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### Subject

# Risk Assessment Covid 19 Blanchardstown Co-Living Development

27 July, 2020

Prepared by:
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CHI (Cork)

For Bartra Property (Castleknock) Limited

#### **Executive Summary**

A risk assessment was performed in relation to the potential transmission of Covid-19 in the proposed Blanchardstown Co-living development on the site of Brady's Pub, Old Navan Rd, Dublin 15.

In general, the risk assessment determined a low risk of transmission between persons in the co-living development. Individuals would not be close contacts simply by living in the building even if another person living in the building was confirmed as having Covid-19.

The shared MasterChef kitchens, although likely to be only intermittently used, are not considered to increase the risk of transmission given all the controls that are in place.

Common areas such as the gym and cinema will need strict adherence to social distancing but are considered no higher risk than similar facilities that may be used outside of the building.

In many respects the risks of transmission would be less than for people living in a normal shared house or apartment. The ability to have individuals living by themselves with all necessary facilities in private suites dramatically reduces the risk of transmission of the virus and indeed make suites ideal for self-isolation or quarantine if that were required.

#### **Background**

CHI was asked to perform a risk assessment particularly in relation to Covid-19 transmission and the risk of close contacts in a proposed co-living accommodation for the Brady's Pub site.

I am a consultant Occupational and Environmental Physician. I practice as a specialist for nearly 30 years. I am a Fellow of the Royal College of Physicians of Ireland and a Fellow of the Faculty of Occupational Medicine. I am a past National Speciality Director and the past Dean of the Faculty. I am Managing Director of CHI (Cork).

I have worked extensively for the last six months in the preparation of Covid-19 risk assessments for some of the largest employers in the country. I regularly have run Covid-19 workshops to train both employers and employees in relation to risk reduction with Covid-19 in particular.

The proposed development is a proposed co-living development with 210 bed spaces.

In the preparation of this risk assessment, I reviewed architect plans, a schedule of accommodation, internal CGI images and Niche Living Plan documents.

I also reviewed the Covid-19 preventive document on Niche Living Stay Safe Shield and C19 Pandemic Operations Plan.

In performing this risk assessment, I am primarily comparing risk of Covid-19 transmission in relation to comparable shared accommodation in an urban environment. For the purposes of clarity, that may be a number of individuals sharing a house or multi-roomed apartment.

#### **Co-Living Development**

The proposed development is relatively unique in Irish terms. It is a form of coliving. Each resident can ultimately be fully self-sufficient within their private suite. Each individual private suite has the ability to be autonomous with private shower room, WC and wash area and private cooking facilities, high speed Wifi and fully functional workstation to enable working from home. The suite is also equipped with a fridge/freezer, cooking hob and microwave oven as well as sink and countertop prep area. It is also fully equipped with cooking utensils, crockery, cutlery and glassware. The bedrooms are also somewhat larger than typical apartment bedrooms having typical areas of 16 to 18 m².

What makes the facility unique is that as well as the ability to have autonomous suites there is access to shared areas which include lounges/co-working areas, "MasterChef kitchens", cinema and amenity rooms. There is also a fitness room, bike shed, bin shed and parcel delivery box.

#### **Covid-19 Close Contacts**

Most people will by now be aware of the concept of a "close contact". These are persons whom by nature of the contact with an infected person is deemed at increased risk of contracting Covid-19.

The HPSC, Health Protection Surveillance Centre, list a number of definitions as to what close contacts include.

This includes any individual who has more than fifteen minutes face-to-fact contact of 2 metres or less with a confirmed case in any setting. This is the definition which I think every person living in Ireland has heard again and again over the last four months.

There are however other types of relevant close contacts. The guidance defines close contacts in a healthcare setting and in airplanes however those are not relevant for this assessment.

#### **Household Close Contacts**

Particularly relevant here is the HSPC definition of a "household contact". HSPC defines household contacts as:

- 1. Living or sleeping in the same home,
- 2. Individuals in shared accommodation where there is sharing of kitchen or bathroom facilities and
- 3. Sexual partners.

Ref.

https://www.hpsc.ie/a-

z/respiratory/coronavirus/novelcoronavirus/guidance/contacttracingguidance/National %20Interim%20Guidance%20for%20contact%20tracing.pdf (accessed 26/7/2020)

On first viewing it may be puzzling as to why the HPSC put emphasis on sharing of kitchen and bathroom facilities. It is less puzzling however when one considers that the virus can be spread by touching contaminated surfaces. Bathrooms have many common touch points including for example taps, toilet handles, showers etc.

Sharing kitchens usually means sharing pots, pans but other items such as cutlery, plates classes cups et cetera.

#### **Enclosed Spaces**

The final relevant consideration for a close contact is people occupying an enclosed space for more than two hours. While the precise definition of an enclosed space is not given, by giving the example of the classroom, which most people intuitively recognise, effectively it means that anything that is sized smaller than a classroom is potentially an enclosed space while something larger is not.

To complicate things slightly, being in the enclosed space does not automatically make one a close contact but prompts a risk assessment. The factors that should be considered here include the actual distances between people, ventilation such as the number of air changes and whether any barriers exist. Another consideration may be the orientation of people. For example, people who are not face-to-face have lower risk.

It is important to remember that the concept of close contact is based on an increased risk of transmission of Covid-19. If one avoids close contacts the risk of transmission of virus between people is very significantly reduced. On diagnosis of a case of Covid-19 close contacts will be traced by Public Health agents. Close contacts of cases are now being tested, typically twice, and are required to restrict their movements for 14 days.

#### **Brady's Pub Site**

In the proposed facility, in my opinion the key assessment to be made, in relation to Covid-19, is whether people living in the proposed suites would be considered close contacts, simply by living in the building or the same floor. In other words, what are the implications for other residents if any individual was a confirmed case of Covid-19?

Clearly, residents would not be seen as living in one home. It may be useful to consider a typical apartment block. This will contain many apartments. Somebody sharing an apartment with somebody who becomes diagnosed with Covid-19 will almost certainly be designated a close contact. Others however living in the apartment block but not in the same apartment would not be designated close contacts in normal circumstances. This is because they do not share bathroom and kitchen facilities.

This is not conjecture or an opinion. It has been the practice of Public Health contact tracing since the start of the pandemic.

Using the same logic individuals living in the proposed development will not be considered close contacts simply by living in the building.

This is because each private suite provides individuals living by themselves with all necessary means with cooking, eating, toilet and working facilities and this would be the home unit as such. Remember the definition of shared accommodation includes the sharing of toilets and cooking facilities. Each private suite would not be sharing toilets at all and, in general, particularly if there is a confirmed case within the building, not kitchen facilities either. I will address the separate matter of the MasterChef kitchens in the next section.

This would therefore differ from shared accommodation such as people sharing a house or an apartment together. Many people sharing houses or apartments cannot have ensuite bedrooms and as well as sharing kitchens and common rooms also share bathrooms. Even those who have ensuite bedrooms typically share quite small kitchens and common rooms. The co-living proposed is more analogous to persons sharing an apartment block but not the same apartment. For the reasons outlined I believe that the co-living residents could not be deemed as having shared accommodation for close contact purposes.

#### **Kitchens**

While each private suite has its own cooking facilities, there is also access to a shared MasterChef kitchen. I believe it is important to review this kitchen to determine if it would fall into the HPSC guidelines.

It is outlined in the Covid-19 Pandemic Operation Plan for the building that social distancing of 2 metres must be observed. There is a restriction on the number of residents permitted into the kitchen space at any one time. This is managed by the Niche Living community app where residents can book hourly slots throughout the day. Based on 58 no. MasterChef kitchens there are 406 one-hour slots available each morning and evening during peak operating times, 7am to 9am and 4 p.m. to 9 p.m., and a further 290 one-hour slots available during the off-peak periods of between 9 a.m. and 4 p.m. See Appendix attached.

The kitchens are laid out in at least five pods. These are laid out so that people are at least 2 metres apart, or separated by a full height screen from any person using another pod. There are a minimum of 5 and a maximum of 16 kitchen pods in each floor. The orientation of people using those parts is that people would normally be faced away from each other with screens incorporated to maintain

The kitchens themselves are in some floors part of a larger area which is significantly larger than a classroom. The area would therefore not be considered to be an enclosed space. For those kitchens on the 1<sup>st</sup> and 2<sup>nd</sup> floors where kitchens approach classroom size the timeslot arrangement means that nobody is in in the kitchen area for 2 hours so no close contacts will occur

There are a significant number of air changes in communal areas reducing further the risk of viral spread.

I have reviewed the proposed cleaning regime for the kitchen hubs. The resident is responsible for cleaning both before and after. This cleaning includes cleaning equipment and is shown to the resident as part of the orientation conducted by the niche team. Cleaning chemical and solutions are also demonstrated to the resident. Cleaning not alone applies to the kitchen but for example to other areas such as every piece of gym equipment. In addition to resident pre-cleaning, there is a team of public area cleaners rostered during the daytime, and into the late evening. In the kitchen, these cleaning duties include cleaning the hobs, microwaves, ovens and fridges, etc. As part of their duties, the night porter would also be responsible for cleaning areas which would include the kitchen. This would not be typical of the sort of regime that might be used for example in a typical shared apartment.

With the reduced numbers and cleaning regimes, I believe the risk even in the kitchens is negligible.

After reviewing the layout of the kitchen and the controls in place in relation to cleaning and social distancing, it is clear to me that people using the kitchen at the same time or after one another would not be close contacts simply by use of the kitchen.

#### **Other Shared Facilities**

There are other facilities within the proposed building that would not be normally seen in, at least most, apartment blocks for example. These would not be intrinsic to life within the co-living accommodation and many may not use these at all. In many respects use of these facilities would be the same as using similar facilities outside of the accommodation.

The reception lounge areas would be subject to social distancing rules with some furniture items subject to restricted use. I have reviewed the adjusted Covid-19 2 metres social distancing capacity of the area as opposed to the full assigned capacity, for example the reception lounge has an adjusted capacity of 10. These plans are attached as an Appendix to this report.

The fitness room has an adjusted capacity of 6. Fitness rooms pose challenges in general in relation to Covid-19 as individuals using fitness rooms typically are breathing heavily. There are a significant number of air changes in the area however which will reduce the risk. Use of masks would theoretically reduce risk further but may be difficult to wear when exercising. It is important to realise that these are issues with gymnasiums and exercise facilities everywhere and not just in the proposed facility. The reduction in individuals allowed to use a room at one time and high levels ventilation will reduce any risk probably below the typical gymnasium.

Many people will not frequent gymnasiums at all during a pandemic. Those who do will almost certainly go to gymnasium whether it is in the building or not.

The cinema has an adjusted capacity of 12 and the co-working and other common spaces all have reduced adjusted capacities to enable social distancing. Only the laundry with a capacity of 2 is unchanged. Although ventilation rates are very good the cinema and function room areas may still be considered an enclosed space with potential close contacts if more than two hours. Again, however this is similar to similar facilities elsewhere.

There are therefore potential issues in the gym and cinema. These however have been managed by the cleaning regime and reduction in numbers allowed to use the rooms. All the rooms are fully bookable. There are high levels of air changes in these rooms. In many ways these challenges are no different to amenity areas anywhere. I would think that with the controls put in place, the risks are probably less than comparable areas elsewhere.

All common areas have social distancing built in. This does not and in many circumstances could not be replicated in a typical shared apartment or house. Other than the ability for autonomous private suites, this is another reason why persons living in the proposed development may have a reduced risk of transmission of the virus to others compared to, for example, a typical shared apartment or house.

#### **Potential for Self-Isolation**

The accommodation had the potential to be used in times of self-isolation and quarantine. The layout of the suites providing individuals living by themselves with all necessary facilities including toilet and changing facilities but also cooking and eating facilities make the suites somewhat unusual. They have good ventilation and each has access to an openable window. They would appear to me to be particularly well suited for self-isolation. Other than the provision of food which could be left at the door, the resident can remain within the suite for the period of self-isolation. They would appear to be uniquely positioned to facilitate such. The person or persons could self-isolate within their own suite with no contact and therefore no risk to anybody else in any other suite. This will be important for people who are already living there, if they were required to self-isolate or quarantine for any reason.

#### **Opinion**

Overall, I have reviewed the plans layout and operation procedures for the proposed development and in my opinion, residents of private suites would not be considered close contacts simply by sharing the accommodation facilities. Indeed, given the control measures put in such as social distancing, booking and reduction in utilisation of common areas, I would assess the risk measures as being of the highest standard.

There will undoubtedly be responsibility on the residents themselves to observe social distancing, but this is common in every setting both within the accommodation and outside. I would assess the risk of transmission of Covi19 as very low provided social distancing is observed and cleaning in the common areas is performed diligently. In addition, the facility has ideal conditions if a period a self-isolation or quarantine is required.

Yours Sincerely,

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Dr Martin Hogan FRCPI FFOMI Consultant Occupational Physician (IMC No. 11908)

# niche Stay Safe Shield LIVING

#### **Fully Self Contained Private Suites**

Unique to co-living our residents can be fully self-sufficient within their private suites. Each individual private suite is entirely self-contained, with a private shower room, WC and wash area, private in-room cooking facilities, high speed Wi-Fi and a fully functional workstation to enable working from home.



#### **Contactless Pathways**

Niche Living buildings are designed around contactless pathways, so residents and Team Members rarely have to touch a surface with their hands to navigate through the building. Lifts can be called from our Niche Living community app, avoiding the need to press a button both outside and in, while doors will open automatically using motion sensors.

standard of

disinfection.

cleanliness and



#### **Contactless Check-In** & Check Out, Keyless **Suite Entry**

Residents can check-in, access their suite and check-out using their mobile devices through the Niche Living community app.



### **Community**

Our Niche Living community app will keep our residents connected as well as providing access to wellbeing resources, a virtual events programme and access to the latest advice and best practice. In partnership with our sister company, Bartra Healthcare, our residents will also have 24/7 access to healthcare resources via the app.

Most importantly our residents can be assured that our Team Members will be onsite all day, every day to support and assist them



### **Social Distancing**

Our spacious, experience led, technology enabled, communal spaces at each level offer a host of amenities for residents to safely enjoy individually, or collectively while practising social distancing.





### **Niche Living Stay Safe Shield**

We will add an extra measure of assurance by placing a room seal on doors to indicate to residents that their suite or booked amenity room has not been accessed since being deep cleaned.



# **Innovative Disinfection Technologies**

Niche Living is exploring the addition of new technologies, like electrostatic sprayers which use an electrostatically charged disinfecting mist - and ultraviolet light to sanitise surfaces and objects.



#### High-Touch, **Deep Clean Areas**

Extra disinfection of the most frequently touched resident suite areas - light switches, TV remotes, thermostats and more.

# **Clean and Clean Again**

Increase the frequency of cleaning our experience led communal areas.







# niche Ventilation LIVING



#### **Community**

Niche Living was founded on the principal of **community** and we will always remain true to this value. Far in advance of the pandemic, people-centred and sustainable approaches were set at the heart of our designs. We thought about how to bring value with amenity, landscape, views, and natural light, and how to reduce the carbon footprint of our community.



# **LEED Certification**

Our buildings have been designed to **LEED** (Leadership in Energy and Environmental Design) standards. LEED is an internationally recognised green building certification system designed by the **world leading** United States Green Building Council (USGBC), providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.









# **Air Quality & Best Practice**

The **LEED** program focuses on **air quality** to improve the health and wellbeing of our residents, making it one of the most important components in our design. This means in a pandemic scenario such as CV-19 our residents can be assured that the air quality throughout our design led private suites and spacious, technology enabled communal areas is in line with sustainable best practices that fully align with HSE, Department of Health and NPHET guidelines.





Our air quality health and wellbeing provisions include:

- the use of 100% outdoor air
- our buildings will be naturally ventilated
- each of our private resident suites will be fitted with an air quality sensor
- each of our private resident suites will have an external facina outwards opening window
- our ventilation will be active during unoccupied times, in addition to occupied times, maximizing fresh air intake with a minimum of 48 air changes per day in our private resident suites and up to 168 air changes per day in our spacious, technology enabled communal areas

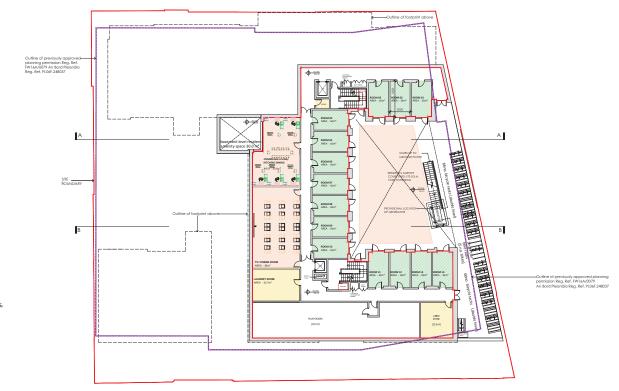




#### Assessment of Designs & Operations of Bradys CoLiving for C19 or future Pandemics.

27/07/2020

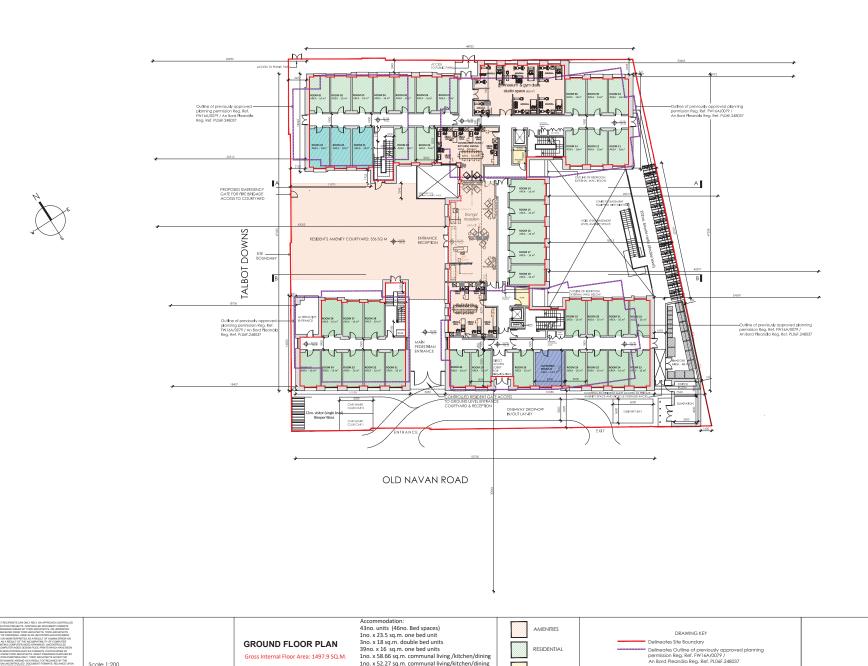
		Adjusted C19 2m Social Distancing Capacity	No. Slots per Hours per Day	Total Slots available per Day	Bed Spaces per Floor	No. Kitchen Stations per Bedspace	Operation Comments
Amenity Areas	Reception Lounge - Co Working Spaces	10	7 x 1hr 45min slots	70			1hr 45min slots available per day. Spaces open from 8am to 10pm
	Fitness Room	6	12 x 1 hr slots	72			Access from 7am to 10pm. 2x deep lean 1 hr slots
	Laundry	2					No reduction of equipment. Ability for ironing while someone loads, unloads laundry.
	Cinema	12	3 sittings per day	36			3 x sittings per day. Room cleaned after each sitting.
	Co-Working 3rd & 4th (Private Dining & Library)	10	7 x 1hr 45min slots	70			Room to have ability to repurpose for residents. 1hr 45min booking
	Co-Working Space in Kitche Areas 1st, 2nd, 3rd, 4th	16	8 x 1hr 45min slots	112			Room to have ability to repurpose for residents. 1hr 45min booking
Communal Kitchens	Lower Grd Floor	5	7 x 1 hr Slots	35	14	2.8	
Peak Times	Ground Floor	10	7 x 1 hr Slots	70	46	4.6	
	1st Floor	16	7 x 1 hr Slots	112	59	3.7	
	2nd Floor	16	7 x 1 hr Slots	112	48	3.0	
	3rd Floor	6	7 x 1 hr Slots	42	25	4.2	
	4th Floor	5	7 x 1 hr Slots	35	18	3.6	<u>_</u>
	Sub Total	58		406	210		7 No. 1 hr slots available per day. Peak times are from 7am to 9am and again from 4pm to 9pm. Deep clean from 9-10.
Communal Ktchens	Lower Grd Floor	5	5 x 1 hr Slots	25	14	2.8	
Off Peak Times	Ground Floor	10	5 x 1 hr Slots	50	46	4.6	
	1st Floor	16	5 x 1 hr Slots	80	59	3.7	
	2nd Floor	16	5 x 1 hr Slots	80	48	3.0	
	3rd Floor	6	5 x 1 hr Slots	30	25	4.2	
	4th Floor	5	5 x 1 hr Slots	25	18	3.6	<u>_</u>
	Sub Total	58		290	210		5 no. 1 hr slots available per day. Off Peak times are from 9am to 4pm with 2 hr closure for deep clean.





BASEMENT

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no. x 52.03 sq.m. communal living/kitchen/dining 101 sq.m. communal reception space 99.1 sq.m. gymnasium & gym class studio space

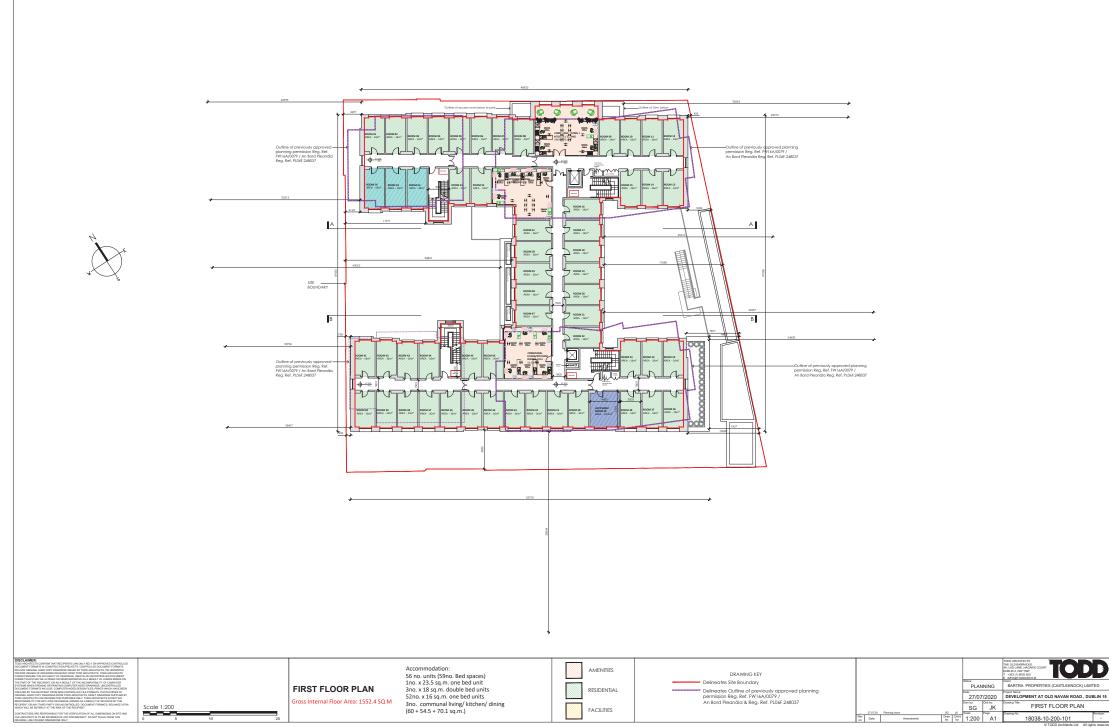
FACILITIES

Son by: Child by: GROUND FLOOR PLAN / SITE PLAN

Dram Child 1:200 A1

Gross Internal Floor Area: 1497.9 SQ.M.

Scale 1:200





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Scale 1:200

SECOND FLOOR PLAN
Gross Internal Floor Area: 1341.6 SQ.M.

Accommodation:
46 no. units (48no. Bed spaces)
1no. x 23.5 sq.m. one bed unit
2no. x 18 sq.m. double bed units
43no. x 16 sq.m. one bed units
43no. communal living/ kitchen/ dining
(60 + 54.5 + 70.1 sq.m.)

AMENTIES

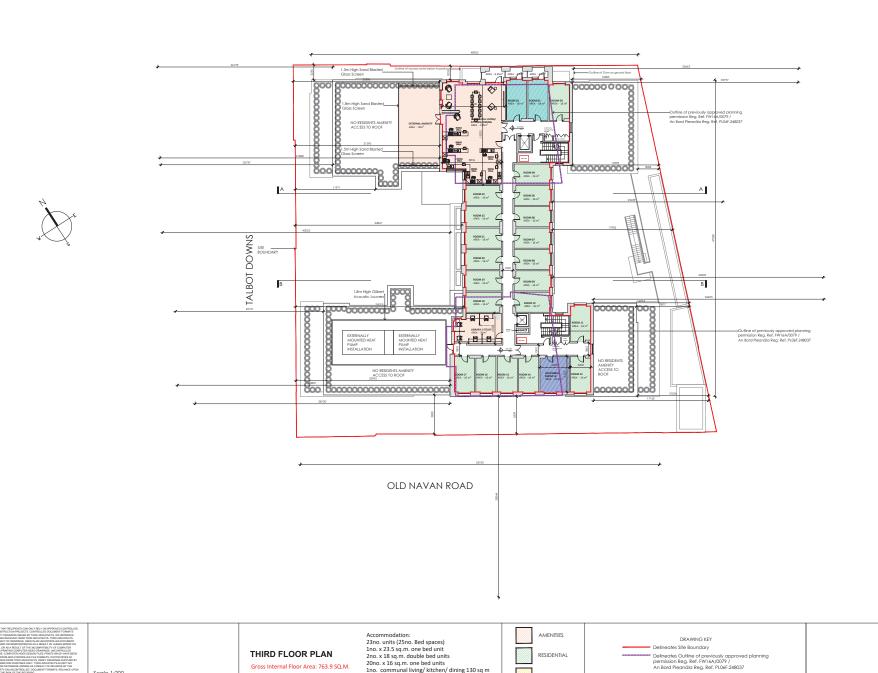
DRAWING KEY

Definedes Site Boundary

Definedes Site Boundary

Definedes Outfine of previously approved planning permission Reg. Ref. 1914.04.0007 /

An Bord Pleandia Reg. Ref. PLOSE 248037



FACILITIES

Gross Internal Floor Area: 763.9 SQ.M.

1no. library /study 30 sq m

Scale 1:200

Date: 27/07/2020 DEVELOPMENT AT OLD NAVAN ROAD, DUBLIN 15
Date by: Clab by: Descript Title: THIRD FLOOR PLAN

Drun Child by: 1:200 A1

