



West Midlands
Interchange

Four Ashes Ltd

The West Midlands Rail Freight Interchange Order 201x

Mitigation Route Map

Document Ref 7.6

Regulation 5(2)(q)

July 2018

Quod

This schedule sets out the mitigation controls and other best practice measures identified in the **Environmental Statement** [Document 6.2] and identifies the means by which those controls and measures will be secured.

The first column provides a unique reference number for each item included in the Mitigation Route Map. The second column identifies the paragraph number of the Environmental Statement where the mitigation measure is referenced. The third column identifies the potential impact or topic which the mitigation measure is intended to address or relates. The fourth column summarises the mitigation measures, as set out in the Environmental Statement and the fifth column identifies the means by which the mitigation measure will be secured.

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
CHAPTER 1: INTRODUCTION				
This chapter does not include any mitigation measures.				
CHAPTER 2: EIA PROCESS AND METHODOLOGY				
This chapter does not include any mitigation measures.				
CHAPTER 3: ALTERNATIVES AND DESIGN EVOLUTION				
This chapter does not include any mitigation measures.				
CHAPTER 4: DESCRIPTION OF THE PROPOSED DEVELOPMENT				
This chapter does not assess the magnitude of potential impacts, nor the significance of likely effects of the proposed development, as this is addressed within individual technical assessments within the Environmental Statement (Chapters 6 - 16). Any mitigation referred to in this chapter is therefore addressed in the relevant chapter below.				
CHAPTER 5: CONSTRUCTION AND DEMOLITION				
This chapter does not assess the magnitude of potential impacts, nor the significance of likely effects during the demolition and construction works, as this is addressed within individual technical assessments within Environmental Statement (Chapters 6 - 16). Any mitigation referred to in this chapter is therefore addressed in the relevant chapter below.				
CHAPTER 6: AGRICULTURE AND SOILS				
6.1	6.64	Loss or degradation of topsoil and subsoil during the demolition and construction stage.	The quality and quantity of soil within the Site should be maintained by implementing appropriate techniques for stripping, storing and re-use. This approach will be adopted in a Soil Resource Plan (SRP), as per Section 6.0 of the ODCEMP.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan); and Requirement 14 (Earthworks)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
6.2	6.68	Loss of agricultural production on agricultural land.	In order to maintain access for agricultural machinery to the land for as long as possible, agreed access routes will be established for construction personnel, machinery and equipment movements through on-going areas of agricultural land use, if required.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan); and Requirement 2 (Phasing of Development)
CHAPTER 7: AIR QUALITY				
7.1	7.57	Potential air quality impacts from emissions from plant proposed within the Proposed Development.	Any boilers associated with the Proposed Development would be assessed to ensure compliance with appropriate standards.	WMI DCO, Schedule 2, Requirement 7 (Air Quality – Operational Emissions)
7.2	7.210	Potential dust impacts from construction phase.	Best practicable means and good site management and mitigation techniques to reduce emissions of dust and limit dispersion set out in the ODCEMP.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
7.3	7.212	Potential air quality impacts from vehicle emissions	Measures to reduce vehicle movements and potential congestion (and hence reduce potential air emissions) are outlined in detail within a Sustainable Transport Strategy included as an appendix to the Transport Assessment (Technical Appendix 15.1).	WMI DCO, Schedule 2, Requirement 22 (Transport – Travel Plan) and Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
CHAPTER 8 – ARCHAEOLOGY (BELOW GROUND HERITAGE)				
8.1	8.93; 8.97 – 8.99	The potential disturbance or loss of archaeological remains.	An indicative mitigation proposal is set out in the Outline Written Scheme of Investigation presented at Technical Appendix 8.5 (ES Volume 2). This sets out a range of measures appropriate to the broad categorisation of the Site. It is anticipated that more detailed mitigation	WMI DCO, Schedule 2, Requirement 8 (Archaeology)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			proposals would be agreed in relation to detailed design layouts for specific phases of development and/or individual development plots as these are brought forward after granting of the DCO.	
CHAPTER 9 – CULTURAL HERITAGE (BUILT HERITAGE)				
9.1	9.314	The potential effects of Demolition and Construction Phase on weekend pleasure boaters or walkers using the Canal Conservation Area.	<p>The normal construction working hours would be as set out below:</p> <ul style="list-style-type: none"> Monday to Friday: 07.00 to 19.00; and Saturday: 07.00 to 13.00. <p>No works will take place outside of the hours stated above, unless by prior written agreement from South Staffordshire District Council or in emergency situations.</p>	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan); and Requirement 6 (Construction Hours)
9.2	9.315	The potential effects of construction of new road bridge at Gravelly Way on the locally listed 18th century canal footbridge.	The details of methods to safeguard the historic bridge will be included in the relevant phase-specific Demolition and Construction Management Plan(s). This will include careful design and construction planning of the new Gravelly Way road bridge so as to minimise the physical and setting impact to the Canal during construction, including sensitive design of scaffolding and other temporary construction features; and undertaking a survey of the current condition of the historic bridge structures in advance of any nearby works. In the unlikely event that the historic bridge sustains any damage as a	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			result of the construction of the new road bridge the necessary remedial works will be undertaken.	
9.3	9.317; 9.382; and 9.390	The potential effects on heritage receptors to be demolished (Heath Farm and Woodside Farm).	Heath Farm and Woodside Farm cannot be demolished until the relevant development or phase of the development has commenced.	WMI DCO, Schedule 2, Requirement 9 (Cultural heritage - Demolition of Heritage Receptors)
			Notification to the local authority is required prior to demolition, to state that the relevant phase of development was due to commence and ensure that any mitigation measures are in place. To mitigate the loss of the heritage receptors, Historic Building Recording would be undertaken by qualified professionals, with a Written Scheme of Investigation agreed with the local authority.	WMI DCO, Schedule 2, Requirement 9 (Cultural heritage - Demolition of Heritage Receptors)
9.4	9.326	The effect on the Canal Conservation Area.	Removal of the two redundant pipe bridges and footbridge located between the SI Group facility and the Bericote Site.	WMI DCO, Schedule 2, Requirement 10 (Cultural Heritage – Demolition of Canal Crossings)
9.5	9.350	The potential impact indirect effects on the Canal Conservation Area.	The elevations of the proposed warehousing will be designed to blend with the sky and landscape by using a natural colour palette, tonality and geometry.	WMI DCO, Schedule 2, Requirement 3 (Detailed Design Approval)
9.6	9.362	Indirect effects on the Canal Conservation Area.	The Lighting Strategy is the subject of careful design to minimise the light spill away from target areas.	WMI DCO, Schedule 2, Requirement 19 (Lighting Details)
9.7	9.469	Likely visual effects on built heritage receptors.	Use of appropriate hoarding during development phases and following industry and best practice construction standards	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
9.8	9.472	Indirect effects on the Canal Conservation Area.	The design of the new road bridge at Gravelly Way to respect the character and appearance of the canal CA.	WMI DCO, Schedule 2, Requirement 3 (Detailed Design Approval)
9.9	9.472	Indirect effects on the Canal Conservation Area.	Landscape buffers and the creation of community parks to preserve the landscape setting of the canal conservation area and associated heritage receptors along its length, including Gailey wharf.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
9.10	9.473; and 9.474	Indirect effects on the Canal Conservation Area.	A Canal Enhancement Scheme will be agreed to improve and enhance the condition of and public accessibility to the heritage receptor. This is part of the package of mitigation to preserve and enhance the heritage receptor. The potential enhancement works are works to the towpath, new pedestrian connections and introduction of a scheme of interpretation.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
CHAPTER 10 – ECOLOGY AND NATURE CONSERVATION				
10.1	10.186	Potential impacts of the Proposed Development on habitats and species present within the study area.	A Framework Ecological Mitigation and Management Plan (FEMMP) has been prepared for both the construction and operational phases of the Proposed Development and is provided in Technical Appendix 10.4 of the ES. The plan details measures intended to mitigate the impact of the Proposed Development on habitats and species present within the study area. The FEMMP will be supported by Ecological Mitigation and Management Plans (EMMP) prepared for each phase of development to	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			reflect site conditions and guidance applicable at the specific time (to ensure any changes in baseline are adequately reflected).	
10.2	Table 10.10: Summary of Embedded Mitigation and How Secured	Potential impacts on receptors listed in Table 10.10	Mitigation measures listed in Table 10.10 are controlled via the FEMMP, the Parameter Plan and European Protected Species Mitigation Licence	As set out in Table 10.10 of the Environmental Statement.
10.3	10.225	The loss of valuable habitat.	This impact has been minimised in the Parameters Plans as part of embedded mitigation measures/design development and as a result significant areas of habitat would be retained in the green infrastructure areas of the Proposed Development including semi-improved grassland, woodland, trees, hedgerows and open water.	WMI DCO, Schedule 2, Requirement 3 (Detailed Design Approval)
10.4	10.226	The loss of valuable habitat.	The Community Parks will be designed to provide a range of native habitats including substantial areas of open water, species rich grassland, native woodland, hedges and scrub.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.5	10.226	The loss of valuable habitat.	Habitat creation or enhancement in the construction phase aims to maximise the ecological value of habitats and these habitats are proposed to be managed (via the FEMMP) in the operational development phase to maintain this value.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.6	10.227; 10.259; 10.263;	The loss of valuable habitat.	Croft Lane Community Park and the key ecological corridor linking Calf Heath Wood and Calf Heath Reservoir are to be	WMI DCO, Schedule 2, Requirement 17 (Landscape – Phasing of Landscaping and Ecology Works)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
	10.280; 10.284; 10.334		provided within 5 years of development commencement as embedded mitigation.	
10.7	10.227; 10.284	The loss of valuable habitat.	Delivery of the southern part of Calf Heath Community Park to be completed prior to the commencement of development at Development Zones A4b and thereafter retained as 'Core GI'.	WMI DCO, Schedule 2, Requirement 17 (Landscape – Phasing of Landscaping and Ecology Works)
10.8	10.230	The loss of valuable habitat.	The creation of species rich grassland habitat as part of the embedded mitigation.	WMI DCO, Schedule 2, Requirement 10 (Ecological Management and Mitigation Plan)
10.9	10.231	The loss of hedgerows	'Important' hedgerows are retained where possible. A total length of approximately 1136 m of ecologically 'Important' hedgerows will be translocated which are not possible to retain.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
10.10	10.232	The loss of woodlands.	Management of Calf Heath Wood to complement that in the adjoining portion of the woodland being managed in a similar manner as part of the Bericote Development to promote a diverse woodland including trees of a range of ages. The wood will be enhanced by restoring the coniferous or mixed plantation areas (reducing proportion of pines) to native broadleaved woodland (e.g. oak, birch and ash) over time through appropriate silvicultural practices. Non-native species notably rhododendron will be removed over several years in a manner that promotes the native shrub layer, but does not remove all of the structure	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			from the woodland in one operation. Areas of standing deadwood would be retained. Also, linking native broadleaved woodlands wherever possible with hedges (retained or new) and existing retained woodland.	
10.11	10.234	The loss of woodlands and individual trees.	Approximately 900 individual trees will be planted including native trees such as oaks within areas of green infrastructure. As part of embedded mitigation, the planting will be planned so that a proportion of the planted trees can be retained and allowed to grow to maturity/overmaturity with no potential for conflict from nearby land uses (i.e. in the timescales of hundreds of years) to become future veteran trees.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
10.12	10.234; 10.407	Impact on Black Poplar trees.	The individual written landscape scheme for each phase will include a method statement and plan for the propagation, planting, establishment and maintenance of propagated Black Poplar specimens.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
10.13	10.235	The potential impact on biodiversity.	The provision of six ponds in compensation and a minimum of ten ponds to be created as enhancement specifically for biodiversity. The new waterbodies provided for Site drainage would include areas where water would be temporary, and levels would vary including ephemeral swales and ponds (and these would emulate the ponds and	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme); and Requirement 10 (Ecological Management and Mitigation Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			ditches on site at present which often dry out). The created open water features would also include overdeepened areas where water can remain permanently, diversifying the open water characteristics and providing a net increase in permanent water compared to the baseline and addressing the aim of biodiversity action plans for ponds.	
10.14	10.245	The potential fragmentation of habitat and severance of linear features that may be used by amphibians.	Amphibian friendly gully pots, ladders and amphibian wildlife kerbs will be installed across the Site as a standard design specification and will be operational in completed phases of development during construction of subsequent phases.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.15	10.255	The potential impact on birds.	Provision of 12 ha of existing intensively managed arable farmland off-site (within 1 km) which will be enhanced and managed for the benefit of farmland birds for a period of 15 years.	Section106 Agreement with Staffordshire County Council
10.16	10.255	The potential impact on birds.	A defined parcel of land has been identified in Calf Heath Community Park which will be managed by periodic harrowing or ploughing. This area will be sown with a seed-bearing crop including a cereal and kale, linseed or quinoa to maximise the habitat value to birds. This would address the aims of the LBAP to expand the area of arable field margins to include cultivated low-input field margins, wild bird seed, flower-rich field	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			margins and permanent grass margins.	
10.17	10.263	The potential impact on invertebrates.	Croft Lane Community Park will include the creation of invertebrate habitats e.g. ephemeral ponds, biodiversity ponds, standing deadwood and bare sandy exposures.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.18	10.274	The potential construction impacts on bats.	Construction activity that creates noise, vibration or emits light within 30 m of known roosts, hedgerows and woodland will cease at sunset between the period March to September inclusive when bats are active to avoid delaying the emergence of locally roosting bats. Construction activity will not commence again until after sunrise to ensure that impacts to bats returning to local roosts does not occur. Construction phase lighting will be designed, installed and maintained to minimise effects on bats outside development plots through avoiding light spill on adjacent habitat. Lighting will only be used when necessary for construction operations or for safety reasons and should be directed within the plot, with no upward directed light and suitable cowls as necessary. Appropriate noise mitigation measures may include temporary noise barriers (for instance where development plots adjoin sensitive habitats such as the canal or woodland areas).	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
10.19	10.280	The potential impact on bats.	Where ecological corridors are interrupted e.g. by the link road, specific embedded mitigation measures have been included to retain connectivity, specifically bat hoppers.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.20	10.289	The potential construction impact on badgers.	Appropriate control measures are defined in FEMMP to mitigate potential for impacts to badger during construction e.g. covering excavations / providing mammal ramp(s).	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.21	10.291	The potential impact on otters.	The FEMMP details measures to minimise disturbance including control of normal working hours which will be limited to 07:00 to 19:00 Monday to Friday and 07:00 to 13:00 on Saturday, except for emergency works or where agreed with South Staffordshire District Council (SSDC).	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.22	10.293	The potential impact on otters.	The 0.82 ha of existing woodland to the west of the canal in the northern part of the Site (section north of Gravelly way, within the proposed Croft Lane Community Park) and the 1.1 ha of existing woodland at the south of the site (south of Straight Mile, within the proposed Calf Heath Community Park), which are suitable for otter resting places, will be retained and additional areas of woodland will be planted within approximately 150 m of the canal to provide greater linkage and habitat provision. The other habitat types up to	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan); and Requirement 3 (Detailed Design Approval)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			150 m from the canal, which are currently arable fields, semi-improved grassland, or improved grassland will also be enhanced and will provide SuDS water features capable of holding water and potentially supporting otter prey species (though no stocking is proposed).	
10.23	10.384	The potential impact on otters.	Provision of otter holt(s) within woodland along the canal in the south of Calf Heath Community Park.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.24	10.295	The potential impact on otters.	Risks to otter will be controlled through the implementation of the FEMMP. This includes measures to inform site staff of potential otter presence, ensure excavations are capped or have means to prevent trapping animals, and to mitigate the noise levels on-site.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.25	10.297	The potential impact on mammals.	The FEMMP sets out measures which will be adopted throughout the construction period to reduce the likelihood and severity, such as: checking of field margins, ditch boundaries and woodland for these species and, if present (and necessary if animals do not leave the working area of their own accord), moving any animals encountered out of the working area to be placed in suitable cover in a safe area or allowing them to leave the works footprint.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.26	10.323	The potential operational impact on valuable habitats.	All development plots will have a security fence installed around their boundary prior to	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			operation starting to prevent operational activities spreading beyond the plots	Plan); and Requirement 4 (Demolition and Construction Environmental Management Plan)
10.27	10.328	The potential operational impact on valuable habitats.	Areas of development (Zones A1-A7, Zone B and Zone C as per the Parameter Plans) would be designed with standard pollution prevention measures included, such that spills are retained by appropriate attenuation facilities with suitable interceptors or equivalent alternative biological treatment measures and water quality in discharged water is of permissible standard.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.28	10.330	The potential impact on amphibians.	Mitigation has been embedded to allow amphibians to move through the Site, namely the provision of ecological corridors linking new and retained habitats, specification of amphibian friendly gully pots, ladders and amphibian wildlife kerbs across the Site to prevent trapping amphibians and wildlife crossings at interfaces of roads and key areas of blue / green infrastructure. These measures are designed to allow the movement and dispersal of amphibians throughout the Site and promote population growth	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.29	10.331	The potential impact on amphibians.	Embedded mitigation includes retention of waterbodies where possible and provision of permanent and ephemeral surface water features (for attenuation but also of biodiversity value) providing	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan); and Requirement 14 (Landscape – Written Landscaping Scheme)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			'stepping stones' across the Site. New ponds will be provided as compensation for any ponds lost as a result of the development and a minimum of 10 waterbodies will be provided as enhancement. Ponds will include a range of depths, bank profiles, aquatic planting suitable for egg laying and shade regimes.	
10.30	10.332	The potential impact on amphibians.	Embedded measures to mitigate the impacts of the Proposed Development on amphibian populations including; careful design of development plots to separate areas posing potential hazard to amphibians from areas of mitigation e.g. ponds and high quality terrestrial habitat and managing areas of retained (and new) habitats sympathetically for the benefit of wildlife including amphibians e.g. management of the retained portion of Calf Heath Wood and undertaking landscape maintenance in sensitive habitats at times of year to avoid direct impacts on amphibians.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan); and Requirement 14 (Landscape – written landscaping scheme)
10.31	10.334	The potential impact on birds.	Nestboxes for a range of building nesting species and species of woodland and scrub.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.32	10.347	The potential impact on invertebrates.	The Proposed Development includes the provision of habitats of value as a foraging resource for invertebrates such as extensive areas of rough grassland/wildflower meadow, standing deadwood	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan); and Requirement 14 (Landscape – written landscaping scheme)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			in ecological corridors, ponds and deadwood (log piles) hibernacula provided for amphibians and reptiles in the Community Parks and in green infrastructure corridors. The FEMMP will provide the mechanism for ensuring these areas of habitat creation are managed in the long term to prevent the natural succession of habitats away from the nectar rich wildflower of value to invertebrates.	
10.33	10.351	The potential impact on bats.	Retained buildings such as the proposed Estate Management Offices/Amenity and Welfare Facilities adjacent the canal at Gravelly Way (presently, The Farmhouse, The Barn and The Stables) will be modified and enhanced to provide enhanced roosting opportunities and bat boxes will be provided on retained trees (in woodland or individual trees with good connectivity) of sufficient maturity.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.34	10.360	The potential impact on bats.	The retained and created habitat areas will be managed for the benefit of wildlife including bats.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.35	10.361	The potential impact on bats.	Embedded mitigation measures include the provision of a 100 m ecological corridor linking these two areas of retained habitat. The corridor will comprise woodland and incorporate areas of standing deadwood from elsewhere on-site. The ecological corridor will be planted early in the development (to be completed	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan); and Requirement 17 (Landscape – Phasing of Landscape and Ecology Works)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			within 5 years of the commencement of the authorised development, or prior to commencement of development at Development Zones A4a or A4b, whichever is sooner)	
10.36	10.365; 10.373; and 10.367	The potential impact on bats.	<ul style="list-style-type: none"> No increase in lighting in Community Park Areas (Calf Heath and Croft Lane) as a result of the Proposed Development; The existing dark canal corridor will be maintained. No increase in lighting as a result of the Proposed Development; and Dark ecological corridors where lighting levels are below 1 Lux at ground level (shown by shaded areas on Figure 10.003 of this ES). 	WMI DCO, Schedule 2, Requirement 19 (Lighting Details)
10.37	10.376; 10.379; and 10.386	The potential impact on badgers and otters.	The Proposed Development includes the provision of mammal underpasses to allow the safe passage of mammals under roads. Four crossings are proposed within the Site. Three crossings provide links from Calf Heath Wood to the north, south and east and one is provided in the north of the Site adjacent the A5 under the new road link.	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.38	10.379	The potential impact on badgers and otters.	A speed limit of 30 mph is proposed for the A5/A449 link road and the internal estate road..	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)
10.39	10.401	The potential operational impact on on retained and created habitats.	Landscape management and maintenance will be carried out at times of year that do not compromise	WMI DCO, Schedule 2, Requirement 11 (Ecological Management and Mitigation Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			seeding/fruitletting/nectar production.	
CHAPTER 11 – GROUND CONDITIONS				
11.1	11.135	Potential impacts of contamination of shallow soils or groundwater.	Development control measures (such as measures to prevent made ground containing asbestos from presenting a potential exposure hazard during or following development) should be determined at the detailed design stage. This would comprise ensuring suitable 'capping' of these areas (either underneath proposed hardstanding or suitable topsoil capping using on-site materials).	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)
11.2	11.146; 11.162; and 11.163	Potential impacts from the demolition and construction stage.	Implementation of the ODECMP.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
11.3	11.148	Potential impacts on ground water.	Control measures are required for excavation works, stockpiling and storage of Site retained materials as well as fuels, oils, chemicals and equipment. In addition, it will be necessary to reroute current underground pipework as well as decommission and replace monitoring wells in order to facilitate the Proposed Development.	WMI DCO, Schedule 2, Requirement 12 (Ground Conditions - Contamination Risk)
11.4	11.149	Potential impacts on ground water.	Localised deeper excavation works, particularly during construction of the rail freight terminal, as well as installation of services and foundations and works, could impact groundwater flow direction and groundwater levels which could, if not controlled, impact	WMI DCO, Schedule 2, Requirement 12 (Ground Conditions - Contamination Risk)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			the efficiency of the ongoing remediation. Mitigation measures as per the Remediation Safeguarding Report (Technical Appendix 11.5) will be implemented.	
11.5	11.162	Potential impacts of contamination of shallow soils or groundwater.	It is recommended that final mitigation measures in relation to potential vapours in Zone A1 are devised based on vapour monitoring data to be obtained following completion of cut and fill works and this will be more representative of the potential for vapours within Zone A1	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)
11.6	11.162	Potential impacts on ground water.	Warehouse buildings within Zone A1 (as per the Parameters Plans) will not be constructed until on-going remediation works are complete.	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)
11.7	Table 11.10	Dust emissions impacting off-site commercial site users, and members of the public and the geological SSSI situated 140m to the south of the Site.	Appropriate mitigation measures, such as damping down and cleaning roadways shall be undertaken throughout the works, whilst also giving due regard to minimisation of surface water runoff.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
11.8	Table 11.10	Introduction of preferential pathways to underlying groundwater both as a receptor and source (where impacted with volatile organic contaminants).	Redundant boreholes shall be appropriately decommissioned. The method of decommissioning shall accord with Environment Agency guidance.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
11.9	Table 11.10	Adverse impact to ongoing groundwater remediation works being undertaken in the south-western portion of the Site.	Safeguarding measures to be outlined in the final ES will be implemented.	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
11.10	Table 11.10	Site workers and visitors may come into contact with residual contaminants in area of soft landscaping.	A clean layer of topsoil would be provided in areas of soft landscaping as required.	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk) and Requirement 14 (Earthworks)
11.11	Table 11.10	Potential impact to human health and the built environment via the pathway of upward migration and containment of ground gases and vapours within buildings.	Appropriate ground gas and vapour mitigation measures shall be installed in accordance with current UK Authoritative Guidance and British Standards.	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)
11.12	Table 11.10	Adverse impact to ongoing groundwater remediation works being undertaken in the south-western portion of the Site.	Safeguarding measures to implemented as per Remediation Safeguarding Report	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)
11.13	Table 11.10	Potential degradation to potable water pipes and other buried services from direct contact with residual contamination.	Appropriate specification of buried services to be identified based on the ground conditions identified at the Site.	WMI DCO, Schedule 2, Requirements 12 and 13 (Ground Conditions - Contamination Risk)
11.14	Table 11.10	Operational activities potentially introducing significant pollutants / additional discharges to underlying groundwater and therefore affecting the groundwater source protection zones II and III underlying the Site.	Storage of fuels / oils to comply with the Control of Pollution (Oil Storage) Regulations 2001	Control of Pollution (Oil Storage) Regulations 2001
CHAPTER 12 – LANDSCAPE AND VISUAL				
12.1	12.143	Potential landscape and visual impacts of the demolition and construction stage.	Where practicable and beneficial, the formation of perimeter mounding and associated planting will be undertaken prior to development on an adjoining or nearby development plot.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
12.2	12.144	Potential landscape and visual impacts.	Once the proposed mounding is formed any associated planting will be undertaken at	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			the earliest opportunity within the planting season.	
12.3	12.145	Direct construction effects, including the phased loss of open farmland and removal of existing hedgerows, trees and other vegetation.	The indicative phasing of the Proposed Development has considered the implications of the construction effects and will bring forward some landscape areas in advance of the nearest development plots (including parts of the proposed Community Parks) in order to mitigate effects and maintain landscape and wildlife connectivity. These areas include a broad landscape corridor between the retained parts of Calf Heath Wood and Calf Heath Reservoir and a further landscape corridor to the south of Calf Heath Wood and the area of Calf Heath Community Park to the south of Straight Mile. The precise sequence will depend upon occupier requirements and therefore the definitive phasing is to be agreed with the SSDC post approval, controlled by a requirement.	WMI DCO, Schedule 2, Requirement 16 (Landscape – Phasing of Landscaping and Ecology Works)
12.4	12.162	Potential landscape and visual impacts.	At the time of the removal of the Calf Heath Wood area, significant new woodland and tree planting will have been undertaken as part of initial phase of the Proposed Development, including the creation of a broad wooded corridor to the north-east of the retained part of the wood and extending towards Calf Heath Reservoir. Other woodland and tree planting will have been implemented along the	WMI DCO, Schedule 2, Requirement 16 (Landscape – Phasing of Landscaping and Ecology Works)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			canal corridor to the north-west of the existing wood.	
12.5	12.215	Potential landscape and visual impacts.	Veteran trees to be removed will be mitigated for through a range of measures, including; propagation of hard wood cuttings and growing acorns from retained specimens (in order to retain the local oak gene pool); strategically planting these trees to form new veteran tree communities / habitats in close proximity to retained specimens; and retaining large sections of felled trunks close to retained specimens (for their biodiversity and ecological connectivity benefits).	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
12.6	12.216	The loss of a native black poplar to be removed as part of the development	The replanting of propagated 'off spring' black poplar specimens will be undertaken within Development Zone A4 (a and b).	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
12.7	12.299	Night time visual effects during construction of the Proposed Development.	The adoption of the Lighting Strategy as detailed in the Lighting Impact Assessment.	WMI DCO, Schedule 2, Requirement 19 (Lighting Details)
12.8	12.343	Potential impact on Canal Conservation Area.	The Proposed Development will deliver a package of environmental enhancements to the canal corridor. These have been drawn up in consultation with the Canal and River Trust and will include removal of a series of redundant pipe bridges or crossings (that exist alongside the existing SI Works), boundary planting and improvements, towpath enhancement works and canalside habitat enhancement works. These	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			will represent localised and beneficial changes.	
12.9	12.356	Potential landscape and visual impacts.	New planting will comprise predominantly native and indigenous species that are appropriate to the Site`s location and landscape characteristics and will satisfy other biodiversity aims.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscaping Scheme)
12.10	12.409	Visual effects for those properties with the views of the Proposed Development.	The design and colour treatment of the higher building elevations and roofs will have implications for the degree of visual change/ presence of the building(s) in these views.	WMI DCO, Schedule 2, Requirement 3 (Detailed Design Approval)
12.11	12.468	Potential landscape and visual impacts.	Well managed and controlled site activities and the application of good practices throughout the construction process will minimise the potential adverse effects arising from construction. This will include the protection of all trees and vegetation to be conserved in accordance with BS5837:2012 (Trees in Relation to Design, Demolition and Construction- Recommendations).	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscape Scheme)
12.12	12.470	Potential landscape and visual impacts.	The early implementation of some of the outer and perimeter landscape and associated earthworks proposals will assist in minimising some of the indirect influences over the immediately surrounding landscape. Overall, the residual landscape effects during construction will remain as stated for construction stage in the earlier Potential Effects section.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscape Scheme)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
12.13	12.472	Potential landscape and visual impacts.	Well managed and controlled site activities and the application of good practices (as outlined within the ODCEMP) throughout the construction process will minimise the potential adverse visual effects arising from construction.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
12.14	12.473	Potential landscape and visual impacts.	The comprehensive management of not only the proposed planting and habitats but also the existing conserved woodland, trees, hedgerows and other habitats will also assist in reducing the initial operational landscape effects.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscape Scheme)
CHAPTER 13 – NOISE AND VIBRATION				
13.1	13.100; and 13.233	Potential operational noise and vibration impacts.	Using a cladding material for the proposed buildings that has a much higher sound reduction performance than the types of cladding materials typically used for buildings of this type; the cladding proposed for use at the Proposed Development will offer a sound reduction performance of 39dB Rw for the walls and 28dB Rw for the roofs.	WMI DCO, Schedule 2, Requirement 22 (Noise – Operational Stage)
13.2	13.189; 13.401 and 13.410	Potential construction noise impacts.	The early implementation of the outer and perimeter landscape bunds, associated earthworks and acoustic screening.	WMI DCO, Schedule 2, Requirement 15 (Landscape – Written Landscape Scheme)
13.3	13.192; 13.399; 13.401; and 13.403	Potential construction noise impacts.	Implementation of the ODCEMP throughout the demolition and construction phase of the Proposed Development. The approval and implementation of phase-specific DCEMPs and	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan); and Requirement 14 (Earthworks)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			earthworks strategies, prior to the commencement of any phase of development.	
13.4	13.193; 13.195; 13.267 – 13.299; 13.399; and 13.409	Potential construction and operation noise impacts.	The provision of a bespoke noise insulation scheme.	Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
13.5	13.393; and 13.426	Potential operational noise and vibration impacts.	Details of mechanical and ventilation plant will be submitted to and approved by the local planning authority.	WMI DCO, Schedule 2, Requirement 21 (Noise – Operational Stage)
CHAPTER 14 – SOCIO-ECONOMICS AND HUMAN HEALTH				
14.1	14.200; 14.281; and 14.290.	The potential to maximise employment opportunities for local residents.	Establish an Employment, Training and Skills Plan to maximise opportunities for local residents to access employment opportunities during construction.	Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
14.2	14.224; and 14.264	Potential recreation and amenity effects arising from traffic and transport effects.	The demolition and construction traffic will be managed through the measures in the Demolition and Construction Traffic Management Plan (DCTMP).	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
14.3	14.232	Potential effects of construction noise and dust.	Best practice dust management techniques are intended to be employed and delivered through a Dust Management Plan (as part of the ODCEMP).	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
14.4	14.245	Potential effect on recreation and amenity	Croft Lane Community Park will be provided within 5 years of development commencement.	WMI DCO, Schedule 2, Requirement 17 (Landscape – Phasing of Landscaping and Ecology Works)
14.5	14.233; and 14.348.	Potential effect of construction noise on human health	The provision of a bespoke noise insulation scheme.	Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
CHAPTER 15 – TRANSPORT AND ACCESS				
15.1	15.5	Potential transport impacts of the operational development and 'Interim Scenario'.	Implementation of the Site Wide Travel Plan.	WMI DCO, Schedule 2, Requirement 22 (Transport – Travel Plan)
15.2	15.5; 15.269/270	Potential transport impacts of the construction and demolition phase.	Implementation of the Demolition and Construction Traffic Management Plan.	WMI DCO, Schedule 2, Requirement 24 (Transport – Demolition and Construction Traffic Management Plan)
15.3	15.5	Potential transport impacts of the operational development and 'Interim Scenario'.	Implementation of the Site Wide HGV Management Plan.	WMI DCO, Schedule 2, Requirement 23 (Transport – HGV Management Plan)
15.4	15.6	Potential transport impacts of the operational development and 'Interim Scenario'.	The overall management and implementation of the SWTP will be the responsibility of the Travel Plan Co-ordinator under the employment of FAL.	WMI DCO, Schedule 2, Requirements 22 to 25 and Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
			The SWTP will be used as an overarching document within which individual occupiers will produce their own Occupier Travel Plans (OTP).	
			OTPs will be required to be in place prior to occupation of a new warehouse on-site.	
15.5	15.196	Potential transport impacts of the operational development and the 'Interim Scenario'.	A public transport strategy has been developed as part of a comprehensive Sustainable Transport Strategy. It is proposed to provide shuttle services to key employee locations such as Cannock Chase, Walsall and Wolverhampton as well as increase the frequency of appropriate existing services.	WMI DCO, Schedule 2, Requirement 22 (Transport – Travel Plan) and Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
15.6	15.197		The Proposed Development includes the provision of an adopted road through the Site	WMI DCO, Schedule 2, Requirement 25 (Transport – Phasing of Highways Works)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
		Potential transport impacts of the operational development.	<p>between the proposed A5 and A449 accesses.</p> <p>It is proposed to modify the A449 / Station Drive junction to ban traffic turning right into Station Drive.</p> <p>It is also proposed to place a restriction on WMI HGVs using the A449 through Penkridge.</p>	and Schedule 13, Parts 2 and 3, Protective Provisions
15.7	15.235; 15.236; 15.238	Potential transport impacts of the construction and demolition phase.	Construction traffic will be managed through the Demolition and Construction Traffic Management Plan and Outline Demolition and Construction Environmental Management Plan.	WMI DCO, Schedule 2, Requirement 24 (Transport – Demolition and Construction Traffic Management Plan) and Schedule 13, Parts 2 and 3, Protective Provisions
15.8			It is intended that construction HGV traffic will approach and leave the Proposed Development via the Strategic Road Network (SRN).	
15.9			The traffic management will be agreed with HE and SCC prior to construction taking place.	
15.10	15.249	Potential transport impacts of the construction and demolition phase.	The A5 access roundabout will largely be constructed off line allowing two-way traffic to be maintained.	WMI DCO, Schedule 1 (Authorised Development) and Schedule 13, Parts 2 and 3, Protective Provisions
15.11	15.241	Potential transport impacts of the construction and demolition phase.	The Vicarage Road Roundabout can mainly be constructed off line allowing two way traffic to be maintained.	WMI DCO, Schedule 1 (Authorised Development) and Schedule 13, Parts 2 and 3, Protective Provisions
15.12	15.273	Potential transport impacts of the operational development.	The creation of an adopted public highway through the Site between the A5 and A449, which will improve performance and provide resilience at Gailey Roundabout.	WMI DCO, Schedule 1 (Authorised Development); Schedule 2, Requirement 25 (Transport – Phasing of Highways Works) and Schedule 13, Part 3, Protective Provisions

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
15.13	15.274	Potential transport impacts of the operational development.	Closure of Crateford Lane to westbound traffic.	WMI DCO, Schedule 1 (Authorised Development); Schedule 2, Requirement 56 (Transport – Phasing of Highways Works) and WMI DCO Article 19
15.14	15.275	Potential transport impacts of the operational development.	Banned right turn into Station Drive from the A449	WMI DCO, Schedule 1 (Authorised Development); Schedule 2, Requirement 25 (Transport – Phasing of Highways Works) and WMI DCO Article 19
15.15	15.276	Potential transport impacts of the operational development.	Using enforcement to prevent HGVs from using the A449 north of Gailey Roundabout through Penkridge, except for local access.	WMI DCO, Schedule 2, Requirement 23 (Transport – HGV Management Plan)
15.16	15.277	Potential transport impacts of the operational development and the 'Interim Senario'.	Implementation of the Site Wide HGV Management Plan, including: <ul style="list-style-type: none"> • Early arrival bays; and • Vehicle booking system. 	WMI DCO, Schedule 2, Requirement 23 (Transport – HGV Management Plan)
15.17	15.278	Potential transport impacts of the operational development and the 'Interim Senario'.	Implementation of the Sustainable Transport Strategy to include: <ul style="list-style-type: none"> • Provision of new and extended bus services which could include: <ul style="list-style-type: none"> • Increase frequency and divert existing services; and • New shuttle buses between employee clusters and the Site, anticipated to be to Cannock Chase, Walsall and Wolverhampton. 	WMI DCO, Schedule 2, Requirement 22 (Transport – Travel Plan) and Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
15.18	15.279	Potential transport impacts of the operational development and the 'Interim Senario'.	New and improved pedestrian and cycle facilities including: <ul style="list-style-type: none"> • Upgrade the existing shared use 	WMI DCO, Schedule 1 (Authorised Development); Schedule 2, Requirement 25 (Transport – Phasing of Highways Works) and, for

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			<p>cycle/footway to a 3m wide shared cycle/footway along the east of the A449 between Gailey Roundabout and the junction with Station Drive to the south;</p> <ul style="list-style-type: none"> • Provide pedestrian crossing facilities at the proposed A449 Site access roundabout to facilitate access to bus facilities on the west side; • Upgrade the existing footway to the west of the A449 in the vicinity of the proposed Site access roundabout to provide a width of 2m; • Alter the existing footway adjacent to the north of the A5 between Gailey Roundabout and the proposed Site access to provide, where feasible, a 3m wide shared cycle/footway. • Provide a 2m footway to the south of the A5 to connect the Proposed Development to Gailey Marina • Provide pedestrian crossing facilities at the proposed A5 site access roundabout; • Provide a 3m cycleway along a section of Vicarage Road as shown on the General Arrangement Drawings • Provide 3m wide cycleways / footways 	<p>permissive paths, Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council</p>

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			<p>adjacent to the roads through the Site.</p> <ul style="list-style-type: none"> • Provide a network of permissive paths within the areas of public open space. Crossing facilities would be provided across Straight Mile plus footway improvements would be provided at the junction of Straight Mile / Kings Lane / Woodlands Lane in order to allow access to these permissive paths. • Improvements to the canal tow path to support an increase in use and connectivity to the footpaths. 	
15.19	15.280	Potential transport impacts of the operational development and the 'Interim Senario'.	<p>Implementation of the Site Wide and Individual Occupier Travel Plans to encourage a reduction in single occupancy car journeys. This will be achieved using measures such as;</p> <ul style="list-style-type: none"> • Appointment of a Travel Plan Co-ordinator • Development of a smart phone app to provide information on bus times and capacity • Provision of sustainable travel information packs for employees • Personalised travel planning for employees • Travel Plan website and social media feeds • Bus taster tickets • Employee discounts for bus services or sustainable transport related purchases 	WMI DCO, Schedule 2, Requirement 22 (Transport – Travel Plan)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
			<ul style="list-style-type: none"> • Car sharing portal • Staggered working hour • Remote / home and flexible working 	
15.20	15.296	Potential transport impacts of the 'Interim Senario'.	Improvements to public bus service as well as private shuttle buses for employees.	Section 106 Agreement with South Staffordshire District Council and Staffordshire County Council
15.21	15.297		Implementation of the Site Wide HGV Management Plan, including: <ul style="list-style-type: none"> • Early arrival bays; and • Vehicle booking system. 	WMI DCO, Schedule 2, Requirement 23 (Transport – HGV Management Plan)
15.22	15.298		Implementation of the Site Wide Travel Plan.	WMI DCO, Schedule 2, Requirement 22 (Transport – Travel Plan)
CHAPTER 16 – WATER ENVIRONMENT AND FLOOD RISK				
16.1	16.100 - 16.127; and 16.166	Potential significant flood risk and surface water effects which may result during the demolition and construction phase of the Proposed Development	Implementation of the ODCEMP throughout the demolition and construction phase of the Proposed Development.	WMI DCO, Schedule 2, Requirement 4 (Demolition and Construction Environmental Management Plan)
16.2	16.131 - 16.155	Potential flood risk and surface water effects which may result during the operation phase of the proposed development Potential significant flood risk and surface water effects which may result during the operational development phase of the Proposed Development	Implementation of the Drainage Strategy.	WMI DCO, Schedule 2, Requirement 27 (Water and Flood Risk – Surface Water Drainage Strategy)
16.3	16.158	Risk that surface water pollution from processes at the Site during operation of the completed Proposed Development may adversely affect water	Secure access to the Calf Heath Reservoir West Dam during development and ensure inspection of the dam for leaks as well as planned silt removal and regular vegetation management	WMI DCO, Schedule 2, Requirement 27 (Water and Flood Risk – Surface Water Drainage Strategy)

MRM Ref	ES Source (Para Number)	Potential Impact/Topic	Mitigation Measure	Securing Mechanism
		quality and WFD status of the reservoirs.		
16.4	16.164	Risk of impact upon local capacity within the foul drainage network due to discharge of waste water from the site to the public sewer network	Implementation of a Foul Drainage Scheme.	WMI DCO, Schedule 2, Requirement 28 (Water and flood risk – foul water drainage)
CHAPTER 17 – CUMULATIVE EFFECTS				
This chapter does not include any specific mitigation measures.				
CHAPTER 18 – SUMMARY OF RESIDUAL EFFECTS				
The proposed mitigation and 'means of implementation' are set out in Table 18.1.				