

- NOTES:
1. All bar dimensions are measured out to out.

2. All Bars are size #4 unless otherwise noted.

3. Install reinforcing steel with a minimum of 2" cover.

4. Bars B6 and B7 (N.S. and F.S.) equivalent in size to B<sub>5</sub> (cut and bend as required)

5. Bars V<sub>1</sub>, V<sub>2</sub>, V<sub>3</sub>, V<sub>4</sub>, V<sub>5</sub>, H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub>, H<sub>4</sub>, and H<sub>5</sub> are straight bars.

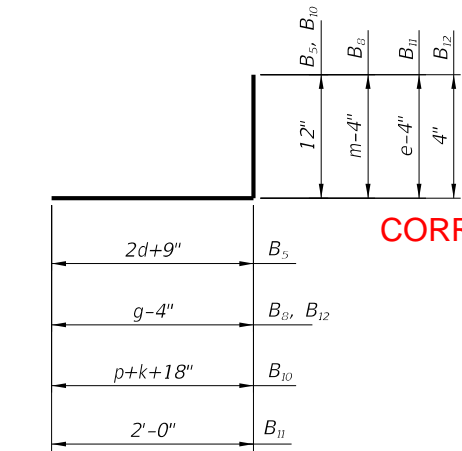
- LEGEND:
- H = Horizontal Bars

V = Vertical Bars

B = Bent Bars

D = Dowels or Diagonal Bars

BENT BARS TABLE												
Pipe	B <sub>1</sub>		B <sub>2</sub>		B <sub>3</sub>		B <sub>4</sub>		B <sub>5</sub>		B <sub>10</sub>	
	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)	Size (No.)	Spacing (Ft.-In.)
30"	4	0-9½	4	1-6	5	0-11	4	0-9½	5	0-5½	4	0-9½
36"	5	1-0	4	1-6	5	0-10	5	1-0	5	0-5	5	1-0
42"	5	0-11	4	1-6	6	1-1	5	0-11	6	0-6½	5	0-11
48"	5	0-9½	4	1-0	6	1-0	5	0-9½	6	0-6	5	0-9½
54"	5	0-8½	4	0-10	7	1-1	5	0-8½	7	0-6½	5	0-8½
60"	6	0-10	5	1-1	7	1-0	6	0-10	7	0-6	6	0-10
66"	6	0-8½	5	0-11½	7	0-11	6	0-8½	7	0-5½	6	0-8½
72"	6	0-7½	5	0-10	7	0-10	6	0-7½	7	0-5	6	0-7½

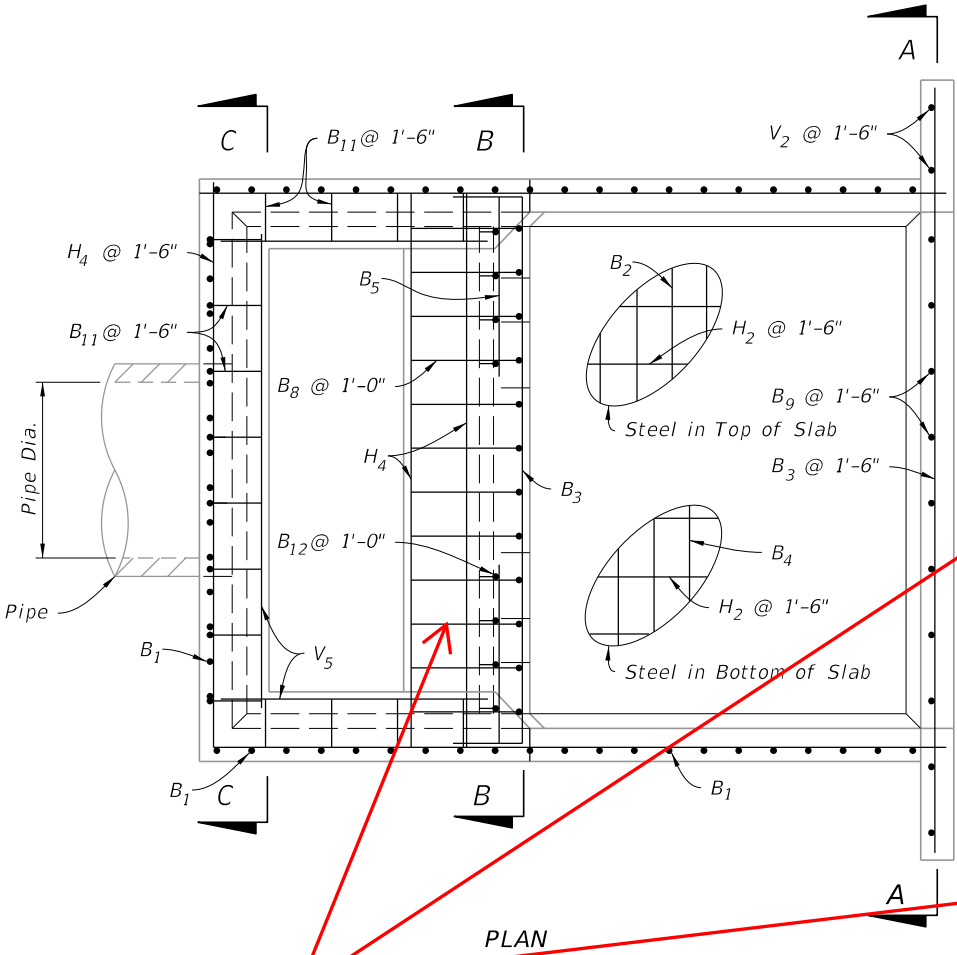


BARS B<sub>5</sub> B<sub>8</sub> B<sub>10</sub> B<sub>11</sub> B<sub>12</sub>

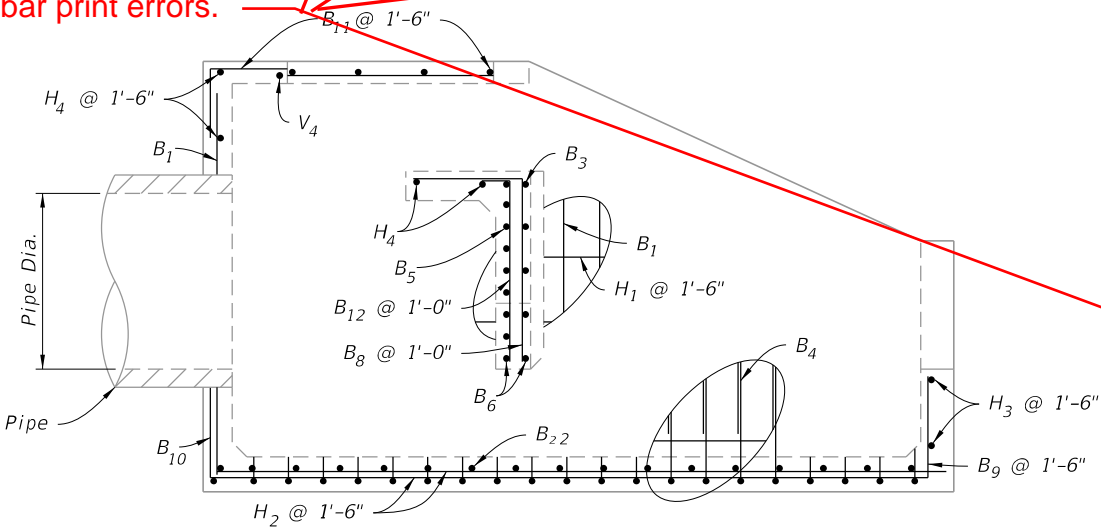


BAR B<sub>4</sub>

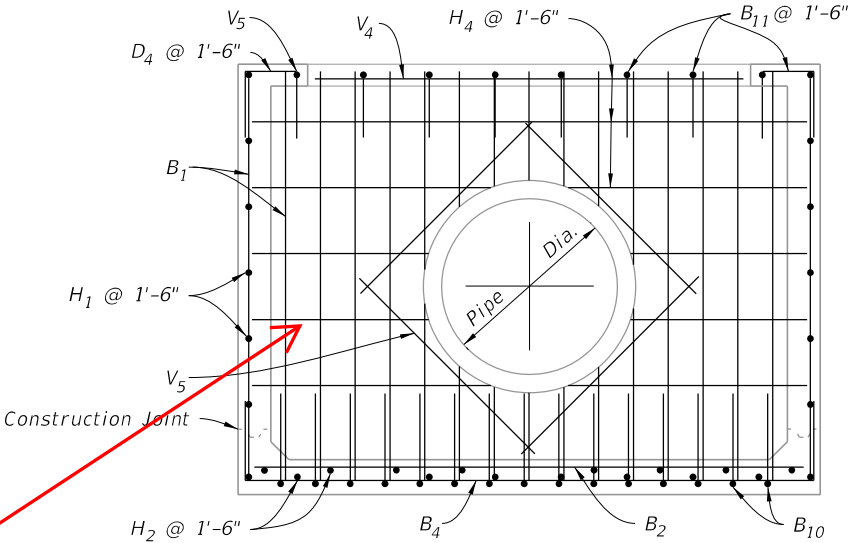
BENDING DIAGRAM



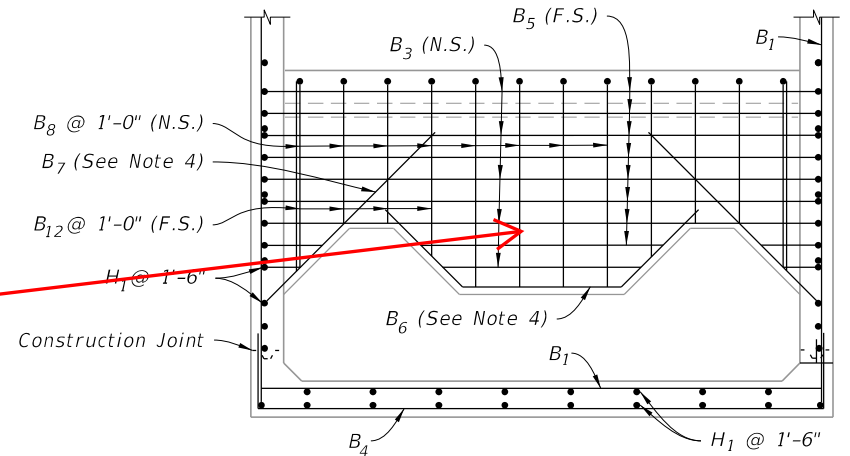
PLAN



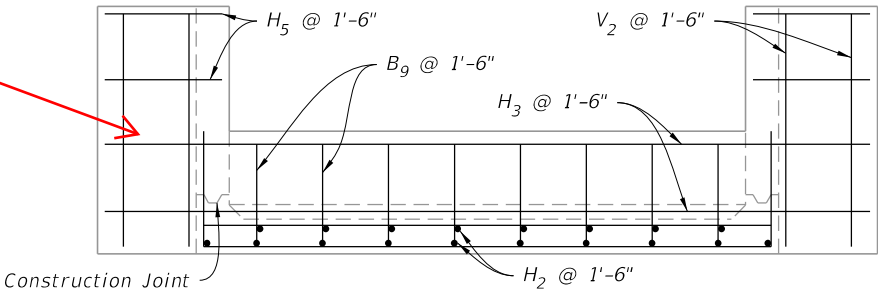
ELEVATION



SECTION C-C



SECTION B-B



SECTION A-A

REINFORCING DETAILS

REINFORCING DETAILS AND BENDING DIAGRAM



FY 2023-24  
STANDARD PLANS

U-TYPE CONCRETE ENDWALLS  
ENERGY DISSIPATOR 30" TO 72" PIPE

INDEX  
430-012

SHEET  
3 of 3