

Hillingdon Council
Civic Centre
High Street
Uxbridge
UB8 1UW

MJH/CES/30500

18 July 2025

Dear Sirs,

Drainage Assessment – Revision 0

Proposed Replacement Waste Transfer Station Building. High View Farm, Newyears Green Lane, Harefield, Newyears Green, Uxbridge, UB9 6LX

This Drainage Assessment (DA) has been prepared to accompany a planning application, for a replacement waste transfer station building, at the above address. This assessment sets out how surface water will be managed using sustainable drainage principles, in line with relevant planning policy. The proposed scheme reuses the existing drainage network, which includes aboveground attenuation and provision for water reuse, in line with preferred approaches of the drainage hierarchy. As the proposal is for a replacement building within an entirely impermeable brownfield site, no increase in runoff is expected, and the existing discharge arrangement, remains suitable and unchanged.

The existing site comprises a waste transfer building, ancillary buildings, and an existing access and hardstanding. All the land within the site that is proposed to be altered is laid to hardstanding either in the form of a roof or in the form of impermeable surfacing e.g. concrete. Refer to Drawing No. GPP/E/WLC/WTS/24/02 in the **Drawings Appendix**.

The proposal is for the demolition of the existing waste transfer building and the smaller building to the north-west, and construction of a new, slightly larger waste transfer building, refer to Drawing No. GPP/E/WLC/WTS/24/03 in the **Drawings Appendix**. The location of the proposed building is currently entirely impermeable.

It should be noted that the proposal is for a replacement building within a brownfield site, not a new development on greenfield/undeveloped land.

The existing drainage scheme for the site comprises of an attenuated system which utilises above ground rainwater tanks before being piped north along the existing access, then west parallel to Newyears Green Lane before outfalling to a drainage ditch to the north-west of the site.

The client has confirmed the site will utilise this same drainage network that currently serves the existing site. Two tanks located behind the replacement building will capture the surface water runoff from the roof and allow the water to be reused for fire and dust suppression purposes. When this is not required the water will outfall to the existing drainage network, and discharge at the same rate to the drainage ditch. The replacement building should not lead to a change in runoff rates from the site.

Pollution control measures should be incorporated into the design of the surface water drainage scheme, in accordance with C753 The SuDS Manual, The Environment Agency's approach to Groundwater Protection,

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and local guidance produced by the LLFA to minimise the risk of pollution entering into the ground or surface waters.

The water quality management is required to minimise the risk of pollution to the surface waters, groundwater and source protection zones.

The Simple Index Approach (SIA) Tool, developed on behalf of SEPA supports the implementation (in Scotland) of the water quality management design methods set out in C753 The SuDS Manual. Whilst there are some differences in the required approach in England, Wales, and Northern Ireland, if the tool is used in these regions, the relevant supporting 'Design Conditions' stated by the tool must be fully considered and implemented. Water quality design criteria and standards are set out in Chapter 4 of C753 The SuDS Manual. Table 4.3 in the Manual sets out the minimum water quality management requirements for discharges to receiving surface waters and groundwater. Use of the SIA is one of the key methods for low to medium land use hazard classifications.

As detailed by the land use hazard indices, roofing has a Very Low pollution hazard level where it is necessary to remove gross solids and sediments only. Therefore, surface water runoff from the proposed roof areas will be treated by silt traps. Use of the SIA Tool is not required for roofs. It is also worth noting that the runoff from the site passes through an oil separator before leaving the site, which provides additional water quality treatment.

To reduce the risk of flooding due to the failure of the surface water drainage system over its lifespan, regular maintenance should be undertaken. The long term maintenance and repair of the surface water drainage system is the responsibility of the site owner and will be included within their general maintenance regime.

The drainage scheme is not proposed to fundamentally change as the existing method of drainage (water reuse, followed by discharge to the ditch) is still the most suitable at the site. As part of the new application, rainwater tanks will be located at the end of the building. These will provide amenity and allow the reuse of water as part of the sites processes. The tanks should be sized during the detailed design phase following planning permission being granted.

The scheme aligns with the principles of the water cycle strategy: water use will be reduced through roof runoff capture, reused on-site for fire and dust suppression, and only discharged off-site when not needed, with runoff rates matching existing flows. The drainage will be maintained by the site owner, and form part of their existing maintenance programme. As such, the drainage scheme currently utilised by the site is still appropriate for this proposed replacement building application.

Yours faithfully,

Chloe Spencer M.Sc, AMIEnvSc
Senior Environmental Consultant
For and on behalf of PDC Engineering

Enclosures:

Drawing Appendix:

Drawing No. GPP/E/WLC/WTS/24/02 – Proposed Waste Transfer Station Building - West London Composting, Newyears Green Lane, Harefield, Uxbridge, Existing Site Layout Plan.

Drawing No. GPP/E/WLC/WTS/24/03 – Proposed Waste Transfer Station Building - West London Composting, Newyears Green Lane, Harefield, Uxbridge, Proposed Site Layout Plan.

DRAWINGS APPENDIX







Civil engineering and building

- Industrial, Commercial, Agricultural and Domestic building design
- Foundation Design and ground improvements
- Highway Engineering including Civil 3D
- Retaining walls
- Sheet Piling
- Infrastructure planning and design
- Design of sustainable drainage system (SUDS)
- Soakaway design
- Architectural design of industrial buildings
- Planning and building regulation applications

- 3D conceptual models
- Renewable Energy Civil Engineering design and project management
- Anaerobic Digestion and Waste to Energy Project design and detail



Environmental engineering

- Contaminated Land reports
- Environmental impact assessments (EIA)
- Flood Risk Assessments
- Water supply, treatment, storage and distribution
- Foul and surface water & effluent/leachate drainage design

- Drainage network modelling
- 1D & 2D flood modelling
- Hydraulic river modelling
- Flood Alleviation
- Breach & overtopping analysis
- Reservoir flood inundation modelling

- Consent to discharge applications
- Environmental Permits
- Nutrient Neutrality



Structural engineering

- Structural calculations for Commercial, Agricultural and Domestic building design
- Structural design using steel, stainless & carbon steel, concrete, timber and masonry
- Maritime and Hydraulic structures

- Structural surveys and structural suitability surveys
- Structural failure studies
- Subsidence claims
- 3D Finite Element Analysis
- Structural monitoring

- Structural enhancement/ remedial work
- Historic building advice
- 3D Revit & Level 2 BIM structural design & modelling



Surveying land and buildings

- Geomatic / topographical site surveys
- Building, Road, and Earthworks Setting out
- Engineering Setting out
- Establish precise site survey control
- 3D digital terrain modelling

- Volumetric analysis
- Site area computations
- Flood risk surveys using GPS active network
- Measured building floor plans and elevation surveys
- Land transfer plans to Land Registry requirements

- Drainage network surveys
- Assistance/Expert witness in land boundary disputes
- Deterioration monitoring
- Preparation of asset plans
- As built record surveys



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