SITE EMP A1 PLAN (1) - TYPES AND LOCATIONS OF ENVIRONMENTAL PROTECTION MEASURES

Project Name:

Date and Revision: | **Locality and Melway Ref:**

The following have been identified as significant environmental aspects for the site:
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–

All Environmental aspects shall be managed with protection measures outlined on this plan.

Management

* 1. Responsibilities:

- Consulting Engineer:
- Civil Contractor :
- Emergency Contacts with mobile 1:
  2:

4. Staging of Works:

* 2. Communication of Site EMP Requirements:

- Induction of all persons working on site regarding requirements as set out on the EMP.
- EMP to be displayed in visible location within site compound, e.g. on walls of site sheds/office.

5. Informing Residents:

* 3. Inspections and Maintenance:

- Two inspections per week.
- Inspect prior to and after storm events and/or heavy rain.
- Maintain as required with all rectification to be addressed within 12 – hours of incident /report.

6. Associated documents:

Noise — 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.

* 7. Working hours:

7.00 am to 6.00 pm Mon–Fri
7.00 am to 1.00 pm Sat

* 8. Noise Minimization Methods:

- Maintain working hours
- Restrict use of noisy equipment and processes
- Follow EPA Noise Control Guidelines Publication 1254
- All vehicle movements to and from site to be during working hours

9. Other:

Dust — Risk: Significant/Med/Low

Requirement: Dust generation must be minimized to ensure there is no health risk or loss of amenity.

10. Minimising Dust Generation:

- Avoid stripping large areas when not required.
- Strip only where required and keep ground moist.

* 12. Contingencies:

- If high wind is expected while large areas of the site are stripped, water spray in order to establish a thick crust over un–vegetated land. Also monitor dryness of exposed earth.
- Should ground dry out significantly consider water spraying or cover area with mulch or matting.

Note: If a hose is used for water spraying, the hose is to be fitted with a large trigger nozel. Check water restrictions with local authority for guidelines.

11. Dust Suppression:

Use a water cart as conditions require.

13. Other

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, natural waterway or adjacent lands.

14. Drainage Management:

- Temporary silt control measures to be implemented as required
- All storm water runoff to be directed and dispersed through adequate sediment controls.

17. Sediment Traps (sediment retention devices):

- Pit lids must be fitted as soon as possible and use temporary pit lids in the mean time.
- Use silt fences, silt sausages, cut off drains and/or other silt control measures where necessary as given in this EMP plan and as required by the situation.

18. Dewatering:

- Supervise during dewatering.
- Site shall be graded to avoid unnecessary ponding.
- In the event water ponding occurs this water shall be pumped into a temporary sump pit and filtered through silt fences prior to discharge into drains. Sump pit to be located away from drain inlets, water courses as nominated by Site Engineer.

15. Soil Stabilisation

Before Construction:

- Determine locations for installation of silt curtains or other soil stabilisation measures to minimise erosion and sediment loses.

During Construction:

- Top soil and re–grass disturbed areas where possible.

Post Works:

- Top soil and re–grass disturbed areas
- Where required environmental control measures shall be inspected and maintained during maintenance period.

* 19. Vehicle and Road Management:

Site Access:

Cleaning Vehicles:

- All vehicles leaving the site must remove any excess sediments/clay collected on the vehicles whilst on site. Each operator must manually remove excess clay such that it minimises deposits on the road.

Street Cleaning:

- Roads are to be cleaned prior to rain/ storm events. Storm water pits along the established roadway, which are subject to sediment deposits, shall be either fitted with kerb inlet protectors or shall be fitted with (geofabric) filter material to capture sediments. Roads are to be inspected and any sediment deposited on these roads shall be fully removed

16. Stockpile Management:

- Locate stockpiles away from roads, water ways and drainage lines where possible
- Divert run–off away from stock piles where possible
- Minimise number of stockpiles
- Restrict height of stockpile to minimise wind erosion
- Install silt fences to prevent sediment run off
- Install cut off drains with earth bund on the up slope of the stock piles

Re–vegetation is encouraged when stock piles are not used for a long time

20. Other:

Waste — Risk: Significant/Med/Low

Requirement: Litter and waste must be contained onsite before disposal in a responsible manner. Waste generation must be minimised.

21. Movement of Soil: Off site/ On site/ N/A
Contaminant Status:

23. Waste Storage and Disposal:

- Lidded bins will be provided on site for general rubbish and emptied on a regular basis.
- A designated concrete wash out point will be provided for use by concrete trucks. This will be cleaned as required and waste disposed of appropriately to be arranged by contractor.

22. Waste Minimisation Methods:

- Separate recycle waste from general waste for recycling.
- Recycling bins to be clearly marked to avoid contamination of recyclable material.

24. Other:

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.

25. Storage:

- Minimise amounts of Chemicals/ hazardous substances kept on site and these need to be labelled and securely stored within the site compound.

27. Refuelling Procedure:

- Refuelling must be done away from drainage lines
- Fuel storage on site to be minimised
- Mobile refuelling truck to be used for major plant

26. Spill Management:

- Spill kits are to be kept on site and are used when required.

28. Other:

Please show the following items on this plan;

- Contour lines
- Drainage patterns (including pits, swale drains, outfall points and related assets)
- Proximity to sensitive areas (eg: waterways, native vegetation, residential housing)
- Locations of access point/haul roads, stock piles, site compound and cut/fill areas
- Locations of environmental protection measures
  - Around all affected drainage pits, open drains, culverts, etc.
  - Around sensitive areas
  - Around stock piles
- Any other identified site specific measures

Other Site Specific Issues

Significant Flora/Fauna — Risk: Significant/Med/Low

Requirement: All significant flora and fauna on and adjacent to the site must be protected.

29. Yes/No.
Details:

Archaeological/Heritage — Risk: Significant/Med/Low

Requirement: Places, sites and objects of archaeological or heritage significance must be protected.

30. Yes/No.
Details:

Risk: Significant/Med/Low

31.

Risk: Significant/Med/Low

32.

I have read this Site Environmental Management Plan and agree to undertake works and ensure that subcontractors undertake works in accordance with this plan.

Developer _____

Consultant _____

Contractor _____

RISK ASSESSMENT CHECKLIST

Noise

Issues:

- Nature of noise generating works:
- Potential noise receptors:
- Proximity of works to noise receptors:
-
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Likelihood

Consequence

Overall Risk

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:
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-

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 waste receptors:
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Likelihood

Consequence

Overall Risk

Chemicals

Issues:

- Types of chemicals (inc. fuels) to be stored/used on site:
- Quantities of chemicals (inc. fuels) to be used on site:
- Potential chemical receptors:
- Proximity to chemical receptors:
-
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Likelihood

Consequence

Overall Risk

Flora/Fauna

Issues:

- Types of flora/fauna:
- Vulnerability of flora/fauna:
- Proximity of works to flora/fauna:
- Work activities which may threaten flora/fauna:
- Potential impacts on flora/fauna:
-
-

Likelihood

Consequence

Overall Risk

Archaeological/Heritage

Issues:

- Traditional land owners 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:
- Work activities which may threaten archaeological/heritage items:
- Potential impacts on archaeological/heritage items:
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Likelihood

Consequence

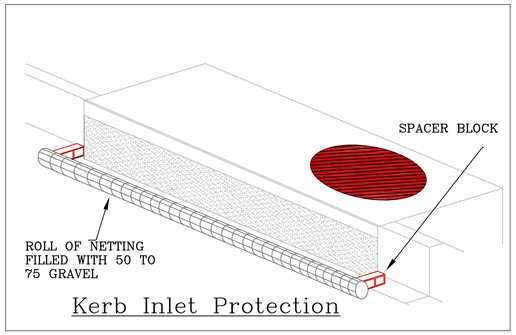
Overall Risk

SITE EMP A1 PLAN (2) - TYPES AND LOCATIONS OF ENVIRONMENTAL PROTECTION MEASURES

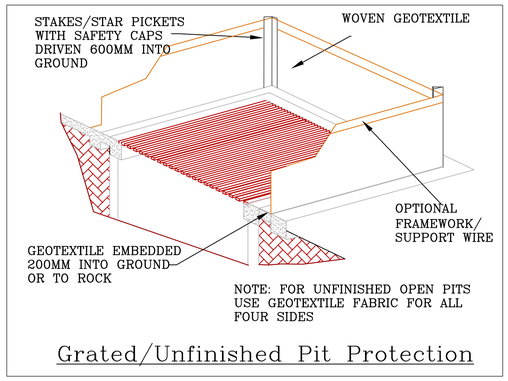
Project Name:

Date and Revision:

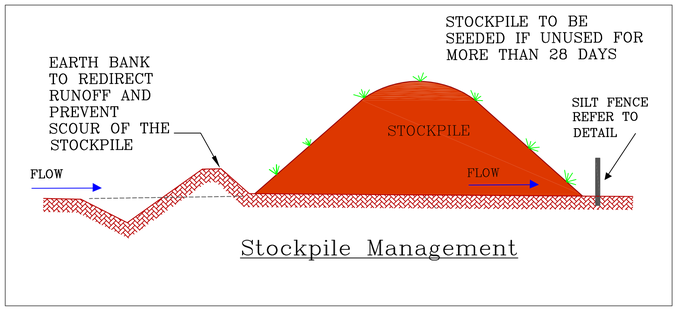
Environmental protection measures shall be constructed in accordance with the following designs and Typical Site Compound details.



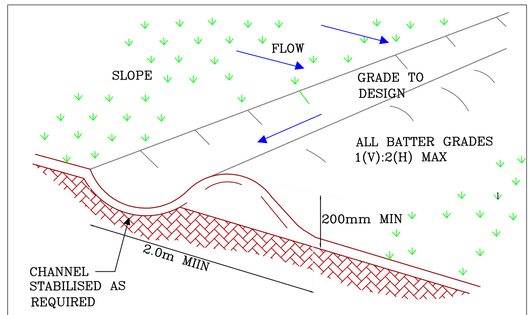
Kerb Inlet Protection



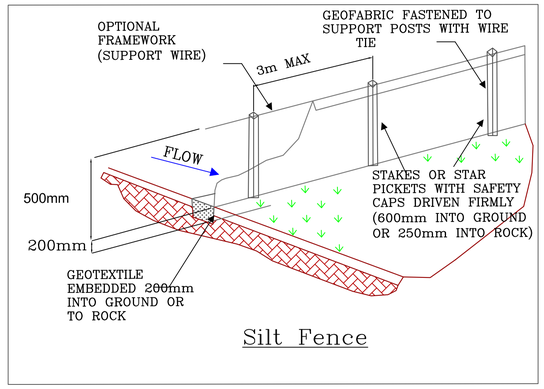
Grated/Unfinished Pit Protection



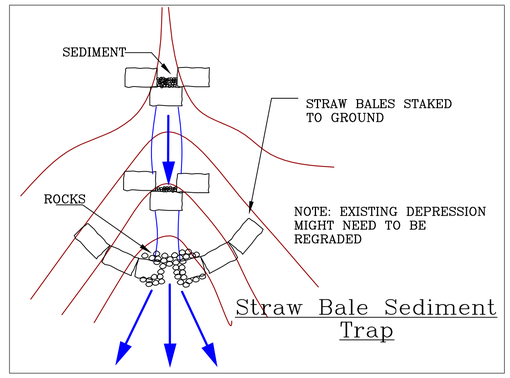
Stockpile Management



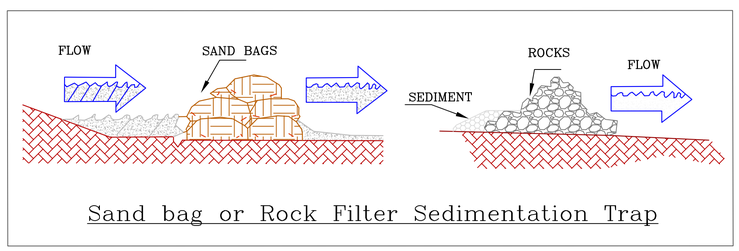
Low Flow Earthbanks



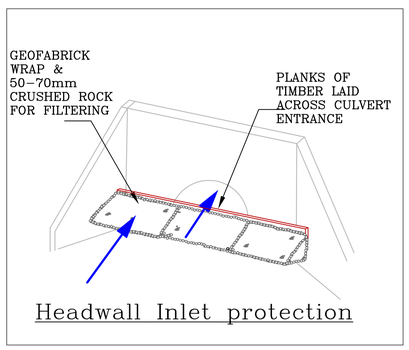
Silt Fence



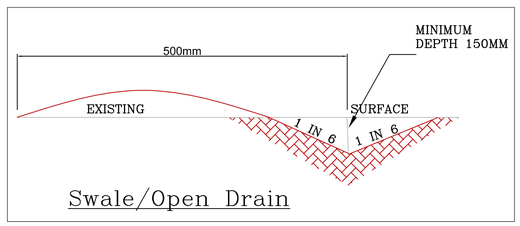
Straw Bale Sediment Trap



Sand bag or Rock Filter Sedimentation Trap



Headwall Inlet protection



Swale/Open Drain

NOTES

1. THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION INCLUDING THE MAINTENANCE PERIOD.
2. ALL SEDIMENT CONTROL DEVICES SHALL BE MONITORED CLEANED AS REQUIRED.

Issues:

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-
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Likelihood

Consequence

Overall Risk

Issues:

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-
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-
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Likelihood

Consequence

Overall Risk