SDCC Rathcoole Housing Development

Environmental Impact Assessment Report (EIAR)
Chapter 19: Summary of Mitigation and Monitoring

South Dublin County Council (SDCC)

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Quality information

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Table of Contents

19 Summary of Mitigation and Monitoring 19-1
19.1 Introduction 19-1
19.2 Pre-Construction Commitments 19-1
19.3 Construction Commitments 19-5
19.4 Operational Commitments 19-16

Tables

Table 19-1: Schedule of Environmental Commitments – Pre-Construction Phase 19-1
Table 19-2: Schedule of Environmental Commitments – Construction Phase 19-5
Table 19-3: Schedule of Environmental Commitments – Operational Phase 19-16

19 Summary of Mitigation and Monitoring

19.1 Introduction

This Chapter of the EIAR provides a Schedule of Environmental Commitments (mitigation measures) for the Proposed Development taking account of the measure as detailed within the EIAR technical chapters.

Embedded mitigation measures have been incorporated into the design of the Proposed Development throughout the design process (refer to Chapter 02 Description of Development). During the EIA process, additional mitigation and monitoring measures have been identified within the EIAR technical chapters (Chapters 05 to 17) as applicable. These measures are required to minimise identified environmental effects resulting from the construction and/or operation of the Proposed Development. Defined mitigation measures will be implemented during the Proposed Development pre-construction design phase (refer to Table 19-1), the construction phase (refer to Table 19-2), and/or operation phase (refer to Table 19-3).

Environmental controls and proposed mitigation measures to be implemented during the Proposed Development pre-construction and construction phases are also included in the oCEMP (refer to Appendix 3-1 of EIAR Volume 2). It should be noted that the Contractor will develop the oCEMP into a project and site-specific Contractor's CEMP.

19.2 Pre-Construction Commitments

Table 19-1: Schedule of Environmental Commitments – Pre-Construction Phase

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
Chapter 05 – Population and Human Health		
PRE_01	Plans and procedures	The following plans shall be compiled: • The Outline Construction Traffic Management Plan (oCTMP) prepared for the Proposed Development will be updated into a detailed Contractor's Construction Traffic Management Plan (CTMP), including measures to minimise disturbance, nuisance, severance effects and traffic-related impacts on nearby residents, businesses, premises and employees. • The Resource and Waste Management Plan (RWMP) prepared for the Proposed Development will be updated into a detailed Contractor's Resource and Waste Management Plan (RWMP) to ensure that construction waste and resources are appropriately managed in accordance with relevant legislation and best practice guidance.
Chapter 06 – Biodiversity		
PRE_02	Plans and procedures	An Invasive Species Management Plan (ISMP) will be produced by the Ecological Clerk of Works (ECoW)/Environmental Clerk of Works (EnCoW) to mitigate risks and prevent the spread of Japanese knotweed (a Scheduled invasive species) and other invasive species such as cherry laurel present within the Site. The appointed ECoW will oversee implementation of the ISMP, and the ISMP (including roles and responsibilities) will be referenced in the Contractor's CEMP. The ISMP will include the following measures as a minimum: training of all Contractors on Site in Japanese knotweed identification and appropriate biosecurity practices (included in the Site induction); exclusion zones of at least 4m around both stands of Japanese knotweed, delimited with secure fencing and warning signs and maintained throughout construction; checking of all new topsoil and materials brought onto Site, with no stockpiling or storage of equipment, plant or materials within 10m of any stand; no removal from Site of soil contaminated with invasive plant material, unless otherwise agreed; and detailed method statements for works within 4m of both stands (including the formalisation of the trail along the southern Site boundary as a resin bound path). A programme of glyphosate-based herbicide treatment (foliar spot spray) of both stands will be undertaken annually in August/September for the duration of construction by a suitably experienced and qualified Contractor, supervised by the ECoW or other suitably experienced ecologist.
PRE_03	Ecological protection	Pre-construction surveys of protected species will be carried out no more than three months before the commencement of construction works (including vegetation clearance or creation of compounds), or, where relevant, within the appropriate preceding season, to avoid project delays in the event that derogation licensing and additional associated mitigation is required. The surveys will cover protected species known to occur in the vicinity of the Site, or for which there is a reasonable possibility of moving into its vicinity, comprising surveys for badger and checks for Irish hare, Irish stoat, pygmy shrew and hedgehog. Surveys will follow standard guidance and will be undertaken within the survey buffers described in Appendix A6-1: Relevant Supporting Information (EIAR Volume 2). Survey results will be reported to SDCC, the Applicant, the Contractor and other relevant stakeholders. All surveys will be carried out by a suitably experienced Ecologist, which may be the appointed ECoW for the construction phase, where appropriate.
PRE_04	Ecological protection	A Woodland Management Plan has been prepared for the Rathcoole Woodland by Ecoplan Forestry on behalf of SDCC (Appendix A6-6 Woodland Management Plan), adopting a 'conservation through restraint' approach. Prior to and during construction, the woodland will be protected from dumping, disturbance and inappropriate development, with a predominantly non-intervention management approach maintained.
PRE_05	Habitat protection	A Landscape Strategy will be developed, centred on retention and protection of natural habitat as far as possible, including Annex I habitats (Alluvial Woodland, Lowland Meadow) and other ecologically important habitats such as non-Annex woodland and boundary vegetation. This will include: • Preservation and enhancement of the riparian corridor through the Site (i.e. the Coolmine Stream) and the Camac along the eastern boundary. A 10m riparian zone will be maintained throughout the rest of the development, and the riparian zones will be delimited with high post and rail fencing to ensure protection. Retained immature woodland at the Site's western boundary will also be delimited with high post and rail fencing;

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Incorporation of Sustainable Drainage Solutions (SUDS). The SUDS are designed to manage surface water through a combination of collection, conveyance, attenuation, and treatment features. This system will integrate with the existing SUDS infrastructure and contribute to a resilient and sustainable drainage strategy. The proposed SuDS components include: – Green roofs on duplexes and villa buildings to reduce runoff and enhance biodiversity. – Permeable paving in car parking areas to allow for onsite infiltration and surface water control. – Rain gardens and bioretention areas integrated into street verges and street tree pits, providing localised water treatment and amenity value. – Swales located within open space areas to convey and temporarily store surface water. – Rainwater harvesting within semi-private and private green spaces, supporting water reuse and reducing demand on potable supplies. • Tree planting will comprise a range of avenue planting along pedestrian connections and in parks, feature trees in residential areas, and trees associated with SUDS. Native (or naturalised) species are proposed. • As much of the existing boundaries will be retained where possible, with new boundary features including fencing (to prevent access and protected sensitive habitats) and native hedgerows. Works near or at any retained trees and woodland will follow the NRA guidance in *Guidelines for the Protection and Preservation of Trees, Hedgerows, and Scrub Prior to, During and Post Construction (NRA, 2006b).* Clearance of sensitive habitats will be kept to the minimum required area. The boundaries of the retained Annex I Alluvial Woodland and Lowland Meadow habitats will be delimited (fenced off and signposted) prior to the commencement of construction, and construction works (including movement of plant, storage of plant and materials, and haulage) will not take place within any retained parcel of Annex I habitat. The presence of the Annex I habitats, along with proactive avoidance, will be incorporated into construction toolbox talks.
PRE_06	Roles and responsibilities	A range of measures that are standard good practice for development of this type, and which are required to comply with environmental protection legislation, will be implemented. These will include the following: • Appointment of an Ecological Clerk of Works (ECoW)/Environmental Clerks of Works (EnCoW). Responsibilities will include (but not be limited to): – Conducting preconstruction surveys; – Ensuring all personnel involved in construction are made aware of the relevant ecological features within the Site and potential ZoI of the Proposed Development and the mitigation measures and working procedures that must be adopted, achieved as part of the induction process or through Toolbox Talks where required. – Monitoring of protected species, and liaising appropriately to resolve any issues that arise, if necessary, including obtaining further derogation licence(s) and developing associated proportionate mitigation. – Monitoring and advising on any additional wildlife protection measures including all standard good practice measures to protect wildlife. – Advising on habitat protection and, where relevant, reinstatement. – Monitoring of pollution control measures and advising on placement of ditches, settlement ponds, etc. to minimise habitat damage. • Sightings of important species within the Site during construction will be recorded and the ECoW/EnCoW notified. if any evidence or sightings of protected species are recorded in works areas, then works would stop immediately and the ECoW contacted for advice.
PRE_07	Habitat protection	Locations for six bat roost boxes (refer to CON_04) will be identified on mature trees (or suitable buildings) within dark areas of the Site that will not be subject to light spill, for example along the east or southern boundaries. Installation will be supervised by the ECoW or a suitably experienced bat ecologist. A programme of bat box monitoring, under appropriate licence, will be devised for the operational phase (refer to OP_04).
Chapter 07 – Land & Soils and Geology		
PRE_08	Roles and responsibilities	The Contractor will appoint a dedicated environmental manager responsible for overseeing the implementation of the environmental management and pollution prevention measures during construction.
PRE_09	Permits, licences, and/ or consents	All required permits and licences will be identified and planned before the start of the construction works.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
Chapter 08 – Water and Hydrology		
PRE_10	Plans and procedures	Prior to the commencement of construction, the need for temporary dewatering (particularly for elements of the SuDS drainage network and foul water drainage network where excavations may extend to depths greater than 3m bgl) will be reviewed following completion of a ground investigation and any associated baseline groundwater monitoring. Where dewatering is considered necessary, the Contractor will prepare a Construction Groundwater Control Strategy at the detailed design stage to minimise the impact of any groundwater control activities during construction on the water receptors, in consideration of CIRIA '*Groundwater Control: Design and Practice, Second Editions*' (CIRIA, 2016). Furthermore, best practice mitigation measures will be followed to avoid and or minimise impact on groundwater and will be included in the Contractor's CEMP. The strategy will outline such best practice mitigation measures as, but not limited, to the following: • A sump hole will be created, and pumps will be installed and used to remove the groundwater from the excavation. The groundwater will be pumped to an outfall area with silt mitigation measures, as advised by the relevant consenting requirements. • Groundwater control measures will be selected through the Groundwater Control Strategy, based on the actual groundwater conditions encountered during the works and the sensitivity of nearby water receptors. Appropriate measures may include the installation of a physical cut-off barrier (such as a temporary cut-off wall or sheet piles) between the sump hole and any nearby water receptors requiring protection, artificial recharge of groundwater or surface water, or the controlled discharge of a portion of the pumped water directly to a suitable water receptor. Where discharge is proposed, the chemistry and sediment content of the discharge water will be monitored to ensure that it does not adversely affect the receiving water receptor. • If discharging water to a nearby watercourse, the rate of discharge will need to be agreed with SDCC to ensure that there is no unacceptable increase in flood risk or risk of scour. Any discharge will need to be undertaken with the agreement of the relevant statutory regulator and will need to comply with the pollution prevention requirements set out in the Contractor's CEMP. • An outfall area will be created using silt bags on the hoses with a silt fence or a combination of two silt mitigation measures. The outfall area will be set up away from any watercourse crossings so the pumped water can naturally disperse into the surrounding area. • Once the outfall has been set up, will be inspected prior to pumping. During this process, the outfall area will be monitored, and water quality of the discharge will also be regularly monitored. • In addition, the Contractor's CEMP will include a WMP outlining a programme of groundwater level and quality monitoring at GI monitoring boreholes at the Site, and adjacent to sensitive water bodies, wetlands and controlled discharge of water abstracted during dewatering. • Managing the risk from groundwater flooding through appropriate working practices (during excavations) and with adequate plans and equipment in place for dewatering to ensure safe dry working environments. Prior to the commencement of development, the Outline Resource and Waste Management Plan (oRWMP) prepared for the Proposed Development will be developed into a detailed Contractor's Resource and Waste Management Plan (RWMP). The RWMP will include the classification, handling and management of all waste generated during the construction stage in accordance with best practice guidelines such as Irish Waste Regulations and the EPA 'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction and Demolition Waste Projects' (EPA, 2021). Material excavated during construction, if deemed suitable by a competent environmental scientist, will be re-used on Site where possible, e.g. backfill. Surplus material that cannot be reused will be managed off-site in accordance with the RWMP and relevant waste legislation and guidance.
PRE_11	Flood risk	• The Contractor will produce an Emergency Response Plan as part of the detailed CEMP which will provide detail of the response to an impending flood event and include: – A 24-hour ability to mobilise staff in the event of a flood warning. – The removal of all plant, machinery and material capable of being mobilised in a flood for the duration of any holiday close down period where there is a forecast risk that the site may be flooded. – Details of the evacuation and site closedown procedures. – Arrangements for removing any potentially hazardous material and implement more stringent protection measures. – If water is encountered during below ground construction, suitable de-watering methods would be used. Safe egress and exits are to be maintained at all times when working in excavations. When working in excavations a banksman is to be present at all times.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
PRE_12	Monitoring	Pre-construction surface water quality and groundwater level monitoring will be undertaken to establish baseline conditions before construction begins; regular monitoring will be undertaken during construction to ensure mitigation measures are implemented correctly. To ensure that monitoring during construction is effective, a pre-construction baseline will be determined at appropriate locations along the Proposed Development, for a minimum of 6 months to establish the baseline.
Chapter 09 – Air Quality		
No mitigation measures are proposed for the pre-construction phase.		
Chapter 10 – Climate		
PRE_13	Plans and procedures	A Preliminary Health and Safety Plan will be prepared by the Project Supervisor for the Design Process (PSDP), identifying climate-related risks (e.g. flooding, extreme weather) associated with the design and construction of the Proposed Development, in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013. An oCEMP, incorporating the climate resilience measures identified in the Climate Change Risk Assessment (CCRA) (Chapter 10, Section 10.7.2), has been prepared for submission with the planning application; a detailed Contractor's CEMP addressing these climate-related construction risks will be prepared by the appointed Contractor prior to the commencement of construction. The following measures to reduce carbon in design will be implemented (Chapter 10, Section 10.5.1): the structural design will use the optimised structural typology selected with embodied carbon as a selection criterion; no basements will be constructed, to reduce the overall carbon footprint; and a minimum of 30% clinker replacement with low-carbon secondary cementitious materials will be included in the specification for structural concrete.
Chapter 11 – Noise and Vibration		
PRE_14	Noise management	Prior to the commencement of construction, the appointed Contractor shall undertake a review of the noise and vibration mitigation requirements based on the final construction methodology and programme. All applicable mitigation measures shall be incorporated into the Contractor's CEMP and implemented throughout the construction phase. Where detailed construction planning identifies the potential for significant noise or vibration emissions, additional site-specific mitigation measures shall be developed and implemented to minimise impacts on nearby sensitive receptors. Noise and vibration monitoring shall be undertaken where required to verify the effectiveness of mitigation measures and to demonstrate compliance with applicable standards and project-specific requirements. Appropriate corrective actions shall be implemented where monitoring results indicate that additional controls are necessary.
Chapter 12 – Landscape & Visual		
No mitigation measures are proposed for the pre-construction phase.		
Chapter 13 – Archaeology and Cultural Heritage		
PRE_15	Roles and responsibilities	Appointment of an Archaeological Contractor.
PRE_16	Permits, licences, and/ or consents	The archaeological works will require a licence from the NMS on behalf of the Minister for Culture, Heritage and the Gaeltacht, in consultation with the National Museum of Ireland, all in accordance with the Provisions of the National Monuments Acts 1930–2014. It will be the responsibility of the Archaeological Contractor to submit a licence application accompanied by the Methodology for Archaeological Works to the Minister. Due allowance will be made for this in the project programme.
PRE_17	Archaeological testing	A programme of pre-construction archaeological testing will be undertaken across the greenfield areas of the Site identified as having archaeological potential (refer to Figure 13-2 of Chapter 13), with particular attention paid to the location of the cropmark (CH1). The scope and methodology of testing will be agreed with the NMS and carried out in accordance with the National Monuments Acts 1930–2014 and the Policy and Guidelines on Archaeological Excavation (Department of Arts, Heritage, Gaeltacht and the Islands, 1999). Testing will comprise the mechanical excavation of test trenches, down to sterile glacial tills and

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		bedrock by means of a smooth toothless bucket, at specified locations targeting those areas where ground disturbance is proposed. The appointed archaeologist will undertake full-time monitoring of the excavation of the test trenches and, where appropriate, carry out investigation of any features uncovered. Should archaeological material/features be encountered during testing, all works in the affected area will cease immediately and further archaeological investigation (by hand) will be carried out by the licensed archaeologist, in consultation with the NMS, to determine the nature, extent and significance of the remains. Construction works in the affected area will not recommence until an appropriate mitigation strategy has been agreed, which may include preservation in situ or preservation by record. Archaeological deposits will not be removed as part of the assessment process unless otherwise agreed as part of the approved mitigation strategy. Testing will be undertaken in advance of construction to allow adequate time to evaluate, record and, where necessary, mitigate any archaeological features revealed.
Chapter 14 – Material Assets (Traffic)		
PRE_18	Traffic management	Update the Outline Construction Traffic Management Plan (oCTMP) prepared for the Proposed Development into a detailed Contractor's CTMP which will be subject to agreement with the SDCC Roads Department.
PRE_19	Construction health and safety	The Contractor will prepare a Construction Health and Safety Plan which will set out how health and safety is to be managed during the construction phase.
Chapter 15 – Major Accidents & Disasters		
PRE_20	Plans and procedures	A number of plans and procedures will be in place to effectively manage and minimise risk by ensuring that every reasonable effort will be made to ensure that environmental impacts during construction and operation will be avoided or reduced, where possible. These include: • A Contractor's CEMP will be prepared, along with supporting method statements and risk assessments to support construction activities. These will ensure such works can be undertaken in a logical and safe sequence with appropriate consultation with key stakeholders to ensure relevant standards are met. • A CTMP will be developed to demonstrate how the interface between public and construction related traffic will be managed, where practicable, and to control vehicular movements associated with the construction of the Proposed Development. The CTMP will be developed by the Contractor so that construction traffic will be managed and monitored safely and efficiently throughout the duration of the Construction Phase. • All fuels and chemicals stored on-site during construction of the Proposed Development will be subject to an assessment in accordance with the Safety, Health and Welfare at Work (Chemical Agents) Regulations and compliance with the requirements of REACH. • The Proposed Development will comply with the requirements of all relevant health, safety and environmental legislation such that measures are taken to prevent major accidents. • The Contractor shall develop and implement Environmental Incident Response Procedures as part of the CEMP to ensure the prompt and effective management of spillages of chemicals, pollution incidents, flooding events, and other environmental emergencies during construction.
PRE_21	Design standards and regulatory compliance	The design of the Proposed Development will be in accordance with relevant international, national and established industry codes, standards and practice, including design and construction of structures to the appropriate EN design standards and relevant Building Regulation Technical and Safety standards, and compliance with material specification standards for building materials such as concrete, blockwork and timber.
Chapter 16 – Material Assets (Utilities)		
PRE_22	Identification of services	The location of all existing utilities and built services within and adjacent to the Site will be confirmed prior to the commencement of construction works.
PRE_23	Built services	Procedures will be established to ensure that existing services and infrastructure are protected during the construction phase, including consultation with relevant service providers where required. Where existing services have the potential to be affected by the works, appropriate measures, including the protection or diversion of existing services and the coordination of proposed utility connections, will be developed in consultation with the relevant utility/service provider.
Chapter 17 – Waste		
PRE_24	Waste management	Update the Resource and Waste Management Plan (RWMP) prepared for the Proposed Development into a detailed Contractor's Resource and Waste Management Plan (RWMP) in accordance with the EPA's 'Best Practice Guidelines for the Preparation of Resource and Waste Management Plans for

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		Construction and Demolition Waste Projects' (2021). The Contractor's RWMP will be maintained as a live document throughout the construction phase and will include procedures for monitoring, recording and managing waste and material arisings and their respective management routes. The Contractor's RWMP will include design and construction measures that apply the waste hierarchy principles and minimise effects on waste, such as: • Planning for the temporary on-site storage of soils, excavated materials and other materials to facilitate reuse. • Reusing excavated materials within the construction of the Proposed Development, where possible, to minimise the need to import and export material. • Considering the importation to site of recycled aggregate material, as an alternative to primary aggregate, and establishing procedures to ensure it is uncontaminated. • Establishing Key Performance Indicators (KPIs) for monitoring and reporting data on waste arising and diversion from landfill.

19.3 Construction Commitments

Table 19-2: Schedule of Environmental Commitments – Construction Phase

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
Chapter 05 – Population and Human Health		
CON_01	Plans and procedures	The following plans shall be implemented: • The Contractor's CEMP and CTMP shall be implemented. • The Contractor's RWMP shall be implemented to ensure that waste is appropriately managed, reused, recovered and disposed of in accordance with relevant legislation and best practice guidance.
Chapter 06 – Biodiversity		
CON_02	Habitat protection	A Landscape Strategy will be implemented, centred on retention and protection of natural habitat as far as possible, including Annex I habitats (Alluvial Woodland, Lowland Meadow) and other ecologically important habitats such as non-Annex woodland and boundary vegetation. During construction, the ECoW will ensure that all site personnel are made aware of the habitats present on site, how construction can be adapted to reduce impacts, and any relevant mitigation (e.g. through toolbox talks during site inductions), and that mitigation is carried out appropriately. Construction works will not take place within any retained parcel of Annex I habitat (refer to PRE_05).
CON_03	Construction phase lighting	Any artificial lighting that may be required for construction works will be directional to avoid or minimise light spill beyond immediate works areas. The measures below will be implemented on a precautionary basis for any artificial lighting required during construction (working hours of 07:00-19:00), to safeguard faunal species, particularly nocturnal mammals such as bats and badger. However, if any temporary artificial lighting is required for construction works, it will be strongly directional and directed only on to the works area, and will be turned off when not required, to minimise light spill and adverse effects on nocturnal wildlife. Provision of artificial lighting will follow Guidance Note *GN08/23 Bats and Artificial Lighting at Night* (ILP and BCT, 2023). Where lighting is used during the construction phase of the Proposed Development, the following generic measures for 'wildlife-friendly' lighting are recommended: • Any artificial lighting that may be required for construction works will be directional to avoid or minimise light spill beyond immediate works areas. • Light spill must be minimised on linear or habitat features (e.g. woodland, hedgerows, trees, boundary vegetation and watercourses) and should not be subject to light spill greater than one lux on such habitat features. • Lighting must be minimised wherever possible in terms of number of lights and the power of the lights (lux level). • All luminaires should lack UV elements when manufactured. Metal halide compact fluorescent sources should not be used.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• LED luminaires will be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. LED lighting should comprise a warm white light source (2700K or lower), to reduce blue light component. • Any bat roost boxes that may be erected as enhancement will not be placed where they would be illuminated by new lighting. • Directional lighting, facing away from surrounding vegetation should be used. Accessories such as baffles, hoods, or louvres can be used to further reduce light spill and direct light only where it is required. However, it must be noted that due to the lensing and fine cut-off control of the beam inherent in modern LED luminaires, the effect of cowls and baffles is often far less than anticipated and so should not be relied upon solely. • Lighting will be turned off when not in use except to meet the minimum requirements for Health and Safety.
CON_04	Habitat protection: bat roost boxes	To enhance the Site for roosting bats, artificial refugia are proposed. Six bat roost boxes will be mounted on mature trees (or incorporated into suitable buildings) within dark areas of the Site that will not be subject to light spill, for example along the east or southern boundaries. Bat boxes should be positioned to face south, south-east, or south-west and at heights no less than 4m above ground level. Erection should be supervised by the ECoW or other appropriately experienced bat ecologist. Models suitable for pipistrelle species are recommended; specific models should be determined based on availability at the time of purchase.
CON_05	Habitat protection - badger setts	No heavy machinery should be used within 30m of badger setts (unless carried out under licence). Lighter machinery should not be used within 20m of a sett entrance. Light work should not take place within 10m of sett entrances. During the breeding season (December to June inclusive), none of the above works should be undertaken within 50m of active setts. Where works to construct the sports pitches and the new path along the Site boundary take place within 30m of the entrances of setts B01, B02 and B05 (located within 15m of the Site boundary), these setts will be closed, where required (temporarily, where possible), for the duration of those works. The requirements for sett closure (including derogation licensing) will be determined by the results of the preconstruction surveys (refer to PRE_03). All sett closure works will be carried out by the ECoW (or a suitably experienced ecologist), including licence applications where necessary, and will follow NRA (2005) guidance.
CON_06	Ecological protection	• As reasonably practicable, works that will directly impact vegetation that could be used by nesting birds will be undertaken outside of the breeding season, this being taken to be between March and August, inclusive. Should vegetation clearance works be required during the breeding season, a search for active nests will be carried out by the ECoW or other suitably experienced ornithologist. Such checks will be completed no more than 72 hours in advance of clearance works taking place as nests can be quickly established. Where any active nests are identified, suitable species-specific exclusion zones will be implemented and maintained until the breeding attempt has concluded. • The following measures to prevent the injury or mortality of faunal species will be adopted where necessary: – Excavations will be provided with a means of escape for animals that may fall in overnight, such as a ramp or battered slope. – Except where required to remain open for passage of water, pipes that animals could enter will be capped overnight. – Plant and machinery will be inspected before use each day to check for the presence of animals which may have taken shelter within or beneath. – Where possible, prestressing, whereby wildlife is encouraged to leave the area prior to works commencing (e.g. by having people walk over the area making noise) will be implemented. If and where necessary, phased vegetation clearance following a pattern to encourage wildlife to move out of the working area to alternative undisturbed habitats.
CON_07	Habitat compensation	All species used will be of local provenance, i.e. sourced from the island of Ireland. Cultivars and ornamental species will be avoided in semi-natural planting, and reputable suppliers will be used. Approximately 1.47ha of new planting will be provided, and existing vegetation, including areas of Lowland Meadow, hedgerows and vegetation along the Camac corridor, will be retained. Where areas of Annex I Lowland Meadow are lost, the grassland will be lifted as sods/turves and translocated to the new meadow areas where timescales allow. Where translocation is not possible, seeds will be harvested from the existing meadow, where the time of year allows, for reuse in the new meadow areas. Sods/turves awaiting translocation will be stored in an appropriate area of the Site and managed (e.g. kept unrolled and watered) until reinstated. The pipeline trench through the existing meadow north of the Site will be excavated in small sections, with sods/turves cut, set aside and reinstated on the same or next day. New meadow/grassland habitats will be managed in an ecologically sensitive way, similar to the management of the existing Lowland Meadow, including the use of yellow-rattle and, where seeding is needed, locally sourced perennial species. Annual seed mixes will not be used.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
CON_08	Monitoring and inspections	A programme of bat roost box monitoring, under appropriate licence, will be devised for the operational phase of the Proposed Development. This will be carried out annually by a suitably experienced and licensed ecologist. Monitoring will be completed in the early spring and, if required, bat boxes will be cleaned of debris such as old bird nesting material. It will be the responsibility of SDCC to engage an ecologist to carry this out.
Chapter 07 – Land & Soils and Geology		
CON_09	General management	The appointed Contractor shall comply with all national laws and regulations controlling pollution of the environment. Necessary precautions to prevent contamination of soil and groundwater with fuels, oils, bitumen, chemicals, or other harmful materials shall be taken. All required permits and licences will be identified and planned before the start of the construction works. All construction materials shall be responsibly sourced, with assurances provided that goods and services are legitimately secured from legal and well-managed sources and from suppliers and contractors who can demonstrate responsible sourcing of their materials.
CON_10	Pollution prevention and control – Excavation, stockpiling and infilling	The following measures will be included in the Contractor's CEMP (as a minimum): • Excavations: – Excavation earthworks will be limited to the removal of topsoil and shallow subsoils for the construction of foundations for buildings within the Proposed Development and for access roads throughout the Proposed Development. Infill earthworks will be required for the importation and compaction of acceptable fill material to achieve the required engineering design and grades. The extent of exposed ground will be minimised during construction to that necessary to facilitate progress of works, and any stockpiles will be covered to prevent the creation of contaminated run-off or dust. • Stockpiling: – Temporary storage of excavated soil and imported soil/stone materials will be carefully managed in such a way as to prevent potential adverse effect on the receiving environment. Handling of materials, such as soils, will be kept to a minimum and materials shall be stockpiled at minimum practicable height. For reusable topsoil, a 2m height limit will be used to prevent the soil compressing under its own weight. Other excavated materials of lower engineering quality can be stored in higher stockpiles. – Spoil and temporary stockpiles will be positioned in locations which are distant from drainage systems and away from areas subject to flooding, so as not to cause potential run off to soil and groundwater receptors. Where required, silt fencing will be deployed at the base of stockpiles when storing fine material, to prevent fine sediment runoff outside the designated area. – Excavated soil and stone that is surplus to requirements will be managed through the Contractor's RWMP. The excavated soil will be tested for potential contaminants and waste acceptance criteria to determine whether it can be stockpiled on site for future reuse; sent to a soil recovery facility; or disposed as inert, non-hazardous or hazardous waste to an appropriately licensed waste facility. • Infilling: – Where possible and where supported by analytical data confirming the absence of contamination, material excavated from the Site will be reused to minimise the volume of imported fill required. Where imported fill is required, the source will be carefully selected and vetted to ensure that it is of a reputable origin and that it is 'clean' (i.e. will not introduce contamination to the environment). Procurement procedures will be developed to ensure that aggregates are sourced from reputable suppliers who are vetted for their environmental management status, as well as regulatory and legal compliance. – If recycled aggregate is used as imported fill, rigorous chemical testing will be undertaken to confirm that it is 'clean' (i.e. will not introduce new contamination to the environment).
CON_11	Dewatering	• If, during the excavation works, either groundwater or surface water run-off enters the excavation, there will be a requirement to dewater the excavation. This will be achieved by pumping water from the excavation, following silt mitigation measures, either to the nearest watercourse or drain or to artificial recharge (re-infiltration), subject to monitoring of sediment, the contamination status of the water, compliance with the CEMP and agreement of SDCC (refer to Chapter 08 Water). To ensure that no silt or sediment is transferred to the drains or watercourses, the water will be pumped via settlement tanks or collection basins, where any solids in the water will settle out. The settled solids will be removed from the tank/ basin as required and disposed of off-site by appropriately licensed hauliers. • All discharged water (rainwater and groundwater) from pumping will be treated and tested. Such water will be disposed of as construction site run-off, having first passed through a settlement tank, filtration system and/ or additional targeted treatment for specific contaminants, where appropriate. No discharge to existing infrastructure/ watercourses/ground shall be permitted to take place without the appropriate consents or approvals.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• The contractor shall provide suitable pumps, settlement tanks and filters to filter all water being pumped/ discharged from excavations into existing drains. The contractor shall also take measures to ensure that runoff from open excavations does not enter the surrounding drainage system without being treated. • Temporary drainage during the construction phase will be addressed in the Contractor's CEMP and will be managed to reduce the direct runoff to ground and to watercourses.
CON_12	Pollution prevention and control – Accidental spills and leaks and use of concrete and lime	The following measures will be included in the Contractor's CEMP (as a minimum): • Pollution prevention will be achieved with both physical and procedural measures. The contractor shall comply with all national laws and regulations controlling pollution of the environment. Necessary precautions to prevent pollution occurring to ground of fuels, oils, chemicals, or other harmful materials shall be taken. • The locations of refuelling, storage of oil/ fuel, concrete mixing and washing areas are to be restricted to impermeable bunded areas with a minimum of 110% storage capacity and away from surface water. The Contractor will be required to submit a site layout plan which will detail the proposed location of these areas. • Oil and fuel storage tanks will be bunded to the greater volume of either 110% of the capacity of the largest tank/ container within the bunded area or to a volume of 25% of the total capacity of all the containers in a single bund. • Drainage from the bunded area will be diverted for collection, monitoring and safe disposal. • All containers within the bunded storage area will be clearly labelled, so that appropriate remedial action can be taken in the event of a spillage. When moving drums from the bunded storage area to locations within the Site, a suitably sized spill pallet will be used for containing any spillages during transit. • A spill response kit will be available on-site and accessible to all to control pollution incidents. These spill kits will contain absorbent pads, absorbent granules and methods of disposal of materials and used kit. These kits will be located at appropriate points around the project site which are considered to be at a higher risk of pollution (e.g. refuelling area and next to fuel tanks). Further spill kits and supplies will be in the stores within the sites, where replacements for used kits will be found. The spill kits will need to be regularly inspected and immediately replaced if used. Any used spill kit materials will be disposed of using a licensed hazardous waste contractor in accordance with relevant legalisation. • Refuelling of construction vehicles and the addition of hydraulic oils or lubricants to vehicles will be conducted by appropriately trained personnel and take place in designated areas, which will be away from surface water gullies or drains. There will be no refuelling allowed within 50m of a watercourse. • Where mobile fuel bowsers are used on the Site, in the event of a machine requiring refuelling outside of the designated area, fuel will be transported in a mobile double skinned tank. Any flexible pipe, tap or valve will be fitted with a lock where it leaves the container and be locked shut when not in use. Each bowser will carry a spill kit, and each bowser operator will have spill response training. • Pumps and generators used on the Site will have integral drip trays where possible. All items of plant without an integral drip tray shall be stored over a portable drip tray. Drip trays shall be inspected and kept free of accumulated rainwater as necessary. Any oily water shall be disposed of at an appropriate licensed facility. Any cleaning/ arisings from drip trays etc. to be disposed of as hazardous waste in accordance with EPA guidance and legislation. • All plant and equipment shall be checked for leaks of fuel and lubricants before being allowed onto the Site. The Principal Contractor will allow for regular checks and maintenance as required. • No discharge to existing infrastructure/ watercourses/ground shall be permitted to take place without the appropriate consents or approvals. • The Contractor shall provide suitable pumps, settlement tanks and filters to filter all water being pumped/ discharged from excavations into existing drains. The Contractor shall also take measures to ensure that runoff from open excavations does not enter the surrounding drainage system without being treated. • Ditches and water streams will be clearly identified on site and shown on method statements and site plans. The Principal Contractor carrying out the works shall identify all watercourses, drains and potential conduits for silt-laden run-off and, where necessary, measures shall be taken to minimise direct sediment run-off from the working site into watercourses. The following measures will be included in the Contractor's CEMP (as a minimum): • The risks from concrete works when constructing the Proposed Development will be managed and mitigated by the Contractor ensuring that no concrete is laid during wet weather, if achievable, so that there is no risk of concrete being washed off the Site and into the surface water drains or nearest watercourse. • Ready-mixed concrete will be brought to the Site by truck. A suitable risk assessment for wet concreting will be completed prior to works being carried out which will include measures to prevent discharge of alkaline wastewaters or contaminated water to the underlying subsoil and groundwater.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• The pouring of concrete will take place within a designated area protected to prevent concrete runoff into the soil/ groundwater media. Washout of concrete transporting vehicles will take place at an appropriate facility, off-site where possible. Alternatively, where wash out takes place onsite, it will be carried out in carefully managed on-site wash-out areas.
CON_13	Monitoring and inspections	The following monitoring requirements for land and soils will be followed by the Contractor during the construction phase (as a minimum): • Periodic inspections of the construction works will be conducted to address issues including dust, litter, surface water, waste management and general housekeeping. These inspections will be conducted by the appointed contractor/ dedicated environmental manager and shall be documented and provided to the SDCC monthly. SDCC, or its appointed consultants, shall also reserve the right to carry out audits, inspections, monitoring and/ or spot checks of the works and any systems being implemented both on-site and off-site in connection with the works to ascertain whether they comply with the Contractor's CEMP. • Audit findings in the form of Corrective Action Requests will be recorded and actioned. • All environmental observations, incidents and near-misses shall be recorded and reported to the necessary stakeholders within 24-hours and the timeframe for close-out agreed at the outset of the project between the Applicant and the Contractor. Good practices will also be recorded.
Chapter 08 – Water and Hydrology		
CON_14	General management	The following measures and good practice will be included in the Contractor's CEMP (as a minimum): • All construction materials shall be responsibly sourced, with assurances provided that goods and services are legitimately secured from legal and well-managed sources and from suppliers and contractors who can demonstrate responsible sourcing of their materials. • Periodic inspections of the construction works will be conducted to address issues including dust, litter, surface water, waste management and general housekeeping. These inspections will be conducted by the appointed contractor/ dedicated environmental manager and shall be documented and provided to the SDCC monthly. SDCC, or its appointed consultants, shall also reserve the right to carry out audits, inspections, monitoring and/ or spot checks of the works and any systems being implemented both on-site and off-site in connection with the works to ascertain whether they comply with the Contractor's CEMP. • Audit findings in the form of Corrective Action Requests will be recorded and actioned • The construction of the Proposed Development will be phased such that there is no reduction in the total available storage volume of existing systems for either clean or polluted surface water runoff at any point during the construction of the Proposed Development. • General surface water management measures will have regard for CIRIA's The SuDS Manual (2015), Environmental Good Practice on Site Guide (2023) and Control of Water Pollution from Construction Sites (2001), TII's Road Drainage and the Water Environment (TII, 2015) and DMRB LA 113 Road Drainage and the Water Environment (National Highways, 2020). • The extent of exposed ground will be minimised at all times during construction and any stockpiles outside areas specifically designed for the purpose will be covered to prevent the creation of any contaminated runoff. Areas where stockpiles are located, and wheel-wash down areas, will be positively drained through a grit trap where silt will be collected before water is discharged. • The locations of refuelling, storage of oil/fuel, concrete mixing and washing areas will be established, where practicable, at a designated location within the Site coordinated with the Contractor, with a buffer zone of at least 10m between this and any excavations (CIRIA C811). • Pollution prevention will be achieved with both physical and procedural measures such as temporary sediment forebays within a designated attenuation basin during construction, suitable interceptors within the permanent and temporary surface water drainage networks and suitable storage of construction materials. • The appointed Contractor will identify and risk assess existing drainage systems and put in place measures to prevent possible contamination from surface runoff emanating from the works. • Topsoil and subsoil will not be stored directly adjacent to the watercourse but a minimum of 20m from the watercourse, with additional mitigation such as silt fences installed if there is a risk of sediment entering the watercourse. No topsoil or subsoil will be stored within a surface water flooding area unless supported by a risk assessment and additional mitigation. Where site constraints mean that a 20m buffer cannot be maintained, additional mitigation measures will be implemented to provide an adequate barrier between the potential source of contaminated runoff and the receptor.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Foul sewage arising from temporary toilets and sanitary facilities on the Site will be discharged to an on-site receptacle which will be emptied by tanker on a regular basis for disposal. • Periodic inspections of the construction works will be conducted to address surface and ground water contamination. • Necessary precautions will be taken to prevent pollution of streams, lakes, ponds and reservoirs with fuels, oils, bitumens, chemicals or other harmful materials.
CON_15	Plans and procedures	A WMP will be prepared as part of the Contractor's CEMP, with the water quality monitoring programme scope developed post consent in consultation with relevant stakeholders, and informed by any relevant environmental permit, licence, or consent conditions.
CON_16	Temporary construction areas and construction compounds	Construction compounds and temporary areas will be installed to provide controlled zones for fuel storage, refuelling, plant maintenance, and material handling, ensuring that all higher-risk activities are managed within contained and supervised environments. These areas will incorporate pollution-prevention measures such as bunded storage, designated refuelling points, drip trays, and watercourse booms to minimise risks to land, soils, and water quality. Compounds will be located away from any watercourses or sensitive water dependent habitats (20m buffer) and will not be located within any flood zones (e.g. Flood Zone A or B).
CON_17	Sedimentation of surface waters	The following mitigation measures will be implemented to reduce the potential for sedimentation during the construction phase: • Excavations will only remain open for the shortest possible time to reduce groundwater ingress. Silt traps will be placed around the Site to reduce silt loss, and these will be inspected and cleaned or replaced regularly. • Runoff from spoil heaps will be prevented from entering watercourses by diverting it through settlement ponds and removing material off-site as soon as possible to designated storage areas. • Silt traps will be placed at any crossing points to avoid siltation of drainage channels and, if the need arises, silt fences will be used during the course of works in order to reduce the potential for pollution of watercourses. These will be maintained and cleaned regularly throughout the construction phase. • Good construction practices will also be used during the construction phase, such as wheel washers and dust suppression on-site roads and at the Site access points. • Surface water run-off from working areas will not be allowed to discharge directly to any surface waterbodies. To achieve this, the drainage system will be constructed prior to the commencement of major site works. All design and construction will be carried out in accordance with *CIRIA C532 Control of Water Pollution from Construction Sites Guidance for Consultants and Contractors and C811 Environmental good practice on site guide*.
CON_18	Pollution prevention and control – Use of concrete and lime	The following mitigation measures will be designed to ensure that no concrete and lime sediment contamination will enter watercourses: • All ready-mixed concrete will be brought to site by truck. A suitable risk assessment for wet concreting will be completed prior to works being carried out, which will include measures to prevent discharge of alkaline wastewaters or wash-water to the surface water drainage system or to the underlying subsoil. • Wash down and washout of concrete transporting vehicles will take place at an appropriate bunded area and direct discharge of wash-water to surface waters will be strictly prohibited. • The appointed Contractor will be required to manage and mitigate concrete works ensuring that no concrete is laid during wet weather, so no concrete will be washed off the Site and into the surface water drains or water bodies. • Other mitigation measures include the use of barriers, avoiding the use of lean mix concrete near surface water features, keeping records of quantities of concrete used and monitoring pH levels in surface water features if necessary.
CON_19	Pollution prevention and control – Fuel and chemical handling	The following measures shall be adopted at the Site in order to prevent spillages to ground and drains of fuels, and to prevent any consequent surface water impacts. • Fuel will be stored and used in accordance with the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 and relevant fire safety, environmental, and HSA codes of practice. • Designate a bunded storage area at the Contractor’s compound(s) and away from surface water gullies or drains for oils, solvents and paints used during construction. The fuel storage tanks will be bunded to a volume of 110% of the capacity of the largest tank / container within the bunded area, which includes 10% more capacity than is needed.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Drainage from the bunded area will be diverted for collection and safe disposal. All containers within the storage area will be clearly labelled so that appropriate remedial action can be taken in the event of a spillage. When moving drums from the bunded storage area to locations within the Site, a suitably sized spill pallet will be used for containing any spillages during transit. • Refuelling of construction vehicles and the addition of hydraulic oils or lubricants to vehicles, will take place in designated impermeable refuelling areas isolated from surface water drains. Spill kit facilities will be provided at the fuelling area in order to provide for any accidental releases or spillages in and around the area. Any used spill kit materials should be disposed of via a hazardous waste contractor. Only construction equipment and vehicles free of all oil/fuel leaks will be permitted on the Site. • All washing down of vehicles and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses. • Where mobile fuel bowsers are used on the Site in the event of a machine requiring refuelling outside of the designated area, fuel will be transported in a mobile double skinned tank. Any flexible pipe, tap or valve must be fitted with a safety lock where it leaves the container and locked shut when not in use. Each bowser should carry a spill kit and each bowser operator must have spill response training. No refuelling will be allowed within 50m of a watercourse. • Adequate stocks of hydrocarbon absorbent materials (e.g., spill-kits and / or booms) will be held on-site in order to facilitate response to accidental spills. Spill response materials will also be stored on all construction vehicles. • Concrete washout is prohibited within a minimum of 20m of any body of water, including ditches and ponds, or surface water drains, and within 5m of a foul drain. Where practical, this will increase to 50m. The Contractor shall describe in a PIRP the actions taken in the case of a possible leak or spill event, and in an ERP the actions taken in the case of a flood event. These actions will be hierarchal meaning that as the risk increases the Contractor will implement more stringent protection measures. This is important to ensure all workers, the construction site and third-party land, property and people are adequately protected from flooding during the construction phase.
CON_20	Water crossings and outfalls	Watercourse crossing (single-span precast concrete portal structure over the existing watercourse): the following mitigation measures will be implemented: • No instream works will be undertaken during construction, and the structure will be designed so that it does not restrict the flow of water within the channel, maintaining the flow regime and morphological process continuity. • The single-span structure will be designed so that its foundations, headwalls and wingwalls are located outside the watercourse channel, with no instream works required. • The proposed structure will maximise the use of precast elements to minimise environmental impact and construction time on the Site. • Temporary silt fencing will be erected to protect the watercourse and maintain safe passage of wildlife. • Excavations will only remain open for the shortest possible time to reduce groundwater ingress, and silt traps will be placed to reduce silt loss. • To minimise habitat loss, vegetation will be removed in a controlled manner and stored in hessian lined containers to preserve it before reinstating. • Bank material will be restored following construction. All excavated materials will be recycled on site and used for backfill; surplus materials will be stockpiled, tested for contamination and sent to a relevant landfill. • Imported materials will be minimised where possible to avoid cross-contamination. • Stockpiles will be located on hard-standing and visqueen sheeting. • Concrete work will be undertaken in dry conditions and site wastewater will be prevented from being discharged to gullies. • Relevant guidance from Inland Fisheries Ireland (2026) ‘Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters’ will be applied. • Outfalls (two outfalls to the branch of the Coolmine Stream/Fitzmaurice Stream): the exact outfall locations will be determined and agreed with Inland Fisheries Ireland (IFI), and the following mitigation measures will be implemented: • Excavations will remain open for the shortest possible period of time and the bank material and vegetation will be reinstated as far as possible. • Imported materials will be minimised where possible to avoid cross-contamination. • Use of concrete will be in dry conditions and wastewater from works will be managed in accordance with other surface waters according to the CEMP. • Measures reported in Inland Fisheries Ireland (2026) ‘Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters’ will be implemented.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Scour protection will be provided to minimise the risk of erosion. • Stockpiles will be located on hard-standing and visqueen sheeting.
CON_21	Flood risk	To minimise the impact of flood risk during construction on the water receptors, it will be necessary to adopt the following mitigation measures at the Site: • During the construction phase, the Contractor would monitor the weather forecasts daily and review the weekly and monthly weather forecasts each week, and plan works accordingly. For example, works in the channel of any watercourses would be avoided or halted were there to be a significant risk of high flows or flooding. • The Contractor will sign up to flood warning alerts and describe in the Emergency Response Plan the actions it will take in the event of a possible flood event. These actions will be hierarchal, meaning that as the risk increases the contractor will implement more stringent protection measures. This is important to ensure all workers, the construction site and third-party land, property and people are adequately protected from flooding during the construction phase.
CON_22	Monitoring and inspections	Water quality monitoring will be required of all potentially affected water features and may include daily visual and olfactory observations or after heavy or prolonged rainfall, in situ monitoring using a calibrated hand-held probe, and potentially grab samples on a regular or ad hoc basis for analysis at an accredited laboratory. Water quality monitoring will continue throughout the construction period for as long as there are activities ongoing that have the potential to result in a significant water pollution incident. The WMP will also detail pre-construction and construction groundwater level and quality monitoring to be undertaken as there is close interaction between groundwater and surface water across the Site. The scope of the monitoring will be discussed with the EPA and SDCC by the Contractor. Groundwater level and quality monitoring will continue throughout the construction period for as long as there are below ground activities ongoing that have the potential to result in a significant impact on the groundwater level or quality
Chapter 09 – Air Quality		
CON_23	Dust management	The following measures will be included in the Contractor's CEMP (as a minimum): • Communications: – Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary. This may be the environment manager/engineer or the site manager. – Display the head or regional office contact information. – Develop and implement a Dust Management Plan (DMP), which may include measures to control other emissions, approved by the Planning Authority. The DMP should include details for monitoring the effectiveness mitigation measures. – Develop and implement a stakeholder communications plan that includes community engagement before work commences on site. • Site management: – Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. – Make the complaints log available to the local authority when asked. – Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the logbook. • Monitoring: – Undertake daily on-site and off-site inspections, where receptors (including roads) are nearby, to monitor dust, record inspection results and make the log available to the local authority when asked. – Increase the frequency of site inspections by the person accountable for air quality and dust issues on site when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions. – Carry out regular site inspections to monitor compliance with the DMP, record inspection results and make an inspection log available to the local authority when asked. • Preparing and maintaining the Site: – Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		– Erect solid screens or barriers around dusty activities that are at least as high as any stockpiles on site. – Avoid site runoff of water or mud. – Keep site fencing, barriers and scaffolding clean using wet methods. – Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on-site. If they are being re-used on-site cover as described below. – Cover, seed or fence stockpiles to prevent wind whipping. • Operating vehicle/machinery and sustainable travel: – Ensure all vehicles switch off engines when stationary – no idling vehicles. – Avoid the use of diesel or petrol powered generators and use mains electricity or battery powered equipment where practicable. – Impose and signpost a maximum speed limit of 15 mph on surfaced and 10 mph on unsurfaced haul roads and work area. • Operation – Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays; – Ensure an adequate water supply on the Site for effective dust/particulate matter suppression/mitigation. – Use enclosed chutes and conveyors and covered skips. – Minimise drop heights. • Waste Management – Avoid bonfires and burning of waste materials. • Earthworks – Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable. – Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable. – Only remove the cover in small areas during work and not all at once. • Construction – For smaller supplies of fine powder materials, ensure bags are sealed after use and stored appropriately to prevent dust. – Avoid scabbling, if possible. – Ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out. • Track out – Use water assisted dust sweeper(s) on the access and local roads, to remove, as necessary any material tracked out of the Site; – Avoid dry sweeping of large areas. – Ensure vehicles entering and leaving the Site are covered to prevent escape of materials during transport. – Implement a wheel washing system.
Chapter 10 – Climate		
CON_24	Climate change risk assessment	A number of further mitigation measures in the construction phase were identified when undertaking the CCRA. Measures to be implemented, where applicable and proportionate to the identified climate risk, include: • Install a water pump for areas with critical infrastructure and key construction operations, to increase the site's surface drainage capacity and reduce the risk associated with fluvial and pluvial flooding. • Raise critical infrastructure above PMF to reduce the consequence of impact for potential flood events. • If applicable, regular monitoring of trees and vegetation in the area will be undertaken, pruning as necessary to avoid damage to the construction site or blocking access roads, in the event of a storm with high wind speed.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Additional attenuation storage tanks will be installed at key locations or identified flood risk areas, to increase the proposed developments drainage capacity. • Construction materials and equipment with superior properties that offer increased tolerance to fluctuating temperatures, heavy precipitation and other extreme weather events such as storms, will be used, where feasible. E.g. construction equipment that can withstand conditions greater than 40°C. • All outdoor construction workers will be granted access to indoor facilities, air conditioning, breaks in shaded areas and water breaks to ensure suitable working conditions. • Outdoor and non-essential work will be ceased if working conditions are too dangerous and could result in injury to workers and damage to equipment. • Adequate cooling and ventilation systems will be added in the design of temporary office buildings and construction worker facilities, that's sufficient to deal with projected increases in extreme temperatures
CON_25	Construction health and safety	One of the key regulations for construction in Ireland is the Irish Safety, Health, and Welfare at Work (Construction) Regulations 2013 (Government of Ireland, 2013). The appointed contractors, designers, workers and other construction stakeholders shall comply with all rules set out in this regulation, during the construction process. This regulation sets out a number of standards and mitigation measures which must be met on the construction site. These measures will act as embedded or planned controls for safety and health concerns and risks arising from climate change during construction. These measures are as follows: • The Contractor will implement the Construction Health and Safety Plan and associated safe systems of work throughout the construction phase. Construction activities will be planned, supervised and managed to protect workers, visitors and members of the public from identified health and safety risks. • The Contractor will implement measures to manage risks associated with adverse weather and climate-related events during construction, including flooding, extreme rainfall, high winds and periods of extreme heat or cold. Construction activities will be adapted, suspended or safely secured where weather or site conditions present an unacceptable risk to workers, the public, plant or equipment. • Excavations and below-ground works will be appropriately planned and managed, with suitable access and egress maintained at all times and appropriate measures implemented to manage risks associated with flooding, water ingress and ground instability. • Suitable welfare and shelter facilities will be provided for personnel working on the Site, including appropriate arrangements for periods of adverse weather. Workers will be provided with, and required to use, appropriate personal protective equipment and equipment necessary to undertake their work safely. • The Contractor will maintain appropriate emergency arrangements for construction-related incidents, including fire, flooding, extreme weather and other foreseeable emergencies. Emergency procedures will be communicated to personnel through site inductions, training and toolbox talks, as appropriate. • The Construction Health and Safety Plan and associated risk assessments and method statements will be reviewed and updated where necessary to reflect changes in construction activities, site conditions or identified risks. – Regulation 12 of the Safety, Health, and Welfare at Work (Construction) Regulations 2013 (Government of Ireland, 2013) states that the Project Supervisor for the design process (PSDP) must prepare a Preliminary Health and Safety Plan. This plan must identify any exceptional features of design and construction, including any risks associated with climate impacts during construction. – Regulation 16 of the Safety, Health, and Welfare at Work (Construction) Regulations 2013 (Government of Ireland, 2013) states that the Project Supervisor for the construction stage, based on the findings in the Preliminary Health and Safety Plan, will further develop a Safety and Health Plan for the construction period, prior to commencement of works on site. This will also take into consideration risks associated with the impacts of climate change. – A CEMP will also be undertaken prior to construction of the Proposed Development commencing. The CEMP will identify current construction environmental risks within and around the environment of the Proposed Development construction site, in addition to outlining the associated controls that will be adopted during construction. The CEMP will provide site specific recommendations and refer to general best practice procedures to comply with when construction wors are carried out. – A site-specific Flood Risk Assessment (FRA) has been undertaken for the Proposed Development. The FRA sets out SuDS measures that will provide storage volume for a 1 in 100-year rainfall event, plus an additional 20% climate change allowance.
Chapter 11 – Noise and Vibration		
CON_26	Noise management	The following measures will be included in the Contractor's CEMP to manage construction noise emissions (as a minimum): • All construction plant and equipment will comply with EU noise emission limits.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Proper use of plant with respect to minimising noise emissions and regular maintenance. All vehicles and mechanical plant used for the purpose of the works will be fitted with effective exhaust silencers and will be maintained in good efficient working order. • Selection of inherently quiet plant where appropriate. All major compressors will be 'sound reduced' models fitted with properly lined and sealed acoustic covers which should be kept closed whenever the machines are in use and all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers. • Machines in intermittent use will be shut down in the intervening periods between work or throttled down to a minimum. • Plant and equipment such as flatbed lorries, skips and chutes will be lined with noise attenuating materials. Materials will be handled with care and be placed, not dropped. Materials will be delivered during normal working hours only. • All ancillary plant such as generators, compressors and pumps will be positioned so as to cause minimum noise disturbance, i.e. furthest from receptors or behind close boarded noise barriers. If necessary, acoustic enclosures will be provided and/or acoustic shielding. • Where ground compaction works are required, vibration-generating plant such as rollers and vibro compaction equipment will be operated in low-vibration modes (e.g. dead rolling) in the vicinity of sensitive receptors. These operational controls are well-established mitigation measures that are effective in reducing ground-borne vibration to acceptable levels. • The appointed Contractor will be required to adhere to the codes of practice for construction working given in BS 5228:2009 and the guidance given therein regarding minimising noise emissions from the Site. • If the developers intend to have a compound on site for material deliveries, then they will locate this away from noise sensitive properties.
Chapter 12 – Landscape & Visual		
CON_27	Vegetation retention and reinstatement	• During the construction phase, mitigation will focus on confining activity to the defined site boundary and preventing unnecessary disturbance to adjacent vegetation and soils. • All mature hedgerows and tree lines will be retained where practicable, maintaining the current overall character of the surroundings. • Retained vegetation will be safeguarded through the use of protective fencing and root-protection zones in accordance with BS 5837:2012 - Trees in Relation to Design, Demolition and Construction, ensuring that root systems and canopies remain undisturbed through the works. • Mixed native hedgerow is proposed in the open spaces to mitigate the removal of hedgerow during site construction. On completion of construction, areas subject to temporary ground disturbance will be reinstated promptly using locally sourced topsoil and appropriate seed mixes to stabilise soils and support vegetation recovery.
Chapter 13 –Archaeology and Cultural Heritage		
CON_28	Archaeological testing	Should previously unrecorded archaeological material, artefacts or features be encountered during construction, work within the affected area will cease immediately and the appointed Archaeological Contractor will be notified. The NMS will be consulted, and the unexpected find protocol will be implemented. Appropriate mitigation, which may include preservation in situ or preservation by record through systematic archaeological excavation and/or monitoring of specific construction activities, will be determined in consultation with the appointed Archaeologist and the NMS.
Chapter 14 – Material Assets (Traffic)		
CON_29	Construction traffic management and road network	The following traffic management measures, set out in the oCTMP, will be implemented during the construction phase to manage potential construction traffic impacts, and will be further developed in the detailed CTMP to be prepared by the appointed Contractor prior to construction: • Warning signs/advanced warning signs will be installed at appropriate locations in advance of the construction access locations. • Construction and delivery vehicles will be instructed to use only the approved and agreed means of access, and movement of construction vehicles will be restricted to these designated routes. • Appropriate vehicles will be used to minimise environmental impacts from transporting construction material, for example the use of dust covers on trucks carrying dust producing material. • Speed limits of construction vehicles will be managed by appropriate signage, to promote low vehicular speeds within the Site.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Parking of site vehicles will be managed and will not be permitted on the public road, unless within a designated area that is subject to traffic management measures and agreed with SDCC. • A road sweeper will be employed to clean the public roads adjacent to the Site of any residual debris that may be deposited on the public roads leading away from the construction works. • On-site wheel washing will be undertaken for construction trucks and vehicles to remove any debris prior to leaving the Site. • All vehicles will be suitably serviced and maintained to avoid any leaks or spillage of oil, petrol or diesel. Spill kits will be available on Site. Scheduled maintenance carried out off-site will not be carried out on the public highway. • Safe and secure pedestrian facilities will be provided where construction works obscure any existing pedestrian footways. Alternative pedestrian facilities will be provided in these instances, supported by physical barriers to segregate traffic and pedestrian movements, and identified by appropriate signage. Pedestrian facilities will cater for vulnerable users, including mobility impaired persons. • HGV trips are anticipated to arrive and depart the Site at a uniform rate throughout the day, to avoid pressure on the morning and evening peak hour periods, and will be required to follow the designated haul routes set out in the oCTMP. Haulage routes, delivery timings and access arrangements will be continuously reviewed as construction progresses.
Chapter 15 – Major Accidents & Disasters		
CON_30	Design standards and regulatory compliance	The design and construction of the Proposed Development will be in accordance with relevant international, national and established industry codes, standards and practice, including design and construction of structures to the appropriate EN design standards and relevant Building Regulation Technical and Safety standards, and compliance with material specification standards for building materials such as concrete, blockwork and timber.
CON_31	Design standards and regulatory compliance – residential wiring	The design and construction of the Proposed Development will be in accordance with relevant international, national and established industry codes, standards and practice for residential buildings, including the National Wiring Rules (I.S. 10101:2020), which mandates specific safety, sizing and hardware requirements to protect modern homes (e.g. plugs and sockets, circuit boards, residual current devices, surge protection devices, arc fault detection devices, lighting and circuit breakers).
CON_32	Maintenance of plant and equipment	Regular maintenance and inspection of all facilities will be carried out during the construction phase, in accordance with the manufacturer's requirements as a minimum, to reduce the potential for equipment failures that could contribute to major accidents or disasters.
CON_33	Security	Security measures, including appropriate fencing, CCTV, access control and guards, will be implemented during the construction phase of the Proposed Development. Embedded design will ensure that the residential properties include doors and windows developed to appropriate BS EN standards, including consideration of security and access.
Chapter 16 – Material Assets (Utilities)		
CON_34	Existing built services	The following measures will be included in the Contractor's CEMP (as a minimum): • All proper steps will be taken to minimise any interference with existing gas, electrical, surface water drainage, foul and potable water infrastructure and existing telecommunication infrastructure located within the adjacent existing developments (namely the Rathcoole and Saggart villages). • Where service diversions and/or infrastructure realignment are required, or where new connections are proposed, the works shall be carried out in accordance with the requirements of the relevant service provider/authority (for example, ESB and Uisce Éireann). • Prior to the commissioning of the Proposed Development, new connections will be tested by a suitably qualified person using an appropriate methodology approved by the relevant service provider. • In the event of accidental damage to existing built services or utility infrastructure during construction, works in the immediate vicinity of the affected infrastructure will cease, where necessary, and the relevant service provider and/or authority will be notified. Appropriate measures will be agreed with the relevant service provider and/or authority before works recommence in the affected area.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
		• Suitable cable- and pipe-locating devices shall be used in conjunction with any available plans and drawings identifying underground built services, in order to determine their position as accurately as possible. These devices will be checked regularly and maintained in good working order. • Safe digging practices will be undertaken in accordance with HAS's 'Code of Practice for Avoiding Danger from Underground Services' (2016). Construction staff will be adequately trained and instructed on appropriate work methods, including, where relevant, SSWPs. Construction staff responsible for handling locating devices will be required to possess a Construction Skills Certification Scheme (CSCS) card in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (S.I. No. 291/2013), as amended. • Where underground built services are identified, their location will be clearly marked using an appropriate method suitable for the ground conditions and maintained for the duration of the relevant works. Markings will be removed, where appropriate, following completion of the works.
Chapter 17 – Waste		
CON_35	Waste management	The Contractor will implement the Contractor's RWMP and regularly review and update, where necessary, waste generation estimates and management measures. Construction waste and materials will be managed in accordance with the waste hierarchy, prioritising waste prevention and reduction, followed by reuse, recycling and recovery where practicable. Procedures for the segregation, handling, monitoring and recording of waste streams will be implemented on-site. Opportunities for the efficient use of materials, off-site prefabrication, and the reuse, recycling, recovery or appropriate disposal of construction waste and suitable excavated materials will be identified and applied where feasible. Estimated quantities of construction waste and excavated materials, together with their management routes, are outlined in the RWMP. Where excavated material is proposed for beneficial use as a by-product and the applicable regulatory requirements are satisfied, the relevant Article 27 notification requirements will be followed.

19.4 Operational Commitments

Table 19-3: Schedule of Environmental Commitments – Operational Phase

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
Chapter 05 – Population and Human Health		
OP_01	Road safety and sustainable design	The scheme design has undergone a Road Safety Audit and has had regard to the Design Manual for Urban Roads and Streets (DMURS), promoting a pedestrian- and cycle-friendly environment, reducing reliance on private cars and reducing the potential for road traffic accidents within the Proposed Development. Substantial areas of woodland will also be retained and protected, with a Woodland Management Plan implemented (refer to Chapter 06: Biodiversity, OP_02) to maintain amenity, recreational, landscape and ecological value for residents and the wider community.
Chapter 06 – Biodiversity		
OP_02	Woodland and habitat management	The Woodland Management Plan for the Rathcoole Woodland will continue to be implemented during operation, following a 'conservation through restraint' approach. This includes monitoring woodland development over time, monitoring and controlling sycamore regeneration where necessary, retaining deadwood wherever safe to do so, and protecting the woodland from dumping, disturbance and inappropriate development. Monitoring of the Alluvial Woodland will be undertaken as set out in the Woodland Management Plan (Appendix A6-6).
OP_03	ISMP	The ISMP will include a monitoring and management regime during operation to curtail the spread of, and possibly eradicate, invasive species within the Site, with an aim to eradicate Japanese knotweed. Management measures may include annual treatment of identified invasive species using appropriate control methods, including herbicide application where required, undertaken by suitably qualified contractors under ecological supervision. Appropriate signage will be retained post-construction to warn recreational site users and (if relevant) maintenance staff of the presence of Japanese knotweed.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
OP_04	Bat roost box monitoring	A programme of bat box monitoring, under appropriate licence, will continue into the operational phase and will be undertaken by a suitably experienced and licensed ecologist. Monitoring will be carried out annually in the early spring and, if required, bat boxes will be cleaned of debris such as old bird nesting material. It will be the responsibility of SDCC to engage an ecologist to carry this out.
OP_05	Annex I habitat condition monitoring	The condition of retained and translocated Annex I habitats (Alluvial Woodland 91E0 and Lowland Meadow 6510) will be monitored to identify any requirement for remedial management. Habitat condition assessments, using detailed relevé (plot) surveys consistent with the ecological baseline methodology, will be carried out by an appropriately experienced ecologist in Years 1, 3, 5, 10 and 20 post-development. Monitoring results will be used to inform ongoing management practices within the habitats, in addition to monitoring set out in the Woodland Management Plan.
OP_06	Habitat protection	To encourage protection during operation of the Proposed Development, it is proposed that signage (e.g. interpretation boards) is installed in key locations (e.g. along walking routes). Further operational mitigation to protect habitats will include ensuring there is appropriate provision of dog waste bins in recreational areas/along walking routes and signs for keeping dogs on leads in sensitive habitats. Operational lighting will be focused on roads, residential and public areas and will not be installed in and around semi-natural and other retained habitats, including green corridors, so that light spill to habitat used by faunal species is minimised (refer to OP_10). Protection and management of the Alluvial Woodland. The Woodland Management Plan for the Rathcoole Woodland will be implemented during the operational phase (refer to OP_02).Provision of landscaped green spaces which are integrated with residential dwellings. This includes the integration of green corridors and parks associated with residential areas. These will include planting that prioritises biodiversity, balanced with ease of maintenance and seasonality. Shrubs and groundcover planting are proposed and include types with fruit and flowers to attract pollinators and other invertebrates.
Chapter 07 – Land & Soils and Geology		
OP_07	Pollution prevention and control – Preventing and managing accidental spills and leaks	Potentially polluted surface water (e.g. from fuel spillage or fire events, including from the pitch and residential car parking) will be directed through the surface water network and a fuel interceptor prior to being discharged, and the drainage management measures described in Chapter 08 Water will be implemented (refer to OP_08).
Chapter 08 – Water and Hydrology		
OP_08	Drainage strategy	Implement and maintain a surface water drainage management system during operation to ensure effective runoff conveyance and prevent flooding. This includes regular inspection and cleaning of drainage infrastructure, and incorporation of SuDS such as bio-retention areas, vegetated swales, attenuation basins, permeable paving (at all car park spaces), filter drains, tree pits, soft landscaped areas, and oil separators (to be provided upstream of the proposed outfalls in trafficked areas). The SuDS will be designed in accordance with CIRIA C753 The SuDS Manual and maintained under an appropriate maintenance regime to ensure their continued effective operation. These measures will manage runoff quantity, improve water quality by treating pollutants (e.g. sediments, metals and hydrocarbons), reduce flood risk, protect receiving watercourses, and enhance biodiversity. The surface water drainage strategy will retain existing surface water flow paths where possible, inclusive of open watercourses and land drains. Runoff from the new hardstanding areas and from the adjacent woodland will be managed through a new gravity surface water network with an integrated SuDS treatment train, providing attenuation and treatment before discharge. Discharge will be restricted to greenfield (QBAR) runoff rates, with attenuation provided through above-ground SuDS features (attenuation basins), and the drainage network will be designed to accommodate the 1 in 100-year rainfall event with an additional 20% climate change allowance. Drainage from the GAA pitches will discharge via a silt-trap manhole incorporating a flow-control (hydrobrake) unit, restricting discharge to the greenfield runoff rate for the drained area. The exact outfall locations will be determined and agreed with IFI, and scour protection will be provided at the outfalls to minimise the risk of erosion. Existing ground levels will not be changed in areas in close proximity to Flood Zone A, so that there is no increase in flood risk as a result of the Proposed Development (refer to the site-specific FRA).
Chapter 09 – Air Quality		
No mitigation measures are proposed for the operational phase.		

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
Chapter 10 – Climate		
OP_09	Climate change adaptation and resilience measures	A number of mitigation measures in the operational phase were identified when undertaking the CCRA. Measures include: • A drainage maintenance and operation plan will be introduced so that the drainage system is monitored and kept free of blockages. • Where feasible, key areas will be surfaced with a permeable material to allow water to be absorbed into the ground and not gather on the surface. • Critical infrastructure will be raised above the PMF (probable maximum flood) level. • If applicable regular monitoring of trees and vegetation in the area must be undertaken, pruning as necessary to avoid damage to the Site, in the event of a storm with high wind speed. • Weather forecasts will be monitored, and an early warning system will be in place at the proposed development. This will allow for contingency plans to be put in place in advance of predicted extreme heat and cold events. • HVAC or air-conditioning systems will be provided, where required, for the substation building to prevent overheating of electrical equipment. • Where necessary and feasible, external shading devices will be used in preference to glazing solar coatings, allowing for sunlight to be absorbed in winter but reflected in summer. • High efficiency heating, ventilation and air conditioning (HVAC) systems and high efficacy lighting with occupancy and daylight control will be used where applicable, particularly around vulnerable equipment (e.g. substation).
Chapter 11 – Noise and Vibration		
No mitigation measures are proposed for the operational phase.		
OP_10	Acoustic design and operational noise management	The acoustic façade specification identified in Chapter 11 (Noise and Vibration) will be incorporated into the final design of the residential units: glazing with a sound insulation performance of Rw + Ctr 28 dB, together with standard hit-and-miss trickle ventilators, to achieve acceptable internal noise levels. The ESB substation transformer will be located within a glass reinforced plastic (GRP) enclosure providing a sound insulation performance of approximately 20 dB Rw. Where required, appropriate operational management measures for the GAA pitches will be developed and implemented in consultation with the relevant local authority to minimise potential noise effects.
Chapter 12 – Landscape & Visual		
OP_11	Vegetation retention and reinstatement	Following the completion of construction and continuing throughout the operational phase, a comprehensive programme of landscape and ecological enhancement will be implemented to restore areas temporarily affected by construction and to reinforce the Site's character. The principal mitigation is inherent in the high-quality architecture, design, and choice of materials, as set out in the Stage 2a Landscape Design Report accompanying the planning application. The landscape strategy includes: preservation and enhancement of the riparian corridor; protection and management of existing woodland; integration of green fingers and local parks; provision of semi-private and private green spaces; enhanced permeability through green links; active recreation areas; integration of SuDS; and street tree planting and urban integration. The Woodland Edge forms a transitional landscape between the Proposed Development and the existing transition woodland, providing a sensitive interface between built form and the natural environment. A linear swale will be incorporated as part of the wider SuDS, providing both a functional drainage element and a strong visual edge to define the space, and a natural material palette will be used throughout, with meadow and grassland areas softening the interface and blending the development into the surrounding landscape. The Public Lighting Concept prepared for the Proposed Development will be implemented. Lighting will be concentrated principally along the proposed roads, pedestrian and cycle routes and within parking areas, rather than providing general illumination across the wider Site, using lower 4m columns along pedestrian and cycle routes, 6m columns within parking areas and 8m columns along the main roads. Low-wattage, warm-white 3000K LED luminaires with asymmetrical beam optics and no direct upward illumination will be used to minimise light spill, glare and sky glow towards neighbouring properties, existing trees and ecologically sensitive areas. The lighting will be dimmable, and lighting levels will be reduced between 23:00 and 06:00, subject to agreement with SDCC.

Reference	Relevant Topic	Mitigation Measures/ Environmental Commitments
Chapter 13 – Archaeology and Cultural Heritage		
No mitigation measures are proposed for the operational phase.		
Chapter 14 – Material Assets (Traffic)		
OP_12	Traffic management	Implement the Mobility Management Plan (MMP) prepared for the operational phase to promote the use of more sustainable modes of transport by residents of the Proposed Development**.**
Chapter 15 – Major Accidents & Disasters		
OP_13	Maintenance and inspection of infrastructure	Routine inspection, maintenance and repair of infrastructure, services and drainage systems will be undertaken throughout the operational life of the Proposed Development to minimise the risk of failure that could result in a major accident or disaster.
OP_14	Emergency response and incident management	In the event of incidents such as fire, flooding, utility outages or accidental damage to infrastructure, established emergency response procedures will be implemented by the relevant management entities, utility providers and emergency services. These procedures will assist in managing incidents effectively, reducing potential consequences and facilitating the timely restoration of affected services.
Chapter 16 – Material Assets (Utilities)		
OP_15	Maintenance of utility infrastructure	Routine inspection and maintenance of utility infrastructure will be undertaken in accordance with the requirements of the relevant service providers and applicable operational requirements. During maintenance works, emergency response controls will be implemented to avoid or reduce the risk of accidental damage to existing built services and utilities, and measures similar to those set out for the construction phase (refer to CON_34) will be followed.
Chapter 17 – Waste		
OP_16	Waste management	The OWMP will be implemented throughout the operational life of the Proposed Development. Waste will be segregated at source and managed in accordance with the waste hierarchy through dedicated facilities for refuse, recycling, food waste and bulky waste. Waste storage areas will be provided at the locations and to the layouts identified in the OWMP.