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330 Church Street, Parramatta
Solar Access Assessment

Report Number 610.10310-R1

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Meriton Apartments Pty Ltd
Level 11
528 Kent Street
SYDNEY NSW 2000

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Solar Access Assessment

PREPARED BY:

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612
2 Lincoln Street Lane Cove NSW 2066 Australia

(PO Box 176 Lane Cove NSW 1595 Australia)
T: 61 2 9427 8100 F: 61 2 9427 8200
E: sydney@slrconsulting.com www.slrconsulting.com

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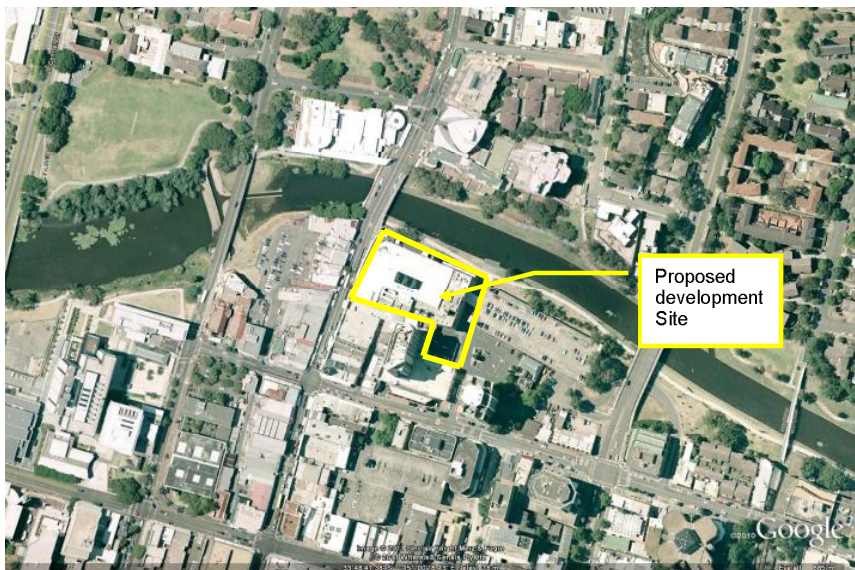
1 INTRODUCTION

SLR Consulting Pty Ltd (SLR) has been engaged Meriton Apartments Pty Ltd (Meriton) to assess the environmental impact of a proposed new development at 330 Church Street, Parramatta with respect to the natural lighting of the residential apartments.

1.1 Development Site

The site is bounded on the west by Church Street and on the north by the Parramatta River. The surrounding area contains a mixture of low to high rise buildings.

Figure 1 Site Location



1.2 Proposed Development Description

The proposed development consists of 3 buildings with a maximum height of 34 storeys. There are a total of 401 dwellings in the development. The following breakdown has been made using the latest plans provided by Meriton.

West Building

- 231 apartments over 33 storeys

East Building

- 161 apartments over 24 storeys

Podium Building

- Nine apartments over two storeys

Figure 2 3D view of proposed development



2 SOLAR ACCESS TO RESIDENTIAL BUILDINGS

2.1 Day Lighting Considerations

The State Environmental Planning Policy (SEPP) 65 supported by the Residential Flat Design Code - Part 03 Building Design, 'Rules of Thumb' is relevant to the assessment of the daylight access into residential components of the proposed development. The above regulation states that:

Living rooms and private open spaces for at least 70 % in a development should receive a minimum of three hours of direct sunlight between 9.00 am and 3.00 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.

Specific interest therefore lies in the solar access through the living areas windows and balconies of the residential apartments of the proposed development during the winter solstice, 21 June, between the hours of 9.00 am and 3.00 pm.

2.2 Solar Access Analysis

Using the latest 3D AutoCAD drawings package, sun's eye view diagrams were generated for each 15 minute interval between 9.00 am and 3.00 pm on the Winter Solstice (21 June).

Table 1 Direct sunlight for June 21st

Apartment type	Number of apartments	Number with 3 hours of sunlight	Percentage	Number with 2 hours of sunlight	Percentage
W1	17	17	100.0%	17	100.0%
W2	33	0	0.0%	0	0.0%
W3	32	0	0.0%	32	100.0%
W4	19	16	84.2%	19	100.0%
W5	19	19	100.0%	19	100.0%
W6	19	19	100.0%	19	100.0%
W7	33	33	100.0%	33	100.0%
W8	17	17	100.0%	17	100.0%
W9	13	13	100.0%	13	100.0%
W10	13	13	100.0%	13	100.0%
W11	16	16	100.0%	16	100.0%
Sub-total	231	163	70.6%	198	85.7%

Apartment type	Number of apartments	Number with 3 hours of sunlight	Percentage	Number with 2 hours of sunlight	Percentage
E1	22	22	100.0%	22	100.0%
E2	23	0	0.0%	23	100.0%
E3	24	0	0.0%	0	0.0%
E4	24	0	0.0%	24	100.0%
E5	24	0	0.0%	22	91.7%
E6	12	12	100.0%	12	100.0%
E7	12	12	100.0%	12	100.0%
E8	10	10	100.0%	10	100.0%
E9	10	10	100.0%	10	100.0%
Sub-total	161	66	41.0%	135	83.9%
P1-P9	9	9	100.0%	9	100.0%
Total	401	238	59.4%	342	85.3%

3 CONCLUSION

SLR Consulting Pty Ltd (SLR) has been engaged by Meriton Apartments Pty Ltd to assess the environmental impact of a proposed new development at 330 Church Street, Parramatta with respect to the natural lighting of the residential apartments.

The State Environmental Planning Policy (SEPP) 65 supported by the Residential Flat Design Code - Part 03 Building Design, 'Rules of Thumb' is relevant to the assessment of the daylight access into residential components of the proposed development. The above regulation states that:

Living rooms and private open spaces for at least 70 % in a development should receive a minimum of three hours of direct sunlight between 9.00 am and 3.00 pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.

Specific interest therefore lies in the solar access through the living areas windows and balconies of the residential apartments of the proposed development during the winter solstice, 21 June, between the hours of 9.00 am and 3.00 pm.

On the basis of the current Solar Access Analysis of the proposed development SLR has concluded the following:

- The proposed development provides **85.3%** of the residential development with at least 2 hours of sunlight on the Winter Solstice, between the hours of 9.00 am to 3.00 pm. This would comply with the suggested rule-of-thumb for solar access in "dense urban areas" by 15.3%. Solar access for individual building is summarised below:
 - For the West Building, % Apartments with 2 hrs of sunlight = **85.7%**
 - For the East Building, % Apartments with 2 hrs of sunlight = **83.9%**
 - For the Podium Building, % Apartments with 2 hrs of sunlight = **100.0%**
- The proposed development provides 59.4% of the residential dwellings with at least 3 hours of sunlight on the Winter Solstice, between the hours of 9.00 am to 3.00 pm.

4 CLOSURE

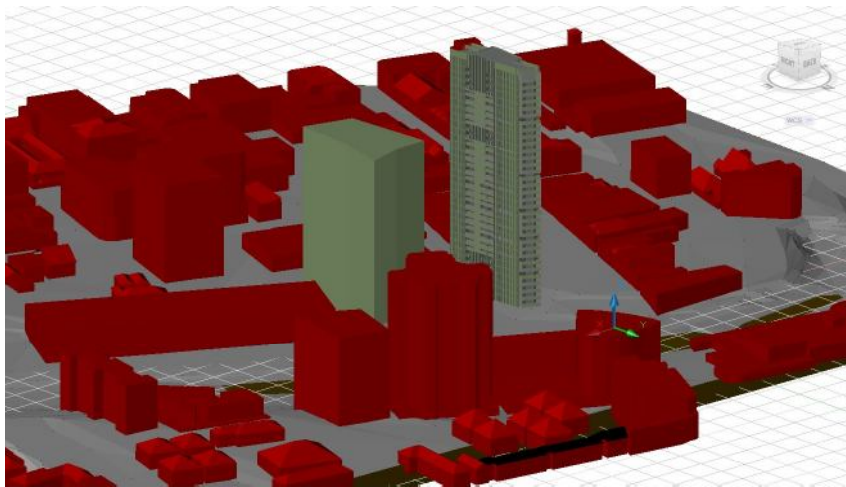
This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Meriton Apartments Pty Ltd. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR Consulting.

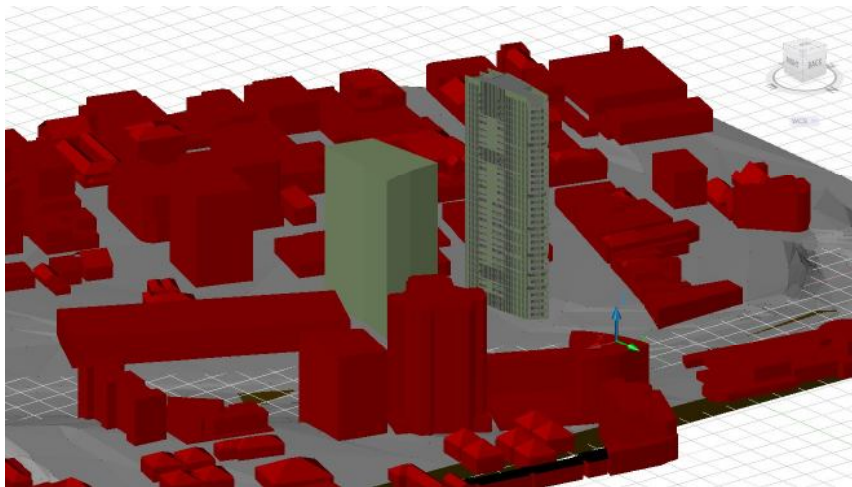
SLR Consulting disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Appendix A: Sun Eye Views

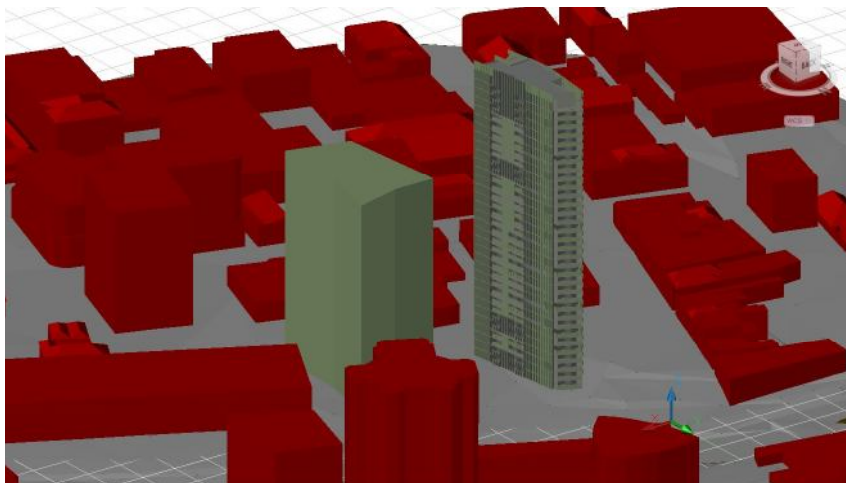
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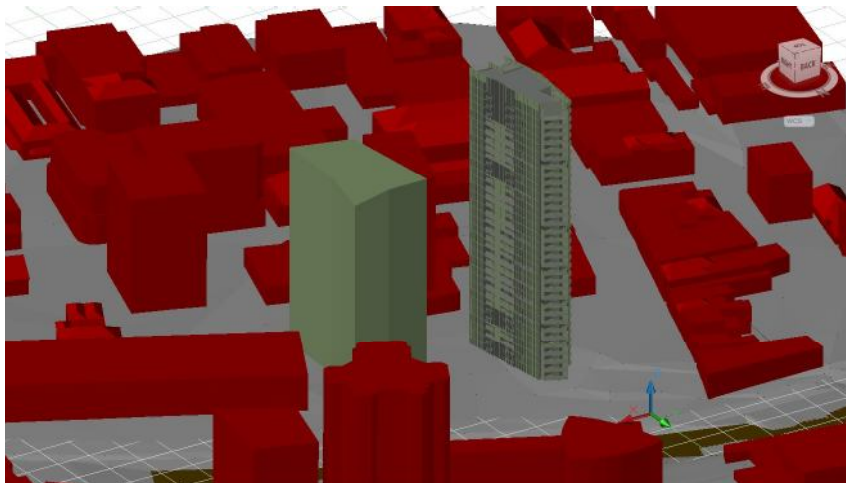
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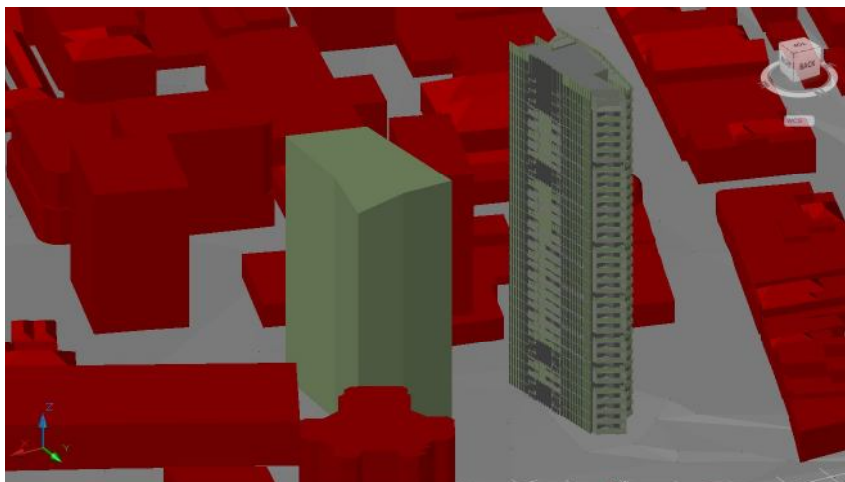
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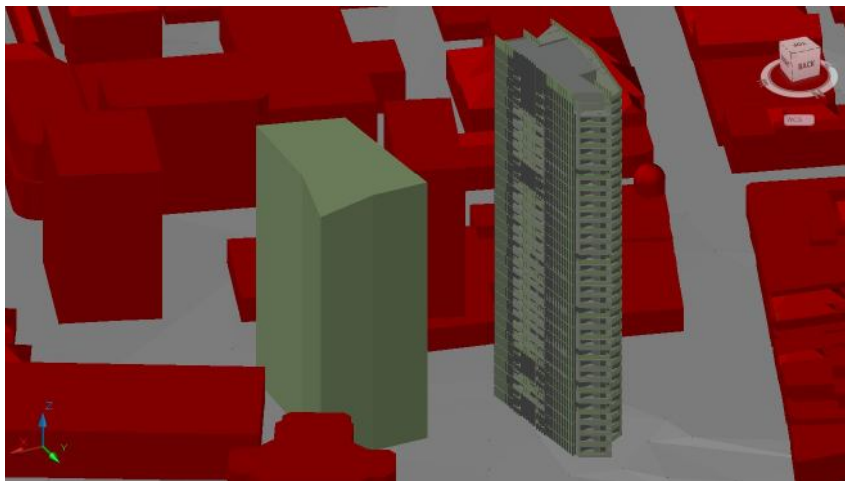
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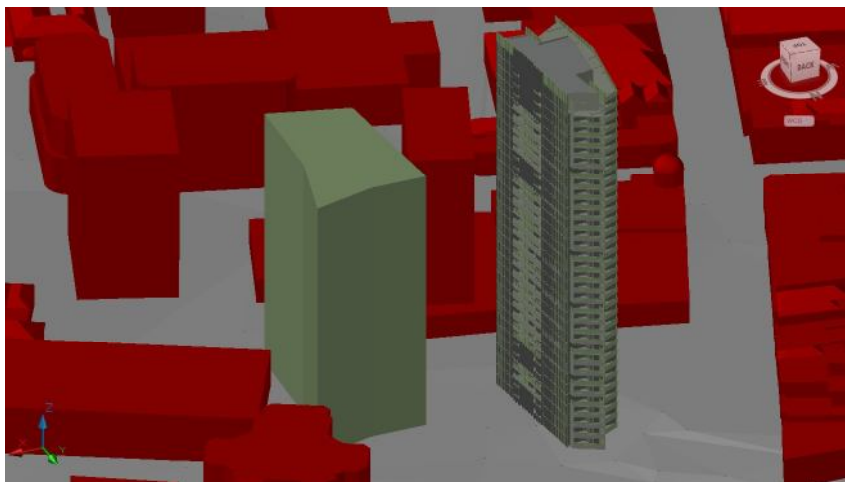
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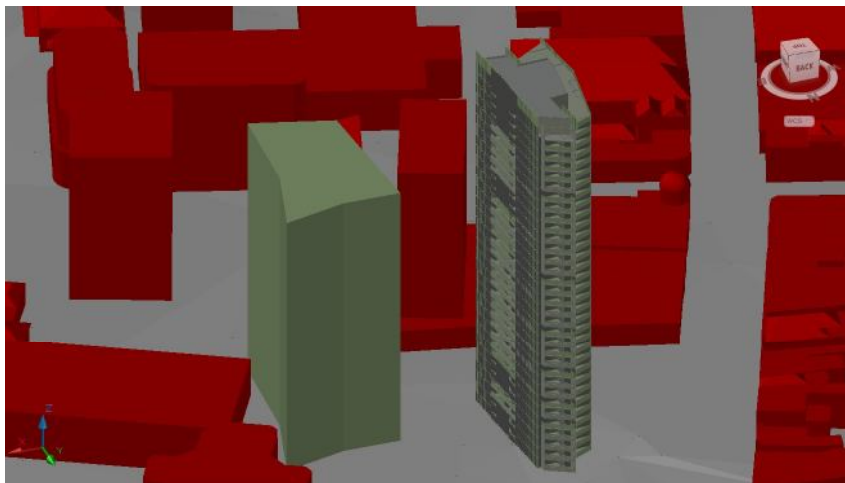
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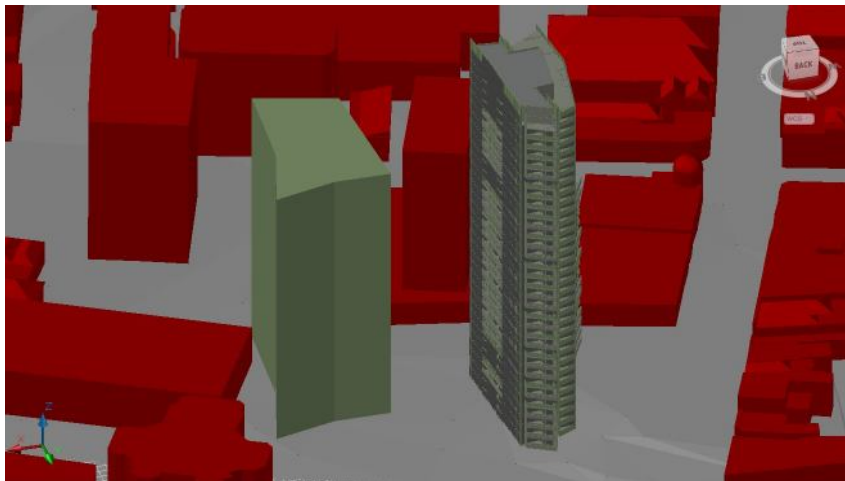
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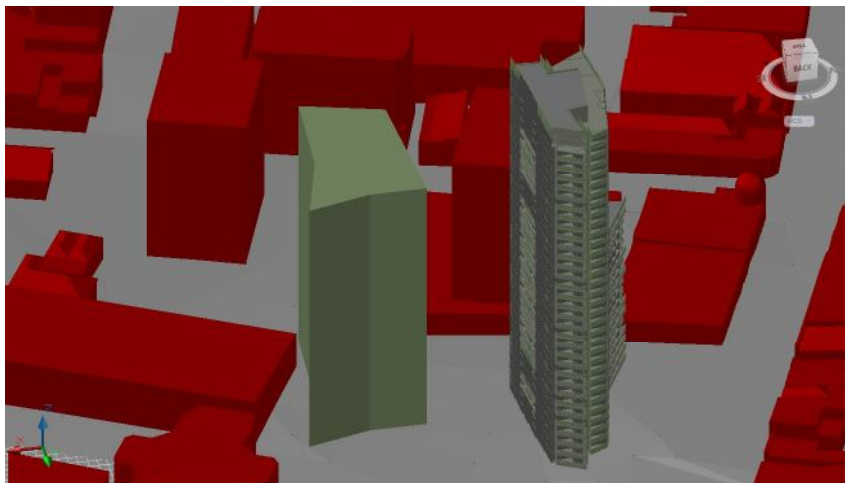
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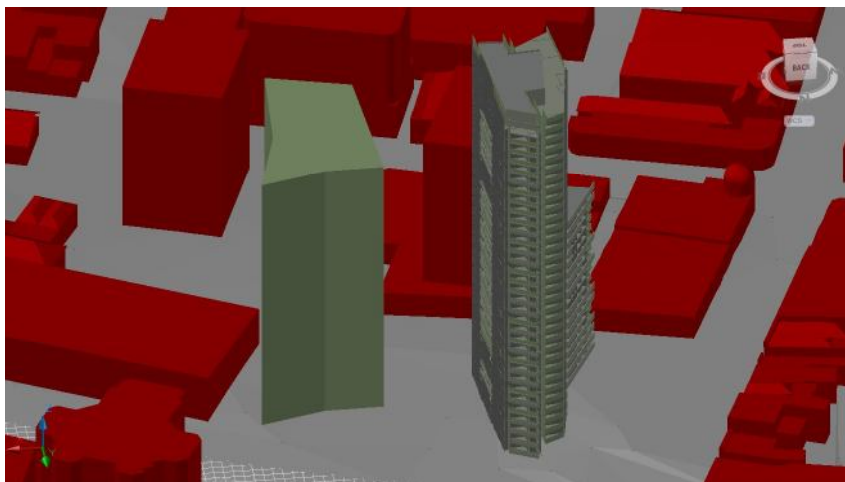
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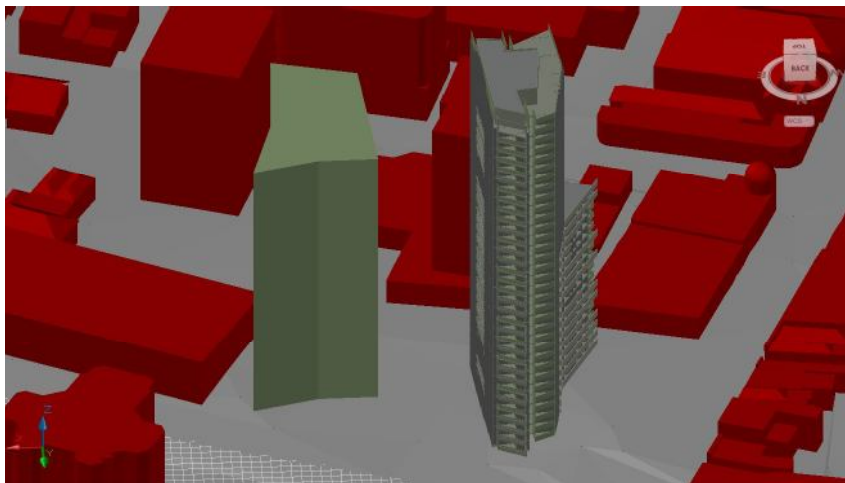
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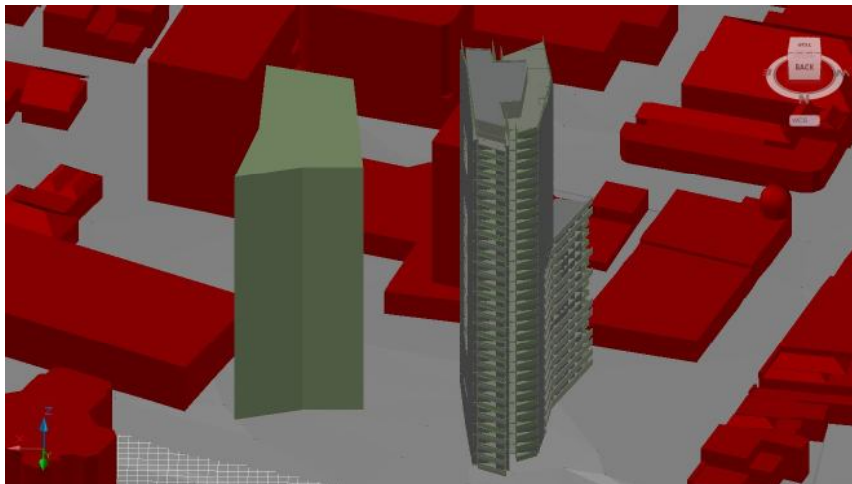
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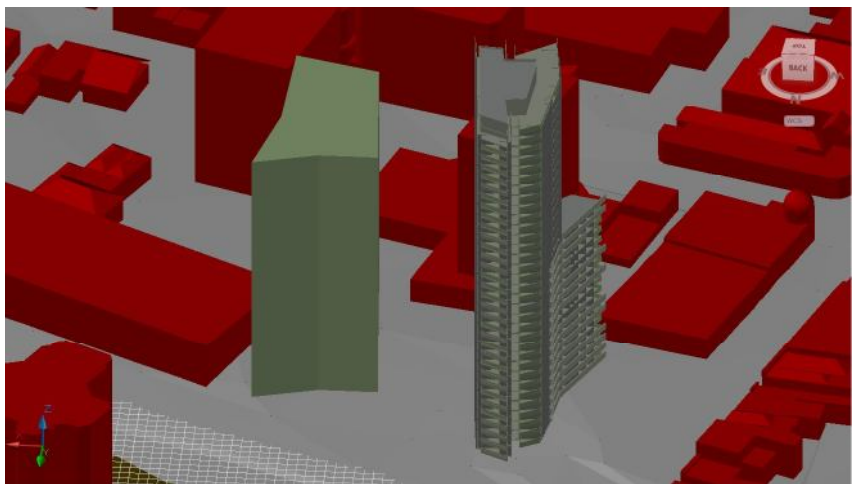
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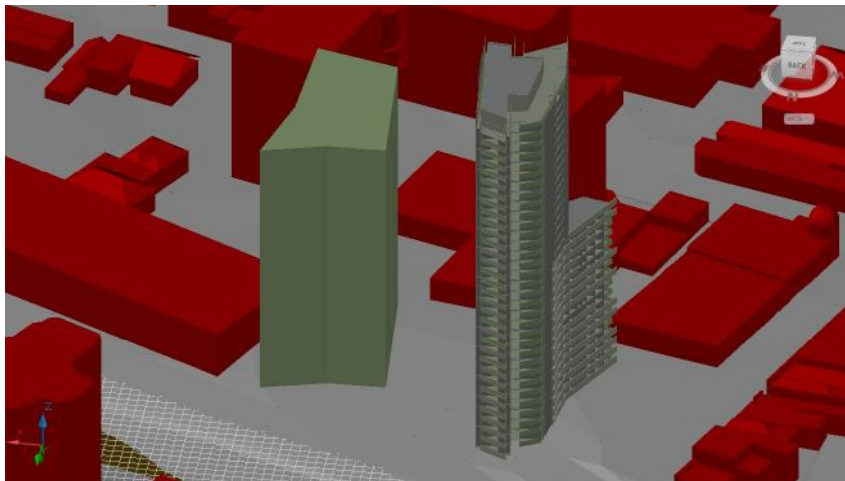
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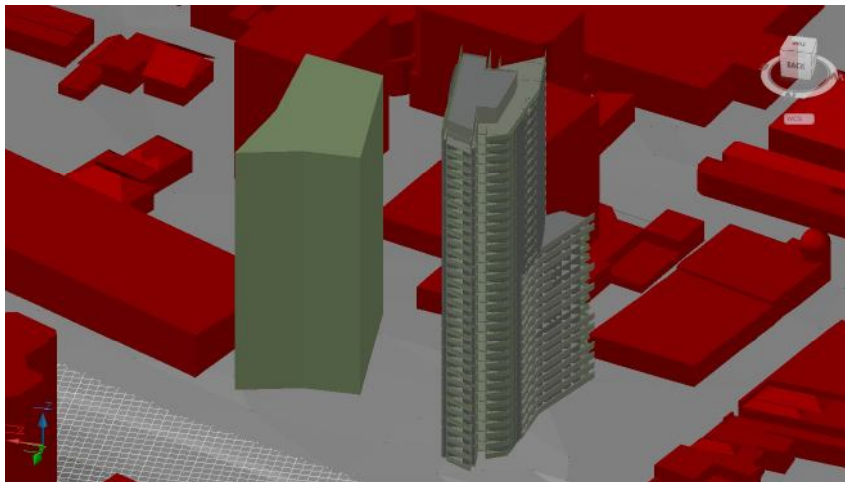
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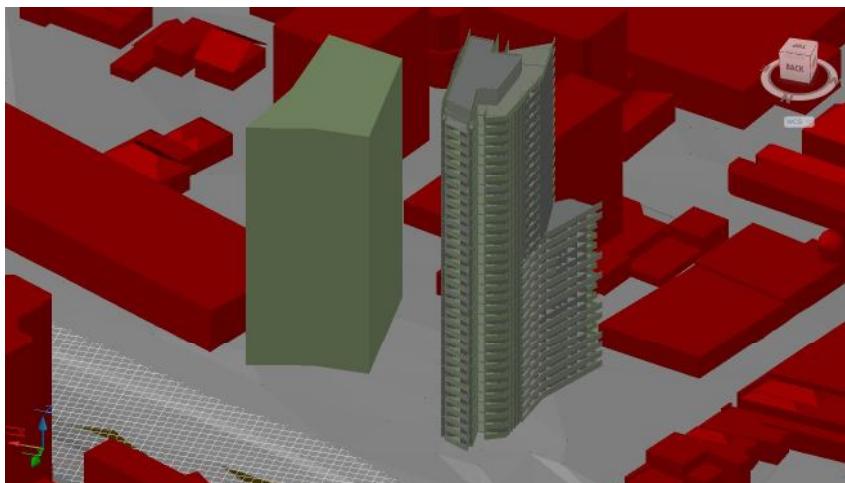
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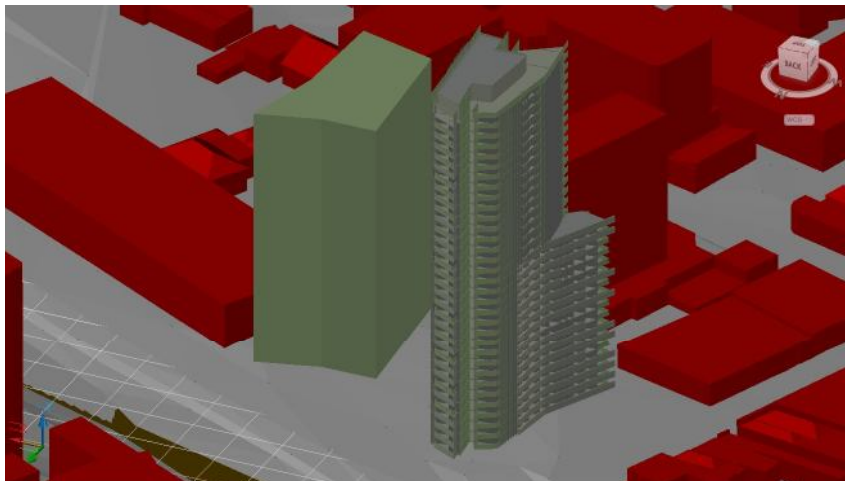
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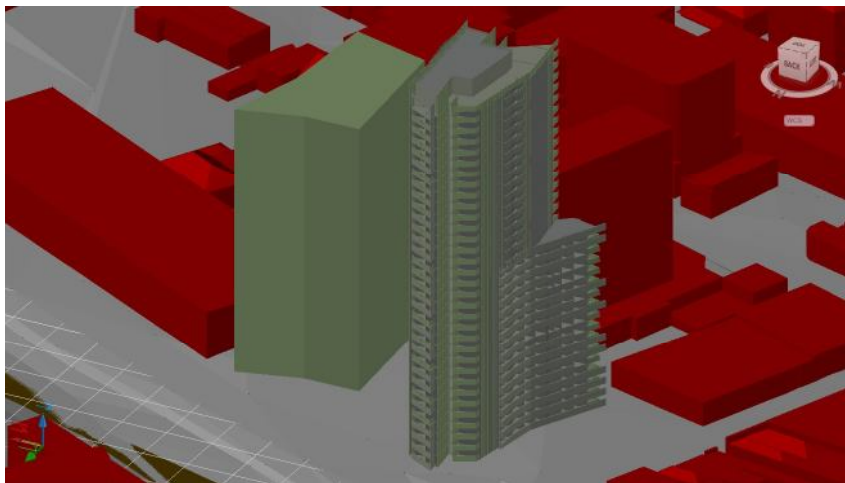
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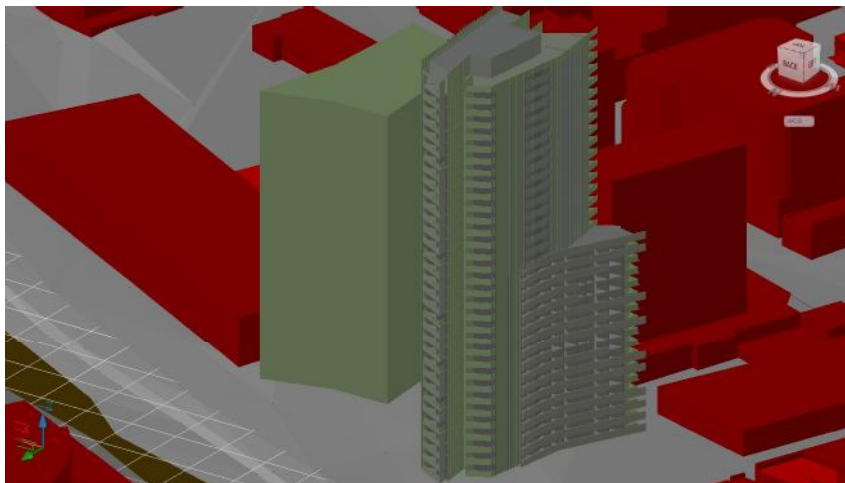
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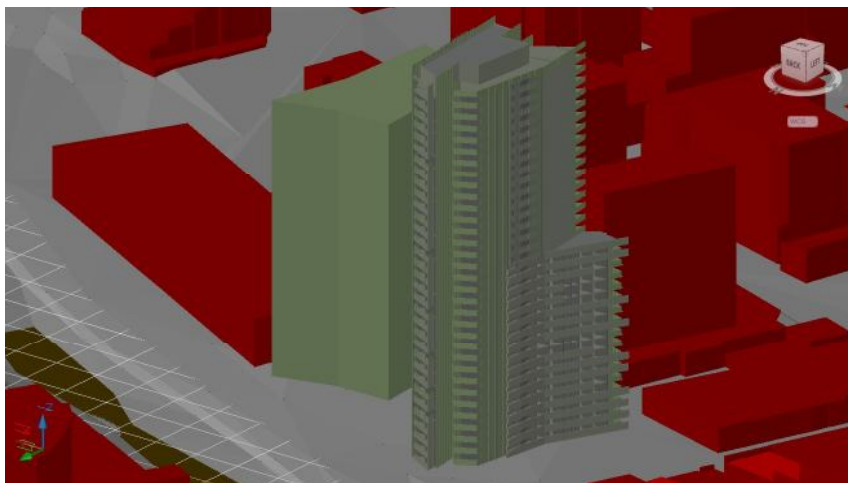
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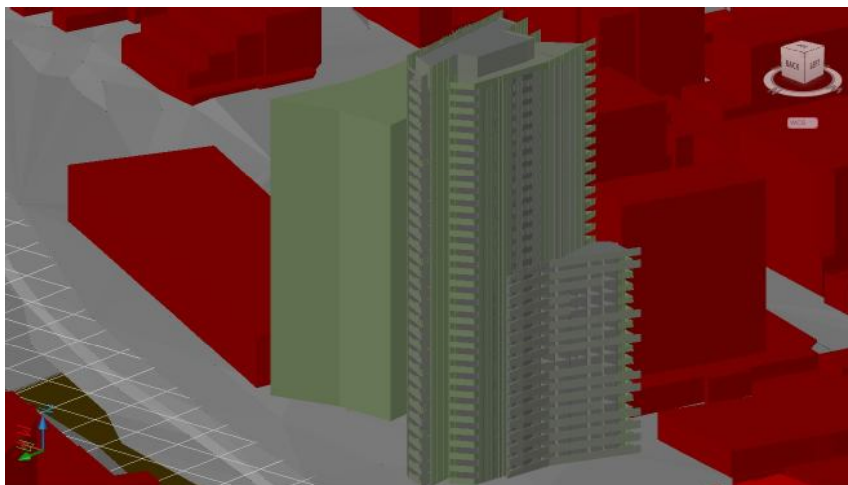
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