1.0 PURPOSE

To minimise the impact of Lipman's project activities by implementing effective runoff and erosion control measures to avert soil degradation and downstream sedimentation and pollution.

2.0 SCOPE

This procedure is applicable to all work carried out by Lipman and its subcontractors.

Refer to Procedure 16 – "Water Management" for the collection, treatment and discharge of water from site.

3.0 DEFINITIONS

DA – Development Application or Consent.

EIS - Environmental Impact Study

EMP – Environmental Management Plan

Suspended Sediments - the mass of filterable solid matter suspended in a volume of fluid.

4.0 PROCEDURE

4.1 PLANNING

4.1.1 Prior to commencement of construction work, the Project Manager will conduct a review of the construction site and planned activities to identify the potential for erosion and sediment run off. Site characteristics such as location of drains, land contours, potential sources for entering

4.1.2 Identified activities and the appropriate erosion mitigation and sediment controls will be documented, reviewed and maintained on the Project Risk Assessment. Refer to Procedure 3 – "Project Planning". The risk assessment will be reviewed at each construction stage to ensure the hazards are current and controls remain suitable.

4.1.3 Control measures will be appropriate to the risk and take into account:

- Contract requirements,
- DA Conditions (EIS or EMP), and
- Other legal and statutory requirements.

4.1.4 The Project Manager will implement the controls and ensure compliance to this procedure through the Project Plan.

4.1.5 The Site Manager will be responsible for monitoring and verifying compliance to the requirements of this procedure and the Project Plan.

4.2 OPERATIONAL CONTROLS

4.2.1 To assist with identifying the most appropriate controls, the following table of activities/hazards and possible controls are provided as a guide.

Activities/Hazards	Possible Controls
Site establishment	• Construct diversion drains around the perimeter of the cleared areas to collect run-off in a bund or holding area/dam, and also to prevent overland flows from entering disturbed/cleared areas. • Divert runoff from upslope away from the site, but ensure the water will not flood neighbours. • Install silt fences, straw bales, gravel filled socks along contours, above and downstream of exposed areas, nearby watercourses and stormwater drains. • Spray earthworks, batters and other exposed areas with water (fine mist) on dry windy days to minimise dust and soil erosion. • Whenever possible, rehabilitate exposed earth with vegetation,

	mulch or re-seal surfaces after completion of earthworks. • Construct and maintain settling ponds as required.
Movement of Plant, Vehicles and Machinery	• Limit vehicular access to one entry and exit point if possible. • Lay recycled road base and geotextile material to stabilise any exposed earth from water or wind erosion. • Minimise movement of vehicle during wet or windy conditions.
Building work	• Connect down pipes from guttering into stormwater drains as soon as the roof is installed. • Build a pit/dam below the area used for cutting tiles, concrete and bricks.
Clearing	• Preserve grassed areas and vegetation for as long as possible, • Leave or lay a strip of turf kerbside (on nature strip) to slow the speed of water flow and trap sediment. • Limited to approved areas, site facilities (i.e. offices, stores, amenities) and access routes.
Stockpiles (Soils)	• Locate away from watercourses and stormwater entry pits, drainage lines and from roads. Do not place it around trees. • Protect with diversion drains and/or silt fences and impervious covers (if required).

4.2.2 Wherever possible, erosion and sediment control works must be put in place before starting earthworks and must be carried out in accordance with the relevant Erosion and Sediment Control plans.

4.2.3 Permanent erosion control work (e.g. landscaping, paving etc) should be carried out as soon as practicable.

5.0 MONITORING & REPORTING

5.1.1 Hazard inspections will be conducted periodically in accordance with Procedure 4 – "Performance Reporting", to ensure the control measures are in place and are effective.

5.1.2 The drains and silt traps will also be inspected after heavy rainfall events, to confirm integrity and correct functioning of all elements.

5.1.3 Results of inspections will be documented on Hazard Inspection Sheet and actions taken to address any issues found in a timely manner.

Incidents and/or complaints will be reported and actions as outlined in the Project Plan and Procedure 18 – "Incident Management".

6.0 REFERENCES

Procedure 3 – "Project Planning"

Procedure 4 – "Performance Reporting"

Procedure 16 – "Water Management"

Procedure 18 – "Incident Management"

DECC Managing Urban Stormwater - Soils and Construction