

7 February 2024

Ref:201209-ER_DPHI-January 2024

[REDACTED]
[REDACTED]
Department of Planning, Housing and Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Dear [REDACTED]

RE: Sydney Metro - Sydney Metro Western Sydney Airport SSI 10051 – ER Monthly Report for January 2024

Healthy Buildings International (HBI) submits this report to the Secretary in accordance with:

- Condition A32 (k) of the Sydney Metro Western Sydney Airport, SSI 10051 Approval (23 July 2021)

The attached summary details the key activities undertaken by Environmental Representatives for Sydney Metro Western Sydney Airport for the month of January 2024.

Yours sincerely

[REDACTED]
Environmental Representative

Cc:

Sydney Metro: [REDACTED]
[REDACTED]

DHI: Major Projects Portal



Enclosed: NIL



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1. Advanced and Enabling Works (AEW)

Contract Package	Environmental Representative/s
Advanced and Enabling Works (AEW)	[REDACTED]
Key Construction Activities During the Period	
<ul style="list-style-type: none"> ▪ St Marys Footbridge (FSM): <ul style="list-style-type: none"> ○ Spoil removal from the rail corridor via Hobart St ○ Developing methodology to repair the damaged internal road ○ Storage of materials in the site compound 	
Key Construction Activities Look Ahead	
<p>The Construction activities planned for the upcoming period for the Advanced Enabling Works (AEW) comprise of:</p> <ul style="list-style-type: none"> ▪ St Marys Footbridge: <ul style="list-style-type: none"> ○ Continuation of piling works ○ Service investigations ○ Planning for weekend 38 works 	
ER Inspections	
<p>There was one (1) inspection of the St Marys Station Footbridge contract undertaken by [REDACTED] in January 2024 (ER inspections are on a fortnightly cycle weather and health permitting).</p> <p>St Marys Footbridge</p> <ul style="list-style-type: none"> ▪ 18/01/2024 - Key points/ issues raised during this inspection were as follows: <ul style="list-style-type: none"> ○ The project held up well over the Christmas break with all controls intact and working as designed ○ The spoil loadout from Hobart St is being done with diligence and no environmental issues ○ Update to the CEMP, including the water reuse strategy, is required by the end of January 2024 	
Photos	
St Marys Footbridge	
	
<p>Compound – ERSED controls have held up well and were effective over the Christmas break</p>	<p>Compound – The ballast entry/exit area is clean and well maintained</p>



Compound – Retained material at the compound has been wrapped in geofabric



Compound – Spill kits are available and fully stocked in the compound



Hobart St – The westerly stockpile along Hobart St has been removed



Hobart St – A street sweeper is onsite and follows the existing spoil truck

Endorsed Document/s

The following documents were endorsed/approved by the ER [REDACTED]

- None for the period

The following documents were provided for information or reviewed with comments provided to Sydney Metro.

- FSM Water Reuse Strategy (for construction) Version 2

Complaints / Incidents / Non-compliance

No non-compliances or incidents were reported to or identified by the ER for the period.

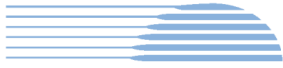
No complaints were received during the period.

Audits (specific to packages reported in this report)

- None for the period

Looking Forward – Core Focus Areas

The site performed well over the Christmas break. The focus for the team now is planning for weekend 38 (16 and 17 March 2024) possession. The ER has requested to be involved in all planning meetings and to date this has occurred. TfNSW will take on the onsite surveillance role, while Sydney Metro will be



focussed on compliance and involvement should issues occur that require changes to the design or methodology.

ER Closing Comments:

In preparation for weekend 38 possession, the contractor has undertaken noise modelling for the works. The impact is predicted to be minimal, however the ER is requiring the contractor to undertake monitoring to verify this prediction. The contractor has nominated a new environment manager and so far this individual is being proactive and taking all ER comments on board.



2. Station Boxes and Tunnelling (SBT)

Contract Package	Environmental Representative/s
Station Boxes and Tunnelling (SBT)	[REDACTED]
Key Construction Activities During the Period	
<ul style="list-style-type: none"> ▪ St Marys: <ul style="list-style-type: none"> ○ No SBT activities this period ▪ Claremont Meadows Services Facility: <ul style="list-style-type: none"> ○ Water treatment plant operating. ○ Sediment basins operational. ○ Upgrade and refresh erosion and sediment controls ○ Storage of surplus construction materials from other northern sites ○ Casting of TBM and installation of support blocks for traverse. ○ TBM Marlene breakthrough and traverse of both TBMs complete. ▪ Orchard Hills: <ul style="list-style-type: none"> ○ Reconfiguration and improvements (concreting) of internal haul roads. ○ Spoil and topsoil storage. ○ Operation and maintenance of ERSED controls. ○ Pre-cast tunnel segment storage in the north. ○ TBMs tunnelling progressed 2550 m and 2150 m respectively ○ Tunnel segment delivery ○ Processing and storage of tunnel spoil. ○ Tunnel Spoil haulage offsite ○ Grout plant operation. ○ Water treatment plant operation ▪ Aerotropolis: <ul style="list-style-type: none"> ○ No SBT activities this period ▪ Bringelly Services Facility: <ul style="list-style-type: none"> ○ Water treatment plant Operation – Water treated and disposed at Claremont Meadows ○ Storage of surplus construction materials from other southern sites. ○ Installation of support blocks and structure for TBM traverse 	
Key Construction Activities Look Ahead	
<ul style="list-style-type: none"> ▪ St Marys: <ul style="list-style-type: none"> ○ Nil SBT activities next period. ○ SBT activities (TBM retrieval) anticipated to resume May/June 2024 ▪ Claremont Meadows Services Facility: <ul style="list-style-type: none"> ○ Continue erosion and sediment controls operation and maintenance. ○ Continue Water Treatment Plant operation and maintenance. ○ Storage of surplus construction materials from other northern sites. ○ Preparations for commencement of tunnelling support activities. ▪ Orchard Hills: 	



- Activities anticipated for the upcoming period are generally consistent with those for this period.
- **Aerotropolis:**
 - Nil SBT activities next period.
 - SBT activities (TBM retrieval) anticipated to resume June/July 2024
- **Bringelly Services Facility:**
 - Continue Erosion sediment controls operation and maintenance.
 - Operation of WTP.
 - TBM breakthrough and traverse anticipated March 2024.

ER Inspections

There was one ER Inspection conducted on 18/1/24 by [REDACTED]

Key points/ issues raised during the inspection were as follows:

- Sites were generally well managed with maintenance of and adjustments to erosion and sediment controls ongoing at the sites.
- Condition of Orchard Hills internal haulage road was significantly improved from northern extent of spoil shed to wheel wash, improving efficacy and efficiency of wheel washing and concrete exit runway cleaning efforts.
- Orchard Hills internal haul road repairs have resulted in a consistent improvement in the condition of Kent Rd from SBT HV access with less reliance on frequency of sweeping and washdown. The contractor team was commended on their efforts and commitment to reaching this objective.

ER inspections are on a fortnightly cycle. Inspections of St Marys and Aerotropolis sites are paused until SBT site establishment activities for TBM retrieval commence.

Photos



Orchard Hills Kent road view south at site access – Erosion and sediment controls well implemented .



Kent road view north at site access – Negligible tracking with only historical veneer noted. Road in good condition.



Orchard Hills view north – Internal spoil haul road repaired and in significantly improved condition.



Orchard Hills view west – Internal spoil haul road repaired. Note condition of road/ HV tyres prior to wheel wash.



Orchard Hills view south – Internal haul road to exit apron free of tracking.



Orchard Hills exit – Exit apron free of tracking.



Orchard Hills view north – Tunnel spoil storage area continues to be well managed.



Orchard Hills – Tunnel spoil haulage truck with project signage at manual wheel wash.



Claremont Meadows shaft view north – TBM Catherine tunnel (right), and TBM Marlene finalising traverse (left) – note TBM head shield tail (dark areas).



Claremont Meadows view south west – Weeding underway.



Claremont Meadows western areas – Implementation of ESCP reviewed by Soil Conservationist underway.



Claremont Meadows – Negligible tracking noted from southern site access onto Gipps Road.



Bringelly northern boundary – Erosion and sediment controls require refreshing.

Bringelly facility service shaft view south – TBM traversing support blocks and structure.

Endorsed Document/s

No documents were endorsed/approved by the ER.

The following documents were provided for information or review as applicable:

- Orchard Hills Stage 1 Site Audit Statement/Report Rev 1
- CEMP (Rev 03, 22/1/24) - Annual review.
- CNVMP (Rev 02, 23/1/24) - Annual review.
- Environmental Review – Claremont Meadows tunnelling Support Activities (Draft 1.0)
- December Monthly Monitoring Reports comprising Dust (real-time), Noise and Surface Water.
- Baseline Groundwater Report (Rev B.01, 22 August 2023)
- Biannual Groundwater Monitoring Report July to November 2023 (Rev A.01, 13/12/23)

Complaints / Incidents / Non-compliance

No Non-compliances with the Approval were raised by or reported to the ER this period. There were no incidents of note identified by or reported to the ER this period.

Three (3) complaints were reported to the ER. All were related to Orchard Hills, with one relating to tracking on Kent Road at M4 on-ramp, and one to property damage. One related to water accumulations at property boundary (Kent Rd) and OOH noise.

Audits (specific to packages reported in this report)

- Nil this period.

Looking Forward – Core Focus Areas

Risks now relate mostly to activities at Orchard Hills, of note being maintaining adequate capacity for process and stormwater onsite, and management of delivery/haulage vehicles and attendant cumulative impacts as SCAW activities off Lansdowne Rd are ongoing and SSTOM activities ramp-up.

ER Closing Comments:

The contractor continues to be receptive to requests for improvements and proactive in planning of works to limit environmental impacts. This was evidenced by the resurfacing of the spoil haul road at Orchard Hills to relieve pressure on exit controls and concerns raised by the ER around tracking. Effectiveness will continue to be assessed over the next period, however, the CPBG team’s actions in the last period have been effective to date in minimising tracking from the site. The CPBG team (including the Project Manager and Site Superintendent) should be commended for their integrity and commitment to a meaningful resolution.



3. Surface and Civil Alignment Works (SCAW)

Contract Package	Environmental Representative/s
Surface and Civil Alignment Works (SCAW)	[REDACTED]
Key Construction Activities During the Period	
<ul style="list-style-type: none"> ▪ Patons Lane: <ul style="list-style-type: none"> ○ Sandstone import over northern tributary stream culvert ○ Weed spraying commenced ○ Northern tributary culvert construction ongoing ▪ SMF <ul style="list-style-type: none"> ○ Stockpiling of vegetation is occurring for use during SSTOM works ○ PS105 asbestos encapsulation commenced ▪ Defence Land: <ul style="list-style-type: none"> ○ Backfill commencing around piers ○ Fauna crossing installation ○ Preparation for viaduct segment placement ▪ Luddenham Station: <ul style="list-style-type: none"> ○ Construction of Luddenham Rd roundabout continues ○ Structural station works continue. ▪ Luddenham Road South <ul style="list-style-type: none"> ○ Ongoing placement of viaduct segments ○ Ongoing structural works. ○ Sediment basin constructed adjacent to Cosgrove’s Creek ▪ M12 to Cosgrove’s Creek <ul style="list-style-type: none"> ○ Sandstone is being used to build the formation. ○ Permanent basin works ongoing ▪ Elizabeth Drive <ul style="list-style-type: none"> ○ Sandstone delivery is progressing south of Elizabeth Drive ○ OOHW sandstone delivery continues ○ Crusher moved into place to commence crushing 	
Key Construction Activities Look Ahead	
<ul style="list-style-type: none"> ▪ Patons Lane: <ul style="list-style-type: none"> ○ Rehabilitation works are continuing along the alignment ○ Determination of the contaminated leachate should be made in February 2024 ▪ Stabling and Maintenance Facility (SMF) Orchard Hills: <ul style="list-style-type: none"> ○ Structures works will continue at Blaxland Creek ○ Culvert and fauna crossing works will continue at the unnamed tributary ○ The containment cell at PS105 will continue to accept material ▪ Defence Land: <ul style="list-style-type: none"> ○ Earthworks to continue 	



- Sandstone filling and compaction will continue
- Structures works to continue
- Luddenham Station:
 - Construction of the roundabout on Luddenham Rd will continue.
- Luddenham Road South:
 - Precast elements for the viaduct will continue to be installed
 - Structures will continue
- M12 to Cosgroves Creek:
 - Structures activities to continue.
 - Sandstone will be continued to be placed on the formation
 - Construction of the 30ML basin continues which will ultimately be a flood mitigation basin.
- Elizabeth Drive:
 - Ongoing sandstone placement along the alignment
 - Crushing of rock to commence

ER Inspections

There were two (2) ER Inspections in January 2024 (ER inspections are on a fortnightly cycle weather and health permitting):

- **11/01/2024** (by [REDACTED]) - Key points/ issues raised during this inspection were as follows:
 - The site performed well over the Christmas shutdown period, with only minor maintenance required
 - Weed spraying has commenced following the risk areas identified in the weed mapping
 - Works at PS105 were undertaken following the methodology identified in the RAP
 - An interface between SCAW and M12 may lead to untreated M12 construction water flowing on to the SCAW site
- **23/01/2024** (by [REDACTED]) - Key points/ issues raised during this inspection were as follows:
 - Weed praying continues with a mix of selective and entire coverage depending on the density of the weeds
 - ER suggested that a coordination meeting between M12 and SCAW occur to understand how M12 will notify SCAW when it will release water onto the SCAW site
 - A review of the ESCP at the interface between M12 and SCAW is recommended

Photos



Elizabeth Drive compound – ACM was being loaded out and taken to PS105



Elizabeth Drive compound – weeds are present onsite, however spraying has commenced



SCAW – M12 interface – Water is released from the M12 project without warning to SCAW. A notification from M12 needs to be made to ensure SCAW has sufficient capacity to accept the water



Elizabeth Drive compound – ACM is being loaded out to PS105, controls were in place to reduce accidental spillage



Defence land – Additional clearing is required to accommodate the width of the viaduct



Warragamba Pipelines – Works have commenced between the pipelines, vibration monitoring is being undertaken



PS105 – ACM is being deposited at PS105 in accordance with the RAP



Unnamed tributary – Scours have occurred at the unnamed tributary culvert. It is noted that the project team used their system to detect and commence rectification works



Unnamed tributary – Fill has been placed over the unnamed tributary culvert, with additional fill material to be imported over the coming weeks	Cosgroves Creek – The viaduct pylons have been constructed across Cosgroves Creek
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Endorsed Document/s

The following documents were endorsed/approved by the ER:

- Nil

The following documents were provided for information or reviewed:

- Nil

Complaints / Incidents / Non-compliance

No non-compliances were reported to or identified by the ER for the period.

No incidents of note were reported to the ER during the period:

No (0) complaints were reported to the ER during January 2024.

Audits (specific to packages reported in this report)

- Nil for the period

Looking Forward – Core Focus Areas

Two main focus areas remain eradication of weeds and understanding and dealing with M12 construction water releases onto the SCAW site. Management of weeds has commenced however needs to progress quickly given the favourable growing conditions. The ER has requested that Sydney Metro facilitate a meeting with M12 that results in a committed process for M12 and SCAW to deal with onsite water.

ER Closing Comments: The contractor has been proactive in rectifying ERSED controls rather than waiting for this to be identified during the ER inspection. Works have progressed well without complaint and this has largely been in part of the proactive effort the stakeholder and communication team has made



4. Stations, Systems, Trains, Operations and Maintenance Package (SSTOM)

Contract Package	Environmental Representative/s
Stations, Systems, Trains, Operations and Maintenance Package (SSTOM).	[REDACTED]
Key Construction Activities During the Period	
<ul style="list-style-type: none"> ▪ St Mary’s Station (STM): <ul style="list-style-type: none"> ○ Production piling continues. Piling material is being taken to Aerotropolis Core ○ Setup of site offices and compound continued ○ Pile break back commenced ▪ Orchard Hills Station (ORH): <ul style="list-style-type: none"> ○ Site establishment works continued ○ Setup of site offices and compound continued ▪ Stabling and Maintenance Facility (SMF): <ul style="list-style-type: none"> ○ Site establishment works continued ○ Stripped topsoil for laydown, light and heavy vehicle areas. ▪ Luddenham Station (LUD): <ul style="list-style-type: none"> ○ Site establishment works continued ○ Removal of redundant drainage and addition of drainage controls installed ▪ Aerotropolis Core (AEC): <ul style="list-style-type: none"> ○ Site establishment works continued ○ Relining of swale drains completed ○ Realignment of clean water diversion completed ○ Site traffic route alignment ongoing 	
Key Construction Activities Look Ahead	
<ul style="list-style-type: none"> ▪ St Mary’s Station: <ul style="list-style-type: none"> ○ Site establishment works ○ Installing temporary drains around the site, and foundation works for base slabs including steel fixing. ○ Pile testing hammer/noise monitoring to be undertaken ▪ Orchard Hills Station: <ul style="list-style-type: none"> ○ Site establishment works: ○ Piling to commence ○ Internal batter remediation to occur ○ Remove contaminated stockpiles ongoing ▪ Stabling and Maintenance Facility: <ul style="list-style-type: none"> ○ Erosion and sediment control drainage and construction of temporary basin to occur. ○ Importation of material to raise levels ○ Haul road to sub-station to commence ○ Connection of 132kv power 	



- Luddenham Station
 - Continue to remove drainage associated with piling works
 - Piling to commence
- Aerotropolis Core:
 - Site establishment works
 - Delivery of piling rig (oversized) and commencing piling
 - Reapplication of hydro-mulch and stabilisation of clean water drain
 - Site access routes for light and heavy vehicles

ER Inspections

There were two ER Inspections, on 16th and 30th January 2024 respectively.

Key points/ issues raised during these inspections were as follows:

- Sites were generally managed well with no sediment tracking observed
- Orchard Hills - Installing internal erosion and sediment controls requires improvement. Temporary controls were not installed to minimise erosion of internal areas.
- Orchard Hills - sediment-laden water was flowing into the storage pond that was near capacity. PLM indicated that an EPL modification was being investigated for the discharge of the pond.
- Orchard Hills – Internal haul roads were noted to be improving throughout the month.
- Luddenham –stabilisation for erosion and sediment controls on the compound embankment was not completed.
- Aerotropolis Core – The clean water diversion realignment had occurred and was temporarily dammed to prevent sediment-laden water from recent works exiting the site. Water was pumped to the sediment basin for treatment before discharge from the site.
- The sites were noted to not be producing visible dust and no sediment tracking was observed.

Photos



STM – Stockpiled material loadout was occurring. The street sweeper was operating on hardstands areas (good practice)



ORH – Scouring of the northern embankment, work to extend the apron had commenced and haul road over the swale was improved. Installation of long-term erosion and sediment controls remained an outstanding action.



ORH –Swale to the storage dam required additional erosion controls and re-pinning of geofabric.



SMF – Topsoil stripping for light vehicle carpark, with tree protection zones were maintained.



LUD – Removal of drainage for upcoming piling work



LUD –Temporary catchment pond adjacent to piling works. PLM indicate that this would be utilised for dust suppression and pumped out regularly to prevent overflow.



AEC – Stabilisation of the stormwater discharge to the clean water diversion to be completed



AEC – Realignment of the boundary clean water swale with pump to sediment basin.

Endorsed Document/s

No documents were endorsed/approved by the ER:

The following documents were provided for information or reviewed with comments provided to Sydney Metro:

- STTOM CTR PLM-Q4 2023
- STTOM CTR SM Q4 2023
- E57 Report – OHE OSOM Deliveries

Complaints / Incidents / Non-compliance

One non-compliance was reported to the ER during this period.

The non-compliance was for the E57 notification to DPHI occurring after the OSOD delivery was made to the site.



<p>There were no incidents of note reported to the ER during this period.</p> <p>One complaint was reported to the ER during the period from STM about property damage at Saint Marys, which has been passed to the SBT contractors to manage.</p>
Audits (specific to packages reported in this report)
No audits were undertaken during the period.
Looking Forward – Core Focus Areas
<p>The focus is on the implementation of the CEMP and sub-plans, with a particular focus on erosion and sediment controls and sediment tracking.</p> <p>ER Closing Comments: Ongoing delays for the stabilisation of the Orchard Hills and Luddenham sites remain an issue. It is noted that permanent staff are starting on the project and implementation of controls is expected to improve during February. Other sites have been managed well and the implementation of management plans is progressing.</p>

5. Statement of Limitations

Healthy Buildings International (HBI) has prepared this report in accordance with the requirements of Condition A32 (k) of the Sydney Metro Western Sydney Airport, Concept and Stage 1 SSI 10051 Approval (23 July 2021). The report is for the sole purposes of the Department of Planning, Housing and Infrastructure (DHI) and Sydney Metro. It has been prepared based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this Report. This report did not assess any aspects relating to safety.

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