

DRAINAGE INSTALLATION AND CONNECTIONS

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Below-ground drainage · manholes · connections to existing systems

KD-RAMS-GW-003 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

Installation of below-ground drainage: pipe runs, bedding, manholes and chambers, testing, and connections to existing systems, including entries into chambers where required.

This document does not cover: live sewer entries without the confined-space permit and gas testing — no chamber entry on any other basis.

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. 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

2. 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

3. Contaminated ground — chemical and biological

At risk: Operatives

Controls: Work to the contamination report and remediation plan; hygiene regime — gloves, washing before breaks, no eating in the work area; PPE per the assessment; unexpected discolouration, odour, drums or asbestos-suspect material stops the work for reassessment.

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

4. 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

5. 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

6. 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

7. Chamber and manhole entry — confined space

At risk: Operatives

Controls: Every chamber is a confined space until proved otherwise: entry only under the confined-space permit with a current gas test, top person, and rescue arrangements; sewer gases kill quickly and without warning.

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

8. Biological hazards from foul systems

At risk: Operatives

Controls: Assume foul water is contaminated: cuts covered, gloves, hygiene before breaks; Weil's disease card carried; splash protection when cutting into live drains.

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 HI...	RESIDUAL...	ACTION OWNER	BY WHEN

4 METHOD — SEQUENCE OF WORK

- 01 Excavate runs under the permit to dig; support and inspect as the excavation document requires.
- 02 Lay bedding, pipes and surround to line and level; joint per the system.
- 03 Construct chambers; fit steps and covers; barrier open chambers at all times.
- 04 Air/water test sections as specified; record results.
- 05 Connections to existing systems: confirm the system, isolate flows where possible, splash protection, hygiene regime.
- 06 Chamber entries only under the confined-space permit with gas testing and top person.
- 07 Backfill in layers; reinstate; leave covers seated and marked.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

Excavator	Gas detector for entries
Pipe lasers and levels	Lifting keys for covers
Test equipment	
INSPECTION / THOROUGH EXAMINATION REFS	COSHH ASSESSMENT REFS

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

Head protection	Gloves — task-rated	Splash protection at live connections
Safety footwear	Eye protection	
High visibility	Hearing protection	
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 For the drainage excavations.	PERMIT NUMBER
KD-PTW-CS-004 — Confined Space Entry Permit For every chamber or sewer entry.	PERMIT NUMBER
KD-SYS-GT-017 — Gas Test Record Completed before and during any chamber entry.	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
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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.

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.