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|  | **Environmental Risk Assessments** |  |

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| **FACILITY** |  | **RISK ASSESSMENT NO:** |  |
| **ACTIVITY** |  | **ASSESSMENT TEAM:** |  |
| **ASSESSMENT DATE:** | **REVIEW DATE**: | **ASSESSMENT APPROVAL**: |  |

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| **TASK** | **HAZARD** | **HAZARD EFFECT (CONSEQUENCE)** | **C** | **L** | **RISK** | **MITIGATED BY** | **C (Reduced Consequence)** | **L** | **REDUCED RISK (ALARP)** |
| Excavation Work | Soil erosion and sedimentation | Contamination of water sources | 4 | 4 | 16 | Use of sediment traps, silt fences, and proper drainage management. | 2 | 2 | 4 |
| Use of Machinery | Fuel/oil spill | Soil and water contamination | 4 | 3 | 12 | Regular maintenance of machinery, spill kits on-site, and training for workers. | 2 | 1 | 2 |
| Waste Disposal | Improper waste management | Environmental pollution | 5 | 3 | 15 | Segregation of waste, proper labeling, designated disposal areas, and periodic inspections. | 3 | 1 | 3 |
| Chemical Handling | Chemical spillage | Harm to aquatic life and ecosystems | 5 | 4 | 20 | Use of bunded storage areas, spill kits, and proper handling procedures. | 3 | 2 | 6 |
| Transportation of Materials | Dust emissions | Air pollution and health impact | 3 | 4 | 12 | Use of water spraying, covered transportation, and low-emission vehicles. | 2 | 2 | 4 |
| Construction Activities | Noise pollution | Disturbance to local wildlife | 3 | 3 | 9 | Use of noise barriers, restricted working hours, and quieter machinery. | 2 | 1 | 2 |
| Site Clearance | Habitat destruction | Loss of biodiversity | 5 | 4 | 20 | Pre-clearance surveys, relocation of species, and minimizing clearance areas. | 3 | 2 | 6 |
| Storage of Hazardous Material | Leakage or spillage | Soil and groundwater contamination | 5 | 4 | 20 | Secondary containment systems, routine checks, and emergency response plans. | 3 | 2 | 6 |
| Vehicle Movement | Collision with wildlife | Injury or death to animals | 4 | 3 | 12 | Speed restrictions, designated vehicle routes, and wildlife crossings. | 2 | 1 | 2 |
| Landscaping and Planting | Introduction of invasive species | Ecosystem imbalance | 4 | 3 | 12 | Use of native species and regular monitoring to identify and remove invasive species. | 2 | 1 | 2 |

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| **Criteria: Consequence ( C )**  **Negligible**- Immediate return to work  **Minor** - First aid and return to work.  **Moderate**- Medical treatment/ lost time  **Major**- Multiple injuries and RIDDOR reportable  **Fatal/Catastrophic-** Death, loss of  installation | **Criteria: Likelihood ( L )**  **Improbable**- So unlikely that it would not happen.  **Unlikely**- Remote chance of event  **Possible**- Inattention may cause an event to happen.  **Probable**- Highly likely without control.  **Certain**- Will happen without Intervention/control. | **Risk Calculator**  Risk level **R= CxL**  1-3 Acceptable  4-6 Moderate  8-12 Substantial  15-25 Intolerable | **Conclusions:**  Working on construction sites is a hazardous activity if the controls proposed are followed this environment can be successfully managed.  Overall risk: Very High - High - Medium **-** Low  Are risks reduced to ALARP (as low as reasonably practicable): **Yes .** |

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| Likelihood→  Consequence↓ | Improbable  1 | Unlikely  2 | Possible  3 | Probable  4 | Certain  5 |
| Negligible 1 | 1 | 2 | 3 | 4 | 5 |
| Minor 2 | 2 | 4 | 6 | 8 | 10 |
| Moderate 3 | 3 | 6 | 9 | 12 | 15 |
| Major 4 | 4 | 8 | 12 | 16 | 20 |
| Fatal/catastrophic 5 | 5 | 10 | 15 | 20 | 25 |

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| 1-3 | 4-6 | 8-12 | 15-25 |
| Low | Medium | High | Very High |