Existing Development

Existing Attenuation Tank - Designed to accommodate drainage from the existing development and the proposed future extension.

Proposed DN300 pipe to connect to the existing Hydro-brake Flow Control Chamber

Existing DN300 Wrexham City Council Highway Stormwater Drainage

Existing on-site Foul Drainage terminates in Cesspool, located at the same Plot.

Existing on-site Foul Drainage

SWMH
CL:33.080m
IL:30.160m

Discharge to WCC Highway Drain
Maximum Peak Flow 5 l/s
- 1-year + 40% CC - 4.9l/s
- 30-year + 40% CC - 5.0l/s
- 100-year + 40% CC - 5.0l/s

Connect via a Discharge Consent (Saddle Connection)

Proposed Flow Control Chamber
Hydro-brake Optimum
Unit Reference MD-SHE-0109-5000-0800-5000
Design Head :0.8 m
Design Flow :5.0 l/s
Minimum Outlet Pipe Diameter :150 mm
Suggested Manhole Diameter :1200 mm
Cover Level :32.942m
Invert Level :31.282m

S17 DN1200
CL:32.608m
IL:31.319m
Depth: 1.289m
Type C Chamber

S06 DN450
CL:32.250m
IL:31.418m
Depth: 0.832m
Type D Chamber

S07 DN450
CL:32.450m
IL:31.363m
Depth: 1.087m
Type D Chamber

S15 DN1200
CL:32.600m
IL:31.441m
Depth: 1.159m
Type C Chamber

Filter Drain
Treat effluent from the yard areas

DN300 @ 1:230
DN300 @ 1:240
DN150 @ 1:150
DN150 @ 1:200

300mm wide kerb breaks at 10m intervals along the filter strip

Filter Drain
Provide 0.5m wide gravel filter strip around the perimeter of the yard with a DN150 perforated pipe underneath.
300mm wide kerb breaks to be installed at 10m intervals.
For Details refer to drawing:
RNW-BML-XX-XX-DR-C-0512

Contractor to reprofile the earthworks to tie into the existing levels at 1:3 slope

S14 DN1200
CL:32.600m
IL:31.535m
Depth: 1.065m
Type C Chamber

S08 DN450
CL:32.150m
IL:31.124m
Depth: 1.026m
Type D Chamber

Discharge to WCC Highway Drain
Maximum Peak Flow 1.5 l/s
- 1-year + 40% CC - 1.5l/s
- 30-year + 40% CC - 1.5l/s
- 100-year + 40% CC - 1.5l/s

Connect via a S106 Discharge Consent (Saddle Connection)
Assumed IL: 28.220m

HYDRO-BRAKE FLOW CONTROL CHAMBER (S11)
Flow Control Chamber
Hydro-brake Optimum
Unit Reference MD-SHE-0066-1500-0420-1500
Design Head :0.420m
Design Flow :1.5 l/s
Suggested Manhole Diameter :1200 mm
Cover Level :32.150m
Invert Level :30.700m

Attenuation Tank

S10 DN450
CL:32.260m
IL:31.000m
Depth: 1.260m
Type D Chamber

S09 DN450
CL:32.200m
IL:31.037m
Depth: 1.163m
Type D Chamber

Bioretention Area
Treat effluent from the yard areas

Geocellular Attenuation Tank
Polystorm Xtra or similar approved
Gross Volume : 16.800m3
Eff. VOL : 15.792 m3
Plan : 40.0m2
Depth : 0.42 m
Void Ratio : 0.94
CL : 32.175m
Top of Tank : 31.120m
Invert Level : 30,700m
Cover Depth : 755mm
Plan Area 40.0m² x Depth 0.42m

Rain Garden
Plan : 40.0 m2
Depth of Top Soil : 300mm
Depth of Type B Filter Material : 300-775mm
For Details refer to drawing:
RNW-BML-XX-XX-DR-C-0512

Filter Drain
Provide 0.5m wide gravel filter strip around the perimeter of the yard with a DN150 perforated pipe underneath.
For Details refer to drawing:
RNW-BML-XX-XX-DR-C-0512

The proposed concrete yard to tie into the existing yard

Permeable Block Pavement
Treat pollutants from the parking bays

FFL:32.750m

Provide ACO MultiDrain 100 or similar approved at level thresholds adjacent to the access doors

Provide ACO MultiDrain 100 or similar approved at level thresholds adjacent to the access doors

S13 DN600
CL:32.600m
IL:31.687m
Depth: 0.913m
Type D Chamber

Filter Drain
Treat effluent from the roofs

S04 DN450
CL:32.260m
IL:31.048m
Depth: 1.212m
Type D Chamber

S03 DN450
CL:32.430m
IL:31.180m
Depth: 1.250m
Type D Chamber

S12 RE
CL:32.600m
IL:31.872m
Depth: 0.728m

S16 DN450
CL:32.600m
IL:31.771m
Depth: 0.829m
Type D Chamber

S01 DN450
CL:32.000m
IL:31.400m
Depth: 0.600m
Type D Chamber

S02 DN450
CL:32.000m
IL:31.225m
Depth: 0.775m
Type D Chamber

The contractor to regarde the earthworks along the site boundary to achieve a desirable slope of 1:3 or flatter.

Filter Drain
Provide 0.5m wide gravel filter strip around the perimeter of the yard with a DN150 perforated pipe underneath.
300mm wide kerb breaks to be installed at 10m intervals.
For Details refer to drawing: RNW-BML-XX-XX-DR-C-0512

Filter Drain
Treat effluent from the yard areas

300mm wide kerb breaks at 10m intervals along the filter strip

Pond

No visible boundary in this area due to dense vegetation

Scale 1:200 (0, 5, 10, 20m)

Drainage Key:

DNXXX @ 1:XXX	Proposed Stormwater Sewer
DNXXX @ 1:XXX	Proposed Filter Drain
S0X	Proposed Stormwater Manhole
S0X	Proposed Ridgistorm Separate Catchpit
S0X	Proposed Stormwater Hydro-brake
	DN150 Gully / RWP Connector
RWP	Proposed Rain Water Pipe
ACO MD XX	ACO MultiDrain 100 or similar approved
	Proposed Rodding Eye
	Proposed Stormwater Perforated Pipe
FFL:XX.XXX	Proposed Finish Floor Level
XX.XXXm	Design Level
XX.XXXm	Existing Level
	Proposed Retaining Wall (TBC)
	Proposed 300mm wide kerb breaks

Existing Drainage

ex.DN300 WCC SWS	Existing DN300 Wrexham County Council Highway Stormwater Drainage
ex.DNXXX OS FWS	Existing On-Site Foul Sewer
	Existing Stormwater Hydro-brake

Safety, Health & Environmental Information:

In addition to the hazards and risks normally associated with the types of work detailed on this drawing, please note the significant hazards identified by symbols below,

INDICATES A RESIDUAL RISK AS A WARNING

INDICATES A RESIDUAL RISK FOR INFORMATION

and described below:

Construction/Maintenance/Cleaning/Demolition
Refer to Drawing:

General Notes:

- Do not scale from this drawing.
- All dimensions are in millimetres (mm), all levels in metres (m) unless noted otherwise.
- Discrepancies or omissions are to be reported to the Engineer prior to work commencing.
- Materials and workmanship are to comply in all respects with current British Standard Specifications, Codes of Practice, and Building Regulations Approved Documents.
- This drawing is to be read in conjunction with all relevant specifications and drawings issued by the Engineer, Architect and other Specialists.
- The contractor is to check all information provided, including all proposed external levels, prior to commencing the works and seek clarification from the engineer in respect to any ambiguities found.
- The copyright of this drawing is vested in the Engineer and must not be copied or reproduced without written consent.

Key:

	Site Boundary
	Proposed Permeable Paving
	Proposed Concrete Yard
	Existing Building / Road (Phase 1 Works)
	Existing Green Areas to remain
	Proposed reprofiling of earthworks
	Proposed Building
	Proposed Gravel Surround
	Proposed Filter Drain

Rev	By / Chk'd	Date	Description
P01	IW/AM	27/02/2026	Preliminary issue for Client comments

PRELIMINARY DRAWING
This drawing is not to be used for construction

Client

R&R Engineering

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B604FG
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Email: design@barnsleymarshall.co.uk
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Project

New Workshop
Oak Road, Wrexham
LL13 9RG

Drawing

Drainage Plan Layout

By	IW/AM	Date	24/02/2026

Drawing No.	Revision
RNW-BML-XX-XX-DR-C-0500	P01
BML Job No.	Status
968-04	-

Drawing Scale at A1: 1:200

CAD Filename: BML Data Server Data/Projects/968-04 R&R New Workshop Wrexham/Drawings/Working/DWG/RNW-BML-XX-XX-DR-C-0500-P02 - Drainage Plan Layout.dwg