



Estate & Campus Services Directorate
Keele University Campus Gritting and Snow Management Plan
(KUCGSMP)

INTRODUCTION:

It is important that Keele University has a realistic, practical and documented Winter plan in place. It is also essential that the University exercises its full duty of care and takes reasonable measures to ensure safe access and egress to and around the campus for all students, staff, and visitors.

OBJECTIVES:

The core objective of the winter plan is to ensure the safe movement of all staff, students, visitors and members of the public during periods of snow and ice, whilst minimizing delays and disruptions due to the poor weather conditions.

It is understood that when it snows the response should be adjusted to meet the circumstances and, as a consequence, any decisions needing to be made at the time will be based on the prevailing conditions.

The Winter Service provided by the Estate & Campus Services team aims to:

- Prevent ice forming on the defined network of campus roads by pre-gritting;
- Melt ice and snow already formed by gritting as necessary; and
- Clear heavy snowfall by mechanical means.

The purpose of this plan is to clarify where, when and why Estates & Campus Services will undertake winter gritting on behalf of the University.

DECISIONMAKING:

The decision-making process follows two stages:

The decision re: the need to pre-salt and if so, whether a whole route/part route or to stand down, will be made by the Estate & Campus Services team in consultation with the Campus Safety team. All decisions about whether to pre-salt must be agreed by the Head of Building and External Maintenance or their nominated representative, this is 24/7 365 days per annum. To assist in the decision-making process the following weather reporting and forecasting systems are used:

- BBC.co.uk. Weather;
- (Newcastle) Metcheck.com; and
- Onsite Ice warning System via the Building Management System.

Decisions to treat roads are taken carefully to ensure road safety, but also to avoid unnecessary gritting.

Arrangements exist to ensure that personnel and plant are available on standby at specified times during winter months. However, it should be noted that mobilization of the vehicles, including loading with rock salt and prestart checks can take up to 2 hours.

WINTER SEASON:

The winter season is defined as being between the first Monday of November to week commencing the last week in March/first week of April and is inclusive of all weekends and public holidays.

RESPONSIBLE PERSONS:

The Head of Building and External Maintenance or their nominated person will be responsible for ensuring there is a Gritting and Snow Clearing Rota for the winter months to cover the University roads and paths. They will be supported by the Grounds Co-ordinator who will ensure sufficient grit is available and that all equipment is functional and fit for purpose.

Campus Safety are responsible at times outside normal operational hours for notifying the Head of Building and External Maintenance or the nominated member of their team when external conditions reach a point at which Ice begins to form on the surfaces of roads and paths.

SAFE WORKING PRACTICE:

The University will ensure that all staff adopt safe working practices and will in particular comply with:

- all Legal procedures;
- all Statutory requirements;
- all relevant codes of practice issued by the Health & Safety Executive; and
- all University regulations.

It is vitally important to the Grounds Team that all operatives involved in this plan maintain their own safety in what can be potentially very dangerous conditions. To support this gritting and snow clearing will commence at 05:00 hours to minimize the amount of lone working taking place. This will only be altered in exceptional circumstances i.e., at the request of the Emergency Services.

To ensure a successful operation is maintained, the Campus will be pre-gritted the day before expected bad weather to maximize the efficacy of the operation and ensure that the grit is being used efficiently.

PRIORITIES:

See Annex 1

Minor roads will not be treated with salt until after the pre-determined routes have been sufficiently treated to ensure that they remain open to traffic at all times. These roads will then be treated on a hierarchical basis of importance or in response to a specific request from the Campus Safety Team or the Emergency Services.

The University does not have the resources to carry out any precautionary gritting on footpaths. The commitment of resources necessary for such an activity would make it unfeasible. However, priority footways including DDA routes will be serviced after heavy snow fall occurs, to assist in the removal of snow and ice.

OUT OF HOURS SET-UP (WINTER):

The Head of Building and External Maintenance or their nominated person will monitor the predicted weather conditions daily. Upon notification that bad weather is expected they will authorize pre-gritting across the Campus on P1 & P2 priorities initially. The mechanical equipment will be pre-loaded before the end of the normal working day and left in readiness. If the bad weather occurs as predicted overnight the Campus Safety Team will contact Callout Operative (CO) 1 by mobile phone at 04:00hrs (Winter Call Out Rota). The Operative will come onto the Campus and start gritting or snow clearing as required on P1 routes.

A second team will come on site at 06:00 hours to support CO1 and to ensure P2 routes are open and as safe as possible dependent on the current weather conditions.

The rest of the Grounds team will commence work at their normal working time in order to maintain cover on the Campus throughout the daytime.

NORMAL DAYTIME OPERATIONAL HOURS (WINTER):

Monday -Thursday 07:00 – 15:15

Friday 07:00 – 15:00

MATERIALS:

Rock Salt

A minimum of 120 metric tonnes of highways grade loose rock salt (Gmm loose) will be in stock by the 30th of September each year. This quantity will be reviewed on a regular basis by the Head of Building and External Maintenance or their nominated person taking into account the economic climate and winter weather forecast.

Sand and Coarse Grit

Estate & Campus Services, due to circumstances out of their control, may from time to time be required to include additives in applied grit salt, such as sand or coarse grit. This is to ensure that the priority areas can receive a continued service during times of restricted salt supply. Additional materials will only be mixed in low contents to ensure the performance of applied salt is not adversely affected.

EQUIPMENT:

Gritters

Estate & Campus Services own/lease and maintain the equipment required to ensure effective deployment of this plan.

Application Density

The gritters spread the salt onto the carriageway at rates between 15 grms/m² and 40grms/ m² depending on the prevailing weather conditions. 15 gm/sq.m is normally spread in anticipation of ice forming (pre-salt) and 40 gm/sq.m is used in anticipation of snow or if we are trying to clear a buildup of snow or ice (post-salting). The Estate & Campus Services team endeavor to preserve our environment in all aspects of our work and as such we need to spread grit accurately. Rock Salt is mined from a non-renewable source and, in high concentrations can severely impact local biodiversity.

Additional equipment/external resource

In extreme weather conditions the Head of Building and External Maintenance or their nominated person will make arrangements on an individual basis with local contractors with regard to hire of any supplementary equipment, which may be needed from time to time. Equipment and labor hire will usually be paid for at hourly rates.

Self-help Salt Bins

There are approximately 42 Salt-bins in strategic locations around campus which are provided for public and staff use. These areas include all known frost pockets, steps to buildings, steep gradients and disabled access. They are checked on a fortnightly frequency during the gritting period and refilled as necessary. The Grounds team can NOT deposit salt at the roadside without any approved form of containment.

EXCEPTIONAL CIRCUMSTANCES:

No matter how accurate the forecast, there are situations where we cannot pre-salt the campus roads prior to icy conditions. Such conditions are:

- When rain is followed by rapidly clear skies, in this scenario pre-salting cannot start until after the rain has stopped to avoid the salt being washed into the drainage system;
- When temperatures fall rapidly and as much as 5 °C per hour;
- When dawn frosts occur on dry roads and early morning dew develops, this falls on cold roads, and then freezes on impact; and
- When rain turns to snow, early gritting cannot take place as it would be washed into the drainage system.

REPORTING PROBLEMS:

Office hours: -

Estates Helpdesk - Tel: - 01782 733137, Email: – estates@keele.ac.uk

Outside of Office hours:

Campus Safety Team: Tel: - 01782 733004, Email: Security@keele.ac.uk

RISK MANAGEMENT:

Estate & Campus Services will ensure that all risks associated with completing the activities detailed in this plan are completed in line with Health and Safety legislation and best practice. These include, but are not limited to:

- RiskAssessment for all activities;
- COSHH Assessments for materials;
- Training on use of machinery;
- Control measures for equipment; and
- Equipment maintenance procedures.

RECORD KEEPING:

The retention of accurate records is vital and is a legislative requirement. Estate & Campus Services are responsible for keeping the following records in relation to the winter gritting regime:

- Decision making process;
- Pre salting return of route completed;
- Complaints from the staff, students and the general public; and
- Record of any accidents that may have been reported.

FOOT NOTE:

The University takes its winter maintenance activities very seriously and will continue its gritting procedure, with no intention of reducing the amount of roads on the gritting route. The nature of the operation means that the University cannot guarantee that having gritted, roads, car parks and footpaths will be automatically free from ice or snow.

Paramount in any inclement conditions is the need to travel in a safe manner within the weather conditions that prevail. (Highway Code rules 205 & 206).

ANNEXES:

Annex 1–Location Priority for Gritting, Ice and Snow Clearing.

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CALLOUT DAYTIME OVERTIME GRITTING SNOWPLOUGHING

Gritting Locations

Attended (a)	Location	Priority
	Priority 1	
	University Avenue	P1
	University Drive	P1
	Keele Hall Road	P1
	Keele Drive ***Frost Pocket***	P1
	The Covert	P1
	Barnes Hall Road	P1
	Priority 2	
	Access 3 / Barnes Hall Road	P2
	Access 2 / Nursery Road	P2
	New Day Nursery Access Road and Car Park	P2
	Science Park 1 Road / Car Parking	P2
	David Weatherall / Car Park A1	P2
	Sustainable Hub main entrance <i>off</i> Mini Roundabout	P2
	Innovation Centre 4 / Rear of Sustainability Hub A2 Car Park Access road only	P2
	Innovation Centre 3 Car Park	P2
	Innovation Centre 2 Car Park	P2
	Innovation Centre 1 Car Park	P2
	Erigal Car Park	P2
	Darwin Building rear and roadside parking bays	P2
	Darwin Car Park Elvia side of Darwin	P2
	Observatory Walk Access Road	P2
	Horwood Hall - Access Road 16 (Health Centre) Horwood Hall Road	P2
	Horwood Hall Avenue - Garages	P2
	Springpool Housing	P2
	Plantation Park Housing - Bollards will be removed 1/11/2012	P2
	Horwood Hall - Access Road 15	P2
	Students Union - Access Road 14	P2
	Access Road 13 / Car Park (Rear of Keele Hall)	P2
	Keele Hall Court Yard & Car Park G ***Frost Pocket***	P2
	Clock House Drive - Court Yard	P2
	Music Department Car Parking	P2
	Library Access Road 12 Access & Loading Bays	P2
	Keele Hall Road / Access 11 Service Road	P2
	Central Drive / Access 10 Road	P2
	Lindsay Hall Road / Access 9 / Q Car Park	P2
	Keele Drive - Larchwood Housing	P2
	Junction The Covert / Keele Drive - Car Park J - Holly Hedge	P2

Attended (a)	Location	Priority
	Priority 2	
	Holly Cross & Oaks / Access No 8 Road	P2
	Keele Drive	P2
	Phase 3 ring road	P2
	Keele Drive - Church Plantation Flats & Housing	P2
	Access No 7 - Post Room / Car Parks	P2
	Covert Road - Access Road 6 (Jack Ashley) + Science Learning Centre	P2
	The Covert Access Road	P2
	Covert Road - Access 5 Oak Tree Road (Dorothy Hodgkin)	P2
	Cherry Tree Walk - E2 Car Park STUDENTS UNION*** Frost Pocket* * *	P2
	Access Road 1- Tawney Building + parking bays	P2
	Barnes Hall Road = Chancellors Car Park Large & Small	P2
	The Covert - Access 4	P2
	Car Park D - Sports Centre	P2
	William Emes Building (Estates Car Park)	P2
	VET School	P2
	Innovation Centre 7 (IC7)	P2
	Priority 3	
	Barnes Hall paths and ramps	P3
	Newcastle Lodge	P3
	Day Nursery paths	P3
	Stevenson Building paths	P3
	New Cycle Path Footpath on the new drive	P3
	Under Graduate Medical School	P3
	Innovation Medi4 paths and steps	P3
	Erival Paths, Steps and ramps	P3
	Darwin Building Steps	P3
	Ring Road footpaths	P3
	Horwood Hall general area and paths	P3
	Staff Housing Pavements Horwood Flats side access	P3
	Staff Housing Pavements Plantation Park paths	P3
	Keele Hall side entrance and parterre steps	P3
	Music Centre paths	P3
	Library Steps and disabled access ramp	P3
	Keele. Village green footpath	P3
	Terrace Steps down from Lindsay to Music Department	P3
	Lindsay Steps from T Block Lindsay	P3
	Lindsay Court / Lindsay Hall	P3
	Students Union Paths	P3
	Shops, Nat West Bank, Insurance, News Agents & Waterstones	P3
	Chapel Court Yard & Steps	P3
	Tawney Building steps and ramp frost pocket	P3
	Staff Housing Pavements - Larchwood paths	P3
	Staff Housing Pavements - Covert Paths	P3
	Staff Housing Pavements - Church Plantation Paths	P3
	Terrace Steps into the Keele Hall Gardens	P3
	Hole in Wall bus stop	P3
	Holly Cross paths and ramps	P3

Attended (a)	Location	Priority
	Priority 3	
	The Oaks paths and steps	P3
	Academic entrances as required	P3
	Church Plantation Flats Steps	P3
	Home Farm - Student Access Steps and court yard to house	P3
	Leisure Centre main entrance and side steps	P3
	HUB for Sustainability - court yard & foot paths	P3

Name:

Signature:

Date: