

# SEEING IS BELIEVING

## OPTICS INSPIRED APARTMENTS DELIVER HIGH LIFE IN GREY LYNN



**AUCKLAND  
DESIGN MANUAL**  
TE PUKA WHAKATAIRANGA | A TAMAKI MAKAUURAU

BUILDINGS + SITES // HOUSING CASE STUDY

**The Isaac**  
Grey Lynn, Auckland

## OVERVIEW

An apartment development in the popular inner city suburb of Grey Lynn that demonstrates that high density and high amenity can go hand in hand.

### PROJECT SUMMARY

The Isaac is a contemporary apartment development in the city fringe suburb of Grey Lynn. There are 75 apartments of a range of sizes as well as two commercial tenancies on the ground level.

The development is within walking distance of West Lynn Village, the Grey Lynn shops and the local school is right next door. The site is well linked to the city centre and other city fringe locations. The street facing site faces a listed heritage building and many other character villas which surround the site. Regional connections are good and the development is well connected to the road network and bus service.

The three buildings are designed to address Surrey Crescent – with two commercial tenancies providing an active edge to the street – and the internal lane. This is designed to be a high amenity, walkable space which provides an outlook area for the apartments, as well as access to the car parking.

The site slopes down from Surrey Crescent, and a major selling point of the buildings are the large, landscaped roof top terraces and associated communal facilities. All residents can gain access to the panoramic 360 degree views over Auckland, including views of the harbour, Waitakere Ranges, and the volcanoes and houses of the inner suburbs. The height on the lower building was limited to ensure that the buildings closer to Surrey Crescent could still see over the top.

The design is influenced by the work of Sir Isaac Newton – in particular his work in optics. The detailing on the pre-cast panels on the front of the building references light interference patterns. This theme has been used as a reference to tie different parts of the design together – and can be seen in the landscape treatment, interior design as well as the front facades of the buildings. As shown here, using an external influence as an inspiration can add richness to the whole project.

The development is a well designed, high quality development that sits well within it's existing environments, and makes the most of a challenging site.



Looking towards the overall development from Surrey Crescent.

# KEY PROJECT INFORMATION

HOUSING TYPE  
**APARTMENTS**

DENSITY  
**300 DW/HA (Gross Site Density)**

ARCHITECT & DESIGN TEAM  
**OCKHAM RESIDENTIAL**

YEAR COMPLETED  
**2013**

Tania Wong, Martin King, Vanessa Wong and Chris Smith

SITE AREA  
**2572 M<sup>2</sup> (Gross)**

PROJECT TYPE  
**BLOCK APARTMENTS**

CLIENT/DEVELOPER  
**OCKHAM INVESTMENTS – RESIDENTIAL DIVISION**

PRICE BAND  
**HIGH –RANGE**

The site is fairly regular in shape, and slopes down from Surrey Crescent. Access had to be maintained to existing buildings behind the development.

75 Apartments & 2 Commercial tenancies

1 bedroom apartments range from 52m<sup>2</sup> to 68m<sup>2</sup>, 2 bedrooms range from 78m<sup>2</sup> to 123m<sup>2</sup>, and the 3 bedrooms range from 109m<sup>2</sup> to 163m<sup>2</sup>.

A high-range project would typically have a current build cost of more than \$3000 per m<sup>2</sup>, exclusive of land costs, professional services and regulatory fees

The surrounding environment has a mixed use character, compromising residential apartments on the northern side of Surrey Crescent as well as a range of other activities including retail shops, cafes and light industry. The wider area is predominantly traditional residential with a high proportion of villas and bungalows.

PARKING  
**BASEMENT – ACCESS FROM LANE**

1 space per one bed, 2 per 2 & 3 bed

Visitor spaces – 8 after hours from 7pm to 7am

Construction cost = \$40.7 million (incl. fees and GST) + Cost per unit – ranges from \$ 420K to \$ 165K

# UNDERSTANDING THE NEIGHBOURHOOD

1. The development is within walking distance to West Lynn Village, Grey Lynn shops and services and Grey Lynn School. The site is well linked to the city centre and other city fringe locations.
2. The site faces a listed heritage building, is close to a historic church, and many other character villas which surround the site. The use of brick references the church, but overall the building is a contemporary, modern development.
3. The rooftop open space is a key design feature of the development. It includes landscaping, a lounge and kitchen facilities, and allows 360 views over the city. The site falls to the south, allowing views over the surrounding suburbs.
4. Other sites in the immediate area include substantial commercial buildings in the direction of Great North Road to the South, an iconic brick church to the East and a modern mixed-use building on the corner of Richmond Road which includes retail activities as well as a panel beaters.
5. In order to provide natural light into the apartments on the western side of 64 Surrey Crescent the building line is stepped back by 5.5m from the boundary, also the existing office building is 1.7m away from the boundary,



Birds eye view looking into the roof top garden and deck.

# GETTING IT RIGHT PLACING BUILDINGS ON SITE

1. The apartments are arranged across 4 levels (excluding basement) that provides a continuous street edge to Surrey Crescent, whilst protecting a generous landscaped lane at the middle of the block.
2. Prior subdivision of the site created a private lane (with existing rights of way easements applying) that divides the site on the North/South axis and provides access to the commercial buildings located at the rear of the site toward Great North Road. This lane naturally forms the heart of the development, and creates three distinct building sites. It also creates additional public frontage and allows many of the potential impacts of the building to be internalised to the site.
3. The design works well with the topography - car parking is accessed at a lower level and is concealed from view.
4. Creating a residential scaled connection with the lane was an important consideration in designing the form of the buildings. The walls are angled and have large corner windows to enable the residents to have a northerly visual connection up the lane looking towards Surrey Crescent.



The private land well designed lane provides a residential scale to the overall development.

# GETTING IT RIGHT SITE DESIGN

1. Speed reduction devices - Traffic is slowed down by utilising wide 'speed humps' with rough textured basalt pavers at the main entry from Surrey Crescent, and then intermittently at the apartment and car park entries.
2. The change in texture and material contrast to the asphalt of Surrey Crescent clearly identifies to drivers that they are leaving the main road and are entering a pedestrian orientated environment.
3. The alternating strips of smooth and rough basalt paving of varying widths is a reference to the patterns on the front façade. The development uses patterns of optical interference from an experiment by Isaac Newton to guide design detail in different parts of the development.
4. Street lighting - Included is a mixture of in-ground lights, low wall lights, bollards and soffit lighting demarcating the main entries and pedestrian paths.
5. Having a central road through the middle of the development provides separation between the buildings, outdoor garden spaces, vehicle/pedestrian circulation spaces and provides a sense of openness to Surrey Crescent.
6. The lane is always safe and secure due to the 'eyes on the street' from the balconies and windows.
7. The lane is 14m wide from building face to building face and is designed as a low speed environment. No on street parking is provided to maintain openness and visual appeal of the street.



Birds eye view looking down the private lane towards Surrey Crescent.

# GETTING IT RIGHT SITE DESIGN

1. Planters provide seating adjacent to entries for both apartment dwellers and visitors.
2. Bicycle stands for visitors are located at main entries in addition to those located in basement car parks for residents.
3. Planting schedule - The plant species mainly consist of native miniature flaxes and shrubs, Hebe type ground covers, cabbage trees and deciduous silver birches were selected allowing light to enter the apartments in winter but provide green leafy shade in the summer.
4. While the buildings have different material and textural treatments to their facades, the planting, hone and splashed concrete retaining walls and hedge types are consistent – creating a landscape theme through the development and reinforcing the sense of identity within the site.



The entrance lobbies are well-connected to the street and has generous dimensions.

# GETTING IT RIGHT STREET TO FRONT DOOR

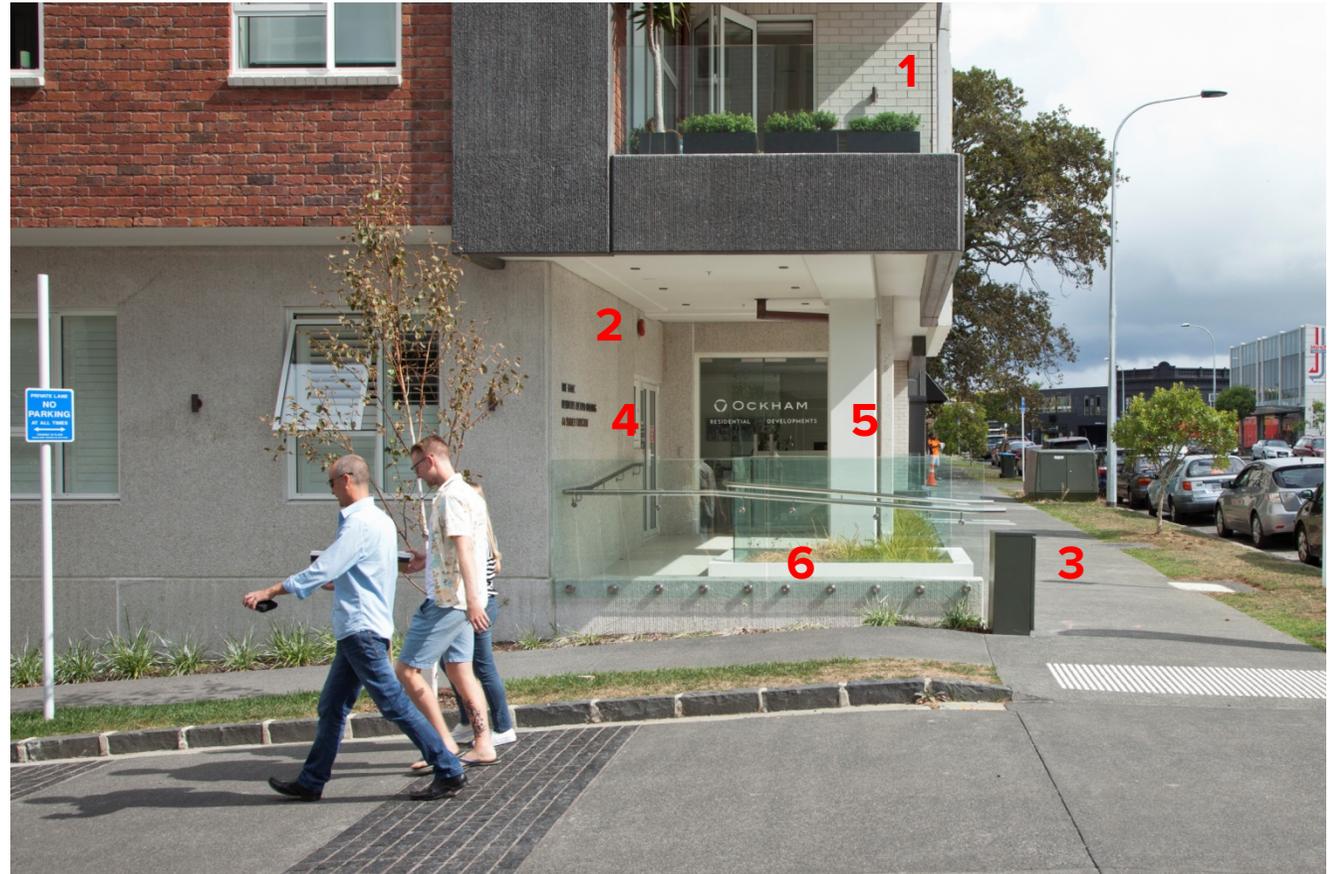
1. Ground floor apartments have useable private open spaces. A combination of elevated ground floor level relative to the street, a concrete up-stand and permeable balustrades balances privacy for the occupants with overlooking of the street.
2. Access to the apartments is via communal apartment lobbies and internal corridors. The entry space is well designed – generous in scale, has a large covered outdoor area, is easy to see from the lane and is welcoming.
3. Providing access for people in wheelchairs would have improved the building and allowed ease of use by people with a range of abilities.



The entrance lobbies are well-connected to the street and has generous dimensions.

# GETTING IT RIGHT STREET TO FRONT DOOR

1. Extensive overlooking from upper apartments contributes to the safety of the street.
2. The corner of the site contributes to and integrates with Surrey Crescent and the private lane, which in turn accentuates the entry and identity of the commercial tenancies.
3. The two commercial spaces are accessed off Surrey Crescent – which has the greatest footfall and is the most visible part of the development.
4. The commercial entrance is located in close proximity to the street and the lane and incorporates an accessible ramp - allowing for easy pedestrian circulation.
5. The two commercial tenancies create an active edge to the street, and a sense of entry into the development.



The commercial entrances are well integrated with the Surrey Crescent interface.

# GETTING IT RIGHT THE BUILDING

1. The main pedestrian entrance at the street corner provides clear legibility to the building entry, which also successfully addresses Surrey Crescent and the private lane.
2. Building materials are designed for long-life and low maintenance with thoughtful detailing to modulate the façade.
3. All habitable rooms except for bedrooms on level 4 open onto recessed balconies between 1.6m and 2.5m wide.
4. Masonry walls give a good level of acoustic privacy, both inside and out. Deep balconies offer a buffer between the interior of apartments and the street edge, whilst also providing protection from the elements.
5. High thermal mass of the building (in situ and pre-cast concrete elements, concrete block work, brick and exposed aggregate panels) contribute towards minimising temperature fluctuations within apartments and help to delay and reduce solar heat gain.
6. The pattern on the precast panels is in direct reference to the light interference patterns created in Sir Isaac Newton's 'double slit' experiments. This pattern has been used elsewhere to help give the building a unique sense of identity.



Looking towards the overall development from Surrey Crescent.

# GETTING IT RIGHT OUTDOOR SPACES

1. A range of secluded and shared open spaces are provided, including a communal courtyard area, roof top area and individual patios for ground and second floor units.
2. All internal living spaces on the ground floor apartments are closely linked with shared outdoor deck areas. Privacy is maintained and balanced against the communal space via planting and hard landscaping features.
3. The building is stepped back from the neighbours to provide natural light into the apartments, the circulation space, and the adjacent building. Even though planning controls allowed this building to be built up to the boundary, providing a spacious, light area for outlook and circulation adds value to both buildings.
4. Roofs gardens and communal spaces have been included on each building to take advantage of the spectacular views from the Surrey Crescent ridge. Ground level communal space was not viable given the substantial area of the site that is taken up by the private lane. The roof gardens have been orientated to be shielded from the south west prevailing winds.



Looking into the internal courtyard which opens out on individual units on the second floor.

## GETTING IT RIGHT OUTDOOR SPACES

1. The balconies are large enough to allow the residents and guests to have a bbq, and sit down together around a table.
2. Internal living areas are well integrated with the balconies. Almost all of the apartments have either east/west or north facing balconies for good solar access, with only 2 apartments have south facing balconies. The lack of sun is balanced with having views over the Waitakere ranges.
3. All of the apartments have double glazing to minimise heat loss and reduce noise transmission. All habitable rooms have good natural solar access.
4. The floor to ceiling height is 2.7m. This is a more generous floor to ceiling height than the standard 2.4m, allows daylight to penetrate further into the apartment and gives an increased feeling of spaciousness.



Internal living spaces are well integrated with the balconies for added comfort and refuge.

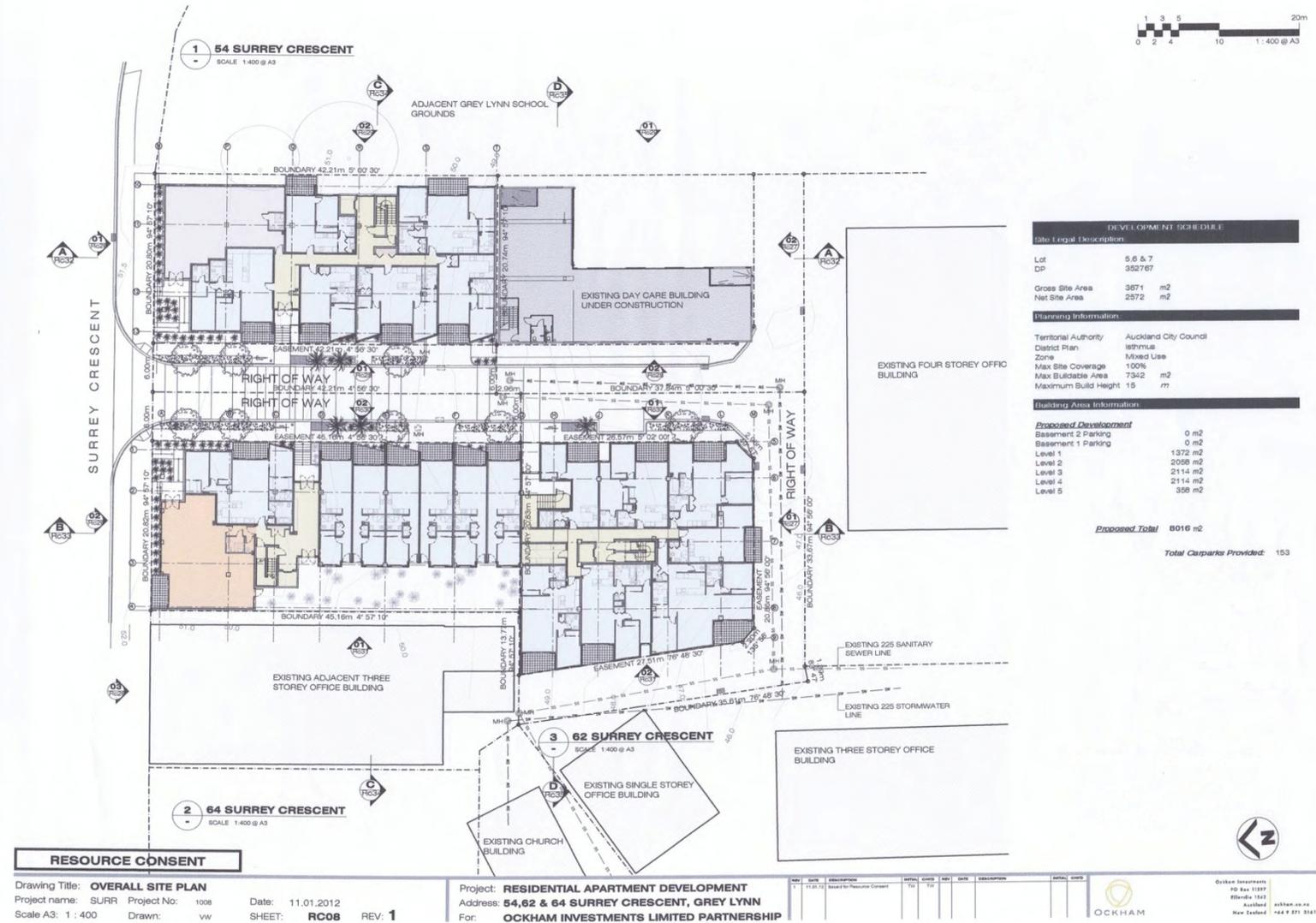
## GETTING IT RIGHT ACCOMMODATING THE CAR

1. There are 2 levels of basement car parking for each building. The design of the parking levels works with the slope of the site – at the ‘top’ of the site next to Surrey Crescent the parking is half a level above ground. At the bottom of the slope, where it is less visible it is a full floor above ground level.
2. All access to the carparking is taken off the lane – so no parking structures or doors are visible from Surrey Crescent.

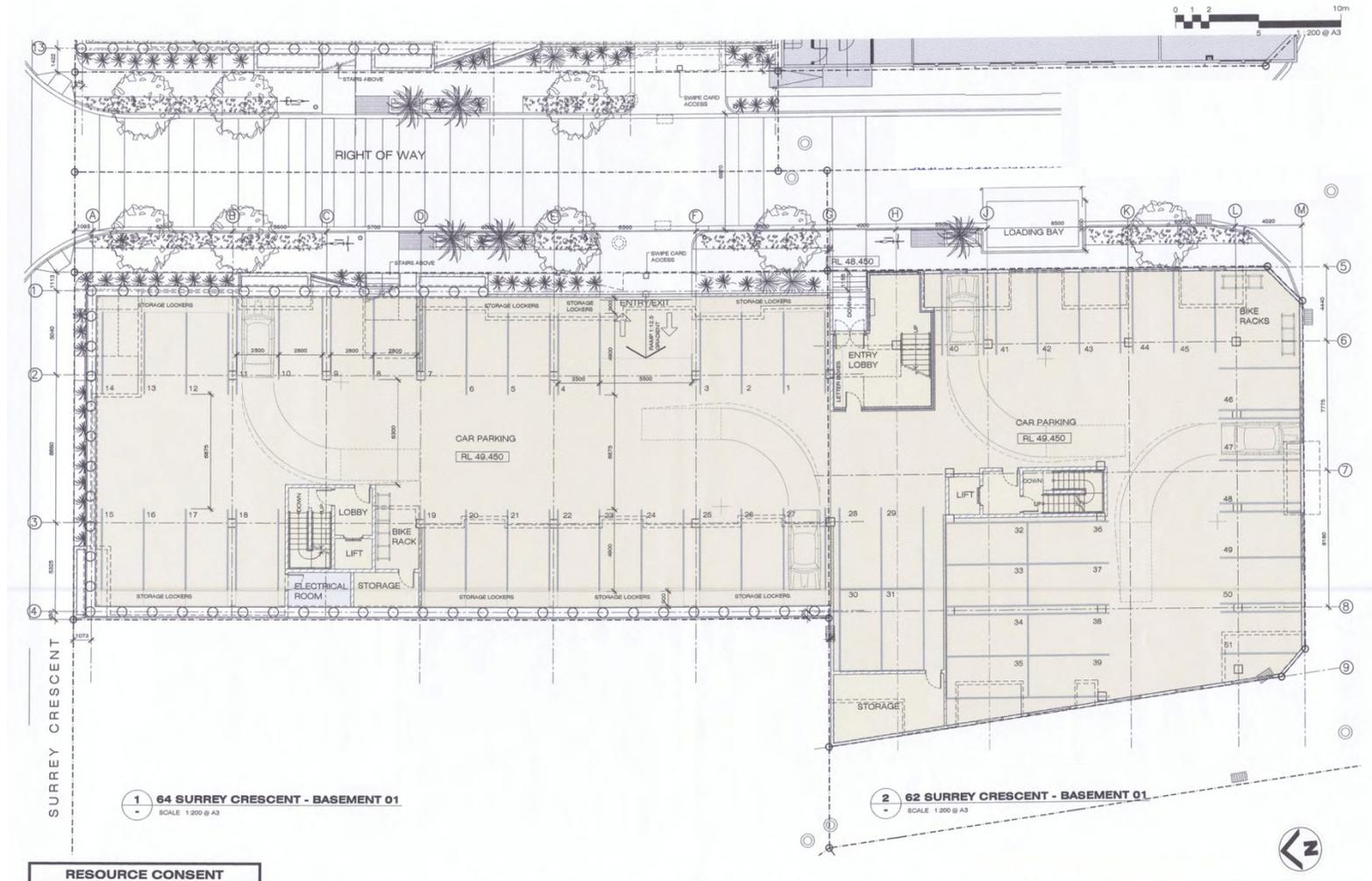


All access to the carparking (basement) is taken off the private lane and not visible from Surrey Crescent.

# GETTING IT RIGHT SITE PLAN



# GETTING IT RIGHT FLOOR PLANS



## RESOURCE CONSENT

Drawing Title: **64 & 62-BASEMENT 01 PLANS**  
 Project name: SURR Project No: 1008 Date: 02.12.2011  
 Scale A3: 1 : 200 Drawn: vw SHEET: **RC18** REV: **3**

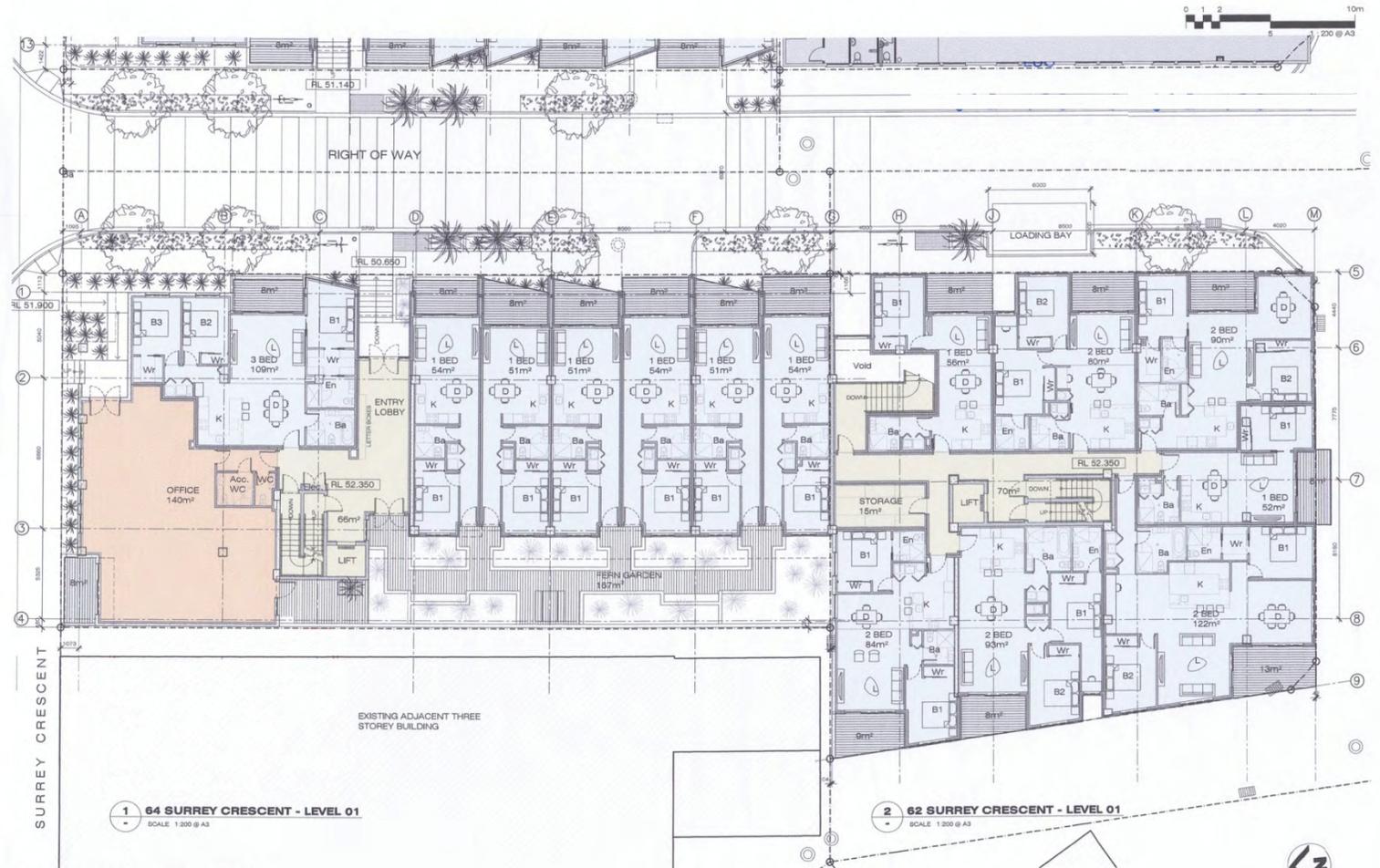
Project: **RESIDENTIAL APARTMENT DEVELOPMENT**  
 Address: **54,62 & 64 SURREY CRESCENT, GREY LYNN**  
 For: **OCKHAM INVESTMENTS LIMITED PARTNERSHIP**

| NO | DATE     | DESCRIPTION                 | BY | CHKD | APP'D | GROUP | REV | DATE | REVISION |
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| 1  | 18.12.11 | DRW ISSUE                   | vw | tw   |       |       |     |      |          |
| 2  | 18.12.11 | DRW ISSUE                   | vw | tw   |       |       |     |      |          |
| 3  | 18.09.12 | ISSUED FOR RESOURCE CONSENT | vw | tw   |       |       |     |      |          |



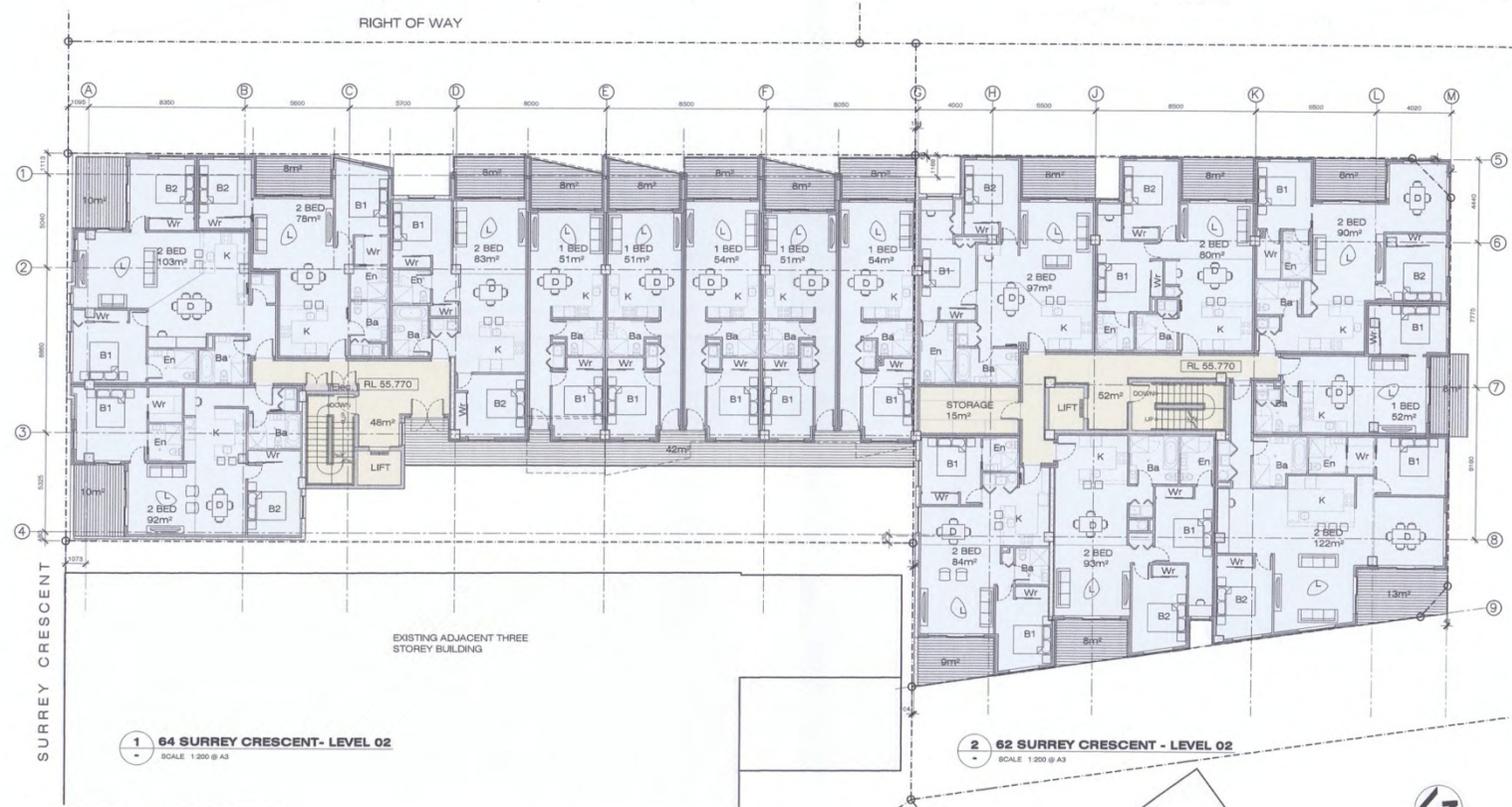
Ockham Investments  
 PO Box 10189  
 Ellerslie 1442  
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 ockham.co.nz  
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# GETTING IT RIGHT FLOOR PLANS



| RESOURCE CONSENT                      |  |  |  | Project: RESIDENTIAL APARTMENT DEVELOPMENT      |  |  |  | DATE       |  |  |  | OCCUPANCY |  |  |  |
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| Drawing Title: 64 & 62-LEVEL 01 PLANS |  |  |  | Address: 54, 62 & 64 SURREY CRESCENT, GREY LYNN |  |  |  | 14.12.11   |  |  |  | 14.12.11  |  |  |  |
| Project name: SURR Project No: 1008   |  |  |  | For: NEWTON'S SECOND LIMITED PARTNERSHIP        |  |  |  | 15.12.11   |  |  |  | 15.12.11  |  |  |  |
| Scale A3: 1:200 Drawn: ww             |  |  |  | SHEET: RC19 REV: 4                              |  |  |  | 16.12.11   |  |  |  | 16.12.11  |  |  |  |
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|                                       |  |  |  |   |  |  |  | 08.07.12</ |  |  |  |           |  |  |  |

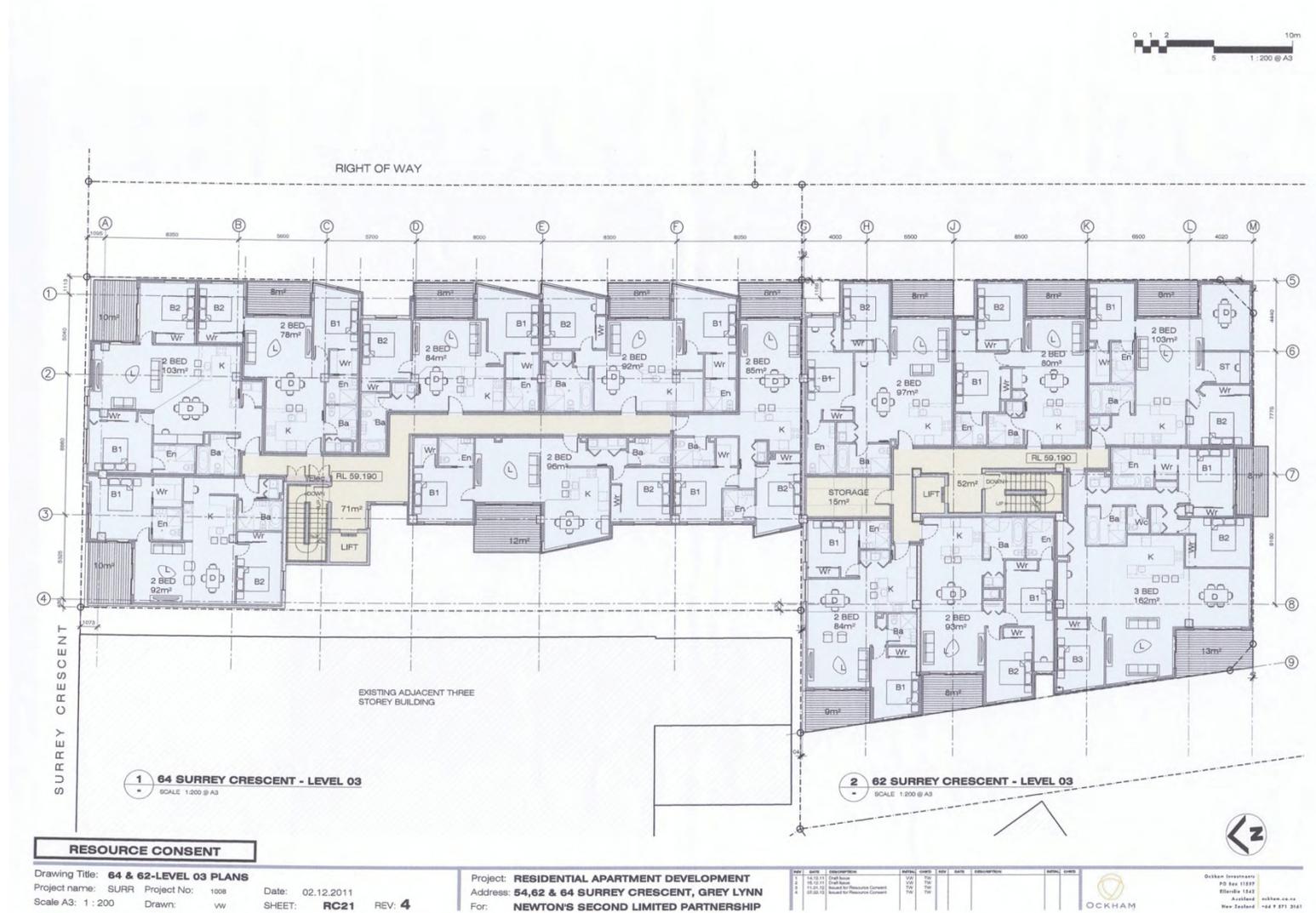
# GETTING IT RIGHT FLOOR PLANS



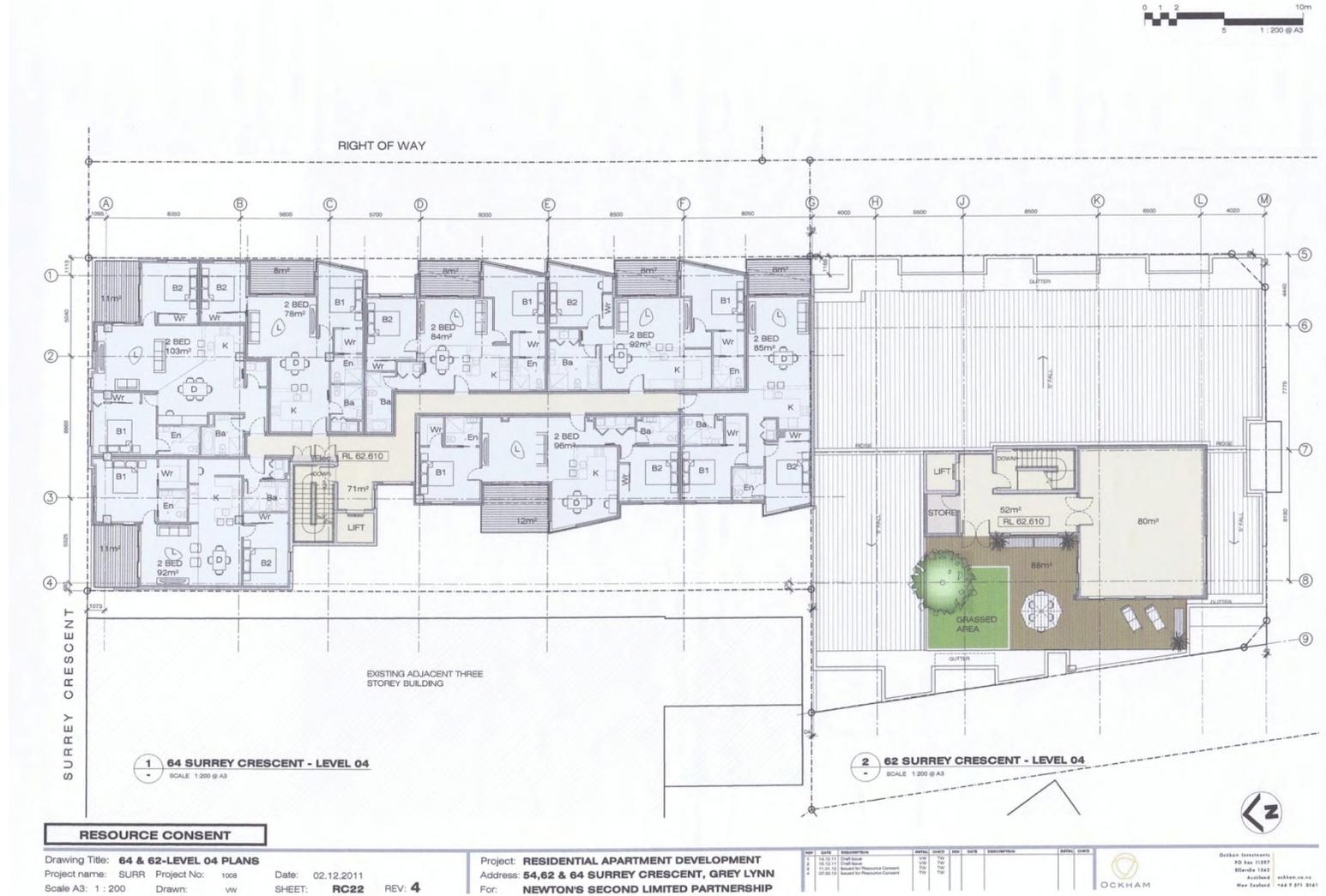
| RESOURCE CONSENT |   |                            |             |      |          |                            |    |      |          |
|------------------|---|----------------------------|-------------|------|----------|----------------------------|----|------|----------|
| Drawing Title:   | <b>64 &amp; 62-LEVEL 02 PLANS</b>                 |                            |             |      |          |                            |    |      |          |
| Project name:    | SURR  | Project No:                | 1008        |      |          |                            |    |      |          |
| Scale A3:        | 1 : 200   | Drawn:                     | vw          |      |          |                            |    |      |          |
| Date:            | 02.12.2011  | SHEET:                     | <b>RC20</b> |      |          |                            |    |      |          |
|                  |   | REV:                       | <b>4</b>    |      |          |                            |    |      |          |
| Project:         | <b>RESIDENTIAL APARTMENT DEVELOPMENT</b>          |                            |             |      |          |                            |    |      |          |
| Address:         | <b>54, 62 &amp; 64 SURREY CRESCENT, GREY LYNN</b> |                            |             |      |          |                            |    |      |          |
| For:             | <b>NEWTON'S SECOND LIMITED PARTNERSHIP</b>        |                            |             |      |          |                            |    |      |          |
| REV              | DATE  | DESCRIPTION                | BY          | CHKD | DATE     | DESCRIPTION                | BY | CHKD | DATE     |
| 1                | 14.11.11  | Issue for Resource Consent | vw          | vw   | 14.11.11 | Issue for Resource Consent | vw | vw   | 14.11.11 |
| 2                | 15.12.11  | Issue for Resource Consent | vw          | vw   | 15.12.11 | Issue for Resource Consent | vw | vw   | 15.12.11 |
| 3                | 02.02.12  | Issue for Resource Consent | vw          | vw   | 02.02.12 | Issue for Resource Consent | vw | vw   | 02.02.12 |

Ockham Investments  
PO Box 11837  
Edwards Road  
Auckland  
New Zealand +64 9 271 3141

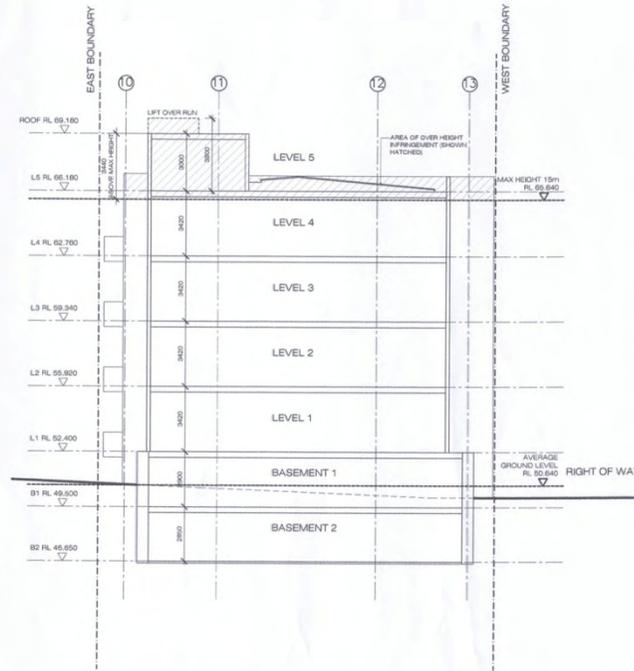
# GETTING IT RIGHT FLOOR PLANS



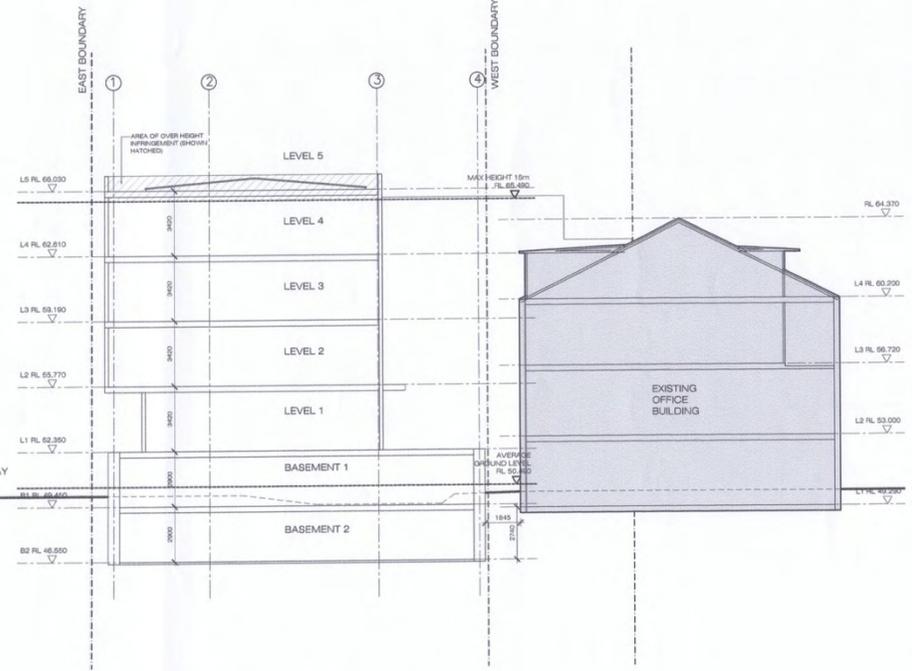
# GETTING IT RIGHT FLOOR PLANS



# GETTING IT RIGHT CROSS SECTION



**1 64 SURREY CRESCENT - SECTION C-C**  
SCALE 1:200 @ A3



**2 64 SURREY CRESCENT - SECTION C-C**  
SCALE 1:200 @ A3

## RESOURCE CONSENT

Drawing Title: **SECTION C-C**  
 Project name: SURR Project No: 1008 Date: 02.12.2011  
 Scale A3: 1:200 Drawn: vw SHEET: **RC34** REV: **2**

Project: **RESIDENTIAL APARTMENT DEVELOPMENT**  
 Address: **54,62 & 64 SURREY CRESCENT, GREY LYNN**  
 For: **OCKHAM INVESTMENTS LIMITED PARTNERSHIP**

| NO. | DATE     | DESCRIPTION                 | APPLIC. STATUS | APP. DATE | APP. NAME | DESCRIPTION | APPLIC. STATUS |
|-----|----------|-----------------------------|----------------|-----------|-----------|-------------|----------------|
| 1   | 02.12.11 | Drawn                       | 1/0            | 1/0       | vw        |             |                |
| 2   | 12.02.12 | Issued for Resource Consent | 1/0            | 1/0       | vw        |             |                |



Ockham Investments  
 PO Box 101870  
 Ellerslie 1421  
 Auckland ockham.co.nz  
 New Zealand +64 9 871 3161

# AUCKLAND DESIGN MANUAL

TE PUKA WHAKATAIRANGA | A TĀMAKI MAKAURAU

The Auckland Design Manual provides practical advice, best practice processes and detailed design guidance to enable us to design and build the world's most liveable city. The manual will enable us all to make informed choices, to build houses and develop our streets and neighbourhoods to not only look good but to ensure they are built to last, sustainable and give the best return on investment.

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