

**Casco Bay Steel Structures, Inc.**  
WELDING PROCEDURE SPECIFICATION

Material specification ASTM Gr 50 + 50W  
 Welding process Submerged ARC Welding  
 Manual or machine Machine  
 Position of welding Flat + Horizontal  
 Filler metal specification AWS A5-23  
 Filler metal classification E8018-ENiK-Ni1-H8  
 Flux LINCOLN 960-Elec LA-75  
 Shielding gas NA Flow rate NA  
 Single or multiple pass Single & Multiple  
 Single or multiple arc Single  
 Welding current DC  
 Polarity DCRP  
 Welding progression See Detail  
 Root treatment Grind-wire Brush-Area Free of Slag-RUST & Moisture  
 Preheat and interpass temperature See Table  
 Postheat temperature NA  
 Heat Input Min 51.3 kJ/in Max 73.4 kJ/in PCR-1 = 64.1 kJ/in

Vermont Agency of Transportation

**RECEIVED**

CK'D BY JWC OK'D BY \_\_\_\_\_

November 4, 2013

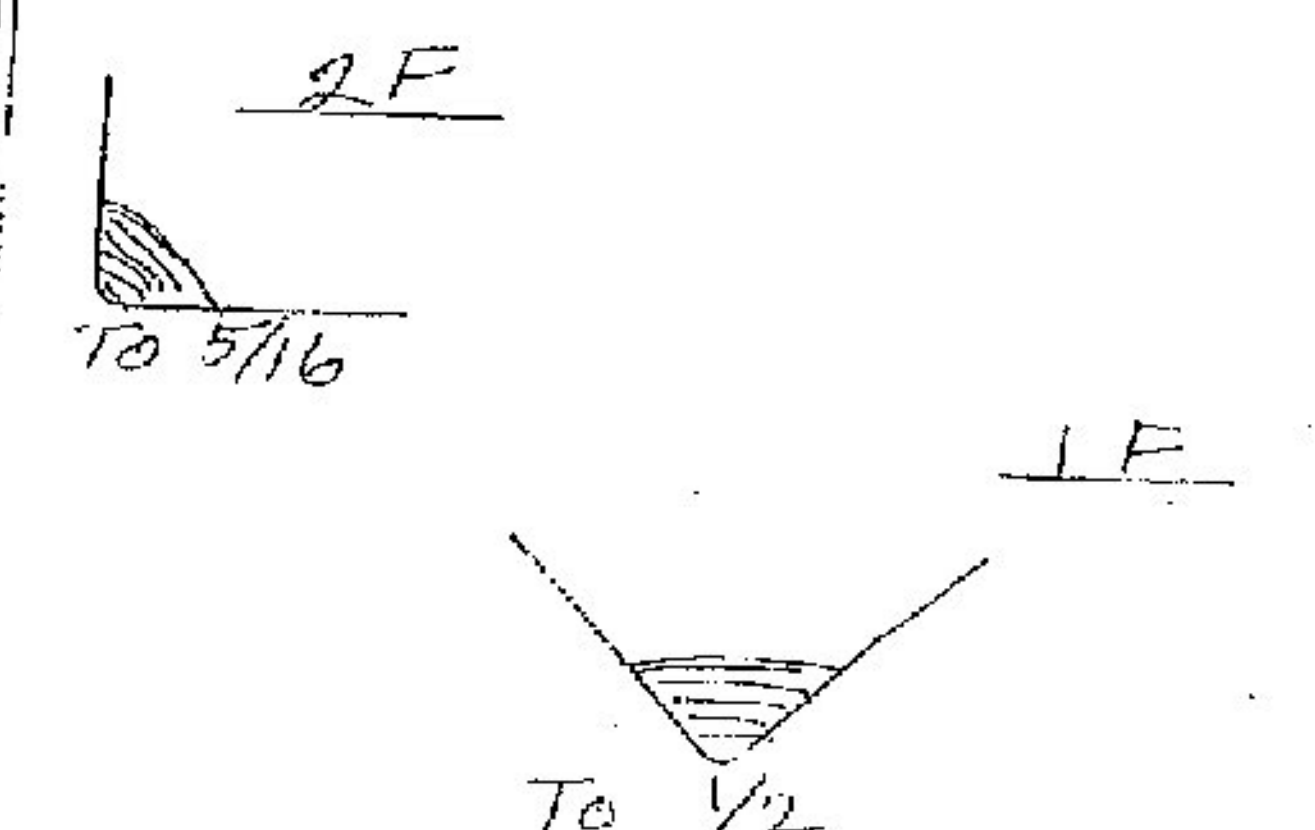
RESUBMIT No Approved  
 BY James Lacroix DATE 11/08/2013

Minimum Preheat and Interpass Temperature, °C (°F)

| Welding Process (Base Metal)   | Thickness of Thickest Part at Point of Welding, mm (in) |   |   |                       |
|--|---|---|---|-----------------------|
|  | To 20 mm (3/4 in) Incl.                                 | Over 20 mm (3/4 in) to 40 mm (1-1/2 in) Incl. | Over 40 mm (1-1/2 in) to 65 mm (2-1/2 in) Incl. | Over 65 mm (2-1/2 in) |
| SAW; OMAW; FCAW; SMAW (M270M (M270) (A 709M (A 709)) Or. 250 (3G), 345 (5G), 345W (50W), HPS 345W (HPS 30W)) | 10 (50)   | 20 (20)                                       | 65 (150)  | 110 (225)             |
| SAW; OMAW; FCAW; SMAW (M270M (M270) (A 709M (A 709)) Or. HPS 485W (HPS 20W), 690 (100), 690W (100W))         | 10 (50)   | 50 (125)                                      | 80 (175)  | 110 (225)             |

VT-ACT; Bristol  
Bridge No. 31  
Proj. No. BRD 1445 (32)  
C.B.S.S. NO. 534

WELDING PROCEDURE

| Pass no.              | Electrode size | Welding current |           | Travel speed  | Notes  |
|-----------------------|----------------|-----------------|-----------|---------------|--|
|                       |                | Amperes         | Volts     |               |  |
| <u>5</u><br><u>32</u> | <u>5</u>       | <u>620</u>      | <u>31</u> | <u>18 IPM</u> | <u>See 5.13</u><br><u>AWS D1-5 Joint detail Fillet</u><br> |
|                       |                | <u>570</u>      | <u>29</u> | <u>15</u>     |  |
|                       |                | <u>To</u>       | <u>To</u> | <u>To</u>     |  |
|                       |                | <u>650</u>      | <u>33</u> | <u>20</u>     |  |

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable A.W.S. codes or contract specifications

Procedure no. 201 - ST OF VT 1 Contractor Casco Bay Steel  
 Revision no. \_\_\_\_\_ Authorized By Paul E. [Signature]  
April 13, 2012