Land Use Conflict Risk Assessment for Tripoli Way Extension EIS

Tripoli Way Extension

Shellharbour City Council

76 Cygnet Ave Shellharbour City Centre

Prepared by:

SLR Consulting Australia

SLR Project No.: 660.V30219.00000

30 April 2024

Revision: 1.1

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1	24 April 2024	D Williams	R Dwyer	R Dwyer
1.1	30 April 2024	D Williams	R Dwyer	R Dwyer

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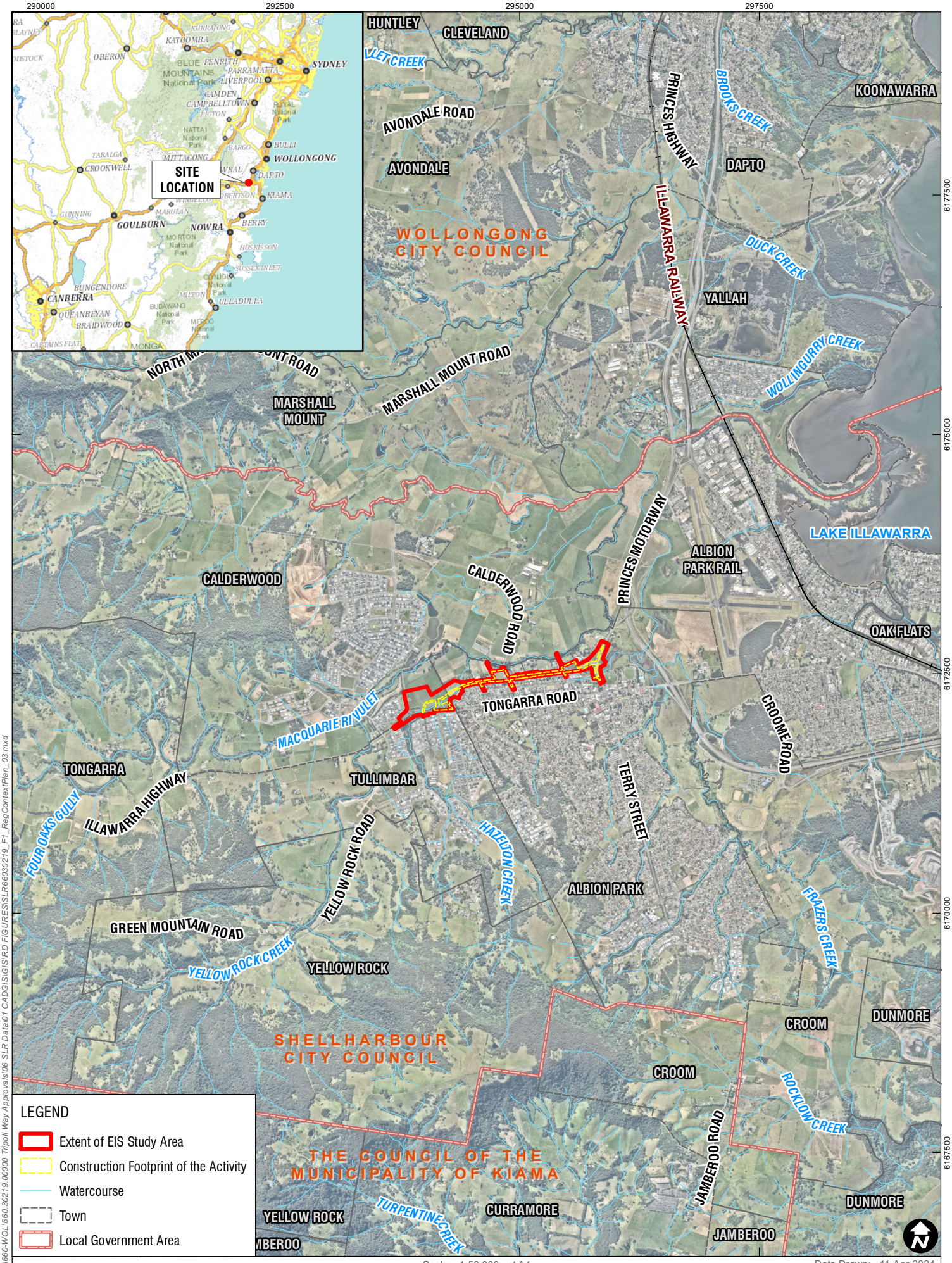
1.0 Introduction

Shellharbour City Council (Council) propose to develop the Tripoli Way Extension (TWE) at Albion Park, which would traverse and extend Tripoli Way and The Expressway running east / west and parallel to the north of Tongarra Road/Illawarra Highway (the Activity). Construction and operation of the Activity encompasses the full length of the existing Tripoli Way, connecting with Tongarra Road/Illawarra Highway at the intersection with Broughton Avenue at the western extent and continuing east to connect with Terry Street. A plan showing the regional context of the Activity is shown in **Figure 1**.

Once constructed the primary function of the Activity will be to alleviate the impacts of traffic growth along Tongarra Road, ease traffic congestion within the Albion Park town centre, increase the safety of roads within Albion Park, support future development and provide a valuable addition to the transport network.

The Activity has the potential to directly and indirectly impact land suitable for agriculture. The western end of the Activity traverses through land zoned RU2 Rural Landscape under *Shellharbour Local Environmental Plan 2013* (SLEP 2013). During construction it is likely that approximately 4.3 hectares (ha) of RU2 zoned land will be disturbed. Once construction is complete and the TWE is operational it is likely that up to 2.6 ha of the disturbed land will be remediated to existing conditions (grazing land) with the remaining 1.7 ha being occupied by the road and its associated infrastructure. The amount of land suitable for agriculture that would be lost is relatively small and the area is already experiencing fragmentation from urbanisation of the broader area.

Notwithstanding the above a Land Use Conflict Risk Assessment (LUCRA) has been carried out and is the subject of this report. This LUCRA report has been prepared generally in accordance with the Department of Primary Industries – Agriculture (DPI - Agriculture) *Land Use Conflict Risk Assessment Guide*.


290000
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SITE LOCATION
SYDNEY
WOLLONGONG
CANBERRA
GOULBURN
NOWRA
HUNTLEY
CLEVELAND
VLET CREEK
AVONDALE ROAD
AVONDALE
PRINCES HIGHWAY
BROOKS CREEK
KOONAWARRA
DAPTO
ILLAWARRA RAILWAY
DUCK CREEK
YALLAH
WOLLONGONG CITY COUNCIL
WOLLINGURRY CREEK
MARSHALL MOUNT ROAD
MARSHALL MOUNT
LAKE ILLAWARRA
PRINCES MOTORWAY
ALBION PARK RAIL
CALDERWOOD
CALDERWOOD ROAD
OAK FLATS
TONGARRA ROAD
MACQUARIE RIVULET
CROOME ROAD
TONGARRA
TULLIMBAR
TERRY STREET
ILLAWARRA HIGHWAY
FOUR OAKS GULLY
YELLOW ROCK ROAD
HAZELTON CREEK
ALBION PARK
FRAZERS CREEK
GREEN MOUNTAIN ROAD
YELLOW ROCK CREEK
YELLOW ROCK
SHELLHARBOUR CITY COUNCIL
CROOM
DUNMORE
ROCKLOW CREEK
THE COUNCIL OF THE MUNICIPALITY OF KIAMA
JAMBEROO ROAD
TURPENTINE CREEK
CURRAMORE
JAMBEROO
LEGEND
Extent of EIS Study Area
Construction Footprint of the Activity
Watercourse
Town
Local Government Area
0
1
2
km
Scale: 1:50,000 at A4
Coordinate System: GDA 1994 MGA Zone 56
Date Drawn: 11-Apr-2024
Project Number: 660.030219
Sheet Size : A4
Data Source: NearMap March 30, 2024
Regional Context Plan
FIGURE 1
SLR
H:\Projects-SLR\660-SnyWOL\660-WOL\660.30219.00000 Tripoli Way Approvals\06 SLR Data\01 CADGIS\GIS\RD FIGURES\SLR66030219_F1_RegContextPlan_03.mxd

2.0 Site Characteristics

2.1 Nature of the Activity Proposed

The construction of the TWE will extend the existing Tripoli Way and The Expressway alignment which runs parallel and to the north of Tongarra Road/Illawarra Highway. It will connect to Terry Street in the east and Tongarra Road/Illawarra Highway at the Broughton Avenue roundabout in the west.

The proposed Activity will deliver improved traffic flow through Albion Park. Increased traffic within the surrounding areas of Albion Park, Tullimbar and Calderwood has increased congestion and decreased amenity.

2.2 Nature of the Precinct

The TWE will be situated in areas of low density residential and rural-residential dwellings within Albion Park. The route crosses a number of private properties and along The Expressway and the existing Tripoli Way Road alignments, both of which front existing house blocks. The alignment also follows the current entrance road into the Albion Park Landscaping Supplies. The alignment crosses Hazelton Creek and traverses across part of the Macquarie Rivulet floodplain zone which is an area used for cattle grazing. The land within the Activity Area is dominated by cleared land, historically used for livestock grazing, agriculture and low-density residential development. The clearing associated with these lands uses has severely interrupted native vegetation connectivity throughout the region resulting in limited to no native vegetation corridors outside of drainage lines. Most of the established remnant native vegetation is concentrated around drainage lines.

2.3 Topography, Climate and Natural Features

The TWE is situated within the Fairy Meadow and Albion Park soil landscapes of Kiama Coastal Plains. The Fairy Meadow soil landscape consists of gently undulating broad alluvial plains, flood plains, valley flats and terraces. This soil landscape has almost been completely cleared of low open-forest and woodland and has been mostly redeveloped for commercial, industrial and residential use. Local relief is less than 10 metres, and slope gradient is less than 5 metres. Soils are highly permeable and possess a high water table.

The Albion Park soil landscape is characterised by short steep slopes with long, gentle footslopes. Slope gradients of footslopes within this soil landscape range from 5-15% and upper slopes 15-50%. Much of the TWE and surrounding land has been extensively cleared, though remnants of tall open-forest still remain. Soils within the Albion Park soil landscape are moderately deep and are subject to waterlogging, with a seasonably high water table.

The annual average maximum and minimum temperatures recorded at the Albion Park weather station are 22.5°C and 11.4°C respectively. On average, January is the hottest month, with an average maximum and minimum temperatures of 27.1°C and 17.1°C, respectively. July is the coldest month, with average maximum and minimum temperatures of 17.8°C and 6.2°C, respectively. The annual average relative humidity reading collected at 9am from the Albion Park AWS is 67% and at 3pm the annual average is 59%.

Rainfall data collected at the Albion Park AWS shows that February is the wettest month, with an average rainfall of 145.5 mm over an average of 12.0 rain days. The average annual rainfall is 893 mm with an average of 120.6 rain days per year.

On an annual basis, the most common winds were from the west and are above 7.5 m/s. The winds are also more frequent from the western and northeastern quadrants. Seasonally the westerly winds dominate through the autumn, winter and spring. During summer months

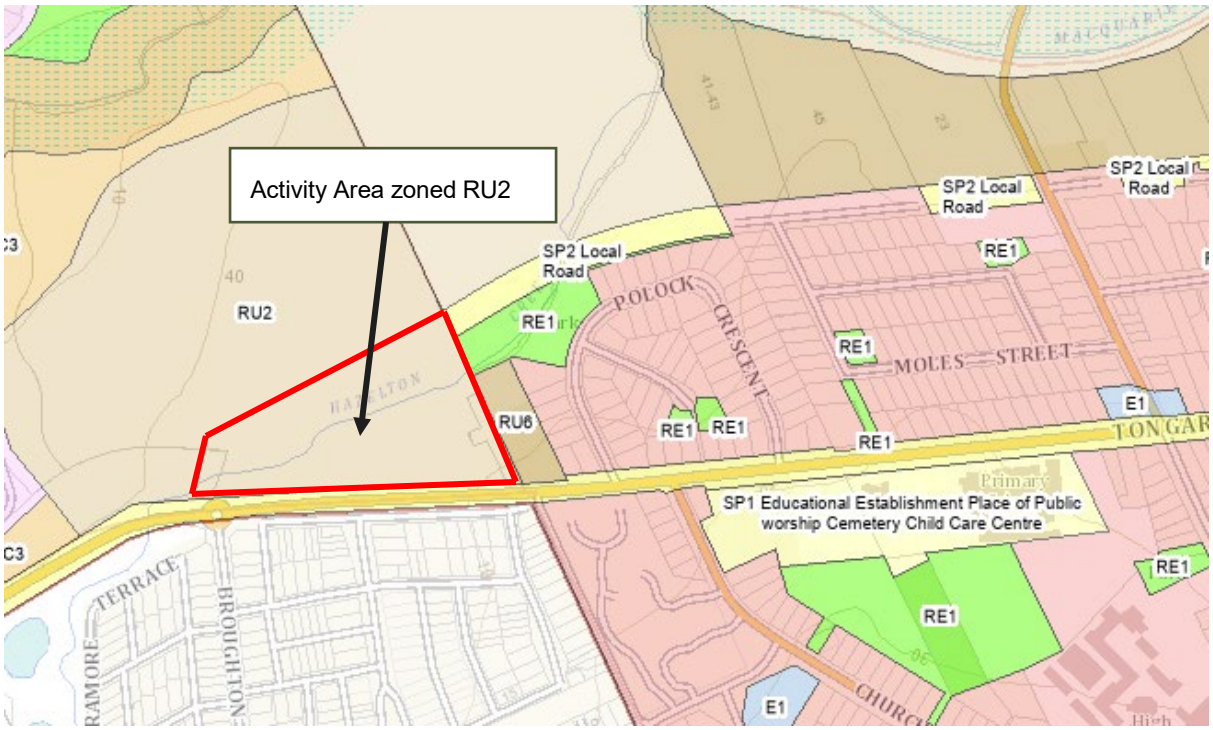
the northeasterly component is more common and also appears to a lesser extent during autumn spring.

The TWE alignment crosses Hazelton Creek and traverses across part of the Macquarie Rivulet floodplain zone which is an area used for cattle grazing.

2.4 Site Zoning

Land immediately west of The Expressway is land zoned SP2 Local Road (the Activity footprint) under SLEP 2013 and the TWE extends further westward to Broughton Avenue on land zoned RU2 Rural Landscape as illustrated in **Figure 2**.

Figure 2: Zoning Extract



2.5 Site History

The TWE was conceived as early as the 1960's, as evidenced by the land zoning shown in the then 'Illawarra Planning Scheme, 1961'.

The development of the dairying industry within the Shellharbour region was pivotal to changes in the environmental, social and technological advancement of dairying in the second half of the 19th century. Before the dairying industry boomed, Shellharbour favoured wheat and potato production throughout the 1840s. The growing of wheat crops was the dominant rural activity within Albion Park up until the 1860s when drought, bush fires, floods and rust devastated crops. Following bush fires in 1865 and flooding in 1867, pastures improved within Albion Park. By the early 1870s, wheat rust had wiped out wheat farming in Shellharbour. As a result, oats, barley and rye became the dominant crops, and increasing numbers of dairy farms, particularly using dairy shorthorn cows, soon replaced wheat farming and beef cattle within the area.

2.6 Site Inspection

Key landscape features of the existing environment as observed during site inspections are provided in **Appendix A**.

3.0 Land Use Conflict Risk Assessment

LUCRA is a system to identify and assess the potential for land use conflict to occur between neighbouring land uses. It helps land managers and consent authorities assess the possibility for and potential land use conflict.

LUCRA aims to:

- Accurately identify and address potential land use conflict issues and risk of occurrence before a new land use proceeds or a dispute arises.
- Objectively assess the effect of a proposed land use on neighbouring land uses.
- Increase the understanding of potential land use conflict to inform and complement development control and buffer requirements.
- Highlight or recommend strategies to help minimise the potential for land use conflicts to occur and contribute to the negotiation, proposal and implementation of separation strategies.

3.1 Key Steps in LUCRA

There are four key steps in undertaking a LUCRA. These are:

1. Gather formation about proposed land use change and associated activities.
2. Evaluate the risk level of each activity.
3. Identify risk reduction management strategies.
4. Record LUCRA results.

The LUCRA conducted for the TWE Activity included the gathering of information, the recording of each activity associated with the TWE and the identification of potential conflicts in a table similar to the that shown in **Table 1**.

Table 1: Initial Risk Evaluation

Activity	Identified Potential Conflict	Risk Ranking

A Risk Ranking Matrix, as per **Table 2**, was used to rank the identified potential land use conflicts. The risk ranking matrix assesses the environmental, public health and amenity impacts according to the:

- Probability of occurrence.
- Consequence of the impact.

Table 2: Risk Ranking Matrix

Probability	A	B	C	D	E
Consequence					
1	25	24	22	19	15
2	23	21	18	14	10
3	20	17	13	9	6
4	16	12	8	5	3
5	11	7	4	2	1

The risk ranking matrix yields a risk ranking from 25 to 1. It covers each combination of five levels of 'probability' (a letter A to E as defined in **Table 3**) and 5 levels of 'consequence', (a number 1 to 5 as defined in **Table 4**) to identify the risk ranking of each impact. For example an activity with a 'probability'of D and a 'consequence' of 3 yields a risk rank of 9.

Table 3: Probability Table

Level	Descriptor	Description
A	Almost Certain	Common or repeating occurrence
B	Likely	Known to occur, or "it has happened"
C	Possible	Could occur, or "I've heard of it happening"
D	Unlikely	Could occur in some circumstances, but not likely to occur
C	Rare	Practically impossible

Table 4: Measure of Consequence

Level	Descriptor
Level 1	**Severe**
Description	• Severe and/or permanent damage to the environment • Irreversible • Severe impact on the community • Neighbours are in prolonged dispute and legal action involved
Example / Implication	• Harm or death to animals, fish, birds or plants • Long term damage to soil or water • Odours so offensive some people are evacuated or leave voluntarily • Many public complaints and serious damage to Council's reputation • Contravenes Protection of the Environment and Operations Act and the conditions of Council's licences and permits. Almost certain prosecution under the POEO Act.
Level 2	Major
Description	• Serious and/or long term impact to the environment • Long term management implications • Serious impact on the community • Neighbours are in serious dispute
Example / Implication	• Water, soil or air impacted, possibly in the long term • Harm to animals, fish or birds or plants

Level	Descriptor
	• Public complaints, neighbour disputes occur. Impacts pass quickly. • Contravenes the conditions of Conditions licences, permits and the POEO Act • Likely prosecution
Level 3	**Moderate**
Description	• Moderate and / or medium term impact to the environment and community • Some ongoing management implications • Neighbour disputes occur
Example / Implication	• Water, soil or air known to be affected, probably in the short term
	• No serious harm to animals, fish, birds or plants
	• Public largely unaware and few complaints to Council
	• May contravene the conditions of Council's Licences and the POEO Act
	• Unlikely to result in prosecution
Level 4	**Minor**
Description	• Minor and/or short term impact to the environment and community
	• Can be effectively managed as part of normal operations
	• Infrequent disputes between neighbours
Example / Implication	• Theoretically could affect the environment or people but no impacts noticed
	• No complaints to Council
	• Does not affect the legal compliance status of Council
Level 5	**Negligible**
Description	• Very minor impact to the environment and community
	• Can be effectively managed as part of normal operations
	• Neighbour disputes unlikely
Example / Implication	• No measurable or identifiable impact on the environment
	• No measurable impact on the community or impact is generally acceptable.

3.2 Results

Table 5 represents the consideration and recording of the Activity, identification of potential conflict, risk ranking prior to implementation and the revised risk ranking after mitigation measures of the Activity are implemented.

Table 5: LUCRA – Tripoli Way Extension

Activity	Identified Potential Conflict	Probability (P)	Consequence (C)	Risk Ranking	Management Strategy (Method of Control)	Revised Risk (P; C)	Performance Target
Weed and Pest Management	Increased distribution of weeds during construction as a result of increased vehicle and pedestrian movements.	C	4	8	The Activity's construction environmental management plan (CEMP) will include weed management protocols, such as measures for the identification, management and ongoing monitoring of weeds on-site.	5 (D;4)	Effectiveness will be measured as part of the CEMP.
	Increased presence of pest animals during construction as a result of increased food waste.	C	4	8	Pest animals may be encouraged by food sources from construction works and general disturbance. If pest control is considered necessary, it will generally involve a routine baiting program in consultation with the project landholders and neighbouring landholders.	5 (D;4)	Effectiveness will be measured as part of the CEMP.
Agricultural land and productivity	Removal of agricultural land from production.	A	2	23	It is anticipated that the permanent footprint will only require minimal area for site preparation and civil works, remaining inside of the road corridor itself. Approximately 4.3 ha of RU2 zoned land is proposed to be disturbed as part of the Activity. Approximately 2.6 ha of the 4.3 ha will be rehabilitated to former conditions at the completion of the Activity. Provisions for rehabilitation of the approximate 2.6 ha will be included in the CEMP, including rehabilitation objectives and strategies for returning the disturbed footprint to agricultural production.	9 (D;3)	Rehabilitation objectives and strategies (including performance measures) will be included in the CEMP.
	Reduced agricultural productivity of land under project infrastructure during operations.	A	2	23	Agricultural activities will not be able to be undertaken in the road corridor. Lasting impacts to the rehabilitated area are not anticipated.	9 (D;3)	Rehabilitation objectives and strategies (including performance measures) will be included in the CEMP.
Neighbouring agricultural operations	Impacts on the operation of the TWE from neighbouring agricultural operations	D	4	5	No significant impacts on the operation and functionality of the TWE are anticipated as a result of neighbouring agricultural operations. Standard maintenance procedures will likely address any potential impacts generated by dust or spray drift from neighbouring agricultural and/or land management practices.	5 (D;4)	No action required.
Noise	Construction noise and associated impacts on residents.	B	3	17	Construction noise impacts have been assessed as part of the noise and vibration impact assessment. The results of the construction noise modelling demonstrate predictions of compliance with the construction noise management levels (NMLs) for all assessment locations. Noise generated during construction will also be minimised through implementation of best practice requirements outlined in the Interim Construction Noise Guideline (DECC 2009). Construction noise management and mitigation will be addressed in the CEMP.	9 (D;3)	Effectiveness will be measured as part of the CEMP.
	Construction noise and associated impacts on livestock.	C	4	8	Noise generated during construction will also be minimised through implementation of several measures from the Interim Construction Noise Guideline (DECC 2009). Any required mitigation measures will be identified in consultation with landholders and included in the CEMP for the project.	8 (C;4)	Effectiveness will be measured as part of the CEMP.
	Operational noise and associated impacts on residents.	B	3	17	Operational noise impacts have been assessed as part of the noise and vibration assessment. To achieve compliance with operational noise criteria at all assessment locations, mitigation measures have been applied to the model. Operational noise modelling with these measures included has demonstrated noise limits are satisfied at all assessment locations during day and night operations with the implementation of the noise mitigation proposed	5 (D; 4)	Effectiveness will be measured as part of the CEMP.
	Noise from increased vehicle movements on local roads during construction and associated impacts on residents and livestock.	B	5	7	Road traffic noise impacts have been assessed as part of the Noise and Vibration Assessment and Traffic Impact Assessment. Construction noise and vibration management and mitigation will be addressed in the CEMP.	2 (D;4)	Effectiveness will be measured as part of the CEMP.
Air Quality	Dust from vehicle movements along unsealed	C	3	13	The application of appropriate mitigation strategies will be implemented to reduce potential dust generation by project-related vehicle movements during construction.	8 (C;4)	Effectiveness will be measured as part of the CEMP.

Activity	Identified Potential Conflict	Probability (P)	Consequence (C)	Risk Ranking	Management Strategy (Method of Control)	Revised Risk (P; C)	Performance Target
	local roads and other construction activities.				Disturbed areas will be stabilised as soon as practicable to minimise risks of dust generation. Air quality has been assessed in Appendix G of the EIS; Modelling was carried out to a worst-case scenario for sensitive receivers along the existing alignment and the project alignment and showed that the operation of the TWE would not result in an exceedance of the air quality criteria. Potential impacts to air quality from construction and operation of the TWE are low and can further be mitigated through implementation of recommended management measures as per below. Air quality management and mitigation measures will be addressed in the CEMP.		
Visual Amenity	Visibility of project infrastructure (TWE) from residences and the local road network.	B	3	23	The TWE will likely be visible for local residents and local read network. Landscape Character and Visual (potential) impacts were assessed in section 6.7 of the EIS and provided mitigation and management measures for visual impacts that will be incorporated in the CEMP. The broader visibility of the project will be largely managed with screening and landscaping features and has been assessed as part of the Assessment of Screening and Landscaping Treatment (Appendix P of the EIS).	8 (C;4)	Effectiveness will be measured as part of the CEMP.
Security	Change in land use resulting in increased pedestrian and vehicle traffic on-site during the project's construction period and potential for theft and vandalism at neighbouring properties.	C	3	13	Construction workforce behaviour will be managed through the implementation of a site induction outlining positive workforce behaviour.	9 (D;3)	Inductions will be completed for entire workforce.
	Change in land use resulting in vandalism and theft of project infrastructure and construction materials.	C	4	8	Security fencing and signs will be implemented to deter vandalism and theft. Security fencing will be installed in the development footprint to control access.	5 (D;4)	No action required.
Safety	Safety of children and cyclists due to increased vehicle movements along the local road network.	D	2	14	The project's Construction Traffic Management Plan (CTMP) and Driver Code of Conduct will be prepared prior to commencement of construction.	9 (D;3)	The CTMP will include a complaint resolution and disciplinary procedure as a mechanism to address any issues identified by the local community and other road users.
	Safety of livestock due to increased vehicle movements along the local road network.	D	2	14	Speed within the development footprint will be limited during construction and operations to minimise potential vehicle collisions with fauna within the development footprint. Temporary travel speed reduction may also be implemented on local roads as part of the CTMP.	9 (D;3)	The CTMP will include a complaint resolution and disciplinary procedure as a mechanism to address any issues identified by the local community and other road users.
Property values and council rates	Devaluation of neighbouring properties due to proximity to project infrastructure.	D	2	14	Where significant impacts to neighbouring landholders have been identified, the project has been refined and/or management and mitigation measures have been proposed to further reduce potential impacts. Construction impacts will be temporary in nature and are therefore considered unlikely to have a lasting impact on the amenity of the locality.	9 (D;3)	No action required.
Health	Potential health impacts due to proximity to project infrastructure.	C	3	13	Air quality is expected to be the only potential impact on health however, the application of appropriate mitigation strategies will be implemented to reduce potential dust generation by project-related vehicle movements during construction. Disturbed areas will be stabilised as soon as practicable to minimise risks of dust generation. Air quality has been assessed as appendix G of the EIS; Modelling was carried out to a worst-case scenario for sensitive receivers along the existing alignment and the project alignment and showed that the operation of the TWE would not result in an exceedance of the air quality criteria. Potential impacts to air quality from construction and operation of the TWE are low and can further be mitigated through implementation of recommended management measures as per below. Air quality management and mitigation measures will be addressed in the CEMP.	8 (C;4)	Effectiveness will be measured as part of the CEMP.

Activity	Identified Potential Conflict	Probability (P)	Consequence (C)	Risk Ranking	Management Strategy (Method of Control)	Revised Risk (P; C)	Performance Target
Traffic	Increased vehicle movements along the local road network during construction and subsequent impacts on accessibility and commute times.	B	4	12	To reduce the project's impacts on the local road network, dedicated access points will be utilised by all project-related vehicles when accessing the project site.	8 (C;4)	The CTMP will include a complaint resolution and disciplinary procedure as a mechanism to address any issues identified by the local community and other road users.
	Impacts on seasonal/campaign-based agricultural transport activities during construction (e.g., livestock or product cartage).	C	4	8	Potential seasonal/campaign-based agricultural transport activities will be identified during further consultation with project landholders and nearby landholders. Any required mitigation measures (e.g., temporary alternate construction vehicle access routes and/or revisions to construction scheduling) will be identified in consultation with landholders and included in the CTMP.	5 (D; 4)	The CTMP will include a complaint resolution and disciplinary procedure as a mechanism to address any issues identified by neighbouring landholders.
	Increased vehicle movements along the local road network during operation and subsequent impacts on accessibility and commute times.	D	4	5	Impacts on accessibility and commute times as a result of the project operations traffic are predicted to be negligible.	5 (D; 4)	No action required.
	Impact of vehicle movements on school bus route accessibility and commute times.	C	4	8	The project's CTMP and Driver Code of Conduct will be prepared prior to commencement of construction.	8 (C;4)	The CTMP will include a complaint resolution and disciplinary procedure as a mechanism to address any issues identified by neighbouring landholders.
	Potential conflicts between project-related construction vehicle movements and stock movements.	C	4	8	Project-related and nearby landholders potentially move stock between paddocks and across roads proposed to be utilised for access to the development footprint, therefore there is potential for conflict with project-related construction traffic movements. If required, potential stock crossing locations will be identified through further consultation with project-related and nearby landholders. Any required mitigation measures (e.g., direct line of communications between landholder and site construction manager and/or temporary traffic control at stock movement locations) will be identified in consultation with landholders and included in the CTMP for the project.	5 (D; 4)	The CTMP will include a complaint resolution and disciplinary procedure as a mechanism to address any issues identified by neighbouring landholders.
Soil Erosion	Soil erosion leading to land and water pollution.	C	3	13	Prior to the commencement of construction, a Soil and Water Management Plan (SWMP) will be prepared, which will outline mitigation measures to be implemented during construction and operation of the project to minimise soil erosion risk (including erosion and sediment control measures).	5 (D; 4)	Effectiveness will be measured as part of the SWMP and CEMP.
Water	Change to surface water flows and water quality as a result of construction and operations of the project.	C	3	13	A Flooding Assessment was completed as part of the EIS, which found that there is not expected to be significant changes in flood behaviour as a result of the Activity. The best practice principles for stormwater and sediment control will be incorporated into the design, construction and operation phases of the project as part of the SWMP.	8 (C; 4)	Effectiveness will be measured as part of the SWMP and CEMP. Further consultation if required.
	Inadequate availability of sufficient water for neighbouring properties during construction and operation of the project.	D	4	5	The Activity will not impact licensed water users. The water needs of the Activity will be met via water trucked to the development footprint.	5 (D;4)	No action required.
	Potential loss of access to water within dams for livestock due to the project's construction.	B	3	17	It is not expected that loss of access will occur due to construction of the TWE.	9 (D;3)	No action required.
Local Infrastructure and Services	Inadequate availability of waste management facilities within the local community during construction and operations of the project.	C	3	13	A Waste Management Plan was prepared as part of the EIS. Waste management and mitigation measures will be addressed in the CEMP.	5 (D;4)	Effectiveness will be measured as part of the CEMP.

Activity	Identified Potential Conflict	Probability (P)	Consequence (C)	Risk Ranking	Management Strategy (Method of Control)	Revised Risk (P; C)	Performance Target
Fire	Impacts on land surrounding the project from fires generated from within the development footprint.	D	2	14	Fire management and mitigation measures will be addressed in the CEMP.	9 (D;3)	Effectiveness will be measured as part of the CEMP. The bushfire management element of the CEMP will be reviewed after incidents of bushfire or other fire as well as annually at the end of each bushfire season.
	Impacts on the operation of the TWE from bushfires in the immediate vicinity of the project.	D	2	14	The key principles for bushfire prevention and protection for the project will be: • The provision of clear separation between structures and bushfire hazards in the form of fuel-reduced asset protection zones (APZs) and/or defendable space. • Adequate water supply. • Suitable location of services and other infrastructure that pose potential ignition risk. • Suitable construction standards and design of buildings.	9 (D;3)	Effectiveness will be measured as part of the CEMP. The bushfire management element of the CEMP will be reviewed after incidents of bushfire or other fire as well as annually at the end of each bushfire season.

4.0 Conclusion

A Land Use Conflict Risk Assessment (LUCRA) has been carried out and is the subject of this report. The LUCRA report has been prepared generally in accordance with the Department of Primary Industries – Agriculture (DPI - Agriculture) *Land Use Conflict Risk Assessment Guide*.

During construction it is likely that approximately 4.3 hectares (ha) of RU2 zoned land will be disturbed. Once construction is complete and the TWE is operational it is likely that up to 2.6 ha of the disturbed land will be remediated to existing conditions (grazing land) with the remaining 1.7 ha being occupied by the road and its associated infrastructure.

The amount of land suitable for agriculture that would be lost is relatively small and the area is already experiencing fragmentation from urbanisation of the broader area. The construction and operation of the Activity will not prohibit existing agricultural land uses on the surrounding lands other than the loss of a small area for the road itself.

The direct impact to local agricultural land and production is therefore considered acceptable.

Appendix A Landscape Photos

Land Use Conflict Risk Assessment for Tripoli Way Extension EIS

Tripoli Way Extension

Shellharbour City Council

SLR Project No.: 660.V30219.00000

30 April 2024

Photo 1: Western Extent – Looking North East

Photo 2: Broughton Avenue from the Western Extents – Looking East

Photo 3: Northern Section of Broughton Avenue Intersection – Looking North

Photo 4: Broughton Avenue / Illawarra Highway Intersection – Looking North

Photo 5: Broughton Avenue / Illawarra Highway Intersection – Looking West

Photo 6: Landscape North on Western Extents – Looking West North West

Photo 7: Escarpment Views – Looking West

Photo 8: View from Pollock Crescent, Looking North West

Photo 9: Pollock Crescent Looking North Toward the Activity Area

Photo 10: Pollock Crescent, Looking North East

Photo 11: The Expressway – Looking East

Photo 12: Potential Ancillary Site 2 from The Expressway – Looking North

Photo 13: Calderwood Road - Looking South

Photo 14: Proposed Calderwood Road / TWE Intersection – Looking South

Photo 15: Proposed TWE Alignment – Looking East

Photo 16: Proposed Calderwood Road / TWE Intersection – Looking North

Photo 17: Western Extent of the Existing Tripoli Way

Photo 18: Proposed Alignment on Tripoli Way

Photo 19: Tripoli Way – Looking West

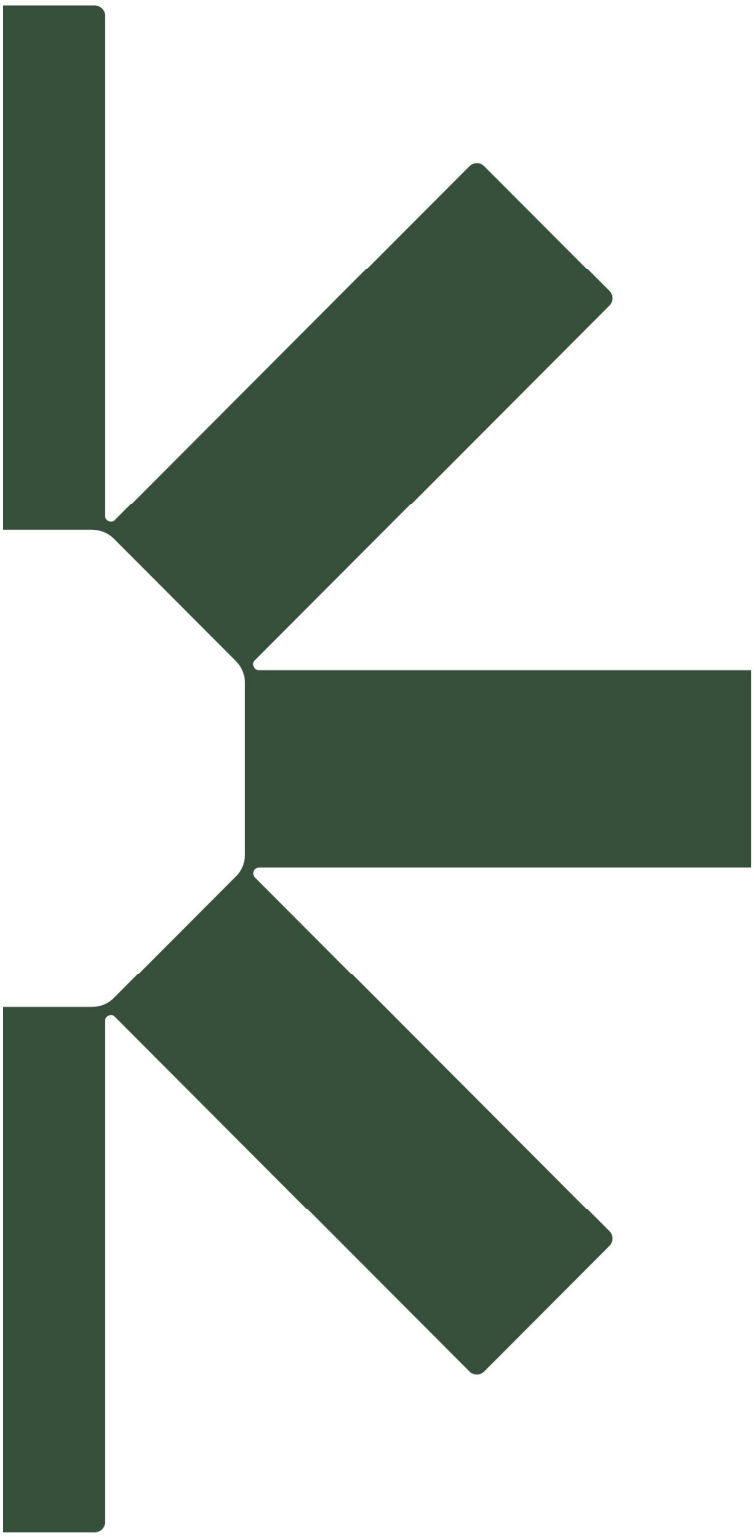
Photo 20: Tripoli Way – Looking East

Photo 21: Terry Street North Towards Proposed TWE Intersection

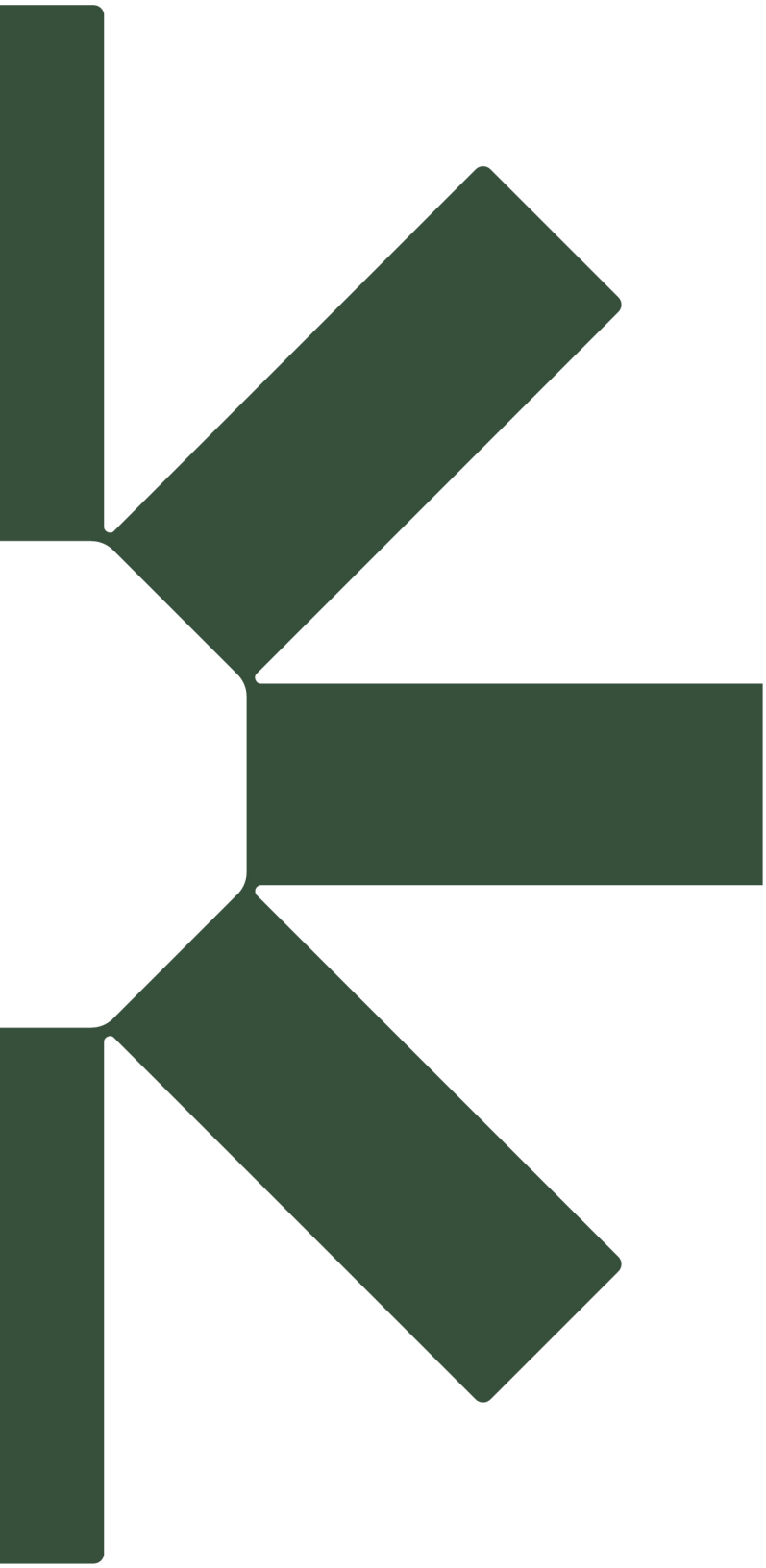
Photo 22: Intersection of TWE and Illawarra Highway

Photo 23: View South from the Eastern Extents of the Study Area

Photo 24: North View from the Eastern Extents of the Study Area



Making Sustainability Happen



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