

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

Company Name ARC ENT. INC.
 Welding Process(es) GMAW
 Supporting PQR No.(s) ARC PQR 5M3-2

Identification # ARC WPS 5M3-2
 Revision 6 Date 1/10/2017 By SVH
 Authorized by STEVE HOWARD Date 1/10/2017
 Type - Manual Semi - Automatic
 Machine Automatic

JOINT DESIGN USED Type <u>FILLET</u> Single <input checked="" type="checkbox"/> Double Weld <input type="checkbox"/> Backing <input type="checkbox"/> NO Backing Material _____ Root Opening <u>0</u> Root Face Dimension _____ Groove Angle _____ Radius (J-U) _____ Back Gouging _____ Method _____		POSITION Position of Groove _____ Fillet <u>1F 2F</u> Vertical Progression <input type="checkbox"/>	
BASE METALS Material Spec <u>A709</u> Type or Grade <u>36, 50, 50W, HPS50W,</u> Thickness <u>Groove</u> Fillet <u>UNLIMITED</u> Diameter (Pipe) _____		ELECTRICAL CHARACTERISTICS Transfer Mode (FCAW) _____ Short Circuiting <input type="checkbox"/> Globular <input type="checkbox"/> Spray <input checked="" type="checkbox"/> Current : AC <input type="checkbox"/> DCEP <input checked="" type="checkbox"/> DCEN <input type="checkbox"/> Pulsed <input type="checkbox"/> OTHER : _____	
FILLER METALS <u>LINCOLN L-56</u> AWS Specification <u>A5.18</u> AWS Classification <u>ER70S-6</u>		TECHNIQUE Stringer or Weave Bead <u>STRINGER</u> Multi-pass or Single Pass (per side) <u>SINGLE/MULTI</u> Number of Electrodes <u>ONE</u> Electrode Spacing <u>Longitudinal</u> <u>Lateral</u> <u>Angle</u>	
SHIELDING Flux _____ Gas <u>98/2</u> Composition <u>98Argon 2 oxygen</u> Electrode - Flux (Class) _____ Flow Rate <u>36-50 cfm</u> Gas Cup Size <u>5/8"</u>		Contact Tube to Work Distance <u>5/8" - 3/4"</u> Peening _____ Interpass Cleaning : <u>HAND AND POWER TOOLS</u>	
Preheat up to 3/4" - 50 degrees F 3/4"-1 1/2" - 70 degrees F 1 1/2" - 2 1/2" - 150 degrees over 2 1/2" - 225 degrees F		POSTWELD HEAT TREATMENT 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	3/16"		.035"	DCEP	230-250	26-28	8.75-9.1 ipm	
1	1/4"		.035"	DCEP	230-250	26-28	8.75-9.1 ipm	
1	5/16"		"	"	"	"	8.75-9.1 ipm	
2	3/8"		"	"	"	"	8.75-9.1 ipm	
3	7/16"		"	"	"	"	8.75-9.1 ipm	
3	1/2"		"	"	"	"	8.75-9.1 ipm	

No welds over 5/16" with this wire for 50W/HPS50W

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