

19117-01-001

Proposed Residential Development at Spencer North, Dublin Docklands

QUALITY AUDIT (incorporating a walking and road safety audit)

for

CS Consulting



July 2019

ROADPLAN
CONSULTING

7, Ormonde Road
Kilkenny.
R95 N4FE

Tel: 056 7795800
info@roadplan.ie

1. INTRODUCTION

- 1.1 Roadplan Consulting in association with Kevin Donovan, Architect, has been commissioned by CS Consulting Engineers to carry out a Quality Audit of Spencer North, Dublin Docklands
- 1.2 The scheme consists of 464 no. apartments and 84 no. shared accommodation, with 78 no. car parking spaces at Lower GF level, accessed from New Wapping Street.
- 1.3 The scheme includes a new street bounding the development on its west side and running south to north between Mayor Street and Sheriff Street. It is referred to in this report as New Street.

2. QUALITY AUDIT

- 2.1 Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, and safety in respect of the movement of both users of the facility and the public are achieved.
- 2.2 Quality Audit was introduced in the publication *Design Manual for Urban Roads and Streets* following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly-designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.
- 2.3 Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.
- 2.4 In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.
- 2.5 The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for consideration in the design process.

3. METHODOLOGY

3.1 The Audit Team was as follows:

- Dermot Donovan Chartered Engineer FIEI
- Kevin Donovan Architect B.A., B.Arch., M.Phil / DEA

3.2 The brief stipulated that the audit was to take the form of:

- Stage 1/2 Road Safety Audit
- Access Audit
- Walking Audit
- Non-Motorised User Audit
- Cycle Audit

The Audit therefore focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian movement both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- the scheme as it is experienced by those entering it and moving around within the streets, including how this affects road user behaviour; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

The Audit was of the external spaces within and around the proposed development. The internal layout of the buildings was not audited.

3.3 The documents provided for the audit were:

Drawing No.	Drawing Title
P4-0003	Site Plan Proposed
P4-1009	Lower Ground Floor Plan
P4-1010	Ground Floor Plan

Copies of these audited drawings are contained in appendix A.

3.4 In carrying out the Audit reference was made to the following guidance documents and standards:

- 3.5 The Design Manual for Urban Roads and Streets – DoE
- 3.6 GE-STY-01024 - Road Safety Audit – TII

- 3.7 HD 42/17: Walking, cycling & horse-riding assessment and review DMRB – Highways England
- 3.8 Building for Everyone: External environment and approach – NDA
- 3.9 How Walkable is your Town – Age Friendly Ireland
- 3.10 National Cycle manual – NTA

4. KEY FINDINGS, SUGGESTED ACTIONS AND COMMENTS

4.1 Issue:

There are repeated changes in geometry in the pattern of the proposed paving within footpaths. This has the potential to result in areas of fragmented paving that could lose integrity over time.

Suggestion:

Make use of a more durable paving pattern.

4.2 Issue:

Bike parking spaces for visitors to the café and shared accommodation are remote from those locations and may not be easily found by users.

Suggestion:

Provide bike parking that is more conveniently located for uses of these facilities.

4.3 Issue:

The pedestrian street that bisects the development is wide and is an area in which people may choose to congregate. Facilities are not shown to be provided to support such use in safety and comfort.

Suggestion:

Provide seating and public lighting sufficient to cater for such use in safety and comfort.

4.4 Issue:

Inter-visibility between pedestrians on the public footpath and drivers emerging from the underground car parking would be restricted if pedestrians walk close to the building frontage.

Suggestion:

- Provide measures to deflect pedestrians out from the building frontages (e.g. a low wall, railing, bollard, item of street furniture).
- Provide signs on exit from the car parking warning drivers of pedestrians crossing ahead.

4.5 Issue:

New Street, on the west side of the development, forms a crossroads junction with Abercorn Road. This may increase the number of pedestrians crossing Sheriff Street at this location. The street is wide and straight so speeds may be relatively high at times. Crossing may be difficult for less able pedestrians.



Suggestion:

Provide crossing facilities appropriate to the predicted pedestrian demand.

4.6 Issue:

Details are not shown on the drawings in relation to the operation of New Street; however, the Client has confirmed that the southern section is one-way (given its relatively narrow width) and, on that section, the direction of travel is to be northbound (this provides a route for residents to egress from the parking bays at the housing terrace on Mayor Street). The north section is to be two-way (given its 6m width) providing access to the pedestrian street for maintenance and delivery vehicles. A system for regulating the intended traffic flow is not shown to be provided.

Suggestion:

Provide the signage necessary to regulate traffic flow. The following signage strategy could be considered:

- cul-de-sac sign and restricted access signage (access only) at Sheriff Street.
- No Entry sign for southbound traffic on New Street immediately south of the pedestrian street (to prohibit entry onto the one-way section);
- two-way traffic sign facing northbound drivers where New Street changes from one-way to two-way operation and centreline marking and lane indicating arrows on the two-way section, all for the purposes of ensuring that northbound drivers are aware that the street changes to two-way operation;
- Stop sign on New Street at the Sheriff Street junction;
- consideration could be given to prohibiting the right turn from New Street onto Sheriff Street for two reasons: first, to improve road safety

given the crest on Sheriff Street west of the junction; secondly, to deter rat-running via New Street.

4.7 Issue:

The one-way section of New Street has indented roadside parking on each side. Given the 3m lane width available between parking bays there is limited scope for evasive action should a car door open into a driver's path.

Suggestion:

Provide traffic calming measures to ensure that drivers travel slowly on this section. Vertical deflections and rough-textured pavements may be appropriate.

4.8 Issue:

Given that the southern section of New Street is intended to be one-way, the mouth of the junction with Mayor Street is too wide. Pedestrian safety would be enhanced by reducing the crossing distance and slowing the speed of turning traffic.

Suggestion:

Reduce the width of New Street at its junction with Mayor Street and re-shape the bell-mouth of the junction so that it facilitates entry from the east and south only (it is understood that there is to be a low-volume road as fourth arm of the junction on its south side) .

4.9 Issue:

Roadside parking on New Wapping Street would, if retained, reduce visibility of drivers exiting the proposed underground carparks.



Suggestion:

Ensure that adequate visibility splays are available to drivers exiting the car parks in accordance with DMURS.

4.10 Issue:

Block 1 ground floor has two floor levels: 4.7m and 5.225m. There are 3 lifts, two of which serve the 4.7m level only. If mobility impaired users require access to the 5.225m level areas they must use the lift at quadrant E5. Those unfamiliar with the building may be unaware of that requirement and might use the incorrect lift.

Suggestion:

Provide directional signage within the underground car park and at the entry to the courtyard area of Block 1 directing users to the appropriate lift serving the reception area.

4.11 Issue:

There will be routine pedestrian trips through the underground car parks, some of which will not be associated with car parking: the Block 1 refuse stores is remote from the northern lift and residents will traverse the car park when depositing waste; the Block 2 bicycle stores are remote from the lift shafts (the lift shaft beside the eastern bicycle store does not appear to serve the store). Users will therefore wheel their bikes and carry their refuse through the car parks. There are no specific provisions for separation of vulnerable users from vehicular traffic.

Suggestion:

Provide a delineated route for pedestrians (including those wheeling bikes) around the outside of the circulating road of each car park.

4.12 Issue:

There are two columns within the area traversed by cars in the car park of Block 1. They are located within the road to the front of parking spaces numbered 22 and 23. They could be struck by vehicles. In addition, drivers may be unaware which side of the column to travel on for the best approach to the western parking spaces.

Suggestion:

Mark the columns with reflective markings and provide a guide line on the floor of the car park extending from space numbered 18 to the first column to indicate the route to the downstream parking spaces.

4.13 Issue:

The distance between car park space numbered 30 and the wall of the stairwell to its east appears to be 600mm or so. This area is the passage

leading to the lift serving the east (residential) area of Block 2 and appears to be the only lift serving this area. Users of the accessible parking spaces will therefore rely on it. It will not be accessible by wheelchair if a vehicle parked in space number 30 obstructs the width required for universal access. In addition, the corridor leading to the lift appears narrow.

Suggestion:

Move parking spaces numbered 28, 29, and 30 westwards to provide the necessary width and ensure that adequate corridor width is available to provide universal access from the car park to Block 2 residential.

4.14 Issue:

No direct access appears to be provided between the Part V residences and the underground car park, either by lift or by stairs. It is not clear if parking is to be provided for the residents. Overspill parking to the adjacent streets may occur.

Suggestion

Cater for the parking needs of the Part V residents and allow direct access to the car share spaces.

4.15 Issue:

A door is not shown to be provided to the street from the Part V bicycle store. The access appears to be thought the refuse store.

Suggestion

Provide direct access from the street to the bicycle store and dish the existing kerblines on New Wapping Street at the proposed access to facilitate entry and exiting by cyclists.

4.16 Issue:

There will be foot traffic across the foot of the ramps to the underground car parks. The refuse stores are located to the south of the ramps and the lifts (to non-Part V residents) are located to the north. Drivers descending the ramp may not expect pedestrians to cross ahead of them.

Suggestion

Provide a marked crossing point for pedestrians with advance signage to warn descending drivers.

4.17 Issue:

Doors to plant rooms in the underground car parks open outwards and car parking spaces are provided in front of some doors. Access may be obstructed by parked vehicles. The west side of Block 2 car park has the most frequent incidence.

Suggestion

If unobstructed access is required, amend the parking layout to ensure it is available.

4.18 Issue:

The floor level of the café and reception of Block 2 shared accommodation is 3.5m; the level of the plant rooms below are 1.1m. Floor to ceiling heights may be insufficient in the plant rooms.

Suggestion

Provide adequate floor to ceiling heights.

4.19 Issue:

Parking on Sheriff Street close to the junction with New Street may obstruct sightlines for divers exiting New Street.

Suggestion

Remove parking as necessary to provide adequate visibility splays.

4.20 Issue:

The ends of the existing roadside parking area on the south side of Sheriff Street are gently tapered and do not in themselves clearly indicate the end of parking. Lined parking prohibitions are not as effective as well-defined parking bays in restricting unauthorised parking. Drivers may park closer to the junction than intended, obstructing sightlines.

Suggestion

The alignment of the kerbing should be parallel to the road centreline from each junction to the points at which parking is to be allowed, at which location the kerblines should chamfer abruptly to form the partially indented parking bay.

4.21 Issue:

The drawing does not show measures to prevent vehicular access to the pedestrian street from New Street.

Suggestion

Provide removable bollards to the rear of the bell-mouth of the junction, sufficiently robust to prevent vehicle entry and adequately set back to provide a turning head for vehicles turning to return to Sheriff Street.

4.22 Issue:

An accessible toilet is shown to be provided in Block 1 but not in Block 2. Such facilities would be required adjacent to the café, reception and gym in the shared accommodation.

Suggestion

Ensure that the WC shown to be provided in Block 1 (at the café) is suitable for universal use.

4.23 Issue:

The floor level of the café is 3.5m. Assuming a level entry threshold at the café entrance, the path level will be similar. The path level is shown to be 2.45m some 18m to the east. The gradient of the public footpaths could be excessive.

Suggestion

Revise the levels to ensure the gradient of the footpath is adequate for universal use.

4.24 Issue:

There are flights of steps on the pedestrian street and the links to the courtyards and public footpaths. They may not be adequately conspicuous to users and could be a trip hazard.

Suggestion

Provide tactile paving at the top and base of the flights of stairs to warn pedestrians.

4.25 Issue:

On New Wapping Street, to the rear of the terrace of houses on Mayor Street, there is a mismatch between the proposed and existing kerblines and the footpath narrows significantly. This may present a hazard to pedestrians. In addition, a passageway appears to be created between Block 2 and the existing rear wall of the terraced properties. It is a narrow area and may be unlit. Its purpose is unclear.

Suggestion

Move out the existing kerbline to match the proposed and maximise the available width of the footpath. Permanently close off the access to the passageway from the public footpath.

4.26 Issue:

Entry to Mayor Street from New Wapping Street junction is restricted but has a plated exception for access only. On opening of New Street drivers are likely to presume that the access only exception permits them to travel onto Mayor Street to access New Street. Rat-running to avoid the Sheriff Street / New Wapping Street traffic signals could occur. This could lead to an increase in vehicular traffic on Mayor Street and These and increased risk of collision with tram traffic.



Suggestion

Clarify the signage so that it clearly informs and regulates driver behaviour. Ideally measure would be provided to prevent trips between the Mayor Street / New Wapping Street junction and the New Street / Sheriff St junction.

4.27 Issue:

The external ramp located between the door to the lobby and the door to the reception at Block 1 is too steep for universal use.

Suggestion

Ensure that the alternative route via the internal lift is always open and available to users.

4.28 Issue:

The ramp from New Wapping Street to the pedestrian street is long and does not appear to have a sufficient number of intermediate landings. It may prove challenging for older people. The ramp from the pedestrian street to the courtyard of Block 1 appears similar.

Suggestion

Provide a sufficient number of intermediate landings at both ramps.

Observation

It is assumed that the green space shown on the Ground Floor Plan adjacent to the public footpath at Sheriff Street (between grid lines 3 and 4) is not publicly accessible from the street and does not need to be provided with public amenities such as seating, lighting, street furniture etc.

Observation

There is a discrepancy between the proposed levels of the footpath on Mayor Street shown on different drawings: the site plan shows 2.7m (mid-way along Mayor Street) and the Ground Floor plans shows 2.45m.

Observation

The surface level of the entrance to the underground car park of Block 1 is shown as 1.710m on the ground floor plan and as 2m on the lower floor plan.

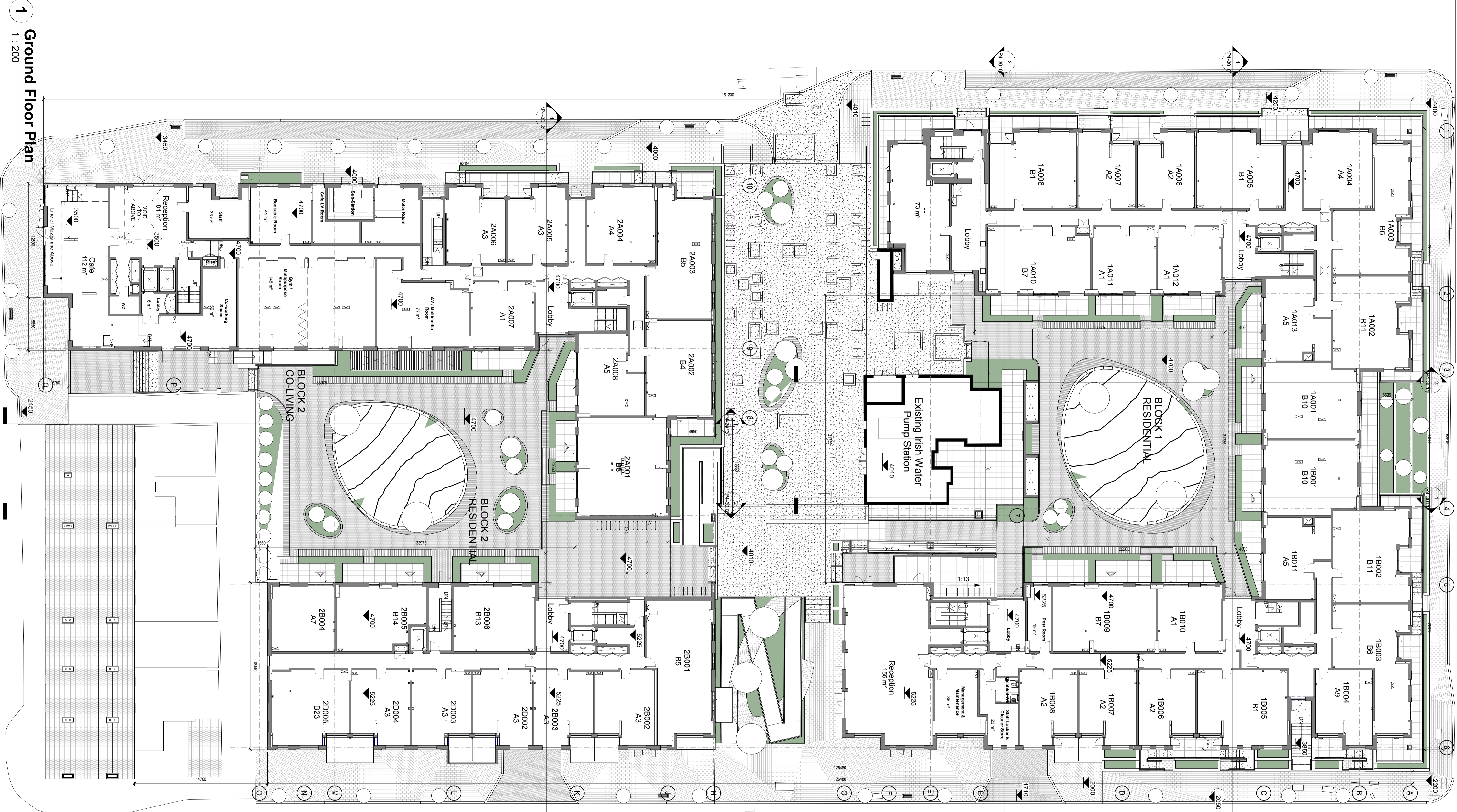
Observation

The sole access to Block 1 rooms at floor level 5.225m elevation is via the Reception in respect of mobility impaired users. The corridor from Reception to these rooms runs through the Management and Maintenance room and the Staff Locker and Cleaner Store room. It is presumed that these areas will remain open and that access through the corridor will not be locked or restricted.

Observation

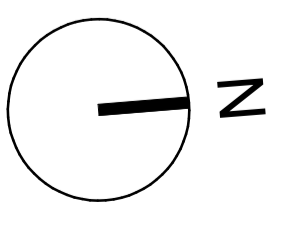
When a lift is shown located on the interface between floors of slightly different levels and lift doors are shown to both sides, it is presumed that the lift will serve both floors.

Appendix A - Drawings



1 Ground Floor Plan
1 : 200

NOTE:
ALL DIMENSIONS TO BE CHECKED ON SITE.
NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
THIS DRAWING IS TO BE USED IN CONJUNCTION WITH
THE RELEVANT CONTRACT DOCUMENTS.



REV. DATE DESCRIPTION CHECKED BY
ISSUED FOR INFORMATION

Henry J Lyons
Architects + Interiors
+353 1 888 3333
info@henryjlyons.com
51-54 Parnassus Street
Dublin D02 K468

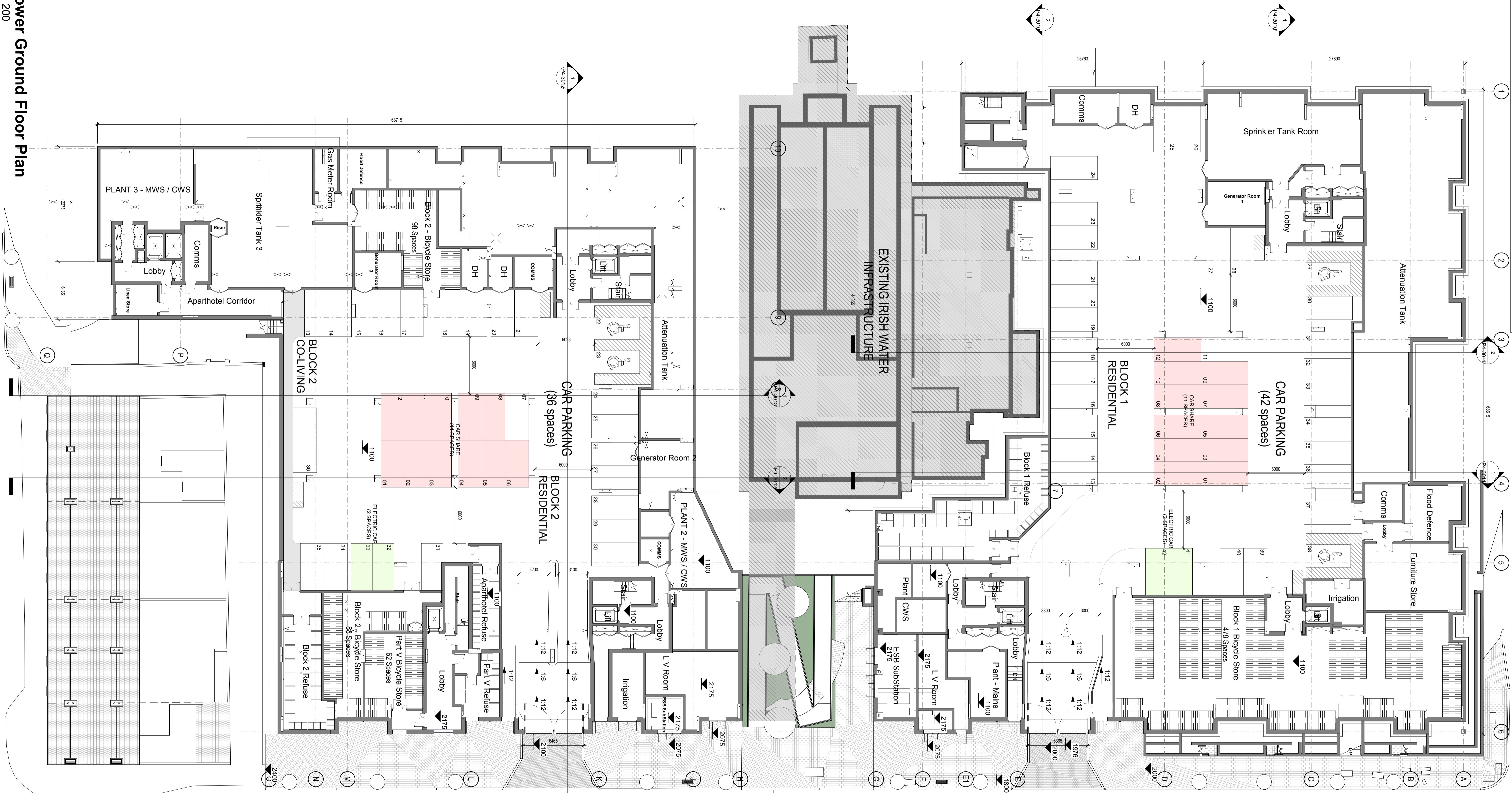
PROJECT
Spencer Place Development
Company Limited
Spencer Place Residential City
Block 2

DATE 28/03/19
SCALE 1:200 @A1
DRAWN BY BP
CHECKED BY NP
MODEL FILE NAME 950291_Spencer Place North
DRAWING

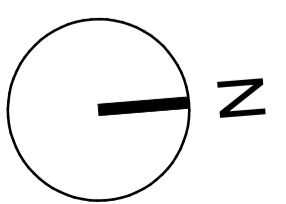
Ground Floor Plan

HAL JOB NO. 950291
DRAWING NUMBER P4-1010
DRAWING STATUS 90 ISSUED FOR PLANNING
REVISION

COPYRIGHT



NOTE:
ALL DIMENSIONS TO BE CHECKED ON SITE.
NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
THIS DRAWING IS TO BE USED IN CONJUNCTION WITH
THE RELEVANT CONTRACT DOCUMENTS.
PLEASE CONTACT THE ARCHITECT FOR ANY CLARIFICATION.



REV. DATE DESCRIPTION CHECKED BY
ISSUED FOR INFORMATION

Henry J Lyons
Architects + Interiors
+353 1 888 3333
info@henryjlyons.com
51-54 Pearse Street
Dublin D02 K466

PROJECT
Spencer Place Development
Company Limited
Spencer Place Residential City
Block 2

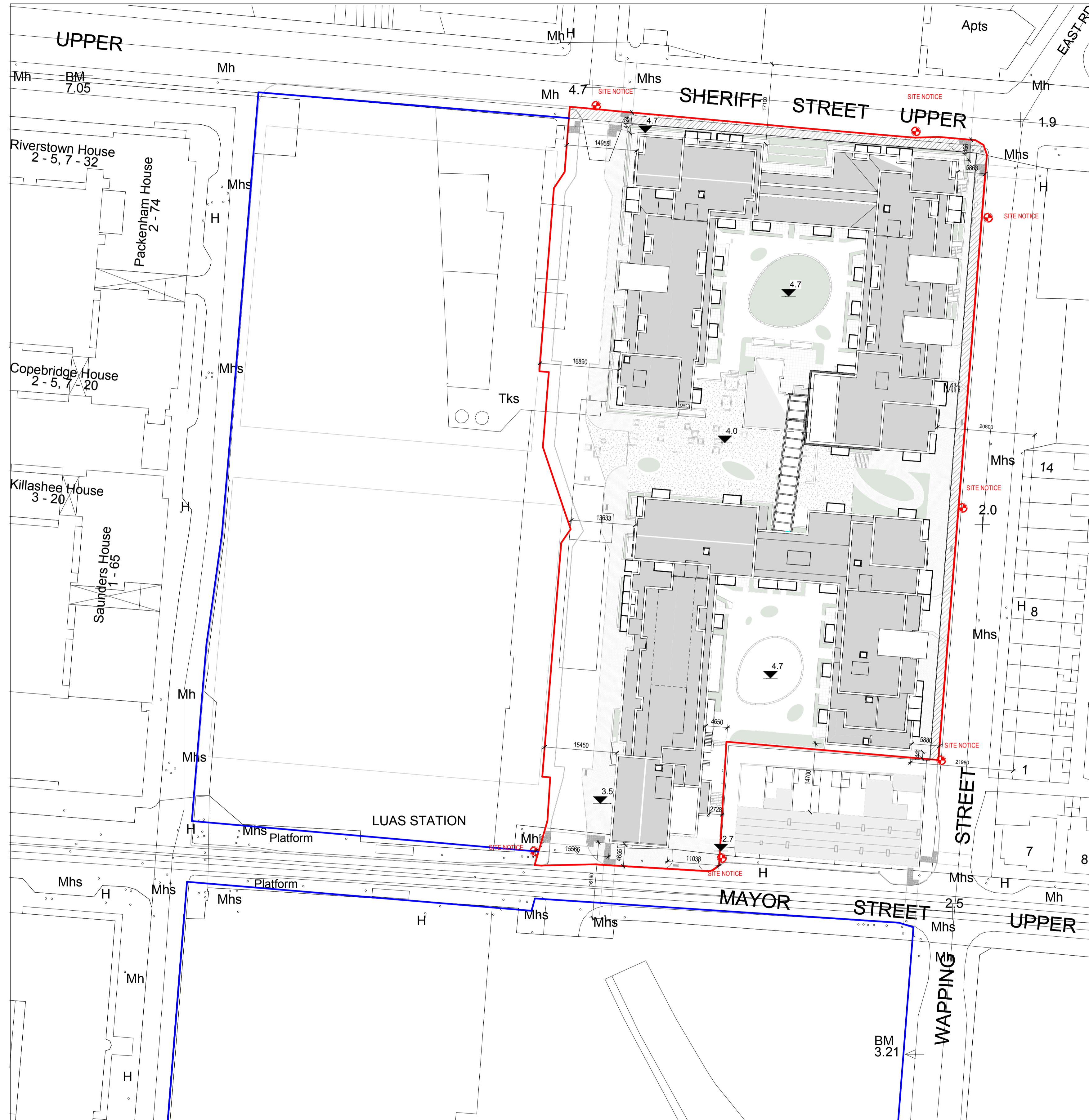
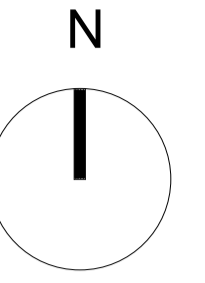
DATE 29/03/19
SCALE 1 : 200 @ A1
DRAWN BY BD
CHECKED BY NP
MODEL FILE NAME 950291_Spencer Place North-
DRAWING

Lower Ground Floor Plan

ALL. JOB NO. P4-1009 DRAWING NUMBER
950291
DRAWING STATUS: 80 ISSUED FOR PLANNING
REVISION

COMMENTS

NOTE
ALL DIMENSIONS TO BE CHECKED ON SITE
NO DIMENSIONS TO BE SCALED FROM THIS DRAWING
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH
RELEVANT CONSULTANTS DRAWINGS



- SITE LOCATION BOUNDARY OUTLINED IN RED
- OTHER LAND OWNED BY APPLICANT AND/OR CIE
- SITE NOTICE LOCATION
- ▨ LANDS WITHIN DCC OWNERSHIP

REV	DATE	DESCRIPTION	CHKD/DRW
-----	------	-------------	----------

ISSUED FOR INFORMATION

Henry J Lyons

Architecture + Interiors
henrylyons.com +353 1 888 3333 info@henrylyons.com 51-54 Pearse Street Dublin D02 KA66

PROJECT
Spencer Place Development
Company Limited
PROJECT
Spencer Place Residential City
Block 2

DATE	29/03/19
SCALE:	As indicated @A1
DRAWN	BD
CHECKED	NP
MODEL FILE NAME	950291-Spencer Place North
DRAWING	

Site Plan - Proposed

1 Proposed Site Plan
1 : 500

HJL JOB No. 950291	DRAWING NUMBER P4-0003
DRAWING STATUS: S0 ISSUED FOR PLANNING	REVISION
COPYRIGHT©	

QUALITY AUDIT FEEDBACK FORM

Scheme: Proposed Residential Development at Spencer North, Dublin Docklands

Audit Reference No.: 19117-01-001

Date Audit Completed: 31st July 2019

Paragraph No. in Quality Audit Report	To Be Completed By Designer			To Be Completed by Audit Team Leader
	Issue accepted (yes/no)	Suggested measure accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting suggested measure	Alternative measures or reasons accepted by auditors
4.1	YES	YES	-----	-----
4.2	YES	YES	-----	-----
4.3	YES	YES	-----	-----
4.4	YES	YES	-----	-----
4.5	YES	YES	-----	-----
4.6	YES	YES	-----	-----
4.7	YES	YES	-----	-----
4.8	YES	YES	-----	-----
4.9	YES	YES	-----	-----

4.10	YES	YES	-----	-----
4.11	YES	YES	-----	-----
4.12	YES	YES	-----	-----
4.13	YES	YES	-----	-----
4.14	NO	NO	Users of the Part V accommodation will not need car parking.	-----
4.15	YES	YES	-----	-----
4.16	YES	YES	-----	-----
4.17	YES	YES	-----	-----
4.18	YES	YES	-----	-----
4.19	YES	YES	-----	-----
4.20	YES	YES	-----	-----
4.21	YES	YES	-----	-----
4.22	YES	YES	-----	-----

4.23	YES	YES	-----	-----
4.24	YES	YES	-----	-----
4.25	YES	YES	-----	-----
4.26	YES	YES	-----	-----
4.27	YES	YES	-----	-----
4.28	YES	YES	-----	-----

Signed 

Design Team Leader Date 02/08/19

Print Name Niall Barrett

Quality Audit

Signed off , Audit Team Leader Date 2/8/19

Print Name DERMOT DONOVAN

Please complete and return to: Roadplan Consulting Ltd.
7, Ormonde Road
Kilkenny
Email: info@roadplan.ie