

## Key Risk Area (KRA)

### KRA 3.4 Excavation and Demolition

#### 1. Purpose

This document provides guidance to ensure, so far as is reasonably practicable, that excavation and demolition work is carried out safely and that hazards affecting workers, students, and visitors are identified, and risk elimination or control measures are implemented.

#### 2. Scope

This Guideline applies to all health, safety and wellbeing activities of staff, students, visitors (including volunteers and contractors), Council members, and other persons interacting with the University of Newcastle (workers); the operations of staff of University aligned Research Centres and controlled entities; and all activities conducted by or on behalf of the University of Newcastle on and outside of the University's campuses.

#### 3. Guidelines

##### 3.1. Identification and Assessment

IFS will ensure that a risk assessment is conducted by a competent person and recorded in writing for all work involving excavation or demolition, so that risk elimination or control measures can be determined, so far as is reasonably practicable, and in accordance with Guideline [HSG 3.1 Health and Safety Risk Management](#).

IFS or the nominated representative will work with the relevant contractor to identify the hazards and risks of work involving excavation or demolition. This includes work which:

- Disturbs the ground beyond a depth of 0.5m; or
- Involves penetration of walls, floors, ceilings or other sealed surfaces which could conceal services or provide structural support; or
- Involves driving stakes, spikes, piles or any other objects into the ground.

### 3.2. Specific Risk Controls

All excavation and demolition work will be conducted under a Permit to Work issued by IFS or the nominated representative. The Permit will be signed by the contractor and all the workers involved in the job to confirm that they understand the risk elimination and control measures that will be applied. Refer to the [IFS Permit to Work Procedure](#) for further details. IFS or the nominated representative will ensure that contractors conducting excavation or demolition work activities have Safe Work Method Statements (SWMSs), Job Safety Analysis (JSAs) or Standard Operating Procedures (SOPs) specific for the work which have appropriate risk elimination or control measures and which have been signed off by all workers who will be conducting the work. Refer to Guideline [HSG 6.1 Contractor Health and Safety Management](#) for details on further requirements.

Where it is not reasonably practicable to eliminate the need for excavation or demolition work, the need or risk must be minimised so far as is reasonably practicable. Suitable and adequate information, training and instruction in relation to the excavation and demolition work will be provided to relevant workers when required by the Work Health and Safety Regulation 2017 (NSW), records of which will be kept for two years. Refer to Guideline [HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency](#) for competency requirements.

Where it is not then reasonably practicable to eliminate the health and safety risks associated with excavation and demolition work, so far as reasonably practicable, and risk controls directed at minimising associated risks so far as is reasonably practicable will be selected with reference to the hierarchy of control measures. Possible control measures must include:

- Contractors will implement any relevant control measures required by the Work Health and Safety Regulation 2017 (NSW), including providing support systems and retaining structures to protect against cave-ins where relevant;
- Safe access will be provided for the area in and around the excavation or demolition so that the contractor's workers can move freely and without risk;
- Barriers and warning signs will be erected if excavation work has the potential to place any worker, student or other person at risk of injury due to their proximity to the excavation or demolition activity. Safe access will be provided for vehicle and pedestrian movement around the work site;
- Where dust emissions could be a hazard to workers, students and other persons who may be present in the area where work is being conducted, emissions will be eliminated or minimised so far as is reasonably practicable by extracting the dust at the point of generation or using water for dust suppression;

- The risk assessment conducted at the start of the work will identify possible emergency situations that might arise as a result of the excavation or demolition and arrangements for managing such a situation will be included in the contractor's SWMS or JSA and also in the Permit to Work. See the [IFS Permit to Work Procedure](#).

### 3.3. Detection of Concealed Services

When planning demolition or an excavation, all reasonable steps will be taken to identify the location of services underground and in walls before work commences. The type, location and depth of services will be identified, including gas, water, sewers, electricity, telecommunication, drainage pipes and soak wells, cables, fuel lines, storage tanks and other associated plant located underground, and any conditions on proposed excavation will also be identified.

The local utilities suppliers will be contracted prior to any excavation to assist with identifying concealed services i.e. "Dial Before You Dig" and IFS will maintain maps and records showing the location of underground services which will be provided to contractors engaged to carry out excavation work.

If unsuspected underground services are identified during preliminary excavation, work shall cease until the service provider has been contacted and the service isolated and made safe.

### 3.4. Completion of the Work

At the completion of the work, the contractor will clear the work site of all rocks, soil and other debris and return it, so far as is reasonably practicable, to its original condition.

IFS will update drawings and other documentation to reflect any changes due to the work just completed and must confirm the contractor in charge of the excavation or demolition has completed the work and the Permit to Work has been satisfactorily signed off before closing the Permit.

## 4. Definitions

In the context of the Health and Safety Management System Framework:

Demolition	Work to demolish or dismantle a structure, or part of a structure that is loadbearing or otherwise related to the physical integrity of the structure, other than the dismantling of formwork, falsework or structures designed or
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	used to provide support, access or containment during construction work or the removal of power, light or telecommunication poles.
Employer	Means the University of Newcastle (the University).
Excavation	A trench, shaft, or tunnel, other than a mine, certain bores, and trenches for use as a place of interment.
Executive Committee	Consisting of the Vice-Chancellor, the Deputy Vice-Chancellors, the Pro Vice-Chancellors, the Chief Operating Officer, Chief People and Culture Officer and the Chief Financial Officer, the University Secretary and the President of Academic Senate.
Leader / Supervisor	Any member of the University who is responsible for supervising staff and/or undergraduate or postgraduate students and/or for leading research projects.
Worker	Includes an employee, conjoint, student on work experience, contractor, sub-contractor, and volunteer. A person is a worker if the person carries out work in any capacity for the University or another person conducting a business or undertaking, including work as: <ul style="list-style-type: none"> <li>(a) an employee, or</li> <li>(b) a contractor or subcontractor, or</li> <li>(c) an employee of a contractor or subcontractor, or</li> <li>(d) an employee of a labour hire company who has been assigned to work in the person's business or undertaking, or</li> <li>(e) an outworker, or</li> <li>(f) an apprentice or trainee, or</li> <li>(g) a student gaining work experience, or</li> <li>(h) a volunteer, or</li> <li>(i) a person of a prescribed class.</li> </ul>

## 5. Responsibilities

A comprehensive list of health, safety and wellbeing responsibilities is provided in [HSG 1.2 Roles and Responsibilities Guideline](#).

Specific responsibilities under this Guideline include:

### **Infrastructure and Facility Services (IFS)**

- Ensure excavation and demolition work is conducted in accordance with this procedure and the requirements of the Work Health and Safety Regulation 2017 (NSW);
- Ensure that contractors who are engaged to conduct excavation and demolition work have the appropriate licences, procedures and equipment to undertake the work;
- Ensure that the contractor's workers are trained and competent to undertake the work e.g. operation of front end loaders and excavators, and are appropriately supervised in accordance with the Work Health and Safety Regulation 2017 (NSW);
- Ensure that any excavation or demolition work is conducted under a Permit to Work issued by IFS or a nominated representative;

- Provide information in relation to affected locations where excavation or demolition work is to take place to ensure the necessary actions are taken to protect workers, students and any other persons in the area, so far as is reasonably practicable.

### **Leaders and Supervisors**

- Ensure that risk elimination and control measures are followed when they are implemented to protect workers, students and any other persons when excavation or demolition work is to be conducted, so far as is reasonably practicable.

### **Health, Safety and Wellbeing Team**

- Provide professional input regarding excavation or demolition work when required; and
- Support IFS in risk assessment and review of excavation or demolition work.

## **6. References & Related Documents**

The following documentation is referenced in, or applicable to this Guideline:

[HSG 1.2 Roles and Responsibilities](#)

[HSG 3.1 Health and Safety Risk Management](#)

[HSG 4.2 Health, Safety and Wellbeing Induction, Training and Competency](#)

[HSG 6.1 Contractor Health and Safety Management](#)

[IFS Permit to Work Procedure](#)

SafeWork NSW Demolition Work Code of Practice

SafeWork NSW Excavation Work Code of Practice

## **7. Amendment History**

Version	Date of Issue	Approval	Section(s) Modified	Details of Amendment
1	September 2015	Director, People and Workforce Strategy	-	Original version
2	October 2023	CPCO	All	1. All sections reviewed for legal compliance 2. Updated content in all sections 3. Added new/renamed Related Documents

				4. Added Amendment History 5. Amended document control header and footer
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## 8. Appendices

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