

Corporate Risk Assessment Form

The Council has a legal duty to assess the risks to the health, safety and wellbeing of staff, and the risks to the health and safety of persons not in employment. This duty is met through the completion of risk assessments of work activities and work locations. The purpose of risk assessment is to:

- identify what could cause injury or ill health (hazards)
- decide how likely it is that someone could be harmed and how seriously (the risk)
- take action to eliminate the hazard, or if this isn't possible, identify methods to control the risk (control measures)

Risk assessment completed for activity

Proposed trial of electric vehicle charging cable channels

Assessment background information

No on-street electric vehicle charging options are currently available to B&NES residents. EV charging cable channels are new products, which when installed into the footway enable residents to charge an EV on-street from their home energy supply, allowing residents with no off-street parking to access the lowest cost most convenient charging option and mitigating social equity issue around charging access. A trial of electric vehicle (EV) charging cable channel products is necessary to identify commercial products and provide data on their performance and operation, which will inform B&NES future policy regards a suitable public offering, product approval, asset ownership, maintenance, and costs. Additionally, cable channels offer an alternative to the dangerous practice of trailing charging cables across footways, an activity which is increasing with the rapid growth in EV ownership, and for which B&NES has limited enforcement capability

How the assessment was completed

The assessment was completed through discussion with highways maintenance officers, cable channel product manufacturers, equality officer, and a wider community of peers working electric vehicle charging infrastructure. Particularly helpful were informed discussions with officers in other local authorities who had run, or were running, trials on cable channels (e.g. Oxford councils trial of Gul-e), who were able to share trial experiences, participant feedback and risk mitigation measures they had put in place.

RA Number:	SC/EV/001	RA Completed by:	Dr. Alex Rowbotham, EV Infrastructure Lead	Service:	Sustainable Communities
Assessment Date:	1/3/23	Location:	B&NES wide	Work Activity:	EV Charging Cable Channel Trial

What are the hazards? (Premises work, equipment, specific tasks etc.)	Who might be harmed and how? (People at risk e.g., Staff, Contractors etc.)	What are you already doing? (Current controls in place)	What further action is necessary? (e.g., Control Measures - guards, training, supervision, safety equipment, safe working procedures, hygiene monitoring etc.)	Action by whom and by when?	Date Completed/ Outcome
Charging cables are not securely located within the cable channel, creating a trip hazard on the footway. This may take the form of a section of charging cable standing proud of the channel, or free cable at either end of the channel being allowed to dwell the footway surface. Causes could be users not following cable channel product operational guidance, not managing cable routing outside the cable channel or leaving excessive cable length between the channel and electric vehicle.	Public using the footway trip and fall causing injury. This risk would be increased for people with mobility issues or impaired vision.	Trial activity not underway. Currently in planning stage seeking council approval to proceed.	Identify approved cable channel operational procedure with manufacturer.	Dr. Alex Rowbotham, before trial participants identified.	
			Provide clear user agreement that identifies expected participant practice: 1) only keep cable in position when EV charging; 2) regularly check cable for causing footway hazards and rectify as necessary; 3) Secure free charging cable within house curtilage; 4) operate with minimal free charging cable length between channel and EV, locating cable between kerbstone and vehicle were appropriate; 5) free charging cable length between channel and EV to be operated at a maximum length of 1.5m.	Dr. Alex Rowbotham, before trial participants on-boarding or units installed.	
			Trial participant user agreement identifies clear penalties for miss-use of the cable channel, with final course of action removal participant from trial process and removal of cable channel unit from footway.	Dr. Alex Rowbotham, before trial participants on-boarding or units installed.	
Cable channel malfunctions such that it creates a trip hazard on the footway. This may take the form of channel components standing proud of footway surface or the	Public using the footway trip and fall causing injury. This risk would be increased for people	Trial activity not underway. Currently in planning stage seeking council approval to proceed.	Acquire clear installation instructions from cable channel supplier, and conduct training with installation contractors, with assistance from supplier where possible.	Dr. Alex Rowbotham, before units installed.	

What are the hazards? (Premises work, equipment, specific tasks etc.)	Who might be harmed and how? (People at risk e.g., Staff, Contractors etc.)	What are you already doing? (Current controls in place)	What further action is necessary? (e.g., Control Measures - guards, training, supervision, safety equipment, safe working procedures, hygiene monitoring etc.)	Action by whom and by when?	Date Completed/ Outcome
channel becoming loose from its location in the pavement. Causes could be an unexpected product failure mode or impact of extreme weather conditions.	with mobility issues or impaired vision.		Identify a clear route for participants to report any issues with the cable channel, and for B&NES officers to task rectification work with contractors.	Dr. Alex Rowbotham, before units installed.	
			Maintain open and honest communications with cable channel product supplier such that any issues identified in the trial can be addressed, both for in-situ units and to inform cable channel product development.	Dr. Alex Rowbotham, commenced and on-going.	
EV Charging cables are trailed across the footway surface without the use of a cable channel, creating an unacceptable trip hazard on the footway. This activity is prohibited in the B&NES area, however is increasing due to the rapid growth in EV ownership, limited council enforcement capability and current lack of any alternative for on-street home EV charging. Use of a cable guard to house the charging cables marginally reduces the trip hazard, while introducing more accessibility issues and is also prohibited.	Public using the footway trip and fall causing injury. This risk would be increased for people with mobility issues or impaired vision. Use of a cable guard also increases accessibility issues for pram and wheelchair users.	Proposing a trial of EV charging cable channel products that mitigate the risks from footway surface trailing cables.	Development of a public offer from B&NES to residents to apply for the installation of an EV charging cable channel. This offer must be based on information from a trial, provide necessary utility for applicants and minimise risks to B&NES.	B&NES council members, within two months of trial project completion.	

Assessment Review Date:	1/3/23	Assessor:	Dr. Alex Rowbotham	Manager:	Nick Helps
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