



# Encroachment Permit PAVEMENT REPAIRS

City Of Orange  
Department of Public Works  
January 2019

This guideline set forth the requirements for street cut repair. Pavement surface protects the integrity of the roadway and its longevity. Pavement cuts reduce the longevity of the street. Proper repair is necessary to prevent deterioration of the cut area and minimize the loss of pavement lifetime. It is therefore critical that this repair guideline be followed to maintain pavement integrity.

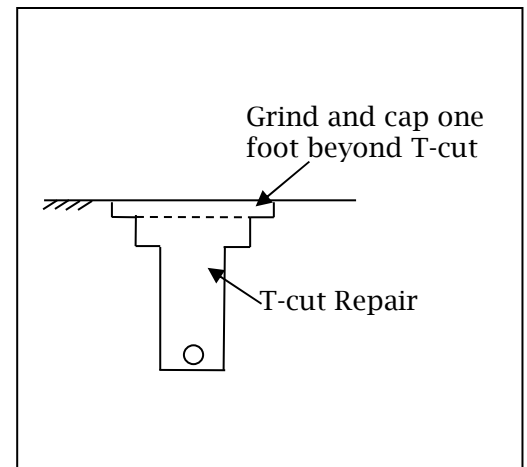
## General Guidelines for Repairing Pavement Cuts

General guidelines for trench cut repair are specified in City of Orange Public Works Standard Plan 125. Repair methods specific to certain types of pavement are outlined below for clarification.

- All trench cut repairs in road pavements shall be per Standard Plan 125.
- All trench cut repairs in sidewalk shall require replacement of full concrete panel, from score line to score line, and shall be per Standard Plan 118.
- Trench shall be backfilled with one and half sack of slurry concrete.
- Restore all traffic lane striping and legends damaged by the street cut and restore any damaged curb painting.

### **Asphalt Pavements:**

- The trench cut section shall be a "T" configuration with one-foot "T" wing on both sides of the trench. The "T" shall be excavated to below existing pavement base.
- After completing the T-cut repair, the surface shall be grind and overlay to a minimum of one foot beyond the T-cut section. The actual limits may need to be determined by the inspector in the field.
- Thickness of the pavement asphalt shall match existing unless otherwise specified by the City.



### **Concrete Pavements:**

- The trench cut section shall be a "T" configuration with one-foot "T" wing on both sides of the trench. The "T" shall be excavated to below existing pavement base.
- New concrete shall be dowel joined with existing concrete.
- Thickness of the concrete shall match existing.

## Guidelines for Streets with Specific Pavement Types

### **Concrete Streets with Asphalt Overlay**

Various streets in the downtown area may have the original concrete pavement underneath new asphalt concrete paving. Special conditions will be specified by the City depending on the actual layout of the pavement.

### **Pavement with Reinforcing Fabric Overlay**

- New pavement fabric overlay must be properly tied to existing to maintain integrity of the fabric.
- Overlap new fabric by at least one foot, or as required by the city inspector.

### **Rubberized Asphalt Pavements**

- All streets with rubberized asphalt pavement shall be restored using the same.
- Rubberized asphalt paving shall be paved using approved paving machine.
- Note that the actual width of the final grind and cap may be wider than standard T-Cut repair depending on the paving machine used.

### **Concrete Pavement in Old Towne District**

Special concrete finishing is required for concrete pavement in the Old Towne District. Please see Notes in Standard Plan 125 for details.

### **Trench Cuts in Concrete Bus Bay**

- Use high early strength concrete
- 3500 psi strength
- 3 day quick set

### **Street Cut in Pavement Moratorium Area**

Moratorium streets are streets that have been resurfaced within the last 3 years (OMC 12.20.360). Trench-cuts are not allowed on moratorium streets.

#### **O.M.C. 12.20.360 - Moratorium.**

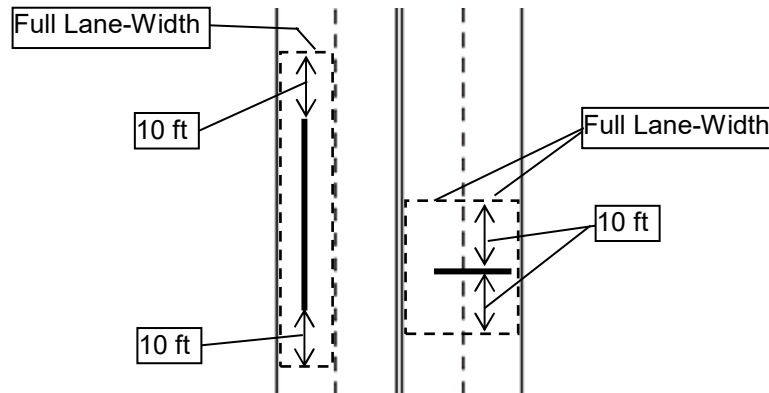
No excavations shall be allowed in any public street, alley or other public place for a period of three years from the completion of street resurfacing or reconstruction; provided, however, that the Director of Public Works may adopt rules and regulations to allow exceptions to this moratorium when such exceptions would benefit the public; and further provided that the inspection cost to be charged shall be sufficient to recover the actual costs of inspection instead of the fees specified in Section 12.20.160 of this chapter.

Under certain special circumstances, such as utility needs by new developments fronting moratorium streets or emergency repairs by utility agencies, it may be necessary to cut a newly paved street. With special approval by the Director of Public Works, excavation on a street under pavement moratorium may be allowed, but with special conditions.

Cutting newly resurfaced street tends to reduce the lifetime of the street roadway. It also degrades the aesthetic appearance of the new pavement surface. In order to help remedy these concerns, additional pavement restoration requirements are imposed for streets under pavement moratorium. These additional requirements are given below:

Moratorium Repair for New Overlay Streets:

1. The limits of grind and overlay area for the trench cut repair shall be full lane width from striping to striping (or from striping to concrete gutter). The lane extent of the grind and overlay area shall be 10 feet of street length in both directions. If the trench is in the middle of two lanes, then the limits of grind and overlay shall be two lane widths.
2. For streets with rubberized overlay, trench cut repair procedure for rubberized pavement shall apply.



Moratorium Repair for New Slurry Seal Streets:

1. The limits of T-grind and overlay shall be a minimum of one foot beyond T-cut, as per Standard Plan 125. However, the exact T-grind limits will need to be determined by the inspector in the field as specific situations may necessitate changes in T-grind width.
2. After completion of the trench repair per Standard Plan 125, slurry seal over the entire lane width and extending 10 feet further along street lane in both directions.

Moratorium Repair for Concrete Streets:

1. The limits of pavement repair shall be the full concrete panel to score lines.
2. Concrete specifications shall match original pavement design.

## Multiple Potholing

When multiple potholes are made in close proximity or along a stretch of linear path, standard pothole patch repair will result in an aesthetically unsightly street. In such a situation, a larger area of the street will need to be overlay to eliminate the appearance of multiple patch repairs.

For multiple pothole patches grouped in close proximity, one large patch should be made to cover the entire area of group.

For a linear series of potholes in closely spaced distance of 100 feet or less between potholes, the entire stretch of the linear path will need to be overlay like for a T-cut repair. This means the entire length of the potholes shall be overlay as one linear patch. The width of the overlay shall equal or be wider than the width of each of the T-cut capping.

