N

Note -
Client has advised roads and sewers are all to remain private.

3no. new properties to utilize existing connection to public sewer as directed by the Client- if properties are brought forward. This is subject to approval from the relevant authorities.

Attenuation tank Cellular storage volume: 255.60m³. Indicative size shown as 35.50m x 9m x 0.8m. Subject to specialist design.

Orifice @ 20mm to be used as the system to permeable paved solution refer to details.

Hydro-Brake to restrict flow to 2l/s based on 2.40m head. Hydro-Brake by Hydro International SHE-0055-2000-2400-2000. Hydro to allow for min outlet dia 75mm to Building Regulations.

Note:
Site to tie into existing combined sewer via 150Ø CW gravity pipes. This is subject to S106 Approval. Invert level TBC on site prior to works commencing.

Note:
Awaiting foundation proposals for care facility building. Design subject to change until RSK are in receipt of this information.

0.031Ha to drain unrestricted to existing combined sewer due to presence of surveyed existing combined sewer crossing the site and also due to gullies at the site entrance cannot be contained within the 100 year +50% climate change event.
This is subject to approval from relevant authorities.

Design Information Identification	
1	Discharge restricted to 2l/s to UU Sewer.
2	Watercourse Connectivity
3	Road tie-in with existing roads.
4	Trees affected by design, may have to be removed

Note -
Any Drainage related works to be constructed in accordance with building control guidance.

All Existing Services to be confirmed prior to any works on site commencing.

Prior to any construction, the contractor must confirm the precise invert level and pipe diameter of the receiving drainage system and must immediately advise RSK of any variation to that upon which the design has been based.

NOTE:- Drainage designed to contain the 2 year, 30 year and 100 year + 50% climate change event storm event
2 year- No surcharge
30 year- No flooding
100 year +50% climate change event- No flooding off site

The details provided on this drawing are subject to comments by all the relevant approving authorities. Until such time as all comments have been received and incorporated onto the drawings, all the information provided and costings, are used at Clients risk and no liability will be accepted by RSK.

Drainage Statement - Surface Water

- Soakaways to be discounted due to poor geology.
- GFRO denotes greenfield run-off, calculated by RSK using ICP SUDS Mean Annual Flood method.
- Surface water design to prevent off site flooding for 1in100 years including 50% climate allowance.
- Storage consists of Permeable paving and cellular storage.
- O denotes orifice chamber allowable for permeable paving
- Discharge to GFRO
- Distribution chambers are require to prevent blockages in the sub base storage.

Drainage Statement - Foul Water

- Foul is assumed to be private to discharge to existing combined by gravity for strategy purposes.
- Requires CCTV investigation to prove condition of receiving pipework or Manhole.

CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing.
Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

Notes:

1. This drawing is to be read in conjunction with all relevant Architect's and Engineer's drawings.
2. All levels quoted are in metres A.O.D.
3. The drainage and storage design assumes the catchments as shown these may be subject to change.

Legend

- Proposed Foul Water drain and manhole
- Proposed Surface Water drain and manhole
- Proposed Combined Water manhole
- Proposed SW Gully and Connection
- FFL 78.500 — Finished Floor Level
- +(77.00) — Existing site boundary level
- Development Boundary
- Existing Combined sewer and manhole
- Existing Easement
- Attenuation Tank - Cellular Storage

Rev.	Date	Amendment	Drawn	Chkd.	Appd.
P4	10.10.23	Road gully note updated	MS		
P3	04.10.23	Updated to new layout and reciept of existing sewer records	DS	MS	
P2	21.08.23	Updated following LLFA comments	MH	MS	
P1	01.06.23	First Issue	MH	MS	

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Client
LNT Construction

Project Title
Whalley Road
Barrow

Status
INFORMATION

Drawing Title
Drainage Layout

Drawn	Date	Checked	Date	Approved	Date
MH	May 23	MS	May 23		

Scale	Orig Size	Dimensions
1:250	A1	

Project No.
882667

Drawing File

Drawing No.
10-01

Rev.
P4