

Attachment 1 - The endorsed Masterplan, prepared by Planit Consulting
Pty Ltd, dated 19 September 2014.



Master Plan for specific use zone SD37 endorsed by the consent authority on 4/9/2014

Consent Authority / Delegate

BAGOT ROAD MASTERPLAN

Part Lot 5182 SP S.77/93B No. 213 Dick Ward Drive, Darwin NT

Prepared for the Gwalwa Daraniki and Citiland P/L

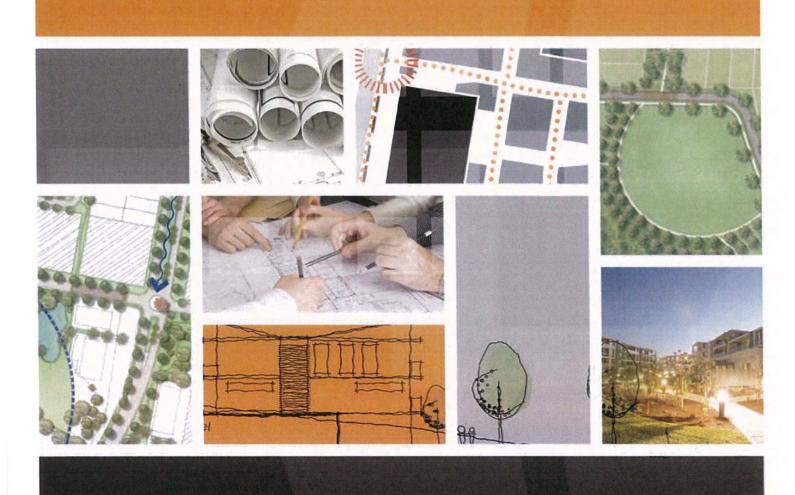




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Review and Amendments Schedule - PLANIT CONSULTING PTY LTD

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Author	BL, JB & AS	March 2012	
Reviewer	BL & AS	January 2013	

Amendments	
DCA Amendments – January 2013	
DCA Amendments – May 2014	
DCA Amendment – August 2014	

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SECTION 1 EXECUTIVE SUMMARY

This Masterplan document was prepared in order to satisfy the clause requirements of Specific Use Zone SD37, specifically that of sub-clause 10 and 11. The Masterplan provides a strategy for guiding development principles associated with sub-clause 11(a) through 11(g), for the future development of the land.

The guiding principles and controls dealt specifically with sub-clause 11, include:

- (a) identify pedestrian and cycle links through the site that connect to Bagot Road, Dick Ward Drive, Fitzer Road and Totem Road;
- (b) integrate parking areas with the pedestrian network;
- (c) include a road network design that provides necessary network upgrades, ingress and egress points, provides a low speed environment that protects the amenity of adjoining areas and prioritises a safe pedestrian network:
- (d) provide any relevant cultural, soil and flora and fauna assessment that demonstrates that development of the land will not cause detrimental impact to the community or the environment;
- (e) provide detailed concept designs that illustrate the landscaping treatment for Areas A and B;
- (f) include drawings that show how the landscaping buffer and built form adjacent to Fitzer Drive will be designed; and
- (g) demonstrate how buildings are likely to be accommodated within the development and that compliance with Clauses 8.2 and 11.3 of the NT Planning Scheme is achievable.

The Masterplan covers those areas identified as Areas A & B and bounded by Bagot Road, Dick Ward Drive, Totem Road and Fitzer Drive, which effectively seeks to facilitate Service Commercial uses within Area A, and Industrial uses within Area B.

This document will support the ultimate pursuit of a Development Permit for the development of the land in addition to setting down the principles upon which this future development is permitted to occur.

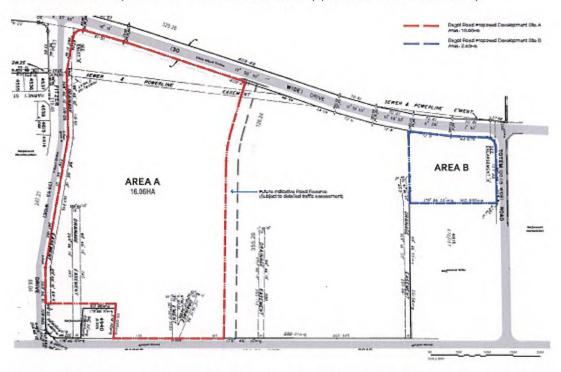
The Masterplan establishes the foundations for the future development of the land and provides the framework for future decision-making. All future development will need to be in accordance with the relevant sections of the NT Planning Scheme, inclusive of SD37.



section 2 THE BACKGROUND

This document seeks to satisfy the requirements of SD37, which applies to Part Lot 5182 with frontage to both Dick Ward Drive and Bagot Road, Darwin. In this regard, the land has been the subject of an extensive rezoning process, which was commenced in 2007 and was granted ministerial consent in June of 2011.

The area that was rezoned, relates to two (2) distinct areas; A & B, as outlined in the plan extract below. The land has been zoned SU – Specific Use and is known as Zone SD37 (Specific Use Zone - Darwin No. 37).



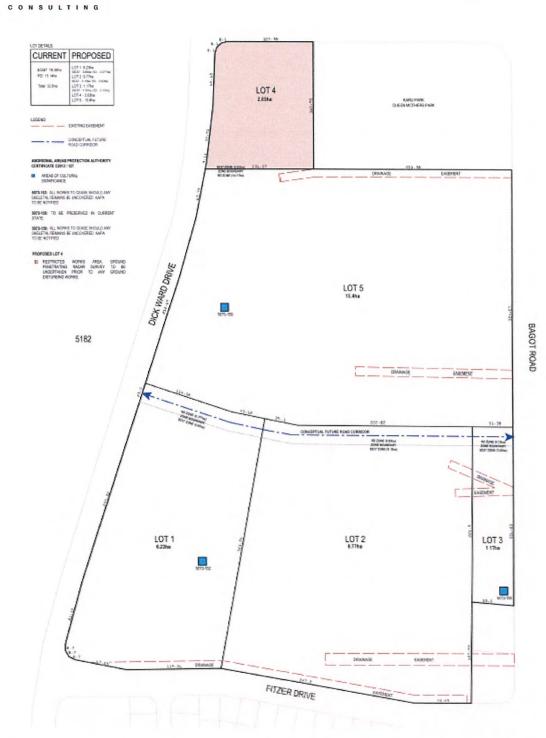
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The property provides for direct frontage to Dick Ward Drive, Bagot Road, Fitzer Drive & Totem Road and is located approximately 8km to the north east of the Darwin CBD and is located between the suburban localities of Coconut Grove and Ludmilla.

The development of the subject land comprises detailed considerations to existing and potential constraints, with particular reference to the following:-

- a. The need to preserve the amenity of adjoining areas, particularly residential land uses;
- b. The need to enhance and address the existing traffic network limitations and constraints;
- c. The need to address and manage ecological & cultural issues; and
- d. The need to manage interactions with the nearby Darwin International Airport to ensure that the safe operation of aviation functions is maintained.

The land is held under a long term lease by the Gwalwa Daraniki Association, who have entered into a commercial agreement with Citiland P/L to develop the land. The image below is reflective of the five (5) masterlot design layout required in order to secure tenure and facilitate the future development of the land.





section 3

The Gwalwa Daraniki association and its commercial partners (Citiland Pty Ltd) intend to develop premium Service Commercial and Light Industrial land uses within close proximity to the Darwin Airport Precinct and make use of the sites location along major arterial roads within the Darwin region.

The development area is located between Dick Ward Drive and Bagot Road to the west of the Darwin International Airport. This land is ideally suited to logistics, freight and on time receival and dispatch service providers for both the aviation and general industry sectors. The potential for commercial and retail operators to establish within the site has been noted due to it being situated amongst an existing residential area. It provides an opportunity to service the surrounding community and the Darwin region beyond.

The land will seek to comprise and incorporate the following:-

Large Format Retail - Area A

This land use could include a number of major retail and bulky goods stores servicing channels such as discount outlets, sporting and outdoor goods, furniture and hardware to electrical goods and more.

Service Commercial - Area A

The proposal will comprise service commercial facilities complimentary to large format retail areas with siting likely to be consistent with main transport routes and exposure to high volumes of passing consumer traffic.

Light Industry - Area B

The primary purpose of this portion of the development will be to provide for light industry uses or development activities that will not by the nature of their operations, detrimentally affect adjoining or nearby land.



SECTION 4 THE LAND

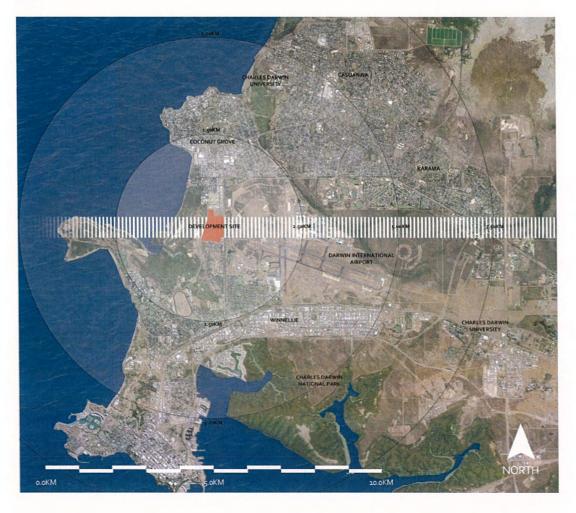
4. 1 Local Context

The current leaseholder of the land is the Gwalwa Daraniki Association Inc. The NT Atlas (accessed 12/06/2011) also shows that the property has a Crown Lease Perpetual tenure type.

The property is legally described as Part Lot 5182, Dick Ward Drive, Darwin.

The Masterplan area incorporates a total surface area of 18.09ha (Area A - 16.06ha, Area B - 2.03ha) and provides for direct frontage to Dick Ward Drive, Bagot Road, Fitzer Drive & Totem Road.

The Masterplan area is located approximately 8km to the north east of the Darwin CBD and is located between the suburban localities of Coconut Grove and Ludmilla. See the below extract for insight into the regional context of the site.

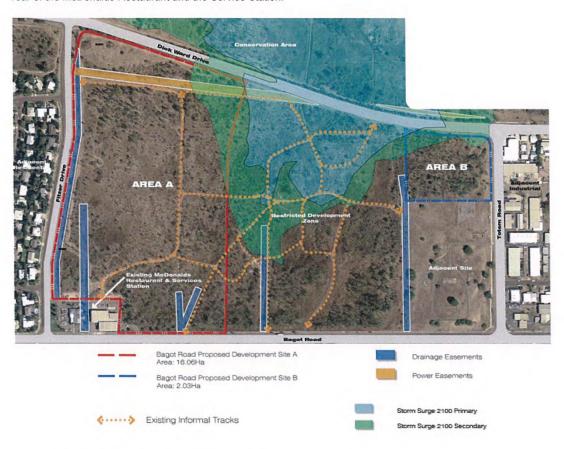


4.2 Site Analysis – Site Location and Description

4.2.1 Existing Site Conditions - Land use

At the time of creating this document, the Masterplan area is currently vacant and unimproved, with the exception of existing informal tracks located throughout the site. An existing Service Station and McDonalds Restaurant are also located on a separate area of land that fronts Bagot Road in the southern corner of the site.

The Masterplan area is currently accessed from Fitzer Drive and an existing driveway / entrance road running to the rear of the McDonalds Restaurant and the Service Station.



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4.2.2 Existing Site Conditions – Climate & Soils

The Darwin region, inclusive of the Masterplan area, experiences distinct wet and dry seasons with high temperatures and dry winds as well as monsoonal rain and other significant rainfall events. These rainfall events can cause flooding which is determined by the volume, duration and spatial distribution of the rainfall. Most of the rain falls during the Wet season between November and April, while the Dry season extends from May to October. Darwin falls within the Hot Humid zone, with a mean maximum temperature of 32°C and mean minimum temperature of 23.2°C. The mean rainfall for Darwin is 1715mm, with 93.5 days of rain, falling mainly within the wet season of November to April.

The CSIRO - Atlas of Australian Soils, NT Portion, while at a coarse scale, suggests that there are two soil types on the subject properties; Kandosols and Tenosols. Kandosols are classified as lacking strong texture contrast and



have massive or only weakly structured B horizons which are not calcareous throughout (Isbell, 2002). Tenosols are soils which have weak pedologic organization apart from the A horizon, and include a diverse range of soils that do not fit the requirements of other soil orders (Isbell, 2002).

At the time of writing this document, Sites A and B have not been assessed for acid sulfate or potential acid sulfate soils. In this regard, these areas are classified under the heading of 'No Known Occurrence of Acid Sulfate Soils' in the ACID SULFATE SOILS – Darwin map (NRETAS, 2009).

Water could be a constraint for the proposed development site. It is mapped as having mainly Kandosols which can be waterlogged during the wet season. Small portions of both Sites A and B fall within the Secondary Darwin Storm Surge zone, with the Restricted Development (RD) area which separates the development sites being mapped as within the Primary Darwin Storm Surge zone. The Land Use and Land Unit mapping suggest that the site has low to moderate suitability for urban subdivision with limitations due to drainage, a high seasonal water table and a hard setting surface. In order to gain development approval the developer will need to be prepared to adopt appropriate engineering and drainage to make this area suitable for the proposed development for the above issues.

4.2.3 Existing Site Conditions – Landform

The site is generally level, with only a slight grade towards the north east and relief of less than 1m.

4.2.4 Existing Site Conditions - Hydrology

The Masterplan Area is located approximately 1km from the high water mark of Beagle Gulf in the Arafura Sea, and is on a gentle slope (~1%) from east to west. The North West corner of Area A as well as the South West corner of Area B is considered to be subject to possible flooding due to storm surge event. It is estimated that approximately 10% of the total Masterplan area could be affected by Secondary Darwin Storm Surge (one in one thousand year event) (refer Site Analysis Plan within Appendix A).

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4.2.5 Existing Site Conditions - Traffic and Circulation

As discussed above, the subject site is bounded by the following roads:

- Bagot Road;
- Dick Ward Drive;
- Totem Road: and
- Fitzer Drive.

Bagot Road is a major arterial road providing for through travel between the Stuart Highway to the south and the northern suburbs of Darwin, including the Darwin Airport. Recent traffic counts indicate that Bagot Road currently carries in the order of 35,000 vehicles per day.

Bagot Road is generally a six lane divided road with major intersections controlled by traffic signals or grade separated ramps.

Dick Ward Drive functions as a two lane Sub-Arterial road and provides for north-south travel between Coconut Grove and Fannie Bay. Recent traffic counts indicate that Dick Ward Drive currently carries in the order of 10,000 vehicles per day. It is a two lane undivided road with a 70km/h speed limit. Intersections are generally priority controlled with Austroads Type C style turning treatments.

Fitzer Drive is located at the southern end of the subject site. It extends between Bagot Road and Dick Ward drive and functions as a Residential Collector Road. Recent traffic counts indicate that Fitzer Drive currently carries in the order of 4,000 vehicles per day. All movements are allowed at the Bagot Road / Fitzer Drive intersection. The Bagot



Road / Fitzer Drive intersection does not exhibit any significant congestion levels. However, concern is raised regarding the operation of this intersection (under priority control) considering the function of and volume of traffic on Bagot Road and its ultimate usability for residents in this area.

The issues surrounding this intersection have also been discussed with the Department of Transport and City of Darwin, with the resolution being that this intersection is to remain as is and significant additional detailed traffic analysis is to be carried out prior to any DA lodgement (refer to dot points below).

To the north of the site, Totem Road extends between Bagot Road and Dick Ward Drive. It carries in the order of 5,000 vehicles per day, and functions as an Industrial Collector Road. Its intersection with Dick Ward Drive is a priority T junction, with a dedicated right turning lane provided for traffic turning right into Totem Road. The Bagot Road / Totem Road intersection is controlled by traffic signals, with a 'seagull' style treatment provided for southbound traffic.

Public bus services currently use Dick Ward Drive and Bagot Road. Bus stops in Dick Ward Drive are located in the vicinity of the residential neighborhood at the southern end of the subject site. It is estimated that future traffic growth will occur at a rate of approximately 3% per annum. Consequently, it is estimated that Bagot Road will carry in the order of 48,000 vehicles per day by the year 2020, and Dick Ward Drive will carry in the order of 14,000 vehicles per day by the year 2020. There are existing pedestrian / cycle footpaths on each of Bagot and Totem Roads and Dick Ward Drive and Fitzer Drives.

Further to the above, commitments are made to carry out the following prior to any construction of formal access points, structures or major site developments;

- Prepare a detailed concept layout plan of the proposed new intersection with Totem Road;
- Refine the concept plan for the new east west road through the site and the intersection layouts for the Dick Ward Drive and Bagot Road intersections;
- Prepare a detailed concept plan demonstrating how access to the existing McDonalds and service station developments can be retained without compromising the quality of existing arrangements and or where it cannot be retained, the provision of a pedestrian link to Fitzer Drive can be provided;
- Detailed assessment of traffic impacts upon the operation of Bagot Road. A PARAMICS style model to be
 used to assess the impact of the proposed new signalised intersection upon the operation of existing and
 planned traffic signals at McMillan's Road, Totem Road, Nemarluk Drive and Narrows Road; and
- Detailed concept plans of the works required at each intersection.

In order to assist in establishing both appropriate tenure and development efficiencies, it will be necessary to establish a covenant on the land that seeks to restrict any construction of formal access points, structures or major site developments on the allotments until such time that a Detailed Traffic Impact Assessment has been carried out cognisant of the likely ultimate development form. This covenant would be created in collaboration with the NT Department of Lands, Planning and the Environment, The City of Darwin and the Department of Transport to ensure that all parties are satisfied with the restrictions and intent of the document. Importantly, this covenant will give certainty that early works associated with establishing efficient tenure and ownership structures, can proceed without the fear that important access arrangement works are not carried out or carried out, out of sequence.

A Draft Covenant that has been prepared in consultation with the key stakeholder authorities is attached at Appendix F – Draft Traffic Assessment Covenant.

The above requirements have been formed in agreement with officers from both the Department of Transport and City of Darwin.



4.2.6 Existing Flora & Fauna

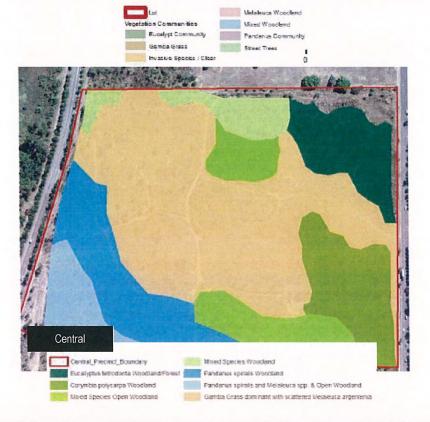
Vegetation

The Masterplan area supports three (3) distinct vegetation communities which are all common within the local region. The proposed development site has been highly disturbed by weeds and by illegally dumped waste.

There are sections where Gamba grass and mission grasses are the dominant species. In addition to this, the other vegetation types have understoreys that are made up of a large proportion of weeds. Refer mapping extract below.



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Weeds

The following weed species were identified on site during a site inspection during October 2011:

Listed Weeds

- Mimosa (Mimosa pigra) A/C and WONS
- Gamba Grass (Andropogon gayanus) B/C
- Perennial Mission Grass (Pennisetum polystachion) B/C

Environmental Weeds

- Annual Mission (Pennisetum pedicellatum)
- Cooch Grass (Cynodon dactylon)
- Sabi Grass (Urochloa mosambicensis)
- Tully Grass (Urochloa humidicola)
- Centro (Centrosema molle)
- Coffee Bush (Leucaena leucocephala)
- Wild passion Fruit (Passiflora foetida)

A weed Management Plan has been produced and will deal with weeds in accordance with the Weeds Management Act.



Threatened Species

Armstrong's cycad (*Cycas armstrongii*,) was found in low numbers within the northern boundary of both Sites A and B as well as the Central RD lands. This species is listed as vulnerable under the *TPWC Act 2000*. The species is locally abundant, but recognised as vulnerable as its habitat coincides with much of the urban development occurring around the Darwin area.

Other threatened species are known to be native within the vicinity of the proposed development site; however the Armstrong's cycad was the only species identified upon inspection. No additional threatened species will be impacted by the proposed development.

4.2.7 Existing Site Conditions - Services and Infrastructure

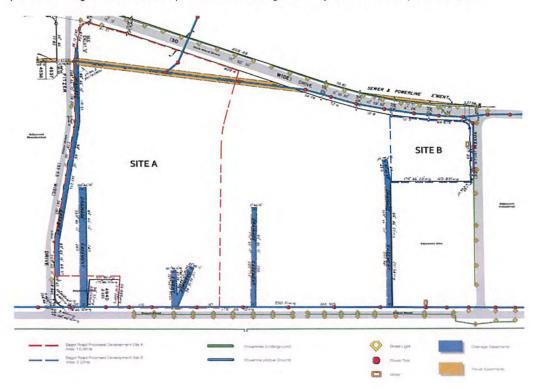
The NT Atlas describes the subject site as part of parcel 5182 in Ludmilla suburb in the Town of Darwin in survey plan S77/93B. The site analysis plan shows a number of easements affecting the development area.

In this regard there are two drainage easements along a general east-west direction in the southern portion of Area A and a sewer and power line easement which is located in a north-south direction along the western border of Area A. There is also a V shaped drainage easement in the northeastern corner of Area A.

The Central, or RD Lands, contains two (2) drainage easements which will not be impacted as part of the proposed Masterplan.

Area B does not contain any easements or encumbrances.

It will be necessary to ensure that the function of these easements is maintained within the future development of the land. The existing drainage and power easements, shown in the extract below, will be adjusted and realigned to provide for integration of the development with the strategies and layout of the Masterplan document.





4.2.8 Existing Site Conditions - Site Contamination

The site visit confirmed that the land and vegetation on-site is highly disturbed. The main disturbances observed were:

Area A

- Extensive weed infestation
- Several burnt-out cars have been dumped on the tracks that run through the site
- Refrigerators, washing machines and other household appliances
- Soil piles and building materials
- General Waste

Area B

- Extensive weed infestation
- Refrigerators, washing machines and other household appliances
- Soil piles and building materials
- 44 Gallon Drums
- General Waste

Central (RD Lands)

- Extensive weed infestations
- Several burnt-out cars have been dumped on the tracks that run through the site
- Refrigerators, washing machines and other household appliances
- Soil piles and building materials
- General Waste

The site has been subject to major earthwork in the past (observed soil piles and young vegetation recruitment). There is a chance that it may have been used for Cyclone Tracy dumps and even potentially post war dumps (which may contain materials such as asbestos, car batteries, paints, hydrocarbons and acids).

4.2.9 Existing Site Conditions – Stormwater

The site is currently subject to natural stormwater flows which follow the contours of the land and infiltrate into the soil profile. All stormwater management will be to the satisfaction of all relevant authorities, inclusive off but not limited to City of Darwin, the Department of Transport, and the Department of Land Resource Management. See Stormwater Management Plan at Appendix G.



SECTION 5

Masterplan - Movement and Site Circulation

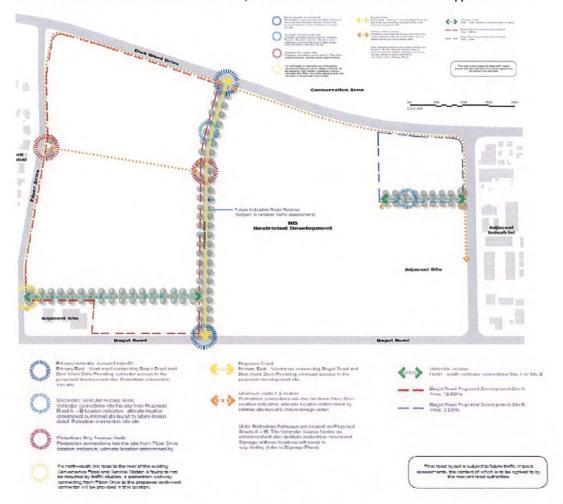
Subclause(s) 11(a), (b) & (c)

5.1 Subclause 11(a) – Pedestrian and Cycle Links

The Master Plan aims to ensure that the pedestrian and cycle access remains in keeping with the scale and extent of the proposed development. The objectives are:

- To establish a whole of site pedestrian priority network;
- To ensure the connection and provision of crossing points for pedestrians;
- To establish a continuation of this network throughout the car parking and between building areas; and
- To allow for an integrated pedestrian and bicycle access with connections into the surrounding street, open space and bicycle networks.

Further detail is illustrated within the concept extract below, which is of subject to the further traffic impact assessment commitments outlined in this master plan document. See the detailed version at **Appendix A**.





5.2 Subclause 11(b) – Integrated Parking Areas

The carparking for both areas is to be designed to promote effective and flowing traffic movement throughout the Masterplan area.

Objectives

- To ensure that safe, convenient, and shaded designated pedestrian access ways to building entrances are provided from car parking areas.
- To ensure the location and design of car parking, driveways and servicing areas are efficient safe, convenient and are appropriately landscaped so as to create minimum visual impact on areas of public domain.
- To ensure that all car parking demands generated by a particular development are accommodated within the development site.
- Parking and service areas are to be of adequate size and dimension to facilitate safe and convenient use.
- To ensure that car parking areas are of suitable dimensions and layout to allow maneuvering space for vehicles.
- To establish a continuation of this network throughout the car parking areas and between buildings.

Development Principals

- Loading, storage and external works are to be located or appropriately screened with landscaping, in addition to any other means necessary to enhance the visual quality of the area.
- No stacked car parking shall be allowed.
- Off street parking is to be generally provided behind or to the side of buildings and away from street frontages.
- Loading docks should be positioned so they do not interfere with visitor and employee parking spaces and
 ensure that delivery vehicles do not stand on any public road, footway, laneway or service road.
- Loading docks should be located at the side or rear of buildings.

Carparking Demand

Car parking within the development area shall be provided in accordance with the NT Planning Scheme.

Loading and delivery bays are to be integrated into the design and clearly identified in any future application.



5.3 Subclause 11(c) – Road Network Design

The Master Plan aims to ensure that the vehicle access remains in keeping with the scale and extent of the proposed development. The objectives are:

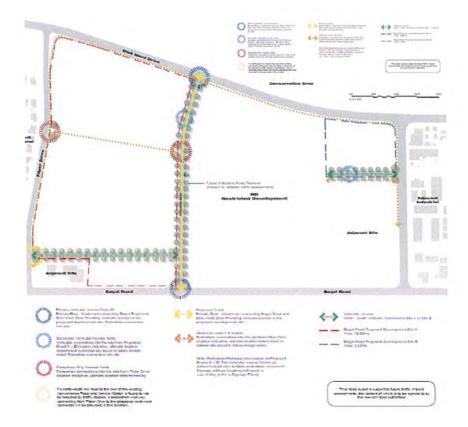
- To establish a whole of site road network; and
- To provide vehicular connections through the site to the surrounding street network without encouraging 'rat running'.

The design of the main link road between Bagot Road and Dick Ward Drive also allows for the future introduction of a bus route through the site, ensuring that the surrounding residential areas are not impacted upon.

Subject to the findings and recommendations of a detailed traffic impact assessment, a potential service road to the rear of the existing McDonalds and Service Station (accessed off Fitzer Drive) will allow for an easing of the access arrangement currently impacting Bagot Road. If a north-south link road to the rear of McDonalds and the Service Station is found to not be required by traffic studies, a pedestrian walkway connecting from Fitzer Drive to the proposed east-west connector will be provided in this location.

To provide more clarity and ensure that the requirements of subclause 11(c) are fully addressed, a draft covenant has been established which restricts the construction of any formal access points, structures or developments until a detailed Traffic Impact Assessment, cognisant of the likely ultimate development form of land at SD37, has been carried out. While a draft covenant is attached in **Appendix F**, it is subject to support and changes deemed appropriate by City of Darwin and the Department of Transport.

Further detail is illustrated within the concept extract below, which is of subject to the further traffic impact assessment commitments outlined in this master plan document. See the detailed version at **Appendix A**.





SECTION 6

Masterplan - Cultural, Soil, Fauna and Flora

Subclause 11(d)

6.1 Subclause 11(d) – Cultural, Soil, Fauna & Flora Assessment

Details regarding all relevant cultural, soil, and flora and fauna assessment that demonstrates that the development of the land will not cause detrimental impact to the community or the environment, have been provided by way of Ecological Assessments undertaken by suitable qualified consultants.

Area A, was found to be a highly disturbed patch of land, infested with gamba grass and other weed species. However, there are still patches of native vegetation, with three (3) main vegetation communities found onsite, including Melaleuca Woodland, Eucalypt Woodland, and Mixed Woodland. There are also smaller patches where Pandanus or Gamba grass, along with areas for access to easements, and street trees planted along the border with Dick Ward Drive. The site has been used as a general dumping ground for cars, household appliances, and building spoil which may require investigation for asbestos. In summary, the ecological condition of the site is not pristine and holds poor conservation value. The site is highly disturbed by weeds, rubbish, busy traffic, and general human impacts. Armstrong's Cycads (vulnerable under the NT TPWC Act 2000) were identified within the project area, however, only in low numbers. Further details regarding cultural, soil, and flora and fauna assessment for Area A are provided in **Appendix C**.

Area B, contains a small patch of remnant native vegetation that is highly impacted by weeds, traffic, rubbish, and fire. The Darwin Cycad (Cycas armstrongii), listed as vulnerable under the TPWC Act, is abundant within the site and efforts towards translocation of larger individuals is recommended (under permit from Parks and Wildlife NT). There are three (3) main vegetation communities found onsite, including Eucalypt Woodland, Pandanus communities, and Introduced Species (and cleared areas). The assessment highlighted a few constraints to the development proposal, including vulnerable species Armstrong Cycad, Gamba Grass and Mission Grass infestation, a drainage channel adjoining the southern boundary of the site, and archeological points of interest. In summary, the ecological condition of the site is not in good condition as it is highly disturbed by weeds, rubbish, busy traffic, and general human impacts. Further details regarding cultural, soil, and flora and fauna assessment for Area B are provided in **Appendix D**.

An Ecological Assessment was also provided for the central portion of the site, and is provided in Appendix E.

The management of all relevant cultural, soil, and flora and fauna will be undertaken in accordance with the recommendations of the ecological assessments as well as all relevant legislation. An Authority Certificate has been obtained from the Aboriginal Areas Protection Authority (AAPA), to ensure compliance with the Aboriginal Sacred Sites Act. See **Appendix H**. It is noted that this Authority Certificate was current at the time of the masterplan originally being submitted but has now expired prior to the endorsement of the masterplan. A new Certificate will be required prior to the commencement of any development on the site.



SECTION 7

Masterplan – Landscaping Subclause 11(e) & (f)

7.1 Subclause 11(e) – Landscape Treatment

The purpose of these Landscape Guidelines is to provide a minimum set of standards that shall be applied in the planning and delivery of the Dick Ward Drive / Bagot Road Proposed Development.

Objectives

The proposed landscape design should achieve the following objectives:

- Provide a high level of design quality and visual amenity for the proposed development;
- Landscaping is to provide shade and comfort to those using outdoor and external environments;
- · Safe and convenient shading shall be provided from all car parking areas to the entrance points of buildings;
- Extend the natural and cultural landscape values of the area; and

All landscaping is to be in keeping with the rationale behind these objectives.

Principles

Landscaping on site should complement and enhance the streetscape, be attractive, water efficient and contribute to a safe street environment. Landscaping may include provision of paved areas and areas for entertainment and recreational activities.

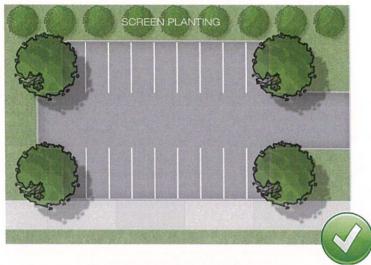
Landscaping should be designed so that:

- (a) planting is focused on the area within the street frontage setbacks and communal open space areas and uncovered car parking areas;
- (b) it maximizes efficient use of water and is appropriate to the local climate;
- (c) it takes into account the existing streetscape, or any landscape strategy in relation to the area;
- (d) significant trees and vegetation that contribute to the character and amenity of the site and the streetscape are retained;
- (e) the layout and choice of plants permits surveillance of public and communal areas; and
- (f) Any threatened species can be retained, or in cases where removal is unavoidable, relocated for use elsewhere on-site.



Landscaping in Car Parking Area

Parking and loading areas must be designed in accordance with Clause 6.5.3 (Parking Layout), of the NT Planning Scheme. Car parking areas visible from the public domain shall include landscaping to lessen their visual impact. For areas less than 20 spaces screen planting to the perimeter of the car park shall be sufficient. See the following extract for clarification.



Carpark areas of less than 20 spaces

For areas in excess of 20 car spaces, tree bays must be incorporated at one bay for every 10 spaces except where bays abut rear or side walls of warehouse buildings. See the below extracts for further clarification.





7.2 Subclause 11(f) - Landscape Buffer

Landscape buffering for the development site are determined by the requirements of each area as follows:-







- A maximum 13 metre wide (variable width) landscape buffer will be provided to Fitzer Drive. This 13
 metres incorporates an existing 10 metre wide drainage easement to be designed in accordance with
 SD37.
- An 8 metre wide landscape buffer will be provided to Dick Ward Drive. This 8 metre buffer will be designed in accordance with SD37.
- 3. Proposed Road B Streetscape Trees.
- 4. Proposed Road A Streetscape Trees.
- 5. Primary Site Access Nodes to provide landmark/gateway landscaping statements.
- 6. Pedestrian Access Node to provide landmark/gateway landscaping statements.
- 7. Proposed Development Site. Landscaping determined by internal layout to future design detail. All proposed landscaping to be in accordance with objectives as described within this document.
- 8. Existing Convenience Foods and Service Station site.
- 9. Land area not subject to masterplan.
- A 3 metre wide landscape buffer will be provided to Bagot Road. This 3 metre buffer will be designed in accordance with SD37.

Area A

As per the clause requirements of SD37, development of Area A is to protect the residential amenity of the adjoining Ludmilla community. This is achieved by:

- meeting the requirements of Clause 6.12 of the NT Planning Scheme;
- providing a vegetated landscaping buffer to Fitzer Drive, which will include the existing 10m drainage easement that runs along the property boundary; or
- providing a minimum 3m landscaping area adjacent to this northern side of the drainage easement within Area A where the operation and/or maintenance requirements of this easement preclude landscaping;
- designing buildings to have an active frontage to Fitzer Drive that allows for the passive surveillance of the landscape buffer;
- provide a minimum 3m landscaped setback area from the property frontage at Bagot Road. No further setback is required in addition to the landscaped setback, however, consideration should be given to sufficient setback to allow for maintenance of the landscaped buffer, car parking and loading and unloading facilities (where relevant);
- the landscaping buffer discussed at paragraphs 5(a) and 5(b) of Clause SD37, are to be constructed prior to the commencement of any development within Area A; and
- loading bays, storage facilities and waste storage utilities should be screened from Dick Ward Drive by
 using a 8m landscaping buffer and other landscaping design techniques in Areas A and B to the
 satisfaction of the consent authority.

The concept's below illustrates how the above can be achieved.

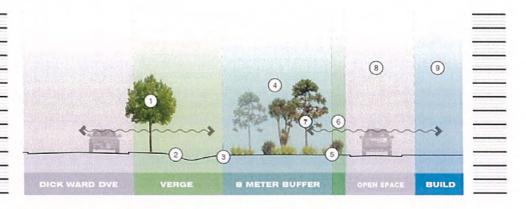


Fitzer Drive



- 1. Existing street trees to Fitzer Drive verge.
- 2. Turfed road reserve ensures clear sightlines
- 3. Proposed fence line to allow for clear sightlines through to an area of vegetation, it will also provide a safety barrier between the pedestrian area of Fitzer Drive road reserve and the open drainage channel (4). Low groundcover planting to the front of this fence will soften its visual impact. Fencing also proposed to the northern side of landscape mounding (6) (Approval required from the easement owner). Fencing to be integrated with soft landscaping.
- 4. Existing concrete lined drainage channel. Supplementary planting as required (areas or scouring etc) any proposed planting will be in accordance with principals as outlined within these guidelines.
- 5. Area of existing vegetation to be retained and regenerated as required.
- 6. Potential for additional 3 metre planting zone where the 10 metre wide drainage easement is deemed to require additional landscape. Potential for mounding as illustrated to provide increased visual mitigation any proposed planting, mounding to be in accordance with principals as outlined within these landscape guidelines.
- 7. Additional screening provided through the planting of clear trunked tree species / low ground cover species.
- 8. Minimum 6 metre setback zone.
- Building zone minimum 6 metres from landscape buffer zone (drainage easement / 3 metre wide landscape buffer). Buildings to have an active frontage to Fitzer Drive, as per requirements of Clause 5(d) of SD37.
- 10. Pedestrian pathway to Fitzer Drive road reserve

Dick Ward Drive

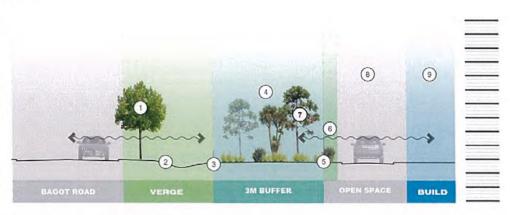


1. Existing street trees to Dick Ward Drive verge.



- Turfed road reserve ensures clear sightlines, shallow drainage swale (turfed runs parallel to Dick Ward Drive)
- 3. Proposed fence line to allow for clear sightlines through to an area of vegetation, it will also provide a safety barrier to the Dick Ward Drive road reserve. Fencing to be integrated with soft landscaping.
- 4. Area of existing vegetation to be retained and regenerated.
- 5. Proposed fence line to allow for clear sightlines through to an area of vegetation, it will also provide a safety barrier between the pedestrian areas of the built area. Fencing to be integrated with soft landscaping.
- 6. 1 metre wide internal verge allows for low ground cover species to be planted to the front of the fence to provide visual softening any proposed planting will be in accordance with principals as outlined within these landscape guidelines.
- 7. Additional screening provided through the planting of clear trunked tree species / low ground cover species.
- 8. Minimum 6 metre setback zone. Potential for this zone to be used for deliveries and carparking.
- 9. Building zone minimum 6 metres from landscape buffer zone (drainage easement / 3 metre wide landscape buffer). Building design to comply with the requirements of Clause 8 of SD37

Bagot Road



- 1. Existing street trees to Bagot Road verge.
- 2. Turfed road reserve ensures clear sightlines, shallow drainage swale (turfed runs parallel to Bagot Road)
- Proposed fence line to allow for clear sightlines through to an area of vegetation, it will also provide a safety barrier between the pedestrian areas of Bagot Road road reserve. Fencing to be integrated with soft landscaping.
- 4. Area of existing vegetation to be retained and regenerated.
- 5. Proposed fence line to allow for clear sightlines through to an area of vegetation, it will also provide a safety barrier between the pedestrian areas of the built area. Fencing to be integrated with soft landscaping.
- 6. Potential area for a 1 metre wide internal verge to allow for low ground cover species to be planted to the front of the fence to provide visual softening.
- 7. Additional screening provided through the planting of clear trunked tree species / low ground cover species.
- 8. Minimum 6 metre setback zone. Potential for this zone to be used for deliveries and carparking.
- Building zone minimum 6 metres from landscape buffer zone (drainage easement / 3 metre wide landscape buffer).



Area B

Landscaping in Area B to provide a high level of amenity by:

- meeting the requirements of Clause 6.12 of the NT Planning Scheme;
- designing buildings to have an active frontage to Totem Road that allows for the passive surveillance of the landscape buffer;
- pursuant to Section 9.1 of the NT Planning Scheme, industrial buildings with frontage to Dick Ward Drive require 9m minimum setbacks. This setback may include the 8m of landscaping;
- pursuant to the NT Planning Scheme, a minimum setback of 3m is applicable from all street frontages (other than Dick Ward Drive and Bagot Road). The building facade is to address all street frontages with landscaping and an elevation that responds to the streetscape; and
- loading bays, storage facilities and waste storage utilities should be screened from Dick Ward Drive by
 using a 8m landscaping buffer and other landscaping design techniques in Areas A and B to the
 satisfaction of the consent authority.



SECTION 8

Masterplan – Building Design Subclause 11(a)

Utilising built aesthetics and landscape strategies will mitigate the visual impacts of development when viewed from surrounding major roads, public areas or other sensitive land uses, and ensure that major landscape elements within the site are retained and managed as part of the regional landscape. In particular, the development of the land must not impose upon the adjacent residential areas fronting Fitzer Drive, nor should the ultimate form of development be imposing to Bagot Road and Dick Ward Drive.

8.1 Subclause 11(g) – Compliance with NT Planning Scheme (Clause(s) 8.2 & 11.3)

The Masterplan aims to ensure that all buildings remain in keeping with the scale and extent of the proposed development, in particular that of Clause 8.2 and 11.3.

8.2 Clause 8.2 (Commercial and Other Development in Zones HR, CV, CB, C, SC, TC, OR, CP, FD, T)

The purpose of this clause is to promote site-responsive designs of commercial, civic, community, recreational, tourist and mixed use developments which are attractive and pleasant and contribute to a safe environment.

It is considered that the design of buildings at the site will need to demonstrate full compliance with the requirements of this clause.

The following urban design objectives are designed to ensure that all future development within the site complies with the clause requirements outlined above.

The objectives are:

- Present a contemporary character by providing a unified streetscape with commercial and light industrial buildings of a high quality;
- Encourage the design of modern, functional buildings that will provide creative, premium commercial and light industrial precincts and set new standards within the Darwin property market;
- Promote sustainable design principles through the use of building materials and products that minimise
 waste, provide energy efficient buildings, and protect downstream environments;
- Establish a development identity through image and place making initiatives;
- Encourage building, site and street designs that interface sensitively with and contributes to the neighbouring residential communities; and
- Encourage creative contemporary design that aims at developing the most effective, highest and best use
 of the sites, while supporting the vision of the "Bagot Road Masterplan".

All buildings should be designed and sited so as to achieve the following:-

- The front elevation must be designed to address the street and to provide a corporate image and an inviting entrance;
- Compliance with Australian Standard 2021 Aircraft Noise Intrusion Building Siting & Construction as
 determined by the location of the site relative to the ANEF contours identified in the Bagot Road Master
 Plan:
- Architectural form and character must avoid large unrelieved expanses of wall or roof;

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- The main entrance is to be on the front elevation or close to the front of the building, clearly visible from the street; and
- Entrance points to buildings are to be designed as focus points and must provide protection for pedestrians by means such as awnings, verandahs, canopies or colonnades;
- External finishes should reduce glare and reflectivity and building lighting should be in accordance with aviation requirements;
- Building design is to address all street frontages to achieve an aesthetically pleasing facade as well as allowing for passive surveillance of the landscaped area; and
- Blank walls are to be minimized through architectural design techniques such as awnings, windows, eaves, articulated roof design and vegetative softening; and
- the presentation of blank walls to Dick Ward Drive is to be minimised in Areas A and B by using architectural design techniques such as awnings, windows, eaves, roof design and other architectural design techniques.

8.3 Clause 11.3 (Industrial Subdivision)

The purpose of this clause is to ensure that industrial lots respond to the physical characteristics of the land. This clause will be addressed at the time of subdivision.



SECTION 9

This Masterplan document was prepared in order to satisfy the clause requirements of Specific Use Zone SD37, specifically that of sub-clause 10 and 11. The Masterplan provides a strategy for guiding development principles associated with sub-clause 11(a) through 11(g), for the future development of the land.

This document covers those areas identified as Areas A & B and bounded by Bagot Road, Dick Ward Drive, Totem Road and Fitzer Drive.

The guiding principles and controls dealt specifically with sub-clause 11, in this masterplan included:

- (a) identifying pedestrian and cycle links through the site that connect to Bagot Road, Dick Ward Drive, Fitzer Road and Totem Road;
- (b) integrating parking areas with the pedestrian network;
- (c) including a road network design that provides necessary network upgrades, ingress and egress points, provides a low speed environment that protects the amenity of adjoining areas and prioritises a safe pedestrian network;
- (d) providing any relevant cultural, soil and flora and fauna assessment that demonstrates that development of the land will not cause detrimental impact to the community or the environment;
- (e) providing detailed concept designs that illustrate the landscaping treatment for Areas A and B;
- (f) including drawings that show how the landscaping buffer and built form adjacent to Fitzer Drive will be designed; and
- (g) demonstrating how buildings are likely to be accommodated within the development and that compliance with Clauses 8.2 and 11.3 of the NT Planning Scheme is achievable.

This Masterplan establishes the foundations for the future development of the land and provides the framework for future decision-making.





APPENDIX A MASTERPLAN SET

APPENDIX A:MASTERPLAN SET

BAGOT ROAD MASTERPLAN

Part Lot 5182 in SP S.77/93B, No. 213 Dick Ward Drive, Darwin

