

**LEGEND**

- COMMERCIAL SITE BOUNDARY
  - INDICATIVE HIGHWALL WITH DIRECTIONAL DIP ARROW. HIGHWALL CREST PROJECTED AT 70° FROM BASE OF EXTRACTION.
  - RECORDED WORKINGS IN BASE OF OPENCAST
  - INDICATIVE HIGHWALL CREST
  - INDICATIVE HIGHWALL TOE
- PROJECTED HIGHWALLS HAVE BEEN ESTABLISHED USING HISTORICAL OPENCAST MINE ABANDONMENT PLANS: OE/COMP/03/311 - CRAVEN & B. OE/COMP/03/121 - HUNTERS COTTAGE & EXTENSION, FARM HOUSE LANE COLLIERY - NO. 2 MINE - BARNSELY BED PILLARS, N.E.415 FARM HOUSE LANE PRIVATE OPENCAST SITE. FURTHER SITE INVESTIGATION IS REQUIRED TO CONFIRM HIGHWALL LOCATIONS.
- CONJECTURED FAULT
  - TICK INDICATES DOWNTHROWN SIDE
  - B BARNSELY SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
  - UN UNNAMED SEAM ABOVE DUNSL
  - DASHED INDICATES CONJECTURED
  - D DUNSL SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
  - G GAWBER SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
  - THIN THIN SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
  - SW SWALLOW WOOD SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
  - THM TOP HAIGH MOOR SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
  - LHM LOW HAIGH MOOR SEAM OUTCROP
  - DASHED INDICATES CONJECTURED
- COAL SEAM OUTCROPS HAVE BEEN DETERMINED USING BRITISH GEOLOGICAL SURVEY MAP: 1:10,000 SHEET SE29W (BARNSELY). COAL SEAM OUTCROPS RECORDED IN OCCS ABANDONMENT PLANS WHERE POSSIBLE.
- RECORDED MINE ENTRY
  - RECORDED MINE ENTRY - ADIT

**COAL MINING RISK ASSESSMENT**

- VERY LOW RISK  
NO FURTHER SITE INVESTIGATION REQUIRED
  - LOW RISK  
PREFER TO UNDERTAKE FURTHER SITE INVESTIGATION
  - LOW - MODERATE RISK  
FURTHER SITE INVESTIGATION REQUIRED
  - MODERATE - HIGH RISK  
REMEDIAL ACTION ANTICIPATED
- CAUTION: MINE ENTRIES & SHALLOW WORKINGS  
 CAUTION TO BE OBSERVED ON SITE AT ALL TIMES DUE TO RISK OF SUFFICIENT COLLAPSE LOCATIONS AND CORRIDORS OF SHALLOW MINE WORKINGS AND MINE ENTRIES ETC. IN APPROPRIATE GROUND INVESTIGATION.  
 ALL MINE ENTRIES LOCATED ON SITE TO BE SURVEYED WHERE POSSIBLE AND RECORDED OFF FROM PUBLIC ACCESS UNITS. APPROPRIATE REMEDIAL ACTIONS ARE TAKEN.

**SITE INVESTIGATION**

- EP-BH EASTWOOD & PARTNERS BOREHOLE 2013
- BH JYG ROTARY BOREHOLE 2019
- TP JYG TRIAL PIT 2019
- EBH JYG EXTENSOMETER BOREHOLE 2019
- BH JYG ROTARY BOREHOLE 2020
- TP JYG TRIAL PIT 2020

**SCALE 1:1250**

REV	DESCRIPTION	DATE	CHK	BY
P05	REDLINE BOUNDARY UPDATED	10.10.23	JDM	LSG
P04	REVISED TO COMMERCIAL BOUNDARY ONLY	04.04.23	DMH	LSG
P03	ADDITION OF S278 INVESTIGATIONS	25.02.21	DLT	CLT
P02	AMENDMENT TO REDLINE BOUNDARY	31.07.19	JBW	CLT
P01	FIRST ISSUE	18.07.19	JBW	CLT

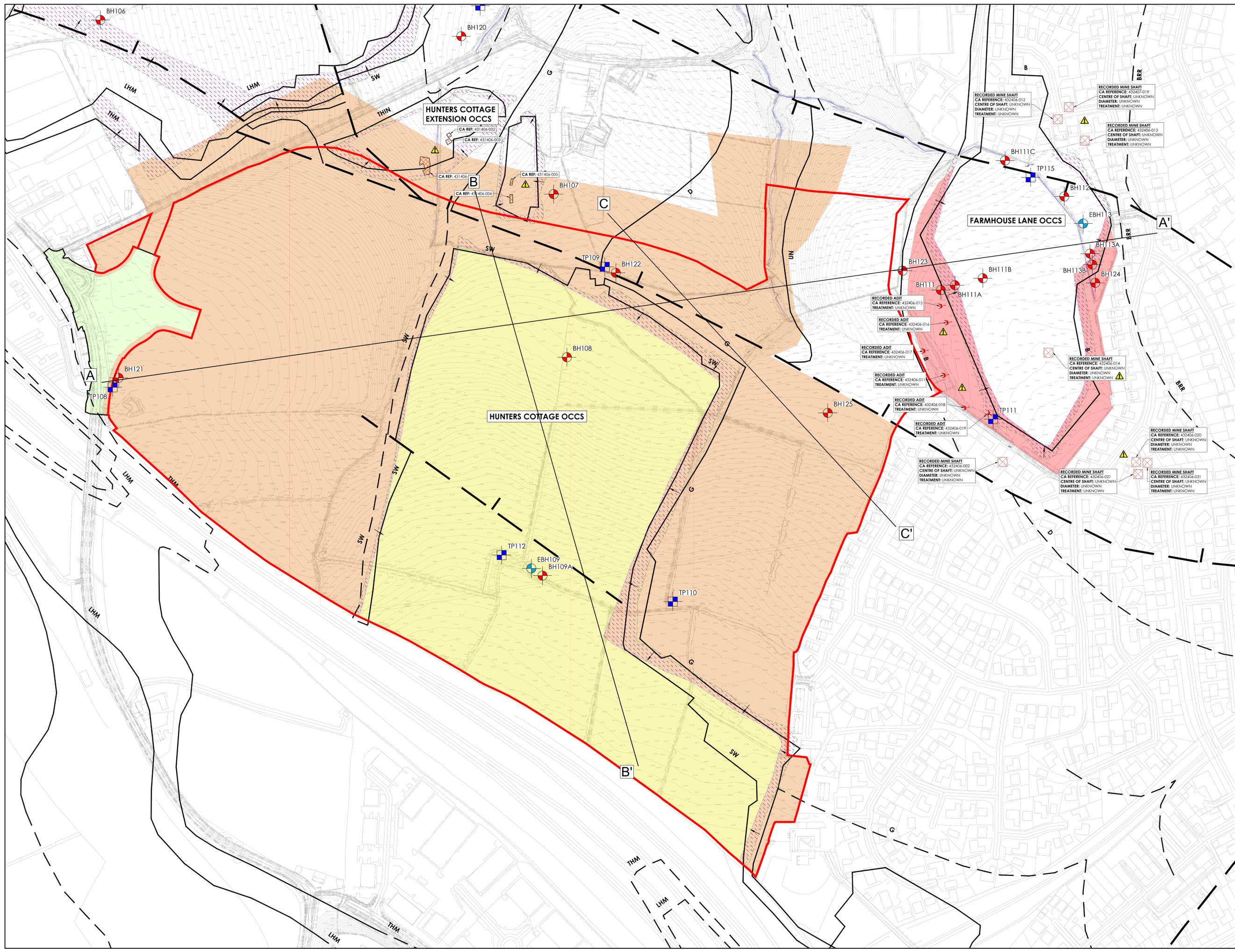
Project: **BARNSELY WEST**

Drawing Title: **CONCEPTUAL GROUND MODEL - COAL MINING RISK LEVEL ASSESSMENT**

**INFORMATION ISSUE**

**JPG**  
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4848-JPG-SW-00-DR-G-1307 S2 P05

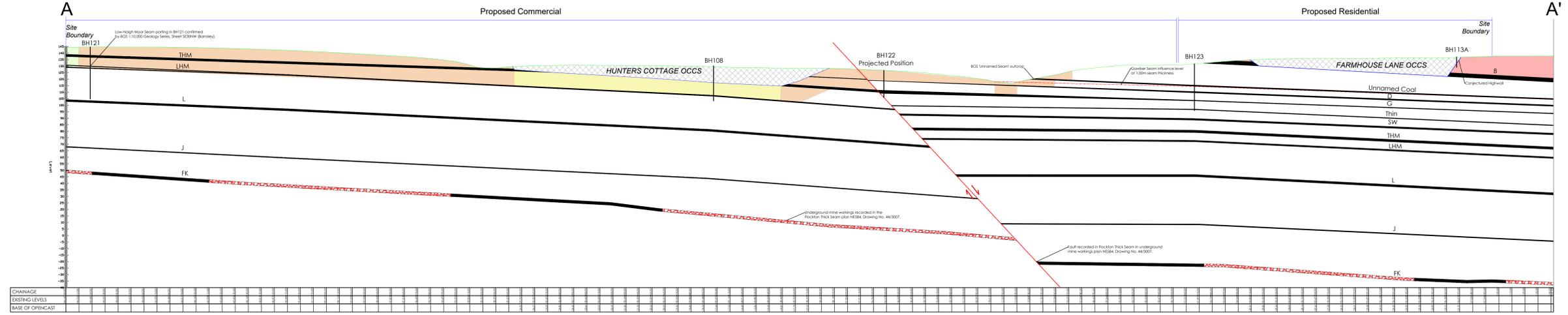


**COAL SEAM DATA.**  
 COAL SEAM INFLUENCE LEVELS HAVE BEEN INDICATED TO HIGHLIGHT ZONES WITH SETTLEMENT RISK AS A RESULT OF SHALLOW COAL MINE WORKINGS IN ACCORDANCE WITH CRBA SPECIAL PUBLICATION 32 CONSTRUCTION OVER ABANDONED MINE WORKINGS (COMA SP3). THE INFLUENCE LEVELS HAVE BEEN SHOWN AS 1X10 SEAM THICKNESS FROM THE TOP OF THE COAL SEAM, USING THE MAXIMUM RECORDED COAL SEAM THICKNESS.  
 THE MAXIMUM RECORDED COAL SEAM THICKNESS HAS BEEN ESTABLISHED USING JPC 2019 KIBBOLDIE SITE INVESTIGATION AND HAS BEEN STATED IN REPORT REF: 4848-JPG-SW-DR-G-1301-00-P01, PRELIMINARY, GEOTECHNICAL, GROUND INVESTIGATION.  
 THE MAXIMUM RECORDED COAL SEAM THICKNESS USED ARE AS FOLLOWS (IN SEQUENCE ORDER):  
 BARNSELY SEAM: 3.00m  
 UNNAMED SEAM: 0.70m  
 DUNSL SEAM: 0.85m  
 GAMBER SEAM: 1.00m  
 THIN SEAM: 0.80m  
 SHALLOW WOOD SEAM: 1.60m  
 TOP HAUGH MOOR SEAM: 1.70m  
 LOW HAUGH MOOR SEAM: 1.80m  
 LODGETT SEAM: 1.52m (TAKEN FROM BGS RECORDS)  
 LHM SEAM: 0.41m (TAKEN FROM BGS RECORDS)  
 FLOCKTON THICK SEAM: 2.16m (TAKEN FROM BGS RECORDS)

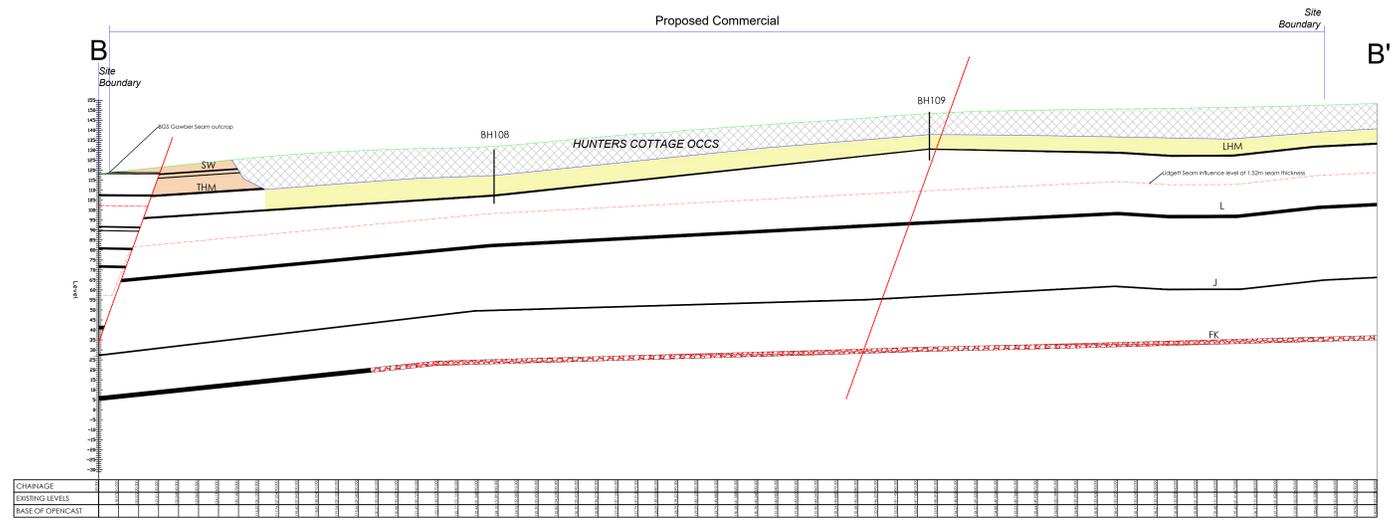
- B - BARNSELY SEAM
- UNNAMED SEAM
- D - DUNSL SEAM
- G - GAMBER SEAM
- THIN - THIN SEAM
- SW - SHALLOW WOOD SEAM
- THM - TOP HAUGH MOOR SEAM
- LHM - LOW HAUGH MOOR SEAM
- L - LODGETT SEAM
- J - JAM SEAM
- FK - FLOCKTON THICK SEAM

- OPENCAST BACKFILL
- PROJECTED COAL SEAM
- RECORDED UNDERGROUND MINE WORKINGS
- PROJECTED UNDERGROUND MINE WORKINGS INFLUENCE LEVEL (SEAM SPECIFIC)
- PROJECTED FAULT

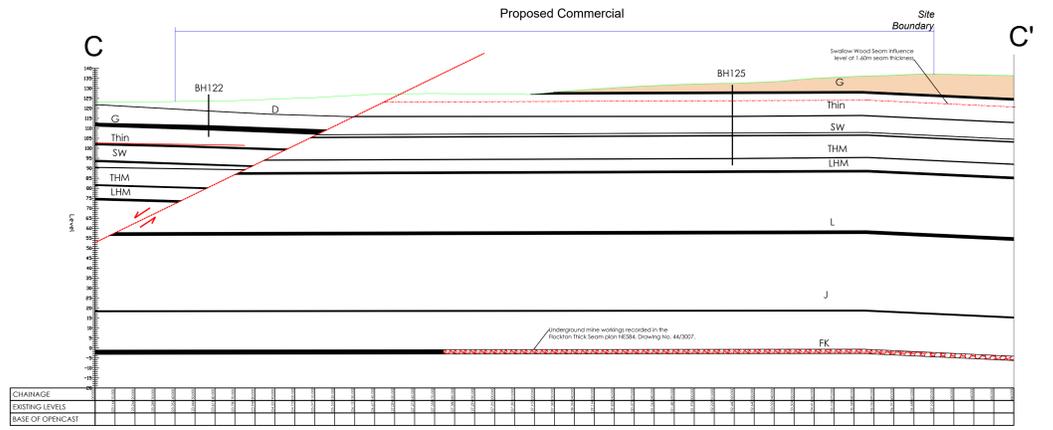
BORHOLES DISPLAYED ON THE CROSS-SECTIONS ARE FROM THE JPC 2019 KIBBOLDIE SITE INVESTIGATION. REFER TO JPC DRAWING NO. 4848-JPG-SW-DR-G-1301-00-P01 FOR SURVEYED BOREHOLE LOCATIONS.



**CROSS SECTION A-A'**  
**POGMOOR & HUNTERS COTTAGE AND EXTENSION**  
**SCALE: 1:1250**



**CROSS SECTION B-B'**  
**SITE OVERVIEW**  
**SCALE: 1:1250**



**CROSS SECTION C-C'**  
**HUNTERS COTTAGE EXTENSION**  
**SCALE: 1:1250**



REV	DESCRIPTION	DATE	CHK	BY
P03	REVISED TO SUIT DRAWING 1307	04.04.23	DWH	LSG
P02	ADDITION OF 5278 INVESTIGATIONS	25.02.21	OLT	OLT
P01	FIRST ISSUE	27.06.19	JBW	OLT

Project  
**BARNSELY WEST**

Drawing Title  
**CONCEPTUAL GROUND MODEL - ILLUSTRATIVE CROSS SECTIONS, CROSS SECTIONS A-A', B-B' & C-C'**

**INFORMATION ISSUE**

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