Appendix 11.1 – Summary of Effects

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Chapter 06 – Air Quality					
Construction Phase					
Site emissions (dust and site plant)	High (dust soiling and amenity impacts)	Increase in dust deposition and soiling of private and public property. Slight to Medium adverse.	Standard best practice control measures as published in IAQM guidance	Negligible to Slight adverse	Not significant
	Low (human health impacts)	Increased exposure of the public to short-term pollutant concentrations. Negligible to Slight adverse	Standard best practice control measures as published in IAQM guidance and secured by the Outline Construction Environmental Management Plan	Negligible	Not significant
Traffic emissions	High	Increased exposure of the public to short-term and long-term pollutant concentrations. Negligible to Slight adverse.	No additional mitigation proposed. Embedded mitigation to include Outline Construction Traffic Management Plan, which will have some benefit on local air quality.	Negligible to Slight adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Operation Phase					
Site emissions (backup generators)	High	Increased exposure of the public to short-term and long-term pollutant concentrations. Negligible to slight adverse.	No additional mitigation proposed. Embedded mitigation includes the release of emissions from height, the minimal use of generators and the testing of generators one at a time	Negligible to Slight adverse	Not significant
Traffic emissions	High	Increased exposure of the public to short-term and long-term pollutant concentrations. Negligible to slight adverse.	No additional mitigation proposed. Embedded mitigation to include Outline Operational Traffic Management Plan, which will have some benefit on local air quality	Negligible to Slight adverse	Not significant
Chapter 07 – Archaeology					
Construction Phase					
Buried Archaeological Assets within the Northern Part of the Site	Low	Groundworks associated with the Proposed Development may result in the partial or complete removal, and disturbance of buried archaeological remains. High magnitude of impact.	Appropriate archaeological mitigation, to be agreed with the LPA Archaeological Officer	Negligible	Not Significant
Previously Unidentified Archaeological Assets	Low or Medium	Groundworks associated with the Proposed Development may result in the partial or complete removal, and disturbance of buried archaeological remains. High magnitude of impact.	Appropriate archaeological mitigation, to be agreed with the LPA Archaeological Officer	Negligible	Not Significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Operation Phase					
Operational phase scoped out of assessment					
Chapter 08 – Climate Change and Greenhouse Gases					
Construction Phase					
The global climate	High	GHG emissions from the construction of the Proposed Development. Low magnitude of impact.	No additional proposed mitigation in addition to the inherent design mitigation measures included under Section 8.4	Minor Adverse	Not Significant
The Proposed Development	High	Physical climate risks to the Proposed Development and associated users. Low magnitude of impact.	Additional measures described in Section 8.4.	Minor	Not Significant
Operation Phase					
The global climate	High	GHG emissions from the operation (including maintenance) of the Proposed Development. High magnitude of impact.	Additional measures described in Section 8.4.	Moderate Adverse	Significant
The Proposed Development	High	Physical climate risks to the Proposed Development and associated users. High magnitude of impact.	Additional measures described in Section 8.4.	Minor	Not Significant
Chapter 09 – Landscape and Visual Impact					
Note: All mitigation is assumed to be inherent, comprising a generous landscape buffer around all sides of the building including trees and meadow planting as shown on the Landscape and Green Infrastructure Parameters Plan. Residual effects are judged to be same as Potential effects and include judgements at Summer and Winter Year 15 when mitigation planting has established.					
Construction Phase: Landscape Character Areas					

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
LCA K1 'Harmondsworth Open Gravel Terrace'	Medium - Low	Views of construction site including crane will reduce rural character.	None (at construction stage)	Negligible adverse indirect	Not significant
LCA K2 'Harlington Open Gravel Terrace'	Medium - Low	Construction of new building and grassland removal within the Site.	None (at construction stage)	Minor adverse direct (within the Site). Negligible adverse indirect (beyond the Site boundaries)	Not significant
LCA L1 'Heathrow'	Low	Views of cranes.	None (at construction stage)	Negligible adverse indirect	Not significant
Historic Core TCA - Sipson	Medium - Low	Glimpsed views of cranes and construction of buildings.	None (at construction stage)	Minor adverse indirect	Not significant
Construction Phase: Landscape Features					
Modified Grassland	Medium-low	Removal of approximately 5.2ha of modified grassland	None (at construction stage)	Moderate adverse direct	Significant
Hedgerow and Scrub Vegetation	Low	Removal of limited areas of scrub	None (at construction stage)	Negligible adverse indirect	Not significant
Trees	Low	Negligible adverse landscape impact	None (at construction stage)	Negligible adverse indirect	Not significant
Construction Phase: Visual Effects					
Users of car park on the Holiday Inn Site (currently a car rental company)	Low	Glimpsed views of construction site through existing vegetation	Inherent mitigation: Retained vegetation around northern boundary.	Minor adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Users of Holiday Inn Upper Storeys (currently under refurbishment)	Low	Elevated views of construction site with panoramic views towards Heathrow Airport beyond.	Inherent mitigation: Retained vegetation around northern boundary.	Minor adverse	Not significant
Users of the eastern end of Holloway Lane to the west of the Holiday Inn	Low	Glimpsed distant views of cranes and emerging buildings.	Inherent mitigation: Retained and vegetation around north-eastern site boundary.	Negligible to Minor adverse	Not significant
Users of the M4 to the north of the Holiday Inn	Low	Glimpsed distant views of cranes and emerging buildings.	Inherent mitigation: Retained vegetation around northern and eastern boundaries.	Negligible adverse	Not significant
Users of Shepiston Lane, Hayes, to the north of the M4	Low	Glimpsed distant views of cranes and emerging buildings.	N/A	Negligible adverse	Not significant
Users of Shepiston Lane and Stockley Road (A408) to the north of the M4.	Low	Glimpsed distant views of cranes and emerging buildings.	N/A	Negligible adverse	Not significant
Users of the M4 Heathrow Spur Road	Low	Clear views of construction site from short stretch of road adjacent to the eastern side of the site.	Inherent mitigation: Retained vegetation along eastern boundary.	Negligible adverse	Not significant
Sipson Lane to the east of the Site, including the bridge over M4 Heathrow Spur Road	Low	Clear views of construction site from short stretch of road adjacent to the eastern side of the site.	Inherent mitigation: Retained vegetation along eastern boundary.	Negligible adverse	Not significant
Workers/visitors to Sipson Sand and Gravel Quarry and	Low	Clear views of construction site from short stretch of road adjacent to the eastern side of the site.	Inherent mitigation: Retained limited	Minor adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Wall Garden Farm (commercial units)			vegetation along eastern boundary.		
Users of Sipson Lane between M4 Heathrow Spur Road and Imperial College Sports Ground	Low	Glimpsed distant views of cranes and emerging buildings.	Inherent mitigation: Retained limited vegetation along eastern boundary.	Negligible adverse	Not significant
Users of Little Harlington Playing Fields	Medium-Low	Glimpsed distant views of cranes and emerging buildings.	N/A	Negligible adverse	Not significant
Users of Imperial College Harlington Sports Ground/ Wycombe Wanderers FC Training Ground	Medium-Low	Glimpsed distant views of cranes and emerging buildings.	N/A	Negligible adverse	Not significant
User of Footpath H68 south of Sipson Lane.	Medium - High	Views of cranes	N/A	Moderate adverse	Significant
Users/ residents of Sipson Lane to the west of the M4 (Heathrow Spur Road) including Lady Nafisa Secondary School for Girls and the locally listed former Baptist chapel	Low (road and school users) Medium (residents)	Clear views of construction site from residential properties and school. Glimpsed views from Sipson Lane.	Inherent mitigation: Retained limited vegetation along southern boundary.	Road users: Minor adverse Residents: Major adverse School users: Moderate adverse	Road users: Not significant Residents: Significant School users: Significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Users of Sipson Road to the north of the junction with Sipson Lane	Low (road users	Glimpsed views of construction site including cranes above.	N/A	Minor adverse	Not significant
Users/residents of Sipson Road to the south of its junction with Sipson Lane, including properties on Vincent Close	Medium (residents) Low (road users	Distant glimpsed views of cranes and upper parts of emerging buildings.	N/A	Residential Properties on Sipson Road: Negligible adverse Residential Properties on Vincent Close: Minor adverse Users of Sipson Road: Negligible adverse	Not significant
Users of Sipson Recreation Ground	Medium-Low	Distant glimpsed views of cranes and upper parts of emerging buildings.	N/A	Negligible adverse	Not significant
Users of PRoW Y19, east of Hardmondsworth	Medium-High	Distant glimpsed views of cranes and upper parts of emerging buildings.	N/A	Negligible adverse	Not significant
Users of Vineries Close and Sipson Road close to the western end of the Site (adjacent to the listed King William IV Public House)	Low	Glimpsed views of construction site including emerging buildings and cranes.	N/A	Minor adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Residents of Vineries Close and Sipson Road close to the south-western end of the Site	Medium	Glimpsed views of construction site including emerging buildings and cranes.	Retention of existing vegetation on western side the Site where practical.	Moderate adverse	Significant
Users of Harmondsworth Lane to the west of Sipson	Low	Distant glimpsed views of cranes and upper parts of emerging buildings.	N/A	Negligible adverse	Not significant
Residents of Sipson Road to the west of the Site	Medium	Glimpsed views of construction site including cranes above.	N/A	Minor adverse	Not significant
Users of Sipson Road at the junction with Russell Gardens	Low	Glimpsed views of construction site including cranes above.	N/A	Minor adverse	Not significant
Users of Russell Gardens	Low	Glimpsed views of construction site including cranes above.	N/A	Minor adverse	Not significant
Residents of Russell Gardens	Medium	Glimpsed and clear views of construction site including cranes above.	N/A	Minor - Moderate adverse	Significant
Users of Sipson Road to the north of Russell Gardens and west of the Site	Low	Glimpsed views of construction site including cranes above.	N/A	Minor adverse	Not significant
Users of PRoW Y8 to the north of Harmondsworth	Medium	Distant glimpsed views of cranes and upper parts of emerging buildings.	N/A	Negligible adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Users of the northern end of Sipson Road to the west of the Site	Low	Glimpsed views of construction site including cranes above.	N/A	Minor adverse	Not significant
Users of Sipson Road at The Plough public house the north-west of the Site	Low	Glimpsed and clear views of construction site including cranes above.	N/A	Minor adverse	Not significant
Users of Harmondsworth Road to the south of the M4 crossing.	Low	Distant glimpsed views of cranes and upper parts of emerging buildings.	N/A	Negligible adverse	Not significant
Operation Phase: Landscape Character Areas					
LCA K1 'Harmondsworth Open Gravel Terrace'	Medium - Low	Views of construction site including crane will reduce rural character.	None (at construction stage)	Negligible adverse indirect	Not significant
LCA K2 'Harlington Open Gravel Terrace'	Medium - Low	Construction of new building and grassland removal within the Site.	None (at construction stage)	Minor adverse direct (within the Site) Negligible adverse indirect (beyond the Site boundaries)	Not significant
LCA L1 'Heathrow'	Low	Views of cranes.	None (at construction stage)	Negligible adverse indirect	Not significant
Historic Core TCA - Sipson	Medium - Low	Glimpsed views of cranes and construction of buildings.	None (at construction stage)	Minor adverse indirect	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Operation Phase: Landscape Features					
Modified Grassland	Medium-low	Removal of approximately 5.2ha of modified grassland	None (at construction stage)	Moderate adverse direct	Not significant
Hedgerow and Scrub Vegetation	Low	Removal of limited areas of scrub	None (at construction stage)	Negligible adverse indirect	Not significant
Trees	Low	Negligible adverse landscape impact	None (at construction stage)	Negligible adverse indirect	Not significant
Operation Phase: Visual Effects					
Users of car park on the Holiday Inn Site (currently a car rental company)	Low	Glimpsed views of construction site through existing vegetation	Inherent mitigation: Retained vegetation around northern boundary.	Minor adverse	Not significant
Users of Holiday Inn Upper Storeys (currently closed)	Low	Elevated views of construction site with panoramic views towards Heathow Airport beyond.	Inherent mitigation: Retained vegetation around northern boundary.	Minor adverse	Not significant
Users of the eastern end of Holloway Lane to the west of the Holiday Inn	Low	Glimpsed distant views of cranes and emerging buildings.	Inherent mitigation: Retained and vegetation around north-eastern site boundary.	Negligible to Minor adverse	Not significant
Users of the M4 to the north of the Holiday Inn	Low	Glimpsed distant views of cranes and emerging buildings.	Inherent mitigation: Retained vegetation around northern and eastern boundaries.	Negligible adverse	Not significant
Users of Shepiston Lane, Hayes, to the north of the M4	Low	Glimpsed distant views of cranes and emerging buildings.	N/A	Negligible adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Users of Shepiston Lane and Stockley Road (A408) to the north of the M4.	Low	Glimpsed distant views of cranes and emerging buildings.	N/A	Negligible adverse	Not significant
Users of the M4 Heathrow Spur Road	Low	Clear views of Proposed Development as part of low value view, in winter months, partially screened during summer.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Negligible - Minor adverse, depending on season	Not significant
Sipson Lane to the east of the Site, including the bridge over M4 Heathrow Spur Road	Low	Clear views of Proposed Development as part of low value view, in winter months, partially screened during summer.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Negligible - Minor adverse, depending on season	Not significant
Workers/visitors to Sipson Sand and Gravel Quarry and Wall Garden Farm (commercial units)	Low	Glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Negligible - Minor adverse, depending on season	Not significant
Users of Sipson Lane between M4 Heathrow Spur Road and Imperial College Sports Ground	Low	Glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Negligible adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Users of Little Harlington Playing Fields	Medium-Low	Glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Minor adverse	Not significant
Users of Imperial College Harlington Sports Ground/ Wycombe Wanderers FC Training Ground	Medium-Low	Glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Minor adverse	Not significant
User of Footpath H68 south of Sipson Lane.	Medium - High	Clear views of Proposed Development in middle distance.	Inherent mitigation: Landscape buffer around all site boundaries, including trees along the eastern area of the Site.	Moderate adverse	Significant
Users/ residents of Sipson Lane to the west of the M4 (Heathrow Spur Road) including Lady Nafisa Secondary School for Girls and the locally listed former Baptist chapel	Low (road and school users) Medium (residents)	Filtered views of Proposed Development in winter, partially screened in the summer.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the southern area of the Site.	Road users: Minor adverse Residents: Moderate - Major adverse, depending on season School users:	Road users: Not significant Residents: Significant School users: Significant,

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
				Minor - Moderate adverse, depending on season	depending on season
Users of Sipson Road to the north of the junction with Sipson lane	Low (road users	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western area of the Site.	Negligible adverse - Minor adverse, depending on season	Not significant
Users/residents of Sipson Road to the south of its junction with Sipson Lane, including properties on Vincent Close	Medium (residents) Low (road users	Distant glimpsed views of upper parts of emerging buildings beyond other buildings/highways in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the southern area of the Site.	Users & Residential Properties on Sipson Road: Negligible adverse Residential Properties on Vincent Close: Minor adverse	Not significant
Users of Sipson Recreation Ground	Medium-Low	Distant glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the southern and western areas of the Site.	Negligible adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Users of PRoW Y19, east of Harmondsworth	Medium-High	Distant glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Negligible adverse	Not significant
Users of Vineries Close and Sipson Road close to the western end of the Site (adjacent to the listed King William IV Public House)	Low	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Negligible adverse - Minor adverse, depending on season	Not significant
Residents of Vineries Close and Sipson Road close to the south-western end of the Site	Medium	Clear/glimpsed views of buildings and adjacent landscape buffer depending on the season and location of property.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Moderate - Major adverse, depending on season	Significant
Users of Harmondsworth Lane to the west of Sipson	Low	Distant glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Negligible adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Residents of Sipson Road to the west of the Site	Medium	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Minor – Negligible adverse, depending on season	Not significant
Users of Sipson Road at the junction with Russell Gardens	Low	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Negligible - Minor adverse, depending on season	Not significant
Users of Russell Gardens	Low	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Minor - Moderate adverse, depending on season	Significant, d depending on season
Residents of Russell Gardens	Medium	Clear/glimpsed views of buildings and adjacent landscape buffer depending on the season and location of property.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Minor – Moderate adverse depending on season	Significant, depending on season
Users of Sipson Road to the north of Russell Gardens and west of the Site	Low	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the	Minor – Major adverse depending on location and season	Significant, depending on season

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
			western side of the Site.		
Users of PRoW Y8 to the north of Harmondsworth	Medium	Distant glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Negligible adverse	Not significant
Users of the northern end of Sipson Road to the west of the Site	Low	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Minor beneficial	Not significant
Users of Sipson Road at The Plough public house and Holiday Inn car park to the north-west of the Site	Low	Glimpsed views of buildings and adjacent landscape buffer, beyond existing buildings in foreground.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Minor beneficial	Not significant
Users of Harmondsworth Road to the south of the M4 crossing.	Low	Distant glimpsed views of upper parts of buildings, primarily in winter months.	Inherent mitigation: Landscape buffer around all site boundaries, including trees within the western side of the Site.	Minor adverse	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
Chapter 10 – Noise and Vibration					
Construction Phase					
R01, R03	Residential	Noise emissions from construction activities. Above LOAEL and Below SOAEL	None	Above LOAEL and below SOAEL	Not significant
R02	Non-residential	Noise emissions from construction activities. Above LOAEL and Below SOAEL	None	Above LOAEL and below SOAEL	Not significant
R04, R05	Non-residential	Noise emissions from construction activities. Above LOAEL.	Acoustic barriers Communication strategy	Above LOAEL and below SOAEL	Not significant
R01, R03	Residential	Vibration emissions from construction activities. Equal to LOAEL	None	Equal to LOAEL	Not significant
R04	Non-residential	Vibration emissions from construction activities. Equal to LOAEL	None	Equal to LOAEL	Not significant
R02, R05	Non-residential	Vibration emissions from construction activities. Below LOAEL	None	Below LOAEL	Not significant
All receptors	Residential, Non-residential	Noise from construction traffic movements. Negligible.	None	Negligible	Not significant
Operation Phase					
R1	Residential	Noise from chillers during normal operations. Above SOAEL	Attenuators to be fitted onto chiller fans	Equal to LOAEL	Not significant
R2	Non-residential	Noise from chillers during normal operations. Above SOAEL	Attenuators to be fitted onto chiller fans	Equal to LOAEL	Not significant
R3	Residential	Noise from chillers during normal operations. Above SOAEL	Attenuators to be fitted onto chiller fans	Below LOAEL	Not significant

Receptor	Receptor Sensitivity	Description of potential impact	Proposed mitigation	Residual effect	Significant / not significant
R4, R5	Non-residential	Noise from chillers during normal operations. Above SOAEL	Attenuators to be fitted onto chiller fans	Below LOAEL	Not significant
R1, R3	Residential	Noise from chillers and generators during generator testing/ emergency operations. Above SOAEL.	Silencers on generator exhausts and generator enclosures	Below LOAEL	Not significant
R2	Non-residential	Noise from chillers and generators during generator testing/ emergency operations. Above SOAEL.	Silencers on generator exhausts and generator enclosures	Above LOAEL and below SOAEL	Not significant
R4, R5	Non-residential	Noise from chillers and generators during generator testing/ emergency operations. Above SOAEL.	Silencers on generator exhausts and generator enclosures	Below LOAEL	Not significant
All receptors	Residential, Non-residential	Noise from traffic associated with the Proposed Development. Minor Adverse	None	Minor Adverse	Not significant