

Appendix I

Consideration of clause 228(2) factors and matters of national environmental significance and Commonwealth land

Clause 228(2) Checklist

In addition to the requirements of the *Is an EIS required?* guideline (DUAP 1995/1996) and the *Roads and Related Facilities EIS Guideline* (DUAP 1996) as detailed in the REF, the following factors, listed in clause 228(2) of the Environmental Planning and Assessment Regulation 2000, have also been considered to assess the likely impacts of the proposal on the natural and built environment.

Factor	Impact
<p>a) Any environmental impact on a community?</p> <p>The proposal involves some impact on a community during construction including noise and vibration impacts, generation of airborne dust, temporary changes to traffic and access, and visual amenity impacts</p> <p>Temporary changes to local access would have short term impacts on access to private properties and businesses located in and around the proposal area. These impacts would be mitigated through a TMP, prepared by the Contractor as part of the overall CEMP.</p> <p>Operation of the proposal would result in a change in availability of on-street parking during daytime periods (including on weekends) to around 252 existing parking spaces along Euston Road and McEvoy Street including time restricted parking, disabled parking, mail zones, and no parking morning and afternoon restrictions to establish a time limited Clearway. Of the 252 parking spaces, existing peak time parking restrictions are in place on Monday to Friday for 228 parking spaces. The proposal would also result in the loss of 28 off-street parking. Local side streets at three locations at the western end of the proposal have limited capacity to accommodate the loss of this parking, however the use of commercial car parks located near the areas of impact may assist in reducing potential impacts.</p> <p>An assessment of the impacts on businesses due to the loss of on-street and off-street parking determined that overall, there is expected to be a low impact to businesses located along Euston Road and McEvoy Street from proposed changes in parking conditions, with businesses in many locations along the proposal likely to experience either no or negligible impacts to customer or staff parking due to the proposal. The exception to this includes four locations where moderate to high impacts on businesses are expected. This includes businesses:</p> <ul style="list-style-type: none"> • On the northern side of Euston Road between Maddox Street and Harley Street • On the northern side of McEvoy Road between Harley Street and Loveridge Street • On the southern side of McEvoy Road / Euston Road between Bowden Avenue and Maddox Street • On the southern side of McEvoy Road between Stokes Avenue and Bowden Street. <p>Mitigation measures, such as providing more localised timed parking on nearby side streets, would be considered to minimise the loss of on-street parking from clearways. Roads and Maritime would investigate options to re-instate some of the off-street public parking spaces at 102-112 McEvoy Street, Alexandria as part of detailed design.</p> <p>The flood impact assessment (Arup, 2019b) for the concept design concept, identified that flood level increases of up to 0.25 metres at McEvoy Street near the Fountain Street intersection, and up to 0.07 metres near the Bowden Street intersection in the one per</p>	<p>Short term, minor negative</p> <p>Long term - negative</p> <p>Long term - negative</p> <p>Long term – positive</p>

Factor	Impact
<p>cent AEP. These impacts potentially affect existing buildings and properties along the project corridor.</p> <p>However, the proposal would result in improved traffic flow and road safety along the road corridor and at priority intersections where the proposal is located.</p> <p>Chapter 6 of this REF describes the likely temporary and permanent impacts of the proposal, and lists recommended measures to mitigate impacts during construction and operation. The CEMP would incorporate all of the proposed safeguards for implementation throughout the proposal's construction phase.</p>	
<p>b) Any transformation of a locality?</p> <p>The proposal area is already a developed urban and semi-urban arterial road carrying high volumes of traffic. The proposal area would undergo temporary transformation during construction due to removal of about 49 planted street trees and earthworks required to widen the road corridor at selected locations intersections.</p> <p>The proposal requires strip acquisition of three privately owned commercial properties of between one and 29 square metres. There are a further nine landscaping lots that are already in public ownership that would be required.</p> <p>As discussed above, in the long term the proposal would impact on around 252 on street parking spaces during daytime traffic times of which 228 already operate under peak time parking restrictions. The parking assessment (Jacobs, 2019a) determined that local side streets in the study area would generally have capacity to accommodate any on-street parking places displaced by the clearway operation, with the exception of three locations at the western end of the proposal including:</p> <ul style="list-style-type: none"> • On the northern side of McEvoy Road between Harley Street and Fountain Street • On the northern side of McEvoy Road between Fountain Street and Loveridge Street • On the northern side of McEvoy Road between Botany Road and Elizabeth Street. <p>The proposal would also result in the loss of off-street parking including up to:</p> <ul style="list-style-type: none"> • Twenty-six public parking spaces at 102-112 McEvoy Street, Alexandria • Two customer parking spaces at 35 Lachlan Street, Waterloo. <p>Overall the results of the parking survey identified that there was capacity to accommodate off-street parking lost as a result of the proposal, with the exception of the parking at 102-112 McEvoy Street, Alexandria, where the side streets in this area showed limited capacity to accommodate displaced vehicles.</p>	<p>Long-term – negative</p> <p>Long-term - negative</p> <p>Long-term – negative</p> <p>Long-term - negative</p>
<p>c) Any environmental impact on the ecosystems of the locality?</p> <p>The proposal would result in the removed of about 49 planted trees, including 25 mature flowering and fruiting trees that provide potential habitat as foraging trees for the Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>) and Powerful Owl (<i>Ninox strenua</i>). Both of these species are listed as vulnerable under the BC Act and the Grey-headed Flying-fox is also listed as vulnerable under the EPBC Act.</p>	<p>Short term – minor negative</p>

Factor	Impact
<p>The proposal may also impact indirectly on three <i>Eucalyptus scoparia</i> (<i>Wallangarra White Gum</i>) identified as endangered the BC Act and vulnerable under the EPBC Act.</p> <p>The proposal would have no long term impacts on any aquatic ecosystems, habitats or species.</p> <p>Assessments of Significance (refer to Appendix P) have been carried out for threatened species impacted by the proposal and found that the proposal is unlikely to have a significant impact.</p>	
<p>d) Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?</p> <p>There would be a minor reduction in the aesthetic quality of the locality due to the removal of vegetation, slight increase in road at key intersections and changes to the intersection layout and some property boundaries. These changes, however, would be consistent with the regional context which is urban in character.</p> <p>Mitigation measures including planting of new street trees would be implemented to reduce visual impacts</p>	<p>Short term negative</p> <p>Long term positive</p>
<p>e) Any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?</p> <p>The proposal would result in the following impacts to the heritage listed items:</p> <ul style="list-style-type: none"> • Moderate (temporary) impacts to Former Sydney Water Pumping Station & Valve House Incl. Interiors and Waterloo Water Pumping Station listed on the Sydney Local Environment Plan 2012 (Sydney LEP) and Sydney Water section 170 Register (Item 002132) due to the establishment of a temporary construction compound (Site 4) immediately next to the heritage curtilage. Impacts would reduce to negligible with the implementation of mitigation measures • Minor direct and/or indirect impact to 'Centennial Park, Moore Park, Queens Park and Moore Park Heritage Conservation Area' listed on the State Heritage Register (SHR), Register of national estate (RNE) and Sydney LEP may occur during construction. Impacts would be temporary • Minor direct and/or indirect impact to 'Waterloo Park & Oval Including Grounds and Landscaping' and 'Waterloo Heritage Conservation Area' both listed on the Sydney LEP associated with slight modifications to the northwest and northeast corners of the Elizabeth Street/McEvoy Street intersection. Temporary impacts may also occur to trees roots located within the curtilage of Waterloo Park during utility relocations • Minor visual and potential vibration impacts to: <ul style="list-style-type: none"> – 'Terrace group 'Gordon Terrace' listed on the Sydney LEP – 'Terrace group including interiors' listed on the Sydney LEP – 'Moore Park View Hotel' listed on the Sydney LEP – 'Former ACI AGM Building including interior' listed on the Sydney LEP <p>The proposal would also have a major impact on sections of sandstone kerbs along Kensington Lane, McEvoy Street and Lachlan Street which are unlisted items of</p>	<p>Long term negative</p>

Factor	Impact
heritage significance. Sandstone kerbs would be retained where possible. If retention is not feasible, they would be reinstated or replaced.	
<p>f) Any impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?</p> <p>The proposal would result in the removed of about 49 planted trees, including 25 mature flowering and fruiting trees that provide potential habitat as foraging trees for the Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>) and Powerful Owl (<i>Ninox strenua</i>). Both of these species are listed as vulnerable under the BC Act and the Grey-headed Flying-fox is also listed as vulnerable under the EPBC Act.</p> <p>The proposal may also impact indirectly on three Eucalyptus scoparia (<i>Wallangarra White Gum</i>) identified as endangered the BC Act and vulnerable under the EPBC Act.</p> <p>Assessments of Significance (refer to Appendix P) have been carried out for threatened species impacted by the proposal and found that the proposal is unlikely to have a significant impact. Refer further to Section 6.9.</p>	Long term negative
<p>g) Any endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?</p> <p>The proposal would result in the removed of about 49 planted trees, including 25 mature flowering and fruiting trees that provide potential habitat as foraging trees for the Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>) and Powerful Owl (<i>Ninox strenua</i>). Both of these species are listed as vulnerable under the BC Act and the Grey-headed Flying-fox is also listed as vulnerable under the EPBC Act.</p> <p>The proposal may also impact indirectly on three Eucalyptus scoparia (<i>Wallangarra White Gum</i>) identified as endangered the BC Act and vulnerable under the EPBC Act.</p> <p>Assessments of Significance (refer to Appendix P) have been carried out for threatened species impacted by the proposal and found that the proposal is unlikely to have a significant impact. Refer further to Section 6.9.</p>	Long term negative
<p>h) Any long-term effects on the environment?</p> <p>Benefits would be realised in terms of reduced congestion and improvements in road safety. However, the proposal requires strip acquisition of three privately owned commercial properties of between one and 29 square metres. There are a further nine landscaping lots that are already in public ownership that would be required.</p> <p>In addition, the proposal would change the availability in parking of about 252 on-street parking spaces along Euston Road and McEvoy Street of which 228 already operate under No Parking restrictions during morning or afternoon peaks. The proposal would also impact on around 28 off-street parking spaces with in the proposal area. Local side streets at three locations at the western end of the proposal have limited capacity to accommodate the loss of this parking, however the use of commercial car parks located near the areas of impact may assist in reducing potential impacts.</p> <p>The proposal would result in the removed of about 49 planted street trees comprised of 25 mature trees and 24 immature trees. The proposal would include an Urban Design Plan that would ameliorate these impacts.</p>	Long term negative

Factor	Impact
<p>i) Any degradation of the quality of the environment?</p> <p>Construction would have the potential to result in water quality, visual, noise and air quality impacts. These potential impacts would be managed by the implementation of safeguards listed in Section 7 of this REF.</p>	Short term – minor negative
<p>j) Any risk to the safety of the environment?</p> <p>Traffic management safeguards including the preparation of a traffic management plan, would address safety risks during construction.</p> <p>The flood impact assessment (Arup, 2019b) identified that flood level increases of up to 0.25 metres are predicted at McEvoy Street near the Fountain Street intersection, and up to 0.07 metres near the Bowden Street intersection in the one per cent AEP. These impacts potentially affect existing buildings and properties along the project corridor.</p> <p>The proposal would improve safety for road users during operation by reducing congestion, improved intersection performance and pedestrian/cyclist facilities.</p>	<p>Short term – potential negative</p> <p>Long term negative</p> <p>Long term – positive</p>
<p>k) Any reduction in the range of beneficial uses of the environment?</p> <p>The proposal would not reduce the range of beneficial uses of the environment.</p>	Nil
<p>l) Any pollution of the environment?</p> <p>There is the potential for accidental spills of chemicals during construction which could affect the surrounding land, surface water and groundwater. Management of impacts on surface and groundwater quality is addressed in Section 6.5 of this REF.</p> <p>There is the potential for air quality and acoustic amenity to be reduced during construction activities.</p>	Short-term – minor negative
<p>m) Any environmental problems associated with the disposal of waste?</p> <p>Waste streams generated during construction are common and would pose no difficulty in their disposal. Waste would be recycled wherever possible.</p>	Nil
<p>n) Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?</p> <p>All resources required for the proposal are readily available and are not in short supply.</p>	Nil
<p>o) Any cumulative environmental effect with other existing or likely future activities?</p> <p>Temporary potential cumulative impacts may occur as a result of construction activities occurring simultaneously with other projects around the proposal. This is potentially a key issue for the proposal due to the length of the construction program and the concentration of a number of major development projects in close proximity, particularly the CSELR and New M5 and urban redevelopment including at Green Square.</p> <p>It is recognised that the works for the proposal are smaller in scale relative to many other major transport and urban development projects occurring in or near the study</p>	Short term – negative

Factor	Impact
<p>area. As such, the contribution of the proposal to potential cumulative impacts relating to such things as construction vehicle traffic, changes to land use and visual amenity are expected to be relatively minor compared to other developments recently completed, under construction or proposed in the study area.</p> <p>The long-term effect of the proposal would have a positive cumulative impact on access within the study area by reducing travel times and congestion, improving road safety and supporting nearby urban renewal and transport projects such as the CSELR and New M5.</p> <p>Cumulative impacts of the proposal are discussed in detail in Section 6.11 of this REF.</p>	
<p>p) Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?</p> <p>The proposal is not located within a coastal area and would not result in any impact on coastal processes and coastal hazards.</p>	Nil

Matters of National Environmental Significance and Commonwealth land

Under the environmental assessment provisions of the EPBC Act 1999, the following matters of national environmental significance and impacts on Commonwealth land are required to be considered to assist in determining whether the proposal should be referred to the Australian Government Department of the Environment and Energy.

A referral is not required for proposed actions that may affect nationally listed threatened species, endangered ecological communities and migratory species. Impacts on these matters are still assessed as part of the REF in accordance with Australian Government significant impact criteria and taking into account relevant guidelines and policies.

Factor	Impact
a) Any impact on a World Heritage property?	Nil
b) Any impact on a National Heritage place?	Nil
c) Any impact on a wetland of international importance?	Nil
d) Any impact on a listed threatened species or communities? The proposal would remove about 49 planted trees comprised of 25 mature trees and 24 immature trees. Of the 25 mature trees all are native flowering that present suitable foraging habitat for the Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>) and the Powerful Owl (<i>Ninox strenua</i>) listed as vulnerable under the EPBC Act. The proposal may also have indirect impacts to three <i>Eucalyptus scoparia</i> (Wallangara White Gum) trees, both of which listed as vulnerable under the EBPC Act. These trees are currently not able to complete their natural life cycles as they have been planted in an urban environment outside of their natural range. The Assessments of Significance (refer to Appendix P) found that the proposal would not be likely to significantly impact threatened species. Refer to Section 6.10 .	Long term minor negative
e) Any impacts on listed migratory species?	Nil
f) Any impact on a Commonwealth marine area?	Nil
g) Does the proposal involve a nuclear action (including uranium mining)?	Nil
h) Additionally, any impact (direct or indirect) on the environment of Commonwealth land?	Nil