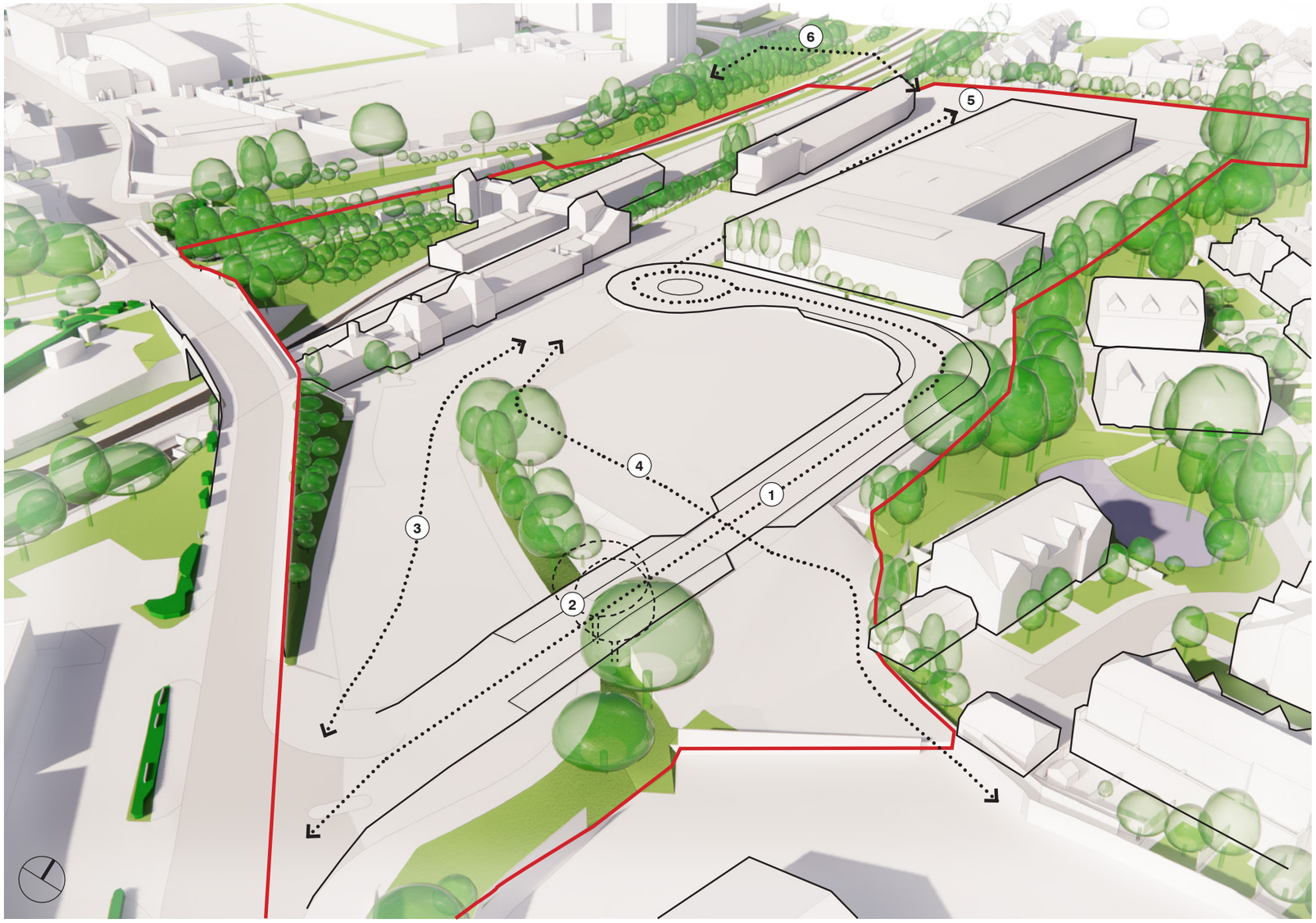



**5.3 transport infrastructure and pedestrian links**

**1** Introduction of key transport infrastructure that enables vehicular links from Regent Street to new bus stops, coach parking, taxi ranks and new station car parking.

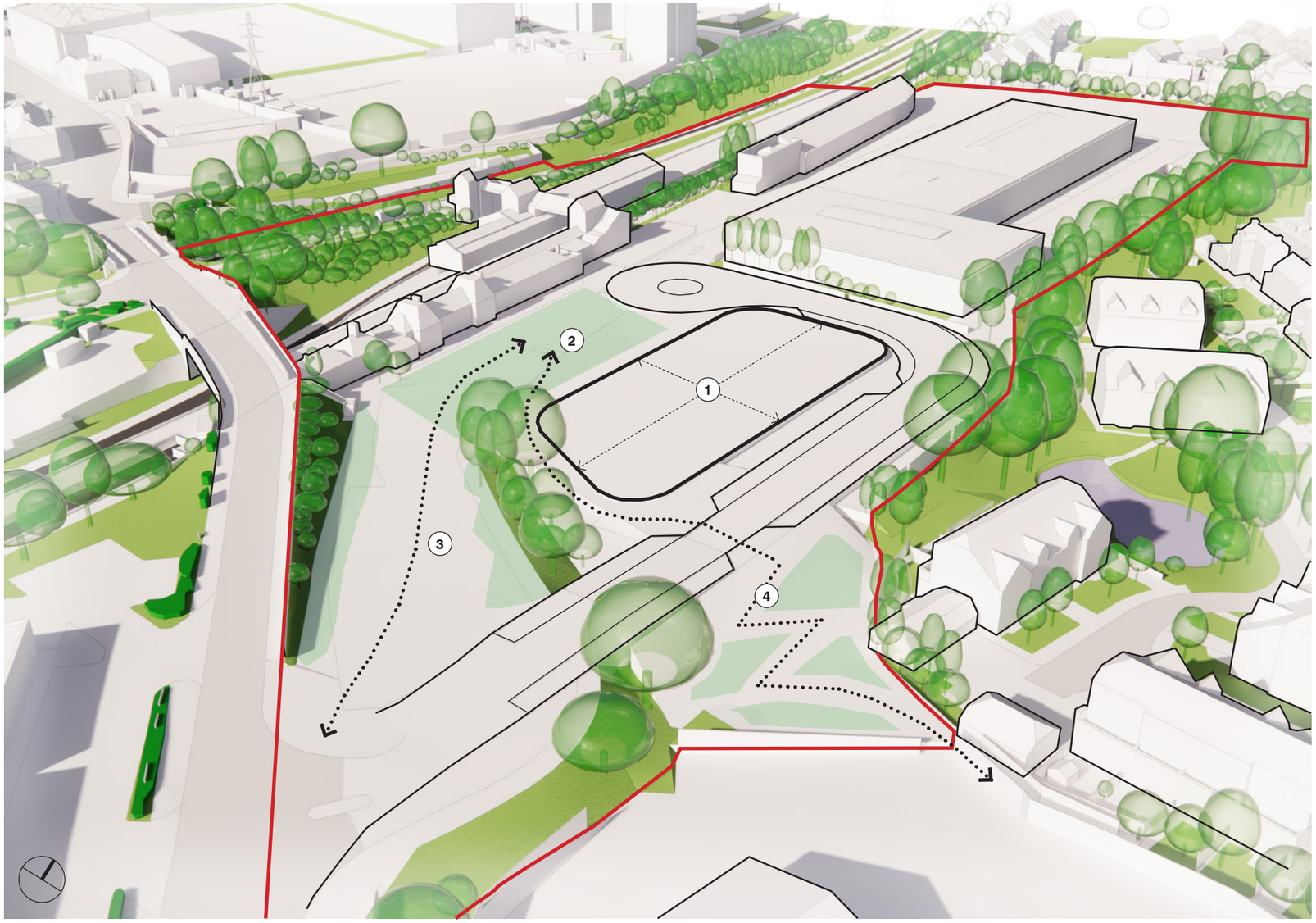
**2** Removal of a minimum possible number of trees and soft landscaping to allow vehicular route into the site.

**3** Station Approach not only provides a key pedestrian link from Regent Street to Wrexham General, but also very much a visual link. This approach will be retained but solely as a pedestrian route, facilitating wayfinding and providing a grand approach to the station.

**4** Another key link that exists is the pedestrian route from Wrexham General to the town centre via the boundary of the Royal Mail site. This will be retained but manipulated and improved to cater for the introduction of the new office building.

**5** New station car parking located to the North West of the site on the former Jewsons site compound.

**6** Introduction of new pedestrian connection from site to Crispin Lane allowing increased accessibility and permeability to the site.




**5.4 building positioning & public realm**

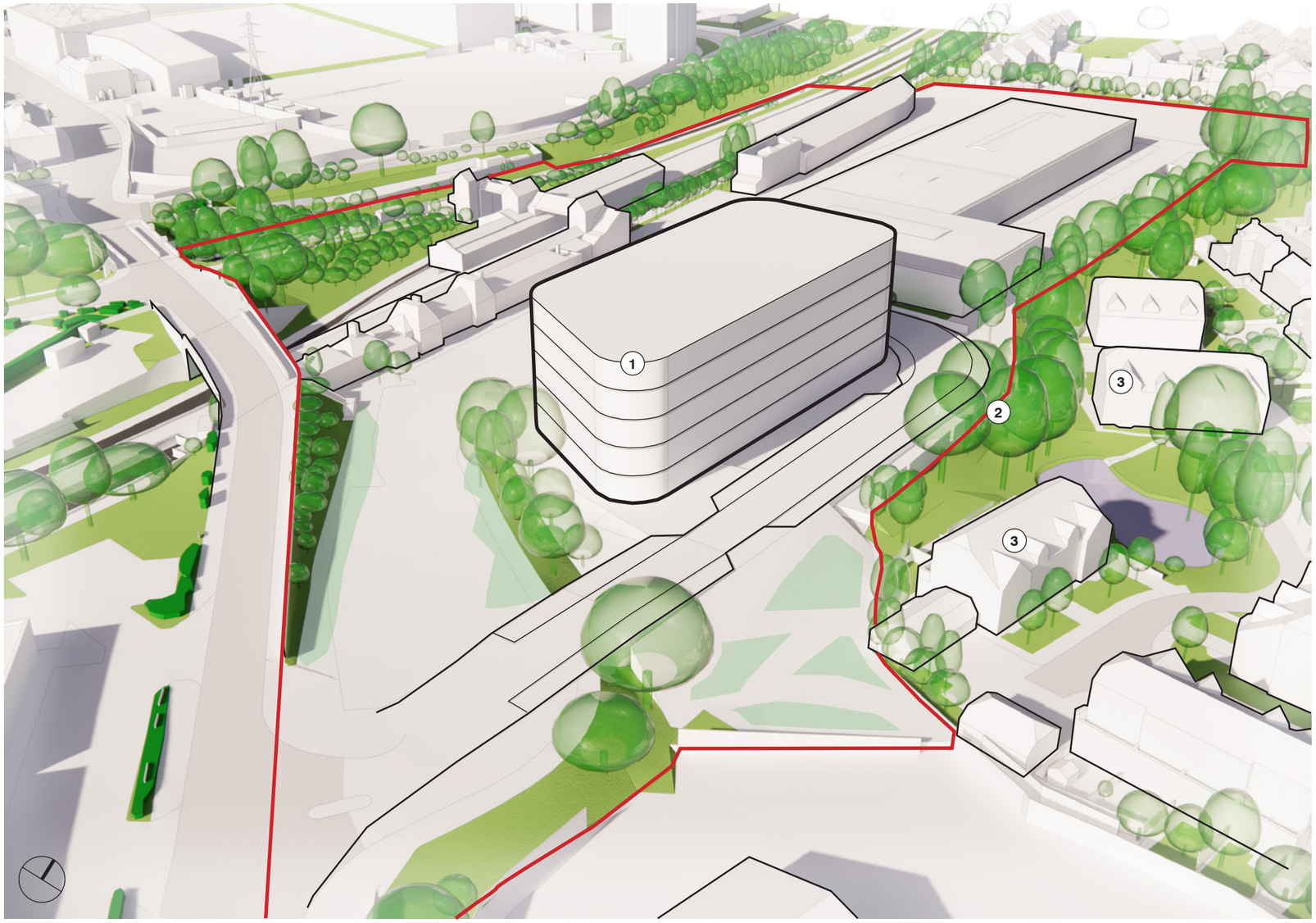
**1** The siting of the new office building is dictated by the constraints formed in the previous pages; the introduction of the new highways, the retention of the existing trees and soft landscaping and the retention of the existing pedestrian route.

The width and depth has been formed by maximising the potential floor plate north to south, while creating an appropriate zone east to west between the new building and the station for the creation of a generous public realm.

**2** Creation of a generous public realm providing a grand entrance / exit for Wrexham Station.

**3** Pedestrianising and greening of Station Approach

**4** The existing pedestrian route adjacent to the Royal Mail site currently follows the site boundary and is practical and understated. Redeveloping this route and making use of the former Wrexham District Scouts building allows it to become something more special and significant.



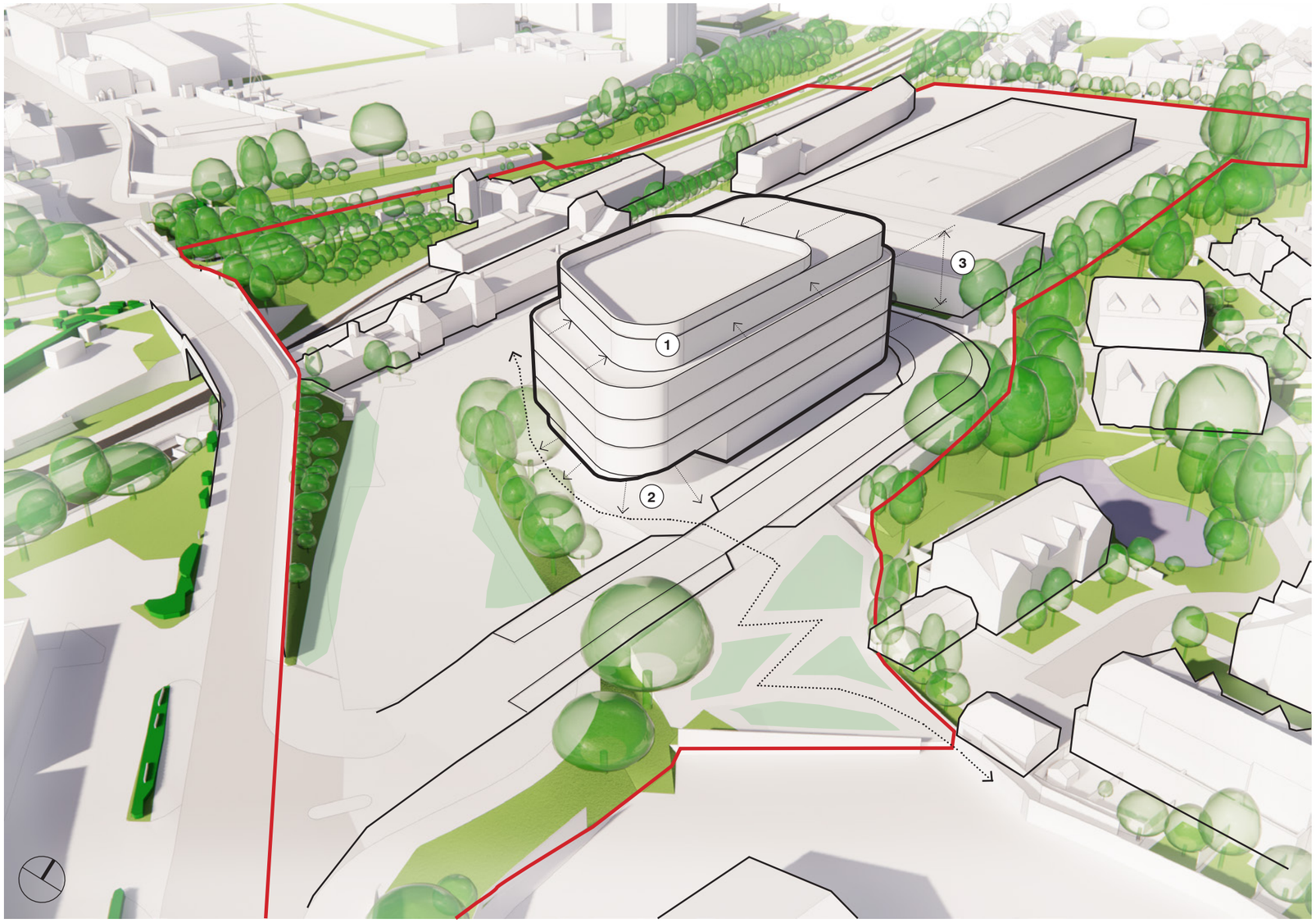

**5.5 building massing & quantum**

**1** The brief requirements meant a total of ground plus four storeys would be required to facilitate the necessary quantum of accommodation. When formulating this massing, several factors have been key to the decision making;

- creating a generous and impactful public realm for the station by constraining the building footprint west to east (discussed on previous pages)
- impact on neighbouring context
- providing a visual beacon for the station and surrounding public realm.

**2** Trees surrounding the existing boundary are of a significant size and will provide a generous amount of protection to the neighbouring residential areas.

**3** The neighbouring residential areas present three-storey semi-detached and terraced housing. The overall massing of the new building should be developed to reduce the overall visual impact.

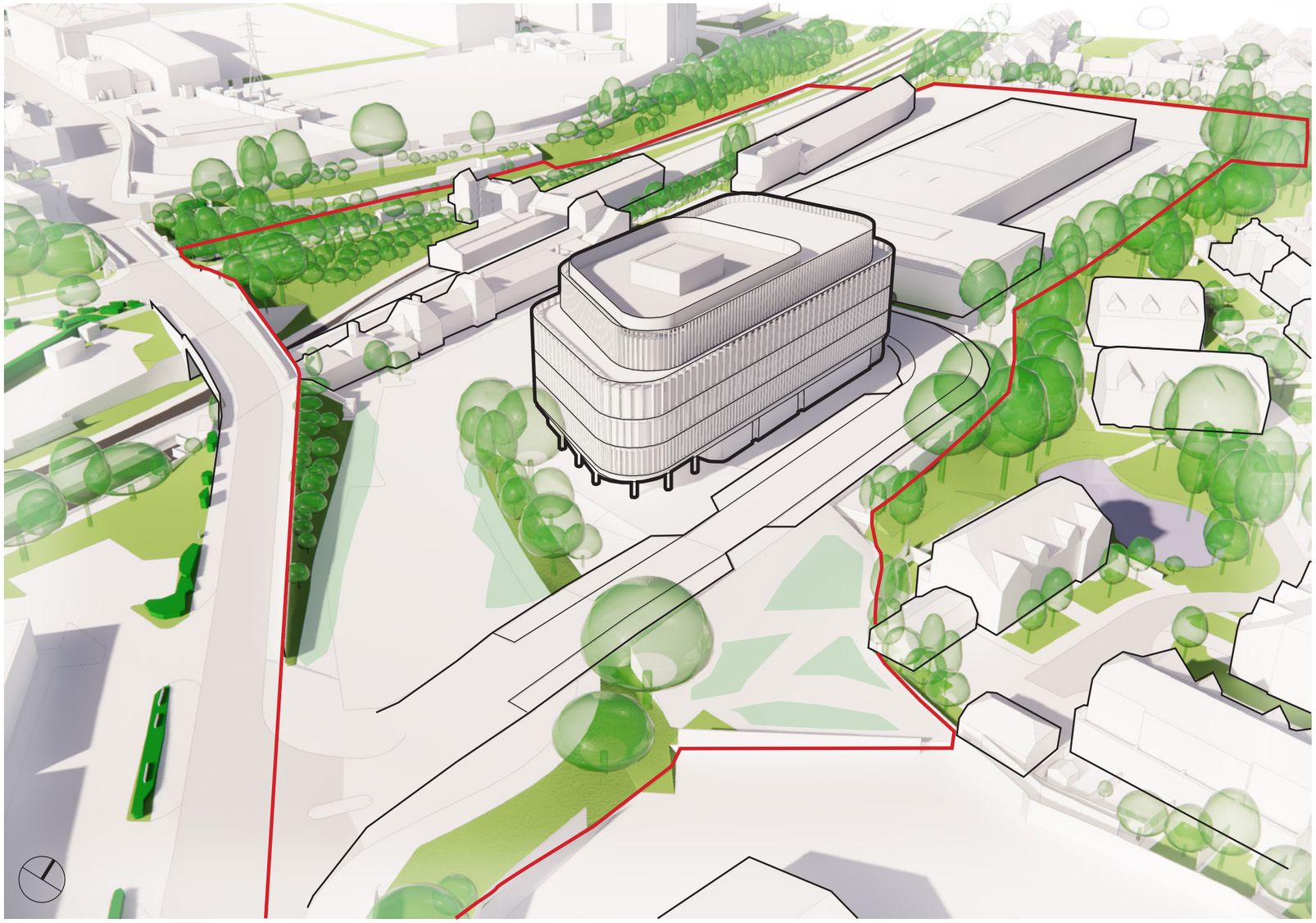



**5.6 massing development**

**1** The massing has been developed and broken down to reduce the impact on the surrounding context. Upper floors have been set back to provide external terraces to office space while creating a lower overall ‘building line’.

**2** Ground floor areas have been cut and carved to create covered zones. This will facilitate active frontages and natural surveillance along the pedestrian route.

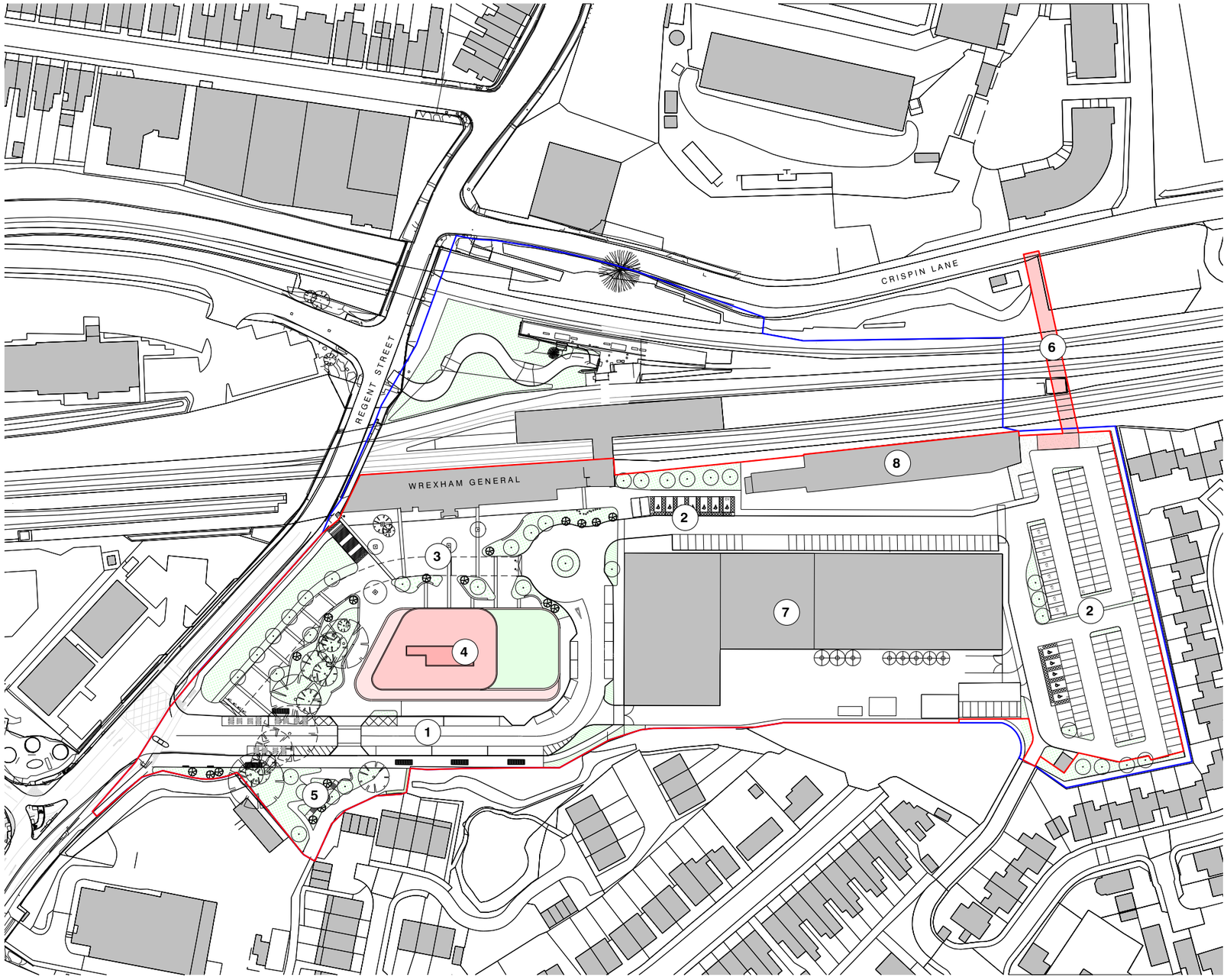
**3** The steps and recesses between the ground and fourth floor allow the main portion of the massing to be expressed as a three storey expression, breaking it down from the former 5 storey massing.



# 5.0 design development

### 5.7 articulating the facade

The massing development created an appropriate base for the proposals. Articulating the facade through solids and opening further animates the proposals. The concept and development of the design approach is discussed in more detail later in the document.




### 5.8 Indicative Site Plan

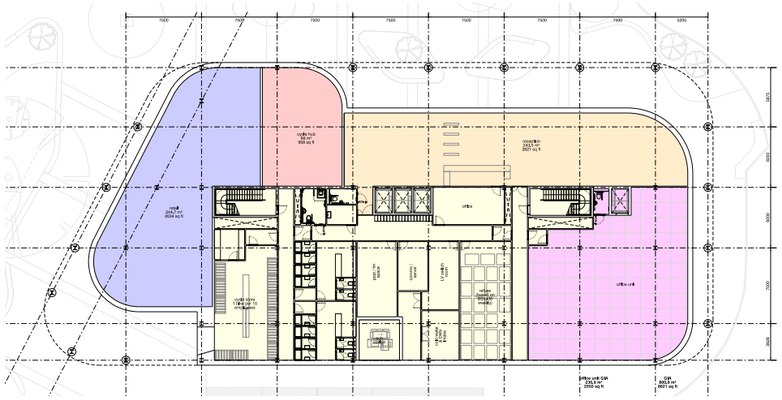
The landscaping, masterplanning and architecture principles discussed in the previous sections of this report have formulated the adjacent overall indicative site plan. The proposals are made up of 6 key elements listed below.

**1** main vehicular access & egress into site
**2** wrexham general and office building parking area
**3** public realm
**4** new office building
**5** pocket park / public footpath route into wrexham
**6** new pedestrian footbridge
**7** existing warehouse change of use to brewery use
**8** cambrian shed change of use for museum and tap house

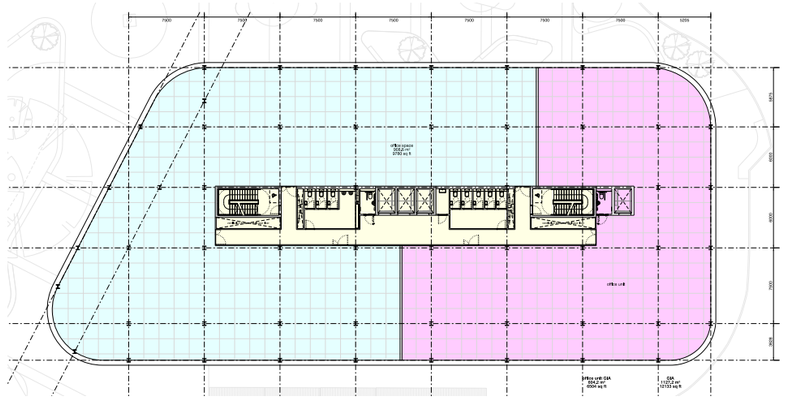
### 5.9 Indicative Floor Plans

In addition to the wider site plan, indicative developed design proposals were prepared specifically for the office building. This process involved the design and coordination of architectural, structural and MEP disciplines to ensure the overall parameters proposed are of an appropriate size and scale.

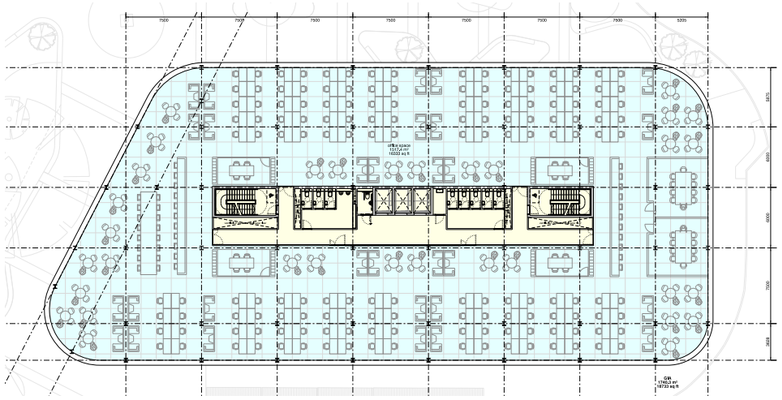
Further to the building practicalities, the developed scheme has also been assessed from a cost perspective to ensure affordability and deliverability.



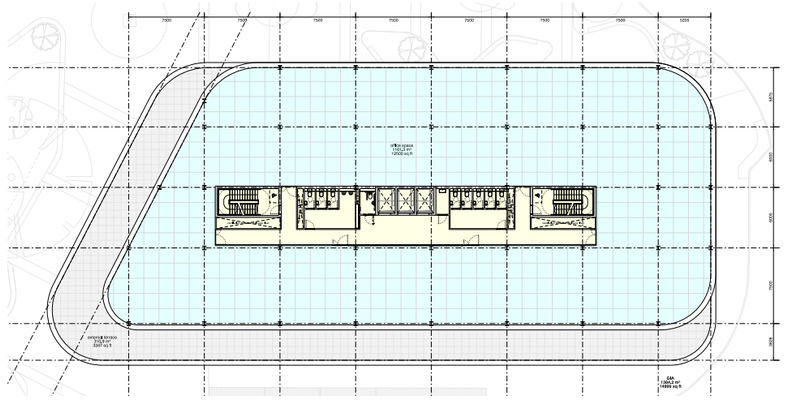
ground floor plan



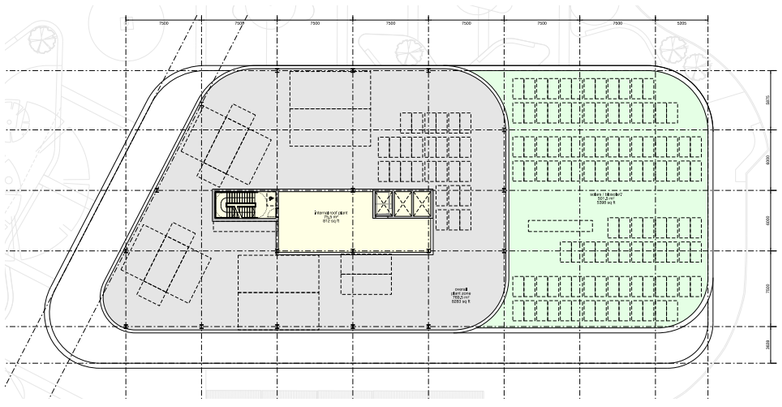
first floor plan



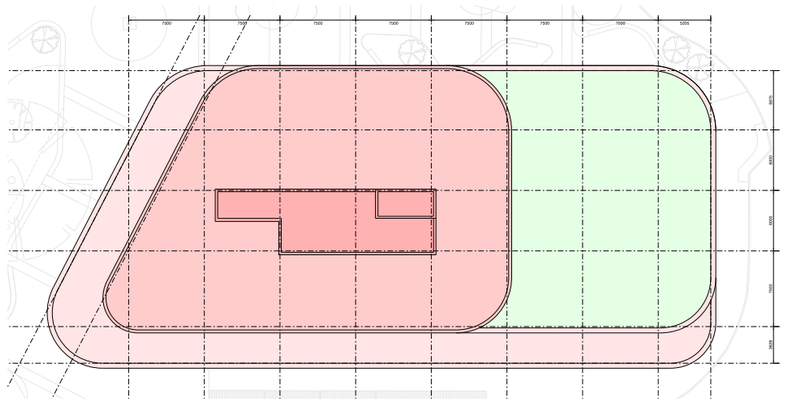
second floor plan



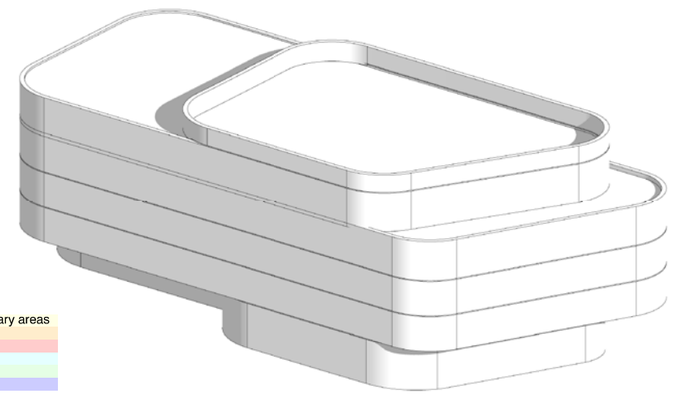
third floor plan



roof plant floor plan



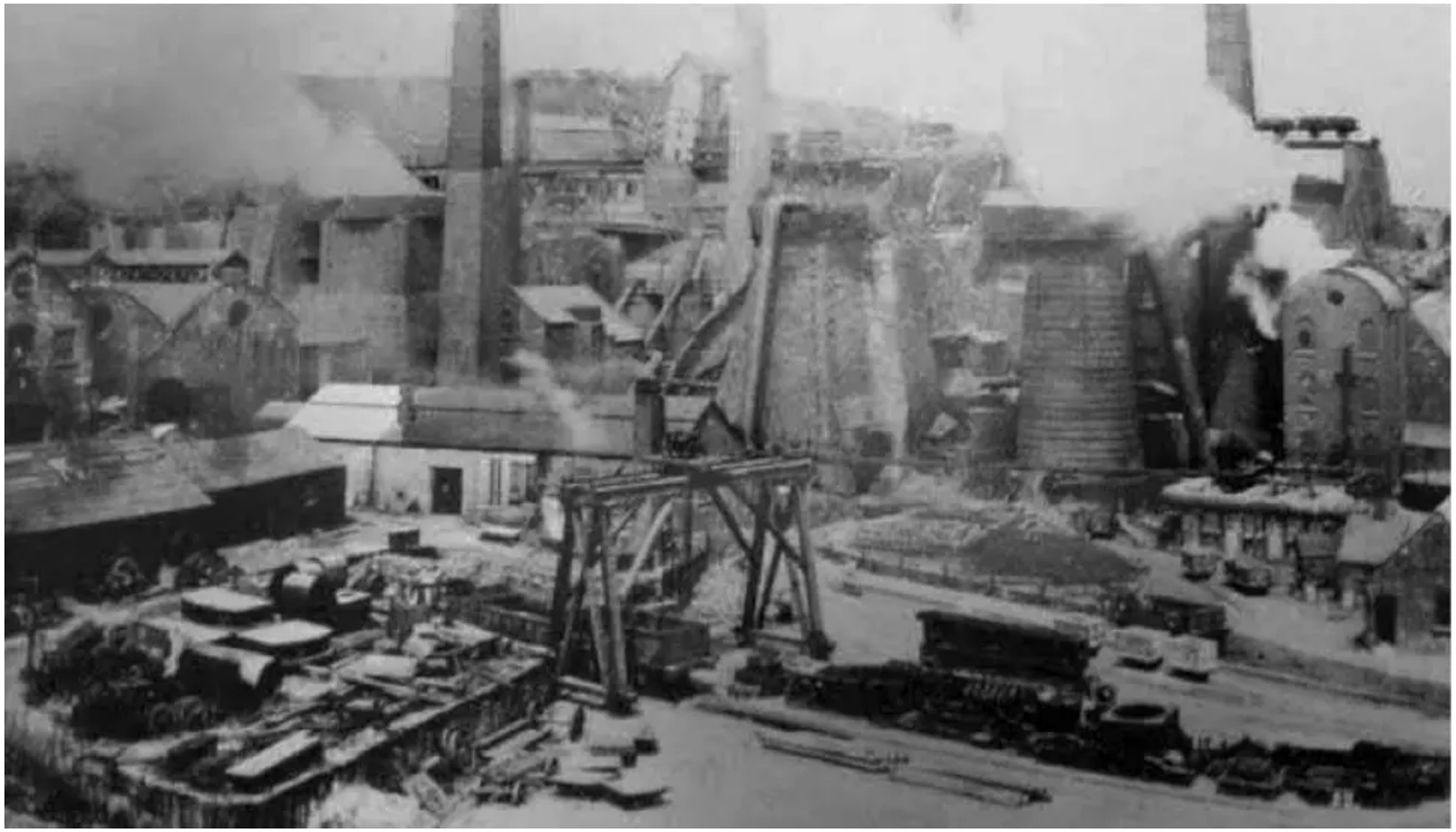
roof plan



stephenson hamilton risley STUDIO

# 6.0 concept development



brymbo steelworks

### 6.1 Transforming Wrexham

**Industrial Revolution**

In the late 18th century Wrexham was transformed by the coming of the Industrial Revolution. It began when the famous entrepreneur John Wilkinson (1728-1808) known as ‘Iron Mad Wilkinson’ opened Bersham iron foundry in 1762. In 1793 he opened a smelting plant at Brymbo.

In 1801, the population of Wrexham was 2,575. By the standards of the time, it was a small market town. Wrexham grew rapidly in the 19th century. By 1841 the population reached 5,854. By 1881 it was 10,903.

In the early 19th century the old wool industry died out. However, Wrexham’s other industries boomed. In the 19th century, coal mining in the vicinity prospered.

**Wrexham Gateway & Wider Masterplan**

The Wrexham Gateway represents a major redevelopment in Wrexham, focused on revitalising the area around the city centre and key transport hubs, the project intends to enhance infrastructure, boost the local economy, and create a vibrant welcoming environment.

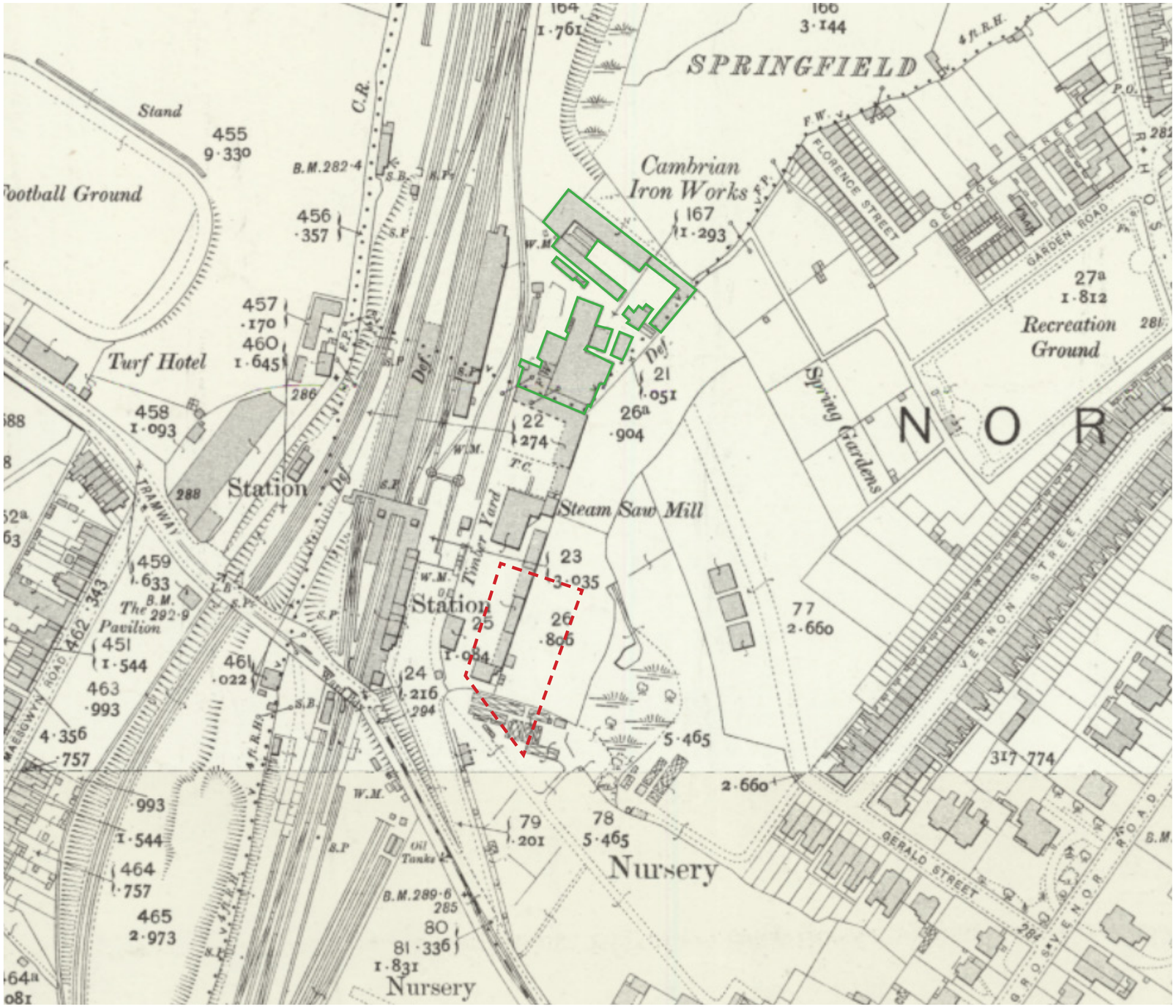
This ambitious scheme could be one of the more transformative periods for Wrexham since the Industrial era and therefore should be celebrated through the architecture.

### 6.2 cambrian iron works

Wrexham's Jewson outlet occupies the site of the former Cambrian Ironworks (edged in green adjacent), which hosted an ammunitions factory in the First World War and afterwards produced motorcycles.

The ironworks was founded by John Evan Powell and Robert John Powell in 1876, joined by John Whitaker in 1877, with premises ideally placed next to Wrexham General station. The firm exported its award-winning agricultural machinery to many countries.

The factory even had its own football team. The old drawing below shows the factory from the north west.



1892-1914 map of wrexham general

drawing of former cambrian ironworks

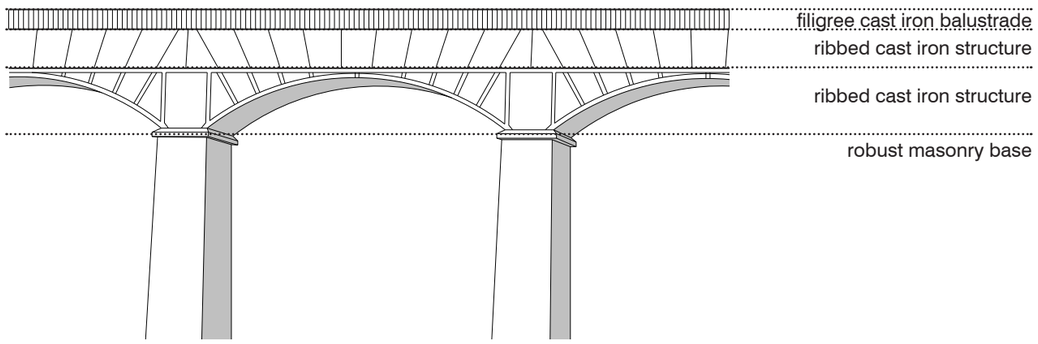
pontcysyllte aqueduct

### 6.3 industrial jewels

Pontcysyllte Aqueduct was completed in 1805, located near Trevor in Wrexham County Borough approximately 8 miles from the Town Centre.

The aqueduct was designed as part of the Ellesmere Canal to connect industrial centres in North Wales and England. It played a crucial role in transporting raw materials like coal and iron, where were key industries in the Wrexham area. The enhanced trade bolstered the economy.

While it does not serve is as an industrial transportation route today, it lasts as a relic and a significant example of engineering of the Industrial era. The structure is now Grade I listed and part of a UNESCO World Heritage Site.



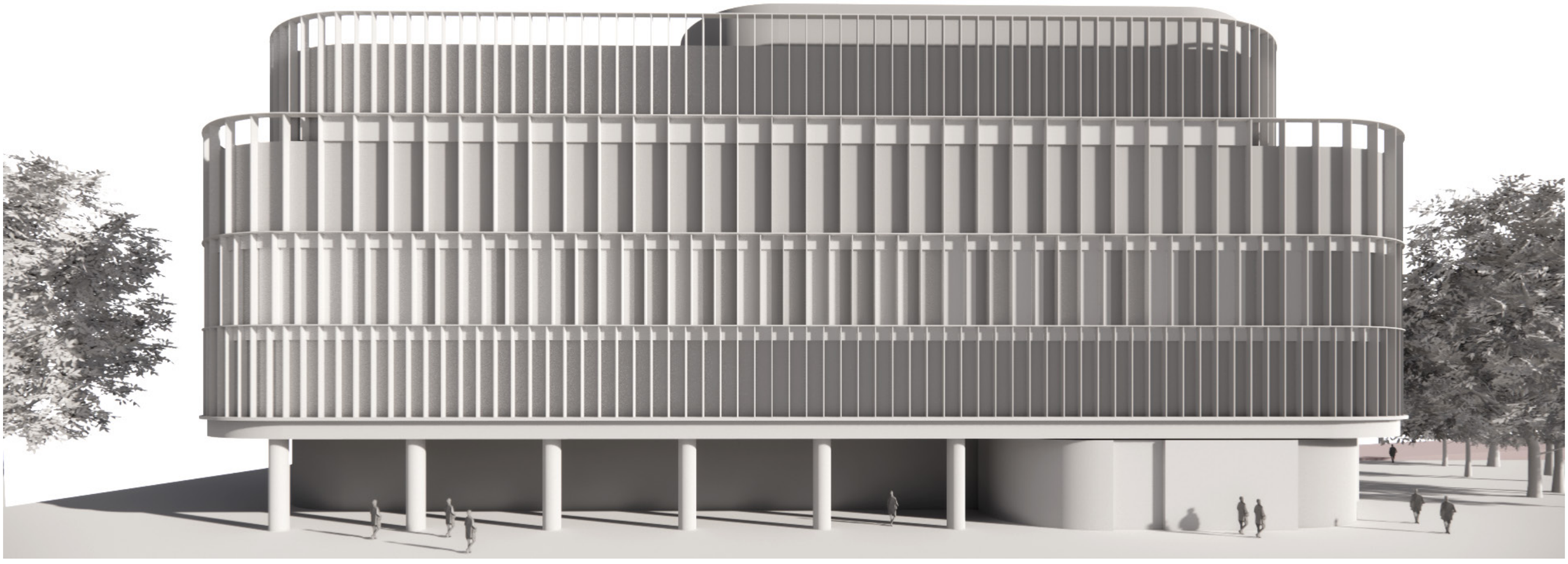

# 6.0 concept development

### 6.4 modern jewel

Many beautiful buildings and structures such as the Pontcysyllte Aqueduct have been left as a lasting memory from the thriving Industrial era across the whole of UK, including around Wrexham.

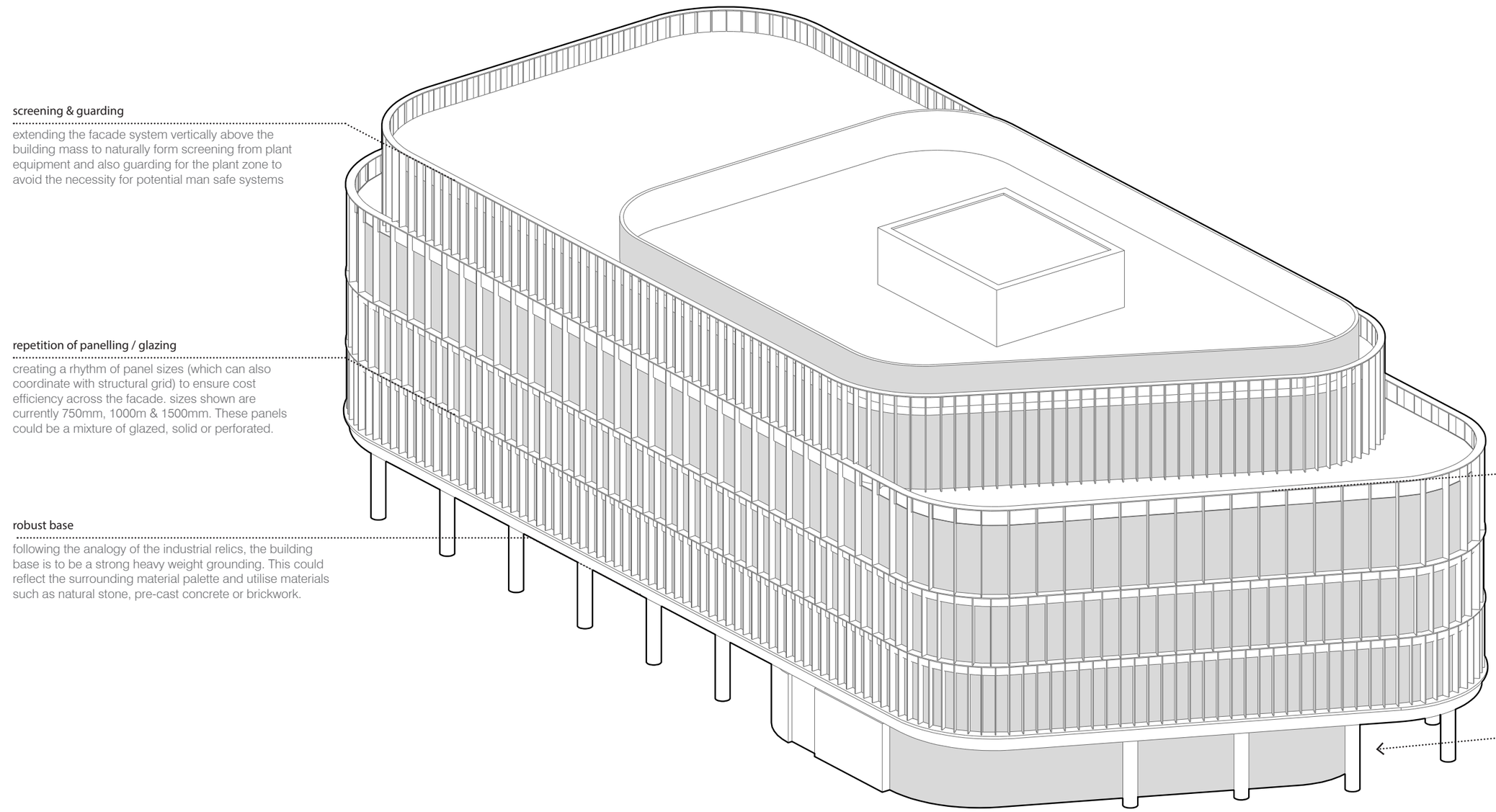
The intention for the scheme is to leave a lasting marker of the modern day regeneration of Wrexham through the Gateway project.

Taking cues from its rich historic context, the scheme intends to provide a contemporary interpretation of the industrial uses and structures.



### 6.5 potential envelope strategy

The adjacent diagram shows the principles considered when approaching the building envelope. The proposals intend to create a rich architectural proposal while still maintaining practicalities and efficiencies throughout.



**screening & guarding**

extending the facade system vertically above the building mass to naturally form screening from plant equipment and also guarding for the plant zone to avoid the necessity for potential man safe systems

**repetition of panelling / glazing**

creating a rhythm of panel sizes (which can also coordinate with structural grid) to ensure cost efficiency across the facade. sizes shown are currently 750mm, 1000m & 1500mm. These panels could be a mixture of glazed, solid or perforated.

**robust base**

following the analogy of the industrial relics, the building base is to be a strong heavy weight grounding. This could reflect the surrounding material palette and utilise materials such as natural stone, pre-cast concrete or brickwork.

**balustrades**

extending the facade treatment above the building height will allow the external balustrade to be formed, forming a crown element to the main building mass while creating transparency and variance in the facade

**deep covered recesses**

recesses formed to provide obviously markers for entrances, to provide shelter from the elements and to provide interest in the elevations