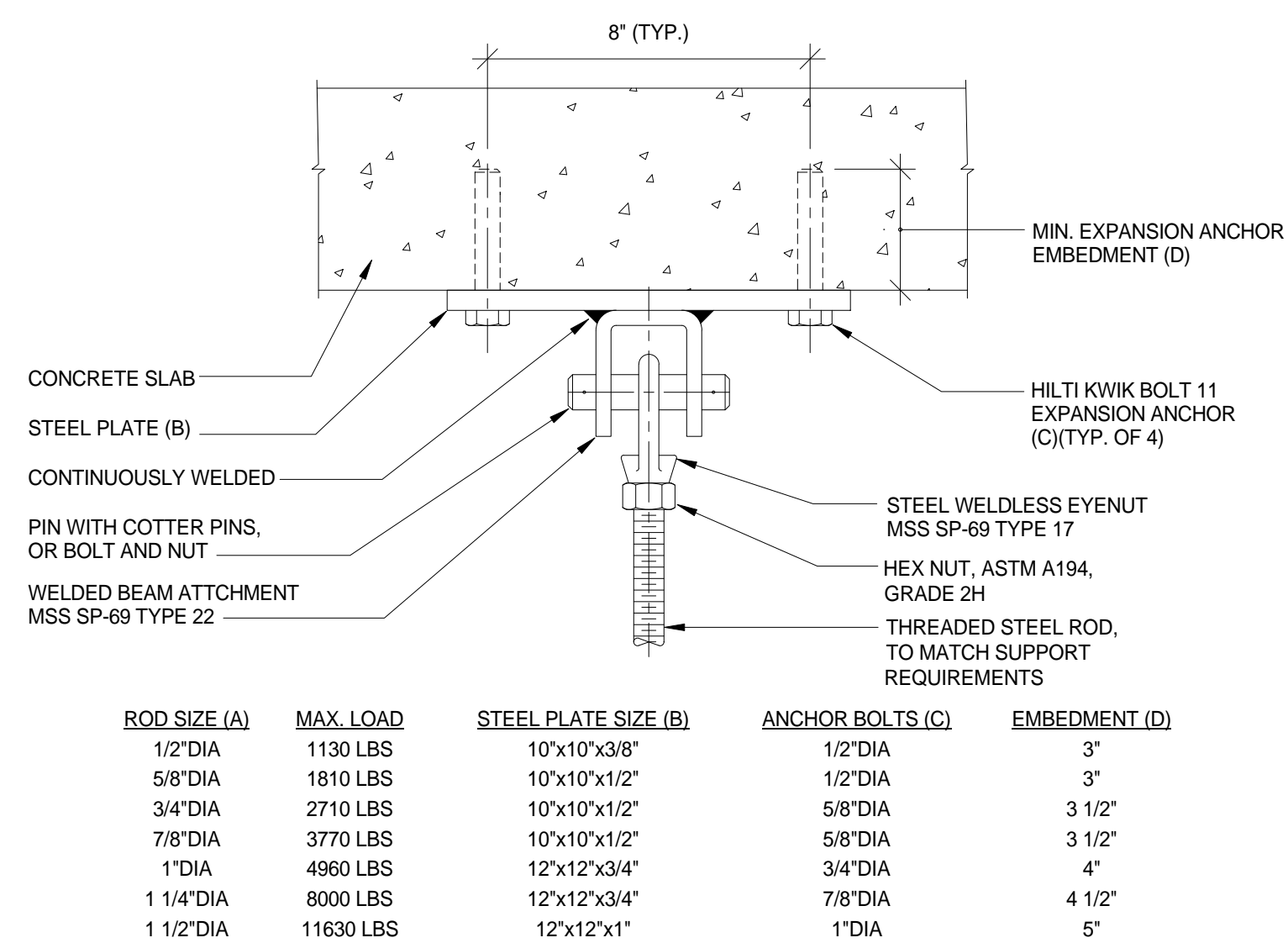
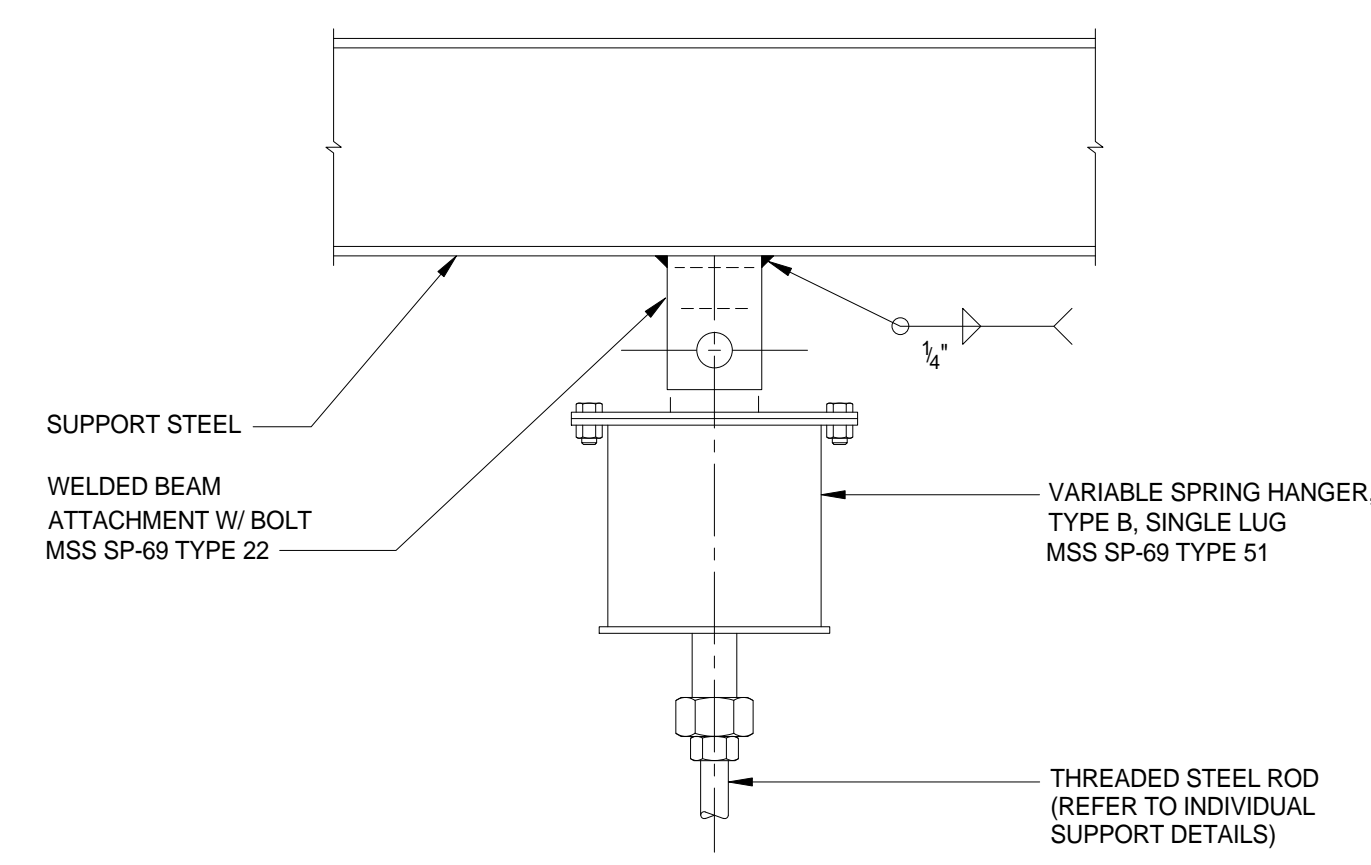


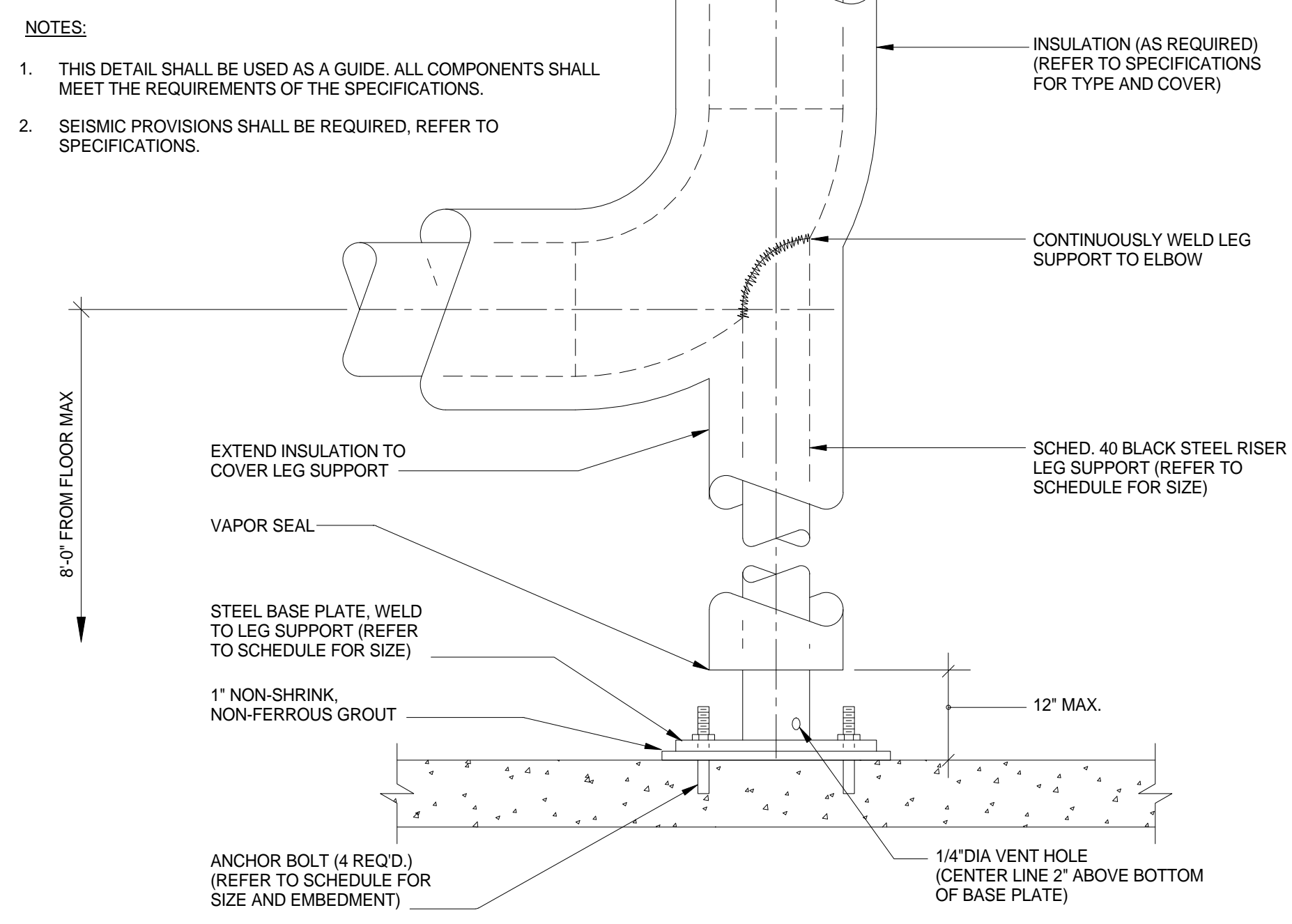
three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot



**DETAIL - HANGER ROD CONCRETE CEILING ATTACHMENT PLATE**  
SCALE: NONE

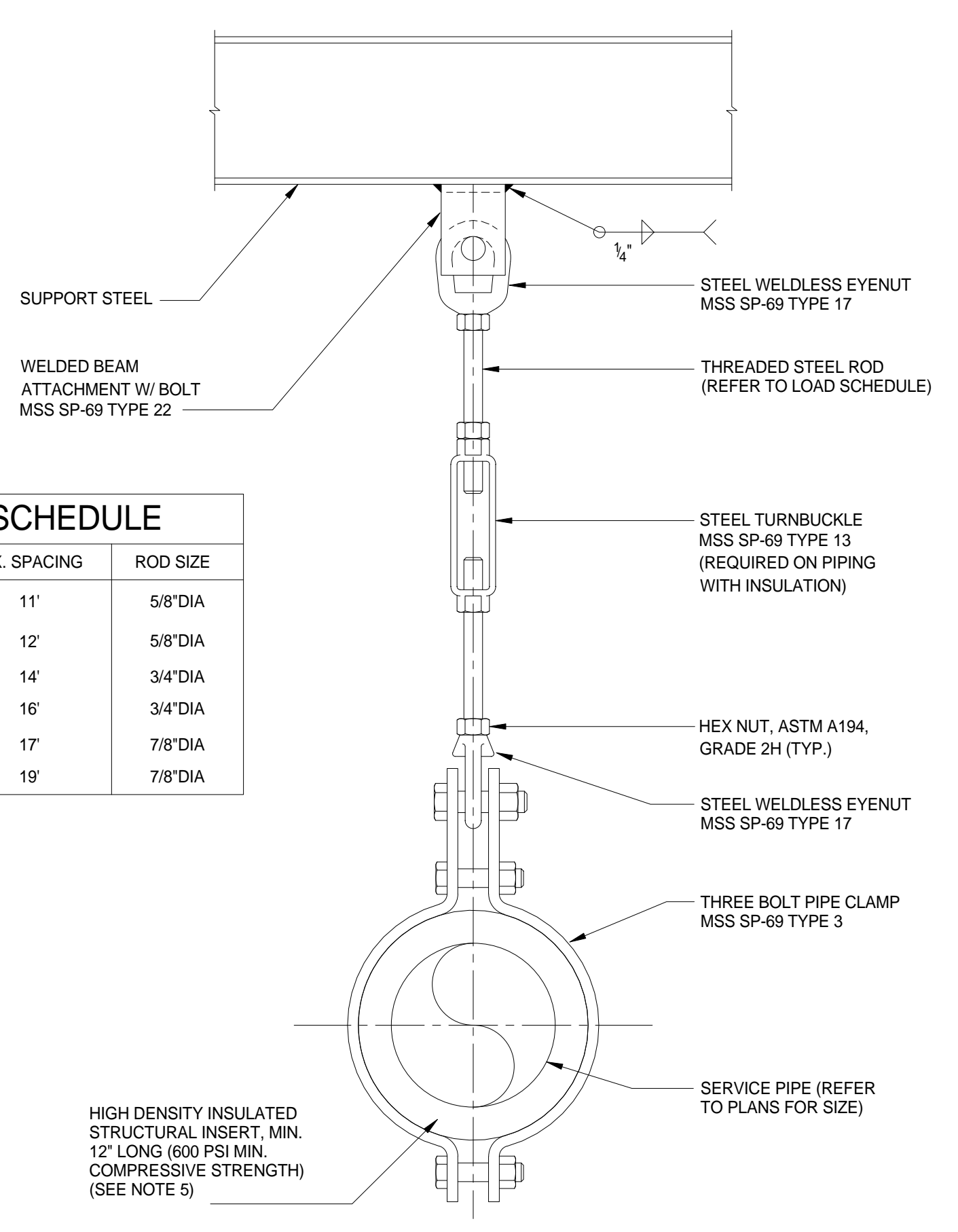


**DETAIL - VARIABLE SPRING HANGER**  
SCALE: NONE



**DETAIL - TYP. INSULATED PIPE RISER FLOOR SUPPORT**  
SCALE: NONE

PIPE SIZE	RISER LEG SUPPORT	BASE PLATE	ANCHOR BOLTS	MIN. EMBEDMENT
8" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	4"
6" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	4"
5" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	3"
4" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	3"
3" DIA	2" DIA	8"x8"x3/8"	1/2" DIA x 6" LONG	3"

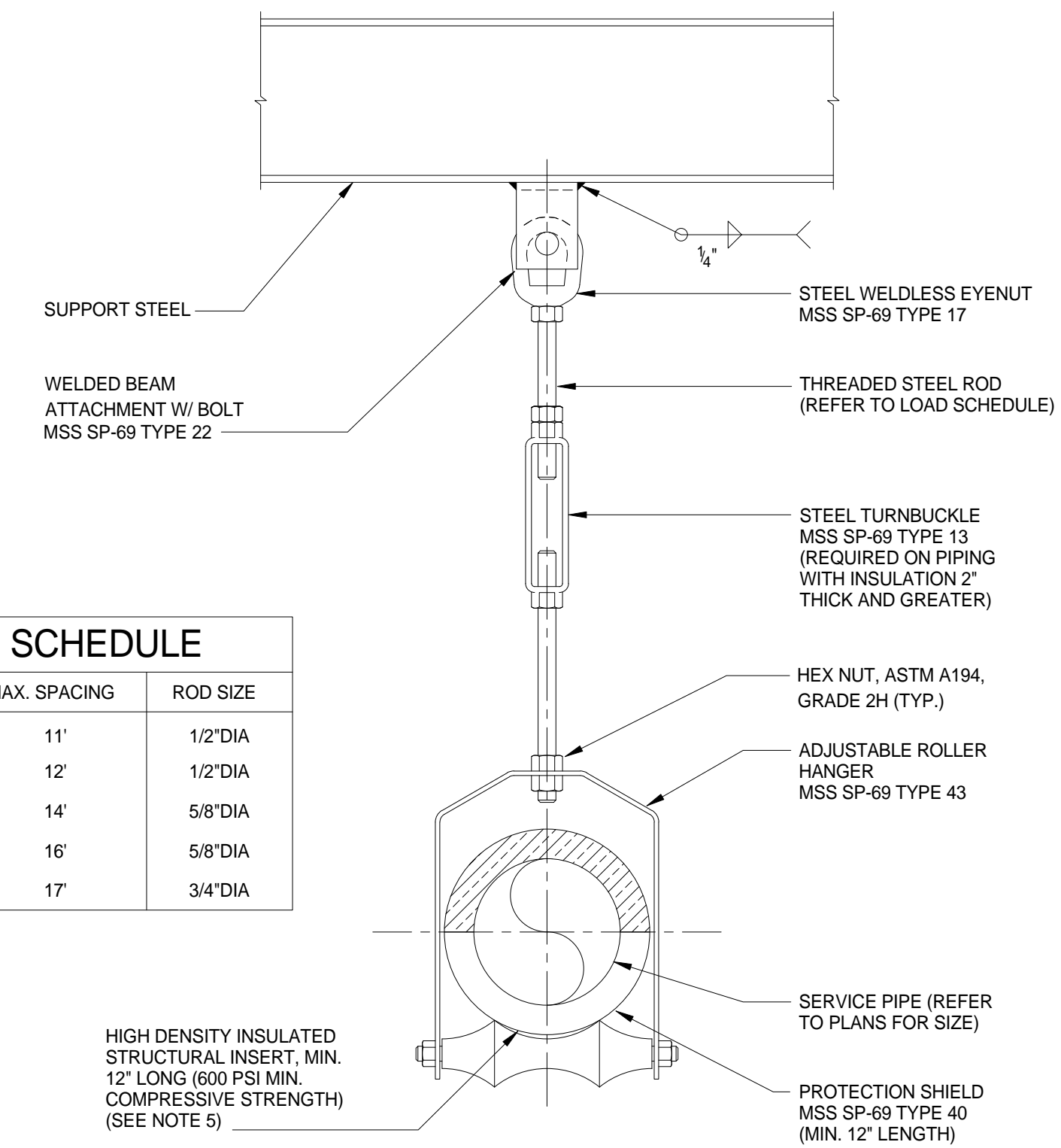


**DETAIL - THREE BOLT PIPE CLAMP**  
SCALE: NONE

- NOTES:**
1. THIS DETAIL SHALL BE USED AS A GUIDE. ALL COMPONENTS SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
  2. THE STEEL WELDLESS EYENUTS SHALL BE INSTALLED TO PIVOT IN OPPOSITE DIRECTIONS.
  3. THE USE OF A TURNBUCKLE WILL REQUIRE THE INSTALLATION AND USE OF BOTH RIGHT AND LEFT HANDED THREADS.
  4. PIPE SIZE NOT INCLUDED IN THE LOAD SCHEDULE WILL NOT BE PERMISSIBLE.
  5. THE THICKNESS OF THE INSERT SHALL BE AS REQUIRED TO FIT THE SUPPORT, BUT NOT LESS THAN THE PIPING SYSTEM SUPPORTED.
  6. SEISMIC PROVISIONS SHALL BE REQUIRED, REFER TO SPECIFICATIONS.

LOAD SCHEDULE		
PIPE SIZE	MAX. SPACING	ROD SIZE
2 1/2" DIA	11'	5/8" DIA
3" DIA	12'	5/8" DIA
4" DIA	14'	3/4" DIA
5" DIA	16'	3/4" DIA
6" DIA	17'	7/8" DIA
8" DIA	19'	7/8" DIA

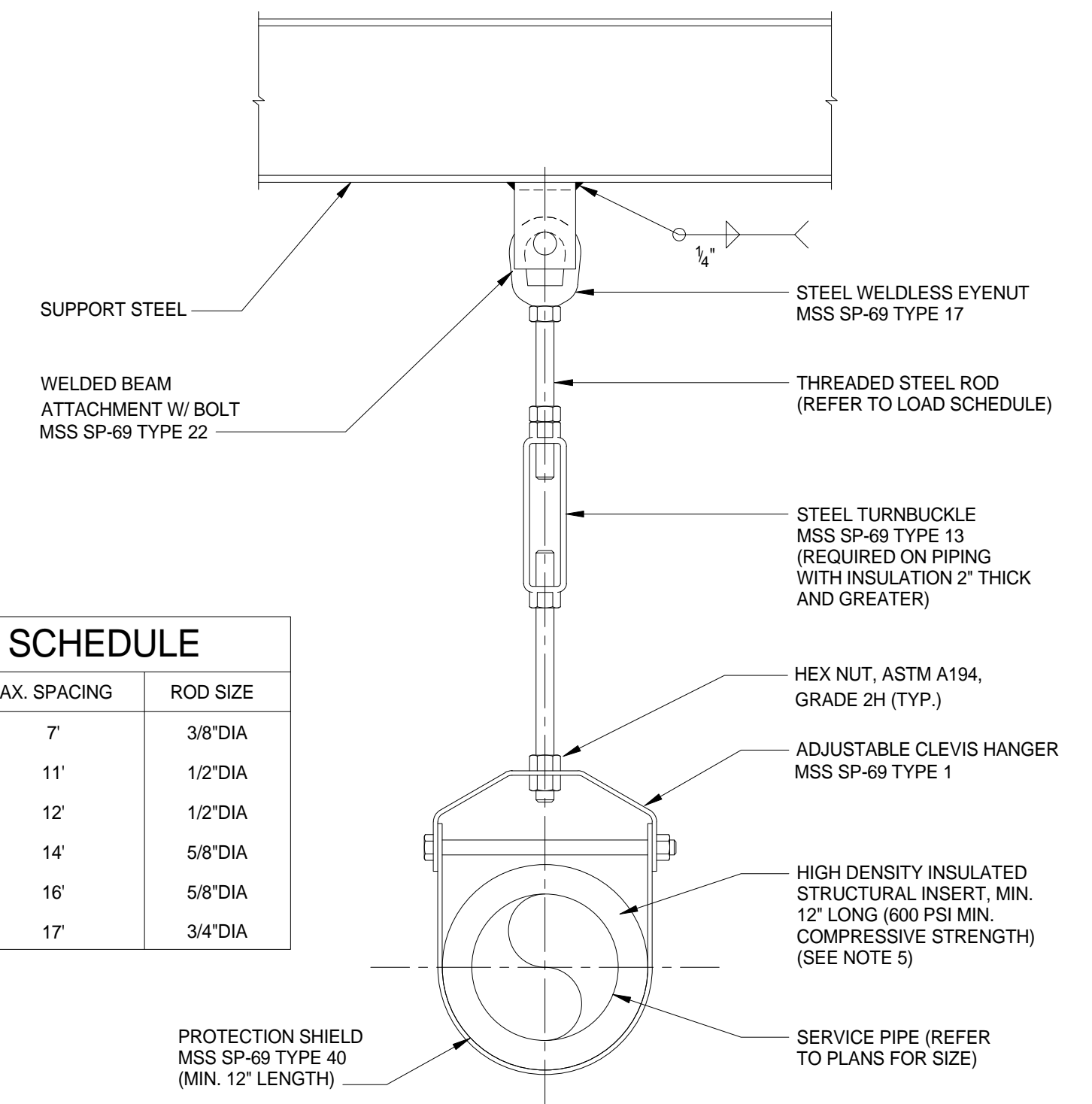
LOAD SCHEDULE		
PIPE SIZE	MAX. SPACING	ROD SIZE
2 1/2" DIA	11'	1/2" DIA
3" DIA	12'	1/2" DIA
4" DIA	14'	5/8" DIA
5" DIA	16'	5/8" DIA
6" DIA	17'	3/4" DIA



**DETAIL - ADJUSTABLE ROLLER HANGER**  
SCALE: NONE

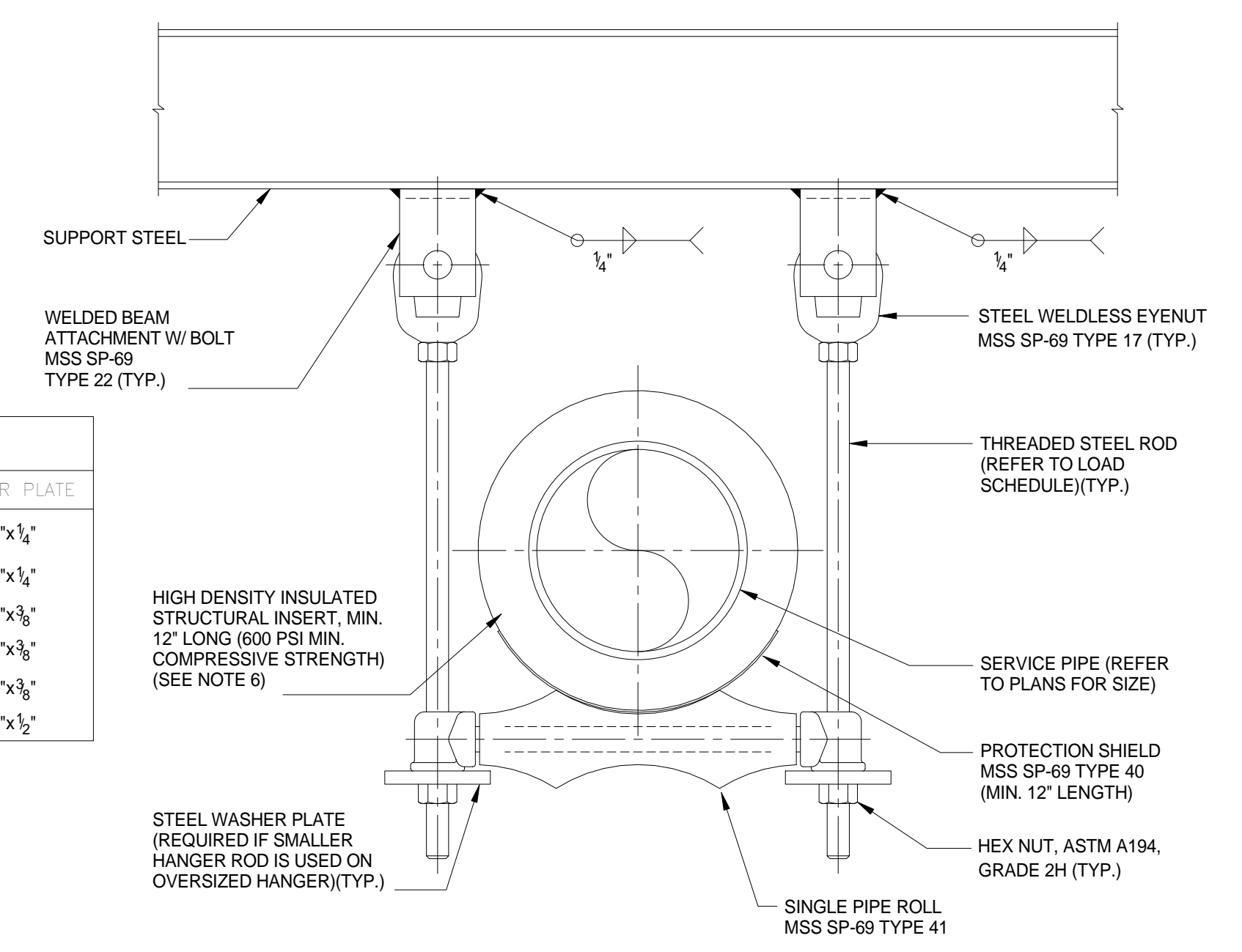
- NOTES:**
1. THIS DETAIL SHALL BE USED AS A GUIDE. ALL COMPONENTS SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
  2. THE STEEL WELDLESS EYENUT SHALL BE INSTALLED TO PIVOT IN OPPOSITE DIRECTION OF ROLLER.
  3. HANGERS THAT UTILIZE A TURNBUCKLE WILL REQUIRE THE INSTALLATION AND USE OF BOTH RIGHT AND LEFT HANDED THREADS.
  4. PIPE SIZE NOT INCLUDED IN THE LOAD SCHEDULE WILL NOT BE PERMISSIBLE.
  5. THE THICKNESS OF THE INSERT SHALL BE AS REQUIRED TO FIT THE SUPPORT, BUT NOT LESS THAN THE PIPING SYSTEM SUPPORTED.
  6. SEISMIC PROVISIONS SHALL BE REQUIRED, REFER TO SPECIFICATIONS.

LOAD SCHEDULE		
PIPE SIZE	MAX. SPACING	ROD SIZE
1/2" DIA - 2" DIA	7'	3/8" DIA
2 1/2" DIA	11'	1/2" DIA
3" DIA	12'	1/2" DIA
4" DIA	14'	5/8" DIA
5" DIA	16'	5/8" DIA
6" DIA	17'	3/4" DIA



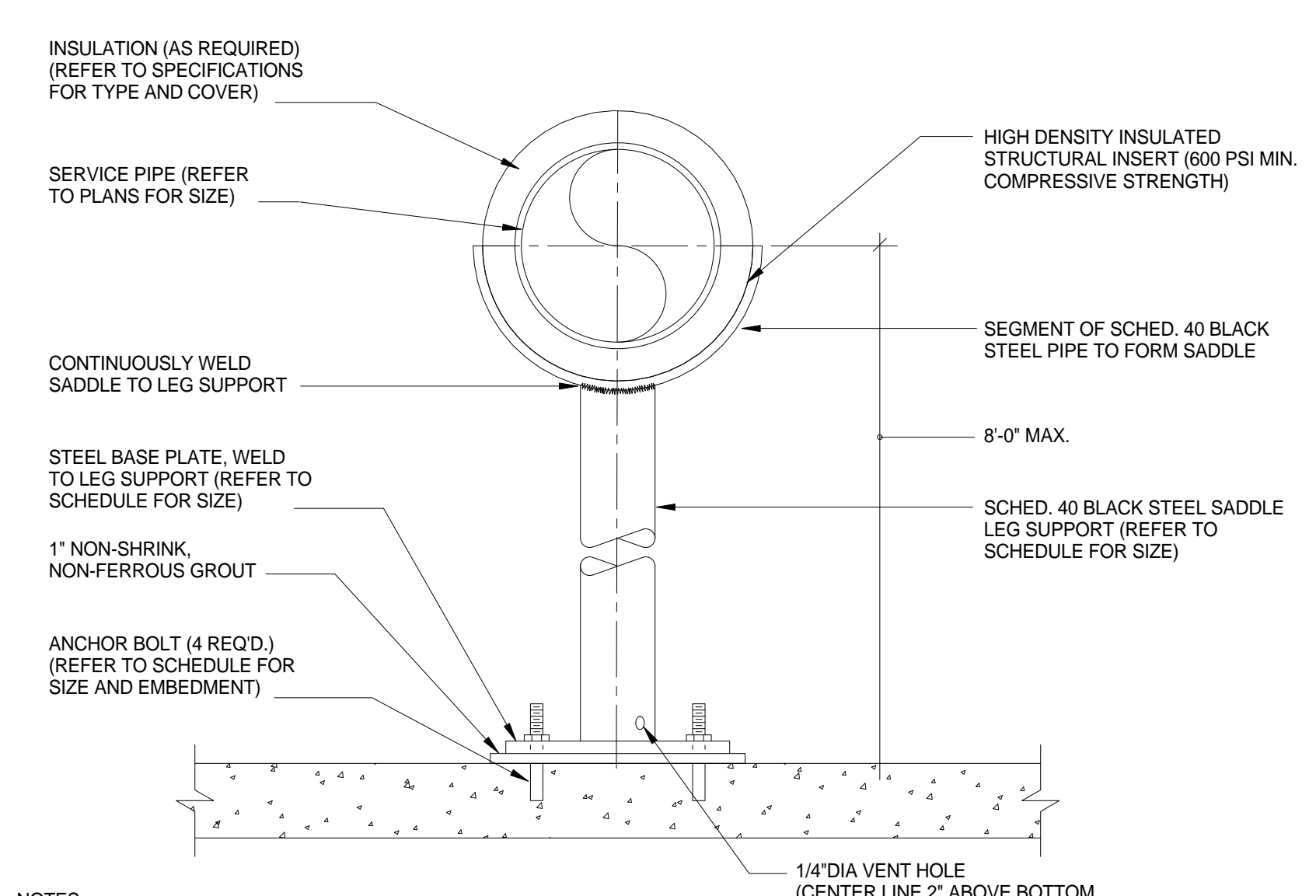
**DETAIL - ADJUSTABLE CLEVIS HANGER**  
SCALE: NONE

- NOTES:**
1. THIS DETAIL SHALL BE USED AS A GUIDE. ALL COMPONENTS SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
  2. THE STEEL WELDLESS EYENUT SHALL BE INSTALLED TO PIVOT IN OPPOSITE DIRECTION OF HANGER.
  3. HANGERS THAT UTILIZE A TURNBUCKLE WILL REQUIRE THE INSTALLATION AND USE OF BOTH RIGHT AND LEFT HANDED THREADS.
  4. PIPE SIZE NOT INCLUDED IN THE LOAD SCHEDULE WILL NOT BE PERMISSIBLE.
  5. THE THICKNESS OF THE INSERT SHALL BE AS REQUIRED TO FIT THE SUPPORT, BUT NOT LESS THAN THE PIPING SYSTEM SUPPORTED.
  6. SEISMIC PROVISIONS SHALL BE REQUIRED, REFER TO SPECIFICATIONS.



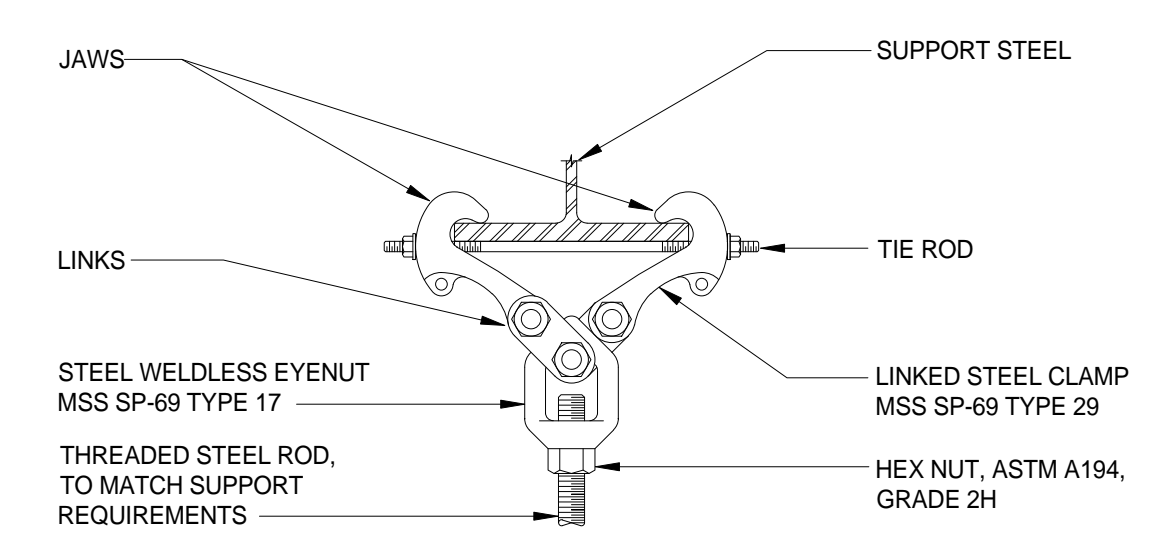
**DETAIL - SINGLE PIPE ROLL**  
SCALE: NONE

- NOTES:**
1. THIS DETAIL SHALL BE USED AS A GUIDE. ALL COMPONENTS SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS.
  2. THE STEEL WELDLESS EYENUTS SHALL BE INSTALLED TO PIVOT IN OPPOSITE DIRECTION OF ROLLER.
  3. STEEL TURNBUCKLES, MSS SP-69 TYPE 13, SHALL BE REQUIRED ON PIPING WITH INSULATION 4" THICK AND GREATER.
  4. THE USE OF A TURNBUCKLE WILL REQUIRE THE INSTALLATION AND USE OF BOTH RIGHT AND LEFT HANDED THREADS.
  5. PIPE SIZE NOT INCLUDED IN THE LOAD SCHEDULE WILL NOT BE PERMISSIBLE.
  6. THE THICKNESS OF THE INSERT SHALL BE AS REQUIRED TO FIT THE SUPPORT, BUT NOT LESS THAN THE PIPING SYSTEM SUPPORTED.
  6. SEISMIC PROVISIONS SHALL BE REQUIRED, REFER TO SPECIFICATIONS.



**DETAIL - TYP. INSULATED PIPE SADDLE SUPPORT**  
SCALE: NONE

PIPE SIZE	SADDLE LEG SUPPORT	BASE PLATE	ANCHOR BOLTS	MIN. EMBEDMENT
8" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	4"
6" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	4"
5" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	3"
4" DIA	3" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	3"
3" DIA	2" DIA	8"x8"x3/8"	1/2" DIA x 8" LONG	3"



**DETAIL - BEAM ATTACHMENT**  
SCALE: NONE

FINAL DESIGN  
APPROVED FOR CONSTRUCTION

<b>Revisions:</b>		<b>Date</b>	

<b>CONSULTANTS:</b>		<b>ENGINEER-OF-RECORD</b>		<b>ARCHITECT/ENGINEERS:</b>		<b>Drawing Title</b>		<b>Project Title</b>		<b>Project Number</b>	
<b>AEI Affiliated Engineers</b> Affiliated Engineers SE, Inc. Tioga Town Center 12921 SW 1st Road Ste 205 Gainesville, Florida 32669 Tel 352.376.5500 Fax 352.375.3479 CA-6140		<b>JACK STEWART NEALE</b> FL P.E. NO. 42678		<b>AKEA INC.</b> 3603 NW 98th Street, Suite B Gainesville, FL 32606 Phone: (352) 474-6124 Fax: (352) 553-4437 COA: FL #26693 AKEA Project No. 083-14		<b>MECHANICAL DETAILS</b>		<b>REPLACE BOILERS - FCA D, ENERGY AT THE MALCOM RANDALL VAMC</b>		<b>573-14-600</b>	
						<b>Approved: Project Director</b>		<b>Location</b> GAINESVILLE, FLORIDA		<b>Building Number</b>	
								<b>Date</b> JULY 8, 2016		<b>Checked</b> JSN	
								<b>Drawn</b> RWD		<b>Drawing Number</b> MP504	
										<b>Office of Construction and Facilities Management</b>	