

Construction Management Plan and Buildability Report prepared by Iris Capital for proposed improvements to 19-21 and 23 The Corso, Manly

Rev B March 2022

1 Introduction

IRIS Capital has prepared this Buildability Report and Construction Methodology for the proposed development at 19-23, The Corso, Manly.

1.1 REVIEWED DOCUMENTS

- Application Architectural drawings prepared by Durbach Block Jagers
- Ivanhoe Hotel historical plans recovered from Northern Beaches Council records
- 23-29 The Corso Structural Plans prepared by Waddington Consulting Pty Ltd (24 plans)
- Sydney Water Hydra Mapping of inground sewer culvert infrastructure
- Plans available at the following Northern Beaches Council DA Tracker website
 - 19-21 The Corso Residential DA Scheme
2019/0512: <https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Public/XC.Track/SearchApplication.aspx?id=1659877>
 - 19-21 The Corso Subdivision DA Scheme
2021/0019: <https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Public/XC.Track/SearchApplication.aspx?id=1913539>
 - 19-21 The Corso Refurbishment DA Scheme
2020/1711: <https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Public/XC.Track/SearchApplication.aspx?id=1908789>
 - 23-27 The Corso Ivanhoe Pub Alterations and Additions - Alterations and Additions to a Hotel, including – new signage DA Scheme
2019/0211: <https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Public/XC.Track/SearchApplication.aspx?id=1627312>
 - 23-27 The Corso Change of use to a pub, alterations and additions to the premises, fitout and signage 2019/574: <https://eservices.northernbeaches.nsw.gov.au/ePlanning/live/Public/XC.Track/SearchApplication.aspx?id=1665215>

2 The Development

2.1 SUMMARY DESCRIPTION

Proposed Development Description

Proposed Development Description

Summary

The proposed development is for alterations and additions to part of the existing buildings on the site, to allow for the adaptive reuse and the stratum and strata subdivision of the land, known as 19-29 The Corso, Manly. This will include new retail spaces at the ground floor of 19-21 The Corso, as well as ancillary office space and building services. At the three upper building levels of 19-23 The Corso, these will be reconfigured to accommodate twelve apartments, being eight, two-bedroom apartments and four, one-bedroom apartments (final mix to be determined). Each apartment will be provided with a new balcony or wintergarden to provide outdoor living space, which is not currently availed to the residential component of the building. Existing light wells will be enhanced to increase amenity and natural light into what are existing substandard residential dwellings. New private open space areas will also be provided to the eastern apartments. A communal roof top area is proposed on the top of 19-21 The Corso for communal open space purposes.

The existing strata building, which is currently not accessible, will also be upgraded to enable compliant building services, fire stair and lift arrangements.

Works to the remainder of the site are currently subject to a separate modification application (Mod 4.55 (MOD) 2019_0574) to facilitate enhancements to the existing Ivanhoe Hotel.

The application also seeks to create three separate strata, which will principally include The Ivanhoe Hotel, the retail tenancies and the residential component of the building. The residential apartments will be subject to further strata subdivision.

Detailed Description

The works to the building include various demolition works over 19-21 The Corso, which generally involve demolition of non-compliant access and building service areas across all building levels. The demolition works will make way for a new retail layout at the ground floor fronting The Corso and improved utilisation of space through to Market Lane, including a new retail tenancy fronting this to improve activation to the frontage. New ancillary retail office space will be created, along with building services. The works to No 23-29 The Corso, at the ground floor will be completed in accordance with Modification Mod 4.55 (MOD) 2019_0574, which expand the existing hotel into No 23. The works to the first floor of No 23, under the modification application, would be superseded by the works the subject of this application at the first floor.

Most importantly, the existing building at 19-21 will be upgraded to provide a compliant lift on the eastern side of the building and fire stairs located directly south of this, which will service all levels.

At the first floor, four apartments will be provided, three of which will contain two bedrooms, and one apartment, on the south-western corner, containing one bedroom. Apartment __ and __ will be expanded through to No 23 to make these apartments larger in size and both will have a garden area, separated by privacy treatment, to provide improved external amenity to these apartments. A new balcony will be provided to the two apartments fronting Market Lane and a winter garden will be provided to Apartment __. The configuration of the apartments is generally around existing internal walls being retained, with the layouts reconfigured to improve the amenity enjoyed by these.

The same internal configuration is proposed at the second-floor level with the two eastern apartments being expanded over No 23 to facilitate additional living space to these. Three two-bedroom apartments and one, one-bedroom apartment are proposed. The south facing apartment on the eastern side will benefit from a balcony on its northern side, adjacent the living room, with a void area separating this with Apartment which is located on the northern side of the building. The separation distance is 9m. Both of the northern apartments will have a new balcony, and the south-western apartment will have a wintergarden.

At the third floor, four apartments are proposed, three containing two-bedrooms and one containing one bedroom. The apartments on the western side of the building will have a balcony and winter garden respectively, while the apartments on the eastern side will each have an eastern balcony, which will benefit from the northern aspect. A bedroom is proposed over No 23, adjacent to the northern and southern side of the void area below, to enable an additional, second, bedroom to each of these apartments. Windows to these bedrooms will ensure that privacy between the apartments is retained.

The roof of No 19-21 will be used for communal outdoor open space purposes, as well as plant and equipment, all of which will be setback from the principal building frontages. The roof forms that are closest to the street frontages will be provided with solar panels to enhance the environmental sustainability of the building. This communal outdoor area will also be serviced by the lift and stairs to maximise accessibility.

There is no existing car parking provision on the site to service either the residential or commercial components and the status quo will be retained.

All works will remain clear of the existing Sydney Water culvert sewer which runs beneath the building at 19-21 The Corso.

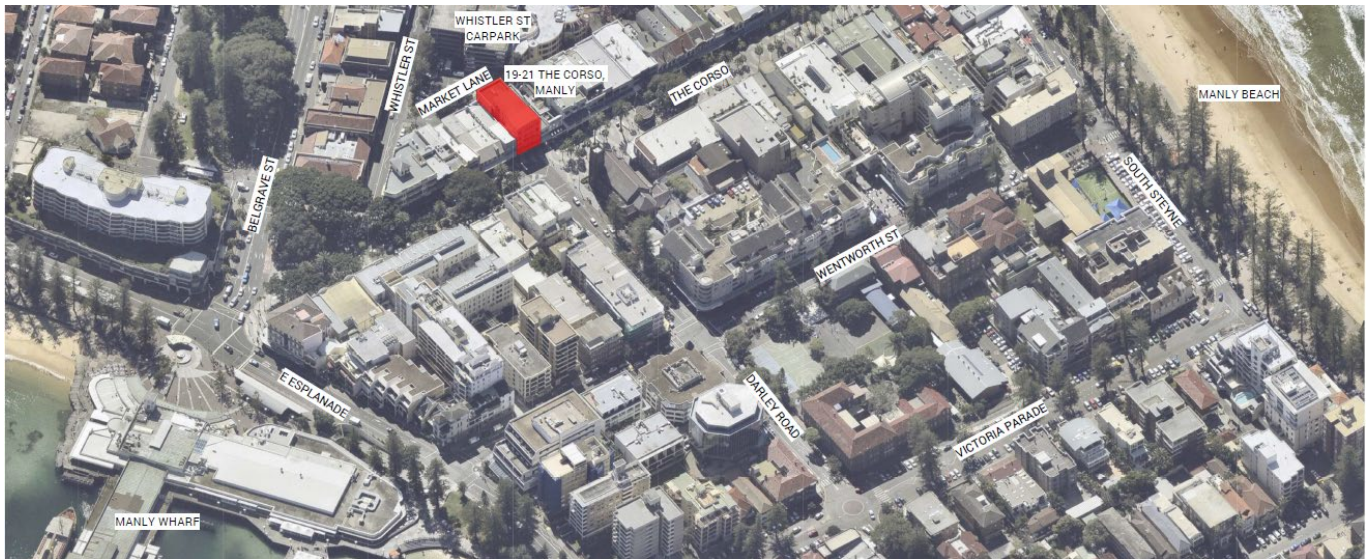


FIGURE 1 The Site Location

2.2 DETAILED DESCRIPTION OF PROPOSED WORKS

The proposed works are as detailed in the Development Application.

A detailed description of the scope is as follows:

2.2.1 Temporary Services

- Temporary services are already available within the site

2.2.2 Demolition

- Establishment of required temporary and staging works zones in Market Lane adjacent premises at 19-23 The Corso (Note that there is already an existing Market Lane loading zone directly adjacent the premises at 19-23 The Corso). During peak materials handling periods, the Ivanhoe Hotel loading zone will also be utilised.
- Establishment of any required temporary propping as required by the structural consultant
- Capping/isolation of relevant building services.
- Establishment of suitable overhead protection hoardings to both The Corso and Market Lane for pedestrian protection.
- Demolition of existing improvements to 23 The Corso.
- Localised demolition of existing select elements contained within part of 19-21 The Corso as approved under the consent
- Other temporary and staging works (if required by the structural consultant) to maintain the structural integrity of Ivanhoe Hotel

2.2.3 Construction

- Establishment of required temporary and staging works zones in Market Lane adjacent premises at 19-23 The Corso (Note that there is already an existing Market Lane loading zone directly adjacent the premises at 19-23 The Corso). During peak materials handling periods, the Ivanhoe Hotel loading zone will also be utilised.
- Installation of screw piling within 19-23 The Corso to facilitate transfer of any additional loads in a manner such that there is no additional loading to Sydney Waters existing culvert sewer infrastructure
- Structural amendments to 19-21 The Corso and new structure to 23 The Corso
- Façade amendments to 19-21 The Corso and new facades to 23 The Corso

- Internal fitout works to both 19-21 and 23 The Corso
- Required temporary and staging works (if required by the structural consultant) to maintain the structural integrity of Ivanhoe Hotel.

2.2.4 Subdivision

- Stratum and strata subdivision as required.

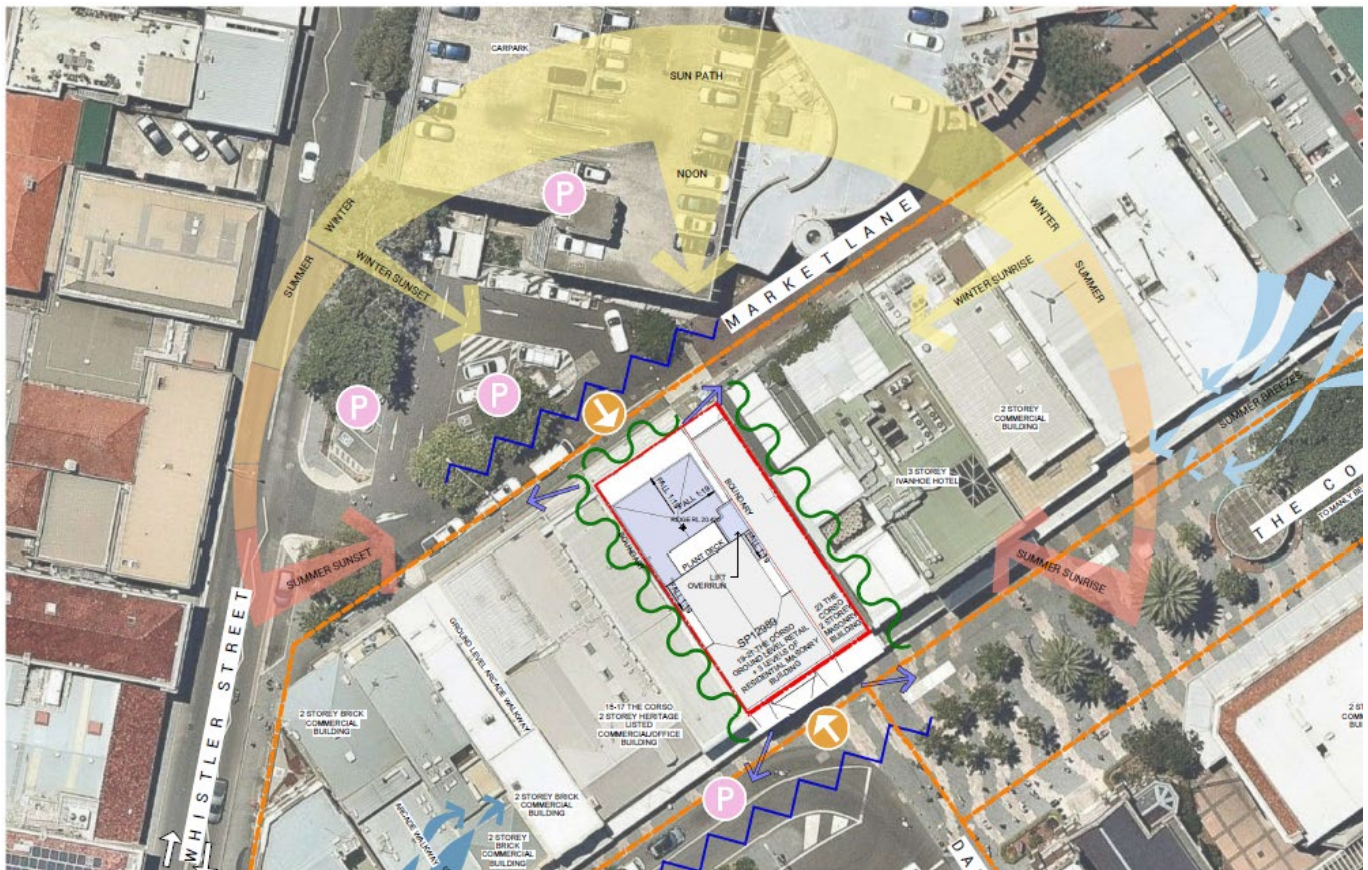


FIGURE 2 Access to and from the Site

3 Constructability and Site Constraints

3.1 CONSTRUCTION VEHICLE ACCESS

Vehicular and construction worker access will be via to and from Whistler Street from Market Lane.

No vehicular construction access is proposed from The Corso.

A temporary and staging works zone will be established in Market Lane adjacent premises at 19-23 The Corso (Note that there is already an existing Market Lane loading zone directly adjacent the premises at 19-23 The Corso).

During peak materials handling periods, the Ivanhoe Hotel loading zone will also be utilised.

The temporary and staging works zone will be utilised for materials handling.

Traffic control will be provided to facilitate deliveries to and from the temporary and staging works zone to facilitate the works.



FIGURE 3 Access to Market Lane from Whistler Street



FIGURE 4a Existing Market Lane Loading Zone (view west)



FIGURE 4a Existing Market Lane Loading Zone (view east)



FIGURE 5a Existing Ivanhoe Hotel Loading Zone in Market Lane (view west)



FIGURE 5b Existing Ivanhoe Hotel Loading Zone in Market Lane (view east)

3.2 CRANE LOCATION

A permanent site crane is not proposed.

Craneage will be from the temporary and staging works zone will be established in Market Lane adjacent premises at 19-23 The Corso (Note that there is already an existing Market Lane loading zone directly adjacent the premises at 19-23 The Corso).

3.3 CONCRETE POURS

Concrete pours will be from the temporary and staging works zone will be established in Market Lane adjacent premises at 19-23 The Corso (Note that there is already an existing Market Lane loading zone directly adjacent the premises at 19-23 The Corso).

Traffic control will be provided for all concrete pours

Pours should be done using a line-pump, with the pump located on the loading zone. Penetrations should be made into the slabs to run a hard-line up the building for the pours on each level.

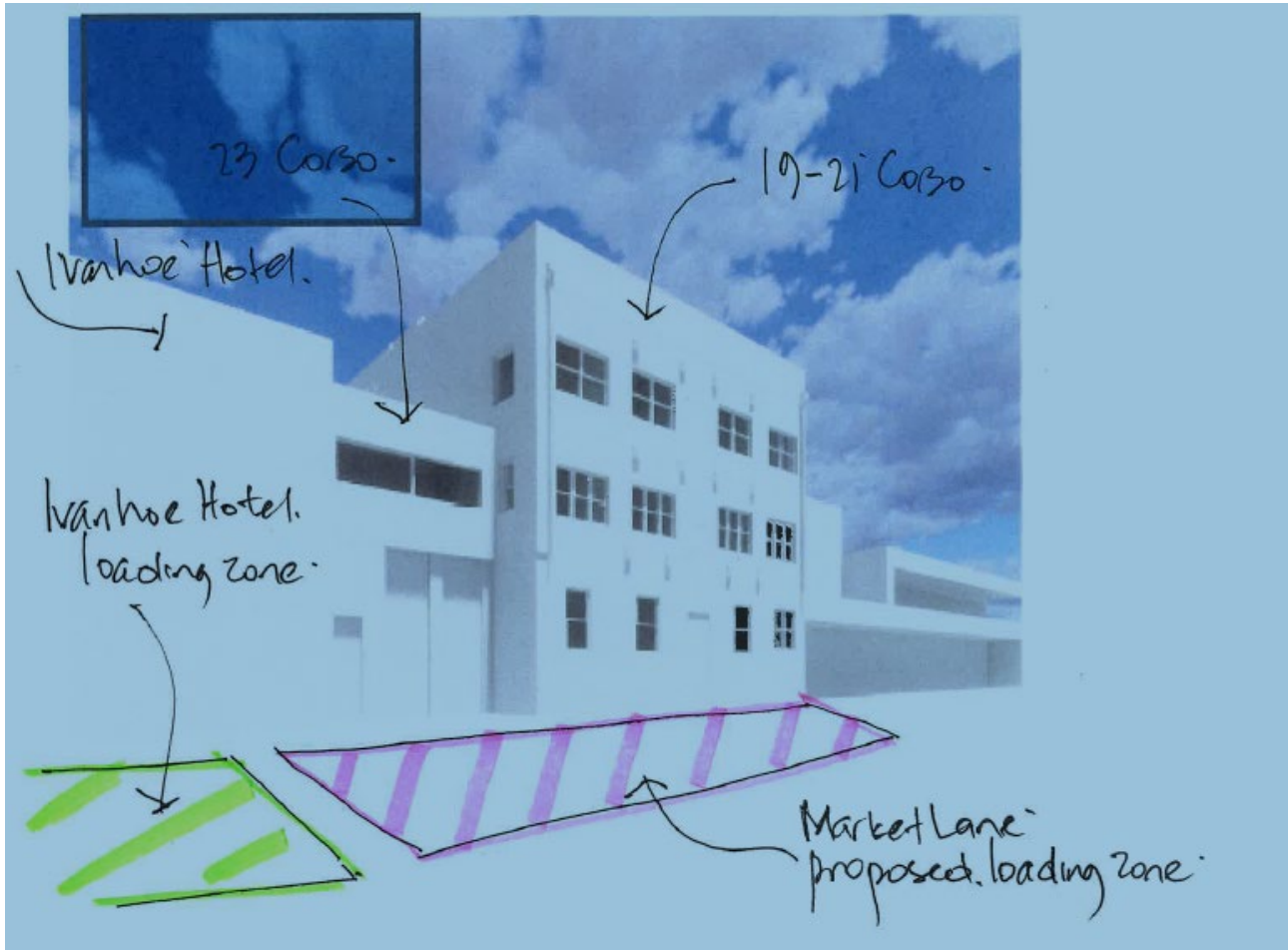


FIGURE 6 Market Lane proposed Loading Zones. During materials handling periods, the Ivanhoe Hotel loading zone will also be utilised.

3.4 PROTECTION MEASURES

Where relevant, temporary overhead protection structures will be provided to the Corso and Market Lane frontages to protect pedestrians.

Where relevant, temporary perimeter scaffolding will be erected to prevent debris falling into adjacent premises. The temporary perimeter scaffolding will also be utilised to access the façade works

Figure 7 demonstrated possible arrangements.



FIGURE 7 Temporary Protection arrangements

4 Vibration

To protect the existing heritage building at 19-23 the Corso and the adjacent Ivanhoe Hotel at 25-29 The Corso, German Standard DIN 4150 - Part 3 'Structural vibration in buildings - Effects on Structure' (DIN 4150-3), provides recommended maximum levels of vibration that reduce the likelihood of building damage caused by vibration. DIN 4150-3 presents the recommended maximum limits over a range of frequencies (Hz), measured in any direction, and at the foundation or in the plane of the uppermost floor of a building or structure. The vibration limits increase as the frequency content of the vibration increases.

The structural damage vibration criteria adopted for this project is presented below. For heritage buildings, it is recommended that vibration sensitive heritage buildings be assessed with reference to the Group 3 criteria, at least during initial monitoring (this being the more stringent of the criteria in BS7385 and DIN4150-3). This threshold may be revisited on further advice from Heritage/Structural consultant.

As described in previous sections, structure to be demolished should be isolated from surrounding structure using saw-cuts, isolation materials or other similar techniques prior to casting.

Table: DIN 4150-3 Structural Damage Criteria

Group	Type of Structure	Vibration Velocity, mm/s			
		At Foundation at Frequency of			Plane of Floor Uppermost Storey
		1Hz to 10Hz	10Hz to 50Hz	50Hz to 100Hz	All Frequencies
1	Buildings used for commercial purposes, industrial buildings and buildings of similar design	20	20 to 40	40 to 50	40
2	Dwellings and buildings of similar design and/or use	5	5 to 15	15 to 20	15
3	Structures that because of their particular sensitivity to vibration, do not correspond to those listed in Group 1 or 2 and have intrinsic value (eg buildings under a preservation order)	3	3 to 8	8 to 10	8

5 Sydney Water Infrastructure

The proposed new consolidated stair and lift core will be positioned and founded in a manner so as to not impose any additional loads in SWC's sewer infrastructure. A concept is provided in Figure 7

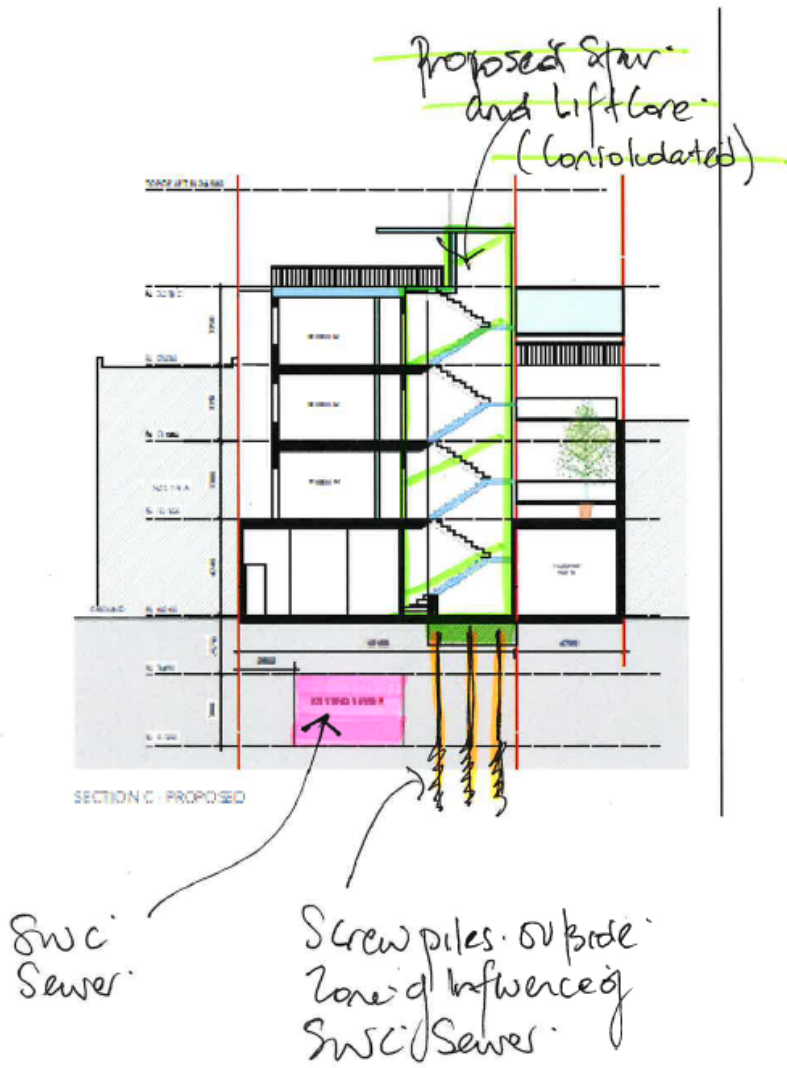


FIGURE 8 Concept for founding adjacent SWV infrastructure

6 Construction Management

All temporary access and construction arrangements will be finalised at the Construction certificate Stage.