Notes:

All levels shown are for drainage strategy design purposes only. The Contractor's Engineer should ensure a full Cut & Fill analysis is carried out to determine a final FFL, suitable car park falls and boundary tie in levels.

Forward flow is to be limited to 4.0 l/s to each outlet point. i.e. 8.0 l/s for the entire site. Storage is provided for the 100 year event with allowance for 40% climate change.

All products shown are for Planning Approval purposes. The Supermarket Brand specification/CRs over-rule any shown products in all cases.

Storm Manhole Schedule

Ref	Cover L	Invert L	MH Type	Cover	Notes
S1	7.500	6.600	1200Ø PCC	D400	300mm sump/catchpit
S2	7.500	6.350	1200Ø PCC	D400	300mm sump/catchpit
S3	7.500	5.950	1200Ø PCC	D400	300mm sump/catchpit
S4	7.400	5.650	1200Ø PCC	D400	300mm sump/catchpit
S5	7.150	6.150	1200Ø PCC	D400	300mm sump/catchpit
S6 FC	7.300	5.250	1500Ø PCC	D400	Flow Control MH. **Hydrobrake Vortex Flow Control** on outlet rated at 4.0 l/s at 1.45m head. 500mm sump/catchpit to allow control installation
S7	7.350	5.100	1200Ø PCC	D400	300mm sump/catchpit
S8	6.500	4.700tbc	1200Ø PCC	D400	300mm sump/catchpit
S9	7.100	6.100	1200Ø PCC	D400	
S10	7.000	5.800	1200Ø PCC	D400	300mm sump/catchpit
S11	6.850	5.500	1200Ø PCC	D400	300mm sump/catchpit
S12	6.850	5.300	1200Ø PCC	D400	300mm sump/catchpit
S13 FC	6.900	5.050	1500Ø PCC	D400	Flow Control MH. **Hydrobrake Vortex Flow Control** on outlet rated at 4.0 l/s at 1.40m head. 500mm sump/catchpit to allow control installation
S14	7.250	6.250	1200Ø PCC	D400	300mm sump/catchpit
S15	6.850	5.850	1200Ø PCC	D400	300mm sump/catchpit
MH35sw	7.530	4.850	1200Ø PCC	D400	Existing MH. MH too shallow for new system. Rebuild in same location at new Invert Level shown
INT 1	Klargester NSBP004 bypass separator or similar approved.				
INT 2	Klargester NSBE010 bypass separator or similar approved. Both interceptors have 300mm standard inlet/outlet diameters. Use 300mm pipes locally to suit. Both will require power supply and silt/hydrocarbon alarm located on panel within building at location of the landowners choice. Installation to be fully in accordance with maufacturer's guidelines and insuring all correct anti-float measures are taken. Bypass type assumed acceptable.				

Storm Storage Tank 1	434m² on plan. Lowest GL 7.10 Soffit 6.30 Base 5.50	0.80m dp (2 cell units) 1.00m cover min.	14m x 31m on plan
Storm Storage Tank 2	200m² on plan. Lowest GL 6.80 Soffit 6.00 Base 5.20	0.80m dp (2 cell units) 1.20m cover min.	10m x 20m on plan
	Tanks to be fully wrapped and sealed in accordance with supplier/manufacturer's specifications. All in/out pipes to have sealed top hat connections. Max connection pipe size usually 300Ø (product dependant). Use manifolds if necessary to ensure free flow. Full GI data and Ground Water levels should be checked to consider and deal with floatation risks. Provide min 1 No. 100Ø vent to landscaped area with 'mushroom' top or similar. Tanks to be suitable for Trafficked Area Loading with 800mm cover. PolyPipe PolyStorm R Units assumed acceptable subject to confirmation by supplier		

Foul Manhole Schedule

Ref	Cover L	Invert L	MH Type	Cover	Notes
F1	7.550	6.900	475Ø Poly IC	B125	Must use rear connection
F2	7.550	6.500	475Ø Poly IC	B125	45° Fore/Aft - 300mm reduced access cover
F3	7.550	5.700	1200Ø PC Conc	B125	Condensate inlet set higher with light flap valve to prevent stench backing up to fridge units. Bench MH to suit.
F4	7.550	6.900	475Ø Poly IC	B125	Must use rear connection
F5	7.550	6.900	475Ø Poly IC	B125	Must use rear connection
F6	7.550	5.425	1200Ø PC Conc	B125	
MH13fw	7.000	5.220	Existing conc. MH	D400	Reset cover as required. See notes on backdrop connection

Covers within paving zones to be recessed if requested by Architect

Design Check Note

100 year storm (40%cc) system check:
Flow Control Manhole S13fc fills to 6.45m AOD
Lowest Site Level Locally is 6.71m AOD
260mm freeboard with no overspill from site.
OK!

Storm Tank 2 notes:

Lowest GL ~ 6.80m
Soffit 6.00 (0.8m cover typ)
Base 5.20

800mm deep.
10m x 20m on plan

Network Rail easement distance unknown at time of writing. Tank can simply be moved east if required

4.0 l/s peak Flow to River (Crythan Brook)

River Outfall

150Ø

MH35sw

Existing Storm MH35sw
CL 7.53
IL (out) 5.92

Manhole to be grubbed out and re-built at lower level (IL 4.85 tbc) with new 150Ø outfall pipe to River. Existing river level to be surveyed to ensure gravity connection is viable.

Provide new headwall if required.

Connection not believed to be subject to Section 106 agreement as pipe runs direct to river.

INT2

S13fc

S15

S12

S11

S10

S9

S14

S3

S4

S5

S6fc

S7

S2

S1

S8

F1

F2

F3

F4

F5

F6

INT1

MH09

MH08

Storm Tank 2

Storm Tank 1

Permeable Paving 7.40 - 6.90

Permeable Paving 7.30 - 7.10

Permeable Paving 6.80 - 6.71

Permeable Paving 6.90 - 6.71

Permeable Paving 7.50

Permeable Paving 7.25

Permeable Paving 7.27 - 7.00

Tree Root Protection Zones

Gully @ 7.20

+7.35 highpoint

Take condensate elsewhere if F1 too shallow

45° fore & aft

Typ 7.45 with rise & fall to gullies

Canopy Siphonic DP position TBC

FFL 7.600 TBC

Internal Condensate System Show INDICATIVE ONLY. All slab penetration positions are TBC. Ensure any connections to main foul system have anti-stench capability. Outlets can also aim for F6 if preferred.

We assume gutter will be sized to allow this RWP to be omitted. To avoid RWP going to ground at low level and pumped system

Mini Packaged Storm Pump Chamber. Pump rate & power supply design by others

Linear Drain @6.35

Store Gully

Ensure foundation bases dropped locally to prevent loading on pipe

Some excavation within tree RPZ inevitable. Allow for possible air-spade use and ensure all Arboriculturist's requirements are met

4.0 l/s peak Flow to Wider Sewer Network

Existing Storm MH09 (demarcation?)
CL 6.07
IL (out) 4.65

Source of incoming 500Ø pipe unknown. Further investigation required to ensure no live inlets are blocked.

New 150Ø inlet will have to be made at level inverts to enable gravity discharge from site. Level soffits not possible due to gradient cosntraints. I.e. IL 4.65

Existing Storm MH08 (adopted).
CL 6.00
IL (out) 4.57

Connection to the sewer to be made under an 'Indirect' Section 106 application with the water authority. This application to be made by the Lead Contractor

Existing Storm & Foul Data taken from EMP Survey ref 1125 - Dec 2024. Existing manhole references taken from that drawing.

Storm Tank 1 notes:

Lowest GL Typ. 7.10
Soffit 6.30 (0.8m cover min)
Base 5.50

800mm deep.
14m x 31m on plan

Design Check Note

100 year storm (40%cc) system check:
Flow Control Manhole S6fc fills to 6.75m AOD
Lowest Site Level Locally is 7.00m AOD
250mm freeboard with no overspill from site.
OK!

Levels of S6fc & S7 set to enable storm to run just under foul whilst still just achieving falls to outfall point. Final clash check and detailed finished levels by Contractor's appointed engineer.

It is assumed the Canopy Siphonic DP can simply run to the tank with above ground rodding available. TBC at final design stage

Existing Foul Demarcation MH13fw.
CL 7.00
IL (out) 5.22
Downstream pipe to have CCTV condition survey to establish suitability for re-use. Connection to manhole to be made under an 'Indirect' Section 106 application with the water authority. This application to be made by the Lead Contractor

MH13fw Existing

100Ø Existing

150Ø Storm runs UNDER foul pipe

Refer to HTC Drawing ref 4406 Rev F for detailed levels data

Key

- Existing Foul Drainage
- Existing Storm Drainage
- Proposed Foul Drainage
- Proposed Storm Drainage
- Proposed Indicative Condensate System
- Proposed Perforated SuDS Pipes
- C* Canopy RWP positions TBC
- Bioretention Garden
- Permeable Parking Zones (Permeable Formation) To Enable Containment - Specification 1
- Permeable Parking Zones (impermeable formation) Near Building - Specification 2
- Storm Water Attenuation Tank
- Wavin SuDs Diffuser or Similar Approved. Number of diffusers TBC at final design stage to suit products available/chosen & outlet Øs

Revision:	Date:	Revision Description:
A	03.04.25	Proposed Levels Amended

Client: Lidl Great Britain Ltd.

Lucion Delta Simons Ltd.
The Arrow. Fifth Avenue.
Team Valley Trading Estate
Gateshead
NE11 0NG

Project:
Briton Ferry Road
Neath

Drawing Title:
Proposed Drainage Layout

Drawing Number: 126785.658400. 050
Revision: A
Drawn By: SN
Checked By:
Date: Feb 2023
Drawing Status: Planning Approval
Scale: 1:250
Sheet Size: A1