Appendix H: ES Mitigation Tables 17.1 and 17.2

Table 17.1: Summary of Mitigation & Monitoring Measures During the Works of the Development

Mitigation, Monitoring or Enhancement Measure	Effect being mitigated, monitored or enhanced	Possible Method of Implementation
Construction Environmental Management Plan (CEMP) A full CEMP will be subject to a Planning Condition. The full CEMP will consider the following mitigation measures. Control measures within the CEMP to minimise noise and would include but not limited to: Use of hoarding to the required height and density appropriate to the noise sensitivity of the Site; Use of modern, quiet and well maintained machinery such as electric powered plant, where possible and hoists should use the Variable Frequency Converter drive system; Vehicles and mechanical plant used for the works would be fitted with exhaust silencers, which would be maintained in good and efficient working order and operated in such a manner as to minimise noise emissions in accordance with the relevant EU / UK noise limits applicable to that equipment or no noisier than would be expected based the noise levels quoted in BS 5228. Plant should be properly maintained and operated in accordance with manufacturers' recommendations. Electrically powered plant would be preferred, where practicable, to mechanically powered alternatives; Avoidance of unnecessary noise (such as engines idling between operations, excessive revving or engines) by effective site management; Use of acoustic screens or enclosures where possible to reduce localised noise emissions around key plant;	 Adverse environmental effects during the Works from: Noise and Vibration from demolition and construction; Dust; Contaminated dust or surface run-off from stockpiles affecting offsite receptors; Handling and storage of potentially hazardous liquids on-Site; Drainage and Spill control; Construction Traffic including provision of a Construction Logistics Plan (see below); Site lighting during construction; Flood risk; Impact on potable water network; Impact on public sewerage network; Construction waste. 	Planning Condition

Effect being mitigated, monitored or enhanced

Possible Method of Implementation

- Establish noise and vibration target levels (a Section 61 agreement under the Control of Pollution Act 1974 (COPA)) to reduce noise and vibration to a minimum in accordance with best practicable means, as defined in Section 72 of COPA;
- Demolition works to have consideration to Demolition Code of Practice BS6187² (2011);
- Using low impact techniques where possible (demolition munchers);
- Off-site prefabrication or preparation of building elements where possible to reduce on-site works;
- Where required, monitoring of noise and vibration levels:
- Changing, where possible, methods and processes to keep noise and vibration levels low as reasonably practicable (e.g. dismantling rather than traditional demolition works where adjoining or immediately adjacent to buildings);
- Resilient mounting of plant/equipment where required to prevent vibration transfer into building structures.
- Acoustically disconnect adjoining buildings prior to demolition works where required (cutting structure to separate from sensitive receptor) to prevent vibration transfer during main works;
- Removal of obstructions at piling locations (old basements/foundation) prior to piling to reduce generated vibration levels, although coring through existing piles at urban locations is an accepted approach but may give rise to higher vibration levels;
- Use of broad-band audible alarms wherever practicable including reversing alarms and other equipment such as mobile elevated work platforms;
- Positioning and or screening plant as far away from residential property as physically possible;
- Works would be limited to the specified hours (08:00 and 18:00 Monday to Friday and 08:00 to 12:30 on Saturdays, excluding Public Holidays). Any works outside of these times will be agreed in advance; and
- Liaison with the occupants of adjacent properties most likely to be affected by noise or vibration from activities on the Site. The occupants should be informed of the nature of the works, proposed hours of work and anticipated duration prior to the commencement of activities.

Flood Risk and drainage measures include:

- Storage of any hazardous substances (including solids and liquids) within impermeable, bunded areas to remove the risk of migration to exposed groundwater;
- Drip trays will be provided to collect potential leaks from standing plant;
- A 'Pump and Sump' system will be in place to mitigate the groundwater flooding impact;

Effect being mitigated, monitored or enhanced

Possible Method of Implementation

- Measures such as reseeding of cleared land where appropriate as soon as practicable to minimise exposed land and reduce localised ponding of surface water, storage of construction plant/materials on hardstanding surfaces where possible to minimise silts and debris within surface water runoff, etc;
- Wheel wash facilities should be provided for vehicles moving to and from the Site to prevent unacceptable levels of silts and debris entering the surface water network.
- Requirements to ensure appropriate permits are obtained for any discharge and connection to public sewerage network.
- Requirements to ensure adequate water supply on the Site and therefore, the magnitude of impact on potable water network.
- Requirements to ensure appropriate consents/permits are obtained for any construction phase discharges of waste (including wastewater) and for any works near main river or watercourses.
- Measures to prevent on-site flooding due to surcharge of public sewerage network.
- Requirements to ensure appropriate consents/permits are obtained for any construction-phase discharges and permits obtained as necessary e.g. under the Environmental Permitting Regulations 2010 (as amended) including works near main river or watercourses.

Construction Logistics Plan (CLP)

A full CLP will be subject to a Planning Condition. The full CLP will consider the following specific transport mitigation measures, measures, as described in the **Outline Construction Logistics Plan (Appendix 6.1)**:

- Traffic Management Plan (TMP) to include:
 - Site Location and Boundaries
 - Site Travel Plan
 - Pedestrian Routes Access and Egress / Site routes and walkways
 - Vehicle Delivery and Access Routes
 - Phased Access Plans
 - Delivery/Collection Site rules and arrangements
 - Loading and Unloading
 - Horizontal and Vertical Distribution
 - Storage
 - Road closures/Traffic Restrictions or other arrangements

To minimise any adverse effects (such as noise and in relation to accidents and safety) as a result of the construction programme and construction traffic.

Planning Condition for a detailed CLP

Mitigation, Monitoring or Enhancement Measure	Effect being mitigated, monitored or enhanced	Possible Method of Implementation
 A Site Travel Plan (which may also be provided as a stand-alone document if required) will provide information on options for travel arrangements to site and will encourage sustainable travel. 		
Materials Management Plan (MMP) and Soils Resource Plan (SRP)	To prevent adverse effects on areas of soil to be protected	Planning Condition for a
Prior to commencement a SRP will be produced as part of the MMP to identify:	from construction activities	detailed CEMP
 Areas of the soil to be protected from earthworks and construction activities 		
 The areas and types of topsoil to be stripped, haul routes, stockpile locations 		
The methods for stripping, stockpiling, respreading, and ameliorating landscape soils		
On commencement, areas of soil to be protected from construction activities will be clearly marked as exclusion zones.		
Where possible soil removal will be undertaken during the spring and summer months of the year, providing a drier time of the year to undertake these works.		
After removal of the surface vegetation, any topsoil and subsoil will be excavated by the use of 360 degree excavators, removed and stored to the agreed location		
within the site in accordance with the SRP for future use.		
Traffic Management Plan (TMP)	Temporary disruption	Planning Condition for a
The TMP will form part of the detailed CLP and will include the following:	10 peacet ians, eyenete	detailed CLP
 A Site Travel Plan (TP) for site operatives and visitors; 	during the demolition and	
 Measures to encourage sustainable Transport during construction; 	construction works	
 Travel options and information of Construction Routes to site; 		
 Delivery Management and Controls of Estimate of construction vehicle numbers; and Loading/Off-loading 		
Excavation Waste	Effects on Human Health from	Planning Condition for a detailed CEMP
Contaminated soils would be loaded for transportation into	Transport of Waste	
transit. Further mitigation measures such as wheel washing		
heeting to prevent loose soil and dust from escaping during transit. Further mitigation measures such as wheel washing prior to vehicles leaving Site would also be implemented to prevent debris on roads. Ground Conditions	Effects to Controlled Waters	Planning
theeting to prevent loose soil and dust from escaping during transit. Further mitigation measures such as wheel washing prior to vehicles leaving Site would also be implemented to prevent debris on roads. Ground Conditions Anticipated measures for the minimisation of potential contamination of the underlying soils and controlled waters	from Accidental Spills and Leakages from New	
theeting to prevent loose soil and dust from escaping during transit. Further mitigation measures such as wheel washing prior to vehicles leaving Site would also be implemented to prevent debris on roads. Ground Conditions Anticipated measures for the minimisation of potential contamination of the underlying soils and controlled waters receptors are likely to include:	from Accidental Spills and	Condition for a
sheeting to prevent loose soil and dust from escaping during transit. Further mitigation measures such as wheel washing prior to vehicles leaving Site would also be implemented to prevent debris on roads. Ground Conditions Anticipated measures for the minimisation of potential contamination of the underlying soils and controlled waters	from Accidental Spills and Leakages from New	Condition for a

Mitigation, Monitoring or Enhancement Measure	Effect being mitigated, monitored or enhanced	Possible Method of Implementation
 Locating stockpiles of materials known or suspected as being contaminated, on hardstanding surfaces to prevent infiltration of mobile contaminants into the underlying soils; 		
Dust suppression measures; and		
Methods to avoid surface water ponding and		
collection and disposal of all on-Site run-off.		
Foundation Works Risk Assessment	Effect to Controlled Waters from	Planning
Depending on the type of piling methodology selected for use within the built development, there is a potential that preferential pathways could be created for the migration of contaminants from the made ground into the underlying bedrock aquifer. To mitigate this, a Foundation Works Risk Assessment would be prepared which would consider the most appropriate piling method for use at the Site, taking into consideration the prevailing ground conditions and the contaminant concentrations present. The piling method to be used at the Site would be confirmed following discussions with a specialist piling contractor and through consultation with the regulatory authorities; however, where feasible, the majority of the piling is likely to utilise a technique which brings potentially contaminated soils to surface, rather than displace them laterally or vertically.	Piled Foundations	Condition for a detailed CEMP
Landfill Capacity The Applicant is committed to exploring the potential to etain the estimated 4,200m³ of non-hazardous waste arising from the excavation into historic landfill, within the earthworks at the Site. If it is not possible to secure the relevant environmental permit for technical or programme reasons, the Applicant will seek on or off-Site treatment and / or recovery options rather than disposal to landfill. The Applicant will seek to minimise the volume of hazardous waste for disposal by undertaking more ground investigation in due course. For any remaining hazardous waste, the applicant will seek on or off-Site treatment and / or recovery options rather than disposal to landfill.	Effect to non-hazardous landfill capacity	Planning Condition for a detailed CEMP and SWMP
Ecological Mitigation and Enhancement Strategy An EMES would be produced and secured by condition. The EMES would set out those mitigation and enhancement measures to be implemented at the Site to ensure that Site clearance and construction activities are undertaken in accordance with environmental best practice and legislative requirements. The EMES will also set out the enhancement of retained, and provision of new, ecologically valuable habitats to provide net gain for biodiversity at the Site.	Protect and enhance ecologically valuable habitats on site	Planning Condition
Archaeological Investigation	Impacts to potential below	Planning

ground archaeological remains

Condition

Due to the potential for the survival of below ground, archaeological remains in discrete areas of the Site, it

Mitigation, Monitoring or Enhancement Measure	Effect being mitigated, monitored or enhanced	Possible Methor of Implementation
is recommended that a programme of archaeological evaluation is completed to confirm the presence, absence, date, value, extent and condition of any surviving archaeological remains. This programme of archaeological evaluation can be secured by way of a suitably-worded planning condition to be discharged prior to the start of any groundworks within the areas shown on Figure 15.3, ES Volume 2. The results of the evaluation would inform any programme of archaeological mitigation required. This could include targeted investigation prior to the commencement of construction and/or an archaeological watching brief during the construction works to ensure any remains disturbed would be preserved in record. For any remains of high or very high value, preservation in-situ should be considered through design, where practicable, to remove all impacts.		
Landscape and Visual Impacts - Compound	Impacts to views from nearby sensitive receptors.	Planning
On-site areas that are required during construction, for example site offices and storage of materials, would as far as possible, be located in visually inconspicuous areas making use of existing hoarding along the site boundaries as screening.		Condition
Landscape and Visual Impacts - Lighting Lighting of the construction works would be undertaken with due consideration for potential receptors. Lighting would only be installed where absolutely necessary and should be directional to avoid unnecessary light pollution.	Impacts to nearby sensitive receptors from temporary lighting during construction.	Planning Condition

Table 17.2: Summary of Mitigation & Monitoring Measures for the Complete and Operational Development

Mitigation, Monitoring or Enhancement Measure	Effect being mitigated, monitored or enhanced	Method of Implementation
Local Jobs and Skills The Applicant is committed to producing a best-in-class employment and skills programme, which would drastically improve the employment and skills offering of the Development. The guiding principles of which include: Engagement with a network of local schools – building awareness about the career opportunities in the industry; FE and HE educational programmes – create programmes with FE/HE institutions that are fit for purpose and delivered using the Marlow Film Studios Culture and Skills Academy; Marlow Film Studios Culture and Skills Academy – a facility dedicated to being accessible to host education and skill Development programmes, as well as serving the local community as space to develop career programmes and industry learning; Deliver pathways for the existing workforce – opportunities and pathways into film and TV, focusing on local priorities, hosting skills and training events, and supporting existing initiatives such as Trainee Finder and Film Forward; Cultural impact – engage and educate about the cultural impact and importance of the studio through access to events, services and facilities; and Environmental, social and governance – commitment to working with partners to deliver programmes to provide equal opportunities for all, and a commitment to high quality pastoral care at work.	Impact on local job and skills.	Onsite provision and/or \$106 / CIL contribution.
Noise and Vibration - Operational Fixed Plant & Building Services	Impact of noise and vibration from fixed plant and building	Planning Condition
Measures to control noise from fixed mechanical plant to the required level would be inherent in the detailed design of the development and may include: Procurement of 'quiet' non-tonal plant; Locate plant and air vents away from sensitive receptors; Acoustic enclosures; In-duct attenuators; Acoustic louvres; and	services to surrounding sensitive receptors.	

Isolation of plant from building structures.

Mitigation, Monitoring or Enhancement Measure	Effect being mitigated, monitored or enhanced	Method of Implementation
Noise and Vibration - Studio and Backlot Noise A noise management plan for the Backlot Area will be required, which should include: Limiting high-noise filming to daytime or evening hours only wherever practical. In particular gunfire and explosions should be avoided post 23:00. Communication lines to be provided to nearby residences advising of the type of activity and duration prior to the commencement of filming. Establishment of a clear complaints procedure. This will form part of the overall Backlot Management Plan.	Impacts of noise breakout from filming on the backlot area on to surrounding sensitive receptors.	Planning Condition
Landscape and Habitat Management Plan An Outline Landscape and Habitat Management Plan (LHMP) has been produced, with detailed LHMP secured via condition to safeguard the long-term ecological value of those habitats to be retained and created as part of the proposed Development. The LHMP shall be written in accordance with BS 42020:2013³ and developed alongside the detailed design of Site landscaping. The LEMP shall set out those management and maintenance prescriptions to be followed in order to ensure benefits for biodiversity in the long term. This will include provisions for waste / litter removal and the removal and control of the spread of invasive non-native species such as Japanese knotweed. The requirement for monitoring of habitats and species as necessary shall also be detailed.	To retain/enhance long- term ecological value of those habitats to be retained and created as part of the proposed Development	Planning Condition

 $^{^2\,\}mbox{BSI}$ (2011) BS6187:2011 Code of practice for full and partial demolition. BSI.

 $^{^3}$ BSI (2013): Biodiversity – Code of practice for planning and development. BS 42020:2013