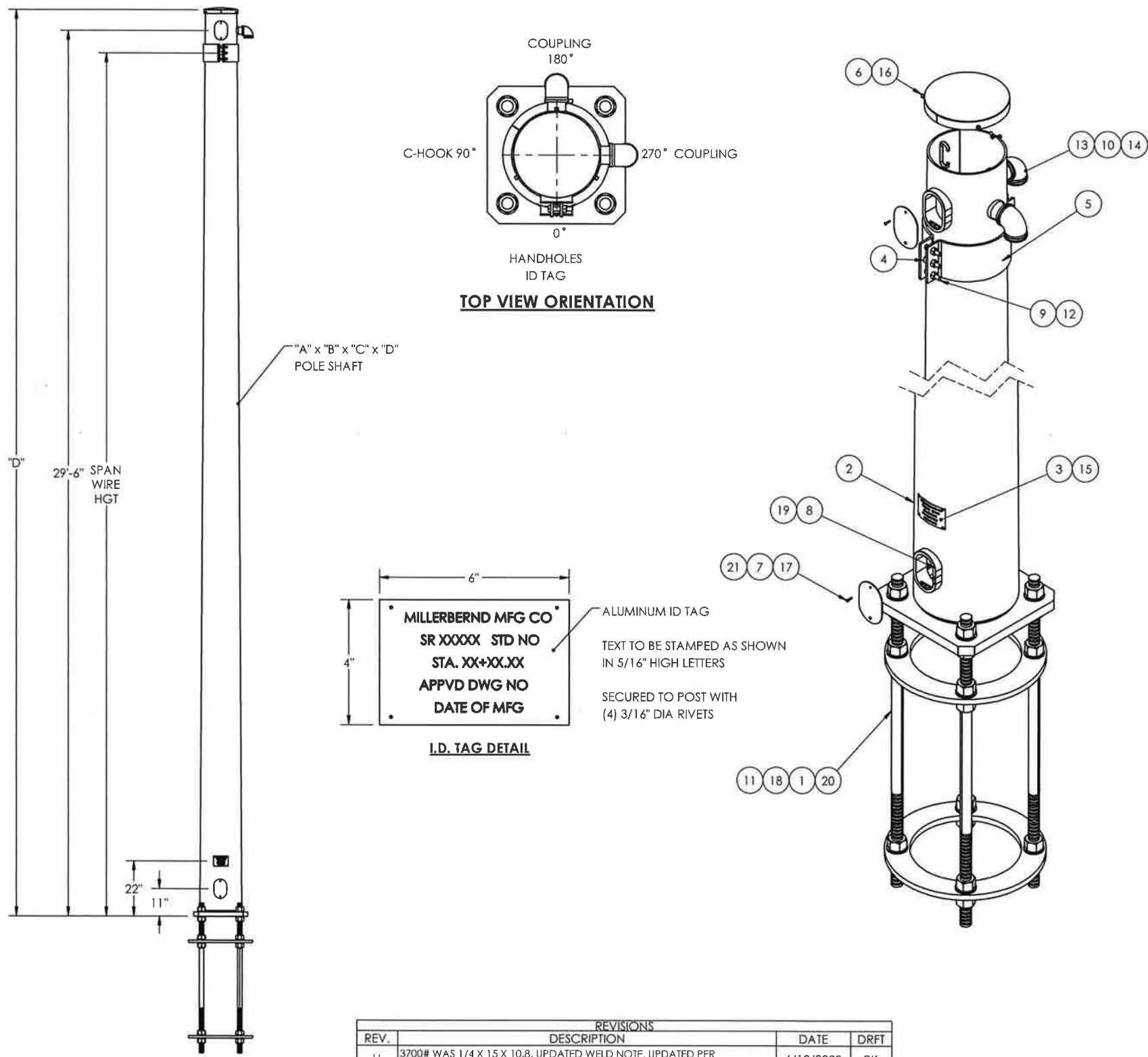


POLE DATA - STRAIN POLE - TYPE IV															
MMC #	SPAN WIRE HGT	QTY	POLE CLASS	POLE TUBE				BASE DETAIL				ANCHOR BOLT			
				THICK (IN) "A"	BASE O.D. (IN) "B"	TOP O.D. (IN) "C"	LENGTH (FT) "D"	SQUARE "S" (IN)	BOLT CIRCLE "F" (IN)	BOLT CENTERS "M" (IN)	THICKNESS "G" (IN)	HOLE/SLOT "H" (IN)	DIA "J" (IN)	LENGTH "K" (IN)	ANCHOR PLATE O.D. "L" (IN)
WA-SP-IV-1900			1900#	1/4	11	6.8	30	15	15	10 5/8"	1 1/2	1 1/2	1 1/4	60	19
WA-SP-IV-2700			2700#		12.5	8.3		17	17	12"		21			
WA-SP-IV-3700			3700#		14	9.8		19	19	13 7/16"		23			
WA-SP-IV-4800			4800#	5/16	14	9.8	30	20	20	14 1/8"	1 3/4	2	1 3/4	60	24
WA-SP-IV-5600			5600#		15	10.8		22	22	15 9/16"		26			
WA-SP-IV-6300			6300#		16	11.8									
WA-SP-IV-7200			7200#		17	12.8									

MATERIAL SPECIFICATIONS
POST: ASTM A572 GR55 BASE PLATE: ASTM A709 GR 50 MAST ARM: N/A MOUNTING PLATE: N/A HARDWARE FINISH: ASTM F2329 CABLE CLAMP CONNECTING BOLT: ASTM F3125 GR A325 CABLE CLAMP CONNECTION NUTS: ASTM F563 GR DH CABLE CLAMP CONNECTION LOCK WASHER: ASTM F436 ANCHOR BOLTS: ASTM F1554 GR105 ANCHOR BOLT NUTS: ASTM A563 GR DH ANCHOR BOLT WASHER: ASTM F436 WELDING ELBOW: PIPE: ASTM A53 GR B OR ASTM A500 GR B

DESIGN CRITERIA
2015 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS ON HIGHWAY SIGNS, LUMINAIRES & TRAFFIC SIGNALS INCLUDING LATEST INTERIMS. WINDS: 115 MPH WITH A MEAN RECURRENCE INTERVAL OF 1700 YEARS VORTEX SHED: N/A FATIGUE CAT: N/A NATURAL WIND GUST: N/A LUMINAIRE: N/A LUMINAIRE WEIGHT: N/A SIGN: N/A SIGN WEIGHT: N/A

WELD SPECIFICATION
THE POST AND MAST ARM TO BE ROUND TAPERED TUBE FABRICATION WITH ONE SUBMERGED ARC LONGITUDINAL SEAM WELD WITH 100% PENETRATION 6" FROM BASE PLATE, FLANGE AND BUTT WELDED SHAFTS. EXCEPT FOR TUBES LESS THAN 5 IN DIAMETERS; FOR FEMALE SECTION OF SLIP JOINTED TUBES 10" AND GREATER; 1.5 X FEMALE SECTION INSIDE DIAMETER + 6 INCHES. FOR FEMALE SECTION OF SLIP JOINTED TUBES LESS THAN 10" FEMALE SECTION NOMINAL DIAMETER AND 60% FOR REMAINDER. GAS METAL ARC WELDING PROCESS WITH 60% PENETRATION MAY BE USED FOR REMAINDER OF WELDED FABRICATION. WELD TESTING: 100% OF ALL WELDS VISUAL TESTED (VT), 100% OF ALL COMPLETE JOINT PENETRATION (CJP) WELDS ULTRASONIC TESTED (UT) BASED ON THE THINNEST MATING MATERIAL: (PER AASHTO 2013 5.15.5-WELD INSP) THICKNESS. < 6MM (0.25 IN) MT ≥ 6MM (0.25 IN) UT A RANDOM 30% OF ALL FILLET WELDS AND PARTIAL JOINT PENETRATION (PJP) LONGITUDINAL SEAM WELDS MAGNETIC PARTICLE TESTED (MT). WELDING INSPECTION OF STRUCTURE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF WASHINGTON STATE DEPARTMENT OF TRANSPORTATIONS STANDARD SPECIFICATION SECTION 6-03.3(25) AND 2015 ASSHTO WELD INSPECTION SECTION 14.4.4.8



APPROVED
 Manufacturer's Pole Plan
 Approved For Listing As A
 Pre-Approved Listing
 WSDOT Bridge & Structures Office
 By GB Date 9-14-2020



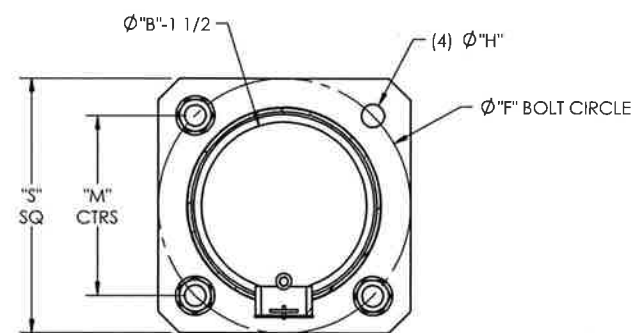
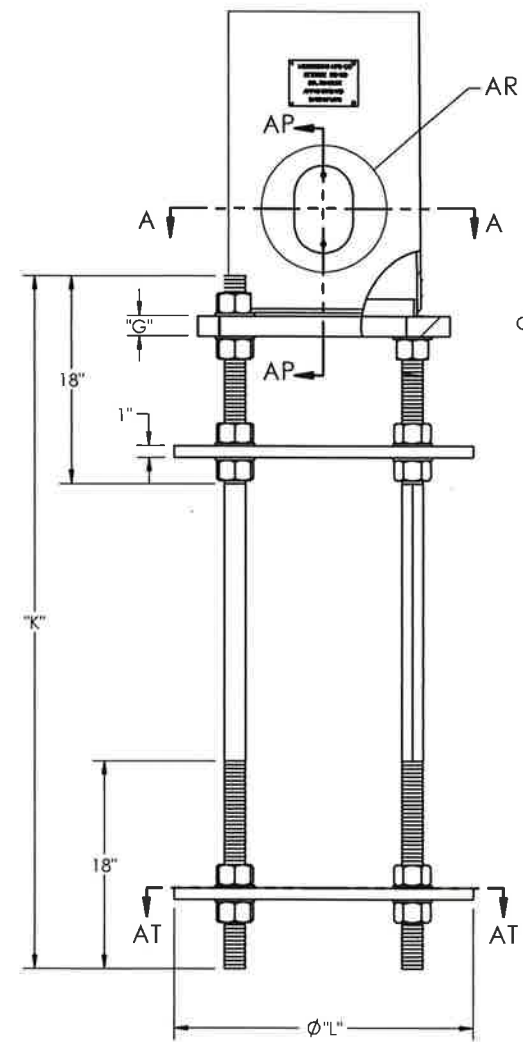
8-18-20 (EXPIRES 12-18-21)

NOTE: FOR NOTE AT WELD SYMBOL TAIL, SEE WELDING PROCEDURE SPECIFICATION

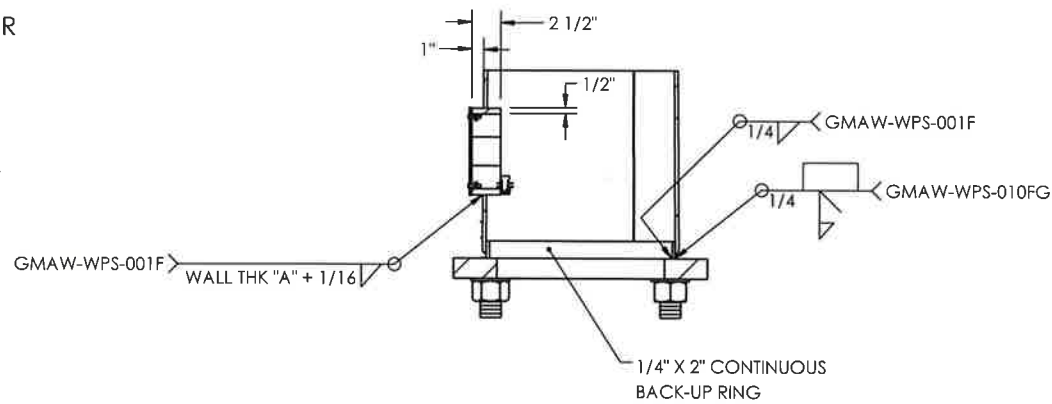
ITEM NO.	DESCRIPTION	QTY PER	ASSY	FINISH
1	BASE RD 1 x "L"	2		X
2	WLDMT POLE STRAIN "A" x "B" x "C" x "D"	1		X
3	I.D. TAG - WA	1		X
4	PIPE A500-B-001-NV (1" SCH 80) 1" LONG	1		
5	SPAN WIRE CLAMP HALF	2		X
6	WLDMT CAP VENT 3 SET SCREW	1		X
7	COVER HH M16C 4 1/4X6 3/4 2 BOLT	2		X
8	BOLT HX HD 1-2-13NC X 1" F593C SS	1	X	
9	BOLT HVYHXHD 5-8-11X3-1-2L F3125 A325 TYPE 1 GV	5		
10	2 1/2" CHASE NIPPLE	2		
11	NUT HVY HX "J" A563 GR DH	24		
12	NUT HVY HX 5-8-11 NC A563 GV(DH)	5		
13	ELBOW 90 DEG 2 1/2"	2		X
14	PIPE NIPPLE THRD BOTH ENDS	2		X
15	RIVET POP 3/16X1/2X3/8 HD SS	4		X
16	SCRW HX SK HD 3-8-16NC X 1 SS	3		
17	SCRW HX SK BT HD 1-4-20NC X 1 SS	4		
18	WASHER FLAT "J" F436 GV	24		
19	WASH F.56 IDX1.375ODX.091 THK BRASS COMM. BRASS	2	X	
20	Ø"J" X "K" LG ANCHOR BOLT	4		
21	GASKET HH M16	2	X	

STRUCTURE FINISH SPECIFICATION			
GALV. OR PRIME COAT: HOT DIPPED GALV, PER ASTM A123 FINISH COAT: - COLOR: - FEDERAL OR RAL SPEC.: - WEIGHT W/GALV.: - WEIGHT W/GALV. & PAINT: - SURFACE AREA: - GAL. OF PAINT: -			
		622 6TH ST. SO. WINSTED, MN 55395	
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SALES ORDER NO.:	QTY:	STATE:	SHEET
74554	-	WA	1 OF 2
DESCRIPTION: SUB STRAIN POLES TYPE IV			
EST. WEIGHT:		DRAWING NO:	
		74554-WA-SP-IV	
PROJECT NAME: STATE OF WASHINGTON STRAIN POLES - TYPE IV			
PROJECT LOCATION: WA			
DWN BY: REBEKAH		DATE: 2/3/17	
CHK BY:		DATE:	

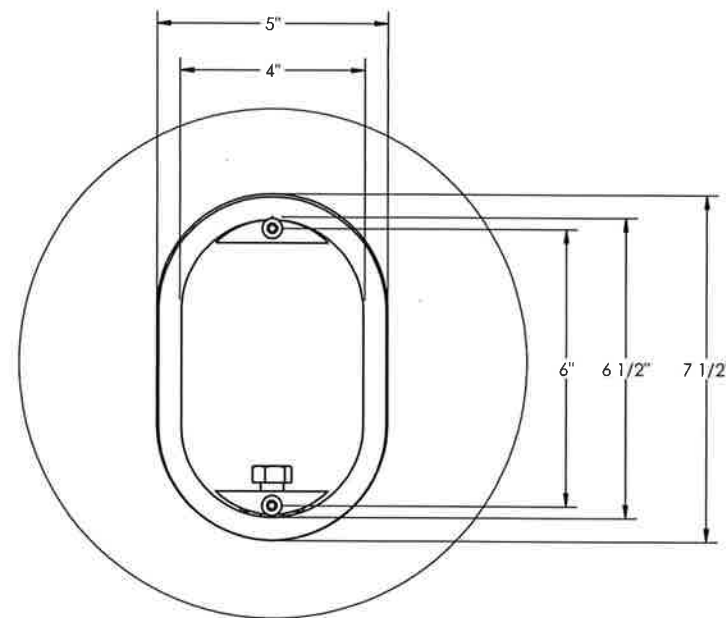
REVISIONS			
REV.	DESCRIPTION	DATE	DRFT
H	3700# WAS 1/4 X 15 X 10.8, UPDATED WELD NOTE, UPDATED PER COMMENTS	6/12/2020	RK
G	UPDATED NOTES PER COMMENTS; UPDATED WPS TO MMC STANDARDS	5/12/2020	RK
F	REVIEWED FOR GALV HANGING, VENTING REQUIREMENTS - NO CHANGES	2/26/2020	RK



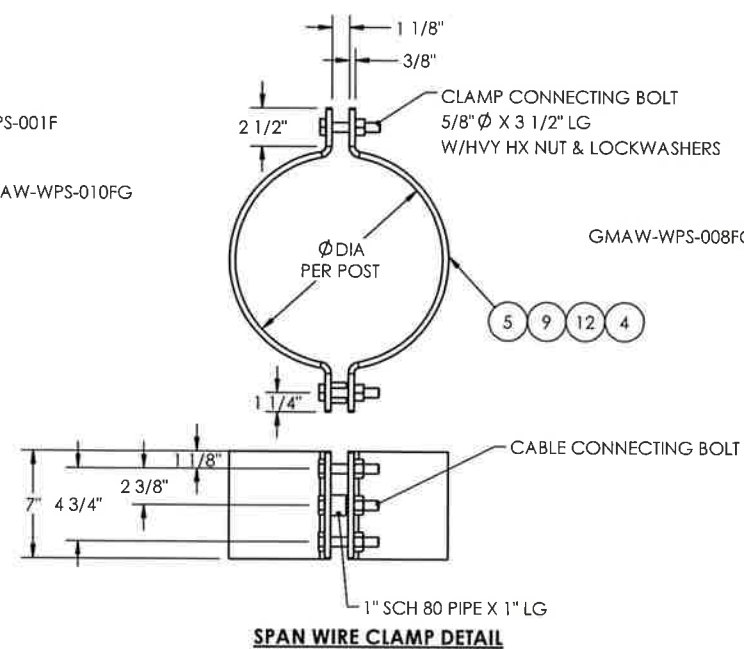
SECTION A-A
SCALE 1 : 16



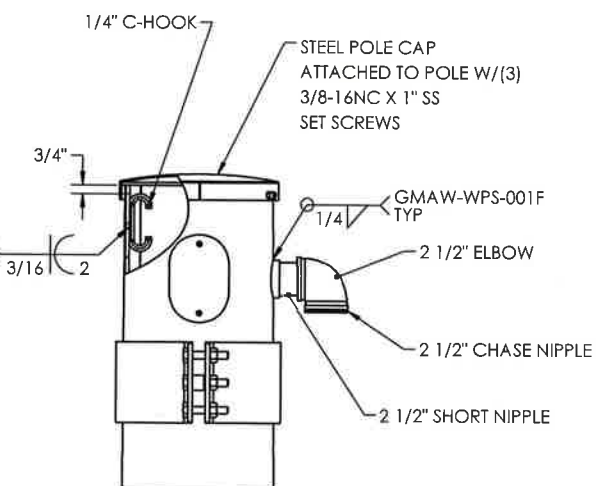
SECTION AP-AP
SCALE 1 : 16



DETAIL AR
SCALE 1 : 4



SPAN WIRE CLAMP DETAIL



APPROVED
 Manufacturer's Pole Plan
 Approved For Listing As A
 Pre-Approved Drawing
 WSDOT Bridge & Structures Office
 By GB Date 9-14-2020



8-18-20 (EXPIRES 12-18-21)

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SALES ORDER NO.:	QTY:	STATE:	SHEET
74554	-	WA	2 OF 2
DESCRIPTION: SUB STRAIN POLES TYPE IV			
EST. WEIGHT:		DRAWING NO.:	
		74554-WA-SP-IV	
PROJECT NAME: STATE OF WASHINGTON STRAIN POLES - TYPE IV			
PROJECT LOCATION: WA			
PROJECT NO.:		CONTROL/CONTRACT NO.:	
DWN BY: REBEKAH		DATE: 2/3/17	
CHK BY:		DATE:	