

For: Dublin City Council

Proposed Residential Development
Saint Andrew's Court, Fenian Street, Dublin City
Status: Part VIII Planning



Outline Construction Traffic Management Plan
(Working Document)

September 2024



MHL & Associates Ltd.
Consulting Engineers



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For: Part VIII Planning

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1 INTRODUCTION

1.1 Background

M.H.L. & Associates Ltd. Consulting Engineers have been engaged by Dublin City Council (DCC) (the applicant) to prepare an Outline Construction Traffic Management Plan (CTMP) to supplement the planning application process (Part VIII) for a proposed residential development complex on an existing brown field site.

The (CTMP) has been prepared to assess the preliminary construction traffic and management implications of the development proposals. These proposals have been arrived at following review of the transport constraints and opportunities at the site.

This CTMP should be read in conjunction with all relevant planning documentation, including the Resource Waste Management Plan and CEMP submitted for this application.

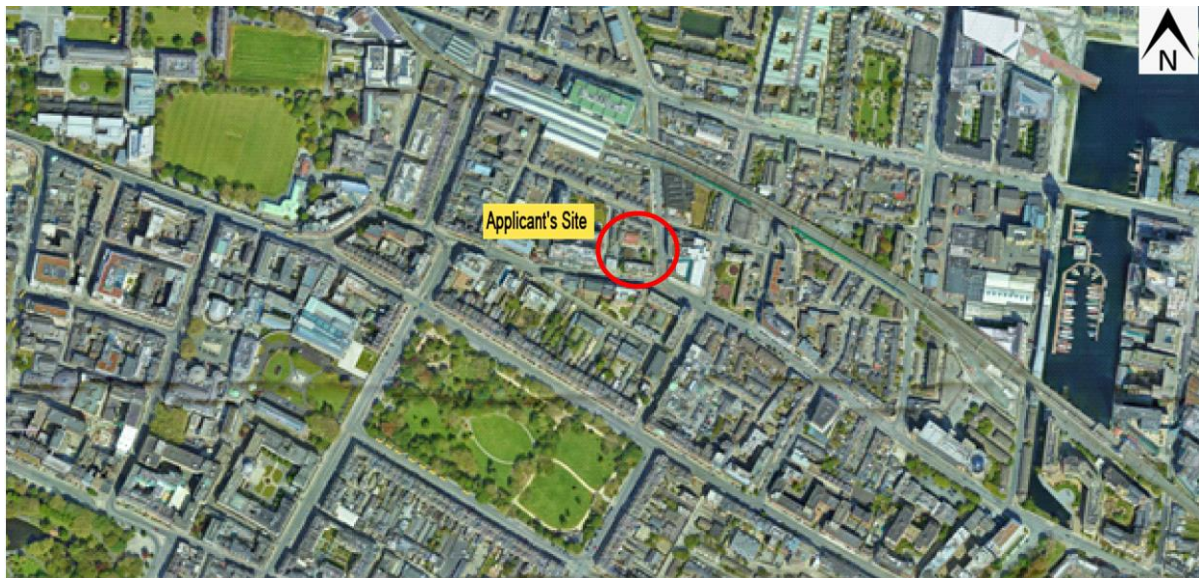


Figure 1.1 Development Site Location

During construction, a Construction Traffic Management Plan will be implemented to ensure adequate measures are taken to minimise disruption to normal traffic. This may include provision of road signage and designated times of access by large construction vehicles.

As part of the construction works, the appointed Contractor shall prepare a Construction Traffic Management Plan which will outline their approach to the project and detail potential impacts for the public road system.

This may include provision of transport facilities and encouragement of car sharing for staff. It will also include measures to mitigate any potential noise and air quality impacts resulting from construction activities, namely from traffic movements in and out of the site.

Bicycle parking spaces will be provided on the site for construction staff, in addition, lockers will be provided to allow cyclists to store their cycling clothes.

Car sharing among the construction staff should be encouraged, especially from areas where construction staff may be clustered. The Contractor will aim to organise shifts in accordance with staff origins, hence enabling higher levels of car sharing. Such a measure offers a significant opportunity to reduce the proportion of construction staff driving to the wider site area and will minimise the potential traffic impact on the road network surrounding this facility. No car parking will be provided on site except for limited visitor parking.

The Contractor will issue an information leaflet to all staff as part of their induction on site highlighting the location of the various public transport services near the construction site.

The Plan will be agreed with both Dublin City Council and An Garda Síochána, prior to commencement of works.

2 EXISTING SITE

The site is located in the north of central Dublin within the jurisdiction of Dublin City Council (DCC). The site is currently an unoccupied dwelling, which is to be demolished as part of the development. The site is located on the edge of the city centre core with excellent sustainable travel facilities. The site is located within walking distance of the City Centre, approximately 1km from College Green.

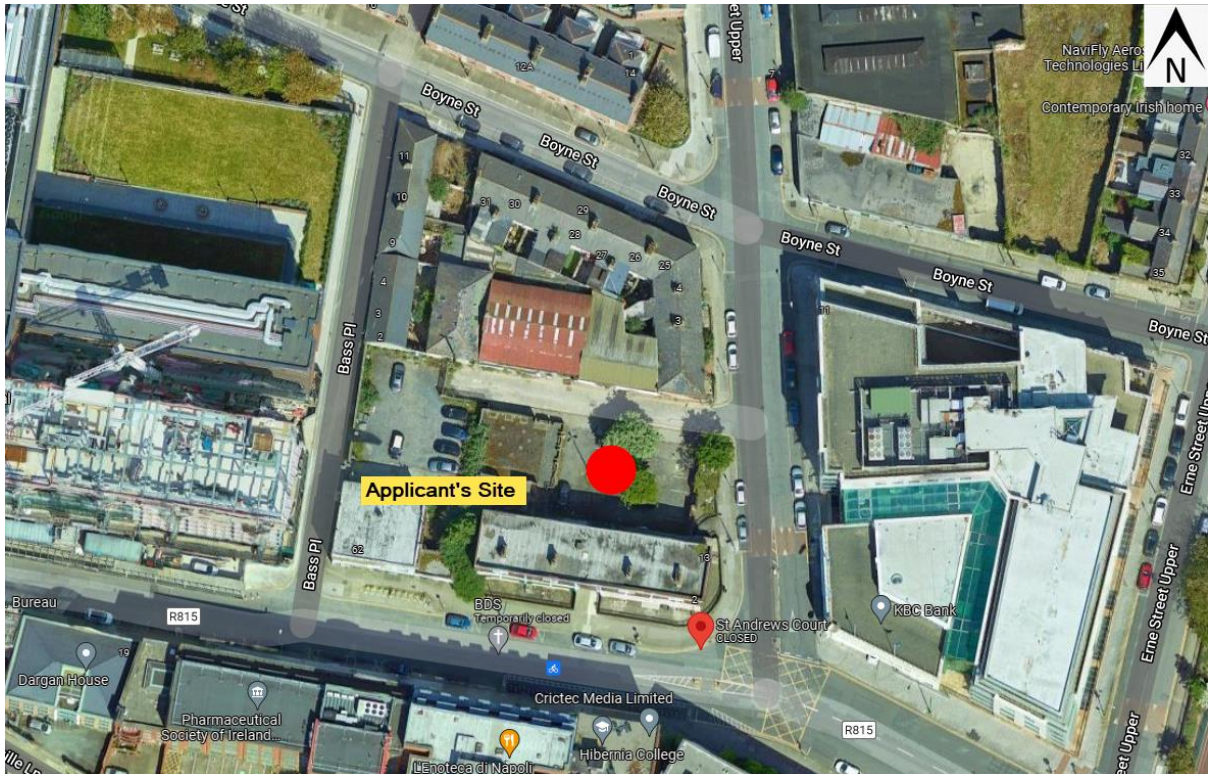


Figure 2.1 Site Location

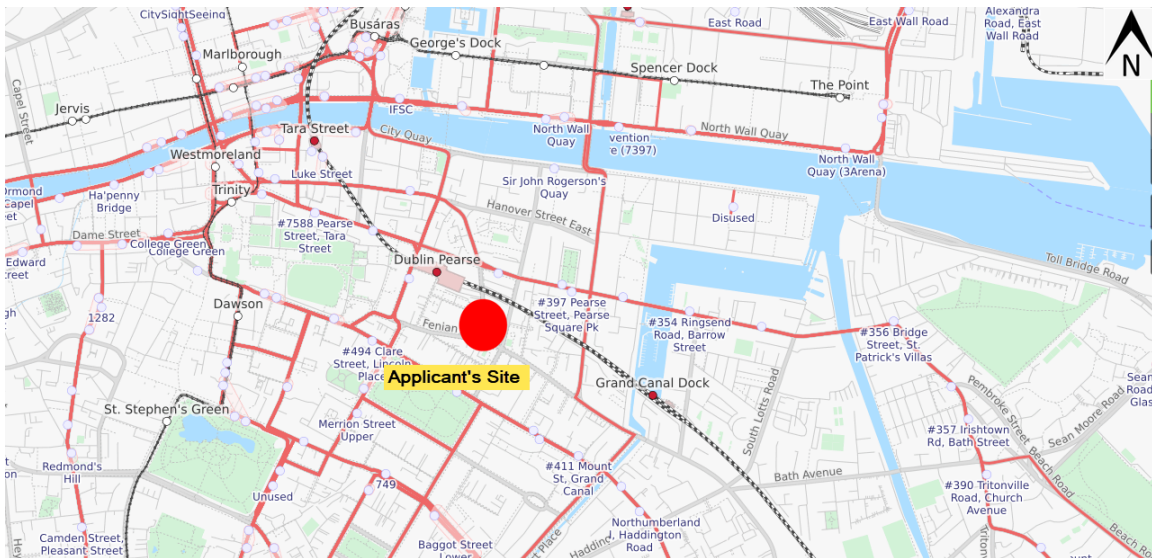


Figure 2.2 Site's proximity to the city centre, Bus/Train Stations.

3 CONSTRUCTION TRAFFIC MANAGEMENT PLAN INFORMATION

3.1 CTMP Outline

This "Construction Traffic Management Plan" report outlines how construction stage traffic can best be managed during the construction works on site. This report serves to outline to the local authority of proposed logistical details for construction traffic travelling to and from the site. The report also informs the Contractor of perceived problems, constraints, and mitigation measures to allow for a successful development of the site whilst ensuring the impact of construction traffic on the surrounding road network is minimised. A detailed Method Statement and Traffic Management Plan should be prepared by an appointed Contractor in advance of any works. This detailed Contractors Method Statement should describe the proposed phasing of the works, set out protection measures for staff and residents, and associated traffic, pedestrian management measures.

3.2 CTMP Purpose

The purpose of the CTMP is to regularise the traffic movements within the applicant's site and on the approach to the proposed development, ensuring safety for all road users during the planning construction works. A CTMP provides the framework for understanding, managing and mitigating construction vehicle activity into and out of proposed development site.

3.3 CTMP Objectives

The objective of the CTMP is to enable and manage all types of Heavy Goods Vehicles (HGV), Large Goods Vehicles (LGV) and general construction traffic to and from the site for the duration of construction. This is to improve the safety and reliability of deliveries to site, reduce congestion, improve safety and minimise environmental impact. The CTMP has been prepared alongside the planning application to show that an outline plan for the arrival and departure of construction traffic, minimising the number of construction vehicles as much as possible and the environmental impact. The CTMP should:

- Ensure the safety and health of work personnel, the public and those who will be impacted by the construction works.
- Ensure that road users are aware of the potential changed traffic conditions and that risks are identified and mitigated.
- Ensure that the site's operations will be maintained at a satisfactory level of performance during the period of the construction works.
- Ensure that temporary parking for security clearance and temporary laydown for heavy vehicles or loads is made available, inclusive of turnaround areas.
- Ensure clear routing of traffic and clearly delineated interaction of light vehicles with heavy vehicles.
- Reduce Congestion by reduce construction trips overall, especially in peak periods.
- Emergency vehicle access arrangements and on-site routing.
- Lower Emissions.

3.4 CTMP Constraints

The CTMP should account for construction operation constraints such as:

Current traffic volumes, peak times, expected construction traffic volumes, vehicle types, operating speeds, queues lengths, existing roadway geometry/ capacity, working hours, traffic management regime, pedestrian and cyclists' safe access, lane width, turning movements and alignments are suitable for these vehicles to traverse. (Non-exhaustive list).

3.5 Site Specific Management Plan

The site-specific traffic management plan shall include the following information:

1. Phasing of the Works at each location
 - a) Geometric Design
 - b) Road Works speed limits (if proposed by the Contractor)
 - c) Position of Flagmen, Signs and Temporary Traffic Signals
 - d) Safety Zones
 - e) Location and Width of Lanes
 - f) Working Areas
 - g) Access and Exit locations for Contractor
 - h) Temporary Barriers
 - i) Taking up and reinstatement of Road Markings
 - j) Temporary Lighting
 - k) Crossovers
 - l) Contra-flow arrangements
 - m) Provision for emergency services
 - n) Protection/diversion of services, supplies, etc.
 - o) Signing
2. Timing of operations.
3. Road Lighting
4. Preventing mud and dust on the public roads

Please refer to the onsite specific traffic management plan proposed by the appointed Contractor.

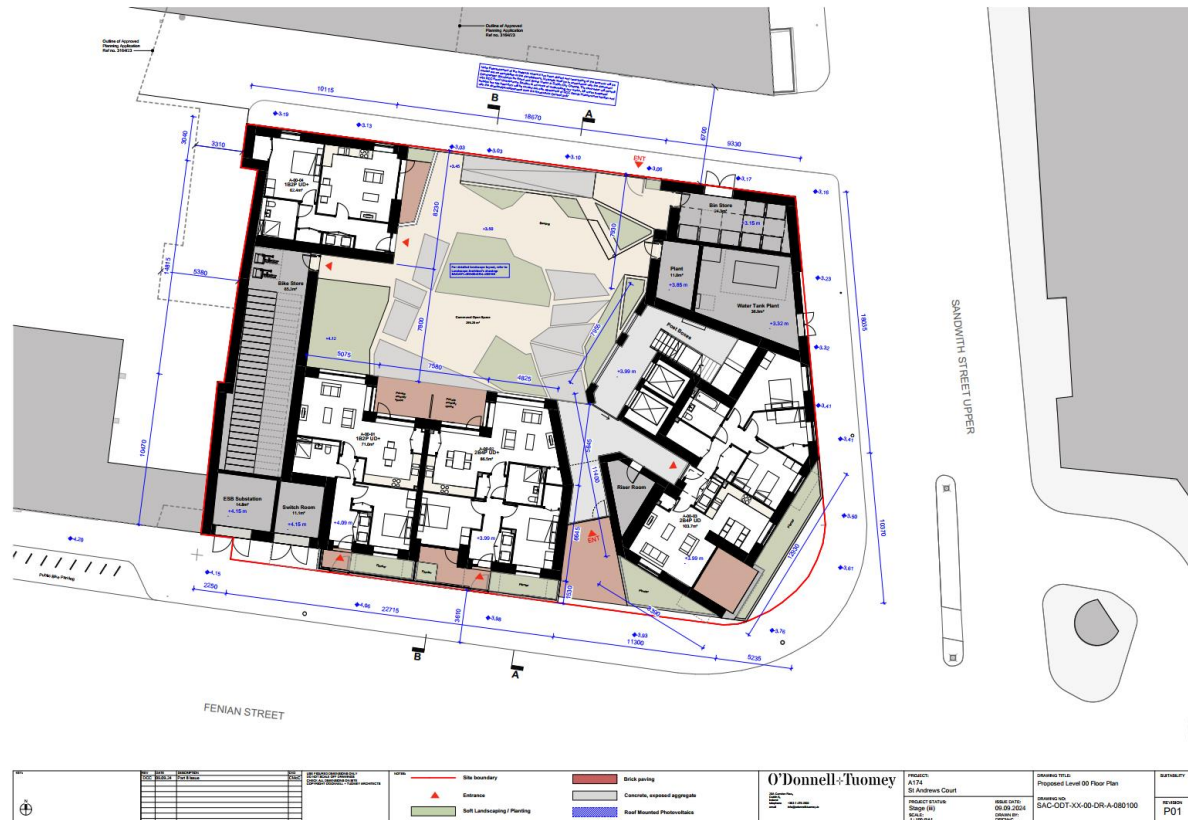
3.6 Logistics Plan

The site agent/ Contractor should reference this CTMP as part of any site assessment, works planning/ programming and site risk assessment tasking.

4 PROPOSED DEVELOPMENT

4.1 Planning Application

A site layout has been developed by the applicant's Architects, O'Donnell Tuomey. The applicant's site layout is shown in the figure below with pedestrian/cycle entrance and bicycle parking areas outlined. The pedestrian entrance from Fenian Street and Sandwith Street upper via an inner pedestrian circulation area of the building.



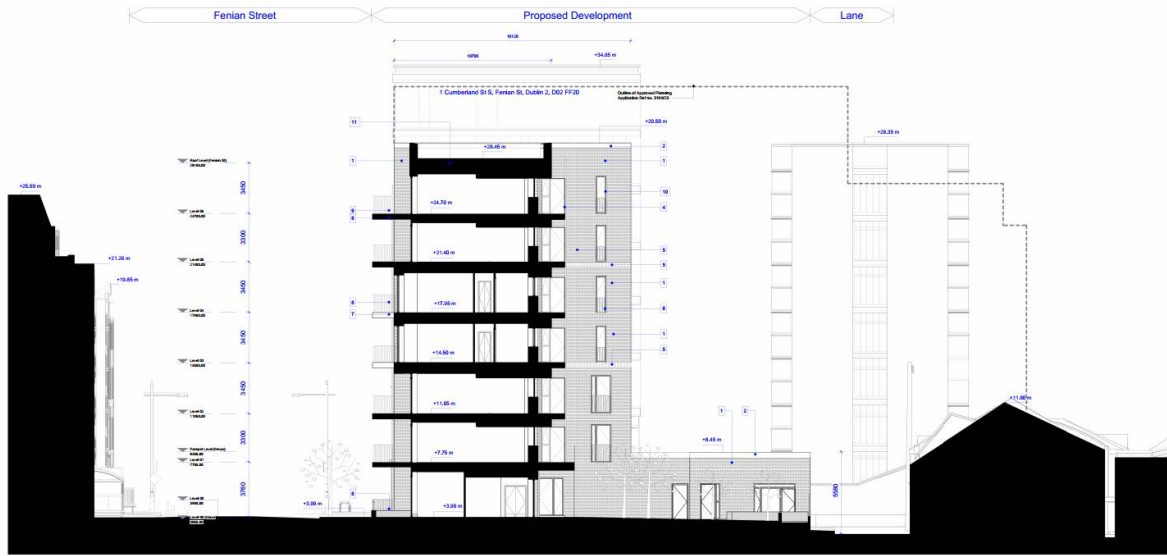
Planning Description

The Saint Andrew's Court planning application is to consist of:

- The demolition of existing structures on site.
- The construction of new residential apartments (comprising a mix of 1,2 and 3 bed apartments).
- The provision of landscaping and amenity areas including an enclosed courtyard.
- The provision of the access to surrounding footpath network pavement improvements, and
- All associated ancillary development including pedestrian/cyclist facilities, lighting, drainage, boundary treatments, bin and bicycle storage, ESB Sub-station and plant at ground floor level.

Material Type Legend

- 1. SELECTED BRICKWORK
- 2. PAINTED CONCRETE CURB
- 3. EXPOSED BRICK VENTIL. ROOF
- 4. PAINTED STEEL AND IRONWORK
- 5. SELECTED BRICKWORK AND IRONWORK
- 6. PRE-CAST CONCRETE SLAB/DECK
- 7. PRE-CAST CONCRETE BALCONY
- 8. PAINTED STEEL BRACING
- 9. GLASS ROOF
- 10. BRICKWORK WITH WINDOW SECTION
- 11. FULL HEIGHT PAINTED STEEL SKIRTING
- 12. PAINTED WOODEN STEEL STAGE
- 13. FULL HEIGHT PAINTED STEEL SKIRTING
- 14. RED BRICK



1 Section B-B
1:100

| | | | | | | |
|--|--|--|--|--|--|---------------|
| | | O'Donnell-Tuomey PROJECT: A174, St Andrew's Court PROJECT START: Stage 03 SCALE: 1:100 | | Issued Title: Proposed Section BB DRAWN BY: SAC-ODT-XX-XX-DR-A-082001 DATE: 11/08/2024 | | DIVISION: P01 |
|--|--|--|--|--|--|---------------|

Figure 4.1 Proposed Development- site section (ODT)

5 DEVELOPMENT WORKS

5.1 Development Description

The proposal is to construct the complex in a single phase over a circa 18* month works programme. (*Appointed Contractor to confirm, pending planning permissions)

5.2 Site Access and Vehicle Routing

Currently the site can be accessed via Sandwith Street Upper (eastern boundary).

- During construction, the development construction traffic will be controlled during access/egress to the site. This arrangement will ensure that conflicting movements between heavy (delivery) vehicles will not occur. This will also ensure minimal traffic impact on the adjoining Sandwith Street Upper.

5.3 Development Delivery Estimation (Works)

The timescale currently in place for the construction of the proposed works is scheduled to commence in 2025, subject to a successful grant of planning.

5.4 Construction Programme and Methodology

As outlined, the expected building programme is estimated to take circa 18 months, completed by mid to late 2026, pending planning permission.

Typical apartment developments require the site development works to be undertaken in the following sequence:

- Site setup and site clearance/demolition
- Site signage and delivery yard/ temporary parking setup.
- Site fencing/ hoarding erection.
- Groundworks/ foundation/ earthworks/grading.
- Carriageway construction.
- Sub structure (piling), sewers/ service runs.
- External service tie in works to public utilities.
- Super structure building out.
- Internal fit out & pod installation
- Cladding.
- Fit out, testing and commissioning.

| Construction Phase | 2025 | 2026 |
|---|-------------|-------------|
| <i>Site setup and Groundworks/foundations</i> | x | |
| <i>Concrete Pours & Services</i> | xx | x |
| <i>Superstructure build out</i> | | xx |
| <i>Fit out/ commissioning</i> | | x |

Figure 5.1 Construction Phasing

5.5 Construction Traffic

Construction traffic will be limited to certain times and logistical routes each day, ensuring disruption to existing Dublin city traffic flows/ public transport is kept to a minimum. Implementation of the following construction traffic control measures can ensure:

- During peak hours, ancillary, maintenance and other site vehicles movements will be discouraged.

- Daily construction programmes will be planned to minimise the number of disruptions to surrounding roads by staggering HGV movements to avoid site queues.
- The Contractor will be required to promote travel by sustainable modes of transport.

The following estimated schedule outlines the volume of large-scale deliveries to site:

- Groundworks stage, excavations and drawing fill for uplift of ground floor slab
- Concrete pours
- Precast frame.
- Precast element to be confirmed, details will be forwarded when confirmed by supplier.

These estimates are to be confirmed in the construction management plan of the development's contractor.

5.6 Construction working times

During the construction phase, the impact of construction traffic will be reduced as far as practicable through sequencing construction timelines as follows:

- 07:00 to 18:00 Monday to Friday
- 08:00 to 14:00 on Saturdays
- No work on Sundays or public holidays

5.7 Coordination

Material deliveries and all construction vehicle movements to site will require strict control by the logistics team and the traffic marshals. These movements will be closely monitored by site supervisors and management. A scheduling system will provide an efficient and effective means of controlling all deliveries.

To reduce the impact of construction traffic during peak traffic hours, active measures to promote ways of consolidating deliveries will be prioritized, reducing the number of vehicle deliveries (total) to this site.

6 CONSULTATION AND COMMUNICATION

6.1.1 On site Personnel

Communication of the traffic requirements associated procedures and practices established in the CTMP are to be communicated to work personnel who will enter the site and are to be undertaken in conjunction with other site induction mechanisms. Visitors to the site should also receive suitable instruction.

6.1.2 Affected property owners/ leaseholders

The Contractor is to consult affected property owners (adjoining properties) and note their requirements and implement mitigations measures which are to be integrated into the site's traffic management plans. Records of affected land holder representatives', their requirements and contact details should be also be recorded for future reference.

6.1.3 Notification to Public, Affected Parties and Government Agencies

The public should be notified as necessary of details of all proposed notices, along with the proposed wording and locations of signage which are to be erected. This will inform and advise locals, passing traffic of the proposed traffic management arrangements for public roads in advance of the construction works. A public notice will generally take the form of on-site advance warning signs, and written notification to affected leaseholders and other Government agencies.

6.1.4 Notification to Dublin City Council

DCC should be notified of any impending traffic disruptions prior to the construction works commencing, whether additional traffic control measures are required, working hours, variation in site delivery times, alternative access requirements, etc.

Any service connections or encroachment onto the public road or footpath requires formal permissions (Road Opening License) from the council.

7 CONSTRUCTION TRAFFIC CONSTRAINTS

The CTMP addresses the following construction operation constraints:

7.1 Site Operating hours

Site development and building works shall be carried out only between the hours of 0800 to 1800 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and only on exceptional circumstances on Sundays and public holidays. To allow for exceptional circumstances, written approval should be sought from DCC prior to changes in the proposed working hours. Peak traffic flows in the wider area occurs during the 08:00-09:00 AM peak and 17:00-18:00 pm peak. Deliveries to the site by large Heavy Goods Vehicles will be restricted to the period 09.30 to 16.00.

7.2 Existing Access

Access is maintained at all times to adjoining properties. Arrival and egress of large HGV's to the site via Upper Sandwith St. The Contractor should ensure that adequate visibility splays are provided at this junction throughout the works. It should be noted that a minimum visibility splays should be provided to the nearside kerb from a minimum setback of 2.5m. The contractor should ensure that HGVs are not delayed entering the site from the adjoining public streets at any time.

7.3 Special Traffic Situations

Special traffic situations outside of the contractor's control such as local festivals, local authority operational/maintenance works, other private development works may impact on the effectiveness of the CTMP.

7.4 Current traffic volumes, peak times, construction traffic volumes.

Any construction traffic / delivery traffic scheduled outside these permitted working hours will note that peak traffic flows in the wider area occurs during the 08:00-09:00 AM peak and 17:00-18:00 pm peak. Traffic volumes are highest during these peak hours and construction / delivery traffic entering/existing the site will take account of this existing traffic flows by restricting major construction traffic around this the period

7.5 Vehicle types (heavy, oversize vehicles)

Construction traffic will be typical of a residential development site. It is expected that the majority of HGV movements to the site will occur during the initial construction phases of the development and will consist of 18T HGV, i.e., during groundworks, drainage and service installation, prefabricated pods, steel, concrete, masonry deliveries. Oversize vehicle entry into the site from heavy life cranes, heavy flatbeds truck/excavators will be very infrequent.

7.6 Queues lengths/ contingency strategy

The formation of excessive construction traffic queues on the Sandwith Street Upper and Fenian Street during construction stage are to mitigated against by staggering construction traffic entry/exit times to limit interference with peak morning and evening traffic flows on the surrounding street network.

7.7 Existing roadway geometry and capacity.

The existing nearby public streets are wide single carriageway road with on-road street parking. The site will have controlled access for security reasons and access will be available during the stated working hours. The Contractor shall ensure that nearby junction sightline envelopes are maintained throughout the works. Uncontrolled construction parking along nearby streets will not be permitted, with all construction traffic parking controlled to ensure the local roadway remains clear of obstruction.

7.8 Environmental Conditions

Proposed traffic control devices are not to affect the adjoining road network through shadowing or glare. Measures to remove and store signs during weather warnings are to be employed, referencing the Storm Weather Response Plan proposed for the site. The CEMP should take account of traffic mitigation proposals, haulage routing and expected delivery traffic times and numbers.

7.9 Hazardous Facilities and Conditions

A risk assessment of all dangerous goods, gas and electricity transmission features and any other potentially dangerous facilities/situations that have the potential to be impacted by construction traffic should be undertaken. All existing service records are to be referred to and service positions verified on site. Appropriate overhead powerline protection measures are to be employed the site development.

7.10 Risk Identification and Assessment

All potential risks associated with the traffic passing near and through the construction site are to be identified and should determine the operational measures that minimise the risk. The Site Manager should, so far as practicable, control or reduce identified risks in accordance with the hierarchy of control. The identification and assessment process should be undertaken, the likelihood and consequences should be rated after risk treatments (that is residual risk) have been determined.

7.11 Future Hazards

The Site Manager should, so far as practicable, identify and complete risk registers, incorporating mitigation measures to ensure minimisation of any potential future hazards as they arise throughout the construction works. These should form part of any traffic control measure installed on site or on the nearby public road.

7.12 Variations to Standards and Plans

The site's risk assessment should note where there are variations to the standards. The risk mitigation measures to address any lower safety levels and the residual risk should be clearly documented in any site works proposal.

7.13 Emergency Planning

Principal response agencies (PRAs) are the agencies that have been designated by Government to respond to major emergencies. They are the Garda Síochána, the Health Service Executive and the local authorities.

Emergency services vehicles are to be provisioned with clearways to access and travel through the site, to another site or leasehold, should an emergency situation arise on-site during the construction works.

Contact details of the police and emergency services contacts in the area:

- An Garda Síochána, Pearse Street, Dublin. (01) 666 9000
- Dublin City Fire Brigade HQ. (01) 222 4000
- National Ambulance Service Ireland 112, 999

7.14 Potential impact that construction works on pedestrian and cyclists.

The internal site works, and associated construction traffic movements are to be traffic managed so as to not interfere with pedestrian/cyclist movements. The implementation of appropriate traffic management, routing all construction traffic efficiently into the site in a supervised manner will ensure that vulnerable road users in the adjoining site are protected. Construction vehicle traffic speeds will be limited to below 05-10kph within the site boundary.

The site boundary has an existing footpath running alongside the development, meaning that separation between pedestrian and construction movements will have to be carefully managed and highlighted.

8 TRAFFIC SAFETY & MANAGEMENT

The appointed works Contractor on site shall be responsible for the planning, design, implementation, maintenance and removal of traffic safety and management measures required in order to facilitate and complete the works.

The closure of the any roads to traffic during the works period will not be permitted without written permission from DCC.

The Contractor should be aware that, during working hours, it is a specific requirement of the contract to employ appropriate traffic management operations. This ensures that traffic flows are maintained at all times, with special consideration necessary during peak traffic periods: between 07:00 and 09:00 in the morning and between 16:30 and 18:00 in the evening.

The Contractor shall notify the nearby residents and local businesses the extent of the works, of the start date and duration of the works through a letter/email drop two weeks in advance of the start date. Further information leaflets shall be issued at monthly intervals throughout the duration of the Works or as may be required to advise of any interference with access.

The Contractor shall comply at all times with the requirements of the Department of the Environment Chapter 8 -Traffic Signs Manual, Temporary Traffic Management Design Guidance, Temporary Traffic Management Operations Guidance, Temporary Traffic Measures and Signs for Roadworks, the Guidance for the Control and Management of Traffic at Road Works, and any additional requirements detailed in the Design Manual for Roads and Bridges.

The design and implementation of Traffic Safety and Management measures shall be carried out by a Traffic Management Design Specialist appointed by the Contractor.

Lightweight water filled barriers or concrete barriers shall be the only delineation devices used within the Temporary Traffic Management phases implemented, unless otherwise agreed to in writing by the Employer's Representative.

For each temporary traffic management phase of the works, the Contractor shall compile detailed traffic management plans showing the sequence of execution of the works within the programme constraints of the design.

The Contractor's traffic management proposals shall take account of the work area required for paving or reinstatement and the location of construction joints. Delay to affected traffic within the works area should be kept to a minimum.

The setting up and removal of any traffic management measure or temporary diversion shall be agreed with DCC.

8.1 Construction Traffic Management Considerations

The Contractor’s traffic management control is to take account of site specific constraints and design suitable mitigation measures. A number of constraints have been identified in the diagram below.

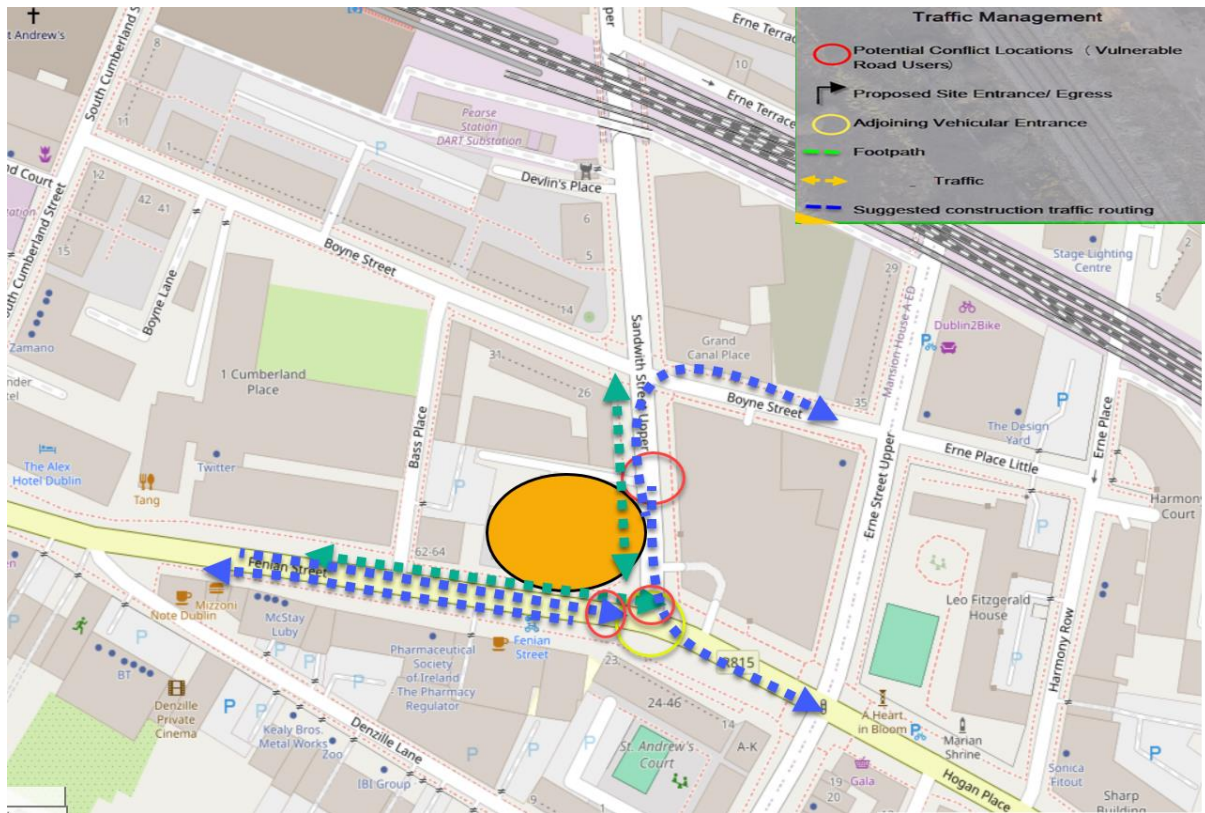


Figure 8.1 Traffic Management Plan Risks

8.2 Location and Width of Lanes

Internal access road carriageway widths (temporary/permanent) are to be constructed in accordance with the Recommendations for Site Development Works for Housing Areas’ issued by the DOELG in November 1998.

8.3 Working Areas / Safety Zones

Safety Zones are to be specified in the site-specific traffic management plans developed by the Contractor.

8.4 Access and Exit locations for Contractor/ sub-contractors

All construction traffic access to the site is to be through the construction site entry/exit tracking with Sandwith Street Upper, as noted in Figure 8.1.

8.5 Staff Management Plan

All staff employed on site are to be instructed on the requirements for traffic mitigation measures proposed to reduce the impact of construction traffic on site and travelling to/from site. Delivery/Operation hours on site are to be strictly enforced by the Site Manager.

8.6 Provision for emergency services

Emergency service site access provision is to be maintained at all times during construction. Clear entry/exit vehicular pathways are to be enforced by the Site Agent through clear traffic management and signage.

All internal construction site parking is to be allocated a temporary parking location with the site and kept orderly.

8.7 Protection/diversion of services, supplies, etc.

As part of the site enabling works/ site setup, all existing service records for the area are to be collated, with any services located and marked out on site. All overhead/underground protection/diversion measures for these services are to be in line with service providers safe working practices/ guidelines for working in the vicinity of these infrastructural elements.

8.8 Temporary Lighting

Any temporary/emergency lighting deployed within the site is to be positioned to mitigate against nuisance lighting, backscatter into domestic residences, glare avoidance for passing vehicular traffic.

8.9 Temporary Road Closures

Any road closure is to be agreed with DCC in writing prior to undertaking works.

8.10 Methods of traffic control

8.10.1 Signage, line-marking, barricades, etc.

All necessary traffic safety precautions shall be undertaken by the Contractor to ensure the safety of all traffic and pedestrians using the existing roads adjacent to the site and connecting minor roads during the execution and completion of the Works, and all precautions shall be taken to minimise disruption to the local residents. The Contractor shall maintain access at all times to land and property owners affected by or adjacent to the works. They shall pay particular attention to construction sites and business premises near to the site in the nearby rural /urban areas.

8.10.2 Road Works speed limits (if proposed by the Contractor)

The nearby local road speed limit is 30km/h. The risk potential for accidents between construction traffic and the Fenian St/ Sandwith Street Upper traffic/ vulnerable road users is a significant risk. The nearby streets accommodates high volumes of traffic, with ambient speeds in excess of the 50kph posted speed limit. Any works on the surrounding public streets (public lighting works or service connections) will require a site specific traffic management plan.

8.10.3 Position of Flagmen, Signs and Temporary Traffic Signals

Any works proposed to facilitate site access, site service connection, site drainage routing, site boundary treatments, development junction speed table construction, etc, onto the adjoining public streets, will be carried out with temporary provision of appropriate traffic management, traffic signals/flagmen and advanced warning signs.

8.10.4 Methods to construction vehicle traffic on public roads

The Contractor shall provide, maintain and finally remove all necessary temporary gates, stiles, ramps and any similar items and shall provide temporary crossings of trenches

and other obstructions. Where the Contractor has to maintain these ways across the site, they shall maintain them at existing ground level and fenced on both sides with temporary fencing. Where it is necessary to have gaps, the Contractor shall ensure that gaps in the fencing for site traffic shall be gated with the gates giving priority to non-site traffic. During working hours, the Contractor shall ensure that the crossings are manned such that site traffic can use the crossing without prejudicing the security of the crossing, be it vehicular or pedestrian.

The Contractor shall ensure that no item of plant, goods or equipment (including stores or offices) shall be placed or parked on the public roadway or its verges in a manner which shall / may result in danger to the personnel on the site or members of the public, or which shall / may restrict sight distances on all accesses to the site or on public roads.

The Contractor shall provide and maintain access to all existing properties adjacent to the works.

All drivers including those delivering plant and materials must be given clear instructions regarding designated haul routes, delivery times and working hours the traffic arrangements applicable at any particular time.

The Contractor shall be responsible for maintaining the traffic carriageway and any pedestrian routes adjacent to the works in a clean and safe condition at all times.

8.10.5 Methods to guide vehicles through the construction site.

Appropriate construction traffic signage.

8.10.6 Additional traffic control (light vehicle escorts, message signs, etc.).

Due to the relatively minor level of work on the public road it is likely that additional traffic control in the form of variable message signs will not be required. All vehicles used on site shall be fitted with a roof mounted amber flashing beacon as a minimum. The use of a vehicles hazard warning lights shall not be acceptable on site.

8.11 Preventing mud and dust on the public roads

All construction traffic exiting the development site is to pass through as wheel wash prior to entering onto public streets and the adjoining wider road network.

8.12 Estimated Construction Vehicles – Monthly and Daily

Please refer to the Construction and Environmental Management Plan and Resource Waste Management Plan developed by Horgan Lynch Consulting Engineers for greater details on construction typology and associated construction requirements.

| Location | Material | Concrete /Masonry m ³ / tonne | Steel/Metal m ³ / tonne | Timber m ³ /tonne | Other m ³ /tonne | Total m ³ /tonne |
|---------------------|--------------|---|---------------------------------------|---------------------------------|--------------------------------|--------------------------------|
| Saint Andrews Court | Demolition | 1,545 / 3,245 | 77/ 608 | 154/ 92 | 1,480 / 1,776 | 3,256 / 5,721 |
| Sanit Andrews Court | Construction | 16/ 41 | 5 / 41 | 69 / 41 | 41 / 41 | 131 / 164 |
| Total | | 1,561 / 3,286 | 82 / 649 | 221 / 133 | 1,521 / 1,817 | 3,387 / 5,885 |

Figure 8.2 Demolition/ Construction estimates (Horgan Lynch)

8.13 Strategies to reduce impacts

The following strategies and planned measures are to be incorporated into the traffic logistics/ construction management plan.

| ID | Planned Measures | Committed | Proposed | Considered |
|---|---|-----------|----------|------------|
| Measures influencing construction vehicle and deliveries | | | | |
| 1 | Safety and environmental standards and programmes | X | x | |
| 2 | Adherence to designated routes | X | X | |
| 3 | Delivery scheduling | X | X | |
| 4 | Re-timing for out of peak deliveries | X | X | |
| 5 | Re-timing for out of hours deliveries | | | X |
| 6 | Use of holding areas and vehicle call off areas | | | X |
| Material Procurement Measures | | | | |
| 7 | Re-use of material on site | X | X | X |
| 8 | Smart procurement | X | X | X |
| Other measures | | | | |
| 9 | Collaboration amongst other sites in the area | | X | X |
| 10 | Implement a staff travel plan | | X | X |

Figure 8.3 Traffic Impact mitigation measures

During construction, Traffic Management Plans developed by the appointed Contractor and agreed with DCC will be implemented to ensure adequate measures are taken to minimize disruption to normal traffic, i.e. the designation of construction traffic haul routes to primary / arterial roads, designated times for large construction vehicle site access, provision of construction road traffic signage, etc. These contractor lead

measures will aim to mitigate any potential noise and air quality impacts resulting from the construction activities from construction traffic movements. The plan will be agreed with An Garda Síochána and Dublin City Council, prior to commencement of the works.

8.14 Coordination with third party site/ projects

At the time of writing, a proposed NTA active travel project between Grand Canal to Lincoln Place is in the early stage of design. The 1.75km walking and cycling scheme is proposed to provide protected cycle tracks and improved facilities for pedestrians from Townsend St / Lombard St junction along Townsend St, Sandwith St Lower, Hogan Place and Grand Canal Street Upper as far as Canal St Bridge including a section along Fenian Street from Sandwith Street Junction to Merrion St Lower Junction. Public engagement in relation to the scheme to commence during 2024.

It is not expected that the NTA scheme and Saint Andrews Court project will impact on each other. There is an expectation that these two projects won't affect each other because their timelines are currently projected not to overlap. However, if their construction schedules do end up overlapping (if one or both experience delays), then the Contractor's Construction Traffic Management Plan (CTMP) document will need to be updated to accommodate these changes and ensure smooth coordination between the projects.

While the initial plan assumes no impact due to timeline projections, contingency measures are outlined in the CTMP to handle any potential overlaps in construction schedules if they occur.

To account for nearby permitted developments, coordination between the appointed works contractor for this site and the contractors of the adjacent development sites will be essential. The relevant permitted developments include planning applications (Reg. Ref. 3164/23) and (Reg. Ref. 3861/24), which involve proposed pedestrian and cyclist access onto the laneway during construction works and planned laneway resurfacing. Effective collaboration will help ensure the smooth integration of construction activities, minimizing disruptions and enhancing safety for all users during the development period.

8.14.1 Potential mitigation/ Contingencies

Contingency planning is crucial for handling potential impacts from overlapping construction schedules between the NTA scheme and the Saint Andrews Court project, if warranted by construction timelines. The CTMP should provide robust monitoring and coordination procedures to closely track the progress of both projects. Regular updates and coordination meetings involving project managers, contractors, and stakeholders ensure everyone remains informed about schedule changes and can adjust plans accordingly.

Flexibility in scheduling

Strategies such as staggered work hours, phased construction sequences, and prioritization of tasks to minimize congestion and interference between the projects. These measures are designed to optimize efficiency while reducing the risk of delays or conflicts.

Traffic management strategies

To address increased traffic or logistical challenges that may arise during overlapping periods. Temporary traffic controls, designated construction vehicle routes, and adjustments to parking arrangements are planned to accommodate heightened demand and ensure smooth flow in the vicinity.

Effective communication protocols.

Clear channels are established to notify local residents, businesses, and authorities about potential disruptions and alternative routes well in advance. This proactive approach aims to mitigate community concerns and maintain positive relations throughout the construction phases.

Resource allocation

This is carefully managed to ensure that equipment, materials, and personnel are effectively distributed between the projects during overlapping periods. This ensures that both projects receive adequate support and that resources are utilized efficiently.

Risk assessment and mitigation strategies

Potential issues such as increased noise levels, safety hazards, and logistical challenges are identified early on. Mitigation measures are then implemented to address these risks promptly, ensuring a safe and controlled construction environment.

A contingency budget

Additional funds allocated to cover unexpected costs associated with overlapping schedules. This financial provision includes additional labour costs, overtime pay, and expenses related to expedited deliveries of materials, thereby safeguarding against budgetary constraints.

Document control procedures

Established to maintain accurate and up-to-date records of changes and revisions to the CTMP as construction progresses. This ensures that all stakeholders have access to the latest information, enabling them to adapt their plans effectively.

By integrating these contingency measures into the CTMP, the contractor can manage potential impacts from overlapping construction schedules proactively. This approach minimizes disruptions, optimizes project efficiency, and enhances overall project outcomes for both the NTA scheme and the Saint Andrews Court project, fostering a smooth and successful construction process.

In developing the Construction Traffic Management Plan (CTMP), the contractor shall ensure coordination with third-party projects in the vicinity. This coordination is essential to mitigate traffic congestion and ensure the safety and efficiency of all construction-related activities. The contractor must liaise regularly with representatives from these third-party projects to align schedules, share traffic management resources, and synchronize construction activities that may impact common roadways. Key considerations include joint planning for road closures, optimizing traffic flow through collaborative traffic signalling, and implementing shared communication strategies to inform the public and relevant stakeholders of any traffic disruptions. By fostering a cooperative approach, the contractor will contribute to a more organized and less disruptive construction environment.

9 REFERENCES

- DTTAS Guidelines for Managing Openings in Public Roads".
- Department of the Environment Chapter 8 -Traffic Signs Manual,
- Temporary Traffic Management Design Guidance,
- Temporary Traffic Management Operations Guidance,
- Temporary Traffic Measures and Signs for Roadworks,
- Guidance for the Control and Management of Traffic at Road Works,
- Design Manual for Roads and Bridges.

10 APPENDIX

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11 APPENDIX - TRAFFIC CONSTRAINTS

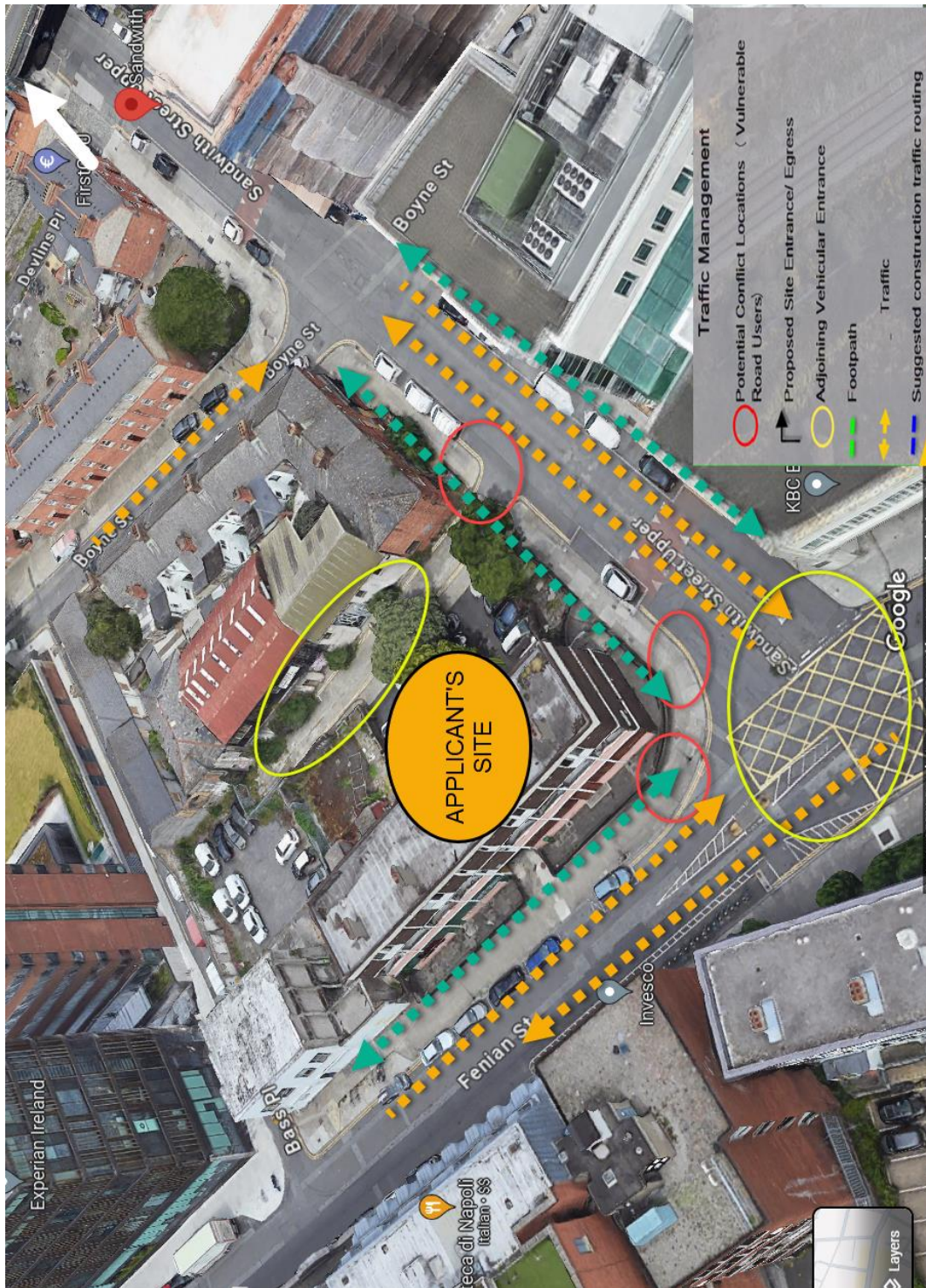


Figure 11.1 Traffic Management Plan Constraints, Wider Network



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