

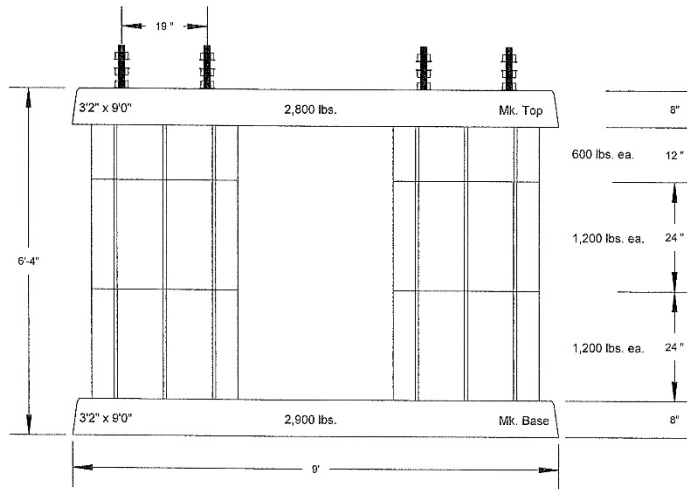
**Dixie Precast, Inc.**

**DPS-16H DPS-90 Bridge Signal Foundation**

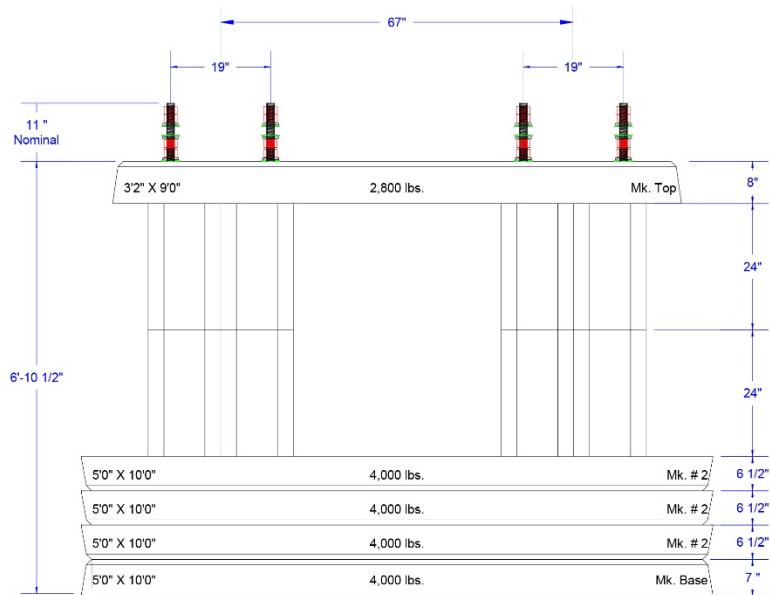
**Installation Instructions**



1. Layout the foundation excavation area in compliance with railroad standards and specifications, including allowances for proper clearances and in accordance with the project drawings.



**Figure 1 DPS-16H Elevation View**



**Figure 2 DPS-90 Elevation View**

2. Determine the required depth of the excavation. Excavation depth should be made in accordance with specific railroad standards for the location of the top of the foundation (i.e. top of the tie, top of the rail, etc.).
3. Excavate for the foundation, allowing ample space for the installation of the base sections. The minimum excavation area should be roughly 4' x 10' for the DPS-16H and 6' x 12' for the DPS-90 Series Foundations. Several inches around the area should be excavated to facilitate proper alignment of the foundation. Level the bottom of the excavation to insure proper alignment of the foundation.



4. The DPS-16H and the DPS-90 series foundations have a one piece base. The base sections will be stenciled on the side of the slab with the marking "Mk. DPS-16H Base" or "Mk. DPS-90 Base". To lift, screw the lifting eyes into the inserts that are cast in the base section. Through the use of a four point sling or chain, hook each lifting eye and lower the base section into place. Note that the weight of each piece is stenciled on the piece.



5. Check the alignment of the base section with the track, making sure the base is aligned properly in accordance with the standards. Check the top of the base after installation for level and make any necessary adjustments by adding or removing fill material under the base. Remove the lifting eyes for reuse.

6. Install the anchor bolts into the foundation bases. The anchor bolts will “bottom out” when installed properly. The base plate design eliminates the need to torque the bolts.
7. Sweep any debris from the top of the base sections prior to the placement of the Spider Sections (DPS-16H) or the # 2 sections (DPS-90). The DPS-16H will consist of 2 each 24” Spiders on each 4 bolt set, topped with a 12” spider on each bolt set. The DPS-90 consists of 3 each of the # 2 sections, followed by 2 each 24” spiders on each 4 bolt set. The spider sections are lifted through the use of the lifting eyes screwed into the inserts cast into the spider. The # 2 Sections are lifted by attaching the hook/clevis to the lifting bar cast into the pockets of the concrete slab.



8. For the DPS-90, secure the sling/chain to the cast in place lifting pockets for proper lifting. Set the # 2 section in place, aligning the anchor bolts with the bolt holes in the slab. The Bolt Alignment Tool allows the bolts to be safely adjusted to align with holes in the slab. Lower the # 2 section onto the base. Sweep the top of each layer prior to setting the next piece. Perform the same procedure with the second and third # 2 sections.



9. The spider sections are lifted through the use of the lifting eyes installed into the cast in place inserts. A spider is set on each group of 4 bolts.



10. The top is then lifted and set in place, again through the use of the lifting eyes. After the top has been set in place, install a flat washer, lock washer, and nut on each bolt. After tightening, install the lower leveling nuts and associated hardware prior to installation of the structure.



11. Backfill the foundation with the excavated material, tamping (can be accomplished with the backhoe bucket) the material to eliminate any voids and to reduce the settlement of the ground around the foundation.

