

PROTECTION OF EXISTING DRAINAGE INFRASTRUCTURE

Scope of Work

- **Objective:** Protection of existing drainage infrastructure during piling/excavation activities.
- **Location:** Hanson Springs Ltd, Gorrells Way, Rochdale, OL11 2PX

Pre-Construction Preparations

- **Locating Drainage :**
 - Carry out subsurface services/drainage scan
 - Conduct a CCTV inspection and review as-built drawings to locate all drainage lines.
 - Mark drainage routes clearly on-site using paint or flags.
- **Risk Assessment:**
 - Identify potential conflicts between pile positions/excavations and drainage paths.
 - Assess soil conditions and vibration risks.

Protection Measures

- **Physical Barriers:**
 - Install steel plates or concrete slabs over shallow drainage lines.
 - Use sandbags or geotextile membranes to cushion against vibration.
- **Isolation:**
 - Divert or temporarily disconnect vulnerable drainage sections if feasible.
- **Pile Positioning:**
 - Adjust pile layout to maintain safe clearance from drainage pipes.
 - Use Bottom driven piling or CFA piling to reduce vibration near sensitive areas.

Monitoring and Controls

- **Vibration Monitoring:**
 - Install vibration monitors near drainage lines to track vibration levels.
 - Set threshold limits based on pipe material and age.
- **Visual Checks:**
 - Daily inspections for signs of movement, cracking, or leakage.
- **Emergency Protocols:**
 - Have repair kits and response teams ready in case of accidental damage.

Roles and Responsibilities

- **Site Engineer:** Oversees implementation and compliance.
- **Piling Contractor:** Executes work as per protection plan.
- **Drainage Specialist:** Advises on pipe integrity and repair methods.

Documentation

- Maintain records of:
 - Pre- and post-piling drainage inspections.
 - Vibration logs and incident reports.
 - Any modifications to drainage or piling plans.