LONDON'S CENTRE FOR THE BUILT ENVIRONMENT

LONDON'S GROWING UP!

NLA Insight Study

LONDON'S CENTRE FOR THE BUILT ENVIRONMENT

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INTRODUCTION

This NLA Insight Study brings together a mass of data regarding planning applications for tall buildings that is available through the planning portals of local authorities, together with published and unpublished future plans for developments, in order to highlight some of the massive changes that are taking place in the capital over the next couple of decades.

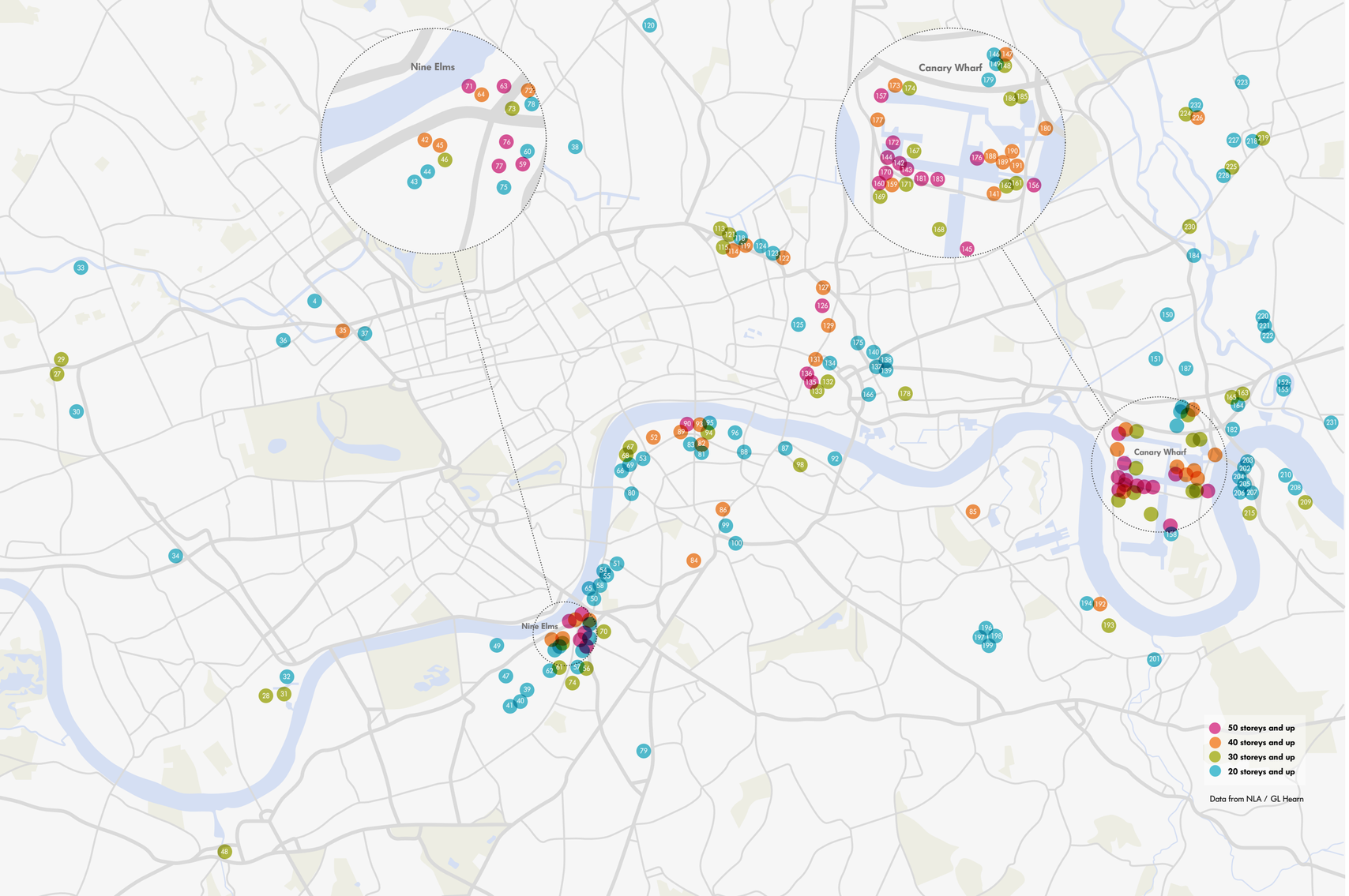
As a result of the exponential growth in London's population, the Mayor and the boroughs have to deliver new homes at a scale not seen since the 1930s, but unlike the 1930s, covering great swathes of Metroland is no answer to our current problems. We need to conserve our land area just as we need to conserve all natural resources – and that means increasing densities.

While in theory increased density does not mean building tall buildings, it is only on large sites with a coherent masterplan that the full benefits of low to mid-rise high-density can be developed. In the sort of smaller, expensive sites generally found in the Central Activity Zone (CAZ), the pressure to build tall – in the present planning system – is hard to resist.

NLA believes that an open and informed debate about the pressures of housing a fast growing city, and the resulting solutions, is essential in the development of a better city. The scale of change revealed in this study will come as a surprise to many and we believe the debate that emerges will have a positive impact on the quality of buildings that will enhance our skyline in the future.

MAP

Location of future tall buildings in London



236 proposals for tall buildings over 20 storeys within Greater London, from research by GL Hearn for NLA

Project name
Borough
Architect
Developer
Height / Storeys
Type
Status

*indicates projects which fall outside the boundaries of the map

1
The Tower GWQ*
Hounslow TW8 0BW
Assael Architecture
Barratt West London
100m / 29 storeys
Mixed Use
Under construction

2
The Apex*
Ealing W5 2BS
Darling Associates Architecture
Frogmore Estates
76m / 21 storeys
-
Approved

3
Copeland School*
Brent HA9
GMH Rock Townsend
Copland Community School / Technology Centre Foundation
82m / 28 storeys
Residential & Retail
Approved

4
399 Edgware Road
Brent NW2
Sheppard Robson
Development Securities
72m / 22 storeys
Residential
Approved

5
Karma House*
Brent HA9 0UU
HTA
Donban
58m / 20 storeys
Residential
Approved

6
Wembley Plot W03*
Brent HA9
Rogers Stirk Harbour + Partners
Quintain Estates
85m / 25 storeys
Commercial
Approved

7
Brent Cross Market Quarter MQ1 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
100m / 25 storeys
Commercial
Approved

8
Brent Cross Market Quarter MQ1 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

9
Brent Cross West BXW1 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

10
Brent Cross West BXW1 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

11
Brent Cross West BXW2 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

12
Brent Cross West BXW2 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

13
Brent Terrace BT2 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

14
Brent Terrace BT2 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

15
Brent Terrace BT4 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

16
Eastern Lands EL1 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

17
Eastern Lands EL1 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

18
Eastern Lands EL3 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

19
Eastern Lands EL3 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

20
Eastern Lands EL4 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
65m / 21 storeys
Residential
Approved

21
Station Quarter SQ1 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
100m / 25 storeys
Commercial
Approved

22
Station Quarter SQ1 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
100m / 25 storeys
Commercial
Approved

23
Station Quarter SQ1 (3)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
100m / 25 storeys
Residential
Approved

24
Station Quarter SQ2 (1)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
100m / 25 storeys
Commercial
Approved

25
Station Quarter SQ2 (2)*
Barnet NW2
Allies and Morrison
B.X.C Development Partners
100m / 25 storeys
Commercial
Approved

26
West Hendon Estate (Block E2)*
Barnet W9
Allies and Morrison
Barratt Metropolitan
85m / 27 storeys
Residential
Approved

27
Brickfields (Block J)
Hammersmith & Fulham
W12
Eric Parry Architects
Helical Bar / Aviva Investors
108m / 32 storeys
Residential & Retail
Approved

28
Chelsea Creek Tower
Hammersmith & Fulham
SW10
Broadway Maylan
St George
86m / 30 storeys
Residential & Retail
Approved

29
Imperial West Tower
Hammersmith & Fulham
W12
PLP Architecture
Imperial College London
105m / 35 storeys
University
Approved

30
Westfield Tower,
Ariel Way
Hammersmith & Fulham
W12
Allies and Morrison
Westfield Shoppingtowns Limited
23 storeys
Residential & Commercial
Proposed

31
Chelsea Waterfront,
Lots Road Tower 1
Kensington and Chelsea / Hammersmith and Fulham
SW10
Farrells
Hutchison Whampoa Properties
130m / 37 storeys
Residential
Under construction

32
Chelsea Waterfront,
Lots Road Tower 2
Kensington and Chelsea / Hammersmith and Fulham
SW10
Farrells
Hutchison Whampoa Properties
92m / 25 storeys
Residential
Under construction

33
Ladbroke Green
Kensington and Chelsea
W10
CZWG Architects
Peabody Trust
67m / 22 storeys
Residential & Commercial
Proposed

34
100 West Cromwell Road
Kensington and Chelsea
SW5
Benson + Forsyth
Spen Hill Developments
82m / 24 storeys
Residential & Retail
Proposed

35
1 Merchant Square
Westminster W2 1JU
Robin Partington Architects
European Land Partnership Ltd
140m / 42 storeys
Residential & Hotel
Approved

36
Paddington Triangle
Westminster W2 6BA
Grimshaw Architects
Crossrail
21 storeys
Commercial & Retail
Proposed

37
West End Green
Westminster W2 1DH
Squire and Partners
West End Green Property Ltd
85m / 22 storeys
Residential
Under construction

38
Maiden Lane
Camden NW1 9YS
PRP Architects
LB Camden
66m / 20 storeys
Residential
Approved

39
New Covent Garden Market (**Apex Site - A1**)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
86m / 26 storeys
Residential
Proposed

40
New Covent Garden Market (Apex Site - A2)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
80m / 23 storeys
Residential
Proposed

41
New Covent Garden Market (Apex Site - A4)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
77m / 23 storeys
Residential
Proposed

42
New Covent Garden Market (Northern Site - N1)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
154m / 46 storeys
Residential
Proposed

43
New Covent Garden Market (Northern Site - N6)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
84m / 24 storeys
Residential
Proposed

44
New Covent Garden Market (Northern Site - N7)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
104m / 29 storeys
Residential & Commercial
Proposed

45
New Covent Garden Market (Northern Site – N8)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
180m / 54 storeys
Residential
Proposed

46
New Covent Garden Market (Northern Site – N9)
Wandsworth SW8 5NX
Skidmore Owing & Merrill
VSM (NCGM) Ltd
122m / 36 storeys
Residential
Proposed

47
Nine Elms Parkside Tower
Wandsworth SW8
Allies and Morrison
Royal Mail Group
80m / 23 storeys
Mixed Use
Approved

48
Ram Brewery
Wandsworth SW18 4LB
EPR Architects
Greenland Holdings Group
115m / 36 storeys
Residential & Retail
Approved

49
Riverlight
Wandsworth SW8
Rogers Stirk Harbour + Partners
St James Group
21 storeys
Residential & Mixed Use
Under construction

50
36-48 Albert Embankment
Lambeth SE1
Make Architects
OKTIS Holdings
75m / 23 storeys
Residential & Commercial
Proposed

51
81 Black Prince Road
Lambeth SE1 7SZ
Keith Williams Architects
Ristoia Ltd
73m / 23 storeys
Commercial & Residential
Under construction

52
Doon Street Tower
Lambeth SE1
Lifschutz Davidson Sandilands
Coin Street Community Builders
140m / 43 storeys
Residential & Mixed Use
Approved

53
Elizabeth House
Lambeth SE1
David Chipperfield Architects
London & Regional / Chelsfield PLC
94m / 22 storeys
Commercial & Residential
Approved

54
Hampton House (Building 1),
20 Albert Embankment
Lambeth SW8
Foster + Partners
St James Group
85m / 27 storeys
Residential & Retail
Approved

55
Hampton House (Building 2),
20 Albert Embankment
Lambeth SW8
Foster + Partners
St James Group
76m / 24 storeys
Residential & Retail
Approved

56
Keybridge House (Building A)
Lambeth SW8 1RG
Allies and Morrison
British Telecommunications PLC
133m / 36 storeys
Residential & Commercial
Proposed

57
Keybridge House (Building F)
Lambeth SW8 1RG
Allies and Morrison
British Telecommunications PLC
77m / 22 storeys
Residential & Commercial
Proposed

58
Merano, 30-34 Albert Embankment
Lambeth SE1
Rogers Stirk Harbour + Partners
St James Group
86m / 28 storeys
Mixed Use
Under construction

59
New Bondway (Tower 1)
Lambeth SW8 1SQ
Kohn Pedersen Fox Associates/Tavernor McLaren Property
50 storeys
Residential & Commercial
Proposed

60
New Bondway (Tower 2)
Lambeth SW8 1SQ
Kohn Pedersen Fox Associates/Tavernor McLaren Property
24 storeys
Residential & Commercial
Proposed

61
Nine Elms Sainsburys (Tower G)
Lambeth SW8 2LF
Rolfe Judd Architects
Sainsbury's Supermarket Ltd
129m / 37 storeys
Residential
Approved

62
Nine Elms Sainsburys (Tower K)
Lambeth SW8 2LF
Rolfe Judd Architects
Sainsbury's Supermarket Ltd
90m / 29 storeys
Residential
Approved

63
One Nine Elms,
City Tower
Lambeth SW8 5NQ
Kohn Pedersen Fox Associates
Green Property Ltd / CIT Group
200m / 58 storeys
Residential & Commercial
Approved

64
One Nine Elms, River Tower
Lambeth SW8 5NQ
Kohn Pedersen Fox Associates
Green Property Ltd / CIT Group
161m / 43 storeys
Residential & Hotel
Approved

65
Prince Consort House,
27-29 Albert Embankment
Lambeth SE1
David Walker Architects
Jones Lang LaSalle
87m / 27 storeys
Residential & Retail
Proposed

66
Shell Centre (Building B3)
Lambeth SE1
Squire and Partners
Canary Wharf Group Plc
85m / 28 storeys
Residential & Retail
Proposed

67
Shell Centre (**Building B4A**)
Lambeth SE1
Squire and Partners
Canary Wharf Group Plc
113m / 37 storeys
Residential & Retail
Proposed

68
Shell Centre (Building B4B)
Lambeth SE1
Squire and Partners
Canary Wharf Group Plc
91m / 30 storeys
Residential & Retail
Proposed

69
Shell Centre (Building B6)
Lambeth SE1
Squire and Partners
Canary Wharf Group Plc
64m / 21 storeys
Residential & Retail
Proposed

70
30-60 South Lambeth Road
Lambeth SW8
Feilden Clegg Bradley Studios
Downing Developments
97m / 32 storeys
Residential
Under construction

71
The Tower, One St George Wharf
Lambeth SW8 2LE
Broadway Maylan
St George South London
181m / 53 storeys
Residential
Under construction

72
Vauxhall Cross Island (Tower 1)
Lambeth SW8 1SJ
Squire and Partners
Kylun Ltd
140m / 41 storeys
Residential
Approved

73
Vauxhall Cross Island (Tower 2)
Lambeth SW8 1SJ
Squire and Partners
Kylun Ltd
106m / 31 storeys
Residential
Approved

74
Vauxhall Sky Gardens
Lambeth SE1
Carey Jones Architects
Fraser Property Development UK
120m / 36 storeys
Residential & Commercial
Proposed

75
Vauxhall Square (Miles Street South)
Lambeth SW8
Allies and Morrison
CLS Holdings
87m / 26 storeys
Residential & Retail
Approved

76
Vauxhall Square (North)
Lambeth SW8
Allies and Morrison
CLS Holdings
168m / 50 storeys
Residential & Retail
Approved

77
Vauxhall Square (South)
Lambeth SW8
Allies and Morrison
CLS Holdings
168m / 50 storeys
Residential & Retail
Approved

78
Vauxhall Square (Wendle Court)
Lambeth SW8
Allies and Morrison
CLS Holdings
69m / 21 storeys
Residential & Retail
Approved

79
Wayland House
Lambeth SW9
PRP Architects
Network Housing Group
69m / 20 storeys
Residential
Under construction

80
199 Westminster Bridge Road
Lambeth SE1
Allford Hall Monaghan Morris
Urbanest
63m / 21 storeys
Residential & University
Under construction

81
20 Blackfriars Road (Office Tower)
Southwark SE1
Wilkinson Eyre Architects
Circleplane
109m / 23 storeys
Commercial
Approved

82
20 Blackfriars Road (**Residential Tower**)
Southwark SE1
Wilkinson Eyre Architects
Circleplane
148m / 42 storeys
Residential & Retail
Approved

83
240 Blackfriars Road
Southwark SE1 9UF
AHMM
Great Ropemaker Partnership (Great Portland Estates + BP Pension Fund)
85m / 20 storeys
Commercial
Under construction

84
360 London, Newington Butts
Southwark SE11 4QU
Rogers Stirk Harbour + Partners
Mace / Essential Living
147m / 45 storeys
Mixed Use
Approved

85
Decathlon
Southwark
Maccreanor Lavington / David Chipperfield
Sellar
40 storeys
Residential & Mixed use
Proposed

86
Eileen House, 80-94 Newington Causeway
Southwark SE1 6BN
Allies and Morrison
Merryvale No.6 International
125m / 41 storeys
Residential
Under construction

87
Fielden House
Southwark
Renzo Piano Building workshop
Sellar
27 storeys
Residential
Proposed

88
Gagarin Tower,
55 Southwark Street
Southwark SE1
Studio 44
Henry George Ltd
84m / 25 storeys
Residential
Proposed

89
King's Reach Tower
Southwark SE1 9LS
Kohn Pedersen Fox Associates
King's Reach Estates Ltd / CIT Real Estate LLP
155m / 41 storeys
Mixed Use
Under construction

90
One Blackfriars
Southwark SE1 9UF
Ian Simpson Architects
St George South London
170m / 50 storeys
Residential & Hotel
Under construction

91
One The Elephant
Southwark SE1 6SQ
Squire and Partners
Lend Lease
127m / 37 storeys
Residential & Retail
Under construction

92
One Tower Bridge (Block 5)
Southwark SE1
Squire and Partners
Berkeley Homes PLC
75m / 21 storeys
Residential
Under Construction

93
Sampson House and Ludgate House (Ludgate B)
Southwark SE1
PLP Architecture
The Carlyle Group
170m / 48 storeys
Mixed Use & Retail
Proposed

94
Sampson House and Ludgate House (Sampson House B)
Southwark SE1
PLP Architecture
The Carlyle Group
112m / 31 storeys
Mixed Use & Retail
Proposed

95
Sampson House and Ludgate House (Sampson House C)
Southwark SE1
PLP Architecture
The Carlyle Group
98m / 27 storeys
Mixed Use & Retail
Proposed

96
South Bank Tower,
185 Park Street
Southwark SE1
Squire + Partners
Delancey
75m / 23 storeys
Residential & Mixed use
Proposed

97
The Blades*
Southwark
Assael Architecture
Ministry of Sound
41 storeys
Residential
Proposed

98
The Quill
Southwark SE1 3QD
SPPARC Architecture
Kings College London / Investream
109m / 31 storeys
Residential & Retail
Approved

99
The Signal Building
Southwark SE1 6BN
Allies and Morrison
Neobrand
70m / 22 storeys
Residential & Commercial
Approved

100
Tribeca Square
Southwark SE1
PKS Architects
Oakmayne Properties / Delancey
76m / 23 storeys
Residential & Hotel
Under construction

101
Addiscombe Road*
Croydon CR0 6SE
Allies and Morrison
Royal Mail
21 storeys
Residential
Approved

102
Croydon College*
Croydon CR0
Darling Associates
Pheonix Logistics / Croydon College
37 storeys
Hotel & Residential
Proposed

103
4-20 Edridge Road*
Croydon CR0
MDR Associates
Edridge BV
70m / 23 storeys
Residential & Commercial
Proposed

104
Morello Tower*
Croydon CR0
Make Architects
Menta
171m / 55 storeys
Residential & Retail
Approved

105
One Lansdowne Road*
Croydon CR9 1LL
CZWG Architects
Guildhouse-Rosepride
199m / 51 storeys
Residential & Commercial
Approved

106
Ruskin Square Phase 1*
Croydon CR0
AHMM
Places for People
68m / 22 storeys
Residential
Under Construction

107
Ruskin Square,
Croydon R03*
Croydon CR7
Foster + Partners & AHMM
Stanhope and Schroders
67m / 20 storeys
Residential
Approved

108
St George's House,
Park Lane*
Croydon CR9 1NR
EPR Architects
Legal & General
95m / 24 storeys
Residential & Commerical
Approved

109
Taberner House & The Queens Gardens*
Croydon CR9 3JS
Make Architects
Croydon Council Urban Regeneration Vehicle (CCURV) / Essential Living
179m / 32 storeys
Residential & Retail
Proposed

110
The Tower at Saffron Square*
Croydon CR0
Rolfe Judd Architects
Berkeley Homes PLC
131m / 43 storeys
Residential & Retail
Under construction

111
Brook House,
Cannon Rubber Factory, 881 High Road*
Haringey N17 8EY
KSS
Newton Housing Trust
22 storeys
Residential & Mixed Use
Approved

112
Hale Village*
Haringey N17
Flanagan Lawrence
Lee Valley Estates
82m / 25 storeys
Residential & Retail
Proposed

113
Canaletto, 257 City Road
Islington EC1V 1AD
UNStudio
Groveworld
100m / 31 storeys
Residential
Under construction

114
City Forum (Tower 1)
Islington EC1V 2PU
Foster + Partners
Berkeley Homes Plc
155m / 42 storeys
Residential & Retail
Proposed

115
City Forum (Tower 2)
Islington EC1V 2PU
Foster + Partners
Berkeley Homes Plc
137m / 36 storeys
Residential & Retail
Proposed

116
City North (Tower 1)*
Islington N4
Benson + Forsyth
United House
64m / 21 storeys
Residential & Retail
Under construction

117
City North (Tower 2)*
Islington N4
Benson + Forsyth
United House
64m / 21 storeys
Residential & Retail
Under construction

118
250 City Road (Tower 1)
Islington EC1V
BUJ Architects
Land Securities PLC
85m / 28 storeys
Residential & Retail
Approved

119
250 City Road (Tower 2)
Islington EC1V 2QZ
Foster + Partners
Berkeley Group
155m / 42 storeys
Residential
Proposed

120
Hornsey Road Arches
Islington N7
CZWG Architects
Ashburton Trading Ltd
78m / 25 storeys
Residential & Retail
Proposed

121
Lexicon, 261 City Road
Islington EC1
Skidmore Owing & Merrill
Mount Anvill
138m / 36 storeys
Residential
Under construction

122
145 City Road
Residential Building
Hackney N1 6AZ
Make Architects
Rocket Investments
134m / 40 storeys
Residential & Retail
Approved

123
151 City Road
Hackney EC1V 1JH
Squire and Partners
Endora Holdings Ltd
73m / 24 storeys
Hotel & Commercial
Under construction

124
Eagle House
Hackney EC1V 1NR
Farrells
Mount Anvill
82m / 26 storeys
Residential
Under construction

125
One Crown Place
Hackney EC2M 2PS
Kohn Pedersen Fox Associates
AlloyMtd Group
114m / 24 storeys
Commercial & Retail
Approved

126
Principal Place
Hackney N1
Foster + Partners
Brookfield
161m / 51 storeys
Residential & Retail
Approved

127
The Stage Shoreditch
Hackney EC2A
Pringle Brandon Perkins+Will
Plough Yard Developments
140m /40 storeys
Residential & Retail
Approved

128
Woodberry Down*
Hackney N4
Fletcher Priest / Rolfe Judd
Berkeley Homes
30 storeys
Residential & Mixed use
Approved

129
100 Bishopsgate
City of London EC3
AMWB
100 Bishopsgate Partnership
172m / 40 storeys
Mixed Use
Proposed

130
20 Fenchurch Street
City of London EC3P 3DP
Rafael Viñoly Architects
Canary Wharf Group / Land Securities PLC
155m / 37 storeys
Commercial & Retail
Under construction

131
Four Seasons Hotel and Residences at Heron Plaza
City of London EC3
PLP Architecture
Heron International PLP
159m / 44 storeys
Hotel & Residential
Approved

132
40 Leadenhall Street
City of London EC3
Make Architects
Henderson
170m / 34 storeys
Mixed Use
Approved

133
52 Lime Street
City of London EC3M 7QD
Kohn Pedersen Fox Associates
WRBC Development UK Ltd
190m / 38 storeys
Commercial
Approved

134
60-70 St Mary Axe
City of London EC3A 8JQ
Foggo Associates
Targetfollow
90m / 22 storeys
Commercial
Approved

135
The Leadenhall Building
City of London EC3V 4AB
Rogers Stirk Harbour + Partners
British Land / Oxford Properties
224m / 52 storeys
Commercial & Retail
Under construction

136
The Pinnacle
City of London EC2N
Kohn Pedersen Fox Associates
Arab Investments
288m / 60 storeys
Commercial & Retail
Under construction

137
Aldgate Place (Tower 1)
Tower Hamlets E1 7PH
Allies and Morrison
Barratt London / British Land
82m / 21 storeys
Residential & Retail
Under construction

138
Aldgate Place (Tower 2)
Tower Hamlets E1 7PH
Allies and Morrison
Barratt London / British Land
24 storeys
Residential & Retail
Under construction

139
Aldgate Place (Tower 3)
Tower Hamlets E1 7PH
Allies and Morrison
Barratt London / British Land
25 storeys
Residential & Retail
Under construction

140
Altitude
Tower Hamlets E1
BFLS
Barratt Homes / Inoder
81m / 25 storeys
Residential & Retail
Under construction

141
Angel House,
225 Marsh Wall
Tower Hamlets E14
Jacobs Webber
The Angel Group
132m / 43 storeys
Residential & Commercial
Approved

142
Arrowhead Quay
(Tower 1)
Tower Hamlets E14
Glenn Howells Architects
Ballymore Properties
169m / 50 storeys
Residential & Retail
Proposed

143
Arrowhead Quay
(Tower 2)
Tower Hamlets E14
Glenn Howells Architects
Ballymore Properties
55 storeys
Residential
Proposed

144
Arrowhead Quay
(East Tower)
Tower Hamlets E14
Glenn Howells Architects
Ballymore Properties
182m / 55 storeys
Residential & Retail
Proposed

145
Baltimore Tower
Tower Hamlets E14
Skidmore Owing & Merrill
Frogmore / Galliard Homes
150m / 45 storeys
Residential & Retail
Under construction

146
Blackwall Reach
(Building H)
Tower Hamlets E14 0EW
Metropolitan Workshop and Jestico & Whiles
Swan Housing Association and Countryside Properties
25 storeys
Residential
Approved

147
Blackwall Reach
(Building I)
Tower Hamlets E14 0EW
Metropolitan Workshop and Jestico & Whiles
Swan Housing Association and Countryside Properties
40 storeys
Residential
Approved

148
Blackwall Reach
(Building K)
Tower Hamlets E14 0EW
Metropolitan Workshop and Jestico & Whiles
Swan Housing Association and Countryside Properties
35 storeys
Residential
Approved

149
Blackwall Reach
(Building M)
Tower Hamlets E14
Metropolitan Workshop and Jestico & Whiles
Swan Housing Association and Countryside Properties
63m / 20 storeys
Residential & Retail
Under construction

150
Bow Enterprise Park,
Cranwell Close
Tower Hamlets E3 3QY
ORMS Architecture and Design
Workspace Group
21 storeys
Residential & Mixed Use
Approved

151
Carmen Street
Tower Hamlets E14
Stock Woolstencroft Architects
Ballymore Properties
77m / 22 storeys
Residential & Retail
Approved

152
City Island (Building B), Leamouth Peninsula
Tower Hamlets E14
Glenn Howells Architects
Ballymore Group
74m / 24 storeys
Residential & Retail
Under construction

153
City Island (Building C), Leamouth Peninsula
Tower Hamlets E14
Glenn Howells Architects
Ballymore Group
79m / 26 storeys
Residential & Retail
Under construction

154
City Island (Building D), Leamouth Peninsula
Tower Hamlets E14
Glenn Howells Architects
Ballymore Group
76m / 25 storeys
Residential & Retail
Under construction

155
City Island (Building EG), Leamouth Peninsula
Tower Hamlets E14
Glenn Howells Architects
Ballymore Group
63m / 20 storeys
Residential & Retail
Under construction

156
City Pride
Tower Hamlets E14
Squire and Partners
Chalegrove Properties
239m / 75 storeys
Residential & Retail
Approved

157
Columbus Tower
(Hertsmere)
Tower Hamlets E14 4AB
-
Ryan Corporation (UK)
242m / 75 storeys
Residential & Hotel
Approved

158
Crossharbour District Centre (Building B)
Tower Hamlets E14 3BT
Broadway Malyan
Ashbourne Beech
71m / 23 storeys
Residential & Retail
Proposed

159
Cuba Street (Tower 1)
Tower Hamlets E14
3D Reid / Gultekin Architecture
Agaoglu Group
122m / 40 storeys
Hotel
Status Unknown

160
Cuba Street (Tower 2)
Tower Hamlets E14
3D Reid / Gultekin Architecture
Agaoglu Group
157m / 57 storeys
Hotel
Status Unknown

161
Dollar Bay
Tower Hamlets E14 9YJ
Ian Simpson Architects
Mount Anvil
115m / 31 storeys
Residential & Retail
Approved

162
1-18 Dollar Bay Court
Tower Hamlets E14 9YJ
Ian Simpson Architects
Mount Anvil
115m/ 31 storeys
Residential & Commercial
Approved

163
East India Dock Road (Block A)
Tower Hamlets E14
CZWG Architects
Barratt Homes
94m / 38 storeys
Residential
Status Unknown

164
East India Dock Road (Block B)
Tower Hamlets E14
CZWG Architects
Barratt Homes
54m / 21 storeys
Residential
Status Unknown

165
East India Dock Road (Block I)
Tower Hamlets E14
CZWG Architects
Barratt Homes
92m / 34 storeys
Residential
Status Unknown

166
Goodman's Fields
Tower Hamlets E1
Lifschutz Davidson Sandilands
Berkeley Homes
73m / 21 storeys
Residential
Under construction

167
Heron Quays West
Tower Hamlets E14
Adamson Associates
Canary Wharf Group
190m / 33 storeys
Commercial & Retail
Approved

168
Indescon Court Phase 2
Tower Hamlets E14
BFLS
Oracle
95m / 32 storeys
Residential & Hotel
Approved

169
Manilla Street
Tower Hamlets E14 8GB
Dexter Moren Architects
Ardmore Group
82m / 30 storeys
Mixed Use
Proposed

170
30 Marsh Wall
Tower Hamlets E14
21st Architecture
3DMW
53 storeys
Mixed Use
Approved

171
40 Marsh Wall
Tower Hamlets E14
BUJ Architects
Accor
128m / 39 storeys
Hotel & Retail
Approved

172
Newfoundland
Tower Hamlets E14
Horden Cherry Lee Architects
Canary Wharf Group
220m / 60 storeys
Residential
Proposed

173
North Quay (Tower 1)
Tower Hamlets E14
Pelli Clarke Pelli Architects
Canary Wharf Group Plc
216m / 44 storeys
Commercial
Approved

174
North Quay (Tower 3)
Tower Hamlets E14
Pelli Clarke Pelli Architects
Canary Wharf Group Plc
203m / 38 storeys
Commercial
Approved

175
One Commercial Street
Tower Hamlets E1
Broadway Maylan / John Seifert Architects Ltd
Redrow Homes / Julius Properties
79m / 23 storeys
Commercial & Residential
Under construction

176
One Wood Wharf
Tower Hamlets E14 9SB
Herzog & de Meuron
Canary Wharf Group
211.5m / 40+ storeys
Residential
Proposed

177
1 Park Place
Tower Hamlets E14
Horden Cherry Lea Architects
Canary Wharf Group Plc
200m / 45 storeys
Commercial
Approved

178
Pinchin Street Tower
Tower Hamlets E1
HTA Architects
The Environment Trust
98m / 32 storeys
Residential & Retail
Status Unknown

179
Poplar Business Park,
Prestons Road (Block C)
Tower Hamlets E14 9RL
Barton Wilmore
Workspace Group PLC
22 storeys
Residential & Hotel
Approved

180
Providence Tower
Tower Hamlets E14
Skidmore Owing & Merrill
Ballymore Properties
136m / 44 storeys
Residential
Under construction

181
Quay House,
2 Admirals Way
Tower Hamlets E14
Kohn Pedersen Fox Associates
Investin
75 storeys
Residential
Proposed

182
Reuters, Blackwall Yard (Block A)
Tower Hamlets E14
Squire and Partners
Blaxmill Ltd
98m / 29 storeys
Residential
Approved

183
South Quay Plaza
Tower Hamlets E14
Foster + Partners
Berkeley Homes Plc
249m / 75 storeys
Residential
Proposed

184
Tesco Bromley by Bow
Tower Hamlets E3
Collado Collins
Tesco Stores Ltd
70m / 23 storeys
Residential & Hotel
Approved

185
Trafalgar Way (Tower 1)
Tower Hamlets E14
Darling Associates
Essential Living
122m / 36 storeys
Residential & Retail
Proposed

186
Trafalgar Way (Tower 2)
Tower Hamlets E14
Darling Associates
Essential Living
127m / 35 storeys
Residential & Hotel
Proposed

187
Willis Street Tower
Tower Hamlets E14
PRP Architects
Poplar HARCA
80m / 20 storeys
Residential & Commercial
Approved

188
A3 Wood Wharf
Tower Hamlets
Stanton Williams
Canary Wharf Group
157m / 42 storeys
Residential
Proposed

189
Wood Wharf 1
Tower Hamlets
Allies and Morrison
Canary Wharf Group
up to 211m / 40+ storeys
Commercial
Proposed

190
Wood Wharf 2
Tower Hamlets
Allies and Morrison
Canary Wharf Group
up to 211m / 40+ storeys
Commercial
Proposed

191
Wood Wharf 3
Tower Hamlets
Allies and Morrison
Canary Wharf Group
up to 211m / 40+ storeys
Commercial
Proposed

192
Convoys Wharf (Tower 1)
Lewisham SE8
Farrells
Hutchinson Whampoa
48 storeys
Residential
Proposed

193
Convoys Wharf (Tower 2)
Lewisham SE8
Farrells
Hutchinson Whampoa
91m / 32 storeys
Residential
Proposed

194
Convoys Wharf (Tower 3)
Lewisham SE8
Farrells
Hutchinson Whampoa
72m / 26 storeys
Residential
Proposed

195
Lewisham Gateway*
Lewisham SE13
PRP Architects
Muse Developments
77m / 22 storeys
Mixed Use
Approved

196
Surrey Canal Triangle - Bolina North (Building 1)
Lewisham SE15 1EP
Studio Egret West / Sew / Townshend Landscape Architects
Renewal
22 storeys
Residential & Retail
Approved

197
Surrey Canal Triangle - Local Landmark Building (Building 2)
Lewisham SE15 1EP
Studio Egret West / Sew / Townshend Landscape Architects
Renewal
86m / 27 storeys
Residential & Commercial
Approved

198
Surrey Canal Triangle - Stadium Avenue Marker Building 1 (Building 3)
Lewisham SE15 1EP
Studio Egret West / Sew / Townshend Landscape Architects
Renewal
21 storeys
Residential & Retail
Approved

199
Surrey Canal Triangle - Stadium Avenue Marker Building 2 (Building 4)
Lewisham SE15 1EP
Studio Egret West / Sew / Townshend Landscape Architects
Renewal
21 storeys
Residential & Retail
Approved

200
Callis Yard Site*
Greenwich
Metropolis PD
Inland Homes
20 storeys
Residential
Proposed

201
Creekside Village East (Block 2)
Greenwich SE8
Squire and Partners
Ampurius NuHomes Investments Ltd
70m / 23 storeys
Residential
Approved

202
Greenwich Hotel
Greenwich SE10
Lifschutz Davidson Sandilands
Queensgate Investments and Arora Hotels
71m / 22 storeys
Hotel & Retail
Approved

203
Greenwich Hotel, Apartments
Greenwich SE10
Lifschutz Davidson Sandilands
Queensgate Investments and Arora Hotels
81m /24 storeys
Residential
Approved

204
Greenwich Peninsula Riverside (1)
Greenwich SE10
Aukett Swanke
Knight Dragon
20+ storeys
Residential
Proposed

205
Greenwich Peninsula Riverside (2)
Greenwich SE10
Aukett Swanke
Knight Dragon
20+ storeys
Residential
Proposed

206
Greenwich Peninsula Riverside (3)
Greenwich SE10
Aukett Swanke
Knight Dragon
20+ storeys
Residential
Proposed

207
Greenwich Peninsula Riverside (4)
Greenwich SE10
Aukett Swanke
Knight Dragon
20+ storeys
Residential
Proposed

208
Greenwich Peninsula Riverside Plot M103
Greenwich SE10
CJCT Architects
Knight Dragon
23 storeys
Residential
Proposed

209
Greenwich Peninsula Riverside Plot M104
Greenwich SE10
Pilbrow and Partners
Knight Dragon
31 storeys
Residential
Approved

210
Greenwich Peninsula Riverside Plot M121
Greenwich SE10
Pilbrow and Partners
Knight Dragon
20 storeys
Residential
Approved

211
Love Lane Tower*
Greenwich SE18
HLM Architects
Love Street Woolwich
77m / 25 storeys
Residential
Proposed

212
Mast Quay (Phase 2 Block E)*
Greenwich SE18
Upchurch Associates
Comer Homes Group
67m / 22 storeys
Residential & Commercial
Proposed

213
Royal Arsenal Riverside
Block A/ B*
Greenwich
-
Berkeley Homes PLC
20+ storeys
Residential
Status Unknown

214
Royal Arsenal Riverside
Block C*
Greenwich SE18
PRP Architects
Berkeley Homes PLC
69m / 20 storeys
Residential
Approved

215
The Meridian Tower
Greenwich SE10
Patel Taylor
Peninsula Quays Ltd
118m / 32 storeys
Residential & Retail
Proposed

216
The Peninsula Tower
Greenwich
RTKL Associates
Arora International
23 storeys
Residential
Approved

217
Woolwich Town Centre Tower*
Greenwich SE18
Collado Collins
Tesco Stores Ltd / St James Investment
92m / 30 storeys
Residential & Retail
Approved

218
Broadway Chambers (Building 1)
Newham E15 4QS
Allies and Morrison
Telford Homes / Caraeno
123m / 39 storeys
Residential & Retail
Approved

219
Broadway Chambers (Building 2)
Newham
Allies and Morrison
Telford Homes/ Careano
20 storeys
Residential
Approved

220
Crown Wharf (Tower 1)
Newham E15
Allies and Morrison
Tower Properties
70m / 23 storeys
Residential
Approved

221
Crown Wharf (Tower 2)
Newham E15
Allies and Morrison
Tower Properties
70m / 24 storeys
Residential
Approved

222
Crown Wharf (Tower 3)
Newham E15
Allies and Morrison
Tower Properties
74m / 24 storeys
Residential
Proposed

223
First Avenue
Newham E15
Fletcher Priest Architecture Ltd
Westfield
92m / 22 storeys
Commercial & Retail
Approved

224
Glasshouse Gardens (Tower One)
Newham
Allies and Morrison
Lend Lease/ LCR
30 storeys
Residential
Proposed

225
206-214 High Street
Newham E15 2JA
MJP Architects
Alumno Developments
84 & 35 storeys
Residential & Commercial
Approved

226
Manhattan Loft Gardens
Newham E15
Skidmore Owing & Merrill
Manhattan Loft Corporation
149m / 43 storeys
Residential & Hotel
Approved

227
Stratford Plaza
Newham E15
Allies and Morrison / Stock Woolstencroft
Telford Homes
93m / 26 storeys
Residential & Commercial
Under construction

228
Stratford Tower
Newham E15
MJP
Alumno
26 storeys
Residential
Proposed

229
The Pump House*
Newham E16
Studio RHE
-
73m / 24 storeys
Residential & Retail
Under construction

230
2-12 Stratford High Street (Block A)
Newham E15
Jestico & Whiles
Telford Homes
117m / 35 storeys
Residential & Commercial
Approved

231
24 Tidal Basin Road
Newham E16
SOM
Hub Residential
76m / 25 storeys
Residential
Approved

232
Unite Stratford
Newham E15
BDP
UNITE Group
90m / 28 storeys
Residential & Retail
Under construction

234
Fresh Wharf (Block H)*
Barking and Dagenham
IG11
Glenn Howells Architects / Jestico and Whiles
Countryside Properties / Fresh Wharf Developments
67m / 22 storeys
Residential
Approved

235
Trocoll House,
Wakering Road*
Barking and Dagenham
IG11
Dexter Moren Architects
Coplan Estates
67m / 22 storeys
Hotel & Retail
Approved

236
Vicarage Field*
Barking and Dagenham
IG11
PRP Architects
LagMAR Holdings
70m / 23 storeys
Residential & Retail
Approved

CHAPTER 1

What determines the scale and location of tall buildings?

‘London’s face is its fortune, and it belongs to everyone’

Sir Neil Cossons OBE, Pro-Provost of the Royal College of Art and from 2000-07, Chairman of English Heritage

Since the Millennium, London has witnessed the construction of a series of tall buildings that have transformed the city’s skyline – from the Gherkin, which gained planning permission in 2000, through to The Shard, which opened in 2012, to The Leadenhall Building and 20 Fenchurch Street which are completing this year. And there are many more to come in the next few years, a veritable tsunami of towers: 236 buildings are in the pipeline, 113 of which are already approved for planning.

Some observers fear that what is currently taking place in London is dangerously akin to a Dubai or Shanghai-style free for all, a pell-mell race to the sky, in which planners wave through applications and count the boroughs’ development gains as a price well worth paying.

Against that, other planners and developers argue that the expansion of towers in London has taken place under the aegis of a sophisticated and highly developed planning regime, which broadly controls where tall buildings can be located and determines what they should, or rather what they should not, look like. Tall buildings such as One Canada Square, the Gherkin or The Shard, have enhanced London’s status on the world stage, setting a visual marker for London as a powerful global player.

Tall buildings inevitably arouse controversy, all the more so in a city with such a rich historical fabric as London. The city’s skyline belongs to everyone, and people’s opinions often differ from those of the planning authorities, who themselves can clash over the many ambiguities that seem to riddle our planning regime. But the question that needs to be asked – and one which this study poses – is whether the planning process is working as best and as sensitively as it could.

Before that charge is properly examined, it is essential to clarify how the current system works. How do we go about making critical decisions on which tall buildings are allowed to be built and where? How do politicians, looking both to safeguard London’s heritage but also to regenerate large swathes of the capital, play their part in influencing the process? And what exactly is driving this current surge in demand for tall buildings in the capital?

As a small but telling indication of the difficulties of the subject, the very term ‘tall building’ eludes an exact official definition. The Greater London Authority (GLA) defines tall buildings as ‘those that are substantially taller than their surroundings’ or ‘cause a significant change to the skyline’. As a rule of thumb for its own purposes, the City of London says this translates to a height threshold of 75m above sea level.

London boroughs take their cue from the GLA, with local variations. The Lambeth Core Strategy, for example, defines tall buildings as developments over 25m high on sites adjacent to the Thames and buildings over 30m elsewhere.

This study has elected to consider tall buildings as structures with over 20 storeys plus those that vary significantly in scale from their surroundings.

1.1 Densification

London’s population is growing twice as fast as the rest of the United Kingdom. From 2011 to 2012 alone, the capital’s population grew by 1.3 per cent to 8.3 million. One in five of all UK births, around 120,000 per year, now takes place in London (ONS). Latest estimates indicate that London’s population may exceed 10 million by 2031 and 11 million by 2050.

This rapidly accelerating growth is driven by a number of factors: high birth and immigration rates, increasing life expectancies, and a greater number of people choosing to stay in London for longer. It places enormous strains on life in the capital, most notably with regard to housing, which has become the most pressing priority for policy makers in London and the south east.

The Mayor of London’s *2020 Vision*, published in 2013 to set out his ambitions for the capital, posits the need to create 400,000 new homes in the next decade, and one million by the mid-2030s. He also predicts that there will be an extra 450,000 jobs by 2023, making the availability of office space an issue only slightly less critical than housing.

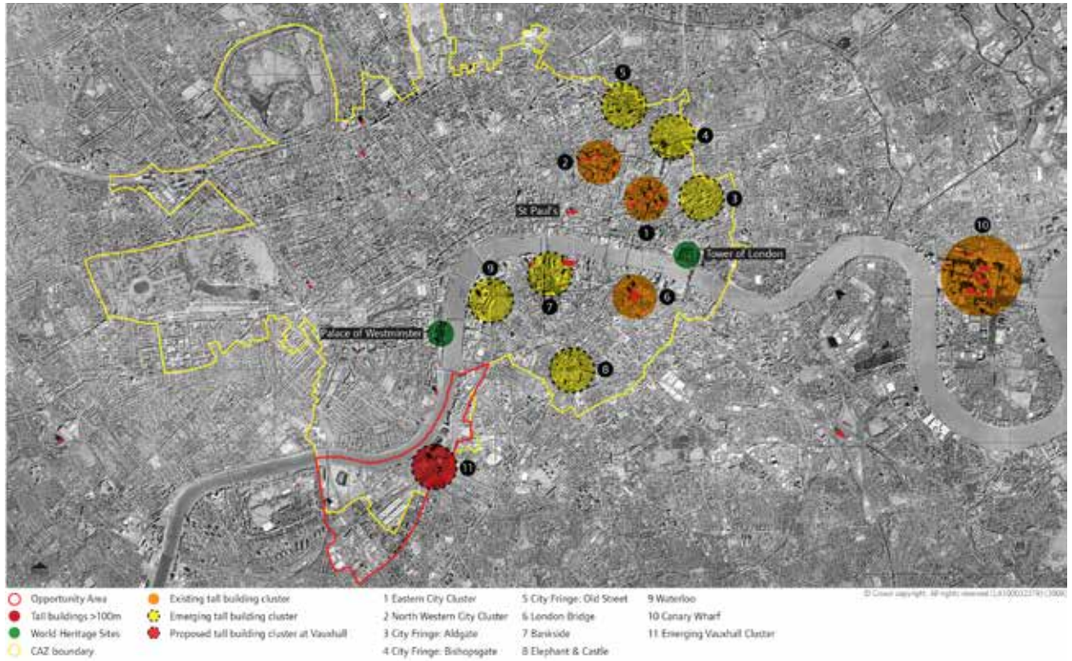
Professor Tony Travers of the London School of Economics, writing for the Housing Forum, said: ‘It cannot be a solution to the demand for housing in thriving places like London to move people ever further

City of London, 2025
© CPAT / Hayes Davidson / Jason Hawkes

Below: GLA map of central London tall building clusters, with Central Activity Zone indicated in yellow

Bottom left: Projected population of London by 2050. Source: GLA Economics

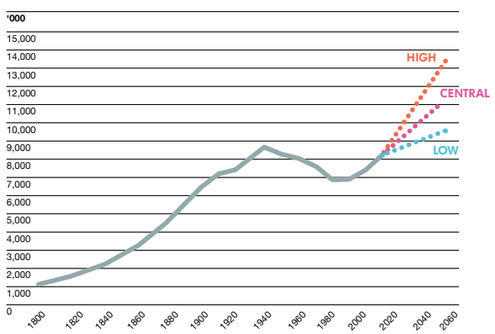
Bottom right: Density rankings across global cities. Source: UN Population Estimates



POPULATION GROWTH

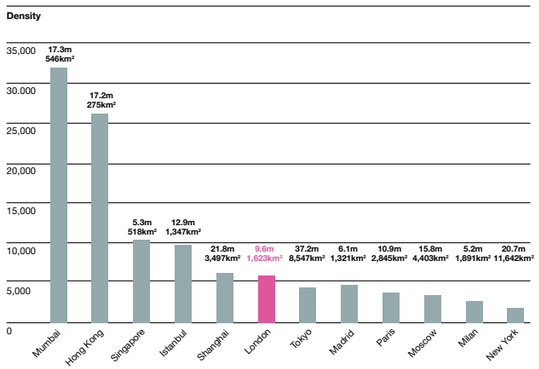
Source: GLA Economics

Projected at 11.3 million by 2050 based on extension of London Plan scenario, driven by natural growth rate



DENSITY RANKINGS ACROSS GLOBAL CITIES

Source: Using UN Population Estimates



out in search of cheaper places to live. The critical issue is how to bring about significant increases in supply without resorting to building extensively in the green belt, or beyond.'

London's policy makers broadly agree with Professor Travers. Historically, high-density housing was associated with overcrowding, particularly in lower-income areas. Now, thanks to the close correlation between high urban density, low energy use for transport, and the desire to curb the spread of the city into the Green Belt, it is seen as a key solution for achieving a sustainable city, and is made explicit in the London Plan. In looking at the relative densities of other large city conurbations around the globe, London's existing density is in fact fairly low.

The formation of the Greater London Authority and the publication of the *Draft London Plan* in 2002 led to a new spatial strategy for London aimed at increasing densities and accessibility in order to create a more 'sustainable and compact city'. According to this strategy – which had been strongly urged in Richard Roger's 1999 Urban Task Force report – an increase in densities in highly accessible areas, can lead to positive economic growth, and more sustainable urban development, bringing many environmental and social advantages. Through combining mixed-use and mixed-tenure developments, particularly around public transport nodes, it argues that greater densities can bring more cohesive and sustainable communities, while halting urban sprawl. Following this approach, the London Plan sets targets for higher densities around London's public transport nodes.

The Commission for Architecture and the Built Environment (CABE), established in 1999 and merged into the Design Council in 2011, agreed with the strategy but also noted that: 'Higher density development leads to more intensive use of space and shared areas with implications for management, security and overall quality of life. Issues of noise, daylight, privacy and overlooking all become more acute as densities increase, requiring careful design.' Unless this is done, 'there is a risk of recreating the cramped and poor housing environments of the past.'

While tall residential buildings are one way of addressing London's acute housing demands, they are not necessarily the only option. Talking of the new homes required, the Mayor has said: 'These will not be high-rise rabbit hutches. They can be built with London's traditional materials – brick and stone and slate. We have introduced new room sizes of Parker Morris plus 10 per cent, and there are plenty of examples in London where high densities can be achieved without high-rise buildings.

'Where buildings are on top of or immediately adjacent to a transport hub, it may make sense to build high – depending on the historic or architectural context. There are some places such as Vauxhall or London Bridge where high-rise development is clearly right and has strong local support.

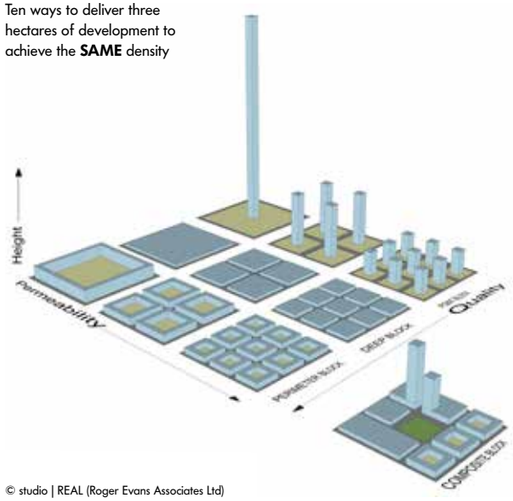
'London is not central Paris. We do not have a single architectural idiom, or a rule that no building should be more than 83 feet high. That gives us great flexibility. But it is simply not the case that good quality high-density housing must always involve tower blocks. Of the 400,000 homes we will need over the next ten years, the vast majority can be built on the brownfield Opportunity Areas we have identified.'

Many urban planners over the years have also argued that tall buildings are not the only way to achieve densification. In 2002, a Parliamentary Select Committee for Transport, Local Government and the Regions reported that, 'there is broad consensus amongst the witnesses that high rise is not the only or most efficient way to provide high densities. As the National Housing Federation pointed out, the Urban Task Force report, *Towards An Urban Renaissance*, found that that the same density could be provided by high, medium and low rise developments in different configurations.'

The Committee referred to the Georgian Group's submission on Lillington Garden Estate in Pimlico, which was designed by Darbourne and Darke in 1961-71, and showed that high density and low-rise could be compatible. Commented the Georgian Group: 'To some extent, Lillington Gardens was simply relearning the lessons of the Georgian era, where the typical urban terrace achieves a density of around 340 habitable rooms per hectare, compared with an average of around two-

Below: Ten ways to achieve the same density on a site

Ten ways to deliver three hectares of development to achieve the **SAME** density



© studio | REAL (Roger Evans Associates Ltd)

thirds that figure for a conventional post-war housing development.'

A report in 2013 from think tank Create Streets, entitled *Create Streets: Not just multi-storey estates*, was also highly critical of building tall residential blocks as a solution to London's housing crisis, arguing that building homes at street level can provide more homes than high-rise.

In fact the 2011 census shows the relatively low-rise London borough of Islington to have the highest population density of all local authorities across England and Wales, at 13,875 people per square km. Speaking at a recent NLA conference, Professor Tony Travers indicated that were the whole of Greater London to be developed at the same density, this could provide enough homes to increase London's population to 20 million, far and away enough to meet current demand.

London faces intense pressures to accommodate its expanding population, whether through more dense construction at low to mid-rise, building upwards or expanding out beyond the city's boundaries. Densification is at the heart of the London Plan and no change of policy is likely on this while London's population continues to grow.

1.2 The market

Commercial and residential land values in London are driven by a combination of factors – rising population, finite development land, a chronic shortage of housing, economic cycles and investor confidence, both domestically and internationally.

When land is at such a premium, particularly in central London, tall buildings with high plot ratios can be an effective way of making the best use of available space. They can also offer the most profit potential.

However, the large upfront investments make tall buildings vulnerable to economic downturns. *The Skyscraper Index*, formulated by the Barclays economist Andrew Lawrence in 1999, detects a strong correlation between the completion of tall buildings, which were started in boom times, and the arrival of financial crises. Certainly, London has its share of tall buildings that fell victim to the world economic crisis of 2008 onwards, most notably the Pinnacle in Bishopsgate which was to become the tallest building in the City of London but struggled with funding and is now being reengineered to meet current market conditions. The Shard was nearly derailed by the global downturn in late 2007.

However, with the onset of recovery recently, residential land values have risen – by over 20 per cent in the past year alone. Construction costs have also fallen – they currently sit 20 per cent below 2006 levels. And investor/developer confidence has returned, some of it money from China and other booming Far Eastern economies seeking a safe haven. Savills research has shown that 44 per cent of new residential developments have Asian owners, while the figure for the central London office market is 24 per cent.

In particular, demand for new tall buildings is being driven by the residential market. Some of this residential development is taking place in fast developing areas along the south bank of the Thames, while much is also happening in the Wood Wharf and South Quay area of Tower Hamlets. As AECOM explains in a paper

Above: Visualisation of the lobby at the Pinnacle © Hayes Davidson
Below: Aerial view of the proposed Pinnacle by KPF, City of London © Hayes Davidson

Below right: One Wood Wharf, by Herzog and de Meuron for Canary Wharf Group plc

published by the Council on Tall Buildings and Urban Habitat (CTBUH) in 2013: 'With office values, in real terms, no different to the levels they attained some 20 years or so ago, there are a number of office-led developments that are incorporating a residential element, sometimes in the same building, creating a new typology of mixed-use tower.'

The cost of tall buildings is one factor that drives many developers to aim for the luxury end of the market. A Knight Frank report, *Tall Towers 2012*, states that 'residential tower schemes are viable only when buyers are willing to pay a relatively high base price, starting at around £800-1,000 per sq ft. The higher the apartment, the higher the premium.'

And, of course, the more desirable the location, the greater the premium at any level. AECOM reports super prime residential schemes achieving between £2,500-£5,000 per sq ft.

The same height-price equation generally applies to commercial buildings too – the higher the floor, the more prestigious the address, and accordingly the steeper the rent.

The potential returns for developers also depend on the costs of design and construction. Building a tower to the exceptional design quality required to win planning permission in itself makes the cost higher than most other forms of lower-level development.

AECOM estimates the construction costs of residential towers are about 10 per cent higher than commercial towers but that their respective values can differ markedly. The residential tower's value in a super-prime location can command premium sales/rental income.

1.3 Controls and policies

Planning in London is organised through a complex hierarchy of controls, from national level to regional level through to local authorities, which are required by law to draw up their own individual local plans. As well as stipulated planning parameters, there are also numerous specific guidances that relate to tall buildings. These include *Guidance on Tall Buildings* issued by English Heritage and CABE in 2007, as well as numerous heritage and protected view obligations, some of which derive from UNESCO's listing as World Heritage Sites the historical London landmarks of the Tower of London; the Royal Botanic Gardens at Kew; the Palace of Westminster and Westminster Abbey; and Maritime Greenwich.

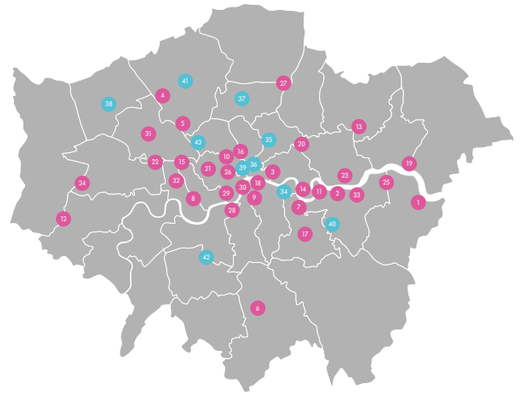
Further complexity is introduced by the planning system's built-in flexibility, which allows for individual projects to depart from the policy norm if there is merit in doing so – many argue this also allows London to take a uniquely pragmatic approach.

1.4 The Mayor and the London Plan

The Mayor's London Plan, the overall strategic plan for London, outlines broad design guidelines for tall buildings in the capital, designates general areas where they should be located and the protected views they must not impede. These views are set out in detail in the London View Management Framework (see page 22).

In particular the London Plan specifies that tall buildings should generally be limited to sites in the Central Activity Zone (CAZ), Opportunity Areas, Areas of Intensification or town centres that have good access to public transport.

Below: Opportunity Areas in the London Plan, courtesy of GLA



Opportunity Areas

1 Bexley Riverside
2 Charlton Riverside
3 City Fringe
4 Colindale / Burnt Oak
5 Cricklewood / Brent Cross
6 Croydon
7 Deptford Creek / Greenwich Riverside
8 Earls Court & West Kensington
9 Elephant & Castle
10 Euston
11 Greenwich Peninsula
12 Heathrow
13 Ilford
14 Isle of Dogs
15 Kensal Canalside
16 King's Cross
17 Lewisham, Catford & New Cross
18 London Bridge & Bankside
19 London Riverside
20 Lower Lee Valley (including Stratford)
21 Paddington
22 Park Royal / Willesdon Junction
23 Royal Docks and Beckton Waterfront
24 Southall
25 Thamesmead & Abbey Wood
26 Tottenham Court Road
27 Upper Lee Valley (including Tottenham Hale)
28 Vauxhall, Nine Elms & Battersea
29 Victoria
30 Waterloo
31 Wembley
32 White City
33 Woolwich

Areas for Intensification

34 Canada Water
35 Dalston
36 Farringdon / Smithfield
37 Haringey Heartlands / Wood Green
38 Harrow & Wealdstone
39 Holborn
40 Kidbrooke
41 Mill Hill East
42 South Wimbledon / Colliers Wood
43 West Hampstead Interchange

The London Plan specifies 33 Opportunity Areas (with an additional five proposed in the 2014 *Draft Further Alterations to the London Plan*) as the capital's major reservoir of brownfield land with significant capacity to accommodate new housing, commercial and other development, while the 10 Areas of Intensification (proposed to reduce to seven in 2014) are typically built-up areas with good existing or potential public transport accessibility which can support redevelopment at higher densities. Together, the opportunity areas have capacity for 490,300 additional jobs and 233,600 additional homes; while the intensification areas can accommodate 13,000 new jobs and a further 14,350 homes.

The Mayor must be consulted on all planning applications that are of potential strategic importance to London, which naturally can include tall buildings. There is no specified height limit for tall buildings in London. However, there is a referral policy – buildings over 30m may be referred to the Mayor, or 25m if they are on the Thames. In the City of London, this rises to 150m. Where the Mayor and his officials are unhappy with the way the London Plan's injunctions have been interpreted by local borough planners – of whose powers, see following sections of this study – it is open to them to call in the tall tower proposal and subject it to further review.

A case in Southwark in December 2013, where the Mayor approved construction of 335 homes at Elephant and Castle, illustrates the use of this GLA power. Planning permission had been refused by Southwark Council for a 41-storey block on the site of Eileen House, Newington Causeway, close to Elephant and Castle. The Mayor chose to take over the application on the grounds that the area has overriding housing needs. After some alterations by the developer, the scheme was approved. The development sits within the Elephant and Castle Opportunity Area – one of the 33 areas designated by the Mayor with significant capacity for new development.

Policy 7.7 Location and design of tall and large buildings

Strategic

Tall and large buildings should be part of a plan-led approach to changing or developing an area by the identification of appropriate, sensitive and inappropriate locations. Tall and large buildings should not have an unacceptably harmful impact on their surroundings.

Planning decisions

Applications for tall or large buildings should include an urban design analysis that demonstrates the proposal is part of a strategy that will meet the criteria below. This is particularly important if the site is not identified as a location for tall or large buildings in the borough's LDF.

Tall and large buildings should:

a) generally be limited to sites in the Central Activity Zone, opportunity areas, areas of intensification or town centres that have good access to public transport
b) only be considered in areas whose character would not be affected adversely by the scale, mass or bulk of a tall or large building
c) relate well to the form, proportion, composition, scale and character of surrounding buildings, urban grain and public realm (including landscape features), particularly at street level
d) individually or as a group, improve the legibility of an area, by emphasising a point of civic or visual significance where appropriate, and enhance the skyline and image of London
e) incorporate the highest standards of architecture and materials, including sustainable design and construction practices
f) have ground floor activities that provide a positive relationship to the surrounding streets
g) contribute to improving the permeability of the site and wider area, where possible
h) incorporate publicly accessible areas on the upper floors, where appropriate
i) make a significant contribution to local regeneration.

Tall buildings:

a) should not affect their surroundings adversely in terms of microclimate, wind turbulence, overshadowing, noise, reflected glare, aviation, navigation and telecommunication interference
b) should not impact on local or strategic views adversely

The impact of tall buildings proposed in sensitive locations should be given particular consideration. Such areas might include conservation areas, listed buildings and their settings, registered historic parks and gardens, scheduled monuments, battlefields, the edge of the Green Belt or Metropolitan Open Land, World Heritage Sites or other areas designated by boroughs as being sensitive or inappropriate for tall buildings.

1.5 London View Management Framework

Key London views of St Paul's and the Palace of Westminster have been legally protected since 1976's Greater London Development Plan. The plan has been modified at various times subsequently, with the London View Management Framework (LVMF) being adopted in 2007 and revised in 2012. Today the framework seeks to 'designate, protect and manage' 27 views of London and some of its major landmarks.

'Designated views' include panoramas across substantial parts of London, views of landmarks framed by objects in the landscape, broad prospects along the River Thames or views of the urban townscape. Any new development proposed within one of these views is expected to demonstrate how it will make a positive contribution to the characteristics and composition of the view.

At the same time 13 viewing corridors, or 'protected vistas' as they are called, place additional consultation requirements on developments that exceed a certain height, within or adjacent to the sightline between the two places so as to preserve the ability to see the landmark as a focus of the view. It was because of the need to protect views of St Paul's that The Leadenhall Building (aka the Cheesegrater) has its distinctive tapered side.

Any new developments within these protected vistas which exceed a certain height threshold must be sent to the Mayor and affected local authority, who must consult English Heritage and, where the development affects the Tower of London, Historic Royal Palaces.

13 views are protected by the London View Management Framework:

- Alexandra Palace to St Paul's Cathedral
- the summit of Parliament Hill to St Paul's Cathedral
- the summit of Parliament Hill to the Palace of Westminster
- Parliament Hill, at the prominent oak tree east of the summit, to Palace of Westminster
- the viewing gazebo at Kenwood House to St Paul's Cathedral
- the summit of Primrose Hill to St Paul's Cathedral
- the summit of Primrose Hill to the Palace of Westminster
- Greenwich Park, north east of the General Wolfe statue, to St Paul's Cathedral
- Blackheath Point, near the orientation board, to St Paul's Cathedral
- Westminster Pier to St Paul's Cathedral
- King Henry VIII's Mound in Richmond Park to St Paul's Cathedral
- the centre of the bridge over the Serpentine to the Palace of Westminster
- The Queen's Walk at City Hall to The White Tower at the Tower of London

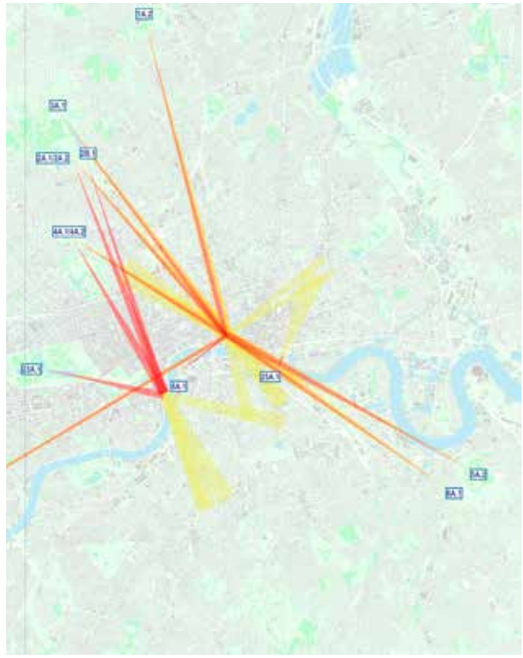
1.6 Secretary of State

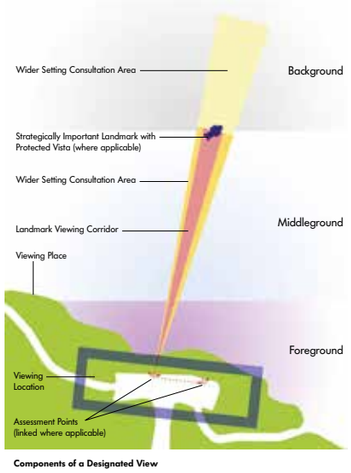
The Secretary of State has the power to call-in planning applications for determination if they conflict with national policies, might have a 'significant long-term impact on economic growth', 'impact beyond their immediate boundaries', give rise to 'national controversy', or raise 'significant architectural and urban design issues'. So far, call-in powers have been used fairly rarely in London.

The decision of the Secretary of State on whether to grant planning permission following an appeal or the call-in of an application is informed by the report of an Inspector who nearly always holds a public inquiry into the proposal. Such decisions are 'quasi-judicial', and therefore particular care is needed in taking them. However, similar considerations also arise in the exercise of discretionary powers on planning matters, such as in deciding whether or not to call in a planning application or recover an appeal.

The Heron Tower, called in in 2001, and The Shard, called in in 2002, are two examples of buildings that went to public inquiry. The Heron Tower, in Bishopsgate, was opposed by English Heritage because of its proximity to St Paul's when viewed from Waterloo Bridge. CABE backed the design, but Deputy Prime Minister John Prescott ordered a public inquiry, which found in the developer's favour. The tower's height was subsequently increased from 183m to its current 230m without objection.

Below: Strategic viewpoints protected by the LVMF, courtesy of GLA
Bottom: Components of a designated view, courtesy of GLA





Components of a Designated View

Below (top to bottom): View from Alexandra Palace – south western section (zoomed in) courtesy of GLA; Telephoto view from Blackheath to St Paul's, courtesy of GLA; View from Greenwich Park (zoomed in) courtesy of GLA; View from Kenwood, courtesy of GLA; View from Parliament Hill to Palace of Westminster (zoomed in) courtesy of GLA

Below: The Barbican complex.
Photography: Agnese Sanvito

The Shard's public inquiry the following year arose out of objections from CABE and English Heritage as well as the Royal Parks Foundation. Again, the public inquiry found for the developer and his architects Renzo Piano.

The most recent example of the Government calling in a tall building proposal is the redevelopment around the Shell Centre in Waterloo, where a decision is expected in early 2014.

The Civil Aviation Authority (CAA) also has a say in height issues, stating that London buildings over 1,000 feet infringe airspace. If planners grant permission for anything in excess of 1,000 feet, the CAA can request the Secretary of State to call in and determine the application. It was because the CAA expressed concerns about The Shard's positioning in relation to the Heathrow approach that its proposed height was reduced from 400m to 300m. London City Airport also influences the height of buildings in its vicinity and flight paths.

1.7 Boroughs and Local Plans

The 32 London boroughs, together with the City of London Corporation, are responsible for preparing Local Plans for their own areas, which determine what can be built where, but must ensure they conform broadly to the Mayor's London Plan.

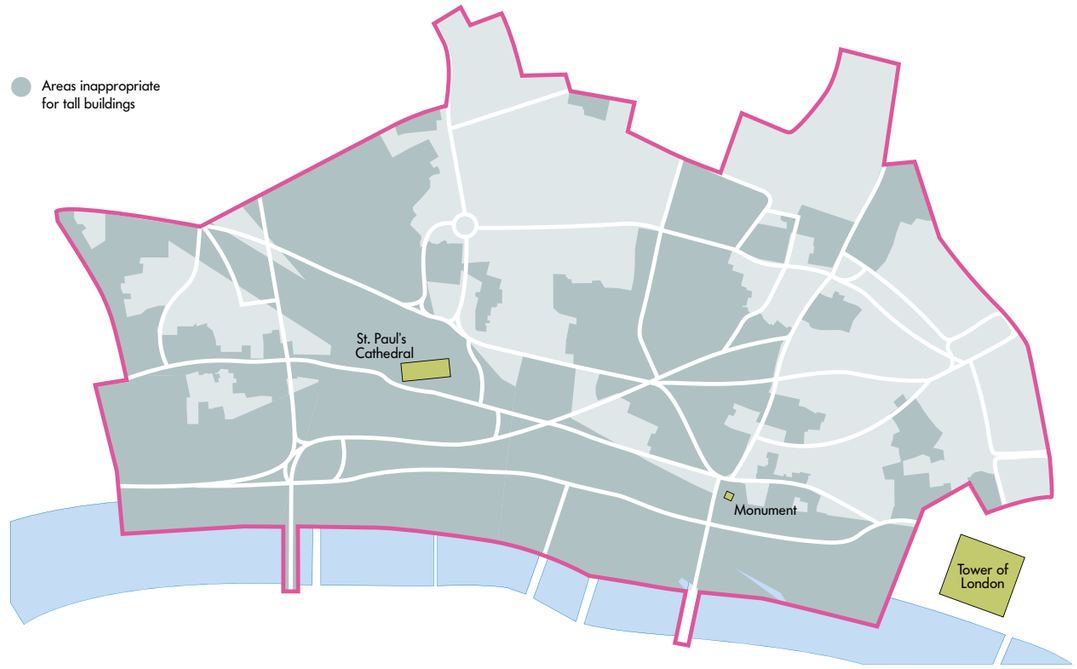
The London Plan states that: 'The Mayor will work with boroughs to identify locations where tall and large buildings might be appropriate, sensitive or inappropriate. He will help them develop local strategies to help ensure these buildings are delivered in ways that maximise their benefits and minimise negative impacts locally and across borough boundaries as appropriate.' (Policy 7.28)

1.8 The City of London

Concentrated in the City's square mile is London's densest cluster of tall buildings. Office towers, and the residential complex of the multi-purpose Barbican Centre, have been constructed here since the 1960s. When London's financial centre of gravity threatened to move towards Canary Wharf in the late 1990s, the City of London authorities responded by loosening its restrictive planning regime and encouraged a new tranche of tall building development, starting with the architecturally adventurous 'Gherkin', which led the way in establishing new design aspirations. Many of the world's elite architects have added to the City's transformation, often with dedicated public access areas at the very top of their buildings, such as at the Gherkin and 20 Fenchurch Street (the 'Walkie Talkie' tower) – something encouraged by the City's planning department as a vital component of their approval.

Bottom: The City of London, with The Heron Tower in the foreground and St Paul's to the far right

Below: City of London Core Strategy 2011, showing areas inappropriate for tall buildings



Below: Eastern Cluster of the City of London, viewed from the South Bank, courtesy of GLA

Like the London boroughs, the City of London, which is a unitary authority, has a Core Strategy which sets a framework for how the City should develop. In it, it defines tall buildings not by a specific figure but as those which 'significantly exceed the height of their surroundings.' The GLA stipulates that the City must refer to it any building with a proposed height of 150m or over.

A key concern for the City of London is the preservation of strategic views of St Paul's Cathedral, which are protected by a policy known as 'St Paul's Heights' that limits the height of buildings within these sightlines. The policy has been in operation since 1938.

These protected views have a significant impact on where tall buildings can be located in the City. The area referred to as 'the eastern cluster', broadly between Leadenhall Market, Liverpool Street Station and Fenchurch Street Station, is where the City supports the development of more tall buildings, while the west of the City and its riverside have been kept free of tall buildings. On the eastern fringe of the City, Aldgate is another area with significant development potential and the City specifies that tall buildings may be appropriate on certain sites.

Below: Proposed redevelopment of King's Reach Tower, by KPF for King's Reach Estates Ltd / CIT Real Estate LLP

1.9 Southwark

Southwark, sitting across the Thames from the City, has become home to some of London's tallest buildings including The Shard and the old King's Reach Tower as well as number of current consents for new tall buildings. The local authority drew up a borough-wide *Strategic Tall Building Research Paper* in 2010.

It defines tall buildings as those higher than 30m (or 25m in the Thames Policy Area) – approximately the height of a 7-10 storey office block. In low-scale areas, anything significantly higher is regarded as a tall building even if below 30m.

The Strategy designates areas appropriate for tall buildings, which broadly reflect key 'Opportunity Areas' in the borough: Bankside, Borough and London Bridge;

Below: View produced by Southwark Council to determine height of buildings along Blackfriars Road, courtesy of Southwark Council

Elephant and Castle; Peckham and Nunhead; Aylesbury; and Canada Water.

To illustrate the level of detail boroughs go into, Southwark's 2010 tall building study of the Bankside, Borough and London Bridge area and a second study of the Elephant and Castle area are illuminating.

The first of these studies was undertaken in two stages. Having identified general areas where tall buildings could be located, a more detailed study provided a comprehensive analysis of the areas to identify specific sites where tall buildings would be appropriate and the particular design opportunities, constraints and sensitivities for tall buildings on these sites. Southwark used a three dimensional model to undertake a desk-based view analysis of strategic, local and dynamic views in order to understand the potential effect that tall building development in these views.

The same micro-analysis was carried out in the *Elephant and Castle Supplementary Planning Guidance*, which was approved by the council in February 2004. The SPG recognised the important role that regeneration of the Elephant and Castle would play in the wider development of London South Central as a focus for investment and jobs.

1.10 City of Westminster

The City of Westminster has taken a very different

Below: Proposal for Elizabeth House, by David Chipperfield Architects for Chelsfield and London & Regional Properties

approach. With over 11,000 listed buildings, a World Heritage Site, Royal Parks and 51 Conservation Areas (which cover 85 per cent of the district), its rich urban fabric has led to a low-to-mid rise buildings regime, generally no higher than six to eight storeys, with some notable exceptions such as Big Ben, the Hilton Hotel, Kensington Barracks and New Zealand House. As a Buro Happold study in 2000 put it, 'the likely detrimental impact on [the area's historical buildings] is the reason why the approach to high buildings in Westminster has always been one of resistance.'

However, the council has designated locations where tall buildings may be permitted – Tottenham Court Road, Victoria and Paddington. There are several tall buildings in Paddington and Victoria – none of which is as tall as the developers originally envisaged.

Surrounded by a number of local authorities with a more favourable approach to tall building development, Westminster has also been quite vocal in its opposition to tall buildings that sit outside of its own boundaries. In response to Lambeth Council's permission for the Elizabeth House scheme in Waterloo, Westminster Council deputy leader Robert Davis wrote to Lambeth Council's cabinet member for housing and regeneration, Pete Robbins, saying: 'Westminster and English Heritage do not agree that your decisions have paid sufficient regard to the national policy on protection of the historic

environment and the World Heritage Site, as required by the National Planning Policy Framework.

'The skyline of London is changing dramatically, and in places not for the better. The GLA and boroughs such as yours are repeating the mistakes of the 1960s, but now on a much greater scale, allowing development which will scar the character of London irreparably. I think it highly likely that future generations will look back on this period and regard it as one where rationality and sensitivity by decision makers were completely missing.'

After the Government rejected its call to call in the application, Westminster obtained from the High Court last November a Judicial Review of the Government's decision to wave it through. The result is due before the summer.

Resolving cross-boundary disputes over tall buildings is something of a grey area. Under the National Policy Planning Framework, councils are only bound to consult with the neighbouring local authority through a 'duty to co-operate'. Ultimately in disputes, the final decision rests with the democratically elected Mayor, subject to legal review.

1.11 S106 and CIL

Many tall building planning permissions come with financial obligations under Section 106 of the Town and Country Planning Act 1990 (as amended), which are commonly known as S106 agreements. The aim is to mitigate or offset the impact any development has on the area, in terms of existing amenities and infrastructure. The commonest uses of planning obligations are to secure affordable housing, new schools, health clinics, new spaces and the infrastructure necessary to support the new building, which the borough might not otherwise be able to afford.

The correct use of S106 agreements is sometimes not clear. In March 2010 the Government consulted London boroughs and were told more clarity of guidance is required on whether a planning application can be refused if S106 obligations are refused. The system is now in transition to the Community Infrastructure Levy (CIL), which has a more clear-cut approach relating the size of the developer's contribution directly to the development's square footage.

From the local authority's point of view, tall building proposals can offer the opportunity to exact considerable community benefits as a quid pro quo from the developer.

Sellar, the developers behind The Shard, for example, contributed £37 million in S106 to Southwark Council. This payment was allocated to:

– £25 million on a new train station concourse, new plaza, refurbishment of London Bridge Street, and a new 30 per cent bigger bus station, re-orientated to create a new public transport interchange;
– £2.2 million refurbishment of St Thomas Street, pedestrianisation of Great Maze Pond and Joiner Street;
– £5 million employment programme – 40 per cent of the staff at The View from The Shard are Southwark residents, while there is a now a dedicated employment and training team to maximise employment opportunities and provide training for local residents;
– £1 million public art programme;
– £4 million payment to Guy's Hospital to create a new modern access to the campus.

1.12 English Heritage

English Heritage, which is the Government's statutory adviser on historical assets, is one of the most active participants in the tall buildings debate in London. It has made a number of interventions that have led to public inquiries, including that for The Shard. Its opposition to the Heron Tower in 2001 led to an inquiry, where it was described by Mayor Ken Livingstone as 'an obscure monastic order', while former City Planning Officer Peter Rees once described English Heritage as the 'Heritage Taliban'.

In 2007, English Heritage and CABE jointly produced *Guidance on tall buildings* to help evaluate tall building proposals (first published in 2003). It is still regarded as best practice nationally with regard to tall building assessments. Though not constituting national policy, it sets out criteria for evaluating tall building proposals and is considered a useful reference in any evidence base.

The guidance is positive about tall buildings' contribution to city life, but it cautions that they can also be harmful. 'In many cases where they have been unpopular, one of their principal failings is that many were designed with a lack of appreciation of the context in which they were to sit.'

The guidance strongly recommends that local authorities should identify appropriate locations for tall buildings in their development plan documents, saying: 'Such an approach will ensure that tall buildings are properly planned as part of an exercise in place-making informed by a clear long-term vision, rather than in an ad hoc, reactive, piecemeal manner.'

In addition to considering the wider objectives of sustainable urban design that apply to all new development, the guidance says local authorities should ensure that tall buildings take into account the historic context of the wider area. The authorities should carry out a character appraisal of the immediate context, identifying those elements that create local character and other important features and constraints, including: natural topography; urban grain; significant views of skylines; scale and height; streetscape; landmark buildings and areas and their settings, including backdrops, and

Below: London Bridge Quarter piazza © Sellar Property Group

important local views, prospects and panoramas. They should also identify opportunities where tall buildings might enhance the overall townscape and identify sites where the removal of past 'mistakes' might achieve a similar outcome.

Paragraph 4.4 of the guidance states: 'To be acceptable, any new tall building should be in an appropriate location, should be of first class design quality in its own right and should enhance the qualities of its immediate location and wider setting. It should produce more benefits than costs to the lives of those affected by it. Failure on any of these grounds will make a proposal unacceptable to CABE and English Heritage.'

Many other detailed recommendations are included in the guidance, including the importance of the base of tall building's effect on streetscape, and sustainability to exceed the latest regulations for energy use/carbon emissions.

Today, officials at English Heritage are keen to clarify that they are not opposed to tall buildings in London *per se* but many feel the evaluation process for assessing them is flawed. Said Nigel Barker, Planning and Conservation Director for London at EH at an NLA think tank on the subject: 'One of our frustrations is that the value of existing identity and character of areas does not seem to play as much role as it should do when being balanced against what are seen to be economic and other environmental benefits which are produced by tall buildings… There does not seem to be quite so much of a level playing field.'

1.13 UNESCO

The United Nations Educational, Scientific and Cultural Organisation (UNESCO) also plays an influential role in London's tall building story. Tall building planning applications within World Heritage Sites or their settings require the authorities to carefully consider the impact on the Outstanding Universal Value, authenticity and integrity of the World Heritage Site.

World Heritage Sites are places of Outstanding Universal Value, as set out in the 1972 UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage (the World Heritage Convention). As a State Party to the Convention, the United Kingdom is required to protect, conserve, present and transmit to future generations its World Heritage Sites.

London has four World Heritage Sites: Maritime Greenwich; the Tower of London; Palace of Westminster and Westminster Abbey, including St Margaret's Church; and Royal Botanic Gardens at Kew.

In all cases likely to have a significant impact on the value, authenticity and integrity of a World Heritage Site, pre-application consultation and discussions must be carried out with the planning authority and regional English Heritage staff to ensure that all the implications are fully understood and explicitly portrayed in supporting illustrative material.

The UNESCO World Heritage Committee has asked to be informed by national governments of proposals for major restorations or interventions which may affect the Outstanding Universal Value of a World Heritage Site.

They ask for notice to be given as soon as possible in order to help ensure the Outstanding Universal Value of the property is fully preserved. As English Heritage points out, this process raises problems in terms of defining whether developments will have an adverse impact on Outstanding Universal Value and of timing since the World Heritage Committee meets only once a year while in the UK planning decisions are normally taken more rapidly. In some cases, it may be appropriate to refer cases before submission of an actual planning application.

The decision on whether or not to refer cases to UNESCO is taken by the Department for Culture, Media and Sport (DCMS). They will first seek the advice of English Heritage and ask for English Heritage staff in the relevant regional office to be consulted at an early stage by planning authorities on all cases with significant potential impact on Outstanding Universal Value. All cases for which English Heritage requests call-in because of impact on Outstanding Universal Value will be considered for potential referral to the UNESCO World Heritage Committee. English Heritage will also advise DCMS on whether cases should be referred at an earlier stage of their development.

Below: The Tower of London, with The City from South Bank

UNESCO's intervention in a planning application is very rare but is always controversial when it does occur. In September 2012, for example, it threatened to delay a string of high-profile schemes near London's Waterloo Station because, it claimed they would damage from the Palace of Westminster, a World Heritage Site.
It has also flagged up concerns about a number of other schemes along the South Bank, including redevelopment around the Shell Centre at Waterloo.

Some critics argue that UNESCO has too much influence on development in London. While UNESCO has no direct power over planning decisions, it can ultimately remove World Heritage status from sites if they are significantly altered by new building developments. World Heritage Site status is a highly prized listing, and observers fear that its removal would both damage London's cultural reputation and the significant tourism economy it brings.

Deputy mayor for planning Sir Edward Lister says the GLA will fight for growth. 'We understand their concerns but have to balance them with the demands of an expanding city,' he said. 'It's all about moderation from both sides.'

1.14 Right to Light

A neighbour's 'right to light', which is protected under planning law, can also play a significant role in influencing the development and height of towers. Redevelopment

within the Square Mile often involves infringements of rights of light due to the dense built form and the need to make efficient use of scarce land resources. Any development which interferes with a legal right of light entitles the owner of that right to seek an injunction preventing development and/or compensation for the loss of light.

In an important ruling in 2011, known as the *Heaney* case, the Court granted a mandatory injunction requiring the developer of a redeveloped office block in Leeds to remove two floors because they blocked the light of a property next door. The decision came as a surprise to many as not only had the building work finished but one of the floors had already been let to a tenant. As a consequence of *Heaney*, neighbours who would previously have agreed to release rights of light (subject to adequate compensation) could now re-consider seeking an injunction, often dramatically affecting the viability and funding of schemes.

As part of the original planning application for the Walkie Talkie tower, the owners of the site at 20 Fenchurch Street had successfully negotiated with a number of individuals that were considered likely to suffer sufficient infringement of their rights to light. As a result of *Heaney*, however, the rights of lights of these neighbours had to be re-assessed. Seven instances were identified by the Court where the loss of light was considered to be of an extent that an injunction could be granted to prevent the development, with the remaining properties suitable for compensation.

The Corporation of London decided to use its planning powers to provide immunity from these claims to rights of light, by invoking Section 237 which is designed to protect developments which will provide economic benefits to the surrounding area. By doing so, the Walkie Talkie tower was provided with immunity from any rights of lights claims that could limit or prevent its development.

While 'rights to light' are rightly designed to protect those who would suffer from the loss of light as the result of a new development, in some cases uncertainty around its application in terms of timing and the scale of compensation has had the effect of holding developers to 'ransom' and thus towers could be reduced in height to avoid the delay and significant costs it poses to a scheme.

Below: 20 Fenchurch Street, by Rafael Viñoly Architects for Land Securities and Canary Wharf Group plc

1.15 The Crown

The Prince of Wales has long taken a close interest in British architecture, presenting himself as an Everyman speaking for the people of this country – even at the risk of abusing his position through what critics have called 'unconstitutional, behind-the-scenes meddling' in the democratic process. One of his most striking interventions occurred in 2001 when he rallied strongly against tall buildings in London, saying: 'The City of London is, without doubt, a hugely successful financial centre – but it is a social disaster,' at a conference, *Building for the 21st Century*.

The Prince argued that tall buildings can wreck the 'sensitive balance' of London's urban environment. 'They will, by their very geometry and scale, always struggle to relate to the spaces a city needs in order to work successfully. They cast long shadows; they darken streets and suck life from them; they tend to violate the sense of public space so vital to a living street, either by requiring a plaza to give them light, or by refusing to align with existing buildings because of the difficulties of entering and servicing them without a large and cluttered forecourt.

'They also create "hot spots" of pedestrian movement that are a major burden on nearby stations and pavements, and because their forms of architectural expression are towering pieces of sculpture, rather than a well mannered contribution to the public realm, they seldom blend into the either the streetscape or the skyline with good aesthetic manners.'

The Prince, nevertheless, stated he was not opposed to tall buildings but that they must 'fit in'. He said: 'If new towers are to be built, they should stand together to establish a new skyline, and not compete with or confuse what is currently there – as has already happened to a depressing and disastrous extent… If clustered, then the virtue of height becomes something that can, in the hands of creative architects, be truly celebrated.'

As well as arguing for a cluster approach, the Prince called for tall buildings to be designed as mixed-use for a variety of homes and business. And he urged more attention be paid to the base and apex of structures. 'At the base, new buildings should properly address the streetscape and help define a public realm that is truly public in form and function.'

Tall building's sustainability credentials also drew the Prince's ire. 'Towers, because of their very structural demands, rely on huge amounts of electricity to power their lifts, air conditioning and other infrastructure. You cannot usually open windows – so nature's cooling system is shut down. Heat losses escalate as one builds higher.

'One of the fundamental principles of sustainable development is the idea of building for change; the construction of buildings that can 'learn' and adapt to new and unforeseen circumstances over time. This is extremely difficult to achieve with very tall buildings.'

The Prince's views evidently stirred debate amongst the profession but it is unclear as to how influential they proved. Certainly, no recent tall building proposal appears to have been derailed by the Prince's intervention in the way that his attack on Lord Roger's Chelsea Barracks scheme for the Qataris was perceived. But his views are reflected by a number of other urban thinkers and many in the public at large.

Right: The developing London skyline, looking west
© Hayes Davidson

1.16 Residents and Neighbourhood Plans

Some years ago the Government noted that resistance from local communities to proposals for new buildings, including towers, and economic development within their neighbourhoods is often a consequence of their lack of opportunity to influence the nature of that development. Communities, the Government said, can feel unable to ensure that development meets local needs and takes satisfactory account of the tensions between development and conservation, environmental quality and pressure on services. These concerns often manifested in objections to planning applications or may be reflected in the policy of the local planning authority. And the current system, it said, can sometimes lead to development taking place against the wishes of the community, being delayed by objections (which could be at expense to both business and the local planning authority) or blocked altogether.

It was to overcome these problems of top-down planning that the Localism Act was introduced in 2011, giving new rights to communities to shape local development through involvement in drawing up Neighbourhood Plans.

However, one of the Government's principal objectives in neighbourhood planning is that it increases the rate of growth. Therefore, neighbourhood planning cannot lead to a lower rate of growth than is established in the local development plan. If a Neighbourhood Plan attempts to slow the local rate of economic development, it will be revoked by the Government.

How this new localism plays out with regard to unpopular new tall building proposals has yet to be established. It is certainly the case that local boroughs go to enormous efforts to consult locally about their development plans; as do developers looking to win approval for a new tall building. But it is equally the case that local opposition to a new tall building does not necessarily prevent the development. And many residents across London have accused their councils of favouring development of tall towers against the wishes of the local community.

From a developer's point of view, Neighbourhood Plans should allow for greater certainty of the success of any proposal. Indeed, developers will be able to approach neighbourhood communities with an offer of financial support to promote a Neighbourhood Plan which explicitly identifies a specific development proposal of the kind that the developer would wish to take forward.

CHAPTER 2

Half a century of tall building in London

Below: Senate House and Library, designed by Adams Holden & Pearson. Photography: Studio Jaanus Limited, 1936. Courtesy of RIBA Library Photographs Collection

Bottom: Great Arthur House, within the Golden Lane Estate, designed by Chamberlin Powell & Bon. Photography: Reginald Hugo de Burgh Galwey, 1957. Courtesy of RIBA Library Photographs Collection

2.1 Pre 1960s

London's first tall buildings – St Paul's and other churches aside – were built in the 1920s and 1930s, several decades after Chicago's and New York's steel-frame structures had started reaching higher for the sky than had ever before been possible. The earliest buildings were hardly skyscrapers – Adelaide House, built in the City between 1921-25, was an 11-storey office block, 45m high. The London Transport headquarters, at 55 Broadway, trumped it in 1929 by just 8m and, in 1937, Senate House in Russell Square by nearly 20m.

In 1930, the London Building Act raised the maximum height of buildings from 80ft to 100ft. At that time, the length of the Fire Brigade's ladders was the main influence on restricting building heights. The City of London Corporation also introduced its own height restrictions in 1938 to protect views of St Paul's, which tied building heights to street widths.

In 1951 the London County Council (LCC) – now in control of London's planning – unveiled its County of London Development Plan, which set varying plot ratios to limit the amount of floor space that should be built on a site. However, the Plan did not control height, allowing tall buildings to be considered on their merits.

The first wave of truly tall London buildings came after the Second World War when residential buildings were created as part of the country's economic and social reconstruction. The London County Council, inspired by Le Corbusier's utopian vision of decent homes for all and steering by the 1944 Abercrombie Plan, wished to rebuild large swathes of London, clearing what was left of the slums after the ravages of war-time bombing. The counterpart of moving many of London's inhabitants out to new towns was the high-rise residential tower, built for mainly working class inhabitants. When the Conservative government in 1956 chose to pump-prime the new housing market by offering higher public subsidies the higher the building, the tall buildings boom took off.

Designed along Modern Movement and Brutalist lines, in rough concrete and often with walkways high above the ground, they rose to 50m and above on housing estates all over east and south London, and were initially considered to be quite successful. Only in the early 1970s were they perceived as bleak and inhuman, by which point more than 300 had been built by the LCC and the Greater London Council (GLC, which replaced the LCC in 1965).

The first high-rise tower block was Great Arthur House, part of the Golden Lane estate in Cripplegate. When completed in 1957 it was the first London residential tower block over 50m, and the first in the City of London.

Below: Balfron Tower, Poplar, designed by Ernö Goldfinger, Image: 1965. Courtesy of RIBA Library Photographs Collection
Bottom: Trellick Tower, North Kensington, designed by Ernö Goldfinger. Image: 1972. Courtesy of RIBA Library Photographs Collection

Bottom right: Cromwell Tower in The Barbican, designed by Chamberlin Powell & Bon. Photography: John Maltby, 1973. Courtesy of RIBA Library Photographs Collection

Right: Ronan Point, West Ham (after building collapse), designed by Newham Department of Planning and Architecture. Image: 1968. Courtesy of RIBA Library Photographs Collection
Below: Ronan Point and neighbouring tower blocks (built 1966-1972). Image: 1986. Courtesy of RIBA Library Photographs Collection

Below: Model of the Barbican development for the 'New Sights of London' exhibition, 1960. Courtesy of the London Metropolitan Archives

2.2 Residential towers in the 1960s and 1970s

The 1960s was the age of the residential tower block. Like stalagmites, they rose all over London's slums and war-blitzed neighbourhoods as local authorities strove to provide thousands of new homes.

The speed of their construction was driven by the adoption of 'large panel system building', mainly the Swedish Larsen-Nielsen system, which was licensed to Taylor Woodrow-Anglian. These fast-track systems used factory-made pre-cast concrete floors and wall panels as well as industrially produced kitchens which were assembled on site. Wates developed its own system in conjunction with Ove Arup.

The first structure erected in the UK of this type was for the LCC in 1963, and in 1965 Newham Council commissioned nine, twenty-two storey Larsen-Nielsen blocks. Pleasing architectural features were not part of the package; the name of the game was speed and cheapness.

By contrast, Balfron Tower (1968) and the Trellick Tower (1972) were two more distinctive residential towers designed by Ernö Goldfinger, the Hungarian-born, Le Corbusier-inspired architect who was a leading figure in British architecture throughout the 1950s and 1960s. Balfron Tower, in Poplar, stood 27 storeys and 276ft high and was constructed using in-situ concrete. With its 146 homes, and characteristic separate lift and service tower, it was the tallest housing block in Europe at the time and was Grade II listed in 1996.

Trellick Tower in North Kensington was built between 1968 and 1972, with 31 storeys and standing at 98m. Its 217 flats were organised into eight different apartment types, with windows on both sides. Although Goldfinger himself was an occupant, basing his office there, the tower quickly became seen as over-large, inhuman and possessing no community spirit, and it was blighted by crime and estate management failures. It was often described as a vertical slum. However, over time, with the introduction of 'right to buy' council homes, many of the apartments were bought up by tenants, and in the 1980s a new residents' association drove a number of improvements to its security and management. It has gradually become quite a fashionable address and in 1998 was Grade II* listed in recognition of its iconic status and architectural significance.

If Trellick Tower stood at the time for the dark side of tall residential buildings and social engineering, Ronan Point sounded the death knell – at least, for the next 40 odd years. The 22-storey tower in Canning Town, built in 1966-68, collapsed on one side following a gas explosion in 1968, killing five people. The explosion, four floors from the top, lifted the top four floors momentarily while the flank wall was blown out. When the load from the top four floors returned, the walls were no longer there to provide support and the floors collapsed like a house of cards.

Following the collapse, pre-fab large panel systems were abandoned, and a large number of tower blocks built that way were demolished. Hackney Council alone blew up 19 blocks. Many of the towers had already deteriorated badly. The systems had suffered from water penetration as the jointing materials aged. Poor thermal performance was also been a feature, and widespread condensation made many tenants' lives miserable. In the haste to build, and perhaps cut corners, there had also been much bad workmanship, which added to the problems of maintaining the buildings.

Councils tended to use multi-storey housing as

repositories for the poorest and most deprived. Crime rates were high, encouraged by ease of escape and the general anonymity that characterised the bleak, inhospitable estates with their lack of social hubs and public spaces. The failure of the 1960s tower blocks contributed to a general reaction against Modernism.

The most successful of the high-rise residential estates was the Barbican – built on 40 acres in Cripplegate that were devastated by World War Two bombing. The 1951 City of London competition was won by Geoffrey Powell, Christof Bon and Peter Chamberlin, designers of Great Arthur House on the Golden Lane estate. Built in concrete in Brutalist style, the estate officially opened in 1969. Comprising three triangular 43-storey towers (126m), it offered high-density housing for 4,000, and over time has developed a school, arts and leisure centre, concert and conference facilities and a music and drama school. Unlike many local authority high-rise estates of its time the Barbican benefited from high quality management provided by the well-heeled City Corporation.

2.3 Commercial towers in the 1960s and 1970s

In 1956, the repeal of the London Building Act freed the LCC from height constraints. Taller buildings could now be allowed if the planners deemed them appropriate to their surroundings, and commercial developers seized the moment.

One of the first new tall office buildings was the Empress State Building in West Brompton in 1961 – London's first 100m building, with 28 storeys, designed by Stone, Toms & Partners.

Others that quickly followed in the early 1960s were the Shell Centre in Waterloo (107m, 27 storeys); Portland House in Westminster (101m, 29 storeys); London Wall (69m, 20 storeys); the London Hilton (101m, 28 storeys); Millbank Tower (118m, 32 storeys); the Economist Building (54m, 17 storeys); and New Zealand House (69m, 19 storeys) – the highest building in St James. The Royal Family objected to this as it was so close to Buckingham Palace and the height came down from the original 95m, thus destroying its proportions.

Then came Centre Point – the brainchild of developer Harry Hyams and architect Richard Seifert. Sited at the intersection of Oxford Street and Tottenham Court Road and completed in 1966, its 35 floors and 121m made Centre Point London's tallest skyscraper of the time. Slender, and built with pre-cast concrete, its unique and load-bearing honeycomb facade led the artist Eduardo Paolozzi to label it 'London's first pop art building'.

The tower created controversy from the very start. In return for Hyams' astute land assembling around the site, the LCC granted him a plot ratio of 10:1 – double

Below: Empress State Building, Lillie Road. Image: 1979. Courtesy of the London Metropolitan Archives.

Below: Centre Point, New Oxford Street, designed by R Seifert & Partners. Image: 1967. Courtesy of RIBA Library Photographs Collection

Below: Commercial Union Building, flanked by the P & O Building. Photography: Crispin Boyle, 1982. Courtesy of RIBA Library Photographs Collection

what was allowed elsewhere, which attracted heavy criticism. Even more stigma was heaped on the tower as it stood empty for nearly 15 years. In the post *Cathy Come Home* world, it was seen as another of capitalism's unacceptable faces. Tenants began to arrive once Hyams dropped his pursuit of a single tenant occupancy, and the building's design was rewarded in 1994 with a Grade II listing.

The Aviva Tower, previously known as the Commercial Union building, on Leadenhall Street bears the clear influence of Mies van der Rohe in Gollins Melvin Ward's (GMW's) design. Built between 1968-69, it was then the second tallest building in the City, standing 118m high with 23 storeys. GMW was one of the first to suspend the floors from cantilevered steel beams coming out of the central service concrete core, which maximised floor space by doing away with support columns. This allowed the offices to be open plan. Distinctive cladding of anodized aluminium sealed the building and prevented internal over-heating. It was transformed by changing light conditions from grey to bronze.

Another landmark tall building of the period was the National Westminster Tower, or NatWest Tower, renamed Tower 42 in 1998 when Greycoat bought it from the

Left: Shell Centre seen from the north bank, designed by Sir Howard Robertson. Image: 1967. Courtesy of the London Metropolitan Archives
Centre left: Portland House, Victoria, designed by Howard Fairbairn & Partners Photography: John Maltby 1963. Courtesy of RIBA Library Photographs Collection
Bottom left: The Economist Building, designed by Alison and Peter Smithson. Photography: Bill Toomey 1964. Courtesy of RIBA Library Photographs Collection

Below: Moor House and St Alphage House, London Wall, designed by Lewis Solomon Kaye & Partners and Maurice Sanders Associates. Photography: Reginald Hugo de Burgh Galwey, 1962. Courtesy of RIBA Library Photographs Collection
Bottom: New Zealand House, Haymarket, designed by Robert Matthew Johnson-Marshall & Partners. Photography: Reginald Hugo de Burgh Galwey, 1963. Courtesy of RIBA Library Photographs Collection

View of Covent Garden looking towards Holborn, Centre Point in the middle distance.
Image: c. 1972. Courtesy of RIBA Library Photographs Collection

Right: Proposal for multi-storey buildings surrounding St Paul's Cathedral, by Joseph Emberton, 1946, never realised. Courtesy of RIBA Library Photographs Collection

Below: Tower 42, Old Broad Street, designed by Seifert & Partners. Photography: Crispin Boyle, 1981. Courtesy of RIBA Library Photographs Collection

Bottom right: Proposed Mansion House Square tower, by Mies van der Rohe (never realised) Photography: John Donat, 1983. Courtesy of RIBA Library Photographs Collection

bank (42 refers to 42 of its 47 floors being cantilevered). Designed by Richard Seifert and built between 1971-80, at 183m it was the tallest building in the UK for a decade until surpassed by the Canary Wharf tower of One Canada Square.

The author Herbert Wright, in *London High*, tells the story of how Seifert won public approval for the tower when its impact on views of St Paul's was being questioned. At a public exhibition, the architect displayed two potential schemes – one with the 183m tower and the other with two towers of 152m and 56m which combined to provide the same amount of office space as the single tower. The public vastly preferred the first.

The tower was built around a concrete core, which supported the cantilevered floors. These were designed in three separate sections, resembling the NatWest logo, though Seifert denied this was his intention. Only the levels 5 to 38 extended around the building.

The foundations had to be huge to support the 130,000 tonnes above. One hundred tonnes of steel reinforced every metre of height, making the walls 1.5m wide. New construction techniques were devised – in particular, a so-called interrupted slide method of slip-form concrete. A new form of laser technology meant that the top of the building was just one centimetre off the plans. Also ground-breaking was the internal M&E system. Plant floors were located on the 13th, 22nd and 31st floors as well as at the top of the core. And double-decker lifts were used for the first time, a significant space saving.

Not all proposed towers made it through the planning system. The Mansion House project was the last building Mies van der Rohe designed before he died in 1969. Without a building to his name in London – though many bore his imprint, van der Rohe was hired by Peter Palumbo to design a replacement for the Mappin & Webb site near the Bank of England when it became vacant in 1986. He came up with a 20-storey tower, clad in bronze glazing, set in new square.

Below: Alban Gate, 125 London Wall, designed by Terry Farrell & Partners. Photography: Kathy de Witt, 1992. Courtesy of RIBA Library Photographs Collection

The heritage lobby, with Prince Charles as its main cheerleader, attacked the proposal. The Prince's description of the design – 'a giant glass stump better suited to Chicago' – was followed by a royal allusion to Luftwaffe bombing, and amidst all the controversy, the project was eventually dropped. London lost the opportunity to host a building by one of the world's great Modernist architects, and substituted it for a Post Modern design by Stirling Wilford.

2.4 1980s and 1990s

Throughout most of the 1980s, tall buildings were out of fashion – a backlash caused by the perceived failures of the 1960s and 70s residential towers.

The deregulation of the financial markets by Prime Minister Thatcher in 1986, known as the 'Big Bang', revolutionised office building in the City of London. A tide of foreign banks swept in, requiring vast dealing floors which necessitated wide open offices and large glass windows to give natural light. Steel-frame buildings with raised floors, suspended ceilings and sophisticated building controls were the architectural order of the day.

To meet the new demand, in 1986 the City of London Corporation relaxed development controls, which led to a six-fold increase in planning permissions. In seven years, post Big Bang, nearly 50 per cent of the City's office space was modernised. Much of the new space came in the form of 'groundscrapers' such as Broadgate – with its relatively low-rise buildings and vast floor space for City trading operations. When attempting, and failing, in 2011 to have Broadgate listed Grade II, English Heritage said Broadgate Square represents 'an exemplar of commercial place making' and is both 'a triumph of urbanism [and] a special place in the financial heart of the capital.'

Alongside the groundscrapers, a number of taller offices sprung up: Minster Court (74m, 14 storeys, 1991); Alban Gate (82m, 18 storeys, 1992); 200 Aldersgate (91m, 21 storeys, 1992); and 54 Lombard St (87m, 19 storeys, 1992).

Frustrated at the complexities of building larger floorplates within the largely medieval street pattern of the City of London, Michael von Clemm, chairman and chief executive of Credit Suisse First Boston, together with developer G Ware Travelstead, saw the advantage of the generous tax breaks offered by the new London Docklands Development Corporation and the light planning regime in the Enterprise Zone in the mid to late 1980s, and pushed to create a new business district of 10 million sq ft at Canary Wharf on the Isle of Dogs, masterplanned by SOM. 'Wall Street on Water', as it was dubbed, had plot ratios of 12:1, much more than the City of London and a new set of dazzling towers was envisaged.

Travelstead's financial backers soon let him down. But the vision of a new financial centre was fulfilled by the Canadian developers Olympia & York, whose Cesar Pelli-designed One Canada Square (50 storeys and at 231m, 50m taller than Tower 42) became London's first tower over 200m when it opened in 1991. Three other nearby towers of over 80m – One Cabot Square, 25 North Colonnade, and 25 Cabot Square – came on stream at the same time.

Below: Vision of the proposed Canary Wharf, by SOM c. 1987

Below: One Canada Square, designed by Cesar Pelli & Associates

One Canada Square was London's first million sq ft tower, and was built at speed, on 222 piles and a 4m thick concrete raft, and with a wind sway tolerance of 32cm from the upright. Five storeys had to be knocked off its designed height because of the proximity of London City Airport.

Recession was striking across the globe at the time, bankrupting Olympia & York the following year – another example of tall buildings' completion coinciding with an economic downturn. As property prices crashed across London there was a glut of office space to be worked through before the need arose for the next wave of towers.

2.5 2000s

By the end of the 20th century, when the Jubilee Line had finally reached Canary Wharf, economic recovery was firmly under way and new towers – such as One West India Quay (111m, 34 storeys, and the first in Britain to unite a hotel with luxury flats) – were under construction again.

It was at this time that the Greater London Authority (GLA) was created, and its first mayor, Ken Livingstone, was a passionate advocate of tall towers, saying: 'I have no objection in principle to London having the tallest of buildings.' His enthusiasm was in part fuelled by using Section 106 to secure funds for London regeneration from commercial development.

In *Towards the London Plan* in 2001, he stated: 'High buildings are often flagship developments that play an important part in regeneration, and they are likely to be relevant to the master planning of areas with good public transport access and capacity. A review of strategic policy relating to high buildings, including their role in maximising the density of development and their potential impact on strategic views, is being undertaken by the GLA as part of the preparation of the London Plan.'

In 2001's *Interim strategic planning guidance on tall buildings, strategic views and the skyline in London*, Livingstone continued: 'Some objectors have claimed that my policies would allow us to recreate Manhattan in London, or turn Hyde Park into Central Park with a ring of tall buildings all around. These are false claims. Policies will remain in place to protect conservation areas and strategic views although I am reviewing these policies to ensure they are not over-restrictive. In actual fact, I expect a very limited number of tall buildings to be constructed during the next decade – probably only 10-15 in all, which are likely to be located in the City of London and fringes and further East, primarily the Isle of Dogs… London must continue to grow and maintain its global pre-eminence.'

The rationale for his support was that tall buildings safeguarded and enhanced London's 'World City' role through maintaining a supply of top quality floorspace; the advantages that clusters of tall buildings can bring to London's skyline; the benefits of free-standing tall buildings in promoting regeneration and in identifying important locations; and the advantages of locating significant concentrations of new office floorspace close to existing public transport infrastructure.

Livingstone stressed that the highest architectural quality was an essential requirement in adding to London's stock of top grade buildings; in achieving exemplary public environments at ground level; and in delivering sustainable buildings that meet the most demanding

Below: London Millennium tower, by Foster + Partners (never realised)

Below: 30 St Mary Axe, by Foster + Partners for Swiss Re © Nigel Young / Foster + Partners

Below: Broadgate Tower and 201 Bishopsgate, by SOM for British Land. Photography: Christopher Hope-Finch, 2009. Courtesy of RIBA Library Photographs Collection

Below: Heron Tower, by KPF for Heron International

'green' credentials. And he expressed continuing support for the conservation of the best of London's heritage.

Commenting on the prospects for tall buildings in the City of London and other areas, the GLA said in 2001: 'The market clearly indicates that Canary Wharf alone cannot meet the demand for office space in tall buildings at the present time… Office availability in central London almost halved between 1995 and 1999, with costs rising, which in turn affected business competitiveness. Without new office space, rents will continue to rise, which will impact on the profitability of London-based businesses. *Towards the London Plan* recognises a need to ensure that the future growth of office space is adequate to accommodate and enable the necessary growth. Tall office buildings will play an important role in doing this.'

In 2000, the John Prescott, deputy Prime Minister, granted planning approval for Swiss Re's plans for the first new tall building to be built in the City for 20 years, standing at 180m. This followed stalled proposals for a 386m high tower on the same site, designed by Foster + Partners, which would have been taller than the Empire State Building, twice the height of Tower 42 and still Europe's tallest tower by far (the Shard stands at 306m). The new 40-storey Foster building was supported by English Heritage with its unusual tapered shape and lozenge-shaped panes, which quickly led it to be popularly known as the 'Gherkin' (a shortened version of its original moniker of the 'Erotic Gherkin').

It was the first of the populist 'nickname' towers, which helped win public approval for it and others that have followed in more recent years such as the 'Cheesegrater' (The Leadenhall Building) and the 'Walkie Talkie' (20 Fenchurch Street) as well as two that have yet to be built, the 'Helter Skelter' (the stalled Pinnacle on Bishopsgate, thus the 'Stump') and the 'Can of Ham' (60 St Mary's Axe).

The Gherkin's tower has strong sustainability features, with natural air circulating inside the building and much natural light to cut energy bills. Rather than spoil the smooth exterior, services and equipment are located in a separate nearby six-storey glass box. Its aerodynamic shape helped reduce the strong winds that can occur at the base of some towers, and because the inner building is housed within an outer envelope, the core alone supports the vertical load.

With the Gherkin approved, new tall building proposals swiftly followed, chief among them being the Heron Tower at Bishopsgate, a one million sq ft proposal from developer Gerald Ronson and designed by KPF. At 202m tall, the plan was fiercely opposed by English Heritage because of its impact on views of St Paul's, though it had been approved by the City of London and CABE.

The ensuing public inquiry became a heavyweight battle between the pro- and anti-skyscraper brigades, and was seen at the time as a crucial test case for the future of tall buildings in London. Mayor Ken Livingstone (who wanted the tower to be higher) was backed by influential architect Richard Rogers. Their design quality argument won the day and the Government approved the scheme in 2002. It was indeed a very significant moment for City tall buildings.

The Heron Tower's construction start was delayed until 2008, by which time the tower had grown by 28m thanks to the addition of a spire, which the City's planners were comfortable with, making it the tallest building in the Square Mile.

In the interim period, from 2005-2009, British Land's Broadgate Tower designed by SOM, was constructed. At 165m and 33 floors it marked the north edge of the Square Mile and further extended the Broadgate Estate.

In October 2004, Rogers Stirk Harbour + Partner's design for the even taller The Leadenhall Building (244m) was also accepted by English Heritage and approved by the City of London's planners. The dramatically leaning facade allowed for clear views of St Paul's from the west past towards the City. The shape constricts its footage to half the size of the biggest Canary Wharf towers.

In April 2000, property developer Irvine Sellar proposed an 87-storey, 365m cylindrical office tower at London Bridge, designed by Broadway Malyan. This was to become The Shard, now London's tallest building.

To help win approval, Sellar brought in architect Renzo Piano, Richard Rogers' partner on Pompidou Centre, who had previously described tall buildings as 'aggressive phallic fortresses'. His new elegant glass design referenced London's church spires and ships' masts. A mega piazza was to be created around London Bridge station to integrate it into the public realm. Offices occupy the lower parts of the building, with a Shangri-La Hotel taking floors 34 to 52, apartments on the next 13 floors, and a public viewing gallery.

Below: Original sketch of the Shard's design, by Renzo Piano for Sellar © Sellar Property Group

Right: The Shard viewed from the east, by Renzo Piano for Sellar © Sellar Property Group

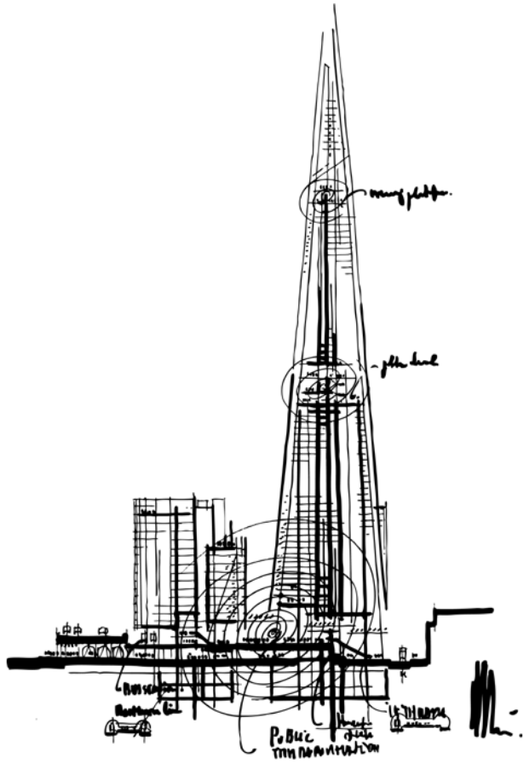
Southwark Council approved the tower, which also significantly boosted local regeneration plans, but English Heritage and CABE opposed it on basis of its impact on views from Hampstead to St Paul's. It was called in by the Government for public inquiry, where Piano told the inspector: 'St Paul's is talking the language of stones, the other the language of glass.'. Deputy Prime Minister John Prescott took his official's advice and approved it, saying: 'For a building of this size to be acceptable, the quality of its design is critical. I am satisfied the proposed tower is of the highest quality.'

These four towers – the Gherkin, the Heron Tower, The Leadenhall Building and The Shard – indicated that using well-respected 'star architects' could help in obtaining planning approval for tall buildings. The City of London's Planning Officer Peter Rees, who played a key role at the interface between developers and the officials has said: 'Pre Big Bang, commercial office architecture was the pits.' It was he who encouraged developers to use some of the world's greatest architects, with mostly successful results.

Rees himself pays tribute to the influence of the Mayor: 'Ken Livingstone was a key figure. He recognised that London was growing, and was constrained by the Green Belt. Densification was totally logical. And he also wanted to show that London was capable of competing on the global stage. Ken recognised that tall buildings were great brand marketing for London. He wanted The Shard and the Gherkin because of the glitz and glamour they project. They're a great billboard for the City.'
It was Ken Livingstone who first introduced the London View Management Framework in 2007, which identified 26 strategically important views for London. This updated on previous regional planning guidance on strategic views, which protected 10 views of London first identified in 1991.

When Boris Johnson was elected Mayor in 2008, however, he postured concern for the impact of new tall towers on London's heritage, and acted to have London's viewing corridors widened to protect key views of historic landmarks. In his housing manifesto Building a Better London he said: 'London's skyline is precious. Tall buildings must be part of London's development, but not at the expense of existing landmarks. Tourists flock to London because of its landmarks, and 91% of people want views protected around St Paul's and the Palace of Westminster.'

Although their politics differed on this policy, Mayor Johnson too has grasped the importance of tall buildings to project London's global pre-eminence, and has similarly seen the benefits of using developer cash to aid inner-city regeneration.



Pinnacle of 30 St Mary Axe with Canary Wharf in the background. Photography: Luke Palmer, 2008. Courtesy of RIBA Library Photographs Collection

CHAPTER 3

The current wave of tall towers

London today is seeing a new wave of tall buildings entering the development pipeline which, if all complete, will dramatically alter the skyline of the capital over the next decade.

NLA have partnered with property consultants GL Hearn to undertake a bespoke research project on tall building proposals across Greater London, in order to understand the scale of development proposed, the findings of which been analysed by GL Hearn. Tall buildings have been defined as those of 20 storeys or more, and the analysis has considered towers that are proposed (without planning permission), approved (with planning permission) or under construction (but not yet completed). For a small number of proposed towers it has not been possible to establish the current status.

To understand Londoners' views on this scale of development and how far perceptions about tall buildings have changed since the completion of structures such as The Shard and The Gherkin, NLA have also conducted a London-wide survey with Ipsos Mori, the results of which are in section 3.5.

3.1 Numbers, height and status

The research has shown that there are a total of 236 towers in the pipeline across London. As detailed in **Table 1 and Figure 1** on the next page, close to half of the pipeline towers already have planning permission (113 / 48%) but have not yet been commenced and some 45 (or 19%) of towers are currently under construction. There are 72 (30%) towers in the pipeline without planning permission and 6 (3%) proposals where the status could not be confirmed.

The analysis assessed proposals above 20 storeys – the tallest proposed tower is the Pinnacle in the City of London, a commercial tower, standing at 288m (60 storeys). The towers with the highest numbers of storeys are residential; City Pride, Columbus Tower, Quay House and South Quay Plaza, all of which would extend to 75 storeys.

Table 2 and Figure 2 shows all of the proposed towers by number of storeys – storey heights and overall tower heights will vary between developments as a result of design and use.

Approximately 57% of the pipeline towers are between 20 and 29 storeys with just 10% extending above 50 storeys. The figures suggest that towers are feasible at any height up to the current maximum of 75 storeys.

Table 1: Status of Tall Buildings Reviewed (Source: NLA / GL Hearn)

Status	Number Of Tall Buildings	% of Tall Buildings Reviewed
Approved	113	48
Proposed	72	31
Status Unknown	6	3
Under Construction	45	19
Total	**236**	**100**

Figure 1: Comparison between the Status of Tall Buildings Reviewed
(Source: NLA / GL Hearn)

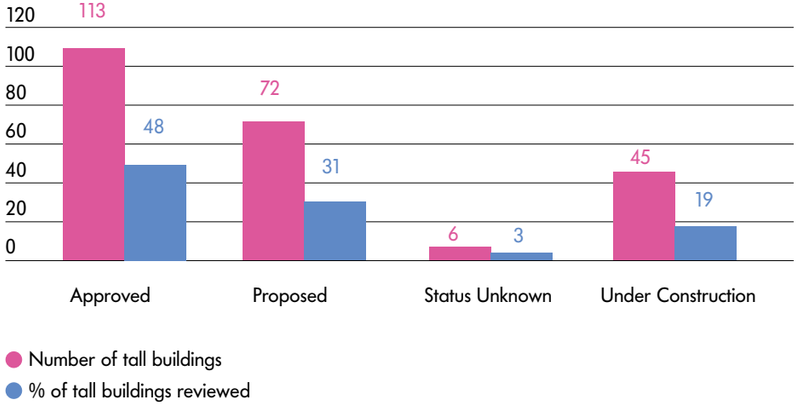
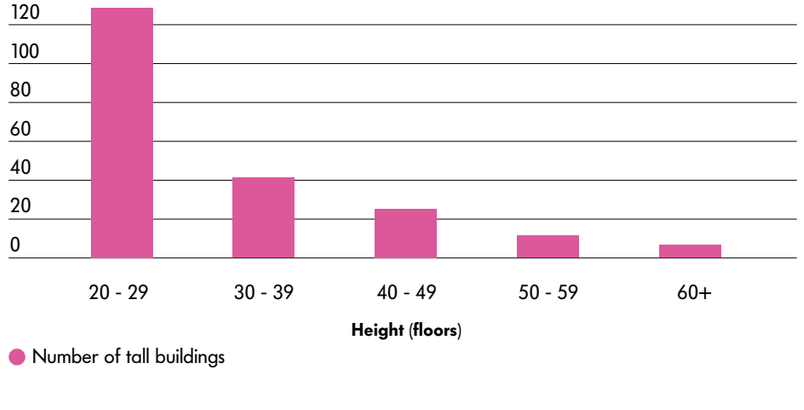


Table 2: Storey Heights of Tall Buildings Reviewed (Source: NLA / GL Hearn)

Storeys	No. Of Tall Buildings	% of Tall Buildings Reviewed
20 - 29	134	57
30 - 39	47	20
40 - 49	33	14
50 - 59	16	7
60+	6	3
Total	**236**	**100**

Figure 2: Height of Tall Buildings Reviewed (Source: NLA / GL Hearn)



3.2 Location

Table 3 and Figure 3 show the geographic distribution of towers by borough. Whilst there are tall building proposals across London, certain boroughs are set to accommodate far higher numbers of towers than others. This may be expected to some extent given the varying planning opportunities and constraints across London allied to local economic and market factors. The figures are nevertheless striking in that more than 36% of towers are proposed in just two boroughs (Tower Hamlets and Southwark) – almost one quarter of all tall building proposals in London are in Tower Hamlets alone (55 / 23%).

The dominance of Tower Hamlets is reflected in the status tall building proposals (**Table 6**) – the borough has the most approved towers (22 or 19%) and the most proposed towers (14 or 19%). Tower Hamlets also has the highest number development projects under construction with 13 proposals (29%).

The emerging importance and significance of the Southbank as a tall building location is highlighted by a total of 37 (51%) of proposed tall buildings in Greenwich, Southwark, Lambeth and Wandsworth.

The amount of tower development in the Central, South and East sub-regions (**Table 4 and Figure 4**) is very evident with these sub-regions accounting for 204 of proposals in the pipeline (87%). Accordingly, the very small number of tall buildings proposed in the North and West sub-regions is striking given the geographic extent and nature of these sub-regions; just 22 (9%) and 10 (4%) respectively. By way of example, Ealing, Hounslow and Camden have only 1 proposal in each borough. Whilst many locations in these sub-regions will not be suitable for tall buildings, there are areas of lower density uses that are suitable for regeneration and the potential for taller buildings. It is likely that the number of proposals in these sub regions will increase as Opportunity Areas move forward towards to delivery.

Table 3: Total Number / Percentage of Tall Buildings Reviewed Per London Borough (Source: NLA / GL Hearn)

Borough	Total no. of Tall Buildings	% of Tall Buildings Reviewed
Barking & Dagenham	3	1.27
Barnet	20	8.47
Brent	4	1.69
Camden	1	0.42
City of London	8	3.39
Croydon	10	4.24
Ealing	1	0.42
Greenwich	18	7.63
Hackney	7	2.97
Hammersmith & Fulham	4	1.69
Haringey	2	0.85
Hounslow	1	0.42
Islington	9	3.81
Kensington and Chelsea	2	0.85
Kensington and Chelsea / Hammersmith & Fulham	2	0.85
Lambeth	31	13.14
Lewisham	8	3.39
Newham	16	6.78
Southwark	20	8.47
Tower Hamlets	55	23.31
Wandsworth	11	4.66
Westminster	3	1.27
Total	**236**	**100.00**

Figure 3: Percentage of Tall Buildings Per London Borough (Source: NLA / GL Hearn)

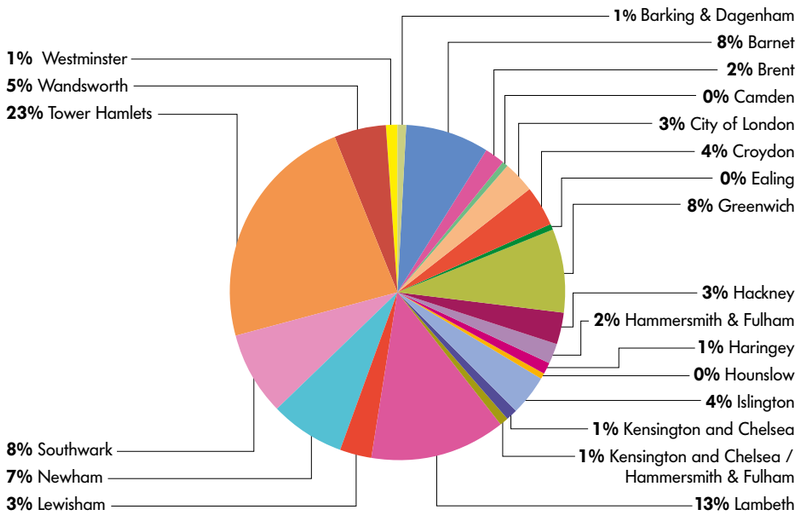


Table 4: Number / Percentage Of Tall Buildings Per London Sub-Region (Source: NLA / GL Hearn)

London Sub-Region	No. Of Tall Buildings	% of Tall Buildings Studied
North	22	9
West	10	4
South	21	9
East	107	45
Central	76	32
Total	**236**	**100**

Figure 4: Comparison between the numbers of Tall Buildings Per London Sub-Region (Source: NLA / GL Hearn)

Table 5: Primary Uses of Tall Buildings Reviewed (Source: NLA / GL Hearn)

Primary Use	Number Of Tall Buildings	% Of Tall Buildings
Commercial	7	3.0
Hotel	8	3.4
Mixed Use	13	5.5
Office	18	7.6
Residential	189	80.1
University	1	0.4
Total	**236**	**100.0**

Figure 5: Comparison of the Primary Use of Tall Buildings Reviewed (Source: NLA / GL Hearn)

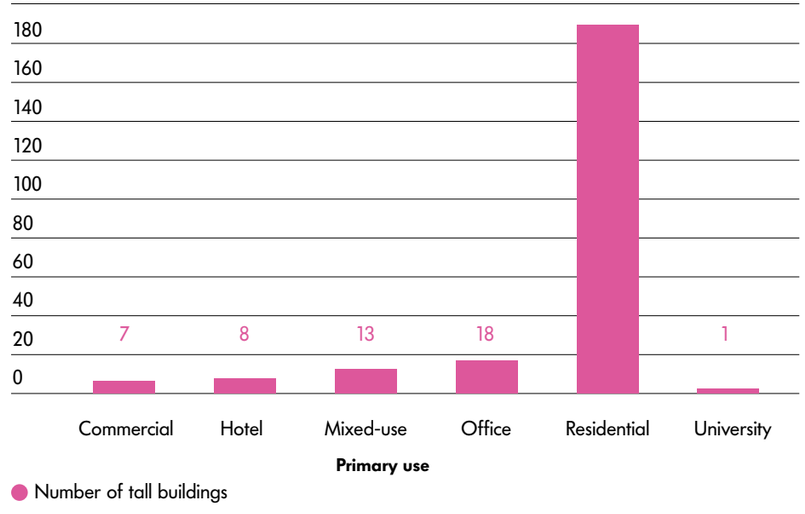


Table 6: Status of Tall Buildings Per London Borough (Source: NLA / GL Hearn)

Borough	Approved	Proposed	Status Unknown	Under Construction	Total
Barking & Dagenham	3	0	0	0	3
Barnet	20	0	0	0	20
Brent	4	0	0	0	4
Camden	1	0	0	0	1
City of London	4	1	0	3	8
Croydon	5	3	0	2	10
Ealing	1	0	0	0	1
Greenwich	8	10	0	0	18
Hackney	5	0	0	2	7
Hammersmith & Fulham	3	1	0	0	4
Haringey	1	1	0	0	2
Hounslow	0	0	0	1	1
Islington	1	4	0	4	9
Kensington and Chelsea	0	2	0	0	2
Kensington and Chelsea / Hammersmith & Fulham	0	0	0	2	2
Lambeth	14	11	0	6	31
Lewisham	5	3	0	0	8
Newham	8	5	0	3	16
Southwark	5	8	0	7	20
Tower Hamlets	22	14	6	13	55
Wandsworth	2	8	0	1	11
Westminster	1	1	0	1	3
Total					**236**

3.3 Type and use

Table 5 and Figure 5 summarises the primary use of the tall buildings assessed. Unsurprisingly, in current market conditions, the vast majority of towers are proposed for residential development (189 or 80%). This is clearly a response to the strength in the residential market, allied to high levels of demand, housing targets and limited land supply. Of commercial uses, office towers are most prevalent (18 / 8%) and there are 8 (3%) proposals where the primary use is hotel. University/educational use are notable in that there is only 1 tall building proposed for these uses.

3.4 Key findings

The research has identified 236 tall building proposals across London – it has focused on buildings above 20 storeys, but in many instances buildings below that threshold will still be considered to be 'tall' in the local context. Of the total pipeline, approximately half of the proposals have planning permission, with 45 schemes already under construction. There is no particular discernible trend in terms of height, but the majority of proposals are between 20-29 storeys (134 / 57%). Tower Hamlets is by far away the most populous location for tall buildings in terms of towers that are proposed, approved and under construction.

There are marked geographic patterns at the sub-regional scale as well. London Plan Opportunity Areas are located across the capital, but the predominance of the Central, South and East sub-regions – in stark contrast to the North and West – is very marked in terms of tall building proposals.

It is no surprise that the tall building proposals are predominantly residential as a result of planning, economic and market conditions representing a distinct phase of tower planning in London. Planning permissions are in place for the new wave of tall buildings, and delivery has started in a new phase of London's growth and development. Tall building proposals are complex and thoroughly tested in terms of design and potential impacts; the success of the planning system should be judged on the quality of these new buildings and neighbourhoods, as they rapidly emerge across the city.

3.5 Public perceptions

In February 2014 NLA and Ipsos MORI conducted a survey into Londoners' views on tall buildings in the capital, defined as buildings over 20 storeys high. 500 people from across London gave us their views.

53% of Londoners said that whether a tall tower looks right in relation to its surroundings should be given highest priority when deciding whether or not it should be built in London. Whether it has a good design was next priority at **35%**, while only **11%** said that how tall it is should be the most important factor

The Gherkin at **36%** and The Shard at **22%** were chosen as the towers Londoners liked best when asked to select from a list of 13 tall buildings

Only **27%** of Londoners would be happy to live in a tall building, while **60%** of Londoners would be happy to work in a tall building

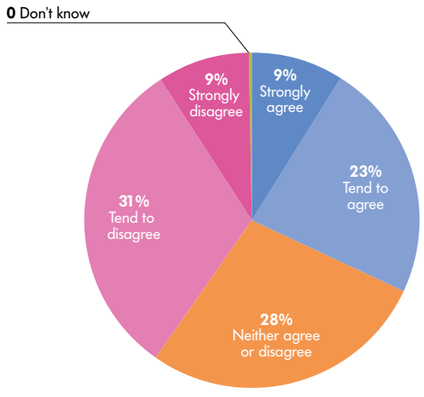
When asked whether they believe there are currently too many tall towers in London, – **40%** disagreed with the statement, while **32%** agreed

46% of Londoners agree that tall buildings have made London look better, **25%** disagree

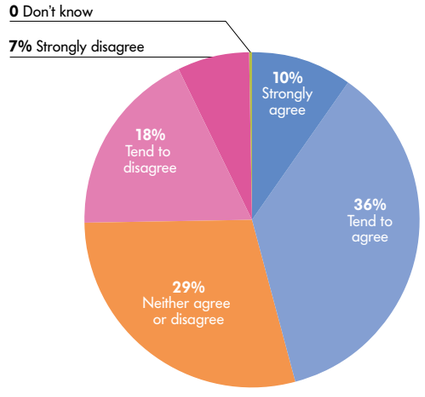
Over the next 5 years, **37%** of Londoners would like to see fewer new tall buildings than were built in the last 5 years, **33%** would like to see about the same number, and **26%** would like to see more

31% of Londoners agree that enough is done to control the number of tall buildings built in London, **26%** disagree

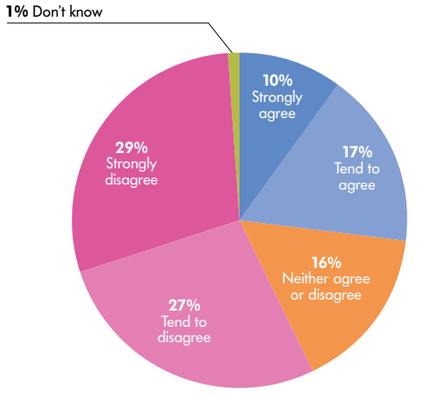
Ipsos MORI interviewed a representative sample of 500 members of the public aged 16-64. Interviews were carried out online between 14-18 February 2014. Data are weighted to be representative of the population. Full question text, and detailed tables are available at www.ipsos-mori.com



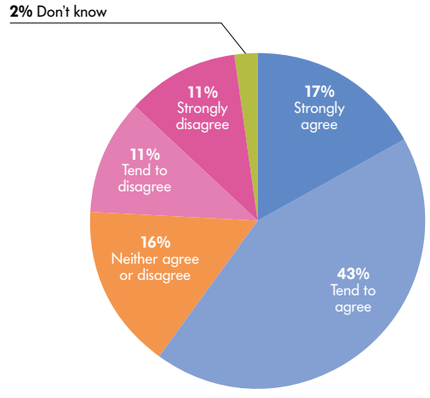
There are too many tall buildings in London



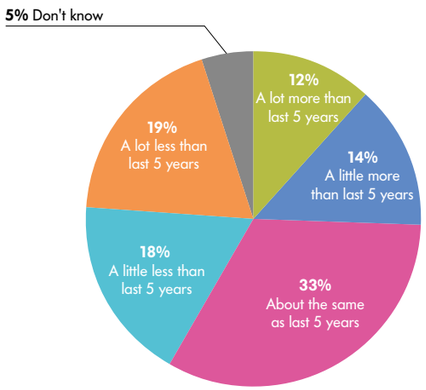
Tall buildings have made London look better



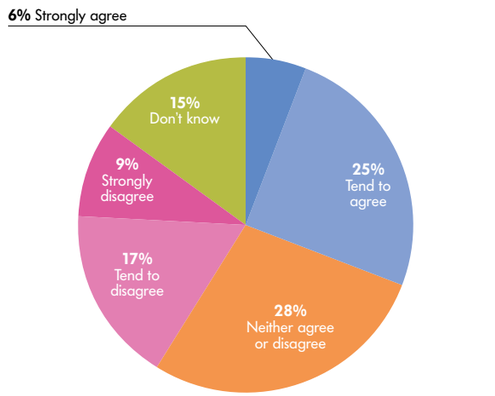
I would be happy living in a tall building



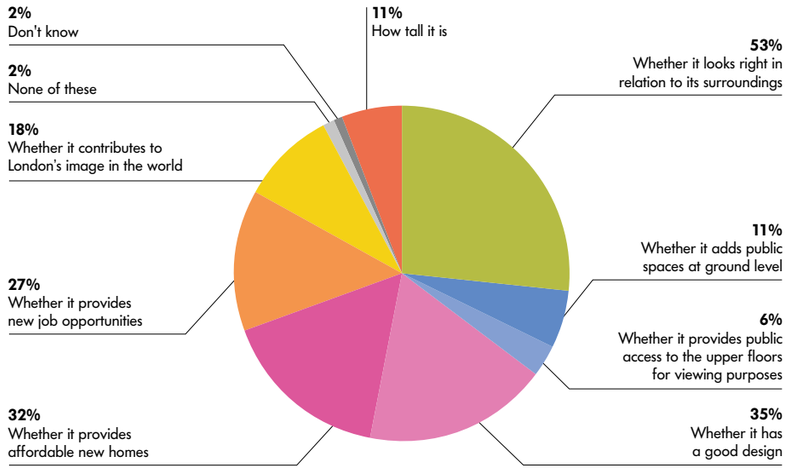
I would be happy working in a tall building



Thinking about the next 5 years, which, if any, of these best describes your view about how many new tall buildings should be allowed to be built in London?



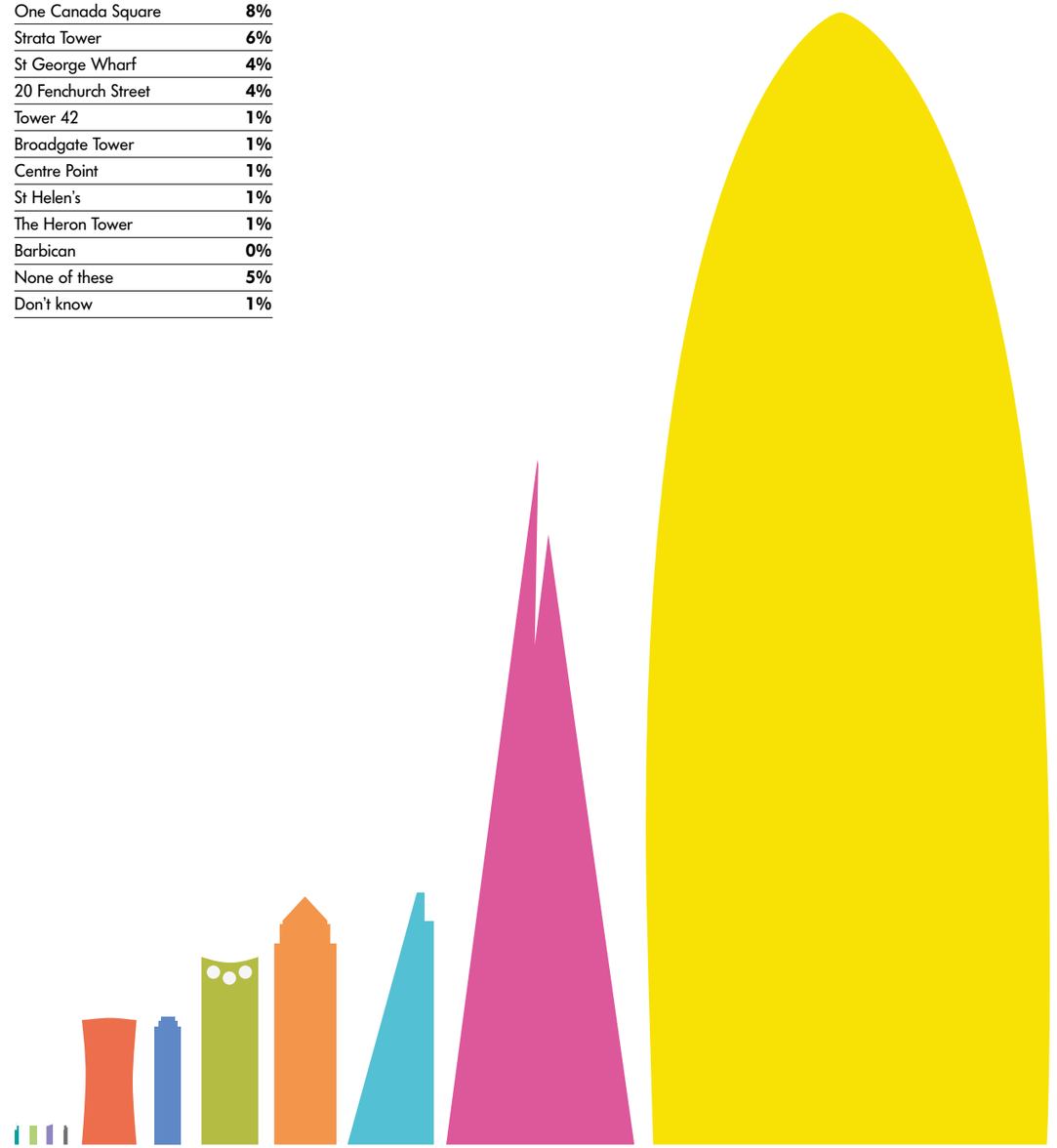
To what extent do you agree or disagree that enough is done to control how many tall buildings over 20-storeys are being built in London?



Which of these factors should be given highest or second highest priority by those deciding whether or not a new tall building should be built in London?

Which of these tall buildings do you like best?

30 St Mary Axe	**36%**
The Shard	**22%**
The Leadenhall Building	**8%**
One Canada Square	**8%**
Strata Tower	**6%**
St George Wharf	**4%**
20 Fenchurch Street	**4%**
Tower 42	**1%**
Broadgate Tower	**1%**
Centre Point	**1%**
St Helen's	**1%**
The Heron Tower	**1%**
Barbican	**0%**
None of these	**5%**
Don't know	**1%**



Future view from Parliament Hill
© Hayes Davidson

CHAPTER 4

Key areas of growth

4.1 Vauxhall Nine Elms

Vauxhall Nine Elms is one of the most significant central London regeneration zones in the city. Straddling the boundaries of the boroughs of Lambeth and Wandsworth, it stretches roughly from Battersea Power Station to Lambeth Bridge and covers around 195 acres. Traditionally a largely derelict industrial district, a major redevelopment programme is breathing new life into the area to include more than 18,000 new homes, a £1 billion extension to the Northern Line and two new tube stations; £45 million improvements to the Vauxhall tube station; remodeling of the gyratory at Vauxhall; new schools; and approximately 50 acres of new public space.

The site represents a significant opportunity to develop new homes and jobs on a large central London site and as such there is intense pressure for fairly high-density development. An Opportunity Area Planning Framework (OAPF) for the area, developed by the GLA in partnership with Lambeth and Wandsworth Councils, TfL and English Heritage, includes a tall building strategy in order to establish a set of parameters which respond to the need to protect key views as set out in the LVMF and to encourage high-density development in the form of 8-10 storey perimeter blocks in certain locations.

The Framework supports an emerging tall building cluster at Vauxhall, defined as a series of tall buildings coming forward as separate individual elements on the skyline to a maximum of 150m, with the pinnacle being formed by the Vauxhall Tower at 180m. Further west, at Albert Embankment, tall buildings should be no more than 80-90m in height and should 'avoid appearing cumulatively as a uniform wall of development in strategic views from Waterloo, Hungerford and Westminster bridges', while at Nine Elms and Battersea, tall buildings should be no more than 60-70m in height.

Examples of tall buildings include:

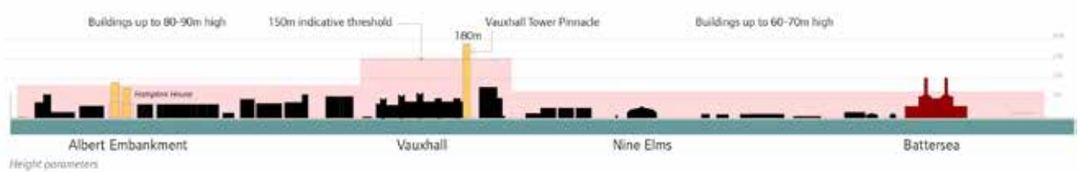
– One Nine Elms: Designed by KPF these two towers of 43 storeys and 58 storeys will stand at 161m and 200m once completed in 2016, and include a mix of residential, offices and retail. The development occupies a prominent position in the emerging tall building cluster in Vauxhall, and the height of the tallest tower currently exceeds the peak defined in the OAPF for Vauxhall. Planning permission for the development was granted in 2012. The development has been bought by Chinese investment and development conglomerate Dalian Wanda Group.
– The Tower at One St George Wharf: This is one of the first tall buildings to have completed in the area, standing at 180m and 53 storeys, and provides 213 luxury apartments. Designed by Broadway Malyan, it is currently the highest residential tower in UK. Occupying a prominent position on the river, the scheme went to public inquiry in 2005 because of its height and proximity to the Palace of Westminster but was approved by Deputy Prime Minister John Prescott.
– Sainsbury's Nine Elms: The redevelopment of the Sainsbury's site has been designed to deliver a larger Sainsbury's store, 737 homes, business and retail space and the site for a new Northern Line extension. Three towers designed by Rolfe Judd Architects – residential buildings ranging up to 129m – are roughly positioned on each corner of the triangular site with the tallest building furthest to the east and a new public square.

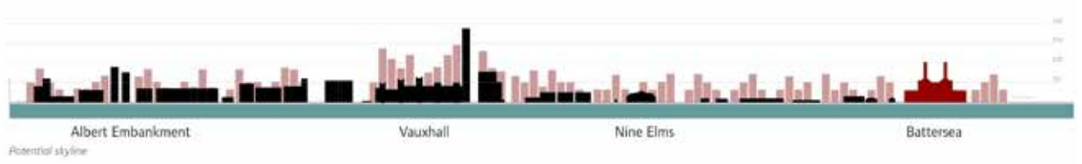
Right: Current view of Vauxhall Nine Elms from Lambeth Bridge
© Hayes Davidson
Below: Projected view of Vauxhall Nine Elms from Lambeth Bridge
© Hayes Davidson

Right: Current view of Vauxhall Nine Elms from Millbank
© Hayes Davidson
Below: Projected view of Vauxhall Nine Elms from Millbank
© Hayes Davidson

Left: Vauxhall Nine Elms Opportunity Area masterplan, 2012, courtesy of the GLA

Below: View from Waterloo Bridge showing proposed development heights, 2012, courtesy of GLA
Bottom: Proposed development heights in Vauxhall Nine Elms, 2012, courtesy of the GLA





Below: One Nine Elms, by KPF for Dalian Wanda (proposed) ©ATCHAIN and KPF
Bottom: One Nine Elms and surrounds (proposed) ©ATCHAIN and KPF

Below: The Tower, One St George Wharf, by Broadway Malyan for St George London Ltd

Below: Tall building strategy for Elephant and Castle, view from south, 2012, courtesy of Southwark Council.

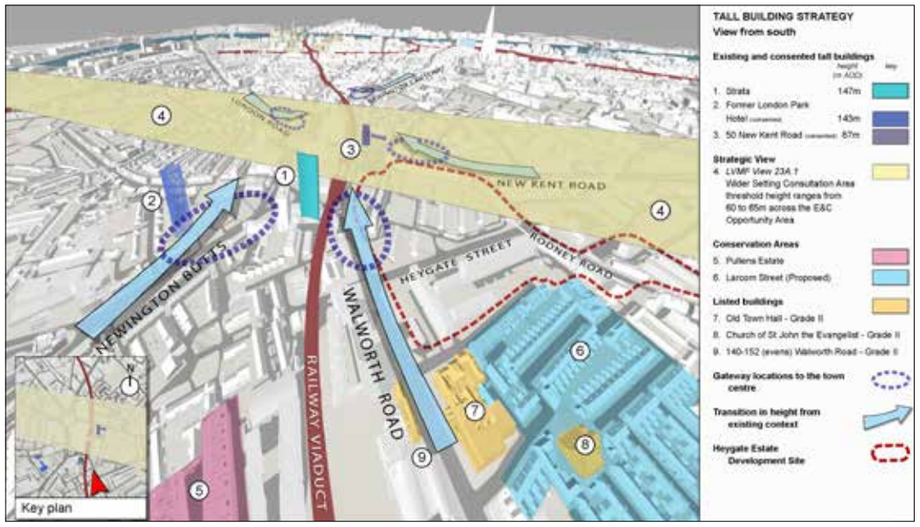
4.2 Elephant and Castle

The Elephant and Castle Opportunity Area in Southwark covers an area of 122 hectares. Southwark Council is aiming to stimulate 440,000 sqm of new development with up to 45,000 sqm of new shopping and leisure floor space and 25,000-30,000 sqm of business floorspace. It has a target of 4,000 new homes and a minimum of 1,400 affordable housing units. Developers Lend Lease are leading on a major transformation of the area.

A Supplementary Planning Document (SPD) for the area stresses that tall buildings will help to signal its regeneration and that the tallest buildings should act as focal points in views towards the Elephant and Castle along main roads and strengthen gateways in the central area. Moving away from the tallest points, buildings should diminish in height to manage the transition down to the existing context. The council says they are to be used to add interest to London's skyline and when viewed in a cluster, should be articulated to ensure that they do not coalesce to form a single mass.

The 148m Strata Tower, London's tallest residential building until The Tower at One St George Wharf completed in 2013, was completed in June 2010. New towers emerging in the area include:

– One the Elephant, a 37-storey residential development designed by Squire and Partners for Lend Lease, which is currently under construction and due to complete in 2015.
– '360 London' or 'Newington Butts' – a 45-storey tower designed by Rogers Stirk Harbour + Partners which will contain a significant number of private rented units.
– Eileen House, a 41-storey residential tower at the northern edge of the site. The scheme had been opposed by Ministry of Sound next door, for fear that noise complaints from the new residents would lead to its closure. The original scheme by Oakmaye Properties was originally rejected by Southwark Council; however it was 'called in' by the Mayor and approved in 2014 with a number of conditions to ensure noise mitigation.



Below: Strata Tower, by BFLS for Brookfield Europe. Photography: Agnese Sanvito
Bottom: Aerial view of the future Elephant and Castle quarter, courtesy of Southwark Council.

Below: Newington Butts, by Rogers Stirk Harbour + Partners for Mace / Essential Living (proposed)

4.3 Blackfriars Road

Blackfriars Road is a wide boulevard running south from the River Thames to historic St George's Circus, forming part of the 'Blackfriars Mile', linking Elephant and Castle to the South Bank and beyond to the City. The area is being transformed by a series of new high-rise developments alongside the opening of a new entrance to Blackfriars Station and public realm schemes.

The Blackfriars Road SPD sets out that tall buildings are encouraged where they reinforce the character and function of this main route into central London. The tallest buildings should be at the north end of the road, signifying the gateway to central London and the gateway to Southwark. The SPD also encourages tall buildings of a height of up to 70m at Southwark tube station and at the southern end of Blackfriars Road towards St George's Circus to provide a focal point. Any buildings over 50m must demonstrate that they contribute positively to London's skyline and make 'exceptional contribution to the regeneration of the area'.

– One Blackfriars: Architect Ian Simpson's design for developer St George has been nicknamed the 'Boomerang' thanks to its curved southern side that has been planned to maintain views of The Shard from around Waterloo Bridge. Standing at 170m, it will provide a mix of residential, hotel and retail uses. In lieu of affordable housing on site, the developer will be contributing £29 million to Southwark Council. The council intends to construct housing on a less expensive site and build a greater number of affordable units as a result.
– Ludgate and Sampson House: Standing opposite One Blackfriars is a £1 billion regeneration scheme designed by PLP Architecture for private equity firm The Carlyle Group, for which Southwark Council gave a resolution to grant planning permission in late 2013. The development consists of nine new buildings on the site, ranging in height from five to 48 storeys (up to 170m). The scheme, to be completed in 2023, will create 492 homes and 300,000 sq ft of offices while Carlyle is also paying £75 million in Section 106 to the council, including £65 million for affordable homes off-site. As well as building a new public square, the developer will improve accessibility to the Thames and reopen parts of the Upper Ground thoroughfare for the first time in 150 years.
– 240 Blackfriars Road: This is a 20-storey predominantly commercial tower designed by Allford Hall Monaghan Morris (AHMM) for the Great Ropemaker Partnership and is currently nearing completion. Media and publishing company UBM has taken a 105,000 sq ft pre-let to function as its UK headquarters.

Bottom: Sampson House and Ludgate House by PLP Architecture for The Carlyle Group and One Blackfriars by Ian Simpson Architects for St George South London (proposed)

Right: 240 Blackfriars by AHMM for Great Ropemaker Partnership
Below: Aerial view of future approach from Blackfriars Bridge, courtesy of Southwark Council

Right: Current view of South Bank from Waterloo Bridge
© Hayes Davidson
Below: Proposed view of South Bank from Waterloo Bridge
© Hayes Davidson

Below: Shell Centre redevelopment by Squire + Partners for Canary Wharf Group and Qatari Diar, 2013 (proposed)

Right: Elizabeth House, by David Chipperfield Architects for Chelsfield and London & Regional Properties (proposed)

Below: Proposals for Doon Street by Lifschutz Davidson Sandilands for Coin Street Community Builders

4.4 Waterloo

The London Plan identifies Waterloo as an Opportunity Area, which is expected to create 1,900 new homes by 2031 as well as much new large-scale office development around York Road and Waterloo Station.

Permission was granted in 2008 for a 144m tall residential tower on Doon Street, behind the National Theatre, after a public inquiry which followed objections by English Heritage and Westminster City Council about the lack of affordable housing and impacts on London views. Masterplanned by Lifschutz Davidson Sandilands, the Doon Street tower houses 329 flats with public uses at ground level. The surrounding development includes a new town square with lift and stairs to Waterloo Bridge and a leisure centre.

Two further nearby schemes have been the subject of controversy. Elizabeth House, a 1960s office block next to Waterloo Station, is to be redeveloped into a 29-storey office tower, designed by architect David Chipperfield for developer Chelsfield, with a double height gallery space at lower levels. While the project gained planning permission from Lambeth Council, a High Court judge ordered a judicial review of the DCLG's decision not to call in the scheme in late 2013, based on strong opposition from English Heritage and Westminster City Council due to its impact on the Palace of Westminster as a World Heritage site.

Plans to redevelop around 27-storey Shell Centre with an additional nine buildings containing nearly 900 homes, 900,000 sq ft commercial space, shops and restaurants, masterplanned by Squire & Partners, has also been the subject of a public enquiry, following a legal challenge mounted by Westminster City Council and other bodies.

Below: Allies and Morrison's designs for Wood Wharf for Canary Wharf Group plc

Below: Wood Wharf masterplan, by Allies and Morrison for Canary Wharf Group plc, 2013

Below: Proposed public realm at Wood Wharf, with Herzog and de Meuron's One Wood Wharf in the background and A2/A3 by Stanton Williams on the right

4.5 Canary Wharf & Wood Wharf

Canary Wharf Group are planning to extend their existing estate at Canary Wharf with a high density mixed-use development at Wood Wharf. The scheme comprises commercial, residential and hotel elements, grouped around a central square and surrounded on three sides by water, and will extend Canary Wharf's city-centre by nearly half. A masterplan by Allies and Morrison was submitted to Tower Hamlets Council in December 2013 for 3,100 homes, two million sq ft of commercial offices, and 250,000 sq ft of retail uses.

Responding to the recent shift in market demand, there is more residential emphasis and less on commercial space than the original masterplan outlined in 2009 by Rogers Stirk Harbour + Partners. The original 1,668 homes proposed are now doubled, while the five million sq ft of offices has been halved.

The first phase of the scheme includes five tall buildings, with two residential buildings designed by Stanton Williams, and two office buildings designed by Allies and Morrison. Swiss architects Herzog & de Meuron have also designed a 56-storey cylindrical residential skyscraper which features a signature 'stacking' style. Canary Wharf Group, which chose the practice for the tower, has said that 'it will set a new benchmark for high-rise residential design in London'.

The masterplan sets the taller residential towers around the perimeter, with the commercial offices at the centre, incorporating a range of floorplates to suit the needs of different businesses.

Right: Current view of Isle of Dogs from Greenwich Park © Hayes Davidson
Below: Proposed view of Isle of Dogs from Greenwich Park © Hayes Davidson

4.6 Isle of Dogs & South Quay

The Isle of Dogs is designated as an Opportunity Area in the London Plan, with an indicative employment capacity of 110,000 and requirement for a minimum of 10,000 new homes by 2031. Tower Hamlets Council is keen to encourage new growth as a part of its efforts to regenerate and revitalise the community, but it is determined it should be 'the right growth.'

Marsh Wall, a road running through the centre of South Quay, is currently seeing proposals for a scale of development quite unprecedented in London, with 30 development sites between them looking to provide above the 10,000 new homes figure stated in the London Plan that could equate to the size of a new town. Situated in such close proximity, this is likely to result in a typology of tall towers much more similar to that of Vancouver or Hong Kong than has been seen in London before. Amongst these proposals is an 80-storey tower designed by Foster + Partners for the Berkeley Group, which includes 1.8 acres of public realm to open up the site; and a 75-storey (239m) tower designed by Squire and Partners for Chalegrove Properties, called 'City Pride'.

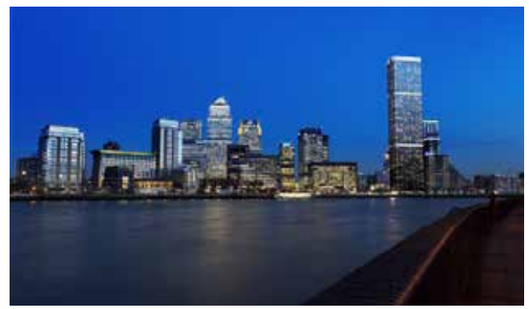
The towers' ability to increase the housing stock dramatically is attractive to the council. New affordable housing is a crucial element of Tower Hamlet's Local Plan: it aims to increase the provision of total housing by 3,000 homes each year for the next five years. The council's stated aspiration is that all commercial housing schemes should deliver affordable homes up to 50 per cent of the total development, subject to viability. Meeting this stipulation is a major factor in determining planning approval for new residential developments.

To ensure that the next phase of growth is managed properly, Tower Hamlets is drawing up a masterplan for the South Quay area, which will be supplementary to the Local Plan. The masterplan, which is being prepared by Tower Hamlets itself with the help of consultants, will be ready in 2014. Its brief is to 'deliver guidance for development that will help to shape the London skyline, deliver affordable housing and secure benefits for the local community resulting from development including the provision of new primary schools, open space and other community infrastructure'.

Tower Hamlets says its approach 'is intended to ensure that tall buildings are properly planned as part of an exercise in place-making informed by a clear long-term vision, rather than in an ad hoc, reactive piecemeal manner', warning that 'if these developments are not appropriately managed there is a risk that the townscape of Marsh Wall will suffer and development opportunities across the whole masterplan area will not be optimised resulting in a lost opportunity to deliver a sustainable place.'

Below: Arrowhead Quay, by Glenn Howells for Ballymore (proposed)

Below: City Pride by Squire and Partners for Chalegrove Properties Ltd (proposed)
Bottom: Western end of South West India Dock, with City Pride in foreground (proposed)



Below: Aldgate Place, by Allies and Morrison for Barratt London / British Land
Bottom: Goodman's Field, by Lifschutz Davidson Sandilands for Berkeley Homes.

Right: The Stage, Shoreditch by Pringle Brandon Perkins+Will for Plough Yard Developments Ltd

4.7 City Fringe

The GLA has defined three emerging tall building clusters within the City Fringe at Aldgate, Bishopsgate and Old Street, which could act as eastward extensions of the office in the City of London core and catalysts for regeneration.

In Aldgate, new developments include Goodman's Fields, a mixed use scheme ranging from 18 to 21 floors, with 920 new homes, student housing, hotel and ground floor uses currently under construction; and Aldgate Place, a development of three residential towers, hotel, office and retail uses. The City of London is also preparing a public realm strategy for the area to improve streets and public spaces.

Shoreditch is seeing significant change, particularly around Old Street, an area developing as a 'tech cluster' for London. There is a great deal of demand for residential schemes here, and proposals for tall buildings include: Principal Place, a mixed-use site including a residential tower designed by Foster + Partners; The Stage, a 40-storey residential tower designed by Pringle Brandon Perkins+Will which includes cultural uses; and Eagle House, an 82m tower for Mount Anvil designed by Farrells. The former Bishopsgate Goods Yard now known as The Goodsyard, is a 4.7 hectare site mixed-use scheme by Shoreditch High Street for which the masterplan went under consultation in late 2013. With a maximum of 350,000 sqm of development set for the site in an Interim Planning Guidance document and proposals for a large park, the proposed masterplan sets out that some areas will require very high densities, more typical of a central London area, and proposes a series of tall buildings to the west, decreasing towards the east to better fit the local context.

Below: Proposal for City Road Basin, by Bennetts Associates Architects, consented in 2005 with construction of the two towers now underway ©Assembly Studios

Bottom: Canaletto, City Road, by UN Studio/Axis Architects for Groveworld (proposed)

4.8 City Road Basin

The City Road Basin area sits between Angel and the Old Street roundabout on the Regent's Canal. A former industrial site, the area was largely inaccessible for some 100 years, but has been brought back into public use following a multi-million pound project to create public access to the waterway as part of a wider masterplan for City Road basin developed by developers Groveworld, British Waterways, Miller Development, Pembroke Real Estate, and masterplanners Bennetts Associates Architects.

The area has also started to become attractive to residential developers as the emergence of Old Street as a centre for technology and creative industries drives demand for high-quality residential properties in the surrounding area, and a number of high profile architects have been employed to work on high-rise residential developments.

The Canaletto tower is a 31-storey (100m) glass-and-steel tower designed by Dutch architects UNStudio, with three storeys of amenity space, including a spa and private cinema, below 190 apartments. Completion is due at the end of 2015. Across the road is Berkeley's City Forum, where Foster + Partners have designed a revised project for 250 City Road in Islington on behalf of Berkeley Homes. The plans include two towers of 42 and 36 storeys rising to heights of 155m and 137m. On another side of the canal basin at 261 Canal Road, is the 36-storey residential Lexicon Tower, designed by SOM, and currently under construction.

Below: Manhattan Loft Gardens, by SOM for Manhattan Loft Corporation (proposed)

Bottom: Aerial view of emerging buildings in Stratford, including the International Quarter, courtesy of Lend Lease

4.9 Stratford

Since the announcement that Stratford would host the 2012 Olympics in 2005, the area has seen a rise in interest from both domestic and international investors. The Olympic Park itself is now well underway with post-Games legacy planning, with a masterplan for 6,800 new homes across five new neighbourhoods in the 64-hectare site. Other developments planned include 'Olympicopolis', a project in the Olympic Park for the Victoria & Albert Museum and University College London to set up facilities there by 2018; the International Quarter, which will see 13 office and two residential buildings as well as a hotel; and iCity, a technology development where Loughborough University will establish a tech campus.

Elsewhere in Stratford, proposed schemes include the Stratford Plaza building by Telford Homes, a 26-storey, mixed use building next to Stratford bus and tube station, with 20 residential floors providing 260 flats; a Broadway Chambers development designed by Allies and Morrison with a 39-storey and a 20-storey building containing 388 apartments; Manhatttan Loft Gardens, designed by SOM for Manhattan Loft Corporation; and the 30- and 17-storey Glasshouse Gardens by Allies and Morrison, sited within the International Quarter for Lend Lease and London & Continental Railways.

Below: Proposals for Convoys Wharf, by Farrells for Hutchison Whampoa

Below: Royal Arsenal Riverside, by PRP Architects for Berkeley Homes (proposed)

Below: Greenwich Peninsula, courtesy of Pilbrow and Partners (proposed)

4.10 Deptford, Lewisham and Greenwich

The London Plan identifies an Opportunity Area encompassing Deptford Creek/Greenwich Riverside and Lewisham/Catford/New Cross, with a minimum of 13,000 homes planned.

One of the most significant schemes in the area is the Hutchison Whampoa led scheme for 3,500 homes on Deptford's Convoys Wharf, in a £1bn regeneration project to transform a 40 acre wasteland which has been derelict for 13 years. Terry Farrell has created the masterplan for the area. The proposal has been under discussion with Lewisham Council but in October 2013 Mayor Boris Johnson decided to 'call in' the planning application, which means that the GLA, rather than Lewisham Council, will now determine whether or not planning permission is granted.

The Mayor said: 'We need to build thousands of new homes in the capital and proposals to do that at Convoys Wharf have been on the blocks for over a decade. Those plans deserve full and thorough consideration, and my team will work closely with the borough and the applicant to do so without further delay.'

The Mayor would not normally take over an application from a local authority until a decision had been made, but as London faces increasing pressure for new development, it is possible that the Mayor could use this power more regularly to speed up planning approvals.

In the past year at Greenwich Peninsula, a major regeneration area by the O2, outline planning permission has also been granted for 1,683 homes and two hotels, and detailed planning consent has been granted for the first phase of 506 homes, which are under construction. The homes are a combination of luxury private dwellings as well as affordable, including social and intermediate. The Peninsula Quays scheme, designed by Swanke Hayden Connell Architects, and given planning permission in 2013, includes residential towers of up to 32-storeys, with landscaped gardens, restaurants and stops.

And at Woolwich, further tall buildings are expected as developers look to maximise development potential when Crossrail comes to the area in 2019. The Royal Arsenal Riverside by developers Berkeley is a £1.5bn Thameside development that has been underway for the past five years and should be fully completed around 2030. The complex will embrace 5,000 homes, several hotels and cinemas, many shops and a variety of commercial work spaces.

Below: No 1 Croydon (formerly the NLA tower), built 1970 by Richard Seifert & Partners, renovated in 2008 by AHMM

Top: One Landsowne Road, by CZWG Architects for Guildhouse-Rosepride (proposed)
Middle: Morello Tower, by Make Architects for Menta (proposed)
Bottom: Proposal for redevelopment of Nestlé Tower to residential apartments, by EPR Architects for Legal & General

4.11 Croydon

Croydon is one of the few outer London boroughs with a number of existing tall office buildings, mostly built in the 1960s and 1970s. More recently, there has been another major redevelopment programme for Croydon town centre, which has seen several new tall buildings proposed, including Morello London, a 55-storey residential tower clad in bronze anodized aluminum, designed by Make as part of a mixed-use development along Cherry Orchard Road; and One Landsdowne Road, a 55-storey tower designed by CZWG, accommodating a hotel, private and serviced apartments, new leisure centre, restaurant and cantilevered viewing gallery.

The tallest tower to date opened in March 2014 – Saffron Square, a 134m, 44-storey residential tower with 414 apartments, designed by Rolfe Judd Architects. As the area sees more demand for homes, plans are afoot to convert the Nestlé Tower into 288 residential apartments, designed by EPR.

Below: Imperial West by PLP and Aukett Fitzroy Robinson for Imperial College London (proposed)

Below: White City OAPF masterplan, courtesy of GLA

4.13 White City and Earls Court

The White City Opportunity Area covers approximately 272 acres on the eastern edge of the London Borough of Hammersmith & Fulham, along the boundary with the Royal Borough of Kensington & Chelsea. Up to 5,000 homes and 10,000 jobs are planned for the area. One of the key objectives is to encourage offices, hotels and flexible work spaces and to 'offer creative, media, bio-medical research and development industries that build on the presence of the BBC, Imperial College London, Westfield and Hammersmith Hospital.'

An OAPF for the area gives general guidance on building heights and locations for tall buildings, noting that the majority of new buildings should be medium rise of six to ten storeys with some lower-rise three to six storey terraces. However, some 'slender' towers of approximately 21-31 storeys could be appropriate on certain sites such as the Westway.

One of the major developments is at Imperial West, a new campus for Imperial College, which includes a 35-storey tapering residential tower designed by architects PLP, masterplanned by Aukett Fitzroy Robinson. Other local plans include the next phase of Westfield, which includes a 20-storey tower.

Plans for the 77-acre £8 billion redevelopment in Earls Court and West Kensington to create 7,500 new homes also includes a 'cluster' of tall buildings around the existing Empress State Building within a largely low-mid rise masterplan for 7,500 homes and thousands of permanent jobs.

Below: Masterplan for Brent Cross Cricklewood, by Allies and Morrison for Hammerson, 2014

3.13 Brent Cross Cricklewood

Brent Cross Cricklewood is a 55 hectare site in north London, just off the M1, which has been earmarked for a £4 billion investment programme, and is an Opportunity Area in the London Plan. Led by Hammerson and Standard Life Investments as BXC Development Partners, the scheme includes plans for 7,500 homes, new offices, four parks, transport improvements (including £200 million on road improvements, expanded bus station and a new train station), a new health centre, schools and an extension of the Brent Cross Shopping Centre.

Architects Allies and Morrison have drawn up a masterplan for the scheme, which includes new green spaces, bridges over the North Circular Road and a green boulevard leading into Brent Cross Main Square. The scheme includes permission for a number of tall buildings, which are 'clustered…as landmarks on the skyline, interspersed with smaller scale buildings and generous open spaces.'

In 2010, Barnet Council commissioned a Tall Buildings study for the whole borough, defining the predominant character of Barnet as two to three storeys, and 'tall buildings' as those over eight storeys. It suggests that over the next 15 years it expects more pressure for tall buildings, which will offer the opportunity for more intensive use but should not detract from the nature of the surrounding area:

'The proposals for the Brent Cross/Cricklewood area anticipate a significant rise in scale from the existing context, particularly in the area to the south of the north circular and east of the railway mainline. Existing plans show scope for a significant cluster of tall buildings up to 25 storeys tall in the area and particularly notes the inclusion of a tall building at the southern end of the M1 which will have a role as a citywide landmark.'

The masterplan for the scheme was given planning approval by the Mayor and Barnet Council in 2010, and the first phase of the scheme is due to start on site next year. This centres on Brent Cross shopping centre and will be refurbished with new shops, hotels, restaurants and leisure facilities, accommodated on the land of the current car park. It will also include new bridges over the North Circular Road, the new expanded bus station, improvements to the River Brent, key junctions, landscaping and around 1,250 homes. The rest of the development will come forward over the next 25 years in six phases.

Masterplan – Brent Cross Cricklewood

A Sturgess Park
B River Brent and new Brent Riverside Park
C Brent Cross Shopping Centre
D New pedestrian and cycle bridge
E New Brent Cross Main Square
F Combined Heat and Power Plant
G Multiplex cinema and leisure facilities
H Bigger Brent Cross bus station
I New Templehof Bridge
J Pedestrian bridge
K New office district square
L New office district
M New food store
N Brent Cross Tube Station
O New Market Square
P New Eastern Park
Q New railway station
R New Station Square
S New community facilities and health centre
T New leisure centre
U New Whitefield School
V New wast and recycling facility
W New Brent Terrace Park
X Clitterhouse Playing Fields
Y Rail freight facility
Z Cricklewood Station

Below: Proposals for Old Oak Common, courtesy of GLA

4.14 Old Oak Common

Old Oak Common, an industrial site located between Harlesden and Acton between the boroughs of Hammersmith and Fulham, Brent and Ealing, is poised for major redevelopment thanks to the development of a new Crossrail station, providing a direct interchange between the proposed HS2 route by 2026.

The GLA, together with local authorities, are seeking to develop a 30-year vision for the area, which they believe has capacity for up to 90,000 jobs and 19,000 new homes, schools, open spaces, shops and leisure facilities. Based on the concept of encouraging high-density development around transport nodes, the London Plan suggests that this area could support a cluster of tall buildings around the interchange.

Stadium Capital Developments, who also have proposals to develop a 40,000 capacity football stadium for Queens Park Rangers on the site have said: 'We envisage a new vibrant, mixed-use and high-quality entertainment and leisure development, which will turn this neglected but tremendously well-connected area into a new world-class city quarter.

'We are talking to a number of world-class architects to design iconic tall buildings akin to New York, the Far East and London's finest, as well as improving and incorporating the waterside environment of the Grand Union Canal. We have assembled a top-class professional team to design tens of thousands of new homes, a 350 bedroom luxury hotel and millions of square feet of entertainment and leisure focused commercial space including: retail, studios and offices, bars and clubs, restaurants, cinemas and other leisure accommodation.'

Although Old Oak Common hasn't yet seen any applications for tall buildings, it represents one in the next wave of as yet untapped regeneration areas for London, most of which require significant new transport infrastructure to unlock their development potential. As London's existing opportunity areas are built out, the arrival of major new transport infrastructure such as HS2, and Crossrail 2 and 3 are likely to drive the development of new areas of high-density high-rise development in London.

CHAPTER 5

London's future skyline

The opprobrium heaped on tall buildings in the 70s and 80s as a result of grim high-rise local authority housing estates – 'concrete monstrosities' – has dissipated in recent years with the emergence of a more elegant strain of skyscraper. 30 St Mary Axe designed by Foster + Partners brought a new distinction to the design of tall buildings in London. Its bullet shape and spiral decoration soon became a new icon for the capital, reflecting an image of modernity and style. Likewise, the simple form and elegant proportions of The Shard by Renzo Piano has proved highly popular with the public and media and shouts 'London' to the world.

The improving popularity of tall buildings is reflected in the poll conducted by NLA and Ipsos Mori into Londoners' views on tall towers where 40 per cent of respondents did not agree with the statement that 'there are too many tall buildings in London' compared to 34 per cent who agreed. 46 per cent agreed that tall buildings have made London look better, while only 25 per cent disagreed.

53 per cent of people thought that how a building looks in its surroundings was the most important consideration when deciding whether a new tall building should be allowed to get built. This was followed by good design and the provision of affordable homes. How tall it was came last on the list with just 11 per cent.

These figures disguise a more complex picture when analysed at a local level. When Soundings, specialists in public consultation tried to find out what people in the area thought about tall buildings proposed for the Bishopsgate Goodyard there was little unanimity. People in Shoreditch 'tech-city' suggested that they could 'live with height' but only if the buildings were of a 'very high quality'. Those living in Banglatown around Brick Lane saw the height as aspirational, and were excited. Local businesses and traders there thought, for the greater part, that the tall buildings will signal a positive shift.

Those opposed tended to be the middle class settlers and artist communities – exemplified by the East End Preservation Society fronted by broadcaster Dan Cruickshank – who see the development of their part of the city as a destructive act.

At a wider level there are critics of policy and intent. Simon Jenkins, journalist and chairman of the National Trust, has said: 'The London skyline is an almighty car crash. We have a real planning issue. The pass has been sold in the past 20-30 years. A policy existed but it crumbled... The policy now is to have no policy.'

Alan Liebowitz, of the developer Dorrington has observed that the wave of tall buildings sweeping the capital is driven by 'vanity and ego. There is a competitive urge to build bigger, build taller and in a different shape to shout "Here I am." It astounds me that we are prepared to allow tall buildings to randomly exaggerate, plunder and privatise our precious skyline.' Liebowitz's main contention is that there is no vision for London – 'no comprehensive approach, no realization of cumulative effect.'

But is it just ego and vanity driving the growth of tall building? London will become the first city in Europe to be home to 10 million people by 2030; this means half a million new jobs and a million more people to be housed. At the same time there are planning policies that support the densification of the Greater London area as opposed to a return of post war policies of developing green field sites around the south east region (although many believe this will become necessary in the future).

According to Sir Edward Lister, deputy mayor for planning, in the light of these pressures of growth 'what we can't do is impose some kind of freeze on the skyline and suspend the capital in stasis.'

He believes the Opportunity Area Planning Frameworks and Local Plans provide clear enough guidance for boroughs and developers about the right places in which to locate tall buildings and how they should be built. 'London has struck the right balance between too much prescription and too little control.'

Most commentators would agree that in the right place, tall buildings can make positive contributions to city life as stated in the joint report published in 2007 English Heritage and CABE. The report reinforced the importance of the quality of tall buildings at ground level. How they touch the ground and impact on the surrounding area are key. Tall buildings can release land

to provide new public space, an example of which can be seen in the linking of the ground plane below the Eastern Cluster in the City of London. Here there is an integrated strategy that includes the space below the Pinnacle, the public atrium at the base of The Leadenhall Building and the existing public squares outside the Aviva Tower and 30 St Mary Axe as well as a series of other new towers in the area. Urban design guidelines should deliver good public space, assist urban integration and control environmental factors such as sun, shade and microclimate.

The English Heritage/CABE report included the caveat that if towers are too big and too prominent, such buildings can harm the qualities that people value about a place; and there are increasing pressures for buildings to be big and prominent.

The pressures are from London's unprecedented growth, from international investors and purchasers for whom tall residential buildings are the norm, from boroughs' dependence on Section 106 agreements with developers that pay for affordable housing and local improvements, from values that increase as you go higher and from the attraction to well-heeled occupiers of spectacular views across the capital. These are pressures the planning system has not had to deal with heretofore and so we suggest that we need to beef up the level of control, while maintaining the approach to planning which is a key part of London's DNA.

Since the Great Fire, London's planning policies have generally been driven by a sense of pragmatism rather than grand visions, frequently in response to commercial pressures and economic circumstance. In contrast, other established cities, according to a report prepared by LSE Cities, notably Paris and New York, are the results of logical 'top-down' planning and co-ordinated development.

In Paris, the tall buildings policy defines three distinct building height zones. In the old centre, buildings cannot exceed six storeys in height. On the fringe, tall buildings are permitted provided they adhere to a set of specified guidelines, while in the Zone d'Action Concert (ZAC), where La Défense commercial centre is located, there are no height restrictions.

New York City has historically attempted to control the configuration and siting of tall buildings through a range of tight zoning mechanisms. Despite these the city is facing similar pressures to London; luxury housing development is booming. Developers are catering to the global elite and ultra-rich who will pay premium prices for apartments with spectacular views. A recent report – *The Accidental Skyline* — by the Municipal Arts Society highlights the rise of super tall, super slim towers including 432 Park Avenue and 217 West 57th Street which will dwarf the Empire State and Chrysler Buildings.

Vancouver has developed a very specific plan which allows low- to mid-rise mixed-use developments to define the urban street pattern and a series of spaced out towers to create the required density. This planning policy, which has become known as 'Vancouverism', also allows for generous parks and accessibility to the city's waterside amenities to create a very liveable city.

The LSE report suggested that London needed more positive planning for tall building in specific areas, in contrast to the negative approach exemplified by the protected view corridor system which dictates where tall building cannot, rather than where they can, be built. The report pointed out that Canary Wharf and similar Dockland regeneration programmes have already established a model: well-designed, densely populated complexes – including a number of tall buildings – that are easily accessible by public transport. The volumes of the buildings of the first phase of Canary Wharf were designed some 25 years ago by masterplanners SOM, and the completed towers have followed precisely the form of that original masterplan in a way that just does not happen elsewhere in the capital.

The GLA has responded to the LSE report with the planning frameworks for the development of opportunity areas around the capital – like Vauxhall Nine Elms, Croydon, Stratford and Old Oak Common – places designated for tall building clusters where local community reaction to tall building is less of an issue, indeed where it is seen as positive economic benefit.

But one must question whether the systems we have in place are robust enough in the face of the pressures

Right: La Défense in Paris, with low-rise buildings in the foreground
Below: Proposed new residential towers in New York from The Accidental Skyline, courtesy of Municipal Arts Society
Bottom: The skyline of Vancouver. Photography: Peter Murray

to develop when one looks at the form of the emerging cluster at Vauxhall Nine Elms. This was defined in 2012 as a 'series of tall buildings coming forward as separate individual elements on the skyline to a maximum of 150 metres with the pinnacle being formed by the Vauxhall Tower at 180 metres.' Today it would seem that the pinnacle of the cluster will more likely be One Nine Elms at height closer to 200m. Not that there is necessarily anything wrong with a 200m tower in this location, but it suggests a worryingly flexible approach to the creation of a key new piece of city. We need firmer plans for these areas, plans that are stuck to.

On the other hand we should beware that the wide area controls of Paris has delivered a rational but essentially sterile city centre. London's pragmatic approach to planning is part of its DNA; the gallimaufry of styles, the contrast and clashes are part of the excitement and character of the capital. It is a characteristic the City of London has succeeded in retaining as it has grown increasingly tall.

Neither does New York provide the right answer, its as-of-right-system delivering a regularity of form and detail that would not sit well in London's less orthogonal layout.

Nevertheless we have to accept that – like New York – we are facing unprecedented pressures to build taller and taller; one must ask the question whether we have the will or the powers to ensure that the quality and scale of new development is commensurate with the impact they will have on the character of the city and the experience of Londoners.

We can all agree that tall buildings should be of the highest architectural quality and designed in full cognisance of their likely impact on the immediate surroundings and the wider environment. To ensure that happens, while delivering essential economic growth and many thousands of homes, the Mayor needs to beef up his design advice. He should set up a London Skyline Commission – a group who can look at the totality of tall building development in London and assess the impact that it is having on the shape of the city. To support the Commission the Mayor should make greater use of 3D computer visualisations that are available to him and would allow new proposals to be seen in the wider context. This digital model would be a valuable tool for public consultation.

The Commission would provide design review, taking into account the historic context as well as the new buildings emerging in the vicinity. It should provide advice throughout the process from the selection of architects through to the detailed construction of the building and help to ensure that as London goes through this period of unprecedented growth and physical change, in a period when local authority resources are stretched, we do not make the mistakes of the 60s and litter the capital's skyline with disparate monstrosities that will blight London for generations to come.

Collected comments

"What we can't do is impose some kind of freeze on the skyline and suspend the capital in stasis."
Sir Edward Lister, Deputy Mayor for Policy and Planning

"Dramatic changes to the London skyline are happening fast and with little debate beyond individual borough boundaries. This is not about stifling change, but recognising that there are alternatives which deliver economic growth without robbing London of the distinctiveness which is key to its success."
Rosemarie MacQueen, Strategic Director Built Environment, City of Westminster

"The fact that London needs new homes is a poor excuse for short-sighted policymaking on the hoof."
Alan Leibowitz, Joint Managing Director, Dorrington

"There has been a shift from the occasional tall building to tall buildings becoming a panacea for solving problems of density, housing and green space."
Nigel Barker, Planning and Conservation Director for London, English Heritage

"The opportunity to build tall brings with it the possibility to create grand, 21st century public spaces. The taller the building, the greater our responsibility to provide an appropriate public gesture to the city at ground level."
Graham Stirk, Partner, Rogers Stirk Harbour + Partners

"There's a general presumption against tall buildings in this city but it's a position that's at odds with the innovative, energetic spirit that is London."
Amanda Levete, Director, AL_A

"Really tall buildings need really good architects – not least to create really friendly ground planes."
Paul Finch, Chair, Design Council Cabe

"Our continued survival on this planet, in the face of a million inhabitants urbanizing every week, relies on densifying our cities."
Antony Wood, Executive Director, Council on Tall Buildings and Urban Habitat

"The unique character of London has always been its ability to embrace change without ignoring its history or culture."
Michael Squire, Senior Partner, Squire and Partners

"We must not fall into the post-war trap of allowing poorly designed buildings to sprout up. To do so would risk damaging not only London's economy, but its heritage and aesthetic qualities for decades to come."
Alexander Jan, Director, Arup

"Hong Kong, one of the most dense cities in the world uses 16 times less, transport related, energy per capita compared to most North American cities. Dense cities with high rise buildings can be more sustainable than low rise low density cities."
Gerard Maccreanor, Director, Maccreanor Lavington

"How will [tall buildings] cope with our changing needs, the requirements of an ageing population, future environmental and technological issues? Towers ought to be designed with loose fit principles in mind to have the longest possible useful lifespan."
Alex Lifschutz, Director, Lifschutz Davidson Sandilands

"Over the next ten years I predict that we will see more of an emphasis on quality of materials, detail and proportion rather the need to make every building a landmark."
Paul Monaghan, Director, Allford Hall Monaghan Morris

REFERENCES

Chapter one

Vision 2020 (2013)
By Mayor of London

Urban Task Force, Towards an Urban Renaissance (1999)
By Lord Rogers

Tall Buildings Report (2002)
By the Transport, Local Government and Regions Committee, House of Commons

Create Streets: Not just multi-storey estates (2013)
By Create Streets

Tall Towers 2012 – London's High-Rise Residential Developments (2012)
By Knight Frank

The Towers of London (2012)
By Savills

Office vs. Residential: the Economics of Building Tall (2013)
By James Barton and Steve Watts, Davis Langdon (AECOM)

Revised Early Minor Alterations to the London Plan (2013)
By Greater London Authority

Draft Further Alterations to the London Plan (2014)
By Greater London Authority

London View Management Framework supplementary planning guidance (2012)
By Greater London Authority

City of London Core Strategy (2011)
By City of London Corporation

Tall Buildings Evidence Paper (2010)
By the City of London Corporation

Revitalise – a Borough-wide Tall Building Research Paper (2010)
By Southwark Council

Elephant and Castle Opportunity Area Supplementary Planning Document (SPD) (2012)
By Southwark Council and GLA

Guidance on Tall Buildings (2007)
By Commission for Architecture and the Built Environment (CABE) and English Heritage

Planning Policy Guidance 1 – Design (1997)
By the Department of the Environment

Chapter two

London High – a guide to the past, present and future of London's skyscrapers (2006)
By Herbert Wright

Towards the London Plan (2001)
By Greater London Authority

Interim strategic planning guidance on tall buildings, strategic views and the skyline in London (2001)
By Greater London Authority

Chapter four

Vauxhall Nine Elms Battersea Opportunity Area Planning Framework (2012)
By GLA, Lambeth Council, Wandsworth Council, TfL, English Heritage

Core Strategy – Development Plan Document (2010)
By Wandsworth Council

Blackfriars Road SPD (2014)
By Southwark Council

Southbank: London's Transforming Skyline (2013)
By CBRE

Core Strategy 2025 – Development Plan Document (2010)
By Tower Hamlets

White City Opportunity Area Planning Framework (2013)
By GLA, Hammersmith and Fulham Council, TfL

Tall Buildings Study of London Borough of Barnet (2010)
By Barnet Council

Old Oak – a Vision for the Future (2013)
By Transport for London, Hammersmith & Fulham Council, Brent Council, Ealing Council and the Mayor of London

Chapter five

The Accidental Skyline (2013)
By the Municipal Arts Society

Tall Buildings: vision of the future or victims of the past (2002)
By LSE for Development Securities PLC

Other general sources

New City – contemporary architecture in the City of London (2013)
By Alec Forshaw

Tall building policy making and implementation in central London: visual impacts on regionally protected views from 2000 to 2008 (2011)
By Juergen Kufner

Building Tall in a 2,000-year-old City (2013)
By Peter Murray

The Council on Tall Buildings and Urban Habitat – various references

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nla LONDON'S CENTRE FOR THE BUILT ENVIRONMENT

This Insight Study is published by NLA, and is supported by a major exhibition 'London's Growing Up!' and tall buildings events programme, taking place from April to June 2014

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NLA – London's Centre for the Built Environment was founded in 2005 to provide an independent information resource and a forum for discussion and debate about London's built environment for professionals, public and politicians. Since that time it has successfully established itself as a major focus for discussion about architecture, planning, development and construction in the capital with a year–round programme of events, publications and exhibitions, and a core mission – bringing people and ideas together to shape a better city. www.newlondonarchitecture.org

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LONDON'S CENTRE FOR THE BUILT ENVIRONMENT

LONDON'S GROWING UP!

Project Showcase

CONTENTS

PROJECT SHOWCASE

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SHOWCASE

PROJECT

The following pages present a selection of tall building projects being delivered by or for NLA Partners across the capital. They are divided by borough – running west to east.

HOUNSLOW

The Tower at GWQ

Brentford

Clayponds Lane, Middlesex, TW8 0BW

Status: Completion August 2014
Height: 100m
Floors: 29
Type: Mixed-use
Cost: £25 million

This 27-storey tower, with residential and hotel units, stands along the Golden Mile in Brentford and provides a public viewing gallery at the top. The complex design was wholly determined through extensive research into surrounding environmental factors, including the noise of the adjacent M4 motorway. The shape and orientation of the building minimises the impact of wind to the public piazza. The twin-skinned cladding protects the residents from prevailing winds – the outer skin creates an enclosure against noise, wind and rain, whilst the inner skin acts as a thermal barrier. Artistic light strategies are incorporated to create an active facade and illuminate the sky at night.

Developer: Barratt West London
Architect: Assael Architecture
Structural Engineer: David Dexter Associates
M&E Engineer: Buro Happold
Acoustic Consultant: Hann Tucker Associates

BRENT

Karma House

Wembley

575 North End Road, HA9 0UU

Status: Planning granted August 2013, completion March 2015
Floors: 20
Height: 57.5m
Type: Student residential

Located at the northern edge of the Wembley Masterplan area, this 450-room student accommodation tower is designed to respond to Brent Council's ambition to improve and increase the student accommodation offer in the area. The three stepped volumes have been designed to resolve the massing constraints set by the immediate context of low-scale light industrial development. Projecting oriels, combined with handing of rooms, create a rhythmic and textured facade. The scheme will be built using Donban's Vision Modular System – a prefabricated volumetric construction system which combines pre-cast concrete floors and steel panels that can be erected at the rate of eight modules a day.

Developer: Donban
Architect, Planning Consultant and Landscape Design: HTA Design LLP
Structural Engineer: Barrett Mahony Consulting Engineers (BMCE)
Contractor: Donban Contracting

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Chelsea Waterfront

Chelsea

Lots Road, SW10

Status: Under construction, completion 2019
Floors: 25 and 37
Heights: 92m and 130m (AOD – Above Ordinance Datum)
Type: Residential

This residential-led mixed-use development incorporates 706 apartments within the refurbished iconic Lots Road Power Station. Two glass towers of 25 and 37 storeys will offer large lateral living space and views over the Thames and across London, while low-rise apartments are situated on the river's edge surrounded by landscaped gardens. The Power Station will become one of the largest residentially converted buildings in the UK, and will also offer some 70,000 square feet of commercial space including restaurants, bars, cafés and boutique shops, with ancillary health, spa and fitness facilities.

Developer: Hutchison Whampoa Properties (Europe) Ltd
Architect: Farrells
Structural Engineer: Buro Happold
M&E Engineer: Hoare Lea
Project Manager: Circadian
Cost Consultant: AECOM
Planning Consultant: DP9

1 Merchant Square

Paddington, W2

Status: Planning granted August 2011, completion 2018
Floors: 42
Height: 140m
Type: Mixed-use
Cost: £209 million

Clad in midnight blue and white ceramic cladding, this landmark will be visible from all over the capital, and will be the tallest building in Westminster. Offering 222 high quality apartments, a 90-room boutique hotel and sky bar overlooking the city, the scheme will also include a new garden square. Each home is proportioned to create a sense of space and light throughout.

Development Manager: European Land and Property Ltd
Architect: Robin Partington Partners
Structural Engineer: WSP
M&E Engineer: Hoare Lee
Project Manager and Cost Consultant: EC Harris
Planning Consultant: DP9
Residential Consultant and Sales Agent: Jones Lang LaSalle

Osiers Gate Tower

Wandsworth Town

Osiers Road, SW18 1NL

Status: Completed November 2013
Floors: 21
Type: Residential
Cost: £13.5 million

This landmark 21-storey residential tower sits within the Osiers Gate development on a former brownfield site alongside both the River Thames and River Wandle. Each elevation responds to its unique position, designed in reflection of its environment and orientation to sunlight, daylight and wind. This enables residents living within the tower and those using amenity spaces below to enjoy maximum sunlight with appropriate screening. The building's height is emphasised by a graduating intensity of colour ascending the tower from dark to light.

Developer: Barratt East London
Architect (Design): Assael Architecture
Architect (Implementation): Sprunt
Structural Engineer: URS / Walsh Associates
M&E Engineer: Hoare Lea / Whitecode
Environmental Consultant: ARM Environment
Wind Engineer: BMT Fluid Mechanics

Ram Brewery Regeneration Project

Wandsworth

Wandsworth High Street, SW18 4LB

Status: Planning approved July 2013, completion 2018 / 2019
Floors: 36
Height: 115m
Type: Residential
Cost: £50.6 million

The Ram Brewery Regeneration Project will transform an industrial island site into a series of interlinked public urban spaces with retained heritage buildings. Strategically located at the northern end of the development, the 36-storey residential tower will signal the regeneration of Wandsworth Town and the rediscovery of the River Wandle. Its dynamic triangular form sits between the river, road and new pedestrian route, emerging with varying set back terraces. Dramatic angular corners emphasise the buildings verticality and address the three principle approaches. The glass and steel will be softened with timber screens and balconies, producing a defined residential character.

Architect: EPR Architects
Structural Engineer: ARUP
M&E Engineer: Hoare Lea
Cost Consultant: Gardiner & Theobald
Valuation and Development Consultants: Montagu Evans
Project Manager: Colliers International
Transport: WSP
Environmental and Flood Risk: Waterman Group
Landscaping: Patel Taylor
Residential Consultant and Investment Agent: Jones Lang LaSalle

Nine Elms Parkside

Vauxhall Nine Elms

Nine Elms Lane, SW8

Status: Demolition and Enabling underway
Floors: 23
Height: c. 80m
Type: Mixed-use

Sitting at the heart of the Nine Elms regeneration area, Nine Elms Parkside is a residential-led mixed-use scheme of 1,870 units. Structured as a series of perimeter blocks with taller elements of 23 storeys, the scheme is set around a new public linear park. The development will provide leisure, cultural and retail uses as well as a new primary school.

Developer: Royal Mail Group
Architect: Allies and Morrison
Structural Engineer: Halcrow Yolles
M&E Engineer: AECOM
Cost Consultant: Gleeds
Development Manager: M3 Consulting
Planning Consultant: DP9

One Nine Elms

Vauxhall Nine Elms

Nine Elms, SW8

Status: Section 106 Planning Consent granted with conditions – S73 applied and pending, completion 2018
Floors: 43 and 58
Heights: 164m and 203m
Type: Mixed-use

These prominent towers, situated at the gateway to the Nine Elms regeneration plan, includes a 200m tall residential building which will become the tallest residential tower in Western Europe. The 160 metre Wanda Vista Hotel, which will accommodate 180 guest rooms, will be the first world-class Chinese five star hotel brand in the UK. The design carefully considers future developments in the area, maintaining open views and maximising the potential of the site, thus enhancing the experience for hotel guests, residents, and occupants of the neighbouring structures. The exterior composition steps down in stages from the highest point on the complex, thereby relating comfortably in scale to lower elements in the surrounding neighbourhood.

Developer: Wanda ONE
Architect: Kohn Pedersen Fox Associates
Structural Engineer: AKT
M&E Engineer: Grontmij
Planning Consultant: Montagu Evans
Cost Consultant: Gleeds

The Atlas

Vauxhall Nine Elms

30 - 60 South Lambeth Road, SW8

Status: Under construction, completion September 2016
Floors: 32
Height: 96.5m
Type: Mixed-use
Cost: £30 million

Based on the site's irregular geometry, wedged between the railway viaduct and South Lambeth Road, the triangular shape emerged as an unusual but efficient building form, responding to the diverse context of the existing and emerging neighbourhoods in the Vauxhall area. The project will house two main uses: a fitness suite with swimming pool facility, and student accommodation including 553 en-suite bedrooms with communal kitchen and lounge facilities, as well as amenity and service spaces. The building will be clad in varied terracotta tiles to achieve a speckled effect, referencing the richly textured brick buildings in the local conservation area to the south of the site.

Developer, Project Manager, Contractor and Cost Consultant: Downing
Architect: Feilden Clegg Bradley Studios
Structural Engineer: Walsh Group
M&E Engineer: Hoare Lea
Planning Consultant: Rolfe Judd
Urban Townscape & Local Character Assessment: CityDesigner

Embassy Gardens

Vauxhall Nine Elms

51 Nine Elms Lane, SW8

Status: Under construction, completion January 2015
Floors: 19
Height: 63m
Type: Residential

Embassy Gardens will sit at the centre of the new riverfront district stretching from Vauxhall through to Battersea. Formed of a series of interconnected blocks of varying heights around a raised garden with retail and lobby functions at lower levels, the cluster will range from four to 19 storeys. The varied heights within the block respond to immediate context and to more distant views, with taller elements located at key corners marking views both from the River Thames and along the proposed Linear Park that will link the Vauxhall Nine Elms neighbourhood together.

Developer and Contractor: Ballymore Group
Architect: Feilden Clegg Bradley Studios
Structural Engineer: Walsh Group
M&E Engineer: OCSC
Cost Consultant: Gleeds
Project Manager: Acumen
Planning Consultant: CBRE
Landscape Architect: Camlins
Residential Consultant and Sales Agent: Jones Lang LaSalle

Keybridge House

Vauxhall Nine Elms

80 South Lambeth Road, SW8 1RG

Status: Planning pending (decision expected Q1 2014)
Floors: 22 and 36
Heights: 21m to 133m (AOD)
Type: Mixed-use

The existing 1.2 hectare site includes a large five-storey podium building and a 16-storey tower both built in the 1970s. The proposed redevelopment of the site will provide 415 residential units, employment and retail space, new open spaces and land for a two-form entry primary school. The existing two-level basement is retained for parking, servicing and storage. Two residential towers, extending to 22 and 36 storeys, will provide a transition between the tall towers proposed to the north of the railway and the lower rise development to the south of the tracks.

Architect: Allies and Morrison
Structural and M&E Engineer: Waterman
Planning Consultant, Strategic Communications and Affordable Housing & Viability: GL Hearn
Cost Consultant: Mace
Landscape Architect: Townshend Landscape Architects

Merano

Vauxhall Nine Elms

Eastbury House, 30-34 Albert Embankment, SE1

Status: On site, completion 2017
Floors: 28
Height: 86m
Type: Mixed-use

Located on the Albert Embankment, opposite the Tate Britain and within sight of the Houses of Parliament, this scheme will offer a high quality, mixed-use development of apartments and offices. At the base of the building, a four-storey public space will be created, offering a café and access through to Vauxhall Pleasure Gardens via Tinworth Street. Formed of three stepped bays, the building will provide a dynamic skyline of varying heights in contrast to the existing 'wall' of neighbouring developments. It is designed to create a strong visual presence along the riverfront and act as a gateway to east Lambeth as well as a natural gathering space.

Developer, Project Manager, Contractor and Cost Consultant: St James Group
Architect: Rogers Stirk Harbour + Partners
Co-architect: EPR Architects
Structural Engineer: Ramboll
M&E Engineer: Hoare Lea
Planning Consultant: Boyer Planning
Landscape Architect: Gillespies
Townscape Consultant: Robert Taverna
Residential Consultant: Jones Lang LaSalle

Sainsbury's Nine Elms

Vauxhall Nine Elms

62 Wandsworth Road, SW8 2LF

Status: Planning granted November 2013
Floors: 37
Height: 129m
Type: Mixed-use

This mixed-use development will deliver a larger Sainsbury's store, 737 new dwellings (144 affordable and 593 private), flexible business and retail floorspace, public realm improvements and the premises for a new Northern Line underground station. The existing Sainsbury's store, located near to Vauxhall, is in need of refurbishment and features a surface level car park, which does not make the best use of the site. The designation of the Vauxhall Nine Elms Battersea Opportunity Area has provided a positive planning context to create a larger store on the site.

Developer: Sainsbury's Supermarkets Ltd
Architect: Rolfe Judd
Planning Consultant: Turley Associates

The Tower

Vauxhall Nine Elms

One St George Wharf, Nine Elms Lane, SW8 2LE

Status: Substantially complete, partially occupied
Size: 27,874 sqm GIA
Floors: 53
Height: 180.6m
Type: Residential
Contract Cost: £150 million

Located on a sharp bend of the River Thames, this cylindrical building provides 213 luxury apartments over 50 storeys and is currently the tallest residential tower in London. The unique floor plan concept, based on a Catherine wheel, is divided into five apartments per floor with separating walls radiating out from the central core. The building uses significantly less energy than that of a conventional tall building through the use of its ventilated cavity facade, with opening windows to reduce reliance on air conditioning. Renewable energy sources include heat exchange technology and a wind turbine generating power to light communal areas.

Developer: St George South London Ltd
Architect and Landscape Architect: Broadway Malyan
Structural Engineer: White Young Green / Robert Bird Group
M&E Engineer: Grontmij
Main Contractor: Brookfield Multiplex Construction Europe
Planning Consultant: Barton Willmore
Cost Consultant: AECOM
Cladding Consultant: Cladtech Associates
Acoustic Consultant: Cole Jarman
Facade Access Consultant: Reef Associates
Residential Sales Agent: Lang LaSalle

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Vauxhall Square

Vauxhall Nine Elms

SW8 1SF

Status: Planning granted 2013, completion 2018
Floors: 50
Height: 168m
Type: Mixed-use

This project includes two new hotels, two office buildings, residential accommodation, student housing, a four-screen cinema and related retail, cafés and restaurants, alongside retained listed buildings. It also includes a new 50-bed homeless hostel, replacing the existing hostel on the site. Two residential towers, standing at 168m, will form part of the emerging Vauxhall Tall Buildings cluster. Over 50 per cent of the site has been given over to the public realm, including a large new public square in the centre of the development providing pedestrian routes through the site.

Developer: CLS Holdings PLC
Architect: Allies and Morrison
Structural Engineer: Waterman
M&E Engineer: Hoare Lea
Project Manager: INK Project Management
Planning Consultant: GL Hearn
Cost Consultant: Gardiner and Theobald
Development Consultant and Residential Sales Agent: Jones Lang LaSalle

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Vauxhall Cross

Vauxhall Nine Elms

SW8 1SJ

Status: Planning granted August 2012
Floors: 31 and 41
Height: 140m
Type: Mixed-use
Cost: £165 million

Comprising residential, hotel and office space, these two towers rise from a densely planted winter garden beneath a 20m high timber-framed glazed canopy. Cafés, bars, restaurants and shops surround the ground floors of the development. The taller of the two towers, at 41 storeys, is designed to act as a landmark for Vauxhall, marking the transport interchange at its foot and looking out towards the South Bank and West End; whilst the shorter tower, at 31 storeys, will serve as a local landmark linking Vauxhall to the river. It aims to become one of the most environmentally efficient multi-storey developments in London.

Developer: Kylun Ltd
Architect: Squire and Partners
Structural Engineer: Expedition Engineering
M&E Engineer: Grontmij
Valuation and Development Consultant: Montagu Evans
Cost Consultant: EC Harris
Landscape Architect: Land Use Consulting
Transport Engineer: TTP Consulting

Wayland House

Stockwell

Robsart Street, SW9

Status: Started on site September 2013, completion January 2015
Floors: 20
Height: 65.8m
Type: Residential
Contract Cost: £27.4 million

Forming part of the Stockwell Park Estate regeneration, this building will rise to 20 storeys and front onto Slade Gardens, accommodating both private and affordable homes within a tenure blind development. Spacious dwellings with large private balconies are designed to provide high quality living with views across London. Redevelopment creates a timely opportunity to address the failings of the existing building whilst creating a centre piece for Robsart Village that will meet current design standards and local housing needs, whilst inspiring a sense of place within a reinvigorated and balanced community.

Developer: Network Housing Group
Client: Community Trust Housing / Network Housing Group
Architect: PRP Architects
Structural Engineer: Conisbee
M&E Engineer: Calford Seaden
Contractor: Wates Construction
Planning Consultant: Jones Lang LaSalle
Cost Consultant: Mace

Maiden Lane
King's Cross
NW1 9YS

Status: Planning granted February 2013, completion January 2016
Floors: 20
Height: 65.8m
Type: Residential
Cost: £53 million

The regeneration of the Maiden Lane estate will provide an additional 265 new homes, all sensitively designed to blend with the renowned estate with a high quality approach to architectural design and detailing. The proposed scheme is designed to reconcile the low rise buildings to the north with the larger emerging buildings of the King's Cross masterplan, culminating in a 20-storey residential tower to complement the King's Cross cluster on the other side of York Way. The redevelopment also includes a mixed-use development of retail and workspace to front York Way, which will reannimate the street frontage.

Developer and Client: LB Camden
Architect: PRP Architects
Structural and M&E Engineer, Project Manager and Cost Consultant: McBains Cooper
Planning Consultant: CBRE

Plot T6
King's Cross
Canal Reach, N1C 4BD

Status: Completed July 2013
Floors: 14 and 27
Height: 67m and 104.9m (AOD)
Type: Student residential

Providing a marker for the northern edge of the King's Cross regeneration area, this design comprises a slender 27-storey tower on a prominent corner of York Way with a 14-storey shoulder creating a south-facing entrance courtyard. The scheme houses 669 student bedrooms through a mixture of cluster flats and self-contained studios, as well as generous terraces for communal areas. A double-height reception area with a café space offers an active frontage to York Way and a meeting place for students and visitors.

Developer and Project Manager: Urbanest Student Accommodation
Architect: Glenn Howells Architects
Structural Engineer: Ramboll UK Ltd
M&E Engineer: URS Corporation
Contractor: Mansell Balfour Beatty
Cost Consultant: Sense Cost Consultancy (Mace)
Asset Manager: Argent LLP

The Triton Building, NEQ
Euston
20 Brock Street, Regent's Place, NW1 3DS

Status: Completed July 2013
Floors: 26
Height: 82.6m
Type: Residential

This private residential development comprises 94 high quality residential apartments, including two penthouses and a two-storey basement with car parking. The building consists of concrete slab, columns, central core, outrigger walls and vierendeel frame construction. The cladding consists of a combination of an aluminium composite site built rainscreen cladding system (Basket Weave), and a proprietary aluminium glazed facade system with aluminium framed punched windows. The scheme achieved Code for Sustainable Homes level 4.

Developer: British Land
Architect: Stephen Marshall Architects / Tate Hindle Architects
Structural Engineer: Halcrow Yolles
M&E Engineer: Watkins Paynes & Partners
Development Manager: M3 Consulting
Construction Manager: Lend Lease
Planning Consultant: DP9
Cost Consultant: AECOM
Development Consultant and Residential Sales Agent: Jones Lang LaSalle

Canaletto

Angel

257 City Road, EC1V 1AD

Status: On site, completion 2015
Floors: 31
Height: 100m
Type: Residential

This development consists of 190 luxury apartments over 30 storeys, with two basement levels containing plant and recreational facilities including a swimming pool, a gym and a cinema, as well as a residents' bar facility on the 24th floor. The building will be split into three levels of accommodation: standard, premier and penthouse, each with an increased level of fit-out to reflect the standard.

Developer: Groveworld
Architect: UN Studio/Axis Architects
Structural Engineer: URS
M&E Engineer: Hoare Lea
Contractor: Ardmore
Planning Consultant: Gerald Eve LLP
Cost Consultant: EC Harris
Residential Consultant and Sales Agent: Jones Lang LaSalle

Lexicon

City Road Basin

261 City Road, EC1

Status: Under construction, completion 2015
Floors: 36
Height: 138m
Type: Residential

Situated in a prime location bordering Angel, Shoreditch, Clerkenwell, and Farringdon, this building will form a key part of the City Road Basin Masterplan, and aims to create a highly visible, positive landmark for Islington which will in turn provide a catalyst for the further uplift of the area. The scheme comprises 307 apartments – 200 for private sale and 107 affordable housing units, managed by Affinity Sutton. In addition the development includes 785 sqm of mixed-use commercial space, 52 car parking spaces as well as a private residents' spa and lounge.

Developer: Mount Anvil
Architect: SOM
Structural and Civil Engineer: WSP
Services Engineer: Hoare Lea
Landscape: Gillespies
Interior Design: Brill

Ruskin Square (Phase 1)

West Croydon

Lansdowne Road, CR0

Status: Tender, completion Q2 2016
Floors: 22
Height: 67m
Type: Residential

This is the first of the three residential phases comprising the larger Ruskin Square masterplan. The first phase contains a landmark 22-storey building; housing 161 residential units, a roof garden on level nine, a 'podium' roof and a communal garden.

Developer: Places for People
Architect: Allford Hall Monaghan Morris (AHMM)
Structural and M&E Engineer: Arup
Project Manager and Cost Consultant: AECOM
Planning Consultant: DP9

St Georges House

East Croydon

Park Lane, CR9 1NR

Status: Planning approved March 2013, completion 2014
Floors: 24
Heights: 95m
Type: Residential
Cost: £40 million

Sited within the Mid Croydon Masterplan, this scheme hopes to act as a catalyst for the regeneration of the area. The former Nestle UK & Ireland Headquarters will be redeveloped, utilising the existing frame and adding an additional four storeys, along with a further three storeys atop the adjacent building. The change of use from office space to residential will provide 288 high quality apartments ranging from studios, one- to three-bedroom flats and duplexes with retail and residential amenity areas. Apartments will have individual balconies partly recessed within the structure and access to the rooftop garden space, affording views over Croydon.

Developer: Legal & General
Architect: EPR Architects
Structural and M&E Engineer, Environmental Consultant and Transport: Waterman Group
Planning Consultant and Project Manager: CBRE
Cost Consultant: DBK
Landscape Architect: Charles Franke Associates

100 Bishopsgate

EC3

Status: Project currently on hold
Floors: 40
Height: 172m
Type: Mixed-use

This 40-storey commercial development will offer highly efficient and flexible floor space to meet the current and future demands of financial, insurance and legal occupiers. The development is in close proximity to Bank and Liverpool Street station, and will provide 900,000 square feet of office, retail and restaurant space, with an emphasis on tenant workspace and convenience. The building will include a prominent ground floor reception with multiple entry points, dedicated lifting to all floors for fast and effective travel throughout the building, and a new half-acre public realm.

Developer: 100 Bishopsgate Partnership
Architect: Allies and Morrison / Woods Bagot
Structural Engineer: Robert Bird Partnership
M&E Engineer: Hilson Moran
Contractor: Brookfield Multiplex Construction Europe
Project Manager: Brookfield Office Properties
Planning Consultant: GVA
Cost Consultant: AECOM
Landscape Architect: Hyland Edgar Driver

20 Fenchurch Street

EC3

Status: Under construction, completion March 2014
Floors: 37
Height: 155m
Type: Commercial

This 155 metre tall building will provide over 670,000 square feet of latest specification office accommodation across 32 upper floors and a three level Sky Garden – the highest public park in London. Future occupiers will enjoy largely uninterrupted views in every direction even from the lower levels. It has been designed for maximum efficiency with an occupational density for all services of one person per eight square metres.

Developer: Land Securities and Canary Wharf Group plc
Design Architect: Rafael Viñoly Architects
Executive Architect: Adamson Associates Architects
Structural Engineer: Halcrow Yolles
M&E Engineer: Hilson Moran
Project Manager and Contractor: Canary Wharf Contractors Limited

The Heron and Milton Court

EC2

Status: Completed July 2013
Floors: 35
Height: 115m
Type: Mixed-use
Cost: £150 million

The redevelopment of Milton Court, adjacent to the Barbican in the City of London, provides an educational facility on the first six floors topped by 285 luxury apartments. The new world-class performance facility for The Guildhall School of Music & Drama includes a new 625-seat concert hall, a 225-seat theatre, a 120-seat studio theatre and associated rehearsal, administrative and teaching spaces. A 28-storey private residential tower, The Heron, sits above the school at the eastern end of the site. Views across London have been maximised with balconies and terraces, as well as floor-to-ceiling glazed corners.

Developer: Heron International
Client: City of London Corporation and The Guildhall School of Music & Drama
Design Architect: David Walker Architects
Executive Architect: RHWL
Interior Architect: School RHWL Arts Team
Structural Engineer: WSP
M&E Engineer: Hoare Lea
Planning Consultant: DP9
Contractor: Sir Robert McAlpine
Quantity Surveyor: EC Harris
Development Consultant and Residential Sales Agent: Jones Lang LaSalle

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Heron Tower

110 Bishopsgate, EC2N 4AY

Status: Completed March 2011
Floors: 46
Height: 230m
Type: Commercial

Situated just 200 metres from Liverpool Street station, Heron Tower stretches 230 metres into the London skyline. The 46-storey building provides 36 storeys of office space, with two bars and restaurants on levels 38-40, along with a further bar on the ground floor. The building incorporates a number of unique features including a triple-height entrance hall containing Britain's largest privately owned aquarium, 10 high-speed double-deck lifts and a full-time five-star concierge service. A range of sustainable features led to the building being given a BREEAM environmental and sustainability rating of 'Excellent'.

Developer: Heron International
Architect: Kohn Pederson Fox Associates (KPF)
Structural Engineer: Arup
M&E Engineer: Foreman Roberts
Contractor: Skanska
Project Manager: Mace
Planning Consultant: DP9
Cost Consultant: AECOM

The Leadenhall Building

122 Leadenhall Street, EC3V 4AB

Status: Under construction, completion Summer 2014
Floors: 52
Height: 224m
Type: Commercial

The Leadenhall Building's distinctive tapering design provides a wide range of accommodation, and an unprecedented seven-storey high landscaped open galleria at ground level. Escalators take visitors from the galleria to the main building reception at level 2 from where high speed glazed lifts serve the office floors. At every level, natural light and views across the city have been maximised by the building core being offset to the north. This has created highly efficient and adaptable floor plates, allowing occupiers great flexibility in how they use the accommodation.

Developer: British Land and Oxford Properties
Architect: Rogers Stirk Harbour + Partners
Structural and M&E Engineer: Arup
Contractor: Laing O'Rourke
Development Manager: M3 Consulting
Planning Consultant: DP9
Cost Consultant: AECOM
Landscape Architect: Edco Design London
Office Leasing Agent: Jones Lang LaSalle

40 Leadenhall Street

EC3

Status: Design stage, completion 2019
Floors: 34
Height: 170m (AOD)
Type: Mixed-use
Cost: £391 million

Varying in height between 10 and 34 storeys, this building will offer 82,903 square metres of office space and 1,605 square metres of retail space, housing approximately 7,000 employees when complete. The Grade II listed building at 19-21 Billiter Street will be restored and integrated into the proposed scheme, with the vertical slices of the new building's form carefully arranged around it. The vertical composition is designed to complement the neighbouring curved and leaning buildings, whilst remaining hidden along the ceremonial route to St Paul's Cathedral. Ground floor frontages will be set back, creating generous pedestrian zones, wider pavements and spaces along key pedestrian routes on adjacent streets.

Developer: Henderson Global Investors
Architect: Make
Structural and M&E Engineer: WSP
Planning Consultant: DP9
Cost Consultant: ECH

52 Lime Street

EC3

Status: Planning granted, completion 2017
Floors: 38
Height: 190m
Type: Commercial

Providing 35 floors of offices above ground and mezzanine, the building's floor plates will range from 15,500 square feet to 6,500 square feet, all arranged around a southern core to maximise floor area and views while limiting solar gain. Adjacent to the office entrance will be a new public open space – the re-creation of the historic 'Lime Street Square' which was lost in the 1940s. This will include public seating, planting and public art, complementing the existing precinct around the Willis and Lloyd's Buildings.

Developer: WRBC Development UK Ltd
Architect: Kohn Pedersen Fox Associates (KPF)
Interior Architect: TP Bennett
Structural and M&E Engineer: Arup
Contractor: Skanska
Planning Consultant: DP9
Cost Consultant: EC Harris
Landscape Consultant: Gillespies

The Pinnacle

22-38 Bishopsgate

Status: Original planning consent 2007, completion 2017
Floors: 64 + 3 basement levels
Height: 288m
Type: Commercial

The 288m Pinnacle, with its cascading top and shingled facade, will form the centrepiece of towers in the heart of London's insurance district. The design features almost one million square feet of high quality office accommodation on 54 floors above Grade A standard. Targeting a BREEAM Excellent rating, it is designed to exhibit exceptional environmental credentials. The combination of a high performance floor-to-ceiling glazed facade and informed MEP equipment selection enables The Pinnacle to perform better than other comparable buildings. With full planning consent achieved, construction is set to commence in summer 2014, with practical completion due in 2017.

Developer: Arab Investments Ltd
Architect: Kohn Pedersen Fox
Structural Engineer: Arup
M&E Engineer: Hilson Moran
Contractor: Brookfield Multiplex
Planning Consultant: DP9
Cost Consultant: AECOM

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One Blackfriars
Blackfriars Road
1 Blackfriars Road, SE1 9UF

Status: Under construction, completion 2017
Floors: 50
Height: 170m (AOD)
Type: Mixed-use

The tower's slender volume is designed to minimise the tower's footprint and maximise the extent of the public realm at street level, whilst providing 274 apartments, 152 hotel bedrooms and six retail units. In addition to the tower, the scheme affords a six-storey hotel on Rennie Street and a three-storey retail and amenity building on the corner of Stamford Street and Blackfriars Road, all arranged around a new public realm strategy that creates three new routes and a public plaza within the block. The double-skin facade includes a subtle variation of rendering that lightens as the building extends skyward.

Developer and Project Manager: St George South London
Architect: Ian Simpson Architects
Structural Engineer: WSP
M&E Engineer: Hoare Lea
Contractor: Laing O'Rourke [Sub-Structure], St George South London [Fit-Out]
Planning Consultant: CBRE
Cost Consultant: AECOM
Interior Designer: Tara Bernerd & Partner

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240 Blackfriars
Blackfriars Road
240 Blackfriars Road, SE1 9UF

Status: Under construction, completion March 2014
Floors: 20
Height: 85m
Type: Commercial
Build Cost: £65 million

This 20-storey mixed-use development is set to provide 233,000 square feet of offices above 4,800 square feet of retail, along with a separate building providing 10 private market flats. Early, pre-completion, lettings to UBM and Boodle Hatfield totalling 129,000 square feet (representing 55 per cent of the offices) is testament to the quality and flexibility of the office floors which are capable of accommodating one person per eight square metres.

Developer: Great Ropemaker Partnership (Great Portland Estates + BP Pension Fund)
Architect: Allford Hall Monaghan Morris (AHMM)
Structural Engineer: AKT II
M&E Engineer: Hilson Moran
Contractor: Mace
Project Manager: Jackson Coles LLP
Planning Consultant: Montagu Evans
Cost Consultant: AECOM

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Sampson House and Ludgate House
Blackfriars Road
Blackfriars Road & Hopton Street, SE1

Status: Resolution to grant October 2013, due to complete 2023
Floors: 48
Height: c. 170m
Type: Mixed-use

The redevelopment strategy for this South Bank site enables a multi-phased delivery of 1.4 million square feet. This will consist of nine buildings, producing 492 residential units and 300,000 square feet of commercial space including residential towers, offices, retail and new cultural and performance spaces, and new pedestrian routes through the site and public squares. The cluster will range in height from five to 48 storeys.

Developer: The Carlyle Group
Architect: PLP Architecture
Structural Engineer: WSP
M&E Engineer: Grontmij
Development Manager: M3 Consulting
Planning Consultant: DP9
Cost Consultant: Gardiner & Theobald

The Blades
Elephant and Castle

Status: Design stage
Floors: 41
Type: Residential

These 40-storey towers – or 'blades' – lie within a challenging site, including a busy dense urban area, problematic environmental conditions, neighbouring residents and a large public piazza. The twin blades are devised to cut through the wind and are the result of meticulous wind tunnel testing which discovers methods of pushing adverse weather away from the soaring structures rather than below to pedestrian level and neighbouring streets.

Client: Ministry of Sound
Architect: Assael Architecture

Eileen House
Elephant and Castle
80-94 Newington Causeway, SE1 6EF

Status: Planning granted January 2014, completion 2017
Floors: 41
Height: 125m
Type: Residential

Located at the northern edge of the Elephant and Castle, Eileen House comprises a 335-unit, 41-storey residential tower and an adjacent eight-storey office building. The scheme will bring significant new public spaces and improvements to the wider public realm, contributing to the ongoing regeneration project. Reflecting the geometry of the site, the building has a parallelogram-shaped footprint, allowing 10 residential units around a central core on a typical floor. The east and west of the tower top is sculpted by two triangular 'cuts', clad with a veil of photovoltaic louvres, contrasting with the stone of the tower body.

Developer: Merryvale no. 6 International Ltd
Architect: Allies and Morrison
Structural Engineer: McBains Cooper / Terrell International
M&E Engineer and Cost Consultant: McBains Cooper
Project Manager: South Central Management
Planning Consultant: DP9
Client's Agent: Shaw Corporation

Newington Butts
Elephant and Castle
86-88 Newington Butts, SE11 4QU

Status: Planning granted, starting on site spring 2014
Floors: 45
Heights: 146.9m (AOD)
Type: Mixed-use

The development of the Newington Butts site in Elephant and Castle will deliver one of the largest private rental developments seen in the capital for decades, containing 462 units, 188 of which will be affordable. The design comprises a compact, slender tower, animated by suspended corner balconies and will offer panoramic views across London. The tower is accompanied by a seven-storey terrace building with multiple entrances to enliven the street. As well as these residential units, the site will also include a new theatre space for the Southwark Playhouse and a café with further retail and marketing spaces.

Developer: Mace / Essential Living
Architect: Rogers Stirk Harbour + Partners
Structural Engineer: AKT II Limited

89-93 Newington Causeway
Elephant and Castle
SE1 6BN

Status: Under construction, completion December 2014
Floors: 22
Height: 67m
Type: Residential

Conceived as one of the gateway buildings into the regenerated Elephant and Castle area, the building is triangular in plan and consists of three separate vertical volumes that vary in height to better relate visually to the height of Metro Central Heights and surrounding context. The three volumes are constructed from an off-white precast concrete with solid infill panels of a contrasting hue and texture, giving the building's elevations a civic quality. The building will contain 38 homes, offices and a small café / kiosk unit.

Developer, Project Manager and Cost Consultant: Neobrand
Architect: Panter Hudspith Architects
Structural Engineer: Robert Wynter & Partners
M&E Engineer: Evans Integrated Design
Contractor: Neobrand / Clarke Design & Build
Planning Consultant: Knight Frank / Daniel Watney LLP

One The Elephant

Elephant and Castle

SE1 6SQ

Status: Under construction, completion Q4 2015
Floors: 37
Height: 127m
Type: Residential
Contract Cost: £70-80 million

Incorporating a 37-storey tower, a four-storey pavilion, new local park and public leisure centre, One The Elephant is designed to become a new focal point for Elephant and Castle, and will offer 284 studio, one-, two- and three-bedroom homes. The tower exterior combines metallic detailing and vertical gardens created by optional planters on each balcony. When complete, it will be the UK's tallest Code for Sustainable Homes level 4 building.

Developer, Project Manager, Contractor and Cost Consultant: Lend Lease
Architect: Squire and Partners
Structural Engineer: Robert Bird and Partners
M&E Engineer: Wallace Whittle
Planning Consultant: DP9
Facade Engineers: Wintech
Landscape Architects: BCA Landscape
Architecture Interiors: Tara Bernerd & Partners

The Quill

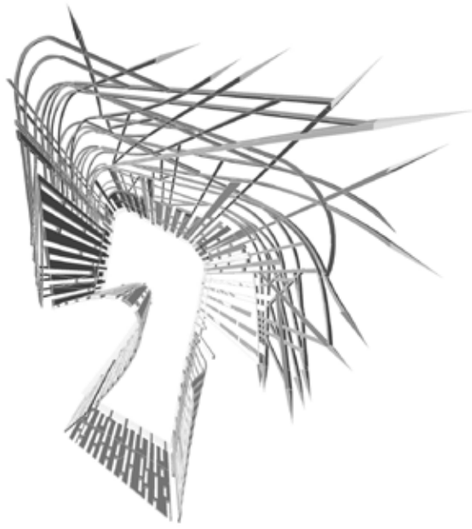
London Bridge

40-46 Weston Street, SE1 3QD

Status: Planning granted 2011, completion Q3 2015
Floors: 31
Height: 109m
Type: Student residential

Replacing an ineffective, outmoded and unsustainable 1960s building, this 31-storey tower is designed to achieve a BREEAM Excellent rating. A steeply sloping roof, varying between 58-degrees and 78-degrees, rises from the 10th floor fronting Melior Street to the 31st floor on St Thomas Street. The fifth elevation's apertures will morph into a series of directional curved structural components that are subtly fused into the surface of the external fabric, producing a distinctive silhouette. Particular attention has been given to the open space around the site, with the aim to provide a positive contribution to an area that is subject to significant transition.

Developer: Investream
Architect: SPPARC Architecture
Structural Engineer: Pell Frischmann
M&E Engineer: Capita Symonds
Planning Consultant: Deloitte Real Estate
Cost Consultant: Gleeds
Heritage and Townscape Consultant: Richard Coleman City Designer



The Shard

London Bridge

32 London Bridge Street, SE1 9SG

Status: Completed September 2012
Floors: 87
Height: 310m
Type: Mixed-use

The Shard, the tallest building in Western Europe, is a mixed-use high rise tower, or more accurately, a 'vertical city'. The building consists of 28 stories of office space, 12 floors of residential, six mid-levels of public space, and 18 stories for the future European flagship hotel for Shangri-La. A four-storey viewing gallery offers 360-degree views of London. This distinctive addition to the London skyline is set to welcome more than 8,000 workers, residents and hotel guests a day and more than two million public visitors a year. The project also included a new concourse to London Bridge Station and external public realm works.

Developer: Sellar Property Group on behalf of LBQ Ltd
Architect: Renzo Piano Building Workshop
Structural Engineer: WSP Cantor Seinuk
M&E Engineer: Arup
Contractor: Mace
Project Manager: Turner and Townsend
Planning Consultant: CgMs
Cost Consultant: AECOM
Office Leasing Agent: Jones Lang LaSalle

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Isis House

Bankside

67 Southwark Street, SE1 0HX

Status: Planning pending February 2014, completion 2015
Floors: 18
Height: 53m
Type: Residential

Occupying a small, wedge-shaped site in Bankside, this residential tower is divided into one flat per floor, and provides an upper floor with panoramic views across the whole of London. The scheme also includes a retail unit at ground level and a communal belvedere at the top.

Developer, Architect, Project Manager and Planning Consultant: Allies and Morrison
Structural Engineer: Robert Bird & Partners
M&E Engineer: Atelier Ten
Cost Consultant: Jackson Coles
Landscape Architects: Townshend Landscape Architects

NEO Bankside

Bankside

Holland Street, SE1 9FU

Status: Completed September 2012
Floors: 24
Height: 76.5m
Type: Mixed-use
Cost: £132 million

Comprising 217 residential units in four buildings ranging from 12 to 24 storeys, this residential scheme lies directly opposite the west entrance to Tate Modern and its new extension. Taking their cues from the immediate context, the four steel and glass hexagonal pavilions provide residents with generous accommodation, views and daylight. New public realm is animated by retail at ground level, with landscaped groves defining two clear public routes through the site, extending the existing riverside gardens and acting as a catalyst for a lively and vibrant environment around the base of the buildings.

Developer: GC Bankside LLP (a joint venture between Native Land and Grosvenor)
Architect: Rogers Stirk Harbour + Partners
Executive Architect: John Robertson Architects
Structural Engineer: Waterman Structures Limited
M&E Engineer and Fire Consultant: Hoare Lea
Contractor: Carillion Plc
Project Manager: EC Harris
Planning Consultant: DP9
Cost Consultant: W T Partnership
Landscape Architect: Gillespies
Residential Sales Agent (joint agent): Jones Lang LaSalle

South Bank Tower

South Bank

Stamford Street, SE1 9LS

Status: Under construction, completion 2015
Floors: 41
Height: 155m
Type: Mixed-use

Retaining and transforming a 1970s office tower, originally designed by Richard Seifert, this project will provide a residential-led development that incorporates retail, leisure and office accommodation, and an enhanced public realm. Residential units will be finished with full-height windows to maximise views, serviced by a range of on-site amenities including a swimming pool and roof gardens. The innovative scheme retains the existing exterior vertical expression and extends the 30-storey building by 11 floors. Targeting a BREEAM Excellent and Code for Sustainable Homes 4 rating, the reuse of the existing structure is anticipated to save in excess of 6,000 tonnes of CO_2.

Developer: King's Reach Estates Ltd / CIT Real Estate LLP
Architect: Kohn Pedersen Fox Associates (KPF)
Interior Architect: Johnson Naylor
Structural Engineer: AKT II
M&E Engineer: Grontmij
Contractor: Mace
Development Consultant: Montagu Evans
Cost Consultant: EC Harris

Eagle House

Old Street

161 City Road, EC1V 1NR

Status: Under construction, completion July 2015
Floors: 26
Height: c. 82m
Type: Residential

This mixed-use development retains an existing Art Deco building and adds a new residential tower. The project includes an arts courtyard surrounded by studio workshops and over 6,000 square metres of ground floor offices, restaurants and cafés, along with 276 units of high quality private and affordable housing and facilities for the locality. The building has been conceived as an elegant landmark, which will contribute positively to the streetscape by providing new frontages and a vibrant public space.

Developer, Project Manager, Contractor and Cost Consultant: Mount Anvil
Architect: Farrells
Structural Engineer: Waterman Structures
M&E Engineer: Hoare Lea
Planning Consultant: Gerald Eve

The Stage

Shoreditch

Curtain Road, EC2

Status: Planning granted July 2013, completion 2015
Floors: 40
Height: 140.5m (AOD)
Type: Mixed-use
Contract Cost: £285 million

Offering residential, office, museum, shops, café and exhibition space, together with heritage assets and 1.3 acres of public space, the scheme aims to create a new and vibrant area in Shoreditch, providing thousands of jobs in the development itself and during construction. The development includes the introduction of an energy centre that shares heat and power evenly across the day, and will achieve a 34 per cent reduction in CO_2 emissions overall. Initial archaeological investigations have revealed the remains of the 'Curtain Theatre' on the site, home to Shakespeare's company of players until the completion of the Globe in 1599, which is being sensitively retained in collaboration with Museum of London Archaeology and English Heritage.

Developer: Plough Yard Developments Ltd
Architect: Pringle Brandon Perkins+Will
Structural Engineer: Buro Happold
M&E Engineer: Caterday
Planning Consultant: Montagu Evans
Cost Consultant: Gardiner & Theobald
Landscape Architect: Townshend Landscape Architects
Building Services, Sustainability and Vertical Transportation
Consultancy: Hilson Moran

Aldgate Place

Aldgate

35 Whitechapel High Street, E1 7PH

Status: Planning approved, completion January 2014, due to complete 2016
Floors: 21 to 25
Height: 70m to 82m
Type: Mixed-use

This scheme will introduce a cluster of brick-clad tall and lower buildings on an intensely constrained inner city site of only 0.764 hectare. The overall development consists of three residential towers of 21, 24 and 25 floors with retail units at ground floor level and a lower 160-bed hotel building. One tower also provides lower level office space. The 463 new residential units on the site offer mixed tenures of affordable and private units at a density of 606 units per hectare. A double basement under the eastern end provides a small number of car parking space, cycle parking and an energy centre.

Developer: Barratt London / British Land
Architect: Allies and Morrison
Structural Engineer: Walsh Group
M&E Engineer: Whitecode Design Associates
Project Manager, Contractor and Cost Consultant: Barratt London
Planning Consultant: Deloitte Real Estate
Landscape Architects: Townshend

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60 Commercial Road

Aldgate

E1 1LP

Status: Starting on site December 2013, completion July 2015
Floors: 19
Height: 54m
Type: Student residential
Build Cost: £26 million

Replacing an existing office building, this new-build student accommodation tower includes 417 student room units, all with self-contained kitchen and bathroom facilities. Communal spaces will be provided at ground and first floor, as well as a sky lounge and accessible terrace on the 18th floor, offering views across the London skyline. A new retail unit is also proposed at ground floor level. The building aims to reduce carbon emissions with energy efficient design and renewable technologies to meet BREEAM 'Excellent'.

Developer: Generation Estates
Architect: BuckleyGrayYeoman
Structural Engineer: AKT II
M&E Engineer: MTT Ltd
Contractor: Wates Construction Ltd
Project Manager: GVA Second London Wall
Planning Consultant: DP9
Cost Consultant: Beadmans LLP

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Goodman's Fields

Aldgate

Mansell Street, E1

Status: North west block under construction, all phases due to complete 2019
Floors: 18 to 21
Height: 60m to 73m
Type: Mixed-use

This masterplan for a seven-acre mixed-use scheme will provide 920 new homes, student housing, a hotel, and ground floor uses to include shops, restaurants, bars, offices, local training centre and new community space. It aims to create a high-density inner-city neighbourhood incorporating a renewable and sustainable energy strategy, including low energy cooling measures, green roofs and over 0.8 hectare of public space. Rising from the courtyard blocks, six slender towers share their cores with the lower blocks, in order to maximise plan efficiencies. A series of new public spaces and streets aim to improve the permeability of the area.

Developer: Berkeley Homes
Architect: Lifschutz Davidson Sandilands
Structural Engineer: PTA Consulting
M&E Engineer: Wallace Whittle
Planning Consultant: NLP
Landscape Architect: Murdoch Wickham
Transport Consultant: Arup
Residential Sales Agent: Jones Lang LaSalle

No 1 Plaza St Andrews

Bromley-by-Bow

Marner Point, 1 Jefferson Plaza, E3 3QE

Status: Completed April 2013
Floors: 27
Height: 82.2m
Type: Residential

The St Andrew's tower forms part of a bigger masterplan with an overall of 964 residential units. This building comprises of two levels of undercroft parking, ground floor entrance lobby, residential gym, a small local supermarket and 24 floors of residential units. The 180 units are arranged around a central core and corridor with nine units per floor, all with a projecting balcony. The units are stacked to form a cluster of smaller 'towers' ending at different heights, creating private and communal roof terraces.

Developer, Contractor and Cost Consultant: Barratt London
Architect: Allies and Morrison
Structural Engineer: Walsh Group
M&E Engineer: Whitecode Design Associates
Civil Engineers: Brand Leonard
Project Manager: CBRE (Planning stage only)
Planning Consultant: CBRE
Landscape Architects: Townshend Landscape Architects
Acoustic Engineers: RBA

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Newfoundland

Canary Wharf

1 Bank Street, E14

Status: Submitted for planning, decision due early 2014, completion December 2017
Floors: 60
Height: 220m
Type: Residential

Providing 575 high quality apartments, this scheme will also include retail, restaurant, bar and resident amenity spaces on the ground first and second floor levels, along with a leisure level on the 24th floor. An innovative structural form allows the building to span over the Jubilee Line tunnels that run directly beneath, generating the diamond fenestration design, which provides a striking appearance and a sense of enclosure for the balconies. The 40 per cent glass facade will optimise solar gain, and the building is set to perform 35 per cent above the standards set by Part L 2010 and Code for Sustainable Homes level 4.

Developer: Canary Wharf Group plc
Architect: Horden Cherry Lee Architects
Structural Engineer: WSP
M&E Engineer: Hoare Lea
Project Manager, Contractor and Cost Consultant: Canary Wharf Contractors Limited
Planning Consultant: DP9
Vertical Transportation Consultancy: Hilson Moran

Park Place

Canary Wharf

West India Avenue, E14

Status: Submitted for planning, decision due early 2014
Floors: 32
Height: 167m
Type: Commercial

Occupying one of the last remaining undeveloped plots along West India Avenue, this office building aims to create a new pedestrian route as well as creating a new public open space at the west end of Middle Dock. The massing of the building, with two setbacks to the south elevation, will create three different office floorplates, served by low, mid and hi-rise lift banks. The building has been designed to be an exemplar scheme in terms of sustainability, minimising solar gains, and utilising a combined cooling, heating and power system (CCHP) and a number of other energy saving measures to target a BREEAM rating of 'Excellent'.

Developer: Canary Wharf Group plc
Architect: Squire and Partners
Structural Engineer: WSP
M&E Engineer: Hoare Lea
Project Manager, Contractor and Cost Consultant: Canary Wharf Contractors Limited
Planning Consultant: DP9

A2/A3 Wood Wharf
Wood Wharf
E14 9SB

Status: Design stage/planning pending - subject to planning, completion 2018
Floors: 12 and 42
Height: 156.94m (AOD)
Type: Residential

Sited at the western end of Wood Wharf, these two buildings will deliver 432 new apartments, combined with new residential and public amenity spaces, setting a new benchmark for high quality housing. Extensive balconies and terraces take advantage of the range of views available from the site, over public gardens and the water's edge. Duplex and lateral penthouses are located on the upper levels of each volume, some with access to private roof gardens. Active frontages will be created at ground level, responding to the different characteristics of the neighbouring public realm and buildings, and will aid in promoting activity and permeability through the site.

Developer: Canary Wharf Group plc
Architect: Stanton Williams
Structural Engineer: AKT II
M&E Engineer: Grontmij
Planning Consultant: GVA
Project Manager and Contractor: Canary Wharf Contractors Limited
Cost Consultant: Gleeds

One Wood Wharf
Wood Wharf
E14 9SB

Status: Design stage/planning pending - subject to planning, completion 2018
Height: 211.5m (AOD)
Type: Residential

Marking the start of a new chapter for the Canary Wharf Estate, this landmark, high-rise building will deliver a significant quantity of high quality new housing and will set a benchmark for future projects within the Wood Wharf masterplan. As a fundamental design objective, the goal of creating a design that is iconic in form whilst human in scale has been central to the ambition of the project. The overall composition of the building is an aggregation of three apartment typologies, creating a unique form with a clearly identifiable bottom, middle and top.

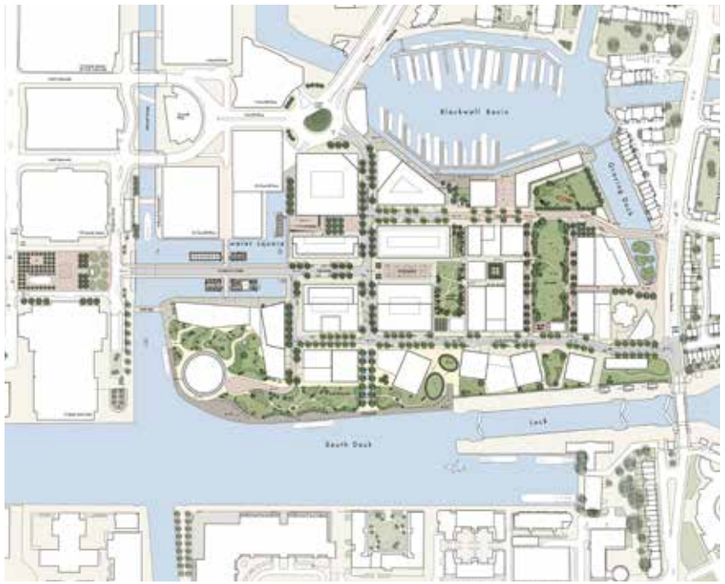
Developer: Canary Wharf Group plc
Architect: Herzog and de Meuron
Structural Engineer: AKT II
M&E Engineer: Grontmij
Planning Consultant: GVA
Project Manager and Contractor: Canary Wharf Contractors Limited
Cost Consultant: Gleeds

Wood Wharf
Isle of Dogs
E14 9SB

Status: Design stage, planning pending, completion 2024 (Phase 1, subject to planning, due to complete Q4 2018)
Height: Up to 211.5m (AOD)
Type: Mixed-use

Wood Wharf is one of central London's largest development sites, and this high density, mixed-use development aims to maximise the potential of the waterfront and public realm, establish new connections to existing and planned public transport networks, and build on the success of the Canary Wharf estate. The masterplan creates a strong and complimentary mix of uses, providing over 3,000 new homes, nearly two million square feet of high quality commercial office space, and a further 250,000 square feet of retail uses.

Developer: Canary Wharf Group plc
Architect: Allies and Morrison
Structural Engineer: AKT II
M&E Engineer: AECOM
Project Manager and Contractor: Canary Wharf Contractors Limited
Planning Consultant: GVA
Cost Consultant: Gleeds
Building Services, Sustainability and Vertical Transportation Consultancy: Hilson Moran



City Pride
Isle of Dogs
15 Westferry Road, E14 8JH

Status: Planning granted July 2013
Floors: 75
Height: 239m (AOD)
Type: Residential

Comprising 752 private residential apartments, 70 shared ownership apartments and 162 serviced apartments, this tower is located at the western end of South West India Dock and joins a group of consented tall buildings in the immediate vicinity, including Riverside South and Heron Quays West. The building is designed as a clean rectilinear form marking the termination of the dock. A triple-glazed facade provides a continuous skin behind which all apartments enjoy private winter gardens, shared amenity spaces and landscaped terraces. A separate single-storey building located on the dockside will provide a publicly accessible roof garden and outdoor areas as well as an indoor play space and café.

Developer: Chalegrove Properties Ltd
Architect: Squire and Partners
Structural Engineer: WSP
M&E Engineer: Hoare Lea
Planning Consultant: GVA
Landscape Consultant: Farrer Huxley Associates
Residential Consultant: Jones Lang LaSalle

Dollar Bay
Isle of Dogs
1-18 Dollar Bay Court, 4 Lawn House Close, E14 9YJ

Status: Planning granted March 2012, completion 2016
Floors: 31
Height: 114.5m (AOD)
Type: Mixed-use

This residential tower will contain 121 apartments, a gym and spa, ground floor commercial space and a courtyard garden, all set within a public realm strategy that opens up the dockside walkway. Its design addresses the two key aspects, east and west, by creating two crystalline forms, with the apartment plan driving the shaping of these forms. The widest elevations have a winter garden across their entire width, clad in horizontal glass louvres. On the western facade these louvres incline both outwards and inwards to create a cascade; a waterfall falling into the dock.

Developer, Project Manager and Cost Consultant: Mount Anvil
Architect: Ian Simpson Architects
M&E and Structural Engineer: WSP
Planning Consultant: Rolfe Judd

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Manilla Street
Isle of Dogs
E14 8GB

Status: Pre-planning
Floors: 30
Heights: 82m
Type: Mixed-use

Offering serviced apartments and a hotel, this scheme, sited along Marsh Wall, marks a dramatic transition in scale between the high-rise towers of Canary Wharf to the north and the residential streets to the south. With a proposed height ranging from 30 down to eight storeys, the design seeks to mediate its surroundings and provide transitional relief for the skyline. To the north of the site the building dramatically steps up in height to emulate the high-reaching, slender proportions of surrounding tall buildings, whilst at the south, the form steps down to street level. The building is further linked to its residential surrounds with stonework sympathetic to the existing fabric.

Developer and Contractor: Ardmore Group
Architect: Dexter Moren Associates
Structural Engineer: Walsh Group
M&E Engineer: MLM
Project Manager and Cost Consultant: Tower 8
Planning Consultant: CgMs
Townscape Consultants: Tavernor
Landscape Consultants: PRP
Transport Consultants: RGP

Lewisham Gateway
Lewisham Town Centre
SE13

Status: Planning granted May 2013, completion January 2015
Floors: 22
Height: 77m
Type: Residential

This prominent roundabout site at the heart of Lewisham Town Centre will be redeveloped as a high-density mixed-use scheme comprising retail, leisure, office and residential with reconfigured infrastructure and road layouts masterplanned by Arup. The first phase of the development comprises 195 new homes for private sale and private rent together with concierge and retail uses at ground floor. The design works within the parameters of outline planning consent with 22- and 15-storey towers differing in character and materials. The landscape design celebrates the confluence of the Quaggy and Ravensborne Rivers, a key feature of the site, by creating a new public park at their meeting point.

Developer: Muse Developments
Architect: PRP Architects
Structural Engineer: BWB
M&E Engineer: Hoare Lea
Contractor: Sisk
Project Manager: TPS
Planning Consultant: Quod
Cost Consultant: Faithful and Gould

Renaissance Tower
Lewisham Town Centre
Loampit Vale, SE13 7DJ

Status: Completed 2013 (All phases completing 2015)
Floors: 25
Height: 78.3m
Type: Residential
Cost: £17.4 million

This private residential 25-storey tower 'Sienna Alto' with 120 apartments, provides Code for Sustainable Homes level 4. Projecting 360-degree wraparound balconies allow views out whilst providing shade and privacy, as well as depth and interest to the elevation. The tower is pronounced by two fins, highlighting the verticality of the structure and framing the entrance overlooking the adjacent park. The total development will comprise 788 residential units (including 146 affordable units), a leisure centre and 1,700 square metres of commercial floor space, served by a community energy system incorporating a combined heat and power (CHP) plant and renewable energy technologies.

Developer, Contractor and Cost Consultant: Barratt Homes
Architect: Assael Architecture
Structural Engineer: Walsh Group / AKT II
M&E Engineer: Hoare Lea
Planning Consultant: bptw

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Surrey Canal
North Lewisham
SE15 1EP

Status: Planning granted March 2012, completion 2025
Floors: 21 to 27
Heights: c. 68m to 82m
Type: Residential
Build Cost: £1 billion

This landmark regeneration scheme aims to transform an overlooked 30-acre site on the edge of zone 1 into a 21st century village with 2,500 new homes and a mix of non-residential uses including sport, health, faith, business and creative uses. An array of tall towers ranging from 21 to 27 storeys provide symmetry and identity across the development, with carefully selected positioning to complement existing housing in the area. New transport infrastructure, including a new overground station, cycle and walking routes, a community park and vibrant open spaces, will connect the site to both the surrounding communities and the rest of London.

Developer: Renewal
Masterplanner: Studio Egret West
Planning: Signet Planning
Landscape Architect: Townshend Landscape Architects

Greenwich Peninsula Riverside, Phase 2 (Plot M0104)
North Greenwich
Chandlers Crescent, SE10

Status: Design stage, completion October 2015
Floors: +27
Height: +90m
Type: Residential

This new development will provide 277 rented apartments over 33 floors. The project comprises a single-storey basement car park with a seven-storey podium and 25+ storey tower with associated external works and landscaping. It will deliver 113 private, 64 intermediate and 100 social rented apartments with a retail shell at ground floor level.

Developer: Knight Dragon
Architect: Pilbrow and Partners
Structural Engineer: CH2M Hill
M&E Engineer: Hoare Lea
Project Manager and Cost Consultant: AECOM

Paynes & Borthwick Tower
Greenwich
Borthwick Street, SE8 3GH

Status: Completed October 2013
Floors: 17
Height: Residential
Type: £50 million (Entire scheme)

The landmark residential tower lies on a strategic riverside site in Greenwich and is adjacent to a sensitively restored Grade II listed building. The development brings together old and new in the form of the contemporary tower and the sympathetic conversion and restoration of the existing warehouse buildings, which retain their original facades. The slender tower structure, replacing the demolished Borthwick Wharf, has been carefully designed to act as a vertical glazed foil against the impressive horizontal masonry elevation of the historic facade.

Developer: United House
Architect: Assael Architecture
Structural Engineer: Walsh Group
Residential Consultant and Sales Agent: Jones Lang LaSalle

Royal Arsenal Riverside (Block C)

Woolwich

Plumstead Road, SE18

Status: Planning granted June 2013, completion January 2015
Floors: 20
Height: 69.2m
Type: Residential
Cost: £35 million

Within an 88-acre regeneration scheme, this project will provide 219 homes within two blocks of 10 and 20 storeys situated within the Royal Arsenal Conservation Area and bounded by numerous listed buildings. Inspired by these historic surroundings, the buildings are elevated in light buff stock bricks, accentuated with darker feature brickwork panels and punctuated with floor to ceiling windows and white stone effect cills. The proposed design complements the previous phase designs whilst allowing the towers to be expressed over a number of grouped floors, reducing the appearance of height. Southern orientated podium courtyards maximises sunlight, providing private gardens for residents.

Client, Developer, Project Manager and Contractor: Berkeley Homes
Architect: PRP Architects
Structural Engineer: Meinhardt / Waterman Transport & Development
M&E Engineer: Buro Happold
Planning Consultant: Barton Willmore

2 – 12 High Street Stratford

Bromley-by-Bow

E15

Status: Planning granted 2011, completion 2016
Floors: 35
Height: 117m
Type: Residential

These 35- and 15-storey buildings will be linked by a car park deck at the second and third floor, allowing for residential accommodation to be situated above the fourth floor away from the noise of the Bow Flyover. Landscaped public gardens meet the Bow Back River, while shared amenity space and children's play areas are provided on the fourth floor. The form of the building ensures that dwellings receive excellent sunlight levels, all with generous winter garden balconies commanding views across London and the Olympic Park. The project is to achieve Code for Sustainable Homes level 4 and Lifetime Homes standard.

Architect: Jestico + Whiles
Contractor: Telford Homes
Planning Consultant: Montagu Evans
Landscape Architect: Standerwick Land Design
Quantity Surveyor: Walker Management
Transport Consultant: Paul Mew Associates

‘Vermilion‘ Rathbone Market Phase 1

Canning Town

30 Barking Road, E16 1EQ

Status: Completed August 2012
Floors: 23
Heights: +75m (AOD)
Type: Residential
Build Cost: £46 million

This residential-led mixed-use development hopes to regenerate the local area and includes an eco-garden with an attenuation pond and a green wall to deflect noise and pollution from the adjacent A13, rooftop allotments for residents and 22,000 square metres of retail space alongside 271 residential units. Units comprise of 40 social rented and 28 shared ownership apartments, 35 Private Rental Sector Initiative apartments and 75 market rental apartments. The overall Rathbone Market development is planned over three phases, to provide 652 new homes, 48,000 square feet of retail space, a revitalised market, improved public realm and connections to the surrounding area and new council community facilities.

Developer: English Cities Fund (a joint venture between HCA, Legal and General and Muse Developments) in partnership with LB Newham
Architect: CZWG Architects
Structural, Sustainability and Facade Engineer: Ramboll
M&E Engineer: Hilson Moran / Haydon
Contractor: John Sisk & Son
Project Manager: Buro Four
Planning Consultant: Longboard Consulting
Cost Consultant: Rider Levett Bucknall
Landscape Architect: Churchman Landscape Architects
Transport and Environmental Consultant: Peter Brett Associates

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Pioneer Point

Ilford

Winston Way, IG1 2ZG

Status: Completed October 2012
Floors: 25 and 33
Height: 105m
Type: Mixed-use

Offering a mix of residences and commercial space, along with a gym and restaurant, the design aims to produce a building of lightness and reflectivity that hopes to be a positive addition to the Ilford townscape and a source of civic pride. In order to dilute the perception of mass, the building has been broken down into three massing elements: a commercial-use podium and the main residential element consisting of 294 apartments arranged in two towers of varying heights. The podium, perceived by pedestrians at ground level, maintains the existing contextual street pattern, relating to adjacent building heights and alignment.

Developer: Empire Property Group
Architect: Haskoll
Structural Engineer: SKM / Anthony Hunts
M&E Engineer: BDSP
Consulting Engineer: Walsh Group
Contractor: London & Regent Ltd
Project Manager: Gateway Project Services Ltd
Planning Consultant: CgMs
Cost Consultant: Burnley Wilson and Fish

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