



ENVIRONMENTAL MONITORING REPORT, FEBRUARY 2021

PARRAMATTA LIGHT RAIL INFRASTRUCTURE WORKS

3 March 2021

Parramatta
Connect

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1. Introduction

1.1. Background

Parramatta Light Rail Stage 1 ('Stage 1') will connect Westmead to Carlingford via Parramatta Central Business District (CBD) and Camellia. Stage 1 is expected to be operational in 2023.

Stage 1 will create new communities, connect great places and help both local residents and visitors move around and explore what the region has to offer. The route will link Parramatta's CBD and train station to a number of key locations, including the Westmead Precinct, the Parramatta North Growth Centre, the new Western Sydney Stadium, the Camellia Town Centre, the new Powerhouse Museum and Riverside Theatre arts and cultural precinct, the private and social housing redevelopment at Telopea, the Rosehill Gardens Racecourse and the three Western Sydney University campuses.

Key features of Stage 1 include:

- A new dual track light rail network of approximately twelve (12) kilometres in length, including approximately seven (7) kilometres within the existing road corridor and approximately five (5) kilometres within the existing Carlingford Line and Sandown Line, replacing current heavy rail services
- Sixteen (16) stops that are fully accessible and integrated into the urban environment including a terminus stop at each end of Westmead and Carlingford
- High frequency 'turn-up-and-go' services operating seven days a week from 5am to 1am. Weekday services will operate approximately every 7.5 minutes in the peak period between 7am and 7pm
- Modern and comfortable air-conditioned light rail vehicles, nominally 45 metres long and driver-operated, each carrying up to 300 passengers.
- Intermodal interchanges with existing public transport services at Westmead terminus, Parramatta CBD and the Carlingford terminus
- Creation of two light rail and pedestrian zones (no general vehicle access) within the Parramatta CBD along Church Street (generally between Market Street and Macquarie Street) and along Macquarie Street (generally between Horwood Place and Smith Street)
- A Stabling and Maintenance (SaM) Facility located in Camellia for light rail vehicles to be stabled, cleaned and maintained
- New bridge structures along the alignment including over James Ruse Drive and Clay Cliff Creek, Parramatta River (near the Cumberland Hospital), Kissing Point Road and Vineyard Creek, Rydalmere
- Alterations to the existing road network including line marking, additional traffic lanes and turning lanes, new traffic signals, and changes to traffic flows
- Relocation and protection of existing utilities
- Public domain and urban design works along the corridor and at Stop precincts
- Closure of the heavy rail line between Carlingford and Clyde
- Active transport corridors and additional urban design features along sections of the alignment and within Stop precincts
- Integration with the Opal Electronic Ticketing System (ETS)
- Real time information in light rail vehicles and at Stops via visual displays and audio.



1.1.1. Statutory Context

The Parramatta Light Rail is classified as Critical State Significant Infrastructure (CSSI) and was subject to environmental impact assessment under the *Environmental Planning and Assessment Act 1979* (EP&A Act). The EIS assessed impacts for Parramatta Light Rail Stage 1 (Westmead to Carlingford) including the light rail and associated road enabling works.

Stage 1 received Infrastructure Approval from the Minister for Planning under Section 5.19 of the EP&A Act on 29 May 2018 (Critical State Significant Infrastructure Application SSI-8285), subject to the conditions provided in the Instrument of Approval, specifically Schedule B – Ministerial Conditions of Approval.

The Infrastructure Approval was subsequently modified under Section 5.25 of the EP&A Act on 21 December 2018 and 25 January 2019.

The planning approval, modifications and related environmental assessment documents are located at: http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8285.

A Construction Environmental Management Plan (CEMP) has been prepared for the Parramatta Light Rail Package 4 – Infrastructure Works (Infrastructure Works). The purpose of the CEMP and associated Sub-plans is to address the requirements of the:

- Minister’s Conditions of Approval (CoA) SSI-8285
- Revised Environmental Mitigation and Management Measures (REMMMs)
- Environmental Performance Outcomes (EPOs)
- Applicable legislation and contractual requirements, including the PLR Stage 1 Infrastructure Contract Project Deed (ISD-17-6721).

The REMMMs and EPOs are listed in Parramatta Light Rail Stage 1 Westmead to Carlingford via Parramatta CBD and Camellia Environmental Impact Statement (the EIS), as amended by the Parramatta Light Rail (Stage 1) Westmead to Carlingford via Parramatta CBD and Camellia Submissions Report (incorporating Preferred Infrastructure Report) (March 2018) (the SPIR). The CEMP and associated Sub-plans were approved the Secretary on the 21 November 2019.

1.2. Scope

The scope of this report is to present monthly results of the inspection and monitoring programs outlined in the Infrastructure Works CEMP and associated Sub-plans, including the results of the construction monitoring programs referred to in Condition C9 of the Planning Infrastructure Approval.

Environmental inspections and monitoring are undertaken to:

- Validate the predicted impacts of the Infrastructure Works
- Measure the effectiveness of environmental controls
- Track progress against targets and objectives of the CEMP.

The monitoring requirements for nominated aspects are included in the relevant Sub-plans and summarised in **Table 1-1**.

Where relevant, data will be presented on a progressive basis (i.e. monthly summary) to identify trends.

The data of the monitoring programs will also be reviewed annually in the Annual Environment Report.



Table 1-1 Monthly Environmental Monitoring Reporting Requirements

CEMP or Sub-plan	Monitoring program	Distribution
Noise and Vibration Management Sub-plan	<ul style="list-style-type: none"> - Locations and descriptions of monitoring undertaken - Noise monitoring results - Summary of any exceedance of the nominated criteria - Corrective actions 	<ul style="list-style-type: none"> - City of Paramatta Council - Cumberland Council - EPA - NSW Health - TfNSW - IC - ER - AA - Made publicly available
Soil and Water Management Sub-plan	<ul style="list-style-type: none"> - Weather forecasts and observations - Water Quality (Turbidity) monitoring - Discharge and dewatering monitoring 	<ul style="list-style-type: none"> - City of Paramatta Council - Cumberland Council - EPA - DOI Water - TfNSW - IC - Made publicly available
Air Quality and Dust Management Sub-plan	<ul style="list-style-type: none"> - Weather observations - Dust deposition monitoring - Real time aerosol dust monitors - Asbestos fibre air monitoring 	<ul style="list-style-type: none"> - EPA - TfNSW - IC - Made publicly available
Grey-headed Flying-fox (GHFF) Construction Monitoring Program	<ul style="list-style-type: none"> - Weekly visual checks of GHFF camp during high risk periods (1 September to 31 January) 	<ul style="list-style-type: none"> - TfNSW



2. Site Activities

Table 2-1 provides a summary of the site activities for this reporting period.

Table 2-1 Site Activities During Reporting Period

Precinct	Site Activities
Westmead and North Parramatta	Westmead
	<ul style="list-style-type: none">– Ongoing utility installations– Ongoing drainage and Combined Service Route works
	Cumberland
	<ul style="list-style-type: none">– Ongoing utility installations and track works
Parramatta CBD	North Parramatta
	<ul style="list-style-type: none">– Ongoing track works at North Parramatta– Ongoing drainage and Combined Service Route works
	Area 2 West (CBD)
	<ul style="list-style-type: none">– Ongoing utility and services installations on Church Street and Macquarie Street– Ongoing electrical and lighting works– Ongoing Multifunction Pole works– Ongoing civil works (tree pits, Combined Service Routes) along Church Street– Drainage works along Church Street and Macquarie Street– Track works along Church Street and Macquarie Street– Ongoing outlet works on Parramatta River foreshore for micro tunnel
Camellia and Carlingford line	Area 2 East (Smith Street to Arthur Street)
	<ul style="list-style-type: none">– Utility and services installations on Macquarie Street, Charles Street, Harris Street, George Street, Purchase Street, Alfred Street– Ongoing installation of Multifunction Poles– Drainage works on Macquarie Street, Charles Street, Harris Street, George Street, Purchase Street, Alfred Street– Ongoing civil works (pavement, CSR, road works) along Macquarie Street, George Street, Tramway Avenue– Track works along Macquarie Street
	Camellia
	<ul style="list-style-type: none">– Arch Assembly and lift at Tramway Avenue– Fill surcharge at Tramway Avenue (Abutment A of JRD Bridge)– Ongoing retaining wall and bridge works at Grand Avenue North– Ongoing utility works at Grand Avenue– Tree removal at Grand Avenue drainage easement (behind 13a)
	Carlingford Line
	<ul style="list-style-type: none">– Vineyard Creek Bridge concrete pour and bridge deck installation– Camellia Bridge concrete pour and bridge deck works– Leamington Road Underpass concrete pour works



Precinct	Site Activities
	<ul style="list-style-type: none">- Adderton Road Overbridge / ATL works- Combined Service Route works from Dundas to Carlingford- Retaining wall and stormwater drainage works from Rydalmere to Carlingford- Active Transport Line works from Telopea to Carlingford- Overhead wire and lighting works from Telopea to Carlingford- Utility works at Adderton Road and Winter Street- Lime stabilisation works from Rydalmere to Carlingford- Hydro mulching and tree planting at Carlingford



3. Monitoring Results

Section 3 presents a summary of the environmental inspection and monitoring programs completed during the reporting period (26 January 2021 to 25 February 2021). Detailed monitoring results for each activity are presented in the appendices to this report.

3.1. Inspections

A total of five ER inspections, two AA inspections and three TfNSW inspections completed during the reporting period in addition to 46 internal inspections. It is noted that TfNSW also attends all ER inspections.

Table 3-1 provides a summary of the number of actions raised and closed within the agreed timeframe.

Table 3-1 Inspections for reporting period

Date	Number of Inspections	Type	Actions	Closed in Time
27/01/2021	6	Internal Inspection	17	Yes
27/01/2021	1	TfNSW Inspection	3	Yes
28/01/2021	1	Internal Inspection	7	Yes
28/01/2021	1	ER Inspection	17	Yes
1/02/2021	8	Internal Inspection	21	Yes
2/02/2021	1	Internal Inspection	3	Yes
2/02/2021	1	ER Inspection	3	Yes
3/02/2021	1	Internal Inspection	3	Yes
3/02/2021	1	AA Inspection	2	Yes
4/02/2021	1	Internal Inspection	3	Yes
8/02/2021	6	Internal Inspection	12	Yes
9/02/2021	2	Internal Inspection	10	Yes
9/02/2021	1	TfNSW Inspection	3	Yes
9/02/2021	1	ER Inspection	14	Yes
15/02/2021	7	Internal Inspection	15	Yes
15/02/2021	1	AA Inspection	2	Yes
16/02/2021	1	TfNSW Inspection	7	Yes
16/02/2021	1	ER Inspection	3	Yes
19/02/2021	4	Internal Inspection	24	Yes



22/02/2021	6	Internal Inspection	12	Yes
23/02/2021	1	Internal Inspection	7	Yes
23/02/2021	1	ER Inspection	17	N/A
24/02/2021	2	Internal Inspection	2	Yes
Total	56	-	207	-

3.2. Weather

The total rainfall recorded during the reporting period was 121.6 mm with 13 days exceeding one millimetre of rain. One rain event exceeded the 80th percentile (25.8mm) whilst none exceeded the 85th percentile (33.1mm).

During the reporting period, there were 29 days where the maximum wind gust recorded was greater than 25km/hr and no days where the maximum wind gust recorded was greater than 50km/hr or 60km/hr. There was a total of 13 days where wind speeds greater than 25km/hr were forecast and on each of those days, notifications were issued to the construction team to alert them of the strong winds forecast.

A summary of the weather observations and weather events during the reporting period of relevance to the Soil and Water Management Sub-plan and Air Quality Management Sub-Plan Trigger Action Response Plans (TARPs) are summarised in **Table 7-2**. A comparison between long term monthly means and recorded values can be found in **Figure 3-2**.

Detailed weather observation records for February 2021 are presented in **Appendix A-1**.

Table 3-2 Weather Summary and Trigger Weather Events for reporting period¹

Weather Event	Forecast	Observation
Minimum temperature	15°C	15.2°C
Maximum temperature	40°C	40°C
Total rainfall	123.0 mm	121.6 mm
Number of days with rain (>1mm)	15 days	13 days
>80 th percentile (25.8mm) rain events	No days	1 day
Flood warning / events	No events	No events
>25km/hr wind ²	13 days	29 days
>50km/hr wind	No days	No days
>60km/hr wind	No days	No days

¹Weather summary based on data from the 26 January 2021 to 25 February 2021 (31 days).

²Wind data from Sydney Olympic Park AWS (Archery Centre) {station 066212}. Weather data from Parramatta North (Masons Drive) {station 066124}.

Note: Red text indicates observation greater than forecast.

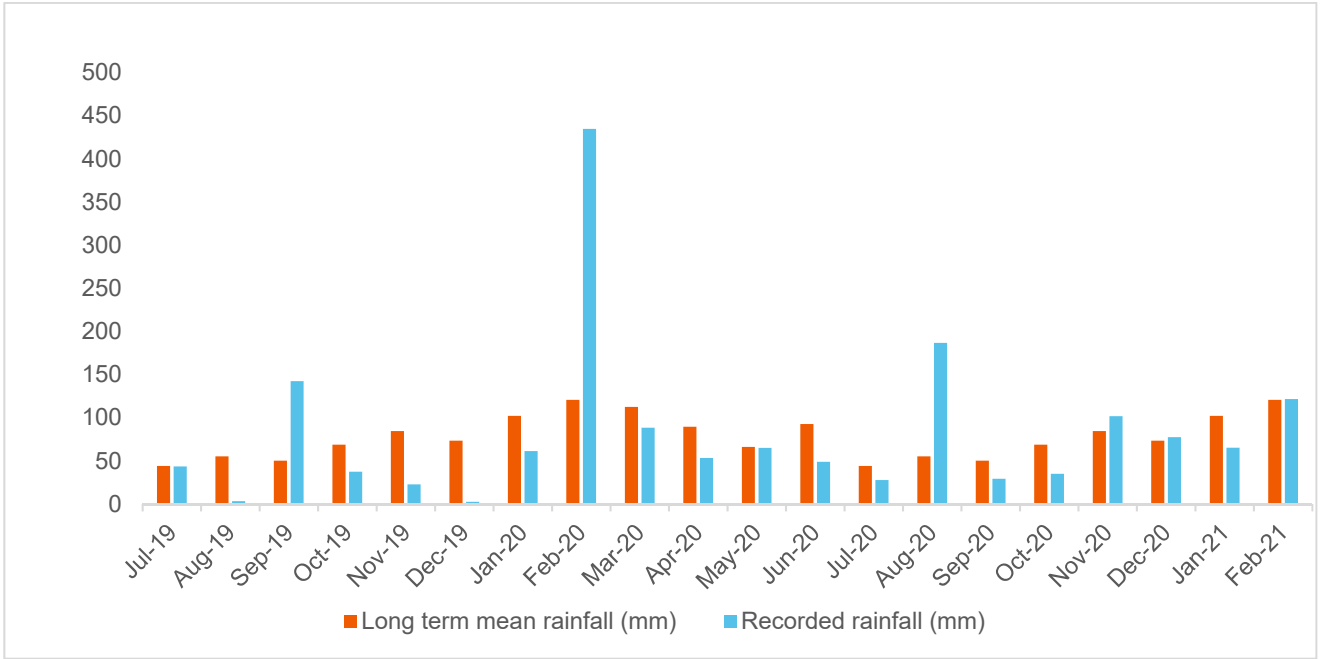


Figure 3-1 Monthly rainfall comparison

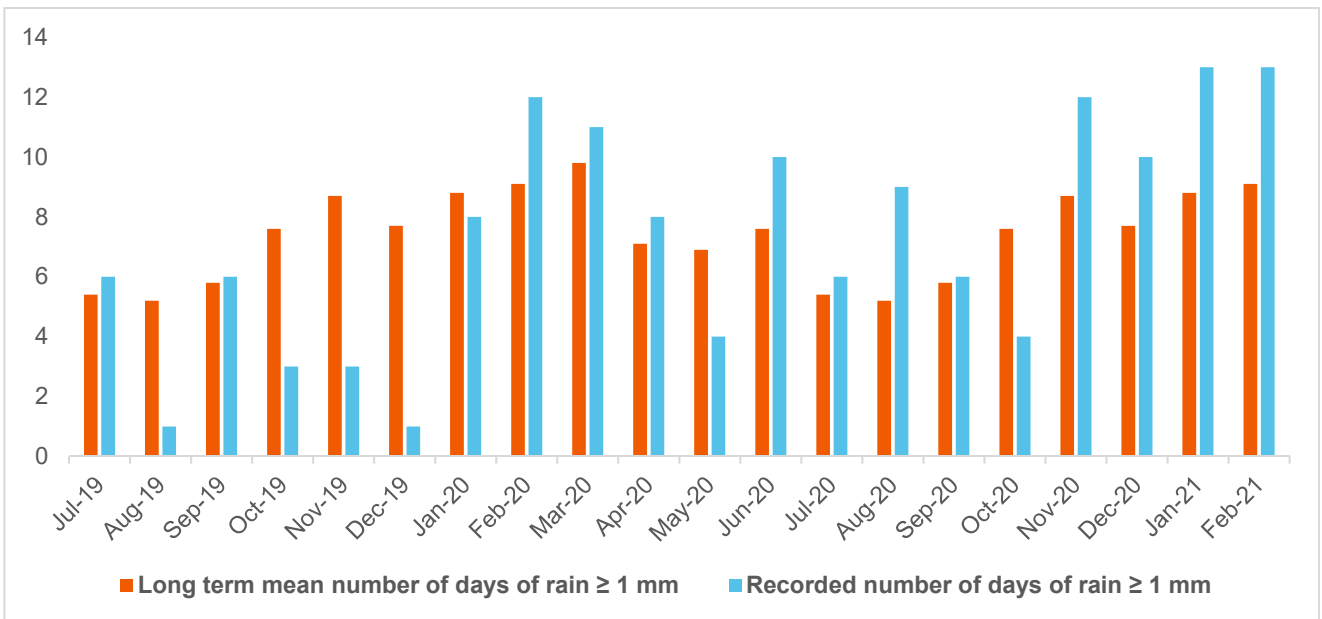


Figure 3-2 Monthly rain days comparison

3.3. Noise and Vibration

Table 3-3 provides a summary of noise monitoring events conducted during the reporting period. Detailed noise monitoring results and comments are presented in **Appendix A-2**. There were two recorded noise levels ($L_{Aeq15min}$) during the reporting period that exceeded the predicted noise levels. In each case, the dominant noise source of noise was traffic.

During the reporting period, additional noise monitoring was carried out by the Independent Acoustic Advisor whilst additional vibration monitoring was carried out by Renzo Tonin. All results were compliant.



Additional information on the hours of works, respite requirements and alternative accommodation is provided in the Noise and Vibration Management Sub-plan (Section 11.3).

Vibration monitoring events completed during the reporting period are summarised in **Table 3-4** and detailed results and comments are presented in **Appendix A-2**. All monitoring events were compliant with vibration targets.

All noise and vibration monitors used during the reporting period, together with current NATA calibration data, are provided in **Table 3-5**.

Continuous noise and vibration monitoring was undertaken during the reporting period at medical facilities in Westmead that have been identified as sensitive receivers. In consultation with the Health Administration Corporation, monitoring will be ongoing for 12 months. Locations of the noise and vibration monitors are provided in **Table 3-6**.

Table 3-3 Summary of Noise Monitoring for reporting period

Date	Monitoring Location	Attended/Continuous	Description
29/01/2021	47 Adderton Road	Attended	General construction
3/02/2021	Bunya (East)	Attended	General construction
4/02/2021	Cumberland	Attended	Acoustic Advisor
15/02/2021	Cumberland East	Attended	General construction
15/02/2021	55 O'Connell Street	Attended	General construction
15/02/2021	8-12 Alexandra Avenue	Attended	General construction
15/02/2021	157 Hawkesbury Road	Attended	General construction
15/02/2021	199 Hawkesbury Road	Attended	General construction
18/02/2021	14 Dudley Street	Attended	Monthly ambient monitoring
18/02/2021	22 Adderton Road	Attended	Monthly ambient monitoring
18/02/2021	89 Marshall Road	Attended	Monthly ambient monitoring
18/02/2021	Carlingford Station	Attended	Monthly ambient monitoring
26/06/2020 -ongoing	Westmead Institute for Medical Research (Sleep Lab)	Continuous	General construction
26/06/2020 -ongoing	Westmead Institute for Medical Research (Brain Dynamics Centre)	Continuous	General construction
26/06/2020 -ongoing	Children's Medical Research Institute (Microscopy Labs)	Continuous	General construction
26/06/2020 -ongoing	Cumberland Hospital (Clinical psychology rooms)	Continuous	General construction



Table 3-4 Summary of Vibration Monitoring for reporting period

Date	Monitoring Location	Attended/Continuous	Description
2/02/2021	Footpath near 175 Hawkesbury Road	Attended	General construction
16/02/2021	Stables Wall	Attended	General Construction
19/02/2021	On soft ground near site	Attended	General Construction
3/02/2021	66 Rippon Avenue	Attended	General construction
4/02/2021	210 George Street	Attended	General construction
8/2/2021	Along bridge alignment	Attended	General construction
17/02/2021	222 George Street	Attended	General construction
26/06/2020	Westmead Institute for Medical Research (HAL incubators)	Continuous	General construction
26/06/2020	Westmead Institute for Medical Research (Microscopy Labs)	Continuous	General construction
26/06/2020	Children's Medical Research Institute (Microscopy Labs)	Continuous	General construction

Table 3-5 Noise and Vibration Monitors and NATA Calibration

Equipment	Serial Number	Calibration Date
Noise Level Meter	00973277	2/12/2021
Noise Level Meter	00661732	19/05/2021
Noise Level Meter	00973275	17/12/2021
Vibration Monitor	BE14639	10/02/2023
Vibration Monitor	BE17441	16/07/2021

Table 3-6 HAC Noise and Vibration Monitor Locations

Organisation	Monitor Type	Location
Westmead Institute for Medical Reach	Vibration Monitor	HAL incubators
		Microscopy Labs
	Noise Monitor	Sleep Lab
		Brain Dynamics Centre
Children's Medical Research Institute	Vibration Monitor	Microscopy Labs
	Noise Monitor	Labs (Level 1)



Organisation	Monitor Type	Location
Cumberland Hospital	Noise Monitor	Clinical psychology rooms

Note: The calibration of the monitoring equipment is checked in the field before and after the noise measurement period per Standards Australia AS/IEC 60942:2004/IEC 60942:2003–Electroacoustic – Sound Calibrators.

3.4. Soil and Water

3.4.1. Water quality in receiving waters

A pre-construction investigation to establish water quality objectives for the project is included within the EIS Technical Paper 6 – Water Quality Assessment.

During the reporting period, wet weather monitoring for the quarter was undertaken as summarised in **Table 3-7** and detailed in **Table A-3-1**. This monitoring was undertaken during a 48.8 mm 8-day rainfall event. Water levels were low to medium with a normal to fast flow at the time of sampling and overall there were little to no debris or leaf litter present. All results were within the water quality objectives outlined in the ANZECC guidelines.

Table 3-7 Water Quality in Receiving Waters

Date	Type	Type of Results	Wet / Dry	Locations
4/02/2021	Monitoring during construction	Field	Wet	Parramatta River: PR1; PR2; PR3; PR4; PR5; PR6 Domain Creek: DC1 Clay Cliff Creek: CC2 Vineyard Creek: VY1; VY2 Subiaco Creek: SC1 A'becketts Creek: AC1, AC2 CC1 was not accessible due to construction at the time of testing.

Table 3-8 Water Monitor Calibration

Equipment ¹	Serial Number	Calibration Date
Water Quality Monitor	DV7F6E7J	21/08/2021

¹All equipment is calibrated by NATA standards.

3.4.2. Discharge and dewatering

There were eight discharge events during the reporting period as presented in **Table A-3-2**. All events were compliant with discharge criteria.

3.5. Air Quality

3.5.1. Dust Deposition Monitoring

A dust deposition gauge was installed at 13A Grand Avenue in Camellia in December 2019 in advance of works which commenced at the beginning of February 2020. Baseline data indicated that the value of Total



Insoluble Matter (TIM) was 3.9 g/m² before the commencement of construction activities at 13A Grand Avenue.

Additional dust gauges were progressively installed at Rydalmere Station, Dundas Station, Carlingford and Telopea in advance of large-scale earthworks.

From December 2020 onwards, results have been presented as Ash Content rather than TIM. This method involves burning the TIM in a furnace to rid the sample of combustible materials such as vegetative matter, coal and insects. The remaining non-combustible material is then weighed to provide a more accurate dust monitoring result.

Dust deposition results are summarised in **Table A-4-1** in **Appendix A-4**, noting that data is received one month in arrears. Results from the previous reporting period show that all locations had a satisfactory level of ash content.

3.5.2. Asbestos Fibre Monitoring

Asbestos air monitoring is completed in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC: 3003(2005)], with NATA certification applying to all sample collection, handling and analytical procedures.

Asbestos Fibre Monitoring results are summarised in **Table A-4-2** in **Appendix A-4**. All reported results were satisfactory and conform with the minimum action level of <0.01 fibres /mL for control monitoring as outlined in Work, Health and Safety (2017) Regulation; and SafeWork NSW (2019) Code of Practice – How to Safely Remove Asbestos.

3.6. Flora and Fauna

3.6.1. Grey-Headed Flying Fox Monitoring

The Grey-Headed Flying Fox (GHFF) camp is located in Parramatta Park which lies approximately 150m from the project boundary at the nearest point.

Under Condition of Approval C9, a GHFF Construction Monitoring Program has been developed by TfNSW. The requirements of this Program have been reflected in the Flora and Fauna Management Sub-plan and include visual inspections on a weekly basis during the 'high risk' months of September to January. If distress is observed within the camp, immediate notification must be provided to TfNSW.

In addition, as required by the Environmental Work Method Statement for the Bridge Road Bridge, a trained ecologist from Narla Environmental must undertake additional inspections of the camp during bridge piling works (**Table 3-9**). An interim report prepared by Narla Environmental for the period up to and including 8 February 2021 concluded that the Parramatta Light Rail project has negligible (if any) impact on the GHFF camp.

During the reporting period, no indicators of stress or abnormal behaviour were observed during inspections.



Table 3-9 Observations from Visual Monitoring

Date	Time	Works	Notification Triggers ¹	Comments and Number of Monitoring Events ²
27/01/2021	7:55 – 14:06	Piling works	No	Narla Monitoring: six events None to small disturbance identified.
28/01/2021	9:30 – 14:45	Piling works	No	Narla Monitoring: four events No disturbance identified.
29/0/2021	8:50 – 13:54	Plant operation	No	Narla Monitoring: nine events. None to small disturbance identified.
1/02/2021	7:43 – 14:47	Piling works and plant operation	No	Narla Monitoring: 18 events. No disturbance identified.
2/02/2021	9:25 – 12:25	Piling works	No	Narla Monitoring: seven events. No disturbance identified.
3/02/2021	8:00 – 15:00	Piling works	No	Narla Monitoring: six events. No disturbance identified.
4/02/2021	7:57 – 15:02	Piling works	No	Narla Monitoring: eight events. No disturbance identified.
5/02/2021	7:41 – 14:59	Hammering and piling works	No	Narla Monitoring: 12 events. No disturbance identified
8/02/2021	7:51 – 15:53	Hammering, drilling and piling works	No	Narla Monitoring: 31 events. None to small disturbance identified.

¹Notification triggers include: >50% of the roost takes flight for over 20 minutes, GHFF leaving the roost in daylight hours, unusual vocalisations, located on or 2m from the ground, panting, saliva spreading, adults moving away from young, GHFF injured or killed on site (including aborted foetuses).

² A 'monitoring event' refers to a period of continuous monitoring in response to noise generating activities (irrespective of whether the noise is generated by Parramatta Connect works or third party activities).

3.7. Issues/incidents/non-compliance

Table 3-10 provides a summary of environmental compliance during the reporting period, including five environmental incidents. There were no non-compliances identified during the reporting period.

Table 3-10 Issues/incidents/non-compliances

Date	Location	Description
28/01/2021	Church Street and Factory Street Intersection	A pre-existing water main leak was identified by Parramatta Connect during excavation works on Church Street, North Parramatta at the intersection of Factory Street. In response, a crew was mobilised to repair the water main. During the repair works, the stop cock valve dislodged resulting in the loss of water and potentially sediment to



		stormwater. Sediment controls were established around the drain prior to discharge and a vacuum truck was mobilised to remove water.
17/02/2021	Church Street at Factory Street	A watermain was impacted during excavation works. The stormwater system was disconnected and as such all water was contained to the site and removed with a vacuum truck.
22/02/2021	70 Rippon Avenue	During a heavy rainfall event, sediment laden water migrated to an adjoining private property at 70 Rippon Avenue. There was no loss of water to stormwater or impact to property.
24/02/2021	214 George Street	During the installation of kerbing formwork, a star picket impacted the watermain. The stormwater system was disconnected and as such all water was contained to the site and removed with a vacuum truck.
24/02/2021	Macquarie Street	Following a rainfall event, bubbling water was identified in the kerb. It was determined that the source was a small crack in the watermain which was not related to PC PLR works. Sydney Water attended site to repair the asset and there were no off-site impacts.



Appendices

A-1 Weather Observations

Table A-1-1 Weather Observations: Parramatta North (Masons Drive) {station 066124}.

Date	Temperatures		Rain	Temp	RH	9:00 AM		
	Min	Max				Cld	Dir	Spd
	°C	°C	mm	%	8th			
26/01/2021	19	40	0	30.5	50	1	NNE	4
27/01/2021	21.4	22.8	0	22	91	8	S	19
28/01/2021	18.3	22.7	3.4	20.5	86	8	E	26
29/01/2021	17.8	22.8	7	19.5	99	8	E	6
30/01/2021	19	30.3	8.4	22.5	99	8	NNW	2
31/01/2021	20.2	23	0.6	22.4	82	8	SW	7
1/02/2021	19.5	28.6	1	22.5	85	8	SW	2
2/02/2021	17	24.3	28	18.6	88	7	SW	7
3/02/2021	17	24.7	0.4	20.5	73	2	SSW	6
4/02/2021	15.2	29.6	0	22.3	80	5	NNW	7
5/02/2021	17.3	28.5	0	24.7	78	3	NE	9
6/02/2021	19.5	26.5	0.4	22.5	83	8	NE	4
7/02/2021	16.8	28	0.6	23.8	69	4	WSW	6
8/02/2021	18.5	23.8	0	21	73	7	SSW	7
9/02/2021	16.8	24.5	0.2	22	54	6	SSE	6
10/02/2021	17.3	24.7	0	20.2	73	7	SW	2
11/02/2021	15.2	28.8	0	21.8	61	2	NW	4
12/02/2021	16	34	0	22.4	65	7	NE	2
13/02/2021	18.5	22.8	12	21.8	95	8	SSE	19
14/02/2021	15.8	25	14.4	19.2	76	4	S	6
15/02/2021	16	23.8	0	21	57	7	SSW	11
16/02/2021	17.7	26.2	10.4	21.2	97	6	SW	2
17/02/2021	17	25	9.2	20	88	6	SE	2
18/02/2021	15.4	23.8	2	23.3	52	4	ESE	4
19/02/2021	18	27	11.4	22	87	7	ENE	4
20/02/2021	18.5	29	0.2	22.8	81	7	N	2
21/02/2021	18.8	28.3	0	23.2	83	6	SW	4
22/02/2021	18.2	29.5	0	23.3	79	2	SW	4
23/02/2021	18.8	21.2	1.4	20.3	66	8	SE	9
24/02/2021	15.2	21.7	3	18	86	7	WSW	4
25/02/2021	16.3	24.5	7.6	18.5	97	7	NW	4



Table A-1-2 Wind Observations: Sydney Olympic Park AWS (Archery Centre) {station 066212}.

Date	Maximum Wind Gusts			9:00 AM		3:00 PM	
	Direction	Speed	Time	Direction	Speed	Direction	Speed
		km/h	local		km/h		km/h
26/01/2021	SE	44	22:36	WNW	7	NNW	13
27/01/2021	S	39	9:09	SSE	15	SSE	22
28/01/2021	SE	39	11:32	SE	17	SE	20
29/01/2021	E	31	12:12	ENE	7	E	17
30/01/2021	N	30	14:42	Calm		N	15
31/01/2021	SSE	35	10:13	SSE	17	SSE	19
1/02/2021	NE	31	16:40	S	6	E	19
2/02/2021	SE	35	15:40	SW	9	SSE	17
3/02/2021	ESE	31	16:53	SW	9	ESE	17
4/02/2021	NE	35	16:27	SE	4	ENE	13
5/02/2021	NNE	39	16:45	N	9	NE	13
6/02/2021	N	26	18:05	NW	2	NNE	9
7/02/2021	SE	37	16:08	W	6	SE	20
8/02/2021	SSE	30	8:43	SSW	13	SSE	17
9/02/2021	SE	28	16:34	SE	11	SE	15
10/02/2021	ESE	28	13:07	W	6	E	13
11/02/2021	NE	33	16:45	NW	11	E	15
12/02/2021	N	33	14:33	E	6	NNW	17
13/02/2021	SSE	39	14:37	SE	13	SSE	20
14/02/2021	SSE	39	13:03	SSW	11	SE	20
15/02/2021	SSE	50	15:30	S	15	S	26
16/02/2021	ESE	35	9:24	Calm		SE	17
17/02/2021	E	35	14:16	Calm		ESE	19
18/02/2021	E	41	10:55	ESE	15	ENE	6
19/02/2021	E	30	9:59	ENE	9	E	17
20/02/2021	ESE	30	13:26	Calm		ESE	19
21/02/2021	ESE	35	14:55	Calm		SE	19
22/02/2021	ESE	35	14:03	WSW	7	ESE	24
23/02/2021	S	35	18:14	S	19	SSE	17
24/02/2021	SSE	20	13:22	WNW	2	SSE	13
25/02/2021	S	24	10:14	NNW	6	SE	9

Notes:

Blue text indicates a rain event greater than 1mm of rain.

The orange text indicates a rain event greater than the 80th percentile of 25.8mm, and a wind speed of greater than 25km/hr

Red text indicates a rain event greater than the 85th percentile of 33.1mm, and a wind speed greater than 50km/hr.

* Data was unavailable.

A-2 Noise and Vibration Monitoring Results

Table A-2-1 Noise Monitoring Results

Date	Time	Works Period	Construction Activity	Activity Location	Monitoring Location	NML (dBA)	Predicted (dBA)	Additional Mitigation Measures	L _{Amax}	Recorded L _{eq, 15min} (dBA)	Exceedance of Predicted (dBA)	Exceedance of Predicted	Comments
29/01/2021	23:00	OOHW Period 2	Stormwater	Teloepa	47 Adderton Road	36	76	V	89.7	50.3	-25.7	No	Construction noise clearly audible
3/02/2021	9:35	Standard Hours	Vibratory Piling setup with Crane	Cumberland East	Bunya (East)	65	80	PN, V, RP, SN, DR, RO	86.1	76.3	-3.7	No	Construction noise audible at most times, construction noise clearly audible
15/02/2021	10:00	Standard Hours	Temporary Jetty Piling	Bunya East Embankment	Cumberland East	65	100	-	60	61	-39	No	Construction noise clearly audible
15/02/2021	10:15	Standard Hours	Pavements (Saw)	Factory Street	55 O'Connell Street	52	100	-	79	77.3	-22.7	No	Construction noise sometimes audible
15/02/2021	8:00	Standard Hours	CSR/Drainage	28 Railway Parade	8-12 Alexandra Avenue	59	60	-	63	60	-	No	Construction noise inaudible
15/02/2021	8:15	Standard Hours	Utilities/Stormwater	Hawkesbury/Darcy	157 Hawkesbury Road	61	98	-	70	65	-33	No	Construction noise sometimes audible
15/02/2021	8:30	Standard Hours	CSR/Drainage	Hawkesbury/Darcy	199 Hawkesbury Road	59	100	-	81	73	-27	No	Construction noise clearly audible
18/02/2021	9:50	Standard Hours	Retaining Wall	Rydalmere	14 Dudley Street	55	60	-	66.1	58.2	-1.8	No	Construction noise audible at most times
18/02/2021	9:05	Standard Hours	Drainage	Teloepa	22 Adderton Road	56	60	-	86.6	67.2	+7.2	Yes	Construction noise sometimes audible; traffic noise dominant noise source
18/02/2021	8:22	Standard Hours	No Works	Teloepa	89 Marshall Road	52	60	-	79.7	53.6	-6.4	No	Construction noise sometimes audible
18/02/2021	7:55	Standard Hours	Retaining Wall/Track works	Carlingford	Carlingford Station	62	60	-	81.1	60.9	+0.9	Yes	Construction noise audible at most times; traffic dominant noise source, truck horn sounded during monitoring period
26/06/2020 - ongoing	Continuous monitoring	Construction works	Hawkesbury Road works	Westmead Institute for Medical Research (Sleep Lab)	65	*	*	*	*	*	*	No	Activities are reviewed in response to exceedance alerts. Where the exceedance is attributed to construction, a review is undertaken of works and plant/equipment or methodology is modified where necessary. No exceedances were attributed to Parramatta Connect construction activities. Continuous monitoring values are available on request.
26/06/2020 - ongoing	Continuous monitoring	Construction works	Hawkesbury Road works	Westmead Institute for Medical Research (Brain Dynamics Centre)	65	*	*	*	*	*	*	No	
26/06/2020 - ongoing	Continuous monitoring	Construction works	Hawkesbury Road works	Children's Medical Research Institute (Microscopy Labs)	65	*	*	*	*	*	*	No	
26/06/2020 - ongoing	Continuous monitoring	Construction works	Cumberland Hospital	Cumberland Hospital (Clinical psychology rooms)	55	*	*	*	*	*	*	No	

Notes:

Standard hours:

- a) All areas excluding Eat Street and Camellia – Monday to Friday 7:00 am to 7:00 pm. Saturday 8:00 am to 6:00 pm
- b) Eat Street (Church Street between Palmer Street and George Street) – Monday to Friday 7:00 am to 6:00 pm. Saturday 8:00 am to 12:00 pm
- c) Camellia, Rosehill and Rydalmere (east of James Ruse Drive to Victoria Road) – 24 hours a day and seven days a week provided that sensitive receivers are not affected by noise levels of greater than 5 dBA above the rating background level at any residence

OOHW Period 1 is defined as:

- a) 6:00pm to 10:00pm (evenings) Monday to Saturday
- b) 7:00am to 8:00am and 1:00pm to 10:00pm (day & evening) Saturday and
- c) 8:00am to 6:00pm Sunday and public holidays (days).

OOHW Period 2 is defined as:

- a) 10:00pm to 7:00am (nights) Monday to Saturday and
- b) 6:00pm to 8:00am (nights) Sundays and public holidays.

Additional Mitigation Measures

- PN = Project Notification
- V = Verification Monitoring
- RP = Respite Period
- AA = Alternate Accommodation
- SN = Specific Notification / individual briefing or phone call
- DR = Duration Reduction
- RO = Project Specific Respite Offer

Table A-2-2 Vibration Monitoring Results

Date	Time	Works Period	Construction Activity	Activity Location	Monitoring Location	Trigger Value (mm/s)	Recorded PVS (mm/s)	Exceedance of Target	Construction Vibration Exceedance	Comments
2/02/2021	11:30 – 11:45	Standard work hours	Compaction of DGB using a 13t roller on low vibration mode	Hawkesbury Road/Queens Road Corner	Footpath near 175 Hawkesbury Road	15	4.3 ¹	No	No	Compliant
16/02/2021	8:03 – 8:19	Standard work hours	3t roller compacting stabilised sand	Ross St	Stables Wall	7.5	1.6 ¹	No	No	Compliant
19/02/2021	9:15 – 9:30	Standard work hours	Plate Compactor compacting backfill material	27 Railway Parade	On soft ground near site	15	1.3 ¹	No	No	Compliant
3/02/2021	10:29 – 16:45	Standard work hours	Vibratory roller compacting following lime stabilisation	Dundas	66 Rippon Avenue	25	3.026	No	No	Compliant
4/02/2021	13:38 – 14:28	Standard work hours	Boxing out and proof rolling (whacker packer, and then 2t roller)	George Street box out + kerbing	210 George Street	7.5	0.601	No	No	Compliant
8/2/2021	14:17 – 14:40	Standard work hours	Baseline Monitoring	Lennox Bridge	Along bridge alignment	7.5	0.293	No	No	Compliant
17/02/2021	14:47 – 15:20	Standard work hours	Vibration Rolling, 25t excavator tracking	Alfred Street Compound	222 George Street	6.5	4.73	No	No	Compliant
26/06/2020		Continuous monitoring	Hawkesbury Road works	Hawkesbury Road	Westmead Institute for Medical Research (HAL incubators)	0.1 mm/s	*	No	No	Activities are reviewed in response to exceedance alerts. Where the exceedance is attributed to construction, a review is undertaken of works and plant/equipment or methodology is modified where necessary.
26/06/2020		Continuous monitoring	Hawkesbury Road works	Hawkesbury Road	Westmead Institute for Medical Research (Microscopy Labs)	0.1 mm/s	*	No	No	
26/06/2020		Continuous monitoring	Hawkesbury Road works	Hawkesbury Road	Children's Medical Research Institute (Microscopy Labs)	0.1 mm/s	*	No	No	

¹ The monitors used in these locations do not record PVS values, rather PPV. In this case, the PPV value is compared to the trigger value. It should be noted that PVS values are always equivalent or higher than PPV. The PPV values for this reporting period are 4.3 mm/s for 2/02/2021, 1.6 mm/s for 16/02/2021 and 1.3 mm/s for 19/02/2021. These values are compliant with CNVIS criteria.



A-3 Water Sampling and Discharge Results

Table A-3-1 Water Quality Monitoring - Comments and observations

Location	Waterway	Upstream/ Downstream of Works	Type ³	Date	Time	pH 5.5-8.5 ²	Elec. Conduct. (µS/cm) LR ¹ : 125– 2200 ² E: None	Turbidity (NTU) 6-50 ²	Comments and Observations
PR1	Parramatta River	Upstream	Wet	4/02/2021	11:18	7.96	260	7.4	Fine weather, no rubbish, water was clear, minimal leaf litter.
PR2	Parramatta River	Downstream	Wet	4/02/2021	11:47	7.94	244	5.8	Fine weather, minimal rubbish, water was clear, no leaf litter. ERSED controls were in place.
DC1	Domain Creek	N/A	Wet	4/02/2021	12:11	7.76	227	0	Fine weather, minimal rubbish, water was clear, no leaf litter.
PR3	Parramatta River	Upstream	Wet	4/02/2021	12:30	8.07	205	4.9	Fine weather, no rubbish, water was clear, minimal amount of leaf litter.
PR4	Parramatta River	Downstream	Wet	4/02/2021	17:05	8.39	219	3.6	Sunny weather, no rubbish, water was clear, no leaf litter.
PR5	Parramatta River	Upstream	Wet	4/02/2021	17:35	7.62	25500	0	Overcast weather, no rubbish, water was clear, minimal leaf litter. There was a run-out tide. PR5 is noted to be an estuarine environment and as such there is not a trigger value for electrical conductivity.
CC2	Clay Cliff Creek	Downstream	Wet	4/02/2021	15:23	8.24	8650	5.5	Sunny weather, moderate amount of rubbish, water was clear, moderate amount of leaf litter. CC2 is noted to be an estuarine environment and as such there is not a trigger value for electrical conductivity.
VY2	Vineyard Creek	Downstream	Wet	4/02/2021	13:14	7.54	496	9.7	Sunny weather, no rubbish, water was clear, minimal leaf litter. Moderate amount of vegetation present. ERSED controls were in place.
VY1	Vineyard Creek	Upstream	Wet	4/02/2021	13:18	7.54	505	37.4	Sunny weather, no rubbish, water was clear, substantial amount of leaf litter.
PR6	Parramatta River	Downstream	Wet	4/02/2021	13:53	7.83	24700	5.9	Sunny weather, minimal rubbish, water was clear, moderate amount of leaf litter. There was a run-out tide. PR6 is noted to be an estuarine environment and as such there is not a trigger value for electrical conductivity.
SC1	Subiaco Creek	N/A	Wet	4/02/2021	14:18	7.74	24100	0	Sunny weather, minimal rubbish, water was clear, moderate amount of leaf litter. SC1 is noted to be an estuarine environment and as such there is not a trigger value for electrical conductivity.
AC1	A'becketts Creek	Upstream	Wet	4/02/2021	14:50	7.98	2230	0	Sunny weather, minimal rubbish, water was slightly turbid, moderate amount of leaf litter. AC1 is noted to be an estuarine environment and as such there is not a trigger value for electrical conductivity.
AC2	A'becketts Creek	Downstream	Wet	4/02/2021	15:02	8.06	1720	0	Sunny weather, large amount of rubbish, water was clear, moderate amount of leaf litter.

1. ANZECC Waterway types: Fresh water (PR1, PR2, PR3, PR4, VY1 and VY2); E: Estuarine (CC1, CC2, AC1, AC2, PR5 and PR6).

2. Trigger values were established by Parramatta Connect within the Pre-Construction Sampling (Baseline Review) Water Quality Monitoring Report (PLR1INF-CPBD-ALL-WA-RPT-000003). Red text indicates values outside of the baseline trigger values.

3. Charles Street Weir separates Parramatta River from up and downstream.

Table A-3-2 Discharge Water Quality

Discharge monitoring Point ID	Type of Monitoring Point	Type of Discharge Point	Date	Discharge Permit #	Oil and Grease (Not visible)	pH (6.5 - 8.5)	Turbidity (NTU)	Comments
A1.10	Basins and settling containers	Stormwater inlet	1/02/2021	DW-A1-027	Not visible	8	1	Discharge to stormwater 1.20
A1.42	Basins and settling containers	Stormwater inlet	2/02/2021	DW-A1-028	Not visible	8	10	Discharge to stormwater 1.42
A1.42	Basins and settling containers	Stormwater inlet	24/02/2021	DW-A1-029	Not visible	8	10	Discharge to stormwater 1.42
A1.42	Basins and settling containers	Stormwater inlet	24/02/2021	DW-A1-030	Not visible	8.4	30	Discharge to stormwater 1.42
A2.02, A2.04	Settling Container (Water Treatment Plan)	Stormwater inlet	29/01/2021	DW-A2-057	Not visible	8.18	4.9	Discharge from Sydney Water main
A2.62	Settling Container (Water Treatment Plan)	Stormwater inlet	4/02/2021	DW-A2-058	Not visible	8.1	<1	Discharge from water filled barriers (filled with potable water)
A3.3	Basins and settling containers	Creek	16/02/2021	DW-A3-028	Not visible	7.1	10.6	Discharge into watercourse/creek
A3.35	Basins and settling containers	Stormwater inlet	22/02/2021	DW-A3-029	Not visible	7.79	3.3	Discharge from Sydney Water main



A-4 Air Quality Monitoring Results

Table A-4-1 Summary of Dust Deposition Data (Ash Content)

Date	Monitoring Location	Ash Content g/m ² /month
January	13a Grand Avenue	0.3
January	Rydalmere Station	1.0
January	Dundas Station	0.7
January	Telopea	0.5
January	Carlingford	1.6



Table A-4-2 Summary of Asbestos Fibre Monitoring

Report Number	Date	Location	Start time	End time	Result (Fibres/Fields)	Result (Fibres/mL)
AMR156	27-Jan	RETAINING WALL 1, EASTERN BOUNDARY APPROX 10M NORTH OF MIDDLE GATE	7:18	15:48	0/100	<0.01
AMR156	27-Jan	RETAINING WALL 1, EASTERN BOUNDARY ADJACENT TO NORTHERN GATE	7:19	15:47	0/100	<0.01
AMR156	27-Jan	RETAINING WALL 1, WESTERN BOUNDARY APPROX 20M NORTH OF MIDDLE GATE	7:21	15:46	0/100	<0.01
AMR156	27-Jan	RETAINING WALL 1, WESTERN BOUNDARY, APPROX 20M SOUTH OF NORTHERN GATE	7:22	15:45	0/100	<0.01
AMR156	27-Jan	SOUTH OF RETAINING WALL 1, EASTERN BOUNDARY, OPPOSITE SOUTHERN GATE	7:48	15:51	0/100	<0.01
AMR156	27-Jan	SOUTH OF RETAINING WLL 1, SOUTHER BOUNDARY	7:49	15:52	0/100	<0.01
AMR156	27-Jan	SOUTH OF RETAINING WALL 1, WESTERN BOUNDARY, SOUTHERN GATE	7:50	15:53	0/100	<0.01
AMR157	28-Jan	OVER PASS STOCKPILE AREA, EASTERN GATE	13:02	16:05	0/100	<0.01
AMR157	28-Jan	RETAINING WALL 2, NORTHERN END	13:08	16:11	0/100	<0.01
AMR157	28-Jan	RETAINING WALL 2, APPROX 40M SOUTH OF NORTHERN END	13:09	16:10	0/100	<0.01
AMR158	29-Jan	WESTERN BOUNDARY, SOUTHERN GATE SOUTH OF RW1	7:05	15:44	0/100	<0.01
AMR158	29-Jan	SOUTHERN BOUNDARY, 20M WEST OF TRAFFIC CONTROL STAND, SOUTH OF RW1	7:06	15:45	0/100	<0.01
AMR158	29-Jan	EASTERN BOUNDARY, OPPOSITE SOUTHER GATE, SOUTH OF RW1	7:07	15:46	0/100	<0.01
AMR158	29-Jan	RETAINING WALL 1, EASTERN BOUNDARY, MIDDLE GATE	7:12	15:31	0/100	<0.01
AMR158	29-Jan	RETAINING WALL 1, WESTERN BOUNDARY, APPROX 40M NORTH OF MIDDLE GATE	7:13	15:32	0/100	<0.01
AMR158	29-Jan	RETAINING WALL 1, EASTERN BOUNDARY, NORTHERN GATE	7:14	15:33	0/100	<0.01

AMR158	29-Jan	RETAINING WALL 2, APPROX 40M NORTH OF JAMES HARDIE BRIDGE	7:15	15:34	0/100	<0.01
AMR158	29-Jan	STOCKPILE AREA, EASTERN GATE	7:21	15:42	0/100	<0.01
AMR159	1-Feb	RETAINING WALL 2, ADJACENT TO JAMES HARDIE BRIDGE	7:35	15:41	0/100	<0.01
AMR159	1-Feb	RETAINING WALL 1, EASTERN BOUNDARY OF NORTHERN GATE	7:34	15:40	0/100	<0.01
AMR159	1-Feb	RETAINING WALL 1, WESTERN BOUNDARY, APPROX 40M NORTH OF MIDDLE GATE	7:33	15:39	0/100	<0.01
AMR159	1-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT MIDDLE GATE	7:32	15:38	0/100	<0.01
AMR159	1-Feb	SOUTH OF RETAINING WALL 1 EASTERN BOUNDARY OPPOSITE SOUTHERN GATE	7:28	15:34	0/100	<0.01
AMR159	1-Feb	SOUTH OF RETAINING WALL 1, SOUTHERN BOUNDARY, 20M WEST OF TRAFFIC CONTROL STAND	7:27	15:33	0/100	<0.01
AMR159	1-Feb	SOUTH OF RETAINING WALL 1, WESTERN BOUNDARY SOUTHERN GATE	7:26	15:32	0/100	<0.01
AMR159	1-Feb	OVERPASS STOCKPILE AREA, EASTERN GATE	7:25	15:31	0/100	<0.01
AMR159	1-Feb	13A - SW OF STORMWATER EXCAVATION	7:25	15:20	0/100	<0.01
AMR159	1-Feb	13A - W OF STORMWATER EXCAVATION	7:27	15:22	0/100	<0.01
AMR159	1-Feb	13 - N OF STORMWATER EXCAVATION	7:29	15:24	0/100	<0.01
AMR159	1-Feb	13 - NE OF STORMWATER EXCAVATION	7:31	15:26	0/100	<0.01
AMR160	2-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT MIDDLE GATE	7:41	15:53	0/100	<0.01
AMR160	2-Feb	RETAINING WALL 1, WESTERN BOUNDARY APPROX 40M NORTH OF MIDDLE GATE	7:42	15:52	0/100	<0.01
AMR160	2-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT NORTHERN GATE	7:43	15:51	0/100	<0.01
AMR160	2-Feb	SANDOWN LINE, AT GATE 14, SOUTHERN BOUNDARY	8:43	15:50	0/100	<0.01
AMR160	2-Feb	SANDOWN LINE, NORTHERN BOUNDARY, OPPOSITE GATE 14	8:44	15:49	0/100	<0.01
AMR160	2-Feb	SANDOWN LINE, WESTERN END, OPPOSITE CAMELLIA TRAFFIC CONTROL STAND	8:45	15:48	0/100	<0.01
AMR161	3-Feb	13A GRAND AVE N OF EXCAVATION	7:25	14:29	0/100	<0.01


AMR161	3-Feb	13A GRAND AVE E OF EXCAVATION	7:26	14:30	0/100	<0.01
AMR161	3-Feb	13A GRAND AVE S OF EXCAVATION	7:27	14:31	0/100	<0.01
AMR161	3-Feb	13A GRAND AVE W OF EXCAVATION	7:29	14:34	0/100	<0.01
AMR161	3-Feb	RETAINING WALL 2 - ADJACENT JAMES HARDIE BRIDGE	7:16	14:30	0/100	<0.01
AMR161	3-Feb	RETAINING WALL 1 - NORTH GATE	7:18	14:32	0/100	<0.01
AMR161	3-Feb	RETAINING WALL 1 - EAST BOUNDARY, 50M NORTH OF MIDDLE GATE	7:20	14:35	0/100	<0.01
AMR161	3-Feb	RETAINING WALL 1 - MIDDLE GATE	7:22	14:37	0/100	<0.01
AMR161	3-Feb	SOUTH OF RETAINING WALL 1 - EAST BOUNDARY	7:25	14:42	0/100	<0.01
AMR161	3-Feb	SOUTH OF RETAINING WALL 1 - SOUTH BOUNDARY	7:26	14:44	0/100	<0.01
AMR161	3-Feb	SOUTH OF RETAINING WALL 1 - WEST BOUNDARY	7:28	14:46	0/100	<0.01
AMR161	3-Feb	OVERPASS STOCKPILE AREA, EAST GATE	7:34	14:49	0/100	<0.01
AMR161	3-Feb	SANDOWN LINE TRENCHING - SOUTH GATE	7:38	14:54	0/100	<0.01
AMR161	3-Feb	SANDOWN LINE TRENCHING - WEST BOUNDARY	7:40	14:56	0/100	<0.01
AMR161	3-Feb	SANDOWN LINE TRENCHING - NORTH BOUNDARY	7:42	14:59	0/100	<0.01
AMR162	4-Feb	RETAINING WALL 2, SOUTHERN END OF BRIDGE OVER PARAMATTA RIVER	7:37	15:10	0/100	<0.01
AMR162	4-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT NORTHERN GATE	7:38	15:11	0/100	<0.01
AMR162	4-Feb	RETAINING WALL 1, EASTERN BOUNDARY APPROX 50M SOUTH OF NORTHERN GATE	7:39	15:12	0/100	<0.01
AMR162	4-Feb	RETAINING WALL 1, EASTERN BOUNDARY, MIDDLE GATE	7:40	15:13	0/100	<0.01
AMR162	4-Feb	OVERPASS STOCKPILE, EASTERN GATE	7:42	15:14	0/100	<0.01
AMR162	4-Feb	SOUTH OF RETAINING WALL 1, EASTERN BOUNDARY, OPPOSITE SOUTHERN GATE	7:44	15:15	0/100	<0.01
AMR162	4-Feb	SOUTH OF RETAINING WALL 1, SOUTHERN BOUNDARY, APPROX 20M WEST OF TRAFFIC CONTROL	7:45	15:16	0/100	<0.01
AMR162	4-Feb	SOUTH OF RETAINING WALL 1, WESTERN BOUNDARY, SOUTH GATE	7:46	15:17	0/100	<0.01
AMR162	4-Feb	RETAINING WALL 1, WESTERN BOUNDARY APPROX 80M NORTH OF SOUTHERN GATE	7:48	15:18	0/100	<0.01

AMR162	4-Feb	RETAINING WALL 1, WESTERN BOUNDARY APPROX 150M NORTH OF SOUTHERN GATE	7:49	15:19	0/100	<0.01
AMR162	4-Feb	ARTHUR ST COMPOUND, SOUTHERN BOUNDARY ADJACENT TO OFFICES	11:47	15:05	0/100	<0.01
AMR162	4-Feb	ARTHUR ST COMPOUND, WESTERN BOUNDARY ADJACENT TO SITE GATE	11:46	15:06	0/100	<0.01
AMR162	4-Feb	ARTHUR ST COMPOUND, NORTHERN BOUNDARY APPROX 30M EAST OF ARTHUR ST	11:45	15:07	0/100	<0.01
AMR162	4-Feb	13 A - SOUTH OF STORM WATER EXCAVATION	7:25	15:12	0/100	<0.01
AMR162	4-Feb	14 A - WEST OF STORM WATER EXCAVATION	7:27	15:13	0/100	<0.01
AMR162	4-Feb	15 A - NORTH OF STORM WATER EXCAVATION	7:29	15:15	0/100	<0.01
AMR162	4-Feb	16 A - NE OF STORM WATER EXCAVATION	7:31	15:16	0/100	<0.01
AMR163	5-Feb	S OF EXCAVATIONS	8:14	15:28	0/100	<0.01
AMR163	5-Feb	E OF EXCAVATIONS	8:15	15:29	0/100	<0.01
AMR163	5-Feb	W OF EXCAVATIONS	8:17	15:30	0/100	<0.01
AMR163	5-Feb	N OF EXCAVATIONS	8:18	15:31	0/100	<0.01
AMR164	6-Feb	RETAINING WALL 2, ADJACENT TO SOUTHERN END OF PARAMATTA RIVER BRIDGE	7:07	12:44	0/100	<0.01
AMR164	6-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT NORTHERN GATE	7:08	12:43	0/100	<0.01
AMR164	6-Feb	RETAINING WALL 1, EASTERN BOUNDARY, APPROX 50M SOUTH OF NORTHERN GATE	7:09	12:42	0/100	<0.01
AMR164	6-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT MIDDLE GATE	7:10	12:41	0/100	<0.01
AMR164	6-Feb	RETAINING WALL 1, WESTERN BOUNDARY APPROX 20M SOUTH OF MIDDLE GATE	7:11	12:40	0/100	<0.01
AMR164	6-Feb	RETAINING WALL 1, WESTERN BOUNDARY APPROX 20M NORTH OF MIDDLE GATE	7:12	12:39	0/100	<0.01


AMR164	6-Feb	DUNDAS PEDESTRIAN WALKWAY AT NORTHWEST END OF PATH	8:15	12:08	0/100	<0.01
AMR164	6-Feb	DUNDAS PEDESTRIAN WALKWAY AT SOUTH EAST END OF PATH	8:16	12:09	0/100	<0.01
AMR164	6-Feb	13A - SOUTH OF STORMWATER EXCAVATION	7:18	13:01	0/100	<0.01
AMR164	6-Feb	13A - WEST OF STORMWATER EXCAVATION	7:20	13:02	0/100	<0.01
AMR164	6-Feb	13A - NORTH OF STORMWATER EXCAVATION	7:21	13:04	0/100	<0.01
AMR165	8-Feb	OVERPASS STOCKPILE AREA, EASTERN GATE	7:20	16:00	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, WESTERN BOUNDARY, SOUTHERN GATE	7:21	16:01	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, EASTERN BOUNDARY, APPROX 30M NORTH OF SOUTHERN GATE	7:22	16:02	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, WESTERN BOUNDARY, OPPOSITE MIDDLE GATE	7:23	16:03	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, EASTERN BOUNDARY, APPROX 20M SOUTH OF MIDDLE GATE	7:24	16:04	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, EASTERN BOUNDARY, APPROX 20M NORTH OF MIDDLE GATE	7:25	16:05	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, WESTERN BOUNDARY APPROX 30M SOUTH OF NORTHERN GATE	7:26	16:06	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 1, EASTERN BOUNDARY AT NORTHERN GATE	7:28	16:07	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 2, ADJACENT TO JAMES HARDIE BRIDGE	7:29	16:08	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 2, APPROX 50M NORTH OF JAMES HARDIE BRIDGE	7:30	16:09	0/100	<0.01
AMR165	8-Feb	RETAINING WALL 2, ADJACENT TO SOUTH END OF PARAMATTA RIVER	7:31	16:10	0/100	<0.01

AMR165	8-Feb	ARTHUR ST COMPOUND, SOUTHERN BOUNDARY APPROX 30M EAST OF ARTHUR ST	7:45	15:39	0/100	<0.01
AMR165	8-Feb	ARTHUR ST COMPOUND, WESTERN BOUNDARY, ADJACENT ACCESS GATE	7:46	15:38	0/100	<0.01
AMR165	8-Feb	ARTHUR ST COMPOUND, NORTHERN BOUNDARY APPROX 20M EAST OF ARTHUR ST	7:47	15:37	0/100	<0.01
AMR166	9-Tue	ARTHUR ST COMPOUND, SOUTHERN BOUNDARY, APPROX 30M EAST OF ARTHUR ST	7:04	15:55	0/100	<0.01
AMR166	9-Tue	ARTHUR ST COMPOUND, WESTERN BOUNDARY AT SITE GATE	7:05	15:56	0/100	<0.01
AMR166	9-Tue	ARTHUR ST COMPOUND, NORTHERN BOUNDARY APPROX 30M EAST OF ARTHUR ST	7:06	15:57	0/100	<0.01
AMR166	9-Tue	CAMELLIA OVERPASS STOCKPILE, EASTERN GATE	7:18	16:10	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 1, WESTERN BOUNDARY, AT SOUTHERN GATE	7:19	16:11	0/100	<0.01
AMR166	9-Tue	RETAINING WALL1, EASTERN BOUNDARY, APPROX 20M NORTH OF SOUTHERN GATE	7:20	16:12	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 1, EASTERN BOUNDARY AT MIDDLE GATE	7:21	16:13	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 1, WESTERN BOUNDARY OPPOSITE MIDDLE GATE	7:22	16:14	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 1, EASTERN BOUNDARY AT NORTHERN GATE	7:23	16:15	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 1, WESTER BOUNDARY OPPOSITE NORTHERN GATE	7:24	16:16	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 2, 10M NORTH OF JAMES HARDIE BRIDGE	7:25	16:17	0/100	<0.01
AMR166	9-Tue	RETAINING WALL 2, 40M NORTH OF JAMES HARDIE BRIDGE	7:26	16:18	0/100	<0.01
AMR166	9-Tue	RETAINING WALL2, AT SOUTHERN END OF PARRAMATTA RIVER BRIDGE	7:27	16:19	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 2, NORTH END	7:18	15:58	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 2, MIDDLE	7:19	15:59	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 2, SOUTHERN END	7:20	16:00	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 1, NORTHERN GATE EASTERN BOUNDARY	7:21	16:01	0/100	<0.01

AMR167	10-Feb	RETAINING WALL 1, NORTHERN GATE WESTERN BOUNDARY	7:22	16:02	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 1, MIDDLE GATE, EASTERN BOUNDARY	7:23	16:03	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 1, MIDDLE GATE, WESTERN BOUNDARY	7:24	16:04	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 1, SOUTHERN GATE, EASTERN BOUNDARY	7:25	16:05	0/100	<0.01
AMR167	10-Feb	RETAINING WALL 1, SOUTHERN GATE WESTERN BOUNDARY	7:26	16:06	0/100	<0.01
AMR167	10-Feb	OVERPASS STOCKPILE, EASTERN GATE	7:27	16:07	0/100	<0.01
AMR167	10-Feb	DUNDAS STATION, PEDESTRIAN PATH, NW END	8:01	16:08	0/100	<0.01
AMR167	10-Feb	DUNDAS STATION, PEDESTRIAN PATH, SE END	8:02	16:09	0/100	<0.01
AMR167	10-Feb	ARTHUR ST COMPOUND, SOUTHERN BOUNDARY	7:01	15:42	0/100	<0.01
AMR167	10-Feb	ARTHUR ST COMPOUND, WESTERN BOUNDARY	7:02	15:41	0/100	<0.01
AMR167	10-Feb	ARTHUR ST COMPOUND, NORTHERN BOUNDARY	7:03	15:40	0/100	<0.01
AMR168	8-Feb	COMPOUND 10-D, SOUTH OF ROAD EXCAVATION	8:10	15:13	0/100	<0.01
AMR168	8-Feb	COMPOUND 10-D, SOUTH EAST OF ROAD EXCAVATION	8:12	15:15	0/100	<0.01
AMR168	8-Feb	7 COMPOUND 10-D, NORTH EAST OF ROAD EXCAVATION	8:13	15:17	0/100	<0.01
AMR168	8-Feb	COMPOUND 10-D, ENTRY GATE	8:15	15:18	0/100	<0.01
AMR169	10-Feb	COMPOUND 10-D - SOUTH OF EXCAVATION	7:17	11:50	0/100	<0.01
AMR169	10-Feb	COMPOUND 10-D - EAST OF EXCAVATION	7:19	11:52	0/100	<0.01
AMR169	10-Feb	COMPOUND 10-D - NORTHEAST OF EXCAVATION	7:21	11:54	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 2, NORTHERN END	7:22	15:41	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 2, MIDDLE	7:23	15:42	0/100	<0.01



AMR170	11-Feb	RETAINING WALL 2, SOUTHERN END	7:24	15:43	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 1, NORTHERN GATE EASTERN BOUNDARY	7:25	15:44	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 1, NORTHERN GATE WESTERN BOUNDARY	7:26	15:45	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 1, MIDDLE GATE EASTERN BOUNDARY	7:27	15:46	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 1, MIDDLE GATE WESTERN BOUNDARY	7:28	15:47	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 1, SOUTHERN GATE EASTERN BOUNDARY	7:29	15:48	0/100	<0.01
AMR170	11-Feb	RETAINING WALL 1, SOUTHERN GATE WESTERN BOUNDARY	7:30	15:49	0/100	<0.01
AMR170	11-Feb	OVERPASS STOCKPILE, EASTERN GATE	7:31	15:50	0/100	<0.01
AMR170	11-Feb	ADDERTON RD, CORNER OF LEAMINGTON RD ADJACENT TO NORTHERN BOUNDARY FENCE	8:01	15:17	0/100	<0.01
AMR170	11-Feb	ADDERTON RD AREA, APPROX 30M WEST OF LEMINGTON RD, NORTHERN BOUNDARY LINE	8:02	15:18	0/100	<0.01
AMR170	11-Feb	ARTHER ST COMPOUND - NORTH BOUNDARY	7:15	15:01	0/100	<0.01
AMR170	11-Feb	ARTHER ST COMPOUND - WEST BOUNDARY	7:17	15:02	0/100	<0.01
AMR170	11-Feb	ARTHER ST COMPOUND - SOUTH BOUNDARY	7:18	15:04	0/100	<0.01
AMR171	12-Feb	ARTHUR ST COMPOUND, SOUTHERN BOUNDARY	7:06	16:01	0/100	<0.01
AMR171	12-Feb	ARTHUR ST COMPOUND, WESTERN BOUNDARY	7:07	16:02	0/100	<0.01
AMR171	12-Feb	3 ARTHUR ST COMPOUND, NORTHERN BOUNDARY	7:08	16:03	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 2, NORTHERN END	7:22	16:12	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 2, MIDDLE	7:23	16:13	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 2, SOUTH END	7:24	16:14	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 2, NORTH END, WESTERN BOUNDARY	7:25	16:15	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 2, NORTH END, EASTERN BOUNDARY	7:26	16:16	1/100	<0.01



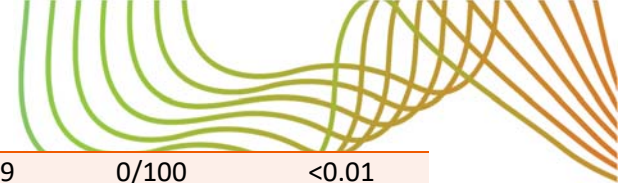
AMR171	12-Feb	RETAINING WALL 1, MIDDLE GATE, EAST BOUNDARY	7:27	16:17	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 1, MIDDLE GATE, WEST BOUNDARY	7:28	16:18	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 1, SOUTH GATE WEST BOUNDARY	7:29	16:19	0/100	<0.01
AMR171	12-Feb	RETAINING WALL 1, SOUTH GATE, EAST BOUNDARY	7:30	16:20	0/100	<0.01
AMR171	12-Feb	OVERPASS STOCKPILE, EAST GATE	7:31	16:21	0/100	<0.01
AMR172	11-Feb	N OF EXCAVATION	13:24	15:15	0/100	<0.01
AMR172	11-Feb	E OF EXCAVATION	13:25	15:16	0/100	<0.01
AMR172	11-Feb	S OF EXCAVATION	13:26	15:17	0/100	<0.01
AMR172	11-Feb	W OF EXCAVATION	13:27	15:18	0/100	<0.01
AMR173	12-Feb	NW OF EXCAVATION	8:50	11:05	0/100	<0.01
AMR173	12-Feb	NE OF EXCAVATION	8:51	11:06	0/100	<0.01
AMR173	12-Feb	S OF EXCAVATION	8:52	11:07	0/100	<0.01
AMR174	15-Feb	RETAINING WALL 1, EASTERN BOUNDARY NORTHERN GATE	7:26	15:20	0/100	<0.01
AMR174	15-Feb	RETAINING WALL 1, WESTERN BOUNDARY NORTHERN GATE	7:27	15:21	1/100	<0.01
AMR174	15-Feb	RETAINING WALL 2, SOUTHERN END	7:28	15:22	0/100	<0.01
AMR174	15-Feb	RETAINING WALL 2, MIDDLE	7:29	15:24	0/100	<0.01
AMR174	15-Feb	RETAINING WALL 2, NORTHERN END	7:30	15:25	0/100	<0.01
AMR174	15-Feb	CAMELLIA SOUTH ROAD EXCAVATION, SOUTH	7:35	15:30	0/100	<0.01
AMR174	15-Feb	CAMELLIA SOUTH ROAD EXCAVATION, WEST	7:36	15:31	0/100	<0.01
AMR174	15-Feb	OVERPASS STOCKPILE, EASTERN GATE	7:37	15:33	0/100	<0.01
AMR174	15-Feb	CAMELLIA SOUTH ROAD EXCAVATION, EAST	7:38	15:35	0/100	<0.01
AMR174	15-Feb	CAMELLIA SOUTH ROAD EXCAVATION, NORTH	7:39	15:37	0/100	<0.01
AMR174	15-Feb	ARTHUR ST COMPOUND SOUTHERN BOUNDARY	7:08	15:09	1/100	<0.01
AMR174	15-Feb	ARTHUR ST COMPOUND SOUTH WEST CORNER	8:09	15:10	0/100	<0.01
AMR174	15-Feb	ARTHUR ST COMPOUND NORTH WEST CORNER	8:10	15:11	0/100	<0.01
AMR175	13-Feb	TRAMWAY AVE - JRD OVERPASS BOOM LIFT PAD, WEST OF EXCAVATION AREA	6:50	10:22	0/100	<0.01

AMR175	13-Feb	N - PERIMETER BUNNINGS, ON FENCE	6:51	10:24	0/100	<0.01
AMR175	13-Feb	TRAMWAY AVE - JRD OVERPASS BOOM LIFT PAD, NORTH OF EXCAVATION AREA	6:53	10:26	0/100	<0.01
AMR175	13-Feb	CAMELLIA - RETAINING WALL 2, EASTERN ENTRY GATE	7:10	10:35	0/100	<0.01
AMR175	13-Feb	CAMELLIA - RETAINING WALL 2, SOUTHERN END	7:12	10:37	0/100	<0.01
AMR175	13-Feb	CAMELLIA - RETAINING WALL 1, NORTHERN EXTENT	7:15	10:38	0/100	<0.01
AMR175	13-Feb	CAMELLIA - RETAINING WALL 1, ADJACENT DRAINAGE INSTALLATION WORKS	7:19	10:44	0/100	<0.01
AMR176	16-Feb	S OF EXCAVATION	11:20	13:20	0/100	<0.01
AMR176	16-Feb	NE OF EXCAVATION	11:21	13:21	0/100	<0.01
AMR176	16-Feb	NW OF EXCAVATION	11:22	13:22	0/100	<0.01
AMR177	17-Feb	CAMELLIA, RETAINING WALL 2, ADJACENT TO JAMES HARDIE ABUTMENT	7:20	15:48	0/100	<0.01
AMR177	17-Feb	CAMELLIA, RETAINING WALL 2, APPROX. 20M NORTH OF JAMES HARDIE BRIDGE	7:21	15:48	0/100	<0.01
AMR177	17-Feb	CAMELLIA, RETAINING WALL 2, APPROX. 20M EAST OF JAMES HARDIE BRIDGE	7:22	15:49	0/100	<0.01
AMR177	17-Feb	13A GRAND AVENUE, SOUTHERN BOUNDARY OF EXCAVATION	7:45	15:38	0/100	<0.01
AMR177	17-Feb	13A GRAND AVENUE, EASTERN BOUNDARY OF EXCAVATION	7:46	15:39	0/100	<0.01
AMR177	17-Feb	13A GROUND AVENUE, WESTERN BOUNDARY OF EXCAVATION	7:47	15:40	0/100	<0.01
AMR177	17-Feb	13A GROUND AVENUE, NORTHERN BOUNDARY OF EXCAVATION	7:48	15:41	0/100	<0.01
AMR178	17-Feb	CHURCH STREET, EASTERN BOUNDARY, 10M NORTH OF FENNEL STREET	11:00	15:16	0/100	<0.01
AMR178	17-Feb	CHURCH STREET, EASTERN BOUNDARY, 10M SOUTH OF FENNEL STREET	11:01	15:17	0/100	<0.01
AMR178	17-Feb	CHURCH STREET, WESTERN BOUNDARY, FENNEL STREET GATE	11:02	15:18	0/100	<0.01
AMR179	18-Feb	CAMELLIA NORTHERN GATE, ADJACENT TO JAMES HARDIE BRIDGE	7:26	15:50	0/100	<0.01
AMR179	18-Feb	CAMELLIA , NORTHERN GATE, ATTACHED TO GATE	7:27	15:52	0/100	<0.01
AMR179	18-Feb	CAMELLIA, APPROX 20M WEST OF JAMES HARDIE BRIDGE	7:28	15:53	0/100	<0.01



AMR179	18-Feb	CAMELLIA, APPROX 20M NORTH OF JAMES HARDIE BRIDGE	7:29	15:54	0/100	<0.01
AMR179	18-Feb	13A GRAND AVE, WESTERN BOUNDARY, ADJACENT TO GRAND AVE FOOT PATH	7:53	16:00	0/100	<0.01
AMR179	18-Feb	13A GRAND AVE, SOUTHERN BOUNDARY, SW CORNER OF CONSTRUCTION AREA	7:54	16:02	0/100	<0.01
AMR179	18-Feb	13A GRAND AVE SOUTHERN BOUNDARY, SW CORNER OF CONSTRUCTION YARD	7:55	16:06	0/100	<0.01
AMR179	18-Feb	13A GRAND AVE, EASTERN BOUNDARY, ADJACENT TO GRAND AVE FOOT PATH	7:56	16:10	0/100	<0.01
AMR179	18-Feb	13A GRAND ACE, EASTERN BOUNDARY APPROX 10M NORTH OF GRAND AVE FOOTPATH	7:57	16:15	0/100	<0.01
AMR180	17-Feb	CHURCH STREET, EASTERN BOUNDARY, 10M NORTH OF FENNEL STREET	11:00	15:16	0/100	<0.01
AMR180	17-Feb	CHURCH STREET, EASTERN BOUNDARY, 10M SOUTH OF FENNEL STREET	11:01	15:17	0/100	<0.01
AMR180	17-Feb	CHURCH STREET, WESTERN BOUNDARY, FENNEL STREET GATE	11:02	15:18	0/100	<0.01
AMR181	19-Feb	NW OF EXCAVATION	12:15	14:32	0/100	<0.01
AMR181	19-Feb	NE OF EXCAVATION	12:16	14:33	0/100	<0.01
AMR181	19-Feb	S OF EXCAVATION	12:17	14:34	0/100	<0.01
AMR182	22-Feb	CAMELLIA, RETAINING WALL 2, NORTHERN END	7:34	15:44	0/100	<0.01
AMR182	22-Feb	CAMELLIA, RETAINING WALL 2, MIDDLE	7:35	15:45	0/100	<0.01
AMR182	22-Feb	CAMELLIA, RETAINING WALL 2 SOUTHERN END	7:36	15:46	0/100	<0.01
AMR182	22-Feb	CAMELLIA, RETAINING WALL 1, NORTHERN GATE, WESTERN BOUNDARY	7:37	15:47	0/100	<0.01
AMR182	22-Feb	CAMELLIA, RETAINING WALL 1, NORTHERN GATE EASTERN BOUNDARY	7:38	15:48	0/100	<0.01

AMR182	22-Feb	CAMELLIA, OVERPASS PILE	7:40	15:50	0/100	<0.01
AMR182	22-Feb	13A GRAND AVE, WESTERN BOUNDARY AT GRAND AVE FOOTPATH	7:53	15:32	0/100	<0.01
AMR182	22-Feb	13A GRAND AVE, WESTERN BOUNDARY NORTHERN CORNER OF EXCAVATION	7:54	15:31	0/100	<0.01
AMR182	22-Feb	13A GRAND AVE, EASTERN BOUNDARY AT GRAND AVE FOOTPATH	7:55	15:30	0/100	<0.01
AMR182	22-Feb	13A GRAND AVE, EASTERN BOUNDARY AT NORTHERN CORNER OF AREA	7:56	15:29	0/100	<0.01
AMR183	23-Feb	RETAINING WALL 2, NORTHERN END	7:12	16:01	0/100	<0.01
AMR183	23-Feb	RETAINING WALL 2, MIDDLE	7:13	16:02	0/100	<0.01
AMR183	23-Feb	RETAINING WALL 2, SOUTHERN END	7:14	16:03	0/100	<0.01
AMR183	23-Feb	RETAINING WALL 1, NORTHERN END, WESTERN BOUNDARY	7:15	16:04	0/100	<0.01
AMR183	23-Feb	RETAINING WALL 1, NORTHERN END, EASTERN BOUNDARY	7:16	16:05	0/100	<0.01
AMR183	23-Feb	OVERPASS STOCKPILE, EASTERN GATE	7:19	16:06	0/100	<0.01
AMR183	23-Feb	BA GRAND AVE, WESTERN BOUNDARY AT FOOTPATH	7:34	15:41	0/100	<0.01
AMR183	23-Feb	BA GRAND AVE, WESTERN BOUNDARY, NW CORNER OF EXCAVATION	7:35	15:42	0/100	<0.01
AMR183	23-Feb	BA GRAND AVE, SE CORNER OF EXCAVATION	7:36	15:43	0/100	<0.01
AMR183	23-Feb	BA GRAND AVE, EASTERN BOUNDARY OF ACCESS GATE	7:37	15:44	0/100	<0.01
AMR184	24-Feb	RETAINING WALL 2, NORTHERN END	7:27	16:32	0/100	<0.01
AMR184	24-Feb	RETAINING WALL 2, MIDDLE	7:28	16:33	0/100	<0.01
AMR184	24-Feb	RETAINING WALL 2, SOUTHERN END	7:29	16:34	0/100	<0.01
AMR184	24-Feb	RETAINING WALL 1, WESTERN BOUNDARY NORTHERN GATE	7:30	16:35	0/100	<0.01
AMR184	24-Feb	RETAINING WALL 1, EASTERN BOUNDARY NORTHERN GATE	7:31	16:36	0/100	<0.01
AMR185	25-Feb	RETAINING WALL 1, MIDDLE GATE, EASTERN BOUNDARY	7:58	15:08	0/100	<0.01



AMR185	25-Feb	RETAINING WALL 1, 40M NORTH OF MIDDLE GATE, EASTERN BOUNDARY	7:59	15:09	0/100	<0.01
AMR185	25-Feb	RETAINING WALL 1, NORTHERN GATE, EASTERN BOUNDARY	8:00	15:10	0/100	<0.01
AMR185	25-Feb	RETAINING WALL 1, APPROX 60M NORTH OF MIDDLE GATE, WESTERN BOUNDARY	8:01	15:11	0/100	<0.01