

# EXCAVATION AND TRENCHING

Machine and hand excavation · trench support · inspection regime

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

KD-RAMS-GW-001 Rev A0

Statutory basis: CDM 2015 reg 22(4) — no work in a supported or battered excavation without a competent-person inspection at the start of the shift, reported under reg 24; reg 25(4) — suitable steps to prevent risk from underground services, with HSE HSG47 (3rd edition, 2014). HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5; Manual Handling Operations Regulations 1992; COSHH 2002.

## 1 DOCUMENT AND PROJECT IDENTIFICATION

| RAMS REFERENCE                | PROJECT / SITE REF | SITE NAME AND ADDRESS | DATE PREPARED | NEXT REVIEW DATE     |
|-------------------------------|--------------------|-----------------------|---------------|----------------------|
|                               |                    |                       |               |                      |
| CLIENT / PRINCIPAL CONTRACTOR | PLANNED START      | DURATION              | OPERATIVES    | SUPERVISING THE WORK |
|                               |                    |                       |               |                      |

## 2 SCOPE OF WORKS

Excavation and trenching by machine and hand: bulk dig, trenches, pits, support installation, inspection and backfill.

This document does not cover: excavations needing a temporary works design not yet issued, and confined-space conditions (separate entry permit).

SITE-SPECIFIC SCOPE, LOCATIONS AND LIMITATIONS

## 3 RISK ASSESSMENT — SCORE EACH RISK FOR THIS SITE, THEN ADD WHAT IS MISSING

The hazards and controls below are the starting point for this activity, written by a working main contractor. They are not complete for your site until a competent person has scored each risk, added the site-specific hazards, and struck out anything that does not apply. Rate risks High / Medium / Low before and after controls.

### 1. Striking buried services

At risk: Operatives, everyone nearby

Controls: HSG47 sequence without exception: plans obtained, CAT-and-genny survey by a trained operative, services marked, trial holes to positively locate, hand digging within 500mm of any known service, machine never over live services; anything unrecorded — stop and reassess.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

### 2. Excavation collapse and falling material

At risk: Anyone in or beside the excavation

Controls: Support, batter or bench to the design before entry; competent-person inspection at the start of every shift and after any event (CDM 22(4), recorded on the permit); spoil and plant back from the edge; ladders for access; nobody below unsupported sides — ever.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

### 3. Plant and pedestrian interface

At risk: Operatives, site personnel

Controls: Segregated plant routes; banksman for reversing and blind slews; high-vis; eye contact and thumbs-up before approaching any machine; no one within the slew radius during operation.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

### 4. Water ingress, flooding and unstable ground

At risk: Operatives in excavations

Controls: Pumping arrangements before they are needed; means of escape maintained; work stops on significant water ingress or ground change until reassessed by the competent person.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

### 5. Respirable silica and general dust from cutting and drilling

At risk: Operatives, others in the area

Controls: On-tool extraction (M-class) or wet suppression; RPE to the COSHH assessment (FFP3, face-fit tested) where extraction cannot adequately control exposure; sheet and segregate the work area in occupied buildings.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

### 6. Manual handling of boards, materials and components

At risk: Operatives

Controls: Mechanical aids first — trolleys, board lifters, hoists. Two-person lifts for boards and long components; order materials in manageable sizes; plan storage close to the workplace; keep carrying routes clear and lit.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

### 7. Noise from cutting, fixing and plant

At risk: Operatives, others in the area

Controls: Select quieter methods and tools where practicable; hearing protection in designated zones and for noisy operations; agree noisy-works windows with the occupier in occupied buildings.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

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## 8. Slips, trips and housekeeping

At risk: Everyone in the work area

Controls: Keep the workface clear, remove waste and offcuts as they are created, route leads at high level or under mats, and maintain task lighting.

| INITIAL (H/M/L) | RESIDUAL (H/M/L) | SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A | ACTION OWNER | BY WHEN |
|-----------------|------------------|-------------------------------------------|--------------|---------|
|                 |                  |                                           |              |         |

Site-specific hazards not listed above — every site has at least one:

| HAZARD | WHO IS AT RISK | CONTROLS | INITIAL H/... | RESIDUAL... | ACTION OWNER | BY WHEN |
|--------|----------------|----------|---------------|-------------|--------------|---------|
|        |                |          |               |             |              |         |
|        |                |          |               |             |              |         |
|        |                |          |               |             |              |         |

## 4 METHOD — SEQUENCE OF WORK

- 01 Obtain service plans; CAT-and-genny survey; mark and trial-hole to prove services before machine digging (HSG47).
- 02 Obtain the permit to dig; confirm the support scheme for the depth and ground.
- 03 Excavate with the banksman controlling the machine-operative interface; hand dig within 500mm of services.
- 04 Install support as the dig proceeds — never enter an unsupported excavation beyond the safe depth.
- 05 Competent-person inspection at the start of every shift and after any event; record it on the permit.
- 06 Maintain edge protection, access ladders, spoil clear of edges; pump water as required.
- 07 Backfill and compact in layers to the specification; reinstate protection as the trench closes.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

## 5 PLANT, EQUIPMENT AND MATERIALS

Excavator with banksman  
Trench support systems  
CAT and genny

Pumps  
Compaction plant

INSPECTION / THOROUGH EXAMINATION REFS

COSHH ASSESSMENT REFS

## 6 PPE — THE LAST LINE OF CONTROL, NOT THE FIRST

Head protection  
Safety footwear  
High visibility  
Gloves — task-rated  
Eye protection  
Hearing protection  
FFP3 RPE in dusty conditions

RPE TYPE, FACE-FIT STATUS, AND ANY OTHER PPE REQUIRED

## 7 PERMITS REQUIRED BEFORE THIS WORK STARTS

A permit authorises this work in that place, on that day. It extends the safe system of work in this document — it does not replace it (HSE HSG250). The site issues the permit; record its number before work starts.

KD-PTW-EX-005 — Excavation & Permit to Dig

Before any ground is broken — carries the CDM 22(4) inspection record.

PERMIT NUMBER

## 8 EMERGENCY ARRANGEMENTS — COMPLETE FOR THIS SITE

|                          |                                     |                                |
|--------------------------|-------------------------------------|--------------------------------|
| FIRST AIDER AND LOCATION | NEAREST A&E                         | ASSEMBLY POINT                 |
|                          |                                     |                                |
| HOW THE ALARM IS RAISED  | EMERGENCY ACCESS FOR THIS WORK AREA | SPILL / ENVIRONMENTAL RESPONSE |
|                          |                                     |                                |

## 9 BRIEFING RECORD — EVERYONE WORKING UNDER THIS RAMS SIGNS BEFORE STARTING

By signing you confirm the contents of this RAMS have been explained to you, you understand the hazards and controls, and you will work to the sequence stated. Tell the supervisor if the work or the site does not match this document — work stops until it does.

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| NAME | COMPANY | SIGNATURE | DATE |
|------|---------|-----------|------|
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |
|      |         |           |      |

10 PREPARED AND ACCEPTED

Prepared / adapted for this site by — I confirm I have adapted this document to the site, scored the risks, and that it describes how the work will actually be done.

| PRINTED NAME | ROLE / COMPETENCE | COMPANY | SIGNATURE | DATE | TIME |
|--------------|-------------------|---------|-----------|------|------|
|              |                   |         |           |      |      |

Accepted for the site by — principal contractor or site manager review.

| PRINTED NAME | ROLE | COMPANY | SIGNATURE | DATE | TIME |
|--------------|------|---------|-----------|------|------|
|              |      |         |           |      |      |

Review this RAMS if the work, the site or the law changes, and at least before each new phase of the works. Flatten the completed PDF before filing so the record cannot be silently edited.

R REVISION HISTORY

Every revision of this document, and every review that found nothing to change. The revision on the front of this sheet is the one you are holding — check kubitdocs.com for the current one before use.

| Rev | Date       | Class       | What changed                                                                                                                                                                                   | Authorised by                                                                 |
|-----|------------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| D0  | 2026-08-09 | first-issue | First issue.                                                                                                                                                                                   | — not yet approved —                                                          |
| D1  | 2026-08-10 | material    | HSG47 dated to the 3rd edition, 2014. Legislation position reviewed against Product Legislation Register KD-REG-01 Rev R01.3 and the August 2026 horizon scan; cutoff moved to 10 August 2026. | — not yet approved —                                                          |
| A0  | 2026-08-27 | review      | Approved for issue by the author. Content unchanged from D1; the draft status strip is removed. No independent third-party review has been carried out.                                        | Author — director, UK principal contractor, SMSTS. Not an independent review. |

Class: first-issue · material (the law, a control, a field or the scope changed — past buyers are notified) · editorial (wording or layout only) · review (checked, nothing changed) · withdrawal. Revision prefix D = draft, not approved and not for sale; A = approved for issue by the person named, on the date shown.