



Submission on the Environmental Impact Statement (EIS) – Coffs Harbour Bypass

Application No. SSI-7666

Name	Grace Mawby	Email	grace.mawby@chcc.nsw.gov.au
Organisation	Coffs Harbour City Council	Telephone	02 6648 4402
Address	Locked Bag 155, COFFS HARBOUR NSW 2450	ABN	79 126 214 487

The attached feedback is provided as a result of a Coffs Harbour City Council technical review in response to the *Environmental Impact Statement (EIS)* for the Coffs Harbour Bypass, September 2019.

Coffs Harbour City Council is highly supportive of the construction of the Coffs Harbour Bypass in its proposed location and in its general terms, and we commend the RMS on the obvious effort which has been applied to the EIS.

It is in that context the Council raises a number of specific issues and areas of concern which are encompassed by this submission.

TABLE OF CONTENTS

Community and Social Issues	5
Impacts on the Rental Market.....	5
Impacts on Social and Welfare Sectors	5
Impacts on Community Safety	5
Impacts on Council Facilities	5
Impacts on Health Services	5
Impacts on Education Services.....	5
Visitor Impact.....	5
Business Impact	6
Economic Impact.....	6
Landscaping and Urban Design (Chapter 11)	7
Transport.....	7
Solid Noise Walls	7
Plan	7
Grass Mix	7
Local Roads Mix.....	7
Korora Hill Interchange	7
Landscape Typical Sections	7
Solid Noise Wall with Vegetated Mounds	7
Elevation Noise Walls.....	7
Visual Viewpoints of the Project.....	8
Luke Bowen Footbridge.....	9
Environmental	10
Koala Habitat Mapping	10
Roberts Hill and other connectivity issues	10
Offsets.....	11
Coastal Management Programs	11
Maintenance of Artificial Hollows, Fauna Connectivity Structures and Fencing.....	11
Re-use of Timber.....	11
Construction	11
Soil Contamination	12
Monitoring	12
Rainforest.....	12
Flooding	12
General	12
Incorrect flood modelling in the North Boambee Model.....	12

Whole of government approach to reducing flood risk in the North Boambee Valley and Newports Creek.....	13
Significant increase in flood levels along the Northern Creeks.....	13
Impacts on detention basins and Coffs Creek.....	13
Traffic and Transport (Chapter 8).....	14
Tunnels Vs Cuttings	14
Local Road Traffic Volumes.....	14
Englands Road Intersection.....	15
Western Service Road for Lindsay's Transport and Others	15
Cyclist Wayfinding at Englands Road Interchange.....	15
Isles Drive Left Turn (from South).....	16
Isles Drive Right Turn (from North).....	16
Local Traffic Volume Changes.....	18
Coramba Road Traffic	18
Closure of Spagnolos Road.....	18
Spagnolos Road Bus Stop.....	18
Footpaths at Interchanges	19
Shepherds Lane Bridge.....	19
Mackays Road North.....	19
James Small Drive.....	19
Sub-standard curves and other features.....	19
Bus Increases on James Small Drive	20
Flooding on James Small Drive	21
Korora Bus Bay	21
Changes to Old Coast Road and OC1 and OC2 Road Bridges	21
OC1 and OC2 bridges as Heritage	22
Wayfinding at Korora Interchange	22
Maintenance of new Infrastructure.....	25
Highway Crossovers.....	25
Local Road Geometrical Standards	25
Transport and Roads	27
Englands Road Interchange – potential industrial area to the west.....	27
Englands Road Interchange – cycleway connectivity.....	27
Englands Road Interchange – pedestrian safety	27
Pacific Highway / Isles Drive intersection.....	27
Stadium Drive Intersection.....	28
Pacific Highway South Bound before Englands Road Interchange.....	28

EIS Volume 3 – Appendix F - Sections 3.2 Traffic volumes and Section 4.6 Traffic forecasts.....	29
Existing Pacific Highway through the City Centre	29
EIS Volume 1B –Sections 8.5 Environmental Management Measures	29
Coramba Interchange Buses	30
Spagnollos Road	30
Korora Bus Bay	30
James Small Drive.....	30
Local Road Standards	30
Crossover Use and Design.....	30
Footpath and Cycleway Crossings	30
Footpath at Englands Interchange SB onramp	30
NB Highway Cycle Useage.....	31
Noise and Vibration	31
Community Submission to Council Regarding Noise	31
Bridges	33
Old Coast No.1 Bridge.....	33
Old Coast No.2 Bridge.....	33
Waste Facilities.....	33
Impacts on Councils Core-Function Waste Facilities	33
Councils Englands Road Waste Management Facilities – Operational Impacts.....	34
Lot 1 DP 1088982 (Materials Recovery Facility and related facilities).....	34
Lot 31 DP 1090175 (Coffs Coast Resource Recovery Facility	37
Lot 2 DP 1088982 (Coffs Harbour City Council – Leasable Transport Depot and Related Facilities)	39
D. Lot 32 DP 1090175 (Englands Road Waste Management Facility – including landfill facility)	39
Surface Water Quality (Chapter 19)	40
Gross Pollutant Traps	40
Hazard and Risk (Chapter 24).....	40
Dangerous Goods	40
Transportation of Dangerous Goods.....	40
Dangerous Goods Destinations	41
Other.....	41

COMMUNITY AND SOCIAL ISSUES

IMPACTS ON THE RENTAL MARKET

The construction phase of the bypass will have a detrimental impact on the availability and affordability of rental accommodation in the City affecting both residents, refugee resettlement programs, seasonal workforces (such as blueberries) and the tourism and major events sectors.

IMPACTS ON SOCIAL AND WELFARE SECTORS

The shortage of rental stock and expected rental prices increases combined with possible increase in cost of various services (e.g. food services) during the construction phase of the bypass is expected to place pressure on various lower socio-economic communities, leading to an increase in potential social issues.

IMPACTS ON COMMUNITY SAFETY

The construction phase of the bypass may result in an increase in road safety issues, due to increase in construction related vehicles on local roads, as well as anti-social behaviour/offences around licenced premises or 'gender-related impacts' such as temporary masculinisation of the town.

IMPACTS ON COUNCIL FACILITIES

The influx of bypass workers, some with families, is expected to impact public facilities and services provided by Council such as libraries, cultural facilities, sporting and recreational facilities and lifeguard services - potentially requiring additional resourcing to maintain levels of service.

IMPACTS ON HEALTH SERVICES

The influx of bypass workers, some with families, is expected to have a detrimental impact on availability of health services for the community, in particular GPs.

IMPACTS ON EDUCATION SERVICES

There is expected to be some impact on local education facilities of bypass workers who bring their families to the area, as some schools are at capacity. School bus services may also be impacted, including through potential traffic delays during construction. Some schools in proximity to the construction may at times be impacted by noise and vibration.

VISITOR IMPACT

No representation of tourism body on advisory panels

Recommendation: Invitation to Councils S355 committee, Destination Coffs Coast Committee (Tourism industry committee) to provide feedback on pre and post activity including signage

Impact on visitation pre and post construction in relation to directional signage. Impact on transport through city (particularly during construction with diversions) and access off highway. CHCC Economic Development Strategy 2017 – 2022 recognises tourism as another of the key sectors for economic health.

Recommendation: Timely communication to business and visitors around changes in access – particularly important for advance notice to be given to tourism businesses to communicate with visitors. Planned signage for directional purposes throughout construction and after

Consideration of needs of tourists around cycling tracks, public transport needs and tourist drive development and promotion

Recommendation: *Development of tourist drive routes and promotion to ensure movement of tourists through the destination in consultation with TASAC*

BUSINESS IMPACT

Movement of business goods during construction – delay in times and availability

Recommendation: *Direct and timely communication to business community before and during construction*

Noise impact on businesses with construction activity occurring mainly during daytime hours

Recommendation: *Advance warning for businesses close to construction to ensure lessening of impact on business but also WHS needs for business can be met*

Impact to retail and hospitality business when extra workers during construction leave the area. Impact on businesses dependent on passing trade.

Recommendation: *Development of business diversification ideas and marketing skills in partnership with local business networks*

Social and economic impact to community based on business closure

Impact to individual sectors, rather than industries, of Coffs Harbours economy

Recommendation: *Examine the impact at SA1 levels and also in sub-category level not just as an impact to whole GRP.*

ECONOMIC IMPACT

Closures or relocation of businesses particularly agricultural and industrial businesses identified in EIS. There is a limit to amount of industrial and agricultural land available in the LGA currently. CHCC Economic Development Strategy 2017 – 2022 recognises agriculture as one of the key sectors for economic health

Recommendation: *Understanding and consideration of LGA's development plans and controls as recommendations are made to affected business and their sites*

LANDSCAPING AND URBAN DESIGN (CHAPTER 11)

TRANSPORT

Page 34. Can RMS please confirm that there is scope for CHCC to establish a more pedestrian friendly environment lowering car speeds and to plant and establish street trees along what will be the Old Pacific Highway extending from Albany Street to Beryl Street?

SOLID NOISE WALLS

Page 56. Is there opportunity for CHCC Staff to comment/be involved in the design of the featured walls/shape and patterning?

PLAN

Page 69. Is there opportunity for CHCC Staff to comment/be involved in the design of the mounding and artworks (point 16 and 15).

GRASS MIX

Page 77. Remove *Dietes grandiflora* from palette.

LOCAL ROADS MIX

Page 79. Remove *Acmena smithii* as they do not perform well in this area. *Hymenosporum flavum* grows sparse canopy unless heavily maintained switch for *Xanthostemon chrysanthus* as these perform well in the area

KORORA HILL INTERCHANGE

Page 82-83. Remove *Strelitzia* and *Philodendron* potential to use *Grevillea Moonlight* or *Coconut ice* instead. Reinforce the native plant palette to exemplify the direct and abrupt transition from agricultural land to bushland. This emulates the existing conditions as how agricultural land use practices and bushland exist and interact it does not need to be softened or blurred with further exotic planting. It is what it is.

LANDSCAPE TYPICAL SECTIONS

Page 110. Is there opportunity for larger trees in the batters? Or gullies/ditches so tree tops can be viewed by commuters from the highway and local roads. More trees are needed

SOLID NOISE WALL WITH VEGETATED MOUNDS

Page 127. More trees need to be added to enhance the “green corridor” experience and to maximise the screening for adjacent residents.

ELEVATION NOISE WALLS

Page 129-130. Planting of trees in clusters along the wall to break up the rigidity and monotony of the wall providing visual interest and framing for commuters and further screening for residents.

VISUAL VIEWPOINTS OF THE PROJECT

Visual viewpoints created for the project show the project fitting in seamlessly in surrounding areas, which for the most part is true. Viewpoint 2 selected at the entrance to Coachmans Close is noted as having a high magnitude visual disruption. However, there is no enhanced image to show the magnitude of the highway retaining wall in this location. At present the location fronts directly to the existing highway. This will be replaced by a 4-5m high retaining wall + noise screening height.

2	View from residential properties at Coachmans Close towards the existing Pacific Highway 	The view is directed towards the existing Pacific Highway with clear views of passing vehicles. Mature vegetation between the Pacific Highway and Coachmans Close filters views slightly towards the highway, contributing to the visual character.	Residents	Moderate
---	---	---	-----------	----------

Additionally, the roadway at Coachmans Close currently has significant screening from dense trees which provides residents a visual screen to the highway and a sense of seclusion.



The intention in this area as far as CHCC can determine from the plan views is that this will be removed to enable the extension of Solitary Islands way and the underpass to the Western Access Road. This will result in views of the 8.3m and 9.0m high retaining walls. RMS note that screen planting will be placed at this location however space appears very constrained and CHCC are concerned vegetation will be omitted.

Retaining wall details

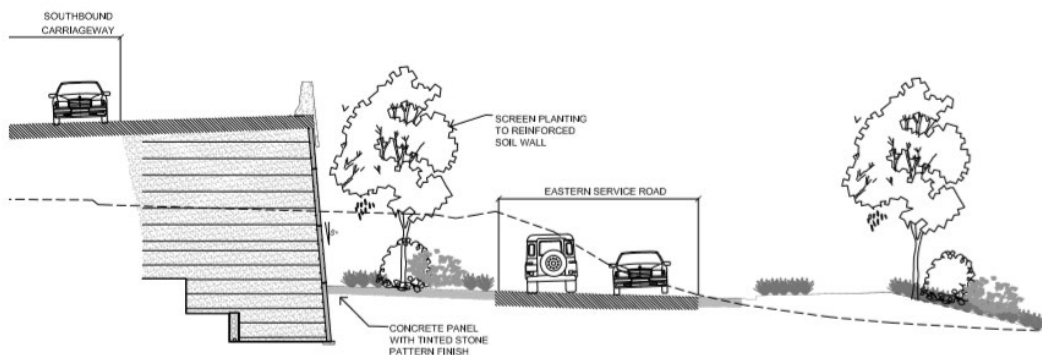
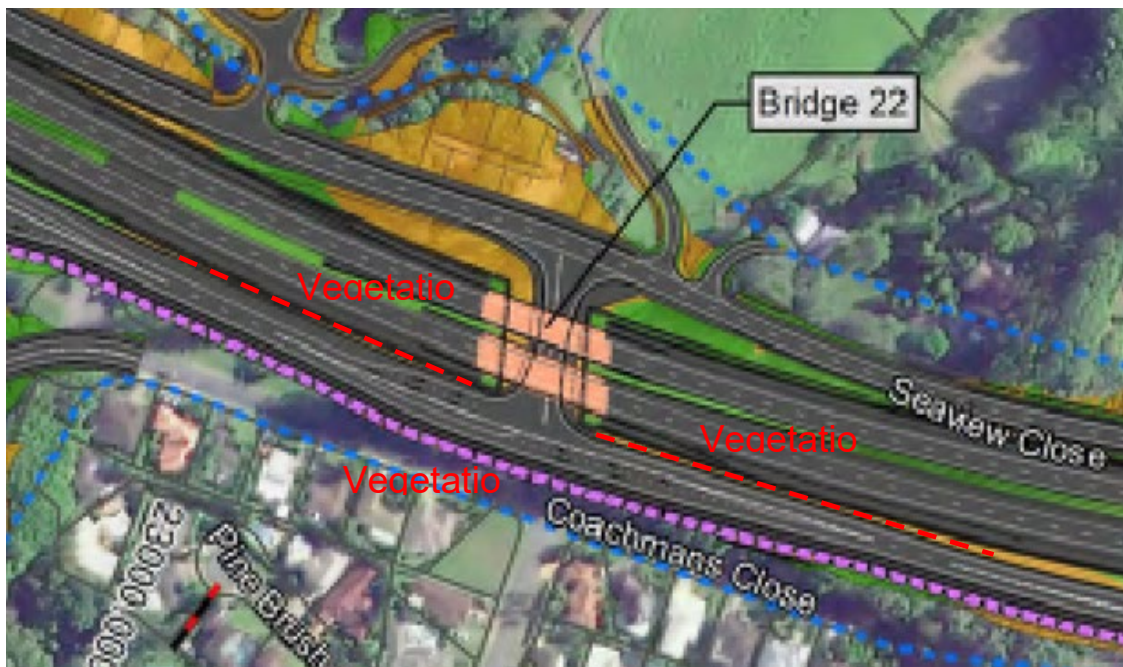


FIG 5.21 TYPICAL SECTION THROUGH RETAINING WALL WITH ADJACENT PLANTING



LUKE BOWEN FOOTBRIDGE

In Appendix 6A the design ‘family’ of the new Luke Bowen Footbridge is suggested to be like the Lloyd Poynting Bridge at Billinudgel. The urban design notes also suggest the bridge is a single span bridge. Photos in the appendix show bridges that are similar to the current Luke Bowen Footbridge, which CHCC believe is nothing like the ‘family’ of bridges such as the Lloyd Poynting Bridge.

The Lloyd Poynting Bridge is a multi-span bridge with an enclosed cage structure. It does not rely on large truss configurations to support the spans and bears little to no resemblance to the photos provided or the current Luke Bowen Footbridge.

CHCC are currently unsure as to the intention of RMS in respect to the design family of the Luke Bowen footbridge and request further clarification on the intended design of the footbridge.



Google Street View of the Lloyd Poynting Bridge

ENVIRONMENTAL

KOALA HABITAT MAPPING

CHCC, in collaboration with OEH and Biolink Ecological Consultants has recently finished a LGA wide Koala Habitat Study that remaps koala habitat and linkages. This study included extensive field work and in-depth analysis of fine scale vegetation mapping. Although the mapping has not yet been adopted by Council (anticipated to be reported to Council for approval to exhibit in early 2020) Council would be willing to share the updated draft mapping to help achieve improved outcomes such as the fine tuning of culvert locations and where to focus rehabilitation works.

Council recommends the RMS to make use of this data in the Preferred Instructure Report and that any approval includes a condition requiring consultation with Council.

ROBERTS HILL AND OTHER CONNECTIVITY ISSUES

Council acknowledges the improved outcomes for fauna connectivity that has been achieved by the 3 tunnels. However, given the high levels of koala activity around Roberts Hill, Council is concerned that the location of the tunnel will not result in a meaningful connection without extensive rehabilitation works, and that even with rehabilitation the lag effect will be extensive. The road will sever patches of existing koala habitat tunnel in the Roberts Hill vicinity while the tunnel itself preserves low quality regrowth vegetation that was a previously a banana plantation. Council is coordinating a number of grants around the Robert Hill area and welcomes opportunities to work with RMS to improve fauna connectivity in the area.

Council considers it imperative that an extensive rehabilitation plan focusing on Roberts Hill, and connectivity more broadly, be included in the Preferred Infrastructure Report and be conditioned as part of any approval. Council would like to be consulted on any such plan. While this may mean that some areas of agricultural lands become environmental lands Council believes that the Robert Hill corridor is critical to the long term survival of Koalas in the Coffs Harbour area and that the EIS, while acknowledging the importance of this area for koalas, has not done enough to protect this essential link.

Council believes that an underpass is needed west of Spagnoles Rd (north of the Coramba interchange) to connect core koala habitat. In addition the bypass presents an opportunity to create a linear corridor alongside the carriageway (but outside the fence) that will funnel animals to the fauna crossing points and connect areas of dispersed habitat.

An extensive rehabilitation/revegetation plan required as part of any approval, with Council's input, will ensure that local biodiversity impacts are more effectively mitigated.

OFFSETS

Council understand that the majority of the offsets required for the project have already been sourced however that some credits, especially species credits are still need. Many of the offset are not within the Coffs Harbour LGA and Council would like to be consulted on the offset plan prior to any approval. Council also welcomes the opportunity to discuss credits needs as staff often have local knowledge that may assist.

COASTAL MANAGEMENT PROGRAMS

It appears as though the certificated CMPs for Coffs Creek and Boambee Newport's have not been addressed. This needs to be rectified. The draft Bonville Pine Creek CMP is expected to be certified early in 2020.

MAINTENANCE OF ARTIFICIAL HOLLOWS, FAUNA CONNECTIVITY STRUCTURES AND FENCING

Mitigation measures such as Artificial Hollows and Fencing must be maintained in order to be effective, this should be required as a condition of any approval. Fencing and connectivity structures should be maintained in perpetuity while artificial hollows should be maintained for a minimum of 15 years. This has been an issue for past upgrades to the Pacific Hwy and a lack of maintenance needs to be avoided if impacts to threatened species are to be avoided over the long term.

RE-USE OF TIMBER

Council recommends that any approval includes a condition requiring RMS to make contact with Landcare and other volunteer groups i.e. WIRES to determine if the removed vegetation can be reused. Examples for reuse include creek bank rehabilitation, river re-snagging, and the use of timber by wildlife carers for animals in care.

CONSTRUCTION

Protection of native fauna will be critical during construction. While Council is confident that the more obvious steps like pre clearing procedures will be implemented Council is concerned that fauna will make its way through construction areas, especially if fencing along the existing highway is removed in some areas, leading to fauna making its way onto roads leading to further road kills and possibly traffic accidents. Council recommends that

any approval includes a condition requiring RMS to include a plan detailing temporary fencing that will exclude fauna from entering the construction area or making its way onto any roads that are currently excluded by fencing.

SOIL CONTAMINATION

It is understood that past banana lands have been assessed for soil contamination. Council recommends that any approval includes a condition requiring RMS to investigate if any areas of newer horticulture activity, not previously farmed for banana, also require remediation as part of the bypass works. Council and Southern Cross University have undertaken some preliminary work in this area. The reports can be found on council website: <https://www.coffsharbour.nsw.gov.au/environment/Compliance-and-Reporting/Pages/Monitoring-Our-Waterways.aspx>

MONITORING

A comprehensive monitoring plan, particularly for the fauna crossing points must be conditioned as part of any approval.

RAINFOREST

An important remnant area of lowland rainforest exists on the Mackay property in West Coffs that Council believes has not been adequately addressed in the EIS. This pocket of remnant rainforest is considered by many local bush regenerators as one of the best examples of rainforest remaining in the Coffs Harbour basin and is regularly used as a seed source and for education activities. If this remnant cannot be retained, a concerted effort should be made to undertake extensive propagation from the remnant over a number of seasons prior to its removal.

FLOODING

GENERAL

A significant part of the Coffs Harbour Bypass passes through flood prone land, crossing Newports Creek, Coffs Creek, Jordans Creek, Pine Brush Creek and various other tributaries. While there are some reductions or no changes in flood levels in certain areas, there is still some significant impacts that require mitigation measures to be investigated further. Council believes it is in the best interest of all parties to work collaboratively in a 'whole of government' approach, in particular to provide a better level of access to the Coffs Harbour Health Campus.

Council provides the advice below in good faith based on the EIS and flood information provided by RMS.

INCORRECT FLOOD MODELLING IN THE NORTH BOAMBEE MODEL

The EIS flood modelling does not match up with councils adopted flood modelling in the downstream reaches of Boambee Newport's creek. In particular, the model does not show overtopping of the Pacific Highway near the sports fields. The model should be updated to better coincide with council's model results, and the bypass should investigate whether it can provide flood protection to the Pacific Highway as this is an access point to the hospital.

Extending the model is recommended to at least the confluence downstream of the tributary through the sports fields and Newports Creek. This should improve the simulated levels around the existing Pacific Highway and the sports fields.

WHOLE OF GOVERNMENT APPROACH TO REDUCING FLOOD RISK IN THE NORTH BOAMBEE VALLEY AND NEWPORTS CREEK

Due to the potential flood mitigation work, and new development occurring across the North Boambee Valley and Newports Creek catchment, it is an opportune time for RMS and Council to work together to provide benefits to the community by reducing flood risk. In particular, improving the flood affectation and access to the Coffs Harbour Health Campus should be a key driver to achieving a positive outcome in this catchment. Option P16 of the Boambee Newports Floodplain Risk Management Study and Plan (GHD, 2016) recommended improving the conveyance across the Pacific Highway near the sports fields. Currently the Pacific Highway at this location is impacted in the 1% AEP design event, meaning there is no access to the Coffs Harbour Health Campus from the south. The option can provide a better level of flood immunity to the Pacific Highway at this location to above the 1% AEP event. As this area is in the scope of works for the bypass, RMS and council should look work collaboratively to achieve this recommendation.

Flood mitigation works as recommended in the Boambee Newports Floodplain Risk Management Study and Plan (GHD, 2016) are currently being investigated by Council. The sharing of modelling information will be beneficial to both parties to assess the potential impacts of the mitigation work on the bypass and vice-versa.

A large area of floodway and flood storage is being taken up by the highway embankments in the North Boambee Valley. Increasing some of the bridge spans through this area may improve afflux upstream and minimise impacts of filling in the floodway and flood storage areas.

SIGNIFICANT INCREASE IN FLOOD LEVELS ALONG THE NORTHERN CREEKS

There is some significant afflux in the downstream reaches of Pine Brush Creek, Jordans Creek and other unnamed creeks. These levels are unacceptable as they increase flood levels on multiple properties, and do not meet the objectives set for the project (Appendix O - Table 6). In particular, the most significant impacts are to the Pacific Bay Resort, Nautilus Villas and properties on Pine Brush Crescent. There is also a reduced level of access to certain properties and routes in these catchments. Of note is the reduction in access to Lot 19, DP771618, James Small Drive and Lot 1 DP527497. The same or better access should be provided to all routes and properties. Mitigation measures should be further investigated and design changes proposed to reduce these impacts in consultation with Council.

IMPACTS ON DETENTION BASINS AND COFFS CREEK

The proposed design shows some impact on Bennets Road and Spagnolos detention basins including some changes being made to their sizing. The design changes cause the majority of the afflux upstream of the basins, with some unacceptable afflux downstream around Coramba Road (at point of interest AQ). Mitigation measures should be further investigated to reduce the level of impact at this location. It is also recommended that RMS consult with Council around any future design changes to the bypass which impacts the detention basins.

Council considers that a joint funding approach between the RMS and Council could lead to significant gains in flood mitigation that will benefit both the Coffs Harbour Bypass design

and the township of Coffs Harbour. Council looks forward to discussing this further with the State Government.

TRAFFIC AND TRANSPORT (CHAPTER 8)

TUNNELS VS CUTTINGS

CHCC are highly appreciative of the RMS adoption of tunnels over cuttings. We appreciate the extent of work that has occurred behind the scenes by the project team to bring this outcome to the project.

LOCAL ROAD TRAFFIC VOLUMES

CHCC provide the following data to back up / refine the RMS data around traffic volumes on a number of roads that will be upgraded or impacted due to the construction of the bypass.

Location	RMS Volume Data (2016)	CHCC Volume Data
Hogbin Drive (north of Park Beach Road)	9,500 (7%)*	2016 - 14,600 (7 Day) between Boultonwood and Prince St
Hogbin Drive (north of Harbour Drive)	17,200 (3%)	No data available
Hogbin Drive (north of Stadium Drive)	20,700 (7%)*	2016 – 19,382 (5 Day)
Stadium Drive (east of Pacific Highway)	8,900 (9%)	2018 – 9,550 (5 Day)
Englands Road (west of Pacific Highway)	5,300 (18%)	2004 – 2,012 (5 Day)
Bray Street (east of Joyce Street)	8,100 (2%)*	2012 – 11,147 (5 Day)
Coramba Road (from Robin Street to Shephards Lane)	10,200 (4%)*	No data available
Coramba Road (from Shephards Lane to Bennetts Road)	6,300 (9%)	2018 – 6,716 (4.9%)
Coramba Road (west of Bennetts Road)	5,900 (5%)*	2016 – 5,758 (5 Day)
Bennetts Road (west of Coramba Road)	300 (10%)	2013 – 283 (5 Day)
James Small Drive (east of Pacific Highway)	3,000 (1%)*	No data available
Bruxner Park Road (west of Pacific Highway)	700 (6%)	2012 – 495 (7 Day)
* These daily volumes are derived from 12-hour turning movement counts using conversion factors.		

ENGLANDS ROAD INTERSECTION

The Englands Road roundabout has had 7 rollover crashes in the past 5 years (RMS data). The upgrade to an at-grade traffic lighted intersection proposes to reduce this type of crash occurring and provides for higher LOS of the general traffic flow.

With these types of intersections, whilst the risk of rollovers is reduced, the risk of T-bone style crashes is increased. The crash type comes with increased consequences for occupants of both vehicles as impact angles and speeds are generally more severe. CHCC are concerned that there may be an increase in serious and fatal accidents as a result of this change. CHCC request the inclusion of red-light camera's and speed control measures on approach from the north and the south in particular.

WESTERN SERVICE ROAD FOR LINDSAY'S TRANSPORT AND OTHERS

CHCC previous have identified that a western service road connecting to the Sawtell Road Intersection instead of Englands Road would bring considerable benefits in minimising conflicts with the waste facility land. By doing this, this would require an upgrade of the Sawtell Road interchange, which is a future priority for RMS. It also brings considerable benefits to the local community in crash reduction.

Ultimately CHCC desire an outcome which minimises impact to the waste facility and maximises the road safety of all users. CHCC believe the current solution is not holistic in considering all of the issues raised in the area and request RMS consider a solution that helps solve future priorities and the local community.



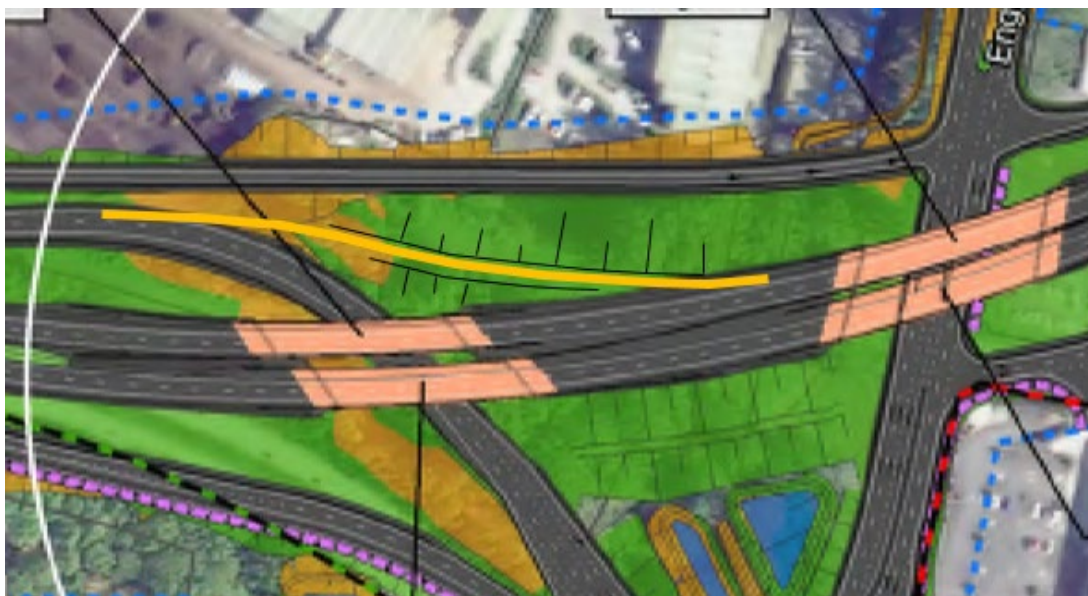
CYCLIST WAYFINDING AT ENGLANDS ROAD INTERCHANGE

CHCC believe there would be considerable challenges with management of cyclists in this interchange which is made increasingly complex with the western service road. There are 3 main conflicts with wayfinding CHCC observe:

- The need for cyclists to leave the highway up to 1km prior to the Intersection to travel on the western service road in order to re-access the highway from the NB onramp at Englands Rd.

- The need for cyclists who miss this to utilise the NB offramp and navigate the upgraded intersection, head west and re-join the pacific highway from the NB onramp. This causes them to navigate 2 sets of traffic lights which is difficult for cyclists and causes impacts to traffic.
- The risk of cyclists ignoring these desired usage paths and travelling through on the highway, risking vehicular conflicts at the NB offramp, considering there are 2 lanes of exiting traffic.

CHCC suggest RMS investigate an option to allow cyclists to exit the highway with town centre bound traffic and re-join the highway main alignment without navigating intersections. This could possibly be achieved through a dedicated cycle ramp from the NB offramp up to the main alignment (see sketch). This enables splitting of the cycle path to give cyclists the option of returning the CHCC town centre if desired or remaining on the bypass and avoiding the intersections at Englands Road.



ISLES DRIVE LEFT TURN (FROM SOUTH)

CHCC have previously indicated that modifications would likely be required to enable a 'left turn in' from the south for B-Doubles due to the imposed turning restriction in place. CHCC would like to thank RMS for acknowledging the need to provide necessary modifications to enable this left turn in to be possible under the proposed new arrangement. CHCC would gladly take part in further discussions regarding these alterations.

ISLES DRIVE RIGHT TURN (FROM NORTH)

CHCC have previously indicated the need to upgrade the Isles Drive intersection specifically to cope with added traffic stress on the right turn in from the north approach. RMS has stated that the intersection upgrades are out of the scope of the project, however acknowledge some alterations for the left turn in.

The screenshot below shows the right turn lane into Isles drive is a single lane of 45m length. This has storage for only 9 vehicles at present. Currently, this turning lane fills and can choke the right southbound lane which leads to minor delays. One current advantage of the 'through road' nature of Isles drive is the ability to detour this right turn and enter via the southern access off Englands Road. Alternatively, if vehicles desire to enter the service

centre, they perform a legal u-turn at the current roundabout at Englands Road and enter the service centre via the slip road. These 2 alternatives alleviate major congestion, allowing the intersection to perform at a higher LOS than it otherwise would.

The bypass project eliminates these 2 alternatives by removing the southern Isles Drive Access and by removing the roundabout. This makes performing a u-turn to enter the service centre illegal. The only local access into Isles Drive will be from the North via the right turn lane. Under this arrangement, all local traffic into Isles Drive will be required to enter from the north leading to more frequent lane blocking on the southbound approach to the lights.



Simple re-sequencing of the lights may provide some relief to this issue, however this will have a greater impact on the through traffic flow on the current highway. Post bypass traffic is noted as being in the order of 20,000vpd which is a substantial reduction. However, this reduction will be seen at non-peak periods as peak traffic is generated by local traffic movements and businesses. The alleviation of traffic through re-sequencing may provide only limited benefit and will not ultimately solve this problem.

CHCC request RMS include this intersection upgrade in the project due to the direct impacts caused by road reconfigurations in the area and the noted LOS D is below highway upgrade targets. CHCC believe this may warrant duplication and extension of turning lanes, similar to the North Boambee Road intersection, located to the north.

LOCAL TRAFFIC VOLUME CHANGES

CHCC have reviewed the logic behind the RMS traffic changes. CHCC have also reviewed data obtained by RMS and the logic applied to the CHTSM used in the study. CHCC have not had access to the model to do a detailed review thus can only review the general logic applied based on knowledge of how traffic moves in the current and proposed arrangement. CHCC believe the logic applied is sound. CHCC traffic volume data was provided earlier in this document.

CORAMBA ROAD TRAFFIC

CHCC wishes to draw the RMS attention to the section of road between Shepherds Lane and Robin Street. This section currently see's 11,300 vpd (Table 8-9). The predicted result is a decrease to the traffic flow in the order of 1800 vpd bringing the daily traffic to 9,500 vpd. CHCC are very supportive of a reduction of vehicular traffic in this location and are hopeful that the bypass will also reduce use from heavy vehicles in this area as well.

If this decrease was not realised and an increase was observed, due to increased use of the Coramba Road interchange, the split level nature of the road, minimal lane width and under-width footpath would make the road unsafe and makes any upgrades extremely challenging and costly to Council.

Council would request RMS consideration and funding for a suitable upgrade/outcome.

CLOSURE OF SPAGNOLOS ROAD

CHCC have no objections to the proposed closure of Spagnolos Road for vehicular traffic from Coramba Road to Rosina Close only. CHCC believes this provides a safer means for vehicular access via Roselands Drive and reduces the turning locations into and out of Coramba Road.

CHCC note that the laydown in this location is currently utilised as a bus interchange with many students walking along the section of Spagnolos Road to access the interchange and from the laneway off Tiffany Close. A walkway should be retained in this location to enable a designated path during construction and post completion. This may require a temporary break in the noise wall to achieve.

SPAGNOLOS ROAD BUS STOP

The EIS design does specifically nominate a new location for a bus stop / interchange in lieu of the existing one when removed. CHCC note a pedestrian refuge is shown on the plan in this location indicating that a possible solution is a bus stop on either side of the road. The current location does not require pedestrians to cross Coramba Road at any point.

The design proposes an increase in traffic on this stretch of road. This increases the exposure of risk to pedestrians, which does not currently exist as there is no reason for any to cross the road.

CHCC welcome RMS suggestions that further consultation is required. CHCC will actively participate to achieve the best outcome but do not encourage the routine crossing of high speed roads. A speed reduction may need to be considered by the RMS at minimum or an alternative crossing method such as an underpass or footbridge.

FOOTPATHS AT INTERCHANGES

CHCC aim to construct all new footpaths a minimum of 1.5m. Where a cycleway forms part of the network in the location a shared path width of 2.5m should be adopted. CHCC do not object to greater widths being provided where there is an identified need.

SHEPHERDS LANE BRIDGE

CHCC support the inclusion of a footpath on Shepherds lane bridge. The current drawings nominate a footpath on the eastern side of the road. Given the existing footpath on Shepherds Lane (500m away) is on the western side, it may be most practical to keep the footpath on the western side in the event that CHCC or development link up the footpaths in the future.

MACKAYS ROAD NORTH

RMS are currently proposing construction access via Mackays Road north. In the assessment, RMS state this road is a collector road. This is the case for the segment south of Bray Street to Beryl Street, however from Bray Street north the road is a local access road.

This road contains a private hospital, retirement village and residential areas. The road is regularly parked to capacity, leaving only a 6.0m travel width. There are many vulnerable pedestrians in this area that access the retirement village and hospital regularly. As a result, the congested environment may not be the best access point to the road corridor.

CHCC recognise there are limited access points in this area but offer 2 alternative access points that pose less of a threat to the community:

- Access via Vera Drive – This area is residential only and there would also be considerable disruption to the residents during construction. The road width however, is between 10.5m and 11.0m wide, reducing congestion and vehicle conflict risks. There are less vulnerable pedestrians in the area as well.
- Access via Gately's Road – This is a far longer access route and potentially steeper. There are far less residences to be impacted but may require residential agreements. This would have the least impact to the local community.

CHCC request the RMS investigate these options and others to ensure the safest approach with minimal disruption to local traffic and pedestrians in the construction phase.

JAMES SMALL DRIVE

CHCC have previously expressed concerns regarding the change in use of James Small Drive as a result of the Korora Bus Bay alteration. Concerns with the proposed arrangement are:

- Sub-standard curves and other features
- Bus Increases on James Small Drive
- Flooding on James Small Drive

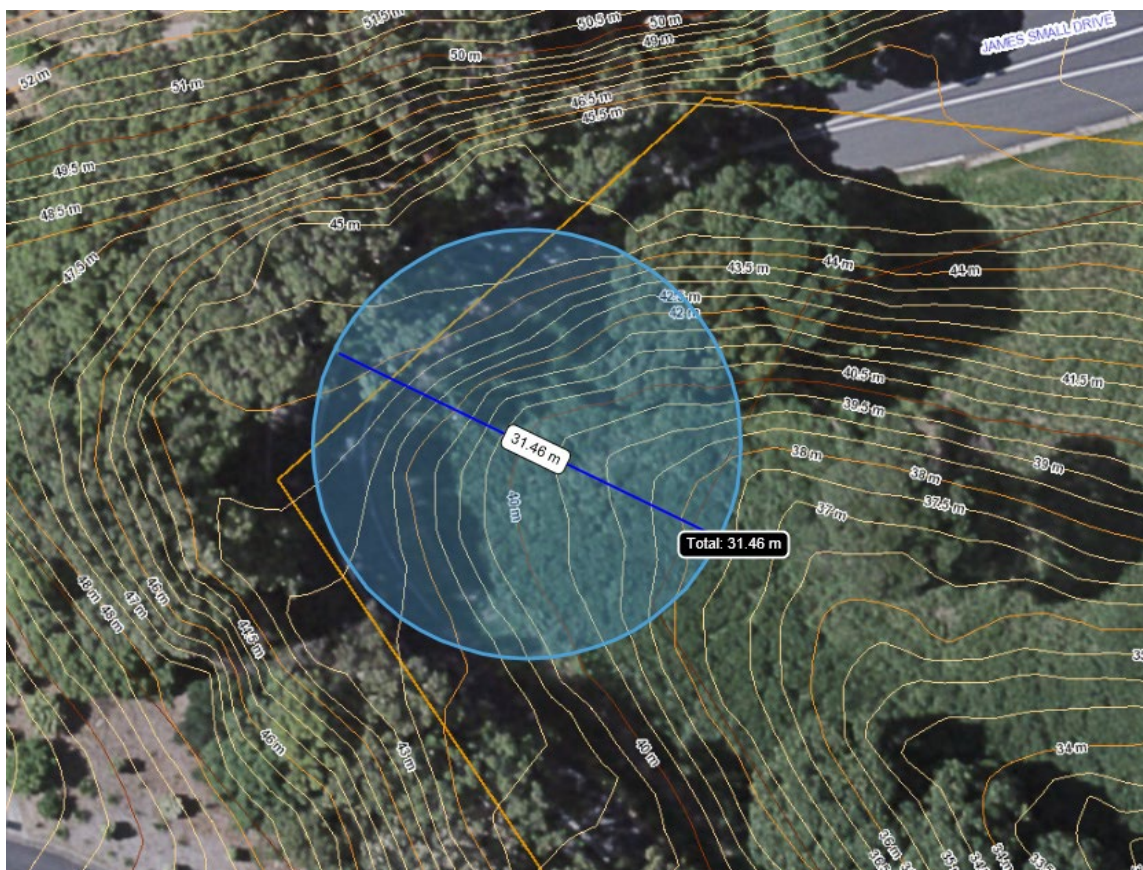
SUB-STANDARD CURVES AND OTHER FEATURES

The Korora Interchange ties into James Small Drive at the southern end of the roadway. The current condition of the roadway is good, however the geometry of this section of road has a

number of safety considerations that CHCC request RMS to address in the design of the bypass.

The roadway is narrow. The carriageway is 6.0m wide with 2x 3.0m lanes. No shoulder is currently available. CHCC specifications for new development requires a minimum 2 x 3.5m lanes with 1.0m shoulders. At curves, the lanes should be widened to 4.0m to allow for vehicle drift effects. At the edge of the roadway are steep embankments with no guardrail due to lack of width and private property boundaries.

In addition to the above points, the curve located between Ballantine Drive and Tranquility Drive has a radius of approx. 16m. The maximum advisable speed around this bend would be 25km/hr and a suitable curve radius for this road is in the order of 80m.



A section of road north of Plantain Rd is only 6.9m wide. Routinely there are cars parked on this section of road which reduces the width further.

The project seeks to increase traffic volumes by 1900 vpd to 6000vpd. CHCC specifications recommend roads of this capacity require an upgrade to 'collector road' standards.

CHCC request RMS to upgrade the Southern Section of James Small Drive between Solitary Islands Way and Breakers Way in order to provide a suitable curve radius and lane and shoulder widths. This will alleviate risks of additional traffic in sub-standard length of road.

BUS INCREASES ON JAMES SMALL DRIVE

Currently very few buses travel on James Small Drive (occasional school pickups/drop offs may be done depending on student demand). The project seeks to substantially increase the bus travel on the road. Due to the narrow and sharp radius nature of the southern section

buses need to enter and exit from the northern connection. This dramatically increases the risk of collisions between pedestrians, vehicles and buses directly adjacent to the Kororo Public School.

In addition, the 6.9m section mentioned previously often has residential vehicles parked on the stretch of road reducing the width further. This section is a risk for passing buses if the bus bay is installed in the current proposed location.

FLOODING ON JAMES SMALL DRIVE

Table 17-17 notes the existing flood immunity to numerous roads and the proposed immunity with the project scenario. Currently James Small Drive is listed as overtopping by 75mm in a 1% AEP event. This is a low risk scenario at present and likely a short duration given the vertical geometry in the area.

Under the project scenario, the table shows the road will be inundated by 130mm in an 18% AEP event. No comments are provided by RMS to show the inundation in the 1% AEP for a like for like comparison. CHCC expect the 1% AEP under the design would be far higher than 130mm. RMS consider case is considered 'accessible' as the current road has the possibility of water over it.

CHCC note that 130mm in flood conditions is substantially higher than 75mm and do not agree that this road is 'accessible' in this situation. CHCC request RMS to assess the 1% AEP flood effects and report the true flood immunity of this road.

CHCC note RMS desire to refine the drainage design at this location but do not support flood increases combined with traffic increases. Given the vertical levels downstream of this road, achieving a similar or better than existing immunity should be targeted.

KORORA BUS BAY

CHCC are supportive of additional parking, pedestrian access to Solitary Islands way and to Old Coast Road. However, the proposed design to the Korora Bus Bay increases the risk of conflicts between buses, pedestrians and vehicles, noted by the RMS in Section 8.4.5. Given the increase in traffic on James Small Drive, CHCC believe the outcomes may not be better overall for Kororo Public School.

CHCC request RMS to develop further options for the Bus Bay, including options that consider bus access on Solitary Islands Way.

CHANGES TO OLD COAST ROAD AND OC1 AND OC2 ROAD BRIDGES

The usage of Old Coast Road is substantially altered in the project scenario changing the usage of Old Coast No 1 and No 2 bridges.

The position of the new Luke Bowen Footbridge and closure of Old Coast Road to the highway creates a pick up and drop off location for students near Kororo Public School. At present, the concept shows a cul-de-sac arrangement, but the plans allow for a possible car park location.

OC1 bridge is a single lane timber bridge with a concrete deck. There is a dedicated pedestrian access path on the northern side of the bridge. The changed arrangement

creates a need for vehicles to enter the cul-de-sac to drop off or pick up students then leave. There is a risk of conflicts at the AM and PM peaks where there will potentially be high frequency usage of this access point and only a single lane bridge to manage in and out vehicles. There is a risk conflict on or near the bridge during these times. Given the changed use and minimal space on the cul-de-sac side, CHCC request the RMS to provide a wider bridge in this location that meets the needs of the area.

An additional risk is that CHCC foresee is that usage may ultimately be deterred because of the risk of vehicle conflicts.

OC2 bridge is a single lane timber bridge located between Korora Basin road and the new proposed Western Service Road. The road and bridge is on a substantial skew at this location, reducing the width of 6m to an apparent width of 4m. Current traffic volumes are low as this bridge feeds 2 dozen properties on Old Coast Road.

The alteration of the western Service Road channels all the vehicles from Korora Basin Road over this bridge. Currently OC2 traffic is 273 vpd (2018 data). Korora Basin Rd traffic is 721 vpd (2013 data). This would see a minimum 3-fold increase in local traffic over this bridge, in addition to school based traffic which is designed to use this access point as well.

CHCC request the RMS upgrade this bridge to a suitable width concrete bridge based on the changed traffic conditions in the area.

OC1 AND OC2 BRIDGES AS HERITAGE

Chapter 16 of the EIS notes that both of these timber bridges are heritage items. Both OC1 and OC2 have had considerable reconstruction and upgrade works carried out previously and as recently as 2016 (girder replacements). Both bridges have concrete decks, which have no heritage value. CHCC currently have 54 timber bridges in inventory, 12 of which have concrete decks over timber substructures.

CHCC does not recognise these as current or possible heritage items, nor do we believe the bridges warrant preservation as heritage items. CHCC request RMS to review the need to upgrade the bridges in line with the proposed changes to traffic flows and usage.

WAYFINDING AT KORORA INTERCHANGE

The complexity of the intersection of Korora will create numerous challenges for vehicles / trucks / cyclists and pedestrians.

Coffs Harbour receives many visitors per annum including general tourism, international travellers and truck deliveries. A significant portion of vehicles are likely to contain drivers who have little to no local familiarity with the road network. The nature of the interchange means there will be heightened confusion and potential risky behaviours performed by drivers who may be confused or funnelled into the wrong direction.

CHCC understand the flow of traffic in a few locations are as follows:

- Vehicles remaining on solitary islands way, northbound. These vehicles are required to turn right at the signalised junction east of the underbridge. 2 lanes are provided for storage. These lanes immediately merge with the NB offramp at the exit of the turning movement which is a point of conflict. All vehicles immediately enter a 5 arm

roundabout, which they need to exit north whilst merging with traffic from the local SB offramp. This is also a major risk of conflict for cyclists who may elect not to use the shared path and navigate the intersections.

- NB offramp traffic follows a long offramp around to the underpass provided. Vehicles then are split, giving the option of returning to the highway or funnelling to the roundabout, which they will need to merge with vehicles remaining on Solitary Islands Way. Then they navigate north or south. Southbound vehicles need to merge to the right lane as the secondary lane exits the roundabout to head north. They then need to merge with traffic from Solitary Islands Way. Further south they need to merge with SB offramp traffic. This means users of the NB offramp, to return to the northern end of Coffs Harbour need to perform 4 merge movements.

CHCC believes the traffic flows in the area demonstrate a high confusion environment, with little available reaction time for drivers. CHCC recognise there are significant challenges with levels, traffic volumes and side roads in this area but would strongly support a complete redesign to simplify the entire interchange.

CHCC offer 2 space reduction suggestions which reduces ramping on the western side of the highway and wayfinding simplicity. CHCC recognise the vast amount of work and thought RMS has put into the design and do not suppose that RMS has not already considered these options, but offer them regardless.

Option 1 – Reduction of ramping on the western side of highway



This creates in-line ramps on the western side. This would be achieved by lowering the main alignment and creating an overbridge interchange like Coramba Road. The current design alignment is showing a slight rise coming out of the cutting to the south and could feasibly be

lowered, with minor depth increase to this cutting. This would unlikely increase the vertical grades towards Gatelys Road.

Off ramps would rise up to the overpass, reducing cutting to the west and aiding vehicle slowing. The connection to Bruxner Park Road would be steep and may need to be optioned to head south to the current design tie in.

A large roundabout would be installed on the fill area to the east of this interchange. This would receive 2 lanes of SB off ramp traffic. A conflict point would still exist with SB off ramp traffic and traffic exiting to Solitary Islands Way north, but this is less conflict points than the current design option.

This option presented has limitations in that it requires off ramp traffic to stop at lights and roundabouts, whereas the RMS option allows for a longer slow down and faster traffic flow. This however, would improve the interactions with local traffic greatly.

Option 2 – Double Signalled Interchange with offset roundabout



This option would take the same alignment and level changes in option 1, but duplicate the NB ramp signalisation on the SB side. Once all the ramp traffic has merged, it would enter a large roundabout where it meets Solitary Islands Way traffic.

This affords more room around the roundabout to manage turns and traffic congestion, which reduces the points of conflict further.

This again would reduce the highway ramp LOS by forcing full stoppages at signals, but would increase the LOS to the local traffic.

MAINTENANCE OF NEW INFRASTRUCTURE

Typically, in the completion process of projects, non-highway sections of road are handed back to local councils. The infrastructure in the Korora Interchange is highly complex and will likely be considered a part of the regional or local road network which council likely will be responsible for.

Council believe there will be challenges with managing signal efficiency, damaged islands, damaged signage and signal infrastructure, ongoing complaints and vegetation management. Council are not willing to accept such complex and challenging infrastructure (with all wayfinding issues shown) without ongoing financial assistance from the RMS.

HIGHWAY CROSSOVERS

CHCC note that RMS have included median crossovers at 5 locations in the design. These are noted as emergency crossovers and for contraflows in the event of incidents. As a part of the tunnel management, maintenance of systems takes place on a regular basis closing a tunnel. This would require regular contraflows to manage this process.

Historically, crashes and significant maintenance on other projects have required contraflows to occur on the local road network. The justification is often that median crossovers do not have adequate length to allow large vehicles to traverse safely through them (recent S2W maintenance). Maintenance crossovers that have been constructed on other projects have a very different design which enables large vehicle traversing, which is not evident in the current design.

CHCC would like RMS to actively commit to contraflow operations for maintenance within the alignment only (unless under extreme circumstances 2 tunnels were required to close). This is important as the likelihood of changes to the current pacific highway arrangement is very high and future arrangements would simply not cope with local contraflows.

LOCAL ROAD GEOMETRICAL STANDARDS

CHCC have previously supplied RMS with generic development specification which are applied to new roads built within the network. In consultation with RMS, there have been implications to the wider project which result in general inefficiencies to the overall project and to Council as the long-term manager of the local roads. Council provide the following information to inform the design and recognise that as the design progresses, further optimisations may be possibly provided there is adequate consultation with Council and other affected stakeholders.

Road / Access Names	AADT	AADT count year	Existing			Current CHCC Road Classification	Existing Speed Limit (km/hr)	Proposed CHCC Road Classification	Proposed Speed Limit (km/hr)	Proposed			Comments
			Lanes x Widths	Shoulders	Total Width					Lanes x Widths	Shoulders	Total Width	
Access Road A	NA	NA	NA	NA	NA	NA	NA	Local Access	60	3.5	2.0 / 1.0	6.5	Single Lane - one direction (needs cycle access) widths in consultation with stakeholders / users
Stadium Drive	10000	2018	2 x 3.5	2 x 2.0	11	Local Sub-Arterial	60	Local Sub-Arterial	60	2 x 3.5	2 x 2.0	11	Allow for curve widenings if req'd
Englands Road	NA	NA	2 x 3.0	NA	6	Rural Collector	50	Rural Collector	60	2 x 3.0	1 x 1.0	8	Unsealed Shoulder
Isles Drive	3095	2004	2 x 3.5	2 x 2.5	12	Collector Street	50	Collector Street	50	2 x 3.5	2 x 2.5	12	As per existing
Coramba Road East	6716	2018	2 x 3.5	2 x 0.7	8.4	Local Sub-Arterial	70	Local Sub-Arterial	50	2 x 3.5	2 x 1.0	9	As per existing
Coramba Road West	6716	2018	2 x 3.5	2 x 0.7	8.4	Local Sub-Arterial	80	Rural Arterial	80	2 x 3.5	2 x 1.0	9	As per existing
Bennetts Road	240	2013	2 x 3.0	0	6	Local Street	60	Local Major	60	2 x 3.0	2 x 1.0	8	Unsealed Shoulder
Bennetts Road - Driveway	NA	NA	NA	NA	NA	NA	NA	Single Lane Rural - 56vpd est	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Coramba Road NB on-ramp driveway (Stn 15000)	NA	NA	NA	NA	NA	NA	NA	Single Lane Rural - 42vpd est	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Shephards Lane - Bridge	NA	NA	2 x 2.5	0	5	Crown Road	50	Local Minor	40	2 x 3.0	2 x 0.6	9	Inc 1.8m walkway (AS5100.1 Section 9.10) Up to 12 houses - 150vpd +
Shephards Lane - Northern access road	NA	NA	1 x 4.7	0	4.7	Local Street	40	Single Lane Rural - No apparent property	40	1 x 3.7	2 x 1.25	6.2	RMS to confirm if there is a need post construction. Appears redundant
Access - Ristalla Pty Ltd	NA	NA	NA	NA	NA	Possible Right of Way	NA	Private Driveway	NA	NA	NA	NA	Needs individual landholder consultation
Stn 17700 Access Road (North)	NA	NA	NA	NA	NA	Crown Road	NA	Single Lane Rural - 84vpd est	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Stn 17700 Access Road (Underpass)	NA	NA	NA	NA	NA	Crown Road	NA	Single Lane Rural - 140vpd est	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Access - Sim / Smith	NA	NA	NA	NA	NA	Crown Road	NA	Single Lane Rural - 2 properties	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Access - Borsato / Reedy	NA	NA	NA	NA	NA	Crown Road	NA	Single Lane Rural - 2 properties	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Mackays Road	305	2011	1 x 3.7	0	3.7	Crown Road	50	Local Major	60	2 x 3.0	2 x 1.0	8	Unsealed Shoulder
West Korora Road	172	2016	1 x 3.7	0	3.7	Local Street	50	Single Lane Rural - 70vpd est	40	1 x 3.7	2 x 1.25	6.2	Austrroads Part 3, Section 4.2.6 - Needs individual landholder consultation
Bruener Park Road	488	2016	2 x 2.9	0	5.8	Collector	60	Local Major	60	2 x 3.0	2 x 1.0	8	Sealed Shoulder
Access - Dhariwal	NA	NA	NA	NA	NA	NA	NA	Private Driveway	NA	NA	NA	NA	Needs individual landholder consultation
Solitary Islands Way (JSD South to JSD North)	NA	NA	NA	NA	NA	NA	NA	Local Sub-arterial	60	2 x 3.5	2 x 1.5	13	Include 2.5m shared path + Kerb east side and 1.5m onroad cycleway each side
James Small Drive - South	850	1997	2 x 3.5	Variable	7 to 8	Collector	50	Collector Street	40	2 x 3.5	2 x 1.0	9	Due to inappropriate curve the speed should not exceed 40km/hr with 25km/hr curve advisory. See CHCC requests
Western Access Road (Coachmans to Old Coast)	NA	NA	NA	NA	NA	NA	NA	Rural Collector	60	2 x 3.0	1 x 1.0	8	Unsealed Shoulder
Opal Boulevard (Solitary Isl Way to Coachmans)	NA	NA	2 x 6	1.4 median	13.4	Local Street	50	Local Street	50	2 x 3.5	1 x 1.0	9	Reduced to standard width
Opal Boulevard (Coachmans to Opal Cov)	NA	NA	2 x 4.5	1.4 median	10.4	Local Street	50	Local Street	50	2 x 4.5	1.4 median	10.4	Medians as per existing from Coachmans Close only.
Coachmans Close	NA	NA	2 x 3.5	0	7	Local Street	50	Local Street	50	2 x 3.5	1 x 1.0	9	As existing

CHCC Existing and Proposed Widths of Local Roads

TRANSPORT AND ROADS

ENGLANDS ROAD INTERCHANGE – POTENTIAL INDUSTRIAL AREA TO THE WEST

It is noted that in a recent meeting between Council officers and RMS (Peter Borrelli) on 27 September 2019, Council (CHCC) indicated that investigation of future employment lands in North Boambee Valley West was currently suspended. However, a more recent draft Employment Land Strategy (HillPDA, October 2019) recommends investigating this area for the opportunity for a general industrial precinct. This area is generally located immediately north of Englands Road / west of the proposed bypass. The draft Employment Land Strategy notes this area could provide approximately 13ha for industrial uses and is similarly identified as an investigation area in the North Coast Regional Plan 2036.

Recommendation: *The interchange design needs to allow for traffic movements associated with this potential industrial precinct.*

ENGLANDS ROAD INTERCHANGE – CYCLEWAY CONNECTIVITY

It is noted the project includes provision of signalised pedestrian/cycle crossings of the existing Pacific Highway and Stadium Drive at the Pacific Highway/Stadium Drive/Englands Road intersection (EIS Volume 3 – Appendix F - Section 5.8.4).

Recommendation: *The signalised pedestrian/cycle crossings need to be designed in consultation with CHCC to ensure they align with CHCC's Bike Plan which is currently being redeveloped (unpublished). CHCC can work with RMS to inform them of any refinements to the cycleway networks outlined in CHCC's Bike Plan. This comment also applies generally to all proposed cycleway works.*

ENGLANDS ROAD INTERCHANGE – PEDESTRIAN SAFETY

The Englands Road interchange is in close proximity to the Coffs Coast Sport and Leisure Park, C. ex Coffs International Stadium, John Paul College and the Coffs Harbour Education Campus. This interchange already does and will continue to see large volumes of pedestrians coming from the sport or education facilities wanting access to the fast food on western side of Pacific Highway. Whilst there is a fast food outlet on the eastern side, the variety is greater on the western side, see pedestrians gravitate over the Pacific Highway east to west.

Recommendation: *Ensure safe pedestrian friendly crossing point to service neighbouring sport and education facilities. Remembering a high volume of users will be children. Also ensure footpath connectivity from traffic lights to fast food to ensure no pedestrian activity along road*

PACIFIC HIGHWAY / ISLES DRIVE INTERSECTION

The performance of the Pacific Highway / Isles Drive intersection is reported to provide a current overall Level of Service (LOS) of 'C' for AM period, and 'D' for PM period with a LOS of 'E' for the worst movements (east and west approaches). The modelled 2044 intersection

LOS is similar for overall performance ('D' for AM period, and 'C' for PM period) but the worst movement LOS degrades to a level 'F' - unsatisfactory as described in Section 3.5 of EIS Volume 3 – Appendix F.

Recommendation: The Pacific Highway / Isles Drive intersection needs to be improved to provide a LOS higher than 'F' for the worst movement. It is noted this should be done in consultation with CHCC together with the proposed modifications to permit B-doubles to access Isles Drive (Section 5.2 of EIS Volume 3 – Appendix F).

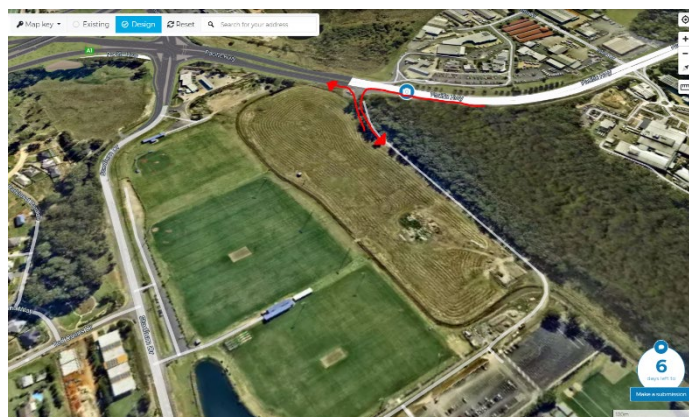
STADIUM DRIVE INTERSECTION

Large event traffic consideration: Stadium Drive is an increasingly busy link road from the Pacific Highway to Hiogbin Drive to industrial areas, and highly used by the community as well as large transport vehicles. The C.ex International Stadium is located in the middle of Stadium Drive, and in addition to the regular high volume of vehicles, events at the Stadium regularly generate large volumes of traffic on top of traditional use and cause congestion at the Stadium Drive / Pacific Highway round about.

Recommendation: Ensure adequate holding lanes (long and wide) on Stadium Drive at traffic lights to allow for large event egress (on top of every day traffic use). As well as adequate TURN LEFT lane space when travelling south on Pacific highway. And TURN RIGHT space when travelling North to prevent backing up on interchange.

PACIFIC HIGHWAY SOUTH BOUND BEFORE ENGLANDS ROAD INTERCHANGE

Due to the Coffs Coast Sport and Leisure Park Precinct and the C.ex Coffs International Stadium growing in size and capacity (2017 – 2019 \$6.5M Federal funded upgrade to Stadium, and 2019 – 2021 \$10M state funded expansion to Leisure Park), consideration should now be given to an additional access point to the precinct from the South on Pacific Highway. See below.



This is identified in adopted council documents such as Sports Facility Plan, CCSLP Masterplan. An additional access point (not on Stadium Drive) will take considerable pressure off the England's Road interchange during major events

Recommendation: additional access point to the Coffs Coast Sport and Leisure Park precinct from the South on Pacific Highway, to reduce pressure on England's road interchange during major events

EIS VOLUME 3 – APPENDIX F - SECTIONS 3.2 TRAFFIC VOLUMES AND SECTION 4.6 TRAFFIC FORECASTS

There appears to be a significant discrepancy in traffic volume figures for Hogbin Drive (north of Stadium Drive) between 2016 survey data in Table 6 (20,700 vpd) and 2016 daily volumes in Table 12 – forecast volumes (27,500 vpd).

Recommendation: *Please clarify why there is such a significant discrepancy.*

EXISTING PACIFIC HIGHWAY THROUGH THE CITY CENTRE

The EIS notes that “once operational, the removal of traffic, especially heavy vehicles, from the CBD is expected to generate new business opportunities due to improved access and amenity” (Section 5.2 of EIS Volume 1B, Chapter 14 -page 14-55). This opportunity is reinforced in Volume 6A: “Potential for CHCC to create a more pedestrian friendly environment with lower speeds and a reduction of heavy vehicles in the city centre; Potential for CHCC to provide street trees to enhance public amenity on the old Pacific Highway route.” (Section 3.9 of EIS Volume 6A)

Recommendation:

In the event that the existing Pacific Highway is transferred to CHCC it is expected that RMS will provide suitable financial assistance and support to achieve:

- *adequate Levels of Service for the network;*
- *appropriate road space reallocation; and*
- *streetscape amenity.*

The road space reallocation and streetscape amenity particularly applies to the City Centre between the intersections with Albany Street and Beryl Street. It is expected that road space allocation and streetscape amenity of this key section will be developed in a cooperative process between CHCC and RMS and in accordance with the NSW Government Movement and Place Framework, CHCC’s City Centre Masterplan, transport strategy and other relevant documents.

EIS VOLUME 1B –SECTIONS 8.5 ENVIRONMENTAL MANAGEMENT MEASURES

One of the measures in Table 8-15 - Environmental management measures for traffic and transport impacts (ID No. TT11) states:

“A review of operational network performance will be undertaken 12 months from the opening of the project to confirm the operational traffic and transport impacts of the project on the surrounding road network, in particular at interchange locations and Coramba Road. The assessment will be based on updated traffic surveys at the time and the methodology used will be comparable with that used in Appendix F, Traffic and transport assessment.”

Recommendation:

It is noted that CHCC is currently working with RMS (Anthony Donohue and others) to develop a collaborative approach to managing and maintaining a traffic model for the Coffs Harbour road network – building on the model developed for the bypass project. It is expected that the above management measure (TT11) will be undertaken in consultation with both RMS and CHCC to ensure the most up-to-date model is used or network modifications are incorporated.

CORAMBA INTERCHANGE BUSES

CHCC notes RMS approach to further consult with operators and Council. There are no formal details provided in the EIS however CHCC request RMS review the need for bus bays on both sides to cater for AM and PM pickup/drop off and safe pedestrian access across Coramba Road.

SPAGNOLOS ROAD

RMS will close this road (will remain pedestrian use). CHCC will acknowledge this proposed closure providing the pedestrian access is safe and not so heavily screened that antisocial behaviour eventuates.

KORORA BUS BAY

This bay creates a need for buses to travel in 2-directions on James Small Drive. Sections of this road are only 7.0m wide (north of Plantain) and would pose additional safety risks.

RMS note the bus bay would increase safety but in chapter 8 note this increases the risk of pedestrian / vehicle / bus conflicts. CHCC to request RMS to review the design and add additional safety features or even isolate bus bays from car bays.

JAMES SMALL DRIVE

There is a tight radius curve located between Tranquillity Drive and Ballantine Drive. The radius is only 16m and RMS propose a minimum radius of 40m for any roads at 40km/hr. Given there is an increase to this road of 1900vpd (now up to 6000vpd) CHCC will request this tie in to be extended beyond tranquillity drive to improve safety and allow for bus usage.

LOCAL ROAD STANDARDS

CHCC will consider some deviations from the local road specification on very low use roads where a road may serve less than 10 residents. This will save RMS considerable land resumption and residential impacts, whilst reducing long term road maintenance for Council.

CROSSOVER USE AND DESIGN

Crossover design appears to be standard emergency vehicle crossovers which cannot be utilised for contraflow (S2W highway works in 2019 put the SB carriageway onto the local road to perform works). Given the high maintenance demand of tunnels, CHCC will request RMS to install full contraflow capable crossovers to eliminate the need to run traffic through the CBD.

FOOTPATH AND CYCLEWAY CROSSINGS

CHCC Request RMS consider centre island crossings of the footpath / cycleway for N-S and E-W paths shown.

FOOTPATH AT ENGLANDS INTERCHANGE SB ONRAMP

RMS plans note a 'new footpath' to be constructed. CHCC request this be a new cycleway, given the existing condition is a cycleway.

NB HIGHWAY CYCLE USEAGE

CHCC believe cycling wayfinding around the NB approach to Englands Road interchange is complex and needs very good signposting.

- Cyclists remaining on the highway need to leave the highway at the western access road and travel through the off/onramp lights at Englands Rd west.
- Cyclists exiting to Coffs Harbour need to stay on the road and take the 2nd exit and underpass.

These needs do not follow surrounding highway logic and pose a risk to users.

NOISE AND VIBRATION

The assessment of development applications for residential accommodation and other sensitive land uses include the consideration of the potential impact of noise on the proposed development. The provisions of the State Environmental Planning Policy (Infrastructure) 2007 (the SEPP) and in particular the impact of road noise or vibration is currently a consideration by Council for development adjacent to the existing Pacific Highway. Council will assess development adjacent to the new bypass in accordance with the SEPP and apply noise mitigation on the development were necessary.

Recommendation: *It is important that noise mitigation measures such as the proposed low noise pavement surfaces and suitable barriers be provided for the benefit of existing development and to assist with new development achieving compliance with the provisions of the SEPP.*

COMMUNITY SUBMISSION TO COUNCIL REGARDING NOISE

Council is aware, via previous input from the community over an extended period, that the potential of noise impacts from a future bypass are a latent concern throughout the community in general. The concern naturally increases amongst the communities which live in areas of closer proximity to the bypass route.

Council has recently received a compelling advocated position via the Coffs Bypass Action Group (a highly active and well-supported local community group operating under its own auspices) regarding this issue.

Council understands the Coffs Bypass Action Group will be supplying a submission under their own cover during this current consultation process which will provide the detail of their concerns. However, Council makes the following comments:

In summary:

The Group presented Council with their key concerns which are:

1. The necessity of ensuring the **absolute validity** of the baseline noise measurements (ie. those noise levels that exist pre-bypass in the various areas along the proposed bypass route), and
2. The necessity of ensuring that the modelling based on those measurements, and conclusions drawn from the modelling, are not unintentionally biased or skewed by the inclusion of irrelevant data.

The importance of ensuring the validity of the activities described in points 1 and 2 above, is underlined by the fact that all project investment decisions regarding the need or otherwise for noise mitigation strategies/infrastructure will be based on the output of those activities. If the outputs and conclusions are not valid then the investment decisions based on those conclusions are unlikely to be correct.

In relation to point 1 above, the Group presented Council with their own commissioned noise measurements which, on their face, appear to contradict some of the baseline noise measurements by the RMS and published in the EIS.

In relation to point 2 above, the Group presented Council with their concerns that the modelling of that noise data which was collected by the RMS, and the conclusions which have been drawn from the modelling in the EIS, are flawed and therefore result in a skewing of the conclusions to the detriment of some residents.

The Problem as Presented by CBAG:

Assumption: In broad policy terms a residential property which suffers an increase in average noise levels of more than 12dB due to the future bypass is eligible to receive at-residence noise mitigation.

Example of the impact of skewing: Consider a property which currently (pre-bypass) enjoys an average noise level of 37dB between 10pm and 5am and a short duration average noise level of 49dB bird noise between 5am and 7am is mathematically taken to have an average noise level of 43dB between the hours of 10pm and 7am.

Consider that the average noise level at the same property is modelled (post-bypass) to be 50dB between 10pm and 7am in the EIS.

The modelled increase in noise due to the bypass will be calculated to be $50\text{dB} - 43\text{dB} = 7\text{dB}$. I.e. such a property will not be eligible for noise mitigation treatment because the modelled increase is less than the intervention point of 12dB.

This is despite the fact that the property is actually incurring a real increase of $50\text{dB} - 37\text{dB} = 13\text{dB}$ during the critical normal sleeping hours of 10pm to 5am.

Lesson: The inclusion of the short duration bird noise outside of normal sleeping hours therefore operates to skew the modelled result to the significant detriment of the affected resident.

Due solely to time constraints in the submission process Council has been unable to validate either the Group's analysis or its conclusions. Nevertheless, the arguments presented to Council by the Group have given Council sufficient concern to bring the issue to the attention of the Department in its own submission presented here.

Recommendation: *Council understands that the Coffs Bypass Action Group proposes that the RMS's noise measurements, collection methodology, and the resultant noise modelling outputs and conclusions drawn from that modelling be validated via an audit conducted by suitably qualified and experienced independent input.*

Council, in its turn, expresses explicit support for the Group's recommendation above.

BRIDGES

OLD COAST NO.1 BRIDGE

This bridge is located at the new Luke Bowen Footbridge. There is a need for the bridge to cope with 2-way traffic for drop off and pick up. It is currently a 1-way bridge which is not appropriate for the new demand. It has also been noted as a bridge with local significance to Coffs Harbour due to its timber construction. CHCC do not believe it being a Timber Bridge brings any real significance as we have many of them. CHCC will request RMS to demolish and re-build a concrete bridge appropriate to the need in the area.

OLD COAST NO.2 BRIDGE

This bridge is nearby OC1 bridge. It has also been nominated by RMS as a locally significant bridge and CHCC do not believe so. The traffic changes are altered significantly by creating a new access point along the western side. This creates a higher risk of vehicle conflicts on the bridge and CHCC will request this bridge to be upgraded and widened appropriate to the needs.

WASTE FACILITIES

IMPACTS ON COUNCILS CORE-FUNCTION WASTE FACILITIES

Coffs Harbour City Council does not support the proposed design of the Coffs Harbour Bypass in the vicinity of the Council's Englands Road Waste Management Facilities.

The Environmental Impact Statement (EIS) is considered to be deficient in its lack of proper identification and consideration of:

- the community importance of the Council's core function waste facilities,
- the likely impacts on the Council's core function waste facilities, and
- any avoidance or mitigation proposals for these impacts (beyond 'further consultation').

The socio-economic assessment in the EIS are entirely deficient in identifying the nature of the operations and services provided by Council (and its contractors) at these facilities in servicing the 100,000-plus residents of the three local government areas of Bellingen Shire Council, Nambucca Shire Council and Coffs Harbour City Council.

Several statements in the EIS appear to Council to be inaccurate with regard to facilities on each site and the level of foreseen impact on Councils facilities due to the EIS design – e.g. "...there would be no change to the existing land use", is considered to be false on Councils review of the EIS.

With specific regard to the impacts on Council's waste facilities, Council considers that the EIS does not appropriately address the requirements of the Department of Planning and Environment's "Secretary's Environmental Assessment Requirements" (SEARs) version October 2017, especially the 'General SEARs' – 'Desired Performance Outcome' and 'Requirement'.

Councils Englands Road Waste Management Facilities – Operational Impacts

The existing Lot boundaries of Lot 1 DP 1088982 and Lot 31 DP 1090175 (and Lot 32) were established some years ago to facilitate long-term lease arrangements for the development and long-term operations of two considerable Council waste processing facilities, and the continued operations of the landfill and associated waste facilities.

These key waste facilities service the three Local Government Areas which comprise ‘Coffs Coast Waste Services’, being Coffs Harbour City Council, Bellingen Shire Council and Nambucca Shire Council.

The Lot boundaries were established with input at the time from the then Roads and Traffic Authority (RTA), now RMS. Correspondence from the RTA to Council provided, inter alia, RTA statements including the following:

- “...the boundary as proposed on the Council’s drawing appears to be consistent with the boundary as shown on our drawing...”
- “...the preferred route for the Coffs Harbour Highway Planning Strategy does not directly impact on either the proposed [Council] subdivision (DA 05/1247) or the proposed Waste Facility (DA 05/1261).”

Based on RTA advice to Council, Council made very considerable investment decisions to facilitate the long-term provision of core-function waste services to its residents. These very considerable investment decisions and the practical, cost effective and long-term provision of our core-function waste services are now directly and seriously jeopardised by the proposals included in the EIS.

The very recent addition of the additional ‘slip lane’ from the Lindsay Transport depot in the south through to Englands Road, and the recent amendments along Englands Road have generated **very substantial concerns** for Coffs Harbour City Council (and its two partner Councils – Bellingen Shire Council and Nambucca Shire Council, which together form ‘Coffs Coast Waste Services’).

In addition to EIS design for Englands Road (west of the existing roundabout on the existing Highway alignment) is considered excessive – thereby exacerbating the Councils concerns as to the level of impacts on Councils waste facilities.

Councils concerns are particularised below:

Lot 1 DP 1088982 (Materials Recovery Facility and related facilities)

Background

Lot 1 DP 1088982 is owned by Coffs Harbour City Council and is currently under a long-term 9-year (+2yr ext. option) lease to our Contractor ‘Handybin Waste Services (Coffs Harbour) Pty Ltd’, with the lease being embedded in the associated 9 (to 11)-year Contract for the processing of recyclables collected from the three Local Government Areas. The facilities upon Lot 1 is known as the ‘Coffs Harbour Materials Recovery Facility’ (**MRF**). The MRF holds an Environment Protection Licence from the NSW EPA. The MRF is essentially owned by Coffs Harbour City Council (with both Bellingen Shire Council and Nambucca Shire Council having a material interest in the facilities) (and operated by Councils contractor).

The Materials Recovery Facility situated upon Lot 1 is considered by Council to be a long-term recyclables-processing-facility which we have intended to operate for many decades. The existing facilities constructed upon Lot 1 DP 1088982 are considered by the Council to have a long-term capacity to deliver key waste services to the three local government areas, beyond the current contract term.



Each year the MRF processes approx. 17,000 tonnes of recyclables – the considerable majority of which is supplied by the three Councils, and to a lesser degree by local commercial sources. Since 2005 when the MRF was considerably expanded, it has processed around 250,000 tonnes of source separated recyclables into high quality market-ready recyclate, including cardboard, aluminium, glass, plastics (e.g. PET, HDPE, etc.), polystyrene, plate glass, ferrous metals and the like. The MRF employs a considerable number of employees, and provides numerous flow-on benefits for the local and broader economy through additional services including transport and service related businesses.

In addition, the MRF includes a state-of-the-art waste education centre which is utilised to run waste education sessions for groups of students ranging from Preschool – Primary School – High School – Adults. The education centre features a viewing window directly into the MRF for students to view first-hand the important operations of this facility. Two waste education officers are employed by Council and it's contractor. This important education centre has been operational since 2005, educating a generation of students so far. The following data shows a snapshot of the high number of recent student attendees to our education centre at the MRF:

MRF Waste Education Session Data	No. of Attendees
March 2018 to June 2018	194
July 2018 to September 2018	431
October 2018 to December 2018	122
January 2019 to March 2019	40
April to June 2019	262
July to September 2019	312
Example Period Subtotal:	1361



Deficient EIS Statements per Lot 1 DP 1088982

The Council considers that the EIS is entirely deficient in its attempt to describe the impacts to Lot 1 DP 1088982, given the only statements included in the EIS are:

*“Partial acquisition of the CHCC owned Coffs Coast Resource Recovery Park ... which includes loss of some parking areas, impacts to buildings and stockpile areas”, and
 “The project would impact access roads, car parking areas and the facility’s annexe, located at the eastern end of the main shed”*

The Council considers that the EIS is entirely deficient in its attempt to describe RMS’ proposals to avoid or mitigate these impacts on Lot 1 DP 1088982, given the only statements included in the EIS are:

“Consultation with CHCC will be carried out before construction regarding impacts to the Coffs Coast Resource Recovery Park to identify opportunities to reduce the extent of property acquisition, temporary construction impacts and any other associated impacts to facilities which are important to the ongoing operations of the park.”

Council Considered Impacts per Lot 1 DP 1088982

The proposed design in the EIS indicate **very significant incursions** into key operational areas of Lot 1 DP 1088982, as per EIS Figure 5-2-02.

These very significant incursions indicate to Council the requirement to demolish considerable existing operational assets in two areas at the eastern and northern portions of Lot 1 DP 1088982. The indicated lost assets would include:

- all office space,
- all amenities,
- a large portion of the internal recyclables processing line,
- the state-of-the-art waste education centre, and
- car, bus and truck parking areas.

The MRF processes recyclables collected for the three Councils (Local Government Areas) which form ‘Coffs Coast Waste Services’ being Bellingen Shire Council, Nambucca Shire Council and Coffs Harbour City Council.

If the EIS were to be approved in its current deficient form and progressed by the RMS, **the level of impacts proposed to the MRF on Lot 1 DP 1088982 by the RMS’s EIS are considered so significant that the Councils Material Recovery Facility would be forced to cease operations.**

Therefore if such impacts were allowed to materialise there would be very significant service delivery impacts to the three Councils. We anticipate that potentially in excess of 17,000 tonnes of source separated recyclables would be required to be directed to landfill, until complex and expensive alternatives could be sought by the Councils. Considerable flow-on impacts to the three Councils >100,000 'customers' (whose collected recyclables are directed to the MRF each week of the year), facility staff, and local businesses and service providers.

In addition, the EIS makes no reference to the socio-economic loss due to the intended complete demolition of the Councils waste education centre located within "*the facility's annexe, located at the eastern end of the main shed*" (per EIS s.14.3).

The Council considers the EIS (especially Chapters 5, 12 and 14) to be strongly deficient in these regards. (Referring to the MRF as a "shed" highlights the lack of due consideration provided in the EIS to the Councils core waste facilities).

In addition the incursion by RMS would continue to limit the Councils available options for the ongoing use of the site (in the long term) in providing Councils core waste functions.

The proposed EIS design for Englands Road is considered excessive by Council, leading to excessive impacts on Council's waste facilities on Lot 1 DP 1088982. The design is excessive in that four to five lanes are not considered required.

Lot 31 DP 1090175 (Coffs Coast Resource Recovery Facility)

For Background per Lot 31 DP 1090175

Lot 31 DP 1090175 is owned by Coffs Harbour City Council and is currently under a long-term 20-year lease to our Contractor 'Biomass Solutions (Coffs Harbour) Pty Ltd', with the lease being embedded in the associated 20-year Contract term for the processing of waste generated from three Local Government Areas.

The facilities upon Lot 31 DP 1090175 is known as the 'Coffs Coast Resource Recovery Facility' (CCRRF).

The CCRRF holds an Environment Protection Licence from the NSW EPA.

The CCRRF is essentially owned by Coffs Harbour City Council (with both Bellingen Shire Council and Nambucca Shire Council having an interest in the facility).

The Coffs Coast Resource Recovery Facility upon Lot 31 DP 1090175 is considered by the three Councils to be a long-term waste processing facility which we have intended to operate for many decades. The existing facilities constructed upon Lot 31 DP 1090175 are considered by the Council to have a long-term capacity to deliver key waste services to the three local government areas, beyond the current contract term.

Each year the CCRRF processes, inter alia, approx. 25,000 tonnes of source separated organic waste – the considerable majority of which is supplied by the three Councils, and to a lesser degree by local commercial sources.

Since 2007 when the CCRRF was commissioned, it has processed around 375,000 tonnes of source separated organic waste into high quality market-ready Australian-Standard-compliant compost and related products.

The CCRRF employs a considerable number of employees, and provides numerous flow-on benefits for the local and broader economy through additional services including transport and service related businesses.

Deficient EIS Statements per Lot 31 DP 1090175

The Council considers that the EIS is deficient in its attempt to describe the impacts to Lot 31 DP 1090175, given the only statements included in the EIS are:

*“Partial acquisition of the CHCC owned Coffs Coast Resource Recovery Park ... which includes loss of some parking areas, impacts to buildings and stockpile areas”, and
“The project would impact external stockpile areas, access roads and car parking areas, but the facility’s main shed would not be directly impacted. Therefore it is expected that operations could continue on site. Access to the facility would be maintained at all times.”*

The Council considers that the EIS is entirely deficient in its attempt to describe RMS’ proposals to avoid or mitigate these impacts on Lot 31 DP 1090175, given the only statements included in the EIS are:

“Consultation with CHCC will be carried out before construction regarding impacts to the Coffs Coast Resource Recovery Park to identify opportunities to reduce the extent of property acquisition, temporary construction impacts and any other associated impacts to facilities which are important to the ongoing operations of the park.”

(Referring to the CCRRF as a “shed” highlights the lack of due consideration provided in the EIS to the Councils core waste facilities).

Council Considered Impacts per Lot 31 DP 1090175

The proposed design in the EIS indicate **very significant incursions** into key operational areas of Lot 31 DP 1090175.

These very significant incursions indicate the requirement to remove considerable existing operational assets in two areas at the eastern portion of Lot 31 DP 1090175. The indicated lost assets would include:

- large area of the ‘compost maturation pad’,
- potentially considerable gas storage infrastructure,
- access roadways, and
- vehicle parking areas.

If the EIS were to be approved in its current deficient form and progressed by the RMS, the level of impacts proposed to the CCRRF on Lot 31 DP 1090175 by the RMS’s EIS are considered to materially threaten the viability of the operation of the Coffs Coast Resource Recovery Facility.

Therefore if such impacts were allowed to materialise there would be very significant service delivery impacts to the three Councils.

We anticipate that processible waste may be required to be directed to landfill, until complex and expensive alternatives could be sought by the Councils.

In addition, the incursion by RMS would continue to limit the Councils available options for the ongoing use of the site (in the long term) in providing Councils core waste functions.

Lot 2 DP 1088982 (Coffs Harbour City Council – Leasable Transport Depot and Related Facilities)

Lot 2 DP 1088982 is owned by Coffs Harbour City Council and has, and is, being utilised under lease to our Contractor 'Handybin Waste Services (Coffs Harbour) Pty Ltd', for purposes associated with service delivery under the waste services contract for the three Councils.

Deficient EIS Statements per Lot 2 DP 1088982

The Council considers that the EIS is deficient in its attempt to describe the impacts to Lot 2 DP 1088982, given the only statements included in the EIS are:

“Partial acquisition of the CHCC owned Coffs Coast Resource Recovery Park ... which includes loss of some parking areas, impacts to buildings and stockpile areas”, and
“The onsite parking area and vehicle maintenance sheds would be impacted by the project and would need to be relocated.”

The Council considers that the EIS is deficient in its attempt to describe RMS' proposals to avoid or mitigate these impacts on Lot 2 DP 1088982, given the only statements included in the EIS are:

“Consultation with CHCC will be carried out before construction regarding impacts to the Coffs Coast Resource Recovery Park to identify opportunities to reduce the extent of property acquisition, temporary construction impacts and any other associated impacts to facilities which are important to the ongoing operations of the park.”

Council Considered Impacts per Lot 2 DP 1088982

The proposed design in the EIS indicate very significant impacts on key operational areas of Lot 2 DP 1088982.

These very significant incursions indicate the requirement to remove considerable existing operational assets on Lot 2 DP 1088982. The indicated lost assets would include:

- complete demolition of a brick and tile building – which houses our contractor's call-centre and management offices and amenities – utilised for the purposes of undertaking operational requirements of their contract with the three Councils, (not merely “vehicle maintenance sheds”),
- vehicle maintenance and related facilities,
- access roadways, and
- vehicle parking areas.

Lot 2 DP 1088982 is heavily utilised, and is considered by Council to offer long-term options to Council in support of its provisions of services to the community. (Lot 2 is the only area of land available to Council to explore expansion proposals for the Materials Recovery Facility (described above) located on Lot 1 DP 1088982.)

The proposed EIS design for Englands Road is considered excessive by Council, leading to excessive impacts on Council's waste facilities on Lot 2 DP 1088982. The design is excessive in that four to five lanes are not considered required.

D. Lot 32 DP 1090175 (Englands Road Waste Management Facility – including landfill facility)

Lot 32 DP 1090175 is owned by Coffs Harbour City Council and incorporates key waste management facilities including a putrescible landfill, weighbridge facilities and associated facilities. The facility holds an Environment Protection Licence from the NSW EPA.

The entrance to Lot 32 DP 1090175 (which also serves as the main entrances to the facilities developed upon Lot 1 DP 1088982 and Lot 31 DP 1090175 noted above), is from Englands Road.

The EIS design in the vicinity of the entrance/exit, and its potential for excessive impacts to the operations of Councils waste facilities remain of strong concern for Council.

The lack of good quality information in the deficient EIS does not allow Council to fully understand the operational impacts of the design moving to construction.

The proposed EIS design for Englands Road is considered excessive by Council, leading to excessive impacts on Council's waste facility on Lot 32 DP 1090175. The design is excessive in that four to five lanes are not considered required.

SURFACE WATER QUALITY (CHAPTER 19)

GROSS POLLUTANT TRAPS

Gross pollutant traps proposed around the tunnels and interchanges appear to target heavy metals, motor oils etc. CHCC note that all GPTs perform different functions and general litter can routinely block GPTs that perform other functions. Typically, highway alignments produce significant amounts of litter.

CHCC recommend RMS review the possibility of tandem GPTs in these locations to ensure optimum performance and a better environmental outcome. These would include a bulk litter style GPT, followed by the RMS recommended oils GPT.

HAZARD AND RISK (CHAPTER 24)

DANGEROUS GOODS

RMS studies quantify vehicles by type only and do not differentiate between vehicles which are 'passing by' and vehicles which are required to deliver goods to Coffs Harbour. CHCC request RMS to conduct a study on this and report the number for each vehicle class that is making deliveries vs those passing by to ascertain the 'true impact' of the tunnel design. CHCC would also like to thank RMS for the inclusion of 3 tunnels in the project and note the outcome is a great improvement to the Concept Design in 2018.

Will the continued need to enable Dangerous Goods vehicles to travel through the CBD impart any planning restrictions on CHCC when the current highway is handed over to Council to own and operate at the completion of the project?

TRANSPORTATION OF DANGEROUS GOODS

There are a number of statements in this section which CHCC struggle to interpret and need further clarification from RMS.

- Section 24.1.2 states that '*under current standards, vehicles carrying dangerous good cannot travel through tunnels.*'

- Section 24.3.2 states that '*Under current standards, vehicles carrying dangerous goods, particularly Classes 1 and 2.1, would not be able to travel on the project.*'

These statements appear to contradict each other. Further comments in Section 24.3.2 state that the St Helena tunnels and Tugun Bypass tunnels exclude Class 1 and Class 2.1, which agrees with the second statement. CHCC are under the assumption that expected outcome of the bypass project is that Class 1 and Class 2.1 will be restricted and all other classes will be allowed, based on risk reduction measures applied by the RMS in the tunnel design.

CHCC request clarification on this point to ensure that there are no illusions with the RMS approach to the project.

Section 24.1.2 indicates that policy development is currently underway but does not indicate whether this would be looking to increase dangerous goods usage or reduce dangerous goods usage. CHCC have reviewed the Austroads '*Dangerous Goods in Tunnels Application and Methodology*' and note that the document contains a risk based approach to DGs, rather than offering rigid outcomes. This makes it difficult for CHCC to predict a possible result. Can the RMS please provide clarification on the current thinking regarding likelihood of all DGs being allowable through the tunnels?

DANGEROUS GOODS DESTINATIONS

Whilst Coffs Harbour represents a significant destination, a majority of deliveries would still be expected to bypass the town.

The Origin-Destination survey conducted in chapter 8 does not consider dangerous goods travel and does not comment on the quantity of other heavy vehicles (Austroads class 6-12) that would be required to make deliveries in Coffs Harbour, therefore not using the bypass.

CHCC request RMS conduct these studies to enable CHCC to determine the true impacts of the bypass and the possible future traffic flows and amenity on Grafton Street.

OTHER

CHCC will acknowledge RMS approach for further consultation in many areas including; Bus Bays and locations, development areas, James Small Drive, management of pedestrians and cyclists during construction + others