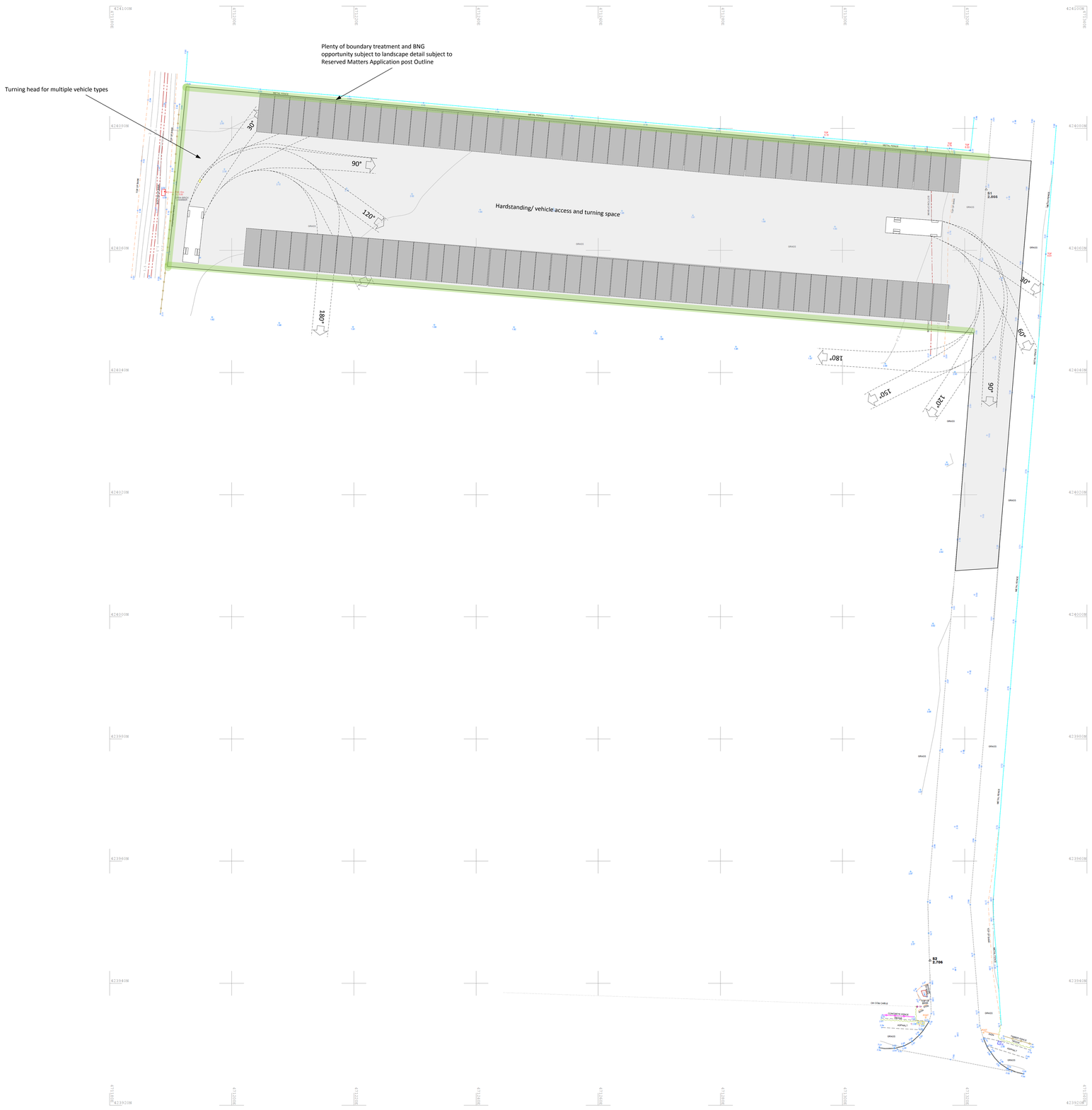


DEWAR PLANNING
TOWN AND COUNTRY PLANNING

OFFICE:
DPA Planning Ltd
4100 Park Approach
Leeds
LS15 8GB

Tel: 0113 3970 310
Mob: 07799 095 613

S.dewar@dpaplanning.co.uk

SITE ADDRESS:
Part of Plot 3
Delta Enterprise Park
Goole
DN14 8JZ

Notes:

Site to accommodate up to 92 self-storage containers.

Each container measures 6.09m long by 2.43m wide with a flat roof height of 2.62m.

N

0m 25m 50m

Date	By	Paper	Scale	Dwg no.	Rev
17/01/2024	SD	AO	1:250	003	

Layout Plan over TOPO

Andrew Moseley Associates, 15 St Paul's Street, Leeds, LS1 2JG

www.amatp.co.uk

Appendix L

YORKSHIRE WATER PRE DEVELOPMENT ENQUIRY

YorkshireWater

Ms J Ellenor
Andrew Moseley Associates
15 St Pauls Street
Leeds
LS1 2JG
jasmine@amatp.co.uk

Yorkshire Water Services
Developer Services
Pre-Development Team
PO BOX 52
Bradford
BD3 7AY

Tel: 0345 120 8482
Fax:

Email:
technical.sewerage@yorkshirewater.co.uk

For telephone enquiries ring:
Chris Roberts on 0345 120 8482

Your Ref:
Our Ref: A000075

16th January 2024

Dear Ms J Ellenor,

Holt Business Park, East Riding, DN14 8JU - Pre-planning Enquiry V361452

Thank you for your recent enquiry and remittance. Our official VAT receipt has been sent to you under separate cover. Please find enclosed a complimentary extract from the Statutory Sewer Map which indicates the recorded position of the public sewers. Please note that as of October 2011 and the private to public sewer transfer, there are many uncharted Yorkshire Water assets currently not shown on our records.

The following comments reflect our view, with regard to the public sewer network only, based on a 'desk top' study of the site and are valid for a maximum period of twelve months:

Foul Water

The site is not within an area served by public sewers. The closest suitable public sewer is the 225 mm foul public sewer approximately 850 metres to the north east of the site in Airmyn Road.

Foul water from kitchens and/or food preparation areas of any restaurants and/or canteens etc. must pass through a fat and grease trap of adequate design before any discharge to the public sewer network.

Surface Water

The developer's attention is drawn to Requirement H3 of the Building Regulations 2010. This establishes a preferred hierarchy for surface water disposal. Consideration should firstly be given to discharge to soakaway, infiltration system and watercourse in that priority order.

Sustainable Drainage Systems (SuDS), for example the use of soakaways and/or permeable hardstanding etc, may be a suitable solution for surface water disposal appropriate in this situation. You are advised to seek comments on the suitability of SuDS in this instance from the appropriate authorities.

It is understood that watercourse are located around the site. This appears to be the obvious place for surface water disposal (if SuDS are not viable). Please note Yorkshire Water cannot provide plans of culverted watercourses or highway drains. To obtain plans please contact the Lead Local Flood Authority for more details.

Surface water run-off from communal parking (greater than 800 sq metres or more than 50 car parking spaces) and hardstanding must pass through an oil, petrol and grit interceptor/separator of adequate design before any discharge to the public sewer network. Roof water should not pass through the traditional 'stage' or full retention type of interceptor/separator. It is good drainage practice for any interceptor/separator to be located upstream of any on-site balancing, storage or other means of flow attenuation that may be required.

Surface water run-off from areas of vehicular parking and/or hardstanding etc. must pass through an oil, petrol and grit interceptor/separator of adequate design before any discharge to the public sewer network. Roof water should not pass through the traditional 'stage' or full retention type of interceptor/separator.

It is imperative, however that surface water run-off from the forecourt of petrol stations, areas used for the delivery of fuel, areas used for and immediately adjacent to vehicle washing facilities and/or other similar areas where detergent is likely to be used is not discharged to any public surface water sewer network. Surface water from such areas must pass through an oil, petrol and grit interceptor/separator of adequate design before discharge to the public foul or combined sewer network. A trade effluent consent - that may be conditional and, amongst other things, place a restriction on the rate of discharge to public sewer - may be required for such discharges. The developer is advised to contact Yorkshire Water's Industrial Waste Section (telephone 0345 1242424) about any such proposal.

It is good drainage practice for any interceptor/separator to be located upstream of any on-site balancing, storage or other means of flow attenuation that may be required.

Other Observations

Any new connection to an existing public sewer will require the prior approval of Yorkshire Water. You may apply on line or obtain an application form from our website - https://www.yorkshirewater.com/developers/sewerage/sewerage-connections/

Yorkshire Water's Trade Effluent team must be consulted in respect of any proposed trade effluent discharge to the public sewer. Please visit - https://www.yorkshirewater.com/business/trade-effluent/

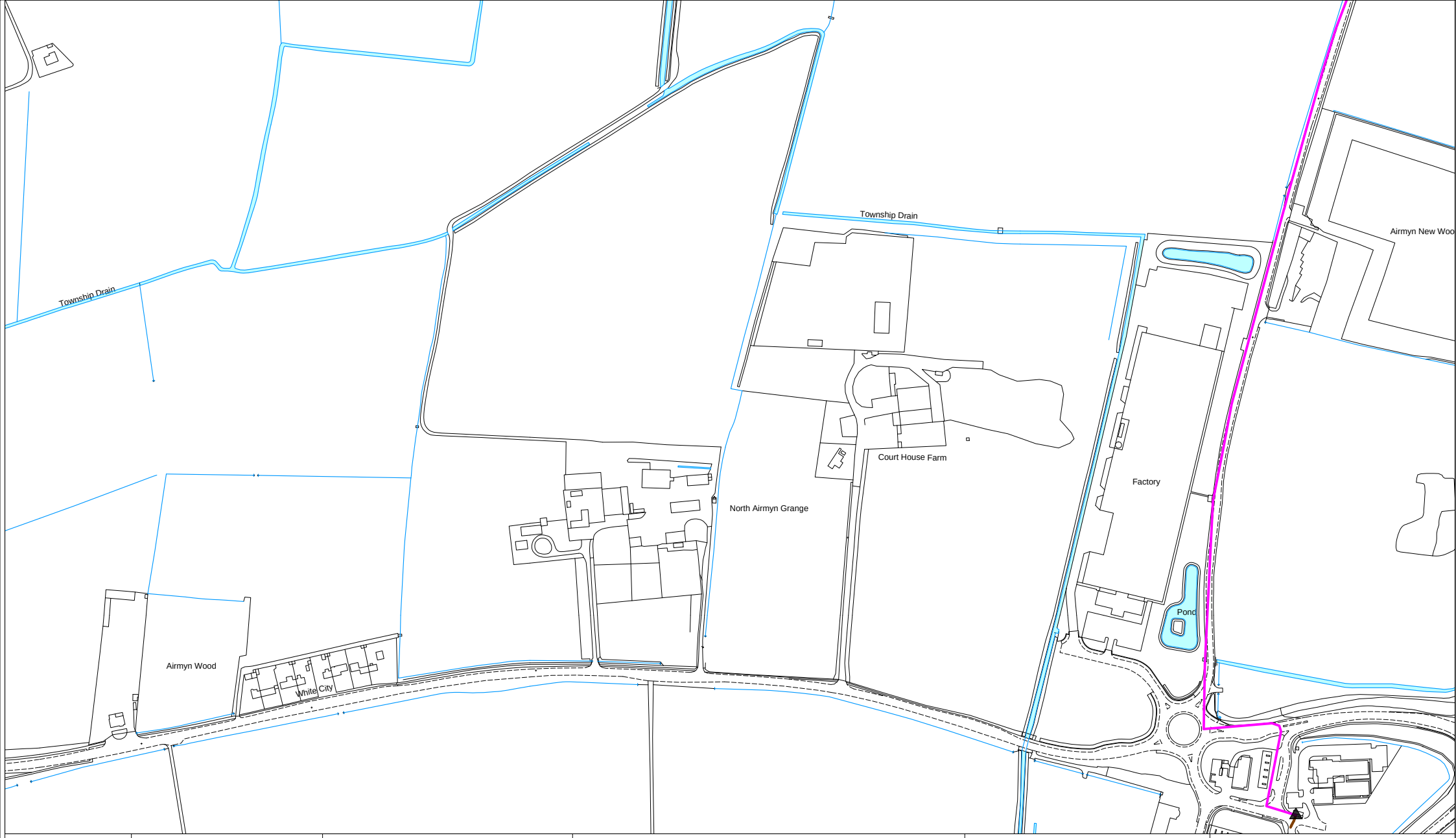
All the above comments are based upon the information and records available at the present time and is subject to formal planning approval agreement. The information contained in this letter together with that shown on any extract from the Statutory Sewer Map that may be enclosed is believed to be correct and is supplied in good faith.

YorkshireWater

Please note that capacity in the public sewer network is not reserved for specific future development. It is used up on a 'first come, first served' basis. You should visit the site and establish the line and level of any public sewers affecting your proposals before the commencement of any design work.

Yours sincerely

Chris Roberts
Development Services Technician



470523 : 423810	Map Name : SE7023NW	Title	Partial Key Foul Sewer = F Combined Sewer = C Surface Water Sewer = SW Trade Sewer = TD Partially Separate = PS
Yorkshire Water, PO Box 500, Halifax Road, Bradford BD6 2LZ Contact Name : YorMap Advisor C ROBERTS Contact Tel : 87 2582		Notes	This plan is furnished as a general guide only and no warranty as to its correctness is given or implied. This plan must not be relied upon in the event of excavations or other works made in the vicinity of public sewers. No house or property connections are shown.
			Date Req : 16/01/2024, 10:13:46 Source : Sewer Network Enquiry
			Date Gen : 16/01/2024, 10:13:48

UPN: Undefined Originator: C ROBERTS, YorMap, 87 2582

Appendix M

UK SUDS GREENFIELD RUN OFF RATES

Greenfield runoff rate estimation for sites

www.uksuds.com | Greenfield runoff tool

Calculated by:	Aaron Yesudian
Site name:	Delta Enterprise Park
Site location:	Goole

This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance "Rainfall runoff management for developments", SC030219 (2013) , the SuDS Manual C753 (Ciria, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Site Details

Latitude:	53.70803° N
Longitude:	0.91951° W
Reference:	608874908
Date:	Jan 24 2024 15:19

Runoff estimation approach

IH124

Site characteristics

Total site area (ha): 0.4

Methodology

Q_{BAR} estimation method:	Calculate from SPR and SAAR
SPR estimation method:	Calculate from SOIL type

Soil characteristics

	Default	Edited
SOIL type:	4	4
HOST class:	N/A	N/A
SPR/SPRHOST:	0.47	0.47

Hydrological characteristics

	Default	Edited
SAAR (mm):	596	596
Hydrological region:	3	3
Growth curve factor 1 year:	0.86	0.86
Growth curve factor 30 years:	1.75	1.75
Growth curve factor 100 years:	2.08	2.08
Growth curve factor 200 years:	2.37	2.37

Notes

(1) Is Q_{BAR} < 2.0 l/s/ha?

When Q_{BAR} is < 2.0 l/s/ha then limiting discharge rates are set at 2.0 l/s/ha.

(2) Are flow rates < 5.0 l/s?

Where flow rates are less than 5.0 l/s consent for discharge is usually set at 5.0 l/s if blockage from vegetation and other materials is possible. Lower consent flow rates may be set where the blockage risk is addressed by using appropriate drainage elements.

(3) Is SPR/SPRHOST ≤ 0.3?

Where groundwater levels are low enough the use of soakaways to avoid discharge offsite would normally be preferred for disposal of surface water runoff.

Greenfield runoff rates

	Default	Edited

Q_{BAR} (l/s):	1.6	1.6
1 in 1 year (l/s):	1.38	1.38
1 in 30 years (l/s):	2.8	2.8
1 in 100 year (l/s):	3.33	3.33
1 in 200 years (l/s):	3.79	3.79

Appendix N

CAUSEWAY FLOW CALCULATIONS

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	1.000	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
AT	0.400	5.00	100.000	1200	100.000	100.000	1.500

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	England and Wales	Skip Steady State	x
M5-60 (mm)	20.000	Drain Down Time (mins)	240
Ratio-R	0.400	Additional Storage (m³/ha)	20.0
Summer CV	1.000	Check Discharge Rate(s)	x
Winter CV	1.000	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
20	0	0	0
100	30	0	0

Node AT Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	98.500	Product Number	CTL-SHE-0054-1600-1500-1600
Design Depth (m)	1.500	Min Outlet Diameter (m)	0.075
Design Flow (l/s)	1.6	Min Node Diameter (mm)	1200

Node AT Carpark Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Invert Level (m)	98.500	Slope (1:X)	500.0
Side Inf Coefficient (m/hr)	0.00000	Time to half empty (mins)		Depth (m)	1.000
Safety Factor	2.0	Width (m)	66.500	Inf Depth (m)	
Porosity	1.00	Length (m)	5.000		

Results for 1 year Critical Storm Duration. Lowest mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	AT	690	98.721	0.221	7.5	73.3450	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)	Discharge Vol (m³)
960 minute summer	AT	Hydro-Brake®	1.2	62.2

Results for 20 year Critical Storm Duration. Lowest mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	AT	960	99.011	0.511	14.5	171.5206	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)	Discharge Vol (m³)
960 minute summer	AT	Hydro-Brake®	1.2	62.2

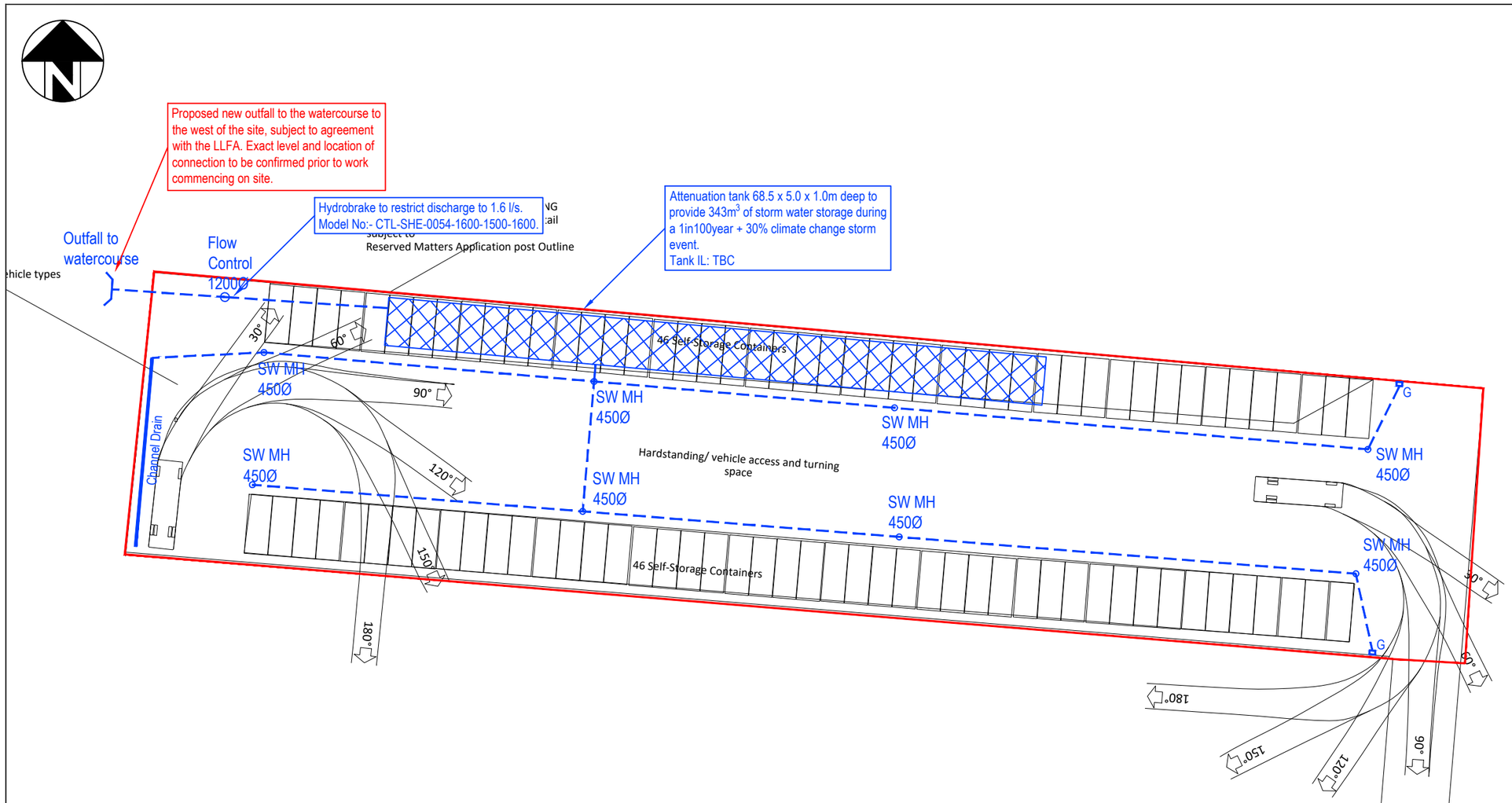
Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 99.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	AT	1380	99.998	1.498	12.5	340.6844	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	Outflow (l/s)	Discharge Vol (m³)
1440 minute winter	AT	Hydro-Brake®	1.6	110.5

Appendix O

DRAINAGE LAYOUT DRAWING



Drainage Strategy

Surface Water

Flow restriction 1.6 l/s.

Based on an impermeable area of 4,000m^2, and modeling using Causeway Flow software, the attenuation requirement for a peak return period of 1in100year + 30% climate change is 343m^3.

Attenuation will be provided via **ATTENUATION TANK 68.5 x 5.0 x 1.0m**. The flows will be attenuated by Hydrobrake model no: CTL-SHE-0054-1600-1500-1600.

Notes

The exact level and location of the outfall to the watercourse should be confirmed prior to work commencing on site.

Key:

Proposed Surface Water Drainage

NOTES

P1	Preliminary - Initial Issue	24/01/2024	JE

ANDREW MOSELEY ASSOCIATES
TRANSPORT AND DEVELOPMENT PLANNING CONSULTANTS

Project:
Holt Business Park,
East Riding

Client:
Dewar Planning Associates

Drawing:
Drainage Layout Drawing

Drawn By: JE	Date: 24/01/2024	
Checked: GS	Scale: 1:500	A3
Drawing No. AMA-22565-DS-001		Rev. P1

Andrew Moseley Associates, 15 St Paul's Street, Leeds, LS1 2JG

www.amatp.co.uk