The LLFA have agreed to the principle of this development having free discharge into the existing system.
The existing system outfalls into the adjacent watercourse through an appropriately sized attenuation pond.

Notes

Do not scale from this drawing.

To be read in conjunction with ARP Foul and Surface Water Drainage Strategy report 2176/02r2.

Design assumes that all works are not to be adopted.

Any existing live services will require diverting to accommodate the future development, if any present.

Drainage shown is approximate and subject to change at detailed design stage. Final position of rainwater downpipes may require additional lengths of drainage or amendments to the design. Similarly, road gullys have not been detailed at this stage and external works design may necessitate amendments to the strategy shown.

All drainage works shall be carried out in accordance with the relevant parts of BSEN 752 'Drains and Sewer Systems Outside Buildings', the current Building Regulations and the Local Authority Building Control specifications and requirements.

All new RWP's & SVP's connections to be 100mm dia (unless specified otherwise by the Architect). Gully connections to be 150mm dia.

Location of proposed trees and proposed drainage to be coordinated at detailed design stage. Special protection measures such as root barriers may be required where drains are located close to trees. Trees to be planted in appropriate growing medium to minimise risk of damage to drains.

Existing Infrastructure

- Previously installed concrete stub pipes are available for the surface water discharge outfall for this proposed development, located in the northeast corner of the application site. These are connected to the 'wider site' drainage system, and outfall into a purpose made attenuation pond, with a pumped outfall into the watercourse adjacent to the site.
- The location of the proposed connection point is labelled 'MHS01' on Millward Drainage Layout Plan drawing, reference MA11168-200 revision B, dated 30th March 2021. The downstream pipe from MHS01 is shown to be a concrete pipe, 375mm in diameter.
- Between the application site to the balancing pond, the drainage pipes increase in diameter from 375mm to 675mm diameter, as shown on drawing Southern Area Drainage Strategy As-Built drawing, prepared by BSP Consulting, reference 14494-240-Z and dated 6th June 2017.
- It is proposed that utilising the existing stub connection(s) will be most appropriate method of drainage for the proposals.

Summary:

- Completed engineering works within the vicinity of the current application site include provision of new access roads to serve a petrol filling station, restaurant, takeaway and hotel
- The access roads to those developments are drained by road gullies, outfalling into concrete carrier pipes laid underneath the roads.
- Surface water from the new developments outfalls into the same concrete carrier pipes.
- The pipes outfall into a balancing pond, located approximately 150m to the northeast of the current application site.
- The balancing pond is shown to outfall into the adjacent watercourse via a pump station.
- Concrete stub pipes are available for this application site, located to the north of the site, and are 375mm in diameter.
- Between the application site to the balancing pond, the drainage pipes increase in diameter from 375mm to 675mm diameter.

Drainage Strategy

Existing stub pipes are present to the northeast of the site. The surface water from the development is to connect into this system. Car parking and seating areas to be drained by permeable paving connecting into new pipework, outfalling into the existing drainage system. The carriageway between the parking bays to have surface levels constructed with crossfall, to enable direct run off to permeable paving and gully locations.

The roof area of the proposed building to be connected to a system of SuDS planters. Indicative locations of SuDS planters are shown. Remaining flow to be conveyed to the car park system.

All other areas to be landscaped subject to detailed design proposals. Areas around the building are to be surface level and drained by the proposed system.

Both the proposed Surface Water and Foul Water connection point are to the existing systems to the north of the site. The LLFA have agreed with the overall strategy. The exact arrangement is subject to agreement with the Regulatory Authorities. As detailed within the Foul and Surface Water Drainage Strategy report undertaken by ARP, reference 2176/01r2, the authorities have been consulted on the strategy. The existing system location, cover level, invert level and condition will need to be verified prior to any works commencing.

PLAN SCALE (1:250)

CURRENT PROPOSED SITE AREA @ 4005m
0.99 acres approx

45 CAR PARKING SPACES
INC. 4No. DISABLED PARKING SPACES

4No. LARGE ORDER BAYS

SPACE FOR DELIVERIES TO REVERSE

SHARED DELIVERY BAY

DELIVERY BIKES

PATIO

KFC 295 MODEL (1 WINDOW) 281.7m² / 3032ft²

TACO BELL (1 WINDOW) 193.8m2 / 2086sqft

COLLECT WINDOW

NOTE

New connection into existing network. Approval of connection to be confirmed by Regulatory Authorities. Line, length and depth of drainage to be confirmed prior to any works commences on site.

Arrangement shown is approximate, intended to demonstrate principles. Exact arrangement subject to further design and hydrological assessment.

MH CL2.259
NO LID
MH CL2.158
CONC
SIGN

SUBJECT TO THE APPROVAL OF ALL RELEVANT AUTHORITIES AND DETAILED DESIGN

Further rain gardens should be considered on southern and eastern parts of the site to increase the bioretention on the site.

The connections from the permeable paving, rain gardens and SuDS planters should be via catch pit manholes to catch debris before it enters the main site drainage system. Alternatively, sub-base diffusers could be used, then the downstream connecting manhole will be the catchpit.

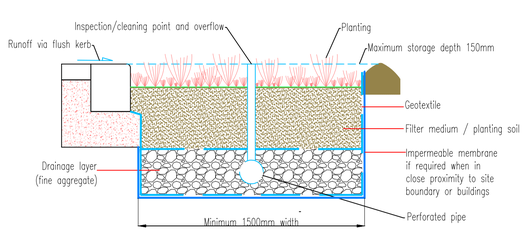
Grease traps may be required for the foul water discharge.

NOTES

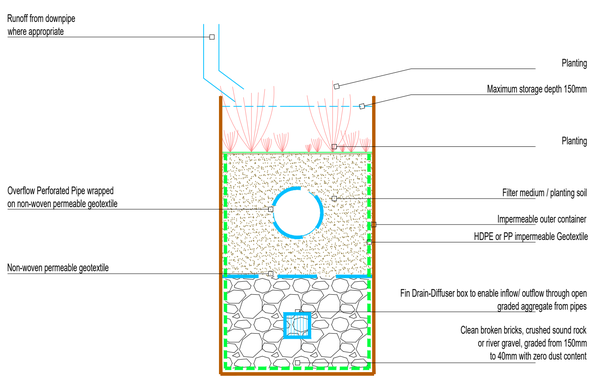
ATTENTION IS DRAWN TO THE REQUIREMENTS OF THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015 AND THE DUTIES AND RESPONSIBILITIES CONTAINED THEREIN

KEY

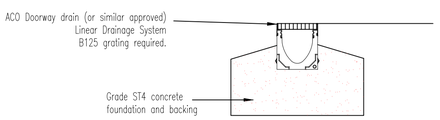
- Site Boundary
- Storm Water Pipe and Inspection Chamber
- Foul Water Pipe and Inspection Chamber 450ø
- ACO — Linear Channel Drain (min B125 grade cover)
- Building Footprint
- Porous Paving
- Direction of Indicative Fall, subject to detailed design
- Car Park road (Tarmac)
- Footpath
- Landscaping
- Proposed Suds Planter
- Proposed bio-retention rain garden



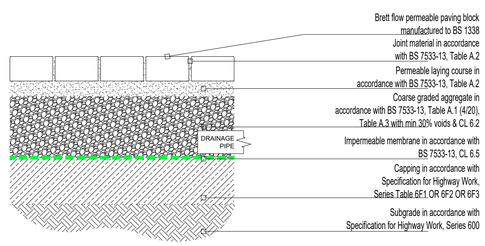
NDICATIVE BIO-RETENTION RAIN GARDEN DETAIL
(1:10)



SuDS PLANTER DETAIL
(1:10)



ACO DRAIN
(1:10)



PERFORATED PIPES NEED SUFFICIENT COVER TO CARRY VEHICLE LOADS

POROUS PAVEMENT CONSTRUCTION
(1:10)

Rev	By	Date	Revision	Chk	Apvd
/	PSC	28.05.21	Issued for approval	MI	MI

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ARP Associates is a trading division of ARP Geotechnical Ltd, a company registered in England and Wales with company number 3771811, whose registered office is at 5/6 Northwest Business Park, Servia Hill, Leeds LS6 2QH

TITLE
INDICATIVE SUSTAINABLE URBAN DRAINAGE STRATEGY

PROJECT
KFC/TACO BELL, LINCOLNSHIRE GATEWAY

CLIENT
ERINDALE LIMITED

DRAWING STATUS
PRELIMINARY

Scale	Date	Drawn
1:250	MAY 21	PSC
		Chk. MI

Drg. No. 2176/01/SK01 Rev —