






Bundaberg Regional Council Infrastructure Services Issue Date: 15-05-2009 Review Date: 15-05-2011		<b>Pothole Patching / Edge Repair Work Instruction</b>		<b>WI-7-250</b>  Rev. No. 1
<b>PURPOSE/SCOPE</b>		This Work Instruction applies to all areas of Bundaberg Regional Council for the repair of an isolated hole or a series of holes or a sealed pavement edge in a roadway surface using asphalt (hotmix) or cold premix.		
<b>ASSOCIATED DOCUMENTS</b>		PD-7-073 Traffic Guidance Scheme Selection for Short Term Work Procedure WS-7-001 Work On or Adjacent To A Road Or Railway Work Method Statement		
<b>TASK</b>	<b>METHOD</b>	<b>PERSONNEL/EQUIPMENT</b>	<b>QUALITY REQUIREMENTS</b>	
Collect materials	<ul style="list-style-type: none"> <li>Inspect materials to ensure that they suit requirements.</li> </ul>	Work staff Job Truck	<ul style="list-style-type: none"> <li>Quantity to suit days requirements only.</li> <li>Only materials that have passed conformance testing/incoming goods inspection to be used.</li> </ul>	
Traffic Control	<ul style="list-style-type: none"> <li>Ensure signs are stable.</li> <li>Use traffic controllers if necessary.</li> <li>Erect signs in a logical sequence.</li> <li>Determine traffic control requirements</li> </ul>	Work Staff Traffic control devices	<ul style="list-style-type: none"> <li>Refer to WS-7-001 for Work on or Adjacent to a Road or Railway</li> <li>Safety of public &amp; work staff</li> <li>Procedure for Traffic Guidance PD-7-073</li> </ul>	
Define work area	<ul style="list-style-type: none"> <li>Locate area to be repaired as per CRM/Works order No.</li> </ul>		<ul style="list-style-type: none"> <li>No loose materials adjoining the pothole.</li> </ul>	
Prepare pothole/Edge repair	<ul style="list-style-type: none"> <li>Sweep base edges and surrounding surfaces</li> <li>Remove all loose material and water to a solid base.</li> <li>Define a finished edge</li> </ul>	<ul style="list-style-type: none"> <li>Work Staff</li> <li>Blower</li> <li>Broom</li> </ul>	 <p style="text-align: center;"><i>No loose materials</i></p>	

TASK	METHOD	PERSONNEL/EQUIPMENT	QUALITY REQUIREMENTS
Apply tack coat of emulsion	<ul style="list-style-type: none"> <li>Apply light, even coat to sides and bottom of failure.</li> <li>Allow emulsion to break.</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <span>Before</span> <span>After</span> </div>	Work Staff Emulsion sprayer	<ul style="list-style-type: none"> <li>Emulsion to completely break before proceeding.</li> <li>Avoid pooling of emulsion.</li> <li>Emulsion covers whole surface of the base and sides of repair.</li> </ul>
Place, spread and compact asphalt/premix	<ul style="list-style-type: none"> <li>Complete compaction before the hotmix cools.</li> <li>Compact edges first.</li> <li>Place and compact in uniform layers 50-70mm thick as needed.</li> <li>Fill and compact isolated holes in base.</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <div style="display: flex; justify-content: space-around; align-items: center;"> <span>Compact hotmix</span> <span>Complete</span> </div>	Work Staff Hand tools Vibrating compactor Hand tamper	<ul style="list-style-type: none"> <li>Final pass of compaction equipment to leave no impression in repaired surface.</li> <li>Finished surface to be within <math>\pm 5</math>mm of height of surrounding surface.</li> </ul>
Clean up work area	<ul style="list-style-type: none"> <li>Remove all loose material.</li> <li>Ensure excess material is clear of local drainage</li> </ul>	Work Staff Hand tools	<ul style="list-style-type: none"> <li>No loose material on road surface or in drains.</li> </ul>
Remove traffic control devices	<ul style="list-style-type: none"> <li>Remove in a logical order.</li> <li>Clean as needed and store so as not to cause damage.</li> <li>Record traffic control devices used &amp; time of erection/removal</li> </ul>	Work Staff	<ul style="list-style-type: none"> <li>Safety of public and work staff</li> <li>All devices are removed and ready for re-use.</li> </ul>

TASK	METHOD	PERSONNEL/EQUIPMENT	QUALITY REQUIREMENTS
Complete documentation	<ul style="list-style-type: none"> <li>• Sign off repair as being completed to this standard.</li> <li>• Record data required for claiming for payment.</li> </ul>	Authorised Work Staff	<ul style="list-style-type: none"> <li>• Accurate</li> <li>• Must conform</li> </ul>

## WORK ACTIVITY RISK SHEET

<b>Supervisor in Charge:</b>	Ian Stitt	<b>Assessment Conducted by:</b>
<b>Occupation of Personnel:</b>	Labourers	1. Alf Schmeider
<b>Number of Persons at Risk:</b>	Two people	2. Glenn Haworth
<b>Frequency of Task/Activity:</b>	The task/activity occurs continuously during the day	
<b>Duration of Exposure:</b>	Occurs for most of the time to continuously during task/activity	
<b>Plant/Equipment Required:</b>	As above	
<b>Substances/Materials Used:</b>	As above	

ASPECTS OF WORK PERFORMED	RISK ASSESSMENT (EVALUATION)		BEFORE RISK SCORE	CONTROL MEASURES	AFTER RISK SCORE
	POSSIBLE HAZARD	POSSIBLE CONSEQUENCE		Use the Hierarchy of Control to eliminate or minimise exposure - Elimination / Substitution / Isolation / Engineering / Administrative / PPE.	
1 Work Environment	<u>Air Quality</u> • Dust	• Eye irritation	L - 40	• Eye/face protection.	L - 28
	<u>Extremes of Temp</u> • Exposure to environmental heat	• Heat rash • Heat cramps • Heat exhaustion • Heat stroke	M - 48	• Access to cool drinking water and adequate intake of it. • Awareness of signs of heat/cold illness. • Regular rest breaks. • Hand protection. • Foot protection. • See WS-7-014 Work in an Area where there are Artificial Extremes of Temperature.	L - 40
	<u>Mental Stress</u> • Bullying • Workplace violence and security	• Stress	M - 48	• Comply with GP-3-015 Workplace Harassment and Bullying Governance Policy. • Comply with Council Procedure PD-5-007 Grievance Handling. • Comply with Council WHS Policy. • Provide avenue for open communication and feedback. • Monitor workplace relations.	L - 32

ASPECTS OF WORK PERFORMED	RISK ASSESSMENT (EVALUATION)		BEFORE RISK SCORE	CONTROL MEASURES Use the Hierarchy of Control to eliminate or minimise exposure - Elimination / Substitution / Isolation / Engineering / Administrative / PPE.	AFTER RISK SCORE
	POSSIBLE HAZARD	POSSIBLE CONSEQUENCE			
<b>2</b> Energy	<u>Gravity</u> • Falls, trips and slips of a person	• Injuries of various kinds	L - 40	• Store materials/plant/equipment in defined areas using best storage practices. • Install non-slip surfaces to areas that may become slippery.	L - 32
	<u>Kinetic Energy</u> • Being hit by moving objects • Entanglement in rotating or moving machinery	• Cuts/bruises • Broken bones/tissue damage • Death	E - 80	• See WS-7-001 Work on or adjacent to a Road or Railway. • See WS-7-005 The movement of Powered Mobile Plant at the workplace. • Foot protection. • High visibility clothing.	M - 52
	<u>Noise</u> • Long term exposure to sound	• Hearing damage and/or loss	L - 32	• See Noise Procedure (PD-7-079) when working in noisy environment such as workshop and around machinery.	L - 32
	<u>Radiation (ionising &amp; non-ionising)</u> • UV radiation	• Skin damage, eg, sunburn and cancer	M - 48	• Safe systems of work.	L - 32
	<u>Vibration</u> • Vibration to parts of body only, such as hands	• Tissue Damage	M - 48	• Rotate workers.	L - 32
<b>3</b> Manual Handling	<u>Body Stressing</u> • Musculoskeletal stress while lifting, carrying or putting down objects • Musculoskeletal stress while handling objects other than lifting, carrying or putting down	• Back injury • Strains and sprains of tendons, ligaments and muscles • Musculoskeletal injury	H - 60	• Instruct workers to get help to lift heavy materials. • See Manual Handling Procedure PD-7-048. • Adopt good manual handling techniques (education and supervision). • Use of cranes to lift/move equipment, etc.	M - 44
	<u>Ergonomics</u> • Fatigue	• Sprains/strains • Back injury	L - 36	• See Ergonomics Procedure PD-7-049. • Training.	L - 28

ASPECTS OF WORK PERFORMED	RISK ASSESSMENT (EVALUATION)		BEFORE RISK SCORE	CONTROL MEASURES	AFTER RISK SCORE
	POSSIBLE HAZARD	POSSIBLE CONSEQUENCE		Use the Hierarchy of Control to eliminate or minimise exposure - Elimination / Substitution / Isolation / Engineering / Administrative / PPE.	
4 Substances	<u>Skin Contact</u> <ul style="list-style-type: none"> <li>Long term contact with chemicals or substances</li> </ul>		L - 36	<ul style="list-style-type: none"> <li>See Material Safety Data Sheet (MSDS) for Handling/Storage and Personal Protection.</li> <li>Train employees relevant to hazardous substance.</li> <li>Exclude employees and others from work area.</li> <li>Hand protection.</li> </ul>	L - 28
6 Plant	<u>Mechanical (Refers to being caught between, struck by or against)</u> <ul style="list-style-type: none"> <li>Mobile and fixed plant and vehicles</li> <li>Non-powered handtools, appliances and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Tissue damage</li> <li>Musculoskeletal injuries</li> <li>Death</li> </ul>	E - 72	<ul style="list-style-type: none"> <li>Hand protection.</li> <li>Foot protection.</li> <li>High visibility clothing.</li> <li>Keep all persons away from zones where machines are operating.</li> <li>Plant is serviced and maintained in accordance with manufacturer's specifications and relevant Aus. Standards. (PD-7-119 Maintenance, Service &amp; Repair of Vehicles Plant &amp; Equipment Procedure).</li> <li>Ensure safety checks are done before operating and record in logbooks.</li> <li>Hand tools are checked to ensure good condition before use.</li> <li>Isolate, Tag out and Lockout plant and machinery (PD-7-053).</li> <li>Selection of appropriate plant for the task.</li> <li>Use or warning devices, signs and barricades.</li> <li>On site training/supervision of personnel to ensure competency with hand/power tools.</li> <li>See WS-7-005 The Movement of Powered Mobile Plant at the workplace.</li> </ul>	M - 44