

Application N°:

OUTLINE APPLICATION WITH ALL
MATTERS RESERVED FOR THE
DEMOLITION & CONVERSION OF
EXISTING PUBLIC HOUSE WITH
RESIDENTIAL ACCOMODATION TO 1ST
FLOOR TO FORM 10 NO. RESIDENTIAL
FLATS OVER 3.5 STOREYS.

Site Address:
224 London Road
Bognor Regis
West Sussex
PO21 1AU

Ref: COUNT/RArms

FOUL WATER DRAINAGE STATEMENT



COUNTERPOINT
PROPERTIES LIMITED

34 The Drive | Craigwell | West Sussex | PO21 4DU

Superficial Deposits (Figure 3) - River Terrace Deposits (undifferentiated) - Sand, Silt And Clay. Superficial Deposits formed up to 3 million years ago in the Quaternary Period. Local environment previously dominated by rivers (U).

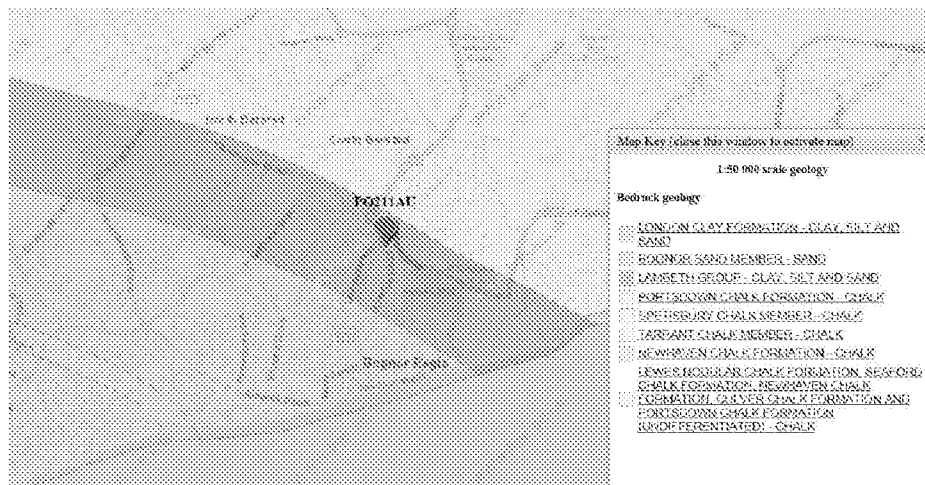


Figure 2: Bedrock geology map of site (source: British Geological Survey)

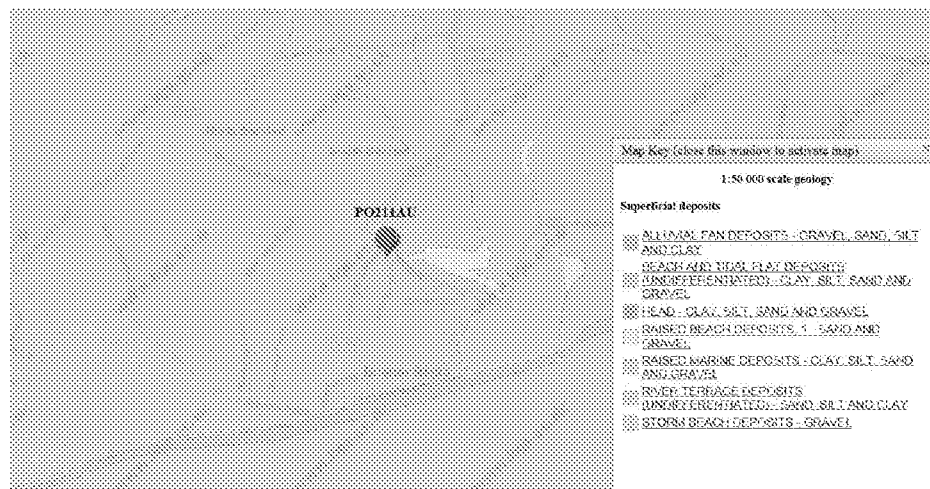


Figure 3: Superficial Deposits geology map of site (source: British Geological Survey)

2.3 Topography

The site has a slight slope from south west to north east but more significantly there is a significant change in level of approximately 0.75m between the existing public footpath and up into rear yard at the south west end of the site. The topography of the site could affect movement of water across the site.

3.0 Public Sewers & Existing Services

3.1 Surface Water Drainage

A full survey of the existing on site drainage has not been carried out but it is likely that existing rain water downpipes combine with the foul water drainage.

The Southern Water asset map shows dia. 375mm VC surface water sewer to the east of the site under Richmond Road North and a dia. 375mm VC surface water sewer just to the north of the site in the landscaped area.

3.2 *Foul Water Drainage*

A full survey of the existing on site drainage has not been carried out but it is likely that existing foul water drains discharge to the public foul water network via a 100mm VC pipe to the nearest public sewer under Richmond Road North.

Southern Water asset map shows dia. 300mm VC foul water sewer to the east of the site under Richmond Road North and a dia. 375mm VC foul water sewer just to the north of the site in the landscaped area.

4.0 *Proposed Drainage Strategy*

4.1 *Surface Water Drainage*

The surface water management train will need to be considered during the design but, based on the site geology, infiltration techniques are unlikely to be feasible for the site. There is no natural watercourse close to the vicinity of the site and so it is proposed to discharge the surface water to the existing Southern Water network. All existing surface water that is combined in to the public foul drainage network will be disconnected.

The existing site has approximately 300m² of impermeable area including the existing building, rear yard and tarmac pavements to the north and east. Through careful design it should be possible to reduce the impermeable area by between 10-15%.

It is possible that a high-level infiltration blanket, set above the groundwater table, may enable a permeable sub-base layer to act as temporary storage while the design storm rainfalls infiltrate; this could provide capacity for the 1 in 100 year +40% climate change rainfall event. At least some of the surface water from the existing hardstanding areas can be collected by permeable tarmac and roof areas can be collected via water butts with excess discharged using rainwater diffuser units.

The discharge point from the site could be to the existing Southern Water surface water manhole (6856) to the east of the site. The discharge rate will need to be agreed with Southern Water.

4.2 *Foul Water Drainage*

The proposed private foul water drainage will be designed to comply with the Building Regulations 1991 Part H and Sewers for Adoption 7th Edition.

Discharge from the upper levels of the development will be collected via soil vent pipes to ground level. It is proposed to discharge to an existing Southern Water foul water sewer using existing connection, subject to survey, or a new connection to manhole (6803) to the north of the site. The discharge rate will need to be agreed with Southern Water.

4.0 *Conclusions*

The proposed design should provide better quality foul and surface water drainage for the site. The impermeable area could be reduced by up to 15% and this should have a positive impact on the run off rates.

A surface water drainage scheme could include some permeable paving and attenuation for highest intensity rainfall events including climate change.

Both foul and surface water will continue to discharge into the existing Southern Water network at rates to be agreed with Southern Water.

The proposed foul and surface water drainage will be constructed in accordance with the current Building Regulations and industry standards.