



planning consultants

APPENDIX E

Mitigation Measures Table

SSD-73365208

Fairfield Showground Community and Events Centre

Prepared for: Fairfield City Council
February 2026

Mitigation Measures submitted with EIS			
Ref.	Environmental Impact	Mitigation Measure	Further Discussion in EIS
OPMM1	Scale of Events	Proportional Usage - The Fairfield Showground Community and Events Centre is permitted to be used as an entertainment facility no more than 180 days in a single calendar year.	Section 4.4.1
DMM1	Demolition	Demolition Works - All demolition works are to comply with Australian Standard AS 2601 – 2001: The Demolition of Structures.	Section 4.5
CEMM1	Engagement	Engagement Plan – Fairfield City Council is to prepare and implement a community engagement plan to provide updates to the relevant stakeholders and community at key milestones of the project including at the determination of the State Significant Development Application, prior to any operational changes within Fairfield Showground resulting from the project and at key stages of demolition and construction of the project.	Section 5.5.1
BMM1	Biodiversity	CEMP Biodiversity Requirements - A CEMP is required for the construction phase of the project, and will be prepared prior to issue of the Construction Certificate. The CEMP is to include, as a minimum, industry-standard measures for the management of soil, surface water, weeds and pollutants, as well as site-specific measures relating to biodiversity (BMM2 to BMM6).	Section 6.4
BMM2	Biodiversity	Project Ecologist - Prior to construction, the applicant is to commission the services of a qualified and experienced Ecologist Consultant (minimum 3 years' experience) with a minimum tertiary degree in Science, Conservation, Biology, Ecology, Natural Resource Management, Environmental Science or Environmental Management. The Ecologist must be licensed with a current Department of Primary Industries Animal Research Authority permit and New South Wales Scientific License issued under the BC Act. The Ecologist will be commissioned to: <ul style="list-style-type: none"> • Undertake an extensive pre-clearing survey, delineating habitat-bearing trees and shrubs to be retained/removed; and • Supervise the clearance of trees and shrubs that contain habitat (e.g. hollows or nests) in order to capture, treat and/or relocate any displaced fauna. 	Section 6.4
BMM3	Biodiversity	Sediment and Erosion Control - Appropriate erosion and sediment control must be erected and maintained at all times during construction in order to avoid the potential of incurring indirect impacts on biodiversity values. As a minimum, such measures are to comply with the relevant industry guidelines such as 'the Blue Book' (Landcom 2004).	Section 6.4
BMM4	Biodiversity	Temporary Fencing - Temporary fencing should be erected around all retained native canopy vegetation. In particular the trees located within the development footprint proposed for retention may incur indirect impacts on biodiversity values due to the construction works.	Section 6.4
BMM5	Biodiversity	Storage and Stockpiling - Allocate all storage, stockpile and laydown sites away from any native vegetation that is planned to be retained. Where practical avoid importing any soil from outside the site as this can introduce weeds and pathogens to the site in order to avoid the potential of incurring indirect impacts on biodiversity values.	Section 6.4
BMM6	Biodiversity	Stormwater Protection During Construction - Potential impacts relating to stormwater and runoff will be managed during construction and operation phases. The CEMP will guide stormwater management during the construction phase of development.	Section 6.4
BMM7	Biodiversity	Landscaping - Landscaping is to incorporate locally indigenous species representative of Cumberland Plain Woodland TEC.	Section 6.4
BMM8	Biodiversity	Swift Parrot Seasonal Mitigations - This species has been historically recorded foraging within the Subject Property. Vegetation clearing activities are to be undertaken outside of the NSW migration season for this species (February – October). Clearing activities scheduled outside of this period overlaps with the breeding period of locally occurring native fauna. Any hollow bearing trees identified during the pre-clearing survey required for removal must be inspected for nesting activity. If nesting activity of a native species is identified within a hollow/nest. The tree is not to be removed until juveniles are old enough to be relocated. It is	Section 6.4

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		recommended that targeted surveys be undertaken within the migratory season to ascertain whether the species is utilising the Subject Property on an annual basis.	
BMM9	Biodiversity	Microbat Pre-Demolition Inspection - A suitable qualified ecologist is required to conduct a pre-demolition inspection of any buildings to be demolished. The inspection will require searches for microbat roosts or evidence of roosting such as urine staining.	Section 6.4
BMM10	Biodiversity	Outdoor Lighting - Lighting is to comply with AS/NZS 4282:2019 to minimise the potential impacts associated with outdoor lighting.	Section 6.4
TMM1	Tree Impacts	<p>Tree Sensitive Footpath/Hard Surfacing Construction in the TPZ - To minimise the impacts of new footpaths and hard surfacing in the TPZ of trees, tree sensitive construction methods are to be used to minimise the impact to roots. The hard surfacing is to be constructed above existing grades in the TPZ of the trees. The location of retaining pegs is to be flexible, avoiding damage to structural roots.</p> <p>If excavations are essential, the excavations are to be supervised by a Project Arborist with a minimum AQF Level 5 qualification. All excavations for the footpath are to be carried out manually to avoid impacting retained tree roots. All tree roots greater than 40mm in diameter are to be retained unless the Project Arborist has assessed and advised that the pruning/severing of the root will not impact the condition or stability of the tree. Manual excavation may include the use of pneumatic and hydraulic tools, high pressure air, or a combination of high-pressure water and a vacuum device.</p> <p>Where tree roots greater than 40mm are encountered that must be retained, footpaths are to be elevated over the individual tree root to allow for its retention. Using pier and beam bridges as per the image below is required, as it will allow for future growth of the tree roots, reducing future damage to the pavement from the roots.</p>	Section 6.4
TMM2	Tree Impacts	<p>Tree Sensitive Underground Services in the TPZ - AS4970 Protection of trees on development sites (2009) recommends that all underground services located inside the TPZ of any tree to be retained should be installed via tree sensitive techniques. This is to include either directional drilling methods or manual/non-destructive excavations to minimise the impact to trees identified for retention.</p> <p>If directional drilling is proposed, section 4.5.5 of AS4970-2009 says that 'The directional drilling bore is to be at least 600 mm deep. The project Arborist is to assess the likely impacts of boring and bore pits on retained trees'.</p> <p>If manual excavations are proposed, all excavations for the services are to be carried out manually under the supervision of the project Arborist (minimum qualification AQF 5). Manual excavation may include the use of pneumatic and hydraulic tools, high-pressure air or a combination of high-pressure water and a vacuum device. All roots greater than 40mm in diameter are to be retained in the service trench. The service pipe is then be threaded below the retained roots where practical. Roots greater than 40mm within the alignment of the service pipe are only to be severed/pruned under the approval of the project Arborist. All root pruning is to be in accordance with AS4373 Pruning of amenity trees (2007).</p>	Section 6.4
TMM3	Tree Impacts	Bulk Earthworks - Soil Level Modifications (Cut and Fill): To minimise the impact of bulk earthworks, all regrading must be avoided in the TPZ wherever practical. The bulk earthworks plan has been assessed in this report. Birzulis Associates have identified specific tree sensitive areas where bulk earthworks/regrading must be avoided in the TPZ of trees. They have also advised that regrading can be avoided/minimised in the TPZ of trees in areas where the depth of cut/fill is +/- 200mm of significant roots will be impacted. The ensure that the trees are not adversely	Section 6.4

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		<p>impacted, all bulk earthworks in the TPZ where the depth of cut/fill is +/- 200mm must be in accordance with AS4970-2009 and supervised by the project arborist, significant roots must not be impacted during these works. Bulk earthworks can impact trees for the following reasons.</p> <ul style="list-style-type: none"> • Cut: A tree's root system is generally located far shallower in the soil than is normally considered, and should be thought of as a 'root plate'. The majority of a tree's root growth is usually found in the upper 600mm of the soil closest to the surface, but a percentage of the roots will extend deeper in the soil. Any significant cut/lowering the soil level in the TPZ can impact the tree. The only way to identify the precise impact to a tree's root system by cut in the TPZ is by carrying out detailed root investigation to identify the individual significant roots. • Fill: Tree roots require air, water, and nutrients to function properly. Increasing the soil level in the TPZ can impact the trees by reducing the availability of water, nutrients and air to the trees underlying root system and can cause the decline of a trees health and vigour. Placing fill directly against the trunk of a tree can potentially cause collar rot. Collar rot forms when soil against the trunk of the tree accelerates sapwood or heartwood decay. 	
TMM4	Tree Impacts	<p>Tree Sensitive Footings for Fence in the TPZ - To minimise root loss in the TPZ of the trees, the footings of the proposed fence are to be flexible during construction as per the following:</p> <ul style="list-style-type: none"> • All excavations for posts must be carried out manually under the supervision of the Project Arborist. • The location of posts must be flexible to avoid significant roots greater than 40mm in diameter. All roots greater than 40mm in diameter must be retained unless the Project Arborist has assessed and approved in writing that severing the root will not impact the condition or stability of the tree. • The base of the fence must be located on or above existing soil grades. • The posts should be located a minimum of 200mm from any root to be retained that is greater than 40mm in diameter. 	Section 6.4
TMM5	Tree Impacts	<p>Tree Protection Plan - All trees to be retained must be protected in accordance with AS4970-2009. A site-specific Tree Protection Plan (TPP) is prepared in accordance with AS4970 Protection of trees on development site (2009) and the recommendations of the Arboricultural Impact Assessment prepared by Urban Arbor dated 20 August 2025. The TPP is to be developed in conjunction with the overall Construction Management Plan for the site, based on finalised design layout and other factors, such as site access routes and storage locations. The TPP is to be prepared prior to the issue of the Construction Certificate and tree protection measures implemented prior to any works and maintained until issue of the final Occupation Certificate.</p>	Section 6.4
TMM6	Tree Impacts	<p>Tree Removal – Tree removal is limited to tree Nos. 17, 18, 19 23, 25, 26, 27, 28, 77, 78, 79, 83, 84 as detailed in the Arboricultural Impact Assessment prepared by Urban Arbor dated 20 August 2025. Tree removal works are to be undertaken in accordance with the WorkSafe Australia Guide to Managing Risks of Tree Trimming & Removal Work.</p>	Section 6.4
TIA1	Traffic Parking and	<p>Infrastructure Upgrades - Provide the following upgrades prior to operation:</p> <ul style="list-style-type: none"> • Upgrade existing carpark CP8; • Upgrade internal circulation road; • Construction of a new carpark (CP-B) with 67 formal car parking spaces; • Provision of a new zebra crossing internal to the site; 	Section 6.6

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			<ul style="list-style-type: none"> Widening of the pedestrian footpath adjacent to the market and associated new wombat crossing. 	
TIA2	Traffic Parking	and	<p>Fairfield Markets – During the weekday operation of the Fairfield Markets the Fairfield Showground Community and Events Centre is restricted to a maximum capacity of 500 persons. During the weekend operation of the Fairfield Markets the Fairfield Showground Community and Events Centre is restricted to a maximum capacity of 210 persons in dual sports mode.</p>	Section 6.6
TIA3	Traffic Parking	and	<p>Fairfield Showground Community and Events Centre – During a large-scale event, being an event greater than 1,000 patrons at any one time at the Fairfield Showground Community and Events Centre, other ticketed events cannot occur at the grandstand, function centres and market awning within the Fairfield Showground.</p>	Section 6.6
TIA4	Traffic Parking	and	<p>Detailed Construction Traffic Management Plan – Preparation and implementation of a Detailed Construction Traffic Management Plan.</p>	Section 6.6
TIA5	Traffic Parking	and	<p>Events Traffic Management Plan – Preparation and implementation of an events traffic management plan for all events greater than 1,000 patrons. The plan is to include the following measures:</p> <ul style="list-style-type: none"> <p>Utilise northern site access: This mitigation measure involves utilising the northern site access on Smithfield Road to redistribute southbound traffic. Although this access is currently closed to general traffic, temporarily opening it during large-scale events at the Community and Events Centre can help redistribute the high traffic volumes that are otherwise required to access the site through the southern site access. In particular, it would alleviate pressure on the right-turn inbound movement on the northern leg of the Smithfield Road/ Richards Road intersection, which is currently predicted to operate above capacity with the addition of the large-scale development traffic.</p> <p>To implement this measure, traffic cones and appropriate signage (e.g. variable message signs) are required on Smithfield Road to redirect a proportion of right-turning vehicles into the site via the northern showground access, with the traffic cones arranged to create a temporary right-turn lane within the existing right-most southbound through lane. The proportion of vehicles redirected through the northern access will depend on how the mitigation strategy is managed. For example, event tickets could specify the designated entry point indicating either the southern or northern access to ensure an appropriately balanced distribution of traffic.</p> <p>Detour to roundabout: Another strategy to redistribute the concentrated traffic currently entering the site via the southern access on Smithfield Road is to redirect northbound vehicles on Smithfield Road to use the Moonlight Road/ Greenfield Road roundabout access instead. Similar to the previous measure, the use of appropriate signage (including detour signage in conjunction with variable message signage) is required to guide vehicles towards the alternate entry point. This approach would help relieve pressure on the overburdened right-turn movement by rerouting opposing traffic that currently turns left into the site from Smithfield Road to the Moonlight Road/ Greenfield Road roundabout. Vehicles turning right into the site will then not have to compete with vehicles turning left into the site (as these vehicles will be using the roundabout access).</p> <p>It is proposed that northbound traffic on Smithfield Road would be detoured to the Moonlight Road/Greenfield Road roundabout by turning left onto Scotchey Street at the Smithfield Road/ Scotchey Street intersection and then right onto Greenfield Road at the Scotchey Street/ Greenfield Road intersection.</p> 	Section 6.6

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TIA6	Traffic Parking	and	<p>Minimising Private Vehicle Usage – Implementation of the following management measures to minimise private vehicle usage:</p> <ul style="list-style-type: none"> • Provide a Travel Access Guide (TAG) which would be provided to all staff and publicly available to all visitors. The document would be based on facilities available at the site and include details on the surrounding public transport services and active transport options. The TAG would be updated as the surrounding transport environment changes. • Provide public transport information boards, web services and/or apps to inform staff and visitors of alternative transport options (the format of such information would be based upon the TAG). • Promote the availability of nearby car-sharing pods for trips that require the use of private vehicles. • Provide bicycle facilities in excess of minimum requirements including secure bicycle parking for staff and bicycle racks/rails for visitors. • Encourage staff and visitors that drive to the site and park to carpool. For staff this could be done through the creation of a carpooling club or registry/ forum. • Regularly promote ride/ walk to work days. • Provide a regular newsletter to all staff members bringing the latest news on sustainable travel initiatives in the area. • Consider implementation of shuttle buses for large-scale events to encourage a mode share shift from private vehicle use to public transport for visitors. 	Section 6.6
NVIA1	Noise Vibration	and	<p>Construction Noise Requirements – Compliance with the construction noise requirements outlined in the Noise and Vibration Impact Assessment prepared by Resonate dated August 2025.</p>	Section 6.7
NVIA2	Noise Vibration	and	<p>Acoustic Design Requirements – The building is to achieve compliance with the following acoustic ratings (at a minimum):</p> <ul style="list-style-type: none"> • External façade to have a minimum sound insulation performance of Rw 50. • External doors to achieve Rw 30. • External glazing to achieve Rw 45. • Roof/ceiling construction to achieve Rw 45. • Plant room wall to achieve Rw 55. • Any wall separating the AHU/ERV should achieve Rw 55. • Glazing on the roof deck to achieve Rw 50. 	Section 6.7
NVIA3	Noise Vibration	and	<p>Fairfield Showground Operational Noise Management Plan – Update or implementation of a Fairfield Showground Operational Noise Management Plan including:</p> <ul style="list-style-type: none"> • Car parks CP-2 and CP-3 ARE not to be used for any use of Fairfield Showground Community and Events Centre that has a start/finish time after 10:00pm. • Car park IP-E is not to be used for any use of Fairfield Showground Community and Events Centre. • Adhered the existing measures within the Fairfield Showground Operational Noise Management Plan. • Facility awareness training/environmental inductions to include a section on noise management measures. Ensure that employees are aware of the locations of sensitive receivers. • Signage should be posted on site to ensure employees are aware of not undertaking noisy activities. Educate employees to undertake noisy activities away from sensitive receivers. • Training is to be provided via induction training for responsible operation of all noise intensive equipment and PA systems with respect to minimising potential operational noise. • Noise levels of events are to adhere to the recommended noise levels in the Noise and Vibration Impact Assessment prepared by Resonate dated August 2025. This can be achieved through noise 	Section 6.7

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		<p>monitoring during events or the use of noise limiters through the PA system.</p> <ul style="list-style-type: none"> • Windows are to be closed in the Community and Events Centre for sports games during the night time period and for all high noise level events such as concerts, inside the facility. • Road traffic noise management measures include the following for the facilities: <ul style="list-style-type: none"> - Enforce driving speed limit within the facilities. - Limit unnecessary acceleration and braking. - Encourage users of the site to find a parking space promptly and minimise idling time. - Implement drop off and pick off points for shuttle buses and the like that are located away from adjacent sensitive receivers insofar as practical. 	
FMM1	Flood	<p>Flood Emergency Management Plan – Update the Fairfield Showground Flood Emergency Management Plan in accordance with the Flood Impact and Risk Assessment for Fairfield Showground Community and Events Centre prepared by WMA Water dated 10 July 2025 including the following requirements:</p> <ul style="list-style-type: none"> • Site information • Flood behaviour • Actions prior to a flood (preparation) • Actions during a flood (response) • Actions following a flood (recovery) <p>The updated plan is to be clear about the response for the site, since it is subject to flash flooding and inundation can occur with very little warning. Allocation of responsibilities is to be clear so that a response can be actioned as soon as it is required.</p> <p>The updated plan is to apply the following principles:</p> <ul style="list-style-type: none"> • In the event of flooding, occupants of the site are to seek refuge within the ground level of the Fairfield Showground Community and Events Centre, which will remain free from inundation even in the most extreme event; • Occupants are not to attempt to leave the site during a flood event. Occupants are not to attempt to walk or drive through floodwater. Occupants are to shelter in place until floodwaters subside. • If emergency access to or from the building, this should be via the southern foyer only. 	Section 6.10
FMM2	Flood	<p>Location of Services – No essential equipment (power, sewer, water, fire, services) are to be located on the B1 Level to ensure functioning of critical services during a PMF event.</p>	Section 6.10
AHMM1	Aboriginal Heritage	<p>Unexpected Finds Protocol - If, during the proposed works, any Aboriginal objects or evidence of Aboriginal occupation are uncovered, all work must cease in the vicinity of the suspected Aboriginal objects or evidence of occupation, and further advice is to be sought from a qualified and experienced archaeologist.</p>	Section 6.14
HMM1	Heritage	<p>Construction Management – The construction environmental management plan (CEMP) is to include specific measures to ensure no polluted run-off from the construction site is capable of reaching/impacting the Fairfield Indigenous Flora Park including measures to protect Orphan School Creek.</p>	Section 6.15
SIAMM1	Social Impact	<p>Complaints Handling – A complaints handling procedure is to be incorporated into the relevant construction and operational management plans.</p>	Section 6.16
BFMM1	Bushfire	<p>Landscaping - Any proposed landscaping is to also achieve the performance of an IPA standard. The landscaping specifications listed below have been designed to achieve this for the site.</p> <ol style="list-style-type: none"> Tree canopy cover is not exceed 40% at maturity. Trees at maturity cannot touch or overhang the building. 	Section 6.18

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		<ul style="list-style-type: none"> c. Tree canopies are to be separated by minimum 2 m. Canopy separation is not required parallel to the building. d. Garden beds are defined, narrow, separated and spread out with an avoidance of large mass-planting beds within 10 m of the building. e. Plantings are separated from the building by turf, gravel or pavement. f. Planting choice within garden beds to be low-lying avoiding large grasses. Taller shrubbery is acceptable for visual screening parallel to the building providing there is adequate separation from the building. 	
BFMM2	Bushfire	Construction Level - The building is to be designed and constructed in accordance with BAL-12.5 of Australian Standard AS 3959-2018 <i>Constructions of buildings in bushfire-prone areas</i> (AS 3959).	Section 6.18
BFMM3	Bushfire	Access - The proposed access road is to comply with Table 6.8b of 'Planning for Bush Fire Protection 2019' for the standard of a non-perimeter road.	Section 6.18
BFMM4	Bushfire	Bushfire Emergency Management and Evacuation Plan - A 'Bushfire Emergency Management and Evacuation Plan' is to be prepared in accordance with the RFS document 'A Guide to Developing a Bushfire Emergency Management and Evacuation Plan' prior to receiving Occupation Certificate. The plan is to address the following: <ul style="list-style-type: none"> a. A mechanism for the early evacuation of patrons or closure of the site when fire activity occurs in the area. b. A decision matrix to guide early off-site evacuation or shelter on site in the event of there not being enough time to evacuate the site before the impact of bushfire. 	Section 6.18
BFMM5	Bushfire	Hydrants - Hydrants are to be installed to comply with Australian Standard AS 2419.1 – 2021 Fire Installations – System Design, Installation and Commissioning (AS 2419). Hydrants will need to be installed to ensure compliant distances (i.e. all sides of a building are within 70m of a hydrant by lay of the hose, or 90 m if a tanker can park inline a maximum 20m from the hydrant). Hydrants cannot be placed within a road carriageway or parking area.	Section 6.18
BFMM6	Bushfire	Gas - Any gas services are to be installed and maintained in accordance with AS/NZS 1596-2014 The storage and handling of LP gas (Standards Australia, 2014).	Section 6.18
SMM1	Staging	Construction Noise and Vibration Management Plan - – The Construction Noise and Vibration Management Plan is to include specific measures to manage the construction noise and vibration impacts from Stage 2 on any occupants utilising the Fairfield Showground Community and Events Centre constructed under Stage 1.	Section 6.19

Fairfield City Council is committed to undertaking all of the above mitigation measures.