

## SCHEDULE 23

### The Schedule of Mitigation Measures

This is the Schedule number 23 to the Section 106 Agreement dated October 2010 and made between (1) THE MAYOR AND BURGESSES OF THE LONDON BOROUGH OF BARNET (2) KLEINWORT BENSON (CHANNEL ISLANDS) CORPORATE SERVICES LIMITED (3) KLEINWORT BENSON (JERSEY) TRUSTEES LIMITED (4) HAMMERSON (BRENT CROSS) LIMITED (5) CRICKLEWOOD REGENERATION LIMITED (6) HAMMERSON (CRICKLEWOOD) LIMITED and (7) TRANSPORT FOR LONDON

PARTY	SIGNATORY/SIGNATORIES
THE MAYOR AND BURGESSES OF THE LONDON BOROUGH OF BARNET	
KLEINWORT BENSON (CHANNEL ISLANDS) CORPORATE SERVICES LIMITED	
KLEINWORT BENSON (JERSEY) TRUSTEES LIMITED	
HAMMERSON (BRENT CROSS) LIMITED	
CRICKLEWOOD REGENERATION LIMITED	
HAMMERSON (CRICKLEWOOD) LIMITED	
TRANSPORT FOR LONDON	

Table 22.1 Long Term and Permanent Impacts Mitigation and Residual Impacts

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
Chapter 6: Planning Policy	Provision of insufficient affordable housing	Potential to develop a mechanism that would enable the percentage of affordable housing to increase, subject to a change in the key value and cost inputs affecting the viability of the Scheme.	No significant adverse impacts	Planning Condition s106 Agreement
	Loss of existing open spaces and areas of nature conservation interest	Substantially improve the nature conservation value of the regeneration area and the quantum of public open space (net increase of 8ha), and specifically at Eastern Park and along the River Brent corridor.	No significant adverse impacts	Included in Planning Application
		Increase in overall open space provision as well as the enhancements to the area both visually and from a nature conservation perspective.		Included in Planning Application
	Inappropriate residential mix	Housing Strategy allows for adjustments to meet market Demand and changing needs	No significant adverse impacts	s106 Agreement
	Non residential mix in Eastern lands differs from Policy	None required	No significant adverse impacts	Included in the Planning Application
Civic amenity facility within the waste handling facility	Site is constrained and it is not possible to provide the required technology and civic amenity premises facility. Alternatives to be provided by LB Barnet.	No significant adverse impacts		
Chapter 7: Traffic and Transport	Increased traffic	Improvements to cycle routes, public transport services, rail services and highway network.	Minor adverse residual impacts which will include	S278 and s106 Agreements

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Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
Chapter 8: Socio Economic	Population increase of approximately 13,255	<p>Based on 'triggers', the following new/ upgraded community facilities, are to be provided:</p> <ul style="list-style-type: none"> <li>• Upgrading Mapledown and Whitefield Schools, Hendon Leisure Centre</li> <li>• Re-development and expansion of Claremount School.</li> <li>• Pre-school provision for up to 130 to 180 full time places.</li> <li>• 700 to 950 primary school places, with an additional 100 from West Hendon, in new/ extended schools.</li> <li>• Around 354 to 507 secondary places, plus 120 to 160 sixth form places.</li> <li>• Eight GP surgery and facilities for other primary care staff.</li> <li>• Library facility.</li> </ul>	<p>some congestion on the highway network, which will reinforce sustainable transport measures.</p> <p>No significant adverse impacts</p>	<p>Included in Planning Application Planning Condition s106 Agreement</p>

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
		<ul style="list-style-type: none"> <li>• Safer neighbourhood provision for the Metropolitan Police.</li> <li>• Multi use community space</li> </ul>		
Chapter 9: Noise and Vibration	Noise impacts on road and rail	<p>The carriageways of the A406 past the Site will, if possible, be resurfaced with a low noise surface</p> <p>Suitable layout and design of the development as follows:</p> <ul style="list-style-type: none"> <li>• Maximise residential buildings set-back distance from the noise source.</li> <li>• Proposals have been developed keeping residential and other noise sensitive uses away from the major noise sources.</li> <li>• Balconies and external façade treatments will provide local screening.</li> <li>• Incorporate appropriate design standards as set out in BS 8233 and PPG24.</li> </ul>	No significant adverse impacts	s106 agreement
	Railway noise and vibration	<p>Development will incorporate appropriate design standards as set out in BS 8233.</p> <p>If necessary, rail side noise barriers could be provided</p>	No significant adverse impacts	Included in RDSF Planning Condition Planning Condition

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
	Operational noise from Rail Freight Facility	<p>A noise barrier will be provided on the Northern site boundary.</p> <p>On the southern side boundary, a landscaped acoustic screen (3-4 storeys high) will be used.</p> <p>Where practicable, lorries will be fitted with broad band noise reversing alarms.</p> <p>Design and layout of freight facility to achieve maximum night time noise level of LAeq, 5 minute 45dB at residential properties in the Railway Cottages Conservation Area.</p>		
	Operational noise from the Waste Handling Facility and CHP	Design to ensure that noise emissions from plant and buildings are no higher than 5 dB below existing background La90 noise levels at the nearest noise-sensitive receptors, to accord with BS4142.	No significant adverse impacts	Planning Condition
	Operation of building services plants and equipment associated with the development	The total noise level due to all items of building services plant should be designed to a level 5 dB(A) below the prevailing lowest La90 Noise level to meet BS4142.	No significant adverse impacts	Planning Condition
	Impacts on new development	<p>Design of the external fabric of each building to achieve suitable internal noise standards including:</p> <ul style="list-style-type: none"> <li>For Schools - Building Bulletin 93.</li> </ul>	No significant adverse impacts	Included in <u>revised</u> DSF

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
		<ul style="list-style-type: none"> <li>For hospitals and health care facilities – Health, Technical Memorandum 2045.</li> <li>For offices: British Standards 8233</li> </ul>		
	Operational noise in public open spaces and recreational areas	Existing boundary treatments will be inspected and upgraded to provide acoustic screening for neighbouring properties.	No significant adverse impacts	Planning Condition
Chapter 10: Landscape and Visual Assessment	Landscape	All areas of hard landscaping will be subject to detailed design and approved by the LB of Barnet as ‘reserved matters’.	No significant adverse impacts	Reserved Matters Planning Condition
		Production of a Landscape Design Strategy to be submitted to and approved by LB Barnet	No significant adverse impacts	Included in <u>revised</u> DAS
	Localised visual impacts and landscape sensitivity as a result of construction, including tree and vegetation loss.	Tree and shrub replacement and planting to be phased as early as possible as part of development	No significant adverse impacts	Planning Condition
		Detail of layout, hard and soft landscapes and general specifications of public open space and landscaping all subject to approval by LB Barnet.	No significant adverse impacts	Planning Condition
		Landscape maintenance to be agreed with LB Barnet	No significant adverse impacts	S106 Agreement

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
Chapter 11: Ecology	Loss of Clarefield Park SLINC	Provision of a mosaic of habitats for a range of invertebrates and birds and one wildlife pond.	Local adverse impact	Planning Condition
	Intensification of use in Clitterhuse Park SLINC	Provision of additional habitats.	Local adverse impact	Planning Condition
	Increased predation of birds by domestic cats	Enhanced and additional onsite habitat for breeding birds, planting of new trees, hedgerows, grassland and shrubs. Measures proposed include: <ul style="list-style-type: none"> <li>• House sparrow boxes - total of 300</li> <li>• Artificial house martin nests - total of 100</li> <li>• Swift bricks - total of 100</li> <li>• Various sized nests boxes and bricks (eg selection for tit species, robins, wrens and starlings) - total of 100.</li> </ul>	No significant adverse impacts	Planning Condition
	Potential disturbance of foraging and community bats	The requirement for a disturbance licence will be discussed with Natural England.  Positioning of lighting and using of hoods or low-pressure sodium lamps.  Bat boxes or bat bricks to be installed/ incorporated on/into trees and buildings in appropriate places around the development. This will include installing, as a minimum three bat boxes for every tree with bat roosting potential, to be lost by the development	No significant adverse impacts	Planning Condition

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
	Loss of bat roost from building within Clitterhouse Park SLINC	Create a like-for-like replacement bat roost on the site. Demolition of the building will be outside of main bat roosting season (May-August) under a licence from Natural England.	Local adverse impact	Planning Condition
	Loss of local invertebrate habitat	Creation of a new Community Park in Clitterhouse Playing Field that will include a mosaic of habitats suitable for a diverse range of invertebrates.  Creation of green and brown roofs on 10% of roof space available, that will include a mosaic of habitats suitable for a diverse range of invertebrates.	No significant adverse impacts	Included in <u>Revised</u> DSF Planning Condition
	Management of nature conservation habitats	Ecological maintenance to be agreed with LB Barnet	No significant adverse impacts	S106 Agreement
Chapter 12: Water Resources and Flood Risk	Ensuring adequate drainage	Details of surface water drainage, including recycling and storage, to be agreed with LB Barnet, TW and the EA.	No significant adverse impact	Planning Condition
	Avoidance of local flood risk	Any land raising will be completed with suitable contouring and profiling.  Flood pathways from the A406 into the River Brent will not be inhibited by the Scheme.	No significant adverse impact  No significant adverse impact	Included in the Planning Application
		Further investigation should be made to confirm the risks of groundwater levels to basements proposed in the Scheme's designs.	No significant adverse impact	Planning Condition



Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
		During detailed design, further consideration to be given to Clitterhouse Playing Fields drainage and Clitterhouse Stream.	No significant adverse impact	Planning Condition
		All potential areas at risk from overland flow and drainage sources will be identified and taken into account during the detailed design	No significant adverse impact	Planning Condition
	River Maintenance	In accordance with the requirements of the EA, an average of 8 m will be allowed between top of banks and the location of pedestrian and cycle paths.	No significant adverse impact	Planning Condition
		Any necessary paths will be set as far back from the river channel as possible in order to allow the river flexibility to move and the riparian habitat space to develop.	No significant adverse impact	Planning Condition
Chapter 13: Archaeology and Cultural Heritage	Impact on the Conservation Area	Mitigation has been included in the design	No significant adverse impacts	Included in the <u>Revised DSF</u>
	Potential archaeological remains within the site.	Archaeological Field Evaluation will be carried out and the scope and methodology agreed with the LB Barnet.	No significant adverse impacts	Planning Condition
		Appropriate arrangements will be made to preserve or record finds.		Planning Condition
		Should the evaluation indicate archaeological presence,		Planning Condition

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
		<p>the following will be adhered to:</p> <ul style="list-style-type: none"> <li>• Written specification will be agreed with LB Barnet;</li> <li>• An archaeologist will be present on the Site during groundworks to establish the presence or absence of archaeological features;</li> <li>• The procedures outlined in the IFA's "Standards and Guidance for an Archaeological Watching Brief" (1999); and</li> <li>• If an archaeological presence is established, additional be agreed with LB Barnet.</li> </ul> <p>The results of the watching brief and any additional field work will be published in line with PPG16 recommendations.</p>		<p>Planning Condition</p> <p>Planning Condition</p> <p>Planning Condition</p> <p>Planning Condition</p> <p>Planning Condition</p>
Chapter 14: Air Quality and Dust	Increase in local emissions of NOx and PM10 Emissions from CHP Plant	Standards not being exceeded, so no mitigation proposed.  Detailed modelling of dispersion of emissions once technology specified and location of nearby tall buildings determined.	Negligible impacts  No significant adverse impacts	Planning Condition
Chapter 15: Ground Contamination	Contaminated groundwater may affect	Further site investigation, assessment and monitoring of the groundwater within the Site will be required prior to	No significant adverse impacts	Included in <u>revised</u> GRS, as part of <u>RDSF</u>

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
	the River Brent following the removal of concrete channel	<p>defining the remediation requirements and methodologies. Measures include:</p> <ul style="list-style-type: none"> <li>The placing of permeable reactive barriers along all or parts of the banks of the river to remediate groundwater as it flows towards the river.</li> <li>in situ or ex situ groundwater remediation to clean up groundwater before it reaches the river.</li> </ul>		Planning Condition
Chapter 16: Waste	Waste from residential development	<p>The collection, handling, treatment and disposal of household waste is currently the responsibility of the Local Authority (LB Barnet) as Waste Collection Authority and North London Waste (as the sub-regional Waste Disposal Authority).</p> <p>The applicants will provide a new waste handling facility (and CHP) subject to agreement, underground waste transfer will be provide.</p> <p>Subject to agreement ,CHP will use RDF from the WHF, transferred by underground travel</p> <p>Waste management principles, which include, waste segregation and storage provision across the proposed Scheme will conform to the general requirements set out in BS5906 – Waste management in buildings – Code of Practice; The point of collection of all components of waste by LB Barnet and other waste collection organisations will</p>	<p>No significant adverse impacts</p> <p>Significant positive impacts on waste targets and carbon emission reduction.</p> <p>No significant residual impacts</p> <p>No significant residual impacts</p>	<p>s106 Agreement</p> <p>Planning Condition S106 Agreement</p> <p>Planning Condition, s106 Agreement</p> <p>Planning Condition s106 Agreement</p>

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
		be at street level unless otherwise advised; Preferred receptacles for residential buildings will be 1100 litre Eurobins; Waste receptacles will be provided for recyclables, organic materials and residual waste; A suitable area and equipment will be provided to allow frequent cleansing of communal storage bins.		
	Waste from commercial development	Waste management principles and storage provision across the Scheme will conform to the general requirements set out in BS5906 - Waste management in buildings - Code of Practice; The point collection of all components of waste by LB Barnet and other waste collection organisations will be a designated waste management area at street level, unless otherwise advised; All non-residential developments above 1,000m <sup>2</sup> floor area will be provided with a minimum of 10m <sup>2</sup> designated waste storage space for materials for recycling, including paper, cardboard, cans, bottles and plastics; Waste producers will be responsible for complying with all building waste management requirements; Mixed residential / commercial buildings will be provided with separate areas for management of residential and commercial waste; A waste management plan will be drawn up for each planned commercial building	No significant adverse impacts	Planning Condition s106 Agreement
	Other waste	Grounds Maintenance and Landscaping: Opportunities for on-site composting will be considered. Contracts for grounds maintenance services will require that suitable landscaping material is composted.	No significant adverse impacts	s106 Agreement

Environmental Topic	Key Potential Impacts (without mitigation)	Mitigation	Residual Impact	Means by which mitigation will be delivered
		<ul style="list-style-type: none"> <li>Health Care: Manage waste in accordance with the NHS recommended practice.</li> </ul>		
Chapter 17: Microclimate	Wind	Wind tunnel modelling of key buildings as part of detailed design.	No significant adverse impacts	Planning Condition
		Preliminary wind mitigation scheme. Detailed design of soft landscaping works in recreational areas will be agreed with LB Barnet.	No significant adverse impacts	Planning Condition
	Inadequate sunlight and daylight	Six facades (F26, F27, F35, F26, F39 & F45) on indicative layout plan fail to meet recommended guidelines for daylight availability. Detailed design studies to ensure adequate daylighting standards achieved..	No significant adverse impacts	Planning Condition
Chapter 18: TV, Radio and Mobile Phone Reception	Loss of TV or radio reception for properties due to shadowing or reflection	Applicants to provide mitigation to individual premises as impacts are identified as they occur, to ensure adequate TV and radio reception for off-site residents..	No significant adverse impacts	S106 Agreement
	Loss of reception for mobile phones due to shadowing	To be agreed with mobile phone operators.	No significant adverse impacts	s106 Agreement
Chapter 19: Carbon Dioxide Emissions	Base Option will not meet London Plan policy for 20% on-site renewables.	Applicants are pursuing Preferred Option for renewable CHP which will deliver up to 60% reduction in CO2 emissions below Part L 2006 Building Regulations.	No significant adverse impacts	Planning Condition, s106 Agreement

Table 22.2 Short Term and Construction Mitigation and Residual Impacts

	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
Chapter 5: Land Use	-	-	-	-
Chapter 6: Planning Policy	-	-	-	-
Chapter 7: Traffic and Transport	Impact of construction traffic	<p>A Construction Traffic Management Plan (CTMP) will be agreed and approved by LB Barnet.</p> <p>HGVs will use designated roads which have been judged as suitable.</p> <p>Wherever practical, deliveries of abnormal loads will be made outside of peak hours.</p> <p>Residents will be notified about temporary road closures and diversion routes.</p> <p>Applicants to seek to ensure that sustainable means used for deliveries to Site possibly to include consolidation centre.</p>	No significant residual impacts	<p>Planning Condition CoCP, included in RDSF CoCP</p> <p>CoCP</p> <p>CoCP</p> <p>S106 Agreement</p>
Chapter 8: Socio Economic	<p>Creation of approximately 1,400 FTE construction jobs.</p> <p>Demolition of community facilities and businesses.</p>	<p>Community facilities to be replaced according to 'triggers'. Some businesses to be relocated on site. Others to be dealt with by agreement/through CPO.</p>	<p>Major positive significant impact</p> <p>Minor significant adverse impact</p>	<p>s106 Agreement</p> <p>Planning Condition s106 Agreement</p>

	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	Demolition of 2179 dwellings.	Replacement dwellings to be provided on site for most residents. Demolition of existing housing will not take place until new dwellings ready for occupation.	No significant adverse impact	Planning Condition s106 Agreement
Chapter 9: Noise and Vibration	Construction noise and disturbance to residents in the vicinity of works	<p>Construction works will adhere to the advice set out in the British Standard BS 5228 for minimising noise and vibration on the site.</p> <p>Construction Environmental Management Plans (CEMP) will be developed for each building contract.</p> <p>Concrete batching and other potentially noisy construction facilities to be sited away from existing residential areas The Contractors will publicise the programme for the duration of operations, provide details of planned noisy events; and provide named contacts to deal with complaints for daytime and out of hours.</p> <p>The Contractors will be required to select the quietest available type of plant available for all site operations and be subject to s61 consent procedures.</p> <p>Where practicable, noise from fixed plant and equipment will be contained within suitable acoustic enclosures or behind acoustic screens.</p> <p>Site construction normal hours of operation will be agreed</p>	Minor significant adverse impacts	<p>CoCP</p> <p>CoCP</p> <p>Planning Condition</p> <p>CoCP</p> <p>CoCP</p> <p>CoCP</p> <p>Planning Condition</p>

	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
		with LB Barnet. Night work will be kept to a minimum.		S61 Consents
		Driven piling only to be used if no alternative		CoCP
		Any plant and equipment required for operation at night (23:00 - 07:00) will be mains electric powered where practicable.		CoCP
		A programme of noise monitoring during construction will be conducted in accordance with a protocol agreed with LB Barnet.		Planning Condition
Chapter 10: Landscape and Visual Assessment	Visual impacts as a result of the landscape alteration during the construction period, resulting from contractor compounds, site offices, temporary traffic and pedestrian management, temporary security lighting, soil stripping, construction machinery etc.	Working areas and open space will be clearly separated. Trees and vegetation to be retained to be protected with temporary fencing. Materials and machinery are to be stored tidily. Temporary buildings will be located as far as possible from residential dwellings. Temporary lighting to avoid nuisance to residents. Temporary/permanent reinstatement of landscape to take place promptly	The temporary impacts will result in short term adverse impacts on the landscape character and views in the area of moderate significance	CoCP CoCP CoCP CoCP CoCP



	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	Eradication of Japanese Knotweed and other invasive plants	Eradication to follow EA/Defra guidance..	No significant adverse impacts	CoCP
Chapter 11: Ecology	Disturbance to habitat and species during the construction period	Ecology Management Plan to be submitted and approved by LB Barnet	No significant adverse impacts	Planning Condition
	Pollution of the Welsh Harp Reservoir SSSI	Environment Agency pollution prevention guidelines, particularly PPG06 - Working at Construction and Demolition Sites, will be adhered	No significant adverse impacts	CoCP
	Disturbance of protected species	Any clearance of bird breeding trees and shrubs will be undertaken outside the bird breeding season (1 <sup>st</sup> March - 31 <sup>st</sup> August).	No significant adverse impacts	CoCP
		Surveys of potential bat roosts will be undertaken before demolition. Licences for disturbance to either bats or bat roosts will be obtained from Natural England, where necessary. Bat boxes etc to be erected.	No significant adverse impacts	Planning Condition
	Habitat damage and loss during site clearance	A phased approach will be taken where some areas are left temporarily whilst newly created habitats in the proposed open spaces have time to begin to mature	No significant adverse impacts	Planning Condition
		The loss of a single bat roost will be mitigated by a like-for like replacement bat roost in the vicinity of the roost to be	Local adverse impact	

	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	Protection of trees	<p>lost, with any works under a licence from Natural England.</p> <p>The requirements of BS 5837:2005 'Trees in Relation to Construction'.</p> <p>Adverse effects on all trees whether statutorily protected or not within or in the vicinity of the site shall be minimised by the adoption of suitable mitigation measures, including:</p> <ul style="list-style-type: none"> <li>selective removal of lower branches in an approved manner, to reduce mechanical damage by construction plant;</li> <li>the use of matting around the root zone to prevent excess soil compaction;</li> <li>the use of fencing around the trunk to prevent damage; and</li> <li>No heavy materials or plant to be stored, and construction traffic movements to be controlled, by fencing or other means.</li> </ul>	<p>No significant adverse impacts</p> <p>No significant adverse impacts</p>	<p>CoCP</p> <p>CoCP</p>
Chapter 12: Water Resources and Flood Risk	Construction impacts on surface and ground waters	<p>Works will accord to regulatory requirements of the HSE and EA.</p> <p>Dust suppression and erosion minimisation procedures</p>	<p>No significant adverse impacts</p> <p>No significant adverse impacts</p>	<p>CoCP</p> <p>CoCP</p>

Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	will be developed and implemented.		
	Stockpiling of soil, spoil and construction materials (such as sand and gravels) will be kept to a minimum and where necessary, stockpiles will be covered or seeded to provide stabilisation.	No significant adverse impacts	CoCP
	Trenching or excavation activities in open land will be restricted during periods of intense rainfall, and temporary bunding will be provided to reduce the risk of sediment, oil or chemical spills.	No significant adverse impacts	CoCP
	Routine maintenance of vehicles and plant will be carried out off site or in a designated, bunded area.	No significant adverse impacts	CoCP
	Stringent site practices will be adhered to prevent any contamination transfer due to vehicular, personnel or materials movement.	No significant adverse impacts	CoCP
	Plant, materials and chemicals will not be stored within or near watercourses, or in areas at risk of on-site flooding. At storage sites, fuels, lubricants and chemicals will be contained within a bunded, covered area.	No significant adverse impacts	CoCP
Pollution and spill risk	Pollution Prevention and Emergency Response Plans (PPERPs) will be developed.	No significant adverse impacts	CoCP
	A programme of water quality and flow monitoring will	No significant adverse impacts	Planning Condition

Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	be developed and agreed with LB Barnet and the EA		
	Specific pollution prevention measures and monitoring programmes will be developed for high-risk operational areas.	No significant adverse impacts	Planning Condition CoCP
	Procedures will be agreed with LB Barnet and the EA to be implemented in the event that a risk to water quality is identified.	No significant adverse impacts	CoCP
Impact of transportation and vehicle movements on water resources	A Construction Traffic Management Plan (CTMP) will be agreed with LB Barnet.	No significant adverse impacts	Planning Condition
	Specific procedures will be developed for the transportation of materials or plant over watercourses.	No significant adverse impacts	CoCP
Impact of waste management on water resources	Individual Site Waste Management Plans (SWMP) will be developed.	No significant adverse impacts	Site Waste Management Regulations CoCP
	During construction appropriate waste handling, storage and disposal procedures will be implemented.	No significant adverse impacts	CoCP
Impact of abstractions, discharges and impoundments	All abstractions, discharges and impoundments will be conducted with appropriate consents from the EA and in accordance with consent conditions.	No significant adverse impacts	Discharge and Abstraction Consents CoCP

Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	No direct discharges will be made to construction watercourses, unless approved by the EA.	No significant adverse impacts	CoCP
	Sediment ponds or other measures to ensure clean discharges will be provided.	No significant adverse impacts	CoCP
	Temporary SUDS arrangements will be used, where practicable.	No significant adverse impacts	CoCP
Impact of the use of specific substances and treatments	Piling and any other specialist works will be conducted by an experienced contractor in accordance with method statements.	No significant adverse impacts	CoCP
	Pre-cast concrete structures will be used wherever practicable.	No significant adverse impacts	CoCP
	Sulphate-resistant concrete (as detailed in the Code of Practice for Concrete Design BS 5328) will be used.	No significant adverse impacts	CoCP
	The use of liquid concrete in the vicinity of watercourses or waterbodies or in bridge construction will be carefully conducted in accordance with EA guidance (PPG5).	No significant adverse impacts	CoCP
	Any culvert or bridge maintenance works involving grouts, paints etc will be conducted in accordance with PPG 5 and appropriate method statements.	No significant adverse impacts	CoCP
Watercourse realignment and	Advice will be sought from specialist	No significant adverse impacts	Planning Condition

Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
restoration works	<p>hydrogeomorphologists with regard to the channel designs for the realignment and restoration.</p> <p>The River Restoration Centre (RRC) will advise on the designs for the phased realignment and restoration of the channel. Design development will include investigations into whether it will be necessary to include a liner or lining material, of suitable specification and durability, to protect the watercourse from any underlying contamination. Channel design will be appropriate to the desired character of each reach and may include:</p> <ul style="list-style-type: none"> <li>• installation of suitable bed material of natural type.</li> <li>• planting, rocks or natural matting to provide revegetation and bank stabilisation where required.</li> <li>• installation of riffles and berms just above average summer water levels to encourage ecological diversity.</li> <li>• design of banks and adjacent areas to recreate natural forms and habitats.</li> </ul>	No significant adverse impacts	Planning Condition
	Specific methodologies will be developed with regard to phasing, channel excavation, liner installation, protection of the new channel and removal of the former channel.	No significant adverse impacts	Planning Condition

Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	A monitoring and survey programme for fish and other aquatic species during and post construction of river works will be agreed with LB Barnet and the EA.	No significant adverse impacts	Planning Condition
Pollution of groundwater	All waste water and site discharges will only be permitted where the effluent quality and discharge location is acceptable to the Environment Agency or Thames Water (as appropriate).	No significant adverse impacts	Discharge Consents CoCP
	Prior to any excavation below the water table, including any site de-watering, the Contractor will inform the Environment Agency of the works to be conducted.	No significant adverse impacts	CoCP
Temporary provision of foul sewerage.	If any temporary sewerage facilities are required prior to installation of permanent sewerage facilities, these are likely to comprise chemical toilets. Sewage will be collected at regular intervals and disposed of by a licensed Contractor.	No significant adverse impacts	CoCP
Chapter 14: Air Quality and Dust	Dust generated as a result of construction activities.	Dust generation will be limited by: <ul style="list-style-type: none"> <li>• Solid barriers, if necessary, at Site boundary.</li> <li>• Machinery and dust causing activities will be located away from sensitive receptors, where possible.</li> <li>• Water suppression or dust extraction will be fitted to drilling and grinding equipment.</li> </ul>	No significant adverse impacts CoCP

Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	<ul style="list-style-type: none"> <li>• Drilling and excavation surfaces will be wetted, where necessary.</li> <li>• Surfaces will be damped down prior to clearing.</li> <li>• Debris piles will be kept watered as necessary so that no dust nuisance may be caused to residential properties.</li> <li>• Buildings to be demolished will be sheeted or screened prior to demolition.</li> </ul>		
	<p>Suitable measures will be taken to prevent the deposition of mud and dirt on the public roads and to prevent the propagation of dust from the Site. This will include:</p>	No significant adverse impacts	CoCP
	<ul style="list-style-type: none"> <li>• Hard surface site haul routes will be constructed.</li> <li>• Sheeting of lorries during transportation of construction materials and spoil export.</li> <li>• Wheel washing and highway cleaning.</li> <li>• All containers will be totally enclosed or covered by tarpaulins / nets to prevent escape of dust or waste materials during loading and transfer from site.</li> </ul>		
	<p>Arrangements for real time monitoring of dust deposition at sensitive receptors will be agreed with LB Barnet.</p>	No significant adverse impacts	Planning Condition
	<p>The GLA Code of Practice for Construction Dust will be adhered to.</p>	No significant adverse impacts	Planning Condition



Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
Impacts of vehicles and plant on air quality	Air quality will be taken into account in the Construction Transport Management Plan (CTMP).	Minor significant adverse impacts	Planning Condition CoCP
	<p>The following measures will apply to vehicles and plant:</p> <ul style="list-style-type: none"> <li>• While on site, all engines will be switched off.</li> <li>• All on-road construction vehicles will comply with emission standards and the requirements of any existing or possible future Low Emission Zone (LEZ).</li> <li>• All non-road vehicles should use ultra low sulphur diesel where available and be fitted with an appropriate particulate filter.</li> <li>• Traffic movements within the Site will be minimised and appropriate speed limits enforced.</li> </ul>	No significant residual impacts	CoCP

	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
Chapter 15: Ground Contamination	Disturbance of contaminated land, resulting in damage to watercourses or human health or environment.	<p>Site remediation to be delivered in accordance with the GRS and zonal Site Specific Remediation Strategies. These likely to include:</p> <ul style="list-style-type: none"> <li>• Arrangements for further ground investigations;</li> <li>• Sampling and monitoring;</li> <li>• Strategy for minimising off-site removal of materials;</li> <li>• Arrangements for storage, treatment and disposal of waste;</li> <li>• Use of registered carriers and operations.</li> <li>• In both cut and fill areas, soil cover systems to isolate the underlying contaminated material from the site users, and to provide a suitable growing medium for plants may be suitable.</li> <li>• Excess contaminated soil being taken to a soil treatment plant for clean-up prior to reuse on this or other sites. Subject to stakeholder agreement it is intended to use the existing waste transfer station site as a soil treatment centre.</li> </ul>	No significant adverse impacts	GRS included in RDSF Planning Condition
	Unidentified Contamination	If during site works contamination that has not previously been identified is encountered on site, no further development shall take place until a site investigation has been carried out.	No significant adverse impacts	Planning Condition
	Safety of the workforce	All standard HSE regulatory requirements are to be followed.	No significant adverse impacts	CoCP

	Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
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Chapter 16: Waste	Demolition and construction	<p>An overall Demolition and Construction Waste Management Plan to be developed which will cover:</p> <ul style="list-style-type: none"> <li>• Targets and procedures for maximising reuse and recycling of materials on site or for effective disposal off-site.</li> <li>• Adoption of a reclamation led approach to the demolition, with re-use and recycling of demolition materials.</li> <li>• Handling of any hazardous materials.</li> <li>• Minimising waste materials, including packaging of materials delivered to Site.</li> <li>• Setting material based targets for a proportion of reclaimed materials to be salvaged from demolished buildings and incorporated into the construction of new buildings.</li> <li>• Materials specification to include sustainability criteria.</li> <li>• Local sourcing of materials.</li> <li>• Specifying materials from renewable sources where practicable.</li> <li>• Segregation of waste materials for re-use and efficient disposal, and development and adoption of a separate material strategy for each waste stream.</li> <li>• Annual review of targets and performance as the project progresses.</li> </ul>	No significant adverse impacts	Planning Condition CoCP
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Key Potential Impacts	Mitigation	Residual Impact	Means by which mitigation will be delivered
	Contractors will be required to control the construction site, keep it clean and provide appropriate facilities for the temporary storage of all waste until it is disposed of.	No significant adverse impacts	CoCP
	The ICE Demolition Protocol and the WRAP Recycled Content Toolkit will be employed, as important means for mitigating environmental impact.	No significant adverse impacts	CoCP
Chapter 17: Microclimate	-	-	-
Chapter 18: TV, Radio and Mobile Phone Reception	Cranes and other machinery may cause some and multi-path ghosting and shadowing problems to TV reception	Applicants will set up procedures for responding to complaints and providing mitigation to provide adequate reception.	No significant adverse impacts s106 agreement
Chapter 19: Carbon Dioxide Emissions	-	-	-

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