

Ku-ring-gai Council – Footpath Maintenance and Repairs
Policy and Procedure– July 2008

Ku-ring-gai Council

Footpath Maintenance and Repairs
Policy and Procedure

1. Purpose

The purpose of this Policy is to formalise Council's policy and set of procedures for the maintenance and repair of Council's footpaths.

2. Objectives

The Objectives of the Policy are to:

- To provide safe access for pedestrians and other users of Council's footpaths.
- To efficiently allocate available funding and resources for the maintenance and repair of the footpaths.
- To develop a priority for repairs.
- To minimise the ongoing maintenance problems by using effective repair treatments.
- To program repair work in association with Council's reconstruction program.
- To develop procedures for the reporting of injuries caused by tripping on footpaths and requests for repairs to damaged footpath.
- To develop a system for recording and reporting on the condition of Council's footpaths and reported injuries.

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Version	Effective date	Summary of changes			
1.0	8 Sept 2003	Original			
2.0	23 June 2008	Rewrite. Updated procedure and process			

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3. Definitions

In this Policy:

Defect means any form of failure in the footpath surface, including raised pavement, cracking and irregularities. Failure can be structural and/or visual in nature.

DN is the abbreviation for Defect Number. It means the number assigned to a footpath defect that is recorded in the Footpath Maintenance Database. It is based on the type of defect and the location category.

3. Legislative Framework

Under the Roads Act 1993, the Council as the road authority is responsible for the care, maintenance and control of the public road reserve.

In 2001, the high court abolished the non-feasance provisions that previously applied to councils and road authorities. On 18 June 2002, the State government introduced the Civil Liabilities Act relating to the awarding of damages against councils. This Policy and procedures is developed to manage risk and allocate funding on a priority basis.

5. Principles

5.1 Issues

The main concern with lifting or damaged footpath is the danger that it presents to the pedestrians who use Council's footpaths. There is a need for Council to be pro-active and effect footpath repairs particularly in busy streets near shopping centres and transport nodes where pedestrian movements are high.

The main causes why footpath slabs are raised or broken is due to tree roots either from Council's street trees or trees within private property which are near the boundary. Other significant causes of damage relate to openings in the footpath caused by public utility authorities or tradespeople. Also, damage to the footpaths can be caused by unauthorised vehicles driving onto the footpath.

In general terms, footpaths that are not subjected to any of the above conditions can remain in a serviceable condition for a significant period without the need for replacement. Whereas, footpaths that are subject to some or all of the above problems can deteriorate quickly and may require continual repair.

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Nature Strips

Generally Council will not undertake work on the nature strip where there is no formed footpath. Any work to ensure safe pedestrian access would need to be determined by assessment of factors such as pedestrian usage or drainage problems.

Council is not responsible for repairs and maintenance of retaining walls on nature strips. Refer to council's Road Reserve Policy.

6. Implementation

Civil Works section is responsible for the implementation of this Policy and procedures.

Operational details of procedures are set out in Footpath Maintenance Procedures as **Attachment A**.

The stages of implementation are explained below and summed as follows:

- Identification
- Evaluation - Prioritisation of footpaths between 1 to 6
- Programming - Rating of footpaths and program
- Establish controls - Notification handling, response times
- Treatments

6.1 Identification

There are three forms of identification methods:

Inspections

This is a survey of existing footpaths, which identifies tripping problems and rates the trip hazards in terms of trip sizes and pedestrian usage. The information is recorded in a database and as sections of footpath repairs are completed the database is updated. It is intended to re-survey the Council area on a five yearly cycle to investigate for any new trip hazards and audit the database.

The 10 Year Footpath Inspection Schedule is included in **Attachment 3** of the Footpath Maintenance Procedures.

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Complaints/Requests from public

When members of the public report trip hazards or injuries relating to falls caused by raised sections of footpaths, the relevant Council officer is required to record the information in the Customer Request System.

If appropriate, information relating to the fall should be reported to Council's Insurance Co-ordinator with details of the location and cause of the fall. These requests are to be actioned promptly with action to be taken as soon as possible to make the area safe.

If required, a report on the cause of the trip hazard and photographs of the section of footpath are taken both prior to and after repair work.

Authorised openings

Both public utility authorities and tradespeople are required to carry out footpath and road openings from time to time when new cables are to be laid or connections are made to service mains. The person responsible is required to complete an application and pay Council a deposit. The conditions of opening are stated on the application form including control of traffic and pedestrians during the work.

Temporary restorations are to be carried out to make that area safe and the exact dimensions of the opening are advised to the Restorations and Driveways Engineer who will issue the order to the Depot or Council's contractor to effect the permanent restoration work. Details of the permanent restoration work are covered in Council's specification.

6.2 Evaluation

The evaluation for footpaths relates to the risk management processes. The two main criteria for evaluation are *severity of the footpath defect* and the *frequency of use* which are explained below. The two criteria are used in a Matrix as shown in **Table 1.0** to determine the priority of the repair to the trip hazard.

Table 1.0 - Prioritisation of footpath hazard

Severity of the footpath defect (Displacement Height)	Frequency of Pedestrian Usage		
	Cat A (High Usage)	Cat B (Medium Usage)	Cat C (Low Usage)
>20mm	1	3	5
10mm – 20mm	2	4	6

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Severity of the footpath defect

The severity categories are based on the height of the trip hazard between consecutive footpath slabs.

Sites with displacement heights greater than 10mm would require removal and replacement techniques. Sites with displacement heights less than 10mm are not recorded or repaired, unless repairing adjacent defects. These may be ground down using a concrete grinding machine.

Frequency of Pedestrian usage

The frequency of use categories were based on pedestrian usage and identified areas throughout the Council area where pedestrian use is likely to be high and also considered the type of users. The three frequency categories are:

- Cat A High pedestrian usage – eg around shopping centres and railway stations for a 300metre radius.
- Cat B Medium pedestrian usage – eg around schools, nursing homes and aged car facilities.
- Cat C Low usage – general local residential streets without schools, nursing homes and bus routes.

6.3 Programming

Rating of footpath trip hazard

The percentage of cracks (%C) and percentage of trippers (%T) is determined for each frontage. The frontage is rated in a similar format as AAS27.

Trippers are rated as a greater problem due to the potential safety hazard. The number of cracks must also be analysed as they are a potential source of trippers and unserviceability of the path.

The rating for the section is determined from an average of the frontage ratings as shown in Table 2.0 below.

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Table 2.0

Rating	Expired Life	Description	Condition T	Condition C
1	40	asset unserviceable	$\%T > 50$	$\%C > 99$
2	30	major reconstruction required	$40 \leq \%T \leq 50$	$75 \leq \%C \leq 99$
3	20	serious deterioration	$30 \leq \%T < 40$	$50 \leq \%C < 75$
4	10	some superficial deterioration	$1 \leq \%T < 30$	$10 \leq \%C < 50$
5	0	near perfect	$\%T < 1$	$\%C < 10$

Develop Program for Footpath maintenance and repair

The entire Council area shall be inspected every 5 years, with the high pedestrian areas inspected more regularly. Scheduled inspections are to be undertaken as follows:

- Category A – High Pedestrian Usage – shops & railway stations - yearly
- Category B – Medium Pedestrian Usage – schools & nursing homes - 3 yearly
- Category C – Low Usage - local residential streets - 5 yearly

Refer to the 10 Year Footpath Inspection Schedule included in **Attachment 3** of the Footpath Maintenance Procedures.

The inspection rates the section and picks up defects – both for immediate action and for programming

6.4 Establish controls

Following the programming, it is necessary to establish control mechanisms for undertaking temporary maintenance for:

- dealing with high to low risk footpath trip hazards;
- dealing with complaints from the public, service requests from staff and authorised openings.

It is intended that with a programmed approach to repairing surveyed trip hazards, the amount of complaints and service requests will reduce. However, there needs to be a sufficient amount of funds available each year to repair sites which have recorded complaints or service requests.

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Authorised openings

These sites generally represent a potential danger and can be either made safe by the erection of barricades and lighting, or temporarily repaired until permanent repairs can be effected.

Authorised openings can be restored on a programmed basis and deposit funds are sufficient to cover the costs of restoration. Requirements for temporary restoration of authorised openings usually render the site safe until permanent repairs can be carried out.

Notification handling

With complaints from members of the public relating to notified trip hazards or falls, the matter is usually reported in the following stages:

- to Council's Customer Service Section in the first instance, then forwarded to,
- Council's Insurance Co-ordinator (if appropriate), who then notifies,
- The Civil Works Section

advising of the location requesting a report on the cause of the trip hazard together with the photographs of the site before and after repairs.

Response times for repair

Complaints or Service Requests relating to Priority 1 sites should be made temporarily safe within 24 hours.

For Priority 2 and 3, should be made temporarily safe within 48 hours of notification.

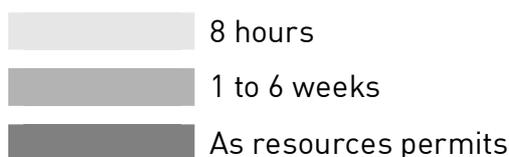
For Priority 4 to 6, sites consideration needs to be given whether action should be taken or programmed as resources permit.

A summary of response times for complaints or service requests relating to trip hazards is shown in the table 2.0 below, based on the prioritisation table 1.0 above.

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Table 2.0 – Response times for repairs

Severity of the footpath defect (Displacement Height)	Frequency of Pedestrian Usage		
	Cat A (High Usage)	Cat B (Medium Usage)	Cat C (Low Usage)
>20mm	1	3	5
10mm – 20mm	2	4	6



6.5 Treatment

Footpath Slabs Subject to Tree Growth

As tree roots cause the displacement of footpath slabs, it is necessary when repairing sites to try and prevent a continuation of the trip hazard when the roots continue to grow.

Tree roots cannot be removed unless approval is given by the appropriate Tree Management Officer. The slab directly over the roots is removed as well as the slabs on either side of the area. All slabs are then replaced with asphalt. This is to allow more movement, as the tree root continues to grow and be more easily replaced as necessary.

Footpath Slabs Subject to Vehicular Movement

Where footpath slabs have been damaged by vehicles, the footpath slabs that are broken need to be replaced because they constitute a trip hazard. Replacement slabs are a minimum of 100mm thick and reinforcement with F72 reinforcing mesh is required. Where driveways exist, any replacement should be in accordance with Council's Standard Drawing details with the likely use of the site being accessed.

Footpath Slabs With Minor Displacements

Where the displacement between footpath slabs is less than 10mm and the slabs are in good condition with no visible signs of cracking, it may be possible to grind the high slab using a concrete grinder until it matches the adjoining slab. This treatment should not be used more than two times as continued

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grinding will reduce the slab thickness and its ultimate strength. The slab should be ground smooth and not leave any rutting.

Footpath Slabs Associated With Openings

When utility openings in Council's footpath is required, it is necessary for the contractors involved to sawcut the edges of the opening to allow for replacement of the concrete footpath or restoration.

The size of the opening is subject to Council's requirements but should not be less than 300mm wide.

Both temporary and permanent restoration should be in accordance with Council's specifications.

Any trenched area needs to be properly compacted prior to replacing the concrete. Any concrete pour in a trench across a driveway should be reinforced in accordance with Council's Standard Drawing.