

**Section 3**

**Existing Site Analysis**

# Section 3 - Existing Site Analysis

## Local Plan Review

A review of the online Local Plan interactive map from 2015, identifies the various planning policy allocations for the Kew peninsula as a whole and opposite; a closer detailed study for the site area.

Apart from the allocation of DM OS 6 - Public Open Space, identifying and responding to the Thames towpath and river frontage, the only allocations specific to the site are the DM OS 2 - Metropolitan Open Land, and DM OS 11 - Thames Policy Area.

LBR's Adopted Development Management Plan states that development that involves the loss of MOL in return for the creation of new open space elsewhere will not be considered appropriate. However,

*'New uses will only be considered if they are by their nature open or depend upon open uses for their enjoyment and if they conserve and enhance the open nature, character and biodiversity interest of MOL.'*

*'Enhancement to MOL, where appropriate, for example by landscaping, removal or replacement of inappropriate fencing and screening, and reduction of the visual impact of traffic or car parking as well as opening up views into and out of MOL will be encouraged. Opportunities to increase the MOL's potential for wildlife will be maximised.'*

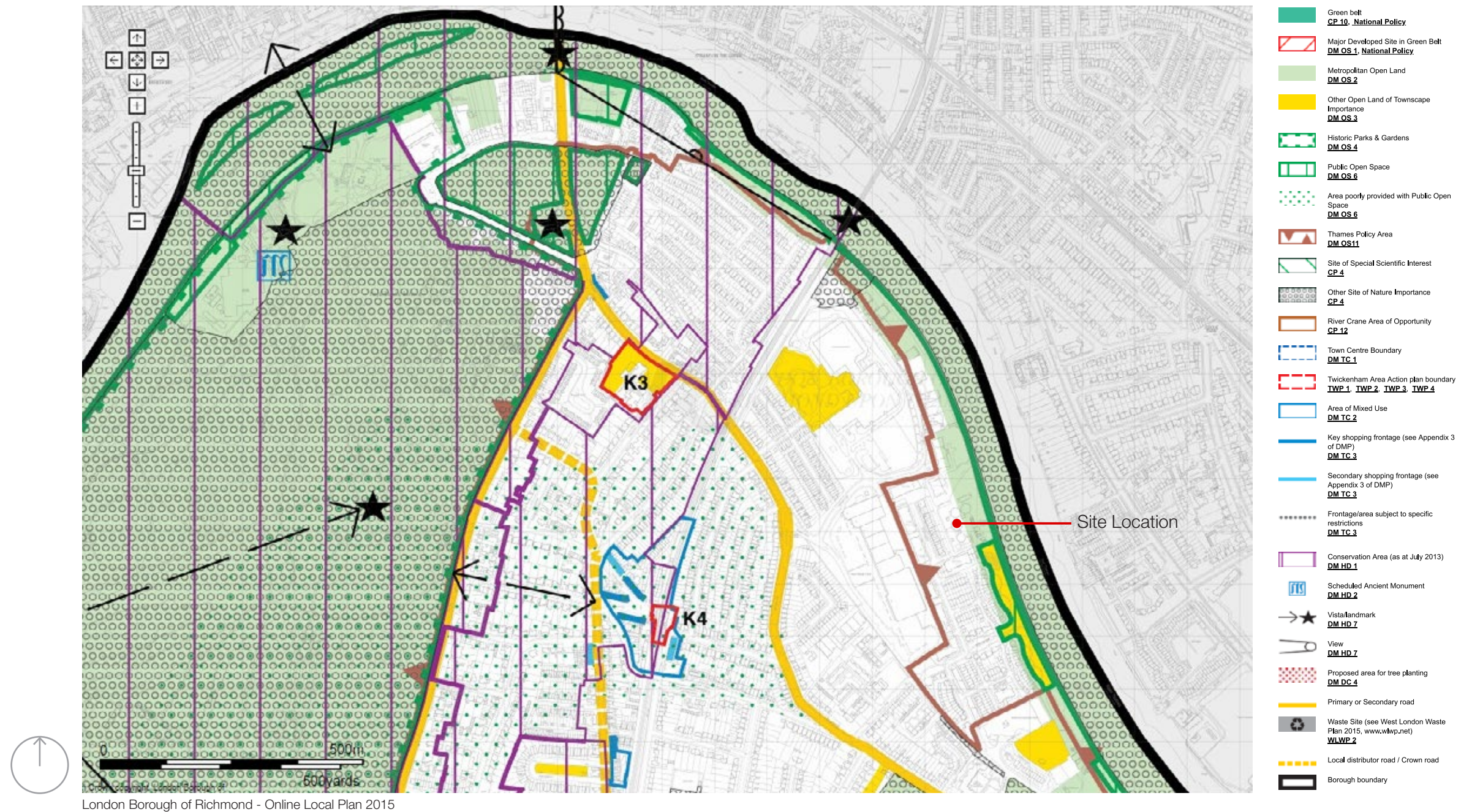
### Key

- Site Boundary
- ... Metropolitan Open Land Boundary
- Metropolitan Open Land
- Public Open Space Policy Area
- Thames Policy Area



London Borough of Richmond - Online Local Plan 2015  
Detail of Site Area







# Section 3 - Existing Site Analysis

## Metropolitan Open Land Zone

The Metropolitan Open Land (MOL) designation is unique to London and protects strategically important open spaces within the built environment. MOL plays an important role as part of the LBR and London-wide green infrastructure network, and improvements in its overall quality and accessibility are encouraged.

PPG 2 identifies that the contribution of MOL is of equal standing as Green Belt and that it should therefore be protected as a permanent feature. In safeguarding this open land for predominately open use, the policy also recognises that there may be exceptional cases where appropriate development could be acceptable, with Water, waste water treatment and sewage treatment plants, being identified due to their essential utility infrastructure.

Critically, the Metropolitan Open Land (MOL) demarcation splits the site in two, and while the zone significantly reduced to the north of the site, the setback is fairly consistent along the length of this section of the Thames.

As illustrated opposite, a number of existing properties are therefore located within the zone, or extend into this zone, and included within these, are the existing structures located on the site.

### Key

- - - - Site Boundary
- ..... Proposed Building Footprint
- - - - MOL Line
- MOL Zone
- Buildings Encroaching the MOL

For a detailed analysis of the Impact of the development on the MOL, please refer to Section 4, page 80.







Thames Water

Saffron House

Terrano House

Melliss Avenue

Kew Retail Park

Emerald Gardens

National Archives

Strand Drive

Kew Meadow Path

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# Section 3 - Existing Site Analysis

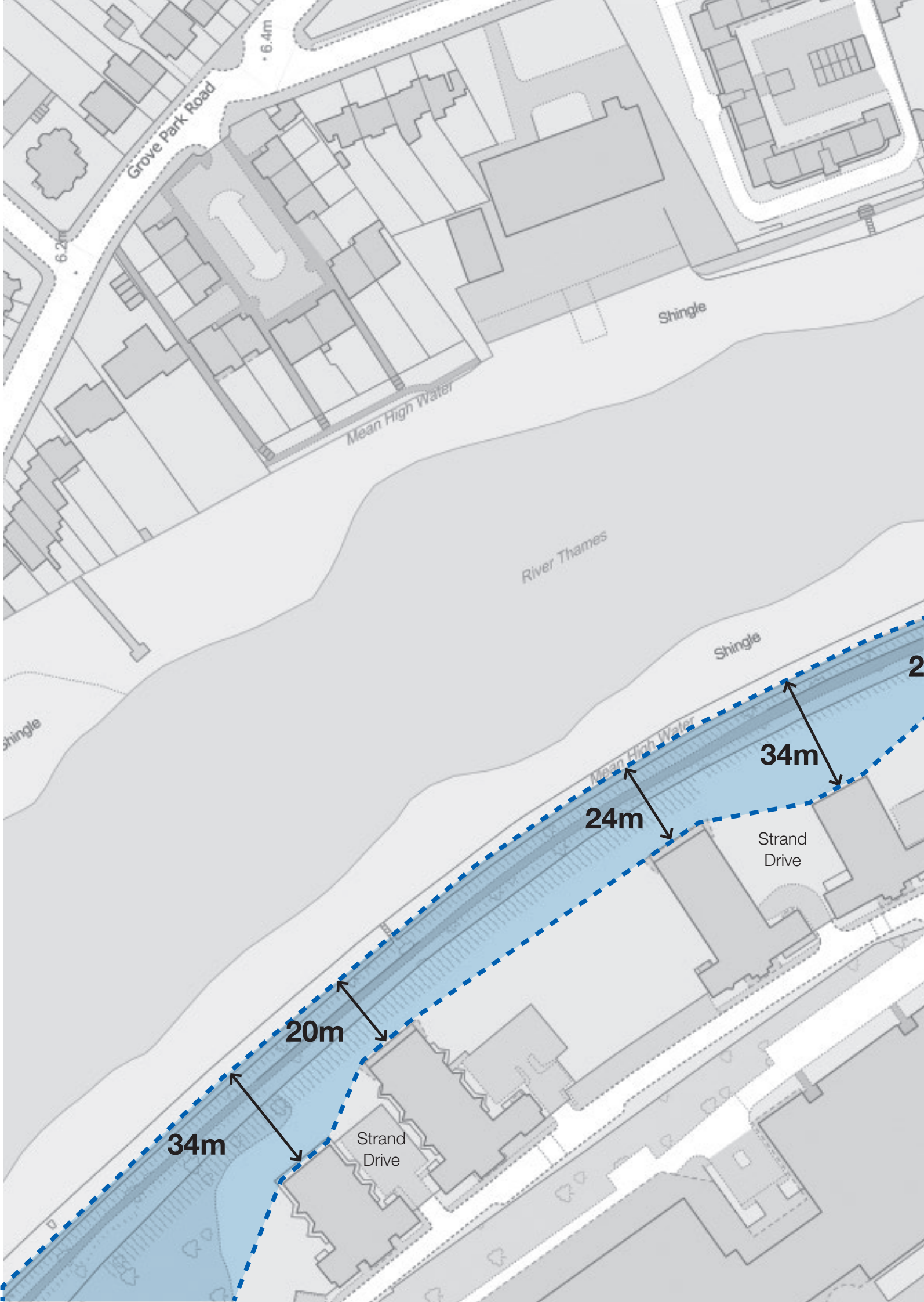
## River Setback Analysis

A review of the existing building setbacks along the river illustrates that there is no strictly enforced building setback line, nor is there an implied setback line based on buildings having a common distance from the edge of the riverbank.

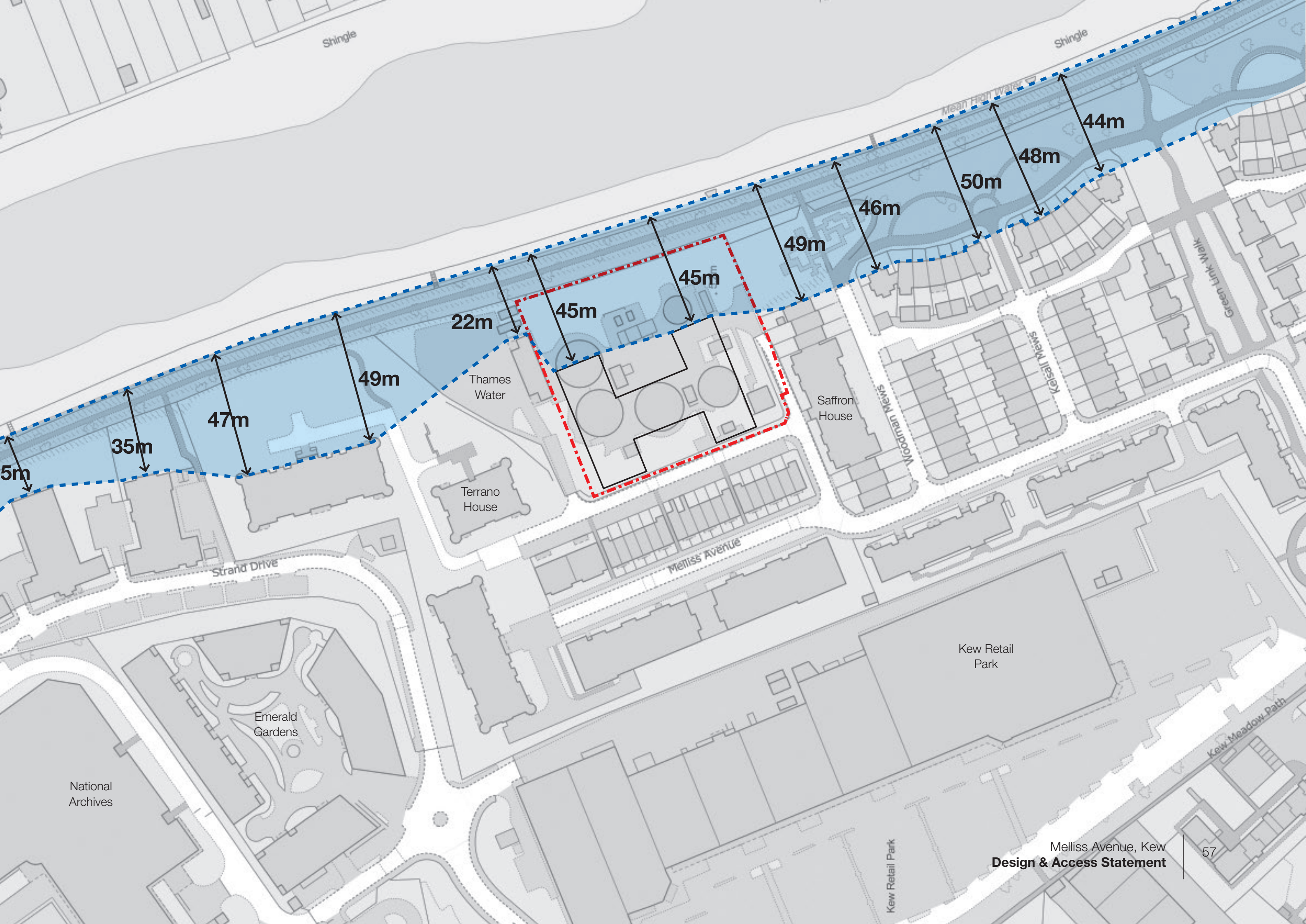
It is interesting to note that to the north, the building setbacks are significantly closer to the towpath, than to the south.

### Key

- ..... Site Boundary
- Proposed Building Footprint
- - - Building Setback Line
- Setback Zone







Shingle

Shingle

Mean High Water

44m

48m

50m

46m

49m

45m

45m

22m

49m

47m

35m

5m

Thames Water

Saffron House

Terrano House

Melliss Avenue

Strand Drive

Emerald Gardens

National Archives

Kew Retail Park

Kew Meadow Path



# Section 3 - Existing Site Analysis

## Site Vehicular Access

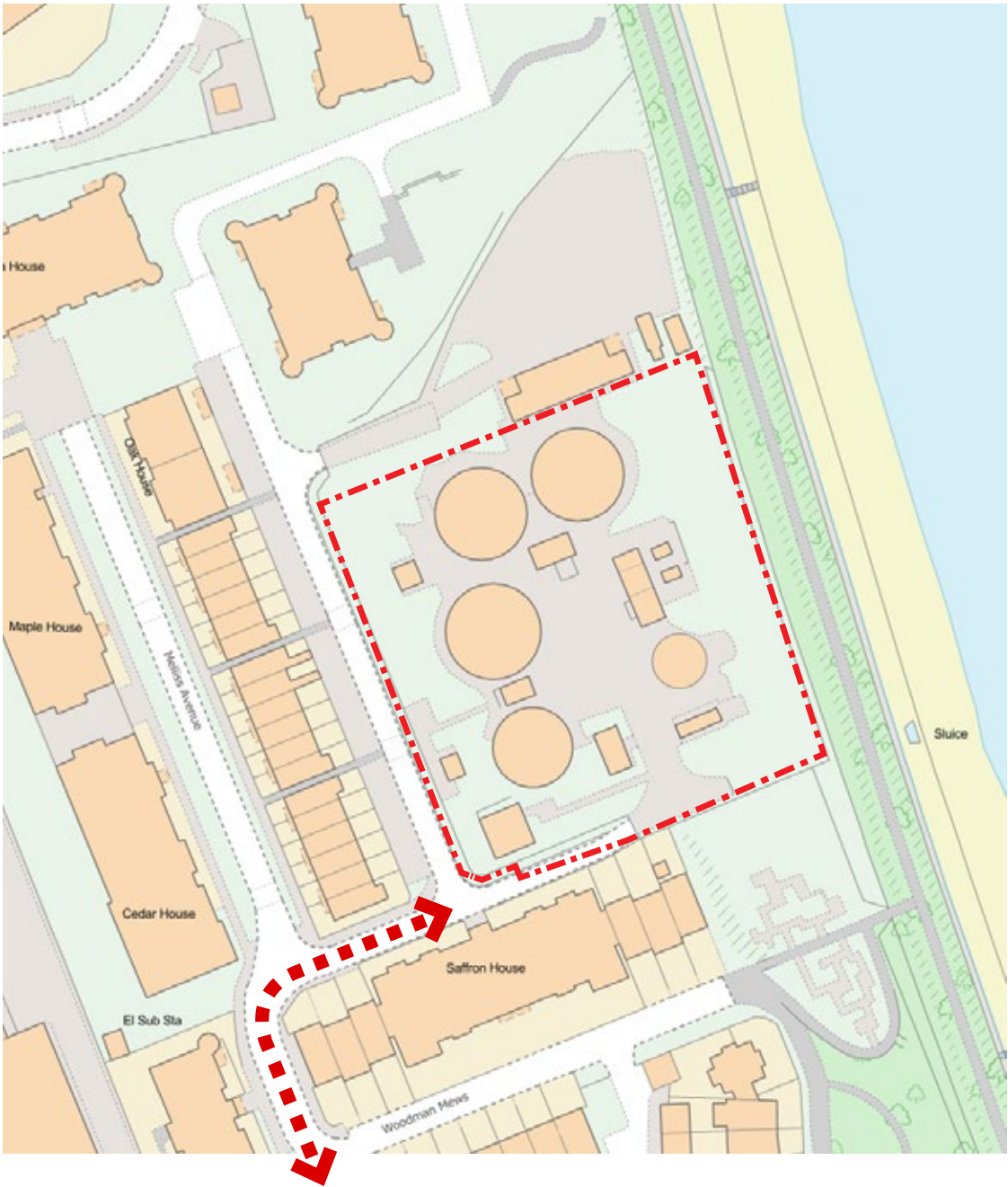
Currently, site vehicular access is provided from the south via Melliss Avenue and Townmead Road, connecting with Mortlake Road adjacent Kew Riverside Primary School.

Unfortunately, due to the location of privately owned land, respectively Kew Riverside Park and Kew Retail Park, these areas are fenced by a high metal security fence. There is therefore no vehicular access available to the site apart from the connection to the Townmead Road, and emergency vehicle access through West Hall Road.

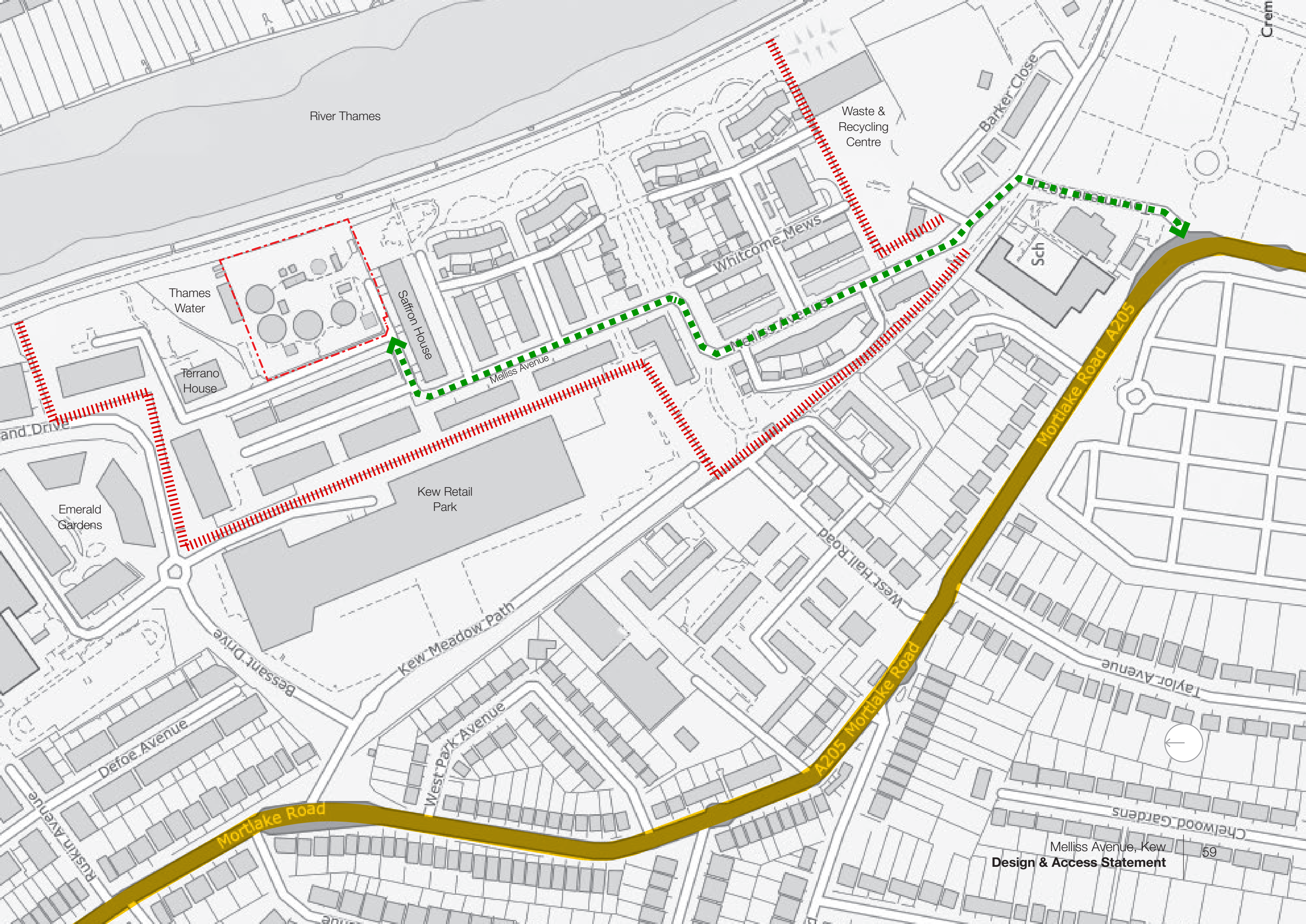
For more information regarding site vehicular access, please refer to the accompanying Transport Impact Assessment.

### Key

- Site Boundary
- South Circular Road
- Site Access Route
- Security Fencing - No Access







River Thames

Waste &  
Recycling  
Centre

Thames  
Water

Terrano  
House

Saffron House

Melliss Avenue

Whitcome Mews

Sch

Kew Retail  
Park

Emerald  
Gardens

Kew Meadow Path

West Park Avenue

A205 Mortlake Road

Mortlake Road A205

Taylor Avenue

Chelwood Gardens

Melliss Avenue, Kew

Design & Access Statement



# Section 3 - Existing Site Analysis

## Pedestrian Access

The main pedestrian access, as per vehicular, is via Melliss Avenue to the south, connecting with Mortlake Road. A secondary link is provided to Mortlake Road through the public garden to Kew Riverside, adjacent West Hall Road. However, this is a gated access and as such does not provide access 24hrs a day.

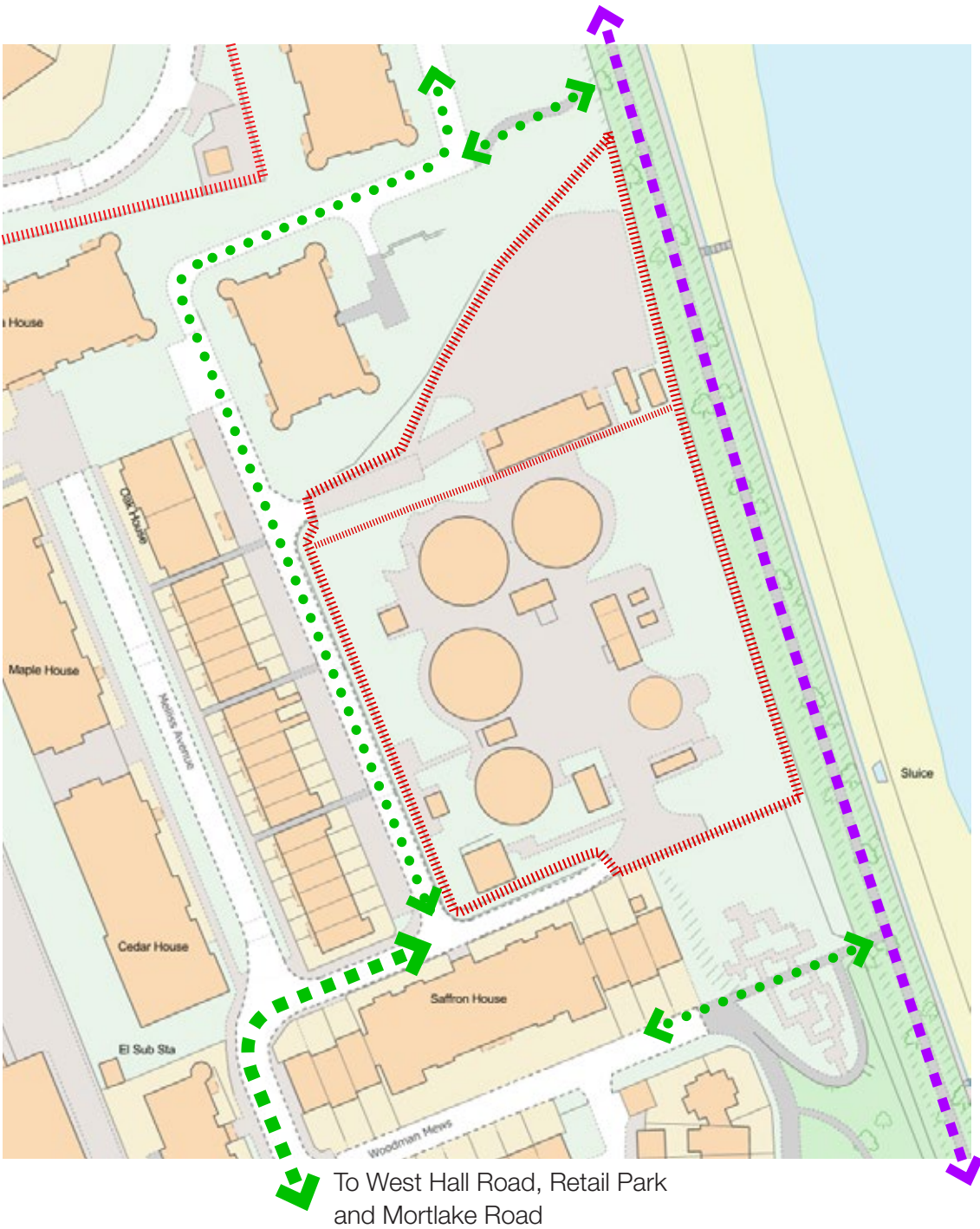
Due to security fencing to the east of the Retail Park and south of Emerald Gardens, there is no pedestrian access to the north or west apart from the routes identified above, and those accessing the towpath to the east.

As is the case further to the south, two access points are provided to the towpath; one to the north of the Thames Water site, and one to the south from Woodman Mews.

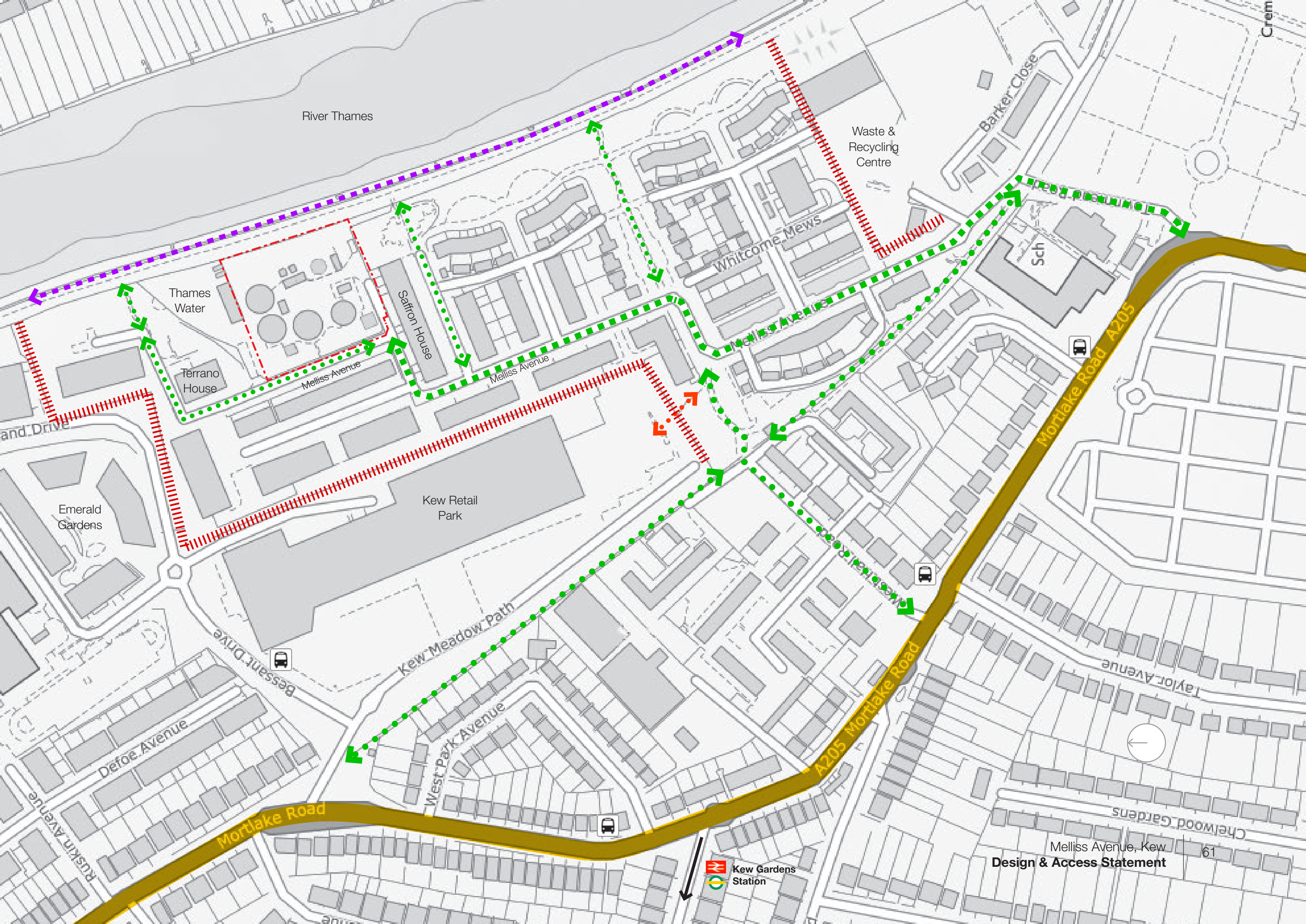
The Thames towpath is used by both pedestrians and cyclists alike, and although not designated as a national cycle route, the towpath is identified as an off-road cycle path.

### Key

- Site Boundary
- South Circular Road
- Main Pedestrian Access Route
- Secondary Pedestrian Linkage
- Thames Towpath / Cycle Route
- Security Fencing - No Access
- Controlled Access
- Bus Services
- Train Services







River Thames

Waste & Recycling Centre

Thames Water

Terrano House

Saffron House

Whitcome Mews

Sch

Emerald Gardens

Kew Retail Park

Kew Meadow Path

West Park Avenue

Mortlake Road

A205 Mortlake Road

Mortlake Road A205

Taylor Avenue

Chelwood Gardens

Melliss Avenue, Kew

Kew Gardens Station

Design & Access Statement



# Section 3 - Existing Site Analysis

## Built Form Analysis

### Urban Planning - Figure Ground

A figure-ground diagram is a two-dimensional map of an urban space that shows the relationship between built and unbuilt space. It is used in analysis of urban design and planning to organise primary urban landscape components i.e. plots, streets, constructed spaces, and open spaces – into a diagram of solid and void.

If building mass is greater than open space, spatial continuity is achieved through street walls and articulated public spaces, creating a mixed-use urban environment that fosters pedestrian activity. If open space is greater than building mass, buildings become disconnected, and voids lack spatial definition.

As can be seen by the figure ground plan opposite, there are a range of building sizes in the locale, and where most adjacent to the site, buildings are of a rectangular form, approximately 18m wide and arranged along roads and avenues aligned north-south / east-west.

Emerald Gardens to the north of the site breaks this somewhat with a circular planning arrangement around a central courtyard, this enables the buildings to address the road and surrounding context, whilst providing articulation, control and definition to the internal landscaped space.

### Building Heights

As illustrated opposite, there are a range of building heights and scales in the locale, most notably the National Archives being the largest building in the peninsula, with Kew Retail Park similar in footprint, although approximately 3 storeys lower.

Adjacent to the site, buildings range in height from 5 storeys, with the buildings to north such as Terrano House, and those to the south being predominantly 4 storeys (Saffron House and beyond) - utilising the roof as additional accommodation.

Melliss Avenue town-houses are at 3 storeys, with those to the northern most block similarly utilising roof space for a 4th level.

The predominant number of storeys in the vicinity of the site therefore ranges between 4 and 5 storeys utilising full footprint accommodation, or roof spaces with dormer windows.

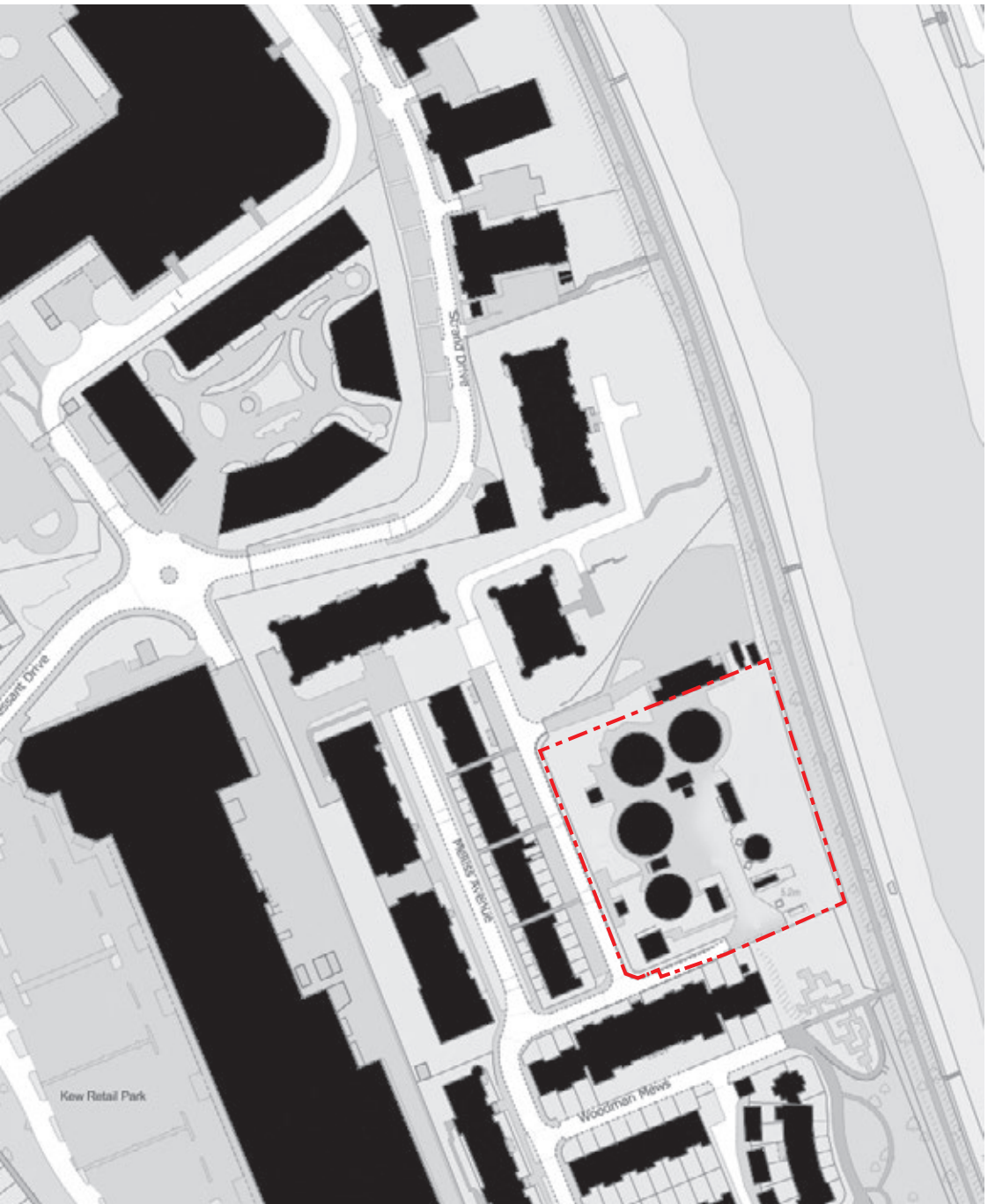


Figure Ground Plan





# KEY

- 7 Storeys
- 6 Storeys
- 5 Storeys
- 4 Storeys
- 3 Storeys
- Site Boundary





# Section 3 - Existing Site Analysis

## Views and Vistas

Due to the site's location, views and vistas to and from the building are limited to the surrounding residents and those similarly living on the eastern river bank.

View 1 identifies the view from the eastern side of the river and shows a tree lined towpath in front of the site. Although this view was taken in early spring, for the large part of the year, this view benefits from a strong tree and vegetation line along the river bank and as such is predominantly green with only glimpses of built form behind.

View 2, along the towpath, shows dense vegetation along this river route, and where in the summer it is clearly very rich with tree, shrub and grass growth, even in the winter views are limited due to evergreen and ivy growth.

View 3 illustrates the first view of the site as pedestrians or vehicles pass via Melliss Avenue. With this view currently obscured by the dense tree line surrounding the site, the proposals will open this view up to the tree line and river beyond.

View 4 illustrates the view from Terrano House and the pedestrian route to the north of the site.

View 5 gives an impression of the typical views residents of the new development will see of the trees lining the towpath, and glimpses beyond to the river behind.

For a detailed assessment of the views in and out of the site, please refer to Section 6.









# Section 3 - Existing Site Analysis

## Site Environmental Conditions

### Sun Path

The site's north-south axis is orientated approximately 22 degrees to the west, and therefore benefits from sunlight all year round. The site is only in shadow during the very early morning and late evenings in the summer, and for longer periods in the winter when the sun is lower.

There is therefore an opportunity to align the main body of any development similarly on a north-south axis, thereby providing the ability to maximise the number of units benefiting from direct sunlight, whilst limiting the number of units facing north.

### Flood Risk

Due to the site's location adjacent the River Thames, it is classed within a Flood Zone 3 area and therefore has a high probability for flooding. However, due to local flood defences being in place, such as the towpath, which is of built-up made ground, and regional defences such as the Thames Barrier, the risks of flooding are limited to approximately a 1% chance of river flooding each year, and 0.5% chance of sea flooding each year.<sup>1</sup>

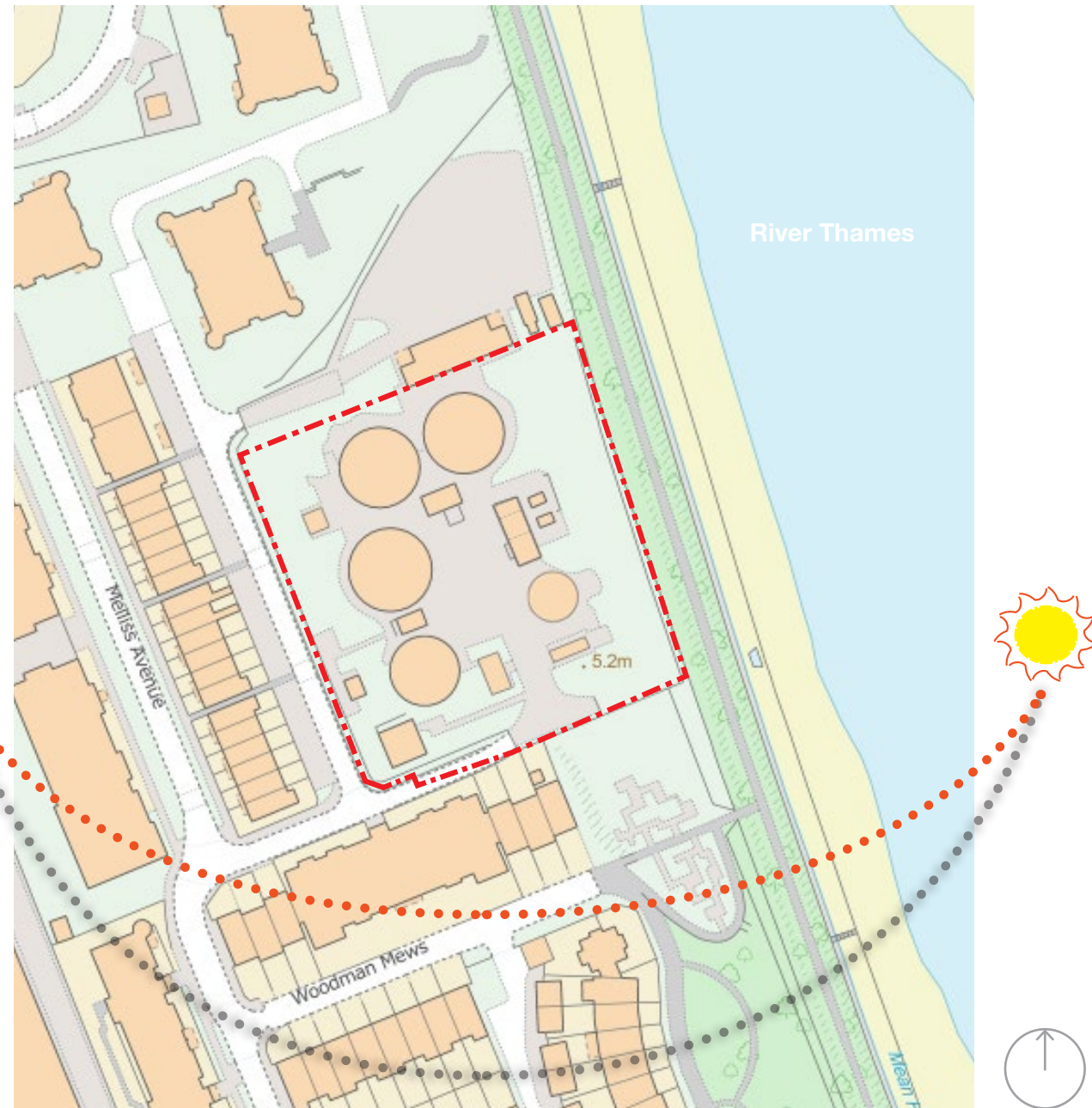
On review of the proposed development, the following feedback has been received by the Environment Agency in respect of Flooding:

*'...recommendations from Richmond's SFRA include that sites with an 'Extreme & Significant Hazard' and 'Moderate Hazard' tidal breach flood hazard should have ground finished floor levels situated above the Thames 2100 year tidal flood level. This is what we would expect to see on the proposed development.'*

*As well as this, as stated self-contained residential basements and bedrooms at basement level will not be permitted in flood zone 3. Therefore we are content that the proposed development does not include a basement/lower ground floor level.'*

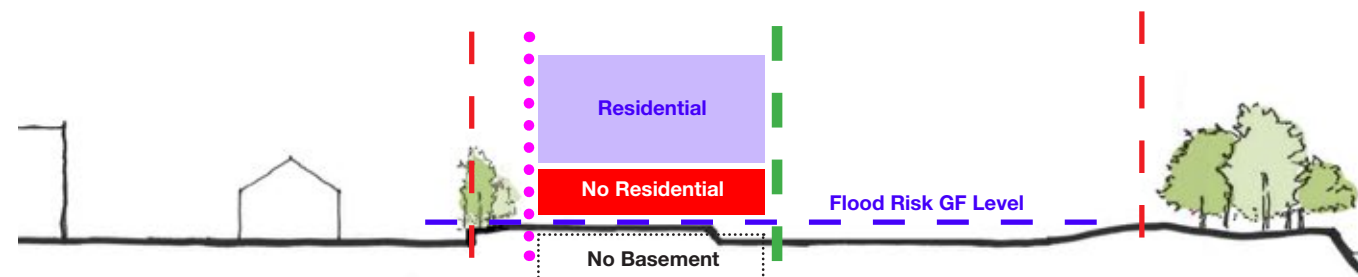
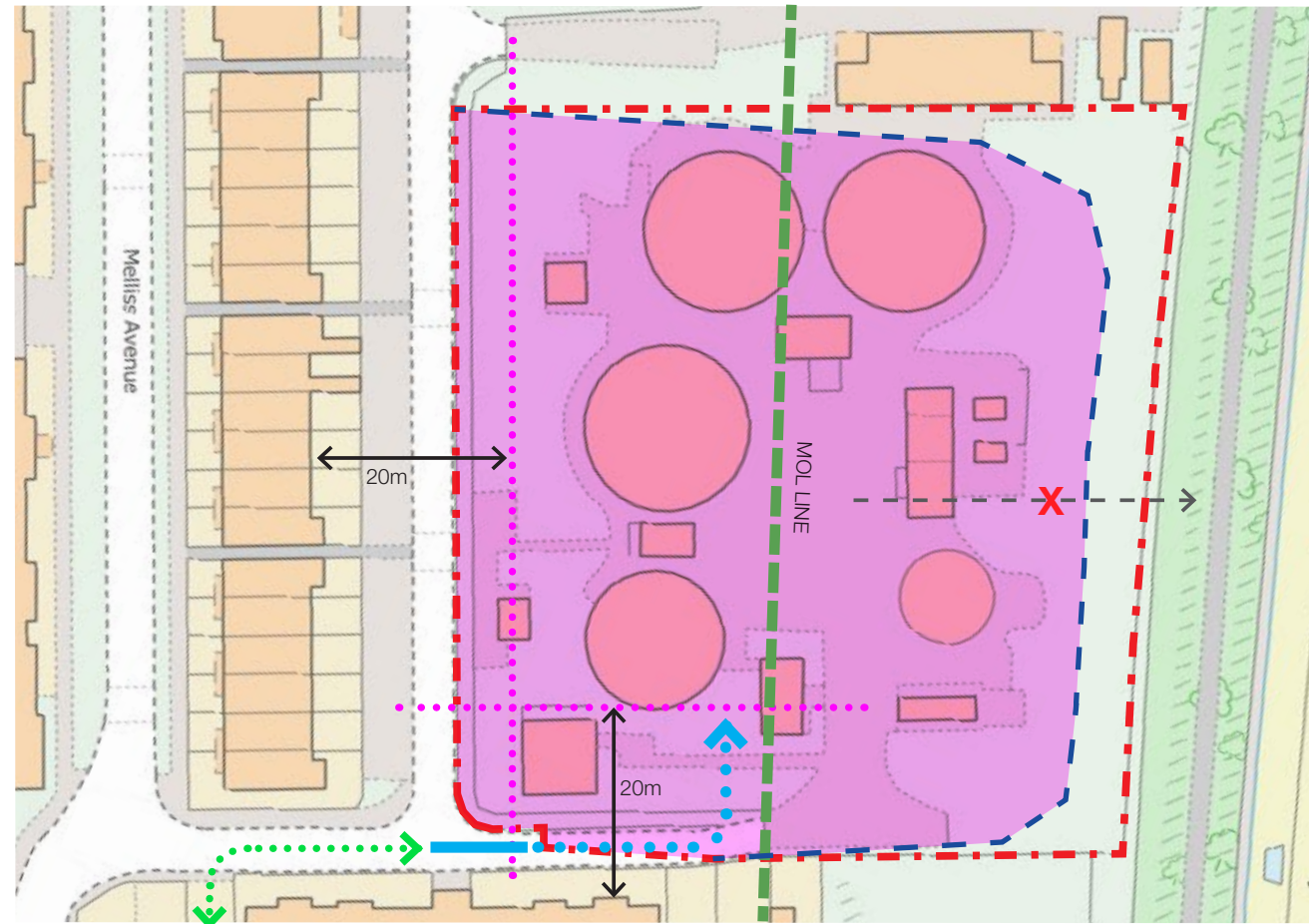
*The modelled breach flood level in this location is 6.09 m AOD. Therefore, we would expect to see the first floor finished floor levels to be set at this level or higher. We are satisfied with the proposed first floor finished floor level of 8.6 m AOD and the ground floor to be occupied only by 'less vulnerable' uses.'*


<sup>1</sup> <https://flood-map-for-planning.service.gov.uk>




Sun Path Study








 FRA / EA requires that no residential accommodation is located at Ground Floor due to flood risk. FRA / EA minimum level for residential is 6.00m AOD - GF would therefore be 2.0m above Ground Level


Basement can only accommodate plant, stores and car parking. Plant would be destroyed in the event of a flood, maintaining equipment at GFL enables a far quicker recovery and reinstatement for vulnerable residents

 Vehicular access would need to be from the South, at 1:10 a 30-35m long ramp would be required

 Setback is required from Saffron House to the South, no new buildings to encroach this zone - so use as grade level car park is sensible

 During construction, soil removal will require a period of using large trucks to access the site

 Ground water level would need pumping/de-watering and it is unlikely we could discharge straight into the river

 Extended duration of the works likely to impact local residents

**Creating additional GF area only increases communal space, as no specialist extra care units can be accommodated at this level**

Flooding Constraint Analysis  
Environment Agency



