

5.10 Servicing & refuse collection

The refuse strategy has been considered with regard to the requirements of HDC. The network of streets has been designed to provide routes which are suitable for refuse collection vehicles. Refuse vehicle turning areas can be accommodated within the site to ensure compliance with the refuse carry and collection distances.

Refuse and recycling will be stored within each dwelling's private garden in designated bin and caddy locations prior to collection. Provision will be made in accordance with HDC requirements.

- KEY
- 

Site access
- 

Refuse vehicle swept path
- 

Refuse stores in back gardens



Refuse collection strategy diagram

5.11 Drainage

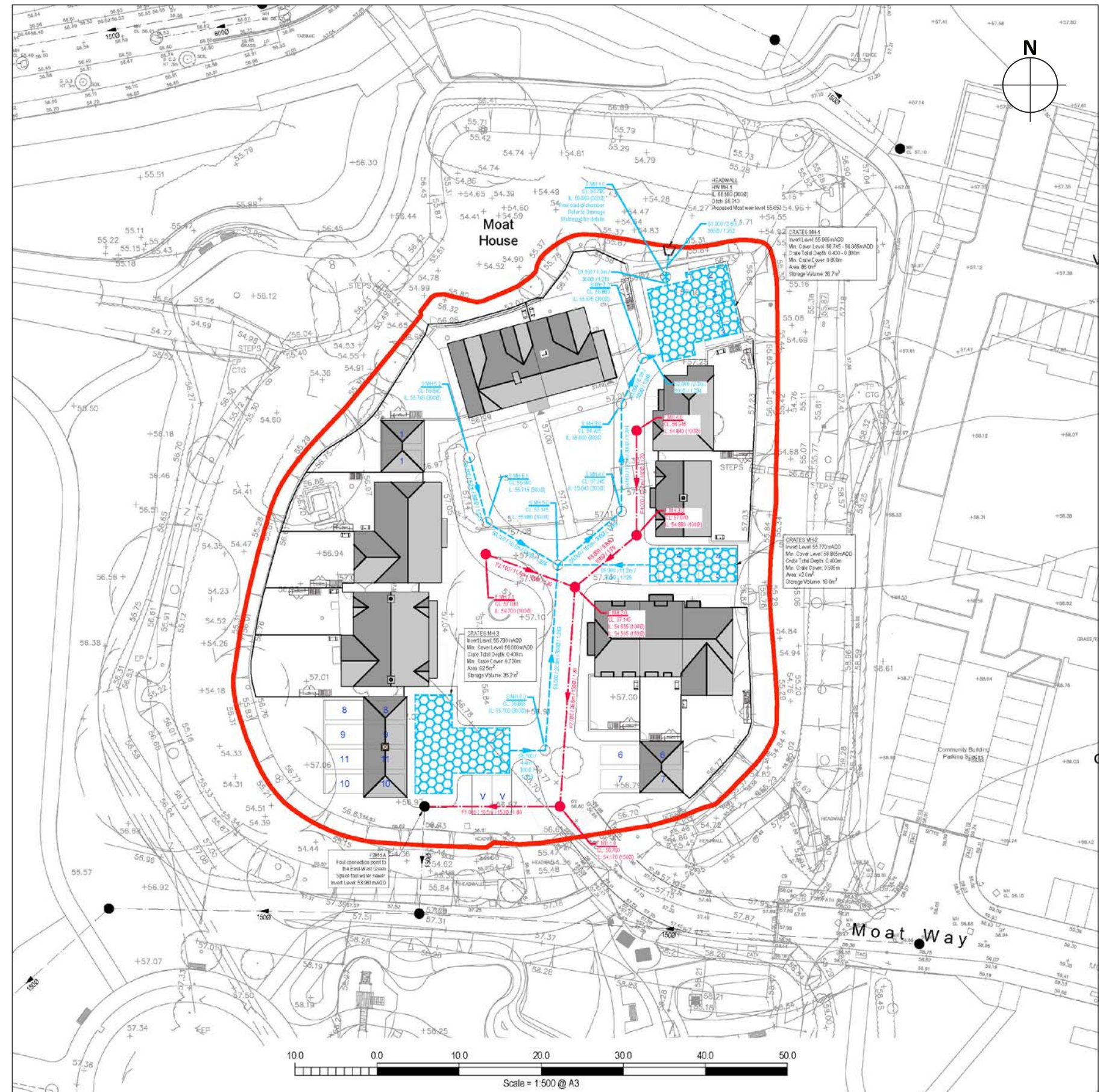
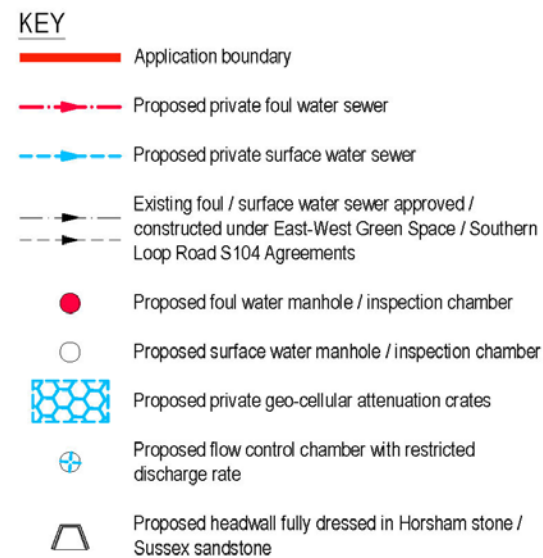
A Drainage statement has been prepared by Glanville provides details of the proposed drainage infrastructure to accommodate the disposal of surface water run-off and foul water in accordance with Conditions 54 and 55 of the outline planning permission.

Surface water

The surface water drainage strategy demonstrates that there will be no flooding for all storm events up to and including the 1 in 100 year storm event, with a 20% allowance for the effects of climate change. Flood risk on-site will therefore not increase either on-site or elsewhere as a result of the development.

Foul water

Foul water generated by RM Area 11 will be conveyed via a private drainage system, which will discharge flows into the foul water drainage network serving Phase 1 via an existing manhole constructed as part of the East-West Green Space and drain to the adoptable pump station FWPS2, which has been built.



Drainage layout (Glanville)

5.12 Sustainability and energy saving principles

Through the incorporation of sustainable design and construction methods, energy and water saving measures, sustainable transport methods, and waste reduction techniques, a high quality and sustainable development is proposed.

Energy Strategy

An Energy Strategy Statement has been produced Briary Energy to inform the application. It examines the feasibility of suitable Low to Zero Carbon (LZC) sources, high-efficiency alternative systems, and low carbon energy efficiency measures. The energy strategy has been developed using the assessment tools that are currently available and demonstrates full compliance with the current Building Regulations requirements, and the requirements of HDC. The strategy for reducing energy use and associated carbon emissions through the design of the scheme follows the energy hierarchy of ‘Be Lean’, ‘Be Clean and ‘Be Green’.

The planning policy for the development requires that demand reduction measures are implemented to achieve an improvement of Building Regulation standards or better, over Part L1 2021 standards.

Provisional SAP assessments for a range of proposed house types have defined a Target Emission Rate for each type. From these, and based on the quantity of each type, a development baseline average carbon emissions target (TER) figure of 11.70 has been estimated. This sets out a site average baseline for the Building Regulation Target Emission Rate.

Energy demand reduction has been prioritised as part of the widely supported ‘fabric first’ approach. The benefits to residents of this approach have been discussed in detail and include improved thermal comfort, lower energy bills, reduced risk of fuel poverty, and minimal maintenance requirements. These benefits are realised alongside the crucial long-term reduction in energy demand built into the lifetime performance of the dwellings.

It is proposed that Air Source Heat Pumps (ASHPs) be adopted for the development for the following reasons:

- Heat pump systems reduce carbon emissions and have an efficient conversion rate from energy to heat. ASHPs can reach high efficiencies, with Coefficient of Performance (CoP) as high as 4.5, so for every 100% of electricity used the pump can produce 4.5 times the heat.
- Moving away from fossil fuel heating is in line with government policy and the proposed Future Homes Standard.
- Increased generation of grid electricity from renewable sources has reduced the associated carbon costs of electric heating.
- Heat pumps require less maintenance than a combustion heating system. Depending on the size of the units they only require inspection by a professional every 3-5 years
- Future proof heating system ready for regulation changes

Applying this approach through a combination of the proposed fabric specification, detailing to avoid thermal bridging, reducing air leakage, and employing passive and active design measures, the dwellings will secure a site average fabric efficiency of 6.08%.

By following the proposed Be Lean fabric targets, together with the application of the Be Clean and Be Green measures outlined, the SAP assessments of the proposed house types demonstrate that the development will achieve a site average DER figure of 6.44. This improvement in carbon emissions (DER) over the baseline (TER) represents an estimated average carbon emissions reduction (DER/TER) across the site of 48.92%.

Water Efficiency

Use of a Water Efficiency Calculator is essential to ensuring compliance with Part G and that the water consumption of the residential dwellings is limited to 110 litres per person per day. In addition, water efficiency is considered during the construction process to ensure practices on site will also reduce usage and waste.



Materials

Where practical, new building materials will be sourced locally to reduce transportation pollution and support the local economy. New materials have been selected based on their environmental impact and responsible suppliers will be used where possible.



Sustainable Transport

The site will provide cycle parking as well as safe and attractive routes to the surrounding areas, in order to encourage travel by sustainable means. Electric vehicle charging points are provided, again helping to deliver a sustainable transport strategy.



Waste and Recycling

Sustainable behaviour will be encouraged and recycling and household waste facilities will be provided. Internal and external storage spaces will be designed to satisfy HDC’s waste bin specification for the removal of general household waste, recyclable waste, food waste and garden waste respectively.



Flood Risk

With regard to Flood Risk and SuDS, the proposed development site lies in a low flood risk zone and will benefit from SuDS that have been put in place. Within the site, sustainable techniques such as bioretention areas, basins and permeable paving are proposed.



Sustainable Construction

In terms of sustainable construction, the site will comply with the Considerate Constructors Scheme and will closely monitor construction site impacts.





6.0 Conclusion

6.1 Summary

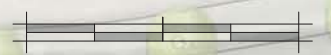
- ✓ 11 new homes consisting of 2, 3 & 4 bedroom houses
- ✓ A density of 27.5 dwellings per hectare gross based on a site area of 0.4 hectares
- ✓ The existing farmhouse is retained and becomes the focus of the new proposals
- ✓ All new homes will be no more than two storeys in height
- ✓ Dedicated vehicular access via the community centre parking area
- ✓ 2 parking spaces for each dwelling either on-plot or in an adjacent parking court
- ✓ 2 visitor parking spaces
- ✓ Secure cycle stores in rear gardens
- ✓ Sustainability credentials including Air source heat pumps and electric vehicle charging for all properties
- ✓ Existing boundary trees and hedges retained and enhanced to screen the new dwellings
- ✓ Views from the east-west greenway towards the existing retained farmhouse
- ✓ Enhanced landscape planting throughout the site



RM3



0 10m 20m 30m 40m



Moat House

Village Centre

Central
Retail 3-5
Plots 9-20

Public Realm

Western Bldg.
Plots 21-44

Community Building

RM6

East/West Greenway



OSP Architecture
Broadmede House
Farnham Business Park
Weydon Lane
Farnham
Surrey
GU9 8QT
Tel: 01252 267878
www.osparchitecture.com