

PLANNING COMMITTEE – 14 NOVEMBER 2019

PART I - DELEGATED

5. **19/1179/FUL - Comprehensive redevelopment to provide 2 no. warehouse Class B1c/B2/B8 units comprising a total of 16,140 sqm including 1,986 sqm ancillary B1a office space, access, landscaping and associated works, at DEVELOPMENT SITE, MAPLE LODGE, MAPLE LODGE CLOSE, MAPLE CROSS, HERTFORDSHIRE (DCES)**

Parish: Non-Parished

Ward: Chorleywood South & Maple Cross

Expiry of Statutory Period: 22.11.2019 (Agreed Extension)

Case Officer: Claire Westwood

Recommendation: That Planning Permission be REFUSED

Reason for consideration by the Committee: Called in by three Members of the Planning Committee.

UPDATE

A preliminary report was discussed at the Planning Committee meeting on 15 August 2019 where Members requested clarification and additional information on a number of points.

Since the August Committee Meeting amended plans have been submitted which:

- Reduce the height of Unit 2 by 2.5 metres;
- Reduce the floor area of Unit 2 by 450sqm, increasing the spacing to the western boundary;
- Revise the landscaping scheme to include retention of 3 additional trees (including T10) with additional new planting proposed;
- Revise the elevational treatment of Units 1 and 2; and
- Revise the car parking and cycle parking layout.

The development description has been amended to reflect the slight reduction in floor area.

Additional information has also been provided since the August Committee Meeting, including:

- Landscape Visual Impact Assessment (LVIA)
- Revised Landscape Strategy and Tree Constraints Plan
- Design and Access Statement Addendum
- Illustrative plans, sections and elevations
- Sunlight Analysis
- Heritage Statement
- Amended Noise Impact Assessment and Noise Impact Memorandum
- Amended Drainage Strategy
- Asbestos Risk Mitigation – Technical Note
- Traffic Impact Executive Summary and Transport Assessment Addendum

Relevant consultees have been re-consulted following receipt of the above. All consultee comments are included in full at Section 4 below.

Neighbours have been re-consulted for 21 days following receipt of the above. All comments received since the August Committee Meeting are summarised at Section 4.2.9 below. All initial responses are also included at Section 4.

3 petitions objecting to the development have been received and are summarised at 4.2.11. They have a combined total of 747 signatures.

1 Relevant Planning History

- 1.1 19/2106/EIA – Request for Screening Opinion. Not EIA development.

2 Description of Application Site

- 2.1 The site comprises an undeveloped open grassed area of approximately 3.4 hectares. Mature trees and vegetation align the eastern, southern and western site boundaries, some of these are protected. The site is accessed via an existing access road leading from the A412 (Denham Way). There is informal pedestrian access to the site but no existing vehicular crossovers. The access road serves the Thames Water Treatment Works which lie to the south east beyond a further undeveloped site. Further south, there is a locally designated nature reserve and wildlife site, Maple Lodge Nature Reserve.
- 2.2 To the north of the site is an area of land which fronts the A412 (Denham Way) which benefits from an extant planning permission which has been implemented (but not built out) for the erection of a hotel. To the east are open fields while to the north east there are two hanger style buildings which are established commercial premises. There are residential and commercial properties to the west of the site.
- 2.3 To the north and west of the site is Maple Cross/Maple Lodge Employment Site, a designated employment area within the Site Allocations Local Development Document (adopted October 2014) (site ref. E(d)) and of which the application site forms part.
- 2.4 The A412 (Denham Way) runs north to south through Maple Cross connecting Rickmansworth to the north and West Hyde to the south. It also provides access to Junction 17 of the M25 (approximately 1.5km north of the application site).
- 2.5 Whilst the majority of the site is outside of the Metropolitan Green Belt, the Green Belt does overlap the eastern site boundary and a narrow strips which is outlined in red on the submitted site location plan linking to Maple Lodge Close to the south. The Green Belt adjoins the southern and eastern site boundaries. The majority of the site is located within Flood Zone 1, however, a narrow strip to the eastern and southern boundaries lies within Flood Zone 2. The site lies within Groundwater Source Protection Zone 1. Maple Lodge Farm Ditch Main River runs along the west boundary of the site. The site is located within the Colne Valley Park. The AONB and Central River Valleys Landscape Area is located to the east.

3 Description of Proposed Development

- 3.1 Planning permission is sought for the redevelopment of the site to provide 2 no. warehouse units. In summary, the proposed development comprises:
- Erection of 2 no. warehouse Class B1c/B2/B8 units totalling 16,140 sqm including 1,986 sqm ancillary B1a office space;
 - 141 car parking spaces;
 - 39 HGV (lorry) parking spaces;
 - 40 long-term cycle parking spaces;
 - Integrated landscaping works; and
 - Associated technical works including widening of the existing access road.
- 3.2 Unit 1 would be located to the north of the site. It would have a maximum width of approximately 96 metres (west to east) and a maximum depth of approximately 84 metres (north to south). The western elevation would be sited between 10 – 15 metres off the boundary.

3.3 Unit 1 would have a haunch height of 12.5 metres with a shallow pitched roof with an overall maximum height of 16 metres to the ridge. The northern (front) elevation would include 8 level access doors with rooflights in the shallow pitched roof. Glazing (over 3 floors) is proposed to the northern and eastern elevations, wrapping around the north-east corner (this would serve the office areas). Rooflights are also proposed. Personnel access doors are proposed to all elevations.

3.4 Unit 1 would be accessed via a new vehicular crossover. This would provide access to a car park to the eastern flank of the building which would provide 79 car parking spaces (including 4 disabled) and a 20 space cycle shelter. The new vehicular crossover would also provide access to a car park to the north of Unit 1 which would accommodate 22 HGV parking spaces/loading bays. A refuse store is also proposed within this area.

3.5 Unit 1 – Area Schedule:

Core Area	52.41 m ²
First Floor Office Area	502.04 m ²
Second Floor Office Area	502.01 m ²
Warehouse Area	7,786.64 m ²
Total	8,843.10 m ²

3.6 Unit 2 would be located to the south of the site. As amended, it would have a maximum width of approximately 97 metres (north to south) and a maximum depth of approximately 66 metres (east to west). The North West corner would be sited 27 metres from the western boundary and the south west corner would be sited 16 metres from this boundary. Unit 2 would be located approximately 11 metres from the western boundary at the closest point.

3.7 Unit 2 would have a haunch height of 10 metres with a shallow pitched roof with an overall maximum height of 13.2 metres to the ridge. The eastern (front) elevation would include 8 level access doors with rooflights in the shallow pitched roof. Glazing (over 3 floors) is proposed to the eastern and southern elevations, wrapping around the south-east corner (this would serve the office areas). Rooflights are also proposed. Personnel access doors are proposed to all elevations.

3.8 Unit 2 would be accessed via two new vehicular crossovers. The first would provide access to a car park to the front (east) of the building which would provide 15 car parking spaces, 17 HGV parking spaces/loading bays and a refuse store. The second crossover would provide access to a smaller car park to the south which would provide 47 car parking spaces (including 4 disabled) and a 20 space cycle shelter.

3.9 Unit 2 – Area Schedule:

Core Area	51.79 m ²
First Floor Office Area	438.75 m ²
Second Floor Office Area	438.88 m ²
Warehouse Area	6,359.07 m ²
Total	7,288.49 m ²

3.10 Both Units are proposed to be finished in a mix of different insulated metal cladding, with a grey pallet with the main entrances emphasised by full height glazing systems. Three shades of grey are proposed to the elevations, 'anthracite' to the base, 'merlin grey' to the mid-section and 'hamlet' to the upper section. The roofs are to be finished with a profiled insulated metal cladding. Doors and windows will have a polyester powder coated finish.

3.11 Originally 30 trees were proposed to be removed to facilitate the proposed works, these are identified within the Tree Survey and Arboricultural Impact Assessment and are predominantly located to the west and east site boundaries. As noted above, amended plans have been submitted during the course of the application to amend the vehicular

access to Unit 1 and reduce the footprint of Unit 2. These changes have resulted in the retention of 3 trees originally proposed for removal (T10, T73 and T61). As such, a total of 27 trees are proposed to be removed. The Tree Survey and Arboricultural Impact Assessment categorises these as 3 x category B, 8 x category C and 16 x category U trees. A number of trees are also proposed to be retained, and these will be supplemented by additional planting (increased during application), with soft landscaping proposed around the Units and perimeter of the site. 46 new trees are proposed to the perimeter of the site to supplement the retained vegetation.

- 3.12 Highways works proposed include the widening of the existing access road to provide a new footpath and provision of three vehicular crossovers to access the site.
- 3.13 The application is accompanied by various reports, a full list is provided in the note entitled 'Submitted Documents and Responses' (16/10/19) which was submitted by the applicant during the application.

4 Consultation

4.1 Statutory Consultation

<u>Consultee</u>	<u>Summary</u>	<u>Paragraph</u>
HCC Highways	No objection	4.1.1
Herts & Middlesex Wildlife Trust	Objection	4.1.2
Herts Ecology	No objection	4.1.3
Development Plans	No objection	4.1.4
Affinity Water	Objection	4.1.5
National Grid	No objection	4.1.6
Landscape Officer	Objection	4.1.7
Thames Water	No objection	4.1.8
Environmental Health (Residential)	No objection	4.1.9
Environmental Health (Commercial)	No objection	4.1.10
Environmental Protection	No objection	4.1.11
HCC Lead Local Flood Authority	Objection	4.1.12
LB Hillingdon	No response received	4.1.13
TRDC Traffic Engineer	No response received	4.1.14
Environment Agency	No objection	4.1.15
Colne Valley Partnership	Objection	4.1.16
Heritage Officer	Objection	4.1.17
HCC Property Services	No objection	4.1.18
HCC Waste & Minerals Team	No objection	4.1.19

Herts Constabulary	No objection	4.1.20
Highways England	No objection	4.1.21

4.1.1 Hertfordshire County Council – Highway Authority: [No objection, subject to conditions]

4.1.1.1 Initial comments (18/07/19) [Additional information requested]:

In order for Hertfordshire County Council (HCC) as Highway Authority to make a full assessment of the acceptability of the transport impacts and proposals, the following amended and additional information would need to be submitted including:

- The proposed trip generation (as outlined in the submitted *Transport Assessment*) would need to be updated using the actual gross floor area of the site (17,039 sqm rather than 15,000 sqm). Junction models would need to be amended accordingly with the results reviewed where appropriate.
- Confirmation of the detailed layout of each of the three vehicle accesses into the site as there appears to be some discrepancy between the *Site Plan as Proposed* (drawing no. 17019-C4P-AV-00-DR-A-0500 P4) and *Proposed Access Arrangements* plan (drawing no. MLC-BWB-GEN-XX-DR-TR-100 S2 P2). All access points would need to include a safe and convenient extension of the footway into the site.
- An appropriate level and design of electric vehicle charging points for the car parking areas (this may be included as part of a condition)
- A toucan crossing at the proposed signalised crossing point at the mouth of the private access road. At present this is only labelled as a “proposed signal controlled crossing point”, not specifically as a toucan crossing (specific details would be approved as part of the approval of detailed S278 drawings but an indication on the current outline plan would be required).

Please see the following comments / analysis for further information:

Existing Access

The site is located approximately 220m from the highway on Denham Way and accessed via a priority T-junction with Denham Way (with a right turn lane provided for vehicles turning into the private road when travelling north along Denham Way) and then a private access road. Denham Way is a single-carriageway road and designated as a classified A main distributor road, subject to a speed limit of 40mph and is highway maintainable at public expense. There is a shared cycle way/footway on the eastern side of Denham Way; a pedestrian only footway on the western side and a signal controlled pedestrian crossing approximately 40m south of the T-junction. There is a pedestrian footway on the south side of the private access road leading to the site.

Existing Trip Generation

As the site is currently undeveloped, the applicant has not provided any existing trip generation for the proposed development site, which is considered to be acceptable.

Proposed Trip Generation

Scoping Note - B8 Trip Generation

The applicant has previously developed a Scoping Note (Appendix 2 of the TA), prior to the development of the full TA, which outlines the anticipated trip generation of the proposed development site based on a GFA of 15,500 sqm and a B8 land use. The applicant has stated that to be robust in their approach, they applied the 85th percentile trip rate from the survey sites selected in TRICs to the GFA of the proposed development.

It is also noted that the TRICs reports are dated 2017 and are therefore 2 years old. An interrogation of TRICs shows that there are new surveys from September 2017 and May 2018 and on this basis the TRICs reports should be updated as there are new sites in TRICs to be considered and the search should exclude Greater London. It is noted, however, that

the 85th percentile AM and PM peak hour trip rates are the same in HCC's interrogation as those presented in the TA and are as follows:

AM Peak

- Vehicle driver (per 100sqm): 0.634 arrivals, 0.083 departures resulting in 0.717 two-way trips
- Vehicle driver (15,500 sqm): 98 arrivals, 13 departures resulting in 111 two-way trips

PM Peak

- Vehicle driver (per 100sqm): 0.055 arrivals, 0.607 departures resulting in 0.662 two-way trips
- Vehicle driver (15,500 sqm): 9 arrivals, 94 departures resulting in 103 two-way trips

Transport Assessment - B1c/B2 Trip Generation

Following the development of the scoping note the site area has increased from 15,500 sqm to 17,039 sqm, which represents an uplift of 1,539 sqm. New trip rates were generated using the same methodology in TRICs for the B1c and B2 land uses on the development site by using an industrial estate and industrial unit to inform the land use parameter.

Following generation of new trip rates, the applicant has deemed that their use is not necessary. The applicant has used the original trip rates and generation from the *Scoping Note*, which is presented at the start of this section, to inform their assessment. The applicant has stated that the 85th percentile trip rates for the Warehouse land use are in line with the median and mean trip rates of the Industrial Estate or Unit land uses, which are typically used in a trip generation exercise. As previously stated, HCC have undertaken their own TRICs interrogation to corroborate the assumptions stated in the Transport Assessment. Whilst HCC disagree with the use of Greater London sites, it was found the 85th percentile trip rates for both the AM and PM peak hours remained the same for the Warehouse land use and as such the trip rates are considered acceptable. Further to this, the Industrial Estate and Unit land use interrogations demonstrated median and mean trip rates lower than the 85th percentile trip rates for the Warehouse and thus corroborates the applicant's assumptions. Therefore, the use of these trip rates for the purposes of the assessment is considered acceptable.

However, the applicant would need to amend the trip generation to take into consideration the additional GFA from 15,500 to 17,039 sqm. Whilst it is appreciated this is an uplift of 11 vehicles in the AM peak hour, this could impact on queuing at any junctions that are at or nearing capacity and thus should be considered in the overall assessment of the site.

Junction Modelling

Following a review of the junction models it is considered that each model is acceptable and they have considered the impact of surrounding committed developments. However, the models should be updated based on changes to the trip generation from the development site.

Proposed Access

The proposals include extending the existing private access road to run along the full front of the site in addition to a new footway adjacent to the carriageway. There are three proposed vehicle entrances / exits from the private road providing access to three separate car parks fronting the two warehouses. The general layout is shown on submitted drawing no. 17019-C4P-AV-00-DR-A-0500 P4.

The proposed access arrangements including kerb radii and widths are shown in further detail on submitted plan no. MLC-BWB-GEN-XX-DR-TR-100 S2 P2 and section 5.4 of the Transport Assessment, the general details of which are acceptable. However there appears to be some discrepancy between the Site Plan as Proposed (drawing no. 17019-C4P-AV-00-DR-A-0500 P4) and Proposed Access Arrangements plan (drawing no. MLC-BWB-

GEN-XX-DR-TR-100 S2 P2 and therefore the applicant would need to confirm the correct site access arrangements. All three access points would need to include a safe and convenient extension of the footway from the private access into the site whilst maintaining the safe maneuverability of vehicles. For example the 6m kerb radii line for the Unit 2 car park appears to run through the pedestrian footway and therefore this would need clarification.

Vehicle tracking / swept path analysis has been included as part of the submitted TA (drawing number MLC-BWB-GEN-XX-DR-TR-110). The general details are considered to be sufficient to illustrate that an HGV can safely manoeuvre into and out of the site accesses, although this is subject to the confirmation and approval of the detailed proposed accesses as commented on above.

Highway Mitigation Works

The signalization of the junction of Denham Way (A412) and the junction of the private access road have been included as part of the application, the general details of which are shown on submitted drawing no. MLC-BWB-GEN-XX-DR-TR-0001 S2 P2. The proposed layout appears to work operationally although full approval of the details is subject to the submission of detailed plans.

Car Parking Level and Design

The proposals include the provision of 156 car parking spaces and 40 HGV parking spaces, the general layout of which is shown on submitted plan no. 17019-C4P-AV-00-DR-A-0500. The area directly to the north and east of the site is located in accessibility zone 3 as documented in Three Rivers District Council's (TRDC) *Development Management Policies: Local Development Document*, although the site itself is not within the zone 3 area and on the edge of an urban area. The levels of car parking have been based on guidance for zone type 3, which states that the car parking levels may be adjusted to 50-75% of the indicative demand-based standard.

Following consideration of the use class, location and details submitted in Section 5.5 to 5.9 of the *Transport Assessment*, the levels and layout of the proposed parking are acceptable to HCC as Highway Authority. TRDC is the parking authority and would ultimately need to be satisfied with the level of proposed parking and HCC as Highway Authority would recommend the provision of an appropriate level and design of electric vehicle charging points.

Conclusion

HCC as Highway Authority would need to assess the requested amended and additional information prior to any formal recommendation of grant or refusal from a highways perspective being made.

4.1.1.2 Further comments (20/09/19) [No objection, subject to conditions]:

Notice is given under article 18 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 that the Hertfordshire County Council (HCC) as Highway Authority does not wish to restrict the grant of permission subject to the following conditions:

1. A) Highway Improvements - Offsite (Design Approval)

Notwithstanding the details indicated on the submitted drawings no on-site works above slab level shall commence until a detailed scheme for the offsite highway improvement works as indicated on drawing number MLC-BWB-GEN-XX-DR-TR-0001 S2 P3 have been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure construction of a satisfactory development and that the highway improvement works are designed to an appropriate standard in the interest of highway

safety and amenity and in accordance with Policy 5, 13 and 21 of Hertfordshire's Local Transport Plan (adopted 2018).

B) Highway Improvements - Offsite (Implementation / Construction)

Prior to the first use of the development hereby permitted the offsite highway improvement works referred to in Part A of this condition shall be completed in accordance with the approved details.

Reason: To ensure construction of a satisfactory development and that the highway improvement works are designed to an appropriate standard in the interest of highway safety and amenity and in accordance with Policy 5, 13 and 21 of Hertfordshire's Local Transport Plan (adopted 2018).

2. Provision of Parking & Access

Prior to the first use of the development hereby permitted the proposed access road, on-site car parking and turning areas shall be laid out, demarcated, surfaced and drained in accordance with the approved plan and retained thereafter available for that specific use.

Reason: To ensure construction of a satisfactory development and in the interests of highway safety in accordance with Policy 5 of Hertfordshire's Local Transport Plan (adopted 2018).

3. Electric Vehicle Charging Points (EVCPs)

Prior to the first use of the development hereby permitted, the details of an appropriate level and design of EVCPs shall be submitted to and approved in writing by the Local Planning Authority. All EVCPs shall be installed in accordance with the approved details prior to occupation of the units and permanently maintained and retained.

Reason: To ensure construction of a satisfactory development and to promote sustainable development in accordance with Policies 5, 19 and 20 of Hertfordshire's Local Transport Plan (adopted 2018).

4. Travel Plan

At least 3 months prior to commencement of the use hereby permitted, a detailed Travel Plan for the site, based upon the Hertfordshire Council document Hertfordshire's Travel Plan Guidance, shall be submitted to and approved in writing by the Local Planning Authority. The approved Travel Plan shall be implemented at all times.

Reason: To ensure that sustainable travel options associated with the development are promoted and maximised to be in accordance with Policies 3, 5, 7, 8, 9 and 10 of Hertfordshire's Local Transport Plan (adopted 2018).

5. Construction Management Plan / Statement

No development shall commence until a Construction Management Plan has been submitted to and approved in writing by the Local Planning Authority. Thereafter the construction of the development shall only be carried out in accordance with the approved Plan. The Construction Management Plan shall include details of:

- a. Construction vehicle numbers, type, routing;
- b. Access arrangements to the site;
- c. Traffic management requirements
- d. Construction and storage compounds (including areas designated for car parking, loading / unloading and turning areas);
- e. Siting and details of wheel washing facilities;
- f. Cleaning of site entrances, site tracks and the adjacent public highway;
- g. Timing of construction activities (including delivery times and removal of waste);
- h. Provision of sufficient on-site parking prior to commencement of construction activities;

i. Post construction restoration/reinstatement of the working areas and temporary access to the public highway;

Reason: In order to protect highway safety and the amenity of other users of the public highway and rights of way in accordance with Policies 5, 12, 17 and 22 of Hertfordshire's Local Transport Plan (adopted 2018).

HIGHWAY INFORMATIVE:

Hertfordshire County Council (HCC) recommends inclusion of the following highway informative / advisory note (AN) to ensure that any works within the public highway are carried out in accordance with the provisions of the Highway Act 1980:

1) Construction standards for works within the highway (s278 works):

The applicant is advised that in order to comply with this permission it will be necessary for the developer of the site to enter into an agreement with Hertfordshire County Council as Highway Authority under Section 278 of the Highways Act 1980 to ensure the satisfactory completion of the access and associated road improvements. The construction of such works must be undertaken to the satisfaction and specification of the Highway Authority, and by a contractor who is authorised to work in the public highway. 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: <https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx> or by telephoning 0300 1234047

COMMENTS / ANALYSIS:

The application comprises the construction of two warehouse units with office space, access and associated works at a development site at the north eastern side of Maple Cross village. The site is currently unoccupied with a total site area of 17,039sqm. The land is zoned as an employment site as part of Three Rivers District Council's (TRDC's) Local Plan.

A Transport Assessment (TA) was submitted as part of the original application documents. A Transport Assessment Addendum (TAA) has subsequently been submitted by the applicant (in response to HCC's initial objections and comments dated 18 July 2019).

1. Existing Access

The site is approximately 220m from its north-eastern corner to the highway on Denham Way and accessed via a priority T-junction with Denham Way (with a right turn lane provided for vehicles turning into the private road when travelling north along Denham Way) and then a private access road. Denham Way is a single-carriageway road and designated as a classified A (A412) main distributor road, subject to a speed limit of 40mph within the vicinity of the junction and is highway maintainable at public expense. There is a shared cycleway/footway on the eastern side of Denham Way; a pedestrian only footway on the western side and a signal controlled pedestrian crossing approximately 40m south of the T-junction.

There is a pedestrian footway on the south side of the private access road leading to the site, which is not part of the highway. It was noted on a site visit in July 2019 that vehicles were parked on much of the length of the private footway.

2. Trip Generation

As the site is currently unoccupied, the applicant has not provided any existing trip generation for the proposed development site, which is considered to be acceptable.

Proposed Trip Generation

Scoping Note - B8 Trip Generation

The applicant developed a Scoping Note (copy in Appendix 2 of the TA) subject to and agreed as part of pre-application discussions with HCC as Highway Authority in November /December 2018, which outlines the anticipated trip generation of the proposed development site based on a GFA of 15,500 sqm and a B8 land use. The applicant has stated that to be robust in their approach, they applied the 85th percentile trip rate from the survey sites selected in TRICs to the GFA of the proposed development.

It is also noted that the TRICs reports are dated 2017 and are therefore 2 years old. An interrogation of TRICs shows that there are new surveys from September 2017 and May 2018 and on this basis the TRICs reports should be updated as there are new sites in TRICs to be considered and the search should exclude Greater London. However HCC have undertaken their own TRICs interrogation to corroborate the results and the 85th percentile AM and PM peak hour trip rates are the same in HCC's interrogation as those presented in the TA and are as follows:

AM Peak

- Vehicle driver (per 100sqm): 0.634 arrivals, 0.083 departures resulting in 0.717 two-way trips

- Vehicle driver (15,500 sqm): 98 arrivals, 13 departures resulting in 111 two-way trips

PM Peak

- Vehicle driver (per 100sqm): 0.055 arrivals, 0.607 departures resulting in 0.662 two-way trips

- Vehicle driver (15,500 sqm): 9 arrivals, 94 departures resulting in 103 two-way trips.

Transport Assessment - B1c/B2 Trip Generation

Following the development of the Scoping Note the site area increased from 15,500 sqm to 17,039 sqm. New trip rates were generated using the same methodology in TRICs for the B1c and B2 land uses on the development site by using an industrial estate and industrial unit to inform the land use parameter.

Following generation of new trip rates, the applicant deemed that their use is not necessary. The applicant therefore used the original trip rates and generation from the Scoping Note, which is presented at the start of this section, to inform their assessment. The applicant has stated that the 85th percentile trip rates for the Warehouse land use are in line with the median and mean trip rates of the Industrial Estate or Unit land uses, which are typically used in a trip generation exercise. As previously stated, HCC have undertaken their own TRICs interrogation to corroborate the assumptions stated in the TA. Whilst HCC disagree with the use of Greater London sites (as trip generation closer to Central London is expected to be lower), it was found the 85th percentile trip rates for both the AM and PM peak hours remained the same for the Warehouse land use and as such the trip rates are considered acceptable. Further to this, the Industrial Estate and Unit land use interrogations demonstrated median and mean trip rates lower than the 85th percentile trip rates for the Warehouse and thus corroborates the applicant's assumptions. Therefore, the use of these trip rates for the purposes of the assessment is considered acceptable. Nevertheless HCC as Highway Authority did raise an objection to the use of the original area of 15,500 sqm rather than the increased area of 17,039sqm.

Transport Assessment Addendum (TAA)

The applicant has subsequently provided a TAA to address objections raised by HCC that the proposed trip generation (as outlined in the TA) would need to be updated using the actual gross floor area of the site (17,039 sqm rather than 15,500 sqm) and that junction models would need to be amended accordingly.

The applicant has used the same trip rates used by the original submission to calculate trip generation for the actual gross floor area. A previously noted, the applicant has used sites within Greater London and surveys conducted prior to September 2017 to derive the original trip rates. Although under normal conditions this would be grounds for further investigation,

it was considered to be acceptable in this case due to the use of 85th percentile AM and PM peak hour trip rates, as opposed to the average trip rate. For reference, the TRICs parameters, peak hour trip rates and anticipated trip generation for a 17,039 sqm floor area are as follows:

TRICs Parameter Selection

- Category '02 - Employment - F - Warehousing (Commercial);
- Sites from 2500sqm to 3230sqm;
- Sites in England, which have been filtered by area, including Greater London;
- Surveys from 01/01/09 to 23/11/16;
- Suburban area (PPS6 out of centre) and edge of town sites were considered; and
- Weekday survey days were chosen.

AM Peak

- Vehicle driver (per 100sqm): 0.634 arrivals, 0.083 departures resulting in 0.717 two-way trips

- Vehicle driver (15,500 sqm): 108 arrivals, 14 departures resulting in 122 two-way trips

PM Peak

- Vehicle driver (per 100sqm): 0.055 arrivals, 0.607 departures resulting in 0.662 two-way trips

- Vehicle driver (15,500 sqm): 9 arrivals, 103 departures resulting in 113 two-way trips

The applicant has also provided updated junction modelling results using the updated traffic generation.

Following a review of the updated traffic generation and junction model results it is considered that all information provided is acceptable. The changes to traffic volume would be minimal (when comparing the 15,500sqm area to the 17,039sqm) and do not have a notable impact on the surrounding highway network; however, an investigation of the changes were required to ensure the applicant provided a robust assessment of the anticipated transport impacts. HCC does not wish to raise any further objections in relation to this matter.

Junction Modelling

Following a review of the junction models it is considered that each model is acceptable and they have considered the impact of surrounding committed developments.

3. Proposed Access

The proposals include extending the existing private access road to run along the full front of the site in addition to a new footway on the western side of carriageway. There are three proposed vehicle entrances / exits from the private road providing access to three separate car parks fronting the two warehouses. The general layout is shown on submitted drawing no. 17019-C4P-AV-00-DR-A-0500 P4. Measures would need to be considered to ensure that the footway is kept free for pedestrian users as this would be part of the pedestrian access route to the site.

The proposed access arrangements including details of kerb radii and widths are shown on submitted plan no. MLC-BWB-GEN-XX-DR-TR-100 S2 P2 and described in section 5.4 of the Transport Assessment. There was some discrepancy between the Site Plan as Proposed (drawing no. 17019-C4P-AV-00-DR-A-0500 P4) and Proposed Access Arrangements plan (drawing no. MLC-BWB-GEN-XX-DR-TR-100 S2 P2. An updated version of the Proposed Access Arrangements (MLC-BWB-GEN-XX-DR-TR-100 S2 P2) has been provided as part of the TAA. Following review of the updated drawing, HCC as Highway Authority is satisfied that the junction alignments no longer intersect the existing footways and corresponding footways are provided adjacent to each access point. Therefore, this is considered to be acceptable and HCC does not wish to raise any further objections in relation to this matter.

Vehicle tracking / swept path analysis has been included as part of the submitted TA (drawing number MLC-BWB-GEN-XX-DR-TR-110). The general details are considered to be sufficient to illustrate that an HGV could safely manoeuvre into and out of the site accesses.

It is unlikely that HCC as Highway Authority would agree to adopt the new and existing industrial access roads if they were ever offered for dedication. The developer would need to put in place a permanent arrangement for long term maintenance and the road name plate would need to indicate that it is a private road.

4. Highway Mitigation Works

The signalization of the junction of Denham Way (A412) and the junction of the private access road have been included as part of the application, the general details of which have been updated as part of the submitted TAA to include the “proposed toucan crossing point” as shown on submitted drawing no. MLC-BWB-GEN-XX-DR-TR-0001 S2 P3. The proposed layout appears to work operationally and is considered to be acceptable; however, it should be noted that any design would be subject to a detailed review and road safety audit as part of the Section 278 agreement.

The applicant would subsequently need to enter into a Section 278 Agreement with HCC as Highway Authority in relation to the proposed highway works to include the following:

- The signalization of the junction of Denham Way (A412) and the private access road.
- The provision of two pelican crossings on Denham Way and one across the mouth / entrance of the private access road.
- The provision of a toucan crossing for pedestrians and cyclists across the mouth/entrance to the private access road
- The relocation of the two bus stops with easy access kerbing, shelters and real-time bus information display screens.

Please refer to the recommended conditions 1 and 2 and the suggested highway informative.

5. Car Parking Level and Design

The proposals include the provision of 156 car parking spaces and 40 HGV parking spaces - split over the two proposed units, the general layout of which is shown on submitted plan no. 17019-C4P-AV-00-DR-A-0500. The area directly to the north and east of the site is located in accessibility zone 3 as documented in TRDC's *Development Management Policies: Local Development Document*, although the site itself is not within the zone 3 area and on the edge of an urban area. The levels of car parking have been based on guidance for zone type 3, which states that the car parking levels may be adjusted to 50-75% of the indicative demand-based standard.

Following consideration of the use class, location and details submitted in Section 5.5 to 5.9 of the TA, the levels and layout of the proposed parking are acceptable to HCC as Highway Authority. TRDC is the parking authority and would ultimately need to be satisfied with the level of proposed parking and HCC as Highway Authority would recommend the provision of an appropriate level and design of electric vehicle charging points.

6. Accessibility & Sustainability

The site is located on the north-east side of Maple Cross within approximately 1.2km of the whole of the settlement. The settlement edge of Rickmansworth is approximately 800m north of the site and the town centre (and train station) approximately 3.5km north-east of the site.

The site is therefore within an acceptable cycling and walking distance from the rest of Maple Cross and parts of Rickmansworth. There is footway and cycle way provision along Denham Way south into Maple Cross and north in Rickmansworth although parts of the

shared foot/cycle way could be widened and improved to maximise pedestrian and cycling accessibility. The only pedestrian and cycling access into the site would be via the unnamed private access road and not Maple Lodge Close. Measures would need to be explored to ensure that the existing (and new extended) footway is kept free of car parking.

The site is approximately 1.5km from the M25 (J17) and therefore provides an easily accessible location for vehicles.

The nearest bus stops are located on Denham Way between approximately 350m and 550m from the development site. This is greater than the normally recommended 400m maximum walking distance from some part of the site. The bus stops are also proposed to be relocated slightly further north along Denham Way as part of the signalisation of the access junction. This is considered to be acceptable when taking into consideration the proposed improvements to pedestrian and cycling accessibility at the junction. Subsequently the distance of the bus stops would not be a significant enough reason to recommend refusal from a highways perspective.

The proposals include the provision of 40 cycle parking spaces. The recommended levels for cycle parking are normally based on the number of full time staff members, the details of which are not yet known for the application site at this stage of the application. HCC as Highway Authority would recommend that the level of cycle parking is increased accordingly dependent on the number of potential staff members. This is to ensure that cycling is encouraged and maximised as a form of sustainable travel for staff members and visitors to and from the site and to ensure that the development is in accordance with NPPF and Hertfordshire's Local Transport Plan.

Travel Plan

The submitted Framework TP is considered to be generally acceptable at this stage of the application/development although the proposed sustainable mode targets are high and ambitious when taking into consideration the location of the site. Therefore the final submitted TP would need to be appropriately updated to take into consideration the following considerations and comments:

- Is the census data used the most relevant data set which can be obtained? The data indicates a 10% figure for rail/underground travel (despite the site being approximately 3km from the nearest railway station in Rickmansworth), which is considered to be ambitious for this location as is the overall 30% travel by non-car modes. Is there more relevant day time travel mode data?
- A statement from the developers / business(es) would be required stating that they are committed to implementing the travel plan.
- Allocated time (prior to occupation of site) would be required to set-up welcome packs / travel info boards.
- Allocated time annually would be required to undertake and analyse travel survey.
- Whether or not responsibility for the TP will be handed over to a management company.
- Provision would need to be made for showers / drying room / lockers etc. for employees who are walking or cycling.
- Staff surveys and additional data would need to be collected annually, with annual reports submitted to HCC.
- An appropriate level of allocated car parking spaces for car sharing should be provided.
- Management of the use of the car park should be provided for.
- Consideration should be made to the potential future reduction in the number of the car parking spaces as and when targets to increase sustainable modes have been achieved. The final TP would need to be submitted to HCC as Highway Authority and approved prior to commencement of the works.

Planning Obligations

TRDC has adopted the Community Infrastructure Levy (CIL) and therefore contributions towards local transport schemes would be sought via CIL in appropriate.

Nevertheless in order to make the proposals acceptable to maximize sustainable travel options, it is recommended that developer contributions of £6000 are sought via a Section 106 Agreement towards supporting the implementation, processing and monitoring of a full travel plan including any engagement that may be needed. For further information please see the following link <https://www.hertfordshire.gov.uk/services/highways-roads-and-pavements/business-and-developer-information/development-management/highways-development-management.aspx> OR by emailing travelplan@hertfordshire.gov.uk It would also be necessary to ensure that alternatives to travel by car have been maximised (as much as is reasonable and practical) to be in accordance with Hertfordshire's Local Transport Plan.

7. Construction Logistics Management Plan

The general details submitted in the plan are considered to be acceptable by HCC as Highway Authority. Nevertheless the applicant would be required to submit a full Construction Management Plan with more specific information (as detailed in the enclosed recommended condition). The details would need to be approved in writing by the planning and highway authority prior to the commencement of any works on site.

8. Conclusion

HCC as Highway Authority considers that the proposal would not have an unreasonable or significant impact on the safety and operation of the surrounding highway network. Therefore, HCC has no objections on highway grounds to the application, subject to the inclusion of the above planning conditions, informatives and comments in relation to the wider proposed scheme at the junction of Chequers Hill and London Road / A5183 London Road.

- 4.1.1.3 HCC have provided an updated response to correct an error at section 8 (conclusion). Section 8 (conclusion) should read:

HCC as Highway Authority considers that the proposal would not have an unreasonable or significant impact on the safety and operation of the surrounding highway network. Therefore, HCC has no objections on highway grounds to the application, subject to the inclusion of the above planning conditions, informatives and comments in relation to the wider proposed scheme at the junction of Denham Road / A412 and the private access road.

4.1.2 Herts and Middlesex Wildlife Trust: [Objection]

4.1.2.1 Initial comments (09/04/19) [Objection]:

Objection: Measurable net gain to biodiversity not demonstrated, insufficient detail supplied on mitigation or compensation measures, ecological report not compliant with BS 42020.

HMWT objects to the development because it is not consistent with national or local planning policy in achieving a measurable net gain to biodiversity. It is not ecologically accurate to suggest that the almost entire removal of 3.4 hectares of semi natural grassland without measured or meaningful compensation would result in a net gain to biodiversity. For any claim of net gain to be considered valid it must be based on a measurable assessment and not a subjective statement as is currently the case.

1. Measurable net gain. The revised NPPF (July 2018) states:

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity

174. To protect and enhance biodiversity and geodiversity, plans should:

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

175. When determining planning applications, local planning authorities should apply the following principles:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;

d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable' net gains for biodiversity.

The Three Rivers Local Plan Development Management Policies document states:

Development should result in no net loss of biodiversity value across the District as a whole.... Development that would affect a site identified as being in need of conservation by the UK Biodiversity Action Plan or the Hertfordshire Biodiversity Action Plan, will not be permitted where there is an adverse impact on the ecological, geological or biodiversity interests of the site, unless it can be demonstrated that:

ii) Adverse effects can be satisfactorily minimised through mitigation and compensation measures to maintain the level of biodiversity in the area.

d) Development must conserve, enhance and, where appropriate, restore biodiversity through:

i) Protecting habitats and species identified for retention

ii) Providing compensation for the loss of any habitats

iii) Providing for the management of habitats and species

iv) Maintaining the integrity of important networks of natural habitats, and

v) Enhancing existing habitats and networks of habitats and providing roosting, nesting and feeding opportunities for rare and protected species.

e) Linked habitats are important in allowing species to adapt and respond to circumstances. Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity with the wider landscape.

Herts Ecological Networks Mapping

The Hertfordshire Ecological Networks Mapping project is a guidance document produced by the Hertfordshire Local Nature Partnership (LNP) to put plan making and development management decisions into the context of the National Planning Policy Framework (NPPF). The dataset, in conjunction with the guidance, allows Hertfordshire's local planning authorities to effectively use the ecological networks mapping outputs to inform their forward planning and development management roles. The development site is identified as a category 2 habitat (see below). This is defined as an area of significant importance to the ecological network and should be avoided, or in the terms of the development management policy, 'habitats identified for retention'. If the need for development outweighs their protection, then the habitats to be affected must be compensated in a proportionate and measurable way.

The decision-maker should undertake a thorough analysis of the applicant's ecological report as part of its wider determination of the application. In reaching a decision, the decision-maker should take the following into account:

h) Whether there is a clear indication of likely significant losses and gains for biodiversity.'

The most objective way of assessing net gain to biodiversity in a habitat context is the application of the biodiversity impact assessment metric created by DEFRA and NE – e.g. the Biodiversity Impact Assessment Calculator (Warwickshire County Council 2018 v19). This metric assesses ecological value pre and post development on a habitat basis and has been upheld by the planning inspectorate as an appropriate mechanism for achieving the ecological aims of NPPF. The use of the metric (which is the foundation of the Biodiversity Offsetting system) is advocated in

<http://planningguidance.planningportal.gov.uk/blog/guidance/natural-environment/>

In order to meaningfully and measurably accord with planning policy to achieve net gain to biodiversity, the applicant will need to use this metric. The development must show a net positive ecological unit score to demonstrate compliance with policy. Habitat mitigation can be provided on or offsite. This will give some legitimacy to statements in the report claiming that net gain can be achieved.

2. Once it has been accurately calculated how much habitat creation is required to offset the impact of the proposals, all ecological mitigation, compensation or enhancement measures suggested in the ecological report must be definitively stated.

Without measured mitigation, compensation or enhancements, to suggest that the scheme would have a permanent positive impact on local biodiversity is subjective and not supported by any measureable and therefore verifiable assessment.

BS 42020 states:

'6.6.2 An ecological report should avoid language that suggests that recommended actions "may" or "might" or "could" be carried out by the applicant/developer (e.g. when describing proposed mitigation, compensation or enhancement measures). Instead, the report should be written such that it is clear and unambiguous as to whether a recommended course of action is necessary and is to be followed or implemented by the applicant.'

Currently the statements of mitigation, compensation or enhancement are not supported by any measurement or mapping or numbers. They cannot be left to an LEMP or CEMP because there is no indication of how big they will be, where they will go and what exactly what they will consist of. Only when this information is provided together with the BIAC calculation can it be known if the site is capable of achieving a measurable net gain to biodiversity, sufficient to condition the requirement for a CEMP or LEMP.

Habitat creation is only as good as its management. Details of all management for wildlife habitats, particularly wildflower meadow areas, in order to achieve required condition i.e. to accord with target condition statements in the BIAC will also be required. Claims of net gain in biodiversity can only be considered valid if the management required to maximise habitat condition are described and secured. Details of establishment, management, and monitoring together with funding mechanisms required to secure these must be supplied.

4.1.2.2 Further comment (07/10/19) [Objection]:

Response to Hertfordshire Ecology letter to Three Rivers District Council of the 30th Sept 2019.

Objection: HMWT do not agree with the habitat compensation proposal put forward by Herts Ecology in its email dated 30th September 2019, because it is not supported by any evidence or justification. In their response 02/10/2019 they state:

'The proposal will result in a loss of approximately 3.4 hectares of grassland, the ecological value and services of which I do not consider can be replicated adequately or in full and then enhanced to provide a net gain by onsite measures. I consider it would be appropriate to determine the contribution based on the cost of creating and managing, over a 25-year period, a smaller area of more species-rich grassland as a comparable ecological resource. I would recommend this should be an area of 2.26 hectares (two thirds of the size of that being lost at Maple Lodge) + 10% to represent a net gain of that resource. This payment would be made available to an appropriate local project to be identified as part of the S106 and held by the LPA for this purpose or refunded to the developer if after a period of 5 years the project has not commenced. I consider a sum of £17,725 would be appropriate to achieve this.

If the applicant is unwilling to consider this or similar, then I would advise the details of net gain should be provided to the LPA in the form of a Biodiversity Impact Assessment Calculator to demonstrate how this can otherwise be achieved.'

As stated in our earlier response, there is a requirement for measured net gain in biodiversity from this development. This must be clearly described, accompanied by a management plan, location plan, properly costed, properly funded, monitored and reported against so that the LPA is certain that net gain is being delivered in perpetuity. Contingencies must also be described to address possibility of the new site not reaching stated condition. This is the process that needs to be followed to achieve a legitimate biodiversity offset. It is the process that is followed in areas such as Warwickshire where this system is well developed.

The Herts Ecology solution is inadequate in several ways.

1. *I would recommend this should be an area of 2.26 hectares (two thirds of the size of that being lost at Maple Lodge) + 10% to represent a net gain of that resource.*

How has this figure been arrived at? There is no documented evidence that this is a sufficient area to offset this impact. It has not been accompanied by a Biodiversity Impact Assessment Calculation (BIAC) to justify this area. There is no indication of what the existing quality of this unknown receptor site is. This will fundamentally affect the required size of the site, e.g. if an arable receptor site is chosen it could be many times larger than a poor semi improved grassland site. Arable sites could be at least 3 times the size of the proposed site to offset the impact – if converted to a wildflower meadow and managed as such. If a semi improved meadow was increased from poor to medium condition to compensate for the loss it would require a site of a larger size to compensate this loss – but this could change depending on location. The estimates referred to above have been generated by a brief application of the BIAC based on the limited information supplied.

There is no location plan for this unspecified receptor site. There is no clear target for habitat condition on this unknown site. The LPA must be certain that an offset can be delivered and that it is sufficient to deliver real, measurable net gain. The decision will be open to challenge if a clear, transparent and auditable plan for net gain is not put forward. This proposal offers no evidence that this can be achieved. HMWT does agree that 10% uplift is appropriate to secure net gain – but it must be measured and legitimised by reference to a BIAC.

2. *I consider it would be appropriate to determine the contribution based on the cost of creating and managing, over a 25-year period... This payment would be made available to an appropriate local project to be identified as part of the S106 and held by the LPA for*

this purpose or refunded to the developer if after a period of 5 years the project has not commenced. I consider a sum of £17,725 would be appropriate to achieve this.

How has this figure been arrived at? It is not justified or evidenced at all. How many ecological units does this represent? If we assume that the offset required is on 3.4 ha of semi improved grassland, this requires an offset of 15 ecological units. This could mean moving 4 ha of poor semi improved grassland from poor to moderate condition and managing as such for 30 years. This must be located, accompanied by a management plan, monitoring plan, and managed appropriately for the timespan. The Warwickshire BIAC contains a cost calculator for this purpose. It shows that the cost of the offset required could be far, far greater than the unsubstantiated £17,725 suggested. This figure must be justified and based on the required number of units calculated by reference to the BIAC.

The LPA must be certain that this figure is enough to achieve a measureable and legitimate net gain. At present this is not the case. HE have offered no evidence that this cost is sufficient. Neither has it specified how many ecological units are required to achieve net gain. The LPA cannot be certain that this enough to deliver the requirement of NPPF for measurable net gain and cannot approve this compensation on the basis of no evidence. A calculation tool exists, so it must be used to substantiate any claims or costs of biodiversity offsets. The developer and HE must use this tool to justify proposed biodiversity offset calculations.

In the absence of an acceptable offset cost the best solution would be to require that the developer provide a biodiversity offset agreement via a legitimate offset broker before development can commence. This would ensure that the correct amount of offset was provided and that its delivery was guaranteed by an accountable body. They have the mechanisms and experience to be able to deliver and report against the required elements of a legitimate biodiversity offsetting agreement. All this must all be informed by reference to the BIAC.

4.1.2.3 Further comments (10/10/19) [Objection]:

HMWT strongly disagree with the habitat compensation proposal put forward by Herts Ecology in its email dated 30th September 2019, because it is not supported by any evidence or justification.

The LPA must be certain that the amount of compensation required is enough to achieve a measurable and legitimate net gain. At present this is not the case. HE have offered no evidence that the cost requested is sufficient to deliver net gain. Neither has it specified how many ecological units are required to achieve net gain. The LPA cannot be certain that this is enough to deliver the requirement of NPPF for measurable net gain and cannot approve this compensation on the basis of no evidence. A calculation tool exists - the biodiversity impact assessment calculator, so it must be used to substantiate any claims or costs of biodiversity offsets. The developer and HE must use this tool to justify proposed biodiversity offset calculations.

The information above is a summary of the objection. The detailed reasoning behind the objection was explained in an email sent to the case officer Claire Westwood on 07/10/2019. The full extent of this objection is too large to be posted via this portal but should be uploaded by the LPA so that others are aware of its contents and can respond if they wish to.

4.1.3 Herts Ecology: [No objection]

4.1.3.1 Initial comments (29/07/19) [Objection]:

Hertfordshire Environmental Records Centre (HERC) has no species or habitat information specific to the location of the development. The southern site boundary of the proposed development is located close to Maple Lodge Nature Reserve and connected to it by a drain, which feeds the Lake within the Local Wildlife Site (LWS). The LWS is important for birds and plant species of grassland, fen and swamp habitats and is composed of a mosaic of open water, marshy grassland, scrub and woodland. The application site is presently an area of undeveloped open semi improved grassland with mature trees and vegetation along the eastern, southern and western site boundaries. There is a wet ditch along the western and northern boundaries, and a patch of relatively species-poor marshy grassland in the south-west corner. There are two small buildings within the site.

Bats

The two buildings were surveyed, one was found to have negligible potential for bats whilst the second had moderate potential. Emergence and re-entry surveys were subsequently carried out on this building and no evidence of its use by bats was found. Four emergence/re-entry surveys were also undertaken focusing on trees identified as having moderate potential to support roosting bats. The surveys confirmed the likely absence of roosting bats from the site. However this report and comments submitted as objections to the application, suggest that the existing site is used by bats for foraging and commuting. Given its location and current nature, I have no reason to doubt this assessment. This includes bats species that are particularly sensitive to lighting effects such as daubenton's, which are using the site and most likely the nature reserve and nearby waterbodies to forage. An Insensitive lighting plan would prevent the effective use by some species of bats of the proposed retained and enhanced vegetative site border, and could affect the ability of bats to utilise the resources of the LWS. Lighting can also have an indirect impact, by drawing insects away from these feeding grounds, into an illuminated area inaccessible to certain bat species. I advise that a biodiversity lighting plan should be submitted for approval to the LPA by **Condition**. This should demonstrate how the adjoining commuting corridors of vegetation, will be maintained as a dark space for bats. It should also show how the LWS, nearby lakes and water courses and sites of importance to wildlife will be protected from the negative impact of lighting from the development.

Reptiles

No reptiles were found during surveys in 2018 and 19 but suitable habitat along the boundary of the sites was identified. There are also historic records of grass snakes from 2014. Suitable measures to safe guard reptiles and prevent an offence under wildlife law, are recommended with in the ecological report.

Badgers

A confidential badger report by Greengage, dated June 2019 contains appropriate measures and mitigation relating to this species, all aspects should be followed in full.

Otters and water voles

Two surveys were undertaken on 26th April 2019 and 4th July 2019. No evidence of use of the site by water vole or otter was identified on either survey visit.

Maple Lodge Nature Reserve

The Local Wildlife Site will not be directly affected by the proposal. It will be buffered from the immediate effects of the development by the existing cricket pitch to the south. There is however, a concern relating to the proposed drainage from the development that may affect the lake within the wildlife site and is essential for the continued ecological function of the reserve, which is already affected by low water levels at times. If the water supply via the drainage channel is reduced in any way it would have a detrimental effect on the habitats and species for which the reserve is important. It is noted that surface water from the site is to be stored on site and discharged into Springwell Lake. There is no information within the application as to whether this will reduce the flow of water into the drainage channel or

whether compaction and drainage of the site to facilitate the development will reduce any groundwater flows into the drain and thus modify its current natural function.

Consequently, the application should **not be approved** unless it has been demonstrated to the satisfaction of the LPA, that the quantity and quality (In terms of pollution) of water supplied to the channel feeding the LWS is not compromised by the development. In any event, the LPA should consider the ecological implications of the discharge any water into Springwell Lake about which there is presently insufficient information. Furthermore, given the lake is to the east of the River Colne, this would presumably have to be piped under the existing river; no information on this aspect has been provided.

Habitats

The value of the grasslands on site, although assessed in the ecological report as being of little value, is semi-natural with a reasonable diversity of species including a number of plants associated with the marshy areas such as meadow sweet. Consequently, it will have value to the local ecology at least at the site level. However, I **do not** consider that it is enough to form a **fundamental constraint** to the determination of the application.

Notwithstanding this, the majority of this grassland will be lost to the development, this represents a **substantial local loss to ecology locally** that should be compensated for. This extensive loss of open ground and the limited open space remaining will not enable any form of meaningful ecology to be maintained on the site other than around the edges, which will also be severely degraded in places in order to accommodate the proposals. Whilst I welcome the ecological enhancements suggested within the ecological report, I do not consider that they adequately compensate for removal of 3.4 hectares of semi-improved grassland within the broader river valley or achieve net gains in biodiversity for the site. This claim of net gain is not based on any measurable assessment is a subjective statement.

Given the scale and type of development proposed, I do not believe it is possible to deliver these ecological requirements on site. Consequently, the LPA should consider Biodiversity offsetting as a means of achieving the expected biodiversity gain. A suitable project should be identified which can be supported locally to maintain or enhance a local habitat resource, sufficient to compensate for the loss of this site. Such a project could involve management to restore and maintain the species rich marsh habitat of Maple Lodge Marsh South LWS that is adjacent to the application site. This should be secured through a **S106 agreement**. The proposals should not be approved unless genuine biodiversity net gain can be demonstrated.

For the above reasons, I do not consider the application should be approved until sufficient further information has been provided to demonstrate that the development will not have any adverse impacts on the Nature Reserve and that it will result in net gain for biodiversity.

4.1.3.2 Further comments overcoming objection regarding biodiversity off-setting (30/09/19):

I have discussed a suitable strategy with my colleague relating to the biodiversity offsetting Maple Lodge. The proposal will result in a loss of approximately 3.4 hectares of grassland, the ecological value and services of which I do not consider can be replicated adequately or in full and then enhanced to provide a net gain by onsite measures. I consider it would be appropriate to determine the contribution based on the cost of creating and managing, over a 25-year period, a smaller area of more species-rich grassland as a comparable ecological resource. I would recommend this should be an area of 2.26 hectares (two thirds of the size of that being lost at Maple Lodge) + 10% to represent a net gain of that resource. This payment would be made available to an appropriate local project to be identified as part of the S106 and held by the LPA for this purpose or refunded to the developer if after a period of 5 years the project has not commenced. I consider a sum of £17,725 would be appropriate to achieve this.

If the applicant is unwilling to consider this or similar, then I would advise the details of net gain should be provided to the LPA in the form of a Biodiversity Impact Assessment Calculator to demonstrate how this can otherwise be achieved.

4.1.3.3 Further comments overcoming objection regarding impact on Local Wildlife Site (28/10/19):

Hertfordshire Ecology responded to the above proposal on the 29/07/2019 as part of that response concerns were raised relating to the proposed drainage from the development, in particular as to whether the development would result in the water supply to the lake in the nature reserve being diminished. This was also related to the proposed discharge of surface water into Springwell Lake to the east of the river Colne. As a consequence it was recommended that the application was not determined until it had been demonstrated that the lake within the nature reserve and Springwell Lake would not be negatively impacted by the proposal.

A response has now been submitted from Tier Consult (Ltd dated 10 September 2019), referencing drawing T- 17-1999/Z01/P1 and from Greengage Ecology referring to the updated drainage proposal. These conclude that the post completion difference in run off due to changes in the development site topography would be negligible and that discharge rates into the drain from the development site would be maintained. Furthermore, the use of permeable surfaces and the control of discharge rates has removed the need to direct water into Springwell Lake. It is also essential that the proposed drainage system does not introduce pollution into the existing channel, and in this respect I note that water coming off hard surfaces will pass through oil interceptors to prevent contamination of the water entering this channel.

Whilst I am not qualified to comment on the accuracy or the validity of the evidence presented on the drainage of the site, it would appear that there is likely to be a negligible change to the levels of water entering the nature reserve, and that measures are proposed to prevent contamination. On this basis I have no reason to believe that this aspect of the development will detrimentally affect the ecology of the nature reserve and in this respect should not be considered a constraint to the proposals.

4.1.4 Development Plans: [No objection]

4.1.4.1 Initial comments (24/07/19) [No objection]:

This application seeks approval for the construction of two warehouses, comprising of B1c, B2 and B8 floorspace, as well as ancillary B1a floorspace. The application site is located in the Maple Cross/Maple Lodge site, an allocated employment area in the Site Allocations LDD (adopted 2014) (site E(d)). Policy SA2 of the Site Allocations LDD states that allocated employment sites will be safeguarded for business, industrial and storage or distribution uses. The provision of a B1a, B1c, B2 and B8 floorspace in this area of the employment site would increase the amount of employment floorspace on the site, thus safeguarding business, industrial, storage and distribution uses. Subsequently, the application complies with Policy SA2. Policy CP6(j) of the Core Strategy (adopted 2011) states that the sustainable growth of the Three Rivers economy will be supported by continuing to focus employment use in the key employment areas of the District, including the Maple Cross/Maple Lodge site. The proposal also complies with Policy CP6(j).

4.1.4.2 Further comments (10/10/19) including reference to SWH Economic Study [No objection]:

This application seeks approval for the construction of two warehouses, comprising of 16,590m² B1c (Light Industrial), B2 (General Industrial) and B8 (Storage or Distribution) floorspace, including 1,986m² ancillary B1a (Office) floorspace. The application site is located in the Maple Cross/Maple Lodge site, an allocated employment area in the Site Allocations LDD (adopted 2014) (site E(d)). Policy SA2 of the Site Allocations LDD states that allocated employment sites will be safeguarded for business, industrial and storage or

distribution uses. The provision of a B1a, B1c, B2 and B8 floorspace in this area of the employment site would increase the amount of employment floorspace on the site, thus safeguarding business, industrial, storage and distribution uses. Subsequently, the application complies with Policy SA2. Policy CP6(j) of the Core Strategy (adopted 2011) states that the sustainable growth of the Three Rivers economy will be supported by continuing to focus employment use in the key employment areas of the District, including the Maple Cross/Maple Lodge site. The proposal also complies with Policy CP6(j).

The South West Herts Economic Study (2018) indicates a need for 152,000sqm of B1c/B2 floorspace between 2018 and 2036 (8,600sqm per annum) and 329,500sqm of B8 (18,300sq m per annum) across the whole of South West Herts¹. Of these amounts, it is estimated that in Three Rivers, there should be a provision of 13,200sqm of B1c/B2 floorspace and 15,600sqm of B8 floorspace over the 2018-2036 period (or 700sqm of B1c/B2 floorspace and 900sqm of B8 floorspace per annum). This is estimated to require a land requirement of 3.3ha and 3.9ha respectively. The application proposes B1c, B2 and B8 uses to comprise the majority of the floorspace within the proposed development. The application site is an existing employment allocation which offers a suitable location to provide a proportion of the land required to meet these needs. It is therefore considered that the proposed development would strongly contribute to meeting the need for B1c, B2 and B8 floorspace set out in the South West Herts Economic Study (2018).

The proposed office floorspace is ancillary to these main uses (B1c, B2 and B8). The South West Herts Economic Study estimates that 37,600sqm of office floorspace should be provided in Three Rivers over the period of 2018-2036 (equating to 1,700sqm per annum). The proposed office floorspace would contribute to meeting this need and would enable the efficient operation of the main uses (B1c, B2 and B8) and is therefore also supported.

Due to the site's formal allocation for employment uses and the future need to provide employment floorspace (as set out above), the site is considered suitable for the proposed uses and the development is supported.

4.1.5 Affinity Water: [Objection]

4.1.5.1 Initial comments (26/07/19) [Objection]:

Thank you for notification of the above planning application. Planning applications are referred to us where our input on issues relating to water quality or quantity may be required.

Affinity Water Limited ("Affinity Water") is the UK's largest water-only company, supplying a population of more than 3.6 million people with more than 900 million litres of the highest quality water every day of the year. Our supply area covers parts of Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, Surrey, the London Boroughs of Harrow and Hillingdon and parts of the London Boroughs of Barnet, Brent, Ealing and Enfield. We also supply water to the Tendring peninsula in Essex and the Folkestone and Dover areas of Kent.

We have a statutory duty to supply water and are under legal obligations to ensure that the water is of a certain quality. As a result of this, any risk of contamination to a borehole will mean that we must stop using it until the risk has been eliminated and we must find an alternative source of supply in the meantime. Any potential contamination to the water supply as a result of development is therefore a significant concern for us.

You should be aware that the proposed development site is located within an Environment Agency defined groundwater Source Protection Zone 1 (SPZ1) corresponding to Springwell

¹ The figures provided are based upon the Preferred Scenario from The South West Herts Economic Study (2018); this is the trends based scenario.

Pumping Station. This is a public water supply, comprising a number of Chalk abstraction boreholes, operated by Affinity Water Ltd.

We are writing to object to this Application because we are concerned, for the reasons set out below, that it has the potential to impact adversely the public water supply. If you are minded to approve the Application, it is essential these concerns are addressed.

Piling within this area poses a risk with regards to the following:

- Creating pathways between shallow gravel groundwater and deep chalk groundwater potentially allowing naturally occurring manganese present in the gravel aquifer to migrate to the chalk.
- As above, but this also applies to other contaminants present due to the site being a former landfill.
- Turbidity during piling causing our sources to reach above 1NTU and shut down.
- Piling potentially blocking significant fissures hence creating a “curtain” effect. This could cause the flow paths to change around our sources, potentially causing greater drawdown for the same output.

4.1.5.2 Comments (24/09/19) [Objection]:

Thank you for your endeavour to address our concerns with your letter dated 10th September 2019. We are not satisfied that these statements represent an accurate understanding of the local geology/hydrogeology. We would suggest arranging a meeting with us to discuss and share our understanding from our investigations of the chalk aquifer in this region. Please see our comments below as a response to each statement.

1. *“The ground conditions at the site have been shown to comprise River Terrace deposits which directly overlie the Chalk Aquifer. During all investigation works, there has been no distinction between the groundwater present in the drift deposits and the deeper groundwater below. It is therefore evident that the groundwater within the shallow gravels is in direct hydraulic conductivity to the Chalk Aquifer and therefore it is not possible that driven piles would create a new pathway when groundwaters are already freely able to move between strata.”*

We know that from our hydrogeological investigations that the chalk is hydraulically disconnected from the gravel aquifer in several locations in the Middle Colne valley. This is likely to be the case due to the hydraulic characteristics of the “putty” chalk, the low permeability sediments present at the base of the gravel aquifer and the marl bands present in the chalk that are known to impede vertical flow.

2. *“The site boundary does not fall within the former landfill site boundary; this landfill site is present to the northeast of the study site. In addition, the site investigations to date have found very little made ground at the site. Granular Made Ground was encountered at depths of between 0.00m bgl and 0.70 bgl in the northern, eastern and southern areas of the Site. The majority of Made Ground was encountered within the north-eastern corner of the Site. The Made Ground was generally recovered as brown, slightly clayey, slightly gravelly, silt. Gravel is angular to sub-angular, fine to coarse of, chalk, flint, glass, concrete, tile, ceramic and brick fragments. These deposits are not consistent with a landfill site.”*

The Made Ground identified onsite including glass, concrete, tile, ceramic and brick fragments do not suggest that there is no contamination on site. The supplementary site investigation report mentions on p.10 that the historic refuse tip located immediately

adjacent to the north-eastern corner of the site accepted both domestic and industrial waste. Cyanide and Nickel were also identified at trace leachable concentrations on site.

3. The proposed development is to be founded on driven piles which are a percussive and penetrative action. The risk of increased turbidity with the use of driven piles is much lower than CFA or rotary borehole piles and therefore will be restricted to the area directly surrounding the piles and, even then, only for the duration of the piling works. Water well uses are unlikely to be affected by the construction and operation of the proposed development, given the distance of the site from the closest abstraction well. Indeed, such water quality well issues are more likely to be affected by regional natural water quality characteristics and their natural variability.

The distance of the site from our abstraction source at Springwell is 400m from the site boundary and 390m from the edge of the adit, which is not considered a significant distance and is within the groundwater source protection zone 1 of this abstraction. It needs to be noted that there are also other abstraction sources to the north and south of the proposed development that could be affected by the piling activity, depending on the depth of the piles and the local hydrogeology. In order to further understand the risks from the proposed activity, a groundwater risk assessment would need to be undertaken as a minimum.

4. "The Chalk bedrock below the site was encountered at depths below 4.4m bgl, as completely weathered to structureless putty in the upper sections (Dm grade) at depths up to circa 6m bgl becoming weathered and clast supported (Dc grade) to depths of circa 11m bgl with structured grade Chalk at greater depths. The highly weathered nature of the Chalk means that significant fissures are extremely unlikely to have formed or stayed open during the recent geological past. As such, the risk of the driven piles blocking said fissures and restricting water supplies is considered to be negligible.

Notwithstanding the above, we note that the Environment Agency has not raised an objection to the proposed scheme, and has proposed a condition in respect of penetrative piling requiring written consent from the LPA in advance of such piling methods being carried out. Therefore, ensuring that the proposed development will not pose a risk to the public water supply."

The supplementary site investigation report states that p.19 "the results of the assessment indicate that the Site is located in an area of Moderately High risk from dissolution features and therefore additional consideration should be given to this as part of the proposed development." We also have information from our downhole inspections, geophysical and CCTV surveys that indicate major flow horizons being present within the top 30-40m of the chalk where most of the groundwater flow occurs. We would be happy to discuss our findings further in a meeting.

We would strongly recommend we meet and discuss our concerns as mentioned above to ensure these are addressed and mitigate the risks posed to public water supply. If the above is not considered and mitigation is not put in place, then this could potentially leave the developer liable for contamination of a public water supply source.

4.1.6 National Grid: [No objection]

I can confirm that from a National Grid and a Cadent standpoint our assets are not affected and therefore we do not have any comments to make.

4.1.7 Landscape Officer: [Objection]

4.1.7.1 Initial comments (18/07/19) [Objection]:

The application is accompanied by a tree report and tree constraints plan. The site contains a number of trees, predominantly located around the edges of the site, a number of which are formally protected. The most visually important trees are located along the eastern boundary.

I do not agree with many of the categories given to trees along the eastern boundary, and do not believe that the cascade method detailed within BS5837 has been correctly applied. Although some of the older alders along the eastern boundary do have decay cavities at their base, which is not unexpected for trees of this age, most are small or isolated pockets, and have not compromised the structural integrity of the trees. Another issue with the categorisation of eastern boundary trees is that their collective value has not been considered. I understand why they have been recorded individually, but their value is not as isolated trees, but as integral trees within a visually important landscape feature, i.e. B2, and not C or U.

Although the report states that the tree survey has informed the layout, I suspect that the layout has dictated tree retention, for example T10 is a category B tree and is proposed for removal due to the fact that the footpath runs through it, it would not take much design to route the path around this tree. There are some suitable areas along the eastern boundary where access could be gained through the tree line, but these have not been fully utilised, and sadly are not apparent from the tree constraints plan.

There are some notes on the constraints plan, and mention in the report, in regard to new hard standing being no dig. However, it appears from the service drawings that proposed services may make this obsolete, particularly in respect to the new footpath adjacent to the road.

I would also expect a tree report for a full planning application to include a detailed tree protection plan, and draft arboricultural method statement, demonstrating the feasibility of the proposal. It is not typical for proposed drainage details to be available at this stage of the planning process, but they are in this case. I would therefore expect the tree report to have considered the impact/implication of these as well, as clearly, they are likely to have impact upon retained trees.

In light of the above I do not consider that existing trees have been given sufficient consideration within the design process, and that this would lead to unnecessary tree loss and damage to higher quality trees and a visually important landscape feature on site. I therefore wish to raise objections to the application at the present time.

4.1.7.2 Further comments (01/10/19) [Objection]:

It is impossible to assess the impact of the amended layout as the tree constraints plan has not been updated. The amended site layout appears to show more of the existing trees to be retained, but there are conflicts with the landscaping plan which still shows them to be removed.

4.1.7.3 Further comments (17/10/19) [Objection]:

The updated tree constraints plan shows T73 & T10 as retained, but otherwise the significant level of tree removals remains the same. Helpfully the constraints plan does not show any footpath or road layouts.

The amended layout has done little to address my original concerns, and still results in the loss of a large number of trees and the breakup of the valuable landscape feature along the eastern boundary, which is protected by a TPO. My original comments are therefore, for the most part, still valid, and my concerns and objections to the proposal also remain.

In light of the above I wish to uphold my objection to the proposal in respect to the loss of trees and likely detrimental impact to other trees.

4.1.8 Thames Water: [No objection subject to conditions/informatives]

Waste Water Comments:

With regard to SURFACE WATER drainage, Thames Water would advise that if the developer follows the sequential approach to the disposal of surface water we would have no objection. Where the developer proposes to discharge to a public sewer, prior approval from Thames Water Developer Services will be required. Should you require further information please refer to our website. <https://developers.thameswater.co.uk/Developing-a-large-site/Apply-and-pay-for-services/Wastewater-services>.

The application indicates that all surface water will be discharged to Springwell Lake to the south east of the site. Affinity Water abstract water from this area so their comments will need to be taken in to consideration. If technically feasible there may be environmental benefits in discharging surface waters to the watercourse north east of the development. These do however, drain to the Maple Lodge Nature Reserve and therefore the water quality would need to be of an appropriate standard.

Thames Water would advise that with regard to FOUL WATER sewerage network infrastructure capacity, we would not have any objection to the above planning application, based on the information provided.

There are public sewers crossing or close to your development. If you're planning significant work near our sewers, it's important that you minimize the risk of damage. You'll need to check that your development doesn't limit repair or maintenance activities, or inhibit the services we provide in any other way. The applicant is advised to read our guide working near or diverting our pipes. <https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes>.

The proposed development is located within 15 metres of a strategic sewer. Thames Water requests the following condition to be added to any planning permission.

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 the programme for the works) has been submitted to and approved in writing by the local planning authority in consultation with Thames Water. Any piling must be undertaken in accordance with the terms of the approved piling method statement.

Reason: The proposed works will be in close proximity to underground sewerage utility infrastructure. Piling has the potential to significantly impact / cause failure of local underground sewerage utility infrastructure.

Please read our guide working near our assets to ensure your workings will be in line with the necessary processes you need to follow if you're considering working above or near our pipes or other structures. <https://developers.thameswater.co.uk/Developing-a-large-site/Planning-your-development/Working-near-or-diverting-our-pipes>. Should you require further information please contact Thames Water. Email: developer.services@thameswater.co.uk Phone: 0800 009 3921 (Monday to Friday, 8am to 5pm) Write to: Thames Water Developer Services, Clearwater Court, Vastern Road, Reading, Berkshire RG1 8DB

Odour Comments:

The proposed development is located near to Thames Waters' Maple Lodge Sewage Treatment Works. Future occupiers of the development should be made aware that they could periodically experience adverse amenity impacts from odour and other operational activities.

Water Comments:

With regard to water supply, this comes within the area covered by the Affinity Water Company. For your information the address to write to is - Affinity Water Company The Hub, Tamblin Way, Hatfield, Herts, AL10 9EZ - Tel - 0845 782 3333.

Biodiversity Comments:

With regard to wildlife and biodiversity this development should take into account the adjacent land uses of Maple Lodge Nature Reserve <https://www.maplelodgenaturereserve.org/> which is fed by the stream at this development's northern boundary. Maple Lodge Nature Reserve is a site of Importance to Nature Conservation (SINC) and is located 50m south-east of the proposed development. It is a nesting site for Tawney Owl (Amber listed status and protected under Countryside and Wildlife Act 1981), as well as hosting a range of notable aquatic insects and amphibians.

Wayleaves & Easements:

There are easements and wayleaves running through the site. These are Thames Water Assets. The company will seek assurances that they will not be affected by the proposed development.

4.1.9 Environmental Health (Residential): [No objection]

4.1.9.1 Initial comments (05/08/19) [Objection]:

I have looked at the noise impact assessment and although it is more theoretical and set out very differently to the majority of noise assessments we receive, I believe that they have made a valid assessment in terms of the impact on the nearby residential properties.

The assessment location is not the nearest receptor however if it is likely to be the most impacted then I am willing to agree with this. If any further assessments are undertaken I would recommend that the nearest residential property is also considered as a comparison to demonstrate what has been stated.

My concern with the assessment is the wider impact on the environment due to the locality, what impact would the proposed activities have on the wider impact beyond the residential receptors identified?

With regards to paragraph 3.3.3, what would the justification be for having a limit of 15dB(A) above the night time limit? – If a limit is set I would recommend that it is 10 dB(A) unless it can be demonstrated otherwise.

Also in the conclusion there is repeated reference to the nearest residential dwelling when the assessment location is different.

4.1.9.2 Further comments (03/10/19) [No objection]:

I have reviewed the amended noise report and the memorandum and they have addressed the points that I have raised.

Therefore the concerns have been addressed and I have no objection to this application.

4.1.10 Environmental Health (Commercial): [No objection subject to conditions]

Air Quality:

I have reviewed the Air Quality Assessment prepared by BWB Consulting Ltd (Report ref. LNT2082).

The residual impacts of from the construction phase are considered to be 'not significant'. The greatest increase in traffic on roads where existing sensitive receptors are present (on the A412 Denham Way, south of the site access road) is below the assessment criteria set out in the IAQM and EPUK guidance. The impact on local air quality is considered to be insignificant. Detailed dispersion modelling of development generated road traffic is not required.

I would recommend that a condition requiring a dust management plan be applied to any permission granted.

I would suggest informatives relating to the following:

The use of Euro 6 vehicles where possible;
Following relevant guidance such as the IAQM guidance.

Contaminated Land:

I have reviewed the Supplementary Site Investigation prepared by Tier Environmental Ltd (Report ref. TL117755511.1).

The investigation has identified unacceptable risks to human health due to the presence of asbestos fibres and fragments in the underlying soils. No exceedances of relevant screening criteria for metals, metalloids, PAHs, TPHs and PCBs were identified.

Some outline remedial measures have been discussed in the report, however, a formal remediation strategy is required.

I would recommend the following conditions:

1. Prior to the commencement of development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Local Planning Authority), the following components of a scheme to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing, by the local planning authority:

i) An options appraisal and remediation strategy, based on the Supplementary Site Investigation prepared by Tier Environmental Ltd (Report ref. TL117755511.1), giving full details of the remediation measures required and how they are to be undertaken.

ii) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in (i) 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 express consent of the local planning authority. The scheme shall be implemented as approved.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

2. Following completion of measures identified in the approved remediation scheme and prior to the first use or occupation of the development, a verification report that demonstrates the effectiveness of the remediation carried out must be produced together with any necessary monitoring and maintenance programme and copies of any waste transfer notes relating to exported and imported soils shall be submitted to the Local Planning Authority for approval. The approved monitoring and maintenance programme shall be implemented.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

The above must be undertaken in accordance with DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11'.

3. Reporting of Unexpected Contamination: In the event that contamination is found at any time when carrying out the approved development that was not previously identified it must be reported in writing immediately to the Local Planning Authority. An investigation and risk assessment must be undertaken, and where remediation is necessary a remediation scheme must be prepared, which is subject to the approval in writing of the Local Planning Authority. Following completion of measures identified in the approved remediation scheme a verification report must be prepared, which is subject to the approval in writing of the Local Planning Authority.

Reason: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

4.1.11 Environmental Protection: [No objection]

No objection to plan.

4.1.12 HCC Lead Local Flood Authority: [Objection]

4.1.12.1 Initial Comments (12/07/19) [Objection]:

Thank you for consulting us on the above application for comprehensive redevelopment to provide 2 no. single storey warehouse Class B1c/B2/B8 units comprising a total of 16,590 sqm including 1,986 sqm ancillary B1a office space, access, landscaping and associated works at Development Site, Maple Lodge, Maple Lodge Close.

The applicant has provided the following information in support of the application:

- A Flood Risk Assessment and Drainage Strategy for Maple Cross, Rickmansworth, prepared by Tier Consult Ltd., Ref: T/17/1999/FRA, Issue No. 1.3, dated 18/06/2019
- General arrangement showing proposed foul and surface water drainage layout. Sheet 1, Project No. T_17_1999, Drawing No. 55-01, Rev P6, dated 13.06.2019
- General arrangement showing proposed foul and surface water drainage layout. Sheet 2, Project No. T_17_1999, Drawing No. 55-02, Rev P3, dated 13.06.2019
- Proposed standard drainage construction details. Sheet 1, Project No. T_17_1999, Drawing No. 55-06, Rev P1, dated 13.06.2019
- Proposed standard drainage construction details. Sheet 2, Project No. T_17_1999, Drawing No. 55-07, Rev P1, dated 13.06.2019
- Proposed surface water manhole schedule, Project No. T_17_1999, Drawing No. 55-05, Rev P1, dated 13.06.2019

We are pleased the applicant has provided Flood Risk Assessment in support of this application. However, the information provided to date does not provide a suitable basis for an assessment to be made of the flood risk arising from the proposed development. Therefore we object to the grant of planning permission. In order for the Lead Local Flood Authority to advise the relevant local planning authority that the site will not increase flood risk to the site and elsewhere and can provide appropriate sustainable drainage techniques the following information is required as part of the surface water drainage assessment:

1. Appropriate drainage strategy

Overcoming our objection

The applicant is proposing that the surface water runoff from the site will be attenuated and restricted to 6.50l/s for all events up to and including the 1 in 100 year (+30%) before discharge via a pump to a Springwell Lake, which is ~250m to the east of the site.

We have concerns regarding why a pumped solution for surface water is suggested, especially considering the fact that there is a main river (Maplelodge Ditch) bounding the western edge of the site. In addition there is a second main river (the River Colne) which is required to be crossed in order to pump the surface water into the proposed Springwell Lake. The applicant needs to explain why this surface water management option has been chosen in favour of closer discharge options. We would consider a pumped solution is not appropriate or sustainable given that there are closer watercourses. The applicant needs to explore if gravity discharge can be achieved. Furthermore, regarding the pumped solution, permission would need to be sought from the relevant landowner that they are happy to accept surface water to cross the site. Permission would also need to be sought to discharge into Springwell Lake.

No surface water management and treatment has been provided for the site. Treatment of surface water is required for the entire site. We would require additional treatment considering that there are loading bays for large vehicle/lorry parking on the site.

The current use of the site is undeveloped green space that comprises a grass covered field surrounded by trees around the boundary of the site. There is no impermeable hardstanding within the extent of the current site. Considering that this is a greenfield site, the applicant should provide above ground storage for surface water. The applicant has stated how it is anticipated that the attenuation storage will be provided in the form of surface storage, cellular storage and underground tanks before discharge to the Springwell Lake. However, only underground tanks have been suggested.

The applicant has stated that they are discharging at the QBAR rate, however no calculations have been provided to support this. Drainage calculations are needed to support and understand the volumes of water needed to be attenuated and managed on site. The applicant should also provide all greenfield run-off rates for the site.

The applicant has stated how there is an existing 600mm diameter foul public sewer which crosses the site and that this is to be abandoned and grouted. From a review of the Thames Water maps, there is also an additional foul sewer. The applicant will need to obtain a build over agreement from Thames Water for this asset, as well as any other sewer assets. We would not recommend or approve building over a surface water sewer.

From a review of the Environment Agency's Risk of Flooding from Surface Water map, there is some surface water ponding across the site, which needs to be accounted for and managed within the surface water drainage strategy.

For further guidance on HCC's policies on SuDS, HCC Developers Guide and Checklist and links to national policy and industry best practice guidance, please refer to our surface water drainage webpage: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/>

Informative to the LPA

We would recommend the LPA consults the Environment Agency considering part of the site is within Flood Zone 2 and the surrounding main rivers to the site, including a main river running along the western edge of the red line boundary. The site is also within the reservoir flood extent.

The applicant can overcome our objection by submitting an adequate surface water drainage strategy. We ask to be re-consulted with the results of the surface water drainage strategy. We will provide you with bespoke comments within 21 days of receiving formal re-consultation.

4.1.12.2 Comments following review of additional information (16/08/19) [Objection]:

Thank you for re-consulting us on the above application for comprehensive redevelopment to provide 2 no. single storey warehouse Class B1c/B2/B8 units comprising a total of 16,590 sqm including 1,986 sqm ancillary B1a office space, access, landscaping and associated works at Development Site, Maple Lodge, Maple Lodge Close.

The applicant has provided the following additional information in support of the application:

- Letter dated 30th July 2019, prepared by Tier Consult Ltd. Ref: T1999/PJB/JH
- Borehole report and logs, dated June 2014, trial pit logs dated 28/04/14
- Flood Map for Planning
- MicroDrainage modelling, dated 13/06/2019
- Contract Plan, Maple Lodge STW, unable to determine date
- Drainage Layout Plan (though half the page is missing), no date

The applicant has previously provided the following information in support of the application:

- A Flood Risk Assessment and Drainage Strategy for Maple Cross, Rickmansworth, prepared by Tier Consult Ltd., Ref: T/17/1999/FRA, Issue No. 1.3, dated 18/06/2019
- General arrangement showing proposed foul and surface water drainage layout. Sheet 1, Project No. T_17_1999, Drawing No. 55-01, Rev P6, dated 13.06.2019
- General arrangement showing proposed foul and surface water drainage layout. Sheet 2, Project No. T_17_1999, Drawing No. 55-02, Rev P3, dated 13.06.2019
- Proposed standard drainage construction details. Sheet 1, Project No. T_17_1999, Drawing No. 55-06, Rev P1, dated 13.06.2019
- Proposed standard drainage construction details. Sheet 2, Project No. T_17_1999, Drawing No. 55-07, Rev P1, dated 13.06.2019
- Proposed surface water manhole schedule, Project No. T_17_1999, Drawing No. 55-05, Rev P1, dated 13.06.2019

Unfortunately, the information provided to date does not provide a suitable basis for an assessment to be made of the flood risk arising from the proposed development. Therefore we object to the grant of planning permission. In order for the Lead Local Flood Authority to advise the relevant local planning authority that the site will not increase flood risk to the site and elsewhere and can provide appropriate sustainable drainage techniques the following information is required as part of the surface water drainage assessment:

1. Feasibility and justification of discharge mechanism
2. Surface water flood risk
3. Appropriate SuDS features and appropriate management and treatment of surface water

Overcoming our objection

The applicant has provided some additional supporting information; however, the proposed surface water drainage strategy for the site is the same as that previously proposed. We would still consider that this is not the most sustainable option for the site; however, we would make the following detailed comments on how to overcome our objection.

1. The applicant has provided a letter within the additional information in support of the application, the applicant has stated how with regards to the pumping of surface water, they cannot discharge into the adjacent watercourse by gravity owing to the site levels in relation to that of the river. The applicant could consider a different site layout. If the applicant still needs to propose a pumped solution, we would query as to why a pumped solution still needs to travel such a distance. If pumping is necessary, then why isn't surface water discharge proposed to be to the nearest watercourse.

The applicant states: "Furthermore, the Contract our Client has within the Land Purchase Agreement only provides two options for the discharge of surface water into neighbouring land and we have chosen that with the least impact on trees and ecology". In addition the position of the attenuation makes it far easier to access the outfall than the alternative option (see attached)." There doesn't appear to be an attachment to the letter, so we cannot see the alternative option, unless the applicant means the additional information attached to the application.

The applicant needs to provide evidence and justify the distance travelled to the discharge location, in addition to the information require below.

At present, we do not consider the discharge mechanism to be the most sustainable considering the site is currently greenfield. The applicant could consider a different site layout.

Considering that the current proposed surface water discharge location is Springwell Lake, this is within Flood Zone 2. The applicant needs to consider if this discharge is still viable under fluvial flood scenario.

In addition, the applicant will need to show that they have permission to discharge surface water at the location they are proposing, in addition to permission to cross any land that may be necessary. Currently the applicant would need to provide confirmation that they have permission from Springwell Lake, as well as the land and Main River to be crossed. If the applicant proposes to discharge to a main river, this would be a separate consent application to the Environment Agency, outside of the planning process. Confirmation of permission to cross any neighbouring land would still be needed, if this is relevant.

2. We acknowledge that only a small part of the site is within Flood Zone 2. However, from a review of the Environment Agency's national Risk of Flooding from Surface Water maps, there is also a very small amount of predicted surface water ponding in the medium risk event in the south west corner of the site and along the highway, which is within the red line boundary and this has not been considered.

Consideration of surface water flood risk is important considering that the development will be piled and the levels raised slightly to facilitate a stone platform to pile from. A very small part of the south west corner of the building is within Flood Zone 2, and the Risk of Flooding from Surface Water map, medium risk event. The applicant needs to consider the effect of raising the land on the surroundings and if this would push water off site.

3. The applicant has provided MicroDrainage calculations and these show that 1995m³ of storage is needed to cater for the 1 in 100 +30% for climate change event. This is reflected in the drainage layout drawing.

Considering the depth of the groundwater, we accept that above ground storage features may be more difficult and would suggest that lined permeable paving with sub-base in the car parking areas would be appropriate. In addition silt traps would be needed to protect any tanked elements. However, these needs to be shown on the proposed drainage layout plan, along with any supporting drainage calculations, if necessary.

Considering the depth of the groundwater the applicant would need to consider management of this during the build processes. In addition, the applicant is proposing cellular attenuation system to be fully encapsulated with a 1mm thick impermeable membrane. The effect of groundwater on the attenuation system itself should be considered, such as the risk of possible lifting. In addition, the applicant would need to provide evidence that a 1mm thick liner, which is currently proposed, would be adequate. This level of detail could be confirmed at a later stage.

Permeable paving is proposed in car parking areas (though the exact area of this is not known), for the rest of the management and treatment of surface water on the site, the applicant is proposing petrol/oil interceptors. As LLFA, we do not recommend the use of petrol interceptors due to the maintenance requirements. We would prefer the use of other SuDS management and treatment such as permeable paving. However, we acknowledge that petrol interceptors may be necessary for parts of the site. The applicant will need to provide confirmation that these will be maintained and that no other form of treatment is possible in these locations. The applicant should be aware, that considering they are proposing to discharge to a body of water (Springwell Lake) appropriate treatment is required. If the applicant proposes to discharge to the main river, the applicant would have to satisfy the Environment Agency that they are happy in water quality terms.

If the applicant would like to discuss any of our objection points in more detail, we offer a Surface Water Drainage Advisory Service, details of which are available on our website: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/surface-water-drainage.aspx>

For further guidance on HCC's policies on SuDS, HCC Developers Guide and Checklist and links to national policy and industry best practice guidance, please refer to our surface water drainage webpage: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/>

Informative to the LPA

The applicant can overcome our objection by submitting an adequate surface water drainage strategy, which addresses the points above. We ask to be re-consulted with the results of the surface water drainage strategy. We will provide you with bespoke comments within 21 days of receiving formal re-consultation.

4.1.12.3 Comments following review of additional information (11/10/19) [Objection]:

The applicant has provided the following additional information in support of the application:

- Letter from Tier Consult Ltd, dated 10 September 2019, Reference: T1999/PJB/EJJ
- Proposed Drainage Layout with the Flood Mapping Indicated, prepared by Tier Consult Ltd, dated 02.09.19, Drawing No. 55-08, Revision P1.
- Existing and Proposed Areas that drain into the existing watercourse, prepared by Tier Consult Ltd, dated 02.09.19, Drawing No. 55-08, Revision P1.
- Storm Water / SuDS Maintenance Plan, prepared by Tier Consult Ltd.
- General arrangement showing proposed foul and surface water drainage layout, Sheet 1, prepared by Tier Consult Ltd, Drawing No. 55-01, Dated 30.08.2019, Revision P9.

- A Flood Risk Assessment and Drainage Strategy for Maple Cross Rickmansworth, Issue 1.4, dated 22 August 2019, Ref: T/17/1999/FRA, prepared by Tier Consult Ltd.
- MicroDrainage calculations dated 28/08/2019, prepared by Tier Consult Ltd.

The applicant has now submitted an updated drainage strategy; the surface water discharge location has been updated along with an updated drainage layout. This has meant that the drainage strategy has now changed; we would seek further clarifications regarding this strategy.

It is proposed that surface water will be attenuated and pumped into Maplodge Ditch at a rate of 6.5l/s which is the QBAR greenfield runoff rate. Unfortunately the information provided to date does not provide a suitable basis for an assessment to be made and we would seek a number of further clarifications from the applicant regarding this updated drainage scheme. This information is needed in order for the LLFA to remove our objection on flood risk grounds.

Clarification is needed on the following:

1. Attenuation within Flood Zone 2 and securing the discharge

We are pleased the applicant is proposing the use of permeable paving. However, from a review of the drawing: "proposed drainage layout with flooding mapping indicated", drawing no. 55-08, part of the permeable paving in the southern part of the site is within Flood Zone

2. This means that during a fluvial flood scenario, flooding which extends to Flood Zone 2 will flow into the permeable paving, into the provided attenuation and the drainage system for the site. This unfortunately is not acceptable, or the additional storage would need to be accounted for. We would suggest that there should be no storage volume within Flood Zone 2. However, we would stress that as much of the parking as possible should be permeable paving; even if this means compensating permeable paving in additional areas, if possible.

We would seek clarification from the applicant on the level of the outfall. The outfall should be available during the 1 in 30 event and out of the fluvial flood level.

2. Clarification on the tanks

The applicant will need to demonstrate half drain down time for the tanks. This is required to ensure the system can drain adequately in the event of a repeat storm.

We would ask that the applicant clarifies the construction and depth of the tank considering the following. It is proposed that permeable paving with 600mm sub-base is proposed on top of a 1.6m deep attenuation tank. This leads to a very deep tank, the applicant needs to clarify that the tank can be adequately drained given its depth, ensuring that there is half drain down time.

From a review of the updated drainage layout drawing, the tank is offline, meaning that in order for surface water to get into the tank, the system needs to back up. From a review of the invert levels backing up could also occur through the petrol interceptor. This also needs to be clarified in conjunction with the above.

3. Background information on the greenfield run-off calculation

We would ask that the applicant provides the background calculations to calculate the QBAR rate of 6.5l/s.

4. Clarification on contributing area

We would seek clarification from the applicant on the contributing area, from a review of the MicroDrainage calculations, this is 2.398ha. From a review of the application form, the total site area is 3.4ha. However, there is no contributing area plan/impermeable area plan to support this.

5. Clarification on MicroDrainage calculations and the provision of storage

From a review of the drainage layout in conjunction with the MicroDrainage calculations, there are some discrepancies. The MicroDrainage modelling details a higher volume of storage; we would therefore seek clarification where this additional volume will be accounted for in the SuDS within the drainage layout; showing the precise storage volumes.

6. Predicted surface water flooding and drainage of the access road

From a review of the Proposed Drainage Layout the “Beany Kerb outfall/catchpit” is shown to be connected to the drainage system on site. The applicant should clarify if the road is indeed connected into the network and if this is accounted for within the drainage calculations. It is also labelled as a proposed combined kerb drain and associated sump outlet.

Further, there is predicted surface water flood risk in this area in the high risk event; that is an event with a 3.33% chance of occurring in any given year. This means that additional surface water flood risk is potentially getting into the proposed drainage system on site.

7. Appropriate management and treatment

From a review of the updated drainage layout, all manholes with a 500mm deep sump are to be fitted with a removable filter (Naylor Smart Filter). These are removable filters; the applicant should detail what is proposed in the event of failure. These will need a rigorous maintenance plan. We would usually not accept such filters; instead the applicant should opt for on surface filter drains or swales to remove hydrocarbons prior to entry into any attenuation or discharge to water body. The applicant is proposing a number of linear drainage channels which could be adapted to on surface SuDS management and treatment features. The applicant should explore the use of above ground filter trenches or other SuDS to remove pollutants.

The applicant should provide evidence that there is appropriate management and treatment for the management of surface water and all SuDS features, but particularly surface water runoff from the car parks, lorry parking and road network, before direct discharge into the main river.

The applicant should be aware that an environmental permit may be needed from the Environment Agency if discharging water directly from a surface water management system into a main river, if there is the potential for pollution.

Therefore, all potential reasons for pollution should be avoided by the use of an appropriate management and treatment train.

8. Future management and maintenance of the river

We would seek from the applicant information on how they propose to maintain the watercourse (which is main river) adjacent to the site. This is needed to ensure the future management and maintenance of the river that the surface water from the site is discharging into.

It was noted on site how there are a number of blockages and fallen trees along the stretch which was able to be inspected downstream of the discharge point. We would recommend a detailed maintenance plan is produced.

We offer a Surface Water Drainage Advisory Service, details of which are available on our website: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/surface-water-drainage.aspx>

For further guidance on HCC's policies on SuDS, HCC Developers Guide and Checklist and links to national policy and industry best practice guidance, please refer to our surface water drainage webpage: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/>

Informative to the LPA

We recommend the LPA obtains a maintenance plan that explains and follows the manufacturer's recommendations for maintenance or follows the guidelines explained in the SuDS Manual by Ciria. A maintenance plan should also include an inspection timetable with long term action plans to be carried out to ensure effective operation and to prevent failure. For further guidance on the maintenance of SuDS components, please refer to the SuDS Manual by Ciria.

The applicant can overcome our objection by submitting information, which addresses the points above. We ask to be re-consulted with the results and will provide you with bespoke comments within 21 days of receiving formal re-consultation.

4.1.12.4 Comments following review of additional information (1/11/19) [Objection]:

Thank you for re-consulting us on the above application for comprehensive redevelopment to provide 2 no. single storey warehouse Class B1c/B2/B8 units comprising a total of 16,590 sqm including 1,986 sqm ancillary B1a office space, access, landscaping and associated works at Development Site, Maple Lodge, Maple Lodge Close.

Following our previous comments in the letter dated 11 October 2019, the applicant has provided the following additional information in support of the application:

- Letter from Tier Consult Ltd, dated 18 October 2019, Reference: T_17_1999/PJB/EJJ
- MicroDrainage calculations dated 16/10/2019
- Impermeable areas plan prepared by Tier Consult, dated 16.10.19, Drawing No. 55-08, Revision P1
- Greenfield run-off details from MicroDrainage, dated 16/10/2019

Unfortunately the information provided does not address all of our outstanding objections on flood risk grounds, and we would make the following comments:

From a review of the letter, the applicant has stated how the Environment Agency has recommended conditions. This is unrelated to surface water drainage, for which the Lead Local Flood Authority is a statutory consultee.

It should be noted, how once we are satisfied that the scheme can adequately drain the site and does not cause flood risk to the site or the surrounding area, we would recommend conditions to address the final detailed technical design of the drainage on site, however, a number of details need to be met prior to approval of planning and these are detailed in the specific objection points in the letter dated 11 October 2019.

Regarding the specific objection points, please see below comments:

1. Attenuation within Flood Zone 2 and securing the discharge

Regarding attenuation within Flood Zone 2, we note how no plans have been updated to address our previous comments.

The applicant has stated how they are happy to accommodate this detailed technical matter by way of condition. However, as the drainage layout drawing (drawing reference/number) would be part of the approved plans and would need to be referenced in any condition, this would need to be addressed prior to the approval of planning.

We would still seek clarification from the applicant regarding this.

Regarding securing the discharge, the applicant has provided details from the Environment Agency regarding the top water level of the ditch and how the outfall will be above this level, and therefore should be available during the 1 in 30 event and out of the fluvial flood level. Therefore this issue has been addressed.

2. Clarification on the tanks

Half drain down times is not just pertinent to soakaway systems. We would refer the applicant to the Susdrain website which details the need to accommodate further storms within attenuation systems.

The applicant should provide details of how long it will take to drain down the tank. However in the interest of being reasonable, and due to the fact that it is known the site is prone to flooding, the tank should be able to accommodate as a minimum a 1 in 30 year storm within 24 hours of a 1 in 100 plus climate change rainfall event.

In order to preserve the development and to allow the applicant to achieve the drain down times for the tank, we would consider a second discharge from the site at 5l/s to the river on the eastern side of the site, providing all appropriate third party agreements are in place.

3. Background information on the greenfield run-off calculation

The applicant has provided the MicroDrainage calculations showing the greenfield runoff rates. This point has therefore been satisfied.

4. Clarification on contributing area

From a review of the impermeable area plan, this is over 26,490m² (as there was an area of pink with no identified area on the plan), meaning the total contributing area used in the MicroDrainage calculations should be over 2.649 ha. However the applicant has stated 2.593ha of contributing area was used in the MicroDrainage calculations. This will require clarification but can be conditioned.

5. Clarification on MicroDrainage calculations and the provision of storage

Permeable paving is providing additional attenuation and has not been included within the calculations. This is appropriate at this stage of planning but should be addressed at any discharge of conditions should the proposal be approved.

6. Predicted surface water flooding and drainage of the access road

The applicant has stated how the road drainage will be part of the surface water drainage for the site. This point has therefore been addressed

7. Appropriate management and treatment

It is noted how investigation once on site will be undertaken to see if there can be provision of above ground management and treatment of surface water.

We are pleased the applicant understands that a rigorous management and maintenance of the proposed removable filters and petrol interceptor will be needed. We are therefore satisfied that any outstanding issues in relation to this matter can be conditioned.

8. Future management and maintenance of the river

We are pleased the applicant will be clearing the watercourse as part of the works on site and will be requesting an appropriate condition for this matter.

We offer a Surface Water Drainage Advisory Service, details of which are available on our website: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/surface-water-drainage.aspx>

For further guidance on HCC's policies on SuDS, HCC Developers Guide and Checklist and links to national policy and industry best practice guidance, please refer to our surface water drainage webpage: <https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/>

Informative to the LPA

We recommend the LPA obtains a maintenance plan that explains and follows the manufacturer's recommendations for maintenance or follows the guidelines explained in the SuDS Manual by Ciria. A maintenance plan should also include an inspection timetable with long term action plans to be carried out to ensure effective operation and to prevent failure. For further guidance on the maintenance of SuDS components, please refer to the SuDS Manual by Ciria.

The applicant can overcome our objection by submitting information, which addresses the points above. We ask to be re-consulted with the results and will provide you with bespoke comments within 21 days of receiving formal re-consultation.

4.1.13 London Borough of Hillingdon: [No response received]

4.1.14 TRDC Traffic Engineer: [No response received]

4.1.15 Environment Agency: [No objection subject to conditions]

4.1.15.1 Initial Comments (13/08/19) [No objection]:

The proposed development will only be acceptable if the following planning conditions are included on any planning permission granted.

Condition 1 - Scheme for compensatory habitat creation

No development shall take place until a scheme for the provision and management of compensatory habitat creation has been submitted to, and agreed in writing by, the local planning authority and implemented as approved. Thereafter, the development shall be implemented in accordance with the approved scheme.

Reasons: Development that encroaches on the marshy grassland habitat associated with the Maple Lodge Farm Ditch (main river) on site and identified in the ecology report may severely affect its ecological value. The National Planning Policy Framework (paragraph 175) states that if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

Condition 2 – Site Investigation and Remediation

No development approved by this planning permission 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 and proposed 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.

Reasons:

- To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 3 - Verification report

Prior to any part of the permitted development being brought into use, a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be 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.

Reasons:

- 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. This is in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 4 - Long-term monitoring

The development hereby permitted may not 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.

Reasons:

- 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. This is in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 5 - Previously Unidentified Contamination

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.

Reasons:

- 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 in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.
- No investigation can completely characterise a site. The condition may be appropriate where some parts of the site are less well characterised than others, or in areas where contamination was not expected and therefore not included in the original remediation proposals.

Condition 6 - SUDS Infiltration of surface water into ground

No infiltration of surface water drainage into the ground at this site is permitted other than with the written consent of the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reasons:

- To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution caused by mobilised contaminants in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 7 - Piling / boreholes /tunnel shafts / ground source heating and cooling systems (lack of information – details to be agreed)

Piling and other deep foundation designs, investigation boreholes and ground source heating and cooling systems using penetrative methods shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved details.

Reasons:

- To ensure that the proposed activities above do not harm groundwater resources in line with paragraph 170 of the National Planning Policy Framework and the Environment Agency's approach to groundwater protection, February 2018 Version 1.2 <https://www.gov.uk/government/publications/groundwater-protection-position-statements>

- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 8 - Decommission of investigative boreholes

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 permitted development.

Reasons:

- To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 170 of the National Planning Policy Framework and The Environment Agency's Approach to Groundwater Protection February 2018 Version 1.2 <https://www.gov.uk/government/publications/groundwater-protection-position-statements>
- Link to archived EA guidance: https://webarchive.nationalarchives.gov.uk/20140328154120/http://cdn.environment-agency.gov.uk/LIT_6478_8cbe6f.pdf
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Advice to Applicant

Compensatory habitat scheme requirements

The scheme should include compensatory habitat through the provision of marshy grassland/ marsh/ scrape/ pond complex within the 8m (from top of bank) buffer zone of the watercourse. A management plan for these habitats should be included with the designs. The buffer zone and newly created habitat should be managed to develop a natural character, with planting options that may include native trees and shrubs, but planned as such to not cause shading issues or bank instability over time. Grass areas should be left unmown or mown later in the season to enhance their floristic and habitat value. Fencing and structures should be kept minimal and set back beyond the buffer zone.

Fostering the development of a continuous and structurally diverse buffer zone along the watercourse will ensure this 'wildlife corridor' provides a wider and therefore more robust and sustainable range of linked habitats.

To ensure the protection of wildlife and supporting habitat. Also, to secure opportunities for enhancing the site's nature conservation value in line with national planning policy and adopted policy DM6 Biodiversity, Trees, Woodlands, Watercourses and Landscaping of the Three Rivers Local Plan. This policy identifies that there should be 'no net loss in biodiversity' at a development site and that 'Linked habitats are important in allowing species to adapt and respond to circumstances. Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity with the wider landscape.' The scheme as it is currently submitted would result in the net loss of marshy grassland and has the potential to fragment the landscape for species that use this habitat.

The NPPF (2018) now identifies that developments should be achieving net gain, in line with the 25 year plan. The provision of a new marshy grassland/ marsh/ scrape/ pond complex would compensate for the loss of habitat at this site and provide connectivity within a fragmented landscape whilst complying with these policies.

Universal condition for development on land affected by contamination

Controlled waters are particularly sensitive in this location because the proposed development site

- is within Source Protection Zone 1
- is located upon a Secondary Aquifer in hydraulic continuity with the underlying Principal aquifer.

The documents submitted in support of this planning application provides us with confidence that it will be possible to suitably manage the risk posed to controlled waters by this development. Further detailed information will however be required before built development is undertaken. It is our opinion that it would place an unreasonable burden on the developer to ask for more detailed information prior to the granting of planning permission but respect that this is a decision for the Local Planning Authority.

In light of the above, we have requested conditions in line with paragraph 170 and 178 of the National Planning Policy Framework.

The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation." (<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/>)"

In addition, the Thames River Basin Management Plan requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Without these conditions, the impact of contamination could prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Model Procedures and good practice

We recommend that developers should:

- Follow the risk management framework provided in the updated guide is called Land contamination: risk management (LCRM), when dealing with land affected by contamination.
- 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.
- 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. <https://www.claire.co.uk/projects-and-initiatives/nqms-sqp-register> The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation." (<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/>)"
- 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 and their subsequent updates:

- BS5930:2015 Code of practice for site investigations;
- BS 10175:2011+A2:2017 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, BS 6068- 6.11: 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 but more may be required to establish the conceptual site model and groundwater quality. See RTM 2006 and MNA guidance for further details).
- BS ISO 18512:2007 *Soil Quality. Guidance on long-term and short-term storage of soil samples*
- BS EN ISO 5667:3- 2018. *Water quality. Sampling. Preservation and handling of water samples*
- Use MCERTS accredited methods for testing contaminated soils at the site.
- Guidance on the design and installation of groundwater quality monitoring points Environment Agency 2006 Science Report SC020093 NB. The screen should be located such that at least part of the screen remains within the saturated zone during the period of monitoring, given the likely annual fluctuation in the water table. In layered aquifer systems, the response zone should be of an appropriate length to prevent connection between different aquifer layers within the system.

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. <https://sobra.org.uk/accreditation/register-of-sobra-risk-assessors/>

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. This is now available as online guidance: <https://www.gov.uk/guidance/land-contamination-groundwater-compliance-points-quantitative-risk-assessments>
- Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is 50m.
- For the purposes of our Approach to Groundwater Protection, the following default position applies, unless there is site specific information to the contrary: we will use the more sensitive of the two designations E.g. if secondary drift overlies principal bedrock, we will adopt an overall designation of principal.

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 updated guide is called Land contamination: risk management (LCRM).

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.) The verification report should be undertaken in accordance with in our guidance **Verification of Remediation of Land Contamination** <http://publications.environment-agency.gov.uk/pdf/SCHO0210BRXF-e-e.pdf>

- 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
- Underground Storage Tanks -The Environment Agency recommends the removal of all underground storage tanks (USTs) that are unlikely to be reused. Once the tanks and associated pipelines have been removed, samples of soil and groundwater should be taken to check for subsurface contamination. If soil or groundwater contamination is found, additional investigations (possibly including a risk assessment) should be carried out to determine the need for remediation. Refer to 'Pollution Prevention Advice and Guidance on Storing and handling materials and products' <https://www.gov.uk/government/publications/underground-storage-tanks-ppg27-prevent-pollution> and 'Defra - The Groundwater Protection Code: Petrol stations and other fuel dispensing facilities involving underground storage tanks - for England and Wales' <http://archive.defra.gov.uk/environment/quality/water/waterquality/ground/documents/groundwater-petrol.pdf> specifically those sections relating to decommissioning redundant underground fuel storage tanks and infrastructure.

NB. The previous site investigations included 3 rounds of groundwater monitoring in 2014, additional information (and more up to date) is required to complete the conceptual site model (CSM) in regard to groundwater flow directions and seasonal variations. The planning application doesn't specify what the final end uses of the commercial property will be and therefore we have concerns about the potential storage of hazardous substances at this location. Please see chapters D and F in our Approach to Groundwater Protection. <https://www.gov.uk/government/publications/groundwater-protection-position-statements> The documents also detail the high possibility of solution features underlying the site. Solution features can also act as preferential pathways for contaminants to migrate.

Flood Proofing and Resilience

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Environmental permit - advice to applicant

The Environmental Permitting (England and Wales) Regulations 2016 require a permit or exemption to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission

For further guidance please visit <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits> or contact our National Customer Contact Centre on 03708 506 506 (Monday to Friday, 8am to 6pm) or by emailing enquiries@environment-agency.gov.uk.

The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Piling

Some piling techniques can cause preferential pathways for contaminants to migrate to groundwater and cause pollution. A piling risk assessment and appropriate mitigation measures should be submitted with consideration of the EA guidance. <http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/scho0202bisw-e-e.pdf>

During piling works (especially if the piles extend to the Chalk within SPZ1 saturated zone) due to the proximity of nearby potable abstractions a weekly groundwater monitoring programme for insitu parameters and turbidity should be considered

Request for consultation on discharge of condition

We ask to be consulted on the details submitted for approval to your Authority to discharge this condition and on any subsequent amendments/alterations. Please provide us with a copy of the decision notice for our records.

4.1.15.2 Further Comments (16/10/19) following review of amended details [No objection]:

The proposed development will only be acceptable if the following planning conditions are included on any planning permission granted.

Condition 1 - Scheme for compensatory habitat creation

No development shall take place until a scheme for the provision and management of compensatory habitat creation has been submitted to, and agreed in writing by, the local planning authority and implemented as approved. Thereafter, the development shall be implemented in accordance with the approved scheme.

Reasons: Development that encroaches on the marshy grassland habitat associated with the Maple Lodge Farm Ditch (main river) on site and identified in the ecology report may severely affect its ecological value. The National Planning Policy Framework (paragraph 175) states that if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

Condition 2 – Site Investigation and Remediation

No development approved by this planning permission 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 and proposed 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.

Reasons:

- To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 3 - Verification report

Prior to any part of the permitted development being brought into use, a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be 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.

Reasons:

- 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. This is in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 4 - Long-term monitoring

The development hereby permitted may not 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.

Reasons:

- 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. This is in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 5 - Previously Unidentified Contamination

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.

Reasons:

- 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 in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.
- No investigation can completely characterise a site. The condition may be appropriate where some parts of the site are less well characterised than others, or in areas where contamination was not expected and therefore not included in the original remediation proposals.

Condition 6 - SUDS Infiltration of surface water into ground

No infiltration of surface water drainage into the ground at this site is permitted other than with the written consent of the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reasons:

- To ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels water pollution caused by mobilised contaminants in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 7 - Piling / boreholes /tunnel shafts / ground source heating and cooling systems (lack of information – details to be agreed)

Piling and other deep foundation designs, investigation boreholes and ground source heating and cooling systems using penetrative methods shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved details.

Reasons:

- To ensure that the proposed activities above do not harm groundwater resources in line with paragraph 170 of the National Planning Policy Framework and the Environment Agency's approach to groundwater protection, February 2018 Version 1.2 <https://www.gov.uk/government/publications/groundwater-protection-position-statements>
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 8 - Decommission of investigative boreholes

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 permitted development.

Reasons:

- To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 170 of the National Planning Policy Framework and The Environment Agency's Approach to Groundwater Protection February 2018 Version 1.2 <https://www.gov.uk/government/publications/groundwater-protection-position-statements>
- Link to archived EA guidance: https://webarchive.nationalarchives.gov.uk/20140328154120/http://cdn.environment-agency.gov.uk/LIT_6478_8cbe6f.pdf
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Advice to Applicant

Compensatory habitat scheme requirements

The scheme should include compensatory habitat through the provision of marshy grassland/ marsh/ scrape/ pond complex within the 8m (from top of bank) buffer zone of the watercourse. A management plan for these habitats should be included with the designs. The buffer zone and newly created habitat should be managed to develop a natural character, with planting options that may include native trees and shrubs, but planned as such to not cause shading issues or bank instability over time. Grass areas should be left unmown or mown later in the season to enhance their floristic and habitat value. Fencing and structures should be kept minimal and set back beyond the buffer zone.

Fostering the development of a continuous and structurally diverse buffer zone along the watercourse will ensure this 'wildlife corridor' provides a wider and therefore more robust and sustainable range of linked habitats.

To ensure the protection of wildlife and supporting habitat. Also, to secure opportunities for enhancing the site's nature conservation value in line with national planning policy and adopted policy DM6 Biodiversity, Trees, Woodlands, Watercourses and Landscaping of the Three Rivers Local Plan. This policy identifies that there should be 'no net loss in biodiversity' at a development site and that 'Linked habitats are important in allowing species to adapt and respond to circumstances. Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity with the wider landscape.' The scheme as it is currently submitted would result in the net loss of marshy grassland and has the potential to fragment the landscape for species that use this habitat.

The NPPF (2018) now identifies that developments should be achieving net gain, in line with the 25 year plan. The provision of a new marshy grassland/ marsh/ scrape/ pond complex would compensate for the loss of habitat at this site and provide connectivity within a fragmented landscape whilst complying with these policies.

The DEFRA biodiversity net gain calculator should be used to ensure that net gain is provided at this site and compensate for the loss of any habitat. This should include the assessment of both the Maple Lodge Farm Ditch and the adjoining grassland habitats. The link to this calculator can be found here: <http://publications.naturalengland.org.uk/publication/5850908674228224>

Universal condition for development on land affected by contamination

Controlled waters are particularly sensitive in this location because the proposed development site

- is within Source Protection Zone 1
- is located upon a Secondary Aquifer in hydraulic continuity with the underlying Principal aquifer.

The documents submitted in support of this planning application provides us with confidence that it will be possible to suitably manage the risk posed to controlled waters by this development. Further detailed information will however be required before built development is undertaken. It is our opinion that it would place an unreasonable burden on the developer to ask for more detailed information prior to the granting of planning permission but respect that this is a decision for the Local Planning Authority.

In light of the above, we have requested conditions in line with paragraph 170 and 178 of the National Planning Policy Framework.

The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation."(<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/>)"

In addition, the Thames River Basin Management Plan requires the restoration and enhancement of water bodies to prevent deterioration and promote recovery of water bodies. Without these conditions, the impact of contamination could prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Model Procedures and good practice

We recommend that developers should:

- Follow the risk management framework provided in the updated guide is called Land contamination: risk management (LCRM), when dealing with land affected by contamination.
- 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.
- 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. <https://www.claire.co.uk/projects-and-initiatives/nqms-sqp-register> The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation."(<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary/>)"
- 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 and their subsequent updates:

- BS5930:2015 Code of practice for site investigations;
- BS 10175:2011+A2:2017 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, BS 6068- 6.11: 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 but more may be required to establish the conceptual site model and groundwater quality. See RTM 2006 and MNA guidance for further details).
- BS ISO 18512:2007 *Soil Quality. Guidance on long-term and short-term storage of soil samples*
- BS EN ISO 5667:3- 2018. *Water quality. Sampling. Preservation and handling of water samples*
- Use MCERTS accredited methods for testing contaminated soils at the site.
- Guidance on the design and installation of groundwater quality monitoring points Environment Agency 2006 Science Report SC020093 NB. The screen should be located such that at least part of the screen remains within the saturated zone during the period of monitoring, given the likely annual fluctuation in the water table. In layered aquifer systems, the response zone should be of an appropriate length to prevent connection between different aquifer layers within the system.

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. <https://sobra.org.uk/accreditation/register-of-sobra-risk-assesors/>

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. This is now available as online guidance: <https://www.gov.uk/guidance/land-contamination-groundwater-compliance-points-quantitative-risk-assessments>
- Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is 50m.
- For the purposes of our Approach to Groundwater Protection, the following default position applies, unless there is site specific information to the contrary: we will use the more sensitive of the two designations E.g. if secondary drift overlies principal bedrock, we will adopt an overall designation of principal.

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 updated guide is called Land contamination: risk management (LCRM).

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.) The verification report should be undertaken in accordance with in our guidance **Verification of Remediation of Land Contamination** <http://publications.environment-agency.gov.uk/pdf/SCHO0210BRXF-e-e.pdf>

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Environmental permit - advice to applicant

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- on or within 8 metres of a flood defence structure or culverted main river (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
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The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Piling

Some piling techniques can cause preferential pathways for contaminants to migrate to groundwater and cause pollution. A piling risk assessment and appropriate mitigation measures should be submitted with consideration of the EA guidance. <http://webarchive.nationalarchives.gov.uk/20140328084622/http://cdn.environment-agency.gov.uk/scho0202bisw-e-e.pdf>

During piling works (especially if the piles extend to the Chalk within SPZ1 saturated zone) due to the proximity of nearby potable abstractions a weekly groundwater monitoring programme for insitu parameters and turbidity should be considered

Request for consultation on discharge of condition

We ask to be consulted on the details submitted for approval to your Authority to discharge this condition and on any subsequent amendments/alterations. Please provide us with a copy of the decision notice for our records.

4.1.16 Colne Valley Partnership: [Objection]

4.1.16.1 Initial comments (17/07/19) [Objection]:

The Colne Valley Park CIC exists to maintain and enhance the Colne Valley as the first taste of countryside to the west of London for the benefit of more than three million people who live within 10 miles of the Park. The Park covers an area from Rickmansworth to Staines, across parts of Herts, London, Bucks, Berks and Surrey.

The six objectives of the Park are:

1. To maintain and enhance the landscape, historic environment and waterscape of the Park in terms of their scenic and conservation value and their overall amenity.

2. To safeguard the countryside of the Park from inappropriate development. Where development is permissible it will encourage the highest possible standard of design.
3. To conserve and enhance biodiversity within the Park through the protection and management of its species, habitats and geological features.
4. To provide opportunities for countryside recreation and ensure that facilities are accessible to all.
5. To achieve a vibrant and sustainable rural economy, including farming and forestry, underpinning the value of the countryside.
6. To encourage community participation including volunteering and environmental education. To promote the health and social well-being benefits that access to high quality green space brings.

The whole of application site 19/1179/FUL is located within the Colne Valley Regional Park. We note that this site, although previously undeveloped green space, is not Green Belt and is in the local plan as an employment site.

The designation of the majority of the site as flood zone 1 may not have taken local circumstances into account: The area just the other side (east) of the loop road that serves the Sewerage works from the A412 used to belong to Thames Water and housed the sewerage drying beds before they were dug out along with the underlying gravel. In that process two large surface water mains that fed into the Thames pumping station were broken through. Regular flooding in the area during heavy rain events since that time suggests that adequate repair or re-routing has never been undertaken thus allowing storm water to simply flow from the mains that are not terminated. The outcome is that for much of the time that loop road and the proposed development site are severely impacted.

Maple Lodge Nature Reserve is referenced and quoted quite extensively in the planning application documentation, but we are disappointed to hear from the Maple Lodge Conservation Society that the applicants have not contacted it. In our view this is a serious omission, and we hope the MLCS's views on the application will be sought and given proper consideration. The impact on Maple Lodge Nature Reserve from reduced flow into watercourse that feeds their lakes is severe. We are also deeply concerned about the implications of pumping water across the Colne into Springwell Lake.

We are deeply concerned about the cumulative impacts of the developments within the Colne Valley Regional Park. In this instance, the particular contributions of this development are:

- The unresolved issues of localised flooding due to the broken pipes.
- Impact on Maple Lodge Nature Reserve and Springwell Lake.
- Loss of openness that detracts from adjacent Green Belt sites.
- Loss of green space and biodiversity with measurable net gain for biodiversity not demonstrated.
- Little information on mitigation.

The Colne Valley Park CIC therefore objects to this application.

If the Council is minded to approve this or any subsequent applications on the site, we strongly urge that conditions should be imposed to ensure mitigation through S106, or other appropriate means, to deliver the objectives of the Colne Valley Regional Park for the benefit of local residents and wildlife in the area around the site including Maple Lodge Nature Reserve, Maple Lodge Marsh, Rickmansworth Lakes Circular Walk (around Springwell Lane) and the River Colne.

4.1.16.2 Further comments (16/10/19) [Objection]:

With regard to the letter from the developer dated 10th Sept and from their consultants dated 11th September we note and welcome that there will no longer be a discharge of water to

Springwell Lake. I confirm that the rest of the points in the Colne Valley Park's letter sent on 17th July still stand.

4.1.17 Heritage Officer: [Objection]

4.1.17.1 Initial comments (23/08/19) [Objection]:

This application is for comprehensive redevelopment to provide 2 no. single storey warehouse Class B1c/B2/B8 units comprising a total of 16,590 sqm including 1,986 sqm ancillary B1a office space, access, landscaping and associated works.

The development site is to the north of Maple Lodge, a grade II listed farmhouse which largely dates from the nineteenth century, incorporating elements of an earlier, seventeenth century building (list entry number: 1173687). A separately listed barn, assumed to date from the seventeenth century, is located to the west of the farmhouse (list entry number: 1100856). The first edition OS map shows that the farm was historically isolated, forming part of a larger network of farms and arable land within the rural Rickmansworth area.

No assessment of the potential harm to the designated heritage assets has been submitted as part of this application. Due to the proximity of the site to the listed buildings, I recommend that the applicant conducts an assessment into the potential harm to the significance of the listed buildings as a result of their proposals. This should include an assessment of the wider setting of Maple Lodge Farm and analysis of historic maps, focussing upon the relationship between the farm and the application site. Without this information it is difficult to fully assess the application, which is contrary to paragraph 189 of the NPPF.

The historic setting of the farmstead has been compromised by the twentieth century development around the building, which has largely divorced Maple Lodge from its original, relatively isolated, position. Development of the site will greater infill the surrounding landscape, impacting on how the buildings are experienced, detracting from their character and historic interconnectivity with the adjoining agricultural land. Furthermore, the scale and design of the proposed buildings, due to their block-like appearance, will detract from the overall appearance of the wider landscape which was historically rural and undeveloped. Breaking up the mass of the buildings, perhaps into smaller units or reducing their size may help to lessen their impact upon the landscape. Similarly, changes to the proposed cladding, using a single colour or alternate materials may help the buildings to appear more sympathetic to the surrounding landscape. Were the design to be amended, I would recommend that the bulk of development is positioned to the north of the site and is further removed from the listed buildings. Maintaining as much as possible of the green, undeveloped appearance of the land would also lessen the impact upon the setting of the properties, which could be achieved by a reduction in the amount of hardstanding or an increased landscaping of the area.

In conclusion, the proposed development of the site will be harmful to the setting of the listed buildings, and therefore their significance. I would class this harm as less than substantial, meaning section 196 of the NPPF is relevant to this application. There may be scope for partial development of the site, however the scale of development would need to be dramatically reduced in order to not cause any harm to the listed buildings. Mitigation regarding the landscaping and positioning of the new buildings within the site may also be useful in lessening the level of harm to the listed buildings.

4.1.17.2 Further comments (11/10/19) [Objection]:

This consultation response provides additional comments following the submission of revised plans, additional information and a heritage statement by the applicant.

The development site is to the north of Maple Lodge, a grade II listed farmhouse which largely dates from the nineteenth century, incorporating elements of an earlier, seventeenth century building (list entry number: 1173687). A separately listed barn, assumed to date from the seventeenth century, is located to the west of the farmhouse (list entry number: 1100856). The first edition OS map shows that the farm was historically isolated, forming part of a larger network of farms and arable land within the rural Rickmansworth area.

The submitted heritage statement states that the land historically associated with Maple Lodge farm does not fall within the application site and this is a useful clarification of the functional relationship between the site and the designated heritage assets.

Nonetheless, the application site will still have an impact upon the wider setting of the listed buildings, which I feel could negatively impact upon their significance due to the scale of the development of the site. Whilst I acknowledge that there is limited inter-visibility between the farmhouse and the application site, due to the existing hedgerow, I still feel that views toward the farmhouse from the east of the site of the site and vice versa, will be interrupted by the construction of the proposed warehouses.

As I stated previously: the historic setting of the farmstead has been compromised by the twentieth century development around the building, which has largely divorced Maple Lodge from its original, relatively isolated, position. Development of the site will greater infill the surrounding landscape, impacting on how the buildings are experienced, detracting from their character and historic interconnectivity with the adjoining agricultural land.

Whilst the site was not directly farmed by occupants of Maple Lodge Farm, as described by the submitted heritage statement, the location and open nature of the fields and surrounding landscape are important to the historic setting of the listed buildings.

Maintaining an element of the rural appearance of the site is key to any development which occurs within the plot and I feel a further reduction of the footprint of the buildings and hardstanding, as well as an increased landscape buffer, would mitigate the harm to the setting of the designated heritage assets.

In conclusion, I maintain that the scale of the proposed development of the site will cause less than substantial harm to the setting of the listed buildings, and therefore their significance, contrary to section 196 of the NPPF. In principle I have no objection to sensitive development of the site, however the scale of development would need to be dramatically reduced in order to not cause any harm to the setting of the listed buildings. An extension of the proposed green buffer to the south of the site and increasing the landscaping of the site, decreasing the amount of proposed hardstanding could also lessen the impact upon the heritage asset's setting.

4.1.18 HCC Property Services: [No objection]

Hertfordshire County Council's Growth & Infrastructure Unit do not have any comments to make in relation to financial contributions required by the Toolkit, as this development is situated within Three Rivers' CIL Area and does not fall within any of the CIL Reg123 exclusions. Notwithstanding this, we reserve the right to seek Community Infrastructure Levy contributions towards the provision of infrastructure as outlined in your R123 List through the appropriate channels.

4.1.19 HCC Waste & Minerals Team: [No objection]

I am writing in response to the above planning application insofar as it raises issues in connection with minerals or waste matters. Should the District Council be minded to permit this application, a number of detailed matters should be given careful consideration.

Minerals

In relation to minerals, the site falls entirely within the 'Sand and Gravel Belt' as identified in Hertfordshire County Council's Minerals Local Plan 2002 – 2016. The Sand and Gravel Belt', is a geological area that spans across the southern part of the county and contains the most concentrated deposits of sand and gravel throughout Hertfordshire. In addition the site falls entirely within the sand and gravel Mineral Safeguarding Area within the Proposed Submission Minerals Local Plan, January 2019.

Adopted Minerals Local Plan Policy 5 (Minerals Policy 5: Mineral Sterilisation) encourages the opportunistic extraction of minerals for use on site prior to non-mineral development. Opportunistic extraction refers to cases where preparation of the site for built development may result in the extraction of suitable material that could be processed and used on site as part of the development. This may include excavating the foundations and footings or landscaping works associated with the development. Policy 8: Mineral Safeguarding, of the Proposed Submission document relates to the full consideration of using raised sand and gravel material on site in construction projects to reduce the need to import material as opportunistic use.

The county council, as the Minerals Planning Authority, would like to encourage the opportunistic use of these deposits within the developments, should they be found when creating the foundations/footings. Opportunistic use of minerals will reduce the need to transport sand and gravel to the site and make sustainable use of these valuable resources.

Waste

Government policy seeks to ensure that all planning authorities take responsibility for waste management. This is reflected in the County Council's adopted waste planning documents. In particular, the waste planning documents seek to promote the sustainable management of waste in the county and encourage Districts and Boroughs to have regard to the potential for minimising waste generated by development.

Most recently, the Department for Communities and Local Government published its *National Planning Policy for Waste (October 2014)* which sets out the following:

'When determining planning applications for non-waste development, local planning authorities should, to the extent appropriate to their responsibilities, ensure that:

- the likely impact of proposed, non- waste related development on existing waste management facilities, and on sites and areas allocated for waste management, is acceptable and does not prejudice the implementation of the waste hierarchy and/or the efficient operation of such facilities;
- new, non-waste development makes sufficient provision for waste management and promotes good design to secure the integration of waste management facilities with the rest of the development and, in less developed areas, with the local landscape. This includes providing adequate storage facilities at residential premises, for example by ensuring that there is sufficient and discrete provision for bins, to facilitate a high quality, comprehensive and frequent household collection service;
- the handling of waste arising from the construction and operation of development maximises reuse/recovery opportunities, and minimises off-site disposal.'

This includes encouraging re-use of unavoidable waste where possible and the use of recycled materials where appropriate to the construction. In particular, you are referred to the following policies of the adopted Hertfordshire County Council Waste Core Strategy and Development Management Policies Development Plan Document 2012 which forms part of the Development Plan. The policies that relate to this proposal are set out below:

Policy 1: Strategy for the Provision for Waste Management Facilities. This is in regards to the penultimate paragraph of the policy;

Policy 2: Waste Prevention and Reduction; &

Policy 12: Sustainable Design, Construction and Demolition.

In determining the planning application the District Council is urged to pay due regard to these policies and ensure their objectives are met. Many of the policy requirements can be met through the imposition of planning conditions.

Waste Policy 12: Sustainable Design, Construction and Demolition requires all relevant construction projects to be supported by a Site Waste Management Plan (SWMP). This aims to reduce the amount of waste produced on site and should contain information including types of waste removed from the site and where that waste is being taken to. Good practice templates for producing SWMPs can be found at:

<http://www.smartwaste.co.uk/> or

<http://www.wrap.org.uk/category/sector/waste-management>.

The county council would expect detailed information to be provided within a SWMP. The SWMP should cover both waste arisings during the demolition and construction phases. The waste arising from construction will be of a different composition to that arising from the demolition. As a minimum the waste types should be defined as inert, non-hazardous and hazardous.

The SWMP should be set out as early as possible so that decisions can be made relating to the management of waste arisings during demolition and construction stages, whereby building materials made from recycled and secondary sources can be used within the development. This will help in terms of estimating what types of containers/skips are required for the stages of the project and when segregation would be best implemented for various waste streams. It will also help in determining the costs of removing waste for a project. The total volumes of waste during enabling works (including demolition) and construction works should also be summarised.

SWMPs should be passed onto the Waste Planning Authority to collate the data. The county council as Waste Planning Authority would be happy to assess any SWMP that is submitted as part of this development either at this stage or as a requirement by condition, and provide comment to the District Council.

County of opportunity

The proposed development site is located north of the Safeguarded Area SA143 STW Maple Lodge. It should be noted that Maple Lodge Sewage Treatment Works is a permanent existing operational waste site which is safeguarded under Waste Policy 5: Safeguarding of Sites, in the county council's Waste Core Strategy and Development Management Policies document, adopted November 2012 as they contribute to a strategic network of waste management provision within the county. Whilst the county council does not object to this proposed development, any further proposals should not prejudice the site's use as a sewage treatment works.

The relationship between any proposed development alongside a safeguarded waste facility needs to be considered carefully to ensure that the operation of the existing waste facility is not jeopardised by a conflict between differing land uses.

4.1.20 Herts. Constabulary: [No objection]

In relation to crime prevention, security & safety, I have no objection with this application, however I have read the documents listed on the planning portal and cannot see security listed. I would ask that the applicants do consider security, if they would like any information regarding the police minimum security standard Secured, Secured by Design (commercial) please forward them my details.

I have attached a copy of Secured by Design (Commercial) for information, I have also advised the Chief Inspector.

4.1.21 Highways England: [No objection subject to conditions]

Referring to the notification of a planning application dated 28th June 2019 referenced above, in the vicinity of the M25 that forms part of the Strategic Road Network, notice is hereby given that Highways England's formal recommendation is that we:

b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – Highways England recommended Planning Conditions).

4.2 Public/Neighbour Consultation

4.2.1 Number consulted (Initial consultation – 27/06/19): 143

4.2.2 No of responses received: 184 objections (including from the Chiltern Society, see 4.2.5; Maple Lodge Conservation Society, see 4.2.6; Colne Valley Fisheries Consultative, see 4.2.7; and North Harrow Waltonians Angling Society, see 4.2.8)

4.2.3 A summary of responses received post 15/08/19 Planning Committee and following re-consultation on 02/10/19 is set out at 4.2.10.

4.2.4 Site Notice: Expired 22.07.2019 Press notice: Expired 26.07.2019

4.2.5 Summary of Responses to initial consultation:

- Site is part of Three Rivers Biodiversity Corridor, the Local Plan acknowledges the importance of biodiversity corridors
- Site constitutes NPPF Category 2 habitat
- Site is important for wildlife
- Proximity to Maple Lodge Nature Reserve (40 acre site) and Maple Lodge Marsh
- Nature Reserve is much valued by hundreds of people and provides safe and secure place for members to enjoy nature, including wheelchair access
- Detrimental impact on Maple Lodge Nature Reserve/Wildlife Site
- Catastrophic and irreversible effects
- Destroy foraging habitat for bats and loss of roosting sites
- Maple Lodge Nature Reserve is a major conservation area providing habitat for birds, small mammals, reptiles, fish, insects and plant life
- Negative impact on nationally important flora and fauna including 'at risk' rare/endangered species
- Removal of grassland may reduce Maple Lodge Nature Reserve to an isolated area, reducing its effectiveness
- Connectivity would be lost
- Tree Report indicates that number of trees are in poor condition, however, this is often ideal for ecology
- Negative impact on Colne Valley Park
- Diverting water to Springwell Lake will devastate Nature Reserve
- Adverse effect on water level in the lakes
- Reserve depends upon local groundwater
- Proposal to 'de-water' site would have devastating effect on water levels of lakes forming part of Nature Reserve
- Water levels already critically low during summer months
- Loss of wildlife habitat
- Impact of noise and light pollution on wildlife
- A dark sky area to be cherished

- Pollution of stream would seep into the Reserve
- Negative impacts from both construction and operation
- Development does not demonstrate any measurable net gain
- TRDC have declared a Climate Emergency
- Building on a flood plain should not be allowed
- Will increase and exacerbate localised flooding
- Harm from asbestos within the ground
- Risk to health due to asbestos
- Site is within DEFRA Nitrate vulnerable zone
- Query Councils evacuation/temporary housing policy
- Visual impact
- Overdevelopment
- Greenfield site
- Green Belt land
- Units would be twice the height of 2 storey dwellings
- Inappropriate location for 24 hour distribution
- Blight on landscape
- Inappropriate development in residential area
- 24 hour operation would result in significant noise and air pollution
- Reduction in air quality
- Noise, air and light pollution causing harm to wellbeing
- Asbestos and diesel pollution
- Air pollution is already high because of existing development including M25 and Heathrow flight path
- Concerns with noise report, measurements not taken from closest neighbours
- High level of risk to human and animal health (acute and chronic)
- Negative impact on mental and physical health
- Impact on pupils at nearby school
- Noise and disturbance for residents during construction and operation (24 hours)
- Overbearing impact on neighbouring properties in Longmore Close
- Loss of light and overshadowing
- Loss of privacy during construction
- Trees will not provide screening
- Disturbance to amenity from floodlighting
- Proximity to neighbouring dwellings
- Loss of outlook
- No sunlight/daylight impact assessment submitted
- Loss of trees
- Lack of landscaping or mitigation
- Roads are already congested
- Additional traffic will exacerbate existing problems
- 1,000 vehicle movements a day
- Heavy vehicle traffic will cause congestion
- Where will vehicles wait/park before entering the site?
- Vehicles will use Maple Lodge Close, obstructing access for residents
- Would not be able to stop staff using Maple Lodge Close
- Narrow road with limited footpaths not suitable for large vehicles or volume of traffic

- Significant highways safety concerns, particularly given proximity to schools
 - Cumulative impact of developments including HS2, quarry and hotel
 - Reports do not consider traffic associated with Woodoaks Farm
 - Roads already gridlocked if any problems on M25
 - Insufficient infrastructure to accommodate development of this scale
 - How many cars are expected?
 - Impact of overflow parking onto surrounding residential roads
 - A third set of traffic lights in this small area would introduce major incremental congestion
 - Would not be able to stop traffic using Maple Lodge Close
-
- Number of objections speak for themselves
 - Contrary to Human Rights Act
 - Contrary to Policy
 - Financial gain being put above wellbeing and the environment
 - Must be more suitable brownfield sites; No evidence to demonstrate that alternatives have been explored
 - There are sufficient empty buildings that can be used
 - Submitted reports are inadequate
 - No Environmental Impact Assessment was submitted
 - Insufficient consultation
 - Maple Lodge Nature Reserve not notified
 - Will Council Tax payers be expected to pay for flood defences?
 - Has a fire risk assessment of buildings been undertaken? How would access be gained to rear of buildings in event of fire?

4.2.6 The Chiltern Society: [Objection]

The Chiltern Society has two comments to make about this planning application.

Site Drainage Plans:

We are concerned about the plan to pump surface water drainage to Springwell Lake. This could have very serious consequences for the Maple Lodge Nature Reserve. The Maple Lodge Ditch is the main natural drainage channel which at present takes water from the site drainage into the lake on the reserve. If any surface water or ground water is diverted to a channel not flowing into the Nature Reserve this will have a devastating effect on the reserve and its wild life.

The reserve lakes already suffer from low water in dry summers without any interference with the natural drainage.

We are also concerned that there should be no pollution from the proposed industrial site into the drainage system.

Traffic Management:

There is a wide access road to the site for traffic approaching from the Rickmansworth end of the A412 but access is also possible via Maple Lodge Close. This is cause for concern. Maple Lodge Close is narrow and bordered by residential property and further down by the Maple Lodge Nature reserve.

At present there is little indication at the A412 end of Maple Lodge Close that it is unsuitable for heavy goods vehicles although this is flagged up in the opposite direction with a notice and a 10mph speed limit in addition. Obviously this needs addressing as drivers may well slavishly follow their satnavs when approaching from the Uxbridge direction. Heavy goods traffic is a serious concern for residents as it causes noise, air pollution, vibration and

possible accidents. The noise, pollution and vibration would have serious consequences for wild life both in the reserve and on adjacent land.

We urge Three Rivers Planning Department to address these points very seriously when they consider this application.

4.2.7 Maple Lodge Conservation Society: [Objection]

4.2.7.1 Initial comments (25/07/19):

We are writing to register our objections to the application for Comprehensive redevelopment to provide 2 no. single storey warehouse Class B1c/B2/B8 units comprising a total of 16,590 sqm including 1,986 sqm ancillary B1a office space, access, landscaping and associated works at Development Site, Maple Lodge, Maple Lodge Close, Maple Cross.

1. Preliminary Remarks

1.1 Although listed on the “Original List of Neighbours That Were Consulted”, we did not receive any formal notification from Three Rivers District Council (TRDC) about this application.

1.2 Although listed as consultees, 2 organisations we contacted were unaware of this planning application and thanked us for bringing it to their attention. These were Affinity Water and Herts & Middlesex Wildlife Trust (H&MWT).

1.3 We are not on the list of consultees, even though we have comprehensive historical records and knowledge of the ecology of the area and will be severely impacted by the development were it to go ahead. We believe this is a major oversight.

We note that consultants have completed a number of ecological surveys of the area which include references to Maple Lodge Nature Reserve. The species and numbers quoted have not been obtained with our permission or confirmed by us. We therefore presume they have been obtained from public record.

There are a number of places where the records quoted are incomplete or out-of-date. This is particularly relevant because the proposed development site is adjacent to the reserve. The surveys they have completed are partial and missing a number of important components which could have a bearing on the assessment of biodiversity in the area.

2. Objection Criteria

We strongly object to the granting of planning permission to this application based on the following material considerations:

- 2.1 Impact upon adjacent land use
- 2.2 Impact on nature and conservation
- 2.3 Impact on the character of the area
- 2.4 Presence of hazardous materials
- 2.5 Non-compliance with National Planning Policy Framework (NPPF)
- 2.6 Non-compliance with local planning policy

Our detailed objections are grouped under each of these material considerations. Supporting information is included in appendices.

2.1 Objection - Impact upon adjacent land use

The proposed development would have a seriously adverse impact on Maple Lodge Nature Reserve. The reserve does not exist in isolation but is interdependent on the surrounding landscape and ecology. The development would result in loss of water, loss of habitat and

loss of species, thereby degrading the nature reserve. It also poses the threat of polluting the reserve's water supply.

The consultants employed by the applicant appear to have failed to identify these potential effects.

2.1.1 Loss of water

The reserve has two lakes which are very sensitive to any changes in the water supply. The lakes are not fed by natural springs. The water comes from rainfall, the input stream and groundwater. The input stream itself, which runs alongside the development site, is fed from rainfall, groundwater and surface water run-off; it is not fed by natural springs.

The activities to "de-water" the development site to reduce groundwater levels and channel away surface water will have an immediate and detrimental impact on the water levels in the lakes.

The reserve depends on the high groundwater levels and surface water run-off during the winter months to maintain the water levels in the lakes. This is essential to compensate for the natural fall in water levels during the summer months. In recent years, with climate change, we are already noticing lower water levels and at times the lakes have dried out completely. Any further depletion in the water supply and the reserve will lose its lakes completely.

It is also noted that, because of the instability of the ground, it is proposed to use concrete piling into a chalk aquifer. This could have unpredictable consequences as far as the water supply is concerned.

(More details about the water supply to the reserve are included in *Appendix A*).

2.1.2 Loss of habitats

The reserve has a rich and varied mix of habitats, making it a precious local resource. However, were it to lose its water supply, then it would lose its lakes, its marshland, its reed bed and its plantation of alders. The very essence of the reserve would be destroyed.

2.1.3 Loss of species

With habitat loss comes the inevitable consequence of loss of species. The reserve is home to a multitude of water dependent species, many of them locally or nationally rare and endangered. All of these would be lost.

(Lists of the reserve's water dependent species, including local and national rarities are included in *Appendix B*).

2.1.4 Pollution of water supply

There is a risk of pollution in the surface run-off from the proposed development site, which would contaminate the input stream and hence the reserve. This has been confirmed by the response submitted by Hertfordshire County Council, the Lead Local Flood Authority, who object to the granting of planning permission. Their response states:

No surface water management and treatment has been provided for the site. Treatment of surface water is required for the entire site.

2.1.5 Impact of construction

The consultants' report states:

Maple Lodge ... could be impacted by the development. ... Due to the proximity to the development site, mitigation measures to minimise the impacts of dust, pollutants, noise and vibrations arising from the construction activity will need to be implemented. These will be set out within a CEMP (Construction Environmental Management Plan) for the site.

This raises the question once again – why was Maple Lodge Conservation Society not included on the list of consultees?

As far as this statement is concerned, there are no measurements of the impacts or any explanation of how they can be minimised. These cannot be left until the production of a CEMP and should have been submitted as part of the planning application process.

2.2 Objection - Impact on nature and conservation

Maple Lodge Nature Reserve is located in the Colne Valley Regional Park and forms part of the green infrastructure corridor through the valley, linking the reserve with other sites such as Maple Lodge Marsh, Springwell Lake, Springwell Reed Beds and Stockers Lake. The proposed development site is also part of this green infrastructure corridor.

Furthermore, the proposed development site is classified as a NPPF (National Policy Framework) Category 2 habitat. This has been highlighted in the response from the Herts & Middlesex Wildlife Trust which states:

This is defined as an area of significant importance to the ecological network and should be avoided, or in the terms of the development management policy, 'habitats identified for retention'. If the need for development outweighs their protection, then the habitats to be affected must be compensated in a proportionate and measurable way.

There is no mention in the consultants' reports about how Maple Lodge Nature Reserve would be compensated for the loss of its lakes, reed bed and marsh areas. It is a wetland reserve and the proposed development would destroy this. It is difficult to see how the developer could compensate for this.

2.2.1 Effects of proposed site development

Wildlife does not recognise artificial boundaries and travels from site to site in search of food and shelter. Maple Lodge Nature Reserve has a rich and varied list of species which are dependent not only the reserve but also the surrounding landscape. Currently there is a free and unhindered flow of species between the reserve and the proposed development site.

Connectivity between habitats is an important factor in sustaining healthy populations of animal species. Conversely, fragmentation of habitats inevitably leads to declines and eventually non-sustainability.

Any changes to this undeveloped and essentially wild area will ultimately impact the site itself, Maple Lodge Nature Reserve and the wider ecological environment in the valley. These detrimental effects will be caused by the loss of the existing environment as well as by the construction and operations of the proposed new development.

Both the construction and operation of the site would turn an area of natural grassland into a totally man-made, ecologically sterile environment. This would have seriously adverse effects on the wildlife of the reserve and surrounding areas.

Species would also be lost from the site because of light, noise and traffic pollution. The proposed site operations, with the accompanying light, noise and traffic pollution will have direct and detrimental effects not only on the wildlife of the site, but also on the wildlife of Maple Lodge Nature Reserve.

(Details about the wildlife that uses the proposed development site and which would be affected adversely are included in *Appendix C*).

2.2.1.1 Effects on bats (European protected species)

The site is especially important for the local population of bats, all of which are European protected species. On 12 and 14 July 2019 members of Maple Lodge Conservation Society (MLCS) carried out bat surveys in the area.
(The findings of these bat surveys are included in *Appendix D*).

The MLCS surveys were carried out in the residential area as well as along the service road adjacent to the proposed site. The consultants did not carry out any surveys in the residential area, where we detected a significant bat population.

There is also a significant bat population at Maple Lodge Nature Reserve, where 10 out of the 12 species found in Hertfordshire have been recorded.

The consultants' bat survey report states:

As there were no roosts identified, roosting bats can be considered likely absent from the site. Therefore, there are no formal mitigation measures required as no impacts are predicted to arise as a consequence of the development proposals.

We disagree with this conclusion as on-site conditions made it difficult to ascertain whether or not bats were roosting in the mature trees.

The consultants' bat survey report has little to say about the importance of the site as a foraging area for bats (see *Appendix C.1.3*). It states:

Wildlife friendly landscaping should be provided to mitigate for the loss of bat foraging habitat associated with the proposals.

The "wildlife friendly landscaping" proposed will be at the margins of the site and will not compensate for the loss of such a large area; an area known to be used not only by bats (European protected species), but also badgers (UK BAP species), Tawny Owls (BoCC amber listed) and Mistle Thrushes (BoCC red listed).

Replacing the current habitat with two warehouses and parking areas would destroy the bats' foraging habitat. Also, removal of the trees next to the service road would not only destroy feeding habitat but also remove the most probable roosting sites. In our experience replacing such sites with bat boxes is rarely successful and the boxes are seldom used.

The UK is party to the Agreement on the Conservation of Populations of European Bats, set up under the Bonn Convention. Article III of the agreement requires protection of all bats and their habitats, including the identification and protection from damage or disturbance of important feeding areas for bats.

There is no mention of this agreement in the consultants' report.

The consultants' report has also not mentioned H&MWT's Wetland Bat Enhancement Project, even though this was announced before they undertook their survey.

2.2.1.1.i Wetland Bats Habitat Enhancement Project

H&MWT has recently received a substantial amount of money from the HS2 mitigation fund to off-set the damage caused by the HS2 project elsewhere in the Colne Valley. This money is being used to improve the habitat for wetland bats, in particular the rare *Nathusius Pipistrelle* of which there are only 1200 in Great Britain & Ireland. This has been recorded on the proposed site, both by the applicant's consultants and, more recently, by MLCS members (see *Appendix D*).

Several thousand pounds has been allocated from the H&MWT fund to Maple Lodge Nature Reserve to extend the reed bed and to provide roosting sites for these bats.

This development would interfere with the bats' flight lines, reduce their incidence on the reserve and frustrate or negate the efforts of the H&MWT and MLCS— effort that is being funded from a mitigation fund because of intrusive development elsewhere!

2.2.1.2 Effects of artificial lighting

Artificial lighting is known to have a detrimental effect on a variety of species.

The planning application is for a 24-hour warehouse operation, which will involve lighting of the site as well as vehicle lights.

(A summary of the wildlife that uses the site and the impact any development would have upon it is included in *Appendix C*).

(The Bat Conservation Trust guidance notes on the effects of artificial lighting are included in *Appendix E*).

The consultants' report states:

A bat-sensitive lighting strategy should be designed to minimise the impacts of artificial lighting on **retained habitats** ... This should include directional lighting, appropriate luminescence and protection from light spill will be minimised. This will enable the continued use of the site as a commuting and foraging resource.

The key words here are “retained habitats”, which will be far less than the habitats available to the bats at present. The proposed development will undoubtedly disrupt the bats' flight paths and foraging behaviour. We are surprised that the consultants have not noted this.

Also, given the known effects of artificial lighting on wildlife and the fact that this development would be in a residential area, we would have expected the consultants to have produced a lighting assessment report. No such report has been produced.

2.2.1.3 Effects of loss of trees and invertebrates

The site is bordered by trees, many of them covered by Tree Protection Orders (TPOs). The consultants' report notes that several of the trees are in a poor state or in general disrepair.

The International Union for Conservation of Nature Report (IUCN) 2018 highlights the removal of dead and decaying wood as being a major contributory factor in the decline of insects. Many species depend upon dead or rotten wood.

It is surprising that the consultants have not mentioned this. The proposal to replace old trees with new ones is not justifiable from an ecological perspective.

On the subject of invertebrates the consultants' report states:

*The mature trees, stands of dead wood, watercourse and mosaic of rough grassland / scrub habitats all provide potential value for invertebrates. No specific survey for invertebrates was deemed necessary due to the dominance of semi-improved mown grassland and the scale of the site. Overall, the site is considered to have low potential for invertebrate species of ecological importance and the majority of habitats at **the site's peripheries** can be retained and enhanced through site proposals.*

The key words here are “the site's peripheries”, because that is all that will be left if this development goes ahead.

It is surprising that the decision was taken not to carry out an invertebrate survey on the site, especially as there are a large and diverse number of invertebrates at Maple Lodge Nature Reserve, some of them local, regional and national rarities (see *Appendix B*). As the proposed development site has been undisturbed for some time, it is likely to be disproportionately important in terms of biodiversity.

Also, there are no comments about the importance of insects on the site for the bats that use it when foraging for food. The statement from the consultants referring to “*the continued use of the site as a commuting and foraging resource*” for bats is being economical with the truth at best.

A large area such as this with trees, decaying wood, scrub and long grass will be home to a very large number of insects and bats consume an enormous quantity. The removal of this large foraging site could seriously affect the local bat populations.

Also, it is well known that the loss of insect habitat has an immediate impact on other creatures. Invertebrates are at the bottom of the food chain so their removal disrupts the whole ecosystem. Once you remove the food, the food chain will collapse.

2.2.1.4 Impact on other sites

In addition to the devastating impact on Maple Lodge Nature Reserve, other sites could be affected by the planned construction and operations, in particular:

- Maple Lodge Marsh
- Springwell Lakes and Springwell Reed Beds
- River Colne

2.2.1.4.i Maple Lodge Marsh

Maple Lodge Marsh is closer to the proposed site than Maple Lodge Nature Reserve. This contains marshy woodland and pond areas, so will also be severely affected by the diminution of water supply caused by the proposed development. And any impact on Maple Lodge Marsh will have a knock-on effect for Maple Lodge Nature Reserve, which is adjacent to it.

There is no mention of the likely impact on this smaller reserve in any of the supporting documentation to the application.

There is also no mention in any of the documentation of the Colne Valley Landscape Partnership Scheme.

2.2.1.4.i.a Colne Valley Landscape Partnership Scheme

The Colne Valley Partnership has recently been awarded £1.6 million from the Heritage Lottery Fund, augmented by a further £900,000 from local funding. This will be used to enhance the landscape within the Colne Valley and features a diverse range of projects, including conserving wildlife habitats. Some of this funding is being spent to develop Maple Lodge Marsh as a Site of Importance for Nature Conservation (SINC).

These improvements will be hindered and in some cases negated by the proposed development.

2.2.1.4.ii Springwell Lake and Springwell Reed Beds

The plans propose channelling excess surface and groundwater to Springwell Lake. There appears to have been no assessment made on what effects this would have on Springwell Lake, Springwell Reed Beds and the hydrology of surrounding areas.

2.2.1.4.iii River Colne

The site is within the River Colne Catchment. The River Colne Catchment Network state on their website:

Although lack of water is a key issue affecting many of the catchment's rivers, flooding can also be a problem particularly in the lower Colne. The Colne catchment has experienced a great deal of development, with many parts of the catchment now densely populated. Periods of heavy rain such as those experienced in 2007, 2012 and 2014 add to the risk of flooding but this can be better managed by slowing down the speed at which rain run-off enters the river, using sustainable urban drainage and by increasing connectivity with the floodplain.

Any plans to divert water off-site, and which eventually ends up in the River Colne, could cause flooding downstream without appropriate management of the flow.

Another factor to take into consideration is that the HS2 project is also planning to channel excess water as a result of their tunnelling activities into the River Colne, even though the River Colne already floods after heavy rains.

2.2.2 Lack of environmental impact assessment

Given the scale of the development and the potential damaging effects on the proposed site, other sites and the Colne Valley in general, we would have expected there to have been an environmental impact assessment report. This appears not to be the case.

Also, none of the organisations with responsibility for any of the other sites or the environment within the Colne Valley were consulted as part of the planning application process. This calls into question the sincerity of any expressions of concern for the environment made within the documentation, and also cast doubts on the validity of statements about any suggested mitigation measures.

2.3 Objection - Impact on the character of the area

We have been told that a decision was taken in 2014 to re-classify this land from green belt to one suitable for development. That decision was taken even though it is a NPPF Category 2 habitat, within the Colne Valley green infrastructure corridor and adjacent to important wildlife sites – Maple Lodge Nature Reserve, Maple Lodge Marsh, Springwell Lake and Springwell Reed Beds.

Because of that decision we are now facing a proposal that is completely inappropriate for the area. It is an area which is a mixture of residential housing, leisure facilities (cricket ground and social club) and the wildlife-friendly areas listed above plus the proposed development site. It is an area where people feel safe to enjoy their leisure time away from the main road through Maple Cross.

As part of TRDC's Local Plan, Core Strategy Policy CP12 - Design of Development states: *In seeking a high standard of design, the Council will expect all development proposals to:*

- a) Have regard to the local context and conserve or enhance the character, amenities and quality of an area*
- b) Conserve and enhance natural and heritage asset*
- c) Protect residential amenities by taking into account the need for adequate levels and disposition of privacy, prospect, amenity and garden space.*

The proposed development meets none of these objectives.

It will completely change the character of the area, making it less safe, destroying an oasis of peace and calm, whilst having a detrimental effect on the area's fragile eco-system and biodiversity.

It will change relatively quiet residential and leisure areas into a busy, industrial location with light, noise and traffic pollution.

2.4 Objection – Presence of hazardous materials

2.4.1 Asbestos risks

There are clear and present risks from buried asbestos on the site – a site which has also been identified as unstable - with the chalk bedrock susceptible to fractures and dissolution. At risk are not only those who will be working on the site, but also people on adjacent sites. The Environmental Health Assessment states:

The investigation has identified unacceptable risks to human health due to the presence of asbestos fibres and fragments in the underlying soils.

The consultants' report states:

...it is considered that the site presents a potentially unacceptable risk from asbestos to human health for commercial / industrial land use...

It also states that:

...the critical exposure pathway is via inhalation of asbestos fibres and the critical receptors are made up of future site users, adjacent site users and the site investigation, construction and underground service maintenance staff.

This is a matter of serious concern for the local residents, the employees of Thames Water and the hundreds of people who visit Maple Lodge Nature Reserve each year.

2.4.1.1 Potential for cross-contamination

Because of the nature of the ground conditions there is a potential for cross-contamination. The consultants' report states:

Under certain conditions the chalk which forms the bedrock in the area is soluble and has the potential to undergo dissolution and thus form sub-surface voids ... the chalk bedrock is classified as a principal aquifer within a Source Protection Zone 1 – Inner Catchment and therefore is fully saturated with a high permeability

The Environment Agency classification for the geology of the site is as follows:

a) Major Aquifer / High Leaching Potential

b) Soil Vulnerability Category H1

Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater

c) Soil Vulnerability Category H2

Deep, permeable, coarse textured soils which readily transmit a range of pollutants because of their rapid drainage and low attenuation potential

The consultants' report states:

The site is considered to be at moderate to high risk of dissolution features

and:

All excavations into existing made ground and the underlying natural soils should be assumed to be unstable

and:

Given the encountered ground conditions and the nature of the proposed development, the most likely foundation solution will be a piled solution....it is considered that the piles should be driven down and socketed into the structured chalk.

This would suggest that there is a high risk of cross-contamination into the water courses, and a high risk of exposure around the site especially during the construction phase.

The connectivity that exists between the site, Maple Lodge Nature Reserve, Maple Lodge Marsh, Thames Water and the residential area means that this is a very real cause for concern.

2.5 Objection – Non-compliance with National Planning Policy Framework (NPPF)

This objection has been raised by H&MWT and we endorse it.

The revised NPPF (July 2018) states:

170. Planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity

174. To protect and enhance biodiversity and geodiversity, plans should:

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

Not only do the proposed plans show no measurable net gains for biodiversity, we believe the evidence we have presented shows a potential net loss for biodiversity.

Furthermore, the development site is identified as a NPPF Category 2 habitat, which is defined as an area of significant importance to the ecological network and should be avoided as a "habitat identified for retention".

2.6 Objection – Non-compliance with local planning policy

This is another objection that has been raised by H&MWT and again we agree.

2.6.1 TRDC Development Management Policies Local Development Document

DM6 Biodiversity, Trees, Woodlands, Watercourses and Landscaping states:

a) Development that would affect a Site of Special Scientific Interest, Local Nature Reserve, Local Wildlife Site or protected species under UK or European law, or identified as being in need of conservation by the UK Biodiversity Action Plan or the Hertfordshire Biodiversity Action Plan, will not be permitted where there is an adverse impact on the ecological, geological or biodiversity interests of the site, unless it can be demonstrated that:

- i) The need for the development would outweigh the need to safeguard the bio-diversity of the site, and where alternative wildlife habitat provision can be made in order to maintain local biodiversity; and*
- ii) Adverse effects can be satisfactorily minimised through mitigation and compensation measures to maintain the level of biodiversity in the area*

The development would affect a protected species (bats), alternative wildlife habitat provision will not be made (almost complete loss of a foraging site) and the level of biodiversity in the area will not be maintained but degraded.

DM6 also states:

d) Development must conserve, enhance and, where appropriate, restore biodiversity through:

- i) Protecting habitats and species identified for retention*
 - ii) Providing compensation for the loss of any habitats*
 - iii) Providing for the management of habitats and species*
 - iv) Maintaining the integrity of important networks of natural habitats, and*
 - v) Enhancing existing habitats and networks of habitats and providing roosting, nesting and feeding opportunities for rare and protected species.*
- e) Linked habitats are important in allowing species to adapt and respond to circumstances. Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity with the wider landscape.*

This proposed development would not “maintain the integrity of important networks of natural habitats” and would “result in fragmentation or isolation of wildlife habitats”.

Section 10 of the local plan, Flood Risks and Water Resources includes the following paragraph:

10.6 This document details the following five flood risk objectives:

- Achieve flood risk reduction through spatial planning and site design*
- Enhance and restore the river corridor*
- Reduce surface water run-off from new developments*
- Safeguard functional floodplain and areas for future flood alleviation schemes*
- Improve flood awareness and emergency planning.*

The applicant proposes channelling surface water off-site in contravention of the third objective.

The applicant proposes to “de-water” the functional floodplain in contravention of the fourth objective.

Section 10 of the local plan also includes the following paragraph:

10.8 The District is entirely underlain by a pervious aquifer (high quality water-table) which is the main drinking water resource for the area. It is important to protect these resources from pollution and to safeguard them, taking into account future climate change.

The construction methods suggested for the proposed development carry with them the risk of polluting a major aquifer in contravention of this objective (see also 2.4.1.1.)

DM9 Contamination and Pollution Control states:

b) Contaminated Land

The Council will only grant planning permission for development on, or near to, former landfill sites or on land which is suspected to be contaminated, where the Council is satisfied that:

- i) There will be no threat to the health of future users or occupiers of the site or neighbouring land; and*
- ii) There will be no adverse impact on the quality of local groundwater or surface water quality.*

In this case there is clearly a threat to future users or occupiers of the site and neighbouring land (see 2.4.1) and there is a risk of contamination of the local groundwater and surface water (see 2.4.1.1)

In order to comply with its own local plan, TRDC must refuse this planning application.

2.6.2 TRDC Sustainability and Climate Change Strategy

We would also like to refer to TRDC's Sustainability and Climate Change Strategy.

On Biodiversity it states:

Aim: To maintain our natural habitats, greenspaces and wildlife

As a public body we have a duty to conserve biodiversity. Three Rivers has a rich diversity of habitats and species and we are keen to continue to manage these sustainably and use our powers to protect them if they are under threat, for example from light, noise, or water pollution as set out in our Local Plan, so that wildlife can flourish and everyone can enjoy them and gain health benefits from doing so. Encouraging people to visit local nature reserves and experience local habitats can help raise awareness of biodiversity. This in turn can help people make a positive link to the impact that can be made by managing homes and gardens in a more environmentally friendly way.

Objective 4: *Sustainably manage woodland sites, local nature reserves, and parks and open spaces owned by the Council for wildlife and people*

Objective 5: *Continue to use our powers to understand, maintain and improve biodiversity in the District*

Objective 6: *Encourage residents to help enhance biodiversity and also to interact more with the natural environment in conjunction with the Countryside Management Service, the Local Nature Partnership and other relevant organisations.*

In this instance habitats and species are under threat from light, noise, water and traffic pollution.

In order to comply with its own Sustainability and Climate Change Strategy, TRDC must refuse this planning application.

2.6.3 TRDC Declaration of a Climate Emergency

It is only two months ago that TRDC declared a climate emergency.

We refer to the Annual Council Meeting held on 21st May 2019 where TRDC agreed the following motion to declare a climate emergency:

30. Motions Under Procedure Rule 11

Council notes:

- 1. The overwhelming weight of scientific evidence pointing to man-made climate change.*
- 2. The harmful effect that such climate change is having on our lives, natural habitats and eco-systems.*
- 3. The proud record of Three Rivers District Council on environmental issues.*

Council therefore agrees to:

- 1. Declare a Climate Emergency.*
- 2. Produce a strategy and action plan to make Three Rivers carbon neutral by 2030.*
- 3. Use all practical means to reduce the impact of Council services on the environment.*
- 4. Use all planning regulations and the Local Plan to cut carbon emissions and reduce the impact on the environment.*
- 5. Work with partners in the public and private sector and implement best practice.*

6. Engage with local residents and businesses to gain their support.

7. Request Central Government to provide the support and resources needed to progress the action plan.

The proposed development will add to any problems caused by climate change.

It will further damage the natural habitats and the local eco-system. The increased traffic and lighting will add to carbon emissions and have a detrimental impact on the environment. If TRDC is serious about its declaration of a climate emergency, then this planning application must be refused.

3. Closing Remarks

As long-standing members of the TRDC Environmental Forum, we are horrified that this proposal is even being considered, and object to it in the strongest possible terms.

On behalf of the trustees of Maple Lodge Conservation Society, which represents 625+ members, and the hundreds of people who visit Maple Lodge Nature Reserve each year, we request that this planning application is refused.

4.2.7.2 Further comments (22/10/19):

We are writing to submit additional objections and comments following responses by the applicant to the previously submitted objections.

1. Additional Comments

As in our previous letter, we have grouped our objections and comments by material consideration as follows:

1.1 Impact upon adjacent land use

1.2 Impact on nature and conservation

1.3 Impact on the character of the area

1.1 Objection - Impact upon adjacent land use

1.1.1 Water issues

The proposed development poses very real risks to the water supply both from disruption and contamination. Even if risk assessments are undertaken and mitigation methods agreed, risks will remain. The applicant cannot categorically guarantee that there will be no detrimental effect to the water supply. This should be a matter of real concern to Three Rivers District Council (TRDC), especially as TRDC Development Management Policies LDD, Section 10.9 states:

Three Rivers is an area of serious water stress ...

Also Hertfordshire County Council states:

Chalk streams and underlying aquifers in Hertfordshire are highly sensitive to pollution and are under increasing pressure ...

There are recent, local examples of the water supply being seriously disrupted and contaminated by the HS2 project. This proves that risk assessments being undertaken and mitigation methods being proposed do not prevent incidents like these from happening.

There are really serious issues with both groundwater and surface water.

1.1.1.1 Groundwater

Our previously stated objections regarding groundwater still stand.

Maple Lodge Nature Reserve's lakes are very sensitive to any changes to its supply of water. As can be seen from the graph supplied with our original submission, the reserve is very vulnerable to any fluctuation in water levels. The lakes are not fed by natural springs. The water comes from rainfall, the input stream and groundwater. Of these, the predominant source is groundwater. This is illustrated in Appendix A, using data collected during September and October 2019.

Our objections cover the reduction, pollution and diversion of groundwater.

1.1.1.1.i Reduction of groundwater

The groundwater flows from the development site towards the reserve. We can confirm this to be the case based on our own experience of the direction of water flow through the reserve. Therefore, the developer's plans to reduce groundwater levels during construction would reduce the water supply to the reserve's lakes and marshland. This would result in a drop in water levels throughout the reserve, having a detrimental impact on the species that live there.

There is no mention in the applicant's documentation of what will happen to the groundwater that is pumped out during construction. If it is pumped into the stream, then it will exacerbate the flooding problem for local residents (see 1.1.1.2). The applicant must be asked to supply details of what will happen to this groundwater.

1.1.1.1.ii Pollution of groundwater

Concrete piling into a chalk aquifer has unpredictable consequences and, in this case, the piling will be through contaminated and unstable land.

According to the applicant's own consultants, the ground has a moderate to high risk of dissolution features. Such features facilitate the migration of pollutants through the ground.

The consultants also state:

All excavations into existing made ground and the underlying natural soils should be assumed to be unstable

The construction methods proposed, combined with the uncertain and unstable ground conditions, means there is a real risk of polluting a major aquifer, causing irreparable damage.

Also, the Environment Agency in their response state:

Controlled waters are particularly sensitive in this location because the proposed development site

- is within Source Protection Zone 1
- is located upon a Secondary Aquifer in hydraulic continuity with the underlying Principal Aquifer

The inherent instability of the ground conditions plus the pollutants plus the proposed method of construction means that there is a real risk of cross-contamination.

The Environment Agency's guidance, Piling into Contaminated Sites, states:

The Agency recommends that piling on contaminated sites underlain by aquifers is avoided where possible

TRDC Development Management Policies LDD, Section 10.4 states:

It is essential to protect water quality and, where possible, make efficient use of it. This means protecting and enhancing the quality and quantity of groundwater; protecting and enhancing surface water features and controlling aquatic pollution

TRDC Development Management Policies LDD, DM9 Contamination and Pollution Control states:

b) Contaminated Land

The Council will only grant planning permission for development on, or near to, former landfill sites or on land which is suspected to be contaminated, where the Council is satisfied that:

ii) There will be no adverse impact on the quality of local groundwater or surface water quality.

The National Planning Policy Framework (NPPF) Paragraph 170 states:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.

In order to comply with the above policies and guidance, TRDC must refuse this planning application.

1.1.1.1.iii Diversion of groundwater

The applicant has not provided any figures for the number of concrete piles which would be driven into the aquifer. However, based on figures for similar warehouse developments, the number could be between 2,500 and 3,000.

As has already been explained by Affinity Water, when groups of piles are driven into an aquifer, as is proposed in this application, then there is a risk that these will form a dam-like effect, altering the natural flow of the groundwater. If this were to happen, then this would divert the groundwater away from Maple Lodge Nature Reserve, which depends upon the flow of groundwater to re-charge its lakes (see Appendix A). The consequences would be devastating for the reserve, causing irreversible damage with the loss of all of its wetland habitats and species.

In response to the similar objection from Affinity Water, the applicant's consultants have replied, saying that "*the risk of ... restricting water supplies is considered to be negligible*".

Once again, the applicant has not categorically guaranteed, and cannot guarantee, that there will be no detrimental effect to the water supply. Each aquifer and body of groundwater is unique and, therefore, it is not possible to predict with absolute certainty the effects of the construction works proposed.

The consultants' state in their reply to Affinity Water:

The Environment Agency has proposed a condition in respect of penetrative piling requiring written consent from the LPA in advance of such piling methods being carried out.

Therefore, ensuring that the proposed development will not pose a risk to the public water supply.

This last statement is not true.

Consent from the Local Planning Authority will in no way ensure that the proposed development will not pose a risk to the public water supply. Recent local experiences with the HS2 project have proved this to be the case. Written conditions and consents will not prevent the public water supply from being contaminated, disrupted or diverted.

The Environment Agency has imposed conditions, not only to ensure that the proposed activities above do not harm groundwater resources in line with paragraph 170 of the National Planning Policy Framework (as mentioned above), but also to comply with the Environment Agency's approach to groundwater protection, February 2018, Version 1.2.

The Environment Agency's approach to groundwater protection, Section A2 states:

Development must be appropriate to the sensitivity of the site. Where the potential consequences of a development or activity are serious or irreversible the Environment Agency will adopt the precautionary principle to manage and protect groundwater. The Environment Agency will also apply this principle in the absence of adequate information with which to conduct an assessment.

The precautionary principle is one of the principles that underpin the EU Water Framework Directive.

The precautionary principle means that, where an outcome is uncertain, unknown or may cause harm, or if the scientific knowledge is lacking, then decision-makers should err on the side of caution.

Applying the precautionary principle to groundwater, as in this case, means that unless it can be proved that there will be no disruption or contamination of groundwater, then the development should not go ahead.

In this instance the Environment Agency has placed responsibility for ensuring there is no risk to the water supply with the Local Planning Authority. Therefore, if planning permission was granted, it would be TRDC that would be putting the water supply at risk of irreversible damage.

This would not comply with TRDC Development Management Policies LDD, Section 10.8, which states:

The District is entirely underlain by a pervious aquifer (high quality water-table) which is the main drinking water resource for the area. It is important to protect these resources from pollution and to safeguard them, taking into account future climate change.

In order to comply with the above policy, TRDC must refuse this planning application.

1.1.1.2 Surface water

We note that the applicant is now proposing to divert surface water into the adjacent stream rather than Springwell Lake, managing it through a Sustainable Drainage System (SuDS).

After heavy rain the water level in the stream rises to high levels near local residents' properties (see Appendix B). Pumping surface water from 3.4 hectares into this stream would exacerbate the situation, resulting in flooding of the residents' properties. Currently, this does not happen because the site operates successfully as a flood plain.

The applicant's consultants also say:

The tenants of both buildings will be issued with a Maintenance Regime for both SuDs and Petrol Interceptor which will form part of their tenancy agreement.

This would delegate responsibility for the management and treatment of surface water to unknown tenants. This is totally unacceptable in a situation where the continued and proper functioning of the SuDS is critical for the wider community, namely the local residents and Maple Lodge Nature Reserve.

In a situation like this responsibility for the SuDS and Petrol Interceptor must rest with a statutory body such as a water company (Affinity Water) or a local authority (TRDC), to ensure that there are no detrimental effects for Maple Cross residents or Maple Lodge Nature Reserve.

We already know that an adjacent landowner has behaved in an irresponsible manner, and there is nothing to suggest that a future warehouse tenant would not do the same.

1.2 Objection - Impact on nature and conservation

The proposed development will have an impact on the ecology of the local area, especially the site itself and Maple Lodge Nature Reserve.

1.2.1 Effects of proposed site development

There are a number of issues to be addressed here including biodiversity value, biodiversity net gain, green infrastructure and bats.

1.2.1.1 Biodiversity value

The applicant's consultants, in response to Herts & Middlesex Wildlife Trust's (H&MWT) objections have stated:

As the site has not identified species or habitats of biodiversity value there will not be any significant impact resulting from the proposed development; as such paragraph 175 (a) does not apply

The consultants define "species or habitats of biodiversity value" as only the rarest and most threatened species which are listed under Section 41 of the 2006 Natural Environment and Rural Communities Act. This definition does not appear in any of the national or local policies and guidelines.

Furthermore, the consultants' interpretation is not supported by Hertfordshire Ecology (HE), H&MWT or TRDC.

Indeed, TRDC's Development Management Policies LDD states:

8.1 Biodiversity encompasses the whole variety of plant and animal life on Earth including all species of plants and animals and the complex ecosystems of which they are part

TRDC advises all applicants that "biodiversity information and advice can be obtained from Hertfordshire Ecology (HE) and Herts & Middlesex Wildlife Trust (H&MWT)".

In answer to the question "Has HE or H&MWT been contacted on this matter?" the applicant has answered "No". So, the applicant has not taken advice from the two recommended local consultees when undertaking their surveys.

H&MWT have stated:

The submitted report does not assess impacts in a measurable way, but instead dismisses all habitats that are not section 41 habitats and offers no compensation for them. They are not devoid of biodiversity. This is not acceptable or consistent with policy or guidance.

We have been advised by TRDC's Biodiversity Officer that "the Council uses Hertfordshire Ecology to provide ecological advice on planning applications".

As TRDC's ecological advisers, HE have stated:

The majority of this grassland will be lost to the development, as well as around 30 trees. This represents a substantial local loss to ecology locally that should be compensated for. This extensive loss of open ground and the limited open space remaining will not enable any form of meaningful ecology to be maintained on the site other than around the edges, which will also be severely degraded in places in order to accommodate the proposals. Whilst I welcome the ecological enhancements suggested within the ecological report, I do not consider that they adequately compensate for removal of 3.4 hectares of semi improved grassland within the broader river valley or achieve net gains in biodiversity for the site.

TRDC's Development Management Policies LDD states:

8.4 Biodiversity is an integral part of the character of Three Rivers and contributes to the high quality of life in the area. The District supports a variety of wildlife in habitats as diverse as wetlands, woodlands, grasslands, orchards, heath and urban gardens. Conserving and enhancing the diversity of wildlife and habitats in Three Rivers is a strategic objective for the Core Strategy

Therefore, in accordance with TRDC's own policies and guidelines, NPPF Paragraph 175 (a) does apply:

If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused

In order to comply with the above policies, TRDC should refuse this planning application.

1.2.1.2 Biodiversity net gain

In relation to this, TRDC's ecological advisers, HE have stated:

I do not consider the application should be approved until sufficient further information has been provided to demonstrate that the development will not have any adverse impacts on the Nature Reserve and that it will result in net gain for biodiversity.

The proposals should not be approved unless genuine biodiversity net gain can be demonstrated.

The applicant has not provided sufficient further information to demonstrate that the development will not have any adverse impacts on Maple Lodge Nature Reserve. Therefore, the application must be refused.

Both H&MWT and Colne Valley CIC have submitted objections because measurable net gain for biodiversity has not been demonstrated.

H&MWT have stated:

Measurable net gain for biodiversity not demonstrated

Colne Valley CIC have stated:

Loss of green space and biodiversity with measurable net gain for biodiversity not demonstrated

The Ministry of Housing, Communities & Local Government advises:

Care needs to be taken to ensure that any benefits promised will lead to genuine and demonstrable gains for biodiversity. Discussions with local wildlife organisations can help to identify appropriate solutions, and tools such as the Defra biodiversity metric can be used to assess whether a biodiversity net gain outcome is expected to be achieved. Planning authorities need to make sure that any evidence and rationale supplied by applicants are supported by the appropriate scientific expertise and local wildlife knowledge.

The applicant's consultants have not demonstrated that the development will not have any adverse impacts on Maple Lodge Nature Reserve, nor have they shown any measurable net gain for biodiversity, and they have chosen not to engage with anyone who has local wildlife knowledge.

NPPF Paragraph 170 states:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity

In order to comply with the above policy, TRDC must refuse this planning application.

1.2.1.3 Green infrastructure

The proposed development site is within TRDC's Green Infrastructure Corridor. The site is also within one of the Key Biodiversity Areas, identified as part of the Hertfordshire Biodiversity Action Plan (see Appendix C). A Key Biodiversity Area is defined as:

An area within an administrative unit that supports the greatest diversity of species and the greatest extent and highest quality of semi-natural habitat

TRDC Core Strategy Policy CP9 states:

Development will not compromise the integrity of the Green Infrastructure network, by causing fragmentation, damage to, or isolation of Green Infrastructure assets including natural habitats and species

TRDC Development Management Policies LDD, Section DM6 states:

e) Linked habitats are important in allowing species to adapt and respond to circumstances. Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity with the wider landscape

H&MWT state:

The development site is identified as a category 2 habitat. This is defined as an area of significant importance to the ecological network and should be avoided, or in the terms of the development management policy, 'habitats identified for retention'. If the need for

development outweighs their protection, then the habitats to be “affected must be compensated in a proportionate and measurable way.”

H&MWT also go on to say:

These patches contain habitats not currently qualifying under S41 of the NERC Act but with high potential to do so. Whilst not receiving the same level of statutory and policy-based protection as the green areas, they should nonetheless be avoided by development and protected by the development management system where reasonable to do so. This is because they are important components of ecological networks and it is much quicker, less risky and more cost-effective to restore these habitats than to create new ones elsewhere.

NPPF Paragraph 170 states:

Planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity including by establishing coherent ecological networks that are more resilient to current and future pressures

In order to comply with NPPF and their own policies, TRDC must refuse this planning application.

1.2.1.4 Bats

We have already submitted our comments regarding the use of the site by bats, all of which are European protected species. One of these, the Nathusius Pipistrelle, is rare and the subject of a special project to improve its habitat within the local area – the H&MWT Wetland Bats Habitat Enhancement Project.

Replacing the current habitat with two warehouses and parking areas would destroy the bats’ foraging habitat.

The Government Circular 06/05: Biodiversity and Geological Conservation – Statutory obligations and their impact within the planning system, paragraph 98 states:

The presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat. Local authorities should consult English Nature before granting planning permission.

As far as we are aware, Natural England (formerly English Nature) has not yet been consulted, so planning permission must not be granted if this is the case.

1.2.1.4.i Artificial lighting

In our previous submission we commented on the effects of artificial lighting on wildlife, and on bats in particular.

This has been supported by TRDC’s ecological advisers, HE who state:

An insensitive lighting plan would prevent the effective use by some species of bats of the proposed retained and enhanced vegetative site border, and could affect the ability of bats to utilise the resources of the LWS. Lighting can also have an indirect impact, by drawing insects away from these feeding grounds, into an illuminated area inaccessible to certain bat species.

In addition, TRDC Development Management Policies LDD, Section 11.10 states:

It is important to avoid insensitive lighting (light pollution) which can have a negative effect on the amenity of surrounding areas and have a negative impact on biodiversity by influencing plant and animal activity patterns. In particular, light pollution can be harmful to birds, bats, and other nocturnal species that avoid overly lit areas.

We know from our own experience on the reserve that bats will avoid areas wherever artificial lighting is introduced.

1.2.1.4.ii Loss of trees

In our previous submission we also commented on the effects of removing trees, many of them covered by Tree Protection Orders (TPOs), and the ecological importance of old trees and dead or rotten wood.

TRDC's Landscape Officer has objected to the application and expressed similar concerns:

I do not agree with many of the categories given to trees along the eastern boundary, and do not believe that the cascade method detailed within BS5837 has been correctly applied. Although some of the older alders along the eastern boundary do have decay cavities at their base, which is not unexpected for trees of this age, most are small or isolated pockets, and have not compromised the structural integrity of the trees. Another issue with the categorisation of eastern boundary trees is that their collective value has not been considered.

Removal of the trees next to the service road would not only destroy feeding habitat but also remove probable roosting sites. In our experience replacing such sites with bat boxes is very rarely successful and the boxes are seldom used.

This is supported by Natural England who state:

You cannot assume no roosting activity because none was observed

and

You cannot put up bat boxes as like for like replacements for roost areas.

1.2.1.4.iii Loss of invertebrates

In our previous submission we noted that no invertebrate survey had been undertaken.

The applicant's consultants state in their report:

No specific survey for invertebrates was deemed necessary due to the dominance of semi-improved mown grassland and the scale of the site. Overall, the site is considered to have low potential for invertebrate species of ecological importance.

But they also state in the same report:

Whilst the habitats present at Maple Lodge LWS are undoubtedly more diverse and ecologically more important than those within the site boundary, the species record give a good indication of those that have the potential to be present at the assessment site.

The consultants took the decision that an invertebrate survey was unnecessary. There have been at least 25 Section 41 invertebrate species recorded at Maple Lodge Nature

Reserve, whose species record the consultants say gives “a good indication of those that have the potential to be present at the assessment site.”

There are plants and habitats on the development site which would support Section 41 invertebrate species. It is unsurprising that the consultants have not identified any, because they did not look for them.

TRDC Development Management Policies LDD, Section DM6 states:

a) Development that would affect a Site of Special Scientific Interest, Local Nature Reserve, Local Wildlife Site or protected species under UK or European law, or identified as being in need of conservation by the UK Biodiversity Action Plan or the Hertfordshire Biodiversity Action Plan, will not be permitted where there is an adverse impact on the ecological, geological or biodiversity interests of the site, unless it can be demonstrated that:

i) The need for the development would outweigh the need to safeguard the bio-diversity of the site, and where alternative wildlife habitat provision can be made in order to maintain local biodiversity; and

ii) Adverse effects can be satisfactorily minimised through mitigation and compensation measures to maintain the level of biodiversity in the area

The development would affect a protected species, equivalent alternative wildlife habitat provision will not be made and the level of biodiversity in the area will not be maintained but degraded.

In order to comply with the above policy, TRDC must refuse this planning application.

1.2.2 Effects on Maple Lodge Nature Reserve

We noted in our previous submission that we had not been contacted, despite being referenced throughout the planning application documentation, and despite having extensive and detailed local wildlife knowledge and experience.

Colne Valley CIC have also stated:

Maple Lodge Nature Reserve is referenced and quoted quite extensively in the planning application documentation, but we are disappointed to hear from the Maple Lodge Conservation Society that the applicants have not contacted it. In our view, this is a serious omission, and we hope that MLCS's views on the application will be sought and given proper consideration.

Furthermore, when TRDC removed the proposed development site from the Green Belt, it was re-classified with a number of conditions imposed on the developer. One of these was:

Part of the site is adjacent to a wildlife site. Measures to avoid adverse impacts and to enhance biodiversity will need to be provided by developers; applications would need to be supported by an adequate ecological survey

The applicant has given little or no consideration to the impact on Maple Lodge Nature Reserve.

1.3 Objection - Impact on the character of the area

Since our last letter the applicant's consultants have submitted a Landscape Visual Impact Assessment. This report is fundamentally flawed.

1.3.1 Landscape Visual Impact Assessment

1.3.1.1 Land classification

In paragraph 5.30 of the report they have classified the land as having “Local Value”, which they define as “undesigned landscapes and landscape features which are locally valued ... and display evidence of responsible use and value”.

TRDC's Core Strategy states:

5.91 The key Green Infrastructure assets in Three Rivers include:

...

- the Colne Valley Park.

5.92 These are important Green Infrastructure assets within the District into which other assets link through the identified Green Infrastructure corridors.

The proposed development site is within the Colne Valley Regional Park.

Therefore, the consultants should have used their higher designation of “County / District Value”, which they define as “Regional Parks, landscape designations in Structure, Unitary or Local Development Plans ... or a landscape feature that has been designated at a County/Borough/District level and forms a distinctive landscape feature”

1.3.1.2 Seasonal conditions

The consultants state:

5.3 The assessment is based on the seasonal conditions at the time of the fieldwork and the illustrated viewpoint photographs, i.e. Summer 2019. We recognise that if the assessment had been undertaken in winter months then the effects may be greater

Obviously, when the deciduous trees lose their leaves the impact will be greater. It is at that time of year, of course, that the hours of darkness become longer. Therefore, the light pollution from the development will be even greater when there is less there to screen it. The consultants have failed to take this into account in their report.

1.3.1.3 Lighting conditions

The consultants' assessment of night time illumination is as follows:

5.25 The Institution of Lighting Engineers (ILE) suggests four environmental zones relating to extant lighting conditions. They are:

- E1: Intrinsically dark landscapes (National Parks, AONBs etc.);
- E2: Low district brightness areas (Rural, small village or relatively dark urban locations);
- E3: Medium district brightness areas (Small town centres or urban locations); and
- E4: High district brightness areas (Town/city centres with high levels of night time activity).

For the purposes of this LVIA, the existing conditions in the vicinity of the site are considered to correspond with Environmental Zone E4

This last statement is not true.

At night there are dark sky conditions at the site. This has been verified by photographic evidence supplied by local residents to the Planning Officer. Despite the existence of photographic evidence to the contrary, the consultants have defended their decision stating that it was a “*professional judgement*”.

We question whether the consultants who made this “*professional judgement*” have ever visited the site at night.

TRDC Development Management Policies LDD, Section DM9 states:

e) Lighting Proposals

Development proposals which include external lighting should ensure that:

...

iii) There is no unacceptable adverse impact on the surrounding countryside

...

vi) There is no unacceptably adverse impact on wildlife

vii) Proposals in the vicinity of habitats and habitat features important for wildlife ensure that the lighting scheme is sensitively designed to prevent negative impacts on use of these habitats and habitat features.

NPPF paragraph 180 states:

Planning policies and decisions should ...

c) Limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation

In order to comply with the above policies, TRDC should refuse this planning application

1.3.1.4. Local knowledge

There is no such place as “*Maple Lodge Wildlife Park*” as mentioned in the consultants’ report. This again raises the question whether the consultants who wrote the report have actually visited the site.

1.3.1.5. Overall impact

NPPF Paragraph 127 states:

Planning policies and decisions should ensure that developments:

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting ...

The proposed development meets none of these criteria.

In order to comply with the above policy, TRDC should refuse this planning application.

2. Concluding Remarks

In conclusion, the proposed development:

- will risk causing permanent and irreversible damage to a primary aquifer
- will risk causing irreparable damage to Maple Lodge Nature Reserve
- will have a damaging impact on the local environment and wildlife
 - will cause irreversible change to the character of the area
 - does not comply with TRDC policies
 - does not comply with NPPF policies

So, once again, on behalf of the trustees of Maple Lodge Conservation Society, which represents 625+ members, and the hundreds of people who visit Maple Lodge Nature Reserve each year, we request that this planning application is refused.

4.2.7.3 Further comments (30/10/19):

I am writing in response to the letter you received from Hertfordshire Ecology, dated 28th October 2019.

As was fully explained in our letter to you dated 22nd October 2019, the main supply of water to the reserve's lakes is groundwater, not the input stream, as the letter from Hertfordshire Ecology appears to suggest. This groundwater flows from the proposed development site to the reserve.

The applicant's proposal to drive concrete piles through contaminated and unstable land into the chalk aquifer poses very real and serious risks to the reserve's lakes. As stated in our letter, this could result in the diversion and / or pollution of our water supply.

Again, as stated in our letter, the consequences would be devastating for the reserve, causing irreversible damage with the loss of all of its wetland habitats and species.

The conclusions drawn by Hertfordshire Ecology are not correct and are based on a lack of understanding of the situation.

I trust you will take this into account when considering their letter.

4.2.8 Colne Valley Fisheries Consultative (CVFC): [Objection]

On behalf of the Colne Valley Fisheries Consultative (CVFC) I wish to object to the proposed development for employment land to the North of Maple Cross, Rickmansworth, Herts, WD3 9SN. TRDC Planning Application Reference No. 19/1179/FUL

The Colne Valley Fisheries Consultative represents over 30 angling clubs and fisheries and works with various partners to improve and enhance the habitats of the Colne Valley especially for fish in rivers and lakes and for the benefit of the wildlife and the public that visit the area.

We support the position taken on this and letters of objection by The Colne Valley Regional Park, Maple Lodge Conservation Society and the Herts and Middx Wildlife Trust among other organisations and individuals who have presented justified reasons why this proposal should be rejected.

Maple Lodge Nature Reserve is referenced and quoted quite extensively in the planning application documentation, but we understand that the Maple Lodge Conservation Society have not been contacted by the applicants or indeed engaged properly through the neighbours to be consulted process. They, like us only hearing of this proposal by chance. In our view this is a serious omission, and we hope the MLCS's views on the application will be sought and given proper consideration.

In addition to inadequate environmental impact assessment and consideration there appears to be lack of understanding by the developer of the history of this site and the immediately surrounding land. The majority of the site is designated as flood zone 1.

It must therefore be questioned why there is a perceived need to discharge surface water. The access road to this site has become so regularly flooded that it now has official signage to that effect warning drivers of the likely conditions. The flooding issue has blighted the area in fact since the 1990's during which time the old Thames Water sewage drying beds and underlying gravel were removed and, in that process, surface water mains that were broken through were buried and never capped or diverted.

The area was then landfilled without any real control and it is known to contain hazardous material because outline planning applications were aborted shortly after that time as remediation of the land was too difficult.

The reason for this background is to illustrate that surface water found in that area may already be contaminated with road run off, interaction with foul sewers etc. but could also have been exposed to buried hazardous materials. It is proposed this water be pumped across at least one other water course to Springwell Lake which is not only a very important local wildlife site but is owned by Affinity Water who house two pumping stations at the location to abstract potable water from the underlying aquifer.

It has also been a successful fishing lake since 1934 and remains a well-managed site by one of our member clubs that provides family and junior facilities.

Whilst it may be feasible that pumping 'clean' water to the watercourse that serves Maple Lodge Reserve would be beneficial there is no robust evidence that any attenuation proposed would achieve the level of decontamination required.

None of the foregoing gives the necessary depth of consideration to the possibility of aquifer cross contamination and pollution during the construction process but that appears to be ignored in the application as well. I respectfully suggest it should not in determining the decision on this proposal.

The concept of biodiversity net gain appears to have been effectively ignored and yet the Three Rivers Local Plan Development Management Policies document states:

Development should result in no net loss of biodiversity value across the District as a whole...Development that would affect a site identified as being in need of conservation by the UK Biodiversity Action Plan or the Hertfordshire Biodiversity Action Plan, will not be permitted where there is an adverse impact on the ecological, geological or biodiversity interests of the site, unless it can be demonstrated that:

ii) Adverse effects can be satisfactorily minimised through mitigation and compensation measures to maintain the level of biodiversity in the area.

d) Development must conserve, enhance and, where appropriate, restore biodiversity through:

- i) Protecting habitats and species identified for retention
- ii) Providing compensation for the loss of any habitats
- iii) Providing for the management of habitats and species

The policy is more comprehensive but those deciding on this application will know that and do not need it repeated here.

It should however, given the vagueness of the application, be reason enough without all the other compelling evidence to reject this application given that there is also evidence of:

Non-compliance with the National Planning Policy Framework (NPPF) of July 2018 and Non-compliance with local planning policy and the TRDC Development Management Policies Local Development Document

We request and expect an outcome that comprehensively rejects this application.

4.2.9 North Harrow Waltonians Angling Society: [Objection]

NHWAS has approximately 300 members. Membership of the Society give access to fishing on Springwell Lake, the River Colne and back stream, as well as the Grand Union Canal. In addition to the angling, Springwell Lake hosts an abundance of wildlife and, through the permissive foot path, is of enormous recreational value to the public.

Under the proposal, there appears to be no meaningful protection of the habitat or consideration of the risks to the fishery. Through NHWAS's ongoing management of the fishery including a long term stocking program, Springwell Lake is a nationally recognised angling venue with very valuable stock of specimen size fish. The proposed plans include the pumping of waste water into Springwell Lake which puts the future of the fishery at risk. At no point have the developers, planners, contractors or land owners contacted us to discuss the implications of the proposed drainage plans on Springwell Lake. We were not notified by TRDC or asked for our input despite the very clear and direct impact it would have.

Springwell Lake, and potentially the river and the canal, will be adversely impacted by any waste water being pumped into it especially given the planned use of the development site and the increased risk of pollutants.

We object to the proposal because:

1. Risk of damage to Springwell Lake: There are already recognised drainage issues on the proposed development site, this and any excess additional water is proposed to be pumped into Springwell Lake with no meaningful consideration given to the impact on the fish stocks or biodiversity. The proposals create significant risks to the fishing and fish stocks on Springwell Lake. It would take a fishery many decades to recover from a pollution incident.

2. Risk of damage to the Springwell Reed bed and the wider area including the back stream and GUC. Connected to Springwell Lake and the back stream this important wildlife site would be at risk.

3. Impact on Maple Lodge Nature Reserve

No consideration is given to this important site.

4. Impact on bio diversity

The developers are not demonstrating any measurable net gain to bio diversity which should be required to support a planning application. Indeed the proposal includes documents that fail to recognise the importance of the areas impacted by the proposals and fail to document accurately the level of existing wildlife already known to thrive in the surrounding area.

5. Flood risk

The underlying problem of drainage on the site is not addressed by simply pumping the waste water somewhere else. The problems on the site should be addressed and the developers should not be permitted to pass the problem to others by pumping it into Springwell Lake, the back stream or the River Colne. While it may pass a desk top review, the flooding of the area in 2014 should be ample evidence that this area does suffer from flooding and moving water a few hundred metres is not a viable solution.

We trust that TRDC will reject the proposal and ensure adequate protection is in place to avoid any damage to the area in any future proposal submitted.

4.2.10 Summary of responses received post 15/08/19 Planning Committee and following re-consultation on 02/10/19: 108 responses comprised of 107 objections and 1 support.

Summary of objections:

- Previous objections remain valid
- Amendments do not mitigate concerns
- Dispute findings of reports submitted in support of application which have not been verified and contain contradictory details
- Application form incomplete/inaccurate
- No reports free of commercial objective have been provided
- Already threatened by HS2
- Elections (councillors will not get my vote)
- Will set a precedent
- Contrary to Climate Emergency declared by TRDC
- Insufficient consultation
- Any economic benefit would be limited and would not outweigh significant harm
- No Health Impact Assessment
- Impact of construction work on residents
- Asbestos
- Development will result in movement of asbestos which will be harmful to human health
- Contaminated land
- Impact on groundwater as a result of sinking piles into contaminated land
- Insufficient information provided in relation to piling
- Reports make no mention of protection of local residents
- Conflict with TRDC published strategy on contamination (Contaminated Land Inspection Strategy)
- TRDC has duty under Environmental Protection Act 1990 (Part 2a)
- Health and Safety Authority Guidance provides guidance on handling asbestos
- Developers Summary Report silent on number of contaminants
- Reference to EA guidance on piling which recommends piling on contaminated sites underlain by aquifers is avoided
- Reports ignore piling and water transmission risk
- Subsidence
- Tons of waste will be generated
- Building on flood plain is inappropriate
- Will result in flooding
- Maple Lodge Ditch is not an appropriate option as already at full capacity when there is heavy rainfall
- Affinity Water object
- Negative impact on drinking water/will pollute drinking water
- Details of end user should be provided in order that impacts can be fully considered
- Use of building 24 hours a day will impact on residential amenity, including by virtue of light and noise pollution
- Dispute findings of revised noise report
- Noise Assessment says no refrigerated HGVs or tug units but is this correct?
- No details of any plant rooms provided
- Dispute LVIA conclusions, eg. classification of site as E4 'high brightness area'
- Harmful emissions from vehicles
- Significant negative impact on human health (physical and mental), including children, site is close to local schools

- Herts second only to London in terms of premature deaths caused by air pollution
- No air quality monitoring in Maple Cross
- Air quality in Maple Cross should be monitored
- Increase in traffic and effect on the environment
- Increased traffic will impact on already congested roads
- Data not presented in clear or transparent way
- Highways safety concerns
- Risk to road safety near residential properties and 2 schools
- Errors in Transport Statement
- Statement incorrectly states that there are existing monitoring facilities (barriers to prevent HGVs using Maple Lodge Close)
- Acute parking problem in area which will be exacerbated
- Obstruction of access for emergency vehicles
- When M25 is blocked local roads are congested
- Negative impact on wildlife
- Impact on wildlife corridor
- Adversely affect feeding area for much wildlife
- Loss of grassland
- Negative impact on Maple Lodge Nature Reserve
- Negative impact on water supply to lakes at Maple Lodge Nature Reserve as a result of reduction in groundwater levels and contamination
- Impact on trees
- Tree planting/retention cannot be guaranteed
- Adversely affect Conservation Area
- Inappropriate use of land
- Land should not have been removed from Green Belt
- Location is not suitable for warehouse development
- Loss of countryside
- Overshadowing
- Sunlight assessment is misleading/dispute accuracy
- Proposal will result in loss of light
- Light pollution
- Trees will not provide screening
- Loss of property value
- Loss of view
- Visual impact of the development
- Excessively prominent in relation to adjacent properties and street scene
- Eyesore
- Monstrosity

Summary of supporting comment:

- Parts of Maple Cross have been unsightly/vacant for period of time
- Will improve the area
- Estate road to be upgraded
- Catalyst to the area

4.2.11 3 petitions objecting to the development have been received:

- A petition with 317 signatures from 'residents of Maple Cross and surrounding areas STRONGLY objecting to the above warehouse development'.
- A petition with 152 signatures titled 'Save Maple Cross from Warehouse Development Hell'.
- A petition with 278 signatures. *"We, the undersigned ask that Three Rivers District Council refuse planning permission no Ref. No: 19/1179/FUL on the grounds of*

Numerous incorrect and misleading statements from the developer: Out of date reports submitted to TRDC by the developer: Environmental and health grounds: Disturbing dangerous asbestos: Destroying rare bats feeding ground and habitat: Damage to adjacent Maple Lodge Nature Reserve: Damage to drinking water aquifers by driving piles into them: Destruction of dark night sky by light pollution: Excessive HGV, LGV and car movements causing pollution and noise 24 hours a day: It's a Flood plane".

5 Reason for Delay

- 5.1 To allow for full consideration of additional information, including re-consultation with neighbours and relevant consultees.

6 Relevant Planning Policy, Guidance and Legislation

6.1 National Planning Policy Framework and National Planning Practice Guidance

- 6.2 In February 2019 the revised NPPF was published, to be read alongside the online National Planning Practice Guidance. The 2019 NPPF is clear that "existing policies should not be considered out-of-date simply because they were adopted or made prior to the publication of this Framework. Due weight should be given to them, according to their degree of consistency with this Framework.

6.3 The Three Rivers Local Plan

The application has been considered against the policies of the Local Plan, including the Core Strategy (adopted October 2011), the Development Management Policies Local Development Document (adopted July 2013) and the Site Allocations Local Development Document (adopted November 2014) as well as government guidance. The policies of Three Rivers District Council reflect the content of the NPPF.

The Core Strategy was adopted on 17 October 2011 having been through a full public participation process and Examination in Public. Relevant policies include Policies PSP3, CP1, CP6, CP8, CP9, CP10, CP11 and CP12.

The Development Management Policies Local Development Document (DMLDD) was adopted on 26 July 2013 after the Inspector concluded that it was sound following Examination in Public which took place in March 2013. Relevant policies include DM2, DM4, DM6, DM8, DM9, DM10, DM13 and Appendix 5.

The Site Allocations Local Development Document (SALDD) was adopted on 25 November 2014 having been through a full public participation process and Examination in Public. Policy SA2 Site E(d) is relevant.

6.4 Other

Planning Practice Guidance (NPPG) (updated 2019).

The Community Infrastructure Levy (CIL) Charging Schedule (adopted February 2015).

The Localism Act received Royal Assent on 15 November 2011. The growth and Infrastructure Act achieved Royal Assent on 25 April 2013.

The Wildlife and Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2010, the Natural Environment and Rural Communities Act 2006 and the Habitat Regulations 1994 may also be relevant.

South West Herts Economic Study (2018) and Update (2019).

7 Planning Analysis

7.1 Principle of Development

- 7.1.1 The application site is an undeveloped Greenfield site located within an allocated employment area as set out in the Site Allocations LDD (adopted November 2014). This allocation removed the site from the Green Belt.
- 7.1.2 The application proposes the construction of two warehouses comprising a total of 16,140sqm class B1c/B2/B8 use including 1,986sqm of ancillary B1a office space.
- 7.1.3 Place Shaping Policy (PSP) 3 of the Core Strategy (adopted October 2011) requires that development in Secondary Centres, such as Maple Cross, will;
- c) Maintain and enhance employment opportunities in Secondary Centres but redistribute some employment floorspace through mixed use development in Kings Langley employment area and an extension in floorspace at Maple Cross/Maple Lodge.*
- 7.1.4 Policy CP6 of the Core Strategy advises that the Council will support development proposals that sustains parts of the District as attractive areas for business location. It also comments that the sustainable growth of the Three Rivers economy will be supported by continuing to focus employment use within key employment areas.
- 7.1.5 Policy SA2 of the Site Allocations LDD (adopted November 2014) states that allocated employment sites will be safeguarded for business, industrial and storage or distribution uses.
- 7.1.6 The provision of a B1a, B1c, B2 and B8 floorspace would increase the amount of employment floorspace within the district, whilst safeguarding the site for business, industrial, storage and distribution uses. The proposal would accord with above mentioned policies in this regard.
- 7.1.7 The South West Herts Economic Study (2018) indicates a need for 152,000sqm of B1c/B2 floorspace between 2018 and 2036 (8,600sqm per annum) and 329,500sqm of B8 (18,300sq m per annum) across the whole of South West Herts². Of these amounts, it is estimated that in Three Rivers, there should be provision of 13,200sqm of B1c/B2 floorspace and 15,600sqm of B8 floorspace over the 2018-2036 period (or 700sqm of B1c/B2 floorspace and 900sqm of B8 floorspace per annum). This is estimated to require a land requirement of 3.3ha and 3.9ha respectively. The application proposes B1c, B2 and B8 uses to comprise the majority of the floorspace within the proposed development. The application site is an existing employment allocation which offers a suitable location to provide a proportion of the land required to meet these needs. It is therefore considered that the proposed development would contribute to meeting the need for B1c, B2 and B8 floorspace set out in the South West Herts Economic Study (2018).
- 7.1.8 The proposed office floorspace (B1a) is ancillary to these main uses (B1c, B2 and B8). The South West Herts Economic Study estimates that 37,600sqm of office floorspace should be provided in Three Rivers over the period of 2018-2036 (equating to 1,700sqm per annum). The proposed office floorspace would contribute to meeting this need and would enable the efficient operation of the main uses (B1c, B2 and B8) and is therefore also supported.
- 7.1.9 In summary, there is a need for Class B1a, B1c, B2 and B8 floorspace within the district and the proposed development within an existing allocated employment site would contribute to meeting the identified need. The proposal in this regard would therefore

² The figures provided are based upon the Preferred Scenario from The South West Herts Economic Study (2018); this is the trends based scenario.

comply with Policies PSP3 and CP6 of the Core Strategy (adopted October 2011) and Policy SA2 of the Site Allocations LDD (adopted November 2014).

7.2 Green Belt

7.2.1 As noted above, the development site is outside of the Metropolitan Green Belt, the Green Belt does adjoin the eastern site boundary and a narrow strip outlined in red on the site location plan and linking to Maple Lodge Close to the south does fall within the Green Belt. No development is proposed within this strip, which is excluded from the proposed site layout plans. The proposed buildings, parking and servicing yards etc. are outside the Green Belt area, only the existing access road is within the Green Belt.

7.2.2 At paragraph 133 the NPPF states that;

“The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence.”

7.2.3 Paragraph 134 of the NPPF continues;

“Green Belt serves five purposes:

- a) to check the unrestricted sprawl of large built-up areas;*
- b) to prevent neighbouring towns merging into one another;*
- c) to assist in safeguarding the countryside from encroachment;*
- d) to preserve the setting and special character of historic towns; and*
- e) to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.”*

7.2.4 No buildings, parking or service yards to either of the units would be located within the Green Belt.

7.2.5 It is noted that the vehicular access to Unit 1 crosses a narrow strip of the Green Belt. Paragraph 146 of the NPPF states that *“Certain other forms of development are also not inappropriate in the Green Belt provided they preserve its openness and do not conflict with the purposes of including land within it.”* One of these is: *“b) engineering operations”*. The creation of this access given its limited size and scale would not harm the openness of the Green Belt.

7.2.6 Although the buildings, parking areas and service yards are not located within the Green Belt it is necessary to consider whether they would harm the openness of the adjacent Green Belt. The fact that they can be seen does not mean that they are automatically harmful to openness. Although the site is free from built form and hard surfacing it is not within open countryside as there is built development to the north/north-west including large commercial buildings and there is also the Maple Lodge Treatment Works to the south.

7.2.7 The buildings would be set back from the eastern edge of the site with the Green Belt and, although the buildings would be large and there are extensive parking and hard surfacing areas, they would be close to existing buildings and would not be harmful to the openness of the Green Belt.

7.3 Impact on Designated Heritage Assets

7.3.1 There are two Listed Buildings to the south west of the site on Maple Lodge Close. Maple Lodge Barn is a Grade II Listed Building located on the corner of Longmore Close. Maple Lodge Farm to the east includes a Grade II Listed detached brick built dwelling dating from the early nineteenth century.

7.3.2 Following initial comments from the Heritage Officer a Heritage Statement was submitted in support of the application and this has also been considered by the Heritage Officer.

7.3.3 Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990 states:

"In considering whether to grant planning permission or permission in principle for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses."

7.3.4 Paragraph 190 of the NPPF advises that:

"Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset's conservation and any aspect of the proposal."

7.3.5 Paragraphs 193 and 194 of the NPPF state that:

"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 (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance."

"Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification."

7.3.6 Paragraph 196 of the NPPF advises 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..."

7.3.7 The NPPG advises that public benefits may follow from many developments and could be anything that delivers economic, social or environmental objectives as described in the NPPF. Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits, for example, works to a listed private dwelling which secure its future as a designated heritage asset could be a public benefit.

7.3.8 Policy DM3 of the Development Management Policies LDD advises that the Council will preserve the District's Listed Buildings and that "Applications will only be supported where they sustain, conserve and where appropriate enhance the significance, character and setting of the asset itself and the surrounding historic environment."

7.3.9 While the application site is located to the north of Maple Lodge Farm and its associated outbuildings, the Heritage Statement asserts that the application site was not historically part of the farm holding of Maple Lodge Farm. The Heritage Officer agrees with this conclusion. Due to the tall and dense vegetation belt to the south and west boundaries with Maple Lodge Farm and its curtilage, inter-visibility between the two sites is limited. The buildings at Maple Lodge Farm are not clearly visible from the application site. However, due to the overall height and scale of Unit 2 there may be views of the upper parts of the proposed building from Maple Lodge Farm and its curtilage and this could affect its setting.

- 7.3.10 Maple Lodge Barn is located on the corner of Longmore Close and its setting has been historically affected by the development of Longmore Close. As with Maple Lodge Farm, due to the overall height and scale of Unit 2 there may be views of the upper parts of the proposed building from Maple Lodge Barn and its curtilage and this could further affect its setting.
- 7.3.11 It is acknowledged that the Heritage Officer considers that further amendments to the size and positioning of the buildings would reduce the impact on the setting and significance of the Listed Buildings. The Heritage Officer concludes that the current proposals would cause less than substantial harm to the setting and significance of the Listed Buildings. Therefore the provisions of paragraph 196 of the NPPF are engaged, namely that any harm should be weighed against the public benefits of the proposal.
- 7.3.12 As set out in paragraph 7.3.7 above the NPPG advises that public benefit can take many forms including economic benefits and that benefits do not always have to be visible or accessible to the public in order to be genuine public benefits. In this case, the application site is allocated for employment use within a wider allocated employment site, this designation suggests that some development was anticipated. The 'Progress Update' dated 14/08/2019 submitted by the agent indicates that if the development was Use Class B1c floorspace, up to 280 jobs could be created, and if the development was Use Class B8 floorspace, up to 194 jobs could be created. These represent significant numbers of jobs in terms of a contribution to the local economy and, particularly given that the site is part of an allocated employment site, this represents a significant public benefit of the scheme. This public benefit is considered to outweigh the less than substantial harm to the setting and significance of the heritage assets (Maple Lodge Farm and Maple Lodge Barn).
- 7.3.13 In conclusion, whilst it is acknowledged that the proposal would cause less than substantial harm to the setting and significance of the Listed Buildings, this harm is considered to be outweighed by the public benefits of the substantial number of jobs that could be created on this allocated employment site.

7.4 Character & Appearance (including impact on the landscape)

- 7.4.1 Paragraph 124 of the NPPF states that:

"The creation of high quality buildings and places is fundamental to what the planning and development process should achieve. Good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities..."

- 7.4.2 Paragraph 127 of the NPPF states amongst other things that:

"Planning policies and decisions should ensure that developments:

a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities); and

f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience."

7.4.3 Paragraph 130 of the NPPF states that:

“Permission should be refused for development of poor design that fails to take the opportunities available for improving the character and quality of an area and the way it functions...Conversely, where the design of a development accords with clear expectations in plan policies, design should not be used by the decision-maker as a valid reason to object to development...”

7.4.4 Policy CP1 of the Core Strategy (adopted October 2011) advised amongst other things that:

“All development in Three Rivers will contribute to the sustainability of the District. This means taking into account the need to:

n) Promote buildings and public spaces of a high enduring design quality that respects local distinctiveness, is accessible to all and reduces opportunities for crime and anti-social behaviour”

Whilst this criterion talks about buildings and public spaces it stresses the importance of design quality and local distinctiveness.

7.4.5 In accordance with the requirements of Policy CP12 of the Core Strategy (adopted October 2011) development should amongst other things:

“a) Have regard to the local context and conserve or enhance the character, amenities and quality of an area.

d) Make efficient use of land whilst respecting the distinctiveness of the surrounding area in terms of density, character, layout and spacing, amenity, scale, height, massing and use of materials”

7.4.6 The combined width (north to south) of Units 1 and 2 would be 181 metres excluding the 3.8 metre spacing between them. The height of Unit 1 at its edge would be approximately 12.5 metres, with its roof sloping to a maximum height of 16 metres. Unit 2 would have a height of approximately 10 metres at its edge, increasing to a maximum of approximately 13.2 metres. Unit 1 would be sited between 10 and 15 metres from the western site boundary. It is noted that the north-west corners of Unit 1 would sit close to the splayed northern site boundary. Unit 2 would be sited between 11 and 27 metres from the western boundary. Unit 1 would be sited between 35 and 41 metres from the access road to the east and Unit 2 would be sited between 40 and 51 metres from the access road. Three new vehicular accesses are proposed along the access road, with some trees retained between them. Some soft landscaping is proposed around the perimeter of the site, however, the space between the buildings and access road and between Unit 1 and the northern site boundary would be largely occupied by hardstanding for service yards and car parks.

Character

7.4.7 In terms of land use, the area is mixed in character. To the east of the site are open fields. To the south west of the site are a number of residential roads including Longmore Close, Maple Lodge Close and Franklins. To the west of the site are a number of office buildings. Other uses in the nearby area are Maple Lodge Water Treatment Works and the Reach Free School.

7.4.8 In view of the variety of uses within the area and noting that the site is within an allocated employment site, the proposed uses would not be out of character within this mixed area.

7.4.9 The proposed buildings are large in terms of their footprint. However, the various commercial buildings to the west are also large. For example, Maple Cross House is 86 metres by 44 metres. The three buildings at The Rivers Office Park have a combined length

of 97 metres facing Maple Cross House and 100 metres facing Hertford Place, although it is acknowledged that there are gaps between the individual buildings.

- 7.4.10 Therefore while it is acknowledged that the proposed buildings would be larger than these existing buildings, it could not be said that buildings with large footprints would be out of keeping with the area.
- 7.4.11 The proposed buildings would have extensive service yards and car parking; however, Hertford Place, The Rivers Office Park and Maple Cross House all have extensive areas of car parking adjacent to the buildings and these car parks are on more than one floor.
- 7.4.12 As noted above, the height of Unit 1 at its edge would be approximately 12.5 metres, with its roof sloping to a maximum height of 16 metres. Unit 2 would have a height of approximately 10 metres at its edge, increasing to a maximum of approximately 13.2 metres. The buildings would be relatively tall; however, the heights would not be inappropriate for the proposed uses.
- 7.4.13 There are a range of building heights in the area, ranging from the 2-3 storey residential buildings in Longmore Close and Franklins to the taller commercial buildings and Reach Free School, although it is acknowledged that the latter is some distance from the site. Maple Cross House is a three storey building with a flat roof, the three buildings in The Rivers Office Park are also three storeys in height but have pitched roofs, and finally Hertford Place is four storeys in height. While the heights of these buildings are not known floor to ceiling heights in commercial buildings will be higher than in a residential building. The site adjacent to Hertford Place on the corner of the A412 (Denham Way) and the access road has an extant planning permission for a four storey hotel between 14.5 and 20.5 metres in height. Whilst this building has not been constructed a Certificate of Lawfulness has been granted to confirm that the planning permission has been implemented.
- 7.4.14 Therefore it is considered that the heights of the proposed buildings would not be out of keeping with existing buildings and would be less than a building that could be lawfully constructed on an adjacent site.
- 7.4.15 In summary it is considered that the proposed uses, the scale of the proposed buildings, the site coverage by buildings and hard surfaced areas and the heights of the proposed buildings would not be demonstrably harmful to the character of the area and the pattern and form of development in the area.

Layout & Appearance

- 7.4.16 Beyond the west of the site is Maple Lodge Farm Ditch. As set out earlier in this section of the report the two units would be positioned between 10 and 27 metres from this watercourse (apart from North West corners of Unit 1). Amended plans submitted during the course of the application have increased the spacing of parts of Unit 2 from the western boundary and therefore the watercourse. The separation distances provided will ensure the buildings would not be cramped relative to the west boundary and also provides space for significant landscaping including tree planting and will ensure that the setting of the watercourse is not adversely affected. Unit 2 would be 11 and 16 metres from the south boundary which would ensure Unit 2 does not appear cramped relative to the south boundary.
- 7.4.17 The service yard to Unit 1 would be to the north of the building, it provides: areas for lorries to load and unload; parking for lorries; a lorry turning area; and refuse and recycling. The car parking is located to the east of the building between it and the access road and this area would provide car parking including accessible spaces and cycle parking. The entrance to the building for visitors and employees is located at the north east corner.

- 7.4.18 The service yard to Unit 2 would be to the east of the building between it and the access road, it provides: areas for lorries to load and unload; parking for lorries; a lorry turning area; and refuse and recycling. The car parking is also located to the east of the building and this area would provide car parking including accessible spaces and cycle parking. The entrance to the building for visitors and employees is located at the south east corner.
- 7.4.19 With regards to both units the entrances for visitors and employees are appropriately located. The accessible parking spaces are well located immediately adjacent to the entrances and are connected to them by footpaths. The cycle parking areas are also located close to the entrances which will encourage their use. The areas for refuse and recycling containers would be enclosed and are appropriately located within the service yards.
- 7.4.20 The layout of the site and the individual units and their associated car parks, service yards etc. is well considered and is acceptable.
- 7.4.21 Although they are different in size and orientation the two units would be similar in terms of their overall appearance and design features. Each unit has ancillary office accommodation. The entrance to both buildings for visitors and employees is marked by a glazed entrance feature almost the full height of the building. The office areas themselves have second and third floor windows along parts of the elevations. Each building would feature vehicle loading doors. Around the buildings are ground floor fire exit doors. Otherwise there will be no openings in the elevations of the buildings.
- 7.4.22 In terms of their roofs, both buildings would have two shallow pitched roofs, which is necessary given the depths of the buildings. Both buildings would have rooflights including to their internal facing pitches.
- 7.4.23 In terms of materials for the majority of the elevations of the buildings metal cladding is proposed with a half round profile. The cladding to the elevations would be in three bands of colour, with the darkest at the base. For the office elements of the buildings composite grey cladding is proposed. The roof would be 'Merlin Grey' metal cladding.
- 7.4.24 The buildings are functional in terms of their design and appearance but this is neither inappropriate nor unacceptable given their proposed uses. The buildings largely comprise blank elevations that are broken up by loading dock doors to one side. The ancillary office accommodation has a greater area of glazing and the entrance to the buildings are marked by three storey framed glazed elements. These glazed elements serve to break up that part of those elevations and the mass and form of the units.
- 7.4.25 Although the pitched roofs increase the overall heights of the buildings, the shallowness of the roof pitches is such that the highest parts of the roofs are considerably set in from the edges of the buildings and would not be clearly perceptible when close to the buildings; although it is acknowledged that from further away they would be visible but their height relative to the elevations would be limited.
- 7.4.26 A common design approach has been adopted for both units, which would produce a coherent and consistent appearance. This approach, particularly when considered alongside the materials to be used (as discussed below) would produce a high quality design.
- 7.4.27 As set out above, some areas of cladding are profiled while others are flat on different areas of the buildings. The use of different profiles, together with the use of different colours would go some way to help reducing the mass and bulk of the buildings and is considered an acceptable approach to their external appearance.
- 7.4.28 The colour scheme would have graduated blocks of colour with a dark colour at the base and light colour at the top. In addition, there would be different coloured panels used to

frame parts of the elevations to denote entrance points etc. Colour shades would graduate up the buildings from darkest at the bottom to lighter shades at the higher levels. The darker colour would have a heavier, more solid appearance helping to draw the eye down the buildings towards the ground, while the lighter colour would have a lighter appearance allowing the higher part of the buildings to sit better against the sky backdrop.

- 7.4.29 While the end user(s) is/are not known and they may have their own branding and colour palette it is proposed that a consistent material and colour scheme would be used for both buildings to ensure continuity. Future occupiers of the development would be required to apply for separate consent to secure the provision of advertising.
- 7.4.30 It is considered reasonable and necessary to impose a condition requiring samples of the external materials to be submitted in order to ensure that the materials are of appropriate quality and appearance and to ensure consistency of approach between the two buildings and their external areas. It is also considered necessary to impose a condition to control the installation of means of enclosure across the site so as to safeguard the ongoing external appearance of the development.
- 7.4.31 In summary, it is considered that the layout and appearance of the buildings is acceptable and would result in a high quality design solution as advocated by the NPPF and Policy CP12 of the Core Strategy (adopted October 2011).

Impact on the Landscape

- 7.4.32 In order to assess the visual impact of the development on various visual receptors and the character and appearance of the landscape the applicant has submitted a Landscape and Visual Impact Assessment (LVIA).
- 7.4.33 The LVIA assesses the impact of the development from 18 viewpoints, some of which are immediately adjacent to the site such as Longmore Close and the junction with the A412 (Denham Way), and others are further away such as Long Lane, Mill End and to the east of Springwell Lake. The LPA requested that 8 other viewpoints in the wider area be considered in addition. The LVIA states that these were visited; however, it was found that the development would not be seen from any of them due to existing vegetation and/or topography.
- 7.4.34 The LVIA considers the impact on 3 types of receptor. These being residents, recreational users (eg. users of local footpaths and bridleways) and drivers. As there is no right to a private view, views from residential properties or their gardens do not need to be assessed as part of an LVIA, however, the LVIA considers public views from the adjoining residential areas. The LVIA considers the visual impact of the development on the landscape at two points in time: Year 1 (i.e. Immediate post completion of the development and any landscaping), and Year 15 (i.e. when the development will have become an established part of the local area and landscaping will have matured).
- 7.4.35 The LVIA has been undertaken in accordance with the most up-to-date version of 'Guidelines for Landscape and Visual Impact Assessment' prepared by the Landscape Institute.
- 7.4.36 Firstly it is considered that the LVIA has been prepared using an appropriate methodology and the viewpoints chosen are also appropriate.
- 7.4.37 The LVIA considers that for the majority of the 18 viewpoints the impacts on the landscape would not be significant or adverse. This is for a number of reasons including the nature of the views (glimpsed views and only the upper part of the buildings would be visible) and intervening existing and/or proposed trees and other vegetation.

- 7.4.38 There are 4 viewpoints where the LVIA identifies that the impact of the development on the landscape would be much greater. These are set out below.
- 7.4.39 Viewpoint 11 (Longmore Close). Being a residential location the sensitivity of this viewpoint is high. There are gaps in the existing trees along the west boundary of the application site, so there will be glimpses of the development through these gaps. At Year 1 the effects of the development would be significant. It is proposed to implement a landscaping scheme along this boundary including water tolerant trees that would be 4.5 – 5 metres high when planted. By Year 15 the landscaping will have matured and will screen views of the development, therefore the effects will not be significant.
- 7.4.40 Viewpoint 9 (Maple Lodge Close/Chiltern Sports and Social Clubhouse and Recreation Ground). The LVIA concludes that the effects on road users in Maple Lodge Close would not be adverse. However, the effects on the Clubhouse and Recreation Ground users would be greater.
- 7.4.41 Being a location that will be used by a number of people, the sensitivity of this viewpoint is high. There are gaps in the existing trees along the south boundary of the application site, so there will be glimpses of the development through these gaps. At Year 1 the effects of the development would be significant. It is proposed to implement a landscaping scheme along this boundary including trees that would be 4.5 – 5 metres high when planted. By Year 15 the landscaping will have matured and will screen views of the development, therefore the effects will not be significant.
- 7.4.42 Viewpoint 3 (Junction of Denham Way (A412) and the access road). The most sensitive receptors at this viewpoint would be users of the footpath adjacent to the main road. There would be unobstructed views of the Unit 1, although there is a yellow hoarding around the site on the corner of the junction. At Year 1 the effects of the development would be moderate. At Year 15 the effects would not be significant. It is noted that the site behind the yellow hoarding has an extant planning permission for a 4 storey hotel between 14.5 and 20.5 metres in height; this consent has been implemented, the hotel has not been constructed to date. The LVIA comments that the hotel and car park would screen views of the proposed development when completed; however, while the consent has been implemented there is no guarantee that the building will be completed. Therefore the LPA does not consider that the potential screening that the hotel could provide is decisive in the landscape impact.
- 7.4.43 Viewpoint 14 (Residential dwellings on Long Lane). Being a residential location the sensitivity of this viewpoint is high; however, these dwellings are located some distance from the site (approximately 1km from viewpoint 14 to edge of application site). There will be long distance, glimpsed views towards the northern boundary of the development across open fields. The newly constructed buildings at the Reach School would be more visible and would occupy part of the view in the middle distance. They may also provide some screening of the proposed development. At Year 1 the effects of the development would be moderate. At Year 15 the effects would not be significant.
- 7.4.44 The LPA agrees with the conclusion of the LVIA with regards to the assessment of the impact on the various viewpoints.
- 7.4.45 As part of the visual impact assessment the LVIA has considered the effects of night time illumination and considers that the existing conditions in the vicinity of the site correspond with Environmental Zone E4 'High district brightness areas (Town/city centres with high levels of night time activity)', as defined by the Institution of Lighting Engineers. The LPA does not agree with this categorisation and considers that the more appropriate categorisation of the existing conditions is Environmental Zone E3 'Medium district brightness areas (Small town centres or urban locations)'. Notwithstanding this disagreement, this does not affect the LPA's conclusions with regards to the assessment of the impact on the various viewpoints.

- 7.4.46 The LVIA also considers the impact on the landscape character of the area. The application site falls within the North Thames Basin (a national landscape character area) and the Colne Valley Gravel Pits (a regional landscape character area). The LVIA suggests that the main visual changes to the character of the landscape would occur at viewpoints in relatively close proximity to the application site and this means that the extent of any perception of landscape change and the viewpoints from where this change would be perceived would be restricted to a localised area. The LVIA continues by arguing that the change in character would be seen in the context of the adjoining land uses. The LVIA considers that the proposed development would not become a noticeable feature in the landscape. The LVIA concludes that the level of change on the landscape character would be moderate to minor and not significant.
- 7.4.47 The LPA agrees with the conclusion of the LVIA with regards to the impact on landscape character.
- 7.4.48 In summary, it is not considered that the proposed development would have an adverse visual impact on the landscape or an adverse impact on the character of the landscape.

Character & Appearance (including impact on the landscape) – Conclusion

- 7.4.49 Overall and on balance although the buildings would be large and would be significant features, the scale, layout and design of the proposed development would be acceptable and would not have demonstrably harmful impacts on the character and appearance of the street scene, the general locality or the wider landscape. The proposed development would represent the quality of design sought by the NPPF and Core Strategy and would be acceptable in this regard.
- 7.5 Impact on Amenity
- 7.5.1 Paragraph 127 of the NPPF advises that planning policies and decisions should ensure that developments create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.
- 7.5.2 Policy CP6 of the Core Strategy (adopted October 2011) advises that the Council will support development that sustains parts of the District as attractive areas for business.
- 7.5.3 Policy CP12 of the Core Strategy (adopted October 2011) states that the Council will expect development proposals to protect residential amenities.
- 7.5.4 There are no residential neighbours to the immediate north or east of the site. To the east are open fields and to the north, the application site adjoins Witney Place, Denham Way where planning permission was granted in 2007 (07/1401/FUL) for the erection of a four-storey hotel. This consent has been implemented, but not built out to date. The approved layout includes parking to the rear (southern) boundary of this site where it adjoins the application site and service yard of Unit 1. The proposed development of the application site would not be of detriment to or impact on the ability to build out the adjacent permission.
- 7.5.5 The closest residential neighbours are located to the west and south on Maple Lodge Close and Franklins and Longmore Close, which are accessed via Maple Lodge Close. The closest neighbour is No. 19 Longmore Close. This is a two-storey end of terrace dwelling that is orientated with its eastern flank elevation running roughly parallel with the western boundary of the application site. There are no first floor flank windows. To the rear of the dwelling is a raised deck with steps down to the remainder of the garden that is laid to lawn and extends to the rear and around the side of the dwelling. The dwelling does not have any boundary treatment marking its eastern boundary, with the Maple Lodge Farm Ditch that runs between No. 19 and the application site forming the boundary.

Overshadowing/Loss of Light/Visual Impact

- 7.5.6 Unit 1 would be located to the north of the site with Unit 2 to the south sited approximately 25 metres from the dwelling at No. 19 Longmore Close at the closest point (rear corner of dwelling). Unit 2 would have a width (north to south) of 97 metres. Amended plans have been submitted during the course of the application, which have reduced the height of Unit 2 and its floor area, such that the spacing to the western boundary with Longmore Close has been increased. A distance of approximately 3.8 metres would separate Unit 1 and Unit 2. The combined width (north to south) of Units 1 and 2 would be 181 metres. The height of the building closest to the boundary would be approximately 10 metres (originally 12.5 metres), with the roof sloping to a maximum height of 13.2 metres (originally 16 metres). The height of Unit 1, which is located over 70 metres from the closest residential neighbour, has not been amended.
- 7.5.7 When the preliminary report was discussed, Members referenced guidance within Appendix 2 of the Development Management Policies LDD (adopted July 2013), which suggests a minimum back-to-back distance of 28 metres in the case of two-storey buildings backing onto each other. This guidance is provided in the 'privacy' section of the design guidelines and is stated as being in "in the interests of privacy and to prevent overlooking" and does not relate to consideration of overshadowing or loss of light. In addition to the fact that it relates to privacy, it is important to note that the relationship between the existing residential neighbours (Longmore Close) and proposed buildings would not be a back-to-back relationship. Similarly, Appendix 2 relates specifically to design guidelines for residential development and there are no specific guidelines of this nature relating to separation distances between commercial and residential properties.
- 7.5.8 Whilst the Appendix 2 guidelines are not directly applicable, it is noted that there would be a distance of approximately 34 metres between the front (south-east) corner of 19 Longmore Close and the south-west corner of Unit 2; a distance of approximately 25 metres between the rear (north-east) corner of 19 Longmore Close and the western flank elevation of Unit 2, and a distance of approximately 73 metres from the rear (north-east) corner of 19 Longmore Close and the south-west corner of Unit 1.
- 7.5.9 Considering the impact on 19 Longmore Close in terms of overshadowing and loss of light, the submitted section drawing (illustrative section showing relationship with Longmore Close) demonstrates that the proposed development would be lower than a 45 degree line of sight. To assist in assessing the impacts on neighbouring sites in terms of overshadowing and loss of light, a sunlight analysis has also been undertaken and submitted during the course of the application.
- 7.5.10 The submitted sunlight analysis includes 3 views where the existing and proposed conditions have been modelled at 2 hour intervals from 9am to 5pm on 21st March, June, September and December. It should be noted that the sunlight analysis was undertaken prior to amendments to Unit 2 (reducing its footprint and height) having been made and therefore does not represent the amended proposal, and the impacts shown would be greater than with the amended proposal.
- 7.5.11 The sunlight analysis demonstrates that as a result of the proposed height and massing and siting to the north east of the existing residential properties on Longmore Close, the impact of the proposed development would not be significant or harmful, particularly when the sun is at its lowest and at its highest points during the year.
- 7.5.12 The proposal would not result in levels of overshadowing or loss of light to justify the refusal of planning permission.
- 7.5.13 There is existing planting along the western site boundary that is proposed to be supplemented as part of the application. Vegetation cannot be relied upon to provide screening; however, due to its extent it would provide a degree of screening and would

soften the appearance of the development when viewed from Longmore Close. A long term landscape management plan could be secured via condition. It is not disputed that the development would be clearly visible and that the outlook of residents to the west would change; however, there is no right to a view and the separation distance is such that it is not considered that the proposed buildings would result in demonstrable harm through visual impact and the buildings, particularly Unit 2, would not appear overbearing.

Overlooking

- 7.5.14 Doors and windows are largely located to the northern and eastern elevations of Unit 1 and eastern and south-eastern elevations of Unit 2 where they would overlook the proposed car parking and service areas. Fenestration to the western elevation is limited to rooflights and a single emergency access at ground floor level. The height of the rooflights and their position in the shallow sloping roof is such that they would not facilitate overlooking. There would be 2 ground floor emergency access doors in the rear (west) elevation of Unit 2. This elevation is located between 11 and 27 metres from the western site boundary with additional planting proposed between the building and boundary. Their number, ground floor nature and spacing is such that it is not considered that overlooking would be facilitated.

Pollution - Noise Impact

- 7.5.15 Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment by amongst other considerations:

(e) Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

- 7.5.16 Policy DM9 of the Development Management Policies LDD (adopted July 2019) sets out that planning permission will not be granted for development that has an unacceptable adverse impact on the indoor and outdoor acoustic environment of existing or planned development, has an unacceptable adverse impact on countryside areas of tranquillity which are important for wildlife and countryside recreation.
- 7.5.17 The Units and their servicing and car parking areas have been laid out so that the service yard for Unit 1 is on the northern side and the service yard for Unit 2 is on the eastern side.
- 7.5.18 An initial Noise Impact Assessment prepared by Cole Jarman (19/0333/R1) was submitted with the application. The assessment concluded that the operational noise from the scheme with the operational assumptions made would be considered to be at or below the Lowest Observable Adverse Effect Level (LOAEL). This is defined as a situation where;

"Noise can be heard and causes small changes in behaviour and/or attitude, eg. turning up volume of television; speaking more loudly; where there is no alternative ventilation, having to close windows for some of the time because of the noise.

Potential for some reported sleep disturbance.

Affects the acoustic character of the area such that there is a perceived change in the quality of life".

The report considers that the positioning of the service yards allows the warehouse buildings to screen most noise from the service yards to the nearest residential dwellings as well as other surrounding properties.

- 7.5.19 The report concludes, that noise should not be considered a reason to impede the approval of the planning application.

- 7.5.20 The Noise Impact Assessment was reviewed by Environmental Health colleagues who requested clarification on some points, and, when discussing the preliminary committee report in August 2019, Members of the Planning Committee also queried the assessment location point chosen. The report included a receptor point AP1 which was considered the 'most exposed receptor' (Maple Lodge Farm) due to lack of vegetation cover.
- 7.5.21 In response an updated Noise Impact Assessment and Noise Impact Memorandum were submitted, with a further assessment point included at AP2 'nearest receptor' (19 Longmore Close).
- 7.5.22 The Noise Impact Assessment was conducted based on the noise consultant's understanding of the proposed use of the site. It has considered the predicted numbers of HGVs and light vehicles accessing and leaving the site based on figures used in the Transport Assessment.
- 7.5.23 The Noise Impact Assessment sets out a series of assumptions representing operational activity of what could be typically expected. The most important of these are:
- Both Units evaluated as use Class B8 distribution centre use as the noise sources are predominantly external.
 - Total vehicle movements to be allocated evenly between the Units.
 - No HGVs are to be refrigerated.
 - No tug units will be used.
- 7.5.24 The Noise Impact Assessment states; "The screening and the distance propagation to the assessment position result in notable attenuation of the noise from operational activities at the units. Therefore, no additional mitigation is necessary in order to comply with the stated criteria at the nearest residential assessment position."
- 7.5.25 The results as set out in the Noise Impact Memorandum show that the predicted noise levels at both receptor AP1 and receptor AP2 are calculated to be below the noise limits at all times, ie. 45dB during the day and 40dB at night.
- 7.5.26 The Noise Impact Assessment concludes that the predicted noise rating levels would be within or below the relevant criteria.
- 7.5.27 The Noise Impact Assessment also considers noise events of short duration such as reversing sounders. The predicted highest noise level from reversing sounders would also be below the relevant criteria.
- 7.5.28 The conclusion of the Noise Impact Assessment is that; "The assessment has demonstrated that operational noise from the scheme with the operational assumptions made would be considered to be at or below the Lowest Observable Adverse Effect Level (LOAEL). Therefore noise should not be considered a reason to impede the approval of the planning application."
- 7.5.29 The Environmental Health Officer has considered all of the submitted information. They agree with the methodology; that the correct receptors have been used; and that the correct noise level criteria have been used. They also agree with the findings of the report and that there would be no adverse impact on amenity by virtue of noise.
- 7.5.30 It is not considered that additional mitigation is necessary. However, as set out above the Noise Impact Assessment makes assumptions regarding there being no refrigerated HGVs and no tug units. It is considered reasonable and necessary to impose appropriately worded conditions to this effect to ensure that noise resulting from the operations at the site does not have an adverse impact on amenity.

- 7.5.31 In summary, in view of the specialist advice received, there would be no adverse impacts with regards to noise as a result of the development. The proposed development complies with the NPPF (2019) and Policy DM9 of the Development Management Policies LDD (adopted July 2013).

Pollution - Light

- 7.5.32 Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment by amongst other considerations:

(e) Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

- 7.5.33 Policy DM9 of the Development Management Policies LDD (adopted July 2013) states in relation to lighting proposals, that development proposals which include external lighting should ensure that:

- i. Proposed lighting schemes are the minimum required for public safety and security*
- ii. There is no unacceptable adverse impact on neighbouring or nearby properties*
- iii. There is no unacceptable adverse impact on the surrounding countryside*
- iv. There is no dazzling or distraction to road users including cyclists, equestrians and pedestrians*
- v. Road and footway lighting meets the County Council's adopted standards*
- vi. There is no unacceptably adverse impact on wildlife*
- vii. Proposals in the vicinity of habitats and habitat features important for wildlife ensure that the lighting is sensitively designed to prevent negative impacts on use of these habitat features.*

- 7.5.34 Details of external lighting are not included with the application, however, given that 24 hour use of the site is proposed it is acknowledged that there would be a requirement for lighting of the car parking and service yard areas. These areas are located to the north and east of Unit 1 and east of Unit 2 and would be screened from residential properties to the west by the proposed buildings.

- 7.5.35 In a letter of 26/09/19 the applicant's agent has confirmed that;

"In relation to lighting, the Applicant is willing to agree to a condition requiring full details of lighting to be submitted to and agreed in writing by TRDC as the Local Planning Authority as is standard practise. Whilst full details are not known at this time, the Applicant is able to confirm that external lighting to the rear of the development would be limited to low level emergency lighting only and willing to commit to limit this as part of the condition".

- 7.5.36 It is considered reasonable and necessary to require details of all external lighting to be submitted for approval to enable full assessment against the criteria of Policy DM9 set out above.

- 7.5.37 In summary, there would be no adverse impacts with regards to light as a result of the development. The proposed development complies with the NPPF (2019) and Policy DM9 of the Development Management Policies LDD (adopted July 2013).

Pollution - Air Quality

- 7.5.38 Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment by amongst other considerations:

(e) Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

7.5.39 The NPPG provides guidance as to when air quality would be relevant to a planning decision. In summary, it states that when deciding whether air quality is relevant to a planning application, considerations could include whether the development would, amongst other considerations:

- *Significantly affect traffic in the immediate vicinity of the proposed development site or further afield.*
- *Introduce new point sources of air pollution e.g. furnaces.*
- *Give rise to potentially unacceptable impact (such as dust) during construction for nearby sensitive locations.*

7.5.40 In relation to air quality, Policy DM9 of the Development Management Policies LDD (adopted July 2013) advises that development will not be permitted where it would:

- i. Have an adverse impact on air pollution levels, particularly where it would adversely affect air quality in an Air Quality Management Area and/or*
- ii. Be subject to unacceptable levels of air pollutants or disturbance from existing pollutant sources.*

7.5.41 The application site is not within an Air Quality Management Area.

7.5.42 An Air Quality Assessment prepared by BWB Consulting Ltd (Report ref. LNT2082) has been submitted with the application. An Air Quality Technical Note has also been submitted. The submitted reports deal with two aspects of potential air pollution: dust during construction and increased traffic resulting from the proposed development. With regards to dust during construction, it is firstly noted that no demolition is proposed; however, there would be earthworks, etc. The report proposes various mitigation measures during construction works and the report concludes that with these mitigation measures in place, the residual impacts from the construction phase are considered to be 'not significant'. The report notes that the greatest increase in traffic on roads where existing sensitive receptors are present (on the A412 Denham Way, south of the site access road) is below the assessment criteria set out in the IAQM and EPUK guidance. As such the report concludes that the impact on local air quality as a result of additional traffic would be insignificant and detailed dispersion modelling of development generated road traffic would not be required.

7.5.43 The Environmental and Protection Officer has considered all of the submitted information. They agree with the methodology and the approaches to dust and traffic impacts. They also agree with the findings of the report and that there would be no adverse impact on air quality as a result of the development.

7.5.44 The Environmental and Protection Officer recommends conditions and informatives relating to: the submission and approval of a dust management plan; use of Euro 6 vehicles where possible, and following relevant guidance such as the IAQM guidance. These are considered both reasonable and necessary.

7.5.45 In summary, in view of the specialist advice received, there would be no adverse impacts with regards to air quality as a result of the development. The proposed development complies with the NPPF (2019) and Policy DM9 of the Development Management Policies LDD (adopted July 2013).

7.6 Wildlife and Biodiversity

- 7.6.1 Section 40 of the Natural Environment and Rural Communities Act 2006 requires Local Planning Authorities to have regard to the purpose of conserving biodiversity. This is further emphasised by regulation 3(4) of the Habitat Regulations 1994 which state that Councils must have regard to the strict protection for certain species required by the EC Habitats Directive.
- 7.6.2 Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment by:
- d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*
- 7.6.3 Paragraph 174 of the NPPF advises that in order to protect and enhance biodiversity and geodiversity, plans should:
- b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.*
- 7.6.4 Paragraph 175 of the NPPF advises that when determining planning applications, local planning authorities should apply principles including:
- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.*
- 7.6.5 Policy CP1 of the Core Strategy (adopted October 2011) advises that; “all development in Three Rivers will contribute to the sustainability of the District. This means taking into account the need to” (amongst other things) (f) “protect and enhance our natural, built and historic environment from inappropriate development and improve the diversity of wildlife and habitats”.
- 7.6.6 Policy CP9 of the Core Strategy (adopted October 2011) advises that; “The Council will seek a net gain in the quality and quantity of Green Infrastructure, through the protection and enhancement of assets and provision of new green spaces”.
- 7.6.7 Policy DM6 of the Development Management Policies LDD advises that development should result in no net loss of biodiversity value across the District as a whole.
- 7.6.8 Policy DM6 advises that;
- (a) Development that would affect a Site of Special Scientific Interest, Local Nature Reserve, Local Wildlife Site or protected species under UK or European law, or identified as being in need of conservation by the UK Biodiversity Action Plan or the Hertfordshire Biodiversity Action Plan, will not be permitted where there is an adverse impact on the ecological, geological or biodiversity interests of the site, unless it can be demonstrated that:*
- ii) Adverse effects can be satisfactorily minimised through mitigation and compensation measures to maintain the level of biodiversity in the area.*
- (d) Development must conserve, enhance and, where appropriate, restore biodiversity through:*
- i) Protecting habitats and species identified for retention*
- ii) Providing compensation for the loss of any habitats*
- iii) Providing for the management of habitats and species*
- iv) Maintaining the integrity of important networks of natural habitats, and*

v) Enhancing existing habitats and networks of habitats and providing roosting, nesting and feeding opportunities for rare and protected species.

(e) Linked habitats are important in allowing species to adapt and respond to circumstances. Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity with the wider landscape.

There is a Local Wildlife Site, Maple Lodge Nature Reserve, to the south east of, but not immediately adjacent to, the application site.

Bats

- 7.6.9 Except for a small (c. 4 sqm), partially-collapsed brick building on the west of the site and a small flat-roof building outside the eastern boundary, there are no existing buildings or hardstandings present and the site is covered almost entirely by natural or semi-natural habitats. In relation to bats, Hertfordshire Ecology (HECO) noted that the submitted survey indicated that one of the buildings had negligible potential for roosting bats whilst the second had moderate potential. Emergence and re-entry surveys were subsequently carried out on the building with moderate potential and no evidence of use by bats was found. Emergence and re-entry surveys were also undertaken focussing on trees as identified as having moderate potential to support roosting bats. Whilst the surveys confirmed the likely absence of roosting bats, HECO note that this is contrary to comments submitted in objections to the application and HECO do not doubt that the site is used by foraging and commuting bats. As bats are light sensitive, HECO highlight the importance of a sensitive lighting plan and suggest that should planning permission be granted, a biodiversity lighting plan should be secured by condition. Given the advice of HECO, subject to an appropriate condition regarding lighting, bats would not be adversely affected by the proposed development.

Reptiles, Badgers, Otters & Water Voles

- 7.6.10 HECO note that no reptiles were found during surveys, however, measures to safeguard reptiles (as set out in the ecological report) are recommended as there is suitable reptile habitat along the site boundary. Appropriate measures and mitigation in relation to badgers has been provided. No evidence of otters or water voles was identified.

Local Wildlife Site (LWS)

- 7.6.11 Maple Lodge Nature Reserve Maple Lodge is a Local Wildlife Site to the south-east, but not immediately adjacent to, the application site. It extends to approximately 40 acres and consists of lakes, a marsh, hedgerows and a wooded plantation. Whilst the site would not be directly affected by the proposals, significant concerns have been raised by interested parties regarding the impact of the proposed development on water levels within the Local Wildlife Site. As such, HECO advised that the application should not be approved unless it has been demonstrated to the satisfaction of the LPA, that the quantity and quality (in terms of pollution) of water supplied to the channel feeding the Local Wildlife Site is not compromised by the development.
- 7.6.12 During the course of the application an amended drainage proposal has been submitted together with accompanying technical data. This data concludes that with the amended drainage proposal, the post-completion difference in run-off due to changes in the development site topography would be negligible and that discharge rates into the channel feeding the Local Wildlife Site from the development site would be maintained. In addition, the use of permeable surfaces and the control of discharge rates has removed the need to direct water into Springwell Lake. Water coming off hard surfaces will pass through oil interceptors to prevent contamination entering the water channel.

- 7.6.13 As such it is considered that there is likely to be a negligible change to the levels of water entering the nature reserve, and measures are proposed to prevent contamination. HECO therefore does not consider that this aspect of the development will detrimentally affect the ecology of the nature reserve and in this respect should not be considered a constraint to the proposals.
- 7.6.14 Maple Lodge Conservation Society in their objections comment that the main supply of water to the reserve's lakes is groundwater, not the input stream, and therefore they do not consider that the amended drainage proposals address their significant concerns. Further details of piling to understand the implications on the groundwater levels would be required, however, it would be reasonable to require this via condition. If a planning condition cannot be satisfied, the development would not be able to be implemented.

Habitats & Biodiversity Offsetting

- 7.6.15 Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment by:

d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.

- 7.6.16 Paragraph 174 of the NPPF advises that in order to protect and enhance biodiversity and geodiversity, plans should:

b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

- 7.6.17 Paragraph 175 of the NPPF advises that when determining planning applications, local planning authorities should apply principles including:

a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

- 7.6.18 When considering the impact on biodiversity it is necessary to consider impacts on the site and other potential habitats off-site. The amended drainage proposal discussed above is not considered to cause an adverse impact on biodiversity at the Local Wildlife Site. The paragraphs above regarding the potential impact on species that are either on or use the site conclude that there would be no adverse impact on species at or using the site. However the proposal would have a direct impact on the application site itself through the loss of grassland.

- 7.6.19 In relation to the value of the grasslands on the site currently, whilst not considering the loss to be a fundamental constraint to development, HECO does consider that the loss represents a substantial loss to ecology locally that should be compensated for. HECO welcomes the ecological enhancements within the submitted report, but these are not considered to adequately compensate for the removal of 3.4 hectares of semi-improved grassland within the broader river valley or achieve net gains in biodiversity for the site. HECO does not consider that ecological requirements could be delivered on site but could be achieved through biodiversity offsetting.

- 7.6.20 HECO considers that it would be appropriate to determine the appropriate financial contribution based on the cost of creating and managing, over a 25-year period, a smaller area of more species-rich grassland as a comparable ecological resource. HECO recommends that this should be an area of 2.26 hectares (two-thirds of the size of that being lost at the application site) plus 10% to represent a net gain of that resource.

- 7.6.21 Herts and Middlesex Wildlife Trust (HMWT) has reviewed the submitted details and has raised an objection to the application. In HMWT's opinion, the proposed development is not consistent with national or local planning policy in achieving a measurable net gain to biodiversity. HMWT comments that it is not ecologically accurate to suggest that the almost entire removal of 3.4 hectares of semi-natural grassland without measured or meaningful compensation would result in a net gain to biodiversity.
- 7.6.22 HMWT notes that the area is identified as a category 2 habitat in the Hertfordshire Ecological Networks Mapping. Such a habitat is defined as 'an area of significant importance to the ecological network and should be avoided', or in the terms of Policy DM6, 'habitats...identified for retention'. If the need for development outweighs their protection, then the habitats to be affected must be compensated in a proportionate and measurable way.
- 7.6.23 HMWT does not consider that the submitted ecological report assesses impacts in a measurable way, but instead dismisses all habitats that are not section 41 habitats and offers no compensation for them. In order to prove net gain to biodiversity, it considers that the ecological report must include a 'measurable' calculation of the current ecological value of the site and what will be provided following the development. The development must show a net positive ecological unit score to demonstrate compliance with policy. Habitat mitigation can be provided on or offsite.
- 7.6.24 Notwithstanding the comments of HMWT regarding the approach to biodiversity offsetting and notwithstanding that there is a disagreement between HECO and HMWT regarding the appropriate methodology for calculating "net gain" or what an appropriate financial contribution or project would be, it is important to be mindful of the advice in the NPPF. While there are aspirations that biodiversity net gain will become mandatory (The Environment Bill is currently passing through its parliamentary stages), there currently is no requirement for it in law and the NPPF does not make net gain or biodiversity offsetting a formal requirement. However, it is appropriate to take a precautionary approach and there is an expectation that some level of net gain should be achieved.
- 7.6.25 When considering the appropriate level of net gain, it is important to consider the impact in ecological terms. As paragraph 7.6.18 above sets out, the main impact is through the loss of the grassland on the application site. HECO considers this area of grassland to be a low quality site.
- 7.6.26 As set out at paragraph 7.6.19 above, HECO considers that it would be appropriate to determine the financial contribution based on the cost of creating and managing a smaller area of more species-rich grassland as a comparable ecological resource. Another opportunity would be to seek improvements at the local wildlife site. This payment would be made available to an appropriate local project to be identified as part of a S106 Agreement and held by the LPA for this purpose or refunded to the developer if after a period of 5 years the project has not commenced. HECO considers a sum of £17,725 would be appropriate to achieve this.
- 7.6.27 The applicant has confirmed agreement in principle to payment of this sum, although a Section 106 Agreement to secure the contribution has not been agreed and in the absence of such an agreement the proposed development therefore fails to meet the requirements of Policy CP9 of the Core Strategy (adopted October 2011), Policy DM6 of the Development Management Policies LDD (adopted July 2013) and the NPPF (2019).

7.7 Trees and Landscaping

- 7.7.1 The site contains a number of trees, predominantly located around the edges of the site, a number of which are formally protected by Tree Preservation Order (TPO) 493 which comprises A1 (a group of Alder along the eastern boundary) and A2 (several Oak, Hawthorn, Sycamore and Ash trees along the southern boundary). The most visually

important trees are the Alder located along the eastern boundary. The TPO also includes groups G1 and G2, however, these are to the south and outside of the application site.

- 7.7.2 A Tree Preservation Order has also recently been made by TRDC in relation to an Ash Tree (referred to as T73 within the application documents). The Order came into force, on a temporary basis on 24 October 2019, and will remain in force for six months during which time a decision will be made as to whether the Order should be given permanent status. T73 is not proposed to be felled as part of this application.
- 7.7.3 Paragraph 170 of the NPPF advises that the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes.
- 7.7.4 In ensuring that all development contributes to the sustainability of the District, Policy CP12 of the Core Strategy (adopted October 2011) advises that development proposals should:
- i) Ensure that development is adequately landscaped and is designed to retain, enhance or improve important existing natural features; landscaping should reflect the surrounding landscape of the area and where appropriate integrate with adjoining networks of green open spaces.*
- 7.7.5 Policy DM6 (Biodiversity, Trees, Woodlands, Watercourses and Landscaping) of the Development Management Policies LDD (adopted July 2013) advises that development proposals for new development should be submitted with landscaping proposals which seek to retain trees and other landscape and nature conservation features. Landscaping proposals should also include new trees to enhance the landscape of the site and its surroundings as appropriate.
- 7.7.6 The application was accompanied by a Tree Survey and Arboricultural Impact Assessment prepared by Greengage (June 2019). The submitted report identified that 70 trees and tree groups ranging from Category B to Category U were recorded (these categories consider the quality and value (non-financial) of trees with Category A trees being the highest in terms of quality and value). This showed that 4 Category B, 10 Category C and 16 Category U trees (30 in total) were proposed to be removed. Outline landscaping proposals were also submitted to show new tree planting along the eastern and western boundaries to compensate for those lost.
- 7.7.7 The Council's Landscape Officer reviewed the original submitted details and raised an objection. They did not consider that the cascade method detailed within the relevant British Standard had been correctly applied and therefore considered that some trees had been incorrectly categorised. Whilst they agreed that some Alders along the eastern boundary did have decay cavities at their base, most are small or isolated pockets that have not compromised the structural integrity of the trees. Similarly, they considered that consideration should be given to the group value of trees along the eastern boundary.
- 7.7.8 The Landscape Officer also raised concerns that the proposed layout had informed the tree removal and retention, rather than the trees informing the proposed layout. They refer to T10 (Black Alder) a Category B tree proposed to be removed due to the fact that a footpath would have run through it.
- 7.7.9 During the application, amended plans have been submitted that include an amendment to the vehicular access to Unit 1 and a reduction in the footprint of Unit 2. These changes have resulted in the retention of 3 trees originally proposed for removal (T10, T73 and T61, 1 x category B and 2 x category C respectively (as categorised by applicant's arboriculturalist)). As such, a total of 27 trees are now proposed to be removed. The Tree Survey and Arboricultural Impact Assessment categorises these as 3 x category B, 8 x category C and 16 x category U trees.

- 7.7.10 An amended tree constraints plan and landscape strategy has also been submitted that proposes additional new planting around the perimeter of the site, which would include 46 new trees to the perimeter of the site to supplement the retained vegetation.
- 7.7.11 The Landscape Officer has reviewed the amended details, and whilst they note the additional tree retention, they consider that the amended layout has done little to address their original concerns and still results in the loss of a large number of trees and the break-up of the valuable landscape feature along the eastern site boundary, which is protected by a TPO. As such, they object to the application due to the loss of trees and likely detrimental impact on retained trees.
- 7.7.12 The development would result in the loss of protected trees and fails to demonstrate that other protected trees would not be harmed as a consequence of the proposal. The development therefore fails to comply with Policies CP1 and CP12 of the Core Strategy (adopted October 2011), Policies DM1, DM6 and Appendix 2 of the Development Management Policies LDD (adopted July 2013) and the NPPF (2019). Therefore the application is recommended for refusal on this basis.

7.8 Highways & Access

- 7.8.1 Paragraph 108 of the NPPF advises that;

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

- 7.8.2 Paragraph 109 of the NPPF states that; ***‘Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe’.***
- 7.8.3 All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed (paragraph 111 of the NPPF).
- 7.8.4 Policy CP1 of the Core Strategy (adopted October 2011) advises that in ensuring all development contributes to the sustainability of the District, it is necessary to take into account the need to reduce the need to travel by locating development in accessible locations and promoting a range of sustainable transport modes.
- 7.8.5 Policy CP10 (Transport and Travel) of the Core Strategy (adopted October 2011) advises that all development should be designed and located to minimise the impacts of travel by motor vehicle on the District. Development will need to demonstrate that:
- i) It provides a safe and adequate means of access*
 - j) It is appropriate in scale to the existing infrastructure...*
 - k) It is integrated with the wider network of transport routes...*
 - l) It makes adequate provision for all users...*
 - m) It includes where appropriate, provision for public transport either within the scheme or through contributions*
 - n) The impact of the proposal on transport has been fully assessed...*

o) The proposal is accompanied by a draft Green Travel Plan

- 7.8.6 The application was accompanied by a Transport Assessment, Construction Logistics Management Plan and Framework Travel Plan. During the course of the application in response to initial comments from HCC as Highways Authority, a Transport Assessment Addendum (Rev 1, 30.07.19) was submitted in addition to a Traffic Impact Executive Summary.
- 7.8.7 The submitted details have been reviewed by HCC as Highways Authority (HCCHA), who do not wish to restrict the grant of planning permission subject to a number of planning conditions.
- 7.8.8 In terms of the existing access, the site is approximately 220m from its north-eastern corner to the highway on Denham Way and accessed via a priority T-junction with Denham Way (with a right turn lane provided for vehicles turning into the private road when travelling north along Denham Way) and then a private access road. Denham Way is a single-carriageway road and designated as a classified A (A412) main distributor road, subject to a speed limit of 40mph within the vicinity of the junction and is highway maintainable at public expense. There is a shared cycleway/footway on the eastern side of Denham Way; a pedestrian only footway on the western side and a signal controlled pedestrian crossing approximately 40m south of the T-junction. There is a pedestrian footway on the south side of the private access road leading to the site, which is not part of the highway, although HCCHA noted at the time of their site visit that vehicles were parked on much of the length of the private footway.

Trip Generation

- 7.8.9 As the site is currently unoccupied, existing trip data has not been provided. HCCHA consider this acceptable.
- 7.8.10 During pre-application discussions with HCCHA a Scoping Note was developed and agreed which outlined the anticipated trip generation of the proposed development based on a gross floor area (GFA) of 15,500sqm and a Class B8 land use. The applicant applied the 85th percentile trip rate from the survey sites selected in TRICs to the GFA of the proposed development (rather than using an average of all the sites in the TRICS database, in this instance the applicant has only used those sites at the higher end of the trip generation scale, "the 85th percentile"). HCCHA did note that the TRICs reports are dated 2017 and are therefore 2 years old. An interrogation of TRICs shows that there are new surveys from September 2017 and May 2018 and on this basis it would be appropriate for the TRICs reports to be updated as there are new sites in TRICs to be considered. However HCCHA have undertaken their own TRICs interrogation to corroborate the results and the 85th percentile AM and PM peak hour trip rates are the same in HCC's interrogation as those presented in the TA and HCCHA therefore consider the approach to be acceptable.
- 7.8.11 Following the development of the Scoping Note the floor area increased from 15,500 sqm to 17,039 sqm. New trip rates were generated using the same methodology in TRICs, however, the applicant deemed that their use is not necessary and therefore used the original trip rates and generation from the Scoping Note to inform their assessment. The applicant has stated that the 85th percentile trip rates for the warehouse land use are in line with the median and mean trip rates of the Industrial Estate or Unit land uses, which are typically used in a trip generation exercise. As previously stated, HCCHA have undertaken their own TRICs interrogation to corroborate the assumptions stated in the TA. Whilst HCC disagree with the use of Greater London sites (as trip generation closer to Central London is expected to be lower), it was found the 85th percentile trip rates for both the AM and PM peak hours remained the same for the Warehouse land use and as such the trip rates are considered acceptable. Further to this, the Industrial Estate and Unit land use interrogations demonstrated median and mean trip rates lower than the 85th percentile trip rates for the

Warehouse and thus corroborates the applicant's assumptions. Therefore, the use of these trip rates for the purposes of the assessment is considered acceptable.

- 7.8.12 The applicant subsequently provided a Transport Assessment Addendum to address objections raised by HCCHA that the proposed trip generation (as outlined in the TA) would need to be updated using the actual gross floor area of the site (17,039 sqm rather than 15,500 sqm) and that junction models would need to be amended accordingly. The applicant has used the same trip rates used by the original submission to calculate trip generation for the actual GFA. As previously noted, the applicant has used sites within Greater London and surveys conducted prior to September 2017 to derive the original trip rates. Although under normal conditions this would be grounds for further investigation, it was considered to be acceptable in this case due to the use of 85th percentile AM and PM peak hour trip rates, as opposed to the average trip rate.
- 7.8.13 The TRICS database which has been used to estimate the potential trips created by the proposed development outlined approximately **122** and **113** vehicle trips within morning (8-9am) and evening (5-6pm) peak hours respectively. The results which have been obtained from traffic survey at the junction outline total existing vehicle movements of **2,333** and **2,458** vehicles within these peak periods. Therefore, the estimated potential trips created by the proposed development would result in an increase of traffic of **5%** during these hours.
- 7.8.14 Data has also been analysed for extended peak periods of 7-10am and 4-7pm. The TRICS database showed **207** and **235** potential trips during these extended periods. The traffic survey data outlined total existing movements of **6,336** and **6,123** during the extended am and pm peaks respectively. The potential trips created by the development would result therefore in an increase in traffic of **3%** (am extended peak) and **4%** (pm extended peak).
- 7.8.15 The data provided can also be used to forecast potential two-way trips for a 24 hour period:
HGVs 136 two-way trips / LGVs/LVs 794 two-way trips, resulting in a total of 930 two-way trips.
- 7.8.16 The applicant has also provided updated junction modelling results using the updated traffic generation and following review of the updated traffic generation and junction model results, HCCHA consider that all information provided is acceptable. They consider that the changes to traffic volume would be minimal (when comparing the 15,500sqm area to the 17,039sqm³) and would not have a notable impact on the surrounding highway network; however, an investigation of the changes was required to ensure the applicant provided a robust assessment of the anticipated transport impacts.
- 7.8.17 It is acknowledged that concerns have been raised by residents regarding trip figures provided in the Transport Assessment not corresponding to trip figures provided in the Noise Assessment. Whereas trip figures in the Transport Assessment are based on GFA, figures in the Noise Assessment are provided per unit. The Noise Assessment notes that the number of vehicles accessing and leaving the site on an hourly basis (two-way trips) has been provided by the Transport Consultant and that this number has been halved and rounded up to provide figures for each unit. Therefore a figure of 5 in the Transport Assessment would become 6 in the Noise Assessment ($5 / 2 = 2.5$, rounded up to 3 per unit and 6 in total). The figures in the Noise Assessment relate specifically to the methodology for that assessment and in considering the highways implications, regard should be had to the figures in the Transport Assessment as set out above.

Proposed Access

³ Floor area has been reduced to 16,140sqm during application.

- 7.8.18 Access to the site is proposed via the private access road, with the introduction of a signalized junction with the A412. Vehicular access is not proposed to be provided via Maple Lodge Close, a residential road with traffic calming measures.
- 7.8.19 It is proposed to extend the existing private access road in addition to the formation of a new pedestrian footway on the western side of the carriageway. Three vehicular accesses are proposed from the private road, one serving Unit 1 and two serving Unit 2.
- 7.8.20 An updated Access Arrangements Plan was provided within the Transport Assessment Addendum which has been reviewed by HCCHA who are satisfied that the junction alignments no longer intersect the existing footways and corresponding footways are provided adjacent to each access point. This is considered acceptable and HCCHA raise no objections. They also note that vehicle tracking / swept path analysis has been included which is considered sufficient to illustrate that an HGV could safely manoeuvre into and out of the site accesses.
- 7.8.21 HCCHA comment that the developer would need to put in place a permanent arrangement for long term maintenance and the road name plate would need to indicate that it is a private road as HCCHA would be unlikely to agree to its adoption.

Highways Mitigation Works

- 7.8.22 The introduction of signalization of the junction of Denham Way (A412) and the private access road has been included as part of the application. HCCHA have advised that the layout appears to work operationally and is considered to be acceptable, however, the design would be subject to a detailed review and road safety audit as part of the Section 278 (Highways) Agreement. The S278 Agreement would need to include:
- The signalization of the junction of Denham Way (A412) and the private access road.
 - The provision of two pelican crossings on Denham Way and one across the mouth / entrance of the private access road.
 - The provision of a toucan crossing for pedestrians and cyclists across the mouth/entrance to the private access road.
 - The relocation of the two bus stops with easy access kerbing, shelters and real-time bus information display screens.

Accessibility, Sustainability & Travel Plans

- 7.8.23 HCCHA note that the site is located on the north-east side of Maple Cross within approximately 1.2km of the whole of the settlement. The settlement edge of Rickmansworth is approximately 800m north of the site and the town centre (and train station) approximately 3.5km north-east of the site. As such, the site is within an acceptable cycling and walking distance from the rest of Maple Cross and parts of Rickmansworth. There is footway and cycleway provision along Denham Way south into Maple Cross and north into Rickmansworth although parts of the shared foot/cycle way could be widened and improved to maximise pedestrian and cycling accessibility. The only pedestrian and cycling access into the site would be via the unnamed private access road and not Maple Lodge Close. Measures would need to be explored to ensure that the existing (and new extended) footway is kept free of car parking.
- 7.8.24 The site is approximately 1.5km from the M25 (J17) and therefore provides an easily accessible location for vehicles.
- 7.8.25 The nearest bus stops are located on Denham Way between approximately 350m and 550m from the development site. This is greater than the normally recommended 400m maximum walking distance from some parts of the site. The bus stops are also proposed to be relocated slightly further north along Denham Way as part of the signalisation of the

access junction. This is considered to be acceptable when taking into consideration the proposed improvements to pedestrian and cycling accessibility at the junction. Subsequently the distance of the bus stops would not be a significant enough reason to recommend refusal from a highways perspective.

- 7.8.26 HCCHA note that the proposals include the provision of 40 cycle parking spaces but recommend that the level of cycle parking is increased accordingly dependent on the number of potential staff members. This is to ensure that cycling is encouraged and maximised as a form of sustainable travel for staff members and visitors to and from the site. Cycle parking in relation to adopted standards is discussed below in section 9.
- 7.8.27 A Framework Travel Plan has been submitted. Whilst HCCHA consider it to be generally acceptable at this stage of the development, the final submitted Travel Plan would need to be appropriately updated to take into consideration the comments of HCCHA. This would need to be submitted for approval prior to the commencement of works.

Planning Obligations & Conditions

- 7.8.28 HCCHA note that as TRDC has adopted the Community Infrastructure Levy (CIL), therefore contributions towards local transport schemes would be sought via CIL in appropriate cases. The Three Rivers Community Infrastructure Levy (CIL) was adopted in February 2015 and came into force on 1 April 2015. The Charging Schedule sets out that the application site is within 'Area A' within which the charge per sqm of non-residential development is £nil.
- 7.8.29 Nevertheless in order to make the proposals acceptable to maximize sustainable travel options, HCCHA recommends that developer contributions of £6000 are sought via a Section 106 Agreement towards supporting the implementation, processing and monitoring of a full travel plan including any engagement that may be needed.
- 7.8.30 In terms of planning conditions, a Construction Logistics Management Plan has been provided and the general details are acceptable to HCCHA, however, a full Construction Management Plan with more specific information would be required to be submitted for approval prior to the commencement of works. As noted above, a final Travel Plan would also need to be submitted for approval.
- 7.8.31 A detailed scheme for off-site highways works would also be required to be submitted, relating to design, implementation and construction.
- 7.8.32 The proposed access road, on-site car parking and turning areas would be required to be laid out, demarcated, surfaced and drained in accordance with the approved plan prior to first occupation and retained thereafter available for that specific use.
- 7.8.33 Details of Electric Vehicle Charging Points (ECVPs) are also requested via condition.

Conclusion

- 7.8.34 HCC as Highways Authority considers that the proposal would not have an unreasonable or significant impact on the safety and operation of the surrounding highway network. Therefore, HCCHA has no objections on highway grounds to the application, subject to the inclusion of the stated planning conditions and informatives (discussed below) and comments in relation to the wider proposed scheme at the junction of Denham Road / A412 and the private access road.

7.9 Parking

- 7.9.1 Three Rivers District Council are the Parking Authority, and Policy DM13 and Appendix 5 of the Development Management Policies LDD set out the car parking requirements for the District. Car parking spaces should be shown on a proposed site layout plan with care

taken to ensure that the size of any proposed car parking area is the minimum necessary to facilitate parking.

7.9.2 The parking requirements at Appendix 5 require:

B1(a) office 1 space per 30sqm
 B1(c) light industry 1 space per 35sqm
 B2 General industry 1 space per 50sqm plus 1 lorry space per 200sqm
 B8 Storage and distribution 1 space per 75sqm plus 1 lorry space per 200sqm

7.9.3 The standards for car parking may be adjusted according to which zone the proposed development is located in. The application site is located within zone 3 where provision of between 50-75% of the standard may be acceptable.

7.9.4 The proposed floor areas for Units 1 and 2 combined and parking requirements are summarised in the table below:

Use	Floor Area	Parking Requirements
Core & Office (B1a)	1,985.88 m ²	1,985.88 m ² / 30 = 66 spaces or 33-49.5 spaces if apply zonal reduction
Warehouse (B1c, B2, B8)	14,145.71 m ²	14,145.71 m ² / 75 = 189 car spaces or 95-142 car spaces if apply zonal reduction 14,145.71 m ² / 200 = 71 lorry spaces or 36 – 53 lorry spaces if apply zonal reduction
Total	16,131.59 m ²	128 – 192 car parking spaces applying zonal reduction + 36 – 53 lorry spaces applying zonal reduction

7.9.5 In summary, the application would generate a requirement for between 128 – 192 car parking spaces and for between 36 – 53 lorry spaces.

7.9.6 Appendix 5 of the Development Management Policies LDD also sets out that the parking needs of disabled motorists should be met in full irrespective of location, i.e. where the zonal procedure results in on-site parking restraint, there shall be no corresponding reduction in disabled spaces. The standards require, in the case of employment generating development 'up to 200 space car park', individual spaces for each disabled employee plus 2 spaces or 5% of the total capacity, whichever is greater.

7.9.7 The number of disabled employees is unknown at this stage. Applying the 5% of the total capacity approach there would be a requirement for 7 spaces.

7.9.8 Appendix 5 also sets out the following cycle parking standards:

B1 - 1 short-term space per 500sqm gross floor area plus 1 long-term space per 10 full time staff

B8 – 1 long-term space per 10 full time staff

7.9.9 In terms of predicted staff numbers, the applicant has indicated that when considering the floor area proposed and the 'Employment Density Guide' there would be up to 280 employees if the development was for Use Class B1c and up to 194 employees if the development was for Use Class B8.

B1c

$16,140\text{m}^2 / 500 = 33 \text{ spaces}$

$280 / 10 = 28 \text{ spaces}$

$= 61 \text{ cycle spaces}$

B8

$194 / 10 = 20 \text{ spaces}$

7.9.10 Assuming a worst case scenario there would be a requirement for 61 cycle spaces; however, this could be reduced to 20 cycle spaces if the proportion of Use Class B8 was greater.

7.9.11 The proposed parking versus the policy requirements are summarised in the table below:

	Proposed	Policy Requirement	Difference
Car	141	128 - 192	Falls within range
Disabled spaces	7 (of 141)	8	+ 1
Bicycles	40	61 (B1c) or 20 (B8)	- 21 (B1c) + 20 (B8)
HGV / Trailers	39	36 - 53	Falls within range

7.9.12 As indicated in the table above, the proposed car parking provision at 141 spaces would fall within the policy requirement when applying a zonal reduction. Of the car parking spaces proposed, the required percentage of accessible spaces would be provided. The proposed lorry parking provision at 39 spaces would also fall within the required range when applying a zonal reduction. There would be a shortfall of 21 cycle spaces against B1c standards, however, it is considered that there is space within the site for an additional 21 spaces to be provided and further details could be secured via condition on any grant of consent. It is also noted that HCCHA consider the levels and layout of the proposed parking to be acceptable.

7.10 Sustainability

7.10.1 Paragraph 148 of the NPPF states that "The planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure".

7.10.2 Policy CP1 of the Core Strategy requires the submission of an Energy and Sustainability Statement demonstrating the extent to which sustainability principles have been incorporated into the location, design, construction and future use of proposals and the expected carbon emissions.

- 7.10.3 Policy DM4 of the DMLDD requires applicants to demonstrate that development will produce 5% less carbon dioxide emissions than Building Regulations Part L (2013) requirements having regard to feasibility and viability. This may be achieved through a combination of energy efficiency measures, incorporation of on-site low carbon and renewable technologies, connection to a local, decentralised, renewable or low carbon energy supply.
- 7.10.4 The application is accompanied by an Energy Statement prepared by KGA (UK) Ltd (June 2019 R1). The statement sets out that the development has been designed to achieve optimum energy performance, incorporating the following features:
- Significantly exceed the minimum fabric requirements of Part L2A (2013) of the Building Regulations.
 - All buildings will include 100% low energy lighting and lighting control.
 - All buildings will be provided with mechanical ventilation with heat recovery (MVHR) systems for ventilation within offices.
- 7.10.5 The statement illustrates that after the application of improvement in fabric, energy efficient building services and low and zero carbon technologies, both Units 1 and 2 would produce 6% less carbon dioxide emissions than Building Regulations Part L (2013) which would accord with the requirements of Policy DM4 of the Development Management Policies LDD (adopted July 2013).
- 7.10.6 Whilst low carbon technologies have been investigated and Solar PV panels and solar thermal were found to be most suitable, as the reduction target has already been met, they are not required in order for the development to comply with Policy DM4 and are not proposed at this time.
- 7.11 Flood Risk & Drainage
- 7.11.1 The majority of the site is located within Flood Zone 1 and therefore has a 'low probability' of fluvial flooding, with less than a 1 in 1000 annual probability of river or sea flooding in any year. A narrow strip to the eastern and southern boundaries lies within Flood Zone 2 and therefore has a 'medium probability' of fluvial flooding, with between a 1 in 100 and 1 in 1000 annual probability of river flooding in any year. The proposed buildings are located wholly within Flood Zone 1. The site lies within Groundwater Source Protection Zone 1 and Maple Lodge Farm Ditch Main River runs along the west boundary of the site.
- 7.11.2 Paragraph 155 of the NPPF states that;
- Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.*
- 7.11.3 Paragraph 170 of the NPPF advises that the planning system should contribute to and enhance the natural and local environment by remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 7.11.4 Policy CP1 of the Core Strategy (adopted October 2011) recognises that taking into account the need to (b) avoid development in areas at risk of flooding will contribute towards the sustainability of the District.
- 7.11.5 Policy CP12 of the Core Strategy (adopted October 2011) also acknowledges that the Council will expect development proposals to build resilience into a site's design taking into account climate change, for example through flood resistant design.

- 7.11.6 Policy DM8 (Flood Risk and Water Resources) of the Development Management Policies LDD (adopted July 2013) advises that development will only be permitted where it would not be subject to unacceptable risk of flooding and would not unacceptably exacerbate the risks of flooding elsewhere and that the Council will support development where the quantity and quality of surface and groundwater are protected and where there is adequate and sustainable means of water supply. Policy DM8 also requires development to include Sustainable Drainage Systems (SuDs). A SuDS scheme for the management of surface water has been a requirement for all major developments since April 2015.
- 7.11.7 The application is accompanied by a Flood Risk Assessment (FRA) and Drainage Strategy, general arrangements showing proposed foul and surface water drainage, drainage construction details and proposed surface water manhole schedule. During the course of the application these details have been amended and supplementary information has also been provided in response to consultee comments.
- 7.11.8 The drainage strategy has been updated during the course of the application following the receipt of comments from HCC as Lead Local Flood Authority (LLFA). The LLFA have reviewed the most recently submitted information (submitted in response to their comments of 11/10/19) and have advised that the information submitted by the applicant does not address all of their outstanding objections on flood risk grounds.
- 7.11.9 The LLFA note that the Environment Agency has raised no objections subject to conditions, however, comment that these are unrelated to surface water drainage for which the LLFA are the statutory consultee.
- 7.11.10 With regards to attenuation within Flood Zone 2, the LLFA note that the plans have not been updated to address their previous comments. The applicant has stated how they are happy to accommodate this detailed technical matter by way of condition. However, as the drainage layout drawing would be part of the approved plans and would need to be referenced in any condition, this would need to be addressed prior to the approval of planning.
- 7.11.11 The LLFA previously advised that the applicant will need to demonstrate half drain down time for the tanks. This is required to ensure the system can drain adequately in the event of a repeat storm. The LLFA comment that half drain down times is not just pertinent to soakaway systems and the applicant should provide details of how long it will take to drain down the tank. The LLFA consider that the tank should be able to accommodate as a minimum a 1 in 30 year storm within 24 hours of a 1 in 100 plus climate change rainfall event. In order to preserve the development and to allow the applicant to achieve the drain down times for the tank, the LLFA advise that they would consider a second discharge from the site at 5l/s to the river on the eastern side of the site, providing all appropriate third party agreements are in place.
- 7.11.12 Background information on the greenfield run-off calculation was also requested, as was clarification on the extent of the contributing area and clarification on MicroDrainage calculations and the provision of storage. The applicant has provided the MicroDrainage calculations showing the greenfield runoff rates and this point has therefore been satisfied. With regards to clarification on the contributing area, from a review of the impermeable area plan, the LLFA note that this is over 26,490m², meaning the total contributing area used in the MicroDrainage calculations should be over 2.649 ha. However, the applicant has stated 2.593ha of contributing area was used in the MicroDrainage calculations. The LLFA require clarification and comment that this point cannot be conditioned.
- 7.11.13 The LLFA note that permeable paving is providing additional attenuation and has not been included within the calculations. They consider that this is appropriate at this stage of planning but should be addressed at condition stage.

- 7.11.14 The applicant has stated how the road drainage will be part of the surface water drainage for the site and the LLFA consider that this point has therefore been addressed. With regards to appropriate management and treatment, the LLFA are satisfied that any outstanding issues in relation to this matter can be conditioned. Similarly the LLFA are pleased that the applicant will be clearing the watercourse as part of the works on site and would request an appropriate condition for this matter.
- 7.11.15 Whilst additional clarification on some points has been provided, it has not been demonstrated that surface water run-off can be adequately handled within the site, and that the development will not result in flooding of adjacent properties and within the site itself. Accordingly the development fails to comply with Policy CP1 of the Core Strategy (adopted October 2011) and Policy DM8 of the Development Management Policies LDD (adopted July 2013).
- 7.11.16 Thames Water have reviewed the submitted details and have raised no objections subject to conditions/informatives. They note that the comments of Affinity Water should also be taken into consideration. As the proposed development is located within 15 metres of a strategic sewer, Thames Water requests that a piling method statement is required by condition on any grant of consent.
- 7.12 Contaminated Land
- 7.12.1 Paragraph 170 of the NPPF advises that planning policies and decisions should contribute to and enhance the natural and local environment by amongst other considerations:
- (e) Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;*
- 7.12.2 Policy DM9 of the Development Management Policies LDD (adopted July 2013) advises that;
- "The Council will refuse planning permission for development, including changes of use, which would or could give rise to polluting emissions to land, air and/or water by reason of disturbance, noise, light, smell, fumes, vibration, liquids, solids or other (including smoke, soot, ash, dust and grit) unless appropriate mitigation measures can be put in place and be permanently maintained."*
- 7.12.3 The application is accompanied by a Supplementary Site Investigation prepared by Tier Environmental Ltd (Report ref. TL1177555511.1).
- 7.12.4 A Technical Note in relation to asbestos (17/09/19) has also been provided during the application.
- 7.12.5 The Site Investigation identified no elevated concentrations of contaminants of concern (chemical) in exceedance of the relevant screening criteria.
- 7.12.6 The Site Investigation identified unacceptable risks to human health due to the presence of asbestos fibres and fragments in the underlying soils.
- 7.12.7 As the presence of asbestos fibres/fragments was identified in underlying soils a Remediation Strategy is required. An options appraisal is required to select the best remedial methods and methodology. For contaminated soil there are several options such as either removing the soil, treating the soil to remove the contaminant, or covering it with a top layer that would stop the pathway and therefore the likelihood of the receptor being subject to the contamination. Asbestos fibres are only a risk if they are inhaled, if these are

encapsulated under a concrete foundation there is no availability of a pathway and therefore no likelihood of a receptor being exposed to fibres.

- 7.12.8 The Environmental and Protection Officer has considered all of the submitted information. They agree with the methodology and the borehole locations and potential contaminant pathways. They also agree with the findings of the report and that there would be no adverse impacts with regards to land contamination as a result of the development.
- 7.12.9 The Environmental and Protection Officer has recommended the imposition of a condition requiring both an options appraisal and remediation strategy. The remediation strategy would include details of fibre monitoring to address the potential impact with regards to asbestos. The site would be required to be remediated to a standard that ensures it is suitable for its proposed use. The remediation would remove risks not only to future occupiers of the site but also to adjacent site users.
- 7.12.10 A verification report would then be required to be prepared to demonstrate completion of works in the agreed remediation strategy. The verification report would be reviewed in order to assess whether the works carried out had removed or controlled the identified risks in accordance with the agreed remediation strategy.
- 7.12.11 The Environmental and Protection Officer also recommends a condition regarding any unsuspected contamination encountered during development that was not previously identified and proposals put forward to remediate accordingly.
- 7.12.12 Objections have been received that the development would be contrary to the Contaminated Land Strategy (2002). This Environmental Health guidance does not form part of the Development Plan and has been overtaken by current national and other local policies, for example, the Strategy refers to Policy GEN5 which is a superseded policy from the previous Local Plan. The application is considered in accordance with current Policies.
- 7.12.13 The application site is within Source Protection Zone 1 and is located upon a Secondary Aquifer in hydraulic continuity with the underlying Principal Aquifer. The Environment Agency has advised that the documents submitted with the application provides it with confidence that it will be possible to suitably manage the risk posed to controlled waters by the development; however, further detailed information would be required to be provided by condition on any grant of consent.
- 7.12.14 Planning conditions are requested by the Environment Agency to ensure that: the site does not pose further risk to human health or the water environment; to prevent further deterioration of water quality, and to ensure that there is no harm to groundwater. Requested conditions include: the requirement for a remediation strategy and verification report; details of a long term monitoring and maintenance plan; no infiltration of surface water drainage into the ground at the site without consent; the submission of details relating to piling/boreholes/tunnel shafts/ground source heating and cooling systems, and a scheme for managing any boreholes installed.
- 7.12.15 Affinity Water has raised an objection to the application as it has concerns that the development has potential to impact adversely on the public water supply. This is because, as noted above, the site is located within an Environment Agency defined groundwater Source Protection Zone 1 (SPZ1) corresponding to Springwell Pumping Station. This is a public water supply, comprising a number of Chalk abstraction boreholes, operated by Affinity Water Ltd. Affinity Water is concerned that piling within this area poses a risk by creating pathways between shallow gravel groundwater and deep chalk groundwater potentially allowing naturally occurring manganese present in the gravel aquifer to migrate to the chalk. Consequently, insufficient information has been submitted to demonstrate that there would not be an adverse impact on groundwater, particularly due to the proposed use of piling.

- 7.12.16 In summary, while the impacts that the proposed development would have with regards to land contamination are not adverse, in view of the specialist advice received regarding groundwater, it has not been fully demonstrated there would not be an adverse impact with regards to water contamination as a result of the development. The proposed development fails to comply with the NPPF (2019) and Policy DM9 of the Development Management Policies LDD (adopted July 2013) in this regard.
- 7.13 Refuse and Recycling
- 7.13.1 Policy DM10 (Waste Management) of the DMLDD advises that the Council will ensure that there is adequate provision for the storage and recycling of waste and that these facilities are fully integrated into design proposals. New developments will only be supported where:
- i) The siting or design of waste/recycling areas would not result in any adverse impact to residential or work place amenity
 - ii) Waste/recycling areas can be easily accessed (and moved) by occupiers and by local authority/private waste providers
 - iii) There would be no obstruction of pedestrian, cyclists or driver site lines
- 7.13.2 The County Council's adopted waste planning documents reflect Government policy which seeks to ensure that all planning authorities taken responsibility for waste management. This includes ensuring that development makes sufficient provision for waste management and promotes good design to secure the integration of waste management facilities with the rest of the development and ensuring that the handling of waste arising from the construction and operation of development maximises reuse/recovery opportunities, and minimises off-site disposal.
- 7.13.3 HCC would therefore require a Site Waste Management Plan (SWMP) to be submitted which should aim to reduce the amount of waste produced on site. As a minimum the waste types should be defined as inert, non-hazardous and hazardous. The SWMP should be set out as early as possible so that decisions can be made relating to the management of waste during construction, whereby building materials made from recycled and secondary sources can be used within the development. This will help in terms of estimating what types of containers/skips are required for the stages of the project and when segregation would be best implemented for various waste streams. It will also help in determining the costs of removing waste for a project. The total volumes of waste during enabling works (including demolition) and construction works should also be summarised.
- 7.13.4 The proposed development site is located north of the Safeguarded Area SA143 STW Maple Lodge. It should be noted that Maple Lodge Sewage Treatment Works is a permanent existing operational waste site which is safeguarded under HCC Waste Policy 5: Safeguarding of Sites, in the County Council's Waste Core Strategy and Development Management Policies document, adopted November 2012 as they contribute to a strategic network of waste management provision within the county. Proposals should not prejudice the site's use a sewage treatment works.
- 7.13.5 In relation to minerals, the site falls entirely within the 'Sand and Gravel Belt' as identified in HCC's Minerals Local Plan 2002 – 2016. The Sand and Gravel Belt', is a geological area that spans across the southern part of the county and contains the most concentrated deposits of sand and gravel throughout Hertfordshire. In addition the site falls entirely within the sand and gravel Mineral Safeguarding Area within HCC's Proposed Submission Minerals Local Plan, January 2019.
- 7.13.6 Adopted Minerals Local Plan Policy 5 (Minerals Policy 5: Mineral Sterilisation) encourages the opportunistic extraction of minerals for use on site prior to non-mineral development. Opportunistic extraction refers to cases where preparation of the site for built development may result in the extraction of suitable material that could be processed and used on site as part of the development. This may include excavating the foundations and footings or

landscaping works associated with the development. Policy 8: Mineral Safeguarding, of the Proposed Submission document relates to the full consideration of using raised sand and gravel material on site in construction projects to reduce the need to import material as opportunistic use.

7.13.7 The county council, as the Minerals Planning Authority, encourage the opportunistic use of these deposits within the developments, should they be found when creating the foundations/footings. Opportunistic use of minerals will reduce the need to transport sand and gravel to the site and make sustainable use of these valuable resources.

7.13.8 Space for the storage of refuse and re-cycling is included within the service yards adjacent to both Units. Whilst it is anticipated that collections would be privately operated, the Council's Waste and Environment Manager has reviewed the submitted details and has raised no objections. Elevational details of the storage areas has not been submitted so would be secured via condition on any grant of consent.

7.14 Infrastructure Contributions

7.14.1 Policy CP8 of the Core Strategy requires development to make adequate contribution to infrastructure and services. The Three Rivers Community Infrastructure Levy (CIL) was adopted in February 2015 and came into force on 1 April 2015. The Charging Schedule sets out that the application site is within 'Area A' within which the charge per sqm of non-residential development is £nil.

7.14.2 In order to make the proposals acceptable to maximize sustainable travel options, HCCHA recommends that developer contributions of £6000 are sought via a Section 106 Agreement towards supporting the implementation, processing and monitoring of a full travel plan including any engagement that may be needed. Whilst the applicant/their agent is aware of this request and no objection has been raised, a Section 106 Agreement to secure the contribution has not been agreed and in the absence of such agreement the proposed development therefore fails to meet the requirements of Policies CP1, CP8 and CP10 of the Core Strategy (adopted October 2011).

7.15 Conclusion & Planning Balance

7.15.1 Paragraph 11 of the NPPF states that; *"Plans and decisions should apply a presumption in favour of sustainable development"*.

7.15.2 For decision-taking this means:

c) approving development proposals that accord with an up-to-date development plan without delay; or

d) where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:

i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or

ii. 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.

7.15.3 Paragraph 8 of the NPPF sets out that there are three overarching and independent objectives to achieving sustainable development: an economic objective; a social objective, and an environmental objective.

7.15.4 In terms of economic and social objectives, it is acknowledged that the application site is an existing employment allocation and that the proposed development would contribute to meeting the need for B1c, B2 and B8 floorspace set out in the South West Herts Economic Study (2018) and would create jobs within the District. However, with regards to the environmental objective, the development would: result in the loss of protected trees and

fails to demonstrate that other protected trees would not be harmed as a consequence of the proposal; fails to demonstrate that surface water run-off can be adequately handled within the site and that the development will not result in flooding of adjacent properties and within the site itself; fails to demonstrate that the proposed development, particularly due to the proposed use of piling, would not have an adverse impact on groundwater; fails to maximise sustainable transport options, and does not provide net gain for biodiversity

7.15.5 In summary, whilst there would be some limited economic and social benefits, there would be adverse environmental impacts. These adverse impacts are considered to outweigh the benefits and, therefore, the proposal would not constitute sustainable development.

7.15.6 It is considered that the adverse impacts that would result from the proposed development would be demonstrably harmful and justify refusal of planning permission.

8 Recommendation

8.1 That Planning Permission be REFUSED for the following reasons:

R1 The development would result in the loss of protected trees and fails to demonstrate that other protected trees would not be harmed as a consequence of the proposal. The development therefore fails to comply with Policies CP1 and CP12 of the Core Strategy (adopted October 2011), Policies DM1, DM6 and Appendix 2 of the Development Management Policies LDD (adopted July 2013) and the NPPF (2019).

R2 In order to maximize sustainable travel options, a financial contribution towards supporting the implementation, processing and monitoring of a full travel plan is required. In the absence of a signed agreement under the provisions of Section 106 of Town and Country Planning Act 1990, the development fails to meet this requirement. The application therefore fails to meet the requirements of Policies CP1, CP8 and CP10 of the Core Strategy (adopted October 2011) and the NPPF (2019).

R3 It has not been demonstrated that surface water run-off can be adequately handled within the site, and that the development will not result in flooding of adjacent properties and within the site itself. Accordingly the development fails to comply with Policy CP1 of the Core Strategy (adopted October 2011), Policy DM8 of the Development Management Policies LDD (adopted July 2013) and the NPPF (2019).

R4 It has not been demonstrated that the proposed development, particularly due to the proposed use of piling, would not have an adverse impact on groundwater, which, in turn, has the potential to adversely impact the public water supply. Accordingly the development fails to comply with Policy CP1 of the Core Strategy (adopted October 2011), Policy DM9 of the Development Management Policies LDD (adopted July 2013) and the NPPF (2019).

R5 In the absence of a signed agreement under the provisions of Section 106 of Town and Country Planning Act 1990, the application does not provide net gain for biodiversity and therefore fails to meet the requirements of Policies CP1 and CP9 of the Core Strategy (adopted October 2011), Policy DM6 of the Development Management Policies LDD (adopted July 2013) and the NPPF (2019).

8.2 Informatives:

I1 The Local Planning Authority has been positive and proactive in considering this planning application in line with the requirements of the National Planning Policy Framework and in accordance with the Town and Country Planning (Development Management Procedure) (England) Order 2015. Whilst the applicant and/or their agent and the Local Planning Authority discussed the scheme during the course of the application, the proposed development as amended fails to comply with the

requirements of the Development Plan and does not maintain/improve the economic, social and environmental conditions of the District.