

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.
	VT	

## GENERAL SHOP NOTES

### SPECIFICATIONS:

— MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990, ITS LATEST REVISIONS, SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES DATED 1992, AND ITS LATEST REVISIONS.

### MATERIAL:

- UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL TO BE AASHTO M270-50W.
- (T) INDICATES CHARPY V-NOTCH TESTING REQUIRED.
- △ SHOP BOLTS TO BE H.S. BOLTS ASTM A325, TYPE 3 W/1 ASTM A563 GR. DH3 HVY HEX NUT AND ONE F436 WEATHERING WASHER EACH BOLT. (UN).
- RCT INDICATES ROTATIONAL CAPACITY TESTED BOLTS. DO NOT MIX NUTS, BOLTS AND WASHERS FROM DIFFERENT CONTAINERS UNLESS ALL NUTS, BOLTS AND WASHERS HAVE THE SAME LOT NUMBER.

### SHOP PROCEDURE:

- CAMBER TOLERANCE: -0, + 3/4"
- ALL RE-ENTRANT CUTS TO HAVE 1" MIN. RADIUS.
- ⊗ DENOTES THICKER SIDE OF SOLE PLATE.
- ⊕ DENOTES SET LINE.

— [RA] NOTE: "HOLES MARKED [RA] ARE TO BE SUB-PUNCHED/SUB-DRILLED 1/8" UNDER SIZE AND REAMED TO FULL SIZE OR DRILLED FROM SOLID WITH CONNECTING PARTS ASSEMBLED AND MATCH MARKED".

### — MINIMUM BENDING RADIUS FOR BENT PLATES

WHEN THICKNESS t	RADIUS INSIDE OF BENT PLATE
UP TO 1"	2 1/2 t
OVER 1" TO 1 1/2	3 t
OVER 1 1/2 TO 2 1/2	3 1/2 t
OVER 2 1/2 TO 4	4 t

### INSPECTION:

— SHOP INSPECTION BY: E. L. CONWELL.

### WELDING:

- ALL WELDING AND FABRICATION SHALL BE PERFORMED IN CONFORMANCE WITH ANSI/AASHTO/AWS D1.5-88 BRIDGE WELDING CODE.
- FOR WELDING STIFFENERS AND CONNECTION PLATES TO GIRDERS SEE "TYP. WELDING DETAIL".

### DRAWING REFERENCE:

WEB CAMBER DIAGRAMS	- PREFIXED "WC"
FLANGE SPLICES	- PREFIXED "FS"
GIRDER JOB STANDARDS	- PREFIXED "X"
SHOP ASSEMBLY DIAGRAM	- PREFIXED "SA"

### NON-DESTRUCTIVE TESTING:

— ALL WEB AND FLANGE BUTT SPLICES SHALL BE RADIOGRAPHICALLY TESTED AS FOLLOWS:

<u>BUTT SPLICES:</u>	<u>TESTING:</u>
FLANGE SPLICES -----	100% @ TENSION SPLICE
	25% @ COMPRESSION SPLICE
WEB SPLICES -----	1/6 WEB @ TENSION FLANGE
	+ 25% OF REMAINDER

— DYE PENETRATION INSPECTION SHALL BE PERFORMED AT ENDS OF FLANGE AND WEB BUTT WELDS.

— MAGNETIC PARTICLE INSPECTION:  
MAGNETIC PARTICLE INSPECTION IS REQUIRED ON ALL FILLET WELDS AND GROOVE WELDS NOT TESTED BY ANOTHER METHOD. INSPECTION IS REQUIRED ON 10% OF ALL WELDS GREATER THAN 10'-0" IN LENGTH AND 1'-0" OF ALL WELDS LESS THAN 10'-0" IN LENGTH IN MAIN MEMBERS.

### CLEANING:

— BLAST CLEAN ALL STEEL TO SSPC-SP10 (NEAR WHITE) EXCEPT BLASTING NOT REQUIRED FOR GALVANIZED SURFACES.  
BLAST CLEANING PROFILE TO BE FROM 1.5 TO 2.5 MILS DEEP.

### PAINT:

— AREAS TO BE PAINTED (NOTED ON DETAIL DWGS.) SHALL BE PAINTED WITH A 3-COAT SHOP APPLIED SYSTEM (UN) CONSISTING OF:

- PRIME COAT - CARBO ZINC 11 HS (INORGANIC ZINC) APPLIED AT 2.0 TO 6.0 MILS DFT.
- INTERMEDIATE COAT - CARBOLINE 893 (EPOXY) APPLIED AT 3.0 TO 7.0 MILS DFT.
- FINISH COAT - CARBOLINE 133HB (POLYURETHANE) APPLIED TO 3.0 TO 7.0 DFT.

FINISH COAT COLOR TO BE DARK BROWN NO.20059 AS SHOWN IN FEDERAL STD. NO. 595.

— PRIME COAT TO BE APPLIED WITHIN 8 HRS. OF BLAST CLEANING.

— STRIPE COAT ALL EDGES OF PLATES, ANGLES OR OTHER SHAPES, BOLTS AND NUTS PRIOR TO THE APPLICATION OF THE PRIME COAT.



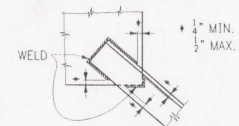
— FIELD BOLTED CONTACT SURFACES WITHIN THE AREAS TO BE PAINTED SHALL RECEIVE THE PRIME COAT ONLY WITHIN 3" OF OPEN HOLES.

— SURFACES WITHIN 2" OF FIELD WELDING (AS NOTED ON DETAILS) SHALL RECEIVE A LIGHT RUST PREVENTIVE COAT OF PRIMER, NOT TO EXCEED 1.5 MILS DFT.

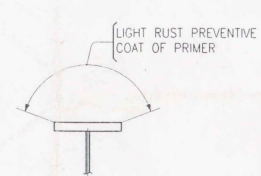
— SURFACES IN CONTACT WITH CONCRETE WITHIN THE AREAS TO BE PAINTED SHALL RECEIVE A LIGHT RUST PREVENTIVE COAT OF PRIMER, NOT TO EXCEED 1.5 MILS DFT. THESE SURFACES ARE NOTED ON THE DETAIL DRAWINGS.

— TOP FLANGE OF GIRDER AS SHOWN IN SECTION-A SHALL RECEIVE A LIGHT RUST PREVENTIVE COAT OF PRIMER, NOT TO EXCEED 1.5 MILS DFT.

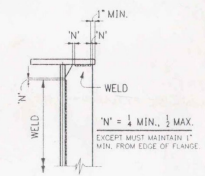
ALL AROUND WELDS TO CROSSFRAME GUSSET PLATES TO BE TERMINATED FROM EDGE OF GUSSET PLATE OR ANGLE AS INDICATED.



CROSSFRAME WELDING DETAIL



SECTION-A



TYP. WELDING DETAIL

RECEIVED  
 CND BY: \_\_\_\_\_  
 DTD BY: \_\_\_\_\_  
 MAY 27 1996  
 RESUBMIT APPROVED  
 BY: \_\_\_\_\_ DATE: \_\_\_\_\_

Rec. 6-26-96

△		
△	Eliminated Additional Finish Coat/Pr. State	5-17-96
△	ADDED SHOP BOLT NOTE	2-21-96
NO.	REVISION	DATE

HIGH STEEL STRUCTURES, INC. 1770 Hempstead Road  
 Lancaster, PA 17602-0008  
 Phone 717/299-5211  
 A Division of High Industries, Inc.

<b>GENERAL SHOP NOTES</b>	
U.S. ROUTE 7 OVER OTTER CREEK	
BRIDGE NO. 79	
TOWN OF WALLINGFORD, COUNTY OF RUTLAND	
STATE OF VERMONT	
AGENCY OF TRANSPORTATION	
STATE CONTRACT OR REF. NO.	PROJECT NO. BRS-0137(13) MAY 27 1996
CONTRACTOR	J. A. McDONALD, INC.
IN CHARGE	abs MADE BY: 无 CND BY: SG DATE: 1-27-96
CONTRACT NUMBER	VT-95367 DRAWING NUMBER: N1

**SHOP DRAWING REVIEW**  
 REVIEWED FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR DETAILS.  
 APPROVED  
 APPROVED AS SHOWN  
 APPROVED WITH RESERVATIONS  
 REJECTED - SEE REMARKS  
 Barnes and Jarris, Inc.  
 807 Devonian Street  
 Montpelier, Vermont 05602-1118  
 DATE: 5-17-96 BY: ELM