



07 Appendix A - Part 01

Shadow Studies Report

Australia Square
 August 31
 12-2 (10 minute intervals)

-  Public Space
-  Overshading caused by tower envelope
-  Overshading caused by 15m indicative roof feature zone
-  Proposed tower envelope



1.00 - 1.20



1.30 - 1.50

Australia Square
August 31
12-2pm (10 minute intervals)

-  Public Space
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2.00



07 Appendix A - Part 01

Shadow Studies Report

Macquarie Place

April 14

10-2 (10 minute intervals)

-  Public Space
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-  Overshadowing caused by 15m indicative roof feature zone
-  Proposed tower envelope



10.00 - 10.20







10.30 - 10.50



07 Appendix A – Part 01
Shadow Studies Report

Macquarie Place

April 14
10-2pm (10 minute intervals)

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11.00 - 10.20



11.30 - 11.50







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Shadow Studies Report

Macquarie Place

April 14
10-2pm (10 minute intervals)

-  Public Space
-  Overshadowing caused by tower envelope
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-  Proposed tower envelope



12.00 - 12.20







12.30 - 12.50



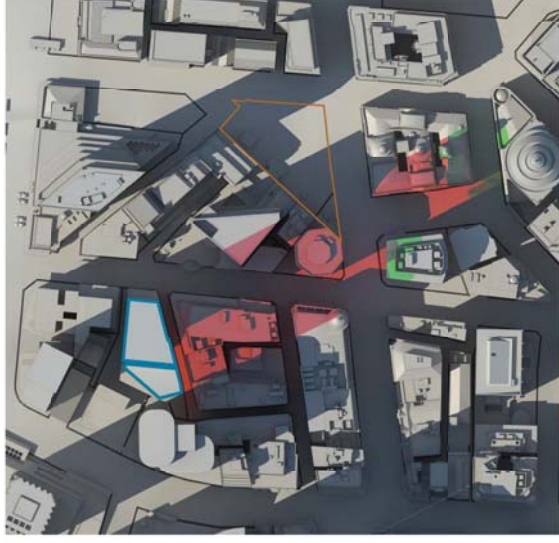
07 Appendix A - Part 01
Shadow Studies Report

Macquarie Place
April 14
10-2 pm (10 minute intervals)

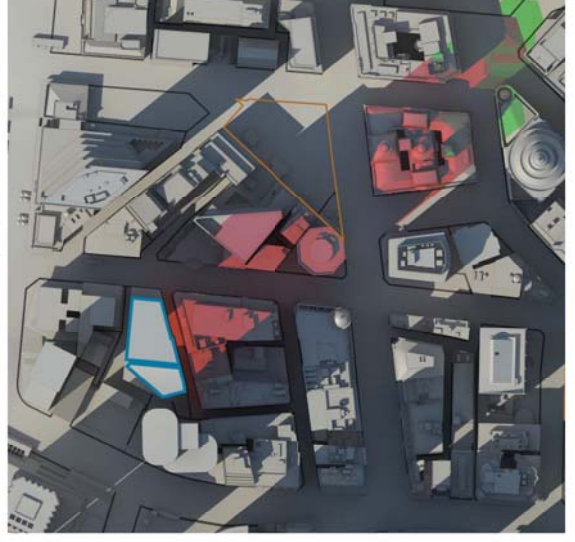
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1.00 - 1.20



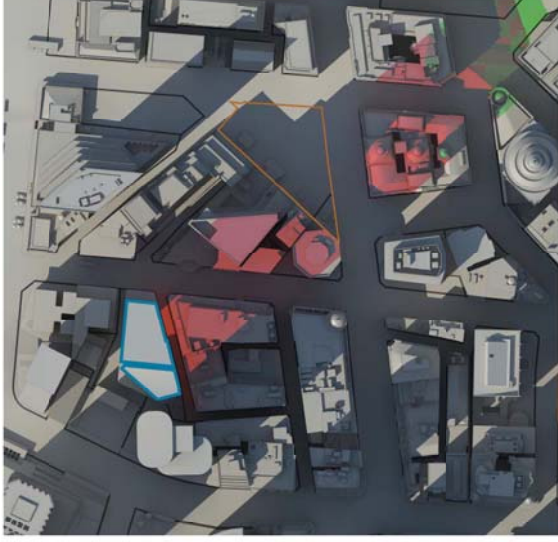
1.30 - 1.50



07 Appendix A - Part 01 Shadow Studies Report

Macquarie Place
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10-2pm (10 minute intervals)

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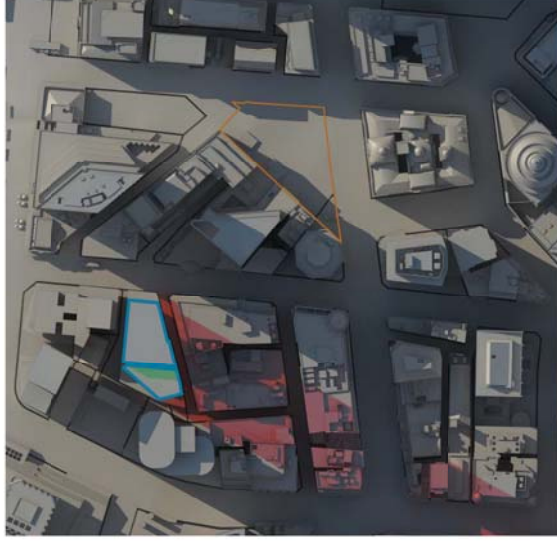
2.00

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Shadow Studies Report

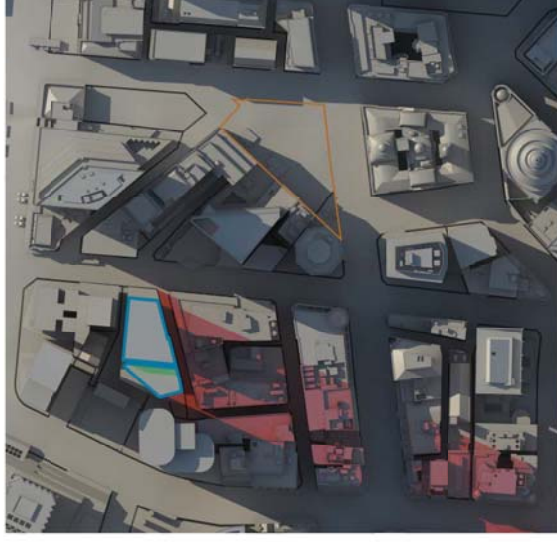
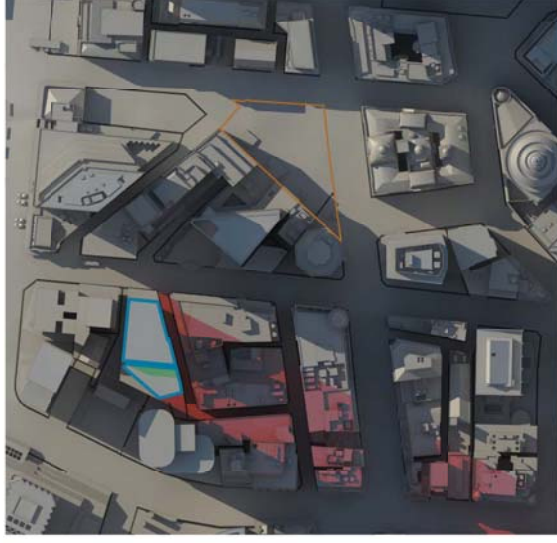
Macquarie Place

June 21
10-2pm (10 minute intervals)

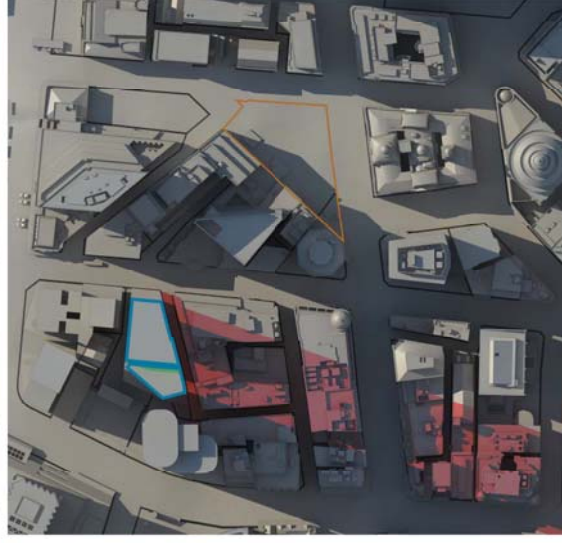
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Shadow Studies Report

Macquarie Place

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12.30 - 12.50

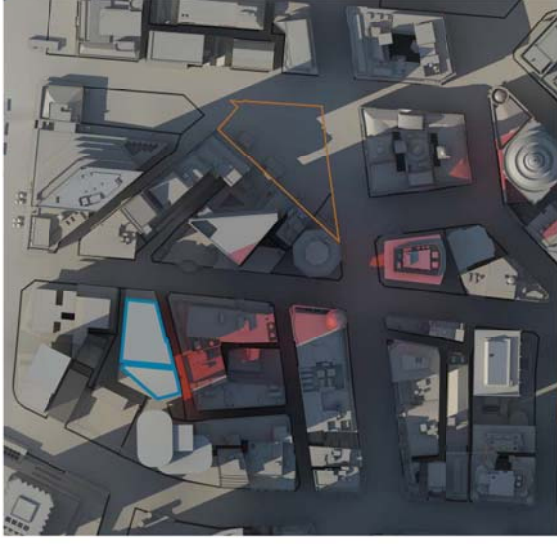


07 Appendix A - Part 01

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2.00

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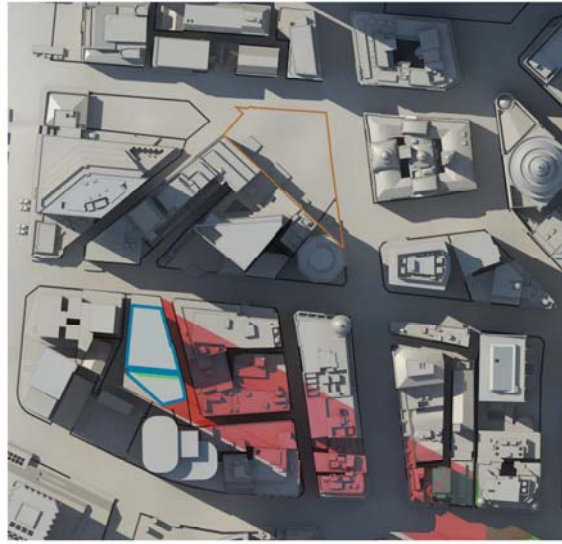
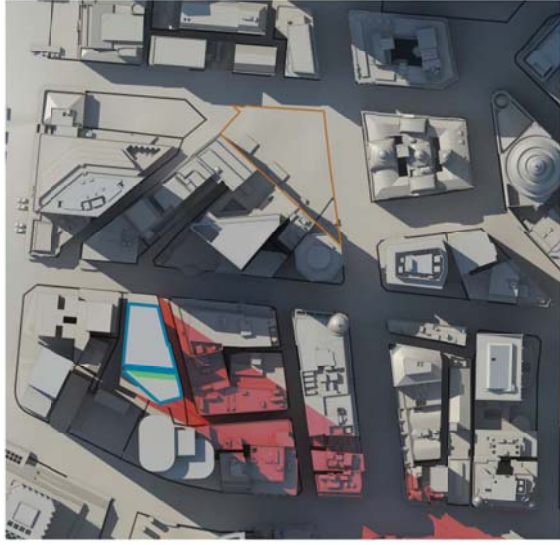
Shadow Studies Report

Macquarie Place
August 31
10-2pm (10 minute intervals)

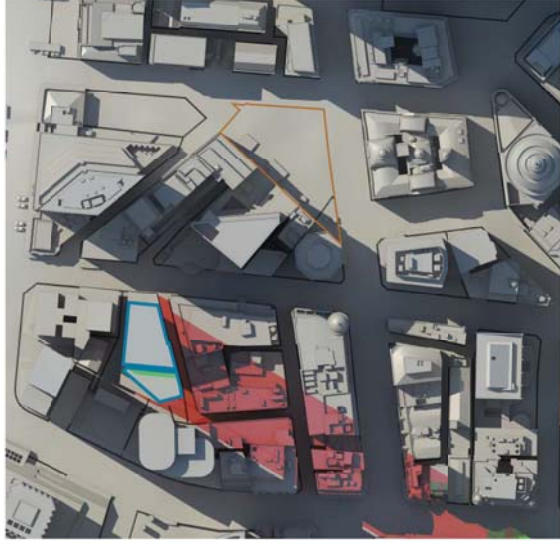
-  Public Space
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10.00 - 10.20






10.30 - 10.50

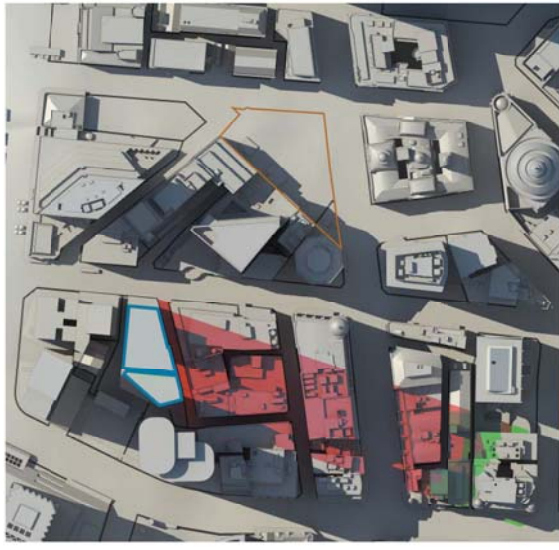


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11.00 - 11.20



11.30 - 11.50

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Macquarie Place

August 31

10-2pm (10 minute intervals)



12.00 - 12.20






12.30 - 12.50



07 Appendix A – Part 01
Shadow Studies Report

Macquarie Place

August 31
10-2pm (10 minute intervals)

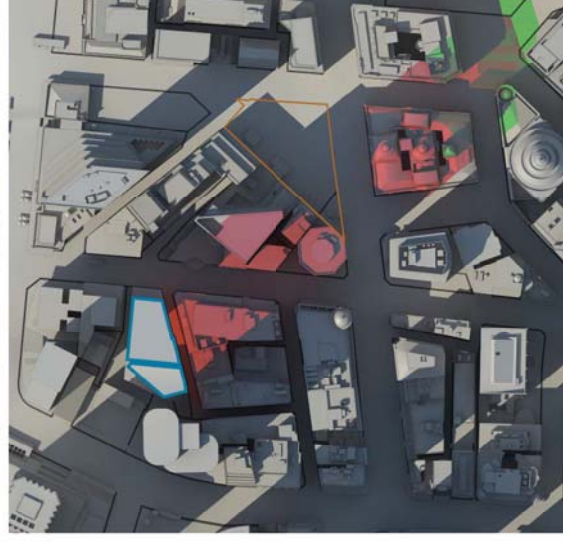
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1.00 - 1.20



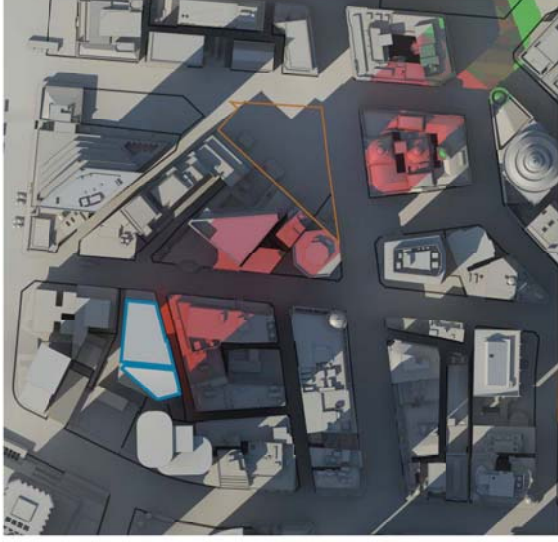
1.30 - 1.50



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August 31
10-2pm (10 minute intervals)

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2.00

Appendix A - Part 02
Publicly Accessible
Square (Plaza) Solar
Access Comparison

07 Appendix A - Part 02 Publicly Accessible Square (Plaza) Solar Access Comparison

Analysis Area

The scope of the analysis area is defined by the publicly accessible square as set out in the Public Domain Plan in the Sydney DCP 2102. This is to be compared to the publicly accessible square as defined by the new proposed public plaza.

Dates/Times Assessed

April 14 and August 31 between 10am and 2pm were selected in accordance with Sydney LEP 2012 control dates and times. In addition, June 21 was included to demonstrate the 'worst case scenario'.

Methodology

The overshadowing studies contained within this report have been produced by HASSELL using 3D Studio Max, and have been based on the following base information:

- City model supplied by the City of Sydney including city buildings and topography (The supplied model has an accuracy of +/- 300mm)

- Proposed envelope model of the Lend Lease tower, podium and plaza prepared by HASSELL

- Indicative massing models of approved schemes located on other sites in the APDG Block*

The shadow studies contained within this report are accurate to the implied limits of the supplied base information. HASSELL does not accept responsibility for the accuracy of information prepared by other parties.

Summary of Results

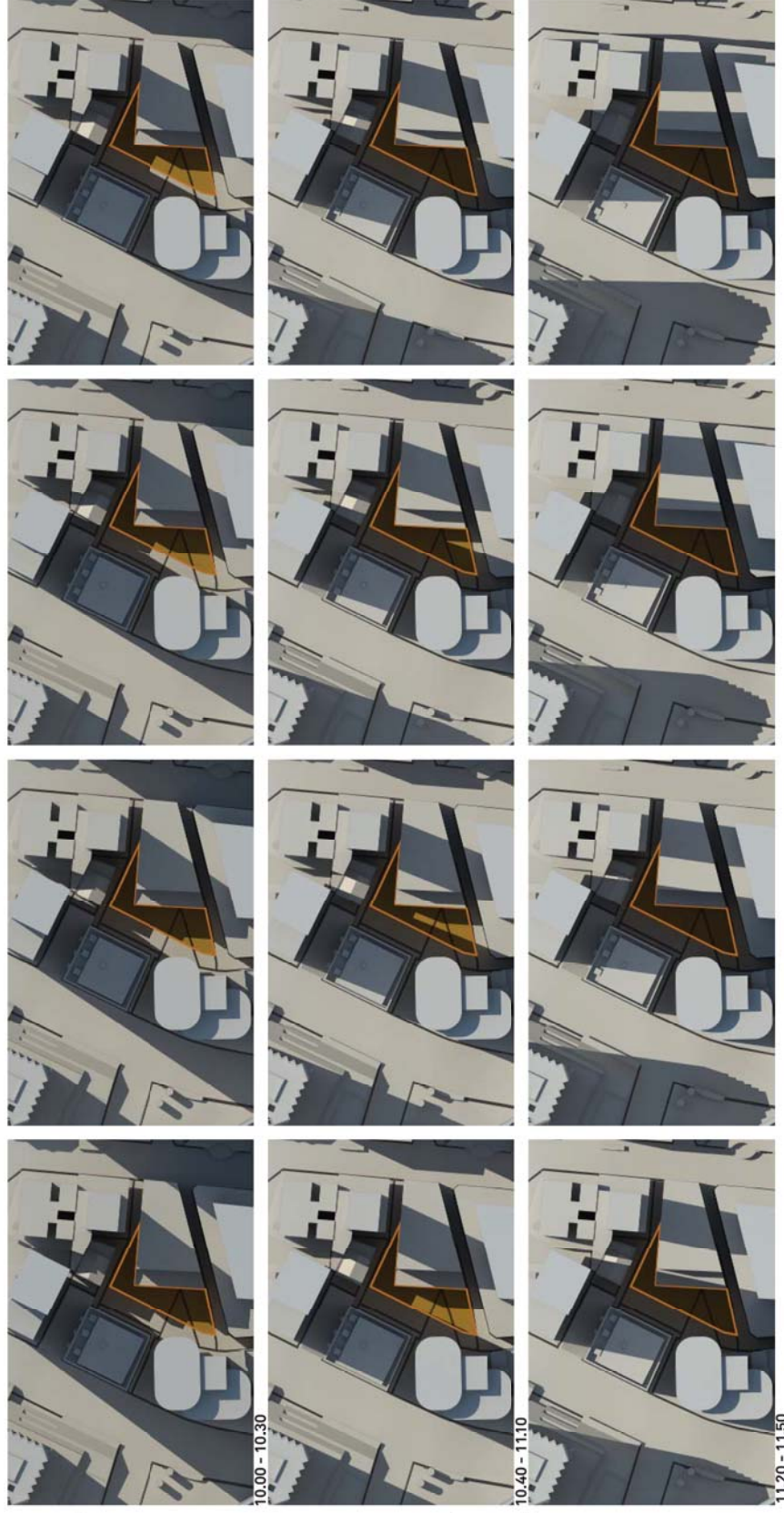
The solar studies in this appendix illustrate that there is a significant improvement to the levels of solar access to the proposed George Street plaza in comparison to the publicly accessible square in the current DCP 2012. For further analysis and comparison, refer to Chapter 06, 'Planning Provisions - Solar Study Comparison.'

DCP Scheme

April 14

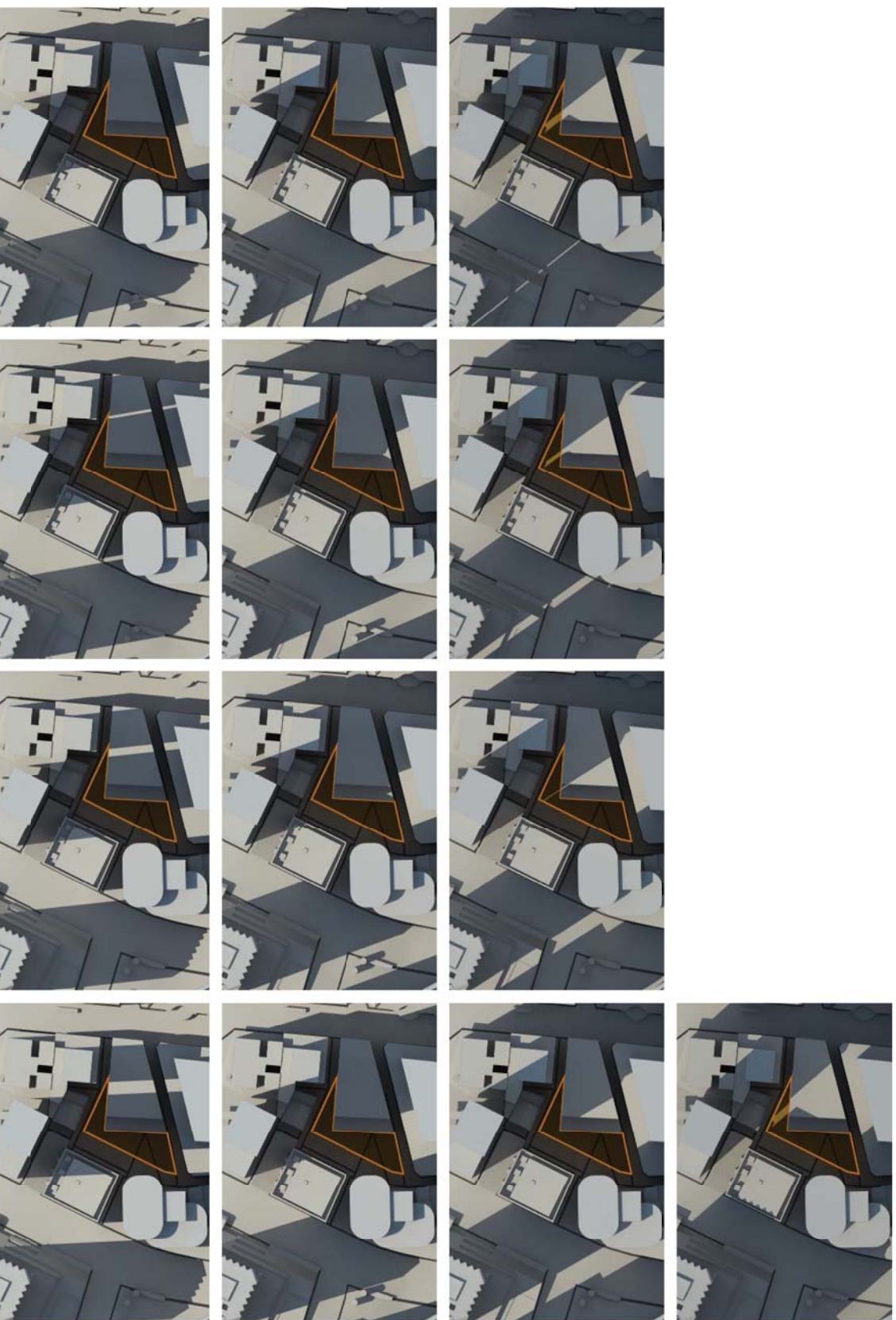
10-2pm (10 minute intervals)

Publicly accessible square



*At the time of preparation of this Urban Design Analysis Report, Wanda Sydney One had recently submitted DA 2015/982 and SSD 2015/7101. Neither of the Wanda applications are as yet approved. For the purpose of this Urban Design Analysis Report, approved envelopes relating to 1 Alfred Street (DA 2010-2029) and T9-31 Pitt Street (D/2010/1533) have been adopted.

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



DCP Scheme
April 14
10-2pm (10 minute intervals)

Publicly accessible square

12.00 - 12.30

12.40 - 1.10

1.20 - 1.50

2.00

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



DCP Scheme
 June 21
 10-2pm (10 minute intervals)

Publicly accessible square

10.00 - 10.30

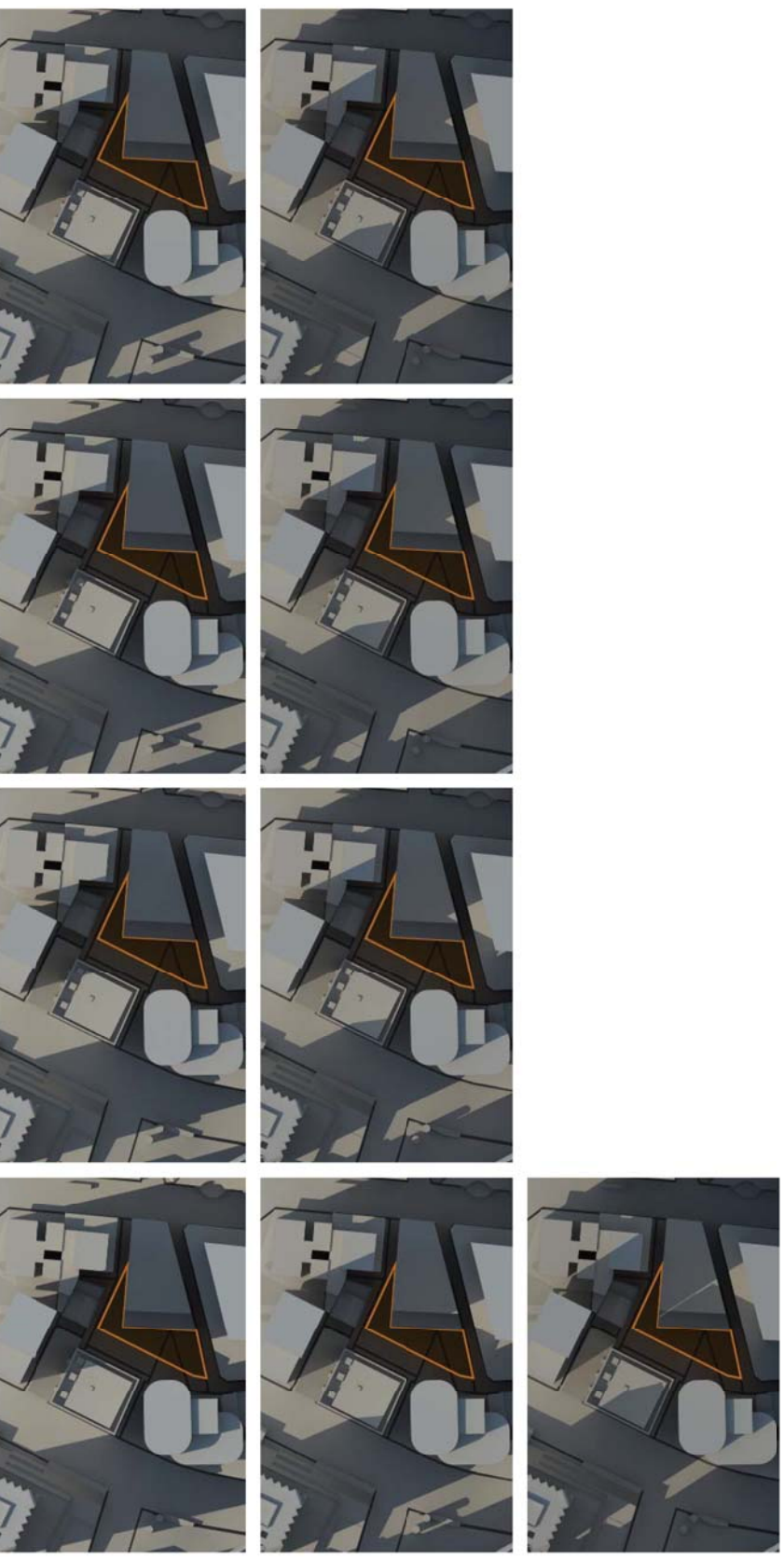
The plaza in the DCP scheme will receive up to 8% solar access between 10am and 2pm in mid-winter

10.40 - 11.10

11.20 - 11.50

12.00 - 12.30

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



DCP Scheme
 June 21
 10-2pm (10 minute intervals)

Publicly accessible square

12.40 - 1.10

1.20 - 1.50

2.00

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



DCP Scheme
 August 31
 10-2pm (10 minute intervals)



Publicly accessible square

10.00 - 10.30

10.40 - 11.10

11.20 - 11.50

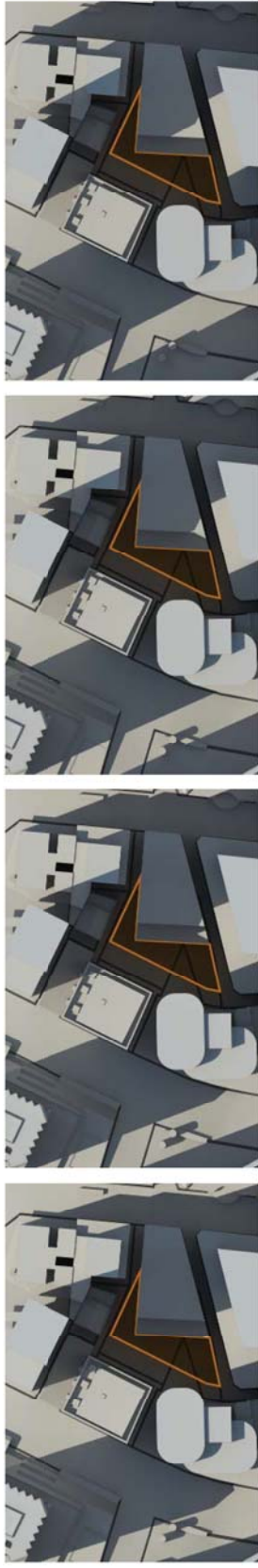
12.00 - 12.30

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison

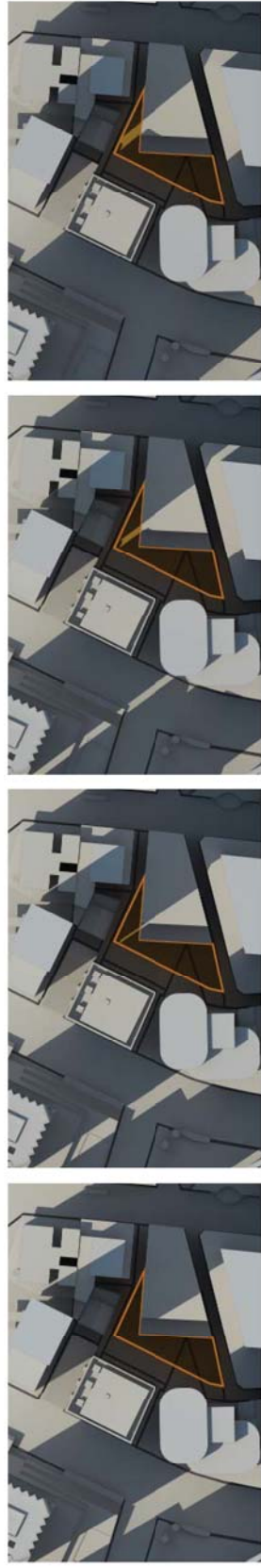
DCP Scheme
August 31
10-2pm (10 minute intervals)



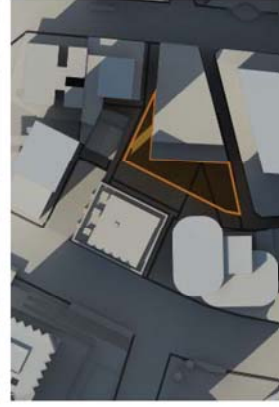
Publicly accessible square



12.40 - 1.10



1.20 - 1.50



2.00

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



Proposed Public Plaza (including adjacent publicly accessible land at 200 George Street) April '14
10-2pm (10 minute intervals)



Publicly accessible square including adjacent publicly accessible land at 200 George Street

10.00 - 10.30

10.40 - 11.10

11.20 - 11.50

12.00 - 12.30

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



Proposed Public Plaza (including adjacent publicly accessible land at 200 George Street)
April 14
10-2pm (10 minute intervals)

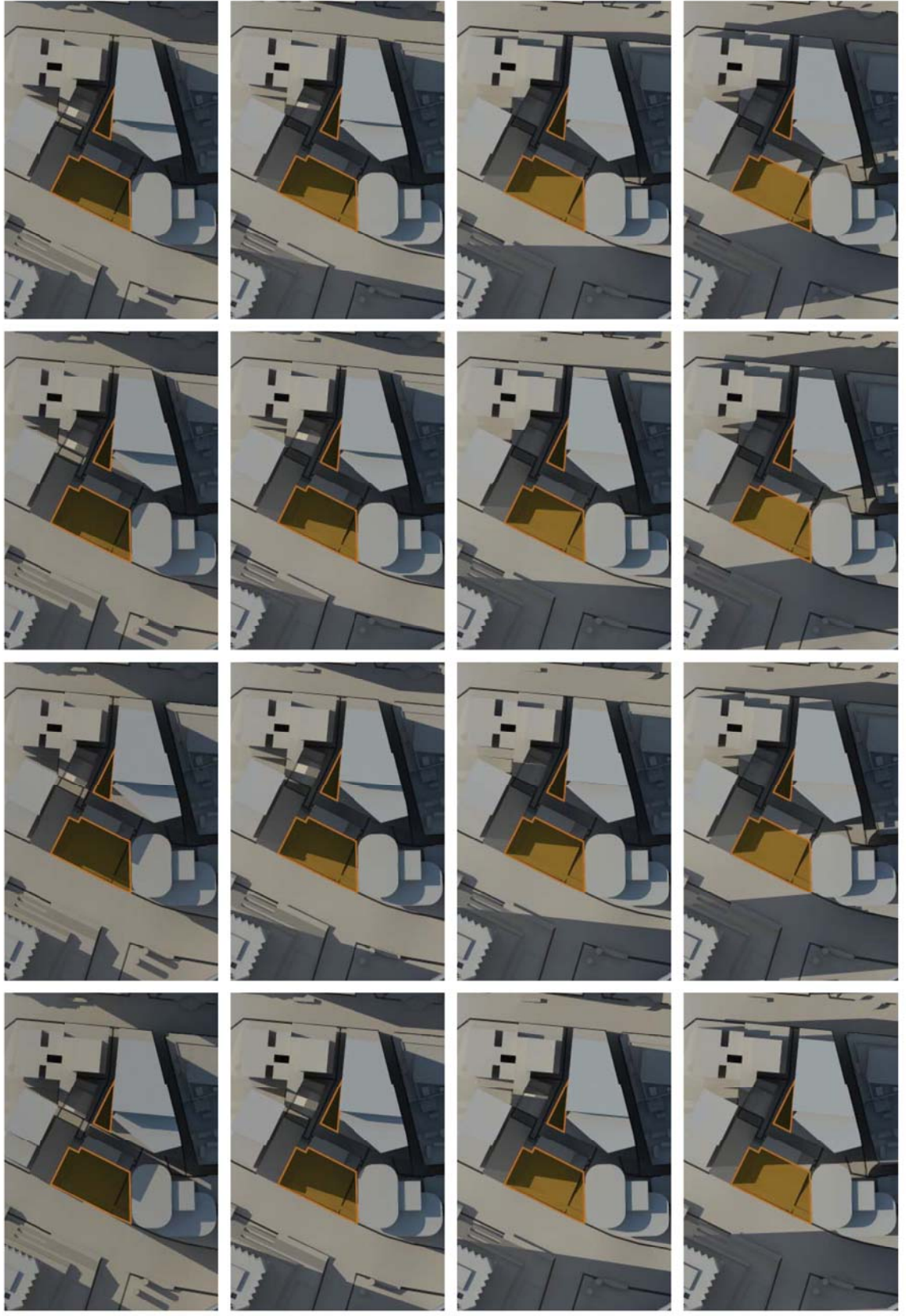
 Publicly accessible square including adjacent publicly accessible land at 200 George Street

12.40 - 1.10

1.20 - 1.50

2.00

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



Proposed Public Plaza (including adjacent publicly accessible land at 200 George Street) June 21 10-2pm (10 minute intervals)



Publicly accessible square including adjacent publicly accessible land at 200 George Street

10.00 - 10.30

10.40 - 11.10

11.20 - 11.50

12.00 - 12.30

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



Proposed Public Plaza (including adjacent publicly accessible land at 200 George Street) June 21 10-2pm (10 minute intervals)

Publicly accessible square including adjacent publicly accessible land at 200 George Street

12.40 - 1.10

1.20 - 1.50

2.00

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



Proposed Public Plaza (including adjacent publicly accessible land at 200 George Street) August 31 10-2pm (10 minute intervals)



Publicly accessible square including adjacent publicly accessible land at 200 George Street

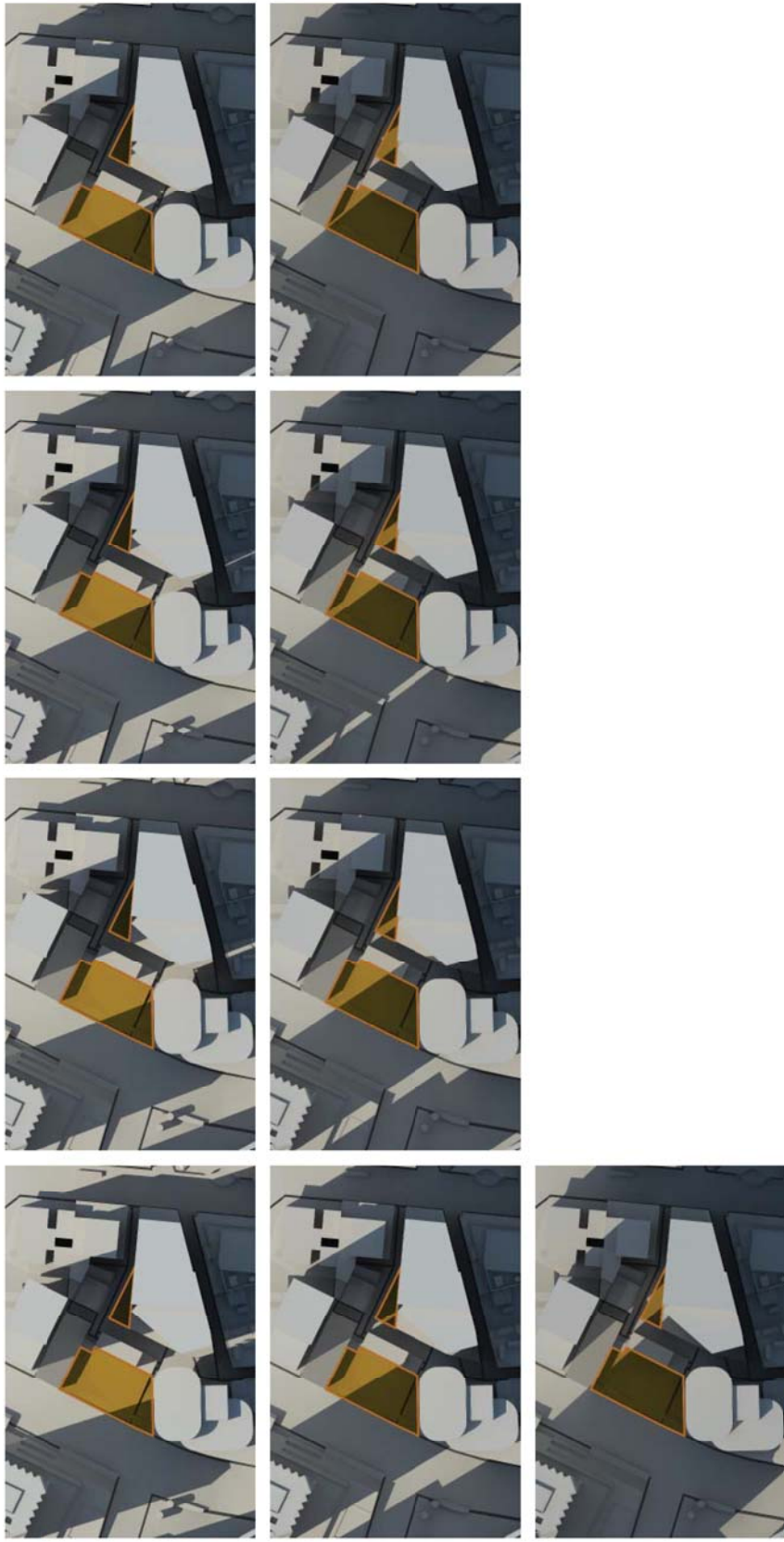
10.00 - 10.30

10.40 - 11.10

11.20 - 11.50

12.00 - 12.30

07 Appendix A - Part 02
Publicly Accessible Square
(Plaza) Solar Access Comparison



Proposed Public Plaza (including adjacent publicly accessible land at 200 George Street) August 31 10-2pm (10 minute intervals)

Publicly accessible square including adjacent publicly accessible land at 200 George Street

12.40 - 1.10

1.20 - 1.50

2.00

Appendix B

View Impact Analysis

08 Appendix B View Impact Analysis Report

Introduction

This View Impact Analysis Report is submitted as supporting documentation for a Planning Justification Report prepared by BBC Consulting Planners and should be read in conjunction with this and its appendices. The Planning Proposal seeks an amendment to the Sydney Local Environment Plan 2012 (SLEP 2012) to facilitate the redevelopment of development block 1 which consists of the land that includes 178-186 George Street (to become known as 182 George Street), 174-176A George Street (known as Jacksons on George), and 33-35 Pitt Lane), and pending a land swap, it will also include the 'triangular' parcel of land (Mirvac triangle) currently part of 188-194A George Street (to become known as 200 George Street). This report has been prepared by Hassell on behalf of Lend Lease.

This report seeks to examine and assess the visual impact of the proposed development as described by the proposed built form maximum envelope.

The Precinct

The APDG block is made up of the block that is bounded by Alfred, Pitt, Dalley and George Streets. Within this block the following sites are the subjects of the View Impact Analysis Study:

- _182 George St (St George Bank)
- _176 George St (Jacksons on George)
- _33-35 Pitt St
- _Mirvac triangle/ land swap
- _Crane Lane land swap

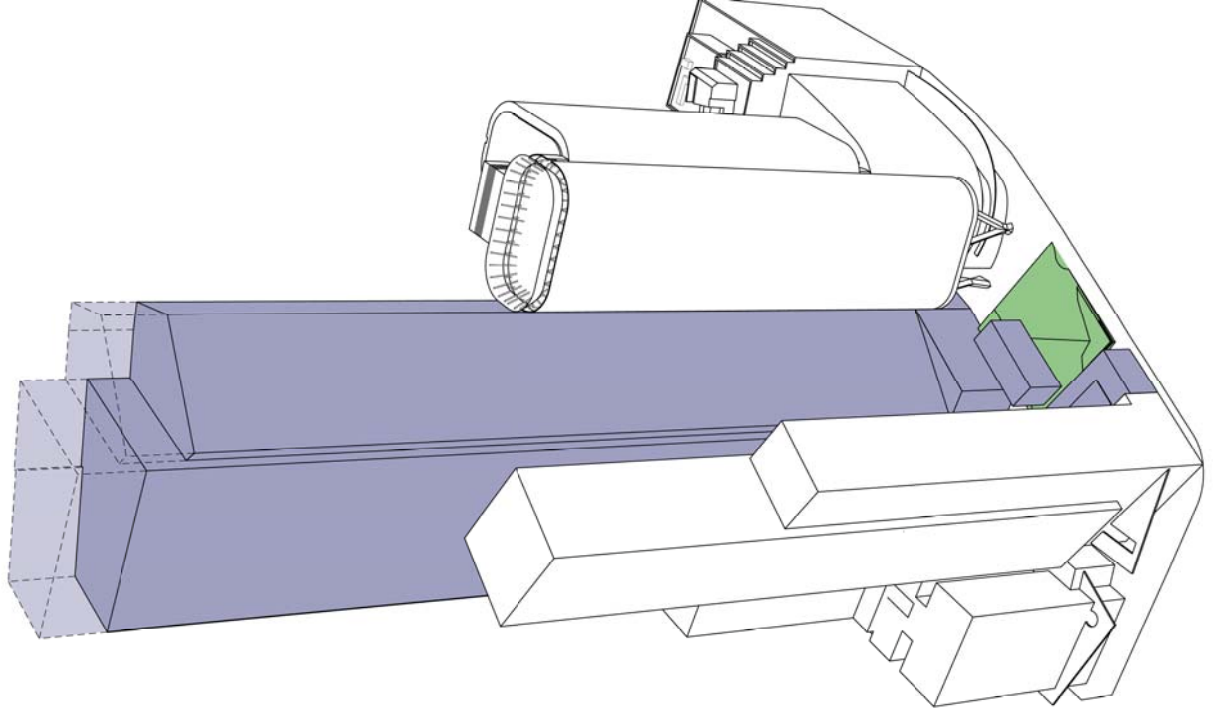
Methodology

The view and analysis studies contained within this report have been produced by HASSELL using 3D Studio Max, and have been based on a 3D city model of Sydney licensed for use by HASSELL.

The view analysis studies contained within this report are accurate to the implied limits of the supplied base information. HASSELL does not accept responsibility for the accuracy of this base information.

The views contained in this report are separated into three distinct categories:

1. **Street level views:** Photographs were taken at eye height (approximately 1700mm above ground level) from prominent locations in a 360° arc around the site. The photograph was matched with a 3D Max model view using the City of Sydney model to obtain an 'existing 3D render' image. The Lend Lease proposed envelope and approved future surrounding developments (1 Alfred Street, 19 Pitt Street and 200 George Street) were placed in the City of Sydney model to create a 'proposed' render using the same camera specifications.
2. **High level views:** Ten 'high level' existing tower developments were selected to assess the view impact of the proposed development. A 24mm focal length camera was used and placed at roof level of the selected tower developments to obtain a 3D studio Max 'existing render' image. The Lend Lease proposed envelope and approved future surrounding developments (1 Alfred Street, 19 Pitt Street and 200 George Street) were placed in the City of Sydney model to create a 'proposed' render image using the same camera specifications.
3. **Plaza views:** Two views of the new plaza taken at various heights were included to provide a visual assessment of the new public space on George Street. A 35mm focal length camera was used to obtain a 3D studio Max 'existing render' image. The Lend Lease proposed envelope and approved future surrounding developments (1 Alfred Street, 19 Pitt Street and 200 George Street) were placed in the City of Sydney model to create a 'proposed' render image using the same camera specifications.



At the time of preparation of this Urban Design Analysis Report, Wanda Sydney One had recently submitted DA 2015/882 and SSD 2015/7101. Neither of the Wanda applications are as yet approved. For the purpose of this Urban Design Analysis Report, approved envelopes relating to 1 Alfred Street (DA 2010-2029) and 19-31 Pitt Street (ID/2010/1533) have been adopted.

08 Appendix B

View Impact Analysis Report

Key Views - Location Map

- 1 Observatory Hill
- 2 Corner of Argyle and Harrington Street
- 3 Overseas passenger terminal
- 4 Circular Quay / First Fleet Park
- 5 Opera House steps
- 6 Circular Quay / Bennelong Apartments
- 7 Mrs Macquarie's Chair
- 8 Farm Cove
- 9 Corner of Pitt and Bridge Street
- 10 Corner of George and Bridge Street
- 11 George Street / Grosvenor Tower
- 12 Corner of Essex and Harrington Street
- 13 View from Circular Quay ferry
- 14 225 George St. (Grosvenor Place)
- 15 255 George St. (NAB House)
- 16 129 - 131 Harrington St
- 17 259 George St. (Suncorp Place)
- 18 199 George St. (Four Seasons Hotel)
- 19 264 George St. (Australia Square)
- 20 273 George St. (Metcentre Sydney)
- 21 30 Pitt St (Marriott: Hotel)
- 22 APDG south east Tower
- 23 200 George Street
- 24 Grosvenor Tower - Street level - to Plaza
- 25 Grosvenor Place to Plaza



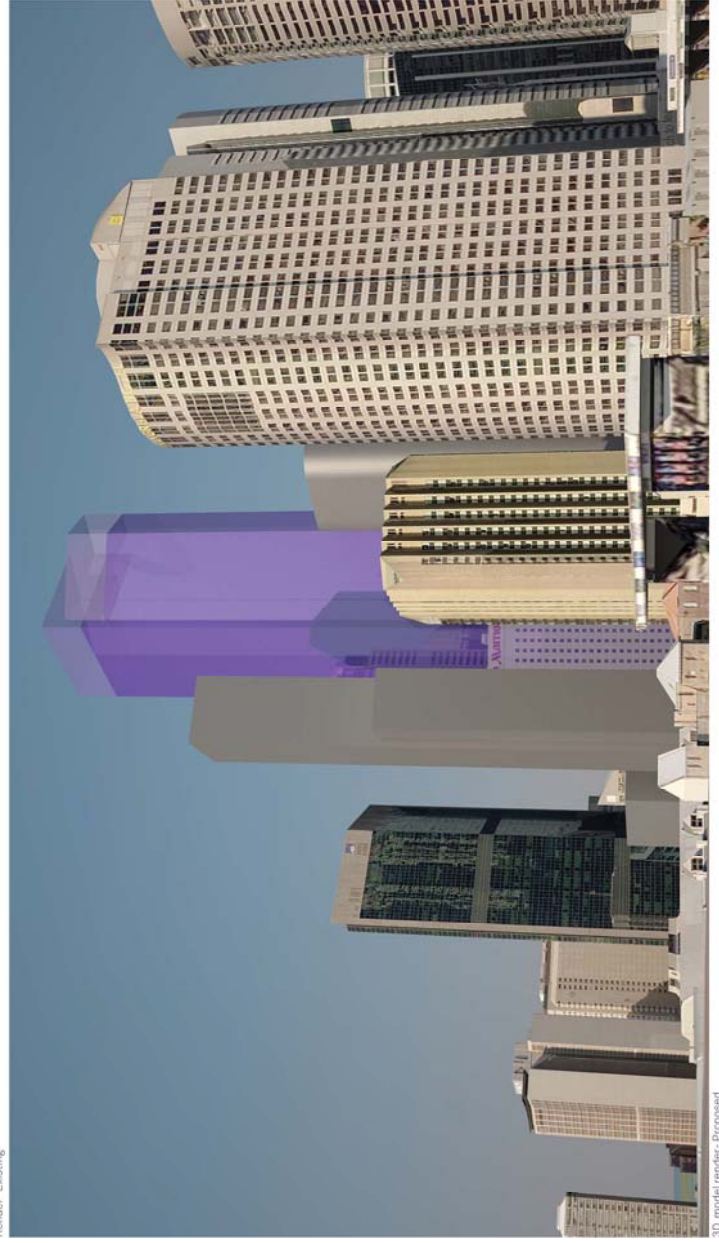
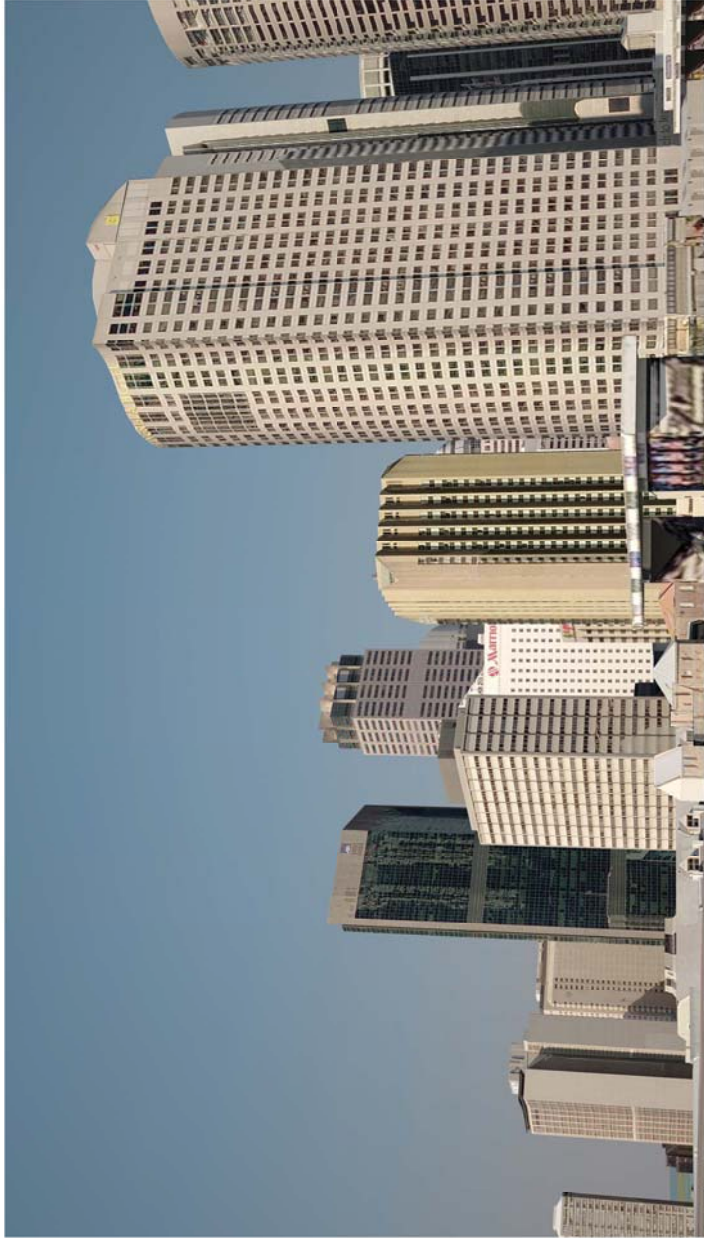
- Street level view
- High level (tower) view
- Plaza view

08 Appendix B
View Impact Analysis Report_
View 1

Observatory Hill



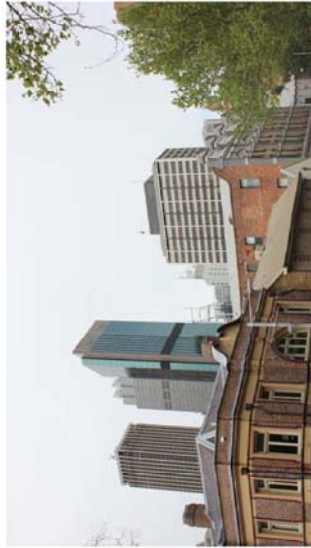
Existing photograph
Canon EOS 550D
38.4mm focal length
1800mm camera height



3D model render - Proposed
Lend Lease proposed envelope
Lend Lease proposed roof feature zone
Approved surrounding developments

08 Appendix B
View Impact Analysis Report_
View 2

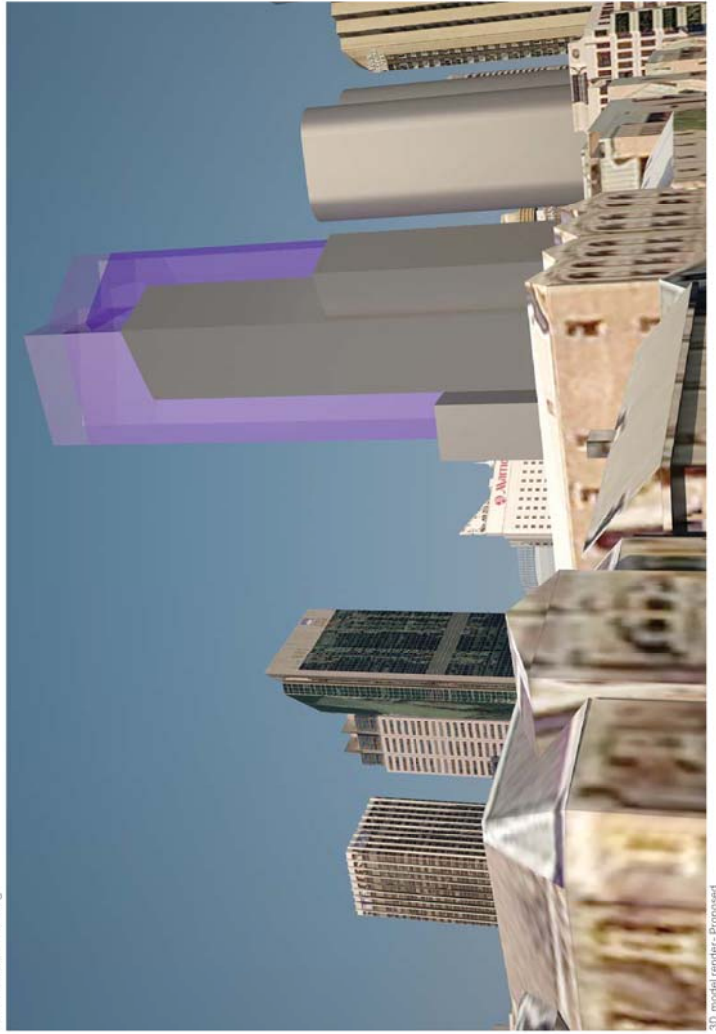
Corner of Argyle St and Harrington St



Existing photograph
Canon EOS 5530
40mm focal length
1800mm camera height



3D model render- Existing



3D model render- Proposed

Legend
 Lead Lease proposed envelope
 Lead Lease proposed roof feature zone
 Approved surrounding developments

08 Appendix B
View Impact Analysis Report_
View 3

Overseas Passenger Terminal



Existing photograph
Canon EOS 550D
14.4mm focal length
1800mm camera height



Render - Existing



3D model render - Proposed
Lend Lease proposed envelope
Lend Lease proposed roof feature zone
Approved surrounding developments
Lend Lease proposed roof feature zone