

## 20. Intermediate Years Assessment

### 20.1 Introduction

- 20.1.1 This Chapter, which has been prepared by Waterman, is provided pursuant to the s73 ES and other EIA Documentation (as defined in **Chapter 4: Approach to the ES Further Information Report**) and provides further information to inform the intermediate years assessment presented in **Chapter 20: Intermediate Years Assessment** of the s73 ES and other EIA Documentation. It sets out where the previous assessment remains valid, and where the Interim Indicative Construction Programme (ICP) Update described in **Chapter 2: Description of Phase 1B (North) RMA** allows the significance of environmental impacts already identified to be refined.
- 20.1.2 A review has been undertaken of the Scheme with Phase 1B (North) in place (and having regard also to the detailed design previously approved in relation to Phase 1A (North)) as well as the Interim ICP Update, the key elements of which are defined below, to identify any potential changes to the construction delivery programme or temporal impacts as reported within the s73 ES and other EIA Documentation which could change the basis of the assessment.
- 20.1.3 The Chapter is supported by **Appendix 2.1: Construction Impact Assessment (CIA) Addendum Technical Note**.

### 20.2 Assessment Methodology

- 20.2.1 The Indicative Construction Programme (ICP) and the Construction Impact Assessment (CIA) Addendum which supported the s73 Application have been revised and updated from that considered by the s73 ES and other EIA Documentation. The changes presented in the CIA Addendum Technical Note and appended Interim ICP Update (see **Appendix 2.1**) are as follows:
- Plots 53 and 54 have moved forward into Phase 1A (North) from Phase 1C in accordance with the re-phasing application reference F/05552/14 approved in February 2015.
  - Six items of critical infrastructure (comprising four items of highway infrastructure - Claremont Avenue, Claremont Road Junction North, High Street South (East Works) and Orchard Lane - and two open spaces - Clitterhouse Playing Fields (Part 1) and Claremont Park) are to be moved from Phase 1A (North) to Phase 1B (South). An application (reference 16/7489/CON) submitted under Condition 4.2 of the 2014 Permission to re-phase these six items was subject to a resolution to grant approval at Planning Committee in February 2017, subject to the signing of a Deed of Variation to the S106 Agreement.
  - The construction programme for Phase 1 (North) has been revised, with commencement of works now programmed for Quarter 2 (Q2) 2018 rather than 2016 as originally envisaged. This has consequential implications for the completion of the Phase 1 (North) works (now scheduled for 2023 rather than 2021 - with the exception of Plot 109 which is now scheduled for completion in 2024 and Plot 113 which is now scheduled for completion in 2027) and there have also been some changes to the precise timings of specific elements within Phase 1.
- 20.2.2 The s73 ES considered three 'snapshot years' (2020, 2023 and 2029) within the intermediate years assessment. Commentary was provided, as relevant, in the other EIA Documentation, to confirm the effects of subsequent submissions, where relevant, on the assessment of impacts at these snapshot years. However the ICP itself has not previously been formally updated.
- 20.2.3 It should be noted that the updated ICP which accompanies this Phase 1B (North) FIR (see **Appendix 2.1: Construction Impact Assessment (CIA) Addendum Technical Note**) represents an interim update, reflecting those changes of relevance to Phase 1 North (i.e. Phase 1A (North) and Phase 1B (North)). Subsequent further updates are to be made to the ICP in due course, to

accompany future proposed submissions for re-phasing wider elements of the Scheme proposed by the other Development Partners. Subsequent to these further submissions, a formal application for an update to the ICP under Condition 4.4 of the 2014 Permission is to be submitted, accompanied by the necessary supporting environmental information. The updates to the intermediate years assessment presented in this Chapter should therefore be viewed in the context that there will be further changes to the delivery programme of the wider Scheme in due course. Those subsequent applications will have regard to the changes encapsulated in the Interim ICP Update for Phase 1 North which are assessed in this Chapter.

- 20.2.4 This Chapter describes the Scheme at three snapshots of time over the course of the Interim ICP Update (2020, 2023 and 2029). It follows the same format as that presented in the s73 ES and other EIA Documentation. It describes which elements of the Scheme are under construction or have been completed during these three intermediate years. **Table 20.1** and **Table 20.2** summarise the key elements of the Development under construction and operational at the first and second snapshot, and replace Tables 2.17 and 2.18 of the s73 ES. There are no changes to the third snapshot as a result of the Interim ICP Update.
- 20.2.5 The detailed design now available for the Phase 1B (North) RMA has been considered by the EIA consultants in their review of the findings of s73 ES **Chapter 20** and its subsequent equivalents, as presented in the other EIA Documentation, to determine whether the assessment(s) remain valid or whether new or different significant environmental effects are likely which were not identified in the s73 ES and other EIA Documentation. Where appropriate, further commentary on the assessment for Phase 1B (North) elements has been provided in the relevant snapshot years to indicate the potential impacts at that specific time in the delivery programme. A description of each snapshot is provided below, and the Interim ICP Update illustrates the level of construction and completed development at each year (see **Appendix 2.1**).

### Snapshot One: Quarter 3 (Q3) 2020

- 20.2.6 The first intermediate snapshot is during Quarter Three (Q3) of 2020. This period is during the peak of construction activity in Phase 1. The assessment presented in this Chapter considers any elements of other Phases that are under construction or completed according to the Interim ICP Update at that time.
- 20.2.7 **Table 20.1** depicts the updated construction programme at this point in time, showing what will be operational and what will be under construction. This table replaces Table 2.17 of the s73 ES.
- 20.2.8 The Interim ICP Update shows that this snapshot is part way through the delivery of Phase 1. The ICP previously showed that all highway infrastructure was planned to be completed by the first snapshot; the Interim ICP Update now shows the delivery of some highway infrastructure continuing beyond this point, with all elements completed by the end of 2023. The proposed movement of Clitterhouse Playing Fields (Part 1) and Claremont Park enhancement works from Phase 1A (North) to Phase 1B (South) has resulted in a later completion of the works to these open spaces, with the works to Claremont Park having been pushed back by around a year, followed by a phased delivery of the Clitterhouse Playing Fields (Part 1) works beyond the first snapshot year. The delivery of Plots 53 and 54 has been brought forward following the re-phasing application (reference F/05552/14), as has the provision of the associated Clarefield Park Temporary Replacement Open Space.
- 20.2.9 A temporary bus station is no longer proposed as the existing bus station will remain in use until the new permanent bus station is constructed and operational 20 months after commencement of the Phase 1 works. The existing bus station will then be closed. Therefore, all references to a temporary bus station within the CIA Addendum 2013 are no longer relevant.

Table 20.1: First Intermediate Snapshot: Q3 2020

Description	Operational	Under Construction
<b>Phase 1 Activities</b>		
<b>Section 278 Works</b>		
Prince Charles Drive Diversion - Between East and West Roundabouts	✓	
River Brent Alteration & Diversion Works Central Section	✓	
A406 Brent Cross Ingress/Egress Junction Improvements	✓	
Bridge Structure B1 (Replacement of A406 Tempelhof)	✓	
Tempelhof Avenue & Tempelhof Link Road	✓	
Claremont Avenue Junction with Tiling Road	✓	
Brent Cross Underpass Improvements	✓	
M1/A406 & A5/A406 Junction Improvements	✓	
Waste Handling Rail Facility Rail Sidings		✓
Transport Interchange T2 (Replacement Brent Cross Station)	✓	
Waste Handling Facility		✓
Tiling Road West Alignment Diversion	✓	
Claremont Park Road (Part 1)	✓	
River Brent Bridge Relevant to Central Section	✓	
A5/ Diverted Geron Way (Waste Handling Junction)		✓
Claremont Road North Junction		✓
Living bridge - Demolish Part Whitefield Estate & Construct Bridge		✓
A41/A406 Junction Improvements		✓
A5/A407 Cricklewood Lane Junction Improvements		✓
Eastern River Brent Alteration & Diversion Works		✓
Cricklewood Lane/ Claremont Road Junction Works		✓
<b>Section 106 Works</b>		
Community Building		✓
Central Brent Riverside Park	✓	
Clarefield Park Temporary Replacement Open Space	✓	
Claremont Park Improvements	✓	
High Street North		✓
River Brent Nature Park	✓	
Sturgess Park Improvements		✓
<b>Building Plots</b>		
Whitefield Estate Replacement Units Part 203	✓	
Office Block (5574 Sqm)		✓

Description	Operational	Under Construction
Construct 47 Units to Relocate Residents from Whitefield Estate	✓	
Plot 105		✓
Plot 102+K31 (Brent Cross Main Square)		✓
Plot 107		✓
Plot 109		✓
Plot 105		✓
Plot 103/K38		✓
Plot 106		✓
Plot 104		✓
Plot 101		✓
Plot 53	✓	
Plot 54	✓	
Plot 110/111		✓
Plot 26		✓
Plot 59		✓
Plot 18 - Residential (375) & Retail/Leisure		✓
Plot 11 - Residential (275) & Retail		✓
Plot 12 - Residential (159) & Retail		✓
Plot 25 + K42/K43 - Community Use/Retail/Temp. Health/Neighbourhood Police Unit		✓
<b>Phase 2 Activities</b>		
<b>Section 278 Works</b>		
A41 Junction	✓	
Highfield Avenue Junction Works	✓	
High Street South		✓
Tiling Road East improvements		✓
Whitefield Avenue		✓
<b>Section 106 Works</b>		
New Special Needs School		✓
Plot 27 - New Whitefields Secondary School		✓
<b>Phase 4 Activities</b>		
<b>Section 278 Works</b>		
New MML Train Stabling Facility		✓

## Snapshot Two: Quarter 2 2023

20.2.10 The second intermediate snapshot is during Quarter Two (Q2) of 2023. The ICP presented in the CIA Addendum and described in the s73 ES showed this period as representing the completion of Phase 1. However, the Interim ICP Update shows some elements of Phase 1 still undergoing construction at this point in time - the Western River Brent Alteration and Diversion Works, Bridges and Riverside Park; the Living Bridge; Claremont Avenue; School Green Corridors and some of the Building Plots including Plot 109, Plot 113 and Claremont Primary School. There will also be elements of subsequent phases under construction at Q2 2023, as identified in **Table 20.2** which replaces Table 2.18 of the s73 ES.

20.2.11 During Q2 2023, all elements that were under construction during the first intermediate snapshot are now operational, with the exception of Plot 109 (Phase 1B (North)), Whitefield Avenue (Phase 2) and the new MML Train Stabling Facility (Phase 4) which are still undergoing construction. At this stage, the following table, **Table 20.2**, depicts those elements that will be operational and under construction.

Table 20.2: Second Intermediate Snapshot: Q2 2023

Description	Operational	Under Construction
<b>Phase 1</b>		
<b>Section 278 Works</b>		
River Brent Ridge Relevant to Eastern Section	✓	
Claremont Avenue		✓
K44 - High Street South "East Works"	✓	
Western River Brent Alteration & Diversion Works		✓
River Brent Bridges Western Section		✓
<b>Section 106 Works</b>		
Community Facilities (Market Quarter)	✓	
Clitterhouse Playing Fields (Part 1)	✓	
Neighbourhood Police Unit	✓	
Brent Terrace Green Corridors	✓	
Eastern Brent River Side Park	✓	
Market Square	✓	
Western Brent Riverside Park		✓
School Green Corridors		✓
<b>Building Plots</b>		
Plot 109		✓
Plot 28	✓	
Plot 81 - Pavilion	✓	
Plot 93 - Tower (117)		✓
Plot 13 - Residential (176) & Retail	✓	
Plot 82 - Park Depot	✓	
Plot 51 - Pavilion	✓	
Plot 46 - Claremont Primary School		✓

Description	Operational	Under Construction
Plot 21 - Existing Hotel		✓
Plot 58 - Residential (20) Retail & Health		✓
Plot 45 - Sub station	✓	
Plot 30 - Residential (6) & Retail		✓
Plot 113 - Residential (52)		✓
<b>Phase 2</b>		
<b>Section 278 Works</b>		
Whitefield Avenue		✓
Claremont Park Road (Part 2)	✓	
A41 Pedestrian Bridge		✓
Brent Cross Underground Transport Interchange		✓
Whitefield Street		✓
<b>Section 106 Works</b>		
Clitterhouse Playing Fields (Part 2)	✓	
School Square	✓	
Clitterhouse Nature Park	✓	
Health Facilities		✓
<b>Building Plots</b>		
Plot 14 (S) - Residential (139)	✓	
Plot 37 (S) - School (Children's Centre)	✓	
Plot 15 (S) - Residential (158)		✓
Plot 114 (N) - Residential (569)		✓
Plot 64 (S) - Residential (40)	✓	
Plot 16 (S) - Residential (183) & Retail		✓
Plot 66 (S) - Terraced Houses (17)		✓
Plot 67 (S) - Terraced Houses (12)		✓
Plot 22 (S) - Residential (51) & Retail		✓
Plot 17 (S) - Residential (203) & Retail		✓
Plot 68 (S) - Residential & Retail (120)		✓
Plot 23 (S) - Residential (61) & Retail		✓
Plot 24 (S) - Residential (61) & Retail		✓
Plot 73 (S) - Residential (118)		✓
Plot 76 (S) - Residential (138) & Business		✓
Plot 74 (S) - Residential (127) & Retail & Business		✓
Plot 80 (S) - Gym and New Health Centre		✓
<b>Phase 4</b>		
<b>S278 Works</b>		
New MML Train Stabling Facility		✓

### Snapshot Three: Quarter 4 2029

- 20.2.12 The third intermediate snapshot is during Quarter Four of 2029 (Q4 2029). The Interim ICP Update shows no change to the elements which are shown as operational or under construction in Table 2.19 of the s73 ES. By the end of 2029, works associated with Phases 4 to 7 will be under construction with the majority of works completed for Phase 4 to 5 and Phases 6 to 7 approximately half way through their construction.

### Summary of the Outcomes of the s73 ES and Other EIA Documentation Intermediate Years Assessment

- 20.2.13 The intermediate years assessment was updated for the s73 ES to reflect the ICP which formed part of the s73 ES, with statements of conformity subsequently provided for the other EIA Documentation. The intermediate years assessment provided a high level assessment of the likely significant impacts of the Scheme at different stages when parts of the Scheme are built out and in operation (residents or visitors occupying the Site) alongside ongoing construction in other areas of the Scheme. It was concluded that there would be some temporary construction-related impacts on residents and site visitors using the Site during the construction programme which would require mitigation through the Construction Environmental Management Plan (CEMP). These impacts would not remain following completion of the construction for the whole Scheme.
- 20.2.14 This Chapter provides further information to inform the intermediate years assessment. It sets out where the Interim ICP Update results in changes to the assessment of effects previously reported, and also confirms where the previous assessment remains valid.
- 20.2.15 The following sections of this Chapter provide a statement of conformity or further information (as relevant to the topic concerned) on the intermediate years' impacts for each technical discipline, as provided in the s73 ES and other EIA Documentation.

## 20.3 Traffic and Transport

- 20.3.1 The s73 ES and other EIA Documentation reported minor adverse impacts on road and rail transport throughout all of the three intermediate years, however it was noted that all impacts could be 'accommodated' within the proposed network. It was therefore not considered that any specific stages of construction would lead to more traffic and transport disruption or impacts than another.
- 20.3.2 As set out in **Chapter 7: Traffic and Transport**, the impacts as presented in the Consolidated Transport Assessment (TA) and the s73 ES and other EIA Documentation with reference to the BXC-TM model are considered to remain valid. The development of the new BXC-DDM model has provided updated traffic forecasts for the purposes of detailed highway design, however the BXC-DDM only provides forecast traffic flows for the years 2021 and 2031 at present. As reported in the s73 ES, the TA intermediate snapshots are slightly different to those assumed for the purposes of this Chapter as the TA assessments are designed to identify the periods just before key items of transport infrastructure open. It is therefore not possible at present to fully update the intermediate years assessment for each of the three snapshot years for traffic and transport. The above approach is consistent with the traffic and transport intermediate years assessment presented in the s73 ES and other EIA Documentation.
- 20.3.3 Notwithstanding the above, it is considered that the outcomes will not change in terms of the significance of impacts from those reported within the s73 ES and confirmed in the other EIA Documentation. While there have been changes to the ICP which have the potential to result in an increase in construction traffic at the first and second snapshot years, given the low magnitude of change between the maximum increase in construction traffic reported in the s73 ES and the

maximum increase demonstrated having regard to the possible 23% uplift in construction traffic from that reported in the CIA Addendum (refer to the CIA Addendum Technical Note in **Appendix 2.1**), and taking into consideration the actual number of additional construction vehicles as reported in Chapter 7 of this Phase 1B (North) FIR, the potential increase in construction traffic forecast in the CIA Addendum Technical Note is not anticipated to give rise to a significant transport or environmental impact at the Strategic Gateway (or any other) junctions. There are no other changes to assumptions regarding construction with the potential to affect the previous assessment of construction impacts for traffic and transport. Furthermore, there are no material changes to the predicted operational traffic movements associated with the Development on completion of Phase 1 North. Thus the conclusions of the intermediate years assessment are considered to remain in accordance with those identified in the s73 ES, and confirmed in the subsequent EIA Documentation, as outlined above.

## 20.4 Socio-Economics

- 20.4.1 The s73 ES and other EIA Documentation reports a gradual increase in employment throughout the construction period, with a large increase from baseline employment within the Site of approximately 5,400 to a completed Development employment total of approximately 30,000.
- 20.4.2 Housing and population impacts were also assessed, and having regard to the updated ICP, the following trends can be concluded:
- Housing numbers decrease from 219 to approximately 80 by 2020 but then increase significantly in 2023 and more than double again by 2029;
  - Population and child volumes also decrease by 2020 (to 145) but then rise sharply by 2023 and again more than double by 2029 to a predicted total population of 13,415 once all 7,500 dwellings are complete.
- 20.4.3 The Phase 1B (North) RMA involves the development of Plot 113 for residential development in line with the floorspace quantum and physical characteristics of the development plots as set out in the parameters and principles of the 2014 Permission. A total of 52 residential units are proposed in Plot 113. Overall, there is a reduction of 226 residential units in Phase 1B (North) from the 278 units envisaged for BXE in the Zonal Floorspace Schedule and expected to be delivered in this zone within the s73 ES. At this stage, it is not known whether this reduction in homes will be made up in later phases of the Development; if it is not, then the number of dwellings and population impacts at each snapshot year will decrease by 226 units and approximately 450 residents (this is a worst-case scenario as it applies the average household size of private-rented units which is higher than market sale units - as per average household size stated in the s73 ES). These changes, should they occur, would not alter the significance of the housing and population trend at each intermediate year previously reported in the s73 ES and other EIA Documentation, given the overall scale of the Scheme.
- 20.4.4 The s73 ES chapter and other EIA Documentation also considered the community impact and determined that the Development has sufficient capacity and provision to service the future residents. The S106 agreement and planning conditions of the 2014 Permission will ensure that the social and community infrastructure proposed as part of the Development will be delivered to meet demand.
- 20.4.5 Overall, the s73 ES and other EIA Documentation concluded that the Development would have a **major beneficial** impact throughout each of the intermediate years, due to net housing, employment and community provision, and this remains the case notwithstanding the changes to the Phase 1B (North) programme and sequencing set out in the Interim ICP Update.

- 20.4.6 A number of new areas of Public Realm / Open Space / Threshold Space are to be provided as part of Phase 1B (North) in line with the 2014 Permission. These include key Threshold Spaces including Fenwick Place, Tempelhof Circus and Layfield Place, and amenity space including the Eastern and Western Brent Riverside Parks and the River Brent Nature Park (NP4). In addition, the existing Sturgess Park is to be retained and enhanced including new formal play facilities, seating areas, gardens, informal sports provision and nature areas.
- 20.4.7 The Interim ICP Update shows changes to the sequencing of open spaces to be delivered by Snapshot One. The Eastern and Western Brent Riverside Parks (Phase 1B (North)) are to be delivered later than originally shown in the ICP, due to a later start to the associated river alteration and diversion works. The Central Brent Riverside Park (Phase 1B (North)) is to be delivered earlier than originally shown in the ICP, to coincide with the Central River Brent Alteration and Diversion works undertaken in Phase 1A (North)). Key Threshold Spaces are programmed to be developed at the same time as their associated plots and thus any change shown in the Interim ICP Update incorporates the appropriate amenity provision, with all such Threshold Spaces and associated Plots now scheduled for completion by Snapshot 2.
- 20.4.8 The enhancement to Clitterhouse Playing Fields (Part 1) are proposed to be re-phased under Condition 4.2 from Phase 1A (North) to Phase 1B (South) (application reference 16/7489/CON) and are now proposed to be delivered later in the programme, beyond Snapshot One. Claremont Park is also proposed to be rephased to become part of Phase 1B (South) under the same application, but will still be complete by the end of Snapshot One. Clarefield Park Temporary Replacement Open Space has now been brought forward to be completed before the neighbouring Plots 53 and 54, in advance of the first snapshot.
- 20.4.9 The proposed re-phasing and associated re-sequencing of amenity spaces as set out in the Interim ICP Update are designed to ensure that the potential disruptions to open space accessibility during the early phases of the Development are minimised, and to ensure that the creation of open space is programmed in accordance with the element of the Scheme it is associated with.
- 20.4.10 Appendix 7 of the CIA Addendum Technical Note shows a revised labour trend histogram to reflect the fact that the overall works within Phase 1 remain the same, but take place within a reduced time frame and thus the labour resource generally increases. As a result, for the first snapshot year of Q3 2020, the labour percentage increase over that presented in the equivalent histogram within the CIA Addendum is 24.5%. Thus, there are still benefits throughout each of the intermediate years due to net increase in employment.
- 20.4.11 Having regard to the above, it can be concluded that the Scheme would continue to have a major beneficial impact throughout each of the intermediate years in terms of both employment generation and providing new homes for new residents to the area. It is therefore concluded that the intermediate years assessment carried out as part of the s73 ES and other EIA Documentation for socio-economics remains valid as **major positive / beneficial**.

## 20.5 Noise and Vibration

- 20.5.1 It was acknowledged in the s73 ES and other EIA Documentation that, during the phases of construction, elevated noise levels will be experienced by existing sensitive receptors bordering or within the Site, and future residents of the Development, and that construction impacts on future residents would increase towards the third snapshot year as more parts of the Site become occupied. It was reported that the majority of the adverse noise impacts will be experienced in the first intermediate snapshot year of 2020 when Phases 1 and 2 will have commenced construction, as these phases contain a large proportion of the critical infrastructure required for the delivery of the Development including heavy earthworks in relation to highways, the River Brent realignment,

open space improvements and building demolition and construction activities around the Brent Cross Shopping Centre and immediately south of the A406 North Circular.

- 20.5.2 The s73 ES intermediate years assessment sets out specific elements of the Scheme at each snapshot; stating which receptors are likely to be impacted by the construction work. The Interim ICP Update re-programmes some of these elements of work as described above. However, it remains the case that the majority of the adverse noise impacts will be experienced in the first snapshot year when Phase 1 and Phase 2 have commenced construction.
- 20.5.3 While construction traffic has the potential to increase during Phase 1 due to the contracted timelines compared with the s73 ICP, there will be no change to the significance of effects previously reported, as assessed in **Chapter 9: Noise and Vibration** of this Phase 1B (North) FIR, as the level of increase equates to an increase in noise level of just over 1dB(A) which is considered to be barely perceptible, particularly in the context of the existing high traffic volumes on the main surrounding road network. The programme changes do not affect the construction traffic routes previously considered.
- 20.5.4 Noise emitting development such as the CHP(s), waste handling facility and rail freight facility, will undergo detailed noise modelling during the detailed design phase for their relevant development phase RMA(s). These features do not form part of the Phase 1B (North) RMA. Detailed design will incorporate measures to reduce and manage noise emissions during operation so that the noise contribution from these operations is limited alongside the ongoing construction activities of later phases.
- 20.5.5 Each phase of construction will create a degree of elevated noise levels to existing sensitive receptors (mostly residents) bordering the Site, or increasingly as the Development progresses over time, at residential and other parts of the Scheme that have become occupied. Qualitative **moderate adverse** noise impacts were identified for each intermediate snapshot year in the s73 ES and other EIA Documentation, however with the application of the Code of Construction Practice (CoCP), CEMP and the Construction Transport Management Plan (CTMP), the noise from construction activities will be controlled and impacts minimised where possible. These conclusions have not changed as a result of the changes to programme and sequencing identified within the Interim ICP Update, and the noise and vibration assessment for the intermediate years as presented in the s73 ES and other EIA Documentation is therefore considered to remain valid.

## 20.6 Townscape and Visual Impact Assessment

### Introduction

- 20.6.1 The Intermediate Years Assessment for Landscape and Visual Impacts is qualitative and relies on the information presented in the s73 ES and other EIA Documentation and Chapter 10: Townscape and Visual of this Phase 1B (North) FIR. The impacts described in the s73 ES and other EIA Documentation are considered to remain valid, whilst additional information specific to Phase 1B (North) townscape and visual impacts and the re-sequencing set out in the Interim ICP Update is provided below.

### First Intermediate Snapshot Assessment: 2020

- 20.6.2 The main townscape and visual impacts arising from Phase 1B (North) include the loss of existing trees and vegetation to facilitate development and the visual intrusion of construction activity (equipment, hoarding etc.). These impacts are of greatest relevance to a relatively small number of existing residents within or adjacent to the Site and to users in close proximity to Phase 1B (North) and the users of the Brent Cross Shopping Centre.

- 20.6.3 The Interim ICP Update shows that by 2020, construction works for many of the Phase 1B (North) development plots would still be ongoing and some of the amenity areas would not yet have been completed. Furthermore, some elements of Phase 1A (North) would also still be under construction.
- 20.6.4 The alterations to sequencing would mean that there would be, firstly, a delay to the loss of Clarefield Park, coupled with an earlier provision of its temporary replacement (both of which would be positive in terms of visual amenity to the residential receptors at Prayel Grove), whilst secondly, the Clitterhouse Playing Fields (Part 1) enhancements are proposed to be delivered later than previously programmed; and after the first snapshot. The latter would result in some delay to the enhancement in the visual amenity to residents at Prayel Grove that would accrue from the new tree planting and other environmental improvements. However, the delay in the programme would not have any negative impact to the residential receptors as there would be no overall loss of green space at this snapshot.
- 20.6.5 The Central Brent Riverside Park would be completed by this time and its planting in place, although the planting would require a few years to establish to provide sufficient visual amenity. This would be delivered in advance of what was previously programmed. The Eastern and Western Brent Riverside Parks (Phase 1B (North)) are to be delivered later than originally shown in the s73 ICP, due to a later start to the associated river alteration and diversion works.
- 20.6.6 The completion of the Living Bridge is now programmed after the first snapshot, and during the first snapshot demolition of the Whitefield Estate and construction of the bridge would be ongoing giving rise to some limited adverse impacts to residential receptors at Prayel Grove and to the road users of the North Circular Road. The A41/A407 junction improvement works would still be ongoing due to a delayed start in the programme and would have negative impacts on the residential receptors to the east of the junction, however these impacts would be highly localised.
- 20.6.7 In addition to the Phase 1B (North) elements, some of the 'early stages' of construction for the wider Scheme will also bring a positive sense of renewal to parts of the Site. Plots 53 and 54 are now programmed to be completed earlier than previously envisaged, and in advance of the first snapshot, having the greatest impacts on those residents living adjacent (to the west) within Brent Terrace and those to the east within Clitterhouse Crescent. Plots 11 and 12 would be under construction during the first snapshot and would be completed before the second snapshot.
- 20.6.8 Additional adverse and beneficial impacts have been noted due the reprogramming of the ICP for the first snapshot affecting the residential receptors of Prayel Grove and limited adverse impacts on residential receptors east of the A41/406 junction, as outlined above. However, overall, it is considered that, having regard to the detailed design of Phase 1B (North) which would be largely under construction or constructed in this snapshot year, the outcomes of the s73 ES remain valid for townscape and visual impact. As a result, the impacts during this snapshot year would be **moderate adverse**.

#### Second Intermediate Snapshot Assessment: 2023

- 20.6.9 By 2023, new planting associated with Brent Terrace, Claremont Park, Clitterhouse Playing Fields and Eastern Brent Riverside Park would be in place, however, the planting would need many more years to mature to reach a size where it would compensate for the loss of existing tree stock or provide suitable visual mitigation and amenity to the proposed Development and to the users of the public realm and open spaces.
- 20.6.10 Plot 109, Plot 113 and Western Brent Riverside Park would still be under construction during the second snapshot and would have negative impact on the residents at Brent Park and Layfield Close.

20.6.11 It is concluded that the outcomes of the s73 ES and other EIA Documentation for this snapshot year remain valid, with the addition of further negative visual impact on residential receptors at Brent Park and Layfield Close due to the continuing construction of some of the elements from Phase 1B (North) at this snapshot year. As a result, the impacts during this snapshot year would be **minor adverse**.

#### Third Intermediate Snapshot Assessment: 2029

20.6.12 Phase 1B (North) is programmed to be delivered by mid-2027 and the Interim ICP Update shows no change to the programme over the third snapshot. Thus the impacts presented in the s73 ES and other EIA Documentation remain valid. As a result, the impacts during this snapshot year would be **moderate beneficial**.

#### Conclusions

20.6.13 Construction impacts of the Phase 1B (North) elements would be highly localised and of a short term duration, with the majority of works being completed and operational by 2023. Each phase of construction will bring some localised areas of vegetation loss and intrusion from construction activity. These are assessed as moderate adverse impacts. However, as more of the Development is completed and the 'early phases' of new landscape become established, the adverse impact of construction on the more sensitive receptors (generally existing residents) will - after the second snapshot - progressively reduce.

20.6.14 The phased approach to the construction programme will ensure some established open spaces are retained on the Site (i.e. some spaces will remain open in their current condition for some years whilst others will be created in the early years of construction and mature over time to become more established during the later years of construction). This will steadily reduce adverse impacts and start to deliver beneficial impacts over time.

20.6.15 The emergence of an extensive area of new townscape with higher quality public open space and public realm will bring positive improvements to the overall townscape, noting that there will now be some changes to the timing of the delivery of the areas of open space to the south of the A406 (specifically Claremont Park and Clitterhouse Playing Fields) which are now proposed to form part of Phase 1B (South). This will change constantly over time starting as no change or slight beneficial impacts, leading to an eventual **moderate beneficial** impact at the third snapshot.

20.6.16 The significant visual impacts as reported in Chapter 20 of the s73 ES and other EIA Documentation remain valid with the addition of detailed design of Phase 1B (North). The description of the impacts at snapshot years one and two have been updated above to address the Interim ICP Update.

## 20.7 Ecology and Nature Conservation

20.7.1 The s73 ES and other EIA Documentation reports on the main activities that will have an impact on the ecological resources on the Site which are primarily as a result of construction work within, and in close proximity to, areas where sensitive habitats and species are known to occur. A summary of the outcomes of the s73 ES and other EIA Documentation is provided below, along with some additional new information on elements related to Phase 1B (North) and relevant commentary in respect of the Interim ICP Update.

20.7.2 There will be no change to the overall open space package delivered by the Scheme as a result of Phase 1B (North), which will see the delivery of a number of new open spaces / public realm / threshold spaces including: Brent Cross Main Square; Living Bridge Approach North; and Fenwick Place, Tempelhof Circus and Layfield Place Threshold Spaces; the Eastern and Western Brent

Riverside Parks and River Brent Nature Park; and improvements to Sturgess Park. Neither will there be any change to the main activities that will have an impact on the ecological resources on the Site which are primarily as a result of construction work within, and in close proximity to areas where sensitive habitats and species are known to occur. However, the Interim ICP Update does show changes to the sequencing of the delivery of these open spaces and consequently the timings associated with ecological enhancement work.

#### First Intermediate Snapshot Assessment: 2020

- 20.7.3 The Interim ICP Update shows an earlier delivery of some ecological enhancements, including the River Brent re-alignment works and the creation of the Central Riverside Park (Phase 1A (North)) and a later delivery of other ecological enhancements including: Claremont Park Improvements (now proposed to be part of Phase 1B (South)), Clitterhouse Playing Fields (now proposed to be part of Phase 1B (South)), and the Eastern and Western Brent Riverside Parks (to be delivered as part of Phase 1B (North)); resulting in the commencement of construction of some of these elements beyond the first intermediate snapshot.
- 20.7.4 Some of the ecological enhancement works and creation of open spaces such as Central Brent Riverside Park, Sturgess Park Improvements and Claremont Park Improvements are to be completed or under construction by 2020, however these habitats will not have had sufficient time to become established at this time. It is therefore assessed that there will be a temporary adverse ecological impact in connection with the construction time and the establishment time for the new habitats. The habitats to be created are of a far higher quality than the existing, and a Landscape and Ecological Management Plan (LEMP) will be in place for each open space area to ensure that habitats and the species that depend on them are maintained on the Site. It was reported in the s73 ES and other EIA Documentation that there would be temporary loss of tree lines along the River Brent impacting on foraging and commuting bats, which alongside the removal of the Clarefield Park SLINC, would both have a **minor adverse** impact during the first snapshot year. This is considered to remain valid, although it should be noted that mitigation measures (such as the provision of a linear feature erected alongside the River Brent during the construction period following the removal of trees and vegetation) are being investigated to mitigate the temporary removal of commuting and foraging habitats for bats during the realignment of the River Brent (refer to **Chapter 11: Ecology and Nature Conservation**).
- 20.7.5 The loss of habitat suitable for breeding birds across the Site will have a negative impact on breeding birds in the short term. Some areas of open space such as Central Brent Riverside Park will be completed by this time, however construction works to other areas such as the Eastern and Western Brent Riverside Parks will not have begun, therefore there will be a temporary adverse ecological impact relating to the loss of breeding bird habitat until these areas are constructed, and during the establishment time of new habitats. Suitable semi-mature / established habitats for breeding birds such as the majority of those within Sturgess Park and Claremont Park will be retained, and associated improvements will have been completed by this time, thereby reducing the level of impacts on breeding birds, and other species, such as invertebrates. The loss of breeding bird habitat was determined as a **minor adverse** impact in the s73 ES and other EIA Documentation and this is considered to remain valid.

#### Second Intermediate Snapshot Assessment: 2023

- 20.7.6 The re-scheduling of the programme of works resulting in a later delivery of the realignment of Brent River and Eastern and Western Riverside Parks will reduce the time available for the new habitats to become established by the second intermediate snapshot, therefore there would be a

temporary **minor adverse** ecological impact due to the temporary loss of tree lines along the River Brent impacting on foraging and commuting bats and breeding birds.

- 20.7.7 The works to Clitterhouse Fields and the Claremont Park improvements are now proposed to be implemented later in the construction programme, although both will still be completed by Snapshot Two, and hence the assessment of **minor adverse** impacts relating to these areas presented in the s73 ES and other EIA Documentation remains valid.

#### Third Intermediate Snapshot Assessment: 2029

- 20.7.8 The re-scheduling of the programme of works resulting in a later delivery of the realignment of Brent River, Eastern and Western Brent Riverside Parks and Clitterhouse Playing Fields will result in less time for these new habitats to become established by the third intermediate snapshot. However, no other changes are identified for Snapshot Three and thus the assessment of **minor adverse** impacts as presented in the s73 ES and other EIA Documentation remains valid.

#### Summary

- 20.7.9 A phased approach to the loss of habitats on Site, balanced with the provision of ecological enhancements (which is acknowledged to take time to establish) was previously assumed. The changes to the sequencing of works to open space (both loss and enhancement) has resulted in habitats being lost for a greater period of time prior to their replacement and enhancement works (including time for establishment), although this is not considered to significantly affect the conclusions of the previous assessment as reported in the s73 ES and other EIA Documentation, as this should also be viewed in the context of the overall ecological enhancements provided by the Scheme compared with the existing conditions.

## 20.8 Water Resources and Flood Risk

- 20.8.1 The intermediate years assessment presented in the s73 ES and other EIA Documentation has been reviewed in light of the detailed drainage and river park design proposals for Phase 1B (North) and having regard also to the Interim ICP Update.

#### River Diversion and Restoration Works

- 20.8.2 The primary activity affecting the water environment is the proposed realignment of the River Brent as it runs through the Site. The information contained within the s73 ES and other EIA Documentation in relation to the scheduling of the River Brent realignment is updated in the Interim ICP Update, which presents construction of the Central Section in 2018 - 2019; construction of the Eastern Section in 2021 - 2022 and construction of the Western Section in 2022 - 2023. Only the Central Section will be complete by the first snapshot, with the Eastern Section being completed by the second snapshot and the Western Section being completed shortly after the second snapshot.
- 20.8.3 It was noted within the s73 ES and other EIA Documentation that the River Brent and its surrounding corridor will be particularly sensitive during the early stages of settlement and therefore more vulnerable to sediment or other pollution mobilisation. As set out in **Chapter 12: Water Resources and Flood Risk**, appropriate monitoring would be in place to mitigate this and **minor adverse** impacts were reported for the first snapshot in the s73 ES and the other EIA Documentation. However, given the later programmed construction of the Eastern and Western Sections, the impacts would likely continue as **minor adverse** for the second snapshot, instead of minor-moderate beneficial as previously reported. These impacts would however reduce over time and become **minor-moderate beneficial** as the naturalised channel and vegetation established and aids the improvement of water quality and flow regime towards the third snapshot of 2029, and

thus the assessment of impacts presented in the s73 ES and other EIA Documentation for the third snapshot remain valid.

#### Surface Water Drainage

- 20.8.4 The s73 ES stated that the drainage strategy and sustainable drainage systems (SuDS) for the Development would be suitable for the ground quality and sensitivities of the Site and would have a minor to moderate beneficial impact upon drainage and flows entering the surface water network and flooding. In regards to the intermediate years, it was reported in the s73 ES and other EIA Documentation that the impacts would be **negligible to minor beneficial** in 2020 and 2023, increasing to **minor to moderate beneficial** in 2029.
- 20.8.5 For Phase 1B (North), the surface water drainage strategy has been brought forward in accordance with the requirements of the Drainage Strategies that accompanied the s73 application and the requirements of Condition 44.5 which relates to sustainable drainage, to be achieved by means of attenuation and SuDS, including blue roofs, green roofs, filter drains, permeable paving and, within Sturgess Park, underground gravel storage trenches and swales. This does not alter the conclusions of the s73 ES and other EIA Documentation.

#### Summary

- 20.8.6 The s73 ES and other EIA Documentation state that, when undertaking an overall intermediate years impact assessment for water resources, a reasonable worst case has been applied, taking likely positive and negative impacts into consideration. The intermediate years impacts for water resources would be **minor adverse** in 2020, as reported in the s73 ES and other EIA Documentation, due to the heavy ground and water works involved in the River Brent re-alignment and the risk of surface water pollution and sedimentation. However, following this, the establishment of the newly naturalised river channel and corridor in conjunction with the proposed drainage strategy and sustainable drainage systems (SuDS) on Site will result in **minor beneficial** impacts. As described above, given the later programmed construction of the Eastern and Western Sections of the River Brent as presented in the Interim ICP Update, the impacts would likely continue as **minor adverse** for the second snapshot rather than the minor beneficial previously predicted in the s73 ES and other EIA Documentation. In terms of mitigation during this period, appropriate monitoring will be in place and specialist guidance adhered to. The assessment of impacts presented in the s73 ES and other EIA Documentation for the third snapshot (**minor beneficial**) remain valid as there are no changes to the ICP for this snapshot.

## 20.9 Archaeology and Cultural Heritage

- 20.9.1 The archaeology and cultural heritage assessment presented in **Chapter 13: Archaeology and Cultural Heritage** of the s73 ES was revised in the Phase 1A (North) FIR, in light of further details being available. The Phase 1A (North) FIR reported that the **negligible** impacts reported in the s73 ES remain valid for snapshot years 2023 and 2029, however having regard to the outcomes of Chapter 13 of the Phase 1A (North) FIR, as outlined below, it was considered that the impacts in 2020 should be altered to **moderate adverse**.
- 20.9.2 The Phase 1A (North) FIR reported that there is a possibility of impacts on below ground heritage assets through the entire construction programme, however the highest potential impacts are associated with the first intermediate phase when works will be completed at Clitterhouse Playing Fields and the River Brent realignment. Clitterhouse Playing Fields lies within a locally designated Area of Special Archaeological Significance and the area of the River Brent re-alignment lies within a Paleo-Environmental Priority Area. It was considered that the impacts in 2020 should be reported as **moderate adverse** having regard to potential effects on these areas.

20.9.3 The Interim ICP Update shows proposed later programming of both Clitterhouse Playing Fields and the River Brent re-alignment; with the works to Clitterhouse Playing Fields now being programmed for 2021 and 2022, between Snapshot One and Snapshot Two. The Central River Brent realignment works have been re-programmed to occur between 2018 - 2020, but remain in advance of the first snapshot year (2023). The Eastern River Brent realignment works are now programmed to span the first snapshot year and the Western River Brent realignment works are now programmed to span the second snapshot year. As a watching brief will still be ongoing during these works (as set out in the Phase 1B North Site-specific Scheme of Archaeological Investigation prepared under Condition 43.1 of the 2014 Permission) and thus during these snapshot years, the previously assessed impact of **moderate adverse** in 2020 remains valid. However whilst the **negligible** impacts reported in the s73 ES and other EIA Documentation can remain valid for intermediate year 2029, for 2023 it is considered that the impacts should now be altered to **moderate adverse** as a result of the re-programming and hence extended works within these areas. This will be addressed via the implementation of the existing mitigation strategy set out in the Site-wide and Site-specific Schemes of Archaeological Investigation.

## 20.10 Air Quality and Dust

- 20.10.1 It was concluded in the s73 ES, confirmed by the subsequent EIA Documentation, that potential adverse impacts on air quality for the three snapshot years would arise from dust emissions generated by demolition, dust from construction activities, and exhaust emissions from construction vehicles accessing the Site. For each snapshot year, qualitative details are provided of the likely construction activities that would occur and which air quality sensitive receptors are likely to be impacted by the generation of dust. The impact of construction traffic has been described in all snapshot years but has been considered in detail for the second intermediate assessment year due to its potential impact on the three major junctions serving the Site (the M1/A406, A5/A406, A41/ A406).
- 20.10.2 The s73 ES concludes that the potential impacts from dust emissions generated by the demolition works and the construction activities at the nearest sensitive receptors is at worst 'minor adverse' in the first and third intermediate years and 'moderate adverse' in the second intermediate year, following the implementation of construction dust mitigation measures and dust management techniques. These effects remained unchanged in the subsequent EIA Documentation.
- 20.10.3 For the potential impacts from construction traffic, the s73 ES concludes that the impacts on air quality will vary, depending on the magnitude and location of construction activities. For the second intermediate year it is assessed there would be a maximum of 82 construction vehicles per hour (62 Light Goods Vehicles (LGVs) and 20 Heavy Goods Vehicles (HGVs)). This change is below the DMRB methodology criteria (as an Annual Average Daily Traffic flow of less than 1000 LGVs and 200 HGVs) and as such the impacts on air quality are not likely to be significant.
- 20.10.4 The Interim ICP Update reprogrammes some of the above elements of work. It remains the case that the majority of the potential adverse air quality impacts will be experienced in the first snapshot year when Phase 1 and Phase 2 have commenced construction, as these phases contain a large proportion of the critical infrastructure required for the delivery of the Development. However, the Interim ICP Update shows a later delivery of some elements of the Scheme including Claremont Park Improvements (now proposed to be part of Phase 1B (South)), Clitterhouse Playing Fields (now proposed to be part of Phase 1B (South)), and the Eastern and Western Brent Alteration and Diversion works and associated Riverside Parks (both Phase 1A (North)), resulting in the construction of these elements taking place after the first intermediate snapshot.

- 20.10.5 Whilst the Interim ICP Update reprogrammes some of the elements of the works, the overall demolition and construction activities remain the same. Consequently, by adhering to the mitigation measures set out in the CoCP, CEMP and the CTMP, which takes into account the control of dust and emissions as detailed in the Mayor of London's Guidance<sup>1</sup> for High Risk sites, the previous reported impacts of at worst '**minor adverse**' in the first and third intermediate year and '**moderate adverse**' in the second intermediate year, as reported in the s73 ES, would remain the same. In addition, dust monitoring and a Dust Management Plan would be used throughout the demolition and construction works to ensure that the mitigation measures are adequate and to ensure existing and future air quality sensitive receptors are protected during the demolition and construction works. As such, the impact from dust emissions generated by the demolition works and the construction activities as reported in the s73 ES and other EIA Documentation remains valid for the intermediate years.
- 20.10.6 The Interim ICP Update includes revised traffic histograms for Phase 1 which are presented in the CIA Addendum Technical Note (see **Appendix 2.1**). This shows that there is a potential 23% increase from the construction traffic figures previously reported in Phase 1, due to the constricted timeline compared with the previous construction programme. Taking account of the detailed information presented in the s73 ES for the second intermediate year, the 23% increase results in an additional 14 LGVs and 5 HGVs per hour, and therefore an overall increase of 76 LGVs per hour and 25 HGVs per hour. This change is below the DMRB methodology criteria for the number of LGVs but is above the criteria for HGVs. However, with the implementation of the CoCP, CEMP and the CTMP, and considering all construction vehicles would need to meet the emission standards for the London Low Emission Zone, any adverse impacts should be reduced to a minimum, as reported in **Chapter 14: Air Quality and Dust**. Therefore, it is considered the impacts as reported in the s73 ES (as at worst '**minor adverse**' in the first and third intermediate year and '**moderate adverse**' in the second intermediate year) would remain the same. As such, the impact from construction traffic as reported in the s73 ES and other EIA Documentation remains valid for the intermediate years.
- 20.10.7 Since the preparation of the s73 ES and other EIA Documentation, all construction plant (described as non-road mobile machinery (NRMM)) are required to meet the emission standards as set out in the London Plan. Details of the NRMM used during demolition and construction would be uploaded and registered to the NRMM website prior to use and details on the plant, emission standards and emission control measures would be made available to London Borough of Barnet (LBB) once these details are known, and prior to the plant being used during the demolition and construction phase. Based on this control measure, the impact of construction plant is likely to result in **negligible** impacts.
- 20.10.8 Potential air pollutant emissions from the CHP and waste facility will undergo detailed air quality modelling during the detailed design phase for their relevant phase RMA(s). Detailed design will incorporate measures to minimise these emissions during operation so that their residual impact on nearby sensitive receptors can be considered **negligible**.

## 20.11 Ground Contamination

- 20.11.1 The s73 ES reported on the implementation of the Global Remediation Strategy and the Site Specific Remediation Strategies as a means of securing the progressive remediation of ground contamination within the Site. These strategies recommend measures which will mitigate potential adverse impacts from the ground works associated with the Development, however it is noted that the residual impacts cannot be reduced below minor adverse due to the potential risk of contamination that exists with a Development of this scale where there is existing contamination on Site.

20.11.2 Although the timing and order of the construction activities have changed, as presented in the Interim ICP Update, the construction activities themselves have not changed and therefore do not change the potential impacts in relation to ground contamination. The first two intermediate years are likely to have a higher level of ground works due to the River Brent realignment, infrastructure and open space works, whilst the majority of the ground works including foundations for Development plots will be complete by the third snapshot year of 2029. It is assessed that overall, throughout the construction period, the likely impacts associated with ground contamination will be **minor adverse**, as previously stated in the s73 ES and other EIA Documentation.

## 20.12 Waste

20.12.1 Following a review of the s73 ES and other EIA Documentation, it is considered that previous waste assessment outcomes remain valid, and no further changes have been identified. The site-wide waste management strategy will continue to be delivered progressively, achieving the overall targets for recycling and reuse at completion of the Development, as previously stated in the s73 ES and other EIA Documentation. The intermediate years impacts presented in the s73 ES and other EIA Documentation are therefore considered to remain valid.

20.12.2 The reported **minor adverse** impacts during demolition and initial construction would relate most appropriately to the first intermediate year 2020, whilst the remaining years 2023 (completion of the majority of Phase 1) and 2029 were reported to have **negligible** impacts.

## 20.13 Wind Microclimate

20.13.1 The s73 ES reported that plots constructed earlier in the programme would experience varying levels of exposure to prevailing winds from the south-west and west. This would result in the potential for downdraughts from exposed façades and subsequent channelling of winds between development blocks which could significantly impact on pedestrian level wind conditions. Therefore it was recommended that the taller buildings are constructed in the later phases of the Development. It is noted that at each phase and sub-phase of the Development detailed design will be undertaken for the plots which will then be added to the wind tunnel model and updates to the microclimate assessment provided to inform the final design, and to determine likely significant impacts and mitigation, where required.

20.13.2 The s73 ES concluded that **minor adverse** impacts may result in 2020 due to the initial building and structure construction within the existing environment, whilst **moderate adverse** impacts may result in 2023 when further tall buildings are completed, however this would reduce further to **minor adverse** once the majority of tall buildings proposed are completed in 2029 and reduce the potential channelling and downdraught impacts.

20.13.3 The intermediate years assessment presented in the Phase 1A (North) FIR considered the detailed design of the Phase 1A (North) elements in the context of the s73 Scheme and confirmed the validity of the above findings presented in the s73 ES.

20.13.4 For the purposes of the RMA for Phase 1B (North), a new wind tunnel test was undertaken to include the detailed design of the Phase 1B (North) elements in the context of the s73 Scheme and having regard also to the detailed design of Phase 1A (North). The technical report for this study can be found in **Appendix 17A.1**. This study includes an assessment of 'Interim Surrounding Conditions' which provides a prediction of wind speeds and impacts following the completion of Phase 1B (North) elements within the existing surrounds and prior to further plot development in subsequent phases.

- 20.13.5 With regards to safety, wind conditions in and around the Development were still considered as suitable for the general public with the exception of Tempelhof Bridge to the south of Phase 1B (North) which would be considered as unsuitable for general public, but suitable for able-bodied, with further wind modelling to be undertaken and potential mitigation or design solutions to be incorporated depending on the final building heights and massing to the south. With regards to pedestrian comfort, no concerns were raised for the thoroughfares, building entrances, outdoor seating areas, balconies in Plot 113 or surrounding areas, having regard to their intended uses.
- 20.13.6 Whilst there have been changes to the sequencing of construction activities as shown in the Interim ICP Update with more elements of Phase 1A (North) now being constructed concurrently with Phase 1B (North) than previously shown, it is still the intention that Phase 1A (North) will be largely completed before the completion of Phase 1B (North). Thus the assessment of 'Interim Surrounding Conditions' as described above remains valid, as does the intermediate years assessment presented in the s73 ES and other EIA Documentation.

## **20.14 Daylight, Sunlight and Overshadowing**

- 20.14.1 The s73 ES demonstrated that the principal potential impacts within the completed Scheme would affect sunlight availability around the bases of the high-rise developments in Tower Square, Station Square and the Office District. With mitigation measures introduced, as set out in the s73 ES, façades can enjoy satisfactory sunlight and daylight availability.
- 20.14.2 As a result, guideline sunlight and daylight standards will be met for the Development and, logically, must therefore also be achieved during intermediate years. In the s73 ES, it is noted that there is the potential for impacts to arise from the proximity of new buildings to existing residential buildings due for demolition as part of the Scheme, however this will be avoided where possible through the construction programme which seeks to ensure early construction of the replacement housing for the units in question (at Whitefield Estate).
- 20.14.3 The Interim ICP Update shows the construction of 47 units to be undertaken from Q2 2018 to house residents relocated from Whitefield Estate. This is due to the commencement of works now programmed for Q2 2018 rather than 2016 as originally envisaged. Thus the construction of the replacement housing for the Whitefield Estate is still programmed as one of the initial construction activities, notwithstanding the change in programme. Existing residents of the Whitefield Estate will therefore be relocated in advance of the construction of new buildings which might otherwise limit their sunlight and daylight availability. The intermediate years assessment of the s73 ES and other EIA Documentation is therefore deemed to remain valid.

## **20.15 TV, Radio and Mobile Reception**

- 20.15.1 The s73 ES and other EIA Documentation reported that there would be negligible impacts from TV, radio and mobile reception throughout each stage of construction and that any potential for impacts to arise would diminish over the programme as new communication infrastructure is provided to service the Site and subject to the implementation of any necessary mitigation measures.
- 20.15.2 The construction programme for Phase 1 (North) has been revised, with the commencement of works now programmed for Q2 2018 rather than 2016 as originally envisaged. There is no change to the proposed end date of construction, therefore the overall duration within which such impacts could occur would decrease marginally. This, coupled with the fact that the proposals for Phase 1B (North) are brought forward in broad accordance with the maximum parameters established within the 2014 Permission (save for the minor exceedances in building heights previously reported, which are not considered significant enough to materially affect the conclusions of the previous assessment) means that the intermediate years assessment for TV, radio and mobile

phone impacts presented within the s73 ES and other EIA Documentation is considered to remain valid.

## 20.16 Carbon Dioxide Emissions

20.16.1 The s73 ES and other EIA Documentation considered the changes in CO<sub>2</sub> emissions arising at each intermediate year taking into account:

- Emissions from the Site energy consumption during construction;
- Emissions from the transport of construction materials and workers;
- Changes to emissions from building energy consumption from existing buildings vacated and demolished, and from newly completed buildings once occupied; and
- Changes to emissions from vehicles within the Site and surrounds resulting from the transport of residents and freight to and from the Site.

20.16.2 The CO<sub>2</sub> assessment in the s73 ES considered the change in CO<sub>2</sub> emissions in each intermediate year between the 'Do Minimum' and 'Do Something' scenarios, i.e. without and with the Scheme. The total cumulative CO<sub>2</sub> emissions as a consequence of the Scheme is fairly consistent until 2025, after which emissions increase due to the number of new buildings occupied and ongoing construction. The peak in CO<sub>2</sub> emissions occurs in 2029 which corresponds with the peak in transport construction. This peak year differs from those reported for air quality and noise as they relate to local impacts whereas the CO<sub>2</sub> assessment deals with global impacts. Following 2029, the CO<sub>2</sub> emissions reduce as construction activities begin to finalise.

20.16.3 The overall impacts reported in the s73 ES and other EIA documentation were **moderate adverse** in 2020 near the start of construction and demolition when works will be intense and trip rates would be high for construction workers and energy consumption on Site is likely to be high due to older units servicing the existing residents. **Minor adverse** impacts were reported for 2023 as more buildings are converted to improved energy supply and efficiency whilst construction would remain high. In 2029, the impacts are reported as **moderate adverse** due to the high level of new residents and site visitors increasing building energy consumption and transport volumes.

20.16.4 The construction programme presented in the s73 ES has now been amended. The Interim ICP Update shows that the construction works for Phase 1 North would commence in mid-2018 and be largely completed in mid-2023, a five year period. This is a reduced programme, from the previous six years (2016 to 2021). However, the overall carbon emissions during construction would be unlikely to change as a result of the Interim ICP Update.

20.16.5 The peak emissions during the construction phase are anticipated to be in 2019 and 2020, as reflected in the revised traffic Construction Vehicle Movements presented in the CIA Addendum Technical Note, which is consistent with the s73 ES and other EIA Documentation. Therefore the impacts during this period would remain as **moderate adverse**. For the interim year of 2023, the assumptions in the s73 ES as outlined above would still apply and therefore there would be no change to the impacts (i.e. **minor adverse**). There is no change to the ICP for 2029 and therefore the impacts would remain as **moderate adverse**. It is therefore considered that the assessment contained in the s73 ES, and confirmed in the subsequent EIA Documentation, remains valid.

## 20.17 Conclusion

- 20.17.1 In general, the impacts assessed within the s73 ES and in the other EIA Documentation for the intermediate years assessment remain valid and it is still considered that certain impacts will arise from construction activity or through the partial completion of the Development. There are some minor changes to the impacts reported at the second snapshot year for a small number of topics, as a result of the changes to the construction programme resulting in the later delivery / continued construction works in relation to certain elements of the Development, compared with the previous assessment.
- 20.17.2 Specifically, the Central River Brent realignment works have been re-programmed, but remain in advance of the first snapshot year. The Eastern River Brent realignment works are now programmed to span the first snapshot year and the Western River Brent realignment works are now programmed to span the second snapshot year. With regards water resources, impacts would likely continue as **minor adverse** for the second snapshot rather than the **minor beneficial** previously predicted. In terms of mitigation, appropriate monitoring will be in place and specialist guidance adhered to during this period. With regards archaeology, later programming of both Clitterhouse Playing Fields and elements of the River Brent re-alignment have also resulted to some small changes in the intermediate years assessments: whilst the **negligible** impacts reported in the s73 ES and other EIA Documentation remain valid for the third snapshot year, for the second it is considered that the impacts should now be altered to **moderate adverse** (as reported for the first snapshot year) as a result of the re-programming and hence extended works within these areas.
- 20.17.3 Impacts during the construction period will be mitigated through the mechanisms set out in the planning conditions and s106 agreement of the 2014 Permission. No additional mitigation over and above that already set out in the s73 ES and other EIA Documentation is required as a result of this updated Intermediate Years assessment.

## References

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<sup>i</sup> Mayor of London (2014) The Control of Dust and Emissions during Construction and Demolition, Supplementary Planning Guidance