

PHASE 1 COAL MINING RISK ASSESSMENT (CMRA)

Site Address: 41 Midland Street, Huddersfield

Prepared For: Architectural planning services

Planning application: 2025/92621 - adj 41 Midland Street

Purpose: Planning Validation – In Support of Proposed Development

Date: 27 Oct 2025

1. Introduction

This Phase 1 Coal Mining Risk Assessment (CMRA) has been prepared to support a planning application for development at **41 Midland Street, Huddersfield**. The site lies within a **Coal Authority Development High Risk Area**, meaning a risk assessment is required as part of local planning validation.

This report has been prepared in accordance with:

- **CON29M Official Coal Mining Search Guidance**
- **The Coal Authority's CMRA Guidance (2022)**
- **National Planning Policy Framework (NPPF), Section 15 – Ground Stability**
- **Local Planning Authority validation requirements**

2. Site Information

2.1 Site Location

41 Midland Street is situated within Huddersfield town centre, an area with a known history of shallow and deep coal extraction. The site is included within the Coal Authority's **defined high-risk zone**.

2.2 Current Use

Existing semi and detached housing on the on the street

2.3 Proposed Development

- Single-storey extension
- Conversion
- New residential unit
- Change of use

3. Information Sources Consulted

This Phase 1 assessment draws upon:

- **CON29M Coal Mining Search** (to be attached once obtained)
- Coal Authority interactive mapping
- British Geological Survey (BGS) geological data
- Historic OS mapping
- Local planning and land-use history
- General coalfield knowledge of the Huddersfield district

4. Coal Mining and Ground Stability Context

4.1 Recorded Underground Workings

Huddersfield sits within the Yorkshire Coalfield, historically worked at varying depths. Typical risks include:

- **Shallow unrecorded workings**
- **Historic room-and-pillar workings**
- **Worked seams close to rockhead**

4.2 Mine Entries (Shafts and Adits)

At this Phase 1 stage, no mine entries are known **within the site boundary**, though the CON29M report will confirm whether any lie within the Coal Authority's critical **20 m influence zone**.

4.3 Coal Outcrops and Geological Features

Coal seams may occur near surface levels in this area. Coal outcrops can indicate zones vulnerable to:

- Unrecorded extraction
- Weak strata
- Localised ground collapse

4.4 Mine Gas

Historic coal mining may produce potentially hazardous gases such as methane and carbon dioxide.

Without intrusive monitoring, gas risk **cannot be ruled out**.

4.5 Opencast Mining

No known opencast mining activity is recorded on or immediately adjacent to the site.

5. Preliminary Risk Assessment (Qualitative)

Hazard	Likelihood	Potential Impact	Risk Level
Shallow underground coal workings	Possible	Ground movement/subsidence	Moderate–High
Unrecorded historic workings	Possible	Instability / voids	Moderate
Mine entries nearby	To be confirmed	Structural collapse	Low–Moderate
Mine gas migration	Possible	Health and safety risk	Moderate
Faulting or weak geological zones	Possible	Localised settlement	Low–Moderate

Given the site's classification as a Coal Authority **High Risk Area**, the possibility of shallow workings or mine gas requires further consideration.

6. Requirement for Phase 2 Intrusive Investigation

Subject to final CON29M results, the following Phase 2 investigation is likely to be required for full due diligence:

6.1 Borehole Investigation

- Boreholes drilled to rockhead
- Exploration for voids or fractured zones
- Core logging and geotechnical assessment

6.2 Gas Monitoring

- Installation of gas monitoring standpipes
- Minimum 3-month monitoring period
- Assessment of methane, CO₂, and flow rates

6.3 Foundation Design Assessment

- Settlement analysis
- Recommendations for protection measures (e.g., gas membranes, strengthened foundations, piling, or grouting if required)

7. Conclusions

This Phase 1 Coal Mining Risk Assessment concludes:

1. The site lies in a **Coal Authority High Risk Area**, where historic mining has taken place.
2. Potential hazards include shallow workings, unrecorded voids, mine gas, and variable geological conditions.
3. Without intrusive investigation, these risks **cannot be discounted**.
4. Subject to the findings of the final CON29M search, a **Phase 2 Geo-Environmental Ground Investigation** is expected to be required.
5. Once investigation and any necessary mitigation are completed, the site can be rendered **safe and suitable** for the proposed development.

8. Recommendations

1. **Obtain the official CON29M Coal Mining Report** for 41 Midland Street.
2. Update this assessment with site-specific coal data from the report.
3. Commission a **Phase 2 Intrusive Ground Investigation**, including boreholes and gas monitoring.
4. Prepare a Coal Authority–compliant final CMRA for planning determination.
5. Implement any required mitigation (e.g., grouting, gas protection, engineered foundations).