DO NOT SCALE

NORTH

LEGEND

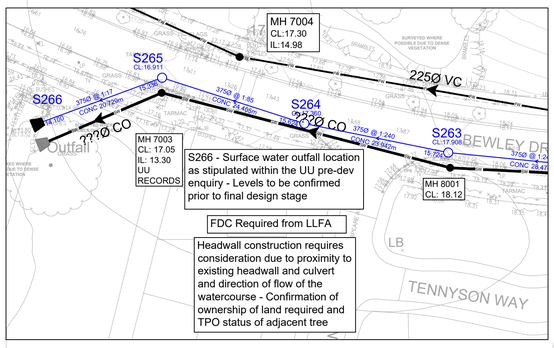
Existing

- Existing Surface Water Sewer
- Existing Foul Sewer

Proposed

- Proposed Surface Water Sewer
- Proposed Foul Water Sewer
- FC — Flow Control Manhole
- Highway Gully
- Easement
- FFL 17.40 — Proposed Slab Level
- Adoptable SUDs Feature
- Site Boundary
- Offline attenuation (Cellular crates)

S122/125
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event
2 x 380m² x 0.8m deep Aquacell 'Prime' or similar approved



S266 - Surface water outfall location as stipulated within the UU pre-dev enquiry - Levels to be confirmed prior to final design stage

FDC Required from LLFA

Headwall construction requires consideration due to proximity to existing headwall and culvert and direction of flow of the watercourse - Confirmation of ownership of land required and TPO status of adjacent tree

S213 - TANK 5
IL:23.521
Overflow IL:24.350

Online attenuation basin
Base area = 135 sq.m.
Base level = 23.156
TOB = 25.020
TWL:
30 yr = 24.337
100 yr = 24.454
100 yr 45% = 24.720
Side slopes = 1:3

S210/S211/S213
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event (Non-return valve at attenuation connection - Overflow pipe connection at 30yr Storm level) 3 x 100m² x 1.2m deep Aquacell 'Prime' or similar approved

S222
(2.1 Dia flow control manhole)
Hydrobrake Optimum
Flow Regulator
MD-SHE-0228-3000-1675-3000
Restricted to:
30 l/s @ 1.675m design head
Orifice size = 228mm

S249
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event
(Non-return valve at attenuation connection - Overflow pipe connection at 30yr Storm level)
126m² x 0.8m deep
Aquacell 'Prime' or similar approved

S230 - TANK 8
IL:20.860
Overflow IL:21.550

S230
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event
(Non-return valve at attenuation connection - Overflow pipe connection at 30yr Storm level)
195m² x 0.8m deep
Aquacell 'Prime' or similar approved

S230 - TANK 7
IL:21.199
Overflow IL:21.650

S229
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event
(Non-return valve at attenuation connection - Overflow pipe connection at 30yr Storm level)
135m² x 0.8m deep
Aquacell 'Prime' or similar approved

S229 - TANK 6
IL:21.332
Overflow IL:21.800

Please note: If the developer chooses for S104 adoption to be under a NAV (Icosa). Installation of a row of gabions baskets into the attenuation may be acceptable - Increasing the bed width and potentially allowing removal of some the offline crates

Online attenuation basin
Base area = 395 sq.m.
Base level = 20.050
TOB = Min 22.018
TWL:
30 yr = 21.439
100 yr = 21.536
100 yr 45% = 21.718
Side slopes = 1:3

S316
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event (Non-return valve at attenuation connection - Overflow pipe connection at 30yr Storm level) 210m² x 1.6m deep
Aquacell 'Prime' or similar approved

S316 - TANK 10
IL:21.254
Overflow IL:23.100

S317
Geocellular attenuation tank providing storage for a 100yr + 45% CC storm event (Non-return valve at attenuation connection - Overflow pipe connection at 30yr Storm level) 210m² x 1.6m deep
Aquacell 'Prime' or similar approved

S317 - TANK 11
IL:21.133
Overflow IL:23.100

S254
(2.7 Dia flow control manhole)
Hydrobrake Optimum
Flow Regulator
MD-SHE-0325-6600-1539-6600
Restricted to:
66 l/s @ 1.539m design head
Orifice size = 325mm

S260
(2.7 Dia flow control manhole)
Hydrobrake Optimum
Flow Regulator
MD-SHE-0307-7250-3700-7250
Restricted to:
72.5 l/s @ 3.700m design head
Orifice size = 307mm

SEE INSET ABOVE

MH 8002
CL: 18.68

MH 9001
CL:19.95
IL:15.73

MH 9906
CL:20.63
IL:18.05

MH 0101
CL:21.67
IL:18.95

MH 1002
CL:23.39
IL:???

MH 1001
CL:23.14
IL:???

MH 0003

MH 0004
CL:22.69
IL:SEIZED

MH 9005
CL:20.86
IL:18.37

MH 9002
CL:19.72
IL:15.50

MH 9002
CL:19.05
IL:SIEZED

Connection to existing 225Ø public foul sewer subject to United Utilities S104 Approval.

Existing UU Sewer levels, condition and pipe diameter TBC prior to construction

Connection to existing 225Ø public foul sewer subject to United Utilities S104 Approval. IL to be confirmed.

MH 1002
CL:23.39
IL:???

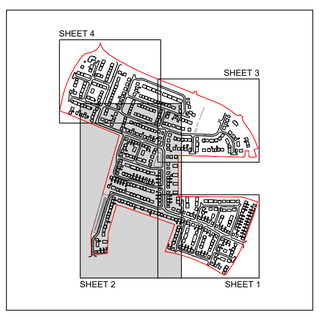
MH 1003
CL:23.58
IL:???

0 5 10 15 20 25 30 35 40 45 50
SCALEBAR (m)

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Notes

1. Setting out shall be undertaken using only the information given. Distances should not be scaled from this drawing.
2. All sewers shall be constructed in accordance with Design and Construction Guidance (DCG) Standards and United Utilities Details & Guidelines.
3. The minimum gravity pipe diameter under adoptable highways shall be 150mm
4. It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works. The rates shall include for hand dig around services where necessary. The Contractor shall adhere to the CDM Regulations at all times
5. The outsides of all sewers shall be a minimum of 1.0m from kerb lines and the outside of manholes shall be a minimum of 0.5m from kerb lines
6. Existing flows in watercourses, sewers and land drains shall be maintained at all times
7. Only trained personnel shall be permitted to enter confined spaces
8. All materials to bear the relevant B.S. Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement to withstand Class 3 condition (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur).
9. All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or the Network Operator as applicable.
10. Where "Structured Wall" UPVC pipes (or similar approved) are used in adoptable drainage they shall be handled and laid in accordance with the manufacturers instructions and will be subject to post installation deformation testing prior to adoption. A Class S Bed and Surround must be used for "Structured Wall" pipes
11. Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Design and Construction Guidance (DCG) Standards.
12. Slab levels shall not be varied without reference to the Engineer for guidance.
13. Pipes have not been designed to accommodate construction traffic loading. The contractor is responsible for providing adequate protection to the pipes during construction.



KEY PLAN

Design based on Layouts:
Cherryfield Drive, Kirkby. Planning Layout (South Parcel)
Dwg No. 203004, Dated 11 March 2024
Rev: P03

Cherryfield Drive, Kirkby. Planning Layout (North Parcel)
Dwg No. 203005, Dated 11 March 2024
Rev: P03

Grid/Level datum based on Topos:
Cherryfield Drive, Kirkby. Topographical Land Survey.
Dwg No. DWH.TS.04 Sheets 1 to 3, Dated 27.04.21
Rev: -

Topographical Land Survey.
Former All Saints School Cherryfield Drive, Knowsley.
Dwg No. A0 14F063/001 Sheets 1 & 2, Dated July '14
Rev: -

Coopers Drawing List:

7778 / 01	Proposed S104 Drainage Layout
7778 / 02	Proposed Highway Setting Out
7778 / 03	Proposed Highway Layout
7778 / 04	Proposed Highway and Drainage Longsections
7778 / 05	Highway Construction Details
7778 / 06	Proposed Surface Finishes
7778 / 07	S38 Agreement Plan
7778 / 08	External Works Layout
7778 / 09	Private Drainage Layout
7778 / 10	Private Drainage Construction Details
7778 / 11	Manhole Schedules
7778 / 12	Flow Control Manhole Details
7778 / 13	Surface Water Catchment Areas
7778 / 14	Surface Water Attenuation Details
7778 / 15	Proposed Cut and Fill Earthworks
7778 / 16	Plot Setting Out
7778 / 17	Manhole Connection Plan

TENDER

Rev.	Date	Revision	By	Appd.
B	21.10.25	Updated to show latest Planninig Layout	PJN	JAR
A	13.08.25	Laterals added to DWN parcel	PJN	JAR

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Project

CHERRYFIELD DRIVE, KIRKBY.

Title

Proposed S104 Drainage Layout
Sheet 2 of 4

DRAWING NUMBER	SCALE at A0	1:100	
7778 / 01-2	DATE	28.04.25	REVISION
	DRAWN	JAR	B
	CHECKED	AJ	