Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment		
Government Agencie	5				
ATCO IN24/179	1.	ATCO Gas Australia (ATCO) has <u>no objection</u> to the proposed application, based on the information and plan provided.	Thank you for your submission.		
DBCA IN24/375	2.	In reference to your correspondence dated 21 December 2023, the Parks and Wildlife Service of the Department of Biodiversity, Conservation and Attractions (DBCA) provides the following comments. Bush Forever Site 360 adjoins the southern boundary of the local structure plan area. The Bush Forever site contains,	Officers have considered the comme		

	 Bush Forever Site 360 adjoins the southern boundary of the local structure plan area. The Bush Forever site contains, a Conservation Category Wetland (CCW) (UFI 14817), a population of the threatened flora species <i>Synaphea sp. Serpentine</i>, which is listed as Critically Endangered under the State <i>Biodiversity Conservation Act 2016</i> (BC Act), and the Federal <i>Environmental Protection and Biodiversity Conservation Act</i> 1999 (EPBC Act), and. a population of the threatened flora species <i>Morelotia australiensis</i>, which is listed as Vulnerable under the BC Act. The threatened flora populations are located on the southern side of Mundijong Rd. Potential hydrological impacts on the threatened flora populations and the conservation category wetland 	received and have incorporated to within the Schedule of Modificat Shire Officers acknowledge that the Structure Plan and appendices do adequately address the development the site's hydrological impacts or threatened flora populations conservation category wetland loo within the Bushforever Site 360.
	 a population of the threatened flora species <i>Synaphea sp. Serpentine</i>, which is listed as Critically Endangered under the State <i>Biodiversity Conservation Act 2016</i> (BC Act), and the Federal <i>Environmental Protection and Biodiversity Conservation Act</i> 1999 (EPBC Act), and. a population of the threatened flora species <i>Morelotia australiensis</i>, which is listed as Vulnerable under the BC Act. The threatened flora populations are located on the southern side of Mundijong Rd. 	Structure Plan and appendices do adequately address the development the site's hydrological impacts or threatened flora populations conservation category wetland log
	 Endangered under the State <i>Biodiversity Conservation Act 2016</i> (BC Act), and the Federal <i>Environmental Protection and Biodiversity Conservation Act</i> 1999 (EPBC Act), and. a population of the threatened flora species <i>Morelotia australiensis</i>, which is listed as Vulnerable under the BC Act. The threatened flora populations are located on the southern side of Mundijong Rd. 	the site's hydrological impacts or threatened flora populations conservation category wetland loo
	the BC Act. The threatened flora populations are located on the southern side of Mundijong Rd.	
	Potential hydrological impacts on the threatened flora populations and the conservation category wetland	
	located within the Bushforever Site 360 have not been addressed in the Structure Plan Report, Environmental Assessment Report or the Local Water Management Strategy.	
	The Local Water Management Strategy and Urban Water Management Plans should demonstrate that the proposed development of the site will not impact the threatened flora populations or the CCW wetland area within Bush Forever Site 360, and also consider any buffer requirements.	
	It is DBCA's expectation that the Department of Water and Environmental Regulation and the Shire of Serpentine and Jarrahdale will consider whether the Local Water Management Strategy and Urban Water Management Plans adequately provide for the maintenance of the pre-development hydrology of the populations of the threatened flora species <i>Synaphea sp. Serpentine</i> and <i>Morelotia australiensis</i> and the Conservation Category wetland within Bushforever Site 360, and ensures that they are not impacted by changes to groundwater and surface hydrology.	
	It is DBCA's expectation that the detailed planning for the site will identify and seek to retain black cockatoo habitat, and that the proponent will consider requirements for referral of the proposal to the Commonwealth Department of Climate Change, Energy, the Environment and Water under the <i>Environmental Protection and Biodiversity Conservation Act 1999</i> .	
	Thank you for the opportunity to provide comment. Should you have any queries regarding the above comments, please contact Lyndon Mutter on 9442 0342.	
3.	The Department of Primary Industries and Regional Development (DPIRD) does not object to the proposed	Thank you for your submission.
	Mundijong Local Structure Plan for Precincts E1 and E2 as this is consistent with the 'Urban' zoning in the Metropolitan Region Scheme (MRS) and the 'Urban Development' zoning in Shire of Serpentine-Jarrahdale Town Planning Scheme No.3.	
4.	As there are no heritage protected places within or around the Structure Plan area, there is no objection to the proposal from a historic heritage perspective.	Thank you for your submission.
_		 Environmental Assessment Report or the Local Water Management Strategy. The Local Water Management Strategy and Urban Water Management Plans should demonstrate that the proposed development of the site will not impact the threatened flora populations or the CCW wetland area within Bush Forever Site 360, and also consider any buffer requirements. It is DBCA's expectation that the Department of Water and Environmental Regulation and the Shire of Serpentine and Jarrahdale will consider whether the Local Water Management Strategy and Urban Water Management Plans adequately provide for the maintenance of the pre-development hydrology of the populations of the threatened flora species <i>Synaphea sp. Serpentine</i> and <i>Morelotia australiensis</i> and the Conservation Category wetland within Bushforever Site 360, and ensures that they are not impacted by changes to groundwater and surface hydrology. It is DBCA's expectation that the detailed planning for the site will identify and seek to retain black cockatoo habitat, and that the proponent will consider requirements for referral of the proposal to the Commonwealth Department of Climate Change, Energy, the Environment and Water under the <i>Environmental Protection and Biodiversity Conservation Act 1999</i>. Thank you for the opportunity to provide comment. Should you have any queries regarding the above comments, please contact Lyndon Mutter on 9442 0342. The Department of Primary Industries and Regional Development (DPIRD) does not object to the proposed Mundijong Local Structure Plan for Precincts E1 and E2 as this is consistent with the 'Urban' zoning in the Metropolitan Region Scheme (MRS) and the 'Urban Development' zoning in Shire of Serpentine-Jarrahdale Town Planning Scheme No.3.

	Applicant Comment
	Noted
A. Shire mments d these cations. he Local do not ment of on the and located	Bush Forever site 360 lies outside the Structure Plan area to the south of Mundijong Road and is not affected by the Structure Plan.
	Noted
	Noted

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Subn	nitter C	omments		Officer Comment	Applicant Comment
DWER IN24/2397	5.	State by an demo Consi Spark draina easer Corpo confir to ens Attacl be re	Planni appro nstrate istent v man R age sol ment o pration mation sure co nment vised in	ng Policy 2.9: Water Resource wed Local Water Managemen the proposed urban developm with BUWM, the proponent ha oad and Adams Street Mundijution proposes to locate the future utside of the site boundary (and Main Roads Western Au of responsibility for the ongoin ntinued stormwater functionalionalion 1 contains further comments f	gement (BUWM) (WAPC, 2008) and policy measures outlines, the proposed Local Structure Plan (LSP) should be support Strategy (LWMS) prior to finalising and supporting the LS ment can adequately manage water quality and quantity. As included <i>Local Water Management Strategy Cockram S ijong</i> (Emerge, October 2023). The stormwater management flood storage areas (FSA) for the site within the service co therefore written acceptance of this proposal from the W ustralia if FSA within the Road Reserve) is required in additing monitoring and maintenance requirements of each of the lity.	raised concerns regarding the LSP and the Local Water Management Strategy (LWMS). Shire Officers have incorporated these comments within the Schedule of Modifications, and have recommended that the LWMS be amended to the satisfaction of DWER and the Shire of Serpentine Jarrahdale.	Noted – Liaison with Water Corporation is being undertaken to confirm the use of the servicing corridor for flood storage. No objection to use of the corridor for flood storage was raised during the consultation
		N	o. Pa	age Section	Rev 1 - DWER Comm EP22-016(01)-003C JI (Version D)		
			1	2 Executive Summary	It is proposed to det surface runoff from ma rainfall events within a adjacent to the site. Flo storage areas (FSA) are be located within the site a within the service corri easement to the west of site.	jor nd od to nd dor	
					Please include write acceptance from Wa Corporation, and M Roads WA (MRWA) applicable), for stormwa drainage from the site to captured within the serve corridor easement. A refer to comment 21 belo	ater ain (if ater be rice Iso	
			2	4 Executive Summary Table E1 SW5	Design criteria SW5 sta infiltration structures will designed to dry out within hours following rain events. However s6.3.3 s6.5 state infiltra structures will be designe dry out within 96 ho Please adjust consistency.	be 13 Ifall and ion d to	

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Su	bmitt	er Com	nents		Officer Comment
			3	5	Executive Summary Table E1 GW3	Criteria description states inverts of FSAs must be at least 500mm above the maximum groundwater level (MGL). However, the adjacent column states a minimum of 300mm clearance will be provided between FSA inverts and MGL. <i>Urban Water Management</i> <i>Plans</i> (DoW, 2008) recommends 300mm above MGL.	
			4	11	s3.6.1.1 Superficial aquifer	The text states the superficial aquifer is within the Byford Groundwater Area. Please adjust: 'The site is within the Serpentine Groundwater Area, Byford 3 subarea.'	
			5	11	s3.6.2 Groundwater levels	The report states the MGL ranges from 25.6m in the north east to 30.6m along the western boundary. Figure 2 shows the MGL falls from the east to the west. Please adjust the text: 'The MGL was found to range from 25.6m in the north western part of the site to 30.6m AHD along the eastern boundary.'	
						Table 3 of the LWMS states the depth below natural surface to maximum groundwater level (MGL) as between 0 - 1.39m. It is noted section 3.3.1 of the LSP states the depth to groundwater as between 2m-5m below ground surface.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	Su	bmitt	er Com	Officer Comment			
			6	12	s3.6.3 Groundwater quantity	Average water quality results have been provided within Table 4. Please include the complete water quality results within the Appendix. The pH of sites M2 – M4 and MB18 is less than 4. As low pH may increase the solubility and release of any metals, has any water quality sampling for metals been undertaken? Please confirm TP of 16.42mg/L at Bore MB17 is correct as it is significantly higher than all other locations.	
			7	14	s3.8.1 Fauna and Flora	Please remove the incomplete sentence.	
			8	15	s3.10 Summary of existing environment	In regard to total nitrogen, please reconsider the statement "TN and TP concentrations were generally 'low' to 'moderate' across the site". Table 4 indicates that 21 of 30 average results exceeded ANZECC Guidelines, with several results 15 times greater than the guideline value.	
			9	18	s5.1.2 Groundwater supply	Existing groundwater licences will be utilised to irrigate POS. Please confirm the expected area (m2) of POS which will require irrigation and the anticipated groundwater requirement. Is it proposed to utilise groundwater for construction purposes (ie. dust suppression) and irrigation of ovals at the proposed primary school? These are to be accounted for within	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Sı	ubmitt	er Comr	nents		Officer Comment
Submitter	No	Su	10		s5.3 Wastewater Management	the LWMS. If groundwater requirements exceed the current licence allocations, there is currently no additional groundwater available for allocation as the aquifers within the Byford 3 subarea are fully allocated, and necessary trades, transfers or alternative supply would need to be secured. The Subdivision Concept Plan (Appendix A) indicates residential zoning is proposed within the odour buffer of the future wastewater pump station plan on Lot 8802 Scott Road (buffer illustrated within Figure 9 Mundjiong Sub- Precinct E1 Local Structure Plan of the LSP with the area previously identified as Unrestricted POS).	Officer Comment
			11	23	s6.1 Inflow from upstream catchments	What mechanisms will be employed to mitigate noise, gas and odour impacts to these houses? The report states "An FSA for discharge from Ct-06 will not be required since pre- development discharge from the site at this location exceeds the inflow from upstream catchments". Please clarify this statement and confirm the proposed living streams and swales will offset the increased runoff from impervious areas within subcatchment Ct-06.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Sub	mitte	er Comi	nents		Officer Comment
			12	23	s6.1 Inflow from upstream catchments steam/swale in Catch 7, as opposed to Ct-06	inflow I be living nment	
			13	23	soakwells will be plac the front of lots, will th	It is hnical lential 46 dijong While near- atively y), we e use b the high nd the clayey ns are of lots nction wever ced at nis be revent g in inimal 2) will hared he lot 5mm. es an ucture e lots.	
			14	23	s6.2 Lot drainage Rainfall on paved area front of lots (10% of the area) is assumed to towards the road rese all rainfall events. How the Modelling Assum Report (Emerge, A 2023) states both per and impervious areas of will retain the first 15m	he lot runoff rve in wever nption august rvious on lots	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments					Officer Comment
						runoff. Please adjust the LWMS to align with the Assumptions Report.	
			15	24 s6 De	5.3 evelopment drainage	Gross Pollutant Traps (GPT) may be used prior to discharge to bioretention areas (BRA). Please adjust the wording to state that GPTs will be used.	
			16		5.3.5 ood Storage Area	The FSAs within the services corridor are stated as modelled with maximum depths of 500mm, however Figure 6 shows the depth of FSA – Ct-01 within the service corridor as 1m. Please adjust for consistency.	
			17		5.3.5 ood Storage Area	Please include further details of the discharge from each of the FSAs into the service corridor. Is discharge expected to infiltrate, flow overland into existing streamlines (Figure 4) or is piping infrastructure proposed? Are there any	
						contingencies in place to ensure outflows post the development of the future Tonkin Highway?	
			18		5.5 emonstration of Compliance able 8	Please include details of the calculated post development discharge of each subcatchments to demonstrate compliance with pre development discharge rates.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments					Officer Comment
			19	28	s6.5 Demonstration of Compliance Table 8	The FSA – Ct-07 Max 1% AEP discharge is stated as 1.3m3/s within Figure 6. The discharge rate of Ct-07 within Table 8 is 1.8m3/s. Please adjust for consistency.	
			20	28	s6.5 Demonstration of compliance Criteria SW3	Criteria SW3 states finished floor levels must have a minimum of 300mm clearance above the 1% AEP to water levels in flood storage areas.	
						In accordance with the Decision Process for Stormwater Management in WA (DWER, 2017), finished flood levels must have a minimum of 500mm clearance above the 1% AEP top water level of flood storage areas.	
						Noted the clearance levels provided within Table 9 are a minimum of 500mm.	
			21	29	s6.6 Stormwater criteria compliance summary Table 10 Stormwater Management Compliance	Design criteria SW5 states infiltration structures will be designed to dry out within 13 hours following rainfall events. However s6.3.3 and s6.5 state infiltration structures will be designed to dry out within 96 hours. Please adjust for consistency.	
			22	40	s8.7 Use of adjacent servicing corridor	It is proposed to locate all FSAs, except Ct-01, within the service corridor to the west of the site. Figure 6 indicates Ct-01 is within the services corridor and Ct-02 is within the site. Please adjust text. The report states that the	
						use of the adjacent service corridor will need to be confirmed during the detail	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments					Officer Comment
						design phase and detailed in future UWMPs. As the proposed LSP layout and stormwater management principles for the area is based upon the FSAs location outside of the site, written in-principle support is required from the current land owners, ie. Water Corporation and MWRA (if FSA extends into Road Reserve).	
			23	41	s9.2 Post development monitoring	Please include details of who will be responsible for post development maintenance and monitoring. Will Water Corporation undertake the monitoring of FSAs within the easement? Is an agreement proposed between the Water Corporation and the Shire of Serpentine Jarrahdale following site handover?	
			24	42	s9.2.2 Water monitoring Table 14	The table states surface water monitoring is proposed at inflow and outflow locations of the existing waterway. Which waterway is this referring to? Figure 4 Surface Water Features identifies four ephemeral streamlines Is monitoring proposed at each of the swale inflow and outflow locations?	
			25	42	s9.2.3 Guideline values	Please specify any proposed contingencies should the short term or long term groundwater quality guideline values be exceeded.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submit	ter Com	ments		Officer Comment	Applicant Comment
		26	56	Figure 6 Stormwater Management Plan	Figure 6 shows the FSA for catchments 1, 3 and 5 extending into the Road Reserve for the future Tonkin Highway. Please confirm within the LWMS if the FSAs also extend into the Road Reserve.		
		27	56	Figure 6 Stormwater Management Plan	Please include the MGL contours. Please include top water levels for the minor, small and major rainfall events, invert levels, inflow/outflow		
					infrastructure of each FSA. Cross sections of each of the BRAs should be included, including top water levels, invert levels, batters and subsoil drainage integration.		
Department Transport IN24/3252	of 6.	comment Reform comment • The the M the M prov • Direct Traff	nt on the (FPAR) nts: subject s Aetropoli control o ides an i ct access ic Asses	our letter dated 21 December 2023 inviting the Dep e above proposed development. The Urban Mobility division of DoT have reviewed the submitted d site abuts Mundijong Rd which is currently reserved tan Region Scheme (MRS) and is intended to become f Main Roads WA. Mundijong Road is part of the mportant strategic east-west and north-south road co s onto this road from the subject land is likely to be re sment Report forecast that the Mundijong - Adams Ro be upgraded around 2040 to cater for future traffic vol	(UM) and Freight, Ports, Aviation and locuments and provide the following as an Other Regional Road (ORR) in a future Primary Regional Road under Main Roads WA RAV 4 network and onnection for freight vehicles. estricted and it should be noted that the d intersection design shown in the LSP	Officers support the proposed structure plan being modified to reflect the Department of Transport's Long Term Cycle Network plans. The proposed LSP has been referred to MRWA, Public Transport Authority, and Department of Education for comment.	include cycling infrastructure will be considered as more detailed road
		 The Tern LTC The 	LSP area n Cycle N and to design o	a abuts a primary route (Tonkin Fwy) and a secondar Network (LTCN). Opportunities should be identified enable and promote active travel to the proposed pri f the cycle routes within the LSP must include consid	ry route (Mundijong Road) in the Long- to provide cycling connections to the imary school site. deration of the proposed route function		
		base and	ed on the should b	ve transport network perspective) in conjunction with road context. The cycling facility however must be d informed by DoT's <u>Planning and Designing for Act</u> <u>ilities Contextual Guidance</u> .	lesigned to cater for all ages & abilities	;	
		• MRV		ds that during future stages of the structure planning ments be sought to identify appropriate ultima s.	•		

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	Applicant Comment	
		The applicant consults with the DoT's cycling team in relation to the LTCN.			
		• The applicant consults with Department of Education in relation to cycle, pedestrian and other access issues in relation to the primary school site.			
		DoT understands that Main Roads WA and Public Transport Authority will send their responses directly.			
Department of Health 7 IN24/3324	7.	 The DoH provides the following comments in relation to this proposal: <i>1. Wastewater management</i> All future developments should be connected to reticulated deep sewerage in accordance with DoH legislation. <i>2. Recycled water management</i> The documentation refers to alternative water usages and treatments. If stormwater is intended to be blended with any form of sewage or used with the Water Corporation's wastewater infrastructure and is intended to be used for or recycled for beneficial purposes such as landscape and garden bed irrigation, toilet flushing or other purposes, then a separate recycled water quality management plan/s (RWQMP) will be required in accordance with the 'Application Process for approval of a recycling water scheme': https://ww2.health.wa.gov.au/Articles/A_E/Application-process-for-approval-of-recycling-water-scheme <i>3. Medical entomology</i> 	Thank you for your submission. The LSP addresses point 1, proposing that residential lots be connected to reticulated sewerage subject to the development of Water Corporation infrastructure to the subject site, within the infrastructure corridor. Shire Officers agree that a Mosquito Management Plan is required to be considered as a condition of subdivision approval.	Noted - Bio-retention areas are to be densely vegetated with species knowr to uptake nutrients and designed to dry out within 96 hours to prevent mosquite breeding risks.	
		 The structure plan should consider development conditions that minimise the potential for mosquito breeding. It is recommended that the Shire of Serpentine-Jarrahdale: o defines and determines the extent of risk from mosquitoes and mosquito-borne disease o develops a Mosquito Management Plan (MMP) if the risk is identified as being moderate or high o adequately resources effective mosquito management into the future. This involves ensuring sufficient resources and funding are available for ongoing mosquito management. Further details on mosquito management may be downloaded from: http://ww2.health.wa.gov.au/Articles/J_M/Mosquito-management 			
Department of Education IN24/3996	8.	The proposed Structure Plan area has an anticipated lot yield of 1,900 dwellings and will provide for one public primary school site with a shared use oval. This dwelling yield is an increase from approximately 1,500 dwellings from the <i>Mundijong District Structure Plan</i> (DSP), and 1,835 dwellings from the combined approved local structure Plans <i>Mundijong Precinct E1 Taylor Road / Adams Street, Mundijong</i> (LSP E1), and <i>Lot 50 Cockram Street & Lot 119 Sparkman Road, Mundijong (Mundijong-Whitby Sub-Precinct E2)</i> (LSP E2), both approved in 2015. The proposed structure plan also proposes to relocate the primary school site approximately 500m north of what was approved in the DSP and LSP 2. In accordance with the Western Australian Planning Commission's Operational Policy 2.4 – Planning for School Sites (OP 2.4), one public primary school site is required to be provided for every 1,500 dwellings. The 2011 DSP originally identified the need for 4 primary schools in the area west of the train line (Precincts E, F and G) based on a maximum dwelling yield of approximately 6,500 dwellings in these three precincts. Since this time the projected dwelling yield in this area as increase to the point that there is a shortfall of one future primary school site in Precincts F or G (possibly in the vicinity of the future high school site however this subject to future structure planning). For this reason, the relocation of the primary school site is secured within	proposed location of the Primary School is not supported by Shire Officers as this is inconsistent with the Mundijong District Structure Plan (DSP) and State	centrally to best maximise accessibility to the school by the future community consistent with the requirements of OP2.4 Planning for School sites. This is demonstrated by Figures 13 and 14 of the Structure Plan report which in showing the distribution of neighbourhood POS throughout the DSP area, which are also collocated with primary schools, demonstrates how the proposed primary school site	

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment	Applicant Comment
		originally intended. In view of the above, the Department does not support to the proposed relocation of the primary school site. relocated south and consisted with the recently approx	also better service the southern area of Precinct E as ort the proposed Structure Plan in its current form due The Department supports the primary school site being ved Mundijong District Structure Plan. The Department and the Shire of Serpentine Jarrahdale on the above.		walkable catchment of the school site proposed by the DSP is severely compromised, containing large areas of road reserve and infrastructure. Similarly, pedestrian access and connectivity between Precinct E3 and any school within the Structure Plan area is also severely compromised. Any requirements for additional schools generated within Precincts F or G should be dealt with through the structure planning of those precincts.
Main Roads Western Australia IN24/4927	9.	 In response to your correspondence received on 21 E on 8 January 2024, Main Roads has reviewed the sup the traffic impacts upon the road network, prior to final To address the above matters, it is requested the follor. The structure plan document and all technical doc the proposed Structure Plan document; and A revised Transport Impact Assessment (TIA), Bus Plan addressing the comments in the attached tab Please provide the following items to address the correspondence of the proposed Structure Plan - Prepare Version 2, Date 06/11/2023 	pporting information. Further clarification is required of alisation of the Structure Plan. owing information is provided: cuments to be reviewed to ensure it is consistent with shfire Management Plan and Noise Management ole.	Thank you for your submission. The LSP and TIA are required to be updated, and comments received within this submission have been considered within the Schedule of Modifications. Shire Officers are supportive of the modification of the LSP, TIA and Noise Assessment to accommodate Planning Control Area 179. Shire Officers support Scenario One being included within the LSP. A temporary cul-de-sac at the Adams Street extension will not provide adequate connectivity to the site, and will create a	Plan modification process. Nevertheless, there remains some uncertainty regarding detailed planning beyond a 20-year horizon which remains strategic, and will be influenced more by other, future developments in the district and
		1.1 docu 179 (PCA Justi The from Highv requi on 2: weste 4.6.2 Figur to re Muno for th Highv	ate the Structure plan and all technical ments to reflect Planning Control Area - Mardella Freight Rail Realignment (179) ification for Information Tonkin Highway Extension project Thomas Road to South Western way has identified additional land rements as shown in PCA 179 declared 2 December 2023 affecting the south- ern portion of Lot 54. Ate the Structure Plan text of Section 2 Proposed Road Network, Plan 1 and re 11, 12, 15 and 16 and supporting TIA effect two scenarios for the interim dijong Road / Adams Street intersection he interim road design of the Tonkin way / Mundijong Road intersection as ade 4-way roundabout.	dependency on timeframes associated with the delivery of the Tonkin Highway/Mundijong Road intersection. Given the expected increases in traffic volumes associated with the development of the subject site, direct access to Mundijong Road is necessary. Shire Officers do not support an FSAR or FSAs being located within the future Tonkin Highway road reserve or any MRS road reserves. Main Roads comments have been considered within the Schedule of Modifications.	2.8 DVC has discussed the trip distribution with the Shire previously and consider the assumptions to be

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	
			Scenario 1	
			The Mundijong Road / Adams Street intersection requires:	
			• Mundijong Road / Adonis Street intersection to be removed with a cul-de-sac abutting Mundijong Road; and	
			• Significant road design by the landowner/applicant to confirm the form and function of the intersection aligns with the Tonkin Highway Extension project.	
			Scenario 2	
			The southern road extension of Adams Street internally within the Structure Plan to be constructed with a cul-de-sac abutting Mundijong Road and Mundijong Road / Adonis Street intersection remains open.	
			At the time when Tonkin Highway / Mundijong Road intersection is upgraded to the ultimate road design the Mundijong Road / Adams Street intersection is to be constructed and Mundijong Road / Adonis Street intersection is to be removed with a cul-de-sac abutting Mundijong Road.	
			Justification for Information	
			The interim road design for the Tonkin Highway / Mundijong Road intersection will be delivered in the Tonkin Highway Extension project and is within the planning horizon of the Structure Plan. The road design for the Tonkin Highway Extension project does not incorporate the Mundijong Road / Adams Street intersection.	
		1.2	Update Figure 11 to remove the 'site access' arrow on Scott Road abutting the future Tonkin Highway and indicate the 'site access' arrow similar to that for Sparkman Road. Refer to marked up Figure 11 below:	

Applicant Comment
very distant and forecasting strategic at best along Mundijong Road.

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	
	•			•
			Image: Control of the control of th	
			Justification for Information	
			Figure 11 infers the northern site access from Scott Road connects onto the future Tonkin Highway. The road designs for Tonkin Highway Extension project shows Scott Road to a cul-de-sac on both the eastern and western side of the future Tonkin Highway.	
		Transport Impact Assessment October 2023 - Ltd, Ref Mundijong LSP TIA, Version 1, Date		
		2.0	The Draft Mundijong District Structure Plan which this Local Structure Plan fits within contains unsupported road connections to South Western Highway. This is an issue that impacts traffic distribution and upon the traffic assessment.	
		2.1	Update the document and SIDRA modelling to match the amended development yield proposed of the Structure Plan to address Item 1.0.	
		2.2	Update the document and SIDRA modelling to address Item 1.1.	
		2.3	Update the document to:	
			 Investigate intersection arrangements to improve the level of service for Mundijong Road / Adams Street intersection in 2051 timeframe; and 	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment
	•	1		1
			Identify all road infrastructure items which are required to be costed, including necessary intersection upgrades.	
			Justification for Information	
			Section 3.7.1 Intersection Assessment and Table 3.5 indicates the future Mundijong Road / Adams Street intersection after 10 years of full opening in 2051 will be a LoS F for a double-lane roundabout intersection arrangement. The document outlines a single lane roundabout at Mundijong Road / Adams Street is adequate for the 2041 year and beyond this a further capacity upgrade may be required if demand along Mundijong Road is realised.	
		2.4	Update the document and SIDRA modelling to include:	
			• Update the statement of section 3.2 Traffic Generation with additional details on the specific traffic study/data source for the primary school and residential uses for the AM and PM peak hour and daily trip generation rates; Pleas provide copy the study undertaken and	
			• The applicant's justification of the adopted AM and PM peak hour trip generation rate for the primary school use sourced from Institution of Transportation Engineers rather than using the WAPC Transport Assessment Guidelines. It is noted the adopted AM and PM peak hour trip generation rate for the residential use were sourced from the WAPC Transport Assessment Guidelines. Applicant to provide land use code and source.	
			Justification for Information	
			Trip generation quoted does not match the source.	
			Section 3.2 Traffic Generation of the document states the trip generation rates "for the primary school the Institution of Transportation Engineers (ITE) rates were used. All-day trip rates were based on the New South Wales Roads and Traffic Authority's Guide to Traffic Generating Developments." A review of this statement and Table 3.1 indicates this statement is inconsistent with Table 3.1 and there is lack	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment
			of justification for using trip rates from three (3) different traffic study/data sources for the residential and primary school uses. The traffic surveys have not been provided for review.	
			Residential use - AM and PM peak hour trip rates were sourced from the WAPC Transport Assessment Guidelines and daily trip rates were sourced from New South Wales Roads and Traffic Authority's Guide to Traffic Generating Developments October 2002.	
			Primary school use - AM and PM peak hour trip rates and daily trip rates were sourced Institution of Transportation Engineers. There is a minor inconsistency with the AM and PM peak hour trip rates and daily trip rate used in Table 3.1 with the elementary school (Code 520) use in Institution of Transportation Engineers Trip Generation Manual 11th Edition September 2021.	
		2.5	The document and SIDRA modelling of the Taylor Road / Bishop Road intersection must be included within the study area.	
			<u>Justification for Information</u> Performance of this intersection is critical considering its proximity to future Tonkin Highway / Bishop Road intersection.	
		2.6	Updated document to include a traffic flow diagram in 2041 and 2051 showing:	
			• Traffic volumes turning to and from Tonkin Highway / Bishop Road and Tokin Highway / Mundijong Road intersections;	
			 Turning volumes to and from the Taylor Road / Bishop Road and Mundijong Road / Adams Street intersections; and 	
			• Traffic volumes without the trips generated from the Structure Plan area.	
			Justification for Information	
			Traffic flow diagram assists with understanding traffic analysis covering both with and without development scenarios to understand the impact of the development.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment
		2.7	SIDRA modelling for Mundijong Road is modelled as 4 lane road in 2051. The document does not provide any details about future upgrade of Mundijong Road.	
		2.8	Section 3.4 Trip Distribution of the TIA outlines the assumptions for the external trip distribution. Traffic assessments will have to be treated differently.	
			<u>Justification for Information</u> Further justification for adopted trip distribution for this Local Structure Plan. There are issues with the TIA which remain outstanding this proposal should assessed on planning merit and as such the TIA should demonstrate that trip distribution is valid.	
		2.9	Update the SIDRA modelling to: • Clarify the proposed turning movements for 2051 model for Mundijong Road / Adams Street intersection for the north leg of the roundabout.	
			 Vehicle Movement Data is incorrect for Movement Calibration Data, the queue space and vehicle length parameters need to be updated in line with values in Main Roads Operational Modelling Guidelines, with consideration of the potential heavy vehicle classes using Mundijong Road. 	
			• Clarify and amend the Island Diameter and Circulating Width used for the Mundijong Road / Adams Road intersection in 2041 and 2051 considering the likely design vehicle requirements of Mundijong Road in future scenarios.	
			<u>Justification for Information</u> A 10m island diameter is considered to be small and negatively impacts intersection performance. A Circulating Width of 8m for both single circulatory lane segments are considered unreasonably high and overestimates intersection performance.	
		Noise Management Plan September 2023 – 31580-2-22095, Version 2, Date 17/10/2023	Prepared by Herring Storer Acoustics, Ref	
		3.0	Amend the document to assessed rail noise and reflect the Mundijong Freight Rail	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment
				-
			Realignment corridor within Planning Control Area 178 - Mundijong Freight Rail Realignment (PCA 178) and PCA 179 and review the rail noise recommendations.	
			Justification for Information	
			The document has not assessed rail noise and assumes no realignment of the freight rail line. The document has not considered the preferred corridor alignment decision in November 2022 for the Mundijong Freight Rail Realignment within PCA 178 and PCA 179. The PCA 178 Plan No. 3.2821/1 (attached) and PCA 179 Plan No. 3.2822/1 (attached) shows the freight rail to be realigned on the western side of the future Tonkin Highway and west of the Structure Plan.	
		3.1	Provide an updated document and modelling addressing the following:	
			• Road and rail traffic parameters, noise predictions and treatment recommendations must be provided for 2044 in order to comply with the SPP 5.4 requirements for a 20-year planning horizon.	
			• The specific type of chip seal for Mundijong Road (i.e. 5 mm, 10 mm or 14 mm) needs to be stated and used as an input for the noise modelling. "Chip seal" is not adequate.	
			• Daytime noise predictions were provided, yet the on-site noise measurements presented indicated that night-time noise was higher. This needs to be discussed in relation to how both the SPP 5.4 daytime and night-time noise targets can be met, with night-time noise predictions and associated treatment recommendations presented in the document.	
			• Update last paragraph of section 5. Traffic Noise Assessment of the document to specify the noise barrier is required to be 2.4m high and the height is taken from the future sand pad levels of the residential lots abutting the noise barrier.	
			<u>Justification for Information</u> The document provided does not comply	
			with State Planning Policy 5.4 Road and Rail Noise (SPP 5.4) and is uncertain.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment
		Bushfire Management Plan – Prepared by Ec 20198, Version 1, Date 12/07/2022	o Logical Australia Pty Ltd, Ref 21PER-	
		4.0	Provide an updated document to address the additional land requirements for Item 1.0 and update the Structure Plan text to ensure:	
			• There are no proposed emergency access ways and fire service access routes (FSAR) to the future Tonkin Highway or the State road network; and	
			• The Asset Protection Zone (APZ) are to be located outside of the PCA and land reserved as Primary Regional Road under the Metropolitan Region Scheme (MRS).	
			Justification for Information	
			Orderly and proper planning.	
		Local Water Management Strategy October 2 EP22-016(01)003C JB, Version D, Date Oc by Emerge Associates, Drawing No. MUJ01- August 2023	tober 2023 Landscape Strategy – Prepared	
		5.0	Amend the Structure Plan text under section 4.4 Landscape Strategy and 4.7 Water Management that stormwater drainage from the Structure Plan area is not to discharge into land reserved as Primary Regional Road and PCA under the MRS.	
			Justification for Information The documents and the location of the public open spaces running east to west within the Structure Plan will channelise flows to the future Tonkin Highway. The stormwater drainage and landscape design at the subdivision stage will need to be develop in consultation with Main Roads to ensure no detrimental impacts and any proposed culverts and landscaping to the western and southern boundaries and public open spaces of the Structure Plan area are located appropriately to assist with directing stormwater drainage not to discharge into the future Tonkin Highway.	

	Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments		Officer Comment
			General	
		6.0	Main Roads preference is for allotments is not to have direct access onto the	
			Primary Regional Road. This position is reflected within Development Control	
			Policy 5.1 – Regional Roads (Vehicular Access). This comment has been	
			made for completeness.	
		7.0	The structure planning process is not indicative of Main Roads approval for	
			future intersection treatments. It is a Main Roads requirement that roundabout options are considered, prior to proposing signalised intersections. Approval from Main Roads is required for the installation of traffic signals pursuant to the Road Traffic Code 2000 (WA).	
			Any proposals for the installation and/or modification of traffic signals must	
			follow Main Roads' Traffic Signal Approval Policy to obtain approval.	
		8.0	This development will contribute to additional traffic onto the road Network.	
			Going forward, it is recommended the City implements a Development Contribution Plan in accordance with State Planning Policy 3.6 Infrastructure Contributions (updated December 2022). The Development Contribution Plan is to include the proposed and upgrades to local road connections in particular for integrator arterial and neighbourhood connector roads onto the State road network. For example the extension of Adam Street south and connection with Mundijong Road.	
			A TIA should identify road infrastructure items which would be required to be costed. Such background information is critical to ensure orderly and proper planning occurs and appropriate funds are allocated to facilitate such development.	
		9.0	The project for the Tonkin Highway Extension from Thomas Road to South	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment
		Western Highway is within Main Roads current 4-year forward estimated construction program. Please be aware that timing information is subject to change and that Main Roads assumes no liability for the information provided.	
		Please provide the above information at your earliest convenience, noting that Main Roads will require 30 days to review this information once received.	
		As stated above, Main Roads is not in a position to support the subject proposal until the above information has been received and reviewed.	
		Enc:	
		Attachment 1: Planning Control Area 178 - Mundijong Freight Rail Realignment Plan No. 3.2821/1	
		Attachment 2: Planning Control Area 179 - Mardella Freight Rail Realignment Plan No. 3.2822/1	
		Attachment 1: Planning Control Area 178 - Mundijong Freight Rail Realignment Plan No. 3.2821/1	
		3.2821/1	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment
		Attachment 2: Planning Control Area 179 - Mardella Freight Rail Realignment Plan No. 3.2822/1	
DFES IN24/4082	10.	 This advice relates only to State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7) and the Guidelines for Planning in Bushfire Prone Areas (Guidelines). It is the responsibility of the proponent to ensure the proposal complies with all other relevant planning policies and building regulations where necessary. This advice does not exempt the applicant/proponent from obtaining necessary approvals that may apply to the proposal including planning, building, health or any other approvals required by a relevant authority under other written laws. Assessment The LSP planning report appears to contain details of the indicative lot layout beyond what is proposed in the BMP. The BMP is based on development of 1,457 residential lots, however, the LSP report and the traffic impact assessment submitted with the proposal are based on the LSP supporting approximately 1,900 residential lots. While this will not materially impact the assessment at this stage, it is vital that the BMP accurately reflects the known lot layout for subsequent stages of planning. DFES has identified areas that require further review as outlined in the assessment below. 	Thank you for your submission. Bushfire Management Plan (BM required to be updated, to reflect to layout, road networks, public open so and tree retention areas proposed be LSP, and incorporate the real modifications. Shire Officers do not consider the Be adequately demonstrate approx separation from bushfire prone veget within the western portion of the so site. The LSP proposes the western lots to be rated BAL-40 or BAL-FZ, or vegetation present to the west of th The creation of lots within a but hazard level above BAL-29 is supported by Shire Officers.

	Applicant Comment
on. The MP) is t the lot spaces d by the required BMP to ropriate getation subject ernmost d, due to the site. bushfire is not	The various items raised can be addressed through minor updates and clarifications to the BMP as part of the standard Structure Plan modification process. The reports reference to lot yield will be corrected, noting that this does 'not materially impact the assessment at this stage'.

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Su	bmitter Comments			Officer Comment	Applicant Comment
		1.	Policy Measure 6.3 a)	(ii) results of a BAL contour map		The LSP does not propose a perimeter	
			Issue	Assessment	Action	road, as is required by the Guidelines to achieve separation from hazardous	
			Vegetation Exclusion	 Evidence to support the exclusion of Plot 5 as managed to low threat in accordance with AS3959 is required. In particular, vegetation in lots abutting the eastern boundary of the LSP area, including between Kiernan and Tonkin Streets, has been excluded however the vegetation appears to be mature and largely similar to classified vegetation to the north. No photographic evidence to support the exclusion has been provided. An enforceable mechanism is required to provide certainty that the proposed management measures can be achieved in perpetuity and that they are enforceable. Modification to the BMP is required. If unsubstantiated, the vegetation should be classified as per AS3959, or the resultant BAL ratings may be inaccurate. 	is required.	vegetation. The LSP proposes an FSAR within the Water Corporation infrastructure corridor. The Guidelines state that an FSAR is only to be used where a perimeter road cannot be achieved. Additionally, no evidence has been provided demonstrating that an FSAR located within this third-party land is achievable. Shire Officers do not support the proposed FSAR, and recommend that a perimeter road be provided within the subject site. An updated BMP is required to reflect the proposed LSP layout, and to accurately classify bushfire risk and achieve adequate separation to bushfire hazards. Modifications recommended by DFES have been incorporated within the Schedule of Modifications.	
			Vegetation Classification	The BMP states the LSP area will be cleared and managed to a low threat state. Appropriate detail should be provided regarding future staging and management of POS to demonstrate how compliance with standards for an exclusion under the acceptable solutions will be achieved in perpetuity.	BMP required.		
			Vegetation Classification	Revegetated areas within road reserves typically mature to a condition beyond Class G Grassland in the absence of a maintenance regime. Evidence to support the classification of Plot 4 as Class G Grassland in the future highway road reserve in its final mature state is required. The vegetation classification should be revised to consider the revegetation of the reserve at maturity as per AS3959, or the resultant BAL ratings may be inaccurate.	BMP required.		
			Vegetation Classification	A vegetation classification map (Figure 4) based on existing vegetation is provided, however, the BMP would also benefit from a vegetation classification map depicting post development impacts and showing where vegetation is proposed to be cleared	BMP is		
			Vegetation Classification	The BMP should demonstrate the BAL rating resulting from each of the vegetation plots classified	1 1		

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Su	bmitter Comments			Officer Comment
				within future development lots. Table 2 replicates the required separation distances, however, does not identify the resultant BAL ratings for each plot.		
		2.	Policy Measure 6.3c)	Compliance with the Bushfire Protection Criteria Assessment	Action	
			Location	 A1.1 – Not demonstrated The assessment at this level should inform the design and layout of the subdivision and reduce the vulnerability of people and property from the impact of bushfire. The BAL Contour Map identifies areas of BAL-40/BAL-FZ within developable areas (residential) of the LSP due to the vegetation and resulting bushfire risk outside the LSP area. The BMP suggests conditionally approving 'residential cells' with BAL40/FZ risk rating to only be sold once future dwellings can achieve BAL-29. However, lots should be located in areas with the least possible risk of bushfire with a maximum BAL-29 risk rating to meet the intent of Element 1. Strategic planning presents the best opportunity to incorporate hazard separation into design and utilise elements such as managed road reserves (including perimeter roads) and managed public open space to provide separation and avoid reliance on building setbacks to achieve BAL-29 or lower for future development. In this case, it is considered that sufficient separation is required, particularly to the west, to achieve compliance with A1.1 and A2.1 for future stages. As discussed in A3.4 below, a perimeter road within the site could achieve this. 	Modification to the BMP is required.	
			Vehicular Access	A3.4 and A3.4b – Not demonstrated The BMP proposes an FSAR abutting the western LSP boundary in the adjoining Water Corporation easement with a licence agreement to the local government.	Modification to the BMP is required.	
				The Guidelines provide for an FSAR to be used to demonstrate compliance with the Acceptable Solutions when a perimeter road cannot be achieved.		
				The BMP does not address why a perimeter road is not proposed along this boundary. In this case, it is considered that a perimeter road would offer a more		

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Sub	mitter Comments	Officer Comment		
						1
				appropriate design solution to achieve hazard separation and access requirements.		
				No evidence has been provided to demonstrate that the FSAR, proposed on third party land outside the LSP, is achievable. Appropriate evidence should be provided to substantiate the in-principle support of the relevant local or State Government agencies and service providers. Evidence of a legal mechanism being in place, or, agreed upon with the adjoining landowner or reserve manager for the proposed FSAR is needed.		
				Further the FSAR would be approximately 2km in length. If the FSAR was considered to demonstrate an acceptable outcome, it would need to meet all requirements set out in A3.4b, for which no evidence has been provided.		
		3. I	Policy Measure 6.6.1 vi	ulnerable land use		
			Issue	Assessment	Action	
			Bushfire Emergency Evacuation Plan (BEEP)	While the BMP makes mention of a Bushfire Emergency Evacuation Plan (section 3.2) for the proposed school, the BMP would benefit from inclusion of an implementation table detailing the steps and responsibilities at subsequent stages, including development of a BEEP, to the satisfaction of the decision maker.	Comment only	
			ommendation – compl uired	iance with acceptable solutions not demonstrated -	- modifications	
		The	BMP does not adequate	ely address the policy requirements of SPP 3.7 and the	Guidelines.	
		futur resid	re modifications to the I dential lots in areas of B	tes, DFES recommends amendments to the proposed L BMP. The proposed changes include commitments re AL-29 or below and vehicular access to meet the requi nds that the LSP be updated and referred for comments	egarding the location of rements of SPP3.7 and	
Department of Energy, Mines, Industry Regulation and Safety – Resource and Environmental Regulation	11.	prop and	oosal raises no significar basic raw materials.	, Mines, Industry Regulation and Safety (DEMIRS) han not issues with respect to mineral and petroleum resource and the above Local Structure Plan.		Thank you for your submission.
IN24/3265						

Applicant Comment
Noted

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	Applicant Comment
Water Corporation IN24/4927	12.	 Thank you for your letter of 21 December 2023. The Water Corporation offers the following comments regarding the proposal. Water The structure plan forms part of a much larger area that is covered by the Water Corporation's long-term water supply planning for the Mundijong Gravity Water Supply Scheme. In late 2019 the Corporation completed the construction of a large (600mm diameter) distribution main along Patterson Rd to augment supply for the growing Whitby subdivision, and for the anticipated growth in other parts of the Mundijong townsite. The 600mm water distribution main will be the source of water supply to the proposed E1 and E2 structure plan area. At the subdivision stage the proponents will need to extend water reticulation mains of adequate size (likely 250mm diameter) from the distribution main to the subdivision. The Water Corporation's Development Services Team has prepared a draft water reticulation plan for the area as a guide to the developers of this land. All water reticulation main extensions for the subject area will need to be laid within existing and proposed road reserves on the correct alignment in accordance with the WA Utility Providers Code of Practice. 	the changes to the Water Corporation infrastructure corridor as a result of increased land requirements.	
		Wastewater		
		The subject land is situated in the Water Corporation's Byford Sewer District. The wastewater flows that will arise from the proposed land uses and dwelling yields indicated in the structure plan have been conceptually allowed for in the Corporation's wastewater infrastructure planning.		
		As per established Water Corporation processes, it is open to land developers in the Mundijong townsite area to approach the Water Corporation to vary or stage the adopted long term wastewater infrastructure planning for Mundijong in a different manner, or to install temporary, developer-funded works to suit their development location or timing. Proposals to change the adopted planning will be assessed on a case-by-case basis having regard to funding arrangements, a range of engineering hydraulic factors, and the availability of adequate wastewater discharge capacity in the Byford sewer network to the north.		
		Subdivision and development of the subject land is dependent on the prior construction and commissioning of the Scott Road Interim Wastewater pump station at the site shown on the structure plan. Capital funding for the interim pump station is currently within the Corporation's 5-year Capital Investment Program. The Corporation is currently liaising with one of the land developers in the structure plan regarding the detailed scoping and delivery of the pump station.		
		The pump station requires an odour buffer of 50m radius measured from the centre of the pump station wet well. Some other components of the pump station including incoming and outgoing gravity sewers and the underground emergency storage vessels may need to be accommodated underground within the adjoining POS area shown on the structure plan. These details will be resolved through the preparation of the pump station catchment plan by the proponent's consulting engineer.		
		Water Corporation trunk main corridor		
		The Water Corporation has purchased land on the western side of Mundijong and Byford for a long-term trunk main corridor (Lot 53). The corridor is approximately 60m wide and abuts the western boundary of the structure plan area. The corridor has been acquired to accommodate staged construction of major, trunk water mains and wastewater pressure mains between the ultimate Scott Road transfer pump station and the East Rockingham wastewater treatment plant.		
		As part of regional road planning for the southern extension of Tonkin Highway, MRWA has been liaising with stakeholders including the Water Corporation about the land requirements to accommodate the ultimate design of Tonkin Highway, in particular the complex flyover pattern associated with the intersection of Mundijong Road and Tonkin Highway. It is understood that the land required for this intersection is larger		

Structure Plan for Mundijong Precincts E1 & E2

Submitter	Νο	Submitter Comments	Officer Comment
		than the land reserved in the Metropolitan Region Scheme. MRWA's draft design for the Tonkin Highway/Mundijong Rd intersection requires additional land as depicted on the attached diagram. The revised intersection design consumes a portion of the Corporation's pipe corridor in this location. The Corporation has asked MRWA to acquire additional land within the southwestern edge of the structure plan area to reinstate the Corporation's trunk main corridor. When this land matter is finalized, it will need to be reflected on the local structure plan. General Comments The developer is expected to provide all water and sewerage reticulation as required at the subdivision works stage. Standard Infrastructure contributions for water and wastewater headworks are also required at subdivision clearance stage. The information provided above is subject to review and may change. If the land development within this area has not proceeded within 12 months, the proponent should be advised to contact the Corporation to confirm that this information is still valid. Please provide the above comments to the landowner, developer and/or their representative.	
Public Transport Authority	13.	 PTA raises no objection to the proposed Structure Plan subject to the following comments: 1. Residential Precincts E1 & E2 are located in the vicinity of the future Mundijong Freight Rail realignment. This railway alignment is protected in the MRS by Planning Control Area 178. This future railway reserve is separated from Precincts E1 and E2 by the future Tonkin Highway MRS PRR reserve (100m wide) and a Water Corporation Service Corridor (60m wide). 2. SPP 5.4 Road and Rail Noise requires a 200m wide noise buffer distance from (future) freight railway lines. Part of Residential Precincts E1 & E2 are located within this trigger distance, in addition of being within the Tonkin Highway trigger distance. Notification advising the future noise impacts should be placed on the titles of lots within this railway noise impact area buffer and these future noise impacts should be addressed in the planning process. 3. Before the Structure Plan could be approved PTA recommends the proponents carry out a site-specific noise impact modelling and assessment of Residential Precincts E1 & E2 - despite only a strip of Precincts E1 & E2 fall within the 200 m freight railway buffer distance. The need for noise modelling is due to the cumulative noise impacts by the future freight trainal. Notification on the titles of residential Area, which may include a future intermodal freight terminal. Notification on the titles of residential Precincts E1 & E2 planning report (Section 4.11 Noise Mitigation) states 'To mitigate the impact of noise, a range of effective treatment options are available, however given the degree of uncertainty regarding the design of the Highway and its associated noise impacts, future development stages will need to consider mitigation measures in more detail. 'The current Noise Management Plan only assessed road noise and assumed dense graded asphalt will be used in constructing the future Tonkin Highway extension. PTA recommends that the proponent of the development. PTA rec	Thank you for your submission. The Noise Assessment dated Septe 2023 only accounts for noise impact future Tonkin Highway extension Mundijong Road. This assessment so be required to also account for impacts from Planning Control Are Mundijong Freight Rail Realignmer the future freight rail located with 557 and 561 Mundijong Road, Pla Control Area 179 Mardella Freigh Realignment, and the West Mun Industrial Area. The submission recommends that modelling be carried out across that despite only a strip of the LSP site within the trigger distance under SF SPP5.4 Road and Rail Noise state where any part of the lot is with trigger distance (which is 200m for railways), an assessment agains policy is required. As this 200m dis encroaches on the majority of th within the LSP site, the noise assess appears to have been undertaken a the entire LSP site. This submission states that Notificat the titles of residential lots within 20 the railway line should apply. How SPP5.4 Guidelines state <i>"Notifications on title are required lots of subdivision and develop proposals where noise levels forecasted to exceed the policy's out</i>

	Applicant Comment
	Noted
tember cts from on and t should r noise rea 178 ent and chin Lot lanning ght Rail undijong	
at noise he site, e falling SPP5.4. tes that hin the r freight nst the listance the lots essment across	
ation on 200m of owever, that d for all opment ls are outdoor	

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment
		It is noted Lots 557 and 561 are under the responsibility of the Public Transport Authority (see images below). These lots are outside of Precincts E1 & E2, abut Mundijong Road to the south and are part of a potential future railway corridor to the Cooloongup junction where the Kwinana Mundijong Freight line intersects the Mandurah Line. These Lots are zoned / reserved in the Shire of Jarrahdale Local Planning Scheme as public open space (POS), however, PTA need appropriate reservation and protection of these parts of the rail corridor.	noise target". Therefore, notification be required as per the outcome of revised noise assessment and outdoor noise levels calculated by the second second s
Business			
D. Ballast IN24/624	14.	I support the proposed development.	Support noted, thank you for your submission.
Landowners/Resi	dents		
Resident L. L. Y	15.	We strongly support as we need more housing for the demand and it's benefit for the Council as well.	Support noted, thank you for submission.

	Applicant Comment
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r your	Noted

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	Applicant Comment
Resident IN24/1102	16.	As a local resident I would like to comment on Local Structure Plan for Mundijong Precincts E1 & E2. As a long term Mundijong residence and land owner I would like the area to remain as it is with low density housing. I understand the State Government and land developers want maximum numbers of residential dwellings, but I think there are problems that go along with this concept, more traffic, more noise, in the area developed almost total destruction of the fauna and flora. These areas become major heat sinks with the blocks so small no one can grow trees and shrubs to brake up the housing areas it is just bricks and concrete I also think crime will increase. If we have to have land development it should be done with a mix of block size minimum 750- 800 sq meters the Council have the opportunity, if the State Government and land developers will listen, to show that high density land development is not this distate rout this distate from Pertk. There are areas of Byford that have high density and I see the anti-social problems this has caused do we have to spread that to Mundijong.	density, and is supported by Shire Officers, as this is consistent with the Mundijong District Structure Plan density range of Low (Suburban) R20-R35. The LSP proposes a transitional density of R20-R25 along the western portion of	<i>Neighbourhoods</i> requires new residential development to meet a residential density per site hectare target of 22 dwellings per hectare. The Structure Plan's indicative concept plan provides for a total lot yield of approximately 1,900 residential lots, equating to a net residential density of 27.5 dwellings per residential hectare, consistent with the targets outlined by

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	Applicant Comment
			site. Modifications are recommended to be made to the LSP, the Environmental Assessment Report, and the Local Water Management Strategy to opportunities to maximise vegetation retention potential. Compared to the previous approved structure plans, this new structure plan does provide some additional capacity for increased vegetation retention. Shire Officers have recommended that an up-to-date assessment of the flora and fauna populations on site be undertaken, demonstrating the linkage between vegetation which holds ecological value, and the tree retention areas. The LSP prescribes measures to be undertaken to protect vegetation at the subdivision stage, as a condition of subdivision approval. However, these measures are limited to areas shown as 'tree retention' on the structure plan map. Shire Officers have recommended that a Tree Pickup Survey (not only restrained to tree retention areas identified on the LSP map) and a Fauna Management Plan, be required as conditions of subdivision approval.	
Resident IN24/2390	17.	 Local Structure Plan Precincts E1 & E2 <u>Submission Points</u> Residential density for Mundijong should not exceed density that occurs in the new areas of Byford. Original Mundijong/Whitby Structure plan did not have a base code of R30. Want base density code of R25 applied. If this plan goes ahead even with a base density code of R25 it will require additional shops and facilities for the number of residents involved. This additional development was not in the original structure plan for the Mundijong townsite. Residents wanted to keep the heritage and the small community town centre. 	Thank you for your submission. The residential densities proposed by the Local Structure Plan do not exceed the densities occurring within newly developed areas of Byford. The current Mundijong District Structure Plan dated 2021 (available on the Shire's website) involved a community consultation process which considered resident preference. This DSP prescribes a base density range of code of R20-R35. Therefore, the R30 base density code R30 proposed by the LSP is consistent with this District Structure Plan and is supported by Shire Officers. The increased demand for amenities is expected to be catered for within the existing DSP and the planning framework. As the proposed LSP proposes to deliver residential lots, a Primary School, and	The Structure Plan proposed a base density code of R30 consistent with the density and development yield targets identified by the WAPC's Liveable Neighbourhoods and the Mundijong District Structure Plan. The development of the Structure Plan will provide a population base to support the sustainable development of the Mundijong District Centre which is less than 1km away from the site.

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	Applicant Comment
			Public Open Spaces as prescribed by the DSP, it is expected that the amenity requirements of this site will be catered for through alignment with the DSP.	
Resident IN24/2808	18.	Impact on water pressure. Road traffic increase. What is planned for our property and when?	The LSP site is intended to be serviced through an extension of the Water Corporation main at Paterson Street. The proposed water supply strategy is in alignment with the Water Corporation's long term water supply planning for the overall Mundijong urban area. In regard to increases in vehicular traffic	
			and noise, this is addressed through Appendix 4 Transport Impact Assessment. The LSP proposes a main 'spine road' accommodating the majority of traffic and a Neighbourhood Connector along the school's interface to address school-generated traffic. The proposed road hierarchy is generally adequate to cater for the indicative future traffic volumes within the LSP, however, modifications to the road network have been recommended by Shire Officers.	
			The property owned by the submitter is not located within Precincts E1 and E2. Under the Mundijong DSP this property is allocated a density range of Medium-High R40-R100. This lot is located within LSP Precinct F5 of which there has not yet been a LSP prepared. There are no timeframes on when a LSP for Precinct F5 will be initiated.	
Owner IN24/3250	19.	 Summary The client wishes to object to the proposed Structure Plan, as it does not reflect the vision of the Mundijong District Structure Plan and demonstrates inconsistencies with the previous District Structure Plans that have been prepared for Mundijong. Locality Mundijong is located approximately 39 kilometres south-east of the Perth CBD and is located at the southern end of the South East metropolitan corridor. The town is located within the Shire of Serpentine Jarrahdale (Shire) local government area. Broadly speaking, the Mundijong area is bound by the railway line, Bishop Road, Robertson Road and Norman Road in the north, the South Western Highway in the east, Feast Road, Wright Road, Hall Road and the Serpentine River in the south, and Kargotich Road in the west. 		development of approximately 1,900 lots. Consistent with the requirements

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment	Applicant Comment
		The Structure Plan area covers 117.8 hectares of land adjacent to the Mundijong District Centre. The Structure Plan area is bound by Scott Road to the north, Taylor Road and Adams Street to the east, a Water Corporation service corridor running parallel to Tonkin Highway to the west and Mundijong Road to the South. The clients' site is located at Lot 6 (No. 5) Adams Street in Mundijong. The site has a total area of 40,515m ² and features an existing single dwelling, a water tank and several outbuildings. The client owns the property and have lived on it since 1969. The subject land is zoned 'Urban Development' under the Shire's Local Planning Scheme No. 3 (LPS3). Consultation We firstly raise concern that the client was not engaged during the consultation process, prior to the lodgement of the Structure Plan. Section 1.1.2 (Pre-Lodgement Consultation) of the Structure Plan states that: "Major landowners within the Structure Plan area have held a number of discussions regarding the proposed development outcomes and are supportive of the development outcomes that the Structure Plan facilitates and the anticipated development timings." We submit that this statement is misleading. The clients' site at No. 5 Adams Street is relatively small in comparison to several of the adjoining properties located within the Structure Plan area. However, the site plays a pivotal role in the Structure Plan area is a earnarked as the site for a Primary School. The client should have been considered a major landowner for all intents and purposes, given the strategic importance of the site. Per the guiding principles of the VMA Planning Manual: Guidance for Structure Plans (SP Guidelines) which came into effect in August 2023, the preparation of a structure planning and outcomes of the plan. Further, the SP Guidelines state that: "Stakeholder engagement is recommended to occur prior to and in addition to the formal consultation required by the Regulations (Shedule 2, 1.8)." As mentioned previousyi, the client was not engaged early i	southern portion of Precinct E, and a more balanced distribution of Primary Schools within the DSP area. The proposed location of the primary school is not supported inconsistent with OP2.4 and Liveable Neighbourhoods, and does not provide adequate street frontages, parking and footpaths. The LSP proposes a Neighbourhood Connector A along the southern boundary of the primary school site. However, this frontage only extends halfway along the school frontage, as it is obstructed by a POS, and will not deliver parking and footpaths adjacent to the school site. An Access Street C is proposed along the northern frontage of the school site, however this does not meet the policy's minimum requirement of an Access Street B. The LSP states that Access Streets will only achieve footpaths on one side of the road, therefore this cannot be considered an adequate street frontage to the school. Shire Officers do not support the proposed Primary School location for reasons regarding landholding distributions. The LSP proposes to locate the primary school wholly within Lot 6 Adams Street, Mundijong. All other landholdings within the LSP site are under the ownership of Kerrboyle Pty Ltd, Qube Adams Street Mundijong 888 Pty Ltd. The Primary School has been proposed within the only lot within the subject site which is under private ownership. Therefore, the Primary School will encompass the entirety of this lot. Given land ownership distributions, Shire Officers view this location as inappropriate and unreasonable.	promote alternative forms of transpor Furthermore, it is important to note tha the walkable catchment of the schoo site location identified by the DSP is severely compromised by the Plannin Control Area for the future Tonki Highway and realignment of Mundijon Road Consistent with the requirements of OP2.4, the site has three road frontages, Sparkman Road, Adam Street and the northern access stree The LSP central spine road als provides an additional road frontage noting its location adjacent the PO adjoining the school site. As such, the proposed school sit location is considered to be mos suitable location available within th Structure Plan area.

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment
		(c) the Commission considers that a structure plan for the area is required for the purposes of orderly and	
		proper planning .	
		Part (a)(i) applies as the entirety of the Structure Plan area is zoned 'Urban Development' under LPS3. Pursuant to LPS3 the Urban Development zone objective is:	
		"To provide an intention of future land use and a basis for more detailed structure planning in accordance with the provisions of this Scheme."	
		In accordance with Clause 28 of Schedule 2, Part 4 of the Regulations, the Mundijong-Whitby District Structure Plan (DSP) remains valid until October 2025 and was adopted in August 2011. Furthermore, the draft Mundijong District Structure Plan (Draft DSP) was prepared in accordance with the provisions of the Regulations and was released in 2020 seeking an update to the 2011 DSP to better align with the state and local planning framework. The DSP and Draft DSP will be addressed further in this submission to detail the inconsistencies with the Structure Plan.	
		Operational Policy 2.4: Planning for School Sites	
		Operational Policy 2.4: Planning for School Sites (OP 2.4) was adopted in December 2022 and guides the strategic planning for government and non-government school sites in existing and proposed urban areas.	
		It sets out general locational criteria, configuration requirements and design standards for the provision of school sites and provides clarity on the methodology and application of developer contributions for public primary schools.	
		The policy measures of OP 2.4 outline requirements relating to the provision of government (public) school sites. One (1) primary school site is required for every 1,500 dwellings. The Structure Plan area, per the report, contains an estimated 1,900 residential lots. Accordingly, one primary school site is provided as part of the Structure Plan. The primary school site is located centrally, bound by Adams Street to the east and Sparkman Road to the south. The primary school is located on the clients' site, located at Lot 6 (No. 5) Adams Street in Mundijong.	
		Notwithstanding, as OP 2.4 details further, the WAPC can apply discretion as follows:	
		"The WAPC may accept alternative primary school site provisioning. This discretion may be based on considerations such as the capacity of surrounding schools, and demographic projections."	
		Section 4.8 of the Structure Plan details the current educational facilities within the area:	
		"Mundijong Primary School is located approximately 800m from the boundary of the Structure Plan area on Livesey Street. According to the Department of Education website, there are currently 191 students enrolled at Mundijong Primary indicating that there is significant capacity within the existing school. Court Grammar School is located approximately 2.5km north-east of the centre of the Structure Plan area at the junction of Bishop and Soldiers Road." [emphasis added]	
		The Structure Plan fails to further detail the 'significant capacity' available within Mundijong Primary School. The statement implies that Mundijong Primary comfortably services the existing community and has the capacity to cater for the short-term population growth, facilitated by any structure planning.	
		Court Grammar School located 2.5 kilometres to the north east, provides opportunity for private and religious education at the early learning, primary and secondary levels. The Court Grammar School Master Plan 2020-2027 includes a timeline of further works that will increase the capacity of the school. Notwithstanding, it is noted that private schools are not subject to the same requirements under OP 2.4.	
		Furthermore, the Draft DSP also identifies a future primary school, approximately 300m to the north of the Structure Plan's northern boundary and a future high school, located 400m to the east of the site along Keirnan Street.	
		Section 3.2.1 of OP 2.4 discusses the demand for school sites as follows:	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment
		<i>"All subdivisions and intensification of residential density create demand for, or on, a primary school, with this demand potentially extending beyond the boundaries of a structure plan or subdivision area."</i>	
		The estimated 1,900 residential lots in the Structure Plan area places substantial demand on education facilities. It is reasonable to assume that this demand may extend further than the boundaries of the Structure Plan, per the statement from OP2.4 above. However, the significant capacity of Mundijong Primary, coupled with the availability of Court Grammar School and the future provision of another primary school, indicates that provision of a primary school as part of the Structure Plan may result in an oversupply of primary school education. This raises concern in a sector that faces significant demand in the state with scare resources, particularly in rural areas.	
		Per the locational requirements of schools prescribed by OP 2.4, the desirable land size for primary school sites is 4 hectares. The primary school provided as part of the Structure Plan achieves the desirable land size. However, per the movement network and road safety requirements of OP 2.4, all new school sites must be designed with at least three road frontages. The primary school site provides two road frontages, namely, Sparkman Road to the south and Adams Street to the east. The shortage of road frontages places unreasonable demand on Sparkman Road as an 'Access Road' under the Main Roads WA (MRWA) Road Hierarchy and fails to balance the movement of people and vehicles.	
		Liveable Neighbourhoods	
		Liveable Neighbourhoods (2015 draft) is the WAPC's operational policy relating to the design and assessment of structure plans and subdivision to guide the future development of Perth and Peel and the State's regional centres. Similar to OP 2.4, Liveable Neighbourhoods considers the provision of education sites and walkable catchments.	
		Per Element 1 of Liveable Neighbourhoods, primary schools are generally located:	
		a) At the edge or outside of the 400 metre walkable catchment, serving approximately three neighbourhoods;	
		b) On the neighbourhood connector between two neighbourhoods; or	
		c) Near the centre of one neighbourhood.	
		One primary school site is provided, located at the centre of the Structure Plan area. However, the siting of the primary school is inconsistent with the DSP and Draft DSP which both identify a suitable site for a primary school further south on Adams Street. It is considered that the siting of the primary school under DSP and Draft DSP is more suitable in accordance with Liveable Neighbourhoods and in consideration of the broader Mundijong area.	
		Per the Draft DSP, the primary school is located on the border of an 800m walkable catchment. The catchment is centred around a transport node and the district centre identified by the Draft DSP map. The identified primary school site under the Structure Plan is not located within a walkable catchment area identified by the Draft DSP. The siting of the primary school under the Draft DSP allows for better accessibility to the District Centre and Mundijong Road to the south.	
		As mentioned previously, the Draft DSP also identifies a future primary school, approximately 300m to the north of the Structure Plan's northern boundary. The second site also sits within a 400m walkable catchment area.	
		Considering the two primary schools located on the western corridor of the DSP and Draft DSP, a third school (per the Structure Plan) located in an area that is not designated as a walkable catchment area, provides a lack of opportunity to travel to community services on foot.	
		Conclusion	
		The client wishes to largely support the Structure Plan, it's general intent and provisions. It is submitted that the Structure Plan will provide for high quality and coordinated development within Mundijong.	

Applicant Comment

Structure Plan for Mundijong Precincts E1 & E2

Submitter	No	Submitter Comments	Officer Comment
		We reiterate concern that the provision of a primary school site as part of the Structure Plan may result in an oversupply of primary school education within Mundijong and its surrounds. Further consideration should be given to the siting of the primary school as it is inconsistent with previous District Structure Plans which better consider the siting of educational facilities across the broader Mundijong area.	

Applicant Comment