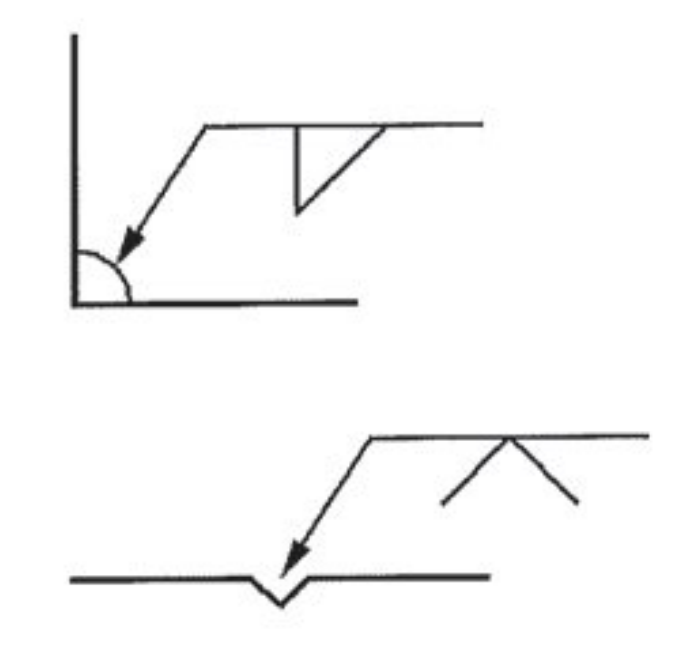


WELDING PROCEDURE SPECIFICATION (WPS) YES ( X )  
 PREQUALIFIED   x   QUALIFIED BY TESTING \_\_\_\_\_  
 or PROCEDURE QUALIFICATION RECORD (PQR) YES ( x )

Company Name ARC Enterprises, Inc. Identification # ARC WPS # 40  
 Revision 5 Date 1/10/2017 By SVH  
 Welding Process(es) SMAW Authorized by STEVE HOWARD Date 1/10/2017  
 Supporting PQR No.(s) \_\_\_\_\_ Type - Manual (X) Semi - Automatic ( )  
 Machine ( ) Automatic ( )

<b>JOINT DESIGN USED</b> Type <u>Groove Repair / Fillet Repair</u> Single _____ Double Weld ( ) Backing _____ NO Backing Material _____ Root Opening _____ Root Face Dimension _____ Groove Angle <u>60 degrees</u> Radius ( J-U ) _____ Back Gouging _____ Method _____	<b>POSITION</b> Position of Groove <u>Flat</u> Fillet _____ Horizontal _____ Vertical Progression _____ ( )
<b>BASE METALS</b> Material Spec <u>A709</u> Type or Grade <u>36 50 50W HPS50W</u> Thickness <u>Groove unlimited</u> See below _____ Diameter ( Pipe ) _____	<b>ELECTRICAL CHARACTERISTICS</b> Transfer Mode (FCAW) _____ Globular ( ) Spray _____ Current : AC ( ) DCEP (X) DCEN ( ) Pulsed ( ) OTHER : _____
<b>FILLER METALS</b> _____ ESAB ATOM ARC AWS Specification <u>A5.5</u> AWS Classification <u>E8018-C3-H4R</u>	<b>TECHNIQUE</b> Stringer or Weave Bead <u>stringer</u> Multi-pass or Single Pass (per side) <u>multi-pass</u> Number of Electrodes _____ Electrode Spacing _____ Longitudinal _____ Lateral _____ Angle _____
<b>SHIELDING</b> Flux _____ Gas _____ Composition _____ Electrode - Flux (Class) _____ Flow Rate _____ Gas Cup Size _____	Contact Tube to Work Distance _____ Peening _____ Interpass Cleaning : _____
pre-heat up to 3/4"=50 degrees F 3/4"-1 1/2" = 70 degrees F 70 degrees F when steel temp is equal to or less than 32 degrees F. 1 1/2" - 2 1/2" = 150degrees F over 2 1/2" = 225 degrees F	<b>POSTWELD HEAT TREATMENT</b> Temp _____ Time _____

WELDING PROCEDURE

Pass or Weld Layer(s)	S	Filler Metals		Current		Volts	Travel Speed	Joint Details
		Class	Diameter	Type & Polarity	Amps or Wire Feed Speed			
1 or more		E8018-C3	3/32"	DCEP	70 - 100	variable	8 ipm	 <p style="font-size: small;">Run-off tabs require d. M.T. repair</p>
1 or more		E8018-C3	1/8"	DCEP	90 - 160	variable	8 ipm	
Weld layers	Flat = 1/8" V O & H = 3/16"		per 4.6.7					

Vermont Agency of Transportation  
**RECEIVED**  
 CK'D BY RSF, TAM OK'D BY JDG  
 February 9, 2017  
 RESUBMIT No Approved  
 BY Kristin Higgins DATE 2/14/2017