



0° SKEW  
**HALF SECTION BELOW SLAB**  
 NOTE: NUMBER OF PILES AND STIRRUPS SHOWN ARE FOR A 70' BRIDGE.  
 CAP DIMENSIONS ARE TYPICAL FOR ALL SPANS.

**REACTION, PILE SPACING, NUMBER AND BEARING**

BRIDGE LENGTH	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
0° SKEW	5 SPA. @ 4'-6	5 SPA. @ 4'-6	6 SPA. @ 3'-9	7 SPA. @ ABOUT 3'-3	7 SPA. @ ABOUT 3'-3	8 SPA. @ ABOUT 2'-10	9 SPA. @ 2'-6	9 SPA. @ 2'-6	9 SPA. @ 2'-6
15° SKEW	5 SPA. @ ABOUT 4'-8	5 SPA. @ ABOUT 4'-8	6 SPA. @ ABOUT 3'-11	7 SPA. @ ABOUT 3'-4	7 SPA. @ ABOUT 3'-4	8 SPA. @ ABOUT 2'-11	9 SPA. @ ABOUT 2'-7	9 SPA. @ ABOUT 2'-7	9 SPA. @ ABOUT 2'-7
30° SKEW	5 SPA. @ ABOUT 5'-2	5 SPA. @ ABOUT 5'-2	6 SPA. @ ABOUT 4'-4	7 SPA. @ ABOUT 3'-9	7 SPA. @ ABOUT 3'-9	8 SPA. @ ABOUT 3'-3	9 SPA. @ ABOUT 2'-11	9 SPA. @ ABOUT 2'-11	9 SPA. @ ABOUT 2'-11
45° SKEW	5 SPA. @ ABOUT 6'-4	5 SPA. @ ABOUT 6'-4	6 SPA. @ ABOUT 5'-4	7 SPA. @ ABOUT 4'-7	7 SPA. @ ABOUT 4'-7	8 SPA. @ ABOUT 4'-0	9 SPA. @ ABOUT 3'-6	9 SPA. @ ABOUT 3'-6	9 SPA. @ ABOUT 3'-6
① REACTION	370 KIPS	409 KIPS	455 KIPS	505 KIPS	553 KIPS	611 KIPS	668 KIPS	727 KIPS	794 KIPS
① BEARING-TONS	31	35	33	32	35	34	34	37	40
②③ BEARING-TONS	28	31	30	29	32	32	31	34	38
* PILING (NO.)	6	6	7	8	8	9	10	10	10

- ① VALUE INCLUDES DEAD LOAD (PIER CAP WEIGHT IS BASED ON 45° SKEW), LIVE LOAD AND LIVE LOAD IMPACT.
- ② VALUE INCLUDES DEAD LOAD (PIER CAP WEIGHT IS BASED ON 45° SKEW), AND LIVE LOAD, WITHOUT IMPACT.
- ③ FOR ESTIMATING PILE LENGTHS AND FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- \* USE PILES AS SHOWN ON P10A STANDARD PILE DRAWING. TYPE, SIZE, AND LENGTH OF PILES SHALL BE SPECIFIED ON THE PLAN. THE LARGER PILE SIZE SHOWN ON P10A STANDARD PILE DRAWING SHALL BE USED IF EITHER THE ACTUAL "H" DIMENSION OR THE REQUIRED BEARING EXCEEDS THE MAXIMUM "H" OR MAXIMUM BEARING CAPACITY SHOWN FOR THE PILE.

**PIER NOTES:**

ALL MONOLITHIC PIER CAP REINFORCING AND CONCRETE IS INCLUDED IN SUPERSTRUCTURE ESTIMATE OF QUANTITIES.

THE MINIMUM CLEAR DISTANCE FROM THE FACE OF THE CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

THE PIER PILES ARE TO BE DRIVEN TO FULL PENETRATION, IF PRACTICABLE, BUT IN NO CASE TO A BEARING VALUE LESS THAN THE PILE BEARING REQUIRED FOR EACH BRIDGE LENGTH AS SHOWN ON THIS SHEET.

CAP STEEL AS DETAILED ON P10A STANDARD PILE DRAWING IS REQUIRED FOR MONOLITHIC PIER CAPS.

THE CONCRETE QUANTITIES ARE BASED ON THE USE OF TYPE 3 PILING. IF TYPE 1 OR TYPE 2 IS USED, THE CONCRETE QUANTITIES MAY BE ADJUSTED TO ACCOUNT FOR THE CONCRETE DISPLACED BY THE PILING.

ALL REINFORCING STEEL IS TO BE GRADE 60.

PIER PILING WAS DESIGNED FOR HS25 LOADING WITH AN ALLOWANCE FOR 20 LBS. PER SQ. FT. FUTURE WEARING SURFACE.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 24' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE SLAB BRIDGES</b> NOVEMBER, 2006	
		MONOLITHIC PIER CAP DETAILS ALL BRIDGES SHEET 1 OF 2	J24-23-06