ABERDEEN CITY COUNCIL

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COMMITTEE	Operational Delivery Committee	
DATE	6 th November 2018	
REPORT TITLE	Procedure for carrying out temporary repairs to granite setts/precast block roads	
REPORT NUMBER	18/225	
DIRECTOR	Rob Polkinghorne	
CHIEF OFFICER	Mark Reilly	
REPORT AUTHOR	Paul Davies	
TERMS OF REFERENCE	1&3	

1. PURPOSE OF REPORT

The purpose of this report is to seek Committee approval for the following report which will become the procedure for carrying out temporary repairs to granite setts/precast blocks and which will enable Aberdeen City Council to fulfil its statutory obligation under the Roads (Scotland) Act 1984.

2. RECOMMENDATION

2.1 That the committee approve the use of bituminous materials in the temporary repair of granite setts and precast block carriageways and a further report will be brought to the Operational Delivery Committee to outline the permanent repair options and associated costs.

3. BACKGROUND

- 3.1 Aberdeen City Council, as Roads Authority, has a statutory obligation under the Roads (Scotland) Act 1984 for the management and maintenance of its road network. Section 1 of the Act states that "...a local roads authority shall manage and maintain all such roads in their area as are for the time being entered in a list (in this Act referred to as their "list of public roads") prepared and kept by them under this section".
- 3.2 On the List of Public Roads for which the Roads Service is tasked with maintaining in a serviceable and safe condition there are currently approximately 80 roads and large areas laid out in setts, as well as approximately 110 roads laid in precast block and many small areas featuring setts, such as at the edging of some carriageways.

- 3.3 Where any defect is found in any such road, footway or area the Roads Service has a statutory obligation to make safe the defect.
- 3.4 The Council's response times to deal with such defects can be found in the Road Safety Inspection Manual.
- 3.5 Setted or precast block roads can fail in a number of ways that may result in safety defects. When making them safe the primary requirement is usually to level the area e.g. due to missing setts or a deformation in the carriageway, although reasons for a potential safety defect are numerous.
- 3.6 Where a safety defect is minor, for instance where one or two setts or blocks have worked loose, it may be possible for the squad responding to the defect to reset the setts on initial visit with the area coned off. The nature of the work required to make an 'as was' repair to a sett or lock block road will, however, often require traffic management or full road closure.
- 3.7 It should be noted that the Roads Service currently have a limited resource for carrying out some of these specialist repairs, some of which may have to be carried out by a specialist contractor. Training to upskill a group of operatives in this area is currently being investigated, potentially in collaboration with other Scottish Roads Authorities.
- 3.8 Where the nature of the works requires a road closure or traffic management to perform a safe repair, the Roads Service is required to give three months' notice through the Road Commissioners Symology system. This is to allow all public utilities the opportunities to carry out any works to their apparatus prior to the permanent road repairs being carried out.
- 3.9 It is highly probable that any large repair will require a full road closure and may require, for example, bus diversions which must be planned in consultation with the bus operators.
- 3.10 Following a repair, as per the Councils' specification, up to 4 weeks may be required for the mortar mix used to secure the setts to set prior to any vehicular traffic being able to drive over the repaired area.
- 3.11 Given the statutory requirement to resolve any safety defects in a timescale that cannot be achieved where any form of traffic management or reconstruction is required, the Roads Service will in the first instance repair any safety defects using bituminous material.
- 3.12 This bituminous material, in hot or cold form, is currently used to fill gaps where setts or blocks have been removed or where an area has suffered movement or become depressed, thus restoring a level surface and removing abrupt level changes that may cause a safety defect. Bituminous material may additionally be used to stabilise areas where its use will prevent further deterioration of the setted or precast block asset.
- 3.13 The Roads Service acknowledge that this style of repair may be perceived to be of poor aesthetic appearance. It is, however, the only practical method which

allows it to fulfil its statutory requirement to maintain a safe road infrastructure. The Roads Service will continue to monitor the marketplace should any better solution become available.

- 3.14 By making temporary repairs in bituminous material, the Roads Service seeks to minimise the work required to complete a permanent repair at a later stage. Bituminous material can be broken up and removed in a manner that is easier and less labour intensive than other materials, such as cementitious material. The inflexible nature of cementitious material also makes it a poor choice of repair material in certain sett areas where the surface is designed to have an element of movement and will very quickly crack.
- 3.15 The use of epoxy mortars would be of benefit, however they are extremely difficult to remove prior to carrying out a permanent repair.
- 3.16 Where traditional setts are removed to complete a temporary repair, these will be numbered, catalogued and retained in order that they may be reinstated at the time of a permanent repair being made.
- 3.17 The requirement for traffic orders, road closures, specialist materials and labour, along with the high associated cost of such repairs requires that permanent repairs will require to be added to programmed future works.
- 3.18 This new procedure for carrying out temporary repairs to granite setts and precast block roads ensures that the Roads Service can react in an appropriate manner to rectify safety defects within the Council's response times derived from the code of practice governing the management of roads assets Well Managed Highways Infrastructure, 2016.
- 3.19 A further report will be brought to the Operational Delivery Committee to outline the permanent repair options and associated costs. This is currently scheduled for spring 2019.

4. FINANCIAL IMPLICATIONS

4.1 By utilising bituminous material to complete the repair of safety defects on setted or precast block carriageway, the Roads Service shall minimise the cost of temporarily rectifying that defect.

5. LEGAL IMPLICATIONS

5.1 Aberdeen City Council has a statutory obligation to rectify safety defects in its adopted network and failure to allow the use of materials, such as bituminous material, to make repairs would leave road closure as the only alternative immediate fix to a number of sett or precast block defects.

6. MANAGEMENT OF RISK

6.1 The potential risks of not approving the use of bituminous material are outlined in the following table:

	Risk	Risk Level	Mitigation
Financial	If no immediate action is taken to address a defect then it may get larger and become a costlier fix.	Medium	The adoption of this reports recommendations as policy allows the Roads department to respond to defects in the only practical method to prevent short to medium term deterioration, minimising permanent repair costs.
Legal	Non-compliance with council's Roads Safety Inspection Manual.	Medium	The adoption of this reports recommendations to carry out temporary repairs will allow compliance with the Roads Safety Inspection Manual.
	That we would not be able to effectively comply with our duty to manage and maintain our adopted road network.	Medium	Allow us to comply with our duty to manage and maintain our adopted road network in a timely manner in accordance with response times in our approved Road Safety Inspection Manual.
Employee	N/A	N/A	N/A
Customer	Customers may not understand the reasoning behind repair procedures.	Medium	The adoption of this report as policy will allow its use when explaining why the council must react to defects in the manner that it does.
	If immediate action cannot be taken to make safe a safety defect, then a road closure may be required.	Medium	The adoption of this report as policy will allow for temporary repairs to be made in order to minimise customer inconvenience and ensure customer safety.
Environment	N/A	N/A	N/A
Technology	N/A	N/A	N/A
Reputational	The Council may be subject to criticism of non-aesthetically pleasing repairs.	Medium	Approval of this report will allow the reasoning for such repairs to be demonstrated to the public.

7. OUTCOMES

Local Outcome Improvement Plan Themes

	Impact of Report	
Prosperous Economy	ous Economy Investment in Infrastructure	
Prosperous Place	Safe and Resilient Communities	

Design Principles of Target Operating Model				
	Impact of Report			
Customer Service Design	Reduction of the potential inconvenience to customers from an inability to carry out emergency repairs.			
Organisational Design	Our organisational structure is such that it reflects our services and the statutory duties we must deliver.			
Governance	N/A			
Workforce	Need to ensure that there are sufficient adequately trained staff resources to execute the proposed policy.			
Process Design	Required Technical staff to understand process reasoning that will assist in an improved service delivery and best value.			
Technology	N/A			
Partnerships and Alliances	We shall continue to discuss with other Roads Authorities the possibility of joint training sessions for some of our workforce.			

8. IMPACT ASSESSMENTS

Assessment	Outcome
Equality & Human Rights Impact Assessment	This report has no direct implications in relation to Equalities & Human Rights Impact Assessment.
Privacy Impact Assessment	N/A
Duty of Due Regard / Fairer Scotland Duty	N/A

9. BACKGROUND PAPERS

- 9.1 The following papers have been used in the development of this committee report:
 - Road Safety Inspection Manual
 - Well-managed Highways Infrastructure Code of Practice 2016
 - SCOTS guidance document for Natural Stone Surfacing

10. REPORT AUTHORS CONTACT DETAILS

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