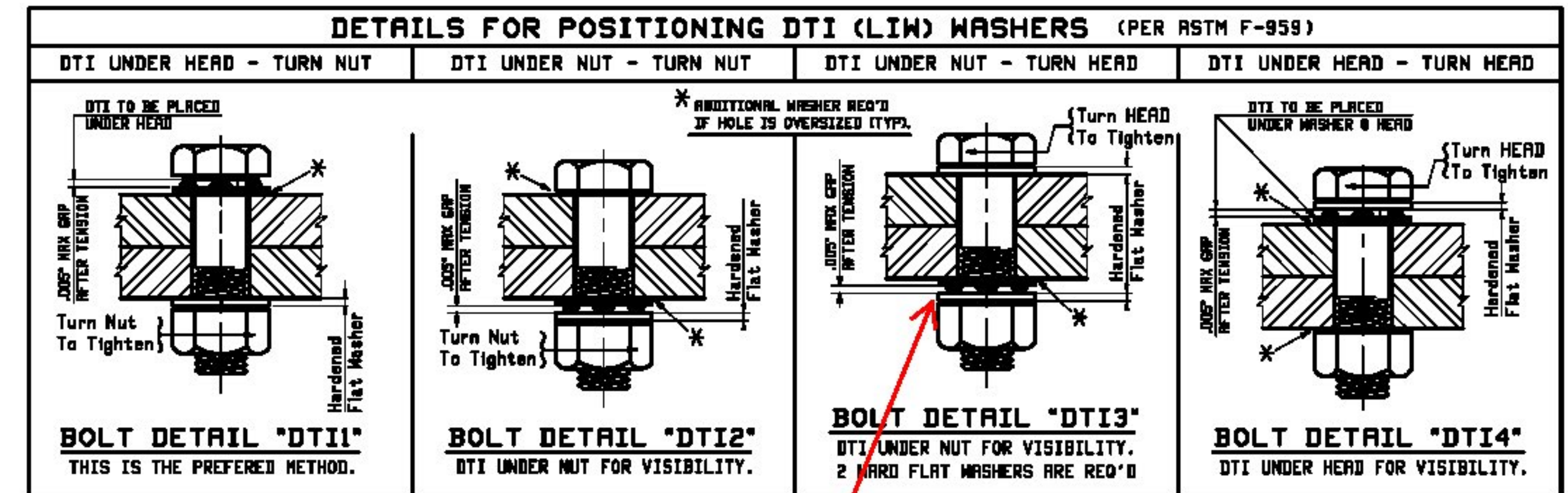
UNPAINTED STEEL SHALL BE BLAST CLEANED TO SSPC SP-10 TO ACHIEVE A UNIFORM WEATHERED APPEARANCE.  
ALL STEEL SHALL BE UNPAINTED.

Are the lifting tabs going to be removed after PBU's are set? If so, should methods/location/etc. for removal be included on these plans??

We are presuming that they are being left in place. Lifting tabs are 9" tall and shear studs are 10" tall in this area. Assumed haunch is 7" in this area, so the transverse reinforcing should be able to be placed around the lifting tabs.



NOTE TO ENGINEER:  
WHERE NOTED ARE NOT INTENDED TO BE ALL INCLUDING AND COMPLIANCE WITH RELEVANT SPECIFICATIONS SHOULD BE MAINTAINED.



Flat washer not required here.

Vermont Agency of Transportation  
**RECEIVED**

May 19, 2016

RESUBMIT No Approved AsNoted  
BY RSY DATE 05/26/2016

5/14/16	APPROVAL COMMENTS	JTB	LWD		
REV. DATE	REMARKS	DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:	
				SHOP BOLTS:	
DESCRIPTION: GENERAL NOTES					
			CASCO BAY STEEL STRUCTURES, INC. 1 WALLACE AVE. PHONE (207) 780-6722 SOUTH PORTLAND, ME 04106 FAX: (207) 780-6726		
STRUCTURE: TH-4 OVER WHITNEY BROOK		ROUTE NO: TH-4, RURAL MINOR COLLECTOR	BRIDGE REPLACEMENT	COUNTY OF ORLEANS	
DATE:	02/25	CHKD:	JTB	DATE:	03/02
DATE:	03/02	CHKD:	LWD	DATE:	
LOCATION: TOWN OF CRAFTSBURY, VERMONT	JOB NO.	DWG NO.			
PROJ NO. BO 1449(34)	649-1	GNI		REV. A	
CUSTOMER: CCS CONSTRUCTORS INC.					