

Stacy Warren
Director Infrastructure
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

7 February 2018
Ref: 170108-ER-DPE-TSE-Jan 18

Dear Stacy

RE: Sydney Metro City & South West Chatswood to Sydenham CSSI 15_7400 – ER Monthly Report for January 2018 – TSE Contract

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

- Condition A24 (I) of the Sydney Metro City & South West Chatswood to Sydenham CSSI 15_7400 Approval (9 January 2017) and SSI 15_7400 and associated modifications (MOD1_Victoria Cross and Artarmon (18 October 2017), MOD2_Central Walk (21 December 2017), and MOD4_Sydenham Station and Metro Facility South (13 December 2017); and
- As required by the subsequent appointment as the approved Environmental Representative (17 February 2017);

The attached summary details the key activities undertaken by Environmental Representatives for Sydney Metro – City and South West Chatswood to Sydenham during the month of **January 2018**.

Yours sincerely

Michael Woolley
Environmental Representative

Cc: Sydney Metro: Fil Cerone, Matt Marrinan, Ben Armstrong, Stuart Hodgson, Nicole Williams, Adam Koutsamanis, Nicole Vanella, Rob Muir (JHCPBG)
DPE: Swati Sharma, Rob Sherry



Summary of Contract Packages	Environmental Representative/s
Demolition and Tunnel and Station Excavation (TSE)	Michael Woolley
Alternate	Jo Robertson / Annabelle Reyes

Key Construction Activities	
Demolition and TSE	<p>Works conducted in January 2018 at the following sites are summarised below:</p> <p>Chatswood Dive Site and Artarmon Substation:</p> <ul style="list-style-type: none"> ➤ Chatswood dive site <ul style="list-style-type: none"> ○ Utility, heritage and geotechnical investigations ○ Installation of hoarding and setting up offices and amenities ○ Relocation of underground utility services ○ Removal of existing concrete and asphalt slabs involving hammering and disposing of contaminated materials ○ Construction of internal roads, driveways, piling platforms and the foundations for sheds and other facilities involving excavating unsuitable material and importing and compacting road base material ○ Commencement of installation of a water treatment plant and sheds involving concreting, building retaining walls and setting-up silos and water tanks ○ Clearing of vegetation around the Mowbray House Building ➤ Nelson Street <ul style="list-style-type: none"> ○ Relocation of underground utility services and temporarily reinstating the works areas ➤ Frank Channon Walk between Nelson Street and Gordon Avenue <ul style="list-style-type: none"> ○ Frank Channon Walk was temporarily closed between Gordon Avenue and Nelson Street from 27 November 2017 until mid-December 2017 to facilitate work by Telstra to relocate telecommunication cables ➤ Out-of-hours works <ul style="list-style-type: none"> ○ Mowbray Road, Hampden Road and Pacific Highway <ul style="list-style-type: none"> ▪ Identification of the location of existing underground utility services involving cutting the road and footpath, excavating with a vacuum truck and temporarily reinstating the works areas ▪ Installation of underground telecommunication and power cables involving cutting the road and footpath, digging and backfilling trenches, laying cables and temporarily reinstating the works areas ▪ Building of site driveways on Mowbray Road involving removing the existing kerb and footpath, minor earthworks using an excavator, vacuum truck and plate compactor and pouring concrete ▪ Trimming of the branches of trees located within the dive site overhanging the footpath and Mowbray Road ○ Pacific Highway / Nelson Street <ul style="list-style-type: none"> ▪ Identification of the location of existing underground utility services involving cutting the road and footpath, excavating with a vacuum truck and temporarily reinstating the work areas ▪ Installation of underground power cables involving cutting the road and footpath, excavating and backfilling trenches, laying cables and temporarily reinstating works areas <p>Crows Nest Station:</p> <ul style="list-style-type: none"> ➤ Within and around the site <ul style="list-style-type: none"> ○ Installing hoarding around the site perimeter ○ Demolition of remaining sections of buildings at 473 and 521 Pacific Highway and 14 Clarke Street



	<ul style="list-style-type: none">○ Completing retention works (structural works i.e. anchoring works around the nearby properties) around the site○ Continuing to identify and relocate utility services such as power, gas, sewer and telecommunication lines around the perimeter of the Crows Nest Station site, along Pacific Highway, Hume Street, Oxley Street and Willoughby Road○ Continuing earthworks to level the site and constructing platforms to hold piling rigs○ Completing vegetation and tree removal around the site perimeter on Oxley Street, Pacific Highway and Hume Street○ Continuing surveys, soil, heritage and geotechnical investigations around the site and removing hazardous material○ Constructing two new power kiosk substations on the corner of Clarke Street and Hume Street○ Upgrading driveways and constructing new site driveways○ Continuing the widening of Clarke Lane from the back of 22 Clarke Lane to Oxley Street○ Continuing preparations for the Hume Street bridge closure, which is scheduled for six months from February 2018 <p>➤ Out-of-hours works - other than for the delivery and removal of oversized equipment, the following works were conducted during out of hours:</p> <ul style="list-style-type: none">○ Albany, Oxley, Hume and Clarke Streets, Hume Lane and Clarke Lane - Conducting road condition surveys○ Hume Street -Hume Street (between Clarke Lane and Pacific Highway) closed between 27-30 December 2017 to complete utility (sewer) relocation works, in preparation for the 6-month closure of the Hume Street bridge from February 2018○ Pacific Highway at Willoughby Road - continuing utility relocation, involving saw cutting, trenching, installing cables and reinstating the work areas○ Pacific Highway, Hume, Oxley and Clarke Streets and Willoughby Road continuing utility relocation including potholing and trenching and removing vegetation and trees○ Clarke Street - completing bundling and commissioning of aerial cables between Pole Lane and Hume Street <p>Victoria Cross Station:</p> <p>➤ Victoria Cross South site</p> <ul style="list-style-type: none">○ Demolition of 181, 187, 189 and 155 Miller Street and loading out demolition materials○ Removing scaffolding from demolished buildings○ Continuing investigating and relocating services such as power, gas and sewer lines, involving potholing, saw cutting, trenching, installing cables and reinstating the works areas○ Decommissioning a substation on Denison Street and Miller Street○ Continuing surveys and geotechnical drilling in the roads around the site○ Continuing retention works and installing ground anchors to prepare the site for tunnel excavation <p>➤ Victoria Cross North site</p> <ul style="list-style-type: none">○ Continuing surveys and soil, heritage and geotechnical investigations○ Removing hazardous material from the site○ Tree clearing○ Establishing site offices and amenities○ Installing erosion and sediment controls○ Importation and compaction of clean fill for construction of piling pads
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	<ul style="list-style-type: none">○ Investigating and relocating utilities including temporary lane and footpath closures➤ Out-of-hours works –Other than for the delivery and removal of oversized equipment, the details of the following works were conducted during out of hours:<ul style="list-style-type: none">○ Miller, McLaren, Walker, Denison, Spring and Little Spring Streets, Blues Point Road and Henry Lawson Avenue - Conducting road condition surveys○ Miller Street<ul style="list-style-type: none">▪ Investigating and relocating utility services▪ De-commissioning a substation▪ Continuing installation of a block wall in the 65 Berry Street car park○ Denison Street - demolishing 155 Miller Street (Tower Square) during standard construction hours and on Saturdays between 8am and 5pm and decommissioning a substation○ Berry Street/Denison Street - continuing to investigate and relocate services and utilities <p>Blues Point temporary site retrieval:</p> <ul style="list-style-type: none">➤ No works conducted in January 2018. <p>Barangaroo Station:</p> <ul style="list-style-type: none">➤ Hickson Road (between Munn Street overpass and High Steps)<ul style="list-style-type: none">○ Utility and geotechnical investigations carried out in the footpath and the road○ Installation of utilities outside of the Heritage Area○ Installation bolts to protect and secure the High Street heritage wall before the start of station excavation works➤ Nawi Cove foreshore and lawn area<ul style="list-style-type: none">○ Installation of hoarding and temporary fencing○ Closing public access to the lawn area and the southern side of Nawi Cove to start site establishment from 8 January 2018. Pedestrian access to Dukes Pier and the pontoon maintained using sealed footpath detour.○ Removing trees, vegetation, pavement, sandstone edging and street furniture within the new worksite○ Delivering materials and equipment, including out-of-hour large vehicle deliveries○ Site investigation works, involving trenching and drilling activities.➤ Out-of-hours works<ul style="list-style-type: none">○ Hickson Road (between Munn Street overpass and High Steps)<ul style="list-style-type: none">▪ Utility and geotechnical investigations and relocation of underground services▪ Installing high voltage power for tunnelling machines <p>Martin Place Station:</p> <ul style="list-style-type: none">➤ Bligh Street site<ul style="list-style-type: none">○ Excavating acoustic shed foundations and concrete ramps using rock hammers and excavators○ Storage of contaminated materials on site and loading into sealed drums○ Removing excavated material from site○ Constructing site driveways on O'Connell Street○ Delivering site huts, equipment, tunnelling machinery and materials to site○ Concrete works for foundations of the acoustic shed➤ Martin Place North site<ul style="list-style-type: none">○ Internal strip out of buildings on Hunter, Castlereagh and Elizabeth Streets○ Installing (and removing) scaffolding and hoarding○ Ongoing structural demolition works and removing materials from site
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	<ul style="list-style-type: none">➤ Martin Place South site<ul style="list-style-type: none">○ Preparing building for demolition○ Substation decommissioning➤ Hunter, Castlereagh, Elizabeth, Bligh and O'Connell Streets and Martin Place<ul style="list-style-type: none">○ Identifying existing utility services using a hand-held scanner and vacuum truck and accessing service pits on footpaths and within the road○ Trenching and potholing➤ Out-of-hours works<ul style="list-style-type: none">○ Ausgrid works to remove, modify and relocate existing services were undertaken around the Martin Place Station and Bligh Street sites from Wednesday 20 December 2017.○ Works occurred on Castlereagh and Elizabeth Streets (between Hunter and King Streets), Martin Place (between Elizabeth and Castlereagh Streets) and at the intersection of Hunter and Bligh Streets.○ Works between Wednesday 27 December and Monday 15 January were undertaken up to 24 hours a day, in order to complete as much of the works as possible when traffic and pedestrian volumes were lowest <p>Pitt Street Station:</p> <ul style="list-style-type: none">➤ Pitt Street North site<ul style="list-style-type: none">○ Ongoing structural demolition work and removal of material from site○ Removing scaffolding and waterproofing of adjoining exposed walls○ Contamination investigations○ TSE site establishment works➤ Pitt Street South site<ul style="list-style-type: none">○ Site establishment and enabling works for demolition○ Scaffolding within the site boundaries➤ Out-of-hours works<ul style="list-style-type: none">○ Pitt, Park and Castlereagh Streets<ul style="list-style-type: none">▪ Removing and replacing existing hoarding around the site▪ Delivering and removing plant and equipment including oversized loads to and from site▪ Ausgrid works including trenching and installing new ductwork and cabling in footpaths and roads▪ Installing a kiosk substation behind hoarding○ Pitt and Bathurst Streets<ul style="list-style-type: none">▪ Preparation for demolition <p>Waterloo Station:</p> <ul style="list-style-type: none">➤ Within and around the Waterloo Station site<ul style="list-style-type: none">○ Continuing to remove internal walls and demolish external walls and roofing○ Installing hoarding and scaffolding around the site, involving tree trimming○ Moving plant and materials to and from the site○ Overhead cable tagging activities○ Concrete slab removal○ Archaeological (Historic Heritage) excavations○ Preparing the site for excavation of the station box, including hammering, piling and concrete works.➤ Out-of-hours works<ul style="list-style-type: none">○ Within and around the Waterloo Station site<ul style="list-style-type: none">▪ Moving plant and equipment to and from site using large vehicles which will access the site via Botany Road▪ Installing hoarding and scaffolding around the site○ Botany Road, Raglan Street and Cope Street
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	<ul style="list-style-type: none"> ▪ Installing new power poles, bundling overhead cables and testing new cables at Raglan Street and Botany Road in December 2017 and early January 2018. ▪ Sewer relocation investigations on Botany Road ▪ Testing new power cables in Raglan, Cope and Wellington streets in December, and Botany Road, Buckland and Wellington streets in January. <p>Marrickville dive site:</p> <ul style="list-style-type: none"> ➤ Marrickville dive site (including external property boundary activities) <ul style="list-style-type: none"> ○ Delivering materials and construction equipment ○ Setting up the precast acoustic shed structure ○ Constructing the precast facility, including the concrete plant and silo structures ○ Construction of the TBM water treatment plant ○ Preparing for piling and steel works, including building footings for future gantry cranes ○ Creating the internal road network, involving saw cutting, concrete works, excavation and earthworks ○ Minor tree removal works within the site and along the footpath ○ Concrete breaking activities across the dive site ○ Installing site hoarding and perimeter fencing ➤ Edinburgh Road and Railway Parade <ul style="list-style-type: none"> ○ Underground utility investigations, involving slit trenching ○ Installing noise barriers, site hoarding and perimeter fencing ➤ Edgeware Road, Lord, Council and May streets <ul style="list-style-type: none"> ○ Underground utility investigations ➤ Out-of-hours works <ul style="list-style-type: none"> ○ Edinburgh and Bedwin roads - underground utility investigations, involving slit trenching <p>Marrickville Station:</p> <ul style="list-style-type: none"> ➤ Completion of survey work - Livingstone Road Bridge.
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ER Inspections	
Demolition and TSE	<p>Weekly inspections continued under the management of the TSE contractor for the demolition sites.</p> <p>Sites inspected in January 2018 comprised:</p> <ul style="list-style-type: none"> ➤ Victoria Cross South – 16/01/18, 30/01/18 ➤ Victoria Cross North – 30/01/18 ➤ Chatswood – 16/01/18, 30/01/18 ➤ Martin Place – 09/01/18, 30/01/18 ➤ Barangaroo – 23/01/18 ➤ Pitt Street – 09/01/18, 23/01/18 ➤ Crows Nest – 16/01/18, 30/01/18



	<ul style="list-style-type: none"> ➤ Waterloo – 09/01/18, 23/01/18 ➤ Marrickville – 09/01/18, 23/01/18 ➤ Bligh St – 16/01/18, 30/01/18 <p>ER Inspection reports have been prepared and issued to Sydney Metro and the TSE Contractor. Actions identified during the inspections comprised:</p> <ul style="list-style-type: none"> ➤ Inspection on 16/01/18 <ul style="list-style-type: none"> ○ Crows Nest – erosion and sedimentation controls ○ Victoria Cross – graffiti and erosion and sedimentation controls ➤ Inspection on 23/01/18 <ul style="list-style-type: none"> ○ Marrickville – prevention control (absorbent socks) for hydrocarbons stains at previous warehouse area ○ Barangaroo – dust and erosion and sedimentation controls ➤ Inspection on 30/01/18 <ul style="list-style-type: none"> ○ Chatswood – maintenance of verge (grass overgrown) in front of site required <p>Various notes were made in the reports reflecting commitments made by the TSE Contractors.</p>
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Endorsed Document/s	
Sydney Metro	<p>The following documents were reviewed and endorsed by the ER with the assistance of alternate ERs:</p> <ul style="list-style-type: none"> ○ Tree Report Rev Q
TSE	<p>The following TSE documents were reviewed, comments provided to the TSE Contractor and Sydney Metro where relevant, and endorsed by the ER with the assistance of alternate ERs:</p> <ul style="list-style-type: none"> ➤ Construction Traffic Management Plans <ul style="list-style-type: none"> ○ Marrickville Utility Works CTMP ○ Martin Place South - Tiffany Building CTMP ➤ CNVISs <ul style="list-style-type: none"> ○ CNVIS Site Est; Rev 8 ➤ Site Establishment Plans (SEPs) <ul style="list-style-type: none"> ○ VCN SEP ○ Crows Nest (Post CEMP Approval) Rev 00 ➤ Out of hours works (OOHW) approvals <ul style="list-style-type: none"> ○ OOHW App 016 and 017 for control survey at Pitt St; Martin Place and Victoria Cross ○ Design Investigation works - Chatswood ○ CH 019 Potholing - Hampden Road ➤ Compliance Tracking Review Q3 2017 Report
Demolition	<ul style="list-style-type: none"> ➤ Out of hours work approvals: <ul style="list-style-type: none"> ○ Delta - OOHW Application VC011 Denison St sub excavation ○ Delta - OOHW Application VC012 Scaffold Scree Denison St ○ Delta -VC 0013 Plant Delivery OOHWs ○ Delta - VC 0014 MSB Disconnection OOHWs ○ Delta - Extension of Crows Nest ABC Installation OOHWs ○ Delta -VC011 Denison Street Substation Abolishment - extension of time ○ Delta -VC 016 Concrete Pour ○ Metropolitan - Extension of OOHWs MP001 ○ Extension of Dates for OOHWs for VC003; VC006; and PS004



Non-compliance/ Incidents / Complaints				
TSE	The following complaints were received:			
	Site	No of Complaints	Complaint Category	Date/s of Complaint/s raised
	Barangaroo	8	Noise	12/01/18, 15/01/18, 16/01/18, 16/01/18, 17/01/18, 17/01/18, 30/01/18, 31/01/18
		1	Dust	16/01/18
		1	Noise -not related to TSE works	16/01/18
		2	Traffic	20/01/18, 31/01/18
	Chatswood	1	Property impact (dirt on private property)	22/12/17
		1	Property impact (flat tyre due to utility works)	22/12/17
		1	Traffic	15/01/18
		1	Noise	16/01/18
		2	Dust	16/01/18, 16/01/18
		1	Vibration	18/01/18
		1	Safety (trip hazard)	25/01/18
		1	Noise not TSE related works	30/01/18
	Crows Nest	1	Water leaking not related to TSE works	31/12/17
		4	Vibration	4/01/18, 10/01/18, 23/01/18, 23/01/18
		1	Dust	3/01/18
		1	Traffic	8/1/18
		1	Safety (wire hanging over the fence)	15/01/18
		1	Soil on ground – not related to TSE works	16/01/18
		1	Worker behaviour	31/01/18
	Martin Place	1	Traffic	28/12/17
	Bligh St	6	Noise	29/01/18, 29/01/18, 30/01/18, 31/01/18, 31/01/18, 31/01/18
	Pitt Street	1	Noise	22/01/18
		1	Traffic	23/01/18
	Waterloo	1	Worker behaviour	23/12/17
	Marrickville	1	Project banners on footpath	4/01/18
	2	Dust	20/01/18, 27/01/18	
	1	Traffic	31/01/18	
Total Complaints' this month	45			

It is understood that Sydney Metro has been providing summaries of non-EPL complaints to DPE on



	<p>a daily basis (changed from fortnightly to daily during January 2018). Responses to each complaint have been noted in each complaint report, with follow up actions often defined in revised reports.</p> <p>There were no incidents related to TSE works, as defined by the project approval definition for incidents, reported or observed by the ER during the period or reported to DPE under condition A41.</p>
Demolition	<p>The following complaints were received at the following sites:</p> <ul style="list-style-type: none"> ➤ Victoria Cross south – 6/01/18 (traffic), 29/01/18 (flora and fauna) ➤ Pitt Street North – 12/01/18 (dust) ➤ Waterloo – 8/01/18 (vibration), 9/01/18 (vibration), 13/01/18 (dust), 16/01/18 (demolition) <p>It is understood that Sydney Metro has been providing summaries of complaints to DPE on a daily basis (changed from fortnightly to daily during January 2018). Responses to each complaint have been noted in each complaint report, with follow up actions often defined in revised reports.</p> <p>There were no incidents related to demolition works as defined by the project approval definition for incidents reported or observed by the ER during the period or reported to DPE under condition A41.</p>
Sydney Metro	<p>There were no complaints received in relation to works undertaken directly by Sydney Metro.</p> <p>There were no incidents related to Sydney Metro conducted works as defined by the project approval definition for incidents reported or observed by the ER during the period or reported to DPE under condition A41.</p>

Audits	
TSE	-The ER attended a TSE Internal audit of the Construction Soil, Water and Groundwater Management Plan (CSWGMP) on 31 January 2018. The audit commenced as a desktop audit and then continued on 6 February at the Marrickville site. The audit was also attended by representatives from Sydney Metro and the Independent Certifier.
Demolition	Nil
Sydney Metro	Nil

Looking Forward	
Demolition and TSE	<p>Core Focus Areas for the month of February 2018 are:</p> <ul style="list-style-type: none"> ➤ Historic Heritage Investigations at Waterloo, Pitt Street, and Barangaroo. ➤ Contaminated soil management at Bligh Street; Marrickville; Waterloo; Crows Nest and Chatswood. ➤ Noise and vibration management for works at Crows Nest, Pitt Street, Martin Place and Victoria Cross TSE and demolition sites. ➤ Dust management during demolition works at Pitt Street, Martin Place and Victoria Cross demolition sites; and ➤ Set up of mitigation controls as part of site establishment across all sites.