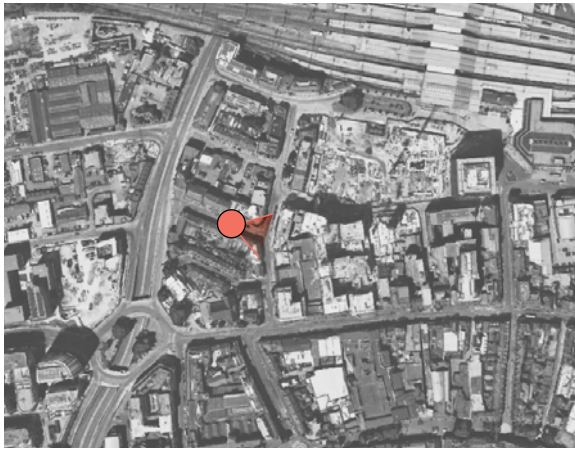


EXTERNAL VIEWS



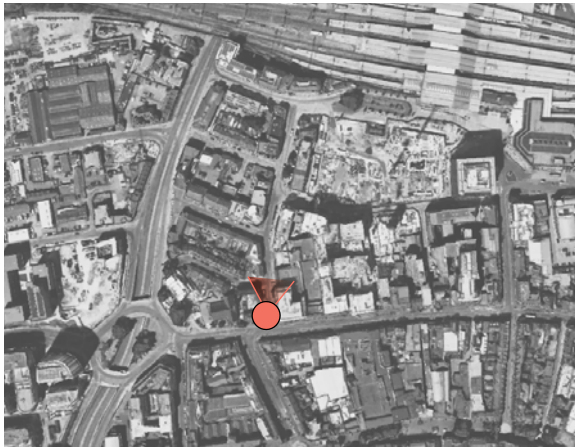
PROPOSED VIEW ON VACHEL ROAD

EXTERNAL VIEWS



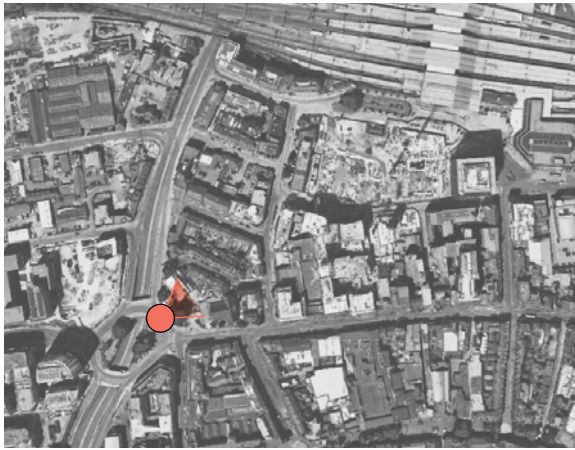
PROPOSED VIEW LOOKING NORTH ON GREYFRIARS ROAD

EXTERNAL VIEWS



PROPOSED VIEW LOOKING NORTH ON GREYFRIARS ROAD

EXTERNAL VIEWS



PROPOSED VIEW LOOKING EAST ON GREYFRIARS ROAD

EXTERNAL VIEWS



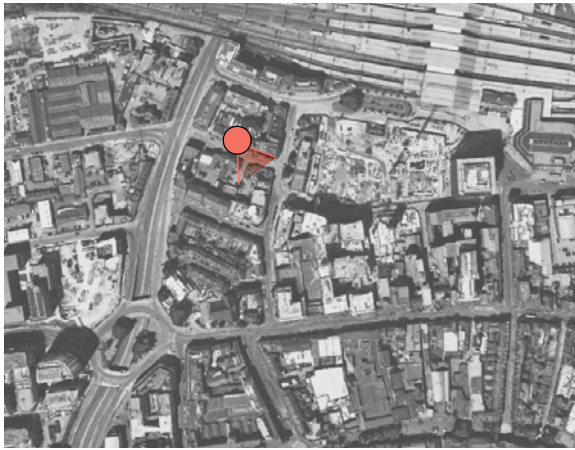
PROPOSED VIEW LOOKING FROM ROUNDABOUT

EXTERNAL VIEWS



PROPOSED VIEW LOOKING EAST ON STANSHAWE ROAD

EXTERNAL VIEWS



PROPOSED VIEW LOOKING EAST ON STANSHAW ROAD

GROUND FLOOR ENTRANCE VIEW
(GARRARD ST)



Landscape Report - Henshall Green

2.0 Landscape strategy

2.1 Design principles

- 

Activate the public realm
Create an enlivened and high quality streetscape with 'signposted' entrance and active frontage linking to the emerging Station Hill quarter and usable multifunctional amenity spaces at various levels for residents that are overlooked and respond to adjoining internal spaces.
- 

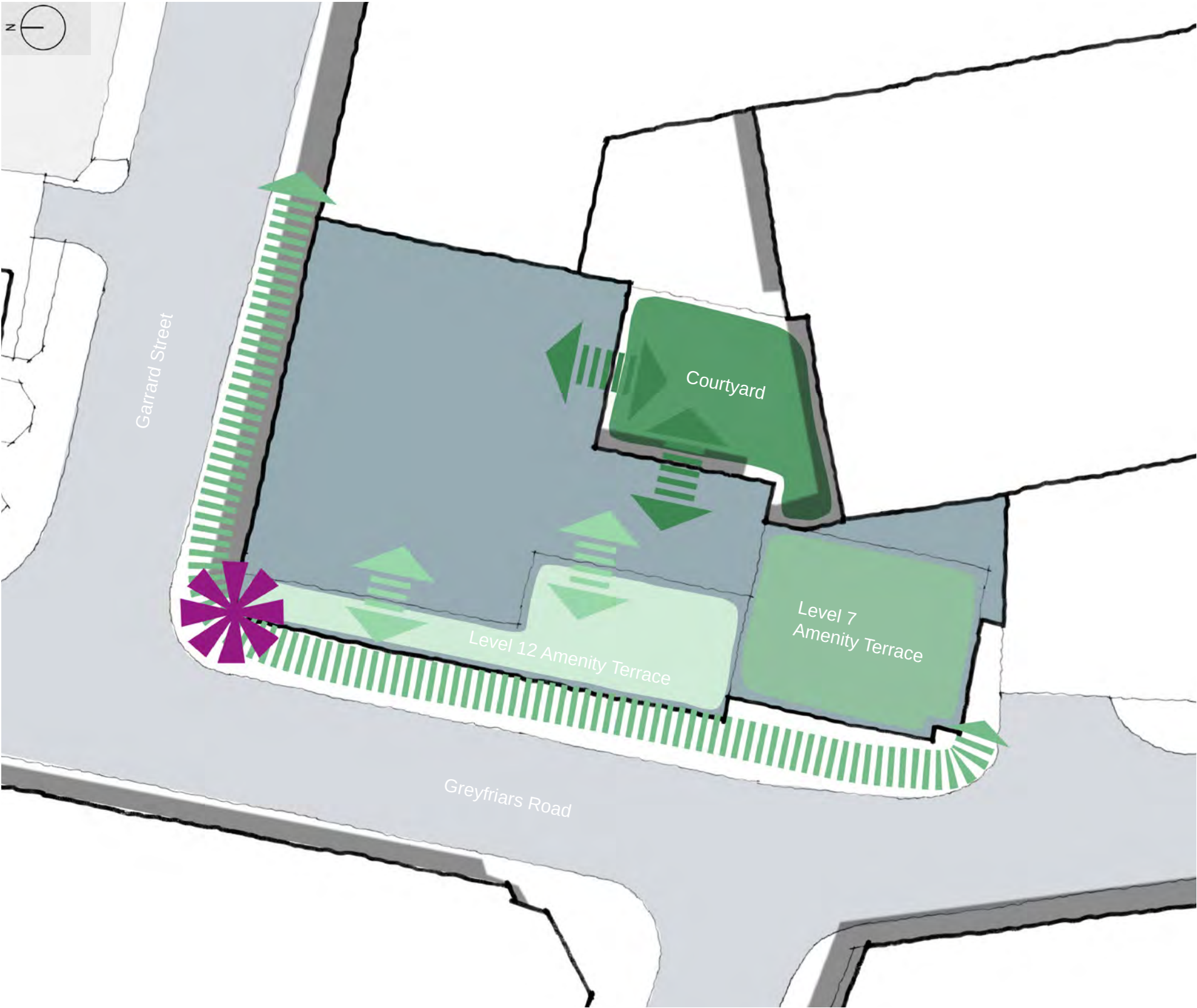
Maximise green infrastructure
Maximise opportunities for urban greening with planters and tree planting at ground level, responding to the RBC Tree Strategy and the Trees for Reading initiative and extensive planting at terrace levels linking to adjoining green spaces and ecological corridors.
- 

Create healthy places
Promote access to nature and 'green' outlook from the buildings, social interaction and shared external amenity spaces, and active lifestyles with easy access to the railway station and cycle parking integrated into the landscape proposals.
- 

Achieve biodiversity net gain
Achieve biodiversity net gain through the introduction of a mosaic of planting types at various levels with ecological enhancements such as integrated habitat boxes and creation of habitat niches responding to RBC Biodiversity Action Plan 2021.
- 

Ensure climate change resilience
Ecosystem services approach and response to the Reading Climate Emergency Strategy 2020-25 including promotion of active transport and planting to reduce urban heat island and overheating, improve air quality and microclimate and respond to more seasonal extreme weather events.
- 

Consider maintenance and management
Whilst all landscape maintenance cannot be eliminated, the proposals seek to minimise ongoing maintenance operations through the careful selection of appropriate plant species as well as hard wearing and durable hard materials with opportunity to harvest rainwater for irrigation.



2.0 Landscape strategy

2.2 Urban greening and climate resilience

Design for active travel

- high provision of resident cycle storage and on street visitor parking
- improve public realm quality with planting and shade to assist human comfort

Planting to manage solar gain and internal daylight

- tree planting to reduce urban heat island effect and planting to the terraces to shade south facing façades and reduce ambient temperature

Planting to improve air quality

- select tree and plant species for air particulate and dust interception and removal
- tree species selection for removal of noxious gases such as CO₂, NO₂ and SO₂
- maximise planting and therefore photosynthesis to contribute to higher uptake of CO₂ and production of O₂

Planting tolerant of wetter winters, drier summers and more seasonal extreme weather events

- maximise planting including linked tree pits
- permeable paving (where possible) to reduce stormwater runoff volume and rate
- drought resilient species with reduced reliance on sustained irrigation
- rainwater capture (if possible) for natural irrigation



Provision of cycle parking for residents and visitors



Street tree planting to improve air quality



Planting selected for air pollution and microclimate benefits



Planting to roof terraces



Permeable paving to reduce stormwater runoff volume



Drought tolerant planting to reduce irrigation demand

2.0 Landscape strategy

2.3 Ecology and biodiversity net gain

On site habitat creation

- dense planting to roof terraces with seasonal variations to provide sustained food and nectar sources
- mixed plantings of layered vegetation to avoid mono cultures
- climbing plants at ground level to provide nesting habitat
- select external light fittings that minimise light pollution and spill

Species rich habitats to encourage diverse flora and fauna

- mix of flowering and fruiting trees and shrubs to encourage a diverse ecosystem through pollination, nesting and roosting habitat and food provision
- mix of native and non-native species which provide a long flowering season and habitat and amenity value

Ecological enhancements

- integrated bird and boxes for local species to the building façades and roofs (based on ecologist's recommendations)



Dense planting with seasonal variation



Nectar-rich planting



Layered planting



Mix of native and non-native species



Integrated bird box



Climbing plants support habitat

2.0 Landscape strategy

2.4 Landscape masterplan



Heritage & Townscape Visual Impact - Montagu Evans

OVERVIEW

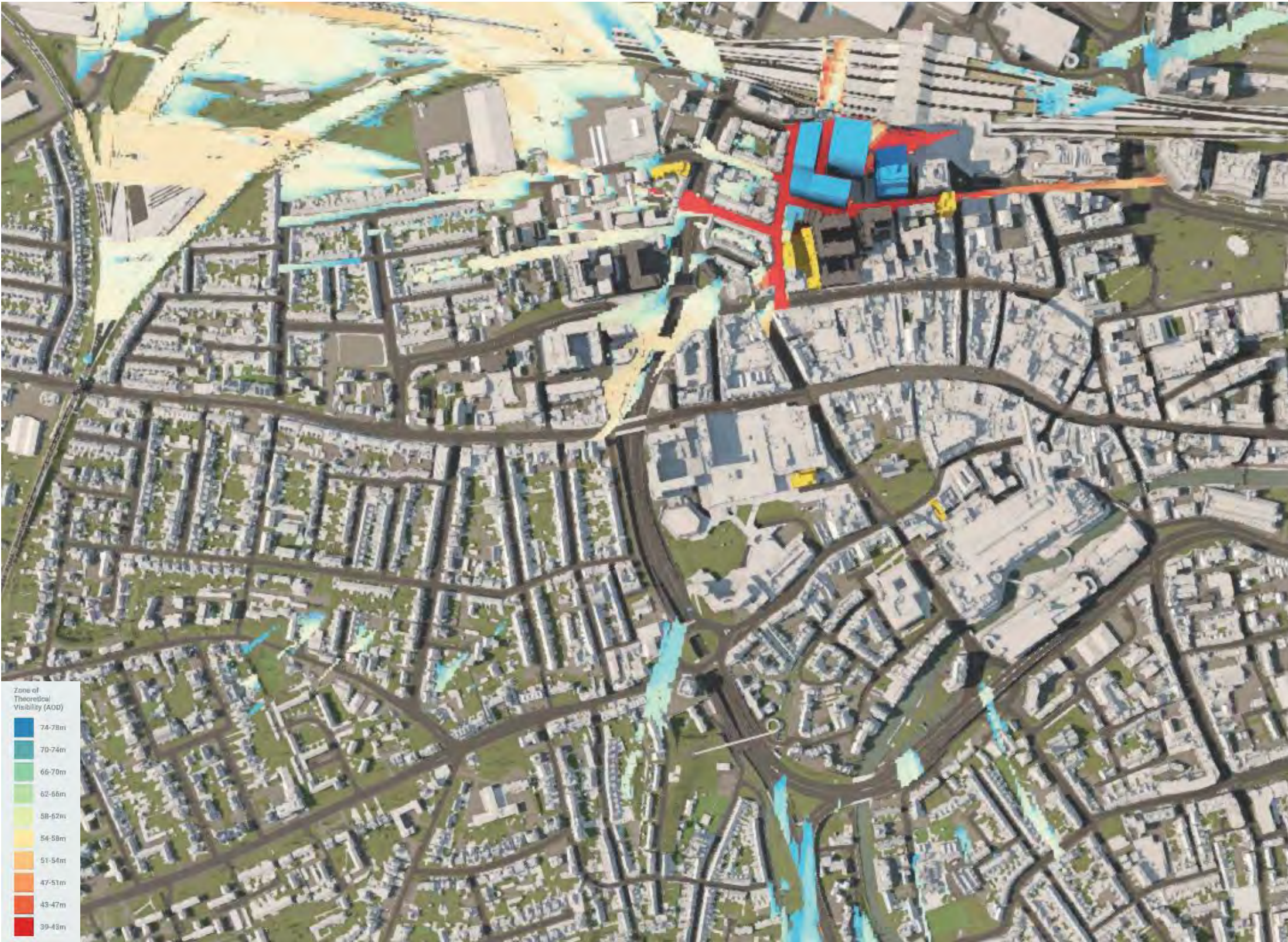
A detailed Heritage, Townscape and Visual Impact Assessment has been prepared by Montagu Evans and Cityscape Digital as part of the planning application and should be consulted for the full assessment.

The assessment demonstrates that the proposed development would have no harmful impact to the surrounding heritage assets and that the proposals would improve the appearance, character and function of the townscape.

All assessments have been informed by visual tools, including a Zone of Theoretical Visibility (ZTV) mapping and accurate visual representations (AVRs).

Both have been used to assess the impact of the proposed development on heritage, townscape and visual receptors.

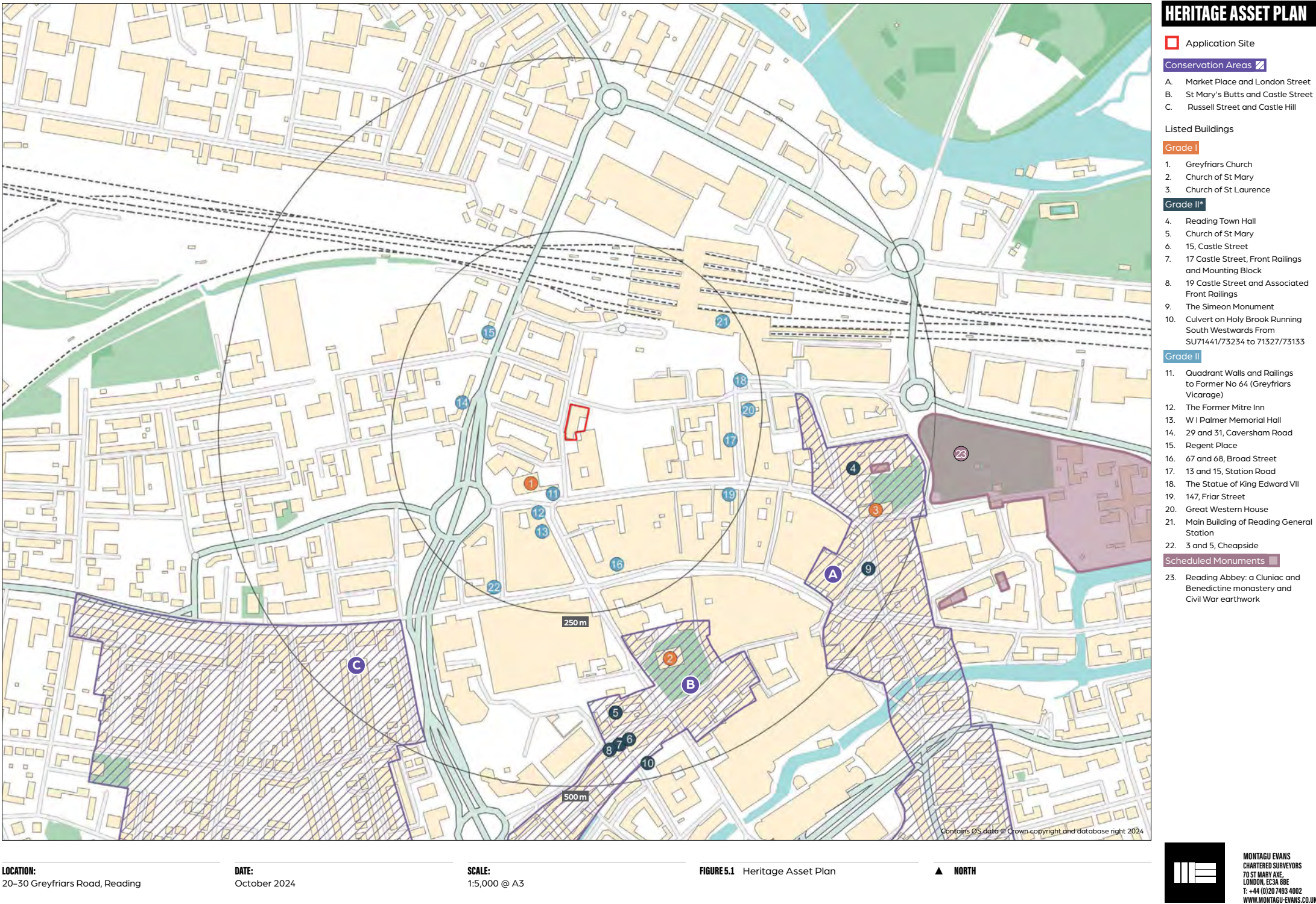
The map (right) shows the ZTV of the proposed development using Vu.city.



BUILT HERITAGE ASSESSMENT

The built heritage assessment describes the significance of any heritage assets affected by the proposed development, including any contribution made by their setting. The map (right) shows the location of all heritage assets within an identified study area.

The site itself does not contain any heritage assets, and is not located within a conservation area.

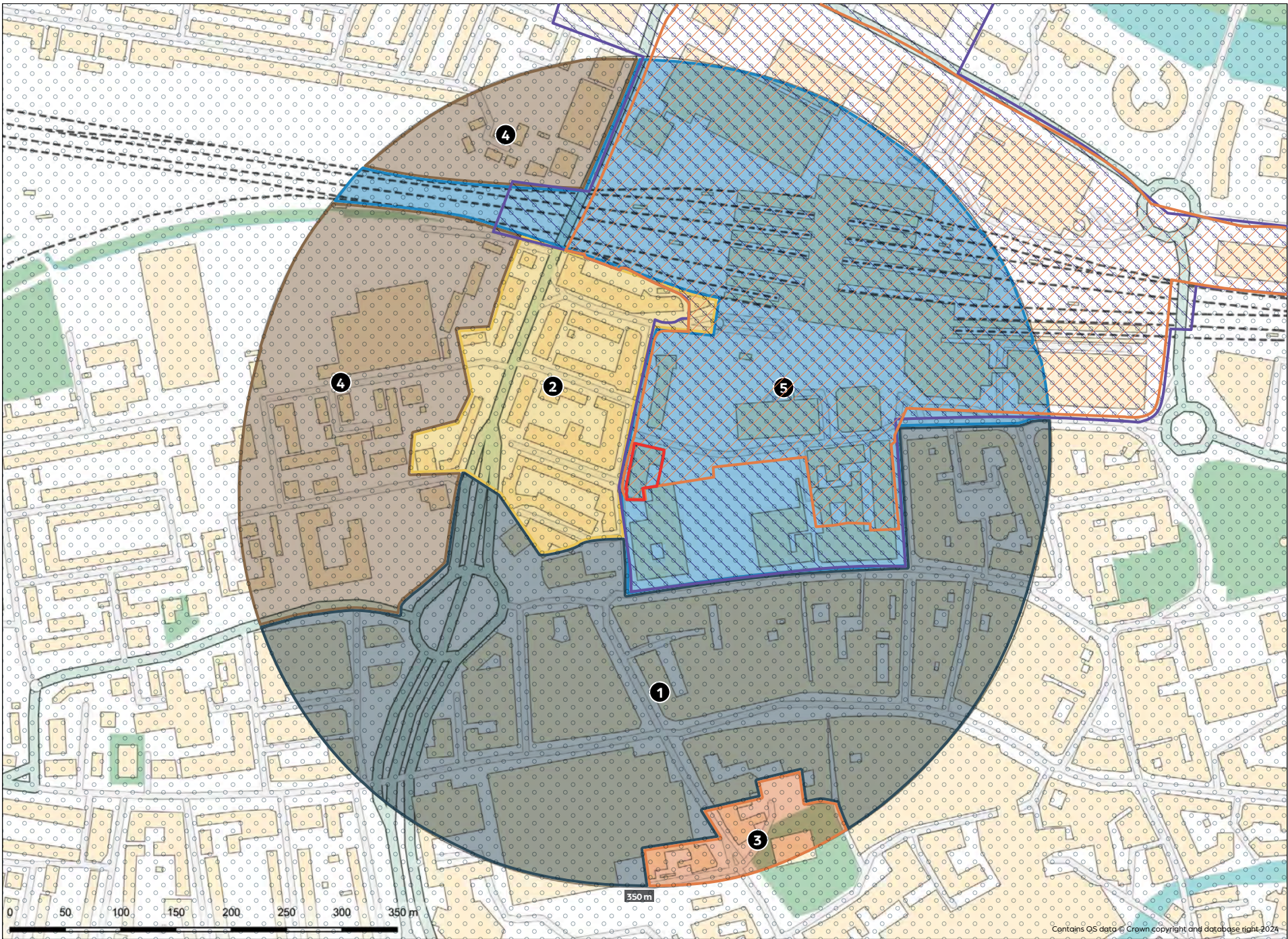


TOWNSCAPE ASSESSMENT

A townscape assessment also provides analysis of the townscape study area and the identified character areas of the site.

The townscape of the study area reflects on the historic development of Reading. The medieval road layout still survives in parts and the northern part of the study area is comprised of large-scale, tall commercial developments of the late 20th to early 21st century. The result is a mixed townscape in which tall, modern developments are highly prominent.

The map (right) shows the six distinct character areas surrounding the site.



LOCATION:
20–30 Greysfriars Road, Reading

DATE:
October 2024

SCALE:
1:3,500 @ A3

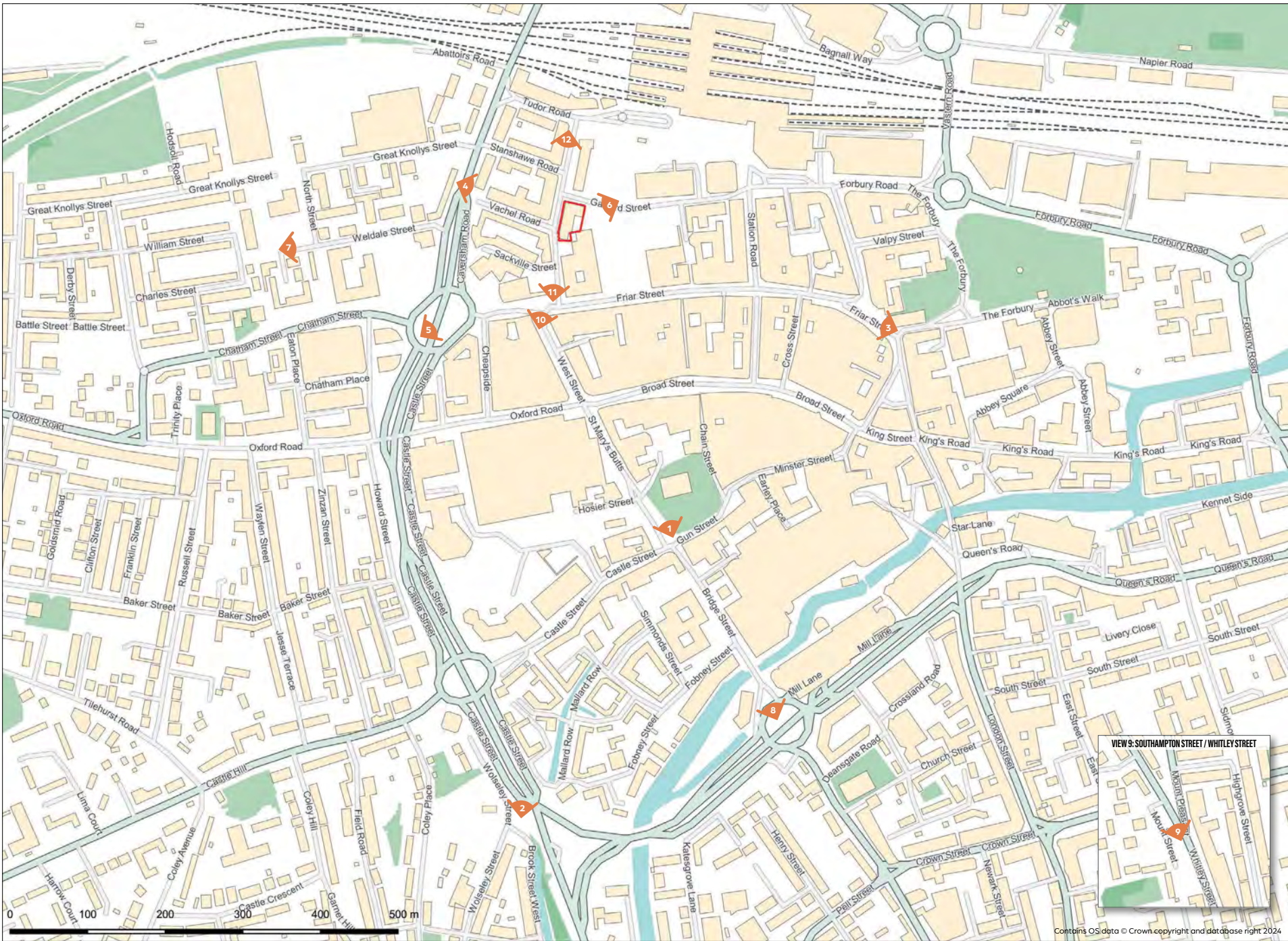
FIGURE 6.1 Townscape Character Area Plan

▲ NORTH

VISUAL ASSESSMENT

The visual assessment assesses the likely impact of the proposed development from various viewpoints, whose locations has been informed by architecture and historical accounts of the area, an appraisal of the existing site and surroundings, planning policy, and consultation with Reading Council planning officers during the pre-application process.

The assessment and design development has been informed by the ZTV and the accurate visual representations (AVRs) of twelve verified views which have been prepared by visualisation consultants, Cityscape. Ten views are fully rendered, whilst the other two are wire-lines.



VIEW LOCATION PLAN

- Application Site
- 1. Reading Minster
- 2. A33/A329
- 3. Townhall Square
- 4. Vachel Road
- 5. Chatham Street
- 6. Garrard Street
- 7. Weldale Street
- 8. Mill Lane
- 9. Southampton Street/Whitley Street
- 10. West Street
- 11. Greyfriars Road (Northern end)
- 12. Friars Street, junction with Greyfriars Road

LOCATION:
20-30 Greyfriars Road, Reading

DATE:
October 2024

SCALE:
1:5,000 @ A3

FIGURE 10.1 View Location Plan

▲ NORTH

AVR VIEW 1 - READING MINISTER



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 2 - A33/A329



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 3 - TOWNHALL SQUARE



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 4 - VACHEL ROAD



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 5 - CHATHAM STREET



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 6 - GARRARD STREET



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 7 - WELDALE STREET



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 8 - MILL LANE



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 9 - SOUTHAMPTON STREET/WHITLEY STREET



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 10 - WEST STREET



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 11 - GREYFRIARS ROAD (NORTHERN END)



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

AVR VIEW 12 - FRIARS STREET, JUNCTION WITH GREYFRIARS ROAD



Existing View



Proposed View



Cumulative View (Proposed + Emerging)

Technical Strategies

AIR QUALITY - SAVILLS (AIR QUALITY)

Overview

A detailed Air Quality Statement has been prepared by Savills (Air Quality) and should be consulted for the full assessment.

Summary

The objectives of the AQA are to review existing air quality on the area, assess the potential effects of the proposed development on local air quality and consider appropriate measures to mitigate any effects.

Conclusion

Based on the car-free nature of the scheme, the proposed development will not cause a significant change in vehicle traffic flows and operational phase.

The monitoring data shows that although the proposed development site is within an Air Quality Management Area, monitored air quality at locations around the site is within the applicable air quality objectives and does not show a trend of worsening air quality in the last three years.

Exposure to unacceptably poor air quality for residents is therefore considered to be unlikely and it can be concluded that the proposed development would be acceptable from an air quality perspective.

To address the risk of dust impact from construction, relevant mitigation measures for construction impacts appropriate for ‘high-risk’ sites’ will be applied, as proposed by the IAQM guidance on dust and demolition.

The relevant measures have been listed in Appendix A of the Air Quality Assessment that has been submitted as part of the planning application.



DAYLIGHT, SUNLIGHT & RIGHTS TO LIGHT - POINT 2

Overview

A detailed Daylight, Sunlight and Overshadowing Report has been prepared by Point 2 as part of the planning application and should be consulted for the full assessment.

Summary

The report considers the potential effects of the scheme in terms of daylight, sunlight and overshadowing to the existing surrounding properties. The report also considers the internal daylight amenity within the proposed development and overshadowing to the proposed amenity areas.

A key objective for the design team was to minimise the effects caused to the neighbouring properties, in particular the recent Station Hill development. This has largely been achieved through a series of design considerations which reduced the scale of the proposed along Greyfriars Road.

Conclusion

The results of the technical analysis demonstrate that 86% of windows would meet the VSC recommended targets, 98% of windows would meet the NSL criteria and 100% of windows would meet the APSH sunlight targets. This represents an excellent level of overall compliance when considering the dense urban regeneration context for the station area. The majority of windows/ rooms that do not meet the guidance would only be slightly short by experiencing relative changes of between 20-29% which is very commonly seen in dense urban areas.

The scheme has been designed to maximise the daylight levels within scheme despite inherent constraints which make achieving optimal levels more challenging. The outwards facing rooms that overlook Greyfriars Road and Garrard Street achieve levels of daylight that would commonly be seen in urban areas.

The courtyard facing rooms would generally receive lower levels, however this is to be somewhat expected given their close proximity to the recent Station Hill development and access to daylight and sunlight within courtyard spaces is naturally more limited. Albeit courtyard facing rooms do have the benefit of being quieter and having a greener outlook.

In terms of overshadowing to the proposed amenity spaces, each of the roof terraces will comfortably meet the BRE criteria. The courtyard area will fall short of the typical BRE assessment which measures 2 hours of sun on ground on March 21st which is common for courtyards in urban areas.

However, the supplementary time in sun assessment for March 21st demonstrates that the majority of the space will still receive some sun (with around half receiving between 1-2 hours). Furthermore, the June 21st results demonstrate that the majority of the spaces would receive between 2-4 hours of direct sun when the space will arguably be more frequently used (i.e. in the summer months).



TRANSPORT & TRAVEL (INC DELIVERY & SERVICING) - TTP CONSULTING

TRANSPORT ASSESSMENT & TRAVEL PLAN

Overview

A detailed Transport Assessment has been prepared by TTP Consulting as part of the planning application and should be consulted for the full assessment.

A Residential Travel Plan has also been prepared by TTP Consulting as part of the application to set out the management tools that are necessary to enable residents to make informed decisions about their travel and minimise the potential adverse impacts of their travel to and from the site.

Summary

It is proposed that the existing building is demolished and a 266 co-living scheme with no car-parking and cycle parking provided at a ratio of 0.27 spaces per unit.

The Applicant is prepared to accept a condition whereby future residents are not able to obtain a permit to park on a car on-street.

The level of cycle parking is considered appropriate taking into consideration the conclusion Reading Borough Council parking standards and the anticipated demand for cycling.

It is estimated that there would be on average 20 deliveries per day to the site. The majority would be undertaken using a transit or similar sized

vehicle which would stop on-street in common with the existing building.

A Delivery Management Plan has been developed to set out how delivered to the site will be managed to minimise the potential impact on the surrounding highway.

Access to the existing car park will be closed following the completion of the development.

Conclusion

The proposed development is acceptable in highways terms being located in a highly accessible location in the town centre and close to the station, thereby enabling residents to walk, cycle and use public transport for all day-to-day activities.

DELIVERY & SERVICING PLAN

Overview

A detailed Delivery and Servicing Plan (DSP) has been prepared by TTP Consulting as part of the planning application and should be consulted for the full assessment.

Summary

It outlines the measures that will be implemented with the aim of minimising the potential impacts on the surrounding highways and sets out in which way goods delivered to the Site will be managed and monitored.

Conclusion

Overall, it is expected that there could be between 20 and 25 deliveries per day, the majority of which would be associated with online purchases by residents. This could consist of postal deliveries, online takeaway/meal orders, purchase of online-goods and the moving in/out of residents.

Online purchases including takeaways and meals will require residents to meet delivery drivers in the reception.

Postal deliveries by Royal Mail will be received by the managed reception in the entrance lounge of the building. Management at reception will be responsible for distributing them to residents.

Refuse and recycling storage has been allocated so that each unit has a provision for daily waste and recycling within the unit’s kitchenette.

The bin store on Level 01 includes a capacity for weekly collections with separate bins for food waste, dry recycling and general waste. Residents will be responsible for sorting their own waste into the correct bins.

The bin store will have direct access to Greyfriars Road and can accommodate 10x 1100l Euro-bins and 6x 24l bins. The Management team will be responsible for transferring bins ready for collection.

The Management team will advise residents of the delivery strategy and plan/consolidate deliveries where possible to minimise the potential of deliveries coinciding. A member of staff will be appointed to oversee the deliveries and refuse activity.

The DSP will be monitored annually for a five-year period to ensure that it is up to date with best practice and any comments received will be considered and addressed when necessary.



FLOOD RISK & SUDS STRATEGY - FORM STRUCTURES

Overview

A detailed Flood Risk Assessment and Drainage Strategy has been prepared by Form Structures and should be consulted for the full assessment.

Summary

The Environment Agency (EA) confirms that the site is located entirely within Flood Zone 1 ‘Low Probability’.

The EA mapping also shows that some areas of the site are at medium or high risk of surface water flooding, however these are small areas of ponding associated with the existing infrastructure. The overall surface water flood risk is medium.

The risks of groundwater flooding, flooding from rivers or reservoirs, artificial sources and sewer flooding have all been assessed as low/negligible risk.

Conclusion

The proposed development will implement a new surface drainage network that will manage surface runoff from the site. This has been designed to manage runoff from the site for all storm events up to and including 1 in 100 (1%) Annual Probability event, including a 40% climate change allowance.

The design also incorporates SuDS features to attenuate and treat surface water runoff, including permeable paving and below ground attenuation tanks.

A pump is proposed to facilitate site constraints while providing the necessary attenuation storage for the site.



FIRE STATEMENT - ORION FIRE

Overview

A detailed Gateway One Fire Statement has been prepared by Orion Fire and should be consulted for the full assessment.

Summary

The fire statement has been developed to outline the current fire strategy for the scheme.

Conclusion

All areas of the building (including residential ancillary areas no more than 100m²) will be served by a Category 4 BS 9251 residential sprinkler system.

A secondary means of escape stairs has a final discharge route which requires occupants to pass up a final flight of stairs due to the sloping nature of the site.

Inner rooms at ground floor will be provided with automatic fire detection and alarm systems in accordance with guidance requirements. Total travel distances from these rooms are within compliance limits.

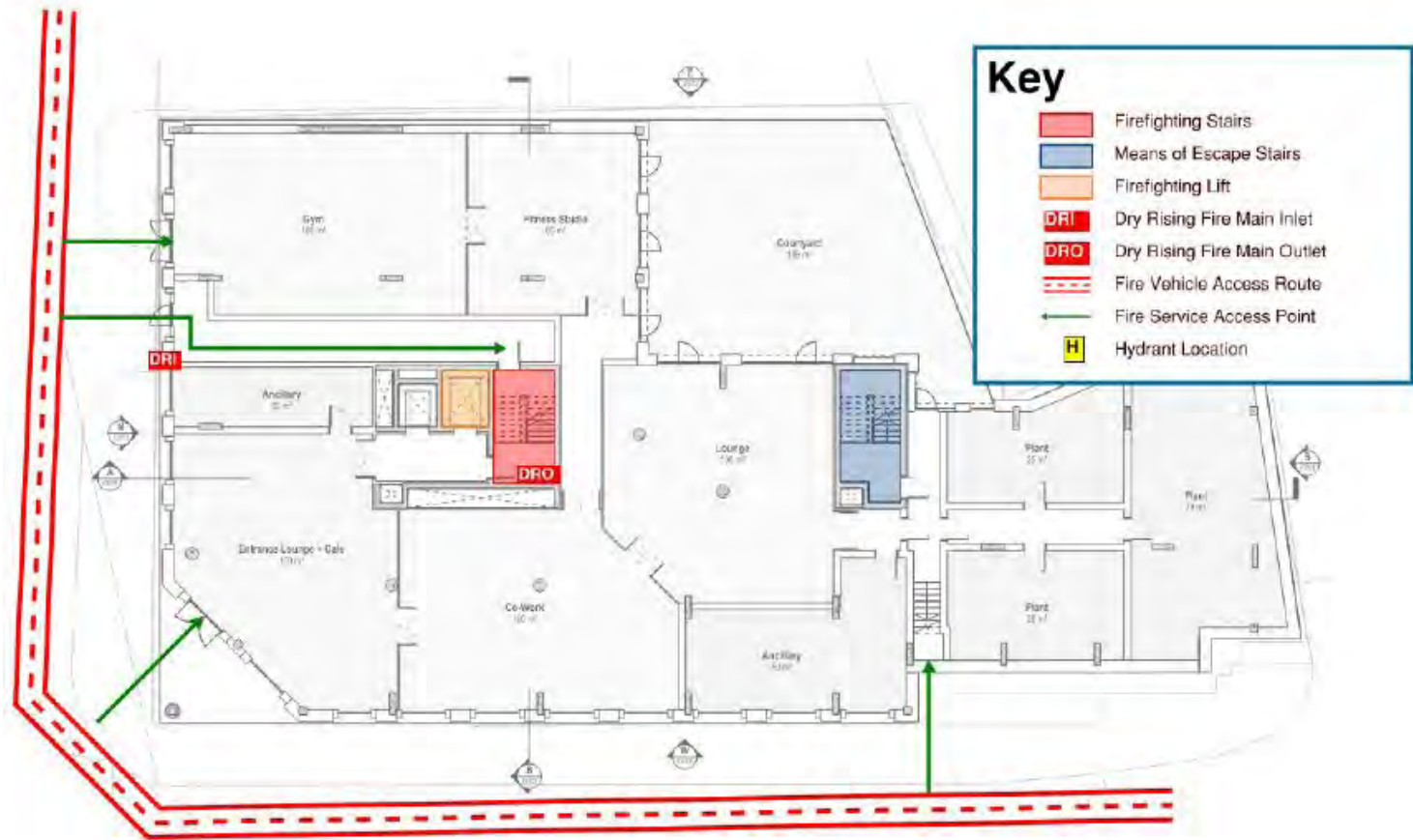
At Level 12, rather than the two stair cores being connected by a common corridor, they will be connected by an external terrace and be designed similar to the balcony deck approach in accordance with BS 9991, which remains complaint.

Fire service access to the site shall be via Greyfriars Road to the west and Garrard Street to the north. Hydrant locations have been requested from Royal Berkshire Fire and Rescue service.

Emergency vehicle access is provided via public Roads Greyfriars Road and Garrard Street.



Fire service site plan (source: Orion Fire)



Fire service site plan (source: Orion Fire)

ACOUSTIC STRATEGY - SOL ACOUSTICS

Overview

A detailed Noise Impact Assessment has been prepared by Sol Acoustics and should be consulted for the full assessment.

Summary

The assessment has assessed the suitability of the development site as based on the pre-existing environmental noise climate on-site as measured by Sol Acoustics during July 2024.

Conclusion

The report demonstrates that the proposed development site can be categorised as ‘Medium risk’ and can be considered suitable for assuming a good acoustic design process is followed to mitigate any potential impacts of environmental noise.

Predictions show that environmental noise levels within the external amenity spaces for the residents are in line with standard guidance.

An assessment of noise from the neighbouring Sainsburys and its service yard has been undertaken. Although this has been classified as noise that will cause significant adverse impact, there are various mitigation strategies which can be implemented to ensure the required internal ambient noise levels are met. This includes the recommendation that windows remain closed for

both standard background ventilation conditions and during periods of overheating.

Additionally, the sound insulation performance of the building shall be specified such that internal ambient noise levels both from the commercial noise specifically and the 16 and 8-hr daily/nightly averages are controlled to a suitable level.

Appropriate daytime and night time environmental noise limits for M&E plant has also been set based on results obtained from environmental noise surveys undertaken.



ENERGY & OVERHEATING STRATEGY - MEINHARDT

Overview

A detailed Energy and Overheating Assessment has been prepared by Meinhardt and should be consulted for the full assessment

Summary

The purpose of the assessment is to demonstrate how the climate change mitigation measures proposed for the development address the relevant planning policies and how energy efficiency is an integral part of the proposed development’s design.

Conclusion

The scheme demonstrated an 8% carbon dioxide gain against Part L 2021 standards and a 40.55% saving against the planning policy requirements set out in Part L2 2013.

The energy strategy for the proposed follows the energy hierarchy approach of ‘Be Lean’, ‘Be Clean’ and ‘Be Green’. The assessment sets out the CO2 saving per hierarchy stage and calculates the development the proposed scheme makes to achieve the overall reduction of 8% in regulated carbon dioxide emissions. Energy demand has been significantly reduced, achieving this reduction in regulated carbon emissions at the ‘Be Green’ stage of the hierarchy, through passive design and energy efficiency measures.

Demand Reduction (Be Lean)

The thermal performance of the building will be significantly improved over Part L 2021 minimum requirements as illustrated in the assessment.

Thermal bridging will be minimised to reduce the loss of heat and prevent the development of cold spots. Target y-values have been detailed in the assessment and have been set at 10% of the construction element ‘U’ values, in accordance with the NCM Modelling Guide.

Target air permeability has been set at 3m3/(h m²) in residential dwellings and non-residential areas to reduce heat loss in winter.

The size and g-value of the glazing has been optimised to provide a balance between minimising summer heat gain to prevent overheating, maximising winter heat gain to reduce heating loads and maximising natural daylight to reduce lighting energy. This has resulted in the g-value of the glazing being set at 0.40.

The scheme is proposing to use heat pumps for communal areas and direct electric for the minimal space heating requirement in the co-living units only. Domestic hot water throughout the development shall also be delivered by heat pumps.

The site heating systems will be designed to minimise heat losses, including measures such as minimising pipework lengths and installing high level of insulation.

In commercial areas, active cooling is proposed via air-to-refrigerant heat pump (VRF) systems. No cooling has been applied to the co-living units.

Ventilation to the units to provide fresh air and extract moisture/pollutants will be via low profile MVHR units. Natural ventilation through opening of windows could not be assumed base on the noise impact assessment. The commercial areas will also be provided with local MVHR units to achieve ventilation values in line with Part L requirements.

Energy efficient LED lighting will be used throughout the proposed development at a value of 120Lm/W.

Heating Infrastructure (Be Clean)

It is currently not feasible to connect to an existing or proposed heat network so it is therefore proposed to serve the site heat network from an on-site storage tank which uses heat pumps as its primary energy source.

Heating Infrastructure (Be Green)

An assessment of the feasibility of including on-site renewable energy has been carried out and various technologies were considered including:

- Biomass boilers: these are better operating as the lead heat source, not a top up, as they are not suited to operating with variable load. They will also adversely impact the local air quality due to their emissions and increased traffic movements from vehicular delivery of fuel would be another consequence of this method and therefore have not been proposed.

Photovoltaics (PVs): the inclusion of these were explored within the assessment and would allow for a small reduction in CO2 emissions. Unfortunately, the area available on the roof of the proposed development is limited and means the resulting CO2 reduction would be relatively insignificant compared to the large cost and duration or repayment that would be endured. Therefore they have not been proposed.

Solar thermal: this system could provide a proportion of the hot water load but would compete with the site LTHW network serving the domestic requirements of the development and are therefore not proposed for the development.

Ground Source Heat Pumps: since overall cooling load is low, resulting in poor balance between heating and cooling demand, the potential yield from any ground source system would be adversely impacted. Additionally there is not sufficient surrounding land for the boreholes.

Therefore, due to the varying reasons listed above, air/water source heat pumps are assumed in the notional building requirements for this application.

ENERGY & OVERHEATING STRATEGY - MEINHARDT

Overheating Assessment - Overview

By using measures including solar shading and ventilation and using appropriately coloured materials in areas of direct sunlight, the proposed development will ensure it’s resilience and climate resistance.

A simulation and modelling of the proposed development was completed by Meinhardt to identify any dwelling at risk of overheating. These are likely to be those with large glazing areas, on the top floors, areas which have less shading, larger sun-facing windows or having limited opening windows. The simulation showed that the spaces seen to be experiencing the largest solar gains were those on the highest floors to the south-west of the building.

The results of the assessment assumed that the thermal comfort category of these floors is assumes to be category II based on CIBSE TM52. It can be concluded from the results that the building passes CIBSE TM59 (which includes the TM52 criterion). This confirms that enhanced ventilation will not be required within the proposed development.

SUSTAINABILITY (CONSIDERING RE-USE OF EXISTING BUILDING) - MEINHARDT

Overview

An earlier iteration of the scheme (Pre App 1) looked at the possibility of reusing the existing building, however through design development and conversations with Reading Council, we came to the conclusion that a new build scheme was deemed more appropriate for this development for the following reasons:

- When assessed by structural engineers, the existing facade was deemed unsuitable for residential conversion. In order for the existing envelope to meet the current standards, a complete overhaul of the facade would be needed, and it would also require significant steelwork and bracketry to support the masonry arrangement and high-quality street-scape appearance we are aiming to create.
- Any increase of height would also require further significant additional stability measures and new foundations to be successful.
- The conversion of the building would likely be further complicated by the new HRB rules and ultimately require significant re-modelling to achieve an acceptable fire strategy and compliant layout.
- The existing steel frame is not well suited for the increase to 90-min fire resistance.
- Long term energy efficiencies of a new-build frame will outweigh the limited embodied carbon of the existing building. Given the existing building condition, structural

- constraints, and poor thermal performance, a light or partial refurbishment was considered not viable for the requirements of a modern residential building.
- While this heavy refurbishment would provide the opportunity to enhance the thermal performance of the building, it will also typically result in higher operational carbon and energy costs when compared to a new build scheme.
 - The earlier re-use scheme didn't align with Reading Council's vision for the site and, once discussed together, it was agreed that a new-build development would be the most appropriate early on in the design process.



BREEAM - GREENGAGE

Overview

A detailed BREEAM Pre-Assessment has been prepared by Greengage as part of the planning application and should be consulted for the full assessment.

Summary

The development at 20-30 Greyfriars Road is targeting a BREEAM ‘Excellent’ rating (70%) in line with Reading Borough Council’s sustainability policies and will be assessed under the BREEAM UK New Construction methodology for multi-residential buildings. The design team is developing a strategy to achieve this rating by identifying BREEAM credits that address key sustainability issues for the development.

Conclusion

The BREEAM Pre-Assessment report has set out a pathway to show how the proposed development could achieve the required ‘Excellent’ rating. The proposed strategy achieves a score of 71.56%, which represents an ‘Excellent’ rating. Further information into the detailed credit assumptions and methodology can be found in the BREEAM Pre-Assessment Report which has been submitted as part of this planning application.



ECOLOGY & BIODIVERSITY NET GAIN - GREENGAGE

BIODIVERSITY NET GAIN ASSESSMENT

Overview

A detailed Biodiversity Net Gain Assessment has been prepared by Greengage as part of the planning application and should be consulted for the full assessment.

Summary

The Biodiversity Net Gain Assessment has been completed to identify the pre-development (baseline) value of the site and compare this against the predicted post-development biodiversity value. It demonstrates that the proposals within the site boundary have potential to achieve a net gain of 0.14 biodiversity units (146.40%) associated with area based habitats.

Conclusion

The baseline value for the site has been calculated as 0.06HU.

Below is a breakdown of how the baseline value was calculated using the SBM calculation tool.

Table 4.1 Baseline Habitat Units

Broad Habitat	Habitat Type	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Urban	Developed land; sealed surface	0.1038	V. Low	N/A - Other	N/A
Urban	Introduced shrub	0.003	Low	Condition Assessment: N/A	0.01
Urban	Introduced shrub	0.001	Low	Condition Assessment: N/A	0.00
Individual trees	Urban tree	0.0122	Medium	Poor	0.05
*Individual trees are not included in the total site area to avoid double counting				TOTAL	0.06

The post-development design proposals are predicted to deliver 0.14HU. This is a new gain of 0.08 HU (equivalent to 146.40% for HU).

Below is a breakdown of how the post-development value was calculated.

The design proposals meet the BNG Trading Rules and are in compliance with the mandate set out in the Environment Act.

Upon receiving planning permission, a Biodiversity Gain Plan will be submitted to the Local Planning Authority.

Table 4.2 Post-Development Habitat Units

Broad Habitat	Proposed Habitat	Area (Hectares)	Distinctiveness	Condition	Habitat Units
Urban	Developed land; sealed surface	0.10499	V. Low	N/A - Other	0.00
Urban	Introduced shrub	0.00385	Low	Condition Assessment: N/A	0.01
Urban	Ground based green wall	0.00474	Low	Poor	0.01
Urban	Introduced shrub	0.0039	Low	Condition Assessment: N/A	0.01
Urban	Introduced shrub	0.0016	Low	Condition Assessment: N/A	0.00
Urban	Introduced shrub	0.00092	Low	Condition Assessment: N/A	0.00
Individual trees	Urban tree	0.0244	Medium	Poor	0.07
Individual trees	Urban tree	0.0163	Medium	Poor	0.04
*Urban trees and green walls are not included in the total site area to avoid double counting				TOTAL	0.14

ECOLOGY

Overview

A detailed Ecological Survey & Appraisal has been prepared by Greengage as part of the planning application and should be consulted for the full assessment.

Summary

This appraisal aimed to establish the ecological value of this site and the potential presence of notable and legally protected species in order to inform appropriate mitigation, compensation and enhancement actions in light of proposed development works.

The survey area encompasses the site boundary and extends to approximately 0.12 hectares (ha) area, principally made up of buildings and hard-standing. The only vegetation present is ornamental introduced shrub planting in addition to three small trees.

No protected or notable species were recorded on site, and no negative ecological effects are anticipated. There is some limited potential for common nesting birds to be present within the trees and shrubs that are located at street level. Consequently, the only ecological protection recommendations relate to seasonal timing of clearance of this vegetation/or after a nesting bird check has been completed. There may also be opportunities for nesting pigeons (and other birds) on the building, although none were observed during the survey. A pre-demolition check is therefore recommended.

Conclusion

Since the site was of limited ecological value initially, there was a significant opportunity to deliver a net gain in biodiversity on site.

The proposed landscaping proposals incorporate tree planting, a trellis based green wall and climate resistant/pollinator friendly shrub and herbaceous planting, with opportunities to incorporate bird and bat boxed, and invertebrate features.



WIND & MICRO-CLIMATE - RWDI

Overview

A detailed Wind & Micro-climate Assessment has been prepared by RWDI as part of the planning application and should be consulted for the full assessment.

Summary

The wind interactions with the massing and form of the proposed development have been proposed using Orbital Stack Artificial Intelligence (AI) to inform RWDI’s professional judgement and identify likely windy areas.

The proposed development’s wind-building interactions, and assessment of both winter and summer comfort have been set out in the full assessment.

RWDI have proposed various mitigation measures, including determining the height of the terrace balconies to ensure user comfort, to ensure the proposed development meets the relevant comfort criteria.



ARCHAEOLOGICAL ASSESSMENT - RPS

Overview

A detailed Archaeological Desk Based Assessment has been prepared by RPS as part of the planning application and should be consulted for the full assessment.

Summary

The site has been assessed for its below ground archaeological potential in advance of proposed development.

Based on current evidence, a moderate to high archaeological potential at the study site has been identified for the Medieval period and a high archaeological potential for the Post Medieval and Modern periods . A low archaeological potential is considered for all other past periods of human activity on the site.

Conclusion

There are no proposals for a basement level at the study site, though extensive piling is anticipated. The proposed development could have some impact on any surviving below ground archaeological remains, however should they remain, they are considered likely to have been heavily truncated and this of reduced archaeological significance.

Remains of national significance which might preclude the development are not anticipated at the study site.

To conclude, in planning terms, the previous development has severely impacted the archaeological significance of the study site and therefore it is suggested that no further safeguards are required for this application.



ACCESSIBILITY

Access Summary

The proposal has been designed to be an inclusive environment for those working and visiting, including those with disabilities. An inclusive approach realises that all groups may have difficulty accessing the building at all stages of life and our building should make these transitions as easily as possible. With such strong fundamental linkages to the existing urban network and onward to the surrounding local centres the development site has all the characteristics that makes it easily accessible for all.

Ground Floor

- All ground floor entrances and spaces will be accessible. The main reception entrance has a level threshold and materials will be chosen that are both suitable for external use and have adequate grip and slip resistance.
- Although the scheme is car free, an existing vehicular drop off area for disabled users can be used on Garrard Street, directly in front of the proposed building and close to the main building entrance.
- The reception area has a free-standing desk which will incorporate a low-level counter suitable for wheelchair users. Floor materials will be chosen so they are not too reflective

and have adequate slip resistance. The other seating provided will ensure it is suitable for people with mobility impairments.

- There will be a level threshold from the reception area to the main lift core which will require secure fob access.
- A dedicated unisex disabled WC has been provided at this level and designed in accordance with Building Control Regulations Approved Document B. Access to this WC is level on all routes to external doors.
- All communal facilities have been designed and located to ensure equal opportunity for all. An adequate number of lifts, appropriate sized corridors, accessibility to all corridors, lifts and both internal and external spaces has been implemented into this scheme. Adaptability of the communal spaces and their facilities has also been considered, with certain spaces having multiple or changing uses, to ensure they can reflect the diverse and changing needs of residents.

First Floor

- A platform lift has been incorporated into the scheme for resident use to provide accessible access between the main cores/corridor and cycle hub and bin store.

- Wide external double doors and a ramp allow for easy movement from the cycle hub and/or bin store to Greyfriars Road at the south of the building.

Upper Levels

- The lifts in the main core open into a generous lobby and there is level access out of the core and into the main internal corridors.
- All internal corridors are 1500mm width minimum.
- All internal doors will be fully compliant in terms of clear width, vision panels, furniture and closures.

Co-living Units

- Entrance doors to each unit will provide the minimum clear opening width (850mm) and 300mm leading edge nibs on in accordance with Building Control Regulations Approved Document B
- All thresholds are wheelchair accessible, particularly to large units.
- All units are single storey and provide step-free access to all rooms and facilities within the dwellings.

- Each unit will be suitably sized and accommodate a range of amenities for sleeping, eating, working, relaxing and storage. Each unit will be fully furnished with at least a double bed with bedside cabinet, wardrobe and storage space, dining area, bathroom with shower and small kitchenette for food preparation.
- Large accessible units have been designed to provide adequate space for disabled use and are distributed to the most convenient locations within the development, close to the cores of the building.



ELDER

GREYFRIARS HOUSE
20 - 30 GREYFRIARS ROAD , READING

