

When Backfilling operations of an excavation in the traveled way, whether transverse or longitudinal, cannot be properly completed within a work day, steel plate bridging with a non-skid surface and shoring may be required to preserve unobstructed traffic flow. In such cases, the following conditions shall apply.

1. Steel Plates used for bridging must extend a minimum of 12" beyond the edges of the trench.
2. Steel plate bridging shall be installed to operate with minimum noise.
3. The trench shall be adequately shored, as mentioned in Section 516.10, to support the bridging and traffic loads.
4. Temporary paving with cold asphalt concrete shall be used to feather the edges of the plates, if plate installation by Method (2) described below is used.
5. Bridging shall be secured against displacement by using adjustable cleats, shims or other devices. Steel plate bridging and shoring shall be installed using either Method (1) or (2):

Method 1 [For speed greater than 45 mph]:

The pavement shall be cold planed to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.

Method 2 [For speed less than 45 mph]:

Approach plate(s) and ending plate (if longitudinal placement) shall be attached to the roadway by a minimum of 2 dowels pre-drilled into the corners of the plate and drilled 2" into the pavement. Subsequent plates are butted to each other. Fine graded asphalt concrete shall be compacted to form ramps, maximum slope 8.5% with a minimum 12" taper to cover all edges of the steel plates. When steel plates are removed, the dowel holes in the pavement shall be backfilled with either graded fines of asphalt concrete mix, concrete slurry or equivalent slurry that is satisfactory to the City Inspector.

The contractor is responsible for maintenance of the steel plates, shoring, asphalt concrete ramps, and ensuring that they meet minimum specifications.

Use of steel plate bridging should not exceed 4 consecutive working days in any give week. Backfilling of excavations shall be covered with a minimum 3" temporary layer of cold asphalt concrete.

The following table shows the advisory minimal thickness of steel plate bridging required for a given trench width.

Trench Width Minimum Plate Thickness

10" 1/2"	3'-5" 1"
1'-11" 3/4"	5'-3" 1 1/4"
2'-7" 7/8"	

NOTE: For spans greater than 5'-3", a structural design shall be prepared by a California Registered Civil Engineer.

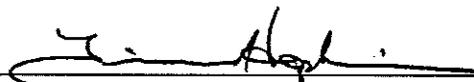
All steel plates within the right of way, whether used in or out of the traveled way, shall be without deformation.

Inspectors can determine the trueness of steel plates by using a straight edge.

Steel plates used in the traveled portion of the highway shall have a surface that was manufactured with a nominal Coefficient of Friction (COF) of 0.35 as determined by California Test Method 342.

A "Steel Plate Ahead" sign with black lettering on an orange background may be used in advance of steel plate bridging. This sign is used along with any other required construction signing.

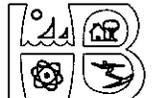
APPROVED:



CITY ENGINEER

CITY OF HUNTINGTON BEACH

DEPARTMENT OF PUBLIC WORKS



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STEEL PLATE BRIDGING

STANDARD PLAN
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