A **Bilfinger Real Estate**
company

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Henry Courtier
Pegasus Group
23 Hanover Square
London
W1S 1JB

17th December 2014

By Post & Email:

Dear Mr Courtier

74 CHARLOTTE STREET, LONDON W1T – REVISED PLANNING SCHEME, DAYLIGHT & SUNLIGHT

Further to your enquiry, we have have received the drawings which now form the current proposal and confirm that these are the representing the same scheme that was assessed in February 2012 and to which the GVA Schatunowski Brooks Daylight Report dated 17th February 2012 refers.

On that basis, the daylight analysis produced in that report will stand as the figures for the scheme you currently propose.

I trust this is satisfactory, however, should you require any further information please do not hesitate to contact me.

Yours sincerely

Ian Absolon
Head of GVA Schatunowski Brooks

Encl.

Report

GVA
10 Stratton Street
London
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Proposed Redevelopment of 74 Charlotte Street, London W1P 4QH

Daylight/Sunlight

17th February 2012

CONTENTS

Appendices

1. Introduction

1.1 GVA Schatunowski Brooks have been instructed by KCB Geotechnics SND to provide daylight/sunlight advice.

1.2 We have been provided with proposed drawings from Darling Associates architects, drawing series (PL) 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016. We have also been provided with topographical survey information from Aworth Surveys drawing series 3963 and 4101.

1.3 We have attended site and reviewed the adjacent properties in order to ascertain the residential use, as well as reviewing the Council Tax planning records.

2. Executive Summary

2.1 The assessment results have demonstrated that the neighbouring residential occupants will continue to enjoy high levels of daylight and sunlight in accordance with the BRE guidelines. There will be no noticeable loss in daylight or sunlight with the proposed development in place.

2.2 The internal daylighting assessments undertaken have demonstrated that the inner lightwell areas will pass the BRE guideline recommendations when reviewing the Average Daylight Factor assessments.

2.3 We therefore conclude that the proposed development complies with the BRE guidelines and there should be no reason for refusal with regard to this planning application relating to daylight/sunlight.

3. Daylight/Sunlight Planning Principles

3.1 The Building Research Establishment (BRE) guidelines 2011 – Site Layout Planning for Daylight and Sunlight: a guide to good practice is the document referred to by most local authorities. The BRE Guide covers amenity requirements for sunlight and daylight to buildings around any development site.

3.2 The introduction to the guidelines state: -

"*The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and this document should not be seen as an instrument of planning policy. Its aim is to help rather than constrain the developer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of the many factors in site layout design.*"

Daylighting

3.3 The requirements governing daylighting to existing residential buildings around a development site are set out in Part 2.2 of the guidelines. The amount of light available to any window depends upon the amount of unobstructed sky that can be seen from the centre of the window under consideration. The amount of visible sky and consequently the amount of available skylight is assessed by calculating the vertical sky component at the centre of the window. The guidelines advise that bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. The guidelines also suggest that distribution of daylight within rooms is reviewed although bedrooms are considered to be less important.

3.4 The vertical sky component can be calculated by using the skylight indicator provided as part of the guidelines, by mathematical methods using what is known as a waldram diagram or by 3D CAD modelling.

3.5 The guidelines states the following:-

"*If this vertical sky component is greater than 27% then enough skylight should still be reaching the window of the existing building. Any reduction below this level should be kept to a minimum. If the vertical sky component with the new development in place, is both less than 27% and less than 0.8 times its former value, then occupants of the existing building will notice the reduction in the amount of skylight.*"

3.6 It must be interpreted from this criterion that a 27% vertical sky component (VSC) constitutes adequacy, but where this value cannot be achieved a reduction of up to 0.8 times its the former value (this is the same as saying a 20% reduction when compared against the existing condition) would not be noticeable and would not therefore be considered material.

3.7 The VSC calculation only measures light reaching the outside plane of the window under consideration, so this is potential light rather than actual. Depending upon the room a window size, the room may still be adequately lit with a lesser VSC value than the target values referred to above.

3.8 Appendix C of the BRE guidelines sets out various more detailed tests that assess the interior daylight conditions of rooms. These include the calculation of the average daylight factors (ADF) and no sky-lines. The ADF value determines the level of interior illumination that can be compared with the British Standard, BS 8206: Part 2. This recommends a minimum of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.

3.9 The no sky-line, or daylight distribution contour shows the extent of light penetration into the room at working plane level, 850mm above floor level. If a substantial part of the room falls behind the no sky-line contour, the distribution of light within the room may look poor.

Sunlighting

3.10 Requirements for protection of sunlighting to existing residential buildings around a development site are set out in Part 3.2 of the BRE guidelines. There is a requirement to assess windows of surrounding properties where the main windows face within 90 degrees of due south. The calculations are taken at the window reference point at the centre of each window on the plane of the inside surface of the wall. The guidelines further state that kitchens and bedrooms are less important in the context of considering sunlight, although care should be taken not to block too much sun. The guidelines sets the following standard:-

"If this window reference point can receive more than one quarter of annual probable sunlight hours, including at least 5% of annual probable sunlight hours during the winter months of 21st September and 21st March, then the room should still receive enough sunlight. The sunlight availability indicator in Appendix A can be used to check this.

Any reduction in sunlight access below this level should be kept to a minimum. If the available sunlight hours are both less than the amount given and less than 0.8 times their former value, either over the whole year or just during the winter months then the occupants of the existing building will notice the loss of sunlight."

3.11 To summarize the above, a good level of sunlight to a window is 25% annual probable sunlight hours, of which 5% should be in winter months. Where sunlight levels fall below the suggested level, a comparison with the existing condition is reviewed and if the ratio reduction is within 0.8 (the same as saying a 20% reduction) its former value then the sunlight loss will not be noticeable. Sunlight reduction that fall below 0.8, i.e. 0.7 (greater than 20%) then the sunlight losses will be noticed by the occupants.

4. Adjoining Properties

4.1 We have undertaken assessments to the neighbouring properties that contain residential habitable rooms.

4.2 The assessment results are shown in Appendix I of this report, with an explanation of the results below.

4 Charlotte Mews

4.3 We have attended site and reviewed the planning portal information in order to ascertain what the room uses are for the windows to the rear of 4 Charlotte Mews. We note that the Council Tax records and the planning application shows residential use to this property. However we note that at first floor level the two windows to the rear elevation appear to light a staircase and bathroom. Both of these uses are identified as non-habitable use and do not require daylight assessment.

4.4 At second floor level a bedroom is identified, although the planning application reference 9100733 dated 1991 does not show any windows to the rear second floor level. However from site inspection there are two windows at second floor level. It is most likely that at least one window serves a bathroom. If one of the windows were to serve a bedroom, high levels of daylight will be maintained with the proposed development in place. We form this view as the 25 degree angle test has been applied at second floor level, with an angle of 21 degrees from over 70 Charlotte

Street. It is evident that irrespective of the height of the proposed development, good levels of light will be maintained from over the surrounding properties.

4.5 We therefore conclude that 4 Charlotte Mews will not be affected by the proposed development and good levels of daylight will be maintained in the proposed condition.

81-87 Charlotte Street

4.6 These properties appear to contain residential use and from reviewing the Council Tax records this should be the case. We have undertaken assessments to the basement, ground, first, second, third and fourth floor levels. To some of these properties the ground floor level is not residential use and this is applicable to 81, 83 and 85 Charlotte Street.

4.7 As these properties are facing due north, sunlight is not an issue and need not be assessed.

4.8 With regard to the daylight assessments, when reviewing the vertical sky component (VSC) it is evident that there will be no noticeable loss in daylight with the proposed development in place. The ADF assessments to all of the rooms demonstrate a good level of daylight will be maintained in the proposed condition and there is little or no loss in daylight in comparison to the existing condition. The no skyline assessments, which have been based on estimated room layouts, demonstrate there is little or no reduction in daylight with the proposed development in place, ensuring that the occupants will not experience a noticeable reduction in daylight.

Internal Daylighting Levels

4.9 We have undertaken an assessment to the lowest habitable room within the inner courtyard area of the proposal. The assessment has been undertaken at first floor level and reviews the bedroom that is facing towards Charlotte Mews.

4.10 The average daylight factor assessment to this bedroom demonstrates that the room will achieve 1.27% ADF, whereas the BRE guidelines suggest a level of 1.0% ADF complies with the BRE guidelines. As the rooms above are of similar layout and size, we conclude that the rooms above will obtain even higher levels of daylight, complying with the BRE guidelines.

4.11 The future occupants of this property will obtain good levels of daylight with the proposed development in place.

5. Conclusion

5.1 We have undertaken assessments to the neighbouring residential properties. The assessments have demonstrated that good levels of daylight and sunlight will be maintained in the proposed condition, ensuring that the neighbouring adjoining owners will not experience a noticeable reduction in light.

5.2 The internal daylight assessment has demonstrated that the future occupants will obtain good levels of daylight in the proposed condition.

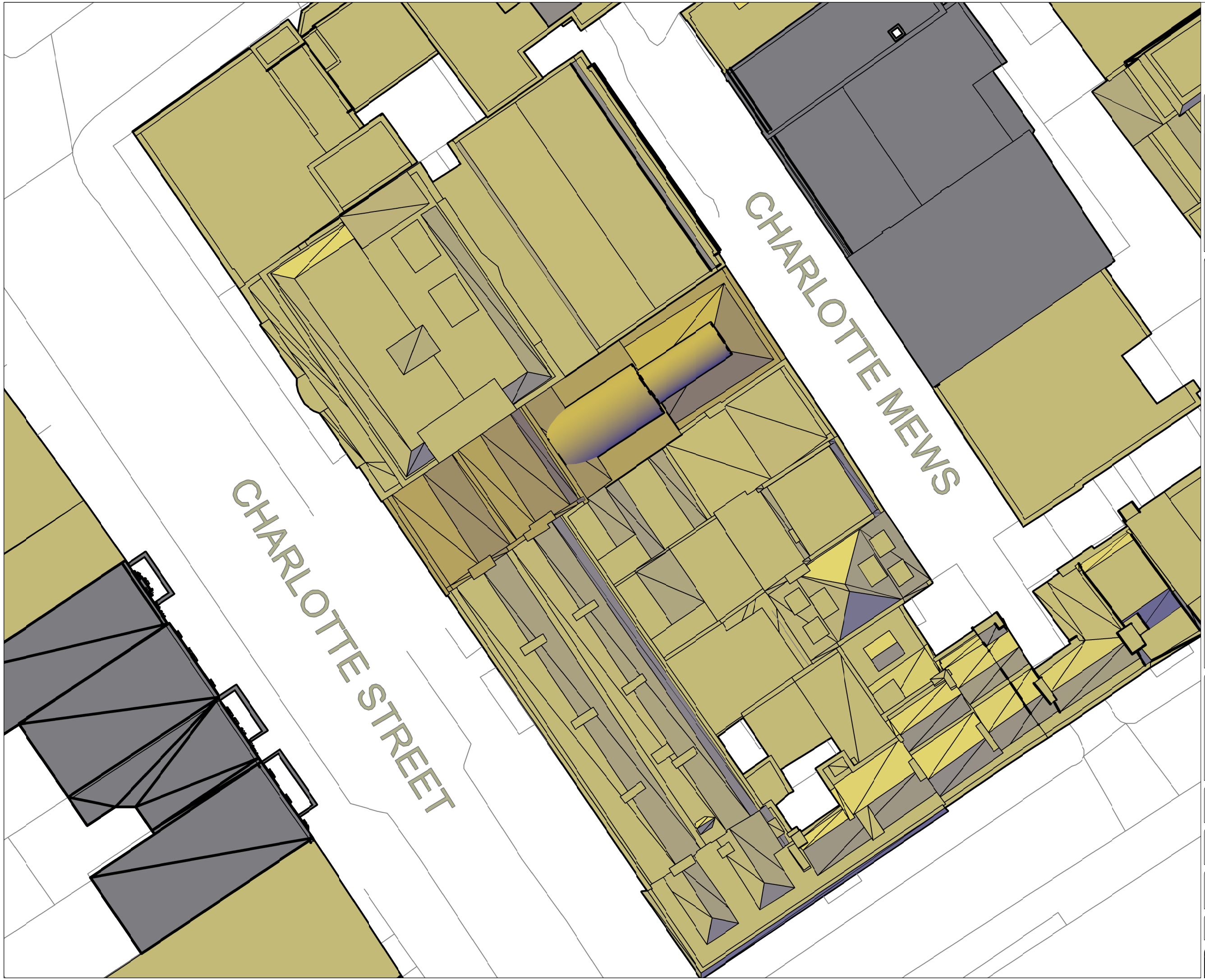
5.3 We therefore conclude that there should be no reason for refusal for this proposed development on daylight/sunlight grounds.

Report

Appendices

Report

Appendix I – Assessment Results



Legend

Daylight

- EXISTING SITE
- PROPOSED SCHEME
- ANALYSED BUILDING
- SURROUNDING BUILDING

Sources of Information

EXISTING AND SURROUNDING BUILDINGINGS
AWORTH SURVEY CONSULTANTS

3963_1, 3963_2, 3963_3, 3963_4, 3963_5, 3963_6
3963_7, 3963_8, 3963_9
4101_1, 4101_2, 4101_3, 4101_4

PROPOSED BUILDING
DARLING ASSOCIATES ARCHITECTS

(PL) 002, (PL) 003, (PL) 004, (PL) 005, (PL) 006,
(PL) 007, (PL) 008, (PL) 009, (PL) 010, (PL) 011,
(PL) 012, (PL) 013, (PL) 014, (PL) 015, (PL) 016,

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Project Name
74 CHARLOTTE STREET

Client
KCB GEOTECHNICS

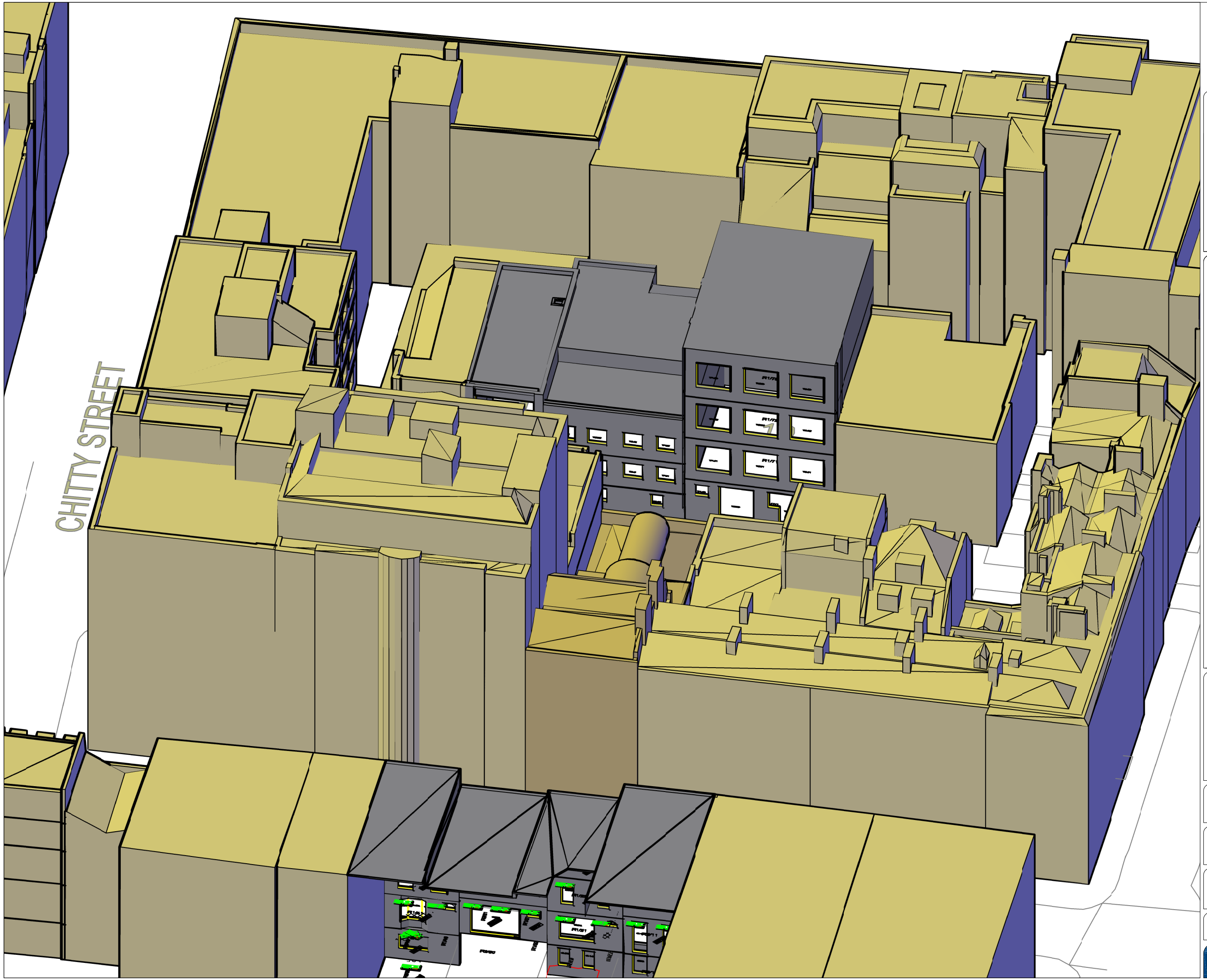
Drawing Title
EXISTING SITE PLAN

Drawn By	Chk'd By	Scale @ A3	Date
MO	-	1:250	17/02/12

Project No.	Drawing No.	Revision
CH133 - 06	017	-

DAYLIGHT

A3



Legend

Daylight

- EXISTING SITE
- PROPOSED SCHEME
- ANALYSED BUILDING
- SURROUNDING BUILDING

Sources of Information

EXISTING AND SURROUNDING BUILDINGINGS
AWORTH SURVEY CONSULTANTS

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3963_7, 3963_8, 3963_9
4101_1, 4101_2, 4101_3, 4101_4

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DARLING ASSOCIATES ARCHITECTS

(PL) 002, (PL) 003, (PL) 004, (PL) 005, (PL) 006,
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(PL) 012, (PL) 013, (PL) 014, (PL) 015, (PL) 016,

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Project Name
74 CHARLOTTE STREET

Client
KCB GEOTECHNICS

Drawing Title
EXISTING 3D VIEW

Drawn By	Chk'd By	Scale @ A3	Date
MO	-	1:250	17/02/12

Project No.	Drawing No.	Revision
CH133 - 06	018	-

DAYLIGHT

A3

Do not scale this drawing.
All dimensions to be checked on site. Drawing to be read in conjunction with any specifications, schedules and Consultants drawings and details.

Legend

Daylight

- EXISTING SITE
- PROPOSED SCHEME
- ANALYSED BUILDING
- SURROUNDING BUILDING

Sources of Information

EXISTING AND SURROUNDING BUILDINGINGS
AWORTH SURVEY CONSULTANTS

3963_1, 3963_2, 3963_3, 3963_4, 3963_5, 3963_6
3963_7, 3963_8, 3963_9
4101_1, 4101_2, 4101_3, 4101_4

PROPOSED BUILDING
DARLING ASSOCIATES ARCHITECTS

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(PL) 012, (PL) 013, (PL) 014, (PL) 015, (PL) 016,

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Project Name
74 CHARLOTTE STREET

Client
KCB GEOTECHNICS

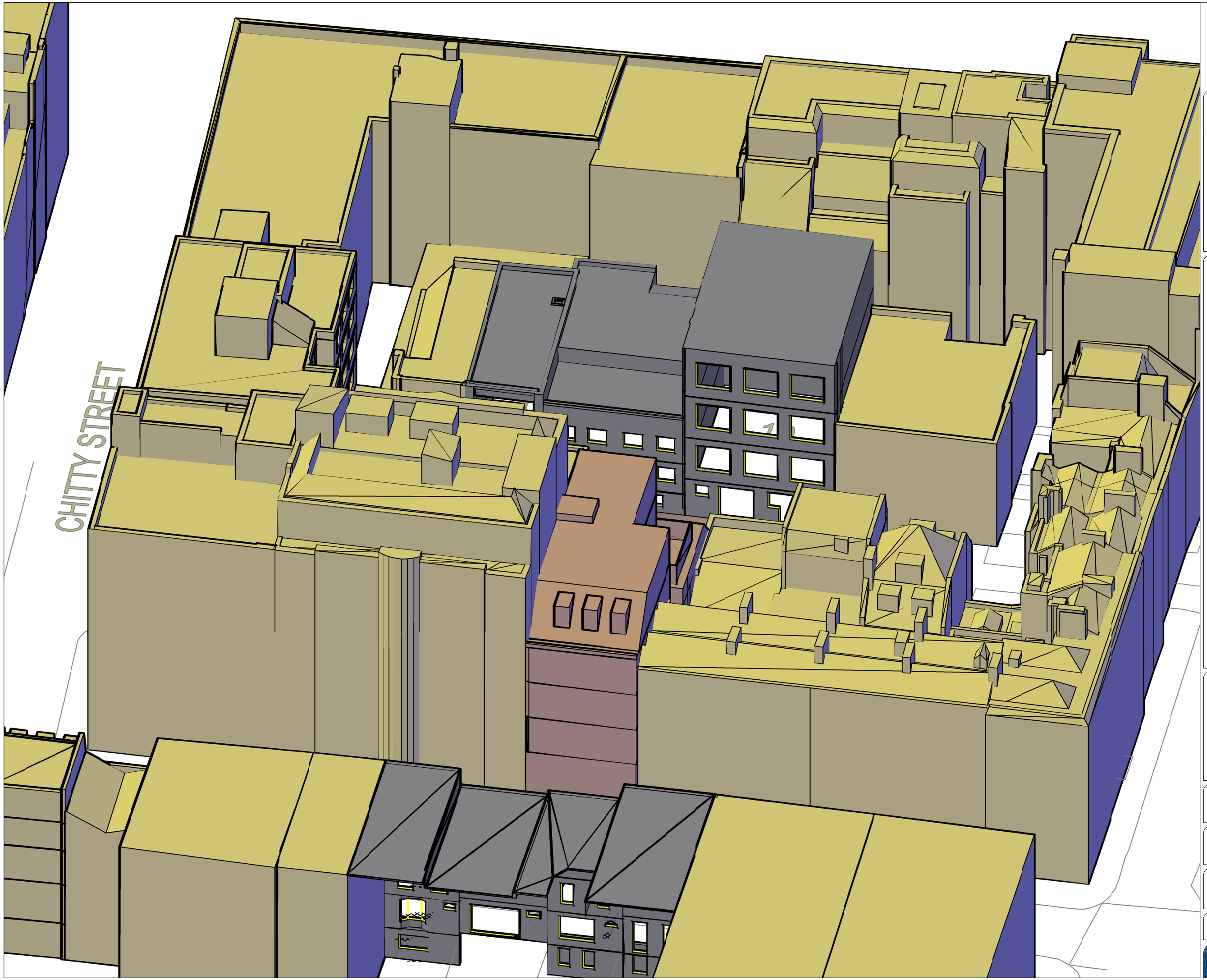
Drawing Title
PROPOSED SITE PLAN

Drawn By	Chk'd By	Scale @ A3	Date
MO	-	1:250	17/02/12

Project No.	Drawing No.	Revision
CH133 - 06	019	-

DAYLIGHT

A3



Legend

Daylight

- EXISTING SITE
- PROPOSED SCHEME
- ANALYSED BUILDING
- SURROUNDING BUILDING

Sources of Information

EXISTING AND SURROUNDING BUILDINGINGS
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3963_7, 3963_8, 3963_9
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Project Name
74 CHARLOTTE STREET

Client
KCB GEOTECHNICS

Drawing Title
PROPOSED 3D VIEW

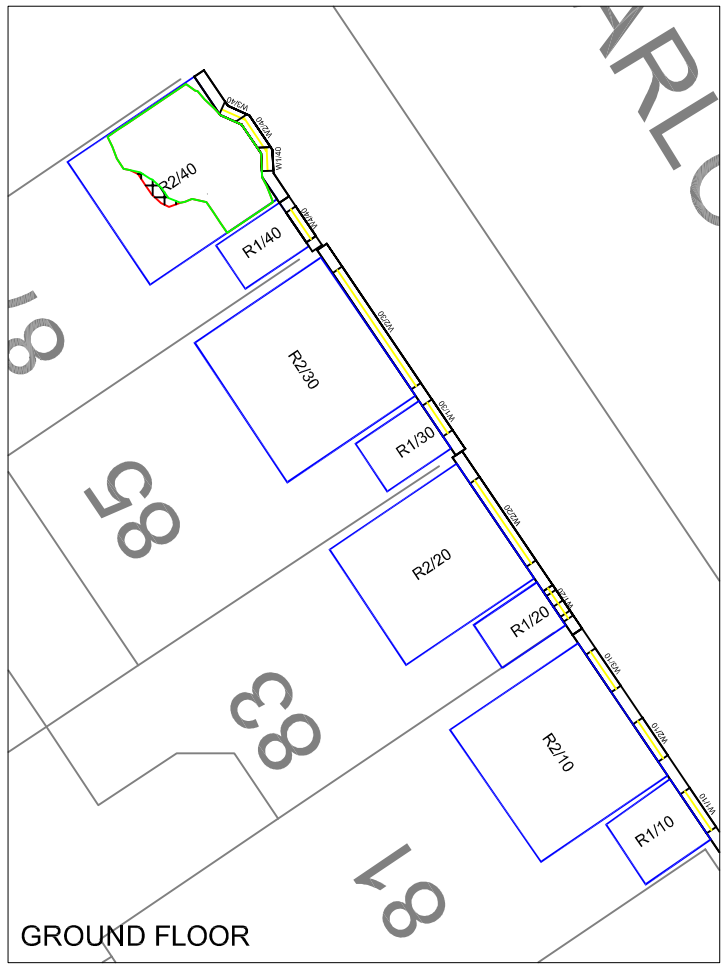
Drawn By	Chk'd By	Scale @ A3	Date
MO	-	1:250	17/02/12

Project No.	Drawing No.	Revision
CH133 - 06	020	-

DAYLIGHT

A3

BASEMENT FLOOR



GROUND FLOOR

FIRST FLOOR

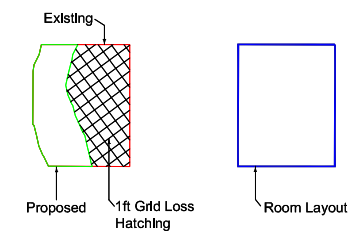
SECOND FLOOR

THIRD FLOOR

FOURTH FLOOR

Legend

Daylight



Existing No-Sky Line Contour

Proposed No-Sky Line Contour

Sources of Information

EXISTING AND SURROUNDING BUILDINGINGS
AWORTH SURVEY CONSULTANTS

3963_1, 3963_2, 3963_3, 3963_4, 3963_5, 3963_6
3963_7, 3963_8, 3963_9
4101_1, 4101_2, 4101_3, 4101_4

PROPOSED BUILDING
DARLING ASSOCIATES ARCHITECTS

(PL) 002, (PL) 003, (PL) 004, (PL) 005, (PL) 006,
(PL) 007, (PL) 008, (PL) 009, (PL) 010, (PL) 011,
(PL) 012, (PL) 013, (PL) 014, (PL) 015, (PL) 016,

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Project Name
74 CHARLOTTE STREET

Client
KCB GEOTECHNICS

Drawing Title
81-87 CHARLOTTE STREET
BASEMENT - FOURTH FLOOR

Drawn By	Chk'd By	Scale @ A3	Date
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Project No.	Drawing No.	Revision
CH133 - 06	021	-

DAYLIGHT

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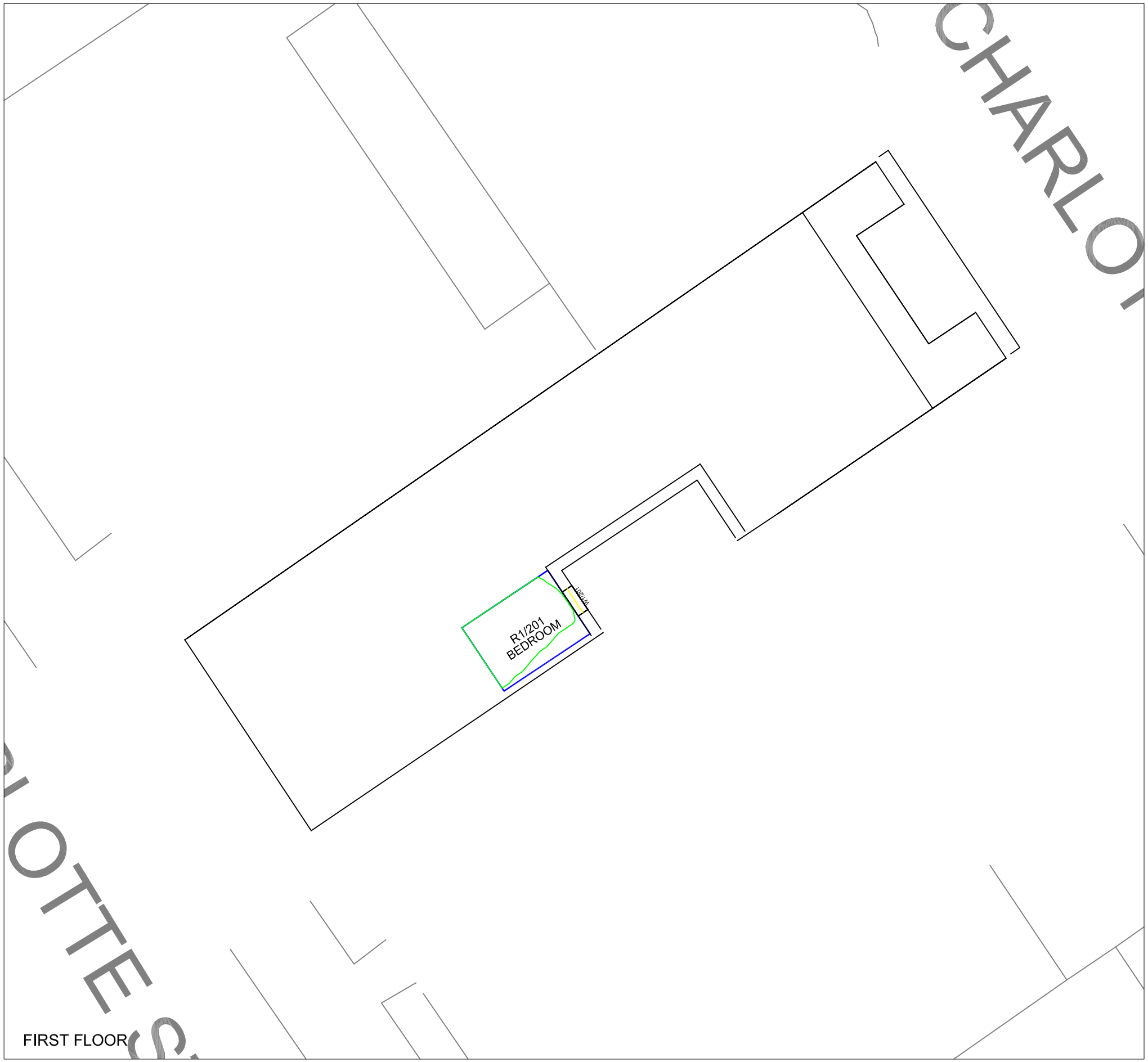

Legend

Daylight

Proposed

Room Layout

Proposed No-Sky Line Contour

Sources of Information

EXISTING AND SURROUNDING BUILDINGINGS
AWORTH SURVEY CONSULTANTS

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3963_7, 3963_8, 3963_9
4101_1, 4101_2, 4101_3, 4101_4

PROPOSED BUILDING
DARLING ASSOCIATES ARCHITECTS

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Project Name
74 CHARLOTTE STREET

Client
KCB GEOTECHNICS

Drawing Title
PROPOSED SCHEME
FIRST FLOOR

Drawn By	Chk'd By	Scale @ A3	Date
MO	-	1:150	17/02/12

Project No.	Drawing No.	Revision
CH133 - 07	022	-

DAYLIGHT

A3

DAYLIGHT ANALYSIS
74 CHARLOTTE STREET
17/02/2012

Room/Floor	Room Use	Window	%VSC			% Daylight Factor			Proposed No Sky	
			Exist	Prop	% Loss	Exist	Prop	% Loss	% of Room Area	% Loss of Existing
81 CHARLOTTE STREET										
BASEMENT FLOOR										
R1/9		W1/9	18.17	18.13	0.22%	2.54	2.54	0.24%	62.06%	0.00%
		W2/9	18.21	18.14	0.38%					
FIRST FLOOR										
R1/11		W1/11	27.03	26.96	0.26%	2.75	2.74	0.26%	98.78%	0.00%
R2/11		W2/11	26.64	26.50	0.53%	3.03	3.02	0.46%	98.40%	0.00%
		W3/11	26.19	26.00	0.73%					
SECOND FLOOR										
R1/12		W1/12	31.14	31.03	>27	2.62	2.61	0.38%	98.78%	0.00%
R2/12		W2/12	30.75	30.58	>27	2.90	2.89	0.48%	98.40%	0.00%
		W3/12	30.30	30.08	>27					
THIRD FLOOR										
R1/13		W1/13	34.23	34.10	>27	2.84	2.83	0.39%	99.39%	0.00%
R2/13		W2/13	33.86	33.69	>27	3.15	3.13	0.51%	98.84%	0.00%
		W3/13	33.43	33.20	>27					
FOURTH FLOOR										
R1/14		W1/14	36.70	36.60	>27	1.00	1.00	0.40%	98.53%	0.00%
R2/14		W2/14	36.39	36.24	>27	1.11	1.10	0.45%	98.01%	0.00%
		W3/14	36.06	35.86	>27					
83 CHARLOTTE STREET										
BASEMENT FLOOR										
R2/19		W1/19	16.16	16.04	0.74%	1.79	1.78	0.61%	50.19%	-1.03%
		W2/19	16.97	16.83	0.82%					
FIRST FLOOR										
R1/21		W1/21	24.98	24.72	1.04%	2.28	2.26	0.88%	95.92%	1.77%
		W2/21	24.26	23.98	1.15%					
SECOND FLOOR										
R1/22		W1/22	28.77	28.47	>27	1.94	1.93	0.87%	97.55%	0.37%
		W2/22	28.01	27.68	>27					
THIRD FLOOR										
R1/23		W1/23	31.80	31.51	>27	1.72	1.70	0.87%	97.91%	0.00%
		W2/23	31.04	30.72	>27					
85 CHARLOTTE STREET										
FIRST FLOOR										
R1/31		W1/31	24.21	23.81	1.65%	2.46	2.43	1.22%	98.74%	0.23%
R2/31		W2/31	23.67	23.25	1.77%	3.00	2.96	1.53%	97.06%	0.00%
		W3/31	23.18	22.73	1.94%					
SECOND FLOOR										
R1/32		W1/32	28.01	27.58	>27	1.89	1.87	1.27%	97.82%	0.35%
R2/32		W2/32	27.46	26.98	1.75%	2.32	2.28	1.51%	96.28%	0.00%
		W3/32	26.92	26.42	1.86%					

Room/Floor	Room Use	Window	%VSC			% Daylight Factor			Proposed No Sky	
			Exist	Prop	% Loss	Exist	Prop	% Loss	% of Room Area	% Loss of Existing
THIRD FLOOR										
R1/33		W1/33	31.26	30.86	>27	2.24	2.21	1.07%	98.97%	0.00%
R2/33		W2/33	30.71	30.27	>27	2.75	2.72	1.24%	98.14%	0.00%
		W3/33	30.16	29.70	>27					
87 CHARLOTTE STREET										
BASEMENT FLOOR										
R2/39		W1/39	13.07	12.92	1.15%	1.50	1.49	0.93%	33.19%	1.78%
GROUND FLOOR										
R2/40		W1/40	19.70	19.49	1.07%	3.02	3.00	0.63%	55.91%	3.14%
		W2/40	17.69	17.48	1.19%					
		W3/40	16.46	16.33	0.79%					
FIRST FLOOR										
R1/41		W1/41	21.52	21.18	1.58%	2.85	2.81	1.20%	80.72%	5.69%
		W2/41	20.87	20.58	1.39%					
SECOND FLOOR										
R1/42		W1/42	24.61	24.21	1.63%	3.15	3.11	1.21%	87.03%	0.94%
		W2/42	23.87	23.54	1.38%					
THIRD FLOOR										
R1/43		W1/43	28.06	27.69	>27	3.22	3.19	0.99%	92.69%	0.00%
		W2/43	27.29	26.99	1.10%					
FOURTH FLOOR										
R1/44		W1/44	31.04	30.81	>27	3.82	3.79	0.68%	98.22%	0.00%

AMENITY ANALYSIS
74 CHARLOTTE STREET
17/02/2012

Room/Floor	Room Use	Window	%VSC	%ADF	No Sky % of Room	%Sun Summer	%Sun Winter	%Sun Total
PROPOSED SCHEME								
FIRST FLOOR								
R1/201	BEDROOM	W1/201	15.62	1.27	81.85%	24.00	0.00	24.00