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5-7 Station Road - Construction Method Statement

1.0 Introduction

Site Address: 5-7 Station Road, Hayling Island, Hampshire, PO11 0EA

The following construction method statement has been prepared for the proposed development of a mixed use development and comprising 2/3 storey building providing 19 flats and 2 commercial units with vehicle and bicycle parking and a bin store.

Currently there are five buildings on the site and in terms of usage the comprises 1no. residential unit (7 Station Road) and 6/7no. business units (5 Station Road). The site measures 0.183 hectares in size

As part of the method statement the following items will be included:

- A programme for demolition & construction
- Parking and facilities provisions
- Arrangements for site deliveries
- Methods and phasing of construction works
- Access and egress for plant and machinery
- Protection of pedestrian routes during construction
- Location of temporary site buildings & Storage facilities;
- Details of external lighting to be used during demolition, excavation, clearance and construction
- Details of measures to be employed to control the emission of noise during demolition

2.0 Programme & Phasing

The overall demolition & construction programme is estimated at 18 months and can be broken down into 5 broad individual sections:

- Pre start activities
- Site setup & Demolition works
- Groundworks & Construction Works
- Fit out and Commissioning
- External Works

As highlighted we have listed some of the works that will be undertaken at each of the first three stages which are where the majority of the major construction activities will be undertaken. It should be noted that this is not an exhaustive list but moreover defines some of the site activities that will be taking place during that phase.

Pre-Start Activities

Prior to commencement of works a period of pre-demolition planning and activities will be carried out to ensure works can be undertaken efficiently. Certain elements of these works will require third party approvals.

- Asbestos surveys and removal prior to demolition
- Section 80 of demolition approval in place
- Neighbour liaison before the commencement on site to explain the nature of works. Ensure neighbours are advised by leaflet drop, two weeks before works commence
- CCTV surveys of existing drainage (completed during the design stage)
- Utilities and services investigations
- Surveys of existing services and structures to confirm demolition methodology
- Ensure all existing fuel tanks have been made safe
- Clear all pre-start planning conditions prior to site setup works commencing

Site setup and demolition works

- Erect site hoarding in accordance with the demolition site layout plan (the erection of site hoarding will be amended as the demolition works progress and furthermore once the construction works commence)
- Provide vehicular and pedestrian gated access to the site
- Install temporary electrics, lighting water and drainage.
- Establish security provisions to ensure that site is protected against unauthorised access
- Establish a temporary site office and welfare facilities prior to demolition works
- Arrange for any asbestos highlighted within the survey to be removed by licensed contractor
- Arrange for existing fuel tanks to be removed in accordance with current legislation
- Emergency routes and signage on site to be specified and clearly signposted
- Diversions of existing utilities as required and isolation of existing services and systems within the building will be carried out at an appropriate point in liaison with the statutory service providers.
- Erection of demolition and access scaffolding where required with dust sheeting to assist with dust containment
- Setup site lighting

As part of the phasing for the site setup and demolition the contractor will erect site hoarding around the perimeter as indicated by the blue dashed line. The Hoarding will include a site entrance in the location of the existing dropped kerb that will be used throughout the duration of the works, and the entrance will provide separate pedestrian and vehicular access to the site.

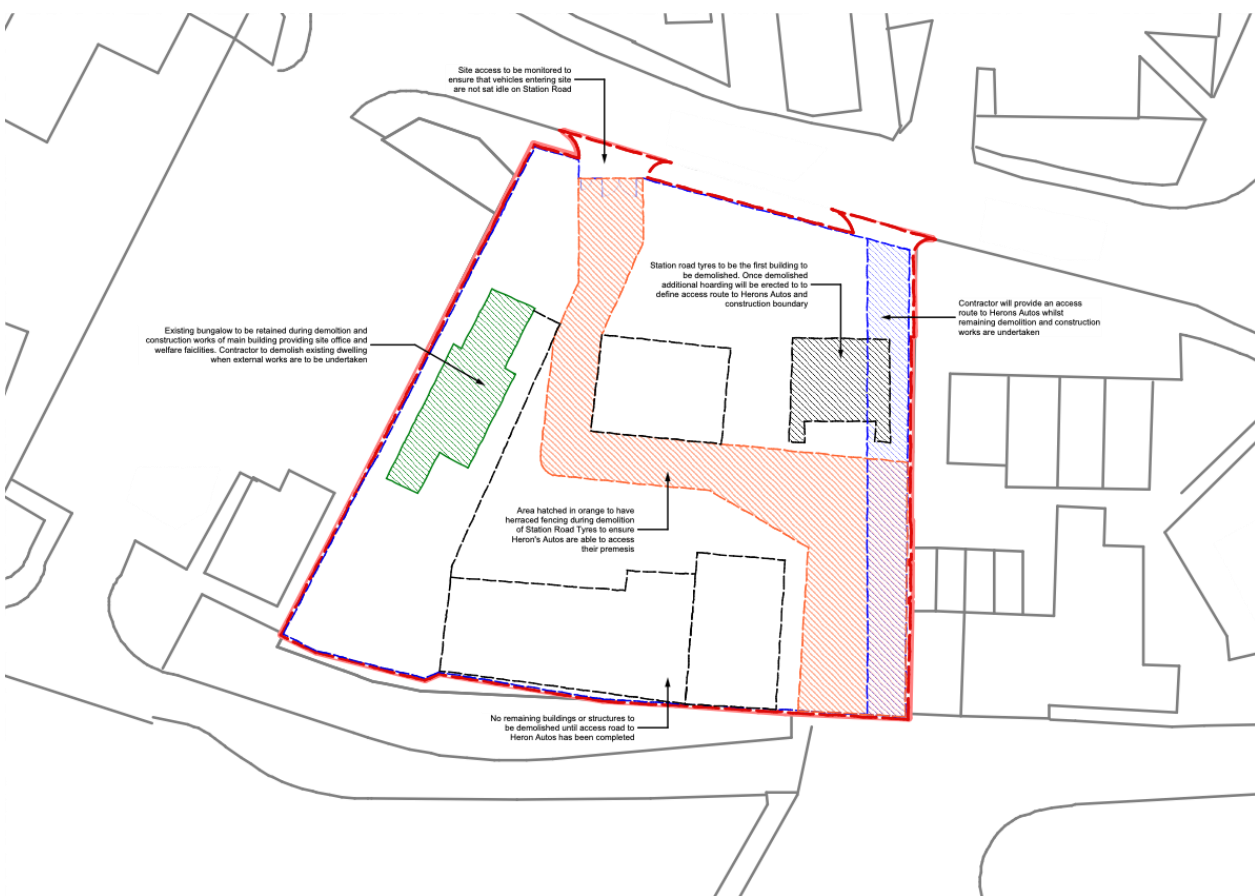
Upon completion of the construction works the agreed site access works will be completed. The Highway Authority requires the access works to be constructed prior to occupation of development in accordance with drawing number 2018-4652-001 Rev C via a Section 184 licence.

Once the perimeter hoarding has been completed, a path of heras fencing will be erected (defined by the orange hatched path shown on the setup and demolition plan). This route is a temporary

access route that will ensure Herons Autos are able to access their site safely whilst the first phase of demolition commences. The first building to be removed as part of the demolition works will be Station Road tyres which is located to the North East Corner of the site. This building requires removal to provide a more safe permanent access to Heron's Autos in the South-East corner of the site. Therefore as soon as Station Road tyres has been demolished the contractor will erect additional hoarding which will be inset from the boundary of the east edge and lay a temporary surface defining the access to Herons Autos.

Once this access has been established the heras fencing will be removed and the contractor will have exclusive access to the site to demolish the remaining buildings. It should be noted that the temporary surface for the access to Herons Autos will remain in position until all remaining remaining demolition and construction works are complete and the surface can be upgraded as part of the external finishing works.

As part of the demolition works for the site it is anticipated that the existing residential dwelling (No.7 Station Road) will be retained and will be used throughout the demolition and construction of



the main building as the site office and for welfare facilities.

Fig 1.0 - Site Setup and Demolition Plan

Groundworks & Construction Works

- Remove any potential contaminants in accordance with current legislation
- Apply for permission to erect scaffolding on council owned land
- Erect scaffolding in accordance with the construction works plan
- Adapt the the site hoarding in the south-east corner to en compass the scaffolding requirements
- Define site vehicular parking spaces on site as shown on the construction works plan
- Define plant and material storage area on site as shown on the construction works plan
- Adapt site lighting

- Ensure the site entrance is monitored for deliveries and visitors etc
- Commence the construction works in accordance with the phases outlined on the construction works plan
- Ensure residents have been notified prior to works formally commencing on site
- Outline site delivery zone

Once the site has been cleared the foundations will be set-out and the groundworks will commence in accordance with the structural engineers recommendations. It is anticipated that traditional trench fill foundations will be sufficient given the information that has been provided to date. Therefore once the foundations have been dug and poured it is proposed that the construction works will be split into three sections as highlighted on the construction works plan. The first phase of the works will start with the largest building section (highlighted by a red hatch).

The second section of works (highlighted by a brown hatch) will be the area along the east boundary and area defined by the blue hatch will be last section. There will inevitably be some overlap amongst these defined sections of work both in the early stages and even more so in the finishing stages. However, as visible from the planning drawings the three sections of work that have different architectural styles and as such a clear distinction between the phases can be made.

By phasing the works like this it is anticipated that this will have a beneficial impact for the contractor as the larger works will be completed at the start of the project and the storage of



materials and deliveries can be managed more efficiently.

Fig 2.0 - Construction Plan

3.0 Traffic Management & Parking

As part of the overall traffic management for the site and surrounding streets this section of the document will highlight the measures that will be implemented to ensure the construction does not have negative impact upon the public that may arise from increases in traffic flows.

The measures that have been considered relate to site access from Station Road for plant and machinery and site parking. Other measures that will also be discussed will include timings of deliveries.

As highlighted on the construction plan Station Road is the main road that runs along the site and therefore access and egress will be made directly from/onto Station Road. Station Road has a regular flow of traffic from pedestrians and vehicles and as such it is important disruption to this is limited. As such the proposal it will be upto the contractor to ensure that any deliveries and visitors are admitted onto the site in a timely manner to ensure that vehicles are not blocking Station Road.

The set up of the site provides adequate room for storage of materials - ie masonry / stone, however it is expected that major components such as steelwork will be programmed to arrive just-in-time. A delivery zone will be established on site and will be able to hold a min. of one HGV at any time.

Furthermore, where possible, vehicles will be brought to site between the hours of 09.30 and 15.30 to avoid the peak periods. It is anticipated that there will be peaks during the demolition works and during the initial phases of the construction. As part of the contractors responsibilities for the site it will be expected that any vehicles reversing onto Station Road from the site will be appropriately guided onto the highway by a competent person or persons. The total vehicle numbers per day are not expected to be large with numbers ranging from 4-6 per day with large vehicle numbers to be around 2-4 per day.

Due to the angle of Station Road against the site it will be encouraged that all large goods vehicles approach the site from the north-west in order to make access onto the site easier.

A total of 5 designated parking spots for contractors and sub-contractors will be provided on site as highlighted on the site plan. One of the five spaces should be allocated for visitors, however, this will be managed by the site foreman as the visitor space may be used by contractors if visitors are not scheduled.

The maximum number of on-site personnel is likely to range between 10-15 and personnel are likely to arrive in gangs. If, in the unlikely event there are not sufficient spaces on site then smaller non-commercial vehicles could use the 24-hour car park next to the site. It is advised that this car park should be used sparingly throughout the duration of the works.

4.0 Protection of Public Routes

As part of construction it is important to ensure public routes and neighbouring land around the site are protected at all times. Therefore as you can see from the construction plan we have highlighted where the site hoarding will be setup and furthermore where the scaffolding will be setup.

There are certain areas of the site that require particular attention in relation to protection of routes. The first being the retained access route along the east boundary of the site to Herons Motors. During the construction the demolition and construction works Herons Motors will be operating and access and protection of this access route is imperative. Therefore it is recommended that debris netting around this section of the scaffolding would need to be considered.

Other areas of concern arise around the south-west corner. It is likely given the layout of the building that scaffolding will need to be partly located on the neighbouring land owned by Havant Borough Council, and as such permission to do so will be sought in advance. However, in order to protect the land and the public debris netting around this corner will be required.

Given the potential for dust becoming a nuisance to the neighbouring properties and surrounding land the contractor should consider the potential for using a debris/dust netting system around the full extent of the scaffolding.

With the anticipated levels of vehicular movement highlighted in Section 3.0 it is important to mitigate against mud, slurry and other pollutants migrating onto the pavement and furthermore onto the public highway.

The site foreman will be responsible for regularly checking the cleanliness of the highway and wheel washing facilities will be provided at the entrance/exit of the site. The facilities will be available for all site vehicles. It is anticipated that the wheel washing facilities will only be required during the initial weeks of the project when the existing ground is removed and footings for the new building are poured. However, the wheel washing facilities will remain on site until the development is complete.

Prior to leaving site all vehicles will be inspected and any heavy deposits on vehicles will be manually removed. Following the inspection all vehicles will be manually washed down using a high pressure jet wash until all debris is clear from the vehicle.

Wagons Carrying loose materials shall either be covered prior to leaving site or damping down will be considered, especially when conditions are particularly windy (this is dependent on the materials being carted away).

5.0 Site Buildings & Storage

As highlighted in section 2.0 of this document it is proposed that (No.7 Station Road) will be retained and used throughout the demolition and construction of the main building as the site office and for welfare facilities. This provides a practical solution to the contractor as the current structure is not in the way of the main core of the demolition and/or construction works and can be removed prior to the external works being undertaken, which will be near the end of the project.

The area north of this will be used for plant and material storage and is located close to the entrance of the site and delivery zone in order to ensure deliveries can be made efficiently and stored safely away from the main construction areas of the site until required.

6.0 Site Lighting

During the project life cycle the requirement and need for temporary lighting will be adapted depending on the phase of the works that are being undertaken. The use of temporary lighting on site can be arranged in different ways to allow for the most efficient use and will either be fixed to support poles, scaffolding, or on movable supports. The main phases of the works have been broken down into the following categories, demolition, excavation and construction, and details of the minimum expectations for lighting have been provided along with general requirements for lighting around the site.

Site lighting should be positioned and directed to not intrude unnecessarily on adjacent buildings and land uses, or to cause distraction, glare or confusion to passing drivers on surrounding public highways. PPG (Pollution Prevention Guidelines) section 6, states that nuisance lighting on construction sites can be reduced through screening, effective programming of work, directional lighting and type of lights used.

Demolition

During the demolition process the HSE guidelines state that the average illuminance required to undertake tasks such as clearance, excavation in hazardous areas; and soil work should meet 50 lux, with the minimum measure illuminance being 20 lux. Due to the fact that there are a number of

buildings to be demolished on site it would be practical to provide a mix of lighting of both support pole lighting and lighting on movable supports.

During the demolition process it is likely that the works will be phased to ensure that one building is demolished at a time to ensure that the buildings are demolished in a safe manner. Therefore the mix of support pole lighting and movable support lighting, if required, will be localised to the building being demolished at any one time which should mitigate any nuisance lighting to the neighbouring properties.

Excavation

As highlighted above the excavation works will require 50 lux, with the minimum measure of illuminance being 20 lux. At this stage of the development further lighting will be required around the site as the formal set-up will be in place and it will be critical to ensure that the movement of people and machines around the site is also adequately lit. As such lighting for these activities requires an average illuminance of 20 lux, with a minimum measure of illuminance being 5 lux.

Given that the works at this stage will all be taken at ground level and the site will have a continuous site hoarding it would be reasonable to suggest that screening around the site to prevent nuisance lighting will not be required. Furthermore Given the precise nature of the excavation works the lighting could be achieved through the use of support pole lighting only. As the lighting will be directional it is again unlikely that there will be any nuisance lighting to the neighbouring properties.

Construction

Throughout the construction phase of the works a requirement for an average 50 lux will need to be achieved, with the minimum measure of illuminance being 20 lux. However, the amount of lighting will be significantly increased and the lighting will need to be positioned at heights above the hoarding level.

Therefore, it would be recommended that on all levels above ground level the contractor should provide a form of screening that will not only mitigate against any nuisance lighting but also provide a dust screen to the neighbouring properties. As the scaffolding will be erected during this stage there will be a mix of scaffold pole lighting required and more generalised lighting for the movement of people and machines around the site. The scaffold pole lighting above ground floor level should be positioned inside the proposed screening. Furthermore once the main bulk of the construction works have been completed (ie. the superstructure) it will be important that the contractor provides proposed further lighting for internal works.

7.0 Mitigation of Noise, Dust & Vibration

As part of the construction process it is inevitable that nuisances set out in the PPG (Pollution Prevention Guidelines) will occur with the main three nuisances that are likely to occur being noise, dust and vibration. Therefore this section of the document highlights the mitigation strategies that will be implemented in order to ensure these nuisances fall within acceptable limits. However, prior to the recommendation of any specific measures, we have highlighted some management mitigation strategies that will hopefully satisfy any concerns raised from residents of the neighbouring properties.

- Firstly specific working hours (in line with the LA planning permission) will be specified to ensure that neighbours are aware when noise disturbance is likely to occur and that this nuisance will be limited to these hours.
- Secondly details of the site foreman will be provided to the residents of the neighbouring properties to answer any queries/concerns that may be raised.

- Thirdly a programme of works will be provided to the neighbouring residents and/or erected on the site hoarding so that the residents of the neighbouring properties are aware of what processes will be taking place at any given time.

The British Standard BS 5228-2:2009 provides guideline peak particle velocities (PPV) for assessing the impact of construction vibration; PPV is the preferred metric for assessing the impact on affected residential occupiers and these have been outlined below

Vibration Level (PPV) & Effect

0.14mms-1 : Vibration might be just perceptible in the most sensitive situations for most vibration frequencies associated with construction. At lower frequencies, people are less sensitive to vibration.

0.3mms-1 : Vibration might be just perceptible in residential environments.

1.0mms-1 It is likely that vibration at this level in residential environments will cause complaint, but can be tolerated if prior warning and explanation has been given to residents.

10mms-1 Vibration is likely to be intolerable for any more than a very brief exposure to this level.

The table below outlines the noise effect levels from construction works at dwellings

Construction noise effect level	Threshold Value, 1m in front of the relevant façade (dB)
Lowest Observed Adverse Effect Level (LOAEL) – Category A in BS5228-1	Day 65 dB LAeq, daytime Evening 55 dB LAeq,1h Night 45 dBLAeq,1h
Significant Observed Adverse Effect Level (SOAEL) – Category C in BS5228-1	Day 75 dB LAeq, daytime Evening 65 dB LAeq,1h Night 55 dBLAeq,1h
Unacceptable Observed Adverse Effect Level (UOAEL)	Day 85 dB LAeq, daytime Evening 75 dB LAeq,1h Night 65 dBLAeq,1h

As highlighted, during the construction process there are a number of process that could/will cause noise, dust and vibration and these have been highlighted below along with some of the mitigation strategies that will be implemented to ensure the level of nuisance is limited.

Demolition

- The contractor carrying out demolition works should utilise non-percussive techniques (e.g. electric and hydraulic pulverisers) where practicable.
- Use well maintained modern plant
- Vehicles to be washed and cleaned effectively before leaving site
- Drop heights to be reduced where possible to prevent impact sound and vibration
- Where practicable, building elements should be detached from a structure and lowered to ground level.
- Erection of site hoarding to act as minor acoustic screen.

Groundworks

- Excavation works to be undertaken using hydraulic plant where possible

- Vehicles and plant to not be left idle
- Concrete pour sizes and pump locations to be carefully considered
- All arisings to be watered to suppress dust where possible

Construction

- Ensure machinery and vehicles are well maintained to meet necessary standards, minimise emissions and noise.
- Where possible, use machinery or plant with noise control measures e.g. silencers, mufflers, acoustic covers.
- Cutting equipment to use water as suppressant where possible or suitable local exhaust ventilation system.
- Dust screening to be positioned around scaffolding
- All fabrication and cutting of steelwork should take place off-site where possible

As part of the overall mitigation measures it is important that along with all the measures outlined the contractor builds good relations with the community in order to show that all works are being carried out in a considerate manner.