

Site Access Slopes and Uneven Terrain

Business Name:	ABN:
Business Address:	
Contact Person:	Phone: Email:

THIS RISK ASSESSMENT IS APPROVED BY THE PCBU ON THIS PROJECT

Under the Work Health and Safety Regulation (WHS Regulation), a person conducting a business or undertaking (PCBU) is required to ensure that a RISK ASSESSMENT is prepared before the proposed work starts.

Full Name:		
Signature:	Title:	Date:

CLIENT OR PRINCIPAL CONTRACTOR DETAILS

Client:	SCOPE OF WORKS
Project Name:	
Project Address:	
Project Manager:	
Contact Phone:	
Date Risk Assessment supplied to Project Manager:	



RISK MATRIX									
LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC	SCORE	ACTION	HIERARCHY OF CONTROLS	
ALMOST CERTAIN	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4 ACUTE			<b>Elimination</b> Remove the hazard.	
LIKELY	2 MODERATE	3 HIGH	3 HIGH	4 ACUTE	4 ACUTE	4A ACUTE	DO NOT PROCEED	<b>Substitution</b> Replace the hazard.	
POSSIBLE	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	4 ACUTE	3H HIGH	Review before work starts.	Isolation Isolate People from the hazard	
UNLIKELY	1 LOW	1 LOW	2 MODERATE	3 HIGH	4 ACUTE	2M MODERATE	Ensure control measures in place.	<b>Engineering</b> Isolate the hazard	
RARE	1 LOW	1 LOW	2 MODERATE	3 HIGH	3 HIGH	1L LOW	Monitor and keep records.	<b>Administrative</b> Change	
								<b>PPE</b>	

  

Risk Rating & Required Action:	
<b>4A</b>	Stop work. The risk is intolerable. Eliminate the hazard or redesign the activity before proceeding. A Safe Work Method Statement (SWMS) or higher-level authorisation is required.
<b>3H</b>	Review and approve additional controls before task starts. Senior supervisor sign-off needed.
<b>2M</b>	Ensure all nominated controls are in place and effective. Proceed with caution; monitor conditions.
<b>1L</b>	Proceed, following standard operating procedures. Monitor and keep records.

  

Consequence Scale:			
Consequence	People (injury/illness)	Project / Assets	Compliance / Reputation
<b>Catastrophic</b>	Fatality or permanent total disability	project shutdown	Significant regulator intervention; criminal prosecution
<b>Major</b>	Serious injury/illness (hospital > 5 days)	critical delay	Improvement notice; major media coverage
<b>Moderate</b>	Medical-treatment injury; lost-time > 1 day	moderate delay	Minor breach; adverse client comment
<b>Minor</b>	First-aid only, no lost time	negligible delay	Isolated non-conformance
<b>Insignificant</b>	No injury	no schedule impact	Deviation caught and corrected on site

  

**Notes on Hierarchy of Controls:**  
Remember to apply controls in the preferred order shown by the coloured pyramid:

1. **Eliminate**
2. **Substitute**
3. **Isolate**
4. **Engineering**
5. **Administrative**
6. **PPE**

Always document **why** a lower-order control is accepted if elimination or substitution is not reasonably practicable.

*aligned with Safe Work Australia's Managing the risk of fatigue at work (2023) and ISO 45001:2018 clauses 6–8.*

JOB STEP	POTENTIAL HAZARDS	IR	CONTROL MEASURES	RR
SPECIFIC WORK STEPS	HAZARDS THAT MAY ARISE	INITIAL RISK	SPECIFIC MEASURES TO BE PUT IN PLACE TO ELIMINATE OR CONTROL THE RISKS	RESIDUAL RISK
1. Site Access Planning & Design for Slopes and Uneven Terrain	<ul style="list-style-type: none"> <li>Inadequate planning for steep inclines, unstable surfaces and uneven terrain during site layout design</li> <li>Poorly designed access and egress routes that do not account for gradients, drainage and ground conditions</li> <li>Failure to segregate pedestrian walkways from plant and vehicle routes on sloping or uneven ground</li> <li>Insufficient assessment of access to elevated work areas, stairs and ramps at design stage</li> <li>Lack of design allowance for crowding and congestion at access pinch points</li> <li>Inadequate planning for safe return-to-site access following installation or construction phases</li> <li>Failure to incorporate safe ingress and egress to and from temporary work areas on sloping ground</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a formal site access planning procedure that requires assessment of slopes, gradients, surface stability and drainage prior to work commencing</li> <li>Require that project and site designs incorporate dedicated pedestrian pathways separate from vehicle and plant routes, with gradients compliant with relevant Australian Standards and codes of practice</li> <li>Mandate that temporary access roads, ramps, stairways and platforms are included in construction methodology and design risk assessments, with clear criteria for maximum slopes and surface types</li> <li>Include in design review a specific WHS access and egress checklist addressing steep inclines, elevation changes, uneven terrain and low overhead clearances</li> <li>Integrate crowd flow and congestion analysis into the site layout planning process to avoid bottlenecks at entry points, work fronts and amenities on sloping or uneven ground</li> <li>Establish a management requirement that any significant change in site topography or access routes (e.g. after excavation, backfilling or installation) triggers a formal re-assessment and re-design of access arrangements</li> <li>Require that subcontractor work packs include site-specific access drawings showing designated walkways, stairs, ramps and barriers on slopes and uneven terrain</li> </ul>	3H
2. Ground Stability Assessment & Surface Management	<ul style="list-style-type: none"> <li>Unidentified unstable ground, loose fill or non-compacted surfaces on access routes</li> <li>Deterioration of surfaces due to mud, erosion or heavy traffic creating slippery or rutted paths</li> <li>Use of unsuitable temporary surfaces (e.g. boards, pallets) on steep or uneven ground</li> <li>Failure to detect subsidence, sinkholes or undermining near excavations and retaining structures</li> <li>Insufficient system for monitoring changes in ground condition over time</li> <li>Inadequate controls for working on non-stable surfaces such as freshly backfilled trenches or embankments</li> <li>Poor management of transitions between different surface types (gravel</li> </ul>	4A	<ul style="list-style-type: none"> <li>Implement a formal geotechnical and ground condition assessment process for new or altered access routes, including steep slopes and embankments where reasonably practicable</li> <li>Establish a documented inspection regime for all primary pedestrian access ways, with frequency increased during and after wet weather or heavy construction activity</li> <li>Develop and enforce engineering standards for temporary access surfacing (e.g. mats, compacted road base, anti-slip coatings) including load capacity, slope limits and installation requirements</li> <li>Introduce a ground condition risk rating system (e.g. green/amber/red) for key pedestrian and vehicle routes, supported by signage and access restrictions when conditions degrade</li> <li>Require competent person sign-off before authorising access over recently backfilled, cut or filled areas, including written criteria for compaction and stability</li> <li>Provide procedures for prompt rectification (grading, dewatering, matting, barriers) when ruts, potholes, mud build-up or erosion are identified on access routes</li> <li>Ensure design and site set-up include controlled transitions between different surface types, with ramps, edging and anti-slip treatments as required</li> </ul>	2M

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	to concrete, grass to scaffold access, etc.) on slopes			
3. Pedestrian Access, Egress & Walkway Management	<ul style="list-style-type: none"> <li>Inadequate systems to maintain clear safe walkways in crowded or congested workspaces</li> <li>Obstructions in access ways caused by stored materials, tools, debris or parked plant</li> <li>Poorly defined pedestrian routes on construction sites with uneven and sloping terrain</li> <li>Lack of management controls to ensure safe ingress and egress from work areas during different project phases</li> <li>Insufficient lighting and visibility on access routes, especially where elevation changes or steps exist</li> <li>Failure to control unauthorised shortcuts across unstable or restricted areas</li> <li>Inadequate emergency access planning considering slopes, stairs and uneven terrain</li> </ul>	3H	<ul style="list-style-type: none"> <li>Establish a formal site access and egress plan, identifying designated pedestrian walkways, crossings, stairs and ramps, and communicate it through site inductions and signage</li> <li>Implement a housekeeping and obstruction control procedure that assigns responsibility and timeframes for keeping walkways, stairs and ramps free of stored materials, waste and equipment</li> <li>Introduce a permit or approval process for any temporary closure, diversion or modification of pedestrian routes, including risk assessment and communication requirements</li> <li>Maintain minimum lighting levels and visibility standards for all access routes, including contingency measures for night work and poor weather</li> <li>Install and maintain clear visual demarcation (line-marking, barriers, fencing) between walkways and hazardous areas, particularly near steep slopes, excavations and moving plant routes</li> <li>Include access and egress integrity checks in daily supervision inspections and documented site walks, with corrective actions tracked to completion</li> <li>Integrate emergency evacuation route planning with consideration of steep and uneven terrain, and test these routes through regular emergency drills</li> </ul>	2M
4. Traffic & Mobile Plant Interaction on Sloping and Uneven Ground	<ul style="list-style-type: none"> <li>Uncontrolled interaction between pedestrians and mobile plant on inclines and uneven surfaces</li> <li>Inadequate traffic management plan that does not account for slope-related stopping distances or loss of control risks</li> <li>Poor positioning of materials loading/unloading zones on or near steep or unstable ground</li> <li>Failure to manage reversing, turning and blind spots on sloping terrain</li> <li>Lack of enforcement of speed limits and right-of-way rules on access roads with gradients</li> </ul>	4A	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M

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	<ul style="list-style-type: none"> <li>Insufficient segregation of pedestrian movement around operating foot-traffic powered doors and vehicle entry points</li> </ul>		[REDACTED]	
5. Stairs, Ramps, Elevation Changes & Low Overhead Clearances	<ul style="list-style-type: none"> <li>Poorly designed or inadequately maintained stairs and ramps on sloping sites</li> <li>Lack of consistent handrails, edge protection and landings for elevation changes</li> <li>Unsafe temporary access solutions (e.g. makeshift steps) on uneven terrain</li> <li>Low overhead clearances on stairs or in access corridors causing impact injuries</li> <li>Insufficient consideration of step riser heights and tread depths for workers carrying tools or materials</li> <li>Lack of systems to inspect and control slip resistance of stairs, ramps and ramp surfaces, particularly in wet or muddy conditions</li> </ul>	3H	[REDACTED]	1L
6. Slips, Trips and Falls on Slopes, Muddy and Uneven Areas	<ul style="list-style-type: none"> <li>Inadequate controls for slipping on slippery, muddy, wet or loose surfaces on sloping ground</li> <li>Poor management of trailing leads, hoses and temporary services across walkways</li> <li>Lack of systems to promptly address trip hazards such as uneven surfaces, potholes and debris</li> <li>Insufficient oversight of work on non-stable or shifting surfaces</li> <li>Failure to control access to high-risk areas during and after adverse weather</li> </ul>	4A	[REDACTED]	2M

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	<ul style="list-style-type: none"> <li>Inadequate consideration of slip and trip hazards in contractor and subcontractor management processes</li> </ul>		[REDACTED]	
7. Congested Areas, Crowding and Movement in Tight or Cluttered Spaces	<ul style="list-style-type: none"> <li>Overcrowding in access ways, work fronts and amenities located on or near slopes</li> <li>Ineffective control of material storage leading to cluttered walk paths and work zones</li> <li>Lack of systems to manage simultaneous activities competing for limited space</li> <li>Inadequate planning for worker movement through narrow corridors, scaffolds or temporary structures on uneven terrain</li> <li>Failure to manage queuing and congregation points at gates, lunch rooms and amenities on sloping ground</li> <li>Poor communication of one-way systems or controlled entry in constrained work areas</li> </ul>	3H	[REDACTED]	2M
8. Moving Objects, Falling Objects & Working Around Obstacles	<ul style="list-style-type: none"> <li>Inadequate controls for moving objects (materials, tools, equipment) on sloping pathways</li> <li>Poorly secured loads and equipment that may slide, roll or top on inclines</li> <li>Failure to control overhead work and falling objects near pedestrian walkways on uneven terrain</li> <li>Obstacles such as scaffolds, formwork and services blocking views and creating collision risks</li> <li>Insufficient exclusion zones and barricading around lift zones and high-risk activities</li> <li>Lack of procedures for safe movement of trolleys, wheelbarrows and mechanical aids on steep slopes</li> </ul>	4A	[REDACTED]	2M

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9. Powered, Automatic and Foot-Traffic Operated Doors & Entry Systems	<ul style="list-style-type: none"> <li>Inadequate control of pedestrian flow through powered or automatic doors at the interface between level and sloping surfaces</li> <li>Door systems that open directly onto stairs, ramps or uneven external surfaces without adequate landing space</li> <li>Lack of maintenance and inspection of door safety features (sensors, interlocks, emergency release)</li> <li>Poor visibility and line-of-sight at doorways used by both pedestrians and vehicles or mobile plant</li> <li>Insufficient emergency egress provisions through powered doors in the event of power loss or malfunction</li> <li>Failure to consider increased slip risk at thresholds where water and mud are tracked in from sloping external paths</li> </ul>	3H	<p>[REDACTED]</p>	1L
10. Worker Competency, Training & Induction for Sloped and Uneven Sites	<ul style="list-style-type: none"> <li>Lack of worker awareness of risks associated with navigating steep slopes, unstable surfaces and uneven terrain</li> <li>Supervisors not competent to identify and manage access and egress risks on complex building sites</li> <li>Insufficient training for new or young workers on movement through congested and cluttered areas</li> <li>Inadequate induction content regarding site-specific access routes, no-go zones and emergency egress paths</li> <li>Poor understanding of manual handling risks when carrying tools and materials over slopes and stairs</li> <li>Failure to ensure labour hire and subcontractor workers receive consistent information about terrain-related hazards</li> </ul>	3H	<p>[REDACTED]</p>	2M

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			[REDACTED]	
11. Fatigue, Health & Fitness to Navigate Challenging Terrain	<ul style="list-style-type: none"> <li>Workers with reduced fitness or health issues struggling to safely navigate steep inclines and uneven ground</li> <li>Fatigue from repeated climbing, descending and walking on unstable surfaces increasing the risk of missteps and falls</li> <li>Inadequate consideration of heat, weather and workload when planning movement around large or sloping sites</li> <li>Lack of systems to identify and manage workers with temporary or permanent mobility restrictions</li> <li>Poor job design that requires excessive carrying of loads over long distances or steep gradients</li> <li>Insufficient rest breaks or rotation for tasks involving frequent negotiating of stairs and elevation changes</li> </ul>	3H	[REDACTED]	1L
12. Weather, Environmental Conditions & Seasonal Impacts on Terrain	<ul style="list-style-type: none"> <li>Rapid deterioration of access routes on slopes due to rain, flooding or high winds</li> <li>Inadequate planning for seasonal changes affecting ground stability and traction</li> <li>Poor drainage design resulting in persistent muddy areas and water pooling on walkways</li> <li>Insufficient monitoring of weather forecasts and conditions leading to unplanned exposure to unsafe terrain</li> <li>Failure to adjust work sequencing or access routes in response to adverse conditions</li> <li>Lack of clear criteria for suspending or modifying work involving slopes and</li> </ul>	4A	[REDACTED]	2M

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	unstable surfaces during extreme weather			
13. Contractor, Subcontractor & Visitor Access Control	<ul style="list-style-type: none"> <li>Inconsistent application of access and egress controls across multiple contractors working on the same site</li> <li>Visitors and short-term workers unfamiliar with terrain-related hazards entering high-risk areas</li> <li>Subcontractor-designed access solutions that do not meet site or legislative requirements</li> <li>Poor communication of changes to access routes, slopes and unstable areas to all duty holders</li> <li>Lack of verification that subcontractor WHS management systems adequately control uneven terrain risks</li> <li>Inadequate escort or supervision arrangements for visitors in congested or sloping work zones</li> </ul>	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	2M
14. WHS Governance, Monitoring & Continuous Improvement for Site Terrain Risks	<ul style="list-style-type: none"> <li>Lack of systematic oversight of access, egress and terrain-related risks at management level</li> <li>Insufficient incident and near miss analysis specific to slips, trips, falls and movement around building sites</li> <li>Failure to update procedures and controls after changes in legislation or site configuration</li> <li>Inadequate worker consultation regarding practical issues with navigating slopes and uneven terrain</li> <li>Poor integration of terrain risk controls into WHS management system audits and inspections</li> <li>Over-reliance on PPE and behavioural reminders instead of robust engineering and administrative controls</li> </ul>	3H	<p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p> <p>[REDACTED]</p>	1L

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SAMPLE

**EMERGENCY RESPONSE – CALL 000 FOR EMERGENCIES**

Ensure to have an Emergency Management Plan in place as well as adequate numbers of trained first aid staff with easy access to fully stocked first aid kits, rescue equipment, material safety data sheets, adequate access to emergency communication equipment and fire-fighting equipment suitable for all classes of fire and ignition sources.

**LEGISLATIVE REFERENCES**

RELEVANT LEGISLATION AND CODES OF PRACTICE. DELETE THE LEGISLATIVE REFERENCES FOR ANY STATE THAT ARE NOT APPLICABLE

**Queensland & Australian Capital Territory**

Work Health and Safety Act 2011  
 Work Health and Safety Regulations 2011  
 Legislation QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws>  
 Codes of Practice QLD: <https://www.worksafe.qld.gov.au/laws-and-compliance/codes-of-practice>  
 Legislation ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/acts-and-regulations>  
 Codes of Practice ACT: <https://www.worksafe.act.gov.au/laws-and-compliance/codes-of-practice>

**Victoria**

Occupational Health and Safety Act 2004  
 Occupational Health and Safety Regulations 2017  
 Legislation VIC: <https://www.worksafe.vic.gov.au/occupational-health-and-safety-act-and-regulations>  
 Codes of Practice VIC: <https://www.worksafe.vic.gov.au/compliance-codes-and-codes-practice>

**New South Wales**

Work Health and Safety Act 2011  
 Work Health and Safety Regulations 2025  
 Legislation NSW: <https://www.safework.nsw.gov.au/legal-obligations/legislation>  
 Codes of Practice NSW: <https://www.safework.nsw.gov.au/resource-library/list-codes-of-practice>

**Western Australia**

Work Health and Safety Act 2020  
 Work Health and Safety Regulations 2022  
 Legislation Western Australia: <https://www.commerce.wa.gov.au/worksafe/legislation>  
 Codes of Practice WA: <https://www.commerce.wa.gov.au/worksafe/codes-practice>

**Northern Territory**

Work Health and Safety (National Uniform Legislation) Act 2011  
 Work Health and Safety (National Uniform Legislation) Regulation 2011  
 Legislation NT: <https://worksafe.nt.gov.au/laws-and-compliance/workplace-safety-laws>  
 Codes of Practice NT: <https://worksafe.nt.gov.au/laws-and-compliance/codes-of-practice>

**Safe Work Australia Links**

Law and Regulation (All States): <https://www.safeworkaustralia.gov.au/law-and-regulation>  
 Model Codes of Practice: <https://www.safeworkaustralia.gov.au/resources-publications/model-codes-of-practice>

**South Australia**

Work Health and Safety Act 2012 (SA)  
 Work Health and Safety Regulations 2012 (SA)  
 Legislation for SA: <https://www.safework.sa.gov.au/resources/legislation>  
 Codes of Practice for SA: <https://www.safework.sa.gov.au/workplaces/codes-of-practice#COPs>

**Model Codes of Practice**

- Managing noise and preventing hearing loss at work
- Confined spaces
- Labelling of workplace hazardous chemicals
- Managing risks of hazardous chemicals in the workplace
- Welding processes
- First aid in the workplace
- Managing the risk of falls at workplaces
- Hazardous manual tasks
- Managing the risk of falls in housing construction
- Managing electrical risks in the workplace
- Demolition work
- Excavation work
- Work health and safety consultation, cooperation and coordination
- Managing the work environment and facilities
- How to manage work health and safety risks
- Managing risks of plant in the workplace
- Construction work

**Tasmania**

Work Health and Safety Act 2012  
 Work Health and Safety (Transitional and Consequential Provisions) Act 2012  
 Work Health and Safety Regulations 2012  
 Work Health and Safety (Transitional) Regulations 2012  
 Legislation for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/acts-and-regulations>  
 Codes of Practice for TAS: <https://worksafe.tas.gov.au/topics/laws-and-compliance/codes-of-practice>

Details of permits, licenses or access required by regulatory bodies (add or delete as required):

- Permits from local council
- Authorisation to commence work
- Any required documents.