TYPICAL CROSS SECTION

CASE I - LOW TRAFFIC VOLUME/LIMITED IN-SERVICE TIME

NON-SKID COATING (SEE NOTE 10)

STEEL PLATES, THICKNESS APPROPRIATE TO CARRY
ANTICIPATED LOAD— (SEE NOTE 3)
MINIMUM: 3/4" FOR TRENCHES ≤ 18" WIDE
1" FOR TRENCHES 18" < W ≤ 6' WIDE
WITH ANCHORS IF SPECIFIED IN PLANS OR AS DIRECTED

EXISTING PAVEMENT
COLD MIX ASPHALT
TACK COAT (TYP)

18" MIN. 30" MAX.

SAW CUT AND MILL SURFACE TO
A DEPTH EQUAL TO PLATE THICKNESS

NON-SKID COATING (SEE NOTE 10)

STEEL PLATES, THICKNESS APPROPRIATE TO CARRY
ANTICIPATED LOAD— (SEE NOTE 3)
MINIMUM: 3/4" FOR TRENCHES ≤ 18" WIDE
1" FOR TRENCHES 18" < W ≤ 6' WIDE
WITH ANCHORS IF SPECIFIED IN PLANS OR AS DIRECTED

EXISTING PAVEMENT

OPENINGS GREATER THAN 1/4" SHALL BE FILLED
WITH COLD MIX ASPHALT MATERIAL

18" MIN.

TYPICAL CROSS SECTION

CASE II - EXTENDED IN-SERVICE PLATING AND/OR
HEAVILY-TRAFFICKED ROADS/STREETS
(HMAC PAVEMENTS ONLY)

SCALE: NTS

CITY OF ROUND ROCK

STEEL PLATING

DRAWING NO: ST-24.1
SHEET 1 of 3

01-28-21
DATE

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR THE APPROPRIATE
USE OF THIS DETAIL.
1. WHERE TRAFFIC MUST CROSS TRENCHES, THE CONTRACTOR SHALL PROVIDE SUITABLE PLATES.
   ALL PLATES ARE TO BE INSTALLED AS DETAILED.

2. THE USE OF STEEL PLATES SHALL BE AS APPROVED BY THE ENGINEER PRIOR TO
   INITIATION OF CONSTRUCTION.

3. THE THICKNESS OF PLATES FOR TRENCH WIDTHS EXCEEDING 6' SHALL BE
   ESTABLISHED IN AN ANALYSIS COMPLETED BY A LICENSED PROFESSIONAL ENGINEER,
   REGISTERED IN THE STATE OF TEXAS. THE ANALYSIS SHALL BE BASED ON HS-20
   TRAFFIC LOADING WITH A MAXIMUM PLATE DEFLECTION OF 1/2” WHEN
   EXPERIENCING SAID LOADING. FOR SITUATIONS WHERE MULTIPLE LAYERS OF
   PLATES (OR STACKED PLATES) ARE TO BE EMPLOYED, THE SEAMS (I.E. THE INTER-
   FACE BETWEEN PLATES PLACED SIDE-BY-SIDE) OF THE UPPER LAYER SHALL BE PLACED
   PERPENDICULAR TO THE SEAMS OF THE UNDERLYING PLATES.

4. WHEN APPROVED, THE TYPE OF PLATE INSTALLATION SHALL BE BASED ON THE ANTICIPATED
   LENGTH OF TIME THE PLATE WILL BE IN SERVICE:
   CASE I: A CASE I INSTALLATION SHALL APPLY FOR NO LONGER THAN A 2 WEEK PERIOD.
   CASE II: A CASE II INSTALLATION SHALL APPLY FOR LONGER THAN 2 WEEK PERIOD.

5. THE TOPSIDE OF THE STEEL PLATE SHALL BE FLAT AND FREE OF ANY CLIPS, CHAINS,
   ATTACHMENTS, WELDMENTS OR SURFACE IRREGULARITIES.

6. PLATES WITH A PERMANENT DISPLACEMENT (I.E. DISPLACEMENT ANYWHERE ON THE
   SURFACE OF THE PLATE WITH RESPECT TO A PLANE FORMED BY THE OUTSIDE
   EDGES) THAT EXCEEDS 1/2” SHALL NOT BE USED FOR PLATING PURPOSES.
   PLATES THAT DEVELOP A PERMANENT DISPLACEMENT EXCEEDING 1/2” DURING
   SERVICE SHALL BE REMOVED AND REPLACED.

7. THE PLATES SHALL BE PROVIDED WITH APPROPRIATE NUMBER OF KEYHOLE
   SLOTS OR CIRCULAR HOLES FOR HANDLING, LIFTING, INSTALLATION AND REMOVAL
   PURPOSES.

8. THE CONTRACTOR SHOULD AVOID USING A LONG SERIES OF PLATES THAT RUN
   PARALLEL TO VEHICULAR TRAFFIC WHEELS PATHS.

9. ADDITIONAL METHODS OF SECURING PLATES MAY BE REQUIRED DEPENDING ON FIELD
   CONDITIONS.

10. FOR PLATES 6' OR GREATER IN DIRECTION OF TRAFFIC, A NON-SKID COATING
    SHOULD BE APPLIED TO THE ENTIRE SURFACE AREA OF ALL PLATES, AS WELL AS
    ADJACENT AREAS. THE NON-SKID COATING SHALL BE TOCA (TEXTURED COATING OF
    AMERICA, INC.) STRATA-GRIP DECK COATING SYSTEM; SLIPFIX, INC. SPS (SLIP
    PROTECTION SURFACE) OR AN EQUIVALENT PRODUCT APPROVED BY THE ENGINEER.

11. FURNISH FOR ENGINEER'S APPROVAL THE PLATE LAYOUT, CONSTRUCTION METHODS,
    AND ANTICIPATED DURATION PRIOR TO CONSTRUCTION.
NOTE:
REFER TO TRAFFIC CONTROL PLAN
FOR PHASING OF EXCAVATIONS

COLD MIX ASPHALT

DEPENDING ON ROADWAY GEOMETRY,
OR TRAFFIC VOLUMES
PLATES MAY NEED
TO BE TACKWELDED TOGETHER

TEMPORARY BACKFILL/PAVT. REPAIR

LATERAL PLATING

30' MAX

LONGITUDINAL PLATING

SCALE: NTS

RECORD SIGNED COPY ON FILE
APPROVED

01-28-21
DATE

THE ARCHITECT/ENGINEER ASSUMES
RESPONSIBILITY FOR THE APPROPRIATE
USE OF THIS DETAIL.

CITY OF ROUND ROCK

STEEL PLATING

DRAWING NO:
ST-24.3

SHEET 3 of 3

ROUND ROCK TEXAS