St Ann's New Neighbourhood, London Borough of Haringey – Phase 1A

Construction Logistics Plan

June 2023

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This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

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Comments

Comments

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We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

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1. Introduction

General

1.1. Waterman Infrastructure & Environment Limited ('Waterman') has been instructed by Hill Residential Limited, Catalyst Housing Limited and Catalyst by Design Limited ('the Applicant') to provide a Construction Logistics Plan (CLP) to discharge Condition 10 with respect to Phase 1A of Planning Ref: HGY/2022/1833 for the redevelopment of a parcel of land, comprising a number of buildings that used to form part of the St Ann's Hospital site, London Borough of Haringey (LBH) (the 'Site').

1.2. The Site, hereafter referred to as St Ann's New Neighbourhood comprises up to 995 new residential units (the 'Scheme') and currently covers an area of 7.2ha. The site is located at St Ann's Rd, London N15 3TH.

1.3. Planning Ref: HGY/2022/1833 sought permission for:

1) Detailed approval for Phase 1A, for:

   a) The change of use, conversion and alteration of seven existing hospital buildings within Phase 1A for a flexible range of uses (Use Class E, F1 / F2);

   b) The demolition of some existing buildings (in accordance with demolition plan) and structures;

   c) The erection of new buildings for residential uses (Use Class C3); and

   d) Alterations to the existing access road and installation of new vehicular, pedestrian and cycle accesses; landscaping including enlargement of the Peace Garden, associated car and cycle parking spaces and servicing spaces.

2) The demolition of existing buildings and structures in Phases 1B, 2 and 3 (in accordance with the demolition plan);

3) Outline approval (all matters reserved except access) for Phases 1B, 2 and 3 for:

   a) The erection of new buildings for residential development (Use Class C3), commercial business and service (Use Class E), and local community and learning (Use Class F1/F2); and

   b) Associated pedestrian and cycle accesses; landscaping including enhancements to the St Ann's Hospital Wood and Tottenham Railsides 'Site of Importance for Nature Conservation' (SINC), car and cycle parking spaces and servicing spaces.

1.4. Condition 10 of the permission to be granted under Ref: HGY/2022/1833 states that:

"No development (aside from demolition and preparatory works) shall take place in any Phase of the development until a Detailed Construction Logistics Plan (CLP) in relation to that Phase of works has been submitted to and approved in writing by the Local Planning Authority for that Phase.

The plan shall conform with Transport for London's Construction Logistics Planning Guidance (2021), and in consultation with the Metropolitan Police, and shall include the following details:

i) Site access (where feasible, minimising the use of the Site Access opposite Chestnuts Primary School) and car parking arrangements;

ii) Delivery booking systems;

iii) Construction phasing and agreed routes to/from the development for lorry routeing;

iv) Timing of deliveries to and removals from the site (to avoid peak times of 07.00 to 9.00 and 16.00 to 18.00 where possible);

v) Travel plans for staff/ personnel involved in construction;

vi) Crane Lifting Management Plan (CLMP);

vii) Crane Erection and Dismantling;

viii) Evidence of engagement with local residents, community groups and measures for ongoing engagement.

Reason: To provide the framework for understanding and managing construction vehicle activity into and out of the proposed development, encouraging modal shift and reducing overall vehicle numbers. To give the Local Planning Authority an overview of the expected logistics activity during the construction programme. To protect of the amenity of neighbour properties and sensitive neighbouring uses and to maintain traffic safety."

1.5. This CLP has been prepared in respect of Phase 1A of the Scheme.

Objectives of the CLP

1.6. The CLP is intended to provide a framework to:

- Safely manage the volume and frequency of construction related trips;
- Minimise the impact on the surrounding transport network in terms of vehicle movements, public transport and vulnerable road users; and
- Contribute to minimising the potential impacts of noise generating activities, and to minimise air quality related issues.

Site Background

1.7. The Site is situated to the south of the B152 St Ann's Road, 1.5 km to the south west of Seven Sisters Station (Zone 3), 1.9 km to the west of South Tottenham Station (Zone 3), 1.3 km to the east of Harringay Green Lanes Station (Zone 3) and 1.7 km to east of Harringay Station (Zone 3). The Site is located adjacent to a bus stop providing services to Wood Green and Kingsland and 160m from a bus stop providing services to Edmonton and Waterloo.

1.8. The site is bounded to the south by the Overground railway line and the rear gardens of properties in Warwick Gardens to the west and to the east by the refurbished St Ann's Hospital site. The hospital buildings range from 2-3 storeys and vary in style, including new build elements and refurbished post war buildings. The remainder of the local area is predominantly residential in character with buildings of varying styles and age. There are more recent flatted blocks abutting the north-east corner of the site, which range in height from four to seven storeys.

1.9. Access to public transport services and Transport for London Road Network (TLRN) is readily achievable close to the Site.

Contact Details

1.10. Principal Contractor Details for the Site are as follows:

Name: Hill Partnerships Ltd. Contact Number: 0800 032 6760

Recent Changes to the Highway Network

1.11. There have not been any significant changes to the wider highway network that directly affect the proposals.

Existing Floorspace

1.12. The Site currently consists of a Gross Internal area (GIA) of 21,987m^2 and a Gross External Area (GEA) of 24,233m^2

Development Proposals

1.13. The Scheme comprises:

- up to 995 residential dwellings – 239 in detail (phase 1A);
- up to 756 units in the Outline Component (phases 1B, 2, and 3);
- Up to 4,150m^2 gross internal area (GIA) and 5,000m^2 Gross External Area (GEA) of Use Class E / F1 / F2;
- 167 parking spaces; and
- 5 car club spaces

1.14. The full Scheme will comprise circa 33 buildings across 14 plots (Plots A to O).

1.15. The total number of dwellings is summarised in Table 1 below.

Table 1: Indicative Unit Mix

Construction phase	1 Bed	2 Bed	3 Bed	4 Bed	Total
Detailed (Phase 1A)	104	102	15	18	239
Outline (Phases 1B, 2, 3)	241	380	99	36	756
Total (up to)	345	482	114	54	995

1.16. The current ground floor drawing indicates the development will be accessed from St Ann's Road to the north and there is a network of internal roads. Associated car, cycle and motorcycle parking facilities will be provided as part of the works.

CLP Structure

1.17. Following this Introduction, the document is structured as follows:

- Section 2 – Context, Considerations & Challenges;
- Section 3 – Construction Programme & Methodology;
- Section 4 – Vehicle Routing & Site Access;
- Section 5 – Strategies to Reduce Impacts;
- Section 6 – Estimated Vehicle Movements; and
- Section 7 – Implementing, Monitoring & Updating.

2. Context, Considerations & Challenges

Policy Context

2.1. Alongside development plan policies contained in the London Plan and Local Plan, the following guidance has been considered in the preparation of this CLP:

- Construction Logistics Plan Guidance (TfL, 2017);
- Construction Logistics & Cyclist Safety (CLOCS) (TRL, 2013);
- Mayor's Transport Strategy (2018);
- London Plan (2021);
- Fleet Operator Recognition Scheme (FORS) (TfL, 2012).

Location Plans

2.2. Location plans are provided below in Figure 1 to Figure 3. Full size versions will be updated following the Principal Contractor's appointment.

Figure 1: Regional Plan

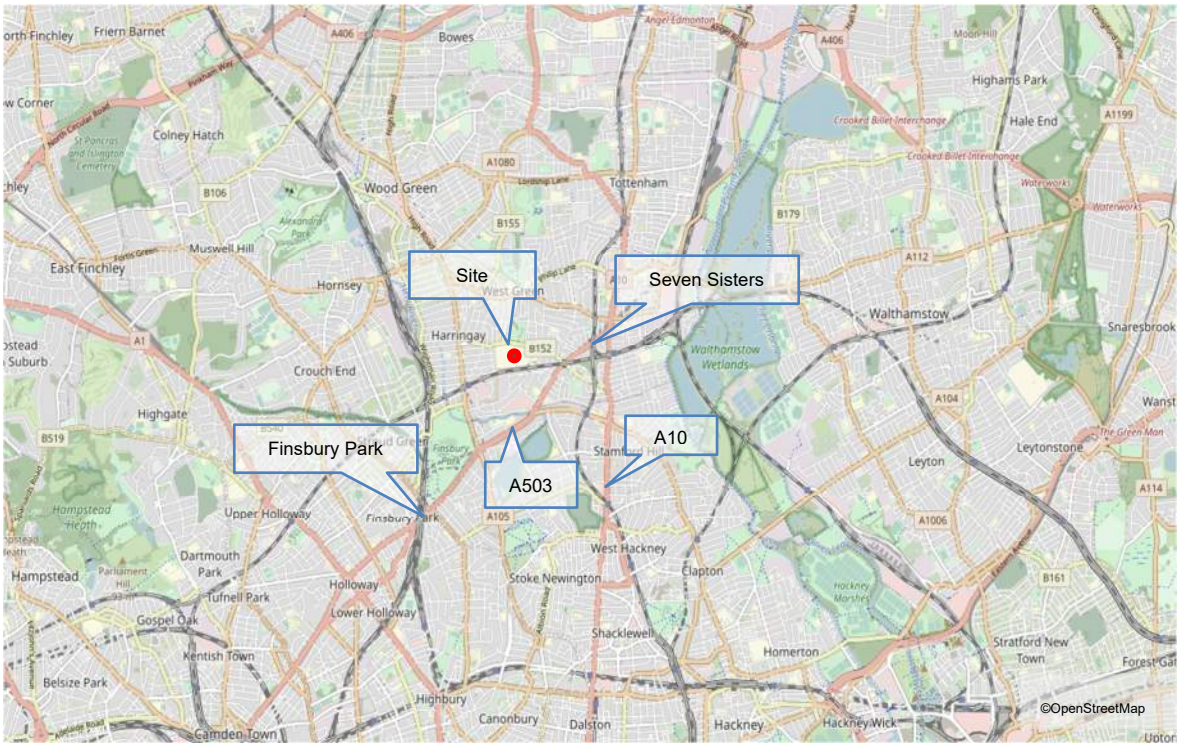


Figure 2: Local Context

Local Access including Highway, Public Transport, Cycling & Walking

Local Highway Network, Carriageways

2.3. The Site is located in Haringey. It is bound by St Ann's Road to the North, Hermitage Road to the East, a railway line to the South and the rear of the residential street Warwick Gardens to the West. To the east St Ann's Road leads onto A504 Seven Sisters Road, which provides access to A10 to the north and A1 to the south. A503 provides direct route to Seven Sisters and Manor House underground station.

2.4. The A503 runs north south, comprises a single lane carriageway in each direction with 2m wide footways for much of its length. Dedicated bus lanes are also in use which are marked on the southbound side north of St Ann's signalised Junction and northbound side south of St Ann's signalised junction.

2.5. Approaching the St Ann's – A503 junction from the north the right turn is facilitated under the railway bridge. It is managed by a traffic signal which allow traffic to either go ahead using both lanes or right using the far right lane.

2.6. Pedestrian crossings are in place in the vicinity though currently without tactile paving or consistent, legible dropped kerbs.

2.7. Street lighting and footways are present on both sides of the carriageways on St Ann's Road.

Pedestrian & Cycle Access

2.8. As would be expected within an urban setting, a comprehensive footway network exists with generally wide footways, street lighting and pedestrian crossing points in the form of both controlled and uncontrolled crossings.

2.9. The Site is within acceptable walking distance of local facilities. The Site is also served by a number of bus stops with the closest stops located directly on St Ann's Road.

2.10. The pedestrian infrastructure surrounding the Site is considered to be of a reasonable standard providing good footway connections to the surrounding facilities and amenities, supporting pedestrian movements.

2.11. With regard to cycling in the area, there are a number of routes, however, these are predominantly on-road and undesignated cycle routes. The Site is in close proximity to Cycle Super Highway 1 (CS1) which is located along A10 High Road approximately 6 minutes cycle ride.

Railway / Underground

2.12. The Site is in close proximity to a number of rail station, with the nearest one being Harringay Green Lanes Overground approximately 800m walk, it provides overground services to Gospel Oak Rail Station and Barking Rail Station at an off-peak frequency of approximately 6tph.

2.13. In addition, Seven Sisters underground station is located 1.1km walking distance away (circa 14 minutes' walk). The station can be accessed via St Ann's Road onto Seven Sisters Road to the northwest.

2.14. Harringay National Rail station is 1.2km away and is directly accessible from the Site via bus route 341. Off-peak service includes 6tph to Moorgate, 3tph to Welwyn Garden City via Potters Bar, 3tph to Hertford North railway station, and 1tph extended to Letchworth Garden City via Stevenage.

Bus Routes

2.15. The 67 bus services run from the stops to the north of the Site, providing 6 buses per hour during daytime periods. Route 341 can also be accessed at Blackboy Lane stop which provides 6 buses per hour.

Considerations & Challenges

Local Policies

2.16. The relevant policy documents and guidance have been referenced above.

Challenges

2.17. The following constraints have been identified at the Site for which will require control or mitigation measures:

- St Ann's Road caters for a significant volume of traffic and can be considered a barrier to pedestrian movement;
- St Ann's CE Primary School located to the northeast of the Site;
- Chestnuts Primary School located to the northwest of the Site;
- Land use in the vicinity of the Site is predominantly residential, commercial or town centre;
- Pedestrians and cyclists in the immediate vicinity.

3. Construction Programme & Methodology

Programme

3.1. This detailed CLP specifically considers Phase 1A but is also relevant to Phase 1B, the other Phases will be addressed within subsequent reports. The construction programme for Phase 1A, which will follow the conclusion of the current demolition programme, is anticipated to be as follows and as shown in Table 2 and Table 3 in relation to Phase 1B.

- Start: October 2023
- End: March 2026

3.2. For the purposes of this CLP the activities assumed to be undertaken within each of the six phases of construction identified by the TfL CLP guidance are:

- Site setup and demolition - comprising the enabling works;
- Basement excavation and piling – comparison of removal of dirt and foundation works;
- Sub-structure - comprising the sub-structure works;
- Super-structure - comprising the above ground works;
- Cladding – comprising of façade works;
- Fit-out, testing and commissioning – comprising the testing, commissioning and landscaping works.

3.3. The above arrangements are considered an optimal construction programme in order to minimise potential disruption to neighbouring residential, community and commercial premises.

3.4. The construction Site will be operational during the following hours:

- Monday to Friday 8.00am - 6.00pm
- Saturday 8.00am - 1.00pm
- No Sunday, bank holiday or public holiday working.

3.5. Work may be permitted outside of these hours in exceptional circumstances; the contractor will liaise with LBH in order to obtain a Section 61 (S61) license. This will be conditional on the Hill Partnership informing local residents in advance of the proposed activity.

Table 2: Demolition and Construction Programme

	Start	End	Approximate Duration
Demolition Phase			
Phase 1A	March 2023	September 2023	7 months
Phase 1B	March 2023	November 2023	9 months
Construction Phase			
Phase 1A	October 2023	March 2026*	30 months*
Phase 1B	September 2024	October 2026	26 months

Note: Subject to change ahead of submission.

** Phase 1: 5 houses which will be held till May 2030 (86 months) due to the location of Sales and Marketing Suite*

Table 3: Site Phasing

Phase	Phase 1A	Phase 1B
Site setup and demolition	*March 2023 – September 2023**	*March 2023 – September 2023**
Infrastructure and Roads	*October 2023 – January 2024*	*September 2024 – November 2024*
Basement excavation and piling	*January – May 2024*	*November 2024 - March 2025*
Sub-structure	February 2024 - September 2024	January 2025 - July 2025
Super-structure	March 2024 - March 2025	March 2025 - November 2025
Cladding	June 2024 - Nov 2025	May 2025 - June 2026
Fit-out, testing and commissioning	July 2024 - March 2026*	June 2025 - October 2026

Note: Subject to change ahead of submission.

** Phase 1: 5 houses which will be held till May 2030 (86 months) due to the location of Sales and Marketing Suite*

Cumulative Schemes

3.6. As works will influence, and be influenced by, surrounding developments this CLP will be further developed regarding other developments scheduled to be active during the construction period.

3.7. At present, it is not considered there are any nearby schemes of note that require consideration within a cumulative assessment.

Staff Schedule

3.8. Details of required staff that will be on site during various phases of construction are as below.

Table 4: Number of staff on site

Roles	No. Staff - Phase 1	No. Staff – Phase 2
Site setup and demolition	60	60
Infrastructure and Roads	20	20
Basement excavation and piling	20	20
Sub-structure	30	30
Super-structure	100	100
Cladding	60	60
Fit-out, testing and commissioning	150	150

Site Setup & Demolition

3.9. Details of the likely duration of demolition working is illustrated above in Table 3. Timings, plant and vehicles required and works description will be included as details are made available.

3.10. During this phase it is necessary to establish the site compound (Welfare). This will include the delivery of welfare, plant and machinery, as well as skips. Trips as part of site setup will be included within the overall trip's calculations.

Security & Hoarding Strategy

3.11. Hoarding will be set up to the Site perimeter. Pedestrian access gates will be provided to facilitate access to the Site. All entrances will be manned during the day by traffic marshals/gate men. This will be checked regularly to ensure continued security and prevention of access to unauthorised persons.

3.12. A notice will be prominently displayed at the entrance to the site which clearly states the following information:

- The permit holder's name;
- The contractors name and contact details;
- An emergency contact name and the Project Manager's telephone number;
- A statement that the site is permitted by the local authorities;
- The permit number; and

- The government's environmental incident hotline (0800 807060) or any other number subsequently notified in writing.

Site Establishment - Accommodation Facilities

3.13. From the outset, the primary objective will be the establishment of office and welfare facilities on site. The site accommodation will comprise office(s), meeting room, drying room, kitchen and eatery, male and female toilets, first aid and reflection room. The facilities will have cleaning staff to ensure they are maintained to the highest standard. During the Construction stage, a site compound complete with welfare facilities will be present on site.

3.14. The site welfare includes a site office, canteen, drying room and toilet facilities. A road cleaner will come to if and when required, to remove any dirt caused by lorries who have entered and left the site.

3.15. A wheel wash station will also be provided to further prevent any dust and mud entering the public highway. A security officer is present on site and helps to coordinate deliveries an minimise conflict between site users.

3.16. The facilities will comply, in all respects, with current HSE/CDM guidelines/regulations including the provision of mains water and electrical services and will have a dedicated PPE free safe access to them at all times. The office will have fully functional telecommunications and internet that can be used by all of the delivery team inclusive of the clients and the client's professional management team.

3.17. A full copy of all project documents including planning permission, planning conditions, design drawings and methodology and risk assessments will be kept on site in the site office available for review by all staff and any authorized visitors on request.

Fire Safety

3.18. The Hill Partnership will produce a fire plan which will be displayed on site notice boards within the site accommodation and included in the site induction. Any Fire Safety duties performed by personnel will be undertaken in accordance with the Fire Plan. Fire marshalling duties will be undertaken by appropriately trained and certified operatives.

3.19. Additionally, the Hill Partnership will carry out regular reviews / updates of the Fire Plan to ensure it remains current. The Hill Partnership will provide fire points, which will be strategically located throughout the work areas as necessary.

3.20. Fire points will include, as a minimum, fire point stand, fire extinguishers (1no. CO_2 and 2no. foam), sand bucket, rotary hand bell and back panel for fixing appropriate signage (evacuation route, emergency procedures, etc.).

3.21. Servicing and maintenance of fire points and extinguishers will be provided based on statutory requirements and additional maintenance necessitated by proper use of the equipment.

3.22. Appropriate signage will be positioned strategically around the accommodation area to effectively communicate the plan to the operatives. Emergency escape routes and exits will also be prominently signed.

3.23. In addition, the existing fire escape routes will be kept clear and maintained at all times. These will be indicated on the fire plan and briefed to all operatives during the induction.

3.24. All visitors will be requested by notices to report to site management prior to entry to their demise.

Drainage

3.25. The Hill Partnership will implement a temporary drainage strategy to control surface water runoff.

Isolation of Services

3.26. Any requirement for any isolations or disconnection to any electric, gas or water supplies/services will require isolation back to the main incoming and distribution of temporary site supplies of electric and water to facilities works will be required.

3.27. Any isolation works for any service provision will be undertaken by experienced and trained personnel.

Statutory Services – Building Services

3.28. The early stages of the project will require necessary enquiries with the statutory authorities regarding existing services on the site, the Hill Partnership will liaise with the department services engineer for the retrospective statutory services companies to ensure adequate and correct protection during the works.

Plant

3.29. It is envisaged that the following NRMM (Non-Road Mobile Machinery) plant/machinery will be required to execute the works:

Table 5: List of Plant/Machinery

Type of Machinery	Number of Machinery
Luffng JibTower Cranes	4
10T Excavator	2
20T Excavator	3
30T Excavator	1
5T Dumper	4
17m Forklift	1

3.30. The NRMM Low Emission Zone uses the Mayor and London Borough's planning powers to control emissions from NRMM used on construction sites.

3.31. The Site will be registered by the Hill Partnership at http://nrmm.london.

Site Clearance

3.32. All plant, welfare facilities, and maintenance materials and rubbish will be removed from the site leaving the site in an orderly condition.

Excavation & Piling

3.33. Between circa June and December, work to undertake piling will proceed. It is anticipated that 13 construction vehicles per day will access the site during the peak in relation to these works.

Sub-Structure

3.34. This stage will typically entail the delivery of mechanical equipment, excavation for foundations and drainage, removal of surplus spoil, delivery of materials and concrete wagon deliveries.

Super-Structure

3.35. Shuttering/Formwork materials - This will be delivered in flat bed articulated lorries off-loaded from an area within the site boundary by the tower crane and would typically take circa 2hrs. Traffic marshals will be in place to accommodate the safe entry and exit of lorries into and out of the site.

3.36. Steel Reinforcement will be delivered in Flat Bed Articulated Lorries off-loaded on site by the tower crane and would typically take circa 2hrs, Traffic marshals will be in place to accommodate the safe entry and exit of lorries.

3.37. Concrete will be delivered in 8-wheel lorries off-loaded from within the site boundary with the aid of the tower cranes & concrete skip. On days floor slabs are poured, the concrete lorries will discharge into a static concrete pump situated within the site.

Cladding

3.38. Façade deliveries will vary in size due to the different elements of façade required. Deliveries will be well organized to ensure lorries are fully loaded to reduce the number of deliveries required. All deliveries will be booked into our system and the logistics team will facilitate the entry and exit of the lorries.

3.39. Frames and glass will be delivered on metal stillages and each until individually strapped.

Fit-Out, Testing & Commissioning

3.40. This will involve deliveries of material on ridged and articulated lorries, off-loaded by the tower crane on site. At this stage in the construction the superstructure will be well advanced/almost complete. This would involve deliveries for materials such as Metal Framing/Plasterboard/plastering materials/ceiling materials/Mechanical and Ventilation Materials/Electrical Materials/ Flooring Materials/Painting and Decoration/Case-goods etc.

3.41. Deliveries will be well organized to ensure lorries are fully loaded to reduce the number of deliveries required.

3.42. During the last 5-6 months of the project there will be a large amount of furnishing to be installed in the units. Typically, these would be delivered in ridged lorries and will be off-loaded on site and then brought directly into the buildings.

4. Vehicle Routing & Site Access

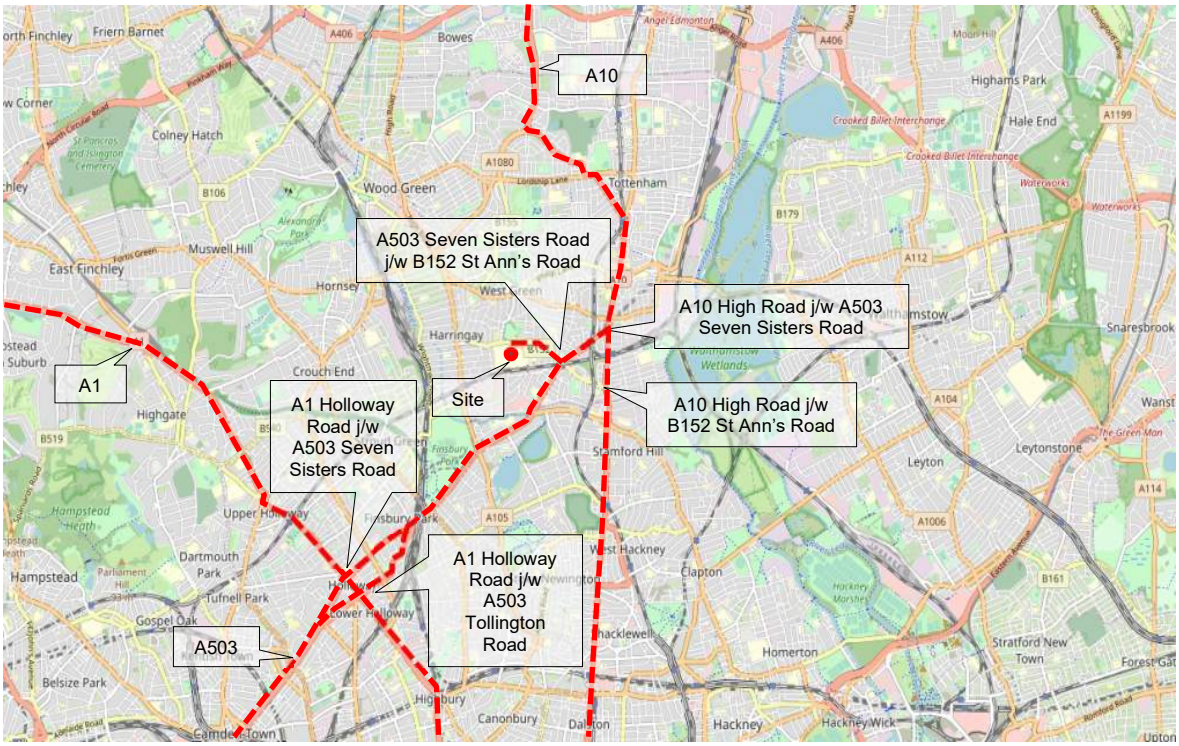
Site Logistics

4.1. It is proposed that the main vehicular access into the Site for construction vehicles will be accessed from the east along B152 St Ann's Road, via A503 Seven Sisters Road which runs in a southwest – northeast orientation between the A1 and A10. The A1, A10 and A503 each constitute part of the Transport for London Road Network (TLRN) known as 'Red Routes'.

4.2. It is envisaged that vehicles will access the B152 St Ann's Road at its existing signal-controlled crossroad junction with the A503 Seven Sisters Road. Construction traffic accessing the Site from the north and south on the A10 High Road will access the A503 Seven Sisters Road at the existing signal-controlled junction between the two roads. Construction traffic will not be permitted to access St Ann's Road directly from its junction with the A10 High Road, noting that access for larger goods vehicles (16.5t) is currently restricted from Monday – Friday, Midnight – 7am and 9pm – Midnight, except for permit holders. Construction traffic for the A1 will utilise the existing one-way routing and signal-controlled crossroad junctions of the A503 Tollington Road and A503 Seven Sisters Road with the A1 Holloway Road.

4.3. The nominated routes are summarised below in Figure 3.

Figure 3: Indicative Construction Vehicle Routes to / from the Site



4.4. It is understood that vehicles will be able to utilise the existing access point from St Ann's Road in order for construction and delivery vehicles to enter the Site. The access will cater for a variety of construction vehicles and will be demonstrated by Swept Path Analysis. It may be necessary to widen the access in order to facilitate the proposed works.

4.5. During construction and operational stages, depending on phasing, vehicles will exit the Site in forward gear having either pulled up kerbside or having reversed on to the Site. Construction vehicles leaving the Site will be required to follow the same route taken to access the Site.

4.6. The western access location opposite Chestnut Primary School will not be used by construction traffic except for emergencies as agreed during the planning consultation process.

4.7. Site traffic management plans and swept paths for construction vehicles accessing the Site are provided at Appendix A.

Control of Site Traffic

4.8. In the interests of public safety, and avoiding disruption to the local area, the method and route of deliveries to the Site will be controlled in agreement with the relevant authorities. The plan will outline timings of deliveries and routes to be taken by hauliers to ensure minimal disruption to local residents and businesses.

4.9. This will include potential risk for noise disturbance as well as minimising additional traffic during peak periods. A formal monitoring regime will be established to ensure all appropriate measures are put in place. Risks will be identified, scheduled, assessed and managed.

4.10. The complaints procedure will be formalised and circulated to local parties (as per the consultation) and the Council, reinforced (if required) through a local working group. Consideration will be given to other developments with regard to potential coordination of deliveries (subject to timely feedback from the Council). This will be regularly reviewed as part of the Site Manager's responsibility.

Access to the Site

4.11. Access to the Site will be locked to prevent unauthorized access and the hoardings will be checked regularly to ensure that they remain secure.

4.12. An appropriate member of staff will be named once appointed, and their contact details will be available to deal with emergencies. A customer care number will be displayed in front of the site allowing 24-hour contact, if necessary.

Road / Footway Closures

4.13. It is not proposed to close any roads or footways during the works unless specific access or utilities works are required, due to the presence and need for existing residents' access. Footways to B152 St Ann's Road will remain open to all users wherever possible. Where temporary access control is needed, this will be managed by Banksmen and traffic marshals.

4.14. In the event of partial closures to transfer goods and materials across the footway, temporary traffic management will be laid out in accordance with Chapter 8 of the Traffic Signs Manual and Safety at Street Works and Road Works.

Initial Risk Assessment

4.15. Table 6 below provides an initial risk assessment, considering the likely impact of construction vehicle movements between the Site and the highway network in the context of potential conflicts with pedestrians and cyclists.

Table 6: Risk Assessment - Construction Vehicle Movements

Potential Hazard	Description of Risk	Embedded Mitigation	Risk Level
Construction vehicles entering/exiting the Site from St Ann's Road	Construction vehicles restricting on-coming traffic and pedestrian movements.	Detailed delivery schedule and booking system for construction movements. Vehicles will turn around within Site and exit Site in forward gear. Banksmen on-site to assist construction vehicle access to Site and manage movements	Low
Construction vehicles waiting on St Ann's Road	Construction vehicles unable to access Site / unauthorised construction vehicles.	Detailed delivery schedule and booking system for construction movements. Banksmen on-site to assist construction vehicle access to Site / move-on unauthorised construction vehicles and manage movements.	Low
Construction vehicle movements during peak network periods	Potential for greater risk of conflict during peak network periods (i.e. AM and PM commuting peaks) on CS1.	Restricted delivery times avoiding 07:00 – 09:30 and 16:00 – 18:00.	Low

Location of Crane

4.20. The cranes expected to be used as part of Phase 1A and Phase 1B are illustrated by below in Figure 4 and Figure 5. A Site wide schematic of crane locations for all phases of work are attached in Appendix B.

Figure 4: Location of Crane - Phase 1a

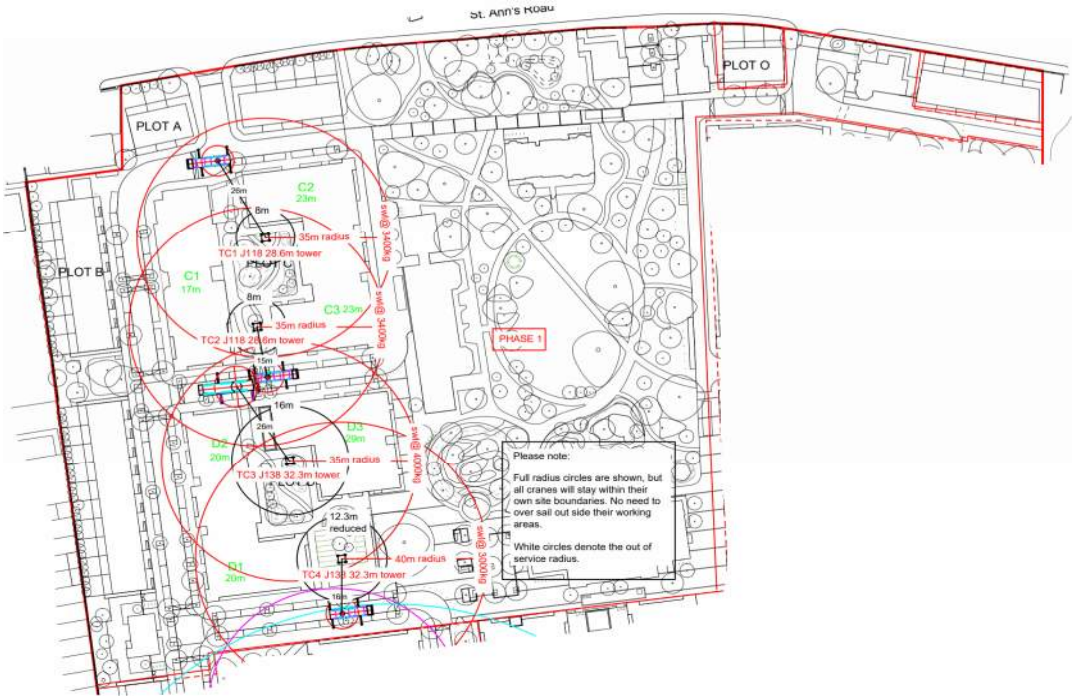


Figure 5: Location of Crane - Phase 1b

5. Strategies to Reduce Impacts

5.1. This Section of the CLP describes the committed, proposed and considered measures and strategies to reduce the environmental impact, road risk, congestion and cost of construction logistics associated with the Proposed Development.

5.2. Table 7 sets out a summary of the construction impact reduction measures.

Table 7: Construction Impact Reduction Measures

Planned Measures Checklist	Committed	Proposed	Considered
Measures influencing construction vehicles and deliveries			
Safety and environmental standards and programmes	✓		
Adherence to designated routes	✓		
Delivery scheduling	✓		
Re-timing for out of peak deliveries	✓		
Re-timing for out of hours deliveries	✓		
Use of holding areas and vehicle call off areas	✓		
Use of logistics and consolidation centres		✓	
Control of dust and dirt	✓		
Emergency Access	✓		
Measures to encourage sustainable freight			
Freight by Water			✓
Freight by Rail			✓
Material procurement measures			
DfMA and off-site manufacture		✓	
Re-use of material on site	✓		
Smart procurement	✓		
Other measures			
Collaboration with other sites in the area	✓		
Implement a staff travel plan	✓		

5.3. The key measures shown in Table 7 will be confirmed as part of future updates to the detailed CLP by the Hill Partnership, however an overview and summary of the measures is outlined below.

Consideration of Adjoining Sites

5.4. The Applicant will liaise with the developers of the other development sites in the area in order to manage the construction programme accordingly. This will also include detailed liaison with LBH regarding highway works and TfL regarding potential diversions to bus routes (if required).

General Measures

5.5. To reduce the risk of potential conflict, this section has been prepared with regard to adjacent works coming forward during the construction programme. Key aspects include:

- Condition Survey (carried out before works commence, copied to LBH);
- Restricted Delivery Times (i.e. avoiding peak hours);
- Fixed Routing (using only the routes specified and agreed in this document);
- Accesses (layouts to be agreed with LBH);
- Monitoring (CCTV facilities funded by the Applicant);
- Traffic Management (using Banksmen, Chapter 8 / Red Book etc. compliant management);
- Holding Areas (e.g. lay-by facilities on strategic road network);
- Neighbours and Public Liaison (contact details of site manager, regular updates to working groups, local interest parties);
- Freight Safety (FORS Silver Level (Minimum), comply/register with Work Related Road Risk (WRRR) and register vehicles with Non – Road Mobile Machinery (NRMM));
- Cyclists (equip construction vehicles with side-bars, blind spot mirrors and detection equipment, CLOCS);
- Waste Management (set waste reduction targets through a Site Waste Management Plan (SWMP), monitor and manage reduction/reuse/recycling etc.); and
- Utility Coordination (liaison with providers during works programme to check and manage overlaps, liaise with adjoining sites).

Supplementary Measures

5.6. Additionally, the following aspects will be incorporated into the management of construction traffic:

- Delivery Scheduling (use of JIT deliveries with holding areas, deliveries called in with refusal systems in place in case of erroneous/early/late deliveries – routing to follow the routes specified above);
- Re-timing out of Peak Deliveries (scheduled deliveries will be scheduled at the point of order where possible, booking system and use of holding areas to support delivery profiles);
- Staff Travel Plan (limit access to site by car where possible, promote use of public car parks and promotion of public transport use);
- DfMA and off-site manufacture;
- Re-use of material on site; and
- Smart procurement.

5.7. Items considered not possible include the following:

- Freight by Water (site, holding areas or contractor depot are not within 100m of a foreshore of navigable waterway); and
- Freight by Rail (site, holding areas or contractor depot are not near any suitable facilities).

5.8. The Applicant confirms that the following items will be considered for the works. These items will be reviewed in more detail by the Hill Partnership prior to commencement on Site and regularly during the programme of works.

Restricted Delivery Times

5.9. No site traffic would deliver to site or arrive in proximity to the site between the following times; 08:30-09:30 (unless by site-specific arrangement), 15:00-16:00 (unless by site-specific arrangement).

Delivery Specific Legal Agreement

5.10. The Applicant may commit to entering into a Delivery Specific Legal Agreement with the Council governing the behaviour of construction delivery traffic.

Holding Areas & Consolidation Centres

5.11. Holding areas are proposed because the number of potential vehicles arriving to the site will benefit scheduling deliveries. Given the scale of development, use of consolidation centres is not proposed at this time.

Crossovers and Highways

5.12. In early-stage works, access to Site by vehicles may be made via the existing vehicle crossover. Enabling works may therefore be necessary for the existing crossover to be suitable for construction vehicle access. The Applicant would contact LBH to establish acceptable parameters for the construction of all crossovers, relevant to the Site, are rated to withstand the weight of construction vehicle traffic and any other related access measures.

5.13. These and measures to return the carriageway to either its previous state or an agreed upon future state will be paid for by the Applicant.

5.14. Regarding a photographic survey of the highway and footway adjacent and leading to their site (the extent of which to be agreed with LBH); they shall lodge digital copies of these images with LBH before the start of works.

5.15. These images will form the basis of assessment of any highway damage at the conclusion of works, which shall then be made good by the Applicant. Failure to do so will result in all highway defects adjacent to the site being attributed to the site traffic and operation.

5.16. It is understood that a Crane licence will be issued by LBH Traffic Management Team, and the Hill Partnership will obtain the necessary highway licences from LBH.

Site Access Monitoring

5.17. The Applicant may install CCTV on their Site which shall include cameras monitoring all site vehicle access and egress points. The data from these cameras is to be retained for at least two weeks after the time of recording and is to be made available in full to LBH officers upon request and in good time.

FORS

5.18. The Applicant will commit to site traffic meeting at least the FORS Silver standard.

Direct Vision Standard

5.19. The Direct Vision Standards (DVS) classifies vehicles using a star rating system. The rating is assigned on a scale of zero stars (the lowest rating, not suitable for use in an urban environment) to five stars (the highest rating), vehicles with excellent direct visibility.

5.20. As part of this development, it is deemed that no vehicles with less than a three-star rating will be used to support the development, and that all operators will be encouraged to use vehicles with the highest star rating possible.

5.21. More detail regarding checking the rating of vehicles and attaining a permit can be found using the following link. https://tfl.gov.uk/modes/driving/dvs-safety-permit-application/

Utility Co-ordination

5.22. The applicant would commit to co-operation with LBH-led utility coordination initiatives aimed at bringing in utility connections with the minimum possible disruption to the traffic network. This will require a full list of required utility connections and specifications to be made available at the earliest possible opportunity so that co-ordinated installation can be arranged. Particularly, contractor should commit to bringing utility connections up to site in a single co-ordinated set of works, with final connection then to be made at will.

Power Banks

5.23. Consideration will be given to power bank systems and or Temporary Builder Supply (TBS) to supplement and at times take over from the use of diesel generators on-site. This would also allow for a reduction in the size/capacity of generators specified for on-site use, leading to savings in cost, noise, pollution and residents' complaints.

TAD I-am

5.24. Consideration will be given to adopting this system of electronic security and monitoring for items of plant to improve health and safety as well as reduce pollution and operating costs on-site.

Deliveries

5.25. A delivery procedure will be implemented to ensure that vehicles to the construction site are organised in a controlled way and to be made '*just in time*', to prevent backing up onto the highway.

5.26. It is proposed that suppliers and sub-contractors will be informed of delivery procedures and the routes to and from Site to take. They will be made aware that there are always to be followed unless otherwise agreed.

5.27. There will be no storage of materials or waste permitted outside of the Site boundary.

Reverse Logistics

5.28. It is proposed that whenever possible delivery vehicles will take surplus or unused materials back to the source supplier, therefore suppliers who operate using reserve logistics will be prioritised as this will reduce waste and vehicle movements.

Delivery Booking System

5.29. All deliveries and collections to Site will be carefully controlled and managed by the site Manager, and the procurement team using a delivery management system.

5.30. Deliveries will be coordinated to avoid multiple vehicle arrivals at any one time. It is proposed that when a delivery will be made on a larger vehicle there will be no other deliveries allowed during the time it is expected to take place. Therefore, all sub-contractors and suppliers should be required to give at least 24 hours' notice of deliveries so that requests can be reviewed, approved or an alternative slot arranged.

5.31. Properly trained and accredited Traffic Marshalls will ensure that any non-compliant vehicles (e.g. not meeting the minimum FORS Silver standard) are swiftly turned away from the Site. The Traffic Marshalls will also turn away any deliveries which arrive outside of their designated booking slots.

Re-timing for Out of Peak Deliveries

5.32. The Contractor will re-time deliveries and collections to avoid peaks of vehicle and pedestrian traffic for the hours set out above. This will entail consideration of:

- Other traffic using St Ann's Road, A503 Seven Sisters Road and A105, such as deliveries to retailers and residential unit;
- Morning and evening peak hours for traffic on the wider highway network; and
- Start and finish times of nearby schools or community uses.

Re-timing for Out of Hours Deliveries

5.33. The contractor may seek permission for out of hours deliveries which could reduce congestion, improve road safety, encourage good relations with neighbours and increase the efficiency of construction delivery among other benefits. A Quiet Delivery Scheme will be implemented to avoid causing disturbance to local residents on the routes.

Freight Operators Recognition Schemes (FORS)

5.34. It is required that all transport / haulage providers of vehicles which are making journeys to the Site are committed to best practice, demonstrated by membership of TfL's Freight Operator Recognition Scheme (FORS). The contractor will require a confirmation of accreditation from transport providers in order for approval of delivery slots.

5.35. Site traffic will be required to meet at least the FORS Silver standard. The contractor will require a confirmation of accreditation from transport providers in order for approval of delivery slots. All construction delivery vehicles should at all times display the FORS Silver badge on the vehicle cab

6. Staff Travel Plan

Aim and Approach

6.1. As part of its measures to reduce the impact of staff travel to the Site, it is envisaged that all staff will either use public transport or other sustainable modes of transport to access the Site.

6.2. To keep the impact of staff travel as low as possible, no additional parking spaces are to be provided within or around the vicinity of the site.

Objectives

6.3. There are a number of objectives that the implementation of the TP is intended to help fulfil, including:

- To influence travel behaviour.
- To encourage a modal shift in travel towards more sustainable methods of travel.
- To reduce the need for unnecessary journeys.
- To help improve the health of employees.

Amenity Access

Walking & Cycling

6.4. As identified previously, the surrounding pedestrian network is considered to be of a high standard, with appropriate footways typically on both sides of the carriageway. Appropriately dropped kerbs and junction protection restrictions are also implemented to maintain pedestrian/vehicle visibility. There are a number of restaurants, cafes and convenience stores located within 200m walking distance of the site, which staff can utilise.

Cycling

6.5. As previously stated in this report. The Site is well served by the London cycle network with CS1 running in close proximity to the Site. It is expected that staff will have the provision to store bicycles onsite safely within the curtilage of the site. There are also existing stands located along Chestnuts Park adjacent to the Site and additional bicycle stands provided at South Tottenham Station and Seven Sisters Station.

6.6. The welfare facilities located along the north-eastern corner of the site (Appendix A) will also offer showers and secure lockers, encouraging staff to cycle to the Site.

6.7. With regard to cycling in the area, there are a number of routes, however, these are predominantly on-road and undesignated cycle routes. The Site is in close proximity to Cycle Superhighway 1 (CS1) which is located along A10 High Road approximately 6 minutes cycle ride.

Rail/Underground

6.8. The Site is in close proximity to a number of rail station, with the nearest one being Harringay Green Lanes Overground approximately 800m walk, it provides overground services to Gospel Oak Rail Station and Barking Rail Station at an off-peak frequency of approximately 6tph.

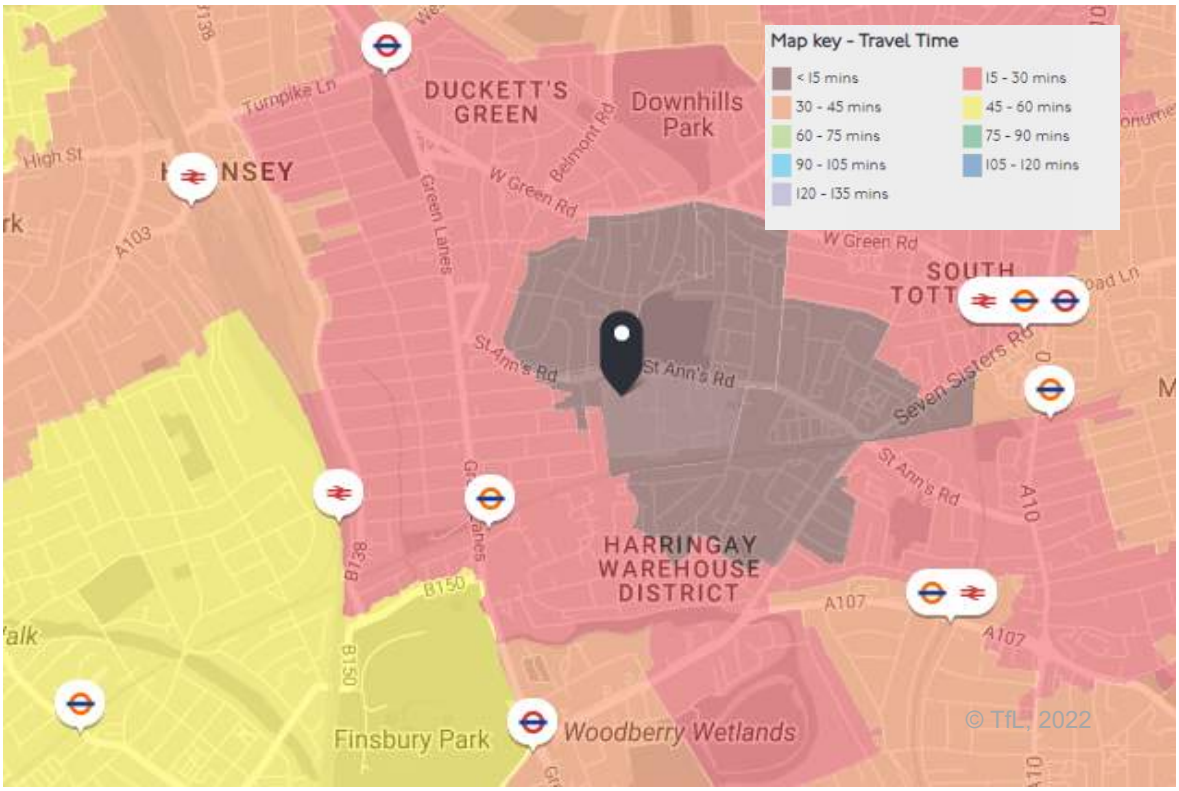
6.9. In addition, Seven Sisters underground station is located 1.1km walking distance away (circa 14 minutes' walk). The station can be accessed via St Ann's Road onto Seven Sisters Road to the northwest.

6.10. Harringay National Rail station is 1.2km away and is directly accessible from the Site via bus route 341. Off-peak service includes 6tph to Moorgate, 3tph to Welwyn Garden City via Potters Bar, 3tph to Hertford North railway station, and 1tph extended to Letchworth Garden City via Stevenage.

Bus Routes

6.11. The 67 bus services run from the stops to the north of the Site, providing 6 buses per hour during daytime periods. Route 341 can also be accessed at Blackboy Lane stop which provides 6 buses per hour.

Figure 6: TIM Mapping



6.12. Figure 6 above represents the catchment area within which staff are able to travel by all public transport modes. As illustrated a number of key locations can be reached within a 15-30 minute journey from the site, including South Tottenham Seven Sisters and Finsbury Park. All of which have excellent transport linking into other regions within London and further.

7. Estimated Vehicle Movements

Vehicles

7.1. It is envisaged that a range of vehicles, will be used as part of the construction and development phases. As currently indicated by the Applicant, an 8 Wheel Rigid Tipper (20t) and UK Maximum Length Articulated Lorry (26t) are anticipated to be the principal construction vehicles used by the Scheme.

7.2. The number and frequency of vehicles required will be dependent on movements permitted within the planning permission and TfL's best practice guidance.

7.3. As per the data provided by the demolition contractor, the number of demolition vehicle movements are presented below in Table 8 below. It is noted that vehicle movements for each stage of the construction programme are subject to change, however, details will be kept up to date in future iterations of the CLP by the Hill Partnership.

7.4. The working hours are expected to be Monday to Friday 08:00 to 18:00 (with start-up 07:00-08:00 and close down 18:00-18:30), and Saturday 08:00 to 13:00.

Table 8: Demolition Trips

	Number of Vehicles	Two-Way Trips	Average Trips Per Month
Phase 1A & 1B	375	750	96

7.5. Table 8 indicates that during the demolition phase an average of 96 two-way vehicle movements are estimated per month. This is also equivalent to 24 two-way per week and an average of 5 per day, which can be seen as nominal and can be incorporated into the existing highway network.

7.6. In the absence of information on the number of construction material and waste trips, Table 9 and Table 10 below provide estimates of the number of trips that may be required. This will be updated in subsequent issues based on client/contractor feedback.

Table 9: Construction Materials Trips (Articulated Lorry 26t)

	Construction Material (t)	Number of Vehicles (26t)	Two-Way Trips	Average Trips Per Month
Phase 1A	84674.18	3257	6513	217
Phase 1B	68022.77	2616	5233	201
Total	152696.00	5,873	11,746	418

7.7. Based on the estimates, Table 9 indicates that during the construction phase a peak average of 217 Articulated Lorry's are estimated per month during Phase 1A and 201 peak average trips during Phase 1B. A combined peak average of 418 two-way trips is estimated during the period September 2024 to March 2026 over which the two phases coincide.

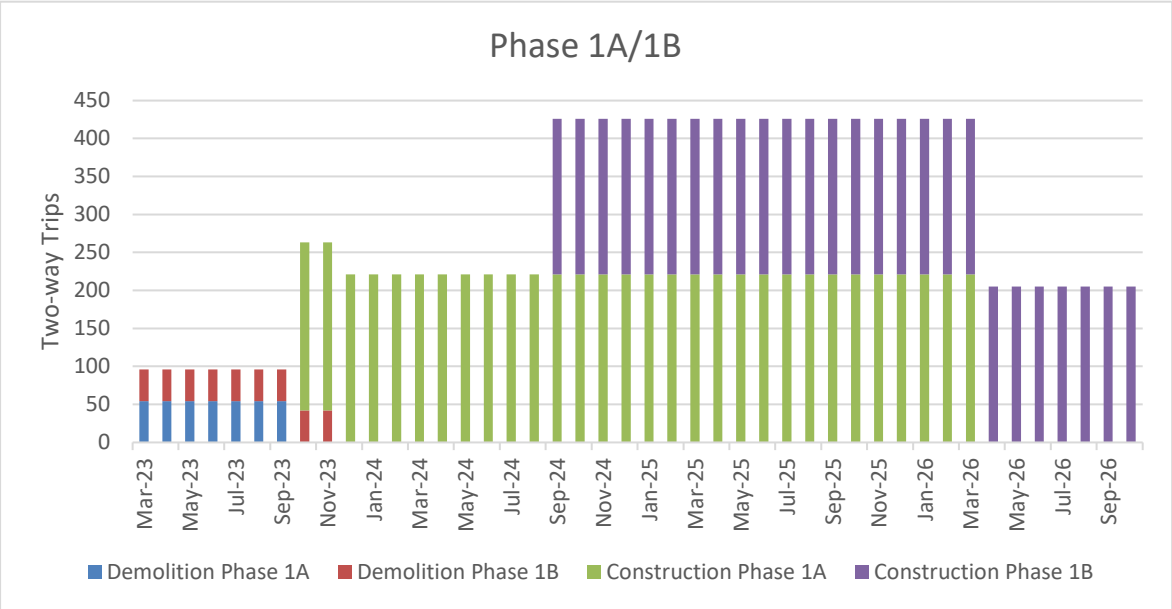
Table 10: Construction Waste Trips (Tipper 20t)

	Construction Waste (t)	Number of Vehicles (20t)	Two-Way Trips	Average Trips Per Month
Phase 1A	1081.83	54	108	4
Phase 1B	897.14	45	90	3
Total	1978.97	99	198	7

7.8. Based on the estimates, Table 10 indicates that during the Construction Phase a peak average of 4, Tipper Lorry's are estimated per month during Phase 1A, 3 during Phase 1B, and 7 two-way trips per month during the period over which the two phases coincide.

7.9. Figure 7 below presents the graph showing the average number of vehicles throughout the construction programme.

Figure 7: Indicative Construction Vehicle Trip Generation – Average Monthly Two-Way Trips



7.10. Further breakdown of Demolition and Construction vehicle trips can be seen in Appendix C.

Site Access & Egress

7.11. Safe and adequate access will be provided to all parts of the Site, and the Site must be kept tidy.

7.12. The Site must be adequately protected by barriers to prevent access (either accidental or deliberate).

7.13. When the work has stopped for the day, the Site must be secured, all ladders and access must be removed, the plant must be immobilised, and all hazardous materials must be safely stored.

8. Implementing, Monitoring & Updating

8.1. The contracting team and Applicant are fully aware of the sensitive nature of the environment and necessity to ensure that operations do not adversely affect neighbouring residents, businesses and the environment.

8.2. A Construction Logistics Manager will be appointed who will be in charge of implementing the detailed CLP and will be responsible to collect data on:

- Number of vehicle movements to Site:
  - Total;
  - By vehicle type/size;
  - Time spent on site;
  - Origin and destination of vehicles arriving at or leaving Site; and
  - Delivery/collection accuracy compared to schedule.
- Breaches and complaints:
  - Community concerns about construction activities;
  - Vehicle routing;
  - Unacceptable queuing;
  - Unacceptable parking;
  - Compliance with safety and environmental standards and programmes;
  - Low Emissions Zone (LEZ) compliance; and
  - Anti-idling.
- Safety:
  - Logistics-related incidents;
  - Record of associated fatalities and serious injuries;
  - Methods staff are travelling to site; and
  - Vehicles and operators not meeting safety requirements.

8.3. The contractor's handbook will be used to distribute information to those responsible for abiding by the CLP and it should include the followings:

- Safety toolbox talk;
- Anti-idling toolbox talk;
- Vehicle routing and delivery scheduling system;
- Driver training; and
- Safety and environmental standards.

8.4. The driver's handbook should include essentials relating to environment and safety that is specific to the construction programme as follows:

- Authorised routes to and from the site;
- Site opening times;
- Booking and scheduling information;

- Site entry and exit points, and other information relating to access;
- Anti-idling; and
- Vulnerable road user safety.

8.5. Should any aspects of the CLP change, updated information will be provided by the Hill Partnership to LBH and TfL.

Community Engagement

8.6. It is recognised that good public relations are important. A Public Liaison Officer will be appointed who will be responsible for communication with members of the public and their representatives.

8.7. Responsibilities of the Public Liaison Officer will include:

- Build relationships with the relevant management personnel within existing businesses, tenants, the general public and local community.
- Provide contact details.
- Maintain a complaints and enquiries log for the project and provide the details of the log for discussion as an item at progress meetings.
- The local community will be kept informed of progress associated with the Works on a regular basis,
- The Site Manager will be visible and 'on the ground' to ensure interaction and communication is face-to-face where possible. In accordance with the Considerate Constructors Scheme, a contact number for the Site Manager will be prominently displayed on site notice boards at all access points. The Site Manager will be contactable at all times throughout the works.

Complaints Procedures

8.8. Any complaints during the construction works will be dealt with by the Hill Partnership and, if necessary, the CLP will be updated and reinforced with processes to avoid similar complaints arising.

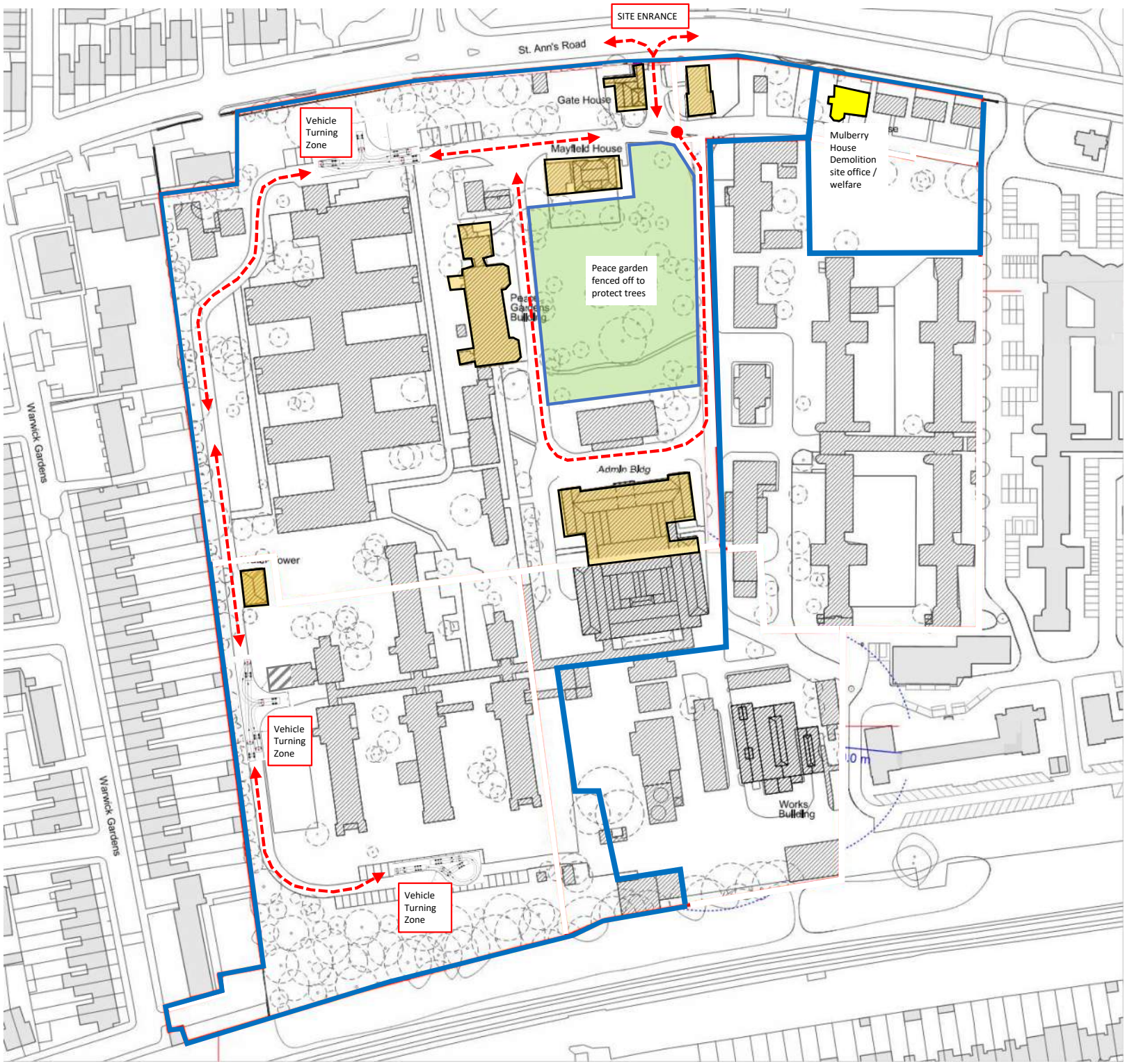
8.9. The Hill Partnership will be responsible for setting up a procedure to receive and act upon complaints. A complaints log will be maintained, and a monitoring system implemented by the contractor throughout the works to ensure that all complaints have been addressed and a satisfactory outcome reached for all parties involved

8.10. The anticipated procedure for dealing with complaints will be as follows:

- Enter all complaints into a Complaints Register;
- Complainants will be encouraged to leave contact details so that a formal acknowledgement can be issued within 24 hours responding to their query;
- Acknowledge receipts of complaints in writing;
- Evaluate validity of complaints;
- Once the matter has been investigated and resolved, the Hill Partnership through the Public Liaison Officer will close it out with the person concerned, confirm this in writing and make an appropriate entry in the Complaints Register.

A. Traffic Management Plan and Swept Path Analysis – Access

TRAFFIC MANAGEMENT PLAN



NOTES:

SITE ENRANCE — Main site entrance

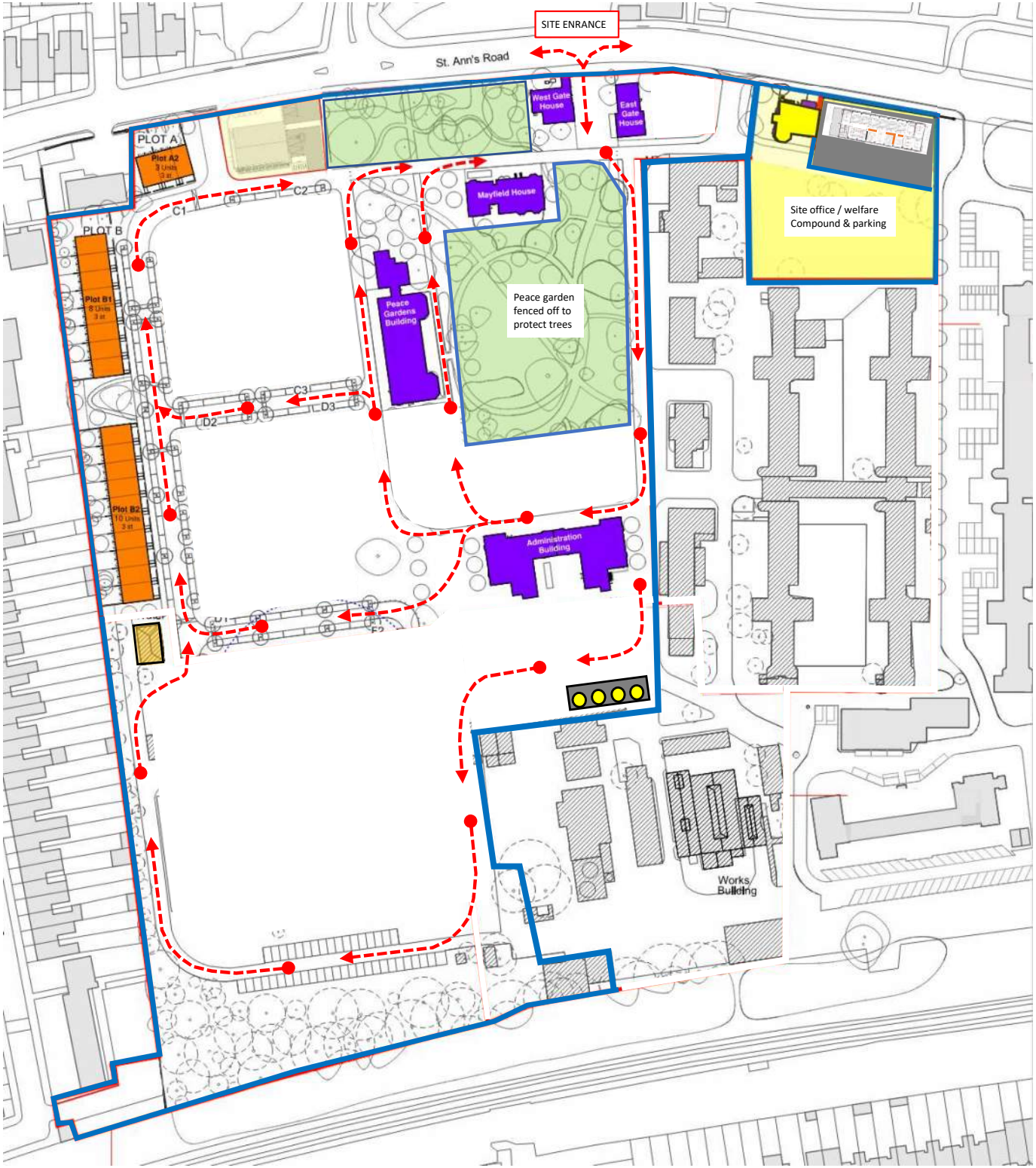
Two way traffic route

One way traffic route

Timeline
March - August 2023

Hill
Created for Living

PROJECT	St Ann's Hospital (X026)
TITLE	Demolition TMP
REVISION	001
DRAWN BY	DW
ISSUE DATE	27/09/22



NOTES:

SITE ENRANCE — Main site entrance

Two way traffic route

One way traffic route

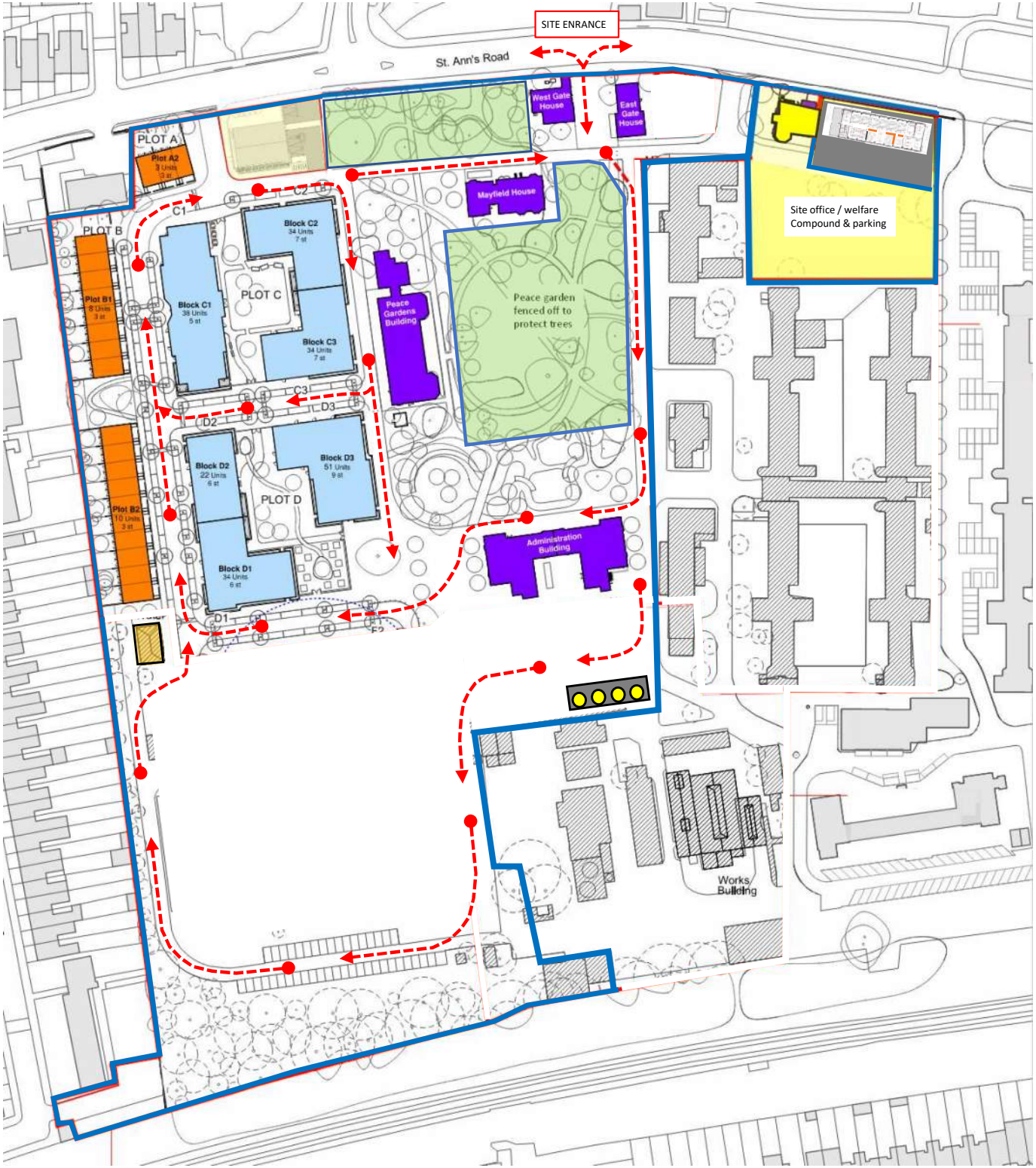
Timeline
August - October 2023

Hill
Created for Living

PROJECT
St Ann's Hospital (X026)

TITLE	REVISION
Construction TMP PH1a Roads	001

DRAWN BY	ISSUE DATE
DW	27/09/22



NOTES:

SITE ENRANCE — Main site entrance

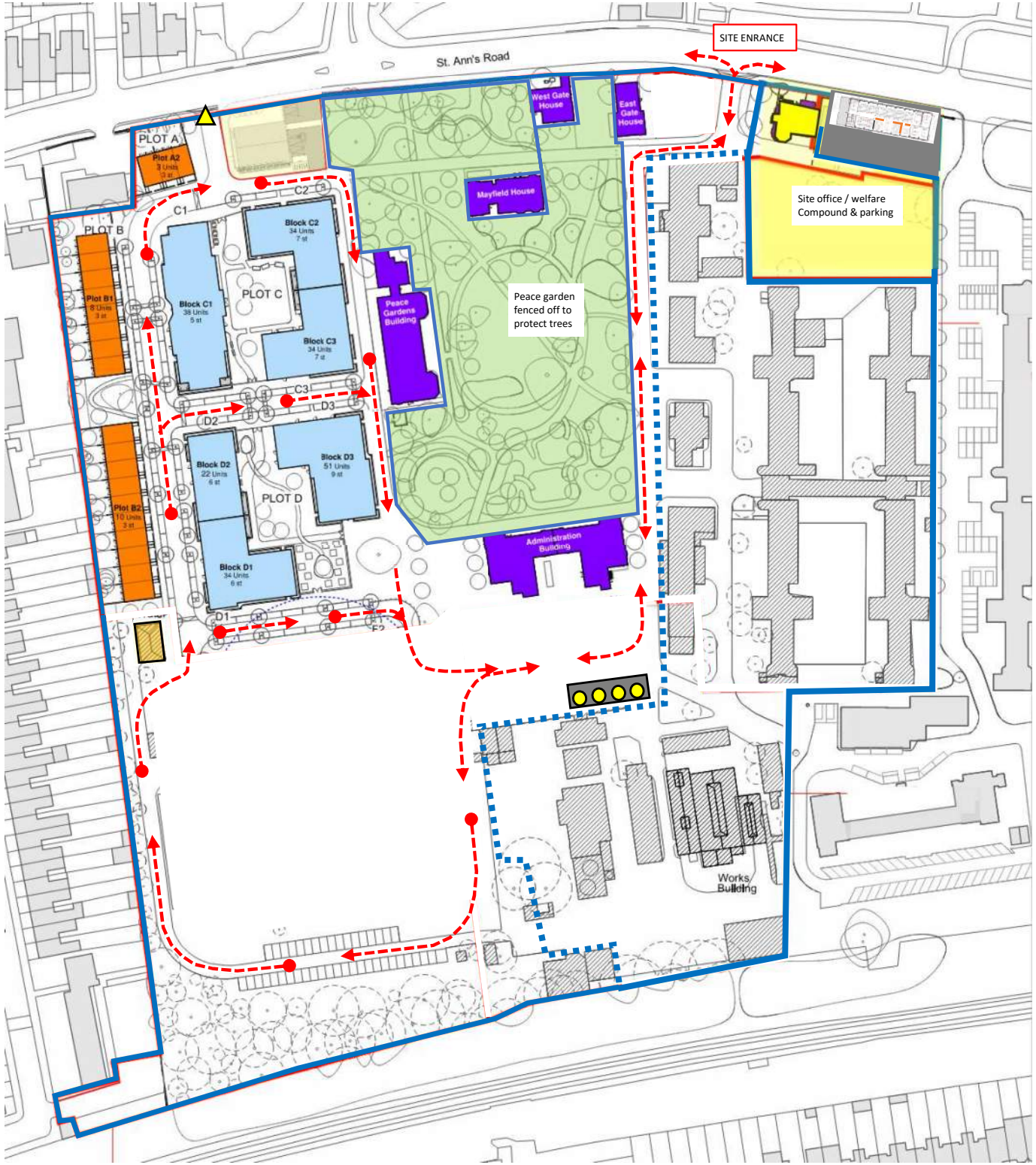
Two way traffic route

One way traffic route

Timeline
October 2023 – April 2024

Hill
Created for Living

PROJECT	**St Ann's Hospital (X026)**
TITLE	**Construction TMP PH1a Groundworks**
REVISION	001
DRAWN BY	DW
ISSUE DATE	27/09/22



NOTES:

SITE ENRANCE — Main site entrance

Two way traffic route

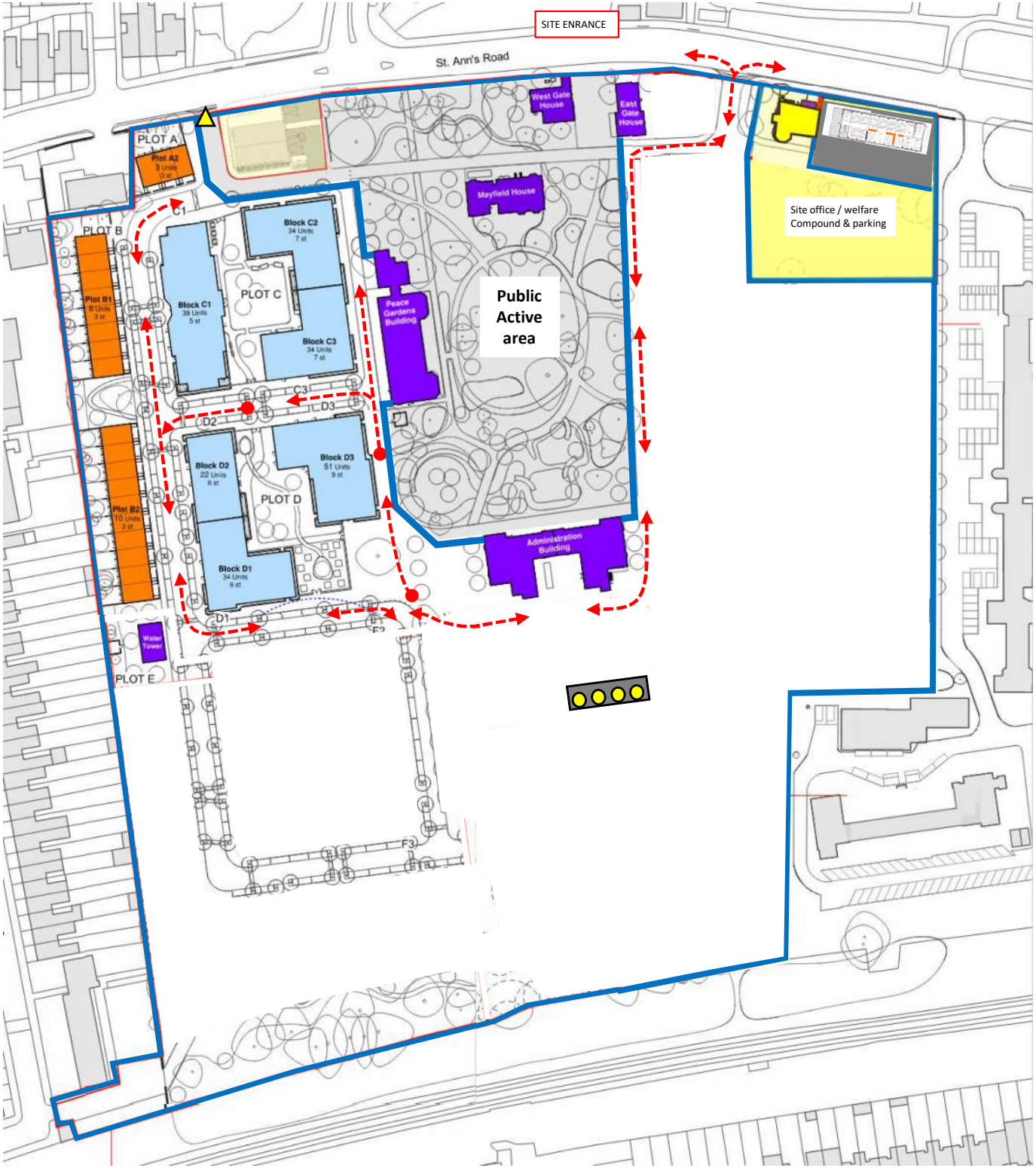
One way traffic route

Emergency exit only

Timeline
April - June 2024

Hill
Created for Living

PROJECT	**St Ann's Hospital (X026)**
TITLE	**Construction TMP PH2/3 Demolition**
REVISION	001
DRAWN BY	DW
ISSUE DATE	27/09/22



NOTES:

SITE ENRANCE — Main site entrance

Two way traffic route

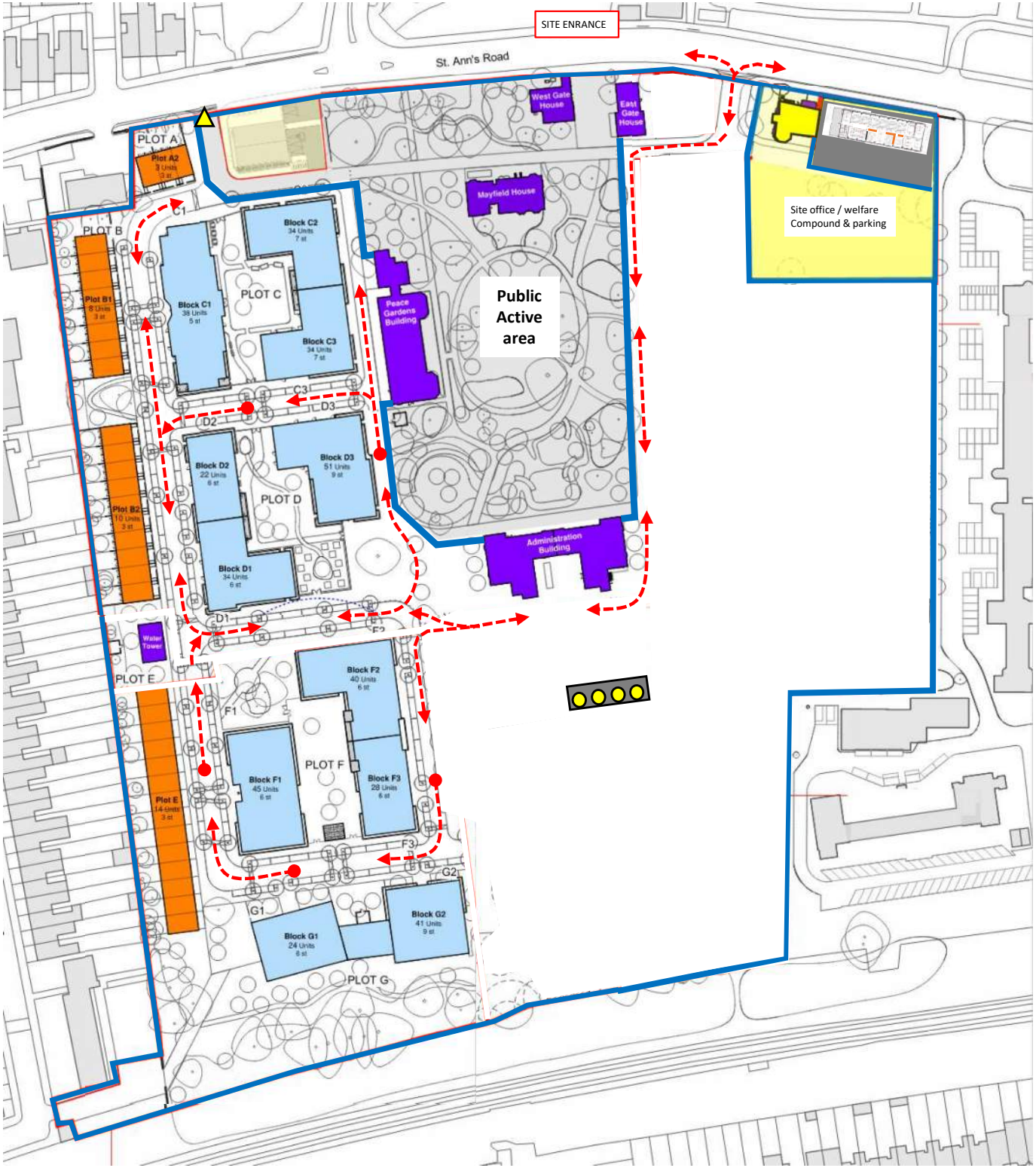
One way traffic route

Emergency exit only

Timeline
July - October 2024

Hill
Created for Living

PROJECT	St Ann's Hospital (X026)
TITLE	Construction TMP PH1b Roads
REVISION	001
DRAWN BY	DW
ISSUE DATE	27/09/22



SITE ENRANCE — Main site entrance

Two way traffic route

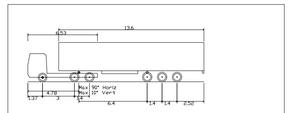
One way traffic route

Emergency exit only

Timeline
October 2024 – February 2025

Hill
Created for Living

PROJECT	St Ann's Hospital (X026)
TITLE	Construction TMP PH1b Groundworks
REVISION	001
DRAWN BY	DW
ISSUE DATE	27/09/22



Max Legal Length (UK) Articulated Vehicle (16.5m)

Overall Length	16.500m
Overall Width	2.550m
Overall Body Height	4.268m
Min Body Ground Clearance	0.411m
Max Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	6.530m

Status	Date	Description	By	Chk
A01 S0	12.10.22	ISSUED	GJ	AB

Amendments

Project

St Ann's New Neighbourhood

Title

Swept Path Analysis
Existing Access
16.5t Articulated Lorry

Client

Hill Residential Limited, Catalyst Housing Limited and Catalyst by Design Limited

waterman

Pickfords Wharf Clink Street London SE1 9DG
t 020 7928 7888
mail@watermangroup.com www.watermangroup.com

Status

PRELIMINARY

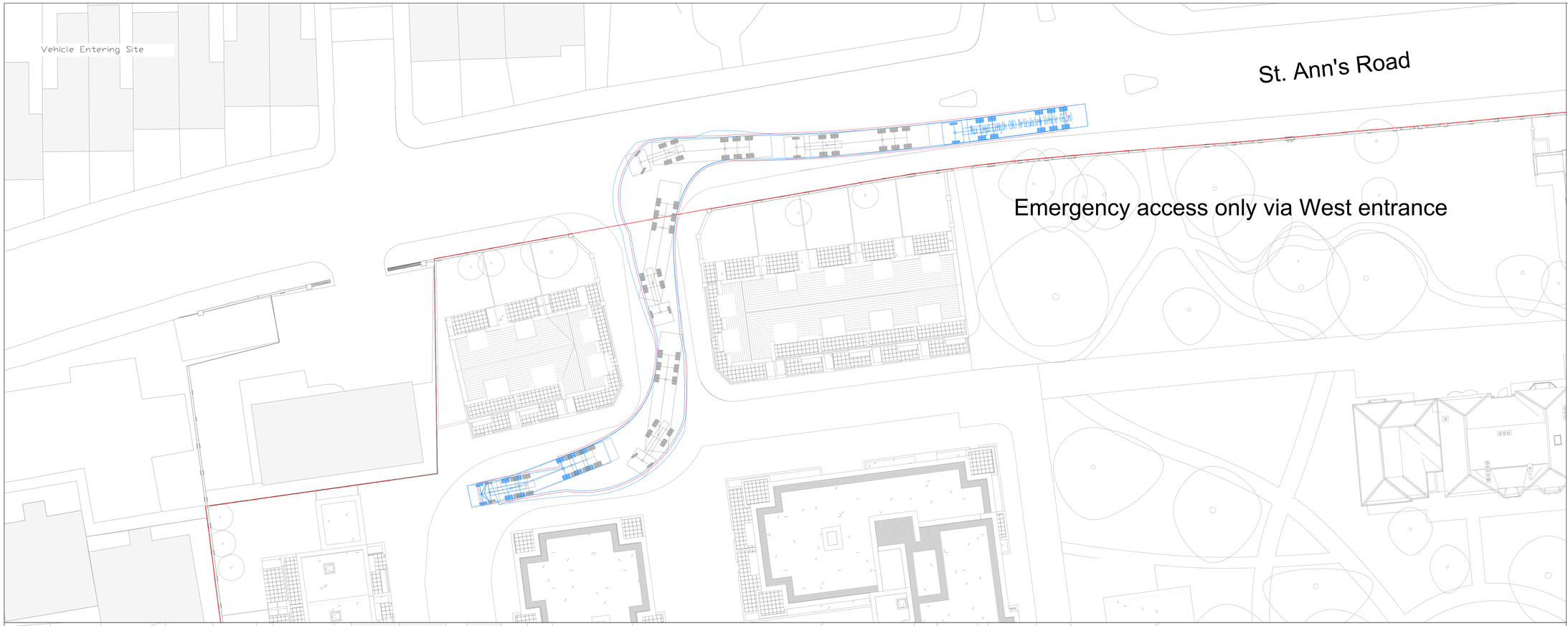
Designed By	Director	Waterman Ref
GJ	AB	WIE18513
Drawn By	**Date**	**Scales @ A1**
GJ	12.10.22	1:250

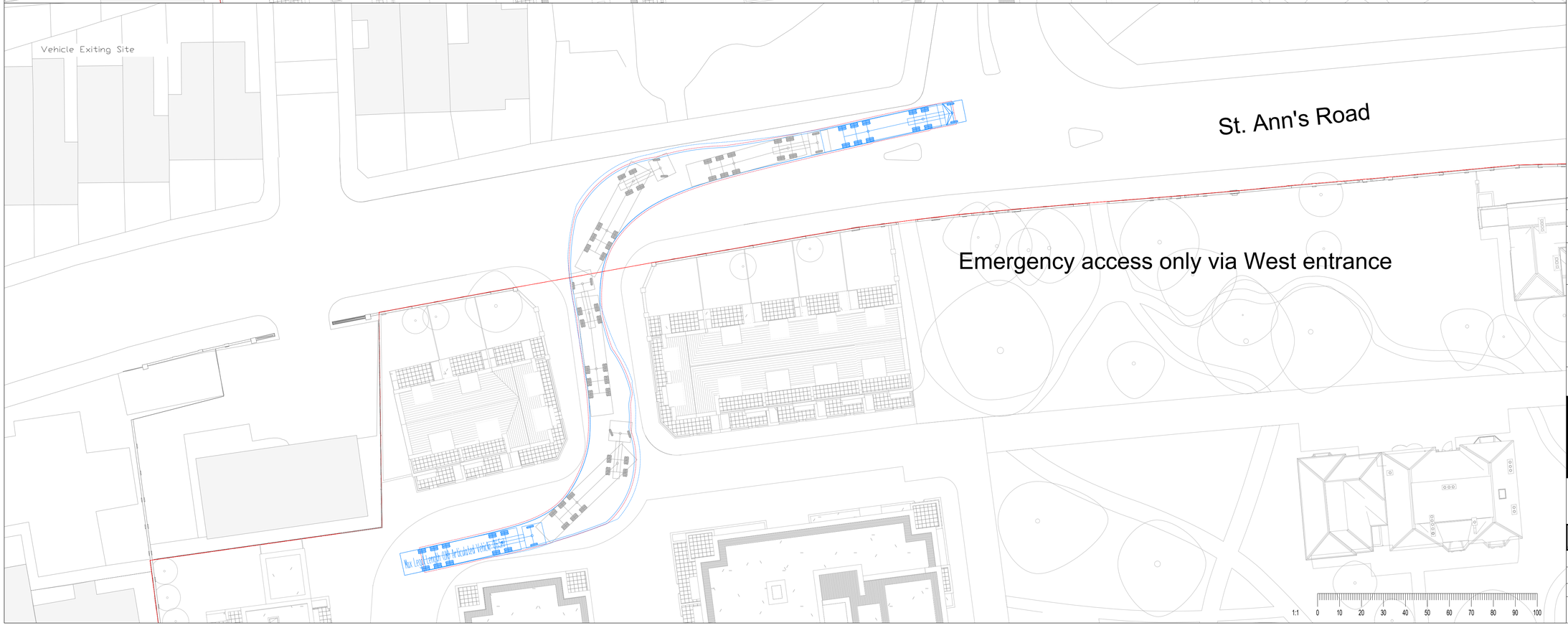
Project - Originator - Volume - Level - Type - Role - Number	Revision
WIE-18513-SA-95-0001-A01	A01

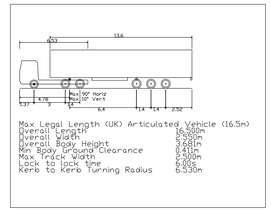
File Path
N:\Projects\WIE18513\0007_CAD\05_Swept Path\

1:1 0 10 20 30 40 50 60 70 80 90 100

A1-Wat-BS-S







Status	Date	Description	By	Chk
A01 S0	12.10.22	ISSUED	GJ	AB

Amendments

Project

St Ann's New Neighbourhood

Title

Swept Path Analysis
New Access
16.5t Articulated Lorry

Client

Hill Residential Limited, Catalyst Housing Limited and Catalyst by Design Limited

waterman

Pickfords Wharf Clink Street London SE1 9DG

t 020 7928 7888

mail@watermangroup.com www.watermangroup.com

Status

PRELIMINARY

Designed By	Director	Waterman Ref
GJ	AB	WIE18513
Drawn By	**Date**	**Scales @ A1**
GJ	12.10.22	1:250

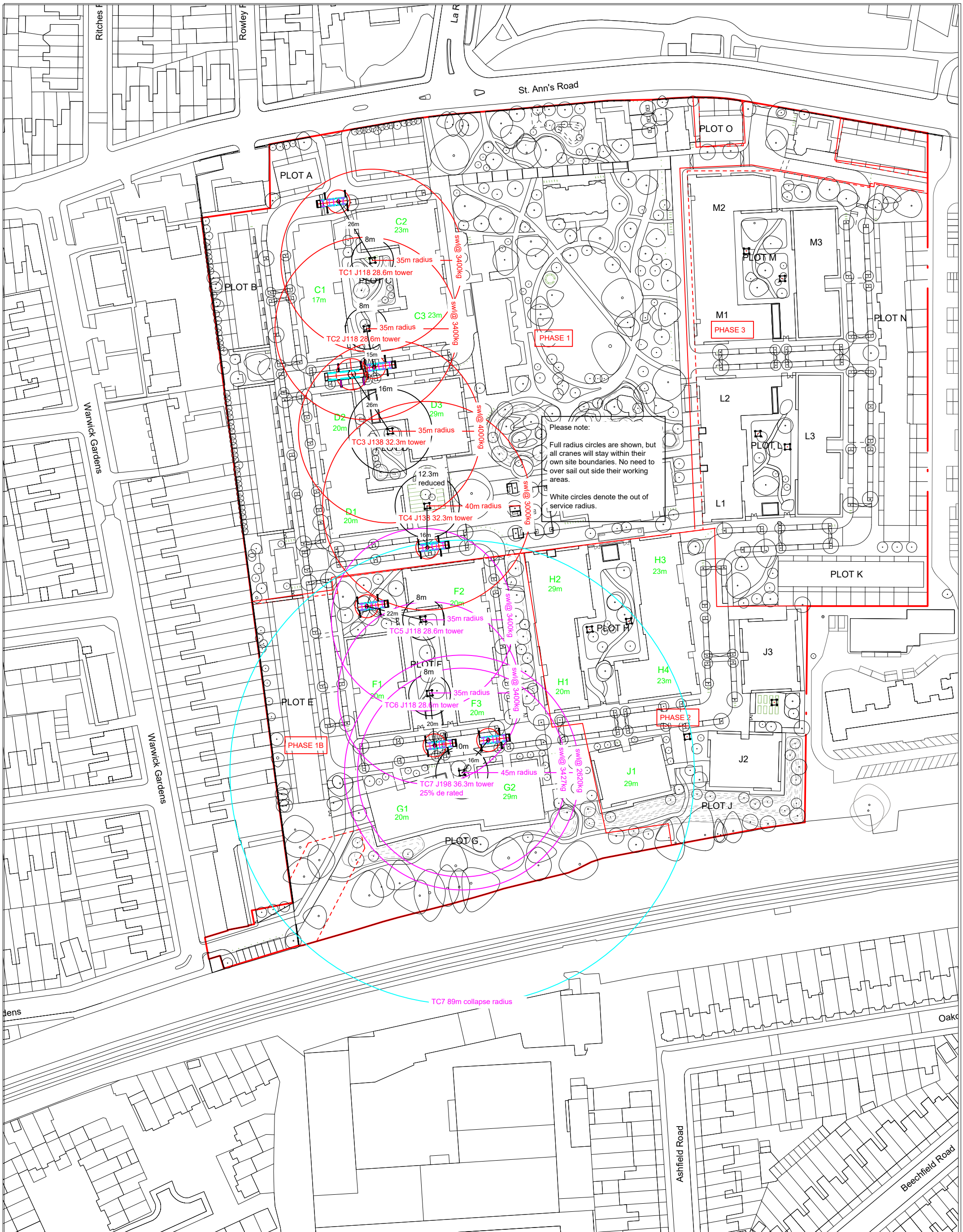
Project - Originator - Volume - Level - Type - Role - Number	Revision
WIE-18513-SA-95-0002-A01	A01

File Path

N:\Projects\WIE18513\1007_CAD\05_Swept Path\

A1-Wat-BS-S

B. Crane Location



This drawing is for reference only. Falcon Tower Crane Services Ltd accepts no responsibility or liability for any information contained within. All dimensions to be checked by site.

This drawing is for reference only. All dimensions and heights are to be confirmed by site.

All drawings are based upon the information given by site and/or detailed on our quotation. All information is finalized upon receipt of the contract and/or site survey.

Unless given, the site/contractor is to confirm all crane base(s) and building(s) levels as soon as possible

It is recommended that sites with multiple cranes have anti-collison installed.

Any hatched areas indicated on the drawing show the areas of no over-sail and/or no lifting zones. This is to be confirmed by site

Client	Hill
Project Address	St Annes
Title	TC proposal Luffing option. Hill scheme
Scale	NTS
Date	13.09.22
Drawn by	SPx
Quote no.	
Checked by	
Status	For Approval

Project	Origin	Zone	Level	Type	Role	Number	Rev.
E	FTCS	ZZ	ZZ	DR	X		P01

FALCON TOWER CRANE SERVICES LTD

Shipdham Airfield Industrial Estate
Shipdham, Thetford, Norfolk, IP25 7SD

Tel; 01362 821048
Fax; 01362 821233
Email; falcon@falconcranes.co.uk

C. Construction Movement Calculations

St. Ann's - Demolition and Construction Vehicle Trips Phase 1A/1B

Vehicle Type	Load Capacity (t)
8 Wheel Rigid Tipper	20
Articulated Lorry	26

Demolition Phase

Demolition Phase	Works	Phase Date	Number of Months
Phase 1A*	Demo and Remediation	March 2023 – September 2023	7
Phase 1B	Demo and Remediation	March 2023 – November 2023	9

Demolition Trips

	Number of Vehicles	Two-Way Trips	Average Per Month
Phase 1A	188	375	54
Phase 1B	188	375	42
Total	**375.0**	**750.0**	**96.0**

Construction

Phase	Development	Completions per phase (units)	Phase Date	Number of Months
1A	Mix of Houses and Apartments	239	October 2023 - March 2026	30
1B	Mix of Houses and Apartments	192	September 2024 - October 2026	26

	Construction Material (t)	Number of Vehicles (26t)	Two-Way Trips	Average Per Month
Phase 1A	84674.18	3257	6513	217
Phase 1B	68022.77	2616	5233	201
Total	**152696.95**	**5873**	**11746**	418

	Construction Waste (t)	Number of Vehicles (20t)	Two-Way Trips	Average Per Month
Phase 1A	1081.83	54	108	4
Phase 1B	897.14	45	90	3
Total	**1978.96**	**99**	**198**	**7**

**5 houses which will be held till May 2030 (86 months) due to the location of Sales and Marketing Suite*

Our vision

"Engineering a better environment for people and the planet"

Our mission

"To solve complex problems for the benefit of clients, communities and the climate"

Our values

People orientated

Individually and collectively, people are our business.
We strive to create environments for everyone to flourish and thrive.

Flexible

Pragmatic by nature and dedicated to getting the job done to the highest possible standard.

Professional

Operating at pace with integrity to deliver technical and robust solutions.

Environmentally aware

We understand our responsibility to the environment, it shapes our decision making and informs our practice.

Innovative

Our forensic questioning provides the ability to deliver appropriate innovations at every stage on every project.

Relationship focused

We value individuality and the benefits of working collaboratively to achieve positive outcomes for all.