Appendix G

Landscape character and visual impact assessment
SYDNEY HARBOUR BRIDGE SOUTHERN APPROACH
LANDSCAPE CHARACTER AND VISUAL IMPACT ASSESSMENT
SYDNEY HARBOUR BRIDGE
SOUTHERN APPROACH
LANDSCAPE CHARACTER AND
VISUAL IMPACT ASSESSMENT

Barbara Schaffer
Government Architect’s Office, NSW Public Works

Department of Finance & Services
McKell Building, Level 18  2-24 Rawson Place  SYDNEY 2000
T: 61 2 9372 8428  E: barbara.schaffer@services.nsw.gov.au
F: 61 2 9372 8499  W: www.govarch.commerce.nsw.gov.au

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EXECUTIVE SUMMARY

The site of the proposal is located between the City of Sydney and the Sydney Harbour Bridge and between Observatory Hill and The Rocks. Since the construction of the Sydney Harbour Bridge it has been a major entry and arrival point to the City of Sydney. The surrounding landscape setting has well documented cultural values, including significant heritage and archaeology, and visual/ scenic values. As part of the Sydney Harbour Bridge corridor, the site itself is a part of the pre-eminent route into the city, travelled by thousands of people each day. It offers views south into the city and north towards the Sydney Harbour Bridge, and is overlooked in turn by many buildings including commercial, residential and public buildings. The site is therefore considered to be of major importance and has a high degree of visual sensitivity.

The proposal has been developed giving regard to the high order Urban Design Principles developed for the Toll Plaza precinct. The proposal includes the removal of the toll booths and the re-alignment of traffic lanes, reconfiguration of medians, and all associated lighting, signage and other infrastructure required for the safe operation of the roadway. The proposal is limited to the existing road corridor and the majority of works proposed would involve removal of existing structures or removal and replacement of structures. The magnitude of the proposal and its visual effect is therefore generally minor.

Given the minor magnitude of the proposal, the overall visual impact is assessed to be minor, despite the high visual sensitivity. The proposal performs better overall than the existing road corridor configuration, from a visual and landscape character point of view.

The current visual quality of the road corridor is characterised by the multitude of infrastructure elements required to support its safe and efficient functioning. The composition of existing elements has grown incrementally over time in response to changing and generally increasing demands, including greater traffic volumes and higher safety and design standards as well as design travel speeds. While the existing corridor conditions generally meets the essential functional requirements, it does not represent an integrated or visually considered composition.

Within this context, the proposal represents a unique opportunity to improve the overall visual quality of the toll plaza area, including simplifying the formation and arrangement of the road space and associated signage and lighting structures. It further provides an opportunity to improve the integration of the road infrastructure with the visual and historic significance of the site through a design that is functional, flexible, restrained, visually recessive and contemporary in detailing.

Balancing the various design requirements through the application of the detailed design principles in an iterative and collaborative detailed design process will be critical to maximise the realisation of the high level urban design objectives for the precinct. This in turn has the potential to lead to an enhanced urban design, visual and landscape setting.
1 INTRODUCTION

This report has been prepared by the NSW Government Architect’s Office (GAO) for NSW Roads and Maritime Services (RMS) for inclusion in the Review of Environmental Factors (REF). It documents the landscape character and visual impact assessment of a proposal to remove toll booths and realign traffic lanes on the southern approaches to the Sydney Harbour Bridge. The proposal also includes the reconfiguration of medians and all associated lighting, signage other infrastructure required for the safe operation of the roadway (the proposal).

The proposal is one of several projects proposed in the vicinity of the southern and northern approaches to the Sydney Harbour Bridge by RMS and other agencies and authorities. Relevant projects by RMS include new electronic tolling points and equipment in Milsons Point, the upgrade of the electronic lane control system on the Sydney Harbour Bridge and pedestrian and cycle access improvements to and across the Sydney Harbour Bridge.

The landscape character and visual impact assessment identifies and addresses both the potential impacts of the proposal on the character and sense of place of the study area and the effect of the proposal on people’s views within and to the study area. It includes the potential visual impacts of the proposal from the surrounding areas and on the motorists’ experience. The purpose of the assessment is to report on the potential impacts and propose opportunities to mitigate potential impacts, as well as to improve overall design outcomes through the integration of urban design and visual design principles with other road design considerations during the detailed design.

1.1 STUDY METHOD

This report is based on RMS (formerly RTA) Guideline EIA_N04: ‘Environmental Impact Assessment Guidance Note – Guidelines for landscape character and visual impact assessment’. Preparation of the report has included

- a review of current site conditions including the landscape character, context and planning framework with regard to landscape, scenic and conservation issues;
- the development of urban design principles for the study area;
- a series of design workshops to discuss and develop the concept design for the proposed works, to ensure integration of the urban design principles into the road design, and to identify means of mitigating any visual impacts;
- a review of the concept design drawings developed by RMS for the south-bound approach to the Sydney Harbour Bridge; and
- discussions with the RMS project team to identify the range of possible issues relating to the proposed works.
1.2 THE STUDY AREA

The study area is defined as the section of the Western Distributor and Bradfield Highway between Grosvenor Street and Argyle Street – refer Figure 1. It is about 500m long in total. Included in the study area are a number of approaches to and exit ramps off the Sydney Harbour Bridge. These include the Kent/Clarence Street on-ramp, York/Grosvenor Street on-ramps and exits and the Cahill Expressway on- and off-ramp, including the ‘corkscrew’ cutting in Observatory Park. The centre of the study area features the tolling booths and is often referred to as the Southern Toll Plaza.

South of the study area is the Western Distributor leading past Darling Harbour and to the City West Link beyond. North of the study area is the viaduct leading to the deck of the Sydney Harbour Bridge.

Figure 1: The Study Area
2 THE PROPOSAL

2.1 DESCRIPTION OF THE PROPOSED WORKS

From a road and road network design point of view, the aim of the proposal is to improve the driver and passenger experience travelling between the Sydney Harbour Bridge and the Western Distributor or northern CBD by:

- simplifying traffic movements
- improving connectivity for buses
- improving operational flexibility for lane management on the Sydney Harbour Bridge
- reducing road safety hazards
- minimising environmental and heritage impacts

The proposal includes the removal of two sets of tolling booths located in the study area (refer Figure 1), with all electronic tolling for the Harbour Bridge proposed to be relocated to Milsons Point. (Installation of electronic tolling facilities at Milsons Point is subject to a separate environmental assessment.) Associated with the removal of tolling booths is a re-design of the carriageway to rationalise the multiple lanes which were provided for the purposes of toll collection. Specifically, the lane configuration in the toll plaza is currently comprised of a total of 12 and 15 lanes at the northern and southern tolling booths respectively, feeding into 6 traffic lanes and one dedicated bus lane on the Sydney Harbour Bridge. The removal of the toll booths would provide an opportunity to realign and streamline the number of lanes, to improve the road design from a road geometry and safety point of view, and to provide more consistent speed limits along the route.

In consultation with the numerous project stakeholders, several road design options were developed for the proposal. The most current option which is the subject of this report is called “Option 4: Realignment of existing lanes with access to York St via eastern ramp and access to Grosvenor Street via western ramp (refer to Figure 2 showing the proposed lane configuration). The proposal comprises several configurations which accommodate the various traffic flow and management modes that apply at different times of the day. It would provide for a posted maximum speed of 70kn/h. The total number of lanes provided would range from eight on the Sydney Harbour Bridge to 13 lanes including one bus lane near Sussex Street. A bus layover would also be provided and would include space for buses to lay in wait for pm peak services. The bus layover would be located between Essex Street and the Cahill Expressway. The bus layover and through lane would be separated from general traffic lanes by a concrete median.

The proposal includes the provision of all lighting and signage, including directional and regulatory signage. Lighting and signage design were under development at the time of writing this report. Much of the detail for lighting and signage including locations, numbers of posts and gantries will be resolved during detail design and take into
consideration constraints such as constructability, structural limitations as well as heritage (the integrity of the Sydney Harbour Bridge and viaduct including tram tunnels - refer section ‘3.1 Planning Considerations’).

Four different configurations are used to manage peak traffic flows, traffic incidents and associated volumes in each travel direction. Lanes 3 to 5 must be designed to allow for the reversal of traffic flow. This requires traffic management devices including moveable medians and electronic signage. In addition, there are also a number of fixed medians that mitigate level changes between the Highway and its on- and off-ramps, the alignment of which supports road geometry. Medians would also allow for the placement of the required traffic management devices including moveable medians, signage structures and possibly lighting. For safety reasons some medians would incorporate crash barriers to protect motorists from non-frangible structures such as signage gantries.

The proposal would also provide the opportunity to facilitate future urban design improvements at the interface of the road corridor and adjoining area - refer section ‘4 Urban Design Objectives and Principles’.
Figure 2: The proposal showing lane configuration under typical morning peak period.
3 CONTEXTUAL ANALYSIS

3.1 PLANNING CONSIDERATIONS

The major planning consideration of relevance for the landscape character and visual impact assessment is the proximity of the proposal to adjacent heritage, conservation and other special area planning precincts such as The Rocks, Millers Point and Observatory Hill. Heritage listed items and special area boundaries include those listed under the City of Sydney Local Environmental Plan 2005 (CoS LEP), the RailCorp Section 170 Heritage & Conservation Register, the NSW State Heritage Act and the National Heritage List (also refer Figure 3). They are:

1. Millers Point Conservation Area (CoS LEP Special Areas, NSW State Heritage Register, National Heritage List)
2. Millers Point & Dawes Point Village Precinct, Upper Fort Street & Watson Road (NSW State Heritage Register)
3. Circular Quay (CoS LEP Special Areas)
4. Wynyard Park/ Lang Park (CoS LEP Special Areas)
5. Lang Park CoS (LEP Archaeological/ Townscape/ Landscape Items)
6. Observatory Park (CoS LEP Archaeological/ Townscape/ Landscape Items)
7. National Trust Centre, Upper Fort Street (CoS LEP Heritage Items – Building and Sites, NSW State Heritage Register)
8. Sydney Observatory, Upper Fort Street (CoS LEP Heritage Items – Building and Sites, NSW State Heritage Register)
9. Sydney Harbour Bridge, Approaches, Viaduct and Curtilage (CoS LEP Heritage Items – Building and Sites, NSW State Heritage Register)
10. All streets within the Millers Point Conservation Area are listed as heritage streetscapes (CoS LEP Heritage Streetscapes)
11. Lawson House, Cumberland Street (NSW State Heritage Register)
12. Cumberland Street Terrace Houses, Shops & Residences (NSW State Heritage Register)
13. Lilyvale, Cumberland Street (NSW State Heritage Register)
14. The Australian Hotel, Cumberland Street (NSW State Heritage Register)
15. Cumberland Street Archaeological Site (NSW State Heritage Register)
16. Argyle Bridge and Argyle Cut, Argyle Street (NSW State Heritage Register)
17. Federation Hall and Courtyard, Grosvenor Street (NSW State Heritage Register)
18. Wynyard former tram tunnels (RailCorp Section 170 Heritage & Conservation Register)
Boundary of Millers Point and Dawes Point Conservation Area
State Heritage Register

Archaeological, Townscape and Landscape Items
Sydney LEP 2005

Boundary of The Rocks Conservation Area

Sydney LEP 2005
Sydney Harbour Bridge Heritage Listing

Other heritage item

Figure 3:
Heritage Items and Special Areas
3.2 LANDSCAPE CHARACTER

Urban Landscape Context

The study area is set within the road reservation on the southern approach to the Sydney Harbour Bridge. As such, it forms part of the pre-eminent entry route into the Sydney CBD from the north. In terms of the urban landscape setting, the study area lies between Observatory Hill on the west and the heritage precinct of The Rocks to the east, and between the City’s northern business district to the south and the Sydney Harbour Bridge to the north. Observatory Hill is a prominent landform and an important landscape, heritage and archaeological precinct. Cumberland Street provides the built edge to the Rocks Conservation Area.

The location is a significant place with views south into the city and north towards the Harbour Bridge. It is travelled by many thousands of people each day and looked down upon by many properties, businesses and the major public buildings of the National Trust and the Observatory. Historically, the study area has functioned as a major entry/arrival point to the city since construction of the Sydney Harbour Bridge.

Within the Sydney Harbour Bridge corridor, the study area is a defining place within the arrival sequence, providing the entrance to the Sydney CBD. In terms of the traffic network it is of importance as a key decision point for accessing different destinations including the northern CBD, southern CBD, or Darling Harbour and suburban destinations beyond which are accessed via the Western Distributor.

A number of important public spaces and landmarks surround the study area (refer Figure 4). They include the Sydney Harbour Bridge, Sydney Harbour and Observatory Park which includes the Sydney Observatory and the National Trust of Australia, Lang Park, the Rocks and the Sydney Opera House. The low-rise historic and heritage buildings located to the north and east of the study area, including those within the Observatory Hill parklands and in the adjoining Rocks historic precinct, are in strong contrast to both the road corridor and the northern business district, providing a valuable landscape feature and a distinct sense of relief within this highly urbanised area.
Heritage and Archaeology

As indicated in the section ‘3.1 Planning Considerations” above, the land surrounding the study area has significant heritage and archaeological values. Of particular relevance to the road corridor itself is the Sydney Harbour Bridge. The Bridge was opened in 1932 and is considered to be the world’s widest long span bridge. It is of local, state and national importance. Approaching and crossing the Bridge provides a major landmark experience due to the combination of the iconic nature of the structure and the beauty of the landscape setting of Sydney Harbour. In addition to its iconic role and heritage significance, the Sydney Harbour Bridge is a critical road infrastructure item in Sydney’s and the State’s road network.

Topography

The proposal site is located on the high point of The Rocks historic area. It is located at the same elevation as the adjacent Observatory Hill Park which is prominent rise above surrounding areas. Located next to the ridge and leading onto the viaduct that forms part of the Sydney Harbour Bridge approach, the site is elevated above Cumberland Street to the east.

Figure 4: Landscape Context
**Parks and Open Space**

There are a number of important parks and open space areas in close proximity to the study area (also refer to section ‘3.1 Planning Considerations’ above). They include Lang Park south-east of the study area and Observatory Park immediately adjoining the study area to the west.

Observatory Park is the site of the Sydney Observatory built in 1858 at the high point of The Rocks area. Other important structures located within the parklands are the Fort Street School and the National Trust Centre. Lang Park is considered to be the northern gateway to central Sydney.

The visual and landscape significance of the Observatory Parklands in particular is that they provide relief from the densely built up city environment, as well as a transition to the open landscape around Sydney Harbour. Throughout the study area the road user experience is transformed from a city/ road infrastructure experience to a landscape experience.

While Observatory Park is of significant landscape and archaeological value itself, it also forms part of the Millers Point Conservation Area which is of national significance. A factor in the area’s significance is the expression of the area’s natural, steep sandstone topography as well as the views to and from Sydney Harbour and the Sydney Harbour Bridge (also refer section ‘Spatial Qualities and Views’ below).

**Vegetation**

Very little of the original vegetation remains in the study area and surrounding landscape. Vegetation within the study area is limited to a number of trees in small rectangular planters on a median which separates north- and south-bound traffic between the two groups of toll booths (refer Figure 5). The trees are of poor form and make little contribution to the visual and road corridor environment.

In terms of the landscape setting, there are significant cultural plantings in the adjoining parklands which are characterised by a pastoral “grass and trees” landscape. At Observatory Park, many of the original 1880’s Moreton Bay Fig (*Ficus macrophylla*) tree plantings remain and are important elements in framing the road corridor while allowing for filtered views (refer Figure 6). They are on the City of Sydney’s Significant Tree Register as being some of the largest of the species to be found in the City, and an integral component of the City’s cultural heritage.
Spatial Qualities and Views

In terms of the road user when approaching the study area from the south, views are largely concentrated along the road corridor, due to the high levels of development surrounding the road corridor. The exception are the views afforded from the road corridor’s elevated position along the Sussex Street/ Hickson Road view corridors, across the Barangaroo redevelopment site and towards Sydney Harbour (refer Figures 7 and 8).

Adjoining the study area there is a transition from tall city buildings through lower buildings including the heritage-listed National Trust Centre in the and the Sydney Harbour YHA in the east, to the open parklands of Observatory Hill. While the road rises along the side of Observatory Hill and onto the Sydney Harbour Bridge viaduct, building setbacks increase. Combined with the elevated position, the result is a more open landscape character, with an expansive sky and views to the landscape beyond the road corridor on all sides. These include views to and from the pastoral landscape of Observatory Park, and glimpses of the urban and natural landscape around Sydney Harbour including Sydney Harbour, North Sydney and other lower north shore suburbs, and the Sydney Opera House (refer Figure 9).

In terms of views from surrounding areas, Observatory Park is considered to be one of the most spectacular vantage points in Sydney. It provides for panoramic views to the north, west and east which include views to and from Sydney Harbour and the Sydney Harbour Bridge. Views extend across the study area and towards the city. Because of the documented importance of these views and the prominence of the study area in the view, conservation management objectives identified for Observatory Park are of relevance to the proposed works. They include the maintenance of existing views and vistas into and out of the precinct, including those to and from the Harbour Bridge and Observatory Park.
Figure 5: Individual tree planting in containers on the median strip.

Figure 6: Tree planting in Observatory Park framing the road corridor.

Figure 7: The visual character on the approach to the study area; the Western Distributor corridor at Kent Street is set amongst tall buildings in close proximity to the carriageway.

Figure 8: View corridor along Hickson Road and across Barangaroo.

Figure 9: Views of the Sydney Opera House from the road corridor.

Figure 10: Toll booths are the dominant visual element in the study area. Other elements defining the road character are the clutter of medians, road markers, light post and trees/planters.
Infrastructure Environment

The road environment of the study area and its approach from the Western Distributor is characteristic of a major road corridor in the sense that it features a large number of structures and items that are critical to its operation and safety. They include gantries supporting signage and other traffic control devices, medians, kerbs and other barriers to direct and separate traffic flow, lane markings and paintings, light poles, planting boxes and temporary and permanent signs. A major structure and dominant visual element in the road corridor are the tolling booths located in the Toll Plaza (refer Figure 10). The cumulative effect of the various traffic management devices is that of a road corridor cluttered with a multitude of infrastructure elements.

Other important pieces of infrastructure in the area include the Harbour Bridge pedestrian path and the Harbour Bridge cycle path. The latter is accessed from a shared path that adjoins the study area on its western side.

Landscape Character Summary

In summary, the key aspects of the landscape character of the study area and its setting that need to be considered are:

The setting
- Location of the study area between the CBD, the Rocks, Observatory Hill and the Sydney Harbour Bridge
- Gateway function, entrance to the City

Heritage
- The history of the study area and surrounds, including the historic significance of the landscape setting and surrounding areas

Open Space Network and Vegetation
- Existing open space network

Spatial Quality and Views
- Views to and from open space
- Views to important cultural buildings and landmarks such as the Sydney Harbour Bridge, the Sydney Opera House, Sydney Observatory and National Trust Centre

Pedestrian and Cycle Network
- Existing pedestrian/ cycle/ public transport network

The Road Corridor itself
- Role and function within in the wider traffic network
- Supporting infrastructure
- Complex operational and management demands
4  PRECINCT URBAN DESIGN PRINCIPLES AND OBJECTIVES

4.1 BEYOND THE PAVEMENT

A series of precinct focused urban design principles and objectives were developed early on in the design process, based on the RMS urban design policy, procedure and principles outlined in ‘Beyond the Pavement’.

The ‘Beyond the Pavement’ principles that apply to the proposal are:

1(b) Consider both transport and community needs in planning and designing road networks and hierarchies
2(a) Keep the road footprint to the minimum possible to achieve a good design outcome
2(c) Avoid adverse visual impacts in the planning and design of roads
2(d) Consider the potential use of adjoining land
3(a) Consider connectivity into and through surrounding environments
6(a) Integrate historic buildings and precincts into road design thinking
6(e) Protect bridges of heritage significance within their setting
7(a) Enhance the view from the road
8(b) Improve the legibility of the roads
9(d) Create a simple, coordinated and neat composition of road elements along a corridor
9(e) Consider the design quality of major road components and individual road elements

4.2 PRECINCT URBAN DESIGN OBJECTIVES AND PRINCIPLES

Based on the analysis of ‘Beyond the Pavement’, a series of precinct based objectives and principles were developed in conjunction with the project team and the RMS stakeholders, external stakeholders and the RMS Executive. These high level objectives were drafted to provide guidance across a range of current and future projects within the precinct. The following high level design objectives were identified for the project:

1. Realign and rationalise the road network to meet road network operational requirements.
2. Simplify traffic movements and improve bus connectivity.
3. Provide a safe road environment.
4. Provide an integrated solution across all projects, enhancing the northern and southern precincts of the SHB as a gateway to the city.
5. Minimise impacts on heritage values and qualities of the SHB and surrounding precinct.
6. Provide an enhanced and integrated pedestrian and cycle network.
The Precinct urban Design Objectives and Principles outlined in the table on the following pages have informed the development of the proposal to date and would be used in the further development and detailed design concept. A number of key principles are illustrated in Figures 11 to 14 on the following pages. To achieve the best design outcome the use of a collaborative and iterative process to the application of the design principles is promoted. This would required input and iteration by the different design groups involved in the design of functional elements of the project including:

- Road user guidance.
- Traffic, bus, cyclist and pedestrian management.
- Traffic management systems and operations.
- Street lighting.
- Incident management and maintenance operations.
- Urban design
- Heritage
- Other environment considerations
- Community consultation
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| 1. Realign and rationalise the road network to meet road network operational requirements. Refer Figure 11. | • 70km/h uniform speed zone maintained through the road corridor.  
• Improve incident management for the corridor.  
• Provide for road transport compliance.  
• Improve bus and traffic flow.  
• Improve safety for road users.  
• Improved guidance and delineation.  
• Rationalise and optimise the operational spaces servicing the bridge and adjacent freeway links while ensuring ongoing operational service requirements. Refer Figure 12. |
| 2. Simplify traffic movements and improve bus connectivity. |  |
| 3. Provide a safe road environment. |  |
| 4. Provide an integrated solution across all projects, enhancing the precincts as a gateway to the city. | • Integrated design of southern toll plaza as part of this entrance to the city.  
• Design responsive to the heritage and cultural context of the precinct. |
| 5. Minimise impacts on heritage values and qualities of the Sydney Harbour Bridge and surrounding precinct. | • Enhance the driver, cyclist and pedestrian experience.  
• Engage community and stakeholder consultation as part of the precinct design response.  
• Minimise the overall footprint of the existing road space and operational areas wherever practical.  
• Investigate reverting residual road and/or operational space for improvements in the public domain. Refer Figure 13. |
| 6. Provide an enhanced and integrated pedestrian and cycle network. | • Enhance and improve the pedestrian and cycle network by simplifying alignments and improving way finding. Refer Figure 14. |
Figure 11:

*Urban Design Principle:* Realign and rationalise the road network whilst maintaining viable operational capacity and traffic and bus movement.

Figure 12:

*Urban Design Principle:* Rationalise and optimise the operational spaces servicing the bridge and adjacent freeway links while ensuring ongoing operational service requirements.
Figure 13:  
*Urban Design Principle:* Investigate reverting residual road and/or operational space for improvements in the public domain.

Figure 14:  
*Urban Design Principle:* Enhance and improve the pedestrian and cycle network by simplifying alignments and improving way finding.
5 LANDSCAPE CHARACTER IMPACT

5.1 METHODOLOGY

This section provides an assessment of the impact of the proposal on the landscape character and sense of place of the area. In doing so, it measures how well the design fits into the landscape. The impact of the proposal is derived from the combination of the sensitivity of the landscape character and the magnitude of the proposal. This combination will provide the rating of the landscape character impact, as shown in Figure 15.

Sensitivity describes how sensitive the character of a setting is to change. For example, a pristine or highly scenic natural environment will be more sensitive to change than an industrial area or an area considered to have low scenic quality.

The Magnitude refers to the nature and scale of the proposal. For example, construction of a new large interchange would have a very different impact on landscape character than a localised road widening.

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Figure 15: Distribution of impact assessment gradings
5.2 SENSITIVITY OF THE LANDSCAPE CHARACTER

The landscape setting is located in the heart of Sydney. While there are high levels of development including commercial and residential towers and major infrastructure, the study area is characterised by the transition it provides between the built and infrastructure environment of the city and the landscape environment of Observatory Hill and Sydney Harbour. It provides a major gateway into the city and has great significance as a result. In addition, the landscape setting has significant natural and cultural (including topography, visual and heritage) values. These factors combine to create a high degree of sensitivity to changes in the landscape setting.

Sensitivity would be particularly high in respect of changes that would impact on the pastoral landscape of Observatory Park, on views such as those to and from the Park and Sydney Harbour, and to changes that would impact on the significant historic and heritage items and their curtilage including heritage buildings and the Sydney Harbour Bridge.

The road corridor itself is a major piece of existing infrastructure that has been in existence for a long period of time and whose critical role in the road network is widely understood. There would be a degree of acceptance that a certain number of structures are required within the road corridor for safe traffic management and operation, such as signage, lighting, medians and the like. The sensitivity of the landscape to changes limited to the road corridor would therefore be low, provided they would not affect views to and across the larger landscape setting.

5.3 MAGNITUDE OF THE PROPOSAL

As outlined in section “2 The Proposal”, the proposal is confined to the existing road corridor and includes the removal of toll booths, lane re-alignment and median re-configurations, as well as all necessary signage, lighting and other supporting infrastructure. Working within an existing road corridor without major changes to the scale of the infrastructure and the topography and grading of the landscape setting, the magnitude of the proposal is regarded as low.
5.4 LANDSCAPE CHARACTER IMPACT

*Landscape Character Impact of the Proposal*

Based on the important landscape character elements identified earlier in this report, the following table provides a summary of key aspects of the landscape setting of the study area and the potential impacts on them.

<table>
<thead>
<tr>
<th>Landscape Character Attribute</th>
<th>Description of the Attribute</th>
<th>Description of Impact by the Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Setting</td>
<td>Important gateway function. High and low rise buildings, including heritage listed buildings.</td>
<td>Potential to enhance the experience of the site as a gateway through removal of clutter in the road corridor. No impact on adjoining buildings.</td>
</tr>
<tr>
<td>Heritage</td>
<td>A multitude of items of significant heritage values surround the study area.</td>
<td>No direct impact on heritage items surrounding the study area. Within the study area, the Toll Booths would be removed. Refer separate Heritage Impact Statement for a detailed discussion of potential heritage impacts.</td>
</tr>
<tr>
<td>Open Space Network and Vegetation</td>
<td>High recreational value of nearby parklands and paths. High visual value of the parklands.</td>
<td>No impact on the recreational value of the parklands. Potential to improve views to and from the parklands through the removal of the toll booths and reduction in clutter. Trees in adjoining open space would not be affected. Trees in planters would be removed. They do not currently make an important contribution to the landscape character. The proposal would present the opportunity to facilitate future projects which may revert residual road corridor space for improvements to the public domain.</td>
</tr>
</tbody>
</table>
The landscape character is defined by the interplay of topography, built form and infrastructure, and open space. The major factor is its location between the Sydney Harbour Bridge and the City and between The Rocks and Observatory Hill. A key feature of the site is the elevated setting on top of Observatory Hill with its spatial openness and expansive views. This provides a strong contrast with the urban environment to the south and results in a gateway experience which is strengthened by significant landmarks such as the Sydney Harbour Bridge, Sydney Harbour, The Sydney Opera House, the Observatory Parklands and the City skyline. As discussed above, the sensitivity of the landscape character to changes that affect these items and views to them would be high.
However, the assessment of the landscape character impact must take into consideration that the road corridor including associated infrastructure is an existing major component of the landscape composition. As the proposed works would not result in an increase in the magnitude of the infrastructure, it would not adversely affect the overall composition of the landscape setting.

Rather, through the removal of the toll booths, the proposal has the potential to produce an overall positive outcome on the landscape character of the setting. This would be achieved through the reduction in the number of infrastructure elements in the road corridor. The current road corridor configuration is the outcome of the corridor’s incremental development over time, with the multitude of infrastructure elements that have been added to it resulting in a cluttering effect. In contrast, the proposal would provide an opportunity to develop a considered and integrated composition of elements with the potential to improve the character of the landscape setting.

The magnitude of the impact of the proposal on the landscape character is therefore considered negligible. The proposal is considered to have the potential to make a positive contribution to the landscape character setting.

**Beyond the Proposal**

Beyond the immediate proposal, there is an opportunity to facilitate other projects that could further enhance the visual amenity and landscape setting of the proposal study area. Projects that could be facilitated include

1. a review of the configuration of the operational area between the traffic lanes and Observatory Park, with the opportunity to revert residual road and/or operational space for improvements to the public domain, and

2. a review of the cycle path alignment, connection and access onto the Sydney Harbour Bridge.

Reverting residual paved areas for public domain improvements would provide the opportunity to improve the road corridor interface by providing increased green space and planting. It would also facilitate more direct and more legible pedestrian cycle links. Both the identified future projects would have significant community benefit as well as reduce the overall width of the road corridor, reducing its visual impact on the landscape setting in turn.
6 VISUAL IMPACT ASSESSMENT

The Visual Impact Assessment seeks to define the day to day visual effects of the proposal on peoples’ views of the area from places such as their home, their office or other places of value in the community. It measures how well the design responds to people’s views and therefore provides important feedback into the design development process. The assessment uses the same gradings of sensitivity and magnitude as the landscape character impact, in order to determine the potential visual impacts of the proposal (refer Figure 15).

6.1 VISIBILITY OF THE PROPOSAL

A Visual Envelope Map (VEM) has been prepared for the proposal (refer Figure 16), to indicate the area from where the proposal might be seen, relative to the existing landform and considering the intervening effect of vegetation and built structures. The VEM indicates that the proposal will be able to be seen by a potentially large number of viewers.

In order to assess the potential impacts on peoples’ views, a number of viewpoints within the study area’s visual catchment have been selected as the basis for the assessment. Locations of viewpoints and the direction of views are shown in Figure 17. The chosen viewpoints test the visual impact of the proposal against two primary types of viewers:

• people in the surrounding areas, including residents and workers in the surrounding Rocks, Millers Point and other City of Sydney areas; tourists and recreational users including people using the Observatory Parklands, and the Sydney Harbour Bridge cycle way and pedestrian link; and

• road users, who view the road and the surrounding landscape from within the road corridor.

6.2 POTENTIAL VIEWERS SURROUNDING THE STUDY AREA

The site is prominently located on a high point next to Observatory Hill. From the west, the site is easily viewed from the Parklands, the Fort Street Primary School, the National Trust Centre, the shared pedestrian cycle path along the Kent Street on-ramp onto the Bradfield Highway.

Potential viewers from the east include both local residents and City workers, recreational users of the parklands, pedestrians and cyclists using and accessing the respective paths on the Harbour Bridge. Pedestrian and cyclists include commuters and locals as well as larger number of national and international tourists that visit the area for its historic, scenic and sight-seeing values. Tourists would also be able to see the study area from nearby hotels and other accommodation such as the ANA Grand
Harbour Hotel, the Shangri La Hotel, Marriott, Paragon and Brooklyn Hotels, the Quay West Suites and the Sydney Harbour YHA (refer Figure 16 – Visual Envelope Map).

From the south, the site is exposed to views from tower buildings on Kent Street, Clarence, York, Cumberland and Gloucester Streets.

Many of the viewers in surrounding high-rise buildings enjoy uninterrupted views of the project site, the adjoining landscape and the larger setting of Sydney Harbour. They would be sensitive to changes which would adversely affect their outlook, in particular changes that would affect water views, views of historic buildings and structures or the extent or portion of open space and greenery that makes up their view. At the same time and given that the study area is located entirely within an existing major road corridor, their sensitivity towards changes limited to the road reservation is likely to be low.

**Figure 16:**
Visual Envelope Map
In addition, being elevated high above the study area would reduce the extent of fine detail they would be able to perceive. The primary concern of these viewers would be the overall composition of their view, that is what portions of their view are comprised of infrastructure, parklands and views to surrounding landscapes and landmarks. Any proposed works at ground level including the detailed design and configuration of the road corridor would be of relatively little interest. They are also less likely to have a major effect on the overall outlook.

Viewers at ground level would be able to perceive a much greater level of detail and would be very sensitive towards changes that impact existing views, especially views across the road corridor. However, where the proposal represents a modification and simplification of an existing major infrastructure corridor, rather than a new development, the sensitivity of viewers is likely to be relatively lower.

6.3 POTENTIAL VIEWERS WITHIN THE ROAD CORRIDOR

The type of road users on the Bradfield Highway, Western Distributor and the various on- and off-ramps in the study area range from regional traffic such as truck drivers and commuters in private cars, taxis, motorcycles or buses, to local traffic including an increasing number of bicycles and pedestrians using the shared path along Kent Street, the Cahill Expressway cycleway and the Sydney Harbour Bridge pedestrian path. Many of these (commuters and local traffic) would use the road corridor on a daily basis and would be closely acquainted with the study area and surrounding landscape setting.

The landscape setting, though not a pristine natural environment, has very high cultural and scenic values which can be experienced from the road corridor. The study area is the major gateway into the City of Sydney (travelling south) and onto the Sydney Harbour Bridge (travelling north). Viewers’ expectations are heightened by the sight of the Sydney Harbour Bridge which first comes into the road users’ view from as far back as Erskine Street. This sets up high expectations for the journey onto the Bridge which results in a high visual sensitivity of viewers to their environment. In addition, motorists would also be sensitive to changes that affect way-finding such as changes to signage if it were to affect the ability to make timely decisions and access their desired destinations.
Figure 17:
Viewpoint Locations
6.4 VIEWPOINT ASSESSMENT

The following pages contain plates of the viewpoints selected for the purposes of the visual assessment, followed by a matrix quantifying the potential visual impact at each viewpoint. The gradings are measured on their impact relative to each other within the scope of the proposal rather than to an absolute score covering all potential forms of impact. Through this process, the Visual Impact of the proposal as a whole has been identified. Areas requiring mitigation and design opportunities including recommendations for detail design development and refinement have emerged and are discussed following the assessment.
PLATE 1: VIEWPOINT 1

Existing view · location shot

The proposal
PLATE 2: VIEWPOINT 2

Existing view - location shot

The proposal
PLATE 3: VIEWPOINT 3

Existing view - location shot

The proposal
PLATE 4: VIEWPOINT 4

*Existing view - location shot*

*The proposal*
PLATE 5: VIEWPOINT 5A

Existing view - location shot

The proposal
PLATE 6: VIEWPOINT 5B

Existing view - location shot

The proposal
PLATE 7: VIEWPOINT 6

Existing view - location shot

The proposal
PLATE 8: VIEWPOINT 7

Existing view - location shot

The proposal
PLATE 9: VIEWPOINT 8A

Existing view - location shot

The proposal
PLATE 10: VIEWPOINT 8B

*Existing view - location shot*

*The proposal*
PLATE 11: VIEWPOINT 9

Existing view - location shot

The proposal
PLATE 12: VIEWPOINT 10

Existing view - location shot

The proposal
PLATE 13: VIEWPOINT 11

**Existing view · location shot**

**The proposal**
PLATE 14: VIEWPOINT 12

Existing view · location shot

The proposal
PLATE 15: VIEWPOINT 13

Existing view - location shot

The proposal
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<tr>
<td>1</td>
<td>Looking north from within the road corridor, from the alignment of Grosvenor Street</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lane</td>
<td>N</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>Views and the spatial qualities would not noticeably change. Views to the SHB would continue to be partially obstructed, due to existing retained and proposed new gantries, in particular the one at the bus lay-over [3].</td>
<td>If possible, locate signage gantries to the south of the Toll Plaza to maximise open views of the sky and SHB. An alternative may be to retain the existing signage at the Grosvenor Street off-ramp and complement with individual cantilever (not gantry) signs as required. The aim is to maximise visual openness of the Toll Plaza. If this is not possible for safety/ way-finding reasons, reduce gantry width from the west and maximise transparency of the structure to improve views towards the SHB.</td>
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<td>2</td>
<td>Elevated viewpoint looking east from apartments in Kent Street</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lanes, reduced operational area [3]</td>
<td>B M G G</td>
<td>Even though Toll Booths would likely be replaced with signage gantries, these would be less prominent when viewed from above because, being narrower and lacking a solid roof, they would be more transparent. The proposed extent of red bus lane marking would have a negative visual impact which would be compensated for to a degree by the removal of yellow pavement marking in front of the Toll Booths. Investigate the potential to reduce the extent of red bus lane marking by limiting it to the bus through lane, if possible. Red is a visually strong colour which draws the viewers’ eye to the road corridor and detracts from the overall view, possibly leading to a stronger perception of the visual impact.</td>
<td></td>
<td>G</td>
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<tr>
<td>3</td>
<td>Looking north from the shared path link from Kent Street/ near the National Trust Centre</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers</td>
<td>B M G G</td>
<td>Views of the Harbour Bridge in particular would be improved through the northern tolling station was removed. Even though the southern tolling station would likely be replaced by a signage gantry [3], the gantry would be a less solid structure, in particular when viewed from an angle. This would result in increased transparency through the Plaza. If possible, locate any signage gantries further south in the plaza to maximise views and transparency of the Plaza. Alternatively, minimise the width of the gantry to ensure it does not protrude into currently unobstructed portions of the view west of the existing Toll Booths.</td>
<td></td>
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<td>4</td>
<td>Looking north-east from the pedestrian/ cycle bridge over the ‘Corkscrew’</td>
<td>Signage, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lane</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>The removal of the northern Toll Booths would result in opening the Plaza up and improving views to the east and to the Sydney Harbour Bridge which are currently obscured.</td>
<td>N/A</td>
<td>G</td>
<td></td>
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<tr>
<td>5a</td>
<td>Looking south-east from Upper Fort Street</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, reduced operational area [3]</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>The removal of the northern Toll Booths and the service pop-up exit to the south of them would have a beneficial effect on this viewpoint. Though the southern tolling booths would likely be replaced by a signage gantry [3], the relatively greater transparency of the structure particularly at ground level, would improve the sense of openness of the Plaza. The reduction in size of the operational area would present the opportunity to deliver significant benefit as part of future projects [3].</td>
<td>Investigate the possibility of placing light poles along corridor edges as a means to further reduce median widths and, possibly as a consequence, the overall width of the road corridor. Benefits would include a reduced paving width which may assist in reducing the visual dominance of the road corridor in the view, as well as a greater area of road corridor with the potential to be reverted to public domain improvements in the future.</td>
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<td>5b</td>
<td>Looking east from the road to the Observatory</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lanes, reduced operational area [3]</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>The removal of the northern Toll Booths and the service pop-up exit to the south of them would have a beneficial effect on this viewpoint. The reduction in size of the operational area would present the opportunity to deliver significant benefit as part of future projects [3].</td>
<td>Investigate the possibility of placing light poles along corridor edges as a means to further reduce median widths and, possibly as a consequence, the overall width of the road corridor. Benefits would include a reduced paving width which may assist in reducing the visual dominance of the road corridor in the view, as well as a greater area of road corridor with the potential to be reverted to public domain improvements in the future.</td>
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<td>6</td>
<td>Looking south from within the road corridor, from the alignment of Argyle Street</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lanes, reduced operational area</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>While the likely provision of a signage gantry in the plaza would partially obscure the view corridor along the Western Distributor, the removal of the northern Toll Booths would improve views towards the National Trust.</td>
<td>If possible, locate signage gantries to the south of the Toll Plaza to maximise views. An alternative may be to retain the existing signage at the Grosvenor Street off-ramp and complement with individual cantilever (not gantry) signs as required. The aim is to maximise visual openness of the Toll Plaza. If this is not possible for safety/ way-finding reasons, reduce gantry width from the west and maximise transparency of the structure to improve views.</td>
</tr>
<tr>
<td>7</td>
<td>Looking south from the Harbour Bridge pedestrian link</td>
<td>Due to the viewing distance and the topography, the study area is only partially visible. Visibility of the proposal would be limited to light poles.</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>The removal of the northern Toll Booths which are a solid element in the view would have a beneficial effect. Due to the viewing distance, light poles would not have an effect on the view.</td>
<td>N/A</td>
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<tr>
<td>8a</td>
<td>Looking north-west from the Cahill Express cycleway</td>
<td>Light posts, concrete and moveable medians including safety barriers</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>The removal of the northern Toll Booths and the service pop-up exit to the south of them would have a beneficial effect on this viewpoint, improving views across the road corridor to the Observatory Hill parklands.</td>
<td>N/A</td>
<td>G</td>
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<tr>
<td>8b</td>
<td>Looking south-east from the Cahill Express cycleway</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lanes</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>The removal of the northern Toll Booths and the service pop-up exit to the south of them would have a beneficial effect, increasing spatial openness and improving views towards the National Trust Centre.</td>
<td>Locating signage gantries further south in the Plaza and maximising the transparency of the structure may achieve additional visual benefit.</td>
<td>G</td>
</tr>
<tr>
<td>9</td>
<td>Looking north from Cumberland Street</td>
<td>Signage gantries, light posts [3]</td>
<td>N</td>
<td>MH</td>
<td>G</td>
<td>G</td>
<td>Due to the likely replacement of the southern Toll Booths with a signage gantry, the view would not be noticeably altered.</td>
<td>N/A</td>
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2. G = Negligible, L = Low, ML = Moderate-Low, M = Moderate, MH = Moderate-High, H = High
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<td>10</td>
<td>Looking north from the path along the Grosvenor Street exit</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lanes</td>
<td>B</td>
<td>M</td>
<td>G</td>
<td>G</td>
<td>Although the southern Toll Booths would likely be replaced by a signage gantry [3], removal of the booths and the greater transparency of the gantry on the ground level would have a beneficial effect on this view. The proposed extent of red bus lane marking would have a negative visual impact which would be compensated for to a degree by the removal of existing yellow pavement marking in front of the Toll Booths.</td>
<td>Investigate the potential to reduce the extent of red bus lane marking by limiting it to the bus through lane, if possible. Red is a visually strong colour which draws the viewers’ eye to the road corridor and detracts from the overall view, possibly leading to a stronger perception of the visual impact.</td>
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<td>11</td>
<td>Looking south from within the road corridor, from near the Cahill Expressway exit</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lanes, bus lay-over and access lane</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>Although the southern Toll Booths would likely be replaced by a signage gantry which would partially obscure views along the Western Distributor corridor[3], the greater transparency of the gantry on the ground level would have an overall beneficial effect on this view. The removal of the northern Toll Booths and the service pop-up exit to the south of them would have a beneficial effect, reducing clutter and improving views across the road corridor. The proposed extent of red bus lane marking would have a negative visual effect.</td>
<td>Investigate the potential to reduce the extent of red pavement marking by limiting it to the bus through lane, if possible. Red is a visually strong colour which draws the viewers’ eye to the road corridor and detracts from the overall view, possibly leading to a stronger perception of the visual impact. Reducing the width of the proposed signage gantry if possible would maintain currently open views along the Western Distributor road corridor.</td>
<td>G</td>
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[3] subject to confirmation and detail design
|---|-----------|----------------------|-----------------------------|------------------|-------------------|---------------------------|-------------------------------|---------|-------------------|----------------------------------------|
| 12 | 12 | Looking north from within the road corridor, from near the National Trust Centre | Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, painted bus lane | B | H | G | G | The removal of the two sets of Toll Booths would have a beneficial effect overall. Even though the southern Toll Booths would likely be replaced by a signage gantry, this would provide a greater level of transparency at ground level, leading to enhanced views of the SHB.

The proposed extent of red bus lane marking would have a negative visual effect. | If possible, locate signage gantries to the south of the Toll Plaza to maximise views of the sky and the SHB. An alternative may be to retain the existing signage at the Grosvenor Street off-ramp and complement with individual cantilever (not gantry) signs as required. The aim is to maximise visual openness of the Toll Plaza.

If this is not possible for safety/way-finding reasons, reduce gantry width from the west and maximise transparency of the structure to maximise views.

Investigate the potential to reduce the extent of red pavement marking by limiting it to the bus through lane, if possible. Red is a visually strong colour which draws the viewers’ eye to the road corridor and detracts from the overall view, possibly leading to a stronger perception of the visual impact. | G |

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<td>13</td>
<td>Looking north from within the road corridor, between the two existing tolling stations</td>
<td>Signage and gantries, line-marking, light posts, re-aligned lanes, concrete and moveable medians including safety barriers, reduced operational area [3]</td>
<td>B</td>
<td>H</td>
<td>G</td>
<td>G</td>
<td>Removal of the northern Toll Booths would result in opening the Plaza up, providing for a greater appreciation of the treed edge to Observatory Park and improving views to the east and to the Sydney Harbour Bridge which are currently obscured. While there are a large number of fixed an operable medians, this is partially offset by the removal of existing medians.</td>
<td>N/A</td>
<td>G</td>
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**Key to Table**

[1] A = Adverse, N = Neutral, B = Beneficial


[3] subject to confirmation and detail design

**Comments common to all Views:**
While a large number of fixed an operable medians are proposed, this is offset by the removal of existing medians.
6.5 VISUAL IMPACT

The proposal is limited to an existing major road corridor and the majority of work would involve removal of existing structures or removal and replacement of structures. The analysis of viewpoints demonstrates that the proposal would have a beneficial impact on the majority of viewpoints (13 out of 15). The potential impact on remaining viewpoints has been assessed as neutral.

Potential beneficial impacts would arise due to the greater transparency of the proposal infrastructure at ground level which would improve views both along and across the road corridor. Viewpoints where the potential impacts would likely be neutral are those at a greater distance from the proposal where changes would not be easily discerned or viewpoints such as in Cumberland Street where the view of the top of the Toll Booths would likely be replaced with the view of the top of a signage gantry.

The overall visual impact of the proposed works is therefore assessed to be negligible, with the proposal expected to perform better overall than the existing road configuration, from a visual point of view.

The current visual quality of the road corridor is characterised by the multitude of infrastructure elements required to support its safe and efficient functioning. The composition of existing elements has grown incrementally over time in response to changing and generally increasing demands, including greater traffic volumes and higher safety and design standards as well as design travel speeds. While the existing corridor conditions generally meets the essential functional requirements, it does not represent an integrated or visually considered composition.

Within this context, the proposal represents a unique opportunity to improve the overall visual quality of the Toll Plaza area, including simplifying the formation and arrangement of the road space and associated signage and lighting structures. It further provides an opportunity to improve the integration of the road infrastructure with the visual and historic significance of the site through a design that is functional, flexible, restrained, visually recessive and contemporary in detailing.

The following section provides design principles to be adopted during on-going design development, with the aim of maximising urban design and visual outcomes during the detailed design process and through the application of design principles that support the project urban design objectives.
7 LANDSCAPE CHARACTER AND VISUAL IMPACT MITIGATION STRATEGY

Following approval of the proposal, the project team (including RMS designers and consultant specialists) would continue to develop the design in a collaborative and iterative process that integrates the design of the various functional, operations, safety, heritage, environmental, visual and other requirements relevant to the proposal. In this context, the landscape character and visual impact mitigation strategy consists of detailed design opportunities to would inform the further detail design and development of the proposal.

The detailed design opportunities are based on the Precinct Urban Design Objectives and Principles and take into consideration the issues identified in the Viewpoint Analysis. Some of the opportunities described have been raised with the design team and incorporated into the concept design development to date, while others would require investigation as part of design development and within the context of the full range of the proposal’s detailed design opportunities and constraints. All opportunities are documented here to ensure continuity between the concept design work to date and future detailed design work, providing a reference point for managing and weighing up road corridor design issues as they arise. The focus of the Landscape Character and Visual Impact Mitigation Strategy is on maximising long-term outcomes which would have a permanent visual effect. Temporary outcomes or measures such as construction activities are not considered as their visual effect would be short term, without lasting effects on the visual or landscape character of the area.

The purpose of the Landscape Character and Visual Impact Mitigation Strategy is threefold:

1. to ensure project Urban Design Objectives and Principles are considered,
2. to mitigate potential impacts identified through the Viewpoint Analysis and improve overall urban and visual outcomes, and
3. to provide guidance in respect of road corridor infrastructure items for which the design is yet to be resolved, such as lighting and signage, to maximise long-term permanent visual and urban design outcomes

Detailed design opportunities are as follows:

1. Minimise the footprint of the carriageway in order to maximise opportunities for the possible use of residual road space for improvements to the public domain as part of future projects. Seek to
   - minimise the widths of medians and lanes to the minimum required, based on relevant design requirements including road geometry, safety and operable median requirements
   - minimise the number of signs, gantries, light poles and other structures in the roadway to minimise the number and width of medians, safety barriers and maintenance access and lay-over space.
2. Design all infrastructure including signage, lighting and medians to reduce clutter and ensure an integrated and consistent suite of infrastructure elements. Seek to
   • design all infrastructure including signage, lighting and gantries to ensure consistency of design
   • minimise the number of separate pieces of infrastructure on the roadway through integration and co-location
   • maximise the spacing between structures such as signs and signage gantries
   • investigate locating lighting along the edges of the road corridor, to
     a) be consistent with the provision of lighting along the Western Distributor and the Sydney Harbour Bridge,
     b) provide consistency in the location of light poles relative to road users between the various traffic configurations, and
     c) improve road corridor definition during the day and at night in particular, by limiting light spill to areas within the road corridor.

4. Maintain the integrity of the landscape setting and heritage items including maintaining and enhancing views to and from them. Seek to
   • locate new structures to maintain existing views and sight lines to important landscape and heritage items including the Sydney Harbour Bridge, the Observatory, the National Trust Centre, Sydney Harbour and the Sydney Opera House.
   • minimise new structures including signage and gantries in the visually sensitive Toll Plaza. If required, seek to minimise their width and length and integrate or align them with existing structures to avoid introducing new free-standing structures in previously open areas where they may be visually prominent or adversely affect existing views
   • design new structures to be visually recessive (e.g. minimal structure/maximum transparency, minimal signage, recessive colour)
   • locate structures and elements along the edges of the road corridor where they integrate with existing buildings and structures. This would minimise the number of elements in the road corridor with the potential to obstruct views
   • visually separate operational areas from travelling lanes to reduce the perceived width of the road corridor and reduce visibility of the clutter created as part of operations and storage of materials
   • minimise the extent of red bus lane marking and if possible, limit red line painting to the bus through lane.
8 CONCLUSION

The Visual Impact Assessment has found that the character of the proposal is such that the potential impact on viewers in the area would be largely negligible. In addition, the proposal would result potentially in an improvement to a large number of views, compared to the existing condition and configuration of the road corridor.

The proposal would be limited to the existing road corridor with the majority of the proposal consisting of the removal of existing structures or removal and replacement of existing structures with similar ones. At the same time, the proposal presents an opportunity to realise an integrated road, urban design and visual outcome, with the potential to improve views, within and beyond the study area. To this end, the continued consideration of the detail design considerations contained in the “Landscape Character and Visual Impact Mitigation Strategy” during ongoing development of the proposal is essential. This would maximise the realisation of the identified Urban Design Objectives and Principles and ensure an improved urban design and visual outcome overall, as indicated in the Viewpoint Assessment table.

In terms of the landscape setting of the proposal, the Landscape Character Impact Assessment has found that the proposal would not adversely impact on the landscape setting of the study area. The proposal would not just retain the essential qualities of the landscape setting but potentially enhance the gateway experience of its location between the Sydney Harbour Bridge, the City, The Rocks and Observatory Hill. This experience is memorable because of the significance of the Bridge itself and the views and vistas to the larger landscape and its icons, including Sydney Harbour and the adjoining parklands.

In the longer term and beyond the scope of the proposal, the proposal would provide the opportunity to facilitate other projects which may offer further opportunities to enhance the precinct’s significant visual, recreational, cultural and heritage values.