

Document Number	OP-PR-006
Document Title	Bulk Earthworks Procedure
Version	2.0
Approved By	Brendan McKenna
Position	Director
Issue Date	01/07/2026
Review Date	01/07/2028

Purpose

Brendan McKenna Earthmoving is committed to undertaking bulk earthworks safely, efficiently and in a manner that achieves the required engineering, environmental and quality outcomes.

This procedure establishes the requirements for planning, preparing and conducting bulk earthworks activities to protect workers, plant, the environment, underground services and surrounding infrastructure while ensuring earthworks are completed in accordance with project specifications.

This procedure supports compliance with the Work Health and Safety Act 2011 (Qld), Work Health and Safety Regulation 2011 (Qld), Environmental Protection Act 1994 (Qld) and Brendan McKenna Earthmoving's Integrated Management System (IMS).

Scope

This procedure applies to all Brendan McKenna Earthmoving employees and contractors undertaking bulk earthworks operations at company worksites.

It applies to activities including:

- Site preparation.
- Cut and fill operations.
- Bulk excavation.
- Material placement.
- Moisture conditioning.
- Compaction.
- Earthmoving plant operations.
- Environmental protection measures.

Responsibilities

Role	Responsibilities
Director	Ensure adequate resources, plant and systems are available to safely undertake bulk earthworks operations.
Operations Manager	Plan bulk earthworks activities, allocate resources, verify project specifications and ensure this procedure is implemented.
Supervisors / Site Managers	Coordinate bulk earthworks operations, verify compliance with this procedure, monitor safety, quality and environmental controls and ensure work is completed in accordance with project specifications.
Health & Safety Representative (HSR)	Participate in worker consultation, assist with hazard identification and support continual improvement of bulk earthworks activities where required.
Employees / Plant Operators	Operate plant safely, comply with this procedure, report hazards and equipment defects and maintain environmental controls.
Spotter / Catcher	Identify, capture and relocate wildlife where required in accordance with legislative requirements, project approvals and environmental controls.

Procedure

Brendan McKenna Earthmoving shall ensure all bulk earthworks are undertaken safely, efficiently and in accordance with engineering specifications, environmental requirements and project plans.

Bulk earthworks shall be completed using suitable plant, competent operators and approved engineering controls to achieve safe, stable and compliant earthworks outcomes.

1. Planning and Site Preparation

Prior to commencing bulk earthworks, personnel shall ensure all planning activities have been completed and the work area has been assessed.

This shall include:

- Completing all required site inductions.
- Participating in the daily pre-start meeting.
- Completing a Personal Risk Assessment (Take 5) where required.
- Reviewing the relevant Safe Work Method Statement (SWMS) where applicable.
- Identifying underground and overhead services in accordance with Dial Before You Dig (1100) information and site investigations.
- Checking the work area for cultural heritage items or artefacts. If any are identified, work shall cease immediately and the Site Manager shall be notified.
- Checking for protected vegetation. Where uncertainty exists, clarification shall be obtained from the Site Manager before work commences.
- Using a Spotter / Catcher where required to identify, capture and relocate wildlife in accordance with legislative requirements.
- Clearly demarcating and delineating the approved work area.
- Confirming survey control points, access routes and designated cut and fill areas.

No person shall enter a bulk earthworks operating area unless authorised by the Site Manager.

Only trained, competent and authorised personnel shall undertake bulk earthworks activities.

2. Bulk Earthworks Operations

Bulk earthworks shall be undertaken in accordance with approved engineering specifications and project requirements.

The following operating sequence shall be followed:

- Survey the work area using a GPS/UTS system.
- Rip the cut area to loosen material.
- Condition the ripped material using the water truck to achieve optimum moisture content.
- Prepare the fill area by cutting benches.
- Condition the natural ground to achieve optimum moisture content using the water truck.
- Compact the prepared benches before placement of fill material.
- Cart, push or transport material to the designated fill area.
- Spread material in 300 mm thick layers while conditioning each layer with the water truck.
- Compact each 300 mm layer before placing the next layer.
- Continue the process until the required design level and compaction requirements have been achieved.
- Trim the finished surface to the required design level.
- Seal completed work areas using the flat drum roller.
- Install silt fencing around cut and fill areas immediately following completion of earthworks.

Compaction testing shall be completed at every 1 metre of lift in accordance with project specifications.

Personnel shall continually monitor:

- Ground conditions.
- Plant interaction.
- Underground services.
- Exclusion zones.
- Weather conditions.
- Condition and stability of cut and fill batters.
- Environmental controls.

Any unsafe condition shall be reported immediately to the Site Manager.

3. Plant and Equipment Operations

Bulk earthworks shall be completed using suitable plant and equipment appropriate for the work activity.

Plant and equipment that may be utilised includes:

- Dozer
- Excavator
- Grader
- Scraper
- Truck
- Water Truck
- Roller

All operators shall hold the appropriate licences, competencies or verified training applicable to the plant being operated.

The Operations Manager or delegated Supervisor shall ensure operator competencies have been verified prior to commencing work.

Validation of Competency records shall be retained with the operator's training records in accordance with company requirements.

Operators shall maintain continual awareness of surrounding personnel, mobile plant, changing ground conditions, overhead services and exclusion zones throughout bulk earthworks activities.

4. Environmental Controls and Completion

Bulk earthworks shall be undertaken in a manner that minimises environmental impacts and ensures completed work areas are stable, compliant and ready for subsequent construction activities.

This shall include:

- Maintaining erosion and sediment controls throughout the duration of the works.
- Installing and maintaining silt fencing around cut and fill areas.
- Preventing unnecessary disturbance outside approved work areas.
- Maintaining separation of unsuitable material, topsoil and fill material where required.
- Monitoring cut batters, fill batters and stockpiles for signs of erosion or instability.
- Reporting environmental incidents, spills or failures of environmental controls immediately to the Site Manager.
- Inspecting completed work areas to confirm compliance with project specifications and environmental requirements.
- Ensuring completed work areas are left in a safe condition prior to leaving site.

5. Documentation and Records

Bulk earthworks activities shall be documented in accordance with company requirements to demonstrate compliance with project specifications, quality requirements and the Integrated Management System.

This shall include:

- Completing Pre-start Inspections for all plant and equipment used.
- Completing a Personal Risk Assessment (Take 5) through the MCK Group App where available.
- Completing paper versions of the Pre-start Inspection and Personal Risk Assessment where mobile coverage is unavailable and forwarding completed records once adequate signal is available.
- Completing a Job Hazard Analysis (JHA) where activities fall outside the scope of this procedure or additional risks have been identified.
- Recording compaction testing results in accordance with project specifications.
- Reporting hazards, incidents, near misses and equipment defects in accordance with company procedures.
- Confirming all bulk earthworks have been completed in accordance with approved drawings, project specifications and environmental requirements before leaving the work area.

Records

The following records may be retained where relevant to bulk earthworks activities.

Record	Responsibility	Retention Location
Personal Risk Assessments (Take 5)	Employees and Contractors	MCK Group App / Site Records
Plant Pre-start Inspection Records	Plant Operators	Plant Records
Validation of Competency Records	Operations Manager	Training Records
Compaction Test Results	Site Manager / Supervisor	Project Quality Records
Survey Records	Site Manager	Project Records
Environmental Inspection Records	Supervisors	Inspection & Audit Register
Incident and Hazard Reports	Employees and Supervisors	Incident Records
Corrective Actions	Operations Manager	Incident / NCR / Corrective Action Register

Related Information

- HS-PR-001 Risk Assessment Procedure
- HS-PR-003 Personal Risk Assessment (Take 5) Procedure
- HS-PR-005 Incident Investigation & Reporting Procedure
- OP-PR-018 Spill Response & Management Procedure
- HS-SWMS-006 Operating Mobile Plant
- HS-SWMS-005 Working in or around trenches & excavation
- Environmental Management Plan (where applicable)
- Environmental Aspects & Impacts Register
- Inspection & Audit Register
- Training & Competency Register
- Incident / NCR / Corrective Action Register
- MCK Group App
- Work Health and Safety Act 2011 (Qld)
- Work Health and Safety Regulation 2011 (Qld)
- Environmental Protection Act 1994 (Qld)

Review and Revision

This procedure shall be reviewed every two years or earlier following legislative changes, organisational changes, incidents, audit findings, changes to work practices or identified improvement opportunities.