

**DETAIL 1 - ASPHALT PAVEMENT SURFACE**

**TYPICAL SECTION**  
NO SCALE

**GENERAL NOTES** - All work shall conform to the latest APWA Standard Specifications and Design Criteria, Division II, and Kansas City, Missouri Supplements, Standards and Utility Cut regulations. Excavations shall be protected at all times. Once excavation is made, work shall continue on a workday basis until final restoration is complete. Cuts in roadways shall be plated or temporarily filled and capped with cold mix asphalt when work is not being performed. Trees shall be protected from damage both above and below ground. City Forester at 513-8900 must be contacted when digging within five (5) feet of a tree or when any damage to the tree or a root over three (3) inches occurs.

**1. EXCAVATIONS** - The top dimension of the excavation shall be equal to or greater than the bottom dimension. (All sides of the excavation shall be vertical or lay back greater than vertical before beginning backfill.)

**BELL HOLE EXCAVATIONS** - Excavation around underground facilities wider than surface opening will be allowed if the excavation is backfilled within 24 hours with flowable backfill as stated in 3 below. If unable to complete in the time frame, then the unsupported subgrade and pavement shall be removed to meet the provisions of section 1 above.

**2. BEDDING** - Utility bedding shall be granular bedding meeting 2602, compacted embankment meeting 2602, or flowable fill meeting 2602 unless approved by City. Bedding may extend no greater than 12" above utility. In the downtown loop granular bedding shall not be used.

**3. BACKFILL** - Backfill shall not be placed in water or mud. Clean graded rock or frozen material shall not be used as backfill. Backfill material and placement shall meet the requirements of 2602.3.C. Franchise utilities with an approved compaction testing program may perform their own compaction tests. All other requirements of 2602.3.C must be met.

**4. ROADWAY SURFACES** - Surfacing shall be of same type of materials as the existing surface. The finished surface shall be flush with the surrounding surface and shall match the slope and contours of the surrounding pavement. An ID tag shall identify the contractor and the year the restoration was made.

**A. Portland Cement Concrete - (Detail 4)**

If the street cut is in a concrete street, the patch shall extend to the nearest joint in all directions. The patch shall be saw cut and all load transfer devices, expansion joints and reinforcing steel placed prior to placing the new concrete. Concrete shall be placed to the current thickness of pavement or ten (10) inches, whichever is thicker. The concrete must match the color and pattern of the previous pavement.

**B. Asphalt - (DETAIL 1)**

Pavement shall be removed twelve (12) inches beyond the edge of the disturbed subgrade or pavement, whichever is greater. If the excavation is within three (3) feet of an existing joint or cut, the surface shall be extended to that joint or cut. Tack coat shall be applied (Section 2204), surface placed and compacted (Section 2205.3) and joints sealed (Section 2206.2). If asphalt is not available at the time repairs are made, concrete may be brought to the surface as a temporary repair. Once asphalt is available, the top 2" of the concrete shall milled out and 2" of asphalt put back.

**C. Other Materials**

- Brick and other paver type materials shall be replaced with matching materials placed over eight (8) inch concrete base similar to DETAIL 1.
- Oiled crushed rock roads shall have four (4) inches of Type 3 asphaltic concrete placed over a minimum of six (6) inches of untreated compacted aggregate base.
- Earth or crushed rock roads shall have a minimum of twelve (12) inches of untreated compacted aggregate.
- All others shall be replaced as directed by the City.

**5. OTHER SURFACES** (Backfill under all surfaces shall be as shown in details for pavement.)

**A. Sidewalks, Curbs and Driveways** - Any section that is cut shall be removed to the nearest joint (Section 2209.3A and 2301.3A). Restoration shall match the existing surface material and joint pattern and shall comply with the appropriate standards.

**B. Grass Areas** - Finish to grade with six (6) inch topsoil compacted to 90%. Seed or sod (Section 2400) area as appropriate.

**C. All Other Areas** - Replace as directed by the City.

**6. MISCELLANEOUS REGULATIONS**

**A. Permits are required before working in right-of-way, which must be on site during work.**

1. Excavation Permits: Public Works 513-2574 or 513-2679 Park Dept. (513-7606)
2. Traffic Control Permit: 513-2646

**B. Notifications required before actual excavation begins:**

1. 2 Working Day Minimum: MO. ONE CALL 1-800-344-7483.
2. 24-Hour Minimum: Public Works 513-8700.

**C. Permit holder must have inspection of backfill or permit will be void. Contact utility cut inspection section @ 513-8700, fax 513-8822, to request inspection in advance.**

**D. Repairs match existing street slope and grade and shall be maintained for three (3) years or bond period.**



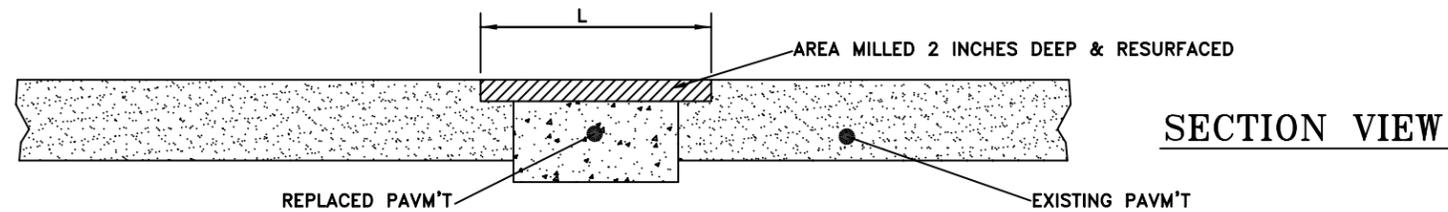
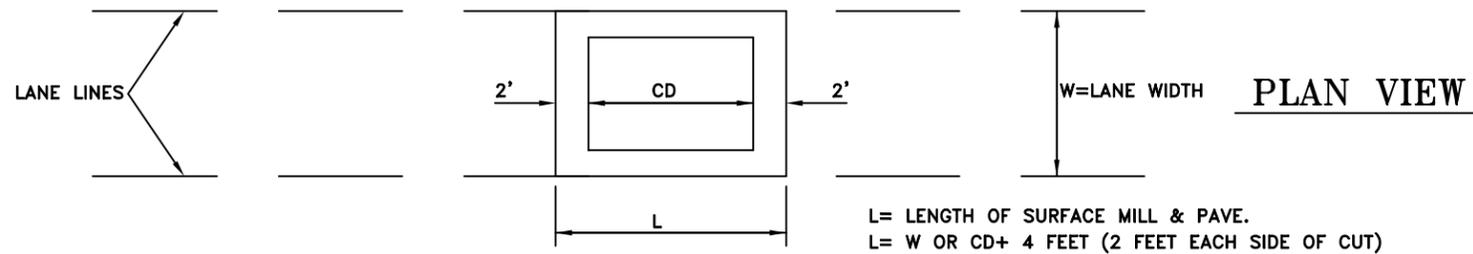
**Kansas City, Missouri**  
**Public Works Department**

**STREET CUT RESTORATION**

STANDARD DRAWING NUMBER  
**SR-1**  
(PG 1 OF 3)

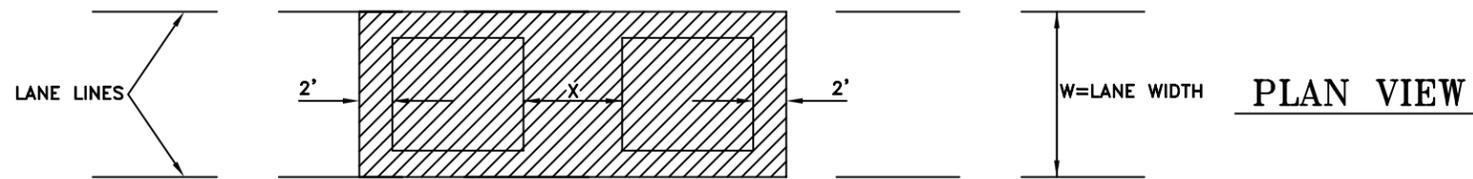
Drawn by R.S.F.

Revised May, 2008



## DETAIL 2

NO SCALE



IF DISTANCE X IS LESS THAN W, THEN ENTIRE AREA SHADED WILL BE MILLED & RESURFACED.

## DETAIL 3

NO SCALE

E. In asphalt streets, core hole excavations 18 inches in diameter or less may be repaired after proper backfilling, by reinstalling the original surface core. The core must be fully intact and installed with an approved epoxy grout. The finished patch must have all cut lines completely filled with the grout.

### 7. EXCAVATING IN STREET PAVEMENTS WITHIN TWO YEARS OF CONSTRUCTION OR RESURFACING.

The City will make available its proposed 2-year schedule of street construction and resurfacing to businesses that may require making street cuts. If a street cut is made, for a non-emergency purpose, within 2 years after a street is constructed or resurfaced, the following requirements will apply:

#### A. Asphalted Surfaced Streets

##### 1. The width and length of the surfaced area shall be as follows:

WIDTH - extend to the full lane width of the affected lane.

LENGTH - extend to the width of the affected lane or the length of the cut plus four feet, whichever is greater.

The area described above shall be milled to a depth of 2 inches and a two-inch thick asphalt surface course shall be placed. This is shown in Detail 2. All lanes affected by the cut shall be milled and resurfaced as stated above.

#### B. For Concrete Streets

The entire slab shall be removed and replaced to the existing joints.

### 8. In asphalt streets, when multiple street cuts are separated by less than the width of the affected lane, the lane shall be resurfaced with a single, continuous and contiguous patch. This is shown in Detail 3.

### 9. EXCAVATING IN PAVED AREA ADJACENT TO A MANHOLE: If pavement is removed adjacent to a casting with a clear opening of 30 inches or less and it does not match the slope and grade of the surrounding pavement, the manhole ring must be replaced with an adjustable manhole ring. All adjustable manhole rings must be adjustable to meet the slope and grade of the pavement from 0 to 17%, and shall be able to be raised and lowered in 1/4 inch increments up to 2 3/4 inches.

The ring and lid shall be rated for H20 traffic. Any casting with a diameter larger than 30 inches must be approved by the Director of Public Works prior to being installed. These casting requirements do not apply to valve castings.



Kansas City, Missouri  
Public Works Department

STREET CUT  
RESTORATION

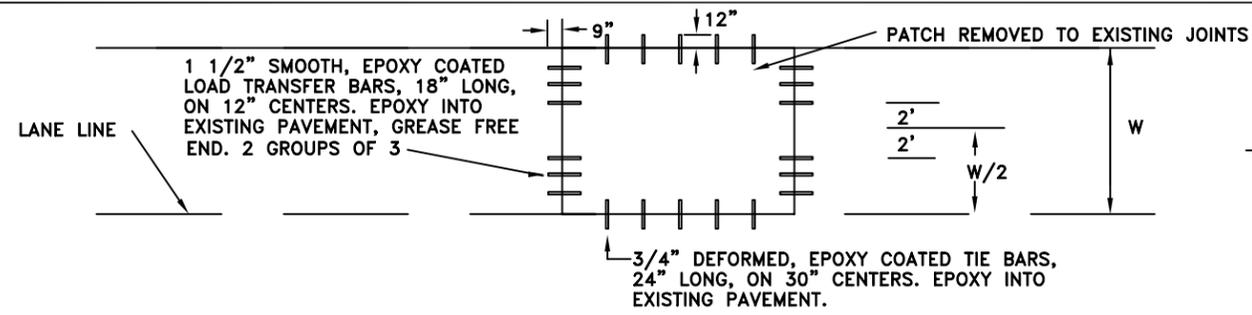
STANDARD DRAWING NUMBER

SR-1  
(PG 2 OF 3)

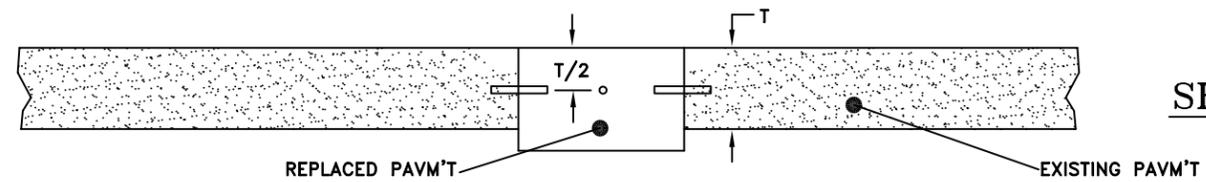
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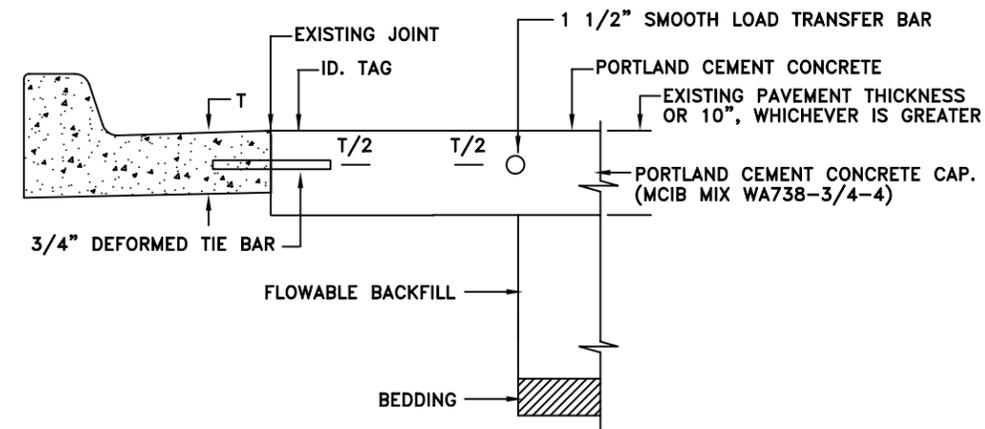
10. UTILITY APPURTENANCE SLOPE AND GRADE: All utility appurtenances shall be installed and maintained at a slope and grade that meets the surrounding pavement within 1/4 inch. The slope and grade tolerance shall be measured by placing a 6 foot straightedge across the manhole and measuring the distance between it and the pavement. One end of the straightedge shall be placed on the casting ring and the straightedge shall cross the opposite edge of the ring. This measurement shall be made on both sides in the direction of travel. All appurtenances shall be adjusted to the proper slope and grade prior to any street paving or patching. If adjustments are not completed prior to the street paving or patching, note 7 of this standard shall be applicable.



PLAN VIEW



SECTION VIEW



P.C. CONCRETE PAVEMENT SURFACE

**DETAIL 4**

NO SCALE



<b>Kansas City, Missouri</b> Public Works Department	
STREET CUT RESTORATION	STANDARD DRAWING NUMBER <b>SR-1</b> (PG 3 OF 3)
Drawn by R.S.F.	Revised January, 2008