



**NOTES:**

1. HEADWALL WHERE REQUIRED WILL BE PROVIDED FOR NONSKEWED CULVERTS HAVING A DIAMETER OR RISE OF 36" OR LESS.
2. REINFORCING STEEL SHALL BE #5 BAR.
3. DIMENSIONS AND QUANTITIES ARE SHOWN FOR CIRCULAR SECTIONS ONLY. CALCULATE REINFORCEMENT FOR ELLIPTICAL CONCRETE OR CORRUGATED PIPE IN ACCORDANCE WITH EQUATIONS LISTED BELOW.
4. CONCRETE SHALL BE CLASS "C".
5. THE SOIL MUST HAVE A BEARING CAPACITY OF 2600 PSF PRIOR TO PLACING HEADWALL.

DIMENSIONS		
DIAMETER	H	L
8"~15"	6'-0"	8'-4"
18"	6'-0"	8'-4"
21"	6'-0"	11'-0"
24"	6'-0"	11'-0"
30"	7'-0"	13'-8"
36"	7'-0"	16'-4"

**LEGEND**

D = DIAMETER OF PIPE  
 R = RISE OF PIPE  
 S = SPAN OF PIPE  
 t = THICKNESS OF BARREL  
 L = LENGTH OF HEADWALL  
 H = HEIGHT OF HEADWALL

**EQUATIONS:**

L CIRCULAR SECTIONS =  $5D+4t$   
 L ELLIPTICAL OR PIPE ARCH =  $4R+t+S$   
 H CIRCULAR SECTIONS =  $D+t+44"$   
 H ELLIPTICAL OR PIPE ARCH =  $R+t+44"$

Date: 3/14/2018

Standard Construction Drawing



Precast Pipe Culvert Headwall  
 8" to 36" Diameter

Drawing No.  
 STS-09