PART A	
Report of: **Head of Development Management**	
Date of committee	**5th July 2017**
Site address:	**Land to the east of Ascot Road Watford**
Reference Number :	**17/00048/FULM**
Description of Development:	**Redevelopment of the site to provide a mixed use scheme including 485 residential units (Class C3), retail units (Class A1 and/or A2 and/or A3 uses), community floorspace (Class D1/D2), with associated cycle parking, car parking, playspace, landscaping and public realm improvements**
Applicant	**Orion (Cassiobridge) Limited**
Date Received:	**17th January 2017**
16 week date (EIA development):	**9th May**
Ward:	**Holywell**

1.0 Summary

The application site is located in Special Policy Area 6 (Western Gateway) of the adopted Watford Local Plan Core Strategy 2006-31 (CS), which seeks to deliver redevelopment that improves and upgrades the area from an economic development and environmental perspective, and to capitalise on the potential of a new Metropolitan Line station 'MLX station' at Ascot Road. The application proposes redevelopment of the brownfield site to provide 485 residential units (including 170 affordable units), retail units, community floorspace and public realm improvements. The scheme includes a 24 storey building in the north-western corner of the site facing Ascot Road.

1.1 The proposed regeneration scheme would have considerable social benefits because it would provide a significant contribution towards meeting the Borough's housing needs, including a large affordable housing component. It is a high density residential-led scheme on previously developed land in a sustainable Special Policy Area location close to the forthcoming MLX station and a range of local services. The proposal accords with the policy objectives of the NPPF to meet the housing needs of the Borough; to encourage the effective use of previously developed land; to promote mixed use development; and to make the fullest possible use of public

transport, walking and cycling by focusing significant development in locations which are or can be made sustainable. Furthermore, the scheme accords with the objectives of SPA6 to provide major regeneration that upgrades the area from an economic and environmental perspective due to the replacement of degraded industrial buildings with high quality design and new public realm. The development would provide additional household spending in the area and would act as a catalyst for further regeneration schemes in the Western Gateway Special Policy Area.

1.2 The proposed development would improve the townscape and environment of the application site because it would replace utilitarian industrial buildings and hard-surfacing with buildings of high quality design and well-landscaped public open space with new pedestrian linkages. The extensive landscaping would also provide enhancements to biodiversity on site. The buildings would provide greater definition to the streetscape due to the strong and defined edges of the development.

1.3 The design of the taller building would be of high quality and would achieve a slender and elegant appearance which would improve wayfinding and legibility towards the new MLX station. The tall building would appear prominent from nearby surrounding areas, as shown in the Townscape Visual Impact Assessment, because it would be taller than neighbouring buildings and would break the skyline. However, it would not obstruct views of any particular landmark features and would be read in context of the existing modern multi-storey flatted development in WCAS Character Area 38B. Furthermore, the massing, elevational features, materials palette and generous spacing to neighbouring development would assimilate the height and scale of the buildings into the surroundings. Therefore, although the height of the taller building does not follow the scale of surrounding buildings, it would be an acceptable addition to the townscape.

1.4 The proposal would cause no harm to the significance of listed buildings or conservation areas, however it would cause less than substantial harm to Cassiobury Park registered park because it would introduce prominent views of built form to parts of Cassiobury Park where no views of built form currently exist. It would reduce the extent to which the parkland character area feels visually contained from surrounding areas and this effect will be most notable from the tranquil southern parts of the park. In applying paragraph 134 of the NPPF, it is considered that the less than substantial harm to the heritage asset is outweighed by the social, environmental and economic benefits of the regeneration scheme in terms of providing significant additional housing and affordable housing; townscape improvements; new public realm with enhanced pedestrian links; enhancements to the biodiversity of the site; provision of jobs; and investment that would act as a catalyst for further regeneration in the area.

1.5 The Council's housing allocations currently do not provide a five year supply of housing land based on the OAN contained within the SHMA (as discussed in paragraphs 4.12 and 4.13 of the report), therefore in accordance with paragraph 49 of the NPPF the relevant policies for the supply of housing should not be considered up-to-date. Accordingly, applications for housing should be considered against the second test for decision taking in paragraph 14 of the NPPF, which means that applications for housing should be granted permission unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework taken as a whole.

1.6 Paragraph 14 of the NPPF highlights that at the heart of the NPPF is a presumption in favour of sustainable development and paragraph 49 states that housing applications should be considered in the context of sustainable development. The proposed development would have considerable social, environmental and economic benefits, as discussed above, and therefore it is felt that it constitutes sustainable development. The tall building would appear prominent from nearby surrounding areas and would cause a minor adverse effect to HLCA Character Area 5 Croxley Moor and a moderate adverse effect to HLCA Character Area 11 Lower Gade Valley (which includes Cassiobury Park registered park). It would also cause less than substantial harm to the significance of Cassiobury Park registered park. The adverse impacts should be afforded weight in the planning balance, however officers are of the view that the planning benefits of the scheme substantially outweigh the adverse impacts.

1.7 The environmental information has been considered in the report in accordance with the requirements of the EIA regulations and appropriate mitigation measures can be put in place through conditions and s106 obligations to ensure that residual effects are minimal.

1.8 The proposed development would have an impact on the capacity of the Ascot Road New/Ascot Road Old (Morrison's) roundabout, however appropriate measures can be put in place to mitigate the impact of the proposed development and cumulative developments in the area to ensure that there would be a negligible impact on the local highway network. The proposed 'car lite' development (which restricts the additional traffic on the local highway network) includes a package of measures to encourage a modal shift towards sustainable transport. The measures along with robust modal shift targets in the Travel Plan should minimise on-street parking in nearby streets. In order to address any concerns about increased on-street parking, the applicant has completed a s106 planning obligation to make a financial contribution towards public consultation and implementation costs for a new Controlled Parking Zone (CPZ) to include nearby streets that do not already have on-

street parking controls.

1.9 The proposed development would cause a noticeable loss of daylight to a small number of second bedrooms of 2-bed flats at the rear of Omega Court, however, it would not have a significant impact on light received by the living rooms and main bedrooms and is therefore in accordance with BRE guidance. The proposal would not cause a significant loss of light, outlook or privacy to neighbouring properties and the proposed layout would provide an acceptable standard of amenity for future occupiers.

1.10 In applying the second test for decision taking in paragraph 14 of the NPPF, Officers consider that the adverse effects of the proposed development would not significantly and demonstrably outweigh the social, economic and environmental benefits. To the contrary, officers are of the view that the planning benefits substantially outweigh the adverse impacts which have been identified. Accordingly, it is recommended that the application should be approved.

2.0 Fire safety

Following the recent tragic fire at Grenfell Tower, the applicant has commissioned a review of the proposed fire strategy measures for the scheme. Fire safety and means of escape in tall buildings are not material planning considerations because it is dealt with under Building Regulations (Approved Document Part B). It is a well established planning principle that the planning system should not duplicate or supplement controls of another statutory regime (such as building regulations). Notwithstanding this, in the circumstances it is considered appropriate that the applicant's additional information relating to fire safety should be reported to Members of the Development Management Committee.

2.1 The applicant's fire safety review proposes the following enhancements:

- All buildings will be sprinkled, including residential and non-residential parts.
- All bedrooms will have smoke detectors, in addition to any internal, enclosed corridors.
- All open-plan kitchen areas will have both smoke and heat detectors. Enlosed kitchens will have a heat detector only.
- Installation of a firefighting lift.
- Installation of an automated smoke system with a fan system throughout (i.e. the stairs in each block will be protected from the ingress of smoke by fan-assisted smoke control systems in the stair lobbies/corridors, rather than with natural systems).
- Use of Gypsum white book only (Furness tested) for partition systems,

and the ASFP red book for fire-stopping system.
- Introduction of an additional exit from the tower block at level 8 on to the annexe.
- Increase structure to 2 hours, including all internal walls, cores, lift lobbies, corridors and escape cores.

2.2 Details of a fire safety strategy will be included as part of a Site Wide Management Plan which will be secured through a Section 106 agreement. Furthermore, the S106 agreement will include a requirement to provide fire hydrants to serve the proposed development.

3.0 Site and surroundings

3.1 The application site is a 1.58ha. parcel of land within Special Policy Area 6 (Western Gateway). The area in the vicinity of Ascot Road is characterised by a poor urban form which is somewhat underutilised. Policy SPA6 states that there will be opportunities for higher density mixed use development in sustainable locations close to the MLX station, including 300 homes, a primary school, retail, employment uses and community facilities. In addition, the Croxley View/Ascot Road Masterplan 2016 has been subject of public consultation and identifies a number of potential development sites, including the application site, within the Western Gateway policy area. The objective of the Masterplan Study is to build on the policy foundations of SPA6 and to provide a framework to facilitate redevelopment. The application site is identified as site S1 in the Masterplan and includes an indicative 400 dwelling units and a retail floor space of 1000m2.

3.2 The application site is also within site MXD4 of the emerging Watford Local Plan Part 2 Publication draft July 2016, which includes an estimated housing component of 400 units along with a mix of commercial uses to provide a local centre.

3.3 The application site is located in close proximity to the proposed MLX station and consists of brownfield land which is currently occupied by old warehouses and hard surfacing. The site is of limited ecological value.

3.4 The northern boundary borders the MLX railway line. The western boundary adjoins the single-carriageway section of Ascot Road (herein referred to as ‘Ascot Road Old’), which operates one-way southbound with a northbound contra-flow cycle lane. Ascot Road Community School, which opened in June 2015, is located to the east and Morrison’s supermarket is to the south. The school and supermarket share an access from Ascot Road. The dual-carriageway section of Ascot Road (herein referred to as ‘Ascot Road New’) provides the sole route to Watford Business Park and Croxley Business Park, which predominantly consist of employment uses within

Class B. Ascot Road is accessed off the A412, which is a Main Distributor Road in Hertfordshire County Council's Hierarchy of Roads. There are 6 roundabout junctions in the area, which are subject of capacity assessments in the Transport Assessment (Technical Appendix 8.1 of the Environmental Statement). The assessed junctions are:

- Hatters Lane/Blackmoor Lane/Ascot Road/ Greenhill Crescent
- Ascot Road(W)/Ascot Road(N)/Morrison's
- Ascot Road(S)/Whippendell Road/Ascot Road(N)/Raven Close
- Ascot Road/Watford Road/Rickmansworth Road
- Watford Road(E)/Baldwins Lane/Watford Road(W)
- Ascot Road/School/Morrisons access road.

3.5 The properties to the north of the railway line include a large storage warehouse and blocks of flats of up to 8 stories within the former Sun Printers site. The closest residential blocks are at The Chase, Omega Court, Rockwell Court, Printers Avenue and Bridgewater House.

3.6 Croxley View housing estate is located to the south beyond Morrisons. There is a public footpath that provides a pedestrian link between Croxley View and the application site. In addition, a cycle route commences adjacent to Morrisions, which connects to Ebury Way. Ebury Way is a 3.5m long traffic-free cycle route which is part of the National Cycle Network and connects Ricksmansworth and Watford town centre.

3.7 The application site benefits from a range of nearby facilities within walking distance, which include:

- Ascot Road Community Free School (primary school)
- Westfield Academy (secondary school)
- St Anthony's Catholic Primary & Nursery School
- Bright Horizons Day Nursery at 2 Printers Avenue
- Squirrels Nursery at Ascot Road Community Free School
- Doctors surgery at 7 Printers Avenue & pharmacy at 5 Printers Avenue
- Morrisons Supermarket
- Watford Business Park & Croxley Business Park
- Bus stops within 400m on Ascot Road (routes to Watford Junction and town centre)
- Ebury Way National Cycle Network (3 minute cycle ride)
- Cassiobury Park (5 minute walk)
- Playgrounds at Raven Close, Croxley View and Cassiobridge.

3.8 There are no nationally listed buildings in close proximity to the application site. Furthermore, there are no particular historical landmark buildings when the Western Gateway area is viewed from a number of locations. The nearest heritage asset is the Sun Clock Tower, which is a Locally Listed Building. The Townscape and Visual Impact Assessment, which forms part of the Environmental Statement, identifies heritage assets within a 1km radius of the application site. The following designated heritage assets have been considered:

<u>Listed buildings (all Grade II)</u>
Cassio Bridge Lock Number 78
Main building at Watford Boy's Grammar School
Cassio Bridge Lodge
Master's House at Watford Boy's Grammar School
Cassio Bridge Lock House
Watford Station

<u>Registered Parks and Gardens</u>
Cassiobury Park (Grade II Park)
Moor Park (Grade II* Park)

3.9 There are no conservation areas in the immediate surrounding area. The nearest conservation areas are The Square in Watford and Moor Park within the Borough of Three Rivers.

3.10 Croxley Common Moor Site of Special Scientific Interest (SSSI) is located approximately 900m to the south-west of the application site. Cassiobury Park Local Nature Reserve is approximately 600m to the north.

3.11 The application site is approximately 140m from the River Gade and is within Flood Zone 1 (low risk of flooding) of the Environment Agency's Flood Map for Planning.

4.0 Proposed development

4.1 The application proposes redevelopment of the site to provide a mixed use scheme including 485 residential units (Class C3), retail units (Class A1 and/or A2 and/or A3 uses), community floorspace (Class D1/D2), with associated cycle parking, car parking, playspace, landscaping and public realm improvements.

4.2 The application includes a 24 storey 81 metre tall building (Block A) in the north-west corner of the site close to the forthcoming MLX station, which forms a landmark or gateway feature. The front elevation facing Ascot Road comprises three

elements which provides strong vertical lines and a slender appearance. The eastern part of Block A reduces to 6 storeys. The lower ground floor provides Class A retail space. On the upper ground floor, an area of communal residential amenity space is proposed to the front and a Class D community use is proposed to the rear.

4.3 There is a change in land level of 3.75m across the site with the levels sloping up from west to east. The application proposes the provision of a podium basement car park, which would provide 185 car parking spaces (a ratio of 0.38 spaces per unit) including 5% disabled parking provision. The car park would include 19 active and 18 passive electric vehicle charging points. The basement would also provide secure storage for 575 cycles, which would be positioned close to the residential cores comprising the lifts and stairwells. The cycle stores would be cage style with a two tier stack system and would be secured by either fob or key access. Bin storage would be provided in the basement close to each of the residential cores. The cores would be secured by fob access and all access points would be covered by CCTV. The basement car park would be served by a vehicular access to the south, which adjoins Ascot Road Old. Three lay-bys are proposed along the site frontage to provide pull-in space for delivery vehicles; waste collection vehicles; and the stationing of 2no. car club vehicles.

4.4 The proposed development includes a package of measures to support the 'car lite' lower parking level, which includes the following:

- Provision of storage space for 575 cycles (in excess of policy requirement).
- A car club scheme to include 2no. vehicles.
- Improved signage to direct residents to the Ebury Way National Cycle Network.
- A financial contribution towards the provision of a cycle hire station adjacent to the application site.
- A financial contribution towards the improvement of local bus stop infrastructure.
- An on-site concierge to assist with deliveries and site management.
- A travel plan including measures and monitoring to reduce car trips to and from the site and promote the use of environmentally friendly transport.
- A financial contribution towards public consultation and implementation of a potential Controlled Parking Zone.

4.5 Pedestrian access to the development is from Ascot Road Old. There is a landscaped shared access 'Woodland Walk' adjacent to the northern boundary which would have a gradual DDA compliant gradient. It can also accommodate access for fire

engines, servicing and delivery vehicles. Due to the change in levels there is also a stepped access, which includes soft landscaping. In addition, the main entrance to Block A includes a lift access between the lower and upper ground floors.

4.6 Block C is a 6 storey L-shaped building that fronts Ascot Road. The lower ground floor comprises retail uses (Class A), which conceals the basement car park to the rear. The upper floors provide market housing. The block is broken into a series of varied vertical building blocks to reference the traditional urban street, which consists of a row of individual buildings built adjacent to each other with a ground floor retail element.

4.7 A large landscaped square is positioned between Blocks C and B. Block B is a 6 storey building providing market housing, which consists of duplex flats over the ground and first floors and flats on the upper floors. The design of the building is a modern interpretation of a traditional townhouse.

4.8 Blocks D and E collectively provide 170 affordable units, which equates to 35% of the total number of units. The blocks are accessed through the main area of public realm. The pedestrian access would lead through a large double-height passage in the middle of Block D which would provide a clear line of sight to Block E. A landscaped outdoor amenity space would be provided between Blocks D and E. There would also be a south facing amenity space adjoining Block E.

5.0 Relevant planning history

5.1 Following the funding approval for the Metropolitan Line Extension, issued by the Department for Transport (DfT) in December 2011, Hertfordshire County Council and London Underground Limited jointly applied to the Secretary of State for Transport under Section 6 of the Transport and Works Act Order (TWAO) 1992 for an Order authorising the construction, maintenance and operation of a new railway comprising the extension of London Underground's Metropolitan Line to Watford Junction. The TWAO Public Inquiry took place in October 2012 and deemed planning permission was granted in July 2013 (Ref. TWA/12/APP/01).

5.2 The former Royal Mail depot adjacent to the application site has been redeveloped to provide a primary school (Ascot Road Community Free School) and a supermarket (Morrison's), which meets the objectives of Policy SPA6 of the CS.

5.3 The primary school was granted outline planning permission on 22nd November 2012 (ref: 12/00792/OUTM) and a subsequent reserved matters application for the 'appearance, layout, scale and landscaping' (ref: 14/01106/REM) was approved on 15th September 2014.

5.4 The supermarket of up to 6,911sqm was granted conditional planning permission on 17th December 2012 (ref: 12/00793/FULM).

5.5 It should be noted that substantive measures were put in place to support the delivery of the primary school at this early stage with Watford Borough Council providing land to Hertfordshire County Council at substantially below market value and the supermarket development (Morrisons) bearing costs associated with remediation and land clearance of the school site in addition to the design and build cost of the access to the site.

5.6 Pre-application consultation

Officers attended a series of weekly workshops from July 2016 under a Planning Performance Agreement to provide advice and guidance to ensure that the proposed development meets the objectives of the Western Gateway Special Policy Area and to capitalise on the infrastructure improvements from the forthcoming MLX station. During the course of the pre-application workshops it was evident through illustrative material provided by the architects that a 24 storey tall building would provide a more slender and elegant appearance compared to a 15 storey building which would appear quite blocky. It was also felt that a taller building would provide improved legibility of the Western Gateway area and act as a catalyst for further regeneration in the locality. The architects improved and refined the massing and detailing of the buildings throughout the iterative pre-application process.

5.6.1 On 5th October 2016 the architects presented the scheme to the Design South-East Design Review Panel. As a result of the feedback from the panel, improvements were made to the legibility of the affordable housing blocks and its integration with the development as a whole. Furthermore, significant landscaping has been provided to integrate the development with the surroundings and improve the environment and biodiversity. The landscaping includes enhanced pedestrian connections within the site and areas of children's play space which is appropriately sited. There was also further refinement and articulation of the elevations.

5.6.2 The applicant held a public exhibition on Wednesday 2 November and Saturday 5 November at Ascot Road Community Free School. The Statement of Community Engagement and Consultation states that approximately 2,600 invitation leaflets were delivered to surrounding properties on Friday 21 October.

6.0 Planning policies

Development plan

6.1 In accordance with s.38 of the Planning and Compulsory Purchase Act 2004, the Development Plan for Watford comprises:

(a) *Watford Local Plan Core Strategy 2006-31*;
(b) the continuing "saved" policies of the *Watford District Plan 2000*;
(c) the *Hertfordshire Waste Core Strategy and Development Management Policies Document 2011-2026*; and
(d) the *Hertfordshire Minerals Local Plan Review 2002-2016*.

6.2 The *Watford Local Plan Core Strategy 2006-31* was adopted in January 2013. The *Core Strategy* policies, together with the "saved policies" of the *Watford District Plan 2000* (adopted December 2003), constitute the "development plan" policies which, together with any relevant policies from the County Council's *Waste Core Strategy* and the *Minerals Local Plan*, must be afforded considerable weight in decision making on planning applications. The following policies are relevant to this application.

6.3 **Watford Local Plan Core Strategy 2006-31**

WBC1	Presumption in favour of sustainable development
SS1	Spatial Strategy
SPA6	Western Gateway
SD1	Sustainable Design
SD2	Water and Wastewater
SD3	Climate Change
SD4	Waste
TLC1	Retail and Commercial Leisure Development
TLC2	Neighbourhood Centres
EMP1	Economic Development
EMP2	Employment Land
HS1	Housing Supply and Residential Site Selection
HS2	Housing Mix
HS3	Affordable Housing
T1	Regional Transport Node
T2	Location of New Development
T3	Improving Accessibility
T4	Transport Assessments
T5	Providing New Infrastructure
INF1	Infrastructure Delivery and Planning Obligations
UD1	Delivering High Quality Design
UD2	Built Heritage Conservation
GI1	Green Infrastructure
GI3	Biodiversity

Watford Local Plan Part 2 – Site Allocations and Development Management Policies 2006-31 Publication Version July 2016

SPMX1	Special Policy Areas
SPMX2	Mixed Use Allocations
SD5	Sustainable Design
SD6	Renewable Energy Technology
SD7	Decentralised Energy
SD8	Managing Flood Risk and the Water Environment
SD9	Water Consumption
SD10	Waste
SD11	Unstable, Contaminated and Potentially Contaminated Land
SD12	Potentially Hazardous or Polluting Development
SD13	Air Quality
SD14	Noise
SD15	External Lighting
HS12	Housing Delivery
T6	Car Parking Provision
T7	Car clubs and Charging Points for Low Emission Vehicles
T8	Cycle Parking Provision
T9	Access and Servicing
UD5	Design Policy: Residential
GI5	Trees, Woodlands and Hedgerows
GI6	Protecting and Enhancing the Grand Union Canal
GI9	Open Space and Children/Young Person's Play Space in Residential Development
GI10	Managing Biodiversity in new Developments
TB1	Location of Taller Buildings
TB2	Design of Taller Buildings

Part 2 of the Local Plan will replace and update the remaining Watford District Plan 2000 policies and site allocations to support the delivery of the Core Strategy. This has been subject to 3 rounds of public consultation – Nov-Dec 2013, Dec 2014-Feb 2015 and Dec 2015-Feb 2016. It contains development management policies and site allocations. The emerging polices and site allocations in this document can be given limited weight at this time.

6.4 **"Saved" Policies of Watford District Plan 2000**

SE7	Waste Storage, Recovery and Recycling in New Development
SE20	Air Quality
SE22	Noise
SE23	Light Pollution

SE24 Unstable and Contaminated Land
SE26 Watercourses
SE27 Flood Prevention
SE28 Groundwater Quality
SE36 Replacement Trees and Hedgerows
SE37 Protection of Trees, Woodlands and Hedgerows
SE39 Tree and Hedgerow Provision in New Development
SE40 Landscape Character Area Assessment
T10 Cycle Parking Standards
T21 Access and Servicing
T22 Car Parking Standards
T24 Residential Development
U17 Setting of Conservation Areas
H10 Planning Agreements for Educational and Community Facilities
E1 Employment Areas
L8 Open Space Provision in Housing Development
L9 Children's Play Space

6.5 **Hertfordshire Waste Core Strategy and Development Management Policies Document 2011-2026**

1 Strategy for the Provision of Waste Management Facilities
1A Presumption in Favour of Sustainable Development
2 Waste Prevention and Reduction
12 Sustainable Design, Construction and Demolition

6.6 **Hertfordshire Minerals Local Plan Review 2002-2016**

No relevant policies.

6.7 **Supplementary Planning Documents**

The following Supplementary Planning Documents are relevant to the determination of this application, and must be taken into account as a material planning consideration.

6.8 *Residential Design Guide*

The Residential Design Guide was adopted in July 2014 and amended in August 2016. It provides a robust set of design principles to assist in the creation and preservation of high quality residential environments in the Borough which will apply to proposals ranging from new individual dwellings to large-scale, mixed-use, town centre redevelopment schemes. The guide is a material consideration in the determination of relevant planning applications.

6.9 *Watford Character of Area Study*

The Watford Character of area Study was adopted in December 2011. It is a spatial study of the Borough based on broad historical character types. The study sets out the characteristics of each individual character area in the Borough, including green spaces. It is capable of constituting a material consideration in the determination of relevant planning applications.

6.10 *Skyline – Watford's Approach to Taller Buildings*
The Supplementary Planning Document was approved by the Council's Cabinet on 7th March 2016. It sets out the definition of taller buildings and the strategic and development management approach in terms of location and design. It is capable of constituting a material consideration in the determination of relevant planning applications.

6.11 **National Planning Policy Framework**
The National Planning Policy Framework sets out the Government's planning policies for England. The following provisions are relevant to the determination of this application, and must be taken into account as a material planning consideration:

Achieving sustainable development
The presumption in favour of sustainable development
Core planning principles
Section 1 Building a strong, competitive economy
Section 4 Promoting sustainable transport
Section 6 Delivering a wide choice of high quality homes
Section 7 Requiring good design
Section 8 Promoting healthy communities
Section 10 Meeting the challenge of climate change, flooding and coastal change
Section 11 Conserving and enhancing the natural environment
Section 12 Conserving and enhancing the historic environment
Decision taking

6.12 In January 2016 the Council received the South West Hertfordshire Strategic Housing Market Assessment and associated Economic Study 2016 (SHMA) which set out an Objectively Assessed Need (OAN) for housing in the Borough that exceeds the levels in the Core Strategy. Currently, the Council's allocations do not provide a five year supply of deliverable housing land based on the OAN contained within the SHMA. The SHMA forms only part of the evidence base for the next iteration of the local plan and further work is being undertaken in relation to capacity assessment and allocations, however it is a material consideration which needs to be taken into account.

6.13 Having regard to the SHMA the most recent evidence suggests that policies relating to targets for the delivery of housing within the Watford Local Plan Core Strategy 2006-31 are out of date. Accordingly, applications for housing should be considered against the second test for decision taking in paragraph 14 of the NPPF applications for housing should be granted permission unless any adverse consequences of doing so would demonstrably and significantly outweigh the benefits when assessed against the policies of the Framework.

7.0 Consultations

7.1 Neighbour consultations

Letters were sent to properties in The Gateway, Sydney Road, Ascot Road, The Boulevard, Greenhill Crescent and Croxley View.

Furthermore, 26 site notices were posted in surrounding streets. The proposal was also advertised in the Watford Observer on 27 January 2017 and again on 13 April and 5 May, when additional information to support the ES was provided.

7.2 The following is a summary of the representations that have been received:

Number of original notifications:	290
Number of objections:	260
Number in support:	96
Number of representations:	1

It is for the planning authority and the Development Management Committee to determine the weight to be placed on comments received in relation to planning application and a number of factors, including the proximity of these parties to the development may be considered relevant to this. Appendix 10 provides further information in relation to the source of comments.

The Council has also received an e-petition containing 1058 signatures in opposition to the proposed development.

The points that have been raised are summarised and considered in the tables below.

Representations objecting to the proposed development:

Representations	Officer's response
The tower is too high and exceeds planning policy.	The proposed tower is 81m tall, not 134.5m.

It rises to 134.5 metres, which is the same height as the London Eye. This scale and mass is starkly out of keeping and character with the local environment.	The height of the tall building and its impact on townscape are considered in paragraphs 8.5 – 8.5.12 of the report.
The proposed development would be visible from Cassiobury Park (registered park), Croxley Moor SSSI, conservations areas and listed buildings. Views into and out of these areas will be severely impaired by the development.	The impact on heritage assets is considered in paragraphs 8.6 – 8.6.8 of the report. It is important to note that a new development being visible from a heritage asset is not in itself harmful to that asset. The impact on setting is dependant on various factors including the distance of the proposed building from the asset and whether any important views would be obstructed. Further guidance is provided in the Historic England document 'The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning: 3'.
At 134.5m the tower might be visible from the Warner Bros. Studio site at Leavesden, which lies approx. 2 miles to the North. The openness of the skyline was a key reason for Warner Bros choosing Leavesden as its UK site, and it is essential to ensure that no development takes place which would be detrimental to the studio backlot and its clear skyline.	There are no Development Plan policies or supplementary planning documents that seek to protect views from Warner Brother Studios Leavesden. Notwithstanding this, the urban form of Watford is to the south of the Studios and the application site is included within the urban environment of the town. The main views from the Studios are to the west across the Metropolitan Green Belt, which would be unaffected by the development, and there is no evidence to suggest that the proposal would be detrimental to the Studios.
The number of dwellings on site is in excess of policy requirements.	The proposal includes 485 dwellings, which is above the housing component shown in Policy SPA6, the Croxley View/Ascot Road Masterplan and site allocation MXD4 of the emerging Local Plan Part 2, however these are only estimated housing figures. SPA6

	and MXD4 are worded positively and neither policy seeks to restrict the housing component. It is not contrary to Policy for the proposed housing component to be higher than the estimated housing delivery. One of the core planning principles of the NPPF is that development should make effective use of previously developed land, therefore the housing component is based on material planning considerations such as standard of layout, design, sustainability and transport impacts etc. rather than being restricted by an estimated figure.
The logic of the application is entirely based on the premise that there is major transport infrastructure in place. At this time, there are no close public transport interchanges. The Met Line Extension has not been confirmed for completion.	The Council expects that the MLX station will be delivered. Notwithstanding this, the application site is considered to be sustainable as it is served by a range of nearby facilities, as shown in paragraph 3.7 of the report. In the interests of robustness, the applicant has considered the 'no station' scenario in the Transport Assessment which shows the expected trip generation should the MLX station not be delivered. The proposed development would increase trip generation, however the proposed mitigation to the Ascot Road New/Ascot Road Old (Morrisons) roundabout would ensure that there would not be a significant impact on the local highway network. Regardless of the delivery of the MLX station the application site remains in a sustainable urban area with appropriate access to facilities and would not result in significant adverse impacts on the operation of the highway network.

The Transport Assessment shows that there would be a severe case of worsening traffic conditions as specified in the junction capacity assessment and what is suggested as mitigation in totally insufficient and all the current queues and delays we experience currently will severely worsen.	This is considered in paragraphs 8.16.5 - 8.16.20 of the report.
Lack of parking. The development would cause overspill parking to neighbouring areas. No mention has been made as to how the on-site parking places are to be allocated	This is considered in paragraphs 8.16.25 – 8.16.32 of the report. In respect of on-site parking allocation, a condition requiring the submission of a Parking Management Plan should be attached to any grant of planning permission, which shall: identify the electric vehicle charging point spaces that are to be provided within the basement car park as 'active' spaces and those as 'passive' spaces; detail the allocation of disabled person's parking space within the basement car park; detail the allocation of general parking spaces within the development; detail the management of general vehicle access across the site; detail the allocation of cycle parking for residents/staff/visitors of the development; and detail lighting within the basement.
The entrance to the underground car park is via a small entry and exit which would create chaos at peak times. No thought has been given to parents with their children walking along Old Ascot Road to the new school.	The proposed vehicular access would be subject to a s278 Agreement with the Highway Authority to ensure that it is constructed to adopted standards. The Highway Authority has raised no objections in relation to safety.
There are no cycle lanes from the site that lead to any part of Watford and there is no evidence of commitment to create the	The application site is a 3 minute cycle ride from the Ebury Way National Cycle Network, which provides a car-free cycle route to Watford town centre. The applicant has

same.	completed a s106 obligation to improve directional signage to the cycle route. The Travel Plan seeks to increase cycle use, as discussed in paragraphs 8.16.25 – 8.16.31 of the report.
There is poor provision for pedestrians.	This is considered in paragraphs 8.16.23 – 8.16.24 of the report.
Has any provision been made for the noise the trains will make during the day and night.	Noise and vibration mitigation is considered in paragraphs 8.12 – 8.12.5 of the report.
Additional pressure on school places, surgeries, hospitals and public utilities.	This is considered in paragraphs 8.4 – 8.4.6 of the report.
Loss of light.	This is considered in paragraphs 8.15 – 8.15.27 of the report.
Loss of outlook.	This is considered in paragraphs 8.15.31 – 8.15.32 of the report.
Loss of privacy.	This is considered in paragraphs 8.15.28 – 8.15.30 of the report.
Living in tall buildings causes depression, poorer social relationships, crime or fear of crime.	There is no evidence that tall buildings cause depression, poorer social relationships, crime or fear of crime. The Hertfordshire Constabulary Crime Prevention Design Service has no objection to the proposed development. They state that their comments made during a pre-application meeting have been incorporated into the design.
The design does not allow enough space between blocks. In addition to insufficient open areas, it risks creating micro-climates and 'wind tunnels'. Have sufficient wind tests been performed?	The impact on microclimate is considered in paragraphs 8.13 – 8.13.7 of the report. The amount of outdoor space is considered in paragraph 8.8.6 of the report.

Would it be advisable to build 485 units overlooking a children's playground.	It is common for schools to be overlooked by housing in urban areas. There is no planning harm associated with this arrangement which would justify refusal of planning permission.
It will effect the existing watertable, the current water quality and current water capacity. Deep piling that will be required for this high construction will damage and impact the subsurface water at this location. Would the building with its deep foundations and enormous weight interfere with the aquifer?	The Environment Agency has requested a number of conditions to be attached to any grant of planning permission. The conditions include the provision of a Piling Method Statement to be approved by the Environment Agency and Thames Water to ensure that there would be no impact on sub-surface infrastructure or the aquifer.
No play space for children.	This is considered in paragraph 8.8.7 of the report.
Increase in air pollution.	This is considered in paragraphs 8.11 – 8.11.2 of the report.
Increase in noise pollution.	This is considered in paragraph 8.12.5 of the report.
Increased pressure on sewerage infrastructure.	Thames Water has stated that they have no objection in relation to impact on sewerage infrastructure.
Refuse collection may be difficult due to high density of dwellings leading to fly tipping.	Refuse stores would be provided in the basement car park adjacent to each residential core. There would be a waste chute system to allow convenient disposal. The Design & Access Statement states that the waste chute system would be a bi or tri-sort version allowing selection of waste material. On collection days the site operative will use a vehicle to move the bins to the collection area to the south of the site, which is close to the lay-by that would be used by waste collection vehicles. Full details of a Site Wide Management Plan

	are to be secured through a s106 obligation.
Low percentage of affordable housing.	The proposal makes provision for 170 affordable units (35%) in accordance with Policy HS3 of the CS. The affordable housing units would make a significant contribution towards meeting the need in the Borough and should be afforded considerable weight in determination of the application.
The area is for light-industrial units and creates non-retail employment for the area. To re-allocate this to retail and domestic accommodations should not be allowed and new light-industrial units should be built instead.	The proposal provides a significant regeneration scheme, which would upgrade the area from a social, environmental and economic perspective. The proposed development meets the objectives in SPA6 of the CS and the loss of degraded industrial units is therefore considered to be acceptable.
The long period of time for construction would cause problems.	Issues arising from the construction of developments are not material planning consideration, however this is considered in paragraph 8.12.5 of the report.
In the light of the recent horrendous fire at Grenfell Towers surely Watford Council will be looking at the Ascot Road Development again. The fire service can only reach 12 storeys with their ladders! The area below the proposed buildings would not be sufficiently spacious for numerous services to attend in large numbers should such a situation as this arise again. Locally fire stations have closed and it would take some time for services to come from other areas. We do not have the infrastructure in lots of areas to support such a tall building with multiple occupancy.	This is considered in paragraphs 2.0 – 2.2 of the report.
Too many 1-bed flats. Need more family housing.	The proposed housing mix provides predominantly one and two bedroom units. It is recognised that one and two bed units

	are more suitable for flatted development, which this site will provide. A large proportion of one and two bed units are considered appropriate in this highly accessible location which is suitable for high density development. The affordable housing mix consists of a large proportion of 2-bed (4 person) units, which was requested by the Housing department at pre-application stage.
It would present a hazard to aircraft and helicopters.	The application site is within the safeguarding area of RAF Northolt. The safeguarding direction dated February 2015 from the Secretary of State for Communities and Local Government requires the Council to consult with the Ministry of Defence in this area for any building, structure or works exceeding 91.4m in height above ground level. The proposed building would be 81m above ground level therefore the Council is not required to consult with the Ministry of Defence. The application site is not within any other safeguarding areas, therefore it would pose no risk to aircraft. The Civil Aviation Authority is responsible for recording all air navigation obstacles in the United Kingdom for the purposes of air safety. Full details of obstacles, that is any building or works extending 91.4 metres or more above ground level, are published for pilots' information and noted on aeronautical maps and charts. Article 109A of the Air Navigation Order 2000 requires the person in charge of any en-route obstacle which extends 150 metres or more above ground level and which is not in the vicinity of a licensed aerodrome to ensure that it is fitted with warning lights and to

	ensure that they are displayed. The proposed building is less than 150 metres high therefore warning lights are not required.
The proposed development would destroy the natural habitat for birds and animals.	This is considered in paragraphs 8.14 – 8.14.8 of the report.

Representations in support of the proposed development:

Representations	Officer's response
The development would provide needed housing. It would provide more affordable homes. It would increase business in Watford. The proposal would improve the area. Watford needs high-rise good quality builds for the prosperity and future of Watford. Unfortunately more and more land will be built on in time to come but I think it's a good idea building a tower of flats rather than spreading houses out everywhere.	Noted.

The Committee will be advised of any additional representations received after the date this report was written.

7.3 **Statutory publicity**

The application was publicised by 26 site notices posted in surrounding streets on 23 January 2017 and by advertisement in the Watford Observer published 27 January 2017.

Further information in relation to the Environmental Statement was submitted on 13 April and 5 May in response to a written request from Officers.

The further information submitted on 13 April included:

- Revised self-test Average Daylight Factor modelling to show compliance with BRE guidance.
- A shadow model to show that the outdoor amenity spaces of the proposed development would achieve appropriate levels of sunlight on 21 March, in accordance with BRE guidance.
- An addendum to the Townscape and Visual Impact Assessment to include a wireline view from Moor Park registered park.
- An addendum to the Flood Risk Assessment and Surface Water Drainage Strategy to address comments from the Lead Local Flood Authority.

The further information submitted on 5 May included the above information and a transport statement addendum, which has been prepared following consultation with the Highway Authority.

The further information has been publicised by way of press adverts published in the Watford Observer on 21 April and 5 May, in accordance with the requirements of Regulation 22 of the EIA regulations.

7.4 **Technical consultations**

The responses received from technical consultees are set out below. The report generally summarises the technical comments, full copies of all responses are available on the public planning record.

7.4.1 Hertfordshire County Council (Highway Authority)

Hertfordshire County Council (HCC) as Highway Authority has no objection to the principle of development on the site, subject to conditions.

The proposed scheme has been the subject of pre-application discussion with HCC and a Transport Assessment Scoping Report was submitted for HCC consideration. HCC provided the applicant's consultant with pre-application advice to be considered as part of any formal application submission.

A planning application for the proposed development site was submitted in January of 2017. HCC have previously recommended granting permission to the proposed

development subject to conditions; however, subsequent to discussions with Watford Borough Council (WBC), the applicant was requested to submit amended traffic profiles and junction modelling to address the discrepancies in the figures used within the submitted TA and the TA submitted as part of a nearby scheme at The High Tech Site. Both the proposed development and the High Tech Site proposed development have undergone pre-application discussions and subsequent planning application submissions in tandem and as such the WBC has requested that the TA submissions consider the same traffic profiles for consistency. However, it was noted that the figures used in the submitted TAs were not the same and therefore the applicants were requested to provide amendments to their submitted TAs. These have been provided and are reviewed herein.

As part of the planning application package, the applicant has provided a Transport Assessment (TA) to provide evidence to demonstrate the impact of the proposed development on the local highway network.

Trip Generation and Distribution:
As part of the pre-application stage, the transport consultant submitted a Transport Assessment Scoping Report (TASR) for HCC consideration and comment. It was agreed at the pre-application stage that the proposed commercial land uses would not generate external trips on the local highway network and that they would likely be used predominantly by residents of the proposed development. Therefore, the proposed commercial land uses would not be taken into account for the cumulative trip generation calculations.

Additional junction modelling and traffic distribution profiles were provided as part of an amendment to address the discrepancies between the junction modelling and traffic volumes used for this TA and a TA submitted as part of the application submission for the High Tech Site.

Trip Generation:
Trip generation profiles for the existing site land use(s) and the proposed development are provided as part of the TA.

Existing Situation:
The existing site comprises Industrial/Warehouse Buildings (6,426sqm). To obtain trip generation profile for the existing site land use, traffic surveys were undertaken in October 2016. This approach was previously agreed as part of pre-application discussions. The existing observed trip generation is as follows:
- AM Peak: (08:00-09:00) 7 arrivals, 1 departures, 8 two-way trips
- PM Peak: (17:00-18:00) 4 arrivals, 12 departures, 16 two-way trips
- 24 Hour: 70 arrivals, 81 departures, 151 two-way trips

Proposed Development Situation:
The proposed development site would comprise a mixed used scheme of 485 residential units, retail units (1,093sqm), community floor space and associated cycle parking, car parking, playspace, landscaping and public realm improvements. For the purposes of this assessment, only the residential land uses are considered for the proposed trip generation profile as no parking will be provided for the retail elements of the scheme and therefore it is intended that the units will be promoted as offering flexible retail space, with customers predominately originating from the immediate site residents. On this basis, they have assumed no trips will be generated by vehicles to the site by the retail units. This is considered acceptable as it was previously agreed as part of pre-application discussions.
To obtain trip rates for the proposed residential land use, the TRICS online database was interrogated, this is considered an appropriate methodology. Inner London sites are manually excluded from the surveys. The applicant has kept outer London sites within the TRICS assessment and this was justified by reviewing the trip rates compared to those of the sites outside of London. This is considered acceptable and suitably justified.

To establish the vehicle trip generation rate, an additional criterion was selected to only include the sites with less than 1 parking space per unit. This rate was used to establish the vehicle trip generation for the site. This is considered acceptable due to the proposed parking provisions being at a rate of less than 1 parking space per unit.

The following parameters were used for the proposed development residential space:

Flats Privately Owned
- 03 - Residential - C - Flats Privately Owned;
- Excluding Scotland, Wales and Ireland and central/inner London;
- GFA: 6 to 530 units;
- Average Vehicle Trip Rates (Monday to Friday); and,
- Town Centre, Edge of Town Centre chosen.

Affordable Flats
- 03 - Residential - D - Affordable/Local Authority Flats;
- Excluding Scotland, Wales and Ireland and central/inner London;
- GFA: 6 to 339 units;
- Average Vehicle Trip Rates (Monday to Friday); and,
- Town Centre, Edge of Town Centre chosen.

The proposed trips rates generated by the TRICS assessment for the proposed development are as follows:

Flats Privately Owned
- AM Peak: 0.038 arrivals, 0.081 departures and 0.119 two-way
- PM Peak: 0.078 arrivals, 0.059 departures and 0.137 two-way

Affordable Flats
- AM Peak: 0.035 arrivals, 0.078 departures and 0.113 two-way
- PM Peak: 0.024 arrivals, 0.049 departures and 0.073 two-way

The resultant trips for the proposed development during the peak hours are as follows:

AM Peak
- Flats Privately Owned: 12 arrivals, 26 departures, and 38 two-way movements
- Affordable Flats: 6 arrivals, 13 departures, and 19 two-way trips
- Total: 18 Arrivals, 39 departures, and 57 two-way trips

PM Peak
- Flats Privately Owned: 3 arrivals, 27 departures, and 30 two-way movements
- Affordable Flats: 4 arrivals, 8 departures, and 12 two-way trips
- Total: 7 arrivals. 35 departures, and 42 two-way trips

Trip Generation Impact:
The difference between the trips for the existing and proposed land uses would be as follows:
- AM Peak: 11 arrivals, 38 departures and therefore 49 two-way trips
- PM Peak: 3 arrivals, 23 departures and therefore 26 two-way trips

Multi-modal Trip Generation:
The TA provides a multi-modal trip generation profile. The total multi-modal trip generation profile was established by first subtracting the vehicle trips from the all-person trips established using TRICS. This is considered acceptable. The remaining all-person trips would be proportioned to individual modes of travel by considering the 'method of journey to work' proportions taken from the census data, excluding the Central area. This is considered acceptable and was agreed with HCC.

Trip Distribution:
Trip distribution assumptions for the proposed development traffic have been provided as part of the TA. The percentage trip distribution profile was derived by interrogating the Census 2011 Journey to Work data which considered

origin/destination information for commuters. The journey to work data by 'car drivers' was considered for the trip distribution profile. This approach is considered acceptable and agreed with HCC.

The distribution and assignment assumptions of traffic generated by the ARMP S3a site are not considered correct, as the site is to be accessed via the Morrisons' spur, not via Greenhill Crescent. However, as the AM and PM total two-way trips equate to 15 and 17 respectively, it is unlikely that this would have a severe impact on the junction assessments. Therefore, revised assessments were not required for the purposes of addressing this discrepancy as part of the original planning application submission.

Committed Developments:
As part of the TA, the applicant has considered both committed developments and developments that are reasonably foreseeable within the near future. The developments considered are the following:
- Cassiobridge Station (Committed Development);
- Ascot Road Free School (Committed Development/already in operation);
- Buildings 1 and 2, Martin Meadow (Committed Development);
- High Tech Site (Development within the foreseeable future ' application being considered in tandem with this application); and,
- Ascot Road Masterplan (ARMP) Sites (P5, P6, P7, S2, S3a) (Development within the foreseeable future).

The committed developments considered as part of the TA are considered appropriate for the purposes of the assessment.

Amended Traffic Flows:
Amended traffic flow diagrams were submitted to address discrepancies between the figures used in the TA for the proposed development and the TA for the proposed development at the High Tech Site, as previously discussed. This was submitted at the request of Watford Borough Council (WBC). The amended traffic flows were submitted as requested by HCC and WBC. The amended flow profile for all flows, including proposed development, committed development and ARMP flows are as follows:

Proposed Development:
- AM Peak: 11 arrivals, 38 departures for a total 49 two-way trips
- PM Peak: 25 arrivals, 15 departures for a total 40 two-way trips

High Tech Site:
- AM Peak: 145 arrivals, 6 departures for a total 151 two-way trips

- PM Peak: 1 arrivals, 190 departures for a total 191 two-way trips

Committed Developments:
Cassiobridge Station
- AM Peak: 0 arrivals, 42 departures for a total 42 two-way trips
- PM Peak: 23 arrivals, 3 departures for a total 26 two-way trips

Buildings 1 and 2:
- AM Peak: 187 arrivals, 16 departures for a total 203 two-way trips
- PM Peak: 11 arrivals, 144 departures for a total 155 two-way trips

Ascot Free School:
- AM Peak: 138 arrivals, 98 departures for a total 236 two-way trips
- PM Peak: 15 arrivals, 21 departures for a total 36 two-way trips

ARMP Sites:
S2 - 100 Residential Units
- AM Peak: 4 arrivals, 8 departures for a total 12 two-way trips
- PM Peak: 8 arrivals, 6 departures for a total 14 two-way trips

S3a - 125 Residential Units
- AM Peak: 5 arrivals, 10 departures for a total 15 two-way trips
- PM Peak: 10 arrivals, 7 departures for a total 17 two-way trips

P5 - 35 Residential Units
- AM Peak: 1 arrival, 3 departures for a total 4 two-way trips
- PM Peak: 3 arrivals, 2 departures for a total 5 two-way trips

PS6 - 6200SQM Office space
- AM Peak: 39 arrivals, 2 departures for a total 41 two-way trips
- PM Peak: 2 arrivals, 35 departures for a total 37 two-way trips

P7 - 40 Residential Units
- AM Peak: 2 arrivals, 3 departures for a total 5 two-way trips
- PM Peak: 3 arrivals, 2 departures for a total 5 two-way trips

Impact on the Highway
Junction Assessment:

The applicant proposes a number of different scenarios in order to demonstrate the impact of the proposed development during different stages of the development of the surrounding area. The adopted scenarios are the following:

- 2016 existing year, considering 2015 traffic counts undertaken in support of the Buildings 1 and 2, Marlins Meadow planning application of Three Rivers District Council with application reference: 15/1427/FUL;
- 2021 future year baseline with committed development;
- 2021 future year baseline with committed development plus development proposal;
- 2021 future year baseline plus selected sites within the Ascot Road Masterplan;
- 2021 future year baseline plus Ascot Road Masterplan plus development;
- 2021 future year baseline plus Ascot Road Masterplan plus TRDC's Woodshots Meadow High Tech Site;
- 2021 future year baseline plus Ascot Road Masterplan plus TRDC's Woodshots Meadow High Tech Site plus development; and,
- 'No Cassiobridge Station' scenario.

Traffic growth rates were established using TEMPRO software (version 7). Growth rates were established to grow traffic from 2015 to 2016. The 2015 - 2016 growth rates are 1.021 and 1.020 for the AM and PM peak periods, respectively.

The growth rates for the 2016 to 2021 period were established considering TEMPRO and proposed masterplan development, this is considered acceptable. The 2016 - 2021 growth rates are 1.049 and 1.048 for the AM and PM peak periods, respectively, for Watford and 1.014 and 1013 for MSOA for the AM and PM peak periods, respectively.

The applicant has provided junction capacity assessments for the following junctions, as agreed as part of pre-application discussions with HCC, within the vicinity of the site:

- Ascot Road Old / Ascot Road New roundabout junction;
- Ascot Road Old/ Ascot Road New / Whippendell Road roundabout junction;
- Ascot Road New / A412 Rickmansworth Road roundabout junction;
- A412 Rickmansworth Road / Watford Road / Baldwins Lane roundabout junction; and,
- Ascot Road Old / Morrisons Access Priority Junction.

An analysis of the impact of the proposed development for each of the aforementioned scenarios on the surrounding junctions is provided below. Any proposed mitigation measures are also considered as part of the junction assessment review. Any mitigation measures would require S278 agreements and would need to be reviewed and approved by HCC's Development Management (DM) implementation team.

Amended junction modelling was submitted to address discrepancies between the figures used in the TA for the proposed development and the proposed development at the High Tech Site. This was submitted at the request of Watford Borough Council. The results of these junction model amendments are discussed below.

Ascot Road Old / Ascot Road New roundabout junction

Amended Modelling:

The results for the Ascot Road / Morrisons roundabout junction demonstrated that the junction would operate over capacity for the 2021 future year, with committed developments added to the network. The future 2021 with committed development scenario would have a RFC of 1.27, queue length of 52.9 PCUs and a delay of 377.58 seconds (6mins and 17.58 seconds). The addition of the traffic associated with the proposed development herein would result in the junction operating further over capacity with a RFC of 1.38 and associated queue of 73 PCUs and delay of 493.35 seconds (8 mins and 13.35 seconds). The proposed development would increase the RFC by 0.11, or +11%, queue by 20.1 PCUs and delays by 115.77 seconds (1 min and 55.77 seconds). The net increase in the operational thresholds would need to be mitigated.

The development also considered the scenario where the High Tech Site is introduced to the network; however the ARMP traffic is also considered is this scenario. The net impact on the junction between the two proposed developments is critical in establishing the required contributions for mitigation at the junction.

The amended modelling provided for the Ascot Road development considers the following scenarios which can be used to determine the associated net impact of the current development proposals compared to the High Tech Site proposals: 2021 base + Com. Dev + ARMP, 2021 base + Com. Dev + ARMP + Development (Ascot Road), and 2021 base + Com. Dev + ARMP + High Tech.

- For the scenario 2021 base + Com. Dev + ARMP (which does not include either of the proposed developments), the RFC value for the Morrisons junction arm is 1.33.
- The 2021 base + Com. Dev + ARMP + High Tech Site traffic has an RFC of 1.80 for the Morrisons Junction arm and the 2021 base + Com. Dev + ARMP + Ascot Road traffic has an RFC of 1.44 for the Morrisons junction arm.

This demonstrates that, relative to each other, the High Tech site has the greater impact. However, they both have an impact that would need to be addressed, whether or not the other development comes forward. Therefore, both developments will be required to provide contributions towards mitigation at this

junction.

The amended modelling also considered the mitigated scenario where the mitigation measures proposed above were modelled with the revised traffic figures. The modelling demonstrates that the overall operation of the junction would continue to be significantly improved for all scenarios and that the results in all scenarios are improved from the future 2021 with committed development scenario.

Ascot Road Old/ Ascot Road New / Whippendell Road roundabout junction
Amended Modelling:
The results for the Whippendell Road / Ascot Road / Raven Close roundabout junction demonstrated that the junction would operate within capacity for the 2021 future year, with committed developments added to the network. The future 2021 with committed development scenario junction operation results would be a maximum RFC of 0.85, queue length of 5.4 PCUs and a delay of 28.80 seconds for the Whippendell Road junction arm in the AM Peak. The addition of the traffic associated with the proposed development herein would result in the junction operating over capacity at the Whippendell Road junction arm with a RFC of 0.86 and associated queue of 5.6 PCUs and delay of 30.98 seconds. The proposed development would increase the RFC by 0.01, or +1%, queue by 0.2 PCUs and delays by 2 seconds. The net increase in the operational thresholds are negligible.

The development also considered the scenario where the High Tech Site is introduced to the network; however the ARMP traffic is also considered in this scenario. The net impact on the junction between the two proposed developments is critical in establishing the required contributions for mitigation at the junction. The amended modelling provided for the Ascot Road development considers the following scenarios which can be used to determine the associated net impact of the current development proposals compared to the High Tech Site proposals: 2021 base + Com. Dev + ARMP, 2021 base + Com. Dev + ARMP + Development (Ascot Road), and 2021 base + Com. Dev + ARMP + High Tech.

- For the scenario 2021 base + Com. Dev + ARMP (which does not include either of the proposed developments), the RFC value for the Whippendell Road junction arm is 0.90.

- The 2021 base + Com. Dev + ARMP + High Tech Site traffic has an RFC of 1.06 for the Whippendell Road Junction arm and the 2021 base + Com. Dev + ARMP + Ascot Road traffic has an RFC of 0.91 for the Whippendell Road junction arm.

This demonstrates that the High Tech site has the greater impact and the Ascot

Road site has a negligible impact at this junction. Therefore, the High Tech Site would be required to provide mitigation at this junction and the proposed development would not be required to provide mitigation.

Ascot Road New / A412 Rickmansworth Road roundabout junction
Amended Modelling :
The junction continues to operate within capacity for all scenarios when the traffic flows are adjusted to address the amendments requested by HCC and WBC.

A412 Rickmansworth Road / Watford Road / Baldwins Lane roundabout junction
A412 Rickmansworth Road / Watford Road / Baldwins Lane roundabout junction operates within capacity only for the 2016 scenario. Queuing issues are demonstrated for the Watford Road West and Watford Road East arms during the AM peak and PM peak.

A mitigation strategy is not provided by the applicant due to the negligible impact of the proposed development at the junction. However, a mitigation plan is proposed to HCC via the extension of the flare on the Watford Road west arm from 15m to 25m, leading to mitigation of any queuing issues for the future scenarios. However, it is agreed that due to the relative minimal impact of the proposals on the overall operation of the junction, additional assessment of the proposals are not required.

Ascot Road Old / Morrisons Access Priority Junction
The junction operates within capacity for all the scenarios. Therefore, no mitigation measures are required.

'No Cassiobridge Station' scenario
Further assessment has been undertaken which considers the scenario where the construction of Cassiobridge station is not completed. The impact of the station has been removed for the purposes of this scenario.

Revised trip rates have been provided by the applicant by interrogating TRICS to obtain higher trip rates due to the increase likely usage of personal cars. This is considered acceptable. Based on these trips rates and the associated increase in trips generated by the proposed development, junction capacity assessments of the surrounding junctions have been provided by the applicant. The junctions that were assessed are the following:

- Ascot Road Old / Ascot Road New roundabout junction;
- Ascot Road Old/ Ascot Road New / Whippendell Road roundabout junction;
- Ascot Road New / A412 Rickmansworth Road roundabout junction;
- A412 Rickmansworth Road / Watford Road / Baldwins Lane roundabout junction;

and,
- Ascot Road Old / Morrisons Access Priority Junction.

Ascot Road Old / Ascot Road New roundabout junction
Amended Modelling:
The results for the Ascot Road / Morrisons roundabout junction demonstrated that the junction would operate over capacity for the 2021 future year, with committed developments added to the network, on the Morrisons junction arm in the AM peak. The future 2021 with committed development scenario would have a RFC of 1.14, queue length of 31.6 PCUs and a delay of 249.66 seconds (4 mins and 9.66 seconds). The addition of the traffic associated with the proposed development herein would result in the junction operating further over capacity with a RFC of 1.45 and associated queue of 86.3 PCUs and delay of 568.48 seconds (9 mins and 28.48 seconds). The proposed development would increase the RFC by 0.31, or +31%, queue by 54.7 PCUs and delays by 318.82 seconds (5 min and 18.82 seconds). The net increase in the operational thresholds would need to be mitigated.

The development also considered the scenario where the High Tech Site is introduced to the network; however the ARMP traffic is also considered in this scenario. The net impact on the junction between the two proposed developments is critical in establishing the required contributions for mitigation at the junction.

The amended modelling provided for the Ascot Road development considers the following scenarios which can be used to determine the associated net impact of the current development proposals compared to the High Tech Site proposals: 2021 base + Com. Dev + ARMP, 2021 base + Com. Dev + ARMP + Development (Ascot Road), and 2021 base + Com. Dev + ARMP + High Tech.

- For the scenario 2021 base + Com. Dev + ARMP (which does not include either of the proposed developments), the RFC value for the Morrisons junction arm is 1.31.

- The 2021 base + Com. Dev + ARMP + High Tech Site traffic has an RFC of 1.79 for the Morrisons Junction arm and the 2021 base + Com. Dev + ARMP + Ascot Road traffic has an RFC of 1.63 for the Morrisons junction arm.

This demonstrates that the High Tech site has the greater impact. However, they both have an impact that would need to be addressed, whether or not the other development comes forward. Therefore, both developments will be required to provide contributions toward mitigation at this junction.

The amended modelling also considered the mitigated scenario where the proposed mitigation measures proposed above were modelled with the revised traffic figures.

The modelling demonstrates that the overall operation of the junction would continue to be significantly improved for all scenarios and that the results in all scenarios are improved from the future 2021 with committed development scenario.

Ascot Road Old/ Ascot Road New / Whippendell Road roundabout junction
Amended Modelling:
The results for the Whippendell Road / Ascot Road / Raven Close roundabout junction demonstrated that the junction would operate slightly over capacity for the 2021 future year, with committed developments added to the network. The future 2021 with committed development scenario junction operation results would be a maximum RFC of 0.9, queue length of 7.2 PCUs and a delay of 38.17 seconds for the Whippendell Road junction arm in the AM Peak. The addition of the traffic associated with the proposed development herein would result in the junction operating over capacity at the Whippendell Road junction arm with a RFC of 0.93 and associated queue of 9.5 PCUs and delay of 49.94 seconds. The proposed development would increase the RFC by 0.03, or +3%, queue by 2.3 PCUs and delays by 11.77 seconds. The net increase in the operational thresholds are negligible.

The development also considered the scenario where the High Tech Site is introduced to the network; however the ARMP traffic is also considered is in this scenario. The net impact on the junction between the two proposed developments is critical in establishing the required contributions for mitigation at the junction.

The amended modelling provided for the Ascot Road development considers the following scenarios which can be used to determine the associated net impact of the current development proposals compared to the High Tech Site proposals: 2021 base + Com. Dev + ARMP, 2021 base + Com. Dev + ARMP + Development (Ascot Road), and 2021 base + Com. Dev + ARMP + High Tech.

- For the scenario 2021 base + Com. Dev + ARMP (which does not include either of the proposed developments), the RFC value for the Whippendell Road junction arm is 0.96.
- The 2021 base + Com. Dev + ARMP + High Tech Site traffic has an RFC of 1.12 for the Whippendell Road Junction arm and the 2021 base + Com. Dev + ARMP + Ascot Road traffic has an RFC of 0.99 for the Whippendell Road junction arm.

This demonstrates that the High Tech site has the greater impact and the Ascot Road site has a negligible impact at this junction. Therefore, the High Tech Site would be required to provide mitigation at this junction and the proposed development would not be required to provide mitigation.

Ascot Road New / A412 Rickmansworth Road roundabout junction
Ascot Road New / A412 Rickmansworth Road roundabout junction would operate within capacity. Therefore, no mitigation measures are required.

A412 Rickmansworth Road / Watford Road / Baldwins Lane roundabout junction
A412 Rickmansworth Road / Watford Road / Baldwins Lane roundabout junction operates over capacity for the Watford Road West junction arm for the AM peaks and for Watford Road East junction arm for the PM peaks.

It is proposed in the TA to increase the effective flare length of Watford Road West junction arm from 15m to 30m based on which queuing issues can be mitigated under all scenarios, including the High-Tech site. However, it is agreed that due to the relative minimal impact of the proposals on the overall operation of the junction, additional assessment of the proposals are not required.

Ascot Road Old / Morrisons Access Priority Junction
Ascot Road Old / Morrisons Access Priority Junction operates within capacity for all the selected scenarios. Therefore, no mitigation measures are required.

Highway Safety
As part of the TA, 5 years of collision data (2011 - 2016) was reviewed and obtained from HCC by the applicant for the surrounding highway network. The methodology is considered acceptable.

The collision data provided in the TA states that there were 18 collisions within the vicinity of the proposed development site during this period. 17 collisions are slight in severity and one is serious and none have fatalities.

9 collisions included vulnerable users - 3 with pedestrians and 6 with cyclists. 2 pedestrian collisions occurred at a toucan crossing where motorists failed to stop at a red signal. Where incidents involved cyclists, the majority occurred in the roundabout and motorists failed to see them circulating the roundabout.

Majority of collisions involving vehicles were shunt collisions where vehicles trailed too closely and collided with the vehicle in front when they stopped prior to entering the junction.

Therefore, it is felt that the proposed development is not likely to have a detrimental impact on the overall safety and operation of the highway as there does not appear to be geographical or highway related issues leading to collisions.

Refuse and Service Delivery

Refuse Vehicles:
Refuse bins would be located in the undercroft storage areas and would be moved to a temporary holding area in the south-west corner of the site. A lay-by would be created in order to allow refuse vehicles to approach the temporary bin storage area. A 10m distance would be kept between the refuse vehicles and the temporary bin holding area. This distance is considered acceptable. Swept path assessments have been provided for a refuse collection vehicle accessing the layby which demonstrates that refuse vehicles can safely enter and leave the layby in a forward gear. This is considered acceptable.

Service Vehicles:
Servicing for the site is proposed to be carried out using dedicated loading / servicing bays along the Ascot Road site frontage. The use of a concierge service located within Block A is proposed to receive these deliveries and to deliver them to the other blocks on foot.

Whilst it is considered that the proposals for the refuse and servicing and delivery for the site have been addressed, a servicing and delivery management plan would be required. The servicing and delivery plan is required to set out the proposed servicing, delivery and refuse collection measures and to manage the movements to ensure that the safety and operation of the highway is not impacted.

Highway Layout
Vehicle Access:
The applicant proposes the construction of the new access at the southwest corner of the site which provide access to the undercroft parking area. The provided swept path assessments demonstrate that a large car can safely enter, manoeuvre through and depart the site in a forward gear. This is considered acceptable. However, the applicant would need to provide exact dimensions for the site entrance as part of S278 agreement for HCC's Development Management (DM) Implementation team consideration. The DM implementation team have been consulted with respect to the access arrangements and their comments are provided in the swept path assessment section.

Pedestrian Access:
Pedestrian access would occur via Ascot Road frontage with a series of pedestrian links that provide access to the core of each building. A pedestrian link to the north of the site would provide access to the proposed Cassiobridge Station. A signalised pedestrian crossing is proposed by the applicant in order to allow the safe movement of pedestrians to and from the Cassiobridge Station. A footway on the east of Ascot Road is provided. Additionally, footways exist on Whippendell Road and Watford Road.

Pedestrianisation of Old Ascot Road is recommended by the applicant in order to improve the pedestrian mobility within the vicinity of the site. This should be discussed and agreed with HCC. However, initial consideration is that these proposals are favourable to HCC if bus access to Old Ascot Road is retained.

Designated crossing facilities surround the site. In the south of the site, an island is used in order to facilitate the safe movement of pedestrians from Ascot Road to Ascot Road Community Free School. Additional pedestrian facilities are provided via dropped kerbs at the south of the site connecting Ascot Road to the Morisons car park. HCC is likely to require a contribution toward improving access to the site by sustainable non-car modes of transport. The DM Implementation team were consulted and provided the following comment with respect to the proposed pedestrian crossing.

- Drawing 16037-01-200: No comments are this stage as not enough information was provided to provide comment;

Swept Path Analysis
Swept path assessments have been provided as part of the planning application. The Development Management (DM) Implementation team were consulted with respect to the proposed access arrangements and swept path assessments and had the following comments to provide:

- Drawing 16037-01-201: The car tracking seems fine but would like to see a delivery vehicle as the right turn from the parking area is restricted;

- Drawing 16037-01-202:
- The swept path of the fire tender takes up the entire carriageway. This can be mitigated through providing passing places on each section of the access road which allow for two vehicles to safely pass in the event that they come into conflict travelling in opposite directions. The passing places should allow enough room for a fire tender to pass another emergency vehicle and/or a servicing vehicle.

- Drawing 16037-01-203: there is concern that when the delivery vehicle is on the entrance road, no other car can fit on that road. If this was to be the case for a small stretch of road it would be ok; however, as it stands, there is potential for conflict on the road between vehicles travelling in opposite directions toward one another. Additionally, when the delivery van performs a 3 point turn it appears to overhang the footpath which could potentially lead to injury of waiting pedestrians.

- Drawings 16037-01-204 and 16037-01-205: no comments at this stage.

In addition to addressing the comments provided by the DM Implementation team, the applicant would need to provide swept path assessments for large cars accessing the car parking spaces within the undercroft car park.

Road Safety Audit:
A Stage 1 Road Safety Audit would be required as part of this full planning application for the proposed alterations to the local highway infrastructure in order to ensure that the proposed designs are safe and suitable for the intended use.

Parking:
The applicant has stated that the proposed development would allocate 185 car parking spaces and 3 electric car charging stations. The parking provisions proposed equate to a provision of 0.38 car parking spaces per unit. WBC current standards set out a maximum parking provision of 1 space per 1 bedroom unit, 1 space per 2 bedroom unit and 1.5 spaces per 3 bedroom unit in Zones 1 and 2; however, WBC has revised their DM Policies and Site Allocations Plan and as part of this, maximum car parking standards would be adjusted. It is noted that new policies would require a parking provisions to be in line with the following guidance:
- Zone 1: 0.75 spaces per 1 and 2 bedroom flats and 1 space per 3+ bedroom flats; and,
- Zone 2: 1.25 spaces per 1 and 2 bedroom flats and 2.25 spaces per 3+ bedroom flats.

According to the WBC's original maximum standards, a maximum of 498 spaces is to be provided. Per the proposed new standards, the proposed development site is considered as part of Zone 2 and would therefore require provision of approximately 564 spaces; however, due to the proposed new Cassiobridge Station, the site may be considered Zone 1 and would therefore require 370 spaces. Additional reductions may be agreed, at the discretion of WBC.

HCC require sufficient evidence to support that parking would not occur on the public highway and create a safety issue due the provision of only 185 car parking spaces being well below the guidance set out by WBC. Alternatively, a Car Parking Management Plan can be provided to ensure that displacement of vehicles would not occur onto the public highway. However, it is ultimately up to the Local Planning Authorities (LPAs) to determine the suitability of the parking provision.

Disabled Parking:
The applicant has not stated in the documents provided whether or not dedicated disabled parking would be provided. Every application is required to provide designated disabled parking spaces. The applicant is required to provide this

information considering the standards set out by WBC.

Car Parking Layout:
The car parking spaces would be provided within an undercroft car park. The parking spaces are arranged in a 90 degrees layout. Exact dimensions for the parking bays have not been provided. The exact dimensions of the car parking spaces are required, or swept path assessments for the more difficult to access car parking spaces are required to demonstrate that a large car can safely enter and depart from the spaces.

Cycle Parking Provisions:
The applicant proposes the provision of 575 sheltered cycle parking spaces for the proposed development. According to Dacorum Borough Council's parking standards, 1 l/t space per unit is required at a minimum. Therefore, the proposed provision of cycling parking spaces is considered acceptable. However, it is ultimately the decision of the LPA to determine the suitability of the proposed car parking provisions.

Accessibility
Bus Services:
The nearest bus stop is located on Old Ascot Road, south of the proposed development site and is approximately 100 metres walking distance from the centre of the site. This distance falls within 400 metre acceptable accessibility criterion. This is currently marked by a temporary bus stop flag but does have easy access kerbing and is served by the W18 and R2 routes. There is also a pair of bus stops to the west of the site on Hatters Lane between the two roundabouts that are approx. 240m away and served by the W30. Both stops are marked by a flag, with no easy access kerbing or shelter. Some of the site would also been within 400m of stops on Whippendell Rd and in Croxley View.

Services are as follows:

R2 Chorleywood-Mt Vernon/Watford	Mon-Fri x2/3 per day, no Sat/Sun
W30 Watford-Business Parks (Circ)	Mon-Fri half hrly, no Sat/Sun
W18 Watford-North Bushey (Circ)	Mon-Sat hrly, no Sun

The W18 is primarily aimed at shopping/leisure use, running Mon-Sat daytimes between the Morrisons just to the south of the site, Watford town centre and on to North Bushey. The W30 is primarily aimed at commuters, with higher frequencies in the AM and PM peak periods, connecting the business park with Watford Junction and the town centre. The coming of the MLX may impact on existing local bus services depending on people's choice of transport mode and may lead to changes in the network. The W30 is currently run on a commercial basis, the W18 is provided

with financial support from HCC. Based on existing levels of bus service provision and the likely forthcoming underground station, it is difficult to justify the need for bus service improvements and if developer contributions are forthcoming these could be directed at bus stop infrastructure to stops in the vicinity of the site.

The TA makes reference to the potential to remove through traffic from Old Ascot Rd. At the moment the W18 uses Old Ascot Rd to access the bus stop closest to Morrisons and it is possible that Old Ascot Rd could provide an alternative routeing for the W30. We would therefore be in favour of an arrangement that continued to allow bus access along the length of this road.

Rail Service:
The closest rail station to the site is Watford Station and is approximately 1.1 miles walking distance from the proposed site. Watford Station is serviced by TfL's Metropolitan line providing access to the Greater London and other underground lines.

The site would be adjacent to Cassiobridge Station on the proposed Metropolitan Line Extension. If the station gets built, this site would be very accessible by public transport with Metropolitan Line services into central Watford and London.

Walking and Cycling:
There are dedicated pedestrian facilities on the east side of Old Ascot Road and a pedestrian crossing to the west side of Ascot Road connecting the west side to a footway connecting from the bus stop location on the east side. The level of pedestrian provision would need to be considered and contributions would likely be required to improve pedestrian facilities in the vicinity of the proposed development site due to the nature of the proposals. The applicant would need to ensure that pedestrian access is maintained and that pedestrians are accommodated through the site.

There is an on-street dedicated cycling route on the west side of Old Ascot Road and a shared cycle/pedestrian path on the north side of Ascot Road, south of the site.

Travel Plan:
A Travel Plan (TP) is provided as part of the application package. A number of hard and soft measures are recommended by the applicant in order to positively affect the modal shift towards more sustainable modes of transport and to reduce the reliance on private vehicles, including a car club for the residents of the development. Contributions would be required via a S106 agreement to cover TP monitoring costs. A revised TP would be conditioned and the following points would need to be incorporated, see also the TP Checklist:

- The revised TP would need to include the name and details of the Travel Plan Co-Ordinator. It is acceptable to provide this information- 3 months before initial occupation as suggested in the provided TP. In addition to the TP, the applicant will need to provide a secondary contact in case of personnel changes. Details about the amount of time to be allocated to role/frequency on site will need to be incorporated into the revised TP.
- The revised TP will need to include a statement of commitment to the Travel Plan from a senior member of staff for the developer. This is required to demonstrate that the development is committed to the success of the TP.
- If the developer intends for a Steering Group to be provided at the site, the revised TP will need to include the name and details of the Steering Group.
- As part of the revised TP, the applicant/developer should consider the potential for providing more measures to encourage public transport use, i.e. providing discounted bus/rail tickets/travel vouchers.
- The TP has not mentioned any contributions toward Residential Travel Pack contributions. Funding toward the Travel Pack can be used toward funding vouchers for cycling and/or public transportation. Please refer to Appendix E of HCC's Travel Planning guidance for more information.
- The applicant will need to complete the targets, monitoring and action plan template as part of the revised TP.
- Following the baseline travel survey at the site, modal shift targets will need to be confirmed to HCC.
- The TP states that the monitoring frequency for the development will be <>, for this size of development, a commitment to yearly monitoring would be preferred. Annual monitoring enables an assessment to be made of whether the Travel Plan is on course to meet set targets and gives the developer the opportunity to identify additional measures needed in order to ensure that set targets are met. Additionally, there is also no quantitative data collection suggested as part of the monitoring (e.g. multi-modal counts), it is suggested that data collection occurs in order to provide a more complete assessment of the modal split, particularly if the supplied questionnaire response rate is limited/unrepresentative.
- As part of the TP, the developer will be required to provide evaluation and support fees.

Construction:
Initial details about the construction procedure are provided in the Environmental Statement of the application package. However, a Construction Traffic Management Plan (CTMP) would be required to ensure construction vehicles would not have a detrimental impact on the vicinity of the site and a condition would be required to provide adequate parking for construction vehicles on-site to prevent on-street conflict and impacts to the highway safety.

Planning Obligations / Community Infrastructure Levy (CIL):
Watford Borough Council has a Community Infrastructure Levy (CIL) and therefore contributions towards local transport schemes would be sought via CIL if appropriate. Additionally, S106 contributions would be required to obtain planning contributions for the CTMP and TP monitoring.

Summary:
HCC as highway authority has reviewed the application submission and have no objections to the proposed development, subject to conditions. HCC has reviewed the Transport Assessment and other relevant documents to assess the impact of the proposals on the local highway network's operation and safety. The trip generation rates, profile and distributions were reviewed and are considered appropriate for the proposals. Junction capacity assessments were provided and were reviewed. They demonstrated that the proposed development would likely impact the operation of the highway; however, suitable mitigation proposals were provided which were found to mitigate the site's impact. The collision data available to HCC was reviewed and it was found that there were no clusters of collisions, or notable issues with the highway, in the vicinity of the site that would likely be exacerbated by the proposed development. Therefore, it was found that the proposed development would not likely have a severe impact on the local highway network, subject to suitable mitigation as proposed in the Transport Assessment. The amended documents were reviewed and the conclusions are unchanged. The proposed development would be required to provide a contribution toward mitigation at the Morrisons Road / Ascot Road roundabout junction.

7.4.2 Hertfordshire County Council (Development Services)

7.4.3 Hertfordshire County Council (Lead Local Flood Authority)
Officer's note: In their initial consultation response the LLFA required clarification in relation to storage volumes provided by infiltration/attenuation tanks and surface water drainage and modelling. The applicant subsequently submitted the requested information in an updated Flood Risk Assessment and Surface Water Drainage Strategy (February 2017) and the LLFA provided the following response:

Following the review of the Flood Risk Assessment carried out by Capita reference CS075456-PE-16-193-R V3, we can confirm that the points raised in our previous response dated 05 February 2017 have now been satisfied and advise the LPA that the proposed development site can be adequately drained and mitigate any potential existing surface water flood risk if carried out in accordance with the overall drainage strategy.

The proposed surface water strategy for the new development comprises of permeable landscaped surfacing, below-ground infiltration devices and off-site discharge to public sewer. We acknowledge that the system has been designed to accommodate the 1 in 100 year storm plus a 40% allowance for climate change, with no above ground ponding. Offsite discharge will be restricted to a Greenfield rate of 5l/s and will be directed into an existing public sewer.

The Lead Local Flood Authority has requested conditions to be attached.

7.4.4 Hertfordshire County Council (Waste & Minerals)
No response.

7.4.5 Hertfordshire County Council (Archaeology)
H.C.C. initially commented that the development is unlikely to have a significant impact on heritage assets or archaeological interest. However, following receipt of the consultation response, Laurence Elvin (Chairman of the SW Herts Archaeological & Historical Society) provided information indicating the survival of archaeological layers on the western part of the site. In light of the new information, H.C.C. has submitted an amended consultation response to request archaeology conditions to be attached to any grant of planning permission.

7.4.6 Hertfordshire County Council (Ecology)
No objection subject to conditions to protect bats and breeding birds.

7.4.7 Hertfordshire County Council (Fire & Rescue Service)
Based on the information provided to date we would seek the provision of fire hydrant(s), as set out within HCC's Planning Obligations Toolkit.

7.4.8 Planning Policy
The key emerging policies of the Local Plan Part 2: Site Allocations and Development Management Policies for this application are:

SPMX1 – Special Policy Areas
SPMX2 – Mixed Use Allocations
TB1 – Location of Taller Buildings
TB2 – Design of Taller Buildings

The site allocations in the Local Plan Part 2 envisage an integrated mixed use development in line with the general character of the area and the taller building policy. Proposals for this site expect a significant residential led mixed use scheme capable of accommodating taller buildings. In terms of site allocations and general quantum of development proposed, the scheme is supported and there is no

objection on principle.

Policy TB1 does however suggest that buildings up to a height of 50 metres (15 storeys) will be considered. It is immediately clear that the taller building element of the proposed scheme is significantly higher than that envisaged by the policy. Therefore the design needs to be of sufficiently high quality to justify a departure from what is envisaged by Policy TB1.

A taller building at 24 storeys (81 metres) will have some visual impact. It is therefore necessary to use the criteria for designing taller buildings in Policy TB2 and particularly Skyline – the Taller Buildings SPD to determine whether the taller building is successful and therefore acceptable in design terms. A comment on each of the criteria is provided here:

1. Skyline, views and townscape

Visual intrusion and impact on the skyline are the most common concerns when considering proposals for tall buildings. Often these occur as a result of dramatic variations and fluctuations in height across an urban grain which can have negative impacts. To help assess the impact of taller building proposals, the SPD identified a series of key views where the impact should be assessed. The applicant has chosen the most relevant views for assessment which are SV6, SV9, and SV10.

The environmental report submitted with the application concludes that the proposals would not have an impact on the heritage significance of those assets from where it is visible; I would agree that this is the case (para 6.6.1).

Following comments received from the Hertfordshire Gardens Trust, the applicants have now included the extra view requested in March from Rickmansworth Golf Course – Moor Park Mansion grounds. This site lies outside of the original area considered in terms of potential impact on heritage assets and their setting as it lies approximately 3km away from the site. Two views were looked at, one from the rear of the house itself and the other from the green to the 2nd hole of the golf course. The main area of concern is that historically there have been linked views between Cassiobury House and its parkland setting and Moor Park Mansion and its parkland setting. Some evidence to support this can be found in paintings from the 1700s but it is not clear how accurate these are and how much artistic licence has been used. It is likely that the park land to Cassiobury house was visible from the Moor Park Parkland but whether there were views from Moor Park to Cassiobury Estate which included the house (now demolished) is more difficult to establish. The new viewpoints assessed clearly show that the proposed buildings would be visible above the existing skyline to the edge of the area where Cassiobury Park can

be seen from the 2nd hole of the golf course. On this basis it will have an impact on views of the setting of the Registered Park (Cassiobury). In terms of assessing the degree of impact the following points are taken into consideration:

- The degree of change already present in the view - much modern development is visible but most is at a low level;
- There are no strong landmark features within the park which are visible in this view – in fact it is hard to make out where the park actually lies.
- The distance from the viewpoint to the site is around 3km which reduces the impact.
- The colour of the materials proposed will merge into the sky more than the wireframe does on the images submitted.

On this basis, whilst there will be an impact, the harm caused is considered to be less than substantial in terms of the setting of the Registered Parks. This means that it should weighed against the public benefits of the proposal (NPPF para 134).

2. Streetscape and near views

The proposal when viewed at streetscape level should enhance the area. The site and the surrounding area is in need of regeneration and it is appreciated that there will be a positive impact through the higher density scheme envisaged. This includes new blocks incorporating considered corner treatment which will provide greater definition to the townscape in the area. The site is not heavily constrained by significant heritage assets and there are no views of iconic or historic streetscapes/features which would be negatively impacted. The area is one where it is appropriate to create a new urban character which is clearly identifiable. It is considered that the principle higher density development with strong and defined edges is appropriate for the area from a streetscape point of view.

3. Building setting

This is one of the key criterions, as the council wishes to see that new taller buildings should relate positively to the surrounding building form. The area is currently rundown and a new urban character and streetscape is proposed for this site. There will be an improvement to the urban grain in the area as the proposed scheme will result in a number of smaller blocks with clearly defined public routes through the scheme than the single unit storage facility that is currently there and where there are no defined public routes through the site. The new building line will naturally provide greater definition to an area that appears somewhat open and undefined and takes advantage of this good opportunity to improve the urban character and sense of place.

4. Public Realm, open space and amenity

The strong form created by the residential and mixed use blocks provides the opportunity to create a high quality public realm; the landscape plan takes the approach of different landscape character areas which respond to the location and function of those spaces. The main boulevard area acts as a busy urban thoroughfare for vehicles and pedestrians whilst much of the remainder of the public realm is pedestrian and bikes only. The landscape strategy shows a mix of formal and informal spaces most of which include soft and hard landscaping. There is no formal play area for younger children within the site, but many opportunities for informal activity and play. The landscape strategy shows a coherent approach to the spaces and routes which if executed well and maintained should provide a good quality amenity area for the residents. All the spaces are relatively well overlooked and a good level of enclosure is provided.

There is concern regarding the amount of daylight and sunlight to some of the spaces. The documentation submitted with the application suggests that the levels provided are acceptable for an urban environment. However, the urban environment in this case is being created by virtue of the development and the public realm will be the only outdoor amenity area that residents will have on site. Given the high number of units it is important to ensure that the amenity areas provided are fit for purpose. It would help to have greater confidence around this as some parts of the amenity areas will not see much in the way of sunlight at any point in the year.

There is a good boundary treatment to the north and to the south eastern boundary, where the site abuts the school. This is important, particularly in the former's case given the proximity location to train line. However the area around the car park access to the south of the site is weak for pedestrian movement and is a dead and poorly designed space. A new approach is required here. Currently there is little incentive to access the steps at this location, as the path punctuates above these steps with no entrances to blocks along this frontage. A shared space for the car park entrance, a livening of the frontage in the form of more planting will soften this area. This will allow the space to be defined and some activity may occur. However currently this is not the case.

Attention to detail regarding the materials and construction of the landscaping is important in ensuring that quality is delivered and maintained, in particular attention to the way different materials meet is important and can raise the feel of a landscape scheme when done well. A detailed landscape scheme will be required showing planting schemes and hard surface materials to be used. . There should

also be a maintenance strategy for the landscape areas to ensure that the quality is retained going forwards.

The Environmental Statement identified that shelter planting is required in some places as part of the landscaping to ameliorate wind impacts. This needs to be pursued and more information supplied. There is also a need to ensure that there is adequate surface drainage amelioration in areas where this is required. This can take to form of SUDs or other drainage solutions.

5. Building scale, form and massing

This criterion states that the quality of a building and how its visual impact is mitigated in terms of an appropriate relationship to the surrounding area is key to the delivery of a successful scheme. A building of this height (81 metres) is going to have a visual impact; however it is clear the design has sought to reduce the impact by reducing its bulk. Different iterations have been provided and although an argument could be made to reduce the number of units (notwithstanding the housing need in the borough) the increased height of a more slender build as opposed to a bulkier smaller building may be preferable in this case.

The taller element will clearly be a landmark building (identifying the location of the proposed Cassiobury Bridge Station) while there has been a worthy attempt to provide a good townscape block by mixing urban apartments with contemporary townhouses (duplex units). There is some concern about the overhanging balconies on some elevations of the scheme as opposed to the recessed balconies used in some of the corner apartments. Overhanging or protruding balconies over roadways do not provide good amenity, and the winter garden or recessed balcony is preferable in this case. Overhanging balconies over amenity features or a courtyard/public realm/ green landscaping can work. There is concern that at the height proposed, the overhanging balconies at the upper levels will have limited amenity use. Work needs to be done on these features such as the extension of the fins to give the balconies more protection and enclosure. The use of railings on balconies can create visual amenity issues as residents either place an internal screen behind the railings to provide greater privacy or, as this is the only external space available to residents, balconies often become storage areas resulting in a cluttered appearance. We would strongly recommend a review of this aspect of the design.

The overall vertical emphasis of the design is welcome and good examples to support this approach have been provided, particularly in relation to brick work and the fenestration.

The benefits of a clear hierarchy of place e.g. the tower and annex, the street corner etc. defines certain character areas to the site. While the taller element has followed a base, middle and skyline approach, some further work is required at the point where the building meets the ground. The entrance to the tower block and the associated elevation facing the steps to the raised platform of the site is not active enough. The façade and the blank brick work on the southern elevation provide a relatively dead frontage and some additional work needs to be done to create a vibrant and active frontage at podium level. Changes are needed to the base of the tower black and the elevations that face the stairway (this will be the key access point and therefore needs to be inviting and have a strong perception of safety).

The woodland walkway to the northern boundary of the site could be made more active. Breaks in the defensive planting as well as some entrances to the building blocks could make the elevations along this walk way more active.

We question whether there is a need for the fences and private amenity spaces for the duplex apartments around the main square e.g. along block D. The provision of this private amenity area results in a poor boundary to the public realm here; these are the only units in the whole scheme to have any private amenity space at ground level and whilst I can see the desirability of some private areas for family accommodation, I would question how useful this really is given the poor boundary to the public realm which results from this provision. I would recommend that this aspect of the scheme is reviewed.

6. Detailed building design and microclimate

This is an important criterion to ensure that there are no negative climatic impacts on the surrounding area as well to ensure that suitable materials that are durable overtime are chosen.

<u>Wind</u>

The Environmental Statement Part 3 details the wind testing that has been carried out. Careful consideration to the effects of the building placement has been carried out. It is important that the planters and canopies as required from the testing are included within the scheme.

<u>Architectural lighting</u>

There is no mention of architectural lighting which would be encouraged in accordance with Skyline SPD.

Street pollution

The separation of the blocks and range of heights has a positive effect in dispersing the pollutants. It therefore doesn't act as a 'street canyon'. The massing of the buildings has a positive effect on this.

Light pollution

Solar glare analysis has been undertaken and it seems limited to the late afternoon there will be an effect.

The sustainability statement also deals with light pollution by having time switches to switch off lighting between late night hours.

Energy

The applicant has provided an energy statement which consists of passive design and energy efficient measures such as the provision of energy efficient lighting. The statement proposed a BREEAM 'excellent' minimum standard as required by policy SD5.

Resource conservation

Materials

The proposal shows a mix of materials including light brick and dark glazed brick; mixed panels in light and dark contrast colours. The overall effect shows good articulation of different sections of the building and the subtle mixture of palette of colours helps to reduce overall massing and bulk effect. There are concerns regarding the use of the panels as a building material on the tower element and we would recommend a review of this material possibly moving either to a brick or a polished masonry block as a facing material. Some panels could be used but it would be good to use an anodised metal finish which would have good reflective qualities rather than the dark grey/brown colour. We have reviewed schemes in London where brick and masonry are used at these heights so would ask that this be reviewed. There are concerns regarding the detailed design of some of the elevations for the tower in terms of the geometric pattern which is shown on the north and south facing elevations and whether this is the best approach. It would be helpful to have a review of the materials to be used on the tower. The same applies to parts of block B where it is considered that brick can be used for some of the more vertical columns/elements and this can be interspersed with the panelling.

The council would prefer to see more solid panel balconies instead of the railings shown.

There is no mention of local or recycled materials which would be encouraged.

It is also anticipated that lighter coloured materials will be incorporated into aspects of the hard landscaping with the aim of light being reflected rather than absorbed causing the production of excess heat. The uses of bricks for the pavements and areas of hard landscaping that surround the green areas are important. Details will need to be provided in this case and there is an option with metal lines.

Waste management/ recycling

There is minimal disruption for waste collection/ vehicle movement. With one refuse pick up and locations. The provision of under sink waste compartments and waste chute system is positive.

A clear waste management plan will be required to comply with Environmental Health standards and to detail how issues will be dealt with such as a breakdown/blockage in the chutes etc.

Green roofs – are there plans to provide green roofs and solar panels where appropriate? Where there are opportunities this needs to capitalise on.

7. Public Access

A level of accessibility is provided in the development. There is ramped access along the woodland walk which brings one to the raise level area of the development blocks. Lift access is also to the front. Building control will need to clarify if the developments include access to the lifts in the blocks are DDA compliant.

8. Transport, Parking and Infrastructure

'Car lite' developments are encouraged in locations in close proximity to major transport infrastructure where secure cycle storage is provided. The proposed development is located next to the new Met Line Station, providing 575 cycle parking spaces in excess of the normal requirements. The undercroft parking provides sufficient car parking spaces with a ratio of 0.38 spaces per unit including blue badge spaces and electric charging points; the design ensures that the active frontage of the scheme is not compromised. Cycle storage cages are not provided for each dwelling however separate cages with key or fob access for each block are provided next to each of the residential cores which is considered sufficient for security. There is a need to clarify that there will be fob access to the underground, followed by fob accessed to each of the cycle. Combined with racks that enable D locking of bikes this is sufficient.

The travel plan promotes a car club and other measures to reduce reliance on cars further negating the need for private cars on the site with the potential to impact car use for surrounding developments.

There is a need to ensure that the parking accounts for electric charging points (Please see new policy in emerging plan (Policy T7). We need 1 active electric space and 1 passive electric space.

7.4.9 Housing

The full application has 485 units which based on the 35% policy requirement would attract 170 units of affordable housing.

The proposals suggest the 485 units will be split 315 Market Housing and 170 Affordable Housing so the 35% has been met.

The property types offered within the 170 affordable housing reflect the overall site. That said, there are 7 studios included in the affordable housing units. During earlier conversations with the developer we requested the studios be incorporated with 1 bedroom flats, to create a 2 bedroom or 3 bedroom flat. That has not been done.

The proposal of a tenure mix meeting policy requirements of 15 % shared ownership, 20% social rented and 65% affordable rent is acceptable to the Housing Service.

We would like clarity as to which units will be in which tenure types. We would like to see the 15% LCHO be predominantly (if not all) 1 bedroom units, the social rented 20% to be the large family sized accommodation including all the 3 bedroom units, and the affordable rented 65% be the remaining units.

Provided the property types to tenure types meet the above requests, Housing would support this application.

7.4.10 Environmental Health

No objection subject to conditions.

7.4.11 Contaminated Land Officer

I am satisfied that if the conditions requested by the Environment Agency are attached to any consent granted that this department would not consider any further contaminated land conditions necessary.

7.4.12 Arboricultural Officer

The proposed tree removal and retention of existing trees is considered acceptable as is the general landscape master plan. Should permission be granted a detailed landscaping scheme should be submitted and approved prior to work commencing on site.

7.4.13 Environmental Services

No response.

7.4.14 Environment Agency

No objection subject to conditions.

7.4.15 Natural England

No objection and no conditions requested. This application is in close proximity to Croxley Common Moor Site of Special Scientific Interest (SSSI). Natural England is satisfied that the proposed development being carried out in strict accordance with the details of the application, as submitted, will not damage or destroy the interest features for which the site has been notified. We therefore advise your authority that this SSSI does not represent a constraint in determining this application.

7.4.16 Canal & Rivers Trust

Based on the information available and given the distance of the development from the canal, we have no comment to make.

7.4.17 Thames Water

Thames Water would advise that with regard to sewerage infrastructure capacity, we would not have any objection to the planning application.

7.4.18 Affinity Water

No objection. Comments are met through the Environment Agency's requested conditions.

7.4.19 Hertfordshire Gardens Trust

HGT, a member of The Gardens Trust, statutory consultee, is familiar with the landscape of Cassiobury and Moor Park (Grades II and II* respectively on the HE Register) and their landscape history. We have recently visited both sites to assess likely impact of this development on them.

The view between Cassiobury and Moor Park is a deliberate, designed one linking the 2 most important alte 17th and early 18th century landscapes in this part of the county. Charles Bridgeman , the foremost designer of his time, removed a 'mountain' (more of a hill) at Moor Park c 1720 to give this specific view, which was enhanced with more earthworks to frame it by Capability Brown in the mid-18th

century

This view (along with other views to and from both sites) are part of the setting of the Registered parks and any harm to their setting will harm their significance as stated in the NPPF. HE have issued Guidance Notes on *The Setting of Heritage Assets* (no.3) and on *Tall Buildings* (no 4). Both these stress the impact tall buildings can have on the settings of heritage assets. This is particularly sensitive in landscapes where the urban intrusion of tall buildings can quickly destroy the rural ambience of these wooded areas. As both Cassiobury and Moor Park are much needed refuges for the public in a densely developed area, HGT consider that the loss of significance and tranquillity arising from a 23-storey tower block situated exactly in this view, as contained in this application, is unacceptable .

HGT have no comments to make on the rest of the proposed development but object strongly to the inclusion of a 23-storey block which would dominate the skyline. A more modest height of 4 storeys, in keeping with other local development would be less intrusive.

Officer's note: Further clarification was sought from HGT in relation to the following points:

- The Historic England listings for Moor Park and Cassiobury Park make no reference to a specific designed view between Moor Park and Cassiobury Park.
- The Historic England listing for Moor Park states *"An informal, largely level, open grass sward extends north-east from the Italian Garden, aligned on the garden front of the house, with views of Watford beyond below the hillside. This <u>may</u> have been an area levelled in the 1720s by Styles in order to open up the view down to Watford, and occupies much of the main axis in Bridgeman's design".* The listing states that the land may have been levelled to open up the view down to Watford. It does not state that it was in order to provide a specific designed view of Cassiobury Park.
- There does not appear to be a view of Moor Park from Cassiobury Park.
- The significance of the view has not been fully explained. There are distant views of the tree line of Cassiobury Park from Moor Park (as well as built development in Watford), however there are no views directly into the park.

HGT provided the following response on 8th March 2016:

I take your point about HE entry for Moor Park but can only point out that much more research has been done since then, notably Peter Willis's magisterial work published after the entry was revised, work by Dr Sally Jeffreys, John Phibbs, Jennifer Milledge and others which strengthens the argument for the deliberate

view across the vale towards Cassiobury. This is re-inforced by the similarity to other Bridgeman designs and to the fact that the view of Rickmansworth church was framed by an avenue and the church is still visible (through a bit of scrub) from the remains of that avenue. I attach Bridgeman's plan of Moor Park and hope you can see that the line of the canal points straight across the valley to Moor Park. As this is a vista rather than a narrowly framed view along an avenue it would have taken in the sweep of the woods at Cassiobury rather than a pin-point church steeple. I also attach the diagrams from the Phibbs report showing the Bridgeman and later Capability Brown layouts superimposed on the old OS map. You will see that Brown deformalised but kept the emphasis on this view.

Your photo is much clearer and a little further round from where I was. The best views are from the 1st floor of the mansion or the roof walk (as intended) but rather obscured by trees now (and certainly not visible when I last went). There are also views from many other places in the historic layout which would also have been designed.

As to the view from Cassiobury towards Moor Park is rather more uncertain. When Cassiobury was laid out by Moses Cook in the 17th century the MP hill would still have been there so it may have been a focus from one of the avenues in the great forest garden. However, so much has changed that that is uncertain. I attach the early 18th century view of Cassiobury so you can judge for yourself! Once the MP hill had gone and Cassiobury deformalized later in the 18th century there may well have been views towards MP itself but that is difficult to ascertain now. There may have been more work done on the views since the HE register (there has been much on a lot of the Cassiobury estate) but I have not come across it.

Officer's note: In light of the comments from HGT, the applicant has prepared an addendum to the TVIA in the Environmental Statement Regulation 22 Response, which shows wireline views of the proposed development from the 2nd hole at Rickmansworth Golf Course (which is an elevated position that provides views towards Watford and Cassiobury Park) and Moor Park Mansion. HGT provided the following additional comments on 3rd May:

HGT have studied the additional EIA provided, particularly Section 2. Heritage, Townscape and Visual Impact Assessment. We note that the Register entry for Moor Park includes the view across the site to Cassiobury as significant. The views from Moor Park landscape are wide and varied comprising views and vistas from a number of point across the landscape. Viewpoint A1 clearly demonstrated that the tower of the proposed development would project above the treeline and form a significant intrusion into the views, especially from Moor Park but also from Cassiobury. This adversely affects the setting and therefore significance of both

parks contrary to NPPF and guidance cited at 2.4 in the ES Vol II. We further note that no assessment is made of the impact on The Grove, a site laid out by Humphry Repton in the 18th century.

Officer's note: the above comments re-iterate earlier comments from HGT and are considered in the report. A new reference is made to The Grove, which is a Grade II* listed building. The application site is approximately 3.14km from the listed building, therefore it would not appear dominant, distract or compete with the heritage asset. It should also be borne in mind that in urban areas it is common for tall buildings to be much closer to heritage assets than is being proposed in the current application.

7.4.20 Transport for London

TfL has requested conditions to protect the Metropolitan Line Extension during construction and operation.

7.4.21 Network Rail

No objection subject to asset protection measures to ensure that the works on site do not impact upon the safety, integrity and operation of the land to the north.

7.4.22 Hertfordshire Constabulary (Crime Prevention Design Service)

I had a meeting with the architects in October 2016 and can confirm that my comments have been incorporated within the design and the Design and Access Statement (DAS).

7.4.23 Three Rivers District Council

TRDC objects to the proposed development and raises the following points:

- TRDC are of the view that a building up to 35 metres tall may be appropriate. The proposed development at up to 134.5 metres would significantly exceed the 50 metre figure set out in Policy TB1. The proposed development is considered to be of excessive scale and would dominate the skyline from a number of points within Three Rivers.
- Policy TB1 recognises that the number of floors is a poor indicator for defining the height of a taller building due to the variation per floor due to different uses. As such there are concerns that there is inconsistency between the proposed height in metres and the stated number of floors.
- Policy SPMX 2 of the Local Plan Part 2 suggests an estimated housing component of 400 dwellings at Ascot Road (Site Ref MXD4). The proposed development of 485 dwellings significantly exceeds this indicative figure.
- Concerns regarding the impact of additional traffic on the local road network. During existing morning rush hours traffic is frequently backed up from the

roundabout onto Baldwins Lane and Watford Road. Full regard should be given to the Highway Authority's comments.

- The development proposes 0.38 parking spaces per residential unit, with no parking proposed for the retail or community uses. There are significant concerns that this level of parking is insufficient and would result in the displacement of vehicles onto local roads within Three Rivers. It would fail to comply with Policy T6 (Car Parking Provision) and the parking standards set out in Appendix H of the Local Plan Part 2.
- The application places heavy reliance on the Metropolitan Line Extension and proposed new station at Ascot Road, however, in the absence of the station and with uncertainty regarding its construction there are concerns that a development of this scale is premature.
- The development will put additional pressure on existing infrastructure including schools and medical facilities. We trust the views of HCC and other infrastructure providers will be taken into account.
- We trust that there will be a full assessment of the impact of the proposed development on residential amenity. It is noted that the development includes limited open space for future occupiers. Existing off site open space in the vicinity, notably Cassiobury Park, is not considered sufficient to justify the lack of open space on site.
- It is noted that the development includes 35% affordable housing in accordance with the requirements of Policy HS3 (Affordable Housing) of the CS, however, concerns are expressed regarding the proposed housing mix which is not considered to accord with Policy HS2.
- We trust that full consideration will be given to the environmental impacts of the proposed development and that it will be assessed against the requirements of Policy SD3 (Climate Change) of the CS.

Officer's note: In respect of the first and second bullet points above, the proposed tall building would be 81.2m high and not 134.5m stated by TRDC, which is why TRDC comment that there appears to be a disparity between the height and the stated number of floors.

The concerns raised are considered in the report.

7.4.24 <u>Croxley Green Parish Council</u>

Croxley Green Parish Council objects to the proposed development.

- There is no evidence in the documents accompanying the application of any consideration of the impact of the proposed development on the adjoining areas of Three Rivers District Council and particularly the area within Croxley Green.

- This group of very large buildings will dominate the view from several parts of Croxley Green, in particular the neighbouring character areas 11 (Cassiobridge, River Gade, Canal and Common Moor), 8 (Byewaters and Croxley Business Park), 5 (Watford Road East and Valley Walk) and parts of character areas 6 (Winton Drive, Barton Way and Baldwins Lane) and 7 (North of Baldwins Lane, Links Way and Little Green Lane) of the proposed Croxley Green Neighbourhood Development Plan, currently submitted to TRDC for consultation and review.
- The Skyline SPD states that a Visual Impact Assessment and 3D model should be submitted with applications for taller buildings. It is not apparent that any of these requirements have been met by the developer in submitting this application.
- The site has an elevation of about 55m OSD. Much of Croxley Green lies on a gently sloping plateau rising from about 70m in the south-east to 85m in the north-west. The lowest of the proposed buildings, at 75.6m will rise to about 130m OSD and be clearly visible from many places within Croxley Green. The concentrated group of tall buildings, with the highest rising to about 190m OSD, will dominate the view and completely alter the character of Croxley Green, as well as being clearly visible as skyline features for miles around Watford, and visible from most, if not all, of the strategic views which are considered to be sensitive to the development of taller buildings within the three areas identified in Policy TB1.
- Croxley Green Parish Council accepts the need for additional housing within Watford and Hertfordshire but notes that local schools are already full and oversubscribed, that local health services, such as doctors' surgeries and dentists are also full and oversubscribed and that such intense additional residential provision without improved education and health provision will be unsustainable.
- The proposed development includes a very low level of car parking, on the basis that there are many facilities within walking distance, and the proposed Metropolitan Line Extension will provide a new station at Cassiobridge / Ascot Road adjacent to the site, providing an effective public transport link to the centre of Watford, Watford Junction station and also towards London. The Transport Assessment report includes an assessment of the traffic effects if the development were to proceed without the proposed station. In this case the effect of additional traffic from the development is offset by reduced traffic to a station car park but the demand for on-street parking is likely to increase and parking controls are likely to be required over a wide area, including adjacent parts of Croxley Green.

Officer's note: In respect of the first and third bullet points above, a Townscape and Visual Impact Assessment is included in the Environmental Statement. It provides

wireline views to show the impact of the proposed development on strategic viewpoints SV3, SV5, SV6, SV9 and SV10 referred to in the Skyline SPD and 10 representative viewpoints. The TVIA includes viewpoints within Three Rivers Borough and an assessment of the townscape and visual impacts on nearby areas within Three Rivers Borough.

The heights stated in the fourth bullet point are incorrect. The Design and Access Statement shows that Ascot Road has a ground level of 53.25m AOD. The top of the tall building is 134.5m AOD (not 190m AOD as stated), which means that the building is 81.25m high measured from ground level in Ascot Road (134.5 – 53.25). Block B, which is the lowest of the buildings, has an AOD of 75.6m at the top of the building, which means that the building is 22.35m high measured from ground level in Ascot Road (75.6 – 53.25). It does not have a height of 75.6m and an AOD of 130m as stated in the fourth bullet point.

As such, on the basis that *"much of Croxley Green lies on a gently sloping plateau rising from about 70m in the south-east to 85m in the north-west",* the proposed tall building would be between 49.5m - 64.5m above the ground level in Croxley Green (134.5m AOD of tall building minus AOD of Croxley Green) and Block B would be between 9.4m below and 5.6m above the ground level in Croxley Green (75.6m AOD of top of Block B minus Croxley Green AOD.

The other concerns raised are considered in the report.

8.0 Appraisal

8.1 Main issues

The main issues to be considered in the determination of this application are:

(a) Principle of development
(b) Housing mix and affordable housing
(c) Socio-economic effects
(d) Townscape and visual impact assessment
(e) Impact on heritage assets
(f) Design and layout
(g) Standard of residential accommodation
(h) Energy & sustainability
(i) Trees and landscaping
(j) Air quality
(k) Noise & vibration
(l) Microclimate - wind
(m) Ecology

(n) Impact on neighbouring properties
(o) Highway impact, sustainability and car parking provision
(p) Flood risk and sustainable drainage
(q) Land contamination
(r) Archaeology

8.1.1 The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended 2015) prohibits planning permission being granted for 'EIA development' until the Local Planning Authority has first taken the environmental information (i.e. the Environmental Statement and representations about the environmental effects of the development) into consideration. 'EIA development' means development which is either Schedule 1 development or Schedule 2 development that is likely to have significant effects on the environment by virtue of factors such as its nature, size or location.

8.1.2 The proposed development falls under Schedule 2 Category 10(b) of the EIA regulations 'urban development projects, over 5 hectares and includes more than 150 dwellings'. Schedule 3 of the EIA regulations sets out the criteria for determining whether a Schedule 2 development is EIA development. The applicant requested a formal Screening Opinion from the Council on 1 July 2016 and the Council issued a Screening Opinion on 15 July 2016, which stated that in its opinion the proposed development is EIA development and therefore an Environmental Impact Assessment is required.

8.1.3 The applicant subsequently requested a Scoping Opinion on 20 October 2016 to seek the Council's opinion on the scope of the significant effects to be assessed in the Environmental Statement. The Council undertook consultation with the statutory 'consultation bodies' as well as other bodies which have specific environmental responsibilities, in accordance with Regulation 2(1) of the EIA regulations. The Council issued a Scoping Opinion on 21 November 2016, which stated that the Environmental Statement should include the following topic areas: heritage, townscape and visual impact assessment; sunlight, daylight and overshadowing; transport; microclimate – air quality; microclimate – wind; geology and ground contamination; water resources, flood risk and drainage; noise & vibration; ecology; socio-economic effects; residual effects, interrelationships & cumulative effects. An Environmental Statement has been submitted with the planning application, which includes the topic areas identified in the Scoping Opinion. The Environmental Statement has been prepared in accordance with Schedule 4 of the EIA regulations and includes a description of the proposed development; an outline of the main alternatives studied; a description of the aspects of the environment likely to be significantly affected; a description of the likely significant effects of the development on the environment; and a description

of the measures to mitigate the impacts of the development.

8.1.4 Following consultation and feedback on the application as it was originally submitted to the Council, various changes to the scheme were made. The applicant subsequently submitted further information in respect of the Environmental Statement on 13 April and 5 May 2017.

8.1.5 The Council as Local Planning Authority has certain responsibilities when determining EIA development. The LPA must provide the main reasons and considerations on which a decision is based and provide a description, where necessary, of the main measurers to avoid, reduce and if possible, offset the major adverse effects of the development. Mitigation measures could be secured through necessary conditions or s106 planning obligations. The main environmental effects of the scheme will be considered in the report along with any necessary mitigation measures.

8.2 <u>(a) Principle of development</u>

Paragraph 14 of the NPPF states that at the heart of NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking. For decision-taking this means:

- Approving development proposals that accord with the development plan without delay; and

- Where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:

    - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or

    - specific policies in this Framework indicate development should be restricted.

8.2.1 Paragraph 17 of the NPPF details 12 core planning principles that should underpin decision-taking. Among other things, it states that planning should:

- Proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs

of an area, and respond positively to wider opportunities for growth.
- Always seek to secure high quality design and a good standard of amenity for all existing and future occupants of land and buildings.
- Encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value.
- Promote mixed use development.
- Actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling and focus significant development in locations which are or can be made sustainable.

8.2.2 Policy SS1 of the Watford Local Plan Core Strategy 2006-31 (CS) seeks to deliver a minimum of 6,500 additional homes and 7,000 additional jobs between 2006 and 2031, along with other supporting services and facilities. The additional development will be focused in the SPA locations which have good access to public transport and local facilities, and are most able to accommodate development without serious harm to character or amenity. The Policy states that most development will be focused on previously developed land and there will be a general presumption against inappropriate development in the Green Belt. Special Policy Areas have been identified for key parts of the borough for which more location specific policies are useful, either because of planned regeneration or other issues to be addressed such as the need for physical enhancement and environmental improvement. Much of the new development will be focused on those Special Policy Areas identified as most suitable for high density development, in order to help protect the residential character of the rest of the borough.

8.2.3 Policy SPA6 Western Gateway of the CS seeks to deliver redevelopment that improves and upgrades this area from an economic development and environmental perspective, and to capitalise on the potential of the new MLX station at Ascot Road. It is currently an underperforming employment area in need of upgrading and there is potential for major regeneration, physical and transport improvements through the redevelopment of key sites in the area and opportunities for restructuring. The Policy states that there will be opportunities for higher density mixed use development in the more sustainable locations close to the new MLX station at Ascot Road. This should include:

- A new primary school (Ascot Road Community Free School opened in 2014);
- Employment;
- 300 homes;
- A1 retail supermarket and associated small scale retail units providing in the order of 150 jobs (Morrisons supermarket opened in 2013); and

- Community facilities.

Given the addition of new retail, community and school facilities there is potential for the Ascot Road area to provide a local centre which could move up in the hierarchy from the modest size local centre to a new neighbourhood centre. The Policy states that there should be a high quality or urban design and public realm. Legibility and connections to the existing adjoining areas are important, as is the concept of the creation of a new place which knits well into the existing urban fabric. Any development should also provide for open space and enhanced links into the wider area including the Colne Valley.

8.2.4 A master plan study (Croxley View/Ascot Road Masterplanning Study May 2016) has been undertaken for part of the SPA6 policy area covering a corridor between Ascot Road to the north and Tolpits Lane to the south. The objective of the master plan is to build on the policy foundations of SPA6 and to provide a framework to facilitate redevelopment that improves and upgrades the area from an economic development and environmental perspective, whilst capitalising on the potential of the new station. The masterplan is indicative and should be applied flexibly. Public consultation on the masterplan study was undertaken until 3rd October 2016. The application site – shown as site S1 on the masterplan study – shows an indicative housing component of 400 dwellings, including a 15 storey tall building in the north-western corner close to the MLX station.

8.2.5 Furthermore, the application site is within allocated site MXD4 of the emerging Local Plan Part 2. The site allocations provide further information on each site and identify key constraints and development considerations. Allocated site MXD4 (Ascot Road) includes an estimated housing component of 400 units. The development considerations, among other things, state that the design should provide an integrated mixed use development in line with the general character of the area and taller building policy, and proposals should be consistent with the objectives of Policy SPA6.

8.2.6 The application proposes a mixed use development including 485 residential units, retail units (900sqm. GIA), community floorspace (193sqm. GIA) and public realm improvements, which would make a significant contribution towards the minimum housing target of 6,500 dwellings in the CS period to 2031. It is a high density residential-led scheme on previously developed land in a sustainable Special Policy Area location close to the forthcoming MLX station, bus routes and National Cycle Network route and near to a supermarket, schools, local shops and services and employment areas. The proposal accords with the policy objectives of the NPPF to meet the housing needs of the Borough; to encourage the effective use of previously developed land; to promote mixed use development; and to make the

fullest possible use of public transport, walking and cycling by focusing significant development in locations which are or can be made sustainable. Furthermore, the scheme accords with the objectives of SPA6 to provide major regeneration that upgrades the area from an economic and environmental perspective due to the replacement of degraded industrial buildings with high quality design and new public realm.

8.2.7 The proposal includes 485 dwellings, which is above the housing component shown in Policy SPA6, the Croxley View/Ascot Road Masterplan and site allocation MXD4 of the emerging Local Plan Part 2, however these are only estimated housing figures. SPA6 and MXD4 are worded positively and neither policy seeks to restrict the housing component. It is not contrary to Policy for the proposed housing component to be higher than the estimated housing delivery. One of the core planning principles of the NPPF is that development should make effective use of previously developed land, therefore the housing component is based on material planning considerations such as standard of layout, design, sustainability and transport impacts etc. rather than being restricted by an estimated figure.

8.2.8 In addition, up to date evidence provided by the SHMA (as discussed in paragraphs 6.12 and 6.13 of the report) indicates that the housing target set out in Policy SS1 is inadequate and would result in insufficient housing provision. Nor do the Council's site allocations currently demonstrate a 5 year supply of housing. In accordance with paragraph 49 of the NPPF the relevant policies for the supply of housing should not be considered up-to-date and applications for housing should be considered against the second test for decision taking in paragraph 14 of the NPPF and should be granted permission unless any adverse consequences of doing so would demonstrably and significantly outweigh the benefits when assessed against the policies of the Framework. Significant weight needs to be placed on the contribution of proposals to meeting housing need in undertaking this balancing exercise. In light of this situation and the requirement to achieve the most efficient use of land, it is logical that more efficient use of the Council's allocated sites be promoted to support our housing need and that these proposals should be granted unless there are significant adverse consequences.

8.2.9 Policy TLC1 (Retail and Commercial Leisure Development) of the CS states that the primary shopping area in Watford town centre will remain the main focus for additional retail floor space, however some of the floor space will be delivered at other SPAs such as the Western Gateway – subject to the proposals being of an appropriate scale of development and to there being no significant adverse impact on the vitality and viability of the town centre or planned investment at Charter Place. The proposed retail use is small scale and would serve the local community. It would accord with the objectives of SPA6 to create a neighbourhood centre and

therefore there would not be a sequentially preferable location for the retail use. The proposed retail floor space is below the 2,500sqm threshold specified in Policy SPA6, therefore the impact test set out in Policy SS1 is not applicable.

8.2.10 The proposal would result in the loss of Class B employment land. However, this is considered to be acceptable given the regeneration objectives set out in Policy SPA6 and the employment that would be provided by the proposed retail uses.

8.2.11 Taking the above into account, it is considered that the proposed development is acceptable in principle. The development will provide substantial planning benefits including, but not limited to, substantial regeneration and provision of much need housing and affordable housing. No significant adverse impacts have been identified which officers consider would outweigh these benefits of justify refusal when considered against the correct balancing exercise in Paragraph 14 of the NPPF.

8.3 <u>(b) Housing mix and affordable housing</u>
Paragraph 47 of the NPPF seeks to significantly boost the supply of housing and paragraph 50 seeks a wide choice of high quality homes. Policy HS2 of the CS states that the Council will seek provision of a mix of housing types, sizes and tenures at a local level to meet the requirements of all sectors of the community.

8.3.1 Policy HS3 of the CS states that a rate of 35% affordable housing will be sought on major applications of 10 residential units and above. The Policy states that the affordable housing provision should consist of 20% social rent; 65% affordable rent; and 15% shared ownership.

8.3.2 The proposed development would provide 485 dwellings in SPA6, which would make a substantial contribution towards meeting the housing need in the Borough and is therefore a material consideration that should be afforded considerable weight.

8.3.3 The proposed development includes 170 affordable units (35%), which meets the affordable housing rate in Policy HS3. The Borough has a significant need for affordable housing and the proposed development would make a substantial contribution towards meeting the requirements of the local community, which should also be afforded considerable weight.

8.3.4 The proposed housing mix provides predominantly one and two bedroom units. It is recognised that one and two bed units are more suitable for flatted development, which this site will provide. A large proportion of one and two bed units are considered appropriate in this highly accessible location which is suitable

for high density development. The affordable housing mix consists of a large proportion of 2-bed (4 person) units, which was requested by the Housing department at pre-application stage in order to house families with young children The three bed units are to be located largely at ground floor level, which is more suitable for family dwellings.

	Private	Affordable
Studio flat	14	7
1-bed flat	168	63
2-bed flat	123	85
3-bed flat	10	15
Total	315	170

Table 1. Proposed housing mix.

8.3.5 The affordable tenure mix consists of 20% social rented, 65% affordable rented and 15% shared ownership, which accords with the tenure mix in Policy HS3. As such, taking the above into account, it is considered that the proposed housing type, mix and tenure would meet local housing needs.

8.4 (c) Socio-economic effects

As discussed in Section 6.3 of the report, the proposed development would provide substantial housing and affordable tenures to meet the needs of the Borough, which brings significant socio-economic benefits.

8.4.1 Community infrastructure is funded through the Watford Community Infrastructure Levy, which was adopted in April 2015. The Watford CIL 123 list details the types of infrastructure to be funded by CIL rather than a planning obligation. Primary and secondary school places in SPA2 Watford Junction, SPA3 Health Campus and SPA6 Western Gateway are excluded from the list of infrastructure to be funded through CIL. The CIL 123 list states that in the SPA6 Western Gateway policy area, planning obligations are likely to be sought for a primary school and on-site community facilities. Policy SPA 6 of the CS identifies the need to provide a primary school within the Western Gateway policy area and community facilities. The Ascot Road Community Free School, which is a 2 Form Entry primary school adjoining the application site, was opened in 2015 and therefore the primary school sought by Policy SPA6 has already been provided.

8.4.2 Chapter 15 of the ES calculates child yield from the proposed development by applying Census 2011 data to the accommodation schedule. Table 15.8 of the ES shows that the proposed development would generate a need for a total of 137 school places, comprising: Early Years (0-4 years) 31 spaces; Primary (5-10 years) 55 places; and Secondary (11-17 years) 51 places.

8.4.3 Table 15.3 of the ES shows that Ascot Road Community Free School has sufficient capacity to accommodate the primary places generated by the proposed development, which has been confirmed by Hertfordshire County Council Development Services.

8.4.4 The proposed development would create additional demand for secondary school places, which would be mitigated through a financial contribution towards the expansion of Rickmansworth School. In respect of nursery provision, there are a range of providers in the area including nearby nurseries at Bright Horizons Day Nursery 2 Printers Avenue and Squirrels Nursery at Ascot Road Community Free School.

8.4.5 The proposal includes approximately 193sqm of community floor space (Use Class D1/D2) at ground floor of Block A, which accords with the objectives of SPA6 to provide community facilities. The provision of community space also meets the aims of paragraph 69 of the NPPF because it would facilitate social interaction by providing opportunities for meetings between members of the community who might not otherwise come into contact with each other. The opportunities for social interaction would be further aided through the provision of Class A retail units on the Ascot Road street frontage, which would promote activity.

8.4.6 Paragraph 69 of the NPPF seeks safe and accessible environments where crime and disorder and the fear of crime do not undermine quality of life or community cohesion; and safe and accessible developments, containing clear and legible pedestrian routes, and high quality public space, which encourage the active and continual use of public areas. As discussed elsewhere in the report, the proposed development would bring significant townscape improvements and would introduce activity and definition to the street frontage thereby reducing the fear of crime for pedestrians. The development includes new pedestrian routes which would be overlooked by habitable windows, ensuring that there would be high levels of natural surveillance. The public space would be well landscaped and would be adjoined by active frontages, which ensures that no dead spaces would be created. Hertfordshire Constabulary Crime Prevention Design Service state that their pre-application comments have been incorporated into the scheme and raise no objection to the proposed development.

8.4.7 Chapter 15 of the ES highlights that the proposal would provide economic benefits in terms of construction jobs, additional employment from the Class A retail units and additional local spending from new occupants of the proposed development.

8.5 <u>(d) Townscape and visual impact assessment</u>

Emerging Policy TB1 of the Watford Local Plan Part 2 states that certain locations in the borough may be appropriate for taller buildings. These are Watford Junction SPA2, Ascot Road (within SPA6 Western Gateway) and Clarendon Road (within SPA1) which benefit from good public transport accessibility and could support more intensive development. The emerging Policy states that heights of up to 50 metres (about 15 storeys) may be considered at Ascot Road, however it states that all heights are 'indicative' figures. Furthermore, the policy is worded positively and it does not state that buildings above 50m tall will be restricted. The height of a taller building would need to be justified through high quality design and other material planning considerations. Paragraph 7.3.4 of the adopted Supplementary Planning Document Residential Design Guide 2016 states "*…where appropriate, on town centre sites, in locations adjacent to transport nodes and within major development sites, denser and taller forms of development may be acceptable. In such instances, the effects of a proposal on amenity and townscape will be the primary issues in determining the appropriate height of development".* Furthermore, Skyline – Watford's Approach to Taller Buildings (Skyline SPD) is an adopted Supplementary Planning Document which sets out a framework of design considerations to be taken into account when considering applications that include taller buildings.

8.5.1 The 'Taller Buildings Location Assessment' (January 2016) sets out the approach taken in identifying the best locations for taller buildings in the Borough. In preparing an assessment to inform the most suitable taller building locations, 5 criteria were identified which were based on a balanced approach to protect positively perceived urban features (namely the historic environment and natural green and open spaces) and contribute to the wider sustainable development objectives. The 5 criteria against which the sites were assessed were: regeneration opportunity; transport and movement; conservation areas and listed buildings; strategic views and landmarks; and topography and green/open spaces.

8.5.2 SPA6 Western Gateway scored 17 out of 20 against the assessment criteria and was therefore identified as a location appropriate for a taller building. It was noted that there are no important landmarks or historical assets that would be particularly sensitive to a higher development typology, while the regeneration opportunity and the provision of a new railway station lend the north-east of the SPA (in the area of the application site) particularly well to more dense development types. It was observed that the area in the vicinity of Ascot Road is characterised by a poor urban form and would benefit considerably from regeneration, where new development opportunities could have positive socio economic impacts. The assessment against the 'Strategic View and Landmarks' criteria stated that there are no particular historical landmark buildings when this area is viewed from a number of locations. The skyline would see some change

when viewed from the south-west however this would not result in significant impacts on key views and landmarks. It was noted that taller buildings can generally alter a skyline, however it is not necessarily a negative thing. In the absence of important landmarks the Western Gateway scored highly against the 'Strategic View and Landmarks' criteria. It should be noted that the 'Taller Buildings Location Assessment' sought to identify appropriate locations for taller buildings and was not used as an assessment tool to specify a maximum height limit.

8.5.3 The Design & Access Statement shows how the design of the proposed taller building has evolved through the pre-application consultation with Officers. Initially, the pre-application proposal included a 15 storey building, however it was felt that this created a somewhat 'blocky' and bulky form, which did not appear particularly elegant. Furthermore, the height of the building would not meet the planning policy objectives to create a 'gateway' development that improves the legibility of the area. The evolution of the design process demonstrated that a taller building would provide a more slender and elegant building that would improve wayfinding and legibility towards the new MLX station. During the course of the design process the appearance of the building has been further refined, as shown in the Design & Access Statement.

8.5.4 The townscape and visual effects of the proposed development have been considered in the Townscape Visual Impact Assessment (TVIA), which forms part of the ES. The methodology of the assessment is based on guidance set out in "Guidelines for Landscape and Visual Impact Assessment" (GLVIA3). Appendix 1.1 of the TVIA considers the townscape effects and Appendix 1.2 considers the visual effects. The TVIA provides wireline views to show the impact of the proposed development on strategic viewpoints SV3, SV5, SV6, SV9 and SV10 which are referred to in the Skyline SPD as well as 10 representative viewpoints.

8.5.5 The application site currently consists of old industrial buildings and hard-surfacing, which is of very poor townscape value. The proposed development would have a markedly greater visual impact than the existing buildings, however it would improve the townscape of the application site because it would replace utilitarian industrial buildings and hard-surfacing with buildings of high quality design and well-landscaped public open space with new pedestrian linkages. The buildings would provide greater definition to the streetscape due to the strong and defined edges of the development.

8.5.6 The application site is within WCAS Character Area 29D, which is an industrial character area. The TVIA comments that the baseline townscape value of the area is very poor as it is dominated by detracting features that make the area appear

degraded. The proposed taller building would appear visually prominent in WCAS Character Area 29D due to its height, however it is considered that the proposed development would have beneficial townscape effects because it would provide buildings of high quality design and an accessible high quality public realm with increased vegetation coverage and pedestrian linkages.

8.5.7 The tall building would appear prominent from nearby surrounding areas, as shown in the TVIA, because it would be taller than neighbouring buildings and would break the skyline. However, it would not obstruct views of any particular landmark features and would be read in context of the existing modern multi-storey flatted development in WCAS Character Area 38B. Furthermore, the massing, elevational features, materials palette and generous space maintained to surrounding development would assimilate the height and scale of the buildings into the surroundings. Therefore, although the height of the taller building does not follow the scale of surrounding buildings, it would be an acceptable addition to the townscape.

8.5.8 "Saved" Policy SE40 of the WDP2000 states that development proposals should take account of the particular characteristics of the landscape regions and Landscape Character Areas in which they are located. The TVIA has assessed the impact of the development on HLCA Character Areas 4 (Moor Park Slopes), 5 (Croxley Moor), 11 (Lower Gade Valley) and 12 (Oxhey Golflands). The assessment states that there would be negligible impacts on HLCA 4 and 12 but there would be impacts on HLCA 5 and 11, as discussed below.

8.5.9 The HLCA Statement for HLCA 5 Croxley Moor states that it is "*A varied though coherent landscape created by a mix of mineral extraction, agriculture, education and transport corridors. A jumbled but peaceful area on the edge of extensive urbanisation. Scattered pasture and semi-natural habitats survive throughout the area, giving an indication of the original landscape character, but there is a strong 20th century influence".* The TVIA assesses the landscape sensitivity of Croxley Moor to be medium, noting that it is a varied and fragmented landscape with a weak landscape structure but it does provide a clear sense of tranquillity. It states that the proposed tall building would be visible from Croxley Moor, which would affect the visual and sensory perception of the character area. The proposed development would decrease the sense of containment of Croxley Moor and would increase the extent to which it is visible from outside – as shown in wireline viewpoints 10 and SV10. However, it should be noted that the 20th Century housing in Croxley is already visible from the Croxley Common Moor area and the adjoining industrial estates in Caxton Way and Tolpits Lane are quite noticeable due to the activities carried out in the industrial areas. The TVIA assesses the impact on HLCA Character Area 5 as of 'Minor significance and Adverse

Consequence' i.e. it would have a minor adverse effect.

8.5.10 The HLCA Statement for HLCA 11 Lower Gade Valley states that it is *"a narrow but marked river valley with the predominant influence from a combination of historic parkland and ancient woodland. Moderate slopes rise to either side with occasional dramatic open views across the valley. The eastern slopes of the area are mainly built-up and form part of Watford. The Grand Union Canal flows majestically through the area from whence there are views up to the parkland landscapes".* The TVIA assesses the landscape sensitivity of Lower Gade Valley to be high noting that it provides a relatively unique combination of parklands, canal and woodlands which is generally well contained visually from surrounding areas and has a good sense of place and tranquillity to the south. The assessment comments that the proposed tall building would be visible from Lower Gade Valley and would affect the visual and sensory perception of the character area – as shown in wireline viewpoint 4. It would reduce the extent to which the parkland character area feels visually contained from surrounding areas and this effect will be most notable from the tranquil southern parts of the character area – Cassiobury Park, the towpath of the Grand Union Canal and West Herts Golf Club. It is assessed that the proposed development would have an effect of 'Moderate significance and Adverse consequence'. The adverse effects to Hertfordshire Landscape Character Areas Croxley Moor and Lower Gade Valley should therefore be afforded weight in the planning balance.

8.5.11 The Skyline SPD details strategic views which should be considered for development proposals including taller buildings. The TVIA shows that views of the development from Strategic Viewpoint 6 (SV6) on the eastern side of the borough would be insignificant as it would appear largely integrated within the skyline due to the distance of the viewing point from the site and because the scheme would be viewed in context of the town centre skyline. However, SV9 and SV10 , which provides views from the south and west, would see a clearly visible change to the skyline. The view from SV9 would see a significant change in building height in the skyline, however it is considered that this is mitigated by the high quality design and slender appearance of the proposed taller building. As discussed in paragraph 8.5.3, it is considered that a 15 storey building would appear bulky and would not achieve the high standard of appearance that has been presented by the proposed scheme. Likewise, the view from SV10 would see a significant change in height, however, as discussed above, this would be mitigated by the slender appearance of the taller building and the use of light coloured materials which would assimilate the building into the skyline.

8.5.12 The Planning Policy section note that the strategic views in the Skyline SPD have not been given special protection, unlike for example protected views in the

London Plan where there are important views towards historic landmarks or heritage assets. As discussed by the Planning Policy section, it is important to distinguish between visual impact on unprotected views and harmful impact on protected views or heritage assets. In this case, views SV9 and SV10 are not protected and although the proposed building would be clearly visible, the slender and elegant appearance of the tall building reduces the impact on the skyline. Furthermore, the building would not restrict views to any historic landmarks and it would not adversely affect the setting of listed buildings or conservation areas, as discussed in section 8.6 of the report. As such, the proposed development would not have a significant adverse effect on the skyline when viewed from the strategic viewpoints identified in the Skyline SPD.

8.6 (e) Impact on heritage assets

Paragraph 132 of the NPPF states "When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to or loss of a grade II listed building, park or garden should be exceptional…"

8.6.1 Paragraph 134 of the NPPF states "where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use".

8.6.2 The application site does not currently contribute to the setting of designated heritage assets or the way they are experienced. Although the proposed development would be visible in distant views from some nationally listed buildings and conservation areas, this would be in the context of other urban buildings and would not appear dominant, distract or compete with heritage assets. Furthermore, the proposed development would not interfere with important views or relationships from conservation areas or listed buildings towards any historical landmarks or other relevant historic assets. As such, having regard to the guidance in the Historic England document 'The Setting of Heritage Assets Historic Environment Good Practice Advice in Planning: 3', it is not considered that the proposed development would be harmful to the setting or significance of nationally listed buildings or conservation areas.

8.6.3 Hertfordshire Gardens Trust (HGT) has objected to the proposal because they consider that the tall building would adversely effect a deliberate designed view

between the registered parks at Moor Park and Cassiobury Park (see paragraph 7.4.19 of the report). However, the Historic England (HE) listings make no reference to a deliberate designed view between the registered parks and it has not been highlighted as a view that contributes to the significance of the parks. The Moor Park HE listing states *"An informal, largely level, open grass sward extends north-east from the Italian Garden, aligned on the garden front of the house, with views of Watford beyond below the hillside. This may have been an area levelled in the 1720s by Styles in order to open up the view down to Watford, and occupies much of the main axis in Bridgeman's design".* The HE listing states that the land may have been levelled to open up the view down to Watford and does not state that it was in order to provide a specific designed view of Cassiobury Park. Furthermore, there is no reference about views from Moor Park of any landmarks within Cassiobury Park, such as the former Cassiobury House. There are no views of Moor Park from Cassiobury Park.

8.6.4 The HGT response of 8th March indicates that the view from Moor Park towards Cassiobury Park is a vista of a "sweep of woods" rather than a narrowly framed view of a landmark. It should be noted that the vista also takes in the built development within Watford, including multi-storey buildings at the adjacent former Sun Printers site and Cassio Metro. It is not considered that a vista including a distant "sweep of woods" is significant, particularly as there are no views of historical landmarks. The HE listing highlights that views extend north and north-east towards Cassiobury Park and Watford, however there is no reference to a deliberate designed view into Cassiobury Park. Furthermore, although a tree line can be seen on the horizon it is difficult to establish where Cassiobury Park lies. The proposed tall building would appear as a distant point in the skyline when viewed from Moor Park in the context of wider built development in Watford.

8.6.5 In light of the comments from HGT, the applicant has prepared an addendum to the TVIA in the Environmental Statement Regulation 22 Response, which shows wireline views of the proposed development from the 2nd hole at Rickmansworth Golf Course (which is an elevated position that provides views towards Watford and Cassiobury Park) and Moor Park Mansion. In the view from Rickmansworth Golf Course the tall building would project above the horizon, however due to the considerable distance between the proposed development and Moor Park, and the slender design of the tall building, it would obscure only a very small portion of the view of the treescape towards Cassiobury Park. It should also be noted that the proposed development, owing to the use of light coloured materials, would appear less prominent than the harsh orange line shown on the wireline image. There would be minimal views of the proposed development from Moor Park Mansion due to the screening provided by mature vegetation in the middle distance. As such, taking the above into account, it is not considered that the proposed

development would be harmful to the significance of Moor Park registered park.

8.6.6 Turning to the impact of the development on Cassiobury Park registered park, the proposal would introduce prominent views of built form to parts of Cassiobury Park where no views of built form currently exist. It would reduce the extent to which the parkland character area feels visually contained from surrounding areas and this effect will be most notable from the tranquil southern parts of the park. However, the proposed development would maintain a fairly large distance to the park and would not directly affect it, therefore it is considered that the scheme would cause less than substantial harm to the significance of Cassiobury Park.

8.6.7 Paragraph 134 of the NPPF states that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal. As discussed elsewhere in the report, the proposed development provides significant public benefits in terms of meeting the Borough's housing needs and providing townscape, public realm, economic and environmental improvements, which are considered to outweigh the less than substantial harm to the setting of Cassiobury Park registered park.

8.6.8 The former Sun Printers Clock Tower is a Locally Listed Building, which is fairly close to the application site. The building was a former industrial pump house and clock tower. It was nominated as a Locally Listed Building because it is now the only surviving building from the printing works, which was historically a major employed in the town, and it is an unusual building that gives visual interest and adds distinctiveness to the local area. The building does not carry the same significance as a nationally listed building. Notwithstanding this, the setting has already been altered by the nearby Premier Inn hotel and self-storage warehouse, therefore it is not considered that the proposed development would be harmful to the significance of the former Sun Printers Clock Tower.

8.7 <u>(f) Design and layout</u>

Paragraph 7.9 of the Skyline SPD states that it is important that the buildings have architectural features which create richness and variety in the townscape and are clearly legible, with strong pedestrian connectivity. Furthermore, paragraph 7.14 states that tall buildings should make a positive contribution to their surroundings through an appropriate form, setback, massing and responds to the prevailing urban pattern.

8.7.1 The Design and Access Statement details how the design of the proposed development has sought to create a vibrant and varied residential environment through the establishment of four different quarters within the scheme – "The

Tower and Annexe', 'The Street Corner', 'The Townhouse' and 'The Urban Apartments', which have their own unique character but are unified through a shared material palette. The four quarters are summarised as follows:

- The Tower and Annexe: The massing achieves a slender and elegant appearance through the provision of 3 vertical elements that are stepped away from the MLX station in order to enhance verticality and to reduce the mass of the building. The proposed materials consist of light cladding panels and brickwork and contrasting dark panels and metalwork. The provision of light coloured materials is proposed in order to reduce its visual impact and the contrasting dark panels and metal work would break up the bulk of the building and aid verticality. The tower is the main focal point of the scheme and aids the legibility of the MLX station and Western Gateway area.

- The street corner: The block is adjacent to the boundary with Ascot Road and includes ground floor retail uses as it forms part of the main street frontage. The block is broken into a series of varied vertical building blocks to reference the traditional urban street, which consists of a row of individual buildings built adjacent to each other with a ground floor retail element. The block displays a variety of architectural styles and are visually separated using materials from a unified palette.

- The townhouse: The block is positioned to the east of the main landscaped square. It provides the backdrop to the square when entering the development from Ascot Road. It is a modern interpretation of a traditional townhouse. The base consists of duplex units with their own front door. The top of the building consists of a modern interpretation of a mansard roof with dormer windows.

- The urban apartments: Two blocks at the easternmost part of the site, which will consist of affordable housing. The mass of the blocks are broken into 3 elements with the tallest in the centre and the smallest elements to the sides. The proposed materials seek to express verticality and an elegant appearance.

8.7.2 The proposed development is considered to provide a high quality standard of appearance and the design approach provides a clear hierarchy of place, which accords with the guidance in the Skyline SPD to create richness and variety in the townscape and a place that is clearly legible. Furthermore, the scheme includes several new public pedestrian routes through the site, which would provide legible routes to the main entrances of each block. Through the pre-application design process, the legibility of the affordable housing blocks towards the eastern part of

the site has been improved through the provision of a tall and wide passageway, which provides a clear line of sight from the main pedestrian entrances and through the landscaped square. The landscaped areas of public realm are well-connected and are overlooked by the proposed flats, which ensures that there would be activity and would not become an under-used dead space. The application site is currently dilapidated and the new defined streetscape, areas of public realm and new pedestrian routes would vastly improve the urban character and sense of place. The proposal would therefore relate positively to the surrounding built form.

8.7.3 The Planning Policy section has highlighted that the proposed development would provide townscape improvements and would have a clear hierarchy of place, however they have suggested some alterations to detailed design (see section 7.4.8 of the report). The suggested alterations are considered below.

8.7.4 Improved protection of projecting balconies:
The Planning Policy section comment that the projecting 'fins' on the tall building could be extended further forward to offer more protection and enclosure to the projecting balconies. However, it is considered that this would make the architectural expression of the building appear more bulky and less refined, particularly when viewed from the north and south. Furthermore, light levels to habitable rooms would be compromised by extending fins forward on the south side of the balconies. On balance, it is considered that providing acceptable levels of light to habitable rooms is more important than balconies being enclosed because residents will spend significantly more time in habitable rooms than on balconies. In respect of the balustrade materials, there is a balance between providing privacy and impact on visual appearance. The proposed railings would be lightweight in appearance and would aid the vertical expression of the building but would allow views of items that are kept on the balconies. On the other hand, a more opaque material such as frosted glass may provide more privacy and would screen items kept on the balconies to an extent but it would appear more noticeable due to its solid appearance and would detract from the vertical fins of the building. It would also compromise light received by habitable rooms and would restrict outlook. On balance, it is considered that the proposed railings for the balconies are acceptable and the exact design of the balconies is a matter that could be secured by condition.

8.7.5 Materials:
The Planning Policy section states that the overall effect of the proposed materials shows good articulation of different sections of the building and the subtle mixture of palette of colours helps to reduce overall massing and bulk effect. However, they comment that there are concerns regarding the use of panels as a building

material on the tall building element and would recommend moving towards brickwork or a polished masonry block as a facing material. The applicant states that the concept with the tower is to use higher quality materials and detailing on the lower three levels, where it can be experienced in close proximity. At elevations above three stories, the detail gives way to the overall form and expression of the tall building and a heavyweight material and smaller module would not create a visual impression. The applicant comments that the cladding of the 'fin' elements of the building, which is fundamental to the broken mass of the building, need to be supported off the balconies to make the detail affordable and to do this the cladding must be a lightweight panelised system. As such, the approach has been to use higher quality materials where they can be seen and experienced and refine the architecture elsewhere to maintain visual quality in the long views, which is considered to be acceptable.

8.7.6 Improvements to the base of the tall building:
The Planning Policy section acknowledge that the tall building has followed a base, middle and skyline approach, however the elevation facing the steps to the raised platform is not active enough. They comment that the blank façade on the southern elevation provides a relatively dead frontage. The applicant has sought to address this by adding additional glazing on the southern elevation to create a more active frontage, which is considered to be acceptable.

8.8 <u>(g) Standard of residential accommodation</u>
The floor areas and room sizes of the proposed flats accord with the internal space standards in paragraphs 7.3.5 – 7.3.8 of the RDG. Furthermore, the habitable rooms would benefit from good levels of outlook.

8.8.1 Chapter 7 of the ES includes a self-test daylight and sunlight assessment of the proposed development, which has been carried out in accordance with guidance in the Building Research Establishment (BRE) publication (2011) "*Site Layout Planning for Daylight and Sunlight. A Guide to Good Practice".* The BRE guidance states that *"it is purely advisory and the numerical target values within it may be varied to meet the needs of the development and its location"* and "*the advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer…".* The method of calculation of daylight for proposed accommodation is known as Average Daylight Factor (ADF). The minimum recommended ADF levels are: 2% for kitchen or combined kitchen and living space where the kitchen is served by a local window; 1.5% for living room and study; and 1% for bedroom. Paragraph 2.1.13 of the guidance states that living rooms and kitchens need more daylight than bedrooms, so where there is a choice it is best to site the living room or kitchen away from obstructions. Paragraph 2.1.14 states that non-daylit internal kitchens should be

avoided wherever possible, especially if the kitchen is used as a dining area too. If the layout means that a small internal galley-type kitchen is inevitable, it should be directly linked to a well daylit living room.

8.8.2 An Addendum to ES Chapter 7 'Regulation 22 Response' dated 13 April 2017 was submitted to address concerns from Officers regarding the ADF levels for some of the main living rooms for the proposed development. In order to increase ADF levels minor amendments have been made to the scheme, including increasing the size of some windows, replacing some projecting balconies with Juliet balconies and alterations to the internal room layout. This has resulted in an improvement to internal daylight levels whereby for the proposed development with the existing surroundings 95% of living rooms pass the ADF level of 1.5%. Given that the proposal is a high density regeneration scheme, this is considered to be an acceptable pass rate. The layout has been designed to maximise daylight into main living areas where there is a greater expectation of daylight. There is a lower expectation of daylight to bedrooms, as highlighted in the BRE guidance, therefore bedrooms have been positioned in areas where there is lower daylight potential. The ES shows that 94% of the bedrooms pass the ADF level of 1%, which is considered to be acceptable. As such, it is considered that the layout accords with the design principles in the BRE Guidance.

8.8.3 The BRE Guidance states "*a dwelling with no main window wall within 90 degrees of due south is likely to be perceived as insufficiently sunlit. This is usually only an issue for flats…The overall sunlighting potential of a large residential development may be initially assessed by counting how many dwellings have a window to a main living room facing south, east or west. The aim should be to minimise the number of dwellings whose living rooms face solely north, north-east or north-west unless there is some compensating factor such as an appealing view to the north".* 441 of the 485 flats (91%) have living room windows that face south, east or west. There are 44 flats that have living room windows which face north. The north-facing living room windows in Block C would have a pleasant outlook across the central square of the development and the north-facing living room windows in Block A would have a green outlook facing the Woodland Walk. As such, the vast majority of the proposed flats would receive sunlight for a part of the day.

8.8.4 The BRE Guidance states that interior sunlight levels can be quantified by applying the Annual Probable Sunlight Hours (APSH) test. It recommends that interiors where the occupants expect sunlight should receive 25% of annual probable sunlight hours, including in the winter months between 21 September and 21 March at least 5% of APSH. 'Probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the location in question. Table 7.14 of

the ES shows that for the proposed development with the existing surroundings, 83% of windows would achieve or be within 20% of the recommended APSH level of 25%. Furthermore, it shows that 88% of the windows would achieve or be within 20% of the recommended winter APSH level of 5%. It should be noted that the APSH levels are likely to be higher than shown in the ES due to alterations referred to in paragraph 8.8.2 of the report that were made to improve the daylight ADF levels. The layout of the proposed development has sought to minimise the number of north-facing units and it is considered that the APSH levels are acceptable given the high density nature of the development.

8.8.5 Paragraph 3.3.7 of the BRE Guidance recommends that at least half of the outdoor amenity areas should receive at least 2 hours sunlight on 21 March. The Council requested further information in the ES to show shadow models demonstrating that the outdoor amenity spaces of the development would receive appropriate levels of sunlight on 21 March. The applicant subsequently submitted further information in the 'Regulation 22 Response' dated 13 April 2017. Appendix 5 of the 'Regulation 22 Response' is a shadow model which shows that at least half of the outdoor amenity areas would receive at least 2 hours of sunlight on 21 March, in accordance with BRE guidance. The southern section of the main square would experience overshadowing, which is typical for a courtyard layout however the amenity space would also receive sunlight, which would provide a balance of sunlit and shaded areas. The tall building is positioned to the north of the site, which ensures that it would not overshadow the rest of the development.

8.8.6 Paragraph 7.3.23 of the Residential Design Guide states that for flatted developments, communal open space provided for the exclusive use of occupants of the development may be acceptable as long as its location, size and shape enable it to be enjoyed by the occupants. The guidance standard for usable communal space is 50 square metres, plus 15 square metres per additional unit over two units. Therefore, for 485 flats the garden space standard is 7295 sqm. The proposed communal gardens measure 4934sqm in area, which is below the guidance in the residential design guide. However, when taken in conjunction with the proposal to incorporate private balconies to a large proportion of the flats, collectively measuring 1538sqm in area, the total amenity space for the development amounts to 6472sqm, which is considered to be a significant and acceptable level of amenity space in this location. It should also be borne in mind that the significant landscaping would provide a high quality space for residents and Cassiobury Park is a 5 minute walk from the application site.

8.8.7 Play space for young children is provided through 'incidental' or 'natural' play rather than formal fixed play equipment. The outdoor areas including significant landscaping (as discussed in section 8.10 of the report) and natural play features

include undulating mounds, stepping stones, seating features and 'play trees' (i.e. stepping logs, hollow trunks, balance beams or small trees with large lower limbs that allow climbing). The more challenging features would be concentrated in two defined areas – a 340sqm space between Blocks A and B and a 190sqm space to the south side of Block E. The spaces would be well overlooked and conveniently located. Fixed play equipment for older children is available in a number of nearby play areas including Croxley View play area to the south and Raven Close and Cassiobridge to the north.

8.8.8 Paragraph 7.3.16 of the RDG states that in new developments directly facing habitable windows should maintain a separation of 22m to ensure that occupiers would have sufficient privacy. In the case of the current application, the directly facing habitable windows would achieve a minimum separation of at least 22m, which accords with the guidance in the RDG. The scheme would therefore provide an acceptable level of privacy for future occupiers.

8.9 <u>(h) Energy & sustainability</u>

Policy SD5 (Sustainable Design Requirements) of the emerging Watford Local Plan Part 2 states that major development within the Special Policy Areas should achieve an energy performance standard equivalent to the former sustainable code for homes level 4 in the case of residential development or BREEAM Excellent in the case of non-residential development. Furthermore, Policy SD6 (Renewable Energy Technology) states that development proposals should incorporate renewable energy technology. Policy SD7 (Decentralised Energy) states that developments will be expected to link up to available decentralised networks. Where no network is currently in place, development should occur in such a way that connection at a later date will be feasible. Policy SD9 states that development should make efficient use of water resources to comply with the tighter Building Regulations requirement (currently 110 litres/person/day).

8.9.1 The Code for Sustainable Homes was abolished by the Government in March 2015 and many of the requirements of the Code have been consolidated into Building Regulations. Part L of Building Regulations relates to conservation of fuel and power and Part G includes water efficiency.

8.9.2 The Energy Statement in Technical Appendix 3.1 of the Environmental Statement has reviewed the suitability of various renewable energy options at the site and concludes that Air Source Heat Pumps and Photovoltaics would be most appropriate. Paragraph 8.1 highlights that it was investigated whether there were any existing energy networks near the proposed site using the Department of Energy and Climate Change CHP database, however it was concluded that there are no suitable existing combined heat and power (CHP) systems where a

connection may be possible. However, a site wide CHP is considered feasible and it is proposed that a central CHP to serve the apartments blocks on site will be provided. The Energy Statement states that the development achieves compliance with Part L 2013 and the CO2 emissions would have an anticipated improvement of 23.92% beyond Part L. Furthermore, the development proposes to limit water consumption to 110 litres/person/day, which accords with the tighter Building Regulations requirement.

8.9.3 The BREEAM Pre-Assessment in Technical Appendix 4.1 of the ES shows that the non-residential part of the development would have a BREAMM Excellent rating. As such, the proposed development accords with sustainability objectives.

8.10 (i) Trees and landscaping

The Landscape Design Statement provides a coherent strategy to the landscaping of the site. It states that the principle aims of the landscape design have been to provide a high quality sustainable development that will complement and integrate with its surroundings; to create external spaces that contribute to the setting and uses of the proposed buildings; and to provide a high quality living environment. The landscape vision seeks to incorporate the following areas into the design:

- Green infrastructure
- Green walls & living roofs
- Biodiversity
- Home making
- Play
- Productive landscape for all
- Accessibility & connectivity
- Places for people to gather
- Water sensitive design

8.10.1 The landscape masterplan has created five character areas that form a hierarchy of different spaces where each space relates to the adjacent buildings and is appropriate to its position on the site. The character areas are as follows:

- Woodland walk (access to the north of the site adjacent to the railway including trees and soft landscaping)
- Boulevard (Outside of the application site and shown for indicative purposes)
- Gateway (Stepped entrance from Ascot Road including trees and soft landscaping)
- Community Woodland Gardens (Open spaces within the development including mounds, trees pathways, street furniture and play areas)

- Green buffer (positioned along the southern and eastern boundaries with Ascot Road Community Free School to provide a green separation including trees).

8.10.2 The proposed trees and planting would be native species, which would aid the biodiversity of the site. The planting along the northern boundary in the 'Woodland Walk' would enhance the green infrastructure along the railway for wildlife including birds and bats, which is discussed further in the 'Ecology' section of the report. Furthermore, the landscaping strategy includes the provision of bird and bat boxes to enhance biodiversity. It is considered that the proposed landscaping strategy including diverse native planting would create an attractive outdoor space for future residents. The provision of mounds and undulating ground would provide visual interest, which could also be used as incidental play space for children.

8.11 (j) Air quality

The application site is not located in an Air Quality Management Area (AQMA). The air quality assessment focuses on concentrations of nitrogen oxide (NO2) and particulate matter (PM10) as the main pollutants of local concern and most associated with emissions from road traffic. Baseline NO2 and PM10 concentrations were obtained from existing modelling and monitoring programmes. Furthermore, a risk assessment of dust from the demolition and construction phases of the proposed development was undertaken.

8.11.1 The ES shows that the NO2 and PM10 concentrations would be significantly below the National Air Quality Objectives (NAQOs) in the projected completion year of 2021. Furthermore, concentrations from additional traffic emissions associated with the proposed development would be negligible and therefore no mitigation is necessary. The Environmental Health department has stated that the methodology and results of the air quality assessment are acceptable.

8.11.2 There are likely to be dust emissions as a result of construction activities, however this is covered by environmental protection legislation.

8.12 (k) Noise & vibration

Operational noise & vibration:
BS 8233:2014 states that the recommended internal noise levels are 35dB LAeq, T for a living room and 30dB LAeq, T for a bedroom. Furthermore, World Health Organisation guidance states that Maximum Noise Levels generated at night should not exceed 45dB LAmax, F. The results in the ES show that the development would accord with the guidance internal noise levels when windows are closed

(assuming a glazing specification that provides a sound reduction of 33dB), however, the levels would be exceeded when windows are open. As such, mitigation measures need to be implemented to ensure that appropriate alternative ventilation can be provided without the need to open windows. The Environmental Health department has stated that a condition should be attached to require the submission of a noise mitigation scheme for approval.

8.12.1 The internal noise assessment has considered the expected cumulative impact of noise associated with the MLX railway (using representative noise measurements obtained close to Croxley Station), which shows that the provision of appropriate glazing and alternative ventilation would provide acceptable internal noise levels. As such, the provision of additional mitigation in the form of a noise barrier is not considered necessary.

8.12.2 Paragraph 13.3.47 of the ES highlights that when compared against the values set out in BS6472:2008, the highest vibration value measured for the existing baseline was below the limit of 'a low probability of adverse comment'. Therefore, it is unlikely that future occupants of the development will experience adverse effects as a result of existing baseline vibration. The ES also considers the cumulative effect of the MLX railway and draws attention to the Croxley Rail Link Environmental Statement, which states that based on current design standards for track construction and the vehicles which will operate on the line, there will be a low risk that operational vibration will result in adverse comment from residents.

8.12.3 The ES shows that the external play areas would be below the BS8233:2014 desirable external noise level of 50dB LAeq.T, which is acceptable.

8.12.4 The proposed development would be served by plant, which could generate noise. Paragraph 13.3.26 of the ES states that lower daytime and night-time background noise levels of around 50dB LA90, T and 35dB LA90, T prevail at the site. BS4142:2014 states that where the rating level of the plant does not exceed the background noise level it is an indication that it would have a low noise impact. The exact specification of the plant is not known at this stage and the ES states that detailed noise assessments will be provided to the LPA on completion of the design and specification of the mechanical plant and equipment. A condition has been suggested in paragraph 13.3.29 of the ES which limits the rating level of plant to 50dB LAr between 07:00 – 23:00 and 35 dB LAr between 23:00 – 07:00. The Environmental Health department has stated that the suggested condition is acceptable.

8.12.5 Demolition and construction noise & vibration:
Noise and vibration as a result of demolition and construction activities are likely

to have significant effects on nearby neighbouring properties. However, construction impacts are covered by environmental protection legislation, including The Control of Pollution Act 1974, The Health & Safety at Work Act 1974, The Clean Air Act 1993 and The Environmental Protection Act 1990, and are not material to the determination of the application.

8.13 (l) Microclimate - wind

Chapter 10 of the ES considers the impact of the development on the local wind microclimate using wind tunnel testing in accordance with London Docklands Development Corporation criteria, which is a commonly used methodology for wind testing. The assessment focuses on the potential effects of wind on pedestrian comfort and safety around the development. The impact is assessed using the Lawson Comfort Criteria, which sets out threshold values of wind speed for pedestrian activities including sitting (wind speed 0 – 4 m/s), standing/entrance (4 – 6 m/s), strolling (6-8 m/s) and walking (8 – 10 m/s). Winds in excess of 10 m/s are classified as uncomfortable where winds are considered a nuisance for most activities and mitigation is recommended.

8.13.1 It is desirable for the amenity areas to be within the 'sitting' threshold (in summer months) and for the entrances to the buildings to not exceed the 'standing/entrance' threshold. Furthermore, it is acceptable for the main pedestrian thoroughfares to be within the 'strolling' category. The following scenarios were tested for the windiest season and the summer season: existing site with existing surrounding buildings; development with existing surrounding buildings; and development with cumulative schemes.

8.13.2 The 'development with cumulative schemes' had the greatest wind impact of the 3 scenarios, therefore this scenario forms the basis of the comments below. The ES notes that it was only possible to include the Cassiobridge Station in the wind tunnel model because there is no detailed design for potential developments in the Croxley View/Ascot Road Masterplan. The results show that during the windiest season (i.e. the worst case scenario) the main thoroughfares were within the 'standing' or 'strolling' categories, which is acceptable. Measurement position 14 (at the top of the stepped access adjacent to Block A) was within the 'walking' category, therefore mitigation is required to improve the wind conditions at this point.

8.13.3 In respect of entrances, the results show that measurement locations 19 and 46 (entrances to Block A and B respectively) would be within the 'strolling' category in the windiest season, which exceeds the desired standing/entrance threshold. As such, mitigation is required to improve the wind conditions at these entrances. The ES states that the entrance adjacent to measurement point 20 is recessed by 1.8m

and therefore is expected to be sheltered from the 'strolling' use conditions. All other entrances are within the 'sitting' or 'standing' categories during the windiest season, which is acceptable. Notwithstanding the above, all entrances would be within the 'sitting' or 'standing' categories during summer months.

8.13.4 The wind testing shows that measurement points for the outdoor amenity areas would fall into the 'sitting' and 'standing' categories in the summer season. The most sheltered area is between Blocks B and C. It is expected that the wind conditions would be improve further through the extensive landscaping that is proposed in the Landscape Design Statement.

8.13.5 The suggested mitigation for measurement point 14 consists of the installation of planters on the stairway with non-deciduous trees of 4-7m height, which is expected to provide shelter by breaking westerly winds between Blocks A and B. Trees on the stairway have been included in the Landscape Design Statement.

8.13.6 Suggested mitigation for measurement points 19 and 46 consists of either recessing the entrance at least 1.5m from the facade; or installing screens 1.5m by 2m in height either side of the entrance; or dense soft landscaping such as shrubs or hedges in planters totalling at least 2m in height. A wind mitigation strategy should be secured through condition.

8.13.7 The wind testing demonstrates that the proposed development would have an acceptable impact on wind conditions outside the application site. Measurement points 3 and 4 (on the platform of the MLX) would be within the 'strolling' category during the windiest season, which is considered to be acceptable. The platform design of the MLX includes new fences which would improve the wind conditions further for pedestrians.

8.14 <u>(m) Ecology</u>

Chapter 14 of the ES deals with ecology. The ecological assessment for the proposed development is based on a Preliminary Ecological Appraisal (PEA), which was carried out in accordance with the Guidelines for Ecological Impact Assessment published by the Chartered Institute of Ecology and Environmental Management (CIEEM), legislation and policy frameworks. The assessment includes a desk study and an extended Phase 1 Habitat Survey, including surveys for the presence of bats, which are a European Protected Species. Section 14.5 of the ES includes outline measures to mitigate the impact of the construction and operational phases of the proposed development.

8.14.1 The application site mainly consists of warehouses and hardstanding, therefore habitats are predominantly man-made and the site is of limited ecological value.

However, the PEA (shown in Technical Appendix 14.2 of the ES) states that there are areas of semi-natural habitats bordering the site, such as areas of scrub and regenerating grassland, which are of higher ecological value and have the potential to support protected and/or notable species. It states that the scrub and scattered trees along the eastern boundary is considered of raised ecological value offering suitable foraging/commuting habitats for bats and birds as well as nesting opportunities for birds.

8.14.2 The PEA was carried out in October 2016 and assessed that most buildings on-site have negligible or low bat root potential. A substantially dilapidated two storey building which is heavily covered in ivy and located close to the northern railway corridor was identified as having moderate bat roost potential on external ivy-clad aspects, but internally the building has negligible bat roost potential. No emergence surveys for bats have been conducted because they can only be carried out between May – September. Hertfordshire Ecology comment that it is not best practice to condition such surveys within a planning decision, however, they state that with the provision of an outline mitigation strategy it would be possible to determine the application before surveys are conducted. The outline mitigation measures can be modified if necessary once the results of the follow-up dusk emergence / dawn re-entry surveys are known. This is considered to be a pragmatic approach given that it is only possible to carry out emergence/re-entry surveys between May - September due to bats hibernating in the winter.

8.14.3 The PEA refers to a bat survey that was carried out in 2013 by Arup & Partners as part of the Croxley Rail Link Order, which identified that the northern embankment adjacent to the railway line and the trees on the eastern boundary hold moderate potential for foraging and commuting bats. Hertfordshire Ecology recommends that a condition should be attached to any grant of planning permission to require the submission of a lighting design strategy for biodiversity for the northern and eastern boundaries in order to ensure that disturbance would not be caused to bats.

8.14.4 The PEA indicates that there are nesting bird habitats on site, therefore Hertfordshire Ecology has stated that a condition to protect nesting birds should be attached to any grant of planning permission. There are no suitable habitats for other protected or notable species including badgers, reptiles, great crested newts or water voles.

8.14.5 A number of recommendations are included in the PEA to mitigate/enhance the ecological value of the site (as outlined by Hertfordshire Ecology), which have been incorporated into the Landscape Design Statement. As such, it is considered that the proposed development would enhance the biodiversity and ecological value of

the site and is therefore in accordance with Policy GI3 (Biodiversity) of the CS.

8.14.6 Croxley Common Moor is located approximately 0.9km to the south-west of the application site, which is a designated Site of Special Scientific Interest (SSSI) and Local Nature Reserve (LNR). It is an extensive area of grass heath with rich and diverse plant species. The grassland types are uncommon in Britain due to drainage and agricultural change. The application site is located within the Croxley Moor SSSI Impact Risk Zone. Natural England state that the proposed development would not damage the interest features of Croxley Moor SSSI. It is already accessible from the nearby housing to the north within Croxley and there is a signposted route from the shops adjacent to Croxley underground station. Although the proposal may generate some increase in the use of Croxley Common Moor it is not considered that this would be significant given the walking distance from the application site and that there is an industrial estate between the two sites which does not provide a legible or signposted route to Croxley Common Moor. As such, bearing in mind that Croxley Common Moor SSSI is already accessible from a nearby significant area of housing and that the site is not expected to generate a significant increase in usage, it is not considered that there would be a detrimental impact on flora as its special scientific interest. Furthermore, although the proposed development would be visible from Croxley Common Moor and would have an impact on the landscape and its sense of containment, as discussed in paragraph 8.5.7 of the report, it would not affect its special scientific interest.

8.14.7 Cassiobury Park Local Nature Reserve is located approximately 0.6km to the north of the application site. The ES highlights that it is an extensive public open space comprising a complex of semi-natural water courses, springs, open areas, remnant river valley grasslands and broadleaved, part wet, semi-natural and old plantation woodlands. The proposed development would be likely to increase the number of visitors to Cassiobury Park, however it is considered unlikely that this would be to such an extent that it would have a significant impact on its ecological features of interest.

8.14.8 Ascot Road Local Wildlife Site is located approximately 0.2km to the north-west of the application site, which is a wet alder/willow woodland and scrub in the Gade Valley. The site and all other designated wildlife sites (as identified in the ES) are separated from the application site by industrial buildings, residential buildings and roads therefore it is not considered that the proposed development would harm the designated sites.

8.15 <u>(n) Impact on neighbouring properties</u>
<u>Daylight</u>

In designing a new development, it is important to safeguard the daylight to nearby buildings. The BRE Guidance is intended for use for rooms in adjoining dwellings where daylight is required, including living rooms, kitchens and bedrooms. The BRE Guidance provides two tests, known as the 'Vertical Sky Component' and 'No Sky Line' for assessing the impact of new development on the daylight received by nearby buildings.

8.15.1 Vertical Sky Component

Any reduction in the total amount of skylight can be calculated by finding the VSC at the centre of each main window. The VSC can be found by using the skylight indicator or Waldram diagram. If the VSC is greater than 27% then enough skylight should still be reaching the window of the existing building. Any reduction below this level should be kept to a minimum. If the VSC, with the new development in place, is both less than 27% and less than 0.8 times its former value, occupants of the existing building will notice the reduction in the amount of skylight. The area lit by the window is likely to appear more gloomy, and electric lighting will be needed more of the time.

8.15.2 No Sky Line

Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the 'No Sky Line' in each of the main rooms. For houses this would include living rooms, dining rooms and kitchens; bedrooms should also be analysed although they are less important. The No Sky Line divides points on the working plane which can and cannot see the sky (in houses the working plane is assumed to be horizontal and 0.85m high). Areas beyond the No Sky Line, since they receive no direct daylight, usually look dark and gloomy compared with the rest of the room, however bright it is outside. If, following the construction of a new development, the No Sky Line moves so that the area of the existing room, which does receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit.

8.15.3 The BRE Guidance states that the above tests need to be applied sensibly and flexibly. For instance, existing windows with balconies above them typically receive less daylight. Because the balcony cuts out light from the top part of the sky, even a modest obstruction opposite may result in a large relative impact on the VSC, and on the area receiving direct skylight. One way to demonstrate this would be to carry out an additional calculation of the VSC and area receiving direct skylight, for both the existing and proposed situations, without the balcony in place. For example, if the proposed VSC with the balcony was under 0.8 times the existing value with the balcony, but the same ratio for the values without the balcony was well over 0.8 times, this would show that the presence of the balcony, rather than

the size of the new obstruction, was the main factor in the relative loss of light. A larger relative reduction in VSC may also be unavoidable if the existing window has projecting wings on one or both sides of it, or is recessed into the building so that it is obstructed on both sides as well as above.

8.15.4 Omega Court:
Paragraph 7.3.19 of the Environmental Statement states that the Vertical Sky Component has been calculated using the 'Waldram Diagram'. The results in Technical Appendix 7.2 of the Environmental Statement show that 36no. windows fail to comply with the VSC test i.e. the VSC is both less than 27% and less than 0.8 times its former value. However, in most instances the windows are secondary in nature because there are other windows serving the same room which receive sufficient levels of light. Furthermore, a number of existing windows already received low levels of daylight because of the balconies that are directly above them, which means that the proposed development would have a larger relative impact on the daylight received. In such situations, the BRE Guidance recommends that an additional test is carried out without the balconies in place to show the impact of the development itself.

8.15.5 In assessing the VSC results (with balconies) in Technical Appendix 7.2, the following windows are considered to be the most affected:

Floor	Room	Window No.	Existing VSC (27% target)	Proposed VSC (27% target)	Difference (80% target)	Pass/Fail
Ground	R13 (bedroom)	W18 (main window)	8.57	2.36	28%	Fail
Ground	R14 (bedroom)	W19 (main window)	8.76	1.35	15%	Fail
Ground	R16 (kitchen)	W23 (main window)	13.42	9.5	71%	Fail
Ground	R19 (bedroom)	W27 (main window)	13.2	10.39	79%	Fail
First	R13 (bedroom)	W18 (main window)	9.67	2.92	30%	Fail
First	R14 (bedroom)	W19 (main window)	9.59	1.95	20%	Fail
First	R16 (kitchen)	W23 (main window)	14.91	11.19	75%	Fail
Second	R13 (bedroom)	W18 (main window)	9.75	3.31	34%	Fail
Second	R14 (bedroom)	W19 (main window)	9.75	2.66	27%	Fail
Second	R16 (kitchen)	W23 (main window)	16.15	12.65	78%	Fail
Third	R13 (bedroom)	W18 (main window)	9.79	3.76	38%	Fail
Third	R14 (bedroom)	W19 (main window)	9.79	3.55	36%	Fail

The results below show the existing and proposed VSC levels without the existing balconies in place.

Floor	Room	Window No.	Existing VSC (27% target)	Proposed VSC (27% target)	Difference (80% target)	Pass/Fail
Ground	R13 (bedroom)	W18 (main window)	28.37	18.14	64%	Fail
Ground	R14 (bedroom)	W19 (main window)	28.55	18.05	63%	Fail
Ground	R16 (kitchen)	W23 (main window)	31.9	27.98	88%	Pass
Ground	R19 (bedroom)	W27 (main window)	30.3	27.45	91%	Pass
First	R13 (bedroom)	W18 (main window)	29.42	19.49	66%	Fail
First	R14 (bedroom)	W19 (main window)	29.41	19.39	66%	Fail
First	R16 (kitchen)	W23 (main window)	33.4	29.68	89%	Pass
Second	R13	W18 (main	28.67	19.92	69%	Fail

	(bedroom)	window)				
Second	R14 (bedroom)	W19 (main window)	28.67	19.88	69%	Fail
Second	R16 (kitchen)	W23 (main window)	34.78	31.29	90%	Pass
Third	R13 (bedroom)	W18 (main window)	15.22	7.79	51%	Fail
Third	R14 (bedroom)	W19 (main window)	15.22	7.81	51%	Fail

8.15.6 As such, the proposed development would cause a noticeable loss of daylight to 8no. bedrooms at Omega Court even if the existing balconies were discounted. In addition to the above test, the No Sky Line results in Technical Appendix 7.2, show that the above bedrooms, with exception of the Third Floor Room 13 (bedroom), would fail to comply with the No Sky Line test because the area of the existing rooms that receive direct skylight would be reduced to less than 80% of its former value. However, if the balconies were discounted the bedrooms would comply with the No Sky Line test.

8.15.7 Although the proposed development would cause a noticeable loss of daylight to 8no. bedrooms at Omega Court, it should be borne in mind that the BRE Guidance states that daylighting to bedrooms is not as important as living rooms, dining rooms or kitchens. Furthermore, all of the affected bedrooms are small second bedrooms of 2-bed flats and the proposed development would have negligible impact on the daylight received by the living rooms and main bedrooms, therefore it would not cause a significant loss of amenity to neighbouring properties.

8.15.8 Rockwell Court:
Technical Appendix 7.2 of the Environmental Statement shows that 20no. windows fail to meet the VSC test. However, all of the affected windows have daylight currently restricted by the existing balconies and, as discussed in the BRE Guidance, it appears that the existing balconies have caused a disproportionate percentage reduction in VSC. Therefore, an additional VSC test has been carried out without the balconies in place.

8.15.9 This shows that without the existing balconies in place, only 2no. bedroom windows would fail to meet the VSC test. The windows in question are small secondary windows and each of the bedrooms are also served by two other windows, which provide good levels of daylight. Furthermore, all windows pass the No Sky Line test. As such, having regard to the BRE Guidance, it is not considered that the development itself causes a noticeable loss of daylight to the habitable rooms of Rockwell Court.

8.15.10 The Chase, The Gateway:

All habitable windows at The Chase pass the VSC and No Sky Line tests, therefore the proposed development would not cause a noticeable loss of daylight to the habitable rooms at The Chase.

8.15.11 Bridgewater House:

Technical Appendix 7.2 of the Environmental Statement shows that 6no. second floor windows on the southern elevation fail to meet the VSC test. However, all of the affected windows currently receive low levels of daylight because they are recessed from a significant roof overhang. As discussed in the BRE Guidance, it appears that the design of the building has caused a larger relative reduction in VSC. Therefore, an additional VSC test has been carried out without the existing roof overhang.

8.15.12 The additional VSC test shows that without the existing roof overhang in place, all of the windows pass the VSC test. Therefore, the design of the neighbouring building, rather than the size of the proposed development is the main factor in the relative loss of daylight. Furthermore, all habitable windows at Bridgewater House pass the No Sky Line test, therefore the proposed development would not significantly affect daylight distribution within rooms.

8.15.13 2 Printers Avenue:

Technical Appendix 7.2 of the Environmental Statement shows that 4no. windows fail to meet the VSC test. The 3no. affected ground floor windows do not serve residential properties and they have daylight restricted by the existing roof overhang. The 1no. affected residential window at third floor in the southern elevation has daylight restricted by the existing roof overhang, which causes a disproportionate percentage reduction in VSC. If the roof overhang were discounted, VSC would be reduced from 37.72 to 34.69 (92% of the former value), which complies with BRE Guidance. Therefore, the design of the neighbouring building, rather than the size of the proposed development is the main factor in the relative loss of daylight.

8.15.14 All habitable windows at 2 Printers Avenue pass the No Sky Line test, therefore the proposed development would not significantly affect daylight distribution within rooms.

8.15.15 1-16 The Gateway:

All habitable windows at 1-16 The Gateway comply with the VSC and No Sky Line tests, therefore the proposed development would not cause a noticeable loss of daylight to habitable rooms.

8.15.16 <u>Sunlight</u>

The BRE Guidance states that the main requirement for sunlight is in living rooms, where it is valued at any time of day but especially in the afternoon. It is viewed as less important in bedrooms and in kitchens, where people prefer it in the morning rather than the afternoon. Paragraph 3.1.10 of the BRE Guidance states that interiors where the occupants expect sunlight should receive at least 25% of annual probable sunlight hours (APSH), including in the winter months between 21 September and 21 March at least 5% of APSH. 'Probable sunlight hours' means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloudiness for the local in question.

8.15.17 To assess loss of sunlight to an existing building, it is suggested that all main living rooms of dwellings should be checked if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun. If the window can receive more than 25% of APSH, including at least 5% of APSH in the winter months, then the room should still receive enough sunlight. If the available sunlight hours are both less than the amount above and less than 0.8 times their former value, either over the whole year or just in the winter months, then the occupants of the existing building will notice the loss of sunlight; if the overall annual loss is greater than 4% of APSH, the room may appear colder and less pleasant.

8.15.18 Paragraph 3.2.9 of the BRE Guidance states that balconies and overhangs above an existing window tend to block sunlight, especially in summer. Even a modest obstruction opposite may result in a large relative impact on the sunlight received. One way to demonstrate this would be to carry out an additional calculation of the APSH, for both the existing and proposed situations, without the balcony in place. For example, if the proposed APSH with the balcony was under 0.8 times the existing value of the balcony, but the same ratio for the values without the balcony was well over 0.8, this would show that the presence of the balcony, rather than the size of the new obstruction, was the main factor in the relative loss of sunlight.

8.15.19 Omega Court:

The results in Technical Appendix 7.2 of the Environmental Statement show that 21no. windows at Omega Court would not meet the APSH test. However, assessment of the results shows that 4no. windows are secondary in nature because there are other windows serving the same room which receive good levels of sunlight. Furthermore, the other 17 windows have the levels of sunlight restricted by balconies that are directly above them, which means that the proposed development would have a larger relative impact on the sunlight received. In such situations, the BRE Guidance recommends that an additional test is carried out without the balconies in place to show the impact of the

development itself.

8.15.20 The results excluding balconies show that only 3no. windows would not meet the APSH test. Ground floor window W15 in room R12 would have summer APSH reduced from 40% to 36%, which passes the test, however the winter APSH would be reduced from 7% to 3%, which fails. However, the room is also served by another window which provides good levels of sunlight. Windows W18 and W19 serving rooms R13 and R14 on the third floor would see APSH reduced to less than 25% in summer months (and 0.8 times its former value). However, the rooms are bedrooms where sunlighting is less important. The main living rooms of the affected flats would continue to receive good levels of sunlight. As such, having regard to the BRE Guidance, it is not considered that the proposed development itself would cause a significant loss of sunlight to the flats at Omega Court.

8.15.21 Rockwell Court:

The results in Technical Appendix 7.2 of the Environmental Statement show that 9no. windows at Rockwell Court would not meet the APSH test. However, assessment of the affected windows show that they all currently have sunlight restricted by balconies that are directly above them, which means that the proposed development would have a larger relative impact on the sunlight received. The results excluding balconies show that all windows comply with the APSH test. Therefore, in accordance with BRE Guidance, the proposed development itself would not cause a significant loss of sunlight to the flats at Rockwell Court.

8.15.22 The Chase, The Gateway:

All habitable windows pass the APSH test, therefore the proposed development would not cause a noticeable loss of sunlight to habitable rooms.

8.15.23 Bridgewater House:

Only 1no. second floor window fails to comply with the APSH test because APSH in winter would be reduced from 3 to 2 (67% of the former value). However, because of the existing low APSH score, any alteration could result in a disproportionate percentage change and therefore trigger a breach of the APSH test. The existing low level of sunlight is caused by the existing roof overhang. If the existing roof overhang were discounted, APSH would be reduced from 26 to 25 (96% of the former value), which complies with the APSH test. This shows that the design of the neighbouring building has caused a disproportionate percentage reduction in APSH rather than the size of the proposed development. As such, the proposed development would not cause a significant loss of sunlight to habitable rooms.

8.15.24 Printers Avenue:

Only 2no. ground floor windows fail to comply with the APSH test because of the existing low level in Winter caused by the roof overhang and the disproportionate percentage reduction. The windows do not serve residential properties and the reduction in APSH would be insignificant. Therefore, the proposed development would not cause a significant loss of amenity.

8.15.25 1-16 The Gateway:

All habitable windows pass the APSH test, therefore the proposed development would not cause a noticeable loss of sunlight to habitable rooms.

8.15.26 Overshadowing of gardens

The BRE Guidance states that amenity areas should receive at least two hours of sunlight on 21 March. Technical Appendix 7.3 of the Environmental Statement includes shadow plans for the existing baseline environment and the proposed development. It shows that the main outdoor amenity areas would continue to receive at least 2 hours of sunlight on 21 March.

8.15.27 Cumulative impact

Technical Appendix 7.2 of the Environmental Statement considers the cumulative impact of the proposed development and the 3.2m high noise barrier that will be installed as part of the Metropolitan Line Extension. The results show the impact on the ground floor windows at Omega Court, Rockwell Court, The Chase, Bridgewater House and 2 Printers Avenue. In comparison to the impact of the proposed development on neighbouring windows, the addition of a 3.2m high noise barrier would cause a negligible change to the daylight and sunlight received by habitable rooms.

8.15.28 Privacy

Paragraph 7.3.16 of the Residential Design Guide highlights that privacy is an important aspect of residential environments. New build schemes should ensure that there is no significant loss of privacy to neighbouring houses or gardens. Paragraph 7.3.17 details the 'privacy arc' which is a rule-of-thumb to assess the impact of development on the privacy of neighbouring properties. The privacy arc is calculated by drawing 45 degree lines on plan from the centre of neighbouring habitable windows to a distance of 27.5m – as explained in paragraph 7.3.18 of the RDG. Upper floor clear glazed habitable windows of a proposed development should not be within the privacy arc and be at an angle of less than 90 degrees from habitable windows of a neighbouring property – as illustrated in paragraph 7.3.19 of the RDG.

8.15.29 The closest neighbouring residential properties to the application site are to the north of the MLX railway line at Omega Court, Rockwell Court and The Chase. The

upper floor windows of the proposed development would be 33m from the neighbouring habitable windows at its closest point to the east of the application site. The distance to neighbouring windows increases further towards the west of the site and the tall building would maintain significant distances of over 60m from neighbouring habitable windows. As such, the scheme would not cause a significant loss of privacy to habitable rooms of neighbouring properties.

8.15.30 Furthermore, the proposed development would maintain significant distances to the main outdoor amenity areas of neighbouring properties and therefore would not cause an unacceptable level of overlooking.

8.15.31 Outlook

Paragraph 7.3.21 of the RDG states *"Outlook relates to visual dominance of a building that results in an overbearing and oppressive sense of enclosure to an adjacent property. This can be from a habitable room window or a garden area. This can occur even if there is no loss of sunlight, daylight or privacy".* It is important to note that in planning terms there is a difference between "outlook" and "view". Although the impact on public views (i.e. public views of landscape and townscape) is a material planning consideration, loss of view from private property (i.e. views of landscape or townscape from a private property) is not a material planning consideration. However, loss of outlook to residential habitable rooms and gardens is a material planning consideration. Outlook relates to whether a development would have an overbearing effect or cause an unduly oppressive living environment for residents.

8.15.32 In the case of the current application, the south facing habitable windows and outdoor amenity areas of the neighbouring dwellings to the north of the railway line currently have a fairly open view across the application site due to the relatively low height of the existing industrial buildings. The proposed development would have a visual impact and would change the view of the landscape and townscape from the neighbouring properties, however, as discussed in paragraph 8.15.31, this is not a material planning consideration. The proposed tall building and lower development would maintain significant distances to the neighbouring properties, as described in paragraph 8.15.29. Furthermore, the massing of the tall building would be slender and the buildings within the scheme would not appear bulky. The elevations are well articulated and there would be no large areas of solid featureless wall. Taking these factors into account, the proposed development would not appear overbearing or cause an unduly oppressive environment for neighbouring residents. As such, the scheme would not cause a significant loss of outlook to neighbouring habitable rooms or outdoor amenity areas.

8.16 (o) Highway impact, sustainability and car parking provision

Paragraph 17 of the NPPF states, among other things, that planning decisions should actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable. Paragraph 32 of the NPPF states that all developments that generate significant amounts of movements should be supported by a Transport Assessment. Plans and decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and
- Improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

8.16.1 The NPPF states that plans should use sustainable transport modes for the movement of goods or people. Therefore developments should be located and designed where practical to:

- accommodate the efficient delivery of goods and supplies;
- give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;
- create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;
- incorporate facilities for charging plug-in and other ultra-low emission vehicles; and
- consider the needs of people with disabilities by all modes of transport.

8.16.2 Policy T2 of the CS states that new development should be located in close proximity to sustainable transport nodes and local centres or the town centre where facilities can be accessed without the need to travel by private car. To be considered accessible by bus services, sites should be within 400m of a bus stop where a frequent bus service operates. Policy T3 states that all development proposals will be required to provide access for people with disabilities and to be accessible by all forms of sustainable transport. All development proposals will be expected to promote smarter travel choices and should be accompanied by a Green Travel Plan. Policy T4 states that appropriate works and/or contributions towards necessary works to enable the development to be suitably accessed will

be required. These works and/or contributions will cover all appropriate modes of transport, will seek to mitigate impacts on the transport network and will seek to improve the accessibility of the site by sustainable modes of transport. Policy T5 states that new development will be expected to provide improved links with neighbourhood centres and the town centre by contributing to a sustainable transport network.

8.16.3 The proposal is a high density residential-led scheme in a sustainable Special Policy Area location close to the forthcoming MLX station. There are bus stops within 400m of the application site in Ascot Road Old, Hatters Lane, Whippendell Road and Croxley View, which are served by routes R2, W30 and W18 to Watford town centre, among other destinations. Furthermore, the Ebury Way National Cycle Network route is located approximately 970m to the south (an approximately 3 minute cycle ride), which provides a car-free cycle route to Watford town centre and Rickmansworth. The site is also close to a supermarket, schools, local shops and services and designated employment areas – as described in paragraph 3.7 of the report. As such, the proposal accords with paragraph 17 of the NPPF to actively manage patterns of growth to make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable. The proposed development is also in accordance with Policy T2 of the CS because the development is located close to sustainable transport nodes and there are local facilities that can be accessed without the need to travel by private car.

8.16.4 The proposed development would provide access for people with disabilities and would be accessible by sustainable transport, including bus, railway and cycling, which complies with Policy T3 of the CS and paragraph 32 of the NPPF.

8.16.5 Junction capacity:
The Highway Authority has provided a detailed analysis in relation to junction capacity (see Section 7.4.1 of the report), which includes details of the development scenarios that were modelled in the submitted Transport Assessment (TA). The TA considers the impact of the proposed development on the local highway network as well as cumulative impacts arising from other committed and masterplan developments in the area, including outline planning application 17/00091/OUTM at The Tech Site Hatters Lane for the provision of 4no. Class B1(a) office buildings providing up to 40,000m2 of floorspace. The proposed development at The Tech Site includes 875 parking spaces at a ratio of 1 per 45m2. The following scenarios have been tested in the TA:

- 2016 informed by 2015 traffic counts undertaken in support of TRDC application 15/1427/FUL Buildings 1 and 2 Marlins Meadow.

- 2021 future baseline including committed development (Cassiobridge Station, Ascot Road Primary School, Buildings 1 and 2 Marlins Meadow).
- 2021 future baseline (as above) plus subject site development proposal.
- 2021 future baseline plus sites within Croxley View/Ascot Road Masteplan.
- 2021 future baseline plus Croxley View/Ascot Road Masterplan plus subject site development.
- 2021 future baseline plus Croxley View/Ascot Road Masterplan plus The Tech Site (ref: 17/00091/OUTM).
- 2021 future baseline plus Croxley View/Ascot Road Masterplan plus The Tech Site plus subject site development.

8.16.6 Ascot Road is the sole access serving the whole of Special Policy Area 6 (Western Gateway) and the purpose of the cumulative assessment incorporating all committed, emerging, and Masterplan developments is to ensure that the additional traffic from these sites, when added to the existing traffic flows, would not result in significant and unacceptable adverse highway impacts on Ascot Road, as the sole road serving the area, and the adjoining roads feeding into it (Whippendell Road, Rickmansworth Road and Watford Road). It would allow junction capacity assessments to be undertaken for each of the 6 roundabouts within the local highway network (referred to in paragraph 3.4 of the report). Where significant impacts were identified, mitigation measures could then be proposed and modelled.

8.16.7 In comparing the transport assessments of Ascot Road and The Tech Site it was found that there were some inconsistencies and inputs that needed to be corrected. In the case of the Ascot Road TA, the trip generation of The Tech Site development was higher than that shown in The Tech Site TA because the trip generation was based on 1000 parking spaces being provided (which was originally proposed during pre-application) rather than a reduced parking level of 875 spaces which is proposed in the outline planning application. As such, a Transport Assessment Addendum has been submitted in consultation with the Highway Authority, which re-models the impact on the local highway network using correct figures between the Ascot Road and The Tech Site transport assessments. In comparison to the original Ascot Road TA, the Addendum also includes slightly lower trip rates for Masterplan site P6 due to a lower parking standard and slightly higher trips for Ascot Road Community Free School. The net change is a lower trip generation than shown in the original Ascot Road TA, which is mainly due to a reduced parking provision and associated trip generation at The Tech Site.

8.16.8 Capacity assessments of each of the roundabout junctions have been undertaken using ARCADY modelling. The results are presented in terms of ratio of flow to capacity (RFC) and queue length (Q). An RFC capacity in excess of 0.85 indicates

the junction is operating above its practical capacity. Table 3.2 of the Addendum shows traffic impact analysis of the Ascot Road New/Ascot Road Old (Morrisons) roundabout with the MLX operational. The Ascot Road Old (Morrisons) arm provides access to the Ascot Road Community Free School and would operate over capacity for all future year scenarios during AM Peak largely because of the impact of the primary school becoming fully operational and the impact of the additional development. Drawing No. 16037-01-208 of the TA shows the proposed mitigation measures, which consists of moving the existing pedestrian island north and shortening the right turn lane into the Morrisons service yard to allow an additional flared entry lane of 26m on to the roundabout. Keep clear markings are shown in front of Ascot Road Old to allow traffic from the site to exit the junctions in situations where there are queues on the Ascot Road Old (Morrisons access) arm.

8.16.9 The modelling results in Table 3.6 of the Addendum show that the mitigation measures would ensure that the Ascot Road Old (Morrisions) arm would operate within capacity for all scenarios except 2021 future baseline + Croxley View/Ascot Road Masterplan + The Tech Site + the subject site development. This scenario would only be slightly over capacity at 0.88 RFC during AM peak, however the mitigation measures would ensure that it would operate at less than the 2021 future baseline including committed development (without the proposed development and The Tech Site) of 1.27 RFC during AM Peak, which is an improvement compared to the 2021 future year baseline. The Ascot Road West arm of the junction would operate over capacity for the scenarios including The Tech Site during the PM Peak due to traffic generation from The Tech Site. The scenarios without The Tech Site operate within capacity and the proposed Ascot Road development would have negligible impact on the capacity of the Ascot Road West arm. It has been agreed that the applicant will contribute 50% of the costs (a £20,000 contribution) towards the mitigation works to the Ascot Road/Morrison's roundabout and the other 50% will be paid by the applicant of the The Tech Site under ref. 17/00091/OUTM. The works to this roundabout will be carried out by the Highway Authority.

8.16.10 The original TA showed that the Ascot Road New/Ascot Road Old/Whippendell Road roundabout would operate over capacity during AM Peak for all scenarios other than the 2016 existing scenario with the MLX operational. However, it was noticed that a data input error at the left turn movement from Whippendell Road to Ascot Road caused approximately 70 additional vehicle movements to be added in error to the future baseline scenario causing all subsequent with development scenarios to operate over capacity. The Addendum provides corrected figures and Table 3.3 shows that the proposed development would increase the RFC value by 0.1 (additional 2 seconds delay) compared to the future 2021 + committed

development scenario, which would have a negligible impact on the capacity of the junction. The scenarios including The Tech Site would operate over capacity on the Whippendell Road arm during the AM Peak due to the southbound flow of traffic from Rickmansworth Road along Ascot Road towards the business park in the morning reducing the availability of gaps for traffic to enter the roundabout from Whippendell Road. As such, mitigation measures would be required to the Whippendell Road arm to mitigate the impact of The Tech Site, which will be provided through The Tech Site planning application.

8.16.11 At the Watford Road/Baldwins Lane roundabout (with the MLX operational) the junction operates slightly over capacity for all the future year scenarios during AM Peak on the Watford Road West arm and during PM Peak on the Watford Road East Arm, however Table 3.5 of the Addendum shows that the impact of the proposed development is negligible resulting in less than one additional vehicle in queue compared to the 2021 + committed development baseline. Furthermore, the impact of cumulative developments including The Tech Site is minor with queue lengths on Watford Road West increasing by 2 vehicles compared to the 2021 + committed development baseline. As such, mitigation at this roundabout is not considered to be necessary.

8.16.12 The Addendum shows that the Ascot Road New/Hatters Lane/Greenhill Crescent/Blackmoor Lane roundabout; Ascot Road/Rickmansworth Road roundabout; and Ascot Road/Morrisons Access junction would all operate within capacity for all scenarios with the MLX operational and therefore no mitigation is required.

8.16.13 The Council expects the MLX Station to be delivered, however, in order to ensure that the assessment is robust, the worst case 'no station' scenario has been considered in the TA. The 'no station' traffic modelling applies more robust vehicular trip rates than those adopted within the scenarios where the station is in place to both the application site and other sites identified within the Croxley View/Ascot Road Masterplan. The trip rates and distribution have been agreed by the Highway Authority. Table 3.8 of the Addendum shows that the Ascot Road Old (Morrison's) arm of the Ascot Road New/Ascot Road Old (Morrison's) roundabout would operate over capacity for all future AM Peak scenarios. Table 3.12 shows that the mitigation measures referred to in paragraph 8.16.8 of the report would ensure that the Ascot Road Old (Morrison's) arm would operate within capacity for all scenarios except the AM Peak 2021 + committed development + Masterplan + Tech Site + development. In this scenario the RFC value increases from 0.88 to 0.99 compared to the 'with station' scenario. However, the mitigation measures ensure that it would operate below the baseline 2021 + committed development scenario AM Peak of 1.14 RFC (shown in Table 3.8), which is an improvement compared to

the baseline.

8.16.14 Table 3.12 shows that the Ascot Road West arm operates over capacity during PM peak for the Tech Site scenarios. However, the Ascot Road development itself has negligible impact on that arm (resulting in less than 1 car added to queue length).

8.16.15 Table 3.9 of the Addendum shows the impact on the capacity of the Ascot Road/Whippendell Road roundabout in the 'no station scenario'. The Whippendell Road arm operates over capacity for all future AM Peak scenarios with the most significant impacts caused by the scenarios that include The Tech Site. This is due to AM Peak commuter traffic from Rickmansworth Road travelling southbound along Ascot Road to the employment area reducing the availability of gaps for traffic to enter the roundabout from Whippendell Road. Therefore, it is appropriate that The Tech Site development should fund/implement mitigation measures on this arm. The proposed development at the subject site would generate a low number of arrivals during the AM Peak because of its residential use, which means that it would not add large numbers of vehicles to the southerly flow of traffic along Ascot Road and therefore would have minimal impact on vehicles from Whippendell Road entering the roundabout. Table 3.9 of the Addendum shows that when comparing the 2021 + committed development scenario to the 2021 + committed development + development scenario there would be only 2 vehicles added to queues during AM Peak (additional 11 seconds delay), which is considered to be negligible.

8.16.16 Furthermore, it should be noted that the modelling used to generate the results in the Addendum used the worst case 'ODTAB' method, which uses a normal distribution profile within the peak hour. This creates a 'peak within a peak hour' rather than an average over the peak hour, which generates a higher traffic distribution for the purpose of the modelling. The Tech Site TA demonstrates that the existing traffic flows within the peak hour has a flat profile (i.e. traffic flow is constant during the peak hour rather than being higher for a 15 minute segment and lower for other 15 minute segments). Therefore, because the modelling in the Ascot Road TA is based on the 'peak within a peak' traffic generation rather than the flat profile, the impact on the capacity of the junctions is likely to be less than modelled.

8.16.17 Table 3.11 of the Addendum shows the impact on the Watford Road/Baldwin Lane roundabout in the 'no station' scenario. The junction operates slightly over capacity for all the future year scenarios during AM Peak on the Watford Road West arm and during PM Peak on the Watford Road East Arm. However Table 3.11 of the Addendum shows that the impact of the proposed development is negligible. On the Watford Road West arm during AM Peak the 2021 + committed

development + development scenario would increase queue lengths by less than 1 vehicle compared to the 2021 + committed development baseline. Furthermore, the impact of the 2021 + committed development + Masterplan + Tech Site + development scenario is minor with queue lengths increasing by 4 vehicles compared to the 2021 + committed development baseline. On the Watford Road East arm the proposed development would increase queues by less than 1 vehicle and the cumulative scenarios including The Tech Site would increase queues by 2 cars when compared against the 2021 + committed development scenario. As such, mitigation at this roundabout is not considered to be necessary.

8.16.18 The Addendum shows that the Ascot Road New/Hatters Lane/Greenhill Crescent/Blackmoor Lane roundabout; Ascot Road/Rickmansworth Road roundabout; and Ascot Road/Morrisons Access junction would all operate within capacity for all scenarios with the 'no station' model and therefore no mitigation is required.

8.16.19 In summary, the proposed development and cumulative developments in the area would have a significant impact on the capacity of the Ascot Road Old (Morrison's) arm of the Ascot Road New/Ascot Road Old (Morrison's) roundabout in both the 'station' and 'no station' models, however the proposed mitigation measures shown on Drawing No. 16037-01-208 would mitigate the impact of the proposed development and cumulative developments. The proposed development would have negligible impact on all other junctions in the 'with station' and 'no station' models. The Tech Site would cause a significant impact on the Whippendell Road arm of the Ascot Road/Whippendell Road roundabout in the 'with station' and 'no station' models, therefore it has been agreed that the applicant for the Tech Site application will carry out mitigation works at the Whippendell Road/Ascot Road roundabout.

8.16.20 The Tech Site planning application (ref: 17/00091/OUTM) was granted conditional planning permission at Development Management Committee on 13th June 2017, which included a condition to complete a Section 278 agreement to carry out highway mitigation measures at the Ascot Road/Whippendell Road roundabout. The technical highways information considered being considered under the current Ascot Road application is identical to that considered by Development Management Committee on 13th June and officers are not aware of any additional factors or changes in circumstances since the previous decision. The previous approval is a material consideration and the need for consistency in decision-making is a well established planning principle.

8.16.21 Highway safety:
The Highway Authority states that the proposed development is not likely to have

a detrimental impact on the overall safety and operation of the highway because there does not appear to be geographical or highway related issues leading to road traffic collisions.

8.16.22 Vehicular access:

The proposed development would be served by a new vehicular access to the south of the site, which would provide access to the basement car park. The Highway Authority comments that swept path assessments demonstrate that a large car can safely enter, manoeuvre through and depart the site in forward gear, which is acceptable. The new access would be subject to the completion of a s278 agreement.

8.16.23 Pedestrian access:

Pedestrian access to the application site is gained from a footway adjacent to the western boundary, which has a generous width of approximately 3m. The footway connects to Whippendell Road to the north and Watford Business Park and Croxley View to the south. The pedestrian/cycle route to the south links to Ebury Way via a toucan crossing on Tolpits Lane, which is a car-free pedestrian/cycle route towards Watford town centre and Rickmansworth. The nearby Classified Roads at Ascot Road, Whippendell Road and Rickmansworth Road all have toucan crossings close to the application site, which provide safe crossing points for pedestrians. As such, it is considered that safe and suitable pedestrian access to the site would be provided and there would be appropriate pedestrian links to surrounding residential areas, schools, shops, services and open spaces.

8.16.24 Notwithstanding the above, the applicant has made a s106 planning obligation to provide a financial contribution towards the pedestrianisation of Ascot Road Old to provide public realm improvements and enhanced pedestrian mobility between the application site and the MLX Station, which is envisioned in the Croxley View/Ascot Road Masterplanning Study. This accords with the objectives in Policy SPA6 of the CS which seeks public realm improvements and enhanced pedestrian links.

8.16.25 Sustainable transport:

The application site is in a location that is close to sustainable transport infrastructure, therefore a ‘car lite’ development is proposed to maximise the use of sustainable transport and restrict travel by private car. 185 on-site parking spaces are proposed, which is a parking ratio of 0.38 per dwelling. This approach is considered to be appropriate because it would minimise the amount of additional traffic on the local highway network. A significant amount of on-site parking would encourage the use of private cars and increase the traffic generation and impact on the local highway network. The proposed ‘car lite’ development includes a

package of measures to encourage a modal shift towards sustainable transport

8.16.26 An outline Travel Plan (TP) has been submitted with the application in accordance with the requirements of the NPPF and Policy T3 of the CS. The NPPF defines a Travel Plan as *'a long-term management strategy for an organisation or site that seeks to deliver sustainable transport objectives through action and is articulated in a document that is regularly reviewed'*. Paragraph 5.23 of the TP states that a baseline Travel Survey will take place within 3 months of the development exceeding its trigger point (which will be occupancy of the 100th unit) and will aim to determine the modal split of residents at TP commencement.

8.16.27 The interim modal shift targets for the end of year 5 of the TP are shown below. Paragraph 7.6 of the TP states that following the baseline travel survey, these interim modal shift targets will be revised to reflect the site and resident specific travel characteristics. Revised targets will be included within the TP that will be submitted to the Council 1 month after the survey is complete for agreement or for revision where necessary.

- Car driver: 10% decrease
- Car passenger: 3% increase
- Public transport: 4% increase
- Walk: no change
- Cycle: 3% increase

8.16.28 The Travel Plan is aimed at influencing and promoting sustainable travel modes for residents. Consideration has been given to walking, cycling, public transport and car clubs. All new residents will be issued with welcome packs containing the above information. Residents will also be offered personalised journey planning by the newly appointed Travel Plan Co-ordinator. The initiatives include a new Travel Plan co-ordinator and 2 new car club bays.

8.16.29 The Travel Plan includes a range of 'hard measures' and 'soft measures' to encourage a modal shift away from car use to sustainable transport. The hard measures are physical elements built in to the development such as a high level of cycle parking and restricted car parking. The application proposes 575 cycle parking spaces in secure weatherproof storage, which encourages cycling as a mode of transport. The amount of car parking spaces is restricted, which discourages the use of private cars. The 'soft measures' mainly include marketing initiatives and information to promote a shift away from the private car to other more sustainable modes.

8.16.30 Walking would be encouraged through measures such as information on local

pedestrian routes to the nearest facilities and/or public transport nodes being provided to residents, including notices being displayed at the site and information in welcome packs. The provision of a high number of secure cycle spaces and close proximity of the Ebury Way National Cycle Network route provides an opportunity towards a modal shift to cycling. The TP includes a range of measures to encourage cycling, including providing information to residents on local cycle routes. The Ebury Way National Cycle Network is not currently well signposted from the application site, therefore the applicant has complete a s106 obligation to provide a financial contribution towards sustainable transport measures, including improved signposting of cycle networks.

8.16.31 The TP includes measures to encourage the use of public transport, including providing information on public transport stops, routes, timetables, and fares from the application site as part of the welcome pack. Furthermore, the application includes the provision of 2 Car Club spaces for residents, which enables the efficient shared use of cars. The Highway Authority has raised a number of items that should be included in the revised Travel Plan to be submitted to and approved by the Local Planning Authority. The Travel Plan has been secured through a s106 agreement and will include implementation, management and monitoring strategies to ensure that modal split targets are met. The s106 agreement includes a financial contribution towards Travel Plan monitoring costs. Additional measures to support sustainable travel will be required where modal split targets are not being met.

8.16.32 Given the restrained level of on-site parking in this sustainable location, there is the potential for some overspill parking in nearby streets. Furthermore, although the proposed MLX Cassiobridge station includes a car park, there is likely to be some commuter parking in nearby streets as a result of commuters avoiding parking charges. In order to address any concerns about increased on-street parking, the applicant has completed a s106 planning obligation to make a financial contribution towards public consultation and implementation costs for a new Controlled Parking Zone (CPZ) to include nearby streets that do not already have on-street parking controls.

8.16.33 Car park layout:
The proposed parking layout provides 5% disabled parking provision, which is acceptable. The car park would provide 19 active and 18 passive electric vehicle charging points, which accords with emerging Policy T7 of the Local Plan Part 2. The Highway Authority has stated that exact dimensions of the car parking spaces are required, or swept path assessments for the more difficult to access car parking spaces are required to demonstrate that a large car can safely enter and exit the spaces. Secure cycle storage for 575 cycles would be provided in the

basement car park, which exceeds the minimum cycle storage requirement in "saved" Policy T10 of the Watford District Plan 2000.

8.16.34 Refuse and servicing:
Refuse stores would be provided in the basement car park adjacent to each residential core. There would be a waste chute system to allow convenient disposal. The Design & Access Statement states that the waste chute system would be a bi or tri-sort version allowing selection of waste material. On collection days the site operative will use a vehicle to move the bins to the collection area to the south of the site, which is close to the lay-by that would be used by waste collection vehicles. There would be a distance of 10m between the refuse vehicles bay and the bin collection point, which is considered to be acceptable. The lay-by would allow refuse vehicles to pull in clear of the highway and the Highway Authority has stated that the swept path assessments show that the refuse collection vehicles can safely enter and leave in forward gear.

8.16.35 Servicing for the development would be via dedicated loading/servicing bays along the Ascot Road frontage, which is acceptable. The Highway Authority has stated that a servicing and delivery management plan is required to set out the proposed servicing, delivery and refuse collection measures and to manage the movements to ensure that the safety and operation of the highway is not impacted. This would be included in a Site Wide Management Plan to be secured through a s106 planning obligation.

8.16.36 In conclusion, the proposed development would increase traffic generation, however the proposed mitigation to the Ascot Road New/Ascot Road Old (Morrison's) roundabout would ensure that there would not be a significant impact on the local highway network and junctions. The site is considered to be in a sustainable location accessible by sustainable transport modes and the proposed development would promote smarter travel choices. Furthermore, the proposal would not be detrimental to highway safety. As such, the proposed development is in accordance with the NPPF and Policies T2, T3, T4 and T5 of the CS.

8.17 <u>(p) Flood risk and sustainable drainage</u>
The application site is located within Zone 1(low risk) of the Environment Agency's Flood Map for Planning, therefore there is low risk of fluvial or tidal flooding at the site. Furthermore, the W.B.C. Surface Water Management Strategy indicates that there are no known historical flooding incidents at the application site.

8.17.1 In April 2015, the Government enacted legislation requiring all major developments to make provision for the sustainable management of surface water within application sites. The County Council as the Lead Local Flood Authority

(LLFA) was also made a statutory consultee on all major applications for surface water drainage.

8.17.2 The applicant has submitted a surface water drainage scheme that incorporates the following measures to deal with surface water within the application site:

i) Below ground infiltration tanks
ii) Permeable paving
iii) Off-site discharge to public sewer – restricted to a Greenfield rate of 5 l/s

The overall drainage network system has been designed to accommodate the 1 in 100 year storm plus a 40% allowance for climate change, in accordance with LLFA guidance. The applicant has provided sufficient detail to demonstrate that there is a feasible drainage scheme for the site, including attenuation volumes and exploring the most appropriate sustainable drainage methods. This has been approved by the County Council as the Lead Local Flood Authority. As such, the site is considered to be at low risk of flooding and will not increase flood risk outside the application site.

8.18 <u>(q) Land contamination</u>

The Environment Agency states that the application site is located in the highest groundwater vulnerability area within Source Protection Zone 1. Paragraph 11.3.1 of the Environmental Statement states that the baseline conditions for soil and groundwater contamination at the site have been obtained from the following data sources:

- Phase 1 Desk Study Report by Capita dated October 2004.
- Phase 2 Geo-Environmental Intrusive Assessment by Capita dated December 2004.
- Phase 3 Environmental Assessment by Capita dated June 2005.
- Groundwater Risk Assessment by Capita dated October 2010.
- Landmark Information Group, 'Envirocheck Report' dated November 2016.
- The British Geological Survey (BGS) online GeoIndex

8.18.1 Paragraphs 11.3.13 – 11.3.19 of the ES identifies that the site has historically been used as a Printing Works in association with the Sun Printing Works, which was formerly located on the northern side of the railway (now consisting of a mixed use development including Omega Court, Rockwell Court and Printers Avenue etc.). Historical maps indicate that a number of tanks (potentially containing solvents) and a cooling tower were situated in the north-eastern corner of the site. Ground investigations carried out in 2004 and 2005 included laboratory chemical analysis of soil and groundwater samples, and on-site measurement of ground gas

and volatile vapour concentrations within monitoring wells. The analysis found solvent impact to soil and groundwater in the north-eastern corner of the site, which is likely to be caused by leakage close to the former solvent tanks in this area. Furthermore, heavy distillate hydrocarbons indicative of weathered diesel were detected below the existing warehouse building, which is likely to have arisen from local machine pits and/or workshops. The solvent tanks have been removed and the service pits have been infilled as a result of the closure of the printing works therefore the only potential ongoing source of contamination may occur from leaching from unsaturated soils into the underlying groundwater.

8.18.2 The ES assesses the significance of the identified ground contamination on a number of receptors including end users (with regards to human health), building services and controlled waters. The ES identifies that without mitigation the demolition/construction phase and operational phase of the development would have major adverse effects on human health and controlled waters. As such, paragraphs 11.6.1 – 11.7.1 outlines measures to mitigate the potential effects on human health and controlled waters during the demolition/construction phase and operational phase of the development. The Environment Agency and Contaminated Land Officer have no objection to the proposed development subject to a number of conditions being attached to any grant of planning permission to ensure that appropriate mitigation measures and monitoring are put in place in order to protect human health and controlled waters.

8.19 (r) Archaeology

The submitted Archaeological Desk-Based Assessment (DBA) states that there is low potential of surviving archaeology at the site due to past ground surfaces being removed. However, in light of new information provided by Laurence Elvin of the South West Herts Archaeological and Historical Society, the Hertfordshire County Council Historic Environment Advisor considers that there is higher potential for surviving archaeology at the site than indicated in the DBA, which may include archaeology of national significance. In these circumstances, it is recommended that an Archaeological Written Scheme of Investigation should be undertaken, which should be secured through conditions.

9.0 Community Infrastructure Levy and Planning Obligation

9.1 **Community Infrastructure Levy (CIL)**

The Council introduced the Community Infrastructure Levy (CIL) with effect from 1 April 2015. The CIL charge covers a wide range of infrastructure as set out in the Council's Regulation 123 list, including highways and transport improvements, education provision, youth facilities, childcare facilities, children's play space, adult

care services, open space and sports facilities. CIL is chargeable on the relevant net additional floorspace created by the development. The charge is non-negotiable and is calculated at the time that planning permission is granted.

The Watford CIL Charging Schedule states that there is no CIL charge for development in Major Development Areas. The application site is within a Major Development Area, therefore there is no CIL charge for the proposed development.

9.2 **S.106 planning obligation**

Under Regulation 122 of the Community Infrastructure Levy Regulations 2010, where a decision is made which results in planning permission being granted for development, a planning obligation may only constitute a reason for granting planning permission for that development if the obligation is:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

The applicant has committed to enter into a s106 planning agreement to make the following obligations:

<u>Phasing</u>

- To require the submission and implementation of a phasing plan setting out the phasing of the delivery of the development.

Reason: This obligation is required to ensure that affordable housing is delivered early in the development.

<u>Affordable housing</u>

- To secure affordable housing units in Blocks D and E. Tenure mix – at least 20% social rented; at least 65% affordable rented; with remaining units to be intermediate.

Reason: This obligation is required to ensure that the proposed development provides affordable housing that meets the Borough's housing needs, in accordance with Policy HS3 of the CS. The provision of affordable housing is directly related to the proposed development, and is fairly and reasonably related in scale and kind to that development. It is also necessary to make the development acceptable in accordance with the Council's planning policies.

Highway mitigation works

- A financial contribution of £20,000 towards off-site mitigation works at Ascot Road/Morrison's roundabout, as shown on drawing No. 16037-01-208.
- Introduction of loading bays on Ascot Road for refuse and delivery vehicles and associated amendment to the Traffic Regulation Order.

Reason: These obligations are required to mitigate the impact of the proposed development on the local highway network. They are directly related to the proposed development, and are fairly and reasonably related in scale and kind to that development. It is also necessary to make the development acceptable in accordance with the Council's planning policies.

Sustainable transport measures

- A contribution of £22,500 towards the provision of a cycle hire station adjacent to the application site, including 5 cycles and initial annual operation costs for 2 years.
- A contribution of £6,000 towards improved directional signage to the Ebury Way National Cycle Network.
- Introduction of car club bay for 2 cars in Ascot Road and associated amendment to the Traffic Regulation Order.
- To secure an agreement with a car club operator to provide car club for 3 years from first occupation of the development.
- A contribution of £32,000 towards bus stop improvements.
- A contribution of £55,000 towards 2 public consultations (one to be held during construction of the development and the other to be held after occupation of the development) and implementation of a new Controlled Parking Zone.

Reason: These obligations are required to encourage a modal shift from private car use to sustainable transport modes. They are also required to restrict parking on nearby streets. The obligations are directly related to the proposed development, and are fairly and reasonably related in scale and kind to that development. It is also necessary to make the development acceptable in accordance with the Council's planning policies.

Travel Plan

- Submission and implementation of an approved Travel Plan.
- Contribution of £6,000 towards Travel Plan monitoring.
- Submission and implementation of an approved Construction Logistics Plan.

Reason: These obligations are required to encourage a modal shift from private car use to sustainable transport modes in accordance with Policy T3 of the CS. The obligations are directly related to the proposed development, and are fairly and reasonably related in scale and kind to that development.

Public realm improvements

- Contribution of £500,000 towards public realm improvements in Old Ascot Road.

Reason: This obligation is required to provide public realm improvements and improved pedestrian connectivity to the forthcoming MLX station, in accordance with the objectives of Policy SPA6 of the CS and the Croxley View/Ascot Road Masterplanning Study. The obligation is directly related to the proposed development, and is fairly and reasonably related in scale and kind to that development.

Community infrastructure

- A financial contribution of towards the expansion of Rickmansworth School, which is calculated using the amounts and approach set out within the Planning Obligations Guidance – Toolkit for Hertfordshire January 2008.
- The provision of fire hydrants to serve the proposed development.

Reason: The occupiers of the proposed development would have an additional impact upon local services. The planning obligations sought towards the above services are based on the size, type and tenure of the individual dwellings comprising this development following consultation with the Service providers and will only be used towards services and facilities serving the locality of the proposed development and therefore, for the benefit of the development's occupants. As such, the above obligations are directly related to the proposed development and are fairly and reasonably related in scale and kind to the development. The obligations are also necessary to make the development acceptable in accordance with the Council's planning policies. Accordingly, the obligations meet the tests in Regulation 122 of the Community Infrastructure Regulations 2010, and, consequently, can be taken into account as material planning considerations in the determination of the application.

It is noted that Hertfordshire County Council had requested a retrospective contribution towards Ascot Road Community Free School, which already exists and is open to students. Watford Borough Council were concerned that this requested

contribution did not meet the test of necessity set out within Regulation 122 of the Community Infrastructure Levy Regulations 2010 (as amended). Accordingly, Watford Borough Council and Hertfordshire County Council jointly instructed Counsel to provide advice on this matter. Having had the opportunity to consider this advice Officers are of the view that, in the particular circumstance of this case, the requested contribution is not necessary and would not meet the relevant test. Accordingly, this contribution should not be secured.

Site Wide Management Plan

- To require the submission and implementation of an approved Site Wide Management Scheme, which, among other things, will include details of a fire safety strategy.

Reason: A Site Wide Management Plan is required to ensure the effective management of the site, including matters such as on-site parking, deliveries, servicing and fire safety. It is directly related to the proposed development and is necessary to ensure appropriate management of the site.

10.0 Planning balance

10.1 The proposed regeneration scheme would have considerable social benefits because it would provide a significant contribution towards meeting the Borough's housing needs, including a large affordable housing component. It is a high density residential-led scheme on previously developed land in a sustainable Special Policy Area location close to the forthcoming MLX station and a range of local services. The proposal accords with the policy objectives of the NPPF to meet the housing needs of the Borough; to encourage the effective use of previously developed land; to promote mixed use development; and to make the fullest possible use of public transport, walking and cycling by focusing significant development in locations which are or can be made sustainable. Furthermore, the scheme accords with the objectives of SPA6 to provide major regeneration that upgrades the area from an economic and environmental perspective due to the replacement of degraded industrial buildings with high quality design and new public realm. The development would provide additional household spending in the area and would act as a catalyst for further regeneration schemes in the Western Gateway Special Policy Area.

10.2 The proposed development would improve the townscape and environment of the application site because it would replace utilitarian industrial buildings and hard-surfacing with buildings of high quality design and well-landscaped public open space with new pedestrian linkages. The extensive landscaping would also provide enhancements to biodiversity on site. The buildings would provide greater

definition to the streetscape due to the strong and defined edges of the development.

10.3 The design of the taller building would be of high quality and would achieve a slender and elegant appearance which would improve wayfinding and legibility towards the new MLX station. The tall building would appear prominent from nearby surrounding areas, as shown in the TVIA, because it would be taller than neighbouring buildings and would break the skyline. However, it would not obstruct views of any particular landmark features and would be read in context of the existing modern multi-storey flatted development in WCAS Character Area 38B. Furthermore, the massing, elevational features, materials palette and generous spacing to neighbouring development would assimilate the height and scale of the buildings into the surroundings. Therefore, although the height of the taller building does not follow the scale of surrounding buildings, it would be an acceptable addition to the townscape.

10.4 The proposal would cause no harm to the significance of listed buildings or conservation areas, however it would cause less than substantial harm to Cassiobury Park registered park because it would introduce prominent views of built form to parts of Cassiobury Park where no views of built form currently exist. It would reduce the extent to which the parkland character area feels visually contained from surrounding areas and this effect will be most notable from the tranquil southern parts of the park. In applying paragraph 134 of the NPPF, it is considered that the less than substantial harm to the heritage asset is outweighed by the social, environmental and economic benefits of the regeneration scheme in terms of providing significant additional housing and affordable housing; townscape improvements; new public realm with enhanced pedestrian links; enhancements to the biodiversity of the site; provision of jobs; and investment that would act as a catalyst for further regeneration in the area.

10.5 The Council's housing allocations currently do not provide a five year supply of housing land based on the OAN contained within the SHMA (as discussed in paragraphs 6.12 and 6.13 of the report), therefore in accordance with paragraph 49 of the NPPF the relevant policies for the supply of housing should not be considered up-to-date. Accordingly, applications for housing should be considered against the second test for decision taking in paragraph 14 of the NPPF, which means that applications for housing should be granted permission unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework taken as a whole.

10.6 Paragraph 14 of the NPPF highlights that at the heart of the NPPF is a presumption in favour of sustainable development and paragraph 49 states that housing

applications should be considered in the context of sustainable development. The proposed development would have considerable social, environmental and economic benefits, as discussed above, and therefore it is felt that it constitutes sustainable development. The tall building would appear prominent from nearby surrounding areas and would cause a minor adverse effect to HLCA Character Area 5 Croxley Moor and a moderate adverse effect to HLCA Character Area 11 Lower Gade Valley (which includes Cassiobury Park registered park). It would also cause less than substantial harm to the significance of Cassiobury Park registered park. The adverse impacts should be afforded weight in the planning balance, however officers are of the view that the planning benefits of the scheme substantially outweigh the adverse impacts.

10.7 The environmental information has been considered in the report in accordance with the requirements of the EIA regulations and appropriate mitigation measures can be put in place through conditions and s106 obligations to ensure that residual effects are minimal.

10.8 The proposed development would have an impact on the capacity of the Ascot Road New/Ascot Road Old (Morrison's) roundabout, however appropriate measures can be put in place to mitigate the impact of the proposed development and cumulative developments in the area to ensure that there would be a negligible impact on the local highway network. The proposed 'car lite' development (which restricts the additional traffic on the local highway network) includes a package of measures to encourage a modal shift towards sustainable transport. The measures along with robust modal shift targets in the Travel Plan should minimise on-street parking in nearby streets. In order to address any concerns about increased on-street parking, the applicant has completed a s106 planning obligation to make a financial contribution towards public consultation and implementation costs for a new Controlled Parking Zone (CPZ) to include nearby streets that do not already have on-street parking controls.

10.9 The proposed development would cause a noticeable loss of daylight to a small number of second bedrooms of 2-bed flats at the rear of Omega Court, however, it would not have a significant impact on light received by the living rooms and main bedrooms and is therefore in accordance with BRE guidance. The proposal would not cause a significant loss of light, outlook or privacy to neighbouring properties and the proposed layout would provide an acceptable standard of amenity for future occupiers.

10.10 In applying the second test for decision taking in paragraph 14 of the NPPF, Officers consider that the adverse effects of the proposed development would not significantly and demonstrably outweigh the social, economic and environmental

benefits. To the contrary, officers are of the view that the planning benefits substantially outweigh the adverse impacts which have been identified. Accordingly, it is recommended that the application should be approved.

11.0 Human Rights Implications

11.1 The Local Planning Authority is justified in interfering with the applicant's human rights in order to alleviate any adverse effect on adjoining properties and their occupiers and on general public amenity. With regard to any infringement of third party human rights, these are not considered to be of such a nature and degree as to override the human rights of the applicant and therefore warrant refusal of planning permission.

12.0 Recommendation

That, pursuant to a planning obligation under s.106 of the Town and Country Planning Act 1990 having been completed to secure the following Heads of Terms, planning permission be granted subject to the conditions listed below:

Section 106 Heads of Terms

i. To require the submission and implementation of a phasing plan setting out the phasing of the delivery of the development.
ii. To secure affordable housing units in Blocks D and E. Tenure mix – at least 20% social rented; at least 65% affordable rented; with remaining units to be intermediate.
iii. A financial contribution of £20,000 towards off-site mitigation works at Ascot Road/Morrison's roundabout, as shown on drawing No. 16037-01-208.
iv. Introduction of 3no. lay-bys on Ascot Road for servicing vehicles and 2 car club vehicles. Financial contribution of £2000 towards amendment to the Traffic Regulation Order.
v. A financial contribution of £22,500 towards the provision of a cycle hire station adjacent to the application site, including 5 cycles and initial annual operation costs for 2 years.
vi. A financial contribution of £6,000 towards improved directional signage to the Ebury Way National Cycle Network.
vii. To secure an agreement with a car club operator to provide car club for 3 years from first occupation of the development.
viii. A financial contribution of £32,000 towards bus stop improvements.

ix. A financial contribution of £55,000 towards 2 public consultations (one to be held during construction of the development and the other to be held after occupation of the development) and implementation of a new Controlled Parking Zone.
x. Submission and implementation of an approved Travel Plan
xi. A financial contribution of £6,000 towards Travel Plan monitoring.
xii. Submission and implementation of an approved Construction Logistics Plan.
xiii. A financial contribution of £500,000 towards public realm improvements in Old Ascot Road.
xiv. A financial contribution of towards the expansion of Rickmansworth School, which is calculated using the amounts and approach set out within the Planning Obligations Guidance – Toolkit for Hertfordshire January 2008.
xv. The provision of fire hydrants to serve the proposed development.
xvi. Submission and implementation of an approved Site Wide Management Scheme. The scheme shall include the following details:
- Details of all on-site parking spaces.
- Measures to prevent parking outside of marked parking spaces.
- Details of areas within the site that would be used for the manoeuvring and loading/unloading of delivery and servicing vehicles.
- Details of access to/from the site for delivery and serving vehicles.
- Details of concierge facilities and procedures for directing and receiving deliveries to the site.
- Details of site waste management, which shall include details of the operation and management of the waste and recycling disposal system; details of waste and recycling storage provision; and arrangements for the collection of waste and recycling from the site.
- Details of a fire safety strategy.

Conditions

1. Time Limit

The development to which this permission relates shall be begun within a period of three years commencing on the date of this permission.

Reason: To comply with the requirements of Section 91 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. Approved plans

The development hereby permitted shall be carried out in accordance with the following approved drawings:-

100-101; 050-001; 050-002 Rev A; 050-010; 050-011 Rev A; 050-012 Rev A; 050-013 Rev A; 050-014 Rev A; 050-015 Rev A; 050-016 Rev A; 050-017 Rev A; 050-018 Rev A; 050-019 Rev A; 050-020 Rev A; 050-021 Rev A; 050-022 Rev A; 050-023 Rev B; 050-301 Rev A; 050-302 Rev A; 050-303; 050-304 Rev A; 050-305 Rev A; 050-306 Rev A; 050-307 Rev A; 050-308 Rev A; 050-309 Rev A; 089680-L-100 Rev D; 089680-L-101 Rev B; 089680-L-102 Rev C; 089680-L-103 Rev B; 089680-L-104 Rev A; 089680-L-105 Rev B; 089680-L-106; 089680-L-200 Rev C; 089680-L-201 Rev B; 089680-L-202 Rev A; and ASCOT_SK-001

Reason: For the avoidance of doubt and in the interests of proper planning.

3. Materials

No development, other than demolition, shall commence until details of the materials to be used for all the external finishes of the buildings, including walls, roofs, doors, windows and balconies, have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out only in accordance with the approved materials.

Reason: In the interests of the visual appearance of the site and the character and appearance of the area, in accordance with Policy UD1 of the Watford Local Plan Core Strategy 2006-31. To ensure that materials are agreed before the construction phase of the development, this condition is a pre-commencement condition.

4. Detailed plans

No development, other than demolition, shall commence until detailed drawings of the elevations, including details of the reveals, projections, recessed areas, balconies, architectural detailing and the proposed capping for the walls, have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out only in accordance with the approved details.

Reason: In the interests of the visual appearance of the site and the character and appearance of the area, in accordance with Policy UD1 of the Watford Local Plan Core Strategy 2006-31. To ensure that detailed plans are agreed before the construction phase of the development, this condition is a pre-commencement condition.

5. Drainage

The development hereby permitted shall be carried out in accordance with the approved Flood Risk Assessment carried out by Capita reference CS075456-PE-16-193-R V3 and the following mitigation measures detailed within the FRA:

1. Providing attenuation to ensure no increase in surface water run-off volumes for all rainfall events up to and including the 1 in 100 year + climate change event.
2. Implementing appropriate drainage scheme based on infiltration and off-site discharge to public sewer.
3. Limiting the surface water run-off generated by the 1 in 100 year + climate change critical storm so that it will not exceed the run-off from the undeveloped site and not increase the risk of flooding off-site.
4. Implementing appropriate SuDS measures as shown on proposed drainage layout drawing reference CS/075456 and to include permeable surfacing and below ground attenuation.

The mitigation measures shall be fully implemented prior to occupation of any part of the development and subsequently in accordance with the timing / phasing arrangements embodied within the scheme, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reason: To prevent flooding by ensuring the satisfactory disposal and storage of surface water from the site and to reduce the risk of flooding to the proposed development and future occupants.

6. Surface water drainage scheme

No development, other than demolition, shall commence until a detailed surface water drainage scheme for the site based on the approved FRA and sustainable drainage principles and an assessment of the hydrological and hydro geological context of the development, has been submitted to and approved in writing by the Local Planning Authority. The drainage strategy should demonstrate the surface water run-off generated up to and including 1 in 100 year + climate change critical storm will not exceed the run-off from the undeveloped site following the

corresponding rainfall event. The scheme shall subsequently be implemented in accordance with the approved details before the development is completed.

The scheme should include;

1. Detailed engineered drawings of the proposed SuDS features including their size, volume, depth and any inlet and outlet features including any connecting pipe runs.

Reason: To prevent the increased risk of flooding, both on and off site. To ensure that measures are agreed and built-in to the development to manage and reduce surface water run-off, this condition is a pre-commencement condition.

7. Drainage management and maintenance plan

Upon completion of the drainage works an updated management and maintenance plan for the all the SuDS features and structure, including arrangements for adoption and any other arrangements to secure the operation of the scheme throughout its lifetime, shall be submitted to and approved in writing by the Local Planning Authority prior to occupation of any part of the development. The SuDS features and structure shall thereafter be operated in accordance with the management and maintenance plan, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To prevent the increased risk of flooding.

8. Contamination remediation strategy

No development shall commence until a remediation strategy to deal with the risks associated with contamination of the site has been submitted to, and approved in writing by, the Local Planning Authority. This strategy will include the following components:

1. A preliminary risk assessment which has identified:
- all previous uses;
- potential contaminants associated with those uses;
- a conceptual model of the site indicating sources, pathways and receptors; and
- potentially unacceptable risks arising from contamination at the site.

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the written consent of the local planning authority. The scheme shall be implemented as approved.

Reason: To protect groundwater and human health. To ensure that mitigation measures are agreed and built-in to the development, this condition is a pre-commencement condition.

9. Contaminated land verification report

No part of the development shall be occupied until a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation has been submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reason: To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete.

10. Contamination monitoring and maintenance plan

No development shall commence until a monitoring and maintenance plan in respect of contamination, including a timetable of monitoring and submission of reports to the Local Planning Authority, has been submitted to and approved in writing by the Local Planning Authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to, and approved in writing by, the Local Planning Authority.

Reason: To ensure that the site does not pose any further risk to human health or the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures. To ensure that

monitoring is in place during the construction phase, this condition is a pre-commencement condition.

11. Discovery of contamination that has not been previously identified

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved.

Reason: To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution from previously unidentified contamination sources at the development site.

12. Details of infiltration surface water drainage

No drainage systems for the infiltration of surface water drainage into the ground is permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to controlled waters. The development shall be carried out in accordance with the approved details.

Reason: To protect groundwater and human health. Infiltration through contaminated land has the potential to impact on groundwater quality.

13. Piling method statement

No piling shall take place until a piling method statement (detailing the depth and type of piling to be undertaken and the methodology by which such piling will be carried out, including measures to prevent and minimise the potential for damage to subsurface sewerage infrastructure and groundwater pollution, and the programme for works) has been submitted to and approved in writing by the Local Planning Authority. Any piling must be undertaken in accordance with the terms of the approved piling method statement.

Reason: To protect groundwater and underground sewerage utility infrastructure.

14. Borehole management scheme

A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as approved shall be implemented prior to the occupation of any part of the development.

Reason: To protect groundwater and human health by ensuring that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies.

15. Soft landscaping scheme

No development, other than demolition, shall commence until full details of a soft landscaping scheme have been submitted to and approved in writing by the Local Planning Authority. The approved landscaping scheme shall be carried out not later than the first available planting and seeding season after completion of the development. Any trees or plants whether new or existing which within a period of five years die, are removed or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species, or in accordance with details approved by the Local Planning Authority.

Reason: In the interests of the visual appearance of the site and the wider area, in accordance with Policy UD1 of the Watford Local Plan Core Strategy 2006-31.

16. Hard landscaping scheme

No development, other than demolition, shall commence until full details of a hard landscaping scheme, including details of all site boundary treatments and all fencing or enclosures within the site, have been submitted to and approved in writing by the Local Planning Authority. The hard landscaping shall be carried out in accordance with the approved details.

Reason: In the interests of the visual appearance of the site and the local area.

17. Lighting scheme

No part of the development shall be occupied until details of the lighting of all public realm and other external areas within the site have been submitted to and approved in writing by the Local Planning Authority. The details shall include details of the intensity of light emissions (including the surface area to be illuminated),

detailed drawings of the proposed lighting columns and fittings and any measures for mitigating the effects of light pollution. The development shall be carried out in accordance with the approved details and shall be retained as such thereafter.

Reason: In the interest of residential amenity, the character and appearance of the area and security.

18. Protection of bats

No removal of trees, works to or demolition of buildings/structures, or development shall take place until follow-up dusk emergence and dawn re-entry bat surveys undertaken during May - September (inclusive) and a mitigation strategy for the construction and operational phases of the development has been submitted to and approved in writing by the Local Planning Authority. Thereafter the mitigation strategy shall be implemented in accordance with the details approved by this Condition.

Reason: To protect roosting bats. To ensure that protection for roosting bats is in place before the construction phase, this condition is a pre-commencement condition.

19. Lighting design scheme for biodiversity

No part of the development shall be occupied until a lighting design strategy for biodiversity for the northern and eastern boundaries of the site has been submitted to and approved in writing by the Local Planning Authority. The strategy shall:

a) Identify those areas/features on site that are particularly sensitive for bats and that are likely to cause disturbance in or around their breeding sites and resting places or along important routes used to access key areas of their territory, for example, for foraging; and

b) show how and where external lighting will be installed (through the provision of appropriate lighting contour plans and technical specification) so that it can be clearly demonstrated that areas to be lit will not disturb or prevent the above species using their territory or having access to their breeding sites and resting places.

All external lighting shall be installed in accordance with the specifications and locations set out in the strategy, and these shall be maintained thereafter in accordance with the strategy. Under no circumstances should any external lighting be installed on site without prior written consent from the Local Planning Authority.

Reason: To ensure that lighting does not adversely affect wildlife.

20. Protection of nesting birds

No removal of hedgerows, trees or shrubs, or works to or demolition of buildings/structures, or development shall take place between 1st March and 31st August inclusive until a survey for active birds nests carried out by a competent ecologist has been submitted to the Local Planning Authority and, in the case of nesting birds being found, a mitigation strategy has been approved in writing by the Local Planning Authority. Thereafter the mitigation strategy shall be implemented in accordance with the details approved by this Condition.

Reason: To protect breeding birds. To ensure that protection for nesting birds is in place before the construction phase, this condition is a pre-commencement condition.

21. Site levels

No development, other than demolition, shall commence until details of the levels of the building(s), road(s) and footpath(s) in relation to the adjoining land and highway(s), and any other changes proposed in the level of the site, have been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the works are carried out at suitable levels in relation to the highway and adjoining properties in the interests of the amenity of neighbouring residents, the appearance of the development, drainage, gradient of access and future highway improvement. To ensure that appropriate site levels are agreed before construction commences on site, this condition is a pre-commencement condition.

22. Noise mitigation

The development hereby approved shall not progress above podium level until a detailed scheme to achieve satisfactory internal noise levels has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include details of glazing specifications and ventilation and shall be based on the mitigation measures detailed in the Hodkinson Acoustic Report dated January 2017, unless otherwise agreed in writing by the Local Planning Authority. No part of the development shall be occupied until all the works forming part of the approved scheme have been completed.

Reason: To protect the amenities of the future occupiers of the development.

23. Noise levels

The calculated rating level of the noise from fixed plant and equipment associated with the development shall not exceed 50dB LAr, T during the hours 07:00 and 23:00 and 35dB LAr, T during the hours 23:00 and 07:00, determined at the nearest noise sensitive premises in accordance with the procedures detailed in BS 4142:2014. Prior to the operation of any fixed plant and equipment associated with the development, the developer shall provide details including calculated rating levels of noise to the Local Planning Authority demonstrating that the detailed design achieves the required criteria.

Reason: To protect the amenities of the future occupiers of the development.

24. Commercial extraction system

No cooking shall take place in the Class A units until details of extraction systems, including manufacturer's specifications, details of the routing of ducts and discharge points, and an acoustic impact assessment including details of noise and vibration mitigation as necessary, have been submitted to and approved in writing by the Local Planning Authority and the extraction systems have been installed in accordance with the approved details. The plant shall not be operated other than in complete accordance with the approved specifications and mitigation measures. No cooking shall take place on the Class A premises unless satisfactory ventilation is installed and being operated in accordance with the approved details.

Reason: To protect the amenities of the future occupiers of the development.

25. Class A outdoor seating

Outdoor seating areas associated with the Class A uses shall be cleared of customers between 22:00 and 08:00 hours, 7 days a week.

Reason: To protect the amenities of the future occupiers of the development.

26. Class A uses

The proposed Class A uses shall operate within use classes A1, A2, and A3 only.

Reason: To ensure that the commercial units do not affect the amenities of residential properties by reason of noise and disturbance.

27. Shopfronts

The shopfront windows to the Class A units shall be used for display purposes and the window glass must not be painted or obscured.

Reason: To prevent the introduction of dead frontages and to protect the character and appearance of the development and surrounding area.

28. Class D use

The non-residential premises on the eastern side of the upper ground floor of Block A (labelled '17' on drawing No. 050-011) shall not be first occupied and used without the Local Planning Authority's prior agreement, in writing, of the following details:

a) notification of any proposed use within Class D1 and D2 of the Town and Country Planning (Use Classes) Order 1987, as amended;
b) any equipment for the projection of amplified sound to customers and other members of the public inside and (where relevant) outside of the building;
c) any externally situated plant and/or other machinery;
d) any externally situated temporary or permanent furniture, means of enclosure and other equipment associated with the extension of commercial activity outside of the building.

The occupation and use of the premises, including any part thereof, shall be carried out in accordance with the notification and details so agreed. Notwithstanding the provisions of the Town and Country Planning (Use Classes) Order 1987 as amended and the Town and Country Planning (General Permitted Development) (England) Order 2015 as amended, the premises shall only be used for a purpose that has been approved in writing by the Local Planning Authority.

Reason: To ensure that the operation of the ground floor uses and any associated equipment, plant, machinery and/or outdoor activity is compatible with residential and visual amenity.

29. Residential development sustainability

The residential units hereby permitted shall be constructed to:

(i) achieve a minimum regulated carbon dioxide reduction of 19% beyond the Building Regulations 2010 (as amended) Approved Document L1A - Conservation of fuel and power in new dwellings (2013 edition);
(ii) achieve a maximum water use of no more than 110 litres per person per day in accordance with the optional standard 36(2)(b) of the Building Regulations 2010 (as amended) Approved Document G – Sanitation, hot water safety and water efficiency (2015 edition).

Reason: To ensure that the development is sustainable and makes efficient use of energy and water, in accordance with Policies SD1, SD2 and SD3 of the Watford Local Plan Core Strategy 2006-31.

30. Non-residential development sustainability

The Class A units hereby permitted shall not be brought into use until a certificate of compliance from an accredited assessor confirming that the development has achieved a BREEAM rating of Excellent has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that the development is sustainable and makes efficient use of energy and water, in accordance with Policies SD1, SD2 and SD3 of the Watford Local Plan Core Strategy 2006-31.

31. Wind mitigation

The development hereby permitted shall not progress above podium slab level until details of mitigation measures to address wind microclimate impacts have been submitted to and approved in writing by the Local Planning Authority. The mitigation measures shall be based on the recommendations in Section 7 of the Pedestrian Level Wind Microclimate Assessment RWDI#1700251 PLW REV-B dated December 13th 2016. No part of the development shall be occupied until the works have been completed in accordance with the approved details and thereafter retained.

Reason: To ensure that the amenity of future occupiers of the development is protected.

32. Access, manoeuvring and parking layout

No development, other than demolition, shall commence until full details in the form of scaled plans and written specifications have been submitted to and

approved in writing by the Local Planning Authority in consultation with the Highway Authority to illustrate the following:

i. Roads, footways, foul and on-site water drainage.
ii. Existing and proposed access arrangements including visibility splays.
iii. Car parking provision.
iv. Servicing areas, loading areas and turning areas for all vehicles.

No part of the development shall be occupied until the proposed layout has been completed in accordance with the details approved by this Condition.

Reason: In the interests of maintaining highway efficiency and safety. To ensure that appropriate access, manoeuvring and parking is built-in to the development this is a pre-commencement condition.

33. Road Safety Audit

No development, other than demolition, shall commence until a Stage 1 Road Safety Audit for all access arrangements and proposed mitigation measures has been submitted to and approved in writing by the Local Planning Authority and Highway Authority. The mitigation measures are as follows:

- Ascot Road / Old Ascot Road, Morrisons Access roundabout: Drawing reference 16037-01-208.

Reason: To ensure that the proposed access arrangements are safe and suitable for their intended use. To ensure that safe and suitable highways works are provided this is a pre-commencement condition.

34. Swept path assessments

No development, other than demolition, shall commence until swept path assessments have been submitted to and approved in writing by the Local Planning Authority. The following swept path assessments are required:

- Delivery vehicles entering and exiting the undercroft car parking area;
- Revised swept path assessments for fire tender manoeuvring within the site;
- Revised swept path assessments for delivery vehicles manoeuvring within the site;
- Large car accessing car parking spaces that are in corners and for one midway in a row.

Reason: In order to protect highway safety and the amenity of other users of the site. To ensure that a safe layout for vehicles is provided this is a pre-commencement condition.

35. Parking Management Plan

No residential or commercial unit or other part of the development shall besold or occupied until a Parking Management Plan has been submitted to and approved in writing by the Local Planning Authority. The plan shall: identify the electric vehicle charging point spaces that are to be provided within the basement car park as 'active' spaces and those as 'passive' spaces; detail the allocation of disabled person's parking space within the basement car park; detail the allocation of general parking spaces within the development; detail the management of general vehicle access across the site; detail the storage and allocation of cycle parking for residents/staff/visitors of the development; lighting within the basement. The development shall be carried out in accordance with the approved plan and shall be retained as such thereafter.

Reason: In the interests of highway safety and to ensure sufficient available on-site car parking and the provision of adequate cycle parking that meets the needs of occupiers of the proposed development and in the interests of encouraging the use of sustainable modes of transport.

36. Access Control System

No dwellings shall be occupied in any building until details of an access control system for that building have been submitted to and approved in writing by the Local Planning Authority and the access control system has been installed in accordance with the approved details. The access control system(s) shall be retained as such thereafter.

Reason: To ensure that the development achieves a high standard of residential quality for future occupiers of the development.

37. Communal aerials and satellites

No dwelling shall be occupied until details of a strategy for the provision of communal facilities for television reception (eg. aerials, dishes and other such equipment) has been submitted to and approved in writing by the Local Planning Authority. Such details shall include the specific size and location of all equipment. The approved details shall be implemented prior to the first occupation of the relevant Block and shall be retained thereafter. Notwithstanding the provisions of

the Town and Country Planning (General Permitted Development) Order 2015 (as ameneded) no other television reception equipment shall be introduced onto the walls or the roof of the building without the prior written approval of the Local Planning Authority.

Reason: In the interests of the character and appearance of the building, in accordance with Policy UD1 of the Watford Local Plan Core Strategy 2006-31.

38. Archaeological Written Scheme of Investigation

No development, other than demolition, shall commence until an Archaeological Written Scheme of Investigation has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include an assessment of archaeological significance and research questions; and:

1. The programme and methodology of site investigation and recording;
2. The programme for post investigation assessment;
3. Provision to be made for analysis of the site investigation and recording;
4. Provision to be made for publication and dissemination of the analysis and records of the site investigation;
5. Provision to be made for archive deposition of the analysis and records of the site investigation;
6. Nomination of a competent person or persons/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.

The development shall be carried out in accordance with the programme of archaeological works set out in the Written Scheme of Investigation.

Reason: The site has potential to include heritage assets with archaeological interest. To ensure that appropriate site investigation is carried out before construction works this is a pre-commencement condition.

39. Implementation of Written Scheme of Investigation

No part of the development shall be occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the Written Scheme of Investigation approved under Condition 40 and the provision made for analysis and publication where appropriate.

Reason: The site has potential to include heritage assets with archaeological interest.

Informatives

1. This planning permission is accompanied by a Planning Obligation under Section 106 of the Town and Country Planning Act 1990.

2. In dealing with this application, Watford Borough Council has considered the proposal in a positive and proactive manner having regard to the policies of the development plan as well as paragraphs 186 and 187 of the National Planning Policy Framework and other material considerations, and in accordance with the Town and Country Planning (Development Management Procedure) (England) Order 2010, as amended. The Council also gave pre-application advice on the proposal prior to the submission of the application and undertook discussions with the applicant's agent during the application process.

3. All new units granted planning permission and to be constructed require naming or numbering under the Public Health Act 1925. You must contact Watford Borough Council Street Naming and Numbering department as early as possible prior to commencement on streetnamenumber@watford.gov.uk or 01923 278458. A numbering notification will be issued by the council, following which Royal Mail will assign a postcode which will make up the official address. It is also the responsibility of the developer to inform Street Naming and Numbering when properties are ready for occupancy.

4. You are advised of the need to comply with the provisions of The Control of Pollution Act 1974, The Health and Safety at Work Act 1974, The Clean Air Act 1993 and The Environmental Protection Act 1990.

   In order to minimise impact of noise, any works associated with the development which are audible at the site boundary should be restricted to the following hours:

   Monday to Friday 8am to 6pm
   Saturdays 8am to 1pm
   Noisy work is prohibited on Sundays and bank holidays

   Instructions should be given to ensure that vehicles and plant entering and leaving the site comply with the stated hours of work.

   Further details for both the applicant and those potentially affected by construction noise can be found on the Council's website at:
   https://www.watford.gov.uk/info/20010/your_environment/188/neighbour_complaints_%E2%80%93_construction_noise

5. Highway Informatives:

AN1) Storage of materials: The applicant is advised that the storage of materials associated with the construction of this development should be provided within the site on land which is not public highway, and the use of such areas must not interfere with the public highway. If this is not possible, authorisation should be sought from the Highway Authority before construction works commence. Further information is available via the website http://www.hertsdirect.org/services/transtreets/highways/ or by telephoning 0300 1234047.

AN2) Obstruction of public highway land: It is an offence under section 137 of the Highways Act 1980 for any person, without lawful authority or excuse, in any way to wilfully obstruct the free passage along a highway or public right of way. If this development is likely to result in the public highway or public right of way network becoming routinely blocked (fully or partly) the applicant must contact the Highway Authority to obtain their permission and requirements before construction works commence. Further information is available via the website http://www.hertsdirect.org/services/transtreets/highways/ or by telephoning 0300 1234047.

AN3) Road Deposits: It is an offence under section 148 of the Highways Act 1980 to deposit mud or other debris on the public highway, and section 149 of the same Act gives the Highway Authority powers to remove such material at the expense of the party responsible. Therefore, best practical means shall be taken at all times to ensure that all vehicles leaving the site during construction of the development are in a condition such as not to emit dust or deposit mud, slurry or other debris on the highway. Further information is available via the website http://www.hertsdirect.org/services/transtreets/highways/ or by telephoning 0300 1234047.

AN4) Construction standards for works within the highway: All works to be undertaken on the adjoining highway shall be constructed to the satisfaction and specification of the Highway Authority, by an approved contractor, and in accordance with Hertfordshire County Council's publication "Roads in Hertfordshire - Highway Design Guide (2011)". Before works commence the applicant will need to apply to the Highway Authority to obtain their permission and requirements. Further information is available via the website http://www.hertsdirect.org/services/transtreets/highways/ or by telephoning 0300 1234047.

6. Network Rail informatives:

The developer is to submit directly to Network Rail, a Risk Assessment and Method Statement (RAMS) for all works to be undertaken within 10m of the operational railway under Construction (Design and Management) Regulations, and this is in addition to any planning consent. Network Rail would need to be re-assured the works on site follow safe methods of working and have also taken into consideration any potential impact on Network Rail land and the existing operational railway infrastructure. Review and agreement of the RAMS will be undertaken between Network Rail and the applicant/developer. The applicant /developer should submit the RAMs directly to:
AssetProtectionLNWSouth@networkrail.co.uk

As the proposal includes works which may impact the existing operational railway, a BAPA (Basic Asset Protection Agreement) will need to be agreed between the developer and Network Rail. The developer will be liable for all costs incurred by Network Rail in facilitating this proposal, including any railway site safety costs, possession costs, asset protection costs / presence, site visits, review and agreement of proposal documents and any buried services searches. The BAPA will be in addition to any planning consent.

The applicant / developer should liaise directly with Asset Protection to set up the BAPA. For major works / large scale developments an Asset Protection Agreement will be required with further specific requirements.
AssetProtectionLNWSouth@networkrail.co.uk

7. Transport for London informatives:
An agreement will be required between the developer and Transport for London/London Underground in the form of an Interface Control Document (ICD) which will need to be prepared and agreed to manage the interface and liaison process. This will also need to include provision for any reasonable costs to cover necessary adjustments to the MLX project that are required as a result of the proposed development.

If the MLX is operational before a start is made on the Ascot Road development the applicants will be required to engage with LU Infrastructure Protection and to meet all the requirements for undertaking development adjacent to operational rail infrastructure.

8. Thames Water informative:
A Groundwater Risk Management Permit from Thames Water will be required for discharging groundwater into a public sewer. Any discharge made without a permit is deemed illegal and may result in prosecution under the provisions of the Water Industry Act 1991. We would expect the developer to demonstrate what measures

he will undertake to minimise groundwater discharges into the public sewer. Permit enquiries should be directed to Thames Water's Risk Management Team by telephoning 02035779483 or by emailing wwqriskmanagement@thameswater.co.uk. Application forms should be completed on line via www.thameswater.co.uk/wastewaterquality

9. Environment Agency informatives:

We recommend that developers should:

1. Follow the risk management framework provided in CLR11, Model Procedures for the Management of Land Contamination, when dealing with land affected by contamination.

2. Refer to the Environment Agency Guiding principles for land contamination for the type of information that we required in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health.

3. Consider using the National Quality Mark Scheme for Land Contamination Management which involves the use of competent persons to ensure that land contamination risks are appropriately managed.

4. Refer to the contaminated land pages on GOV.UK for more information.

We expect the site investigations to be carried out in accordance with best practice guidance for site investigations on land affected by land contamination. E.g. British Standards when investigating potentially contaminated sites and groundwater, and references with these documents:

- BS5930:2015 Code of practice for site investigations;
- BS 10175:2011 A1:2013 Code of practice for investigation of potentially contaminated sites;
- BS ISO 5667-22:2010 Water quality. Sampling. Guidance on the design and installation of groundwater monitoring points;
- BS ISO 5667-11:2009 Water quality. Sampling. Guidance on sampling of groundwaters (A minimum of 3 groundwater monitoring boreholes are required to establish the groundwater levels, flow patterns and groundwater quality.)

- Use MCERTS accredited methods for testing contaminated soils at the site.

A Detailed Quantitative Risk Assessment (DQRA) for controlled waters using the results of the site investigations with consideration of the hydrogeology of the site and the degree of any existing groundwater and surface water pollution should be carried out. This increased provision of information by the applicant reflects the potentially greater risk to the water environment. The DQRA report should be prepared by a "Competent person" E.g. a suitably qualified hydrogeologist. In the absence of any applicable on-site data, a range of values should be used to calculate the sensitivity of the input parameter on the outcome of the risk assessment.

- GP3 version 1.1 August 2013 provided further guidance on setting compliance points in DQRAs.

- Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is 50m.

Where leaching tests are used it is strongly recommended that BS ISO 18772:2008 is followed as a logical process to aid the selection and justification of appropriate tests based on a conceptual understanding of soil and contaminant properties, likely and worst-case exposure conditions, leaching mechanisms, and study objectives. During risk assessment one should characterise the leaching behaviour of contaminated soils using an appropriate suite of tests. As a minimum these tests should be:

- upflow percolation column test, run to LS 2 – to derive kappa values;

- pH dependence test if pH shifts are realistically predicted with regard to soil properties and exposure scenario; and

- LS 2 batch test – to benchmark results of a simple compliance test against the final step of the column test.

Following the DQRA, a Remediation Options Appraisal to determine the Remediation Strategy in accordance with CRL11. The verification plan should include proposals for a groundwater-monitoring programme to encompass regular monitoring for a period before, during and after ground works. E.g. monthly monitoring before, during and for at least the first quarter after completion of ground works, and then quarterly for the remaining 9-month period.)

Where SUDs are proposed; infiltration SUDs should not be located in unsuitable and unstable ground conditions such as land affected by contamination or solution features. Where infiltration SuDS are to be used for surface run-off from roads, car parking and public or amenity areas, they should have a suitable series of treatment steps to prevent the pollution of groundwater. For the immediate drainage catchment areas used for handling and storage of chemicals and fuel, handling and storage of waste and lorry, bus and coach parking or turning areas, infiltration SuDS are not permitted without an environmental permit. Further advice is available in the updated CIRIA SUDs manual http://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

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Drawing numbers

100-101; 050-001; 050-002 Rev A; 050-010; 050-011 Rev A; 050-012 Rev A; 050-013 Rev A; 050-014 Rev A; 050-015 Rev A; 050-016 Rev A; 050-017 Rev A; 050-018 Rev A; 050-019 Rev A; 050-020 Rev A; 050-021 Rev A; 050-022 Rev A; 050-023 Rev B; 050-301 Rev A; 050-302 Rev A; 050-303; 050-304 Rev A; 050-305 Rev A; 050-306 Rev A; 050-307 Rev A; 050-308 Rev A; 050-309 Rev A; 089680-L-100 Rev D; 089680-L-101 Rev B; 089680-L-102 Rev C; 089680-L-103 Rev B; 089680-L-104 Rev A; 089680-L-105 Rev B; 089680-L-106; 089680-L-200 Rev C; 089680-L-201 Rev B; 089680-L-202 Rev A; and ASCOT_SK-001
