



| В            | С                    |
|--------------|----------------------|
| TRENCH WIDTH | MIN. PLATE THICKNESS |
| 1'-0"        | 1/2"                 |
| 2'-0"        | 3/4"                 |
| 3'-0"        | 7/8"                 |
| 4'-0"        | 1"                   |
| 5-'0"        | 11/8"                |
| 6'-0"        | 11/4"                |

BASED ON HL-93 TRUCK LOAD

## **NOTES:**

- USE OF STEEL PLATES TO BE APPROVED BY THE DEPARTMENT AND IS NOT PERMITTED BETWEEN NOVEMBER 1ST AND MARCH 31ST.
- 2. STEEL PLATE BRIDGING ON FREEWAYS AND EXPRESSWAYS IS STRICTLY PROHIBITED.
- 3. PROVIDE STEEL PLATES AND DOWELS CONFORMING TO ASTM A36 STANDARDS.
- 4. ADEQUATELY SHORE THE TRENCH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO SUPPORT THE BRIDGING AND TRAFFIC LOADS.
- 5. SECURE BRIDGING AGAINST DISPLACEMENT BY USING ADJUSTABLE CLEATS, SHIMS, OR OTHER DEVICES.
- 6. USE OF STEEL PLATE BRIDGING IS NOT TO EXCEED FOUR (4) CONSECUTIVE WORKING DAYS IN ANY GIVEN WEEK AND NOT LEFT IN PLACE OVER THE WEEKEND, UNLESS DIRECTED BY THE ENGINEER IN THE FIELD.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF STEEL PLATES, SHORING, ASPHALT CONCRETE RAMPS, AND ENSURING THEY MEET ALL MINIMUM SPECIFICATIONS. DEFORMATIONS OF ANY KIND ARE NOT ACCEPTABLE ON STEEL PLATES. EXAMPLES OF DEFORMATIONS COULD BE, BUT NOT LIMITED TO, ANY OF THE FOLLOWING: FREE FROM ANY CLIPS, CHAINS, ATTACHMENTS, WELDMENTS, SURFACE IRREGULARITIES, ETC.
- 8. A STRUCTURE DESIGN IS REQUIRED FOR TRENCH WIDTHS GREATER THAN 6'-0". SUBMIT DESIGN TO THE DEPARTMENT FOR APPROVAL.
- 9. INSTALL STEEL PLATE BRIDGING AND SHORING USING EITHER OF THE METHODS BELOW:
  - METHOD 1: FOR SPEEDS GREATER THAN 45 MPH, MILL THE PAVEMENT TO A DEPTH EQUAL TO THE THICKNESS OF THE PLATE AND TO A WIDTH AND LENGTH EQUAL TO THE DIMENSION OF THE PLATE. BUTT SUBSEQUENT PLATES TO EACH OTHER. ATTACH THE PLATE TO THE ROADWAY BY A MINIMUM OF TWO DOWELS PRE-DRILLED INTO EACH CORNER OF THE PLATE AND DRILLED 2" INTO THE PAVEMENT AS SHOWN ON THIS DETAIL.

METHOD 2: FOR SPEEDS 45 MPH OR LESS, ATTACH THE PLATE TO THE ROADWAY BY A MINIMUM OF TWO DOWELS PRE-DRILLED INTO EACH CORNER OF THE PLATE AND DRILLED 2" INTO THE PAVEMENT AS SHOWN IN ON THIS DETAIL. BUTT SUBSEQUENT PLATES TO EACH OTHER. USE COMPACTED BITUMINOUS TEMPORARY ROADWAY MATERIAL (TRM) TO FORM A RAMPED WEDGE WITH A MAXIMUM SLOPE OF 5% AND A MINIMUM TAPER LENGTH OF 20" TO COVER ALL EDGES OF STEEL PLATES.

- 10. FOR BOTH METHODS, WHEN THE STEEL PLATES ARE REMOVED, BACKFILL THE DOWEL HOLES IN THE PAVEMENT WITH EITHER GRADED FINES OF ASPHALT CONCRETE MIX, CONCRETE SLURRY, OR EQUIVALENT SLURRY TO THE SATISFACTION OF THE ENGINEER.
- 11. PROVIDE STEEL PLATES WITH A SURFACE THAT IS MANUFACTURED WITH A MINIMUM NOMINAL COEFFICIENT OF FRICTION OF 0.35 AT THE TIME OF PLACEMENT.

