
Appendix F

Non-Aboriginal heritage technical information

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This appendix provides technical information relevant to the non-Aboriginal heritage impact assessment undertaken of the proposed design refinements described in Chapter 2 (Environmental Impact Statement clarifications) of this Submissions Report.

The methodology and baseline environment for the non-Aboriginal heritage assessment is provided in Technical Paper 5 (Non-Aboriginal heritage) of the Environmental Impact Statement.

Westmead metro station

Since the exhibition of the Environmental Impact Statement, several refinements to the exhibited design for Westmead metro station and surrounding precinct have been identified as part of ongoing design development to improve access and connectivity to the metro station, improve amenity and minimise potential impacts.

Of relevance to the non-Aboriginal heritage assessment, these changes include:

- a new metro station entry from Hawkesbury Road (to the south of Alexandra Avenue)
- a minor reduction to the extent of the station canopy to the east of Hawkesbury Road
- relocation of bus stops to the west along Alexandra Avenue to support efficient interchange between the metro station and bus services
- adjustments to the proposed bicycle route and public domain upgrades on the Hawkesbury Road overbridge
- other minor changes to the location of transport interchange elements and public domain upgrades.

Further detail on the proposed refinements is included in Chapter 2 (Environmental Impact Statement clarifications) of this Submissions Report.

Table 1 provides a revised assessment of built heritage impacts associated with the Westmead metro station site, which takes into consideration the proposed refinements. Overall, there has been no change in impacts compared to the assessment included in the Environmental Impact Statement.

Table 1 Revised assessment of heritage impacts – Westmead metro station

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Westmead Public School, c1917	Direct impact There would be no direct impacts to the heritage item as a result of proposed design refinements as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
Cumberland LEP Item No. I295	Settlement and vibration impacts There would not be an increase in nearby construction vibration levels within the vicinity of the item as a result of the proposed design refinements, as the proposed refinements would not include additional construction work near the item.	Neutral (no change to the Environmental Impact Statement rating)
Local	Temporary indirect (visual) impact The proposed design refinements would be constructed within the exhibited construction site. Construction associated with the design refinements would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.	Negligible (no change to the Environmental Impact Statement rating)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>Permanent indirect (visual) impact</p> <p>The proposed design refinements are minor in nature and are primarily limited to ground level adjustments. These changes would not be noticeable in relation to surrounding infrastructure. Therefore, there would not be an increase in the level of permanent indirect (visual) impacts. The reduction of the aboveground station infrastructure to the north of Alexandra Avenue is a positive change.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
<p>Western Sydney University</p> <p>Parramatta LEP Item No. I628</p> <p>Local</p>	<p>Direct impact</p> <p>The proposed design changes would result in a minor reduction of proposed bicycle route along the south-eastern corner of the heritage item. This would not result in any changes to direct impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration impacts</p> <p>There would not be an increase in nearby construction vibration levels within the vicinity of the item as a result of the proposed design refinements, as the proposed refinements would not include additional construction work near the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would be constructed within the exhibited construction site. Construction associated with the design refinements would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>The proposed design refinements are minor in nature and are primarily limited to ground level adjustments. These changes, including the reduction in the size of aboveground station infrastructure, and the relocation of the proposed bicycle route and bus stops, would not be noticeable in relation to surrounding infrastructure. Therefore, there would not be an increase in the level of permanent indirect (visual) impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
<p>Victorian residence (in University of Western Sydney grounds)</p> <p>Parramatta LEP Item No. I629</p>	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of proposed design refinements, as no work would occur within the curtilage of the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration impact</p> <p>There would not be an increase in nearby construction vibration levels within the vicinity of the item as a result of the proposed design refinements, as the proposed refinements would not include additional construction work near the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Local	Temporary indirect (visual) impact The proposed design refinements would be constructed within the exhibited construction site. Construction associated with the design refinements would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.	Neutral (no change to the Environmental Impact Statement rating)
	Permanent indirect (visual) impact The proposed design refinements are minor in nature and are primarily limited to ground level adjustments. These refinements, including the relocation of the proposed bicycle route, would not be noticeable in relation to surrounding infrastructure. Therefore, there would not be an increase in the level of permanent indirect (visual) impacts.	Neutral (no change to the Environmental Impact Statement rating)

Parramatta metro station

Since the exhibition of the Environmental Impact Statement, further design development has been undertaken for Parramatta metro station. This has resulted in refinements to the location of station services infrastructure for this proposal, with some infrastructure relocated from below ground to aboveground.

The design refinement includes additional station services infrastructure as part of this proposal. This aboveground station services infrastructure would be located to the west of Horwood Place, within the building previously proposed as over station development in the exhibited design.

Further detail on the proposed refinements is included in Chapter 2 (Environmental Impact Statement clarifications) of this Submissions Report.

Table 2 provides a revised assessment of built heritage impacts associated with the Parramatta metro station site, which takes into consideration the proposed refinements. For the majority of items, there has been no change in impacts compared to the assessment included in the Environmental Impact Statement. Four items within the vicinity of the proposed additional aboveground station services infrastructure would experience an increase in indirect (visual) impacts. Direct impact ratings would be unchanged from the Environmental Impact Statement.

Table 2 Revised assessment of heritage impacts – Parramatta metro station

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Shops (and potential archaeological site)	Direct impact There would be no change to the assessed level of direct impacts to the heritage item as a result of the proposed design refinements, as no new work would occur within the curtilage of the item.	Negligible (no change to the Environmental Impact Statement rating)
Parramatta LEP Item No. I703 Local	Settlement and vibration There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements, as the proposed work near the heritage item would generally remain the same as what has been previously assessed.	Minor to moderate (no change to the Environmental Impact Statement rating)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would be constructed within the exhibited construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be of a similar height to the western station services building, however would be located approximately 100 metres from the rear of the building to be retained and 50 metres south of the heritage item's curtilage. Currently the rear elevation of the original 1840s shopfront is in an unknown condition. Following removal of the modern rear additions to the building as part of the previous Sydney Metro West planning application, the rear of this building would be made visible. However, due to intervening structures, there would be no direct view line from the rear of the 1840s structure to the newly proposed aboveground station services infrastructure, as the latter would be largely blocked by existing two-storey structures on Church Street. There would be limited views of the station services building and the proposed infrastructure would not obstruct or overshadow views of heritage significant elements (the street frontage on Church Street) of the heritage item from this siting. This would be consistent with what has been previously assessed, therefore, there would not be an increase in permanent indirect (visual) impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
<p>Convict Drain</p> <p>Parramatta LEP Item No. I647</p> <p>Local</p>	<p>Direct impact</p> <p>There would not be an increase in the level of direct impacts to the heritage item as a result of the proposed design refinements. Although there would be a reduction in the size of the adjacent station box, which could potentially contain a short section of the heritage item, the surrounding area would still be impacted by basement excavations for future over and adjacent station development. Therefore, this section of the heritage item would still be subject to the same level of direct impacts as previously assessed.</p>	<p>Moderate (no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration</p> <p>There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements, as the proposed work in the vicinity of the heritage item would remain the same.</p>	<p>Minor (no change to the Environmental Impact Statement rating)</p>
	<p>Temporary indirect (visual) impact</p> <p>Potential indirect (visual) impacts are not applicable in the case of this subsurface item of infrastructure and associated archaeological remains.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>Potential indirect (visual) impacts are not applicable in the case of this subsurface item of infrastructure and associated archaeological remains.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
<p>Roxy Theatre</p> <p>State Heritage Register (SHR) Listing No. 00711; Parramatta LEP Item No. I00711; Register of the National Estate (RNE) #3040</p> <p>State</p>	<p>Direct impact</p> <p>There would be no change to the assessed level of direct impacts to the heritage item as a result of the proposed design refinements, as no new work would occur within the curtilage of the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration</p> <p>Work in the immediate vicinity of the heritage would remain largely consistent with the work assessed in the Environmental Impact Statement. Therefore, there would not be an increase in nearby construction vibration levels as a result of the proposed design refinements.</p>	<p>Minor to moderate (no change to the Environmental Impact Statement rating)</p>
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would remain within the exhibited construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be around 80 metres south-west of the item's curtilage. The height of the proposed infrastructure may mean that there are views between the building and the Roxy Theatre from George Street. However, the construction of the new aboveground station services infrastructure would not detract from the aesthetic appeal of the heritage item. There are several extant structures surrounding the Roxy Theatre of a similar height to the additional station services infrastructure, including the proposed station building to the south of the Roxy Theatre that has been previously assessed, meaning that the introduction of the additional station services infrastructure would not significantly alter the visual landscape of the area.</p> <p>The additional station services infrastructure would also be partially obscured by the Civic Link, which would be located between the Roxy Theatre and the additional station services infrastructure. As a result, there would not be an increase in permanent indirect (visual) impacts compared to what has been previously assessed.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
<p>Horse Parapet Façade (and potential archaeological site)</p> <p>Parramatta LEP Item No. I656</p> <p>Local</p>	<p>Direct impact</p> <p>There would be no change to the assessed level of direct impacts to the heritage item as a result of the proposed design refinements, as no new work would occur within the curtilage of the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration</p> <p>The design refinement would include the construction of the additional aboveground station services infrastructure adjacent to the heritage item. However, the construction would be comparable to the station building on the north side of the heritage item, and therefore would be consistent with what has been previously assessed. As a result, the proposed design refinements would not result in an increase in nearby construction vibration levels.</p>	<p>Minor to moderate (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would be constructed within the exhibited construction site and would generally be consistent with the planned construction activities near the heritage item. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Moderate (no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be located adjacent to the heritage item. The additional proposed structure would be subject to design development, indicatively around 21 metres above street level, meaning that it is far taller than the heritage item. The verticality of the proposed infrastructure would also display its modern design materials and form more prominently, putting it in direct conflict with the Horse Parapet Façade, particularly along Macquarie Street. The additional infrastructure and the western station services building and entry (as proposed in the Environmental Impact Statement) would collectively impact the item's heritage significance as a landmark within the Church Street and Macquarie Street environment. However, as the proposed design change would not directly impact the heritage item, it is assessed that the permanent indirect (visual) impact to the heritage item would be moderate, unchanged from the Environmental Impact Statement.</p>	<p>Moderate (no change to the Environmental Impact Statement rating)</p>
Murrays' Building (and potential archaeological site)	<p>Direct impact</p> <p>There would be no change to the assessed level of direct impacts to the heritage item as a result of the proposed design refinements, as no new work would occur within the curtilage of the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
Parramatta LEP Item No. I652 Local	<p>Settlement and vibration</p> <p>The proposed additional aboveground station services infrastructure would be located on the opposite side of Macquarie Street compared to the heritage item (about 20 metres away). Therefore, it is not expected that the proposed design refinement would result in an increase in nearby construction vibration levels that would impact the heritage item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would involve the construction of the additional aboveground station services infrastructure across the road from the heritage item. The additional structure would be subject to design development, indicatively around 21 metres above street level. Although site hoarding would partially obscure the construction activities, tall machine plant and the construction of the additional aboveground station services infrastructure would still be visible above it and would be prominent from the Macquarie Street frontage of the heritage item. Although the new additional aboveground station services infrastructure would be comparable in height to the other proposed station buildings, compared to the proposed western station services building it would be less obscured by other buildings along Macquarie Street. As a result of the more prominent view of the new building during construction, the temporary indirect (visual) impact as a result of the design change would increase from negligible to minor.</p>	<p>Minor (increased from negligible in the Environmental Impact Statement)</p>
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be constructed across the road from the heritage item (about 20 metres away) and would front Macquarie Street. The height of the structure (subject to design development, indicatively around 21 metres) would be inconsistent with the standard building height along Macquarie Street in this area. While the additional aboveground station services infrastructure would not interrupt views of the heritage item on Macquarie Street and views from the heritage item to the adjacent Bicentennial Square, its height and mass would partially overshadow the heritage item. Overall, the design refinements would result in an increase of permanent indirect (visual) impacts to the heritage item from negligible to minor.</p>	<p>Minor (increased from negligible in the Environmental Impact Statement)</p>
<p>Kia Ora (and potential archaeological site)</p> <p>Parramatta LEP Item No. I716; RNE #3088</p> <p>Local</p>	<p>Direct impact</p> <p>The heritage item would continue to be retained as part of the design refinements and no modifications to the heritage item are proposed. Therefore, there would not be an increase in the direct impacts as a result of the proposed design refinements.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration</p> <p>Although the proposed design refinements include the construction of additional aboveground station services infrastructure in the vicinity of the heritage item, the proposed construction activities would be largely the same as what has been previously assessed. As a result, there would not be an increase in nearby construction vibration levels as a result of the proposed design refinements.</p>	<p>Minor to moderate (no change to the Environmental Impact Statement rating)</p>
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would remain within the construction site and would generally be consistent with the planned construction activities near the heritage item. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Moderate (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>Permanent indirect (visual) impact</p> <p>This proposal would situate Kia Ora within the public domain of the Parramatta metro station site. Views of all elevations of the building would be publicly accessible and the building would be in a highly prominent place within the revised public streetscape, allowing better public appreciation of the heritage item.</p> <p>The additional aboveground station services infrastructure would be constructed about 10 metres to the west of the heritage item. The proximity of this structure and its height would mean that it would overshadow Kia Ora. However, this is generally consistent with the structure currently abutting the heritage item, and views of the heritage item would still be more open from the north and east.</p> <p>Overall, the introduction of public domain around the heritage item would still allow for increased views towards Kia Ora that would, on balance, result in positive heritage outcomes. However, because of the design change the overall permanent indirect (visual) impact would be reduced from a minor positive impact to a negligible positive impact.</p>	Negligible positive (reduced from minor positive in the Environmental Impact Statement)
<p>Dr Pringle's Cottage</p> <p>Parramatta LEP Item No. I705</p> <p>Local</p>	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.</p> <p>Settlement and vibration</p> <p>There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the proposed work.</p> <p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would remain within the construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p> <p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be generally consistent in scale with the other proposed station buildings, and would not be noticeable from the heritage item due to its distance (in excess of 100 metres). The additional station services infrastructure would not interrupt the significant views of the heritage item which are predominately on Horwood Place north of George Street. As a result, there would not be an increase in the permanent indirect (visual) impacts as a result of the design refinements.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p> <p>Neutral (no change to the Environmental Impact Statement rating)</p> <p>Neutral (no change to the Environmental Impact Statement rating)</p> <p>Neutral (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
<p>Redcoat's Mess House</p> <p>SHR Listing No. 00218; Parramatta LEP Item No. I00218</p> <p>State</p>	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration</p> <p>There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the proposed work.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would remain within the construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>There would not be an increase in the permanent indirect impacts as a result of the design refinements, as the proposed work would not detract from the visual significance of the item.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
<p>Civic Arcade (former theatre) (and potential archaeological site)</p> <p>Parramatta LEP Item No. I704</p> <p>Local</p>	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
	<p>Settlement and vibration</p> <p>There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the proposed work.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
	<p>Temporary direct (visual) impact</p> <p>The proposed design refinements would remain within the construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Neutral</p> <p>(no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be generally consistent in scale with the other proposed station buildings, and would not be noticeable from the heritage item due to its distance (in excess of 100 metres). The additional station services infrastructure would not interrupt the significant views of the heritage item, and the realignment of Horwood Place would continue to result in a positive heritage outcome. As a result, there would not be an increase in the permanent indirect (visual) impacts as a result of the design refinements.</p>	<p>Negligible positive</p> <p>(no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Westpac Bank Parramatta LEP Item No. I665	Direct impact There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
Local	Settlement and vibration There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the proposed work.	Neutral (no change to the Environmental Impact Statement rating)
	Temporary indirect (visual) impact The proposed design refinements would remain within the construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.	Neutral (no change to the Environmental Impact Statement rating)
	Permanent indirect (visual) impact The additional aboveground station services infrastructure would be generally consistent in scale with the other proposed station buildings, and would not be noticeable from the heritage item due to its distance (in excess of 100 metres). The additional station services infrastructure would not interrupt the significant views of the heritage item which are predominately on George Street. As a result, there would not be an increase in the permanent indirect (visual) impacts as a result of the design refinements.	Neutral (no change to the Environmental Impact Statement rating)
Former Courthouse Wall and Sandstone Cellblock (and potential archaeological site)	Direct impact There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
Parramatta LEP Item No. I659	Settlement and vibration There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the proposed work.	Neutral (no change to the Environmental Impact Statement rating)
Local	Temporary indirect (visual) impact The proposed design refinements would remain within the construction site and would be negligible in relation to the surrounding construction activities. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.	Neutral (no change to the Environmental Impact Statement rating)
	Permanent indirect (visual) impact There would not be an increase in the permanent indirect impacts as a result of the design refinements as the proposed work would not detract from the visual significance of the item.	Neutral (no change to the Environmental Impact Statement rating)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
HMV (former Commonwealth Bank) (and potential archaeological site) Parramatta LEP Item No. I658 Local	Direct impact There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
	Settlement and vibration Work in the vicinity of the heritage item would remain largely the same as the work assessed in the Environmental Impact Statement. Therefore, there would not be an increase in nearby construction vibration levels as a result of the proposed design refinements.	Minor (no change to the Environmental Impact Statement rating)
	Temporary indirect (visual) impact The proposed design refinements would remain within the exhibited construction site would generally be consistent with, or obscured by, the proposed construction of the western services building. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.	Negligible (no change to the Environmental Impact Statement rating)
	Permanent indirect (visual) impact The proposed design refinements include the construction of additional aboveground station services infrastructure. The additional aboveground station services infrastructure would be located behind the western services building when viewed from the heritage item, and therefore would be largely obscured from view. As a result, there would not be an increase in the permanent indirect (visual) impacts as a result of the design refinements.	Minor (no change to the Environmental Impact Statement rating)
Telstra House (former post office) (and potential archaeological site) Parramatta LEP Item No. I657; RNE #3037 Local	Direct impact There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
	Settlement and vibration Work in the vicinity of the heritage item would remain largely the same as the work assessed in the Environmental Impact Statement. Therefore, there would not be an increase in nearby construction vibration levels as a result of the proposed design refinements.	Neutral (no change to the Environmental Impact Statement rating)
	Temporary indirect (visual) impact The proposed design refinements would remain within the construction site and would generally be consistent with, or obscured by, the construction of the western services building (as assessed in the Environmental Impact Statement). Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.	Minor (no change to the Environmental Impact Statement rating)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>Permanent indirect (visual) impact</p> <p>The proposed design refinements include the construction of additional aboveground station services infrastructure. The additional aboveground station services infrastructure would be located behind the western services building when viewed from the heritage item, and therefore would be largely obscured from view. As a result, there would not be an increase in the permanent indirect (visual) impacts as a result of the design refinements.</p>	<p>Minor (no change to the Environmental Impact Statement rating)</p>
Shop (and potential archaeological site)	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.</p>	<p>Neutral (no change to the Environmental Impact Statement rating)</p>
Parramatta LEP Item No. I655 Local	<p>Settlement and vibration</p> <p>There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the additional aboveground station services infrastructure.</p>	<p>Minor (no change to the Environmental Impact Statement rating)</p>
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements include the construction of additional aboveground station services infrastructure directly to the east of the heritage item. The additional aboveground station services infrastructure would be subject to design development, indicatively around 21 metres above street level, and therefore would be visible from the heritage item. However, the construction activities would be largely consistent with what is already planned within the construction site (as assessed in the Environmental Impact Statement). Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be visible from the heritage item. However, the station services infrastructure would be located a sufficient distance from the heritage item (about 75 metres) so it would not diminish the main views of the heritage item, which are focussed on the Church Street and Macquarie Street intersections. Therefore, the new station services infrastructure would not overshadow the heritage item or diminish its setting. As a result, there would not be an increase in the permanent indirect (visual) impacts caused by the design refinements.</p>	<p>Negligible (no change to the Environmental Impact Statement rating)</p>

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Bicentennial Square and adjoining buildings	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.</p>	Neutral (no change to the Environmental Impact Statement rating)
Parramatta LEP Item No. I651 Local	<p>Settlement and vibration</p> <p>There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements due to the distance of the item from the proposed work.</p>	Neutral (no change to the Environmental Impact Statement rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would involve the construction of additional aboveground station services infrastructure to the north-east of the heritage item (about 30 metres away). Although site hoarding would partially obscure the construction activities, tall machine plant and construction of the additional aboveground station services infrastructure would still be visible above it from the Macquarie Street frontage of the heritage item. However, the impact would be reduced as the construction activities would be located off to the side of the heritage item at an angle, rather than being immediately adjacent to it. The construction work would not impede the public appreciation of the significant elements of the heritage item. Overall, there would not be an increase in the temporary indirect (visual) impacts caused by the design refinements.</p>	Negligible (no change to the Environmental Impact Statement rating)
	<p>Permanent indirect (visual) impact</p> <p>An additional aboveground station services infrastructure would be located to the north-east of the heritage item (about 30 metres away). The height of the additional aboveground station services infrastructure (subject to design development, indicatively around 21 metres) would be inconsistent with the standard building height along that portion of Macquarie Street. The station services infrastructure generally would not impede the public appreciation of the significant elements of the heritage item, and the visual impact would be reduced as the station services infrastructure would be situated at an angle to the heritage item rather than being immediately opposite it. However, the scale of the additional station services infrastructure would partially overshadow the heritage item. Overall, the design change would result in an increase in the permanent indirect (visual) impacts to the heritage item from neutral to negligible.</p>	Negligible (increased from neutral in the Environmental Impact Statement)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Centennial Memorial Clock Parramatta LEP Item No. I654; RNE #3087 Local	Direct impact There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
	Settlement and vibration The additional aboveground station services infrastructure would be located on the opposite side of Macquarie Street compared to the heritage item (about 40 metres away), therefore it is not expected that the proposed design refinement would result in an increase in nearby construction vibration levels that would impact the heritage item.	Neutral (no change to the Environmental Impact Statement rating)
	Temporary indirect (visual) impact The proposed design refinements would involve the construction of additional aboveground station services infrastructure to the north-east of the heritage item (about 40 metres away). Although site hoarding would partially obscure the construction activities, tall machine plant and the construction of the aboveground station services infrastructure would still be visible above it. Although views of the heritage item from Macquarie Street would not be affected by the design refinement, views of the memorial clock from the south-west within Bicentennial Square would be partially overshadowed by the increased construction activities. Overall, the design refinement would result in an increase in the temporary indirect (visual) impacts to the heritage item from neutral to negligible.	Negligible (increased from neutral in the Environmental Impact Statement)
	Permanent indirect (visual) impact The additional aboveground station services infrastructure would be located about 40 metres north-east of the heritage item. Although views of the heritage item from Macquarie Street would not be affected by the design refinement, due to the height of the station services infrastructure (subject to design development, indicatively around 21 metres) it would be visible above the heritage item when viewed from the south-west within Bicentennial Square. The height of the station services infrastructure and display of modern design materials behind the heritage item would detract from the setting of the heritage item when viewed from this direction. Overall, the design change would result in an increase in the permanent indirect (visual) impacts to the heritage item from neutral to negligible.	Negligible (increased from neutral in the Environmental Impact Statement)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Leigh Memorial Uniting Church Parramatta LEP Item No. I719	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.</p>	Neutral (no change to the Environmental Impact Statement rating)
Local	<p>Settlement and vibration</p> <p>The additional aboveground station services infrastructure would be located on the opposite side of Macquarie Street compared to the heritage item (about 30 metres away), therefore it is not expected that the proposed design refinement would result in an increase in nearby construction vibration levels that would impact the heritage item.</p>	Neutral (no change to the Environmental Impact Statement rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed design refinements would involve the construction of additional aboveground station services infrastructure to the north-west of the heritage item (about 30 metres away). Although site hoarding would partially obscure the construction activities, tall machine plant and the construction of the aboveground station services infrastructure would still be visible above it. However, the heritage item is significant to its contribution to the character of the Macquarie Street streetscape, the site hoarding and construction activity across the road would not diminish from the church's prominent position on Macquarie Street. Therefore, there would not be an increase in the level of temporary indirect (visual) impacts.</p>	Negligible (no change to the Environmental Impact Statement rating)
	<p>Permanent indirect (visual) impact</p> <p>The additional aboveground station services infrastructure would be located north-west of the heritage item on the opposite side of Macquarie Street (about 30 metres away). While the additional station services infrastructure would be taller than the Church, it would be comparable in height to the current building located to the north-west of the Church. The Church is also surrounded by several structures much taller than the station services infrastructure, meaning that it would not detract from the heritage item's aesthetics. Furthermore, the design would continue to allow increased views to and from the item through the construction of a section of the Civic Link. Therefore, the design refinement would continue to result in a positive heritage outcome. Overall, there would not be an increase in the permanent indirect (visual) impacts as a result of the design refinement.</p>	Negligible positive (no change to the Environmental Impact Statement rating)

Clyde stabling and maintenance facility and Rosehill services facility

Since the exhibition of the Environmental Impact Statement, further design development has been undertaken for the Clyde stabling and maintenance facility and Rosehill services facility. This has resulted in the relocation of the operational water treatment plant from its exhibited location adjacent to James Ruse Drive, to within the Rosehill services facility on Unwin Street. The relocation of the water treatment plant to this location would create a common precinct which houses several operational ancillary facilities, including the Rosehill services facility, traction substation and water treatment plant.

Additional aboveground services infrastructure would be required in the location previously identified Environmental Impact Statement for the operational water treatment plant, adjacent to James Ruse Drive (for example, services infrastructure above the tunnel dive structure such as ventilation). This aboveground services infrastructure would be similar to the size and scale previously identified for the operational water treatment plant at this location.

Further detail on the proposed refinements is included in Chapter 2 (Environmental Impact Statement clarifications) of this Submissions Report.

Table 3 provides a revised assessment of built heritage impacts associated with the Clyde stabling and maintenance facility and Rosehill services facility site, which takes into consideration the proposed refinements. Overall, there has been no change in impacts compared to the assessment included in the Environmental Impact Statement.

Table 3 Revised assessment of heritage impacts – Clyde stabling and maintenance facility and Rosehill services facility

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Wetlands Parramatta LEP Item No. I1	<p>Direct impact</p> <p>No native vegetation clearing would be conducted under this proposal, meaning the design refinements would not result in a direct impact to the item.</p>	Neutral (no change to the Environmental Impact Statement rating)
Local	<p>Settlement and vibration</p> <p>Significant elements for this item (wetland vegetation and ecological communities) are not anticipated to be affected by ground vibration caused by the design refinements.</p>	Neutral (no change to the Environmental Impact Statement rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed refinement would involve additional construction activities for the construction of the water treatment plant in the new location to the north of the heritage item. However, the proposed location would be within the Rosehill services facility where similar activities are already planned. As a result, there would not be a noticeable increase in temporary indirect (visual) impacts.</p>	Negligible (no change to the Environmental Impact Statement rating)
	<p>Permanent indirect (visual) impact</p> <p>The proposed refinement would involve the construction of the water treatment plant within the Rosehill services facility site. This would result in additional infrastructure being built; however, it would be co-located with other planned buildings to minimise the visual impact, and it would be located within an area that does not have heritage significant views of remnant vegetation. As a result, there would be no change to visual impacts in this location.</p>	Negligible (no change to the Environmental Impact Statement rating)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
	<p>The previously proposed location of the water treatment plant would instead contain aboveground services infrastructure (for example, for the dive structure). This aboveground services infrastructure would be similar in size to what was assessed for the water treatment plant in the Environmental Impact Statement. Therefore, there would be no change to visual impacts in this location.</p> <p>Overall, there would be no change in permanent indirect (visual) impacts as a result of the proposed design change compared to what has been previously assessed in the Environmental Impact Statement.</p>	
RTA Depot Parramatta LEP Item No. I576	<p>Direct impact</p> <p>There would be no direct impacts to the heritage item as a result of the proposed refinement, as there is no significant fabric present at the location of the proposed work.</p>	Neutral (no change to the Environmental Impact Statement rating)
Local	<p>Settlement and vibration</p> <p>As the new location of the water treatment plant within the Rosehill services facility would be co-located with previously planned aboveground infrastructure of a larger scale, it is not anticipated that there would be an increase in nearby construction vibration levels as a result of the proposed refinement.</p>	Minor to moderate (no change to the Environmental Impact Statement rating)
	<p>Temporary indirect (visual) impact</p> <p>The proposed design change would involve additional construction activities for the construction of the water treatment plant, which would be visible from the retained 1944 brick depot. However, the treatment plant would be within the planned Rosehill services facility where similar activities are already planned. As a result, there would not be a noticeable increase in temporary indirect (visual) impacts compared to the assessment in the Environmental Impact Statement.</p>	Negligible (no change to the Environmental Impact Statement rating)
	<p>Permanent indirect (visual) impact</p> <p>The proposed relocation of the water treatment plant would result in an additional building within the Rosehill services facility to the south and east of the remnant brick depot building of this heritage item. However, the treatment plant would be smaller in scale and height compared to the other structures around it, and therefore would be obscured from view from the heritage item. As a result, there would be no change to permanent indirect (visual) impacts in this location.</p>	Negligible (no change to the Environmental Impact Statement rating)

Item, listing and significance	Potential impact	Revised magnitude (and comparison to Environmental Impact Statement impact rating)
Capral Aluminium Parramatta LEP Item No. I575 Local	Direct impact There would be no direct impacts to the heritage item as a result of the proposed design refinements, as no work would occur within the curtilage of the item.	Neutral (no change to the Environmental Impact Statement rating)
	Settlement and vibration There would not be an increase in nearby construction vibration levels as a result of the proposed design refinements.	Neutral (no change to the Environmental Impact Statement rating)
	Temporary indirect (visual) impact Additional construction activities for the construction of the water treatment plant within the Rosehill services facility would not be noticeable from the Capral Aluminium complex which is located about 150 metres to the east.	Neutral (no change to the Environmental Impact Statement rating)
	Permanent indirect (visual) impact The proposed water treatment plant within the Rosehill services facility would be smaller in scale and height than the adjacent planned infrastructure within the services facility area and therefore would be obscured from view from the heritage item. As a result, there would be no change to permanent indirect (visual) impacts in this location.	Neutral (no change to the Environmental Impact Statement rating)

