



SUSTAINABLE DRAINAGE AND LANDSCAPE MANAGEMENT PLAN FOR FORMER CASTLETON SIDINGS, ROCHDALE

1.0 An introduction to sustainable drainage systems or SuDS

SuDS are a new environmentally friendly approach to managing rainfall that uses landscape features to deal with surface water. SuDS aim to:

- Control the flow, volume and frequency of water leaving a development area
- Prevent pollution by intercepting silt and cleaning runoff from hard surfaces
- Provide attractive surroundings for the community
- Create opportunities for wildlife

2.0 SuDS at Castleton Sidings, Rochdale.

The site is a brownfield site, which originally drained unattenuated into a culverted, which in turns outfalls into Trub Brook to the south of the site.

Unfortunately due to the underlying ground conditions soakaways are not suitable for this site.

Through negotiation with Rochdale Council's LLFA the surface water discharge rate was agreed to be restricted to 90l/s for the 1 in 100 year event (plus 45% climate change). The storage will be held in oversized pipes and an online storage crate.

In the same email the LLFA advised at the time that a pond would be less expensive than buried tanks, but would 'leave the details to ourselves', therefore to maximize usable public open space underground we required. (See Appendix A)

3.0 Managing the SuDS / Landscaped areas

The underground storage crates and landscaped areas have been designed for easy maintenance to comprise:

The Plan contained in Appendix B shows the areas to be maintained by the proposed Management Company have been coloured blue and green on the plan, with the pink areas being either maintained by the residents of Rochdale Councils Highways Department.

The Sewers shown coloured Red and Blue on the Section 104 Plan contained in Appendix C will be maintained by Murphy Group once the site has completed the 12month maintenance period and Kellen Homes have completed any remedial works required by Murphy Group.

Kellen Homes will undertake all maintenance works until such time the areas are adopted.

These works will include the following:

- Regular “day to day” care - litter collection, grass cutting and checking silt traps, inlets and outlets where water enters or leaves a SuDS feature.
- Occasional tasks - managing vegetation and removing any silt that builds up in the SuDS features
- Remedial work - repairing damage where necessary

4.0 SPILLAGE – EMERGENCY ACTION

Most spillages on development sites are of compounds that do not pose a serious risk to the environment if they enter the drainage in a slow and controlled manner with time available for natural breakdown in a treatment system.

Therefore small spillages of oil, or other known organic substances should be removed where possible using soak mats as recommended by the Environment Agency with residual spillage allowed to bio-remediate in the drainage system.

In the event of a serious spillage, either by volume or of unknown or toxic compounds, then isolate the spillage with soil, turf or fabric and block outlet pipes from chamber(s) downstream of the spillage with a bung(s). (A bung for blocking pipes may be made by wrapping soil or turf in a plastic sheet or close woven fabric.)

Contact the Environment Agency immediately.



5.0 Typical SuDS and Landscape Maintenance – Summary

		Frequency
	REGULAR MAINTENANCE	
1	LITTER MANAGEMENT	
1.1	Pick up all litter in SuDS and Landscape areas and remove from site	12 visits monthly
2	GRASS MAINTENANCE – all cuttings to wildlife piles	
2.1	Mow all grass verges, paths and amenity at 35-50mm with 75mm max. Leaving grass in situ	As required or monthly
2.2	Mow all dry swales, dry SuDS basins and margins to low flow channels and other SuDS features at 100mm with 150mm max. Cut wet swales or basins annually as wildflower areas	4-8 visits as required Annually
2.3	Wildflower areas trimmed to 50mm in Sept or at end of school holidays Or Wildflower areas trimmed to 50mm on 3 year rotation 30% each year	1 visit annually 1 visit annually
3	INLETS AND OUTLETS	
3.1	Inspect monthly, remove silt from slab aprons and debris. Strim 1m round for access if required.	4 visits yearly
4	WETLAND AND POND VEGETATION	
4.1	Wetland vegetation to be cut at 100mm on 3 – 5 year rotation. 30% each year. All cuttings to be removed to wildlife piles or from site.	As required
5	SILT MANAGEMENT	
5.1	Inspect crates, swales, ponds and wetlands annually for silt accumulation	4 visits yearly
5.2	Excavate and remove silt	As required
	REMEDIAL WORK	
6	Inspect SuDS system regularly to check for damage or failure. Undertake remedial work as required.	As Required



APPENDIX A

Charles Townsend

From: Stephen McCann <Stephen.McCann@Rochdale.Gov.UK>
Sent: 09 July 2021 12:24
To: ElannaHerod@campbellreith.com; Tom Foster
Cc: GarryTaylor@campbellreith.com
Subject: RE: QUESTIONS re. Confirmation of future Discharge of rate - to culvert : Castleton, Rochdale - Discharge Rate Enquiry
Attachments: Land Ownership queries - Castleton Sidings - notes.pdf
Follow Up Flag: Follow up
Flag Status: Flagged

Hello Elanna and Tom

I looked at the Campbell Reith CAD drawing of the brownfield areas for the site and I'm happy with your calculation with 30% reduction i.e. SW discharge flow rate of 90 l/s (rounded up from 87.6 l/s).
The design of your proposed vortex control should be for this. I'm not sure what attenuation measures you will include?

A pond is less expensive than a buried attenuation tank?
One way to reduce runoff is to have some impermeable surfaces for parking areas.
Perhaps there is scope for a pond on the southern boundary? However, I leave the details to you.

It's worth noting that Land Registry does not have a known owner for Areas A and B on the appended Plan. Area C is the farmer, as you know.

Stephen McCann
Drainage & Flooding Engineer
Highways, Property & Strategic Housing



ROCHDALE
BOROUGH COUNCIL

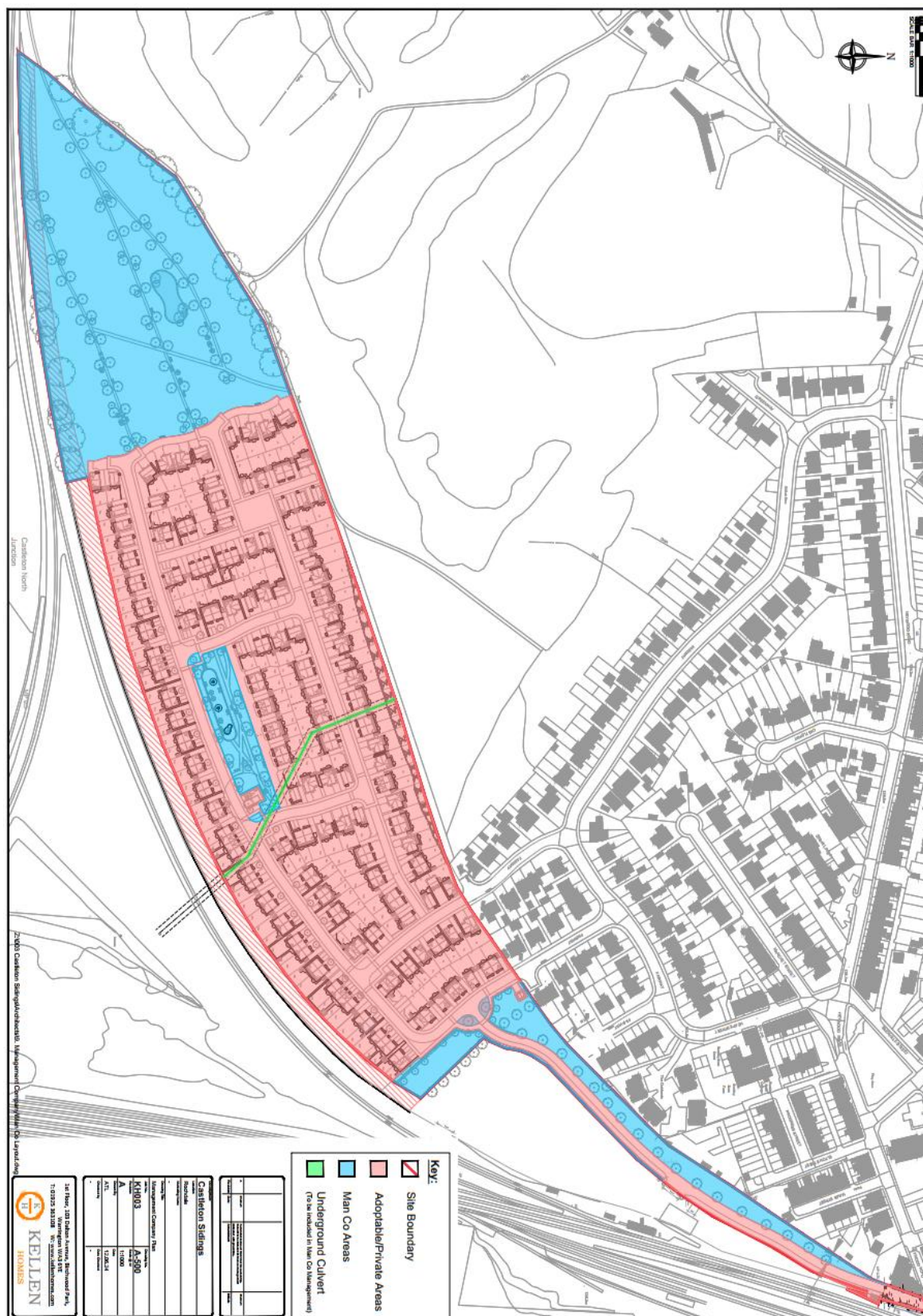
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APPENDIX B



Management Company Plan

Appendix C

