Barings – Access Estate
BURTONS Contractors

Erosion and Sediment Inspection Report
Inspection Date: 03 March 2025

Attendees:
- Bradley Cole
- Mustafa Ak

CPESC Auditor: Bradley Cole (CPESC #7645)
Signature:

Instructions:
- Where an item is not applicable, N/A is to be placed in the comments box.
- Where a non-conformance is identified, a brief explanation is to be provided in the comments box.
- The completed checklist and details of any corrective are to be provided to the Environment Manager for action and rectification timeframes agreed.

⊗ **Project ESCP cited**

Requirement / Aspect	Yes/ No (Y/N)	Comment
General		
Were previous audit actions closed out in agreed timeframes?	Y	No outstanding actions from the previous February site inspections remain open.
Has an approved ESCP been prepared for the work area?	Y	ESCP for the development has been prepared and implemented. Minor updates for progress of works are being undertaken with progression of works and in response to recent rainfall events.
Are construction permits and approvals in place?	Y	Works are undertaken in accordance with approval.
Are basin / discharge records recorded and available?	Y	Basins are constructed with water retained from recent rainfall events. The basin adjacent to the access roadway has been increased in capacity in response to over-topping in recent events.
Are internal / self-assessments being undertaken and documented?	Y	Burtons Contractors personnel undertake internal assessments.
Are weather records / monitoring being undertaken and recorded?	Y	Site weather records are maintained from local weather station (Horsley Park AWS).
Is the relevant monitoring being undertaken?	Y	Site monitoring in accordance with the CEMP is being undertaken.
Is the site generally tidy and well organised?	Y	Minimal waste / rubbish was observed on the site. The works are focused on the Lot 2 earthworks. Demolition of the former residence is completed.
Is disturbance being minimised?	Y	The site is established under the current works staging with the undertaking of earthworks on Lot 2. ESC elements are installed and operating effectively. The western portion of the site remains unimpacted at this stage of works.

Requirement / Aspect	Yes/ No (Y/N)	Comment
Is all work (including storage and stockpiling) within the identified project boundary?	Y	All works are contained within the Project boundary.
Erosion and Sediment Controls		
Are measures installed as per ESCP?	Y	The site has controls implemented as per the ESCP.
Are measures installed correctly (i.e. sizing, effective)?	Y	Controls are implemented to accommodate site conditions. The basin adjacent to the access roadway has been increased in capacity in response to over-topping in recent events.
Are entry / exit controls in place and effective?	Y	Site entry is stable with aggregate entry and access road from the Mirvac road side. The access road is chip sealed and has a shaker grid at the crest.
Are offsite water diversions in place?	Y	The site is largely bound by external drainage swales / berms for the management of offsite water as per the ESCP.
Are drains functional (unblocked, connected)?	Y	Drains were in place and effective.
Are controls maintained (i.e. sediment accumulation, wear and tear, consistent with work progression)?	Y	Controls are established and maintained.
Is sediment fence installed correctly and intact?	Y	Sediment fence installation is trenched in an effective.
Are traps installed appropriately and maintained (i.e. free of sediment accumulation)?	Y	Check controls are installed along the internal drainage areas for sediment traps.
Is dirty water collected in appropriate locations for management?	Y	Water from recent rainfall events is contained in site sediment basins and detention ponds / former farm dams. Water is to be transferred to the sediment basin for management / treatment as capacity allows.
Basins		
Are basins installed as per ESCP?	Y	Basins are installed for active work areas with additional retention areas for the former dam locations.
Are appropriate identification / markers present at basin locations?	N/A	No markers in basins. Type B basins implemented
Are basins walls and inlets stable and operational?	Y	Basin walls are stable and fabric covered.
Are spillways stable and operational?	Y	Basins are operational and constructed as Type B basin in accordance with the standard design
Do basins currently hold water?	Y	Basins currently hold water from transfer events. Basins are being actively managed and reviewed for operation.
Has rainfall occurred in past 5 days? (10 days for operational sediment basin)	Y	3.2 mm of rainfall has occurred in the preceding 5 days – (Horsley Park AWS)
Has any overflow occurred?	N	No basin overflow has occurred from Basins on the site between this and the previous inspection. Basin AB2 is holding some water following rainfall in the latter part of February, as the Project team transfers and manages site water.

Requirement / Aspect	Yes/ No (Y/N)	Comment
Has water been treated/tested?	Y	Basin auto dosing units are in place and operating. A water sampling activity was undertaken to review the treatment process and flocculation efficiency. This is summarized below.
Are sediment levels below 60% of allowable levels?	Y	Basins are constructed and have retained sediment in the forebay as per the basin design. Floc stations are operational.
Has sediment removal occurred? And has sediment been appropriately managed?	N	Basins are constructed and sediment removal has not been undertaken this month.

GENERAL SITE CONDITION NOTE

The ESC inspection undertaken on the Barings Access Estate Site reviewed the progression of earthworks associated with Lot 2 and the maintenance of erosion and sediment controls under the occupation of Burtons Contractors for the month of March.

A review of all site activity including the implementation of catch drains, earthworks activities associated with the Lot 2 area and the operation of the AB2 basin. A review of the access areas and the current, and proposed erosion and sediment controls were assessed for effective operation and planning. The inspection observed the implementation of the initial bio basin areas at the western boundary which would be likely to operate as an additional retention area in a rainfall event increasing retention capacity of the site.

The review of access to the site has observed recent improvements and noted the effectiveness of the updated controls. These include the application of the chip seal and the implementation of diversion berms and increase to the capacity of the retention pond adjacent to the access way.

Dust and water management on site are performing well with minimal visible dust observed from heavy vehicle movements and the water cart in operation. Loal drainage swales are installed with check controls for water transfer and are working effectively in the transfer of site water.

Earthworks for Lot 2 have increased elevations which are approaching design levels, with runoff directed to Basin AB2 via berm and drain controls.

The site has the capacity to retain water in depression and basins performing above design requirements for future events. Water from these areas is to be transferred to Basin AB2 once dewatering allows capacity.

The site is very tidy and organized and is well presented with designated access routes and signage. Controls are maintained and appear effective. The site is forecasting the continuation of earthworks for Lot 2 and progression of site activity to design and the construction of the bio basin areas along the Mamre Road frontage.

The installed controls are working well for effective sedimentation control with minor alterations proposed for the progression of fill activities.

Water treatment assessment:

Based on the initial assessment of site water I note the following:

- 4 products were tested for settlement rate of the material
- The hybrid coagulant / flocculant product (such as Turbiclear Extra) was the best performing product. It is noted that this is the product utilised on the site.
- It is noted that gypsum performed well in the settlement of suspended material, and it is recommended that the drainage lines are pre dosed with gypsum to assist in the treatment of runoff on the site.
- The dosage rate applied was consistent with the previous preconstruction assessments and it is noted that during recent rainfall events the velocity of the flow received on the site Is likely to have led to ineffective settlement time in the forebay.
- Based on the site water assessment, the rate applied to the site (100PPM) is considered adequate for the standard rainfall event.
- During pumping / transfer of water from depressions on the site, a review of the constant dosage rate can be made being
    - V=L/s x 0.0036 x PPM

The following corrective actions have been identified during the inspection. Actions are to be closed out in the agreed timeframe and evidence documenting the close out of the actions provided to the auditor for verification.

Timeframe reference: L – Low (7 days), M – Medium (3 days), H – High (1 day), I – Immediate

Action (Observation / Recommendation)	Photo	Timeframe (L,M,H,I)	Responsibility	Close out Comment
OB-001 Observation The commencement of the boxout for the roadway has been undertaken reducing potential for water to exit the site in the southern portion of the site. Runoff is directed to the AB2 Basin.		N/A		
OB-002 Observation The former residential household has been demolished and waste removed.		N/A		

Action (Observation / Recommendation)	Photo	Timeframe (L,M,H,I)	Responsibility	Close out Comment
OB-003 Observation Earthworks for Lot 2 are progressing with elevations approaching final landform design levels.		N/A		
OB-004 Observation The site has established a series of internal berm controls to direct water to the treatment basin locations and to limit impacts to the fill / placement areas .		N/A		

Action (Observation / Recommendation)	Photo	Timeframe (L,M,H,I)	Responsibility	Close out Comment
OB-005 Observation Topsoil processing is being undertaken in the north western portion of the site. This activity is due to finish in the coming weeks.		N/A		
OB-006 Observation The commencement of the bio basin along the frontage to Mamre Road has increased the potential water holding capacity for the site.		N/A		

Action (Observation / Recommendation)	Photo	Timeframe (L,M,H,I)	Responsibility	Close out Comment
OB-007 Observation The access is stable and has implemented chip seal and additional berm type controls. Batters are protected with geofabric.		N/A		
OB-008 Observation The retention pond adjacent to the access road has been altered with the northern wall height increased allowing for greater retention capacity of site water.		N/A		

The below section is to be completed by the Environment Manger / Site Construction Manager following completion of the identified actions.

I certify that all identified actions have been addressed and closed out in the agreed timeframe as documented above.

Name:	
Signature:	
Date:	