

6 Landscape

Landscaping

The proposed landscape strategy offers a well balanced amount of green space when compared with the existing condition. The front garden is a key element of the new landscape strategy as it is both a condition found on many other houses along Glenilla Road but also enhances the relationship between the new building, it's neighbours and the street. Two new trees, a bench and two finely crafted bin stores and loose planters will compose the front garden in a playful way and generate defensible space. The proposal is to plant one tree within the site boundary and there is an intention (subject to agreement with Camden Highways) to plant a new street tree, continuing the existing line of trees along Glenilla Road.

Materials

Two types of granite sets will define entrance footpaths and parking areas. Granite will blend effortlessly with the concrete flags of the public footpath and provide an appropriate background tone for the rich red brick cladding.

Trees

There are no tree preservation orders affecting trees within the site. There are no tree preservation orders immediately adjacent to this site.

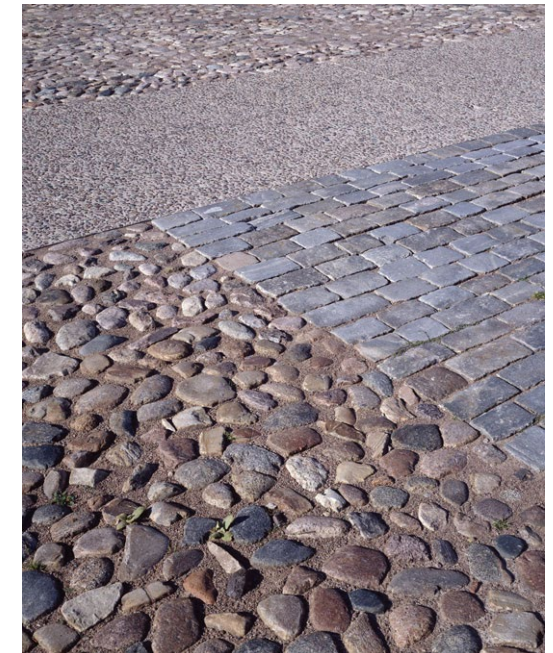
T1, T2, T7 - Category C trees to be removed due to impact on roots.
 T8, T9, T10 - Low amenity value category C trees to be removed to allow good site access.
 New trees will be planted to mitigate loss.

The proposal is to plant two new trees at the front of the house. Himalayan White Birch trees can provide good amenity while not dramatically reducing internal daylight levels.

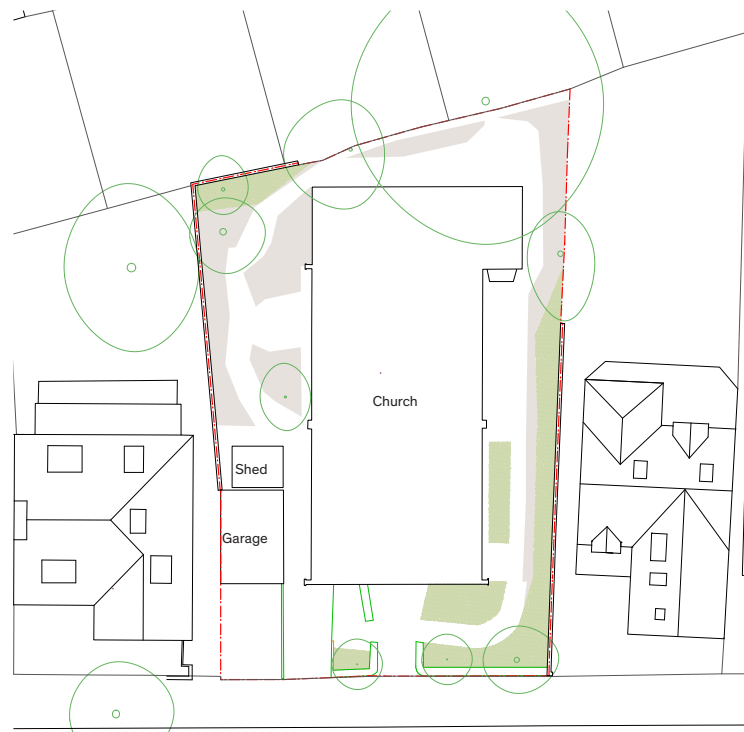
For detailed information on existing trees see Arboricultural Impact Assessment on Appendix.



Himalayan White Birch trees

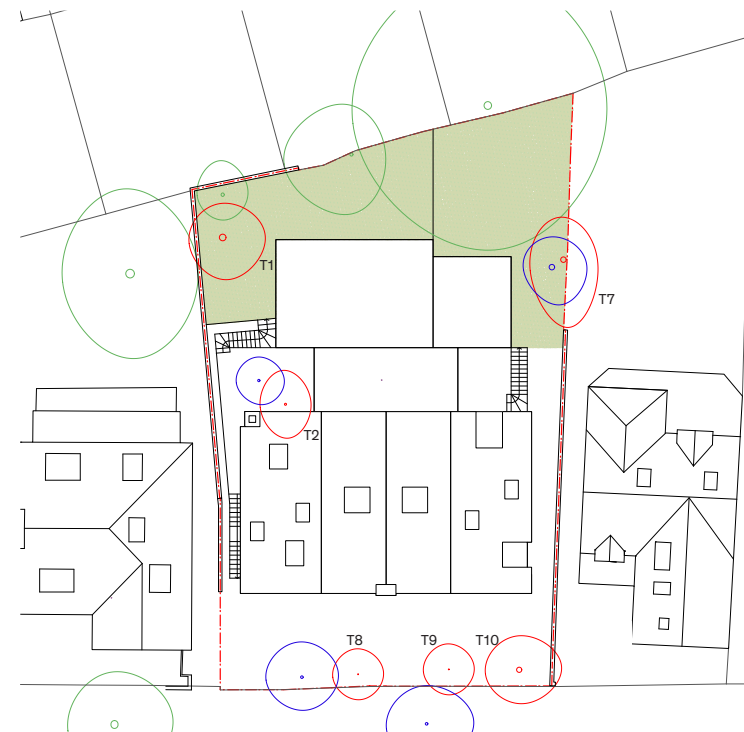


Granite setts at Kalmar (Caruso St John Architects)



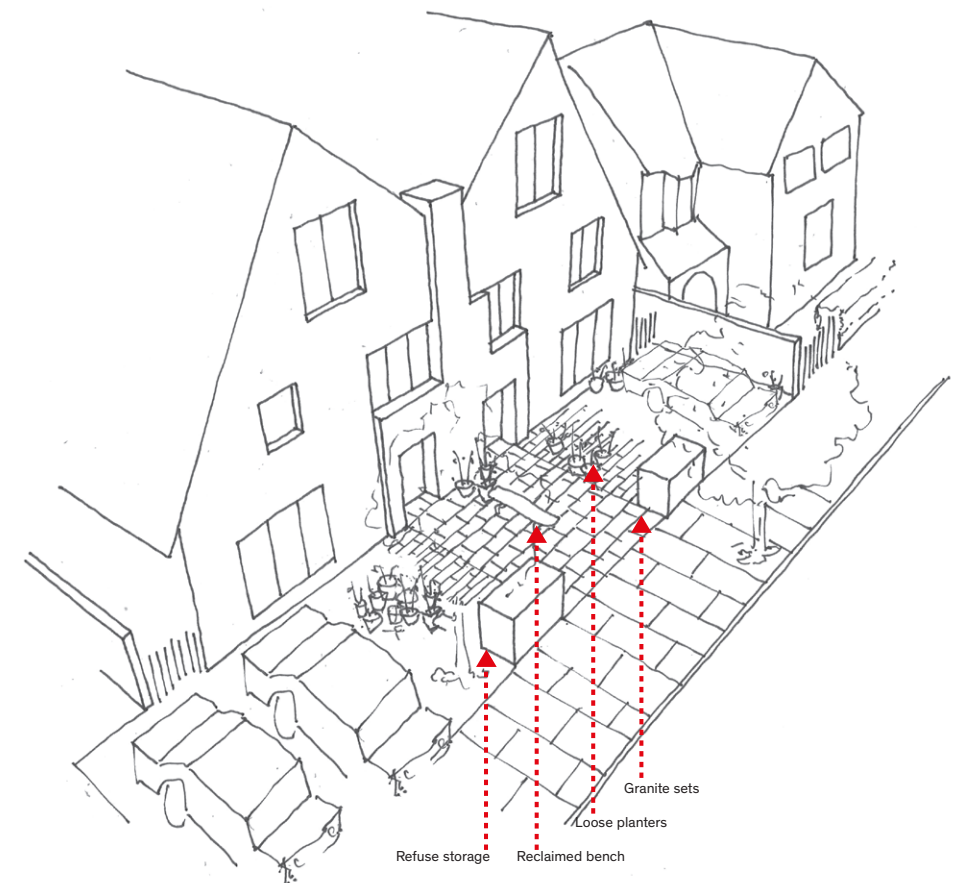
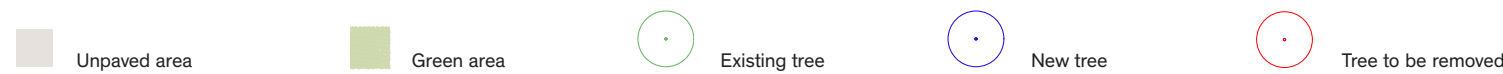
Existing

Green area: 65.2m²
 Unpaved area: 82.1m²
 Total unpaved area: 147.3m²



Proposed

Green area: 165m²
 Total unpaved area: 165m²



Landscape strategy

Roofscape

The roofs of the rear extensions will be intensive green roofs, with sufficient depth to allow mixed perennial planting such as lavender.

The garden extension thus blends into the landscape reducing the visual impact on neighbouring properties and enhances the views from the house upper levels.



Rear extension roofs and garden proposal



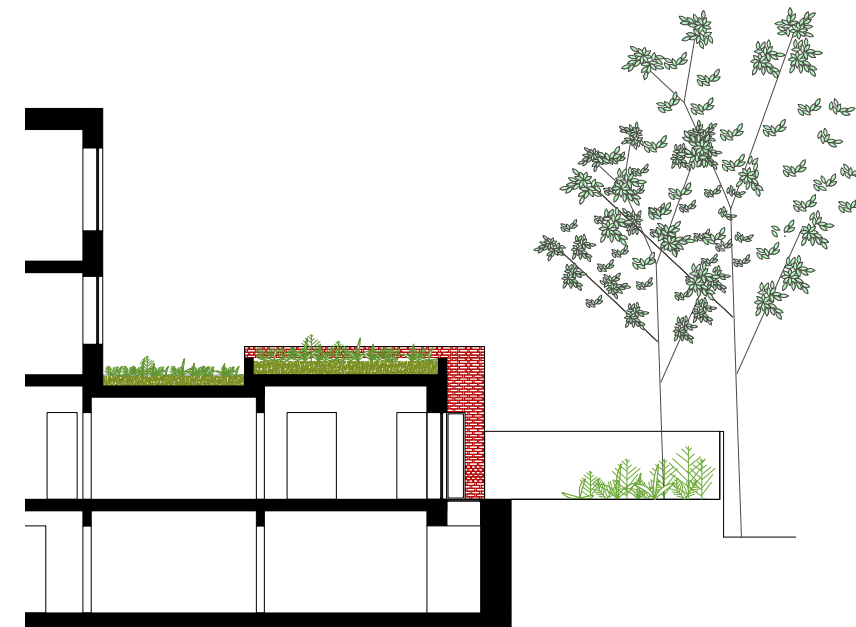
Mixed perennials, London



Stadhalle Hotel, Vienna



Highline, New York



Partial section through green roofs

7 Structure

Basement Impact Assessment

The findings of this report are informed by site investigation data and information regarding construction methods, sequence and loading provided by the Structural Engineer. The analysis is undertaken on the assumption of high quality workmanship during the construction of the basement.

Contamination and Remediation

No contaminant exceedances were noted within the natural soils on site. However, elevated concentrations of lead and benzo(a) pyrene were noted in the Made Ground across the site. Proposed development plans indicate that the majority of the Made Ground across the site is to be removed during excavation of the basements, removing the source of the contamination and therefore the risk to future occupants in this area will be negated. A capping layer will be required in areas where Made Ground is to remain, such as the north-eastern and south-western parts of the site. This layer should comprise hardstanding or a geotextile membrane underlying a minimum of 450mm cohesive subsoil and 150mm topsoil.

Ground Movement

The construction of the basements will generate ground movements due to a variety of causes including heave, settlement, pile construction and piled wall deflection during and after excavation. Calculations indicate that these will give rise to a damage category within 'Category 0' ('negligible) for the adjacent properties of Nos. 30 and 34 Glenilla Road. The above assumes a good standard of workmanship during construction. It is recommended that a condition survey is undertaken and an appropriate monitoring regime is adopted to manage risk and potential damage to the neighbouring structures as construction progresses onsite. The remaining neighbouring buildings and infrastructure surrounding the site are sufficiently distant from the basement development to not be considered to be susceptible to ground movements due to pile installation, deflection and heave due to excavation, assuming a typical 450 load spread from the proposed development.

Ground Water

Groundwater was encountered during the site investigation within the Made Ground and in claystone bands or bands of silty sand within the London Clay Formation. It is anticipated that groundwater within the Made Ground will be diverted around the basement and will continue to flow downslope towards the historical River Tyburn. The claystone bands and bands of silty sand within the London Clay Formation and not consistent across the site and groundwater within these bands may be considered to be isolated and not representative of a groundwater table.

The impact of the proposed basement on this water is therefore considered to be negligible.

Flood Risk

The site is located in Flood Zone 1 "areas with little or no potential risk of flooding (annual probability less than 0.1% for fluvial flooding), which are already developed." Therefore there is no risk of flooding from rivers and/or the sea. Proposed developments in these areas have no restrictions provided that the surface water drainage proposals will not increase the flood risk to the site or the surrounding areas.

The site is at low risk of flooding from rising groundwater; however groundwater levels should be confirmed at site investigation. Engineering techniques such as drainage cavity systems and waterproofing should be considered during the detailed design.

There is a low risk of surface water flooding as there is a constant fall away from the property along Glenilla Road.

Surface water will be attenuated to 5l/sec for each property benefiting the public sewers which are currently receiving unrestricted run-off rates from the existing development.

The proposed development has an acceptable flood risk within the terms and requirements of the NPPF and accompanying technical guidance.

For detailed information see Basement Impact Assessment on Appendix.

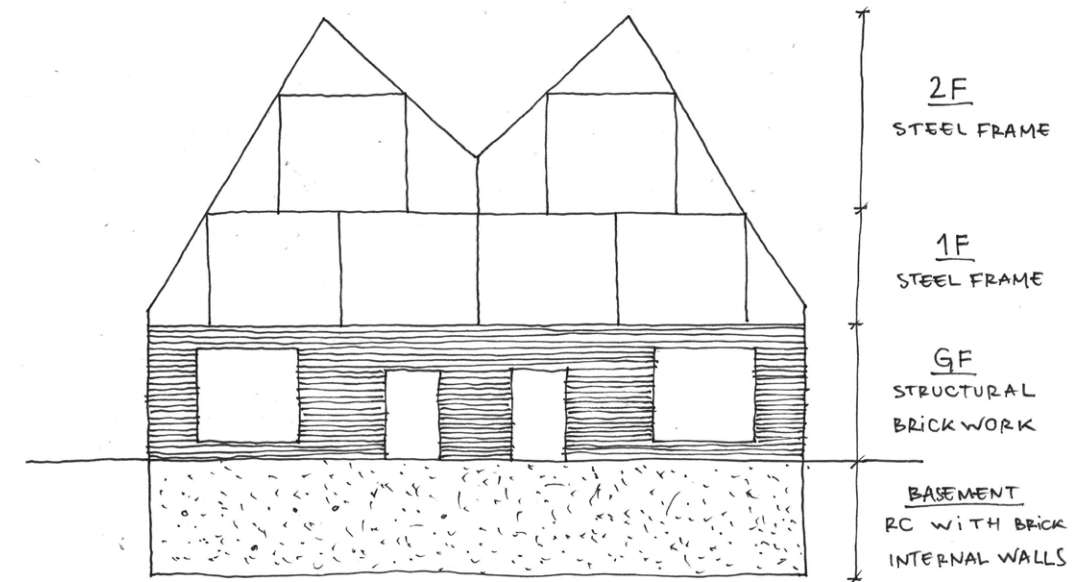
Structure

The proposal explores the use of structural brickwork wherever possible on basement and ground floor levels where the building footprint is larger.

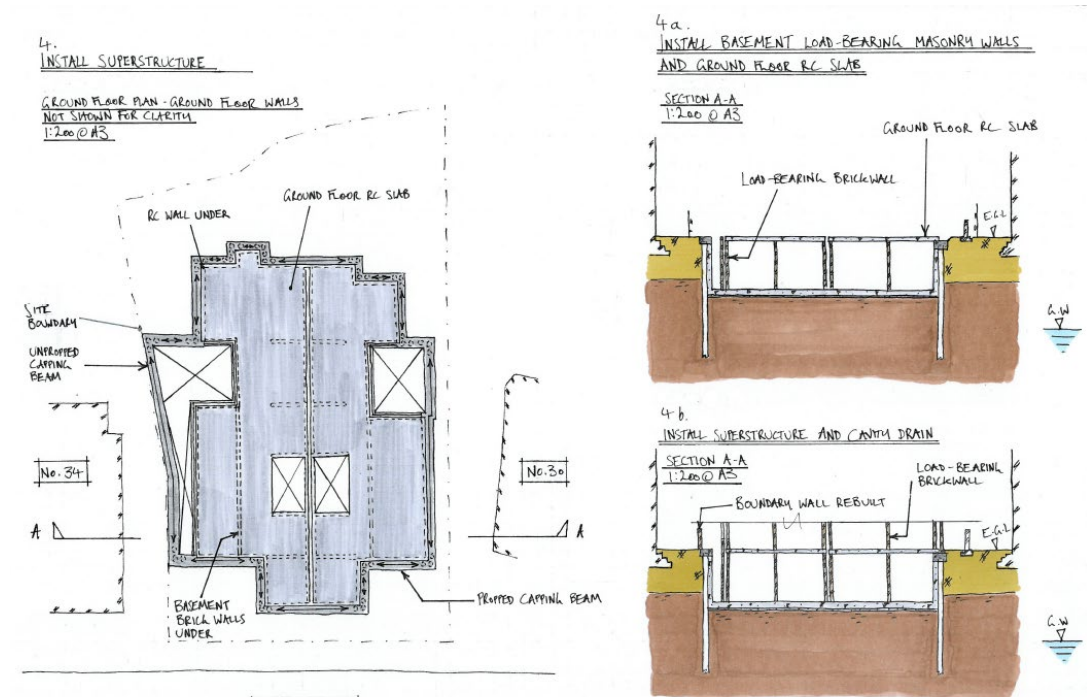
The use of lime mortar as opposed to cement mortar has a number of benefits:

- Movement joints can usually be omitted as mortar remains flexible
- Walls breathe, absorbing/releasing moisture into internal environment
- Nicer 'feel' to exposed brickwork internally
- Lime mortar more workable on site than cement mortar
- Autogenous healing – the mortar can self-heal hairline cracks
- Better for the environment than cement, as it absorbs CO2.

On the upper levels - where the footprint is smaller and a lighter/warmer feeling is expected inside the rooms - the structure becomes a steel frame with timber joists and linings. This solution allows the roof slopes to be formed effortlessly and reduces construction times.



Structural concept



Structural Engineer sketch showing construction methodology

8 Services & Sustainability

Services

Sustainability in this context is the concept of developing a design that satisfies the brief without compromising the resources available for future generations. This essentially means reducing the resources consumption and impact of the building.

The internal environment has been carefully designed to ensure that the occupants are comfortable and the building is fit for purpose. This means ensuring that elements that control or have impact on air, light, sound etc. are well designed.

Energy Strategy

The buildings are being designed to satisfy the energy credit requirements of Code for Sustainable Homes Level 4. This means a 19% reduction in carbon emissions over a Building Regulations 2013 Part L1A compliant building (equivalent to 25% reduction over 2010 Building Regulations).

To reduce the energy demand, building fabric with excellent thermal performance will be used, which exceeds the requirements of Building Regulations.

After improving the thermal performance of the building fabric and thereby reducing the heating demand, efficient heating, ventilation, and lighting systems will be chosen to reduce energy consumption.

Each house will be heated by ground source heat pump with underfloor heating. The houses will be naturally ventilated (with intermittent mechanical extract in bathrooms, kitchen etc.) to reduce electrical energy consumption and maintenance requirements. No active cooling will be installed and large window openings will be designed to allow for summertime purge ventilation.

The London Heat Map indicates there are currently no district heating schemes available to connect to in the site vicinity. Should a suitable network become available in the future then the proposed heating system would not preclude the houses being connected if so required.

For detailed information see Energy Statement on Appendix.

Services Integration

The present strategy does not require photovoltaic panels installation and therefore no detrimental impact is anticipated on the roofs.

Two boilers will be fitted in the basement for backup and occasional hot water pipework sterilization. The boiler flues will be integrated inside the chimney on the street elevation.

There will be no flue overrun.

Services intakes will be accommodated within the entrance door recesses.

Window/ventilating panels will allow for purge ventilation with doors/windows closed.

Sustainability

Local site conditions have been taken into account when developing the design. For example, the adjacent quiet Glenilla Road. This provides useful opportunity for natural cross ventilation throughout the house.

Two sides, east and west, are bounded by two houses however, there is good access to daylight and natural ventilation in general.

Wherever possible the design keeps plan depths shallow to facilitate good daylight and natural ventilation. Furthermore, all the main spaces have been provided with openings on more than one face to allow cross ventilation.

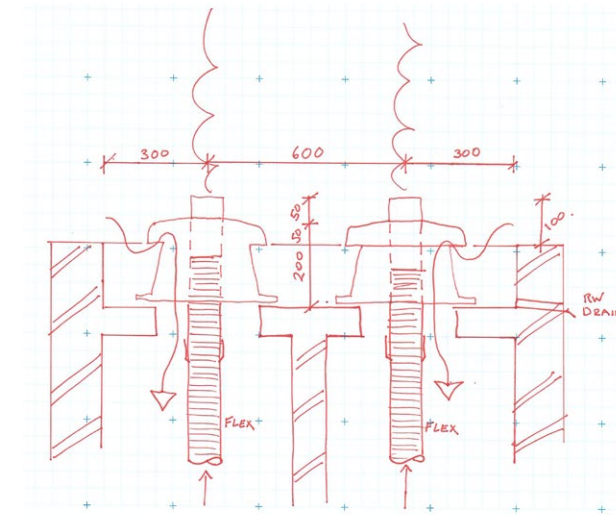
The orientation of key spaces has been considered and incorporated into the design.

Having open space (garden) to the south provides excellent opportunity for passive solar heating.

Sustainable Use of Materials

Material selection has been an integral part of the design process throughout. Materials have been interrogated for their structural capabilities / efficiencies, environmental impacts and longevity.

Construction methods are critical in this examination - prefabricated techniques have been considered wherever possible in order to reduce on-site waste and reduce construction times.



M&E Engineer sketch showing boiler flues integration



Services intakes integration within front door recess



Background and purge ventilation panels

9 Parking

Parking

The existing condition provides two 6.95m long kerbside parking spaces between two crossovers. The existing cross over in front of the plot provides access to three parking spaces.

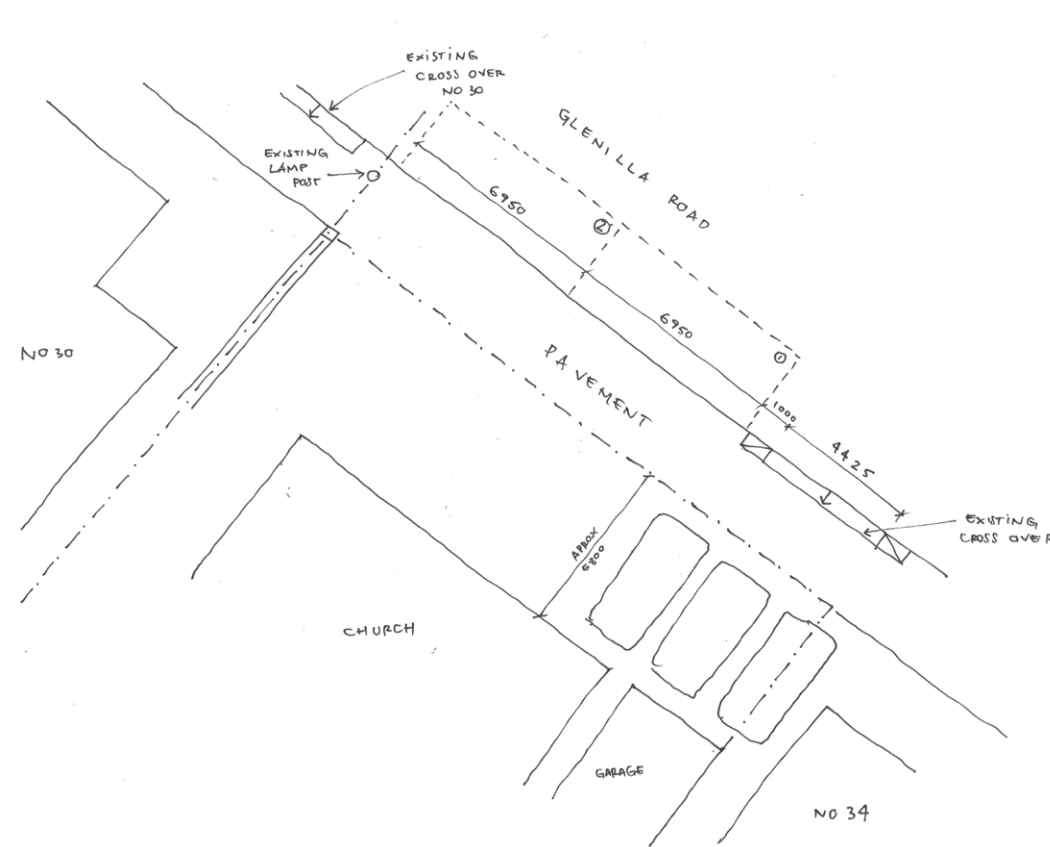
The proposal is to reduce the existing kerbside parking spaces in length to provide one additional cross over on the west side of the plot.

The proposal have been reviewed by Camden Highways and appear to be acceptable in transport terms.

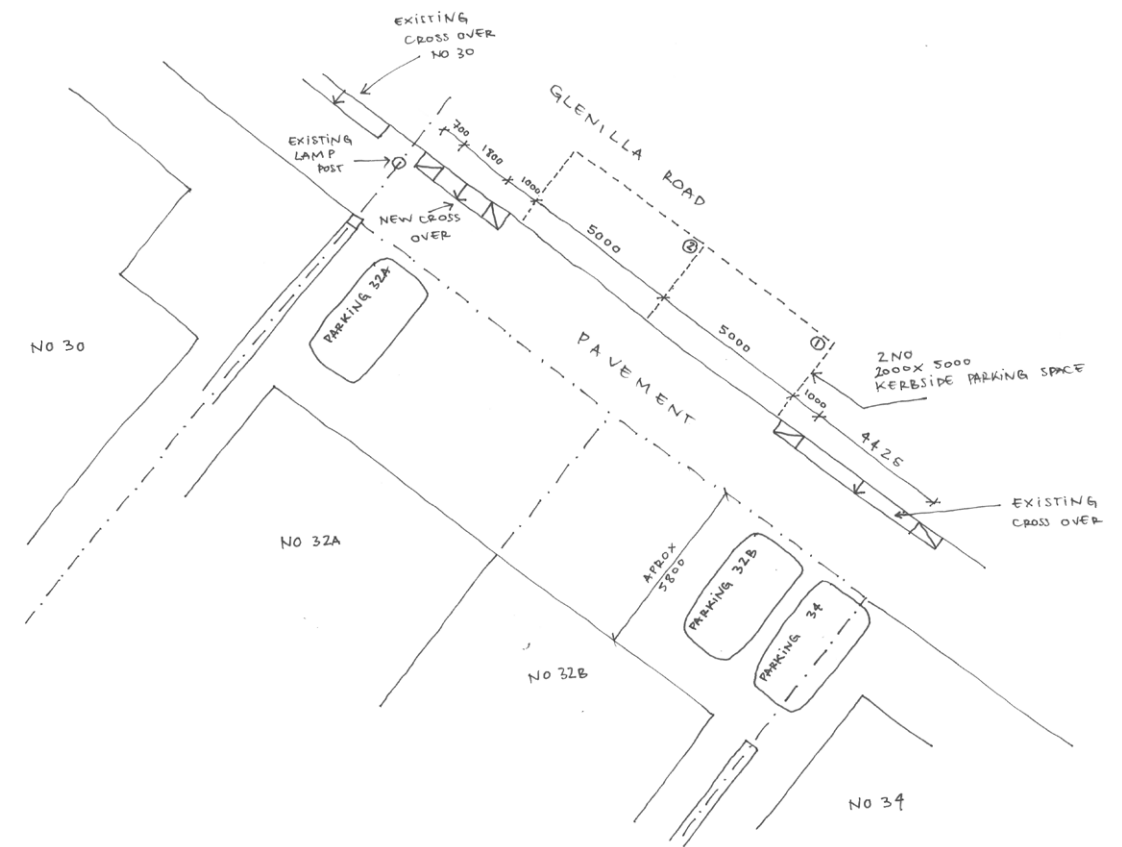
Highways have visited site and advised that the kerb side parking should be 5.5m long but that on this occasion they would accept 5m, and that the new cross over could be reduced from (3.6m) to 3.2m.

The existing lamp post may have to be moved to accommodate the works.

A car capped planning obligation will need to be agreed in accordance with Core Strategy CS11 and development policies DP19 and DP21. This means that residents of 32a and 32b Glenilla Road will be ineligible for residents parking permits for the CPZ. The new residents will need to secure a financial contribution to repave the footpath (including the existing and proposed crossover). If planning permission is granted then a separate public consultation will be required to allow the traffic management order for parking bay to be amended. This would be done by Camden Transport Design Team.



Existing parking layout



Proposed parking layout

10 Access

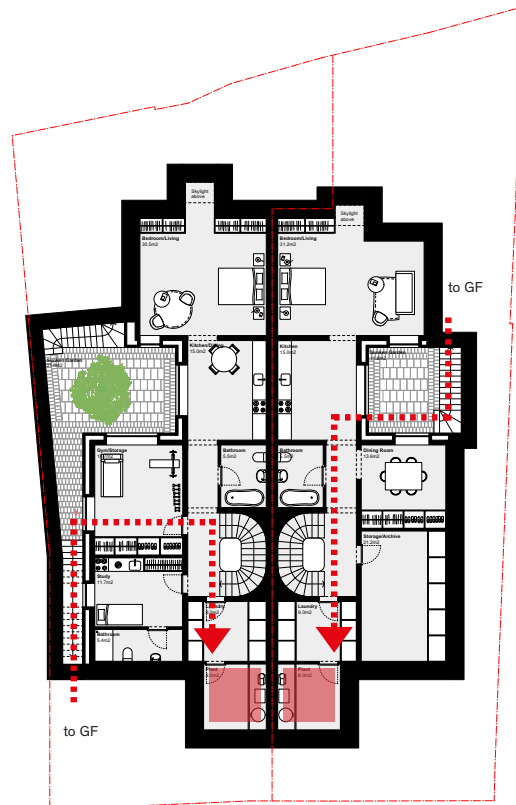
Access

Step free access is provided in main entrance and all rooms accessible from ground floor.

- The proposal has been designed to meet: British Standard 8300:2009 - Design of Buildings and their Approaches to Meet the Needs of Disabled People.
- Approved Document M and K of the Building Regulations 2013.

Basement plant access is facilitated via external stairs connecting basement and ground floor levels.

External stairs provide alternative escape route from basement rooms in case of fire.

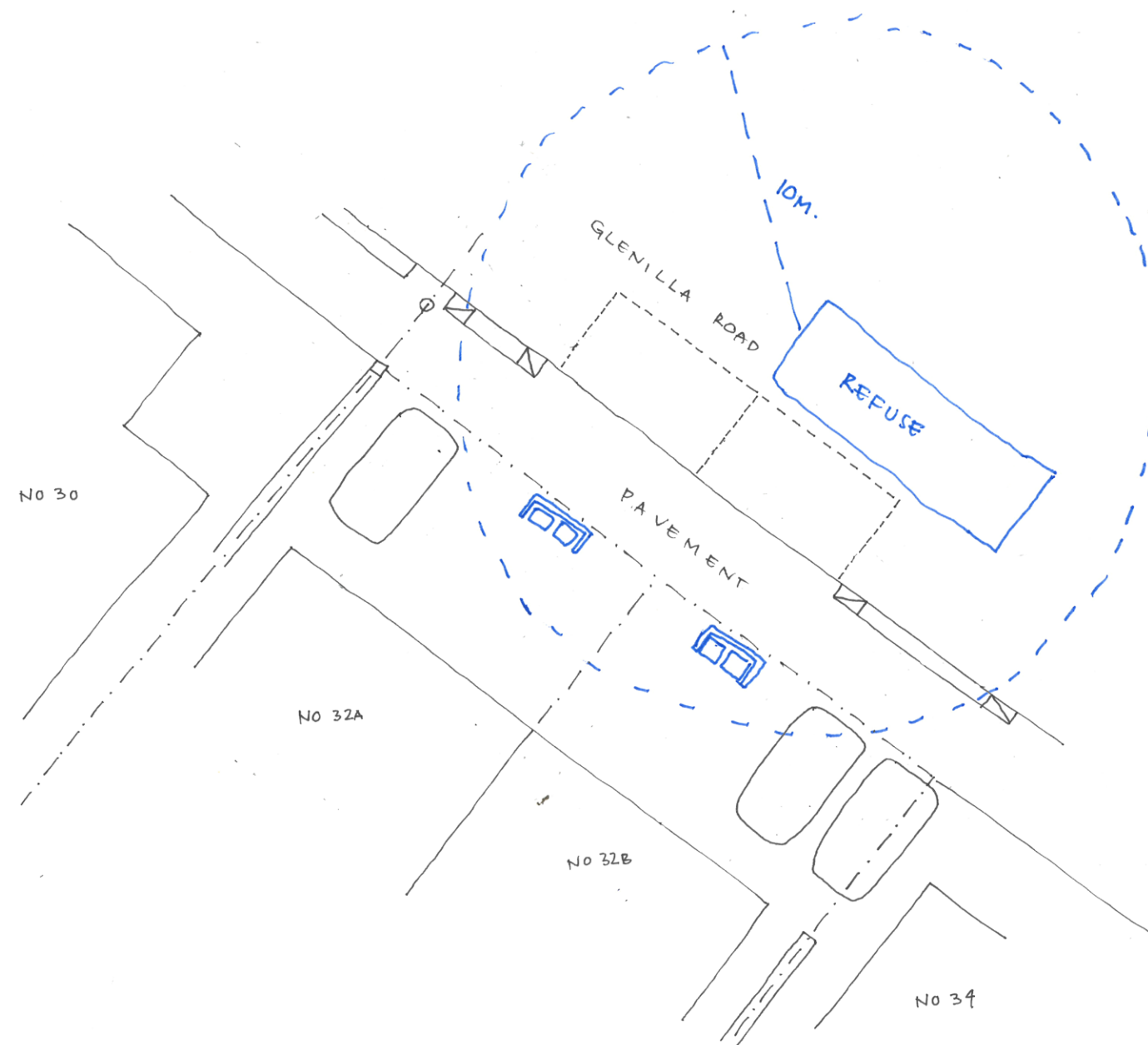


Basement plan - Plant access

Refuse / Recycling

A refuse and recycling store for each house will be located near the site curtilage and will be incorporated within the landscape design.

Each store is well within 10m distance from the street.



Refuse collection diagram

11 Consultation

Consultation

A brochure was produced to explain the intention and key principles of the project to interested neighbours surrounding 32 Glenilla Road.

Invites were sent locally to an introduction event.

Initial feedback from this process is that neighbours believe the proposal will fit well within the streetscape of Glenilla Road and is seen as an improvement when compared with the existing condition.

The careful approach to the relationship between the new building and the houses nearby is well-regarded.



12 Appendix

Architects Information

Drawings Existing

060/2001 Existing Location Plan
 060/2010 Existing Site Plan
 060/2020 Existing Roof Plan
 060/2050 Existing Elevations - No34
 060/2051 Existing Elevations - Garage
 060/2052 Existing Elevations - Church
 060/2053 Existing Elevations - No30
 060/2060 Existing Site Elevations

Drawings Proposed

060/2100 Location Plan
 060/2110i Site Plan
 060/2120i Basement Floor Plan
 060/2121i Ground Floor Plan
 060/2122i First Floor Plan
 060/2123i Second Floor Plan
 060/2124d Roof Plan

060/2150 Site Section
 060/2182d Section AA
 060/2183c Section BB
 060/2184e Section CC
 060/2185c Section DD

060/2190b North Elevation
 060/2191a East Elevation
 060/2192a West Elevation
 060/2193 South Elevation
 060/2198 Street Elevation

Consultants Information

Arboricultural

09302 Tree Report 2016

Daylight & Sunlight

W939 NOV 2016 DS Report

M&E

20161128 Glenilla Energy Statement
 Appendix A_32 Glenilla Road Energy Statem.

Structure & Geotechnical

CG18516_GIR&BIA_Rev2_Nov16