

## SOIL AND WATER MANAGEMENT NOTES

- IT HAS BEEN ASSUMED THAT SEDIMENT FENCING WILL BE PROVIDED TO THE STAGE BOUNDARY SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING SITE (EXCEPT IN THE CASE OF ENTRY/EXIT LOCATIONS WHERE TEMPORARY CONSTRUCTION ENTRY/EXIT SEDIMENT TRAP ARE PROVIDED). IF THIS IS NOT THE CASE, PROVIDE SEDIMENT FENCE TO STANDARD DETAIL BELOW AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING SITE, DIRECT RUNOFF TO SEDIMENT BASIN.
- ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK".
- CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO BE PARALLEL TO THE CONTOURS OF THE SITE BUT WITH SMALL RETURNS TO LIMIT THE CATCHMENT OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50L/S IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.

### SEDIMENT CONTROL CONDITIONS

- SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES AS NEAR AS POSSIBLE TO THEIR SOURCE.
- SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
- STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARD AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
- WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
- TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.

### SITE INSPECTION & MAINTENANCE CONDITIONS

THE SITE MANAGER WILL INSPECT THE SITE AT LEAST WEEKLY AND WILL:

- ENSURE THAT DRAINS OPERATE PROPERLY & TO EFFECT ANY NECESSARY REPAIRS
- REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5m FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS & PAVED AREAS.
- REMOVE TRAPPED SEDIMENT WHENEVER LESS THAN DESIGN CAPACITY REMAINS WITHIN THE STRUCTURE
- ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS APPROPRIATE.
- CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS.
- MAINTAIN EROSION & SEDIMENT CONTROL MEASURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
- REMOVE TEMPORARY SOIL CONSERVATION STRUCTURES AS THE LAST ACTIVITY IN THE REHABILITATION PROGRAM.

AS PART OF THE STATUTORY 'DILIGENCE OF CARE' RESPONSIBILITIES, THE SITE MANAGER WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:

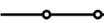
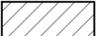
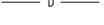
- THE VOLUME & INTENSITY OF ANY RAINFALL EVENTS
- THE CONDITION OF ANY SOIL & WATER MANAGEMENT WORKS
- THE CONDITION OF VEGETATION & ANY NEED TO IRRIGATE
- THE NEED FOR DUST PREVENTION STRATEGIES
- ANY REMEDIAL WORKS TO BE UNDERTAKEN

THE BOOK WILL BE KEPT ONSITE & MADE AVAILABLE TO ANY AUTHORISED PERSON ON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF WORKS.

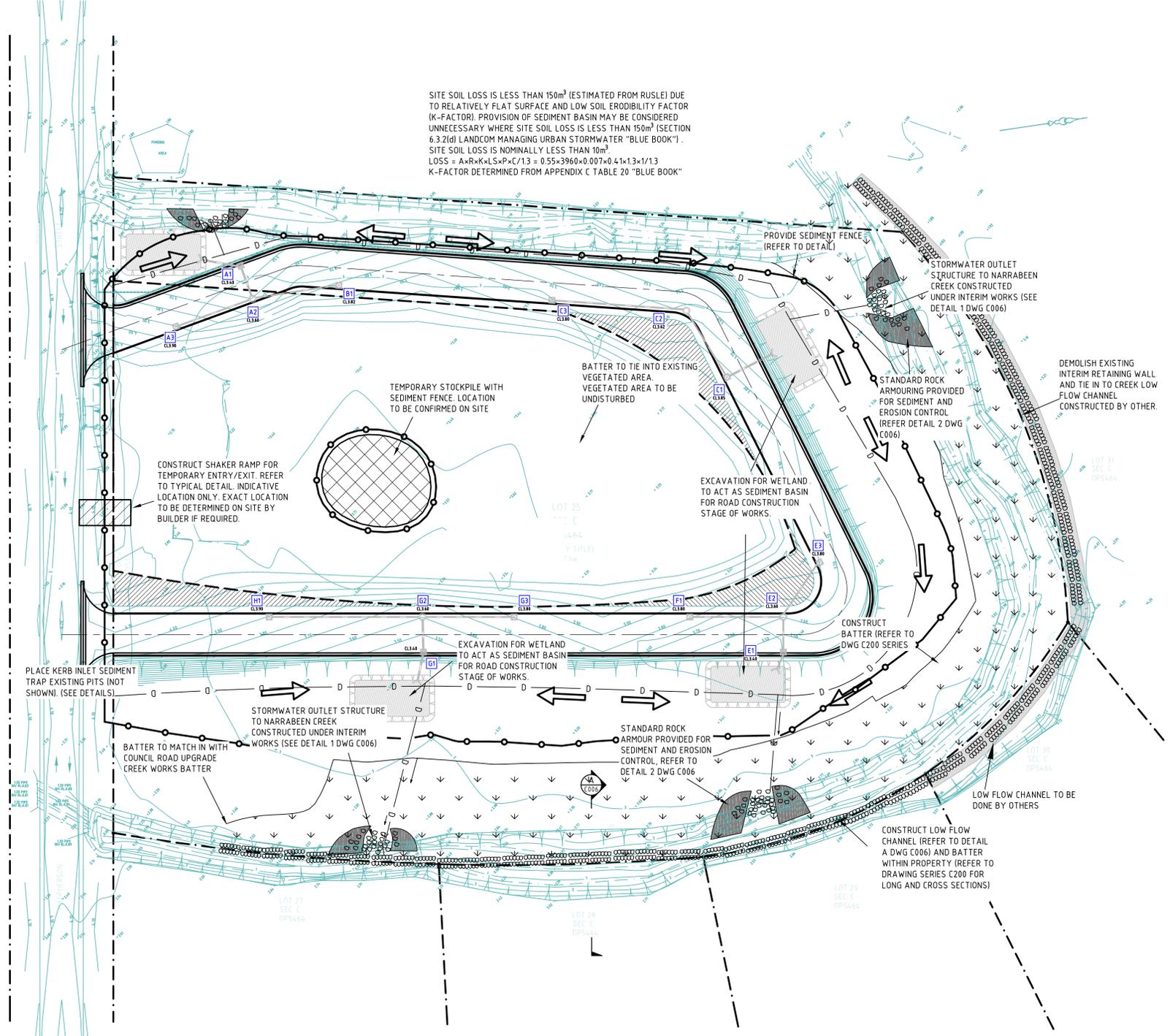
### TREE PROTECTION

REFER TO "ARBORICULTURAL ASSESSMENT REPORT" PREPARED BY TALC TREE AND LANDSCAPE CONSULTANTS DATED 6 NOVEMBER 2014 FOR THE EXTENT OF TREES PROTECTION ZONE AND THE PROTECTION MEASURES REQUIRED.

## SOIL AND WATER MANAGEMENT LEGEND

-  SEDIMENT FENCE
-  TEMPORARY SHAKER RAMP FOR ENTRY/EXIT
-  STANDARD ARMOUR (REFER TO DETAIL 2 DWG C006)
-  TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
-  OVERLAND FLOW
-  EARTH DRAIN (SEE DETAIL 3 DWG C006)

SITE SOIL LOSS IS LESS THAN 150m<sup>3</sup> (ESTIMATED FROM RUSLE) DUE TO RELATIVELY FLAT SURFACE AND LOW SOIL ERODIBILITY FACTOR (K-FACTOR). PROVISION OF SEDIMENT BASIN MAY BE CONSIDERED UNNECESSARY WHERE SITE SOIL LOSS IS LESS THAN 150m<sup>3</sup> (SECTION 6.3.2(d) LANDCOM MANAGING URBAN STORMWATER "BLUE BOOK"). SITE SOIL LOSS IS NOMINALLY LESS THAN 10m<sup>3</sup>.  
 $LOSS = A \times R \times K \times L \times S \times P \times C / 13 = 0.55 \times 3960 \times 0.007 \times 0.4 \times 1.3 \times 1 / 13$   
 K-FACTOR DETERMINED FROM APPENDIX C TABLE 20 "BLUE BOOK"



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Rev	Description	Date	By	App
P1	DEVELOPMENT APPLICATION	15.08.17	JH	-

Rev	Description	Date	By	App

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Project Name  
**2 MACPHERSON STREET  
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Drawing Title  
**SOIL AND WATER MANAGEMENT  
 PLAN**

**DEVELOPMENT APPLICATION**

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