

SHIRE OF DUNDAS VISITOR SITE DEVELOPMENT PLAN

Prepared for



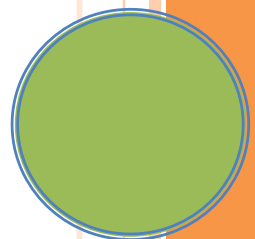
By



And



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*“If there is any road not travelled
then that is the one I must take”*

Edward John Eyre

A note regarding place names in this report

The subject area of this work is acknowledged to be the *whole* of the Shire of Dundas

However, as Norseman is the primary (and by far the largest) settlement in the Shire the two terms “Shire of Dundas” and “Norseman” are often used interchangeably in this document.

In cases where “Norseman” is used in lieu of “The Shire of Dundas” there is no intention to exclude other places within the Shire.

EXECUTIVE SUMMARY AND RECOMMENDATIONS

Norseman has been a gold mining town since 1894 – but in recent decades mining has proven to be a somewhat unreliable foundation for the community and the Shire of Dundas more broadly. With increasing numbers of tourists (especially “grey nomads”) passing through – and in the light of the recent attention to the so-called Great Western Woodlands (GWW) – the Shire has now recognised a need to develop another strong and reliable focus by enhancing and expanding its suite of visitor attractions and experiences.

This Report outlines a series of projects and activities that together will provide the Shire with a long-term strategy for significantly enhancing visitor infrastructure, marketing the Shire’s assets, encouraging travellers to stay longer, and capitalising on its unique location at the heart of the GWW and the west end of the Nullarbor. In the light of this, a fresh look at the Shire’s historical positioning and at what it has to offer is warranted.

It is clear that the long-time focus on mining as a mainstay to the economy (and therefore the strength of the community) has become outdated and unreliable. Mining in Western Australia is generally in an era of contraction, but beyond this it is historically a sporadic sector prone to a “boom and bust” pattern which leads to cyclical instability in both business and community sectors.

Further, mining (at least in the Shire of Dundas, and in particular around Norseman) no longer contributes substantially to growing tourism in the area. Some reasons for this include:

- The new generation of visitors are less interested in industrial attractions, be they modern or historical, and are increasingly looking for natural and wilderness experiences;
- As an “attraction”, Norseman’s mining operations cannot compete with the nearby Super Pit for sheer scale, and therefore do not contribute significantly to the tourism sector;
- Mining as a narrative for tourism offers little opportunity for value-added experiences; it is somewhat one-dimensional as evidenced by the same “stories” being told in mining-based tourism across many local governments and regions, and
- For the Shire of Dundas, tourism based on a mining history does not offer a “point of difference” from the adjacent City of Kalgoorlie-Boulder, which will naturally be the primary destination for visitors seeking the gold rush / mining story.

There are however, a number of valuable untapped and underdeveloped visitor assets in the Shire, which could help move it toward a more contemporary, vibrant and sustainable visitor experience which also reflects some of the key elements that local residents value about the place. These include:

- The Great Western Woodlands, which enfold Norseman at its heart – and which provides such a striking contrast to the comparative sparseness of the Nullarbor;
- Ngadju culture, in all its wealth of connection to the land over thousands of years;
- The visually arresting landscape of vast woodlands, immense salt lakes, ironstone hills and ancient gypsum dunes, and
- The story of the Eyre Highway and the Nullarbor itself, tracing the many journeys of exploration and linking them to the present day traveller.

The town of Norseman is uniquely placed at the end of several long day’s drive for most west-bound visitors – who, if offered a rich choice of attractions and experiences, may welcome an opportunity to stop and take a break. Likewise, it is the gateway to the journey east, and travellers heading off across the Nullarbor could similarly be encouraged by a sufficiently-well developed suite of attractions to pause in Norseman - and then leave refreshed a day or two later, having enjoyed the best of what the Shire has to offer - and having learned some of the highway’s history in order to better appreciate their journey.

Key elements in attracting and retaining visitors are *quality* and *uniqueness* – both in the physical infrastructure they encounter and in the variety and presentation of “stories” provided for their enjoyment and understanding. Wherever possible, attractions and experiences should be presented in a way that clearly signifies a community that takes pride in itself, welcomes visitors and values its assets. In time an expectation of a *quality experience* in the Shire will build in the broader travelling community (who are well-connected through the internet), and this will encourage a greater percentage to stop and spend longer in the Shire.

While the primary goal of this project is to increase visitor numbers and the average duration of stay (in order to bring outside dollars into Shire businesses and help support the community), a major focus of the proposals recommended in this Report is also the development of assets for - and skills within - the resident community. Norseman is a *living town*, not a museum or an empty landscape for tourist enjoyment only. Wherever possible new attractions or experiences for visitors should be matched with and contain a positive outcome for the community.

At the same time, local residents and ratepayers should not be expected to subsidise visitor activities at the expense of their own needs. It is clear however, that a well-cared for town with sites, stories and attractions that local people enjoy and appreciate is also the kind of place that visitors like to spend time in – and so managing this process for the benefit of *both* groups is both achievable and desirable.

As mentioned, the town of Norseman (and the smaller Shire settlement of Eucla, too) is ideally positioned to capture the attention of a great majority of tourists entering or leaving Western Australia, and it now it can also legitimately claim to be the centre or heart of the Great Western Woodlands. Further, the Shire encompasses some of the most varied and spectacular landscapes to be found in outback Australia – but the presentation of these natural attributes lacks both focus and the necessary standard of development to attract and keep visitors in the area.

This then is the goal of this project: to better package and present the outstanding natural (and cultural) heritage of the Shire to a significantly expanded section of the travelling public, in the belief that doing so will underpin the ongoing commercial wellbeing of local businesses and give the community a renewed sense of identity and positivity.

This is a brave and visionary move on the part of the Shire, and is to be applauded as potentially having the capacity to be a major make-over / game-changer for Norseman and the Dundas Shire.

Recommended suite of projects

The projects outlined in this Report fall into several broad groupings, as follows:

New “entry points” for Norseman / Shire

- South: Bromus dam
- East: Mt Kimberlana
- North: New MRWA information bay
- West: Lake Cowan Lookout

Walk and cycle trails: new and existing

- Gypsum dunes cycle trail
- Woodland Walk maintenance review
- Beacon Hill trail maintenance review
- Norseman Town Heritage Trail

- In-town eucalypt identification trail
- Lake Cowan walk/cycle trail

Drive trails: maintenance reviews

- Granite & Woodlands Discovery Trail
- Dundas Coach Road Heritage Trail

In-town sites & projects

- Developing & conserving a central "precinct"
- Woodlands Culture, Community & Visitor Centre
- Murals at pool / youth centre / elsewhere
- Town centre & museum signage – review
- Wildflower Park site review
- Central roundabout enhancement
- Light poles & bin surrounds: enriching the streetscape
- Street furniture, paving & more landscaping enhancements

Eyre Highway projects

- Information bay opposite service station
- Enhanced entry point at Eucla
- Eyre Highway interpretive signage suite (5 roadhouses)
- The Eyre & Wylie audio CD

General / shire-wide projects

- Marketing the "new" Dundas (especially internet)
- Developing a Style Manual and a new "brand"
- An overall Shire signage & infrastructure suite
- New & unique information shelters and interpretation
- New shire & town "welcome" signs
- Interpretive panel replacement program

These projects are all outlined in detail in the body of the Report. Each includes an itemised works list with cost estimates to guide the Shire in budget planning for the future. Importantly, the Report provides a prioritised program of works set out over 4 financial years, beginning 2016/17 (see below).

While the table that follows sets out the full set (and sequence) of projects required to roll out this new vision for the Shire of Dundas, there are a number of specific recommendations that have arisen from this work. These can be found after the 4-year program, and encompass the primary important findings of this work.

It is worth reiterating a statement made above: *This is a brave and visionary move on the part of the Shire, and is to be applauded as potentially having the capacity to be a major make-over / game-changer for Norseman and the Dundas Shire.* Further, the work outlined here-in is a bold move toward becoming a more economically diverse and resilient community, built around *inclusive* projects and activities that value the Shire's natural assets and are sustainable in the long term. This new innovative and creative economy will benefit local residents both directly and indirectly, producing broad-based economic, social and environmental benefits for the Shire and the region.

Summary of costs

When considering the costs set out below it is vital to be aware that funds for this work will come from three sources:

- External grant funds and contributions from a range of project partners;
- Existing Shire budgets for staff, machinery, tools etc;
- Direct Shire budget allocations.

Therefore, the “total” figures in the table below DO NOT represent the likely actual cash cost to the Shire. The more likely direct input required from the Shire is shown in the right-hand column of the detailed and prioritised tables that are presented in the next section of the Report.

	Total project cost	Possible grants	Shire labour	Shire direct budget
Year 1: 2016/17				
<u>Whole project / all items</u>				
Source grant funds and negotiate with potential partners for all projects below	20,000	0	0	20,000
<u>Marketing / branding and planning – Shire wide</u>				
Prepare a Style Manual – including defining new “brand” & strap line	20,000	10,000	0	10,000
Integrate two websites into one, and redevelop new visitor section	20,000	0	2,000	18,000
Undertake Scoping Study for Woodlands Cultural, Community & Visitor Centre	20,000	20,000	0	0
Replace / install new “Welcome to” signs – entry to town (3) and Shire boundaries (4)	9,240	0	1,540	7,700
<u>Planning – specific projects and infrastructure items</u>				
Complete detailed design work and engineering for proposed interp shelters	15,000	0	0	15,000
Complete detailed design work and image selection for corrugated iron sculptures	18,000	0	3,000	15,000
Resolve specific planning / permission issues with DPaW and MRWA	5,000	3,000	2,000	0
Finalise site planning and owner negotiations at six Eyre Highway locations	6,000	0	0	6000
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Undertake maintenance on Woodlands Walk, as outlined in Report	17,860	0	7,280	10,580
Undertake maintenance on Beacon Hill Trail, as outlined in Report	31,140	0	12,500	18,640

	<i>Total project cost</i>	<i>Possible grants</i>	<i>Shire labour</i>	<i>Shire direct budget</i>
Undertake maintenance to Beacon Hill Lookout site, as outlined in Report	29,930	0	11,210	18,720
Finalise the Eucalypt Identification Walk Trail project, apart from book (Year 2)	38,120	21,150	6,600	10,370
Undertake maintenance on Granite & Woodlands Trail, as outlined in Report	28,070	0	11,490	16,580
Undertake maintenance on Coach Road Heritage Trail, as outlined in Report	28,280	0	8,090	20,190
Undertake planning study for Norseman Town Heritage Trail	18,240	15,000	0	3,240
First year of full panel replacement program: Beacon Hill – Lookout and Trail	15,810	0	0	15,810
<u><i>In-town projects and activities</i></u>				
Replace various directional signs leading to town centre and other attractions	6,300	0	2,140	4,160
Deliver the murals and painted power pole projects as outlined in Report	35,000	30,000	5,000	0
Prepare a Conservation Plan / Building Conservation Strategy for main street	14,000	7,000	0	7,000
Annual allowance for new street furniture, paving and landscaping	16,000	0	4,000	12,000
Undertake immediate remedial actions to tidy up Wildflower Park	2,000	0	1,500	500
<u><i>Major new entry points</i></u>				
Upgrade the Bromus Dam site as per Plan and report: Stage 1 (Year 1 component)	117,780	0	39,760	78,020
Upgrade the Mt Jimberlana site as per Plan and report	250,850	123,930	42,920	84,000
YEAR 1 TOTALS not inc GST	782,620	230,080	161,030	391,510
Year 2: 2017/18				
<u><i>Whole project / all items</i></u>				
Source grant funds and negotiate with potential partners for all projects below	20,000	0	0	20,000
<u><i>Major new entry points</i></u>				
Upgrade the Bromus Dam site as per Plan and report: Stage 2 (Year 2 component)	100,000	0	20,000	80,000
Upgrade and enhance Northern Information Bay	83,470	0	6,930	76,540
Upgrade and enhance Lake Cowan Lookout (G&W trail)	60,450	0	16,520	43,930

	Total project cost	Possible grants	Shire labour	Shire direct budget
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Construct / create new in-town Heritage Trail, as per Plan to be produced in Year 1 (estimates only – to be fully costed in planning study)	80,000	40,000	8,000	32,000
Second year of full panel replacement program: camel panels and Woodlands Walk Trail	8,610	0	0	8,610
In-town Eucalypt ID Trail – produce book(let)	35,000	30,000	5,000	0
<u>In-town projects and activities</u>				
Town-centre roundabout enhancement: Eagle sculptures	36,300	20,000	4,400	11,900
Central Precinct: window pictures on main street	20,000	8,000	4,000	8,000
Annual allowance for new street furniture, paving and landscaping	16,000	0	4,000	12,000
YEAR 2 TOTALS not inc GST	459,830	98,000	68,850	292,980
Year 3: 2018/19				
<u>Whole project / all items</u>				
Source grant funds and negotiate with potential partners for all projects below	20,000	0	0	20,000
<u>Major new entry points</u>				
Upgrade the Bromus Dam site as per Plan and report: Stage 3 (Year 3 component)	100,000	0	20,000	80,000
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Construct / create Gypsum Dunes Cycle Trail	59,590	30,000	13,730	15,860
Third year full panel replacement program: Granite & Woodlands Discovery Trail	22,850	0	0	22,850
<u>In-town projects and activities</u>				
Annual allowance for new street furniture, paving and landscaping	16,000	0	4,000	12,000
<u>Eyre Highway projects</u>				
Upgrade information bay opposite service station in Norseman	79,290	10,680	7,710	60,900
Create major new “entry point” installation in Eucla	85,670	20,680	8,430	56,560
Install Eyre Highway shelters and signage (5 sites)	113,020	9,650	11,000	92,370
Produce the “Eyre & Wylie” audio CD	75,000	40,000	5,000	30,000
YEAR 3 TOTALS not inc GST	571,420	111,010	69,870	390,540

	<i>Total project cost</i>	<i>Possible grants</i>	<i>Shire labour</i>	<i>Shire direct budget</i>
Year 4: 2019/20				
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Lake Cowan Walk/Cycle Trail and viewing platform	55,210	25,000	3,520	26,690
Fourth year full panel replacement program: Dundas Coach Road Heritage Trail	11,120	0	0	11,120
<u>In-town projects and activities</u>				
Annual allowance for new street furniture, paving and landscaping	16,000	0	4,000	12,000
<u>Whole project / all items</u>				
Undertake a review of this program and set new goals	20,000	0	0	20,000
YEAR 4 TOTALS not inc GST	102,330	25,000	7,520	69,810
TOTALS ACROSS ALL 4 YEARS	1,916,200	464,090	307,270	1,144,840

Recommendations

While the first and obvious recommendation of this Report is to commit to the 4-year program of projects set out above, there are several other important recommendations that address key issues and opportunities:

1. Undertake a professionally guided community consultation process to develop a new “brand” for the Shire, and as a central part of this process consider the merits of seizing the opportunity to become the “Heart of the Great Western Woodlands”;
2. Integrate a positive presentation of Ngadju culture, knowledge and language into all possible / realistic public information sources, and utilise this process to further build healthy relationships within the local community;
3. As a key component of #2 above, commit to co-naming of visitor sites and physical features, wherever a Ngadju name is known;
4. Present all visitor information on one significantly enhanced website, combining Visitor Centre and Shire tourism pages into one location hosted on the Shire’s website; ensure that the Shire takes direct control of the web name www.norseman.info;
5. Recognise that the program of works outlined here-in is *substantial*, and review Shire staffing levels in order to deliver efficient and focussed project management that does not place unrealistic and onerous expectations on existing staff;
6. Commence an early and vigorous campaign of attracting and involving key partners such as Tourism WA, MRWA, IGO, GEDC and others, with the goal of *exceeding* the net totals of external funding estimated in the second column of the overall budget outlined above;
7. Ensure that as each year of the program outlined in this Report is completed an adequate *additional* sum is added to the Shire’s maintenance budget to enable the new/upgraded sites to be kept in pristine condition, and to maintain visitor safety;
8. As part of #7 above, allocate staff time to undertaken maintenance reviews of all trails and other visitor sites at least every 6 months, using the Checklists provided in this Report (where relevant);

SECTION 1: PROJECT BACKGROUND AND BRIEF

Background to this project

Norseman has been a gold mining town since 1894 – but in recent decades mining has proven to be a somewhat unreliable foundation for the community and the Shire more broadly. With increasing numbers of tourists (and especially “grey nomads”) passing through the area – and in the light of the recent attention on the so-called Great Western Woodlands – the Shire has now recognised an opportunity and a need to develop another strong and reliable focus by enhancing and expanding its suite of visitor attractions.

The town of Norseman (and the smaller Shire settlement of Eucla, too) is ideally positioned to capture the attention of a great majority of tourists entering or leaving Western Australia. Its location at the western end of the Eyre Highway has long seen it branded as the “Gateway to WA”, but now it can also legitimately claim to be the centre or heart of the Great Western Woodlands. Further, the Shire encompasses some of the most varied and spectacular landscapes to be found in outback Australia – but the presentation of these natural attributes lacks both focus and the necessary standard of development to attract and keep visitors in the area.

This then is the goal of this project: to better package and present the outstanding natural (and cultural) heritage of the Shire to a significantly expanded section of the travelling public, in the belief that doing so will underpin the ongoing commercial wellbeing of local businesses and give the community a renewed sense of identity and positivity.

This is a brave and visionary move on the part of the Shire, and is to be applauded as potentially having the capacity to be a major make-over / game-changer for Norseman and the Dundas Shire.

The project brief / work to be undertaken

The contract / brief for this project stipulated that a comprehensive Report would be prepared, which would guide the Shire in prioritising and actioning the development of a broad range of visitor attractions both in the town of Norseman and more widely across the Shire. This report would outline each of the projects below, and the following key points were noted:

- All projects would be presented with individual cost estimates, to enable the Shire to plan funding needs over a series of Stages of implementation.
- Site plans would be provided for many projects, and these were to be of good, clear, functional standard, but would *not* be engineer’s / surveyor’s drawings.
- A large-format “poster” was to be prepared, showing all of the proposed developments – for use in community or Council / Agency consultation.
- The Report and any appendices would be provided in both bound and electronic formats following a Draft Report → consultation / feedback → Final Report process.

The planning study was to include the following sub-projects:

Norseman / Shire “entry points”

- South: Bromus dam site plan, interpretation recommendations & walk trail plan
- East: Mt Jimberlana site plan, interpretation recommendations & walk trail plan
- North: Lake Cowan Info Bay - site plan & interpretation recommendations (NB: Shire to negotiate which location is to be used with Main Roads)

- West: Entry point site plan & interpretation recommendations (either existing Lake Cowan Lookout or possibly on Cherry Island)

Other / existing information bays

- Information bay opposite service station – interpretation recommendations & site plan
- Existing information bays (south & east of town): interp recommendations

Walk trails: Existing and new

- Gypsum dunes walk trail plan, parking area site plan & interpretation recommendations
- Woodland Walk maintenance review & lookout / parking area site plan with interpretation recommendations
- Beacon Hill trail maintenance review & recommendations, with site plan for parking area upgrade
- Review other potential walk / cycle trail opportunities

Drive trails: maintenance reviews

- Granite & Woodlands Discovery Trail maintenance review (with reusable checklist)
- Dundas Coach Road Heritage Trail maintenance review (with reusable checklist)

In-town sites & projects

- Developing a central "precinct" – area / site plan & recommendations
- Woodlands Culture & Heritage Centre - early thoughts & ideas (no drawings/plans)
- Wildflower Park site upgrade plan & signage recommendations
- Murals at pool / youth centre / elsewhere
- Town centre & museum signage – review of existing directional signage
- Central roundabout – enhancement
- Bin surrounds & light poles - recommendations to enrich streetscape
- In-town eucalypt identification signage – where and how

Eyre Highway projects

- Road trip to Eucla, and review of signage/interpretive/visitor opportunities there
- Information Bay opposite service station in Norseman
- Eyre Highway promotional signage suite – recommendations

General / shire-wide projects

- Overall Shire signage & infrastructure suite – a palette of recommended styles, sizes, colours and basic hardware items (tables, seats etc)
- Marketing Dundas - early thoughts and ideas on a process for improvement

Sundry report inclusions / project actions

- Field trip travel - Trip 1, January +/- 10 days
- Field Trip travel - Trip 2, April +/- 4 days
- Report collation and preparation, with a staged implementation strategy

- Overall site / project development “poster” – for display and discussion purposes (A0/A1, showing all recommended projects)
- Presentation of recommendations and projects to Council during Field Trip 2
- Amendments to Draft Report / preparation and delivery of Final Report

Timeframe for project

As the Shire wished to have a Draft Report available for consideration during the period in which it would be preparing the budget for financial year 2016/17, the following timeframe was been established:

- Acceptance of quote / commencement of project: mid-December 2015 / early January 2016
- Major field visit to Norseman - 10 days approximately: January 21 - 31
- Easter break: end of March
- Second field trip - to finalise on-ground work and present and discuss work to date: mid April
- Submit finalised Draft Report with cost estimates: mid June (for budget review at June 21st meeting)
- Submit amended Final Report following comments & feedback: July 2016

Tourism in the Shire of Dundas

The Shire website has a page headed “Tourism” – this gives the following information for prospective visitors:

Norseman is the major town in the Shire of Dundas and is situated 726 km from Perth. The Borders of the Shire are 45km North of Norseman, 50km South of Norseman, 165km West of Norseman (as the crow flies) and East until you reach the WA/SA border. Eucla is the other townsite within the Shire and is situated 717 km East of Norseman.

Despite a low annual rainfall, much of which fall during the Summer months, the countryside is quite pleasantly wooded with more than 40 species of Eucalypts and more than 70 species of Acacias, all of which flower. At certain times of the year wildflowers bloom and the countryside abounds with native blossoms. Much of the flora is of unusual interest and the trees and scrubs provide a continuity of colour over many months of each season.

Norseman has a semi-arid climate with an annual rainfall of about 300mm. Temperature ranges in summer from 15 to the high 30's early 40's degrees Celsius. Winter ranges from 0 to the low 20's.

The population of the Shire varies and at present is approximately 1,600.

Major industries in the Shire include Goldmining and Tourism in Norseman, Pastoral Farming along the Eyre Highway and Fishing and Tourism at Eucla.

Business mining and tourism are the backbone of the Norseman economy. Norseman sits on an ancient geological plate containing a variety of mineral deposits worth hundreds of millions of dollars. The mainstay of the mining economy is gold mined by Central Norseman Gold which is owned by Croesus Mining N/L. Gold deposits are very rich. Three times as much gold per tonne of ore is extracted from Norseman mines as compared to major mines in Kalgoorlie. There is a very large proven deposit of tantalum in its exploration stage of development, gypsum is also currently mined.



It appears Norseman still “hangs its hat” on gold mining, if these relatively new “Welcome” signs are an accurate reflection

Today gold remains of major importance to Norseman who still depend on the mining industry.

While some of this material may be of interest to visitors the text as it stands does not appear to do a particularly effective job of promoting the attractions of the area. It is also bedevilled by a number of language, punctuation and grammar errors, which have the potential to give a somewhat negative perspective to at least some of the reader group.

However, the Shire does not see itself as the major promotional outlet, rather handing this mantle to the Norseman Visitor Centre which has its own website (www.norseman.info). The front page of this site greets potential visitors as follows:

GATEWAY TO WESTERN AUSTRALIA & THE NULLARBOR
Steeped in History, Surrounded by Magnificent Granite Formations, Nestled Amongst Unique
Beautiful Eucalypt Woodlands.
We Invite You to STOP, STAY & EXPLORE

The image on this first page is not of one of the Shire's spectacular attractions but rather of the Visitor Centre itself, and the page has a dated and vaguely amateur feel to it and lacks the dynamic presence required to attract visitors and then keep them in the area for long enough to be of value to the Shire and town.

Attractions listed on the Visitor Centre site include:

- Dundas Rocks
- Mt Jimberlana
- Gemstone Fossicking (sic)
- Peak Charles
- The Granite & Woodlands Discovery Trail
- Historical Museum
- Phoenix Park
- Horse Statue
- Corrugated Iron Camels
- Beacon Hill
- Tailings Dump
- Cemetery

Descriptions under the headings "Nature" and "History" are brief and are accompanied by small unspectacular images, and do not do justice to the magnificent landscape or intriguing history of the Shire. There appears to be no mention at all of indigenous history, occupation or culture.

Delving deeper into the website unfortunately does not deliver the breadth or quality of information that can be found on a growing number of local government / regional tourism sites, and this suggests that Dundas has something of an issue in how it currently presents itself to the travelling world.

Oddly, the Shire website contains a more fulsome list of "Attractions". In addition to the sites listed above, this includes the following places:

- Bromus Dam
- Churches
- Old Coach Road Heritage Trail
- Buldania Rock
- Woodlands
- Old mine workings
- Scenic Drive
- Picnic and camping spots (various locations)

The impression at this point is that yes, there are places of beauty and interest in the Shire, but the information and visual appeal necessary to "sell" these places to potential visitors is lacking. One suspects that many who view these two sites may plan on simply passing through the town and Shire on their way to elsewhere.

Meeting with Visitor Centre manager

A long and fruitful discussion with Evelyn Reid, the manager of the Visitor Centre, took place on the morning of January 22nd. This conversation generated a much better understanding of the issues and opportunities facing tourism in the Shire, and much of this can be attributed to the experience and longevity of tenure of the manager herself. A series of key points were noted, and these are presented in the pages following in the order in which they were raised during the meeting.

- The majority of visitors who stay come to the Visitor Centre either have caravans or campervans;
- Younger travellers (usually driving “Wicked” vans) want to free-camp and generally spend very little in town. They may actually cost the Shire more than they contribute;
- Older European travellers spend more. They want to “see and do” rather than buy. However, they too are keen to free-camp;
- Self-drive is the main market, with little contribution from organised tours. Most visitors are retirees;
- Many self-drive visitors are also carrying bicycles – commonly one of three types: mountain bikes, electric bikes or family road bikes;
- Visitation is no longer seasonal, and numbers are quite steady throughout the year;
- Travellers these days are not spending as much on “retail” items, and therefore the focus should be on providing *experiences* rather than on souvenirs or saleable items;
- The Shire needs more “products” (sites / visitor opportunities) to offer travellers;
- The two websites – Shire and Visitor Centre – need to be rationalised, and the Shire and/or Visitor Centre needs to take control of the domain / hosting of the main site (currently held by Reynold’s Graphics). More work needs to be done to insert key words into search engines, to attract more online visits, and to ensure that the website(s) also convert to a mobile phone friendly platform;
- The main promotional item is the Norseman brochure, a multi-page A4 format item that is updated every 18-24 months when either 25,000 or 30,000 copies are printed. It is “self-distributed” (rather than using a marketing agency such as Templar) to key outlets in the Region and wider in WA and beyond (Ceduna etc);
- Key outlets for the brochure are seen to be Perth, Northam, Rockingham, Albany, Esperance, Kalgoorlie, Ceduna, Port Augusta, and the various Nullarbor roadhouses;
- The Visitor Centre combines with the AGO (Australia’s Golden Outback – regional tourism body) and the Goldfields Tourism Network Association (GTNA) to have a presence at various tourism, caravan and traveller shows;
- The main markets for growth are seen to be NSW, Queensland and Victoria;
- Key natural attractions are seen to be the woodlands, bird watching and free-camping in nature;
- Goldfields / mining history is another key attraction, with Beacon Hill, Phoenix Park and the Museum all attracting interest. Visitation is growing at the Museum;
- The swimming pool is an attraction, especially during hotter months;



Many self-contained / RV vehicles are now arriving in town with bicycles on board, suggesting a prime opportunity for new visitor experience developments

- Enhancing the appeal of the main street, possibly via more murals, would be advantageous;
- An in-town Heritage Trail is a major item missing from the town's suite of attractions. This could link the Visitor Centre to the Museum, the main street, the Railway Hotel, Phoenix Park, the camel sculptures, photo gallery etc;
- The horse sculpture (Norseman) and the camels are much photographed, and are visited by most who come to town;
- There are some signage issues on the Old Coach Road Heritage Trail, especially for visitors coming from the south. A clearly-marked walk trail should be installed to take visitors to the "baby's grave" from the old Dundas townsite, as people continue to drive onto the lakes and get bogged;
- Dundas Rocks was known as Nooganyer Soak. Offensive graffiti at this site should be removed;
- Response to the Granite & Woodlands Discovery Trail has been overwhelmingly positive. However, the brochure needs updating and reprinting, and conversation should take place with the Shire of Kondinin, who host a section of the trail;
- The Community Garden and the work of the women's craft group and the men's shed could both be developed into in-town attractions;
- The link with explorer EJ Eyre and his companion Wylie could be much better integrated into the Eyre Highway traveller's experience;
- Key needs / opportunities were seen to be:
 - More walk trails, including the in-town Heritage Trail and a walk from the Visitor Centre / Caravan Park to the lake edge;
 - Downloadable apps defining visitor experiences and providing information;
 - Developing army / war history opportunities;
 - Offering a 4wd outing / trail on the woodlines to the NE of town;
 - Developing more 4wd trails in general – possibly including on the Nullarbor and maybe a clover-leaf network based on Norseman;
 - Clarifying access options to get to the south coast from the Eyre Highway;
 - Mountain bike / cycle trails, possibly on the lake(s);
 - Mt Jimberlana upgrade, including Ngadju history;
 - Developing a eucalypt identification book(let) that could be a for-sale item if well researched and delivered as a quality item.
- As the central hub of the Great Western Woodlands Norseman has an excellent opportunity to develop and capitalise on the naming and recognition of this landscape. Need to produce a map showing the GWW with Norseman clearly in the centre;
- Need to encourage expenditure in in-town businesses. However, those businesses need to be encouraged to provide the goods and services that visitors are seeking;



The colours of the woodlands can be striking, and are an important part of their significant attraction

- Public toilets at the Visitor Centre are open 7 days a week; however, those at the Shire (which service the main street) are only open during office hours Monday to Friday, and this is an issue for many visitors;
- Interest in aboriginal (Ngadju) culture is widespread, and there is a significant opportunity here – if issues of reliability and accessibility / availability can be addressed;
- Need to turn Norseman (and the Shire) into a *destination*. Word of mouth is very important in promoting the town and shire more widely.

These meeting notes provide valuable guidance as far as this planning project – and the future of tourism in the Shire of Dundas is concerned. Key matters raised and worthy of further attention and energy are seen to be:

- ❖ The need to provide visitor *experiences*, and more “products” or attractions for travellers;
- ❖ The need to rationalise (and update / enhance) the online presence of the Shire and town;
- ❖ The opportunity presented by/for the Ngadju community in town;
- ❖ The opportunity to brand Norseman as “The Heart of the Great Western Woodlands”.

Clearly, the capacity of any organisation to effectively promote a shire, district or region is defined by its resources – both financial and human. The future of many of the implied “criticisms” in this section of the Report – and many, if not all of the suggested opportunities - will be largely defined by the degree of long-term commitment and vision brought to bear when the resourcing matters underpinning this whole project / process are considered. Without adequate resourcing there is limited capacity for change.

The role and benefits of a Visitor Centre

The 2015 “Industry Snapshot Review” report prepared by Angeleen Schimanski, Manager of the Kalgoorlie Boulder Pure Gold Visitor Centre, contains some interesting and useful background to the role and potential of a Visitor Centre, as follows:

The top three features that visitors look for in a visitor centre are:

- *Knowledgeable, professional staff, skilled in customer service;*
- *Unbiased and authoritative information; and*
- *Regional displays and stories*

Research commissioned by Tourism Research Australia and Tourism Western Australia, and carried out by Metrix Consulting in 2015, revealed that Visitor Centre’s provide unrivalled information to visitors, encouraging them to do more and stay longer. Nearly all (95%) of Visitor Centre users believe that a Visitor Centre was an important part of their overall visitor experience and that most users (84%) indicated that Visitor Centre’s had a positive influence on how they viewed the location they were visiting. This showed that Visitor Centre’s were having a direct influence on how visitors were choosing to spend their time and tourist dollar in the regions they visited.

This report also contains information that may be useful in understanding tourism trends, factors and issues in the Shire of Dundas. For example, 52% of all visitors to the Kalgoorlie region were from interstate, with local (WA) travellers accounting for a further 32% - a figure which has increased as petrol prices have fallen, encouraging locals to explore further from home.

“Grey nomads” (travellers over the age of 65) still make up the largest portion of the visitor group at 36%, with those between ages 55 and 65 adding a further 33%. Over 60% of all visitors stayed between 2 and 4 nights.

Internet / web statistics made particularly interesting reading:

- When asked how they'd heard about or found contact details for the Visitor Centre some 40% indicated that they'd used the internet, with a host of other options (business contacts, phone book, word of mouth etc) making up the remainder.
- Over 60% of all web traffic came from mobile devices, indicating just how many people are using smart phones or tablets to do their travel planning.
- People are accessing the website from all over the world, but still almost 90% of web traffic came from within Australia.
- Interestingly, the Centre's Facebook page was a significant contributor in feeding traffic to the main website.
- The introduction of free WiFi in the Centre was seen as a big positive, especially as visitors needed to check in through the Facebook page – which encouraged further interaction.
- Instagram is seen to be a "huge growth channel" with followers up 600% in the last year alone. It is particularly useful with regard to the Pure Gold Moments photographic competition.
- Lastly, Trip Advisor is also proving hugely beneficial, with both the Visitor Centre and the Kal-Boulder Audio Tour rating at 4.5 stars. It was noted that: *"All reviews are responded to quickly so we look professional and engaged with our customers"*.

The Report contains a separate section on RV (Recreational Vehicle) statistics, and this too makes useful reading given that such a high percentage of the Shire of Dundas' visitors travel by this mode of transport. The City of Kalgoorlie-Boulder now provides a 24 hour Free RV site – in otherwords, a place RV's can stop over just one night. In regard to this:

- 54% of people surveyed actually stayed longer than the free first night, moving on to local caravan parks etc;
- 84% said that having the free site impacted their decision to stay in the City and not travel straight through;
- Being an "RV Friendly" town was seen to encourage visitation, with 45% knowing of this status (and therefore the free one-night site) prior to arriving;
- 77% said they would recommend the City to others based on its RV Friendly status;
- Over 50% indicated that they would spend between \$100 and \$300 while in town, with 28% being in the higher bracket (\$200-300).

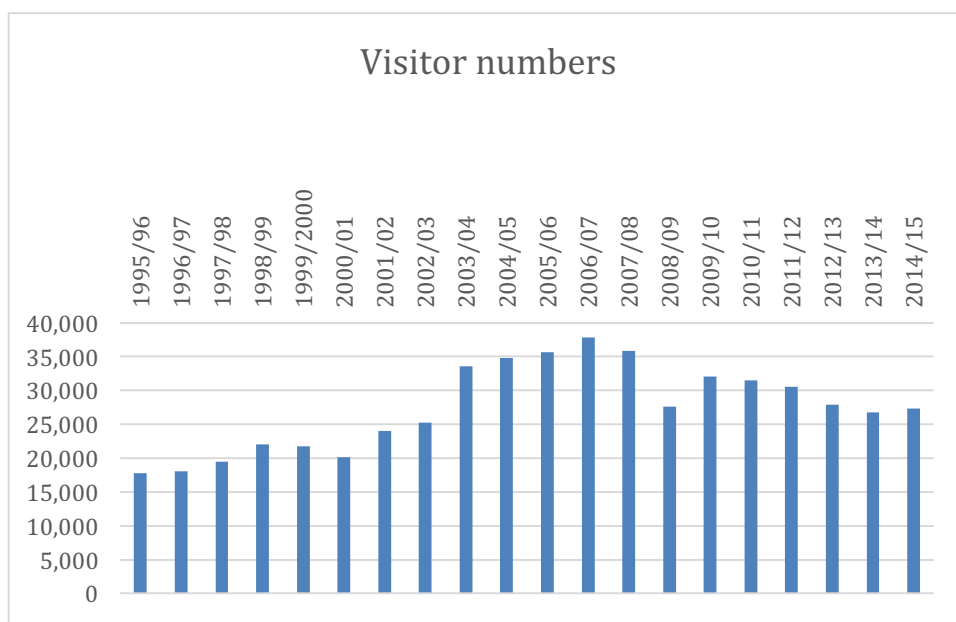
Reading this report suggests that the Shire of Dundas and the local Visitor Centre might benefit significantly from engaging with the expertise and experience of Ms Schimanski, as there are almost certainly strong parallels between the two markets and the two visitor groups. Clearly the level of resourcing in Kalgoorlie is completely different – but there is no reason Norseman should not benefit from an on-flowing stream of knowledge.

Visitor numbers

The Visitor Centre manager kindly supplied a comprehensive set of numbers for visitors who'd come into the Centre in each year for the last two decades. These figures were primarily taken by an electronic counter at the doorway, though in one period of mechanical failure a manual record was kept instead. The numbers provided translate into the graph below:



The challenge now is to extract value from this visitor group

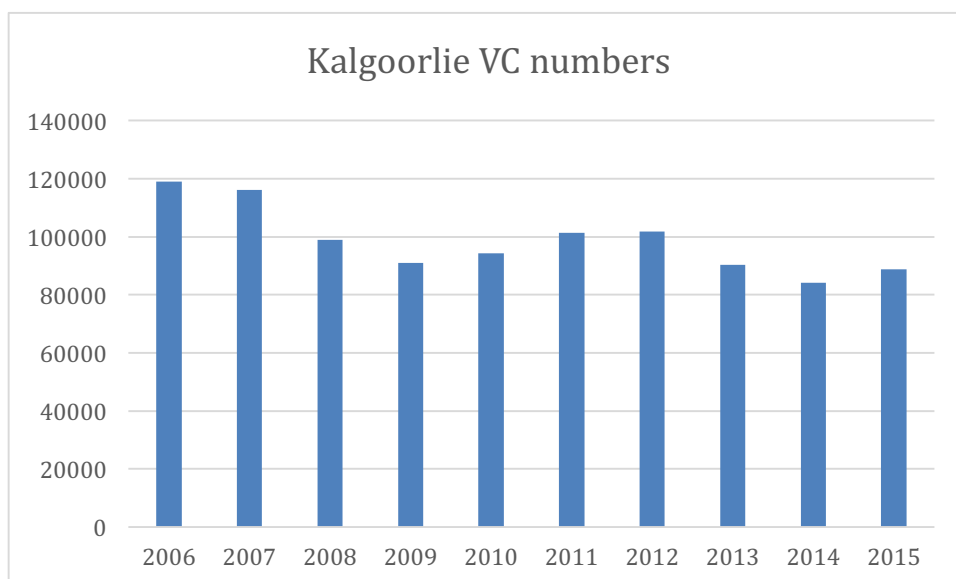


* 2008/09 was the year of the door-counter failure, so this figure should be taken as an aberration.

As can be seen from the graph of these numbers, a peak was reached ten years ago, in 2006/07 and since then there has been a steady decline of some 27%. It is useful to consider why this may have occurred as this is a reasonably significant decline and may point to underlying issues that are impacting levels of visitation in the Norseman / Dundas Shire areas.

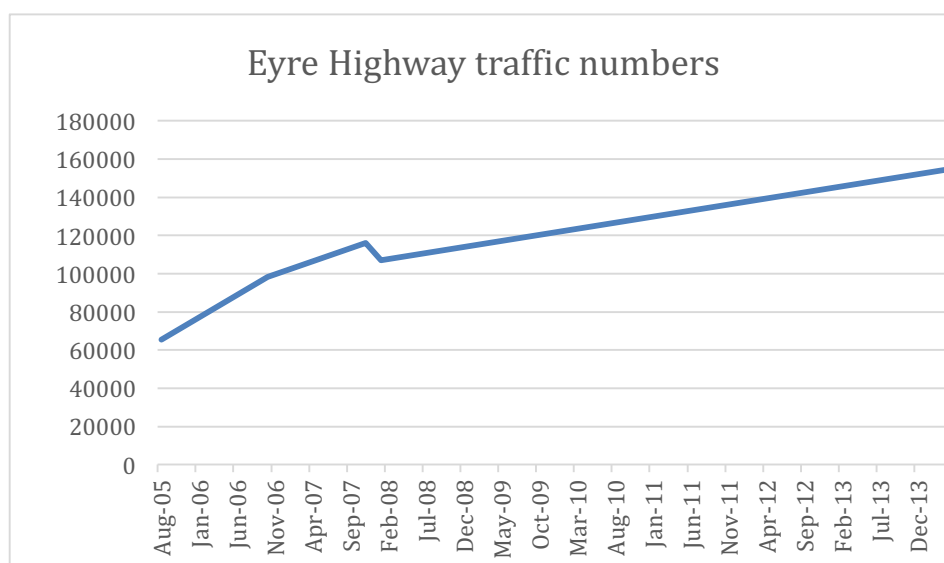
One possible contributing factor could be that the use of the internet to plan travel has become widespread in recent years, with most people now carrying a tablet or laptop on which they research and plan their journey well in advance. This may have resulted in fewer people feeling the need to access the Visitor Centre for information “over the counter” – but if this is the case then it points very strongly to the need for a powerful and effective web presence.

In order to test this theory – and get another perspective of this measure of visitation - an enquiry was made of the Visitor Centre in Kalgoorlie regarding their door numbers over the last 10 years. Statistics supplied produced the following graph:



When asked about the gradual downward trend, which broadly mirrors the Norseman graph, the Manager, Angeleen Schimanski, agreed that it was possible that the increased usage of mobile phones and tablets may have had some impact. However, she felt that in Kalgoorlie's case the most powerful factor was the mining downturn, which has meant many residents leaving town – with a significant knock-on impact on the numbers in the "VFR" (Visiting Friends & Relatives) traveller group. It is possible, but perhaps unlikely that this would have impacted Norseman, which suggests that without this factor the Kalgoorlie numbers may have remained close to static – again raising the question as to why Norseman's numbers have fallen so noticeably.

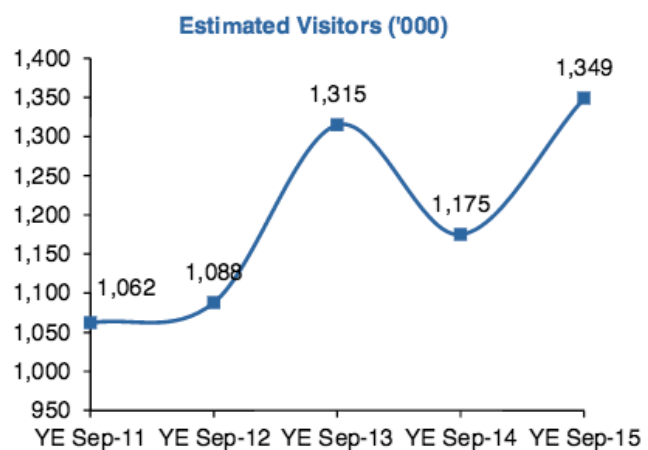
One other possible reason for this decline could be a reduction in the overall number of travellers passing through the town. To ascertain whether or not this may be the case information was sought from MRWA regarding traffic counts on the Eyre Highway, the main feeder route (for tourists at least) in and out of the town. Data supplied was for annual totals for "light vehicles" (ie: excluding trucks and other heavy freight) travelling either east or west (in other words, all traffic), and translated into the following graph:



The simple line graph above shows exactly what would be expected: a steady upward climb in the number of vehicles crossing the Eyre Highway. On this basis alone (if other factors could be ruled out) visitor numbers in Norseman should be showing a broadly similar pattern. That they're not is cause for some concern.

To put the Norseman experience in a State-wide context total visitor numbers coming into WA from elsewhere in Australia were reviewed for the last five years. These show a substantial increase across this period, with some year-on-year fluctuation, as can be seen from the graph to the right.

With 85% of these visitors coming from NSW, Queensland or Victoria it is safe to assume that a great many are crossing the Nullarbor and entering the state via its "gateway" – Norseman. So, if there are 300,000 (or 30%) more visitors coming to WA in the last five years, many by car and most via the Eyre Highway, why have Norseman's numbers dropped so significantly in the same period?



One possible reason for this could be that fewer people are actually coming into Norseman town as other places “out-sell” the Shire of Dundas and visitors choose to move on to “more appealing” destinations. Decisions like this will almost certainly have been made prior to arriving in town – which again points to two recurring and crucial factors:

1. Having the right mix of appealing “products” or attractions / experiences to offer potential visitors, and
2. Presenting and promoting these effectively and with flair and passion on the platform(s) that the great majority of visitors are using in their decision-making: primarily the internet, with the brochure also being relevant in this case.



A new visitor information installation in Kimba, SA – a fine example of quality design and excellent / appealing presentation

While it is not within the Brief of this project to fully analyse visitation numbers or the reasons behind them, this information does appear to point to some significant challenges as the Shire of Dundas seeks to transition away from an economy based on mining to one based on tourism. This report contains recommendations and projects that might go a long way toward alleviating issues under the first item noted above, by providing the planning framework for the development of additional (quality) attractions in the area. It also contains some preliminary surface-level thoughts about item #2 above, under the heading “Marketing Norseman / Dundas”. However, the Shire may wish to consider contracting specialist marketing guidance to better flesh out how it moves forward from here.

Meeting with Professor Steve Hopper, Dec 10, 2015

During the preliminary visit to Norseman early in December 2015 the Shire mentioned that there may be an option to “Partner” with a tertiary institution in establishing the then so-called “Discovery Centre”, due to the presence of self-contained accommodation at the rear of the building. An offer was made to meet with Professor Hopper, head of the Natural Resource Management “Centre of Excellence” at UWA in Albany, as he is a known enthusiast of the woodlands landscape (and granite outcrops in particular), and is vastly experienced in the academic research world.

The notes from this meeting are placed here in the introductory section of the Report as they contain useful information pertaining to the whole broader visitor site enhancement project, rather than being specifically related to the Centre concept.

- Interpretive centres are hard to make work – most fail after a few years as they are financially unsustainable. Those that do work offer more than one experience – a café, shop, gallery, tourist information centre and/or government office for example. The issue with this is that the Shire may not want to install uses which would take trade from existing local businesses, so the mix needs careful thought.
- Any such centre would need to offer a significantly strong experience to make an “inside” experience worthwhile when visitors may be mostly focused on being outside, in the natural environment.
- Partnering with a research organisation may be challenging as research funding is always uncertain, and often cyclical – therefore tenure and involvement is not certain to be full-time and ongoing.
- Living facilities for researchers only need to be quite basic, and would quite probably be used if they were available, but should not necessarily be seen to be an ongoing source of funding. In many cases the researchers may want to be camped out at the research site, not in town anyway.

- Developing the Ngadju connection would appear to be a stronger option, especially if this could involve true cross-cultural learning – and some legitimate research projects as well.
- Indigenous tourism / cultural tourism works best when it has strong logistical support – this is where the Centre could play a very useful role, and the two could work together quite effectively.
- Prof. Hopper is keen to undertake some research around Ngadju culture and life on and around the rock outcrops.
- Four potential positives could come from Ngadju / indigenous engagement:
 - It encourages and assists the older generation to pass knowledge on to the younger;
 - It meets a growing need in the tourism sector for indigenous culture - a particular sub-sector of which is the “experience economy”. Visitors want to do more than just read a brochure or buy a product - they want to meet the maker / grower / artist. In terms of Indigenous tourism, they want to have contact with aboriginal people, hear their stories, be able to ask them questions and make a real and memorable connection with their culture;
 - It has the potential to capture and conserve a significant bank of knowledge of the country, landscape, plants and seasons. This knowledge has the potential to inform the management of the environment as well as add to the understanding of specific plants and landforms. Recording this knowledge is becoming critical as Ngadju elders die, sometimes without having had the opportunity to pass on their understanding of the country;
 - It has the potential to create employment (outside the mining industry) in a way that enables Ngadju people to continue their connection to the country, and have an ongoing role in its management and promotion as a special and unique asset for the Shire. Sometimes in the past, indigenous knowledge has been collected and translated into publications, which sit on bookshelves. The opportunity in Dundas is for the knowledge to be collected, recorded and then applied day-to-day in land management and visitor experiences – and this is something which could bring significant benefits to the Ngadju and wider community.

SECTION 2: NATURAL AND CULTURAL ASSETS

Enhancing a district or region's visitor attractions necessarily requires a clear understanding of those assets which may be of appeal to potential visitors. It also requires a recognition of the likely interests of those visitors: will they be looking for / expecting primarily natural attractions? Or may they also (or instead) be mainly interested in historical – or cultural – sites and stories?

The Shire's natural assets

The Visitor Centre website has a page headed "Nature" – this provides the following information:

Norseman is surrounded by beautiful, unique, eucalypt woodlands and numerous outcrops of granite. Many of the flora species are considered to be rare and some trees are endemic to this area. The granite formations are extremely old geologically and cover large areas.

The woodlands are full of adventure tracks for 4 wheel drive enthusiasts and also provide challenging walks for the energetic traveller. Alternatively there are wonderful picnic/camping spots at the granite outcrops with stunning views rewarding those who make the effort to climb a little or a lot. During the spring months the bush comes alive with colour and flowers making it a delight to spend time exploring and communing with nature. Add to this the spectacular ancient salt lakes that were once vast river systems resulting from the melting ice that covered the earth in a much earlier age. The largest of these is Lake Cowan which extends some 6.5km south of Norseman and 120km North. On occasion the lakes hold water, usually following heavy rain, but mostly are dry. They provide stunning images when combined with the beautiful sunsets that Norseman often enjoys.

For a more extended description of the natural landscapes surrounding Norseman and within the broader boundaries of the Shire it is worth turning to the report that was primarily responsible for bringing attention to the Great Western Woodlands. This document, titled "The Extraordinary Nature of the Great Western Woodlands" was prepared for The Wilderness Society in 2008, and the Executive Summary describes the area thus:

The Great Western Woodlands contains the largest and healthiest temperate woodland remaining on Earth. The region covers almost 16 million hectares, 160,000 square kilometres, from the southern edge of the Western Australian Wheatbelt to the pastoral lands of the mulga country in the north, the inland deserts to the northeast, and the treeless Nullarbor Plain to the east. This is a vast area, nearly three times as large as Tasmania.

Landscapes with similar climates and geography in South America, North America, Africa and Europe have all experienced a heavy human footprint. Almost all of their original vegetation has been replaced with agriculture and urban sprawl, and the remnants heavily logged for timber and firewood or overgrazed by cattle, sheep and goats. Similar ecosystems in other areas of south-western and eastern Australia have also been cleared for agriculture. In contrast, the Great Western Woodlands remains relatively unspoilt, making the region of both national and international significance.



The Great Western Woodlands is full of marvellous contrasts and striking, unexpected views

This huge area of eucalypt woodlands, open bushland with scattered trees, is intermixed with thicker eucalypt mallee, low shrublands, and grasslands. The exceptional plant diversity within these vegetation types, with over 3000 species being recorded to date, is one of the primary reasons for the region's conservation significance and why the entire region should be considered a biodiversity hotspot. Across the landscape, these species change rapidly, many occurring only in localised areas. This creates a mosaic of ecological communities throughout the region.

The Woodlands' diversity has evolved in a landscape with an unbroken biological lineage stretching back some 250 million years. Having not experienced mountain building, glacial events, or ocean submergence since that time, these lands have a uniquely continuous biological heritage that includes the development of the first flowering plants, the coming and going of dinosaurs, and the appearance of humans. The interplay between the age of the lands, the complexity of the soils, the climate, and isolation from eastern Australia, have all combined to allow the Woodlands' exceptional diversity of species to evolve.

Recent Australian research has highlighted the importance of 'ecological processes' in maintaining these populations of plants and animals, as well as the health of the broader ecosystems in which we all live. As the key interactions and connections between living and non-living systems, these processes include movements of energy, nutrients and species. Hydro-ecology, for example, is the connection of water and wildlife in a landscape. Other important ecological processes include fire, plant productivity, and 'keystone' plants and animals whose presence maintains many other species. Unlike most of southern Australia, these ecological processes remain largely intact in the Great Western Woodlands. Their protection and maintenance is essential to maintaining healthy populations of species, ecosystems, and the human communities they support.

Suffice to say that the Shire of Dundas is blessed with a wealth of natural assets. It encompasses much of the Great Western Woodlands, but spreads beyond to yet more varied and wonderful landscapes. Key features from a visitor's perspective could be said to be (note: not necessarily a comprehensive and complete list):

- ❖ The gorgeous eucalypt woodlands themselves;
- ❖ Numerous often-spectacular granite / rock outcrops;
- ❖ Vast, eerie and beautiful salt lake systems;
- ❖ Isolated peaks with extensive views in all directions;
- ❖ Extensive grasslands and treeless plains, especially in the east;
- ❖ Spectacular and remote sections of the south coast;
- ❖ The sheer diversity of life – especially plant/tree species;
- ❖ Magnificent wildflowers in springtime.

This is rich raw material on which to build a suite of visitor sites / attractions / experiences, and Norseman (and the Shire more widely) should consider itself fortunate: many local government's are far less blessed on this front. The task at hand is to best capitalise on this impressive array of assets.

Cultural / historic assets

Reading the sections headed "History" on the two websites is an interesting exercise in racial / colonial amnesia. Though archaeological evidence indicates that Ngadju (and other aboriginal) people have lived comfortably in this region for tens of thousands of years there is *absolutely no mention* of this ancient and rich cultural world in either site. It is as if the world began in this area with the arrival of white settlers...

The short "History" section on the Visitor Centre website has this to say:

Norseman is very much a part of the historic goldfields with the first discovery of gold in 1892 but because the gold here is located in hard quartz reef and not alluvial, this area did not attract the same number of prospectors as Coolgardie and Kalgoorlie. The first township established was actually Dundas which was approximately 22km south of Norseman, there was also a smaller community established at Princess Royal which was approximately 5km east of Norseman. The discovery of a rich gold reef by Laurie Sinclair in 1894 as a result of his horse 'Norseman' uncovering a piece of gold bearing quartz, caused a town to be established and named in honour of the horse. Since then a rich history of gold mining has developed with numerous mines operating over the years and many ounces of gold being extracted. In November 2002 the current mining company celebrated the extraction of the 5 millionth ounce of gold from the Norseman operation.

One hundred and ten years of gold mining? Is this truly all that Norseman and the Shire have to offer by way of a history? The Shire website is more detailed by far, but no less narrow in its perspective:

The history of Norseman and Dundas begins in the 1840's with the exploration of the South Coast by Edward John Eyre, the naming of the Dundas Hills in 1848 by JS Roe, the establishment in 1864-65 of a sheep station in Esperance by the Dempster brothers from Northam, and the crossing in 1871 of John Forrest from Western Australia into South Australia, which between 1871 and 1880, produced the establishment of sheep stations at Mundrabilla, Fraser Range and Balladonia.

Between 1876 and 1878 the construction of the Overland Telegraph (coastal), from Albany to Adelaide took place, and after its completion the Southern Area was linked with the rest of Australia.

In 1890 Mr Moir of Fanny's Creek found traces of alluvial gold whilst searching for new pastures in the Dundas Hills area, however no further exploration took place until Moir returned in 1892, with a prospecting team. Unfortunately no gold was found. During this time, other prospectors had started to explore the area and in 1892 Messrs Mawson and Kirkpatrick discovered gold in the southern end of the Field and named it the "May Bell". Following this Messrs, Bromley, Mawson and Desjarlis, found a rich outcrop of ore, and named it "Great Dundas". In August 1893 the "Dundas Field" was finally proclaimed. The townsite of Dundas was established with the discovery of another two rich outcrops, which were registered under the one name of "Scotia".

In 1894 Laurie Sinclair, whilst prospecting about 4 miles north of Dundas, discovered a rich gold reef which he named "Norseman". This reef was registered by Sinclair and a man named Allsop on the 13th August 1894. Also registered on the same day was a reef called "Mt Barker" by Messrs, Ramsay, Talbot and Goodliffe.

During its first few years Norseman struggled to establish itself due to Dundas being the major township in the area, however due to the Norseman fields being richer than Dundas, it gradually outgrew the later, and in 1895 was declared a town and in 1896 a Municipality.

In 1895 the first Post Office was opened as well as the West Australian Bank followed by the Commercial Bank of Australia. These two banks were forced to close in 1899, due to the depression, but were replaced by the Union Bank of Australia. In September 1895 the first Doctor arrived and during the first twelve months a tent was used as the hospital.



It is said that "history belongs to the victors" – and while the Shire makes much of its relatively brief European history its far deeper Ngadju story is conspicuous only by its absence

The first newspaper for the area was printed in October 1895 and followed in January 1896 by the first issue of the "Norseman Pioneer". In 1899 the two were forced to amalgamate to form the "Norseman Times", which was circulated bi-weekly. The Norseman Volunteer Fire Brigade was formed in 1898, which brought a water tower and fire hydrants into town.

As Norseman was situated on the edge of the Salt Lakes, water was supplied to town by condensing the lake water. Water was also drawn from Theatre Rocks, Nine Mile Rocks, Kieser's Rocks and Bulldania Rocks. These were rock pools situated east, west and north of the Town. In 1899 a reservoir which held about 3,000,000 gallons of drinking water was completed.

In 1898 there were three churches, the Roman Catholic, Anglican and Wesleyan churches. For sport there was tennis, cricket, croquet and cycling. A recreation area was set aside close to the centre of town.

In 1899 carriage mail was introduced, being carried by Cobb and Co Coaches, as well as the building of the Masonic Hall, which contained a small library. By this time there were five hotels in the town - the "Criterion", the "Commercial", the "Freemason", the "Horseman" and "The Horseman".

In 1901 a brewery and two general stores were built and the magistrate's and wardens court was held on the second Wednesday of the month.

In 1902 another brewery was built with the addition of several batteries, a new dam and two new halls. There were by now five general stores and the recreation area had a bicycle track, cricket pitch and tennis courts. There was also ten miles of water mains to carry water to parts of the municipality.

During this period the Mines were booming, with the hand hauling method of bringing ore to the surface, replaced by a steam hauling plant. Between 1901 and 1903 the population of Norseman declined slightly, due to the discovery of gold five miles north of Norseman. This discovery resulted in the town of Princess Royal. The town was later abandoned in the 1920's.

Norseman was linked up to Coolgardie by the railway in 1909, however the track did not continue to Esperance, so the coaches were still used.

In 1910 a theatre was constructed to seat 600 people, with moving pictures shown by travelling showmen. In 1913 a telephone exchange was introduced and in 1914 golf links were built on the salt lakes and a racecourse was also constructed.

Around this period the production of gold was decreasing rapidly, due to the war and the overworking of reefs and the working out of nearly all of the major mines. This led to the population dropping to around 300 by 1920.

A syndicate of local prospectors was formed to find a new gold reef, and in 1926 the "butterfly" was discovered and the Butterfly Mining Company formed. The years 1928-1932 was the period of the Great Depression, however in 1929 the railroad from Norseman to Esperance was completed.

In 1935 Western Mining came to Norseman which began a new era for the town. Money was put into improving the town and by 1936 the pipe-line from Coolgardie was continued to Norseman. The company also gave the town electricity and with the backing of the company the Roads Board began work on footpaths and roads.

In 1953 an Olympic Swimming Pool was constructed and in 1956 the road to Coolgardie was bituminised.

Today Norseman has a transit population of approximately 1800, all roads are bituminised and it has a substantial shopping area. There is one bank, a daily mail service, four churches, a Junior High School, two hotels, three garages and numerous sporting facilities.

Central Norseman Gold Corporation is the major mining company in town and they have numerous mining operations in the Shire. Resolute Samantha is situated outside of the Shire, but many of their employees live in town. Both companies contribute substantially to many sporting and community groups in the Shire, and we hope that they continue to prosper so that our town will grow and develop. (NB: Four more paragraphs follow, providing the family history of the Sinclair clan...)

The history of Norseman and Dundas begins in the 1840s... Really? Anyone reading this material would likely see the place as being just another two-bit outback mining town trying to make a familiar and common story of its hard-scrabble mining years into something interesting. While there is no denying that many visitors have at least a passing interest in this aspect of a place's story, promoting the Shire in this way places severe limitations on visitor expectations.

Yes, there is value in presenting – and further developing – the European history of the Shire. However in doing so it is important to realise that *this* aspect of the Shire's cultural assets is far broader than just mining. East of town is a rich field of pastoral stories, while the traverses of a number of early explorers make for fertile pickings that have at this point barely been touched. Then there is the whole woodline story, which, while centred on Kalgoorlie-Boulder also extended significantly into the Shire's domain. Even the history of the Eyre Highway itself, and the many (often crazy) adventures that early travellers experienced in crossing the continent could be mined for entertaining interpretive material that could encourage visitors to view Norseman and the Shire in a more positive light – and, hopefully, stay and spend money here.

Having said that, the cultural assets of Norseman and the Shire are far richer than has been presented in the two primary sources of information offered to potential visitors, and key to building on these potential riches is the acceptance of the pre-white settler history of the place.

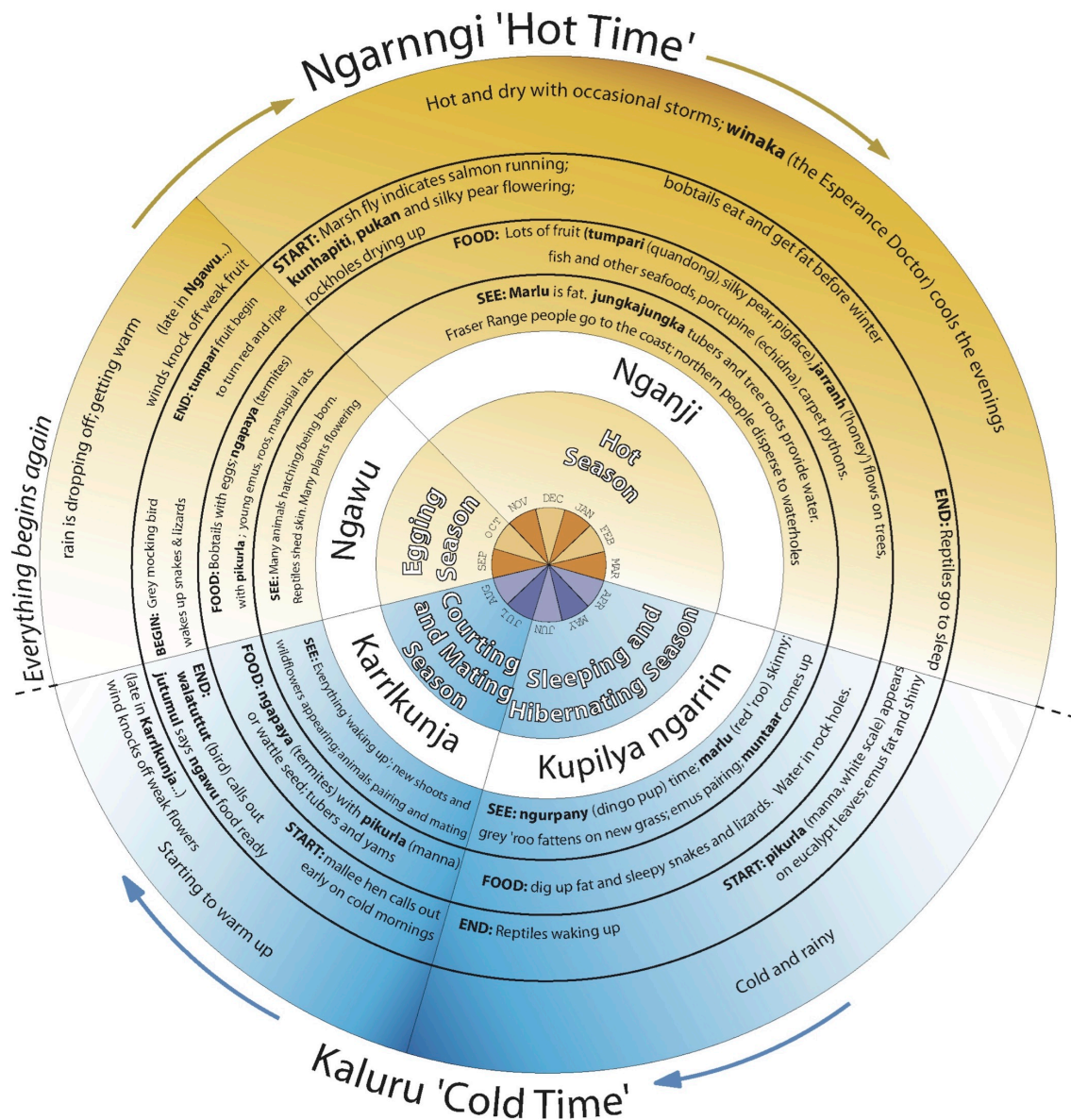
Ngadju culture, knowledge and language: priceless assets

Research has shown time and again that there is a substantial unmet desire for an understanding – and perhaps even an experience – of indigenous culture among the widest array of travellers in Australia. With a significant and empowered Ngadju community the Shire of Dundas is well placed to tap into this unmet demand – if it has the vision, leadership and patience to fully engage with its indigenous residents, past and present.

The recent settlement of the Ngadju Native Title Claim and the concomitant development of formal representative bodies which, in time to come, will have access to significant funding appears to present an excellent opportunity for the development of partnerships which could benefit the Shire and the community of Norseman far more broadly than just in the field of tourism. Building a strong and open acknowledgement of Ngadju *connection to country* has the potential to positively impact all manner of social situations – and to feed into the projects outlined in this report with what could well be fruitful outcomes for all concerned.

One relatively simple way in which the Shire could begin building connections would be to embark on a process of co-naming geographical features and places across the Shire. A fine illustration of this can be seen in work being undertaken widely across Western Australia by DPaW, with many new National Parks maps carrying both indigenous and white names for key features. For example, Peak Charles, often promoted in Norseman's publicity material, is now also known as *Karrukarrunya* – and this immediately establishes the fact that Ngadju people knew, visited and camped at and around the place long before JS Roe struggled through the scrub to its foot in 1849.

While clearly establishing agreed Ngadju names may take some effort, the work already being done to capture Ngadju language should help significantly. Another relatively simple opportunity for co-naming could be in ascertaining and promoting the indigenous names for common tree species found in the woodlands around the Shire. This idea is given more detail later in this Report.



Note: Timing of Ngadju seasons in terms of European months are approximations

*The finely-tuned Ngadju seasonal calendar, courtesy "A Calendar of Ngadju Seasonal Knowledge",
Suzanne Prober & Michael O'Connor, CSIRO*

In recent years local Ngadju people have been engaged in substantial processes of consultation during the preparation of two excellent reports prepared by the CSIRO:

- “A Calendar of Ngadju Seasonal Knowledge” and
- “Ngadju kala: Ngadju fire knowledge and contemporary fire management in the Great Western Woodlands.”

These reports alone offer substantial opportunity for enhancing the visitor experience in and around Norseman, providing of course permission is obtained from the authors and from the Ngadju themselves. But more than that, the processes involved may well have established a very useful body of relevant experience within the Ngadju community – experience that should have delivered a feeling of pride and satisfaction that this generations-old knowledge was (and is) being taken seriously and valued for all that it offers.

The Ngadjumaya Dictionary: An invaluable resource

The Shire (and community) of Dundas is particularly fortunate that in 2008 the Wangka Maya Pilbara Aboriginal Language Centre received funding to produce the Ngadjumaya Dictionary. Updated a year later, this document is largely drawn from the work of the remarkable linguist, Carl Georg von Brandenstein who, in the 1970s and 80s, recorded a substantial portion of the Ngadju language (at a time when fluent language speakers were still alive).

Given that it is now thought that as few as 10 people may have still have “substantial knowledge of the language”, this dictionary is a repository of extraordinary value. Not only does it provide potential raw resources for incorporation into many aspects of the projects outlined here-in, but it can anchor the excellent work being undertaken through the local Norseman school to develop the knowledge and use of *Ngadjumaya* among younger people in the community, thereby assisting greatly in keeping the broader culture alive and healthy. Anthropologists the world over agree that in most cases *the loss of language leads to a terminal loss of culture* – and this would be tragic for the Ngadju people and the wider Shire community.

This Report recommends a substantial number of projects that have the potential to utilise *Ngadjumaya* in addition to English and the dictionary guarantees that where local people are unable to provide words for use in specific situations (or have difficulty agreeing the spelling of those words) there is a back-stop resource that can be used to ensure opportunities for using the Ngadju language are not lost.

Some examples of individual words that may be of relevance and use are as follows:

Places

<i>Warrkaninya</i>	Afghan Rock
<i>Jirtaljiirtalpur Puri</i>	Balladonia district
<i>Kulerinya</i>	Newman's Rock
<i>Karrukarrunya</i>	Peak Charles
<i>Warrayangu</i>	Salmon Gums (place)
<i>Wiljinya</i>	Woolanyer Hill

Animals

<i>Murun</i>	Bardi grub
<i>Waa or waajika</i>	Crow
<i>Ngurpany</i>	Dingo
<i>Kulypirr</i>	Grey kangaroo
<i>Jilkamarta</i>	Echidna
<i>Panjo</i>	Scrub turkey (bustard)

Artefacts / objects

<i>Yarlu</i>	Bark dish
<i>Yuwarra</i>	Bitumen road
<i>Waamu</i>	Camp
<i>Kaarpa</i>	House (white man's)
<i>Puri</i>	Mountain range
<i>Jalir</i>	Split stone
<i>Mijalkarru</i>	Well

Birds

<i>Ngolya</i>	Black cockatoo
<i>Ilkari</i>	Duck
<i>Yarta</i>	Eagle
<i>Jula, thula or ngalpu</i>	Emu
<i>Kurrrpartu</i>	Magpie
<i>Pirlpan</i>	Ring-necked parrot
<i>Jangkal</i>	Wattlebird (red)

The elements / landscape /earth

<i>Nganka / ngannga</i>	Cliff
<i>Mijal / mijarr</i>	Cloud
<i>Purilkata</i>	Stony country
<i>Kaya</i>	Fire
<i>Yimgkal</i>	Granite
<i>Ngaparu</i>	Salt lake
<i>Jukulu</i>	Rock hole
<i>Nganji wilur</i>	Hot season
<i>Kutanya</i>	Thunder
<i>Jurrkaamu</i>	Southerly wind

Food, drink, cooking, fire

<i>Kujurru</i>	Ashes
<i>Walu</i>	Billy can
<i>Ngarlku</i>	Consume or eat
<i>Kunkulja</i>	Drink
<i>Warrama</i>	Food
<i>Jarran</i>	Native honey
<i>Yakupiyan</i>	Quandong tree
<i>Kalapuya</i>	Smoke
<i>Kalaja or karla</i>	Set fire
<i>Tangka</i>	Well done (meat)

Plants

<i>Intal</i>	Branch of tree
<i>Turrkuny</i>	Blue salt bush
<i>Ngartanyiru</i>	Flower
<i>Jilya</i>	Greenery
<i>Nalari</i>	Gum tree
<i>Ngarta or ngartha</i>	Tree

Reptiles and snakes

<i>Yarlun</i>	Death adder
<i>Pula</i>	Carpet snake
<i>Kaaluny or kalya</i>	Racehorse goanna
<i>Yuma</i>	Blue-tongue lizard
<i>Kamtarrka</i>	Salamander
<i>Mamgkan</i>	Tiger snake

Time

<i>Ngulaanjarra</i>	Late afternoon
<i>Panngarta</i>	Daylight
<i>Ngapujaa</i>	Distant future
<i>Jungin or jungun</i>	Night
<i>Kankaa or kumpa</i>	Recent past
<i>Ngalaan</i>	Sundown

Vocalising and thought

<i>Tukurmgarrri</i>	Dream
<i>Kuwana</i>	Hear or listen
<i>Warrtu</i>	Quietly
<i>Mayapany</i>	Silent
<i>Junkuji</i>	Talk together
<i>Nyinanangu</i>	Watch

Many (or most) of the words above are nouns, but the dictionary contains fulsome lists of verbs, descriptors, particles, suffixes and more. Given this resource – and the growing interest in (and use of) *Ngadjumaya* in the local community – there should be no reason for not incorporating significant elements of language into the various elements of interpretation and public information.

While the process necessary to engage the Ngadju community in these (and broader) projects could be challenging the Shire is fortunate to already be involved in ongoing interactions via the Ngadju Ranger program – and this too, could be further developed to the mutual benefit of all. Several opportunities for the enhancement of this interaction will be mentioned in later parts of this Report.

In summary: few places in Australia have made the effort to effectively engage with their indigenous people and the cultural assets they hold dear. Those that have have benefited enormously. Norseman would appear to be unusually well placed to enter this elite field, an investment that should see sizable and widespread benefits that would well outweigh the likely costs involved.

SECTION 3: NEW / UPGRADED “ENTRY POINTS”

Norseman is fortunate in its geographical location from a number of perspectives. Firstly, and as has already been acknowledged, it is located at the western end of the Eyre Highway, the primary feeder route for travellers entering or exiting Western Australia. Secondly, it sits at a major north-south and east-west crossroads: the Eyre Highway comes in from the east, the Coolgardie-Esperance Highway runs north-south through the town, and the increasingly popular Hyden-Norseman Road exits to the west.

This geographical good fortune makes it relatively easy to “trap” incoming visitors and provide them with high-quality information that should go some way to persuading them to stay in town (or at least in the Shire) and explore some of the local attractions. While Main Roads WA has previously provided “standard” information bays close to town, the Shire has wisely opted to develop its own new “entry points” at existing (or logical) sites on three of the four of the primary feeder routes.

The intention in developing these sites is to entice a far greater percentage of travellers to stop and view information / interpretation by using locations that have a strong natural appeal in their own right (as distinct from typical information bays which are almost always simply parking areas on the roadside close to town). Here again the town / Shire is fortunate in that appealing natural / cultural sites exist on all three of the target roads leading into Norseman, and each of these is described in the sections that follow.

The fourth of these roads – the Coolgardie-Esperance Highway north of town – also has a prime natural attraction at which it was hoped to construct a major visitor site, this being the Lake Cowan causeway. However, consultation with Main Roads WA has led to this option being removed from the originally proposed suite, and the reasons behind this – and the actions recommended in lieu – are outlined below.

Establishing a Norseman / Dundas “brand”

One of the most valuable opportunities that accrues from the development of these new “entry points” is the chance to establish a “brand” – a look and/or feel – via the use of a unique set of features / infrastructure / colours across a range of sites and locations. Naturally, the locations outlined below – being the first likely stopping point for many coming into Norseman – will play a primary role in this.

There are a number of items that could contribute to establishing the “face” of Norseman at these sites, including:

- ❖ Advance warning and site indicator signage (to be negotiated with MRWA);
- ❖ The shape and style of the main “Welcome to the Shire of Dundas” interpretive shelter and the look and feel of the panels there-in (same shelter and similar information to be used across all these sites);
- ❖ Installation of a set of corrugated iron interpretive “sculptures” based on a different theme for each location (same style as the in-town camels);
- ❖ The standard and style of basic infrastructure such as tables, bins etc;
- ❖ The sheer quality of site design and presentation, which – when compared to the majority of (run-down) visitor sites will alone “brand” the Shire as somewhere *different*.

This concept is fully fleshed out in Section 8: Shire-wide Projects, under the sub-heading “A Dundas Shire signage and infrastructure suite”.

South: Bromus Dam

Site description and current infrastructure

The Shire website describes Bromus Dam in these terms:

This freshwater dam which was constructed in 1925/26, is a magnificent example of early workmanship. The dam was built by the Railways to ensure a reliable supply of water for the early steam trains that plied between Coolgardie and Esperance. Why not take a picnic lunch and enjoy a day exploring the dam and following the pipeline on foot up to the tank.

The site itself is 32 km south of Norseman and 65 km north of Salmon Gums, just off the Coolgardie-Esperance Highway on the west side. Nestled in an attractive eucalypt woodland and easily accessible to all vehicles, it has become a popular and well known free-camping place. It features on many websites catering to the travelling public, especially those frequented by so-called "freedom campers". One example is the site www.caravancaravan.com.au which describes it thus:

- Large camping area with shaded and sunny spots
- Picnic tables, wood BBQs, fire places and bins
- Good mobile phone signal

It scores 4.25 (out of 5) on Trip Advisor and is, not surprisingly, much frequented – and judging by the impact evident around the dam this has been the case for many years.

Air photos show very clearly what is immediately evident on the ground: "braiding" has become a major issue, with tracks pushing out into the bush in all directions (except east, which is curtailed by the Highway). Numerous campsites and tracks have been worn clear by regular usage, and the whole area for some 2-300 metres around is noticeably degraded by this uncontrolled access. Despite there being a number of concrete fire-rings there was evidence of "wild" fireplaces scattered among these campsites. The various bins appeared to be attracting most of the litter, though the absence of a toilet ensured that many clumps of trees and fallen logs hid unwelcome deposits carrying decaying paper flags...



*The Bromus Dam site extends all the way from the dam in the foreground to the rock catchment in the distance, below the horizon.
(Photograph courtesy Lynn Webb)*



*The alarming extent and scale of degradation around the dam is clearly visible in the photo above, and on the previous page. The tree canopy is already dramatically thinned and will become more so as root-compaction takes effect.
(Photograph courtesy Lynn Webb)*

Importantly, this unmanaged use is putting the whole site under pressure and destroying the very assets that attract users: shade, the bush camping experience and privacy between camp sites. In time, the stress of compacted roots from traffic, firewood foraging and wild fires, track and campsite proliferation and quad / trail bike / 4wd "hooning" will see the tree canopy (which is already thinning) diminish further then disappear; leaving an open unshaded plain populated with dead "stags" (trunks) around the dam.

The site is apparently also quite popular with Norseman locals, generally being accessed for a picnic or perhaps a quick overnight camp out. There is evidence of a semi-formal "day use" area having been established on the south side of the dam, though the complete absence of signage leaves visitors to explore and choose whatever site or stopping place they wish.

Current infrastructure includes:

- Concrete picnic tables: 3
- Concrete fire-rings: 3
- Rubbish bins: 5

The historic dam is attractive and interesting, while the rock catchment walls and concrete tank some 800 metres west are also an engaging site – though many who stop at the dam would be unaware of their presence. A simple brochure is available at the Visitor Centre – this provides an excellent history of the place, and should form the basis for a significant enhancement of interpretation, both on-site, and off (websites and Visitor Centre).

Signage on the Highway consists of a somewhat ambiguous "H 300m" advance warning sign to the north and south, and a double-sided "Bromus Dam" chevron opposite the entry point. To fully utilise this site as a primary southern "entry point" these signs will need to be enhanced and made more informative and engaging.

Bromus Dam is potentially a wonderful site – but it requires meaningful management intervention. The only evidence of active management at present is the dense crop of "Quarantine Area" signs that have sprung up around the "moat" that is apparently infested with the noxious weed Noogoora Burr. The works outlined below entail a substantial investment of resources, but the potential pay-off in the short, medium and longer term is significant.

Site plan

An A4-version of the Site Plan appears on the next page. This shows the works proposed below and in the cost tables that follow. An A3-version is included in the Appendices at the back of the Report, and this is significantly easier to read.

Proposed works & costs

The works proposed are designed to turn this into a quality free-camping and interpretive experience – one that will stand the test of time and still provide an enjoyable experience many years into the future. As a key entry point, Bromus Dam should offer a standard of facility that clearly sends a message of welcome to users, and establishes an expectation of *great experiences* in the Shire's other visitor sites (therefore encouraging them to spend longer in the Shire). Key elements include:



The walk along the top of the pipeline from the catchment to the dam passes through pleasant woodland



MRWA have sanctioned large brown and white Advanced Warning signs (with colour logos) on similar projects elsewhere in the state. This size and style of sign is recommended for ALL the Shire's new entry sites

- ❖ Limiting camping and vehicle access to one well-contained area on the south side of the dam;
- ❖ Ripping and encouraging re-seeding on all tracks and cleared areas outside this designated site;
- ❖ Identifying "designated" camping sites via the installation of basic camp infrastructure (tables etc), and enhancing them through quality design and infrastructure so that there is no need for visitors to look elsewhere in the bush for a place to camp;
- ❖ Installing a new and unique "Welcome to Dundas" interpretive shelter and signage near the south wall of the dam;
- ❖ Installing corrugated iron artworks/sculptures depicting creatures or people relevant to the site;
- ❖ Installing a composting toilet halfway between day-use and camping areas;



The rock catchment walls and entry "gate" are beautifully built, and are an attraction in their own right (above)

The walk around the top of the dam wall is also very pleasant, but requires some clearing and repairs to erosion and collapsed rock walls (right)



- ❖ Creating a walk trail along the top of the pipeline leading to the rock catchment area;
- ❖ Installing interpretive signage along this trail and at the rock outcrop and tank;
- ❖ Improving highway signage to alert travellers to the merits of the upgraded site.

The detail of these works – and more – is set out in the table that follows. Cost estimates for each item are provided, based on information provided by the Shire and on current known retail prices (as in early 2016).



Extensive use as a camp site and the absence of necessary facilities results in inappropriate and visually unappealing toilet behaviour (left)



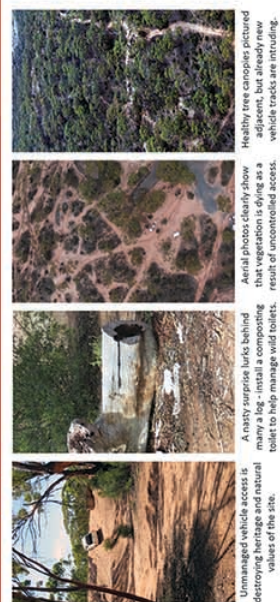
The dam itself, an important heritage site, clearly needs protection from those who have no respect for such things (right)



Larger Site



Camping site detail



Signage Notes

A variety of traffic and environmental management, information, interpretation and 'Welcome to Dundas' signage is needed to enhance the visitors' experience and elicit their support to protect the natural values of the site. Sign locations are numbered on the plan and the numbers correlate to descriptions in the Bromus Dam works and cost table in the full Report.

These plans have been prepared from an informal survey, allow to check all measurements prior to construction. The plans must be read in conjunction with the related section of the Report.

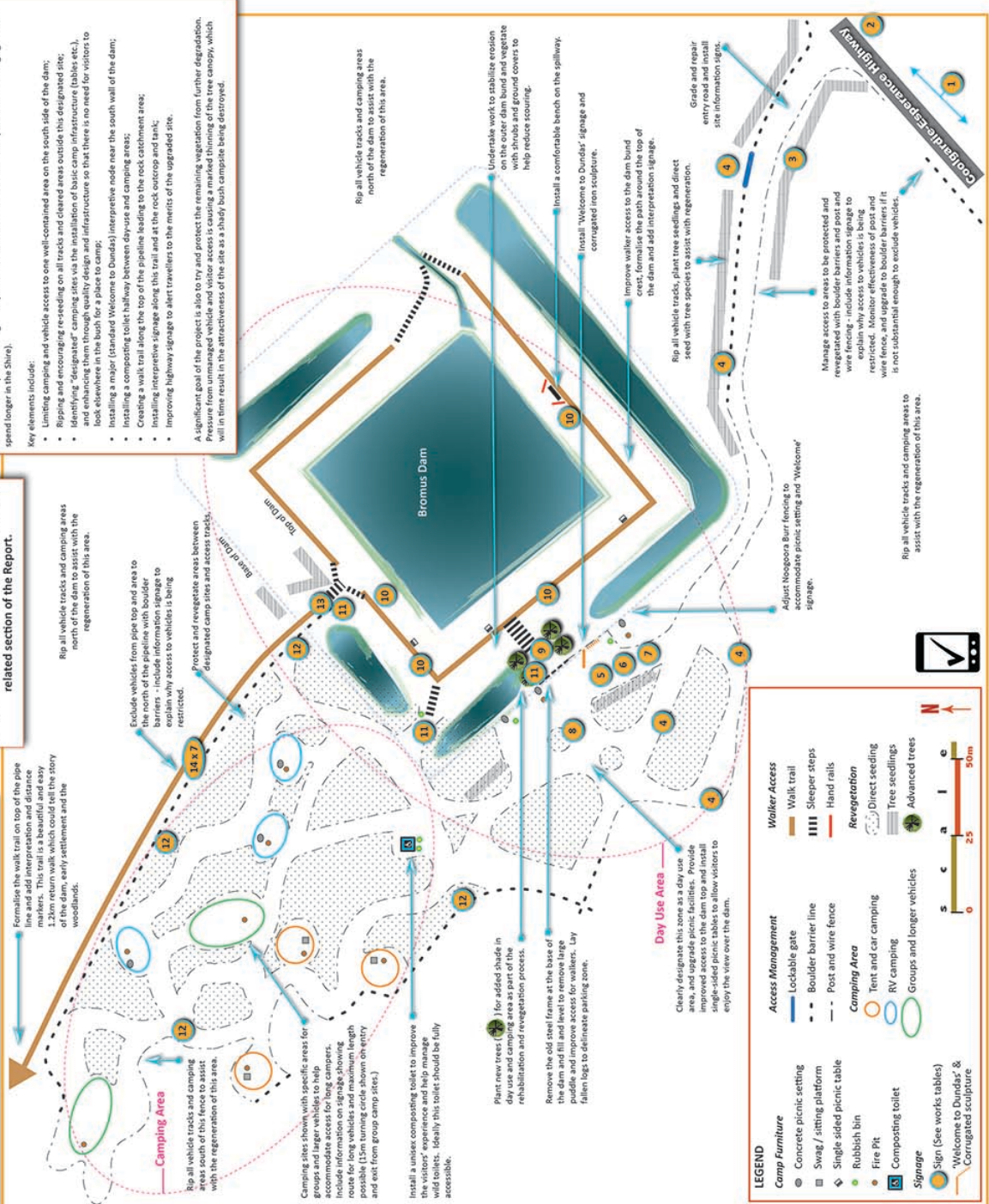
Enhancement Goals

The works proposed are designed to turn this into a quality free-camping and interpretive experience – one that will stand the test of time and still provide an enjoyable experience many years into the future. As a key entry point, Bromus Dam should offer a standard of facility that clearly sends a message of welcome to users, and provides an experience of great experiences in the Shire's other visitor sites (therefore encouraging them to spend longer in the Shire).

Key elements include:

- Limiting camping and vehicle access to one well-contained area on the south side of the dam;
- Rippling and encouraging re-seeding on all tracks and cleared areas outside this designated site;
- Identifying 'designated' camping sites via the installation of basic camp infrastructure (tables etc.), and enhancing them through quality design and infrastructure so that there is no need for visitors to look elsewhere in the bush for a place to camp;
- Installing a major (standard Welcome to Dundas) interpretive node near the south wall of the dam;
- Installing a composting toilet halfway between day-use and camping areas;
- Creating a walk trail along the top of the pipeline leading to the rock catchment area;
- Installing interpretive signage along this trail and at the rock outcrop and tank;
- Improving highway signage to alert travellers to the merits of the upgraded site.

A significant goal of the project is also to try and protect the remaining vegetation from further degradation. Pressure from unmanaged vehicle and visitor access is causing a marked thinning of the tree canopy, which will in time result in the attractiveness of the site as a shady bush campsite being destroyed.



Detailed Site Plan

Bromus Dam Visitor Facility Enhancement Plan

Notes re costs below:

- The "Total" figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- The "Sign #" column refers to annotations on the Site Plan showing locations of signage;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

Item / Action	Plan # (signs) or size	Item \$	Labour \$	Total \$
<u>Whole site</u>				
Refine and finalise site set-out – bring in specific expertise for 3 days to peg out detailed layout and resolve issues		3600	1200	4800
<u>Turn off Highway / Entry road to site</u>				
Install new large Advance Warning signs 1 km either side of site; include pictograms for camping / picnic facilities / information / toilets / bbq's etc	1	960	280	1240
Install new large chevron style site sign, double-sided (Bromus Dam), at entry road (include pictograms once again)	2	880	180	1060
Gravel and grade entry road to repair stormwater erosion	180 x 5	0	2500	2500
Install post-and-wire barrier to manage vehicle movement, as shown on Site Plan	300 m	0	2000	2000
Install rock barrier to manage vehicle movement, as shown on Site Plan	100 m	0	1800	1800
Install information sign at beginning of entry track: Day Use / Picnic Area 200 metres; Camping Area 350 metres (use pictograms too: brown & white sign)	3	350	120	470
Install management access gate on north side of entry road, to provide access to water at spillway in case of fire needs. Retain track to this access when ripping and revegetating		900	400	1300
<u>Area north of dam and pipeline</u>				
Exclude vehicles as shown on Site Plan: install barriers as described above on entry road (costed above)		0	0	0

Item / Action	Plan # (signs) or size	Item \$	Labour \$	Total \$
Address major erosion damage and drainage issues by grading etc	100 sqm	0	500	500
When item above is complete, rip all vehicle tracks and cleared / parking / camping areas, and promote revegetation. Plant seedlings at strategic points to hasten regrowth and deter unwanted access.	400 sqm	0	2000	2000
Install management signs (2) to explain exclusion and revegetation, to encourage compliance	4	700	280	980
Remove old-style bin from north-west corner of this area		0	100	100
<u>Day-use / Picnic area</u>				
Remove or cover blue metal, re-grade for drainage and gravel where required	200 x 6	0	2800	2800
Remove old-style bin and 4 metal footings adjacent to it		0	200	200
Remove old steel frame / infrastructure at concrete pad near base of main climb to top of bank, then remove old concrete pad and gravel and grade around this site to create a flat puddle-free area. Lay logs (or rocks) across the front of this space to delineate parking zone.		0	1200	1200
Remove low earth bunds beside secondary concrete pad and use this material to fill any unwanted sumps nearby		0	200	200
Install post-and-wire barrier to define boundaries of site, as shown on Site Plan; install log barrier as shown	600 m / 12 m	0	4500	4500
Rip and revegetate all tracks and cleared areas outside the demarcated picnic / day-use area	50 sqm	0	1000	1000
Rock bollard south-west corner as shown on Plan	60 m	0	800	800
Relocate existing picnic table and bbq ring as shown, and relocate two further tables and one more bbq ring from now-closed north side to sites as shown on Plan.		0	300	300
Install 3 new wheelie-bins (in protective enclosures) as shown on Site Plan		3570	450	4020
Lay concrete pad to take new information shelter: 8 x 3 m		1600	800	2400
Install major new Shire of Dundas interpretive shelter: 3 "trees" (as per all new Entry Points) – as per Site Plan (angle shelter so panels face south, away from direct sun)	5	29100	1800	30900

Item / Action	Plan # (signs) or size	Item \$	Labour \$	Total \$
Install new interp panels in main shelter: 2 @ 1800 x 1000; 2 @ 1000 x 1400; 2 @ 400 x 700 – all full-colour polycure		14760	280	15040
Allowance for purchasing artwork and/or photography		2800	0	2800
Install corrugated iron sculptures (possibly brumbies) as shown on Plan	6	12600	1200	13800
Relocate Noogoora Burr fence in area around interp shelter site, to make it less intrusive		200	800	1000
Replace all 7 existing Noogoora Burr signs with a style more fitted to the new site have adequate posts (2 per sign), 5 need new posts to match the two)		3200	980	4180
Install management sign: No camping / Fires only in designated bbq's etc	7	350	140	490
Install management signs (3) to explain exclusion and revegetation, to encourage compliance	4	1050	420	1470
Install directional signage to Camping Area (100 metres) and Toilet (60 metres) – again, use pictograms and a map as well as words	8	290	140	430
Plant trees for future shade as shown on Plan – and wherever reasonably possible		500	300	800
<u>Bromus Dam – dam access and wall-top walkway</u>				
Repair erosion above old pump-house frame, and then install a wide set of sleeper steps leading up from Day Use / Picnic Area to top of bank (from where concrete pad is located) – approximately 25 steps	200 sqm / 25 steps	400	3600	4000
Install large interpretive panel at foot of these steps, describing history of dam (800 x 500 mm etched)	9	2670	240	2910
Install new sign/panel at top of these steps in the corner of the Burr fence line, explaining the problem in detail, and why it is important to keep out (and keep pets/dogs out too): 500 x 300	10	1680	180	1860
Repair erosion around inlet pipe, then install sleeper steps up the bank to the inlet pipe, splitting left and right to pass either side of the pipe at the top (on the bank) – for access onto pipe walk trail and to camping area – approximately 25 steps required	100 sqm / 25 steps	400	3200	3600

Item / Action	Plan # (signs) or size	Item \$	Labour \$	Total \$
Install sleeper steps up the south-west corner of the bank (from Day Use & Camping Areas) – approximately 25 steps required	25 steps	400	1600	2000
Remove fallen branches, prune vegetation, repair stone edge and clear and level the trail around the top of the wall so that it forms a full circuit – but keep maximum width to no more than 1200 mm		300	1000	1300
Install 3 small interpretive panels around wall-top walk trail (500x300 mm etched)	10	5010	480	5490
Install 3 single-sided picnic tables on top of dam wall, as shown in Site Plan (to catch summer shade and winter sun). Path may need to be widened at these points		4800	900	5700
Install warning signs relating to dangers of swimming - possible meningococcal infection etc at all three sets of steps	11	870	360	1230
Install +/- 25 narrow sleeper steps down the steep bund on highway side of "new" outlet channel, and install +/- 15 narrow sleeper steps up dam wall again on the opposite side of the channel – but follow the contour to climb gradually along existing "wear line" to top of wall	25 steps / 15 steps	600	2200	2800
Install handrail / grab-rail either side of old original outlet / overflow in the centre of the south-east wall of dam (to help walkers around it)	2 x 2.5 m	800	600	1400
Install a bench seat in the old spillway, between new handrails		1100	240	1340
Stabilise erosion on outer bank and vegetate with shrubs and ground covers to reduce scouring		350	400	750
<u>Camping area</u>				
<i>Formalise 8 camping areas of different sizes (2 x group/big vehicle, 3 x RV and 3 x tent / swag) aiming for privacy for group and individual campers, also pleasant aspects and improved facilities (see below for itemised detail)</i>		0	0	0
Install rock bollards and/or post-and-wire barriers around the outside perimeter of the overall area, limiting it to approx. 150 x 100 m – to contain caravan and RV camping to a manageable space with good facilities. Rock barrier to run along south side of pipe bund as shown on Plan	350 m rock / 200 m fence	0	6000	6000

Item / Action	Plan # (signs) or size	Item \$	Labour \$	Total \$
Install post-and-wire barriers around vegetation islands to prevent root compaction and allow revegetation (brush / mulch and direct seed where possible)	800 m	0	6000	6000
Install a total of 3 concrete picnic tables, 8 bbq rings (6 new, 2 from north of dam) and 3 swag/sitting platforms (2m x 2m) at various "designated" camping sites as shown, but no bins in this area.	3 tables	5400	600	6000
	6 bbqs	5400	600	6000
	3 platforms	3000	600	3600
Install a ring of logs around the fire pits in the two group sites		0	1500	1500
Install composting toilet between Camping Area and Day Use Area as shown on site plan; install signage so its location is clear.		80000	4000	84000
Install 2 new wheelie-bins (in protective enclosures) immediately outside toilet, as shown on Site Plan		2380	300	2680
Clear up and cut to usable lengths any fallen trees in area – stack wood for use in fire pits. Inspect large dead tree near dam – either "make safe" and retain for habitat, or remove and cut up for wood or sitting logs.		0	800	800
Install "No Camping" and "Revegetation Area" signs around perimeter – allowance for 4 in total	12	1160	480	1640
<u>Dam-to-Tank Walk Trail (Pipe top trail: 580 m one way)</u>				
Trail starts at inlet on top of dam wall: install trailhead signage at foot of dam wall (700 x 450 etched)	13	2310	160	2470
Grade pipe-top earth bund with a small dingo to create a reasonably level single-person track +/- 1 metre wide. Some sections will need to be hand-levelled where machine access is not possible, or where pipe is exposed	580 m	0	3000	3000
Prune overhanging vegetation and tree limbs, and remove shrubs / small trees where they intrude into trail alignment		0	300	300
Install sleeper steps down off bund at western (entry "gate") end	8 steps	200	800	1000
Clear and create new walk trail from the steps above to the rock face (about 40 metres), finishing at existing low step-over point in catchment wall		0	400	400

Item / Action	Plan # (signs) or size	Item \$	Labour \$	Total \$
Install 7 small (500x300) interpretive signs along trail – topics: both natural & cultural history of site & surrounds.	14	11690	1120	12810
Attach a small distance marker to the pedestal post of each of the interp panels above (both sides of post, 14 in total)	14	1120	700	1820
Install two 700x450 interp panels at west end – one near gate / entry chute and one on the rock face, describing the catchment scheme. The latter is to be placed so that it is visible from up at the tank	15	4620	320	4940
Install 700x450 interp panel at tank on top of rock	16	2310	160	2470
Sub-totals		216,380	72,510	288,890
Contingency allowance 10%		21,640	7,250	28,890
TOTALS not inc GST		238,020	79,760	317,780

East: Mt Jimberlana

Site description and current infrastructure

The Shire website description of this site is succinct, if not detailed:

Reputed to be one of the oldest geological sites in the world this beautiful granite outcrop is located some 5 kilometres east of Norseman. The climb to the top is well worth the effort with stunning views in every direction your reward for taking up the challenge.

The Visitor Centre website is even more to the point, simply saying:

Large granite outcrop offering spectacular views from the top with a picnic area at the base, located 5km east of town.

Mt Jimberlana (known in some quarters as Jimberlana Hill) is an isolated outlier of the Dundas Hills and, as is mentioned above, provides an outstanding view over a vast area surrounding Norseman. It is immediately south of the Eyre Highway, and is visible from some distance in each direction – making it something of a natural landmark, and therefore an ideal eastern entry point for the town.

It is accessed from an "official" MRWA parking bay beside the Highway, and it takes approximately 15-20 minutes to walk / climb to the summit. There is, however, only an informal walk trail – and this clear "line of desire" route is apparent for most of the distance, courtesy of the many folk who've made the climb in the past. There are no facilities on the summit, though graffiti and a few scattered items of detritus / litter again suggest that the place is well visited.



Mt Jimberlana is clearly visible from the large and unkempt Main Roads parking bay on the south side of the Highway

The parking area is in very poor condition, with a number of random tracks extending southward into the scrub where people over the years have sought to get further off the road. Erosion has taken a toll, with significant flows shedding off the mountain directly through this space. The old 4-wd track pushing part-way up the slope does not help in this case, and is a notable scar on the environment.

The climb ascends from 311 metres at the car park to 395 metres at the summit and, while moderately steep in parts, is not difficult or long at just 530 m each way. Natural rock forms "steps" in many places and the vegetation is low and open enough to allow a generally free passage. The view from the top is indeed "stunning / spectacular", as mentioned in both websites. Having said that, the almost complete absence of shade would distinctly limit the comfortable time that could be spent up on top in warm/hot sunny conditions.

This place is known to have both European and Ngadju significance, and therefore the proposed development / enhancement of the site will require thorough negotiation. The hill sits centrally in a designated Nature Reserve that is managed by the Department of Parks and Wildlife (DPaW), Kalgoorlie Region. The primary reason for this is the presence of the Jimberlana mallee, or *Eucalyptus playdisca*, a species listed as "Vulnerable" by the Federal Government and as "Rare Flora" by the State.

There are only about 200 plants on Mt Jimberlana and a small number more than that on the nearby Mt Norcott. A "Conservation Advice" note was prepared in 2008, and outlines a range of actions required to protect this rare and endangered species. It will be important to ensure that all actions taken on this site are consistent with the intent of this Advice, and this will need to be negotiated with DPaW.

Given the Nature Reserve status, DPaW are only able to permit works that can be considered "necessary operations" within the goal of maintaining the conservation values of the site – and therefore it has been important to try to ensure that the work proposed here fits within these guidelines. Generally speaking, this means that repairing or renovating existing facilities should be acceptable, where those facilities contribute to the preservation and/or interpretation of conservation values. Construction of significant new facilities is generally not permitted, and this is recognised in the scoping of the works outlined below.

From a Ngadju perspective the mountain does not appear to be a registered heritage place, though a site known as Jimberlana Well Camp is lodged with DAA under the "Other Heritage Places" category. This place is north-east of the mountain and does not impact the works recommended here-in. Having said that, it is well known that Mt Jimberlana is an important place to the Ngadju people. One published story associated with the mountain has been found on the ABC Goldfields website – it reads as follows:



Extensive track braiding and vegetation damage emanating from the parking area is visible from the summit (above).

The view from the summit is expansive and glorious (below)





The path (or wear line) up the hill is quite visible in most places (above).

Unfortunately, graffiti now defaces several large rock slabs on the summit (below)



The Ngadju story is that the hill was formed when two brothers walking came from the north. One lay down to sleep, and his head became this hill. Mr Rule points out the rocks that form the forehead and the nose, and the shadows that form the beard.

This too, will require careful negotiation – but would also seem to offer significant opportunity for cross-cultural interpretation and story-telling. Indeed, this is a classic opportunity for multi-cultural interpretation, both on the trail and up on the summit – and as many travellers arrive in Norseman from the east establishing this kind of "different" and interesting visitor experience here at the eastern entry point could have a significant impact in persuading people that this is a place at which it is worth spending time.

Given reasonable conditions and the type of upgrade proposed here, the walk to the summit would likely become a 1 to 2-hour experience for most people. Sunrise and sunset would be particularly enjoyable, and an opportunity may arise for a local operator (perhaps the Ngadju community) to lead guided walks at these times. Further, it is likely that local residents would utilise the outcomes of the proposed upgrade too, as the summit is well-known as a pleasant place to enjoy a cool drink while watching the sun go down. All of these activities would be more appropriate in the Nature Reserve if the facilities were renovated to encourage respect for and understanding of this special place.

Current infrastructure is limited to:

- Formal MRWA parking area with standard signage (gravel surface in poor condition);
- Rubbish bins and concrete picnic table (inappropriately located);
- Informal walk trail to summit via north-west slope and spine.

The condition of this parking bay and its surrounds was a disgrace at both field visits (January and April). Substantial quantities of litter lay strewn around, extending well back into the vegetation on all fronts. This included the usual traveller rubbish (bottles, cans, wrappers etc), car parts and tyres, what appeared to be household/business rubbish, and an alarming display of poor toileting procedures. The intensity of this despoiling significantly

detracted from the appeal of the site, and spoke loudly of a severe lack of maintenance.

It is imperative that the Shire negotiate a more effective maintenance program with MRWA *immediately* – and in particular, before any new works are undertaken. If Main Roads cannot guarantee to keep the place clean then the Shire should negotiate a contract to do so itself.

Site plan

An A4-version of the Site Plan follows on the next page, while an A3-version can be found in the Appendices.

Enhancement Goals:

- ~ Create a more attractive eastern entry to Norseman;
- ~ Promote the site and the wider Dundas Shire attractions and facilities;
- ~ Address significant degradation of the natural values of the site;
- ~ Manage illegal camping, and
- ~ Provide enhanced facilities for travellers and walkers.



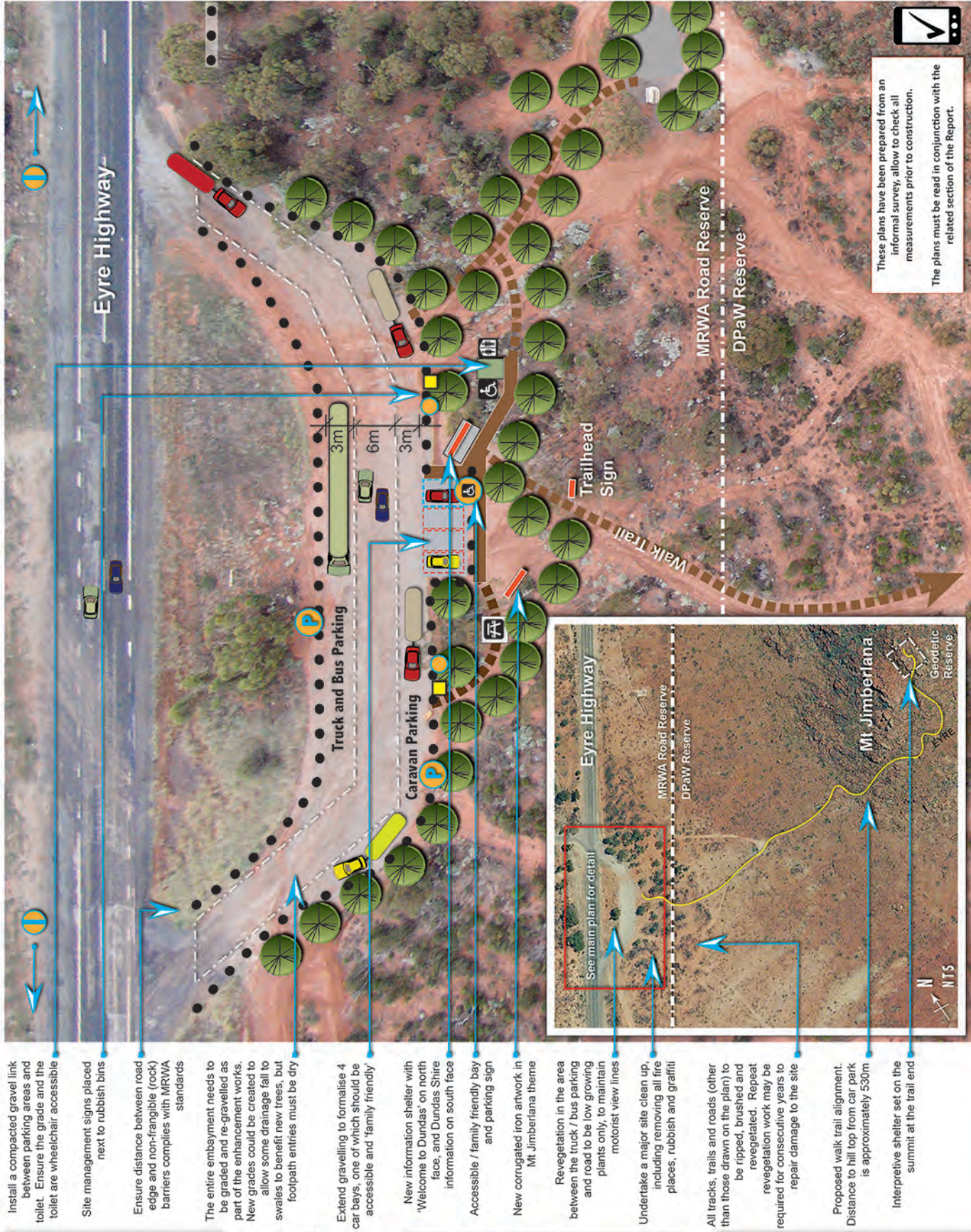
Protect all existing shade trees and their roots during the construction and installation of new structures.



New picnic table to be set in the shade of the existing tree.

LEGEND

- New picnic setting
- Rock boulder barrier line
- Parking / Management sign
- Highway signs (see Report works table)
- Rubbish bin
- New shade tree (advanced stock)



Proposed works & costs

Works proposed for Mt Jimberlana fall broadly into two categories: renovating the parking area (and restricting its spread) and formalising the existing walk trail / installing interpretation. As the parking area is an official MRWA roadside stopping place the site works required here should be the responsibility of that agency (as was outlined by the Regional Network Manager at a January meeting). Elements of the works that fall into this sphere are clearly indicated in the table below.



The trail component of this site is within the "Jimberlana Hill Nature Reserve" – and will require negotiation with DPaW

In setting out these proposed works it is acknowledged that a key component – the walk trail – falls within the Mt Jimberlana Nature Reserve. Therefore, this work will need to be negotiated and finalised with the Esperance District Office of DPaW, and recommendations made in this Report may need to be modified accordingly. The same may be true for the summit shelter/interpretation structure, however it could well be sited in a small rectangular reserve on the flat peak of the hill that is excised from the Nature Reserve and is vested with "WA Land Information Authority" (now Landgate) for the purpose of a "Geodetic Station". The most appropriate placement of this structure and its associated interpretive signage will need to be discussed with both agencies prior to final resolution.

It is also important that all parties understand that there is no expectation of funding flowing from DPaW as the enhancements proposed here are part of the Shire's visitor site development project, and are to be funded by the Shire. DPaW may nevertheless wish to contribute to the interpretation of the Nature Reserve, and to the information provided on management signs.

There is an excellent opportunity for the Ngadju Ranger team to be involved in many aspects of the work at this site, especially in trail construction, the removal of graffiti and the development and installation of interpretation (with guidance from the Elders).

With regard to the removal of graffiti, it is now known that the Department of Aboriginal Affairs has run training courses for this activity, and that funding may be available from the Department for the same – and for the necessary equipment to undertake this work. This could present a specific opportunity for the Ranger program, and should be followed up as a matter of priority. Information on a similar project / process can be found at: <http://www.daa.wa.gov.au/about-the-department/news/daas-preserving-our-aboriginal-site-grants-program/?epieditmode=true>

Key works proposed for the whole Mt Jimberlana project include:

- ❖ Resurfacing the main parking area and installing bollards to prevent unwanted spread;
- ❖ Ripping and encouraging re-seeding on all tracks and cleared areas outside this designated site;
- ❖ Installing the "standard" Welcome to Dundas" interpretive node / shelter in parking area;
- ❖ Installing corrugated iron interpretive sculptures in parking area;
- ❖ Interpreting the core values of the Nature Reserve and installing signage to ensure they are respected;
- ❖ Renovating, formalising and interpreting the walk trail to the peak;
- ❖ Installing a simple low-key shade shelter and interpretation on the summit (out of sight from road).

The detail of these works – and more – is set out in the table that follows. Cost estimates for each item are provided, based on information provided by the Shire and on current known retail prices (as in early 2016).

Notes re costs below:

- The "Total" figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

Item / Action	Item \$	Labour \$	Total \$
<u>Whole site</u>			
Resolve specific permissions and planning issues with DPaW and MRWA (allowance to cover North Entry Point too, re Main Roads)	5,000	0	5,000
Undertake detailed consultation with Ngadju people re stories to be told and any other matters relevant to site	6000	1000	7000
<u>Parking area / main information node</u>			
Install 2 new large brown & white Advance Warning signs 1 km either side of site, with pictograms	960	280	1240
Install 2 new large chevron style site signs (Mt Jimberlana), single-sided – one at each entry to parking area	880	280	1160
Grade and gravel parking area, create car parking node as shown on Plan, and remedy drainage & erosion issues	0	6000	6000
Install rock bollard barrier to limit vehicle access and parking to the area shown on the Site Plan	0	2800	2800
Rip and revegetate all old tracks and parking areas outside the new designated vehicle access zone; plant saltbush seedlings immediately outside retained parking area.	0	1600	1600
Plant advanced tree stock protected by rock bollard line as shown on Plan	900	400	1300
Lay concrete pad to take new information shelter: 8 x 3 m	1600	800	2400
Install new large Shire of Dundas interpretive shelter (3 "trees"), facing south as shown on Site Plan.	29100	1800	30900
Install new interp panels in main shelter: 2 @ 1800 x 1000; 2 @ 1000 x 1400; 2 @ 400 x 700 – all full-colour polycure	14760	280	15040

Item / Action	Item \$	Labour \$	Total \$
Install "Welcome to the Shire of Dundas" signs on the north side of the new information shelter	3240	240	3480
Allowance for purchasing artwork and/or photography	2800	0	2800
Install corrugated iron interpretive sculpture as shown on Plan (to be visible from road)	18000	1500	19500
Install disabled-access composting toilet as shown on Plan, with compacted gravel pathway from parking area	80000	4000	84000
Retain picnic table in shaded area under tree to south-east of site, but remove concrete bbq ring entirely	0	100	100
Install new concrete picnic table under tree by south edge of site, as shown on Plan	2000	240	2240
Install trailhead sign under tree by commencement of walk	2440	320	2760
Install "truck parking" signs along north edge of bay, and "caravan parking" signs toward west end on south side of bay	580	240	820
Install management signage next to rubbish bins: no camping / no fires / etc (but try to not make it too negative and unwelcoming)	350	140	490
Collect and remove all litter from in and around site: 3 men. 2 days	0	2100	2100
<u>Walk trail (530 metres one way) and summit</u>			
Repair eroded section immediately after leaving parking area, and resolve drainage issues	0	3000	3000
Repair / renovate old trail – but keep it simple, narrow and natural in the landscape. Will largely involve moving rocks, pruning some vegetation, and creating a small number of rock steps	1200	7000	8200
Install simple low-key trail markers along route to ensure visitors stay to designated track and do not stray into sensitive N. R. areas (8)	1120	960	2080
Install 4 small (400x300) interpretive panels on trail, to explain aspects of the Nature Reserve and/or Ngadju culture	6280	720	7000
Install a simple low-key shade shelter (with seat) on flat rock section of summit. Shelter to face east with west (back) wall providing shade in addition to roof. Important to ensure this structure is not visible from the Highway, hence careful selection of site shown on Plan	3600	1200	4800
Install two long low interpretive panels down at foot-level in front of seat	4360	480	4840
Install interpretive signage on the outside (west wall) of interpretive shelter	4600	320	4920

Item / Action	Item \$	Labour \$	Total \$
Place a QR code on each panel on trail and at shelter, and link this to a web-based audio recording providing either Ngadju stories or more information on the natural environment (NB audio recording or uploading not costed in this budget – separate add-on project)	0	0	0
Install a "Directional Dial" to help visitors orientate themselves both locally and nationally/globally	3240	320	3560
Remove graffiti from rocks on and around summit, especially those visible from the trail, the parking area or the highway. Use "So Safe Blue" (see: www.sosafe.com.au/products/graffiti-remover). See information in Appendix 2	300	800	1100
<u>Existing MRWA information bay about 2 km closer to town</u>			
Replace the "I" symbols on existing signs with "P" for parking (do not want to confuse travellers with two "information bays" so close together)	260	100	360
Sub-totals	193,570	39,020	232,590
Contingency allowance 10%	19,360	3,900	23,260
TOTALS not inc GST	212,930	42,920	255,850

North: MRWA Information Bay

Site description and current infrastructure

The original concept for this site involved establishing a major new visitor attraction / node in the middle of the Lake Cowan causeway, on the south (west) side of the Highway. A key factor behind this idea was the recognition of a public safety issue caused by motorists stopping on the narrow and steeply-sloping verges of the causeway to photograph the beautiful and eerie "moonscape" that is Lake Cowan. The very fact that this was happening regularly suggested a powerful attraction to this unusual and striking landscape – a good reason to establish a safe place for people to stop and absorb / photograph / learn about the lake and its surrounds.

However, Main Roads WA have made it clear that while they are not opposed to this concept they would require substantial roadworks involving extensive slip-lanes (turning pockets) – and that given the nature of the location this would be extremely expensive. In a meeting held at the Shire offices figures in excess of \$2 million were indicated as likely minimum costs, based on similar works elsewhere. Clearly this level of expenditure is not realistic at this time and so it became necessary to consider a range of alternative sites for the northern entry point.

An extended field trip involved exploration of options both north of the lake (including up at the microwave towers) and to the south (tracks extending toward the lake from an existing MRWA parking area). Unfortunately, no viable alternative that gave visitors easy access direct to substantial views over the lake could be found. A key limiting factor was that this site would primarily be established for travellers driving south down the Highway – and therefore any stopping place would need to be on the east side of the road (as turning these visitors across the traffic to a site on the west side would once again involve expensive slip-lanes).

Ultimately it was decided that the best available opportunity to welcome visitors coming from the north would be via a significantly-enhanced version of the new "standard" information bay which was to be installed by Main Roads (with input from the Shire) some 2 km north of town in the near future. All clearances had already been arranged and funding was committed – and this bay was to proceed regardless of any other option that the Shire might consider, making it the obvious fall-back position.

Two such standard information bays have been constructed in recent years, one south of town and one to the east. While the layout and standard of construction are clearly of a high level, these places lack visitor appeal in their current form. Indeed, one of the smaller projects considered for this Report was to review these existing bays with an eye to possibly making them more useful and attractive. The challenge then for the northern entry point has been to turn this standard framework into something unique and appealing, something that speaks strongly of the "new" Norseman/Dundas, something that warrants the majority of visitors stopping to enjoy the place.

According to MRWA, one of the primary reasons for establishing this bay has been to enable the rationalisation of the many advertising signs spread out along the northern approach to town. This is why information shelters already installed in the southern and eastern bays carry advertising signage for businesses in and around Norseman. Therefore, it has been important to retain this function in the redesign of the bay outlined below.

In order to build consistency across the entry points there is a specific selection of items which must be installed in this new stopping place. These are:

- The "standard" substantial and newly-designed Dundas-specific information shelter, with its suite of "Welcome to Norseman/Dundas" signs;
- A set of corrugated iron sculptures, to "match" the camels in town – and to match those proposed for Bromus Dam and Jimberlana, as outlined above (but naturally depicting a different theme);
- Substantial new landscaping and revegetation in order to make the site more appealing, and more in keeping with the other new entry sites proposed herein;
- New advance warning and site signage, again to match that proposed for the sites already outlined.



The "standard" new information bays constructed south and east of town (east shown above) may be functional but lack the strong visual appeal desired for the Shire's new entry points

Without these elements the whole purpose of developing this suite of enhanced “entry points” begins to break down – and the northern entry is a key point in the process. The site plan that follows shows how these items (and more) could be set out in the standard bay in a fashion that should make it significantly more appealing than might otherwise be the case.

This process has suggested that there is a strong desire among at least one group of visitors to gain access to expansive (and beautiful) views over Lake Cowan. In order to fulfil this desire, it is proposed that the Shire develop a short and simple walk and cycle trail from the Visitor Centre and caravan park to the high bank at the eastern shore of the lake. This project is outlined in brief later in the Report. Further, the enhancement of the Lake Cowan Lookout site on the Hyden-Norseman Road (described below) will enable this to be better promoted as a specific site to visit from town – rather than just a stopping place on the Granite & Woodlands Discovery Trail. It offers marvellous, if slightly distant views over the lake – and will meet some of this unmet desire too.

MRWA Meeting Notes

The following notes were taken during the meeting with the Regional Network Manager, Ammar Mohammed, and the regional project manager, Wayne Marquand, on January 27th:

- All clearances are already in place for the “Northern” info/parking bay, including indigenous;
- This bay is already budgeted and programmed. Stopping work at this point will likely prejudice the Department against future similar projects, and money allocated cannot be put towards something else;
- A new “Policy” is coming into play which will require slip lanes on both approaches at all new “Category B” intersections and entry roads. This policy may also be made retrospective to apply to existing entry roads, but at the moment this is not the case;
- Double slip lanes (one in each direction) can cost between \$1 million and \$2.5 million;
- A MRWA standard parking/information bay costs \$450,000 to \$550,000;
- Need to allow \$1,000 per day for on-site indigenous overseer;
- Proposed North entry information bay will likely have a slip lane / turning pocket on the south bound lane only;
- One of the goals with the new Information Bay is to deal with the scattered and unsightly roadside advertising in the area – so that it can be removed and installed in the new bay instead;
- MRWA will pay for repairs / upgrading of their existing parking / pull-over bays. This would need to go through their “normal processes”. Relevant to existing Jimberlana entry point / parking bay.



The new bay being constructed north of town sits in a reasonably attractive and very typical open saltbush woodland area. Once the bay itself is upgraded this backdrop should assist in making this site the appealing stopping place desired

Site plan

An A4-version of the Site Plan is shown on the next page, while a larger A3-version can be found in the Appendices.

Enhancement Goals:

- ~ Create an attractive northern entry point to the Shire, with a unique Dundas-style information shelter;
- ~ Promote the town of Norseman, and its attractions and facilities;
- ~ Create an avenue for local businesses to provide their contact details, and 'Brand' the Shire with unique art and signage to match other entries.



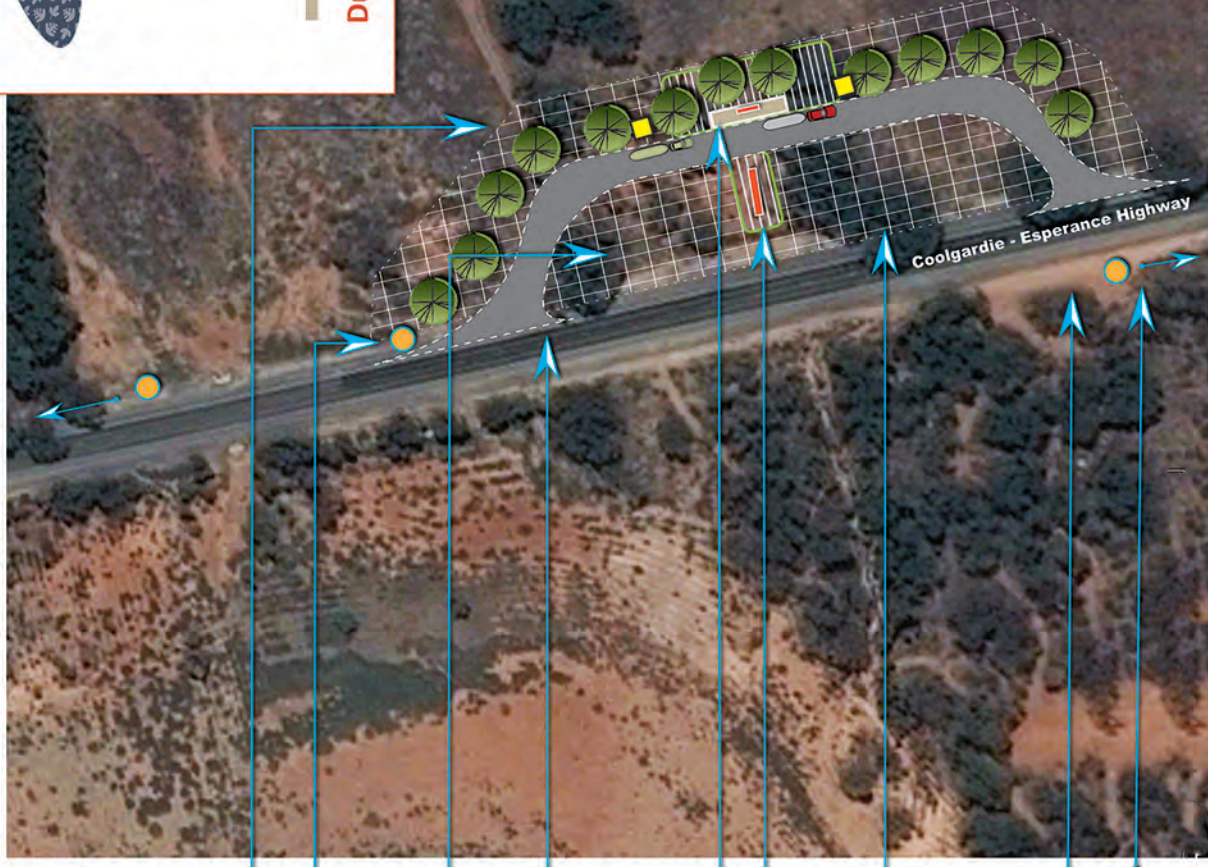
The site has some beautiful established trees.



The artwork will be in a similar style as the camels.

LEGEND

- Road surface under construction
- New shelter pavement
- Revegetation with direct seeding
- Landscaping to signage and art
- New trees (advanced stock)
- Rubbish bin
- Advance warning and site signage



Revegetate the area on the eastern edge of the new information bay with local shrubs and shade tree species

New site entry signage

Revegetate the area between the road and information bay with low growing local species. Remove old fence and any rubbish

Standard MRWA information bay under construction - due for completion May 2016

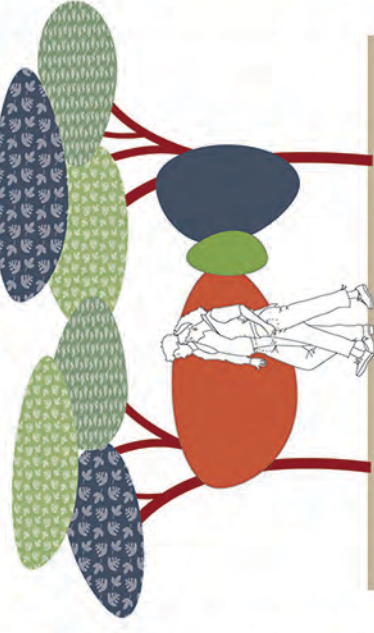
Install new Dundas information shelter (to match shelters at other entry points). Shelter to include a high quality map of Norseman town, with business locations and contact numbers. Business advertising will not be provided elsewhere on the signage

Install corrugated artwork to welcome visitors to the town. Ensure that the artwork is set back from the road edge as per MRWA standards

Undertake any remedial work required to ensure the health of existing trees - remove built up soil from around the trunk, trim torn or broken branches, and treat any disease in gouged trunks

Undertake a general rubbish pick up on both verges around the new bay

New advance warning signage as per Report works table



Dundas-Style Information Shelter Concept

These plans have been prepared from an informal survey, allow to check all measurements prior to construction.

The plans must be read in conjunction with the related section of the Report.

Northern Approach Information Bay Enhancement Plan

Proposed works & costs

As mentioned above, the design and construction of this site will be under the auspices of MRWA. Their drawing for the site is simple and familiar, and has been integrated into the site plan above. As outlined, and as shown in the site plan, the primary works recommended are those designed to make the site more appealing – and to establish it as one of the new suite of entry points that are intended to brand the town and the Shire.

Key works are the three set out with bullet-points under Site Description above. These and others are outlined in the table that follows:

Notes re costs below:

- The "Total" figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

Item / Action	Item \$	Labour \$	Total \$
Install new large Advance Warning sign 1 km north of site (with MRWA approval)	480	140	620
Install new large chevron style site sign, at entry on north side of bay	440	180	620
Lay concrete pad to take new information shelter: 8 x 3 m	1600	800	2400
Install major new Shire of Dundas interpretive shelter: 3 "trees" (as per all new Entry Points). Signage to include large town map with locations and phone numbers of local businesses (in lieu of advertising)	29100	1800	30900
Install new interp panels in main shelter: 2 @ 1800 x 1000; 2 @ 1000 x 1400; 2 @ 400 x 700 – all full-colour polycure	14760	280	15040
Allowance for purchasing artwork and/or photography	2800	0	2800
Install corrugated iron sculptures as shown on Plan	18000	1500	19500
Landscape around information shelter and sculptures to improve appeal of site: install rocks / logs / plants etc	1200	400	1600
Revegetate all bare areas around new bay with local species – but do not plant tall species or trees where they will hide installation from road view	600	300	900
Plant advanced tree stock to improve the aesthetics of the site, as shown on the Plan	600	400	1000
Remove all rubbish from within 100 metres of site, both sides of road	0	300	300

Item / Action	Item \$	Labour \$	Total \$
Remove old post and wire fence	0	200	200
Sub-totals	69,580	6,300	75,880
Contingency allowance 10%	6,960	630	7,590
TOTALS not inc GST	76,540	6,930	83,470

West: Lake Cowan Lookout (Granite & Woodlands site 15)

Site description and current infrastructure

The only mention of this lovely place in either of the websites is two lines on the Shire site, under the generic heading of "Picnic & Camping Spots", where it is described thus:

Just a few kilometres out of Norseman the Lake Cowan Lookout provides the perfect location for a cooked breakfast. Just 7.5km across the salt lake, the lookout has picnic and barbeque facilities.

The brochure/map for the Granite & Woodlands Discovery Trail gives no detail on the site itself, but does wax lyrical about the drive between it and town, under the heading "The moonscape that is Lake Cowan":

The drive across Lake Cowan is a short but fascinating one – resist the urge to rush into (or out of) town, slow down and observe some of the features of an intriguing landscape. In addition to the vast flat expanses of the playas (pans) you will pass through a miniature dune system, made up of wind-driven sand and salt particles, and supporting its own unique collection of hardy shrubs and herbs. You will also pass some remarkable 'islands', formed where a hard rocky crust has resisted erosion for long enough for a mature woodland to be sustained on top. And if you are lucky enough to be passing through after rain you may well be able to spot various species of water bird feeding on the crustaceans hatched from the mud below.

The viewpoint is located on a prominent ridge immediately west of the lake and on the north side of the road. A gravel access track of around 100 metres climbs the back of this ridge, bringing visitors out to a delightful overlook set beneath mature Dundas blackbutt. From here one can see all the way across the lake to the town, with the massive tailings dump and Beacon Hill providing a recognisable and impressive backdrop to this view. While the southern part of the lake is hidden by Cherry Island, the northern part does extend far into the distance, giving an impressive feel for the sheer scale of this ancient watercourse.

Infrastructure installed for the Discovery Trail included:

- Concrete picnic tables and fire-rings;
- Interpretive signage;
- Rubbish bins;
- Advance warning signs (small) 1 km east and west of entry road;
- Fingerboard site sign at entry road.



The Lake Cowan Lookout is already a popular stopping (and camping) place, with useful infrastructure and wonderful views

Physical evidence from the field visit indicates that the place is used as a free-camping site, and some unwanted impact has accrued from this activity. The relatively low level of infrastructure and the absence of management signage may be contributing to the negative aspects of this behaviour.

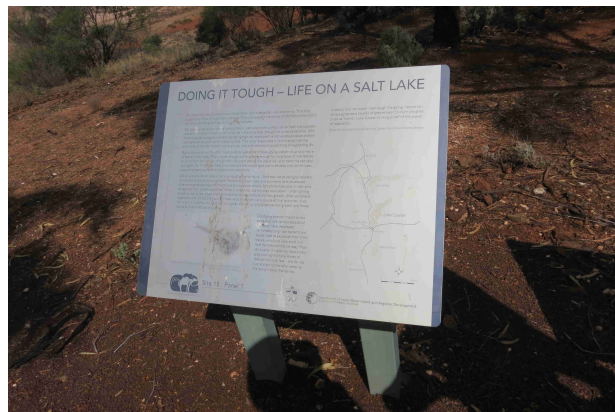
The access track is of good condition, though it may be too steep for some visitors with caravans. Nonetheless, there is a broad gravel area immediately off the main road on which caravans could be parked if drivers felt the hill on the track to the lookout was too steep. From here it would be just a short walk to the viewpoint. Some resurfacing work will be necessary to ensure this place does not degrade over time.

While the Hyden-Norseman Road carries significantly less traffic than the other routes in/out of Norseman, this site is sufficiently appealing to warrant upgrading and enhancement to bring it broadly into line with the three locations outlined above. The view is quite spectacular, especially late in the afternoon / early evening, and promoting this as a fine place to bring a cool drink to enjoy while watching the last light lift from the lake would be well and truly warranted. It would also be a marvellous place from which to watch a full moon rise across the lake – or perhaps a sunrise on a cool winter's morning.



The informal parking area immediately adjacent to the Hyden-Norseman Road will need to be expanded and upgraded to facilitate caravan / large RV parking (above)

Existing interpretive signage has suffered some damage but is still in adequate condition (below)



The site (when upgraded as outlined below) will certainly warrant promotion as a stand-alone attraction – and the existing name is highly appropriate given the discussion regarding the northern entry point and the evident desire for spectacular views across the lake.

Site plan

An A4-version of the Site Plan appears on the following page, while a larger A3-version can be found in the Appendices.

Sadly, one of the mature Dundas blackbutts on site has been chopped down and used for firewood. The remaining stump should be removed and information provided to forewarn visitors to bring their own firewood to the site

Enhancement Goals:

- ~ Create an attractive western entry point with a promotional/interpretive shelter;
- ~ Manage vehicle access, in particular oversized vehicles;
- ~ Improve the picnic area aesthetics, and
- ~ Upgrade approach signage to the site.



The views from the lookout are spectacular.



The saltbush 'island' is an ideal location for corrugated art.



Existing trees need to be protected from root compaction.



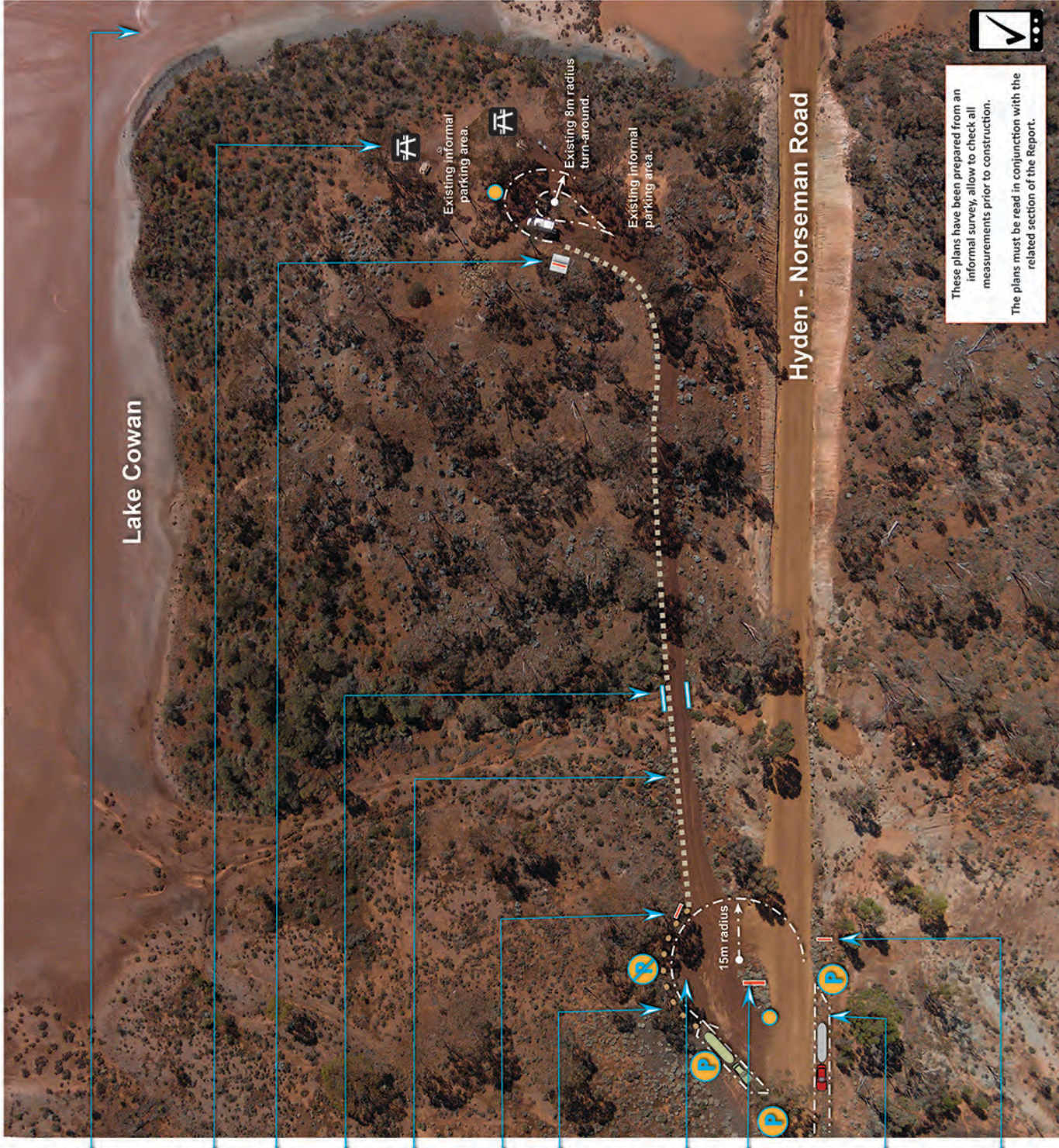
Some grading for caravan parking will be needed.

LEGEND

- Existing picnic setting with fire ring
- Rock boulder barrier
- On-road walk path
- Parking / traffic / management sign
- Stabilized road edge at creek



Lake Cowan



- Install signage at lake edge tracks indicating: 'No access, soft surface' with a suitable pictogram
- Undertake a general clean up, including removing informal fire places, rubbish and ash from concrete fire rings
- New single sided information shelter set between trees
- Grade the access road and repair drainage scouring and erosion at the creekline pipe
- Grade the road edge to provide a walking route for visitors who have parked in the lower car park
- Relocate 'Granite and Woodlands' sign, and add management and traffic signage information
- Protect existing shade trees with rock bollards
- Widen access area at this point to allow caravan turn around. Ensure existing trees are protected and retained
- New corrugated iron artwork in Lake Cowan theme
- Build a new parking area for caravans and over-length vehicles; one or two bays could be constructed. Clearly sign the over-length parking areas so drivers understand to park at the base of the hill
- New double sided chevron site name sign, with facility pictograms. Install advance warning markers as per Report works table

These plans have been prepared from an informal survey, allow to check all measurements prior to construction.

The plans must be read in conjunction with the related section of the Report.

Proposed works & costs

Work required at this site is limited due to the good foundations put down in its development for the Granite & Woodlands Discovery Trail. The major items required here are those that again "brand" this as a key entry point to the Shire and town:

- ❖ The "standard" newly-designed Norseman-specific information shelter, with its suite of "Welcome to Norseman/Dundas" signs;
- ❖ A set of corrugated iron sculptures, to "match" the camels in town – and to match those proposed for the three sites outlined above (but naturally depicting a different theme);
- ❖ New advance warning and site signage, again to match that proposed for the sites already outlined.

All works required are as shown on the Site Plan above, and as set out in the table below:

Notes re costs below:

- The "Total" figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

Item / Action	Item \$	Labour \$	Total \$
Rip and close informal track leading onto lake on north side of Hyden Road just before the climb onto the hill from lake causeway. Install "Do not drive on lake" sign, with warning about recovery costs	240	1600	1840
Replace 2 existing small Advance Warning signs with larger ones to match those used at other "Entry Points" (but ensure the Granite & Woodlands identity remains on new signs too)	960	280	1240
Relocate existing fingerboard into "parking area" at base of entry road, pointing east (up the hill)	0	120	120
Install new large chevron style site sign (Lake Cowan Lookout), double-sided, at entry road	880	180	1060
Construct new caravan parking bay on south side of Hyden Road, just beyond (west of) entrance to main site	0	4500	4500
Install "caravan parking" signs at either end of new parking bay	580	240	820
Grade (and gravel if required) "parking area" at main entrance (north side of road) to enable long caravans to park here and still allow other vehicles to get past. Widen on north edge where possible and line with rock bollards (+/- 30 m)	0	2100	2100

Item / Action	Item \$	Labour \$	Total \$
Install management sign in "parking area": <ul style="list-style-type: none"> • Upper car park not suitable for caravans • RV's / Caravans please park here • Walk to site: XX metres • No camping allowed • BBQ's – please supply own wood Include pictograms for information / picnic tables / viewpoint etc	350	140	490
Grade (and gravel if required) access track to main lookout site; repair erosion as needed	0	1000	1000
Install new blue warning / marker posts either side of creek crossing on access road (costed in Maintenance Review)	200	200	400
Grade (and gravel if required) main lookout turning circle & parking area; limit size of these spaces as shown on plan	0	600	600
Lay concrete pad to take new information shelter: 5 x 3 m	1200	600	1800
Install smaller version of new Dundas-style interpretive shelter: 2 "trees"	19330	1400	20730
Install new interp panels in main shelter: 1 @ 1800 x 1000; 1 @ 1000 x 1400; 1 @ 400 x 700 – all full-colour polycure	7380	200	7580
Allowance for purchasing artwork and/or photography	1400	0	1400
Install corrugated iron sculpture(s) as shown on site plan	6500	800	7300
Install management signs as shown (keep left / no camping / fires only in designated pits)	720	360	1080
Demolish wild fireplaces and clean out ash from BBQ rings (costed in Maintenance Review). Collect all rubbish from site	0	200	200
Clean and sweep table tops & bases; clean interp panels (costed in Maintenance Review)	0	100	100
Add cage tops to rubbish bins to keep rubbish in and birds out	200	200	400
Remove tree stumps where trunks have been cut off; spread out stone piles	0	200	200
Sub-totals	39,940	15,020	54,960
Contingency allowance 10%	3,990	1,500	5,490
TOTALS not inc GST	43,930	16,520	60,450

SECTION 4: WALK AND CYCLE TRAILS

Gypsum Dunes Cycle Trail

Site description and current infrastructure

This project was originally conceived as a walk trail, which was to go north from the Hyden-Norseman Rd crossing of Lake Cowan to some pronounced gypsum dunes visible somewhat less than a kilometre away. From the road it appeared these dunes carried interesting vegetation – and air photos suggested that reaching them via an easy-to-achieve trail should be possible.

Unfortunately, field work did not bear out these predictions. While a small patch of interesting eucalypt and cypress pine were located, the route to get there involved long stretches of unusually soft going – which would have made construction difficult and expensive. Further, this route was of limited interest – and it was not until the primary patch of vegetation was reached that there was either aesthetic appeal or significant interpretive stories. In weighing the cost-benefit ratio of this option it was clear that pursuing such a concept would not be worthwhile.

Further investigation to the south of the Hyden-Norseman Road did, however, indicate strong potential for a simple and pleasant cycle trail – and given that a high percentage of travellers seen in town had bicycle racks on the back of either their vehicles or their caravans, this appeared to offer another valuable attraction / experience to add to the growing collection in around around Norseman.

A close inspection of aerial photography suggested a near ready-made loop involving the Hyden-Norseman Road, existing well-compacted vehicle tracks extending south down the gypsum dune system (through some very interesting vegetation in this case) and then turning back to cross the lake near the south-west end of the airport runway. From there it appeared that existing tracks could be used to take riders past the old speedway track and into the woodlands on the eastern fringe of the lake, passing the cemetery and then the motocross track before re-entering town from the south west.

Field work bore out the functionality of most of this route, with one exception: most of the tracks leading

through the woodland between the speedway track and town were bedevilled by illegal and unsightly dumping of household rubbish. This area appears to have been used as a de-facto tip for some decades, with all manner of items rotting or rusting beneath the trees.



The proposed cycle trail route offers an intriguing array of landscapes, from the ancient gypsum dune section with its gnarled but beautiful callitris (left) to the almost moon-like samphire flats of the lake system (below)





The cemetery is a potentially interesting cultural attraction along the trail route (above)

Widespread dumping of household and industrial rubbish is a blight along existing tracks in the woodland section (below)



Fortunately, this dumping is generally limited to adjacent to the tracks themselves, and there is ample space to create a simple single-track cycle trail through the open woodland well away from this visual blight. Such a trail section (approximately 2.3 km long) would be neither expensive nor difficult to build, and would provide a far more appealing experience than using the existing network of tracks. And setting out to remove the rubbish from any given route is likely to be an onerous task, and notably more expensive than creating a new trail.

This route – clearly shown on the map that follows – offers an outstanding mix of experiences, and showcases some of the Dundas Shire’s most notable landscape features. It incorporates a direct encounter with one of the major salt lakes of the area; it includes a fascinating section through the gypsum dune system with its ancient, gnarled and intriguing cypress pine vegetation, and it finishes with a pleasant ride through typical and attractive open woodland. Along the way it also offers encounters with a number of cultural “stories” from Norseman’s past and present: gypsum mining, the airport (and the Flying Doctor story), the speedway, the cemetery and all the stories to be found there,

the motocross track, and even the hospital which is in close vicinity in the outskirts of town.

The whole loop is just over 14 km long and is largely flat, with just some gentle rolling dips among the dunes and then a single easy climb off the lake to break this pattern. As such it should translate into a ride of 1 to 2 hours for most people, and would not be at all exclusive: the gentle nature of the route should allow both older people and families with children to undertake the outing. Further, it could form a very welcome “fitness ride” for residents of the town, and as such would have benefit beyond just the tourism sphere.

As mentioned, the great majority of the actual “trail” is already in place and would require no work at all. However, there is no existing “infrastructure” as such – no tables, seats, shade shelters, bins etc – but the need for these would be limited in the extreme, and details of recommendations can be found in the Proposed Works section below.

Developing this trail could potentially open up the prospect of a small bike hire business in town, for those visitors not travelling with their own machines. This could be an adjunct to an existing business or a small part-time project for a retired or semi-retired person. Or the service could be provided by the Shire or the Visitor Centre, if the idea was not taken up by a commercial operator. Further into the future it may even be possible for guided rides to be offered, if a person with the right skill set took up this option.

A cycle trail – especially one suited to such a wide cross-section of the public – would add significantly to the breadth of attractions on offer around Norseman, and would help build a sense of this being a welcoming place with much to see and do.

Enhancement Goals:

- ~ Respond to visitor trends and provide an interesting and enjoyable cyclin circuit;
- ~ Provide an avenue for visitors and locals to experience the unique landscape around Norseman, and
- ~ Add to the suite of activities in the Shire to encourage longer visitor stays.

These plans have been prepared from an informal survey, allow to check all measurements prior to construction.
The plans must be read in conjunction with the related section of the Report.



Track notes and trail map

The notes that follow describe the proposed trail route as shown on the map on the preceding page, and give some information about the experience likely to be had. The map will help further clarify what is being recommended. These notes are likely to also form the basis of “track notes” for use in a promotional brochure outlining the trail and helping cyclists find their way around it.

Note: Exactly where this trail starts and finishes will depend on when it is implemented – and where the Visitor Centre is at that point in time. If, for example, it was built immediately then the trailhead (start/finish) should be outside the existing Visitor Centre, with additional trail notes and markers installed accordingly. If, however, the construction of the trail more closely fits in time with the move of the Visitor Centre to the Woodlands Culture and Heritage Centre building, then the trailhead should be either outside that building or diagonally opposite, on Ramsay Street immediately west of the camel roundabout.

The notes below – and the subsequent works list – are written based on this second scenario.

Map #	Km from start	Note / Information / Action
1	0.00	Camels Roundabout: travel west via Ramsey Street to join Mort Harslett Drive, then head out onto Lake Cowan
2	3.77	Left turn down existing gypsum dunes 4wd track. Surface is well compacted. Interp opportunity
3	4.89	Pass ancient and striking <i>Calitris</i> ('Lynn's tree') – interp opportunity?
4	5.19	Reach a 'Y' junction of tracks. Veer right to follow main trail. Left is the proposed “shortcut” for those wanting a lesser overall distance. Shortcut saves 2.42 km
5	6.99	Pass gypsum pit on right – interp opportunity
6	7.18	Turn sharp left along edge of samphire flats / lake – interp opportunity
7	8.38	At junction of tracks turn right to cross samphire flats / lake. Shortcut re-joins trail at this point (from the left).
8	9.5	Veer left around end of airport runway – interp opportunity
9	9.81	Veer left again around runway
10	9.88	Reach junction of tracks on salt pan just south of runway. Turn left
11	10.2	Turn right onto speedway access track – interp opportunity. Remove burnt car bodies and rubbish (route needs to feel 'safe')
12	10.29	Join rim of old speedway track (at north-east end of the old oval circuit). Follow this around to the south east. (NB: red dirt trails from here on)
13	10.45	Turn sharp left off speedway onto track leading up into woodland. Track here is quite washed out in places - need to grade lightly (possibly bobcat or dingo)
14	10.68	Turn left into woodland on existing track: surface is soft and shows signs of

Map #	Km from start	Note / Information / Action
		much trail bike usage from here on. Interp opportunity (NB: commencement of proposed new trail)
15	10.88	Reach north-west corner of cemetery – install a stile over fence. Interp opportunity
16	11.28	Veer left off main trail to follow western motocross track fence alignment
17	11.41	Lots of rubbish dumped in the bush around this section – would need to be removed if using these tracks, but new trail section further west may solve issue
18	11.72	Turn right downhill, and then immediately hard left to re-join main track again
19	12.11	Cross a road and continue straight ahead. (Looks like an old sanitary pit / dump site here)
20	12.44	Keep bearing left
21	12.71	Turn left
22	12.96	Follow track around to the left. This would most likely be the end of the proposed new single-track section (it would re-join from the left)
23	13.29	Reach Talbot Street with footpath to hospital on north side – interp opportunity. Continue straight over and directly ahead
24	13.35	Turn right up older trail/track
25	13.53	Reach Mort Harslett Drive near the corner of Simon Street; turn right
1	14.24	Arrive back at camel roundabout – end of trail

Proposed works & costs

This is a comparatively simple project, especially given its proximity to town and the aesthetic appeal and interpretive interest it offers. Key works could be said to be:

- ❖ Defining and clearing a 2.3 km section of single-track through the woodland south-west of town;
- ❖ Removing burnt-out cars, old tyres and other unsightly items in the vicinity of the speedway track;
- ❖ Installing trail markers and directional signage to clearly define the route;
- ❖ Installing interpretive signage at various locations around the trail.

These works – and all others required to complete the project – are set out in the table below. Again, much of this could be undertaken by the Ngadju Ranger team, if that was felt to be appropriate.

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Interpretive signage has been costed on the basis of being 600x400 mm etched aluminium panels on standard pedestal posts, to broadly match signs installed elsewhere around the Shire. Topics outlined below should be seen to be “Thought-starters” only, with the final array of subjects to be defined during the detailed planning phase. However, sufficient numbers of panels have been allowed for, in order to facilitate responsible budget estimates (10 in total);
- Trail markers are recommended to be 100x150 mm etched plates affixed to galvanised steel SHS posts measuring 100x100 mm, again to broadly match those recommended for trails like Beacon Hill. *Where trail markers are noted for installation between turns they are NOT marked on the map, as these locations will be finalised in the field. These are listed as “NM” (Not Marked) in the first column below;*
- Costs do NOT include GST.

LOCATION Map #	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Whole trail	Write, design and print trail brochure (2 x DL, folded) – or incorporate into Shire-wide trail brochure	3200	0	3200
	Add trail to (new/upgraded) website	2000	0	2000
	Affix distance marker plates to all 10 interp panels	1100	200	1300
1	Camel roundabout: Install trailhead panel with map and route description (800x600 mm)	2780	140	2920
	Install full-colour (Polycure) promotional sign (1500x500 mm)	930	140	1070
NM	Install 5 straight-ahead markers, approx. 750 m apart	700	300	1000
NM	Install “Beware of cyclists on road” signage both east and west of the section on Hyden Road	400	200	600
2	Left turn down existing gypsum dunes 4wd track. Install left-turn directional fingerboard, etched on single low post (turn too critical to use a standard trail marker)	440	100	540
	Install interp panel (Gypsum Dunes)	1830	120	1950
NM	Install 2 straight head markers	280	120	400
3	Pass ancient and striking <i>Calitris</i> (‘Lynn’s tree’) – Install interp panel (if not adjacent to the old tree then somewhere nearby, to tell the <i>Calitris</i> story)	1830	120	1950
4	Reach a ‘Y’ junction of tracks. Install directional signage: right for main trail, left for shortcut (etched, 300x400 mm on single post)	860	120	980

LOCATION Map #	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
NM	Install straight ahead marker mid-way along shortcut	140	60	200
NM	Install 3 straight head markers	420	180	600
NM	Install picnic table in shade (if possible) – location to be defined in the field around 6 km from start	2200	240	2440
5	Pass gypsum pit on right – install interp panel	1830	120	1950
6	Turn sharp left along edge of samphire flats / lake – install left turn trail marker	80	60	140
	Install interp panel – samphire flats environment	1830	120	1950
NM	Install 2 straight ahead markers along this section	280	120	400
7	Junction of tracks. Shortcut re-joins trail at this point (from the left). Install two trail markers on single post (straight, for shortcut, and right for main trail)	220	80	300
NM	Install 2 straight ahead markers along this section	280	120	400
8	Veer left around end of airport runway – install left turn trail marker	140	60	200
	Install interp panel – airport and runway	1830	120	1950
9	Veer left again around runway – install left turn marker	140	60	200
10	Reach junction of tracks on salt pan just south of runway. Install left turn marker	140	60	200
11	Turn right onto speedway access track – install right turn marker	140	60	200
	Remove burnt car bodies and rubbish (route needs to feel 'safe')	0	1500	1500
12	Join rim of old speedway track (at north-east end of the old oval circuit). Install straight ahead marker	140	60	200
	Install interp panel (speedway)	1830	120	1950
13	Turn sharp left off speedway onto track leading up into woodland. Install left turn marker	140	60	200
	Lightly grade washed out sections of track – gravel if needed (possibly bobcat or dingo)	0	300	300
14	Turn left into woodland: commencement of proposed new trail. Install left turn marker	140	60	200

LOCATION Map #	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Utilise specialist skills (when in town for other work) to define and tape new trail alignment for 2.3 km	900	300	1200
	Clear new trail over 2.3 km, using combination of dingo (sensitively used to not create a trench) and/or manual labour with rakes (mainly)	0	2000	2000
	Install interp panel at this junction (Two environments: salt lake, and woodland)	1830	120	1950
	Install trail bike barriers / chicanes at either end and where appropriate along new trail (allowance for 4 in total, final design to be resolved with shire staff)	1200	1200	2400
	Remove rubbish and invasive weeds (prickly pear etc) from viewshed of new trail section	0	1200	1200
	Rip and revegetate old tracks leading to or crossing new trail (where not required for legitimate access)	0	600	600
15	Reach point opposite north-west corner of cemetery – install a short spur trail and a style over fence	200	500	700
	Install interp panel (Cemetery)	1830	120	1950
NM	Install straight ahead marker	140	60	200
NM	Install interp panel (Woodlands trees & vegetation)	1830	120	1950
NM	Install picnic table in shade (if possible) – location to be defined in the field around 11-12 km from start	2200	240	2440
NM	Install trail markers as needed on new trail sections, especially where it crosses existing tracks (6 costed)	840	360	1200
22	Re-join existing tracks (and route shown on map above) – install left turn marker (confirm in field)	140	60	200
23	Reach Talbot Street with footpath to hospital on north side – install straight ahead marker & construct short linking section of trail	140	240	380
	Install interp panel (hospital & health care)	1830	120	1950
24	Turn right up older trail/track – install right turn marker	140	60	200
25	Reach Mort Harslett Drive near the corner of Simon Street; install “return to trailhead” plate on marker post	200	60	260
1	Arrive back at camel roundabout – end of trail	0	0	0

LOCATION Map #	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Sub-totals		41,690	12,480	54,170
Contingency allowance 10%		4170	1250	5420
TOTALS not inc GST		45,860	13,730	59,590

Notes re construction

The following notes are relevant to the proposed new section of trail between points 14 and 22 in the table above:

- When aligning the trail avoid the worst of the rubbish tip areas. All rubbish within view of the trail – and weedy species where possible (i.e. prickly pears) – needs to be removed;
- Meander through the trees in a serpentine route that will not have much appeal to trail bike riders;
- Keep the track narrow (single) and as “natural” as possible;
- Place fallen logs (or use pine poles) as motorcycle chicanes at key points;
- Install management signs to clearly designate it as a bicycle only route (not trail bikes)
- Superfluous tracks adjacent to the trail can be ripped and revegetated. Natural log barriers may be needed to keep vehicles off these tracks – and therefore off the trail.

Woodlands Walk: Maintenance review & recommendations

Site description

The Woodlands Walk is perhaps Norseman's best existing introduction to the Great Western Woodlands – a remarkable entity which has been spoken of as a potential key focus for this drive to develop tourism (and therefore greater long term economic sustainability) in the Shire of Dundas. Yet it is not mentioned among the attractions listed on the Visitor Centre website, and on the Shire site the name is listed as a dot-point under the Granite & Woodlands Discovery Trail heading, and then there is a link to the trail brochure under the generic “Woodlands” header. This is somewhat mystifying – but the situation may well be remedied through undertaking the maintenance / upgrading works below – and enhancing the website presence as outlined elsewhere in this Report.

The introductory paragraph to the trail brochure describes the attraction as follows:

Norseman is right in the centre of one of the great wild places in outback Australia - 250,000 square kilometres of woodland wilderness that is host to many wonders. Few people realise that this is indeed the greatest untouched temperate woodland in the world. The Woodlands Walk has been designed as a window to this world, a means of understanding some of what makes this landscape such a unique and special place.

The Walk is short - not even a kilometre in length - and provides an easy 30 to 40 minute opportunity to look at and learn about the woodlands. The 13 interpretive panels along the route not only give a 'European' perspective of selected natural features of the woodlands, but also provide an insight into relevant aspects of the local Ngadjju culture.

The Walk is on the eastern outskirts of town – why not combine it with a visit to our spectacular Beacon Hill Federation Lookout, and the Beacon Hill Walk?

The trailhead panel augments this with another important descriptive note:

The Woodlands Walk is both a trail experience in its own right and the eastern “terminus” (Site 16) of the Granite and Woodlands Discovery Trail, a 300 kilometre interpretive drive between Norseman and Hyden.

The Woodlands Walk is indeed short, at some 860 metres in length. It is also highly accessible, being barely a 5 minute drive from the town centre – or indeed, a pleasant 10-15 minute walk away. There is potential to make it even more immediately accessible, by installing a link trail from the museum – but that option is not part of this planning process. It passes through some lovely – and very typical – open woodlands, and is well interpreted. However, some maintenance issues have arisen, and these are documented in the Maintenance Review Checklist that follows.

Maintenance review checklist & cost estimates

The checklist that follows was completed during the first field trip for this project, in January 2016. It is unusually loaded with “actions required” – this is not surprising, given that it is unlikely that this kind of attention has been focussed on the trail since it was constructed well over 10 years ago.

Blank versions of the checklist will be provided to the Shire in order for these inspections to take place every 6 months, a review period that is strongly recommended in order to avoid either significant short-term issues going unnoticed, or the long-term build-up of a significant quantity of work (as is outlined below).

Costs in the table below have largely been provided by the Shire in an attempt to ensure they are “real” and local, rather than estimates based on work elsewhere. Detail on some of the works involved can be found in the section that follows, along with some potentially useful construction drawings.

The key issues that require remediation are:

- Repairing erosion where water has run down the trail. This involves installing waterbars to shed any flow off the side of the trail, and replenishing gravel as necessary to produce a level and safe walkway;
- Keeping quad-bikes (and potentially trail bikes too) off the trail by installing either pine pole chicanes or offset log barriers at critical locations;
- Replacing old hand-crafted bush timber seats that have rotted away;
- Either cleaning all interpretive panels and replacing one that is damaged – or replacing all panels as part of a staged Shire-wide program of replenishment.

Two of the key issues confronting the Woodlands Walk are illustrated in the photos to the right: unwelcome and damaging quad-bike usage (top) and severe erosion on many downhill slopes (bottom)



NOTE: The work list and costs outlined below does not include replacing ALL interpretive panels - this action forms Phase 1 of the recommended "Staged Replacement Program" which will see all etched aluminium panels installed during the 2001-4 period updated and replaced over a period of time, as outlined elsewhere in the report.

Rather than have a small number of panels that are new and in good (shiny / bright) condition, it is recommended that the full set be replaced as outlined above.

Notes re costs below:

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Trailhead	Panels are in surprisingly good condition for their age. However, panels and posts need cleaning	20	20	40
Whole trail	All panels need cleaning now – and then at every 6 monthly inspection. Specific heavy-duty anodised aluminium panel cleaning fluid is to be sourced – costs are itemised below	0	0	0
25	Install a wide "chicane" of pine logs immediately below bitumen road to deter quad-bikes from using the trail (even though they can go around the chicane through the bush this is a worthwhile "statement" that they are not meant to be there)	200	200	400
25	Install small plate on chicane saying: "Woodlands Walk ↑ Caution – some sections have loose gravel surface"	40	20	60
25-30	Water running off bitumen road is eroding trail surface. Re-gravel and compact, and inspect regularly (waterbars not required here)	0	200	200
100	Trail junction totem post and symbol in good condition	0	0	0
125	Panel #1 in good condition, but needs cleaning	10	10	20
160	Panel #2 has been damaged by rock-throwing. Replace face only	500	40	540
235	Panel #3 needs cleaning	10	10	20
235-375	Clear evidence of quad-bikes using – and damaging the trail in this section. Install chicanes (2) or interlocking log barriers to deter use of trail as a race track	200	200	400

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
290	Panel #4 needs cleaning	10	10	20
290	Old timber seat has collapsed. Source a replacement – possibly from the Men's Shed	1100	200	1,300
290-305	Trail surface eroding – install waterbars every 3 metres or as required	200	200	400
335	Panel #5 needs cleaning	10	10	20
375	Sleeper footbridge appears in reasonable condition, other than one sleeper 2/3 of the way across which has a large hole and needs replacing	100	100	200
375	Footbridge is a good location to stop quad-bikes as there are no other easy creek crossings nearby. Install chicane or log barrier just before bridge	100	100	200
375-400	Water running down trail causing erosion. Install waterbars every +/- 3 metres to shed water across trail directly into creek. Re-gravel surface as required.	1000	1000	2000
400	Second sleeper footbridge – 3 sleepers need replacing	300	300	600
405	Panel #6 needs cleaning	10	10	20
465	Panel #7 has some horizontal scratches, but would be adequate with cleaning	10	10	20
500-515	Trail turns right and uphill – significant erosion on this slope. Install waterbars over 15 metres and re-gravel as required	300	300	600
515	Old timber seat is rotted and needs replacing (or significant repair) – another possible Men's Shed job	1100	200	1,300
570-605	Trail climbs uphill to next panel – significant erosion on this section. Install waterbars over 45 metres (beyond next panel) and re-gravel	900	900	1800
585	Panel #8 has been bent on both bottom corners. Remove from post and straighten if possible. If not, order replacement (with backing plate) (Erosion extends 20 m uphill from this panel)	500	40	540
635	Panel #9 has been bent – attempt to straighten (as above) or replace	500	40	540
685-710	Trail descends to creek. Erosion over last 25 metres of slope: install waterbars and re-gravel	800	800	1600

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
710	Sleeper bridge over creek – appears in reasonable condition at this point	0	0	0
715	Panel #10 needs cleaning. Seat at this location appears intact, though replacing top slats (actual sitting part) is recommended for user safety	200	200	400
715-760	A number of waterbars on this slope are damaged or loose, and will need replacing. Much gravel required to repair erosion on this slope to junction	1500	1500	3000
760	Trail junction (see notes above for final section)	0	0	0
860	Return to Trailhead	0	0	0
Sub-totals		9620	6620	16,240
Contingency allowance 10%		960	660	1620
TOTALS not inc GST		10,580	7,280	17,860

Construction detail & notes

See Appendix 2 for some potentially useful construction drawings, notes and photographs.

Beacon Hill Lookout & Walk Trail: Review & recommendations

Site description and current infrastructure

The construction of the Beacon Hill Lookout shelter and walk trail marked the beginning of a busy period of visitor attraction development in the Shire of Dundas. Undertaken early in 2001 under the guidance of then-Deputy CEO, Tom Hartman, this project was the precursor to the Granite & Woodlands, Old Coach Rd and Woodlands Walk developments, and as such was both a learning experience and a trend setter. In reading the information and recommendations below it is important to bear this in mind – and to recognise that this infrastructure is now 15 years old; that the site is regularly frequented by all manner of people (including those with nefarious intentions), and that the slopes of the hill are – not surprisingly – quite steep. All of these factors have impacted the current condition of the site and trail.



The Lookout Shelter and its view are prime attractions on Beacon Hill

The Visitor Centre website refers to Beacon Hill as follows:

A spectacular view awaits those visitors who take the short 2km drive up to Beacon Hill. One can see in every direction and be regaled with history from the display boards on the quaint information hut that perches at the top. You can also enjoy a short walk trail through the beautiful bushland that leads off the top of the hill and comes back to the top.

The Shire website is slightly more fulsome and eloquent:

A short 2 kilometre drive from the town centre brings you to Beacon Hill with spectacular panoramic views in every direction and a rustic information hut that provides you with history of Norseman, a directional dial and beautiful bush timber seats from which to enjoy the views. A scenic walk trail meanders down from the eastern side of the hill through peaceful bushland and back up on the western side.

From these two brief summaries and a site visit it is relatively easy to draw out a succinct list of the existing infrastructure:

- The “rustic” information /shade shelter itself;
- 7 large etched aluminium panels and one circular direction dial in the shelter;
- One large panorama interpretive panel (freestanding);
- The walk trail and its 4 interpretive panels, seats, waterbars and other hardware;
- Two recently-installed concrete picnic tables;
- A large gravel parking area surrounded by a ragged line of rock bollards.

Recommendations regarding the enhancement of this site are now separated into two parts: the hilltop / lookout area and the walk trail.

Beacon Hill Lookout & parking / picnic area

Beacon Hill has many of the aspects required to make it a prime visitor attraction: it is very close to town; there is good (perhaps adequate?) road access; it has sufficient elevation to proffer excellent views, and there are a range of natural and cultural features which can readily be interpreted.

However, it does have one significant limitation: it is also home to a major air traffic control installation involving two substantial towers and two heavily-fenced enclosures. This Federal Government infrastructure does currently detract from the appeal of the place – and the recommendations below are intended to ameliorate this impact to the best extent without imposing an onerous financial burden.

The major fenced installation and associated buildings are very apparent as one arrives at the top of the hill, and currently do not create an initial sense of welcome. On passing these visitors arrive in an oversize (and frequently ragged) gravel parking area surrounded by an irregular line of rocks of various shapes and sizes. This too, is not particularly appealing. Thankfully the lookout building soon attracts attention, and becomes the focal point of attention for most visitors thereafter.

The building and its interpretive panels are in remarkably good condition given their age and potential exposure to antisocial behaviour. While the panels are fading and are desperately in need of cleaning, they are largely unmarked. Only the gold-finished direction dial has been significantly scratched – and only it requires early replacement. The panorama panel too, is in good condition, having already been replaced once after a savage vandal attack involving the back of an axe.

The two picnic tables appear to be relatively recent additions to the site, and are in good condition. The same cannot be said for the parking area itself, which has suffered from excessive use for what is known as “circle work” – high speed racing of vehicles around and around a central point (in this case the conveniently located secondary fenced enclosure). It (the parking area) is also larger than necessary, and the sheer expanse of gravel overwhelms some of the other more attractive aesthetic elements of the hilltop. This sense of unkemptness is exacerbated by the semi-informal bollarding which meanders around the perimeter as if only half intending to be a functional item.

The site plan that follows shows works that are intended to remedy many of these issues, and includes a number of new ideas to enhance the overall appeal and functionality of the site. These works – and all others required to complete the project – are set out in the table below. Some of this could be undertaken by the Ngadju Ranger team, if that was felt to be appropriate.

Primary works recommended for the site include:

- Reducing the road turn-around area in size (though still accommodating tour busses)
- Screening the telecommunication facilities with planting, protected by rock bollards.
- Providing additional picnic furniture and an accessible picnic table
- Improving the site entry appearance.

During field work at this site and subsequent planning processes consideration was given to installing another of the proposed corrugated iron sculptures here on Beacon Hill. This is a high priority site, and it is highly likely to be visited by a significant percentage of those exploring the town and Shire – which does suggest that such an idea could have merit.

However, it is felt that it is prudent for the Shire to focus energy and resources on renovating and repairing what already exists in the first case, as a not-inconsiderable effort and expense is involved in that process. Consideration could then be given in later years to adding a sculpture to this site as part of an ongoing enhancement program for the Shire's visitor facilities.

NOTE: The work list and costs outlined below does not include replacing ALL interpretive panels - this action forms Phase 1 of the recommended "Staged Replacement Program" which will see all etched aluminium panels installed during the 2001-4 period updated and replaced, as outlined elsewhere in the report. A separate table containing these figures follows the one below.

Notes re costs below:

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.



Vast gravelled areas invite hoon behaviour, while security fences are seriously unattractive (above)

Inadequate rock bollarding is another issue to be addressed in the site upgrade (below)



Enhancement Goals:

- ~ Enhance the entry point to the hill top;
- ~ Screen infrastructure and fencing;
- ~ Reduce the expanse of gravel;
- ~ Manage 'hoon' activity;
- ~ Provide a fully accessible picnic area, and
- ~ Continue revegetation work.



There is more road and parking area than is needed. Planting in this central area will help screen the infrastructure fences and make the lookout more attractive.

This picnic location can be made wheelchair accessible.

LEGEND

Furniture

- New fully accessible picnic setting
- Relocated picnic setting on new pad
- Existing access gate
- Speed hump
- Rock boulder bollards
- Rubbish bin

Planting

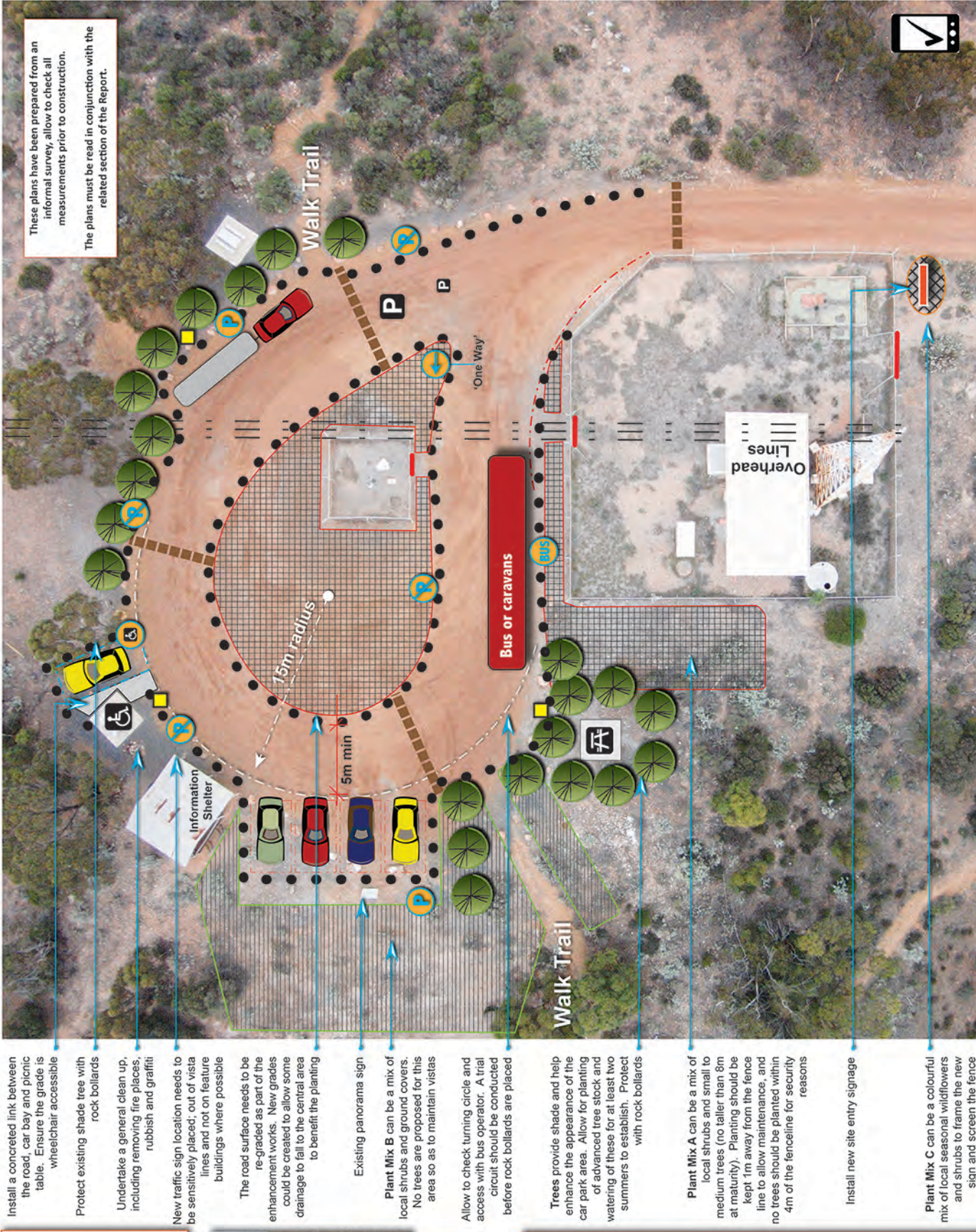
- Plant Mix A
- Plant Mix B
- Plant Mix C
- New shade trees (advanced stock)

Signage

- New place name sign
- Parking / traffic management sign



These plans have been prepared from an informal survey, allow to check all measurements prior to construction. The plans must be read in conjunction with the related section of the Report.



- Install a concreted link between the road, car bay and picnic table. Ensure the grade is wheelchair accessible
- Protect existing shade tree with rock bollards
- Undertake a general clean up, including removing fire places, rubbish and graffiti
- New traffic sign location needs to be sensitively placed; out of vista lines and not on feature buildings where possible
- The road surface needs to be re-graded as part of the enhancement works. New grades could be created to allow some drainage to fall to the central area to benefit the planting
- Existing panorama sign
- Plant Mix B can be a mix of local shrubs and ground covers. No trees are proposed for this area so as to maintain vistas
- Allow to check turning circle and access with bus operator. A trial circuit should be conducted before rock bollards are placed
- Trees provide shade and help enhance the appearance of the car park area. Allow for planting of advanced tree stock and watering of these for at least two summers to establish. Protect with rock bollards
- Plant Mix A can be a mix of local shrubs and small to medium trees (no taller than 8m at maturity). Planting should be kept 1m away from the fence line to allow maintenance, and no trees should be planted within 4m of the fence line for security reasons
- Install new site entry signage
- Plant Mix C can be a colourful mix of local seasonal wildflowers and shrubs to frame the new sign and screen the fence

Item	Size	Item \$	Labour	Total
<u>General site works</u>				
Regrade road turn-around area; use existing stockpile of gravel (and bring in extra) to mix with the blue metal and make it less visually obtrusive. Grade to reduce scouring and improve drainage	120m x 6m	0	2,200	2,200
Install compacted gravel speed humps at 4 locations around the turning circle as shown on Plan	4 x 6m long	0	800	800
Install rock bollards around mesh fence lines as per Plan	100 Lm	0	1,800	1,800
Tidy up existing rock bollards so they appear more consistent in size and alignment, and are cleaned of graffiti. Relocate some to the alignment shown on the Plan	120 Lm	0	800	800
Rip old road areas to promote revegetation	250 sqm	0	800	800
Relocate existing picnic table from next to shelter, to south west area as per Plan. Install on a concrete pad	Pad: 4m x 4m	1,600	300	1,900
Install a new fully accessible picnic table adjacent to information shelter. (Cost estimate assumes existing concrete pad can be used)		2,500	250	2,750
Install a concrete path from car park to fully accessible table for wheelchair and pushchair access	6m x 2m	1,600	0	1,600
Install new promotional site sign: "Beacon Hill Lookout and Walk Trail" - as shown on Plan	2000 x 800mm	1,340	200	1,540
Install bus/caravan parking, disabled access parking & other traffic management signs (6 @ 200x300)	6	1,440	720	2,160
Remove existing yellow steel bin and install 3 new wheelie-bins in protective enclosures	3	3570	450	4020
Feature planting around new sign above	n/a	300	100	400
Tree planting as per Plan. (advanced stock)	n/a	1,000	400	1,400
Plant specific screening shrubs as per Plan	n/a	1,400	300	1,700
Revegetation with low growing species as per Plan	n/a	300	300	600
General site clean-up including removing fireplaces.	n/a	0	500	500
<u>Lookout shelter and interpretive signage</u>				
Replace directional dial (necessary regardless of whether full panel replacement program outlined below is undertaken)	n/a	1,970	120	2,090

Sweep / wipe bench seats in shelter and clean bird droppings off handrail	n/a	0	100	100
Clean the “panorama” panel	n/a	0	50	50
Sub-totals		17,020	10,190	27,210
Contingency allowance 10%		1,700	1,020	2,720
TOTALS not inc GST		18,720	11,210	29,930

Replacement of all interpretive panels

As mentioned, the maintenance and works checklist costs outlined above does not include replacing ALL interpretive panels as this action forms Phase 1 of the recommended “Staged Replacement Program” which will see all etched aluminium panels installed during the 2001-4 period updated and replaced, as outlined elsewhere in the report. Costs associated with undertaking this replacement process for the Beacon Hill Lookout are as follows (at 2016 rates not including GST):

Replace 7 panels in the Lookout shelter (800x400). Face only to be supplied – use existing backing plates	3360
Replace large “Panorama” panel outside the shelter. Face only to be supplied – use existing posts & backing plates	1440
TOTAL – Beacon Hill Lookout	4,800

See Section 8 for a summary of the proposed full Shire-wide panel replacement program – this includes the panels outlined above, and sets their replacement into a broader program of prioritised updating (Year 1, along with all of the Beacon Hill Trail panels).

Beacon Hill Walk Trail

The brochure for this trail describes it in these terms:

The Beacon Hill Walk Trail is an 865 metre loop trail around the upper slopes of Beacon Hill starting at, and returning to, the car park at the summit. It should be walked in a clockwise direction. The well-formed gravel trail passes through attractive woodlands and provides expansive views out over the nearby salt lakes, remnant forests and mining activity. The trail also enables users to see at close range evidence of historic mines, some magnificent Eucalypts and a variety of vegetation types that exist in this harsh environment. Interpretive signs provide interesting information and hand-made bench seats are located at vantage points enabling views to the distant Dundas Hills, the Central Norseman Gold Mine and over the townsite.

As already mentioned, this trail was the first built around Norseman during its early-2000s phase of tourism site developments. As such it came at a time when the specific skills required for this kind of project were still being acquired, and as a result the trail design fell somewhat short of a long-time sustainable model. It most certainly passes through “attractive woodlands” and offers “expansive views”, and there is plenty along the way to sustain the visitor’s interest. Indeed, it is a truly excellent concept that has unfortunately not fulfilled its potential due to some of the alignment flaws that are very evident today.



Significant erosion issues are apparent in the first 50 metres of the trail, on the descent to the first interpretive panel. Further, the near-new aluminium seats – while functional – do not fit well in this landscape, and should be replaced

The maintenance checklist that appears below was completed in January 2016, and at first glance may seem to contain an inordinate amount of renovation works. However, this could well be one of Norseman's very best visitor offerings – it has all the raw materials needed to be a prime attraction – and many of the works outlined are repetitive and not necessarily hugely expensive to undertake.

Consideration was given to realigning sections of the trail, to take out some of the short sharp inclines and tight turns – but doing so would leave a substantial scar in the wake of the old alignment, and it is felt that quality work remedying the existing issues would be a better value process to undertake.

The location of this trail and the quality and interest in the environment through which it passes warrants a moderately substantial repair and enhancement program. As these were the first etched aluminium interpretive panels to be installed around Norseman they should be the first to be replaced as part of the proposed staged program of replenishment. This also allows for a necessary updating of information on existing panels and the inclusion of 4 additional panels to bring the density of interpretation on this key trail up to that which is now expected of such an attraction. One of these new panels should address the patch of *Eromophyla* that apparently puts on a striking display in spring (soon after the first existing panel).

Maintenance review checklist & cost estimates

The key issues to come out of this review very closely mirror those listed for the Woodlands Walk:

- Repairing erosion where water has run down the trail. This involves installing waterbars to shed any flow off the side of the trail, and replenishing gravel as necessary to produce a level and safe walkway;
- Replacing inappropriate “town style” seats with others that better fit this environment;
- Replace and update all interpretive panels as first part of a staged Shire-wide program of replenishment. Additional on-trail interpretation is also recommended (4 panels) in order to break up long stretches without specific information / attraction.
- Replace existing totems & trail markers with more modern / attractive options, and install additional markers to break up long gaps.

Costs in the table below have largely been provided by the Shire in an attempt to ensure they are “real” and local, rather than estimates based on work elsewhere. Detail on some of the works involved can be found above in the Woodlands Walk section, along with some potentially useful construction drawings.

Blank versions of this checklist will be provided to the Shire in order for these inspections to take place every 6 months, a review period that is strongly recommended in order to avoid either significant short-term issues going unnoticed, or the long-term build-up of a significant quantity of work (as is outlined below).

NB: The maintenance checklist costs outlined below does not include replacing ALL interpretive panels or updating the text and layout on the same as is recommended in the table below. Nor does it include sourcing and installing new panels as recommended. These actions form Phase 1 of the recommended "Staged Replacement Program" which will see all etched aluminium panels installed during the 2001-4 period updated and replaced, as outlined elsewhere in the report. A separate costing for this element of the upgrade is provided after this table.



Despite its currently diminished condition, the Trail does offer wonderful views – including east to Mt Jimberlana

Only the panels that are damaged and which therefore demand immediate non-negotiable attention are included in the cost table below.

Notes re costs below:

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under "Item Cost";
- Figures under "Labour Cost" are intended to cover work done by Shire employees and other contractors (perhaps the Ngadjju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Approach	Replace three old black & yellow signs on the route up from town with standard brown & white versions, and install an additional sign at the final tight bend before the climb to the hilltop	800	400	1200
Approach	Repair road at mine haul crossing, and ensure boom gates are working	0	1000	1000
Trailhead	Update and replace trailhead interp panel (when new panels are installed) and install a 1500x500 mm "promotional" sign facing the interp shelter. NB: Replacement trailhead panel not costed here – in full panel replacement program	1000	150	1150
Whole trail	Replace all 200 mm wide recycled plastic trail marker totems with 100x100 square steel posts with new trail markers. NB: items are costed on individual lines below	0	0	0
Whole trail	Review and update text on all interpretive panels prior to replacement. NB: Panels costed on individual lines below	0	0	0

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
25-40	Replace waterbar that is out of place, and install waterbars down 15 metres of eroded trail. Re-gravel as required	450	450	900
50-70	Repair erosion, install waterbars and re-gravel slope leading down to first interpretive panel	600	600	1200
70	Panel #1: replace – face only (damaged by stone throwing). Includes updating text and layout	1030	40	1070
70	Replace aluminium seat with a timber option more fitted to this environment	1100	200	1300
70	Install new trail marker immediately beyond interp panel pointing upslope up the trail	140	60	200
70-80	Repair erosion, install waterbars and re-gravel slope on first 10 metres uphill from interpretive panel	300	300	600
110-120	Replace totem and repair erosion, install waterbars and re-gravel down 10 metres of slope beyond bend in trail	440	360	800
140-145	Repair erosion, install waterbars and re-gravel slope over 5 metres	150	150	300
185-190	Water running down trail - repair erosion, install waterbars and re-gravel slope over 5 metres	150	150	300
200	Replace totem and install new interpretive panel (topic to be defined). <i>Panel not costed here</i>	140	60	200
230-240	Water running down trail - repair erosion, install waterbars and re-gravel slope over 10 metres	300	300	600
250	Sharp dog-leg in trail with a well-worn shortcut across the corner. Abandon old trail "bow" – use gravel from this to formalise the short-cut; dig/rip the old section and scatter seed or bushes on it	0	200	200
300	Install new interpretive panel (topic to be defined). <i>Not costed here</i>	0	0	0
340-345	Right turn to uphill slope: water running down trail - repair erosion, install waterbars and re-gravel slope over 5 metres	150	150	300
370-400	Right turn onto slope: water running down trail - repair erosion, install waterbars and re-gravel full length of slope	900	900	1800
445	Replace totem near interp panel. Panel #2 (Hit & Miss) in good condition but needs cleaning	150	70	220

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
445	Replace seat with timber option – reuse seat in town if possible	1 100	200	1 300
500	Road crossing – replace totems both sides	280	120	400
510-515	Water running down trail - repair erosion, install waterbars and re-gravel slope over 5 metres	150	150	300
540-550	Water running down trail - repair severe erosion, install waterbars and re-gravel slope over 10 metres	300	300	600
610-630	Trail bends right and goes uphill: significant erosion evident. Install waterbars and re-gravel as required	600	600	1 200
610	Opportunity for new interpretive panel re Bullen Decline and mining operations clearly visible below. <i>Not costed here</i>	0	0	0
675-680	Short downhill section to right-hand bend – repair erosion, install waterbars and re-gravel over 5 m	150	150	300
700	Panel #3 has damaged face – replace. Includes rewrite and redesign of panel face	1030	40	1070
700	Replace seat as per other locations	1 100	200	1 300
700-750	Long slope with water running down it: repair erosion, install waterbars and re-gravel 50 metres	1500	1500	3000
750	Panel #4 is half the size of other panels: replace with full-size version for consistency. <i>Not costed here</i>	0	0	0
770-805	Trail turns right and goes uphill: significant erosion evident. Install waterbars and re-gravel over 35 m	1050	1050	2 100
820	Replace old totem	140	60	200
820-830	Erosion: install waterbars and re-gravel over 10 m	300	300	600
850	Install new interpretive panel (topic to be defined). <i>Not costed here</i>	0	0	0
860-870	Water flowing off hillside is very damaging to this section as trail descends to right turn. Repair, install waterbars and re-gravel – but may need annual renovation	300	300	600
870-880	Trail turns uphill – significant erosion. Install waterbars and re-gravel over 10 metres	300	300	600
930-945	Trail turns right and goes uphill to car park. Water flowing off parking area onto trail – install waterbars to divert, and re-gravel over 15 metres	450	450	900

LOCATION (metres from start)	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
950	Remove totem at car park edge and replace with "Trail ends here" sign (small, on 100x100 post)	200	60	260
950	Install sign on edge of car park by top end of trail saying "Do not enter. Trail commences 50 m across parking area, and is only marked for one-way (clockwise) travel" – on post above (flip side)	200	40	240
Sub-totals		16,950	11,360	28,310
Contingency allowance 10%		1,690	1,140	2,830
TOTALS not inc GST		18,640	12,500	31,140

Replacement of all interpretive panels

As mentioned, the maintenance checklist costs outlined above do not include replacing ALL interpretive panels, updating the text and layout on the same, and sourcing and installing new panels as recommended. This action forms Phase 1 of the recommended "Staged Replacement Program" which will see all etched aluminium panels installed during the 2001-4 period updated and replaced, as outlined elsewhere in the report. Costs associated with undertaking this replacement/upgrade process on the Beacon Hill Walk Trail are as follows (at 2016 rates):

Rewrite, redesign and supply replacement trailhead panel (800x600). Face only to be supplied – use existing posts & backing plates	2270
Rewrite, redesign and supply 2 existing panels at 400 x 300 (#'s 2 & 4). Face only to be supplied – use existing posts & backing plates (#'s 1 & 3 in maintenance list)	2460
Write, design and supply 4 new panels at 400 x 300 (as noted in table above). Includes supply of backing plates and posts	6280
TOTAL – Beacon Hill Walk Trail	\$11,010

Again, see Section 8 for a summary of the proposed full Shire-wide panel replacement program – this includes the panels outlined above, and sets their replacement into a broader program of prioritised updating (Year 1, with Lookout panels).

Construction detail & notes

See Appendix 2 for some potentially useful construction drawings, notes and photographs.

Existing interpretive signage is no longer considered adequate for what should be a high-profile walk trail, and should be augmented as set out above



In-town eucalypt identification trail

If Norseman is to be “The Heart of the Great Western Woodlands” then significant effort should be put into encouraging visitors to engage with (and recognise) the extraordinary array of eucalypt species found in the landscape across the Shire. In this case the place is fortunate as there are many mature and magnificent specimens scattered along various verges in and around the town centre.

The concept outlined below is designed to create “doorways” through which visitors (and locals) can be encouraged to recognise and learn about many of the key species to be found in the Woodlands. It also offers significant opportunities for cross-cultural exchange via the inclusion of a substantial Ngadju component.

Project outline

This is to be a two-part project made up of a short (+/- 1 km) “*Get to know our gum trees*” walk around Norseman’s streets, taking in perhaps 10 or 12 tree species, each to be marked with a plaque giving broad information on the species – and a high quality colour booklet which will provide more in-depth information, and assist visitors and locals to identify and appreciate tree species in the wider Great Western Woodlands.

The walk trail should ideally start and finish at the Visitor Centre and should be mapped out in such a way as to incorporate the maximum number of different tree species. Hopefully it will use (mostly) existing footpaths, and will require little other than directional signage and the proposed interpretive panels in order to bring it to fruition. Specialist assistance will be required in order to ascertain the best route for the trail – and developing the interpretive material should be a cross-cultural partnership involving professional / scientific knowledge on one hand and the Ngadju community on the other.

The booklet should be a high-quality production, perhaps A5 (or DL) in size, full colour, and easy to use. It is intended that this should be a retail item, with the Visitor Centre manager indicating a solid likely market for an item such as this. It too, should be a cross-cultural production, with benefits to both future visitors (who will doubtless find the indigenous perspective of the woodland trees fascinating) and to the local wider community through the processes of sharing knowledge that will be involved. The booklet (and the signage) should be designed to “fit” the Dundas graphic / visual style.

Currently the only options available to travellers (or locals) who may have an interest in the trees of the Woodlands are either the small pocket-size DPaW publication “Trees of the Goldfields” (part of the Bush Books series), which sells for \$6.95 but is small in size, limited to just basic euro-centric information and only covers a relatively few species – or substantial special-interest eucalypt identification books which would be daunting in both price and content for most “average” travellers/locals.

The information on the small panels and in the booklet will include:

- Ngadju knowledge (name, uses, broader cultural implications etc),
- European/scientific knowledge (Latin name, botanical facts etc),
- Photographs of the flowers / bark / mature form etc,
- Illustrations if necessary, and any other points of interest.

This project could/should generate a wide and valuable range of benefits, including:

- A joint project between (for example) Ngadju Conservation and the Shire would help build relationships and enhance trust and cooperation – which would have many potential flow-on consequences for both parties and the community at large.
- Information gathered through this project could be used in other “products”, such as an upgraded website, smartphone apps, web-based podcasts, and downloadable brochures.

- If Ngadju knowledge can be recorded on audio during the research stage, this could be used in the development of future/additional audio guides (podcasts, CD's etc).
- Tapping into Ngadju knowledge like this would help pass this information on to younger generations in the Ngadju community, and should generate a sense of pride in the respect being shown for what is quite ancient wisdom.
- Inter-generational aspects of the project could be supported; i.e. Ngadju elders walking with school groups (from all backgrounds) and teaching/learning about the trees and their traditional uses.
- There are likely to be skills development and mentoring opportunities for the local community- i.e. photography skills to provide the images for the brochure, or audio recording / editing skills for podcast or CD-based usage.
- A wide involvement in the project would help enhance the knowledge base of the community, so that should opportunities for guided walks for visitors become available, people have confidence to talk about the trees, use their Latin names and identify other plants when quizzed.
- If the project is undertaken early (as has been mooted by Shire staff) the design of the booklet is likely to influence following publications – hence the graphic designer would need to be aware that they are establishing a “template” that could be used for promotional material relating to other Shire features, and would therefore potentially be setting up a “brand” for the Shire of Dundas.

Stages of Project Development

Step 1: The first and primary task if a decision was taken to proceed with this project would be to refine the desired project outcomes so a clear understanding of the final shape of the project and the product(s) is well understood, financially achievable and commercially viable (i.e. booklet sales V cost analysis etc). A clear project brief should be developed in this first stage of work – which would then help lead to the longer-term outcomes outlined above.



The brief needs to define the following likely tasks/skills:

- Overall project management
- Publication and panel production management
- Graphic design for the book and walk trail panels (and a “template” for similar projects)
- Indigenous knowledge of the trees and their uses / place in culture
- Botanical knowledge of the trees
- Walk trail design
- Photography (and possibly illustration)

Eucalypts of a variety of species can be found scattered all around the central part of town – and along many of the street verges too



- Writing and editing
- Installation of panels and any requisite trail infrastructure (directional markers etc)
- Spin-off skills such as audio recording and editing, school curriculum liaison, translation to web friendly platforms etc.

Step 2: Early in the project it would be important to identify opportunities to incorporate training courses as part of the project implementation, to help improve the skills base of the community for future projects.



Gimlet woodland is such a striking feature of the Great Western Woodlands – and yet it is likely few visitors would recognise it

Step 3: Engage with the school and community groups about their involvement and potential contribution.

Step 4: Finalise contracting arrangements – options include an umbrella organisation subcontracting the Ngadju community for special knowledge areas, and other specialists such as graphic designers and scientific/ecological advisors for specific tasks. A range of possible project partners is apparent, including:

- Shire of Dundas
- Gondwana Link
- Ngadju Conservation Group
- Private consultants

Clearly this is a more complex process than simply employing an “out of town” consultant/designer to produce a brochure. It has the potential however, to build community skills and capacity, and to provide an important stepping stone for future/following initiatives. Given that, this multi-faceted project appears to have significant potential upside, and should be an early candidate for action on the part of the Shire (and other interested parties / organisations).

Cost estimates

The cost estimates below have been provided in the absence of clear information as to how far the Ngadju Rangers will have proceeded with their preliminary work on this concept – or what their future role might be in its completion. Nonetheless, the figures provided should be adequate to produce a satisfactory outcome. As with other projects, GST is not included.

The table below summarises those components required to actually complete the trail on the ground – and this work is recommended as a Year 1 priority. The research, writing, design and production of the proposed book(let) is held over to Year 2, and a cost estimate follows the table.

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;

- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Interpretive signage has been costed on the basis of being 300x200 mm etched aluminium panels on standard pedestal posts, to broadly match signs installed elsewhere around the Shire;
- Trail markers are recommended to be 100x150 mm etched plates affixed to galvanised steel SHS posts measuring 100x100 mm, again to broadly match those recommended for trails like Beacon Hill;
- Costs do NOT include GST.

ACTION TO BE TAKEN	ITEM COST	LABOUR COST	TOTAL COST
Complete tree identification and finalise trail route	2500	2500	5000
Research, design and supply 15 small etched panels	18750	0	18750
Design and supply 20 trail markers with posts	2400	0	2400
Install panels and trail markers	0	3500	3500
Write, design and supply simple 2-page DL size brochure	3000	0	3000
Refine scope / size / style / market for proposed book(let)	2000	0	2000
Sub-totals	28650	6000	34650
Contingency allowance 10%	2870	600	3470
TOTALS not inc GST	31,520	6,600	38,120

Possible future extension of project: Book(let) and other

As mentioned above, the proposed book(let) has been held over to Year 2, to enable the full development of the trail – and the completion of the Shire's style manual and new website. Estimating costs likely to be involved in this part of the project are extremely difficult as no defined scope currently exists. As can be seen, an allowance has been included in Year 1 to produce this Scope / Brief – and this will define the shape of the final product and therefore the cost.

In order to provide a figure for future budgeting, an estimation of \$35,000 has been made, to cover further research, photography, graphic design, creative writing and then printing costs for the initial print run of perhaps 5000 copies.

Further, during discussion about this trail concept it was suggested that a flow-on project especially suited to the Ngadju Ranger group could be to develop a small seed collection, propagation and revegetation “business”, to ensure the Shire and local residents have a long-term supply of truly local plant species. This would require specific training programs and the purchase of requisite infrastructure, but does appear to have considerable merit – and is worthy of further discussion between the Shire and Ngadju Conservation.

Norseman Town Heritage Trail

During the course of this project it was pointed out by the Visitor Centre manager, Evelyn Reid, that Norseman currently lacks an in-town heritage trail. As noted in the section on tourism, earlier in this Report, this appears a significant “oversight” as such trails have proven consistently popular in many towns and suburbs right across Australia.

While this concept was not included in the Brief for the current project, it is nonetheless strongly supported – and undertaking a detailed “Trail and Interpretation Plan” is considered to be a high priority. This would deliver a clear picture of the proposed trail route, the various sites, buildings, places and stories that should be incorporated into it, and the best means of interpreting the same. It would also provide detailed cost estimates which should allow the Shire to seek grant funding for at least 50% of implementation costs. Lotterywest is known to be a strong supporter of such projects.



Classic heritage buildings such as the hotel should feature on the proposed in-town heritage trail. Their story needs to be told

A quote for \$18,240 + gst has been submitted to the Shire for the preparation of the recommended “Trail and Interpretation Plan”, and funding for the recommended planning study is included as a Year #1 priority in later stages of this Report.

In order to facilitate future budget planning an estimate of \$80,000 has been made to cover likely implementation costs flowing from this planning study. This figure is based on experience with similar small-town heritage trails elsewhere in Western Australia – however, final costs will only be known once the planning work has been completed.

Lake Cowan Walk/Cycle Trail & viewing platform

During investigations around the desired northern entry point it became clear that many visitors arrive in Norseman desiring some kind of interaction with Lake Cowan. This is particularly true for travellers coming down from the north, or those entering town from the west – who, in both cases, cross the lake on their way into town. The level of this interaction is in most cases likely to be limited to a nice photo opportunity, though some might appreciate learning more about the lake and having a chance to sit and enjoy what is a notably striking landscape.

Meshing nicely with this apparent desire is feedback from the Visitor Centre manager that quite a number of tourists ask if there’s a trail from town (or the caravan park) down to the lake – information which would appear to support the concept of a simple dual-use route through the woodland to the lake’s edge.

Preliminary field investigations have shown that there are already a number of vehicle tracks leading from behind the caravan park (adjacent to the school) at least as far as the golf club entry road (which is close to the lake edge). Consequently, it should not be necessary to cut a new trail through the woodland – rather, the chosen track should be closed to vehicles with barriers where required and signposted as walk/cycle only.

As a “target” a pleasant viewpoint has been identified on the final shoulder of the slope immediately before the golf club access road. This site overlooks the eastern shore of the lake itself, but through a screen of trees. As the lake shore bund is not attractive it is recommended that a viewing “tower” of moderate height (perhaps in the form of a replica poppet head) be constructed at this point, to elevate visitors above the relatively low tree canopy. Such a platform could readily contain a picnic table – which would create a lovely place at which to enjoy (perhaps) a glass of wine while watching the sun set over the lake in the west.

This is also a prime interpretive opportunity, and low-level panels could be installed in front of the table, to allow visitors to sit comfortably and read about the natural and human stories associated with Lake Cowan. From here visitors would return to town via the same route. A link could easily be marked from the Visitor Centre, adding another 1 km to the outing.

Given the number of visitors coming into town with bicycles – and given that the route involved is largely flat and relatively open – there seems no reason why this should not be developed and promoted as a dual-use trail. Standard information signage would need to be provided, indicating that – as on all shared pathways – cyclists should give way to walkers, but in reality little more would need to be done to cater for both user groups.

While this project is actually beyond the scope of the Brief and is a comparatively lower priority, it has been included here in the belief that it should be reviewed in the future as a possible “add on” to the suite of trails previously outlined – once all works associated with other projects in this Report have been completed. The project budget does not permit detailed planning, but the information provided in the possible works list below is not likely to be far removed from the final reality – though prices are at 2016 levels and would naturally need to be reviewed.

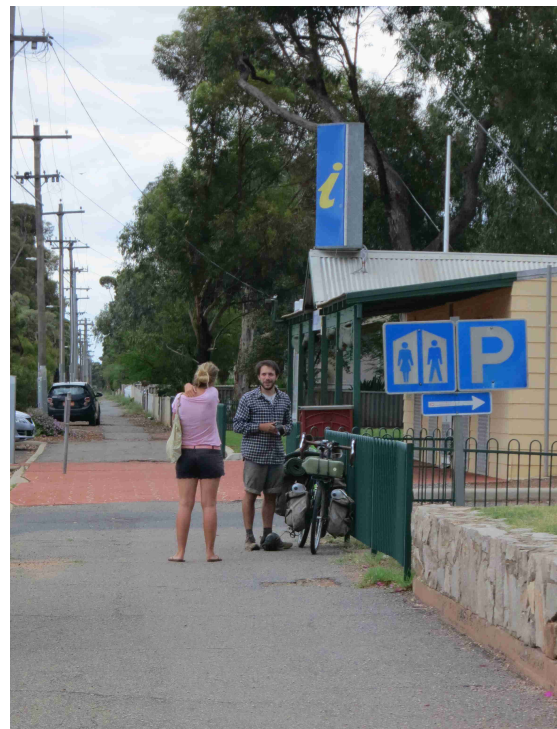
Finally, this trail and its pleasant view over the lake would go some further way toward “compensating” for the now-shelved northern entry point in the middle of the Lake Cowan causeway. It is also likely that it would prove popular with local residents, either as an exercise walk/cycle or as an evening get-some-fresh-air outing. It is therefore considered worthy of future consideration by the Shire, as outlined above.

Proposed works & costs

The costs below are based on a *likely* scenario rather than on detailed field work. However, they should be sufficiently accurate to give the Shire a clear enough impression of the likely cost of proceeding with this project. It should be noted that the proposed elevated viewing platform makes up 60% of the budget outlined below, so the remainder of the project is relatively low-cost.

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;



Bicycles arrive in Norseman under their own power too

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

LOCATION Map #	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Whole trail	Write, design and print trail brochure (Single DL panel, double-sided) – or incorporate into Shire-wide trail brochure	2200	0	2200
	Add trail to (new/upgraded) website	1000	0	1000
	Install trail markers as required along route (allowance for up to 20, standard size on steel posts)	2800	1200	4000
	Close other vehicle tracks as required to make chosen route walk/cycle only. Signpost accordingly	1200	500	1700
1	Install full-colour (Polycure) promotional sign with directional arrow outside Visitor Centre (1200x300 mm)	750	140	890
	Install trail markers on link trail from Visitor Centre – allowance for 4 (standard size on steel posts)	560	240	800
2	Corner Angove & Mclvor Streets: Install trailhead panel with map and route description (600x400 mm)	2190	140	2330
	Install full-colour (Polycure) promotional sign (1200x300 mm)	750	140	890
	Install management sign indicating that cyclists should give way to walkers, and that trail bikes are not welcome (300x400 etched, on single post)	860	120	980
3	Install simple elevated viewing platform – estimate only!	30,000	0	30,000
	Install low-level etched interp panels (800 x 400) on viewing platform	4280	320	4600
3 + trail	Clean up rubbish around platform site and along trail route	400	400	800
Sub-totals		46,990	3200	50,190
Contingency allowance 10%		4700	320	5020
TOTALS not inc GST		51,690	3,520	55,210

Geocaching as a means to augment trails

Wikipedia gives a sound and succinct description of geocaching, describing it as: *“an outdoor recreational activity, in which participants use a Global Positioning System (GPS) receiver or mobile device and other navigational techniques to hide and seek containers, called "geocaches" or "caches", anywhere in the world.*

A typical cache is a small waterproof container containing a logbook (with a pen or pencil). The geocacher enters the date they found it and signs it with their established code name. After signing the log, the cache must be placed back exactly where the person found it. Larger containers such as plastic storage containers or ammunition boxes can also contain items for trading, such as toys or trinkets, usually of more sentimental worth than financial.”

The “Geocaching Australia” website describes geocaching as *“a treasure hunt with something for everyone. Using map coordinates and a GPS enabled device, you can find a geocache near your home, in the city, in the bush or in Antarctica.*

Geocaches come in all shapes and sizes too. You can find a tiny little one as small as your fingernail, or a huge geocache with exciting 'treasures' inside. It can be as easy or as hard as you like to make it. You can drive up to your geocache and spot it from the car, or you can choose to hike for miles up and down mountains in the snow in search of that elusive container.

Geocaches are hidden all over the world. Geocachers will hide caches in locations that are important to them as well as locations that may require special skills such as tree climbing, abseiling or kayaking. Geocache locations are very diverse and may be at your local park, at the end of a long hike, underwater or on the side of a city street.

- *Geocaches are rated according to a scale that measures their difficulty to find and terrain where the cache is located or the terrain you need to traverse to get to the geocache site.*
- *Finding a difficulty 1 geocache should take only a few moments, a difficulty 2 or 3 may take you 15 minutes to an hour searching for the geocache itself whereas a difficulty 5 may take some weeks of puzzle solving.*
- *A terrain 1 geocache should be able to be found by someone in a wheelchair or crutches whereas a terrain 5 may require abseiling, tree climbing or other specialised skills like diving.*
- *Geocaches also have a size ranging from nano through to large and all sizes in between.*
- *Finding a nano geocache which can be smaller than your fingernail can be a significant challenge, a small is around 200ml and may take a little while to think through where it may be hidden whereas finding a large which is generally 20 litres or larger shouldn't be too troublesome at all.*
- *When searching for your first few geocaches, choose a traditional cache type where the difficulty is low, the terrain is low and the size is small or larger.*
- *You should also check the latest logs from the geocache page itself to make sure that there are no unattended issues with the geocache and that it hasn't recently been reported as missing.*
- *Be environmentally conscious when searching for a geocache. You may be searching in some creature's home. Do not rip or shred the area. Be gentle and kind to the environment. If you can't find the geocache don't take it out on the rocks, plants, trees or creatures that may be living nearby.*

Geocaching is – not surprisingly – gaining some momentum as a means of augmenting a walk (or cycle – or drive) trail. The proponents of this line of thought maintain that placing “caches” along a trail can attract a whole new user group – and it is a substantial group too. Statistics supplied on the international www.geocaching.com website indicate that there are more than 10 million registered users and over 2.5 million geocaches spread across more than 180 countries – though it is highly likely that these figures are well out of date and that numbers are now significantly higher.

A quick search for caches in the Norseman area on the Geocaching Australia website brings up 12 sites “in Norseman” with half-a-dozen more “near Norseman”. This separation appears arbitrary as all locations appear to be out of town, with places like Jimberlana Hill, Honman Ridge, Ant Rock, Theatre Rocks and Woolyeeny Hill appearing on these lists. Almost all sites are simply trig points rather than actual stashed caches – a legitimate alternative but one that would seem to reduce the potential appeal somewhat.

As most smart phones have a gps chip, and as geocaching “apps” are readily available, the uptake of this activity has been widespread across many demographic groups. It is promoted as a positive and healthy way of encouraging children who are commonly obsessed with technology to get outdoors and into nature, and for many people it has rapidly become an obsession. States like NSW and Victoria have incorporated bodies “representing geocachers and promoting the pastime of geocaching to ensure it is seen in a positive light”.

The activity has not been without its issues and controversies, with numbers of people reported to the police for “acting suspiciously” (presumably while searching for well-hidden caches), and with various national park management agencies limiting or putting conditions on where and how caches can be hidden. Having said that, it is generally accepted to be a healthy and mostly harmless pastime.

The question here is: would placing caches on various trails (or in some of the upgraded sites) around Norseman have the potential to attract additional visitors – or keep them in the area longer? The answer to this is “probably yes”, but the remote location may play against a substantial gain. In the context of this report pursuing geocaching as an add-on does not appear to be a priority, given the number and scale of other upgrade / enhancement / development projects and, while it may not be an overly expensive or complex process to undertake it does have the potential to be something of a distraction.

Nonetheless, this is a concept that is worth reviewing in the short to medium term, perhaps when the Shire has established its program of activity arising from this Report – and when this “add on” might be conveniently addressed as part of the ongoing flow of these developments.

SECTION 5: DRIVE TRAILS – MAINTENANCE REVIEWS

Granite and Woodlands Discovery Trail

Site description and current infrastructure

The Granite & Woodlands Discovery Trail (GWDT) is a major tourist drive trail of State relevance, ranking with such attractions as the Golden Quest Discovery Trail and the Golden Pipeline Trail. It was developed in 2003, and while it traverses both the Shire of Dundas and the neighbouring Shire of Kondinin the project was primarily Norseman-driven.

Perhaps the most fulsome description of the Trail comes from the original small promotional booklet:

Stretching 300 kilometres from Norseman to Hyden and Wave Rock, the Granite and Woodlands Discovery Trail is your invitation to explore a remarkable landscape. The Trail passes through part of one of the world's greatest untouched temperate woodlands, a vast wilderness mosaic that is both beautiful and fascinating. With its patchwork of heathlands and distinctive granite outcrops it is a unique and intriguing piece of outback Western Australia.

Following the recently-upgraded all-weather gravel Hyden-Norseman Road, the Trail offers 16 designated stopping places, each with quality interpretation focussed on a particular aspect of natural or cultural history. Some sites have walk trails, while others have picnic and/or camping facilities.

Highlights of the Trail include:

- *McDermid & Disappointment Rocks (with heavily interpreted walk trails);*
- *Lake Johnston Picnic Area and Campsite*
- *The Breakaways Campsite*
- *Woodlands Walk (near Norseman)*
- *Wave Rock (with new Wave Rock Walk Circuit)*

It is also quite nicely described on the Visitor Centre website:

The Granite Woodlands Discovery Trail links Norseman to Hyden and Wave Rock and is a delight of beautiful woodlands, stunning granite rocks, spectacular wildflowers in spring and numerous picnic/camp spots that include some walk trails, along the way. The drive trail is 297km and offers a different route to Perth meandering through one of the largest untouched temperate woodlands in the world and is suitable for most vehicles. Brochure available from the Visitor Centre.

The Shire website has a similar description but also includes a short list of “Highlights” – which largely mirrors those set out above.

Establishing the trail involved significant expense (mostly grant funded), much of which revolved around constructing parking and camping areas (some with facilities such as toilets, tables, bbq rings etc), and installing interpretation (including two rock-based walk trails). It also involved considerable consultation and cooperation between the two Shires, something that has largely continued since the Trail's inception.



The Granite & Woodlands Discovery Trail resulted in sturdy long-lasting infrastructure being installed in a range of highly attractive sites (Lake Johnston camp ground, above)

The road has been significantly improved over the years since the Trail was installed, and now (generally) provides a safe and comfortable 100 kph gravel-surfaced journey. The majority of major ongoing impacts on the road surface appear to accrue from heavy transport accessing nickel mines in the Forrestania – Maggie Hays section – especially after rain. This is a management issue that requires ongoing attention, and enhanced cooperation should be sought from the mines involved in order to minimise these negative outcomes.

It should also be noted that during the field work for the maintenance review at least two other large semi-trailers were seen to be using the road as a through-route from the south-west to either the Goldfields or the Eastern States (one being a double-decker cattle truck). Attention needs to be paid to the scale of this usage over coming years, as increased heavy through-traffic will naturally impact the condition of the road – which may be to the detriment of visitors / trail users.

While the original small booklet is no longer produced (due to the costs involved) the large-format map/brochure that replaced it does an excellent job of describing the experience and giving travellers the information they need to safely enjoy the outing. This document is distributed by both Shires, and better coordination of updates and reprints would be helpful in ensuring it remains a quality item that is readily available at both ends of the Trail – and further afield too.

A somewhat rough scan of the map/brochure is downloadable from the Shire website – which is a good initiative, albeit lacking in the professionalism that an attraction of this magnitude merits. It would be wise to replace this item with a web-specific version of the latest version of the document.

Maintenance review checklist & cost estimates

A full review of the condition of the Trail was undertaken in January 2016. The walk trails on both Disappointment and McDermid Rocks were both fully reviewed in the field, and the outcomes of this work is presented in the table below.

The review was undertaken from the Norseman end, so Sites appear to be in reverse (ie: high numbers → low numbers) in the table that follows. However, given that this work has been driven by the Shire of Dundas this seems appropriate.



The need for a major maintenance program now is seen in overloaded fire rings (above) and damaged interpretive signs (below). Regular maintenance will ensure these issues do not build up again in the future



By way of overall comments, the following points are worth noting:

- Given the age of the infrastructure and interpretive signage most items – and most parking areas - are in surprisingly good condition.
- The full set of interpretive panels needs cleaning, and all will need to be replaced as part of the recommended Shire-wide “batch replacement” program as they are now 13 years old and are beginning to fade.
- The walk trails on the two rocks need some attention to bring them up to the standard now expected – this is particularly true of the Disappointment Rock trail. Specifically, trail marking needs to be enhanced so that the route(s) are more easily followed.
- Undertaking the remedial works recommended for Sites 1 to 5 (and in Hyden itself) will need to be negotiated with Shire of Kondinin. No cost contribution from them has been factored into the tables below – but this may be forthcoming post-negotiation.

Notes re costs below:

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Whole trail (Information only)	Shires of Dundas and Kondinin need to negotiate maintenance review schedules and any/all resultant work. A simple MoU may need to be established	0	0	0
	The original full-colour trail logo stickers that were affixed to the brown & white directional signs (fingerboards, advance warnings etc) have mostly faded beyond recognition. Replacing these stickers may be technically tricky, and would be time-consuming and therefore expensive. No action recommended at this point, but the issue will need to be addressed in the future.	0	0	0
	Establish a regular regime for checking toilet tank levels (and overall condition of structure) – and pumping out as required	0	0	0
	When clearing ash from concrete bbq rings ensure it is dumped well out of sight – not adjacent to the fireplace or anywhere within the cleared picnic area	0	0	0
	When the brochure is to be reprinted the notes for the Disappointment Rock trail need to be amended, as noted at distance 1460-1580 in the table below. Not costed here as timing of reprint is unknown	0	0	0

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Whole trail: <i>For action</i>	All 20 interpretive panels need thorough cleaning with specific etched aluminium cleaning fluid/process (as per Woodlands Walk, Beacon Hill etc). As with other trails, an allowance of \$10 per panel for each of "hardware" and "labour" has been included here (whole trail figures). NB: Does not include small panels on rock trails – costed in those entries below	200	200	400
	Develop a web-specific version of the brochure and make it easily downloadable	600	0	600
Site 16 Woodlands Walk	See separate sections in this Report for site plan and recommendations relating to both the walk trail itself and the parking/picnic area at the scenic lookout	0	0	0
Site 15 Lake Cowan Lookout	Panel 2 has a large dent in the photo, and several smaller scratches, but remains legible	0	0	0
	Empty concrete fire-rings (see note above)	0	50	50
	Sweep bases of picnic tables	0	50	50
	Install 2 additional blue marker posts either side of the culvert across the watercourse on the access drive – it is narrow and potentially dangerous	320	240	560
	See separate section on Lake Cowan Lookout for further works and enhancements	0	0	0
Site 14 Gemfields	Directional and interpretive signs are in good condition, and site is in overall good condition	0	0	0
	Clear ash from fire place – which is badly cracked but intact. Also remove "wild" fireplace nearby	0	80	80
	Clean concrete table	0	50	50
Site 13 Woodlands Picnic Area	Eastern "advance warning" sign is leaning badly and needs to be straightened. Otherwise directional signage is in good condition	0	120	120
	Overall site and interpretive signage all in good condition and showing signs of much usage	0	0	0
	Check back end of site (south end) for any additional extensions or braiding of tracks – or establishment of yet more camping places	0	0	0
Site 12 Disappointment Rock	Site sign at entry road sign is much larger the usual standard, and is only single sided. Further, it is leaning noticeably. Remove and replace with standard double-sided fingerboards to maintain consistency across sites	340	200	540

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Toilet has had 'pump handle' removed, but the old instructions are still there – these need to be modified to avoid confusion. Remove the sign and cut out the main image (referring to use of pump handle), then re-install top and bottom sections of sign (perhaps affixed to a new single backing plate) Remove the melted Enviro-Loo sign from the front by the door	0	120	120
	Toilet door needs a catch on the outside to prevent it banging in the wind when not in use	20	40	60
	Install a new sign in the toilet, saying: "If you see an issue with this toilet please call the Shire of Dundas on 9039 1205 and let us know. We aim to keep these facilities in good condition and would appreciate your assistance if there is a problem"	120	40	160
	Clear ash from fireplace and clean the table	0	100	100
<i>Disappointment Rock Walk Trail</i>	<i>The following notes apply to the trail up and around the rock outcrop. Distances are as per the tables in the map/brochure (cumulative from the car park)</i>	0	0	0
<i>Whole trail</i>	Clean all 17 interpretive panels with special cleaner	170	170	340
<i>Car park</i>	Install "straight ahead" trail marker at beginning of short walk leading to rock edge (small "walk trail ↑" plate on 100x100 steel totem)	160	100	260
	Trailhead panel in good condition	0	0	0
	Trail to rock needs pruning	0	40	40
30 m	Install small "Return to car park" sign at foot of rock where trail exits vegetation (same dimensions as for the trail marker described above)	160	100	260
73 m	Panel #1 is damaged but still legible and not needing replacement yet. Needs cleaning (as do all panels below)	0	0	0
131 m	Panel #2 is in good condition	0	0	0
220 m	Panel #3 is in good condition	0	0	0
284 m	Panel #4 is in good condition	0	0	0
353 m	Panel #5 is in good condition	0	0	0
+/- 400 m	Install new trail marker on the brow of the rock midway between Panels 5 & 6 (see photo in Appendix 2)	100	140	240
460 m	Panel #6 is in good condition	0	0	0

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
506 m	Panel #7 is in good condition	0	0	0
555 m	Panel #8 is in good condition	0	0	0
+/- 590 & 630 m	Install two new trail markers between Panels 8 & 9, each on successive brows of the rock ridge	200	280	480
670 m	Panel #9 is in good condition	0	0	0
+/- 730 & 790 m	Install two new trail markers between Panels 9 & 10, each to be visible from the one before	200	280	480
856	Panel #10 is in good condition	0	0	0
922	Panel #11 is in good condition	0	0	0
1029	Panel #12 is in good condition	0	0	0
+/- 1110 & 1190 m	Install two new trail markers between Panels 12 & 13, each to be visible from the one before	200	280	480
1267	Panel #13 is in good condition	0	0	0
1312	Install new junction signage at spur to Panel #14 (100x150 markers on same size steel item as recommended for trail markers elsewhere – one “right turn” on west face and one “right turn” on south face	160	140	300
+/- 1350 & 1380 m	Install two new trail markers between trail junction & Panel #14, each to be visible from the one before	200	280	480
1412	Panel #14 is in good condition	0	0	0
+/- 1460, 1500, 1540 & 1580 m	Install four new trail markers between trail junction & Panel #15, each to be visible from the one before. This section needs careful re-marking!	400	560	960
	Clarify and amend trail notes in brochure for this section as current notes are misleading*	0	0	0
1617 m	Panel #15 is in good condition	0	0	0
1695 m	Panel #16 is in good condition	0	0	0
1772 m	Panel #17 is in good condition	0	0	0
1862 m	Reach head of trail leading back to car park – see note at 30 m above re installing marker here	0	0	0
1892	Return to car park	0	0	0
Site 11 Lake Viewpoint	Site fingerboard sign needs to be rotated 90 degrees for improved visibility and made double sided	0	40	40
	Interpretive panel damaged (bent and shot). Replace with new sign including new backing plate	1240	100	1340

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Protect interp panel from future vehicle / grader damage by installing at least 4 large boulders as bollards	0	300	300
Site 10 Lake Johnston	Directional signage and general site condition is good	0	0	0
	Toilet badly needs cleaning, and bracing holding air vent tube to roof needs repair	40	120	160
	Toilet door needs catch on the outside to prevent it banging when not in use	20	40	60
	Modify internal "how to use" sign as outlined for Disappointment Rock above	0	100	100
	Install a new sign in the toilet, saying: "If you see an issue with this toilet please call the Shire of Dundas on 9039 1205 and let us know. We aim to keep these facilities in good condition and would appreciate your assistance if there is a problem"	120	40	160
	Clean ash out of all fire-rings, remove old ash piles and collect broken glass and litter	0	150	150
	Extend gravel walk trail another +/- 100 metres south along lake shore, and install timber seat under tree close to lake edge (see photo after this table of works)	1600	500	2100
Site 9 McDermid Rock	Directional signage and general site condition is good	0	0	0
	Access track can be subject to water damage after heavy rains – inspect and repair as needed	0	0	0
	Clean ash out of fire-rings and remove any/all old ash piles and wild fire places	0	50	50
	Toilet needs catch on outside of door and modification to internal signage, as per previous sites	20	140	160
	Install a new sign in the toilet, saying: "If you see an issue with this toilet please call the Shire of Dundas on 9039 1205 and let us know. We aim to keep these facilities in good condition and would appreciate your assistance if there is a problem"	120	40	160
McDermid Rock Walk Trail	<i>The following notes apply to the trail up and around the rock outcrop. Distances are as per the tables in the map/brochure (cumulative from the car park)</i>	0	0	0
Whole trail	Clean all 18 interpretive panels with special cleaner	180	180	360
Car park	Trailhead panel in good condition	0	0	0
71 m	Panel #1 has some scratches but is in adequate condition	0	0	0

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Rock dam is intact – check each time	0	0	0
109 m	Panel #2 is in good condition	0	0	0
+/- 150 m	Install new trail marker on the brow of the steep ridge above Panel 2	100	140	240
191 m	Panel #3 is in good condition	0	0	0
242 m	Panel #4 somewhat faded but adequate condition	0	0	0
+/- 280 m	Install trail marker on the brow of ridge between Panels 4 & 5	100	140	240
308 m	Panel #5 somewhat faded but adequate condition	0	0	0
388 m	Panel #6 is in good condition	0	0	0
	Prune branch of bush to the right (north) of Panel 6 as it obscures the view of this panel from up at Panel 5	0	40	40
438 m	Panels #7 & 8 are in good condition (same site)	0	0	0
479 m	Panel #9 is in good condition	0	0	0
552 m	Panel #10 is in good condition	0	0	0
623 m	Panel #11 somewhat faded but adequate condition	0	0	0
703 m	Panel #12 is in good condition	0	0	0
828 m	Panel #13 is in good condition	0	0	0
887 m	Panel #14 is in good condition	0	0	0
900 m	Panel #15 is in good condition	0	0	0
+/- 915-940 m	Prune vegetation on short section of trail along side up gully between Panels 15 & 16	0	40	40
963 m	Panel #16 is in good condition	0	0	0
1039 m	Panel #17 is in good condition	0	0	0
1179 m	Panel #18 has some scratches near the top but is in adequate condition	0	0	0
1271 m	Return to car park at trailhead	0	0	0
Site 8 Emily Ann	Eastern advance warning sign is missing – replace	160	100	260
	Interpretive panel and backing plate are bent – remove from post, straighten carefully and re-install if possible. NB: Replacement costed here	1240	100	1340
	Protect interp panel from further vehicle / grader damage by installing several large rocks as barrier	0	300	300

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Site 7 The Breakaways	Advance warning sign on east approach is missing – replace	160	100	260
	Large double-sided chevron at entrance to this site is warranted here – retain and check condition both sides each review	0	0	0
	Access track needs grading and drainage repair over first 100 metres	0	500	500
	Tracks within and around site are showing some water damage – grade and gravel when repairing access road (line above)	0	500	500
	Rock fall risk sign is missing at first breakaway – replace on existing post	80	40	120
	Clean ash out of all fire-rings and remove all wild fireplaces	0	250	250
	Bollards protecting reveg area are intact but will require frequent checking (as it remains an enticing camping spot)	0	0	0
	The rotating ventilator on the top of the toilet breather pipe is broken and needs replacing	150	100	250
	Toilet badly needs cleaning (insufficient / irregular maintenance?)	0	50	50
	Toilet door needs an external catch, as per toilets at other sites	20	40	60
	Internal toilet usage signage needs modifying as per other sites	0	100	100
	Install a new sign in the toilet, saying: “If you see an issue with this toilet please call the Shire of Dundas on 9039 1205 and let us know. We aim to keep these facilities in good condition and would appreciate your assistance if there is a problem”	120	40	160
Site 6 Grevillea Hill	Collect rubbish from around parking area and picnic site, and clean table and panel	0	100	100
Site 5 Shire Boundary	Site sign (at site itself) is missing – install standard site signs on back side of each of the existing Shire signs (2 of, each on 2 posts)	240	140	380
	Remove old “bus shelter” and out-of-date signage in it	0	300	300

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Collect old tyres and other rubbish from around site	0	300	300
	Plaque on rock between interpretive signs is no longer legible. Negotiate replacement with Shire of Kondinin (allowance made here for new plaque)	700	100	800
	Both interp panels are extremely dusty and badly in need of cleaning (costed in whole trails costs above)	0	0	0
Site 4 Forrestania Plots	“You are entering Great Western Woodlands” sign is installed below top of posts and looks untidy. Either remove excess posts above or shift sign to top of posts.	0	100	100
Site 3 Holland Track	Replace blue “Holland Track” sign with double-sided standard brown & white site signs	240	100	340
	Western advance warning sign is leaning - straighten	0	80	80
	Interp panel is bent – remove from post and straighten, then re-install. Protect from future damage by installing rock “bollards” (see below) <i>NB: Replacement costed here</i>	1240	100	1340
	Install rock bollards to prevent damage to panel	0	300	300
Site 2 Barrier Fence	Site sign needs to be installed on full-height posts in order to be visible above vegetation	200	140	340
	Interp panel is damaged in the lower right corner, but does not yet need replacing	0	0	0
	New “Ben Mouritz” plaque is poorly worded and should be re-written and replaced. Negotiate with Shire of Kondinin (no funds allocated here)	0	0	0
Site 1 Wave Rock	No advance warning sign east of turn off main Hyden Norseman Road – install standard version	160	100	260
	No GWDT signage at turn off main Hyden-Norseman Road. Install double-sided fingerboards	260	100	360
	There is no need for signage at the western approach as existing “To Wave Rock” signs are ample – for note only	0	0	0
Hyden	There is no GWDT signage in any of the information bays. Negotiate installation of a single 800x1200 colour panel in the main bay south side of road toward east end of town. Panel to be installed on south verge of bay under tree near western end of bay (see photo below)	2850	350	3200
	Install “Granite & Woodlands Discovery Trail information →” sign under blue “I” sign that faces eastbound traffic (at entrance to Info Bay)	160	100	260

LOCATION	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Sub-totals		15,070	10,450	25,520
Contingency allowance 10%		1,510	1,040	2,550
TOTALS not inc GST		16,580	11,490	28,070

The informal trail extending south of the Lake Johnston camping area should be extended and gravelled, with a seat being installed under the tree as shown to the right



A Granite and Woodlands interpretive display should be installed in the Information Bay in Hyden, at the location shown to the left

Dundas Coach Road Heritage Trail

Site description and current infrastructure

The current version of the Dundas Coach Road Heritage Trail (DCRHT) was developed by the Shire in 2004, building on an earlier version that had been in place for many years previously. It has many of the attributes required to make it an outstanding visitor attraction among similar heritage trails:

- It starts (or finishes) in town;
- It is relatively short at less than 25 km (+/- 50 km round trip);
- It is comfortably driven in any kind of vehicle – and would make a passable cycle trip too;
- It is heavily interpreted, with 10 sites at an average spacing of just 2.5 km;
- It passes through delightful country, and has a fine mix of natural and cultural attractions;
- It has a quality brochure describing the outing and providing background information;
- The return trip (if starting from town) is a quick and easy journey back up the Highway.

Why then, one wonders, does it not appear *at all* on the Visitor Centre website? This would appear to be a strange and inexplicable omission. It is mentioned as an “attraction” on the Shire’s site under the heading “Heritage Trail”, being described thus:

This trail retraces the original Cobb & Co Coach Route from the Lady Mary Mine through to the original Dundas Townsite. The 28 kilometre drive provides an insight into early mining history, unique eucalypt woodlands and ancient granite nature reserves. A delightful picnic spot welcomes visitors after your adventure on the trail.

There is also a link from which visitors can download a good-quality copy of the trail brochure. The same link appears on the Australia’s Golden Outback website under a heading “Dundas Rocks and Lone Grave”. Here about nine lines of text can be found, of which one relates to the Trail (the remainder referring to the grave or the old Dundas townsite). The relevant line is: *“Discover more of this fascinating region by taking the Dundas Coach Road Heritage Trail which ends at the Lone Grave.”* This is actually erroneous as the Trail does not finish at the Lone Grave.



The Heritage Trail interprets classic historical sites such as the Break 'o Day cricket pitch – which, sadly, needs urgent protection from hoon behaviour

A quick web-search shows that the DCRHT is also mentioned on the Kalgoorlie Tourism site, under the Norseman entry in the “Region” section. Here it is also incorrectly referenced as follows: *“Norseman's Heritage Trail is located near Lake Dundas and offers the chance to explore the bush and artefacts from the Dundas Goldfield's pioneering years.”* While it is useful, perhaps even valuable, that the Trail is mentioned in a major regional site like this, it (the Trail) is not “located near Lake Dundas” and it offers a chance to explore a lot more than “the bush and artefacts from the Dundas Goldfield’s pioneering years”.

These two web entries underline the critical importance of developing and maintaining accurate, up-to-date and interesting/appealing information on the internet – no matter who controls the site in question. Visitors who may only (or initially) read the two regional website entries mentioned above may well not give the DCRHT (or Norseman for that matter) a second thought based on the existing material – which would be a great shame, as this is a thoroughly excellent Heritage Trail (comparable with any similar short heritage drive trails in the State) and should be a significant drawcard for the Shire.

The brochure carries a thorough background to the trail in its primary description:

Late in 1892 prospectors Mawson and Kirkpatrick found gold in the rocky Dundas Hills, some 20 km south of Norseman. A tortuous 200 km ride through trackless scrub took them to the boom town of Coolgardie, where on November 15th they lodged their “Mawson’s Reward” claim, the first in what was to become the Dundas Goldfields.

Their success attracted a swarm of prospectors and soon enough other finds were made nearby to warrant the establishment of a town. Late in 1893 the Dundas townsite was laid out near Noganyer Soak, not far south of the Mawson’s Reward lease.

Unfortunately for the fledgling town more gold was discovered in 1894, at what was to become Norseman. These finds were richer than those around Dundas and almost before it was fully alive the original town began to wither and die. The population of Norseman boomed and miners and business people poured in from all directions.

While some came down from the rail-head at Coolgardie, many came up from Esperance and other ports on the south coast. Soon a 'road' was established, linking the various water-holes and settlements including Grass Patch, Salmon Gums, Dundas and Norseman. On May 23rd 1896 the first 'Royal Mail Coach' arrived in Norseman after an arduous two day journey – and now you can follow in its wheel tracks and explore some of the historic sites along the way.

The Dundas Coach Road Heritage Trail features 10 stopping places spread along the 25 km between Norseman and the site of the original township of Dundas. Each site features fascinating interpretive stories that help build a picture of life in the early years along the Coach Road. Some sites have picnic tables, others have walk trails – all showcase the life and times of the hardy folk who flocked to the Dundas goldfields.



Several low or flat gullies trap water on the Heritage Trail, forcing it to be closed from time to time (above)

Vandalism and graffiti will be less of an issue if regular maintenance is undertaken (below)



Access to the trail route for the field review of its condition in January 2016 was delayed by summer rain which had left sections of the road deemed impassable. This suggests that the Shire could investigate those low-lying areas that are prone to flood to ascertain whether any remedial work might be undertaken in order to limit (rather than prevent entirely) these occurrences when the trail becomes inaccessible to visitors. The results of the review that eventually took place follow in the next section.

Maintenance review checklist & cost estimates

The DCRHT appeared to be in reasonably good condition in January 2016, given that 12 years have passed since the project was undertaken. Key actions required are summarised below:

- Attending to flooding and erosion issues after heavy summer rains;
- Remedying the situation re the short walk trail in Brockway Timber Reserve, at Site 7;
- Enhancing and clarifying directional signage at the junction at Site 10 (old townsite), and
- Upgrading access and signage to the Lone Grave, and including it in the trail as Site 11.

Other actions are more site specific – or are simple and repetitive (clean interp panels etc) – and all are set out in sequence from north to south in the table below.

Notes re costs below:

- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

LOCATION Km from Vis. Centre	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
Brochure	Current printed version is on thin / flimsy stock. This looks and feels “cheap”. When reprinting use a heavier and more classy stock in fitting with the quality of the trail experience.	0	0	0
	When re-printing the brochure consideration should be given to having it fit the overall “Dundas style/look” that should be established as part of this broader project. A web-friendly version should also be produced.	0	0	0
	Modify and reprint brochure when work outlined in this Review is complete. The modifications should include: <ul style="list-style-type: none"> • A column for cumulative / total km travelled for the “reverse” south-north direction of travel. • Mention of picnic table at Site 6, and 2 tables, 2 bbqs and rubbish bins at Site 9. • Information about the “new” Site 11 – Lone Grave (including warnings re bogging/towing costs) • And the reprint should be on better stock, as outlined above 	1980	0	1980
Whole trail Information only	Consider promoting the Heritage Trail as a long but relatively easy outing for cyclists	0	0	0
Whole trail For action	All interpretive panels need thorough cleaning with specific etched aluminium cleaning fluid/process (costs included for each Site below)	0	0	0
	Remove any rubbish within view of sites and the road	0	400	400
	Remove any and all ‘Give Way’ signs placed at the exit from sites – they are redundant and intrusive	0	400	400
	Install a small brown & white plate carrying the trail logo and the words “Heritage Trail” immediately below each of the 100 metre “advance warning” signs	700	500	1200

LOCATION Km from Vis. Centre	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Repair storm water damage to road surface (various locations – minor erosion damage). In January 2016 there were three large flooded sections at: <ul style="list-style-type: none"> • 50 m north of Site 10 • 500 m south of Mt Henry Rd • 1.2 km south of Site 3 	0	600	600
	Remove all old "Heritage Trail" signs (black letters on white painted background)	0	200	200
0.1	Install brown & white sign at main roundabout (Roberts & Ramsey St) "Dundas Coach Road Heritage Trail ↑"	120	50	170
Site 1	Clean interp panels and prune bushes around lower & left sides	20	30	50
	Install small fingerboard at south end of long gravel parking area to show exit route to the right	140	60	200
Site 2	Clean interp panels	20	20	40
Site 3	Clean interp panel	10	10	20
Site 4	Clean interp panels	20	20	40
	Check old grave site for damage	0	0	0
Site 5	Replace fingerboard at turn to site – should say: "Site 5 100 m"	140	40	180
	Relocate existing fingerboard to the "Y" junction halfway to the site, to direct visitors to the left	50	60	110
	Replace or repair mesh grill at entrance to decline, to prevent access	400	400	800
	Clean interp panel	10	10	20
Site 6	Remove old "Cricket pitch" sign	0	40	40
	Install barriers (logs, rocks or bollards) to prevent vehicles getting onto cricket pitch	800	600	1400
	Sweep base of table & clean top & seats	0	50	50
	Clean interp panel	10	10	20
Site 7	Clean interp panels	20	20	40
	Re-open walk trail west of road: * Install "Brockway Timber Reserve Walk Trail 800 m" sign by road	180	60	240

LOCATION Km from Vis. Centre	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	* Clear trail route & check / improve surface	0	400	400
	* Install trail markers on 100x100 steel posts (allowance for 10 markers)	1400	600	2000
	* Replace or repair the bush timber bench up at the interp panel	1100	200	1300
	* Install 6 small (200x300) etched aluminium interp panels identifying key features of Timber Reserve	8280	600	8880
Site 8	Panel 1 is faded, but still okay. Clean all panels	30	30	60
22.64	Stop sign is missing from east side of Mt Henry Rd intersection – replace	100	60	160
Site 9	Remove ash from both concrete fire-rings and remove any wild fireplaces	0	80	80
	Clean off or paint out graffiti on bins and fire-rings	0	80	80
	Empty bins if required	0	0	0
	Interp panel is faded – clean and monitor	10	10	20
	Sweep bases of picnic tables and clean tops & seats	0	80	80
	Check condition of dam wall itself, repair rock work as/if required	0	400	400
Site 10	Note: further enhancement of the Old Dundas Townsite is not considered warranted. Instead, upgrade access to Lone Grave and include it in Heritage Trail	0	0	0
	Clean both interp panels	20	20	40
	Plaque on rock between panels is missing: either replace it or remove the rock (rock removal costed)	0	200	200
	Remove wild fireplaces under trees north east of site	0	50	50
	Remove the old (short) Site 10 post, and the old “picnic area” post 20 metres north of junction	0	60	60
	Install new sign 20 m east of site (at beginning of road to Lone Grave) saying “Tracks ahead can be treacherous when wet. Substantial towing costs will accrue if you become bogged”	180	60	240
Site 11 Lone Grave	Remove ALL old signage leading to the Lone Grave	0	200	200
	Grade access track (lightly) as far as the parking area beneath big eucalypts by lake edge, and grade parking area too	0	400	400

LOCATION Km from Vis. Centre	ACTION TO BE TAKEN (if any) / COMMENT	ITEM COST	LABOUR COST	TOTAL COST
	Install the following new signs: * “Lone Grave ↑ Drive xx km, then walk yy km” – on same post as management sign re bogging listed above	100	20	120
	* “Lone Grave ⇒” at first “Y” junction	140	60	200
	* “Lone Grave ↑ at next junction	140	60	200
	* “Lone Grave ⇐” at turn down to parking by lake edge	140	60	200
	* “Park here and walk to Lone Grave. Warning: Do not drive on lakes or tracks beyond this point. Recovery fees are substantial if you become bogged” at parking area beneath trees”	180	60	240
	* “Walk to Lone Grave 520 m ↑” at start of track from parking area to the east	140	60	200
	* “Lone Grave ⇐” at turn down to lake	140	60	200
	* “Lone Grave ⇒” just before lake crossing	140	60	200
	* “Lone Grave ↑” at existing old straight-on sign	140	60	200
	* “Lone Grave ⇒” near grave, at existing sign	140	60	200
25.2	Remove offensive graffiti from big Dundas Rocks boulders	0	200	200
26.5	Reach Highway junction – replace large “Tourist Drive” chevron with one that says “Dundas Coach Road Heritage Trail ⇒” (both sides)	560	120	680
	Replace both advance warning signs with “Dundas Coach Road Heritage Trail – Turn Right/Left 300m”	520	200	720
Sub-totals		17620	8090	25710
Contingency allowance 10%		1760	810	2570
TOTALS not inc GST		19,380	8,900	28,280

The lone grave is an emotional site, located on the isolated and evocative headland seen in the photo to the right



Possible future 4wd trails

During field work for this project the prospect of creating a network of 4wd trails was raised as yet another potential visitor-attracting project. Reviewing maps of the Norseman area does immediately suggest that there are a considerable number of tracks and old roads that might well suit this concept. Indeed, it would seem that a “clover-leaf” of trails may potentially be established, with the town at the centre of the network. All four directions appear to have good prospects:

North East:	Old woodline tracks, mining exploration tracks and tracks leading to the Trans line
North West:	Tracks leading to and in the vicinity of Cave Hill; more woodline tracks
South West:	Tracks heading toward Peak Charles
South East:	Mining access tracks, old telegraph line, tracks in Dundas Nature Reserve

While the raw materials may exist on the ground, the key question with regard to this idea revolves around the size of the market – or the potential market. Four-wheel driving is clearly a popular activity in the goldfields – but it is thought that the majority of those involved live in the area – and these folk are less likely to be attracted to “official” trails. Norseman’s distance from major population centres may mitigate against there being a sizable group of visiting four-wheel drivers who might be more likely to be attracted to formalised trails, and this suggests that while the concept has merit and should be explored in the short-medium term, it is not a high priority at this point in time – especially given the number and quality of other site and trail development projects outlined in this report.

It is worth noting however, that developing such a suite of trails is not likely to be significantly costly, and therefore even though there may not be a large “market” the cost/benefit ratio could still make this a worthwhile option at some point in the future. If/when the Shire is ready to further investigate the idea it would be appropriate to contract a specialist consultant with experience in drive trail development to undertake a feasibility study which would review the on-ground options and consider whether or not they would merit the cost of implementation.

SECTION 6: IN-TOWN SITES AND PROJECTS

Developing a central "precinct"

The seed of the "central precinct" concept was sown in a discussion about a possible location for some large items of "historical" mining equipment that had been donated to the Shire. Initial thoughts revolved around locations well removed from the "core" of town – the area where it was most likely visitors could/should be encouraged to walk around and spend time (and money).

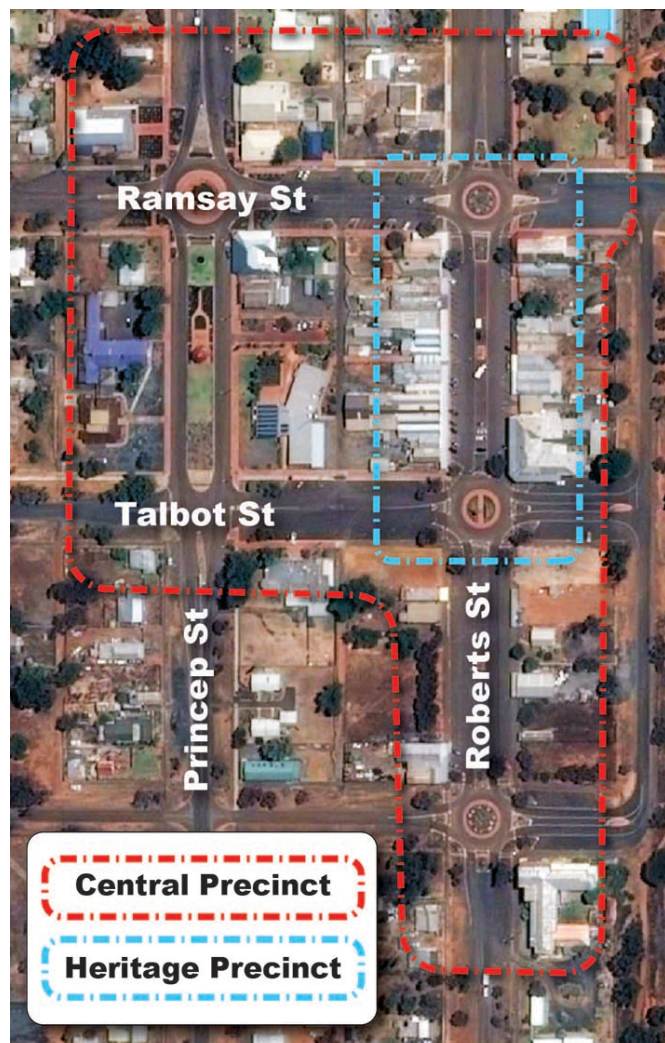
This led to the recommendation that this central core or precinct should be identified – and that the Shire should then attempt to focus the (great) majority of enhancements and new developments within this zone, to build the density of experience and prevent possible attractions becoming somewhat stranded or lost out in fringe areas where visitors may have to drive or take an unwanted longer walk in order to view them.

Rationale

The goals in designating a core area of Norseman are to:

1. Strengthen the sense of a town heart, for both visitors and locals;
2. Ensure important historic fabric is conserved as much as possible;
3. Enable resources to be focused where they will have the most impact;
4. Support key businesses, primarily for the benefit of locals, but also for visitors;
5. Maintain a consistent set of streetscape furniture styles, structures and colours, and
6. Provide a rationale for decisions about siting new businesses or facilities, staging infrastructure works, addressing eye-sores and encouraging private owners to enhance their property or services.

Once the Precinct has been designated, strengthening and enhancing it can be done through a combination of Shire policies (i.e. planning and building codes, design and development guidelines, conservation policies and incentive initiatives), community development programmes (i.e. community artworks, community markets, small scale street festivals, 'buy local' promotions) and business initiatives (seeking assistance to find gaps in the market or new markets, up-skilling and supporting local businesses, strengthening existing business networks and promoting existing businesses and services to local and visitors).



The Shire can take a lead role, but the business and wider community needs to partner and make a significant contribution. Enhancing the streetscape will have an impact on the attractiveness of the town centre, but it can only go so far - the commercial viability and quality of products and services in the precinct also needs to be strengthened and supported.

Heritage Precinct

The run of buildings on Roberts St between Ramsay and Talbot St are a remarkably intact and consistent set of "tin and timber" goldfields stores. Many are however, reaching a point dilapidation which will place them at risk of collapse or condemnation. Urgent work needs to be done to assess these buildings, identify tools that the Shire can use to conserve (or at least arrest further degradation of) the buildings and, ideally, find ways in which they can become tenanted and contribute to the vitality of the town centre. Tenanted buildings generally have a much higher chance of survival than empty ones.

Heritage Architects H+H advise that there are advantages to "listing" streetscapes or building clusters, both in terms of accessing assistance and in achieving a consistent approach to conserving intact runs of buildings. The Shire's Municipal Inventory may also need to be reviewed and refreshed.

Further advice on a Conservation Strategy can be sought from:

Julie de Jong
Director, H+H Architects
Email: julie@hharchitects.com.au
Tel: (08) 9842 5558

Undertaking the necessary Conservation Strategy for this area is estimated to cost \$14,000 + gst.

Conservation of these buildings is likely to be a longer term project, and in the interim the facades of empty buildings have been boarded up with tin and cladding, and contribute little to the central precinct for locals or visitors. A short term approach to bringing life and interest to the main street could be a project to install images in frames set up to mimic shop windows.

The frames would be installed on posts immediately in front of the closed buildings (many of which are not structurally sound and so frames should not be attached to them) and designed to be made locally if possible. Images should be curated to a theme and could be taken from the town's historic collection or could be the result of a community photographic project (see the 'Thicker Than Water' Mullewa project for an example). Once selected, the images would be printed onto sign sheet and set into the frames. An illustration of the concept is provided below.



As an immediate action, the verandah of the demolished building on Roberts St adjacent to the Rock Drill competition site needs to be removed as it only underlines a sense of decline for the town.

Each “picture window” is estimated to cost \$800 including the frame (assuming frames are made by the Men’s Shed), with an additional \$200 per unit allowed for installation, bringing the total likely cost for this particular project to \$20,000.

While it may be appealing as an action that would have immediate impact in the main street it is listed for Year 2 of the implementation program, as it is important that the heritage architects have unfettered access to these shop fronts – both for assessment purposes and for any follow-up structural works that may be required to stabilise the structures.

Woodlands Cultural, Community and Visitor Centre

In recent years the Shire has purchased the old “camel café” building near the roundabout at the junction of Prinsep & Ramsey Streets for possible conversion into a major “Interpretive Centre”. This was seen to be a potential “anchor” attraction in town, and a means of very visibly and directly branding Norseman (and therefore the Shire) as “the heart of the Great Western Woodlands”.

The building appears to have been constructed in the 1920s or 30s and has previously housed a number of well-known local businesses. It is directly between the “Gallery of Splendid Isolation” (on the corner) and the combined playgroup / community health building and has a substantial and visible frontage to the Coolgardie-Esperance Highway (Prinsep St) – the primary route into town. As such, it would appear to be well located to host such a lofty and potentially far-reaching project.

The idea of a major Interpretive Centre has held – and holds – appeal for many smaller regional centres, who perceive such attractions as “icons” that will draw visitors in their own right, keep them in town for longer and liberate them of at least moderate sums of money. Many such projects have been attempted in Western Australia in the last 10 years, with two in the immediate Goldfields region quickly springing to mind: The “Miners and Prospectors Hall of Fame” in Kalgoorlie, and the “Great Beyond Explorers Hall of Fame” in Laverton. Other examples in towns of roughly similar size to Norseman would be the “Yongemow Malleefowl Centre” at Ongerup and “Kodja Place” in Kojonup.

To say that these examples have met with mixed success would be a broad understatement. The Hall of Fame in Kalgoorlie has, despite liberal applications of sponsors funding, closed for business; the Great Beyond Centre has had to be substantially scaled back and now operates primarily as an upmarket visitor centre; the Yongemow Centre too has struggled for sufficient funds to be fully developed and has failed to have a significant impact on visitor numbers in the area, and only the Kodja Place appears to have met with some success (perhaps significantly assisted by its location on a major highway and at a natural stopping point between Perth and Albany). This story is repeated time and time again right across Australia: traditional interpretive centres are extremely difficult to deliver in a fashion that produces worthwhile outcomes without becoming a major drain on shire and/or community resources.

The building is in a prime location near the “camel corner”, and offers a substantial blank canvas for enhancement



Indeed, it is probably fair to say than quite a number have become “black holes” that require ongoing propping up without producing notable benefits. They then become a focus point for criticism that the community is having to underwrite infrastructure (both financially and through volunteer labour) that doesn't service them in any meaningful way, and which soaks up funds that may otherwise be spent on local projects.

Having said that, one of the key elements commonly found in those (few) that do produce valuable and worthwhile outcomes is that they are anchored in or on a *major* natural or cultural attraction. The National Anzac Centre in Albany appears to be succeeding at this early point of its history – but it is built around a truly national story (and was the recipient of well in excess of \$5 million of federal and state funding). The Stockman's Hall of Fame in Longreach is another such entity that appears to be both surviving and succeeding – but again, it is built around a national story/theme, something deeply embedded in the Australian psyche and widely associated with the “real Australia” in most tourist's minds. Now the question is: does the Great Western Woodlands have the weight, the awareness, the appeal to deliver this kind of outcome?

While there is little doubting the merit of the Great Western Woodlands as a concept – and *no* doubting the aesthetic or scientific value of this remarkable tract of land – real questions could be raised around the actual level of awareness of such an entity in the wider travelling public. And to suggest that a full-scale interpretive centre would actually *develop* this awareness would be most likely to hobble the place with an unsustainable burden of expectation that could well cripple what in other more moderate forms may be a valuable concept.

It is the consultants' opinions that there is merit in Norseman (and the Shire) laying claim to being “*The Heart of the Great Western Woodlands*”. This appears to have considerable potential value in terms of marketing and positioning – but that is not the same thing as being adequate sustenance for a full-scale traditional interpretive centre. Instead, this phrase (and concept) could/should become the centrepiece of a wholly revised promotional and development strategy for the Shire – and the future of the building in question should be re-envisioned as a scaled-back more rounded and more locally-focussed “Visitor and cultural / community hub”.

The goal should be for this to become an attractive, activated, locally relevant facility with real connections to the Dundas community – one that has the potential to be a vibrant environment delivering great outcomes *for* that community. As such it will also be a place that travellers will enjoy and seek to visit.

There is no question that a redeveloped and reinvigorated Visitor Centre should be at the core of this project. And with the proposed new marketing pitch focussing on the Woodlands, a major gallery / interpretive space supporting this would be entirely appropriate (perhaps in cooperation with entities such as the Gallery of



Splendid Isolation next door and the local Ngadju arts group). Incorporating an active arts hub into the building is another option, and while there may be alternative locations for such a place this idea is woven into some of the suggestions outlined below.

Norseman's location in the centre of the well-signposted Great Western Woodlands offers the Shire a prime opportunity to link with an entity of national and international importance

Ideally development of the centre should include an aspect of skills development so that the capacity in the community to provide services to (and within) the Shire is improved. For example, this could be hands-on experience and teaching in building maintenance and handling asbestos, or it could be a short course in how to hang exhibitions and manage artworks, or build and maintain websites, or perhaps qualifications in visitor services. These are just a sample of the skills that could be enhanced through this project/concept/centre – to the mutual benefit of the Shire and its citizens.

A key element in considering the future of this project is the extent to which Ngadju culture, language and knowledge can be built into the shape of the outcome. Achieving a high level of engagement and involvement would be likely to deliver a substantial reimbursement in terms of both visitor satisfaction and wider local community benefits.

As mentioned elsewhere in this report, there is among the travelling public a great thirst for a real, meaningful and respectful experience of Aboriginal culture – and following the settlement of the Ngadju Native Title Claim and the subsequent establishment of organisations like Ngadju Conservation and the Ngadju Ranger program there appears to be an unusually fertile opportunity for the Shire to integrate positive aspects of indigenous culture into this project from the very beginning – to the extent to which such is desired by the local Ngadju population of course.

It would be realistic to imagine that more widely recognised goals such as worthwhile training and possible job / employment / business opportunities could spring from such a committed engagement. But perhaps the greatest potential outcome might lie in the more subtle but massively influential field of *cross-cultural respect* and *self-respect* within the local community. When the existence and intrinsic values of a people and their culture cease to be denied and instead are accorded an equal place in the public realm great and lasting impacts ripple through both European and indigenous sectors of the local population. The challenge for the Shire is to have the leadership, vision and patience to work through the sometimes long and challenging consultation and partnership processes required to bring such a goal to fruition.

It is therefore recommended that if the Shire desires to follow this path it immediately seeks professional and sensitive support in designing and facilitating an inclusive process of discussion about the shape and extent of this interaction *right from the earliest stages of scoping*. Retrofitting indigenous culture into a concept such as this is almost always counter-productive as it is inevitably (rightly) seen to be at worst blatant usury or at best shallow forelock-tugging.

Indeed, it is clear the Shire needs to contract quality consultant(s) with a proven record in empathetically engaging with small remote communities to scope out a Concept Plan for this project. This is a specialised field of work, often dominated by “suits” from the big cities – many of whom have little knowledge and less interest in the real-life workings of a place like Norseman, and who may be inclined to simply give the client what they (the consultants) think is the pre-conceived and therefore desired outcome – without applying real rigour and without taking the time and making the effort to dig into the deeper realities and subtleties of the host community.

Such a Concept Plan should draw on the *whole community* for its most creative ideas – and yet should also apply the sharp edge of reality (both economic and social) to these ideas before shaping the final outcome. This project must not be driven by starry eyes and *must not become a financial millstone* around the Shire's neck. With those provisos, there appears to be considerable merit in pursuing the notion, and hitching the Shire's wagon to the concept that Norseman is (clearly) *The Heart of the Great Western Woodlands*”.

Some possible uses / spaces / requirements

Initial brainstorming delivered the following list of possible / potential uses or options for the building. These are put forward in the belief that the traditional full-scale “Interpretive Centre” model is highly unlikely to be feasible in the medium to long term, and that therefore a more rounded and community-focussed model may be more advisable. Some combination of these ideas may be integrated together to produce an outcome that would be of value to both the local residents and visitors alike:

- Relocate the Visitor Centre operations to the front / main part of the building, and expand and reinvigorate these crucial operations, potentially incorporating some modern touch-screen style of enhancements.
- Connect the above with a larger Shire-focussed exhibition space for displays of natural visitor attractions, and cultural / historical material.
- Include a small reference library, with the same selection of books being on sale.
- Install a mini theatre or dark enough space to watch a tourism (or interpretive) DVD.
- Also incorporate a small gallery / changing exhibition space with some kind of flexible hanging system. It should be possible to close off this space so if its empty between exhibits it doesn't look vacant and unappealing.
- Create a pop-up shop “pod” for local craft sales (could be in the small gallery).
- Provide a public WiFi lounge and (maybe) a coffee machine / mini café (without wanting to draw business away from main street cafes). Access to WiFi could be via a voucher system with the password provided upon showing a receipt from any business around town with a value of more than (say) \$5.
- Create workshop spaces – wet (artists, painters etc) and dry (language groups, cultural workshops etc). These spaces should be visible from main use area so visitors can see activity – and/or they should be accessible so people can wander through where/when appropriate. Or maybe install a glass wall or bi-fold doors to limit direct access but give a sense of engagement? It would be important to try to achieve this without making artists feel like they are an “exhibit” or are being constantly interrupted. However, sales are more likely if the buyer has met the artist and had a pleasant/rewarding encounter with them.
- Include a small studio to be used as an artist-in-residence space – see note above about being “visible”. The space would need to be lockable so they can leave their equipment safely.
- Build in cages for art group equipment and storage for the whole building/facility: separation would be necessary so community groups can have their own small storage spaces.
- Rear access roller doors are likely to be useful for bringing in new exhibits; for deliveries and for storage of items (such as – possibly - bikes for hire).
- Provide a kitchen for keeping food warm, tea coffee etc – though probably not a full commercial kitchen.
- There will need to be a staff retreat and kitchen / toilet.
- And of course public toilets, baby change etc. will be necessary.

This is a significant project, and will need to be staged in achievable steps so that it is “designed to succeed”, and is built from successful sub-project to successful sub-project. If the initial stage is too ambitious and the project fails, it would then be much harder to try again a second time.

Some possible considerations for upgrading the building

The following list of ideas was provided to the Shire early in this project, in advance of their initial meeting with the architect. They mainly relate to structural matters that might influence the sustainability of the project concept in the long term:

- Reduce ongoing running and maintenance costs of the building to the Shire – is it suitable for solar passive / insulation / cooling initiatives to be retrofitted to reduce power bills etc?
- Building interior is very dark: how best to bring in light without heat and bleaching of interior displays, and allow winter sun and warmth?
- Can the interior be planned as a set of modules (pods) so that the initial facilities can be expanded over time? What implications would this have for cooling / heating / services etc?
- How best could power, internet and other cabling be brought into the space for flexibility and cost effectiveness? Would a dropped ceiling be worth considering?
- The existing disabled access is not up to Australian Standards – and issues relating to improving access into and throughout need to be considered and factored in.
- The accommodation at the back of the building is very run down – the northern part of this section of the building is an old 'tin' cottage - does this have heritage significance, or can the whole rear be removed? A careful review would need to be undertaken when deciding the benefits of making the existing structure liveable against starting afresh or even using accommodation elsewhere. Does there actually need to be accommodation here, or is this a case of simply thinking "oh, it's here so we should do it up and use it..." without first defining who or what for?
- The building use is likely to change and grow over time, so spaces need to be flexible but ideally not feel temporary or flimsy; there needs to be some noise insulation between 'rooms' (which could be generous in size). There will be issues with getting natural light into internal 'rooms/spaces'.
- The façade needs substantial enhancement in order to give the place a strong street appeal.
- The north face fronts onto a pleasant green space. Options for decking, solar awnings etc need to be considered, and separation from playgroup and community health may be necessary.

The value in funding a professional assessment and feasibility study for the buildings' development cannot be overstated. Careful and strategic planning for the development of the facility will save future spending on re-modelling, renovation and ongoing maintenance costs, and will ensure that the building retains a degree of flexibility that allows for the uptake of as yet unknown opportunities.

The Shire may consider contacting managers of similar facilities to learn from their successes and issues. The Shire of Kojonup opened the Kodja Place in 2001 with the goal of creating an Aboriginal Cultural Heritage Centre, Historical Interpretive Centre and Regional Rose Garden. A café was subsequently added. (www.kodjaplace.com.au). The project included a significant element of local skill build, with visiting consultants helping to leave behind new skills in the community (one example being film making which is now done locally for the interpretation gallery).

The Shire is currently reviewing the entire centre in order to refresh the displays, upgrade interpretation to accommodate new technology and address some issues which have become apparent as the place matures. Some of these issues relate to:

- Circulation of visitors to ensure that the separate elements of the campus connect better;
- Programming of the spaces and activating the galleries, and
- Providing public facilities (i.e. toilets) in a way that doesn't have a negative impact on the galleries.

Discussions with the project managers for the Kodja Place during the preparation of this Report reinforce the need to have a very clear design brief, to seek advice from a variety of specialists – an architect alone is not sufficient - and to work with a community-based steering group to ensure local nuances are addressed and there is local ownership. The following people may be valuable resources for the Shire to contact in the early planning stages of the Norseman centre:

Zahra Shirazee,
Manager, Community Development & Tourism
Shire of Kojonup
Email: mkpp@kojonup.wa.gov.au
Contact numbers: 9831 0500 or 0417 987 237

Kodja Place website co-ordination, text development and photo selection project manager in 2001:
Margaret Robinson, Contact number: 0427 520 196

Another resource could be the WA Museum:
James Dexter, Manager Creative and Regional Development
Toll free (country WA callers only): 1800 023 333

Responsible for:

- site management, visitor services and programming at Albany, Geraldton and Kalgoorlie-Boulder, and site volunteers at Perth;
- Exhibition and design; learning and creativity;
- Regional and outreach activities.

The Shire should also look at the Port Headland Courthouse Gallery (and Spinifex Studios) which is a FORM initiative as there are good parallels to the goals envisaged for Norseman (www.form.net.au). It may be helpful to contact FORM to discuss the issues they have encountered, and possibly even opportunities for FORM to be involved in the Norsemen project. Contact:

Lynda Dorrington
Executive Director
Email: Lynda@form.net.au
T: +61 (08) 9226 2799

Cost estimates

It is estimated that the scoping/feasibility study necessary to flesh out the concept will cost \$20,000 + gst.

Town centre & museum signage – review

Town centre signage

This first (and major) part of this matter arose when reviewing vehicle movement and the possible flow of visitors from the Eyre Highway (perhaps the single most important feeder route) into the town centre itself with Shire representatives early in the project's conception. Whilst this kind of signage is important in any town, it is a particular issue with regard to Norseman, as the western end of the Highway is a busy and somewhat cluttered space – especially for travellers who've just driven most of the way across the continent and seen little sign of a built-up area.

Three routes from the Highway to the town centre appear possible, on paper at least (listed from east to west):

- The “Scenic Drive” up past the Woodlands Walk and down onto Mines Road;
- Roberts Street, which actually forms the main street of town further south, and
- The Coolgardie-Esperance Highway.

Currently, directional signage indicates that the “Town Centre” can be found by turning south (left if travelling from the east; right if coming from the west) onto Roberts Street. This may seem logical as this then puts visitors on the main street in the middle of town. However, there are a number of issues with this:

- For visitors coming from the east – perhaps the largest group to be impacted by this signage – this junction is immediately before the large service station, a place that may be the initial “target” for many of these people. They may well thus be focussed on getting into the service station and simply not see signage at the Roberts St junction;
- Further, this is a busy, cluttered and potentially dangerous piece of highway, with large trucks pulling in and out, and vehicles moving around in many directions – making it far from a safe route into town;
- Those who miss the existing signage then arrive at the T-junction of the highways and see no clear signage directing them to the town – and so may well simply drive on out (especially if heading north);
- One of the primary attractions and key “branding images” for Norseman (and the Shire) is the “camel roundabout” at the junction of the Coolgardie-Esperance Highway and Prinsep Street. Directing visitors down Roberts Street means they are not “greeted” by this signature sight – yes, they may well see the camels later in their visit, but welcoming travellers with this unique view has significant benefits.

Consideration of all these factors, and time spent watching vehicle movements in this area, has led to the belief that a more functional and effective “feeder route” into town would be via the Coolgardie-Esperance Highway. While the Scenic Drive is a pleasant route in its own right it turns off the highway too far east to be functional for this purpose. As a result, this reports recommends:

- Removing all “Town Centre” and related signage from the Roberts Street / Eyre Highway junction, including the panel of blue information symbols, and
- Installing the large “Town Centre” sign immediately above the major green-and-white sign panels at the T-junction of the highways. This may need to be modified through consultation with Main Roads WA, but the thrust of the recommendation is to have a sizable “Town Centre” sign at this junction;
- Reviewing the need for blue-and-white information/attraction signs at the highway junction and rationalising the existing signs of this type and the symbols from the Roberts St junction into one coherent set of signs and/or symbols.

It is very important not to clutter the highway junction with unnecessary signage, and therefore this review should be rigorous, and should involve input from MRWA.



The town centre is clearly signposted to be accessed from Prinsep Street on the northern approach to town – but this is not the case on the key eastern entry



The “Town Centre” signage for those arriving from the east should be at this junction – and the other (blue) signage here should be reviewed and rationalised

The “camel roundabout” is unobtrusively but effectively marked already, and clear signage is in place one block further north, indicating the whereabouts of the Visitor Centre. Therefore, no further signage is required to deliver what should be a more effective means of channelling visitors into the business district of the town.

Museum – and other town centre - signage

The Historical Museum in the old School of Mines building on the corner of Mines Road and and Battery Road is one of the primary in-town visitor attractions – yet signage alerting travellers to its presence (and directing them to it) could be improved. Oddly, on most major signs it is referred to as “Historical Collection”, a term which does not really do the place full justice. And there is no substantial signage on the road verge out front of the Museum itself, which does detract from its immediate visibility.

Other issues are evident when reviewing the existing brown-and-white tourism signs at the main town centre roundabout at the Roberts Street / Ramsey Street junction. These include:

- Reference to the “Historical Collection” not the Museum (issue outlined above);
- Reference to “Lion’s Park” – an outdated and defunct name for the picnic area on the Scenic Drive;
- Indication that Scenic Drive is 2 km away (same as Beacon Lookout) – which is clearly incorrect;
- Use of the term Beacon Lookout, when something more descriptive is warranted, even if that is simply Beacon Hill Lookout & Walk Trail.

These three signs need to be replaced so that all of these issues can be remedied at the same time. When new signs are prepared they should also include the Granite & Woodlands Discovery Trail on the main panel, so that the existing “extra” signs for this attraction can be removed.

Another signage issue that came to attention while doing this review relates to what appear to be relatively new “Welcome to Norseman” signs on the three main approaches to town. This sign carries the strap line / sales pitch “Gold mining town since 1894” – which seems odd for a Shire that is apparently attempting to wean itself away from its historic dependence on mining. These signs should be replaced with new versions using the line “Heart of the Great Western Woodlands” – if Council accepts that as its new “pitch”. The same new Welcome signs also need to be installed on the Shire boundary on each of the four main entry roads – north, south, east and west – as a matter of priority

In summary, actions required to remedy the key signage issues are as follows:

- Replace all three large brown-and-white signs at the main roundabout;
- Remove all existing Granite & Woodlands signage at this intersection;
- Install a new (large) Norseman Historical Museum sign outside the building;
- Replace the three “Welcome to Norseman” signs on the highway approaches with a new version connecting the Shire to the Great Western Woodlands (as outlined above);
- Install the same new “Welcome” signs at the Shire boundary on all four main entry roads.



All three brown and white signs at this junction should be updated and rationalised

Other in-town signage issues are identified in the works list and cost table that follows.

Cost estimate – all in-town signage works

Costs associated with all signage outlined above are as follows:

Item / Action	Item \$	Labour \$	Total \$
Eyre Highway approach: SE corner Roberts St & Eyre Highway			
• Remove green Town Centre sign	0	100	100
• Remove blue facilities icons sign	0	50	50
• Retain small blue attractions / business signs	0	0	0
Eyre Highway approach: Eyre & Coolgardie-Esperance junction			
• Install large green Town Centre chevron pointing south	380	140	520
• Update and install blue facilities icons signage	140	100	240
• Remove all blue fingerboards and small signs	0	100	100
Central Norseman area			
• SE cnr Prinsep & Sinclair: install large green Town Centre 100m chevron pointing left (east)	380	140	520
• SW cnr nib Princep and Sinclair Sts: Remove existing fingerboards	0	100	100
• North median Princep and Ramsay Sts: Remove small Granite and Woodlands sign	0	50	50
• NE cnr nib Princep and Ramsay Sts: Install new large Granite & Woodlands chevron pointing west	380	140	520
• Camel Roundabout: Retain existing Town Centre sign	0	0	0
• SW cnr nib Princep and Ramsay Sts: Retain 'Shopping' sign, and add a Granite and Woodlands chevron pointing west	380	140	520
• SW cnr nib Princep and Talbot Sts: Large green Town Centre 100m chevron sign pointing east; '	380	140	520
• NE cnr nib Roberts and Ramsay Sts: Update and replace brown 'T' sign	360	140	500
• North median Roberts and Ramsay Sts: Remove old Beacon Hill Trail sign	0	50	50
• NW cnr nib Roberts and Ramsay Sts: Update and replace brown 'T' sign	360	140	500
• SW cnr nib Roberts and Ramsay Sts: Update and replace brown 'T' sign	360	140	500
• Ramsay St museum entry point: Install large brown & white Museum Entry sign (with arrow to left)	300	140	440

Item / Action	Item \$	Labour \$	Total \$
<ul style="list-style-type: none"> Intersection Battery Rd and Ramsay St: Update and replace brown & white signage (Woodlands Walk etc) 	360	140	500
Sub-totals	3780	1950	5730
Contingency allowance 10%	380	190	570
TOTALS not inc GST	4160	2140	6300

Cost estimate – new “Welcome” signs

The estimates below include an allowance for purchasing any artwork or photography that may be used on these signs, and professional graphic design to produce a quality layout.

Item / Action	Item \$	Labour \$	Total \$
Three main entries to town: replace existing Welcome signs with new design resulting from marketing /style manual process	3000	600	3600
Shire boundaries: install 4 of the new Welcome signs, one at each main entry point to Shire	4000	800	4800
Sub-totals	7000	1400	8400
Contingency allowance 10%	700	140	840
TOTALS not inc GST	7700	1540	9240

Murals at pool / youth centre / elsewhere

One very effective means of adding appeal to a town centre is to paint (quality) murals on otherwise blank walls and/or fences. Indeed there is at least one town in Australia that has built a high level of tourism activity around a vast and still-growing collection of murals – Sheffield, in central Tasmania. Nearer to home there are a number of towns in rural/remote WA that have fine examples of murals, be they historic or modern in theme and delivery. These include Perenjori, Mullewa, Three Springs, Wongan Hills, Bridgetown and Northcliffe.

Creating murals is a dedicated and skilled art – if a quality outcome is desired. Sadly, there are examples of “home grown” images that are clearly amateur and lacking in the requisite skills or experience. On the positive side, there is now a growing trend to deliver quite remarkable images, many of which are 3-dimensional and so clever that one can (mistakenly) walk into brick walls – imagining there to be a doorway (or lane, or whatever). The Rocks in Sydney hosts some of these, and others can be seen in the older parts of Hobart.



Heritage-themed mural in Wongan Hills

Norseman too, has recent experience with creating murals – with the artwork on the front of the Pensioner's Op-Shop building. This could well be added to in a project designed to brighten the visual appeal of the town centre, and add interest and enjoyment for visitors and towns-people alike.

There are a number of walls and fences in the CBD area, which could be painted with murals to enliven the streetscape and provide opportunities for community art projects. How murals are applied will depend on the budget available and local capacity, but some installation options - from the simplest to the most complex - include:

- a. Employ a professional street artist and commission them to paint a specific site with a theme of the Shire's choosing. *Artsource* is an excellent resource for identifying suitable artists – see www.artsource.net.au
- b. Initiate a public art project and employ a mural artist to work with local artists to design and paint the mural around a particular theme
- c. Develop a community art process in which a mural artist works with the wider community (schools, cultural groups etc.) to develop the theme and subject, teach new skills and coordinate the community to help paint the mural
- d. Work with an organization such as FORM (www.form.net.au - see PUBLIC pages) to bring a 'festival' of public art to the CBD, creating a number of mural works in a short space of time.

Each of these approaches has particular advantages, and the project will need to be crafted around funding opportunities and the deeper goals for community building in the Shire. It is worth noting that the timing of any mural painting needs to take into account variables such as school holidays and likely daytime temperatures.

The first mural project recommended is the fence on the south side of Ramsay St between Princep and Roberts Streets (pictured below). This fence could be an eye-catching link from the tin camels to the shopping area, helping to lead visitors off the Coolgardie-Esperance Highway into town. New flat sheeting (which will provide a better painting surface) could be attached to the fence for the mural, and the Shire will need to work with the adjacent landowners in arriving at this outcome.

Other possible mural sites include the upstairs balcony of the Norseman Hotel, the swimming pool and youth centre, the front wall of the Shire offices, and some of the older buildings which have lost their cladding and are contributing to a sense of decline in the town's heart.

This project is another fine prospect to showcase both European and Ngadjju world views – and skill sets – and both cultures should be given equal opportunity to be involved in design and delivery of these artworks.

Cost estimates

It is estimated that the priority mural project – the long fence between Princep and Roberts Streets – could cost up to \$15,000, depending on which process the Shire undertakes. Adding (at least) one more major mural brings a total allowance for possible Year 1 projects to \$25,000.



This long and unsightly fence on the south side of Ramsay Street is the priority target for artwork / murals

Central roundabout enhancement

As mentioned above, the “camel roundabout” is a primary visual feature in Norseman, and is highly likely to be one of the images that visitors recall when thinking back to their time in the town/Shire. Another roundabout too, hosts a major installation – the town clock at the Roberts and Talbot Streets junction. Yet, it could be argued that there is yet another roundabout that is even more centrally placed – and therefore more in need of a similarly striking feature – that being the one at the Roberts and Ramsay Street intersection.

In its current form this roundabout is nicely landscaped with a mix of large rocks and well-tended plants (of an odd assortment of native and introduced species) interspersed with open mulched areas. In the centre, but almost hidden by shrubbery is what appears to be a historic timber well, though only the windlass and the top of the posts is visible from most directions.

Given the prominence of this location and the desire to enhance to proposed Town Centre Precinct it is recommended that this site be redeveloped to feature an eye-catching structural element in keeping with the scale and visual impact of the other two roundabouts – and in keeping with the central location at the heart of town.

As wedge-tail eagles are a striking feature of the woodlands and Nullarbor experience – and as it is important not to block the view of drivers entering the roundabout – it is recommended that two poles (ideally natural “bush timber”) of 3-5 metres height be installed to carry the sculptural elements. These should be a typical eagle’s nest (on one pole) perhaps with one eagle perched on it, and another eagle (possibly just taking flight) on the second pole. These could be corrugated iron to match the camels and other sculptures around the Shire – but this would be dependent on arriving at a design that could be delivered in this form.

However, this is just one possible installation idea – and the Shire may wish to work with the community to arrive at a mutually-agreed theme/topic/image for this cornerstone site – but in doing so it would be important to bear in mind the limitations of the site.

This concept could become a full-blown artistic project, with a brief going out to a range of sculptors – or it could be a simple and much lower-cost exercise, depending on how the Shire prioritises the project. As this is not likely to be a priority project in the light of other works recommended here-in, a mid-line estimate only is provided below. The Shire should review options for delivery of the concept when it becomes a priority.

If the desire is to go for something fully creative and professional the Shire would do well to consider the work of a sculptor named Jordan Sprigg, who is based in Naremburn – see: <http://jordanspriggsculptures.com.au/>



This roundabout, while not unattractive, is located in such an important and visible location that it would benefit from a creative artwork / installation of similar standing to the camels. This could be a sculpture similar to the eagle-on-nest installation overlooking Canberra as shown below



When this installation proceeds the roundabout itself should be subject to a refreshed landscaping, focussing on local plants and features (rocks / timber etc). It is important to make key sites like this reflect the Shire's new focus on its natural attributes – primarily the surrounding woodlands.

Cost estimate

The estimate below is purely that: an estimate. As outlined above, this could be a simple steel cut-out image – or it could be a full-scale professional sculpture. Consequently the range of possible costs is considerable. The figures below should be considered an allowance for budget purposes and no more. Detailed scoping of the project is required in order to arrive at more accurate figures – and to define whether the eagle-and-nest concept is actually the most appropriate installation for this site.

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

Item / Action	Item \$	Labour \$	Total \$
Source and install two bush timber poles	2,000	2,000	4,000
Develop, design and fabricate two sculptures: eagle and nest	25,000	0	25,000
Install the two sculptures on the bush timber poles	1,000	1,000	2,000
Refresh landscaping for whole roundabout	1,000	1,000	2,000
Sub-totals	29,000	4,000	33,000
Contingency allowance 10%	2,900	400	3,300
TOTALS not inc GST	31,900	4,400	36,300

Street furniture enhancement

The central area of Norseman is well presented, with good quality footpaths in most areas, well maintained garden beds, new rubbish bins and light poles and almost no graffiti. The Shire is to be commended for presenting a well-cared-for streetscape in what must be difficult conditions at times.

The following recommendations aim to build on the existing elements and reinforce the central precinct as the clear town centre:

- Development of a streetscape colour palette would help set a theme for future enhancements and help unite the different elements in the street. The Shire may like to undertake this work as part of the branding and style guide works recommended elsewhere in this Report;

- Paving should be consistent - the existing red brick pavers with cream trim are in good condition, and this style should continue be used wherever old paving is being replaced. A staged programme of upgrading all footpaths in the central precinct will assist in planning and budgeting;
- Seats / benches – there are no seats or benches in the CBD. While benches can sometimes become a focus for anti-social activity, older residents appreciate a resting place, and if visitors are being encouraged to walk trails around the town, they will need the occasional bench. Suggestions for seating have been made in Section 8 of this Report;
- Bins – there are plenty of these, the stainless steel top is easy to clean, and the design would allow 'festival' and promotion signage to be added. These are quite cheap to have printed on coreflute, and over time several sets of these, suited to different occasions, could be accumulated.
- Bike racks – there are innumerable verandah posts in the CBD area which cyclists can use. Racks may be needed at the Visitor Centre, and can be added later if required. A simple upturned 'U' profile bike rack is recommended;
- Light poles – these are new and in good condition: continue to install this style, but consider using the bottom 2 metres as an opportunity for some extra colour in town. Older wooden power poles could also be treated similarly. See discussion below.

Light pole treatment

Norseman is at least fortunate that recent upgrading works have delivered modern steel light poles, all of a single and reasonably attractive design, and similarly modern steel bin surrounds (which at least are not unattractive). Other towns have significantly enhanced the visual appeal of their main streets by having the base section of power poles (perhaps to 2 metres height) painted with locally-appropriate designs and colours. As with creating murals, this work needs to be professionally guided, if not professionally done, in order to avoid the "cheap" amateurish outcomes that can actually detract from the appeal of the place.

Mullewa is one place that is quite similar in many ways to Norseman – and which has brightened its main street substantially with oversize and brightly coloured wildflowers painted around this lower portion of the timber power poles (see photo above). This work was done by local Wadjari people under guidance from Fiona Sinclair, a professional artist, and therefore has not only delivered street appeal but build a sense of connection and belonging among a population that is often alienated. Another option is to use bold colour banding or stencil work to provide colour and vibrancy on the street.



A photo-shopped version of a temporary bin sign (above; photo courtesy Lynn Webb)

Painted light poles are a feature in Mullewa (below)



Norseman has 20 steel light poles, mainly in Roberts Street but some either side of major intersections. These are currently a deep brick red-brown – as are the rubbish bin surrounds – and the prevalence of this colour is somewhat visually overwhelming. While the poles are not strictly unattractive, they could contribute much more to the appeal of the town if the lower 2 metres of each was brightly painted as outlined above.

Bin surrounds too, have been the subject of artist adornment in other places. The City of Subiaco uses them to display historic photographs, turning them into low-cost interpretive elements, while Lake Grace affixes temporary panels to the sides of these structures at Christmas time to brighten the streetscape during that particularly festive season. Norseman could follow either of these paths – or could commence a community art project to design and deliver its own unique beautification of the bins along the main central block in town.

However, this Report recommends that this may be a (relatively) lower priority, and that the Shire should consider following the Lake Grace model of affixing temporary signs either at Christmas or perhaps for festivals or special events. These are quite cheap to have printed on coreflute, and over time several sets of these, suited to different occasions, could be accumulated.

Wildflower Park: recommendations

Wildflower Park is a rectangular piece of land located between the railway line and the fire station (in the south) and the Visitor Centre in the north. At the south end it has frontage to Mines Road while at the north end it abuts private property. The area is well shaded, having been planted with native eucalypt species some 15-20 years ago. These trees are not mature yet, but are generally quite well grown. There is little to no understory or low-growing vegetation.

It is understood that one of the drivers behind the establishment of this Park was to showcase local species – both trees and smaller shrubs (hence the name). Extensive trickle irrigation was installed, though this appears to have been dysfunctional for some years now and should be removed as it serves no purpose and is quite unsightly. However, most of these tree species are slow-grown, and even the largest here are not really at the point where they could be considered “typical” of mature woodland specimens likely to be found in natural areas. It is hard to estimate when this point might be reached, but it is unlikely to be within 10 years.

Several items of basic infrastructure can be found in the Park. A pleasant gravelled walk path winds from the Visitor Centre parking area south to the Mines Rd footpath, where it passes beneath a four-post structure that appears to be a replica poppet-head. This structure is in good condition, and should be left in place. A similar structure straddles the commencement of the walk behind the Visitor Centre: this too, is in sound condition and should be left in place.

The same cannot be said for the old timber picnic tables in the Park – these are in poor condition and should be removed as soon as is possible. Replacement would be useful, though perhaps not a priority (however, removal of the old tables is: they are potentially dangerous).

At the south end of the Park there are several palm trees growing close to the simple post-and-rail fence. These should be removed immediately as they are clearly alien in this landscape, and are inappropriate in this setting.

Nearby, just beyond the drain and centrally located in a roadside node, is an historic watering trough – though the absence of information would leave most visitors guessing as to its relevance. This node and the surrounds of the trough should be upgraded as part of general town-centre enhancements (see elsewhere in this Report). At the same time interpretive signage should be installed, so that visitors can appreciate the story behind the trough and pump.

Some trees overhang the walk path, and minor pruning may be required. However, this should be done delicately and with an eye to the aesthetics of the branches involved, as there are one or two which warrant leaving in place despite their mild intrusion in the pathway space – these will be obvious when a close inspection is made, and should be spared from pruning (as to remove them would detract from the appearance / feel of the relevant path section).



This verge at the south end of Wildflower Park should be landscaped, and the historic pump & trough should be interpreted

A suggestion has been made that the Park should be the subject of a substantial upgrade and enhancement program, as it falls within the “Town Centre Precinct” outlined earlier – and as the pathway mentioned above is a key link from the Visitor Centre to the Museum (and may one day form part of an in-town Heritage Trail). However, in reviewing the range of projects outlined in this Report, it is felt that this work would be of a relatively low priority – and therefore should not be pursued until many/most of the other attractions outlined have been attended to. Then it would be worth reconsidering the role and function of the place in the light of the shape and feel of the town at the time.

Consequently, actions relating to Wildflower Park can be summarised as follows:

- Immediately remove the old timber picnic tables and, if budget permits, replace them with new longer-lasting more vandal-resistant models;
- Remove the palm trees growing just inside the southern boundary fence;
- Upgrade the area around the old water trough outside the southern boundary;
- Undertake minor maintenance work on the pathway, including (sensitive) pruning where required;
- Remove all of the old trickle irrigation system;
- Ensure the whole park area remains neat and tidy as it is a useful overflow area behind Welcome Park and the Visitor Centre.

Cost estimate

An allowance of \$2000 is made in order to cover direct costs associated with the above actions.

Other central precinct enhancements

There are a number of other enhancement projects which could be undertaken over time - these are perhaps less urgent than the initiatives suggested above, but are described below so that they can be factored into annual works programmes for future years:

- Southwest corner Roberts and Sinclair Streets: remove tree stumps and enhance this corner (i.e. create nib and plant new trees);
- Northwest corner Ramsay and Roberts Streets and southwest corner Ramsay and Princep Streets: these lots are key sites in the townscape and could contribute more to the streetscape. The opportunity to look at their use, presentation and ongoing management could be a project that would help improve the central precinct. The southwest corner verges of Ramsay and Princep Streets could be paved and landscaped to match the quality of streetscaping elsewhere in the central precinct.

- Ramsay St between the rail line and Roberts St: enhance and landscape this section of Ramsay St so that it forms a better connection to the Museum and is in keeping with the standard of streetscape elsewhere in the town centre. Provide a bridge to allow access to the historic trough from the footpath, and install interpretive signage.

An allowance of \$5,000 per year has been made for the works above – and general Central Precinct landscaping enhancements – over the roll-out period of this Report (4 years).

Cost estimate summary – in-town work

The table below brings together cost estimates for all items in this Section. Some have detailed cost tables embedded with their description (i.e.: directional signage) and in these cases a single line total is provided in the table below.

The usual caveats and explanations re how the tables work and the non-inclusion of GST apply. Further, it is worth noting yet again that the “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs.

Item / Action	Item \$	Labour \$	Total \$
Developing a central precinct – Conservation Strategy	12,000	0	12,000
Developing a central precinct – window pictures (20)	16,000	4,000	20,000
Woodlands Cultural, Community & Visitor Centre – scoping study	20,000	0	20,000
Town centre signage, as per detailed table	4,160	2,140	6,300
New “Welcome to” signs: 7 of, as per detailed table	7,700	1,540	9,240
Murals: long fence, Prinsep to Roberts Sts, plus one other	22,000	3,000	25,000
Central roundabout: Eagle-and-nest sculpture and landscaping	31,900	4,400	36,300
Street furniture – seats etc (annual allowance \$5000 + installation)	20,000	4,000	24,000
Light pole painting project: 20 poles @ \$500 each (prof. artist)	10,000	0	10,000
Wildflower Park – immediate renovations and repairs	0	2,000	2,000
Paving: complete all central precinct paths in red & cream (\$5k p.a.)	8,000	12,000	20,000
General landscape improvements as outlined above	10,000	10,000	20,000
Sub-totals	161,760	43,080	204,840
Contingency allowance – included in individual lines	0	0	0
TOTALS not inc GST	161,760	43,080	204,840

SECTION 7: EYRE HIGHWAY PROJECTS

The Eyre Highway is much more than just a feeder route into or out of Western Australia (or Norseman for that matter). It is a major experience in itself, and it traverses a great majority of the Shire of Dundas. Few travellers (and, quite likely, few West Australians) would realise that the Shire extends all the way to the South Australian border – and this makes the Highway so much more than just a main road linking to “the East”.

The Highway should not be seen to be a largely-forgotten appendage to the Shire, but rather a unique opportunity just waiting to be developed. A number of projects aimed at capitalising on this fortuitous geography are outlined in the material that follows.

The journey across the Nullarbor remains one of the great road trips world-wide – but sadly for many Australians (and perhaps international visitors too) its length/duration and its apparent “emptiness” and “sameness” makes it more of a trial than a pleasure. This presents a unique opportunity for the Shire to provide “infotainment” that can inform, educate and captivate at least a reasonable percentage of travellers, both east and westbound.

The journey provides ample opportunity to engage with the traveller - times and distances are considerable, as can be seen in this table:

Norseman – Balladonia:	193 km
Balladonia – Caiguna:	182 km
Caiguna – Cocklebiddy:	64 km
Cocklebiddy – Madura:	83 km
Madura – Mundrabilla:	115 km
Mundrabilla – Eucla:	66 km
Eucla – Border Village:	12 km

This produces a total distance of 715 km, or – for most drivers – somewhere between 8 and 10 hours on the road, depending where and for how long they stop. And most will stop at least once for fuel and/or food between the border and Norseman, though that might be at any one of the 8 roadhouses/settlements along the route. Many will stop along the way too, at parking areas or scenic points – or simply because they need to (as is invariably the case with a journey of this length). They are therefore, largely a captive audience – and this section of the Report outlines a number of projects that could help the Shire of Dundas engage with them in mutually beneficial ways.

It is proposed that a series of “products” be developed that build on the journey of the man who gave the Highway its name: the explorer Edward John Eyre, and his fellow traveller and guide, the Noongar man known as Wylie. While it is true that many other European explorers and early travellers made this arduous crossing - and that the Ngadju people and their eastern neighbours traversed this landscape for aeons – it is Eyre who gives the Highway its name, and it is Eyre’s journey that is best known (and beautifully recorded in his journals).

Interestingly, the www.nullarbomet.com.au website makes much of this remarkable journey, saying (at the end of an extended summary of Eyre and Wylie’s journey): *“In the spirit of reconciliation this site is dedicated to the memory of Edward John Eyre and his companion Wylie”*.

Given this scenario, the following suite of Eyre Highway projects are recommended:

- Redevelop the Information Bay opposite the service station in Norseman to feature Eyre and Wylie, and to be the launching point for the journey eastward;

- Develop a similar bookend “information bay” in Eucla, again featuring Eyre and Wylie, and again offering relevant Shire and Highway interpretive signage.
- Install interpretive / promotional signage at each of the roadhouses between Norseman and Eucla, “selling” the attractions of the Shire, but linking also the the Eyre / Wylie story and the journey itself;
- Produce an audio CD, narrated jointly by “Eyre” and “Wylie”, for sale to travellers heading across the Shire. Stories could cover the narrator’s journey, Ngadju cultural knowledge and life in this landscape, other explorers and early travellers, pastoral / mining / other industrial activities, and – of course – the changing and unique landscape along the Highway;

Taken together as a suite of projects, these concepts have the capacity to quite dramatically alter the experience of this +/- 10 hour drive between Norseman and Eucla / the border. They also have a major role to play in “branding” the Shire of Dundas well before westbound (incoming) visitors reach Norseman – and in sending eastbound travellers away with a strong and positive message about the Shire and its community.

Information Bay opposite service station, Norseman

This site is on the north side of the Eyre Highway, a short distance east of the T-junction with the Coolgardie-Esperance Highway and almost opposite the large service station in Norseman. It was originally considered to be the town’s primary “information bay”, and functioned as such for many years. More recently (perhaps 10-15 years ago) a new information shelter was installed with extensive signage promoting WA – and, in particular, the Norseman area and the regions immediately adjacent. It is understood that this signage was prepared and provided by the predecessor agency to DPaW and, as such, it did not necessarily deliver the kind of promotion / information that was relevant to visitors stopping in this particular place.

Because of the Bay’s location on the north side of the highway the great majority of people pulling in there were heading east – out of the Shire and out of the State. As a consequence, much of the information provided was now irrelevant to them – and because of this the shelter was relocated to Welcome Park, beside the Visitor Information Centre, where it serves a much more appropriate function. Vehicles coming in from the east were generally focussed on either fuel/food, the town itself or the T-junction – and therefore were reluctant to cross lanes to use this bay.

Recognising the real-life usage of this bay leads to a recommendation that the focus of information here should be changed, to be relevant to people going east and therefore embarking on the journey across the Nullarbor. Though they may be leaving Norseman they will still be in the Shire of Dundas for almost 800 km, and this provides an excellent opportunity to send them back to their home states feeling notably positive about the Shire – with, hopefully, significant knock-on promotional benefits.

As the western bookend of the Eyre Highway this information bay is the perfect place to introduce Messrs Eyre and Wylie – and to provide information (both practical and educational) relevant to the next 800 km. However, this bay also functions as a “welcome mat” for travellers arriving from the east who may – with good signage – pull in here, or who may walk across from the service station (if encouraged by an interesting installation).



Eyre and Wylie, as depicted just outside Kimba. SA

As a consequence, it is important that it also plays a similar role to the major “entry points” described earlier in this Report – so, it should feature the new Dundas-style information shelter and information about the attractions of the Shire (in addition to the Eyre / Wylie / Highway material).

Given its prime location, this bay must become a major welcome / farewell feature, with high-quality iconic / unique facilities, stamping the Shire of Dundas as a place worth spending time in – or (for those going east) worth remembering warmly. Key works proposed to deliver this outcome include:

- ❖ Install a Dundas-style information shelter and appropriate interpretive signage;
- ❖ Install corrugated iron interpretive sculptures depicting Eyre & Wylie on their journey;
- ❖ Provide seating and rubbish bins;
- ❖ Install clear and strong entry signage (directing traffic to the bay), and management signage too.



There is ample space here for a substantial and eye-catching installation (above).

The verge island would benefit from refreshed landscaping and the removal of the Town Centre signage (below)



Given the somewhat difficult location of this bay it is vital that signage drawing the traveller’s attention to it is clear and visible from both directions. Advance warning signage is also warranted on all three major roads. Further, it is important that the attractions and facilities to be installed are of sufficient scale as to attract the attention of visitors who may have made the service station their first priority. A full table of proposed works follows.

If this Information / Parking Bay is to be the subject of a substantial upgrading it will be vital to ensure maintenance is frequent and regular. It is not known whether this is a Shire responsibility, or if maintenance work is meant to be done by the MRWA contractors – but this needs to be clarified, and whoever is tasked with the job needs to be rigorous about its effective delivery.

Cost estimates

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

The Site Plan for this proposed upgrade follows on the next page, and illustrates the works set out below.

Item / Action	Item \$	Labour \$	Total \$
Install Advance Warning signs on all three highway approaches (Eyre Highway information ahead), featuring the "I" symbol and other pictograms to indicate facilities at this information bay	1440	420	1860
Install new "Eyre Highway Information" signage at both entries to the bay, again featuring the "I" symbol and other relevant pictograms. Retain "No Trucks" signage – or incorporate into new signs	700	280	980
Remove all old infrastructure, including dilapidated picnic tables, remnants of trickle irrigation system etc	0	400	400
Bollard the northern kerb line, to keep cars on the sealed parking area only (recycled plastic or steel pipe bollards, not rocks)	800	600	1400
Lay concrete pad to take new information shelter: 8 x 3 m	1600	800	2400
Install a new Dundas-style information shelter as shown on Site Plan (3-tree version recommended and costed)	29100	1800	30900
Install new interp panels in main shelter: 2 @ 1800 x 1000; 2 @ 1000 x 1400; 2 @ 400 x 6700, all full-colour polycure - outlining the Shire's attractions, the Eyre Highway journey – and the Eyre & Wylie story. Ensure information about where to buy the CD is clear (service stn)	14760	280	15040
Purchase local artwork and photography for use in panels above	2800	0	2800
Install corrugated iron interpretive sculptures depicting Eyre and Wylie on their journey	8000	800	8800
Install unique corrugated iron "Eyre & Wylie" information sign on verge of highway before information bay	1400	240	1640
Install 2 new bench seats as shown on Plan	2200	400	2600
Add another rubbish bin to the site, as shown on Plan (wheelie bin in protective enclosure)	1190	150	1340
Install management signs x 2 (no camping / fires etc)	580	240	820
Refresh landscaping in roadside island and around new installations, ideally to reflect aspects of surrounding countryside	500	600	1100
Sub-totals	65,070	7,010	72,080
Contingency allowance 10%	6,510	700	7,210
TOTALS not inc GST	71,580	7,710	79,290

Enhancement Goals:

- ~ Create an attractive gateway to the Eyre Highway for east-bound travellers;
- ~ Welcome visitors arriving from the east to Norseman town;
- ~ Provide high quality and interesting information about the Eyre Highway and the Nullarbor;
- ~ Celebrate the story of Eyre and Wylie;
- ~ Improve the amenity of the bay, and
- ~ Upgrade approach signage to the site.



The information shelter and artworks can be placed next to the tree line, to provide a setting for them and additional shade for viewers. The water meter and tap can be protected by a post bollard.



Planting in the verge island should be kept to low-growing species to preserve views to the new shelter and artworks.

LEGEND

- New seat
- Rubbish bin
- Post bollards
- Advance warning and management signs (see Report)



Existing green dome power should lighting be required in the future; irrigation take-off points are also available

Remove all old infrastructure, including dilapidated picnic tables, remnants of trickle irrigation system etc.

Install corrugated iron interpretive sculptures depicting Eyre and Wylie on their journey

Install a new Dundas-style information shelter. Connect to the parking area with a compacted gravel path and construct a wheelchair / pusher accessible ramp at the kerb

New comfortable seats set in the afternoon shade, away from the information shelter

Install post bollards to contain parking to kerbed parking area

Undertake a general clean up and enhancement of garden beds as part of the Shire's regular maintenance programme

Additional new 'Eyre Highway Information' advance warning sign in the corrugated art theme to give east-bound motorists time to turn into the bay

Information and management signs as per the table of works in the Report

Install Advance Warning signs on all three highway approaches (Eyre Highway information ahead), featuring the "i" symbol and other pictograms to indicate facilities at this information bay



Service Station

Existing kerb

Eyre Highway

Roberts Street

These plans have been prepared from an informal survey, allow to check all measurements prior to construction. The plans must be read in conjunction with the related section of the Report.

Eucla: Eastern gateway to the Shire of Dundas

If Norseman is the western book-end of the Eyre Highway / Nullarbor journey, then Eucla can reasonably claim to be (at least) the primary eastern entry point to Western Australia (and, of course, to the Shire of Dundas) – notwithstanding the fact that the border is actually 12 km further east. It is therefore appropriate that the Shire create a fifth significant “entry point” out here – both as a means of introducing westbound travellers to the attractions and stories of the Shire, and to offering them creative ways to link in to the Eyre/Wylie story – thereby perhaps making their onward journey more interesting and enjoyable.



Ideally, the new installations would go into this space directly opposite the Hotel entry – but this is dependent on a mooted reconfiguration of this whole area

Further, Eucla has its own local tourist “industry” – and this proposed entry point should also seek to promote the attractions and facilities found in the area. The proposed entry point / information bay should be located outside the Eucla Motor Hotel, ideally in the vicinity of the whale / playground / former snack shack. This is clearly the most visible (and most visited) location in Eucla – and therefore, despite it being privately owned land, it is the “obvious” place for such a critical new feature. It is understood that a revamp of this area is being considered, and therefore the Shire should engage with the owners of the Hotel to integrate the proposed new installation into a revised layout for this area.

The new installation needs to feature Eyre and Wylie once again, as at the bay opposite the service station in Norseman. However, interestingly the party was still 5 as they passed through this area: Eyre’s “loyal overseer”, John Baxter, had not yet been shot and nor had the two lesser-known Aboriginal men, Joey and Yarry, absconded with many of the expedition’s vital supplies. Consequently, it would be appropriate to feature all five men in the corrugated iron interpretive sculpture at this site.

Further, a large version of the new Dundas-style information shelter should also be installed, and this should carry interpretive information relevant to State, Shire and local stories. This, along with the sculptures of the Eyre party, should be integrated into the revised layout for the site. This will begin the process of “branding” the Shire for those arriving from the eastern states.

It would be appropriate for the Shire (or its contractors) to liaise with the WA Tourism Commission regarding information to go into not only this shelter but those outlined in the section below, to be located at each of the roadhouses between here and Norseman. There may be opportunity to discuss some form of partnership in the installation of this information, given the Highway’s status as *the* primary feeder route into Western Australia.

Decommissioning the “old” gateway to WA site

Such discussions should also include the decommission and removal of the former primary “Welcome to WA” information site at the state border. Such information as remains in this structure is now out of date and of little relevance to westbound travellers. Further, the location of the site – immediately west of the agricultural checkpoint building – is far from ideal, as most travellers will not want to stop again so soon after having to stop for the checkpoint. Instead, it is most likely that they will be focussed on Eucla, and food / coffee / toilet facilities.

The shelter structure itself is also outdated, and is now looking old and somewhat ragged. The Shire should negotiate with the Tourism Commission for the right to remove it – and could then consider refurbishing it (and removing the extraneous above-roofline components) and perhaps utilising it for an alternate purpose at a different site. During this process the sign marking the actual SA / WA border should be relocated much closer to the edge of the road (and the checkpoint) – where it can readily be seen from vehicles as they pull into or out of the stopping area there. In its current location it will be seen by relatively few, and this is a pity as such a remote border is worthy of note.



The structure at the old State Border information site is well past its use-by date and should be removed / relocated / re-used elsewhere

Cost estimates

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadju Rangers). Machine-based work such as grading is also included in this column;
- Costs do NOT include GST.

Item / Action	Item \$	Labour \$	Total \$
Negotiate redevelopment of site opposite Hotel as described above with the owners of the land/premises. If need be, contribute to a site plan for the new layout	1,000	0	1,000
Install Advance Warning signs on both highway approaches (Eyre Highway information ahead), featuring the “I” symbol and other pictograms to indicate facilities at this site	960	280	1240
Lay concrete pad to take new information shelter: 8 x 3 m	1600	800	2400
Install a new 3-tree Dundas-style information shelter in a location to be agreed with the Hotel owners (“labour” includes transport)	29100	2800	31900
Install new interp panels in main shelter: 2 @ 1800 x 1000; 2 @ 1000 x 1400; 2 @ 400 x 670, all full-colour polycure - outlining the State, Shire and local attractions, the Eyre Highway journey – and the Eyre & Wylie story. Ensure information about where to buy the CD is clear	14760	280	15040

Item / Action	Item \$	Labour \$	Total \$
Purchase local artwork and photography for use in panels above	2800	0	2800
Install corrugated iron interpretive sculptures depicting Eyre's party on their journey (with Baxter & other companions) – at a site to be agreed with Hotel owners	18000	1500	19500
Decommission and remove old information shelter/site at the state border (with approval from Tourism WA), and relocate WA/SA border sign as outlined above	2000	2000	4000
Sub-totals	70,220	7660	77,880
Contingency allowance 10%	7,020	770	7,790
TOTALS not inc GST	77,240	8,430	85,670

Eyre Highway promotional signage & interpretation

As already mentioned, each of the 5 places between Eucla and Norseman presents an opportunity for the Shire (and the State) to promote itself and engage with potential visitors – or potential word-of-mouth “sales persons” in the case of those heading east out of the state. These places also represent a further opportunity to brand the Shire in the eyes of those heading west, and to make a lasting (final) impression on those heading east.

During a road trip from Norseman to Eucla with Shire representatives it became clear that, despite the cost that may be involved, there would be substantial benefit in installing a small version of the new Dundas-style interpretive shelters at each of these places. Doing so would deliver a simple but no less eye-catching / engaging facility through which to attract the attention of road-weary travellers.

These structures should ideally be designed to carry three interpretive panels – one detailing State-level information, one outlining Shire-wide attractions and one telling local stories. Again, discussions will need to take place with Tourism WA, but given that a broad State-wide “welcome” will have been provided at Eucla, each subsequent stopping place could provide information about one of the state’s tourism regions (ie: Australia’s Golden Outback).

The Shire’s panels at the 5 sites could each detail a different aspect of the cultural and/or natural assets of the district, while there are many local stories currently not effectively told along this lengthy stretch of road. And of course, there is always Eyre and Wylie’s parallel journey to the south to further enliven the experience.

While preliminary locations have been identified during this field trip it will be necessary for the Shire and/or its contractors to engage with individual place managers/owners to finalise the detail of what will be installed and where. It is to be hoped that the proprietors of these businesses will quickly recognise that an installation such as this can only benefit the ambience and appeal of their premises.

During the drive to Eucla it became apparent that many of the parking bays and stopping places along the highway were suffering the same lack of maintenance as was to be seen at Mt Jimberlana. Overflowing rubbish bins contributed to an unattractive and in many cases widespread array of litter, making these places feel uncared for and unwelcoming.

Of particular note was the appalling condition of the viewpoint above Madura Pass. Given the highly scenic outlook, this is a very popular stopping place – but the site was (in April 2016 at least) in a woeful state. A quick review of the nature of the rubbish strewn around revealed an apparent pressing need for a toilet at this location, suggesting it is a commonly-used overnight camping place. Further, the access to and from this place from the Highway is highly questionable from a road safety perspective, being close to a blind rise/bend.

It is imperative that the Shire engage in discussion with MRWA regarding the maintenance of *all* stopping places between Norseman and Eucla – as seen on this road trip they do not present an attractive face to visitors arriving in Western Australia. These discussions must also address the issues associated with the Madura Pass site, as outlined above.



At Balladonia the ideal location for the proposed installation would be as shown above, directly outside the main entrance to the roadhouse

Cost estimates

Notes re costs below:

- The “Total” figures in the table that follows do NOT necessarily represent the actual cost to the Shire: it is expected that grant funds and/or partnerships will make a significant contribution to overall costs;
- Where an item involves outside expertise – for example research/writing interpretive signs, or redesigning brochures or panels – the full cost is included under “Item Cost”;
- Figures under “Labour Cost” are intended to cover work done by Shire employees and other contractors (perhaps the Ngadjju Rangers). Machine-based work such as grading is also included here;
- Costs do NOT include GST.

Item / Action	Item \$	Labour \$	Total \$
Negotiate details of site and installation/structure/information at each of 5 roadhouses along the Highway	5,000	0	5,000
Install concrete pad for new interp shelters: 5 @ 4 x 3 m	7000	2500	9500
Install a single-tree Dundas-style information shelter at each of 5 locations (“labour” includes transport)	48750	5500	54250
Install 3 interpretive panels in each of the new shelters: totals are 5 @ 1000 x 1400, 10 @ 700 x 1000, all full-colour polycure	30950	1000	31950
Purchase local artwork and photography for use in panels above	5500	0	5500
Allowance for minor landscaping around all/some sites, as required and/or negotiated with business proprietors	1000	1000	2000
Sub-totals	98,200	10000	108,200
Contingency allowance 10%	9,820	1000	10,820
TOTALS not inc GST	108,020	11,000	119,020

The Eyre and Wylie audio CD

A full day is a long time to sit in a car primarily focussed on getting from Point A to Point B – and this offers a classic chance to convert adversity into opportunity. There are six longer stretches between roadhouses, varying from 64 km (35-40 minutes) to 193 km (around 2 hours) – and these days the great majority of vehicles have the capacity to play audio CD's, which is where Eyre and Wylie come in...

The uptake of – and response to – the audio CD developed for the Golden Quest Discovery Trail suggests that there is a willing market for this kind of professionally-produced *infotainment*. A similarly varied and clever product focussed on this part of the Eyre Highway journey – and told jointly by “Eyre” and “Wylie” – would seem to have substantial potential as a retail item, and as a means of introducing visitors to the wonderful cultural and natural world that is the Shire of Dundas.

While this would be a moderately substantial project in its own right, and would require detailed and considered conceptualisation, it is possible to contemplate just some of the stories that might be told:

- Eyre and Wylie's journey (of course);
- John Forrest, the Elder expedition and other European explorers;
- The elegant and sustainable lives of the the Mirning and Ngadju peoples (multiple stories);
- Travellers tales from the early years of the Highway;
- Encountering the first (or last) of the woodland eucalypts (and then the woodlands themselves);
- The telegraph line and those who worked along it;
- The Trans-Australia rail line and, again, those who worked on it;
- Nullarbor limestone and the landscape it begets;
- The woodlines and their remarkably resilient communities (closer to Norseman);
- Pastoralism, mining, roadhouses and other hard-graft ways of making a living.

Like the Golden Quest product, this CD could be developed in a linear geographically-anchored fashion – so travellers would be encouraged to play (say) Tracks 4 and 5 between (say) Madura and Mundrabilla, with these tracks focussing specifically on information and/or stories relevant to this stretch of the country. This logical progression along the highway would also lend itself to the “guides”, Eyre and Wylie, unfolding the telling of their epic journey between tracks, as a means of linking the whole experience into one continuous story.

Producing a CD such as this is no simple task. Further, there are a number of elements that are critical to its likely future success (or failure), and many of these impact both the scoping and the budget of the project. These include (and the list that follows should not be considered full and final):

- ❖ Detailed research, thorough community consultation and clever, considered scoping;
- ❖ Quality script-writing by somebody who understands the area, the project and the people;
- ❖ Professional production / sound recording / mixing/ mastering and pressing;
- ❖ The “right” voices / actors for the lead players (especially) – and for all “parts” that are voiced;
- ❖ Music that “fits” the ambience of the overall concept and the individual stories;
- ❖ Professional and appealing packaging that makes marketing the product easier;
- ❖ A marketing “plan” that is carefully targeted to raising awareness of the CD among travellers;
- ❖ A budget that doesn't overly cramp the potential of the product or the processes required to deliver it!



Another example of a quality audio project made available on CD as an adjunct to a wider interpretive project – prepared by Monsignor Hawes Heritage Incorporated, a community group based in Geraldton

Naturally, this item would need to be available for purchase at every stopping place between Norseman and Border Village – but it should also be on sale (and well promoted) further afield. Places like Kalgoorlie, Esperance, Ceduna and Port Augusta would seem to be highly likely outlets – and of course it could be sold over the internet too. Indeed, it would also be worth considering the potential for making the various tracks a for-purchase downloadable item, as many people can now stream audio from their smart phones and tablets via Bluetooth to the sound system in their vehicles.

Cost estimate

This is another “how long is a piece of string?” question. A wide range of possible outcomes will produce a wide range of costs: from a simple narrated story-only version (perhaps \$30-40,000) right through to a fully dramatized with music option that could require a budget of up to \$100,000. As with other projects, some significant consultation and scoping work is necessary to define the most appropriate level at which to pitch this product.

Having said that, it is thought that an allowance of \$75,000 + gst would be adequate to deliver an CD that fits with the overall quality of the new Shire of Dundas visitor suite.

NB: The recommended 4-year works program sets the Eyre Highway signage projects in the final year of implementation – this is because these signs should depict the full suite of visitor attractions and experiences around the Shire, and these will be rolled out in the first three years. If signage was to be erected early it would then need to be updated when other new projects are completed – this can, of course, be done – but will entail additional cost.

SECTION 8: SHIRE-WIDE PROJECTS & RECOMMENDATIONS

Marketing Dundas: ideas and recommendations

An earlier section of this report succinctly summarised four key matters as being vital in building a stable economic and social foundation for the Shire – one based on celebrating its natural assets rather than depending on the vagaries of the mining industry. It is worth reviewing these prior to considering how Dundas/Norseman may be marketed in the future. These were:

1. The need to provide visitor experiences, and more “products” or attractions for travellers;
2. The need to rationalise (and update / enhance) the online presence of the Shire and town;
3. The opportunity presented by/for the Ngadju community in town;
4. The opportunity to brand Norseman as “The Heart of the Great Western Woodlands”.

The same earlier section of the Report went on to say: *“Clearly, the capacity of any organisation to effectively promote a shire, district or region is defined by its resources – both financial and human. Many of the implied “criticisms” in this section of the Report – and many, if not all of the suggested opportunities – are highly dependent on the scale of resourcing that is made available. Therefore the future of tourism in the Shire of Dundas will be largely defined by the degree of courage brought to bear when the resourcing matters underpinning this whole project / process are considered. Without adequate resourcing there is limited capacity for change.”*

“Courage” is indeed a key word in both the delivery of this overall project and in reshaping the way in which the Shire is marketed. Clearly, if this process is to have any foundation on which to stand the Shire needs to very quickly and openly respond to point #4 above. A new “strap line” (sales pitch) framed to define the revised focus of the Shire must be identified and adopted. One option is set out above – but there may be others too.

In considering options, the tried-and-true “Gateway to WA” should not be entirely ignored. It is clearly and undoubtedly true; it gives a strong sense of “arrival”, and it has a nice rhyming ring to it. Another alternative then would be to combine the two, thus: “Heart of the Great Western Woodlands, and Gateway to WA”. A good graphic designer should be able ensure that the relative length of this line would not be problematic in print or web usage, and the two phrases work well together.

The Shire could consider running a community competition and poll around this matter, to give a sense of ownership and to bed down the background behind the change and the new focus. The line in #4 above could be offered as one option and the longer combined version as another, with community members being asked to provide alternatives, then Shire staff selecting perhaps 3 or 4 to put out for a public vote. It would be important to provide sufficient background information at the beginning of this process to ensure there was a clear understanding of why this was happening. But establishing this clear focal point should be a priority starting point in reshaping how the Shire is promoted to the outside world.



The Shire is blessed with an array of remarkable landscapes. Photo courtesy Lynn Webb

Information gained in preparing the earlier “Tourism” section of this Report strongly suggests that the second priority step for the Shire would be the item listed at #2 above: to rationalise and update/enhance the online presence of the Shire and town. It is very clear that the great majority of travellers are making decisions based on information, ideas and images gathered from the internet – and that this trend is growing rapidly. Therefore, it is crucial that the Shire *invest substantially* in a significantly enhanced online presence.

This means not only integrating the Shire and Visitor Centre web pages into a single “tourism in the Shire of Dundas” entity, and not only ensuring they have direct and sole control over the domain for that site – but also developing a vastly more appealing, descriptive, interactive and engaging website. Further, this investment should include building the capacity of whomever is charged with the responsibility of managing this site to the point where frequent and adept engagement with all of the new social media opportunities is part of the daily job description. The “new” face of the Shire of Dundas *must* be sold via the new media – and sold well. All else is secondary.

Building the Ngadju community and Ngadju culture into this new face of the Shire is another area where courage (and liberal application of resources) will be required. But, as outlined earlier in this report, the potential benefits are substantial – and not only in terms of visitor appeal / appreciation of the place. The social benefits that could accrue from such a process may well exceed in real value those accumulating from throngs of intrigued and satisfied tourists. This is not something that will be developed overnight, and so it should not be seen to be an immediate part of marketing the new Dundas – but it should be a priority medium-term goal of the whole process.

The fourth of the points above - #1 – is the matter of the great bulk of this Report. If the Shire was to adopt the key recommendations and commit the funding required to deliver the same then this point will be fulfilled just as quickly as the new projects are rolled out. However, it should be recognised that with all the good intentions in the world it is going to be some years before a significant number of these new developments can be funded and implemented. This does *not* mean the Shire should hold back on the first three points outlined above: they can (and should) all proceed as soon as decisions and funding will permit.

So, the key recommendations for marketing the new Dundas are as follows:

1. Generate and adopt a new “strap line” for the Shire – this may or may not be “Heart of the Great Western Woodlands”. Embed this in every public face of the Shire as soon as is possible;
2. Rationalise and substantially upgrade the online presence, bringing all visitor information together on one strikingly attractive and appealing website under the control of a skilled and tech-savvy operator;
3. Embark on a process of consultation and discussion with the Ngadju community about how best to engage them and their culture in the development of the new Dundas – and, as soon as this process permits, build these outcomes into visitor attractions and services, and the marketing of the Shire;
5. Commit to a comprehensive and aggressive program of development of the visitor sites outlined in this report, as funding and priorities will permit – and, as each project is completed, ensure it is promoted appropriately and in an aesthetically appealing fashion on the new upgraded website.



The magic of the woodlands. Photo courtesy Lynn Webb

In addition to these major recommendations, there are a number of other matters worthy of consideration and possible short-term action, including:

- Considering employing a good marketing consultant with a proven track record in providing grounded and achievable outcomes for small rural/remote communities to prepare a simple and succinct marketing plan that would build on the ideas outlined here-in, and provide clearer and more detailed guidance as to the process and priorities of delivery. The same person could assist the Shire in arriving at its new strap line – and therefore lead directly into the process outlined in the next section: developing the look and feel for the “new” Shire of Dundas;
- Review the main marketing brochure in the light of all these recommendations – and in the light of this new “pitch” for the Shire – and consider a complete revision, going right back to the basic shape, size, concept, content, look and feel. Aside of the proposed new website, this will continue to be the other major public face of the Shire – and it should match the aspirations outlined in this report;
- Integrate a modern, technically advanced and visually striking Visitor Centre into the proposed “Centre” – and review the prospect of making this not just a Shire of Dundas visitor centre but also a Great Western Woodlands Culture & Heritage Centre;
- Work with service providers in the towns and roadhouses of the Shire to ensure that visitor information is freely available – and to enhance the skills and knowledge of the management (at least) of those businesses. Wherever possible, assist and promote staff improvement programs and support active engagement with AussieHost and/or similar organisations;
- Replacing the existing “Welcome to Norseman” signs (which feature the line “Norseman – Mining Town since 1894”) with new Welcome signs that more accurately reflect how the Shire wishes to be seen. Seven new signs should be installed – one on each of the three sets of posts that currently carry the outdated signs mentioned above (close to Norseman town), and one on the Shire boundary on each of the four main entry routes.

It is vital that the Shire is clear on *how it wants to be seen* before it embarks on the works set out in the following section.

Establishing the Dundas “brand”

As mentioned above, establishing the look and feel of the new Dundas must flow from a clear picture of how the Shire wishes to present itself. Therefore, there are elements of the marketing work outlined above, and the style manual process detailed below, that *must* occur at the very beginning of the process of defining infrastructure, styles, colours etc. These are all physical representations of the *image and message* that the Shire wishes to present to the wider world.

A Style Manual: The crucial first steps

A key aspect to establishing a recognisable Dundas/Norseman brand is the development of a guiding document that takes the *image and message* the Shire now wishes to present and turns it into a series of standards or parameters that can be applied to the many physical outcomes that will be on display in years to come. Consequently, it is recommended that a simple “Style Manual” be prepared right at the commencement of the implementation phase.

This document should precede the redevelopment of website(s) and any reprinting of existing brochures (or the production of new printed material). It should establish the basic *look and feel* of the Shire’s public face, taking the colour recommendations set out below and working them into a suite of colours to be used for each of the key areas of interest (website / brochure / other printed matter / colour signage etc). It should also

recommend a limited set of fonts to be used across all of these platforms, and should establish a basic framework (or template, if you wish) for designers to use when working on individual items in the future.

To guide the Shire in establishing the production of a Style Manual the following points have been established for potential inclusion in a project brief:

- Branding / marketing / goal setting / establishing key themes (as set out under Marketing above)
- A suite of colours that reflects key aspects of the local landscape
- Recommended fonts for use on large-scale infrastructure items and in printed and online material.
- Website design and layout (in a form that can be “grown” over time)
- Social media styles – for Facebook / Instagram / Twitter / Blogs etc
- Guiding direction re appropriate styles of hardware/ infrastructure (building on information below)
- Needs to work across a variety of platforms: web, mobile phone, brochures, posters, television, signage and streetscape items.

Once this document has been produced (the very first and most critical project of all) the Shire should move directly into integrating and upgrading (at least) the visitor pages of a single unified website. An initial allowance of \$20,000 is made for this work.

Colours selected and set out below are drawn from the landscape of the area, and relate strongly to the “Heart of the Great Western Woodlands” concept. The example below is provided to illustrate how the natural setting of the Shire can be used to inspire a colour palette that is vibrant and unique to Dundas. The Style Manual will detail exact colours, and these need to be specified in PMS (print) numbers, web codes and paint formulae colours. The palette also needs to indicate which colours are for highlight only use, and which are for wider use - proportion is a key aspect of colour use.



A Dundas Shire signage & infrastructure suite

One of the most noticeable hallmarks of towns, districts or regions that are undeniably *appealing* is a visibly consistent style or look that flows across from in-town infrastructure and aesthetics to out of town sites, places and attractions. Central to achieving this outcome is the establishment of a suite of infrastructure, signage, styles and colours. While in larger LGA's (and other distinct geographical regions) this can necessitate the development of a full-scale "Design Manual", this should not be necessary in the Shire of Dundas.

During this project a limited set of infrastructure and signage has been identified as being central to the proposed developments and upgrades, and while these won't necessarily cover all situations they should encompass the majority of the items that will be key contributors to establishing the Dundas/Norseman "look". These items are set out below, along with cost estimates (at 2016 rates). A list of possible suppliers follows in a separate section below.

A unique Dundas / Woodlands interpretive shelter

In terms of "branding" the Shire with a fresh and unique image there are few more visible opportunities than the interpretive shelters required for all 6 of the key entry points and information bays. Such structures are commonly of-the-shelf items that have (at best) limited aesthetic appeal – for example, the shelters installed in the new information bays created by MRWA on the outskirts of Norseman. These are functional, certainly, but lack any distinguishing style that might set them apart from similar items anywhere else in Australia.

As a consequence, one of the major investments recommended for the Shire of Dundas is a new custom-made shelter that truly reflects the gorgeous nature of the surrounding landscape. As can be seen in the concept drawing on the next page, this structure draws its inspiration from the woodland trees that will surround it in-situ, yet at the same time it has a modern, almost playful feel to it.

The uprights and primary support structure will be fabricated from heavy-gauge steel pipe, bent into shapes that resemble the trunk and limbs of a tree, and then primed and epoxy painted. The roof panels will be made of 4 mm mild steel plate, laser-cut to broadly replicate leaves, and will have small leaf shapes laser cut from within too. These will then be pressed to create a rolling corrugated-iron look-alike and painted in a range of colours chosen to fit the surrounding environment.

Early discussions with an experienced and creative fabricator have helped refine this concept, but a full-scale design phase is required in order to bring it to a point where construction could begin. This process would include having the structure assessed by an engineer to ensure its strength and stability. It would be important to commence on this detailed planning phase as soon as the Shire commits to the concept as it may take some months to arrive at a point where construction drawings are complete.

Two other key aspects of the concept are worth noting:

- The shelter is designed in a modular format, so it can "grow" by adding as many (or few) "trees" as is required for any given site. For example, a 3-tree structure is recommended for both Bromus Dam and Mt Jimberlana, where-as a 2-tree shelter is recommended for the Lake Cowan Lookout and just a single-tree version for the Eyre Highway roadhouses (not including Eucla);
- It is intended that these structures be shipped "flat packed", with the trunk section separate from the leaves and the panel support frames that would join the trunks. This would then facilitate on-site construction – and should reduce freight costs too.

Enhancement Goals:

- ~ To help brand Dundas as a forward-thinking community with unique assets;
- ~ To celebrate the natural heritage of the Shire;
- ~ To provide a structure which allows a variety of excellent and innovative imagery and information to be presented, and
- ~ To develop a shelter which can be assembled on-site using local labour and skills.

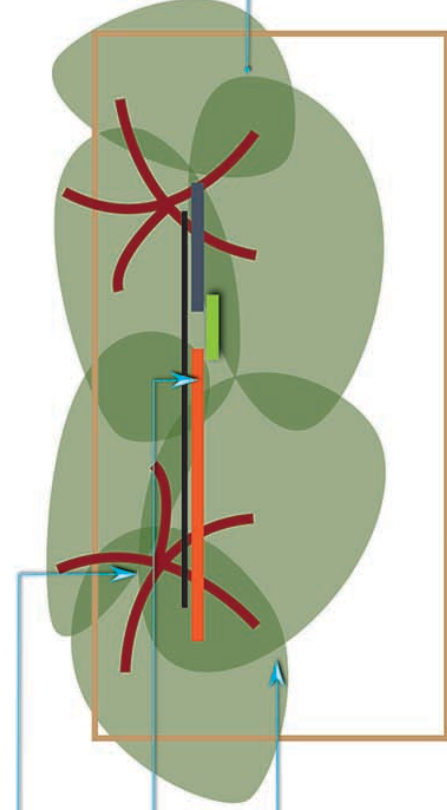
The Great Western Woodlands and wider Shire of Dundas contains a wealth of vibrant and sometimes surprising colours.



The base unit - a single 'trunk' with 'branches' and 'canopy' - can be repeated to make longer shelters for large sites

The majority of shelters will be single sided, but the structure can be adapted to be double sided

Canopy sections overlap to provide shade, but are broken into 'leaves' to give the structure a light and open feel



Plan View

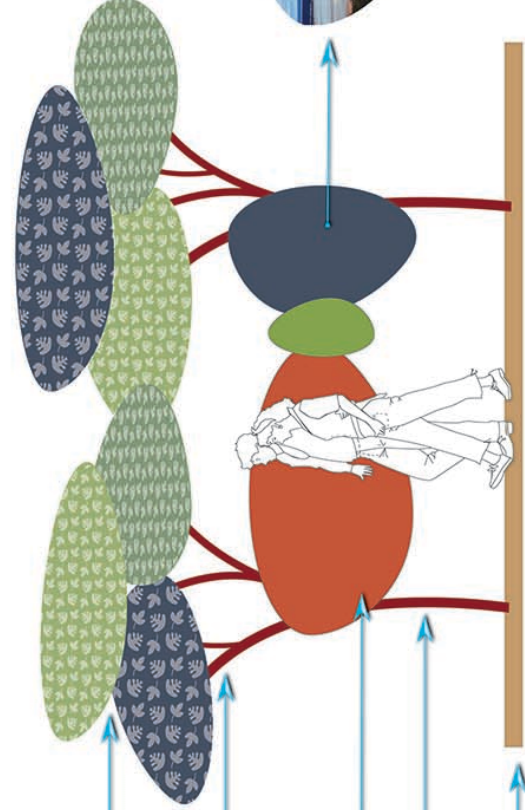
Canopy leaves are fabricated from laser cut metal sheets, possibly corrugated for strength and aesthetics, and finished in Woodlands colours. (Pattern pictured for illustrative purposes only.)

Branches are designed to provide structural strength to the canopy. Details and fixings to be designed to be aesthetically attractive as well as practical

Interpretation panels are shaped in the leaf theme and designed to assist with structural cross-bracing. Some panels may be decorative and sculptural to fit with the individual site themes

Trunk fabricated from rolled steel pipe sections and powdercoated in colours that reflect Woodland species

Concrete paved area under each shelter; trunk footings likely to be cage and rag bolt fixtures



Elevation



The patterns cut out of the canopy will be inspired by leaf shapes of Woodland trees, and will provide dappled shade under the shelter.



The interpretive panels will showcase not only the extraordinary landscapes of the Shire, but also local culture and artwork, and other visitor attractions and experiences.

They can also include QR Codes and App. links to direct visitors to web sites and maps.

Dundas-Style Information Shelter Concept

The budget in this Report contains a figure of \$15,000 to undertake the detailed planning and design of the shelter structure, including engineering costs. Initial estimates suggest that each “tree” could cost between \$9000 and \$10,000, though this figure will need to be refined once the detailed design work has taken place. It is hoped that the unit price will come if/when a bulk order is placed – however, the current estimate has been included in the project budgets in this Report to ensure adequate funding is set aside.

Yes, this is a comparatively expensive route to take in terms of presenting information – but it does offer a distinctive and powerful opportunity to make a bold statement about the Shire of Dundas and its engagement with both visitors and its own landscape and community.

Interpretive signage for shelters

The concept drawings above indicate that the interpretive information to be provided in the new shelters is also to be presented in a creative and “different” fashion. Panels are to be cut in shapes that again broadly resemble leaves, picking up on both the roof structure and the surrounding Woodlands vegetation. It is recommended that these panels be full-colour in order to be able to use some of the striking photographs and artworks that come from within the Dundas community, and ideally they should be produced using the unique and hard-wearing “Polycure” process which gives the best lifespan in terms of fade resistance.

Early thinking suggests that each of the major interpretive installations (Bromus, Jimberlana, North, Eucla etc) should carry one large-format photograph and a similar-size large-format Ngadju artwork – perhaps at the outer ends of the installation, bracketing the rest of the information. Allowances have been made in individual project budgets to cover the purchase of these creative outputs.

Information should certainly be informative, but it should also be *enjoyable* to read, and it should be highly visually appealing. As far as is possible a Ngadju view/perspective/story should be told alongside the more standard/typical information, and this could (at least in part) be presented in *Ngadjumaya* (language). Wherever possible it will be important to incorporate co-naming of places and objects/activities/events in order to clearly underline the importance of the Ngadju community within the Shire, and the value placed on Ngadju culture more generally.

The smaller panels shown in the concept drawing could be used as title boards or as artworks. Indeed, they may not actually be interpretive panels as such but may be laser-cut steel items added to provide a creative touch to the whole installation – again with the goal of making a statement about the “new” Shire of Dundas being somewhere a bit different, somewhere unique, and somewhere proud of its heritage (both natural and cultural). Budgets in individual project outlines contain sufficient funding to deliver on all of these interpretive aspirations.

The corrugated iron “creatures”

As mentioned earlier in this Report, the second of the primary physical “branding” elements proposed for the key sites around the Shire of Dundas is an eclectic collection of corrugated iron sculptures, based on the eye-catching and memorable group of camels on the Prinsep & Ramsey Streets roundabout. This installation has become one of the most photographed features in the Goldfields and – despite depicting what is actually a feral animal – has done much to brand Norseman in the eyes of the travelling public.

Similar sculptural installations are proposed for six key sites around the Shire:

- Bromus Dam,
- Mt Jimberlana,
- Northern Information Bay,

- Lake Cowan Lookout,
- Information Bay opposite service station, and
- Eucla, outside hotel/motel

Each should depict either an image, person(s) or creature(s) clearly associated with that place, or something particularly relevant to the wider Shire / Woodlands. While some suggestions are made in this Report and a number of ideas have been canvassed during discussions leading to this document, there needs to be a comprehensive process of consultation and consideration before final decisions are made as to what might be depicted at each place.

Further, a detailed design and fabrication planning process also needs to be undertaken prior to finalising the subjects and scale of installation for each of these places. Some concepts may in fact be very difficult (read “expensive”) or in fact impossible to deliver via this particular 3-dimensional structural format.

This design and planning work needs to take place immediately the Shire commits to the concept, and should proceed in parallel with the similar process recommended for the interpretive shelters.

Indeed, it is possible / likely that the same person or people could undertake this work as similar skill sets are required in each case. An allowance of \$18,000 has been set aside in the budgets that follow, equating to approximately \$3000 per site. While this may seem a significant sum, it is expected that a substantial consultation process will be required, and that a number of artist’s drawings may be necessary to resolve individual shapes/forms – and that resolving the actual structural requirements of each of the resulting images might be quite complex.

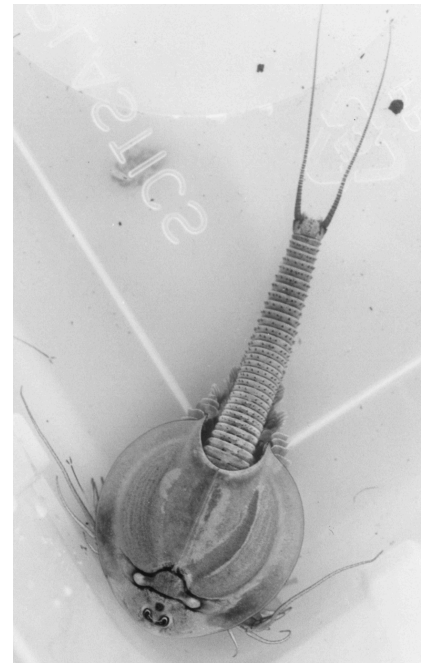
When set beside the proposed interpretive shelters this sculptural attraction will go a long way to establishing the Shire of Dundas as a progressive, socially-conscious and vibrantly creative place to visit or to live in.

Cost estimates

While the actual cost of manufacturing and installing these two key elements of the proposed new hardware suite is included in each site budget, parallel processes of detailed planning need to be undertaken in order to flesh out the design concepts and refine the subject matter for the corrugated iron sculptures. The table below shows the costs associated with this work.

As it is presumed that this work will need to be primarily outsourced the estimates below should be sufficient – and therefore no contingency has been added.

Item / Action	Item \$	Labour \$	Total \$
Detailed design and engineering of the unique Dundas interpretive shelters – includes engineer’s certification	15,000	0	15,000
Consultation to finalise the image(s) for each of the 6 (?) corrugated iron sculpture sets; includes researching/scoping options, workshopping ideas and having conceptual design drawings prepared	15,000	3,000	18,000
TOTALS, not Including GST	30,000	3,000	33,000



A giant over-size version of the shield shrimp could be installed at Lake Cowan

Seating	Tables	Bins	Barriers	Sundries
 <p>Vasse seat by Exterior; 1300 785 765 \$1,000</p>	 <p>Access table by Exterior; 1300 785 765 \$1,300</p>	 <p>Surround by Esperance Sheet Metal; 9071 1048 \$1,250</p>	 <p>Railway sleeper steps \$90 per 'step' installed</p>	 <p>Composting toilet \$84,000 installed</p>
 <p>This stool is suggested for CBD areas where congregating is an issue, and a bench is not suitable.</p> <p>Cafe stool by SFA; 1300 027 799 \$250</p>	 <p>Locally made, or Vasse bench and table by Exterior; 1300 785 765 \$1,600</p>	 <p>Locally made bin surround (Eucaly Hotel) \$1,200</p>	 <p>Rock barrier - local stone \$18 per lineal metre installed</p>	 <p>Pre-cast by Kagoorlie Concrete; 9021 2551 \$900</p>
 <p>Vasse bench by Exterior; 1300 785 765 \$600</p>	 <p>Pre-cast by Kagoorlie Concrete; 9021 2551 \$1,800</p>	 <p>240L Brown bin (if no surround used) - \$80ea Exteria Commander securing post - \$310ea</p>	 <p>Post and wire fence \$6 per lineal metre installed</p>	<p>Notes</p> <p>Similar products are available from suppliers other than those listed.</p> <p>Battens in areas outside the CBD should be composite plastic; such as Ezywood, Modwood, Rightwood or Millboard. Colours such as jarrah, redwood or cedar are recommended. Timber battens may be used for firewood and so are not recommended.</p> <p>All prices are estimates only, and do not include freight or GST. Installation is included only where specifically stated.</p>
 <p>Locally made bush seat \$500</p>	 <p>Locally made (See Greenskills Coastal Specification for plans) \$1,000</p>	 <p>Standard 'MRWA' bin \$5 <= Generator: Adobe Illustrator 19.2.0, SVG</p>	 <p>Locally made hand rails / bike racks \$150 per lineal metre galvanised steel</p>	 <p>Shire of Dundas Visitor Site Development Plan Infrastructure Suite</p> <p>May 2016</p>

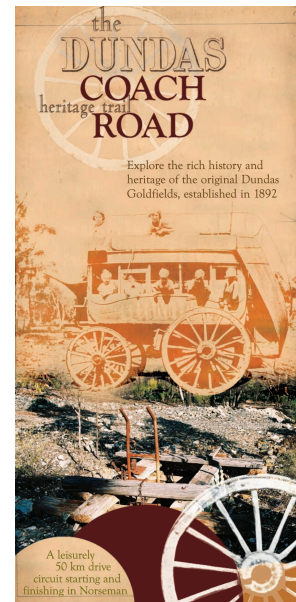
Building a “suite” of look-alike brochures

The Shire already has quite a number of small single-attraction brochures which have been developed over the years as projects have been completed, including:

- Beacon Hill Lookout and Walk Trail
- Woodlands Walk
- Dundas Coach Road Heritage Trail
- Granite & Woodlands Discovery Trail (with the Shire of Kondinin)

At this stage there is no consistency of design (or content for that matter) among these brochures – and keeping track of what stocks remain of each, and what might need to be amended at the next reprint of each may well be something of a challenge. This situation will only grow more pronounced should the Shire decide to proceed with the implementation of what is an appealing (but significant) set of walk/cycle trails in the near future. To the above list could be added the following:

- Eucalypt Identification Walk (brochure and booklet)
- Norseman Town Heritage Trail
- Gypsum Dunes Cycle Trail
- Lake Cowan Walk/Cycle Trail



One of many different “looks” – but a good one: appropriate colours, and a nice heritage / woodlands feel

Reviewing this overall list it is apparent that these attractions fall into two groups: walk/cycle trails and drive trails. The latter, being more substantial outings, will continue to warrant a separate and trail-specific brochure (though when next reprinted these should be redesigned to fit with the directions of the proposed Style Manual). However, the former group (walk/cycle trails) could well be combined into a single “Trails in and around Norseman” brochure.

This would potentially alleviate a number of ongoing issues, as there would then be just one brochure to maintain adequate stocks of, and there would be just one brochure to hand out (and/or distribute) instead of up to six. For visitors, this would mean all of the trail options around town would be immediately accessible to them – and they may therefore be encouraged to walk or cycle a number of these routes (instead of perhaps just one, as they may if they “cherry-pick” brochures).

A single (non-motorised) trail brochure would also make it much easier to ensure consistency of content and appearance, even if there are then still two drive trail brochures.

However, this approach can only be taken if/when the four new trails noted above are constructed. While it may be a case of “the tail wagging the dog” this does appear to put some impetus behind the concept of “bundling projects” that is outlined in the section on Priority Projects that follows. Developing all (or even most) of these four trails across a limited timespan would make a single integrated brochure a very sensible outcome. This may need to be as large as double-sided A3 (or even greater) but overall costs – and the wider benefits accruing – would make this initial work well worthwhile.

Regardless of whether this approach is taken or not, it is imperative that – over time – *all* Dundas Shire brochures be brought into one suite that presents a unified and unique Dundas aesthetic. The Style Manual will guide this outcome, whichever pathway is taken.

A Shire-wide program of interpretive panel replacement

In the period between 2000 and 2004 the Shire of Dundas developed a number of trails and other visitor attractions that involved the installation of etched anodised aluminium interpretive panels. These panels were recommended as they were known to have the longest lifespan of any manufacturing method (excluding specialist and highly expensive techniques like embossed brass or vitreous enamel), and provided outstanding resistance to severe weather conditions and vandal attack alike. The manufacturer now provides a 10 year guarantee on these products, underlining what is a reasonable life span expectation.

However, even the best of interpretive panels begin to fade and suffer over extended periods of time – and this has been evident in the field reviews of the various projects around Norseman. The fading that occurs with extreme heat gradually diminishes the legibility and visual appeal of the panels, bringing them firstly to a stage in which they simply look old and tired, and then to a point at which text becomes hard to read and photos are too blurred to interpret. Some of the Shire's panels have reached the first of these phases and all will soon be reaching the end of their functional usefulness.

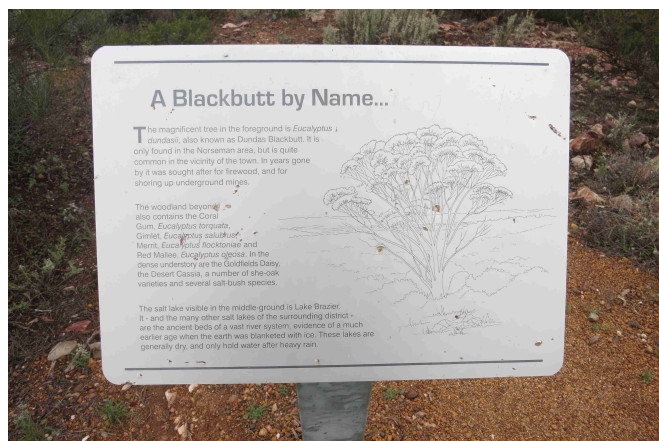
Unfortunately, not all panels age / fade at the same rate, as this is dependent on their orientation to the sun, the degree of shading they may or may not get, and a number of other factors. Thus it is tempting to simply go around each trail and replace those that are most severely impacted – and leave the remainder for some similar point in their process in the unknown future. This is *not* advised, for several reasons: firstly, replacing part of a set of panels immediately makes the remainder look much older and worse for wear, simply by comparison with their newer brethren. And secondly, there is no guarantee that any future / ongoing replacements will be undertaken as staff can leave the Shire and budget priorities change.

Therefore, it is recommended that the Shire commence a staged process of replacements, spreading the financial load over the coming 4-5 years and ensuring these excellent attractions are maintained at their highest level of appeal. The original sequence of installation was as follows:

• Beacon Hill Walk Trail	Early 2001
• Beacon Hill Lookout Shelter	Late 2001
• Camel panels at roundabout in town	2002
• Woodlands Walk Trail	2003
• Granite & Woodlands Discovery Trail	Early 2004
• Dundas Coach Road Heritage Trail	Late 2004

As can be seen, the various sets of panels have now been out in the field for between 12 and 15 years, and a detailed assessment of the maintenance reviews undertaken as part of this project will show that they are mostly still in surprisingly good condition for their age. Sadly, this will not last – and the downhill slope will be steeper now as each year goes by.

While some interpretive signage is actually damaged (such as this example, on the Beacon Hill Trail), the broader issue is the fading that is now apparent across many panels



It is almost impossible to source grant funds to replace existing panels like this. Some funding agencies may consider an application worded as an *upgrade* (rather than straight-out replacement) – though this would need to be ascertained at the time by speaking diplomatically to representatives of bodies such as GEDC and LotteryWest. In the expectation that grant funds cannot be sourced, it is recommended that the Shire instigate a forward plan to allocate funds in its own budget over a period of 4 or 5 years to ensure these panels are replaced in a timely fashion. Depending on financial capacity, an “ideal” program would be as follows:

- Financial Year 2016/17: Beacon Hill Walk Trail and Lookout Shelter
- Financial Year 2017/18: Camel panels and Woodlands Walk Trail
- Financial Year 2018/19: Granite & Woodlands Discovery Trail
- Financial Year 2019/20: Dundas Coach Road Heritage Trail

The cost of each of these years is estimated to be as set down below, based on 2016 prices with an allowance made for inflation in each successive year. These figures are based on replacing the front face of each panel only – not the backing plates or posts/pedestals. Unless the backing plate is damaged it is a simple task to apply the new front face (printed on 1.6mm aluminium) directly over the face of the existing panel using double-sided tape (supplied with the replacements). Costs are for supply only, and do not include the labour involved in the replacement process – nor do they include GST.

- | | |
|--|-----------|
| • Year 1: Beacon Hill Walk Trail and Lookout Shelter | \$15,810* |
| • Year 2: Camel panels and Woodlands Walk Trail | \$8,610 |
| • Year 3: Granite & Woodlands Discovery Trail | \$22,850 |
| • Year 4: Dundas Coach Road Heritage Trail | \$11,120 |

* The estimate for Beacon Hill includes 4 new panels recommended for the walk trail, and modifications to existing trail panels. It does not include replacing the gold and black directional dial, as this has been included in “necessary maintenance works” for the site.

If the Shire of Dundas is serious about building an economy and a community based on its natural (and permanent) assets rather than on the unreliable mining industry this program of replacement should be seen to be central and essential to that commitment. While it is naturally appealing to focus on new projects it is also vital to maintain existing assets in a state that is both functional and appealing.

The need for – and merits of – a dedicated project manager

Depending on the approach Shire takes with the projects outlined in this Report and the pace and sequence of implementation it may be worthwhile considering employing or contracting a dedicated project manager. Staff in smaller local governments are commonly overworked just maintaining their existing and essential array of activities, and projects such as these can involve quite substantial additional work loads. Further, many of these projects would benefit from specific skills, which may or may not exist within the array of current staff members.



Panels left undeanned for too long eventually become stained, unattractive and hard to read. Note also damage to lower left corner

Appointing a dedicated project manager is likely to make even more sense if the Shire decides to “bundle” some of these projects, as outlined above. Then, for example, it would be possible to seek someone with – say – specific walk trail skills, or site construction experience or graphic design, web and publication skills. This can result in both a smoother and more efficient roll-out of the project, in a higher-quality final outcome, and – potentially – in cost savings too.

Too often Shires choose to set about implementing projects such as these via their existing staff, unable to see beyond the up-front “additional” costs of contracting a specific project manager. This frequently proves to be short-sighted, and can have deleterious impacts on staff moral and/or well-being. Given the sheer scale of the works described in this Report – and their potential positive impact on the Shire, if delivered smoothly and with panache – it is strongly recommended that the Shire of Dundas give serious consideration to the merits of bringing in the skills, time and energy of a dedicated project manager.

This could be a full-time staff member employed for the duration of this project (at an estimated annual cost of perhaps \$100,000 total package) – and such an option has considerable merit in terms of continuity and teamwork. However, this is a significant in-house decision for the Shire to make, and councillors and senior staff will be well aware of the likely budget implications.

A dedicated project manager could bring in new energy, complementary skills which could also be passed on (i.e. mentoring existing staff), efficiencies that will result in project cost savings, and a legacy of enhanced investment in relationships between the Shire and other organisations all because they will have time. For all these reasons, *not* employing someone in this specific role might in fact prove to be false economy.

However, if a decision is taken not to proceed with such an appointment there will still be a requirement for on-site project management for most of these works. Many require specialised skills and therefore contracting particular people or organisations on a case-by-case basis may be preferred.

This too, will come at a cost and, as a consequence, when calculating the total budget requirements for each of the four years of the outlined program it is recommended that an allowance of up to \$100,000 be set aside to cover project management costs regardless of whether this is for an additional staff member or for contracted specialised skills.

A list of potential suppliers / consultants / contractors

A Report such as this, containing a host of different projects which may be implemented across a substantial spread of time, can be confronting and full of potential stopping points for staff in smaller rural and remote local governments. In order to assist with the efficient rolling out of all or some of this work – and in order to try to guide the Shire away from pitfalls common to this kind of situation – a list of possible / potential suppliers has been provided below.

This list is predicated on a number of factors believed to be of value to the Shire of Dundas. It includes:

- Suppliers who are known to stock certain infrastructure items – and sell at reasonable prices;
- Suppliers who have previously worked for the Shire, or undertaken projects in the area;
- Suppliers who are known to relate well to small rural and remote communities (these are generally smaller, often one-person operators, often based in country towns themselves);
- Suppliers who have worked with – or are known to be comfortable with – indigenous communities;

This list is *not* a set of recommendations or a fully comprehensive description of all options, and the Shire should make its own enquiries before selecting a provider for any particular project.

Item	Potential supplier	Reason / rationale
Project management (Only if the Shire seeks contract assistance with specific projects, rather than – or in addition to – appointing a full time staff member to the position)	Ian Kealley, Kalgoorlie	Former DPaW Regional Manager; vast expertise re Goldfields & Woodlands
	Tom Hartman, Mandurah	Former Shire Deputy CEO, and later an experienced and effective CEO at Meekatharra & Mullewa
	Kulbardi Hill Consulting	Knows the Shire and the projects well, and an experienced project manager
	Sally Malone Design	For specific projects (style manual, public art etc)
On-site construction / hands-on training / project management in remote locations	Lawrence Cuthbert	Based in Albany, and known to understand and work well with small remote communities
Style Manual – preparation, and general graphic design work	Sheryl Stephens, Verve St Design	All based in Albany; all known to understand and work well with small rural and remote communities
	Tim Waters Design	
	Jacqui Grieve, Spur of the Moment	
Website Design	Jacqui Grieve, Spur of the Moment	Known to understand and work well with small rural and remote communities
Public art / curation & image-related projects, cultural workshopping	Annette Davis	Based in Albany, and known to understand and work well with small remote communities
Interpretive signs and brochures: write / design and supply	Kulbardi Hill Consulting	Supplied most existing interp panels and brochures and has access to design files and production information
Printing (brochures etc)	Kulbardi Hill Consulting	As above
	Advance Press, Bassendean	Known to be efficient & familiar with small rural/remote agencies
Ecological & environmental information	Nathan McQuoid, Landscape Ecologist, Bremer Bay	A renowned eucalypt expert familiar with presenting information to the public

	Ian Kealley, Kalgoorlie	Former DPaW Regional Manager; vast expertise re Goldfields & Woodlands
Site planning / Townscape & urban design	Sally Malone Design, Albany	Deep knowledge of the Shire and its sites; widely experienced working with small rural & remote communities
Picnic tables & seats	Norseman Men's Shed	May have skills required, and should understand local conditions / aesthetics
	See infrastructure sheet	Recommended by Sally Malone
Interpretive sculptures & complex steel fabricated interp elements	Kanyana Engineering, Mandurah	Known to have good design & fabrication skills
	MCB Construction, Albany	As above

Some possible project partners

During the development of this Report it has become apparent that there are a range of organisations that may be useful and effective partners for the Shire in various projects outlined here-in. Again, this list should not be seen to be comprehensive or final: it is simply a capture of ideas and opportunities noted through this process:

- Independence Group (IGO)
- Central Norseman Gold
- MATSA Resources (North Scotia pit)
- Goldfields Esperance Development Commission
- Shire of Kondinin
- Ngadju Conservation
- Ngadju Native Title Group
- Main Roads Western Australia
- Tourism WA
- Australia's Golden Outback
- Prendiville family (BP Service Stations)
- Dept of Parks and Wildlife
- Major trucking companies
- FORM – Woodlands Cultural, Community & Visitor Centre
- Gondwana Link
- WA Museum – Regional Development section

SECTION 9: A PRIORITISED IMPLEMENTATION PROGRAM

This Report covers a wide range of projects with potentially far reaching implications for the future of tourism and community development in the Shire of Dundas. In an ideal world they would all be undertaken in the next 12 months, transforming the landscape in a quite dramatic fashion for visitors and local residents alike. However, resource limitations – both financial and human – are almost certain to curtail such a prospect, and it is therefore prudent to shape a step-by-step prioritised program of implementation.

The Shire – both Councillors and staff – will ultimately decide which projects proceed first and how quickly the program is rolled out, but the information below might give some guidance as to where the best immediate impacts might be obtained.

Summary of all projects and costs

The table below brings together all of the projects outlined in this report along with their relevant cost estimates. It is set out to mirror the structure of this Report, and therefore is NOT in any order of priority.

Cost estimates are just that: estimates – and are based on 2016 figures. Shire staff should perform “due diligence” on the figures provided in this table (and in the detailed earlier sections of the Report) and should make any adjustments necessary. And for projects undertaken beyond 2016 an additional factor (perhaps 3% per year) should be allowed to cover cost increases over time.

When considering the costs set out below it is vital to be aware that funds for this work will come from three sources:

- *External grant funds and contributions from a range of project partners;*
- *Existing Shire budgets for staff, machinery, tools etc;*
- *Direct Shire budget allocations.*

Therefore, the “total” figures in the table below DO NOT represent the likely actual cash cost to the Shire. The more likely direct input required from the Shire is shown in the right-hand column of the detailed and prioritised tables that are presented in the next section of the Report.

PROJECT	ESTIMATED COST
NEW / UPGRADED ENTRY POINTS	
Bromus Dam site upgrade, interpretation & visitor management	317,780
Mt Jimberlana site upgrade, walk trail & interpretation	255,850
Northern MRWA Information Bay – enhancement	83,470
Lake Cowan Lookout – site upgrade & enhancement	60,450
WALK TRAILS – EXISTING & NEW	
Gypsum Dunes Cycle Trail – construction & interpretation	59,590
Woodlands Walk – maintenance work	17,860
Beacon Hill Lookout & Walk Trail – upgrade & maintenance	61,070

PROJECT	ESTIMATED COST
In-town Eucalypt Identification Trail – on ground works (Year 1)	38,120
In-town Eucalypt Identification Trail – Book(let) (Year 2)	35,000
Norseman Town Heritage Trail – planning study only	18,240
Norseman Town Heritage Trail – estimate of construction costs	80,000
Lake Cowan Walk / Cycle Trail, including viewing platform	55,210
DRIVE TRAILS	
Granite & Woodlands Discovery Trail – maintenance work	28,070
Dundas Coach Road Heritage Trail – maintenance work	28,280
IN-TOWN PROJECTS	
Developing a town centre “precinct” Conservation Strategy	14,000
Developing a central precinct – window pictures (20)	20,000
Woodlands Culture, Community & Visitor Centre – scoping study	20,000
Town centre & museum signage – new & upgraded signage	6,300
Murals: long fence, Prinsep to Roberts Sts, plus one other	25,000
Central roundabout: Eagle-and-nest sculpture and landscaping	36,300
Street furniture – seats etc (annual allowance \$5000 + installation)	24,000
Light pole painting project: 20 poles @ \$500 each (prof. artist)	10,000
Wildflower Park – necessary works	2,000
Paving: complete all central precinct paths in red & cream (\$5k p.a.)	20,000
General landscape improvements as outlined above	20,000
EYRE HIGHWAY PROJECTS	
Information Bay opposite service station in Norseman	79,290
Eucla – the eastern gateway: enhancement / upgrade	85,670
Eyre Highway – promotional signage & interpretation	119,020
Eyre & Wylie audio CD production	75,000
SHIRE-WIDE PROJECTS	
Shire of Dundas “Style Manual”, including marketing workshop	20,000
Developing a single integrated and enhanced visitor website	20,000

PROJECT	ESTIMATED COST
Detailed design work and engineering for proposed interp shelters	15,000
Detailed design work and image selection for 6 corrugated iron sculptures	18,000
New “Welcome to” signs: 7 of, town and Shire boundaries	9,240
Staged interpretive panel replacement program (4 years)	58,390
Sourcing grant funds and negotiating with prospective partners (3 years)	60,000
Undertake a review of this program and set new goals (Year 4, late)	20,000
TOTAL – ALL PROJECTS	1,916,200

A prioritised program of projects

With so many projects on offer the process of deciding which to undertake first is more complex than is commonly the case. The information in the sections that follow is provided more as a “thought starter” than as a direction or even a recommendation. In the end, it is the Council who must decide which of these options is the most important – but in doing so the points that follow may be instructive:

- ❖ Availability of funds is clearly a key driver of what gets done and when. Council will almost certainly wish to seek grant funding for at least some of these projects, and this will set a number of time parameters in place, depending on what grants are available and what their lead-times are.
- ❖ Some of these projects are unlikely to be grant funded, and therefore will need to be allocated funds from the Shire’s own budget. Depending on where Council is in its annual cycle this too will impact start times for these projects. For example, maintenance or upgrading work is not likely to be grant funded, so the work described here-in for attractions like the Beacon Hill and Woodlands Walk trails, and the Granite & Woodlands and Dundas Coach Road drive trails will need to be done using Council funds.
- ❖ Supporting the point above, there is merit in “fixing up what you have before you start on something new” – especially in the eyes of those in the community who may be somewhat sceptical of the broader transition to a tourism-based economy.
- ❖ Given the momentum (and possibly, expectations) raised by a major planning process like this, picking some “low hanging fruit” from among the many projects and bringing on their implementation in the near future could have merit in terms of engaging community enthusiasm and clearly setting a new direction for the future. Projects that don’t need substantial pre-planning, and that might be harder to find funding partners for – and which could deliver a visible and clearly positive outcome – would be prime targets in this sphere.
- ❖ Specific time-limited opportunities and particular known problems / issues can also drive priority-setting, and may cause certain projects to elevate quickly to the top of a priority list.
- ❖ The Shire should not miss an opportunity to use its own funds in order to leverage funding from other organisations. There will quite likely be opportunities to double, triple or even quadruple these contributions if the timing and the project is the right “fit” for the funding agency.

- ❖ The net positive effect of these projects does to a certain extent depend on their combined impact rather than their individual (if undeniable) benefits. This lends weight to the “bundling” concept outlined below, and suggests that drip-feeding the roll-out of these projects over an extended period of time may make any significant overall improvement harder to ascertain. Council’s vision and determination to drive this process of transition will be likely to be clearly reflected in the overall stability and health of the local community and its economy.

The merits of “bundling” projects

In preparing this report and working out cost estimates for the many various projects, it has become apparent that there could be some merit – and some financial savings – in bundling “like” project together, and undertaking a batch of similar works all in one extended project. Some of the possible advantages of this approach could include:

- If outside skills need to be brought in they can be utilised for all projects of a similar kind while in the Shire – this saves repeated travel costs, and ensures consistency of advice (and therefore outcome);
- If extra staff or outside contractors are required for a certain kind of job they can be brought on board once for an extended period, rather than having to stop and start at random intervals;
- Skills developed in one project can be immediately carried on to others of the same kind, thereby alleviating the concern that skills may be lost if staff leave the Shire;
- Gathering all the tools, machinery and equipment for a batch of similar projects makes good logistical sense, and may save money too;
- Modifying promotional material is rationalised into sizable “chunks” instead of having to be done piecemeal as individual projects are completed. For example, undertaking all new walk/cycle trails at once would allow a single new map/brochure to be prepared and printed, streamlining the process;
- If the Shire is seeking grants for particular projects (or types of projects – viz: trail, arts, heritage conservation etc) it may be advantageous to present a group of similar projects to funding agencies – and it would certainly save staff time in only having to prepare a single application;

Obviously, embarking on this course has ramifications on several fronts – not the least of which is the potential financial implication. As can be seen below, some of the logical groups tally to sizable sums, and this may be beyond the budget capability of the Shire in any given year.

Further, and as already mentioned, selecting priorities becomes a personal – and often subjective – matter. Bundling projects like this may make it harder to “spread the love around” among a selection of different projects each year. This may upset particular groups within the community, and careful explanation would be necessary to ensure no backlash.

However, there do appear to be several logical groups of projects which might be bundled together to create some efficiencies and possible cost savings:

- New entry points (Bromus, Jimberlana, North, Lake Cowan)
- Trail maintenance (Beacon Hill, Woodlands, Granite & Woodlands, Coach Rd)
- New trails (Town Heritage, Eucalypt ID, Gypsum Dunes, Lake Cowan)
- Town centre (Precinct, Wildflower Park, Signage, Murals, Lights, Roundabout etc)

These groupings do not include *all* projects outlined here-in, so if taking this approach an overall prioritisation program should still be established to ensure other stand-alone projects (such as the Style Manual, the Culture, Community & Visitor Centre scoping study, Eyre Highway works etc) are not forgotten.

One possible prioritised program (4 Financial Years)

Following discussions with the Shire leadership group, it has been decided to present a 4-year program for rolling out the works outlined above. This program commences with the upcoming 2016/17 financial year, and is clearly dependent on resource availability and on broader Shire-wide priorities. Projects listed within each year group are placed in their order of priority, in case all projects set down for a particular year cannot be undertaken.

Once again, when considering the costs set out below it is vital to be aware that funds for this work will come from three sources:

- *External grant funds and contributions from a range of project partners;*
- *Existing Shire budgets for staff, machinery, tools etc;*
- *Direct Shire budget allocations.*

Therefore, the “total” figures in the table below DO NOT represent the likely actual cash cost to the Shire. The more likely direct input required from the Shire is shown in the right-hand column of the tables that are presented below. However, there are of course uncertainties about grant funds and potential sponsorship / partnership contributions and therefore a degree of flexibility is necessary when assessing these figures.

	Total project cost	Possible grants	Shire labour	Shire direct budget
Year 1: 2016/17				
<u>Whole project / all items</u>				
Source grant funds and negotiate with potential partners for all projects below	20,000	0	0	20,000
<u>Marketing / branding and planning – Shire wide</u>				
Prepare a Style Manual – including defining new “brand” & strap line	20,000	10,000	0	10,000
Integrate two websites into one, and redevelop new visitor section	20,000	0	2,000	18,000
Undertake Scoping Study for Woodlands Cultural, Community & Visitor Centre	20,000	20,000	0	0
Replace / install new “Welcome to” signs – entry to town (3) and Shire boundaries (4)	9,240	0	1,540	7,700
<u>Planning – specific projects and infrastructure items</u>				
Complete detailed design work and engineering for proposed interp shelters	15,000	0	0	15,000
Complete detailed design work and image selection for corrugated iron sculptures	18,000	0	3,000	15,000

	<i>Total project cost</i>	<i>Possible grants</i>	<i>Shire labour</i>	<i>Shire direct budget</i>
Resolve specific planning / permission issues with DPaW and MRWA	5,000	3,000	2,000	0
Finalise site planning and owner negotiations at six Eyre Highway locations	6,000	0	0	6000
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Undertake maintenance on Woodlands Walk, as outlined in Report	17,860	0	7,280	10,580
Undertake maintenance on Beacon Hill Trail, as outlined in Report	31,140	0	12,500	18,640
Undertake maintenance to Beacon Hill Lookout site, as outlined in Report	29,930	0	11,210	18,720
Finalise the Eucalypt Identification Walk Trail project, apart from book (Year 2)	38,120	21,150	6,600	10,370
Undertake maintenance on Granite & Woodlands Trail, as outlined in Report	28,070	0	11,490	16,580
Undertake maintenance on Coach Road Heritage Trail, as outlined in Report	28,280	0	8,090	20,190
Undertake planning study for Norseman Town Heritage Trail	18,240	15,000	0	3,240
First year of full panel replacement program: Beacon Hill – Lookout and Trail	15,810	0	0	15,810
<u>In-town projects and activities</u>				
Replace various directional signs leading to town centre and other attractions	6,300	0	2,140	4,160
Deliver the murals and painted power pole projects as outlined in Report	35,000	30,000	5,000	0
Prepare a Conservation Plan / Building Conservation Strategy for main street	14,000	7,000	0	7,000
Annual allowance: street furniture, paving & landscaping	16,000	0	4,000	12,000
Undertake immediate remedial actions to tidy up Wildflower Park	2,000	0	1,500	500

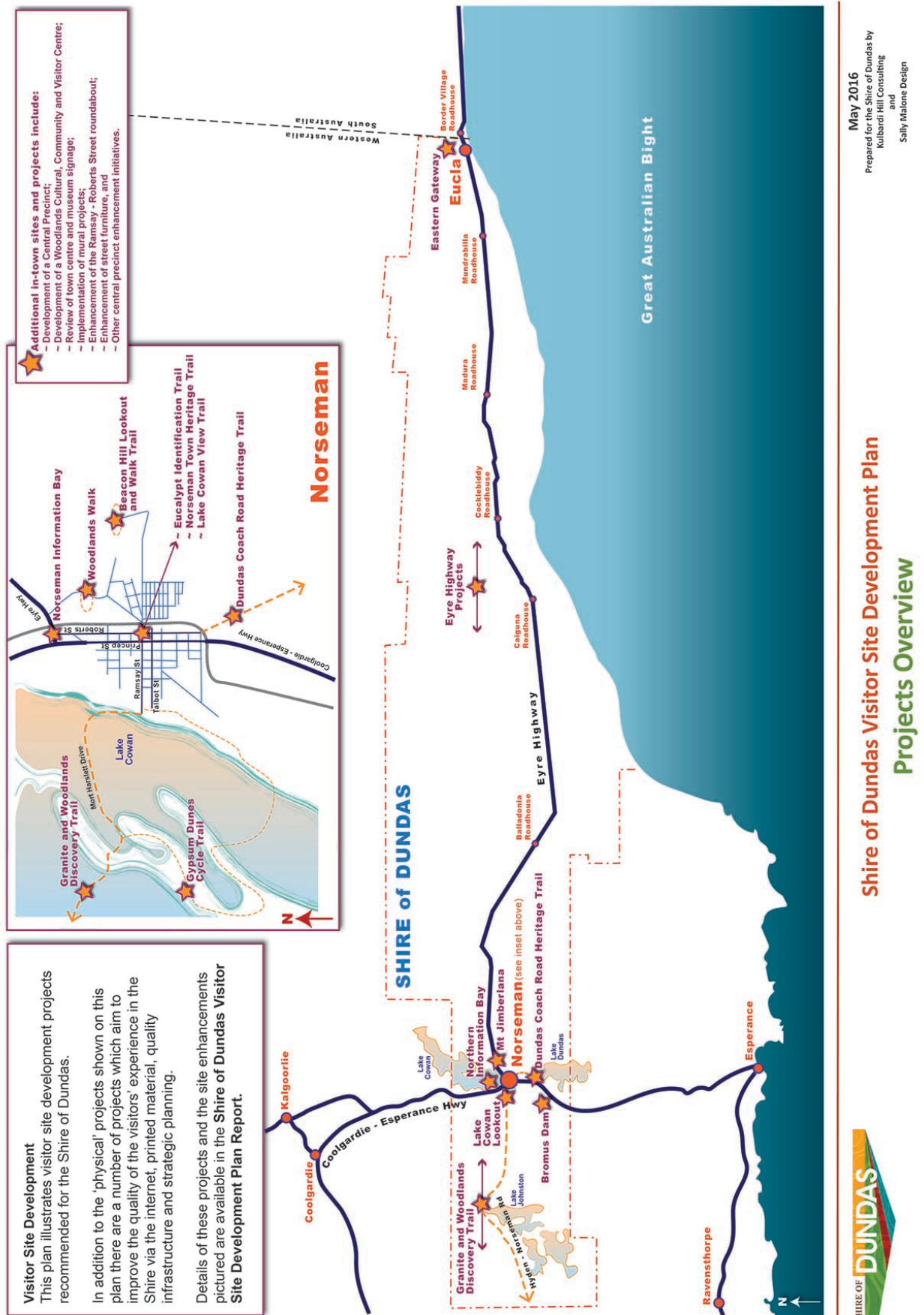
	<i>Total project cost</i>	<i>Possible grants</i>	<i>Shire labour</i>	<i>Shire direct budget</i>
<u>Major new entry points</u>				
Upgrade the Bromus Dam site as per Plan and report: Stage 1 (Year 1 component)	117,780	0	39,760	78,020
Upgrade the Mt Jimberlana site as per Plan and report	250,850	123,930	42,920	84,000
YEAR 1 TOTALS not inc GST	782,620	230,080	161,030	391,510
Year 2: 2017/18				
<u>Whole project / all items</u>				
Source grant funds and negotiate with potential partners for all projects below	20,000	0	0	20,000
<u>Major new entry points</u>				
Upgrade the Bromus Dam site as per Plan and report: Stage 2 (Year 2 component)	100,000	0	20,000	80,000
Upgrade and enhance Northern Information Bay	83,470	0	6,930	76,540
Upgrade and enhance Lake Cowan Lookout (G&W trail)	60,450	0	16,520	43,930
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Construct / create new in-town Heritage Trail, as per Plan to be produced in Year 1 (estimates only – to be fully costed in planning study)	80,000	40,000	8,000	32,000
Second year of full panel replacement program: camel panels and Woodlands Walk Trail	8,610	0	0	8,610
In-town Eucalypt ID Trail – produce book(let)	35,000	30,000	5,000	0
<u>In-town projects and activities</u>				
Town-centre roundabout enhancement: Eagle sculptures	36,300	20,000	4,400	11,900
Central Precinct: window pictures on main street	20,000	8,000	4,000	8,000
Annual allowance for new street furniture, paving and landscaping	16,000	0	4,000	12,000
YEAR 2 TOTALS not inc GST	459,830	98,000	68,850	292,980

	Total project cost	Possible grants	Shire labour	Shire direct budget
Year 3: 2018/19				
<u>Whole project / all items</u>				
Source grant funds and negotiate with potential partners for all projects below	20,000	0	0	20,000
<u>Major new entry points</u>				
Upgrade the Bromus Dam site as per Plan and report: Stage 3 (Year 3 component)	100,000	0	20,000	80,000
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Construct / create Gypsum Dunes Cycle Trail	59,590	30,000	13,730	15,860
Third year full panel replacement program: Granite & Woodlands Discovery Trail	22,850	0	0	22,850
<u>In-town projects and activities</u>				
Annual allowance: street furniture, paving & landscaping	16,000	0	4,000	12,000
<u>Eyre Highway projects</u>				
Upgrade information bay opposite BP service station	79,290	10,680	7,710	60,900
Create major new “entry point” installation in Eucla	85,670	20,680	8,430	56,560
Install Eyre Highway shelters and signage (5 sites)	113,020	9,650	11,000	92,370
Produce the “Eyre & Wylie” audio CD	75,000	40,000	5,000	30,000
YEAR 3 TOTALS not inc GST	571,420	111,010	69,870	390,540
Year 4: 2019/20				
<u>Trails/sites & interp panels – maintenance and replacement program</u>				
Lake Cowan Walk/Cycle Trail and viewing platform	55,210	25,000	3,520	26,690
Fourth year full panel replacement program: Dundas Coach Road Heritage Trail	11,120	0	0	11,120
<u>In-town projects and activities</u>				
Annual allowance: street furniture, paving & landscaping	16,000	0	4,000	12,000

	<i>Total project cost</i>	<i>Possible grants</i>	<i>Shire labour</i>	<i>Shire direct budget</i>
<u>Whole project / all items</u>				
Undertake a review of this program and set new goals	20,000	0	0	20,000
YEAR 4 TOTALS not inc GST	102,330	25,000	7,520	69,810
TOTALS ACROSS ALL 4 YEARS	1,916,200	464,090	307,270	1,144,840

* . The total figures for implementation of the Mt Jimberlana and Eyre Highway projects (as shown in the detailed descriptions in the body of the Report) are made up of two components each: the pre-planning work listed under “Planning – Specific projects and infrastructure items” in Year 1 and the construction figures listed under “New entry points” in Year 1 and “Eyre Highway projects” in Year 3.

APPENDIX 1: A VISUAL REPRESENTATION OF ALL PROJECTS



APPENDIX 2: SOME CONSTRUCTION INFORMATION

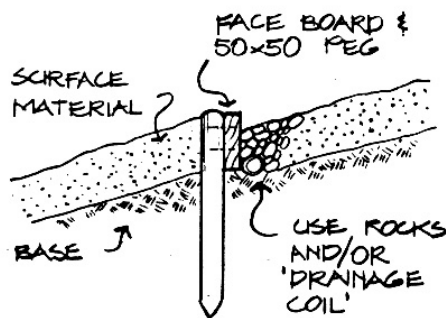
The information in this Appendix is not intended to be a complete summary of construction notes and drawings – that is outside the Brief for this project, and in any case it is assumed that considerable knowledge, skills and experience already exists within the Shire of Dundas. The material provided below is rather a collection of specific items of work that may relate to one or more of the projects in this report, and it is broken into three sub-sections: trail work, site works and in-town works.

It is *not* intended to be comprehensive or prescriptive. If the Shire feels a different way of delivering these outcomes will suit its conditions (or fit with the availability of skills or materials) more effectively then there is no expectation that the material below will over-ride that local know-how.

Walk trail works

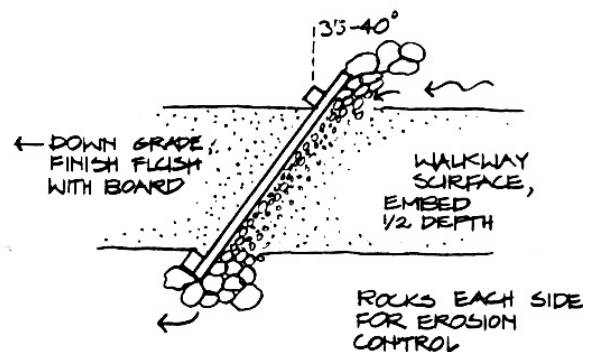
Installing water-bars

Water-bars are crucial to the long-term sustainability of trails on or across slopes – as is the case on both the Beacon Hill and Woodlands Walk trails. While the actual face material can vary from flat boards to pine poles to rocks – or even old railway sleepers (as recommended here) the principles remain the same, as shown in the image below (from DPaW):

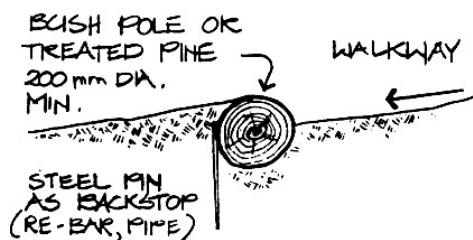


WATER BAR - SECTION

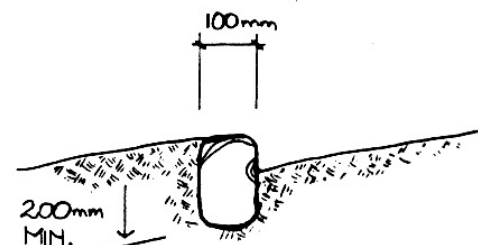
ANGLE ALL WATER BARS AT 35 - 40° & INCLUDE ROCK MULCH TO HELP PREVENT EROSION.



WATER BAR - PLAN



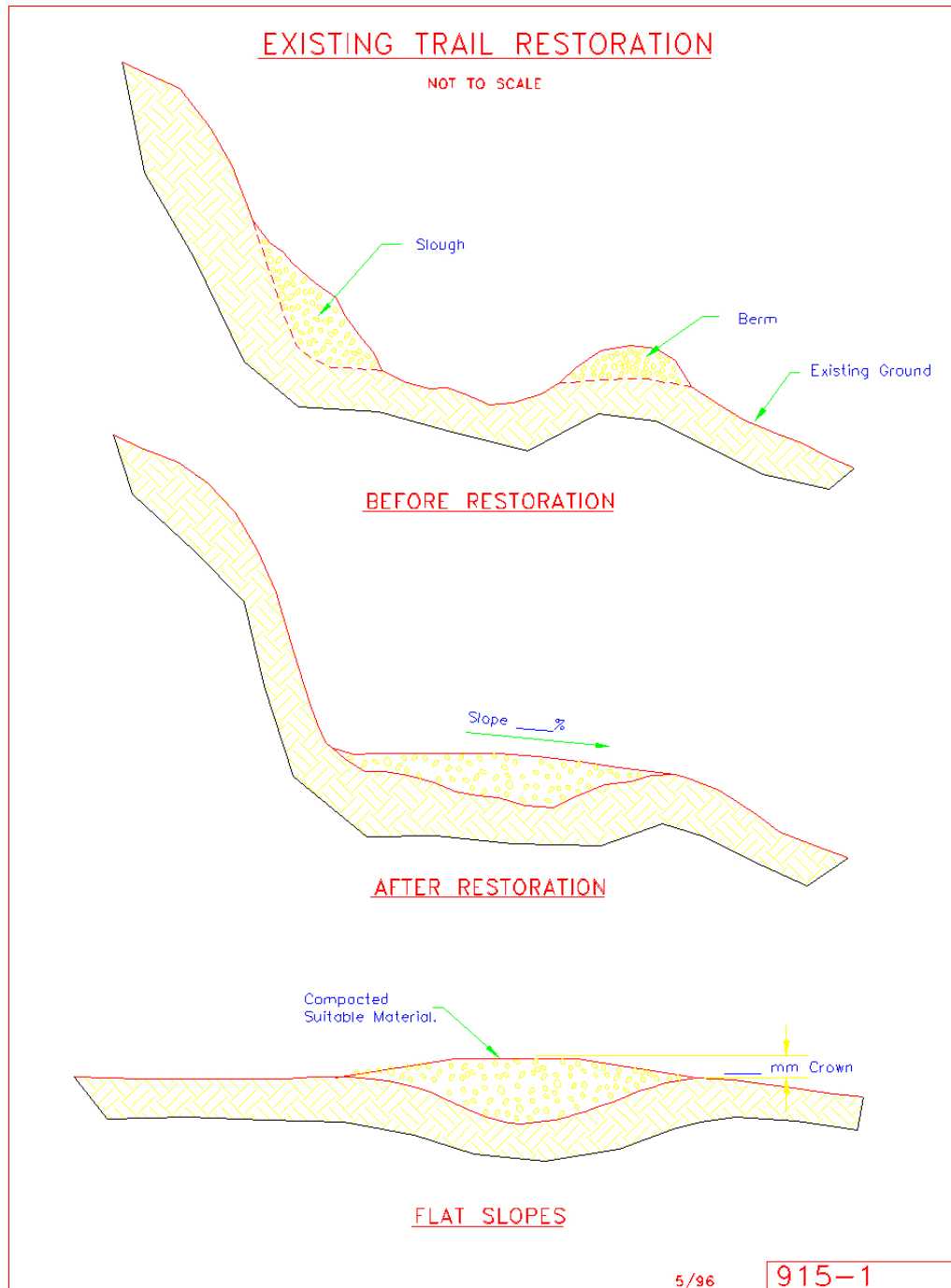
LOG WATER BAR



ROCK WATER BAR

Trail surface restoration

Significant sections of both the Beacon Hill and Woodlands Walk trails are notably eroded, and require substantial restoration. The diagram below, from the US Forest Service, may be of some use. Of crucial importance in this process is to ensure that the cause of the problem is remedied, rather than just the symptom (ie: where is the water coming from, and why is it running down the trail?). The outward slope shown on the finished trail sections is also important as this helps shed water off the surface rather than channelling it down the trail.



Drilling into rocks

Installing interpretive signage, trail markers or even shade/interp shelters on rock surfaces may/will be required at places like 3 Mile Rocks and Mt Jimberlana. The information below is for general guidance as to this process, and was provided by a contractor experienced with such installations:

- A good quality Makita cordless drill with plenty of spare fully-charged batteries (or a portable charging system) and the best quality drill bits that can be afforded will work quite adequately for remote rock drilling;
- Drill the hole 2 mm wider than the bolt size for bolts up to 20 mm; 4 mm larger for bolts over 20 mm;
- Chemical fix with Hilti (https://www.hilti.com.au/anchor-systems/injectable-adhesive-anchors/sc-CLS_INJECTABLE_ADHESIVE_ANCHORS).
- Save the core that is drilled out to use as a plug if it is found that the hole is in the wrong place and re-drilling is necessary;
- If the drilling or other works leave a light-coloured mark on the granite that is unsightly, apply yogurt (yes yogurt) rather than pay for expensive commercial oxidizing agents - the long term result is the same;
- For large structures it will be necessary to weigh up the pros and cons of drilling lots of small holes as against fitting a few big bolts. Some engineering advice might be needed in this case;
- Consideration should be given as to whether or not expansion and contraction of metal with extreme heat may be an issue – again, engineering advice may be required.

Installing trail markers on rock outcrops

The information above is highly relevant to the process of installing trail markers on rock outcrops such as McDermid and Disappointment Rocks on the Granite and Woodlands Discovery Trail.

The style of marker recommended for use in these projects is a low-profile galvanised steel item that will not be overly visually intrusive on these large open granite surfaces. An example of this is shown in the photograph to the right. This is a short (200 mm) section of standard 100x100 shs galvanised steel post, with an end-cap glued on. A simple steel “post” is welded inside one corner – this is generally a reinforcing bar of around 16 mm diameter, and is then chem-set into a hole drilled in the rock surface (as outlined above).

The shiny galvanised surface ensures that these markers are readily seen, despite their relatively small stature. And, as they are small, they are not seen to be “visual pollution” on the rock face. However, they do need to be carefully located, to ensure they are visible from the previous known point on the trail, be that another marker or an interpretive panel.



This style of trail marker is relatively unobtrusive on open rock outcrops, but still visible from quite some distance

Removing graffiti from rocks

Sites such as Dundas Rocks and Mt Jimberlana suffer from spray-painted graffiti on large flat rock surfaces. Advice on the best way of removing this was sought from the City of Albany (who have a frequent issue with this nefarious activity on Mt's Clarence and Melville, and other rock formations around the City). Information provided was as follows:

- Use a product called "So Safe BLUE" - see: <http://sosafe.com.au/products/graffiti-remover/>
- Spray it on, scrub with a stiff brush and then hose off with water
- Could provide very little information as to what it would do to plants, but thought it likely to kill them. Perhaps ensure a good wash and rinse of any splashed plants as soon as possible
- Trial using a back-pack spray at remote sites like Mt Jimberlana, and experiment with one of the "tags" that is in a less visible place (in case results are messy).

APPENDIX 3: TRAIL MAINTENANCE CHECKLISTS

A number of points should be noted with regard to the use of these checklists:

- They are intended to be photocopied (or printed from digital copies) and used for regular 6 monthly inspections by Shire staff.
- The resulting information should be used to undertake (at least) an annual program of renovation / repair / replacement, with urgent items dealt with as soon as possible after the inspection.
- Checklists should then be filed so that a picture of trail condition over time can be developed.
- It would be useful if the Shire could set aside an annual trail maintenance budget which, if not all used up in any given year, could be carried forward to help cover inevitable calamitous events (floods, fires, significant vandal attack etc).
- It is recommended that two staff members undertake each 6 monthly review together. One should be “experienced” ie: should have undertaken a previous inspection, while the other should be “new” to the trail review process. This provides continuity of knowledge (one set of eyes who saw the trail 6 months ago and may notice incremental issues) and yet guards against the “familiarity breeds contempt” issue (becoming too familiar with the trail and therefore not noticing things that need attention). It will also build and broaden knowledge and experience through Shire staff, hopefully ensuring that all relevant knowledge is not lost if one person should leave.
- The final column should be used to confirm what action has been taken – or if nothing has been done, why that is the case.
- Distances used in the first column show places that were identified as having significant issues at the major January 2016 inspection – these are expected to be locations where future issues may arise, and have therefore been identified in the tables that follow.
- It will be necessary to take a GPS when inspecting walk trails in order to ascertain relevant distances.
- Should any additional works be required at locations not marked in these tables they should be written into the blank rows at the end of the document, with distances. Electronic versions of these tables can then be modified to insert these line-items in the relevant place for future inspections.

Woodlands Walk Maintenance Checklist

Target Date (tick one box):

July 2016 ☐ January 2017 ☐ July 2017 ☐ January 2018 ☐ July 2018 ☐

Actual Date: _____ **Inspection by (name):** _____

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
Trailhead		Check panels and posts for damage or vandalism. Clean both panels and posts.	
Whole trail		Clean all interpretive panels using special anodised aluminium cleaner	
25		Check integrity of "chicane" of pine logs immediately below bitumen road	
25		Check small plate on chicane saying: "Woodlands Walk ↑ Caution – some sections have loose gravel surface"	
25-30		Possible erosion site: inspect for water damage	
100		Check trail junction totem post and symbol	
125		Inspect Panel #1 for any damage & clean	
160		Inspect Panel #2 for any damage & clean	
235		Inspect Panel #3 for any damage & clean	
235-375		Quad-bikes using this section in 2016– inspect for ongoing damage and check chicanes / barriers installed in 2016 upgrade	
290		Inspect Panel #4 for any damage & clean	
290		Check condition of timber seat	
290-305		Possible erosion site: inspect for water damage; check condition & function of waterbars	
335		Inspect Panel #5 for any damage & clean	
375		Check condition & integrity of sleeper footbridge	
375		Check condition of chicane or log barrier just before bridge (installed 2016)	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
375-400		Possible erosion site: inspect for water damage; check condition & function of waterbars	
400		Check condition & integrity of second sleeper footbridge	
405		Inspect Panel #6 for any damage & clean	
465		Inspect Panel #7 for any damage & clean	
500-515		Trail turns right and uphill – possible erosion site: inspect for water damage; check condition & function of waterbars	
515		Check condition of timber seat	
570-605		Possible erosion site: inspect for water damage; check condition & function of waterbars	
585		Inspect Panel #8 for any damage & clean	
635		Inspect Panel #9 for any damage & clean	
685-710		Trail descends to creek - possible erosion site: inspect for water damage; check condition & function of waterbars	
710		Check condition of sleeper bridge over creek	
715		Inspect Panel #10 for any damage & clean	
715		Check condition of sleeper seat	
715-760		Steep gradient to trail junction - possible erosion site: inspect for water damage; check condition & function of waterbars	
760		Trail junction	
860		Return to Trailhead	

Beacon Hill Lookout & Trail Maintenance Checklist**Target Date (tick one box):**

July 2016 ☐ January 2017 ☐ July 2017 ☐ January 2018 ☐ July 2018 ☐

Actual Date: _____ **Inspection by (name):** _____

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
Approach		Check condition of 4 brown & white directional signs from “camel” roundabout up to and including final sharp bend before the climb to the hilltop	
Approach		Check condition of road at mine haul crossing, and ensure boom gates are working	
Lookout shelter		Check condition of all interp panels and directional dial, and clean	
		Sweep and clean timber seat and handrails	
		Check condition & safety of shelter building; clean & remove graffiti (if necessary)	
Parking area		Check condition of Panorama panel and clean	
		Check picnic tables for cleanliness, graffiti and damage	
		Check condition of parking area surface for vehicle or water damage, and check integrity of bollard lines	
		Check new plantings; replace any deaths, ensure watering is adequate	
		Check presence and condition of all management signs and site entry sign	
Trailhead		Check condition of trailhead interp panel and 1500x500 mm “Beacon Hill Walk Trail – Start” sign	
25-40		Possible erosion site: inspect for water damage; check condition & function of waterbars	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
50-70		Possible erosion site: inspect for water damage; check condition & function of waterbars on slope to interpretive panel	
70		Inspect Panel #1 for any damage & clean	
70		Check condition & cleanliness of seat	
70		Check trail marker & post for condition & cleanliness	
70-80		Possible erosion site: inspect for water damage; check condition & function of waterbars	
110		Check trail marker & post for condition & cleanliness	
110-120		Possible erosion site: inspect for water damage; check condition & function of waterbars	
140-145		Possible erosion site: inspect for water damage; check condition & function of waterbars	
185-190		Possible erosion site: inspect for water damage; check condition & function of waterbars	
200		Check trail marker & post for condition & cleanliness; inspect Panel #2 for damage & clean	
230-240		Possible erosion site: inspect for water damage; check condition & function of waterbars	
250		Sharp dog-leg in trail – check condition of new “short-cut section” and confirm that old trail section is brushed over or re-growing	
300		Inspect Panel #3 for any damage & clean	
340-345		Right turn to uphill slope: possible erosion site - inspect for water damage; check condition & function of waterbars	
370-400		Right turn onto slope: possible erosion site - inspect for water damage; check condition & function of waterbars	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
445		Check trail marker & post for condition & cleanliness; inspect Panel #4 for damage & clean	
445		Check condition of seat	
500		Check and clean trail markers & posts both sides of road crossing	
510-515		Possible erosion site - inspect for water damage; check condition & function of waterbars	
540-550		Possible erosion site - inspect for water damage; check condition & function of waterbars	
610-630		Trail goes uphill: inspect for water damage; check condition & function of waterbars	
610		Inspect Panel #5 for any damage & clean	
675-680		Possible erosion site - inspect for water damage; check condition & function of waterbars	
700		Inspect Panel #6 for any damage & clean	
700		Check condition of seat	
700-750		Possible erosion site - inspect for water damage; check condition & function of waterbars	
750		Inspect Panel #7 for any damage & clean	
770-805		Trail turns right and goes uphill: possible erosion site - inspect for water damage; check condition & function of waterbars	
820		Check and clean trail marker & post	
820-830		Possible erosion site - inspect for water damage; check condition & function of waterbars	
850		Inspect Panel #8 for any damage & clean	
860-870		Water off hillside is damaging to this section as trail descends to right turn. Possible erosion site - inspect for water damage; check condition & function of waterbars	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
870-880		Trail turns uphill. Possible erosion site - inspect for water damage; check condition & function of waterbars	
930-945		Trail turns right and goes uphill to car park. Water flowing off parking area onto trail – possible erosion site - inspect for water damage; check condition & function of waterbars	
950		Check condition of “Trail ends here” and “Do not enter. Trail commences 50 m across parking area, and is only marked for one-way (clockwise) travel” signs at car park edge	

Granite & Woodlands Discovery Trail Maintenance Checklist**Target Date (tick one box):**

July 2016 ☐ January 2017 ☐ July 2017 ☐ January 2018 ☐ July 2018 ☐

Actual Date: _____ **Inspection by (name):** _____

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
Whole trail		Advise Shire of Kondinin of timing of review and invite one of their staff members to join for Sites 1-5	
		All interpretive panels need thorough cleaning with specific etched aluminium cleaning fluid/process during every 6 monthly review	
		Empty <i>all</i> rubbish bins along whole route and pick up any litter that is visible	
Site 16 Woodlands Walk		See <i>Woodlands Walk maintenance checklist</i>	
Site 15 Lake Cowan Lookout		Check and clean interp panels (NB: In January 2016 Panel 2 had a large dent in the photo, and several scratches, but remained legible)	
		Check advance warning signs (2) and site sign at entrance	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table bases & clean tops and seats	
		Check blue marker posts either side of the culvert across the watercourse on the access drive – it is narrow and potentially dangerous	
		Check condition of access road and “overflow / large vehicle” parking at entrance	
		Check condition of gravelled parking areas both sides of Hyden Road and at main site	
		Check condition of corrugated iron sculpture	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
		Check condition of new interpretive shelter and the signage in it – clean as required	
Site 14 Gemfields		Check advance warning signs (2) and site sign at entrance	
		Check and clean interp panel	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table base & clean top and seats	
		Check condition of gravelled parking area	
Site 13 Woodlands Picnic Area		Check advance warning signs (2) and site sign at entrance	
		Check and clean interp panel	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table base & clean top and seats	
		Check condition of gravelled parking area	
		Check back end of site (south end) for any additional extensions or braiding of tracks – or establishment of yet more camping places	
Site 12 Disappointment Rock		Check advance warning signs (2) and site sign at entrance	
		Check and clean interp panel	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table base & clean top and seats	
		Check condition of gravelled parking area	
		Toilet: * check level of tank & arrange pump-out if required * check door catches outside and inside * clean toilet as required * check structural integrity of building * check “how to use” & “please phone if an issue exists” signage inside	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
<i>Disappointment Rock Walk Trail</i>		<i>The following notes apply to the trail up and around the rock outcrop. Distances are as per the tables in the map/brochure (cumulative from the car park)</i>	
<i>Car park</i>		Check "straight ahead" trail marker at beginning of short walk leading from car park	
		Check and clean trailhead panel	
		Check trail to rock and prune if required	
30 m		Check "Return to car park" sign at foot of rock where trail exits vegetation	
73 m		Check and clean Panel #1 (NB: in January 2016 it was damaged but still legible and not needing replacement yet)	
131 m		Check and clean Panel #2	
220 m		Check and clean Panel #3	
284 m		Check and clean Panel #4	
353 m		Check and clean Panel #5	
+/- 400 m		Check new trail marker on the brow of the rock midway between Panels 5 & 6	
460 m		Check and clean Panel #6	
506 m		Check and clean Panel #7	
555 m		Check and clean Panel #8	
+/- 590 & 630 m		Check two new trail markers between Panels 8 & 9, on successive brows of the rock ridge	
670 m		Check and clean Panel #9	
+/- 730 & 790 m		Check two new trail markers between Panels 9 & 10 (each to be visible from the previous)	
856		Check and clean Panel #10	
922		Check and clean Panel #11	
1029		Check and clean Panel #12	
+/- 1110 & 1190 m		Check two new trail markers between Panels 12 & 13, each to be visible from the previous	
1267		Check and clean Panel #13	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
1312		Check new junction signage at spur to Panel #14 (one "right turn" on west face and one "right turn" on south face)	
+/- 1350 & 1380 m		Check two new trail markers between trail junction & Panel #14, each to be visible from previous	
1412		Check and clean Panel #14	
+/- 1460, 1500, 1540 & 1580 m		Check four new trail markers between trail junction & Panel #15, each to be visible from the one before.	
1617 m		Check and clean Panel #15	
1695 m		Check and clean Panel #16	
1772 m		Check and clean Panel #17	
1862 m		Reach head of trail leading back to car park	
1892		Return to car park	
Site 11 Lake Viewpoint		Check advance warning signs (2) and site sign at parking area	
		Check and clean interp panel	
		Check condition of gravelled parking area	
Site 10 Lake Johnston		Check advance warning signs (2) and site sign at turn into parking area	
		Check and clean interp panels	
		Check condition of gravelled parking areas	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table bases & clean tops and seats	
		Toilet: * check level of tank & arrange pump-out if required * check door catches outside and inside * clean toilet as required * check structural integrity of building * check "how to use" & "please phone if an issue exists" signage inside	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
		Check condition of gravel walk trail south of camping area, and check new seat at trail end	
Site 9 McDermid Rock		Check advance warning signs (2) and site sign at turn into access track	
		Inspect access track – which can be subject to water damage after heavy rains	
		Check condition of gravelled parking areas	
		Check and clean interp panels	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table bases & clean tops and seats	
		Toilet: * check level of tank & arrange pump-out if required * check door catches outside and inside * clean toilet as required * check structural integrity of building * check “how to use” & “please phone if an issue exists” signage inside	
McDermid Rock Walk Trail		<i>The following notes apply to the trail up and around the rock outcrop. Distances are as per the tables in the map/brochure (cumulative from the car park)</i>	
Car park		Check and clean Trailhead panel	
71 m		Check and clean Panel #1 (NB: in Jan '16 had some scratches but condition okay)	
		Check rock dam is intact	
109 m		Check and clean Panel #2	
+/- 150 m		Check trail marker on the brow of the steep ridge above Panel 2	
191 m		Check and clean Panel #3	
242 m		Check and clean Panel #4 (somewhat faded but adequate condition in Jan '16)	
+/- 280 m		Check trail marker on the brow of ridge between Panels 4 & 5	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
308 m		Check and clean Panel #5 (somewhat faded but adequate condition in Jan '16)	
		Check that Panel #6 is not obscured by scrubby bush just to the right of it	
388 m		Check and clean Panel #6	
		Prune bush to the right (north) if obscured from up at Panel 5	
438 m		Check and clean Panels #7 & 8 (same site)	
479 m		Check and clean Panel #9	
552 m		Check and clean Panel #10	
623 m		Check and clean Panel #11 (somewhat faded but adequate condition in Jan '16)	
703 m		Check and clean Panel #12	
828 m		Check and clean Panel #13	
887 m		Check and clean Panel #14	
900 m		Check and clean Panel #15	
+/- 915-940 m		Check vegetation on short section of trail in gully before Panel 16 – prune if required	
963 m		Check and clean Panel #16	
1039 m		Check and clean Panel #17	
1179 m		Check and clean Panel #18 (some scratches near the top but in adequate condition)	
1271 m		Return to car park at trailhead	
Site 8 Emily Ann		Check advance warning signs (2) and site sign at turn into site	
		Check condition of gravelled parking area	
		Check and clean interp panel	
Site 7 The Breakaways		Check advance warning signs (2) and site sign (chevron) at turn into site	
		Inspect access track – which can be subject to water damage after heavy rains	
		Check condition of gravelled parking areas and internal tracks for water damage	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
		Check and clean interp panels	
		Empty concrete fire-ring(s) – dispose of ash out of sight. Remove any wild fire places	
		Sweep table bases & clean tops and seats	
		Toilet: * check level of tank & arrange pump-out if required * check door catches outside and inside * clean toilet as required * check structural integrity of building * check “how to use” & “please phone if an issue exists” signage inside	
		Check bollards protecting reveg area for incursions (remains an enticing camping spot)	
		Check warning signs near breakaways	
		Check that visitors are not driving or camping in non-designated areas	
Site 6 Grevillea Hill		Check advance warning signs (2) and site sign at turn into site	
		Check condition of gravelled parking area	
		Check and clean interp panels	
		Sweep table base & clean top and seats	
Site 5 Shire Boundary		Check advance warning signs (2) and site signs at turn into site (on back of Shire signs)	
		Check condition of gravelled parking area	
		Check and clean interp panels	
		Check condition of plaque on rock between interpretive signs – clean if required	
		Sweep table base & clean top and seats	
Site 4 Forrestania Plots		Check advance warning signs (2) and site signs at turn into parking area	
		Check condition of gravelled parking area	
		Check and clean interp panel	

LOCATION (metres from start)	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
		Check around the old tin shack for litter and general condition	
Site 3 Holland Track		Check advance warning signs (2) and site signs at turn into parking area	
		Check condition of gravelled parking area	
		Check and clean interp panel	
Site 2 Barrier Fence		Check advance warning signs (2) and site signs at turn into parking area	
		Check condition of gravelled parking area	
		Check and clean interp panel & plaque	
Site 1 Wave Rock		Check advance warning sign (east only) and site / fingerboard sign at turn off main Hyden-Norseman Road (there is no GWDT signage west of Wave Rock)	
Hyden		Check single 800x1200 colour panel in the main information bay south side of road toward east end of town. Panel is on south verge of bay under tree near west end of bay	
		Check "Granite & Woodlands Discovery Trail information →" sign under blue "I" sign that faces eastbound traffic (at entrance to Info Bay)	

Dundas Coach Road Heritage Trail Maintenance Checklist**Target Date (tick one box):**July 2016 ☐January 2017 ☐July 2017 ☐January 2018 ☐July 2018 ☐**Actual Date:** _____ **Inspection by (name):** _____

LOCATION Km from Visitor Centre	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
Whole trail		All interpretive panels need thorough cleaning with specific etched aluminium cleaning fluid/process (as per Woodlands Walk, Beacon Hill etc)	
		Remove any rubbish within view lines of sites and the road	
		Check for storm water damage to road surface	
0.1		Check directional signage at main roundabout	
Site 1		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panels, and prune bushes around lower & left sides (if required)	
		Check small fingerboard at south end of long gravel parking area to show exit route to the right	
Site 2		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panels	
Site 3		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panel	

LOCATION Km from Visitor Centre	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
Site 4		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panels	
		Check old grave site for damage	
Site 5		Check advance warning signs (2) and site signs (2)	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panel	
Site 6		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panel	
		Sweep base of table & clean top & seats	
Site 7		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panels	
		Check "Brockway Timber Reserve Walk Trail 800 m" sign by road	
		Walk the trail west of the road and check the route is clear and trail markers are in place	
		Clean all interp panels along the trail	
		Check condition of timber bench at top end of trail	
Site 8		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panels NB: Panel 1 was quite faded in Jan 2016	
22.64		Check Stop signs are in place both sides of Mt Henry Rd intersection	

LOCATION Km from Visitor Centre	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
Site 9		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panel – was noticeably faded in Jan 2016	
		Remove ash from both concrete fire-rings and remove any wild fireplaces	
		Check for graffiti on bins and fire-rings – remove if need be	
		Empty bins if required	
		Sweep bases of picnic tables and clean tops & seats	
Site 10		Check advance warning signs (2) and site sign	
		Check condition of gravel parking area and access track (if relevant)	
		Clean and check interp panels	
		Check and clean plaque on rock between panels (if present)	
		Check for and remove any wild fireplaces	
		Check directional signage on main post at junction of roads: * Existing Site 10 sign at top, pointing east * “Highway 1.8 km” pointing west * “Dundas Coach Road Heritage Trail (Norseman 25 km)” pointing north * “Picnic Area” pointing north	
		Check sign 20 m east of site (at beginning of road to Lone Grave) saying “Tracks ahead can be treacherous when wet. Substantial towing costs will accrue if you become bogged”	
Site 11 Lone Grave		Check condition of tracks and gravel parking area by lake edge	
		Check the following signs leading from Site 10 to parking area by lake edge:	

LOCATION Km from Visitor Centre	TICK IF OKAY	ITEM TO BE CHECKED	ACTION TAKEN / NOTES
		<ul style="list-style-type: none"> * "Lone Grave ↑ Drive xx km, then walk yy km" – on same post as management sign re bogging listed above * "Lone Grave ⇒" at first "Y" junction * "Lone Grave ↑ at next junction * "Lone Grave ⇐" at turn down to parking by lake edge 	
		At parking area check following signs: <ul style="list-style-type: none"> * "Park here and walk to Lone Grave. Warning: Do not drive on lakes or tracks beyond this point. Recovery fees are substantial if you become bogged" * "Walk to Lone Grave 520 m ↑" at start of track from parking area to the east 	
		On walk section from parking area to Lone Grave check the following signs: <ul style="list-style-type: none"> * "Lone Grave ⇐" at turn down to lake * "Lone Grave ⇒" just before lake crossing * "Lone Grave ↑" halfway to grave * "Lone Grave ⇒" near grave 	
25.2		Check for offensive graffiti on big Dundas Rocks boulders – remove if need be	
26.5		Reach Highway junction – check large "Dundas Coach Road Heritage Trail ⇒" sign and three distance plates below	
		Check both advance warning signs 300 m north and south	

APPENDIX 4: FULL-SIZE SITE PLANS

The Site Plans that follow are the full size (A3) versions of those included in various sections of this report.