

# City of Dalton Gardens Pavement Cut Policy

Effective January 7<sup>th</sup>, 2021



Prepared By:

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### PURPOSE:

The purpose of this policy is to establish a uniform approach to pavement cuts and repair applicable to utilities and other contractors working in the City's rights-of-way.

### GENERAL REQUIREMENTS

1. Patching:

- a. No patching material will be allowed within an existing patch if the new patch exceeds seventy percent or more (70%+) of the existing patch. The entire existing patch shall be replaced.
- b. The minimum length of the patch parallel to the road shall be six feet (6'-0"). If any part of the excavation, patch or damaged area intrudes into an adjacent lane, that lane shall also be replaced.
- c. New patches adjacent to any existing patch shall be installed at the existing patch line. When this is not feasible, no gap of 4 feet or less shall exist.
- d. When 2 or more patches are created within a given job that measure 15 feet or less longitudinally or transversely, they will be incorporated into a single patch. Anytime five or more patches are required within a 350-foot longitudinal area, the utility will notify the City to determine if cost sharing is an option to expand the pavement repair/replacement area.
- e. Only saw cutting or approved grinding device will be allowed. Only parallel and perpendicular pavement cuts will be allowed. No jagged, broken or rolled undermined edges.
  - i. Per City approval, grind and overlay outside of the full depth asphalt removal limits may be allowed to achieve full patch limits.
  - ii. There may be times when a diamond shaped patch is the preferred method for the repair (i.e. man holes and valve boxes), since it will provide a smoother ride instead of a square patch.
- f. A Tack Coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted. Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.08 gallons per square yard.
- g. All pavement **overcuts** shall be sealed full depth, flush with the pavement surface. The contractor is required to use an approved crack sealant material as defined in Specifications for Joint Adhesive and Crack Sealant section. The maximum length of overcut is equal to the depth of asphalt. Crack Sealant shall be applied according to manufacturer's recommendations. If any holes remain after application, the contractor is to repeat procedure.
- h. A joint adhesive shall be used on all transverse and longitudinal joints of all lifts of asphalt that are not hot lapped or as designated by the City Engineer. The contractor is required to use an approved joint adhesive option as defined in the Specifications for Joint Adhesive and Crack Sealant section. It is important to assure that the wearing course joint is sealed completely

and can visually be seen upon inspection. Joint Sealant shall be applied according to manufacturer's recommendations.

- i. The completed surface of all courses shall be of uniform texture; smooth, uniform as to crown and grade and free from defects. The completed surface of the wearing course shall not vary more than 1/4 inch from the lower edge of a ten-foot straightedge placed parallel to the centerline. Recognition and consideration will be made for existing roadway conditions. The City Engineer must approve corrective measures.
2. Materials. All patching materials and construction requirements not addressed in this document shall conform to ISPWC. Any variances to the specifications shall be requested in writing prior to the work.
  3. Traffic Control:
    - a. All existing traffic control markings will be replaced as soon as possible after permanent paving is completed.
    - b. Temporary markings for lane lines and stop lines shall be in place prior to the roadway opening for traffic.
    - c. All remaining temporary striping will be completed within seven days of new pavement completion and shall be maintained by permittee until permanently restored.
    - d. All traffic markings will be replaced per normal work practices. All temporary traffic control for the work zone shall conform to the MUTCD and Idaho State modifications to the MUTCD and shall be stamped by a professional engineer licensed in the state of Idaho.

### **SPECIFIC REQUIREMENTS**

1. All existing pavement types shall be constructed at the existing depth of asphalt and crushed surfacing; Replacement section of asphalt shall not be less than 2.5".
3. All areas outside of the travel lanes that are affected by the work shall be restored to their original condition. All shoulders shall be restored to their original condition.

### **WARRANTY REQUIREMENTS**

1. All roadways shall require a minimum three-year warranty period. The patch in the roadway shall be repaired as necessary until the warranty has passed. All warranties shall become void if rehabilitation work is performed to the road within the patching limits.
2. For road cuts performed by a Utility using its internal capability, that Utility or assignee will be responsible for repairs required during the warranty period.
3. All curb, sidewalks and structures that are affected by the excavation shall be included in this policy and have a warranty for three years.
4. All warranty work requires that a City inspector be on site. The permittee shall be required to coordinate inspection with the appropriate department within the City.
5. The following defects identified by the city engineer shall be covered by warranty:
  - a. Sunken or uneven pavement patches greater than or equal to one-quarter inch (Measured by a ten-foot straight edge).
  - b. Poor workmanship.
  - c. Inadequate compaction per City standard.
  - d. Sunken or damaged utility boxes in excavation work area.

6. Notice of Repairs.
  - a. If emergency repairs are needed due to safety concerns, the permittee shall have twenty-four hours in which to make such repairs from time of verbal notice.
  - b. Residential streets, the permittee shall have up to seven days to make such temporary repairs.

The City may provide for repairs not completed within the specified timeframe and permittee will be assessed all costs associated with the repairs. The costs shall be based on actual costs plus ten percent overhead fees. If repairs are made other than seam sealing to the warranted patch, a new warranty will be implemented for the new patch.

The permittee shall have two days to notify their asphalt company of the needed permanent repairs. If the work is not done in a timely manner and following notification the work shall be privately contracted or City maintenance crews will perform the needed repairs. The permittee shall be assessed the associated fees for the repairs. All utility cut construction shall follow the construction and warranty requirements per ISPWC standards.

### **TEMPORARY PATCHING**

1. During winter asphalt concrete paving plant closures or outside of temperature specifications (see section 3.9 Weather Limitations of the ISPWC). The permittee shall install and maintain a temporary patch until it can construct a permanent patch. A temporary patch will be required if the road must be opened to traffic before a permanent patch can be made.
2. The temporary patch shall consist of four inches of crushed surfacing and two inches of cold-mix asphalt pavement, or upon approval of the City Engineer, crushed surfacing top coarse and/or steel plates may be used.

### **RESPONSIBLE PARTY**

The permittee shall be responsible for all construction and warranty requirements of this policy. Utilities will provide identity of excavator/permittee as known to local agencies. The City will attempt to get permittee to correct warranty defects. If permittee is a subcontractor for utilities, the utilities will assume responsibility if permittee cannot/will not make repairs.

### **SPECIFICATIONS FOR JOINT ADHESIVE AND CRACK SEALANT**

The Contractor shall install Joint Adhesive to all joints of wearing course lifts that are not hot lapped or as designated by the Engineer. Equipment used for performing the joint adhesive application shall be maintained in satisfactory working condition at all times. Prior to the application of the joint adhesive the face of the joint shall be thoroughly dry and free from any loose material, dust, or other debris that would inhibit adhesion. Heating and pumping of joint adhesive shall be in accordance with manufacture recommendations. Application of the joint adhesive shall be in a continuous, 1/8-inch-thick band over the entire vertical face of the joint. Joint adhesive shall be applied concurrent with HMA placement and application shall be limited to the surfaces that will be paved during the same working shift.

#### **Joint Adhesive – Hot Applied – Option 1**

Joint adhesive material shall conform to the following requirements:

#### **Test Specification**

Cone Penetration, 77°F (25°C) (ASTM D 5329) 60 - 100

Flow, 140°F (60°C) (ASTM D 5329) 5 mm maximum  
Resilience, 77°F (25°C) (ASTM D 5329) 30% minimum  
Ductility, 77°F (25°C) (ASTM D 113) 30 cm minimum  
Ductility, 39.2°F (2°C) (ASTM D 113) 30 cm minimum  
Adhesion, 77°F (25°C) (ASTM D 5329) 500% minimum  
Softening Point (ASTM D 36) 170°F (77°C) minimum  
Asphalt Compatibility (ASTM D 5329) Pass  
Installation: Install according to manufacturer specifications.

### **Joint Adhesive – Tape – Option 2**

Joint adhesive joint tape shall conform to the following requirements:

Test Specification

Softening Point, 225° F (107) min.

Flexibility 90-degree Bend, 1” (25mm) mandrel (ASTM D311), Pass at 30° F (-34° C)

Cone Penetration 77° F (25° C) (ASTM 5329), 50 max

Elongation 77° F (25° C), 1,000% min

Opening to traffic time, immediate

Installation: Install according to manufacturer specifications.

### **Joint Adhesive - CSS1/Sand – Option 3**

A heavy application of tack coat (0.16 gallons per square yard) shall be applied to all vertical faces of the joints. Care shall be taken to assure that enough tack coat has been applied to seal the joint once the patch is complete. A clean sand may be needed to blot the adhesive while patching to assure that the tack coat does not track off site. It should be evident that the joint is sealed to the City inspection staff. If the joint opens up, the contractor shall seal the joint with an approved crack sealant.

For Roadways open to traffic, the application of joint adhesive, tack coat, and crack sealant shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material. Equipment shall not operate on the joints until the adhesive has cured. If the Contractor’s operation damages the joint adhesive it shall be repaired prior to placement of the HMA.

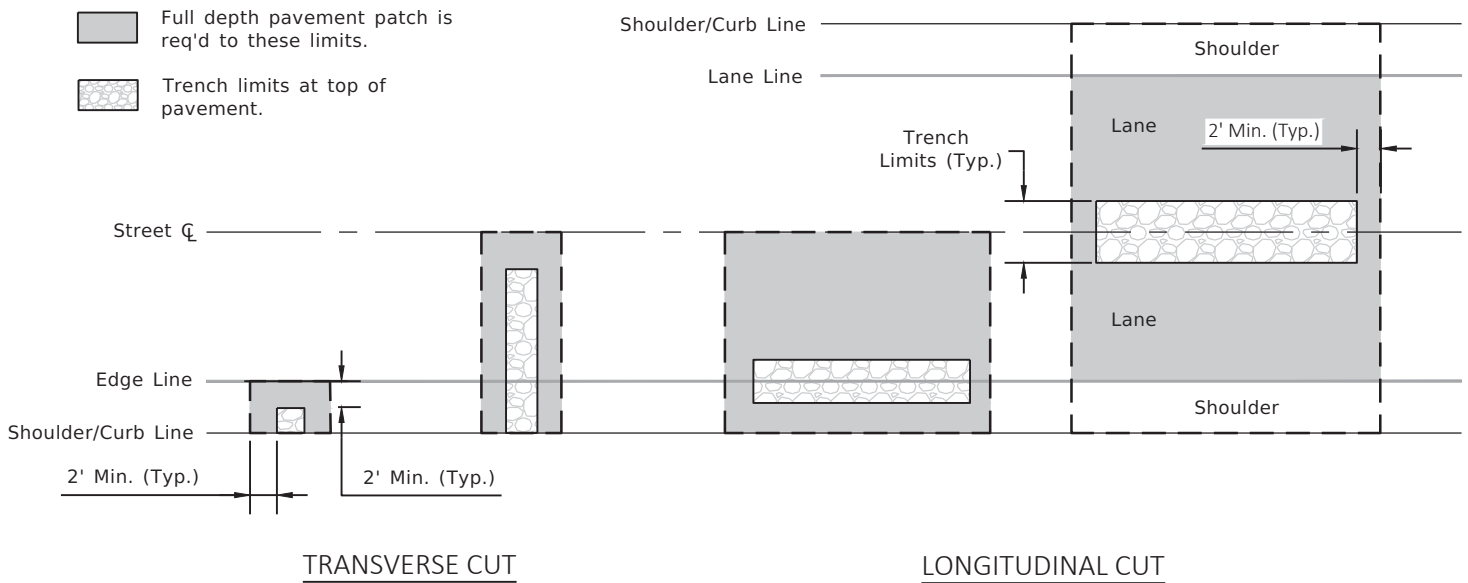
The Tack Coat shall be an un-diluted CSS-1 emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer.

### **Crack Sealant – Hot Poured – Option 1**

Hot poured crack sealant shall be rubberized and premium grade. Pre-approved products include: Crafcro Roadsaver 546, Crafcro Roadsaver 539 or approved equal. Crack sealant product shall be installed according to manufacturer’s specifications and with the appropriate equipment.

### **Crack Sealant – Pourable – Option 2**

Pourable crack sealant shall be rubberized and suitable for asphalt and concrete pavements. Pre-approved products include: Lastek33 or equivalent. Crack sealant product shall be installed according to manufacturer’s specifications and with the appropriate equipment.

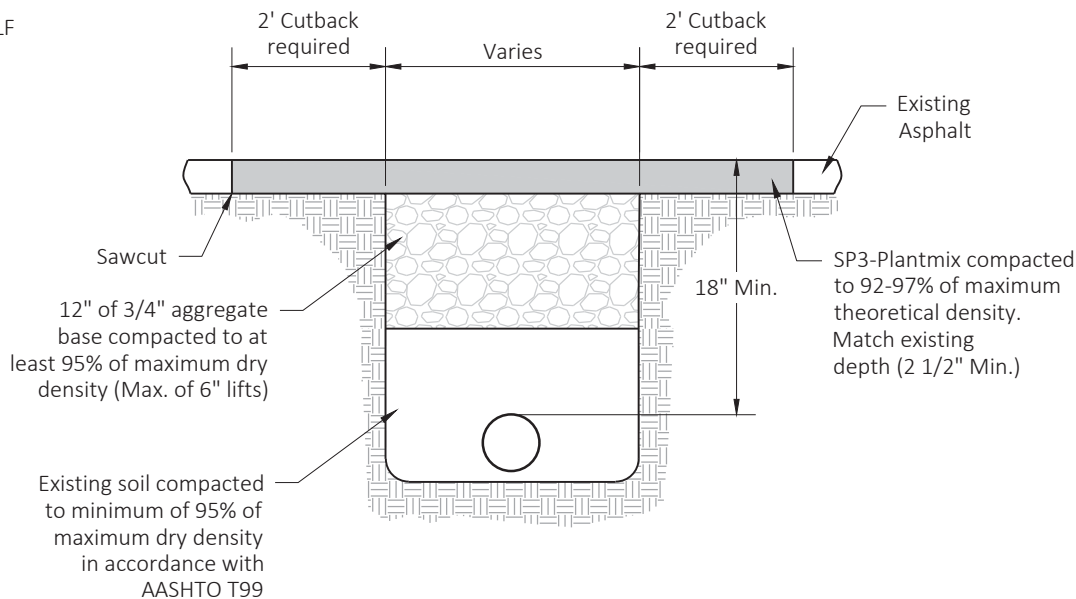


**NOTES:**

1. Full-depth pavement patch joints shall be sealed.
2. All cuts shall be perpendicular to direction of travel.
3. Pavement replacement is req'd to the next adjacent curb, shoulder, or lane line whenever a trench or disturbance of asphalt or support mat'l extends beyond such line.

**REQUIRED TESTING:**

1. Trench Backfill: Compaction - 1 per 100 LF
2. 3/4" Aggregate Base: Gradation and Compaction - 1 per 100 LF
3. Plantmix: Compaction - 1 per 100 LF



**TYPICAL TRENCH DETAIL**  
N.T.S