

Leyton Bus Depot

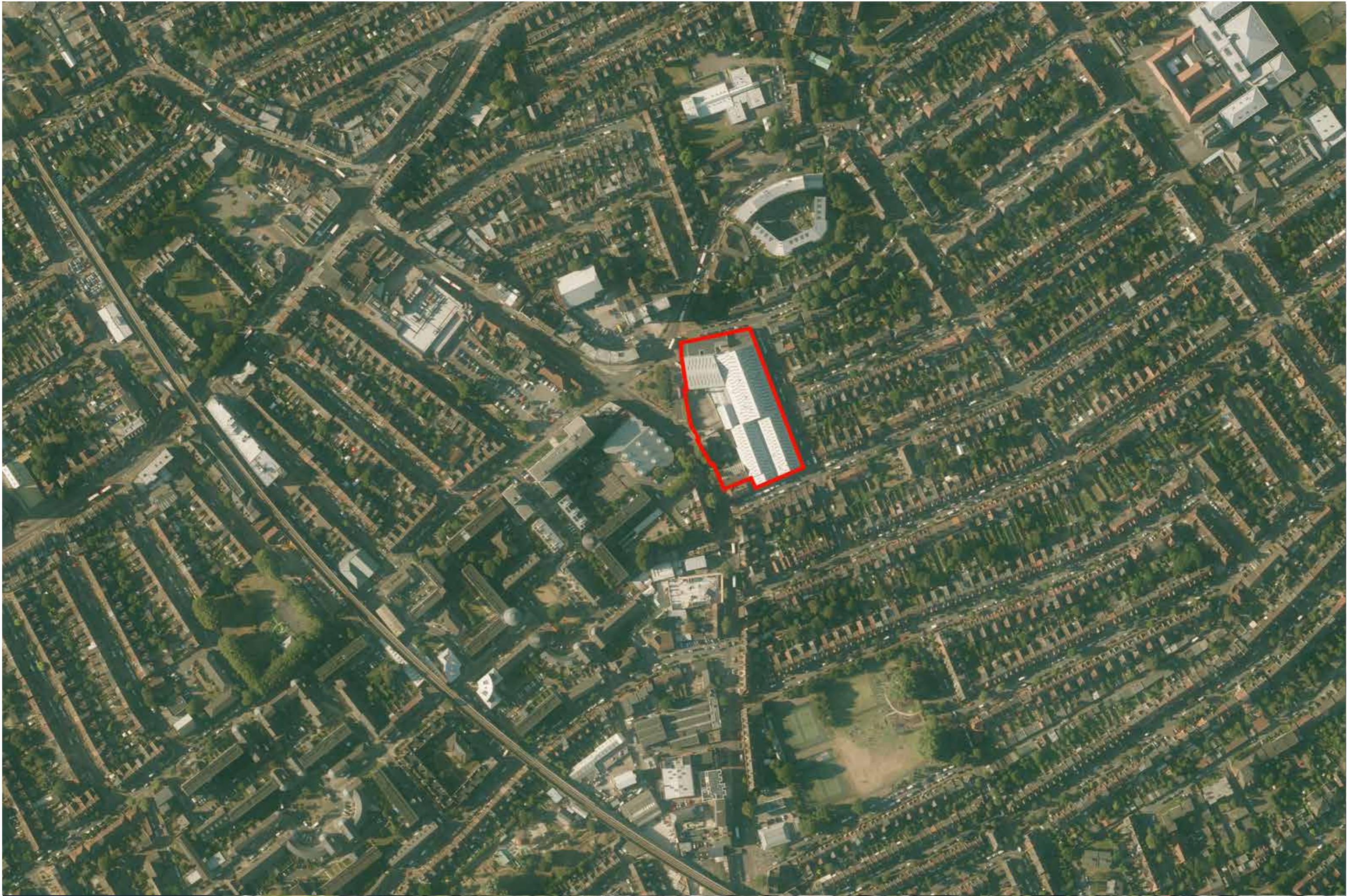
Feasibility Studies

Submission Date:

19.06.20

For and on behalf of:

London Borough of Waltham Forest



AERIAL VIEW OF SITE
Leyton Bus Depot Feasibility Studies



SITE PHOTOS
Leyton Bus Depot Feasibility Studies

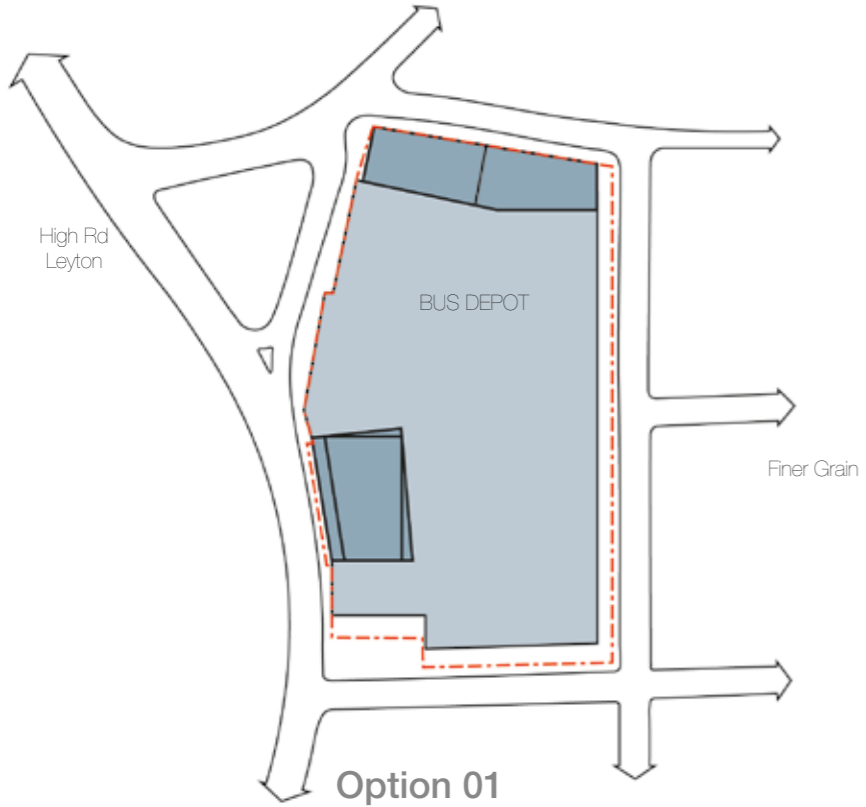




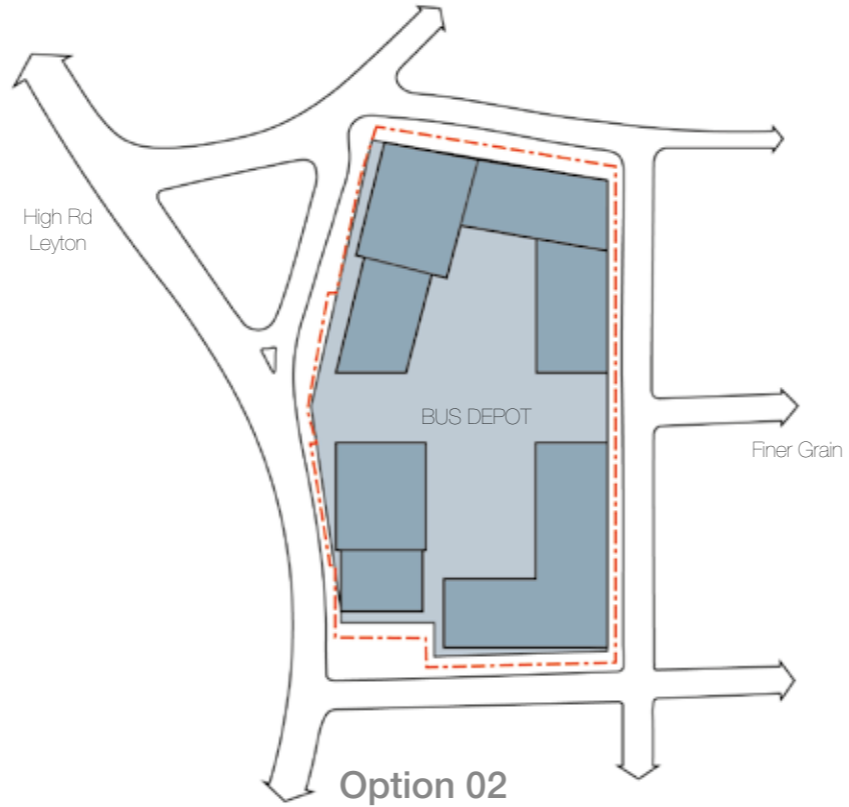


EXISTING BUILDING TYPOLOGIES
Leyton Bus Depot Feasibility Studies

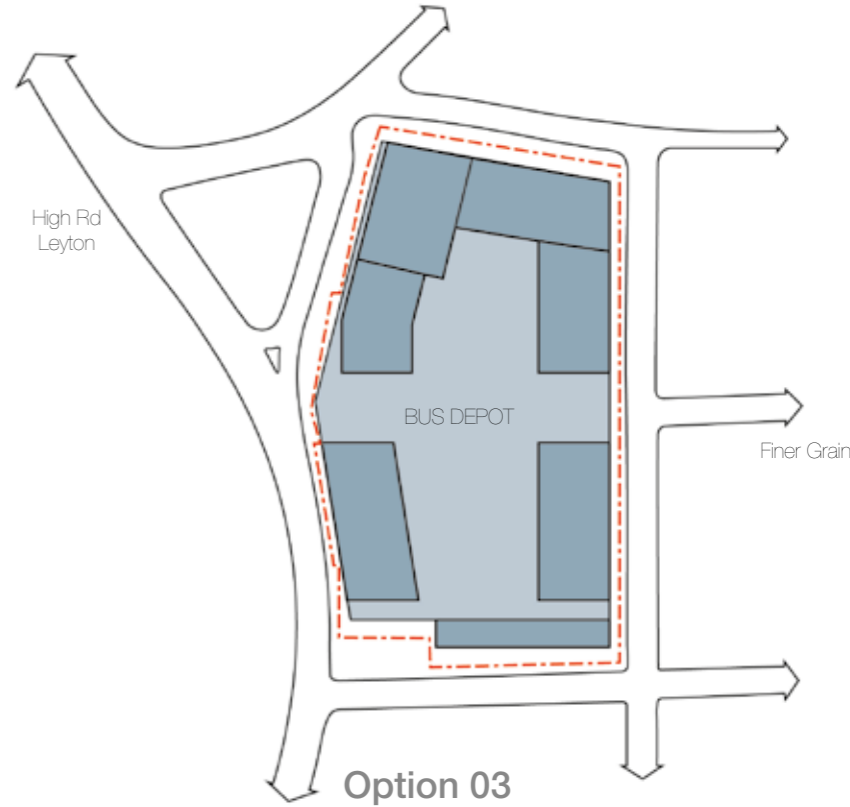
Bus Station Retained



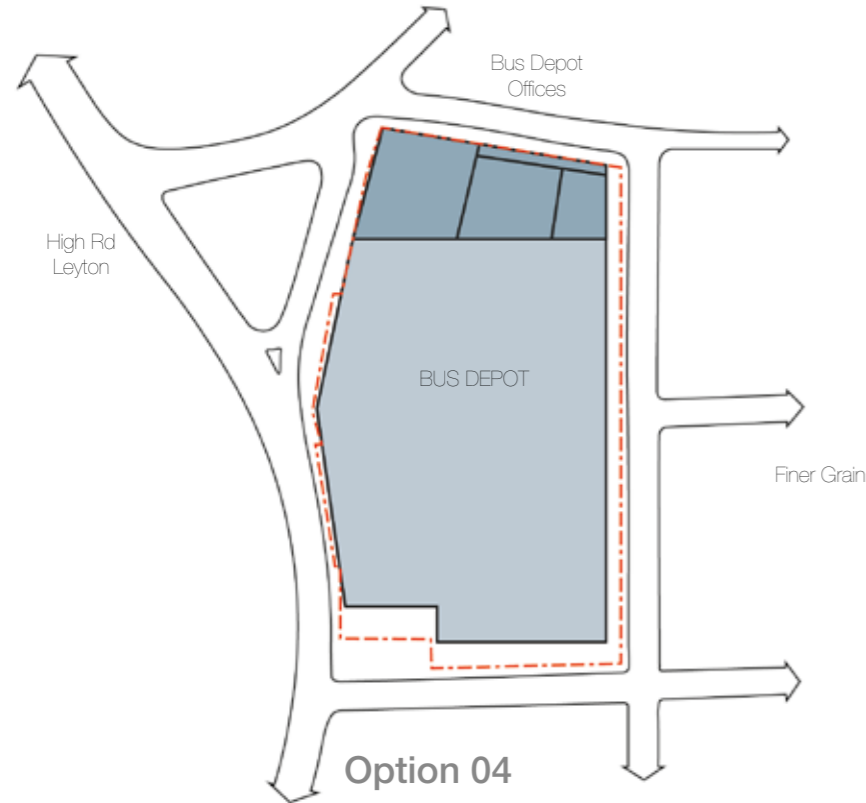
Bus station retained in current configuration. Proposed development focused on church/nursery site and location where bus depot offices are currently located along northern boundary. These could be re-located in the lower floors of one of the proposed development.



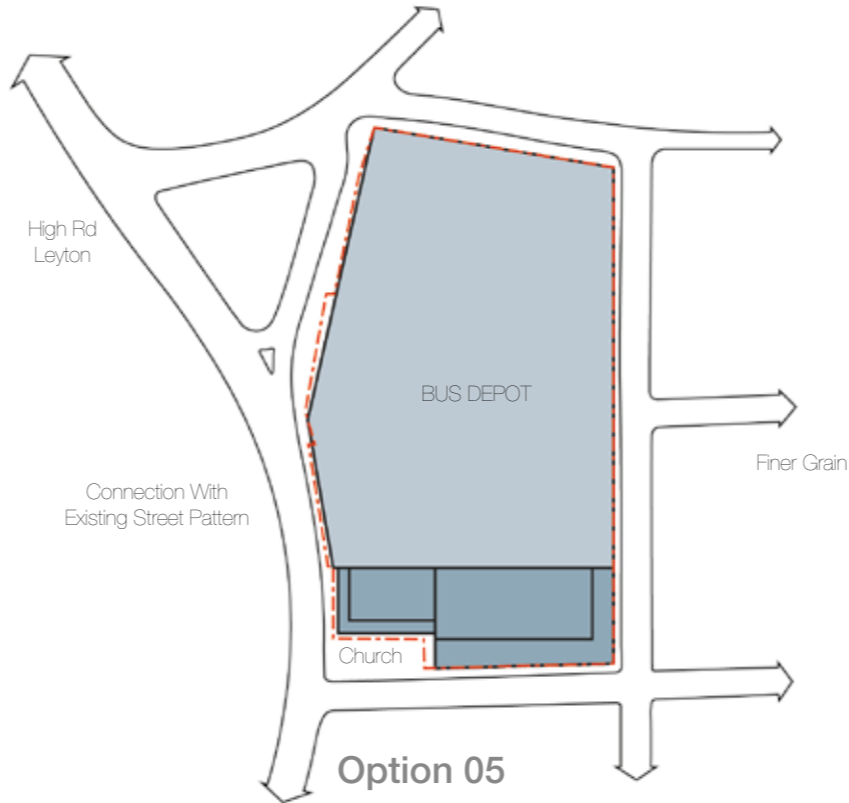
Bus depot rebuilt and reconfigured, with development over new bus depot - may cause viability issues due to requirement for clear spans in bus depot. Massing focused at edges of site to allow residential blocks to come to ground.



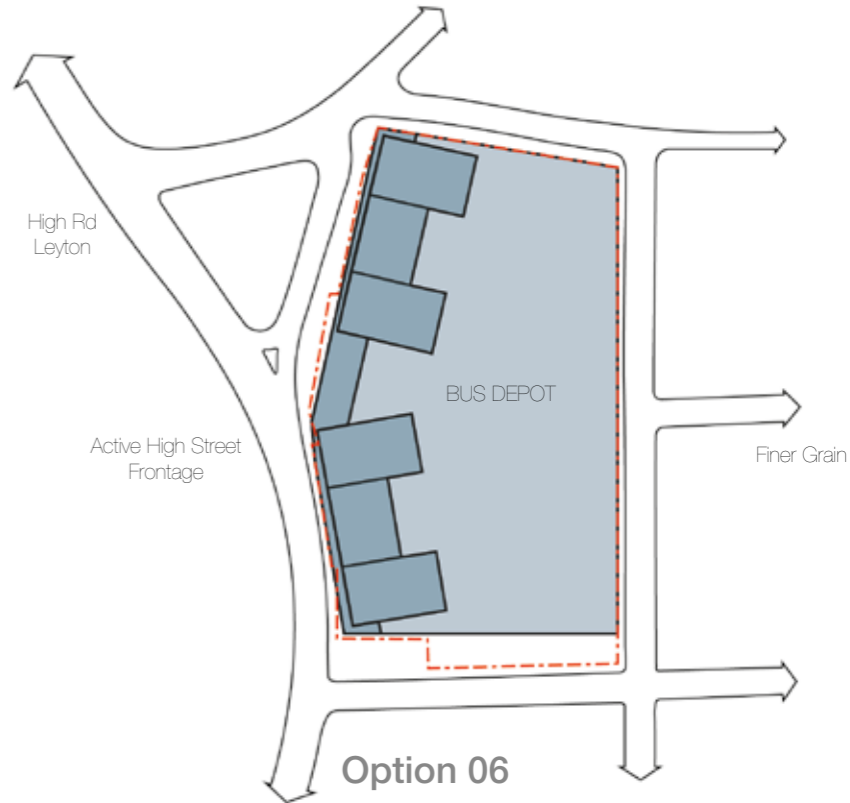
Approach as per option 02, with finer grain introduced to south to respond to context.



Bus station rebuilt and reconfigured, development focused along north of site, with no development over bus depot. Development at north of site presents opportunity for increased height due to closer proximity to town centre.



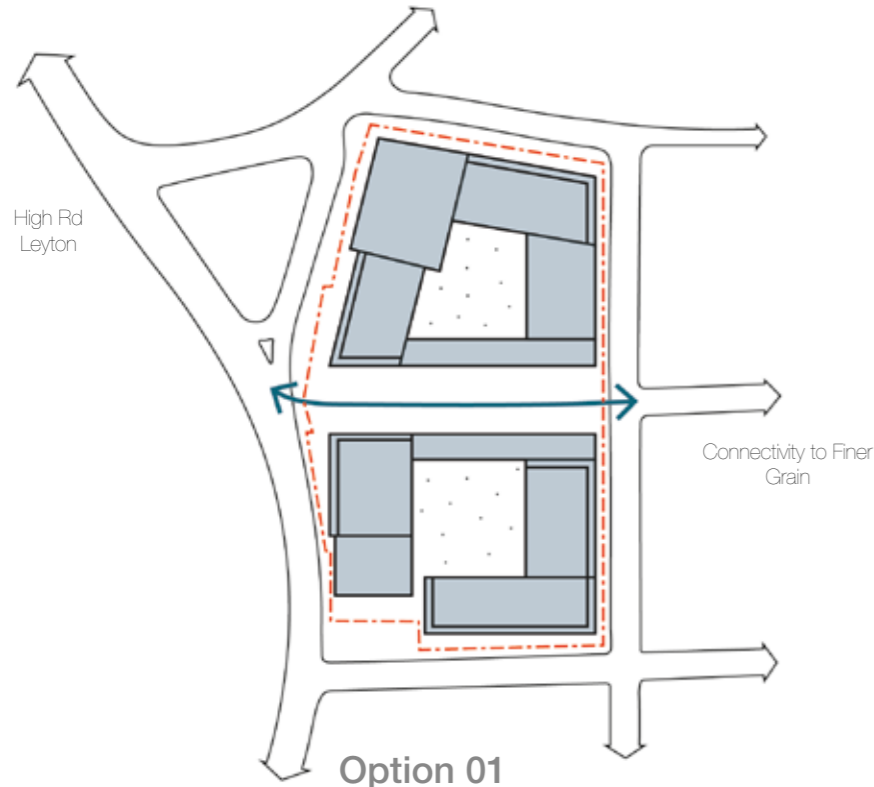
Bus station rebuilt and reconfigured, development focused along south of site, with no development over bus depot. Development at south of site would need to be lower density to respond to neighbouring development.



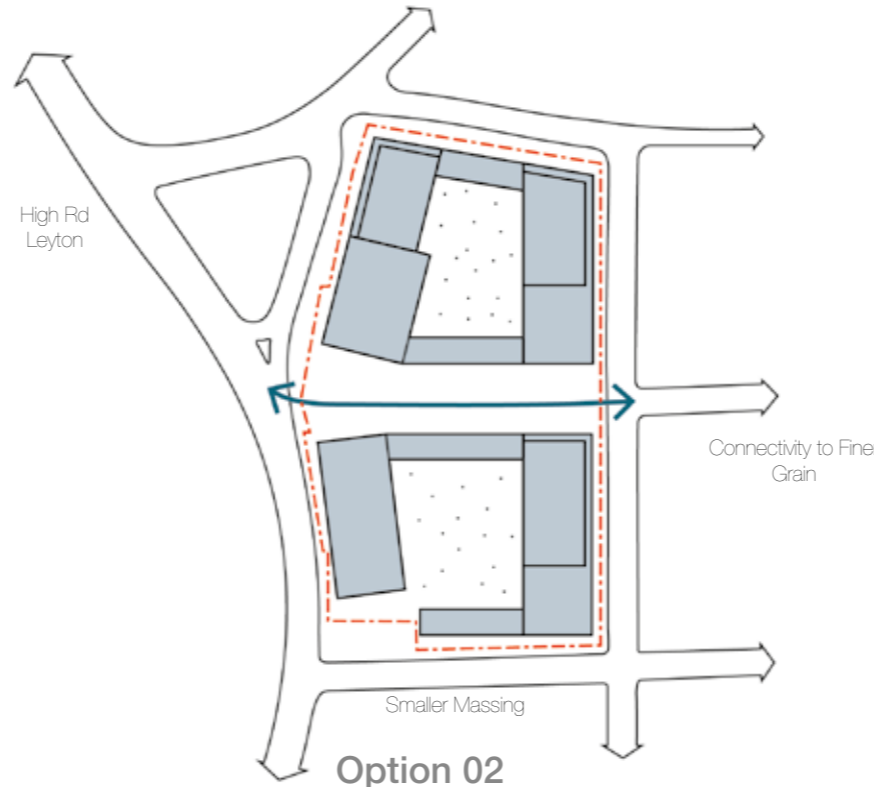
Bus station rebuilt and reconfigured, development focused along west of site. Small amount of development extends over bus station. Development at west of site presents opportunity to incorporate high street uses.



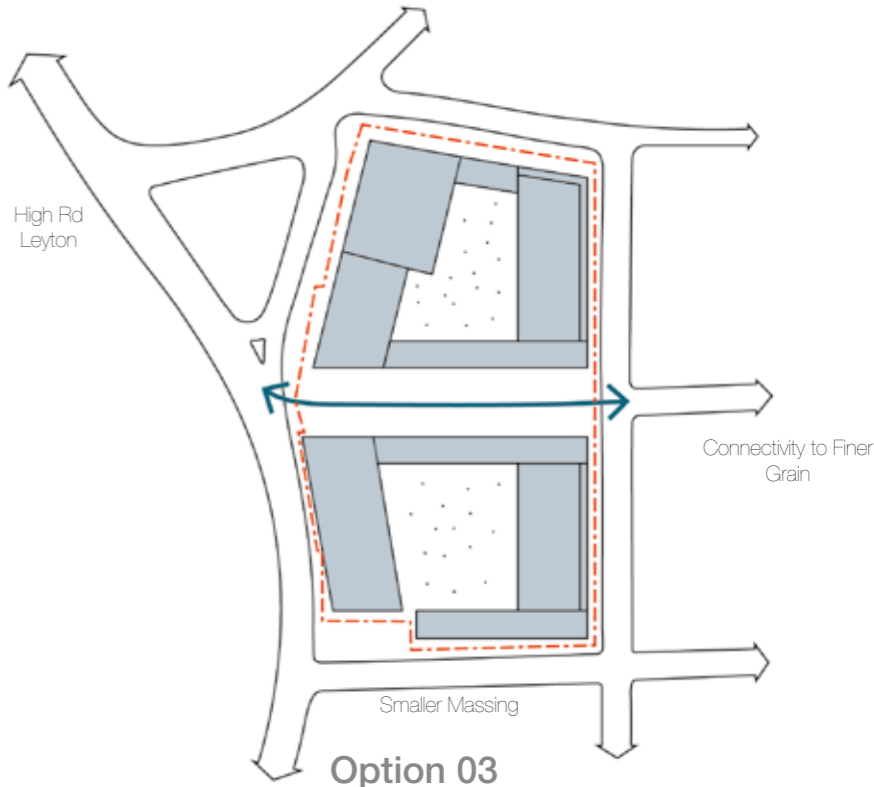
Bus Station Relocated



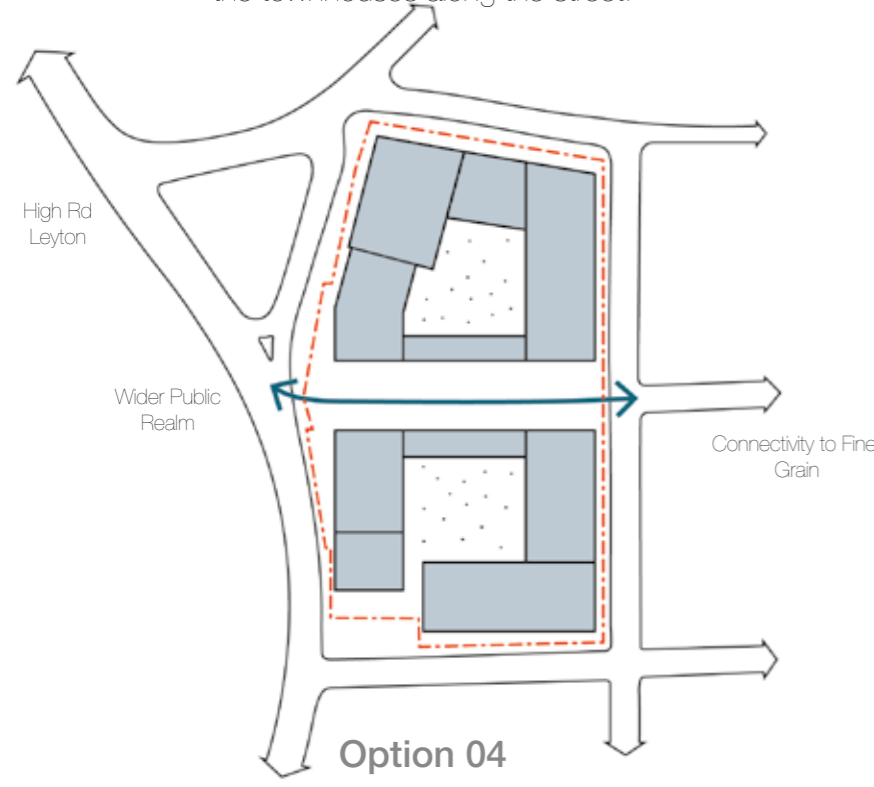
A new central road is established in the centre of the site, with two courtyard blocks either side. This new road aligns with the adjacent street pattern, and allows improved east to west connectivity towards town centre. It will be a shared surface / play street, with access only to service the townhouses along the street.



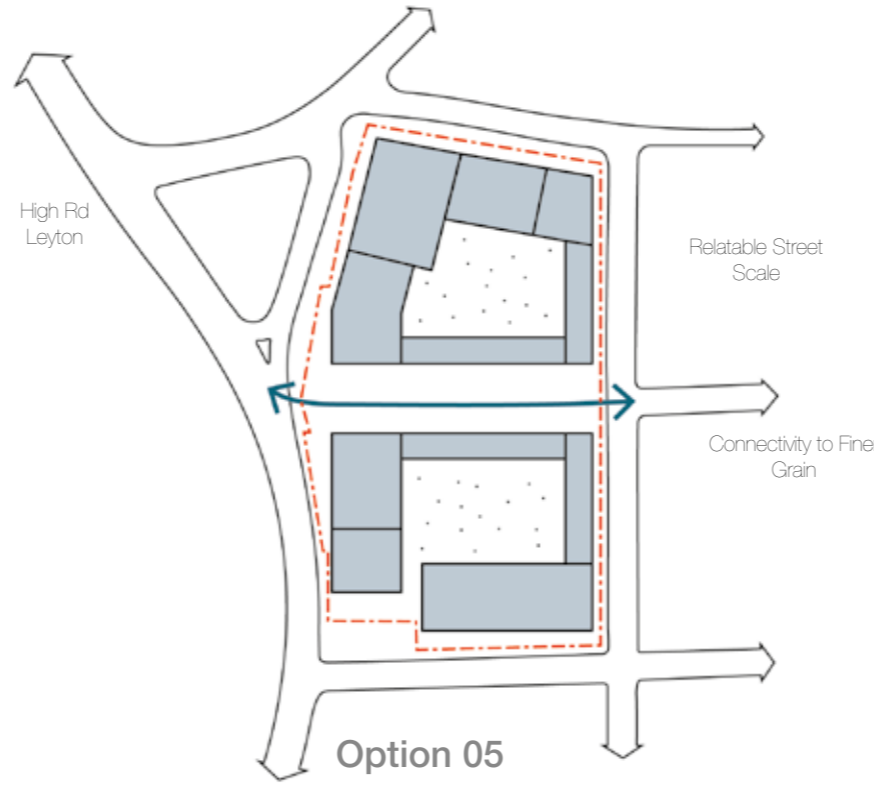
New street as per option 01, height focused to north of this street.



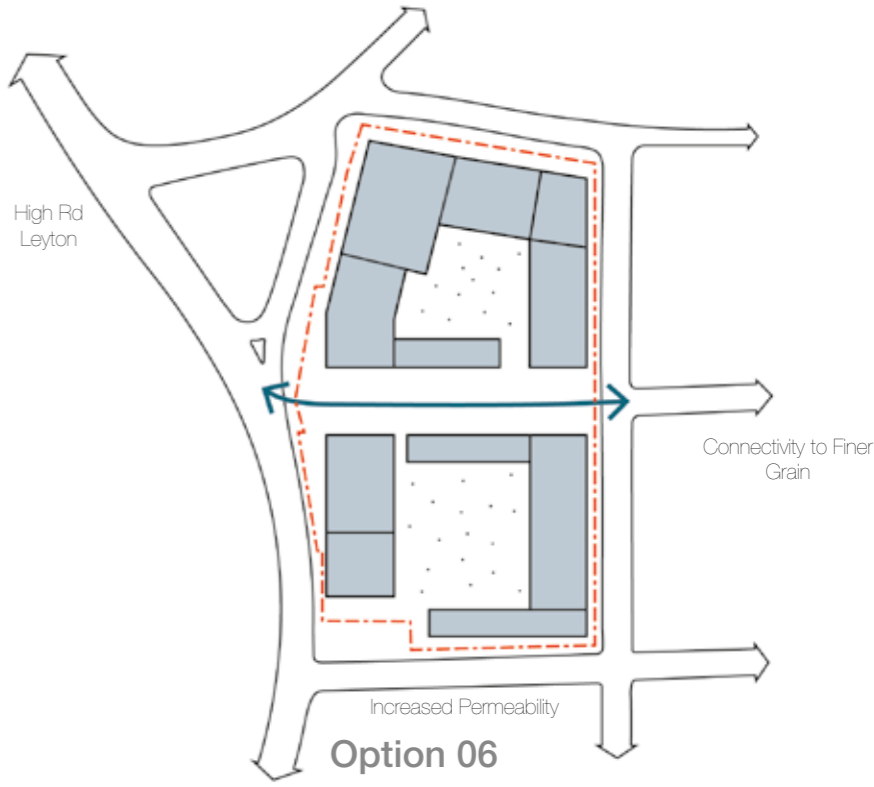
Finer scale along north and south of site, in response to surrounding development.



Larger scale perimeter blocks, small scale development at centre of site.



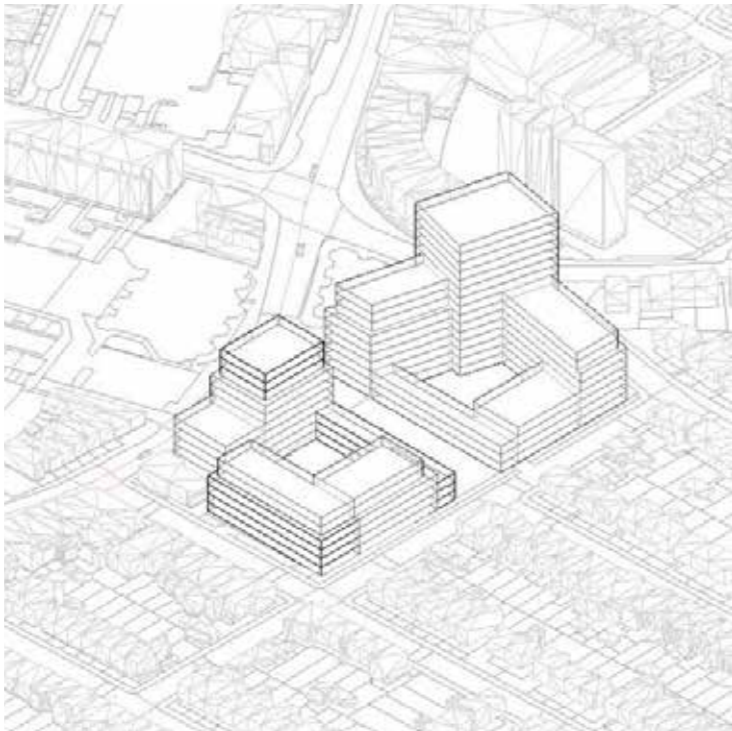
Townhouse units along the east of the site create a street scale relatable to the finer grain over the road.



Finer grain focused at the centre and south of site in response to surrounding context.

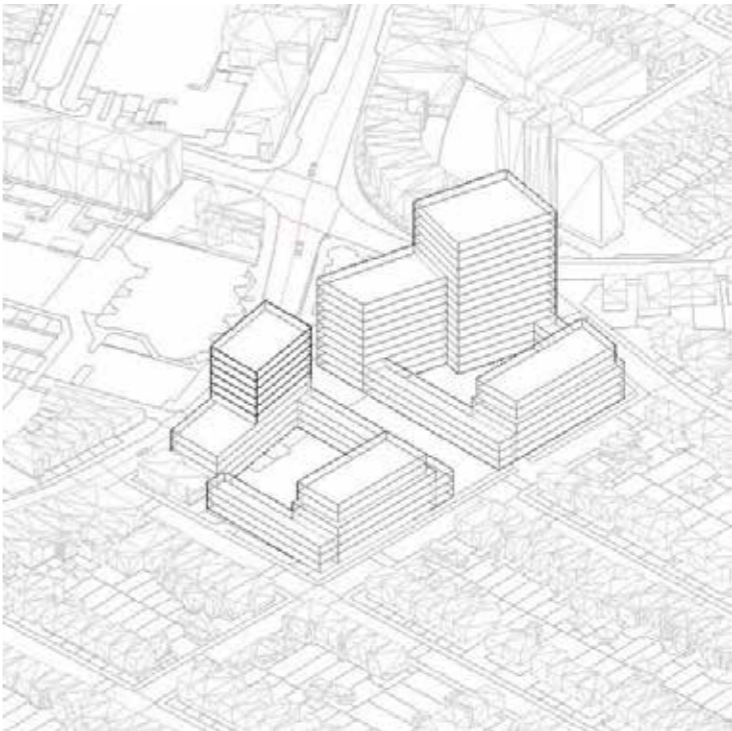


Bus Station Relocated - Height on North West Corner



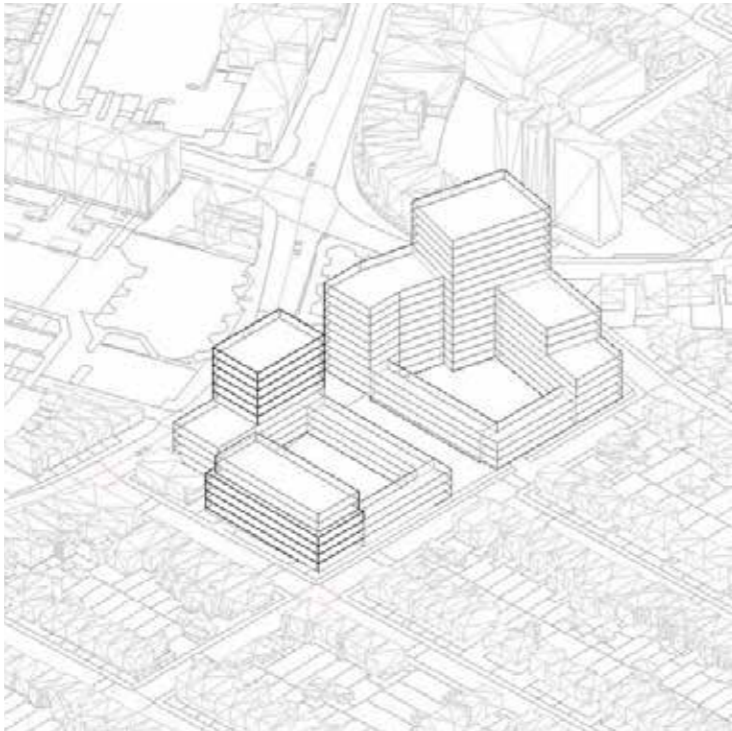
Study A - c. 38,000 sqm GEA (all uses)

Height concentrated along edges of site, stepping down in the centre. Height along north and south of site may be detrimental to adjacent residential development.



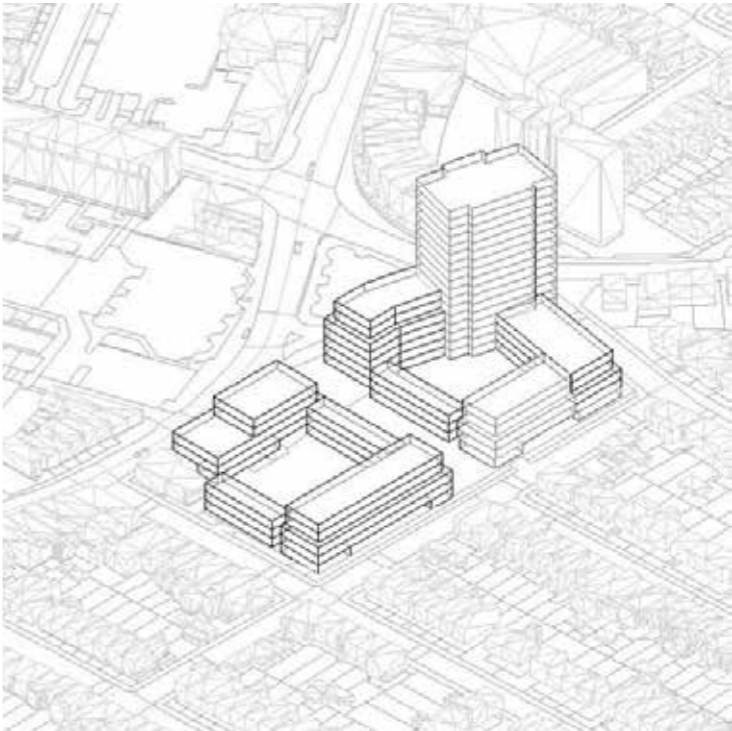
Study B - c. 32,500 sqm GEA (all uses)

Lower massing along north and south in response to neighbouring development. Development along High Road would benefit from lower shoulder height.



Study C - c. 34,000 sqm GEA (all uses)

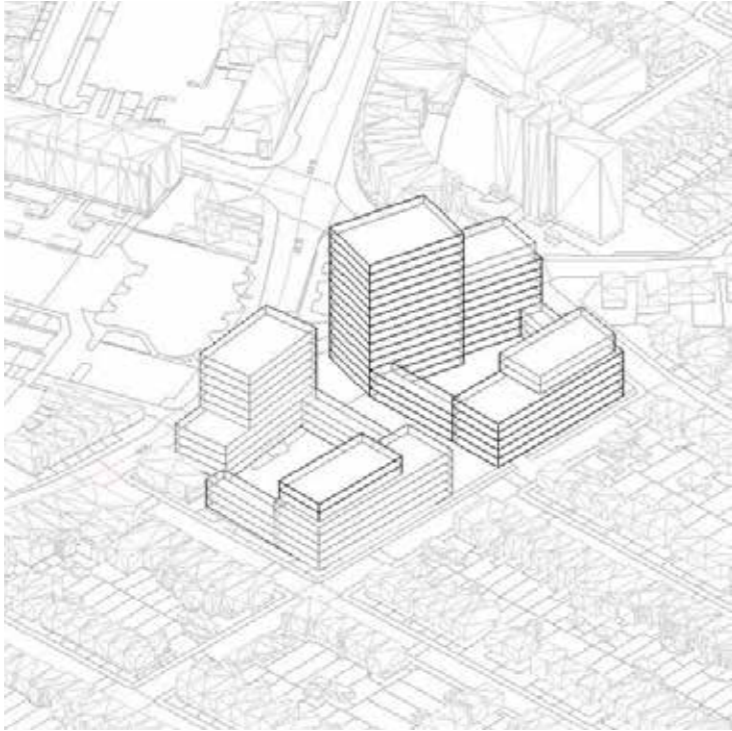
Townhouses along central street, and wrap along south of site. Studies with lower height along south more successful. Development along High Road would benefit from lower shoulder height.



Study D - c. 30,000 sqm GEA (all uses)

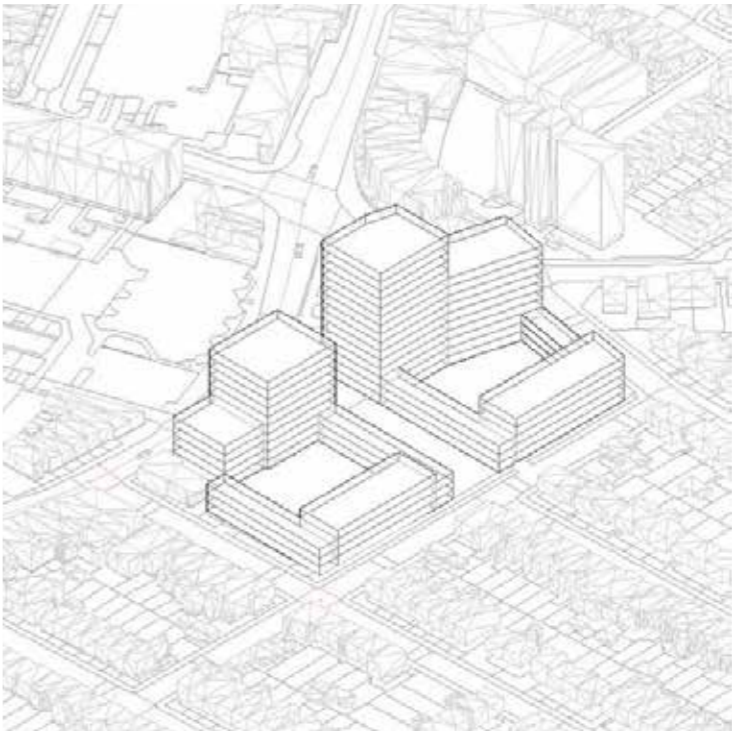
Townhouses along central street and south of site. Lower shoulder heights introduced along the east, north and west of site, with taller tower on NW corner. Massing steps down in south west corner in response to existing two-storey house on the corner.

Bus Station Relocated - Height Adjacent to New Street



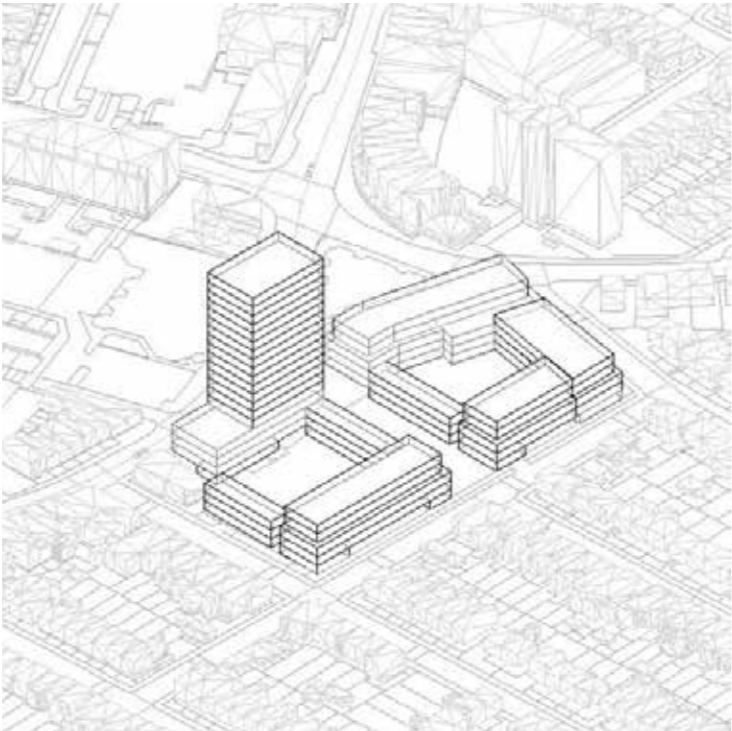
Study E - c. 35,000 sqm GEA (all uses)

Height concentrated on north west side of new street, with apartment blocks along the east and townhouses along the north and south of the site. Proposed height along the east and west edges of the site likely to have detrimental impact on central courtyards.



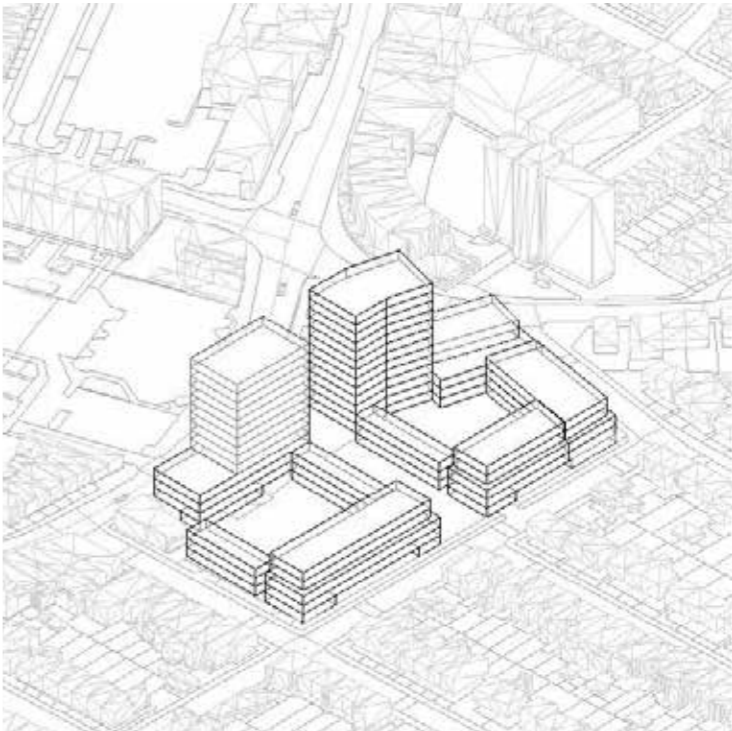
Study F - c. 32,000 sqm GEA (all uses)

Arrangement of height as per Study E, but with smaller tower footprint and reduced height along south of site. Tower in this location likely to have detrimental effect on townhouses along central street.



Study G - c. 25,000 sqm GEA (all uses)

Height concentrated on south west side of new street, with apartment blocks along the north and east of the site, with townhouses along the south. Tower in this location likely to have detrimental impact on existing two storey house on the corner of Canterbury Road and Leyton High Road.



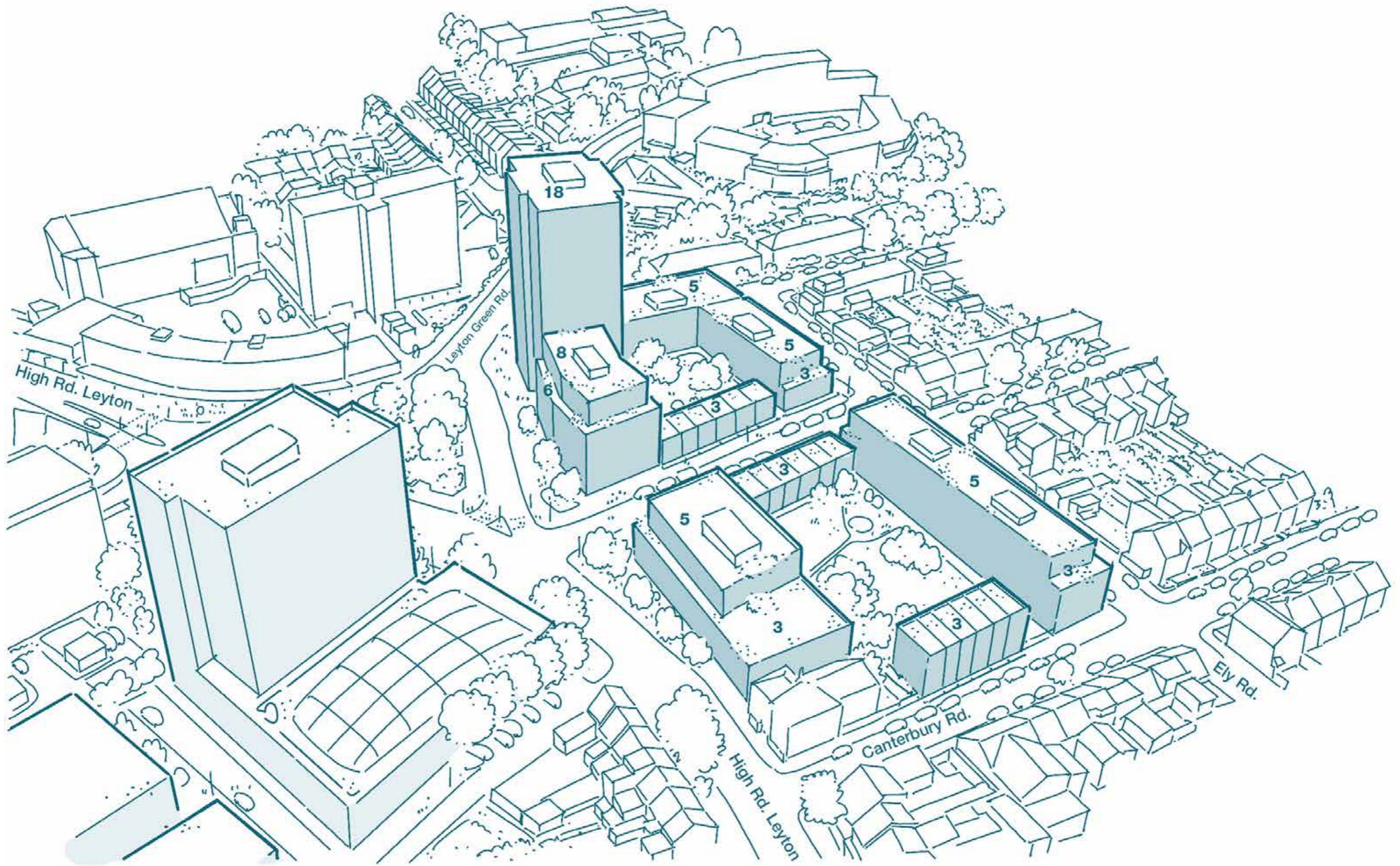
Study H - c. 28,500 sqm GEA (all uses)

Two mid-rise elements either side of central road - minimising impact on existing development to the south, and creating a marker at either side of the street.

Study 01

Key brief points

Affordable housing	50% affordable housing
Unit mix	Market: 20% 1B, 30% 2B, 50% 3B+ Affordable: 20% 1B, 40% 2B, 40% 3B+
Car parking	Accessible parking only
On site servicing	Sufficient access for refuse collection and deliveries
High-street uses	Suitable mix of non-residential uses to complement and enhance existing Bakers Arms District Centre



AERIAL SKETCH VIEW
Leyton Bus Depot Feasibility Studies



Key plan



STREET SKETCH VIEW
Leyton Bus Depot Feasibility Studies



GROUND FLOOR SKETCH - EXISTING CONTEXT
Leyton Bus Depot Feasibility Studies



GROUND FLOOR SKETCH - PROPOSED CONTEXT
 Leyton Bus Depot Feasibility Studies

Response to brief

Affordable housing ✓

Unit mix ✓

Car parking ✓

On site servicing ✓

High-street uses ✓

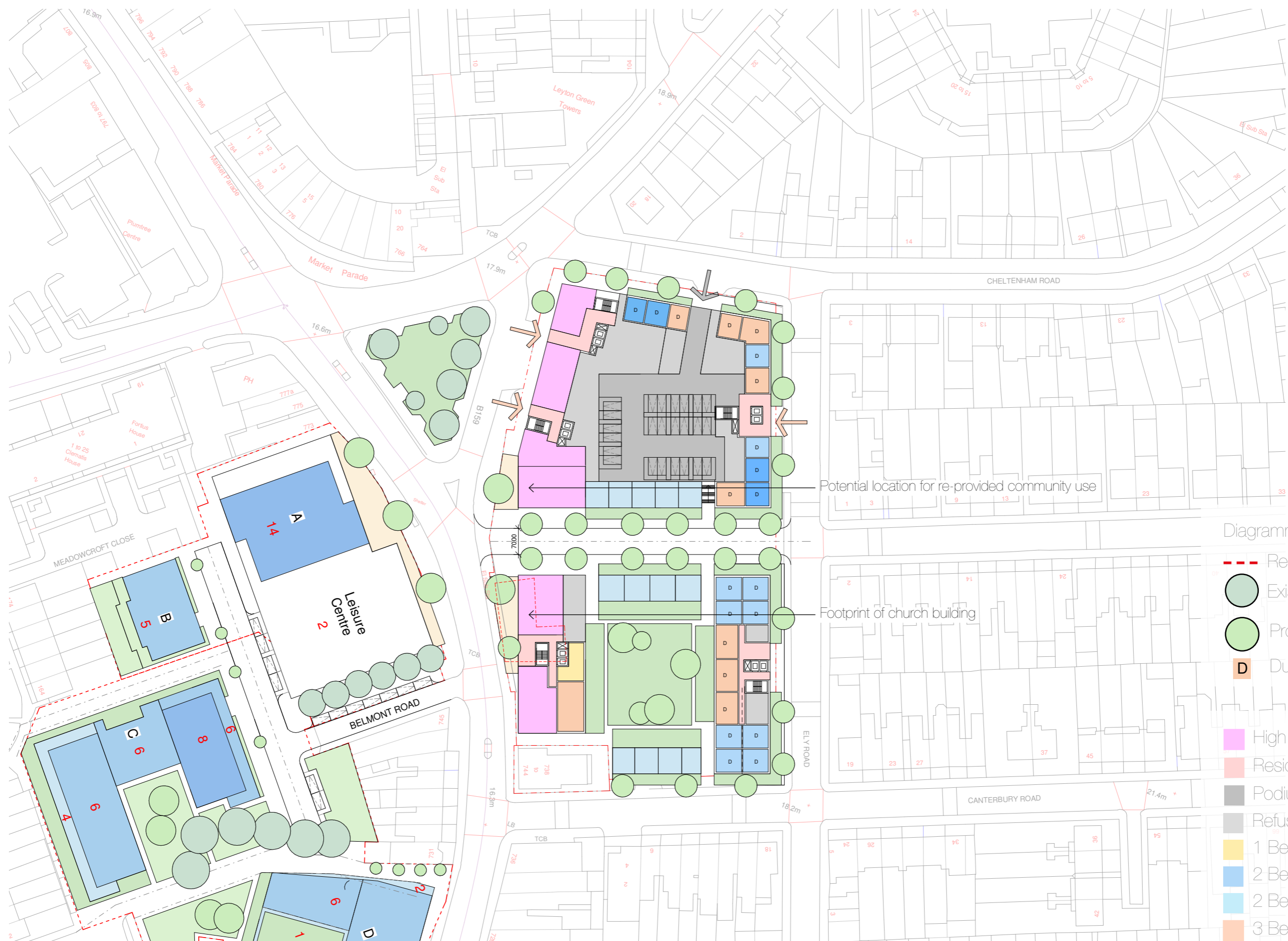


Diagrammatic Key

- Redline Boundary
- Existing Tree
- Proposed Tree
- D Duplex
- High Street
- Residential Entrance
- Podium Car Park
- Refuse/Bike Store
- 1 Bed 2 Person
- 2 Bed 3 Person
- 2 Bed 4 Person
- 3 Bed 6 Person



SITE PLAN
Leyton Bus Depot Feasibility Studies



Diagrammatic Key

- Redline Boundary
- Existing Tree
- Proposed Tree
- D Duplex
- High Street
- Residential Entrance
- Podium Car Park
- Refuse/Bike Store
- 1 Bed 2 Person
- 2 Bed 3 Person
- 2 Bed 4 Person
- 3 Bed 6 Person



GROUND FLOOR PLAN
Leyton Bus Depot Feasibility Studies



Diagrammatic Key

- Redline Boundary
- Existing Tree
- Proposed Tree
- Duplex
- High Street
- Residential Entrance
- Podium Car Park
- Refuse/Bike Store
- 1 Bed 2 Person
- 2 Bed 3 Person
- 2 Bed 4 Person
- 3 Bed 6 Person



FIRST FLOOR PLAN
Leyton Bus Depot Feasibility Studies



Diagrammatic Key

- - - Redline Boundary
- Existing Tree
- Proposed Tree
- D Duplex
- High Street
- Residential Entrance
- Podium Car Park
- Refuse/Bike Store
- 1 Bed 2 Person
- 2 Bed 3 Person
- 2 Bed 4 Person
- 3 Bed 6 Person



TYPICAL FLOOR PLAN
Leyton Bus Depot Feasibility Studies

Bus Depot Relocated

Leyton Bus Depot Site	Site area	9,073 sqm	1.87 ha
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Assumed Mix - market sale

unit type	1b2p	2b3p	2b4p	3b5p	Townh	
area sq ft	545	740	800	950	1,275	
area m2	51	69	74	88	118	
mix %	20%	15%	15%	50%		100%
factor m2	10.13	10.31	11.15	44.13		75.71 conversion
						814.98

Total mix - market sale

Residential NSA/sqft	1b2p	2b3p	2b4p	3b5p	Townh	Units
91,386	22	17	17	56		112
	0	0	0	0	-	-

HR Totals
Unit Totals

	45	50	50	280	0	426
91,386	22	17	17	56	-	112

Final Mix including Townhouses

	1b2p	2b3p	2b4p	3b5p	Townh	
	20%	15%	15%	50%	0%	100%

TOTAL UNITS 227

FAR 2.53

Car Parking

Car Parking spaces

Podium parking	23	*Assumed 26sqm per space to allow for circulation and accessible spaces Spaces located on site A - all accessible units in blocks A1-A3
Street parking		
TOTAL	23	
Ratio	0.10	

Town Centre Uses	931	sqm
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Assumed Mix - affordable

unit type	1b2p	2b3p	2b4p	3b5p	Townh	
area sq ft	545	740	800	950	1,275	
area m2	51	69	74	88	118	
mix %	20%	20%	20%	40%		100%
factor m2	10.13	13.75	14.86	35.30		74.04 conversion
						796.98

Total mix - affordable

Residential NSA/sqft	1b2p	2b3p	2b4p	3b5p	Townh	Units
91,386	23	23	23	46		115
	0	0	0	0	-	-

HR Totals
Unit Totals

	46	69	69	229	0	413
91,386	23	23	23	46	-	115

Final Mix including Townhouses

	1b2p	2b3p	2b4p	3b5p	Townh	
	20%	20%	20%	40%	0%	100%

Plot Area Assumptions

	Exclude inset balconies*	GEA	GEA	GIA ft2	NIA ft2	typ unit ft2	
	m2	m2	ft2	95%	78%	700	
A	16,489	896	15,593	167,843	159,451	124,372	178
B	7,490	168	7,322	78,814	74,873	58,401	83
			0	0	0	0	0
			0	0	0	0	0
			0	0	0	0	0
Th/Dupl.	-	0	0	0	0	0	0
Totals		22,915	246,657	234,324	182,773	261	

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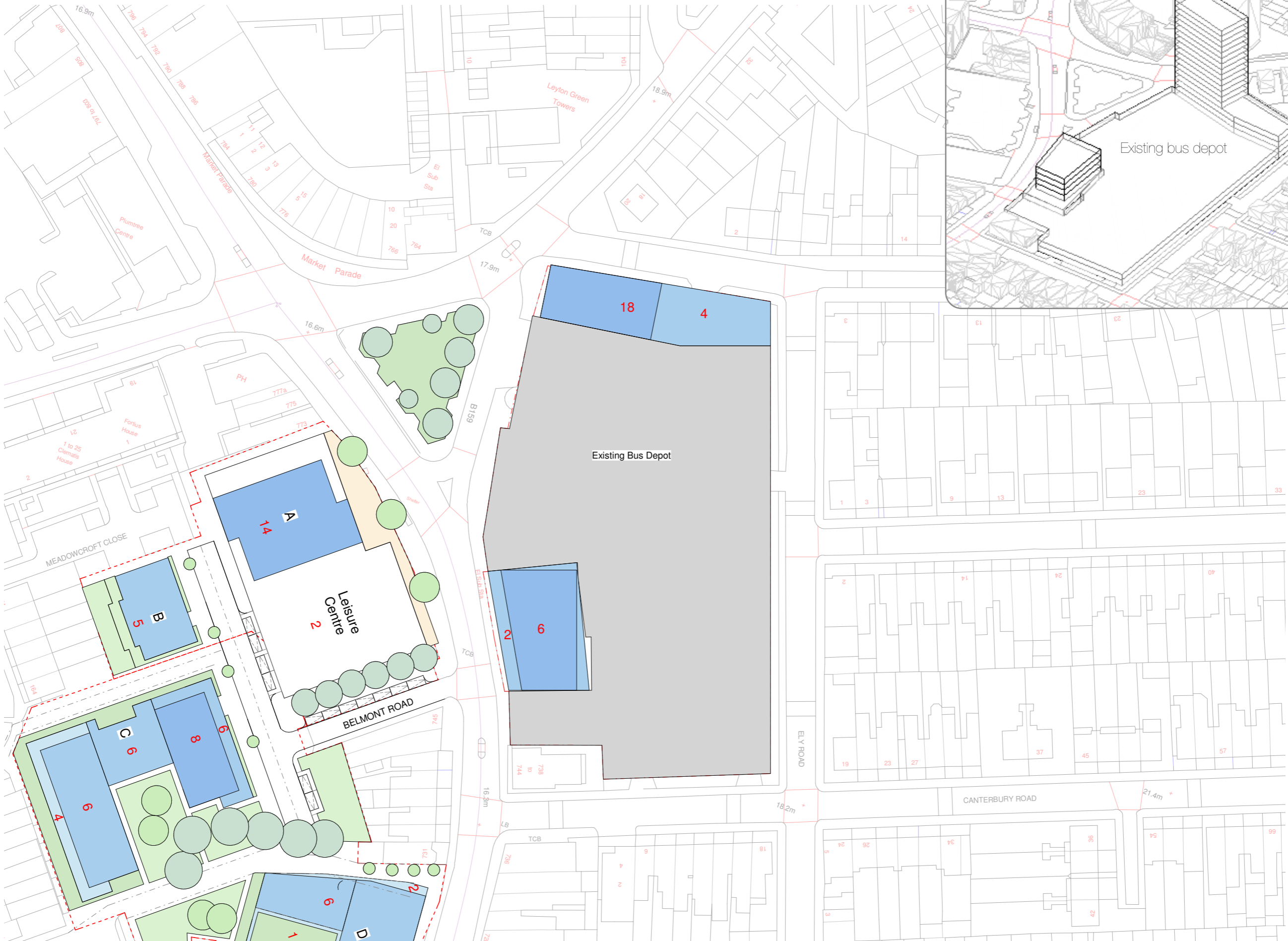
*Inset balconies, as indicated on typical floor plans, are excluded from GEA. Assumed average of 7sqm per balcony

Residential Area Assumptions

Unit mix based on areas extracted from Revit model highlighted in red above

Sqm to sqft	10.7639
GEA to GIA	95%
GIA to NIA	78%

Bus Depot Retained



BUS DEPOT RETAINED - SITE PLAN
Leyton Bus Depot Feasibility Studies

Bus Depot Retained

Leyton Bus Depot Site	Site area	1,705 sqm	0.1705 ha
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Assumed Mix - market sale

unit type	1b2p	2b3p	2b4p	3b5p	Townh	
area sq ft	545	740	800	950	1,275	
area m2	51	69	74	88	118	
mix %	20%	15%	15%	50%		100%
factor m2	10.13	10.31	11.15	44.13		75.71 conversion
						814.98

Total mix - market sale

Residential NSA/sqft	1b2p	2b3p	2b4p	3b5p	Townh	Units
43,869	11	8	8	27		54
	0	0	0	0	-	-
HR Totals	22	24	24	135	0	205
Unit Totals	43,869	11	8	27	-	54

Final Mix including Townhouses

	1b2p	2b3p	2b4p	3b5p	Townh	
	20%	15%	15%	50%	0%	100%

TOTAL UNITS	109
FAR	6.45

Car Parking

Car Parking spaces

Accessible parking	11	*Assumed 26sqm per space to allow for circulation and accessible spaces Location TBC
TOTAL	11	
Ratio	0.10	

Town Centre Uses	750 sqm
*Located on Church/Nursey Site	

Assumed Mix - affordable

unit type	1b2p	2b3p	2b4p	3b5p	Townh	
area sq ft	545	740	800	950	1,275	
area m2	51	69	74	88	118	
mix %	20%	20%	20%	40%		100%
factor m2	10.13	13.75	14.86	35.30		74.04 conversion
						796.98

Total mix - affordable

Residential NSA/sqft	1b2p	2b3p	2b4p	3b5p	Townh	Units
43,869	11	11	11	22		55
	0	0	0	0	-	-
HR Totals	22	33	33	110	0	198
Unit Totals	43,869	11	11	22	-	55

Final Mix including Townhouses

	1b2p	2b3p	2b4p	3b5p	Townh	
	20%	20%	20%	40%	0%	100%

Plot Area Assumptions

	Exclude inset balconies*	GEA	GEA	GIA ft2	NIA ft2	typ unit ft2
	m2	m2	ft2	95%	78%	700
A+B	11,000	0	11,000	118,404	112,484	87,737
			0	0	0	0
			0	0	0	0
			0	0	0	0
			0	0	0	0
Th/Dupl.	-	0	0	0	0	0
Totals		11,000	118,404	112,484	87,737	125

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*Inset balconies, as indicated on typical floor plans, are excluded from GEA. Assumed average of 7sqm per balcony

Residential Area Assumptions

Unit mix based on areas extracted from Revit model highlighted in red above

Sqm to sqft	10.7639
GEA to GIA	95%
GIA to NIA	78%

Areas based on massing model from Revit - layouts have not been developed