



Excavation and Penetration Procedure

Brief description

This Procedure aims to provide a systematic approach to understanding and controlling the risks associated with excavation and penetrations of the ground or penetrations of wall, floor and ceiling.

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If you require any further information, please contact the Custodian.

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1 Terms and definitions

In this Procedure:

"**Accurately Surveyed**" means the accuracy required to properly locate services in the future from the plans or drawings i.e. information provided by a surveyor, survey pickup.

"Backfill" means the process of returning to the original state prior to the excavation in accordance with the required scope of works.

"Barricade" means a structure consisting of either soft or solid components (e.g. tape, mesh, scaffold tubes, guardrails) used to cordon off a work area and/or area where a hazard exists to prevent unauthorised access.

"Barrier" means a physical structure which blocks or impedes something.

"Battering Back" means the process of removing material around a trench or excavation such that the walls are sloped at an angle rather than vertical.

"Bench" means a horizontal step cut into the face or side or wall of an excavation to provide horizontal bearing and sliding resistance.

"Benching" means the process of removing material around a trench or excavation such that the walls are stepped or benched back rather than vertical.

"Building Penetration" means penetrations into walls, ceilings and floors but is not limited to.

"Competent Person" means person who has a combination of training, education, and experience acquired knowledge and skills enabling that person to perform the specified task.

"**Digging**" means any activity involving the use of hand tools or the insertion of objects into the ground, (e.g. driving a picket or boring of holes), whereby earth, rock, sand, soil or other material is moved or displaced at a depth exceeding 300mm

Note: This does not include the digging or movement of material stockpiles such as coal and topsoil, the digging of raised garden beds, cleaning of culverts around drains to the natural ground shape, etc.

"Excavation" means the removal of the pre-existing surface at ground level, mass excavation, trenching, demolition to a depth >300mm.

"Exclusion Zone" means an area from which all persons are excluded during excavation work. This will include not locating mechanical plant, vehicles and storage of materials (including excavated materials) within the zone of influence of an excavation.

"Face" means an exposed sloping or vertical surface resulting from the excavation of material.

"Geotechnical Engineer" means an engineer whose qualifications are acceptable for membership of the Institution of Engineers, Australia and who has qualifications and experience in soil stability and mechanics and excavation work.

"Ground Penetration" means a localised piercing into the ground > 300 mm deep which requires support from the ground, (e.g. tent pegs, fence posts, street sign, tree or significant plant) or drilling / cutting of concrete.

"Hoist" means an appliance intended for raising or lowering a load or people, and includes an elevating work platform, a mast climbing work platform, personnel and materials hoist, scaffolding hoist and serial hoist but does not include a lift or building maintenance equipment.

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- "Off Site" means outside the boundaries of any terminal i.e. Marina and Parklands, Spinnaker Park, East Shores Precinct, Central Queensland University ("CQU") grounds any GPC Leased areas.
- "On Site" means within the boundaries of any terminal or construction site i.e. Reg Tanna Coal Terminal (RGTCT), Barney Point Terminal (BPT), Auckland Point Terminal (APT), Port Alma, Fisherman's Landing and Port of Bundaberg.
- "Owner" means under the GPC governance structure, the Owner is accountable for approval and has the authorised discretion to implement or significantly change the system.
- "Permit" means documented approval to carry out work on or associated with GPC's assets or secure plant to prevent operation. Request to Excavate or Penetrate Permit.
- "Permit Holder" means the person who is in control of the excavation and/or penetration to be performed. It is also the person who holds the Excavation/Penetration Permit.
- "**Potholing**" means a method used to locate underground services i.e. manual dig or hydrovac excavate.
- "Relevant Area Manager/Superintendent" is the person/s with the overall responsibility for the department for whom the work is being conducted. This may be the Operations Superintendent, Support Services Superintendent etc.
- "Requester" means the person who is requesting the Request to Excavate or Penetrate. Requester may not be the applicant.
- "Responsible Person" means generally the project manager or anyone who is deemed responsible for the area i.e. manager, engineer or area supervisor.
- "Safe Slope" means the steepest slope at which an excavated face is stable against slips and slides, having regard to the qualities of the material in the face, the height of the face, the load above the face and the moisture conditions for the time being.
- "Shaft" means a vertical or inclined way or opening from the surface downwards or from any underground working, the dimensions of which (apart from the perimeter) are less than its depth.
- "Sheeting" means vertical, close-spaced, or interlocking planks of steel, reinforced concrete or other structural material driven to form a continuous wall ahead of the excavation and supported either by tie-backs into solid ground structural members from within the excavation as the work proceeds.
- "**Shoring**" means the use of timber, steel or other structural material to support an excavation in order to prevent collapse so that construction can proceed.
- "Survey Accurate" means the accuracy required to properly locate services in the future from plans or drawings e.g. information from a surveyor or measurements taken of services prior to backfill. Measurement can be taken from a reference point such as a building.
- "Trench" means a horizontal or inclined way or opening:
- The length of which is greater than its width and greater than or equal to its depth; and
- That commences at and extends below the surface of the ground

That is open to the surface along its length.

"Tunnel" means an underground passage or opening that is approximately horizontal and commences at the surface of the ground or an excavation.

"Underground Service" means a cable, pipe or other thing laid or installed underground for the transmission, transportation or storage of electricity, or a substance, including telephone and gas service lines.

Terms that are capitalised and not otherwise defined in this Procedure are defined in the GPC Corporate Glossary Instruction (as listed in Appendix 1 – Related documents).

2 Introduction

2.1 Purpose

The purpose of this Procedure is to provide a systematic approach to understand and control the risks associated with excavation and penetrations of the ground or penetrations of wall, floor and ceiling. This Procedure defines the requirements for performing excavations and penetrations on GPC owned or controlled sites.

2.2 Scope

This Procedure applies to all Workers conducting work at GPC owned or controlled sites and facilities for, or on behalf of GPC. It must be applied where there is an identified risk relating to an excavation, ground penetration or building penetration.

This Procedure does not include the digging or movement of material stockpiles such as coal and topsoil, the digging of raised garden beds and the cleaning of culverts around drains to the natural ground shape.

2.3 Objectives

This Procedure aims to:

- Ensure so far as is reasonably practicable, that the health and safety of people either
 engaged in the excavation or penetration work, or adjacent to the work area, is not
 put at risk from work performed in relation to an excavation or ground penetration;
- Ensure the continual maintenance of a safe working environment by minimising hazards associated with excavation and penetration; and
- Specify a standard of controls that ensure compliance with all legislative requirements.

3 Excavation and penetration Procedure

3.1 Permit and risk assessment

An Excavation/Penetration Permit is required for:

- (a) all activities conducted by, or on behalf of, GPC involving the removal of soil or rock to form an open face, hole or cavity greater than 300mm in depth; or
- (b) In the circumstances where the conditions in section 3.3 (Building Penetration) cannot be met.

Refer to Appendix 2 for the permit process flow.

The Requesting Person must prepare the Permit and obtain required information, drawings/plans, service locations, internal clearances and external clearances. The Responsible Person for the work being conducted (Supervisor) must sign to confirm the process outlined in the permit will be performed for the excavation/penetration. The Permit

Issuer (Project Manager or other person responsible for the work area e.g. Manager, Superintendent, Engineer) must identify who the permit is being issued to (Permit Holder) and sign to provide authority to proceed.

Hazards introduced and associated with the specific excavation or penetration task and proposed work methods as well as the required control measures are to be considered and documented in the accompanying risk assessment (JSA). A JSA must be developed to support the permit. All personnel involved with the work must review and sign onto the JSA. If works do not commence within three months of the permit authority being obtained, the permit must be reviewed prior to commencement of works.

3.2 Excavation/Ground Penetration – Permit Requirements

Once the Backfill requirements (Part E) are identified, completed and signed off (Part F) by the Responsible Person for the work being conducted (Supervisor), the permit can be returned to the Permit Issuer. The Permit Issuer must inspect the work prior to signing off to close and relinquish the permit.

3.3 Building Penetration – Permit Requirements

The following rules must be applied by all Workers undertaking work activities where penetrations are made through or into walls, ceilings or floors:

- (a) Prior to conducting any work activity where penetrations are made into walls, ceilings or floors, a visual inspection must be carried out to positively identify/confirm the:
 - (i) the location of services in the work area will not be impacted i.e. can visually see both sides of a ceiling tile, a door; or
 - (ii) the method of performing the penetration removes the risk of impacting services i.e. depth gauge on cutting device.

If this can be achieved, there is **no requirement** for a Permit to be completed.

If Workers are unable to meet 3.3(a), Workers must complete the Excavation/Penetration Permit.

A Permit for building penetration does not require Part E and F to be completed. On completion of the building penetration work, the 'Permit Closure and Cancellation' section must be completed. The Permit Issuer must inspect the work prior to signing off to close and relinquish the permit.

3.4 Construction work requirements

Construction work is any work carried out in connection with the construction, alteration, conversion, fitting-out, commissioning, renovation, repair, maintenance, refurbishment, demolition, decommissioning or dismantling of a structure. A structure includes foundations, earth retention works and other earthworks, including river works and sea defence works. All Workers involved in excavation work must hold a general construction induction training card.

Any excavation work needs to be assessed to see if it meets the criteria of 'High Risk Construction Work' as per the Work Health and Safety ("**WHS**") Regulation (reg. 291). Where the excavation work is deemed 'High Risk Construction Work', a Safe Work Method Statement (SWMS) is required.

3.5 Excavation/penetrations is undertaken in close proximity to services

If any excavation/penetration work is within two metres of an energy source (e.g. transformer, sub-station, switch room, power cables, communication cables, live pipelines, conveyor systems, feeders, pile dischargers) where there is potential for an uncontrolled release of

energy then, where reasonably practicable, the energy source must be positively isolated in accordance with the GPC Isolation and Lockout Procedure. If positive isolation is not reasonably practicable, control measures must be put in place as per the hierarchy of control.

Any excavation undertaken within one metre of any known buried service must be preceded by potholing (hand tools or a 'Vac Truck') to determine the depth and direction of services, unless an exemption has been obtained in writing from the responsible manager for the service. Once the services have been confirmed and depth details obtained, then the excavation can proceed in accordance with the controls outlined in the permit.

Powered machinery or equipment such as jackhammers and excavators must not to be used within three metres of a gas line without prior contact with the asset owner for specific conditions and control measures.

Any excavation work or where there is the potential that the reach of the equipment being used can enter a three metre radius corridor of any overhead power lines must only proceed with an authority obtained from the owner of the power line (e.g. Ergon, Queensland Rail ("QR")).

3.6 Service clearances

The location of all services must be verified and indicated as clear or not clear by a person who is authorised and who has knowledge and service drawings for the specific location to be excavated or penetrated. Services include water, fire, air, electrical-low voltage, electrical-high voltage, communications, sewerage, fuel and gas and services owned by others – e.g. Gladstone Regional Council ("GRC"), Aurizon.

When using a detection locator over a proposed excavation or penetration site, the investigation must be extended no less than three metres beyond the proposed excavation or penetration boundary.

Personnel must not rely on previous plans being accurate in terms of location and or placement of buried and or concealed services.

3.7 Adjacent to buildings or structures

The Permit Holder must ensure that any work adjacent to buildings or structures does not commence until steps are taken to prevent the collapse or partial collapse of any potentially affected building or structure. These steps and controls are to be captured on the JSA.

Any excavation work that is below the level of the footing of any structure, including walls that could affect the stability of the structure, must be assessed by a competent person and secured by a suitable ground support system which has been designed by a competent person. Suitable supports to brace the structure may also be required and must be identified by a competent person and captured on the JSA.

It is important that other buildings in and around the excavation site are not adversely affected by vibration or concussion during excavation work. Special precautions may need to be taken when in the vicinity of buildings that contain equipment sensitive to shock and vibration. All stakeholders of nearby buildings that may be affected must be consulted before works commence.

3.8 Crossings and thoroughfares

The supervisor of the excavation must ensure the following precautions are taken if an excavation involves the crossing of a road or will impede access to areas of the plant:

- A traffic management plan is developed and approved for the works area/s;
- All appropriate traffic control signs are displayed as per the traffic management plan;

- The Supervisor of the area concerned is notified before commencement of work; and
- A site notice is sent out listing dates, times and safety measures put in place to control the works.

3.9 Hazardous atmosphere in an excavation/trench

The potential for a hazardous atmosphere must be considered when assessing the risk of working in or entering an excavation or trench. Where a potential is identified, allowance for gas testing and/or monitoring and establishment of controls must be identified within the work permits. If the potential for a hazardous atmosphere has been identified, then additional controls must be put in place before works commence.

Trenches are not considered confined spaces based on the risk of structural collapse alone, but will be confined spaces if they potentially contain concentrations of airborne contaminants that may cause impairment, loss of consciousness or asphyxiation. In these instances, the GPC Safe Work in Confined Spaces Procedure would need to be complied with.

Bottles of heavier-than-air gases, e.g. 'LPG', must not be placed in any excavation. If gas is used in an excavation, it must be delivered via hoses which must not be left in the excavation between uses.

An internal combustion engine cannot be located in a trench or within close proximity to the trench when a trench is greater than 600mm in depth unless additional control measures in place.

3.10 Work in an excavation/trench

Mechanical plant, vehicles, storage of materials (including excavated material) or any other heavy loads must not be located in the zone of influence of an excavation. The zone of influence is the volume of soil around the excavation affected by any external load (e.g. vehicles, plant, and excavated material). The zone of influence is based on a ratio of 1:1 and taken on the horizontal plane against the depth of the trench.

As a minimum, where a person is required to enter the zone of influence, a PORT risk assessment (or equivalent) must be conducted and permission granted from the works supervisor. If entry is to be on going due to work activities, risks and control measures must be captured on the JSA.

Benching or battering techniques may be used as a safeguard to reduce the height of the vertical sidewalls hence reducing the risks.

3.11 Prevention of excavation collapse

Where an excavation is likely to be 1.5 metres or greater, or in sandy or unstable locations, then the following control measures must be in place:

- Ensure, as far as is reasonably practicable, that the work area is secured from unauthorised access (including inadvertent entry) and the risk to any person arising from the collapse of the trench is minimised by ensuring that all sides of the trench are adequately supported by doing one or more of the following:
 - Shoring by shielding or other comparable means; or
 - Benching; or
 - Battering.

The ground support system installed must be designed by a competent person (e.g. a geotechnical engineer) to carry such loads and prevent ground collapse.

3.12 Excavation hazards and controls

(a) Barriers

A secure fence or barricade and signage on all sides, set at a minimum height of one metre, must be erected around any accessible part of all open or exposed excavations where there is a risk of fall from one level to another that is reasonably likely to cause injury to the person or another person. Barricades should comply with the GPC Barricades Procedure. Depending on the excavation site and the location, sufficient lighting should be positioned during the hours of darkness to ensure adequate illumination. A risk assessment should determine when it is not practical to do so.

When operating vehicles close to open excavations, berms or barriers must be erected to prevent vehicles over-running or endangering the stability of the excavation.

(b) Water inrush

Consideration must be given to the potential for water ingress or inrush into excavations or trenches where person(s) may have to enter. Where the potential exists, controls must be identified within the JSA and Permit, e.g. allowance for drainage and/or pumps. Secondary risks of water ingress must also be considered where electrical equipment, welders, etc. are to be used.

(c) Work in excavation – Spotter

Where required by a risk assessment and/or permit, a Spotter who has been trained in the duties of a Spotter, must keep the Worker(s) and work area under constant observation. Effective communication procedures must be established between the Worker(s) and the Spotter. When performing the role of a Spotter, the person must not conduct any other task.

(d) Geo-technical engineering approval

If shoring, benching or battering in the standard form cannot be used to prevent collapse of the excavation, then approval from a geotechnical engineer must be obtained. Included with the Permit, a geo-technical engineer's approval must state the following:

- All sides of the trench are safe from collapse;
- The period of time that the approvals last; and
- Any natural occurrences that could adversely affect the stability of the trench, which would then require a further review and approval from the geo-technical engineer.

(e) Acid Sulfate Soils and Contaminated Soils

GPC activities generally occur on low-lying coastal areas of land which has been identified by the Department of Environmental Heritage and Protection as areas of high potential for acid generation.

If there is the potential to disturb Acid Sulphate Soils (ASS) during excavation, then detailed controls in the JSA must include:

- Identification processes;
- Handling practices; and

Treatment and disposal.

GPC ASS and Contaminated Land Procedure provides guidelines and advice on identification, handling, treatment and disposal of contaminated land or uncovered acid sulphate soils or Potential Acid Sulfate Soils (PASS).

If unexpected contamination is identified during excavation, then the following must apply:

- Contact an Environmental Specialist to confirm the level of contamination and develop a management plan to reduce the risk to non-contaminated areas (land, water, flora, fauna, and people); and
- Do not use contaminated excavated material to refill the void.

(f) Additional fill material

When fill material from offsite is required in addition to the excavated material, the source of the additional fill material must be clearly stated on the permit. This will allow the Environment Team opportunity to ensure that it is able to be brought onto site.

3.13 Inspections

Where an excavation will remain open for more than the one day, a competent person must re-examine the excavation each day before any person is permitted to enter the excavation. Excavations must be monitored by the Supervisor of the task on a regular basis throughout each day that the excavation is open. The monitoring must be performed to determine if the condition of the excavation has changed and requires additional controls to be implemented. Inspections should be recorded on the Daily Inspection Checklist (see Appendix 3).

3.14 Updating records of buried services

Where the excavation is for the installation of any new buried service, it is mandatory that full details of the service/s be updated on GPC records. If, during any excavation, any services are exposed which are not identified on the drawings/plans, or are not accurately marked on the drawings/plans, these services must be survey accurate located.

On completion of the excavation, the following must occur:

- The Excavation/Penetration Permit must be returned to the Supervisor of the works along with the marked-up drawings for sign off.
- Prior to Backfilling, all services requiring survey locations must be identified. Buried services must have surveyed locations along routes and co-ordinates passed on to Port Infrastructure Asset Department and/or the Technical Services Department for addition to site services drawings.
- The marked-up drawings must contain sufficient detail to ensure the Port Infrastructure Asset Department and/or the Technical Services Department can complete the "as-built drawing".
- The Supervisor of the works is responsible for ensuring the modified drawings are sent to the Port Infrastructure Asset Department and/or the Technical Services Department.

Where any excavation exposes an incorrectly documented or unknown buried service, the Port Infrastructure Asset Department and/or the Technical Services Department must be advised to ensure that the records are updated accordingly.

3.15 Training

Information on excavation and penetration on GPC controlled sites and facilities must be provided to Workers in the general induction.

All Workers involved in excavation work must have completed general construction induction training.

Job specific mandatory training in 'Acid Sulfate Soils and Contaminated Land' is provided for those who plan tasks that require excavation and those who supervise excavations.

All personnel engaged at GPC controlled worksites and facilities that carry out work associated with excavation or penetration activities must undertake additional training as required (e.g. confined space, using an electrical detection monitor, utilising gas monitoring equipment, using lasers etc.). Where mobile plant/equipment is utilised, all personnel operating the mobile plant/equipment must be licenced, trained and competent.

4 Roles and responsibilities

To assist GPC Representatives to better understand their responsibilities, key responsibilities and accountabilities are summarised below:

Role	Responsibilities
General Managers	 Provide adequate resources to ensure the consistent and effective application of this Procedure across GPC. Ensure strategies are in place to manage the risks associated with excavation and penetration activities. Ensure the application and effectiveness of this Procedure and its associated measures are regularly monitored.
Managers	 Ensure the requirements of this Procedure are supported, promoted, understood and complied with in their area. Manage non-conformances to this Procedure. Ensure the application and effectiveness of this Procedure and its associated measures are regularly monitored.
Superintendents, Discipline Leads or Project Managers	 Ensure Workers comply with this Procedure. Ensure training and information is provided on the risks associated with excavation and penetration and the tools and methods available to control these risks. Ensure that appropriate investigations are conducted into non-conformance with this Procedure.

Ensure JSA for the excavation or penetration work is being followed and controls are utilised effectively. Ensure the application and effectiveness of this Procedure and its associated measures are regularly monitored. Ensure Workers comply with this Procedure. Ensure JSA is completed before any excavation or penetration work commences. Ensure JSA for the excavation or penetration work is being followed and controls are utilised effectively. Ensure an authorised permit is in place for the excavation or penetration work. Discuss stipulated controls with Permit Holder. Permit Holders Identify excavation or penetration tasks. Obtain authorised permit before commencing work. Ensure services have been identified and marked out. Comply with conditions and controls identified in the permit. Ensure the permit is closed at the completion of the task. Withdraw the permit if a breach of controls is observed. Spotter Assist the Permit Holder to ensure a safe place of work in the vicinity of the excavation or penetration is maintained. Observe the area being excavated and look for services, signs or changes of strata and/or services location tape/tiles. Will not perform any other work or function that compromises their role as a Spotter.	Role	Responsibilities
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services, signs or changes of strata and/or services location tape/tiles. • Will not perform any other work or function that	Spotter	work in the vicinity of the excavation or penetration is
		services, signs or changes of strata and/or services
 Withdraw the permit if a breach of controls is observed. 		

5 Appendices

5.1 Appendix 1 – Related documents

(a) Legislation and regulation

Key relevant legislation and regulation, as amended from time to time, includes but is not limited to:

Туре	Legislation/regulation
Federal	National Environmental Protection (Assessment of Site Contamination) Measure 1999
State Acts	Work Health and Safety Act 2011 (Qld)
	Work Health and Safety Regulation 2011 (Qld)
	Electrical Safety Act 2002 (Qld)
	Electrical Safety Regulation 2013 (Qld)
Other	QLD Excavation Work Code of Practice
	Queensland Acid Sulfate Soils Technical Manual 2014

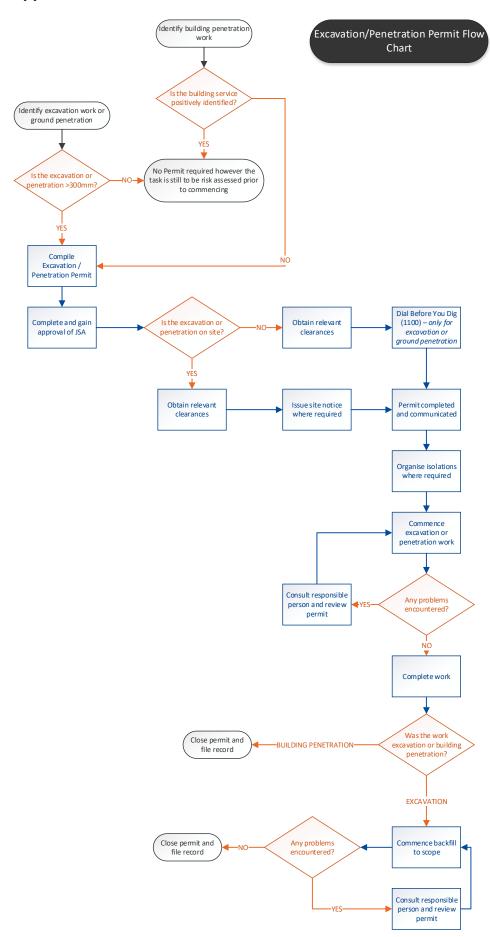
(b) Gladstone Ports Corporation documents

The following documents relate to this Procedure:

Туре	Document number and title		
Tier 1: Policy	#365624 Safety Policy		
	#1412364 Enterprise Risk and Resilience Policy		
Tier 2: Standard/Strategy	#854303 Safety Management Framework Standard		
	#829152 Enterprise Risk Management Standard		
	#995910 Contractors and Port Users Safety, Environment and Security Standard		
Tier 3: Specification/ Procedure/Plan	#697854 Safety Management System Plan		
. , , , , , , , , , , , , , , , , , , ,	#123526 Barricades Procedure		
	#1293169 Safe Work in Confined Spaces Procedure		
	#1075526 Incident Management and Investigation Procedure		

Туре	Document number and title
	#154111 Hot Work Procedure
	#1774581 Isolation and Lockout Procedure
	#849347 ASS and Contaminated Land Procedure
Tier 4: Instruction/Form/ Template/Checklist	#1216441 Excavation and Penetration Permit Form
Template/Onecklist	#1172310 Excavation Daily Inspection Checklist Form
	#1621179 GPC Corporate Glossary Instruction

5.2 Appendix 2 – Excavation and Penetration Permit Flow Chart



Appendix 3 – Excavation Daily Inspection Checklist 5.3

CHECKLIS	T					prosperity, community.
EXCAVATION LOCATION:						
INSPECTION DATE:			INSPECTION	TIME:		
EXCAVATION CONDITIONS TO	CHECK FO	R FAILURI	I.			
CRITERIA – UNACCEPTABLE CO	NDITIONS	;	DETAILS OF CONTROLS	ACTIONS REQUIRED		
Shoring becoming unstable	□ YES	□ №				
Sharing components not secure	□ YES	□ №				
Premature removal of shoring	□ YES	□ №				
Workers in excavations venturing outside the confines of shoring, benching or battering	□ YES	□ №				
Cracks appearing near and parallel to the edge of the excavation	□ YES	□ №				
Excavated material being placed close to the sides of the excavation	□ YES	□ №				
Machinery operating close to the sides of the excavation	□ YES	□ NO				
Surface soil falling into excavation	□ YES	□ №				
Water seeping into excavation from walls or base	□ YES	□ №				
Surface water entering the excavation or accumulating on the surface	□ YES	□ №				
inclined bedding planes 'dipping' into the excavation	□ YES	□ №				
Heaving or swelling of the ground at the bottom of the excavation	□ YES	□ NO				
Land subsiding alongside the excavation	□ YES	□ NO				
Soil staining or weeping red/yellow, or unusual smell – Environmental concerns	□ YES	□ №				
OTHER OBSERVATIONS OR ACT	IONS TAK	EN:				
If YES has been selected for	or any res	ponse ab	ove, actions/controls mus	t be implemented pric	or to wor!	k continuing.
EXCAVATION ACCESS APPROVA	AL.					
At the time of this inspection, is	the excav	ration in a	safe condition for work to	continue?		□ YES □ NO
If any of the above unacceptable o	onditions a	are identifi	ed:			
Has the JSA been reviewed to identify and record additional control measures? ☐ YES ☐ NO						
Have the additional control mea	asures bee	en implem	ented prior to entry or wo	ork continuing?		□ YES □ NO
EXCAVATION INSPECTION SIGN	OFF					
Name of Supervisor:		Signature		Date:	Time:	

5.4 Appendix 4 – Revision history

Revision date	Revision description	Author	Endorsed by	Approved by
17/06/2016	Initial creation to align with Code of Practice and WHS Regulation.	Jason Britton, Safety Specialist	Tony Young, Safety Manager	John Sherriff, SER GM
17/03/2020	Updated as per scheduled review.	Kirsty Iszlaub, Safety Systems Officer	Tony Young, Safety Manager	Rowen Winsor, PCS GM
10/05/2022	Addition of building/wall penetrations. Update document template. V5 published	Jason Britton, Safety Specialist	Tony Young, Safety and Training Manager	Richard Haward, Executive General Manager Safety and Environmental Social and Governance