Metro Body of Knowledge

# Planning Approval Environmental Review Form

| SM-22-00008046 |
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Sydney Metro – Metro Body of Knowledge (MBoK)

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|---|---|
| **Assessment Name:** | Victoria Cross interchange facility upgrades |
| **Prepared by:** | Sydney Metro |
| **Prepared for:** | Sydney Metro and relevant contractor |
| **Assessment number** | TfNSW82 |
| **Type of assessment:** | Assessment under EP&A Act 1979, Division 5.2 |
| **Version:** | Final (1.0) |
| **Planning approval No. (where relevant):** | SSI_7400 |
| **Date required:** | July 2024 |
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Form information – do not alter

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|  | |

# Table of Contents

# Environmental Review

## 1. Proposed works and justification

An environmental review is applicable to design changes which are consistent with the conditions of approval and would have negligible impacts on the community and/or the environment. This environmental review is required to demonstrate compliance with the conditions of approval and the Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and the Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR). A description of activities is listed in Table 1 and an assessment provided in Section 2.

**Table 1 Description of proposed works**

| Description | Overview |
|---|---|
| **Location of works** | The proposed works subject of this Environmental Review are located adjacent to the Victoria Cross Station (Victoria Cross North) centred on the intersection of Miller and McLaren Streets in North Sydney.<br>The proposed bus shelter location would be on Miller Street and the proposed taxi shelter location would be on McLaren Street.<br>The proposed works would be located within and adjacent to the McLaren Street Conservation Area adjacent to Victoria Cross Station. See Figure 1 for location of works. |
| **Scope of works** | The proposed works along Miller Street and McLaren Street include:<br>• Installation of new bus shelters in two locations on opposite sides of Miller Street (See Figure 1)<br>• Installation of a new shelter for a taxi bay on McLaren Street (See Figure 1)<br>• Intersection and pedestrian crossing upgrade at intersection of McLaren and Miller Streets, including adjustment of kerb levels and relocation of signage.<br>• A new accessibility bay<br>• Installing new signage poles (e.g., bus stop pole, parking signage, etc.)<br>• Stormwater pit relocation.<br>This Environmental Review assesses potential impacts associated with the proposed works to the McLaren Street Conservation Area and adjacent listed heritage items.<br>The proposed works would require some minor excavations.<br>The technical description of the shelters is provided in Appendix A. |
| **Justification for works** | The proposed works would provide transport interchange facilities in the form of bus and taxi shelters, signage, and intersection and pedestrian crossing upgrades. This will enable safe public use for pedestrians and commuters and improve customer experience.<br>The locations for the shelters have been thoroughly reviewed and the available locations for the required shelters have been selected due to a number of constraints including:<br>• Impacts to the health of existing trees along the street kerb<br>• Extensive underground services and authority assets<br>• Width of the existing footpath |
| **Timeframe for works** | The works are proposed to commence mid to late July for about 6 weeks. Installation of shelters are anticipated to occur for approximately 3 week for |

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| | the buses and the intersection and pedestrian crossing upgrade works are anticipated to occur for 6 weeks. |
| **Work hours, workforce and equipment / machinery** | Works for installation of shelters would be completed during standard construction hours:<br>• 7am to 6pm Monday to Friday, inclusive<br>• 8am to 6pm on Saturday<br>• No works on Sunday or public holidays<br><br>Intersection and pedestrian crossing upgrade works would require OOHW approval for night-time works.<br><br>The below plant equipment would be required for the works:<br>• Hand tools<br>• Jack hammer<br>• Machinery to lift shelters into place<br>• Excavator |

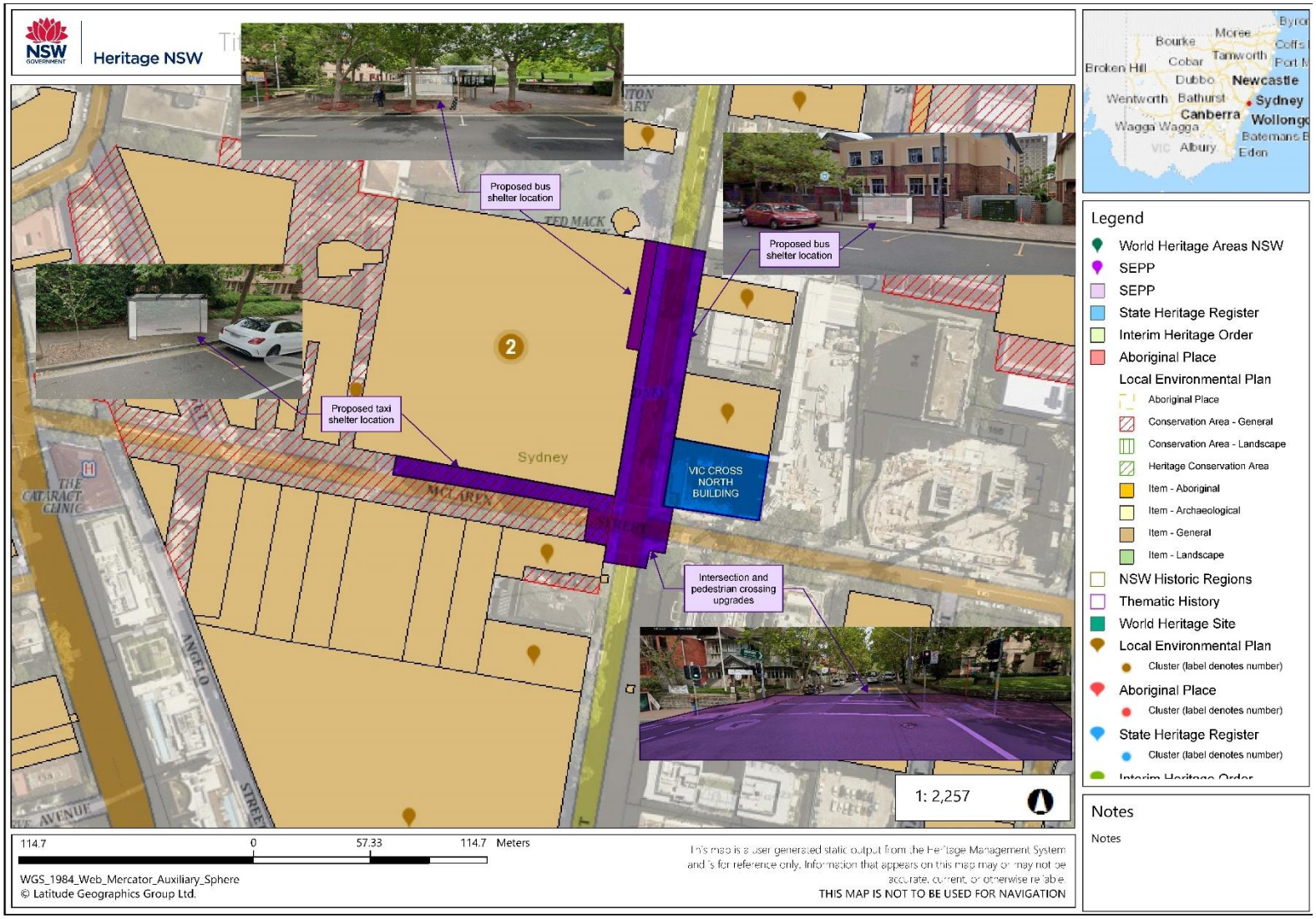


**Figure 1 – Location of works area (highlighted in purple)**

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## 2. Consistency with Conditions of Approval

The following table outlines whether the proposed changes would be consistent with the relevant Conditions of Approval.

**Table 2 Comparison of the proposal with relevant elements of the Approved Project**

| Relevant elements of the Approved Project | Proposed Change |
|---|---|
| The Approved Project (SSI 7400) includes alterations to pedestrian and traffic arrangements and public transport infrastructure around the new stations. | No change from the Approved Project. The proposed works would provide transport interchange facilities in the form of bus and taxi shelters, and intersection and pedestrian crossing upgrades.<br>Partial lane closures would be required to facilitate the proposed works. |
| **EIS Technical Paper 4 – Non-Aboriginal Heritage**<br>The Heritage Impact Assessment identified minor indirect impacts, for views and vistas only for McLaren Street Conservation Area. The assessment identified neutral impacts for direct and archaeological impact.<br>The Heritage Impact Assessment also identified the adjacent listed items to Victoria Cross Station, including the McLaren Street Group heritage items. Indirect impacts for identified heritage items had neutral to minor indirect impacts for views and vistas. | A Statement of Heritage Impact (SoHI) Report is provided for the proposed works in Appendix A. The proposed works are considered to be minor, with no adverse impact on the heritage significance of any of the listed items. |
| **Interchange Access Plan (IAP) – Victoria Cross**<br>The IAP identified the provision of two new bus stops on Miller Street near the northern and southern entrance and wayfinding signage within the North Sydney CBD. It also identified the Taxi zone and Accessible kiss-and-ride on McLaren Street.<br>Enhancement of pedestrian infrastructure around the station was identified to be investigated further in consultation with the Transport Cluster and North Sydney Council. | No change from the Approved Project. The proposed works subject of this Consistency Assessment would provide new transport interchange facilities in the form of bus and taxi shelters, accessibility bay and wayfinding to commuters. |
| **EIS – Table 6-5 Victoria Cross Station design elements**<br>The Approved Project proposed a new signalised mid-block pedestrian crossing on Miller Street. | No change from the Approved Project. The proposed work facilities the intersection and pedestrian crossing upgrade at the Miller/McLaren Street intersection. |
| **EIS Section 7.11.6 (Utility adjustments and protection)**<br>The Approved Project identified that utilities would need to be adjusted, relocated and / or protected where there is a possibility they would otherwise be impacted by construction. | No change from the Approved Project. The proposed works requires stormwater pit relocation. Adequate erosion and sediment control measures would be provided around stormwater infrastructure to provide protection. |

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| **CoA E2 –** Utilities, services and other infrastructure potentially affected by construction must be identified before works affecting the item, to determine requirements for access to, diversion protection, and/or support. The relevant owner and/or provider of services must be consulted to make suitable arrangements for access to diversion, protection, and/or support of the affected infrastructure as required. The Proponent must ensure that disruption to any service is minimised and be responsible for advising local residents and businesses affected before any planned disruption of service | North Sydney Council have been consulted with prior to the works commencing. |
| **REMM T22 –** Where existing footpath routes used by pedestrians and / or cyclists are affected by construction, a condition survey would be carried out to confirm they are suitable for use (e.g. suitably paved and lit), with any necessary modifications to be carried out in consultation with the relevant local council. | The provision of the new bus and taxi shelters would necessitate some minor excavation of the footpath for footings. Enhancement of pedestrian infrastructure around the station was developed in consultation with the Transport Cluster and North Sydney Council. |
| **CoA B5 –** The Community Communication Strategy, as approved by the Secretary, must be implemented for the duration of the works and for 12 months following the completion of construction. | The Community Communication Strategy would be implemented for the proposed works to notify any adjoining affected landowners and businesses |

# 3. Environmental review

The following table provides a risk review of the potential environmental impacts of the proposed works.

**Table 3 Environmental review**

| Environmental review | Yes / No | Description of impacts (including consideration of safeguards required by the Approved Project) |
|---|---|---|
| Is the proposal to take place outside of the construction footprint of the project | Yes | The proposed interchange facility upgrades would take place adjacent to the construction footprint along McLaren Street and Miller Street and outside of the construction footprint at the intersection, however the proposed works are identified within the Approved Project. |
| Is the location of works within the existing EPL premise boundary | No | There is no EPL required to be in place at Victoria Cross construction site. |
| Will the works take longer than 2 weeks to complete. | Yes | The works are proposed to commend mid to late July for about 6 weeks. |
| Does the work require OOHW approval | Yes | OOHW approval would be required for night-time works for intersection and pedestrian crossing upgrade works. |
| Will the works impact an EEC or threatened species | No | The clearing of EEC and impacts to threatened species are not required. |
| Will works impact on native vegetation | No | The clearing of native vegetation is not required. |
| Will the works impact on habitat trees | No | The clearing of vegetation is not required. |
| Will clearing of non EECs or ground disturbance be of High / moderate condition vegetation.<br>What is the area of impact | No | The clearing of vegetation is not required. |

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| Will the works result in medium / high noise or vibration impacts<br>Will noise and vibration impacts on sensitive receivers be greater than that predicted in the EIA | Yes | Figure 10-4 of the EIS provides the location of sensitive receivers near Victoria Cross Station. The sensitive receivers in vicinity to the proposed works comprise of a mix of residential, commercial and educational receivers.<br>For residential and commercial receivers to the north on McLaren Street there would be no exceedances in Noise Management Level (NML). For educational receivers to the west on Miller Street, there is potential for NML exceedances of up to and above 20 dB.<br>The equipment that would be used during the proposed works would include hand tools, jack hammer, machinery to lift shelters into place, and an excavator. Any noise or vibration impacts produced would be minor and temporary in nature.<br>The proposed works are not expected to generate any additional noise above those already assessed as part of the Approved Project.<br>Receivers that have the potential to be affected by the works would be notified in accordance with the Community Communication Strategy. |
| Will the works result in medium/ high air quality impacts | No | Similar to the Approved Project, the works have the potential to cause impacts to air quality through dust generation from minor excavation, pavement removal, and emissions from plant and machinery.<br>Any emissions or dust generated by the works are anticipated to be localised and minimal and will be managed in accordance with existing conditions and mitigation measures identified for the Approved Project. |
| Will the activity be located adjacent to or in close proximity to sensitive receivers | Yes | Figure 10-4 of the EIS provides the location of sensitive receivers near Victoria Cross Station. The sensitive receivers adjacent to the proposed works comprise of a mix of residential, commercial and educational receivers.<br>The works would be temporary, short-term, and limited to standard construction hours.<br>Receivers that have the potential to be affected by the works would be notified in accordance with the Community Communication Strategy. |
| Would there be additional impact from what was predicted in the EIS on an Aboriginal / Historic heritage site as a result of the works | No | EIS Technical Paper 4 (Non-Aboriginal Heritage) considered the following heritage items within the vicinity of the proposed work with the potential to be affected:<br>• McLaren Street Conservation Area (North Sydney LEP 2013 CA19)<br>• House (31 McLaren Street) (North Sydney LEP 2013 I0884)<br>• “Fairhaven” (North Sydney LEP 2013 I0883)<br>• Restaurant (196 Miller Street) (North Sydney LEP 2013 I0900)<br>• North Sydney bus shelters (North Sydney LEP 2013 I0407)<br>• “O’Regan” (North Sydney LEP 2013 I0889)<br>Heritage items House, “Fairhaven” and Restaurant were identified for minor vibration impacts and neutral archaeological and indirect impacts. Whilst McLaren Street Conservation Area was identified to have neutral direct and archaeological impacts, with minor indirect impacts to views and vistas. |

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| | | Heritage items “O’Regan” (I0889) and North Sydney bus shelters (I0407) are identified in Figure 49 of Technical Paper 4 of the EIS being within the operational site area for Victoria Cross North. However, the proposed works would not obstruct views to the heritage items (I0407 and I0889) and would not have a visual impact on the heritage significance.<br>A Statement of Heritage Impact (SoHI) Report is provided for the proposed works and provided in Appendix A. The proposed works subject of this Environmental Review are considered to be minor, with no adverse impact on the heritage significance of any of the listed items summarised in the EIS or additional heritage items within close proximity to the works listed in Section 1.3.4 of the SoHI in Appendix A. There would be no direct physical impact to any of the listed heritage items.<br>The minor excavation works required for the bus and taxi shelter installation would be localised excavation into brick paved footpaths. However, the pavers are not considered to be significant in themselves and Section 6 of the SoHI provides recommendations and mitigation measures to provide positive heritage outcomes.<br>The bus and taxi shelters have been selected in accordance with North Sydney Council standards and are to a standard design that is considered neat and discreet. The design is modest and, while clearly distinguishable as modern, will have little visual impact.<br>Overall, the impact of the proposed works on the heritage significance of adjacent sites is assessed as minor.<br><br>The following recommendations have been made to provide guidance for the proposed works in order to mitigate any potential adverse heritage impacts associated with the works:<br>• Any pavers required to be removed during the works should be salvaged for reuse, where haphazard footpath repairs have been previously undertaken using unsympathetic materials such as bitumen.<br>• Any accidental damage caused to adjacent heritage items must be reported immediately. Damage is to be made good in accordance with specialist heritage advice.<br>• All areas affected by the work must be cleaned and made good after completion of works.<br>• All contractors and subcontractors involved in the works should be briefed on the heritage significance of the adjacent items prior to work commencing. |
| Are works within 10m of a watercourse | No | The proposed works are not within 10m of a watercourse.<br>The proposed works involve stormwater pit relocation. Adequate erosion and sediment control measures would be provided around stormwater infrastructure to prevent sediment entering the stormwater system and migrating offsite. |
| Are works in an area of known contamination | No | No known contamination exists within the proposed area. Victoria Cross Station is located within well-established |

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| | | commercial area surrounded by low to high density residential land use. |
| Will the works result in temporary or long-term traffic impacts | Yes | The works would result in temporary traffic impacts as lane closures would be required along Miller and McLaren Streets for shelter installation and intersection and pedestrian crossing upgrades works. Traffic and pedestrian management would be implemented in accordance with the CTMP.<br>A road occupancy licence has been obtained.<br>The works are temporary in nature and limiting construction works to off peak times would minimise any traffic related impacts. |
| Will the works result in visual impacts to sensitive receivers | Yes | Similar to the Approved Project, there would be minor visual impacts associated with construction works, stormwater pit relocation, plant and equipment and any temporary fencing and safety measures implemented. The project would adopt all appropriate mitigation measures to minimise visual intrusiveness to these receivers where possible. |
| Will the works involve significant earthworks | No | The works would involve minor, localised excavation and ground disturbance. |

## 4. Recommendation

Based on the above assessment, and with reference to the Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR), including the conditions of approval and associated CEMP and plans, it is recommended that:

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| ✓ | The proposed design/construction change is consistent with the Approved Project Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR) including the conditions of approval, has negligible impacts on the community and environment and no further assessment is required. |
| | The proposed design/construction change is likely to be consistent with the Approved Project Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR), however more than a negligible impact on the community and environment may result and further assessment in the form of a Planning Approval Consistency Assessment form is required to be completed and submitted to the Planning team for the proposed design/ construction change. |
| | The proposed design/ construction change is not substantially the same as the Approved Project and is considered a radical transformation. A new planning pathway should be considered. |

## 5. Certification

The above information provides a true and fair review of the proposed works.

**Prepared by (signed):**

Isabella Caruso

**Date:** 11 July 2024

**Name:** Isabella Caruso

**Position:** Planning Approval Officer

## 6. Endorsement

I have reviewed the above review and provide the following endorsement:

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| ✓ | The proposed design/construction change is consistent with the Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR), has negligible impacts on the community and environment and no further assessment or modification of the planning approval is required. |
| | The proposed design/construction change is likely to be consistent with the Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR), however more than negligible impacts are expected on the community and environment and further assessment is required. |
| | The proposed design/construction change constitutes a project modification and requires further assessment and approval. |

This endorsement is conditional on the following:

1. All works will be carried out in accordance with the Sydney Metro Chatswood to Sydenham Environmental Impact Statement (EIS) and Chatswood to Sydenham Submissions and Preferred Infrastructure Report (SPIR) and the Project Conditions of Approval.
2. All works will be carried out in accordance with the approved Construction Environmental Management Plan and any relevant sub plans.

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| **Signed:** | Yvette Buchli |
| **Endorsed by:** | Yvette Buchli<br>Director Planning Approvals |
| **Date:** | 12/07/2024 |

# Appendix A – Statement Of Heritage Impact Report

OCP ARCHITECTS

# VICTORIA CROSS STATION

TRANSPORT INTERCHANGE WORKS

## STATEMENT OF HERITAGE IMPACT REPORT

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|---|---|
| Client | Lendlease |
| Job No | 24060 |
| Date | Tuesday, 9 July 2024 |
| Issue | A |

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Report Register

The following report register indicates the development and issue number of this report, undertaken by OCP Architects.

Document status:

| Issue | Date | Purpose | Authors |
|---|---|---|---|
| A | July 2024 | Draft Issue for Client Review | Rowan Day / Bianca Hollo |
| | | | |

CONTENTS

# PART A: BACKGROUND

## 1. INTRODUCTION

OCP Architects have been engaged by Lendlease to prepare this Heritage Impact Statement for proposed works in the immediate vicinity of Victoria Cross Station. As part of the delivery of the Sydney Metro – City and Southwest program of works, the Victoria Cross station is marked as one of the key station locations on the Sydney Metro network. Victoria Cross Station is in the heart of North Sydney's business district, comprising two station entrance boxes connected by a cavern platform directly beneath Miller Street. The station will provide enhanced accessibility to business, education and residential communities via Station access and entry through the pedestrian plaza opening to Miller, Denison and Berry streets, and the proposed northern services building on McLaren Street.


As an integrated development, the Victoria Cross ISD (VC ISD) comprises the following main components:

- A new underground station located at Victoria Cross, North Sydney;
- An over-station development (OSD) tower, integrated into the station.

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown. There will be new metro railway stations underground at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new metro platforms under Central. Upon completion of CSW project, Sydney Metro will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. The Sydney Metro project is illustrated in the Figure below. On 9

January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (CSSI Approval). The terms of the CSSI Approval includes all works required to construct the Sydney Metro Victoria Cross Station, including the demolition of existing buildings and structures on both sites. The CSSI Approval also includes

In conjunction with the metro station itself, works are proposed to provide transport interchange facilities, in the form of bus and taxi shelters, and intersection and pedestrian crossing upgrades.

## 1.1 This Report

This Statement of Heritage Impact Report has been prepared in order to assess the impact of the proposed works on the heritage significance of adjacent heritage items, including North Sydney Council Chambers.

This report aims to:

- Describe the existing site and the context, assess its significance and describe the proposed works.
- Assess the impact of the proposal on the heritage significance of adjacent listed items.

This report is structured into three parts. The Executive Summary and Introduction form **Part A.** Historical and descriptive information relating to the subject site are included at **Part B**. Assessment of heritage significance and details of the proposed works and an assessment of potential heritage impacts are included at **Part C**, which provides recommendations and measures to assist with the mitigation of heritage impacts.

## 1.2 Site Identification

The works subject of this report are located adjacent to the Victoria Cross Station (Victoria Cross North) centred on the intersection of Miller and McLaren Streets in North Sydney.


Figure 1: Map showing context of proposed works, with subject area indicated in blue. Source: OpenStreetMap 2024

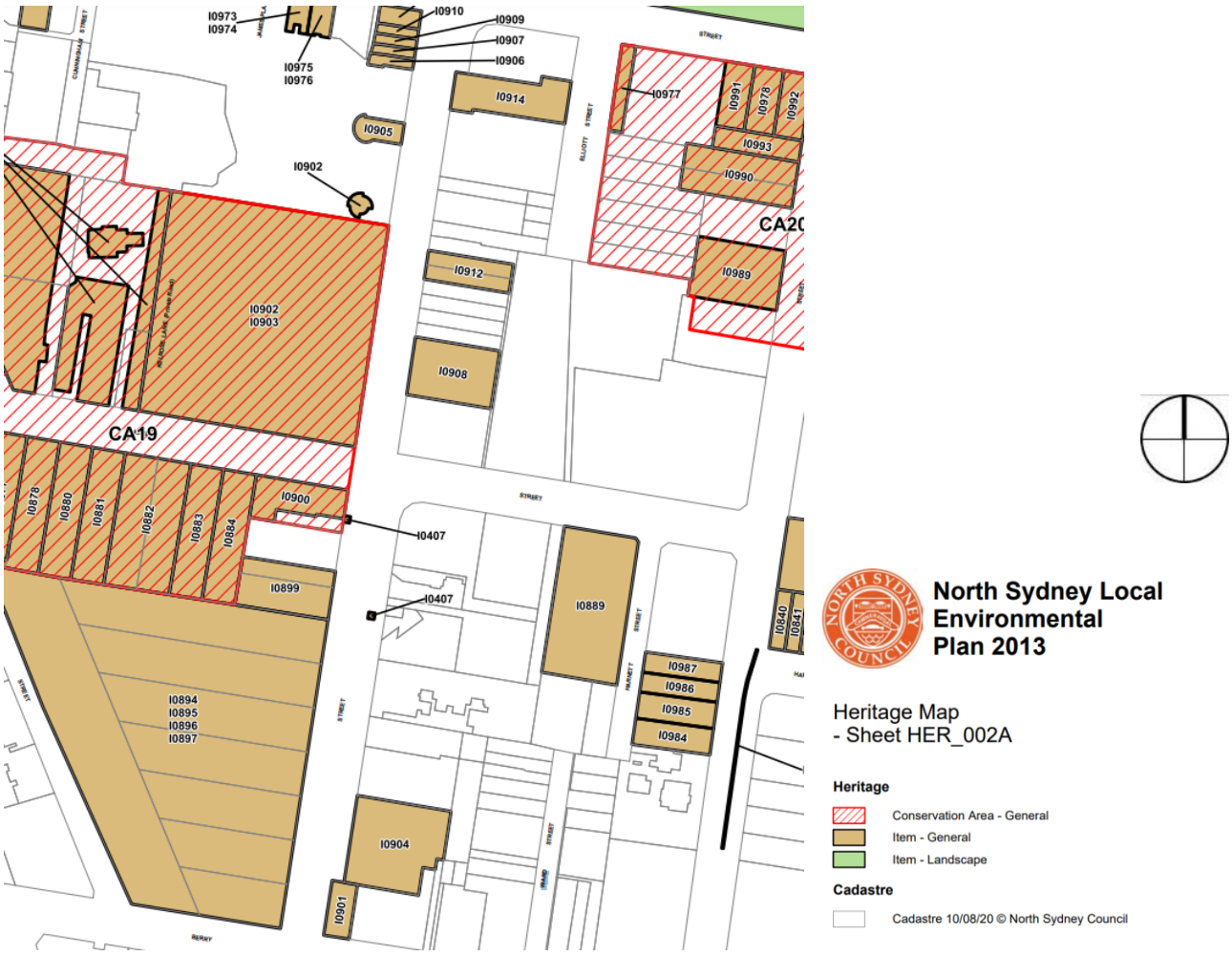


Figure 2: Excerpt from North Sydney Local Environmental Plan 2013 Heritage Map Sheet 002A, showing heritage items in the vicinity of the proposed works. Note that the map predates construction of the Victoria Cross Metro Station.

## 1.3 Statutory Context and Heritage Listings

The following paragraphs provide an outline of the statutory planning and heritage management framework and how the various forms of legislation and environmental planning instruments apply to the site and the proposed works.

### 1.3.1 Heritage Act 1977

The Heritage Act 1977 provides protection for heritage places, buildings, works, relics, moveable objects, precincts and archaeological sites that are important to the people of NSW. The State Heritage Register includes heritage items which are deemed to be significant to the people of New South Wales.

There are no state-listed heritage items affected by the proposed works.

### 1.3.2 Environmental Planning & Assessment Act 1979

Planning and development in NSW is predominantly governed by the *Environmental Planning and Assessment Act 1979* (EP&A Act). The EP&A Act provides for the making of Environmental Planning Instruments which include: State Environmental Planning Policies (SEPPs) which address matters of state or

regional significance; and Local Environmental Plans (LEPs) which apply to a specific Local Government Area (LGA).

### 1.3.3 North Sydney Local Environmental Plan 2013

The subject site is located within the North Sydney Local Government Area and as such, development in the area is currently controlled by the North Sydney Local Environmental Plan 2013 (NSLEP 2013).

Schedule 5 of LLEP 2014 lists 200 Miller Street (North Sydney Council Chambers), as a local heritage item (Items I0902 and I0903).

### 1.3.4 Summary of Heritage Listings

The following table provides a summary of the statutory heritage listings that apply in the immediate vicinity of the study area:

| ITEM NAME | STATUTORY LISTING | SIGNIFICANCE | ITEM NO. |
|---|---|---|---|
| North Sydney Council Chambers (including Jubilee Fountain in Civic Park adjacent to Council Chambers) | North Sydney LEP 2013 | Local | #I0902 |
| North Sydney Council Chambers - Wyllie Wing | North Sydney LEP 2013 | Local | #I0903 |
| Shop (243 Miller Street) | North Sydney LEP 2013 | Local | #I0908 |
| House (255-257 Miller Street) | North Sydney LEP 2013 | Local | #I0912 |
| Restaurant (196 Miller Street) | North Sydney LEP 2013 | Local | #I0900 |
| 'Grahwey' (9 McLaren Street) | North Sydney LEP 2013 | Local | #I0877 |
| House (21-23 McLaren Street) | North Sydney LEP 2013 | Local | #I0880 |
| 'Tara' (25 McLaren Street) | North Sydney LEP 2013 | Local | #I0881 |
| 'Stormanston' (27 McLaren Street) | North Sydney LEP 2013 | Local | #I0882 |
| 'Fairhaven' (29 McLaren Street) | North Sydney LEP 2013 | Local | #I0883 |
| House (31 McLaren Street) | North Sydney LEP 2013 | Local | #I0884 |
| McLaren Street Conservation Area | North Sydney LEP 2013 | Local | CA19 |

## 1.4 Project Methodology

This report has been prepared on the basis of the NSW Heritage Branch guideline for the preparation of Assessments of Heritage Impact. The principles contained in the Australian ICOMOS *Charter for the*

*Conservation of Places of Cultural Significance (The Burra Charter)* 2013 are used as a methodology for assessing heritage impact.

Physical inspection of the site was undertaken by Bianca Hollo from OCP Architects in July 2023.

## 1.5 Project Limitations

This report does not consider indigenous cultural heritage significance.

## 1.6 Authorship & Acknowledgements

This report was prepared by OCP Architects, authored by Rowan Day and Bianca Hollo.

## 1.7 Terminology & Abbreviations

The following table provides a list of terms and abbreviations that have been used throughout this report:

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| Adaptation / Adaptive Reuse | Adaptation may involve additions to the place, the introduction of new services, or a new use, or changes to safeguard the place.<br>Adaptation of a place for a new use is often referred to as 'adaptive re-use'. (Burra Charter Article 7.2) |
| Burra Charter | The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999. |
| Conservation | Means all the processes of looking after a place so as to retain its cultural significance (Burra Charter Article 1.1). Conservation can include 'maintenance', 'preservation' and 'restoration' works. |
| Heritage NSW | Heritage NSW, or its delegate. This was formerly the Heritage Division of the Office of Environment and Heritage (NSW OEH). In 2019, the NSW Heritage Office was integrated with the NSW Department of Premier and Cabinet. |
| Maintenance | Means the continuous protective care of the fabric and setting of a place, and is to be distinguished from 'repair'. Repair involves 'restoration' or 'reconstruction' (Burra Charter Article 1.5). |
| Restoration | Means returning the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material (Burra Charter Article 1.7). |
| Reconstruction | Means returning a place to a known earlier state and is distinguished from 'restoration' by the introduction of new material into the fabric (Burra Charter Article 1.8). |
| Preservation | Means maintaining the fabric of a place in its existing state and retarding deterioration (Burra Charter Article 1.6). |
| State Heritage Register (SHR) | A register of places that are considered to be of 'state' significance, and protected under the *Heritage Act 1977*. |
| S170 | Section 170 of the *Heritage Act 1977* |

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| S170 Register | Section 170 Heritage and Conservation Register, a heritage register of items owned and managed by a government agency, as required by the *Heritage Act 1977* |
| Infrastructure SEPP | State Environmental Planning Policy (Transport and Infrastructure) 2021 |
| NSLEP 2013 | North Sydney Local Environmental Plan 2013 |

# PART B: HISTORY AND PHYSICAL ANALYSIS
# 2. HISTORICAL CONTEXT

The following historical overview of North Sydney Council Chambers was sourced from the heritage inventory listing form for the LEP listing of the site:

*The site was the 1870 home of James Husband and family. A new house named 'Kelrose', designed in the Federation Arts and Crafts style by Edward Jeaffreson Jackson in 1903, was owned by Dr. Harold Selwyn Capper and his mother Annie Capper. From this a hand-carved mantelpiece remains in the front building. It was used at times as a home and hospital. Purchased by the Municipality of North Sydney in 1925, Kelrose was converted by Albert Edmund Bates in 1926 into North Sydney Council Chambers. The Council Chambers were officially opened in 1926 by the Member for North Sydney, William Hughes and was further enlarged in 1936-1938 by Rupert Villiers Minett. The northern end was burnt out in 1976, restored and re-opened in 1978. The Wyllie Wing (named after Town Clerk David Wyllie) in McLaren Street, designed by Harry Seidler, was completed in 1977.*

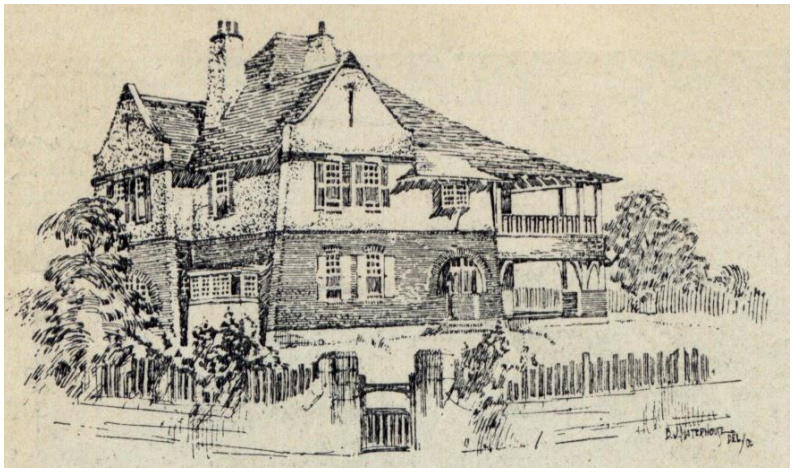


Figure 3: Sketch of Kelrose in c. 1908 by B.J. Waterhouse

Figure 4: View of the Council Chambers c. 1930, showing the 1920s alterations.

Figure 5: Photo taken in 1938 showing the 1936-8 sympathetic extensions.

*In the first half of the Twentieth Century Miller Street became the focus of medical expertise on the north shore, from which many of the prominent and well-known doctors of the area lived and operated their surgeries. No. 255 Miller Street was no different, being the residence of Dr William Sheldon until his death in 1906 and the residence and surgery of Dr George Gatenby from 1930 until his death in 1946.*[1]

# 3. DESCRIPTION AND PHYSICAL EVIDENCE

The site of the proposed works is centred on the intersection of Miller and McLaren streets. The existing footpaths in the subject area are typically brick paved, and planted with mature London Plane trees.

In the immediate vicinity of the proposed works are the Federation Arts and Crafts style North Sydney Council Chambers, a two storey brick building with hipped and gabled terracotta tiled roof. The upper floor is roughcast rendered. The building features nine-pane upper sash double-hung windows; parapets to gable ends with semi-circular motif above narrow tall ventilator openings. The ground floor has three brick segmental arches over window openings. The entrance porch is rough-cast rendered with face brick rectangular parapet and semi-circular arch. Side walls of the porch have bullseye leadlight windows articulated in face brick. The original chimney breast remains on the south elevation of the building.

[1] SHI inventory sheet for 255 Miller Street https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=2180849 accessed July 2024

Figure 6: View along southern side of McLaren Street, OCP Architects 2024


Figure 7: View of southern side of McLaren Street, with intersection of Miller Street on right. OCP Architects, 2024

Figure 8: View to southern side of McLaren Street. OCP Architects 2024

Figure 20: View along northern side of McLaren Street looking east towards Miller Street. OCP Architects 2024

Figure 21: McLaren Street frontage of the North Sydney Council Chambers. OCP Architects 2024.

Figure 21: View of North Sydney Council Chambers looking north along Miller Street. OCP Architects 2024

Figure 21: Looking south along the western side of Miller Street towards the Council Chambers. OCP Architects 2024

# PART C: HERITAGE ASSESSMENT AND IMPACT ASSESSMENT

# 4. ASSESSMENT OF HERITAGE SIGNIFICANCE

The assessment and summary statement of significance included below has been sourced from the NSW State Heritage inventory (LEP) listing for the North Sydney Council Chambers, which is in the near vicinity of the proposed works.[2]

## 2.1 Statements of Significance for adjacent heritage items

*North Sydney Council Chambers: Important example of the Federation Arts and Crafts style in a prominent corner location, associated with the Federation character of the McLaren Street Group (2180856). Significant association with the former Miller Street medical precinct prominent in the first half of the twentieth century as the former medical practice and hospital of Dr. Harold Selwyn Capper. Later associations from 1926 as Council Chambers and an important local public building, which has been altered extensively over its life to reflect the status of its changing ownership. The Council Chambers are significant as an example of the work of several prominent local architects including Edward Jeaffreson Jackson for the original 1903 structure, Albert Edmund Bates for the 1926 Council Chambers conversion and Rupert Villiers Minnett for the 1936 Miller Street expansion.*

[2] NSW Office of Environment and Heritage, State Heritage Inventory Listing for North Sydney Council Chambers, accessed July 2024 from: https://www.hms.heritage.nsw.gov.au/App/Item/ViewItem?itemId=3150123

*North Sydney Council Chambers – The Wyllie Wing: The Wyllie Wing is a physical record of the growth and stature of local government in North Sydney. For architectural historians, it also demonstrates an uncompromising modernist approach by one of Australia's most prominent modernist architects - Harry Seidler. It is a representative, rather than exceptional, example of a 1970s modernist style building.*

*Shop (243 Miller Street): A very good example of a c.1897 two-storey house in the Federation Arts and Crafts style in a prominent location in area dominated by buildings of the same period. Example of the work of local architect George Matcham Pitt. Important stylistic and physical relationship to Council Chambers, and has a strong contributory association to the Federation character of the McLaren Street Group (2180856). Associated with the former Miller Street medical precinct prominent in the first half of the twentieth century as the former surgery of Drs. Bernard Newmarch, Erasmus Bligh, Richard Bligh, Harold Capper and Marjory Little.*

*House (255-257 Miller Street): Good example of c. 1912 Federation Arts and Crafts house with with high quality brickwork and decoration in a prominent location on Miller Street. It relates well to other similar houses in the vicinity, such as Council Chambers and McLaren Street Group. Now part of Wenona School, it is associated with the former Miller Street medical precinct prominent in the first half of the twentieth century as the residence and surgery of Dr George Gatenby.*

*McLaren Street Group: A fine group of buildings which contains individually interesting examples of Federation architecture which taken together, form an important period streetscape. The group relates well to the St. Thomas Church and Council Chambers and the majority being large houses with mature gardens, forms an important and attractive air of comfort and prosperity close to the encroaching commercial centre. Relic of nineteenth century character of vicinity.*

# PROPOSED WORKS

## 3.1 Background

As part of the delivery of the Sydney Metro – City and Southwest program of works, the Victoria Cross station has been constructed as one of the key station locations on the Sydney Metro network. Victoria Cross Station is in the heart of North Sydney's business district, comprising two station entrance boxes connected by a cavern platform directly beneath Miller Street. The station will provide enhanced accessibility to business, education and residential communities via Station access and entry through the pedestrian plaza opening to Miller, Denison and Berry streets, and the proposed northern services building on McLaren Street. As an integrated development, the Victoria Cross ISD (VC ISD) comprises the following main components:

- A new underground station located at Victoria Cross, North Sydney;
- An over-station development (OSD) tower, integrated into the station.

## 3.2 Proposed Works

Following on from the broad station development noted above in Section 5.1, the works subject of this report outlined below represent further measures intended to facilitate public use of the site.

- Proposed new bus shelters in two locations on opposite sides of Miller Street (see Figure 9 below). The shelters are to a standardised design by Philip Cox (see Figure 11 below).

- A new taxi shelter on McLaren Street (see Figure 9 below).
- Intersection and pedestrian crossing upgrade at intersection of McLaren and Miller Streets, including adjustment of kerb levels and relocation of signage.
- The provision of the new shelters will necessitate some minor excavation of the footpath for footings (note that this report recommends salvaging of pavers for reuse where intrusive maintenance works have previously been undertaken)

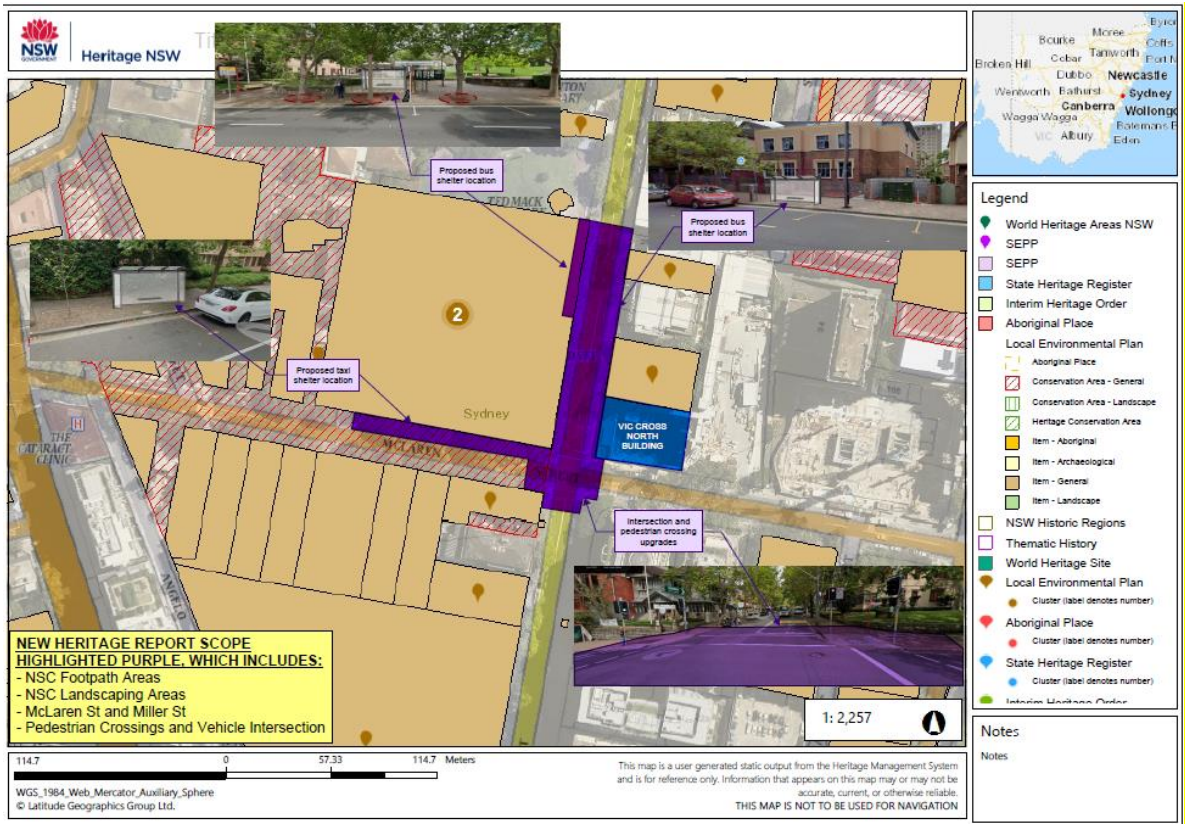



Figure 9: Annotated aerial view of subject area showing overview of proposed works

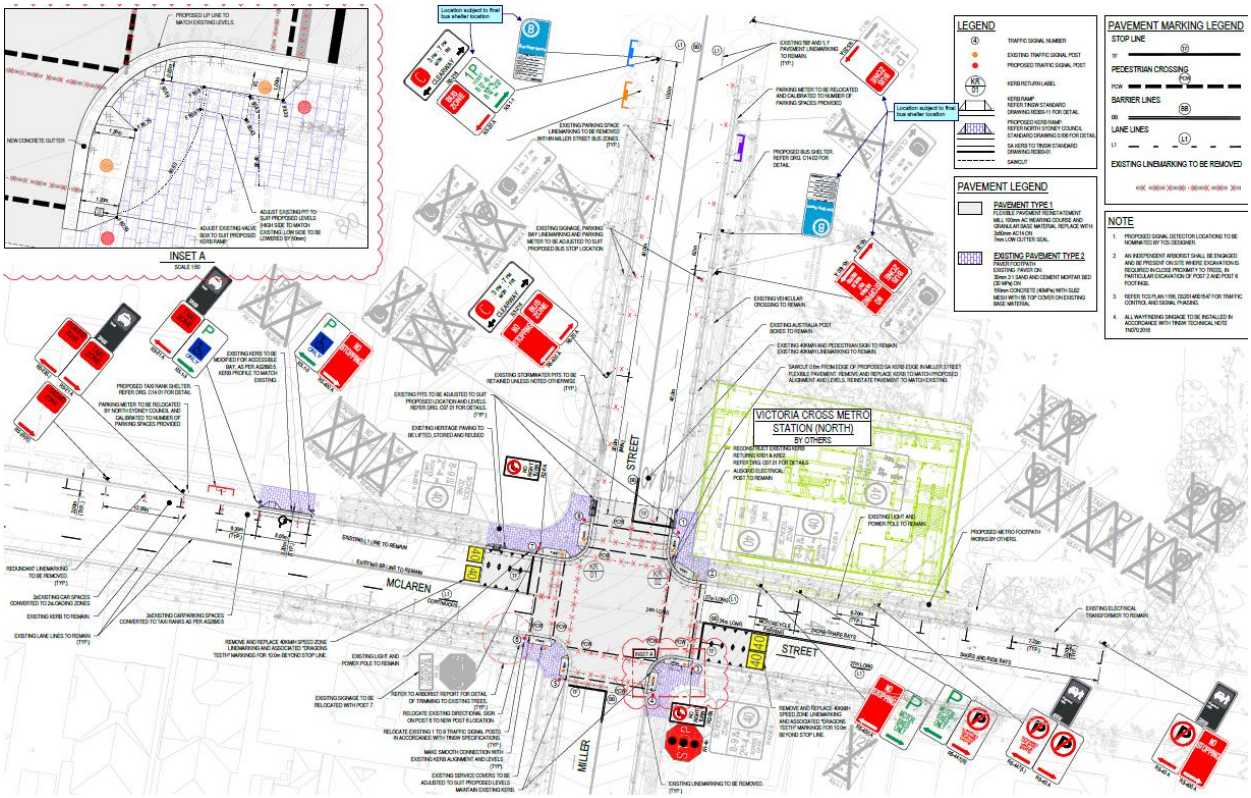



Figure 10: Excerpt of annotated map showing itemised location of proposed works (refer Appendix A for full drawing)

Figure 11: Standard design for narrow shelter. JCDecaux, Technical Description, Bus Shelter, designed by Philip Cox

# 5. HERITAGE IMPACT ASSESSMENT

This section assesses how the proposed works impact the heritage significance of adjacent listed items, including the North Sydney Council Chambers.

Broadly, the works are considered to be minor, with no adverse impact on the heritage significance of any of the listed items summarised in Section 1.3.4. There will be no direct physical impact to any of the listed items noted in this report.

The works are intended to facilitate public use of the Victoria Cross metro station, and interchange between the station and other forms of local transport.

The provision of the proposed shelters will necessitate localised excavation into brick paved footpaths however, these pavers are not considered to be significant in themselves and provided the recommendations in section 6.1 are followed, there is an opportunity for salvaged pavers to be used to replace previously undertaken haphazard and inappropriate maintenance of areas of the footpath, that has included localised bitumen surfacing that is inconsistent with the broader paving scheme. This would be a positive heritage outcome.

The shelters themselves are to a standard design that is considered neat and discreet. The design is modest and while clearly distinguishable as modern, will visually will have little impact.

Collectively, the impact of the proposed works on the heritage significance of adjacent sites is assessed as acceptable, and will enable safe public use for pedestrians and commuters.

# 6. RECOMMENDATIONS & MITIGATION MEASURES

## 6.1 Recommendations

The following recommendations have been made to provide guidance for the proposed works in order to mitigate any potential adverse heritage impacts associated with the works.

- Any pavers required to be removed during the works should be salvaged for reuse, where haphazard footpath repairs have been previously undertaken using unsympathetic materials such as bitumen.
- Any accidental damage caused to adjacent heritage items must be reported immediately. Damage is to be made good in accordance with specialist heritage advice.
- All areas affected by the work must be cleaned and made good after completion of works.
- All contractors and subcontractors involved in the works should be briefed on the heritage significance of the adjacent items prior to work commencing.

## 6.2 Conclusion

This Statement of Heritage Impact has reviewed the proposed transport interchange works external to Victoria Cross metro station. The assessment contained within this report has found that the proposed works will not have an adverse impact on the heritage significance of adjacent listed items. Collectively, the impact of the proposed works on the heritage significance of adjacent sites is assessed as acceptable, with

no direct physical impact, and will enable safe public use for pedestrians and commuters. The works are not considered to conflict with the *Critical State Significant Infrastructure Sydney Metro City & Southwest Chatswood to Sydenham Conditions of Approval*.

# APPENDIX A – DRAWINGS

NSW GOVERNMENT | Heritage NSW

Proposed bus shelter location

Proposed bus shelter location

Proposed taxi shelter location

Intersection and pedestrian crossing upgrades

VIC CROSS NORTH BUILDING

Sydney

MCLAREN STREET

THE CATARACT CLINIC

ANGELO

**NEW HERITAGE REPORT SCOPE HIGHLIGHTED PURPLE, WHICH INCLUDES:**
- NSC Footpath Areas
- NSC Landscaping Areas
- McLaren St and Miller St
- Pedestrian Crossings and Vehicle Intersection

1: 2,257

114.7 0 57.33 114.7 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere



This map is a user generated static output from the Heritage Management System and is for reference only. Information that appears on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR NAVIGATION


## Legend

- World Heritage Areas NSW
- SEPP
- SEPP
- State Heritage Register
- Interim Heritage Order
- Aboriginal Place
- Local Environmental Plan
  - Aboriginal Place
  - Conservation Area - General
  - Conservation Area - Landscape
  - Heritage Conservation Area
  - Item - Aboriginal
  - Item - Archaeological
  - Item - General
  - Item - Landscape
- NSW Historic Regions
- Thematic History
- World Heritage Site
- Local Environmental Plan
  - Cluster (label denotes number)
- Aboriginal Place
  - Cluster (label denotes number)
- State Heritage Register
  - Cluster (label denotes number)
- Interim Heritage Order

## Notes

Notes

JCDecaux

# Technical description_
# Bus shelter
*Designed by Philip Cox*

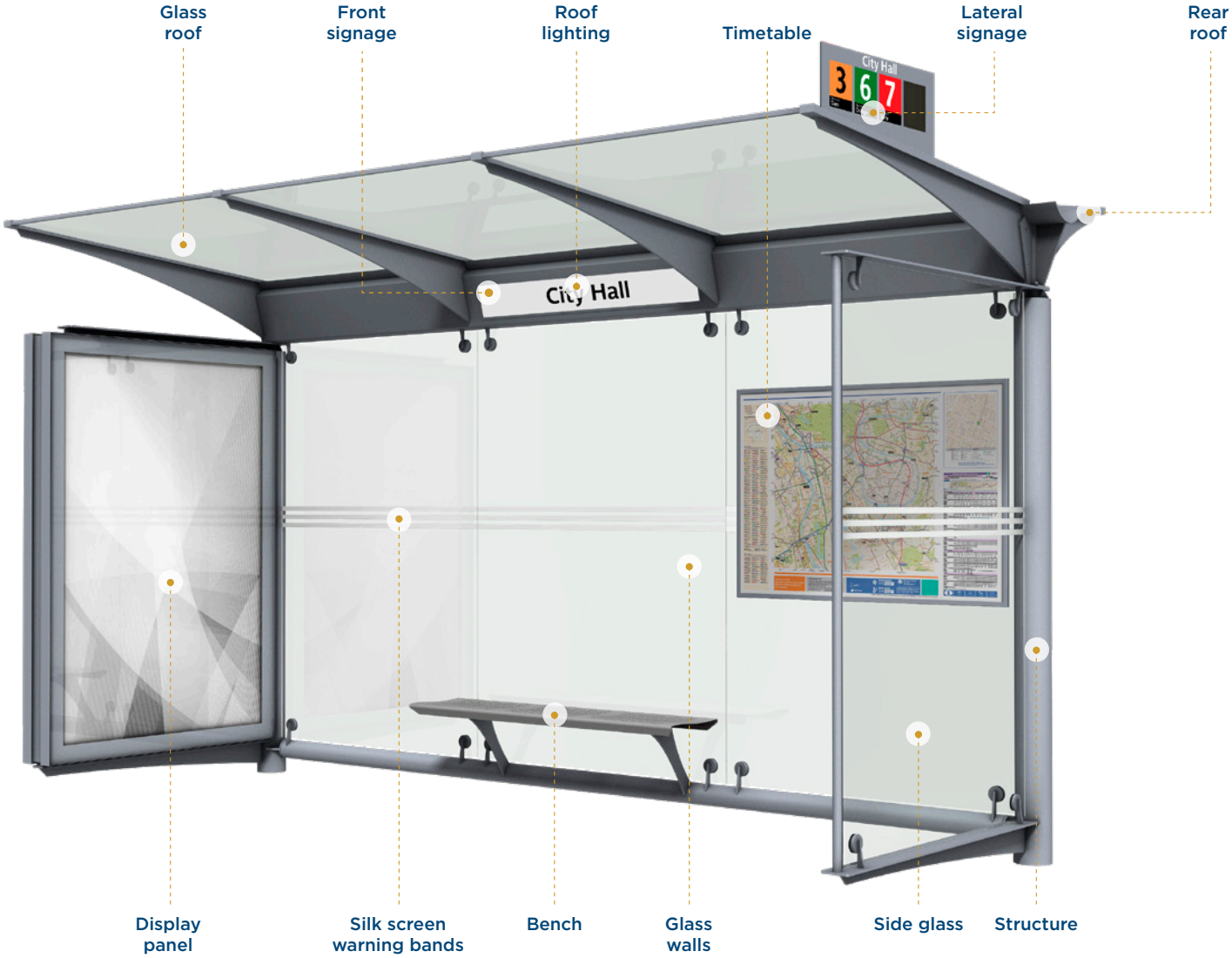
## OVERVIEW_

**Designed by Philip Cox and developed by JCDecaux**

Up to 12 persons under shelter

Up to 3 persons seated

Up to 9sqm roof



# PRESENTATION_

Street furniture providing shelter and service to bus passengers

Designed by Philip Cox and developed by JCDecaux

# TECHNICAL FEATURES_

## Structure

Built with two poles supporting the cross beam and the roof

The cross beam holds the bench and the glass walls

One pole is equipped with a technical hatch to get to the electric board

The structure is designed to resist extreme local weather conditions

Can be installed on slopes up to 4% without additional modifications

## Glass walls

Equipped with three glasses at the back and a side glass, all made of tempered safety glass 10 mm thick

Lower part of the glasses is a few centimeters above the ground to avoid any waste building up inside the shelter

Perfect protection against bad weather conditions ensuring an excellent visibility towards the street

## Display panel

Cantilever mounted on the pole

Two $2m^2$ backlit sides, with static or scrolling displays

Each side is equipped with a glass door hinged at the top

The doors are kept open with struts during posting operations

Posters are held in position against a back support allowing a perfect display quality

Posting operation are done at man's height

4 LED tubes backlight the whole display area evenly

Contributes to the shelter's lighting

## Roof

Transparent roof composed of a steel welded frame supporting laminated tempered glass panels

Can be made opaque replacing glass panels by honeycomb aluminum panels

Tilted roof designed with a central gutter allowing rainwater to flow to the sides of the shelter out of the waiting area

## Bench

Adapted for 3 persons:

- Fixed on a cross beam
- Made from beadblasted stainless steel
- Perforated to enable water evacuation

Does not require any foundation

### Lighting

1 LED tube embedded into the roof central case so that the whole sheltered area and timetable are lighted

The tube is glass protected against vandalism

## ELECTRICITY_

### Power supply

220 V/240 V – 50 Hz

Connected to the public lighting network or to the permanent network (lighting managed by astronomical clock)

### Protection

6 A circuit breaker, 25 A - 30 mA differential switch

| | NOMINAL POWER (VA) | AVERAGE CONSUMPTION (kWh/day)* |
|---|---|---|
| Roof lighting | 19 | 0,21 |
| Display panel | 90 | 1,04 |

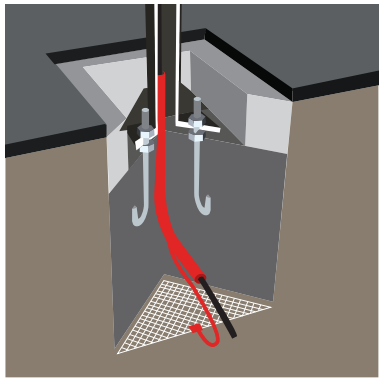
** Based on 4,200 hours lighting a year (equivalent to an average of 11,5 hours per day)*

## FOUNDATION_

Unit anchored into a buried concrete foundation to conceal the rods

Dimensioned according to the local standards to resist extreme weather conditions

The electric supply cables and the earth tail are protected in a technical duct



*Foundation with anchoring sleeves*

## STANDARDS_

CE marking

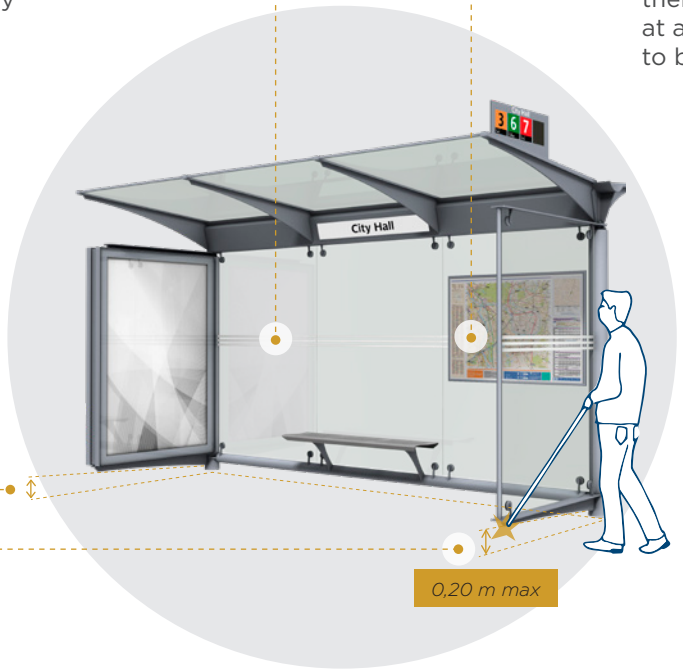
## INCLUSIVITY AND ACCESSIBILITY_

**Glasses**

are silkscreen printed with warning strips to prevent any collision

**Timetable**

is located aside of thebench and positionned at a comfortable height to be read by everyone




**Lower part of the shelter**

is at a few centimeters from ground to be detectable by people using a white cane

## ENVIRONMENTAL CONSIDERATIONS_

LED technology for the lighting:

- Significantly reduces electricity consumption compared to fluorescent tube technology
- Minimises tube changes and consequently the amount of waste to be treated

Service life of LEDs: 50,000 hours

Use of a powder coating without any Volatile Organic Compounds (VOC)

Electrical and electronic equipment recycled according to WEEE regulations

Unit mainly manufactured from sustainable and recyclable materials

## MATERIALS_

| MATERIALS | TREATMENT AGAINST CORROSION | FINISHING | MAIN PARTS |
|---|---|---|---|
| STEEL | Hot dip galvanizing | 80 µm powder coating | Poles, bench arms, roof structure, cross beam |
| | Centrifugal galvanizing | 80 µm powder coating | Anchoring sleeves |
| STAINLESS STEEL | | Beadblasted | Bench seat |
| | Passivation | | Bolts, nuts and screws |
| ALUMINIUM | Chromate conversion* | 80 µm powder coating | Ad panel |
| 8 MM TEMPERED GLASS | | Silkscreen printing | Ad panel glazing |
| 10 MM TEMPERED GLASS | | Silkscreen printing | Walls |
| 5-5-2 LAMINATED TEMPERED GLASS | | | Roof panels |
| CONCRETE | | | Foundations |

** Free from hexavalent chromium*

## RESISTANCE TO VANDALISM_

Protection rating against impacts > IK10 (corresponding to a 2-kg mass dropped from a height of 1m)

Doors are secured using a special key

Tempered glass which break into small pieces in case of a shock to avoid injury to the pedestrians

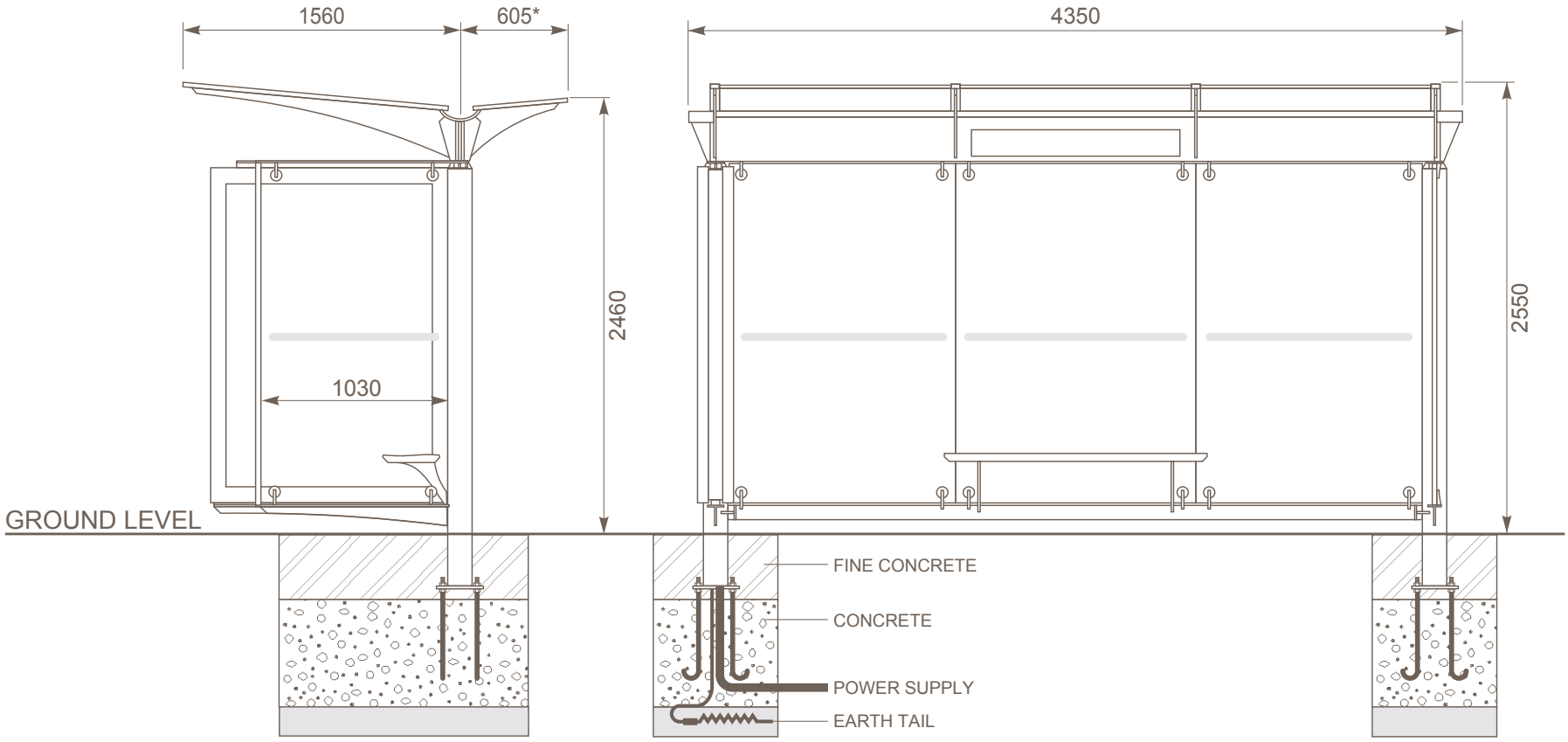
Visible screws have a special print to avoid any malicious usage or dismantling

Roof panels made of laminated tempered glass which do not collapse in the event of a shock

In sensitive areas, the glass walls may be replaced by perforated metal sheet

*Perforated metal sheet*

# Technical drawing_




** Available without rear roof*

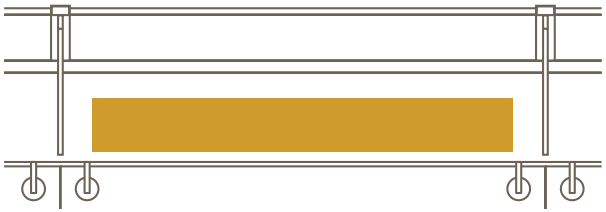
*Dimensions in mm*

# Equipments_

## SIGNAGE_

Included in the roof beam

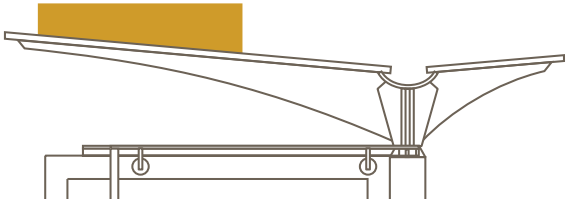
Backlit station name on tranparent sticker



*Front signage*

Metal plate fixed to the roof thanks to rods

Dimensions to be adapted according to the number of lines and station name length



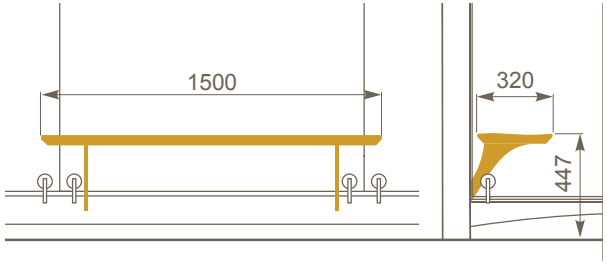
*Lateral signage*

## BENCH_

Seat made of beadblasted stainless steel

At 447mm from the ground

Do not require any foundation




## TIMETABLE_

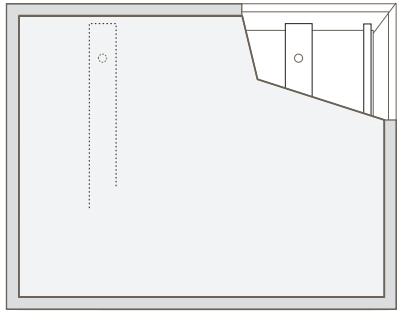
Fixed on the glass walls

Allows an air flows to prevent any condensation

Protected by a front face with a synthetic glass

Can be fitted with a door to enable display acess secured using a special key

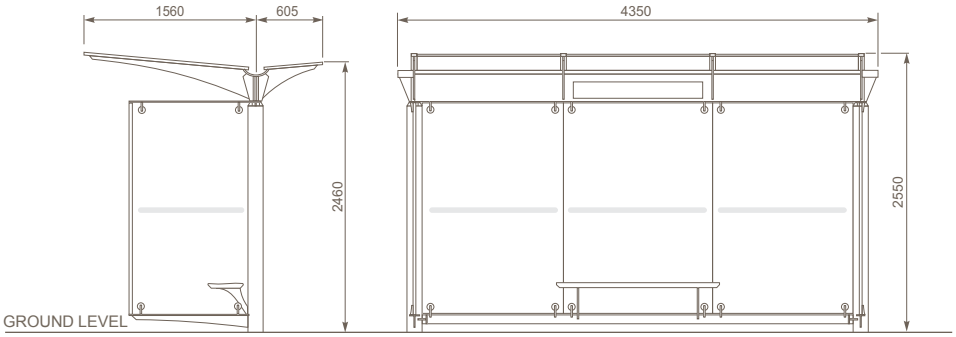
Dimensions to be adapted according to display requirements



# Modularities_

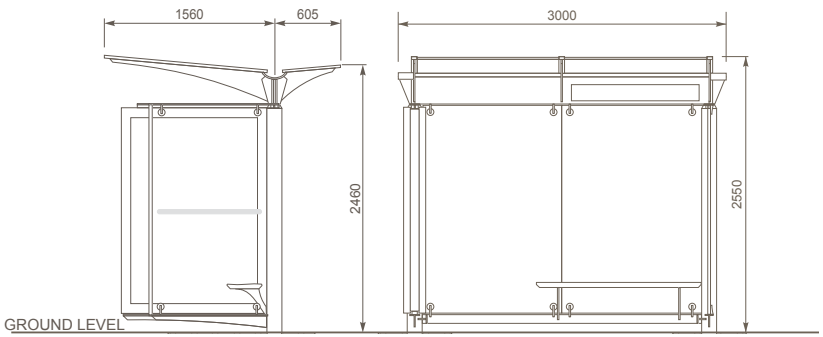
## NON-AD SHELTER_

Same design where the display panel is replaced with a side glass



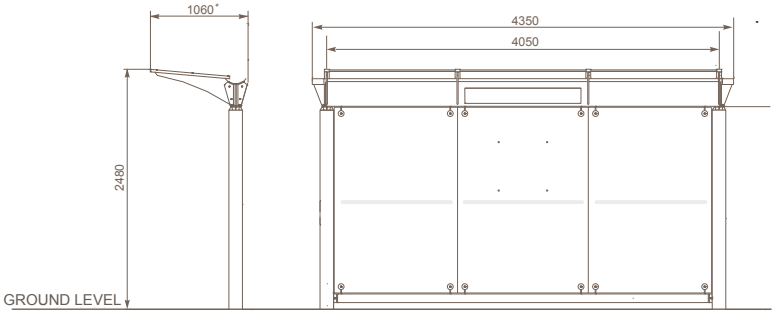

## SHORT SHELTER_

Reduced in length configuration



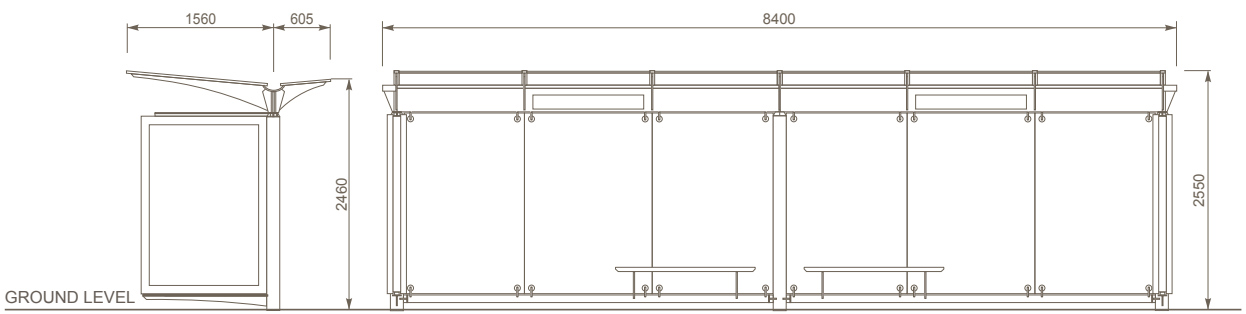
## NARROW SHELTER_

Shorter roof depth appropriate for narrow side walks




## DOUBLE SHELTER_

Same design as the single shelter doubled in length

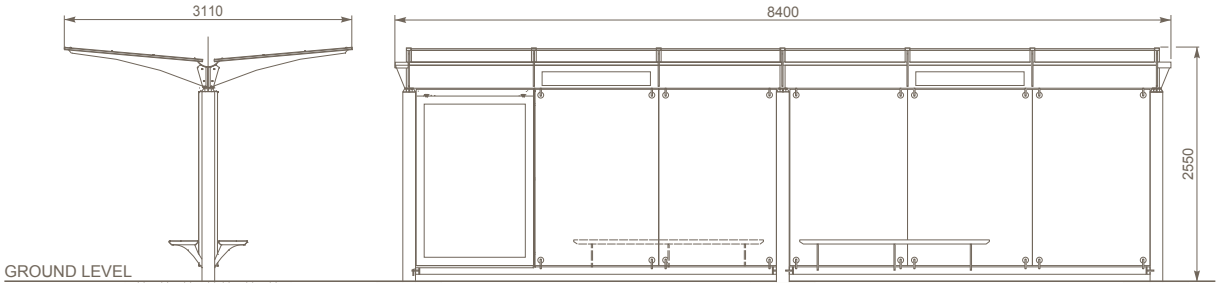



** Available in 1300mm roof depth*

## DOUBLE ROOF SHELTER_

Fitted with a double roof and benches on both sides

Adapted to bus or tramway central platform



**SHELTER 2 POSSIBLE OPTIONS**

As option B will obstruct the clear pathway along Miller St and to Ted Mack Park, Lendlease, Sydney Metro and North Sydney Council have expressed option A as their preferred location for shelter 2.


OPTION B

OPTION A

SHELTER 2
REFER DRG. C14.01 FOR DETAIL

SHELTER 1
REFER DRG. C14.01 FOR DETAIL

SHELTER 3
REFER DRG. C14.02 FOR DETAIL

SHELTER 4
REFER DRG. C14.02 FOR DETAIL

VICTORIA CROSS METRO STATION (NORTH)
BY OTHERS

MCLAREN STREET

MILLER STREET

MOTORCYCLE PARKING

2xCAR-SHARE BAYS

5xKISS AND RIDE BAYS

E: 334161.551
N: 6254703.671
R = 3.50
T = 3.53
A = 5.53

E: 334157.516
N: 6254700.763

## STORMWATER PIT SETOUT

| PIT NUMBER | EASTING | NORTHING |
|---|---|---|
| A01 | 334161.275 | 6254724.671 |
| A02 | 334148.652 | 6254727.304 |
| A03 | 334133.565 | 6254721.123 |

## SIGNAL POST SETOUT

| POST ID | POST TYPE | EASTING | NORTHING |
|---|---|---|---|
| 1 | 8 | 334162.090 | 6254723.398 |
| 2 | EXISTING | 334165.192 | 6254716.639 |
| 3 | 8 | 334164.291 | 6254702.098 |
| 4 | 8 | 334158.110 | 6254697.987 |
| 5 | 8 | 334143.454 | 6254700.367 |
| 6 | 6 | 334137.916 | 6254706.838 |
| 7 | 8 | 334140.224 | 6254721.023 |
| 8 | 8 | 334147.350 | 6254725.413 |

## LEGEND

- ④ TRAFFIC SIGNAL NUMBER
- EXISTING TRAFFIC SIGNAL POST
- PROPOSED TRAFFIC SIGNAL POST
- (A03) PIT LABEL

## NOTE

1. PROPOSED SIGNAL DETECTOR LOCATIONS TO BE NOMINATED BY TCS DESIGNER.
2. AN INDEPENDENT ARBORIST SHALL BE ENGAGED AND BE PRESENT ON SITE WHERE EXCAVATION IS REQUIRED IN CLOSE PROXIMITY TO TREES, IN PARTICULAR EXCAVATION OF POST 2 AND POST 6 FOOTINGS.
3. REFER TCS PLAN 1156, DS2014/001547 FOR TRAFFIC CONTROL AND SIGNAL PHASING.

| REV. | DATE | DESCRIPTION | DRN. | DES. | VERIF. | APPD. |
|---|---|---|---|---|---|---|
| 8 | 2/05/2024 | ISSUED FOR 100% APPROVAL | EZ | MTL | MKH | MKH |
| 7 | 18/03/2024 | ISSUED FOR 100% APPROVAL | SW | MTL | MKH | MKH |
| 6 | 27/09/2023 | ISSUED FOR 100% APPROVAL | CB | MTL | MKH | MKH |
| 5 | 18/09/2023 | ISSUED FOR 100% APPROVAL | CB | MTL | MKH | MKH |
| 4 | 8/08/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 3 | 27/07/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 2 | 20/06/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 1 | 29/05/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |

Client: lendlease

Scale: 0 5 10 15 20 25m — SCALE 1:250 @A1

North



Enspire Solutions Pty Ltd
Level 4, 153 Walker Street, North Sydney NSW 2060
ABN: 71 624 801 690
Phone: 02 9922 6135

Project: SYDNEY METRO CITY AND SOUTHWEST
VICTORIA CROSS METRO STATION
MILLER-MCLAREN INTERSECTION, CIVIL WORKS

Title: ROADWORKS SETOUT PLAN

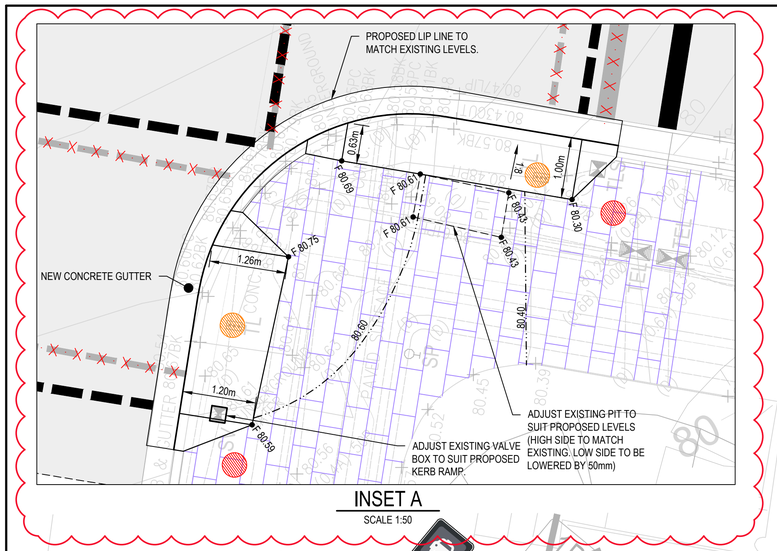
Scale: 1:250
Date: 29/05/2023
Size: A1
Datum: MGA2020

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number: 210125-02-WAD-C05.11
Revision: 8

DATE PLOTTED: 7 May 2024 2:46 PM BY : CAITLIN BEHETS

CAD File: P:\210125 VictoriaCrossStation\AP\D-Civil\02-WAD 1 Miller & McLaren St\Drawings\6-DACC\210125-02-WAD-C05.11 ROADWORKS SETOUT PLAN.dwg




INSET A

SCALE 1:50

Location subject to final bus shelter location

Location subject to final bus shelter location

EXISTING 'BB' AND 'L1' PAVEMENT LINEMARKING TO REMAIN. (TYP.)

PARKING METER TO BE RELOCATED AND CALIBRATED TO NUMBER OF PARKING SPACES PROVIDED

PROPOSED BUS SHELTER. REFER DRG. C14.02 FOR DETAIL.

EXISTING PARKING SPACE LINEMARKING TO BE REMOVED WITHIN MILLER STREET BUS ZONES. (TYP.)

EXISTING SIGNAGE, PARKING BAY LINEMARKING AND PARKING METER TO BE ADJUSTED TO SUIT PROPOSED BUS STOP LOCATION

EXISTING VEHICULAR CROSSING TO REMAIN

EXISTING AUSTRALIA POST BOXES TO REMAIN

EXISTING 40KM/H AND PEDESTRIAN SIGN TO REMAIN. EXISTING 40KM/H LINEMARKING TO REMAIN.

SAWCUT 0.6m FROM EDGE OF PROPOSED SA KERB EDGE IN MILLER STREET FLEXIBLE PAVEMENT. REMOVE AND REPLACE KERB TO MATCH PROPOSED ALIGNMENT AND LEVELS. REINSTATE PAVEMENT TO MATCH EXISTING.

EXISTING STORMWATER PITS TO BE RETAINED UNLESS NOTED OTHERWISE. (TYP.)

EXISTING PITS TO BE ADJUSTED TO SUIT PROPOSED LOCATION AND LEVELS. REFER DRG. C07.01 FOR DETAILS. (TYP.)

EXISTING HERITAGE PAVING TO BE LIFTED, STORED AND REUSED

EXISTING KERB TO BE MODIFIED FOR ACCESSIBLE BAY. AS PER AS2890.5. KERB PROFILE TO MATCH EXISTING.

PROPOSED TAXI RANK SHELTER. REFER DRG. C14.01 FOR DETAIL

PARKING METER TO BE RELOCATED BY NORTH SYDNEY COUNCIL AND CALIBRATED TO NUMBER OF PARKING SPACES PROVIDED

REDUNDANT LINEMARKING TO BE REMOVED. (TYP.)

2xEXISTING CAR SPACES CONVERTED TO 2xLOADING ZONES

EXISTING KERB TO REMAIN.

2xEXISTING CARPARKING SPACES CONVERTED TO TAXI RANKS AS PER AS2890.5

EXISTING LANE LINES TO REMAIN (TYP.)

REMOVE AND REPLACE 40KM/H SPEED ZONE LINEMARKING AND ASSOCIATED "DRAGONS TEETH" MARKINGS FOR 10.0m BEYOND STOP LINE.

EXISTING LIGHT AND POWER POLE TO REMAIN

EXISITNG SIGNAGE TO BE RELOCATED WITH POST 7.

REFER TO ARBORIST REPORT FOR DETAIL OF TRIMMING TO EXISTING TREES. (TYP.)

RELOCATE EXISTING DIRECTIONAL SIGN ON POST 6 TO NEW POST 6 LOCATION.

RELOCATE EXISTING 1 TO 8 TRAFFIC SIGNAL POSTS IN ACCORDANCE WITH TINSW SPECIFICATIONS. (TYP.)

MAKE SMOOTH CONNECTION WITH EXISTING KERB ALIGNMENT AND LEVELS (TYP).

EXISTING SERVICE COVERS TO BE ADJUSTED TO SUIT PROPOSED LEVELS MAINTAIN EXISTING KERB.

EXISTING LINEMARKING TO BE REMOVED. (TYP.)

REMOVE AND REPLACE 40KM/H SPEED ZONE LINEMARKING AND ASSOCIATED "DRAGONS TEETH" MARKINGS FOR 10.0m BEYOND STOP LINE.

VICTORIA CROSS METRO STATION (NORTH)
BY OTHERS

RECONSTRUCT EXISTING KERB RETURNS KR01 & KR02. REFER DRG. C07.01 FOR DETAILS

AUSGRID ELECTRICAL POST TO REMAIN

EXISTING LIGHT AND POWER POLE TO REMAIN

PROPOSED METRO FOOTPATH WORKS BY OTHERS.

EXISTING ELECTRICAL TRANSFORMER TO REMAIN

EXISTING L1 LINE TO REMAIN

EXISTING BB LINE TO REMAIN

MCLAREN STREET

MILLER STREET

CONTINUOUS

12.00m

6.20m (TYP.)

8.00m

3.20m (TYP.)

2.00m (TYP.)

20.0m (MIN.)

10.0m

40.0m

6.0m

24m LONG

27m LONG

MOTORCYCLE PARKING

2xCAR-SHARE BAYS

5xKISS AND RIDE BAYS

7.20m (TYP.)

2.00m (TYP.)

## LEGEND

- TRAFFIC SIGNAL NUMBER
- EXISTING TRAFFIC SIGNAL POST
- PROPOSED TRAFFIC SIGNAL POST
- KERB RETURN LABEL (KR 01)
- KERB RAMP. REFER TINSW STANDARD DRAWING R0300-11 FOR DETAIL
- PROPOSED KERB RAMP. REFER NORTH SYDNEY COUNCIL STANDARD DRAWING S106 FOR DETAIL
- SA KERB TO TINSW STANDARD DRAWING R0300-01
- SAWCUT

## PAVEMENT LEGEND

**PAVEMENT TYPE 1**
FLEXIBLE PAVEMENT REINSTATEMENT
MILL 100mm AC WEARING COURSE AND GRANULAR BASE MATERIAL REPLACE WITH:
2x50mm AC14 ON
7mm LOW CUTTER SEAL.

**EXISTING PAVEMENT TYPE 2**
PAVER FOOTPATH
EXISTING PAVER ON:
30mm 3:1 SAND AND CEMENT MORTAR BED (30 MPa) ON
150mm CONCRETE (40MPa) WITH SL82 MESH WITH 55 TOP COVER ON EXISTING BASE MATERIAL

## PAVEMENT MARKING LEGEND

- STOP LINE (TF)
- PEDESTRIAN CROSSING (PCW)
- BARRIER LINES (BB)
- LANE LINES (L1)
- EXISTING LINEMARKING TO BE REMOVED

## NOTE

1. PROPOSED SIGNAL DETECTOR LOCATIONS TO BE NOMINATED BY TCS DESIGNER.
2. AN INDEPENDENT ARBORIST SHALL BE ENGAGED AND BE PRESENT ON SITE WHERE EXCAVATION IS REQUIRED IN CLOSE PROXIMITY TO TREES, IN PARTICULAR EXCAVATION OF POST 2 AND POST 6 FOOTINGS.
3. REFER TCS PLAN 1156, DS2014/001547 FOR TRAFFIC CONTROL AND SIGNAL PHASING.
4. ALL WAYFINDING SINGAGE TO BE INSTALLED IN ACCORDANCE WITH TINSW TECHNICAL NOTE TN070:2016

| REV. | DATE | DESCRIPTION | DRN. | DES. | VERIF. | APPD. |
|---|---|---|---|---|---|---|
| 16 | 2/05/2024 | ISSUED FOR 100% APPROVAL | EZ | MTL | MKH | MKH |
| 15 | 18/03/2024 | ISSUED FOR 100% APPROVAL | SW | MTL | MKH | MKH |
| 14 | 27/09/2023 | ISSUED FOR 100% APPROVAL | CB | MTL | MKH | MKH |
| 13 | 18/09/2023 | ISSUED FOR 100% APPROVAL | CB | MTL | MKH | MKH |
| 12 | 8/08/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 11 | 27/07/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 10 | 20/06/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 9 | 29/05/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |

Client: lendlease

Scale: 0 5 10 15 20 25m — SCALE 1:250 @A1

North



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Project: SYDNEY METRO CITY AND SOUTHWEST
VICTORIA CROSS METRO STATION
MILLER-MCLAREN INTERSECTION, CIVIL WORKS

Title: ROADWORKS AND STORMWATER DRAINAGE PLAN

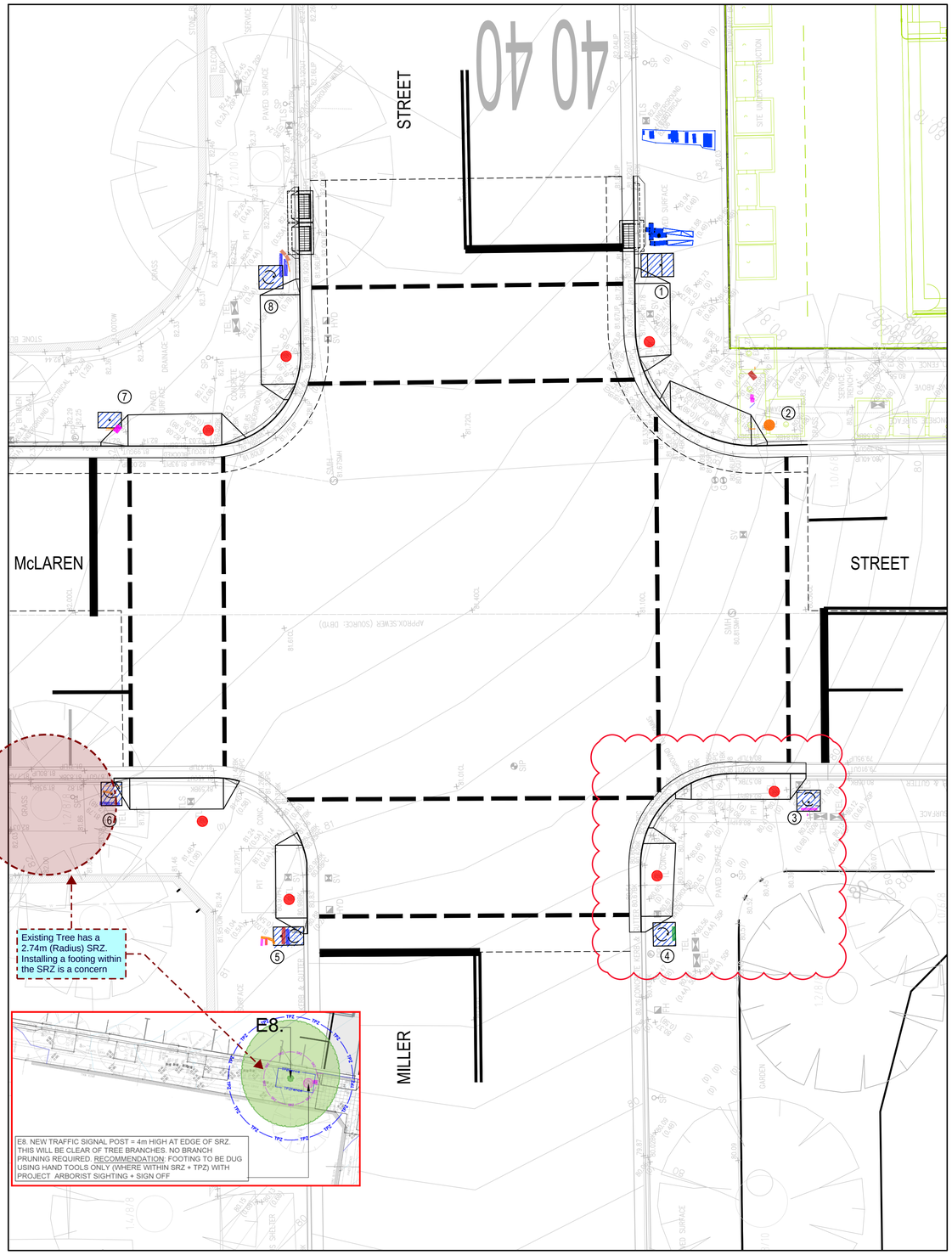
Scale: 1:250
Date: 26/07/2022
Size: A1
Datum: MGA2020

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

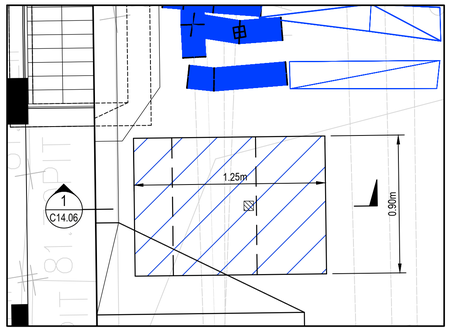
Project Number/Drawing Number: 210125-02-WAD-C05.01
Revision: 16

DATE PLOTTED: 7 May 2024 2:46 PM BY : CAITLIN BEHETS

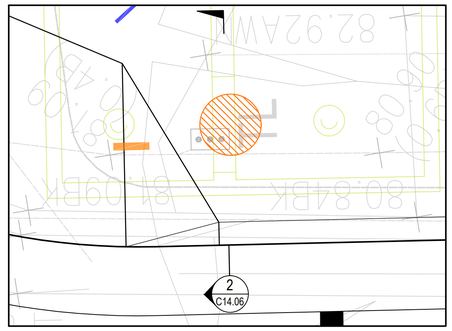
CAD File: P:\210125 VictoriaCrossStationIAP\D-Civil\02-WAD 1 Miller & McLaren St\Drawings\6-DACC\210125-02-WAD-C05.01 ROADWORKS AND STORMWATER DRAINAGE PLAN.dwg



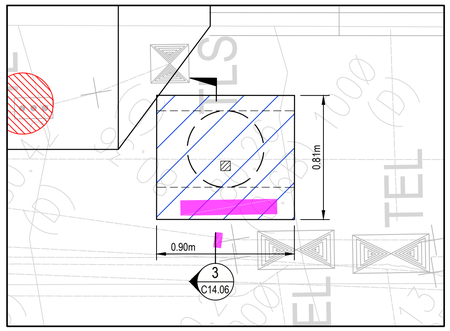

PLAN VIEW
SCALE 1:100




POST 1
SCALE 1:20




POST 2
SCALE 1:20

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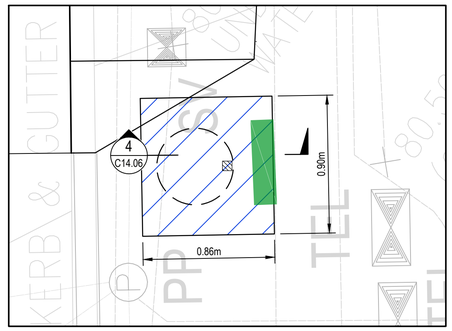
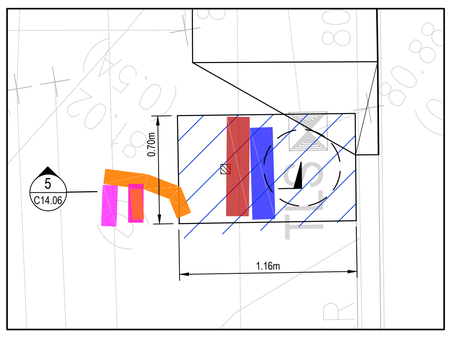
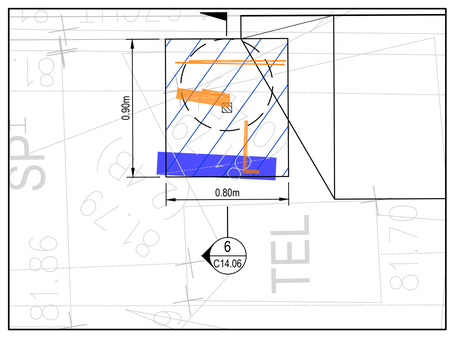
SCALE 1:20



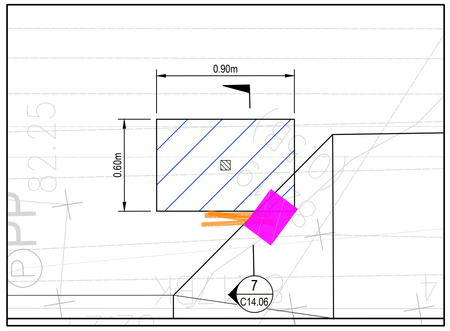

POST 4
SCALE 1:20



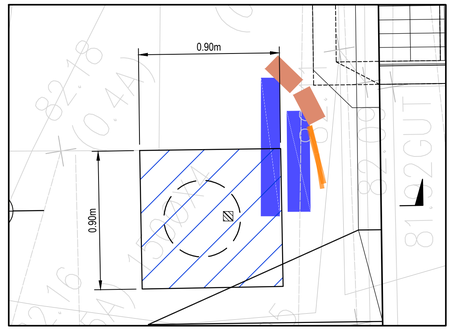

POST 5
SCALE 1:20




POST 6
SCALE 1:20




POST 7
SCALE 1:20




POST 8
SCALE 1:20

## SIGNAL POST SETOUT

| POST ID | POST TYPE | EASTING | NORTHING |
|---|---|---|---|
| 1 | 8 | 334162.090 | 6254723.398 |
| 2 | EXISTING | 334165.192 | 6254716.639 |
| 3 | 8 | 334164.291 | 6254702.098 |
| 4 | 8 | 334158.110 | 6254697.987 |
| 5 | 8 | 334143.454 | 6254700.367 |
| 6 | 6 | 334137.916 | 6254706.838 |
| 7 | 8 | 334140.224 | 6254721.023 |
| 8 | 8 | 334147.350 | 6254725.413 |

## SIGNAL POST REFERENCE

| | |
|---|---|
| VC002-38: | HOLDING DOWN BOLT DETAILS FOR TYPE 5 & 9 MAST ARMS AND TYPE 6 POSTS. |
| VC002-59: | FOOTING FOR TYPE 7 & 8 POSTS. |
| VC002-60: | HOLDING DOWN BOLT ASSEMBLY FOR TYPE 7 & 8 POSTS. |
| VC002-72: | FOOTING FOR TYPE 5 & 9 MAST ARMS AND TYPE 6 POST. |
| VM212-2: | GENERAL ARRANGEMENT OF POST TYPE 6 WITH SIGN MOUNTING FACILITY. |
| VM015-22: | ASSEMBLY DETAILS OF TERMINAL BOX FOR MAST ARMS AND TYPE 6 POST. |
| VM015-41: | MECHANICAL DETAILS OF TERMINAL BOX FOR A TYPE 8 POST. |
| VM015-42: | ASSEMBLY DETAILS OF TERMINAL BOX FOR MAST ARMS AND TYPE 8 POST. |
| VM202-10: | ADAPTOR PLAE FOR A TYPE 2 POST ON A TYPE 5 MAST ARM FOOTING OR A TYPE 6 POST FOOTING. |
| VM202-25: | MECHANICAL AND ASSEMBLY DETAILS OF THE TYPE 8 POST. |
| VM202-26: | ADAPTOR STOOL FOR TYPE 7 & 8 POSTS ON A TYPE 2 FOOTING. |
| VM211-17: | LOWER ASSEMBLY DETAILS OF TERMINAL BOX AND LANTERNS SUITABLE FOR MAST ARMS & TYPE 6 POT. |
| VM212-1: | MECHANICAL AND ASSEMBLY DETAILS OF THE TYPE 6 POST. |
| VM626-6: | MOUNTING BRACKET FOR AUDIO TACTILE HOUSING ON MAST ARMS & TYPE 6 POSTS. |

| REV. | DATE | DESCRIPTION | DRN. | DES. | VERIF. | APPD. |
|---|---|---|---|---|---|---|
| 8 | 2/05/2024 | ISSUED FOR 100% APPROVAL | EZ | MTL | MKH | MKH |
| 7 | 18/03/2024 | ISSUED FOR 100% APPROVAL | SW | MTL | MKH | MKH |
| 6 | 18/12/2023 | ISSUED FOR 100% APPROVAL | MDH | MTL | MKH | MKH |
| 5 | 7/12/2023 | ISSUED FOR 100% APPROVAL | MDH | MTL | MKH | MKH |
| 4 | 27/09/2023 | ISSUED FOR 100% APPROVAL | CB | MTL | MKH | MKH |
| 3 | 18/09/2023 | ISSUED FOR 100% APPROVAL | CB | MTL | MKH | MKH |
| 2 | 8/08/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |
| 1 | 27/07/2023 | ISSUED FOR 100% APPROVAL | GJI | MTL | MKH | MKH |

Client: lendlease

Scale: SCALE 1:20 @A1 (0 0.5 1 1.5 2m); SCALE 1:100 @A1 (0 1 2 4 6 8 10m)

North



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Project: SYDNEY METRO CITY AND SOUTHWEST
VICTORIA CROSS METRO STATION
MILLER-MCLAREN INTERSECTION, CIVIL WORKS

Title: SIGNAL POST DETAILS

SHEET 01

Scale: 1:20
Date: 26/07/2022
Size: A1
Datum: MGA2020

Status: FOR APPROVAL
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number: 210125-02-WAD-C14.05
Revision: 8

DATE PLOTTED: 7 May 2024 2:50 PM BY : CAITLIN BEHETS

CAD File: P:\210125 VictoriaCrossStationIAP\D-Civil\02-WAD 1 Miller & McLaren St\Drawings\6-DACC\210125-02-WAD-C14.01-C14.06 STRUCTURAL FOOTING PLANS.dwg