

2nd March 2020

Ref: 6400/3

D MORGAN

**PROPOSED RESIDENTIAL DEVELOPMENT AT NEW HEY QUARRY,
HUDDERSFIELD ROAD, ROCHDALE**

INITIAL FLOOD RISK AND DRAINAGE APPRAISAL

1.0 Introduction

1.1 D Morgan have instructed Lees Roxburgh Ltd to carry out initial flood risk and drainage appraisal work for a proposed development of their New Hey Quarry site for residential development.

1.2 This statement with attachments summarises the initial work undertaken to date.

2.0 Flood Risk

2.1 Flood Zoning

2.1.1 Reference to the Gov.UK Flood Map for Planning (**Figure 1**) indicates that the site is located in a Zone 1 area of flood risk with the nearest area of Zone 2/Zone 3 flood risk associated with the River Beal some 250m south of, and well below, the site.

Flood Risk Zone 1 comprises land assessed as having a 1 in 1000 or less annual probability of flooding (<0.1% in any year).

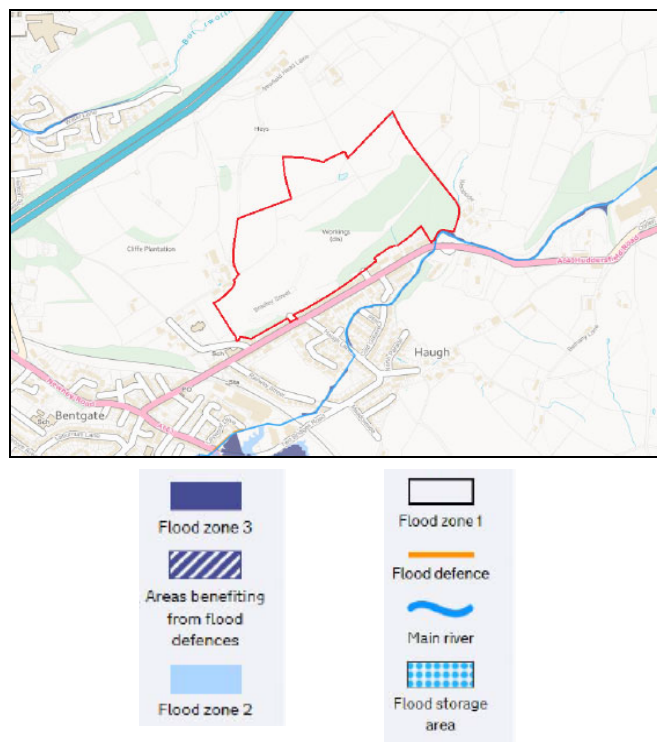


Figure 1: Gov.UK Flood Map for Planning

2.2 Surface Water Flooding

2.2.1 Reference to the Gov.UK Surface Water Flood Risk Map (**Figure 2**) identifies areas of flood risk within the surrounding area, but generally concentrated to the south and west, with an area of risk through the main body of the site and coincident with the low area created by the quarry workings.

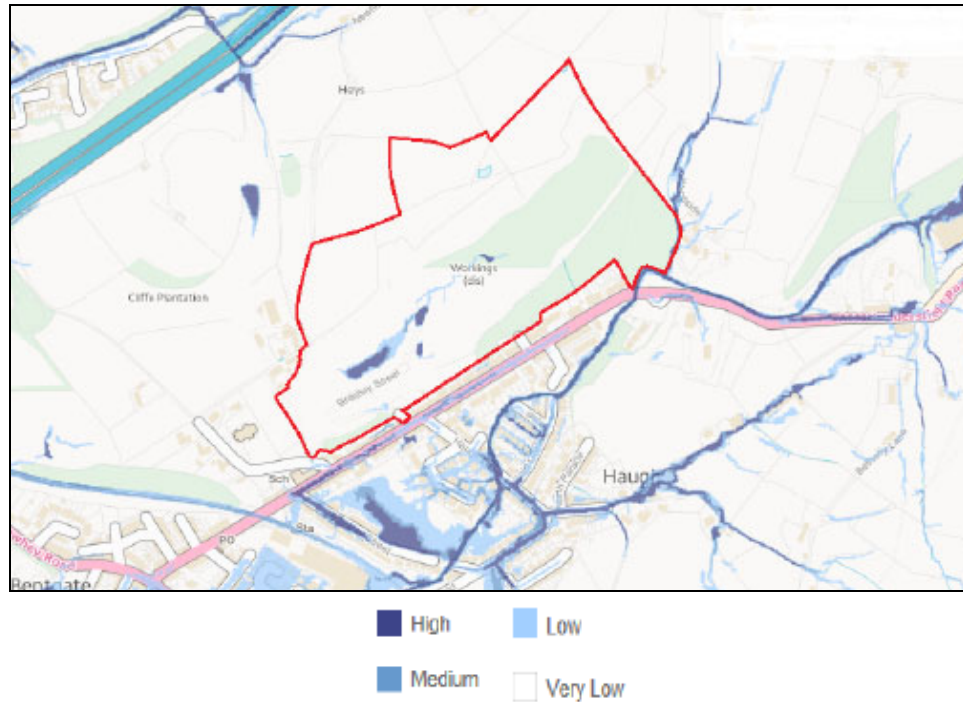


Figure 2: Gov.UK Flood Risk from Surface Water

2.3 Watercourse Network

2.3.1 The site lies within the catchment of the River Beal which flows into Rochdale.

2.3.2 Mapping (attached) identifies numerous watercourse networks surrounding the site with the nearest being Piethorne Brook to the south, a main river which briefly runs along the eastern site boundary. This is fed by at least one minor tributary from the south east corner of the site with a second isolated network within the southern boundary, both of which have been identified on historic mapping.

2.3.3 The OS contours identify that the site substantially falls south west although the north west area of the site falls away to the west. These contours also reflect the top of the hill within the northern area of the site.

2.4 Existing Sewers

2.4.1 United Utilities public sewer records have been obtained and are attached.

These identify the following;

- 300mm diameter combined sewer system in Huddersfield Road
- More generally combined sewer network within the surrounding area with isolated areas of separate foul and surface water drainage

2.4.2 These systems do not present a source of risk to the development.

3.0 Proposed Drainage

3.1 Surface Water

3.1.1 It is proposed to connect surface water to Piethorne Brook to the south of the site.

A route into Huddersfield Road and down Haugh Lane has been allowed for at this stage.

Negotiations will be held with the relevant landowners with respect to a more direct connection across the Recreation Ground to the south with a view to significantly reducing works within the highway.

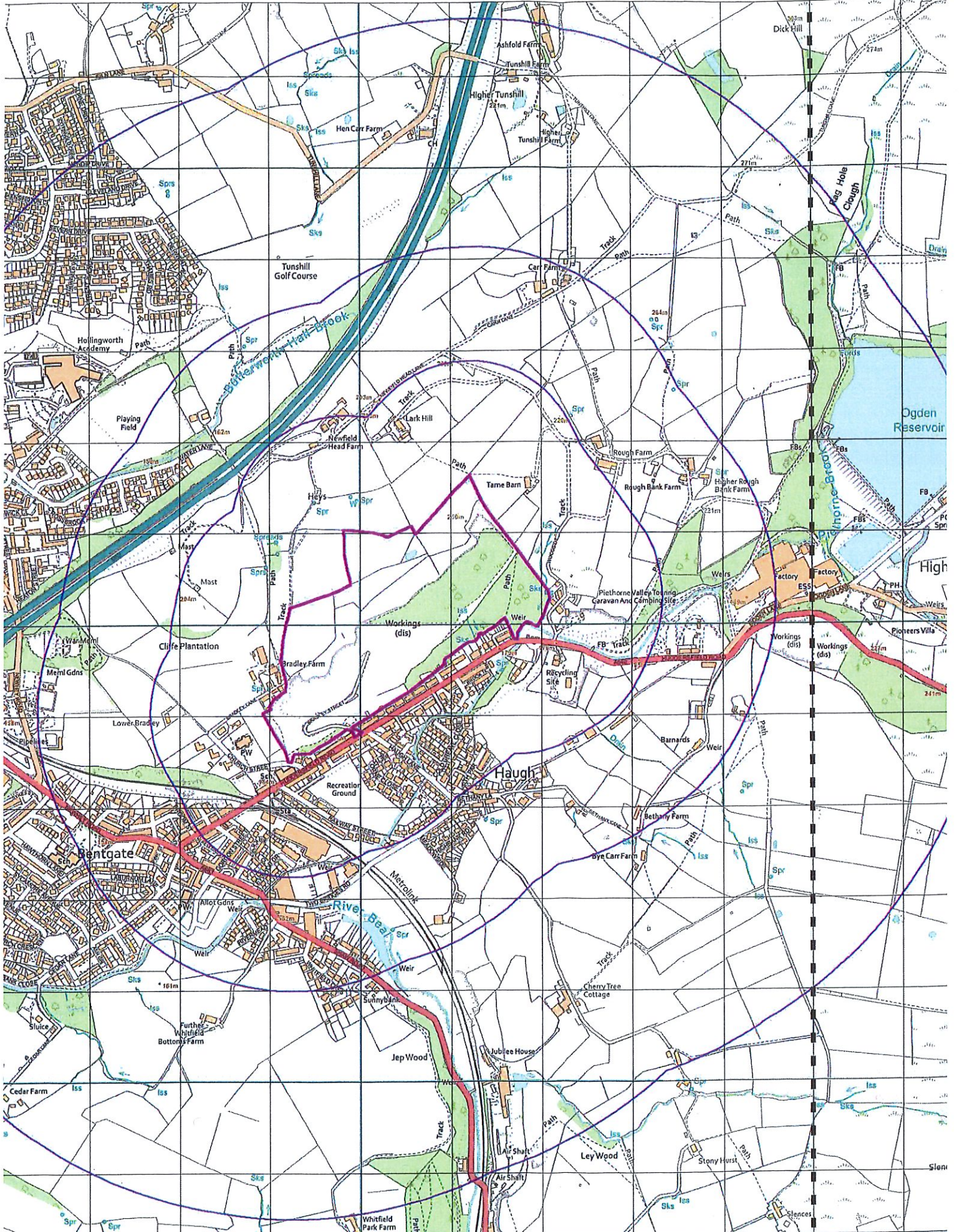
3.1.2 Flows will be limited to runoff rates to be agreed with the LLFA and attenuated on site up to the 1 in 100 year event plus an appropriate allowance for climate change.

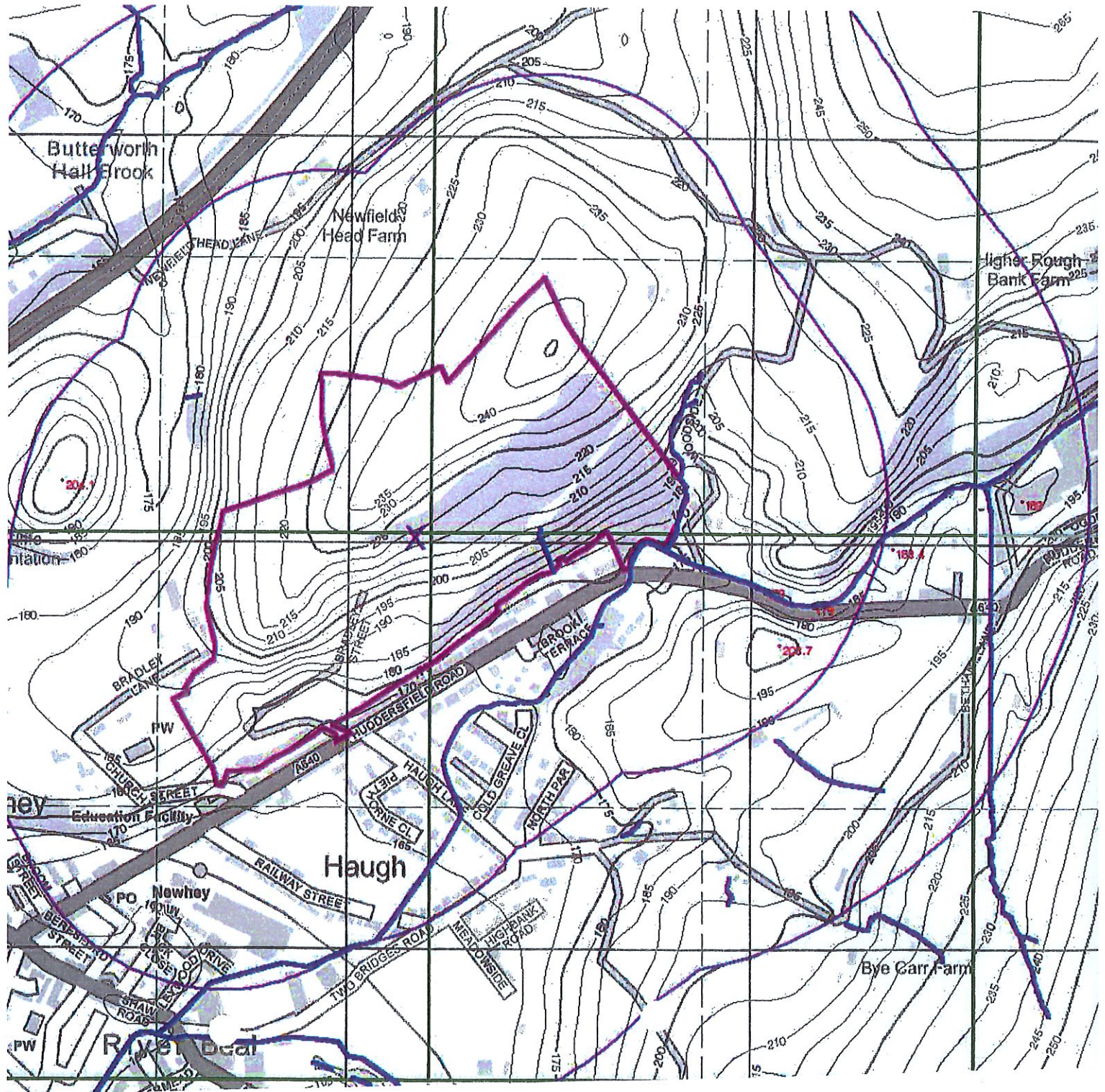
3.2 Foul

3.2.1 Connection is proposed to the 300mm diameter combined sewer in Huddersfield Road.

3.2.2 In their email of 19th July 2019 (attached), United Utilities have confirmed that based on a development of 450 No. houses, this proposal is accepted.

John E. Lees BSc CEng MICE MCIWEM





Lees Roxburgh

From: Dodd, Matthew <Matthew.Dodd@uuplc.co.uk>
Sent: 19 July 2019 12:30
To: Lees Roxburgh
Cc: Wastewater Developer Services
Subject: RE: PDE New Hey Quarry, Rochdale 6400/5.1 4200026998 Due date 22/07/2019

Good Afternoon

We have carried out an assessment of your application which is based on the information provided; this pre development advice will be valid for 12 months

Foul

Foul will be allowed to drain to the public combined sewer network at an unrestricted rate.

Surface Water

Surface water from this site should drain to either soak away or directly to watercourse. Discharge rates and consents must be discussed and agreed with all interested parties.

Connection Application

Although we may discuss and agree discharge points & rates in principle, please be aware that you will have to apply for a formal sewer connection. This is so that we can assess the method of construction, Health & Safety requirements and to ultimately inspect the connection when it is made. Details of the application process and the form itself can be obtained from our website by following the link below

<http://www.unitedutilities.com/connecting-public-sewer.aspx>

Sewer Adoption Agreement

You may wish to offer the proposed new sewers for adoption. United Utilities assess adoption application based on Sewers adoption 6th Edition and for any pumping stations our company addenda document. Please refer to link below to obtain further guidance and application pack:

<http://www.unitedutilities.com/sewer-adoption.aspx>

Please be aware that on site drainage must be designed in accordance with Building Regulations, National Planning Policy, and local flood authority guidelines, we would recommend that you speak and make suitable agreements with the relevant statutory bodies.

Please note, if you intend to put forward your wastewater assets for adoption by United Utilities, the proposed detail design will be subject to a technical appraisal by an Adoption Engineer as we need to be sure that the proposals meets the requirements of Sewers for adoption and United Utilities Asset Standards. The proposed design should give consideration to long term operability and give United Utilities a cost effective proposal for the life of the assets. Therefore, further to this enquiry should you wish to progress a Section 104 agreement, we strongly recommend that no construction commences until the detailed drainage design, submitted as part of the Section 104 agreement, has been assessed and accepted in writing by United Utilities. Any works carried out prior to the technical assessment being approved is done entirely at the developers own risk and could be subject to change.

Regards

Matthew Dodd
Assistant Developer Engineer
Developer Services and Planning
Network Delivery
United Utilities
T: 01925 679369 (internal 79369)
unitedutilities.com

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From: Lees Roxburgh [<mailto:Office@leesroxburgh.co.uk>]
Sent: 08 July 2019 14:28
To: Wastewater Developer Services <WastewaterDeveloperServices@uuplc.co.uk>
Subject: New Hey Quarry, Rochdale 6400/5.1

Good afternoon,

Please find attached our Wastewater Predevelopment Enquiry for the above.

Regards,

John Lees

LEES ROXBURGH Ltd, The Genesis Centre, Science Park South, Birchwood, Warrington, WA3 7BH
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