## Clause 228(2) Checklist

In addition to the requirements of the *Is an EIS required?* guideline 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

## a. Any environmental impact on a community?

There would be short-term negative impacts on the local community during the construction of the proposal as a result of visual amenity impacts, traffic disruptions and potential noise, vibration and air quality impacts.

The proposal is anticipated to have temporary visual impacts on the locality. The temporary impacts would occur through the presence of building vehicles, cranes and equipment. Vegetation would also be removed during the building phase, which would temporarily affect the local landscape. Revegetation and rehabilitation would be carried out to minimise the permanent impact on the landscape and visual characteristics of the area.

Once operational the proposal would have a limited visual impact due to its location within the floodplain, which allows for a better integration of the structure in its setting, complemented by landscape design strategies. Impacts to the key views of the locality would be minimally impacts due to the existing and proposed vegetation which would visually obscure the structure.

Potential traffic impacts during construction would result in minor increases in travel times due to reduced speed limits relating to roadwork and a number of temporary road closures throughout the local road network. Construction and noise vibration impacts would be generated by plant and vehicles during the construction phase. Air quality impacts may occur during construction as a result of dust or vehicles emissions.

The long-term positive impacts of the proposal include the improved access for HML vehicles through the local area, reduced traffic disruptions due to the closure of the New Street level crossing and significantly improved vehicle, pedestrian and cyclist safety.

Short-term minor negative

Long-term major positive

Factor	Impact
b. Any transformation of a locality?	Long-term minor negative
The proposal would have temporary impacts on the visual amenity of the locality due to the placement and movements of construction plant and equipment, as well as the removal of existing native vegetation.	· ·
In the long-term the proposal would result in a transformation of the locality and modification of visual and landscape characteristics by introducing a new feature into the existing landscape. As mentioned in Section 6.11.4, an options assessment process has included urban design principles and objectives to ensure the impact of the proposal on the landscape and key views would be minimised. Safeguard and mitigation measures are provided in Section 6.11.5.	
c. Any environmental impact on the ecosystems of the locality?	Short-term minor negative
The proposal would require the removal of vegetation as well as incidental disturbance of vegetation to allow access for construction activities. Approximately 0.61 hectare of Box Gum Woodland Endangered Ecological Community (EEC) and koala habitat would be impacted by the proposal. This includes the removal of 26 koala feeds trees.	negative
Permanent or temporary loss of habitat from the study area would principally be limited to that associated with the urban parkland, where potential foraging, roosting, sheltering, nesting and possible breeding habitats are currently available for native fauna species (including birds, micro-bats and the Koala). The removal of this habitat is not expected to cause significant impacts to species that may use the area.	
d. Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?	Long-term minor negative
The construction of the proposal has the potential to reduce the aesthetic and recreational value of the locality by increasing dust and noise generation, increasing traffic movements and temporarily impacting on key views of the landscape.	
The operation of the proposal introduces a new feature into the landscape and impacting on key visual views of the locality. A landscape character and visual impact assessment (Appendix K) determined that the proposal has a moderate visual and landscape character impact. The highest impact occurs in the floodplain section of the local area, as the proposal would become the dominant element within this setting. Impacts in other areas are mitigated due to existing and proposed vegetation which would visually obscure the proposed structure. Landscape and urban design strategies outlined in Section 6.11.5 would help to further minimise visual and landscape character impacts.	
Overall the construction and operation of the proposal is not anticipated to have any significant impact on the aesthetic, recreational, scientific or environmental quality of the locality.	

Factor **Impact** Any effect on a locality, place or building having aesthetic, Long-term, minor, anthropological, architectural, archaeological, cultural, negative historical, scientific or social significance or other special value for present or future generations? An assessment of the study area determined that there were no sites of Aboriginal heritage significance near the proposal and no known or predicated Aboriginal sites or objects would be impacted by the proposal. The Gunnedah Maize Mill is located within the study area and is listed on the Gunnedah LEP 2012 and on the NSW heritage register as a place of local heritage significance. The proposal has been designed to minimise direct impact on the Mill, and heritage assessments have determined that the proposal would result in minimal impacts on the heritage significance of the Mill. The proposal would result in some minor land acquisition in the western corner of the Mill property, however no feature of historical significance have been identified within this area. Mitigation and safeguard measures outlined in Section 6.10.5 have been provided to ensure the historical significance of the Mill is respected as much as is feasible and practical. Any impact on the habitat of protected fauna (within the Short-term minor meaning of the National Parks and Wildlife Act 1974)? negative The study area contains urban parkland that resembles open grassy woodland, however it possesses limited and marginal habitat values for native flora and fauna species. Approximately 0.61 hectare of Box Gum Woodland EEC and koala habitat would be impacted by the proposal. This includes the removal of 26 koala feed trees. A biodiversity assessment of the study area determined that eight threatened fauna species and three migratory species may possibly occur periodically. Assessments of significances for these species indicated that the proposal was not likely to cause a significant impact on the species or EEC within the study area. Safeguards and mitigation measures to are outlined in Section 6.5.4. Any endangering of any species of animal, plant or other form Nil of life, whether living on land, in water or in the air? Assessments of significance have been undertaken for one EEC, eight fauna species and three migratory species. It has been determined that significant impacts are unlikely to result from the proposal due to the modified urban setting in which the proposal would be located, the small area of anticipated vegetation clearing and the avoidance and mitigation measures proposed. Safeguards and mitigation measures are outlined in Section 6.5.4.

Factor Impact

h. Any long-term effects on the environment?

Long-term minor negative

The proposal would have minor long-term impacts on the biodiversity of the study are as a result of the permanent loss of 0.61 hectare of Box Gum Woodland EEC and koala habitat, including the removal of 26 secondary koala feed trees. Some of this impact would be mitigated through post-construction revegetation and rehabilitation which would increase connectivity, structural diversity and biodiversity value of vegetation within the study area.

The proposal would also result in minor long-term visual impacts due to the modification of visual and landscape characteristics of the locality by introducing a new feature into the landscape. The construction of the proposal would require acquiring residential properties and a small amount of land included within the curtilage of the Gunnedah Maize Mill

The proposal would provide positive long-term impacts by significantly improving access for HML vehicles through the locality, significantly improving vehicle, pedestrian and cyclist traffic safety. Overall the proposal would reduce local traffic disruptions by replacing the New Street levels crossing, where traffic needs to wait while trains pass through town.

Long-term minor positive

i. Any degradation of the quality of the environment?

Long-term minor negative

The proposal would impact on the biodiversity of the area through the loss of vegetation and potential koala habitat. This loss would be minor in the context of high quality preferred habitat available throughout the locality. Post-construction revegetation and rehabilitation would mitigate this loss and is likely to improve koala habitat quality within the study area. Safeguards would be implemented during construction to prevent any additional loss of biodiversity as a result of pests/weeds and clearing outside of the construction footprint.

Water quality in Blackjack Creek could be reduces as a result of pollutant such as sediment, soil nutrients and spilt fuels or chemicals. Mitigation measures mentioned in Section 7 would be implemented to reduce these impacts.

The proposal would have a temporary visual impact on the locality through the presence of construction vehicles, cranes and equipment. There would be temporary disturbance to key views of the locality. The proposal would modify the visual and landscape characteristics of the locality and introduce a new feature into the landscape. The revegetation and rehabilitation would minimise the permanent impact on the landscape and visual characteristics of the area.

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	Factor	Impact
	j. Any risk to the safety of the environment?  During the construction of the proposal fuels, oils, chemicals and excavated material may all be stored onsite, which would cause harm to the environment (particularly Blackjack Creek) should storage measures fail. Safeguards and mitigation measures mentioned in Section 7 would be put in place to minimise the risk to the safety of the environment.	Short-term minor negative
	There is the potential for road safety to be reduced due to increased heavy vehicles movements through the locality, associated with temporary road closure during construction of the proposal. The proposal would result in a long-term improvement in road safety by providing a grade separated crossing and a dedicated HML route through the locality.	Long-term major positive
	k. Any reduction in the range of beneficial uses of the environment?	Short-term minor negative
	The proposal would result in short-term minor traffic impacts during construction due to temporary road closures. These closures would increase traffic movements on the surrounding road network due to the diversion of vehicles and reduced speed limits. The proposal would also result in temporary and future permanent disruptions to a local bus route due to the need for re-routing.	
	In the long-term the proposal would be consistent with the future uses of the locality and there would be no reduction in the range of beneficial uses of the environment that currently exist. The proposal is anticipated to have a positive impact on the use of the environment by providing a safer crossing on the railway line.	Long-term minor positive
	I. Any pollution of the environment?  The proposal would have the potential to result in some minor negative short-term water pollutions risks resulting from erosion and sedimentation resulting from building work activities such as vegetation clearing. Accidental impacts may also occur as a result of spills of fuel, chemicals or other contaminants from storage areas within the site compound. Management of water quality impacts would be carried out in accordance with the safeguards and mitigation measures outlined in Section 7.	Short-term minor negative
	Short-term air and noise quality impacts are expected during the building phase of the proposal. Dust nuisance represents the greatest potential air quality impacts, however given the relatively small areas of exposed surfaces, potential dust emission would be minor and would be able to be controlled using routine dust management measures. Noise impacts may occur from the operation of plant and machinery. These impacts would be managed in accordance with the safeguards and management measures outlined in Section 7.	
	The proposal is not anticipated to have any long-term negative impacts on the air quality or noise of the locality.	

Factor	Impact
m. Any environmental problems associated with the disposal of waste?	Nil
The proposal is not anticipated to generate or uncover any form of contaminated waste. All waste on site (including stockpiles) would be managed in accordance with the <i>Waste Avoidance and Resource Recovery Act 2001</i> and recycled or reused where possible. All material that cannot be recycled or reused would be disposed of appropriately. It is not anticipated that there would be issues encountered with the disposal of waste.	
n. Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply?	Nil
The proposal would require common construction materials, which are unlikely to be in short supply. All other resources that would be required for the proposal are considered to be readily available. The proposal would not increase demands on resources (natural or otherwise) that are likely to be in short supply.	
o. Any cumulative environmental effect with other existing or likely future activities?	Short-term minor negative
A search of development applications within the locality, as well as a search of the NSW Department of Planning and Environment major projects register was carried out in February 2015. The results of these two searches indicated that no additional significant proposals are to be completed close to the proposal.	
The environmental impacts resulting from the proposal and other minor development proposal and activities within the local area would not generate any major cumulative impacts. During the building phase, the proposal is anticipated to generate minor cumulative impacts in combination with other activities within the local area. These impacts may affect the local amenity (including noise and air quality), visual amenity, traffic and access. The safeguards and mitigation measures outlined in Section 7 would ensure the proposal minimises any potential cumulative impacts.	
p. Any impact on coastal processes and coastal hazards, including those under projected climate change conditions?	Nil
The proposal is not located within a coastal area and would not impact on any coastal processes or coastal hazards.	

## Matters of National Environmental Significance

Under the environmental assessment provisions of the *Environment Protection and Biodiversity Conservation 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 Sustainability, Environment, Water, Population and Communities.

Factor	Impact
a. Any impact on a World Heritage property?	Nil
The proposal would not have any impact on a World Heritage property. There are no World Heritage properties located within 10 kilometres of the proposal.	
b. Any impact on a National Heritage place?	Nil
The proposal would not have any impact on a National Heritage place. There are no National Heritage places located within 10 kilometres of the proposal.	
c. Any impact on a wetland of international importance?	Nil
The proposal would not have any impact on a wetland of international importance. There are no wetlands of international importance located within 10 kilometres of the proposal.	
d. Any impact on a listed threatened species or communities?	Minor
As noted in Section 6.5 and Appendix A (Biodiversity Report) there are seven threatened fauna species that have the potential to occur within the proposal area, one threatened fauna species confirmed to occur within the proposal area and one endangered ecological community confirmed to occur within the proposal area.	Negative
Assessments of significance were carried out on eight fauna species and one EEC. The assessment indicated that given the modified urban setting in which the proposal would be located, the small area of anticipated clearing and the avoidance and mitigation measures proposed, the proposal is not expected to significantly impact on any of the known/potentially habitats within the proposal area.	
e. Any impacts on listed migratory species?	Nil
As noted in Section 6.5 and Appendix A (Biodiversity Assessment Report) thee migratory species were identified as having the potential to be recorded within the proposal site. The three species are highly mobile and may only occur in the proposal site as vagrant seasonal occurrences. Based on the minimal level of impact of the proposal and the anticipated sporadic use of the area by the migratory species, it is highly unlikely that the proposal would impact on the species.	
d. Any impact on a Commonwealth marine area?	Nil
The proposal would not have any impact on a Commonwealth marine area. There are no Commonwealth marine areas located within 10 kilometres of the proposal.	

Factor	Impact
g. Does the proposal involve a nuclear action (including uranium mining)?	Nil
The proposal does not involve a nuclear action.	
Additionally, any impact (direct or indirect) on Commonwealth land?	Nil
No Commonwealth land would be directly or indirectly impacted by the proposal.	

