

# Trail Master Plan for the Shire of Ravensthorpe

Incorporating Trail Development Plans for Five Priority Projects



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Department of  
Sport and Recreation





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Front cover image: The Railway Heritage Trail yards and ash pit east of Hopetoun, and the quartzite rise west of Kundip. Two of the myriad of compelling sites and stories of the Ravensthorpe Shire

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## SUMMARY

The Shire of Ravensthorpe boasts a remarkable cultural and natural history, and a capable, proactive community. The Shire's landscape is large and its natural and cultural assets are many and varied providing a broad, complex and compelling, suite of trail and interpretation opportunities.

The Shire of Ravensthorpe has an immense wealth of natural features including intense geological and landscape variation in the form of the Ravensthorpe Range, The Barrens quartzite range, granite derived plains and outcrops, significant drainage systems, the Esperance sandplain, and a dramatic coastline. This extreme landscape variation and its Mediterranean climate, sees the Shire recognised as one of the richest areas for botanical diversity in the world, with over 50 species known to be endemic to Ravensthorpe Range alone. This extensive natural richness gives rise to a strong human history in both European and Noongar contexts, which together with the region's international Biosphere Reserve status, provides a complex and compelling suite of trail and interpretation opportunities.

In 2012, the Fitzgerald Coast Tourism Association developed a brief for a Trail Master Plan for the Shire of Ravensthorpe. The Master Plan is to address areas outside Fitzgerald River National Park, which has an existing Management Plan with a trails component. In January 2013 Fitzgerald Coast Tourism appointed the team of Landscape Ecologist Nathan McQuoid and Trail Designer Jesse Brampton to develop the Trail Master Plan.

This Trail Master Plan for the Shire of Ravensthorpe was developed during January to March 2013. It provides background, explains its development processes, and identifies five priority trails for and simple development plans for trails covering Hopetoun and Ravensthorpe towns, and for Kundip, Mt Desmond and Cocanarup.

The Master Plan is aimed at increasing overall tourism across the region by building on and enhancing a range of natural and cultural heritage sites, and packaging them into a set of attractions.

The Brief for the Ravensthorpe Trail Master Plan:

- The Master Plan should provide clear guidance for the development of trails to (and in) places of natural, cultural and heritage significance in the Shire;
- It should contribute to sustainable management of the Shires natural and cultural resources;
- It should take into consideration recommendations made in the Tourism Strategy and the Coastal Management Plan, and should be developed with an awareness of developments in the Fitzgerald River National Park;
- Consideration should be given to the potential for developing trails for walkers, cyclists and mountain bikers, horse riders, canoeists, quad bike and 4 wheel drive users, and general vehicle-based tourists;
- A range of listed community and agency stakeholders are to be consulted in the preparation of the Plan;
- The report should incorporate both an overall master plan and detailed developmental information for priority trail projects.

Significant trail development resources exist – a rich and fascinating smorgasbord of natural and cultural sites and themes spanning an eclectic array of themes, including:

- |   |   |
|---|---|
| • A complex array of landforms and seascapes                              | • Agricultural and pastoral history             |
| • A profoundly rich flora including many endemic and rare plants          | • Rivers systems, estuaries, lagoons and swamps |
| • Historic gold mining, coastal and abandoned towns                       | • Jam and sandalwood cutting                    |
| • Historic and modern copper, gold, nickel, silver and spodumene mining   | • An historic railway line                      |
| • Noongar cultural history  | • Exploration history and John Forrest          |
| • Ravensthorpe Range with its rocky ridges, rich flora and great outlooks | • Rabbit Proof Fence                            |

With these very welcome raw materials in mind – and drawing on experience gained from dozens of other similar shire-based Trail Master Plans – it is proposed that the Master Plan be made up of two main components:

The first will be the preparation of the broad overall Master Plan for the Shire – this will then lead to the second component of the project, being a succinct Development Plan for each of the five priority trail projects to emerge from the Master Planning process. This will enable smoothly a quick and efficient move into an implementation phase, without having to undergo a separate development planning process for the top priorities.

This Master Plan Report will contain the following:

Part 1: Trail Master Plan for Shire of Ravensthorpe, incorporating:

- o General information re the project, outcomes sought and the process involved
- o Context and setting (including geographical opportunities & constraints)
- o Review of local community needs
- o Review of potential trail users and target markets
- o Review of heritage sites and stories/themes
- o Review of any existing trail network
- o Assessment of target areas for potential project development
- o Community consultation – summary and outcomes
- o Prioritised list of potential projects, with broad cost estimates
- o Summary of possible interpretation – content & style of delivery
- o Broad scale mapping of potential trails
- o Management and maintenance issues
- o Funding opportunities for trail development

Part 2: Simple Development Plans for the top 5 priority trails, including:

- o Summary of rationale behind project, including target user/visitor groups
- o A detailed route or site description (with mapping)
- o Comprehensive works list, with budget / cost estimates
- o Description of specific infrastructure requirements & recommendations
- o Recommended interpretive sites, themes and styles
- o Marketing & promotion recommendations

This duality allows a direct move to trail construction, without having to undertake further planning. This is a highly efficient process – not only does it save time, but it also saves costs as there are obvious economies of scale in combining the two phases of planning.

Why only five priority trail projects when so much opportunity exists? Detailed trail planning is time consuming, especially when combined with the overall Master Planning process, and budgetary constraints preclude extending this component of the project any further. The number of priority projects to be detailed via development plans depends on the scale and complexity of the top ranking projects – and in this case five will be detailed, which is at the top end of what is realistic, and they will be presented in relatively simple terms given there is some degree of complexity in subject matter. The priority projects are mostly straightforward, and the support and knowledge of the proactive community and the logistic and planning knowledge of the authors enables the five development plans to be provided.

Notwithstanding budgetary and time constraints, there would be little value in detailing more projects in any case as it is highly likely that any such information provided now could be out of date by the time any further

projects had attracted funding and were ready for implementation. Albeit that a very significant opportunity exist for a range of trails and interpretation, it all gets down to what is feasibly undertaken.

It is our experience that most smaller regional local Authorities are best placed to implement no more than one trail project per year – indeed, even taking one through the full process of grant applications, approvals, resourcing, tendering, construction and promotion can be daunting. Therefore it is likely to be three to five years before the Shire is ready to delve deeper into this list of priority projects – and by then it is quite possible that the social and/or natural landscape may have shifted and new priorities or opportunities may have arisen. At very least costs and development technologies / opportunities will have changed sufficiently to warrant reconsideration. It would therefore be wise to review the status and relevance of the Master Plan at this point, and undertake up-to-date detailed development planning accordingly.

The Five Priority Trails recommended are:

1. The Hopetoun Town Heritage Trail
2. The Ravensthorpe Heritage Walk
3. The Kundip Loop
4. The Mt Desmond Circuit
5. The Ravensthorpe Town Heritage Drive Trail

**The Hopetoun Heritage Trail.** This 3060 metre self-guided walk trail is in two parts – a town loop and a spur to the Railway yards east of town. It starts and finishes at the trail-head at McCulloch Park and includes 16 stopping places. It traverses the streets and buildings of the town of Hopetoun and extends east of town to access a range of sites of historic appeal via a mix of footpaths and coastal limestone trails.

Hopetoun has an array of cultural and natural history information, and like Ravensthorpe, some of this has already been catalogued through interpretive publications and the in-depth historic knowledge of the members of the Ravensthorpe/Hopetoun Historical Society and the broader community. This has led to the identification of a considerable number of historic buildings and sites around the core of the town – which in turn have given rise to the trail route recommended. Quality interpretive signage is the key to bringing alive the 16 sites spread along this walk trail. It is proposed that the etched panels should be on pedestals in the shape of an open book, the same as the Ravensthorpe Heritage Walk providing a relationship between the trails. This will also give a certain “uniqueness” to the trail, helping set it aside from the “standard” in-town fare served up all over Australia.

Most of the actual trail itself is already in place, as it uses town footpaths and other already-existing infrastructure. This helps keep the cost of construction contained, coming in at \$32,310 (+ GST), and \$71,150 for the crucial interpretive elements.

The estimated total cost of development of the Hopetoun Town Heritage Trail at \$140,860 (+ GST). Like the Ravensthorpe Town Heritage Walk with which it closely relates, it is good value for money, and is likely to be highly appealing to a range of grant funding agencies – especially as it presents and interprets the history of one of southern Western Australia’s most appealing and historic coastal towns.

**The Kundip Loop.** This bushwalk combines the immediate and compelling cultural history of the abandoned Kundip Townsite, with an extraordinary botanical diversity – even for Ravensthorpe. It extends over 5000 metres through the old townsite, then through wild and diverse bushland along the old Railway Heritage Trail including the Kundip Siding and along tracks through shrublands and low woodlands to the south and west, before returning via the north-western corner of town. Shorter loop options include a 1670 metres eastern loop along the Rail Trail, and a western loop of 3760 metres along the rail trail, through the bushland and the townsite.

The northern part of this trail area is the old town under moort and mallet woodland with its almost grown over “streets” and scattered wistful ruins of once thriving lives and enterprises. The remainder is basically

"virgin" bush through which the trail echoes the development and use of the railway, giving an excellent insight into the early progress and lifestyle, and ancient and wildly complex nature of this landscape that is strangely related to the coastal Barrens. This report proposes a number of mechanisms to interpret the remarkable riches of Kundip. It also seeks to maximise the experience of what is a truly lovely walk through and along the compelling heritage and nature, which has 25 stops and 25 interpretive panels.

Much of the trail is in place along the existing Railway Heritage Trail, via the old town street matrix and along some existing tracks. This will help limit the cost of construction, although some upgrading will be needed, as well some new construction will be required, which will be designed to avoid sensitive vegetation. The estimated total cost of the Kundip Loop is \$264,525(+ GST). This includes \$99,820 for construction and \$82,925 for interpretation.

**The Ravensthorpe Heritage Walk.** This 2200 metre self-guided walk trail includes 23 stopping places; it starts and finishes at the new Visitor Information Centre on Morgans St west. It traverses the footpaths along the streets and among the buildings of the town of Ravensthorpe to access a range of sites of rich historic appeal. It has a mix of information reflecting the human history, the underlying mineral value and its mining history.

Ravensthorpe has a vast store of cultural and natural history information already catalogued through interpretive publications and the in-depth historic knowledge of the members of the Ravensthorpe Historical Society. This has led to the identification of a considerable number of historic buildings and sites – which in turn have given rise to the trail route recommended. Quality interpretive signage is the key to bringing alive the 23 sites and 30 stories spread along this walk trail. It is proposed that these panels should be mounted on panels take the shape of an open book, the same as the Hopetoun Heritage Trail.

Most of the actual trail itself is already in place, as it uses town footpaths and other already-existing infrastructure, although some path construction will be needed. The cost of construction is modest, coming in at \$12,480 (+ GST). In addition some \$88,450 will be required for the crucial interpretive elements to present and tell the many stories of a fascinating place.

**The Mt Desmond Circuit.** Starting and finishing at Mt Desmond, over a length of 6120 metres, this bushwalk traverses the wild southern end of Ravensthorpe Range. It treks north along the ridge and swings eventually westwards through a range of typically rich "Ravensthorpe" shrublands and woodlands, and alongside drainage lines down to the historic Railway Heritage Trail at the foot of the Range. The Trail follows the Railway south to almost Elverdton Rd, whereupon it turns east and up a moderately gentle slope to return to Mt Desmond at the end of Ethel Daw Drive. Underneath woodlands of warted yate, past thickets of shaggy dryandra and tennis ball banksia, alongside target bottlebrush, beneath myriad mallees, and over kwongan heaths of immense variety, this trail reveals the incredible botanical diversity of the Ravensthorpe Range. It also explores the hilly landforms and formative geology, presents aspects of the areas mining history, and takes in a lengthy section of the Railway Heritage Trail along the western foot of the range.

Significant parts of the trail are largely in place along the existing Ridge Track, old exploration grid lines and the Railway Heritage Trail. This will help limit the cost of construction, although significant upgrading and some new construction will be required, which will be placed to avoid sensitive vegetation and keep grades to a user friendly limit. The estimated total cost of the Mt Desmond Circuit is \$332,225 (+ GST). This includes \$150,005 for construction and \$109,450 for interpretation.

### **The Ravensthorpe Town Heritage Drive Trail**

This final priority project resulted from the process of working out which of Ravensthorpe's many heritage sites could logically be incorporated into the proposed Heritage Walk. It does not exactly "fit" within the scope of the project, as the funding guidelines do not strictly allow for motorised trails. However, the inclusion of this trail is logical due its close relationship with the Heritage Walk and the number of high-value heritage sites within 3 km surrounding the town centre, which are too "remote" to be included on the walking route – although they warrant interpretation and sharing with visitors.

Like the Walk Trail, the Drive Trail starts and finishes at the Visitor Information centre (at the old telephone exchange) on Morgans St west, with the first stop at the Hospital. It includes 14 stops with 14 stories for interpretation that will take an estimated around 2 hours to complete. The stops do not fall into a simple circuit route, although with good clear mapping it should be relatively easy for visitors to find their way from one place to another.

It should be noted that the final route to access some of these sites will not be able to be resolved until the Heavy Haulage Bypass is finalised, which should happen during 2013. This project is relatively simple and low cost, at an estimated total of \$48,810 (+ GST)- which is predominantly interpretation work. It could be implemented sooner rather than later as part of the redevelopment of Ravensthorpe town centre as a result of the heavy haulage road works.

This planning study has estimated the cost of development of the five priority Ravensthorpe Shire Heritage and Nature Trails as proposed at \$910,590 (+ GST). This should be considered as good value for money, because of its immensely appealing subject matter, international importance of the area, and likelihood of being highly attractive to a range of grant funding agencies - especially as it presents and interprets the natural and cultural history of one of southern Western Australia's most interesting, attractive and extensive Shires.

Other potential trails that became apparent during this planning project are a set of canoe trails across the several water-bodies within the Shire, and a trail circuit to present and interpret the rich natural and human history of the Cocanarup area.

The canoe trails present a particularly compelling case for development, as a unique situation and opportunity exists for a truly outstanding set of canoe trails on the four significant and beautiful rivers and their estuaries, and a freshwater swamp, spread across the southern part of the Shire. However, the size of such an undertaking is beyond the ability and scope of this current Master Planning and trail development project. With the considered importance of the canoe trails package, assistance was provided to the Shire of Ravensthorpe to develop an application to Lotterywest to fund a separate canoe trail development plan. When completed, this canoe trail plan would be an adjunct to this Master Plan.

The Cocanarup Trail is also beyond the scope of this current project, and did not make the priority list given the enormity of opportunities available. Although it would make the next set of priorities once the projects in this Master Plan are completed and the Plan reviewed.

The predominate cost of the town trails is in interpretation panel design and materials, with a lesser amount needed for construction as the majority of the paths exist. In the case of the Kundip Loop and Mt Desmond Circuit trail, construction would be a greater cost given the terrain, the requirement to upgrade existing trails and tracks, and the need to manage significant ecological sensitivities. Nevertheless, the projects are cost effective given the profound nature and history they present in an internationally recognised area.

Interpretation effort revolves around the use of mainly etched black and white and some full-colour interpretive panels on rusty steel blade pedestals featuring a "cut shape", giving them the outline or words of a local feature and is a significant part of all five trails.

The trail construction works for the Kundip loop and Mt Desmond Circuit will require a significant degree of knowledge and skill in the vegetation ecology of the sites, the relevant Commonwealth and State legislation covering threatened flora and ecological communities, in erosion repair, and in setting out and trail construction; given the ecological sensitivities and difficult terrain at these locations. However these skills are available in the local community and this will help with cost effectiveness, as well as providing support for the local economy. Trail construction in the town trails is limited to some new path works and upgrading of some existing paths in cleared areas, and as such is quite cost effective.

The trails, as a mix of in-town, town outskirts, historic sites, heritage trails and amongst some of southern Australia's most extraordinary and diverse nature, should help encourage local residents to be more active (and to learn more about their natural neighbours), serve as an "outdoor classroom" for the local school and attract

and hold visitors from WA, Australia and the world. But in the context of the key driver to this overall project, there is no doubt that it would be a welcome addition to the suite of activities available to visitors at any time of the year, thereby helping keep them in town for longer. The five priority trails proposed are comparable and in some cases superior to the many similar outings on offer around WA. Ravensthorpe town and visitor centre is the ideal centre point from which to access this trail network, and indeed the broader trail network including those in Fitzgerald River National Park.

This trails Master Planning project implements key actions in the Action Plan for Fitzgerald Biosphere that relate to interpretation and providing access to nature and culture. The Action Plan was written to support community development based on the areas natural and cultural history, and this Trail Master Plan helps provide and enable that support.

To summarise this whole project: the five trails recommended in this report will all contribute strongly to the goal of providing and expanding options for both locals and visitors to this spectacular and historic area. This has direct benefits for the local economy, and that in itself would be sufficient reason to proceed to a staged implementation project. However, these trails have the capacity to do much more than this – they will acknowledge and honour aspects of the past that form vital foundations to these communities; they will explain both the rich culture and nature of key parts of the Shire in an accessible fashion, they will help build and maintain local pride, and wonderfully demonstrate the eminent place Ravensthorpe Shire occupies in both the physical and philosophical sense in the internationally renowned Fitzgerald Biosphere.

The Fitzgerald Coast Tourism Association commended for commissioning this work, and for their support during the project. The priority projects that have resulted should go a fair distance towards delivering deserved attention that has the capacity to make a strong contribution to the local economy, and each will in its own way help to lock in a very real sense of “this is who we are, this is our wonderful country, and we’d like to explain it and share it with you”.

## **PART 1**

### **General Information Shire of Ravensthorpe**

## SECTION 1: SCOPE, CONTEXT, SETTING AND BACKGROUND

### **Scope of Works**

This Trails Master Plan project is made up of three components. The first part contains general information pertaining to trails development. The second part is an overall Trail Master Plan for the Shire, excluding Fitzgerald River National Park, containing a detailed trail development plan for 5 priority trails.

The Scope of Works for the Trail Master Plan included the following elements:

- A review of geographical opportunities and constraints in and around each town
- Consultation with the community and other stakeholders
- A review of potential trail users and "target markets"
- An assessment of the existing trail network
- An assessment of target areas for potential trail development
- Development of a prioritised list of potential trails
- Development of an implementation schedule (a 5 year works program)
- Details of infrastructure and signage 'styles'
- A summary of possible interpretation – content and style of delivery
- Provision of marketing and promotion recommendations
- Details of recommended funding opportunities

For each of the priority trails, the detailed trail development plans include the following elements:

- A detailed route description of each trail
- Comprehensive works list, with cost estimates
- A summary of the rationale behind each proposed trail
- A description of infrastructure requirements
- Recommended interpretive sites, themes and styles
- A map showing the location of the trail

### **Context, Setting and Background**

The Master Plan is aimed at increasing overall tourism across the Ravensthorpe Shire by building on and enhancing a range of natural and cultural heritage sites, and packaging them into a set of attractions that will compliment the world class nature and compelling human history the area boasts. The key goal of this project is to help the Shire and its community expand existing and develop new tourist opportunities by taking advantage of the area's remarkable natural and cultural riches. As well it will serve to help interpret these values for the community itself.

The Shire of Ravensthorpe covers a relatively large area of around 12,872 square km. Within this is an extraordinary range of natural and cultural history, including some of the most diverse and famous botanical features in the World. It lies on the central south coast of Western Australia, between the southern ocean and the north flowing watersheds of the Wheatbelt and Goldfields interior. It comprises wild natural lands, estuaries, coastlines and seascapes, productive farmlands, with the enterprise and lifestyles of thriving agricultural, coastal and mining communities. It has strong Indigenous Noongar and European histories,

The Shire landscape is ancient, eroded and subdued yet complex; with fossil valleys, broad sandplains, granite rises, volcanic greenstone ranges, ancient sea floors turned into mountains, Eocene landforms of breakaways ridges plains and valleys, rivers creeks and estuaries, and coastal cliffs and dunes.

The profoundly diverse vegetation communities are among the most species rich on Earth; they range from low sedgelands, to rich kwongan heaths, mallee shrublands, sheoak thickets and tall woodlands. The flora that makes up these communities comprises around 2,000 species and subspecies, many restricted and uncommon. Fitzgerald River National Park has around 1,700 species and subspecies, including 62 endemic. While the Ravensthorpe Range area has around 1,300 with 50 endemic. The often-conspicuous endemic plants are predominant on the peculiar substrates of the Barrens and Ravensthorpe Range, they help characterise the area by their form and intrigue, and are of great appeal to visitors.

The Ravensthorpe area including Fitzgerald River National Park is home to one of the most intact native animal assemblages in southern Western Australia. It still has tammar, red-tailed wambenger, dibbler, western ground parrot, western bristlebird, western whipbird, and mallee fowl. Ravensthorpe Range is the exclusive home to one species of skink – the Ravensthorpe Range Lerista; being among the few places in Australia that can boast an endemic vertebrate! The coast has another range of marine and estuarine including mammals, seabirds, fish, and invertebrates; all are of great conservation value and many being of great attraction to people through intrinsic enjoyment and some for sustainable use.

The marine environment includes whale calving grounds, inshore and offshore reefs, shallow sand and weed banks, small rocky islands, and interactions with estuarine systems. Further offshore at the continental edge, the Bremer canyons are becoming known for the seasonal massing of a huge diversity of oceanic invertebrates, fish, birds and mammals due to the upwelling of nutrients. The ocean, estuaries and shorelines are a rich attraction for holidaymakers, with the coastal town of Hopetoun and the camping spots at Masons and Starvation Bay swelling with the influx of people during the summer months.

This diverse mix gives the Shire an outstanding range of coastal and inland attractions, from the southern ocean and estuaries along the coast, to the Ravensthorpe Range and other natural bushlands inland across large areas. Among this are the towns of Hopetoun, Munglinup and Ravensthorpe; the localities of Fitzgerald, West River, Mt Madden and Jerdacuttup; the abandoned towns of Kundip and Desmond; and the relics and current enterprise of mining of a range of minerals. Human history in the area presents a rich range of cultural evidence that is of great interest to visitors and locals. This goes right back to the 50,000 year presence of the Noongar Indigenous people, includes the early European sea navigators, explorers and pioneers on the coast and inland, the mining history attracted by the rich mineralisation of the Ravensthorpe Range that continues as enterprises today, and the agricultural history that continues today across large parts of the shire and provides an significant part of the areas economic base and the character of the community.

Access throughout the shire consists of a highway, major and minor sealed roads, a matrix of gravel roads through farming areas, National Park roads and trails, and a range of tracks through the large areas of bushlands across the shire. Several trails exist as a range of old vehicle tracks through Ravensthorpe Range, along the coast and the historic Hopetoun to Ravensthorpe Railway Heritage Trail. These are used by walkers, hikers, trail bike riders, quad bikers, and by conventional and 4 wheel drive vehicle users. The Ravensthorpe Enduro club hold an annual "Rat Run" even through Ravensthorpe Range along old mining exploration lines and 4wd tracks.



*The Lookout at East Mt Barren in Fitzgerald River National Park*

The world famous Fitzgerald River National Park is a very significant driver of tourism interest in the Shire, and while its landscapes and facilities are not within the scope of this Master Plan, spinoff from its profile and presence is, as it affects the activities and interest of the same visitors. In fact, this Master Plan and its priority trails add considerable value to Park visitors, by enhancing their experiences and

exceeding their expectations in promoting access and explanation of comparable and otherwise outstanding natural and cultural history. The coastal areas used by tourists predominantly in summer and autumn, and the inland areas mostly in spring and winter. Of course, the use of both areas does extend outside these peak times and it is planned that the initiatives of this Trail Master Plan will help this grow.

This Master Plan is a follow up to the Shire's Tourism Strategy, which has a range of actions as performance indicators under the headings: *Leadership, Identity, Exposure, Dispersal, Destination Development and Yield*. The specific indicator that relate to this Trails Master Plan is under *Destination Development: Year 1. Interpretation and Trails plan developed*. The Master Plan also relates to other aspects of *Destination Development* and other Indicators, as follows:

- Leadership: Year one. *The Shire adopts a range of policies to promote sustainable tourism development, this plan is a result.*
- Identity: Year 3. *ASWIAGO redevelop drive trails to incorporate Fitzgerald Coast*
- Exposure: Year 2. *Wildflower and other themed tours and trails promoted.* Year 3 *Conservation and restoration projects arranged as tour products.*
- Dispersal: Year 1. *Heritage Trail converted to dual use. Research and develop quad bike trail.* Year 2. *Build quad bike trail.* Year 3 *Further trails development – Hamersley Inlet, Culham Inlet etc*
- Destination Development: year 1. *Interpretation and Trails plan developed.* Year 2. *Mountain biking, walking 2wd and 4wd trails developed and mapped. Develop interpretation plan for specific trails as per plan.* Year 3. *Continue to develop interpretation for specific trails and sites as per plan.*
- Yield: Year 2. *Day use activities developed at Phillips River, Culham Inlet, Ravensthorpe Range, Mt Drummond, Mt Barren Lookout.*

The tourism Strategy aims to guide the Shire's investment and priorities in relation to tourism development within the Shire over the three years 2010 to 2013. The Strategy sought to assess the current tourism infrastructure, develop a regional tourism vision and a development plan to assist business growth, recommend new tourism opportunities and position the Shire as a premier destination for recreation eco and adventure based tourism experiences.

Ravensthorpe Shire comprises the eastern half of the Fitzgerald Biosphere Reserve. The United Nations Environment Scientific and Cultural Organisation (UNESCO) Man and Biosphere (MAB) Program originally listed Fitzgerald River National Park as a Biosphere Reserve in 1978, with recent work completed to renominate the expanded Biosphere Reserve in line with the MAB Program's Seville review of 1995. The MAB Program objective is to address a sustainable balance between the goals of conserving biological diversity, promoting economic development and maintaining cultural values. Biosphere Reserves are sites where this objective is discussed, designed, resourced, tested, demonstrated and refined. The Fitzgerald Biosphere community is committed to addressing the MAB objectives to achieve conservation and development from the three functions of Biosphere Reserves, which are conservation, development and logistical support. To this end, the formation of the Biosphere Implementation Group (BIG) is a recent collaborative initiative to bring the key community and stakeholder groups and agencies together to guide the progress of Fitzgerald Biosphere and its communities. An Action Plan for Fitzgerald Biosphere as completed in 2012, which outlines the background to the MAB charter and describes detailed Actions by which to fulfil its worth, to help advance Fitzgerald Biosphere communities and enterprises.

This Master Plan is in line with the Ideals of the Biosphere Program and supports the implementation of several specific actions of the Action Plan that relate to the protection and interpretation of nature and culture, and community development.

Fitzgerald Biosphere is a strong brand in line with the favourable international profile of the area has in natural and cultural history diversity protection and interpretation. The community development and enterprise

support opportunities that stem from the Biosphere Brand and the Action Plan are in turn further supported by this Master Plan and its trail developments.

The Fitzgerald River National Park Management Plan has a number of strategic approaches supported by comprehensive range of prescriptions, by which to protect and manage Fitzgerald River National Park. Included in the Management Plan are prescriptions that relate to supporting recreation, the interpretation of nature and the involvement of the community. While the specifics of the Management Plan and the National Park are outside the scope of this Master Plan, the concept of trails, the activities of trail users; spatial proximity and management imperatives are congruous and supported by this Master Plan.

The Ravensthorpe Shire Coastal Management Plan 2011 to 2021 was undertaken to guide the management of the coastal reserves of the Shire from Hamersley Inlet in the west to Oldfield Estuary in the east. Its objectives are to:

- Manage and protect the Shire's coastal reserves in a sustainable manner so that they can be enjoyed by future generations
- Enhance and protect conservation values
- Reduce land use conflicts and ensure safety and quality in the long term
- Encourage sustainable recreational land uses at each coastal reserve
- Enhance community understanding of the environmental values of the coast and encourage a sense of ownership
- Encourage that successful relationships between the community and the Shire continue in the future to allow for better coastal management.

The Trail Master Plan supports the Coastal Management Plan objectives, in particular by encouraging sustainable recreational uses at each coastal reserve, and enhancing community understanding of environmental values of the coast.

The Trail Master Plan helps implement the planning initiatives outlined above by a providing specific analysis and guidance to encourage a more frequent, multi season, sustained and sustainable use of the areas natural and cultural attractions by travellers and locals alike. This is in the guise of increased use of destination-specific holiday attractions, access to developed mobility and explorative activities, interpretation of natural and cultural features for a range of users, to present the areas world class attractions, and support appropriate access to a greater range of the areas landscapes, waterscapes and cultural history for greater parts of the year. It will work as a foundation or framework that can be infinitely expanded to 'grow' the trails concept both in terms of locations and of site-specific attractions. Vitally this Master Plan will enhance the areas profile and reputation as a destination for lovers of nature and culture from across the district, state, nation and world.

Specifically, the trail development plans in this Master Plan provide a series of recommended priority trails in and around the towns of Hopetoun and Ravensthorpe and in the nearby Mt Desmond and Kundip.



*The Kundip area provides a wonderful opportunity to share and interpret stories of cultural and natural history.*

## **Outcomes Sought from Trail Master Plan**

Local governments and community groups across Australia have been keen to develop trails within their communities for many years and government agencies have been providing funding for trails projects because of the broad range of benefits they provide.

Trail projects can make a positive contribution in five key areas:

1. They can help attract visitors and – more importantly – they can keep visitors in town for longer, increasing their expenditure in local businesses (eg. accommodations, restaurants and cafes, grocery stores, souvenir shops);
2. They provide an ideal resource for low-impact physical activity, encouraging walking and/or jogging and potentially contributing to the health of the community;
3. They can prompt the community to recognise and record its human and natural heritage;
4. They can help bring together disparate groups within the community by providing non-threatening common-ground; and
5. They can contribute to a sense of pride by highlighting what is good and rich and of value to the community.

For Ravensthorpe Shire and the Fitzgerald Coast Association, the main objective is to develop a series of trails that will attract and keep visitors longer in the towns and the region, provide recreation and information opportunities for local people, and make the most of the natural and cultural diversity and history the area enjoys. Additionally, as with most trail projects, there will be a range of benefits accruing to the communities that host the trails.

## **Review**

To make the most of the foundation laid by the Trail Master Plan, a review following implementation or after a period of time during implementation is important. This is all the more vital in the case of the Ravensthorpe Trail Plan, as it has a substantial recommended priority program and with such abundant opportunities for trails, a review process that includes a reflection on original priorities, implementation, currency, context and new priorities is imperative.

Implementation review should be conducted annually as a check on progress, and after three to five years to visit the priorities in the plan, assess their relevance, update aspects of the plan including funding opportunities, and bring new priorities into being. Continuing to keep the Master Plan current and addressing new priorities through a community input process will best support an ongoing trails appraisal and development program.

## **Trails and Trail Users**

Right across Australia the many benefits of well-planned and promoted trails are being recognised by a range of agencies from National Park services to tourism departments, and from Local Governments to a host of health organisations. It is now well recognised that recreation trails perform a number of highly beneficial roles in the broader community:

- They provide opportunities for low-key unstructured passive recreation for local residents and visitors alike;
- They enable users to gain fitness and they foster general well-being;
- They are a valuable tourism attraction, especially when marketed well;
- They provide a significant economic benefit to communities where they are located. Users of the Bibbulmun Track, Western Australia's long distance walk trail, inject \$21 million/year into the Western Australian economy, a very good return on an initial one-off \$5 million investment for construction by the WA Government. The Riesling Trail (a 27 kilometre shared use rail-trail in South Australia) injects \$1.08 million per year into the Clare region (Market Equity 2004). Visiting trail users on the Mundaring trails network (a Local Government on the outskirts of Perth) inject a total of \$10.39 million annually into the local economy;

- They can help instil a conservation ethic amongst users; and
- They can be a means of educating users about the attributes of an area, especially when interpretation is a feature of the trail. High quality trailside interpretation can showcase the district's heritage.

Trail Master Plans relate primarily to three non-motorised user groups"

- Walkers (recreational, fitness, nature study, "bushwalkers"/hikers)
- Mountain bikers (not road cyclists)
- Horse riders

In traditional Trails Master Plans motorised trails are usually excluded. However, in this case consideration has been given to a drive trail as part of the overall program of community enhancements, particularly as the recommended drive trail is a practical extension to a walk trail.

In the case of Ravensthorpe, where rivers, estuaries and the southern ocean are a major part of the landscape/seascape, canoe/kayak trails, and even underwater dive trails in the ocean could be considered.

Of the three primary user groups only two are really relevant to Ravensthorpe – primarily walkers, and to a lesser extent canoeists/kayakers. It is unlikely that either mountain bikers or horse riders would ever become a *significant* user group given the distance from where the majority of these groups exist. Although it is possible that horse riders and mountain bikers would and do use the Trails of Ravensthorpe to some extent.

In assessing opportunities for trail development in any location it is important to bear in mind generic factors that might influence trail usage in Ravensthorpe.

### **Recreation and physical activity trends**

- There is a move away from traditional structured sport, rosters and club memberships. The Exercise, Recreation and Sport Survey (undertaken in Queensland) showed participation in non-organised activities at 63.5% (of those who participated in recreation and sport) compared with 39.4% in organised activities. Participation rates in organised activities are highest in the 15-24 age group declining to be lowest in the 65+ age group. (Source: Sport and Recreation Qld Website)
- Significant technological advances in equipment design and function have created new forms of outdoor activities and extended the scope and levels of participation for the general population.
- There is greater accessibility and information on a range of outdoor activities, however there is also a clear demarcation between those who have access to this wide range of activities (proximity, ability, finances, transport etc) and those who cannot.
- In general the population is making increased 'lifestyle' choices that associate with greater access and contact with the natural environment. This includes aspects of urban to rural ('sea change') residential drift, increased demand for open space (parks, recreation trails etc.) in urban developments, and increasing demands for recreational time in the outdoors (changing work patterns and day trips from home). (Source: *Sport and Recreation Tasmania*)

### **Participation in trails related activities**

The Australian Bureau of Statistics reports on the propensity of Australians to participate in leisure activities:

- 28.8% of survey respondents across Australia participated in walking (making it the most popular form of activity across the country).
- 5.3% of survey respondents Australia participated in bushwalking (making it the 8th most popular form of activity across the country).

This discrepancy between "walking" and "bushwalking" is interesting, and of some importance for Ravensthorpe. Trails are now seen to be a resource for the larger group (walkers), as much or more than they are for the smaller, more traditional bushwalking set.

This usage by people who would not have considered themselves “bushwalkers” drives much of today's trail development.

Walking and cycling are engaged in much more frequently over a one year timeframe than horse riding, with walking being the most frequent. While the majority of users are relatively low frequency users, both walking and cycling have a core of participants who engage in their activity very frequently, eg at least once or more per week.

Based on prevailing demographic trends, there are some implications for recreation provision in the region relevant to this Trails Master Plan:

- Participation in trail-related activities has increased over time.
- Demand for recreation opportunities is likely to increase.
- An increase in the number of older people is likely to result in substantial increase in demand for local activities, particularly passive recreation activities. It also highlights the importance of access for people to participate in these activities.
- A recent Victorian study (prepared for the Draft Victorian Trails Strategy 2001 - 2004) found that there is a clear preference for shorter walks (up to 6 kilometres and taking between 30 minutes and 2 hours to walk) both in metropolitan and “remote” trails. Work undertaken in South Australia supports this conclusion with 76% of walkers using trails for less than 2 hours.

## **Existing Trails and Visitor Facilities**

Existing trails and visitor facilities in the Shire of Ravensthorpe are many and varied. The community has a long history of strong active groups and individuals that have developed several trails and interpreted historical and natural sites over several years. The most active of these groups are The Ravensthorpe Hopetoun Historical Society, The Ravensthorpe Wildflower Show Inc, The Ravensthorpe Hopetoun Arts Community, and the recently formed Fitzgerald Coast Tourism Association. Several trails and interpretive brochures and maps have been developed over many years, including:

- The Hopetoun to Ravensthorpe Railway Heritage Walk Trail
- The Fitzgerald Coast Visitor Map and Information Guide
- The Cattlin Creek Heritage Trail
- Things to see and do in Hopetoun
- Things to see and do in Ravensthorpe
- Ravensthorpe Historical Society – Welcome to Dance Cottage Museum
- Munglinup Beach and The Oldfield Estuary
- Ravensthorpe Range Scenic 4 WD Trail
- Ravensthorpe WA Archer Drive Lookout
- Ravensthorpe WA Mt Short Scenic Drive
- Ravensthorpe WA Mt Madden Scenic Drive
- Ravensthorpe WA Ethel Daw Scenic Drive
- Hopetoun Beaches WA
- The Longest Fence in The World

- Birds of Ravensthorpe/Hopetoun WA
- Farm Gate Art Project Scenic Drive
- Fitzgerald River National Park Information and Recreation Guide

The Shire of Ravensthorpe is active in supporting and promoting visitors. It lists the following Paths, Trails and Tracks on its website:

- The Hopetoun – Ravensthorpe Railway Heritage Trail
- Ravensthorpe range
- Hamersley Drive Heritage Scenic Trail
- Ethel Daw, Mt Madden, and Mt Short Scenic Drives
- Cattlin Creek Heritage Trail, and the
- Wildflower Self Drive Tour

The most comprehensive of these is the excellent Fitzgerald Coast Ravensthorpe and Hopetoun Visitor Map and Information Guide. Produced in 2010 and updated in 2011, this full colour A4 DL fold out brochure provides a large map of the shire with attractions and key points comprehensively marked, a list of 24 attractions, background and history of the shire and information about Fitzgerald River and Frank Hann National Parks, a short descriptions of walks, drives and annual events, town maps of Hopetoun and Ravensthorpe with keys to features, a full list of emergency numbers and local services, and a set of 27 sponsors advertisements that includes local services. It is an excellent overview produced with local expertise.

The Hopetoun – Ravensthorpe Railway Heritage Trail has a series of four DL fold out brochures dividing its length as: The Hopetoun Trailhead Loop, Kundip to Lee Creek, Desmond to Ravensthorpe, Desmond to Kundip, and Desmond to Ravensthorpe.. The brochures provide maps, directions and explanation of the features and history of the railway and the places and nature it traverses, and a code of conduct for users. The Railway Heritage Trail is not a full through route between the two towns, two sections no longer exist as these parts cross what is now private farmland and the railway formation has been removed. The missing southern section is around 16 km long from Lee Creek to Dunns swamp (north of Hopetoun), and the northern section around 2.5 km long from near the corner of Carlingup Rd south to the edge of the private property north of Mt Chester. The 7 km northern section from Carlingup Rd to Ravensthorpe is also "missing" as it traverses under what is now the South Coast Highway. These missing sections are skirted around, with access provided along the Hopetoun Road and the South Coast Highway. The Railway Heritage Trail is an excellent resource being both of great historic value and of enormous natural appeal given the country it traverses. Its conversion to a trail and the development of interpretation material is a credit to the vision and efforts of the community. However, its maintenance is a significant issue, and its missing sections make its use as an end-to-end experience somewhat diminished.

Cattlin Creek Heritage Trail was created in 1988 as a Commonwealth/State Bicentennial Project by the WA Heritage Committee as part of a network of WA heritage Trails. This trail is a loop starting and finishing at the Ravensthorpe Visitor Centre (Dance Cottage Museum) that takes about two hours to complete. Taking in the area through and north of town as far as the Mt Cattlin mine and back, it covers nine stops that feature early mining infrastructure and historic buildings. The brochure is now out of print and the trail is not promoted.

The other "trails" and places of interest have basic mostly black and white A4 folded brochures describing routes, sites and features, taking car drivers off-roaders and walkers to several locations roads and tracks around the towns and district.

In terms of visitor facilities, hotels, motels, B and B's, and caravan parks in each town have good reputations, and are busy during most wildflower and summer holiday seasons at the coast. The campsites on the coast are also very busy during the holiday periods, particularly around Christmas. The towns themselves are prosperous,

although ups and downs in the mining industry over the last several years has brought its challenges. The towns are attractive to visitors, given their beauty, richness of nature and history, proximity to wilderness and the coast, and services. Indeed Ravensthorpe Shire is known as the *Welcoming Wilderness* a signature that appears on some signage and brochures.

The range of tourism activity is based on the attractions:

- The Ravensthorpe Wildflower show and seasonal wildflowers (August, September & October)
- The coast, estuaries and rivers (mainly summer and school holidays)
- Fitzgerald River National Park (all year round with a peak in spring)
- The Towns and their Heritage (all year round)

This strong mix of trails and information promoting the area provides a strong foundation upon which to further build and hone. For example – if visitors are already coming to the region for the coast and to see the wildflowers then it can be expected that a range of well-developed trails would be an added attraction that may well prompt these people to stay longer, and enjoy more enriching experiences. The trails and infrastructure variety befits the cultural and natural diversity of the area, providing an experiential exemplar in line with the area's international status.

## **Areas of Potential for Trail Development**

Ravensthorpe has an almost overwhelming potential for trails. As outlined in previous sections it has an enviable size and abundance of wild, remote, rich and often spectacular landscapes; as well as rivers, estuaries and southern ocean seascapes, world renowned botanical diversity, long and intricate human history and historical heritage; and supportive progressive communities. It is part of the world renowned Fitzgerald Biosphere Reserve, and includes Fitzgerald River National Park and Ravensthorpe Range. The challenge is to make the most of the potential, and to maintain its value.

### **Bushland trails**

In the preparation of a Trails Master Plan for a local government area, consideration is given to the development of trails in natural areas – such as National Parks, Nature Reserves, State Forests, Unallocated Crown Land, Shire Reserves and other publicly owned land along rivers and other watercourses, etc. Ravensthorpe is unique in that it has some of the largest, most intact and attractively remote natural lands in greater south-western Australia, a diverse matrix of landform and vegetation, and therefore great appeal. Fitzgerald River National Park is the major natural lands drawcard, and while it pulls a crowd, its trails are outside the scope of the Master Plan. However, its pulling power and the surrounding landscape talent create a unique situation, one that great recreation and conservation advantages can come from.

The wildflowers and the landform diversity are one of the main reasons why Ravensthorpe is a well-known town on the south coast of Western Australia. It is nationally famous for its wildflower show, held in September each year. The area's bushlands are substantial and wild, and make appealing places where people walk for pleasure and/or recreation. It has much to offer locals and visitors wanting to explore and appreciate the bush and its landforms, flora, fauna and geological richness.



*Ravensthorpe Range looking north from Mt Chester*

Ravensthorpe Range is the dominant and celebrated landform of the northern part of the district. It surrounds Ravensthorpe town, running north-west south-east and visible from quite a distance away. It is a very large area of bushland, particularly when combined with the broad natural areas in its immediate surrounds. It is predominantly unallocated Crown Land, and due to its mineral richness, contains exploration and mining leases.

With such profoundly rich diversity of wildflowers within a huge range of vegetation types – features that give it local and wide appeal including its ranking as one of the richest places for botanical diversity in the world. It stands to reason that Ravensthorpe Range and the surrounding related landforms and bushlands should be the subject of a trails program; the challenge is to identify priorities and locations.

This complex situation being the case – of an abundance of opportunity due to such large areas of natural lands with an excellent reputation, the assessment of opportunities was focused on some principle elements, designed to provide the necessary ingredients for the development of successful trails that will attract users, the elements being:

- Has characterising landforms and places of intense botanical diversity that typify Ravensthorpe's renowned natural heritage,
- Proximity to Ravensthorpe and Hopetoun with easy access,
- Likely to have broad appeal from perspectives of position, "feel", and access
- Where bushland and heritage sites converge

### **In-town heritage trails**

The built environment and history of Ravensthorpe and Hopetoun provides ample sites suitable for in-town heritage walk trails, taking visitors past many old buildings (and sites of old buildings and former land uses).

Like many towns in Western Australia, both Ravensthorpe and Hopetoun have changed since they were founded. In each town there remains a number of historic buildings. The towns were significant commercial centres for the region, boasting several hotels and banks, mining support services, and numerous other shops and enterprises (including bakeries, drapers, blacksmiths, grocery stores, etc). While many of these businesses are long closed, some of the buildings remain and the locations on which they stood are known, as do the stories of the people, events and historic happenings within town. The record of the history is relatively intact due to the quite remarkable work of the Ravensthorpe Hopetoun Historical society over many years.

### **Canoe Trails**

The potential for canoe trails in the Shire of Ravensthorpe is quite outstanding, with the several rivers, estuaries and other water bodies that lay across the southern parts of the Shire. These mostly sheltered waters have the potential to provide some of the finest quiet water canoe trails in southern western Australia, which would provide supreme experiences in accessing the areas spectacular nature in a sustainable manner, and admirably augmenting the walk trail system.



*The Jerdacuttup River, a superb opportunity for part of a flat water canoe trail network*

This canoe trails concept would be best designed as a network that invited the user to undertake them as set of activities, which would add very appreciably to the list of trail and nature exploration activities available in the area. More discussion on this is provided in Part 2, Section 2: *Existing, Potential and Priority Trails*

During the field work for this Trail Master Plan, the opportunity for a canoe trail network was recognised. It was also recognised that planning and developing the canoe trail network and its interpretation methods should be the focus of separate project due to its size, and that unmatched resources are available for such concept and development planning through the Lotterywest trails program. This presents an ideal opportunity, and accordingly an application for funding was prepared and submitted by the Shire of Ravensthorpe. If successful, this will support a Canoe Trail Development Plan incorporating five canoe trails as an addendum to this Trail Master Plan.

## Other potential projects

Very early in the fieldwork for this Trails Master Plan it became apparent that there were a number of other projects that had the potential to contribute significantly to the Ravensthorpe community. While most of these potential projects are not normally part of a Trails Master Plan (for non motorised use), it is clear that they could be dovetailed with the trails proposed here-in, to ensure a coherent outcome and one that utilises resources most efficiently.

Some of the potential projects to arise were:

- Local drive trails, both standard and 4x4 vehicles. Many very significant opportunities exist for well planned and interpreted drive trails to access and inform visitors on the enormous range of close and remote roads and tracks to many exciting parts of the Shire. Areas such as Ravensthorpe Range, Cocanarup, the coastline east of Hopetoun, the rabbit proof fence, areas to the north east including the upper Oldfield River catchment in the unallocated Crown land, the Phillips and Jerdacuttup River reserves and many other places including Fitzgerald River National Park. Planning drive trail priorities and development would be a separate planning project in its own right, and would add great value to the other trail networks. Interpretation could be a mixture of on site panels and brochures or guide books, or only brochures and guide books to limit the upkeep of built infrastructure.
- Develop an Interpretation Plan, as a compendium to this Trails Master Plan and to address priority interpretive subjects and projects. Suggested priorities include: Guidebooks and brochures (as mentioned next), signage and styles, sites for interpretation, priority nature and history stories, Noongar history, maritime history. The Shire is blessed with knowledgeable and passionate people and groups who could contribute wonderfully and whose contributions would be greatly valued.
- The measure of a place and its importance is often found in the way it is written about and the publications made available. Ravensthorpe Shire is such an extraordinary place that compels writing about, and some publications have been produced such as the Wildflower book. Although the area deserves further publications including a series of guide-books and brochures on key aspects of the Shire, such as landforms, flora and vegetation, habitats and animals, birds for birdwatchers, marine environment, history etc. Guides to the nature of priority (and other) trails would be a priority as supporting information.
- Additional planting (trees, shrubs, garden beds) using the pick of the rich Ravensthorpe flora to bring example, colour, tone and texture to the town centre areas. This would go hand in hand with the Ravensthorpe Wildflower show and whet the appetites of travellers who may wish to visit the real things out in the wild.
- Enhancement of the display of historic machinery in the Pioneer Park in Ravensthorpe, with quality interpretation. The collection of historic machinery, although the area looks a little degraded and much more information could be provided pertaining to each piece. Further up Morgans St, the Ravensthorpe Museum has displays some items of historic machinery that could augment Pioneer Park.

This Trail Master Plan should be seen to be more than a traditional "Trails" project – while it still addresses those outcomes it extends further, too, into the realm of a "Community Enhancement Program", at the core of which are several potentially outstanding trail projects.

## Project Objectives / Benefits

The overriding objective of this trails plan is to provide additional activities for locals and visitors to Ravensthorpe Shire, to enhance and present the areas extraordinary natural history, diversity of recreational opportunities and outstanding history.

An allied objective is to support and enhance the reputation the Ravensthorpe Shire community has for its relationship with its outstanding natural and cultural history as a part of Fitzgerald Biosphere Reserve.

It is expected that the development of a network of walk trails (and the associated projects described in this Report) will deliver many benefits to the community and its visitors. It is envisaged that these projects will

attract additional visitors to Ravensthorpe and Hopetoun, and keep them in each town longer while they enjoy the trails and their stories.

The extensive range of historical and natural values of the Shire are able to be presented and celebrated through a trails network. The dedication and skill of many people in the community in conserving and investigating and sharing information has a valued place in this project.

These projects will also have a range of other benefits, including health benefits (for local people using the trails); community development through participation of all sectors of the population (hence developing some unity and cohesion between all groups); and a set of facilities that can be used safely and enjoyably by all sectors of the community.

Much of the extensive bushland areas have a relatively cryptic value, being that often their secrets are not widely known and are currently an underutilised and in some cases undervalued resource. Projects outlined in this Trails Master Plan will better utilise these resources, build upon excellent work already carried out, and deliver a range of benefits to the community.

### **Tourism, and economic benefits**

One of the overarching goals of these projects is to provide additional high quality visitor experiences in and around Ravensthorpe and Hopetoun and in between, to capitalise on the tourist traffic generated primarily by wildflower season. Each town will derive economic benefits by providing extra reasons to stay longer, or to come at other times of the year as an extended “wildflower season” and as an added bonus to attending the wildflower show. One of the most crucial aspects in increasing visitor numbers relates to the ability of tourists to enjoy their experiences in comfort and with security. Increasing the number of travellers who stay in town, even by a small amount, has a significant positive economic impact in smaller communities and their businesses.

It is important to the communities of Ravensthorpe and Hopetoun to extend their economic base beyond often fluctuating mining, agriculture, and the basic needs of tourists. Well-executed trails will help enhance the reputation the area has for its outstanding natural and cultural history, and in doing so will attract and keep more tourists for more of the year. This is in line with the objective in making the most of the areas natural and cultural diversity and supporting its international reputation.

The region is already well visited – principally during the spring wildflower season and the holiday periods. South Coast Highway and the Ravensthorpe – Hopetoun Road are well used by people heading east to Esperance, west to Albany, north to Hyden and Perth, and south to the holiday destination of Hopetoun. The location of Ravensthorpe, Hopetoun, Mt Desmond and Kundip on or adjacent to major access route further enhances their capacity to capitalise on its own local attractions. The trail projects proposed in this Trails Master Plan will provide more options for self-drive tourists, whether travelling from the Eastern states, from Perth or from other south coastal parts of Western Australia.

The region has an airport between Hopetoun and Ravensthorpe with jet links to Perth and Esperance three times a week. This opportunity can be developed to bring new types of visitors who are looking for an outstanding natural experience, an opportunity that can be supported by quality trails.

### **Recreation for locals**

A principle objective of this planning project is that the trails are as much for local people as for visitors, and in fact for local people to take their visitors. Ravensthorpe community people use the trail and track networks as they stand, and these enhanced trails will provide for the local need.

### **Health benefits**

Trails such as those priority trails proposed provide communities with opportunities for healthy recreational pursuits. Health authorities regularly identify lack of physical activity and poor diet as the second leading cause of death (after smoking). Active recreation, in any form, has proven health benefits. Trails allow people the opportunity to recreate in a variety of ways, depending on their abilities and preferences. Participation in trail activities can improve physical and mental health, assisting with disease prevention particularly cardiovascular,

musculoskeletal, respiratory, nervous and endocrine systems as well as reducing obesity, hypertension, depression and anxiety.

Trail activities facilitate participation and interaction between a diversity of community members, age groups, individuals and families and facilitate social interaction, e.g. community walking groups and voluntary maintenance.

Trails can offer a range of opportunities to a wide range of people. Depending upon design, trails can accommodate the elderly and/or people with disabilities, or satisfy those seeking challenging adventures. Trail activities have a relatively low cost to participants.

Trails can introduce participants to other recreational offerings in the community; and can help to connect people and places and develop and grow “community”. Some of these trails will pass close to the hospital and aged persons accommodation, providing opportunities to facilitate the rehabilitation and recovery of patients.

### **Town revitalisation**

Trail projects are often either the stimulus for, or a part of a townscape improvement program. The main street of Ravensthorpe and Hopetoun are the subject of previously planned townscaping projects. These two projects are enhanced by the two Town Heritage trails recommended as priorities 1 and 3, and add increased value, as they are able to provide the basis for support to attract matching funds from grant bodies.

This Trails Master Plan includes plans to upgrade and modify the existing facilities by installing updated interpretation and information at some sites. The proposed town heritage trails commence at key sites (McCulloch Park and The new Ravensthorpe Visitor Centre), and with all the improvements proposed these sites are set to become a focal point for each town.

### **Fitzgerald Biosphere Reserve**

Much of Ravensthorpe Shire sits within Fitzgerald Biosphere. Fitzgerald Biosphere “Reserve” is a United Nations Education, Scientific and Cultural Organisation (UNESCO) Man and Biosphere (MAB) program initiative, initially listed in 1978 as Fitzgerald River National Park Biosphere Reserve. Over the last several years it has been notionally accepted as an expanded “reserve”, with its eastern boundary being the vermin fence, and the western remainder of Ravensthorpe Shire falling within. Recently the formalisation of the expanded “site” has been undertaken through South Coast Natural Resource Management Inc, through the community group – the Biosphere Implementation Group (BIG).

The UNESCO MAB Program objective is community oriented, addressing a sustainable balance between the goals of conserving biological diversity, promoting economic development and maintaining cultural values. Biosphere reserves are sites where this objective is discussed, designed, resourced, tested, demonstrated and refined.

The MAB Biosphere Reserves program’s Seville Strategy (UNESCO 1995) states that *Biosphere Reserves should strive to be sites of excellence to explore and demonstrate approaches to conservation and sustainable development on a regional scale through the Three Functions of Biosphere Reserves:*

1. *Conservation - contribute to the conservation of landscapes, ecosystems, species and genetic variation*
2. *Development - foster economic and human development which is socio-culturally and ecologically sustainable*
3. *Logistic support - support for demonstration projects, environmental education and training, research and monitoring related to local, regional, national and global issues of conservation and sustainable development.*

To implement the objective and Seville strategy locally, the Action Plan For Fitzgerald Biosphere has been written. It includes detailed community developed (through the BIG) actions by which to fulfil the MAB ideal, and to advance Fitzgerald Biosphere communities and enterprises. Several of these actions relate to exploring and explaining nature and culture, which this Trails Master Plan admirably achieves.

Fitzgerald Biosphere is an enviable brand, which this trails Master Plan fits perfectly with, helping Fitzgerald Biosphere further develop its reputation as an exemplar Biosphere Reserve.

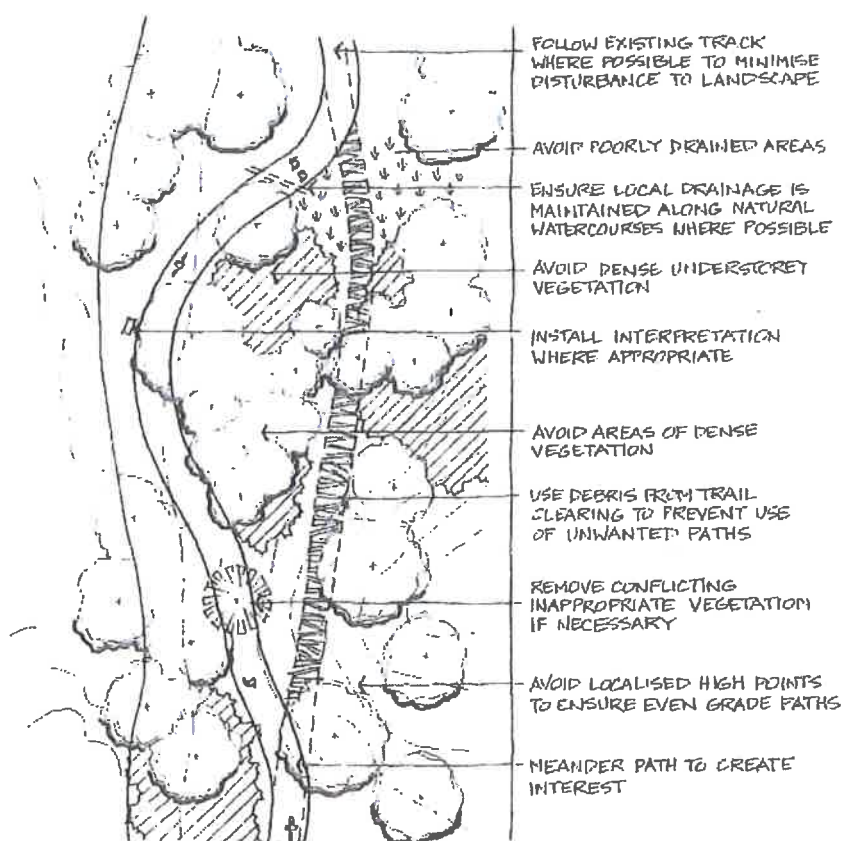
## SECTION 2: INFRASTRUCTURE & CONSTRUCTION

### General Considerations for Sustainable Trails

This section of the Report addresses a series of matters relating to trail design and development of trails in the Ravensthorpe and Hopetoun areas, to achieve trails (and paths) that are constructed with minimal disturbance to the natural environment, are sustainable and that require minimal maintenance.

In general, the following general design and location considerations should be taken into account before and during construction of any trail or path:

- Following existing tracks/trails where possible to minimise disturbance to the landscape.
- Avoiding poorly drained areas.
- Consideration of dieback (*Phytophthora* sp.) disease hygiene
- Ensuring local drainage is maintained along natural watercourses where possible.
- Avoiding dense understorey where possible.
- Avoiding areas of dense vegetation that may require heavy clearing.
- Avoiding environmentally sensitive areas (eg. areas of endangered flora).
- Using brush and debris from trail clearing to prevent use of unwanted paths.
- Removing conflicting inappropriate vegetation if necessary and as approved.
- Avoiding localised high points to ensure even path grades.
- Avoiding long straight sections with long steady grades. Trail to meander to take advantage of natural and man made features and to create interest.
- Avoiding areas with high erosion potential.
- Locating path near to points of interest.
- Taking note of safety hazards and avoiding where possible.



TRAIL ALIGNMENT GUIDELINES

## Trail-specific Construction Information

### Trail surface, Bushland Trails – Kundip Loop and Mt Desmond Circuit

Each of the Bushland Trails traverses a variety of terrain types, from flat and already formed in the case of the rail trail, to relatively steep slopes at Mt Desmond. These surfaces will require some modification and upgrade to make the trail routes suitable for the intended user groups. It is not proposed to use gravel fill to create defined routes – instead, it is proposed to utilise the existing firm earth surface with surface improvements to make a smooth walking surface and to manage water. The proposed trail routes have been chosen in the field to maximise the use of already cleared ground, thereby minimising the amount of trail surface modifications required; nevertheless, there will be a degree of surface treatment required.

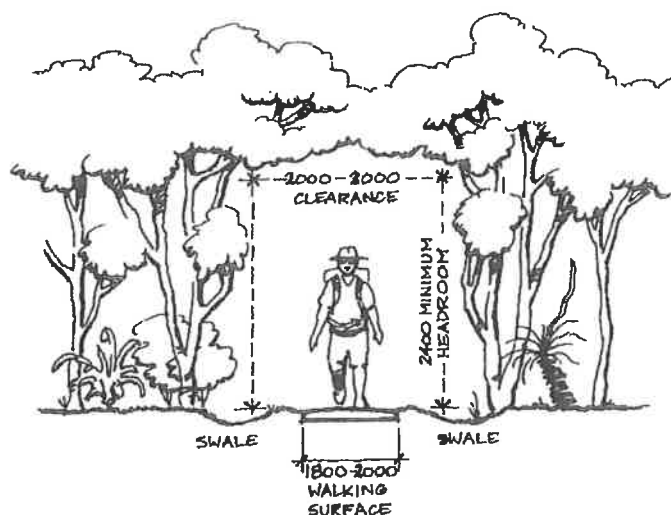
Constructing these two trails will require knowledge, skill and sensitivity, as several species of rare and priority flora occur in the Kundip and Mt Desmond areas. This will include a sound understanding of the relevant Commonwealth and State legislation regarding threatened flora and ecological communities. Both places are well known for their particular botanical richness and as the locations of several restricted plants – the very things that make the area famous and attract visitors. Further to this, although dieback disease (*Phytophthora* sp.) is not known from Ravensthorpe Range and Kundip, and dieback hygiene during construction and maintenance is imperative. The trail routes through new sections, and the areas to be cut back on existing trails and tracks should be surveyed by a competent botanist with local experience, to ensure these sensitive plants, if present, are avoided. Knowledge and skills in erosion repair will also be needed as quite long sections of existing tracks on sloping sections are badly eroded, and the ideal way to repair these is to use vegetation (brush) cut from the cleared sections laid in the eroded ruts. This will impede the velocity of water and catch soil to form a perfect bed for the seeds carried in the brush to lodge and grow.

The Kundip Loop will require the least construction work, with all the trail along existing pathways, the majority of the construction work will be in upgrading the trail to the 2m standard, repairing erosion, water management and bypassing bridge ruins. As such rail construction will be comparatively straightforward.

The Mt Desmond Circuit trail is across a mixture of existing trail and tracks, and "virgin" country. Significant sections of already cleared trail exist along the formed rail trail, and along grid lines and the ridge track. The vegetated areas are through three main types: through sparse understorey under low woodland, among mallee, and through some dense mallee/banksia shrubland. These will require a mix of relatively easy and some more challenging construction.

The routes of the trails have not been marked on ground during this planning stage; rather they have been shown on the maps included in the individual trail project sections. The routes would be marked during construction planning with surveyors (flagging) tape, as would sites of particular interest, such as where interpretive panels are proposed.

The principal work on the along the existing tracks and trails will be to clear the sides to allow a standard 2m trail surface width and make a smooth trail surface. The most practical way of achieving this is



WALK TRAIL – GENERAL CHARACTERISTICS

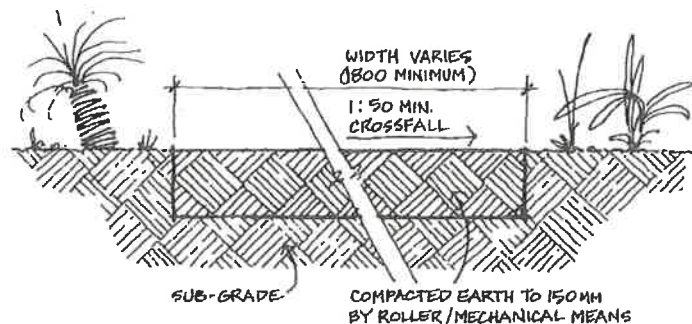
to use a well-led work team with chainsaws to cut back the vegetation (where prescribed), and a medium sized skid-steer loader or small tractor with a loader and ripper to remove stumps, and grader blade to level off the trail route. This treatment will allow easy and efficient follow up of trail vegetation maintenance. It is important to note that in many places mature trees will be left on the trail path as they add to the experience and are easy to walk around.

Over open ground in sparse vegetation where the trail route traverses bare natural earth, a light pushing off of vegetation and grading with a skid-steer loader or small tractor equipped with a loader and grader blade will be required in order to clearly define the trail route, remove rocks and branches from the route, and construct water management mounds and waterbars.

The preferred course of action to upgrade the existing trails and tracks and construct the trail route is to use a narrow width skid-steer loader or small tractor with loader ( $< 1.5\text{m}$ ) to level the (sometimes) rocky and uneven surfaces – thereby eliminating hollows and bumps, and to fill in some eroded sections. It is likely that several passes of a loader will be required to level off the surface, grading it flat and pushing any rocks and logs off to the side, or into eroded ruts where possible. Some compaction of the loose surface will occur during the work of the skid-steer loader or tractor. The loader will also be useful for carting brush to areas it is needed to repair eroded sections.

Care should be taken to ensure that 'berms' are not created along each side of the trail route – as these would tend to channel stormwater along the trail's surface rather than the water being allowed to drain freely off to the side of the trail.

The desirable width for the bushland trails is 2.0m. Where clearing of vegetation is required – a clearing envelope of around 2.0 – 3.0 metres will be required. This may seem severe, although the bush will quickly regrow to fill the space and the leaf drop will soon soften the trail edges. It is necessary to make the trails easy to maintain, and appealing and rare plants will be avoided or left in place.



**BUSH TRACK : COMPACTED EARTH**

It will be necessary to clear some live vegetation from each of the trail routes as described. By necessity, the trail must pass through, under and between thickets of vegetation and individual trees and bushes. In some instances it may be appropriate to cut back branches flush with the trunk, leaving no obvious cut branches. Filling of the root holes of trees removed from the trail route should be done to remove all evidence of the removal.

The clearing the areas of bush required to construct the trail at Mt Desmond will require some careful management of both the sites and the material. With particular care taken with route selection to ensure that rare and sensitive plants are avoided as described earlier. Also that dead logs and branches should be moved away by hand from woodland and mallee sections, rather than piling the logs and branches to the side of the trail, they should be relocated away from the trail and deposited elsewhere in the bush in a "natural" fashion. Some sections will require relatively substantial vegetation removal, although this will be kept to an absolute minimum during final route selection, nevertheless, this vegetation should be used to "brush mulch" eroded ruts as erosion repair, and the remainder placed in nearby bare areas needing repair, or within the bush away from the trail to retain the natural look.

All loose rocks and stones should be removed from the trail surface, and where necessary used for waterbars and steps. This removal should be done by hand and/or the use of rake hoes or in the case of existing tracks with the tractor/loader, removing all loose rocks from within the 2.0 metre wide trail surface. Rocks removed from the trail route should be used as described above or distributed evenly about the surrounding area, and NOT raked to the trail's edge so as to create an edge bund.

Some larger rocks that cannot easily be removed on sloping sections trail route of the Mt Desmond trail should be left in situ if they act as effective water management structures.

### **Dieback disease**

Several of the diverse vegetation and flora communities of the Ravensthorpe Range and Kundip areas are highly susceptible to dieback disease (*Phytophthora* sp.). This destructive plant disease is not known from the Range or Kundip, and it would be devastating if it were introduced. Therefore strict dieback hygiene must be adhered to when constructing and indeed using these trails. Construction hygiene should include the use of clean machinery and equipment, operations under dry soil conditions only and limiting the movement of soil. A concise dieback hygiene plan should be developed for implementation that includes the latest techniques for ensuring this disease is not introduced.

### **Bridges at creek crossings**

Along the Railway Heritage Trail parts of these trails, several crossings of drainage lines are required. These are mostly where the original bridges have either been burnt or washed away. In most cases the recommendation is to skirt around the edge of the "bridge ruin" down and across the drainage line, although in two cases on the Kundip Loop, the recommended bridge or boardwalk construction material is 'walkways' and supporting sub-structure could be manufactured locally from timbers sourced from the Redmond sawmill near Albany.

### **Stone and Sleeper steps**

Several flights of steps are required to gain access up and down the embankments alongside the drainage channels at the sides of the bridge ruins. These could be made from rocks where rocks are present, or by the use of sleeper steps (constructed from good quality old railway sleepers – or new sleepers).

Steps should be at least 1.2m wide. Simple to sport out with the rocks, and depending on the length of sleepers obtained, full-length sleepers could be cut in half. Steps laid in the ground they should be firm and level, and well anchored. Sleepers are best anchored by means of reo bar pins driven through the timber into the ground below (and cut off below the surface of the tread of the step) – or – timber 'pins' driven into ground at the front of the riser of each step.

### **Hopetoun Heritage Trail**

Existing concrete, asphalt or paving brick footpaths are used for the majority of the town trail route. The Railway line spur is a mix of existing paver, asphalt and crushed limestone. However there are some sections where new asphalt and the upgrading and widening of the crushed limestone paths is required.

To enable people in wheelchairs to access the entire trail, it should be ensured that ramps are made where necessary. Some clearing of overhanging vegetation will be required on some parts of the railway spur, mainly mallees and coastal tea tree, this should be easily accomplished with a chainsaw in the hands of a skilled operator.

### **Ravensthorpe Heritage Walk**

As with the Hopetoun Heritage Trail, the Ravensthorpe Heritage Walk makes maximum use of existing paths in the town. However, not all the proposed route has a sealed surface, and an additional 210 metres of new concrete path is recommended. 70m of this is already planned as part of the Shires works program, so only the additional 140m is needed as "new" works, which includes paths and new kerb ramps are recommended, to enable ease of access for people with disabilities, the elderly and those in wheelchairs and using gophers, etc.

The additional concrete paths do add considerably to the cost of developing the trail – therefore, completion of the sealed pathway along Andre St and the path sections and kerb ramps on Morgans St near Hosking St could be undertaken as part of the town centre redevelopment works. These broader townscape works are being undertaken as a response to the new heavy haulage route, which supports the reasoning that this trail be a priority project.

### Ravensthorpe Town Heritage Drive Trail

This project has no formal trail works needed, as it is a drive trail on existing roads.

## Directional Signage

### Kundip and Mt Desmond Trails

The Bushland Trails in each town are to be marked by the use of 90mm x 90mm etched anodised aluminium trail marker plates affixed to mild steel square section tube (100mm x 100mm) with rivets. The trail directional marker posts are to be placed into holes purposely drilled into the earth along the trail route, spaced at intervals as set out in the works lists. Mostly these trails are along obviously formed routes. Although, where the trail route is indistinct (such as through thickly vegetated areas), the marker posts should be within sight of each other.

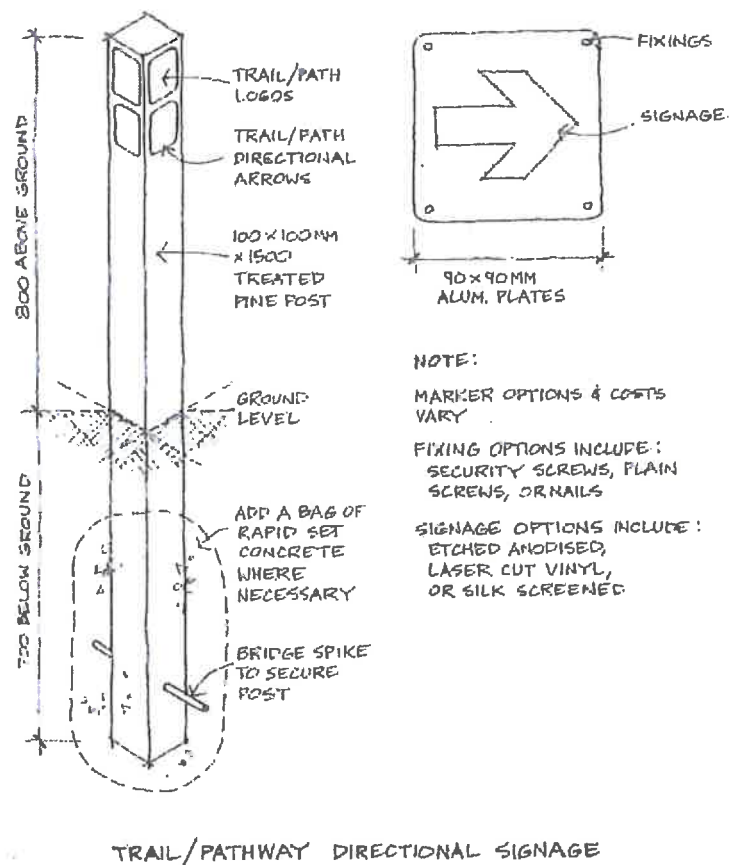
The steel marker posts are also to be installed at track intersections, road crossings or significant changes of trail direction - where some

uncertainty may exist (see plans for suggested locations for posts). These posts should be approximately 1500mm long – 700mm in ground and 800mm out of ground. A concrete footing is recommended to ensure the posts cannot easily be removed.

Different trail marker plates (name/logo plates) should be designed for each trail. Directional arrows (colour coordinated with the name/logo plate) should be affixed underneath each directional marker (name) plate. For simplicity, one arrow design can be made for each trail, and that arrow can be placed on the posts pointing right, pointing straight ahead, or pointing left.

On the Kundip Loop there are approximately 27 markers in total, to be placed on the side of the steel post facing trail users (trail marked for one-way travel only).

On the Mt Desmond Circuit there are approximately 21 markers in total, to be placed on the side of the steel post facing trail users (trail marked for one-way travel only).



## Hopetoun and Ravensthorpe Heritage Walks

The Hopetoun and Ravensthorpe Town Trails are to be marked by the use of 90mm x 90mm etched anodised aluminium trail marker plates affixed to jarrah or treated pine totem posts (100mm x 100mm) with Sikaflex construction adhesive or similar. (Note: it is preferable to glue and security screw trail directional marker plates and arrows to the posts to minimise removal). The trail directional marker posts (pine totem posts) are to be placed into holes purposely drilled into the earth along the trail route, spaced at intervals of approximately 100 metres (or at locations and changes of direction as set out in the works lists and plans). Ideally, the marker posts should be within sight of each other.

The totem posts are also to be installed at intersections, road crossings or significant changes of trail direction - where some uncertainty may exist (see plans for suggested locations for posts). These posts should be approximately 1500mm long – 700mm in ground and 800mm out of ground. A concrete footing is recommended to ensure the posts cannot easily be removed.

Different trail marker plates (name/logo plates) should be designed for each trail. Directional arrows (colour coordinated with the name/logo plate) should be affixed underneath each directional marker (name) plate. For simplicity, one arrow design can be made for each trail, and that arrow can be placed on the posts pointing right, pointing straight ahead, or pointing left.

On the Hopetoun Heritage Trail there are 21 markers in total, to be placed on the face of the totem posts facing trail users. The trail ideally should be signed for one-way travel only.

On the Ravensthorpe Heritage Walk there are 28 markers in total, to be placed on the face of the totem posts facing trail users. This trail should also be signed for one-way travel.

Bearing in mind that some directional markers and arrows may be 'souvenired', it is recommended that a quantity of spares of each be ordered. The cost tables and works lists make an allowance for additional/spare directional marker plates and arrows.

## Trail Maintenance

New trails should not be considered unless the Shire is able to afford the ongoing maintenance of the trails.

Ideally, maintenance should be fully costed by the Shire works department once the design has been completed, in order that the sum can be included in future Council budgets.

The following areas need consideration in trails maintenance:

- Surface maintenance: ensuring safe surfaces, sound timber components and no erosion points.
- Drainage: ensuring drains are functional, erosion and scouring are controlled and storm water is allowed to settle before being discharged into waterways.
- Dieback hygiene: Ensure machinery used for path surface and earthworks maintenance on bush trail is spotlessly clean and that maintenance is undertaken in dry soil conditions.
- Marking & signage: check trail markers and signage *regularly* and replace missing or damaged items – if users cannot follow the route they will quickly lose interest.
- Landscape: including re-vegetation, keeping path edges cleared and branches overhanging at head height trimmed; weed management, and fire control access.
- Trail furniture: seats need to be regularly checked for structural stability and cleanliness.
- Installations: rusty steel cut-outs and interpretive panels, map panels, trail markers and all signage should be regularly inspected for damage, graffiti and cleanliness.
- Monitoring: inspection and reporting of trail conditions, ideally in partnership with the Fitzgerald Coast Tourism group and the community.
- Monitoring of vandalism and prompt response to damage - evidence from other Shires shows allowing vandalised areas to remain un-repaired rapidly leads to further vandalism and in the longer term more costly repairs. More damaging still, vandalized locations appear unsafe to users, who will avoid using them, reducing the amount of informal 'surveillance' at a site and further compounding the problem. A formal inspection timetable assists in managing trail maintenance.

## SECTION 3: INTERPRETATION – A REVIEW OF THE OPTIONS

### ***What is Interpretation?***

In simple terms, interpretation is the process of communication between the visitor and the values of a place (Perrigo 2004). Perrigo argues that the best definition comes from a 1957 publication by Freeman Tilden entitled "Interpreting Our Heritage". He wrote that interpretation is *"an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experiences and by illustrative media rather than simply to communicate factual information"*. (Perrigo, T - Interpreting trails – the need for standards - Paper to 3rd National Tracks and Trails Conference, Hahndorf, South Australia, October 18 – 20, 2004)

*Interpretation means all the ways of presenting the significance of an item, i.e. the importance of an item, beyond its utilitarian value. Significance refers to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item. Significance is reflected in the item, fabric (physical material) of the item, its setting (the area beyond its boundaries), use, associations, meanings, records, related items and related objects. Items may have a range of values and meanings for different individuals or groups.* (Heritage Information Series - Interpreting Heritage Places and Items - Guidelines – NSW Heritage Office 2005 – Page 5)

Through interpretation:

- Visitors (and local people) will be inspired. This will lead to increased commitment to the trail and/or heritage site as an entity;
- Visitors are likely to show greater respect for heritage sites and the infrastructure and natural landscape that surrounds them;
- Visitors numbers and the duration of their stay will increase;
- Visitors are more likely to visit again;
- Visitor diversity (user patterns) will increase. Examples will be children, adults and sections of the community particularly attracted to a theme or storyline; and
- Grants and other forms of external support are likely to increase.

The Department of Environment and Conservation believes interpretation conveys the essence of a natural or cultural resource in a memorable way that reveals meaning and enhances its value. It states that interpretation provides visitors with the opportunity to make a personal connection with a place through an enriched experience.

*"Interpretation is a process that leads visitors from understanding to appreciation and from appreciation to conservation. Interpretation encourages visitor actions to be compatible with conservation of the environment. Interpretation uses a wide variety of techniques to convey important and meaningful messages to visitors. These include brochures, posters, signs, displays, audiovisual presentations and guided activities"*. (Draft Interpretation Plan for Herdsman Lake Regional Park March 2003 Department of Conservation and Land Management Interpretation and Visitor Information Unit)

Interpretation of the complex and often cryptic nature of the Ravensthorpe Shire presents particular and exciting challenges. This challenge needs to be met to satisfy the increasing curiosity of interested users, present a sophisticated response as a measure of the community's regard for its landscape, and embrace this refined theme as a way to value-add sustainable community development.

Some landforms features are obvious and easy to discuss. However, presenting and explaining the often easily overlooked aspects and reasons for the extreme diversity is a key theme that requires skill and creativity to convey effectively. These more enigmatic features can be presented and explained as a package through a trails program.

## Interpretation Plans

*"An interpretation plan is a management tool that provides a strategy for transmitting messages about the cultural heritage values of a heritage place to visitors. It identifies the most significant themes and stories about a place and the media most suited to exploring them.*

*The plan also provides a framework for managing visitors, providing them with a memorable and enriching experience while also ensuring the heritage values, including significant fabric, of the place are upheld. It also helps ensure that the interpretive strategies recommended are appropriate to the place."* (National Trust Interpretation Planning Guidelines).

*"Interpretation is not mere information – it is revelation based upon information. But the information upon which it is based must be thematically organised, based on rigorous research and specific to each place. The interpretation should aim to relate the place being displayed to something within the visitor."* (Paul Kloeden of Mulloway Studio in Interpretation Plan for Merredin Peak Reserve – Shire of Merredin February 2007).

Most importantly, Interpretation Plans should favour practical outcomes ahead of theoretical ones – especially when a small community with limited resources is involved. Therefore, the interpretation component of this Trail Master Plan is designed to:

- Identify and present the most significant themes and stories about sites, buildings and people of the area;
- Outline the most suitable way of presenting themes and stories so that local people and visitors are enriched by encountering them;
- Provide information to aid in ensuring the heritage values of places, structures and objects are preserved;
- Provide a framework for managing visitors;
- Provide general costings and a prioritised program for implementation;
- Be practical, achievable and realistic but above all, flexible and open to further development.

*"An Interpretation Plan would develop an overall or overarching theme for the area, establishing a common 'thread' that would link each site and each interpretive panel together. The plan would also develop a consistent style of presenting the interpretive information, and present recommendations on the materials to be used, the colours and style of any logos to be used, and provide suggestions for promotional material to be developed to promote the trails / sites."* (Draft Interpretation Plan for Herdsman Lake Regional Park March 2003 Dept of Conservation & Land Management).

In summary, the benefits of interpretation are to:

- Capture and acknowledge the heritage and stories that are precious to the local community, and acknowledge the source of these "roots";
- Enrich the visitor's experience by making it more meaningful and enjoyable;
- Assist both locals and visitors to develop a keener awareness, appreciation and understanding of the heritage being experienced;
- Accomplish management objectives by encouraging thoughtful use of the resource by the visitor (whether local or from out of town)

This Plan sets out to define which questions visitors want answered (and which stories are most precious to the local community), and how best to share those stories and provide those answers. In arriving at these outcomes it is hoped that all of the benefits set out above will be delivered much more effectively than is currently the case.



*Interpretation can involve the dramatic use of shapes and forms, in addition to text or audio (Leonora Loop Trails)*

## Options for interpretation

The Interpretation Association of Australia (IAA) describes interpretation as: "a means of communicating ideas and feelings which help people understand more about themselves and their environment. There are many different ways of communicating these ideas, including guided walks, talks, displays, signs, brochures and electronic media."

IAA goes on to say "Interpretation is often used in national parks, museums, zoos, botanic gardens, Aboriginal keeping places, galleries, historic sites, science centres, state forests, urban parks, and reserves. Interpretation is used increasingly by guided tour operators, conservation organisations and local history associations.

*Interpretation is the key to understanding ourselves and who we are. It challenges us to work out what Australia means, as a continent and as a nation. Interpretation makes sense of life, of systems and structures. Interpreters work in Australia's most important places. They deal in stories, ideas and experiences. They explain, guide, reveal, arrange, question, share and provoke. They are central to the national conversation about meaning and significance.*

*Above all interpreters engage with people. They know their visitors' needs and interests. They must know how to create communication links between people and place, past and present, people and people. They know the important questions visitors want answered."*

Knowing the "important questions visitors want answered is just one part of the challenge – knowing how to answer these questions most effectively is the other. As outlined above, there are a number of common mechanisms for delivering interpretive information:

### Guided walks and talks

A very personal and flexible means of delivering information to visitors – allows rapid updating of material depending on circumstances, and also allows visitors to ask questions, thereby ensuring they get answers to their particular and personal interests.

Drawbacks are the need for well-trained guides who are readily available, the need for visitors to fit a schedule of "tours", costs to visitors, and what some might see as the "over-structuring" of the visitor experience.



*A tour group sets off after their Aboriginal guide on the top of Hyden Rock, October 2006*

## Displays, artwork / sculpture, artefacts

A number of small West Australian towns have excellent experience with the use of this type of interpretive material. In Hyden, for example, are the "PeopleScape" sculptures in the parking bay on the main street. Here, local bush "artwork" combines with interpretive signage to give an entertaining insight into the history of the community. In Mullewa and Leonora excellent use has been made of rusty steel figures as a means of engaging visitors and providing visual interest to a site and story.



*"Sculpture" or physical display is used very effectively in the main street of Hyden. Humour helps greatly in imparting the experience!*

Physical displays reach across a wide spectrum of visitors, from young to old, and from many different cultural and language backgrounds. Whether they are artistic creations or historic / natural artefacts they are *approachable* and they tell stories, just by their very being. On the negative side, they can be quite expensive to install, may attract vandalism, and require a significant degree of artistic input to ensure they do not look cheap and amateurish. If skills and resources are available this kind of interpretive display is well worth considering at key locations, and has the potential to attract grant funds not normally associated with trail and interpretive projects.

### On-site signage

Perhaps the most common form of interpretive delivery, interpretive signage is now ubiquitous across Australia (and much of the western world). Some would say it is overused, and has become a form of visual pollution in some sites. It does however offer significant advantages – it is "permanent" (being always available to the visitor no matter the time of day or day of the year); it is relatively cheap to produce (compared to audio delivery, for example) and now has a respectable lifespan of between 5 and 10 years, depending on materials and conditions; when well-written it can be enjoyable and highly approachable, and it reaches a relatively high percentage of site visitors.

Signage does need to be used with caution – it can crowd and clutter a landscape, even detracting from some visitor's experiences, and "cheap" manufacturing processes can degrade quickly when exposed to harsh conditions. Writing and designing interpretive signs has become a highly-specialised task, and the difference in visitor impact between "good" signs and the "ordinary" can be substantial.



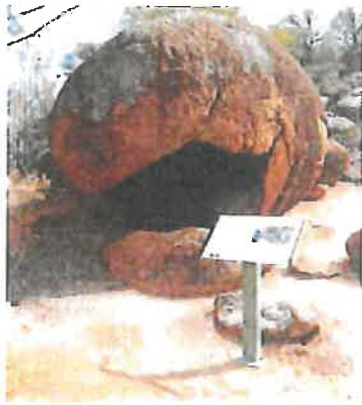
*Interpretive signage materials have improved dramatically in recent years, while layouts have become more creative and often more complex.*

Installing signage in outdoor locations can however be a risky exercise. Vandalism and harsh weather conditions can take a toll on signs of many types, and can rapidly reduce the effectiveness and value of what are often substantial capital investments.

A wide range of materials is used for interpretive panels across Australia. These vary substantially in terms of longevity/hardiness and price. Simply put, the cheaper the panel the more prone it is likely to be to degradation by the weather and/or vandalism, and the shorter the period that it will retain its full original 'colour' and therefore its aesthetic appeal. Experience in many places has shown that vandals and the weather can combine to make life difficult for interpretive panels, and can quickly erode the investment made by host organisations.

In order to circumvent this outcome it is proposed that architectural-grade etched anodised aluminium panels be used in this project. In countless similar situations across Australia these panels have proven themselves to be as close to indestructible as is possible. They are also stylish and attractive to trail users and site visitors.

In locations such as those found around Ravensthorpe and Hopetoun the panels are highly likely to be exposed to a high level of weather impacts including the salty sea air. Etched anodised aluminium panels retain their high-



*Etched aluminium interpretive panels can be mounted direct onto rock (or other hard surfaces) if required*

quality aesthetics into the 10-year (and beyond) timeframe – regardless of conditions. Further, this material / process has the greatest resistance to vandalism (paint, ink, felt pens, scratching, impact damage etc) of any known option on the Australian market.

Etched anodised aluminium panels are more expensive than other styles but have proven to still provide better value for money over the longer term. Cost estimates provided in this Interpretation Plan are based on utilising this process for several priority projects. However, technology is changing rapidly, and new materials and processes are making full-colour digital print panels more attractive than in the past. While they are more easily damaged and do not last as long in full-sun situations they are cheaper to produce – and they work brilliantly in interpreting subjects such as wildflowers and birds! Consequently, they are well suited to the “bushland” trails recommended in this report.

This Plan recommends that “standard” interpretive panels should be of approximately 600 x 350 mm size, either in etched anodised aluminium or in digital print panels. Each should contain around 200 words of text (less if possible, while maintaining the integrity of the story), and 1 (or more) image to illustrate the story or site. Quality scans of historic photographs should illustrate most cultural heritage panels, while others should utilise pen-and-ink sketches. Good clear colour photographs will reproduce beautifully on digital print panels.

### Brochures, maps, written guides



*A new brochure has recently been produced for Kookynie and Niagara Dam*

After signage, brochures or written guides are perhaps the most common form of interpretive material – especially at natural sites and on walk trails. They can be effectively combined with a promotional purpose to deliver added value for money, and are often seen to be a “memento” of the visit, thus spreading the “message” further afield as they are shared with family and friends.

Brochures and guides can range from simple folded cards to complex and weighty books. The purpose of the printed matter must be carefully defined to ensure the product meets the intended market. If this is done, clever design and writing can produce an appealing and informative document for relatively low cost. Distributing such an item can be challenging, unless visitors have to pass through a central entry station to get onto the site in question. Then they can have almost 100% saturation, making them highly effective in sharing both interpretive and management messages.

### Electronic media – primarily audio (CD, narrow-cast FM, website, pod-cast, hand-held audio)

Modern technology is bringing new opportunities to the interpretive field at a rapid pace. Visitor expectations are being stimulated by exposure to “gee whiz” delivery mechanisms, and certain high-level visitor sites have become very competitive in terms of what they offer and how. Audio interpretation, touch-



*Hand-held rechargeable audio “wands” are gaining popularity rapidly in controlled-access environments*

screen information booths, laser light shows, small-scale theatrettes and pod-casting facilities are on the cutting edge of big budget visitor sites.

However, costs can be significant and benefits have to be both substantial and reasonably assured to warrant proceeding down this path. And the *nature* of the experience needs to fit the ambience of the site itself – and here it could be questioned as to whether these high-tech solutions would be appropriate for many of the stories. However, given the presence of some oral histories, it may well be that some kind of audio delivery may well be worth considering in the future.

A recent relevant (relatively) local example of the excellent use of audio interpretation is on the Southern Forest Sculpture Walk at Northcliffe. Here, small portable MP3 players are provided as part of the entry fee – each carries a choice of 5 “story lines” from which visitors can choose. However, the Sculpture Walk is “self contained” – it has just one access and egress point, and so is well suited to this style of delivery.

In another West Australian situation the City of Albany has installed a set of Acoustiguide audio handsets (or wands) in the replica of the Brig Amity. Each has 21 professionally recorded audio stories on it, and visitors select the story that is appropriate for their location around the ship as directed by small numbered plates placed in strategic locations. This system again works very well in a situation that has a clear “access” point – and has the advantage of the hardware being of no value beyond the site (unlike MP3 players!).

### **Rusty steel cut-out figures**

Both the Shire of Mullewa and the Shire of Leonora have in recent times made very good use of life-size rusty steel cut-out figures to interpret key aspects of local history. This process encourages visitors to use their imagination, and engages a level of curiosity that extends well beyond that reached by many more common forms of interpretation.

Shapes can be quite literal – or can be caricatures, bringing humour into play too. They can be whole figures, or just parts of images, and they can be augmented with first-person text panels affixed to the cut-out – so that the image is in effect “talking to” the visitor.

Both “positives” (as seen in the Mullewa cows) and “negatives” (as shown at Leonora) can be utilised, giving quite different visual effects. Rusty steel fits very well into the rural and remote landscapes of Western Australia, and is not overly expensive to work with. Other materials can also be used in this kind of process, such as stainless steel, but these bring a higher level of costs to the project.

These elements provide insight into what design can bring to accentuate and celebrate chosen themes. For the priority trails recommended for Ravensthorpe more subtle fixtures are recommended, albeit they have many of the principles outlined here such as materials and the use of cut-outs. The reasoning is to relate in a deferential sense to the trail settings, where the trails and their landform and townscape settings are dominated by big-ticket landscape, vegetation and seascape.

Beyond the priority trails, future trail developments should consider presentation design creatively to arrive at their installation elements.



*Rusty steel cut-out figures can work very well in interpreting aspects of local history (Mullewa - De Grey Stock Route)*



*Negatives of images used on the Leonora Loop Trails have been augmented with corrugated iron backing plates and placed in the Information Bay in that town – to great effect!*

## SECTION 4: MAPPING, MARKETING AND PROMOTION

### ***It's only worth it if people know about it***

There is little point developing wonderful new and refurbished trails in the Ravensthorpe and Hopetoun areas if no one knows about them, and no-one stops long enough to explore them. This is where interpretation veers towards marketing and the two combine to inform visitors about the new or refurbished attraction and inspire them to stop and spend some time.

The projects recommended into this Report warrant their own promotional/mapping for marketing via the production of trail brochures. While this could be considered an interpretive item, it is outlined here, as it will be the major marketing tool for the trail. It is common for "marketing" items to serve a dual purpose in enhancing interpretation too – but their primary purpose should remain to promote the attraction involved.

It is proposed that A4 folded to standard brochure size (DL, 210 x 99 mm) colour brochures be developed for the four walk trails – in some ways similar to the current set of four for the existing Railway Heritage Trail. For the heritage Drive Trail an A2 high-quality route map be produced in such a way that it can fold down to "standard" brochure size

These brochures would double as the key promotional tools for the trail, the promotion and dissemination of which would be done through the tourist centre and possibly the Shire at Ravensthorpe and the Telecentre and other tourist outlets in Hopetoun.

There are other means of promotion for Trails, and these should also be attended to as and when opportunity arises:

- Any update to the overall Shire-wide promotional material such as brochures and/or information bay signage should include the trails as a primary attraction for the area;
- Any update to Shire (or regional) websites should include clear reference to the trails, with the map (or elements of it) being made available for download by potential visitors;
- The trail could be featured in region-wide promotional material as a new attraction (in the Wildflower Show promotional material and mediums for example);
- Opportunities to present the trail experience direct to staff from surrounding visitor centres and/or travel journalists should be taken with alacrity – it may even pay to consider a trail-specific "familiarisation tour" of the route, ideally in spring when the flowers and the weather make it such a wonderful outing.

The ideal end result would be for there to be a single promotional map/brochure covering either all four of the proposed walk trails, or as sets of the two town focussed and two bush focussed. These are short walks, which require simple mapping, and limited text and photographs to promote them to the travelling public (and locals too). A double-sided A2 size brochure would contain the four trails very well, with each getting the equivalent of a double side of A4 paper. Such a document, when folded down to standard DL size, would do a fine job of promoting "Walk Trails around Ravensthorpe and Hopetoun."

However, as it is perhaps unlikely that all five trails will be developed at the same time, and therefore this outcome should be seen to be a future step in consolidating local promotional material, when all five are constructed. In the interim, the brochures described previously should be developed for each of the four trails as they are completed. This information could then later be used to very simply create the larger "all trails" item mentioned above.

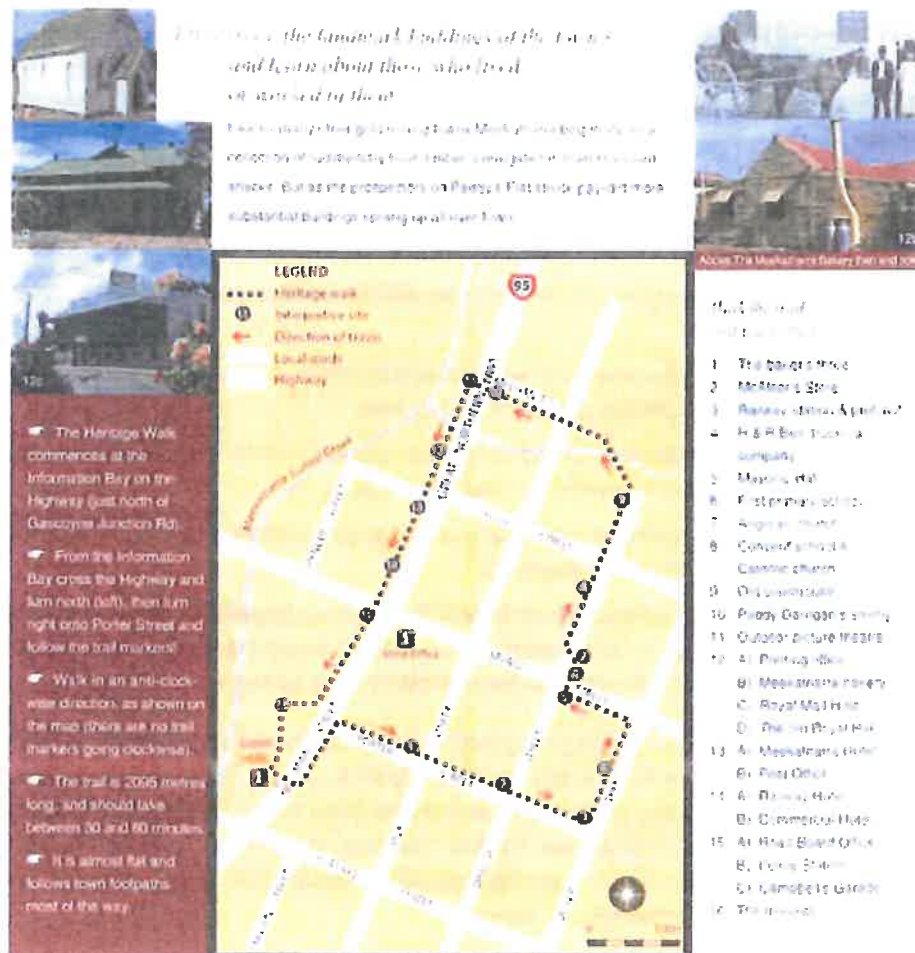
As described earlier, the single-trail brochures should be an A4 sheet in size, printed double-sided in colour on recycled stock – in other words, and folded to DL size. This would provide sufficient space for mapping and trail information while retaining a simple and low cost final product. Brochures should be designed so that they appear to be part of a "family" – this will also aid in integration into a single larger document in the future.

Again, these brochures could be distributed to key surround visitor centres, though it is highly likely that the majority will be handed out in the two towns in question. To ensure that the local community is aware of these

new developments it may be wise to consider distributing a copy of the brochure(s) to each household, perhaps with the annual rates notice.

Cost estimates included in this report are based on small individual brochures being produced in the first case. These have been budgeted at \$4850 + gst each. In all cases an initial print run of 5000 is recommended, simply because it is likely that early updating will be required as more trails are developed. By comparison, the slightly larger A2 size brochure covering the drive trail would cost \$11,600 + gst for 10,000 copies – a higher print run being required to cover a more extended span of time to likely updating.

Should all four trails be developed, the double-sided A3 size combined brochure could involve an initial print run of up to 20,000 copies, and would cost in the vicinity of \$13,000 + gst. Although this is a suggestion only and has not been included in the project costs herein.



*Typical inside spread of a "double DL" heritage trail map (60-70% real size)*

## SECTION 5: FUNDING OPPORTUNITIES

### Introduction

This Section provides a detailed list of potential funding sources – from all levels of Government, corporate sponsors, community-government programs such as Green Corps and the use of community volunteers such as Conservation Volunteers Australia.

Resourcing trail construction and promotion programs can be challenging, as can resourcing ongoing maintenance requirements. It must be recognised that a Trails Master Plan such as this, and the individual projects it contains, are an investment in the future. Well-planned and built, well interpreted and appropriately promoted, the trail projects will bring more tourists and money into the Shire of Ravensthorpe, and will deliver on the expectation that an area of this ecological importance will have trails and interpretation. They will stimulate the creation of jobs, and will significantly assist in the conservation and preservation of natural and cultural heritage throughout the area.

A range of sources of funds and other resources are currently available, and some of the better known are summarised below. This list should NOT be taken to be final, as there are doubtless sources not shown.

### Commonwealth Government

#### TQUAL (formerly known as the Australian Tourism Development Program)

TQUAL Grants is a competitive merit-based funding program aimed at stimulating sustainable growth in the Australian tourism industry. It will do this by supporting innovative, high-quality tourism products that contribute to the long-term economic development of Australia. Through TQUAL Grants, the Australian Government has redesigned the program formerly known as the Australian Tourism Development Program to better position the Australian tourism industry in a highly competitive market.

There are three categories of funding, each with separate eligibility requirements, evaluation criteria and funding requirements.

Category 1: \$5,000 - \$100,000

Category 1 grants of between \$5,000 and \$100,000 for Innovative Tourism Projects. Category 1 projects should aim to stimulate the development of innovative tourism product, service(s) or system(s).

Category 2: \$100,000 - \$500,000

Category 2 grants of between \$100,000 and \$500,000 for Integrated Tourism Development Projects. Category 2 projects should aim to enhance the overall tourism appeal of a large area by encouraging inter-regional collaboration to achieve greater tourism benefits. Projects funded under this category will be large scale, collaborative, multi-faceted activities that involve a number of regions.

Category 3: \$25,000 - \$500,000.

Category 3—grants of between \$25,000 and \$500,000 for National or Sectoral Tourism Initiatives.

TQUAL Grants will be delivered by AusIndustry in the Department of Innovation, Industry, Science and Research on behalf of the Department of Resources, Energy and Tourism.

Contact details:

[www.ret.gov.au/tourism](http://www.ret.gov.au/tourism) or at [www.ausindustry.gov.au/tourism](http://www.ausindustry.gov.au/tourism) and follow the links to TQUAL Grants. Alternatively, contact the AusIndustry Hotline on 13 28 46

Applications for TQUAL Grants opened on 15 March 2013 and close on 3 June 2013.

A summary of the different categories appears on the following page.

## TQUAL Grants at a Glance

	Category 1 Innovative tourism projects	Category 2 Integrated tourism development projects	Category 3 National or sectoral tourism initiatives
<b>Applicants</b>	<ul style="list-style-type: none"> <li>private sector business</li> <li>non-profit organisation</li> <li>regional tourism or regional economic development organisation</li> <li>local government agency (LGA)</li> </ul>	<ul style="list-style-type: none"> <li>regional tourism or regional economic development organisation</li> <li>local government agency (LGA)</li> <li>non-profit organisation</li> </ul>	<ul style="list-style-type: none"> <li>national tourism peak bodies</li> <li>national tourism industry associations</li> <li>national tourism sectoral industry associations.</li> </ul>
<b>Applicant eligibility</b>	<ul style="list-style-type: none"> <li>be incorporated</li> <li>be registered for GST</li> <li>have matching cash</li> </ul> <p>LGAs must demonstrate additionality</p>	<ul style="list-style-type: none"> <li>be incorporated</li> <li>be registered for GST</li> <li>have a compulsory cash contribution of 10% of the value of the grant requested</li> <li>include collaborative partnerships with private sector businesses who contribute directly to the project (cash or in-kind – evidence must be provided)</li> </ul> <p>LGAs must demonstrate additionality</p>	<ul style="list-style-type: none"> <li>be incorporated</li> <li>be registered for GST</li> <li>have a compulsory cash contribution of 10% of the value of the grant requested</li> </ul>
<b>Funding</b>	\$5,000 to \$100,000	\$100,000 to \$500,000	\$25,000 to \$500,000
<b>Aims / focus of category</b>	<ul style="list-style-type: none"> <li>stimulate the development of an innovative tourism product, service or system.</li> </ul>	<ul style="list-style-type: none"> <li>enhance the overall tourism appeal of a large area by encouraging inter-regional collaboration to achieve greater tourism benefits.</li> </ul>	<ul style="list-style-type: none"> <li>provide strategic support to the Australian tourism industry by funding national or sectoral peak bodies to develop national projects that offer leadership to industry.</li> </ul>
<b>Project requirements</b>	<ul style="list-style-type: none"> <li>provide visitors with high quality services and experiences</li> <li>lead to an increase in visitation and yield that contributes to long-</li> </ul>	<ul style="list-style-type: none"> <li>large scale</li> <li>collaborative</li> <li>include multi-faceted activities</li> <li>involve a number of</li> </ul>	<ul style="list-style-type: none"> <li>showcase innovation</li> <li>encourage productivity gains</li> <li>support world's best practice across all elements of the tourism</li> </ul>

	Category 1 Innovative tourism projects	Category 2 Integrated tourism development projects	Category 3 National or sectoral tourism initiatives
	term economic development in the host region	regions.	supply chain. <ul style="list-style-type: none"> <li>• have national benefit or application</li> <li>• advance the tourism industry as a whole</li> </ul>
<b>Project examples</b>	<p>NOTE: Only one option can be applied for and funded per project.</p> <p><b>Option 1—Project initiation</b> - funding ranges from \$5,000 to a maximum of \$25,000 to undertake:</p> <ul style="list-style-type: none"> <li>• research</li> <li>• market testing</li> <li>• feasibility studies</li> </ul> <p><b>Option 2—Project planning</b> - funding ranges from \$40,000 to a maximum of \$75,000 to undertake:</p> <ul style="list-style-type: none"> <li>• preparation of drawings / design specifications</li> <li>• development of a project implementation strategy</li> <li>• facilitating community consultations</li> <li>• meeting compliance requirements</li> <li>• preparing investment proposals</li> </ul> <p><b>Option 3—Project implementation</b> - funding ranges from \$50,000 to a maximum of \$100,000 to undertake:</p> <ul style="list-style-type: none"> <li>• enhancing the tourism experience</li> <li>• re-investment in</li> </ul>	<ul style="list-style-type: none"> <li>• Develop distinctive regional or inter-regional product</li> <li>• Provide tourism support infrastructure</li> <li>• Develop industry quality processes, and/or industry planning or management processes</li> <li>• Product and/or market development</li> <li>• Assist communities / regions to plan for and manage increased tourism</li> <li>• Re-brand or refresh existing brands</li> </ul>	<ul style="list-style-type: none"> <li>• national or sectoral tourism industry policy development needs</li> <li>• development of 'whole of industry' systems and processes</li> <li>• development and implementation of national or sectoral skills development programs</li> <li>• development and implementation of sectoral industry quality programs</li> <li>• development of industry or sectoral programs which address economic performance, improved efficiency and increased productivity.</li> </ul>

	Category 1 Innovative tourism projects	Category 2 Integrated tourism development projects	Category 3 National or sectoral tourism initiatives
	<p>existing infrastructure</p> <ul style="list-style-type: none"> <li>enhancing the quality of visitor experiences by developing and/or implementing innovative approaches to visitor services/facilities</li> <li>any other innovative project that has the potential to increase tourism</li> </ul>		

### Indigenous Heritage Program

Australian Government support will help identify, protect and share Australia's Indigenous heritage.

The Indigenous Heritage Programme provides Indigenous organisations or not-for-profit bodies with grants for projects up to \$100,000 (GST inclusive). Individual Indigenous applicants are generally eligible for funding up to \$5,000 (GST inclusive).

To be eligible, a project must relate to one or more of the following five activities:

- Conservation of a place or places of Indigenous heritage significance.
- Identification of Indigenous place(s), and/or the Indigenous heritage values of a place or places, for heritage protection, heritage listing or conservation planning.
- Heritage Planning, including projects which will develop plans to assist with the identification, conservation and/or promotion of the Indigenous heritage values of a place or places.
- Sharing Australia's Indigenous Heritage, including projects that interpret or explain a significant Indigenous heritage place or places, promote the knowledge and understanding of Indigenous heritage, or facilitate the active teaching of traditional knowledge and understanding of customary responsibilities (where appropriate) to future generations.
- Construction of Keeping Places: A maximum of \$30 000 may be provided for small-scale keeping places to house remains and objects that require restricted access, where exceptional circumstances can be demonstrated.

The 2012 application round for the Indigenous Heritage Programme is now closed. This annual funding round should be considered for 2013-14, with prospective applicants encouraged look at the website for news of the new grant round.

For more information:

[www.environment.gov.au/heritage/programs/ihp](http://www.environment.gov.au/heritage/programs/ihp)

Freecall: 1800 982 280

Email: [ihp\\_grants@environment.gov.au](mailto:ihp_grants@environment.gov.au)

## **Foundation for Rural and Regional Renewal (FRRR)**

The Foundation for Rural and Regional Renewal (FRRR) is Australia's only national foundation dedicated to the needs of rural and regional Australia. The FRRR was established through the support of the Sidney Myer Fund (\$1 million) and the Australian Government through the Department of Infrastructure, Transport, Regional Development and Local Government.

The FRRR is a philanthropic foundation, with an independent board, to help provide a viable social and economic future for Australia rural and regional communities. It aims to encourage innovative collaboration between business, community and government in philanthropic endeavours that will boost the economic and social well-being of regional Australia.

Donations to the Foundation are tax deductible. The FRRR also has key funding partnerships with The Pratt Foundation, ANZ, the Gardiner Foundation, Bendigo Bank's Community Enterprise Foundation and Rural Education Programme Founding Donors, Sarah & Baillieu Myer, Tim & Gina Fairfax, John & Janet Calvert-Jones and a large number of private trusts and foundations.

The Foundation sets out to achieve its objectives in a variety of ways including funding projects that have the potential to achieve significant results for people within rural and regional Australia.

The Foundation also administers a number of small grants programmes, which have developed to help rural and remote communities with small, well-targeted grants. This Programme is aimed at (but not limited to) communities with a population of 10,000 or less and provides grants up to \$5,000 or \$20,000. Although the current 2013 program is aimed at QLD, NSW and NT with limited funding to other parts of Australia possible. Grant round closes on May 24 2013.

The Foundation's 'Community Foundations Kit for Australian Communities 2nd Edition' provides useful tools for community leaders who want to create and develop a community foundation in their community. The Foundation can also provide funds for feasibility studies and the establishment of community foundations.

Further details about FRRR can be obtained from their website <http://www.frrr.org.au/>

## State Government

### Goldfields Esperance Development Commission

The Goldfields Esperance Development Commission offers funding through the Royalties for Regions Regional Grants Scheme and a Small Grants Scheme.

#### Royalties for Regions Goldfields Esperance Regional Grants Scheme

The Western Australian Government's Royalties for Regions initiative was designed to reinvest the equivalent of 25 per cent of the State's annual mining and resources royalties revenue into regional communities every year.

Unfortunately, no funding is currently available under the scheme. The Goldfields-Esperance Development Commission will provide an update for future Royalties for Regions funding rounds. To be included on their grants contact database, contact details can be sent to [grants@gedc.wa.gov.au](mailto:grants@gedc.wa.gov.au).

When operational, the primary objective of the scheme is to improve economic and community infrastructure and services in the Goldfields Esperance region through funding projects that will assist in attracting investment and increasing jobs and help to improve the quality of life in the region. It is not known whether a new Royalties for Regions based grants scheme will be available in the future.

The Royalties for Regions Goldfields Esperance Regional Grants Scheme was part of the Royalties for Regions program. Funding was provided to assist infrastructure, services and community projects including the provision of headworks and to help in the development of regional communities so they prosper as vibrant and interesting places in which to live.

- Increase capacity for local strategic planning and decision-making.
- Retain and build the benefits of regional communities.
- Promote relevant and accessible local services.
- Assist communities to plan for a sustainable economic and social future.
- Enable communities to expand social and economic opportunities.
- Assist regional communities to prosper through increased employment opportunities, business and industry development opportunities, and improved local services.

#### Organisations that were eligible for funding:

- Local governments
- Voluntary organisations
- Business groups
- Educational institutions
- Philanthropic foundations
- Community organisations
- State and Federal government agencies (may apply but projects deemed to be within their core business functions will not be supported)

#### Eligibility criteria:

- The project must demonstrate that it will result in a positive economic, social and/or environmental return (e.g. employment growth, population increase, improve education and information technology links, improve facilities) to the Goldfields Esperance region.
- The project must fit within the framework of the Goldfields Esperance Development Commission's Strategic Plan or other nominated regional planning documents.

- Applicants should demonstrate a high level of financial commitment to the project, either through sourcing other project funding and/or a direct financial contribution.
- The project should have the support of local government and/or key regional stakeholders.
- The project should promote partnerships (i.e. between community/business sector and government; or across various levels of government).
- The project should reflect a commitment to local decision-making and planning.
- The project should demonstrate its capacity for meeting ongoing operating and maintenance costs.
- The proponent should demonstrate that detailed project planning has been completed (including all approvals being in place or achievable in a short timeframe), the project is ready to proceed and that it can be completed in a timely manner. (Note: This criterion will not preclude applications for feasibility studies and business planning.)

Priority will be given to projects that fit within the framework of the Goldfields Esperance Development Commission's Strategic Plan and priorities.

Goldfields Esperance development Commission offer a grants service to support not-for-profit or community organisations in the development of their grant funding strategies. We can also provide on request, free-of-charge, project planning documents to assist in the development of grant applications. These include a Project Planning Guide, Project Planning Template, Risk Management Plan, Communications Plan and Action Plan.

For further information contact:

Shane Liddelow Phone:

+61 8 9083 2203

Email: shane.liddelow@gedc.wa.gov.au

### **Lotterywest - Cultural Heritage - Interpretation Grants**

Cultural Heritage - Interpretation Grants support projects which assist communities to understand and communicate the significance of their cultural heritage places and objects. It is envisaged that projects will help communities to maintain their sense of identity and heritage.

In providing these grants Lotterywest recognises and acknowledges the importance of the State's diverse communities and their role in the care of Western Australia's cultural heritage for the future. The Program will aim to:

- interpret and make clear the cultural heritage significance of objects/places;
- encourage organisations of all types to develop initiatives which engage communities in active and creative ways with their cultural heritage;
- enhance community identity and sense of place; and
- enhance social and economic development of communities.

For the purpose of these grants, 'place' can include a building or other structure, group of buildings or other structures, or a landscaped area.

Examples of the type of project that may be considered for funding include:

- the development of interpretation plans;
- the creation and installation of interpretive materials;
- the improvement of collection management practices;
- assistance with the employment of consultants for a project or the contracting of specialist services;

- the assessment of significance of moveable heritage objects in accordance with the Heritage Collections Council guidelines ('significance': A Guide to Assessing the Significance of Cultural Heritage Objects and Collections is available on [www.amol.org.au/craft/publications](http://www.amol.org.au/craft/publications));
- the development of on-going public education and information programs;
- improving the documentation, research and/or display environment(s) of the object(s) or place;
- training in relation to interpretative projects;
- publication regarding the heritage object(s)/place;
- public programs and the use of innovative strategies such as music and theatre; and
- interpretative signage which discovers and celebrates the community's heritage.

The total funding available for the program is limited. A maximum of \$15,000 for any one project has therefore been set. Projects that exceed this amount and are a joint initiative discussed with the Program Coordinator prior to an application being developed. The Annual round for 2013 will open on 14 May and close on 6 July

Contact Details:

Lotteries Commission Program Coordinator,  
Cultural Heritage - Interpretation  
Phone: (08) 9340 5270  
Toll Free: 1800 655 270  
Fax: (08) 9340 5274  
Email: [grants@lottery.wa.gov.au](mailto:grants@lottery.wa.gov.au)  
Website: [www.lotterywest.wa.gov.au](http://www.lotterywest.wa.gov.au)

### **Lotterywest, Community Histories Grants**

Lotterywest's Community Histories Grants aim to help communities to record and share their history, as a way of maintaining their sense of identity and heritage. A project may record the history of people living in a particular place or may focus on a community of interest. It could look at a local theme or the local experience of a broader event or movement.

The history of an organisation, activity, or event that made a significant contribution to, or had a significant impact on, the community will also be considered. Although we do not provide grants for family histories, a community history might incorporate a genealogical approach.

Grants can be considered towards the cost of research, writing, collation, and production. We can also support the cost of obtaining professional advice to guide the early stages of the project.

Proposals should generally result in a product that is accessible to the broad community. The history can be produced in a format appropriate to a project, for example, as a book, a CD-ROM, a leaflet or brochure, photographic record, or for oral histories, audio, or video tape.

Available funds: Usually a maximum of \$15,000 for any one project, though up to \$40,000 can be considered. Applications can be made at any time.

Lotteries Commission Program Coordinator, Community Histories Grants  
Phone: (08) 9340 5270  
Toll Free: 1800 655 270  
Fax: (08) 9340 5274  
Email: [grants@lottery.wa.gov.au](mailto:grants@lottery.wa.gov.au)  
Website: [www.lotterywest.wa.gov.au](http://www.lotterywest.wa.gov.au)

### **Lotterywest Conservation Grants**

Lotteries Commission Program Coordinator, Community Histories Grants

Phone: (08) 9340 5270  
Toll Free: 1800 655 270  
Fax: (08) 9340 5274  
Email: [grants@lottery.wa.gov.au](mailto:grants@lottery.wa.gov.au)  
Website: [www.lotterywest.wa.gov.au](http://www.lotterywest.wa.gov.au)

## ArtsWA

ArtsWA runs several grant programs, including an Indigenous Arts Program.

The Indigenous Arts program aims to promote a greater understanding of Indigenous culture amongst both Aboriginal peoples and the wider community. Support for traditional and contemporary Aboriginal and Torres Strait Islander arts and culture is a priority for the State of Western Australia.

The Indigenous Arts panel has adopted the program principles developed by the Australia Council's Aboriginal and Torres Strait Islander Arts Board. These principles fall within five key areas: Respect, Authority, Rights, Responsibilities and Diversity. The panel is comprised of Indigenous artists and representatives from around Western Australia who assess applications from Aboriginal and Torres Strait Islander artists, groups and organisations.

Applications are invited across all artforms, excluding film, television and radio.

Indigenous Arts applications are invited in the following funding categories:

- Project Development
- Distribution;
- Annual or Multi-Year Program; and
- Creative Development Fellowships.

The program supports applications that:

- demonstrate artistic merit and innovation and encourage creativity;
- encourage the expression of spirituality, integrity and authority of Aboriginal and Torres Strait Islanders through the arts;
- provide a direct benefit to Indigenous artists;
- utilise regional resources, especially Indigenous organisations;
- demonstrate long-term benefits that promote cultural maintenance and skills development of Indigenous arts in Western Australia;
- acknowledge and respect the rights of Indigenous communities in determining cultural priorities;
- ensure that cultural integrity is observed and maintained in all areas of the arts, arts practice and arts advocacy;
- support the needs and aspirations of Indigenous peoples through the arts;
- encourage and support exchanges with other Indigenous peoples of Australia and the world; and
- demonstrate sound financial and project management.

Application must be discussed with the relevant Indigenous Arts Project Officer prior to application.

Further information and assistance:

ArtsWA  
PO Box 8349  
Perth Business Centre  
PERTH WA 6849

08 9224 7310 or Freecall 1800 199 090; Web: <http://www.artswa.wa.gov.au/ArtsWAGrants.asp>

## Country ARTS WA

Country Arts WA is one of a number of organisations providing funding for a wide range of arts projects and programs in regional Western Australia.

Country CAPS is designed to assist community organisations and groups in country areas to take an active role in the development of arts activity in their own community. Projects that offer opportunities for creative expression, skills development and broad community participation are encouraged. All artforms are eligible, including visual arts, theatre, dance, creative writing, music, multimedia and film. Funding is to a maximum of \$2000. Country CAPS cannot fund the entire cost of the project. Applicants are required to contribute at least 25% in-kind or cash.

Further information and assistance:

Catherine Green  
Regional Arts Development Manager  
PO Box 7012  
Cloisters Square  
PERTH WA 6850  
or  
Level 1, King Street Arts Centre  
357 Murray Street  
PERTH WA 6000  
Tel: (08) 92006200 Fax: (08) 92006201  
Free call: 1800 811 883  
Email: [info@countryartswa.asn.au](mailto:info@countryartswa.asn.au)  
Website: [www.countryartswa.asn.au](http://www.countryartswa.asn.au)

## CATALYST Community Arts Fund

Agency: Community Arts Network Western Australia Ltd

### Overview

Community Arts Network WA (CAN WA) manages this fund on behalf of the State of Western Australia through the Department of Culture and the Arts.

The fund supports projects that:

- facilitate and support Western Australian community-determined arts and culture activities that express local culture and identity
- promote the values of community empowerment, social inclusion, respect for diversity and self-determination.

### Who Can Apply?

Funding is available in three categories:

#### Category A – INNOVATE

*Innovate* is for artists and communities interested in developing new and innovative community arts practices.

#### Category B – CREATE

*Create* is for projects that stretch and grow communities' skills using ideas, materials and art forms to express their local culture and identity.

#### Category C – DEVELOP

*Develop* is a professional development category for community artists and community cultural development workers for research and/or development in areas that have the potential to benefit community and the arts industry in the long term. Applicants can apply for up to \$15,000 in funding.

#### *Assistance Available*

Category A – Innovate: \$30,000 in March Round and \$30,000 in September Round

Category B – Create: \$75,000 in March Round and \$75,000 in September Round

Category C – Develop: \$30,000 in March Round and \$15,000 in September Round

CATALYST can fund the part of the project where people have the opportunity to participate, learn together and experience the arts. CATALYST can fund artists' fees and also some consumable materials, promotion and administration costs.

Closing dates for most recent rounds were/are:

- 30 March 2013 for projects commencing after 1 July
- 30 September 2013 for projects commencing after 1 January

For further information on selection criteria and application forms contact:

Funds & Operations Manager  
Community Arts Network, WA  
PO Box 7514  
CLOISTERS SQUARE WA 6850  
Tel: (08) 9226 2422 Fax: (08) 9226 2230  
Free call: 1800 681 021  
Email: [jason@canwa.com.au](mailto:jason@canwa.com.au) Website: [www.canwa.com.au](http://www.canwa.com.au)

### **Trailswest (Department of Sport and Recreation) – Lotterywest Funding**

Trailswest is program of the Department of Sport and Recreation established in October 1997 to oversee recreation trail development in Western Australia. Its mission is to develop an integrated network of recreation trails throughout WA for recreation, conservation, education and tourism, and to preserve trail/transport corridors for the future.

Trailswest provides an integrated consultative link between State and local government agencies and the community to develop a Statewide recreational trail network. Trailswest is the leading advocate in Western Australia for the following key recreation trail users:

- Mountain bikers
- Bush Walkers
- Horse riders.

The scope of interest of Trailswest does not extend to trails for motorised users.

Grants up to \$100,000 will be offered through the Trails Funding Program. Priority will be given to those projects which satisfy the selection criteria and to those organisations which demonstrate there is a matching component. Applications for projects up to the value of \$15,000 may be allocated up to 100% of the project cost with local contributions highly regarded.

Organisations applying for a grant in excess of \$15,000 are required to provide a matching contribution - on a \$1 for \$1 basis. This matching component may be:

- financial (a direct \$1 for \$1 contribution)

- in staff time (calculated at an hourly rate) and/or through voluntary contributions (with voluntary labour calculated at \$20/hr - and no more than 25% of the total project value)
- through sponsorship provided by other organisations.

Recipients of grants of less than \$15,000 will be provided with 100% of the grant at the commencement of the project (ie. upon completion and submission of Grant Agreement). Recipients of grants of \$15,000 and over will only receive 85 - 90% of the grant at the project commencement, the remaining 10 - 15% being retained until satisfactory completion of the project and submission of a final project evaluation report. The application form asks that future trails projects be described on the application form, together with an indication of funds to be sought in future years.

### Conditions/Criteria

Trailswest will determine trails projects suitable for grants from the Lotteries Commission according to an assessment based on a range of selection criteria. The selection criteria will generally cover the following broad areas:

- Project justification
- Planning process
- Community input and support
- Management planning and maintenance commitment
- Trail access and trail sharing opportunities
- Design considerations
- Connections
- Cultural, heritage and environmental considerations
- Trail user education
- Partnerships and volunteers.

Funding may be sought under the following categories only:

- Trail Construction (generally gravel, crushed limestone or natural earth)
- Upgrade of existing trails
- Trail Promotion and Marketing
- Trail Planning (feasibility, consultant work)

*Trail Maintenance is not eligible for funding under this program.*

The following examples of trails projects may be considered for grants:

- Proposals that demonstrate inclusion in local, regional or state trail plans or in a local government recreation plan.
- The conversion of disused railways into multiuse recreational trails.
- Trail construction and development for non-motorised uses, such as walking, hiking, mountain biking, canoeing and horse riding.
- Trails catering for the disabled.
- Preparation of individual, local and regional plans.
- Interpretive signposting.
- Signposting for distances and direction, general information (trailhead signs), trail rules and trail etiquette, traffic safety and road crossings.
- Publicity brochures, trail guides and maps.
- Hosting of special trail events (e.g. trail openings) and general promotional activities.

- Other worthwhile projects.

Grants will not be available for:

- Construction of trails for motorised uses such as 4WD or ORV uses.
- Property acquisition.
- Payment for goods or services purchased prior to a grant being approved.
- Dual use paths, cycle ways or footpaths in urban areas with bitumen or concrete surfaces. Alternate funding is available from other departments and local government for such projects.

Application forms and funding guidelines are available online at <http://www.dsr.wa.gov.au/programs/trailswest/funding.asp> on CD-Rom or as hardcopies.

Further Information from Trailswest:

Tel: (08) 9387 9700.

E-mail: [trails@dsr.wa.gov.au](mailto:trails@dsr.wa.gov.au)

Website: <http://www.dsr.wa.gov.au/programs/trailswest/funding.asp>

### **Regional Bicycle Network Local Government Grants Program**

The Program provides funding assistance to local government and community groups to assist in planning, development and promotion of shared-use pathways and cycling facilities in regional Western Australia.

The Program's primary aims are to:

- Encourage the integrated planning of shared-use paths and on-road bike lanes.
- Develop an integrated network of shared use paths and on road bike lanes.
- Provide safe access to schools, sport, recreation and community facilities.
- Improve the safety of cyclists, pedestrians and other path users.

Only local governments in regional WA can apply for funding. This is because they are best situated to determine the needs of local communities and to operate and maintain the facilities on a long-term basis.

There appears no maximum grant amount (according to the Application Guidelines) though it is uncommon for grants larger than \$50,000 to be awarded, which is usually provided on a dollar-for-dollar basis. Funding assistance will be available for the following project types:

- 1) Planning
- 2) Infrastructure and facilities
- 3) Promotion or Community Education.

Further Information

Project Officer Regional Bicycle Network  
Department for Planning and Infrastructure

Tel: (08) 9216 8540

Fax: (08) 9216 8497

Email: [cycling@dpi.wa.gov.au](mailto:cycling@dpi.wa.gov.au)

## Other Funding Opportunities

### Shire Council Contributions

Many of the grant programs available for trail projects require matching contributions, and it is recommended that Ravensthorpe Shire Council make an annual budget allocation for the trail initiatives set out in this Trails Master Plan. This could be through the Ravensthorpe Future Fund as a way of leveraging funds from grant bodies mentioned above. This remarkable co-contribution opportunity could achieve the implementation of trails creating direct benefits to the community through their development and on-going use.

### Corporate Sponsors

Sponsorship is big business – and very competitive. Two main options exist: either negotiate with local corporate entities which have a geographical and social connection with the area or go after the 'big' players for big projects. Many large companies have formalised sponsorship programs.

Elsewhere in Australia, funding for trail development has been received from a number of major (and minor local) companies.

- Alcoa has been a major contributor to Western Australia's two premier long distance tracks – the Bibbulmun Track (walk) and the Munda Biddi Trail (mountain bike).
- BHP Billiton provided over \$200,000 for the Coast to Crater Rail Trail in western Victoria to help construction.
- GlaskoSmithKline Australia has donated \$10,000 to the development of the Warmambool to Port Fairy rail trail project to encourage employees to combine their physical exercise with commuting to work. GSK has stated "We are proud to contribute to the establishment of the Port Fairy rail trail through our Community Partnerships Program. We see this project as being of benefit not only to our own employees, but also to the local community as a whole".

Significant sums can be gained if benefits can be proven. Any company with an operation within the region would appear to be a potential sponsor.

Companies are looking to be good local citizens and being associated with a positive asset such as a trail can be good for business. Companies should be approached with the message that such a project will bring a number of benefits to the region. Any approaches to corporate sponsors should focus on a main message that trails and the company products provide an alliance of healthy sustainable living and healthy sustainable products (if such a link exists).

Corporate entities are looking to make community commitments in a number of ways other than direct funding. The Macquarie Bank Foundation looks to supply time and expertise as well as funding. Many other banks have both a competitive grants program and a volunteer scheme that provides paid volunteer leave to every employee. Organisations such as the ANZ and National Banks also look for community development options for their staff e.g. corporate team building days are held on a trail.

What is important in dealing with potential corporate sponsors is to have:

- a clear trail development plan (the next stage of work should the trail proponent determine to proceed);
- a well-developed message;
- clear pointers as to what and where their engagement might be; and
- a clear indication of how they might benefit from their involvement.

## **Volunteers**

Volunteers are often the last thought-of resource but are often the most effective. Many trails are only built – and then kept alive – by volunteer input. The way forward is to either establish a specific local 'Trail Volunteers' or 'Friends of...' group, or tap into existing community organisations such as service clubs, progress associations, schools, scouts etc. There is also a growing network of trail advocates whose experience is extremely worthwhile. Concerns have been expressed in a number of forums (including popular media) about getting volunteers in a time when people have very busy lifestyles. This is acknowledged, however the Bibbulmun Track in Western Australia provides an encouraging lesson. Some 780 kilometres of the Track (total length of 962 kilometres) is maintained by volunteers five years after opening.

Volunteer labour can also be used in innovative ways to benefit a number of community sectors. One rail trail in Victoria needed bridge construction and put out a public tender for the work. The tender was won by the local branch of the Country Fire Authority, which needed a new fire engine. Labour in bridge construction was "swapped" for a new fire engine.

## **Conservation Volunteers Australia (CVA)**

The Trust provides small crews of volunteers, with a supervisor, to undertake environmental activities. Teams of between five and eight people work for one to two weeks. An administration fee is imposed by CVA. Materials, tools and technical supervision need to be provided by the host agency. CVA have been involved in trails project elsewhere in Australia.

## **Prison crews**

Crews of minimum security inmates have worked extensively in trail construction in Western Australia in the last ten years. This has proven a hugely beneficial program - to host agencies, to the Ministry of Justice and to the inmates themselves. A prison officer and transport is usually provided, but materials, tools, and technical supervision are required. In addition the Ministry may require host agencies to cover the Ministry's costs (staff etc).

## **PART 2**

### **Trail Master Plan for The Shire of Ravensthorpe**

#### **Incorporating Trail Development Plans for Five Priority Projects**

## SECTION 1: COMMUNITY CONSULTATION

### Discussion with Stacey Newman – Development Officer Fitzgerald Coast Tourism Association

At the commencement of the project in November 2012 a discussion was held with Stacey Newman regarding the project scope and delivery, the following matters were discussed:

- It was confirmed that the plan would include 3-5 detailed priority trail development plans
- Trails in Fitzgerald River National Park would be outside the scope of this report, although they would be taken into consideration, particularly as the Shire have an "enclave reserve" at Hamersley Inlet
- Local drive trails should be considered if they fit logically and could be included as adjunct trails
- Project timing, and community meetings and input

### Community Meeting 1 – Hopetoun Tuesday January 8 2013

A community meeting to discuss the trails master plan project was advertised, with the community invited to participate and contribute to the project. This first (of two) meeting was held on the morning of Tuesday January 8 at the Hopetoun Community Resource Centre. Community interest and turnout was remarkable, with 26 people attending; including 3 Shire councillors (including the Shire President) and the CEO, members of community groups, NGO's and the broader community. This turnout and the input was an indicator of the deeply held interest in natural and cultural heritage across the community and it was noted as a high point in community interest in trails projects.

The following matters were highlighted and discussed at the meeting:

- Introductions of the attendees and the two Trail Master Plan consultants
- The trail master planning process, and the scope of this planning project
- Target markets. For who? Locals and visitors? Walkers, riders, paddlers?
- Resources as attractions for trails, the enormous set of attractions across the large and complex Shire landscape, the major attractor – Fitzgerald River National Park
- Current trails: eg Rail Heritage Trail, National Park trails, Ravensthorpe Heritage trails, Rat Run, etc
- Possible trails: Canoe/kayak, bike trails, additions to current trails, new trails
- The trend for trails in user preferences and design for lengths and interpretation subjects
- Trail concepts and constraints, what makes a good trail
- In-town heritage trail sites. Issue of signs outside private residences. Need for permission.
- Information provision for the trails, Historical Society, Shire and other community members
- Next steps: trail prioritisation, recommendations and next meeting to present and discuss priorities



*Meeting 1, introducing the master planning process*

Other people and organisations were consulted outside the meeting, including Peter Masters, Mike Shephard and Deon Utber of the Department of Environment and Conservation, Pascoe Durtanovich and Matthew Hunt of the Shire of Ravensthorpe, Chris Thompson at Department of Sport and Recreation, and Ann Williams for help with information provision.

### Community Meeting 2 – Hopetoun Tuesday March 5 2013

Community meeting 2 was held (at the same venue) to present the recommended priority trails and discuss their merit, routes, interpretation subjects, and implementation. The pros and cons of the existing "end to end" Railway Heritage trail was discussed in some detail, including its considerable difficulties of missing sections, efficient visitor access, and maintenance. The meeting brought out thoughts on user groups and desires, interpretation methods, the move of the Ravensthorpe visitor centre, and how the priority trails relate to the railway Heritage Trail. A smaller core group attended this meeting, although less in number the contribution and interest was significant and appreciated.



*Meeting 2, discussing the recommended priorities*

## SECTION 2: EXISTING, POTENTIAL AND PRIORITY TRAILS

### **Existing Trail Supply Analysis**

In the preparation of a Trails Master Plan it is customary to analyse the extent of the existing supply of trails within the area at issue. In the Shire of Ravensthorpe, several formal and some informal trails exist.

To determine what 'trails' are to be included, information from a number of sources is used:

- Information supplied by various stakeholders;
- Information brochures, trail maps and books;
- Trails observed during field work;
- Information provided by community groups such as the Ravensthorpe Hopetoun Historical Society
- Information from members of the community via community meetings; and
- Input from Fitzgerald Coast Tourism, Shire and DEC staff.

Only trails that are regarded as being 'recognised' are included in the list of existing trails. 'Recognised' means that the trail has some or all of the following characteristics:

- Recognised by the land manager (eg. Shire of Ravensthorpe, Department of Environment and Conservation);
- Signposting (trail directional markers; trailhead signage; interpretive signage); and
- Mapping (such as a map contained within a trail brochure).

As outlined in Part I Section I *Context Setting and Background – Existing Trails and Visitor Facilities*; visitor facilities in the Shire of Ravensthorpe are many and varied. The community has a long history of strong active groups and individuals that have developed several trails over many years, including:

- The Hopetoun to Ravensthorpe Railway Heritage Walk Trail
- The Cattlin Creek Heritage Trail
- Ravensthorpe Range Scenic 4 WD Trail
- Ravensthorpe WA Mt Short Scenic Drive
- Ravensthorpe WA Mt Madden Scenic Drive
- Ravensthorpe WA Ethel Daw Scenic Drive
- Farm Gate Art Project Scenic Drive
- Fitzgerald River National Park Information and Recreation Guide (includes directions to Park trails)

The Shire of Ravensthorpe is active in supporting and promoting visitors. It lists the following Paths, Trails and Tracks on its website:

- The Hopetoun – Ravensthorpe Railway Heritage Trail
- Ravensthorpe Range tracks
- Hamersley Drive Heritage Scenic Trail
- Ethel Daw, Mt Madden, and Mt Short Scenic Drives
- Cattlin Creek Heritage Trail
- Wildflower Self Drive Tour

The Hopetoun – Ravensthorpe Railway Heritage Trail is the most prominent trail in the Shire, it has a series of four DL fold out brochures dividing its length as: The Hopetoun Trailhead Loop, Kundip to Lee Creek, Desmond to Ravensthorpe, Desmond to Kundip, and Desmond to Ravensthorpe.

The other acknowledged trails have basic A4 folded brochures with maps and interpretive information; they are available through the Ravensthorpe Visitor Centre, and some at the front desk of the Shire of Ravensthorpe.

The annual Ravensthorpe Wildflower show promotes trails for wildflowers during its September show, in some cases these are offered as a guided experience.

The Ravensthorpe Enduro motorcycle club, for an annual event known as the "Rat Run", uses many of the tracks that crisscross Ravensthorpe Range. While the Rat Run is a motorised use of trails, it should be included here as a known and celebrated use of a "trail". As well as the fact that it has implications for other users of the same and nearby trails.

The Ravensthorpe Community are one of the most progressive when it comes to providing access and interpretation of its immense natural and historic attractions, as evidenced by the strong list of trails, the effort in their establishment, and dedication to their use.

### Potential Trails

In the course of investigating potential trails in the Shire of Ravensthorpe an inspection was made of the potential for trails including in-town Heritage Walk Trails, and in Shire reserves and natural areas. As described elsewhere, Fitzgerald River National Park was not included in this review.

The following areas were visited:

- Ravensthorpe Range north – Mt McMahon and Carlingup
- Ravensthorpe Range south – Mt Desmond and Mt Chester
- Kundip area
- Cocanarup
- Culham Inlet
- Railway Heritage trial sections
- Dunns Swamp
- Munglinup area
- Oldfield Estuary
- Starvation and Masons Bays
- The beaches east of Hopetoun
- Hopetoun
- Ravensthorpe
- Mt Cattlin
- East Mt Barren and Barrens Beach

Given the size of the Shire and the complexity of its landforms, access to a long coastline, and that a major National Park is included, many varied opportunities exist for potential trails across the Shire, for walkers, hikers, bike riders, horse riders, motor cyclists, 4x4 drivers and for car drivers. The scope of this Master Plan is limited to non-motorised trails, as such the potential trails considered are limited to walking, bicycle, horse riding and paddling (canoe). Although, if drive trails are seen as an adjunct to town walk trails because of distance and able to be investigated as part of assessing a walk trail; they could be considered.

On extensive natural lands common throughout the large shire, a myriad of tracks and firebreaks occur, many of which are used informally and semi-formally by walkers and bike riders, and occasionally by horse riders, as well as many by motor and quad bike riders and 4x4 enthusiasts. These were looked at and discussed as part of the community meeting and while many offer excellent trail opportunities, the immediate priorities became clear given the brief guiding the master planning project (see next section *Priority Trails*).

Cocanarup in the Phillips River Valley is well known for its mix of cultural and natural history, including its early conflicts and its importance as intact old salmon gum woodland habitat for many native animals, including threatened birds and mammals. The area lends itself perfectly to a walk trail through this spectacular environment that is refuge to nesting Carnaby's cockatoo, carpet python, wambenger and numbat. The Human history could be told of the Noongar people who lived on the rich resources the woodland provided, and the early European pioneers, of which wells, lime burning pits and timber cutting remain evident.

### Canoe Trails

The potential for canoe or paddling trails was investigated and it was found that a very unique opportunity exists for a quite remarkable set of canoe trails. The lower reaches of the Hamersley, Phillips, Jerdacuttup and Oldfield Rivers and the upper parts of the estuaries they join, and Dunns Swamp, are outstanding places to paddle a canoe to soak in the nature and enjoy a serene experience. Ravensthorpe Shire is very fortunate to have such an amazing group of waterways that lend themselves so well to a canoe trail network. The Hamersley and Phillips Rivers are in Fitzgerald River National Park, and in principle support for these trails was discussed with DEC. Indeed, the Fitzgerald River National Park Management Plan supports such recreational activities. The enormity of the opportunity of the canoe trails is beyond the scope of including development plans for them in this Master Plan. However their unique potential was recognised during this planning project and a solution to their development arrived at (see next section *Priority Trails*). During the fieldwork for this master plan several vehicles carrying canoes and kayaks were observed, making it quite apparent that this type of activity is growing in popularity, and catering for it with a set of high quality canoe trail will be well received.



*The Phillips River above Culham Inlet, where Phillips River Shire Reserve allows access to the river and makes an ideal launching site for canoes and kayaks*

## Priority Trails

In assessing the range of opportunities for trail development within the Shire of Ravensthorpe, account was taken of projects likely to provide the greatest benefit to the Shire, according to the following considerations:

- Had greatest benefit and interest to the local people
- Would be most likely to contribute to the principal goal of attracting visitors and keeping them longer in the region— especially at times other than the peak tourist season during Spring when the wildflowers are their best; and in summer, Easter and school holidays for the coastal destinations, and
- Built on existing infrastructure and input of the community
- Invested in showcasing the Shire's world renowned natural assets, and its remarkable human history
- Could be achieved as part of planned works or matched with resources allocated for planned works.

These factors also influence the order of priority for the trail projects presented, with the final dot point bringing the most bearing given the support planned works could provide, and that the trails would be considered as inclusive - or an obvious adjunct to the works

As described in the previous section, the potential for an outstanding set of canoe trails was recognised during this planning project, although creating their development plans is a significant project in itself. Accordingly, an application to the Trails Funding Program of the Department of Sport and Recreation and Lotterywest was developed by the Shire to seek the resources for the canoe trail development plan set. In this way it is a priority, albeit that it has not able to be done as part of this Master Plan.

Information provided by the local community (including the Shire of Ravensthorpe Staff and Councillors) was of special importance. It is apparent that the towns of Ravensthorpe and Hopetoun, and the region in general has an outstanding abundance of history, and the range of historical sites, people and places (whether still existent or not), and that both towns have redevelopment plans in place with works planned for commencement in the near future, provides clear direction that in-town Heritage Trails are likely to be priority projects.

The beautiful and complex landscape with its many landforms and diverse wildflowers, the world famous Fitzgerald River National Park, the extensive and often rugged coastline, and Ravensthorpe Range are without doubt a stunning set of attractions that visitors come to see. Based on this fact alone, it is obvious that walk trails encompassing the unique nature would be well utilised by visitors and local people alike, indeed it would be expected as a key feature in a Biosphere Reserve. Consequently areas and parts of the existing Railway Heritage Trail between Ravensthorpe and Hopetoun were examined for their ability to provide suitable conditions for a nature-based walk trail.

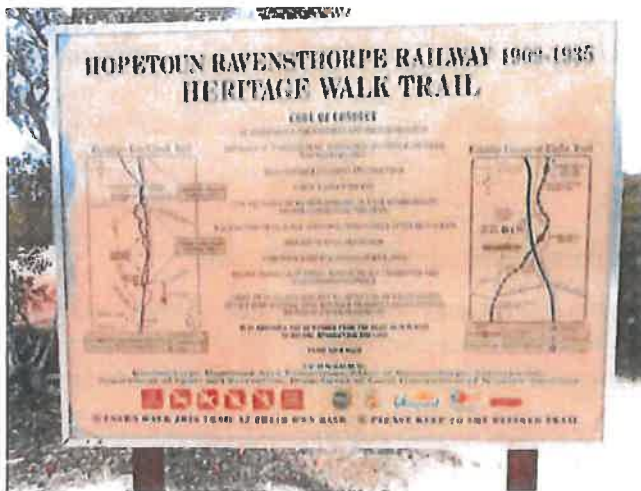


*The Interpretation panel at Culham Inlet. With its view across the estuary to East Mt Barren in Fitzgerald River National Park*

The other dominating factor providing clues to potential trails is the wealth of history in area. The Shire features mining of many minerals and metals, agricultural pursuits, indigenous sites, railway history, old (ghost) towns, fishing, exploration history, and a host of other interesting stories and places.

Given that the brief and budget for this project allowed the selection of 3 -5 priority trails, and in line with the dot points above, the recommended list of priority projects was narrowed down to the following (in order of preference):

1. An in-town heritage walk in Hopetoun.
2. A walk trail encompassing history and nature centred on Kundip
3. An in-town heritage walk in Ravensthorpe
4. A walk trail encompassing nature and history centred on Mt Desmond
5. A short heritage drive trail at Ravensthorpe (as an adjunct to 2 - the heritage walk)



*The Hopetoun to Ravensthorpe Railway Heritage Walk Trail. A remarkable historical asset, greatly prized by the community, that winds through some beautiful landforms and vegetation communities. It features strongly in the Kundip Loop and Mt Desmond Circuit trails.*

## SECTION 3: RECOMMENDED INTERPRETIVE ELEMENTS, SHIRE OF RAVENSTHORPE TRAILS

Trails such as those recommended for the Shire of Ravensthorpe exist primarily for the stories/information that can be shared with visitors. While historical features, heritage artefacts, gorgeous landscapes and intriguing natural features can be interesting in their own right it is the stories behind them that bring richness to the experience. Interpretive information is therefore the key element of these projects – without it these trails would not be worth developing – and here the study area is fortunate, for there are ample stories to be told!

The opportunity is self-evident: tell these stories well and many trail users will reap a rich and rewarding experience. What's more, they will talk to their friends and relatives about their experience here at Ravensthorpe and Hopetoun – and so trail usage will grow, to the benefit of local businesses in the towns. Telling these stories well also ensures that important natural and cultural history is not lost; it aids in enhancing cultural and environmental awareness, and it builds community pride. The benefits of quality interpretation are therefore many and substantial.

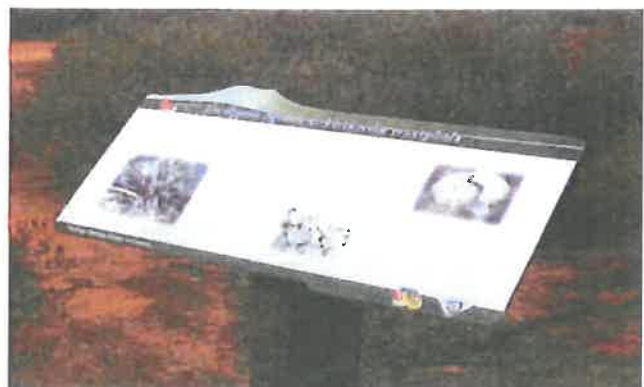
But how best to deliver these stories and their associated benefits? Three delivery methods are commonly used on trails such as this:

- On-site interpretive signage
- Detailed trail maps/guides or guide books
- Some kind of audio interpretation: either compact disks or narrow-cast FM radio

The fourth "common" means of delivering interpretive information – via trained guides – is clearly not suitable in circumstances such as these. Of the three common methods set out above it is clear from experience on similar trails elsewhere that quality interpretive signage offers the most reliable and cost-effective means of delivering stories to visitors.

Trail maps/ guides can offer sound interpretive potential, but they should work as an adjunct to signage rather than a stand-alone method of delivery as not everyone will wish to purchase a copy. Further, with smaller-scale walk trails such as these, it can be argued that a dedicated trail guide is not warranted. Similarly, audio interpretation is somewhat "over the top" for projects of this scale.

Installing signage in outdoor and bush-based locations can be a risky exercise. Vandalism and harsh weather conditions can take a toll on signs of many types, and can rapidly reduce the effectiveness and value of what are often substantial capital investments.



*Interpretive panels are usually etched anodised aluminium (left) or digital colour (above). In this case, aluminium panels are recommended, due to their longer life in harsh conditions*

In order to circumvent this unhappy outcome it is proposed that architectural-grade etched anodised aluminium panels be used in these projects. In countless similar situations across Australia these panels have proven themselves to be as close to indestructible as is possible. They withstand attempts to scratch or damage the surface remarkably well, and do not fade over time (as is the case with full-colour signage). They are also stylish and attractive to the visitor, and are eminently well suited to the subject matter of interpretation on these trails. Signs of this type have been installed along many trails in rural and remote Western Australia, and have proven their worth in tough local conditions.

### Proposed presentation styles

The trails proposed for the Shire of Ravensthorpe fall into two groups – there are two in-town heritage walks and there are two out-of-town loops that focus on both natural history and elements of cultural heritage (the former railway line). Therefore it is felt appropriate that two linked but slightly different styles of presentation should be used, with the intent being to create a unified "suite" across the whole Shire.

Both styles utilise creative rusty steel "pedestals" to display the etched aluminium signage. While this is more expensive than using a simple steel post with an angle bracket, it is much more appealing aesthetically and creates a situation in which the pedestal becomes part of the overall interpretive story – rather than simply being a necessary support structure. Traditional "signs on sticks" are no longer seen to be appealing to visitors, and are considered "old hat" by many (including key funding agencies such as Lotteries West).

For the two in-town heritage walks a unique "book style" of presentation is recommended – this is best seen in the image below.



This involves the use of two rusty steel "leaves" fixed together to create the pedestal. These would have either the site name or perhaps a relevant image laser cut into the sides (as shown in the image) – this is highlighted by the installation of a thin sheet of galvanised steel between the two "leaves". Such a pedestal would be amply strong as each component would be cut from 8 mm mild steel plate, and the vertical blade of the pedestal would extend into a concrete filled hole below ground.

Each "leaf" would carry a separate etched aluminium panel of approximately 300 x 350/400 mm size, with the left hand side most likely displaying images / photograph(s) and the right carrying the text component of the story. This would create a very familiar book-like presentation, which should be highly appealing to visitors and locals alike.

On the two nature-based walk trails (Kundip and Desmond) a variation of this style of pedestal / panel combination is proposed, as shown below.



This utilises the same two-part rusty steel pedestal with the galvanised sheet sandwiched in the middle to highlight text or images cut into the sides – but in this case the top section is a single flat unit rather than the two tilted-in “book pages”. This would allow the use of a single etched panel of approximately 600 × 350 mm (“small” size in the interpretive tables) rather than the two smaller leaves proposed for the in-town trails. This results in a slightly lower unit cost, but more importantly gives a surface area that is better suited to the kind of content and design that will most likely be required for the topics to be interpreted on these trails.

Both of these interpretive concepts would be to our knowledge unique to the Ravensthorpe Shire, and both would stamp these projects as something beyond the ordinary. This is very important not only in terms of appealing to visitors, but also with regard to attracting grant funding. Many agencies are keenly aware of what is considered “current” and are always looking for projects that offer something different – and something that actually enhances the surrounds rather than just being another “boring” sign on a stick.

These two concepts would be used for both “small” and “large” panels as described in the tables of interpretive sites for each trail, with the actual structure simply being scaled up for the larger two-story sites.

### Trail brochures & background material

While signage would therefore form the front-line of interpretive delivery it is also important to note that a trail brochure is proposed in each case. This is important as it doubles as a marketing tool and a location finder (as it would contain a clear map of each trail). In due course as more trails are developed it would be worthwhile to combine these brochures into a single “Trails of the Ravensthorpe Shire” document, so that the logistics of getting this information into visitors hands can be better managed.

It is also worth noting that an allowance has been included in the cost tables to enable the extensive resources of the Ravensthorpe Hopetoun Historical Society to be utilised in providing research information and historic images for use on relevant panels. The Shire is very fortunate to have these resources available, and there is no doubt the panels produced as a result of integrating material from this source will be significantly richer than might otherwise be the case.

## SECTION 4: PROJECT 1 – THE HOPETOUN HERITAGE TRAIL

The Hopetoun Trail is a 3060-metre walk trail through town and via a spur east to the site of the old railway yards. It is the number one priority project for the Shire of Ravensthorpe Trail Master Plan as it could be implemented as a part of the soon to be commenced Hopetoun Redevelopment Project. This coinciding opportunity is the principle reason for this trail's number one priority, with which it could be resourced, or part funded and matching funds sought.

The route of the trail is designed in two parts: an anti-clockwise loop through the central section of Hopetoun townsite over 1060m, and an out and back "spur" walk 1000m east alongside the historic railway formation. The Trail is a relatively short although well-interpreted walk around the central and oldest part of the town, passing some of the most historic buildings and locations; as well it extends east just in from the beach to cover the compelling history associated with the historic railway line and the enterprises it supported.

*Hopetoun Heritage Trail Map. Numbers relate to the Interpretation Stories and Sites Table*



From the trailhead at the entrance to McCulloch Park at the corner of Veal St and The Esplanade (East), the Town Trail section crosses Veal St west, and heads north along Veal St, before turning west along Canning Boulevard, and then south onto Barnett St to The Esplanade (West), where it turns east back to and across Veal St, before heading north for 100m back to the trail-head. The railway "spur" heads east from the trailhead for 200m along The Esplanade before picking up the limestone path that runs alongside the old railway formation, where it continues for another 800m to the old Railway Yards.

Both trail sections include a mix of well constructed and maintained sealed and limestone paths, with the town loop along sealed paths, and the eastern section along sealed and limestone paths. The trail uses mostly existing paths, although some new path sections are recommended in the works list following. These include a 205m-

asphalt path to connect the trailhead with the limestone path on the railway spur, and upgrading 775m of existing narrow limestone path further east.



*The existing limestone path of the railway spur that will require upgrading*

A total of 16 stopping places or interpretive sites are recommended for inclusion on the walk trail, 9 on the town loop and 7 on the railway spur; not including the trailhead at McCulloch Park. A total of 26 interpretive panels are proposed for the trail, covering a wide variety of buildings, sites, places, people and stories from Hopetoun's past, and aspects of its local nature, on mostly single and some double panels (see subject detail in the interpretation table following).

*Trailhead site at McCulloch Park, and north up Veal St towards the Post and Telegraph Office*



A quite spectacular view across the groyne and sea where the old jetty stood is to be had from the fine vantage point opposite the hotel. This rise on the corner of the trail is sometimes accessed by vehicles and will need a section bollarded off to improve its amenity and safety and protect the interpretive panels.



*Site 8 opposite the hotel. An angled line of bollards will help protect this site and infrastructure*

## Interpreting the Hopetoun Heritage Trail

Hopetoun is an intriguing historic coastal village, for which a wonderful set of historic information has been thoroughly researched and listed for this project by Ann Williams and other members of the Ravensthorpe Hopetoun Historical Society. This invaluable information listed an extensive range of possible sites and stories around the town site. Given the nature of the information (and images) available, the most logical means of interpreting these places is via on-site signage.



*The old Metropolitan Hotel at site 2 in Veal St*

It is recommended that high-quality etched anodised aluminium panels be used, as described in Part 1, Section 3, and Part 2, Section 2 of this report, on rusty steel open book-style pedestals (the same as the Ravensthorpe Heritage Walk). These signs and their pedestals will be best equipped to deal with the demanding weather conditions to which they will be exposed, including salty air and harsh sunlight. They also withstand vandalism very well, and this will help reduce maintenance over the longer term.

Two different size panels are proposed for the trail interpretation, both based on the same shape (in addition to the two different sized panels for the trail-head). The larger trail panel is to be used at sites that have major stories, or which may have hosted a series of interesting buildings or businesses over the years. The smaller size is well suited to single story locations, which will most commonly be used.



*The Railway Ash Pits and turntable at the eastern end of the spur*

The list of sites in the table below gives a strong impression that this is to some degree a "building focussed" project, particularly in the town loop section. This in fact will not be entirely true, as it is intended that several of these panels focus on the human and community oriented aspects of the locations, as well it has the railway line history. Visitors quickly become bored with dry facts about structures or businesses, but thankfully the extensive background

material available to this project will ensure a lively and interesting set of stories.

The table below includes two large panels to be installed at the trailhead at the entrance to McCulloch Park. One of these will be a map panel with general trail information, and the other a large colour panel interpreting the railway line and the local flora and fauna to replace the existing sign at the Goods Shed. This should carry clear mapping of the trail, and provide sufficient information to enable visitors to understand the dimensions of the experience on offer.

## INTERPRETATION SITES / STORIES FOR INCLUSION

The table below lists the sites to be interpreted on the Hopetoun Heritage Trail in sequence starting from the proposed trail-head on Veal St, just south of The Esplanade. Corner. The Town Loop is set out to be walked in a counter-clockwise direction, while the Railway Spur is obviously an out-and-back walk.

Reference numbers in the second column of the table relate to original background information supplied by the local Historical Society, and is for future uses only. Site numbers are reflected on the map of the trail provided in this report.

Site #	Ref #	Panel size	Site Description
TH	-	- 800 x 500 2 @ 1200 x 1200	Trail-head in pathway node nr north-west corner of McCulloch Park, Veal St;  Trail-head / map panel with trail information.  Large colour interpretive signage for former railway line history and local flora & fauna (replacing existing sign by Goods Shed).
TOWN LOOP			
1	7	600 x 350	Post & Telegraph Office 1901-1987.
2	5	900 x 400 (combined onto one larger panel)	Veal's Store 1901 – 1988. Rebuilt in 1988.
	6		Metropolitan Hotel 1903 – 1925.
3	8	600 x 350	Site of former Doctor's house from Ravensthorpe.
4	12	600 x 350	Hopetoun Hall 1949 - 2013. Brought from Kundip.
5	16	600 x 350	Reserve 7660. Government School Site 1907-1932.
6	20	900 x 400 (combined onto one larger panel)	Police Station and Gaol 1908 – 1913.
	19		Railway passenger carriage 1909-1935. Moved here after railway closed.
7	21	600 x 350	Peter the Fisherman Catholic Church 1975 – current. Include early church / travelling minister stories.
8	2	900 x 400 (combined onto one larger panel)	Hopetoun lighthouses . 1 on sand hill and 1 on ocean end of the jetty 1907 – unknown date.
	1		Hopetoun Jetty 1901 – 1937. Demolished 1983. 1984 Replaced with a breakwater/groyne.
	3	600 x 350	Port Hotel single-storey bar 1901 replaced 1967. Double storey 1907- current.
9	4	600 x 350	Veal's Warehouse 1902 – 1909. Now McCulloch Park.

RAILWAY SPUR			
A	22	600 x 350	Replica of Hopetoun Railway Station used as Bandstand c2000.
B	23	600 x 350	Camper's Kitchen 1949-1958. CWA 1958- current.
C	18	600 x 350	Two Veal houses circa 1900. Originally 3 houses.
D	24	600 x 350	Salmon Cannery 1948 – 1951.
E	25	600 x 350	Railway station yards. 1907-1935 between Buckie and Chapman Sts.
F	26	600 x 350	Railway Station 1907 – 1935.
G	27	600 x 350	Railway turntable 1908 – 1935.

## COST ESTIMATES – INTERPRETIVE PANELS / PEDESTALS, AND OTHER SIGNAGE

### Notes:

1. Costs in tables below are for hardware only – installation costs are included in the Works List;
2. All interpretive panels are recommended to be architectural-grade etched anodised aluminium, unless otherwise stated (for maximum longevity and vandal resistance);
3. Costs provided include research and writing text, sourcing and supplying images, graphic design work, sign and pedestal production, and supply to Hopetoun with all mounting hardware;
4. Where the supply of background material and historic images can be separated out it has been listed as a unique line-item in the table below (as it is presumed that these tasks will be undertaken by the Ravensthorpe Hopetoun Historical Society;
5. Interpretive panels are to be installed on creatively designed rusty steel "book-style pedestals" rather than on standard posts – this encourages people to engage with the signage and results in more people reading the text (in addition to enhancing the aesthetics of the streetscape!).

Sign / Item	Units	Unit Cost	Total Cost
Design and supply double-sided Trail-head promotional sign	1	1870	1870
Design and supply full-colour Trail-head sign, 900 x 500 mm	1	2880	2880
Design and supply two full colour interpretive signs @ 1200 x 1200 (to replace Rail Heritage sign beside "goods shed")	2	2730	5460
Write, design & supply small etched anodised interp panels (2 @ 300 x 350 per site, to be installed on a single "book style" pedestal)	14	1790	25060
Write, design & supply large etched anodised interp panels (2 @ 400 x 500 per site, to be installed on a single "book style" pedestal)	3	2380	7140

Historical research and supply of photos for panels (per story)	16	125	2000
Design & supply rusty steel "book style" pedestals for small panels	14	890	12460
Design & supply rusty steel "book style" pedestals for large panels	3	1230	3690
Design and supply trail markers (3 styles, 2 colours + spares)	26	50	1300
Design and supply "Trail End / 2 Mile Beach" signage	1	480	480
Research, write, design and supply double-sided A4 brochure/map	5000	Na	4650
Site visit by interpretation consultant to gather materials & information	Na	Na	4160
TOTAL (not inc GST)			71,150

## COST ESTIMATES – HARDWARE AND MATERIALS

### Notes:

1. Costs in tables below are for hardware supply only – installation costs are included in the Works List;
2. Estimates are at early 2013 prices, and are based on past experience (not on specific local quotes).

Sign / Item	Units	Unit Cost	Total Cost
Supply jarrah or treated pine posts for trail markers (100 x 100 square)	21	30	630
Supply rapid-set cement for all installation work (+/- 50 holes)	100	12	1200
Supply bollards for site opposite Port Hotel	20	35	700
Supply picnic table setting for railway turntable site	1	2400	2400
TOTAL (not inc GST)			4,930

## WORKS LIST – HOPETOUN HERITAGE TRAIL

### Notes:

1. All signs and interpretive panels are costed elsewhere – costs in tables below are for installation only;
2. All other specific hardware items (tables, seats, posts for trail markers etc) are costed in the Hardware table – costs below are for installation only;
3. Where complex construction tasks are involved (viz: steps, bridges etc) all costs are included in the table below;

Site or location	Description	Total Cost
Trail-head	Install large 2 post promotional sign (double-sided)	200
	Install trail-head panel on 2 posts	240
	Install 2 large colour interpretive panels on 3 posts	360
	Install trail marker (left) for Town Loop	100
	Install trail marker (right) for Railway Spur	100
	Remove old Rail Trail signage beside goods shed	240
TOWN LOOP		
West side of main street	Install trail marker (right turn)	100
Ditto, further north	Install trail marker (straight)	100
Interp Site #1	Install small interpretive panel	120
	Install large interpretive panel	180
North side of Clarke St	Install trail marker (straight)	100
Interp Site #2	Install small interpretive panel	120
Further north up main street	Install trail marker (straight)	100
Interp Site #3	Install small interpretive panel	120
Further north up main street	Install trail marker (straight)	100
Interp Site #4	Install small interpretive panel	120
Cnr of Canning Boulevard	Install trail marker (left turn)	100
Midway along block	Install trail marker (straight)	100
Cnr Barnett St (Site 5)	Install small interpretive panel	120

Site or location	Description	Total Cost
	Install trail marker (left turn)	100
60 m south down Barnett St	Install trail marker (straight)	100
Opposite West St (Site 6)	Install large interpretive panel	180
Cnr The Esplanade	Install trail marker (left turn)	100
Outside church (Site 7)	Install small interpretive panel	120
Near hotel	Install trail marker (straight)	100
Outside front of hotel	Install trail marker (straight)	100
Opposite hotel (Site 8)	Install bollards to limit vehicle access and protect panels	1200
	Install large interpretive panel	180
	Install small interpretive panel	120
Just north of Site 8	Install trail marker (straight)	100
Beside park (Site 9)	Install small interpretive panel	120
RAILWAY SPUR		
South side of The Esplanade	Construct 205 m new asphalt pathway @ 2 metres width	10,250
Site A	Install small interpretive panel	120
Site B	Install small interpretive panel	120
Further east on The Esplanade	Install trail marker (straight)	100
Near cnr Scott St (Site C)	Install small interpretive panel	120
	Install trail marker (right turn)	100
	Upgrade 775 metres limestone path to 2 m width	15,000
East on pathway	Install trail marker (straight)	100
East on pathway	Install trail marker (straight)	100
Old Cannery (Site D)	Install small interpretive panel	120
East on pathway	Install trail marker (straight)	100
Railway yards (Site E)	Install small interpretive panel	120

Site or location	Description	Total Cost
Railway station (Site F)	Install small interpretive panel	120
East on pathway	Install trail marker (straight)	100
Turntables (Site G)	Install small interpretive panel	120
Just east of turntable	Replace old table with new setting	240
	Install signage re "End of Trail" & "1.35 km to 2 Mile Beach"	140
TOTAL (not inc GST)		32,310

## TOTAL PROJECT COSTS – HOPETOUN HERITAGE TRAIL

### Notes:

1. All items were estimated at early 2013 rates, with a 5% per annum allowance added in the table below for time passing prior to construction;
2. The table below summarises all individual items set out above.

Description	Total Cost
Interpretive panels, panel pedestals, other signage, brochure	71,150
Supply of hardware and materials	4,930
Works list (including pathway construction / upgrading)	32,310
Site visit by trail planner(s) at commencement to mark exact locations etc	3,400
<b>Sub Total</b>	<b>111,790</b>
Project management costs / contingency allowance (20%)	22,360
Cost increase allowance – 1 year at 5%	6,710
<b>Project Total (not inc GST)</b>	<b>140,860</b>
<b>GST @ 10%</b>	<b>14,090</b>
<b>Project Total including GST</b>	<b>154,950</b>

## SECTION 5: PROJECT 2 – THE KUNDIP LOOP

The Kundip Loop is identified as a priority trail because it brings together the very elements that the area is famous for – the exceptional natural and cultural history, centred on an accessible, attractive, and well-known place – Kundip.

Kundip is a historic townsite with strong evidence remaining of civic arrangement and building ruins in a beautiful setting among woodlands of mallet and moort. It has the historic Hopetoun to Ravensthorpe Railway line running adjacent, with the old Kundip siding apparent. It has a mining history from the southern slopes of Ravensthorpe Range on its immediate east side, and it has a unique geological substrate related to the Barren Ranges that supports a diverse and peculiar flora of great natural history interest.

The Kundip Loop has been designed as a complete loop of 5000 metres, with two shorter loops of 1670 m and 3760 metres. The Rail Trail section is It is a dual use trail for both walkers and mountain bike users The trail is strongly interpreted with three major themes: The Hopetoun to Ravensthorpe railway line, the historic townsite and its mining heritage, and the remarkable nature of Kundip.



*The Kundip Loop. The red line the entire loop, and the yellow the shortcut for the two shorter loops*

The loop trail starts and finishes at the trail-head on the eastern edge of the old townsite near the Ravensthorpe - Hopetoun Rd. The trail heads north parallel to the Ravensthorpe – Hopetoun Rd for 220m past the edge of the long abandoned townsite, before crossing the road and heading east. The trail then takes a course for 150m through a creek and onto the Historic Hopetoun – Ravensthorpe Railway line. The trail traverses the railway formation for 2190m to Road Eleven; along this section the trail passes historic Kundip Siding before crossing the Ravensthorpe - Hopetoun Road at 1215m. Across on the west side of the road the short loop options heads north for 430m back to the trail-head, while the main trail loop continues along the railway formation through the complex bushland, some excavated cuttings and skirting around missing bridges south/south east to Road Eleven at 2585m from the start. From here the trail takes a right turn along Road Eleven for 110m before turning north (right) to go along the edge of the firebreak that protects Kundip for 1375m. This section has several interpretive stops explaining some of the natural marvels of the Kundip area, as well as what can be seen from high points. From here, which is also near the site of the Kundip cemetery, the trail swings east through mostly moort and mallet woodlands along old roads of Kundip townsite outskirts, the surfaces are badly eroded in several places and significant works will be needed to repair the damage and manage the water flow. At 590m from where the trail turned east the Kundip Townsite is reached, where the trail will require additional surface repair and drainage, and interpretation will feature the townsite history, the trail meanders for 340m through the old townsite before returning to the trail-head.



*Trail-head car park area, with existing toilet behind*

The trail head area is a natural parking area with a clearing and a central island of moort trees, it will need some work to fully define the parking area and clean up the access to the existing toilet. The area adjacent to the north behind the moort island will need some surface restoration to repair erosion and to bollard off the access to the north. These works will delineate and capture the essence of the trail-head and parking area among the beautiful moort woodland in the corner of the old townsite.

*Rail Trail section showing the need for vegetation clearing to form a 2 metre wide path*

A standard 2 metre cleared trail width is required for the Kundip Loop. This may at first appear excessive, however it is necessary to allow for a safe, enjoyable, user-friendly, walk/cycle dual use, and low-maintenance trail. The vegetation will quickly grow back to fill the gap, although this will be smaller branches rather than the large branches and trunks, making maintenance with a machine efficient and cost effective. Dieback disease hygiene is imperative during construction, and an important interpretive issue for trail use.

The historic railway line formation forms the eastern north-south trail link, extending for 2190m. This whole section will require upgrading, as well as the 150 metres of creekline west of its northern end. This will include vegetation clearing from the sides to provide the standard low-maintenance 2 metre width described in the last paragraph, surface reconstruction to provide a smooth walking and cycling path, clearing and step construction work around washed out bridges, and a bridge built to provide a feel for the original experience.





*The remains of a 12 metre wide bridge the site of a replacement.*

The replacement of one of the three bridges along the rail formation is recommended; although it is a significant task, it will add an appreciable feel to the trail experience.

The works list following also recommends the placement of a short 5m bridge at 2305 metres to span a somewhat small washout. This is not taking the place of an existing bridge, rather is over where a culvert allows water movement under the formation.

The short 110 metre Road Eleven section will require some surface grading and erosion control. The 1375 metres of trail beside the firebreak along the western flank will require a reasonable amount of work to establish the trail to the standard described above. The work is clearing and grading the existing track mainly along its centre, some vegetation clearing back along parts of the section particularly through a creek at 3055 metres, the grading off of some rocks, erosion repair, and the placement of water management drains across the trail.

*The trail south of the quartzite hill to the west of Kundip townsite. The trail surface is in reasonable condition in large parts, with surface treatment needed for the rocky area in the foreground, erosion control and vegetation ingress. Also evident is the "chained" vegetation of the firebreak on the right of the trail*



*Erosion on the trail surface leading into Kundip townsite from the west*

The return trail through the woodland east to the Kundip townsite will require significant erosion repair using brush. This brush material could be cut off the regrowth on the chained firebreak to the west. The brush is laid in the ruts requiring repair where the water flow is impeded and soil washed in covers the rut, severe erosion can be repaired this way – a method that takes time although works well. Further along through this route, which is part of the seeming maze of old tracks that crisscross the old townsite, more erosion control and water management will be needed to maintain a quality trail surface.

A total of 25 interpretive panels at 25 locations are proposed for the trail, covering a wide variety of historic sites, buildings, people, enterprises, nature, and stories from Kundip's past (see detail in next section of report).

## Interpreting the Kundip Loop Trail

Kundip lends itself so wonderfully well to telling its many stories, with its attractive setting and rich history. The Kundip Loop has 25 interpretation sites with 25 interpretive panels, 22 small panels and 3 large. The historic Hopetoun to Ravensthorpe railway line forms the eastern north-south trail link where the majority of the interpretation relates to the railway line history, while the western section of the trail is dominated by interpretation of the remarkable and in many cases quite unique nature. The Kundip townsite lends itself perfectly to relating the stories of the people who lived there and what enterprises and lifestyles they lead.



*The existing panel of the historic Kundip townsite*

Kundip is already well served by interpretive material, mainly regarding its human history, both on the existing historic rail trail and in some places in Kundip townsite associated with the rail trail. The Ravensthorpe Hopetoun Historical Society have, like they have for most of the district, compiled a substantial amount of information about the history of Kundip. In addition, one of the project consultants has been fortunate to be involved in investigating the ecology of the Kundip area over many years and is able to provide comprehensive information

regarding its rich nature. This invaluable resource has made the availability of potential information a fortune. With these sources, and visiting the extensive range of possible sites around Kundip, an inclusive list of information is available.

*Kundip honeymyrtle (Melaleuca sophisma) found only in the immediate area, typifies the unique nature of Kundip*

Kundip is an important site for its immense nature conservation values, and like Mt Desmond with several rare and restricted plants known from the area. Accordingly dieback hygiene should be the subject of interpretation to help ensure that dieback disease is not introduced or spread.



Given the nature of the information (and images) available, the most logical means of interpreting these places is clearly via on-site signage. It is recommended that high-quality etched anodised aluminium panels be used, as described in Part 1, Section 3, and part 2 Section 2 (Recommended Interpretive Elements) of this report. These signs will be best equipped to deal with the harsh sunshine and demanding weather conditions to which they will be exposed. They also withstand vandalism very well, and this will help reduce maintenance over the longer term.

Two different size panels are proposed, both based on the same shape. The larger panel for sites that have major stories or two stories to tell, while the smaller size well suited to more common single story locations.

For mounting the etched aluminium panels, the use of blade (or plate stock) naturally rusty mild steel pedestals is proposed, as shown in part 2 Section 2 Part (Recommended Interpretive Elements). These pedestals are robust and lend themselves perfectly to "fit" the site through their weathered metal character being related to the landscape and mineral expression in its geology.



*Moort (Eucalyptus platypus) leaf at Kundip*

The steel pedestals will feature a silhouette cut-out in the blade of a characterising natural element, the leaf of a moort – a well-known charismatic tree common in the Kundip townsite with a very prominent round leaf is recommended.

The use of high quality interpretive elements conveys a strong sense of importance of the heritage and environment being described, expressing the high regard the community hold for its natural and cultural history that will be apparent to visitors. Using interpretive elements like this can be a powerful statement about a community, and one well worth making.

The table below also includes one large panel to be installed at the trail-head, as a "general information" panel. This should carry clear mapping of both long and shorter loop trails, and sufficient information to enable visitors to understand the experience that is on offer, and how to sustainably use the trail – particularly with dieback hygiene in mind. The panel information should be a general introduction to the history and nature of Kundip, in order to set the scene.

## INTERPRETATION SITES / STORIES FOR INCLUSION

The table below lists the sites to be interpreted on the Kundip Loop Trail in sequence starting from the proposed trail-head at the Kundip Townsite. The Kundip Loop Trail is set out to be walked in a clockwise direction with the complete loop of 5000m, and an optional shorter loop of 1645m that only takes in the section of the old Railway Trail on the east side of the Hopetoun Rd. A second slightly shorter 4190m loop on the west side provides a third nature theme dominated option; heading south of the rail head, it takes in the trail section on the west side of the Hopetoun Road.

Site numbers are reflected on the map of the trail provided in this report

Site #	Panel size	Site Description
TH	800 x 500	Trail-head at carpark west side of road entering Kundip Townsite: Trail-head / map panel with trail information, including dieback information
KUNDIP LOOP		
1	600 x 350	Kundip Halfway Hotel story from existing panel
2	600 x 350	Hopetoun to Ravensthorpe Railway summary
3	900 x 400	Railway bridge, building materials & process, creek dynamics / bridging problems
4	600 x 350	Mallee fowl - update and replace existing panel

Site #	Panel size	Site Description
5	600 x 350	Gold and Flag mine, and its relationship to the railway
6	600 x 350	Kundip siding and its heyday activities, replace old panel
7	600 x 350	Remove existing panel. Replace with railway construction story
8	600 x 350	Railway locomotive G Class story
9	600 x 350	Large mallet regrowth on formation – time since railway closed
10	600 x 350	Cutting – gradient requirement and cutting construction method
11	600 x 350	Unstable clay soils and replacement with gravel for formation
12	600 x 350	Road 11 – explain why “Road 11”, where the name comes from
13	600 x 350	Firebreak – reason and management processes
14	600 x 350	Melaleuca endemism and diversity at Kundip
15	600 x 350	Myriad mallee – mallee eucalypt diversity and soil diversity
16	600 x 350	Soil type variation and vegetation system match
17	900 x 400	Vegetation and fauna habitats / western whipbird (two stories, one panel)
18	600 x 350	Quartzite geology, view to related Barrens
19	600 x 350	Kundip cemetery
20	600 x 350	Sandplain community patch and habitat
21	600 x 350	Mallet and moort community (and use to early settlers)
22	600 x 350	Mallet and moort habitat – food source for birds and animals
23	900 x 400	Kundip town layout, including town map if possible
24	600 x 350	Houses and living in Kundip
25	600 x 350	Kundip Hotel cellar, hotel design and “use”

## COST ESTIMATES – INTERPRETIVE PANELS / PEDESTALS, AND OTHER SIGNAGE

### Notes:

1. Costs in tables below are for hardware only – installation costs are included in the Works List;
2. All interpretive panels are recommended to be architectural-grade etched anodised aluminium, unless otherwise stated (for maximum longevity and vandal resistance);
3. Costs provided include research and writing text, sourcing and supplying images, graphic design work, sign and pedestal production, and supply to Ravensthorpe with all mounting hardware;
4. Interpretive panels are to be installed on creatively – designed rusty steel “pedestals” rather than on standard posts – this encourages people to engage with the signage and more people reading the text.

Sign / Item	Units	Unit Cost	Total Cost
Design and supply full-colour Trail-head sign with map, 900 x 500 mm	1	2880	2,880
Design and supply small etched anodised interp panels @ 600 x 350	22	1540	33,880
Design and supply large etched anodised interp panels @ 900 x 400	3	2180	6,540
Historical research and supply of photos for panels (per story)	17	125	2,125
Design and supply rusty steel pedestals for small interp panels	22	890	19,580
Design and supply rusty steel pedestals for large interp panels	3	1230	3,690
Design and supply trail markers (3 styles, 2 colours + spares)	38	40	1,520
Design & supply double-sided chevron signs at turn off main road (2800 x 800 mm, single set of posts)	2	790	1,580
Design & supply advanced warning signs for 500 m either side of entrance (2800 x 800 mm, 2 sets of posts)	2	860	1,720
Design & supply "Kundip Loop Parking" chevron sign (1500 x 500mm)	1	620	620
Design & supply "Shared Use" signs for trail bike riders (750 x 750)	2	340	680
Design & supply "Short Loop Option" signage for junction nr road	1	540	540
Design & supply "Walkers on road" signs for Road 11 (750x750)	2	340	680
Design and supply "Management Access Only – Walkers Welcome" signs (1200 x 300, 2 posts)	1	520	520
Design & supply two-post directional signs (1000x200)	4	380	1,520
Research, write, design and supply double-sided A4 brochure/map	5000	Na	4,650
TOTAL (not inc GST)			82,725

## COST ESTIMATES – HARDWARE, SURVEY AND MATERIALS

### Notes:

1. Costs in tables below are for hardware supply only – installation costs are included in the Works List;
2. Estimates are at early 2013 prices, and are based on past experience (not on specific local quotes).

Sign / Item	Units	Unit Cost	Total Cost
Supply steel posts for trail markers (90 x 90 square)	27	70	1,890
Supply rapid-set cement for all installation work (+/- 75 holes)	150	12	1,800
Supply bollards for Trail Head parking area (north end)	40	35	1,400
Supply post and rail barrier	1	300	300
Design 12m bridge	1	2700	2,700
Supply 12m bridge materials	1	8600	8,600
Design 5m bridge	1	900	900
Supply 5 m bridge materials	1	2100	2,100
Rare Flora Survey/assessment	1	3500	3,500
TOTAL (not inc GST)			33,190

## WORKS LIST – KUNDIP LOOP

### Notes:

1. All signs and interpretive panels are costed elsewhere – costs in tables below are for installation only;
2. All other specific hardware items (tables, seats, posts for trail markers etc) are costed in the Hardware Table – costs below are for installation only;
3. Where complex construction tasks are involved (viz: steps, bridges etc) all costs are included in the table below;
4. Trail construction standard to apply: 2m cleared width unless otherwise stated, surface graded smooth;
5. Shorter loop option (along old Figure of 8 trail) from 430m south of trail head.

Site or location	Description	Total Cost
Hopetoun Rd opposite Kundip entrance	Install two-post double sided chevron sign	340
	Install advanced warning signs 500m north and south on road	480
Entrance off Hopetoun Rd	Remove all old Railway Heritage Trail signage at entrance	300
Parking area/Trail-head	Install sign "Kundip Loop Parking" chevron single sided	240
Trail-head	Install trail-head sign (with map) on south side of centre vegetation patch	240
	Construct graded 20 m path from new parking area to toilet (clear pathway and remove branches)	240
	Repair drainage issue north side of carpark area north of trail-head	1,000
	Install 35 m of bollards 30 m north of trail-head to prevent vehicle access from west and north	2,000
KUNDIP LOOP TRAIL		
30m	Install trail marker (straight) at end of bollards	100
50m	Install trail marker (right turn)	100
75m	Install trail marker (straight)	100
105m	Install trail marker (left turn 45 degree angled)	100
125m	Install trail marker (right turn 45 degree angled)	100
170m	Install trail marker (straight),	100
	Remove old trail markers	120
210m	Remove old Figure of 8 trail sign	120

Site or location	Description	Total Cost
220m	Rake and prune existing trail over this 220m section from road	2,640
	Leave existing walker crossing signs on road	0
245m Interp Site #1	Install trail marker (straight)	100
	Install small interpretive panel (single post),	120
	Remove old panel	120
	2340m to Road 11 requires standard specification trail: 2m cleared width, drained surface, dual use (walkers and mountain bikes)	18,720
300m	Creek. Install trail marker (straight)	100
395m Interp Site #2	Install trail marker (right turn) at railway formation	100
	Remove Figure of 8 trail sign	120
	Install small interpretive panel (single post)	120
	Install shared use signage to inform trail bike riders (2)	240
550m Interp Site #3	Bridge. Reconstruct 12m bridge, remove chains	15,000
	Install large interpretive panel (double post)	240
760m	Install trail marker (straight)	100
790m Interp Site #4	Install small interpretive panel (single post)	120
825m	Bypass big bridge, 20m span. Install side ramps in zigzag at each end with sleeper retaining walls.	3,600
910m Interp Site #5	Install small interpretive panel (single post),	120
1070m	Install trail marker (right 45°)	100
1110m Interp Site #6	Kundip siding. Install small interpretive panel (single post)	120
1215m	Hopetoun Rd. Leave old heritage trail sign & walker crossing signs	0
	Remove old exit 2 sign/posts and star picket	120
1240m	Remove old figure of 8 trail sign	120
	Install trail marker (straight) on west side of road	100
	Install "Short Loop Option" signage at trail junction	120

Site or location	Description	Total Cost
1330m	Install trail marker (straight)	100
1360m Interp Site #7	Remove existing interpretive panel	120
	Install small interpretive panel (single post)	120
1635m	Install trail marker (straight)	100
1745m Interp Site #8	Remove old interpretive panel	120
	Install small interpretive panel (single post)	120
1795m	Old bridge. Construct ramp to west through creek, reconstruct southern ramp and retain with railway sleepers	3,600
1835m Interp Site #9	Install trail marker (straight)	100
	Install small interpretive panel (single post)	120
1930m Interp Site #10	Cutting. Install small interpretive panel (single post)	120
2250m	Install trail marker (straight)	100
2305m	Construct short bridge 5m span. Build with 2 posts and sleeper abutments with poles and treads on top, include handrails	12,000
2345m Interp Site #11	Install small interpretive panel (single post)	120
2585m Interp Site #12	Road 11. Remove all old signs including the old one to south side	240
	Install 2 post directional sign with right point arrow	240
	Install small interpretive panel (single post)	120
	Install warning signs (2) on Rd 11, 100m either side of trail	240
2695m	Install 2 post directional sign right arrow	240
	Install post and rail barrier	300
	Install "Management Access Only - Walkers welcome" sign	120
2735m Interp Site #13	Install small interpretive panel (single post)	120
	Install trail marker (straight)	100
2785m Interp Site #14	Install small interpretive panel (single post)	120
2845m Interp Site #15	Install small interpretive panel (single post)	120

Site or location	Description	Total Cost
2940m	Install trail marker (straight)	100
	Repair/construct surface, grade centre and right side rut to fill in left rut, construct drainage to left (west)	1,800
2980m Interp Site #16	Install small interpretive panel (single post)	120
3160	Install trail marker (straight)	100
3220m	Repair surface on northward slope (55m)	900
	Grade drainage dips into new surface	400
3275m Interp Site #17	Install large interpretive panel (double post)	240
3520m	Repair surface (200m)	2,400
3630m Interp Site #18	Install small interpretive panel (single post)	240
	Repair surface, (100m), grade and remove rocks	1,200
3880m	Repair surface on southward slope, (150m) grade and drain	1,800
	Grade drainage dips into new surface	600
4070m Interp Site #19	Install 2 post directional sign, right arrow	240
	Install small interpretive panel (single post)	120
4115m	Repair surface of section 80m	1,360
	Fill required: 32m <sup>3</sup> , and/or brush from firebreak	2,400
	Install trail marker (straight)	100
4190m Interp Site #20	Install small interpretive panel (single post)	120
4265m Interp Site #21	Install small interpretive panel (single post)	120
4290m	Install trail marker (angle right 45°)	100
4320m	Repair surface of section to east (170m), fill required	4,080
4395m	Install trail marker (straight)	100
4460m Interp Site #22	Install small interpretive panel (single post)	120
4490m	Repair surface 190m, use brush to fill (from firebreak chaining to west) to 4680m	4,560

Site or location	Description	Total Cost
4520m	Install trail marker (straight) on left hand fork of track/trail	100
4660m Interp Site #23	Install large interpretive panel (double post)	240
4680m	Install trail marker (straight)	100
	Repair surface for erosion 110m (to 4790m)	2,640
4730m	Install trail marker (angle right 45°)	120
4740m Interp Site #24	Install small interpretive panel (single post)	120
4790m	Install trail marker (straight)	100
	Repair surface erosion to end of trail	2,100
4820m Interp Site #25	Install small interpretive panel (single post)	120
4860m	Install 2 post directional sign, right	240
5000m	Trail-head	0
SUBTOTAL		95,920
SHORT LOOP OPTION LINK		
0m	Install junction sign (different colour to main trail)	120
60m	Prune overhanging veg, repair erosion	1,400
	Install trail marker (straight), (different colour to main trail)	120
180m	Repair surface erosion over 40m, requires fill	1,440
250m	Repair surface drainage and erosion over 30m	720
	Install trail marker (straight), (different colour to main trail)	100
430m	Trail head and carpark	0
SUBTOTAL		3,900
TOTAL (not incl. GST)		99,820

## TOTAL PROJECT COSTS – KUNDIP LOOP TRAIL

### Notes:

1. All items were estimated at early 2013 rates, with a 5% per annum allowance added in the table below for time passing prior to construction;
2. The table below summarises all individual items set out above.

Description	Total Cost
Interpretive panels, panel pedestals, other signage	82,725
Supply of hardware and materials	23,190
Works list (including pathway construction / upgrading)	99,820
Site visit by trail planner at commencement to flag trail, pinpoint locations etc	4,200
Sub Total	209,935
Project management costs / contingency allowance (20%)	41,990
Cost increase allowance – 1 year at 5%	12,600
Project Total (not inc GST)	264,525
GST @ 10%	26,543
Project Total including GST	290,978

## SECTION 6: PROJECT 3 – RAVENSTHORPE HERITAGE WALK

Ravensthorpe is one of the most attractive and historic towns in southern Western Australia. Set among the beautiful Ravensthorpe Range, it has a long and rich history of enterprise and lifestyles stemming from its early days as a mining and agricultural community. The Ravensthorpe Heritage Walk takes in many sites of historic buildings and the activities they contained, in many cases the buildings have long gone, although a few wonderful examples remain.

The Ravensthorpe Heritage Walk covers 2200 metres, and has been designed to be walked in a clockwise direction. It starts and ends from a trail-head at the new Tourism Information Office on Morgans St opposite the Community Centre. Trail users will set off eastward along the main street to the Palace Hotel (along the south side of Morgans St), crossing and walking back along the north side for 220m before turning north onto Queen Street. From Queen St, the trail turns east into Dunn St running 420m eastwards to Andre St, then turning south to and right along Morgans St, before crossing and heading west up the south side of Morgans St 420m to Carlisle St. The trail turns left at Carlisle St and 130m south on the west side of Carlisle to Spence St, then right along the north side of Spence St to Queen St where it turns right to return to Morgans St along the east side of Queen St. At Morgans St the trail turns right again to return 70m to the trail-head. This route covers all the significant sites and buildings without backtracking, with a mixture of uphill and downhill sections.

*Ravensthorpe Heritage Walk Map (numbered sites correspond with the Interpretation Sites/Stories Table)*



A total of 23 stopping places or interpretive sites are recommended for inclusion on the trail. These places have 30 interpretive stories proposed on mostly single and some double panels, covering a wide variety of buildings, sites, places, people and stories from Hopetoun's past, and aspects of its local nature (see subject detail in the Interpretation Stories and Sites Table following).



*New path section needed Andre St*

New path sections will be needed in three places: 110m along the west side of Andre St, 15m (with pram ramps) at the Morgans St crossing near the corner of Hosking St, and 130m along the east side of Queen St between Dunn St and Morgans St. The latter is not mentioned in the works list below, as this path installation is part of the Shire's works program for this year.



*New path section needed for the crossing of Morgans St near Hosking St*

This Trail ranks as the third priority trail for development, as it would be able to be implemented over the next few years as part of the redevelopment of the Ravensthorpe main street (Morgans Street/South Coast Highway) that will result from the moving of heavy haulage traffic to a new bypass road to the north of town.

An adjunct Ravensthorpe Heritage Drive Trail (Section 8 Project 5) is recommended to augment this walk trail, as many historic sites of significant interest occur near and surrounding town, beyond the ideal distances for walking. Although, this report recognises that this drive trail is outside the project guidelines and scope (not to extend beyond non-motorised access). Nonetheless, it was a straightforward and cost-effective extension to include this drive trail and map, as its research was obtained a part of developing the Ravensthorpe Heritage Walk.

### ***Interpreting the Ravensthorpe Heritage Walk***

Ravensthorpe is a fascinating historic town, for which, like Hopetoun in section 4 Project 1, a wonderful set of historic information has been thoroughly researched and listed for this project by Ann Williams and other members of the Ravensthorpe Hopetoun Historical Society. This invaluable information listed an extensive range of possible sites and stories around the town site. Given the nature of the information (and images) available, the most logical means of interpreting these places is via on-site signage.



*The Palace Hotel, built 1907*

It is recommended that high-quality etched anodised aluminium panels be used, as described in Part 1, Section 3, and Part 2, Section 2 of this report, placed on rusty steel open book-like pedestals. These signs, similar to the Hopetoun Heritage Trail, will be well equipped to deal with the demanding weather conditions to which they will be exposed, including harsh sunlight. They also withstand vandalism very well, and this will help reduce maintenance over the longer term.

Again, like the Hopetoun Heritage Trail, two different size panels are proposed, both based on the same shape, with a third one-off size for the trail-head map. The larger panel is to be used at sites that have major stories, or which may have hosted a series of interesting buildings or businesses over the years. The smaller size is well suited to single story locations, which will most commonly be used. The map and information panel to be installed at the trailhead at the Visitor Information Centre will carry clear mapping of the trail, and provide sufficient information to enable visitors to understand the dimensions of the experience of the history of Ravensthorpe on offer.



*Lansell's General Store (now Ravensthorpe Pharmacy)  
built 1901*

A very significant number of sites with a corresponding large amount of information is available for interpreting the rich history of Ravensthorpe townsite. The interpretation sites and stories table below describes the subjects chosen from among the many available. In some cases the buildings still stand, with most in use, and in other cases images are available for buildings and activities now gone from other locations. The trail is a mixture of buildings, activities, lifestyles and enterprises, and as such will be

feature strong variety to captivate both visitors and locals alike.

*The corner of Carlisle and Dunn St, site 9. The site of the Dunn Brothers' house, and in the background the former Union Bank and managers house.*

Some of the large panels will interpret more than one site or location, such as site 9 on the corner of Carlisle and Dunn Streets. Here the sites on opposite sides of the road can be viewed and interpreted from one place, rather than by a number of panels that may appear scattered.



## INTERPRETATION SITES / STORIES FOR INCLUSION

The table below lists the sites to be interpreted on the Ravensthorpe Heritage Walk in sequence starting from the proposed trail-head on Morgans Street, outside the new Visitor Information Centre building. The trail is to be walked in a clockwise direction and will only be signposted for that route. Sites listed below are in the order in which walkers will encounter them.

Reference numbers in the second column of the table in red relate to original background information supplied by the Ravensthorpe Hopetoun Historical Society, and is for future uses only. Site numbers are reflected on the map of the trail provided at the beginning of this section.

Site #	Ref #	Panel size	Site Description
TH	-	- 800 x 500	Trail-head outside new Visitor Centre building (former Post & Telegraph Office): Trail-head / map panel with trail information.
TOWN LOOP			
1	14	600 x 350	Former Post and Telegraph Office. 1901.
2	15	900 x 400 (combined onto one larger panel)	Site of original Wardens Court. 1910-1967.
	16		Site of Assay Office and residence of Charles Grant the assayer.
3	17	600 x 350	The Goldfield Club 1901-1906, then the Palace Hotel (built 1907).
4	35	600 x 350	The West Australian Bank building (now Shire Office).
5	33	900 x 400 (combined onto one larger panel)	Site of Dunn Bros general store, 1901.
	32		Site of Miner's Arms Hotel, built 1901 but demolished 1967.
6	30	600 x 350	Commercial Hotel 1906 – 1924 (now Rav. Community Centre).
7	51	600 x 350	St Andrew's Church, built 1906 (only corrugated iron church still in use in WA).
8	45	600 x 350	Former St John Ambulance and then CWA rooms (1950s – 2008).
9	48	900 x 400 (combined onto one larger panel)	Site of Dunn Bros house built 1905.
	47		Former Union Bank building and manager's house (1906-1918).
	52	600 x 350	Site of original CBH bins (1947-67), now Town Hall site.
10	53	600 x 350	House built by the architect Daniels and his wife, Olive Edmunds, the local midwife (1907-1912)
11	50	900 x 400	Grand old house built for F.E. and Ethel Daw when they married.

Site #	Ref #	Panel size	Site Description
	37	(combined onto one larger panel)	Site of F.E. Daw & Sons first store & agency, 1901-1912.
12	38	600 x 350	Site of Chapman's Boarding House in 1901.
13	39	600 x 350	Site of original Phillips River Road Board offices, 1903-1916.
14	40	600 x 350	Site of the offices of the Phillips River Times, 1904-1911.
15	24	900 x 400 (combined onto one larger panel)	Ravensthorpe Primary School – first built 1901.
	23		Site of Mechanic's Institute, built 1907, used as a hall for social events
16	22	600 x 350	Dance Cottage, built 1901 – oldest original house in Ravensthorpe.
17	20	600 x 350	Site of Ravensthorpe Hotel, first built in town, in 1901.
18	19	600 x 350	Site of Lansell's General Store, built 1901 (currently pharmacy).
19	18	600 x 350	Site of store built 1900 for Legge's Clothing & Chemist. F.E. Daw & Sons moved to the site in 1912.
20	11	600 x 350	Site of former "Carlisle Chambers" – offices of solicitor A.H. Foord and the accountant, Carlisle.
21	10	600 x 350	Site of premises of Dan Coleman, teamster and contractor.
22	9	900 x 400 (combined onto one larger panel)	Site of original gaol and police residence, first built 1901.
	8		Second police house (now private residence).
23	7	600 x 350	House originally built for Warden F.W. Spence in 1906.

## COST ESTIMATES – INTERPRETIVE PANELS / PEDESTALS, AND OTHER SIGNAGE

### Notes:

5. Costs in tables below are for hardware and specialist consultancy work only – installation costs are included in the Works List;
6. All interpretive panels are recommended to be architectural-grade etched anodised aluminium, unless otherwise stated (for maximum longevity and vandal resistance);
7. Costs provided include research and writing text, sourcing and supplying images, graphic design work, sign and pedestal production, and supply to Hopetoun with all mounting hardware;
8. Where the supply of background material and historic images can be separated out it has been listed as a unique line-item in the table below (as it is presumed that these tasks will be undertaken by the Ravensthorpe Hopetoun Historical Society;
9. Interpretive panels are to be installed on creatively designed rusty steel "book-style pedestals" rather than on standard posts – this encourages people to engage with the signage and results in more people reading the text (in addition to enhancing the aesthetics of the streetscape!).

Sign / Item	Units	Unit Cost	Total Cost
Design and supply double-sided Trail-head promotional sign	1	1870	1,870
Design and supply full-colour Trail-head sign, 900 x 500 mm	1	2880	2,880
Write, design & supply small etched anodised interp panels (2 @ 300 x 350 per site, to be installed on a single "book style" pedestal)	18	1790	32,220
Write, design & supply large etched anodised interp panels (2 @ 400 x 500 per site, to be installed on a single "book style" pedestal)	6	2380	14,280
Historical research and supply of photos for panels (per story)	30	125	3,750
Design & supply rusty steel "book style" pedestals for small panels	18	890	16,020
Design & supply rusty steel "book style" pedestals for large panels	6	1230	7,380
Design and supply trail markers (3 styles, 2 colours + spares)	31	40	1,240
Research, write, design and supply double-sided A4 brochure/map	5000	Na	4,650
Site visit by interpretation consultant to gather materials & information	Na	Na	4,160
TOTAL (not inc GST)			88,450

## COST ESTIMATES – HARDWARE AND MATERIALS

### Notes:

- Costs in tables below are for hardware supply only – installation costs are included in the Works List;
- Estimates are at early 2013 prices, and are based on past experience (not on specific local quotes).

Sign / Item	Units	Unit Cost	Total Cost
Supply jarrah or treated pine posts for trail markers (100 x 100 square)	28	30	840
Supply rapid-set cement for all installation work (+/- 60 holes)	130	12	1,560
TOTAL (not inc GST)			2,400

## WORKS LIST – RAVENSTHORPE HERITAGE WALK

### Notes:

- All signs and interpretive panels are costed elsewhere – costs in tables below are for installation only;
- All other specific hardware items (tables, seats, posts for trail markers etc) are costed in the Hardware table – costs below are for installation only;
- Where complex construction tasks are involved (viz: pathway construction etc) all costs are included in the table below;

Site or location	Description	Total Cost
Trail-head (outside old Post Office)	Install large 2 post promotional sign (double-sided)	200
	Install trail-head panel on two posts	240
Interpretive site #1	Install small interpretive panel	120
30 m from trail-head	Install trail marker (straight)	100
Interpretive site #2	Install large interpretive panel	180
Just west of hotel	Install trail marker (straight)	100
Interpretive site #3	Install small interpretive panel	120
At crossing out front of hotel	Install trail marker (left turn)	100
North side highway @ crossing	Install trail marker (left turn)	100
Interpretive site #4	Install small interpretive panel	120
Halfway between interp sites	Install trail marker (straight)	100

Site or location	Description	Total Cost
Interpretive site #5	Install large interpretive panel	180
Halfway between interp sites	Install trail marker (straight)	100
Interpretive site #6	Install small interpretive panel	120
Corner of Queen St	Install trail marker (right turn)	100
Midway to Dunn St	Install trail marker (straight)	100
Corner Queen & Dunn Sts	Install trail marker (right turn)	100
Interpretive site #7	Install small interpretive panel	120
Interpretive site #8	Install small interpretive panel	120
Halfway from #8 to corner	Install trail marker (straight)	100
Cnr Carlisle St, west side	Install trail marker (straight)	100
Interpretive site #9	Install large interpretive panel	180
	Install small interpretive panel	120
30 m from #9	Install trail marker (straight)	100
Interpretive site #10	Install small interpretive panel	120
Cnr Dunn & Andre Sts	Install trail marker (right turn)	100
Between Dunn St & highway	Construct 110 metres of 2 m gravel path west side of Andre St,	3,000
Interpretive site #11	Install large interpretive panel	180
Halfway from #11 to highway	Install trail marker (straight)	100
Cnr Andre & highway	Install trail marker (left turn)	100
Interpretive site #12	Install small interpretive panel	120
Halfway between interp sites	Install trail marker (straight)	100
Interpretive site #13	Install small interpretive panel	120
Interpretive site #14	Install small interpretive panel	120
Near cnr highway & Hosking	Install trail marker (right turn)	100

Site or location	Description	Total Cost
Across highway west of Hosking St	Construct pathway and road crossing: 15 m concrete pathway, 2 pram ramps with grab rails	3,000
South side highway at crossing	Install trail marker (right turn)	100
Interpretive site #15	Install large interpretive panel	180
Halfway between interp sites	Install trail marker (straight)	100
Interpretive site #16	Install small interpretive panel	120
Cnr highway & Andre, east side	Install trail marker (straight)	100
Interpretive site #17	Install small interpretive panel	120
Interpretive site #18	Install small interpretive panel	120
Halfway between interp sites	Install trail marker (straight)	100
Interpretive site #19	Install small interpretive panel	120
Cnr highway & Carlisle, east side	Install trail marker (straight)	100
Outside hotel, cnr Carlisle & highway	Install trail marker (left turn)	100
Halfway to Spence St	Install trail marker (straight)	100
Interpretive site #20	Install small interpretive panel	120
Cnr Carlisle & Spence Sts	Install trail marker (right turn)	100
Interpretive site #21	Install small interpretive panel	120
Interpretive site #22	Install large interpretive panel	180
Interpretive site #23	Install small interpretive panel	120
Cnr Spence & Queen Sts	Install trail marker (right turn)	100
Halfway to highway	Install trail marker (straight)	100
Cnr Queen St & highway	Install trail marker (right turn)	100
TOTAL not inc GST		12,480

## TOTAL PROJECT COSTS – RAVENSTHORPE HERITAGE WALK

### Notes:

3. All items were estimated at early 2013 rates, with a 5% per annum allowance added in the table below for time passing prior to construction;
4. The table below summarises all individual items set out above.

Description	Total Cost
Interpretive panels, panel pedestals, other signage, brochure	88,450
Supply of hardware items	2,400
Works list (including pathway construction / upgrading)	12,480
Site visit by trail planner(s) at commencement to mark exact locations etc	3,400
<b>Sub Total</b>	106,730
Project management costs / contingency allowance (20%)	21,350
Cost increase allowance – 1 year at 5%	6,400
<b>Project Total (not inc GST)</b>	134,480
<b>GST @ 10%</b>	13,448
<b>Project Total including GST</b>	147,928

## SECTION 7: PROJECT 4 – MT DESMOND CIRCUIT

The Mt Desmond Circuit Trail presents and interprets some of the most notable natural and cultural features of the Ravensthorpe area, specifically Ravensthorpe Range and the abandoned Hopetoun – Ravensthorpe Railway Line; as such it is a Priority Trail. Ravensthorpe Range is considered a natural wonder for its enormous botanical diversity, which includes many endemic species and a particular richness in eucalypts. This diversity is related to the Range's mineral diversity, another important dimension featured on the circuit.

The Mt Desmond Circuit traverses just over 6 km of range and foothills, beginning and ending at the popular and easily accessible landmark, Mt Desmond in southern Ravensthorpe Range. The Trail provides insights into the origins of the characterising range landform, its natural features of geology, plants, habitats and animals, as well as its historic features of mining activity, transport and cultural history. It includes a significant section the Railway Heritage Trail, and interprets this compelling historic link between the one-time port of Hopetoun, and the mining and agricultural settlement of Ravensthorpe. This circuit brings the cultural and natural history together, and provides a spectacular walk with views across and access through the alluring landscape and its historical elements.



*The Mt Desmond Circuit. The trail-head lower right at the end of Ethel Daw Drive. Elverdton Rd is to the south*

The Circuit is a loop of 6120 metres; designed to be walked in an anti clockwise direction starting and finishing at the prominent southern Ravensthorpe Range landmark Mt Desmond, off Ethel Daw Drive. The Circuit takes off from the trail-head at the carpark north east for 95m to Ethel Daw Drive, before crossing to the ridge track. The trail takes the ridge track north for 960m to the track junction near Mt Chester. The "Rat Run" motorcycle event uses parts of the ridge track from here south 450m to head westwards down a steep exploration track. This (450m) section of the ridge track is dual use and will be signposted such. From the junction the circuit trail continues north for another 770m down-slope along a mineral exploration line to (where trail construction will be required) continue upslope north and swing westwards through open mallet and mallee bushland for 1095m to the Rail Trail. 100m before meeting the Rail Trail, the circuit crosses the Rat Run track, where signposts will alert riders and walkers. The rail trail section continues south for a total of 2280m, along which several issues require treatment and signposting; this Rail Trail section is also a dual use trail for both walkers and mountain bike users. At 2280m the Circuit swings east through 175m of mallee dominated bush (where new trail will require construction), to again cross the Rat Run track, thereupon the trail continues east for another 410m up slope along an exploration line. From here the trail turns north for its final 310m (where it will require construction) through the rich mallee and banksia shrubland to return to the trail-head.

It should be noted that the Circuit avoids the old manganese mine known as the "bat cave", as this is a sensitive site due to it being prime habitat for bats and other nocturnal animals, and that is also a potentially dangerous site as an old mine.



Left: The lookout at Mt Desmond.  
Right, the headframe at Mt Cattlin

The trail-head area is at eastern edge of the existing parking area at the end of Ethel Daw Drive, where sufficient parking exists at the site as it is. Removal of the existing lookout is recommended; to be replaced with a new version based on a stylised headframe to mirror the



mining heritage of the Range. This new structure provides a view through it to the surrounding bush, and includes a platform within its section that will allow more people to share the view, and provides a mounting for interpreting the surrounding view.



Rail Trail section showing the need for vegetation clearing to form a 2 metre wide path

Like the Kundip Loop, a standard 2 metre cleared trail width is required for the Mt Desmond Circuit. This may at first appear excessive, however it is necessary to allow for a safe, enjoyable, user-friendly, walk/cycle dual use where applicable, and low-maintenance trail. The vegetation will quickly grow back to fill the gap, although this will be smaller branches rather than the large branches and trunks, making maintenance with a machine efficient and cost effective.

The Mt Desmond area, again like the Kundip area, is home to several rare and conservation priority plants. As such careful investigation and selection of trail alignments and for the additional clearing of the existing trail sections will be needed to ensure Declared Rare and priority flora are avoided. Specialised expertise will be needed to survey for the existence of rare and priority flora.

Creating the circuit will require the upgrading of existing tracks and trail sections, together with some new construction, to the 2m trail standard described previously. The upgrading will include some vegetation clearing on the track and trail sides and centre, surface grading to provide a smooth walking (and cycling for the rail trail section) path, clearing and step construction work around washed out bridges, and erosion control and water management. In most cases trees growing in a few sections along the rail trail will be left in place, as they add greatly to the trail experience and are easily walked under and around.



*The Ridge track.  
Left the southern  
section. Right the  
northern section*



Existing tracks include 1820m of ridge track and old mineral exploration lines. This occurs in two sections: the ridge track north of Mt Desmond where the first (southern) 960m is along a relatively well used 4x4 track, and the next 770m along a very little used northern extension to a point at which the track stops. The second section is south of Mt Desmond east/west along an old almost grown over gridline for 410m. These sections will require varying degrees of centre line and side vegetation clearing, and surface grading and water management to provide a good trail surface. The northern 770m section is quite rocky and in parts steep, it will require careful construction to deliver a durable trail with a quality surface using the rocks to assist water management and trail definition. The southern 410m section is predominantly along a steep slope on gravelly clay soils, severe erosion has occurred that will require rut repair by the brushing method, using brush from the immediate trail sides cleared as part of the track upgrade to trail standard and construction of the next section.



*One of the 3 bridge ruins. The trail to be re-routed around*

The existing trail section is the 2280m of the historic railway formation making up the western north-south part of the circuit. This section requires works to upgrade it to the 2m trail standard, re-routing of the trail around 3 bridge ruins at 605m, 1360m and 1705m that will include stone and sleeper steps and short sections of trail construction. A small deck to bridge a 3m washout at 1005m will also need construction. In a few places the Rat Run and other 4x4 tracks cross, these will require signposting to warn trail walkers and track users and some barriers placed to prevent vehicles from entering the trail.

New construction in four sections over a total 1670m is needed. The first is a 95m section immediately beyond the trail-head, vegetation clearing and water management using rocks on site is needed. The next section is the longest requiring construction - from the north end of the ridge track 1095m to the Rail Trail, here vegetation clearing, switchbacks down slopes, and steps and water management using rocks found on site is needed; in many places the bush is somewhat sparse and it will be relatively easy to construct the trail through. The third section is for 175m left off the end of the Rail Trail, this is a relatively flat section in a low area, although steps down off the rail trail will be needed to access it, construction will include vegetation clearing and some water management measures. The last section is the last 310m of the trail, immediately south of the trial-head and carpark; this section will require clearing through thick mallee and banksia bushland, with special care taken to avoid rare flora, and some water management on its relatively slight slopes.

*Erosion on the southern end of the Circuit, where brush from the widening and nearby construction of the last 310m section can be used for repair*



The trail is strongly interpreted with three major themes: The Hopetoun to Ravensthorpe railway line, mining heritage, and the remarkable nature of the Ravensthorpe Range. A total of 25 interpretive panels at 25 locations are proposed for the trail, covering a wide variety of nature, history and stories (see detail in next section of report).

## Interpreting the Mt Desmond Circuit

Mt Desmond lends itself so wonderfully well to telling its many stories associated with Ravensthorpe Range and its rich nature and human history. The Mt Desmond Circuit has 29 interpretation sites with 29 interpretive panels, 24 small panels and 5 large. The interpretation is a mixture of natural and human history; with the majority stories about the rich nature given the prominent place in world terms the area has for its diverse flora and the underlying geological formations. Mining history features as well - given the mineral richness, as does stories relating to the historic Hopetoun to Ravensthorpe railway line that forms the western north-south part of the Circuit.

Mt Desmond is relatively well served by material and stories for interpretation, with suggested stories shown in the Interpretation Site/Stories table following. One of the project consultants has been fortunate to be involved in investigating the ecology of the Ravensthorpe Range area over many years and is able to provide comprehensive information regarding its rich nature. The human history, both on the existing historic rail trail and in some places associated with mining and mineral exploration. The Ravensthorpe Hopetoun Historical Society have, like they have for most of the district, compiled a substantial amount of information about the history of the Ravensthorpe Range and the rail trail.



*The view south from the Mt Desmond Lookout, Southern Range bushland in the foreground, Desmond mine in the mid-ground, and East Mt Baren in the background*

Given the nature of the information (and images) available, the most logical means of interpreting this trail is via on-site signage, in this way and using the same style as the Kundip loop it demonstrates relatedness of style and method. It is recommended that high-quality etched anodised aluminium panels be used, as described in Part 1, Section 3, and part 2 section 2 (Recommended Interpretive Elements) of this report. These signs will be best equipped to deal

with the harsh sunshine and demanding weather conditions to which they will be exposed. They also withstand vandalism very well, and this will help reduce maintenance over the longer term.

In line with the Kundip Loop, two different size panels are proposed, both based on the same shape. The larger panel is to be used at sites that have major stories or two stories to tell, while the smaller size is well suited to more common single story locations.

The use of blade-form mild (rusty) steel pedestals for mounting the etched aluminium panels is proposed, as shown in part 2 Section 2 Part (Recommended Interpretive Elements). These pedestals are robust and lend themselves perfectly to "fit" the site through their weathered metal character being related to the weathered Range landscape and mineral expression in its geology. The steel pedestals will feature a silhouette cut-out in the blade of a characterising natural element, the bud of a warted yate – a well known charismatic Ravensthorpe Range tree with a very prominent bud, is recommended.



*Warted yate buds*

The use of high quality interpretive elements conveys a strong sense of importance of the heritage and environment being described, expressing the high regard the community hold for its natural and cultural history that will be apparent to visitors. Using interpretive elements like this can be a powerful statement about a community, and one well worth making.

The table below also includes one medium/large panel to be installed at the trail-head, as a “general information” panel. This should carry clear mapping of the circuit, and sufficient information to enable visitors to understand the experience that is on offer. It should be a general introduction to the history and nature of the Mt Desmond area in order to set the scene. A second large panel is proposed for the lookout to interpret the view shed.

## SITES / STORIES FOR INCLUSION

The table below lists the sites to be interpreted on the Mt Desmond Circuit Trail in sequence starting from the proposed trail-head at the Mt Desmond Lookout. The Mt Desmond Circuit is set out to be walked in an anti clockwise direction with the complete loop of 6120m. It traverses Ravensthorpe Range via a mix of the ridge track, old mineral exploration grid lines and the Railway Heritage Trail.

Site #	Panel size	Site Description
TH	800 x 500	Trail-head / map panel with trail information
	1200 diameter	Lookout platform – large panel with directions and distances to key features
Mt DESMOND CIRCUIT		
1	900 x 400	Ravensthorpe Range landform and its geological and biological diversity
2	600 x 350	Warted yate mallet woodland
3	600 x 350	Banded iron formation geology
4	600 x 350	Woodlands connection
5	600 x 350	Ravensthorpe Range / Barrens connection
6	600 x 350	Raptors on updrafts
7	600 x 350	Proteaceous community, thicket habitat, dieback prone
8	600 x 350	Tennis ball banksia TEC, and range view north
9	600 x 350	Target bottlebrush, thicket habitat
10	900 x 400	Mallet woodland & Ravensthorpe Range skink (two stories on one panel)
11	600 x 350	Melaleuca fencing, habitat – bark lichens and lichen spider
12	600 x 350	Echidna and termites
13	600 x 350	Creek habitat poison plants 1080
14	600 x 350	Quartz ground and Range geology complexity and weathering

Site #	Panel size	Site Description
15	900 × 400	The historic rail formation – general introduction (large panel)
16	600 × 350	Building of raised railway formation over gully
17	600 × 350	Bridge building on the railway line
18	600 × 350	Great railway stories #1 (topic to be defined by research)
19	600 × 350	Golden whistler and <i>Grevillea patentiloba</i>
20	600 × 350	J.S. Roe and Mt Desmond
21	600 × 350	Great railway stories #2 (topic to be defined by research)
22	900 × 400	Meat ants and railway bolts/fixings – two stories on one panel
23	600 × 350	Noongar food – yook and bush banana
24	600 × 350	Rock sheoak disturbance ecology & habitat/food for parrots & Carnaby's cockatoo
25	600 × 350	Great railway stories #3 (topic to be defined by research)
26	600 × 350	Brush wallaby and kangaroo, or <i>Eucalyptus desmondensis</i>
27	600 × 350	Why straight up hill? – mineral exploration grid lines and minerals sought
28	900 × 400	Elverdton mine and slag dump, new mine developments
29	600 × 350	Dryandra plants endemic and almost

## COST ESTIMATES – INTERPRETIVE PANELS / PEDESTALS, AND OTHER SIGNAGE

### Notes:

1. Costs in tables below are for hardware only – installation costs are included in the Works List;
2. All interpretive panels are recommended to be architectural-grade etched anodised aluminium, unless otherwise stated (for maximum longevity and vandal resistance);
3. Costs provided include research and writing text, sourcing and supplying images, graphic design work, sign and pedestal production, and supply to Ravensthorpe with all mounting hardware;
4. Where the supply of background material and historic images can be separated out it has been listed as a unique line-item in the table below (as it is presumed that these tasks will be undertaken by the Ravensthorpe Hopetoun Historical Society);
5. Interpretive panels are to be installed on creatively-designed rusty steel "pedestals" rather than on standard posts – this will fit with the landscape "feel" of the Range and encourages people to engage with the signage and results in more people reading the text.
6. Interpretive QR Codes are an option for describing stories on sections of the trail where mobile phone coverage is good – in the range sections. These extended stories would be researched and provided as additions to panel interpretation.

Sign / Item	Units	Unit Cost	Total Cost
Write, design and supply full-colour Trail-head sign, 900 x 500 mm	1	2880	2,880
Design and supply interpretive panel for lookout with directions and distances to key features (circular, 1200 diameter, free standing)	1	3240	3,240
Design and supply "Mt Desmond Circuit – Start" sign (1000 x 200, two post)	1	380	380
Design and supply "Wrong way – do not enter" sign for trail end (1000 x 200, two post)	1	380	380
Design and supply "Management Access Only – Walkers Welcome" signs (1200 x 300, 2 posts)	2	520	1,040
Design and supply "Walkers Crossing" road signs (for lookout road: 750 x 750)	2	340	680
Design and supply "I" symbol (for top of Rat Run, nr interp panel)	1	80	80
Design and supply "Shared Use – Motorcycles and Walkers" signs (750 x 750)	4	340	1,360
Design and supply "Walkers on track ahead" signs (750 x 750)	4	340	1,360
Design and supply 2 post directional signs, 1 right, 3 left (1000 x 200)	4	380	1,520
Design and supply "Walkers crossing ahead" signs (750 x 750)	6	340	2,040

Sign / Item	Units	Unit Cost	Total Cost
Design and supply "Motorcycles prohibited" signs (600 x 600)	5	310	1,550
Design and supply 2 post "Walkers →, Motorcycles ←" sign	1	380	380
Design and supply Elverdton Rd distance sign (600 x 600)	1	310	310
Design and supply small etched anodised interp panels @ 600 x 350	24	1540	36,960
Design and supply large etched anodised interp panels @ 900 x 400	5	2180	10,900
Historical research and supply of photos for panels (per story)	10	125	1250
Design and supply rusty steel pedestals for small interp panels	24	890	21,360
Design and supply rusty steel pedestals for large interp panels	5	1230	6,150
Design and supply trail markers (3 styles, 2 colours + spares)	40	40	1,600
Research, write, design and supply double-sided A4 brochure/map	5000	Na	4,650
Research and design QR code delivered interpretation	5000	Na	5,000
Site visit by interpretation consultant to gather information	N/A	N/A	4,380
TOTAL (not inc GST)			109,450

## COST ESTIMATES – HARDWARE, MATERIALS, CONTRACT (RARE FLORA SURVEY)

### Notes:

1. Costs in tables below are for hardware supply only – installation costs are included in the Works List;
2. Estimates are at early 2013 prices, and are based on past experience (not on specific local quotes).
3. Includes an estimate for the lookout in the form of a mine headframe, this structure would be a stylised representative modelled on the Mt Cattlin headframe, albeit much smaller.

Sign / Item	Units	Unit Cost	Total Cost
Supply steel posts for trail markers (90 x 90 square)	21	70	1,470
Supply rapid-set cement for all installation work (+/- 110 holes)	110	12	1,320
Supply treated pine posts and rails for track barriers	6	70	420
Supply seat for Trail ascent south end	1	1200	1,200
Design headframe style lookout for trail head	1	2700	2,700
Construct headframe style lookout	1	35000	35,000
Rare Flora Survey	1	6500	6,500
TOTAL (not inc GST)			48,610

## WORKS LIST – MT DESMOND CIRCUIT

1. Notes:
2. All signs and interpretive panels are costed elsewhere – costs in tables below are for installation only;
3. All other specific hardware items (tables, seats, posts for trail markers etc) are costed in the Hardware table – costs below are for installation only;
4. Where complex construction tasks are involved (viz: steps, bridges etc) all costs are included in the table below;
5. Trail construction to a standard 2m cleared width, surface graded smooth
6. Trail construction in new areas (1675m) will require Declared Rare and Priority Flora clearance surveys, and trail route adjusted to avoid. Liaise with DEC. Trail could be aligned to avoid DRF as part of construction planning using local botanical and trail design expertise as a cost saving.
7. Strict dieback hygiene for trail construction and repair.

Site or location	Description	Total Cost
Trail-head	Install trail-head panel on 2 posts	240
	Install trail marker (straight) for Trail entrance across carpark turnaround	100
	Remove earth formed lookout and hand rails	500
	Install new elevated lookout in style of mine headframe	5,000
	Install large interpretive panel with direction and distances to key points	360
MT DESMOND CIRCUIT		
0m	Lookout base. Install "Wrong way – do not enter sign" at trail end	240
25m Interp # 1	Install 2 post "Trail Start" sign on edge of car park, east side	240
	Construct trail through 95m of bush @ 2m wide, rocks for steps on site, construct waterbars, avoid rare flora	1,140
	Install large interpretive panel	180
120m	Road crossing, install 2 post directional sign (left)	240
	Install 2 post information sign – "Management access only – Walkers welcome"	240
	Install walker crossing signs 50m either side of trail crossing on road	120
	Install vehicle barrier across entrance to ridge track	300
150m	Install trail marker (straight)	100

Site or location	Description	Total Cost
260m Interp #2	Install small interpretive panel	120
340m Interp #3	Install trail marker (straight)	100
	Install small interpretive panel	120
475m Interp #4	Install small interpretive panel	120
630m Interp #5	Install "Walkers on track ahead" sign (down slope on Rat Run)	120
	Install trail marker (straight)	100
	Install warning sign "Share use trail – motorcycles and walkers"	120
	Install post I symbol, with left arrow	120
	Install large interpretive panel	240
795m Interp #6	Install small interpretive panel	120
920m	Install trail marker (straight)	100
1080m	Bat Cave track junction: install "Shared use trail – motorcycles and walkers"	120
	Install "Walkers on track ahead" sign down slope on Rat Run track	120
	Install 2 post directional sign (right)	240
1170m Interp #7	Install trail marker (straight)	100
	Install small interpretive panel	120
1350m	Install trail marker (straight)	100
1450m Interp #8	Install large interpretive panel	240
1485m	Install trail marker (straight)	100
1580m	Prune vegetation and clear track centre	1,000
1660m	Install trail marker (straight)	100
1690m Interp #9	Install small interpretive panel	120

Site or location	Description	Total Cost
1850m	Install trail marker (straight),  Trail construction, extends 1095m to Rail Trail at 2945m, @ 2m wide	100  13,140
1950m Interp #10	Install large interpretive panel	180
1980m	Install trail marker (straight)	100
2080m	Install trail marker (straight)	100
2140m Interp #11	Install small interpretive panel	120
2180m	Install trail marker (straight),	100
2240m Interp #12	Install trail marker (left 90°)  Install small interpretive panel	100  120
2310m	Install trail marker (straight)  Construct switchbacks down slope through mallet patch	100  1,200
2460m	Install trail marker (straight)	100
2545m	Install trail marker (straight)	100
2565m Interp #13	Install small interpretive panel	120
2650m	Construct water bars over 85m up slope from creek (15)	2,250
2700 Interp #14	Install small interpretive panel	120
2760m	Install trail marker (straight)	100
2810m	Cross "Rat Run" track, install warning signs: "Walkers crossing ahead" 100m either side of trail on track (2)  Install "Motorcycles prohibited" signs (2) on trail  Install barriers on walk trail (2, both sides of track)	240  240  600

Site or location	Description	Total Cost
2945m Interp #15	Railway Trail junction. Install 2 post directional sign (left)	240
	Install sign "Motorcycles prohibited" sign (for trail coming in from east)	120
	Install large interpretive panel	180
3430m Interp #16	Built up formation. Install small interpretive panel	120
3550m Interp #17	Bridge missing. Construct steps down north side, ramp across old timbers and steps up south side (8 each side)	2,900
	Remove old interp south side, install small interpretive panel	240
3680m	Rat Run track joins walk trail. Install warning signs "Walkers on track ahead" 50m north and south on Rat Run track	240
	Install shared use signs where Rat Run joins trail – north and south: "Shared use trail – motorcycles and walkers" (2)	240
3765m	Install trail marker (right turn)	100
3785m Interp #18	Remove old interp panel, Install small interpretive panel	120
3830m	Install trail marker (right turn) after detour	100
3865m Interp #19	Remove old interp panel, Install small interpretive panel	240
	Install 2 post directional sign: "Walkers →, Motorcycles ←" where rail trail and Rat Run diverge	240
3910m Interp #20	Vehicle track crossing. Remove old interp panel, Install small interpretive panel	240
	Install vehicle barrier on track	300
	Install "Walkers crossing ahead" signs 50m either side on vehicle track (2)	240
3950m	Culvert washout on formation. Build 3m deck across culvert	2,800
4070m Interp #21	Install small interpretive panel	120
4165m Interp #22	Install large interpretive panel	180
4230m	Install trail marker (straight)	100

Site or location	Description	Total Cost
4305m	Bridge missing. Construct stone steps on east side (8)	1,800
4330m	Creek. Construct trail through creek approx 15m	750
	Construct steps at end of 15m section back up onto formation (8)	1800
4430m	Install trail marker (straight)	100
4650m Interp #23	Missing bridge. Install small interpretive panel	120
	Construct sleeper steps (no rocks here) (8)	2,400
4680m	Other end of detour. Construct trail through creek bed	1500
	Construct sleeper steps at southern end up onto formation (8)	2,400
4850m	Install trail marker (straight)	120
4910m Interp #24	Install small interpretive panel	120
4970m	Trail crosses old vehicle track. Install trail marker (straight)	100
5130m Interp #25	Replace interp. Install small interpretive panel	240
5225m	Install 2 post directional sign (left)	240
	Install sign with distance to Elverdton Rd (to south)	120
	Construct sleeper steps off formation (5)	1250
	Construct trail for next 175m	2,625
5280m Interp #26	Install trail marker (straight)	100
	Install small interp panel	120
5400m	Rat Run track. Install trail marker (straight)	100
	Install warning signs "Walkers crossing ahead" 50m either side of trail on track (2)	240
	Install "Motorcycles prohibited" signs on trail entrances (2)	240
5430m	Erosion control, substantial fill required in eroded ruts, construct water bars over 380m (64) to displace water into repaired rut (see 5630m)	9,600

Site or location	Description	Total Cost
5480m	Install trail marker (straight)	100
5605m Interp #27	Install small interpretive panel	120
5630m	Erosion management in severe erosion, substantial fill to repair. Construct trail in good wheel rut. Backfill and repair with suitable machine. 380m total	4,560
	Brush repair eroded rut, take brush from cleared section @5810m	1,900
5680m Interp# 28	Install large interpretive panel	180
	Install seat for rest on climb and interp site	500
5780m	Install trail marker (straight)	100
5810m Interp # 29	Install 2 post directional sign (left)	240
	Construct trail 310m north to lookout through bush, carefully choose path to avoid sensitive flora.	4,720
	Install waterbars on sloped sections (30)	3500
	Install small interpretive panel	120
6120m	Trail Head at lookout. See 0m	0
TOTAL		101,395

## TOTAL PROJECT COSTS – MT DESMOND CIRCUIT

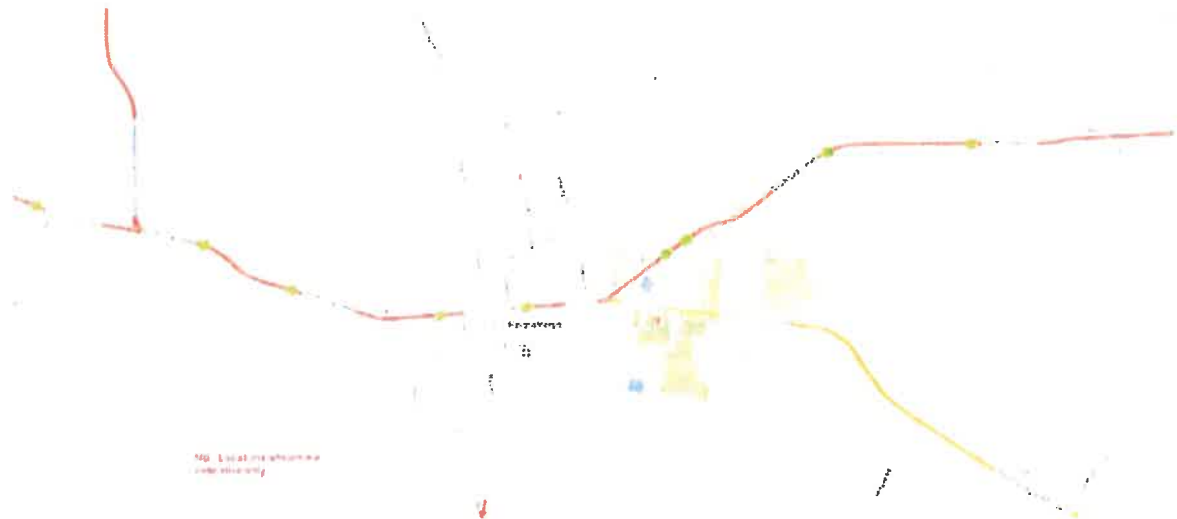
### Notes:

1. All items were estimated at early 2013 rates, with a 5% per annum allowance added in the table below for time passing prior to construction;
2. The table below summarises all individual items set out above.

Description	Total Cost
Interpretive panels, panel pedestals, other signage	109,450
Supply of hardware, materials and contract	48,610
Works list (including pathway construction / upgrading)	101,395
Site visit by trail planner at commencement to flag trail, pinpoint locations etc	4,200
Sub Total	263,655
Project management costs / contingency allowance (20%)	52,750
Cost increase allowance – 1 year at 5%	15,820
Project Total (not inc GST)	332,225
GST @ 10%	33,223
Project Total including GST	365,447

## SECTION 8: PROJECT 5 – THE RAVENSTHORPE TOWN HERITAGE DRIVE TRAIL

This project resulted from the process of working out which of Ravensthorpe's many heritage sites could logically be incorporated into the proposed Heritage Walk. The outcome of this was the recognition that there are a number of high-value heritage sites on the outer fringes and outskirts of town that are too "remote" to be included on the walking route – but which warrant interpretation and sharing with visitors.



### *The Ravensthorpe Town Heritage Drive Trail*

The sites included on this short local drive trail are all within 3 km of the town centre. There are a number of other heritage sites and attractions further out from town, but promoting and interpreting these should be the subject of a separate "Tourism Drive" planning project.

The sites listed below do not fall into a simple circuit route. However, with good clear mapping it should be relatively easy for visitors to find their way from one place to another. Having said that, the final "routes" to access some of these sites will not be able to be resolved until the Heavy Haulage Bypass is finalised – but given that work on that project should be completed during 2014 it is not likely to hold up the implementation of this trail.



*Remains of the Ravensthorpe Railway Station, the terminus of the Hopetoun – Ravensthorpe railway*

This project has deliberately been kept simple and relatively low cost in the hope that it can be implemented sooner rather than later. In short, it is a simple way of offering a rewarding +/- 2-hour drive to visitors, thereby keeping them in town for longer. It is also a simple and cost-effective way of "capturing" the heritage of these places, and acknowledging the important place they hold in the fabric of the local community.

## INTERPRETATION SITES / STORIES FOR INCLUSION

The listing below starts with the site nearest the centre of town (the Hospital) and moves in a broadly clockwise direction around town. This is a logical "route" for visitors to follow in the future.

Site #	Ref #	Site Description
TH	-	Trail-head outside new Visitor Centre in old telephone exchange
1	1	Ravensthorpe District Hospital (Cnr Martin & Queen Sts)
2	60	Historic cemetery site (Moir Rd)
3	59	Time meridian (South Coast Highway)
4	29	Marion Martin gold & copper mine (South Coast Highway)
5	n/a	Galaxy spodumene (lithium) mine (Floater Rd)
6	56	Hawk's Nest and blacksmith's tree (north of town)
7	57	Historic Cattlin Mine (north of town)
8	58	Former Mine Manager's house (Carlisle St)
9	41	Original railway station site (South Coast Highway, Esperance side)
10	44	Brewery and aerated water factory site (South Coast Highway, Esperance side)
11	42	Old racecourse and airstrip (South Coast Highway, Esperance side)
12	26	Agricultural showgrounds and rifle range (Hopetoun Rd)
13	28	Government copper smelter site (Hopetoun Rd)
14	2	Town dam (access via Hosking St)

## INTERPRETATION AND OTHER COSTS

As already outlined, this Drive Trail project has been deliberately kept simple. No on-site interpretive panels are proposed. Instead it is recommended that a detailed and high-quality brochure/map be produced – not only would this serve to direct visitors from one site to another but it would also contain interpretive information and images of each of the sites. This is a comparatively low cost option, and makes updating or changing easier if that should be required in the future. It also gives visitors a nice summary of some of Ravensthorpe's key historical events and places to take away with them.

The only other recommended "works" of any substance is the installation of relatively large "site signs" – these are designed to let trail users know that yes, they have actually arrived at their chosen site. Some of these places have completely disappeared over time (viz: the old racecourse, the former brewery etc), and others are a little obscure and hard to find (viz: Hawk's Nest, Marion Martin Mine).

### Notes:

1. Costs in tables below are for all aspects of each line-item (there is no separation between "labour" and "hardware" unless listed on separate lines);
2. Estimates are at early 2013 prices, and are based on past experience (not on specific local quotes).

Sign / Item	Units	Unit Cost	Total Cost
Install brochure dispenser on wall outside front door of new Visitor Centre (for visitors who arrive outside opening hours)	1	120	120
Write, design and supply 5,000 copies of A2 size brochure	1	11,600	11,600
Historical research and supply of photos for brochure (per story)	14	125	1,750
Design and supply large colour site signs – single sided (2000 x 650 mm, 2 post)	12	980	11,760
Design and supply large colour site signs – double sided (2000 x 650 mm, 2 post)	2	1370	2,740
Grading – tracks north of town, some "parking areas" (simple tidy-up)	n/a	4500	4,500
Design and supply warning / do not enter signs where required	7	240	1,680
Install all signs, including concrete supply (35 holes)	35	140	4,900
SUB-TOTAL (not inc GST)			39,050
Project management / contingency allowance (20%)			7,810
Cost increase allowance – 1 year at 5%			1,950
Project Total (not inc GST)			\$48,810
GST @ 10%			4,880
Project Total including GST			\$53,690

