

Utility Trench Bedding, Surround and Backfill Inspection and Test Plan Template

Reusable baseline for ordinary utility trench earthworks from clearance and formation through bedding, pre-cover inspection, surround, backfill, specified earthworks verification and handover. Excludes structural trench support design, deep excavation engineering, pipe-system pressure/leak testing, commissioning, disinfection and utility-owner operational acceptance.

Project	[Enter project / state / parties]
Package	trench-backfill
Document / revision	[Enter controlled number and revision]
Issue purpose	For review - proposed editable baseline
Boundary	Complete against project documents; remove out-of-scope activities.

Read before use

- This is a reusable proposed baseline, not an approved project plan or completed inspection record.
- Enter actual acceptance criteria, source revisions/locators, lot basis, frequency, roles and contractual control points from the project. No numeric limit, test result, qualification, signature or client release has been supplied.
- Confirm scope and remove or mark conditional rows that do not apply. Resolve missing or conflicting decisions with the assigned project authority.
- Complete the matching blank Record Prompts only when actual work occurs; retain source certificates and original specialist reports.

Project inputs to resolve

Project jurisdiction / authority context: [Enter project source / decision] State or territory and any authority or contract scope that governs the work.

Approved civil / services drawings and revisions: [Enter project source / decision] Identify controlled plans, sections, set-out details, levels and applicable drawing items.

Project earthworks specification and adopted standards: [Enter project source / decision] Identify contract clauses, adopted editions, annexures and precedence.

Geotechnical design basis and disposition roles: [Enter project source / decision] Identify the report, design zones and who provides any specified founding or changed-ground disposition.

Material source, classification and use schedule: [Enter project source / decision] Identify approved source, permitted use and project material criteria; do not infer a class.

Project testing, lotting and reporting plan: [Enter project source / decision] Enter nominated methods, test locations, lot definition, rate, acceptance and laboratory role.

Survey control, geometry and closeout requirements: [Enter project source / decision] Identify control, design geometry, tolerances, as-built format and responsible survey role.

Service clearance and permit process: [Enter project source / decision] Identify current service information, locating, protection and permit requirements.

Service and work-package interfaces: [Enter project source / decision] Identify exact trench, building, pavement or service boundaries and owner handover/testing responsibilities.

Performing, reviewing and contractual release roles: [Enter project source / decision] Identify assigned roles, notice period, evidence, and contractual Hold/Witness or release conditions.

Project records and handover requirements: [Enter project source / decision] Identify required registers, reports, photos, dispositions and handover submission.

Inspection and Test Plan

Proposed baseline. Replace prompts with controlled project criteria and references before project review.

UTB-01 • Trench package, service information and approvals

Inspection / test	Confirm pipe/service identity, route, trench zones, interfaces, bedding/surround/backfill requirements and project test/handover basis.
Method	Review approved service drawings, specifications, utility owner information, installation instructions and project responsibilities; identify commissioning/testing as an interface only.
Acceptance condition	Current controlled documents define the included trench extent, service system and zone-specific requirements; unknown technical criteria and interfaces are logged for project decision. [Enter Approved civil / services drawings and revisions] [Enter Project earthworks specification and adopted standards] [Enter Service and work-package interfaces] [Enter Performing, reviewing and contractual release roles]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Before excavation and when route, service system or controlled documents change.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Utility trench work-front register
Applicability / remarks	Ordinary utility trench earthworks and pipe-zone backfill only; excludes structural trench support design and service-system testing/commissioning. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-02 • Service locating, excavation permit and work-front clearance

Inspection / test	Verify applicable utility searches, locating marks, permits and protection arrangements at the planned trench section.
Method	Review current plans and permit/clearance records; check field marks and service owner instructions are identifiable at the trench location.
Acceptance condition	Clearance and permits required by the project are current for this section; discrepancies or unknown services are referred before affected excavation proceeds. [Enter Service clearance and permit process] [Enter Approved civil / services drawings and revisions]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Before each trench section is opened and after route/condition changes.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Trench clearance and permit record
Applicability / remarks	Includes service information and excavation clearance only; this record does not design temporary support. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-03 • Trench excavation, bottom condition and water

Inspection / test	Inspect the excavated section and bedding formation against the documented profile and record encountered ground/water.
Method	Compare location, alignment, depth/profile evidence and bottom condition with approved service drawings and specified geotechnical/installation criteria; refer deviations.
Acceptance condition	Dimensions and bottom condition match the project source; water, instability, obstruction or unsuitable founding receives written disposition before bedding or pipe placement. [Enter Approved civil / services drawings and revisions] [Enter Geotechnical design basis and disposition roles] [Enter Project earthworks specification and adopted standards]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each section before bedding; recheck after disturbance, water ingress or changed ground.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Trench excavation and formation record
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-04 • Bedding and foundation material approval

Inspection / test	Verify bedding material identity and source against the project-specified pipe-zone material requirements.
Method	Review source/delivery documentation and compare material description or required test evidence with the approved material schedule and pipe-system documents.
Acceptance condition	Material is traceable to the project-approved bedding requirement and intended service/zone; unsuitable or unidentified delivery is held for project disposition. [Enter Material source, classification and use schedule] [Enter Project earthworks specification and adopted standards] [Enter Service and work-package interfaces]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Before first use of each source/material and for each delivery group as project criteria require.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Bedding material receipt record
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-05 • Bedding placement, grade and bearing interface

Inspection / test	Check bedding placement and prepared support/grade before the service component is installed.
Method	Observe preparation, material placement and grade evidence; compare with the identified drawing, specification and manufacturer/project installation detail.
Acceptance condition	Support, grade and contact arrangement meet the specific project and system documents; dimensions or tolerances are entered only from those documents. [Enter Approved civil / services drawings and revisions] [Enter Project earthworks specification and adopted standards] [Enter Service and work-package interfaces]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each trench section before pipe or service installation; recheck any disturbed section.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Bedding pre-installation inspection
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-06 • Installed service position and pre-cover inspection

Inspection / test	Record visible service identity, alignment, joints/supports and required pre-cover evidence at the open trench interface.
Method	Inspect against approved service drawings and installation documents; capture required photographs, survey or specialist inspection references before surround conceals the installation.
Acceptance condition	Installed work and required evidence match the cited project/system requirements; defects or missing inspection evidence remain open before concealment. System commissioning and pressure/leak testing are outside this package. [Enter Approved civil / services drawings and revisions] [Enter Project earthworks specification and adopted standards] [Enter Service and work-package interfaces] [Enter Project records and handover requirements]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each defined section before surround or other concealment.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Open-trench pre-cover record
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-07 • Haunch and surround placement

Inspection / test	Inspect selected surround material, placement and support around the service before general backfill.
Method	Compare zone material/dimensions and placement sequence with the project detail and installation requirements; observe for displacement or damage.
Acceptance condition	Surround material, extent and placement follow the project-defined pipe-zone detail; service remains in required position and any disturbance is corrected and re-inspected. [Enter Approved civil / services drawings and revisions] [Enter Material source, classification and use schedule] [Enter Project earthworks specification and adopted standards] [Enter Service and work-package interfaces]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each section before advancing above the specified surround zone.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Service surround inspection
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-08 • Backfill above pipe zone and reinstatement build-up

Inspection / test	Check accepted backfill material, staged placement and protection of the installed service through the remaining trench depth.
Method	Trace delivered material to project use requirements; observe the documented placement method and specified verification stages; coordinate interfaces for surface reinstatement.
Acceptance condition	Backfill material and sequence match project drawings/specification; specified verification is completed at the stated project trigger; any damage, settlement or open test is recorded and referred. [Enter Material source, classification and use schedule] [Enter Project earthworks specification and adopted standards] [Enter Project testing, lotting and reporting plan] [Enter Service and work-package interfaces]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	Each defined backfill stage before it is covered by the next stage; use project lot/test basis.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Trench backfill stage log
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

UTB-09 • Trench testing, defects, survey and handover

Inspection / test	Close the trench section by reconciling specified earthworks tests, final location/level evidence, reinstatement and records.
Method	Review test reports and lot coverage against the project plan; verify survey/as-built files, defect/disposition register and handover index for the same section.
Acceptance condition	Specified earthworks/backfill evidence and location records are complete to project requirements; outstanding failures or interfaces have written disposition before closeout. Pipe-system commissioning or operational acceptance is by the separately assigned package. [Enter Project testing, lotting and reporting plan] [Enter Survey control, geometry and closeout requirements] [Enter Project records and handover requirements] [Enter Performing, reviewing and contractual release roles]
Reference / locator	Topic guidance only; see Source Register. Enter the actual project document, revision and locator.
Trigger / frequency	At section completion before package handover and before records are closed.
Responsibility	Proposed: assigned earthworks supervisor / quality role performs and records; project-assigned reviewer acts only within documented authority. Confirm project roles: [Enter Performing, reviewing and contractual release roles].
Point / external party	TBC; Proposed: [Enter project-assigned reviewing / release authority]
Notice / release	Proposed: Confirm project notice recipient, evidence, timing and release authority; no external control point is assigned.
Record	Trench section closeout register
Applicability / remarks	Include only for work shown in this package scope. Proposed baseline. Confirm applicability and replace with controlled project requirement.

Blank matching record prompts

Complete the actual date, observation, result and responsible roles during the work. Blank cells are intentional; this template contains no completed inspection or approval.

UTB-01 • Trench package, service information and approvals

Field	Actual entry / evidence
Service / system / line ID	
Route / drawing locator	
Spec / drawing revisions	
Open interface decision ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-02 • Service locating, excavation permit and work-front clearance

Field	Actual entry / evidence
Section / chainage	
Service owner / located service	
Permit / clearance ref.	
Field mark / photo ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-03 • Trench excavation, bottom condition and water

Field	Actual entry / evidence
Section / location	
Drawing / profile locator	
Bottom / water observation	
Instruction / reinspection ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-04 • Bedding and foundation material approval

Field	Actual entry / evidence
Docket / delivery ID	
Material description / source	
Service / trench zone	
Approval / report ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-05 • Bedding placement, grade and bearing interface

Field	Actual entry / evidence
Section / location	
Observed grade / method / unit	
Drawing / installation detail locator	
Support / contact observation	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-06 • Installed service position and pre-cover inspection

Field	Actual entry / evidence
Line / component ID	
Section / location	
Inspection / survey / photo ref.	
Defect / disposition ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-07 • Haunch and surround placement

Field	Actual entry / evidence
Section / line ID	
Zone limits / drawing locator	
Surround material / delivery ref.	
Observed position / survey ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-08 • Backfill above pipe zone and reinstatement build-up

Field	Actual entry / evidence
Section / lift or stage	
Material / source ID	
Specified test / report ref.	
Surface reinstatement interface	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

UTB-09 • Trench testing, defects, survey and handover

Field	Actual entry / evidence
Section / line ID	
Test method / report / lot refs.	
As-built location / level ref.	
Defect / disposition / interface ref.	
Handover index / recipient ref.	
Date / location / lot	
Actual observation / result / unit	
Original evidence / report reference	
Disposition / corrective action / recheck	
Performed by / date	
Reviewed / decision reference	

Topic guidance sources and limitations

Queensland Department of Transport and Main Roads, MRTS04 General Earthworks (March 2025)

Inspected official PDF and local searchable extract industry-library/text/tmr-mrts04.txt. Topic locators: 1.1-1.2 scope (printed specification pp. 1-2); 5.2-5.6 procedures, testing/lotting (printed pp. 15-19); 6 geometry (printed pp. 19-20); 8 topsoil (printed pp. 22-24); 9 unsuitable material (printed pp. 25-26); 13 excavation (printed pp. 34-38); 14 Earth Fill (printed pp. 38-47); 15 Compaction (printed pp. 48-53); 19 Backfill (printed pp. 67-74).

<https://www.tmr.qld.gov.au/-/media/busind/techstdpubs/Specifications-and-drawings/Specifications/3-Roadworks-Drainage-Culverts-and-Geotechnical/MRTS04.pdf>

Inspected topic example for Queensland road and bridge earthworks only. Supports identification of process topics, documentary controls, materials, geometry, excavation, fill, compaction, backfill and the fact that lot/test rules are specified. Its technical values, tests, frequencies, lot sizes, control points and roles are not defaults; use only if the project contract adopts this edition and applicable annexures.

Hutchinson Builders, Safety & Quality Planning: 010 Groundworks ITP and Report (EXAMPLE)

Official downloads page lists 010 Groundworks ITP and 010 Groundworks Report; both DOCX files downloaded and text-extracted 2026-10-07 from the linked Toolbox files. ITP table rows 3-11 cover bulk set-out, fill source, excavation, fill operations, bottom/surface preparation, compaction/soil-strength records and final inspection; rows 12-25 cover detailed earthworks, trench/pit bottoms, bedding/blinding, backfill, regulatory records and closeout. Matching report table rows 2-4 capture lot/location/open-close/comments/signature; rows 8-32 carry process, specification, acceptance, pass/fail, CAR, initials and date.

<https://subbies.hutchies.com.au/resources/videos/safety-and-quality-planning>

Builder example marked EXAMPLE; used only to check broad staging and useful lot/report fields. Many acceptance/frequency/role cells are blank. It does not set universal criteria, regulatory steps or release authority. Original DOCX files are not redistributed.

Construction Quality Australia, How to create an Inspection and Test Plan

Official industry guide, sections 1-4, previously inspected and summarized in skills/au-construction-ityp/references/template-writing-guide.md.

<https://www.cqa.org.au/post/guide-how-to-create-an-inspection-and-test-plan-ityp>

Method structure only: sequence checkable activities and specify method, acceptance source, trigger/frequency, responsibility, control and records. Does not substantiate earthworks technical limits or project requirements.

Topic guidance is provided for orientation only. Confirm applicable jurisdictional adoption, approved design and contract requirements. No cited source substitutes for the complete controlled project documents or licensed standards.