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| The following have been identified as significant environmental aspects for the site: | | | | **Site EMP A1 Plan (1)- Types and Locations of Environmental Protection Measures**  Project Name: Estate Name / Address – Stage XX  Date and Revision: | | | | |
| * Retained native vegetation * Retained trees and associated Tree Protection Zones * Open Space Reserves & public assets | * Aboriginal cultural heritage and other heritage sites * Waterways and waterbodies * Significant fauna (e.g. kangaroos, threatened species) | | |
| **These aspects shall be managed with the Environmental Protection Measures outlined on this plan.** | | | |
| Management | | | |
| **1. Responsibilities:**  Emergency Contacts 1: Full name (Foreman - Company) – Mobile phone #  2: Full name (Company) – Mobile phone #  3: Out of Hrs Full name (Company) – Mobile phone # | | **4. Staging of Works:**  All environmental protection devices to be installed prior to the commencement of works.  Maintain maximum soil surface cover and minimise the “footprint” of soil disturbance at any one time.  All rectifications to be addressed immediately of incident/report. | | PLAN HERE | | | | Plan Legend:[include and define all symbols used in plan] |
| Construction fencing:  - 1.8m high cyclone mesh fencing or similar  - Fitted with NO GO ZONE signage where shown  - Must not be breached, except where approved by Council or to implement approved kangaroo management plan |
| **2. Communication of EMP Requirements:**  All onsite personnel to be inducted into all requirements of this SEMP prior to undertaking any works or removing vegetation.  An amended version of this SEMP is to be submitted to City of Whittlesea Council’s Development Engineering Department to address any identified deficient aspects of this SEMP to protect significant environmental aspects.  SEMP must be displayed in visible location within site compound/office. | | **5. Informing Residents:**  All residents within XX metres of the development site to be advised by mail of the following, at least 48hrs prior to commencement of corresponding activities:   * Any required tree removal * Rock crushing * XXXX | |
| **3. Inspections and Maintenance:**  All environmental protection/sediment control devices to be inspected daily for functionality and compliance with this SEMP.  SEMP protection measures must be monitored at least once per week.  Sediment and Erosion Control measures to be inspected daily for functionality and compliance with SEMP. Immediate rectifications and repair of sediment control measure to occur.  Any defects in environmental protection devices to be rectified within 24hrs.  Incident management and processes must be clearly exhibited in site office. | | **6. Associated Documents:**  City of Whittlesea Planning Permit PXXXXXX  Contract (ref)  Arborist Report (ref)  Kangaroo Management Plan (ref)  Cultural Heritage Management Plan (ref)  EPA Publication XXXX | |
| Noise, Vibration and Lighting Risk: Significant/Med/Low | | | |
| Requirement: EPA Victoria and Council requirements must be adhered to in relation to the level of noise and working hours, to ensure that residents and other applicable neighbours to the site are not disturbed unreasonably. The generation of noise must be minimised.All noise from construction equipment (including warming up of plant) is prohibited before 7 am. | | | |
| **7. Working Hours:**  Mon-Fri: 7am to  Sat: 7am to  Before 9am Sat: NA  No equipment use within 35m of any residential premises boundaries.  Only the following equipment used between 35 and 200m from any residential premises boundaries: earthmoving machinery (eg graders or excavators); concrete trucks; self-propelled, single-drum vibrating rollers | | **8. Noise Minimisation Methods:**  Regular maintenance and inspection of machinery.  All machinery and vehicles used to be fitted with standard noise management equipment. | **9. Other:**  Site lighting must be designed and used to minimise impacts on surrounding land uses. |
| Dust Risk: Significant/Med/Low | | | |
| Requirement: Dust generation must be minimised to ensure there is no health risk or loss of amenity. | | | |
| **10. Minimising Dust Generation:**  20km/h speed limit to apply to the works area at all times.  Stripping of vegetation to be minimised and staged where possible.  Keep to approved truck/haulage route and maintain truck route.  Any activity involving the handling and moving of soil to be restricted on dry windy days. | | **12. Contingencies:**  Stop work if dust generated from works reaches neighbouring areas, sensitive receptors and if visibility is affected on adjoining roads or if dust on the work site is a risk to occupational health. | |
| **11. Dust Suppression:**  Control dust by spraying with water wherever required.  Maintain appropriate number of watercarts onsite and use as required to suppress dust generated from haul roads, earthworks and other activities.  Any hose used for water spraying to be fitted with a trigger nozzle.  Recycled water (refer to EPA guidelines for controls on usage) to be used for dust suppression.  Stabilise exposed soils prior to leaving works area at the end of each working day. | | **13. Other:**  If using a dust suppression product, ensure that the product will not have an impact on the environment. Provide a copy of the Safety Data Sheet (SDS). | |
| * **Erosion and Sediment Risk: Significant/Med/Low** | | | |
| **Requirement:** Erosion and sediment must be managed in accordance with current best practice environmental management practices, to prevent sediment-laden water from entering any drainage system or natural waterway. All water leaving or discharged from the works area is to meet EPA water quality requirements, including for turbidity, salinity, pH, temperature, dissolved oxygen and contaminants. | | | |
| **14. Drainage Management:**  Drainage lines must be naturalised as much as practical.  Storm drains inlet must be protected. Appropriate material or rock can be used to filter trash and debris.  Break up long slopes with sediment barriers or under drain or divert stormwater away from slopes.  Sheet runoff should be collected and diverted across a slope or around a soil disturbance. Catch drains can be used especially on erosion-resistant and non-dispersive soil.  All cut-off/catch/swale-drains to be designed and constructed as per prescriptions in this SEMP.  Must not drain water into any NO GO ZONEs or adjacent properties. | | 17. Sediment Traps:  Sediment run-off controls and drainage around all construction areas must be established prior to commencement of any building or works.  Sediment fencing (or other acceptable sediment control measures) must be installed downslope of disturbed areas.  All sediment control measures must be maintained and intact for the duration of the works (including reinstatement period) and inspected daily including prior to (and after) rain events.  All internal and external stormwater inlets subject to siltation or pollution from the works area must be protected throughout works using silt control measures prescribed in this SEMP.  Sediment fences require desilting when sediment has built up to 1/3 the height of the measure or when built up sediment is preventing the fence from working effectively. | |
| 18. Dewatering:  Method and Location XXX  - Water to be reused onsite (e.g. for dust suppression) as a preference to discharging.  - Water must not be discharged into any NO GO ZONEs or adjacent properties without prior written consent from City of Whittlesea Council’s Development Engineering Department and any affected landowners. | |
| **15. Soil Stabilisation:**  During Construction (Method):  Avoid clearing areas and minimize vegetation disturbance.  Stage soil work to minimize areas of exposure.  Grading, excavation and construction work must not proceed during periods of heavy rainfall.  Post Works (Method):  Battering is to be done in accordance with council specifications. Lots may be seeded if and where required | |
| 19. Vehicle and Road Management:  Site Access:  Where practical, only one access point to be used on site  Site access point must be maintained to avoid stripped/exposed earth onto sealed roads ie. fitted with mud removal devices eg. Rumble grid raised above ground level; Must be at least two full wheel rotations in length; Must be designed to cater for the weight of fully loaded vehicles; Must abut a firm, stable exit-road surface.  Cleaning Vehicles:  All vehicles, machinery and plant to be cleaned of rock and excessive mud prior to leaving site or accessing internal or external sealed roads. All cleaning to be carried out in designated bunded wash bay.  Street Cleaning:  All internal and external roads and gutters to be cleaned of any deposited rock, mud, silt, dirt and other debris from the works area prior to rain and as required.  Keep mud off road and on site as much as possible (Do not use water hose) | |
| **16. Stockpile Protection:**  Design and designate key stockpiling areas on site before work commence.  All stockpile to meet the following requirements:  - 3m maximum height with 2:1 Batters; 10m minimum setback from adjacent properties; 30m minimum setback from waterways (natural or man-made)  Revegetate all long-term stockpiles (in place more than 28days) within 14 days of establishment.  Divert stormwater away from stockpiles using a Flow Diversion Bank or Catch Drain.  Appropriate sediment control system must be located down-slope of stockpiles. | | Overview/inset: |
| 20. Other:  Extra sediment fencing and other sediment control measures must be stockpiled on site for emergency repairs.  Imported soils and aggregate must be free of weeds, debris and other pollutants as per current standards and guidelines. | |
| * **Waste Risk: Significant/Med/Low** | | | |
| **Requirement:** Litter and waste must be contained on site, before disposal in a responsible manner. Waste generation must be minimised. | | | |
| **21. Movement of Soil:** Off-site/ On Site/ N/A  Contaminant Status: XXX  All fill exported off site must be taken to a legal site of disposal in accordance with the approved Soil and Fill Recovery Plan. | | **23. Waste Storage and Disposal:**  Bins or covered skips to be located at site compound; of suitable capacity for requirements; lidded; emptied prior to being over-full. | |
| **22. Waste Minimisation Methods:**  Keep and reuse surplus material on other projects, where possible  Reduce usage of materials/reuse materials where possible – avoid, reduce, reuse, and recycle. | |
| **24. Other:**  Site must be kept free of litter - any visible litter on site must be collected daily. | |
| * Chemicals Risk: Significant/Med/Low | | | |
| Requirement: Storage and spill management practices must be implemented to ensure that no environmental damage can result from the escape or spillage of chemicals or fuels. | | | | Other Site Specific Issues | | | | |
| 25. Storage:  On site storage of chemicals to be minimised.  All chemicals on site to be stored under cover, on an impervious surface and within a suitable bund (e.g. drip tray). Any required storage of large chemical drums is to follow EPA guidelines. | | 27. Refuelling Procedure:  All refuelling only within appropriate bunded or portable sealed bunded area.  Minimize refuelling of vehicles on site, where possible, it should be done off site.  Undertaken away as far as practicable from waterways, drainage lines and other sensitive areas. | | * **Significant Flora/ Fauna** **Risk: Significant/Med/Low** | Archaeological/ Heritage Risk: Significant/Med/Low | 🞏 Risk: Significant/Med/Low | 🞏 Risk: Significant/Med/Low | |
| **Requirement:** All significant flora and fauna on and adjacent to the site must be protected. | Requirement: Places, sites and objects of archaeological or heritage significance must be protected. | **Include any other relevant planning permit condition requirements.**  Example: Outbreaks of any declared noxious weed and Weeds of National Significance must be controlled. |  | |
| **29. Yes/No. Details:**  All significant flora, fauna and habitat on or adjacent to the site must be protected and signed accordingly for all stages of work.  Include requirements from any approved Kangaroo Management Plans (KMPs) (Reference relevant KMP report numbers XXX).  Any vegetation removal must be in accordance with PSP. | **30. Yes/No. Details:**  Include requirements from any approved Cultural Heritage Management Plans (CHMPs) (Reference relevant CHMP report numbers).  Should any artefacts be uncovered during works immediately stop works, contact superintendent and follow relevant procedures (as per CHMP). |
| 26: Spill Management:  All onsite personnel to be trained in correct deployment and use of spill kits. Provided spill kits to be of sufficient type and capacity for onsite chemicals.  Any soil contaminated from a spill must be removed and disposed of at an appropriate EPA landfill licensed to receive the waste type. The extent of soil contamination must be assessed, classified and removed in accordance with relevant authority guidelines. | |
| 28. Other:  Contact relevant Regulatory Authority to notify of spill, as required.  Safety Data Sheets for all on site chemicals to be kept available in the site compound. | |

I have read this Environmental Management Plan and agree to undertake works and ensure sub-contractors undertake works in accordance with this plan. Developer Consultant Contractor

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| RISK ASSESSMENT CHECKLIST | | **Site EMP A1 Plan (2)- Risk Assessment** **and** **Designs of Environmental Protection Measures**  Project Name: Date and Revision: | | | |
| * **Noise** | |
| Issues:   * Nature of Noise Generating Works: * Potential Noise Receptors: * Proximity of Works to Noise Receptors: | Likelihood |
| Consequence |
| Environmental protection measures shall be constructed in accordance with the following designs.DESIGNS HERE | | | |
| Overall Risk |
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| * **Dust** | |
| Issues:   * Dust Sources: * Potential Dust Receptors: * Proximity of Works to Dust Receptors: * Extent of Exposed Earth and Duration of Time Exposed: * Wind Conditions: | Likelihood |
| Consequence |
| Overall Risk |
| * **Erosion and Sediment** | |
| Issues:   * Erosion and Sediment Sources: * Potential Erosion and Sediment Receptors: * Proximity of Works to Erosion and Sediment Receptors: * Extent of Exposed Earth and Duration of Time Exposed: * Soil Type and Erosivity: * Slope: * Site Drainage Regime: * Rainfall: * Vehicle Movements On and Off Site: | Likelihood |
| Consequence |
| Overall Risk |
| * **Waste** | |
| Issues:   * Nature of Waste to be Generated: * Presence of Waste On Site Prior to Work Commencement: * Quantity of Waste Anticipated: * Potential Waste Receptors: * Proximity to Potential Waste Receptors: | Likelihood |
| Consequence |
| Overall Risk |
| * **Chemicals** | |
| Issues:   * Types of Chemicals and Fuels Used and/or Stored On Site: * Quantities of Chemicals and Fuels Used and/or Stored On Site: * Potential Chemical Receptors: * Proximity to Potential Chemical Receptors: | Likelihood |
| Consequence |
| Overall Risk |
| * **Significant Flora/ Fauna** | |
| Issues:   * Types of Flora/ Fauna: * Vulnerability of Flora/ Fauna: * Proximity of Flora/Fauna to Works: * Work Activities Which May Threaten Flora/ Fauna: * Potential Impacts on Flora/ Fauna: | Likelihood |
| Consequence |
| Overall Risk |
| * **Archaeological/ Heritage** | |
| Issues:   * Traditional Landowners Consulted? Yes/ No * Survey or Assessment Conducted? Yes/ No/ Not Required * Probability of Encountering Archaeological/ Heritage Items During Works: * Types of Archaeological/ Heritage Items On Site: * Proximity of Archaeological/ Heritage Items to Works On Site: * Work Activities Which May Threaten Archaeological/ Heritage Items: * Potential Impacts on Archaeological/ Heritage Items: | Likelihood |
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