Appendix B – Significant Residual Impact Guideline Assessment

Remnant vegetation within the defined distance of a watercourse SRI assessment

Connectivity areas SRI assessment

Appendix Table 1 Remnant vegetation within the defined distance of a watercourse SRI assessment

SRI criteria	Project assessment
An action is LIKELY to have a SRI on remnant vegetation within the defined distance of a watercourse if the action will result in:	
(a) permanent removal of vegetation within the defined distance of a stream order 2 or higher where no rehabilitation is proposed;	**Not applicable** As shown on the precinct master plan (refer Figure 3-1), there is no clearing required within 100 metres of the defining bank of the Flinders River and 50 metres of the defining bank of any other drainage features. However, there will be some disturbance (up to 25 ha) through inundation associated with the proposed overland flow dam primarily associated with very sparse RE 4.3.4 (*Eucalyptus coolabah open woodland on drainage lines and/or plains*) / 4.3.10 *Corymbia terminalis +/- Lysiphyllum gilvum and Acacia victoriae low open woodland on alluvium* and grassland RE 4.9.1 (*Astrebla lappacea +/- Aristida latifolia +/- Panicum decompositum grassland on Cretaceous sediments*). The overland flow dam would unlikely retain water year round and is expected to create an environment similar to that of the existing oxbow lake wetland and smaller mapped wetland downstream of the proposed overland flow dam. This is not expected to result in a significant residual impact to the MSES.
(b) building of an online detention basin greater than 1 ha in size or other similar works that result in the clearing of vegetation which fragments up and downstream remnant areas on any stream order; OR	**Not applicable** As shown on the precinct master plan (refer Figure 3-1) there is no clearing required within 100 metres of the defining bank of the Flinders River and 50 metres of the defining bank of any other drainage features. However, there will be some disturbance (up to 25 ha) through inundation associated with the proposed overland flow dam primarily associated with very sparse RE 4.3.4 (*Eucalyptus coolabah open woodland on drainage lines and/or plains*) / 4.3.10 *Corymbia terminalis +/- Lysiphyllum gilvum and Acacia victoriae low open woodland on alluvium* and grassland RE 4.9.1 (*Astrebla lappacea +/-*

SRI criteria	Project assessment
	Aristida latifolia +/- Panicum decompositum grassland on Cretaceous sediments). The overland flow dam would unlikely retain water year round and is expected to create an environment similar to that of the existing oxbow lake wetland and smaller mapped wetland downstream of the proposed overland flow dam. This is not expected to result in a significant residual impact to the MSES.
(c) permanent clearing of more than 0.5 ha of an endangered or of concern RE, within the defined distance of a watercourse.	**Not applicable** There are no endangered of concern RE's on the site.

Appendix Table 2 Connectivity areas SRI assessment

SRI criteria	Project assessment
In deciding if a SRI is likely to occur on a connectivity area, an administering agency (that is the State) must consider the significance of the vegetation in the context of the local and the regional landscape. The measure of impact significance is based on how the prescribed activity will change the size and configuration of remnant vegetation areas and the level of fragmentation that will result at the local scale (5 km radius) given regard to the regional scale (20 km radius). Impact significance is measured by the reduction in the extent of remnant vegetation and increase in patchiness at the local scale. In highly fragmented landscapes at the regional scale, a SRI on connectivity areas will be associated with smaller impacts compared to impacts within regionally intact landscapes, as the extent and configuration of existing connectivity areas in fragmented landscapes is limited. If the prescribed activity will have a SRI on connectivity areas, then offsets will be required at a multiplier of one and will need to be located in fragmented subregions to ensure that any lost connectivity is replaced in another fragmented landscape."	**Not applicable** The primary mitigation measure associated with the project is incorporating approximately 420 ha of natural features (i.e. watercourses, wetlands and regulated vegetation) with vegetated buffers of 'Least Concern' regional ecosystems as well as the outcomes of the NRA (2019) land suitability study into the precinct master plan (refer Figure 3-1). The clearing will retain connectivity through the site to key features including wetlands and watercourses (i.e. the Flinders River) and drainage features within a larger area of connected remnant vegetation within all directions of the site.