

6 October 2023

Ref:201209-ER_DPIE-September 2023

[REDACTED]
[REDACTED]
Department of Planning Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Dear [REDACTED]

RE: Sydney Metro - Sydney Metro Western Sydney Airport SSI 10051 – ER Monthly Report for September 2023

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 September 2023.

Yours sincerely

[REDACTED]
Environmental Representative

Cc:

Sydney Metro: [REDACTED]

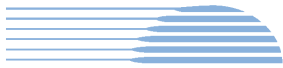
DPIE: Major Projects Portal

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"> ▪ SSTOM Project Office (SPO): <ul style="list-style-type: none"> ○ The exterior of the project was completed ○ Minor internal fit out continued ▪ St Marys Footbridge (FSM): <ul style="list-style-type: none"> ○ Initial geotechnical investigations have occurred ○ Piling works have commenced ○ Compound establishment ▪ Water: <ul style="list-style-type: none"> ○ Material receipt and load out from the Gipps St compound ○ Works are continuing on Solander Drive, no complaints have been received from these out of hours works ○ Trenching works adjacent to Mamre Road is ongoing 	
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"> ▪ SSTOM Project Office (SPO): <ul style="list-style-type: none"> ○ The SSTOM Project Office will be handed over to Sydney Metro ▪ St Marys Footbridge: <ul style="list-style-type: none"> ○ Continuation of piling works ○ Service investigations ○ Establishment of a site compound over the next six weeks ▪ Water: <ul style="list-style-type: none"> ○ Continue trenching adjacent to Mamre Rd ○ Continuation of OOHW on Luddenham bridge ○ Continuation of trenching on Solander Drive 	
ER Inspections	
<p>There was one (1) ER inspections of the SPO, two (2) inspections of the St Marys Station Footbridge, and two (2) inspections of the AEW Water contract undertaken by [REDACTED] in September 2023 (ER inspections are on a fortnightly cycle weather and health permitting).</p> <p>SSTOM Project Office (SPO)</p> <ul style="list-style-type: none"> ▪ 12/09/2023 – Key points/ issues raised during this inspection were as follows: <ul style="list-style-type: none"> ○ Additional waste bins are on site in case there is additional waste generated during the handover ○ The landscaping works are complete and appear to be well maintained <p>St Marys Footbridge</p> <ul style="list-style-type: none"> ▪ 12/09/2023 - Key points/ issues raised during this inspection were as follows: 	



- Trees in the compound area have been removed, mulch needs to be appropriately managed if it is to stay on site
- Cumulative impacts should be discussed with Sydney Metro who will facilitate meetings as required.

▪ **28/09/2023** - Key points/ issues raised during this inspection were as follows:

- Minimal works has been undertaken to date, however, works that have occurred have been managed well by LoR
- Stockpiles in the compound and in the Hobart St areas require geofabric to be extended to cover all exposed areas.
- The stockpile in Hobart St has waste deposited behind it that needs to be removed and placed in the relevant skip
- Exposed areas within the site compound area need to be protected to reduce ERSED risk, LoR to develop a strategy and update the ESCP.
- Fly tipping has occurred adjacent to the Hobard St site, LOR to notify council of this waste.

AEW Water

▪ **12/09/2023** - Key points/ issues raised during this inspection were as follows:

- The material storage bays at the site compound are in use, however, require signage
- Additional erosion and sediment controls on Solander Drive need to be considered prior to forecast rain periods
- Existing waste that is in the works alignment should be reported to Sydney Metro for a direction on how to proceed in managing this waste.

▪ **28/09/2023** - Key points/ issues raised during this inspection were as follows:

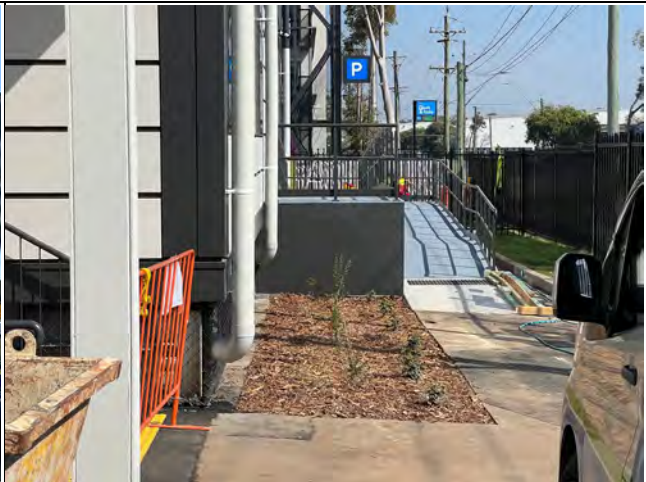
- Excavated road material has been placed in the ENM bay, this needs to be delineated to prevent mixing
- Trucks have screwed on the material in the compound, this needs to be regraded and reinstated when the conditions allow
- Mud tracking was observed leaving the site gate, this needs to be cleaned up from the public road

Photos

SSTOM Project Office (SPO)



SPO - Site offices are being dismantled and handover is expected to occur on 15/09/23



SPO - Landscaping works have been finalised



St Marys Footbridge



Site compound - TPZ placed around trees to be cleared, until ecologist confirms hollows are clear.



Site compound - Site compound establishment had approximately another six weeks to go



Rail corridor - Geofabric in the back of this spoil stockpile to be extended to cover all exposed faces, and rubbish to be removed into designated skips



Rail corridor – The contractor should ring council to report fly tipping adjacent to their stockpile areas



AEW Water



Gipps St Site compound – manual wheel washing was employed during wet conditions



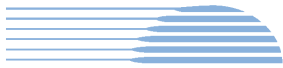
Solander Drive to Mamre Rd- Works progressing well with no complaints received from residents

	
<p>Mamre Road - The controls along the water channel are effective and well implemented</p>	<p>Mamre Road - Hydromulch has been applied to the disturbed areas of the alignment</p>
<p>Endorsed Document/s</p>	
<p>The following documents were endorsed/approved by the ER [REDACTED]</p> <ul style="list-style-type: none"> ▪ None for the period <p>The following documents were provided for information or reviewed with comments provided to Sydney Metro.</p> <ul style="list-style-type: none"> ▪ Out of Hours Application Form – AEW Water – Corner of Mamre Rd and Solander Dr Works (rev 02 and 3) 	
<p>Complaints / Incidents / Non-compliance</p>	
<p>No non-compliances or incidents were reported to or identified by the ER for the period.</p> <p>No complaints were received during the period.</p>	
<p>Audits (specific to packages reported in this report)</p>	
<ul style="list-style-type: none"> ▪ None for the period 	
<p>Looking Forward – Core Focus Areas</p>	
<p>With the SPO finished and AEW Water finishing by the end of the year, the focus is shifting to finishing works and rehabilitation.</p>	
<p>ER Closing Comments:</p> <p>The AEW Water contractor has been performing well with regard to minimising risk and completing and rehabilitating areas. The Footbridge St Marys (FSM) project is still in the early phases due to limited time available to access the rail corridor. A focus for the FSM is understanding the cumulative impacts especially with regard to cumulative impacts for the out of hour works that will occur.</p>	



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"> ○ Stub tunnel lining and finishing FRP ○ Station box excavation and shotcrete within station box excavation completed ○ Offsite Haulage of station box excavation spoil completed ○ Main (Station Plaza) Laydown spoil demobilised. ○ Stub tunnel air extraction unit operation. ○ Water treatment plant in operation ○ Compound and site (excluding east of station box) transferred to SSTOM ▪ Claremont Meadows Services Facility: <ul style="list-style-type: none"> ○ Water treatment plant operating. ○ Sediment basins operational. ○ Shaft excavation, and material stockpiling and haulage completed. ○ Shaft anchor installation completed. ○ Shaft base basement and foundation FRP ongoing ▪ Orchard Hills: <ul style="list-style-type: none"> ○ Spoil and topsoil storage. ○ Reconfiguration, operation and maintenance of ERSED controls. ○ Pre-cast tunnel segment storage in the north. ○ TBMs tunnelling progressed 520 m and 250 m respectively ○ Processing and storage of tunnel spoil. ○ Station box completed. ○ SW corner of site at Kent and Lansdowne Roads and areas south and north of Lansdowne Rd to north end of station box transferred to SSTOM. ○ Water treatment plant operation ▪ Aerotropolis: <ul style="list-style-type: none"> ○ Excavation of station box and stub tunnels completed ○ Stubb tunnel lining ○ Shotcreting and soil nail installation on station box excavation walls completed ○ Stockpiling and haulage offsite of station box excavation spoil material completed ○ Water Treatment plant operation – water reused onsite. ○ Long term spoil stockpiling for SSTOM use. ▪ Bringelly Services Facility: <ul style="list-style-type: none"> ○ Shaft base slab water proofing and FRP ○ Spoil stockpiling and haulage to M12 completed ○ Water treatment plant Operation – Water treated and disposed at Claremont Meadows ○ Haulage of spoil materials stored in the west of the site 	



▪ **Key Construction Activities Look Ahead**

- St Marys:
 - Complete stub tunnels lining.
 - Water treatment plant operation.
- Claremont Meadows Services Facility:
 - Continue erosion and sediment controls operation and maintenance.
 - Continue Water Treatment Plant operation and maintenance.
 - Shaft Water proofing.
- Orchard Hills:
 - Spoil and topsoil storage.
 - Reconfiguration, operation and Maintenance of ERSED controls.
 - Pre-cast tunnel segment storage in the north.
 - TBM tunnelling and tunnel spoil storage and haulage.
 - Water treatment plant operation.
 - Grout plant operation.
- Aerotropolis:
 - Complete site stabilisation for handover to SSTOM.
 - Complete stub tunnels lining.
- Bringelly Services Facility:
 - Continue Erosion sediment controls operation and maintenance.
 - Operation of WTP.
 - Complete Shaft Water proofing.

ER Inspections

There were two (2) ER Inspections conducted by [REDACTED] on 14/09/23 and 28/09/23 by [REDACTED]. ER inspections are on a fortnightly cycle.

14/09/2023 - Key points/ issues raised during this inspection were as follows:

- St Marys – With changing temperatures CPBG to closely monitor dust from plant movements within site (Station St and laydown areas) and ensure wetting of potential dust sources is undertaken.
- St Marys – Tracking to public roads continued to be well managed, including two manual pressure washers after wheel wash.
- Claremont Meadows – Silt fence adjacent the western boundary required improvement to better collect and filter sheet flow from upgradient areas.
- Orchard Hills – General housekeeping and waste management practices significantly improved with raw materials and wastes segregated in dedicated areas.
- Orchard Hills – Suggested CPBG implement local signage informing of dedicated waste storage areas.
- Orchard Hills – It was discussed that prior to handover to SSTOM eastern central areas should be graded to drain towards sediment fences or end of line controls rather than accumulate in low points of haul road within the SBT site.
- Orchard Hills – CPBG proactively implementing settling/holding ponds with automated flocculant dosing and settlement baffles to manage water runoff on paved laydown, haulage, and soil processing areas north of station box. Ponds to be operated with robust procedures and management systems.
- Aerotropolis – Dust from station box excavation and spoil loading was observed that required repositioning of mist cannons operating at the time, to adequately cover operations.



- Aerotropolis – Southern areas between the station box and the southern clean water swale (including the swale) to be stabilised as a matter of priority, followed by western spoil stockpiles and diversion v drains to be formalised and provided with energy dissipation checks.
- General – ongoing improvements were noted, with proactive implementation of environmental management across the project.

28/09/2023 - Key points/ issues raised during this inspection were as follows:

- St Marys – CPBG repairing potholes and damage to asphalt on Philip Street.
- Orchard Hills – General clean up and housekeeping required in the water treatment plant bund.
- Orchard Hills – CPBG proactively implementing settling/holding ponds to manage water runoff on paved laydown, haulage, and soil processing areas north of station box. CPBG to ensure cleanliness of upgradient areas is improved and ponds are cleaned prior to automated operation.
- Aerotropolis – Western face of eastern dirty water swale being stabilised and protected where appropriate to reduce rilling and undermining.
- Aerotropolis - CPBG scraping back, refreshing and reinstating DGB surface of western and northern areas access roads so as to reduce ponding and attendant tracking to site access.
- Bringelly – use of area west of dam for laydown and equipment/materials storage noted not consistent with the CEMP and ESCP. CPBG to revise CEMP and ESCP, and upgrade controls as required.

Photos



Orchard Hills view north from station box: TBM Spoil delivery conveyor and storage area



View west.– CPBG proactively implementing settling/holding ponds to manage water runoff.



Orchard hills view south: General housekeeping required in the water treatment plant bund.



Orchard Hills - View south of Installation of ErSed controls at interface of SSTOM and SBT sites.



St Marys: view east of completed station box



St Marys: view west of SBT - SSTOM interface



View south east along Phillip St.: Plaza laydown demobilised and cleaned.



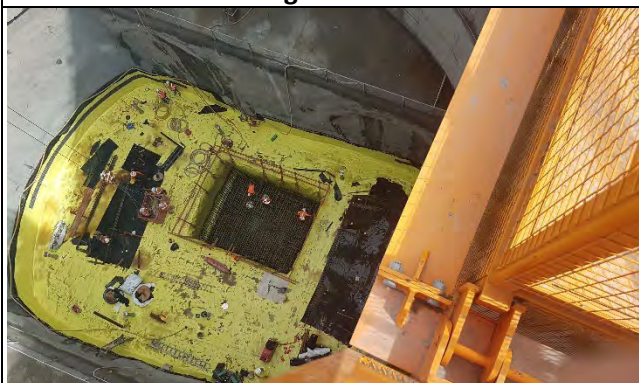
St Marys Philip St: View southeast of area of asphalt to be repaired .



St Marys – Area and controls stable and tidy in northwest areas near goods shed.



Bringelly: use of area west of dam is not consistent with the CEMP



Bringelly: Waterproofing of shaft.



Aerotropolis view north: Eastern embankment batter stabilised and sed . fence improved.



Aerotropolis view north: Station box completed.

Aerotropolis view south east: Southern areas and berm stabilised.



Claremont Meadows: Mulch use as control & CPB improving installation of western sediment fence.



Claremont Meadows: View south west with final spoil pile in foreground.

Endorsed Document/s

No documents were endorsed/approved by the ER, however, the following documents were approved as the Sydney Metro (SM) approved delegate pursuant Section 1.4.4 of the Construction Noise and Vibration Standard v4.2:

- Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works Detailed Noise and Vibration Impact Statement - Claremont Meadows Ventilation Facility (Rev 5.0), dated 5 September 2023
- Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works Detailed Noise and Vibration Impact Statement - Aerotropolis Core Station (Rev 7.0), dated 5 September 2023

The following documents were provided for information or review:

- August Monthly Monitoring Reports comprising Dust (real-time), Noise and Surface Water.

Complaints / Incidents / Non-compliance

No Non-compliances with the Approval were identified by or reported to the ER this period.

There was one incident of note identified by or reported to the ER this period:

- 5/9/2023– St Marys – Overflow of sump at corner of Gidley and Station St due to pump failure, which resulted in flow under the hoarding, onto a grassed within the site boundary adjacent the temporary bus interchange.

One complaint was reported to the ER relating to rocks on Bringelly Rd, but unlikely to be attributable to the project.

Audits (specific to packages reported in this report)

- Independent Environmental Audit 4 report submitted to DPE.



Looking Forward – Core Focus Areas

Station boxes are now completed and implementation of environmental management measures across the project are also completed and going into a period of monitoring and maintenance. Risks will now relate mostly to 24/7 TBM spoil haulage out of Orchard Hills site.

ER Closing Comments:

The contractor continues to be receptive to requests for improvements and proactive in planning of environmental controls, including for future activities at Orchard Hills.



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"> ○ Wheel wash facilities are installed with chipseal ○ Stormwater drainage works are complete between Patons Lane and Blaxland’s Creek ▪ Stabling and Maintenance Facility (SMF) Orchard Hills: <ul style="list-style-type: none"> ○ Stockpiling of vegetation is occurring for use during SSTOM works ○ Piling is complete at Blaxland’s Creek ○ Sandstone placement is ongoing north of Blaxland’s Creek ○ Water diversion has been installed at the tributary north of Blaxland’s Creek ▪ Defence Land <ul style="list-style-type: none"> ○ Piling has commenced ○ Sandstone placement is ongoing between Patons Lane and the Warragamba Pipeline ○ Topsoil is being placed on batters ▪ Luddenham Station: <ul style="list-style-type: none"> ○ Ongoing placement of viaduct segments ○ Construction of Luddenham Rd roundabout continues ○ Structural station works continue. ▪ Luddenham Road South: <ul style="list-style-type: none"> ○ Piling is complete ○ 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. ○ Piling is completed at Cosgrove’s Creek ○ Cosgrove’s creek clearing and haul road crossing ongoing ▪ Elizabeth Drive: <ul style="list-style-type: none"> ○ Sandstone delivery is progressing south of Elizabeth Drive ○ OOHW sandstone delivery continues 	
Key Construction Activities Look Ahead	
<ul style="list-style-type: none"> ▪ Patons Lane: <ul style="list-style-type: none"> ○ The SSTOM contractor has taken possession of the compound. ○ Rehabilitation works will occur along the alignment ▪ Stabling and Maintenance Facility (SMF) Orchard Hills: <ul style="list-style-type: none"> ○ Blaxland Creek will have columns poured ○ Unname tributary will have culverts installed ○ Rehabilitation will commence 	



- Defence Land
 - Earthworks to continue
 - Sandstone filling and compaction will continue
 - Piling will continue
- Luddenham Station:
 - Sections of the site will be handed over to SSTOM
 - Precast elements for the viaduct will continue to be installed
 - Construction of the roundabout on Luddenham Rd will continue.
- Luddenham Road South:
 - Asbestos stockpiles to be removed.
 - 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 stabilisation activities.

ER Inspections

There were two (2) ER Inspections in September 2023 (ER inspections are on a fortnightly cycle weather and health permitting).

- **14/09/2023** (by [REDACTED]) - Key points/ issues raised during this inspection were as follows:
 - The project experienced a substantial rainfall event on 06/09/23 (60mm in 2 hours). Overall the controls held up well and the environment team has identified any deficiencies and assigned timeframes and responsibility for rectification.
 - A grader fuel tank spill occurred on Monday 11/09/23, and incident report has been raised.
 - At the defence site water ponded around the live trees could impact the health of the trees, this water level should be reduced so that roots are not submerged.
 - On the defence land it was observed that excess concrete has been placed outside of a concrete washout and needs to be removed and properly recycled or disposed of
 - Fire weeds were observed at PS105 and need to be sprayed.
 - Across the project rock lining, jute matting and hydromulching has been effective in stabilising drainage lines.
- **21/09/2023** (by [REDACTED]) - Key points/ issues raised during this inspection were as follows:
 - The project has recovered from the large rainfall event two weeks ago and controls are well installed and maintained.
 - At Cosgrove's Creek dried clay and no inlet controls may lead to siltation of this sediment basin. CPBUI to risk assess this location to determine if any treatment is required



- Dust was observed during the inspection, it is noted that watercarts were in use to control the dust. The project is to determine whether any further controls are required.
- As works progress the sandstone layer placed throughout should reduce the dust and ERSED risk for the project

Photos



Luddenham North - The bridge gantry rotated to commence working towards Cosgrove's Creek



Luddenham North - Roundabout kerb poured, and Out of Hours works are due to commence



Defence - Piling has progressed and is almost complete on Defence land



Defence - Water is still being drawn down from the pondage near the Warragamba pipeline



Orchard Hills - Floor of unnamed tributary west of Blaxland Crk excavated ahead of the blinding slab pour



Orchard Hills unnamed tributary west of Blaxland Crk – Minor dust was observed but watercart in this area.



Cosgrove's Creek - The flood retention basin is almost dry, once it is work will recommence on it



Blaxland Creek - Jute mat has been used effectively as scour protection in drainage lines at Blaxland's Creek.



Blaxland Creek - The forebay of the basin at Blaxland's Creek reduces sediment load on the main basin.



PS105 Stockpile - Rock lining, hydromulching and jute matting used to stabilise drainage lines effectively

Endorsed Document/s

The following documents were endorsed by the ER:

- Nil this period

The following documents were provided for information or reviewed:

- Detailed Noise and Vibration Impact Statement 5. Material Delivery and Placement – Elizabeth Drive to Cosgroves Creek and Defence Establishment Orchard Hills & Elizabeth Drive Haul Road Drainage Crossing (rev C)
- Detailed Noise and Vibration Impact Statement 6. Lansdowne Road / Samuel Marsden Earthworks & Structure Works (rev B)

Complaints / Incidents / Non-compliance

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

One (1) incident of note was reported to the ER during the period:

- 11/09/23 - A grader burst a fuel plug while grading the alignment losing approximately 30L of diesel onto the sandstone/fill. The diesel contaminated sandstone was dug out and placed in a stockpile



for waste classification and disposal. Waste docketts were obtained and recorded in the CPBUI Waste Tracking register.

Two (2) complaints from 146 Samuel Marsden Road Orchard Hills were reported to the ER during the period, one related to parking of trucks not related to the project, and one related to dust, which the contractor acknowledged and acted on by stopping works likely to result in dust generation.

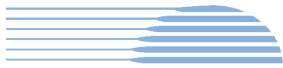
Audits (specific to packages reported in this report)

- Independent Environmental Audit 4 report submitted to DPE.



Looking Forward – Core Focus Areas

Focus will be on proactive management measures and early closeout of actions identified in the ER inspection report.

ER Closing Comments: The SCAW project has managed the erosion and sediment issues well, this was seen during the large rain event during the month that did not result in any incidents. This time of year sees the germination of many plants including weeds, the project will need to manage the weed levels by early treatment of completed areas with hydromulch. The revised CEMP and sub plans should be endorsed in October 2023, depending on if all comments being sufficiently addressed.



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"> ▪ Commencement of works was pending RILL accreditation (received end of month) ▪ SMF compound handed to STTOM. 	
Key Construction Activities Look Ahead	
Site establishment to commence post PC handover. The first site was the SMF compound.	
ER Inspections	
There was one ER Inspection on 5 September 2023.	
Photos	
	
SMF compound	ESCP on display in the SMF compound
Endorsed Document/s	
<ul style="list-style-type: none"> ▪ Nil 	
Complaints / Incidents / Non-compliance	
<p>No non-compliances were identified by or reported to the ER during this period. There were no incidents of note identified by or reported to the ER during this period.</p> <p>No complaints were reported to the ER during the period.</p>	
Audits (specific to packages reported in this report)	
No audits were undertaken during the period.	
Looking Forward – Core Focus Areas	
<p>ER inspections are undertaken on a risk-based approach until Construction commences. The focus will be on the implementation of the CEMP and sub-plans.</p> <p>ER Closing Comments: The project team has formed a healthy team dynamic. Detailed design is continuing. Stabilised handover of the sites from SCAW and SBT will be important over the coming months and handover planning is well underway.</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 Department of Planning Industry and Environment (DPIE) 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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