March 2020

MA11242 Sunnydale Close, Surfleet
DRAINAGE and SuDs MANAGEMENT STATEMENT

Drainage Strategy

The detailed design drawings and drainage design for this site is in accordance with the planning approved FRA Report (**MA11242 FRA/DS-R01**) and drainage strategy drawing MA11242-200.

The drainage strategy drawing MA11242-200) submitted for planning approval confirms the approved preliminary surface water discharge rate at 3.96l/s. This is the rate to which the detailed design has been designed to.

The strategy within the planning approved Drainage Strategy Report confirms adopted highways draining via roadside filter drains with private roof drainage draining either direct into the permeable pipework of the under-drained filter drains or into private permeable pavements before outfall into the perforated pipework via a privately maintained silt trap.

The road side filter drains are primarily for conveyance, whilst also providing some storage in the higher storm events. Private offline attenuation is provided for all storms up to and including the 1 in 100 year event including an allowance for 40% climate change plus 6% urban creep within the private attenuation tanks across the site.

Outfall to the south of the site is controlled by a vortex flow control manhole positioned downstream of the attenuation controlling the outfall rate to 3.96l/s maximum for all storms up to and including the 1 in 100 year plus 40% climate change event.

SUDS Adoption

In terms of SUDS adoption the road side under-drained filter drain tops (grassed areas and stone underneath) are to be maintained by LCC and the perforated pipework within these filter drains is to be adopted by Anglian Water under a S104 agreement.

The foul piped network is to be adopted by Anglian Water under a S104 agreement.

Permeable pavements on driveways are privately maintained by the owner of the dwelling the driveway relates to and shared driveways are the cumulative responsibility of the owners. (Which will be confirmed in the conveyance for each plot.)

The attenuation tanks across the site are to be privately maintained by a management company as part of their overall maintenance responsibilities for the overall site (including POS and other communal landscaped areas).

Method Statement During Construction

- SW Discharge: During construction of the drainage system it is advised that the system is constructed from the outfall upstream. This will allow any flows that are conveyed to discharge appropriately from site in a controlled manner.

- S104 Manholes: The use of a trash screen on the last manhole before the outfall will prevent debris from the site entering the existing system or watercourse.

- Permeable paving: The perforated pipe connecting the system to the network should be laid prior to the pavement system. The water would be then able to pass through the stone prior to the surface course being laid.

- Roadside Filter Strips: Prior to the surface course being constructed the water will need to convey into the filter strips. Drawing MA11242 – 604-1 Interium SuDs Drainage Detail shows this.

- Attenuation Tanks: Storage required should be installed prior to the upstream network being connected in.

- All features should be inspected and cleaned once construction is completed by removing silt and debris that has formed during construction.

SUDS Maintenance

Maintenance of the SUDS features within this site is outlines as follows;

<u>Permeable Paving – (Owners for Driveways, Management Company for Private Shared Areas)</u>

- Annual Inspection of the silt traps within the driveway and clear of any silt or debris.
- Annual cleaning of blocks surface to clear debris or weeds within joints.

<u>Roadside Filter Drain Tops -Lincolnshire County Council</u>

- Grass cutting and litter removal on a three month rolling timescale basis or as deemed required by LCC.

<u>S104 Manholes and Perforated Pipes– Anglian Water</u>

- Annual visual inspection to check for silt build up or blockages (remove silt debris as necessary).

- Jetting of pipework in accordance with Anglian Water.

Aquacell Attenuation Tanks- Management Company

- Visual inspection at every inspection point is recommended: at 6-month intervals.

- Silt traps prior to inlet pipework should be routinely inspected and cleaned out at 6-month intervals to minimise debris reaching the tank. It is important to prevent construction silt from entering the AquaCell structure.

Vortex Flow Control Manholes – Anglian Water

- Annual visual inspection to check for silt build up or blockages (remove silt debris as necessary).
- Jetting of pipework in accordance with Anglian Water maintenance requirements at 6-month intervals.

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For and on behalf of Millward