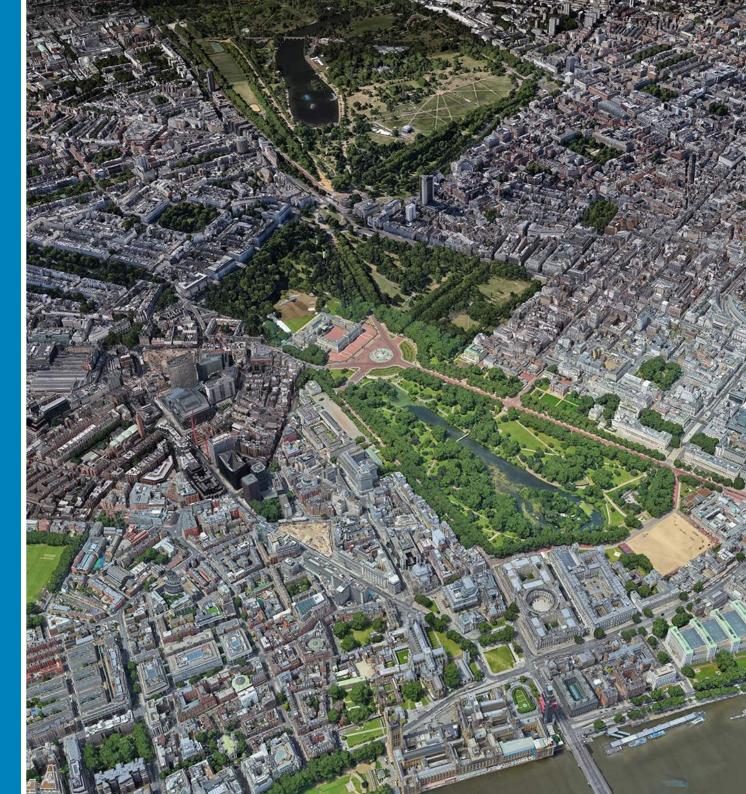
WESTMINSTER CITY COUNCIL BUILDING HEIGHT STUDY

APPENDIX: MODELLING STUDIES

JUNE 2019





4224

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APPENDIX: TESTING POTENTIAL FOR TALL BUILDINGS THROUGH MODELLING

This Appendix supports the Westminster Tall Building Study and provides the initial modelling that was carried out to test the visibility and potential impacts of tall buildings on a number of sites within Westminster. This modelling was carried out for sites that were considered to have the potential to accommodate tall buildings based on their location and development opportunity.

For these selected sites view shed analysis was used to test the visibility of buildings at a range of heights. The impacts from particular sensitive viewpoints was then tested in the VuCity model. This is compared to street views taken from google maps. Views are not verified and should not be treated as accurate depictions of where buildings may be visible from but rather as an initial guide that has helped to inform the initial evaluation. The modelling of trees within VuCity cannot be taken to be accurate but again gives an indication of the winter scenario when trees are not in leaf.

TEST MODELLING 1 PADDINGTON - MARYLEBONE FLYOVER / EDGWARE ROAD JUNCTION

VIEWSHED ANALYSIS FOR THREE BUILDINGS - M1, M2 AND M3

TESTING AT 60M, 80M, 100M, 120M AND 150M

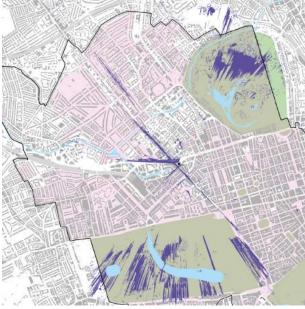


Figure A.1: Marylebone M1: 60m viewshed analysis



Figure A.3: Marylebone M2: 60m viewshed analysis

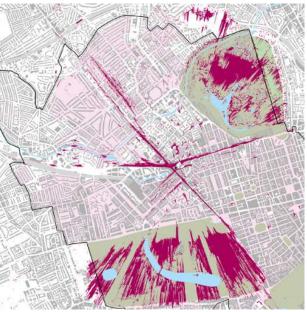


Figure A.2: Marylebone M1: 80m viewshed analysis

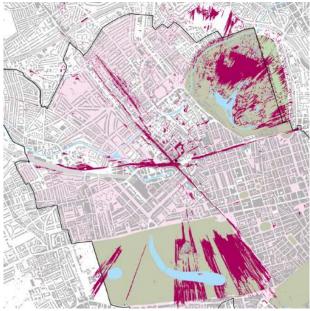


Figure A.4: Marylebone M2: 80m viewshed analysis

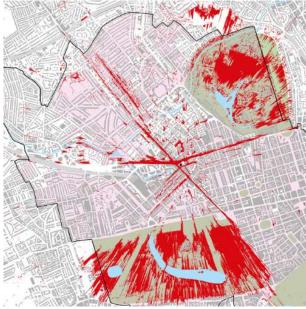


Figure A.5: Marylebone M1: 100m viewshed analysis

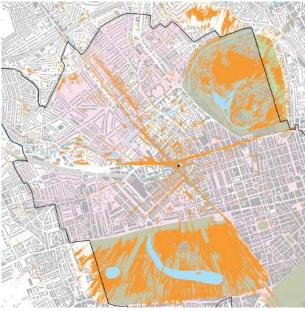


Figure A.6: Marylebone M1: 120m viewshed analysis

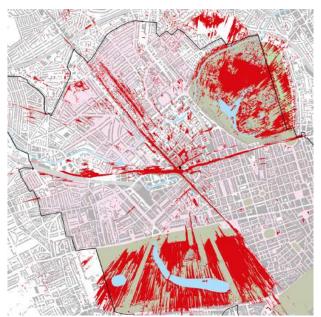


Figure A.8: Marylebone M2: 100m viewshed analysis

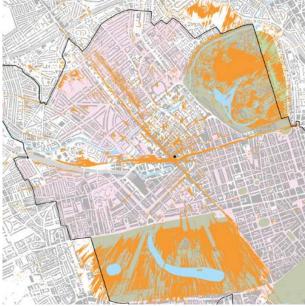


Figure A.9: Marylebone M2: 120m viewshed analysis

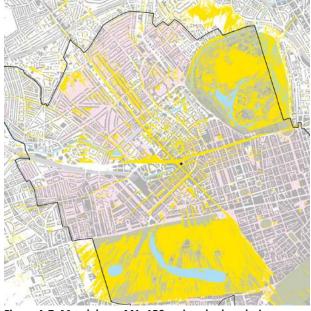


Figure A.7: Marylebone M1: 150m viewshed analysis

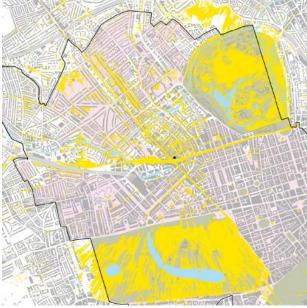


Figure A.10: Marylebone M2: 150m viewshed analysis

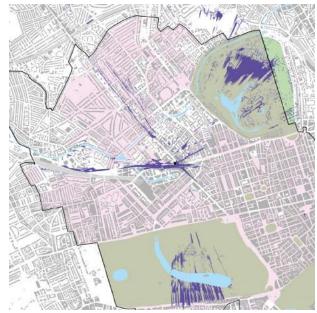


Figure A.11: Marylebone M3: 60m viewshed analysis

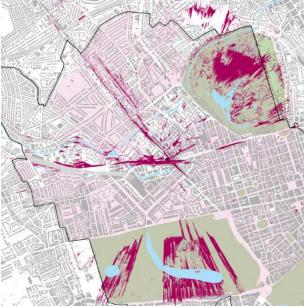


Figure A.13: Marylebone M3: 80m viewshed analysis

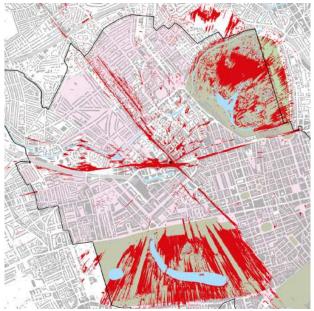


Figure A.15: Marylebone M3: 100m viewshed analysis

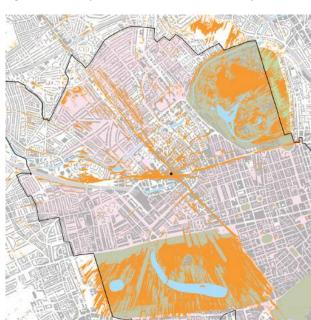


Figure A.12: Marylebone M3: 120m viewshed analysis

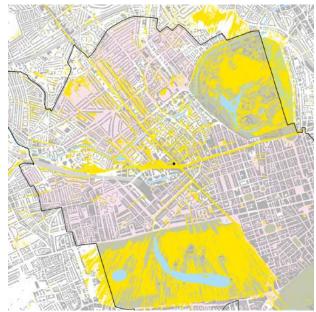


Figure A.14: Marylebone M3: 150m viewshed analysis

TEST VIEWS SELECTED BASED ON VISIBILITY IN VIEW SHED ANALYSIS

- 1. Westway at Westbourne Green open space
- 2. Blomfield Road
- 3. Westway at Paddington Basin
- 4. Edgware Road at Canal
- 5. Edgware Road at Church Street
- 6. Edgware Road at Sussex Gardens
- 7. Marylebone Road
- 8. Hyde Park at Reformers Tree
- 9. Marylebone Road/Baker Street
- 10. Regent's Park
- 11. Regent's Park Broad Walk
- 12. Primrose Hill

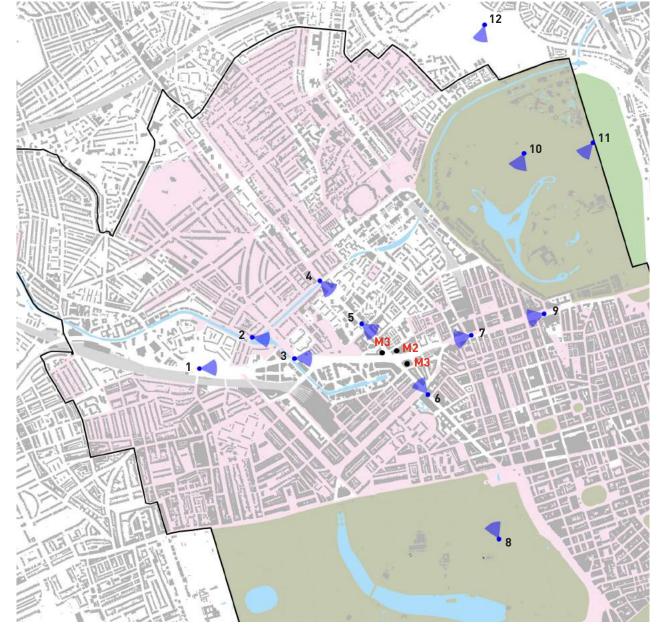


Figure A.16: Marylebone test view locations

TALL BUILDING TEST VIEW 1: WESTWAY AT WESTBOURNE GREEN OPEN SPACE



Figure A.17: Marylebone view 1: Streetview

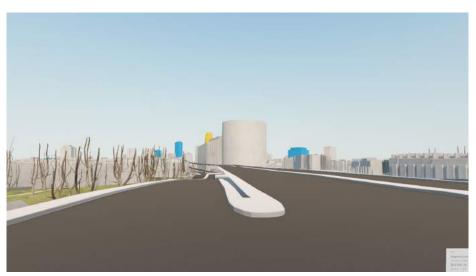


Figure A.18: Marylebone view 1: Existing view

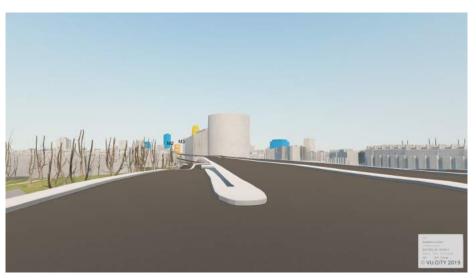


Figure A.19: Marylebone view 1: 60m building test

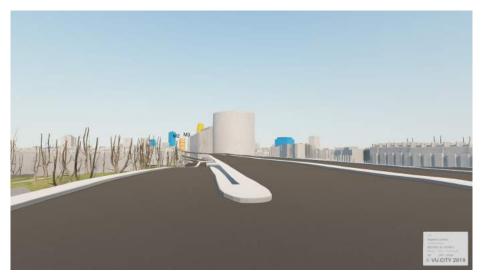


Figure A.20: Marylebone view 1: 80m building test

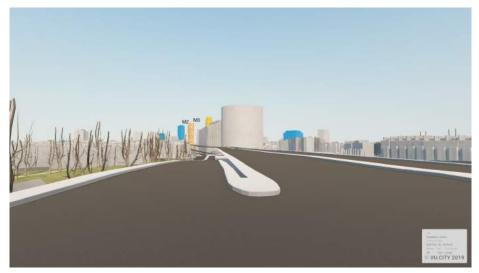


Figure A.21: Marylebone view 1: 120m building test

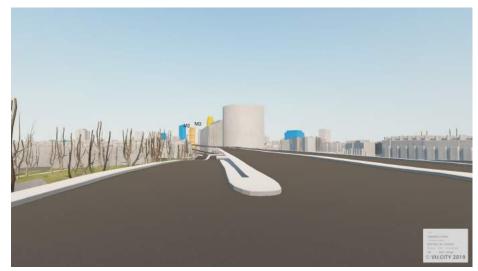


Figure A.22: Marylebone view 1: 100m building test

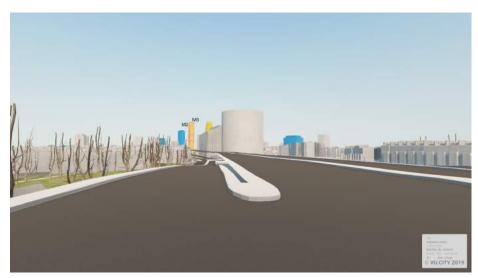


Figure A.23: Marylebone view 1: 150m building test

TALL BUILDING TEST VIEW 2: BLOMFIELD ROAD



Figure A.24: Marylebone view 2: Streetview



Figure A.26: Marylebone view 2: Existing view



Figure A.25: Marylebone view 2: 60m building test



Figure A.27: Marylebone view 2: 80m building test



Figure A.29: Marylebone view 2: 100m building test

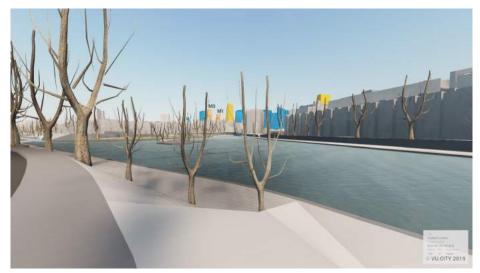


Figure A.28: Marylebone view 2: 120m building test



Figure A.30: Marylebone view 2: 150m building test

TALL BUILDING TEST VIEW 3: WESTWAY AT PADDINGTON BASIN



Figure A.31: Marylebone view 3: Streetview



Figure A.33: Marylebone view 3: Existing view



Figure A.32: Marylebone view 3: 60m building test



Figure A.34: Marylebone view 3: 80m building test



Figure A.35: Marylebone view 3: 120m building test



Figure A.36: Marylebone view 3: 100m building test



Figure A.37: Marylebone view 3: 150m building test

TALL BUILDING TEST VIEW 4: EDGWARE ROAD AT CANAL



Figure A.38: Marylebone view 4: Streetview



Figure A.40: Marylebone view 4: Existing view



Figure A.39: Marylebone view 4: 60m building test



Figure A.41: Marylebone view 4: 80m building test



Figure A.42: Marylebone view 4: 120m building test



Figure A.43: Marylebone view 4: 100m building test



Figure A.44: Marylebone view 4: 150m building test

TALL BUILDING TEST VIEW 5: EDGWARE ROAD AT CHURCH STREET



Figure A.45: Marylebone view 5: Streetview

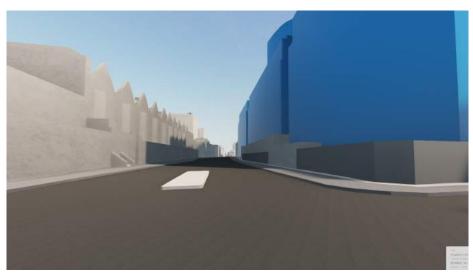


Figure A.47: Marylebone view 5: Existing view



Figure A.46: Marylebone view 5: 60m building test

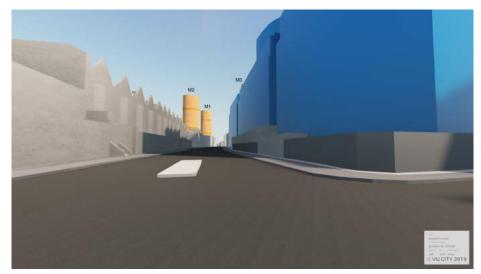


Figure A.48: Marylebone view 5: 80m building test

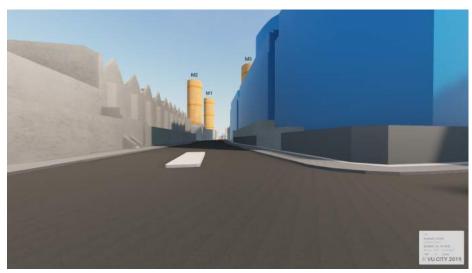


Figure A.50: Marylebone view 5: 100m building test

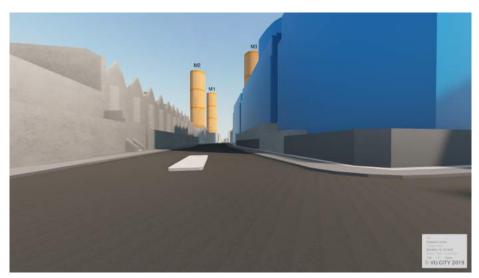


Figure A.49: Marylebone view 5: 120m building test

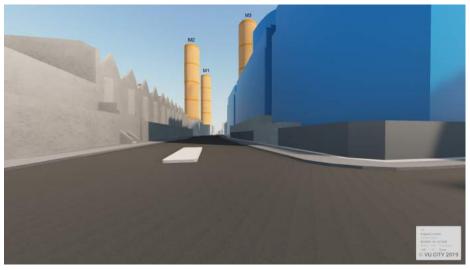


Figure A.51: Marylebone view 5: 150m building test

TALL BUILDING TEST VIEW 6: EDGWARE ROAD AT SUSSEX GARDENS

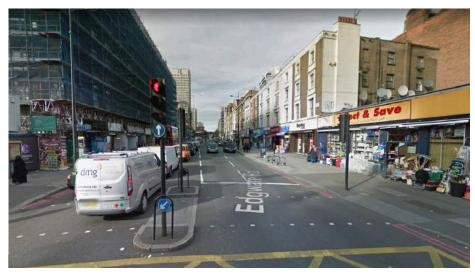


Figure A.52: Marylebone view 6: Streetview



Figure A.54: Marylebone view 6: Existing view



Figure A.53: Marylebone view 6: 60m building test



Figure A.55: Marylebone view 6: 80m building test



Figure A.57: Marylebone view 6: 100m building test



Figure A.56: Marylebone view 6: 120m building test



Figure A.58: Marylebone view 6: 150m building test

TALL BUILDING TEST VIEW 7: MARYLEBONE ROAD



Figure A.59: Marylebone view 7: Streetview



Figure A.61: Marylebone view 7: Existing view



Figure A.60: Marylebone view 7: 60m building test



Figure A.62: Marylebone view 7: 80m building test



Figure A.63: Marylebone view 7: 120m building test



Figure A.64: Marylebone view 7: 100m building test



Figure A.65: Marylebone view 7: 150m building test

TALL BUILDING TEST VIEW 8: HYDE PARK AT REFORMERS TREE



Figure A.66: Marylebone view 8: Streetview



Figure A.68: Marylebone view 8: Existing view



Figure A.67: Marylebone view 8: 60m building test



Figure A.69: Marylebone view 8: 80m building test



Figure A.70: Marylebone view 8: 120m building test



Figure A.71: Marylebone view 8: 100m building test



Figure A.72: Marylebone view 8: 150m building test

TALL BUILDING TEST VIEW 9: MARYLEBONE ROAD/BAKER STREET



Figure A.73: Marylebone view 9: Streetview



Figure A.75: Marylebone view 9: Existing view



Figure A.74: Marylebone view 9: 60m building test



Figure A.76: Marylebone view 9: 80m building test



Figure A.77: Marylebone view 9: 120m building test



Figure A.78: Marylebone view 9: 100m building test



Figure A.79: Marylebone view 9: 150m building test

TALL BUILDING TEST VIEW 10: REGENT'S PARK



Figure A.80: Marylebone view 10: Streetview



Figure A.82: Marylebone view 10: Existing view



Figure A.81: Marylebone view 10: 60m building test



Figure A.83: Marylebone view 10: 80m building test



Figure A.84: Marylebone view 10: 120m building test



Figure A.85: Marylebone view 10: 100m building test



Figure A.86: Marylebone view 10: 150m building test

TALL BUILDING TEST VIEW 11: REGENT'S PARK BROAD WALK



Figure A.87: Marylebone view 11: Streetview



Figure A.89: Marylebone view 11: Existing view



Figure A.88: Marylebone view 11: 60m building test



Figure A.90: Marylebone view 11: 80m building test



Figure A.91: Marylebone view 11: 120m building test



Figure A.92: Marylebone view 11: 100m building test



Figure A.93: Marylebone view 11: 150m building test

TALL BUILDING TEST VIEW 12: PRIMROSE HILL



Figure A.94: Marylebone view 12: Streetview



Figure A.96: Marylebone view 12: Existing view



Figure A.95: Marylebone view 12: 60m building test



Figure A.97: Marylebone view 12: 80m building test



Figure A.98: Marylebone view 12: 120m building test



Figure A.99: Marylebone view 12: 100m building test



Figure A.100: Marylebone view 12: 150m building test

TEST MODELLING 2 PADDINGTON - ROYAL OAK STATION

VIEWSHED ANALYSIS FOR THREE BUILDINGS - P1, P2 AND P3

TESTING AT 36M, 45M, AND 54M

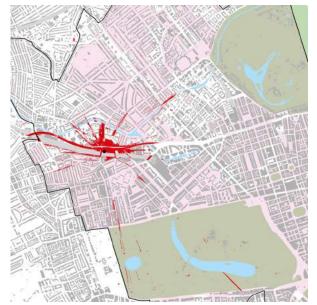


Figure A.101: Royal Oak P1 - 36m viewshed analysis

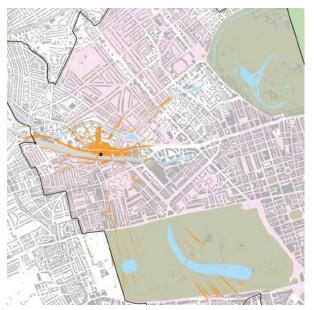


Figure A.102: Royal Oak P1 - 45m viewshed analysis

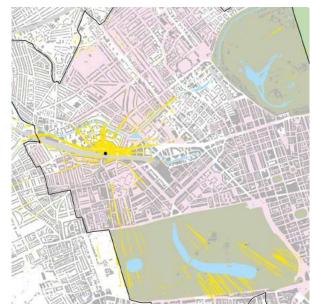


Figure A.103: Royal Oak P1 - 54m viewshed analysis

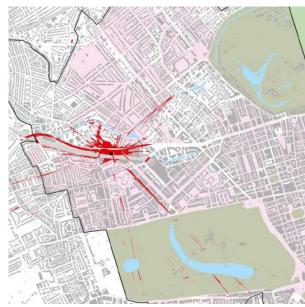


Figure A.104: Royal Oak P2 - 36m viewshed analysis

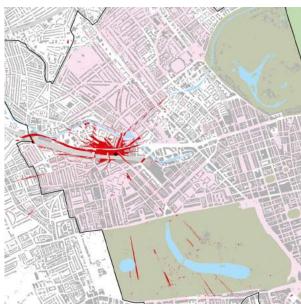


Figure A.107: Royal Oak P3 - 36m viewshed analysis

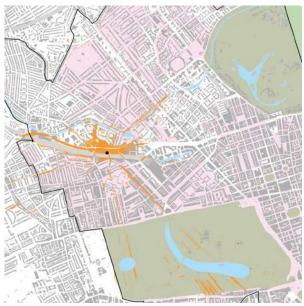


Figure A.105: Royal Oak P2 - 45m viewshed analysis

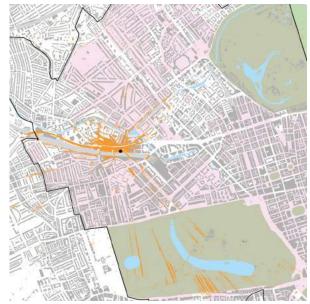


Figure A.108: Royal Oak P3 - 45m viewshed analysis



Figure A.106: Royal Oak P2 - 54m viewshed analysis

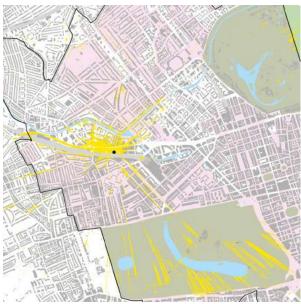


Figure A.109: Royal Oak P3 - 54m viewshed analysis

TEST VIEWS SELECTED BASED ON VISIBILITY IN VIEW SHED ANALYSIS

- 1. Westway view east
- 2. Talbot Road view east

3. Gloucester Terrace/Porchester Terrace viewing east

- 4. Gloucester Terrace viewing north
- 5. Gloucester Terrace at Westbourne Terrace viewing north
- 6. Westbourne Terrace Road viewing south
- 7. Blomfield Road viewing south-west



Figure A.110: Royal Oak test view locations

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TALL BUILDING TEST VIEW 1: WESTWAY



Figure A.111: Royal Oak view 1: Streetview

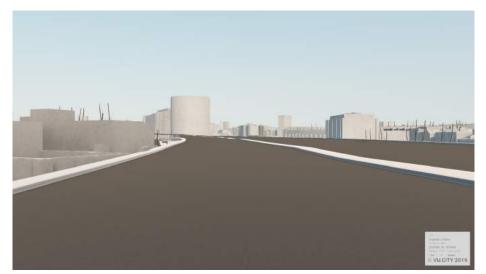


Figure A.112: Royal Oak view 1: existing view

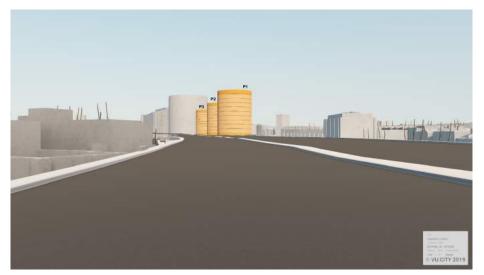


Figure A.113: Royal Oak view 1: 45m building test



Figure A.114: Royal Oak view 1: 36m building test



Figure A.115: Royal Oak view 1: 54m building test

TALL BUILDING TEST VIEW 2: TALBOT ROAD



Figure A.116: Royal Oak view 2: Streetview



Figure A.117: Royal Oak view 2: existing view



Figure A.118: Royal Oak view 2: 45m building test



Figure A.119: Royal Oak view 2: 36m building test



Figure A.120: Royal Oak view 2: 54m building test

TALL BUILDING TEST VIEW 3: GLOUCESTER TERRACE/PORCHESTER TERRACE



Figure A.121: Royal Oak view 3: Streetview



Figure A.122: Royal Oak view 3: existing view

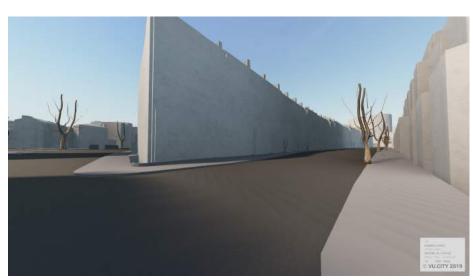


Figure A.124: Royal Oak view 3: 36m building test



Figure A.123: Royal Oak view 3: 45m building test

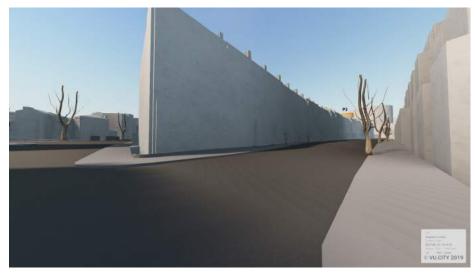


Figure A.125: Royal Oak view 3: 54m building test

TALL BUILDING TEST VIEW 4: GLOUCESTER TERRACE



Figure A.126: Royal Oak view 4: Streetview



Figure A.127: Royal Oak view 4: existing view



Figure A.128: Royal Oak view 4: 45m building test



Figure A.129: Royal Oak view 4: 36m building test



Figure A.130: Royal Oak view 4: 54m building test

TALL BUILDING TEST VIEW 5: GLOUCESTER TERRACE AT WESTBOURNE CRESCENT



Figure A.131: Royal Oak view 5: Streetview



Figure A.132: Royal Oak view 5: existing view



Figure A.133: Royal Oak view 5: 45m building test



Figure A.134: Royal Oak view 5: 36m building test



Figure A.135: Royal Oak view 5: 54m building test

TALL BUILDING TEST VIEW 6: WESTBOURNE TERRACE ROAD



Figure A.136: Royal Oak view 6: Streetview



Figure A.137: Royal Oak view 6: existing view



Figure A.138: Royal Oak view 6: 45m building test



Figure A.139: Royal Oak view 6: 36m building test



Figure A.140: Royal Oak view 6: 54m building test

TALL BUILDING TEST VIEW 7: BLOMFIELD ROAD



Figure A.141: Royal Oak view 7: Streetview

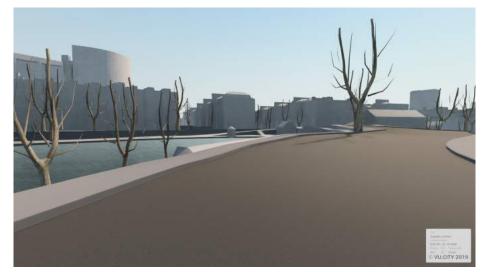


Figure A.142: Royal Oak view 7: existing view

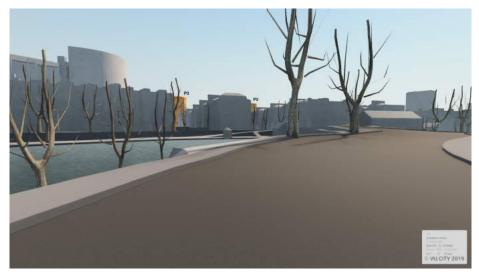


Figure A.143: Royal Oak view 7: 45m building test



Figure A.144: Royal Oak view 7: 36m building test

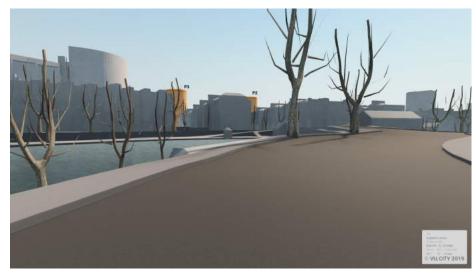


Figure A.145: Royal Oak view 7: 54m building test

TEST MODELLING 3 VICTORIA - TERMINUS PLACE

VIEWSHED ANALYSIS TESTING AT 40M, 60M, 80M AND 100M

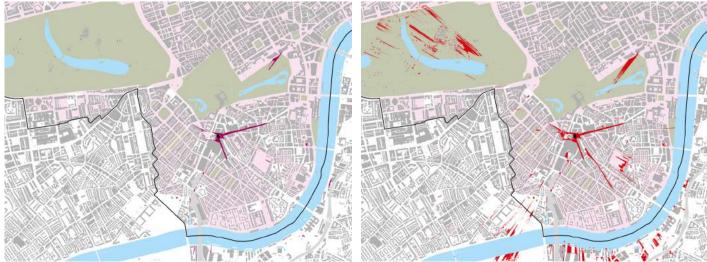


Figure A.146: Victoria Terminus Place - 40m viewshed analysis

Figure A.147: Victoria Terminus Place - 60m viewshed analysis

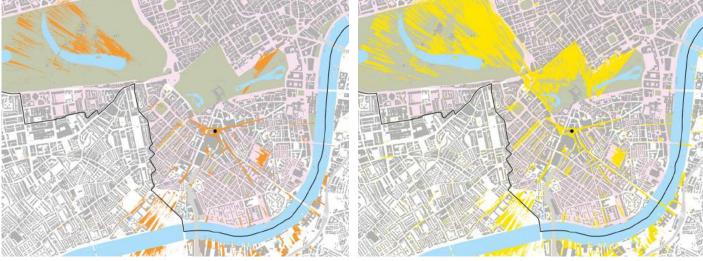


Figure A.148: Victoria Terminus Place - 80m viewshed analysis

Figure A.149: Victoria Terminus Place - 100m viewshed analysis

TEST VIEWS SELECTED BASED ON VISIBILITY IN VIEW SHED ANALYSIS

- 1. Victoria Street viewing west
- 2. Constitutional Hill viewing south
- 3. Green Park Piccadilly Entrance viewing south
- 4. Hyde Park Corner viewing south
- 5. South Bank (North of Westminster Bridge) viewing west

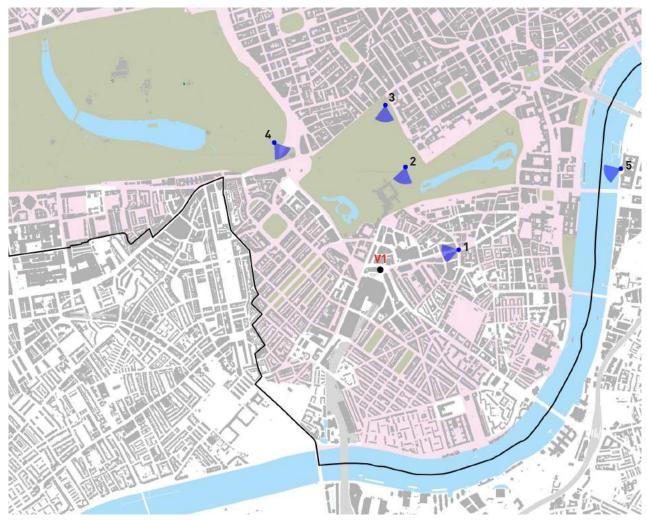


Figure A.150: Terminus Place test view locations

TALL BUILDING TEST VIEW 1: VICTORIA STREET



Figure A.151: Terminus Place view 1: Streetview



Figure A.152: Terminus Place view 1: Existing view



Figure A.153: Terminus Place view 1: 40m building test



Figure A.155: Terminus Place view 1: 80m building test



Figure A.154: Terminus Place view 1: 60m building test



Figure A.156: Terminus Place view 1: 100m building test

TALL BUILDING TEST VIEW 2: CONSTITUTION HILL



Figure A.157: Terminus Place view 2: Streetview



Figure A.158: Terminus Place view 2: Existing view

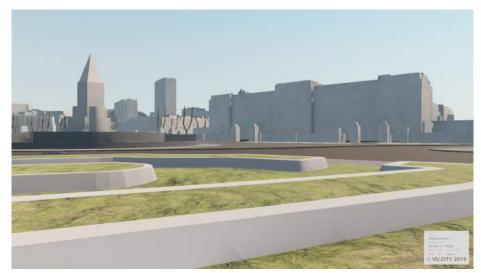


Figure A.159: Terminus Place view 2: 40m building test



Figure A.161: Terminus Place view 2: 60m building test



Figure A.160: Terminus Place view 2: 80m building test



Figure A.162: Terminus Place view 2: 100m building test

TALL BUILDING TEST VIEW 3: GREEN PARK PICCADILLY ENTRANCE



Figure A.163: Terminus Place view 3: Streetview



Figure A.164: Terminus Place view 3: Existing view



Figure A.165: Terminus Place view 3: 40m building test



Figure A.166: Terminus Place view 3: 80m building test



Figure A.167: Terminus Place view 3: 60m building test

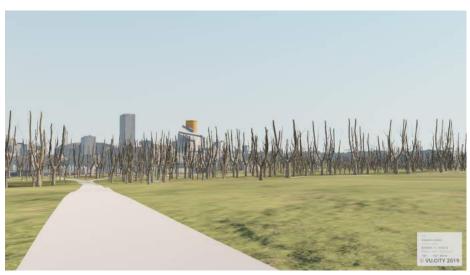


Figure A.168: Terminus Place view 3: 100m building test

TALL BUILDING TEST VIEW 4: HYDE PARK CORNER



Figure A.169: Terminus Place view 4: Streetview



Figure A.170: Terminus Place view 4: Existing view



Figure A.171: Terminus Place view 4: 40m building test



Figure A.172: Terminus Place view 4: 80m building test



Figure A.173: Terminus Place view 4: 60m building test



Figure A.174: Terminus Place view 4: 100m building test

TALL BUILDING TEST VIEW 5: SOUTH BANK (NORTH OF WESTMINSTER BRIDGE)



Figure A.175: Terminus Place view 5: Streetview



Figure A.176: Terminus Place view 5: Existing view



Figure A.177: Terminus Place view 5: 40m building test



Figure A.179: Terminus Place view 5: 60m building test



Figure A.178: Terminus Place view 5: 80m building test



Figure A.180: Terminus Place view 5: 100m building test