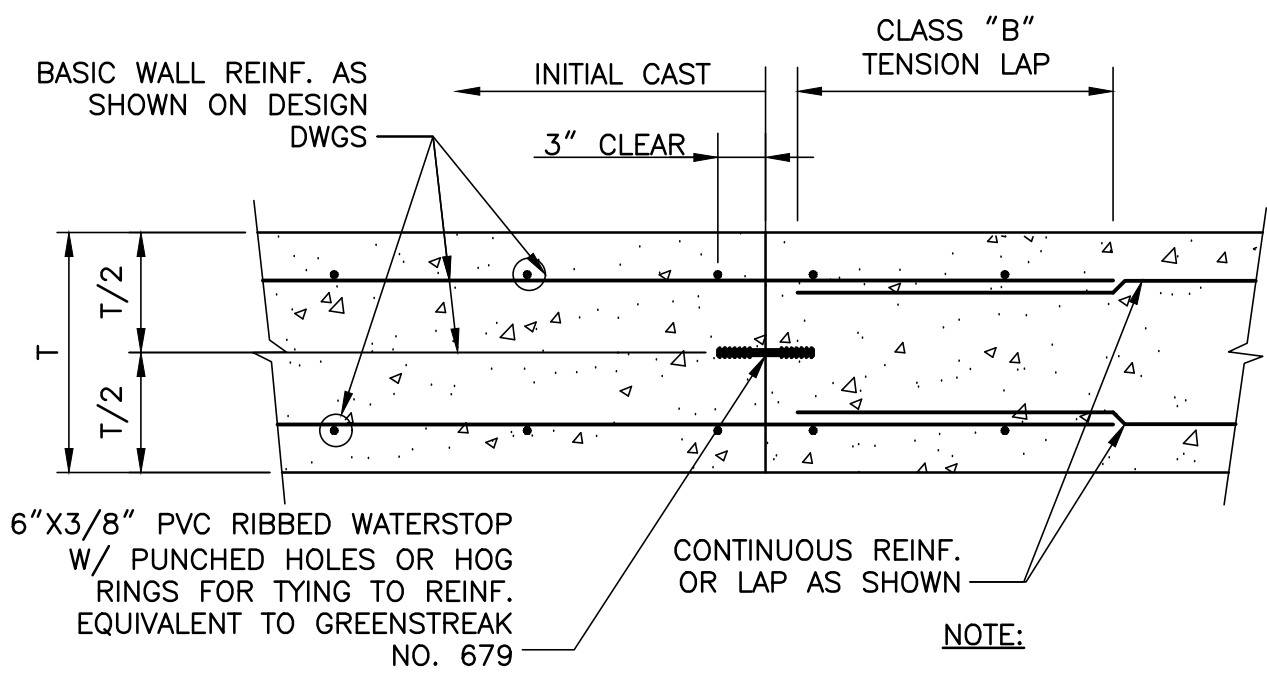
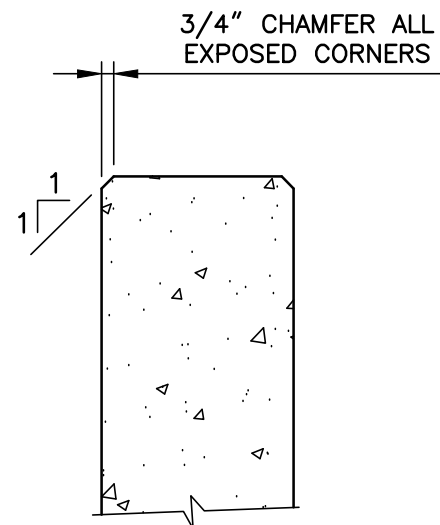
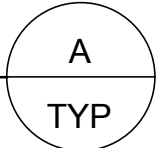




1. ALLOW 48 HOURS BETWEEN PLACEMENT OF INITIAL CAST AND SUBSEQUENT CASTS.

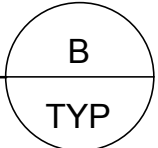
SLAB CONSTRUCTION JOINT

DETAIL
SCALE: NTS



CHAMFER

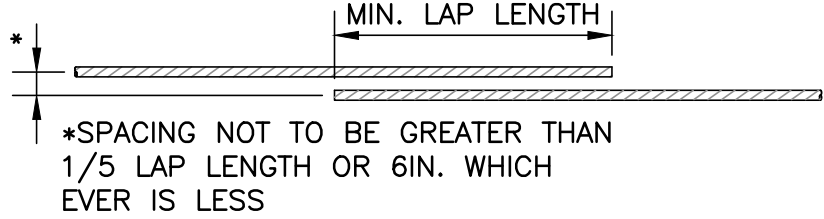
DETAIL
SCALE: NTS



REBAR MINIMUM TENSION DEVELOPMENT & LAP LENGTHS					
CONCRETE STRENGTH f'_c = 4,000 PSI OR GREATER					
BAR SIZE	DEVELOPMENT LENGTH, l_d		LAP LENGTH (CLASS B SPLICE)		BAR SIZE
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
#3	1'-7"	1'-3"	2'-0"	1'-7"	#3
#4	2'-1"	1'-7"	2'-8"	2'-0"	#4
#5	2'-7"	2'-0"	3'-4"	2'-7"	#5
#6	3'-1"	2'-4"	4'-0"	3'-1"	#6
#7	4'-6"	3'-6"	5'-10"	4'-6"	#7
#8	5'-2"	3'-11"	6'-8"	5'-2"	#8
#9	5'-10"	4'-6"	7'-6"	5'-10"	#9
#10	6'-6"	5'-0"	8'-6"	6'-6"	#10
#11	7'-3"	5'-7"	9'-6"	7'-3"	#11

NOTES:
1. GRADE 60 UNCOATED REINFORCEMENT
2. SPLICE LENGTHS GIVEN ABOVE ARE TO BE USED UNLESS NOTED OTHERWISE ON DESIGN DRAWINGS.

MAXIMUM BAR SPACING AT NON-CONTACT LAPS:

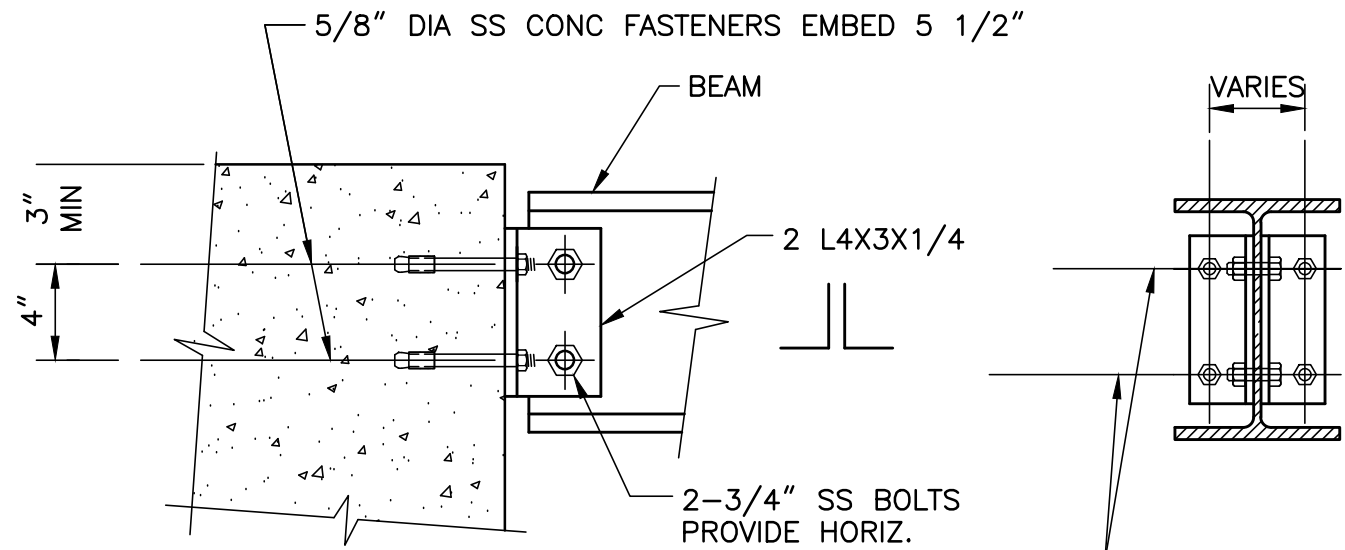
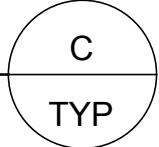


STANDARD HOOK DEVELOPMENT LENGTH			
BAR SIZE	90° STD HOOK "A"	180° STD HOOK "J"	DEVELOPMENT LENGTH, l_{dh}
#3	6"	3"	6"
#4	8"	4"	7"
#5	10"	5"	9"
#6	1'-0"	6"	10"
#7	1'-2"	7"	1'-0"
#8	1'-4"	8"	1'-2"
#9	1'-7"	11 1/2"	1'-3"
#10	1'-10"	1'-1 1/2"	1'-5"
#11	2'-0"	1'-2 3/4"	1'-7"

*FOR STD HOOK BAR GEOMETRY NOT SHOWN REFER TO MINIMUM ACI REQUIREMENTS

STANDARD REINFORCEMENT DETAILS

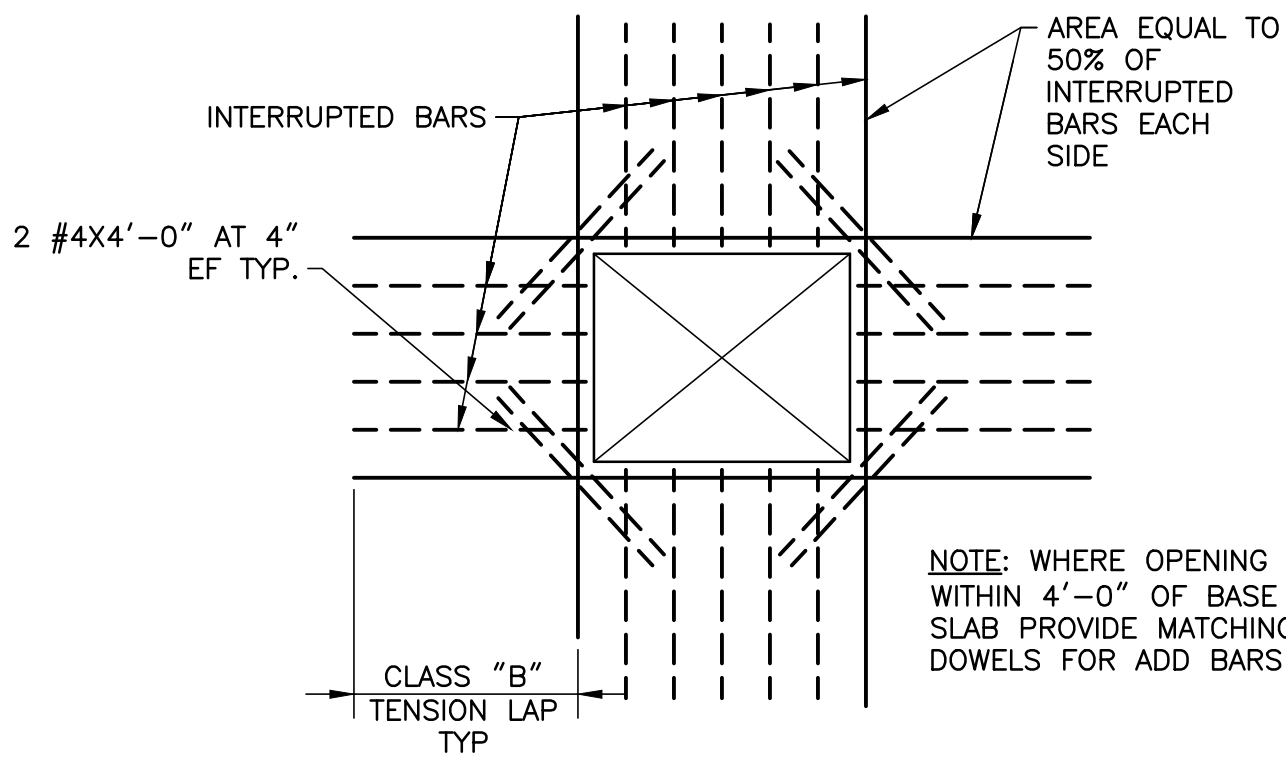
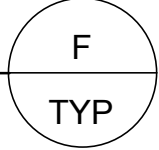
DETAIL
SCALE: NTS



BEAM DEPTH	8, 10, 12	14, 16, 18
NO. OF ANCHORS	4	6

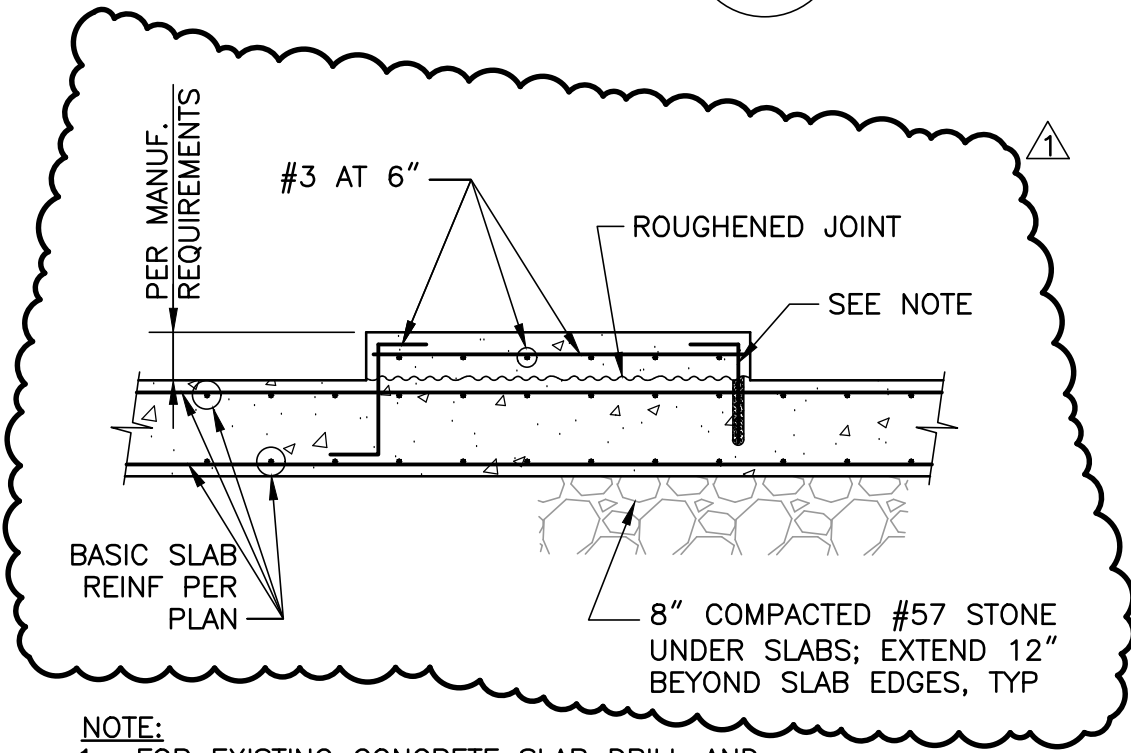
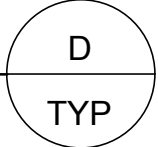
BEAM TO CONCRETE

DETAIL
SCALE: NTS



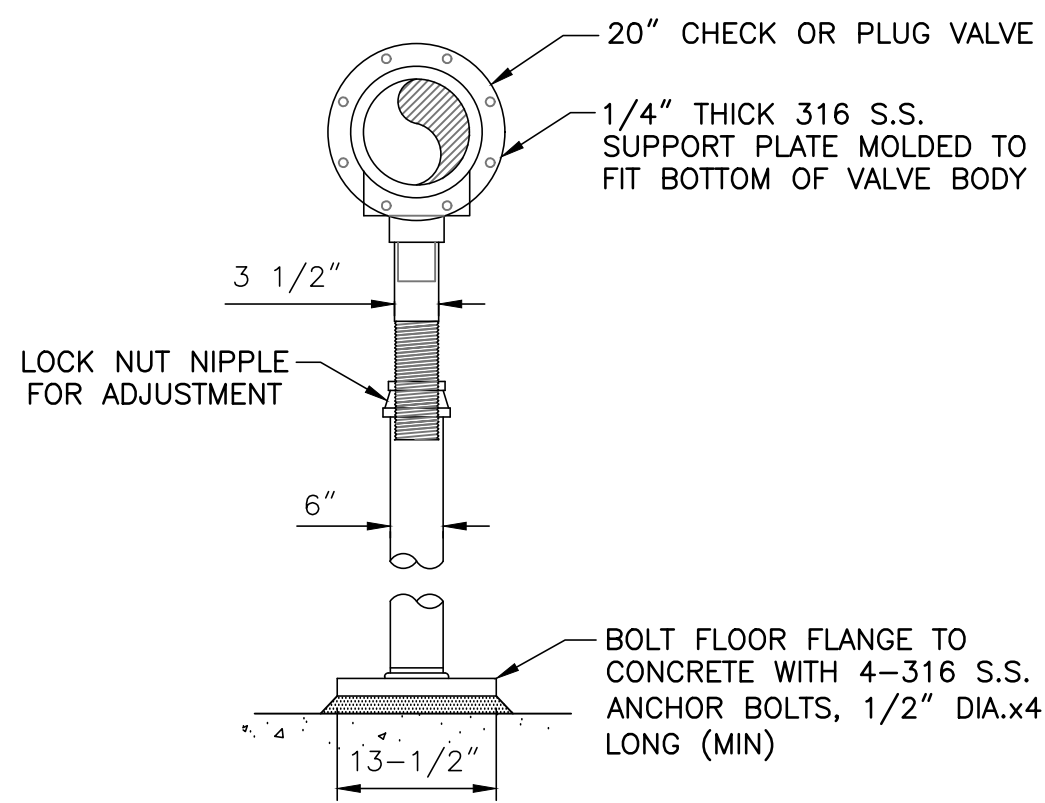
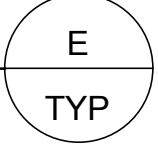
REINF AT RECTANGULAR OPENINGS GREATER THAN 12"

DETAIL
SCALE: NTS



EQUIPMENT PAD

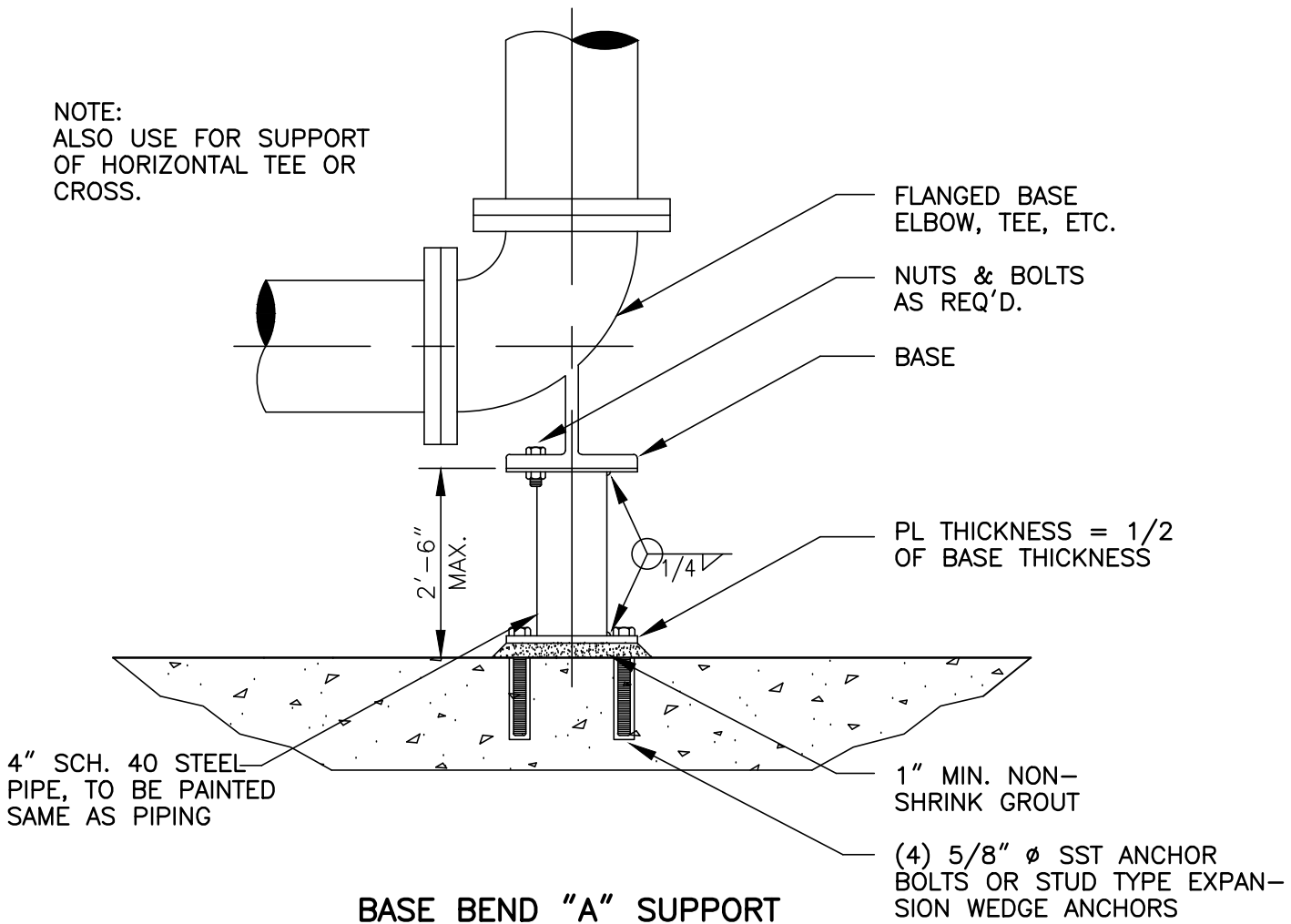
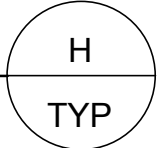
DETAIL
SCALE: NTS



- NOTES:
1. ALL SUPPORT MATERIALS SHALL BE 316 S.S. AFTER FINAL HEIGHT ADJUSTMENT, COAT ENTIRE SUPPORT AND DISCHARGE PIPING WITH STAINLESS STEEL SPRAY PAINT.
 2. FOR FORCE MAINS LARGER THAN 10" SIZE, THE COMPONENTS OF THE VALVE SUPPORT SHALL BE ENLARGED AS PER ADJUSTABLE STANCHION PIPE SADDLE SUPPORT DETAIL

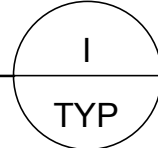
ADJUSTABLE VALVE SUPPORT DETAIL

DETAIL
SCALE: NTS



BASE BEND "A" SUPPORT

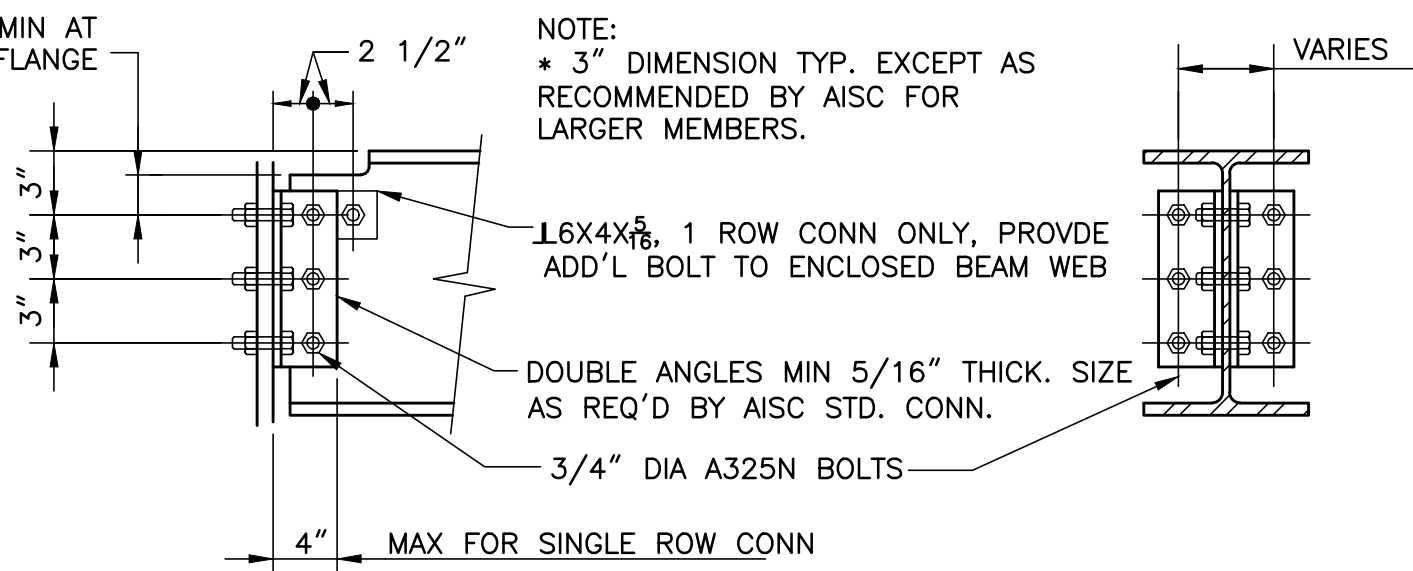
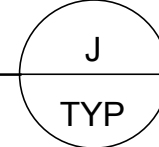
DETAIL
SCALE: NTS



KWIK BOLT TZ 316 SS				
DIAMETER (D) (IN.)	EFFECTIVE MIN. EMBEDMENT (h_{ef}) (IN.)	NOMINAL EMBEDMENT (h_{nom}) (IN.)	MIN. HOLE DEPTH IN CONCRETE (h_o) (IN.)	MIN. EDGE DISTANCE (c_{min}) (IN.)
3/8	2	2-5/16	2-5/8	4
1/2	3-1/4	3-5/8	4	4
5/8	4	4-7/16	4-3/4	4
3/4	4-3/4	5-5/16	5-3/4	4

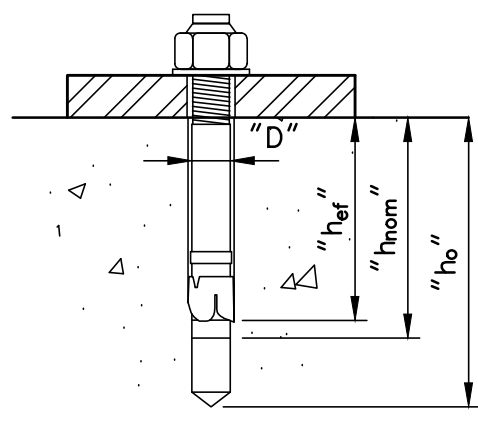
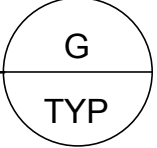
GENERATOR ANCHORAGE

DETAIL
SCALE: NTS



TYPICAL FRAMING CONNECTION

DETAIL
SCALE: NTS



REVISIONS		NO.	BY	DATE
1		1	JVS	6/12/2019
2		2		
3		3		
4		4		
5		5		
6		6		

DESIGN ENGINEER	JOHN V. SOBOSZAK, P.E.
FLORIDA REGISTRATION NO.	71407

DESIGNER	JVS
DRAWN BY	MARCH 2019
CHECKED BY	DSM
DATE	



180-48 BM 5301 Buffalo Avenue
Pump Station Rehabilitation
STRUCTURAL STANDARD DETAILS

PROJ. NO.	100431.17
DATE	MARCH 2019
SCALE	AS SHOWN
NO. SHEETS	5-11.0
SHEET NO.	
DRAWING NO.	