



General Notes

- All dimensions are in metres unless otherwise stated.
- All levels are in metres.
- This drawing is to be read in conjunction with all relevant Engineers and Architect's drawings, Specifications, Reports and Engineering Details.
- Do not scale from this drawing.

Drawing Key

- Site boundary - Taken from site layout referenced
- FFL=4.200 Finished floor level
- +3.00 + Proposed ground level
- + Existing ground level
- 1.5% Proposed gradient
- 4% Exposed brickwork - starting 150mm below DPC, 4C = No. of course exposed
- DDPC Double damp proof course - between FFL and 150mm below FFL
- Retaining wall
- Gravel board
- Part M level access
- Part M ramped access
- Permeable paving
- Extent of swale and detention basin to be offered for S104 adoption
- Proposed road contours
- Tree Root Protection Area (Taken from CBE Consulting tree survey report "P2473/0122/01" Rev 2)
- Section 38 adoptable linear kerb drainage system
- Linear drainage channel
- Amended Path

Health, safety & the environment

In accordance with the Construction (Design and Management) Regulations 2015, the designs and details on this drawing have been the subject of a Designers Risk Assessment, to identify risks in the construction, use, or demolition of the scheme.

It is not considered necessary for Designers to highlight obvious and/or common risks (such as deep excavations, manual handling and working around heavy plant) which Contractors should be familiar with, and be able to control by good management and site practices.

So far as is reasonably practicable, the risks inherent in the design have been eliminated. Where it has been considered that elimination of a risk (or part of a risk) is not reasonably practicable, it has been reduced.

This drawing has been based/developed using the following external drawings

Type	Company	Drawing date	Drawing title	Date received	Rev
Site Layout	JGA Architects	04.05.2022	20050 0102-POS Proposed Site Layout-Model Space	04.01.2023	POS
Topographical survey	EMP Surveys LTD	July 2022	2023_Pinchbeck & Topographical Survey_Final	04.01.2023	POS

Agreement	Approval Granted
S23 (Land drainage consent)	NOT APPROVED
S104 (Adoption of sewers)	NOT APPROVED
S278 (Works in existing highway)	NOT APPROVED
S106 (Foul connection)	NOT APPROVED

High Groundwater and Trench Instability

Deep Made Ground present within area of proposed detention basin and plots 13-22 (exact extents of Made Ground unknown). Constant inflow of groundwater and excavation collapse encountered in this area during ground investigations. There is also the risk of trench instability and high groundwater across the site. Excavations have been limited where possible by raising site levels.

Geogrid required - design to be undertaken by a specialist. Allowance to also be made for removal of Made Ground.

Prior to commencing works the Contractor is to familiarise themselves with the ground conditions detailed within the Elemental GI Ltd Phase 1 Geo-Environmental Investigation Report (Jan 2022, Ref: E21142/2/1) and the findings of JPP Geotechnical additional ground investigations undertaken in February 2023. The Contractor is to ensure suitable safe working practices are followed in accordance with current best practice. The Contractor is to ensure the excavations are suitably managed with supports or benching to prevent collapse, and de-watering / pump equipment in place where required. Excavations are not to be left open for long periods.

Site Wide Build-Up

Levels across the site have been lifted significantly above existing ground levels to allow for the following:

- To allow surface water drainage to drain to the existing ditch at the southern side of the site by gravity.
- To avoid deep foul drainage required to allow the site to drain to the existing AW manhole by gravity (alternative solution is to pump foul flows via a rising main).
- To limit excavations required for drainage and services in the unstable ground and Made Ground, where high groundwater is present.

A geogrid will be required under all road, footway, parking areas and patios due to low strength soils (CBR values have been shown to range from 5.2% to 0.3%) and deep Made Ground. Geogrid to be designed by a specialist.

Allowance to be made for Geogrid to extend below all manholes and inspection chambers, and also to cover PDS and garden areas where there is a risk of future settlement. Fill material specification also to be advised by Geotechnical Engineer to reduce risk of settlement - allowance to be made for removal of Made Ground material.

ALL WORKS WITHIN THE ADOPTABLE PUBLIC HIGHWAY SHALL CONFORM TO THE CURRENT "LINCOLNSHIRE DEVELOPMENT ROADS & SUSTAINABLE DRAINAGE DESIGN GUIDE" AND "DEVELOPMENT ROAD AND SUSTAINABLE DRAINAGE SPECIFICATION AND CONSTRUCTION" PUBLICATIONS IN FORCE IN THE COUNTY AT THE TIME OF CONSTRUCTION.

ALL ADOPTABLE DRAINAGE WORKS TO BE IN ACCORDANCE WITH CODES FOR ADOPTION DESIGN & CONSTRUCTION GUIDANCE

DRAWINGS HAVE NOT BEEN APPROVED, UNTIL THE DRAWINGS ARE APPROVED THE DESIGNS AND DETAILS SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE.

ANY WORKS UNDERTAKEN PRIOR TO TECHNICAL APPROVAL IS ENTIRELY AT THE CONTRACTORS' RISK.



Online Detention Basin
Online detention basin designed to accommodate for all flows up to and including the 1 in 100 year storm events +40% climate change allowance, prior to discharging into the existing watercourse at a controlled flow rate.
Basin base level: 2.625
Max water level: 3.225
Top of freeboard level: 3.625
Basin volume at max water level: 638m³
Depth of attenuation: 0.6m
Freeboard: 0.4m
Impermeable liner required to basin due to high groundwater - to be designed by specialist.
Basin designed in accordance with SUDS Design Manual C753. Basin to be offered for adoption to Anglian Water as part of S104 agreement