

**CITY
IN
THE
WEST**

COSTA

**DEVELOPMENT SCENARIO TESTING
FOR THE ROYAL BOROUGH OF**

KINGSTON UPON THAMES

PART 1 FEBRUARY 2017

MAYOR OF LONDON

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Introduction

Part I of this document sets out the development scenario testing which has been undertaken on sites within the emerging Kingston Opportunity Area. The boundary of the area was agreed by Kingston Council's Infrastructure, Projects and Contracts Committee on 24 March 2015.

The purpose of this work is to identify the key development sites within the area, the sites' constraints and the capacity for low, medium and high density redevelopment. It is not intended to set a preferred development approach for sites. It is a tool to enable further development capacity work and to underpin a transport assessment to assess the implications of different levels of growth, and a Development Infrastructure Funding Study to look at the infrastructure needed to support growth in the borough.

Policy context

Policy 3.4 of the London Plan seeks to optimise housing delivery. Table 3.2 provides guidance on the range of development densities that may be appropriate for development sites. It is not appropriate to apply Table 3.2 mechanistically. Its density ranges are broad, which allows for other factors relevant to optimising a site's potential, (such as local context, design and transport, social infrastructure and open space) to be taken into account. Where appropriate, the density ranges can provide a tool for increasing density in areas where transport proposals will improve public transport accessibility in the future.

The Mayor's Housing SPG explains that the size, scale and importance of large sites and opportunity areas in London's housing need means that optimising housing potential in these locations is considered to be a strategic context, recognising existing and planned transport accessibility and planned investment. Paragraph 7.5.8 explains that densities in opportunity areas and on other large sites may exceed the relevant density range in Table 3.2 of the London Plan. This is subject to development achieving the highest standards, in terms of residential and

environmental quality. The extent to which this is possible will depend on anticipated infrastructure capacity whilst having regard to local character. The potential for higher levels of development to enable additional infrastructure capacity should be explored as part of the emerging opportunity area. Densities which exceed those shown in Table 3.2 of the London Plan have therefore been tested as part of this work.

Emerging Area of Opportunity

The scenarios, as presented, are the product of a process through which land-use, height, urban form and local context have been assessed and determined. A range of wider physical and policy constraints have also been reviewed as part of this process, through mapping and observation.

A series of appropriate typologies have been presented in order to better calibrate the scenario testing. These include three definitions of scheme: land-use; predominantly residential, residential-led mixed-use and commercial-led mixed-use. Educational-led mixed-use and sui generis and other sites have also been considered.

These typologies have been used to overlay and test different densities and distribution of development across identified emerging Opportunity Area sites.

Through a series of workshops with GLA, TfL and RB Kingston officers, land-use, and development potential have been discussed and refined. A number of pre-existing schemes and related undertakings have provided further intelligence to this process.

Scenarios

Three scenarios of low, medium and high levels of development have been investigated. A summary of the key considerations for each development area are set out at the beginning of each section.

There are key areas of growth potential that have been identified through the process to date. The Kingston Station Area, Cambridge Road Estate and London Road, and the Hogsmill Valley are three sub-areas of the emerging opportunity area that offer potential to deliver either a significant quantum of new homes and / or space to support jobs growth. Broadly, the development scenarios optimise densities in these three areas. Elsewhere a more restrained position on growth is evidently borne out as, policy, context and sensitivities limit the opportunity to deliver a higher quantum of new homes and jobs in these remaining areas.

Further iterations can test and calibrate these current positions to produce a preferred scenario.

Key notes/ assumptions on scenario methodology

Predominantly residential and residential-led mixed-use:

- The gross number of homes has been determined on the basis of dwellings per hectare, on the refined 'development emerging opportunity area' (accounting for key sensitivities).
- Site analysis includes definition of different densities/ heights on larger sites where sensitivities and adjacencies are deemed to introduce constraints on development capacity.
- For residential-led mixed use, 10% of the total proposed floorspace has been considered as commercial.
- In areas of low PTAL rating, the scenarios have sought to test increased density on the basis of expected improved transport connectivity and capacity. This is the case for areas of the Cambridge Road Estate and Hogsmill where current PTAL ratings would be expected to be improved through increased connectivity. (As such, these scenarios exceed the densities set out in the London Plan on current PTAL rating).
- Consideration has been given to optimising housing potential, taking into account local context, character and design principles.

Commercial-led mixed-use:

- Potential 'generic' footprints have been determined for commercial-led mixed use sites in order to calculate gross m2. This includes refining the 'development of the emerging opportunity area' (accounting for key sensitivities).
- The vertically-mixed 'split' on commercial-led mixed-use in the town centre and Kingston Station area assumes 50% residential use for the high density scenarios, 40% for medium density and 30% for low density. The same is applied to educational-mixed use as a notional split.

Education and other sites (including Sui Generis):

- Where there is potential for densification or consolidation, 20% of the site within the emerging opportunity area is allocated for residential use (for the purposes of capacity testing).

Summary of density ranges

Based on the typologies presented within the Appendix, the following density ranges have been used in the development of the scenarios. Further explanation can be found in the 'refining distribution of densities' table on page 12.

Predominantly residential
 < 200 dph (Low – medium density), 2-5 storeys
 200-300 dph (Medium density), 5-10 storeys
 400 + dph (High density, estate regeneration specific), 16-20 Storeys

Residential-led mixed-use
 (infill and densification sites)
 < 350 dph (Low – medium density), 6 storeys
 350-400+ dph (Medium - high density), 7-10 storeys

Commercial-led mixed-use
 Low – medium density, 2-5 storeys
 Medium density, 5-8 storeys
 High density, 9-16 storeys

Other/ generally:
 Low density, <5 storeys
 Medium density, 5-8 storeys
 High density, 9-12 storeys
 Anchor/ tall building, >16 storeys

Education
 (20% gross site area assumed for residential)
 < 200dph (Low)
 200-400 dph (Medium)
 400+ dph (High)

*dph = density per hectare

Development Area	Gross 'sensitivity tested' scenario figures					
	Low		Medium		High	
	Homes	Commercial (sqm)	Homes	Commercial (sqm)	Homes	Commercial (sqm)
Kingston Retail Centre	1,075	72,000	1,175	97,250	1,250	136,000
Kingston Station Area	1,350	166,250	1,700	261,750	2,075	416,750
Northern Riverside	350	37,250	425	59,250	500	95,000
Kingston Town Centre (South)	600	43,250	825	70,750	1,050	112,750
London Road and Cambridge Road Estate	2,350	45,750	3,025	79,500	4,375	125,500
Kingston Town Centre (East) and Hogsmill River	825	0	1,050	0	1,675	0
Hogsmill Valley (baseline)	2,300	1000	2,900	2,750	4,575	4,000
Total Emerging Area of Opportunity	8,850	365,320	11,100	571,250	15,500	890,000

Development Area	Indicative scenario figures	
Kingston Retail Centre	1,225 homes	120,000 sqm commercial
Kingston Station Area	1,750 homes	324,000 sqm commercial
Northern Riverside	450 homes	75,250 sqm commercial
Kingston Town Centre (South)	750 homes	67,750 sqm commercial
London Road and Cambridge Road Estate	2,825 homes	56,000 sqm commercial
Kingston Town Centre (East) and Hogsmill River	825 homes	0 sqm commercial
Hogsmill Valley (baseline)	2,650 homes	1000 sqm commercial
Total Emerging Area of Opportunity	10,475 homes	644,000 sqm commercial

Note:

- Figures include identified current and forthcoming development within scenarios
- Homes rounded to nearest 25
- Commercial space rounded to nearest 250m2

Further notes

Sensitive locations, edges and adjacencies

There are areas where significant development constraints are most pronounced, including; heritage assets, historic built environment and riverside setting. Protected views and local heritage designations have not been a determining factor in this study.

Flood Zones

Flood Zones have been highlighted on areas where impact on development options is considered to be considerable, requiring further exemption tests or attenuation/ prevention measures. Surface water flooding has not been considered as a development constraint within this study.

Hogsmill & MOL

Hogsmill Valley assumes the consolidation of sewage works and waste management centre. Access to, and improvement of, MOL areas which are classed as important for nature conservation are expected to have a role to play in defining distribution of development. A more thorough and detailed appraisal of the MOL will be required in order to progress beyond initial scenario assumptions.

Sui Generis and car park densification

A number of sui generis sites are identified within the town centre areas. These are primarily multi-storey car parking. Where there is potential for densification or consolidation, 25% of the gross area is allocated for residential use (for the purposes of capacity testing).

Community uses

Community uses remain as before, but with residential development to be added above.

Protection of existing employment uses

There are a number of employment sites with proposed land use change to predominantly residential or residential mixed-use. The development scenarios expect some affordances to retain and protect these uses, or relocate to appropriate strategic locations.

Limitations of scenario testing

These scenarios are based on 2D tests in order to provide early indicative capacity information for new homes and commercial space. The base information is OS mapping and GIS information provided by GLA and RB Kingston. 3D massing and testing of key views would be expected to further refine urban form and distribution of development.

The scenario densities and example building heights presented in this report are indicative. They are examples of how development could be spatially arranged. They are not agreed densities or figures for the development of the sites. The purpose of this document is to provide a range of densities to enable officers to test and assess how growth could be accommodated in the borough and what mitigation measures would be necessary. It is recognised that development may be carried out in a number of different ways and alternative proposals could be considered appropriate.

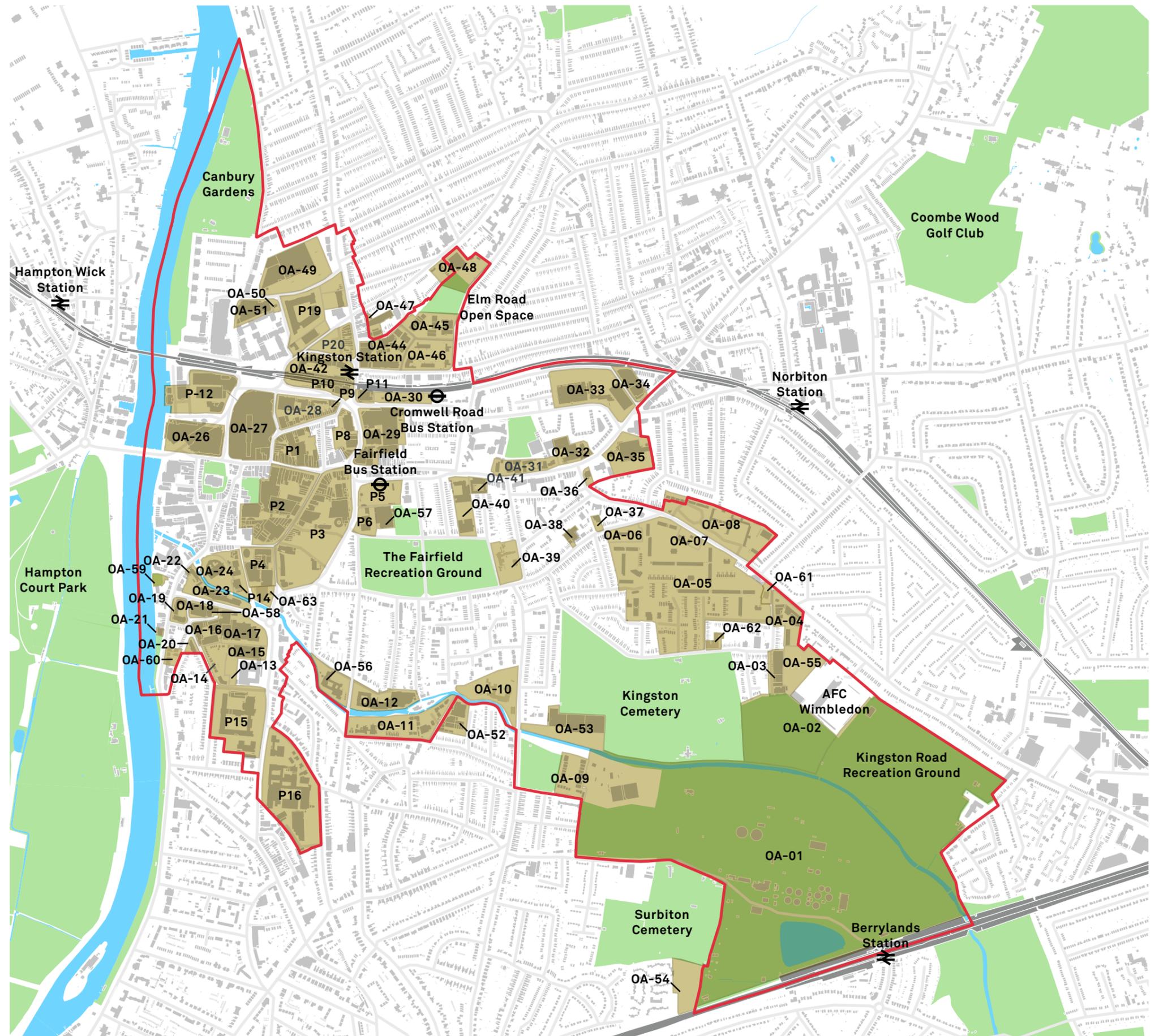
2.0 IDENTIFIED OPPORTUNITY SITES

The map opposite illustrates the opportunity sites that have been identified by RB Kingston & GLA officers. Within this study the opportunity sites will be scrutinised with regards to listed buildings, conservation areas, sensitive edges, flood zones and live developments.

It is noted that the boundary agreed by Kingston Council's IPCC Committee on 24 March 2015 contains a hole within it. However after discussion with RB Kingston and GLA officers it is understood that the intention is to remove this anomaly.

KEY

-  Identified opportunity sites
-  Identified opportunity sites on open space
-  Kingston Emerging Area of Opportunity boundary

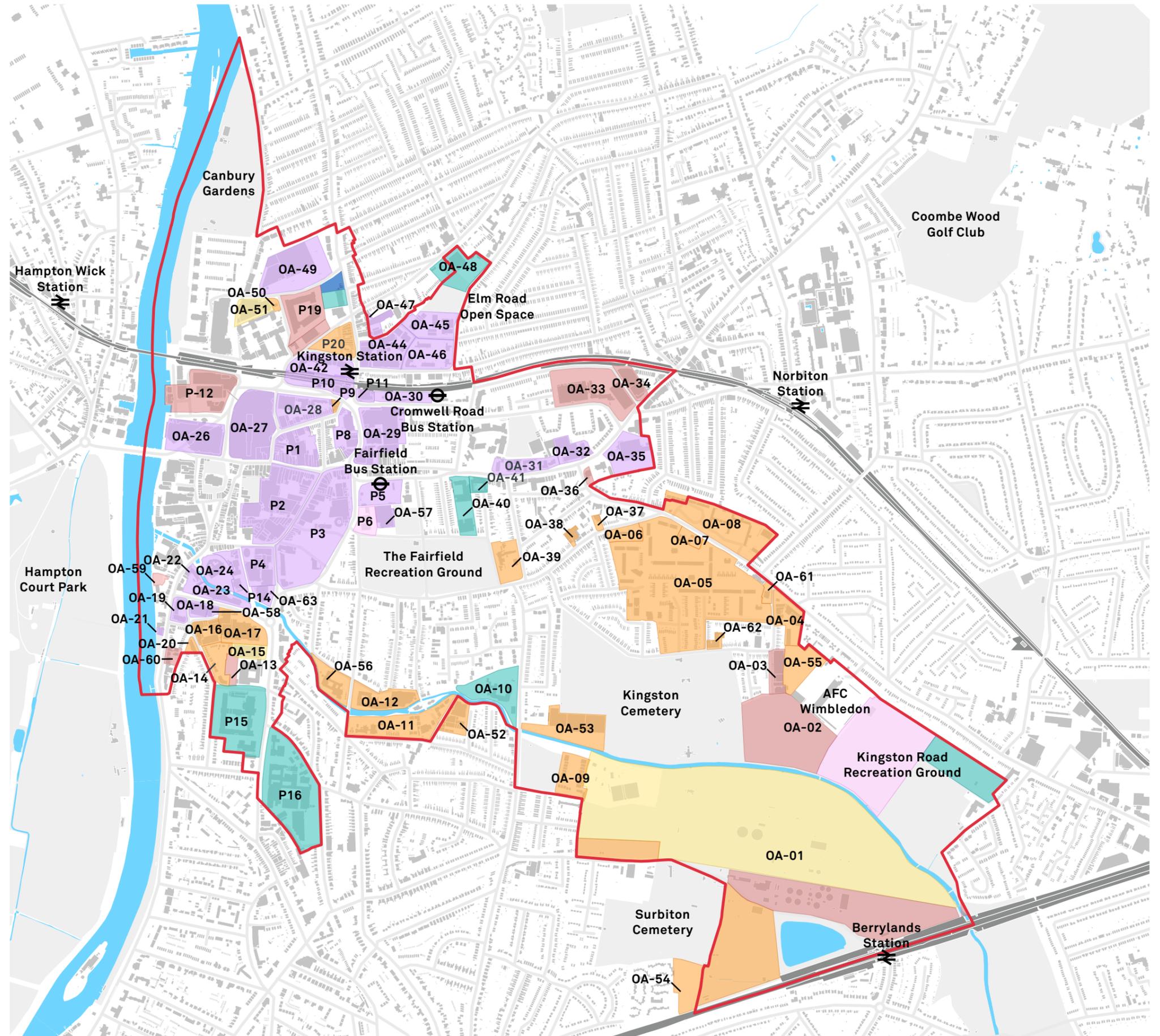


PROPOSED
LAND USE

The map opposite indicates the allocated land uses for each of the designated opportunity sites. A number of sites already have land use determined by successful planning applications or live developments.

KEY

- Predominantly residential (C3)
- Residential-led mixed-use (C3, A1-A3, B1)
- Commercial-led mixed-use (A1-A3, B1, C3)
- Educational-led mixed-use (D1, C3)
- Leisure (D2)
- Sui Generis
- Kingston Emerging Area of Opportunity boundary

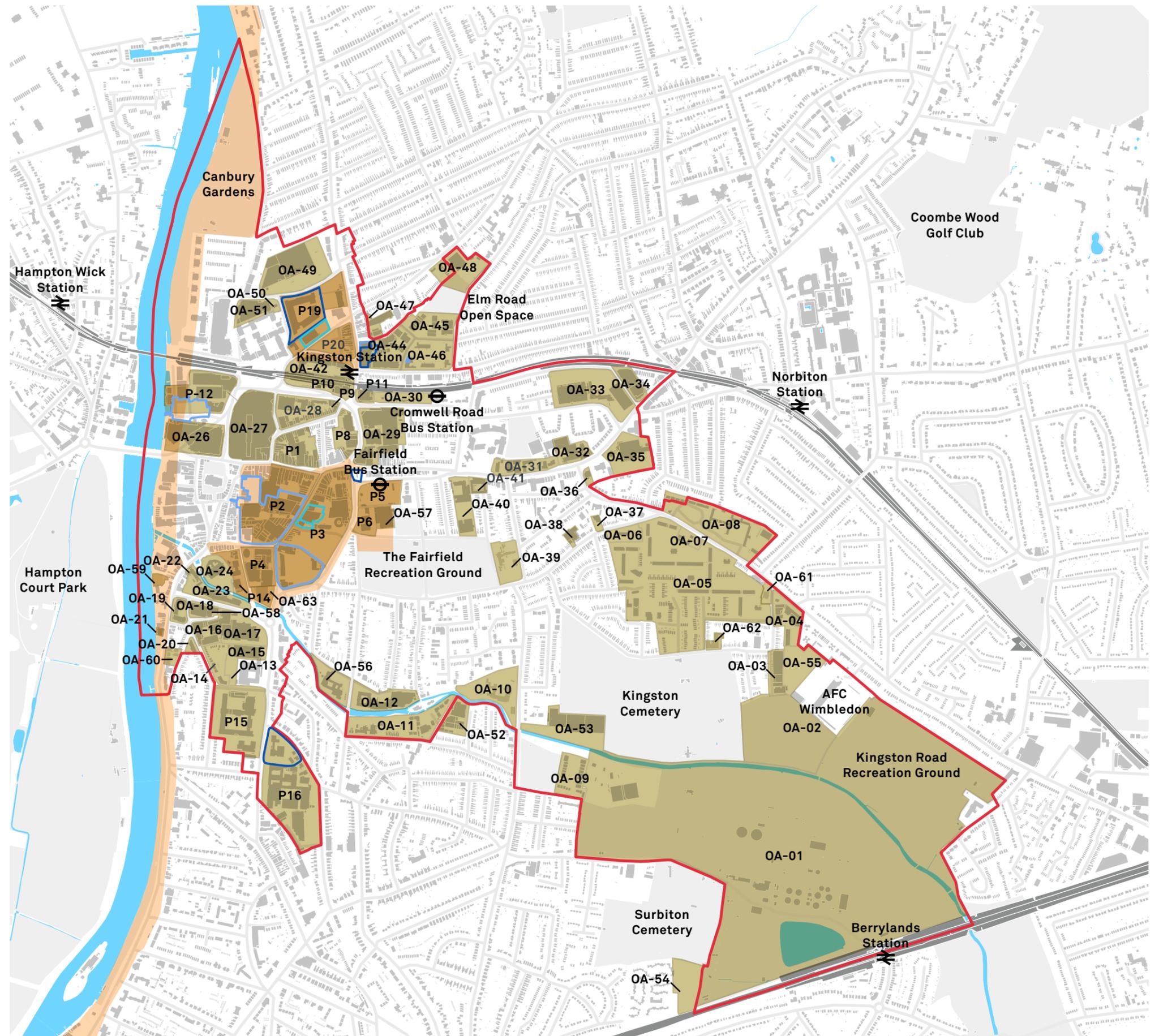


CURRENT & FORTHCOMING DEVELOPMENT

The map opposite overlays live developments with the designated opportunity sites, to highlight where the development is already coming forward. The Riverside SPD, Eden Quarter SPD and the North Kingston Development Brief highlight areas where there is existing definition to both development density and use.

KEY

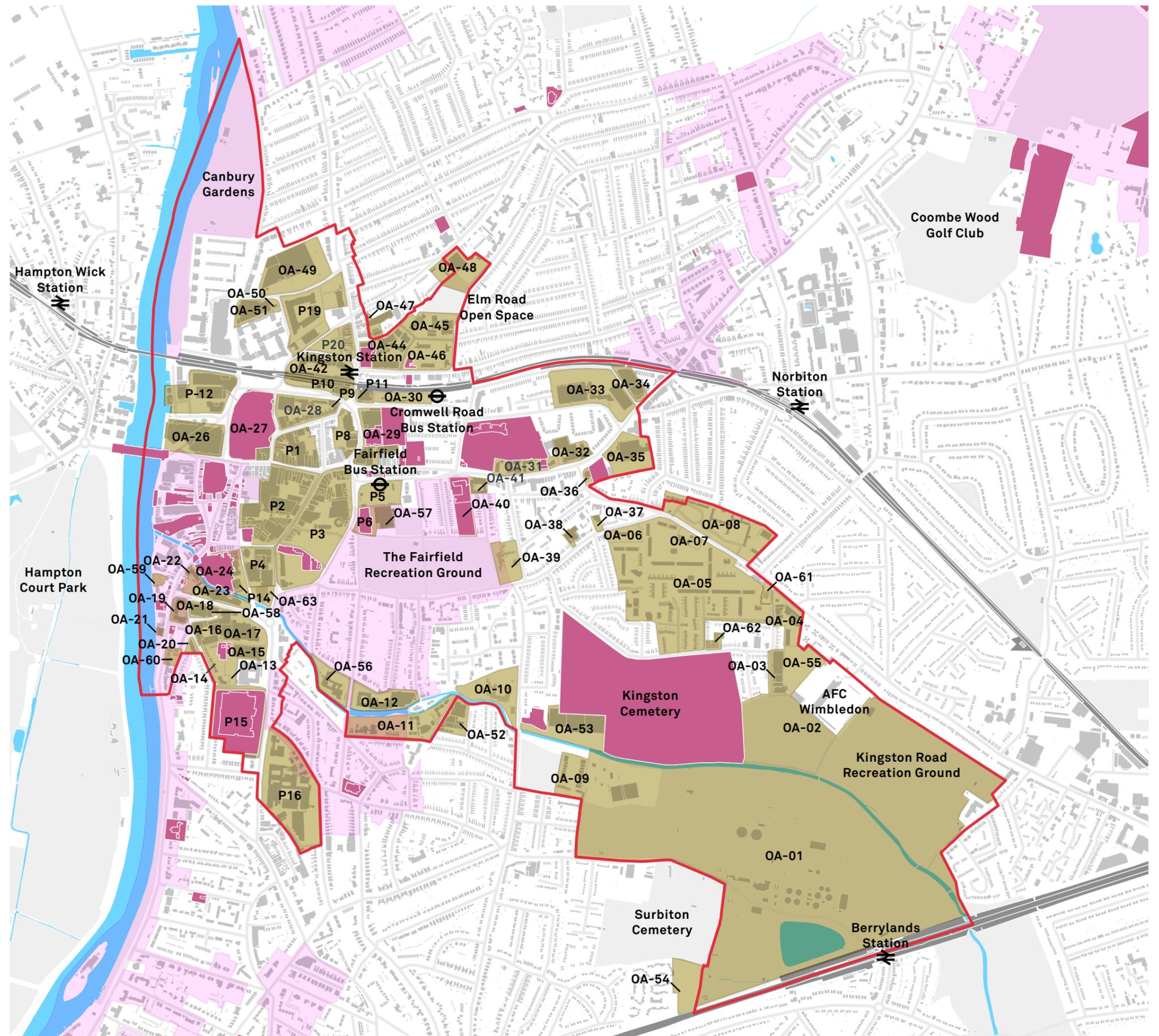
-  Under construction
-  Planning permitted (& expected to proceed)
-  Committee decision
-  Consultation stage
-  Identified opportunity sites
-  SPD & Development brief boundaries
-  Kingston Emerging Area of Opportunity boundary



HERITAGE ASSETS

The map opposite illustrates the wealth of heritage assets within the emerging area of opportunity. There are a significant number of listed buildings, particularly concentrated within the town centre. There are also a number of Conservation Areas with distinct characters and appearance which place restrictions upon future development.

- KEY
- Listed buildings
 - Conservation area
 - Identified opportunity sites
 - Kingston Emerging Area of Opportunity boundary

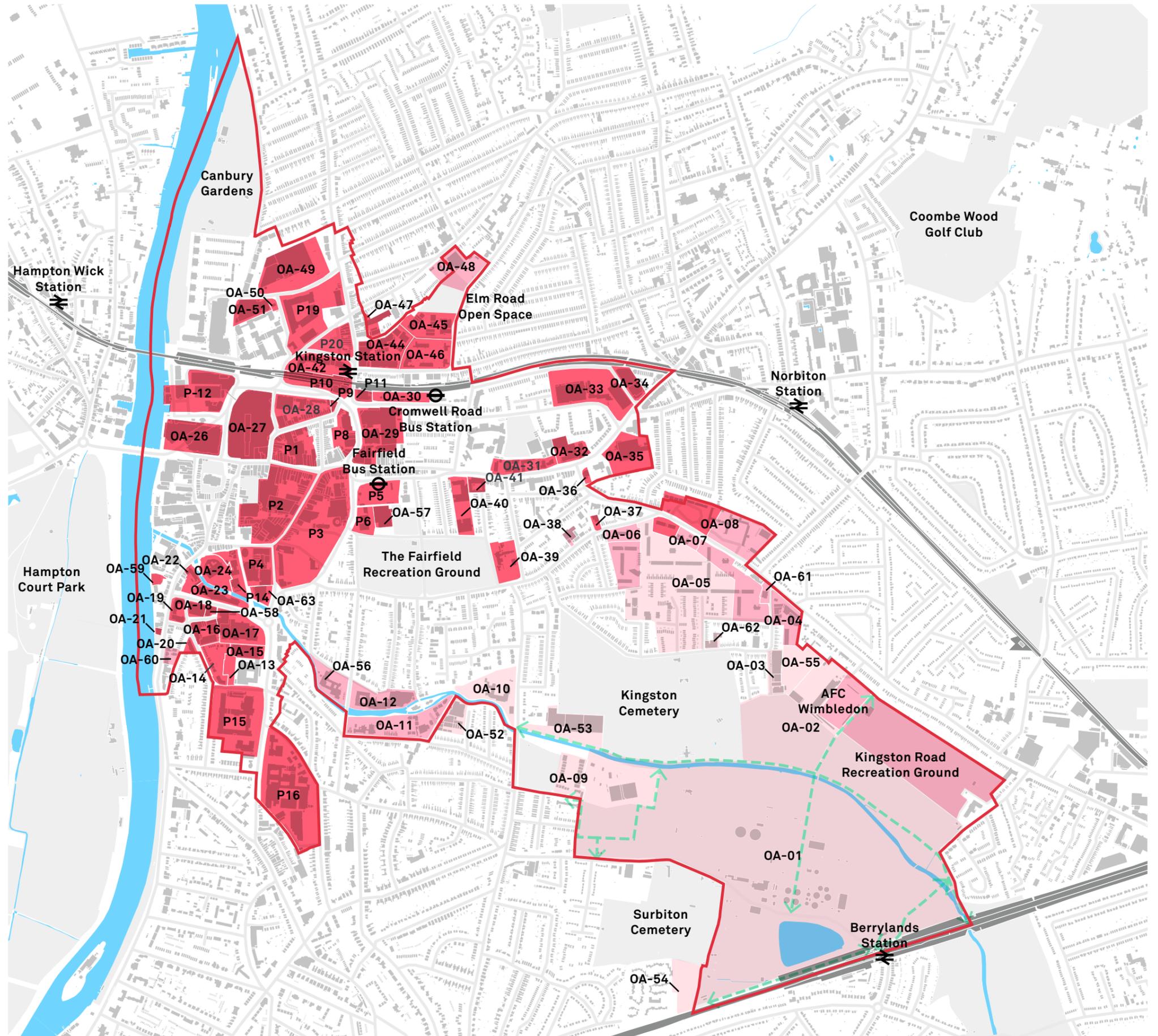


PTAL RATING

The map opposite illustrates the current PTAL ratings for each of the opportunity sites in Kingston. The PTAL is particularly strong within Kingston town centre owing to the proximity to the train station, and particularly weak across the Cambridge Road Estate and Hogsmill Valley area. These PTAL ratings would be significantly affected by the addition of Crossrail 2 services.

- KEY**
- High (4-6)
 - Medium (2-3)
 - Low (0-1)
 - Proposed connectivity
 - Kingston Emerging Area of Opportunity boundary

* Data sourced from WebCAT provided by Transport for London



FLOOD ZONES

The map illustrates the extent of the flood zones across the emerging area of opportunity, which are defined as the following:

Flood Zone 2

Medium probability
Land assessed as having between a 1% (1 in 100) and 0.1% (1 in 1000) annual probability of river flooding in any year

Flood Zone 3

Flood Zone 3a: High probability
Land assessed as having a 1% (1 in 100) or greater annual probability of flooding in any year Exception test required for residential.

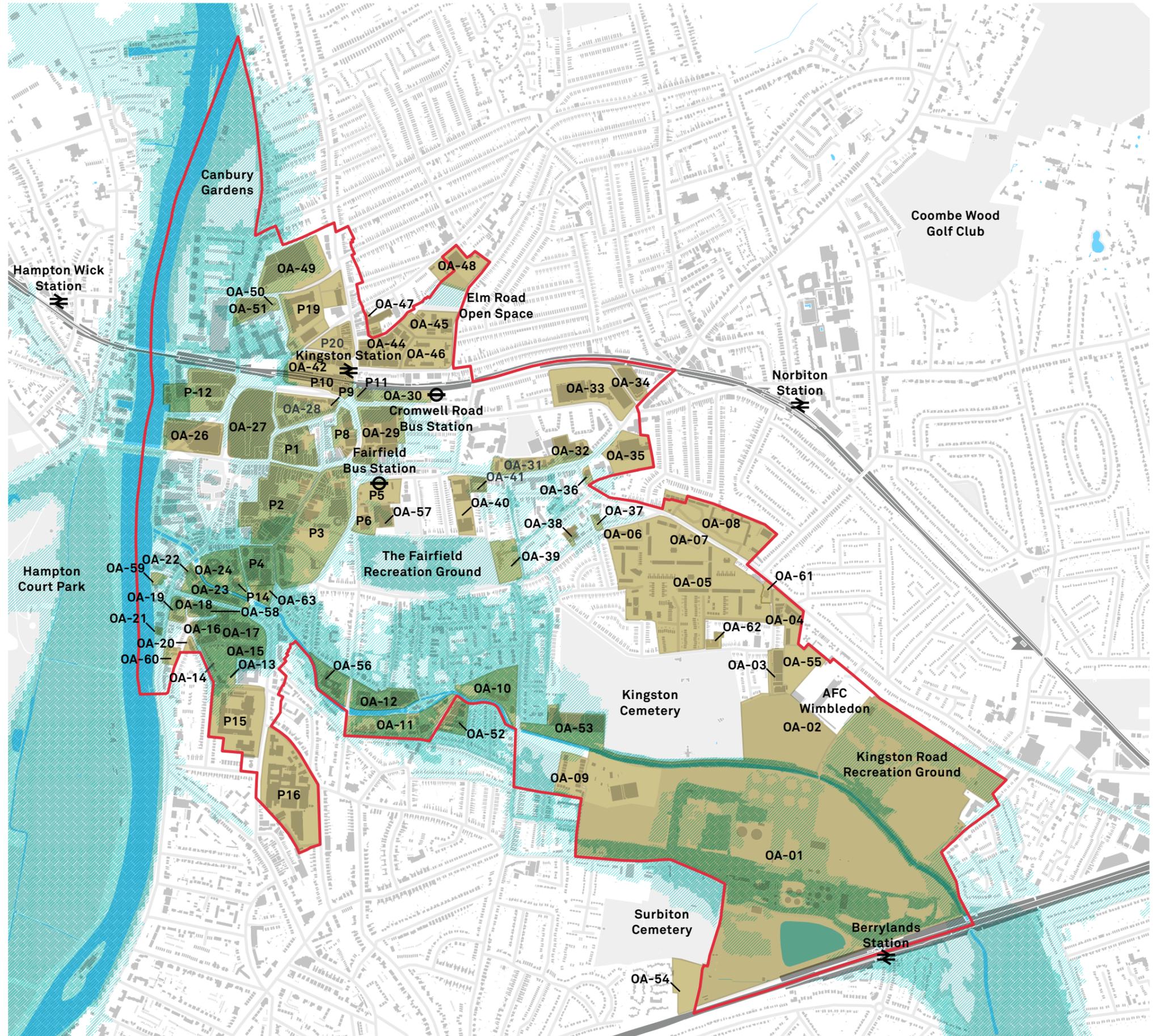
Flood Zone 3b: Functional flood plain
Land assessed as having a 5% (1 in 20) or greater annual probability of flooding in any year, and/or areas susceptible to flooding within which 'water has to flow or be stored in times of flood'. Residential development is not appropriate.

KEY

 Flood zone 2

 Flood zone 3

 Kingston Emerging Area of Opportunity boundary



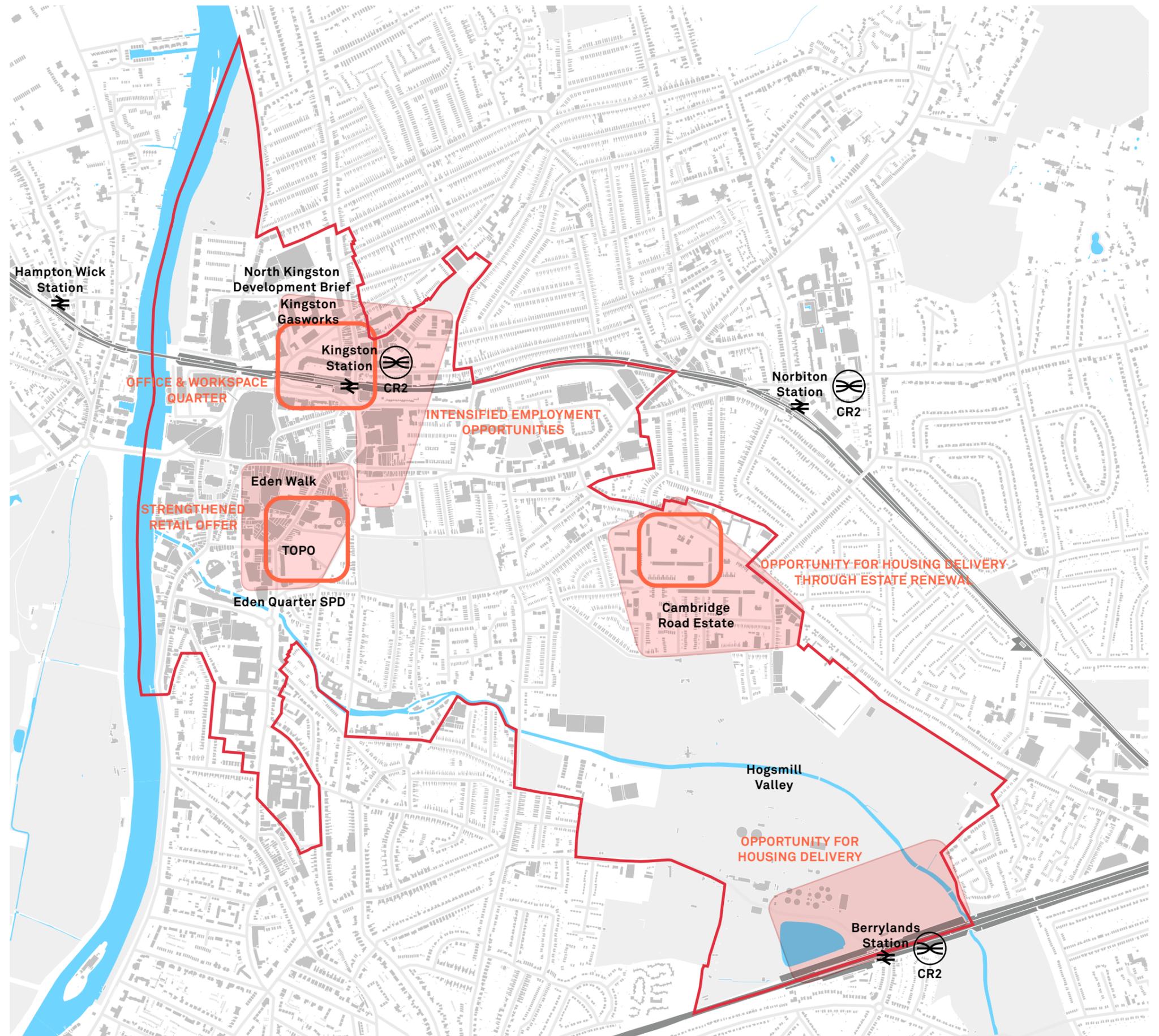
3.0

REFINING DISTRIBUTION OF DENSITIES

	Density response	Approximate density	Indicative heights	Typology comparisons
Sensitive locations, edges and adjacencies	<p>Seek to respond to local character, existing street grain and relate to existing densities in existing residential neighbourhoods.</p> <p>Enhance and protect heritage assets, protected views and natural assets such as the riverside, through distribution of development which is mindful of heritage significance and sensitivities.</p> <p>Consider uses which are place-specific/ responsive to identified need. It may be appropriate to intensify uses if it contributes to placemaking.</p>	< 200 dph (Low – medium density)	2-5 storeys	Claredale Street Brentford Lock, P1 Clearwater Yard
Defining predominantly residential areas	<p>Outside of sensitive locations and key transport interchanges, development should respond in delivering medium densities. To contribute towards meeting housing targets and provide a high quality residential environment, at and around new and improved stations should respond to the higher public transport accessibility and seek to optimise densities.</p> <p>The regeneration of the Cambridge Road Estate should seek higher densities than existing provision, providing a viable approach that provides a high quality residential environment.</p>	<p>< 200 dph (Low – medium density)</p> <p>200-300 dph (Medium density)</p> <p>400 + dph* (High density)</p> <p>*estate regen specific</p>	<p>2-5 storeys</p> <p>5-10 storeys</p> <p>16-20 storeys</p>	Claredale Street Brentford Lock, Phase 1 Royal Road St Andrews, Phase 1 Colville Estate, Phase 2&3
Defining residential mixed-use infill and densification sites within town centre	At and around improved stations, as well as in the town centre, residential mixed-use should respond to the higher public transport accessibility and seek to optimise densities.	<p>< 350 dph (Low – medium density)</p> <p>350-400+ dph (Medium - high density)</p>	<p>6 storeys</p> <p>7-10 storeys</p>	Adelaide Wharf Bear Lane Battersea Power Station (4a)
Defining key retail and commercial-led destinations	<p>Higher density built form around the station and public transport interchanges.</p> <p>Support access and navigation to key destinations alongside the vitality and vibrancy of the commercial offer. Development in these locations should respond in delivering high density development.</p> <p>Differentiated response in relation to types of workspace and observed need/ emerging requirements in Kingston.</p>	<p>Medium density</p> <p>High density</p>	<p>5-8 storeys</p> <p>9-16 storeys</p>	Clearwater Yard Steward Building The Landing Central St Giles
Flooding, attenuation and sewage treatment infrastructure	<p>The Hogsmill sewage works covers 25.6ha of MOL land, which currently does not offer public access. Assumption of consolidating the sewage works to release approx. 20% of the site for development, whilst also improving connectivity through the area. Loss of MOL in this case is intended to enable improved public access and cross-subsidy.</p> <p>Flood attenuation measures are being considered by RB Kingston and the Environmental Agency, both upstream, and within the Hogsmill Valley area. This will need to be accommodated in development scenarios.</p>	Detailed masterplan required	-	-
Planned and forthcoming development	A large proportion of the emerging opportunity area is already planned, or has some definition; K+20, North Kingston Design Brief, and the Eden Quarter SPD. There are consented schemes for the Eden Shopping Centre and The Old Post Office site, and a number of schemes under construction, such as Kingston Gasholder.	Determined by others	4-16 storeys	-

ZONES OF TRANSFORMATION & OPPORTUNITY FOR SUPPORTING GROWTH

The map opposite indicates zones within the opportunity area, which could accommodate a significant amount of growth through transformational development. There are a number of key locations, which provide significant opportunity for development with high densities including Kingston Station, Eden Quarter and the Cambridge Road Estate. These have been refined through workshops with RB Kingston and GLA officers.



- KEY
- Densification / Intensification
 - Opportunity for height
 - Crossrail 2
 - Kingston Emerging Area of Opportunity boundary

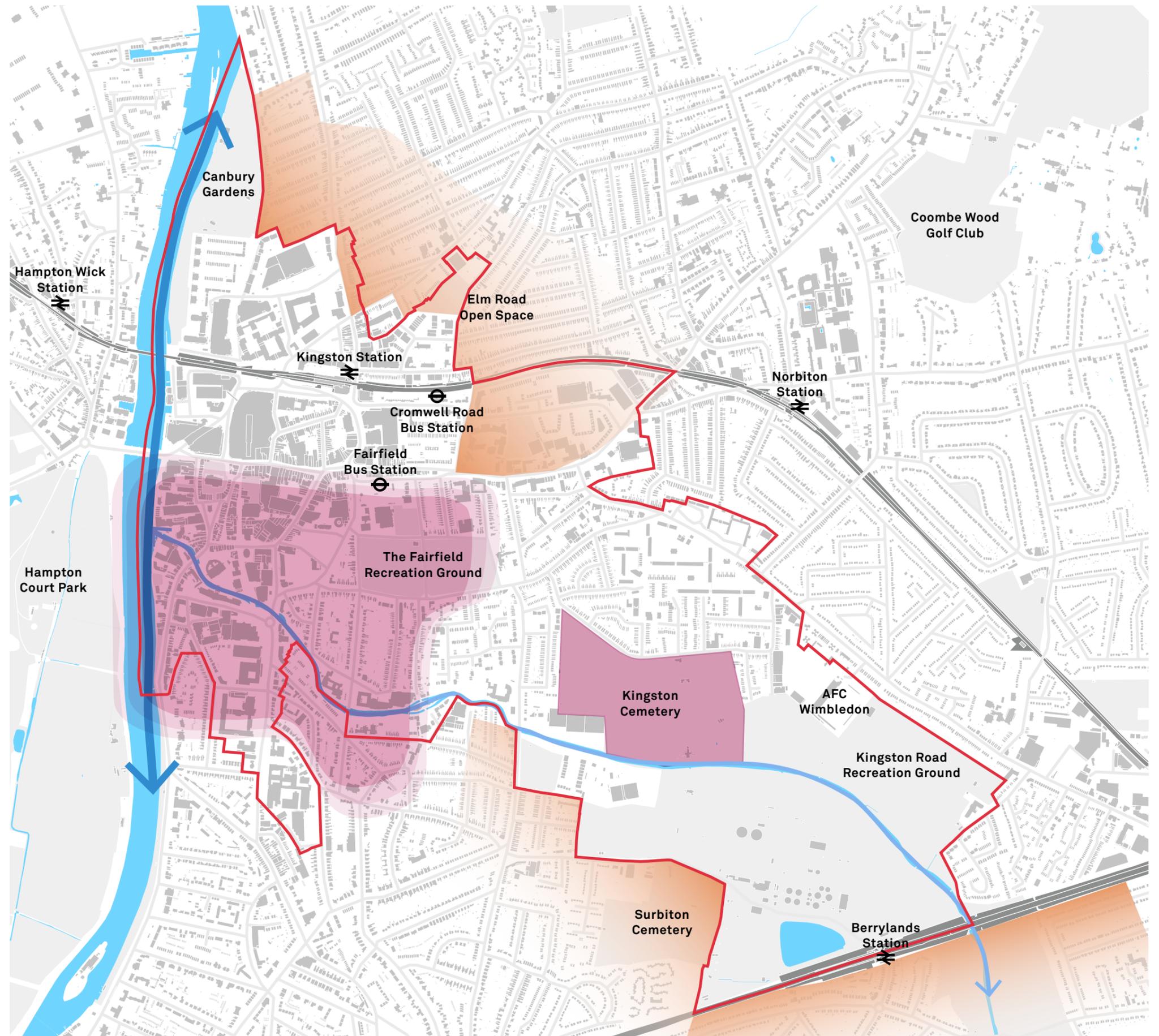


SENSITIVE LOCATIONS, EDGES & ADJACENCIES

This study takes into consideration locations which have sensitive edges and adjacencies. This is owing to heritage or natural assets, or existing residential neighbourhoods. The southern area of the town centre is particularly constrained by the historic built environment and designated conservation area.

KEY

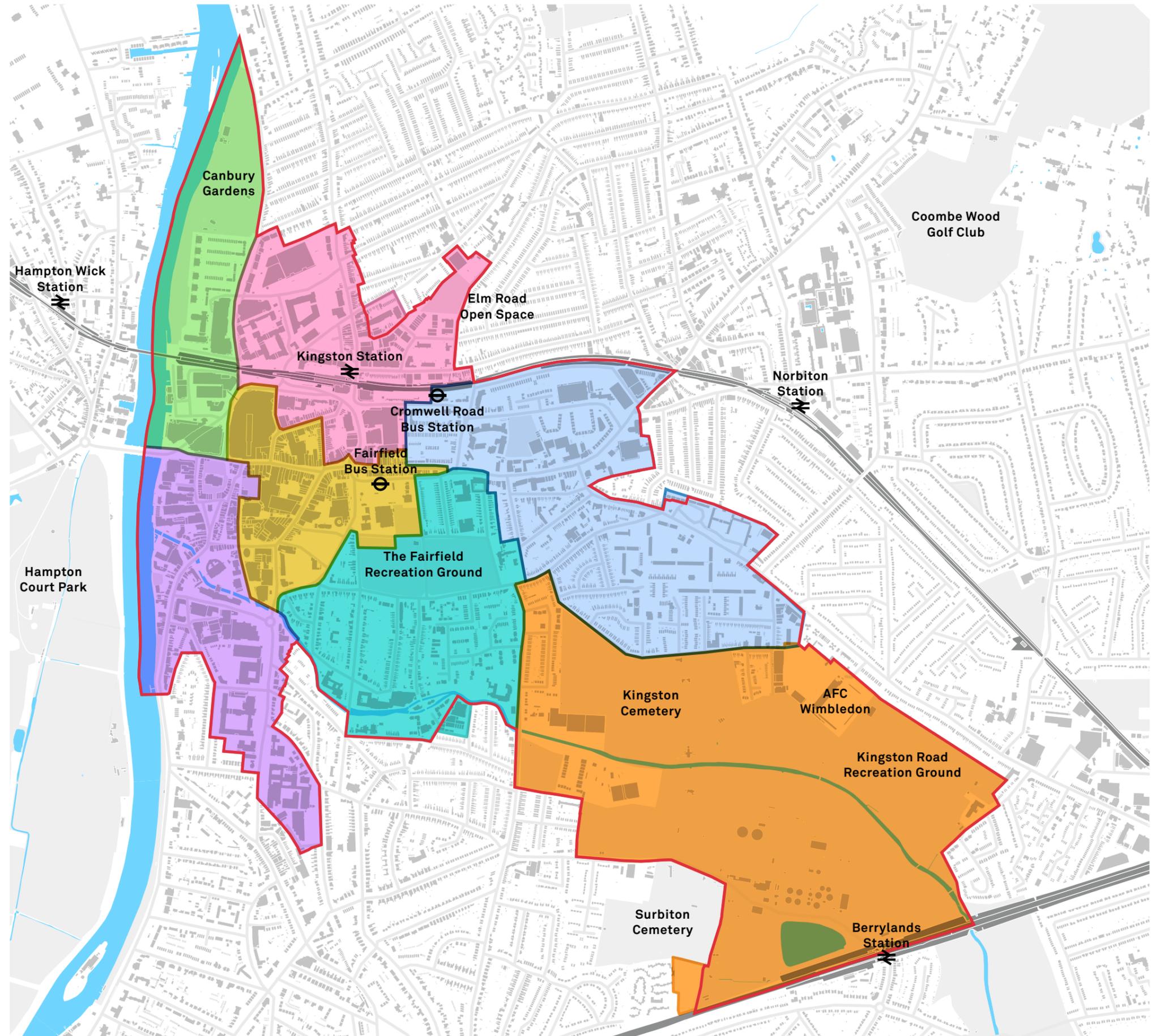
-  Sensitivity of built form with existing residential neighbourhoods
-  Significant development constraints: heritage assets, historic built environment & riverside
-  Thames riverside
-  Hogsmill River
-  Kingston Emerging Area of Opportunity boundary



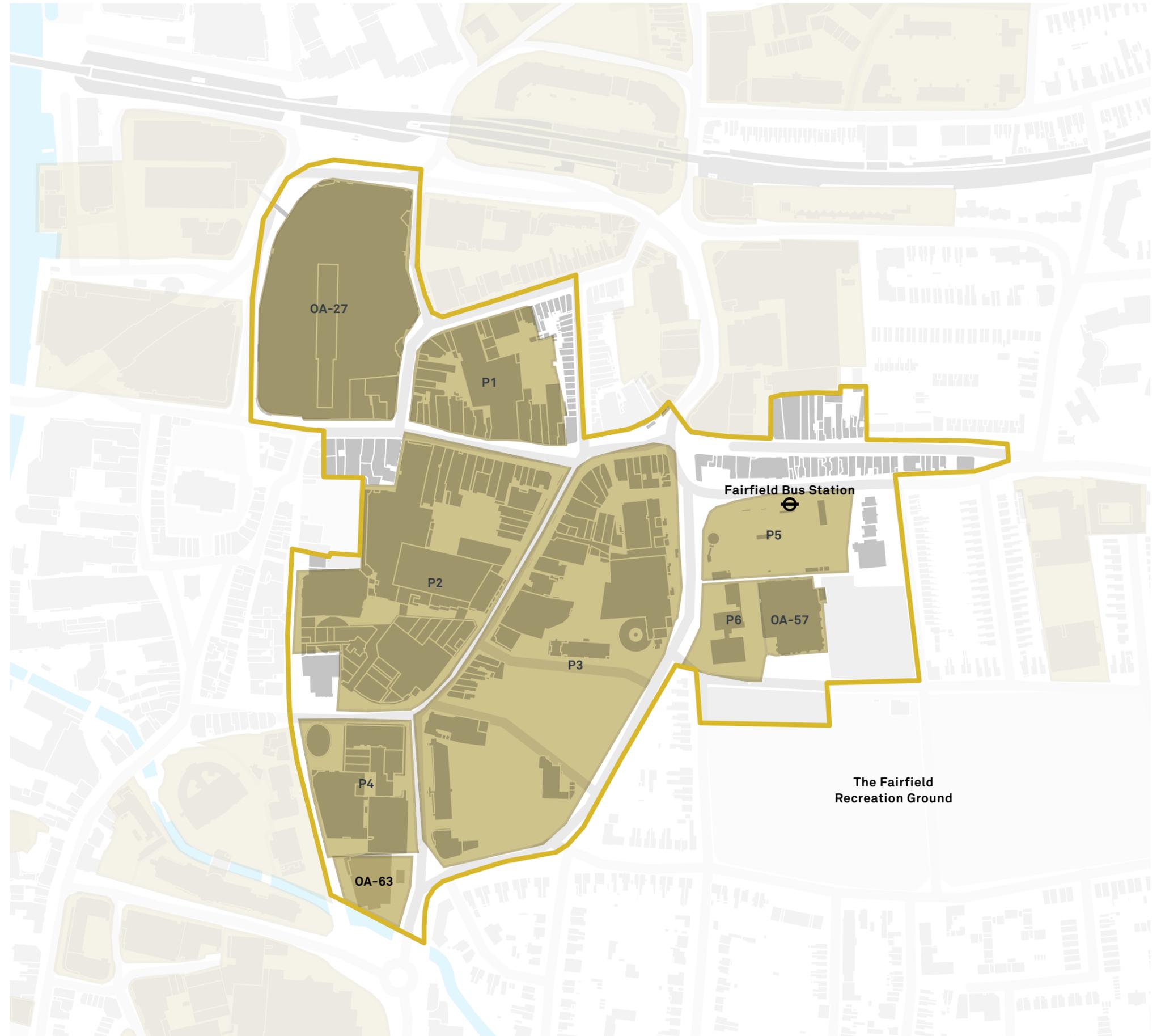
4.0 DEVELOPMENT AREAS

The Emerging Area of Opportunity is divided into seven character areas which are defined by use, existing built environment and other significant features. The study zooms in on each area to illustrate the constraints, followed by the development opportunity.

- KEY**
-  Kingston Retail Centre boundary - p16
 -  Kingston Station Area boundary - p22
 -  Northern Riverside boundary - p27
 -  Kingston Town Centre (South) boundary - p32
 -  London Road & Cambridge Road Estate boundary - p37
 -  Kingston Town Centre (East) boundary - p43
 -  Hogsmill Valley boundary - p47
 -  Identified opportunity sites
 -  Kingston Emerging Area of Opportunity boundary

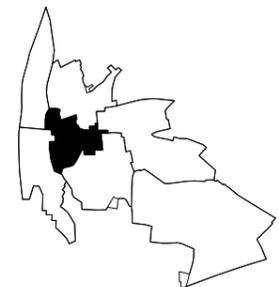


KINGSTON RETAIL CENTRE



KEY

- Identified opportunity sites
- Kingston Retail Centre boundary





Clarence Street



Church Street



Clarence Street



Clarence Street



Car park adjacent to Kingfisher Leisure Centre

AREA SUMMARY

Indicative scenario

Retail-led mixed-use development throughout Kingston's retail centre is a clear direction of travel set out by the Eden Quarter SPD. Within the town centre, the residential element should respond to the higher public transport accessibility and seek to optimise densities and intensify identified emerging Opportunity Area sites. There is some potential for higher density development and height particularly in locations set out within the SPD, whilst understanding the desire for care towards Kingston's historic environment and setting. Valuing these heritage assets as part of renewal is a constraint to which the scenarios respond with regards to density and character.

There is a significant quantum of development proposals coming forward already.

Key considerations and constraints

- This area has already been substantially defined by current development proposals including The Old Post Office site and the Eden Walk development.
- The development scenarios seek to complement the strategy set out in the Eden Quarter SPD, taking density, use and layout into consideration.
- There are key protected views through the area, including visual links to the Guildhall. This will have an impact upon large scale development.

Site	Land use	Low		Medium		High		Planning application	
		Homes	Commercial (sqm)	Homes	Commercial (sqm)	Homes	Commercial (sqm)	Homes	Commercial (sqm)
KINGSTON RETAIL CENTRE									
P1	Commercial-led mixed-use	0	0	0	0	0	0		
P2	Commercial-led mixed-use	0	0	0	0	0	0	385	24,127
P3.1	Commercial-led mixed-use	58	11,493	77	18,295	96	29,319		
P3.2	Residential-led mixed-use	21	285	30	808	30	1,188		
P3.3	Commercial-led mixed-use	0	0	0	0	0	0	319	1,785
P3.4	Commercial-led mixed-use	0	0	0	0	0	0	0	5,550
P3.5	Commercial-led mixed-use	0	0	0	0	0	0	39	500
P4	Commercial-led mixed-use	74	9,707	99	15,452	124	24,763		
P5.1	Commercial-led mixed-use	36	4,435	48	7,059	60	11,313		
P5.2	Residential-led mixed-use	77	1,028	108	2,911	108	4,281		
P6	Commercial-led mixed-use	0	0	0	0	0	0		
OA27	Commercial-led mixed-use	0	0	0	0	0	0		
OA57	Commercial-led mixed-use	29	6,047	39	9,625	49	15,425		
OA63	Commercial-led mixed-use	30	6,980	40	11,111	50	17,806		
		1,075	72,000	1,175	97,250	1,250	136,000		
		to nearest 25	to nearest 250m2	to nearest 25	to nearest 250m2	to nearest 25	to nearest 250m2	inc. in all scenarios	
Indicative scenario		1,225 homes to nearest 25				120,000 sqm commercial to nearest 250m2			

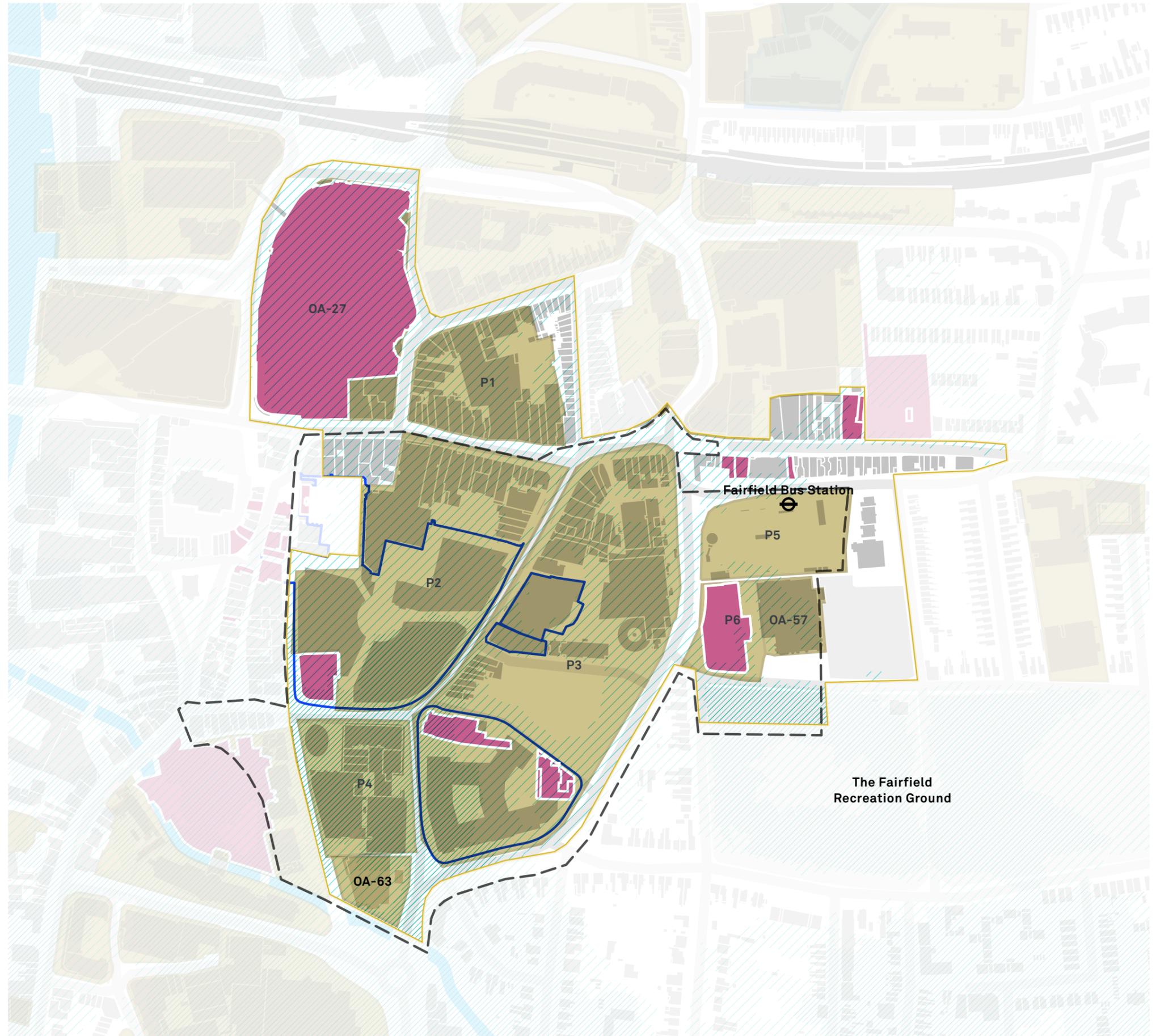
Note:

- Figures include identified current and forthcoming development within scenarios upon the following sites: P2, P3.3, P3.4, P3.5
- A number of sites provide no opportunity owing to listed buildings or current land uses.

CONSTRAINTS

KEY

- Listed buildings
- Identified opportunity sites
- 'Live' development
- Flood zone 2
- Flood zone 3
- Eden Quarter SPD boundary
- Kingston Retail Centre boundary



INDICATIVE SCENARIO: DENSITY AND LAND USE

1A Current scheme and SPD compliant view

The indicative scenario shows one of many possible mixes of density that should be considered through onwards work.

KEY

Predominantly residential

- Low-medium density: 2-5 storeys
- Medium density: 5-10 storeys
- High density: 16-20 storeys

Residential-led mixed-use

- Low-medium density: 6 storeys
- Medium-high density: 7-10 storeys

Commercial-led mixed-use

- Low-medium density: 2-5 storeys
- Medium density: 5-8 storeys
- High density: 9-16 storeys

Educational-led mixed-use

- Low density: <5 storeys
- Medium density: 5-8 storeys
- High density: 9-12 storeys

Sui Generis

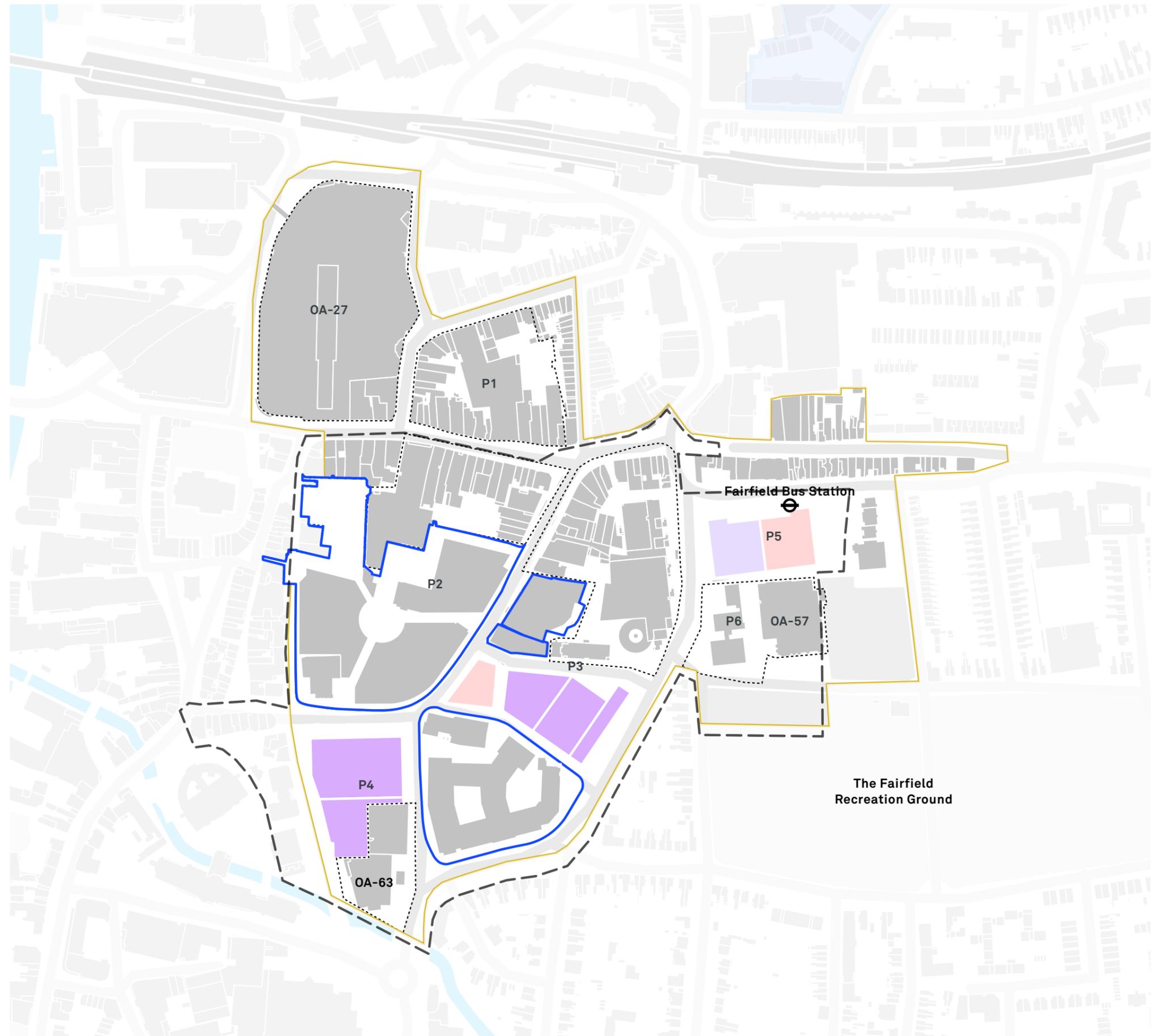
- Low density: <5 storeys
- Medium density: 5-8 storeys
- High density: 9-12 storeys

 'Live' development

 Existing to be retained / Anticipated limited net gain

 Eden Quarter SPD boundary

* Open space will need to be provided as part of residential developments



INDICATIVE SCENARIO: DENSITY AND LAND USE

1B Current scheme/ SPD and optimised development on key opportunity sites

The indicative scenario shows one of many possible mixes of density that should be considered through onwards work.

KEY

Predominantly residential

- Low-medium density: 2-5 storeys
- Medium density: 5-10 storeys
- High density: 16-20 storeys

Residential-led mixed-use

- Low-medium density: 6 storeys
- Medium-high density: 7-10 storeys

Commercial-led mixed-use

- Low-medium density: 2-5 storeys
- Medium density: 5-8 storeys
- High density: 9-16 storeys

Educational-led mixed-use

- Low density: <5 storeys
- Medium density: 5-8 storeys
- High density: 9-12 storeys

Sui Generis

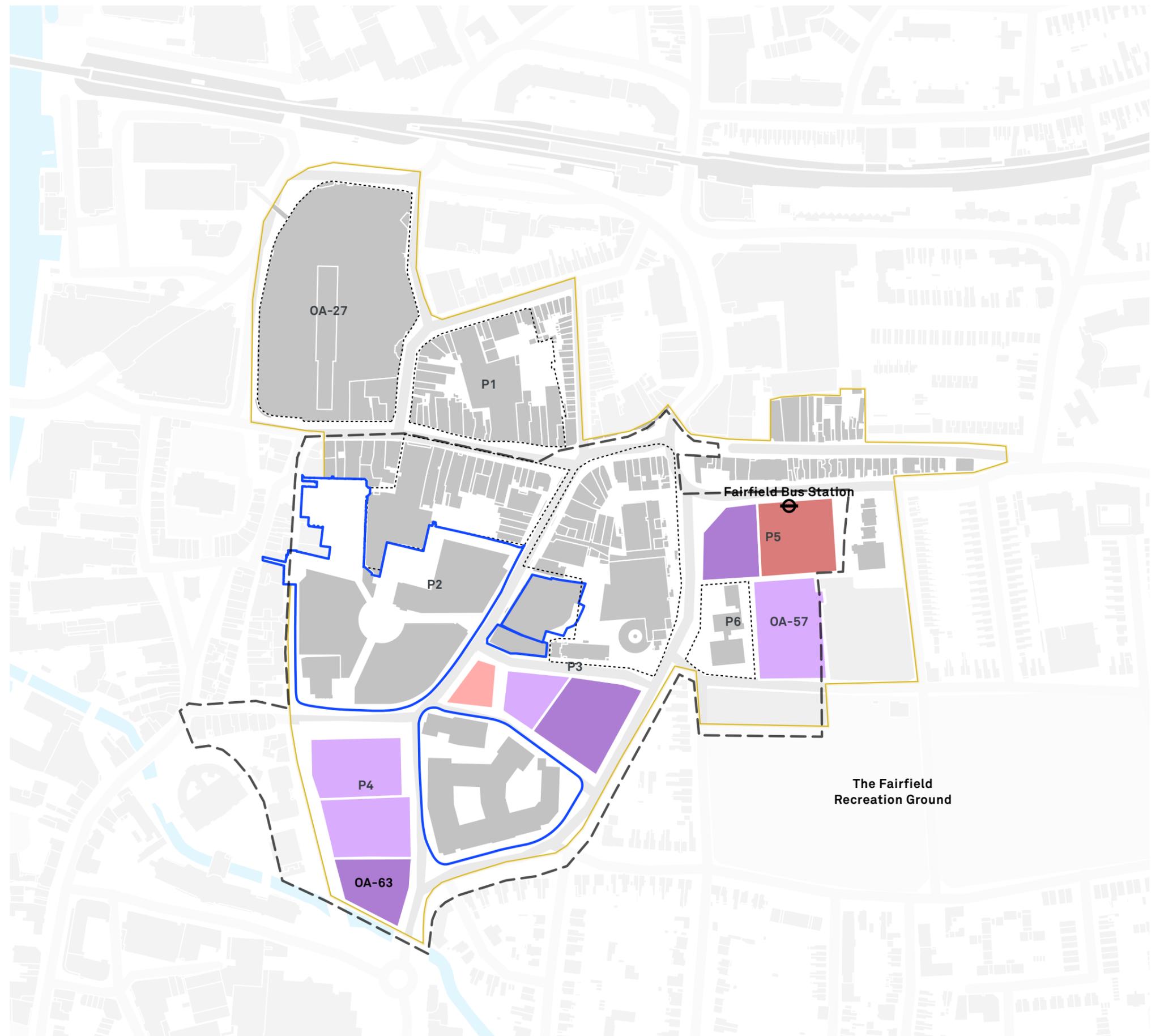
- Low density: <5 storeys
- Medium density: 5-8 storeys
- High density: 9-12 storeys

 'Live' development

 Existing to be retained / Anticipated limited net gain

 Eden Quarter SPD boundary

* Open space will need to be provided as part of residential developments

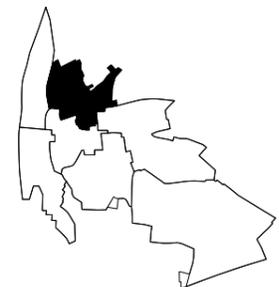


KINGSTON
STATION AREA



KEY

- Identified opportunity sites
- Kingston Station Area boundary





Kingston Station side entrance



Units opposite Kingston Station



Shop parade on Richmond Road



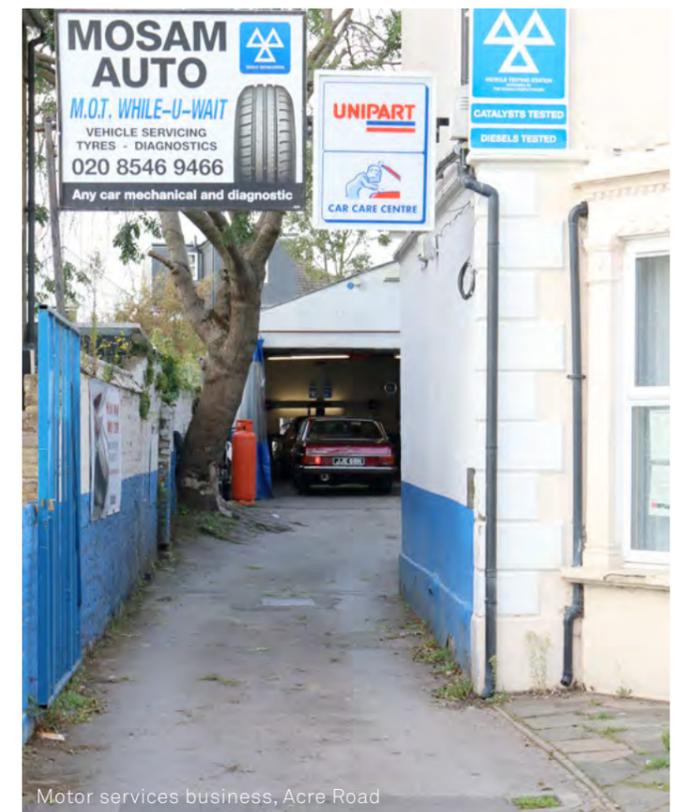
Kingston Station main entrance



Kingston College on Richmond Road



The Factory business units, Acre Road



Motor services business, Acre Road

AREA SUMMARY

Indicative scenario

Commercial-led mixed-use development is a priority through this area. Kingston is expected to enhance its prime and grade A office offer, particularly by consolidating an office quarter around Kingston Station.

There is an expectation of higher density built form around station and public transport interchanges, with Kingston businesses able to take advantage of increased connectivity in this area in the future. There is opportunity for supporting growth in the Kingston Station Area.

Distribution of density and appropriate height will support access and navigation to key destinations alongside the vitality and vibrancy of the commercial offer. The eastern edge of the Station Area is anticipated to be capable of supporting creative and small-scale workspace, including co-working, incubator and hybrid light industrial typologies. Adjacent to the Kingston College Creative Industries Centre, the opportunity to intensify fine-grain working yards and creative mews around Cowleaze Road could provide a dynamic workspace offer to complement the grade A office provision. A range of commercial workspace with excellent connectivity could stem the perceived 'brain drain' of young entrepreneurs leaving Kingston after graduating, as well as attract new large employers.

Key considerations and constraints

- This area has some definition through the North Kingston Development Brief, with one of the largest sites (Kingston Gasholder site) currently progressing with construction.
- The eastern part of this development area contains sites that provide space for employment uses including some creative industries. The development scenarios seek to retain and protect these uses, whilst intensifying and complementing this activity.
- There are key protected views through the area including visual links to Richmond Park, which will impact upon large scale development.
- There are a small number of listed buildings within this area including the former regal cinema.

Site	Land use	Low		Medium		High		Planning application	
		Homes	Commercial (sqm)	Homes	Commercial (sqm)	Homes	Commercial (sqm)	Homes	Commercial (sqm)

KINGSTON STATION AREA

P8	Commercial-led mixed-use	24	3,369	32	5,363	40	8,594		
P9	Predominantly residential	9	0	12	0	18	0		
P10	Commercial-led mixed-use	83	11,167	111	17,776	139	28,488		
P11	Commercial-led mixed-use	16	3,283	21	5,226	26	8,375		
P19.1	Commercial-led mixed-use	0	0	0	0	0	0	315	4,725
P19.2	Commercial-led mixed-use	10	2,352	13	3,744	17	6,000		
P19.3	Education-led mixed-use	11	0	17	0	23	0		
P20	Commercial-led mixed-use	53	12,466	71	19,843	89	31,800		
OA28	Commercial-led mixed-use	105	20,014	140	31,859	175	51,056		
OA29	Commercial-led mixed-use	74	7,345	99	11,692	123	18,738		
OA30	Commercial-led mixed-use	44	8,242	59	13,120	73	21,025		
OA42	Commercial-led mixed-use	96	13,333	128	21,224	160	34,013		
OA44.1	Commercial-led mixed-use	90	14,173	120	22,562	150	36,156		
OA44.2	Commercial-led mixed-use	0	0	0	0	0	0	27	29,307
OA45	Commercial-led mixed-use	87	16,082	116	25,600	145	41,025		
OA46	Commercial-led mixed-use	84	14,658	112	23,334	140	37,394		
OA47	Commercial-led mixed-use	0	0	0	0	0	0		
OA48	Education-led mixed-use	41	0	61	0	82	0		
OA49	Commercial-led mixed-use	173	34,984	230	55,688	288	89,244		
OA50	Predominantly residential	14	0	18	0	29	0		
OA51	Other sites	20	0	30	0	40	0		

1,350 166,250 1,700 261,750 2,075 416,750

to nearest 25 to nearest 250m2 to nearest 25 to nearest 250m2 to nearest 25 to nearest 250m2 inc. in all scenarios

Indicative scenario	1,750 homes to nearest 25	324,000 sqm commercial to nearest 250m2
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Note:

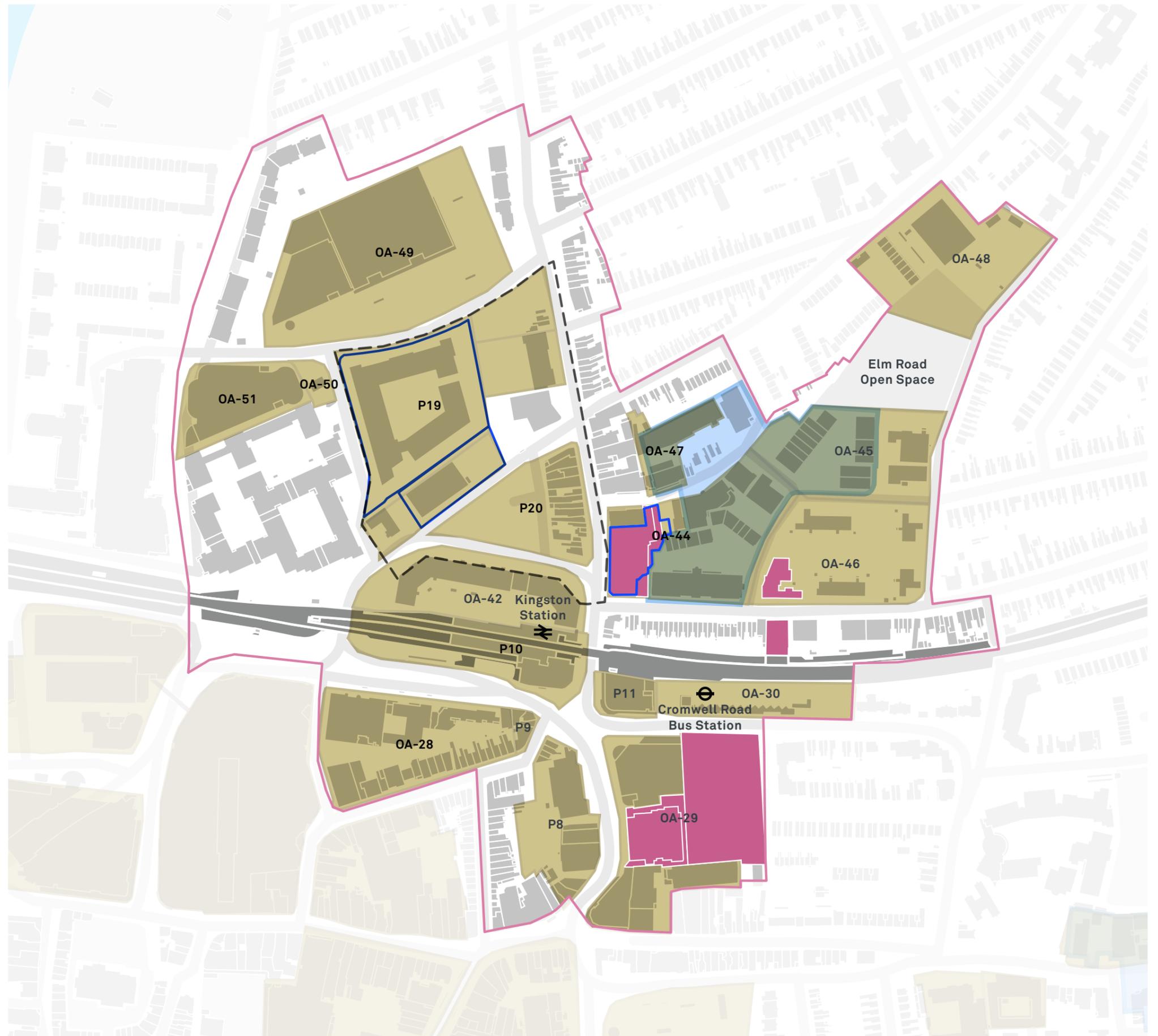
- Figures include identified current and forthcoming development within scenarios upon the following sites: P19.1, OA44.2
- A number of sites provide no opportunity owing to listed buildings or current land uses.

CONSTRAINTS

KEY

- Listed buildings
- Identified opportunity sites
- 'Live' development
- Locally Significant Industrial Site
- North Kingston Development Brief boundary
- Kingston Station Area boundary

* Flood zones not shown



INDICATIVE SCENARIO: DENSITY AND LAND USE

The indicative scenario shows one of many possible mixes of density that should be considered through onwards work.

KEY

Predominantly residential

- Low-medium density: 2-5 storeys
- Medium density: 5-10 storeys
- High density: 16-20 storeys

Residential-led mixed-use

- Low-medium density: 6 storeys
- Medium-high density: 7-10 storeys

Commercial-led mixed-use

- Low-medium density: 2-5 storeys
- Medium density: 5-8 storeys
- High density: 9-16 storeys

Educational-led mixed-use

- Low density: <5 storeys
- Medium density: 5-8 storeys
- High density: 9-12 storeys

Sui Generis

- Low density: <5 storeys
- Medium density: 5-8 storeys
- High density: 9-12 storeys

 'Live' development

 Existing to be retained / Anticipated limited net gain

 North Kingston Development Brief boundary

* Open space will need to be provided as part of residential developments

