

AGENDA SHEET FOR COUNCIL MEETING OF: April 4, 2005

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Submitting Dept.
Engineering Services

Contact Person
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Phone No.
6307 CITY CLERK'S OFFICE
SPOKANE, WA

LGL 2005-0016
PRO

ADMINISTRATIVE SESSION

- Contract
- Report
- Claims

LEGISLATIVE SESSION

- Emergency Ord
- Resolution
- Final Reading Ord
- First Reading Ord
- Special Consideration
- Hearing

CITY PRIORITY

- Communications
- Economic Development
- Growth Management
- Human Services
- Neighborhoods
- Public Safety
- Quality Service Delivery
- Racial Equity/Cultural Diversity
- Rebuild/Maintain Infrastructure

CLERK'S FILE _____
RENEWS _____
CROSS REF _____
ENG _____
BID _____
REQUISITION _____

STANDING COMMITTEES

(Date of Notification)

- Finance _____
- Neighborhoods _____
- Planning/Community & Econ Dev _____

- Public Safety _____
- Public Works 2-28-05

Neighborhood/Commission/Committee Notified: _____
Action Taken: _____

AGENDA WORDING:

A Resolution adopting a new regional pavement cut policy for the City of Spokane.

BACKGROUND:

(Attach additional sheet if necessary)

City of Spokane and Spokane County staff have been working together to develop a new regional policy to identify the proper and consistent application of pavement cut repairs and warranty requirements. The purpose of this policy is to preserve the life of streets by minimizing the impact of utility cuts on the lifecycle of our roads, to provide an improved driving surface and a more pleasing appearance to our roadway surfaces that have undergone utility work. The policy has been developed through coordination with public and private utilities. The policy will be reviewed on an annual basis for minor changes that may need to be made.

RECOMMENDATION:

Adopt resolution

Fiscal Impact	<input type="checkbox"/> N/A	Budget Account:	<input type="checkbox"/> N/A
<input type="checkbox"/> Expenditure: \$		#	
<input type="checkbox"/> Revenue: \$		#	
<input type="checkbox"/> Budget Neutral			

ATTACHMENTS:

Include in Packets:

Resolution, Pavement Cut Policy

SIGNATURES:

Director, Engineering Services

Director, Public Works & Utilities

Finance

Legal

Deputy Mayor

Council President

DISTRIBUTION:

Engineering Services, S Decker Neighborhood Services

\\agenda\Pavement Cut Resolution agenda.doc

COUNCIL ACTION:

ADOPTED BY
SPOKANE CITY COUNCIL:

April 4, 2005

CITY CLERK

RES 2005-0031

CITY OF SPOKANE ADMINISTRATIVE POLICY AND PROCEDURE	ADMIN 0370-05-02 LGL 05-16
TITLE: REGIONAL PAVEMENT CUTS EFFECTIVE DATE: April 4, 2005 REVISION DATE:	

1.0 GENERAL

1.1 INTRODUCTION

The local governmental entities within Spokane County are faced with the same challenges as many other municipalities throughout the country. Pavement cuts are a necessary operation and cannot be avoided. Utilities need to serve new customers and repair existing facilities. There is a common good for all utilities to be placed in the Public Right-of-Way. All parties shall strive to reduce the burden to the taxpayer/ratepayer, and damage to the roadways.

Studies conducted by multiple groups and organizations have determined that poorly restored pavement cuts cause permanent structural and functional damage increasing maintenance costs, future rehabilitation costs, and produce a rough ride. If realized, the increased costs and rough ride are a burden for the taxpayer/ratepayer.

As Exhibit A shows, the pavement beyond the trench may be weakened by sagging which results from loss of lateral support. Heavy construction traffic also weakens the area adjacent to the trench. Studies (see attached bibliography) have shown that the pavement life may be reduced by pavement cuts. Poorly constructed patches tend not to last through the life of the existing road and fail prematurely when there is a lack of good construction techniques used when backfilling and compacting. This causes an additional burden to maintenance departments and taxpayers/ratepayers. A poorly constructed pavement cut usually requires repair before the road needs to be resurfaced; problems typically appear in the first two years. Studies also reveal that patch areas probably require thicker overlays compared to the rest of the pavement in the area. This also results in higher costs to the taxpayer/ratepayer.

1.2 EXECUTIVE SUMMARY

This document outlines Spokane County, the City of Spokane Valley, and the City of Spokane's joint regional policy regarding pavement cuts. It addresses excavation problems, construction requirements, warranties and other related aspects. In addition, it modifies the County's Five-year New Pavement Cut Moratorium, creating a new Regional Three-Year Cut Moratorium as outlined in this agreement and Exhibit B. Any road will remain available to be cut if there is no other means to take care of an emergency situation (broken water, sewer or gas lines or as approved by the Agency Engineer). The utility shall attempt to use other innovative ideas for servicing customers other than cutting into the public Right-of-Way while not diminishing safety standards.

1.3 TABLE OF CONTENTS

- 1.0 GENERAL
- 2.0 DEPARTMENTS/DIVISIONS AFFECTED
- 3.0 REFERENCES
- 4.0 DEFINITIONS
- 5.0 POLICY
- 6.0 PROCEDURE
- 7.0 RESPONSIBILITIES
- 8.0 APPENDICES

2.0 DEPARTMENTS/DIVISIONS AFFECTED

This policy shall apply to all City departments and divisions.

3.0 REFERENCES

Resolution 2005-0031

4.0 DEFINITIONS

- 4.1 "Agency Engineer" means the City or County Engineer, his/her designee (Engineers, Inspectors, Project Managers, Field Personnel) representing a Local Agency.
- 4.2 "Assignee" means the contractor who is taking out the permit.

- 4.3 "Length of Patch" means for this document the length of all patches is the patch dimension parallel to the roadway.
- 4.3 "New Roadway" means any roadway that has had a designed rehabilitation in the permitted excavation location that is less than or equal to three (3) years.
- 4.4 "Patch" means a cut in the pavement as part of the current permitted job.
- 4.5 "Permittee" means the utility company or contractor who submits an application for a permit to obstruct and/or conduct construction operations in the public right-of-way. Local Agencies and their contractors shall be considered permittees for application of this policy even though the respective agencies and/or their contractors may not take out permits.
- 4.6 "Project Completion" means the date when the following has occurred: final permanent restoration of roadway is complete and approved by the inspector, and all as-built documentation has been submitted to the Local Agency. A fax transmittal confirmation ticket of 'as built' shall be considered confirmation.
- 4.7 "Standard Specifications" means the current version of the WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, Supplemental Specifications and/or Drawings as attached by Local Agencies.
- 4.8 "Width of Patch" means for this document the width of all patches is the patch dimension perpendicular to the roadway.

5.0 POLICY

5.1 CONSTRUCTION REQUIREMENTS

- 5.1.1 A Pavement Cut Moratorium will be in effect for a period of three (3) years for all new roadways (see Exhibit B).
- 5.1.2 No patching material will be allowed within an existing patch if the new patch exceeds seventy percent (70%) or more of the existing patch. In this case, the entire existing patch must be replaced.

- 5.1.3 All patching materials and construction requirements not addressed in this document shall conform to each Local Agency's Standards, copies available from Local Agencies. Longitudinal cuts that extend through multiple tier classifications will require discussion with the Local Agency to determine appropriate patching approach. In principle, each road section will be patched according to the tier in which it is ranked.
- 5.1.4 All existing traffic control markings will be replaced as soon as possible after permanent paving is completed. Temporary markings for lane lines and stop lines shall be in place prior to the roadway opening for traffic. All remaining temporary striping will be completed within seven (7) days of new pavement completion and shall be maintained by permittee until permanently restored. All traffic markings will be replaced per normal work practices.
- 5.1.5 Full depth full lane pavement removal and replacement shall be constructed beyond the nominal completed trench edge longitudinally, and transversely per Exhibit B. The goal is that the tee section does will not arbitrarily force patch into adjacent lanes, dependent on quality and care of trenching. The minimum length of the patch parallel to the road shall be six feet. If any part of the excavation, patch or damaged area intrudes into an adjacent lane, that lane shall also be replaced per the tiered chart. For new patches adjacent to any existing patch, all attempts will be made to install the utility at the existing patch line. When this is not feasible, no gap of four (4) feet or less shall exist.
- 5.1.6 The permittee shall be allowed to make emergency repairs provided a more reasonable alternative does not exist. Every reasonable effort will be made to restore the roadway quickly. (Note: an emergency will not allow permittee to coordinate and plan with asphalt company). (See "Repairs of Pavement Cuts").

- 5.1.7 Only saw cutting or approved grinding device will be allowed. Only parallel and perpendicular pavement cuts will be allowed. No jagged, broken or undermined edges.
- 5.1.8 Bicycle/pedestrian/parking/travel lanes to be repaired per tier chart and attached drawings.
- 5.1.9 Each Local Agency shall have the prerogative to encourage the permittee to contribute permittee's normal patching costs to local agencies to accomplish paving or full depth replacement of the roadway. (This does not apply to work done within larger projects, i.e. sewer projects). The Local Agency should be notified of existing problems with the adjacent roadway to a proposed patch. Every effort will be made to leverage both utility and agency dollars for street improvements.
- 5.1.10 When two (2) or more patches are created within a given job that measure fifteen (15) feet or less longitudinally or transversely they will be incorporated into a single patch. Anytime five (5) or more patches are required within a three hundred fifty (350) foot longitudinal area, the utility will notify the agency to determine if cost sharing is an option to expand the pavement repair/replacement area.
- 5.1.11 Potholing to find utilities shall be allowed. The use of innovative technologies is encouraged (Keyhole etc.). To be exempt from the gap and patching policy, cuts shall be a maximum of two (2) square feet with no longitudinal joints in the wheel path and shall be backfilled with controlled density or other approved fill from six (6) inches above the utility to six (6) inches below bottom of asphalt. Round vs. square cuts are preferred.
- 5.1.12 Chip sealed roads shall be rehabilitated according to construction requirements for asphalt roads as outlined in this document.
- 5.1.13 All temporary traffic control for the work zone shall conform to the MUTCD and Washington State modifications to the MUTCD. All traffic control is subject to the approval of the Agency Engineer or his/her designee (See temporary patching section).

- 5.1.14 All existing pavement types shall be constructed at the existing depth of asphalt and crushed surfacing, in accordance with applicable Local Agency Standards (including any fabric or membranes); however, the replacement section of asphalt and crushed rock shall not be less than the minimum section specified in Local Agency's Design Standards.
- 5.1.15 All concrete road cuts shall be pre-approved before beginning work (except in the case of an emergency situation). Concrete roads shall require full panel replacement unless approved otherwise by Local Agency. All concrete joints shall require an approved tie bar and dowel retrofit. Depth of concrete replacement shall match the existing thickness, or as per Local Agency's Standards. Care shall be made not to undermine the existing panels. If the adjacent panels are disturbed or damaged, they also shall be replaced. All joints shall be sealed with an approved material.
- 5.1.16 Asphalt over concrete road cuts, if known, shall be approved before beginning work (except in the case of an emergency situation). Saw cutting or other approved practice for removal of the concrete shall be allowed at the discretion of Local Agency. The asphalt portion of the cut shall be constructed according to the pavement cut policy.
- 5.1.17 All areas outside of the roadway that are affected by the work shall be restored to their original condition. All shoulders shall be restored to their original condition.
- 5.1.18 Valve and manhole repairs shall be exempt from the patching requirements of this policy. Valve and manhole patching requirements shall be per each Local Agency's Standards. All warranty and construction requirements shall be met. No longitudinal construction joints shall be allowed in the wheel path.
- 5.1.19 The permittee shall provide a detailed "As-built" record of the pavement cut after construction is completed (see attached Exhibit C). The permittee shall provide details indicating

existing pavement section, new pavement section and any unusual conditions at the location of the constructed utility. The location shall include the name of the road the work is being performed on and the name of the closest intersections in each direction. Distance measurements shall be from intersecting streets. This information will be provided to the Local Agency's Permit department as a permanent record. This information shall be returned no later than seven (7) days after the completion of the permitted project by mail, fax, or other electronic means by either permittee or patching contractor. The intent of this process is to record small patching details. Larger projects shall be reviewed and approved prior to construction.

- 5.1.20 The moratorium policy will be explained both as to costs and to construction practices by the Local Agencies as part of the permitting/zoning process for new construction or major remodeling projects. Individual permittees/utilities will not be responsible for this function. Individual permittees/utilities will be responsible for doing the work and the costs associated with the moratorium policy as they open roadways for work. Cost recovery from developers will be calculated and coordinated by permittee/utility.

5.2 SURFACE SMOOTHNESS REQUIREMENTS

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 one-fourth inch (1/4") from the lower edge of a ten-foot (10') straight edge placed parallel to the centerline. Recognition and consideration will be made for existing roadway conditions. The Agency Engineer must approve corrective measures.

5.3 WARRANTY REQUIREMENTS

- 5.3.1 Pavement cuts on roadways ten (10) years old or less require a warranty period of five (5) years. The patch in the roadway shall be repaired as necessary until the warranty has passed.

5.3.2 All other roadways shall require a minimum three (3) year warranty period. All warranties shall become void if rehabilitation work is performed to the road within the patching limits.

5.3.3 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. All curb, sidewalks and structures that are affected by the excavation shall be included in this policy and have a warranty for five (5) years.

5.4 WARRANTY PROVISIONS

5.4.1 Sunken pavement patches greater than or equal one-fourth inch (1/4") (Measured by a ten (10) foot straight edge).

5.4.2 Visual rating of patch = to medium or high (Per Agency's rating procedure).

5.4.3 Visual rating of construction joint = to medium or high (Per Agency's rating procedure).

5.4.4 Poor workmanship (To be determined by each Agency's Engineer).

5.4.5 Compaction requirement per Agency Standard.

5.4.6 Sunken or damaged curb and sidewalks in excavation work area (To be determined by each Agency's Engineer).

5.4.7 Sunken or damaged drywells and catch basins in excavation work area (To be determined by each Agency's Engineer).

5.5 REPAIRS OF PAVEMENT CUTS

5.5.1 If emergency repairs are needed due to safety concerns, the permittee shall have twenty-four (24) hours in which to make such repairs from time of verbal notice by the Local Agency. For non-emergency repairs on arterial roads the permittee shall have forty-eight (48) hours to make such temporary repairs. On residential streets, the permittee shall have up to seven (7) days to make such temporary repairs. If these repairs are not

accomplished within the specified timeframe, the work shall be privately contracted by the Local Agency or the Local Agency's maintenance crew shall perform the needed repairs.

5.5.2 The permittee will be assessed all costs associated with the repairs. The costs shall be based on the average bid items for comparable projects for the year preceding plus ten percent (10%) overhead fees. If repairs other than seam sealing are made to the warranted patch, a new warranty will be implemented for the new patch.

5.5.3 The permittee shall have two (2) days to notify its 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 Local Agency 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 Local Agency Standards.

5.6 TEMPORARY PATCHING

5.6.1 During winter asphalt concrete paving plant closures or outside of temperature specifications (see section 5-04 of the Standard Specifications) 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.

5.6.2 The temporary patch shall consist of two inches (2") of crushed surfacing and two inches of cold-mix asphalt pavement and/or steel plates or, upon approval of the Agency Engineer, crushed surfacing top coarse may be used. On arterials, when a temporary patch is required for more than two (2) months, Portland Cement Concrete shall be used to construct the temporary patch (Contact Local Agency for mix design requirements). The permittee shall maintain the temporary patch until the patch has been permanently restored.

5.7 PERMITS

5.7.1 All work in the 'Public Right-of Way' requires a permit. Permittee shall take out all permits and perform all work.

5.7.2 The permittee shall fax or send a letter to the appropriate Local Agency permit center designating its assignees. The permittee will be required to submit a construction and traffic control plan (traffic control for arterial work and roadways above 35 M.P.H.) when applying for a permit. If the Agency Engineer determines that abuse of obligations are prevalent, future construction permits shall not be issued until the permittee has fulfilled all obligations to existing permits. Written notification by Local Agency will be sent prior to this action.

5.8 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. Local Agencies will attempt to get permittee to correct warranty defects. If permittee is a subcontractor for utilities, the utilities will assume responsibility if permittee can not/will not make repairs.

5.9 WAIVERS AND EXEMPTIONS

It is understood that field conditions may warrant a waiver or an exemption from these regulations. Permittee may file for a waiver, and such waivers shall be at the discretion of the Agency Engineer or his/her designee.

5.10 POLICY REVIEW

The Local Agencies will host a meeting with each other and other interested stakeholders at the end of each construction season for the purpose of reviewing the effectiveness of the policy for the completed construction season and suggested improvements for future construction seasons.

5.11 AMENDMENTS

The mayor may make minor revisions, additions or deletions to this policy without city council approval.

6.0 PROCEDURE

6.1 Not Applicable

7.0 RESPONSIBILITIES

The Engineering Services Department is responsible for administering this policy.

8.0 APPENDICES

Bibliography

Exhibit A – Typical Trench Excavation

Exhibit B – Tiers

Exhibit B1 – Moratorium/Full Policy – Arterial

Exhibit B2 – Moratorium/Full Policy – Residential/Local Access


Exhibit B3 – Moratorium/Full Policy – Intersections

Exhibit B4 – Modified Policy – Arterial

Exhibit B5 – Modified Policy – Residential/Local Access


Exhibit C – Asphalt and Concrete Pavement Repair Request


APPROVED BY:


City Attorney (Asst)


Engineering Services, Director


Director, Public Works and Utilities


Deputy Mayor Date


Deputy Mayor

BIBLIOGRAPHY

- AGA. White Paper. *Gas Industry's Use of Public Right-of-Way*. Sept. 1998.
- APWA. *Managing Utility Cuts*. Aug. 1997.
- City of Bellevue. *Trench Restoration Requirements*".
- City of Dallas, DPW&T. *Pavement Cut and Repair Standards Manual*. Oct. 2003
- City of Seattle. *Impact of Utility Cuts on Pavement Performance*.
- Metropolitan Transportation Commission. *Utility Trench Cut Restoration Specifications*. Jan. 1997
- Wisconsin Department of Transportation. *Asphalted Pavement Warranties*, June 2001.

EXHIBIT A

PAVEMENT CUT POLICY TYPICAL TRENCH EXCAVATION

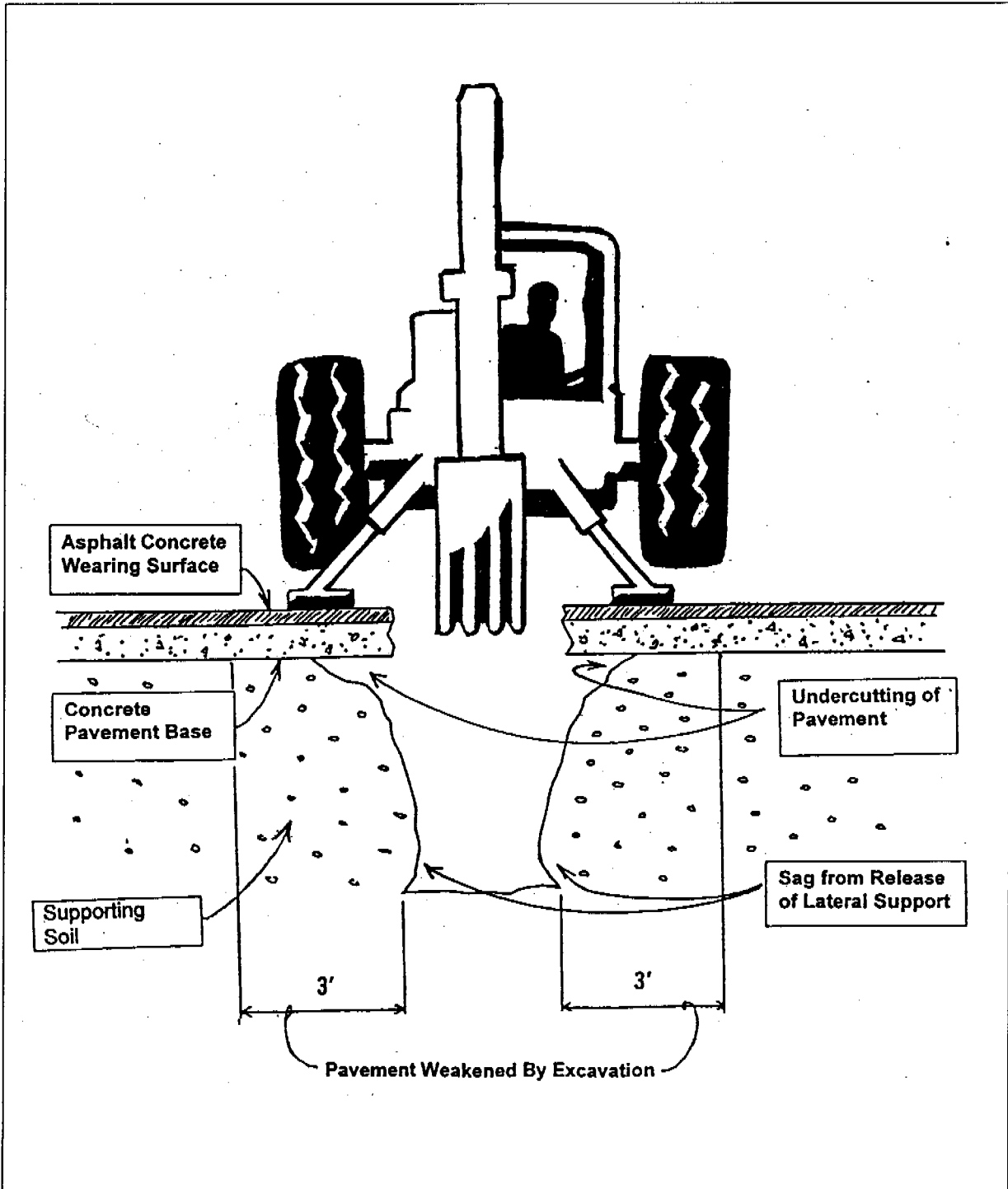


EXHIBIT B

PAVEMENT CUT POLICY TIERS

	Tier 1	Tier 2	Tier 3	Tier 4
Arterial Streets:	≤ 3 years	Years 4-5	Years 6-12	> 12 years
Principle	Moratorium Policy	Full Policy	Full Policy	Modified Policy
Minor	Moratorium Policy	Full Policy	Modified Policy	Trench Only
Neighborhood Collector	Moratorium Policy	Full Policy	Modified Policy	Trench Only
Local Access Streets:				
Industrial/Commercial	Moratorium Policy	Modified Policy	Modified Policy	Trench Only
Residential	Moratorium Policy	Modified policy	Modified Policy	Trench Only

Exhibit B Notes

Moratorium Policy = Half roadway or full roadway replacement for longitudinal cuts in new roadways. This policy requires prior approval from Agency having jurisdiction.

Full Policy = Policy w/paving to established/dedicated lane lines. Cut full depth 2 feet beyond excavation. No gaps ≤ 4' from curb or gutter.

Modified Policy = If no striping for lane line, lane is = to 12', can patch to middle of lane lines, cannot leave any gap ≤ 4' from curb or gutter. Cut 1' beyond excavation.

Trench Only = Cut 1' beyond excavation all locations. No longitudinal joints in the wheel path

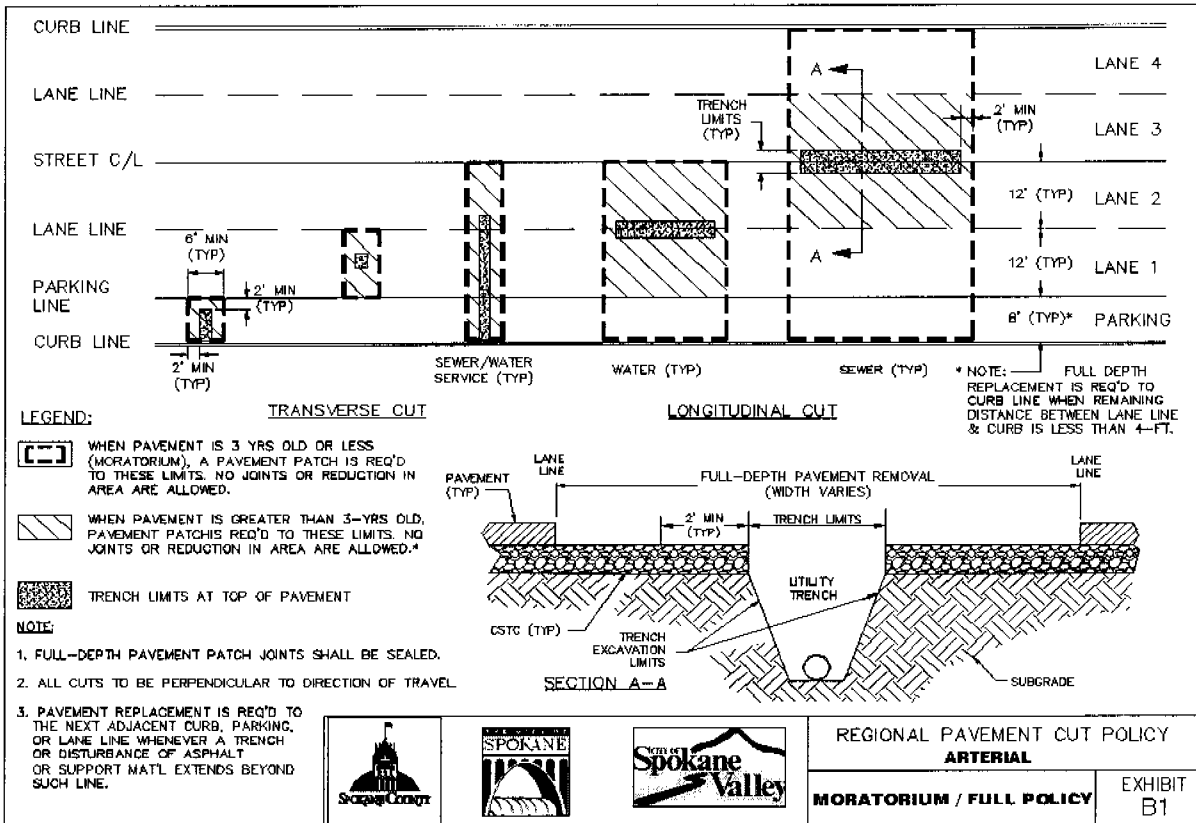
Note: It is the discretion of each jurisdiction to review the individual road segment ages to determine patch requirements on longitudinal installation over multiple roadway segments with variable ratings. In principle, each road section will be patched according to the tier in which it is ranked.

Note: Any deviation from the Tier Policy will require approval in advance by the local agency.

Note: Each agency will provide date of last major reconstruct either electronically or on each permit. Maintenance does not constitute a reconstruct for age determination.

Note: Moratorium policy will be reviewed as seam-sealing technology improves.

**EXHIBIT B1
MORATORIUM/FULL POLICY - ARTERIAL**



**EXHIBIT B2
MORATORIUM/FULL POLICY - RESIDENTIAL /LOCAL ACCESS**

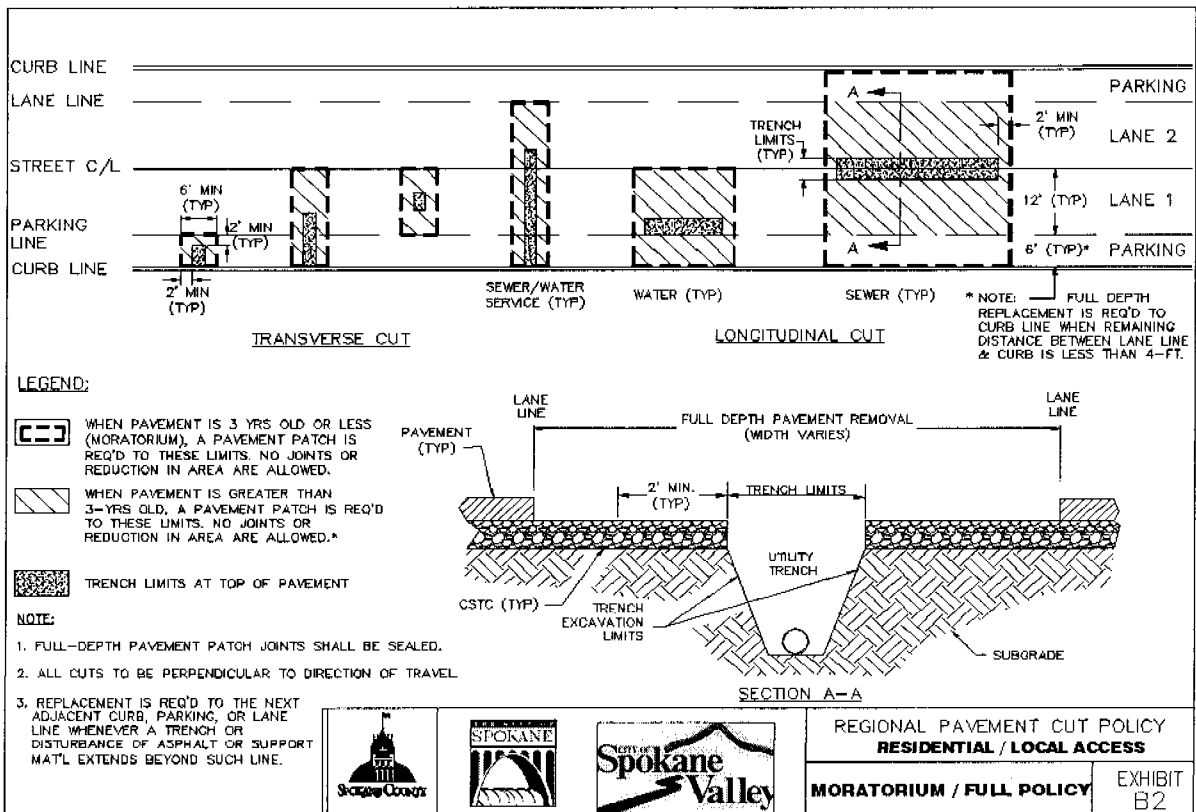


EXHIBIT B3

MORATORIUM/FULL POLICY – INTERSECTIONS

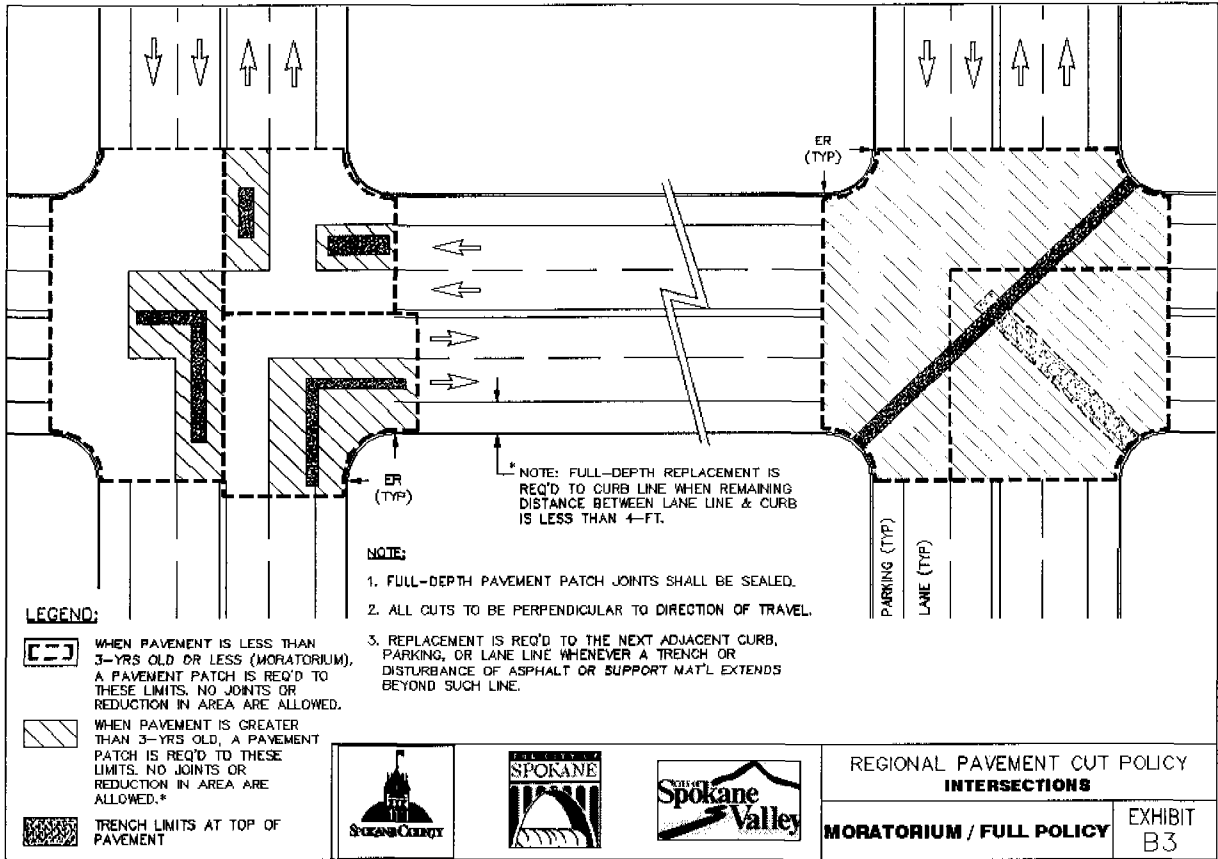
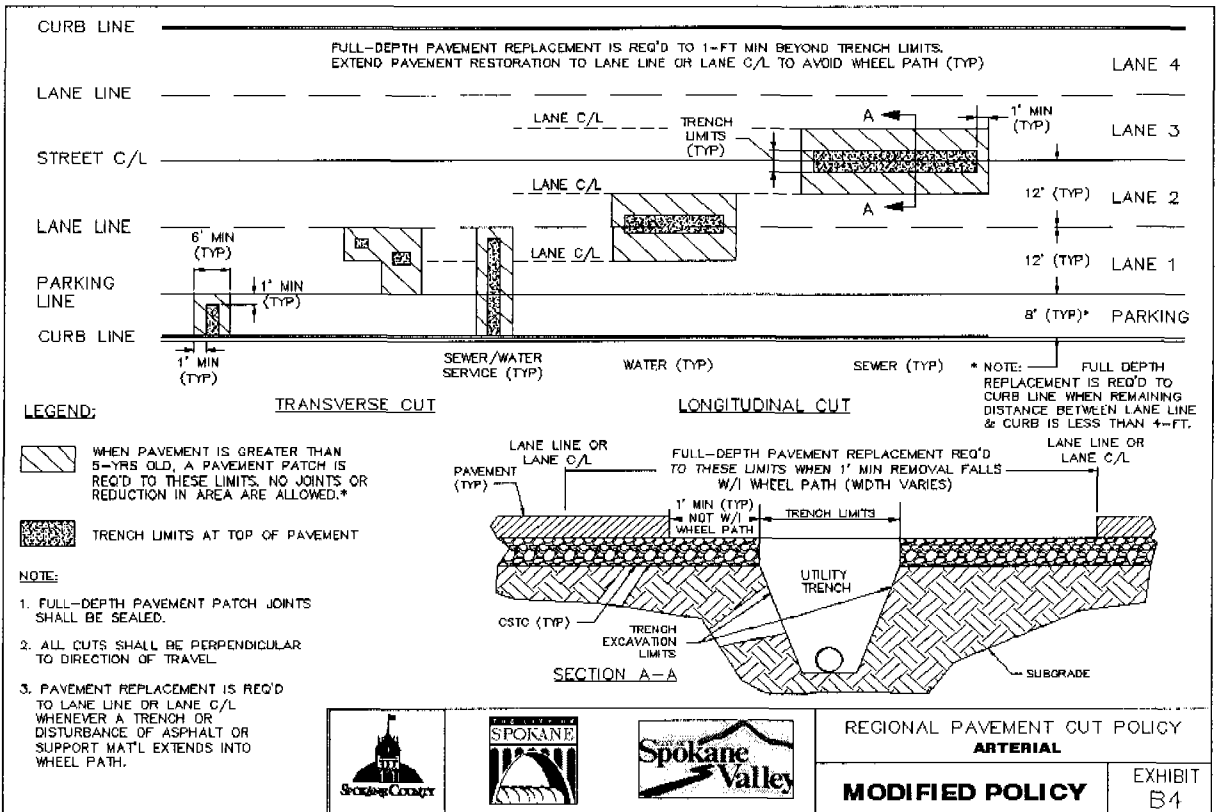


EXHIBIT B4

MODIFIED POLICY - ARTERIAL



**EXHIBIT B5
MODIFIED POLICY – RESIDENTIAL/LOCAL ACCESS**

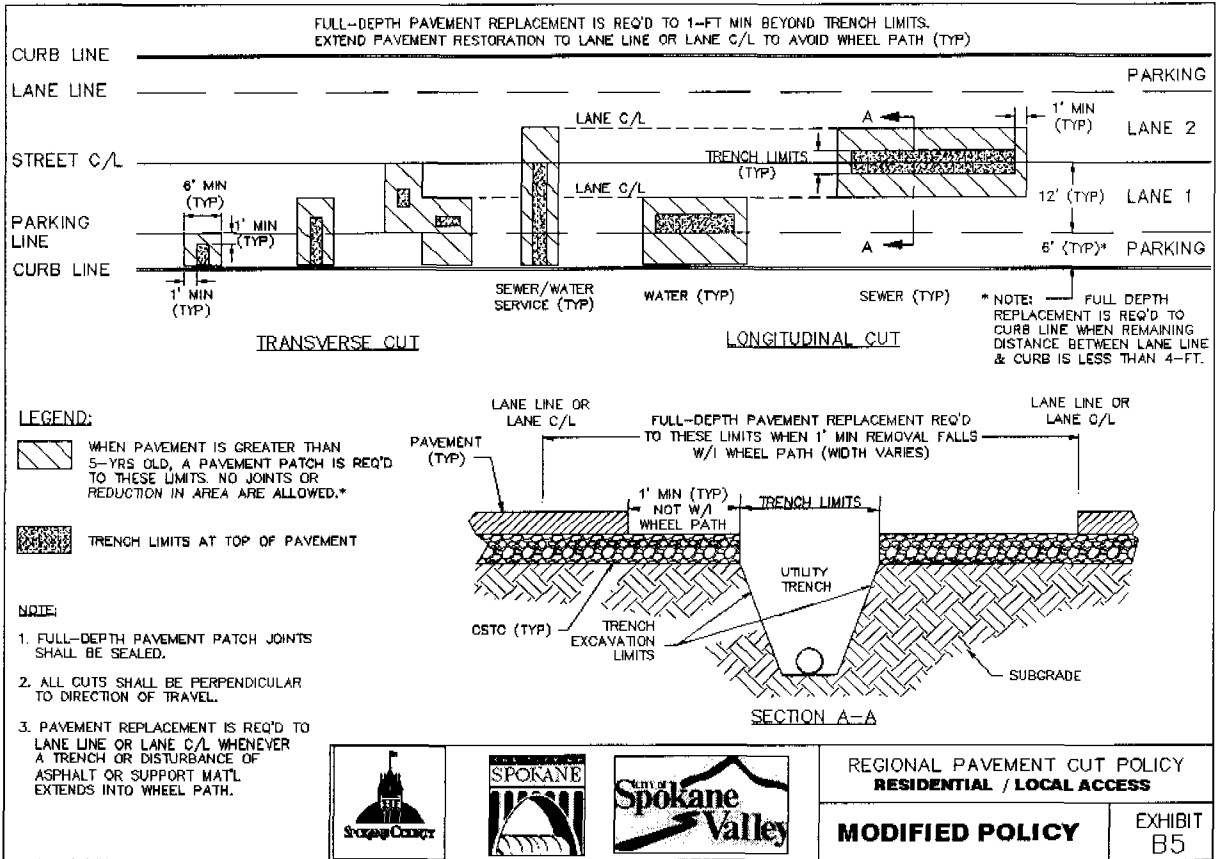


EXHIBIT C

PAVEMENT CUT POLICY

ASPHALT AND CONCRETE PAVEMENT REPAIR

Permittee Name: _____

Job Address: _____
(if no house number, please list hundred-block)

Coordinates : _____
(Example : 15N 24W)

Street

Alley

Project/Task #: _____

Date Cut: _____ Crew: _____

PO/Job #: _____ City/County Permit #: _____

Unusual Conditions/Special Instructions: _____

Tier#: <small>(Please circle)</small>	1	2	3	4
Policy: <small>(Please circle)</small>	Moritorium	Full	Modified	Trench

<u>Condition of Cut</u> <small>(Circle any that apply)</small>	<u>Type of Work</u>	<u>Type of Repair</u>	<u>Existing Road Condition</u>
6" Gravel (required)	Gas	Asphalt	Depth of Asphalt _____
Cold Mix	Electric	Concrete	Depth of Gravel _____
Winter Mix	Water		Sub Base Type _____
Sawcut	CATV		
Grind	Communications		
	Sewer		
	Other _____		

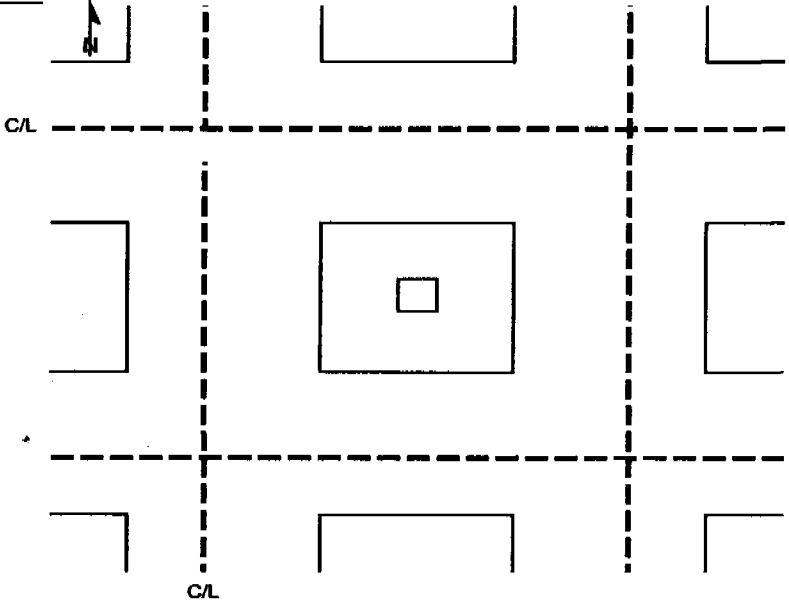
Asphalt

Width	x	Length
_____	x	_____
_____	x	_____
_____	x	_____
_____	x	_____

Concrete

Width	x	Length
_____	x	_____
_____	x	_____

striping (linear foot) _____



Date Sent for Repair: _____

Date Completed: _____

Patching Co. Signoff: _____
(patching company to fax to local agency at completion)

Fax Completed Form to: Spokane County, Sylvia Lightfoot: 509/477-7198
 City of Spokane, Dan Eaton: 509/625-6124