

Station Hill Reading

Demolition of Friars Walk and Telecom House

Method Overview

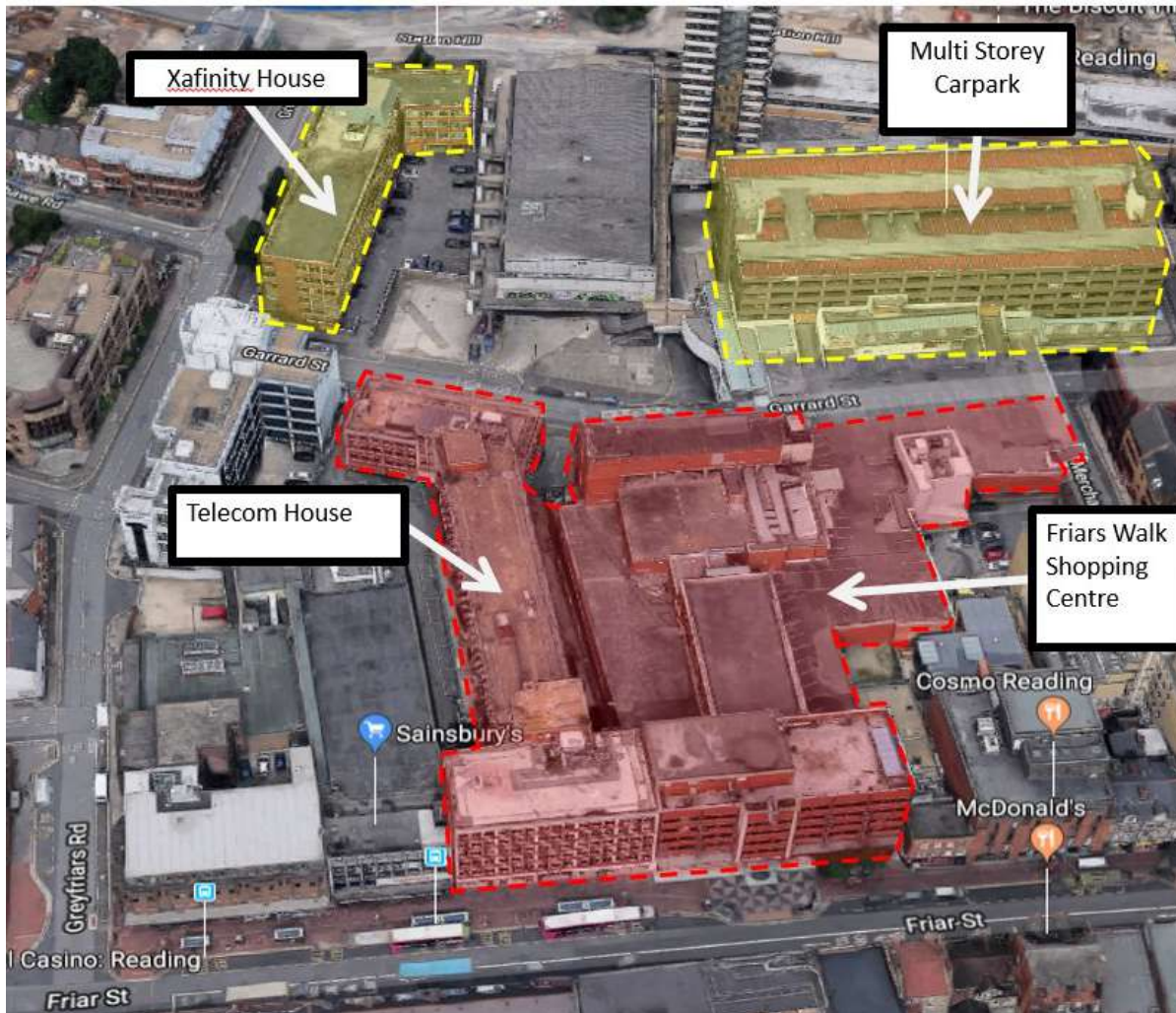


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1. Overview





Site Location

Telecom House is a office building with retail units on the ground floor, ranging from four to six storeys throughout.

Friars Walk shopping centre is adjacent to telecom House and connects Garrard Street and trough to Friars Walk. We are aware that Savers at unit 48-48A, A2 Supplies (unit 21) and Bon Marche (50-51) of Friars Walk are currently occupied.

We understand they will be vacant at the time of works, but should any delays occur works may be re-programme to avoid delay in the project as far as practicable and safe.

The Works

- Services Isolations
- Temporary Services
- Soft Strip
- Temporary works to facilitate demolition
- Structural Demolition to ground bearing slab(s), hard standing and road structures where they are not being retained for the permanent works
- Community Liaison
- *Asbestos surveys have been carried out and all known asbestos will have been removed prior to our possession for demolition*

2. Site Investigations



Site Investigations

Existing Building

Telecom House and Friars Walk buildings stand as independent reinforced concrete structures, with varied construction methods through different sections of each building.

While further detailed inspections are required to ascertain full details of construction, initial site inspections have revealed both solid concrete and rib / waffle ('clay pot') slabs are present.



Clay Pot / Waffle Slab

Significant alterations have taken place in terms of removal of sections and in effect a reduction in the size of the roof level carpark, where the carpark overpass has been previously removed, separating the Friars Walk shopping centre carpark from the Garrard St Multi Storey Car Park in mid 2015.

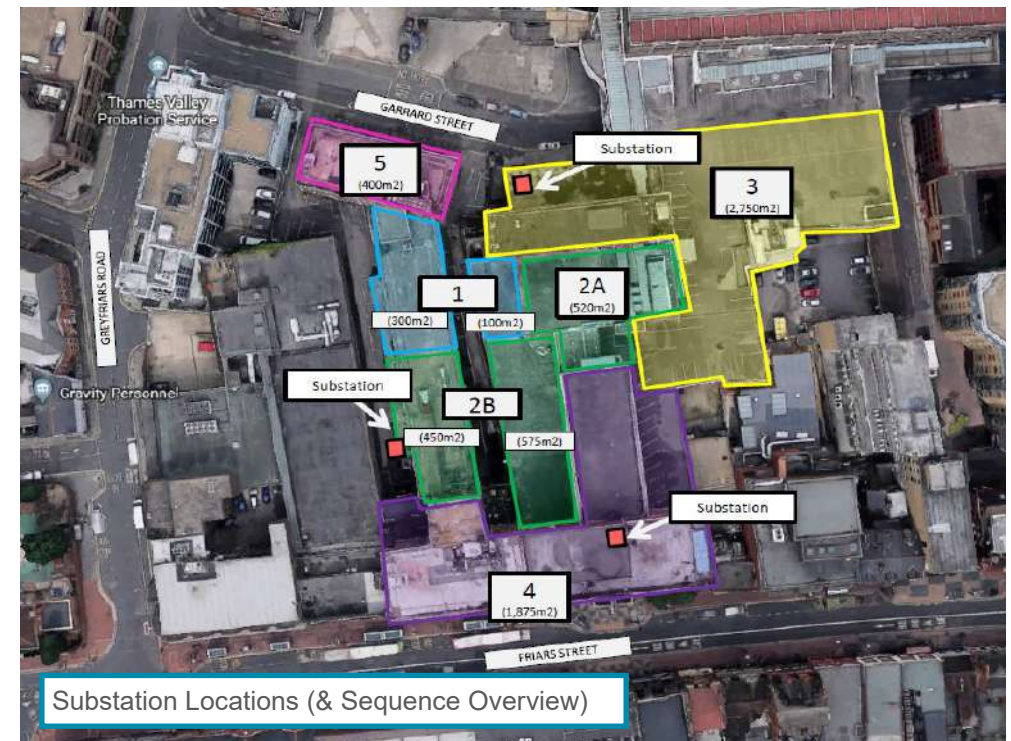


Car Park separation Works completed mid 2015

Site Constraints

Three substations are positioned within the demolition footprint, and require decommissioning prior to demolition commencing within the vicinity.

Latest possible decommission dates are provided within the programme contained within this methodology



Substation Locations (& Sequence Overview)

3. Site Layout & Logistics



Site Layout & Logistics For Prior Approval

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- Trees pruned & protected 2No
- Trees removed 3No
- Monarflex clad independent scaffold
- Scaffold protection fan
- Protected Walkway
- HAKI Access Stairs
- 2.4m high hoarding
- Lane closure required, Taxi rank temp relocated to create additional lane to maintain 2 lanes traffic
- Traffic marshals
- Pedestrian crossing
- Felt & battens weather protection
- Party wall temporary works & felt & battens weather protection required
- Jet Wash facility



The existing cross overs onto the site along Garrard St will be utilised to facilitate the demolition works. Where required these will be widened with protection measures installed. Any changes in level will have tarmac fill installed to remove any trip hazards. Any damage to the surrounding footpaths / highways will be repaired.

4. Site Establishment and Set-up



Site Establishment & Set Up

Hoarding, Access and Egress

The site will be completely protected by 2.4m high timber hoarding or protected pedestrian tunnels. All pedestrian walkways will have fully boarded soffits, upstands with the external legs and foundations boxed in with openings. Pedestrian walkways will be lit sufficiently.

Pedestrians will access the site via security controlled pedestrian gates. Access will be strictly controlled using a biometric bi-directional turnstile and finger print scanner. This enables all site personnel and visitors' movements to be accurately logged and ensures no unauthorised persons enter the site.

No construction vehicles will be permitted to enter site before 08:00 or after 18:00 Monday to Friday, or outside our specified delivery times unless they are granted express permission.

Site personnel will maintain warning signs, barriers and safety measures, and report any defects to the Asbestos Contracts Manager Project Manager and walkways to be repainted as necessary to maintain a smart appearance.

Approximate duration of use for each gantry / scaffold can be extracted from the programme and timescales provided within this methodology.

The demolition contractor will arrange for the removal of the existing lampposts through the Council, this will not be done until suitable alternative lighting has been provided. Due to timescales a temporary solution may be installed whilst the location of the new lampposts is agreed with the Council.

Site Security

During the works the following provisions will be put in place to safeguard the project, the public and the surrounding stakeholders:



- CCTV cameras with facility to record live footage, monitors movement around the site and is accessible remotely via a broadband connection
- Scaffold intruder alarms to prevent unauthorised accesses via the demolition falsework or temporary works
- Turnstile at the main entrance gate with biometric scanners—our provider is Donseed, who were finalist in the Technology Supplier of the Year category of the Construction News Specialist Awards 2017
- Logistics gang with trained traffic marshals/banksmen to manage pedestrian and vehicle movements
- All areas of the site shall be inspected daily and prior to any work commencing to ensure no unauthorised intrusion or other suspect activity has taken place
- No unauthorised person will be allowed access to the site at any time and all visitors will be directed to Contracts Manager's office only.

donseed



Welfare

It is proposed to make use of the existing hardstanding adjacent to Xafinity House and west of Garrard Street Car Park.

During the initial stages of the project a temporary welfare facility could be created within Xafinity House for short-term use making use of the existing facilities that are unavailable within Telecom House or Friars Walk while permanent welfare is established.

All welfare will be in line with our Company Safety Standard No. 2 'Site Welfare Facilities' which exceeds legislative requirements under CDM 2015 by specifying the number of facilities required according to the number of people onsite.



Above: Example welfare entry with cabins, hoarding and segregated pedestrian route

Site on completion

As the project nears completion, the project team in close consultation with the client, will take the necessary steps to ensure a safe and secure site is handed over. Excavations will be made safe, any live edges protected, retained services clearly identified and hoarding fit for purpose. Any close out actions required, would be tabled during the site walk, for close out and final authorisation of project completion by the client.

5. Traffic Management and Access



Traffic Management & Access

Cranes

By the methodology proposed, the works would be serviced by mobile or crawler cranes (moving progressively around site). The only access required would be contained within the required scaffold zone (lifting scaffold gear to and from the external work face, from within the site).

Parking Bay Suspension

Garrard Street acts as the main thoroughfare for servicing the demolition works.

Generally the parking bays along Garrard street will not need to be suspended. If required for one off and/or “special deliveries” this will be formally applied for from the council 6 weeks prior to the required date.



The parking bays adjacent to the south site access points will be suspended as needed should this be required. The suspensions will be applied for from the council 6 weeks prior to the required suspension date.

The 3 taxi holding bays opposite Telecoms House will not need to be suspended to facilitate the demolition works. However the Statutory Utilities may need to be suspended these for the disconnection/diversions of the substations (TBC).

For the taxi bays adjacent to the NCP, these will need to be suspended for a limited duration 5 – 10 weeks (dependent on the chosen demolition Contractors programme / methodology). These will be moved on to the existing car park access road as shown opposite. These will be moved on to the existing car park access road as shown.

A protective scaffold walkway tunnel will be erected along the NCP elevation over the existing footpath to

maintain pedestrian flows and enable the demolition scaffold to be erected to the NCP (as shown below). The scaffold to Friars walk would be installed on the road and the lanes moved over utilising the old taxi rank as shown below. This proposal would keep the taxi bay in operation, the footpath open and the carriage way open as existing whilst undertaking demolition

Liaison with the Local Authority would take place early on in the pre demolition period to allow sufficient time for these to be obtained taking account of the 6 week LA approval period (see attached programme for latest date for submitting applications).

Pedestrian Management

Protective pedestrian routes will be provided. The philosophy is to maintain existing footpaths as far as reasonably practical. Footpaths closed only when an alternative safe route can be provided (i.e. temporary crossings and adjacent footpaths available), with prior notification with the local community in advance of any alternative arrangements to minimise disruption.



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Where required, overhead gantries will be installed to maintain safe pedestrian access below (*shown bottom left*).

A Traffic Management Licence will be applied for from the Council for any temporary crossings that may be required.

Gantry & Scaffold

Gantry, scaffold and fans are only shown for external elevations (where third party access approvals are required), extending a maximum of 3m beyond the boundary line (scaffold + fans).

Scaffold and gantry on Friars Street shall extend past the demolition line by 1m in plan view (to ensure containment of the demolition).

In the below, Pink zones require only general access to adjacent property for inspections. Yellow zones require 3m zone from face of boundary for protection installation (scaffold, gantry, fans) and general access to adjacent property for inspection.



Transportation

There will be limited parking on site and all site operatives will be encouraged to utilise public transport.

Jet washing facilities will be provided at vehicle exits to control the emissions of dirt on the road. All waste will be covered and sheeted prior to leaving site. (refer to the CMP for further details).

A waste loading area will be created within the site compound during the demolition works, there will be no waiting to access or after egress of site, with delivery schedules adhered to strictly to avoid clashes.

All loading / unloading will take place within the site boundary, with the exception of one off and / or “special deliveries” which will be pre planned and agreed with the Council prior to implementation. (i.e delivery of tower cranes etc).

Site Rules for Deliveries

Deliveries will not be made to site during the following times, 7.30am – 9am and 5.00pm – 7.00pm, Monday to Friday, in accordance with the Councils Guidance Notes for Activities on the Public Highway.

The rules right will be issued when we place an order with our suppliers, along with any site-specific rules, to help ensure compliance. For an auditable trail all deliveries are logged on our Delivery Drivers Attendance Sheet (SMS-018-3).

Vehicle reversing alarms on plant and delivery vehicles will not use the tonal “bleeping” sound. A white noise reverse signal will be utilised which is less of a nuisance as it is lower in frequency and less intrusive .

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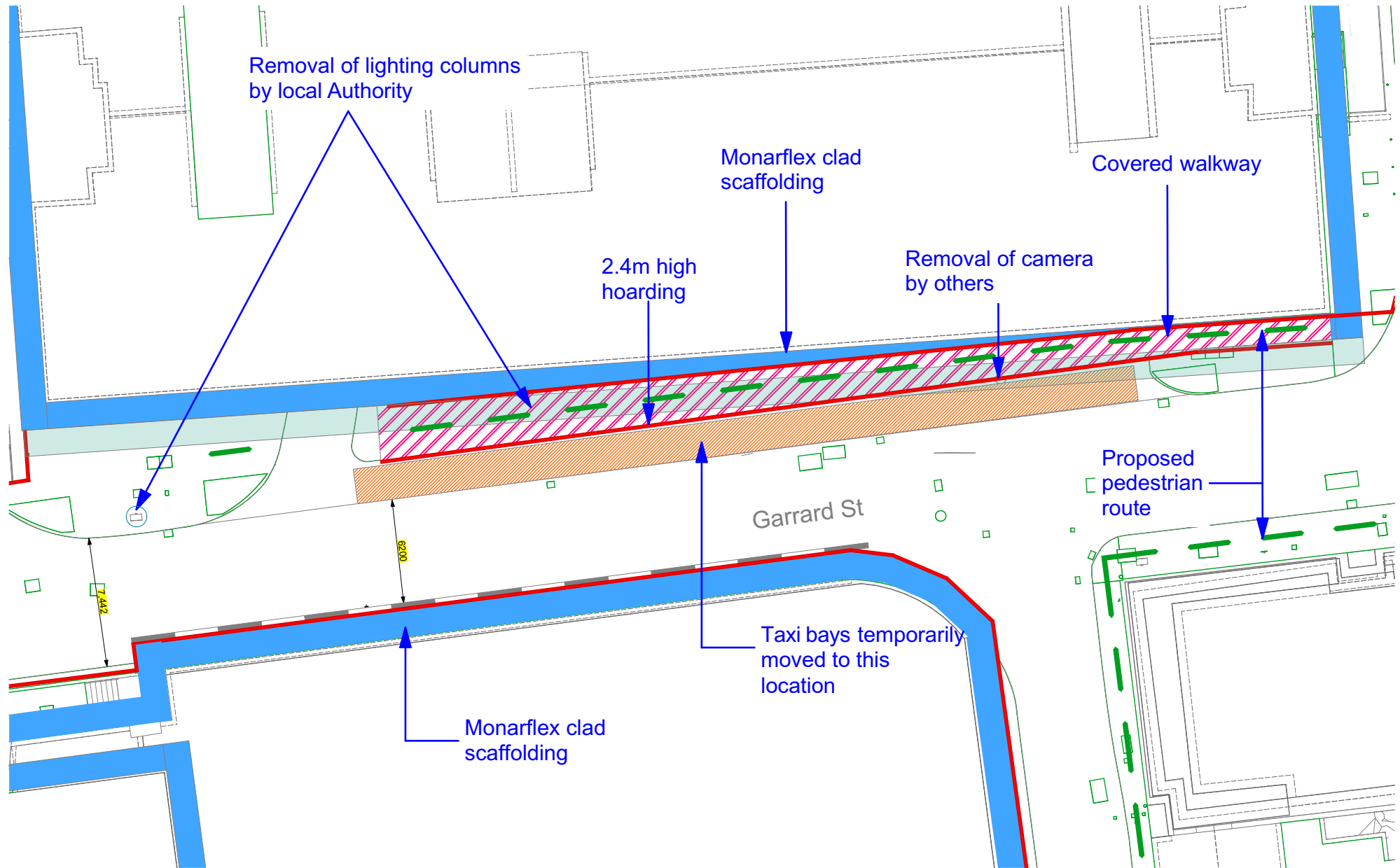
Site Rules for Delivery Drivers

- ⇒ Maintain site speed limit, 5MPH
- ⇒ **Switch your ignition off** when waiting to protect local air quality
- ⇒ Only deliver at your pre-booked time
- ⇒ Remain in your vehicle at all times unless otherwise instructed and wearing PPE
- ⇒ Before leaving your vehicle ensure it is disabled and switched off with breaks applied
- ⇒ Register at the site office asked to leave your vehicle; you must be escorted round site
- ⇒ STOP at the exit gate and before moving out onto public roads: never reverse out of the site onto public roads
- ⇒ Do not unload vehicle without Banksman present or mechanical assistance
- ⇒ Wait in designated area only near the site

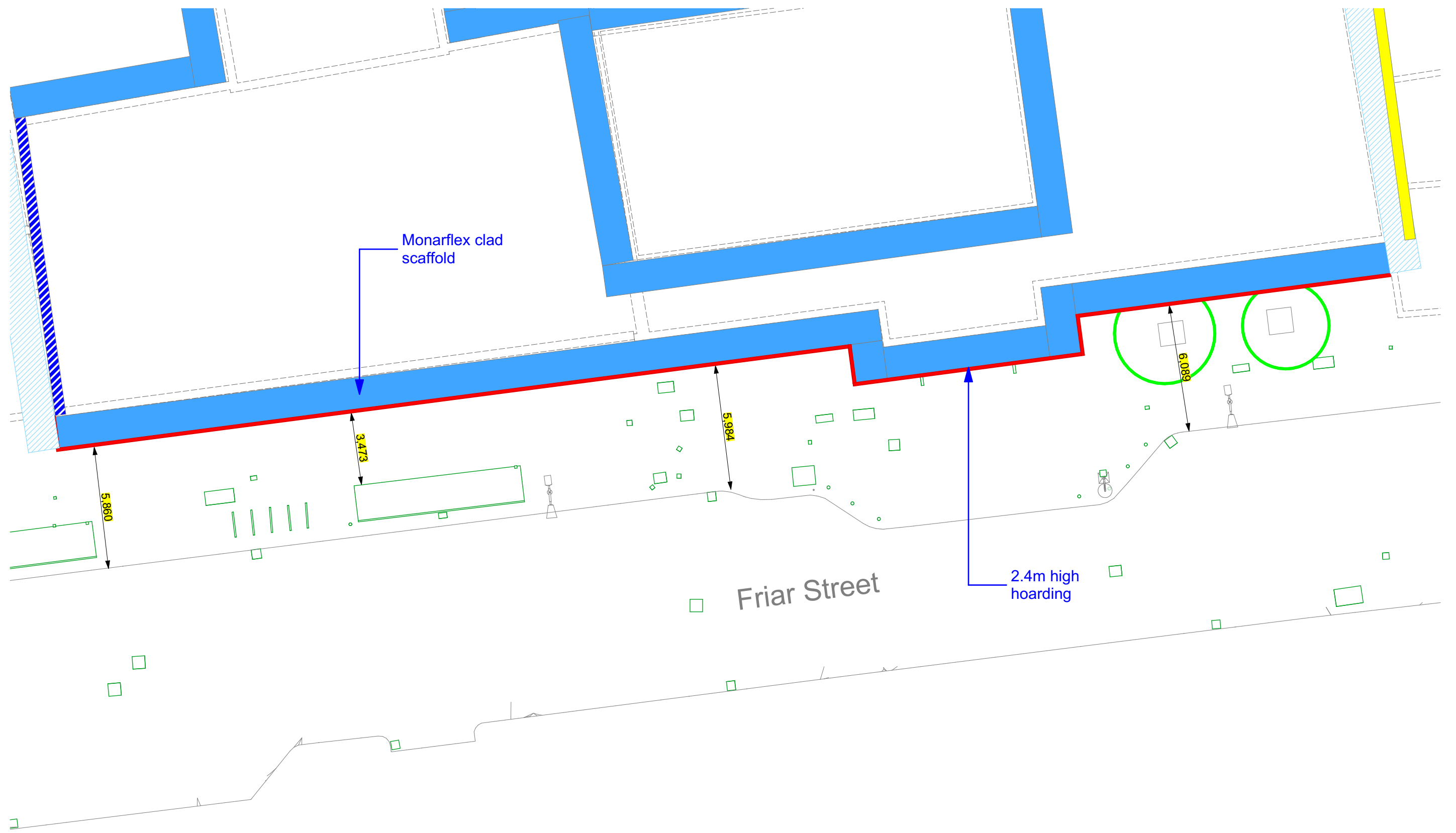
All vehicles from our in-house divisions including Plant Hire and Lifting are FORS Bronze or Silver and in line with CLOCS. We will require the rest of our supply chain vehicles to be compliant to FORS Bronze at minimum.



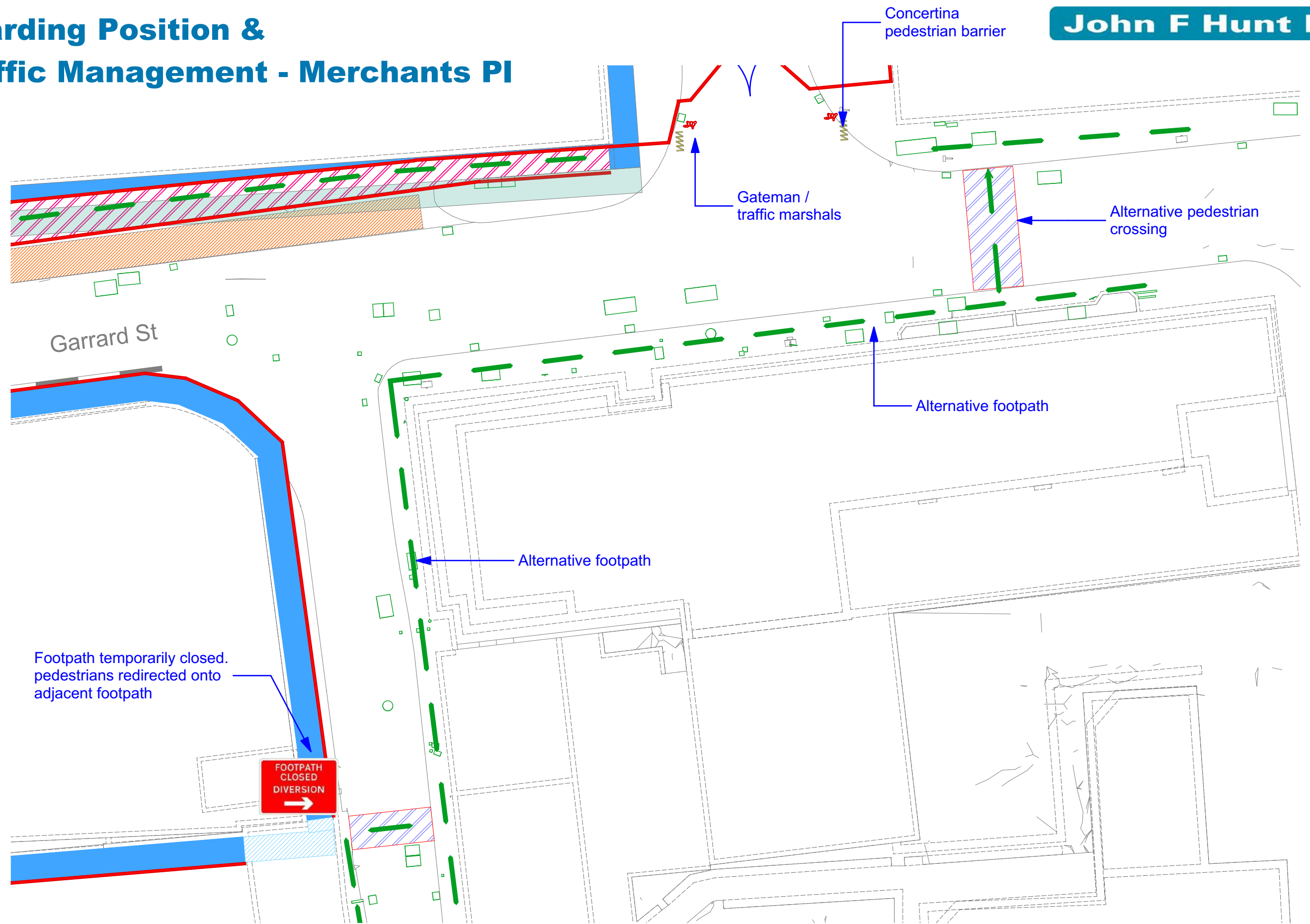
Taxi bay relocation



Hoarding Position - Friar St

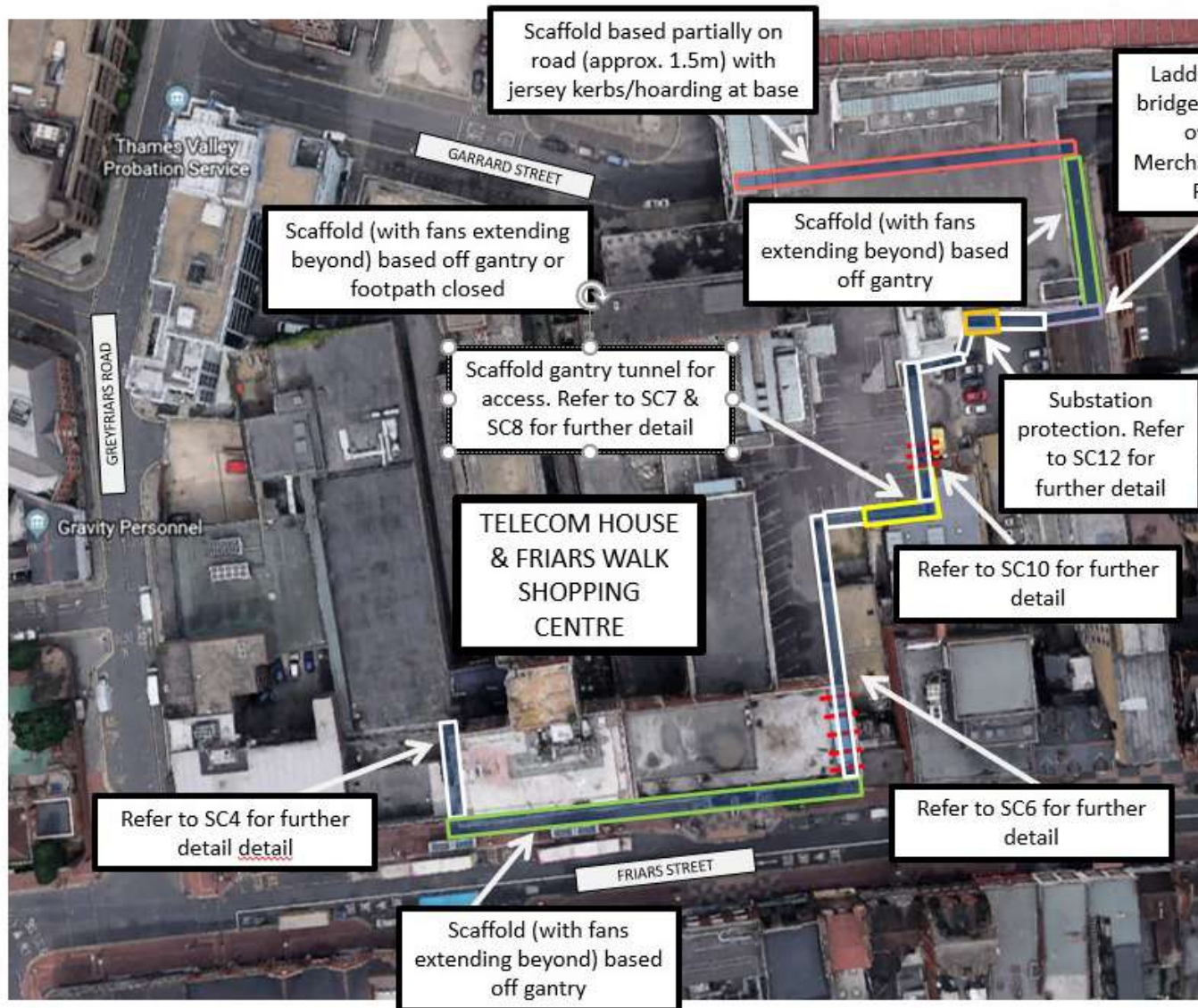


Hoarding Position & Traffic Management - Merchants PI



Outline Access Proposal

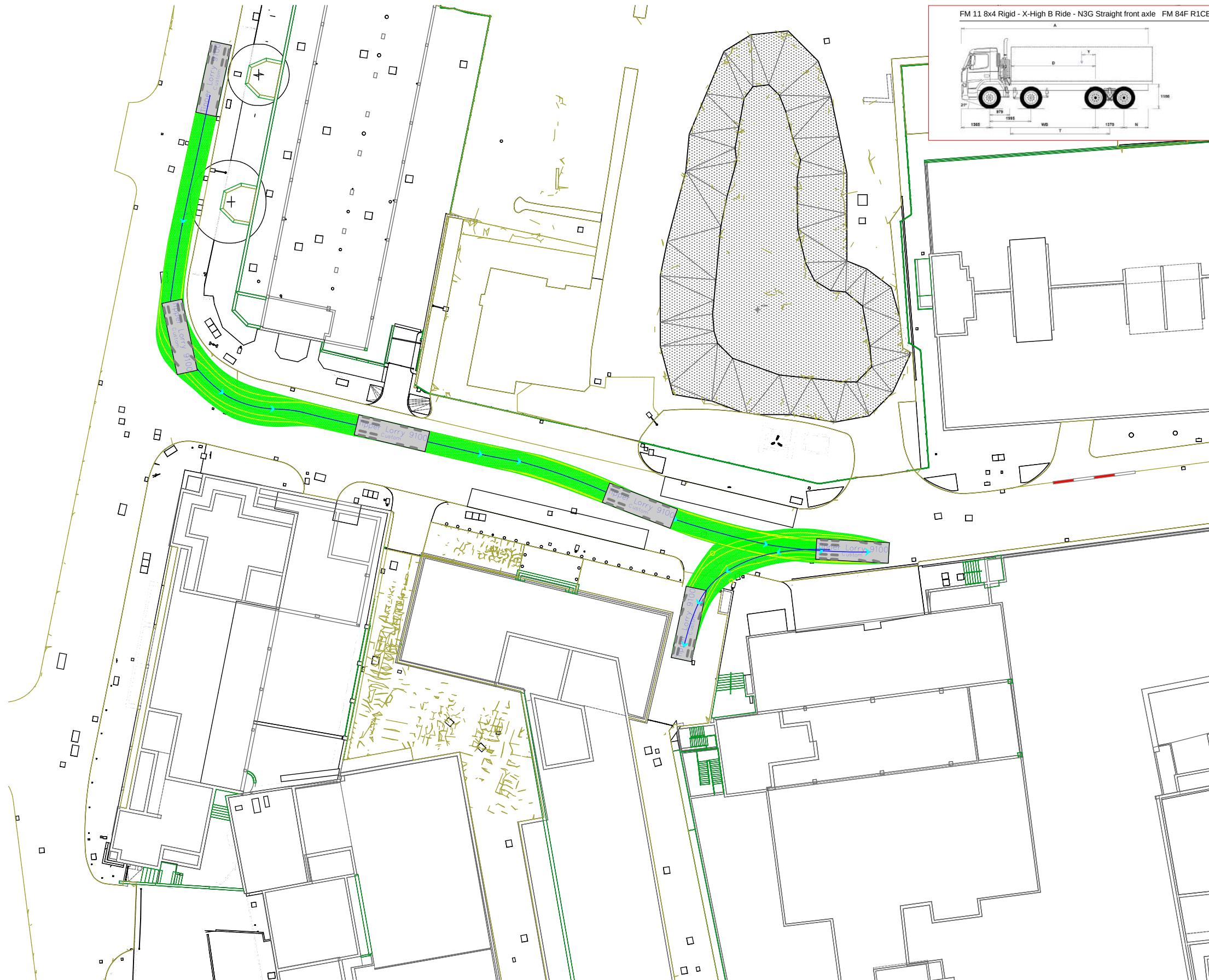
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This image shows a detailed scaffold and gantry plan and provides reference to some specific considerations listed on the following pages.

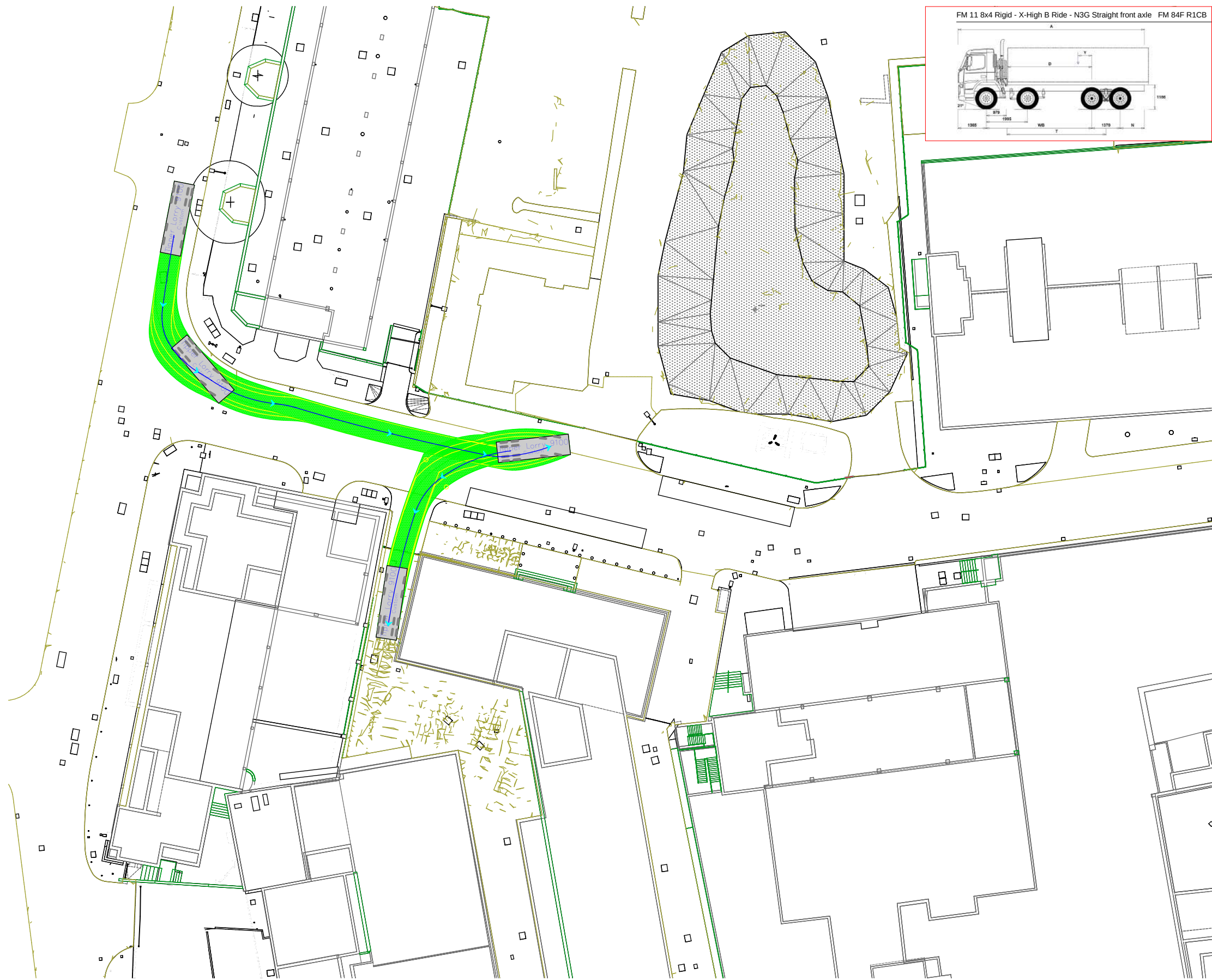
Swept Path for Soft Strip & Early Works

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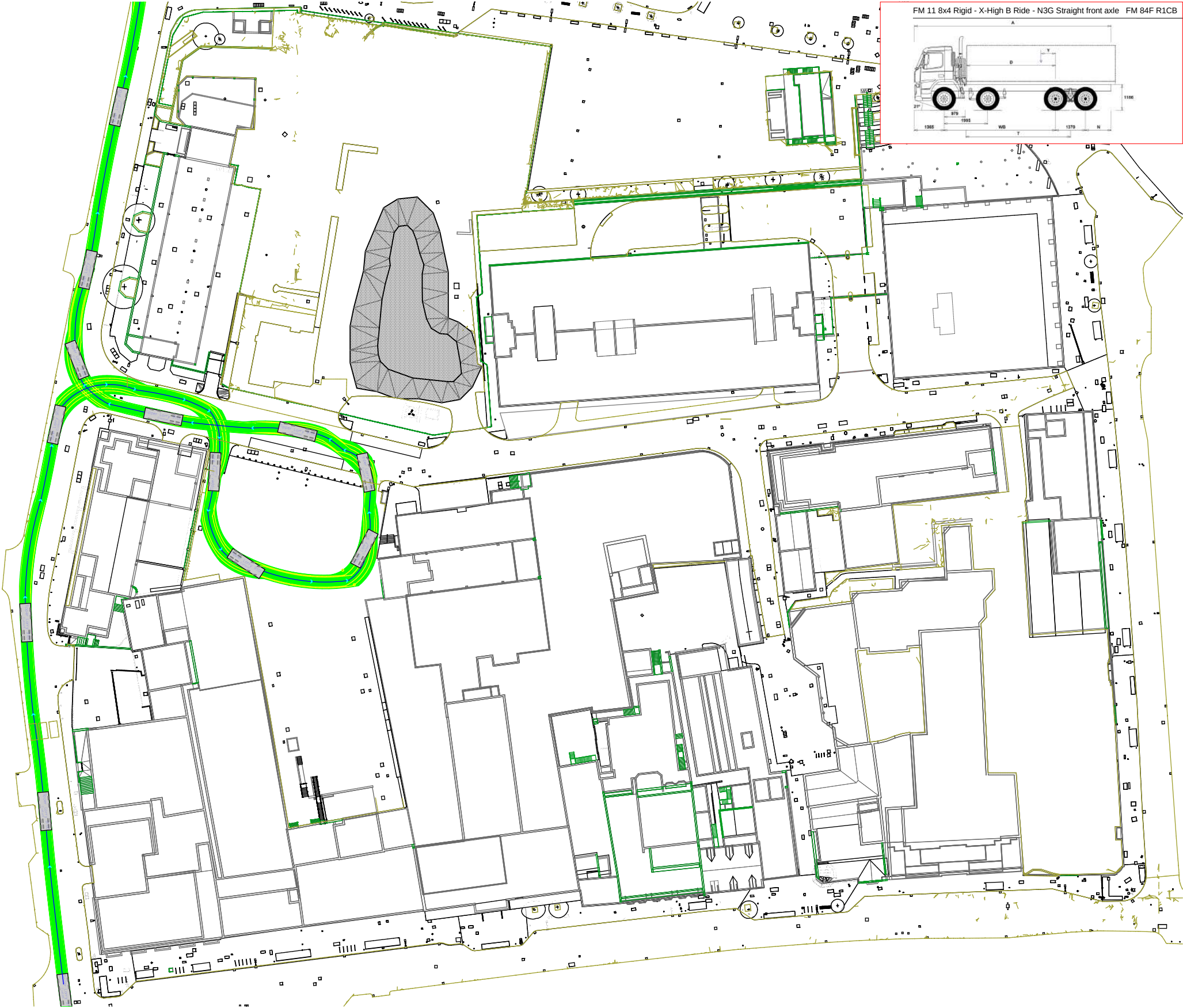


SCALE 1:500 @A3

Swept Path for Soft Strip & Early Works



Swept Path South after Demolition



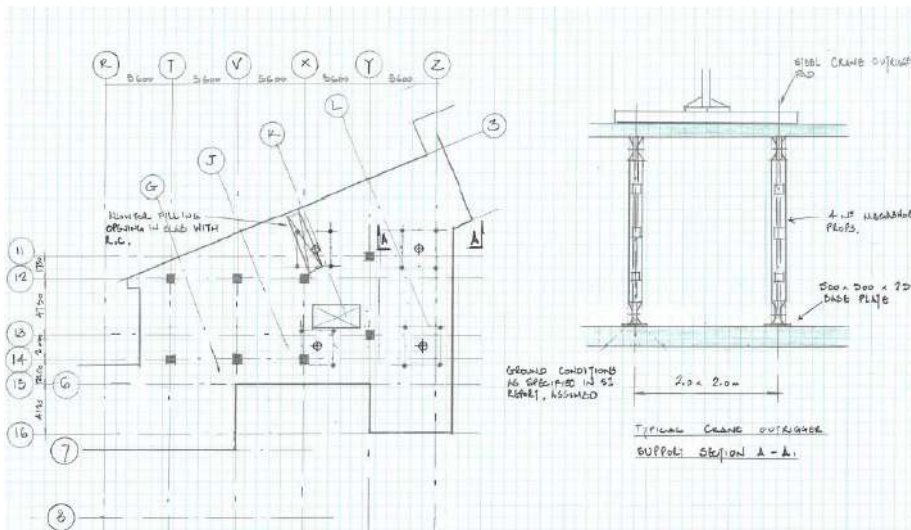
6. Demolition Sequence and Specific Considerations



Enabling Works

The site will utilise multiple lift cores or similar voids to establish demolition chutes and demolition drop zones to service multiple work fronts.

Subject to engineering review, suspended slabs may require structural support i.e. propping, to allow top down demolition with 5-15T excavators.



General Sequence

Initial 'opening up' works will involve 'open face' demolition, to create as much space within the confines of the site as early as possible, to maximise site logistics and facilitate top down demolition for high level structures, bringing structures to a safe height for large excavator demolition in the final stages.

Open Face Demolition

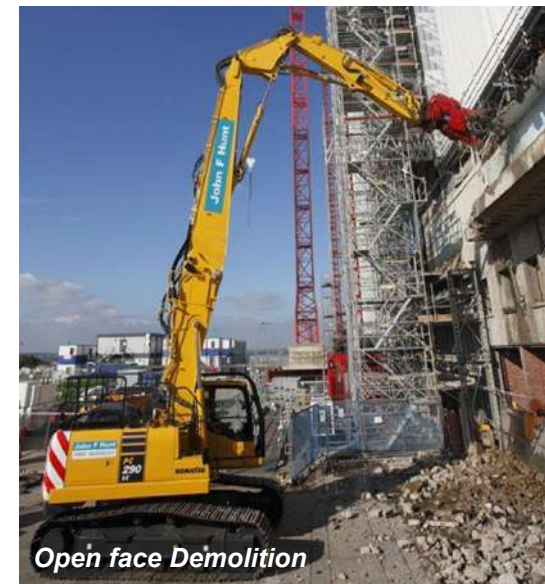
Large excavators fitted with "midi" or "long reach" arms and hydraulic cracker & shear attachments will undertake demolition in a 'walk through' open face demolition.

This method is only employed where the structure is within suitable height, and there is sufficient exclusion zones around the building.

The skilled plant operators will progressively work their way into the structure by demolishing in a "bay-by-bay" sequence, working from the roof level down through the structure.

Care will be taken to continually clear the arisings from the slabs below those being demolish by the operator so as avoid overloading the structure and prevent the risk of an uncontrolled collapse.

A suitable "pad" foundation of demolition arisings will be progressively created upon which the excavator will stand.



Open face Demolition

Demolition Sequence

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Top Down Demolition

Demolition can only commence once all controls & safety measures are in place:

- full scaffold encapsulation including monar-flex
- carpet/ply to the scaffold decks
- temporary water points for dust suppression
- fire blankets and extinguishers in place
- external emergency access points per building
- Ground floor void catch decks (to internal stairs and existing risers)



A 160-250T crane will be used to lift 5-20T excavators, bobcats and tools/equipment to the roof to commence top down demolition.

The demolition of the plant rooms may require a combination of manual removal methods (metal roofing) and machinery (membrane & structure)

Excavators will demolish level by level in a reverse construction sequence using hammer and cracker/rotating pulveriser attachments:

- Step 1 - Non structural walls
- Step 2 - Slabs
- Step 3 - Beams (by mobile crane)
- Step 4 - Columns

As each level is complete, all plant and equipment will be mobilised to the next level using by mobile crane, restarting the cycle.

There will be a small overlap between finishing one floor and beginning the rest to help drive the programme

Once the plant room demolition is complete, a well hole is created in the slab to allow plant and equipment to be lifted down to the next level.

Well holes sequence:

- Step 1 - Install edge protection barriers to 3 sides
- Step 2 - Exclusion zone on floor except operator and 5-8T excavator

- Step 3 - Excavator to create slab penetration in local bay by hammer attachment
- Step 4- Excavator to track back and drag in final barrier to enclose the penetration

Demolition then cycles through the floors using the same reverse construction demolition sequence

Top down demolition will cease at Level 3 slab, allowing larger machinery (30-45T excavators) to walk through the remaining structure ('open face' technique)

Boundary Wall Demolition & Potential Damage

Demolition conducted adjacent to any boundary needs to be carefully planned to mitigate noise, dust and vibration, or potential damage to adjacent properties.

Where ever possible, hoarding and scaffold will be used to segregate demolition from adjacent properties.

Any brick or blockwork walls may require the initial top courses to be removed by workers from elevated platforms, prior to small machines carefully removing the remaining

Demolition Sequence

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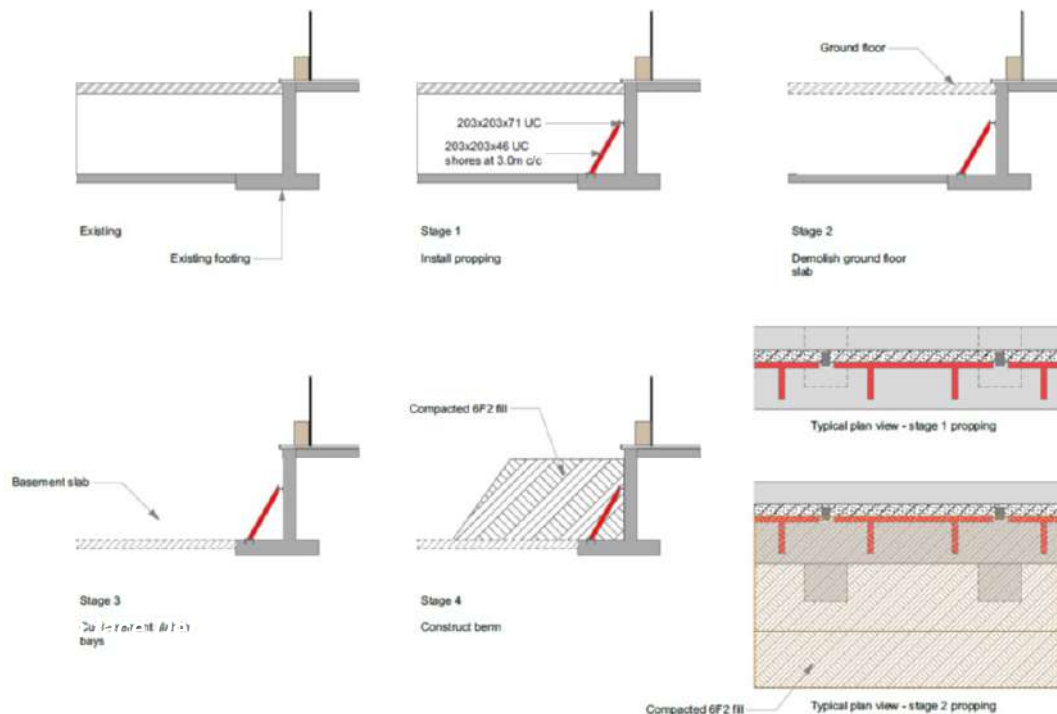
Ongoing controls

- Hot works adjacent to the perimeter scaffold requires a spotter at all times (including fire watch), wetting down scaffold protection (ply and carpet), fire extinguishers, and fire blankets
- No excessive stockpiling on suspended structures
- Noise, dust and vibration monitoring

Removal of Ground Bearing Slabs, Drainage and Foundations

After demolition and clearance we will begin to break-out the existing ground bearing slabs, foundations, drainage and hard standings to the specified levels.

Temporary works and earthwork support will be installed subject to engineering review during breaking out and earthworks.



Breaking out and earthworks will commence in the following sequence:

- Area to be broken out will be marked out by Demolition Manager
- Safety fencing with appropriate warning signage will be placed around the work area creating an exclusion zone
- A 21/45T excavator equipped with buckets, hydraulic breaker and ripped tooth attachments will commence with the breaking out of the concrete slabs and tarmac
- The excavator will break out the concrete / tarmac working in a controlled methodical sequence through each slab, base or hardstanding
- Arisings will be grubbed up with bucket attachments and sorted into the relevant stockpile for offsite recycling or on-site crushing



Specific Considerations

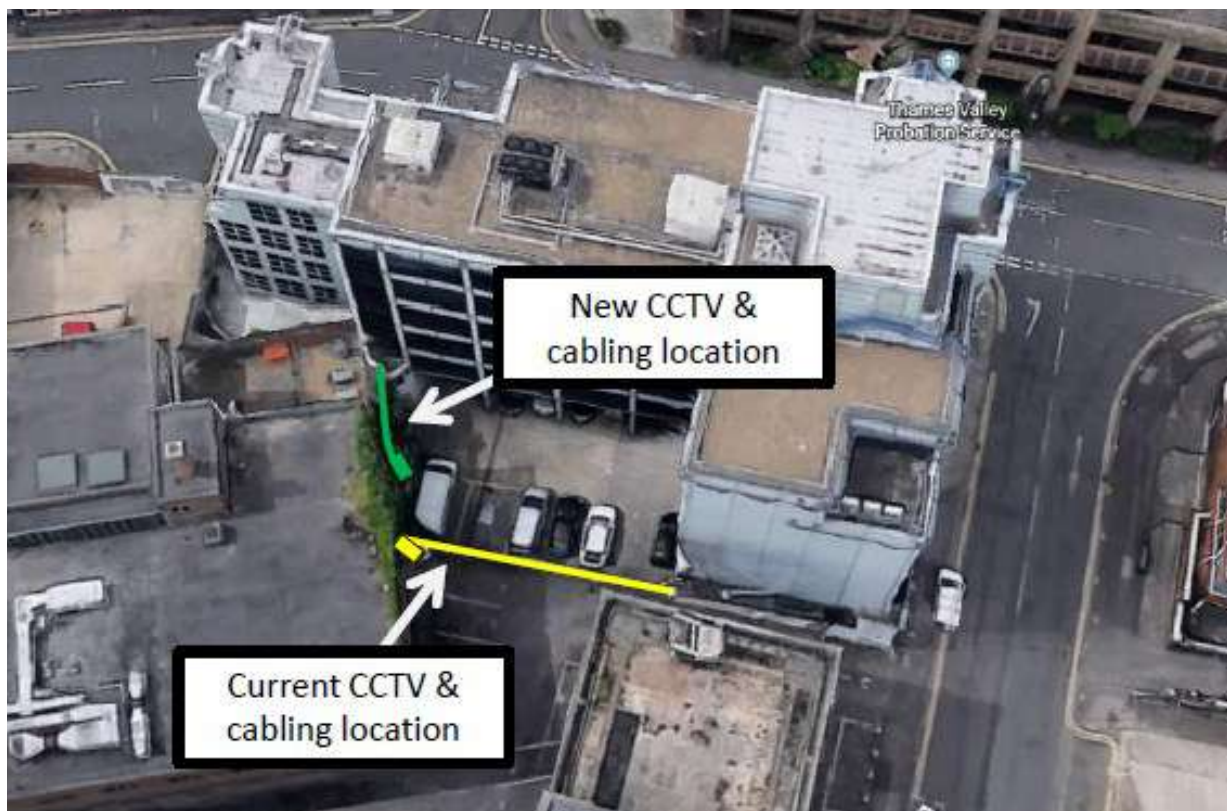
SC1

20-30 Greyfriars Road—Removal of CCTV

The existing CCTV camera filming Telecom House and the electrical conduit along the boundary wall with 20-30 Greyfriars Road require removal.

The will be relocated to the new location as shown in the following sequence:

- New cabling installed
- Camera and stand dismantled and repositioned within 20-30 Greyfriars Road car park taking care not to obstruct parking spaces



Specific Considerations

SC2

52-55 Friars Street: Working around projected foundations

Initially site access will be from the rear of friars walk shopping centre. As the works progress this will be updated in line with the demolition.

For hardstand and below ground removal working adjacent to neighbouring footings, a combination of saw cutting to create isolation and smaller excavators may be required (methods would be finalised once each condition is exposed and inspected).



Specific Considerations

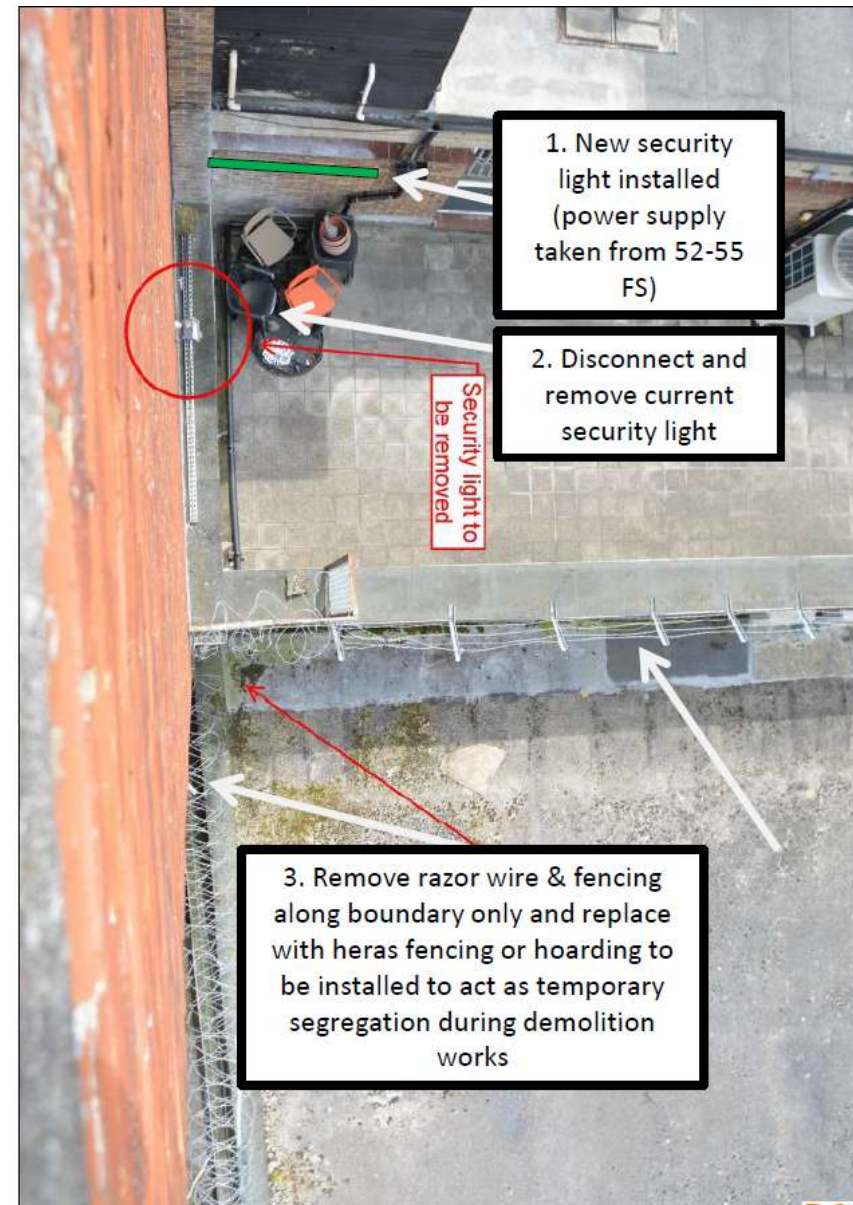
SC3

52-55 Friars Street: Lighting and Razor Wire

We note there is lighting and fixed to the building owners wall and razor wire protecting the Adjoining Owner's property. We will develop detailed proposals including any proposed temporary or permanent relocation of the same or proposals to re-instate upon completion.

New assets will be installed and old assets removed.

We would expect for details / design of a suitable permeant barrier to be provided by the main contractor at construction phase if required.



Specific Considerations

SC4

52-55 Friars Street: Access for Scaffold

Access/oversailing over the property is anticipated for the duration of any scaffold that is erected, whether this is based out on the neighbouring property or cantilevered over.

Both options for scaffold may be achievable given the relatively flat roof structure of 52-55 Friars Street.

Basing out (on an adjacent property) is generally preferred as it is quicker to install and remove, eliminating unnecessary additional steps during demolition.

Scaffold based off of any adjacent property is always subject to an assessment of the structure, pre and post-condition surveys and neighbour approvals.

Approximate duration: 10 weeks



The preferred method for scaffold over 52-55 Friars St is basing off the adjacent property

Specific Considerations

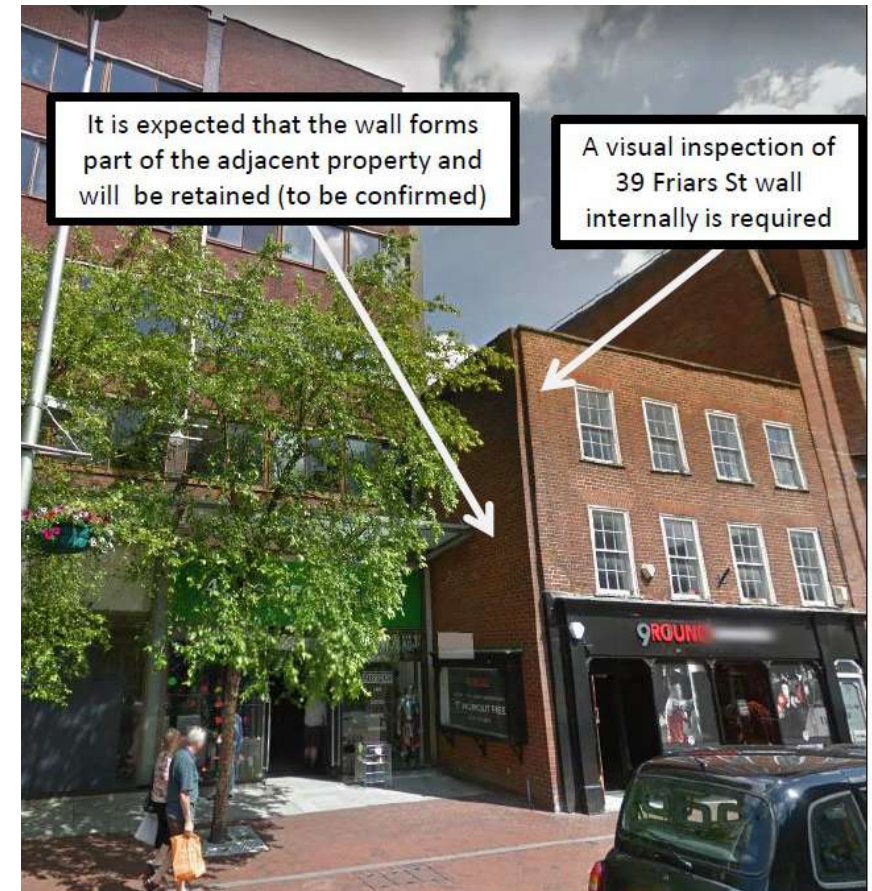
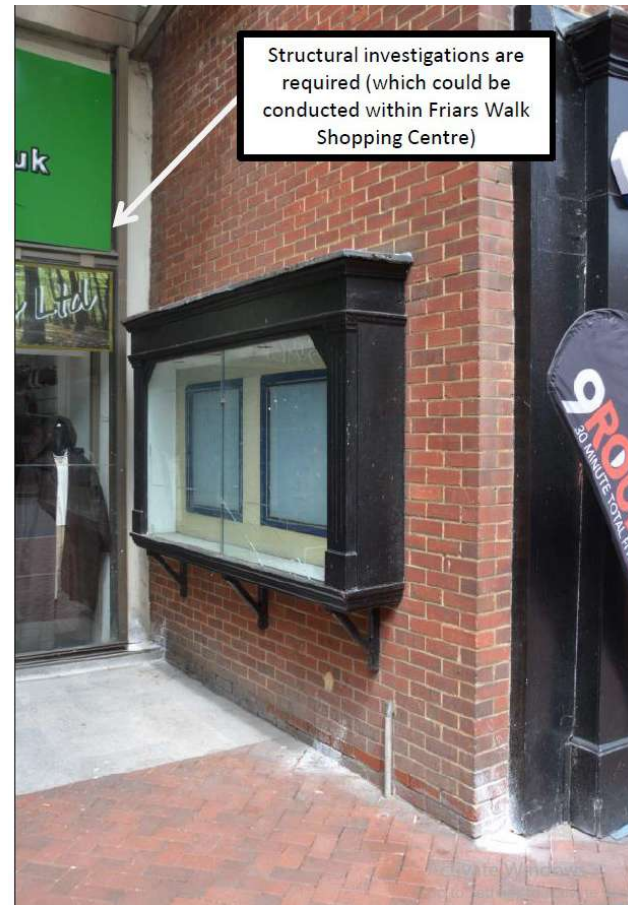
SC5

39 Friars Street: Adjacent Walls

Proposals for independent skin of wall adjacent neighbouring property, including whether it is intended to retain or demolish this and in either eventuality how it would be address.

Initial inspections suggest it is required to be retained, however further investigations are required to confirm these assumptions, as well as to confirm that the wall is already suitably tied in, without being reliant on the Friars Walk wall.

Should temporary retention be required, the temporary works designer would provide this design after investigation and inspection.



Specific Considerations

SC6

39 Friars Street: Access over neighbouring property

Proposals for how access will be addressed over the property, anticipated duration of any scaffold to be erected, whether this will be based out on the neighbouring property or alternatively cantilevered over.

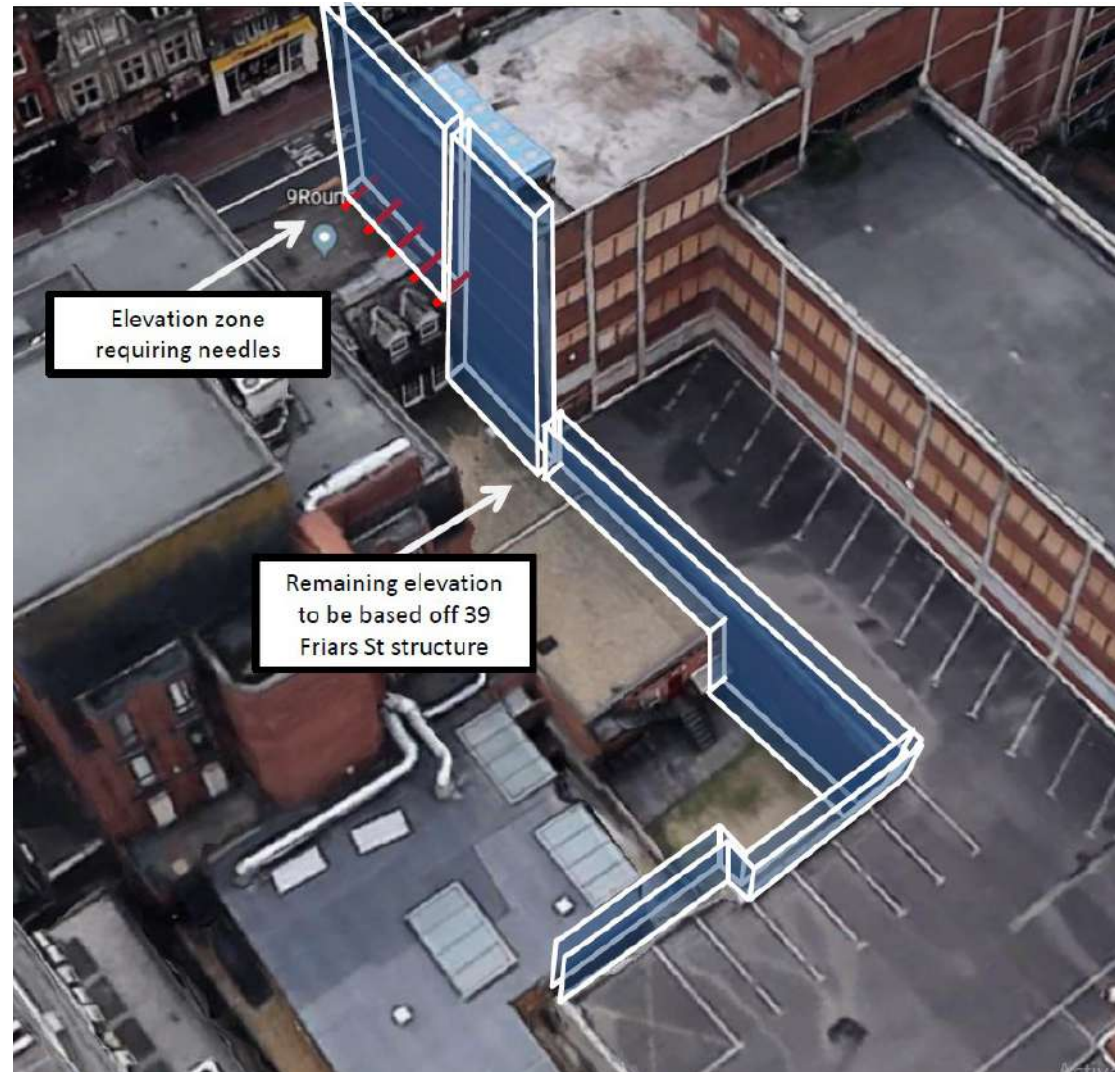
The scaffold will be partially cantilevered off needles (where immediately above the undulating roof), then where practical based off the 39 FS structure.

The scaffold based off the adjacent property is subject to an assessment of the structure, condition surveys pre and post, and neighbour approvals.

Approximate duration:

Low section: 6 weeks

High section: 14 weeks



Specific Considerations

SC7

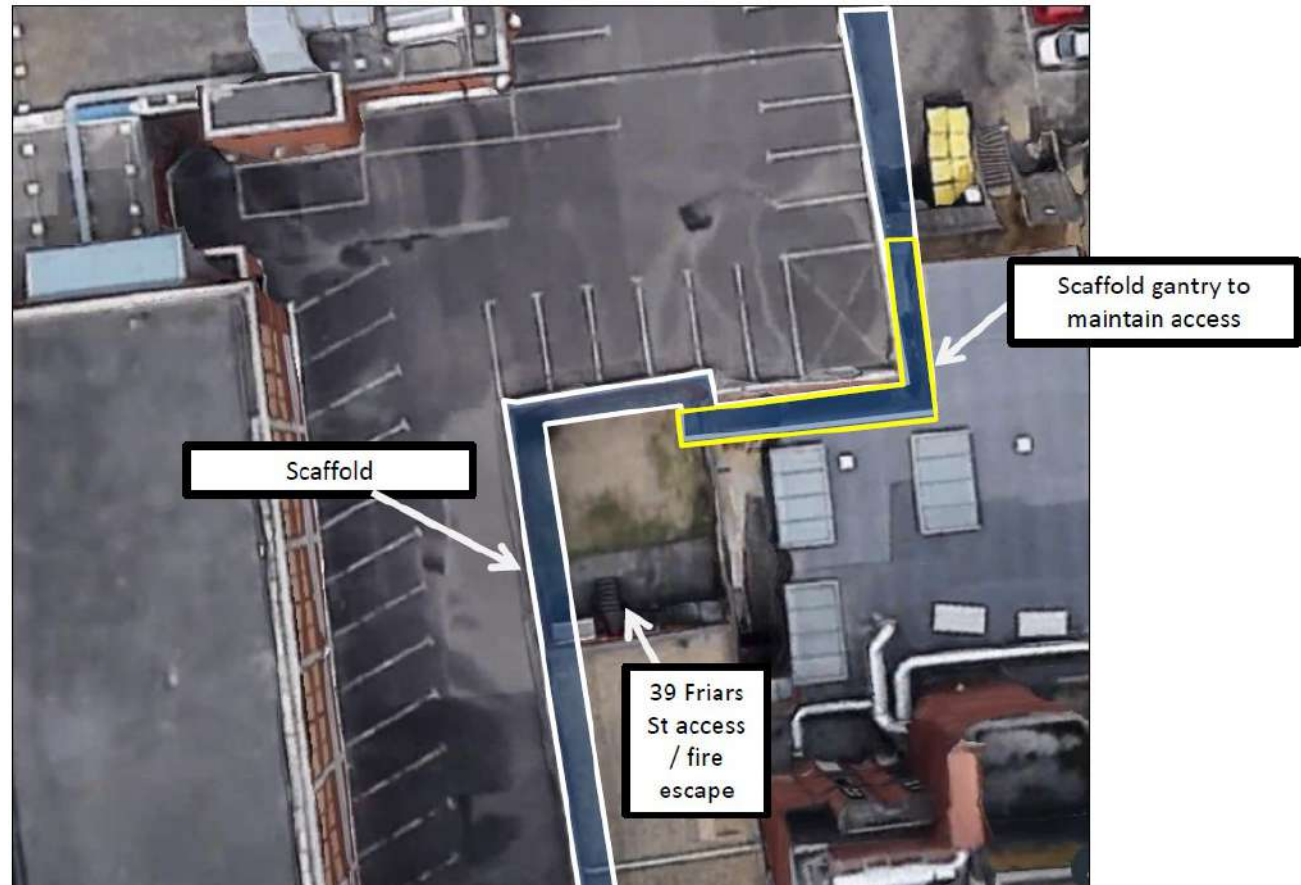
39 Friars Street: Retaining and supporting the boundary wall

Proposals for retaining and supporting the boundary wall to the rear of 39 Friars Street and for maintaining access through the neighbours gate / fire escape through out the works.

Subject to structural investigations, the boundary wall to the rear of 39 Friars Street may require a similar solution to the retaining wall and adjacent property walls shown below and in the demolition sequence commentary.



Access is maintained via a scaffold gantry where scaffold would otherwise obstruct fire.



Specific Considerations

SC8

35—38 Friars Street: Retaining and supporting the boundary wall

Our proposals for retaining and supporting the boundary wall to 35-38 Friars Street and maintaining access to the fire escape (pictured below left) throughout the works are included on the previous page in SC7.



Scaffold gantry tunnel
to maintain access



Specific Considerations

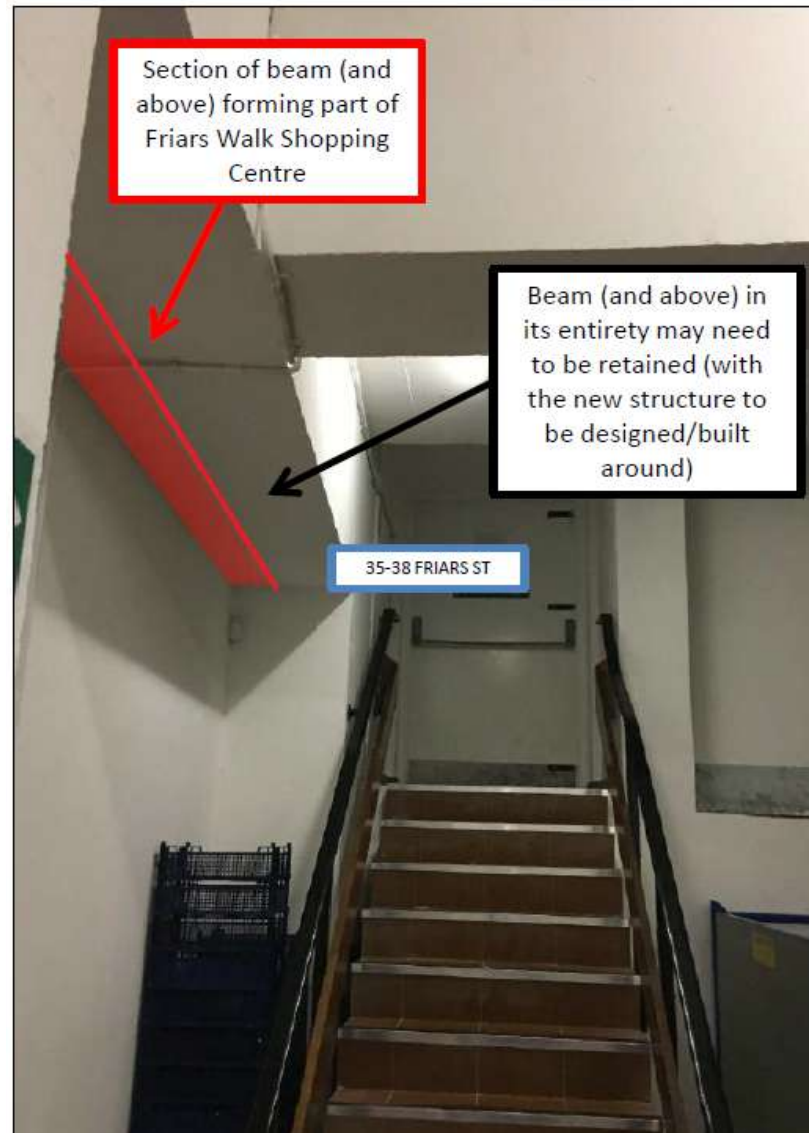
SC9

35—38 Friars Street: Encroachment of basement

Our proposals for addressing the encroachment of the basement to the neighbouring property at 35-38 Friars Street are as below.

Should elements of the Friar Walk Shopping Centre encroach the adjacent property, subject to further investigation, some or all elements may be required to be retained

The was not inspected as it could not be located.
Proposal is conceptual without a full understanding of design intent



Specific Considerations

SC10

35—38 Friars Street: Maintaining and supporting wall and roof to bin store

We envisage a requirement for maintaining and supporting the wall and roof to the bin store of the neighbouring 35-38 Friars Street during and following demolition of the adjacent structures.

The roof and wall appears independent of the adjacent structure requiring demolition.

To bridge across the roof, the scaffold may need to be cantilevered off needles.



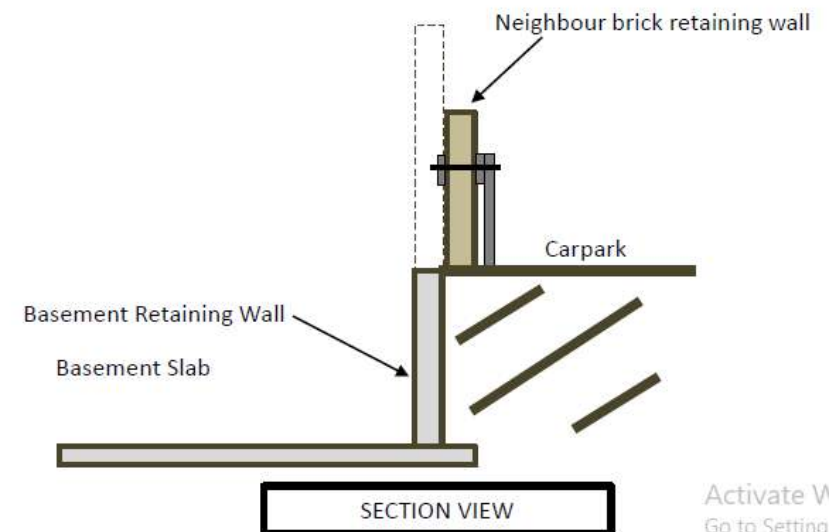
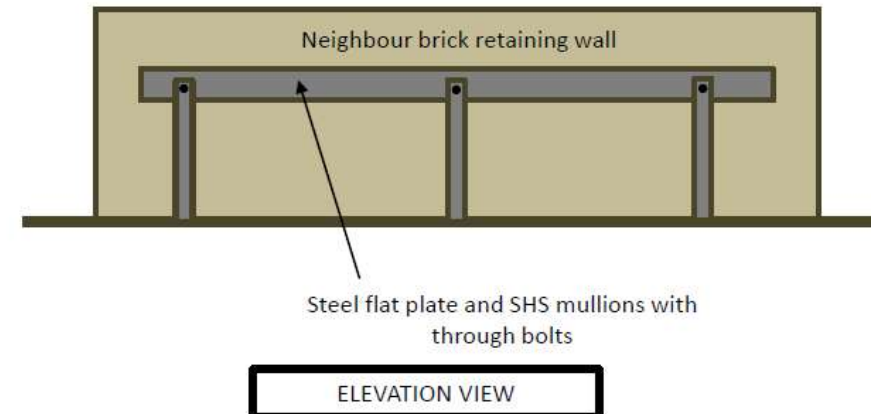
Specific Considerations

SC11

30—31 Friars Street: Retaining and supporting adjacent low level wall

To retain and support the adjacent low-level wall belonging to the Adjoining Owner of 30-31 Friars Street during and following demolition activities we will first undertake structural investigation.

The wall does not appear to be serving any purpose. Subject to structural investigation, it may be suitable for demolition or otherwise retained internally with a lightweight steel strap design.



Activate V
Go to Setting

Specific Considerations

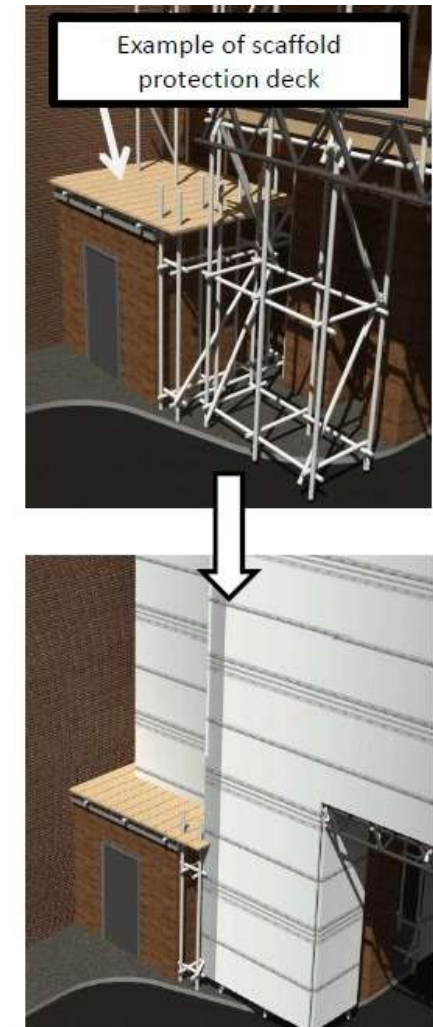
SC12

30—31 Friars Street: Enclosure of sub-station

The substation will be protected with a scaffold gantry crash deck to maintain a safe enclosure to the sub-station during and following demolition activities, whilst ensuring access is maintained at all times for maintenance purposes.



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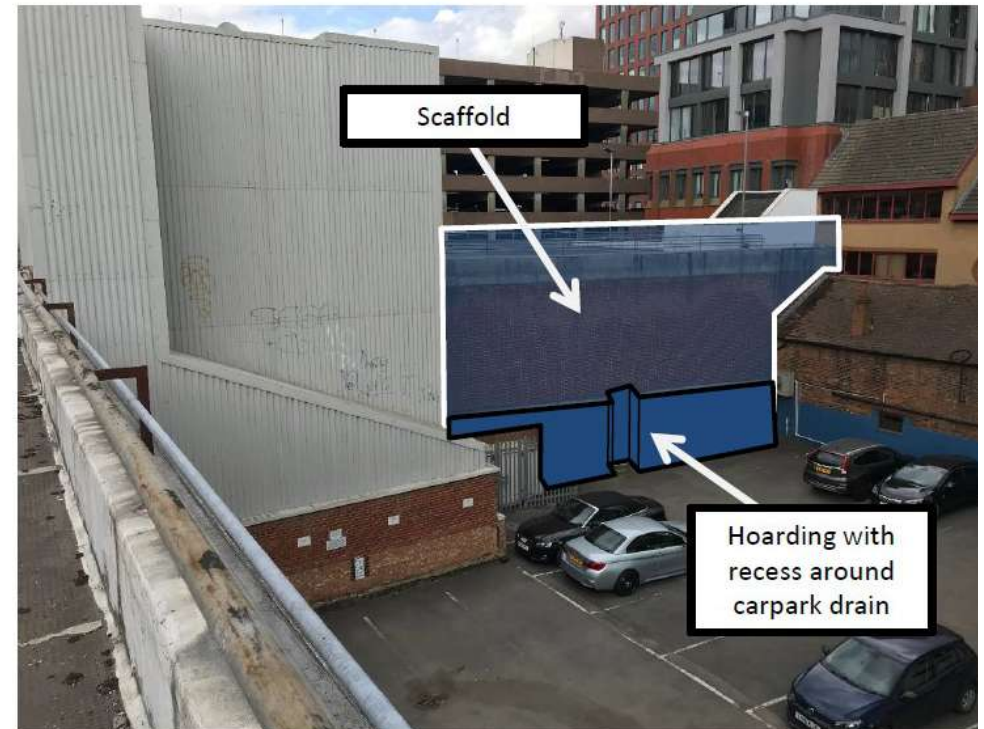
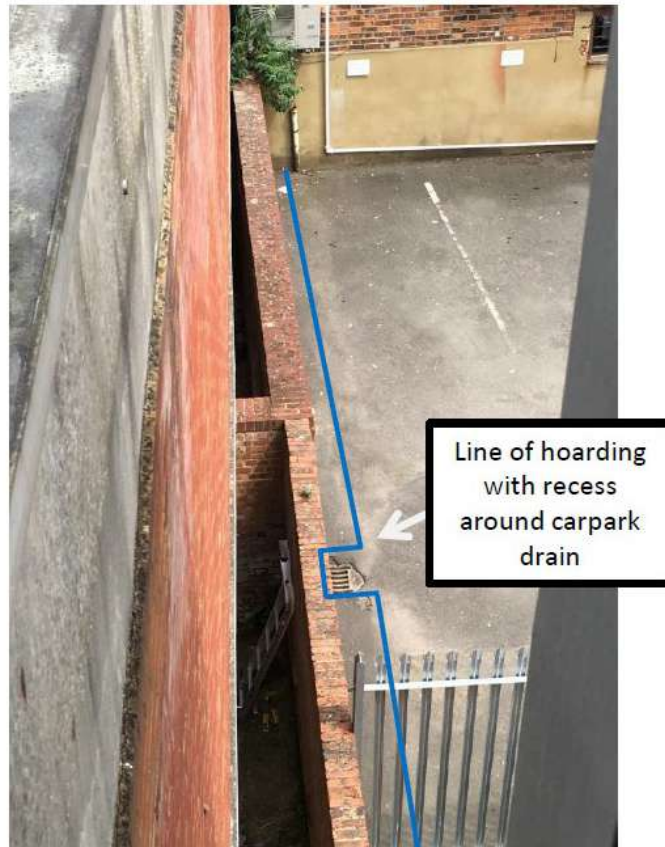
Specific Considerations

SC13

30—31 Friars Street: Hoarding

Scaffold will be based off the adjacent 30-31 Friar Street carpark, with hoarding installed at the base of the scaffold. This will protect access from the neighbouring land whilst ensuring surface water drainage is maintained to gully outlet adjacent boundary.

As hoarding is installed partly to contain dust, water and debris, the drain will be built around as a recess in the hoarding to maintain carpark drainage.

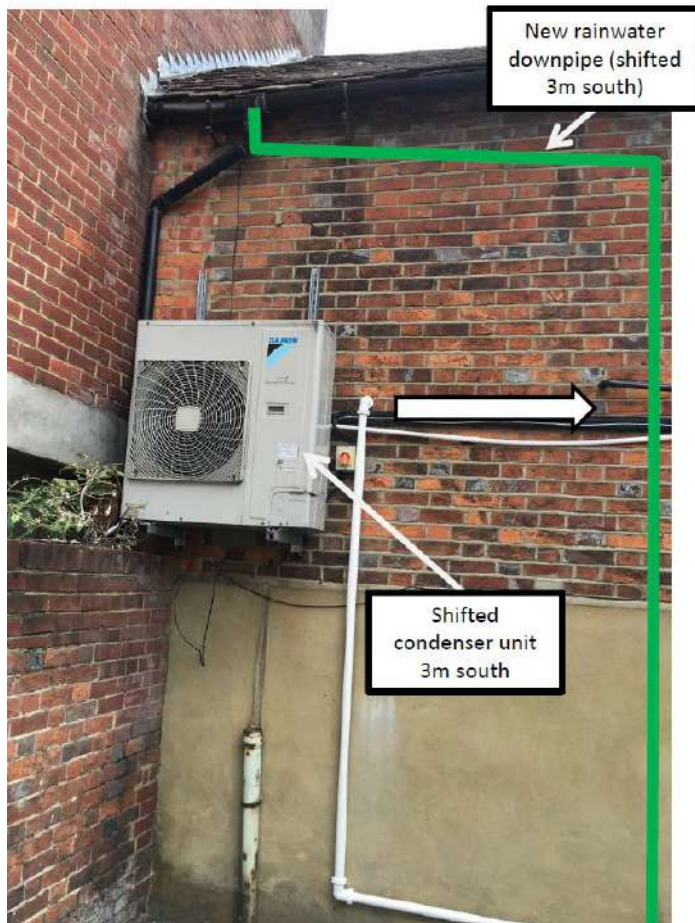


Specific Considerations

SC14

8 Merchants Place: Condenser unit and rainwater goods

We have identified a requirement for the condenser unit and rainwater downpipe serving 8 Merchants Place to be shifted 3m south to maintain clearance from scaffold/



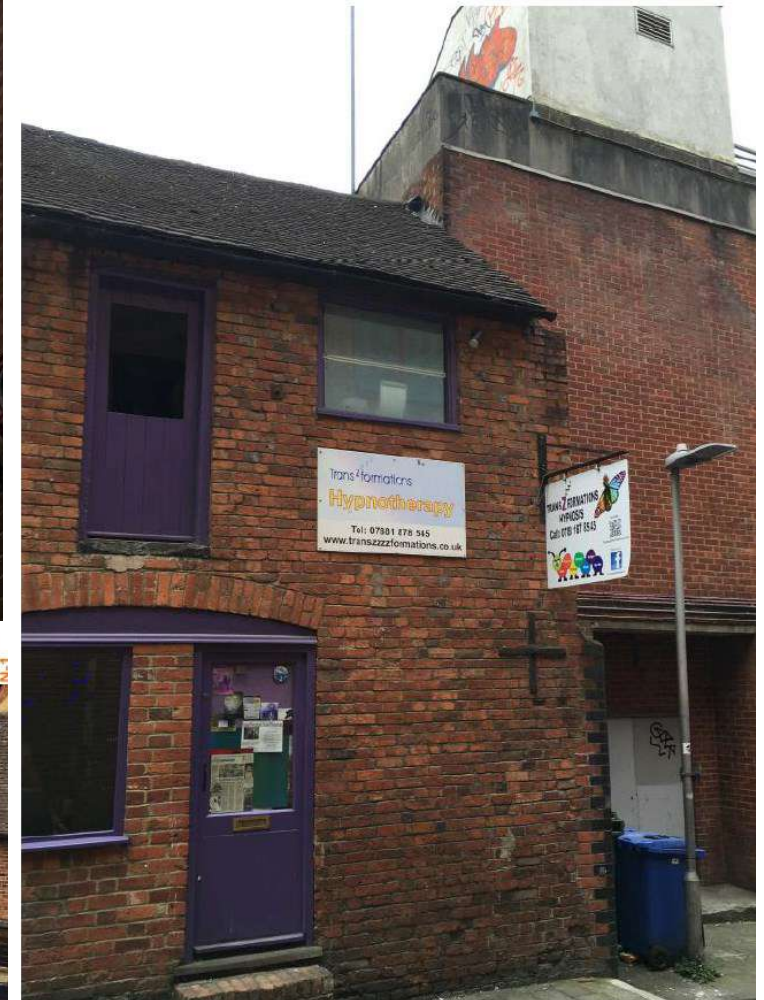
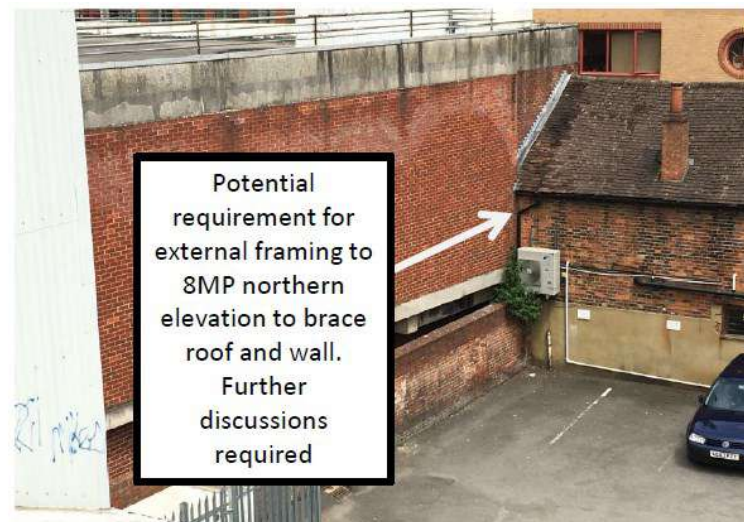
Specific Considerations

SC15

8 Merchants Place: Retaining and supporting gable walls and roof

Following review of Watermans Structural Report, to retain and supporting neighbouring property at 8 Merchants Place, including the gable walls and roof, we propose the installation of external structural framing to brace the wall and roof above.

Conceptual design mark ups will be provided subject to further discussions. Proposal is conceptual without a full understanding of design intent.



Specific Considerations

SC16

Trees on main high-street within

There are a number of mature trees outside our site boundary on the main high-street outside Friars Walk shopping centre. Although outside our hoarding line, we will protect these from the works. Dust and emission controls (as detailed within the Environmental Management section), together with continuous air monitoring, will be implemented to mitigate any potential impact on trees near the demolition site. In addition:

- No fires will be lit on site
- No access will be permitted within areas demarcated by protective barriers, unless and only where otherwise approved herein. Ground levels will not be changed within them
- No materials, equipment or debris will be stored within any of the protected areas and no chemicals, petrol or diesel will be allowed to spill where they may contaminate the root protection areas of retained trees
- All heavy plant, machinery, cranes and delivery vehicles shall be excluded from the areas demarcated for protection on the Tree Protection Plan
- Roots often exist in the substrate below hard surfaces and extreme care must be taken to avoid damage to them. Therefore existing hard surfaces should be retained to ensure the underlying rooting environment is protected, or if required, removed by less intrusive methods than conventional large machine demolition and civil works
- No excavations are proposed within the root protection area of retained trees



The trees that we will protect from the adjacent works



Example monarflex sheeting on another inner-city site, used to contain dust, noise and emissions protecting arboriculture.

Sequence 1—Existing Structure

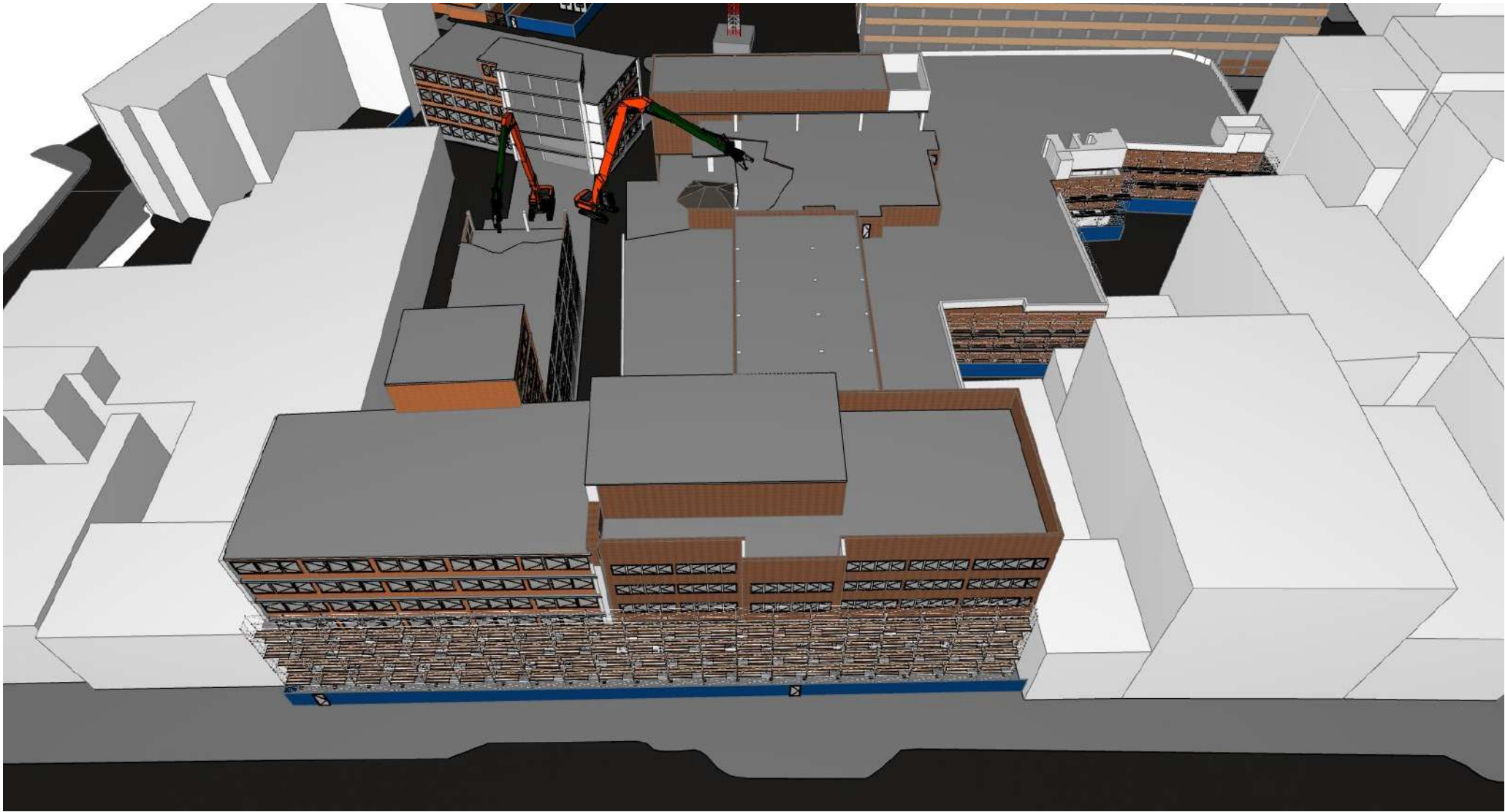
John F Hunt Ltd

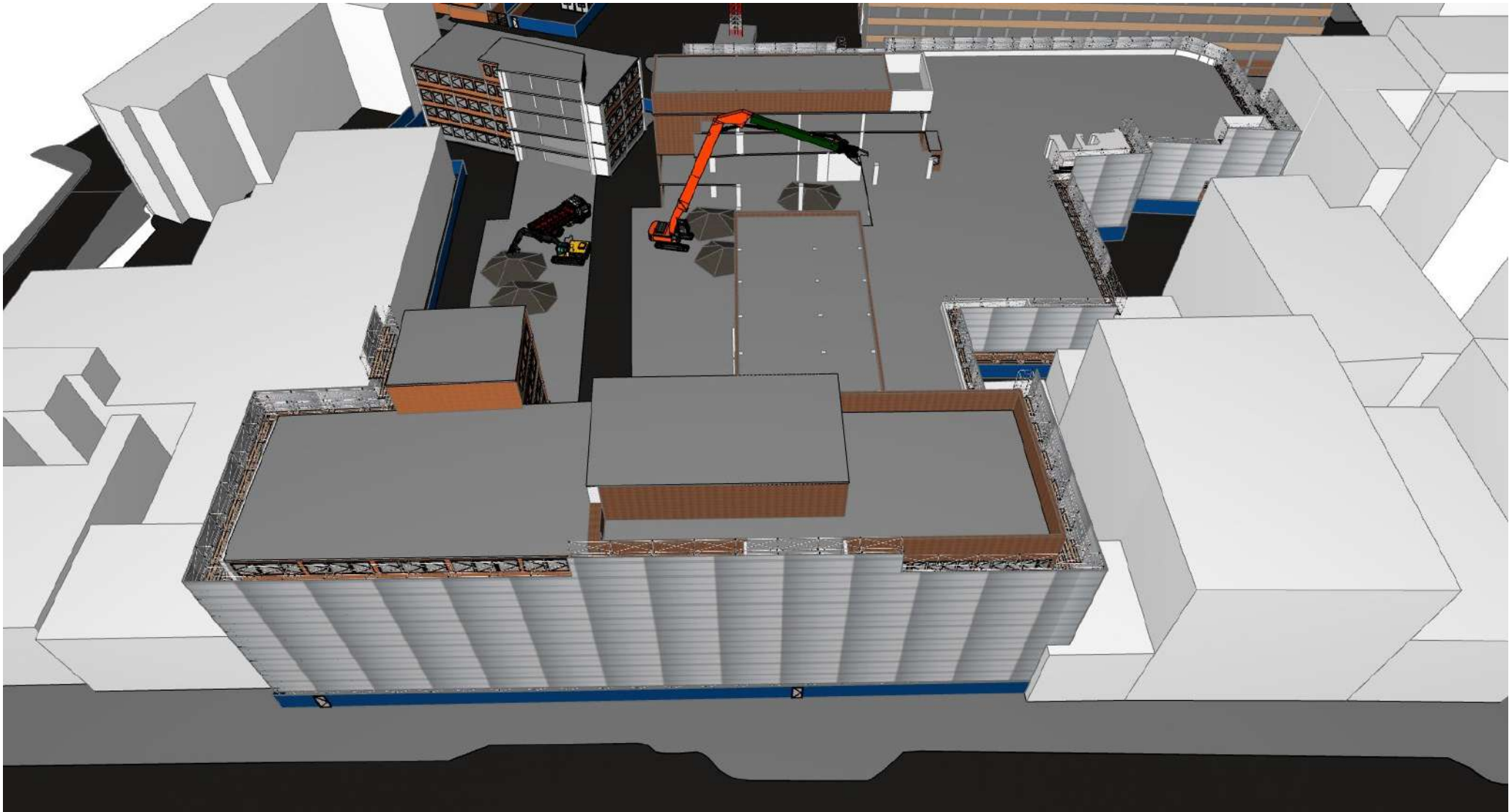


Sequence 2—Soft strip, early works & scaffold commencement

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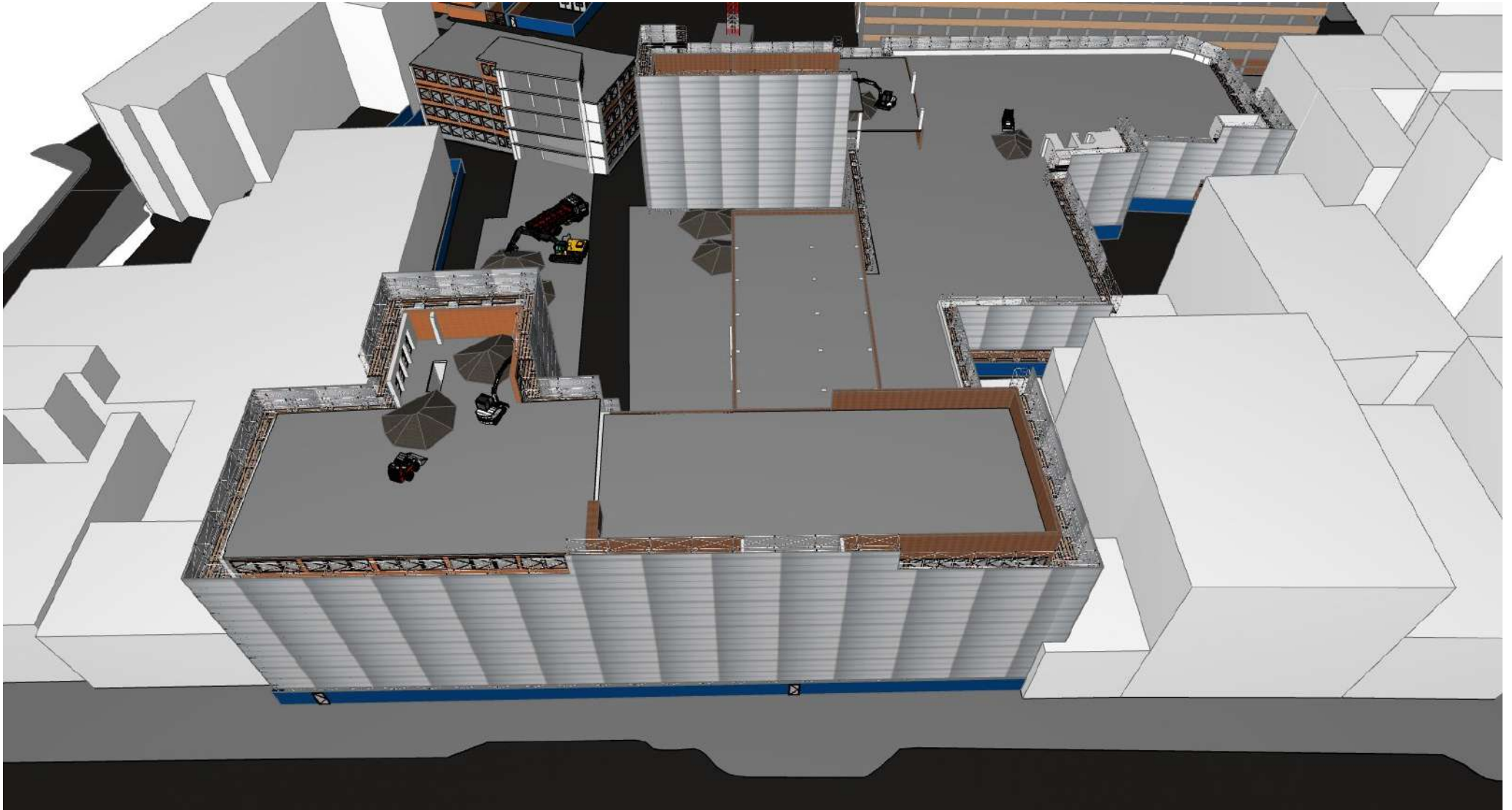




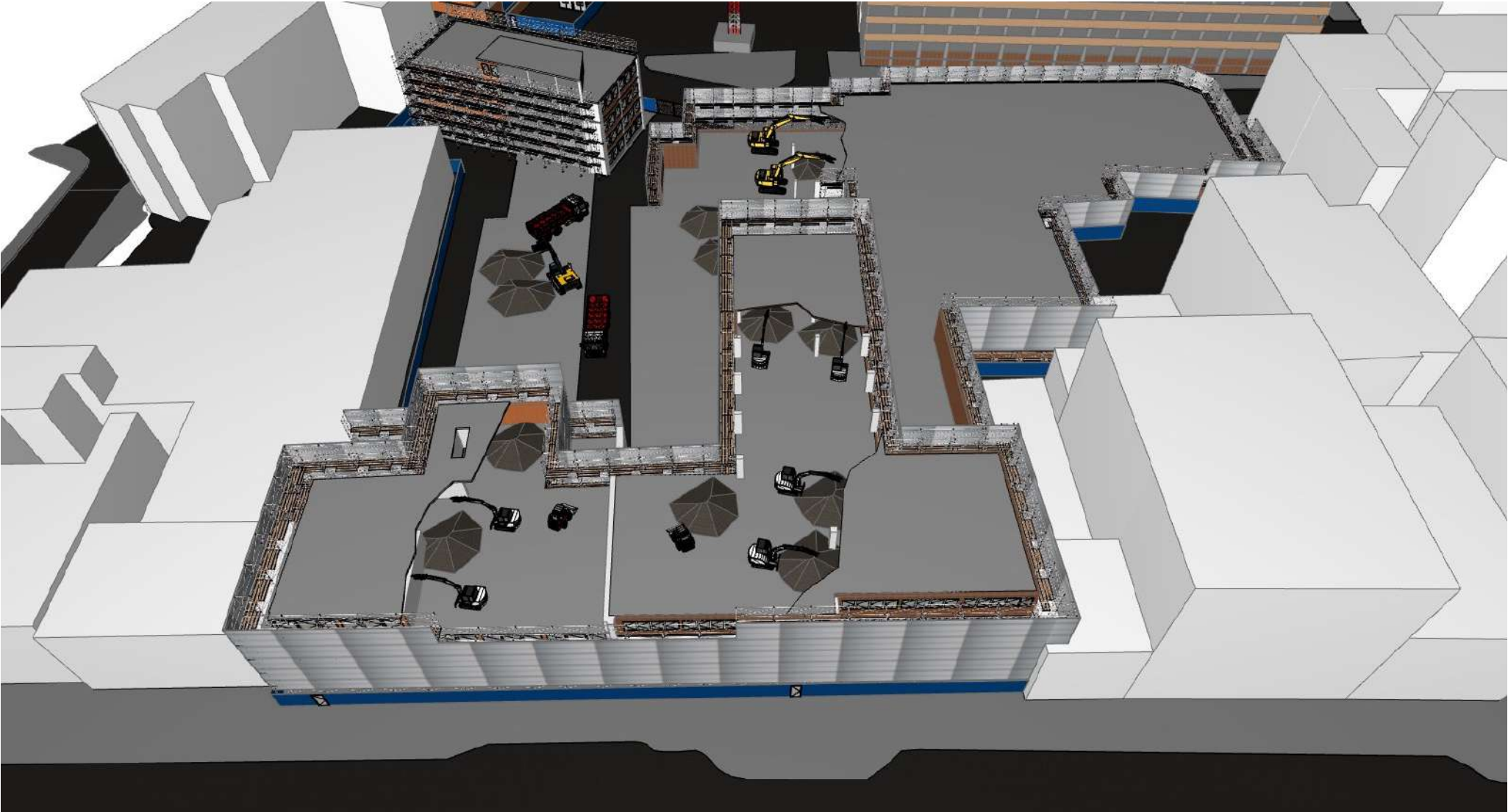


Sequence 5— Commencement of top down demolition

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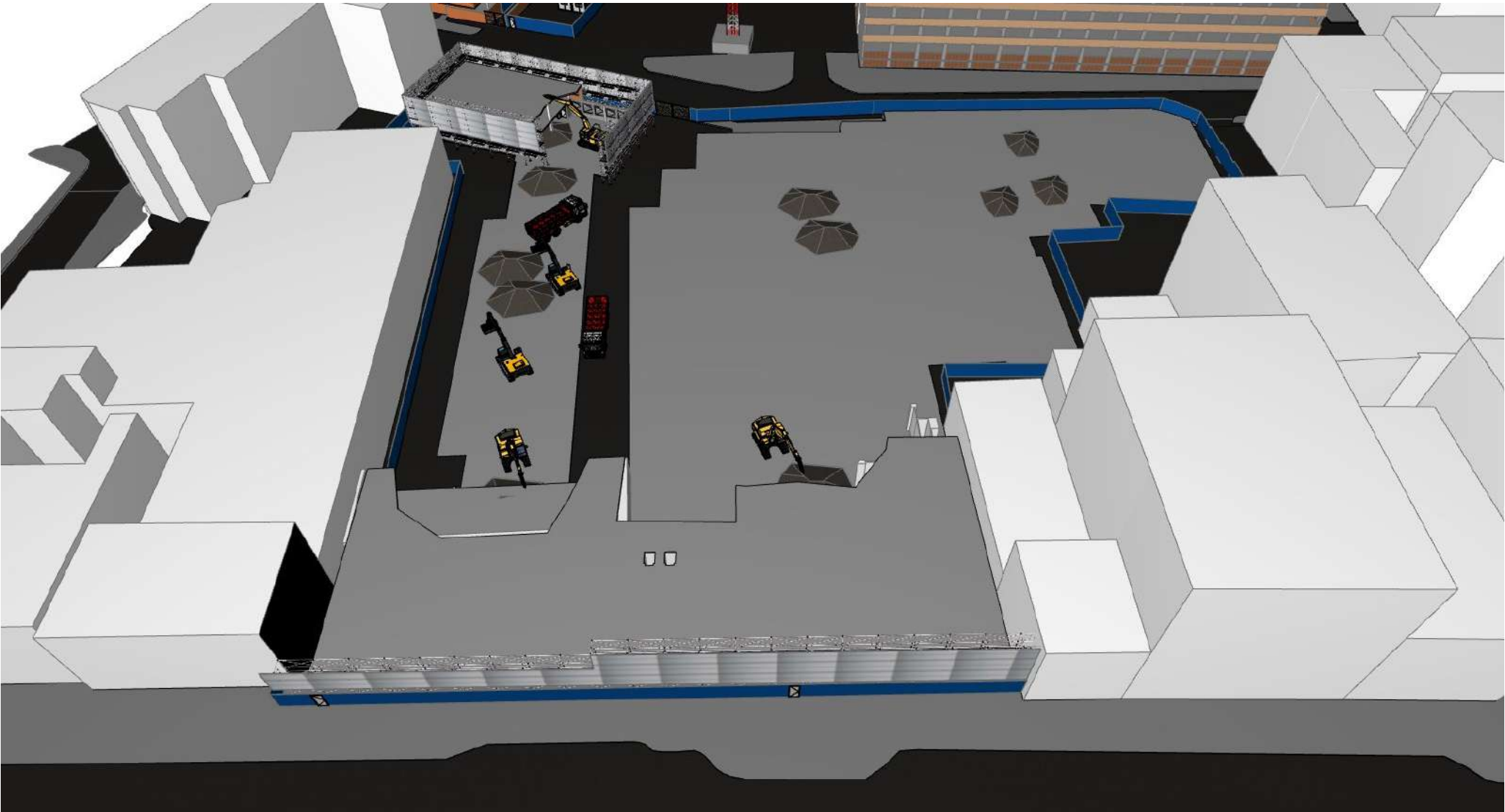




Sequence 8—Commencement of final building

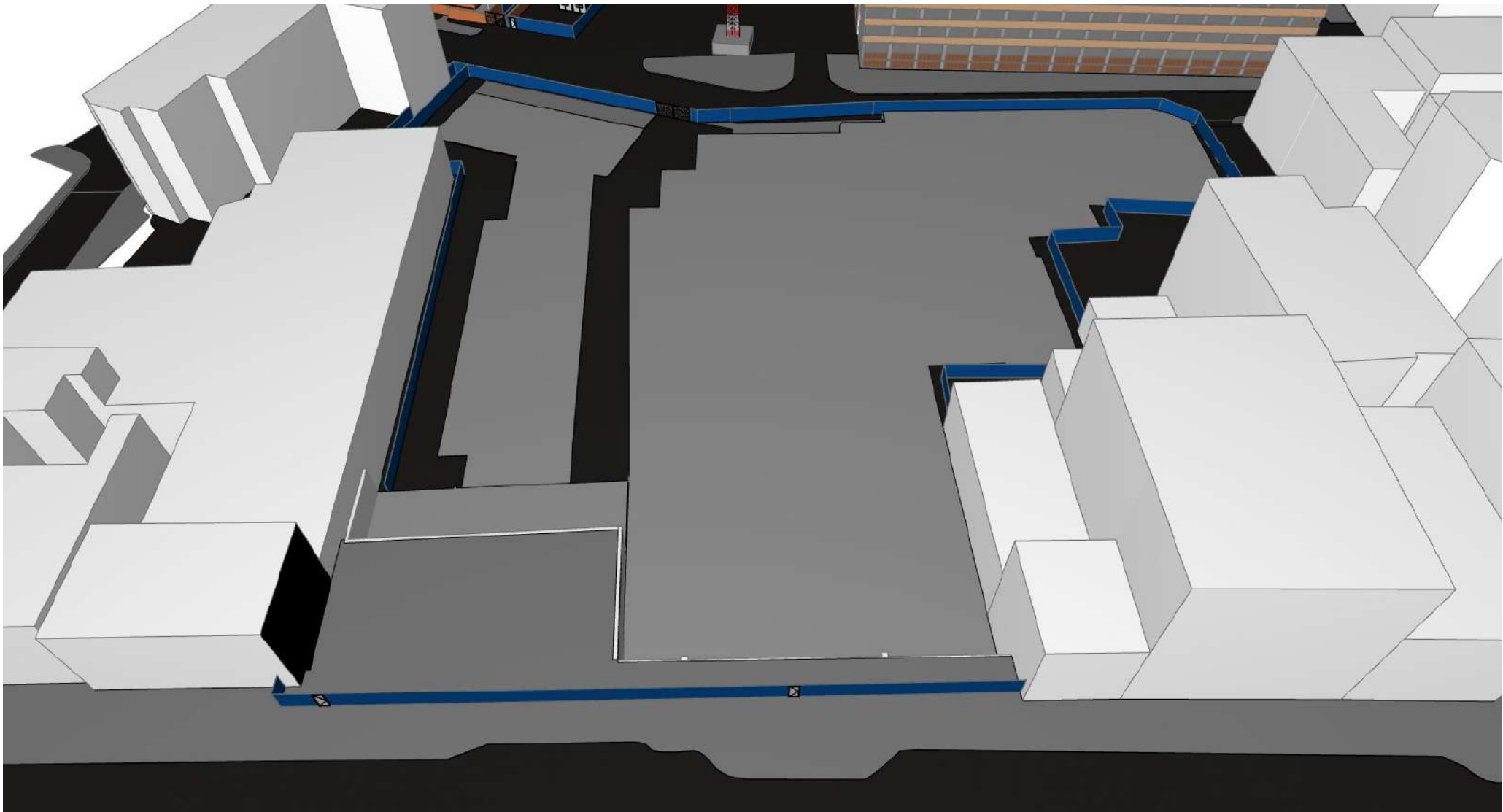
John F Hunt Ltd





Sequence 10—Handover (retention not shown)

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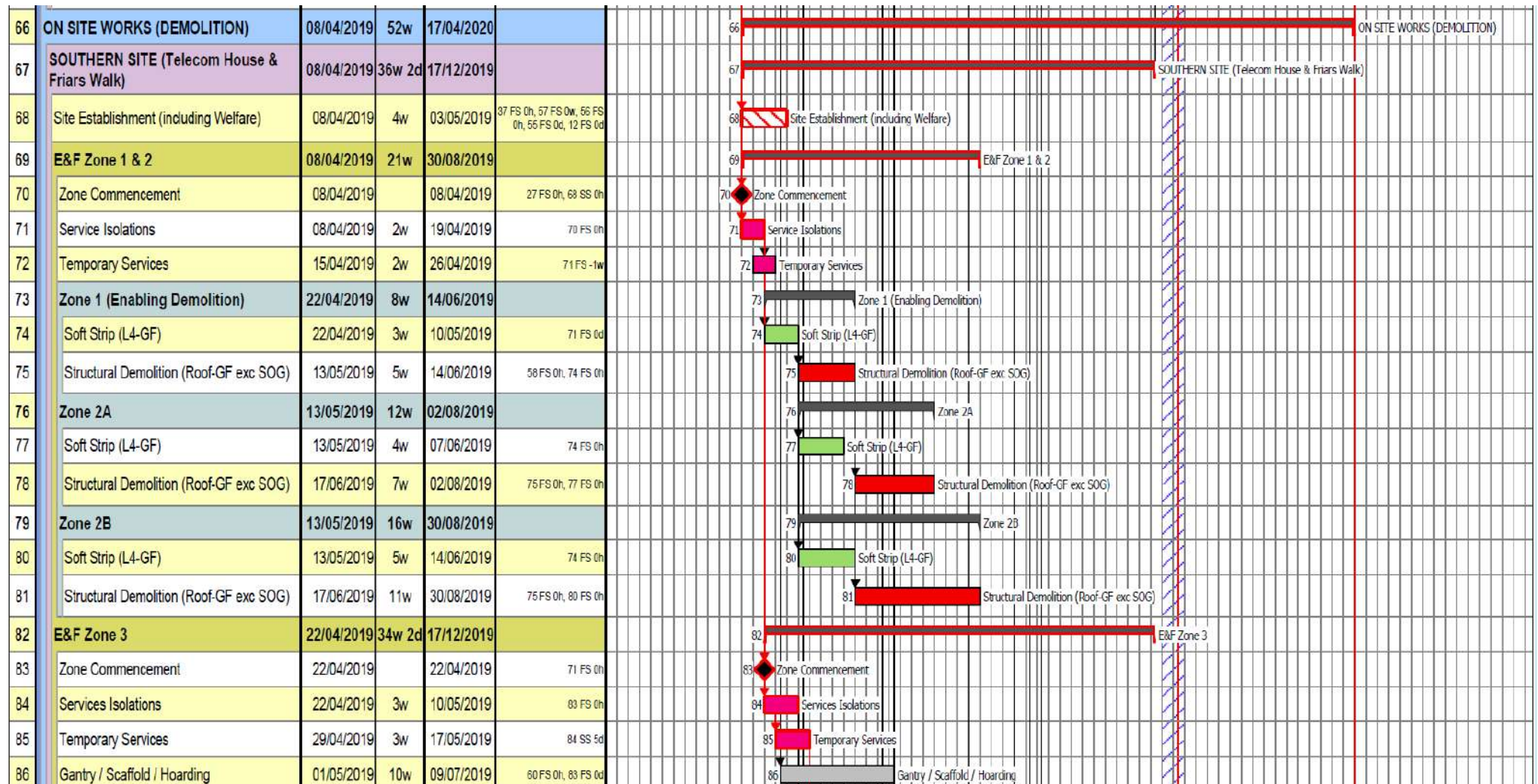


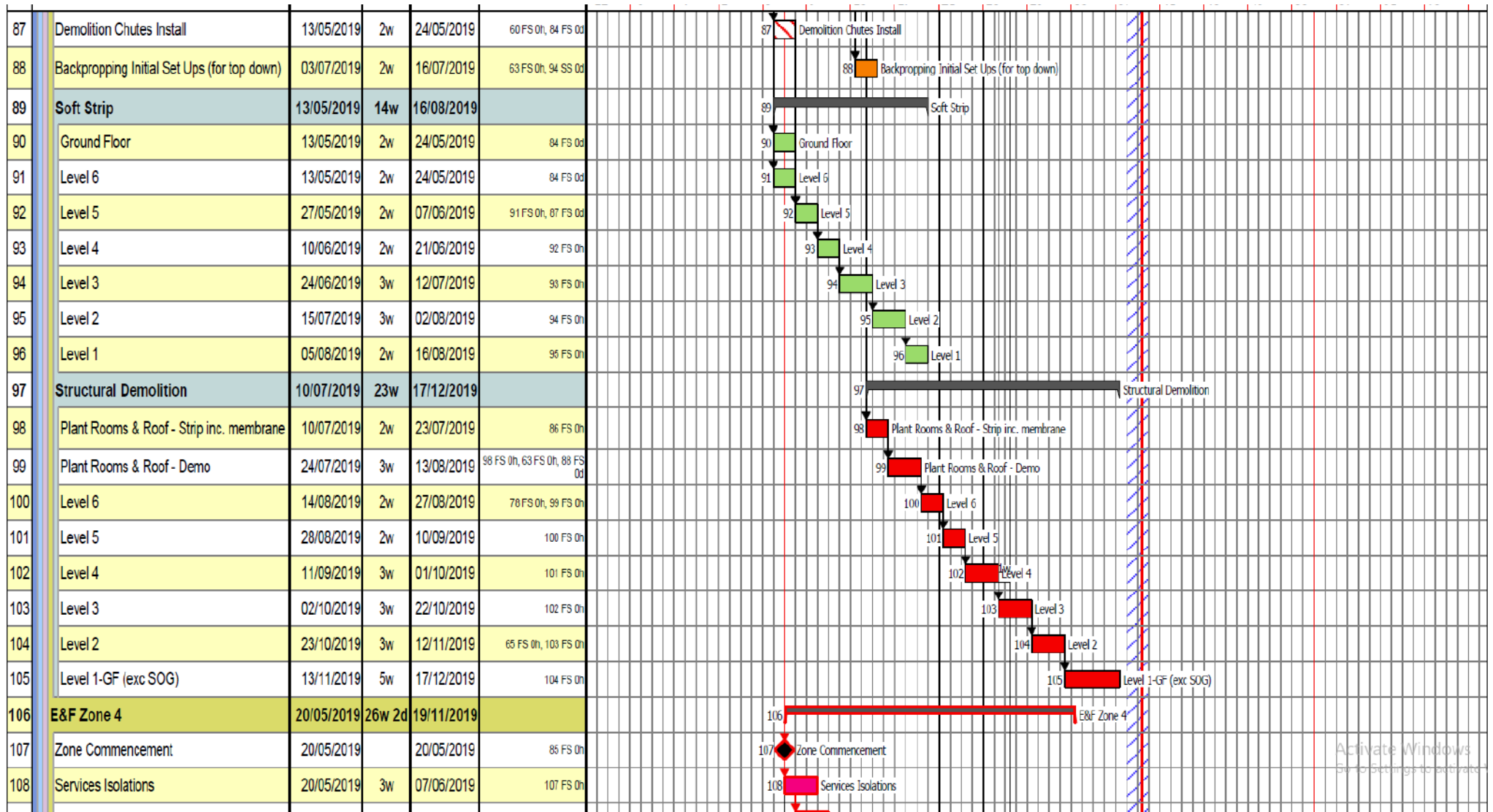
7. Programme and Timescales



Programme and Timescales

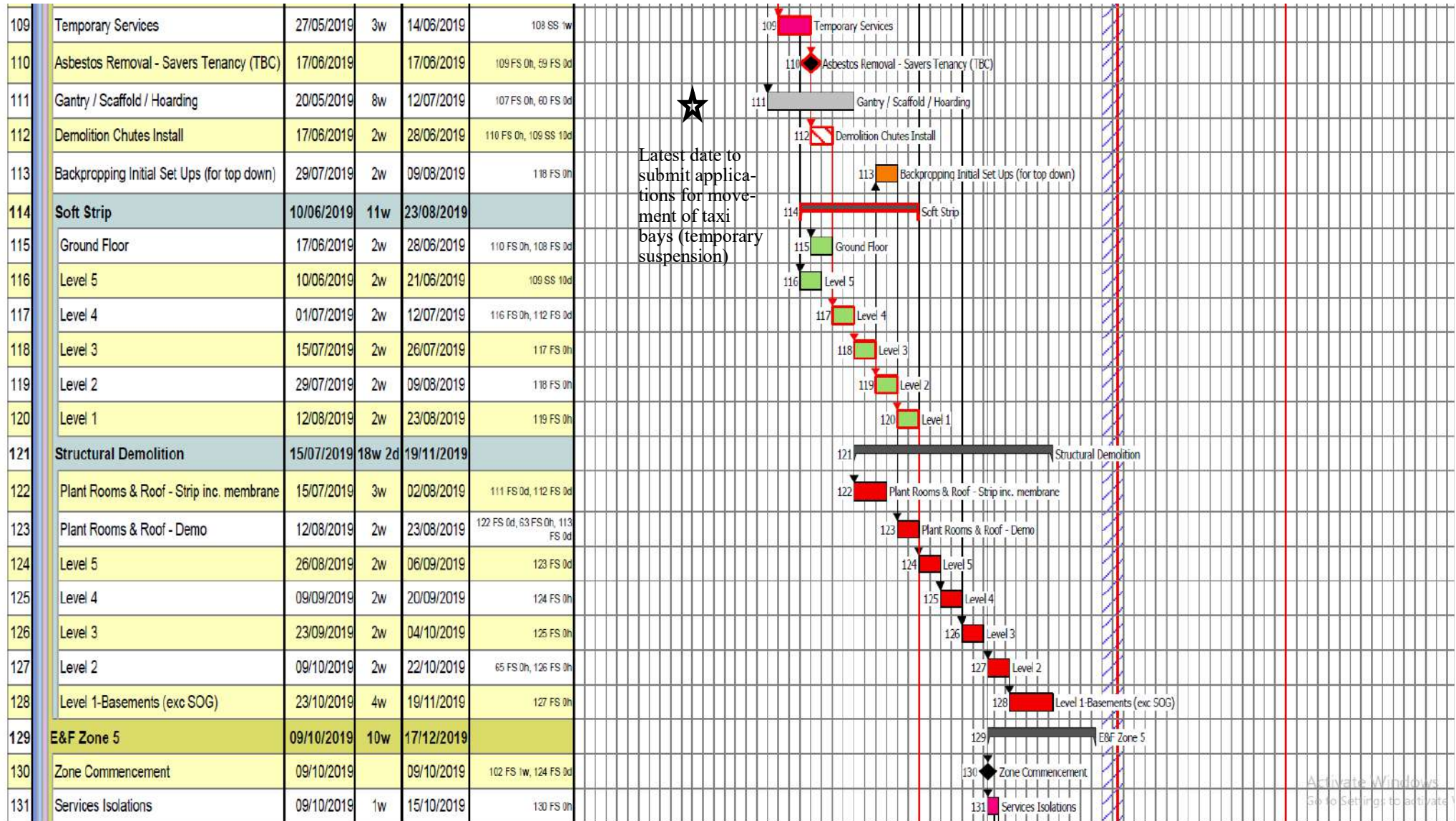
John F Hunt Ltd





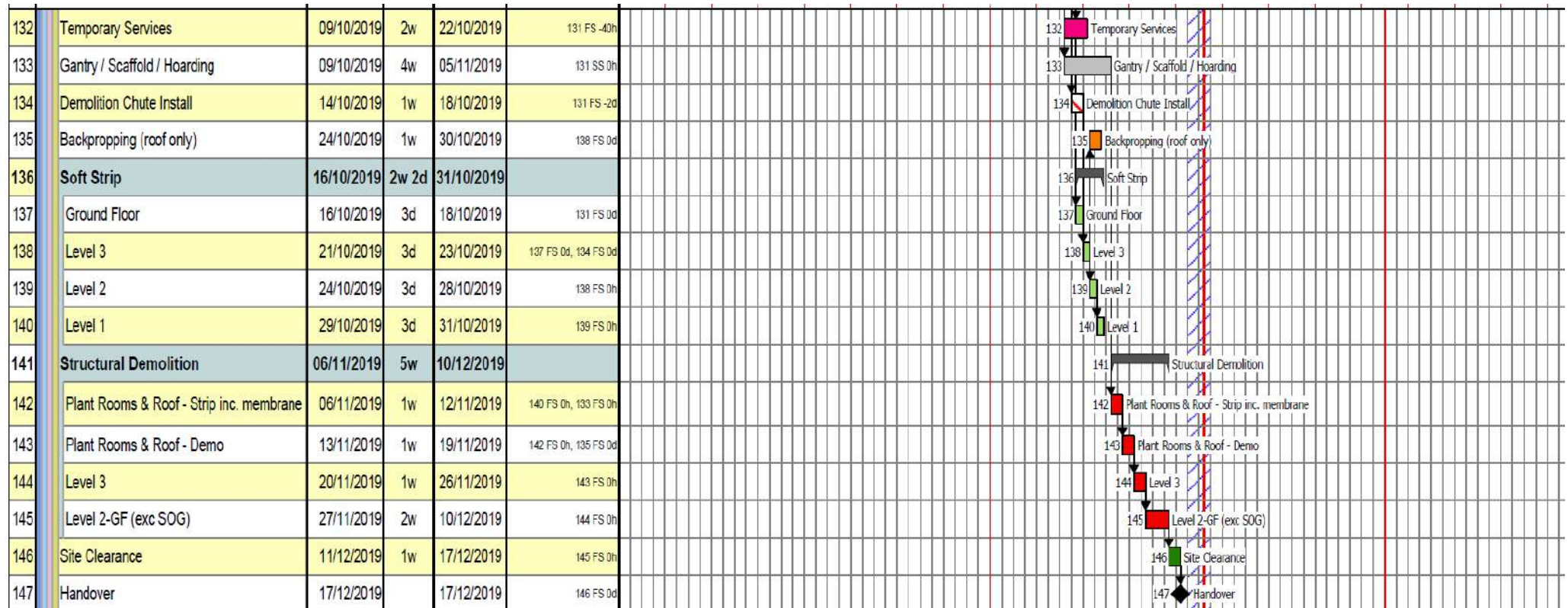
Programme and Timescales

John F Hunt Ltd



Programme and Timescales

John F Hunt Ltd



8. Temporary Works



Designing and Managing Temporary Works

All design management will be in accordance with our **Temporary Works Procedure SMS-020**, ensuring compliance with BS5975:2008.



Following a **Structural Appraisal Assessment** and provision of **Design Brief** from the Temporary Works Coordinator, a full design will be completed for each temporary works element used to facilitate works and included on the **Temporary Works Register**. A **Site Control Assessment** during installation verifies it has been build to design before use.

SMS-020 sets out requirements such as a '**permit to load**' and provides a **Temporary Works Inspection Register** prompting inspections at the appropriate frequency.

Records are kept in the Site Office and uploaded to the project's secure SharePoint.

Our Contracts Manager will maintain control of temporary works on-site; all of our project managers are competent in this having completed Temporary Works Coordinator Training.

In line with our procedure, when designing due cognisance is given to:

- The proximity of third-party assets, public footways and roads
- Obtaining agreements for oversailing scaffold
- Management of traffic on adjacent haul roads

- The protection of adjacent third-party assets and structures
- Services and utilities that are to remain in place

All designers risks will be recorded on a risk matrix proforma using a scale of impact and severity between 1-5. Residual risks that cannot be eliminated through design will be clearly marked on drawings.

Method Statements with Risk Assessments and designs for installing temporary works will be produced prior to their installation for comment by your design team or other third-parties. To ensure only up-to-date design information is used updates will be recorded on the site drawing register and correctly versioned.

Cranage

Given the methodology adapted and ability to facilitate demolition with mobile cranes; zoning, out of service restraint and free movement is not of concern.



The mobile crane will be mobilised and demobilised to site using agreed traffic routes and conducted out of normal hours in agreement with Reading Council, to avoid impacting normal traffic. Once onsite, erection and dismantling of the crane would be done within the site footprint.

Crane type and sizing will be confirmed, after structural investigations and assessment is completed. This assessment ultimately determines which excavators are chosen, which will be lifted to the roof to

commence top down demolition. Ideally mobile cranes in the range of 110T-220T would be used, which are more than capable to also facilitate adjoining land scaffold/gantry install and dismantle.

Mobile cranes may also be used against adjacent boundaries where saw-cutting and lifting techniques are employed, for example to remove a beam or column, if conventional demolition methods are not suitable.

A programme will be issued prior to commencement and be used to ascertain key dates for crane use on site including any over sail.

Scaffolding

Company Health and Safety Standard No.7 'Scaffold Requirements on Site'

will be followed and this will provides guidance to ensure safety and compliance as well as an inspection and testing scheme.

All proposed scaffold structures will be designed in accordance with the TG20:13 regulations by an independent scaffold designer and the proposals will be subsequently checked by our in-house engineering dept, logged on a scaff-tag and in site files.

Flame retardant Monarflex type sheeting will be installed to the external face of the scaffolding to encapsulate the car park and assist in containing dust and debris.

The scaffold will be secured from authorised external entry using 2.4m hoarding at the base on public frontages.

Scaffold and hoarding on Garrard St elevation may be subject to obtaining a relevant licence through Reading Council, however all other external protection will be contained with the demolition boundary, with no requirement for oversailing or access required.

Logistics of installation and striking is

addressed below under *General Access*.

An agreed level of liability and professional indemnity insurance will be maintained covering all scaffold or gantry works.

Scaffold, gantry and hoardings will be used to protect and segregate the public from the demolition works, while assisting to contain demolition dust and debris. External scaffold will be for site worker access and to conduct works from where it is unsuitable or inefficient to work from the structure.

The scaffold shall be used for emergency access no materials or debris will be stored on scaffold, only kept there while being used for any current task.

Fans will be used in line with best practice and as a secondary measure to mitigate potential injury from a falling object which has escaped the immediate scaffold face.

General access for scaffold

Scaffold will stand completely independent and separate of surrounding adjacent neighbouring structures.

To avoid unauthorised access we will secure this using monarflex, hoardings

and locked gates.

With suitable space around the perimeter for deliveries and laydown, a combination of existing lifts, forklifts using existing ramps and manual methods will be used to mobilise and install scaffold, fans and gantry.

Striking of scaffold, fans and gantry will be aided by lifting out using mobile cranes located to the west within the site boundary. Some equipment may need to be manually demobilised however we anticipate this to be minimal.

Working hours will comply with the project working hours for any install/dismantling unless alternative arrangements are agreed prior.

Community liaison is vital to minimise the disruption associated with scaffolding. We will conduct an initial **newsletter drop** with information about the works, the programme and site team contact details. This will be followed by an evening information meeting for residents/local businesses if necessary and a continuation of subsequent newsletters in hard copy or via email. Where specific stakeholders have bespoke requirements e.g. neighbouring access, we will issue individual updates also via our Project Manager.

All required Personal Protective Equipment and tools used to install scaffold/gantry at height will be tethered to avoid falls or drops from height in line with our **Working at Height procedure**.

The scaffolding will be delivered to site from Garrard St and loaded on to the floors from the rear, generally scaffolding will not need to be off loaded from Friar St. Should special circumstances arise this will be agreed with the council and will take place during the stated access times of 11am and 4pm.



9. Environment and Sustainability



Environmental Management Plan

ISO:14001 Certified System



Noise



- In line with Good Neighbor Policy, no shouting, stereos or radios
- White Noise reversing alarms not beeping
- All plant switched off, never idling, when not in use
- Silencers, vibration dampers, barriers, screening and static plant & waste chutes positioned away from party walls and site boundary to minimise noise levels
- Methodology to maximise use of mini-pulverisers, with percussive plant avoided
- Plant used in line with BS 5228
- Cutting operations and noisy tasks minimised through off-site fabrication where practicable
- Monaflex sheeting provides sound barrier
- Compliance with Section 61 agreements
- Unattended real-time sound level meters deployed on site boundary to monitor LAeq with trigger levels pre-agreed
- Demolition arisings loaded via internal well-holes down to the

Dust



- Employ Best Practicable Means (as per Part III of the Environmental Protection Act 1990)
- Vehicles securely sheeted when transporting materials to/from site
- Site speed limit adhered to
- Haulage roads cleaned regularly
- Jet washing facilities and access points to public roads
- Mobile water bowzers to dampen haul roads
- Increased spraying in dry weather
- Drop heights for loading/unloading minimised
- Water supply installed for dust suppression to Dampen down cutting, grinding and breaking out using atomisers forcing tiny particles of moisture into air without creating excess water
- Monarflex screens used as well as primary containment areas
- Dust monitoring

Waste



- Monitor waste streams using data collected from **Waste Log Forms** provided by Site Managers.
- Exceeding best-practice a detailed Site Waste Management Plan will be developed for the project prior to the commencement of any works, for your approval
- All waste and demolition/excavation arisings separated into waste streams as much as practicable on site and send to the appropriate recycling facility or reused
- Implement initiatives on-site to reduce, reuse and recycle diverting waste from landfill with a target of 98%:
 - Compost bins for food waste
 - All timber for hoardings and ply FSC/PEFC accredited
 - **Reuse crush** on site to reduce waste and traffic movements

Carbon



- On site water and energy analysis is carried out monthly using **Emissions Target Sheet** to record target and actual emissions from site and the project progresses. This form logs the number of loads delivered/removed, the mileage of each trip and total monthly mileage, litres of fuel used and electricity consumption on site. Carbon dioxide emission levels can be assessed to address areas where this can be minimised
- To reduce carbon emissions:
 - All vehicles from FORS Bronze
 - Promote the use of public transport, providing map to the nearest links on site
 - We use suppliers that are as local as possible, or ensure deliveries come from / waste is taken to the closest suitable depot

Water, Drainage & Hydrology



- Works in accordance with the Environment Agency Pollution Prevention Guidelines 1, 2, 3, 5, 6, 8, 13, 18, 21, 26
- Areas of bare soil kept to minimum
- Water run-off from dust suppression absorbed by hardcore
- No pumping to controlled waters, surface water drains or foul sewer without Discharge Consent from the Environment Agency or local water authority

Vibration



- Vibration surveys completed prior to demolition and ground works in consultation with Reading Borough Council
- Vibration will be minimised as far as practicable through the selection of plant, equipment and methodology
- Pre and post-works condition survey