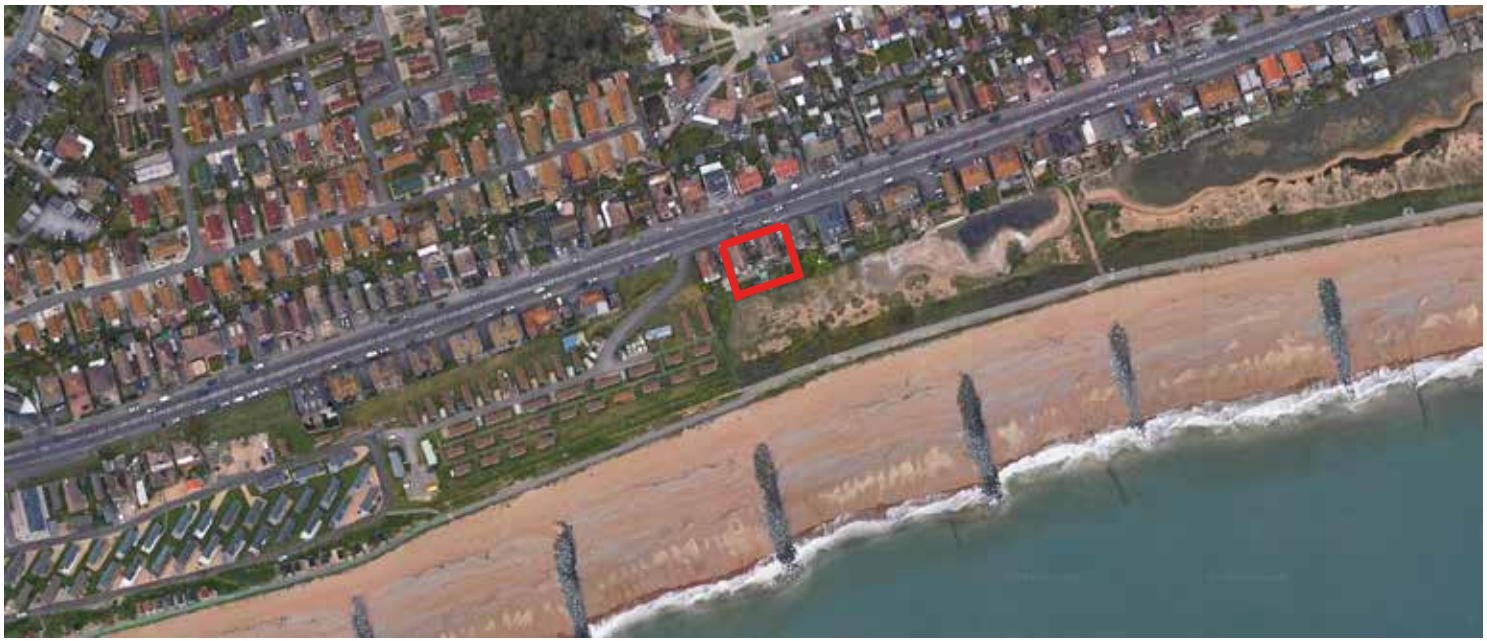
104-106 Brighton Road, Lancing

Design Report - Minor Amendments

15/05/2023 - Rev B





Aerial view - wider context



Aerial view

Introduction
The design report accompanies an application under Section 73 of the Town and Country planning Act to vary condition 01. and vary or remove other conditions of planning permission AWDM/1541/20 (dated 09/062021).

This report describes the proposed amendments and additional details and examines them in consideration of national and local planning policies and the local built and natural environment.



Aerial view - from the east



Aerial view - from the south



Aerial view - from the west



Aerial view - from the north

Summary of Proposed Amendments
The following variations are proposed to condition 01. Of planning permission AWDM/1541/20:

1. Height of the dwelling houses increased slightly (0.5m) and piers added to front elevation at lower ground floor
2. (Proposed change omitted)
3. Addition of solar panels to flat roofs
4. Addition of air source heat pumps ASHP and screening
5. Solar shading added to rear at upper ground floor
6. Drainage pipes/vents added to drawings

The following additional information is supplied with this application to vary or remove conditions listed in planning permission AWDM/1541/20:

Condition 08. Construction & demolition management plan
Condition 10. Schedule of materials and finishes
Condition 11. Details of hard and soft landscaping

The sections below describe site, context and planning history and the proposed amendments and/or provide additional information relating to the removal of conditions.



Front elevations to 104-106 (north-east)



Front elevations to 104-106 (north-west)

Existing Context and Site

The subject site consists the combined plots of No.s 104 and 106 Brighton Road, Lancing, BN15 8LW. The plots currently each contain a detached building, which had historically been converted to flats. The existing timber framed buildings are in a very poor state of repair.

The site occupies a position on the southern side of Brighton Road (A259) at Lancing, backing on to the eastern end of Widewater Lagoon, which is a local nature reserve. The lagoon is in turn bounded by man-made shingle bank to the south, with the beach and the English Channel beyond.

The site is spilt by bank of circa 2.5m high, which runs parallel to the coast and divides Brighton Road from Widewater Lagoon, this forms part of the secondary coastal defence.

This section of Brighton Road is residential in nature. Nos. 102 and 108 Brighton Road, to the west and east of the site respectively, are detached timber framed building built at the same time and in the same style and massing as Nos. 104 and 106. No. 110a and 110b are a pair of terrace houses built on the site of No 110. There is one further (originally) identical detached building at No. 112 then further east the detached buildings have already been replaced by more modern terrace houses of three stories or so.

To the south-west of the site is the eastern sands holiday park, which consists of a series of single-storey chalets. Further west are larger apartment blocks of three to four storeys.

On the north side of Brighton Road opposite the site there is a mix of two-storey semi-detached and detached houses and bungalows.

There is a pedestrian crossing directly in front of No 104. There is a parking bay directly in front of No. 106. Either side of these features are solid white of zizag white lines beside the crossing. Both 104 and 106 have off-street parking in an area of hard-standing to the east of each unit.



Rear elevations to 104-106 (south)



Looking east towards Eastern Sands holiday park



View from across the lagoon, with No. 100 to right of shot



Looking east along Widewater lagoon

Planning History
In June 2021 Adur District Council granted planning permission for the site under AWDM/1541/20 (dated 09/06/2021). This permission relates to the:

Demolition of two existing properties of converted self-contained flats, erection of a 4-storey terrace of five dwellings (3 No. 4 bedroom and 2. No. 3 bedroom) with balconies, roof terraces and integral garages.

Searching the online Adur planning records, there do not appear to be any applications/approvals relating to the historic conversion of the original houses on the site to flats. There is one application from 2010 relating to the replacement of windows to Flat 1, 104 Brighton Road.

There are numerous examples along this stretch of Brighton Road of permissions for modern residential buildings to replace the original timber framed detached houses. The closest of which is No 110 Brighton Road (approved application refs ADC/0340/10 and AWDM/1064/11).

The photos on the following pages show examples of some of the modern replacements and original buildings along Brighton Road.



265-271 Brighton Road - on the north side of road opposite the site



265-267 Brighton Road - on the north side of road opposite the site



136-146 Brighton Road



243 Brighton Road - on the north side of road



78 Brighton Road



80-88 Brighton Road



110 Brighton Road



122-126 Brighton Road



132 Brighton Road



148-152 Brighton Road



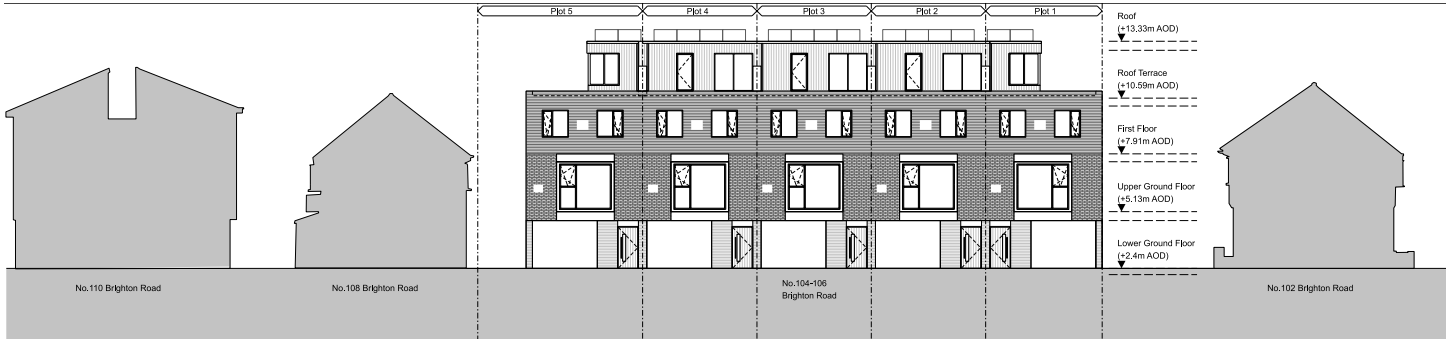
156-158 Brighton Road



170 Brighton Road



Front elevation as approved



Front elevation as proposed

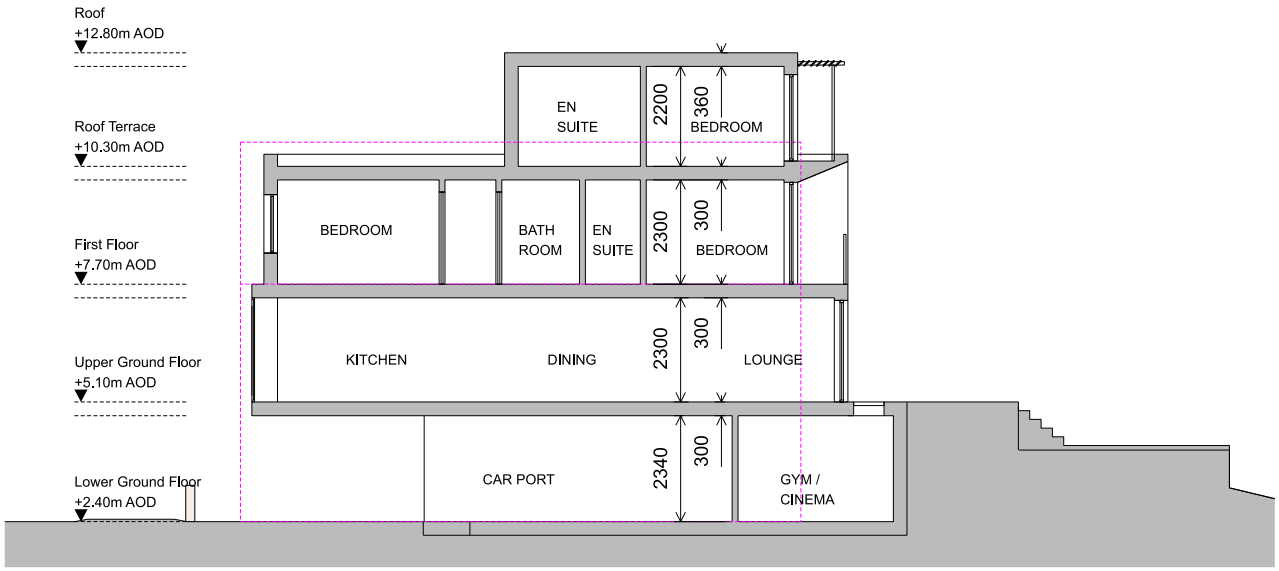
Detail of Proposed Amendments

1. Change to Height and Piers Added to LGF (related to variation of Condition 01.):
As the structural and services design has developed it has become clear that the floor and roof build-ups allowed for in approved drawings would be insufficient to provide the structural strength required whilst accommodating ducting for the MVHR system stated as required by planning condition 7. As the floor to ceiling heights allowed were already on the minimum of 2.3m for 75% of the floor plan. The only way to overcome this was to either A. excavate so the lower ground floor sits lower, or B. increase the height of the buildings. Option A. lowering the ground level would not be feasible due to issues with parking levels and increased flood risk. We therefore propose option B. increasing height.
A comparison of the building heights, floor/roof build-up and ceiling heights as approved and as now proposed is shown in the diagram opposite.

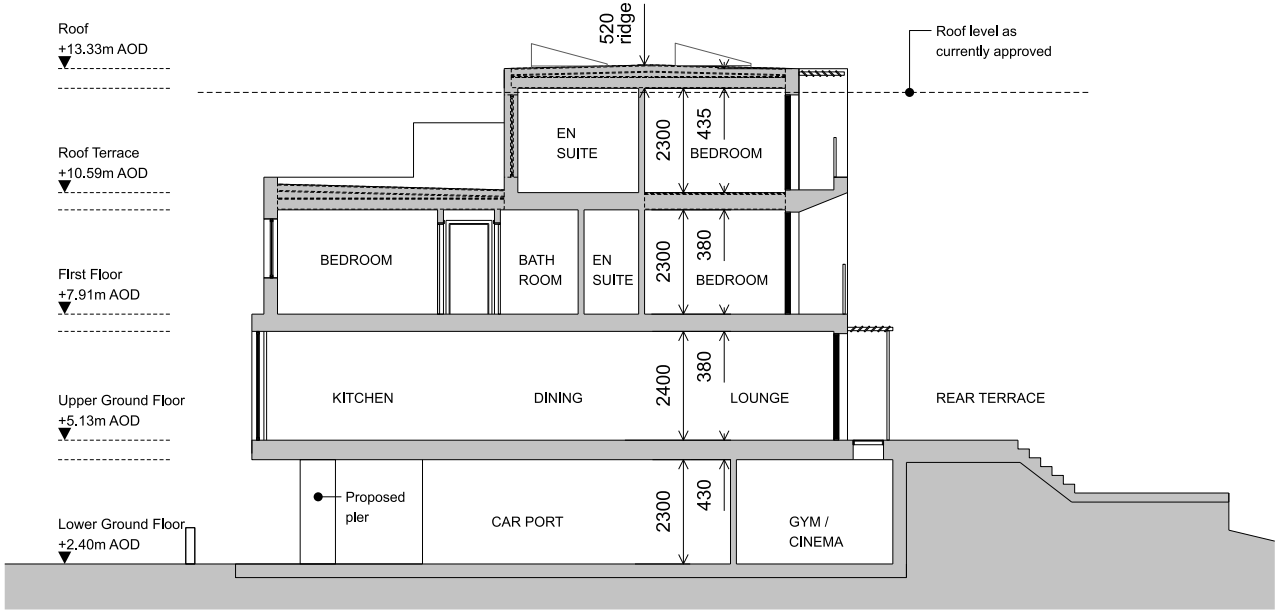
Floor build-ups - increased to provide sufficient depth of structure to support the floor and live-load weights and to accommodate ductwork for the MVHR system – posi-joists are proposed so that the ducts can pass within the depth of the floors rather than a suspended ceiling being required – which would increase the build-up further. An additional 50mm layer of cement-screed has been added to the upper ground floor as part of the sustainability strategy, to increase thermal mass and therefore the efficiency of the underfloor heating.

Roof build-ups - increased in depth to provide sufficient insulation to meet current Building Regulations and provide sufficient gradient for free-draining of the roofs.

In the increases in floor build-ups result in an increase in total building height of 0.5m.



Floor/roof levels as approved - showing ceiling heights and floor/roof build-ups



Floor/roof levels as proposed - showing ceiling heights and floor/roof build-ups

The lower ground floor cantilever as approved would require large amounts of steelwork and complex structural design to achieve. We propose the addition of a series of piers at lower ground floor level to support the structure above, these would be set back from the upper levels by 0.8m and from there front boundary/ back of pavement by circa 2.5m, thus maintaining site lines for parking. This change would reduce weight of structural steel required and therefore reduce embodied carbon and cost.

As can be seen from the photographs on the previous pages, there are numerous examples of buildings where car ports have walls between them close to the line of the front elevation. So the proposed piers would not be incongruous.



Insulted concrete formwork (ICF)



Insulted concrete formwork (ICF)

~~2. Change of External Brick Finish to Render (related to variation of Condition 01.):~~

Proposed change from brick to render now omitted following advice from the planning officer.



Low-profile solar panels on flat roofs



ASHP unit



MVHR unit



MVHR distribution ducts within posi-joist floor

3. Addition of solar panels to flat roofs (related to variation of Condition 01.):
As well as steps to reduce energy consumption - including improved insulation and airtightness, the site provides a good opportunity to incorporate renewable energy production. The flat roofs to Plots 2, 3 and 4 would accommodate 8x solar panels each.

The flat roofs to end Plots 1 and 5 would accommodate 4x solar panels each, a smaller number due to the smaller roof over second floor.

The solar panels would be installed angled towards the south on low profile troughs filled with ballast.

4. Addition of air source heat pumps (ASHP) and screening (related to variation of Condition 01.):
Again, with the improved insulation and airtightness and in view of reducing use of fossil fuels to power space heating and domestic hot water. High-efficiency low-energy air-source heatpumps (ASHP) are proposed to meet the (lower heating) demand. The ASHP units would be located on flat roofs at second floor level, on the street facing elevation but located to face west or east. The parapet walls between properties would be built up slightly to screen neighbouring ASHP units. The hot water cylinder storage cylinder for each house would be located within a cupboard on the upper ground floors, close to the kitchens.

In addition to ASHP, each unit will have mechanical ventilation and heat recovery (MHVR). These large units would be located on the lower ground floor, raised off of the floor to reduce vulnerability to flooding. The air supply / return distribution ducts would run vertically through voids beside the stairs and run horizontally through the posi-joist floors. Fresh air for each house would be brought in from an inlet grille on the south facade state stale air would be exhausted, via an acoustic baffle, to the car port. The MVHR system would provide conditioned fresh air to the whole building, reducing energy use by retaining heat (in winter) and disturbance from external noise by allowing windows to be kept shut and not requiring uncontrolled background ventilation.

5. Solar shading added to rear at upper ground floor (related to variation of Condition 01.):
The large south facing windows, whilst making full use of the fantastic coastal views, would be vulnerable to solar heat gain from the southern sun. In the approved scheme solar shading was already provided to the south facing windows at second floor and first floor with respectively, brise soleil and an overhanging of the terrace above. However no solar shading was proposed to the rear windows at upper ground floor level. To reduce solar gain to these windows, we therefore propose to add timber brise soleil on a lightweight timber frame work spanning between the boundary fences.

Further details on the design on the brise soleil are provided on the following pages.

6. Drainage pipes/vents added to drawings (related to variation of Condition 01.):
The development of the technical design has highlighted that some of the services elements were missing from the approved scheme. The proposed drawings for this minor amendment application now include rainwater vent pipes, and ventilation outlets for the MVHR.

These elements are indicated on the drawings.



1a. Brick finish



1a. Brick finish



1b. Shaped brick slips installed in textured pattern

Construction and Demolition Management Plan (to satisfy/remove condition 08.):

Condition 08:
No development shall commence unless and until a construction/demolition management plan (including details of storage of construction materials /equipment/ parking/disposal of waste and surplus materials and dust suppression scheme) has been submitted to and agreed by the Local Planning Authority. The construction/demolition shall not be carried out other than in full accordance with any such approval.

Our Construction and Demolition Management Plan is appended at the end of this document - Appendix A.



1a. Brick finish



3. Projecting aluminium surround to oriel windows



2. Western red cedar timber cladding



4. Aluminium framed windows

Materials and Finishes
(to satisfy/remove condition 10.):

Condition 10:
No development shall be carried out unless and until a schedule of materials and finishes to be used for the external walls (including windows and doors) and roof of the proposed building has been submitted to and approved in writing by the Local Planning Authority and the development shall be completed in accordance with the approved schedule.

The proposed materials are detailed below, with the corresponding numbers indicated on the design drawings:

External walls:
1a. Brick finish to external walls. We have a selected pale grey mixed-tone brick finish - as pictured opposite and on the preceding page.

1b. Bricks in projecting pattern. The bricks to the bands at upper ground floor on the south and north façades would have an angular profile, creating a textured shadow pattern to these bands - as indicated on the original planning permission. These bricks would be the same type as detailed on 1a above - ie colour/tone.

2. Timber to second floor. Western red cedar tongue and groove boards, installed in vertical orientation. Western red cedar chosen due to it's longevity and resistance to fungal attack/decay. Treated with clear UV-protection to slow the bleaching process from the sun, over time the timber will weather to a mellow silver-grey. As the walls at this level would be accessible from the roofs they could be maintained as required.

3. The projecting north facing oriel windows to the upper ground floors will have surrounds formed in powder coated aluminium panels. Colour: anthracite grey.

Windows and terrace doors:
4. Aluminium framed windows with triple glazing. Thermally broken high-performance aluminium profiles. Colour: anthracite grey.
(details of acoustic glazing to be submitted separately under condition 07)



5. Aluminium insulated core front doors



6. Glass guarding and handraills to terraces



7. Resin bound gravel to lower ground floor



8. Paving to patio and terraces

Front doors:
5. Aluminium faced, insulated core high-security front doors with vision panel.
Colour: anthracite grey.

Glass to guardings to terraces:
6. Low iron toughed and laminated clear glass panels topped with a stainless steel handrail.

Hard landscaping:
7. Finish to parking area at lower ground floor - permeable resin bound gravel system - Sureset. Colour Blue Granite.

8. Finish to rear patios and terraces - Marshels Arrento Vitried paving, beige.

Other:
Fences (details to be submitted via later submission for Condition 12).
Brise soliel (details to be submitted via later submission for Condition 13).



a. Hydrangeas - ‘paniculata’,



b. Cornus stolonifera



c. Berberis thunbergii f. atropurpurea



d. Rosa rubiginosa



e. Anemone x hybrida

Hard and Soft Landscaping (to satisfy/remove condition 11.):

Condition 11:
No works or development shall take place until full details of all hard and soft landscaping works and the proposed times of planting have been approved in writing by the Local Planning Authority and all soft landscape works shall be carried out in accordance with those details and at those times. Any plants which within a period of five years from the time of planting die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species unless the Local Planning Authority gives written consent to any variation.

We have prepared a drawing for hard and soft landscaping which includes a scope of hard and soft landscaped areas and details of the planting, also listed below:

<u>Beds along Brighton Road:</u>

a. Shrub hydrangeas - ‘paniculata’, ‘strong Annabel’, ‘limelight’.
Planting April to May, or September to October.

b. Cornus stolonifera - ‘winter fire’
Planting mid-March to April, or mid September to October

<u>Beds to south facing rear gardens:</u>

c. Berberis thunbergii f. atropurpurea ‘Rose glow’.
Planting mid-March to April, or mid September to October

d. Rosa rubiginosa (sweet briar),
Planting October to mid-March

e. Anemone x hybrida
Planting mid-March to April, or mid September to October

Details on proposed materials for landscaping are contained in the previous section (Condition 10).

Appendix A

Construction and Demolition Management Plan: 104-106 Brighton Road, Lancing, BN15 8LW

This Construction and Demolition Management Plan has been produced to assist the safe and efficient execution of the demolition and construction works. The contractor will aim to minimise disruption to the surrounding area, local residents and roads and will work with the council to agree and adapt procedures should problems arise.

Existing Site:
The subject site consists the combined plots of No.s 104 and 106 Brighton Road, Lancing, BN15 8LW. The plots currently each contain a detached residential building, which had historically been converted to flats. The existing timber framed buildings are in a very poor state of repair.

The site occupies a position on the southern side of Brighton Road (A259) at Lancing, backing on to the eastern end of Widewater Lagoon, which is a local nature reserve. The lagoon is in turn bounded by man-made shingle bank to the south, with the beach and the English Channel beyond.

The site is spilt by bank of circa 2.5m high, which runs parallel to the coast and divides Brighton Road from Widewater Lagoon, this forms part of the secondary coastal defence.

Proposed works:
The works will involve the demolition of the two existing detached buildings and outbuildings and construction of five terraced houses of lower ground floor plus three storeys.

Demolition/Construction Timescales:
Works start date (Target) – June 2023
Target completion date - June 2024
Duration 52 weeks

Working hours:
Works will be carried out on site between the hours of 8:00-18:00 Monday to Friday and 09:00-13:00 on Saturdays. No noisy works are to be carried out outside of these hours or on bank holidays.

Materials movements (deliveries and disposals) will be carried out in off peak hours where possible to reduce disruption to traffic and residents.

Community Liaison:
Prior to demolition or construction works commencing on site, a senior member of the works team will attempt to make personal contact with neighbour's, and explain the nature and possible impacts of the works and provide a point of contact if problems or concerns arise. This in-person contact would be followed by letters with a summary and reiterating key contacts.

Any complaints will be logged and timely action taken to address the complaint, with unresolved complaints also recorded.

Site Personnel and Visitors:
All persons working on or visiting the site will be logged and inducted with the following key details explained: site layout, safe routes, safe working and medical / emergency provision, welfare facilities as well as more detailed induction specific to the task/s to be carried out.

The Site Foreman will regularly inspect the site and recording system to ensure adherence to the Construction and Demolition Plan.

Site Welfare facilities:
Welfare facilities will be provided on site for heating food and making hot drinks, rest and medical area and toilet facilities with handwashing. Site facilities will be within site huts until such time that the properties are built and weathered so facilities can be transferred to these.

Access for Vehicles, Parking and Loading:
Vehicle movements around and inside the site will be closely managed by the site team to ensure safety of staff and the pubic at all times, and to avoid queueing of vehicles and disruption to traffic.

Access to and from the site will be via Brighton Road (A259). The parking bay directly in front of the site may be used for minor/lightweight deliveries. Generally, all other deliveries and vehicles movements to/from the site will cross the pavement at the existing dropped kerb, progress to park on hardstanding inside the site boundary and unload/load. Where crainage of deliveries would be required the appropriate licenses and parking suspensions will be obtained beforehand.

Vehicles entering and leaving the site will be marshalled as they cross the pavement to ensure pedestrian safety and safe exit/entry from/to Brighton Road.

Access to the traffic light pedestrian crossing in front of No. 104 will be kept clear at all times, except where vehicles are crossing the pavement to access the site.

Where possible deliveries will be scheduled for weekdays, outside of peak traffic times.

Control of Dust, Dirt and Pollution:
All plant and equipment shall be maintained in accordance with manufacturer's recommendations to ensure emissions to atmosphere/leakages are minimised. Engines of plant, machinery and vehicles shall be turned off when not in use.

Stored materials liable to dust generation will be dampened down or covered with tarpaulin. Skips, chutes and conveyors to be covered to ensure dust does not escape. Light items of waste will be secured from wind and waste piles regulatory dampened down to reduce dust.

A wheel washing facility will be in place at the site entrance (where necessary) and adjacent roads and footways will be swept clean and hosed off at the end of each day.

No burning of waste will be permitted on site.

Waste Management:
Waste will be stored on site and disposal off site managed such that it does not accumulate over the practical storage capacity.

All waste will be disposed of using reputable specialist companies and fully documented.

Site Security:
The site will be segregated by timber hoarding or linked Heras fencing, with access points kept secure and locked shut out of operation hours. CCTV will be set up to monitor the site, with security lighting s required.

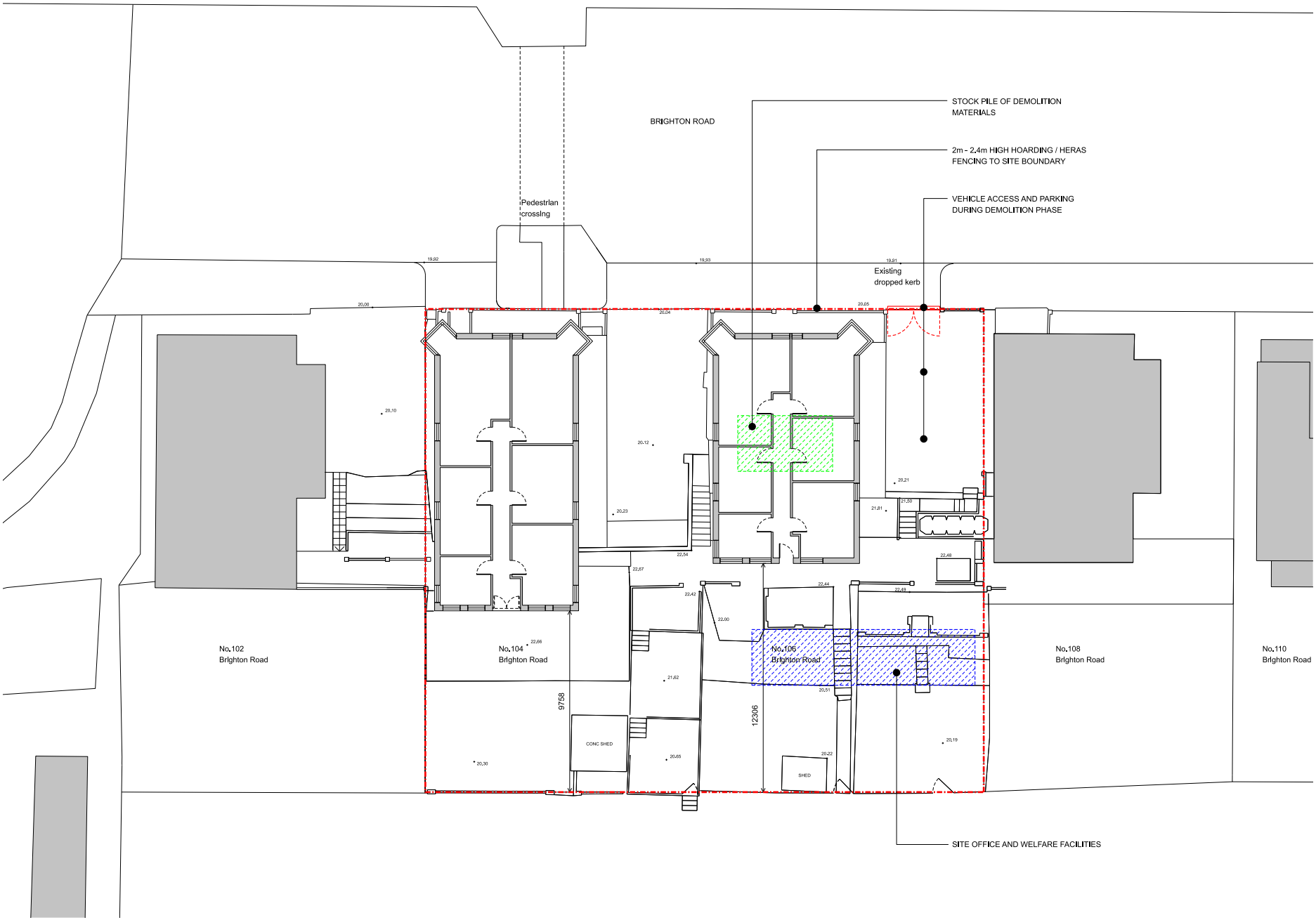
The Site Foreman or other senior staff will regularly inspect the site, perimeter and access gates.

Sequence of Works / Construction Methodology:
Initially services will be isolated and disconnected and temporary building supplies set-up. Following demolition works the ground works will commence, including piling works - site investigation have found that piling will be required.

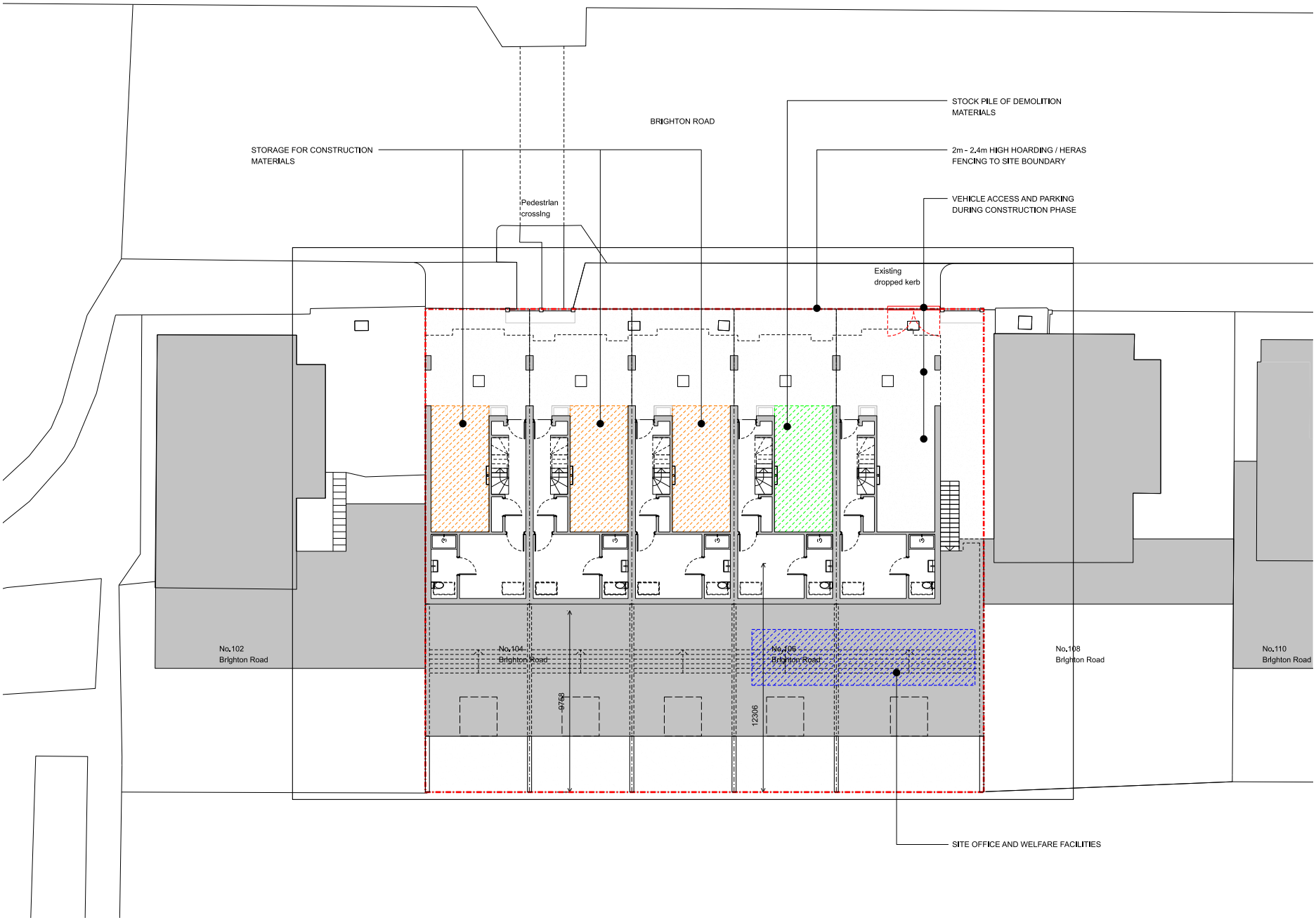
The use of insulated concrete formwork (ICF) is proposed for most external walls and party walls. The method of construction allows construction of the shell to progress faster than typical brick cavity walls and reduces vehicle movements. Walls will be constructed by level, with floor joists installed to tie the walls and provide a platform for the next lift.

Scaffold platforms will be constructed to enable construction and finishing of the external walls and roofs. Scaffolding to be installed, modified and demounted by trained operatives in accordance with the relative standards and to be regularly inspected and documented. Exposed poles at ground floor level will be wrapped with foam.

As walls are topped out the roofs will be formed and waterproofed and windows and doors fitted. Mechanical and electrical service will be installed. Finally external works and landscaping will be completed.



Site hoarding, entrance/hardstanding and material storage during demolition phase



Site hoarding, entrance/hardstanding and material storage during construction phase