

# GMA Certification Group

BUILDING SURVEYORS

ACN 150 435 617

*Leaders in Building Certification Services*

**CAIRNS**

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3 August 2022

The Chief Executive Officer  
Douglas Shire Council  
PO Box 723  
MOSSMAN QLD 4873

Attention: Development Assessment

Dear Sir/Madam,

**Re: Application for Building Works Assessable Against a Planning Scheme  
226 Bamboo Creek Road, Bamboo (Lot 9/RP865065)**

GMA Certification Group has been engaged to assess an application for a patio as illustrated on the enclosed plans. The allotment is zoned Environmental Management and is affected by the following local plans and overlays:

- Acid Sulfate Soils (5-20m AHD)
- Flood Storm (Floodplain Assessment Overlay (Daintree River))
- Landscape Values (Medium Landscape Values)
- Transport Road Hierarchy (Major Rural Road)

Building work within the Environmental Management Zone is Code Assessable under the Douglas Shire Planning Scheme. Accordingly, an application for Building Works Assessable Against a Planning Scheme is enclosed for council's consideration which includes:

- DA Form 2
- Assessment against the following codes;
  - Environmental Management Zone Code
  - Acid Sulfate Soils
  - Flood and Storm Ride Hazard Overlay Code
  - Access, Parking and Servicing Code
  - Filling and Excavation Code
  - Infrastructure Code
- 1 x copy of plans

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## Assessment under Douglas Shire Planning Scheme 2018

The following table represents an assessment of the proposal with respect to Environmental Management Zone Code.

Environmental Management Zone Code		
Performance Outcome	Acceptable Outcome	Conclusion
PO1 The height of all buildings and structures is in keeping with the natural characteristics of the site. Buildings and structures are low-rise and not unduly visible from external sites.	AO1.1 Buildings and structures are not more than 8.5 metres and two storeys in height.  AO1.2 Buildings have a roof height not less than 2 metres.	<b>Complies</b> The proposed patio has a maximum height of 3.1m and a minimum height of 2.323m
PO2 Buildings and structures are set back to: a) maintain the natural character of the area; b) achieve separation from neighbouring buildings and from road frontages.	AO2 Buildings and structures are set back not less than: a) 40 metres from the frontage of a state controlled road; b) 25 metres from the frontage to Cape Tribulation Road; c) 6 metres from any other road; d) 6 metres from the side and rear boundaries of the site.	<b>Complies</b> The patio is proposed to be approximately 30m from the Bamboo Creek Road frontage and 15m to the closest side/rear boundary.
PO3 Development is consistent with the purpose of the Environmental management zone and protects the zone from the intrusion of inconsistent uses.	AO3 Inconsistent uses as identified in Table 6.2.4.3.b are not established in the Environmental management zone.	<b>Complies</b> The existing use of the premises is a dwelling house as defined by Schedule 1 of the Planning Scheme. No change in use is proposed.
PO4 The site coverage of all buildings and structures and associated services do not have an adverse effect on the environmental or scenic values of the site.	AO4 No acceptable outcomes are prescribed.	<b>Not Applicable</b> The total site coverage is approximately 8.1%. The minor increase of 1.4% of the overall site will not diminish the environmental or scenic value of the site.
PO5 Development is located, designed, operated and managed to respond to the characteristics, features and constraints of the site and its surrounds.	AO5.1 Buildings, structures and associated access, infrastructure and private open space are sited: a) within areas of the site which are already cleared; or b) within areas of the site which are environmentally degraded; c) to minimise additional vegetation clearing.  AO5.2 Buildings and structures and associated infrastructure are not located	<b>Complies</b> The proposed patio is to be located within an existing cleared area as shown in Appendix B.  The site is considered to be relatively flat as shown in Appendix B.

	on slopes greater than 1 in 6 (16.6%) or on a ridgeline.	
PO6 Buildings and structures are responsive to steep slope through innovative construction techniques so as to: a) maintain the geotechnical stability of slopes; b) minimise cut and/or fill; c) minimise the overall height of development	AO6.1 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the land and single plane concrete slab on-ground methods of construction are not utilised.  AO6.2 Access and vehicle manoeuvring and parking areas are constructed and maintained to: (a) minimise erosion; (b) minimise cut and fill; (c) follow the natural contours of the site.	<b>Not applicable</b>
PO7 The exterior finishes of buildings and structures are consistent with the surrounding natural environment.	AO7 The exterior finishes and colours of buildings and structures are non-reflective and are moderately dark to darker shades of grey, green, blue and brown or the development is not visible external to the site.	<b>Complies</b> The colours proposed are to match the existing dwelling construction; Roof – shale gray Trims – night sky
PO8 Development does not adversely affect the amenity of the zone and adjoining land uses in terms of traffic, noise, dust, odour, lighting or other physical or environmental impacts.	AO8 No acceptable outcomes are prescribed.	<b>Complies</b> Existing site access is to remain. No changes are proposed.
PO9 The density of development ensures that the environmental and scenic amenity values of the site and surrounding area are not adversely affected.	AO9 The maximum residential density is one dwelling house per lot.	<b>Complies</b> Development is of existing residential dwelling use. No potential contaminants are existing or proposed.  Stormwater is to be directed to the street.
PO10 Lot reconfiguration results in no additional lots	AO10 No acceptable outcomes are prescribed.	<b>Not Applicable</b>

The following table represents an assessment of the proposal with respect to Acid Sulphate Overlay Code.

Acid Sulphate Overlay Code		
Performance Outcome	Acceptable Outcome	Conclusion
PO1 The extent and location of potential or actual acid sulfate soils is accurately identified.	AO1.1 No excavation or filling occurs on the site. or  AO1.2 An acid sulfate soils investigation is undertaken.	<b>Complies</b> No excavation or filling is proposed
PO2 Development avoids disturbing potential acid sulfate soils or actual acid sulfate soils, or is managed to avoid or minimise the release of acid and metal contaminants.	AO2.1 The disturbance of potential acid sulfate soils or actual acid sulfate soils is avoided by: (a) not excavating, or otherwise removing, soil or sediment identified as containing potential or actual acid sulfate soils; (b) not permanently or temporarily extracting groundwater	<b>Complies</b> No excavation or filling is proposed

	<p>that results in the aeration of previously saturated acid sulfate soils; (c) not undertaking filling that results in: (d) actual acid sulfate soils being moved below the water table; (e) previously saturated acid sulfate soils being aerated.</p> <p>Or</p> <p>AO2.2 The disturbance of potential acid sulfate soils or actual acid sulfate soils is undertaken in accordance with an acid sulfate soils management plan and avoids the release of metal contaminants by: (a) neutralising existing acidity and preventing the generation of acid and metal contaminants; (b) preventing the release of surface or groundwater flows containing acid and metal contaminants into the environment; (c) preventing the in situ oxidation of potential acid sulfate soils and actual acid sulfate soils through ground water level management; (d) appropriately treating acid sulfate soils before disposal occurs on or off site; (e) documenting strategies and reporting requirements in an acid sulfate soils environmental management plan.</p>	
<p>PO3 No environmental harm is caused as a result of exposure to potential acid sulfate soils or actual acid sulfate soils.</p>	<p>AO3 No acceptable outcomes are prescribed.</p>	<p><b>Complies</b> No excavation of filling is proposed</p>

The following table represents an assessment of the proposal with respect to Flood and Storm Tide Overlay Code.

<b>Flood and Storm Tide Overlay Code</b>		
<b>Performance Outcome</b>	<b>Acceptable Outcome</b>	<b>Conclusion</b>
<p>PO1 Development is located and designed to: ensure the safety of all persons; minimise damage to the development and contents of buildings; provide suitable amenity; minimise disruption to residents, recovery time, and rebuilding or restoration costs after inundation events.</p>	<p>AO1.1 Development is sited on parts of the land that is not within the Flood and Storm tide hazards overlay maps contained in Schedule 2; or For dwelling houses,</p> <p>AO1.2 Development within the Flood and Storm Tide hazards overlay maps (excluding the Flood plain assessment sub-category) is designed to provide immunity to the Defined Inundation Event as outlined within Table 8.2.4.3.b plus a freeboard of 300mm.</p> <p>AO1.3 New buildings are: a) not located within the overlay area;</p>	<p><b>Complies</b> The patio is located within the flood overlay area however, the proposed patio is a non-habitable structure and will be used in conjunction with the lawfully constructed dwelling. Accordingly, the proposed development will not increase existing risk to the residents from inundation.</p>

	<p>b) located on the highest part of the site to minimise entrance of flood waters;</p> <p>c) provided with clear and direct pedestrian and vehicle evacuation routes off the site.</p> <p>AO1.4 In non urban areas, buildings and infrastructure are set back 50 metres from natural riparian corridors to maintain their natural function of reducing velocity of floodwaters.</p>	
PO2 The development is compatible with the level of risk associated with the natural hazard.	<p>AO2 The following uses are not located in land inundated by the Defined Flood Event (DFE) / Storm tide:</p> <p>a) Retirement facility;</p> <p>b) Community care facility;</p> <p>c) Child care centre.</p>	<p><b>Complies</b></p> <p>The existing use of the premises is a class 1 dwelling house. No changes to the use are proposed.</p>
PO3 Development siting and layout responds to flooding potential and maintains personal safety	<p>For Material change of use (Residential uses)</p> <p>AO3.1 The design and layout of buildings used for residential purposes minimise risk from flooding by providing:</p> <p>(a) parking and other low intensive, nonhabitable uses at ground level;</p>	<p><b>Not applicable</b></p>
PO4 Development is resilient to flood events by ensuring design and built form account for the potential risks of flooding.	<p>For Material change of use (Non-residential uses)</p>	<p><b>Not applicable</b></p>
PO5 Development directly, indirectly and cumulatively avoids any increase in water flow velocity or flood level and does not increase the potential flood damage either on site or on other properties.	<p>For Operational works</p> <p>AO5.1 Works in urban areas associated with the proposed development do not involve:</p> <p>a) any physical alteration to a watercourse or floodway including vegetation clearing; or</p> <p>b) a net increase in filling (including berms and mounds)</p> <p>AO5.2 Works (including buildings and earthworks) in non urban areas either:</p> <p>a) do not involve a net increase in filling greater than 50m<sup>3</sup> ; or</p> <p>b) do not result in any reductions of on-site flood storage capacity and contain within the subject site any changes to depth/duration/velocity of flood waters; or</p> <p>c) do not change flood characteristics outside the</p>	<p><b>Complies</b></p> <p>No cut and fill is proposed</p>

	<p>subject site in ways that result in:</p> <ul style="list-style-type: none"> <li>- loss of flood storage;</li> <li>- loss of/changes to flow paths;</li> <li>- acceleration or retardation of flows or any reduction in flood warning times elsewhere on the flood plain.</li> </ul> <p>For Material change of use – AO5.3 and AO5.4</p>	
<p>PO6 Development avoids the release of hazardous materials into floodwaters.</p>	<p>For Material change of use</p>	<p><b>Not applicable</b></p>
<p>PO7 The development supports, and does not unduly burden, disaster management response or recovery capacity and capabilities.</p>	<p>Development does not:</p> <ol style="list-style-type: none"> <li>a) increase the number of people calculated to be at risk of flooding;</li> <li>b) increase the number of people likely to need evacuation;</li> <li>c) shorten flood warning times; and</li> <li>d) impact on the ability of traffic to use evacuation routes, or unreasonably increase traffic volumes on evacuation routes.</li> </ol>	<p><b>Complies</b></p> <p>The proposed patio is a non-habitable structure and will be used in conjunction with the lawfully constructed dwelling. Accordingly, the proposed development will not increase the number of people accommodated within the residence.</p>
<p>PO8 Development involving community infrastructure:</p> <ol style="list-style-type: none"> <li>a) remains functional to serve community need during and immediately after a flood event;</li> <li>b) is designed, sited and operated to avoid adverse impacts on the community or environment due to impacts of flooding on infrastructure, facilities or access and egress routes;</li> <li>c) retains essential site access during a flood event;</li> <li>d) is able to remain functional even when other infrastructure or services may be compromised in a flood event</li> </ol>	<p>AO8.1 The following uses are not located on land inundated during a DFE/Storm tide:</p> <ol style="list-style-type: none"> <li>a) community residence; and</li> <li>b) emergency services; and</li> <li>c) residential care facility; and</li> <li>d) utility installations involving water and sewerage treatment plants; and</li> <li>e) storage of valuable records or items of historic or cultural significance (e.g. archives, museums, galleries, libraries).</li> </ol> <p>Or</p> <p>AO8.2 The following uses are not located on land inundated during a 1% AEP flood event:</p> <ol style="list-style-type: none"> <li>a) community and cultural facilities, including facilities where an education and care service under the Education and Care Services National law (Queensland) is operated or child care service under</li> </ol>	<p><b>Complies</b></p> <p>The existing use of the premises is a class 1 dwelling house. No changes to the use are proposed.</p> <p>No additional infrastructure is proposed.</p>

	<p>the Child Care Act 2002 is conducted,</p> <ul style="list-style-type: none"> <li>b) community centres;</li> <li>c) meeting halls;</li> <li>d) galleries;</li> <li>e) libraries.</li> </ul> <p>The following uses are not located on land inundated during a 0.5% AEP flood event.</p> <ul style="list-style-type: none"> <li>a) emergency shelters;</li> <li>b) police facilities;</li> <li>c) sub stations;</li> <li>d) water treatment plant</li> </ul> <p>The following uses are not located on land inundated during a 0.2% AEP flood event:</p> <ul style="list-style-type: none"> <li>a) correctional facilities;</li> <li>b) emergency services;</li> <li>c) power stations;</li> <li>d) major switch yards.</li> </ul> <p>And/or</p> <p>AO8.3 The following uses have direct access to low hazard evacuation routes as defined in Table 8.2.4.3.c:</p> <ul style="list-style-type: none"> <li>a) community residence; and</li> <li>b) emergency services; and</li> <li>c) hospitals; and</li> <li>d) residential care facility; and</li> <li>e) sub stations; and</li> <li>f) utility installations involving water and sewerage treatment plants.</li> </ul> <p>AO8.4 Any components of infrastructure that are likely to fail to function or may result in contamination when inundated by flood, such as electrical switch gear and motors, telecommunications connections, or water supply pipeline air valves are:</p> <ul style="list-style-type: none"> <li>A) located above DFE/Storm tide or the highest known flood level for the site;</li> <li>B) designed and constructed to exclude floodwater intrusion / infiltration.</li> </ul> <p>AO8.5 Infrastructure is designed and constructed to resist hydrostatic and hydrodynamic forces as a result of inundation by a flood.</p>	
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The following table represents an assessment of the proposal with respect to Access and Parking Code.

Access and Parking Code		
Performance Outcome	Acceptable Outcome	Conclusion
<p>PO1 Sufficient on-site car parking is provided to cater for the amount and type of vehicle traffic expected to be generated by the use or uses of the site, having particular regard to: (a) the desired character of the area; (b) the nature of the particular use and its specific characteristics and scale; (c) the number of employees and the likely number of visitors to the site; (d) the level of local accessibility; (e) the nature and frequency of any public transport serving the area; (f) whether or not the use involves the retention of an existing building and the previous requirements for car parking for the building (g) whether or not the use involves a heritage building or place of local significance; (h) whether or not the proposed use involves the retention of significant vegetation.</p>	<p>AO1.1 The minimum number of on-site vehicle parking spaces is not less than the number prescribed in Table 9.4.1.3.b for that particular use or uses. Note - Where the number of spaces calculated from the table is not a whole number, the number of spaces provided is the next highest whole number.</p> <p>AO1.2 Car parking spaces are freely available for the parking of vehicles at all times and are not used for external storage purposes, the display of products or rented/sub-leased.</p> <p>AO1.3 Parking for motorcycles is substituted for ordinary vehicle parking to a maximum level of 2% of total ordinary vehicle parking.</p> <p>AO1.4 For parking areas exceeding 50 spaces parking, is provided for recreational vehicles as a substitute for ordinary vehicle parking to a maximum of 5% of total ordinary vehicle parking rate.</p>	<p><b>Complies</b> A minimum of 2 carparking spaces are existing on-site. No changes to the carparking spaces are proposed.</p>
<p>PO2 Vehicle parking areas are designed and constructed in accordance with relevant standards.</p>	<p>AO2 Vehicle parking areas are designed and constructed in accordance with Australian Standard: (a) AS2890.1; (b) AS2890.3; (c) AS2890.6.</p>	<p><b>Not applicable</b></p>
<p>PO3 Access points are designed and constructed: (a) to operate safely and efficiently; (b) to accommodate the anticipated type and volume of vehicles (c) to provide for shared vehicle (including cyclists) and pedestrian use, where appropriate; (d) so that they do not impede traffic or pedestrian movement on the adjacent road area; (e) so that they do not adversely impact upon existing intersections or future road or intersection improvements; (f) so that they do not adversely impact current and future on-street parking arrangements; (g) so that they do not adversely impact on existing services within the road reserve adjacent to the site; (h) so that they do not involve ramping, cutting of the adjoining road reserve or any built structures (other than what may be necessary to cross over a stormwater channel).</p>	<p>AO3.1 Access is limited to one access cross over per site and is an access point located, designed and constructed in accordance with: (a) Australian Standard AS2890.1; (b) Planning scheme policy SC6.5 – FNQROC Regional Development Manual - access crossovers.</p> <p>AO3.2 Access, including driveways or access crossovers: (a) are not placed over an existing: (i) telecommunications pit; (ii) stormwater kerb inlet; (iii) sewer utility hole; (iv) water valve or hydrant. (b) are designed to accommodate any adjacent footpath; (c) adhere to minimum sight distance requirements in accordance with AS2980.1.</p> <p>AO3.3 Driveways are: (a) designed to follow as closely as possible to the existing contours, but are no steeper than the gradients outlined</p>	<p><b>Complies</b> No additional crossovers or changes to the existing is proposed.</p>



	<p>in Planning scheme policy SC6.5 – FNQROC Regional Development Manual; (b) constructed such that where there is a grade shift to 1 in 4 (25%), there is an area with a grade of no more than 1 in 6 (16.6%) prior to this area, for a distance of at least 5 metres; (c) on gradients greater than 1 in 6 (16.6%) driveways are constructed to ensure the cross-fall of the driveway is one way and directed into the hill, for vehicle safety and drainage purposes</p> <p>(d) constructed such that the transitional change in grade from the road to the lot is fully contained within the lot and not within the road reserve; (e) designed to include all necessary associated drainage that intercepts and directs storm water runoff to the storm water drainage system.</p> <p>AO3.4 Surface construction materials are consistent with the current or intended future streetscape or character of the area and contrast with the surface construction materials of any adjacent footpath.</p>	
PO4 Sufficient on-site wheel chair accessible car parking spaces are provided and are identified and reserved for such purposes.	AO4 The number of on-site wheel chair accessible car parking spaces complies with the rates specified in AS2890 Parking Facilities.	<b>Not applicable</b>
PO5 Access for people with disabilities is provided to the building from the parking area and from the street.	AO5 Access for people with disabilities is provided in accordance with the relevant Australian Standard	<b>Not applicable</b>
PO6 Sufficient on-site bicycle parking is provided to cater for the anticipated demand generated by the development.	AO6 The number of on-site bicycle parking spaces complies with the rates specified in Table 9.4.1.3.b.	<b>Not applicable</b>
PO7 Development provides secure and convenient bicycle parking which: (a) for visitors is obvious and located close to the building's main entrance; (b) for employees is conveniently located to provide secure and convenient access between the bicycle storage area, end-of-trip facilities and the main area of the building; (c) is easily and safely accessible from outside the site.	<p>AO7.1 Development provides bicycle parking spaces for employees which are co-located with end-of-trip facilities (shower cubicles and lockers);</p> <p>AO7.2 Development ensures that the location of visitor bicycle parking is discernible either by direct view or using signs from the street.</p> <p>AO7.3 Development provides visitor bicycle parking which does not impede pedestrian movement</p>	<b>Not applicable</b>
PO8 Development provides walking and cycle routes through the site which: (a) link to the	AO8 Development provides walking and cycle routes which are constructed on the carriageway or	

external network and pedestrian and cyclist destinations such as schools, shopping centres, open space, public transport stations, shops and local activity centres along the safest, most direct and convenient routes; (b) encourage walking and cycling; (c) ensure pedestrian and cyclist safety.	through the site to: (a) create a walking or cycle route along the full frontage of the site; (b) connect to public transport and existing cycle and walking routes at the frontage or boundary of the site.	
PO9 Access, internal circulation and on-site parking for service vehicles are designed and constructed: (a) in accordance with relevant standards; (b) so that they do not interfere with the amenity of the surrounding area; (c) so that they allow for the safe and convenient movement of pedestrians, cyclists and other vehicles.	AO9.1 Access driveways, vehicle manoeuvring and onsite parking for service vehicles are designed and constructed in accordance with AS2890.1 and AS2890.2.  AO9.2 Service and loading areas are contained fully within the site.  AO9.3 The movement of service vehicles and service operations are designed so they: (a) do not impede access to parking spaces; (b) do not impede vehicle or pedestrian traffic movement	<b>Not applicable</b>
PO10 Sufficient queuing and set down areas are provided to accommodate the demand generated by the development.	AO10.1 Development provides adequate area on-site for vehicle queuing to accommodate the demand generated by the development where drive through facilities or drop-off/pick-up services are proposed as part of the use, including, but not limited to, the following land uses: (a) car wash; (b) child care centre; (c) educational establishment where for a school; (d) food and drink outlet, where including a drivethrough facility; (e) hardware and trade supplies, where including a drive-through facility; (f) hotel, where including a drive-through facility; (g) service station. AO10.2 Queuing and set-down areas are designed and constructed in accordance with AS2890.1.	<b>Not applicable</b>

The following table represents an assessment of the proposal with respect to Filling and Excavation Code

Filling and Excavation Code		
Performance Outcome	Acceptable Outcome	Conclusion
PO1 All filling and excavation work does not create a detrimental impact on the slope stability, erosion potential or visual amenity of the site or the surrounding area.	AO1.1 The height of cut and/or fill, whether retained or not, does not exceed 2 metres in height.  and  Cuts in excess of those stated in A1.1 above are separated by benches/ terraces with a minimum	<b>Complies</b> No cut and fill is proposed

	<p>width of 1.2 metres that incorporate drainage provisions and screen planting.</p> <p>AO1.2 Cuts are supported by batters, retaining or rock walls and associated benches/terraces are capable of supporting mature vegetation.</p> <p>AO1.3 Cuts are screened from view by the siting of the building/structure, wherever possible.</p> <p>AO1.4 Topsoil from the site is retained from cuttings and reused on benches/terraces.</p> <p>AO1.5 No crest of any cut or toe of any fill, or any part of any retaining wall or structure is closer than 600mm to any boundary of the property, unless the prior written approval of the adjoining landowner has been obtained.</p> <p>AO1.6 Non-retained cut and/or fill on slopes are stabilised and protected against scour and erosion by suitable measures, such as grassing, landscaping or other protective/aesthetic measures</p>	
<p>PO2 Filling and excavation are carried out in such a manner that the visual/scenic amenity of the area and the privacy and stability of adjoining properties is not compromised.</p>	<p>AO2.1 The extent of filling and excavation does not exceed 40% of the site area, or 500m<sup>2</sup> whichever is the lesser, except that</p> <p>AO2.1 does not apply to reconfiguration of 5 lots or more.</p> <p>AO2.2 Filling and excavation does not occur within 2 metres of the site boundary.</p>	<p><b>Complies</b> No cut and fill is proposed</p>
<p>PO3 Filling and excavation does not result in a change to the run off characteristics of a site which then have a detrimental impact on the site or nearby land or adjacent road reserves.</p>	<p>AO3.1 Filling and excavation does not result in the ponding of water on a site or adjacent land or road reserves.</p> <p>AO3.2 Filling and excavation does not result in an increase in the flow of water across a site or any other land or road reserves.</p> <p>AO3.3 Filling and excavation does not result in an increase in the volume of water or concentration of water in a watercourse and overland flow paths.</p> <p>AO3.4 Filling and excavation complies with the specifications set</p>	<p><b>Complies</b> No cut and fill is proposed</p>

	out in Planning Scheme Policy No SC5 – FNQROC Development Manual.	
PO4 Filling and excavation does not result in a reduction of the water quality of receiving waters.	AO4 Water quality is maintained to comply with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.	<b>Complies</b> No cut and fill is proposed
PO5 Excavation and filling does not impact on Public Utilities.	AO5 Excavation and filling is clear of the zone of influence of public utilities	<b>Complies</b> No cut and fill is proposed

The following table represents an assessment of the proposal with respect to Infrastructure Works Code

<b>Infrastructure Works Code</b>		
<b>Performance Outcome</b>	<b>Acceptable Outcome</b>	<b>Conclusion</b>
PO1 Works on a local government road do not adversely impact on footpaths or existing infrastructure within the road verge and maintain the flow, safety and efficiency of pedestrians, cyclists and vehicles.	<p>AO1.1 Footpaths/pathways are located in the road verge and are provided for the hierarchy of the road and located and designed and constructed in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p>AO1.2 Kerb ramp crossovers are constructed in accordance with Planning scheme policy SC 5 – FNQROC Regional Development Manual.</p> <p>AO1.3 New pipes, cables, conduits or other similar infrastructure required to cross existing footpaths: (a) are installed via trenchless methods; or (b) where footpath infrastructure is removed to install infrastructure, the new section of footpath is installed to the standard detailed in the Planning scheme policy SC5 – FNQROC Regional Development Manual, and is not less than a 1.2 metre section.</p> <p>AO1.4 Where existing footpaths are damaged as a result of development, footpaths are reinstated ensuring: (a) similar surface finishes are used; (b) there is no change in level at joins of new and existing sections; (c) new sections are matched to existing in terms of dimension and reinforcement. Note – Figure 9.4.5.3.a provides guidance on meeting the outcomes.</p> <p>AO1.5 Decks, verandahs, stairs, posts and other structures located in the road reserve do not restrict</p>	<b>Complies</b> Development is within property boundaries only. No Council infrastructure is to be altered.

	or impede pedestrian movement on footpaths or change the level of the road verges	
PO2 Development is designed to ensure it is accessible for people of all abilities and accessibility features do not impact on the efficient and safe use of footpaths.	<p>AO2.1 Accessibility structures are not located within the road reserve.</p> <p>AO2.2 Accessibility structures are designed in accordance with AS1428.3.</p> <p>AO2.3 When retrofitting accessibility features in existing buildings, all structures and changes in grade are contained within the boundaries of the lot and not within the road reserve.</p>	<b>Complies</b> Development is within property boundaries only. No Council infrastructure is to be altered
PO3 An adequate, safe and reliable supply of potable, fire fighting and general use water is provided.	<p>AO3.1 The premises is connected to Council's reticulated water supply system in accordance with the Design Guidelines set out in Section D6 of the Planning scheme policy SC5 – FNQROC Regional Development Manual; or</p> <p>AO3.2 Where a reticulated water supply system is not available to the premises, on site water storage tank/s with a minimum capacity of 10,000 litres of stored water, with a minimum 7,500 litre tank, with the balance from other sources (e.g. accessible swimming pool, dam etc.) and access to the tank/s for fire trucks is provided for each new house or other development. Tank/s are to be fitted with a 50mm ball valve with a camlock fitting and installed and connected prior to occupation of the house and sited to be visually unobtrusive.</p>	<b>Complies</b> Development is within property boundaries only. No Council infrastructure is to be altered.
PO4 Provision is made for the treatment and disposal of effluent to ensure that there are no adverse impacts on water quality and no adverse ecological impacts as a result of the system or as a result of increasing the cumulative effect of systems in the locality.	<p>AO4.1 The site is connected to Council's sewerage system and the extension of or connection to the sewerage system is designed and constructed in accordance with the Design Guidelines set out in Section D7 of the Planning scheme policy SC5 – FNQROC Regional Development Manual; or</p> <p>AO4.2 Where not in a sewerage scheme area, the proposed disposal system meets the requirements of Section 33 of the Environmental Protection Policy (Water) 1997 and the proposed on site effluent disposal system is designed in accordance with the Plumbing and Drainage Act (2002).</p>	<b>Complies</b> Development is within property boundaries only. No Council infrastructure is to be altered.
PO5 Development is planned, designed, constructed and operated to avoid or minimise	AO5.1 A connection is provided from the premises to Council's drainage system; or	<b>Complies</b>

<p>adverse impacts on stormwater quality in natural and developed catchments by: (a) achieving stormwater quality objectives; (b) protecting water environmental values; (c) maintaining waterway hydrology.</p>	<p>AO5.2 An underground drainage system is constructed to convey stormwater from the premises to Council's drainage system in accordance with the Design Guidelines set out in Sections D4 and D5 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p>AO5.3 A stormwater quality management plan is prepared, and provides for achievable stormwater quality treatment measures meeting design objectives listed in Table 9.4.5.3.b and Table 9.4.5.3.c, reflecting land use constraints, such as: (a) erosive, dispersive and/or saline soil types; (b) landscape features (including landform); (c) acid sulfate soil and management of nutrients of concern; (d) rainfall erosivity.</p> <p>AO5.4 Erosion and sediment control practices are designed, installed, constructed, monitored, maintained, and carried out in accordance with an erosion and sediment control plan.</p> <p>AO5.5 Development incorporates stormwater flow control measures to achieve the design objectives set out in Table 9.4.5.3.b and Table 9.4.5.3.c, including management of frequent flows, peak flows, and construction phase hydrological impacts.</p>	<p>All stormwater is to be directed to the lawful point of discharge via downpipes and surface drainage.</p> <p>Minimal levels of additional roof stormwater is to be expected from the approximately 65m<sup>2</sup> roof.</p> <p>Erosion and sediment control is to be in accordance with the Building Code of Australia. The site will not see increased levels of erosion or sediment issues from the proposed carport development.</p>
<p>PO6 Development involving non-tidal artificial waterways is planned, designed, constructed and operated to: (a) protect water environmental values; (b) be compatible with the land use constraints for the site for protecting water environmental values; (c) be compatible with existing tidal and non-tidal waterways; (d) perform a function in addition to stormwater management; (e) achieve water quality objectives.</p>	<p>AO6.1 Development involving non-tidal artificial waterways ensures: (a) environmental values in downstream waterways are protected; (b) any ground water recharge areas are not affected; (c) the location of the waterway incorporates low lying areas of the catchment connected to an existing waterway; (d) existing areas of ponded water are included.</p> <p>AO6.2 Non-tidal artificial waterways are located: (a) outside natural wetlands and any associated buffer areas; (b) to minimise disturbing soils or sediments; (c) to avoid altering the natural hydrologic regime in acid sulfate soil and nutrient hazardous areas.</p>	<p><b>Not applicable</b></p>

	<p>AO6.3 Non-tidal artificial waterways located adjacent to, or connected to a tidal waterway by means of a weir, lock, pumping system or similar ensures: (a) there is sufficient flushing or a tidal range of &gt;0.3 m; or (b) any tidal flow alteration does not adversely impact on the tidal waterway; or (c) there is no introduction of salt water into freshwater environments.</p> <p>AO6.4 Non-tidal artificial waterways are designed and managed for any of the following end-use purposes: (a) amenity (including aesthetics), landscaping or recreation; or (b) flood management, in accordance with a drainage catchment management plan; or (c) stormwater harvesting plan as part of an integrated water cycle management plan; or (d) aquatic habitat.</p> <p>AO6.5 The end-use purpose of the non-tidal artificial waterway is designed and operated in a way that protects water environmental values.</p> <p>AO6.6 Monitoring and maintenance programs adaptively manage water quality to achieve relevant water quality objectives downstream of the waterway.</p> <p>AO6.7 Aquatic weeds are managed to achieve a low percentage of coverage of the water surface area, and pests and vectors are managed through design and maintenance.</p>	
<p>PO7 Discharge of wastewater to waterways, or off site: (a) meets best practice environmental management; (b) is treated to: (i) meet water quality objectives for its receiving waters; (ii) avoid adverse impact on ecosystem health or waterway health; (iii) maintain ecological processes, riparian vegetation and waterway integrity; (iv) offset impacts on high ecological value waters.</p>	<p>AO7.1 A wastewater management plan is prepared and addresses: (a) wastewater type; (b) climatic conditions; (c) water quality objectives; (d) best practice environmental management.</p> <p>AO7.2 The waste water management plan is managed in accordance with a waste management hierarchy that: (a) avoids wastewater discharge to waterways; or (b) if wastewater discharge cannot practicably be avoided, minimises wastewater discharge to waterways by re-use, recycling, recovery and treatment</p>	<p><b>Complies</b> No wastewater is proposed.</p>

	<p>for disposal to sewer, surface water and ground water.</p> <p>AO7.3 Wastewater discharge is managed to avoid or minimise the release of nutrients of concern so as to minimise the occurrence, frequency and intensity of algal blooms.</p> <p>AO7.4 Development in coastal catchments avoids or minimises and appropriately manages soil disturbance or altering natural hydrology and: (a) avoids lowering ground water levels where potential or actual acid sulfate soils are present; (b) manages wastewater so that: (i) the pH of any wastewater discharges is maintained between 6.5 and 8.5 to avoid mobilisation of acid, iron, aluminium and other metals; (ii) holding times of neutralised wastewater ensures the flocculation and removal of any dissolved iron prior to release; (iii) visible iron floc is not present in any discharge; (iv) precipitated iron floc is contained and disposed of; (v) wastewater and precipitates that cannot be contained and treated for discharge on site are removed and disposed of through trade waste or another lawful method.</p>	
<p>PO8 Development is provided with a source of power that will meet its energy needs.</p>	<p>AO8.1 A connection is provided from the premises to the electricity distribution network; or</p> <p>AO8.2 The premises is connected to the electricity distribution network in accordance with the Design Guidelines set out in Section D8 of the Planning scheme policy SC5 – F</p>	<p><b>Complies</b> The main dwelling house is connected to electricity and will be maintained. The patio construction will not affect the dwelling house use or connected to the electricity network.</p>
<p>PO9 Development incorporating pad-mount electricity infrastructure does not cause an adverse impact on amenity.</p>	<p>AO9.1 Pad-mount electricity infrastructure is: (a) not located in land for open space or sport and recreation purposes; (b) screened from view by landscaping or fencing; (c) accessible for maintenance.</p> <p>AO9.2 Pad-mount electricity infrastructure within a building, in a Town Centre is designed and located to enable an active street frontage.</p>	<p><b>Complies</b> Existing electrical connections will be maintained and undisturbed.</p>
<p>PO10 Development is connected to a telecommunications service approved by the relevant</p>	<p>AO10 The development is connected to telecommunications infrastructure in accordance with</p>	<p><b>Complies</b> Existing telecommunications infrastructure will be maintained and undisturbed.</p>



telecommunication regulatory authority.	the standards of the relevant regulatory authority	
PO11 Provision is made for future telecommunications services (e.g. fibre optic cable).	AO11 Conduits are provided in accordance with Planning scheme policy SC5 – FNQROC Regional Development Manual.	<b>Complies</b> Existing conduits will be maintained and undisturbed.
PO12 The road to the frontage of the premises is constructed to provide for the safe and efficient movement of: (a) pedestrians and cyclists to and from the site; (b) pedestrians and cyclists adjacent to the site; (c) vehicles on the road adjacent to the site; (d) vehicles to and from the site; (e) emergency vehicles.	AO12.1 The road to the frontage of the site is constructed in accordance with the Design Guidelines set out in Sections D1 and D3 of the Planning scheme policy SC5 – FNQROC Regional Development Manual, for the particular class of road, as identified in the road hierarchy.  AO12.2 There is existing road, kerb and channel for the full road frontage of the site.  AO12.3 Road access minimum clearances of 3.5 metres wide and 4.8 metres high are provided for the safe passage of emergency vehicles.	<b>Complies</b> The existing road, kerb and channel is to be maintained and undisturbed.
PO13 Infrastructure is integrated with, and efficiently extends, existing networks.	AO13 Development is designed to allow for efficient connection to existing infrastructure networks.	<b>Complies</b> Existing connections will not be affected.
PO14 Development and works do not affect the efficient functioning of public utility mains, services or installations.	AO14.1 Public utility mains, services and installations are not required to be altered or repaired as a result of the development; or  AO14.2 Public utility mains, services and installations are altered or repaired in association with the works so that they continue to function and satisfy the relevant Design Guidelines set out in Section D8 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.	<b>Complies</b> Existing infrastructure will not be altered, repaired or disturbed by the proposed patio construction.
PO15 Work is undertaken in a manner which minimises adverse impacts on vegetation that is to be retained.	AO15 Works include, at a minimum: (a) installation of protective fencing around retained vegetation during construction; (b) erection of advisory signage; (c) no disturbance, due to earthworks or storage of plant, materials and equipment, of ground level and soils below the canopy of any retained vegetation; (d) removal from the site of all declared noxious weeds.	<b>Complies</b> The minor building work will not affect the existing vegetation or landscaping. Minimal ground disturbance is expected.
PO16 Existing infrastructure is not damaged by construction activities.	AO16 Construction, alterations and any repairs to infrastructure is undertaken in accordance with the Planning scheme policy SC5 – FNQROC Regional Development Manual.	<b>Complies</b> Existing infrastructure will be maintained and undisturbed.

<p>PO17 Development provides infrastructure to facilitate the roll out of high speed telecommunications infrastructure.</p>	<p>AO17 No acceptable outcomes are prescribed.</p>	<p><b>Complies</b> Existing infrastructure will be maintained and undisturbed.</p>
<p>PO18 Where relevant, the development is capable of providing for the storage, collection treatment and disposal of trade waste such that: (a) off-site releases of contaminants do not occur; (b) the health and safety of people and the environment are protected; (c) the performance of the wastewater system is not put at risk.</p>	<p>AO18 No acceptable outcomes are prescribed.</p>	<p><b>Complies</b> No trade waste is proposed.</p>
<p>PO19 Hydrants are located in positions that will enable fire services to access water safely, effectively and efficiently.</p>	<p>AO19.1 Residential streets and common access ways within a common private title places hydrants at intervals of no more than 120 metres and at each intersection. Hydrants may have a single outlet and be situated above or below ground.</p> <p>AO19.2 Commercial and industrial streets and access ways within a common private title serving commercial properties such as factories and warehouses and offices are provided with above or below ground fire hydrants located at not more than 90 metre intervals and at each intersection. Above ground fire hydrants have dual-valved outlets.</p>	<p><b>Complies</b> Existing infrastructure will be maintained and undisturbed.</p>
<p>PO20 Hydrants are suitable identified so that fire services can locate them at all hours.</p>	<p>AO20 No acceptable outcomes are prescribed</p>	<p><b>Complies</b> Existing infrastructure will be maintained and undisturbed.</p>

Should you require any further information or wish to discuss the application, please contact me on 4041 0111 or by email [admin@gmcert.com.au](mailto:admin@gmcert.com.au)

Kind Regards,



Rebekah Mulligan  
GMA Certification Group



## APPENDIX B – PHOTOS

Image 1 and 2: Street View



Image 3: Aerial View



