

9.3.7 Extractive industry code

9.3.7.1 Application

- (1) This code applies to assessable development identified as requiring assessment against the Extractive industry code by the tables of assessment in **Part 5 (Tables of assessment)**.
- (2) All provisions in this code are assessment benchmarks for applicable assessable development.

9.3.7.2 Purpose and overall outcomes

- (1) The purpose of the Extractive industry code is to ensure that the exploitation of *extractive resources* is undertaken in an environmentally sound manner which avoids, or if avoidance is not practicable, minimises and mitigates, any adverse impacts on environmental and landscape values, public safety and the amenity of surrounding premises.
- (2) The purpose of the Extractive industry code will be achieved through the following overall outcomes:-
 - (a) extraction of *extractive resources* occurs in a safe and environmentally sound manner;
 - (b) *ecologically important areas* and water quality are protected from any environmental degradation potentially arising from *extractive industry* operations;
 - (c) *extractive industry* operations are located, designed, constructed and operated to avoid, or if avoidance is not practicable, minimise and mitigate, adverse impacts on any *sensitive land use*;
 - (d) *transport routes* allow extractive materials to be transported with the least amount of impact on development along those roads and on the function of those roads;
 - (e) land used for *extractive industry* operations is effectively rehabilitated; and
 - (f) in Precinct RUR1 (Meridan Plains Extractive Resource Area), the exploitation of *extractive resources* occurs in a manner that:-
 - (i) maintains or improves the integrity of the Mooloolah River and the flood storage capacity of the Mooloolah River *floodplain*;
 - (ii) maintains, as far as practicable, the flow conveyance patterns of the Mooloolah River flood plain, avoids any worsening of existing flooding conditions and protects the existing ground water regime;
 - (iii) protects, buffers and reconnects *ecologically important areas*;
 - (iv) maintains the quality of surface water and groundwater;
 - (v) avoids adverse impacts on upstream and downstream properties;
 - (vi) provides for and protects existing and planned future transport and other *infrastructure corridors*;
 - (vii) provides for and protects the function of identified *transport routes*;
 - (viii) provides appropriate separation distances to conflicting land uses;
 - (ix) minimises the visual impacts of *extractive industry* operations throughout the life of the development on the scenic values of the *floodplain* as an open landscape;
 - (x) provides for the rehabilitation of the area in a manner that supports the establishment of a range of complementary open space and recreation uses within a post extraction setting;
 - (xi) provides land for continuous public access trails along a rehabilitated Mooloolah River esplanade, connecting to public access points and open space areas; and
 - (xii) protects the advanced waste water and sewage treatment plant site.

9.3.7.3 Performance outcomes and acceptable outcomes

Table 9.3.7.3.1 Performance outcomes and acceptable outcomes for assessable development

Performance Outcomes		Acceptable Outcomes	
Extractive Industry Generally			
Site Planning			
PO1	The <i>extractive industry</i> is designed and established so as to provide:- (a) adequate buffering measures including separation distance to protect the surrounding area from significant noise, dust, vibration and visual impacts of operations; (b) suitable vehicle access; (c) protection against erosion; (d) acceptable quality of water leaving the <i>site</i> ; (e) public safety; (f) acceptable restoration measures; (g) protection of groundwater quality and quantity; (h) avoidance of land contamination; (i) effective stormwater management; and (j) waste management practices which maximise recycling and reuse of wastes.	AO1	<i>In partial fulfilment of Performance Outcome PO1:-</i> The <i>extractive industry</i> is undertaken in accordance with an approved environmental management plan which is regularly updated to reflect on-site practices and addresses the environmental and social impacts of the <i>extractive industry</i> .
PO2	Environmental management requirements for the <i>extractive industry</i> are properly identified, and their effective implementation and monitoring appropriately planned, to minimise environmental impact.	AO2	<i>In partial fulfilment of Performance Outcome PO2:-</i> The <i>extractive industry</i> demonstrates that adequate resources are available to fulfil the environmental management requirements identified in the approved environmental management plan.
PO3	The <i>extractive industry</i> provides for volumes of extraction to be planned and staged so that a suitable and sustainable landscape form remains on the extraction site.	AO3	No acceptable outcome provided.
Vehicle Access and Manoeuvring			
PO4	Vehicle access to, from, and within the <i>extractive industry</i> site is provided so as to:- (a) be adequate for the type and volume of traffic to be generated; (b) not create or worsen any traffic hazard; (c) ensure disturbance to surrounding land uses is minor and that impacts from emissions are minimised; and (d) ensure no tracking of sediment or material onto the road network results from the transport of materials associated with the haulage of <i>extractive resources</i> .	AO4.1 AO4.2 AO4.3 AO4.4	The proposed <i>transport route</i> to the <i>site</i> is along sealed roads and does not require heavy vehicles to traverse residential or rural residential streets classified as collector streets or local streets. All driveways and manoeuvring areas between the site entrance and site office and all wash down areas and works depot areas are sealed. Driveways have a minimum width of 9 metres measured at the property alignment/road <i>frontage</i> and are located not less than 9 metres from any other driveway. A wheel wash down area is provided near the driveway entrance of the <i>site</i> to any <i>transport route</i> .
Separation Distances			
PO5	The <i>extractive industry</i> is located on a <i>site</i> which has sufficient area to provide	AO5.1	Hard rock extraction and processing activities involving blasting are not carried

Performance Outcomes		Acceptable Outcomes	
	for adequate setback of operations from road <i>frontages</i> , <i>site</i> boundaries, surrounding residential uses and other <i>sensitive receptors</i> , such that the <i>extractive industry</i> achieves an acceptable standard of visual amenity and control of noise, light, dust and vibration impacts.	AO5.2	out within 40 metres of any boundary of the <i>site</i> or within 1 kilometre of any residential premises, land included within a <i>residential zone</i> or Rural residential zone or other <i>sensitive receptor</i> on surrounding land. Extractive and processing activities not involving blasting are not carried out within 30 metres of any boundary of the <i>site</i> or within 200 metres of any residential premises, land included within a <i>residential zone</i> or Rural residential zone or other <i>sensitive receptor</i> . Note—a topographic feature providing a natural buffer between extractive and processing activities and a <i>sensitive land use</i> may justify provision of a lesser setback distance.
		AO5.3	A vegetated <i>buffer strip</i> or mound having a minimum width of 10 metres is provided to all boundaries of the <i>site</i> . Note—Acceptable Outcomes AO5.2 and AO5.3 may be modified by more specific requirements in this code relating to Precinct RUR-1 (Meridan Plains Extractive Resource Area).
		AO5.4	Extraction and processing activities are screened from view from any <i>major road</i> and any land included in an <i>urban zone</i> , where appropriate.
Site Drainage			
PO6	The <i>extractive industry</i> provides on-site drainage that is designed, constructed and maintained so as to:- (a) avoid erosion; (b) prevent pollution of groundwater and surface water; (c) protect downstream water quality; and (d) provide opportunities to recycle water for reuse in processing, washing and/or screening materials, dust suppression and on product stockpiles, overburden stockpiles, revegetation or rehabilitation areas and wheel wash facilities.	AO6.1	Banks and channels are constructed to divert stormwater run-off away from excavated areas.
		AO6.2	Sediment basins are provided to detain stormwater run-off from disturbed areas such that there is no off-site discharge likely to cause environmental harm.
		AO6.3	Bunding and treatment and disposal of industrial wastes are carried out such that no environmental harm is caused.
		AO6.4	Lining or other suitable treatment of erosion-prone areas is established and maintained at discharge points.
		AO6.5	Harvested water is re-used on the <i>extractive industry</i> site for a range of purposes including, but not limited to:- (a) processing, washing and/or screening materials; (b) dust suppression and for use on product and overburden stockpiles; (c) irrigation of revegetation and rehabilitation areas; and (d) wheel wash facilities.
Management of Blasting and Other Operations			
PO7	The <i>extractive industry</i> provides for blasting, crushing, screening and loading to be carried out safely and in accordance with <i>best practice</i>	AO7.1	Blasting and other operations are confined to the hours of operation identified in Table 9.3.7.3.1A (Extractive industry hours of operation) .

Performance Outcomes		Acceptable Outcomes							
	management standards so that disturbance to surrounding land uses is minor and that impacts from emissions are minimised.		<p>Table 9.3.7.3.1A Extractive industry hours of operation</p> <table border="1"> <thead> <tr> <th>Column 1 Extractive industry activity</th> <th>Column 2 Hours of Operation</th> </tr> </thead> <tbody> <tr> <td>Blasting operations</td> <td>9am to 5pm Monday to Friday No operations Saturday, Sunday or public holidays</td> </tr> <tr> <td>Other operations</td> <td>6am to 6pm Monday to Friday. 7am to 1pm Saturday No operations Sunday or public holidays.</td> </tr> </tbody> </table> <p>AO7.2 Vibration levels do not exceed the relevant provisions contained in the <i>Environmental Protection Act 1994</i>.</p>	Column 1 Extractive industry activity	Column 2 Hours of Operation	Blasting operations	9am to 5pm Monday to Friday No operations Saturday, Sunday or public holidays	Other operations	6am to 6pm Monday to Friday. 7am to 1pm Saturday No operations Sunday or public holidays.
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Blasting operations	9am to 5pm Monday to Friday No operations Saturday, Sunday or public holidays								
Other operations	6am to 6pm Monday to Friday. 7am to 1pm Saturday No operations Sunday or public holidays.								
Public Safety									
PO8	<i>Extractive industry</i> operation areas are fenced to prevent unauthorised or accidental public entry.	AO8.1	Safety fence is provided to prevent unauthorised or accidental public access to the <i>extractive industry</i> site to the greatest extent practicable.						
		AO8.2	Public signage to warn of operations and safety hazards is provided to all boundaries of the <i>site</i> .						
Site Rehabilitation									
PO9	Rehabilitation of the <i>extractive industry</i> site provides:- (a) progressive/staged rehabilitation works; (b) appropriate clean-up works (taking particular account of areas of possible soil contamination); (c) agreed landform and soil profiles; (d) suitable revegetation; and (e) establishment phase requirements.	AO9	The <i>extractive industry</i> provides for all rehabilitation works to be undertaken in accordance with an approved expected final landform design and site rehabilitation plan.						
PO10	Rehabilitation works for each operational stage are bonded to ensure the effective return of disturbed areas to acceptable land use suitability.	AO10	No acceptable outcome provided.						
PO11	Rehabilitation allows for suitable use of any water bodies created through the extraction process, having regard to water quality, hydraulic conditions, land form and <i>vegetation</i> .	AO11.1	Rehabilitation is carried out to provide water quality of a standard that can support aquatic vertebrates and invertebrates.						
		AO11.2	Fringes of water bodies are planted with wetland species such that a sustainable aquatic plant community is established.						
Additional Requirements for Extractive Industry in Precinct RUR-1 (Meridan Plains Extractive Resource Area) on Zone Map ZM63									
Master Planning and Rehabilitation Concepts									
PO12	The <i>extractive industry</i> is established, operated and rehabilitated in a manner that is generally in accordance with the development and rehabilitation concepts identified on:- (a) Figure 9.3.7A (Meridan Plains extractive resource area master plan) ; and (b) Figure 9.3.7B (Meridan Plains extractive resource area end use	AO12	No acceptable outcome provided.						

Performance Outcomes		Acceptable Outcomes	
	concept plan).		
Avoidance of Constrained Areas and Staging of Extraction			
PO13	<p>The <i>extractive industry</i> avoids constrained areas and utilises a staged approach to <i>site</i> development that provides for:-</p> <ul style="list-style-type: none"> (a) the efficient exploitation of the Extractive Resource Area; (b) the progressive rehabilitation of the <i>site</i> such that the scenic values of the Mooloolah River <i>floodplain</i> are retained throughout the duration of the extraction; (c) the progressive creation of a lake system that at all times:- <ul style="list-style-type: none"> (i) maintains or improves the integrity of the Mooloolah River and the flood storage capacity of the Mooloolah River <i>floodplain</i>; (ii) maintains, as far as practicable, the flow conveyance patterns of the Mooloolah River <i>floodplain</i>; and (iii) maintains or improves the quantity and quality of surface and groundwater in the catchment area; and (d) the avoidance or effective mitigation of any potential environmental harm. 	AO13	<p>The <i>extractive industry</i> provides for:-</p> <ul style="list-style-type: none"> (a) the avoidance of exploitation in areas identified as 'Constrained Resource Area (Type A)' on Figure 9.3.7A (Meridan Plains extractive resource area master plan); (b) the avoidance of exploitation in areas identified as 'Constrained Resource Area (Type B)' on Figure 9.3.7A (Meridan Plains extractive resource area master plan) until such time as outstanding strategic coastal management, flooding and hydrological issues are investigated and resolved; (c) the avoidance of exploitation in any other part of the Extractive Resource Area determined (through further site assessment or referral agency advice) to have coastal management or other biophysical limitations making the land unsuitable for <i>extractive industry</i> development; (d) development on the <i>site</i> to be staged such that not more than 30% of the surface area of the <i>site</i> is used for <i>extractive industry</i> at any particular time; and (e) development of a lake system with a configuration that is generally consistent with that shown on Figure 9.3.7B (Meridan Plains extractive resource area end use concept plan) and designed in accordance with:- <ul style="list-style-type: none"> (i) an approved lake management plan for the entire Extractive Resource Area; or (ii) if a lake management plan is yet to be approved for the entire Extractive Resource Area—a site specific lake management plan. <p>Note—<i>Council</i> may consider an alternative staging or lake configuration, provided that the development is otherwise consistent with this code and the intent of the end use concept depicted on Figure 9.3.7B (Meridan Plains extractive Resource area end use concept plan).</p>
Buffers and Batter Stability Zones			
PO14	<p>The <i>extractive industry</i> provides for ecological and <i>landscape buffers</i>, visual screens and batter stability zones to conceal and/or setback operations and activities involved in the use from road <i>frontages</i>, <i>site</i> boundaries, incompatible uses on surrounding land, lakes, <i>waterways</i>, <i>wetlands</i>, ecologically important areas and <i>infrastructure</i> corridors, such that the <i>extractive industry</i>:-</p> <ul style="list-style-type: none"> (a) maintains or improves the integrity of the Mooloolah River and other 	AO14.1	<p>The <i>extractive industry</i> provides for the establishment of ecological and <i>landscape buffers</i>, visual screens and batter stability zones in accordance with Table 9.3.7.3.1B (Ecological and landscape buffers, visual screens and batter stability zones).</p> <p>Table 9.3.7.3.1B Ecological and landscape buffers, visual screens and batter stability zones</p>

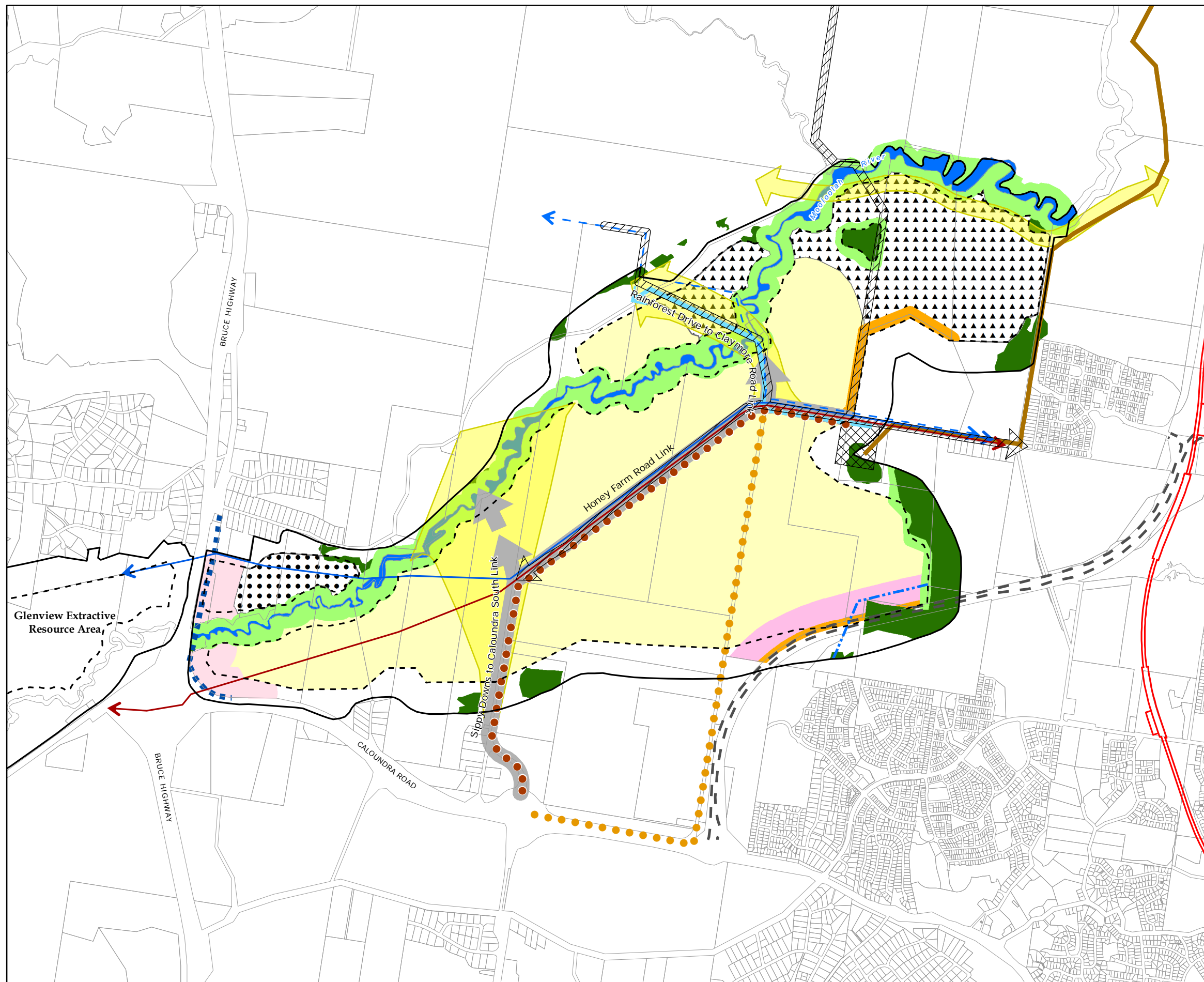
Performance Outcomes		Acceptable Outcomes	
<p><i>waterways</i>;</p> <p>(b) protects and reconnects <i>ecologically important areas</i>;</p> <p>(c) achieves a high standard of visual amenity from all scenic routes and significant viewpoints;</p> <p>(d) protects the functionality of transport and other <i>infrastructure</i> corridors;</p> <p>(e) prevents channel avulsion or erosion; and</p> <p>(f) avoids or effectively mitigates any potential environmental harm.</p>		Column 1 Feature/ element	Column 2 Ecological/landscape/ visual buffer/ batter stability zone
		Mooloolah River and <i>waterways</i>	60 metre wide (minimum) ecological <i>buffer</i> measured from the high or outer bank of the <i>waterway</i> to the top of the batter of any extraction area. The northern and southern boundaries of this ecological <i>buffer</i> are "smoothed" (i.e. they do not follow every bend in the river) as indicated in figures 9.3.7A and 9.3.7B. To remove any doubt, the distance is not less than 60m at any point, but could be up to 100m when "smoothed".
		Native <i>vegetation</i>	50 metre wide (minimum) ecological <i>buffer</i> measured from the outer edge of the native <i>vegetation</i> to the top of the batter of any extraction area.
		Bruce Highway – Caloundra Road Interchange	200 metre wide open <i>landscape buffer</i> measured from the planned final Bruce Highway and Caloundra Road boundaries to the top of the batter of any extraction area.
		Multi Modal Transport Corridor	40 metre wide batter stability zone measured from the final MMTC Road Boundary to the top of the batter of any extraction area; and 200 metre wide interim visual screen.
		Sippy Downs to Caloundra South Link	20 metre wide batter stability zone and visual screen measured from the final corridor boundary to the top of the batter of any extraction area.
		Rainforest Drive to Claymore Road Link	20 metre wide batter stability zone and visual screen measured from the final corridor boundary to the top of the batter of any extraction area.
		Honey Farm Road Link	20 metre wide batter stability zone and visual screen measured from the final corridor boundary to the top of the batter of any extraction area.
		Water Supply Ring Tank	40 metre wide batter stability zone measured from the property boundary to the top of the batter of any extraction area.
		Water supply and sewerage main pipelines	40 metre wide batter stability zone measured from the centreline of the pipe to the top of the batter of any extraction area.
	Created water body / lake	20 metre wide batter stability zone measured from the top of the batter of any extraction area/lake to another extraction area/lake.	
	Electricity transmission tower or other <i>infrastructure</i> service where not included within a road reserve	20 metre wide batter stability zone measured from the outer extremity of the transmission tower or other <i>infrastructure</i> service to the top of a minimum 1:3 batter of any extraction area.	

Performance Outcomes		Acceptable Outcomes			
			<table border="1"> <tr> <td>External site boundary</td> <td>10m wide batter stability zone measured from the property boundary to the top of the batter of any extraction area, except where a lake traverses a property boundary and is part of a development site.</td> </tr> </table>	External site boundary	10m wide batter stability zone measured from the property boundary to the top of the batter of any extraction area, except where a lake traverses a property boundary and is part of a development site.
External site boundary	10m wide batter stability zone measured from the property boundary to the top of the batter of any extraction area, except where a lake traverses a property boundary and is part of a development site.				
		AO14.2	<p>The <i>extractive industry</i> provides for:-</p> <p>(a) that part of any <i>site</i> included within the Mooloolah River ecological <i>buffer</i> to be:-</p> <p>(i) rehabilitated to provide for bank stabilisation and buffering in accordance with:-</p> <p>(A) an approved final landform design and site rehabilitation plan for the entire Extractive Resource Area; or</p> <p>(B) if an approved final landform design and site rehabilitation plan is yet to be approved for the entire Extractive Resource Area—a site specific final landform design and site rehabilitation plan; and</p> <p>(ii) dedicated to <i>Council</i> as esplanade prior to the commencement of any extraction on the <i>site</i>;</p> <p>(b) that part of any <i>site</i> included within another ecological <i>buffer</i>, to be established prior to the commencement of any extraction on the <i>site</i>;</p> <p>(c) that part of any <i>site</i> included within the Bruce Highway-Caloundra Road open <i>landscape buffer</i> or the Multi-Modal Transport Corridor visual screen to be established for that purpose prior to the commencement of any extraction on the <i>site</i>; and</p> <p>(d) that part of any <i>site</i> included within another <i>buffer</i> or batter stability zone to be established for that purpose, at a time appropriate to the staging of the extraction.</p> <p>Note—where land in the Mooloolah River Ecological Buffer is dedicated to <i>Council</i> as esplanade in accordance with AO14.2(a)(ii), <i>Council</i> will consider the granting of a temporary lease over part of the esplanade in order to provide for:-</p> <p>(a) any activity required to avoid or mitigate impacts on the environment (including approved rehabilitation work); and/or</p> <p>(b) any access required to allow maintenance of the Ecological Buffer or egress to an extraction area adjoining the Esplanade; and/or</p> <p>(c) any security measure required for public safety purposes and/or the security of <i>extractive industry</i> sites.</p>		
PO15	The <i>extractive industry</i> provides for ecological and <i>landscape buffers</i> , and visual screens and batter stability	AO15	No acceptable outcome provided.		

Performance Outcomes		Acceptable Outcomes											
	zones, to comprise of <i>vegetation</i> endemic to the area and to have a landscape character that is consistent with a coastal plain landscape, where rural scenery and pockets of local native <i>vegetation</i> are interspersed with screen planting and views over water.												
Transport/Infrastructure Corridors and Transport Routes													
PO16	The <i>extractive industry</i> protects existing transport and <i>infrastructure</i> corridors and provides for the establishment of new transport and <i>infrastructure</i> corridors.	AO16.1	<p>The <i>extractive industry</i> provides for the establishment of the identified transport and <i>infrastructure</i> corridors described in Table 9.3.7.3.1C (Transport and infrastructure corridor requirements) to be located within the future transport and infrastructure study area depicted on Figure 9.3.7A (Meridan Plains extractive resource area master plan).</p> <p>Table 9.3.7.3.1C Transport and infrastructure requirements corridor</p> <table border="1"> <thead> <tr> <th>Column 1 Transport/ infrastructure corridor</th> <th>Column 2 Land requirement</th> </tr> </thead> <tbody> <tr> <td>Sippy Downs to Caloundra South Link (Local government <i>infrastructure</i>)</td> <td>80 metre wide road reserve from Caloundra Road to Laxton Road and including the existing Honey Farm and Sattler Road Reserves.</td> </tr> <tr> <td>Rainforest Drive to Claymore Road Link (Local government <i>infrastructure</i>)</td> <td>40 metre wide road reserve from Honey Farm Road to Laxton Road and including the existing unnamed Road Reserve.</td> </tr> <tr> <td>Honey Farm Road Link (Local government <i>infrastructure</i>)</td> <td>40 metre wide road reserve from Sippy Downs to Caloundra South Link to Rainforest Drive and including the existing Rainforest Road Reserve.</td> </tr> <tr> <td>Electricity transmission line or other <i>infrastructure</i> service where not included within a road reserve</td> <td>40 metre wide <i>infrastructure</i> corridor in an alignment and configuration that fulfils the functional requirements of the <i>infrastructure</i>/service provider.</td> </tr> </tbody> </table>	Column 1 Transport/ infrastructure corridor	Column 2 Land requirement	Sippy Downs to Caloundra South Link (Local government <i>infrastructure</i>)	80 metre wide road reserve from Caloundra Road to Laxton Road and including the existing Honey Farm and Sattler Road Reserves.	Rainforest Drive to Claymore Road Link (Local government <i>infrastructure</i>)	40 metre wide road reserve from Honey Farm Road to Laxton Road and including the existing unnamed Road Reserve.	Honey Farm Road Link (Local government <i>infrastructure</i>)	40 metre wide road reserve from Sippy Downs to Caloundra South Link to Rainforest Drive and including the existing Rainforest Road Reserve.	Electricity transmission line or other <i>infrastructure</i> service where not included within a road reserve	40 metre wide <i>infrastructure</i> corridor in an alignment and configuration that fulfils the functional requirements of the <i>infrastructure</i> /service provider.
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Electricity transmission line or other <i>infrastructure</i> service where not included within a road reserve	40 metre wide <i>infrastructure</i> corridor in an alignment and configuration that fulfils the functional requirements of the <i>infrastructure</i> /service provider.												
		AO16.2	That part of any <i>site</i> required to accommodate a local government transport or other <i>infrastructure</i> corridor is dedicated to <i>Council</i> prior to the commencement of any extraction on the <i>site</i> .										
PO17	The <i>extractive industry</i> provides for the establishment and utilisation of identified <i>transport routes</i> , so as to provide for the efficient transport of extracted material from the Meridan Plains Extractive Resource Area in a manner that:- (a) is adequate for the type and volume of traffic to be generated; (b) does not create or worsen any traffic hazards; (c) minimises adverse effects on the	AO17	The <i>extractive industry</i> provides for the establishment of the <i>transport routes</i> in the configuration depicted on Figure 9.3.7A (Meridan Plains extractive resource area master plan) .										

Performance Outcomes		Acceptable Outcomes	
	<p>amenity of the locality;</p> <p>(d) protects the inherent rural character and identity of the area; and</p> <p>(e) ensures that disturbance to surrounding land uses is minor and that impacts from emissions are minimised.</p>		
Lake and Site Management			
PO18	The <i>extractive industry</i> provides for the appropriate establishment and management of lakes provided in accordance with Figure 9.3.7A (Meridan Plains extractive resource area master plan) in a manner that appropriately addresses potential environmental and flooding impacts.	AO18	<p><i>In partial fulfilment of Performance Outcome PO18:-</i></p> <p>The <i>extractive industry</i> is established and operated in accordance with a lake management plan (supported by modelling) that:-</p> <p>(a) considers the full development scenario for the Meridan Plains Extractive Resource Area and its external influences; and</p> <p>(b) identifies and addresses all environmental and flooding impacts and the measures to manage the potential impacts.</p> <p>Note—a lake management plan is intended to be prepared for the entire area as well as individual sites.</p>
Site Rehabilitation and End Use			
PO19	The <i>extractive industry</i> provides for the progressive rehabilitation of all areas subject to <i>extractive industry</i> operations to a stable and restored state such that the land is suitable for use in accordance with Figure 9.3.7B (Meridan Plains extractive resource area end use concept plan) .	AO19.1	<p>The <i>extractive industry</i> provides for site rehabilitation to be carried out on a progressive basis at the conclusion of each stage of extraction, providing for:-</p> <p>(a) clean-up works (taking particular account of areas of possible soil contamination);</p> <p>(b) minimisation of potential for erosion from the <i>site</i> and sediment transport across the <i>site</i>;</p> <p>(c) management of the quality of stormwater, water and seepage released from the <i>site</i> such that releases of contaminants are not likely to cause environmental harm;</p> <p>(d) management of any actual and potential <i>acid sulfate soils</i> in or on the <i>site</i>;</p> <p>(e) a stable final landform and soil profile;</p> <p>(f) local native <i>vegetation</i> suitable for establishment in the coastal plain to be planted, established and maintained;</p> <p>(g) management of weeds; and</p> <p>(h) public <i>infrastructure</i> (including pathways) to be provided in those areas dedicated as <i>public open space</i>.</p>
		AO19.2	<p>The <i>extractive industry</i> provides for all lakes created through the extraction process to achieve an end use water quality standard at least suitable for secondary contact recreation use with a self managing pH range of 5.0 to 8.5 and metal concentrations and hardness similar to background concentrations in the adjacent Mooloolah River (as at 2006).</p>

Performance Outcomes		Acceptable Outcomes	
		<p>AO19.3</p> <p>The <i>extractive industry</i> provides for all rehabilitation works to be undertaken in accordance with an expected final landform design and site rehabilitation plan.</p> <p>Note—a final landform design and site rehabilitation plan is intended to be prepared for the entire area as well as individual <i>sites</i>.</p> <p>AO19.4</p> <p>The <i>extractive industry</i> provides for the long term management of any rehabilitated lands or lakes dedicated to <i>Council</i> as <i>public open space</i> or <i>esplanade</i>.</p>	
Infrastructure Agreement			
PO20	<p>The <i>extractive industry</i> occurs in accordance with an infrastructure agreement made with the <i>Council</i> that:-</p> <p>(a) incorporates the agreed plan of staging for extraction on the <i>site</i>;</p> <p>(b) provides for the establishment and maintenance of <i>transport routes</i> necessary to support development of the extractive resource area;</p> <p>(c) establishes the performance bonding arrangements for:-</p> <p>(i) the operation of the <i>extractive industry</i> in accordance with the lake management plan and site based management plan;</p> <p>(ii) the rehabilitation of the <i>site</i> in accordance with the final landform design and site rehabilitation plan; and</p> <p>(iii) the long term management of any rehabilitated lands or lakes dedicated to <i>Council</i> as <i>public open space</i> or <i>esplanade</i>; and</p> <p>(d) specifies any other obligation of the parties necessary to ensure the extraction, rehabilitation and ongoing maintenance of the extractive resource area.</p>	AO20	No acceptable outcome provided.



Meridan Plains Extractive Resource Area Master Plan

Meridan Plains Extractive Resource Elements

- ■ ■ Main Roads - Bruce Highway
 - Possible Resumption Boundary
 - ● ● Haulage Route
 - ○ ○ Interim Haulage Route
 - ▨▨▨ Future Meridan Plains Sewerage and Advanced Waste Water Treatment Plants
 - ↔↔↔ Trunk Sewer Pipe
 - ↔↔↔ Trunk Water Pipe
 - ↔↔↔ Aquagen Pipeline
 - Trunk Pressure Main
 - Future Infrastructure Corridor
 - Future Transport and Infrastructure Study Area
 - Open Landscape Buffer
 - Visual Screen
 - Transport Infrastructure Corridor
 - Batter Stability Zone
 - Regional Significant Vegetation (areas shown within and adjoining extractive resource area only)
 - Ecological Buffer (areas shown within and adjoining extractive resource area only)
 - Mooloolah River
 - ▨▨▨ Indicative Future 132kv Electricity Corridor
 - Primary Resource Area
 - ▨▨▨ Constrained Resource Area (Type A)
 - ▨▨▨ Constrained Resource Area (Type B)
 - ▨▨▨ SPP Key Resource Area Boundary
 - ▨▨▨ SPP Extractive Resource Area Boundary
- Other Elements**
- DCDB 28 January 2013 © State Government
 - CAMCOS Transport Corridor
 - Major Road Corridor
 - Indicative Proposed Drainage Line

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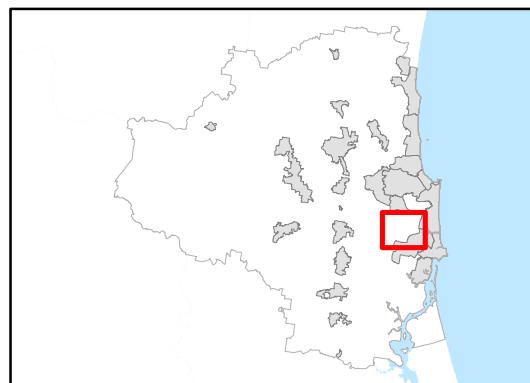
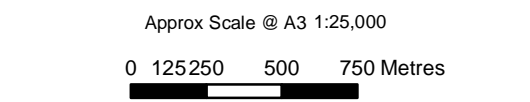
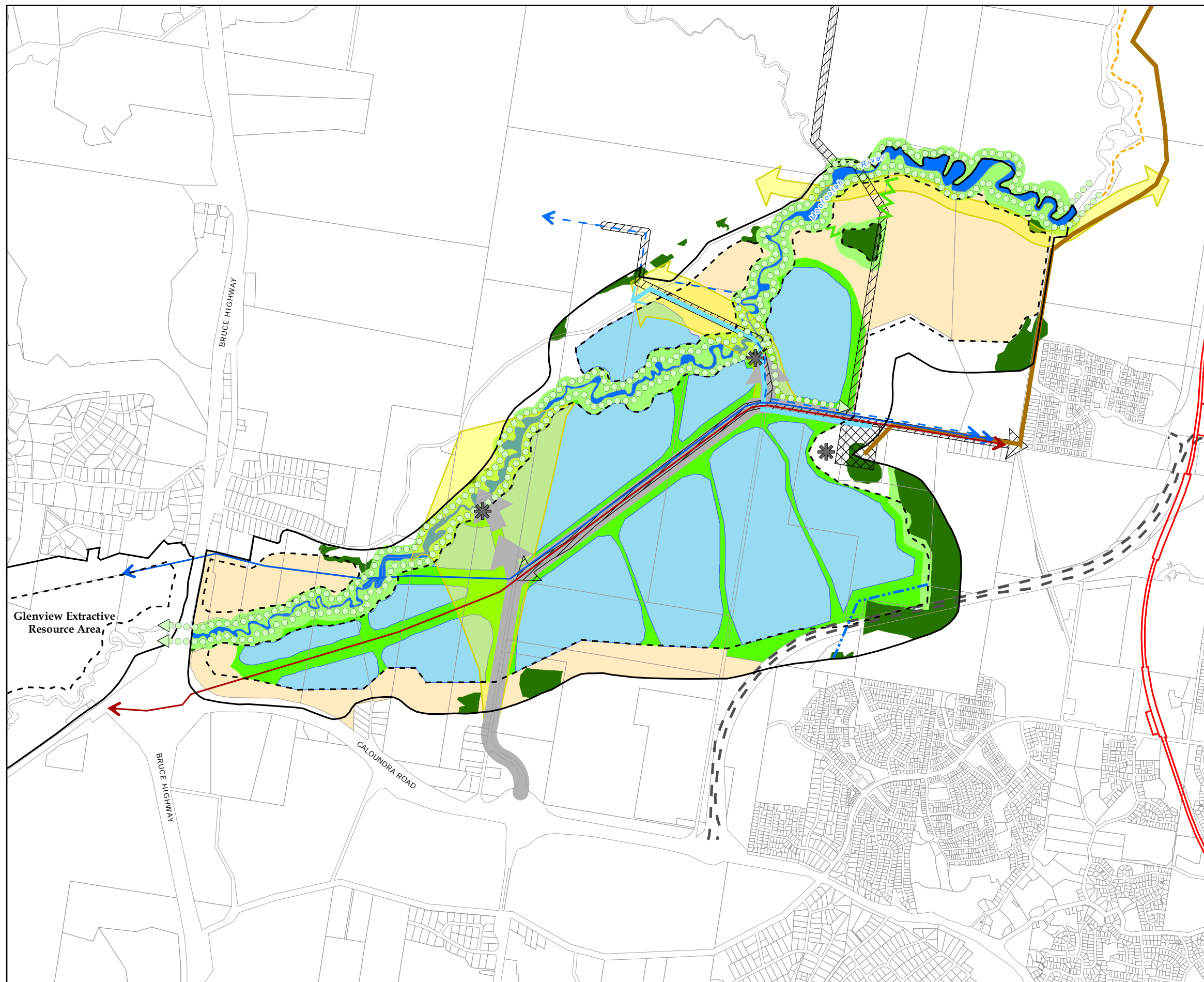


Figure 9.3.7A



Meridan Plains
Extractive Resource Area
End Use Concept Plan

Meridan Plains Extractive Resource Elements

- Parking / Public Access Points (depending on final road crossing location)
 - Future Trails
 - Public Access Trails
 - Ecological Link
 - Future Meridan Plains Sewerage and Advanced Waste Water Treatment Plants
 - Existing Sewer Pipe
 - Existing Water Pipe
 - Proposed Aquagen Pipeline
 - Trunk Pressure Main
 - Future Infrastructure Corridor
 - Future Transport Infrastructure Corridors
 - Future Transport and Infrastructure Study Area
 - Open Space / Landscape Area
 - Rural
 - Regional Significant Vegetation (areas shown within and adjoining extractive resource area only)
 - Ecological Buffer (areas shown within and adjoining extractive resource area only)
 - Mooloolah River
 - Indicative Lake Configurations
 - Indicative Future 132kv Electricity Corridor
 - SPP Key Resource Area Boundary
 - SPP Extractive Resource Area Boundary
- Other Elements**
- DCDB 28 January 2013 © State Government
 - CAMCOS Transport Corridor
 - Major Road Corridor
 - Indicative Proposed Drainage Line

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Approx Scale @ A3 1:25,000
0 125 250 500 750 Metres

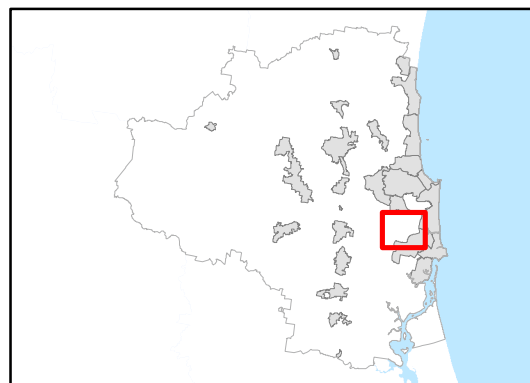


Figure 9.3.7B