



# West Gate Tunnel Project

## EES Inquiry and Advisory Committee (IAC)

Statement of landscape and open space evidence

prepared by

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on behalf of Ashurst Australia

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# 1 Preamble

1. My name is Stephen Schutt and I am a Registered Landscape Architect and a Director of Hansen Partnership. I have 23 years professional experience in urban design and landscape architectural projects in Australia and overseas. I hold a Bachelor's degree in Planning and Design and a Master's degree in Landscape Architecture.
2. I have been engaged by Ashurst Australia on behalf of the City of Melbourne to prepare a statement of evidence in relation to matters of landscape and open space impacts, specifically focusing on the extent of the proposed West Gate Tunnel Project which is located within or immediately adjacent to land within the City of Melbourne. With respect to key project components, my evidence considers the following:
  - Proposed Dynon Road connection;
  - Proposed Wurundjeri Way extension;
  - Proposed Maribyrnong River crossings and connections to MacKenzie Road, and
  - Proposed Footscray Road elevated structures.
3. I have visited the subject site and surrounds numerous times, most recently on Sunday 30<sup>th</sup> July 2017.
4. In preparing this statement, I have reviewed:
  - Relevant sections of the *West Gate Tunnel Project Environment Effects Statement*, notably *Chapter 2 – Project Rationale*, *Chapter 6 – Urban Design*, *Chapter 8 – Environmental Management Framework* and *Chapter 28 – Effects on community*;
  - Relevant appendices to the *West Gate Tunnel Project Environmental Effects Statement*, notably *Technical Report N – Landscape & Visual*, *Map Series D – Proposed landscape plans*, *Map Series F – Conceptual urban design plans* and the *Development and urban design plans – Attachment 3: Port, CityLink and city connections*;
  - Melbourne City Council's Submission to the West Gate Tunnel Project Environmental Effects Statement;
  - Relevant sections of the Melbourne Planning Scheme;
  - Relevant State Government policy, notably *Plan Melbourne 2017*, and
  - Relevant City of Melbourne strategies, including:
    - Open Space Strategy 2012
    - Urban Forest Strategy 2012
    - Urban Forest Precinct Plans 2012-2024
    - Tree Retention and Removal Policy 2012
    - Arden Macaulay Structure Plan 2012.

## 2 Review of proposal

5. On the basis of my review of relevant documentation within the EES, it is my understanding that the Project as it relates to land within the municipality of the City of Melbourne, which is the subject of my evidence, comprises the following key components:
  - Proposed Dynon Road connection;
  - Proposed Wurundjeri Way extension;
  - Proposed Maribyrnong River crossings and connections to MacKenzie Road, and
  - Proposed Footscray Road elevated structures.

## 2.1 Dynon Road connection

6. An elevated roadway which connects the proposed Footscray Road elevated structure at its eastern end with the existing Dynon Road elevated roadway (north-west of North Melbourne Railway Station).
7. Whilst the proposed structure is elevated for its full extent, its height above natural ground levels varies somewhat, and where it crosses the Moonee Ponds Creek corridor the approximate clearance from natural ground to the underside of the proposed structure is in the order of 4 metres above the western bank of the creek and in the order of 5 metres above the eastern bank of the creek.
8. The structure itself is in the order of 25 metres wide where it crosses the Moonee Ponds Creek corridor, however by virtue of it crossing the creek at an acute angle (relative to the centreline of the creek) it will sit above a 30 metre length of the Moonee Ponds Creek Trail, which is located behind the east bank of the creek.



Figure 1: Proposed Dynon Road connection across Moonee Ponds Creek (source: EES Technical Report N).

## 2.2 Wurundjeri Way extension

9. An elevated roadway which connects the existing Dynon Road corridor (west of Moonee Ponds Creek) with the existing Wurundjeri Way corridor (south of Dudley Street).
10. Whilst the proposed structure is elevated for its full extent, its height above natural ground levels varies somewhat. At its crossing of the Moonee Ponds Creek corridor the approximate clearance from natural ground

to the underside of the proposed structure is in the order of 6.0 metres above the western bank of the creek and in the order of 7 metres above the eastern bank of the creek.

11. The structure itself is in the order of 25 metres wide where it crosses the Moonee Ponds Creek corridor, however by virtue of it crossing the creek at an acute angle (relative to the centreline of the creek) it will sit above a 45 metre length of the Moonee Ponds Creek Trail, which is located behind the east bank of the creek.
12. To the east of the Moonee Ponds Creek, the elevated structure rises to a height of approximately 20 metres above natural ground level (measured to the underside of the elevated structure), which I understand is to enable this structure to pass over the proposed Dynon Road Extension elevated structure, before dropping to a height of approximately 8 metres above ground level (to the underside of the elevated structure) through land identified as the E-Gate urban renewal area. Beyond Dudley Street, the elevated structure grades down to natural ground level where it meets the existing Wurundjeri Way carriageways.



Figure 2: Proposed Wurundjeri Way extension through E-Gate proposed urban renewal area (source: EES Technical Report N).

## 2.3 Maribyrnong River crossings and connections to MacKenzie Road

13. The proposed Maribyrnong River crossings and connections to MacKenzie Road include a main bridge across the Maribyrnong River connecting the tunnel (to the west of the river) with the Footscray Road elevated structure, and two ramps across the River connecting to MacKenzie Road on the eastern riverbank.
14. The eastbound exit ramp connection to MacKenzie Road is located to the north of the main bridge, and comprises an elevated structure which is identified in drawings as having a clearance above the river water level of between 4 and 6 metres (noting that there is no indication on the drawing as to whether the water level indicated is the maximum High Water Level with respect to tidal flows or how it relates to ARI flood levels). On the western bank of the river the structure is elevated sufficiently to provide approximately 5 metres clearance above natural ground at the top of the bank, whereas on the eastern bank there is no clearance as the structure connects with the MacKenzie Road carriageway, which is located immediately behind the top of bank. At its widest point, the structure occupies an approximately 50-metre length of the eastern bank of the River.
15. The westbound ramp connection from MacKenzie Road is located to the south of the main bridge, and comprises an elevated structure which is identified in drawings as having a clearance above the river water level of between 4.0 and 5.0 metres (noting that there is no indication on the drawing as to whether the water level indicated is the maximum High Water Level with respect to tidal flows or how it relates to ARI flood levels). On the western bank of the river the structure is elevated sufficiently to provide approximately 5 metres clearance above natural ground at the top of the bank, whereas on the eastern bank there is no clearance as the structure connects with the MacKenzie Road carriageway, which is located immediately behind the top of bank. At its widest point, the structure occupies an approximately 60-metre length of the eastern bank of the River.
16. The main bridge crosses the Maribyrnong River in a diagonal alignment (relative to the river course), and comprises an elevated structure which is identified in drawings as having a clearance above the river water level of between 8 and 13 metres (noting that there is no indication on the drawing as to whether the water level indicated is the maximum High Water Level with respect to tidal flows or how it relates to ARI flood levels). The structure is approximately 35 metres wide, however by virtue of it crossing the River at an acute angle (relative to the centreline of the creek), it will sit above a 60 metre length of the western bank and an 85 metre length of the eastern bank of the River.





Figure 3: Proposed Maribyrnong River crossings & connections to MacKenzie Road (source: EES Technical Report N).

## 2.4 Footscray Road elevated structures

17. The proposed Footscray Road elevated structures include an elevated roadway comprising two separate, parallel elevated structures located within the existing Footscray Road corridor and following the alignment of the existing carriageways. A separate but connected structure is proposed to sit between the two elevated roadway structures for the purposes of providing for an elevated, dedicated bicycle path, which is referred to in the EES documentation as a 'Veloway'.
18. The combined width of the two elevated structures (with the Veloway suspended between them) is in the order of 30 metres typically, but expands to a significantly greater width where exit ramps leave the main structure to connect with other roads, including at Dock Link Road and Appleton Dock Road. The elevated roadway structures are typically proposed at a height of approximately 8 metres above ground (measured to the underside of the structure) whereas the Veloway will have a clearance of approximately 7 metres above natural ground.
19. The existing configuration of Footscray Road typically comprises 7 lanes eastbound, 3 of which are within a service road separated from the main carriageway by a grassed median which is planted with predominantly native trees (Eucalypt species) of heights in the order of 10 metres, and 4 lanes westbound, which are separated from the eastbound main carriageway by a broad central grassed median which is planted with predominantly native trees (Eucalypt species) of heights between 10 and 15 metres. The northern side of the

Footscray Road corridor contains a footpath and a mix of native and exotic trees of heights between 10 and 15 metres planted within a grassed nature strip. The southern side of the Footscray Road corridor comprises a broad grassed nature strip (in the order of 15 metres wide), within which a shared path runs the entire length and within which is planted predominantly native trees of heights in the order of 5 to 10 metres.

20. The proposed elevated structure will sit over two of the eastbound lanes, the entire central median and three of the westbound lanes. This configuration will require the removal of the central median and all existing trees within it, and potentially the removal of some existing trees within the southern nature strip, depending upon the proximity of their canopy vegetation to the proposed elevated structures.
21. The proposed connections from the eastern end of the Footscray Road elevated structures to CityLink comprise elevated ramps to heights in the order of 25 metres above ground level.



Figure 4: Proposed Footscray Road elevated structures (source: EES Technical Report N).

### 3 Review of EES visual impact assessment methodology

22. The methodology within *Technical Report N* of the EES documents outlines a process for determining levels of visual impact, which involves a matrix assessment of the relationship between the visual sensitivity of a landscape setting and the degree of visual modification to that setting likely to result from the proposed development. The matrix is represented as follows, with Visual Sensitivity represented by the horizontal axis and Degree of Modification by the vertical axis:

	H	M	L
H	H	H	M
M	H	M	L
L	M	L	L

*Level of visual impact: L = Low M = Moderate H = High*

23. The matrix assessment approach is a commonly-used method of defining categories or levels of visual impact. It is an approach which I have used for numerous landscape and visual impact assessment projects in my own practice, and it is a method which is recognised and described in key reference documents, including *Guidelines for Landscape and Visual Impact Assessment* (3rd edition) by the Landscape Institute and the Institute of Environmental Management and Assessment (2013) and *Visual Landscape Planning in Western Australia: A manual for evaluation, assessment, siting and design* by the Western Australian Planning Commission (2007).
24. The matrix assessment approach is regularly used by practitioners in Victoria and can be found in numerous landscape and visual impact assessments undertaken as part of other Environmental Effects Statements, submissions to planning Panels Victoria and as a component of Planning Permit Applications.
25. However, on the basis of my own expertise in visual impact assessment, it is my opinion that the manner in which the matrix approach has been constructed in Technical Appendix N is overly simplistic, by virtue of it only allowing for 3 levels of visual impact; High, Moderate and Low. In my own practice, a typical approach is to categorise visual impact across 5 levels, namely Very High, High, Moderate, Low and Very Low (or Negligible). Assessment on the basis of 5 levels of impact is commonly found in the work of other practitioners undertaking similar work in Victoria, such as AECOM and Spiire.<sup>1</sup>

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<sup>1</sup> Recent relevant examples include the *Mernda Rail Extension Project Landscape and Visual Impact Assessment* (2016) undertaken by AECOM on behalf of the Level Crossing Removal Authority and the *Echuca-Moama Bridge EES Landscape and Visual Impact Assessment* (2015) undertaken by Spiire on behalf of VicRoads.

26. With respect to my own practice, my preference for the identification of 5 levels of impact as opposed to 3 originates from my experience as a Sessional Panel Member with Planning Panels Victoria, and specifically my involvement with the Planning Panel which assessed the *Waubra Wind Farm EES* in 2005. The Panel report for that project articulated a framework of 5 categories of visual impact, which whilst specifically referring to wind turbines, are in my opinion equally suited to other forms of infrastructure, on the basis that they clearly articulate the relative magnitude of the varying levels of impact and also – importantly – introduce the notion of ‘triggers’ enabling the identification of impact levels for which mitigation is recommended, and also the identification of an impact level which may be determined to be unacceptable. The relevant extract from the Waubra Wind Farm Panel Report is reproduced as follows:

*“In adopting a series of criteria for assessing visual impact the Panel considers it important to define a range of terms which provide some indication of the extent to which a dwelling may be impacted upon visually by the proposed development. In determining this range, the Panel has sought to make use of the grading system of visual impact categories described in the Bald Hills Panel Report. The Panel has also considered the Sensitivity Levels and Distance Zones described within the Landscape and Visual Assessment Study 2004 prepared by the proponent. The categories which this Panel has sought to adopt for the process of assessment are derived from these examples, with some minor modifications based on particular circumstances at Waubra.*

*Extreme – entailing close proximity in an exposed location incapable of effective mitigation, where in principle the Panel would consider development as impacting unacceptably on visual amenity, with limited opportunity for the implementation of mitigation measures, leading prima facie to a breach of policy.*

*Substantial – where impacts will be substantial, with turbines forming a major element in the view. There will be a tendency for turbines to be more dominant than other landscape elements. Consideration of the feasibility and appropriateness of mitigation measures will determine whether or not development results in unacceptable impacts on visual amenity.*

*Moderate – turbines will typically be visible, sometimes obviously so. Notwithstanding this, the generally greater distances involved, together with the contribution to visual screening typically provided by vegetation, results in situations where turbines will not be a dominant element in the view. Consistent with the approach adopted by the Bald Hills Panel, mitigation measures are generally unnecessary. Exceptions to this would be where dwellings are very close to proposed turbines or where potential outlooks towards turbines are screened by senescent vegetation, which may require augmentation or replacement to ensure that the screening function can be maintained into the future.*

*Limited – turbines are visible but form only minor elements in available views, as a result of distance and/or screening by vegetation and/or topography. Mitigation measures are considered unnecessary.*

*Negligible – turbines may be visible in clear conditions and may be recognisable, but conversely may sometimes not even be noticed. Mitigation measures are considered unnecessary.*

*With direct reference to the criteria against which the project is assessed, the Panel has adopted a position whereby the visual impact categories of ‘extreme’ and ‘substantial’ are considered significant and thereby require the implementation of mitigation measures, whereas the categories of ‘moderate’, ‘limited’ and ‘negligible’ are considered insignificant and typically will not require the implementation of mitigation measures.” (pp.68-69)*

27. By limiting the categories of visual impact to three levels only – as *Technical Report N* does - it is my opinion that the ability of the assessor to determine that the level of impact is sufficiently high to be considered either in need of mitigation to make it acceptable, or simply unacceptable is reduced, as there is no mechanism by

which an 'extreme' scenario can be readily identified and demarcated from other significant – but not extreme - scenarios.

28. It is therefore my opinion that an alternative matrix approach, which more accurately reflects a scale of impacts from 'Very Low' to 'Very High' (or 'Extreme' as per the example of the Waubra Wind Farm Panel), is a more precise approach and provides for more definitive outcomes. It is my view that such a matrix, utilising the same inputs, would be represented as follows:

	H	M	L
H	VH	H	M
M	H	M	L
L	M	L	VL

Level of visual impact:      VL = Very Low      L = Low      M = Moderate      H = High      VH = Very High

29. The logic underpinning this approach is that in circumstances where both Visual Sensitivity and Degree of Modification are rated as high, a visual impact rating of 'Very High' can be applied. This contrasts the approach used in Technical Appendix N, whereby a visual impact rating of 'High' is assigned in circumstances where one of either Visual Sensitivity or Degree of Modification is ranked as Moderate and the other High, but also in circumstances where both inputs are ranked as High. Such an approach in my view results in under-emphasising the instances where visual impact is actually at its highest, with the resultant downgrading of the significance of that impact.

## 4 Review of EES visual impact assessment findings

31. In consideration of the preceding discussion of the appropriateness of the methodology used in *Technical Report N* to determine levels of visual impact, I have reviewed the findings for each of the 14 viewpoints identified within that report (Viewpoints 22 to 35) which are of relevance to my evidence, being located within the City of Melbourne' municipality. The table below summarises the findings contained in that report.

<i>Viewpoint</i>	<i>Visual sensitivity</i>	<i>Visual modification</i>	<i>Visual impact</i>
22	M	H	H
23	H	n/a	n/a
24	M	L - M	L - M
25	M	M - H	M - H
26	M	H	H
27	M	H	H
28	L	H	M
29	M	M	M
30	L	L - M	L
31	M	M	M
32	M	M - H	M
33	M	n/a	n/a
34	M	L	L
35	M	L - M	L - M

32. Through a detailed review of the assessment undertaken within *Technical Report N*, and informed by my own site investigations, I have identified a number of viewpoints where my own assessment of either the Visual Sensitivity or the level of Visual Modification differs from that provided within *Technical Report N*. Furthermore, I have also identified a number of locations which are not addressed by *Technical Report N* but from which it is my expectation that visual impact would be high and potentially very high on the basis that those locations are within environments which would reasonably be described as being of High Visual Sensitivity and likely to experience High Visual Modification as a result of the project. Each of these locations is discussed as follows.

#### 4.1 Viewpoints where my assessment differs from *Technical Report N*

Viewpoint 25 – On the Shepherds Bridge shared use path looking south

33. With respect to Viewpoint 25, it is my understanding that the municipal boundary follows the centreline of the River, and as such the eastern end of the Shepherds Bridge is within the City of Melbourne. With respect to the assessment from Viewpoint 25 in *Technical Report N*, I agree with the categorisation of Visual Sensitivity as being 'Moderate' by virtue of the viewpoint being taken from a shared use path. I do not agree with the categorisation of Visual Modification being 'Moderate', as it is my opinion that the photomontage provided at Figure 100 of *Technical Report N* represents a 'High' level of Visual Modification consistent with the description contained within *Technical Report N*, as follows:

<i>Modification level</i>	<i>Description</i>
High	The proposal is highly visible and intrusive in regards to the size, scale and geographical extent, and would disrupt views from sensitive land use areas and/or a noticeable compositional change to the existing landscape setting in which there is a moderate capacity for change.



Figure 5: Existing view from Viewpoint 25 as represented in the EES (source: EES Technical Report N).



Figure 6: 'Photomontage' view from Viewpoint 25 as represented in the EES (source: Technical Report N).

34. On the basis of the above, it is my opinion that the visual impact on this view location is 'High' on the basis of the categories available using the methodology contained within *Technical Report N*, rather than 'Moderate to High' as assessed in *Technical Report N*, and in consideration of the significance of the Maribyrnong River as one of Melbourne's primary riparian corridors and the inability to mitigate the visual impact upon views of the River itself, an alternative design to the proposed elevated crossings should be explored.
35. My own observations of the visual context of this location are illustrated on the following page, noting that the photograph I have produced represents a horizontal angle of view in the order of 105 degrees. I discuss in Section 7 of my evidence reasons why I believe that a photograph which represents a horizontal angle of this magnitude is more appropriate in the context of a Landscape and Visual Impact Assessment than the photographs provided in Technical Appendix N, which typically comprise a horizontal angle of view of less than half that extent.





*Figure 7: Existing view from Shepherds Bridge in the vicinity of EES Viewpoint 25.*

### Viewpoint 27 – From Footscray Road shared use path, looking east

36. With respect to the assessment from Viewpoint 27 in *Technical Report N*, I agree with the categorisation of Visual Sensitivity as being 'Moderate' by virtue of the viewpoint being taken from a shared use path. I also agree with the categorisation of Visual Modification being 'High', as the proposed structure would be highly visible and visually intrusive. I agree with the resultant assessment of the visual impact on this viewpoint as being 'High', however I do not accept that the residual visual impact will be 'Moderate', as this conclusion relies upon the ability of future landscaping to ameliorate the visual impact of the proposed structures. Noting the compromised growing conditions likely to result in this location due to the impacts of overshadowing, which I discuss in detail in Section 8 of my evidence, the ability for proposed vegetation to grow to a sufficient height and spread to provide the required amelioration of visual impacts will likely be limited. On this basis it is my opinion that the residual visual impact should be assessed as High, and noting that proposed vegetation should not be relied upon to mitigate that impact, an alternative design to the proposed elevated structures should be considered.



Figure 8: Existing view from Viewpoint 27 as represented in the EES (source: EES Technical Report N).

37. My own observations of the visual context of this location are illustrated in Figure 11.



Figure 9: 'Photomontage' view at 'Year One' as represented in the EES (source: EES Technical Report N).



Figure 10: 'Photomontage' view at 'Year 10' as represented in the EES (source: EES Technical Report N).



Figure 11: Existing view from shared path on south side of Footscray Road, in the vicinity of EES Viewpoint 27.

### Viewpoint 28 – From the north side of Footscray Road, looking east

38. With respect to the assessment from Viewpoint 28 in *Technical Report N*, I do not agree with the categorisation of Visual Sensitivity as being 'Low' by virtue of the viewpoint being taken from an arterial road, as there is a footpath (along the northern side of Footscray Road) which is in close proximity to the viewpoint and offers similar views. I would argue that a Visual Sensitivity rating of 'Moderate' is more appropriate given the likelihood of this view being experienced by pedestrians using the northern footpath. I agree with the categorisation of Visual Modification being 'High', as the proposed structure would be highly visible and visually intrusive. In my opinion the resultant assessment of the visual impact on this viewpoint is 'High' rather than 'Moderate', due to the higher Visual Sensitivity rating I have recommended, and as such an alternative design to the proposed elevated structures should be considered.



Figure 12: Existing view from Viewpoint 28 as represented in the EES (source: EES Technical Report N).



Figure 13: 'Photomontage' view at 'Year 1' as represented in the EES (source: EES Technical Report N).

39. My own observations of the visual context of this location are illustrated in Figure 14.



Figure 14: Existing view from footpath on north side of Footscray Road.

Viewpoint 29 – From Capital City Trail at the corner of Footscray Road and Appleton Dock Road, looking northeast

40. With respect to the assessment from Viewpoint 29 in *Technical Report N*, I agree with the categorisation of Visual Sensitivity as being ‘Moderate’ by virtue of the viewpoint being taken from a shared use path. I do not agree with the categorisation of Visual Modification being ‘Moderate’, as the proposed structure would be clearly visible at a height significantly greater than the existing elevated roadway associated with CityLink, and would interrupt the clear views of the Melbourne CBD skyline presently available. It is my opinion that the level of Visual Modification is ‘High’, consistent with the description contained within *Technical Report N*, as follows:

<i>Modification level</i>	<i>Description</i>
High	The proposal is highly visible and intrusive in regards to the size, scale and geographical extent, and would disrupt views from sensitive land use areas and/or a noticeable compositional change to the existing landscape setting in which there is a moderate capacity for change.



Figure 15: Existing view from Viewpoint 29 as represented in the EES (source: EES Technical Report N).





Figure 16: 'Photomontage' view at 'Year 1' as represented in the EES (source: ES Technical Report N).

41. On this basis I disagree with the resultant assessment of the visual impact on this viewpoint as being 'Low to Moderate'. In my opinion the visual impact will be High, on the basis that the methodology contained within *Technical Report N* recommends this categorisation where visual sensitivity is considered moderate and visual modification is considered high, and as such an alternative design to the proposed elevated structures should be considered.

#### Viewpoint 32 – From Moonee Ponds Creek Trail, looking south-west

42. With respect to the assessment from Viewpoint 32 in *Technical Report N*, I do not agree with the categorisation of Visual Sensitivity as being 'Moderate' by virtue of the viewpoint being taken from a shared use path, as that path is located within the Moonee Ponds Creek corridor, within a landscape setting which I believe can be reasonably described as 'parks and reserves' on the basis of its appearance, use and landscape character. For such landscapes, the methodology within *Technical Report N* describes the Visual Sensitivity of parks and reserves as 'High'. Further, I do not agree with the categorisation of Visual Modification being 'Moderate to High', as it is my opinion that the photomontage image provided at Figure 122 of *Technical Report N* clearly represents a 'High' level of Visual Modification consistent with the description contained within *Technical Report N*, as follows:

<i>Modification level</i>	<i>Description</i>
High	The proposal is highly visible and intrusive in regards to the size, scale and geographical extent, and would disrupt views from sensitive land use areas and/or a noticeable compositional change to the existing landscape setting in which there is a moderate capacity for change.



Figure 17: Existing view from Viewpoint 32 as represented in the EES (source: EES Technical Report N).



Figure 18: 'Photomontage' view at 'Year 1' as represented in the EES (source: EES Technical Report N).

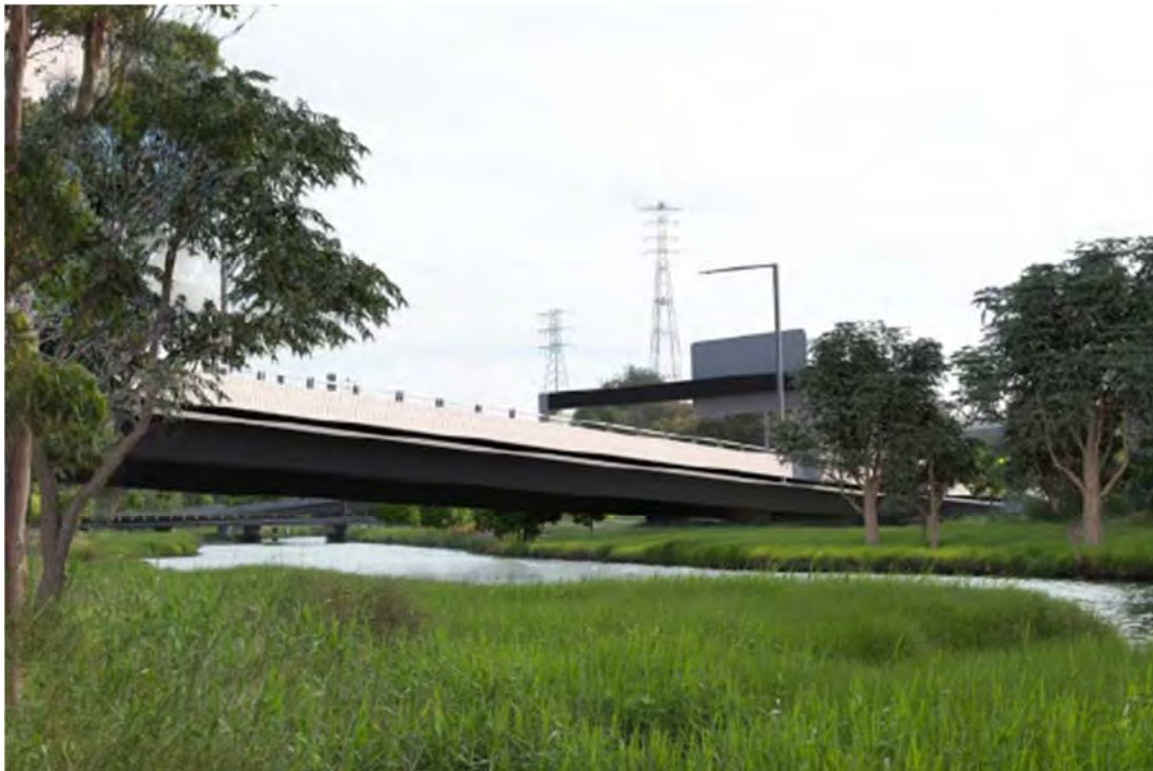


Figure 19: 'Photomontage' view at 'Year 10' as represented in the EES (source: EES Technical Report N).

43. My own observations of the visual context of this location are illustrated in Figure 20.



*Figure 20: Existing view from shared path within the Moonee Ponds Creek corridor, in the vicinity of EES Viewpoint 32.*

44. On the basis of the above, it is my opinion that the visual impact on this view location, within the Moonee Ponds Creek corridor, should have been described as 'High' on the basis of the categories available using the methodology contained within *Technical Report N*, and, on the basis of the alternative matrix assessment I have described previously, would be described as 'Very High'. It is my opinion that a 'Very High' visual impact on the Moonee Ponds Creek corridor in this location should be considered an unacceptable outcome.

## 4.2 Other viewpoints not considered in *Technical Report N*

### Moonee Ponds Creek corridor

45. In considering Viewpoint 31 in *Technical Report N*, I understand that the view location is described as being on a shared use path (the Capital City Trail), however I note that the context of this viewpoint (being within the Footscray Road corridor) is quite different to that of viewpoints which I observed approximately 150 metres north of this location, on the same shared use path, where it is located within the Moonee Ponds Creek corridor. My own photographs from within the Moonee Ponds Creek corridor, on the shared trail north of Footscray Road, are provided at Figures 21 and 22.
46. With respect to the Visual Sensitivity criteria described in Technical Reference N, I would describe the Moonee Ponds Creek corridor as 'parks and reserves' (existing and future) which would have a Visual Sensitivity Rating of 'High' – utilising the criteria set out in Table 5 of *Technical Report N*. On the basis of my understanding of the scale, height, form and bulk of the elevated structures associated with the Dynon Road connection - which is proposed to cross the Moonee Ponds Creek corridor approximately 75 metres north of the camera location used to take the photo shown in Fig 21 and approximately 50 metres north of the camera location used to take the photo shown in Fig 22 – the level of Visual Modification at the viewpoints I have identified would undoubtedly be High. On the basis of the matrix assessment utilised in *Technical Report N*, the resultant visual impact would be described as 'High', however on the basis of my alternative matrix assessment, the resultant impact would be 'Very High'. It is my opinion that a 'Very High' visual impact on the Moonee Ponds Creek corridor in this location should be considered an unacceptable outcome.



*Figure 21: Existing view from shared path within Moonee Ponds Creek corridor, approximately 75 metres south of proposed Dynon Road connection over the creek corridor.*



*Figure 22: Existing view from shared path within Moonee Ponds Creek corridor, approximately 50 metres south of proposed Dynon Road connection over the creek corridor.*

47. Other locations within the Moonee Ponds Creek corridor which I have observed yet are not considered in *Technical Report N* include views from the existing Dynon Road Bridge, primarily to the south (as shown in Figure 23 which would be impacted upon by the proposed Dynon Road Connection, and views from the shared trail within the Moonee Ponds Creek corridor to the north of the Dynon Road Bridge (such as that shown in Figure 24) which would be impacted upon by the proposed Wurundjeri Way Extension.
48. With regard to the view represented in Figure 24, and noting my opinion that the Moonee Ponds Creek corridor should be considered as having a Visual Sensitivity Rating of 'High', my understanding of the scale, height, form and bulk of the elevated structures associated with the Wurundjeri Way Extension - which is proposed to cross the Moonee Ponds Creek corridor directly above this location - the level of Visual Modification at the viewpoint I have identified would undoubtedly be High. On the basis of the matrix assessment utilised in *Technical Report N*, the resultant visual impact would be described as 'High', however on the basis of my alternative matrix assessment, the resultant impact would be 'Very High'. It is my opinion that a 'Very High' visual impact on the Moonee Ponds Creek corridor in this location should be considered an unacceptable outcome.





Figure 23: Existing view of Moonee Ponds Creek corridor looking south from Dynon Road bridge, approximately 250 metres from proposed Dynon Road connection over the creek corridor.



Figure 24: Existing view from shared trail within Moonee Ponds Creek corridor, directly beneath alignment of proposed Wurundjeri Way extension over.

## E-Gate proposed urban renewal area

49. There is no assessment within *Technical Report N* of viewpoints located within the E-Gate proposed urban renewal area. There are very few references to E-Gate within the entire document, other than at pages 1 and 10 where it is identified by name and at page 185 where it is described as:

*"This large-scale mixed-use development adjacent to the CityLink and city connections is likely to commence following the completion of the West Gate Tunnel Project".*

50. With respect to urban renewal areas generally, *Technical Report N* at page 185 provides a rationale for their exclusion from any assessment, as follows:

*"This LVIA does not assess the urban renewal areas that adjoin or are near the West Gate Tunnel Project due to the ambiguity around the design and implementation of planned future works. However, it is recognised that future urban renewal areas adjoin or are near the project".*

51. Noting the recognition described above that urban renewal areas such as E-Gate do exist alongside the Project, and the acknowledgement that E-Gate will comprise a mixed-use development likely to commence after the completion of the Project, it is my opinion that the failure to provide any preliminary review of the potential visual impacts on the E-Gate site reduces the efficacy of the assessment.
52. It is my opinion that it would be both useful and appropriate for *Technical Report N* to have included a preliminary assessment of the visual impact of the Project – and specifically the Wurundjeri Way Extension – on the E-Gate proposed urban renewal area. Such an assessment could have utilised Table 5 within *Technical Report N* to determine the likely future visual sensitivity of E-Gate, on the basis that it would be reasonable to expect that a "large-scale mixed-use development" would likely comprise land uses including residential private realm, parks and reserves, health care facilities, educational facilities and community facilities, all of which are identified and described in Table 5 within *Technical Report N* as having High Visual Sensitivity within 200 metres of the Project, and for residential private realm and parks and reserves, High Visual Sensitivity within 1,000 metres of the Project, which would account for the entire E-Gate proposed urban renewal area. Given this, and noting the scale, height, form and bulk of the elevated structures associated with the Wurundjeri Way Extension which are proposed within and alongside E-Gate, it is my expectation that the level of Visual Modification resulting from these structures would very likely be High. The resultant level of Visual Impact on the E-Gate urban renewal area would be 'High' using the matrix assessment contained within *Technical Report N*, however on the basis of my alternative matrix assessment, the resultant impact would be 'Very High'. It is my opinion that a 'Very High' visual impact on the E-Gate proposed urban renewal area should be considered an unacceptable outcome.

## 5 Amenity impacts on landscape and open space

53. In addition to the visual impacts of the Project identified and discussed in the preceding Sections of my evidence, it is my opinion that the Project will also result in significant impacts on the amenity of affected landscapes and open space.
54. There is no clear acknowledgement or assessment of potential impacts on the amenity or functionality of affected landscapes and open space within the EES, other than in relation to visual impact. However, the amenity of public space is not simply determined on the basis of its visual qualities, but also on the basis of other experiential qualities such as comfort, functionality and safety. If any of these qualities is diminished, then the resultant outcome will be a diminution of the amenity of that space.
55. With specific reference to safety, the Victorian State Government has produced the Safer Design Guidelines for Victoria (2005), which are a reference document within the State Planning Policy Framework, and hence must be considered in any relevant planning task. A fundamental premise of these Guidelines, which are based on the International best practice principles of 'Crime Prevention Through Environmental Design' (CPTED) is stated in the Guidelines as follows:

*"People use parks and open spaces if they feel safe and comfortable there." (p.31)*

56. The Guidelines include a Section on walking and cycling paths, with key objectives being:
- *To co-locate pedestrian, cycle and vehicle movement routes, where practical, to maximise activity and natural surveillance opportunities;*
  - *To provide convenient paths with generous proportions to encourage walking and cycling and promote natural surveillance, and*
  - *To maintain long sightlines along paths and into adjacent spaces to maximise visibility.*
57. The third objective is particularly relevant in considering the potential impacts on perceptions of public safety for users of existing and future shared use trails which are affected by the Project. Design Suggestions provided within the Guidelines to assist in achieving that objective which are in my view relevant as a means of assessing the amenity impacts of the Project include the following:
- *Provide clear sightlines along pedestrian/cycle routes to assist navigation and provide visibility of potential hazards such as people or cars entering or crossing the path. Pedestrians and cyclists need to be clear about where they can move to and from.*
  - *Locate paths to permit views of activity, as well as for safety and security.*
  - *Eliminate all potential entrapment spots within a reasonable distance (30 metres) of commonly-used pedestrian paths.*

- *Use lighting to ensure visibility is extended into the evening.*
  - *Physically integrate pedestrian/cycle paths and crossings into surrounding areas to avoid predictability of movement, fixed paths or routes that offer no choice to pedestrians.*
  - *Identify the safety implications of places where movement options are limited such as pedestrian bridges, enclosed pathways and stairways. Develop solutions to reduce vulnerability, such as increasing visibility, lighting and adjacent activity at these places.*
58. With regard to the specific circumstances likely to result from the proposed construction of large elevated road structures over existing (and possible future) shared path alignments with relatively low clearance heights (in the order of 5.0 metres or less), the Guidelines advise:
- “A potential offender will be able to predict where a person is going to end up. This can turn path users into potential crime targets. For example, pedestrian tunnels, narrow passageways, pedestrian bridges, moving escalators and staircases all serve as effective predictors of a user’s route. Such ‘movement predictors’ are of particular concern when they are isolated or terminate in entrapment spots.”*
59. On the basis of my review of relevant documentation within the EES, and the information contained within the *Safer Design Guidelines for Victoria (2005)*, I have identified the following concerns with respect to potential impacts on the amenity of affected landscapes and public space as a result of the Project.

## 5.1 Dynon Road connection

60. The proposed structure will result in a length of approximately 30 metres of the existing Moonee Ponds Creek Trail being placed into a tunnel-like context, by virtue of the proposed structure having a clearance of only 5.0 metres above natural ground level in the vicinity of the trail, and abutted on one side by a concrete support structure and on the other side by the Moonee Ponds Creek.
61. The proposed structure will severely constrain access to natural light from this section of the Trail, which may necessitate the inclusion of permanent artificial lighting to ensure the Trail is sufficiently illuminated for safety considerations.
62. The enclosed nature of this section of the Trail resulting from the proximity and scale of the proposed structure will have a negative impact on the perceived safety of the Trail for users, as it would result in the creation of an environment which is inconsistent with relevant objectives and design suggestions contained within the *Safer Design Guidelines for Victoria (2005)*.
63. The obstruction of natural light and natural rainfall as a result of the elevated structures overhead will also significantly reduce the ability to successfully establish indigenous vegetation along the affected length of the creek corridor, affecting both the east and west banks.
64. Chapter 28 of the EES – Effects on Community – includes a summary description of the key impacts on landscape and visual amenity resulting from the project. From my own review of this document, I was not able

to find any references to or assessment of amenity impacts resulting from the scale, form and height above ground level of the proposed Dynon Road extension where it crosses the Moonee Ponds Creek corridor. Rather, there are simply general references to the “bulk and verticality of the structure proposed” in relation to its impact on shared paths. On this basis, it is my opinion that the amenity impacts on the Moonee Ponds Creek corridor have been inadequately assessed.

## 5.2 Wurundjeri Way extension

65. The proposed structure will result in a length of approximately 45 metres of the existing Moonee Ponds Creek Trail being placed into an enclosed context, by virtue of the proposed structure having a clearance of only 7.0 metres above natural ground level in the vicinity of the trail.
66. The proposed structure will constrain access to natural light from this section of the Trail, which may necessitate the inclusion of permanent artificial lighting to ensure the Trail is sufficiently illuminated for safety considerations.
67. The enclosed nature of this section of the Trail resulting from the proximity and scale of the proposed structure will have a negative impact on the perceived safety of the Trail for users, as it would result in the creation of an environment which is inconsistent with relevant objectives and design suggestions contained within the *Safer Design Guidelines for Victoria (2005)*.
68. Within the E-Gate urban renewal area, the amenity impacts will be continuous for the entire length of the elevated structure, a length in excess of 1 kilometre across its 25 metre width. Whilst I have not undertaken any detailed assessment or modelling of the impacts of overshadowing in this location, nor is any such assessment provided within the EES, I note that the alignment of the proposed Wurundjeri Way extension along the north-western flank of the E-Gate urban renewal area will likely result in extensive overshadowing by virtue of its height above natural ground level, its width and its predominantly solid concrete construction.
69. I was not able to find any references to or assessment of amenity impacts (in Chapter 28 of the EES) on the Moonee Ponds Creek Corridor or the E-Gate proposed urban renewal area resulting from the scale, form and height above ground level of the proposed Wurundjeri Way Extension. On this basis, it is my opinion that the amenity impacts on the Moonee Ponds Creek corridor and the E-Gate proposed urban renewal area have been inadequately assessed.

## 5.3 Maribyrnong River crossings and connections to MacKenzie Road

70. The Project will result in approximately 120 metres of the western bank and 85 metres of the eastern bank of the Maribyrnong River being placed under proposed structures. Furthermore, the proposal to connect two of these elevated structures to MacKenzie Road at ground level will result in roadway structures occupying a further 110 metres of the eastern bank of the River.

71. The proposed elevated structures will constrain access to natural light from these sections of riverbank, and where they run over existing or potential future pathways may necessitate the inclusion of permanent artificial lighting to ensure those pathways are sufficiently illuminated for safety considerations.
72. The enclosed nature of this section of riverbank resulting from the proximity and scale of the proposed structure will have a negative impact on the perceived safety of the riverbank for users, as it would result in the creation of an environment which is inconsistent with relevant objectives and design suggestions contained within the *Safer Design Guidelines for Victoria (2005)*.
73. The obstruction of natural light and natural rainfall as a result of the elevated structures overhead will also significantly reduce the ability to successfully establish indigenous vegetation along the affected length of the creek corridor, affecting both the east and west banks.
74. The occupation of some 110 metres of the eastern bank of the River for proposed connections to MacKenzie Road will preclude any future opportunity to improve the amenity, recreational connectivity or ecological quality of these sections of riverbank.
75. The proposed connections to MacKenzie Road will likely preclude any future opportunity to provide unimpeded pedestrian, cycling or shared path access along the eastern bank of the Maribyrnong River south of Shepherd Bridge by virtue of the lack of clearance below the proposed structures. Any future path would need to include at-grade crossings of the proposed connections to MacKenzie Road, which would likely involve signalised crossings.
76. I was not able to find any references to or assessment of amenity impacts (in Chapter 28 of the EES) on the eastern bank of the Maribyrnong River resulting from the scale, form and height above ground level of the proposed Maribyrnong River crossings and connections to MacKenzie Road.
77. On the basis of my observations above, it is my opinion that the amenity impacts on the eastern bank of the Maribyrnong River have been inadequately assessed.

#### 5.4 Footscray Road elevated structures

78. The proposed elevated structures will require the removal of a significant number of mature, native canopy trees which presently sit within the central median of Footscray Road and provide a strong positive contribution to the 'boulevard' character of this roadway. Notwithstanding the visual presence of the industrial land uses on either side of Footscray Road, the road reserve itself exhibits very clear characteristics of a boulevard of some significance, with 4 separate avenues of established canopy trees of heights up to 15 metres along its length. The removal of the central avenue of trees, and the potential removal of additional trees within the southern avenue will fundamentally alter the amenity of the roadway corridor, by replacing a natural, vegetative canopy with a solid, bulky and impenetrable overhead structure.

79. Noting the east-west alignment of Footscray Road and of the proposed elevated structures, I have undertaken a preliminary assessment of the impacts of overshadowing, via the preparation of a 3-dimensional computer model of a section of the proposed structures. The modelling has been undertaken in my office by a qualified Architect, using industry standard software programs including Rhino 5, Grasshopper 0.9 and Ladybug. The modelling was prepared on the basis of drawings provided within the *EES Development and Urban Design Plans – Attachment 3: Port, CityLink and city connections*. The results of the modelling are provided as shadow diagrams at Appendix A to my evidence.
80. The shadow diagrams demonstrate that the southern side of the Footscray Road corridor – which includes the broad southern nature strip and the existing shared path – will be subjected to extensive overshadowing as a result of the proposed elevated structures. It is my expectation that this overshadowing will negatively impact upon the amenity of the shared path, but even more significantly will impact upon existing and proposed future vegetation within the southern nature strip. The shadow diagrams demonstrate that the southern nature strip of Footscray Road will be impacted by shadows generated by the elevated structures almost continuously during daylight hours from 21<sup>st</sup> March until 21<sup>st</sup> September, and for parts of the day at all other times of year.
81. The proposal seeks to maintain the existing shared use path along the southern side of the Footscray Road corridor and also to introduce a new, elevated ‘Veloway’ between the proposed roadway structures. However, there does not appear to be any connections between the two pathways for the entire length of Footscray Road. The design of the Veloway, as an enclosed ‘elevated tunnel’, will create an environment which is inconsistent with relevant objectives and design suggestions contained within the *Safer Design Guidelines for Victoria (2005)*, as referred to in paragraphs 56 to 58 of my evidence.
82. I was not able to find any references to or assessment of amenity impacts (in Chapter 28 of the EES) on Footscray Road resulting from the scale, form, bulk and height above ground level of the proposed Footscray Road elevated structures. On this basis, it is my opinion that the amenity impacts on Footscray Road have been inadequately assessed.

## 5.5 Proposed open space adjacent to the Moonee Ponds Creek

83. I note that a number of the EES documents make reference to land adjacent to the western bank of the Moonee Ponds Creek north of Footscray Road as:

*“Additional open space land (approximately 1.4 hectares) north of Footscray Road and west of Moonee Ponds Creek, subject to landowner agreement” (EES Chapter 6, p. 6-9).*

84. It is my interpretation that this proposed open space is provided for within the project as a means of mitigating impacts on the landscape of the creek corridor and surrounds, however it is my opinion that this approach does not provide for any direct mitigation of the impacts on the creek corridor, as it will not ameliorate those impacts. There is very little information provided within the EES to identify what physical improvements are proposed for this area of land to enable it to be transformed into public open space, and there is even less information



articulating the manner by which this land would be transferred from its present private ownership into public ownership. Neither is there any indication provided within the EES documents with regard to ongoing roles and responsibilities with respect to maintenance and management of this land into the future. On the basis of the lack of reliable information with respect to what is proposed for this land, and in particular the lack of any articulated mechanism or timeframe for that land to be transferred into public ownership, it is my opinion that very little weight can be given to suggestions that this land will provide any positive contribution to – or mitigations of impacts upon - the amenity of the Moonee Ponds Creek corridor as part of the Project.

## 6 Assumptions in the EES relating to 'residual impact'

85. *Technical Report N* at Section 3.2.2.2 provides a definition for 'residual impact' as follows:

*"The residual impact assessment level has considered the existing view in comparison to the view ten years after project opening. Maturation of the landscape plantings that have been included in the design would filter or inhibit views at some locations, potentially reducing the visual impact of the project over time. These are discussed in the viewpoint assessments in Sections 5, 6 and 7." (p. 22)*

86. For each of the identified viewpoints within *Technical Report N*, a 'photomontage' image is provided which is described as representing the 'residual impact (Year 10)', with computer-generated vegetation visible in each of the images. There is no information provided within the EES documentation that I have seen which articulates the assumptions which have been relied upon to inform the preparation of the 'residual impact photomontage' images. The landscape plans contained within the EES Map Book provide either extremely limited or no information on plant species, planting density, ground conditions or maintenance obligations which would be required to ensure the successful establishment of proposed planting as represented by – and relied upon in – the residual impact photomontage images. It is my opinion that in the absence of this information, the accuracy of vegetation height, form and extent depicted in the residual impact photomontages cannot be relied upon and should be interpreted as 'artist's impressions' only, rather than accurate photomontages (such as would be required by VCAT and/or Planning Panels Victoria) and should be given limited weight in an assessment of the residual visual impact of the Project.

87. Of further concern to me is the conclusion stated in respect of the residual impact at Viewpoints 25, 26, 27, 28, 29, 30, 31, 32, 34 and 35, that:

*"Community engagement and liaison with key stakeholders would assist in managing the impact".*

88. This same statement is repeated a number of times in Chapter 28 of the EES.

89. There is no explanation provided to articulate what is meant by this statement, however it appears to be relied upon as a means of visual impact mitigation. It is my opinion that community engagement cannot be relied upon as an effective means of mitigating visual impact. It may be a way of placating some members of any particular community, but in the absence of other physical measures it is unlikely to address the concerns of many others.

## 7 Review of photomontages contained within the EES

90. Appendix A to *Technical Report N* comprises a 'Visual Prominence Rationale', which provides an explanation of the constructs of visibility, horizontal line of sight and vertical line of sight, and provides an outline description of levels of visual impact relative to these constructs. Among other things, it identifies and describes horizontal line of sight as follows:

*"It is generally accepted that the central field of vision for the human eye covers a horizontal angle of approximately 50 degrees to 60 degrees. Given both eyes see simultaneously and that there is a degree of overlap, a central field of view results in a person looking straight ahead."*

*"In the production of visual simulations, a 50mm lens on a 35mm film format is most widely used as it captures a field of view of approximately 46 degrees, similar to that of the view from one eye. Two photos taken with a 50mm lens produced as a panorama, with a degree of central overlap, capture the central field of view in a similar way to that of the human binocular view (binocular field)."*

91. On the basis of my own expertise in visual impact assessment, I agree with this description. It suggests that in order to be representative of a human eye field of view, a visual simulation (or 'photomontage') should represent a horizontal field of view in the order of 100 degrees, being 50 to 60 degrees for each eye with an allowance for overlap. Figure 25 provides a graphic representation of the manner by which the panoramic photographs I have prepared as part of this evidence are constructed, so as to provide a close representation of the horizontal angle of view a person sees when looking in a particular direction.

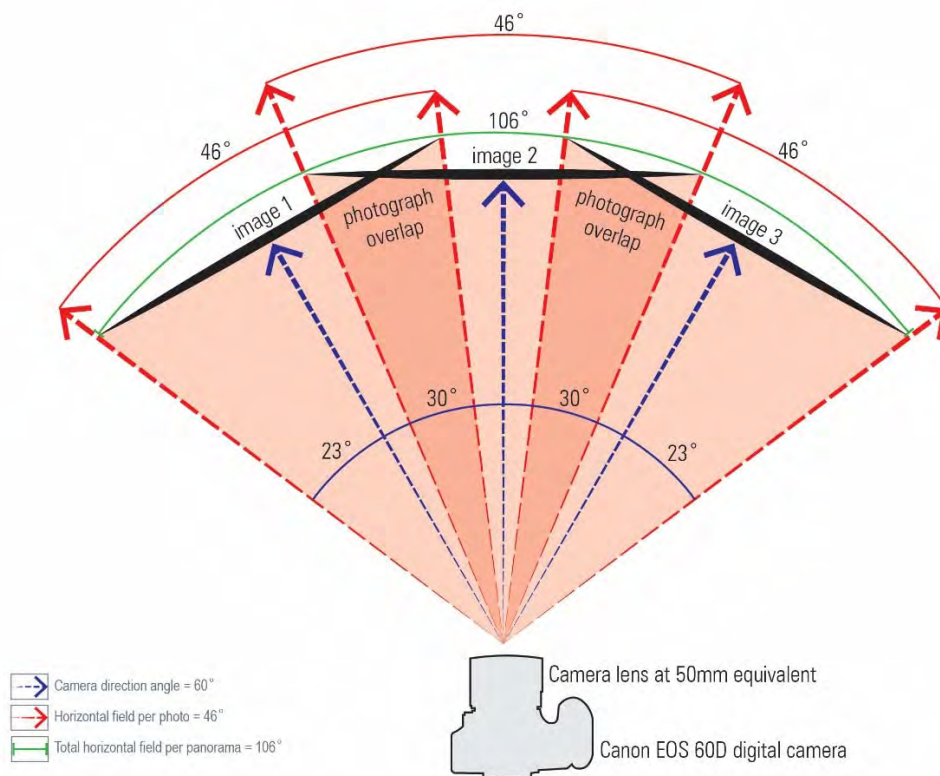


Figure 25: Diagrammatic representation of the composition of a panoramic photo to provide a horizontal field of view in the order of 100 degrees.

92. However, the 'photomontages' provided within *Technical Report N* as the basis for demonstrating the visual impact of the Project do not represent a horizontal field of view of 100 degrees. It is my estimation that they represent a horizontal field of view of roughly half that extent. To demonstrate, the 'photograph of existing conditions' at Figure 26 below is a reproduction of Figure 102 in EES *Technical Report N*, which – like every other Viewpoint in the EES *Technical Report N* is used as the basis for the preparation of subsequent 'Photomontage' images. By comparison, the panoramic photo in Figure 27 on the following page was taken by me, at a location I have estimated as being within very close proximity to Viewpoint 26 within *Technical Report N*. The panoramic photo prepared by me utilised a camera with a 50mm lens, with a series of photos joined to form a panoramic view which comprises a horizontal field of view in the order of 106 degrees, consistent with the diagram provided in Figure 25 above. When comparing my photo to the photo for Viewpoint 26, the horizontal field of view for the latter is clearly significantly narrower. By representing this – and other – viewpoints with a significantly reduced horizontal field of view to that which a person standing in these locations would actually see, the 'photomontages' provided in *Technical Report N* significantly under-represent the full extent of the proposed structures which would actually be visible. In doing so they significantly under-represent the actual visual impact which will be experienced at those view locations, given that the proposed structures are not individual buildings but rather are continuous linear structures which – by virtue of their horizontality – will have a tendency to occupy significant proportions of any available horizontal field of view.



Figure 26: Existing view from Viewpoint 26 as represented in the EES (source: EES *Technical Report N*).



Figure 27: Existing view taken in close proximity to Viewpoint 26, representing a horizontal field of view of 106 degrees.

93. On the basis of the explanation above, it is my opinion that the 'photomontages' provided in *Technical Report N* should not be relied upon as accurate representations of the likely visual impact which will result from the Project.

## 8 Analysis of shadow impacts

94. I note that there does not appear to be any assessment within the EES of the amenity impacts of shadows generated by the proposed elevated structures. Indeed, in order to adequately determine the extent of amenity impacts on landscape and open space, I have instructed staff within my office to prepare shadow diagrams for a discrete section of Footscray Road, as outlined in preceding sections of my evidence. The resultant diagrams are provided at Appendix A.
95. The failure to undertake any assessment of the potential impacts of overshadowing resulting from the Project is in my opinion a significant oversight as there are a number of specific clauses within the Melbourne Planning Scheme which deal specifically with overshadowing impacts on both public and private space, on the basis that the avoidance of overshadowing is a desirable outcome with respect to amenity.
96. The extent of overshadowing which will result from the proposed elevated structures will also significantly affect the proposed landscaping, as it will likely reduce the range of suitable plant species to those which are shade-tolerant, and will also likely reduce the ability of any plant species with limited shade tolerance to successfully establish and grow to the sizes which are relied upon within the EES documentation for the mitigation of identified visual impacts.

## 9 Summary of opinion

97. In summary, I am of the opinion that – in respect of landscape and open space matters – the proposed West Gate Tunnel Project as described in the Environmental Effects Statement will result in visual impacts and impacts upon the amenity of existing and future publicly-accessible and publicly-usable land which have been inadequately considered within the EES and as a result have the potential to result in a significant diminution of the amenity and visual quality of the landscapes where these impacts will be felt.

98. The inadequacies which I have identified and described within my evidence include:

- The EES visual impact methodology is overly-simplistic in that it only describes 3 levels of visual impact, whereas a 'best practice' approach would describe 5 levels and in doing so would provide a trigger enabling the identification of impact levels for which mitigation is recommended and also the identification of an impact level which could be determined to be unacceptable, which the EES does not;
- The EES visual impact methodology, by virtue of only describing 3 levels of visual impact, under-emphasises those instances where visual impact is at its highest;
- The EES visual impact assessment findings under-estimate the significance of the visual impact at numerous identified viewpoint locations;
- The EES visual impact assessment fails to consider or identify visual impacts which will be experienced now and in the future upon the Moonee Ponds Creek corridor and shared trail and the E-Gate proposed urban renewal area;
- Other than visual impact, the EES does not consider impacts on the amenity of affected landscapes and public space (current and future), such as those relating to access to natural light, access to natural rainfall and perceived safety for users of affected areas;
- There is no information within the EES articulating the assumptions which have been relied upon to inform the depictions of proposed vegetation in 'photomontage' views, particularly with respect to the height, form and extent depicted 10 years post-construction;
- There are numerous references within the EES proclaiming that visual impact can be mitigated through community engagement and liaison with key stakeholders, however there is no explanation of how such a process would be implemented or a successful outcome achieved;
- The 'photomontages' provided in the EES are inconsistent with the 'Visual Prominence Rationale' provided within Appendix A to *Technical Report N* of the EES, in that they do not provide a representative horizontal field of view, and as such should not be relied upon as accurate representations of the likely visual impact resulting from the Project, and



- There is no assessment within the EES of the impact of overshadowing which would result from the proposed elevated structures, even though such an assessment is a standard requirement of any statutory planning assessment.

## 10 Conclusion

99. I declare that I have made all the enquiries that I believe are desirable and appropriate and that no matters of significance which I regard as relevant have to my knowledge been withheld from the Panel.



Stephen Schutt BPD (Hons) M L Arch Grad Dip Proj Mgt RLA

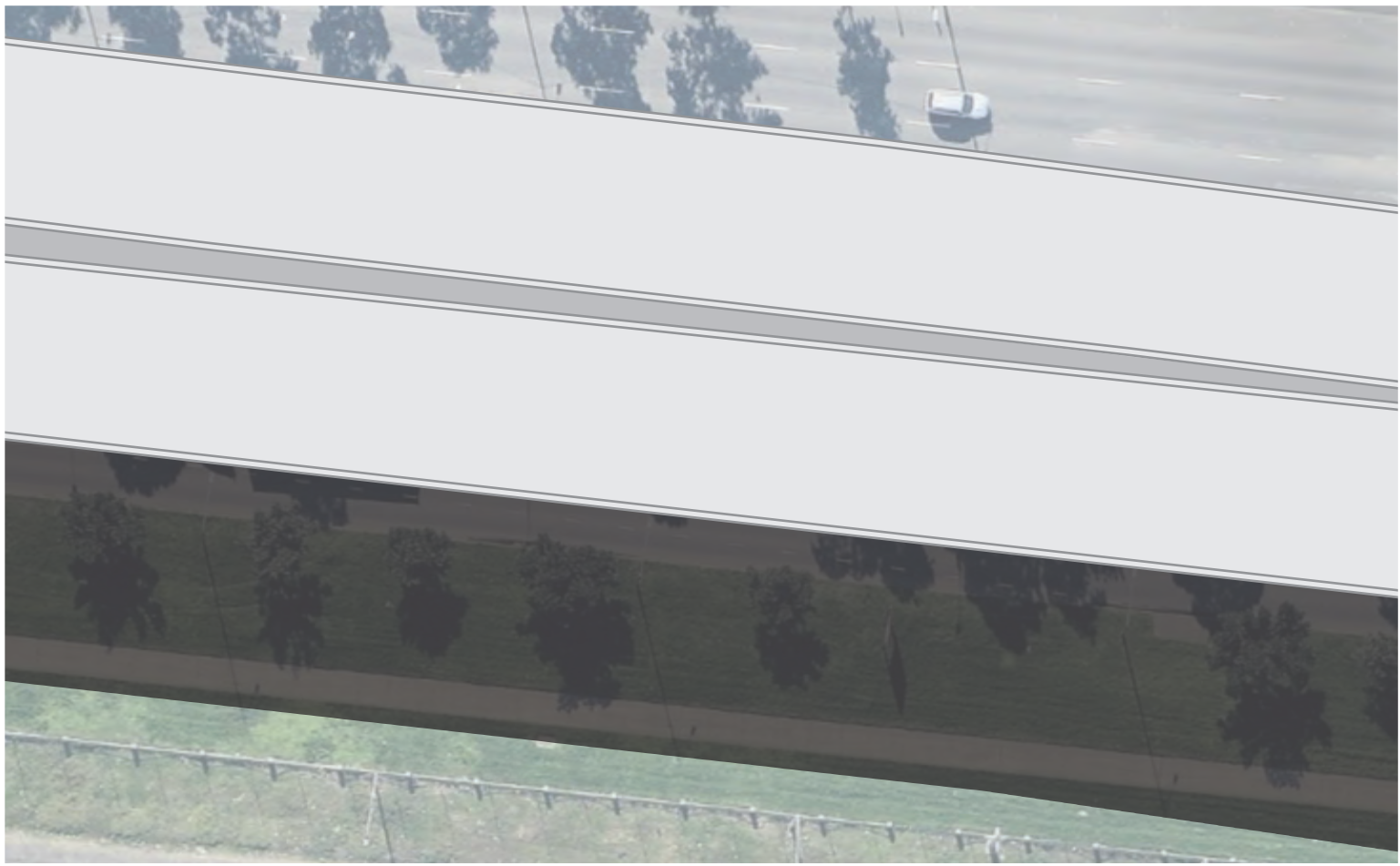
Director

**Hansen Partnership Pty Ltd.**

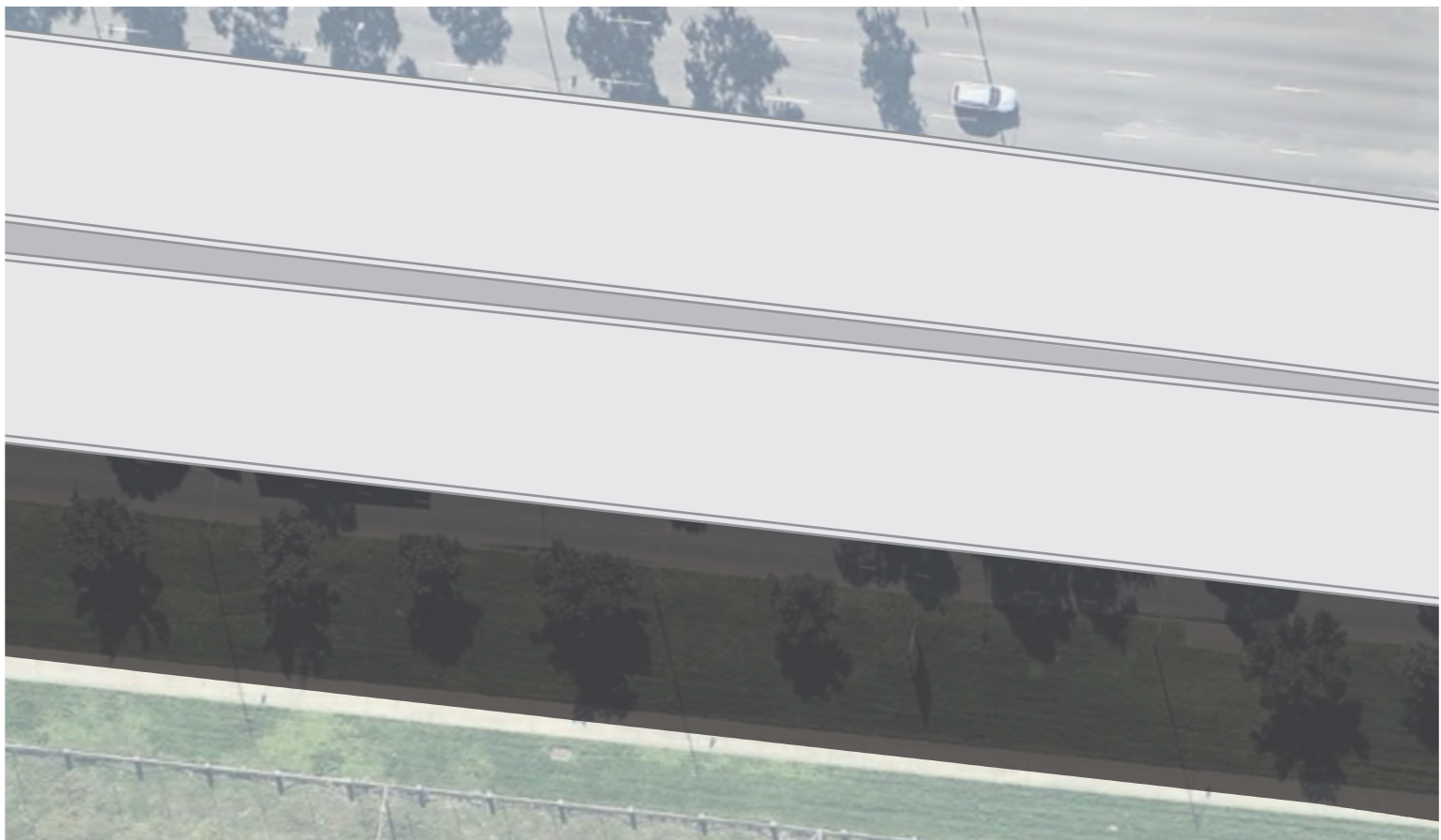
1<sup>st</sup> August 2017

## appendix a

Shadow Diagrams prepared (by Hansen Partnership) to illustrate the overshadowing generated by a discrete section of the proposed Footscray Road elevated structures.



8am



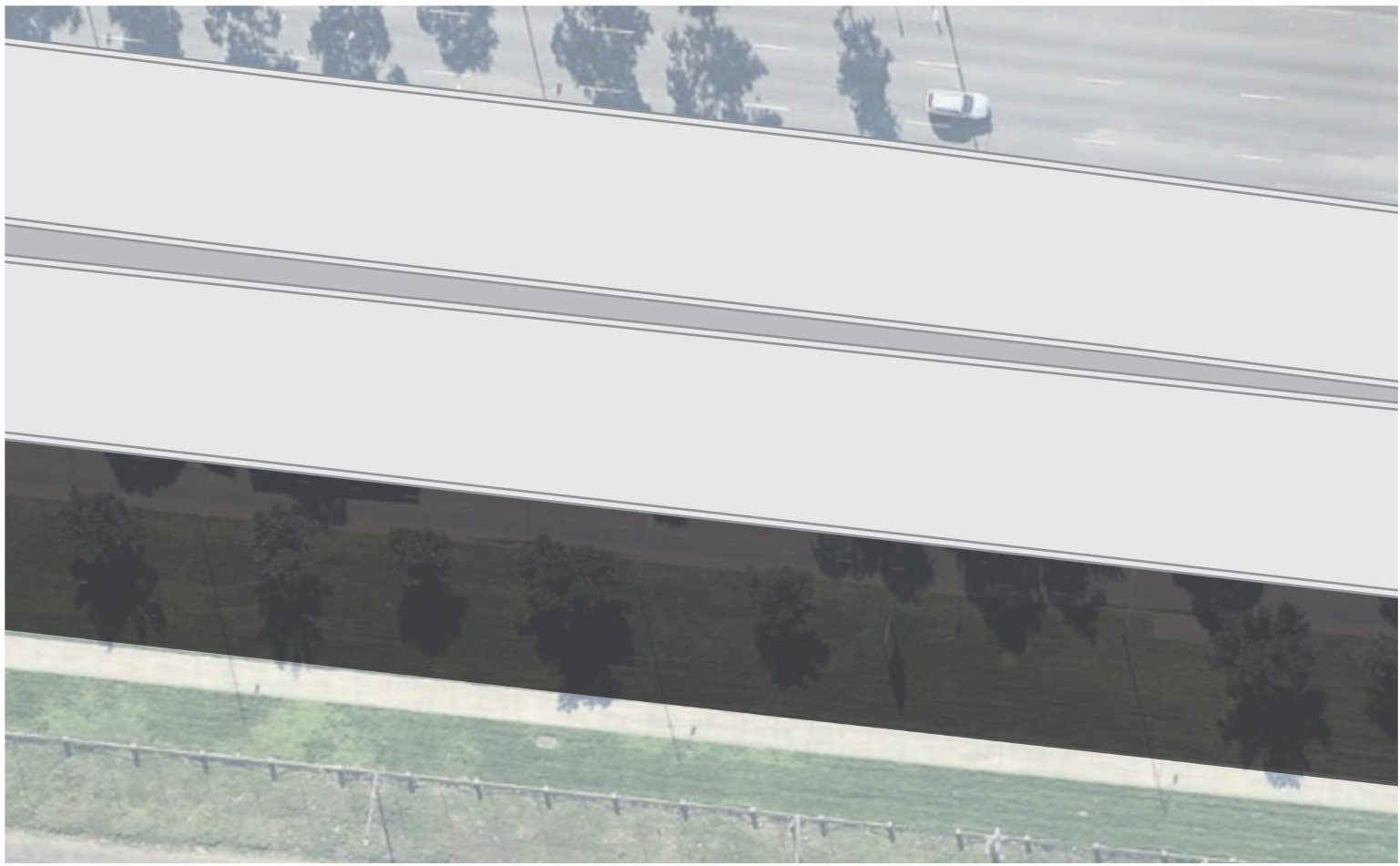
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21 March  
SHADOW DIAGRAMS

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Dwg No.: LCD-001  
Scale: 1:500@A4  
Date: 31.07.10  
Revision: -



keymap



10am

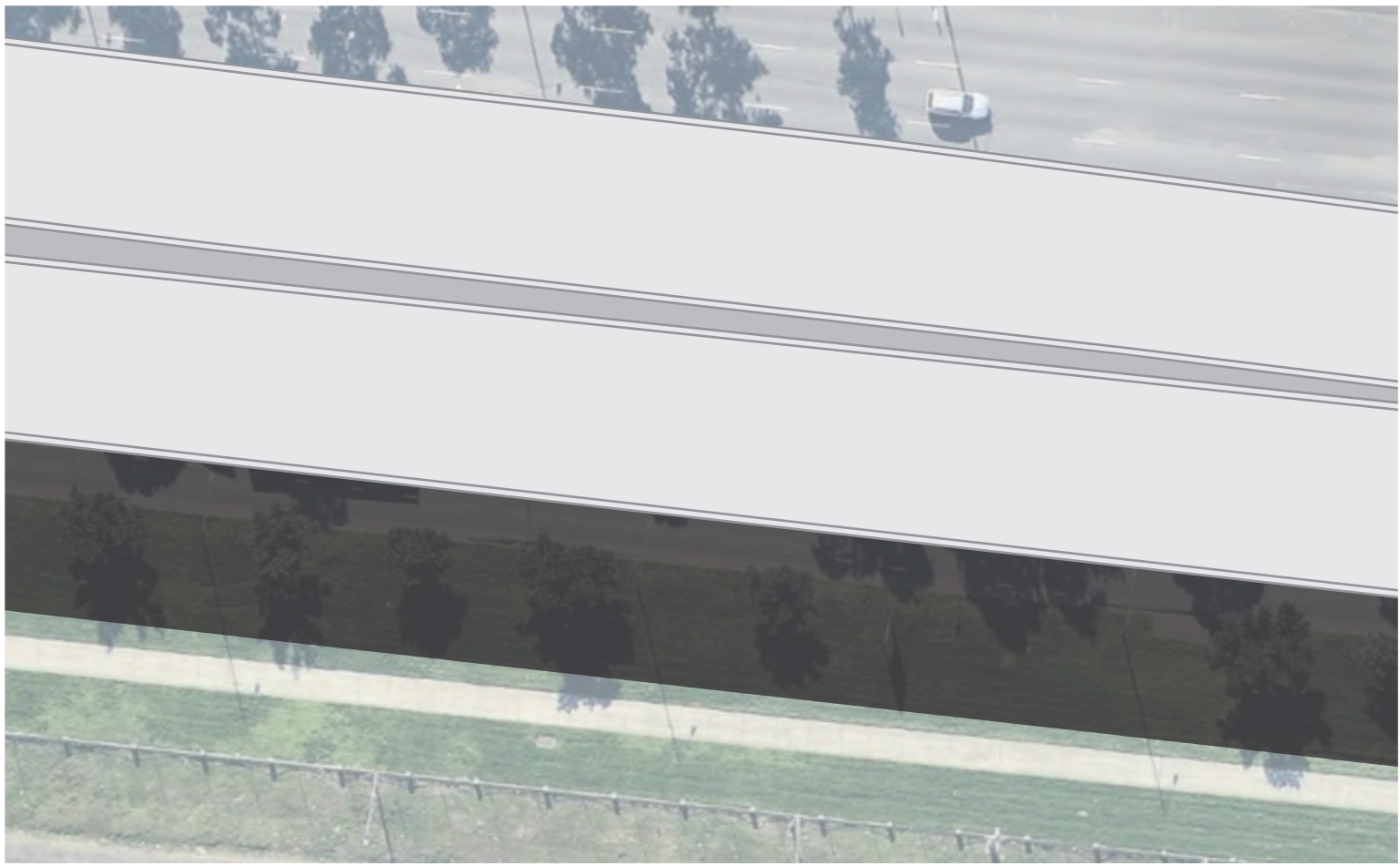


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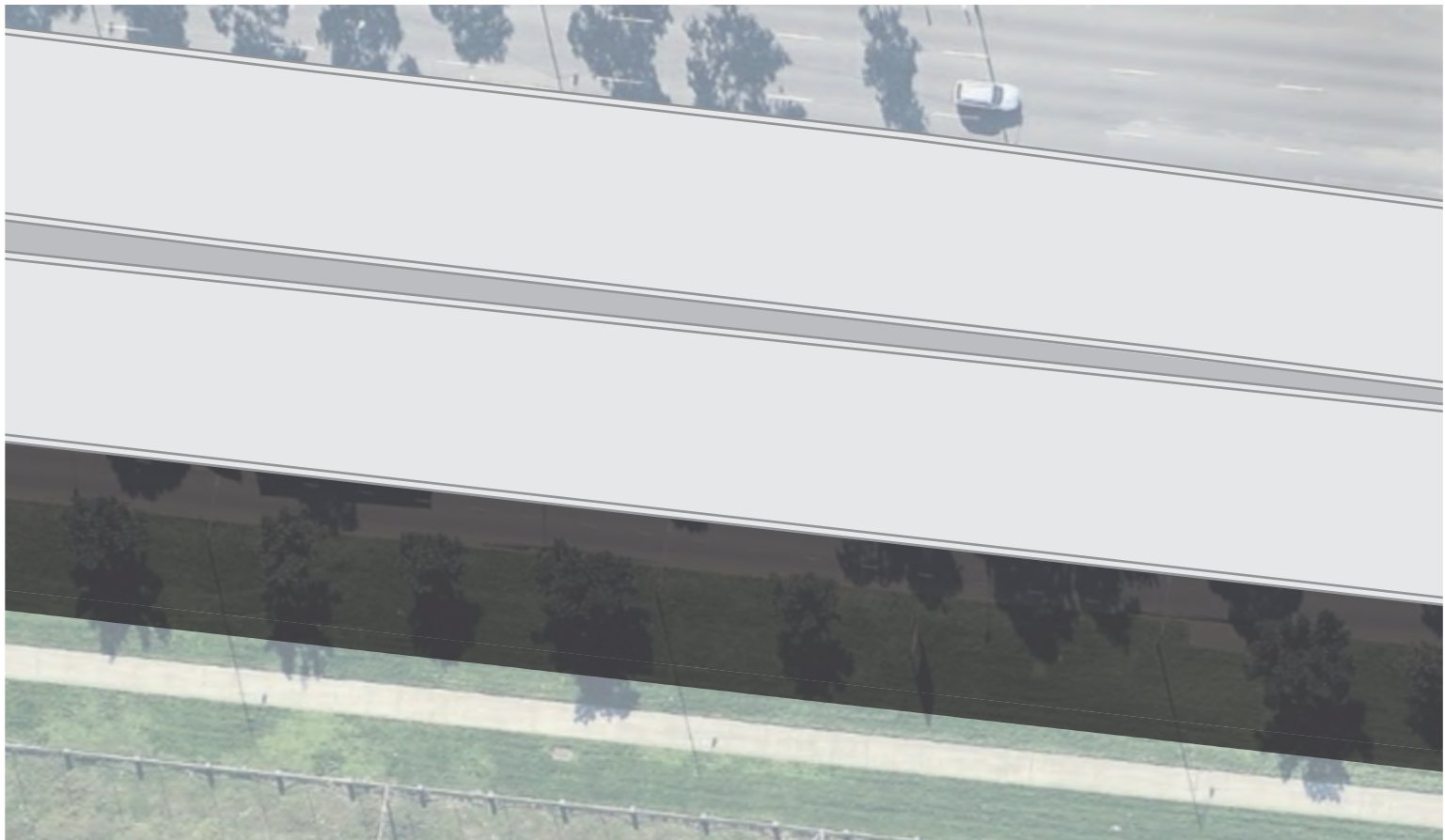
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Date: 31.07.10  
Revision: -





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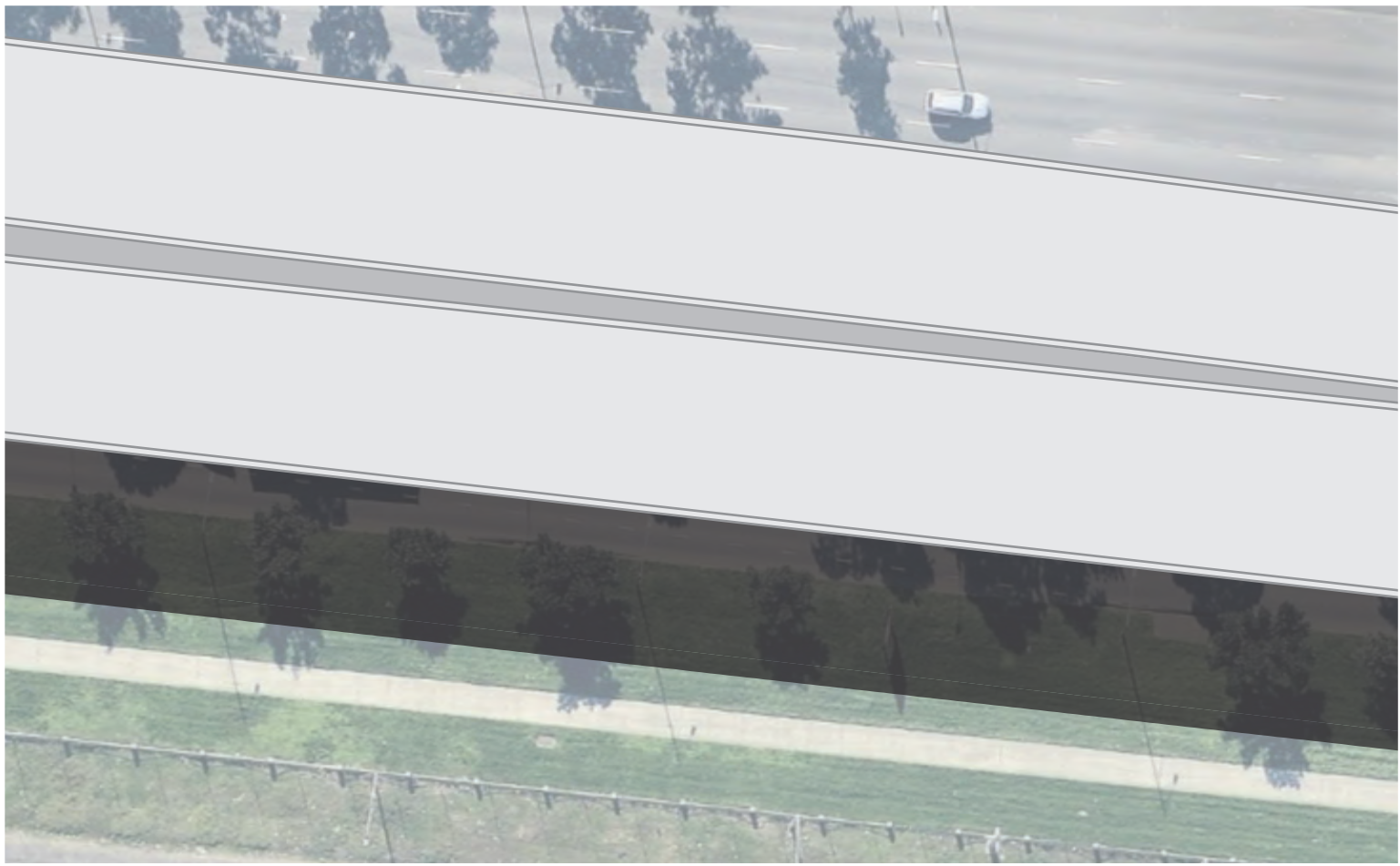


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# 21 March SHADOW DIAGRAMS

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Date: 31.07.10  
Revision: -





2pm

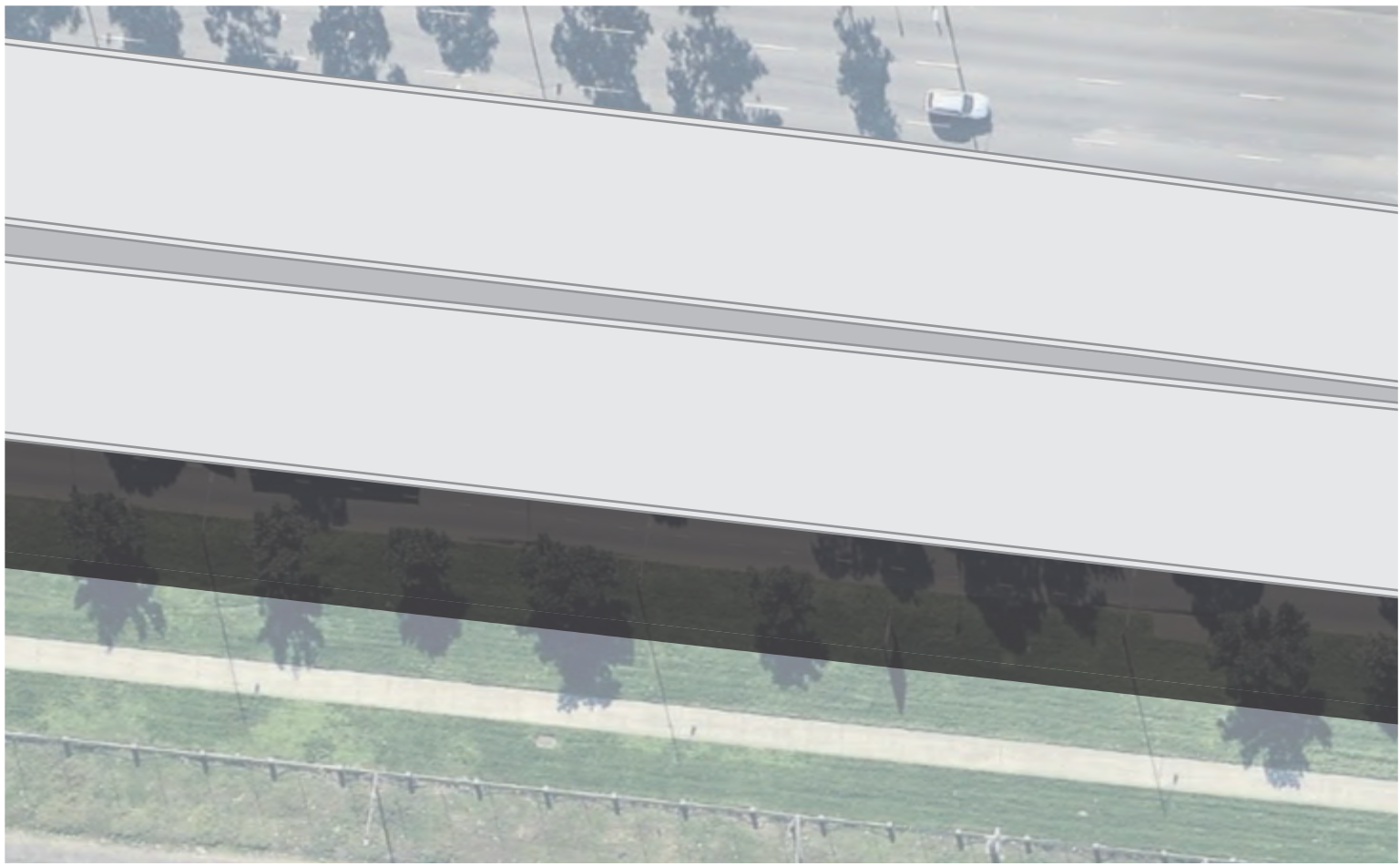


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Revision: -





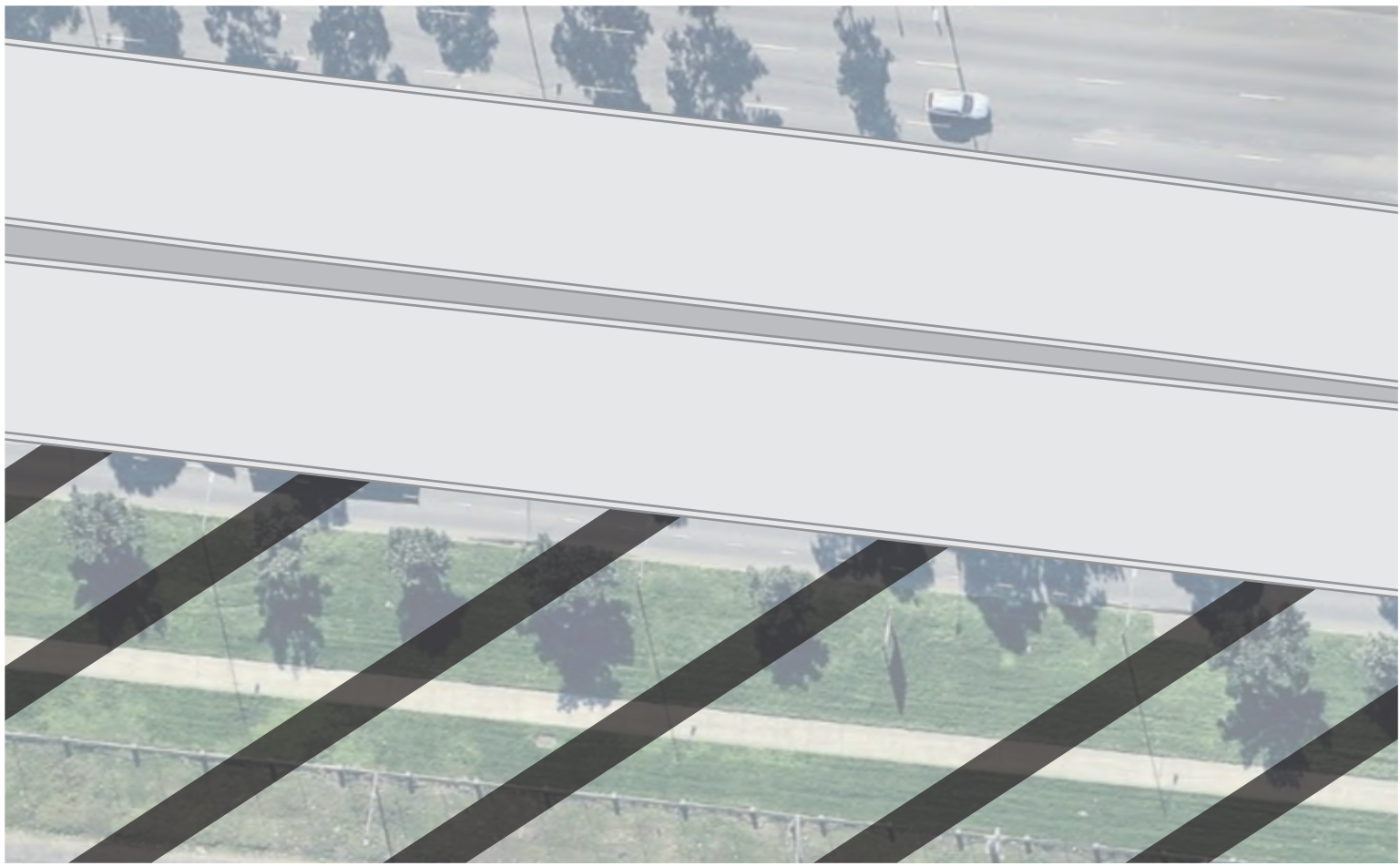
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21 March  
SHADOW DIAGRAMS

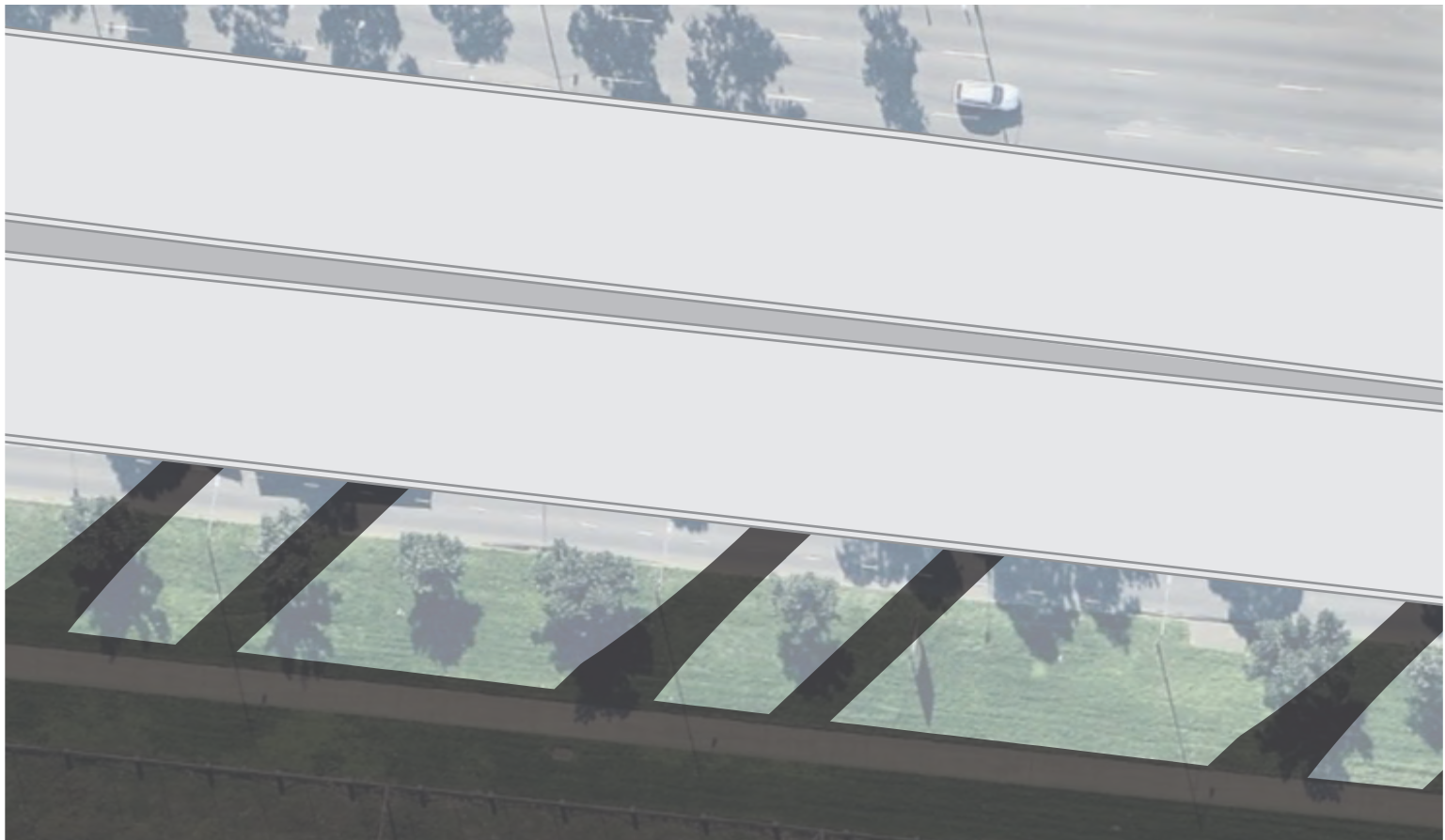
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Revision: -







8am



9am

21 June  
SHADOW DIAGRAMS

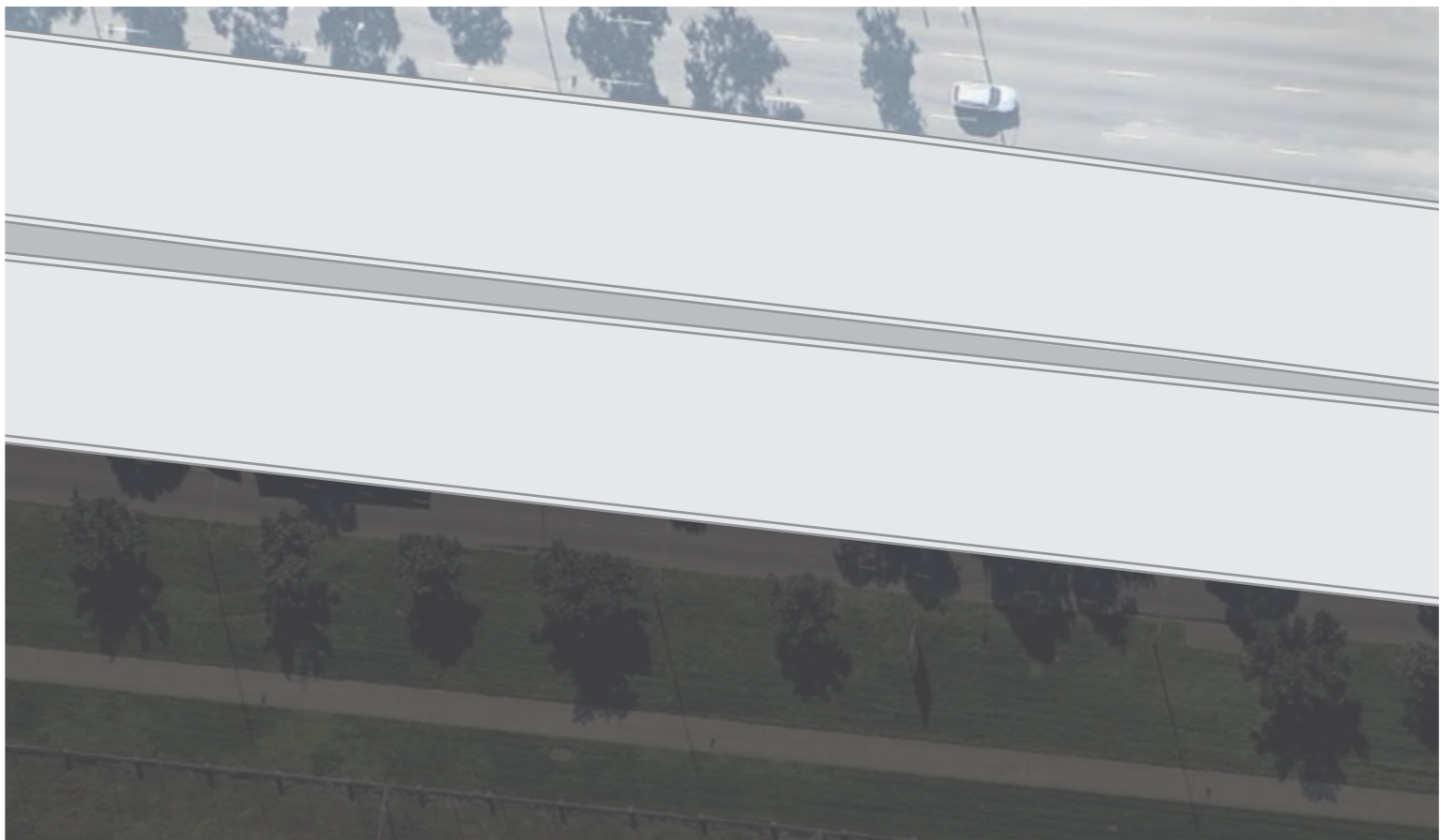
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keymap



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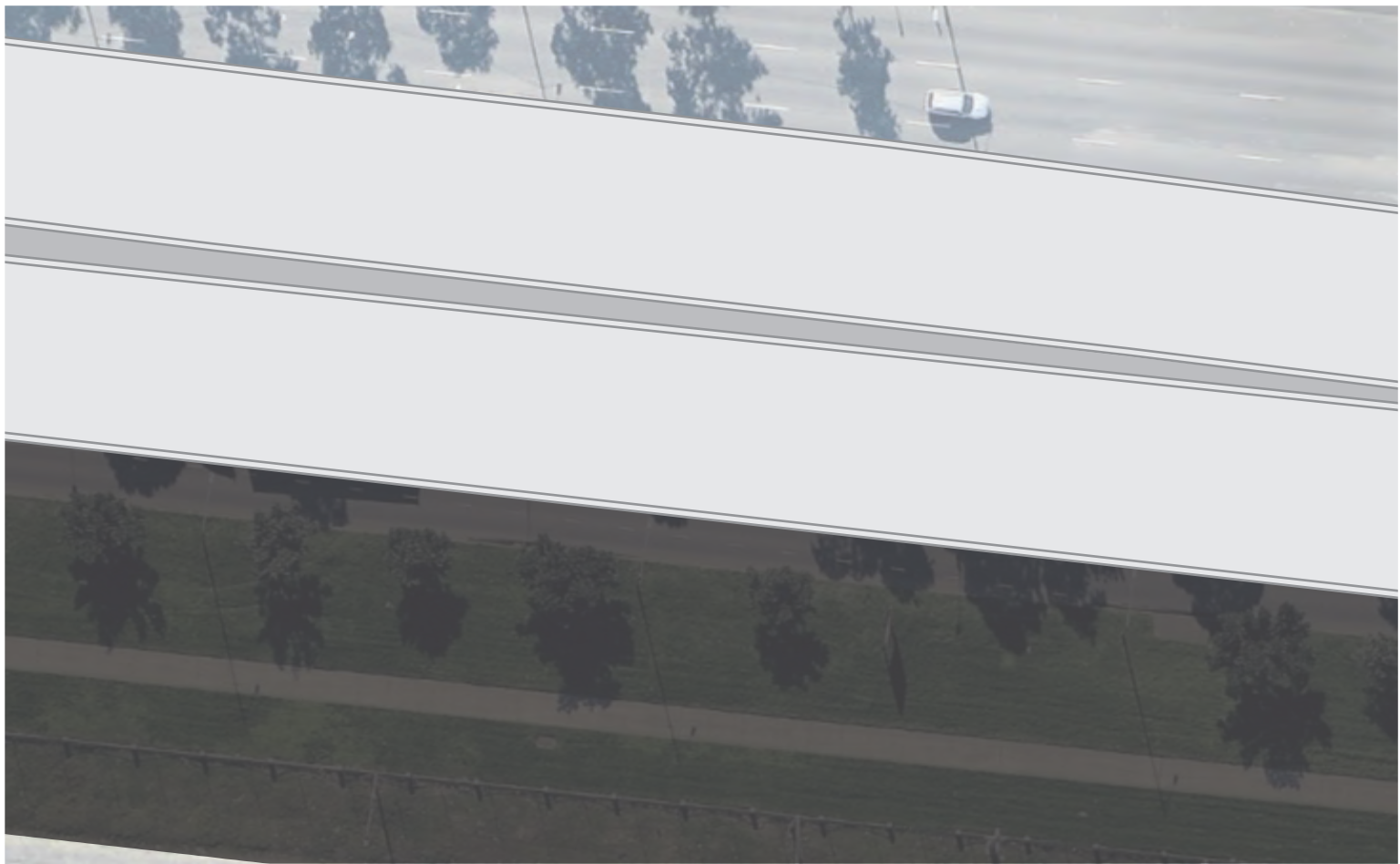


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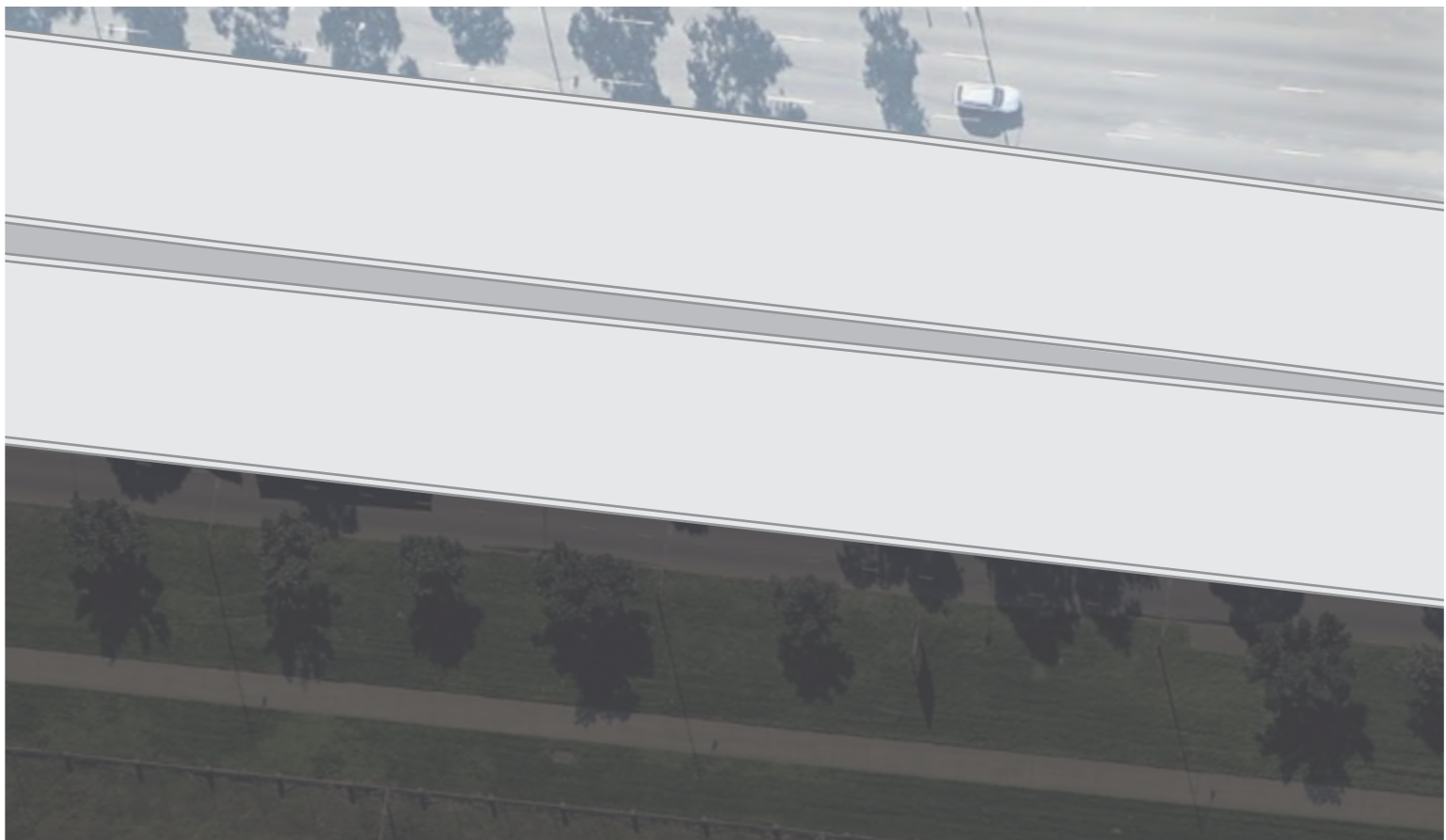
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Revision: -





12pm

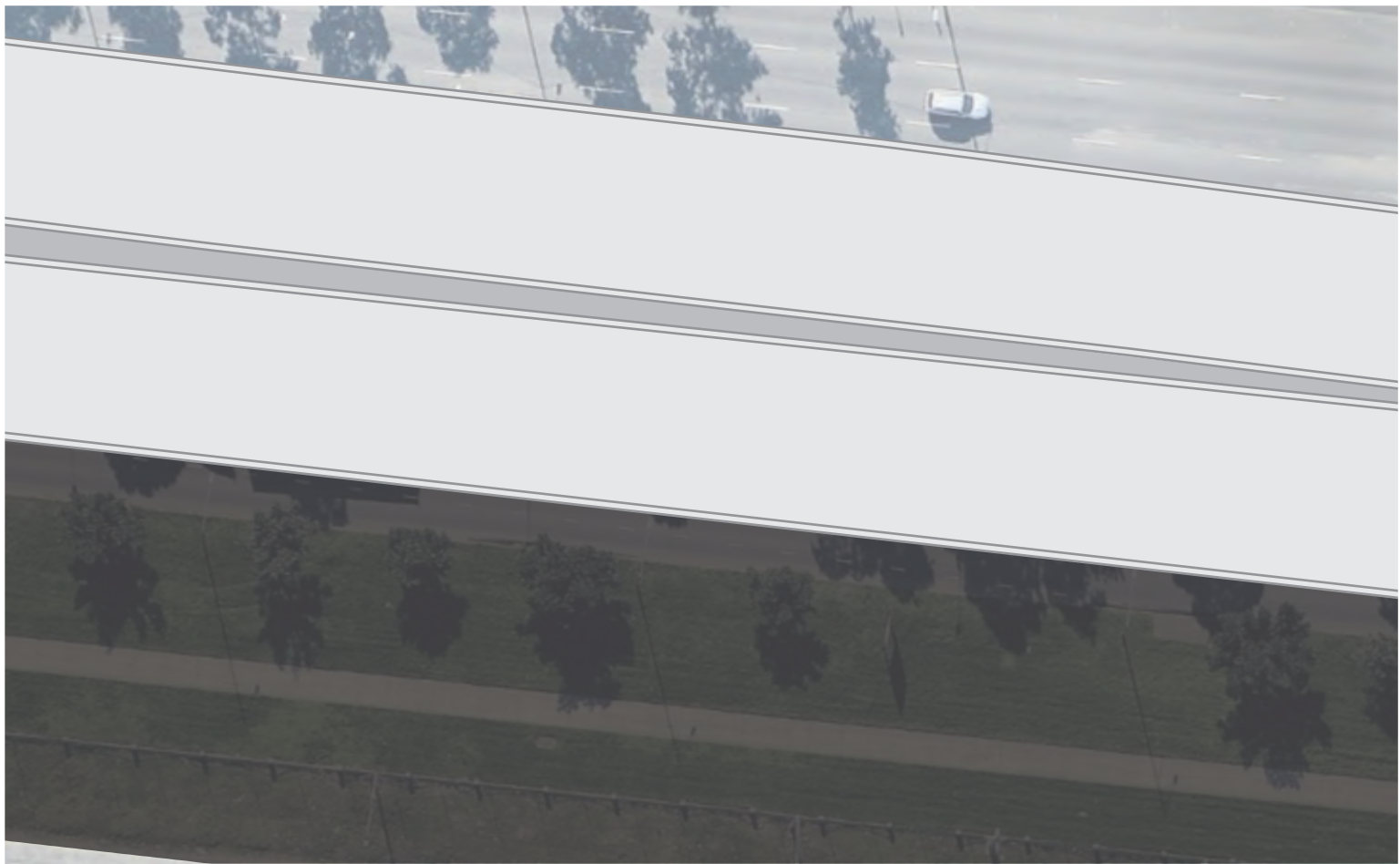


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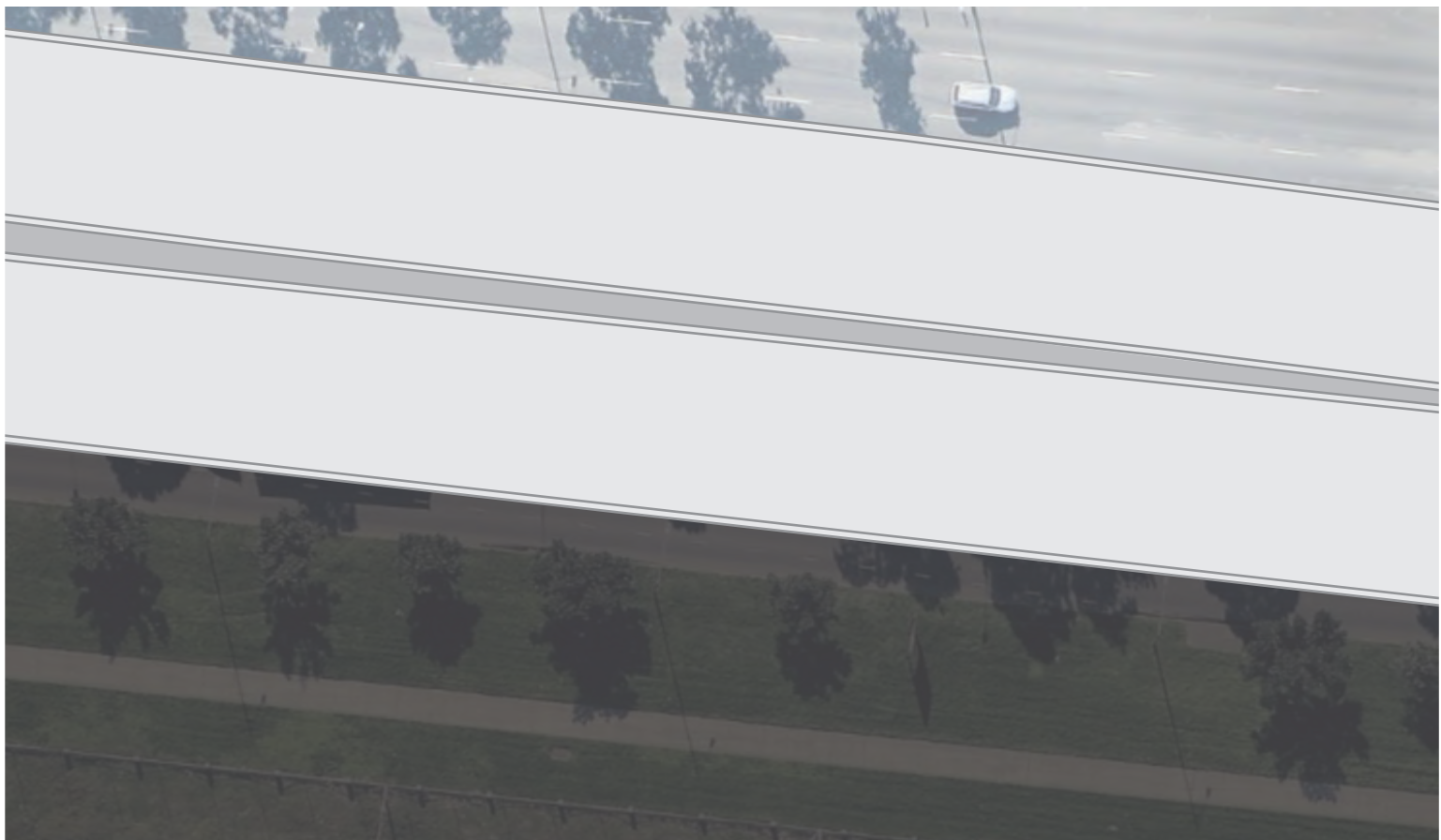
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Revision: -





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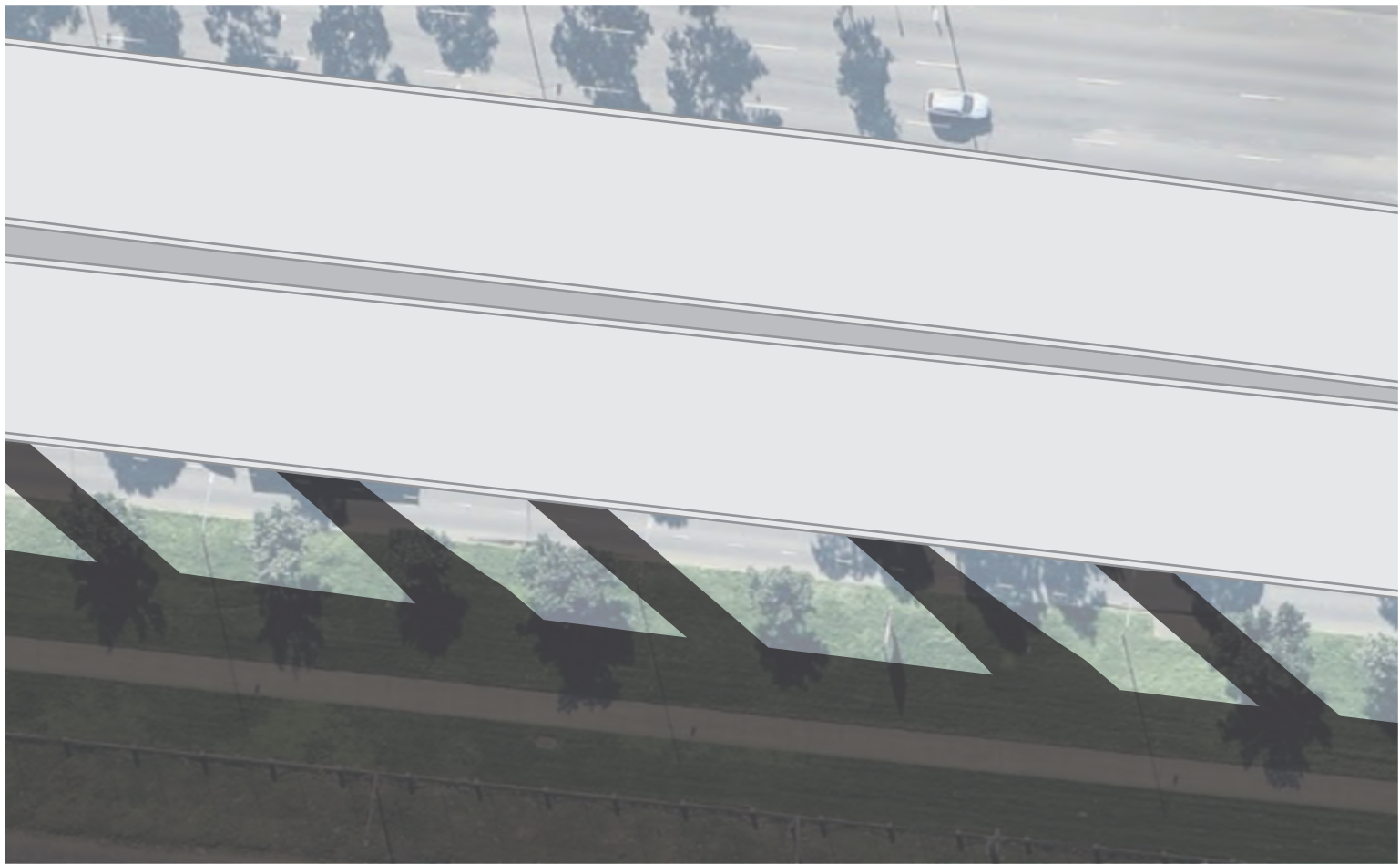


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21 June  
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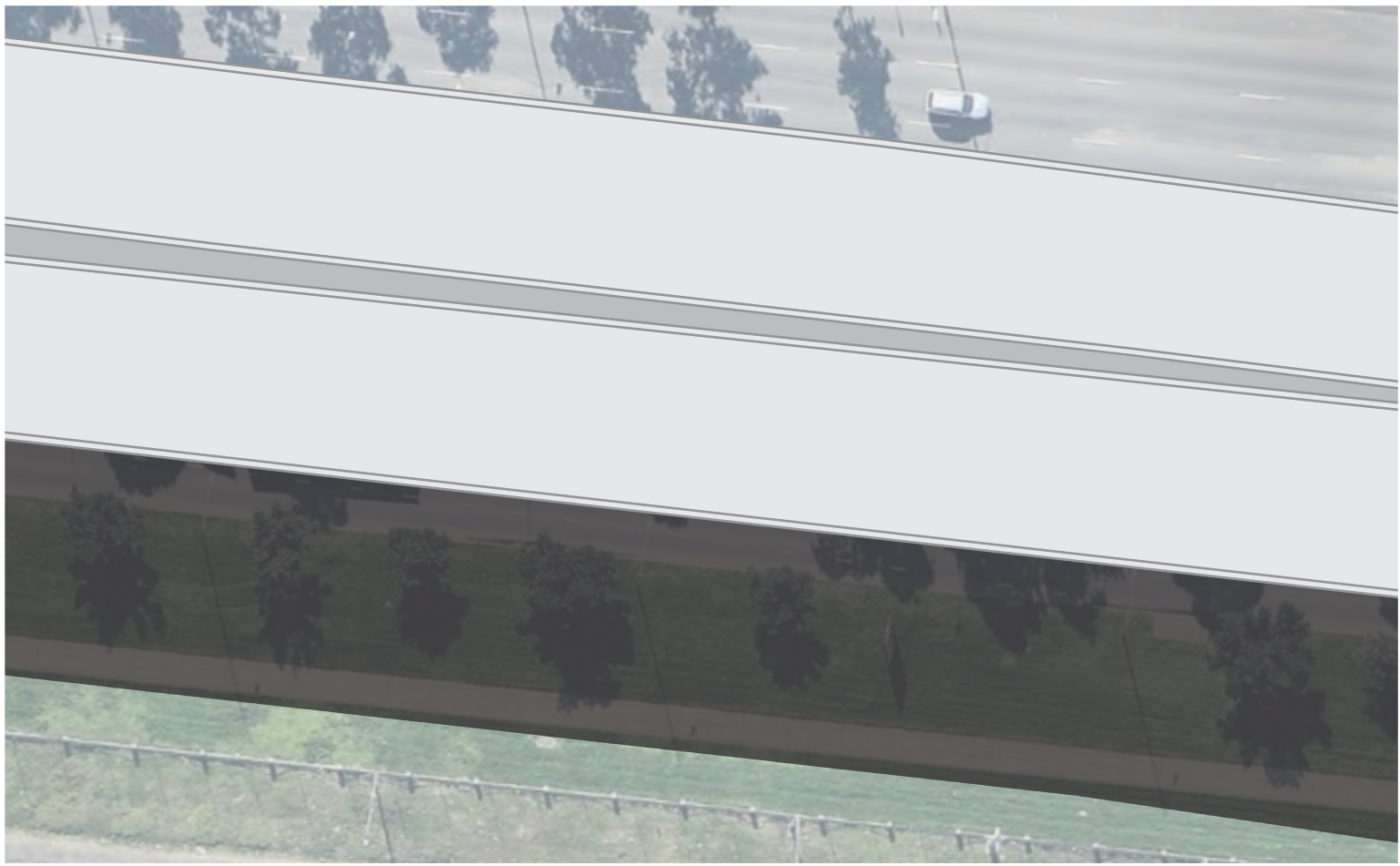


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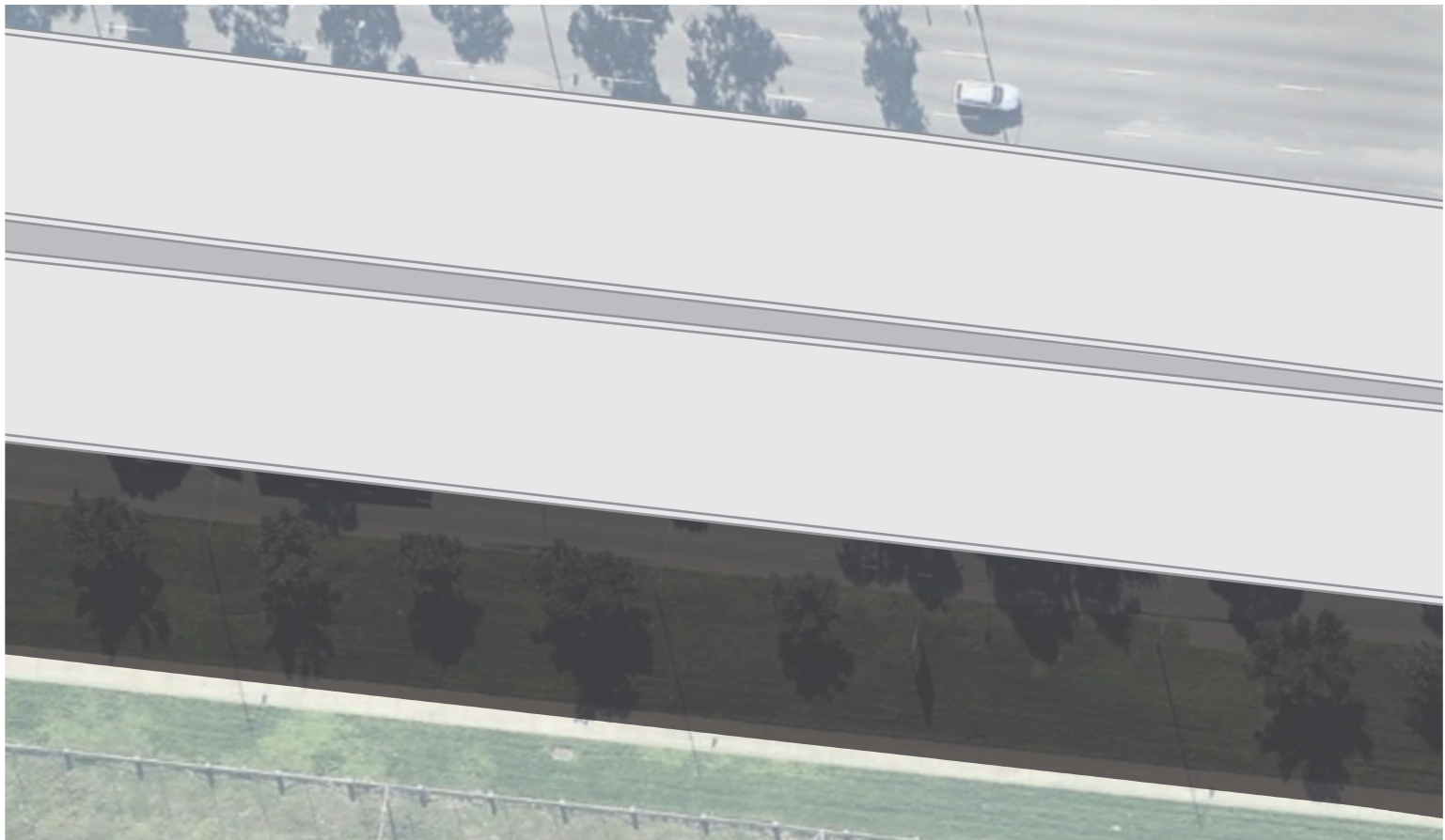
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Revision: -





8am



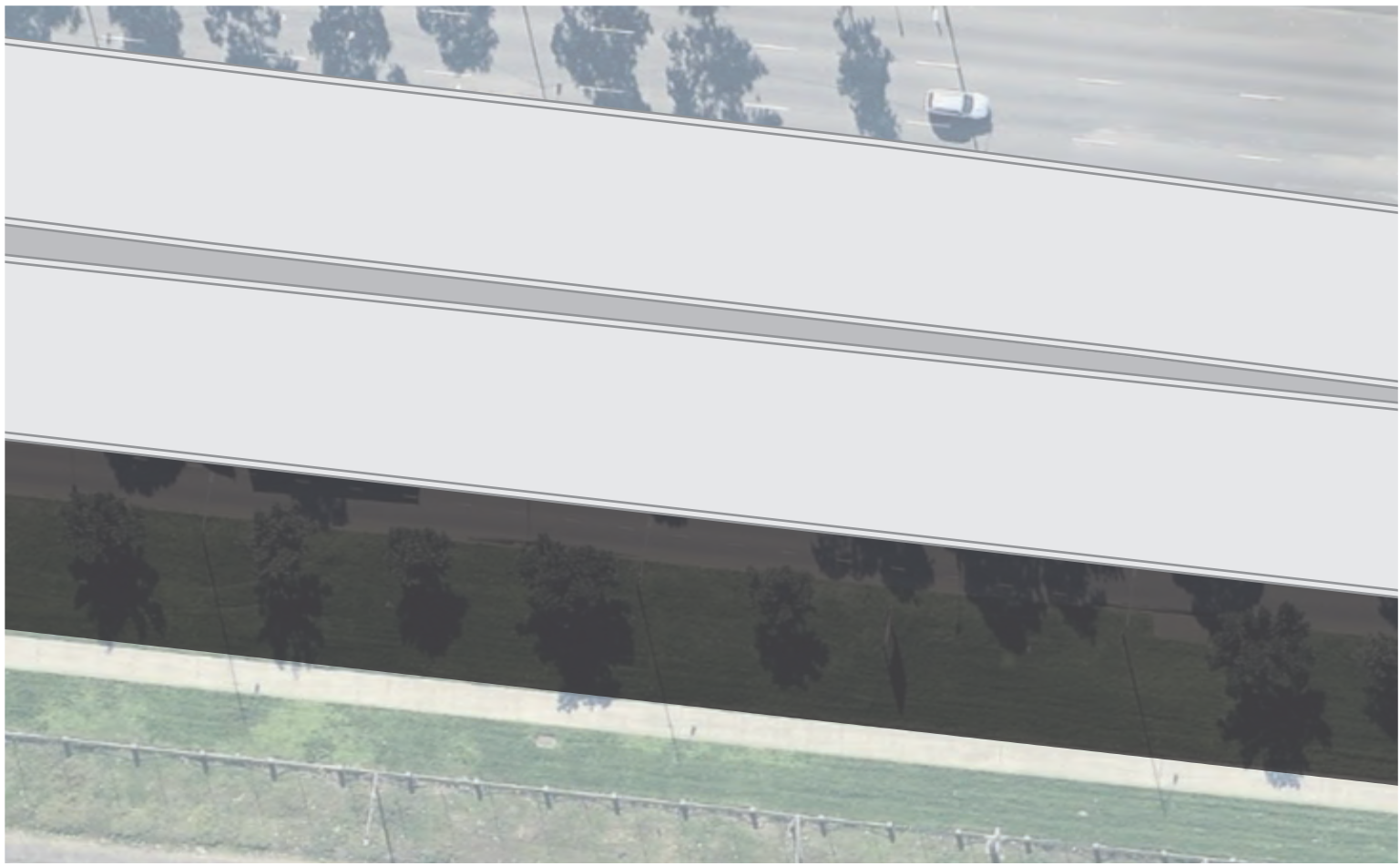
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SHADOW DIAGRAMS

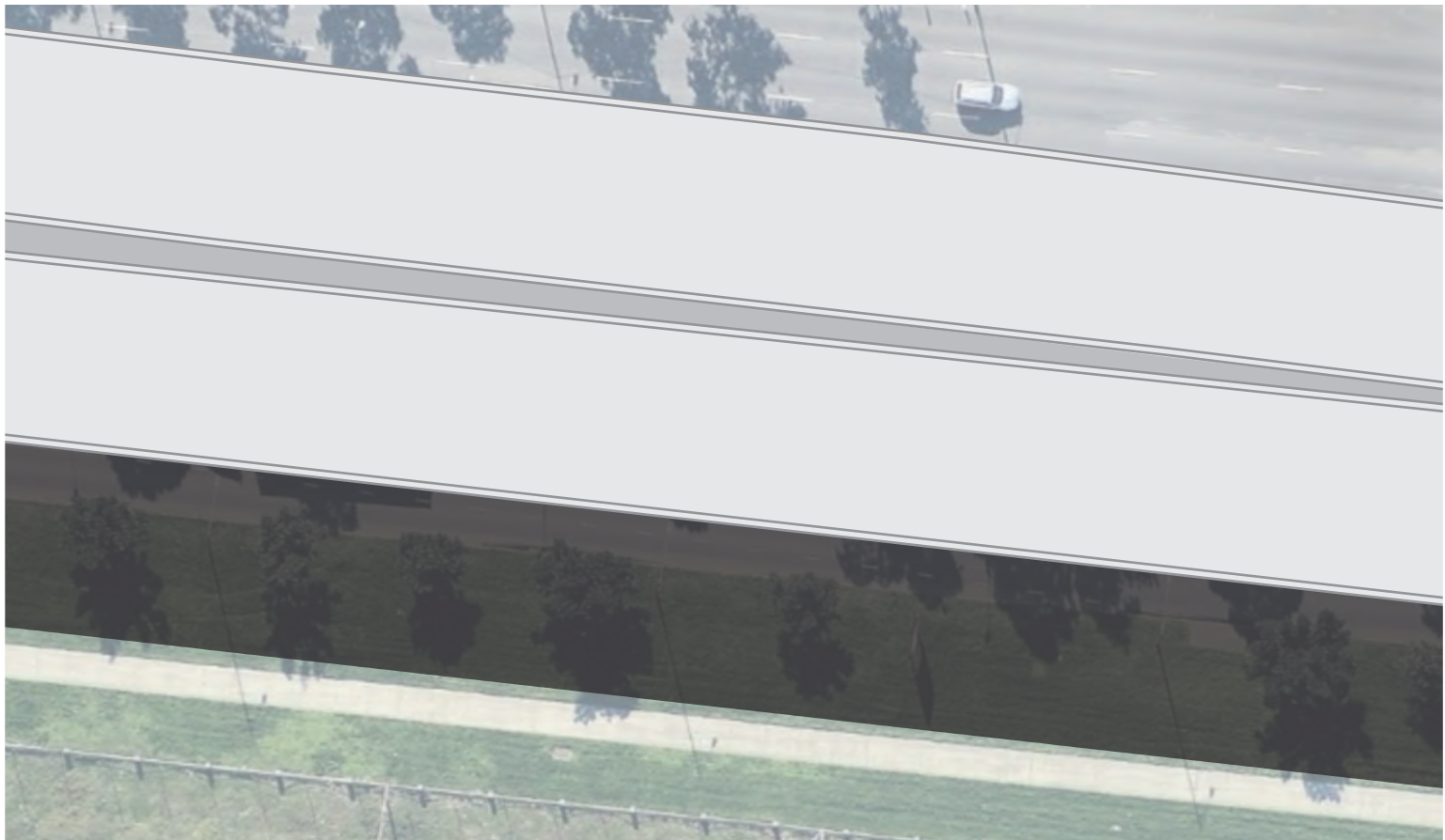
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Revision: -



keymap



10am

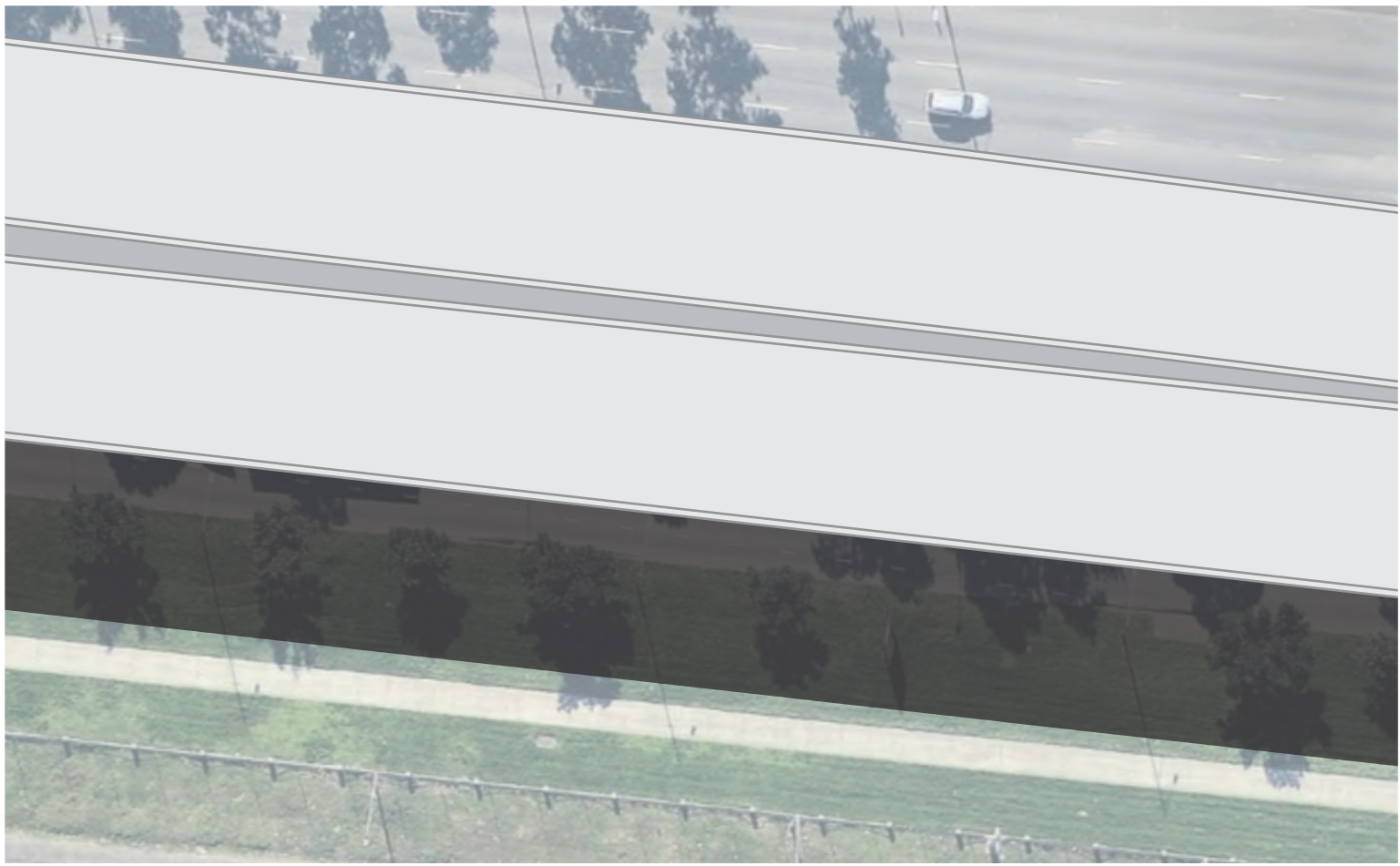


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12pm



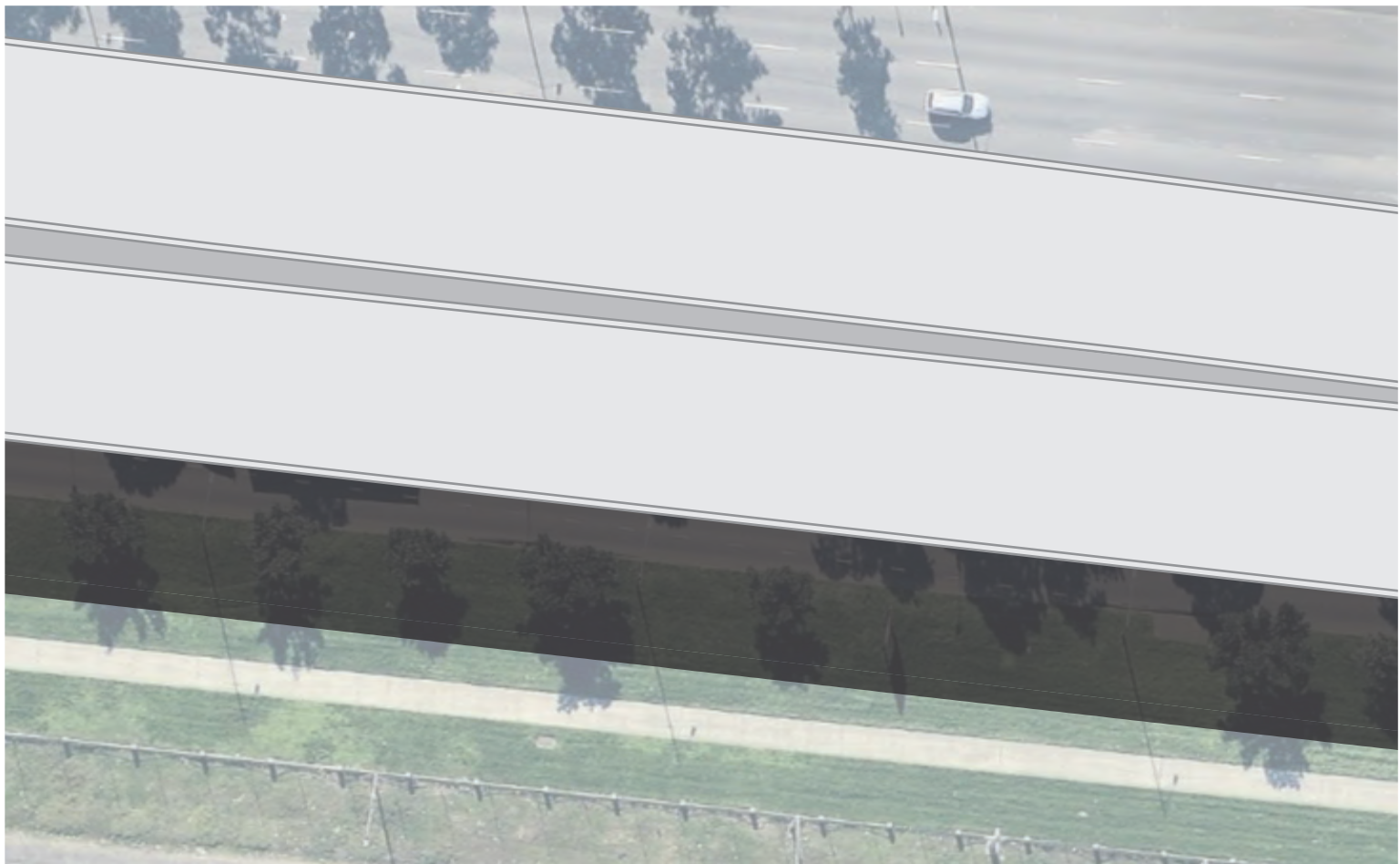
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21 September  
SHADOW DIAGRAMS

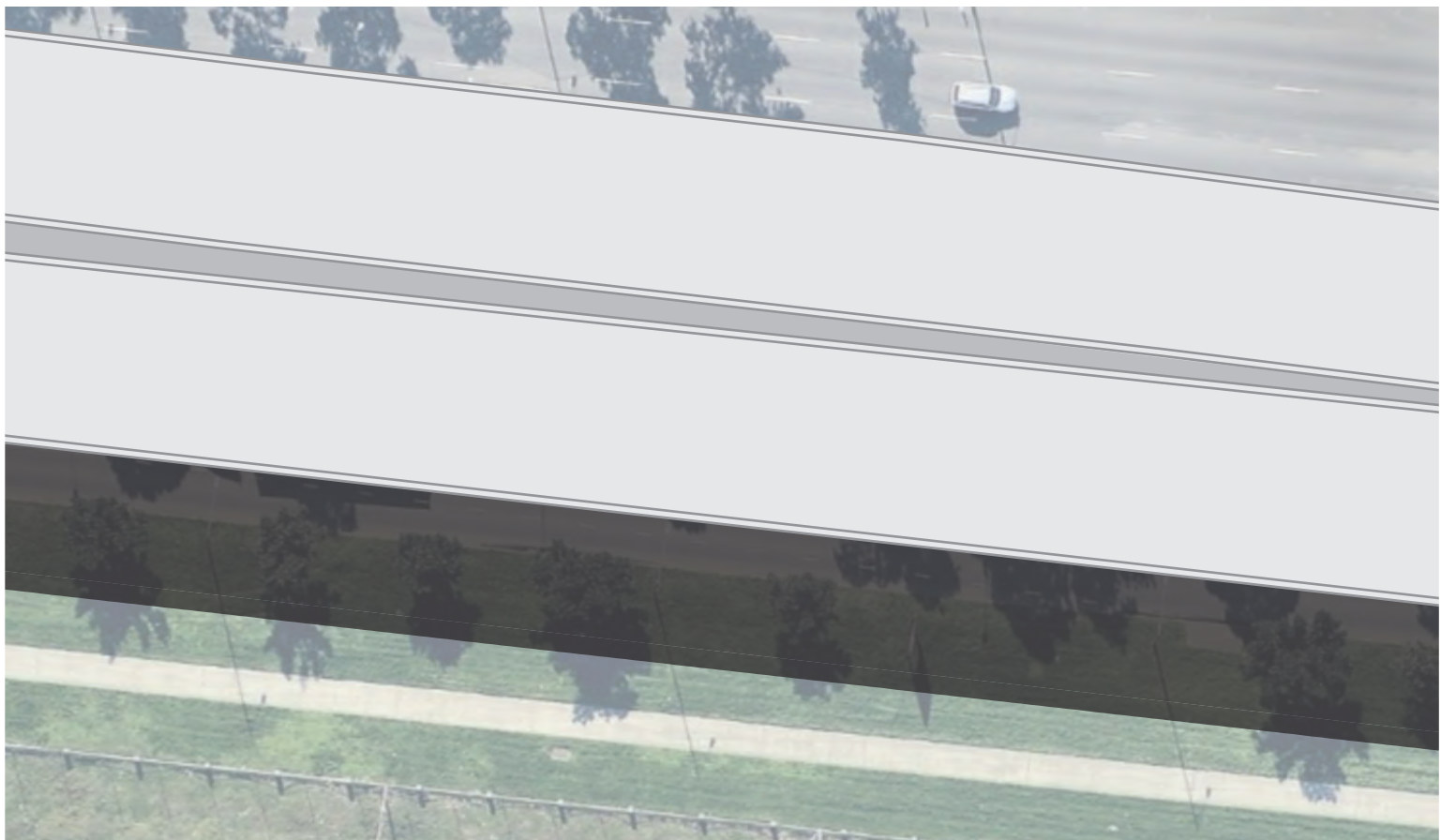
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Revision: -







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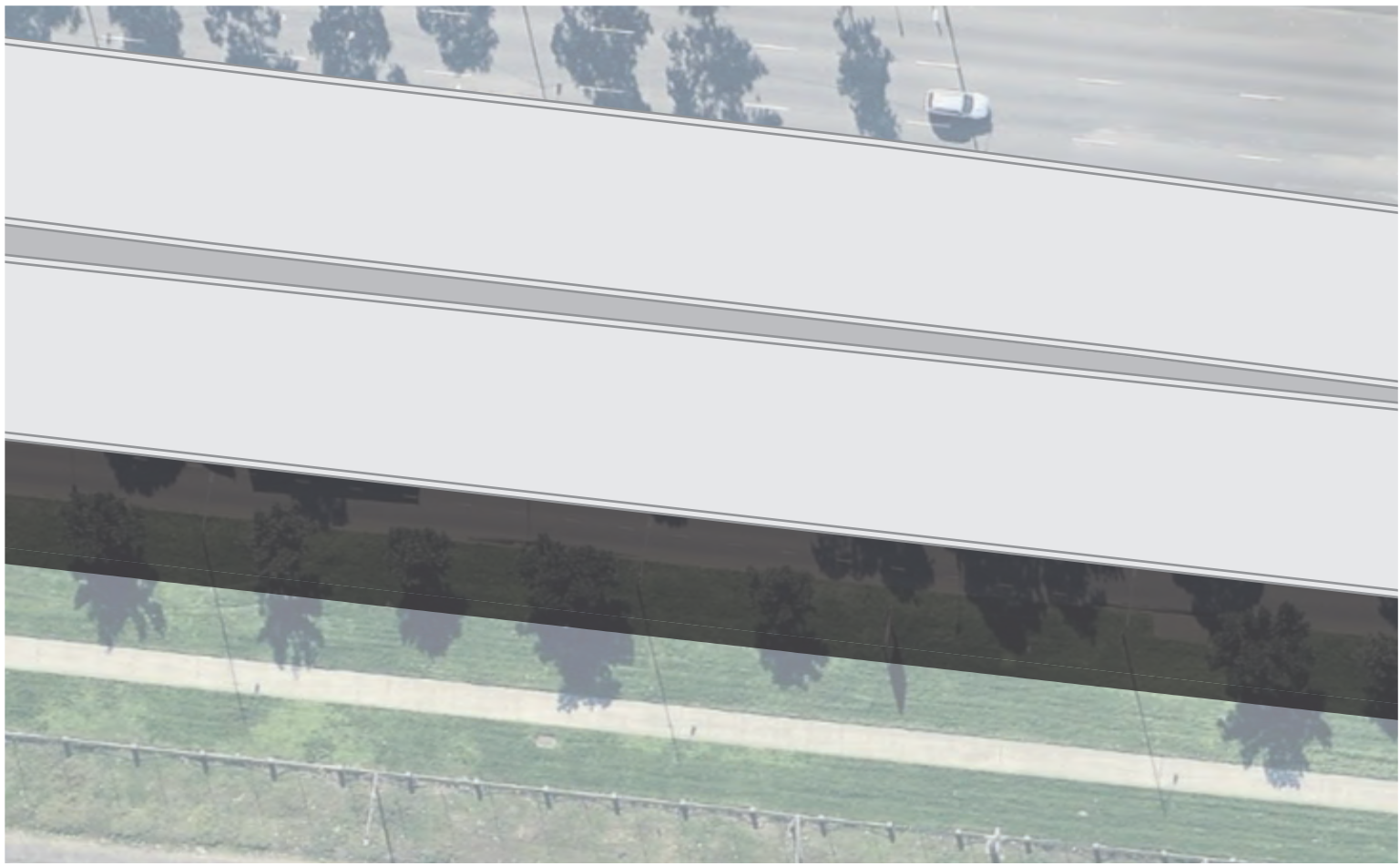


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Revision: -

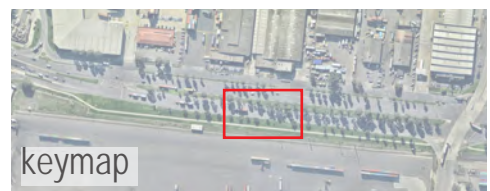




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Date: 31.07.10  
Revision: -



appendix b  
curriculum vitae for Stephen Schutt



# Steve Schutt

## Director

email [sschutt@hansenpartnership.com.au](mailto:sschutt@hansenpartnership.com.au) | phone +61 3 9664 9811 | mobile + 61 417 042 343

## Summary of Experience

Steve is a Registered Landscape Architect with extensive experience in Australia and internationally in the delivery of projects across the fields of public domain design, residential landscapes, educational institutions, recreational facilities, natural and rehabilitated landscapes, commercial developments and large-scale infrastructure projects. His skills and experience embrace the full spectrum of landscape architecture, from conceptual design to design development, documentation, contract administration, master planning, visual assessment, community consultation and the provision of expert evidence to planning tribunals.

As a director of **Hansen Partnership**, Steve is able to apply his skills and experience across a broad range of projects, from landscape master planning to urban design studies and the detailed implementation of landscape designs in both urban and non-urban environments. In this regard, Steve is able to operate effectively as a multi-disciplinary professional, offering skills in urban planning, urban design and landscape architecture.

## Current

Director  
**Hansen Partnership**  
July 2006 – present

## Experience

**Hansen Partnership**  
Associate (July 2002 - July 2006)

Context Landscape Design  
Associate (January 1997 – June 2002)

GBLA  
Landscape architect (June 1995 – November 1996)

Melbourne Parks & Waterways  
Landscape architect (June 1994 – November 1995)

## Qualifications

- Graduate Diploma in Project Management, RMIT University (2004)
- Master of Landscape Architecture, The University of Melbourne (1994)
- Bachelor of Planning & Design (hons), The University of Melbourne (1992)

## Affiliations

- Australian Institute of Landscape Architects (AILA) - Member
- Victorian Planning & Environmental Law Association (VPELA) - Member

## Specialisations

- Public domain design
- Master planning
- Landscape design
- Strategic planning & design
- Visual assessment
- VCAT expert witness



## Key Project Experience

### Public Domain Design

- Alfred Street, Hastings, Mornington Peninsula Shire Council (2013)
- Vernon Street, South Kingsville, Hobsons Bay City Council (2013)
- Empire Mall, Mornington, Mornington Peninsula Shire Council (2013)
- Richmond Terrace Park, City of Yarra (2012)
- Sherbrook Park, Ringwood, Maroondah City Council (2012)
- Langtree Mall Redevelopment, Mildura, Mildura Rural City Council (2011)
- Port of Echuca Visitor Experience, Shire of Campaspe (2011)
- Devonport Foreshore Plaza, Devonport City Council (2011)
- Nunawading Village Urban Realm Vision, Whitehorse City Council (2009)
- Alfreda Street Improvements, St Albans, Brimbank City Council (2009)
- Lakes Reserve, Taylors Lakes, Brimbank City Council (2008)
- Montrose Linear Garden, Shire of Yarra Ranges (2007)
- Frankston CAD Urban Renewal, Frankston City Council (2004)
- Frankston Waterfront Entry, Frankston City Council (2004)
- Hastings Anzac Plaza, Mornington Peninsula Shire (2001)
- University of New South Wales Mall, UNSW (2001)
- St Mary's Cathedral, Sydney, Catholic Archdiocese (2000)
- Sydney Olympic Velodrome, Bankstown, Sydney Olympic Coordination Authority (1999)
- Wollongong Entertainment Centre Foreshore Plaza, Wollongong City Council (1998)
- Toukley Village Green, Wyong Shire Council (1997)

### Master Planning

- Portland to Cape Bridgewater Shared Pathway, Portland Pathways Group (2014)
- Windsor Siding Master Plan, Stonnington City Council (2014)
- Mount Alexander Master Plan, Mount Alexander College (2014)
- Alfred Street Landscape Master Plan, Hastings, Mornington Peninsula Shire Council (2013)
- Mount Baw Baw Development Concept Plan, Mount Baw Baw Management Board (2013)
- 'Re-Discover' Chapel Street Public Domain Master Plan, City of Stonnington (2013)
- Yarra Junction Community Precinct Master Plan, Yarra Ranges Shire Council (2012)
- Bridport Central Foreshore Precinct Plan, Dorset Council (2012)
- Traralgon Railway Station Precinct Master Plan, Latrobe City Council (2011)
- Warragul Town Centre Master Plan, Baw Baw Shire (2011)
- Gaskin Park Master Plan, Churchill, Latrobe City Council (2010)

- Eastern Park and Geelong Botanic Gardens Strategic Plan, City of Greater Geelong (2008)
- Ted Summerton Reserve Master Plan, Moe, Latrobe City Council (2008)
- Cathedral Range Golf Resort Master Plan, Golf Club Properties (2004)
- Sandridge Beach Foreshore Reserve Master Plan, City of Port Phillip (2002)

### Landscape Design

- Coles, Lara, Coles Property Group (2013)
- Coles, Hallam, Coles Property Group (2013)
- Scenic Estate Master Plan, Bass Coast Shire Council (2013)
- Zumsteins and MacKenzie Falls Precinct Plan, Grampians National Park, Parks Victoria (2012)
- Devonport Maritime Museum, Devonport City Council (2011)
- Riverside Park Concept Plan, Mildura, Mildura Rural City Council (2011)
- Morningside Estate, Gisborne, Dennis Family Corporation (2010)
- Whitehorse Civic Centre Forecourt, Whitehorse City Council (2008)
- Mildura Council Offices Forecourt, Mildura Rural City Council (2011)
- Walsh Bay Redevelopment, Sydney, Mirvac (2000)

### Strategic Planning and Design

- Wyndham RDF Landscape Plans, City of Wyndham (2014)
- Hastings Laneways Strategy, Mornington Peninsula Shire Council (2014)
- Phillip Island Integrated Transport Study, Bass Coast Shire Council (2013)
- Werribee River Shared Trail Strategy, Melton Shire Council (2012)
- New Gisborne Development Plan, Macedon Ranges Shire (2011)
- Ballarat Avenue of Honour Urban Design Guidelines, Ballarat City Council (2010)
- Warragul Town Centre Urban Design Framework and Railway Station Master Plan, Baw Baw Shire Council (2009)
- Mersey Bluff Precinct Urban Design Framework, Devonport City Council (2008)
- Spring Creek Growth Framework Plan, Torquay, Surf Coast Shire (2009)
- Jackass Flat New Development Area Structure Plan, City of Greater Bendigo (2005)
- San Remo, Newhaven and Cape Woolamai Structure Plan, Bass Coast Shire (2005)
- Geelong Western Wedge Urban Design Framework, City of Greater Geelong (2002)
- Point Lonsdale Village Urban Design Framework, Borough of Queenscliffe (2002)

### Landscape and Visual Impact Assessment

- Arthurs Seat Skylift, Arthurs Seat Skylift Pty Ltd (2014)
- 86 Paradise Drive, St Andrews Beach, private client (2014)
- Torquay Eco-Park, Torquay, BCR Asset Management (2013)
- Casey Foothills Landscape Assessment, City of Casey (2012)

- Pakenham East Landscape Assessment, Cardinia Shire Council (2012)
- Western Water Storage Facility, Mount Cottrell, Western Water (2012)
- Visual Assessment of Ridgelines in Banyule, Banyule City Council (2011)
- Vodafone Telco Facility Visual Impact Assessment, Warrandyte, Vodafone (2011)
- Bells Boulevard Landscape Assessment, Jan Juc (2009)
- Victorian Desalination Plant EES Enquiry Visual Impact Assessment, Cardinia Shire Council, (2008)
- Stockyard Hill Wind Energy Facility, Beaufort (2008)
- Martha Cove, Safety Beach (2007)
- Devon North Wind Energy Facility, Yarram (2007)
- Oaklands Hill Wind Energy Facility, Glenthompson (2007)

## International

- Surabaya Urban Corridor Development Program, The World Bank (2014)
- Con Dao Precinct Master Plan, BR-VT Province Peoples Committee, Vietnam (2014)
- Xining ToD PoD Workshop, The World Bank (2012)
- Haiphong Transit Oriented Design Study, Haiphong People's Committee, Vietnam (2012)
- Soc Trang Technology Park Master Plan, Vietnam, Viet Investment Projects Corporation (2008)
- Saigon Golf and Country Club Master Plan, Norfolk Group Vietnam (2005)
- Dalat Walking Centre Urban Design Framework, Dalat People's Committee, Vietnam (2004)