

**City of Marysville
Public Service Department
Streets and Storm Water**

Pavement and Utility Cut Repair Standards

GENERAL NOTES

No person, firm, corporation or political subdivision shall do or permit to be done by its agents or employees any of the following activities without first obtaining a permit therefor from the City Engineer or his or her duly authorized representatives:

- (a) Make any excavation in any paved or concrete surface;
- (b) Remove, break or make holes in the pavement of the streets or other public ways or places, or cut any curb;
- (c) Construct, build, erect or place any permanent article or structure, or hinder visibility of oncoming traffic, under or upon any street, alley, lane or public way or place; or
- (d) Make any improvement or change in the surface of any street, alley, lane or other public way or place by grading, graveling, paving or curbing.

Scope of Work

This work shall consist of pavement removal, necessary excavation, and pavement replacement, in accordance with the City of Marysville Construction and Material Specifications. (MCMMS)

Procedures used for pavement removal and replacement shall not cause spalling or cracking to the adjacent pavement.

In the event that the contractor is unable to complete the pavement replacement in time for the street to be opened to traffic as indicated on the permit, the excavation shall be filled and a bituminous patch with a durable surface placed. A steel plate may be used to cover the excavation if approved by the City Engineer. The contractor will be responsible for maintaining these patches while they are in service. Placing, maintaining, removal and disposal of the patches shall be at the contractors expense.

When ODOT 613 (LSM) is used as a backfill, no pavement shall be placed until the bleed water has evaporated, drained, or removed from the surface.

The backfilling pavement repair and/or heatwelding shall be done by the contractor or permittee in accordance with MCMMS.

Restoration of any sidewalk, curb, street pavement, etc., shall occur no later than 30 days after conclusion of any utility repair or installation activity. Construction activity completed December through April shall be permanently resolved no later than May 31. Additional permits shall not be issued until the violations are corrected to the satisfaction of the City Engineer.

**City of Marysville
Public Service Department
Streets and Storm Water**

Pavement and Utility Cut Repair Standards

GENERAL NOTES (Cont.)

A small lateral trench or small pavement area shall be defined as 5 feet or less in width and/or no greater than 100 feet in length. When repair areas exceed one or both of these dimensions, the pavement repair section shall conform to a minimum 2 inches of 448 Type I asphaltic concrete placed on either 7 inches of either 301 asphalt or 305 concrete base. New pavement thickness shall match the existing pavement if values exceed the minimums shown above. Area is to be heat welded to include the cut and extend for 6 inches beyond each side of the cut to a depth of 2 inches. Heat weld shall conform to City of Marysville Supplemental Specification 1541.

When a trench exceeds 100 feet in length, the repair shall include planing the full lane width to a depth of 1 ¼ inches over the entire length of the trench. The planed area shall be paved with a paver in accordance with ODOT CMS. If trench crosses lanes, all affected lanes shall be planed and resurfaced as described above. Planed area shall have ODOT 407 tack coat applied before placing pavement. Joint sealing shall be done to exposed joints in conformance with ODOT 409.

Any cold mix that was placed as a temporary repair shall be removed and replaced with ODOT 448 Type I asphalt and is to be heat welded as soon as asphalt is available.

Special Notes

Note A: When using Low Strength Mortar (LSM), the optional fill area over the conduit may be backfilled with ODOT Type 1, 2, or 3 material, for a distance not to exceed 1 foot. A protective barrier of visqueen or similar material is permitted.

Note B: For Type I and Type II cut repairs, the area to be heat welded is to include the cut and extend for 6 inches beyond each side of the cut for a nominal depth of 2 inches.

Note C: For Type I and Type II pavement repair, the Item 448 Type I or cold mix shall be placed in lifts not to exceed 3 inches, and compacted with a combination vibratory plate compactor, or a vibratory steel wheeled roller with a minimum certified force of 2000 pounds. In all cases the surface lift shall be compacted with the vibratory steel wheeled roller. When placing cold mix full depth, material shall be 70 degrees or above.

Note D: Cold mix shall be HCM cold mix or other cold mix approved by the City of Marysville. In lieu of cold mix, the contractor may stockpile 448 Type I asphalt and reheat it to place in cut as pavement repair. Type II pavement replacement shall consist of full depth HPM cold mix for small excavations. Large excavations shall require a minimum of 7 inches of fast setting Portland cement and 2 inches of HPM cold mix.

Note E: The cold mix is to be replaced with Item 448 Type I asphalt which is to be heat welded as set forth in Note B. This work shall be performed as soon as asphalt is available.

Note F: Repair of Brick Streets

1. Bricks removed from a repair area shall be stored in a safe place by the contractor for reuse. The contractor will be responsible for replacing any bricks that are stolen or damaged, at no additional cost to the city.
2. Bricks supplied by the contractor must first be approved by the city before they are used.
3. Saw cutting: All partial bricks shall be sawcut. Further, no brick will be permitted to be cut for replacement to a length less than half its original length. This may require that adjacent bricks be saw cut.
4. The perimeter faces of the existing base material shall be cut back to as nearly vertical orientation as possible. If shearing of the adjacent base results, the contractor may be paid for the additional areas of removal as described on the attached detail sheet.
5. The maximum width of a brick mortar joint shall be ½". This restriction shall also apply to the joint formed adjacent to the perimeter of the repair area, where the rows may not be parallel to one another.
6. Mortaring of Joints: All joints shall be mortared with a 50/50 mixture by volume of sand and cement so as to provide a flush finish. This may require more than one application. Further, mechanical vibration will be required for consolidation of dry mortar mix.
7. Allowable base material shall be determined by the trench size as applicable for small or large excavations, as specified on page 3 of 7.

NOTE G: For alley repairs, the proposed pavement replacement shall conform to the existing type and thickness of pavement. Chip and Seal type alleys shall require matching the existing thickness of pavement with the appropriate combination of materials based on the size of the excavation. The minimum shall consist of 3 inches of Item 448 Type 1 asphaltic concrete. Finish concrete pavement is not permitted. Materials used shall conform to the City of Marysville CMS.

If more than 1/3 of the alley is removed, the pavement shall be replaced as per typical, and then the total width of pavement shall be overlaid for the entire length of the trench.

NOTE H: Item 304 – Compacted granular Backfill:

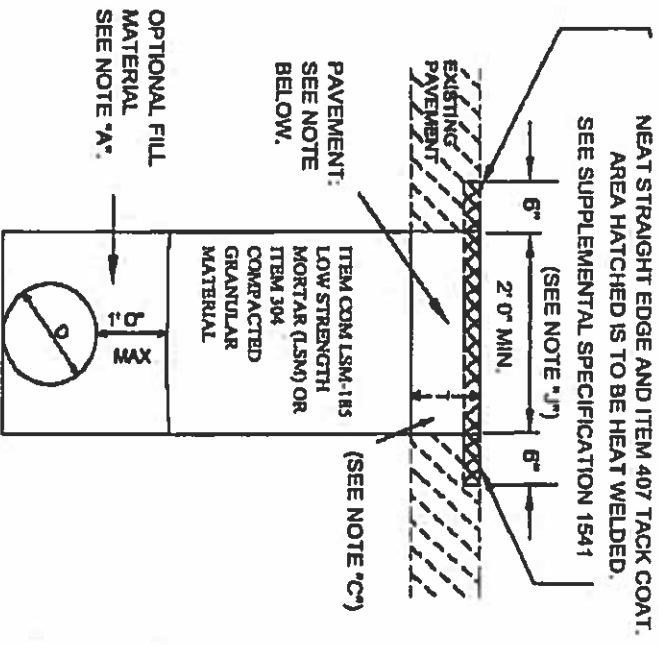
This method of backfill requires full time City inspection. A fee for the inspection must be posted when the permit is issued.

NOTE J: The trench width for small pipes and conduits shall be of sufficient width to allow for the proper placement and compaction of the backfill material. The pavement portion of the trench shall be a minimum of two (2) feet wide. This is to allow for the proper compaction of the asphalt pavement. If the trench is less than two (2) feet in width, the pavement shall be cut back to provide the 2 feet minimum width for paving.

NOTE K: Item numbers on the following standards represent ODOT Construction and Material Specifications.

HEAT WELDED ASPHALT SURFACE
MINIMUM DEPTH 2"

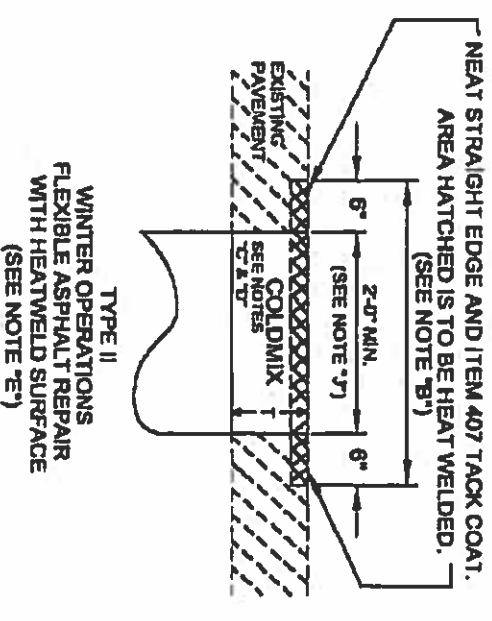
NEAT STRAIGHT EDGE AND ITEM 407 TACK COAT.
AREA HATCHED IS TO BE HEAT WELDED.
SEE SUPPLEMENTAL SPECIFICATION 1541



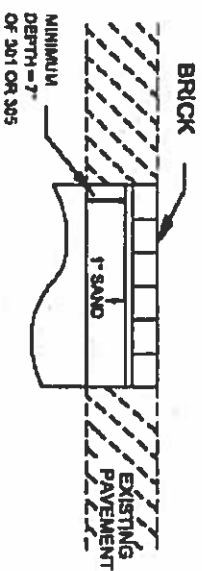
TYPE I
STANDARD FLEXIBLE ASPHALT REPAIR WITH
HEATWELDED SURFACE. (SEE NOTE "B")

HEAT WELDED ASPHALT SURFACE
MINIMUM DEPTH 2"

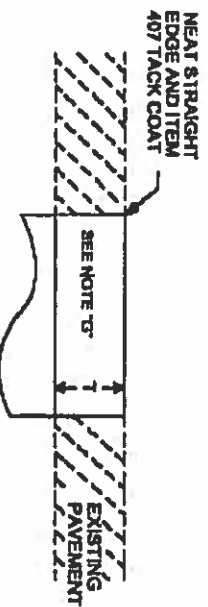
NEAT STRAIGHT EDGE AND ITEM 407 TACK COAT.
AREA HATCHED IS TO BE HEAT WELDED.
(SEE NOTE "B")



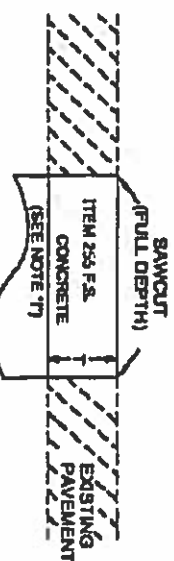
TYPE II
WINTER OPERATIONS
FLEXIBLE ASPHALT REPAIR
WITH HEATWELD SURFACE
(SEE NOTE "E")



TYPE III
BRICK STREET REPAIR
(SEE NOTE "F")



TYPE IV
ALLEY REPAIR



TYPE V
CONCRETE STREET REPAIR
OR
CONCRETE BUS PAD

NOTE: BACKFILL FOR ALL TYPES SHALL MEET THE REQUIREMENTS SHOWN IN TYPE I ABOVE.
T: MATCH EXISTING PAVEMENT THICKNESS, HOWEVER, MINIMUM OF 9" ON ALL STREET CUTS.



City of Marysville
Division of Engineering

STANDARD CONSTRUCTION DRAWING

Approved:

City Engineer

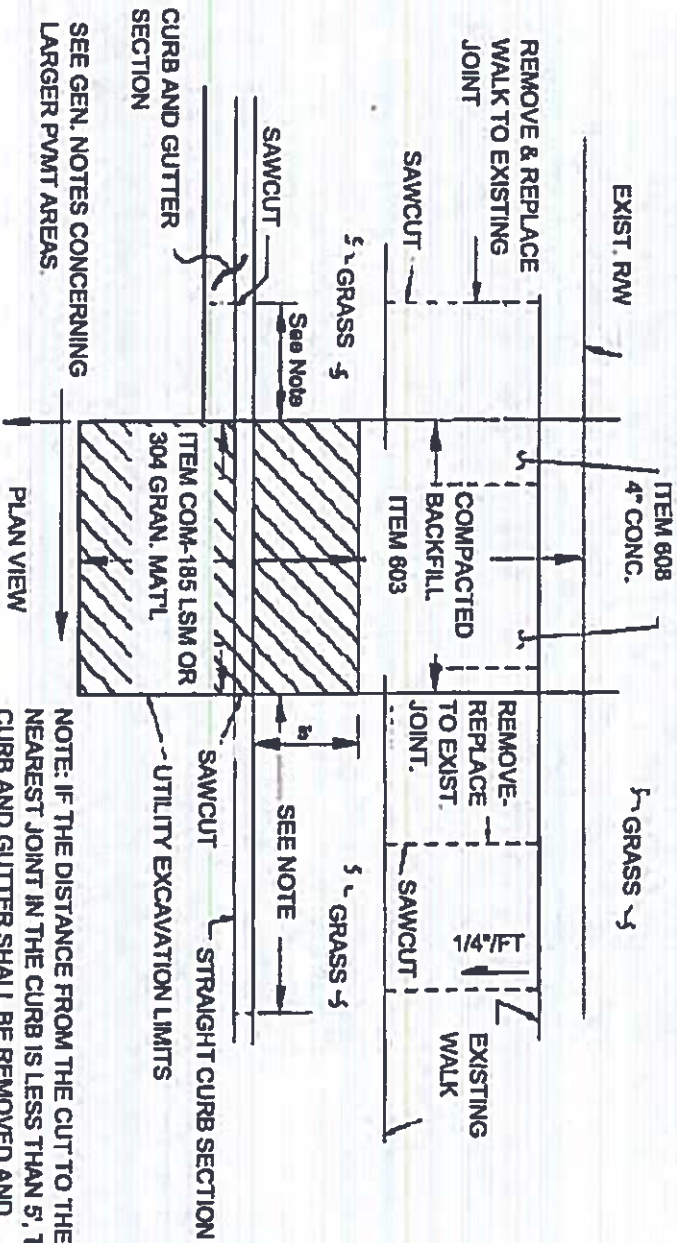
Date

STANDARD
PAVEMENT REPAIR

Drawing

No.
STR-04
Sht. 4 of 6

SIDEWALK AND CURB REPAIR DETAILS



City of Marysville
Division of Engineering

STANDARD CONSTRUCTION DRAWING

STANDARD

Drawing

PAVEMENT REPAIR

No.
STR-04
Sh. 5 of 6

Approved:

City Engineer

Date

OWNER'S NAME
24 HOUR EMERGENCY CONTACT PHONE NUMBER

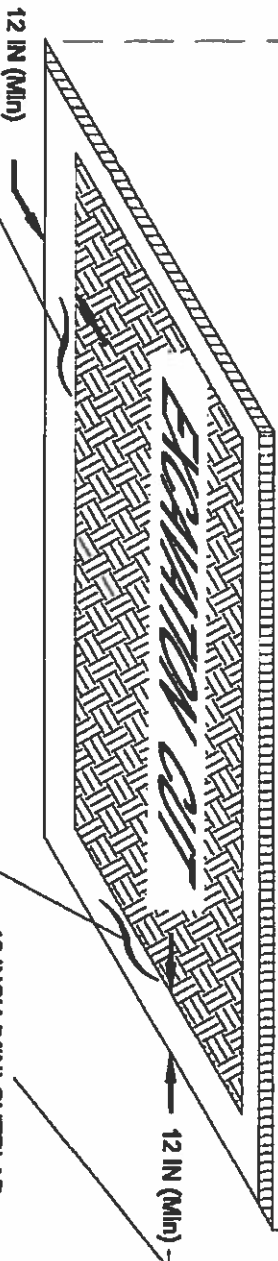
STEEL PLATE

THICKNESS OF PLATE AS PER TABLE BELOW

CURB AREA

CURB AREA

STREET SURFACE



RECESSED CUT-OUT AREA IN PAVEMENT TO MATCH SIZE AND THICKNESS OF STEEL PLATE, CAUSING THE SURFACE TO BE FLUSH WITH THE TOP OF EXISTING PAVEMENT.

12 INCH (MIN) OVERLAP
REQUIRED (ALL SIDES) FROM
EDGE OF VOID TO EDGE OF
PLATE.

THIS DRAWING ONLY APPLIES TO BITUMINOUS ASPHALT SURFACED STREETS

NOTE: ALL STEEL PLATES MUST HAVE THE FOLLOWING INFORMATION CLEARLY AND LEGIBLY ETCHED INTO THEIR TOP SURFACE:

- 1 OWNER'S NAME
- 2 A 24 HR. EMERGENCY CONTACT PHONE NUMBER.

MINIMUM THICKNESS OF STEEL PLATES	
SIZE OF PLATE	THICKNESS
4 FT x 4 FT	1/2 INCH
4 FT x 6 FT	3/4 INCH
LARGER	1 INCH

STEEL PLATE REQUIREMENTS