



APPENDICES

Ordinary Council Meeting

Monday, 16 December 2019

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SY082-06/19 DRAFT TRAILS MASTERPLAN REPORT

File Number:	CS.LCS.13
Author:	Carol Littlefair, Arts and Cultural Heritage Officer
Authoriser:	Paul Martin, Chief Executive Officer
Previously before Council:	25 March 2019 – Stakeholder and Community Engagement Plan and advertising of the Draft for community consultation
Appendices:	<ol style="list-style-type: none">1. Final Draft Trails Masterplan for consideration June 20192. Draft Vision response during consultation period 13-31 May 20193. Individual letters received as feedback during consultation period 13-31 May 20194. Draft Vision for public comment during 13-31 May 2019

NATURE OF COUNCIL'S ROLE IN THE MATTER

Executive

PURPOSE OF REPORT

This report informs Council of progress to date with the Trails Masterplan for the Shire of York and requests that Council:

1. Considers the public comment and feedback (Appendices 2 & 3), on the Draft Trails Vision (Appendix 4) received during the public consultation period 13-31 May 2019 produced in line with the requirements of Shire of York Community Engagement and Consultation Policy G2.9
2. Adopts the Trails Masterplan for the Shire of York prepared by trails consultants Common Ground Trails. (Appendix 1).
3. Selects a priority project to progress resulting from the Trails Masterplan.

BACKGROUND

The creation of this Trails Masterplan arose from two previous unadopted Trails Masterplans and recent public demand for Trails facilities, especially from the fast-growing change in the Mountain Bike sector, which has the potential to increase tourism in York substantially.

The Shire has endeavoured to test demand by the running of cycling events on an ad hoc basis over the last two years and numbers of participants have substantiated and often exceeded the projected demand for such facilities in York.

This reflects the current State-wide situation regarding trails, as there are gaps in trails supply across multiple trail types and geographic regions. The Western Australian Strategic Trails Blueprint 2017-21 highlights the overall increase in trails use and the increasing significance of trails in tourism development, for physical and mental health and improving awareness and appreciation of the natural environment.

There is rising demand from both domestic and international visitors for activities and experiences across this tourism sector. Demand for Indigenous tourism experiences at 82% is outweighed by visitor fulfilment of 26%. Cultural tourism accounts for 37% of world travel and this is growing at an

annual rate of 15%. Well maintained, publicised and interpreted heritage sites significantly increase tourism to an area and York's many cultural heritage assets are currently underutilised.

Events, Regional tourism and Indigenous tourism are identified as 3 of the 7 key pillars in the State Government Strategy for Tourism in Western Australia 2020. The Trails Masterplan is intended to provide a structure that will enable the Shire of York to bring social and economic benefits to the community in equal measure.

The plan has been developed with input from local community members, stakeholders and members of state-wide user groups and associations. The details regarding opportunities for input are outlined further in the report and Officers are comfortable with the level of engagement by the consultants with the community.

The draft report is now presented to Council for consideration at Appendix 1.

COMMENTS AND DETAILS

Geographical Scope

The Draft Plan is concerned primarily with land which the Shire of York either owns or manages, or land/roads to which there is public access (such as the DBCA Wandoo woodlands around Mt Observation). It makes recommendations of High and Medium priority only in relation to such land.

Recommendations in the Low Priority category also point up the desirability of trails which are currently restricted by land tenure (such as a York-Northam Riverbank trail, York-Bruce Rock Railway line trail) which may change in the future.

Notwithstanding the focus of the plan on land owned or managed by the Shire, a proposed Mountain Bike trail development concept on private land at Mt Bakewell is noted in the Draft Plan for the following reasons:

- It has the potential to be linked to any trail created by the Shire of York on vested Crown land
- It may be a contributor to the attractiveness of York to the Mountain Bike sector.
- Improved vehicular access to Mt Bakewell for emergency vehicles will be a necessity for developing any walk/bike trails on this Shire-vested land – it will be essential to share emergency access with private landowners as the Shire-vested land is too steep for vehicular access.

Priority Project

As part of this report, Council is asked to determine the priority project for the organisation to focus upon over the next two years. The organisation's limited financial and human resources require prioritisation and focus in the implementation stage.

The trails consultants were engaged to examine all types of trails use to benefit local residents and tourism alike and assess their merits. Officers met with the consultants on Monday 10 June to discuss the public feedback received and possible priority projects.

The consultants have identified a network of trails on Mt Brown as the highest priority, short term project which will require external funding, for the reasons outlined below.

They have also identified high priority, short term projects that can be carried out in-house: Rationalisation of Heritage/cultural Walk trails, including the Avon River walk trail and rationalisation of Self Drive trails. All of the above are recommended to be formatted for a digital platform (Trails WA, which gives unlimited free publicity to well-managed, standards-compliant trails) and can be achieved with in-house resources due to simple infrastructure being required with the main media being electronic and print.

High Priority/Short term Project

As outlined above, the formalisation and development of the trails network on Mt Brown is recommended as the priority short term project to deliver. Rationalisation of the many existing trails into three types; walk, mountain bike and equestrian; creating one well-made example of each type that minimises user conflict and landscape damage. It is likely that the Walk and Mountain Bike trails would be of easy/medium difficulty to appeal to a broad user group of both local residents and visitors alike, especially families. The equestrian trail would be situated near the base/perimeter to minimise erosion and would largely make use of existing/proposed firebreak tracks, so is likely to be the lowest construction cost of the three trails. Mt Brown also has the existing benefit of vehicular access to the summit for both emergency vehicles and the less mobile.

This would also provide an opportunity to upgrade infrastructure at the lookout to ensure universal access. This lookout and associated infrastructure, including interpretation material is in need of upgrade and would benefit from an integrated approach for the entire site.

The proposed network would include trails catering for the following users:

1. Mountain bikers. The trails on Mt Brown are popular due to the proximity to the town centre and the height of the mountain. This interest has been demonstrated by the number of events and participants wanting to use Mt Brown over the past two years. Because of this and pressure on other locations, trails in York are increasing in popularity. This has resulted in the trails being subject to heavy wear from unsanctioned cycle use all year round plus the events 2-3 times per year. Whilst this has clearly demonstrated the demand and potential drawcard from Perth and further afield; long term management of the site now needs addressing urgently. Officers are concerned that if formalisation and development of appropriate trail infrastructure does not occur, steps will need to be made to manage or limit the events in order to manage impact upon the environment and opportunities for remediation.
2. Walkers. Walking on Mount Brown is currently an activity enjoyed by many locals. Walking is a pastime which caters for a wide range of ages and fitness levels and is popular with York residents and visitors alike. Walking tops the list of WA physical recreation activities with 62% of adults participating in walking for recreation*. (* Milligan, R., McCormack, G.R., & Rosenberg, M (2007). Physical Activity Levels of Western Australian Adults 2006: results from the Adult Physical Activity Survey. Perth, Western Australia: Western Australian Government).
3. Equestrians. These users currently have no public trails at all and there are a high proportion of leisure horse owners on small acreages in the York area. Riders are vulnerable road users (especially children on ponies) so safe off-road riding is essential and the rural lifestyle, which often includes horse ownership, is a notable drawcard for attracting new residents to York.

However, if Council's objective was entirely focused upon increasing tourism activities in the Shire, Mt Bakewell trails would likely be a better priority project. Whilst development of the Mt Brown Trails Network offers very substantial tourism benefits these are not considered to be 'gamechanging' from a purely economic and tourism perspective.

Mt Brown does in addition to continued tourism opportunities (i.e. events and indigenous cultural tourism) also provide lifestyle benefits to a wide range of local residents and because the trails development would be governed by the results of an environmental survey, enhancement of the environment in York.

High Priority/Medium term project

Mt Bakewell Summit Trail is designed to be a steep climbing walk trail, with many steps up the southern face of Mt Bakewell, designed to be a challenging yet achievable, high quality landscaped experience focused on reaching the summit and sensational views. The main user group would be hikers seeking fitness but it would certainly appeal to the broader market as a tourist attraction for visitors, becoming an iconic drawcard if well promoted and combined with a summit Lookout, modelled on Wineglass Bay Lookout in Tasmania. <https://atravellersfootsteps.com/wineglass-bay-lookout-tasmania/> which states: "Almost every tourist will have Wineglass Bay on their itinerary, and for good reason. Wineglass Bay lookout is located within Freycinet National Park on the East Coast of Tasmania, nestled within a granite mountain range known as the Hazards and surrounded by long stretches of white sand beaches. Wineglass bay trail leads to a lookout that offers panoramic views over Wineglass Bay and the surrounding national park".

The consultants regard this trail as the 'gamechanger' in tourism terms, with more potential to be an iconic drawcard than Mt Brown but particularly in its early years is likely to require marketing through events (such as competitive run/climbs) and promotional advertising, to establish. There is currently no possibility for vehicular access to the summit without accessing neighbouring private land, which makes the development less straightforward than Mt. Brown both in terms of emergency and universal access. For this reason, it has been allocated a High Priority/Medium term rating.

Implementation requirements

The Trails Master Plan outlines and makes recommendations on the process which should be followed to develop both of the above-mentioned trails, should Council wish to proceed. The consultants have stressed the importance of implementing a sound process to develop either of these priority projects based upon trail industry standards and evidence based upon sound research.

Furthermore, if Council wants to formalise and actively develop the trail network on either Mt Brown or Mt Bakewell, it is recommended that the "purpose" of these reserves is amended to include recreation. This is outlined further in the report.

It is acknowledged that external funding will be required to implement both projects, hence sound processes, involvement and support from the community/stakeholders and appropriate approvals are required to be in place to secure major grant funding.

The construction of trails will also need to be done to the appropriate standards by suitably qualified companies to ensure high quality long lasting facilities.

On this basis, Officers are recommending a measured, staged approach to the development of the trail network on Mt Brown incorporating all of the issues above.

OPTIONS

Council has the following options in regard to this report:

1. Selecting the High Priority/Short term Project

Mt Brown Trails Network.

Mt Brown offers very substantial, though not 'gamechanging' economic and tourism benefits plus lifestyle benefits to a wide range of local residents and as the trails development would be governed by the results of an environmental survey, enhancement of the environment in York.

2. Selecting the High Priority/Medium term project

Mt Bakewell Summit Trail

The consultants regard this trail as the 'gamechanger' in tourism terms, with more potential to be an iconic drawcard than Mt Brown but particularly in its early years is likely to require marketing through events (such as competitive run/climbs) and promotional marketing, to establish. There is currently no possibility for vehicular access to the summit without accessing neighbouring private land, which makes the development less straightforward than Mt. Brown both in terms of emergency and universal access.

3. Selecting another trail as priority project

Any of the Medium and one or two of the Low priority projects would be possible to undertake. However when applying for major grant funding from external sources it is generally expected that the professional advice offered in a Trails Masterplan is followed and projects are undertaken in priority order. It may also incur risks as outlined in 'Risk Related' below.

4. Not adopt the plan in its current form and require further consultation or exploration of certain issues.

5. Not select any priority project at this stage. This is also an option open to Council but may also incur risks as outlined in 'Risk Related' below.

IMPLICATIONS TO CONSIDER

Consultative

On 25 March 2019 Council approved the Stakeholder and Community Engagement Plan and advertising of the Draft Vision for community consultation. Since that date, the following consultative processes have taken place:

- The consultants held a meeting with 5 local Noongar Elders on 10 April 2019; several matters about the cultural sensitivity of sites were discussed and noted, along with the generally positive views of the Elders to increasing public awareness about Ballardong Noongar culture, providing that this was done in full consultation with the Ballardong Noongar community.
- Officers met with the Department of Biodiversity, Conservation & Attractions Interpretation Unit in April and obtained useful advice regarding trail signage and interpretation to DBCA standards.
- The consultants ran a Public Open Workshop at York CRC on 11 April which was well attended by approximately 30 participants and the results are recorded in the Draft Vision.

- Officers met with the consultants on 8 May in Dwellingup to discuss the Draft Plan and view the new Dwellingup National Trails Centre project being created by the Shire of Murray, which has successfully secured \$3.5 million through the Australian Government's Building Better Regions Fund along with \$5 million from the Department of Biodiversity, Conservation and Attractions. The project includes many kilometres of quality mountain bike trails, a new Visitor Centre, a suspension bridge, upgrades to 4WD tracks and roads in reserves, plus marketing and promotion. See <https://www.murray.wa.gov.au/dwellingup-national-trails-centre/>
- Advertising of the Draft Trails Vision for public comment and feedback was undertaken during 13-31 May. This was a week less than initially planned due to the consultants' pressure of workload. The comments and feedback have been analysed and collated as Appendix B and additional letters collated as Appendix C of this report for Councillors reference and review.
- The meetings and advertising of the comment period were publicised through the Shire website and Facebook page, in the York Community Matters newspaper and on posters put up around town. The Avon Valley Tracks & Trails group (AVTAT) was also proactive in assisting to spread the word about the Draft Vision. A list of persons and organisations directly contacted is included in the Draft Vision.

The public feedback received has been generally supportive. As can be seen from the survey results (Appendix 2) many of the comments that fell into the 'negative' category did so because participants wished to see certain trails as a higher priority than these had been allocated. There were also three strongly anti-equine comments. Letters from the Equine community in Appendix 3 highlighted concerns about increased use of the area which adjoins York Racecourse and the area initially identified as a trailhead at the foot of Mt. Bakewell. In the final Draft the consultants have made some modifications and recommended the need for further consultation with and in relation to Equine and Offroad Recreational Vehicles (ORV) groups in particular, each of which have specific needs that may conflict with others. This is part of the reason for progressing with Mt Bakewell after Mt Brown, to allow for further consultation and resolution of these matters.

Full and ongoing consultation with the Ballardong Noongar community will be necessary for implementing both the construction and interpretation of trails in the Draft Plan as Noongar cultural heritage is inseparable from Country. The underpinning rights of Aboriginal people as defined by the United Nations Declaration on the Rights of Indigenous Peoples (2007) includes the:

- Right to self-determination.
- Right to full and fair participation in processes, projects and activities that impact on or portray them.
- Right to control, maintain and celebrate culture, heritage and identity.

The Draft Master Plan contains guidelines for formal Aboriginal consultation processes applicable to the creation of Trails. In addition, the National Trust (WA) publication 'We're a Dreaming Country' Guidelines for Interpretation of Aboriginal Heritage (2012) provides ethical guidelines for interpretation processes. Cultural considerations, such as areas for secret/sacred ritual, landmarks with particular significance and oral histories associated with a site are likely to be part of the intangible Noongar heritage of the area and no trails development should take place without full consultation; to do so would risk severely alienating the Noongar community, with whom fragile relationships have been carefully built up over a number of years. Doing trails development with full consultation can provide opportunities for tourism benefits for both the Noongar and wider community.

Full and ongoing consultation with local environmental groups will be essential in the planning and ongoing care and maintenance of these open space assets and good liaison with local members by any professional environmental firm when surveys are carried out will be extremely beneficial to survey outcomes. Once fully surveyed, local groups will have benchmarks for monitoring the environment.

Circumstances, land owners and land uses may change over the ten-year period intended to be covered by this Trails Masterplan and ongoing consultation with State peak bodies and local user groups will be necessary as a continuous part of the trails development process and should be adequately funded throughout the life of the Plan. Shire of York Community Engagement and Consultation Policy G2.9 has been and will continue to be the guiding principle behind community consultation for the Trails Masterplan and its implementation.

Given this Officers are recommending that a Community Engagement Plan be prepared for each project being worked on at that time. In this regard then Officers are recommending that a report be presented to a future Council meeting with a Community Engagement Plan for the development of the priority project (i.e. Mount Brown Trail Network) for Council's consideration.

Strategic

The Corporate Business Plan:

Economic Development: Theme 3: Prepare a comprehensive Trails Master Plan that incorporates walk, bike, drive, bridle trails, signage and interpretation, 2019/20

Priority Budgeted Strategic Capital Projects; Open Space Assets: Theme 4: Improvement Programme – Mt. Brown, planning phase 2019/20, delivery phases 2020/21, 2021/22

The Strategic Community Plan:

Revitalisation: Driving the York Economy Forward, in the context of:
'a programme to use the town's strengths, including heritage' and the Key Challenge of Leveraging the 'Leap Forward' in Heritage and Tourism.

Theme 2: A leader in Cultural Heritage and the Environment, particularly:

- 2.1 Aboriginal culture is respected and showcased under the guidance of the Aboriginal community,
- 2.5 The Avon River and river edges are restored to health, have high levels of biodiversity and people are able to use and enjoy both,
- 2.6 The Shire's wildflower and at-risk habitats are protected,
- 2.9 There is a high level of community involvement in heritage and environmental conservation.

Theme 3: Driving the York Economy forward, particularly:

- 3.4 Visitor based economic activity is flexible, self-supporting, resilient, innovative and growing.

Strategic Positioning of Trails Development in York

Council will need to be cognisant of the fact that a number of local authorities are preparing and implementing trails master plans in their communities. To check the vision for trails in York align with priorities of the State Government involved in trails development across the State, Officers have held meetings with State-level stakeholders, including: Tourism WA and the Department of

Local Government, Sport & Cultural Industries, Department of Biodiversity, Conservation and Attractions and Regional Development Australia (Wheatbelt) to discuss the Draft Masterplan and seek feedback about the positioning of York within the Trails network in WA.

All have provided positive feedback about the Draft Plan especially in regard to the realistic building upon York's existing strengths of proven desire for trails, heritage and the arts and location for the short break market. These external stakeholders have all indicated they consider the Draft Plan has been well tailored to its purpose and is realistic, which augurs well for achieving external funding.

Policy Related

Shire of York Community Engagement and Consultation Policy G2.9.

Financial

The Trails Masterplan budget allocation for 2018/19 is \$35,000. No overrun of this costing is anticipated although a portion will be carried forward to 2019/20 in order to provide an outline concept plan for the selected priority project.

The budget for next year's priority project is outlined below for Council's consideration and is included in the draft 2019/20 financial year budget:

Trails Master Plan - Implementation Action Plan – Mt. Brown Network	Cost
<ul style="list-style-type: none"> • Prepare a Concept Plan for support infrastructure and lookout on Mt. Brown 	\$30,000
<ul style="list-style-type: none"> • Prepare detailed analysis and concept plan for trails (3 types) on Mt. Brown 	\$30,000
<ul style="list-style-type: none"> • Noongar cultural consultation 	\$10,000
<ul style="list-style-type: none"> • Plant Hygiene/Dieback Study* 	\$15,000
<ul style="list-style-type: none"> • Environmental Assessment/FF Studies* 	\$20,000
Total	\$105,000

Construction, Signage and Revegetation TBC in the following financial year, with the aim of attracting major grant funds from both the State and Federal Government.

Officers have explored the ability to fund some of the planning items identified above using grant funding without success. However if the Trails Master Plan is adopted, priority project selected and funding committed from the Shire towards this project it will make it easier to attract funding for planning should it become available during the course of the year.

*Note: savings may be possible if these can be combined and undertaken with one firm.

Trails Master Plan - Implementation Action Plan – Other Interpretive Trails	Cost
<ul style="list-style-type: none"> • Greenhills heritage trail (consistent with other reports presented to Council) 	
<ul style="list-style-type: none"> • Wara Art Trail with York Art & Events 	\$3,000

- Town Heritage trails – rationalise into loops, online/print format \$3,000
- Self Drive trails – rationalise, online/print format \$3,000
- Design and production of waymarkers for all trails \$10,000

Total

\$19,000

Total for all projects

\$124,000

Legal and Statutory

For both the Shire-vested Crown land on Mt Bakewell (C Class Reserve) and Mt Brown (A Class Reserve), areas identified as High Priority for trails development, it has been identified that a statutory amendment to the purpose/use of these reserves will be required if Council wants to progress with the recommendations in the plan.

Whilst the use of these reserves has been able to accommodate adhoc events, if Council now wants to formally sanction and develop either of these sites for permanent trails use an amendment of the purpose of the reserve is required.

This amendment would need to add the use “Recreation” to the permitted purpose in the Management Orders for both reserves.

The adoption of the Trails Master Plan is considered to be an appropriate time to consider the future uses of these open space assets as Council is making a strategic decision regarding the future use and purpose of these land parcels.

Council may choose to only request the amendment/change to the use/purpose of Mt Brown at this stage and consider any changes to Mt Bakewell in the future should that priority project be progressed.

Preliminary advice from the Department of Planning, Lands and Heritage advises:

- a written request from Council is required to change/add the purpose ‘Recreation’ to the existing purposes of Parklands (Mt Brown) Parklands and Grazing (Mt Bakewell)
- C Class requires the Shire of York to fill out a Crown Land Enquiry Form and each case is considered on its merits.
- A Class has the highest protection and the proposed amendment has to be tabled in parliament for 14 sitting days, prior to tabling it has to be advertised in the local paper for 30 days for any comments or objections.
- The advertising and tabling is done by the Department of Planning Lands and Heritage can take considerable time.

As this is a complex process Officers recommend seeking further detailed advice from the DPLH and provide a report to a future Council meeting with full information of the procedure required to amend the purposes of either or both of these reserves.

Risk Related

Not going ahead with the Masterplan poses a moderate environmental risk due to ongoing unsanctioned use of Mt Brown which if left unaddressed poses the risk of degrading areas of sensitive environment. Conversely there is a possible moderate reputational risk and consequent economic effect upon tourism if the already proven demand for trails goes unfulfilled and all use of the site has to be curtailed.

It will be essential for a Change of Use application to define how the current environment of Mt Brown, which is somewhat degraded environmentally, will be enhanced following the development of trails due to an understanding and protection of sensitive areas.

This understanding, gained through a professional environmental survey (ideally during August to October) will ensure better management and channelling of recreational use into official, sanctioned and waymarked trails rather than the current unofficial use which is increasing rapidly. (Rottnest Island is an example of a well-managed A-Class Reserve for recreation and conservation). Although the Shire-vested Crown land on Mt Bakewell is classified as a C Class Reserve it is generally considered by environmental experts to be a far more pristine environment with sensitive flora, although most of the sensitive flora is found on private land, not the Shire vested areas.

For these reasons it is recommended that these surveys are carried out prior to any Change of Use application and to a high standard, which Officers recommend be commensurate with Environmental Protection Agency guidelines. See <http://www.epa.wa.gov.au/policies-guidance/technical-guidance-flora-and-vegetation-surveys-environmental-impact-assessment>. A reconnaissance survey followed by a targeted survey, as defined by EPA guidelines are likely to be required, with possibly a detailed survey dependant on findings.

By rigorous analysis of environmental considerations, the Trails Masterplan priority project will be able to demonstrate and communicate exactly how the environment of the area selected will be enhanced, or remain unharmed, by trails development which is planned around avoidance of sensitive areas and provides the opportunity to improve degraded areas.

Should a Change of Use be refused for any reason, such surveys will inform the future environmental care of the sites in line with their existing classifications, something which should be considered in the light of the Shire's aim to be 'A Leader in Heritage and the Environment'.

Workforce

As with any plan prepared, the Shire needs to be cognisant of its ability to implement the plan considering both human and financial resources. To this end, Officers have identified capacity to progress with one priority project at any one time. Whilst with unlimited capacity it would be ideal to progress more than one project, this is not an option for an organisation like the Shire of York. This therefore requires Council to select (if any) the priority project it wishes the organisation to progress.

Officers have also identified some quick wins in the plan which can be implemented within existing staffing resources but require financial resources from Council.

To implement the project selected by Council, Officers will continue the cross organisational working group to coordinate actions and ensure all aspects of trails development are considered and addressed.

VOTING REQUIREMENTS

Absolute Majority: No

RECOMMENDATION

Moved: Cr Kevin Trent

Seconded: Cr Denis Warnick

That Council:

1. Adopts the Trails Masterplan for the Shire of York prepared by trails consultants Common Ground Trails as attached at Appendix 1 with minor typographical corrections if required.
2. Selects the development of the Mt. Brown Trail Network as the first priority project for implementation from the Trails Masterplan.
3. Requests the Chief Executive Officer to include in the draft budget resources identified in the Financial section of this report for progressing the development of the Mt Brown Trails Network, including: An environmental assessment of flora, fauna and plant hygiene/dieback survey of the site; detailed analysis of the existing trails and concept plan for Mt Brown and associated infrastructure including the lookout; and a Noongar cultural heritage survey of the site.
4. Requests the Chief Executive Officer to present a report to Council detailing the requirements of a formal Change of Use in the Management Order for Shire-vested Crown land on the selected Priority site through the Department of Planning, Lands and Heritage once some of the above-mentioned studies are completed.
5. Requests the Chief Executive Officer to present a Community Consultation and Engagement Plan in accordance with Council Policy G.2.9 for the development of the Mt Brown Trails Network for Councils consideration.

AMENDMENT

Moved: Cr Jane Ferro

Seconded: Cr Pam Heaton

That Council:

2. Selects the following capital projects as high priority short term projects for implementation from the Trails Master Plan:
 - (a) the development of the Mt Brown Trails Network
 - (b) Off Road Vehicle area upgrades
6. Requests the Chief Executive Officer present a report to Council regarding implementation of the desired improvements to the Off Road Vehicle area as outlined on page 53 of the report including but not limited to costings and funding opportunities for Councils consideration.

CARRIED: 7/0

Reason: *The Off Road Vehicle area* is 1 of only 6 gazetted in the State and the circuit is currently exceptional due to recent upgrades to the facility by the Shire of York. It is considered one of the

benchmarks for ORV areas in the State. With improved directional signage and uploading information onto the Trails WA website and the Shire of York map, this would be a quick 'win' for the Shire.

AMENDMENT BECAME THE MOTION

That Council:

1. Adopts the Trails Masterplan for the Shire of York prepared by trails consultants Common Ground Trails as attached at Appendix 1 with minor typographical corrections if required.
2. Selects the following capital projects as high priority short term projects for implementation from the Trails Master Plan:
 - (a) the development of the Mt Brown Trails Network
 - (b) Off Road Vehicle area upgrades
3. Requests the Chief Executive Officer to include in the draft budget resources identified in the Financial section of this report for progressing the development of the Mt Brown Trails Network, including: An environmental assessment of flora, fauna and plant hygiene/dieback survey of the site; detailed analysis of the existing trails and concept plan for Mt Brown and associated infrastructure including the lookout; and a Noongar cultural heritage survey of the site.
4. Requests the Chief Executive Officer to present a report to Council detailing the requirements of a formal Change of Use in the Management Order for Shire-vested Crown land on the selected Priority site through the Department of Planning, Lands and Heritage once some of the above-mentioned studies are completed.
5. Requests the Chief Executive Officer to present a Community Consultation and Engagement Plan in accordance with Council Policy G.2.9 for the development of the Mt Brown Trails Network for Councils consideration.
6. Requests the Chief Executive Officer present a report to Council regarding implementation of the desired improvements to the Off Road Vehicle area as outlined on page 53 of the report including but not limited to costings and funding opportunities for Councils consideration.

Reason: Mount Brown is a Class A Reserve and an important natural asset, this process

AMENDMENT**Moved: Cr Heather Saint****Seconded: Cr Denese Smythe**

That Council:

4. Council only consider making an application to the State Government to change the use/purpose of the Mt Brown reserve once the following steps are undertaken:
- An assessment of flora, fauna and plant hygiene/dieback survey of the site;
 - A detailed analysis of the existing trails and a concept plan for Mt Brown and the associated infrastructure including the lookout is prepared;
 - A Noongar cultural heritage survey is undertaken;
 - The community has been consulted on any potential change of use from Parklands to Recreation and provided an opportunity for comment.

CARRIED: 7/0

should be well managed with the broader community having an opportunity to comment on its future.

**Mt Brown Reserve
Reconnaissance Survey
2019**



Prepared for: Shire of York

Prepared by: **Del Botanics**
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November 2019

Mt Brown Reserve Reconnaissance survey
Shire of York 2019

EXECUTIVE SUMMARY

This report has been prepared by Del Botanics on behalf of the Shire of York to undertake a reconnaissance survey to review remnant flora, fauna and vegetation at Mt Brown Reserve, York. A site survey was undertaken in September 2019. The site is approximately 107 kilometres east of the Perth central area, in the Shire of York.

The site visit in September 2019 recorded a majority of the vegetation within Mt Brown Reserve as “Degraded” condition. Vegetation communities were broadly mapped and described by recording the dominant tree species and upper level flora species. The vegetation described on site can be categorised into three broad vegetation communities, York Gum Woodland, Sheoak Woodland and Granite Outcrops. The Granite Outcrops are valuable habitats for Flora and Fauna and should be protected on this reserve.

Adjustment to some of the current tracks, by potentially increasing the width and the number of tracks may increase the use from walkers and reduce the conflict between different user groups of the reserve. Increasing the width of some of the tracks and applying additional tracks will also aid in immediate weed control by removing the current weeds directly, these areas can then be used to as buffers for future weed control. The retention of the current narrow tracks can be utilised for mountain bikes.

Immediate weed control is recommended and should be undertaken over multiple years starting with small manageable areas. This will need to be followed through with a rehabilitation plan that uses local endemic species. To aid in weed control it is suggested to limit fire use and use fire as an opportunity to undertake weed control.

Due to the site being dominated by weed species with a very low diversity of native understorey, it is recommended that a Level 2 Flora and Vegetation Assessment is not necessary, however there are number of recommendations that should be considered for future planning.

Mt Brown Reserve Reconnaissance survey
Shire of York 2019

STATEMENT OF LIMITATIONS

This environmental report has been prepared in accordance with the scope of services set out in the original quotation. In preparing the report, Del Botanics has relied on data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations, most of which are referred to in the report. Del Botanics has not verified the accuracy or completeness of the data to the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report are based in whole or in part on the data, those conclusions are contingent upon the accuracy and completeness of the data. Del Botanics will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, unavailable, misrepresented or otherwise not fully disclosed.

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1. INTRODUCTION

1.1 BACKGROUND

This report has been prepared by Del Botanics on behalf of the Shire of York to review remnant flora, fauna and vegetation on Mt Brown Reserve, (further referred to as MBR) York. A site survey was undertaken in September 2019. The site is approximately 107 kilometres south east of the Perth central area, in the Shire of York. The location of the site is shown on **Figure 1** below.

The Shire of York covers an area of 215,963 hectares. It is located in the Avon River Basin which includes the Lockhart and Avon Catchments. The Avon River runs through the centre of the shire. The State forest covers the western part of the shire, occupying nearly quarter of the total shire.

Figure 1: Mt Brown Reserve Location



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1.2 HISTORY

The first European farmers settled in the Avon Valley in 1831 and established themselves as pastoralists, grazing sheep on native herbage and cropping small areas of the better soil types. In 1880 the railway came to the Avon Valley and large advances to agriculture were made in the early 1900's.

Native vegetation in the Shire of York has been significantly cleared for agricultural purposes. The district was first settled in the mid 1800's and the best country for agriculture, being the woodlands on heavy soils in the valleys, was cleared by hand. The remaining areas of native vegetation are mostly the areas unsuitable for agriculture, such as granite outcrops, breakaway country and saline areas. Woodland and sandplain country are very poorly represented in reserves and much of the woodlands that do remain on private land have been degraded by grazing, weed invasion and inappropriate fire regimes (Safstrom, 1997).

1.3 MT BROWN NATURE RESERVE

Mount Brown Reserve (Figure 2) is vested within the Shire of York as a gazetted Class A Reserve no. 6915, for the purpose of "Parkland" within the York town site. The reserve covers a total area of 138.80 hectares and its highest point is 342.52 metres above sea level. MBR was originally natural bushland with no cultivated parkland areas but has a network of tracks and firebreaks running through it. MBR has a look out area which appears to be a popular spot for tourists.

The boundary of MBR can be broadly described as Attfield Road to the east, the fence lines of the private properties to the south, Chandos Road to the north and west, the eastern fence line of the cemetery and the eastern fence lines of the properties lining the western boundary of the reserve. The lookout platform and adjacent picnic area are accessed via Steere Road and its continuation, known as Pioneer Drive.

There is a long history of unofficial recreational use of this area for walking, horse riding and more recently for mountain biking. Formal cycling events and the unofficial use of MBR for mountain biking have created conflict between cyclists and walkers and a demand and pressure for public access to trails, especially for mountain bike trails, as identified in the recent Trails Master Plan 2019 for the Shire of York.

Many areas of MBR are degraded or weed infested but it is believed that there are still areas which may contain significant or priority flora. Before applying to vary the vesting order to Parklands and Recreation, the Shire Council has determined to commission a flora and fauna survey to identify and locate vulnerable species or habitats, to protect these areas and guide future recreational use of MBR (Shire of York, 2019). A previous inspection has revealed a number of narrow paths of compacted soil, devoid of native vegetation. These paths are the results of the trail bike activity and off road vehicles.

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Mt Brown Reserve currently has a medium to heavy density cover of York Gum (*Eucalyptus loxophleba*) and Jam trees (*Acacia acuminata*), fairly evenly distributed over the whole area, with the odd tree of a different species. However the condition of the understorey across the entire area is in a very degraded condition, with exotic grasses dominating the understorey. In a previous Environmental Field Assessment undertaken in 2008 (Burbidge, 2018), it was noted that there were copious amounts of Lupin, Cape Tulip and Patterson's Curse that dominated the landscape. It further describes that there is very little native understorey vegetation on MBR. Some Granite Outcrops had moss, lichen and fungi present. It also states that without a defined plan for MBR its chances of recovery and re-establishment of native plants will be minimal and it will be left to languish and degrade even further until the reserve is left with nothing more than a few stands of York Gum and Jam trees with the remainder of the parkland covered in weeds, almost as it is now (Burbidge, 2018).

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Figure 2: Mt Brown Reserve



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2. METHODOLOGY

Del Botanics completed a Reconnaissance (Level 1) spring flora, fauna and vegetation survey at Mt Brown Reserve, York in accordance with EPA Guidance Statement No. 51, Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA 2004) and EPA Guidance Statement No. 56 Technical Guidance for Terrestrial Fauna Surveys (EPA 2004).

This involved recording dominant flora and fauna species and vegetation communities and condition throughout the reserve. Targeted searches for Threatened and Priority flora listed as occurring or likely to occur at MBR were conducted in likely habitat areas on foot. Vegetation communities and condition of vegetation were recorded and mapped using the Keighery (1994) scale.

2.1 DESKTOP ASSESSMENT

Prior to the commencement of the field survey, a desktop assessment was undertaken to identify relevant environmental information pertaining to both the survey area and to assist in survey design. The desktop assessment involved a review of the following documents:

- Threatened Flora listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- Declared Rare and Threatened Flora listed under *WA Environmental Protection Act 2016*;
- Priority Flora recognised by the Department of Biodiversity, Conservation and Attractions (DBCA);
- Threatened Ecological Communities (TECs) listed under State and Federal legislation;
- Priority Ecological Communities (PECs) recognised by DBCA;
- Environmentally Sensitive Areas (ESAs) recognised by DBCA;
- Threatened Fauna listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- Priority Fauna recognised by the Department of Biodiversity, Conservation and Attractions (DBCA);
- Environmental Field Assessment – Mt Brown, York WAGE event 26 August, 2018 (T.Burbidge, 2018);
- York Trails Master Plan, Shire of York (2019-2028) (Common ground Trails, 2018);
- Mt Brown Reserve Management Plan (Terri Watson 2008); and
- Liaison with available local environmental groups (River Conservation Society, Wildflower Society).

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3. EXISTING ENVIRONMENT

3.1 SOILS AND LANDFORMS

The Shire of York area is underlain by granitic rocks, and migmatites and acidic gneisses. Most of the shire is underlain by granites of the Yilgran Block. The Shire of York contains two broad regions, each containing characteristic landforms, soil landscapes and vegetation (Weaving, 1994).

- **The Zone of Rejuvenated Drainage**

This zone is defined by the Meckering Line to the east and the Darling Range Zone to the west.

- **The Darling Range Zone**

This Zone is found in the west of the Shire.

3.2 VEGETATION

The Shire of York covers an area of 215,963 hectares. It is located in the Avon River Basin which includes the Lockhart and Avon Catchments. The Avon River runs through the centre of the shire. The State forest covers the western part of the shire, occupying nearly quarter of the total shire.

The South west of Western Australia has been divided into districts based on their vegetation type, drainage system and rainfall. The Shire York contains four Natural Resource Zones as shown below in **Table 1** (Weaving, 1994).

Table 1: The Natural Resources Zones in the Shire of York

NRZ Number	NRZ Code	Beard's Natural Region	Drainage Division	Rainfall (mm)
30	DIAvR3ii	Dale Sub-district (Northern Jarrah Forest)	Avon River	500-700
32	DLSwR3i	Dale Sub-district (Northern Jarrah Forest)	Swan Coast	500-700
34	DISwR2	Dale Sub-district (Northern Jarrah Forest)	Swan Coast	700-1100
62	AvAvR4	Avon Botanical District (Wheatbelt)	Avon River	less than 500

The Shire is found within two botanical districts: The Darling Botanical District and the Avon Botanical District. These Botanical Districts are divided into two drainage divisions, the Avon River and the Swan Coastal Plain.

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The forested areas west of the shire are dominated by the Darling Plateau. These areas consist of Jarrah (*Eucalyptus marginata*), Banksia's and grasstree's (*Xanthorrhoea* spp.). Marri (*Corymbia calophylla*) are predominately found on the loamy soils of the valley slopes, often with Wandoo (*Eucalyptus wandoo*). Flooded Gums (*Eucalyptus rudis*) and Paperbarks (*Melaleuca* spp.) are dominant along the Avon River.

The eastern side is dominated by agricultural land uses and a large portion of the native vegetation has been cleared. Remnant vegetation is common along the water courses, which includes York Gum (*Eucalyptus loxophelba*) and Jam Wattle (*Acacia acuminata*). Wandoo occurs on the mid slopes and along roadsides. Salmon gum (*Eucalyptus salmonophloia*) appears as a dominant tree in remnant vegetation on loamy clay soils. Granite Outcrops are dominated by Lichens (Weaving, 1994).

A major portion of the shire falls within the York Vegetation System. This vegetation is characterised by underlying gneissic rocks which have been eroded so that almost the entire laterite crusted surface has degraded revealing the fertile red loams. There is a gentle relief with occasional local outcrops of metamorphic rocks forming hills. York Gum Woodland covers the whole area with Wandoo confined to the less basic rocks, in areas such as MBR. Flooded Gum and Swamp Sheoak (*Casuarina obesa*) grow along the Avon River and its tributaries (Weaving, 1994).



Photo 1: Jam tree (*Acacia acuminata*) Woodland with weed dominated understorey

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Photo 2: Sheoak (*Allocasuarina huegeliana*) Woodland with degraded understorey.



Photo 3: Granite outcrops.

3.3 CLIMATE

The Shire's climate consists of a warm Mediterranean climate with hot dry summers and mild wet winters. Annual rainfall ranges from 1100mm in the west of the Shire to less than 451mm to the east of the Shire. The average maximum temperature range from 34.3°C in January to 15.6°C in July, while the corresponding average minimum temperature's range from 16.8°C in January to 5.3°C in July, when frost are common.

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4. FLORA, FAUNA AND VEGETATION

The survey area lies in the Drummond Botanical Subdistrict within the Southwest Botanical Province as described by Beard (1990). Flora composition has been described by Beard (1990) as predominantly consisting of *Banksia* Low Woodlands on leached sands with *Melaleuca* swamps where ill drained and Woodlands of *Eucalyptus* spp. on less leached soils. This area has been described by Beard (1990) as the Avon Botanical District.

The updated mapping system IBRA (*Interim Biogeographic Regionalisation for Australia*) was developed in 1993-94 and is endorsed by all levels of government as a key tool for identifying land for conservation under *Australia's Strategy for the National Reserve System 2009-2030*.

The nationally agreed regionalisation was published in Thackway and Cresswell (1995), *An Interim Biogeographic Regionalisation for Australia: a framework for establishing the national system of reserves*.

The latest version, IBRA7, classifies Australia's landscapes into 89 large geographically distinct bioregions based on common climate, geology, landform, native vegetation and species information. The IBRA description of vegetation for this area is best categorised as the Avon Wheatbelt Region.

4.1 FLORA

The site is dominated by York Gum (*Eucalyptus loxophleba*) and Jam Wattle (*Acacia acuminata*) Woodland with various weed species dominating the understorey. There is a low diversity of native understorey species, which are scattered amongst the site. A species list is available in **Appendix A**, this provides a list of flora species identified during the field survey.

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Photo 4: York Gum (*Eucalyptus loxophleba*) Woodland with Degraded understory



Photo 5: York Gum (*Eucalyptus loxophleba*) with Jam Wattle (*Acacia acuminata*) woodland with everlasting understorey.

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4.1.1 Threatened flora

A search of the Department of Biodiversity, Conservation and Attractions (DBCA) NatureMap database identified three Threatened (T), one Priority 1 (P1), one Priority 2 (P2), eleven Priority 3 (P3), and eight Priority 4 (P4), species within a 10 km radius, that are likely to occur within the area. These species are listed in Table 2 below.

Table 2: NatureMap listed flora species

Species Name	Common Name	Conservation Code	Likely to occur onsite	Flowering time during survey
<i>Acacia cuneifolia</i>		P4	Yes	Yes
<i>Allocasuarina fibrosa</i>	Woolly Sheoak	T	No	No
<i>Anigozanthos bicolor</i> subsp. <i>exstans</i>		P3	No	Yes
<i>Asterolasia grandiflora</i>		P4	Yes	Yes
<i>Beaufortia eriocephala</i>	Woolly Bottlebrush, Woolly Beaufortia	P3	No	Yes
<i>Caladenia integra</i>	Mantis Orchid, Smooth-lipped Spider Orchid	P4	Yes	Yes
<i>Cryptandra beverleyensis</i>		P3	No	unknown
<i>Drosera albonotata</i>		P2	unknown	unknown
<i>Eucalyptus exilis</i>	Boyagin Mallee	P4	Yes	No
<i>Eucalyptus x camabyi</i>		P4	Yes	Yes
<i>Hemigenia platyphylla</i>		P4	Yes	Yes
<i>Hibbertia montana</i>		P4	Yes	Yes
<i>Placynthium nigrum</i>		P3	unknown	unknown
<i>Pterostylis echinulata</i>		P3	unknown	unknown
<i>Senecio gilbertii</i>		P1	Yes	No
<i>Stackhousia</i> sp. Red-blotched corolla (A. Markey 911)		P3	unknown	unknown
<i>Stylidium scabridum</i>	Moth Triggerplant	P4	No	Yes
<i>Stylidium uniflorum</i> subsp. <i>extensum</i>	Red-stemmed Triggerplant	P3	unknown	unknown
<i>Thomasia glabripetala</i>		T	No	Yes
<i>Thomasia montana</i>	Hill Thomasia	T	No	Yes
<i>Thysanotus cymosus</i>		P3	No	Yes
<i>Thysanotus tenuis</i>		P3	No	Yes
<i>Xanthoparmelia hypoleiella</i>		P3	Yes	unknown
<i>Xanthoparmelia subimitatrix</i>		P3	Yes	unknown

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A search of the Department of Environment and Energy (DEE) Protected Matters database identified fourteen flora species of significance within a 10 km radius, which are likely to occur within the area.

Three flora species have been listed as Vulnerable and ten species are listed as Endangered and 1 species is listed as Critically Endangered. These species are listed in Table 3 below.

Table 3: DEE Protected Matters listed flora species

Species Name	Common Name	Conservation Code	Likely to occur onsite	Flowering time during survey
<i>Acacia ataxiphylla</i> subsp. <i>magna</i>	Large-fruited Tammin Wattle	Endangered	No	No
<i>Banksia oligantha</i>	Wagin Banksia	Endangered	No	Yes
<i>Dasymalla axillaris</i>	Native Foxglove	Critically Endangered	Yes	Yes
<i>Eleocharis keigheryi</i>	Keighery's Eleocharis	Vulnerable	No	Yes
<i>Gastrolobium hamulosum</i>	Hook-point Poison	Endangered	Yes	Yes
<i>Grevillea christineae</i>	Christine's Grevillea	Endangered	No	No
<i>Melaleuca sciotostyla</i>	Wongan Melaleuca	Endangered	No	No
<i>Roycea pycnophylloides</i>	Saltmat	Endangered	No	No
<i>Symonanthus bancroftii</i>	Bancrofts Symonanthus	Endangered	unknown	No
<i>Thelymitra dedmaniarum</i>	Cinnamon Sun Orchid	Endangered	Yes	No
<i>Thelymitra stellata</i>	Star Sun-orchid	Endangered	Yes	Yes
<i>Thomasia glabripetala</i>	Sandplain Thomasia	Vulnerable	No	Yes
<i>Thomasia montana</i>	Hill Thomasia	Vulnerable	No	Yes
<i>Verticordia staminosa</i> subsp. <i>staminosa</i>	Wongan Featherflower	Endangered	Yes	Yes

4.1.2 Department of Biodiversity, Conservation and Attractions (DBCA) Database Search

In addition to the background searches undertaken through the DBCA Naturemap and the DEE Protected Matters, a Threatened and Priority flora search was undertaken through the DBCA. The search is undertaken on records from the Threatened and Priority Flora Database (TPFL) and the WA Herbarium database (WAHerb), which provides known locations of each species. The search was conducted within a 10km radial area from the central coordinate. One Priority 3 (P3) species *Xanthoparmelia hypoleiella*, has been previously recorded from MBR. This lichen is likely to occur on the Granite Outcrops throughout the site.

4.1.3 Weeds

Invasive plants are widespread in fragmented landscapes that have been highly modified, and where nutrient enrichment of soils and frequent disturbance encourages the establishment of weeds over native vegetation. Established weeds compete with native plants, affecting their recruitment and survival,

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therefore reducing the habitat quality for native fauna. Grassy weeds can also increase the flammability of the vegetation, increasing fire frequency and intensity. Once established, weeds become a long-term and potentially costly management issue.

There are a very high number of weed species and densities on average across the entire site at MBR. Weeds are dominant throughout the reserve. Intensive weed control is recommended for this site. It will be beneficial to undertake weed control in sections to ensure adequate management is achieved, which can be followed up with planting and rehabilitation. During the survey a majority of the dominant weed species recorded were grasses.

It is important to plan weed control efforts and work from areas in best condition to worst condition. Consider the use of prescribed burns or wildfires as an opportunity to undertake weed control. Insist on using a suitably qualified and experienced environmental professional to undertake weed control (ie. ensure the contractor or staff have knowledge of local native species, ensure weed control is undertaken in a targeted manner). Have a plan in place to follow up weed control efforts and invest in rehabilitation of the area to re-introduce native flora species.



Photo 6: Tracks and weeds within the MBR

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4.2 FAUNA

Due to the location of the reserve and the reduced areas of other natural bushland in the area, this reserve is an important refuge for native animals and is a valuable stepping stone of native vegetation in this landscape. A species list of Fauna identified during the field survey is available in **Table 4** below. This is not a complete list as more reptile, bird, insect and mammal species potentially utilise the site; this species list is just a record of those noted during the site visit.

MBR offers a number of valuable fauna habitats. There are numerous trees containing hollows and forage opportunities for birds, there are several granite outcrops which provide valuable habitat for reptiles and the site provides food and shelter for a number of mammal species.

Table 4: Fauna species identified at MBR

Family	Genus/Species	Common Name
Accipitridae	<i>Aquila audax</i>	Wedge-tailed eagle
Apidae	<i>Apis mellifera</i>	Honey bee
Apidae		Native Bee's
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced cuckooshrike
Canidae	<i>Vulpes sp</i>	Fox
Cercopidae		Spittlebugs
Leporidae	<i>Oryctolagus cuniculus</i>	Rabbit
Macropodidae	<i>Macropus fuliginosus</i>	Western grey kangaroo
Podargidae	<i>Podargus strigoides</i>	Tawny frogmouth
Psittaculidae	<i>Barnardius zonarius</i>	Australian ringneck
Strigidae	<i>Ninox boobook</i>	Australian boobook
Tachyglossidae	<i>Tachyglossus aculeatus</i>	Short-beaked echidna
Varanidae	<i>Varanus gouldii</i>	Sand goanna

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Photo7: Sand goanna (*Varanus gouldii*) located at MBR

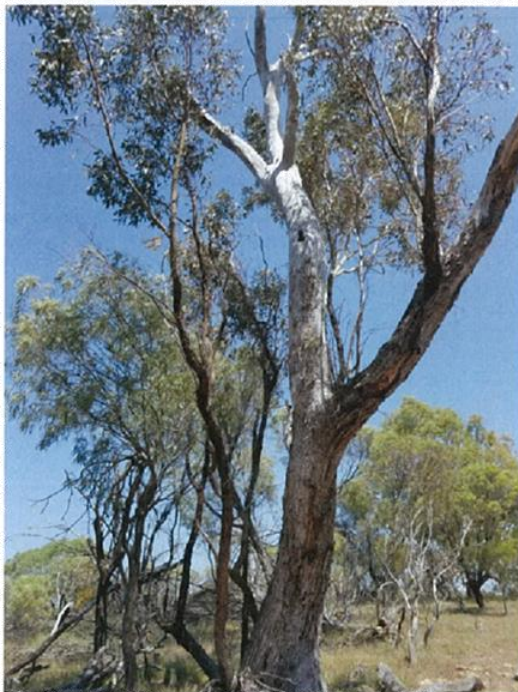


Photo 8: Habitat Tree within MBR

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Photo 9: Spittlebugs frothy mass produced while feeding on plants.

4.2.1 Threatened Fauna

A search of the Department of Biodiversity, Conservation and Attractions (DBCA) NatureMap database, identified eight priority species within a 10 km radius, which are likely to occur within the area. Of these, five are listed as Threatened (T) and one as Priority 3 (P3) and two as Priority 4 (P4) species. The list is provided in **Table 5** below.

Table 5: NatureMap listed fauna species

Species Name	Common Name	Conservation Code
<i>Calyptrorhynchus baudinii</i>	Baudin's Cockatoo, White-tailed Long-billed Black	T
<i>Calyptrorhynchus latirostris</i>	Carnaby's Cockatoo, White-tailed Short-billed Black	T
<i>Hydromys chrysogaster</i>	Water-rat, Rakali	P4
<i>Idiosoma nigrum</i>	Shield-backed Trapdoor Spider	T
<i>Lagostrophus fasciatus subsp. fasciatus</i>	Banded hare-wallaby, Mernine	T
<i>Leipoa ocellata</i>	Malleefowl	T
<i>Neelaps calonotos</i>	Black-striped Snake, black-striped burrowing snake	P3

A search of the Department of Environment and Energy (DEE) Protected Matters database identified eight fauna species of significance likely to occur within a 10km radius of the reserve. One fauna species is listed as Critically Endangered, five species have been listed as Endangered and two species are listed as Vulnerable. These species are listed in **Table 6** below.

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Table 6: DEE Protected Matters listed fauna species

Species Name	Common Name	Conservation Code
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered
<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo, Karrak	Vulnerable
<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo, Short-billed Black-Cockatoo	Endangered
<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	Vulnerable
<i>Idiosoma nigrum</i>	Shield-backed Trapdoor Spider, Black Rugose, Trapdoor Spider	Vulnerable
<i>Leipoa ocellata</i>	Malliceowl	Vulnerable
<i>Phascogale calura</i>	Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor	Vulnerable
<i>Rostratula australis</i>	Australian Painted-snipe, Australian Painted Snipe	Endangered

4.2.2 Department of Biodiversity, Conservation and Attractions (DBCA) Database Search

In addition to the background searches undertaken through the DBCA Naturemap and the DEE Protected Matters, a Threatened and Priority fauna search was undertaken through the DBCA. The search is undertaken on records from the Threatened and Priority Fauna Database, which provides known locations of each species. The search was conducted within a 10km radial area from the central coordinate. There is currently no priority fauna species recorded as occurring onsite; however the site is listed as a location utilised by the Endangered Carnaby Cockatoo (*Calyptorhynchus latirostris*).

4.2.3 Feral Animals

Several species of invasive animals have established in the Wheatbelt region which have impacted upon native vegetation and fauna. Feral cats (*Felis catus*) and the European fox (*Vulpes vulpes*) are key predators that prey upon ground-dwelling native fauna. The European rabbit (*Oryctolagus cuniculus*) causes direct loss of plant species, and indirect loss of native plant and animal species through changes to soil structure and nutrient dynamics by their digging, burrowing and grazing activities. Feral cats have been noted as using the reserve. There is also evidence rabbits on the reserve.

4.3 VEGETATION

The original vegetation of the region has been mapped and described by Beard (1979, 1980). A majority of the Shire of York's vegetation falls into the Avon Botanical District (Safstrom, 1997). MBR is part of the York Vegetation System. The York Vegetation system is characterised by York Gum (*Eucalyptus loxophleba*) Woodland covering a majority of the area, with Wandoo (*Eucalyptus wandoo*) confined to the less basic rocks. Flooded Gum (*Eucalyptus rudis*) and Swamp Sheoak (*Casuarina obesa*) grow along the Avon River and its major tributaries. Jam (*Acacia acuminata*) and Rock Sheoak (*Allocasuarina*

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huegeliana) are common in most areas of the woodland but most of the understory species have disappeared.

4.3.1 Vegetation complexes found within Mt Brown Reserve

MBR falls within the Michibin vegetation complex. The Michibin complex consists of Open woodland of *Eucalyptus wandoo* over *Acacia acuminata* with some *Eucalyptus loxophleba* on valley slopes, with low woodland of *Allocasuarina huegeliana* on or near shallow Granite Outcrops in arid and perarid zones (WALGA, 2019).



Photo 10: York Gum with weed dominated understory at MBR

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Photo 11: York Gum at MBR from the Lookout

4.3.2 Local Vegetation Communities

During the site visit, vegetation communities were broadly mapped and described by recording the dominant tree species and upper level flora species. The vegetation described on site can be categorised into three broad vegetation communities, which are described below. These communities are described in **Table 7** and shown on **Figure 3**.

- **York Gum with Jam**

This vegetation is dominated by York Gum (*Eucalyptus loxophleba*) and Jam (*Acacia acuminata*) over a low understorey of various grass weed species and sparse native species. This vegetation community is the dominant vegetation occurring at MBR. There are significant York Gum's with hollows found in this reserve that provide valuable fauna habitat.

- **Sheoak woodland**

This vegetation is dominated by Sheoak (*Allocasuarina huegeliana*) with an understorey of various grass weed species and sparse native species. This vegetation community occurs predominately around the Granite Outcrops.

- **Granite outcrops**

There are multiple areas of Granite outcrops at MBR. These areas are highly valued habitat areas for various flora and fauna.

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Granite Outcrops in WA have a likely-hood of containing rare species of both Flora and Fauna. It is generally agreed amongst those who manage lands of conservation value that Granite Outcrops require individual and careful management if their local plant and animals species are to survive into the future (Watson, 2008).

In the Wheatbelt particularly (mainly because of the loss of habitat due to clearing) more and more Granite Outcrops are used as a source of water and food by many species of animals, birds and insects, some of which are endemic only to rocky outcrops, these include reptiles such as dragon lizards and gecko's. There are also some species of moths and spiders that are thought to be totally reliant on the granite hills of the wheatbelt (Watson, 2008).

Much of the south west of Western Australia is underlain by the Yilgarn Block which is one of the oldest land masses in the world. The Yilgarn Block is principally granite that has eroded in to an almost flat surface, most of the surface is covered by soil but occasionally Granite Outcrops occur at the surface. The topography of the outcrop determines the types of plants and animals that can survive on and around it (Weaving, 1994).

Different vegetation structures form around the Granite Outcrops making them a more valuable natural habitat. This occurs at Mt Brown Reserve, Sheoak Woodland forms around the Granite Outcrop, the Sheoak contains nitrogen fixing micro organisms around the rock edge and the dense woodland and mulch from the Sheoak provides various fauna habitats. Beyond the Sheoak Woodlands is Eucalyptus Woodlands creating more valuable flora and fauna habitats (Weaving, 1994).

It is recommended that MBR installs interpretive signage around the reserve to help educate the community about the importance of the vegetation communities, in particular the Granite Outcrops as an important habitat feature of Wheatbelt Woodlands. During the site visit flora species were recorded from three Relevés in each of the vegetation communities. Data recorded from Relevés on site are provided in **Appendix B**.

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Table 8: Vegetation Communities

Mapping Code	Community Descriptions
Vegetation Community 1 – York Gum with Jam open Woodland	
1	Open woodland of (<i>Eucalyptus loxophleba</i>) and Jam (<i>Acacia acuminata</i>), over grassland of <i>Neurachne alopecuroides</i> and <i>Avena barbata</i> , and herbland of <i>Lupinus cosentinii</i> and <i>Arctotheca calendula</i> and <i>Rhodanthe manglesii</i>
Vegetation Community 2 – Sheoak Woodland	
2	Low woodland of <i>Allocuarina huegeliana</i> , over grassland of <i>Neurachne alopecuroides</i> and <i>Avena barbata</i> and <i>Aira caryophyllaea</i>
Vegetation Community 3 – Granite outcrop	
3	Exposed Granite outcrops with lichens and mosses

4.3.3 Threatened Ecological Communities

The EPBC Act provides for the strong protection of TEC's, which are listed under section 181 of the Act and are described as 'Critically Endangered', 'Endangered' or 'Vulnerable' under section 182. Schedules of protected TECs maintained pursuant to the EPBC Act are based on the same Floristic Community Type's (FCT's) as adopted by DBCA, however not all TEC's listed by the DBCA are scheduled under the EPBC Act. A DEE Protected Matters Report indicated there is one known Threatened Ecological Community (TEC) likely to occur in the area, this is listed in Table 8.

Table 8: EPBC listed Threatened Ecological Communities

Threatened Ecological Community	Conservation Code	Comments
Eucalypt Woodlands of the Western Australian Wheatbelt	Critically Endangered	Community likely to occur in the area

In addition to the background search undertaken through the DEE Protected Matters database, a Threatened Ecological Community search was undertaken through the DBCA. The search is undertaken on records from the Threatened Ecological Community Database which provides known locations of each community. The search was conducted within a 10km radial area from the central coordinate. The TEC *Eucalypt Woodlands of the Western Australian Wheatbelt* is recorded as occurring on site, however due to

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the vegetation condition of the site it is unlikely that this TEC is evident. It is recommended that a TEC assessment is undertaken.

4.3.4 Vegetation Condition

Many bushland remnants have been historically subject to ongoing degradation and are especially susceptible to disturbances arising as a result of indirect impacts from surrounding developments and human activity. Degradation is caused by a wide range of factors, including isolation and edge effects, weed invasion, plant diseases, changes in fire frequency and behaviour, landscape fragmentation, illegal firewood cutting, rubbish/refuse dumping, off-road motorbikes and 4WD's, increased predation on native fauna by feral animals, decrease in species richness and general modification of ecological function.

The Vegetation Condition was rated according to the Vegetation Condition Scale commonly used in the Perth Metropolitan Region (Government of WA 2000). The definitions are described in Table 9.

Table 9: Vegetation Condition Scale (Taken from Bush Forever (Government of WA 2000))

Vegetation Condition	Definition
Pristine (1)	Pristine or nearly so, no obvious signs of disturbance.
Excellent (2)	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good (3)	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing
Good (4)	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded (5)	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded (6)	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

In general, the vegetation condition ranged from "Degraded" to "Completely Degraded" in the study area. Vegetation condition mapping is provided on Figure 4. The site lacks understorey structure and diversity and is dominated by various weed species. Significant weed control over numerous years is recommended to reduce the amount of weeds and aid in future flora rehabilitation with local endemic species.

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4.4 HABITAT TREES

There are a number of Eucalyptus trees on MBR that are suitable habitat trees with formed hollows. Tree hollows are essential to provide shelter and breeding sites for many native animals. Australia-wide, it is estimated that around 300 species of vertebrates use hollows at some time and many of these are now endangered, in part because of the removal of hollow-bearing trees. The hollows provide refuge from the weather and predators, and safe sites for roosting and breeding. In order to maintain this essential wildlife habitat, it is important to retain both living and dead hollow-bearing trees (CALM, 2005).

Hollows form as a trees age, over time, the trees are subject to various natural forces such as fire or storm that cause injury to the protective bark. While the living, outer sapwood may remain healthy, wood-rotting fungi and termites gain access to the heartwood, beginning the decay process. In Western Australia, fire often contributes to the initial cause of injury, as well as, by burning decayed wood, enlarging existing hollows. Wildlife can also renovate hollows using beaks, teeth or claws. Only old trees have hollows. Research has shown that Jarrah, Wandoo and Salmon Gum rarely form hollows before they are 120-150 years of age. A hollow large enough for a black cockatoo (which requires an entrance hole 25cm in diameter) will only be found in a tree that is even older than that (CALM, 2005).

Tree locations are listed below on **Table 10** and shown on **Figure 4**.

Table 10: Habitat Tree Locations

Tree Species	GPS Location	Comments
<i>Eucalyptus loxophleba</i>	50 479395 6472127	Small hollows
<i>Eucalyptus loxophleba</i>	50 479374 6472149	Multiple branches
<i>Eucalyptus loxophleba</i>	50 479723 6472131	
<i>Eucalyptus loxophleba</i>	50 479382 6471793	

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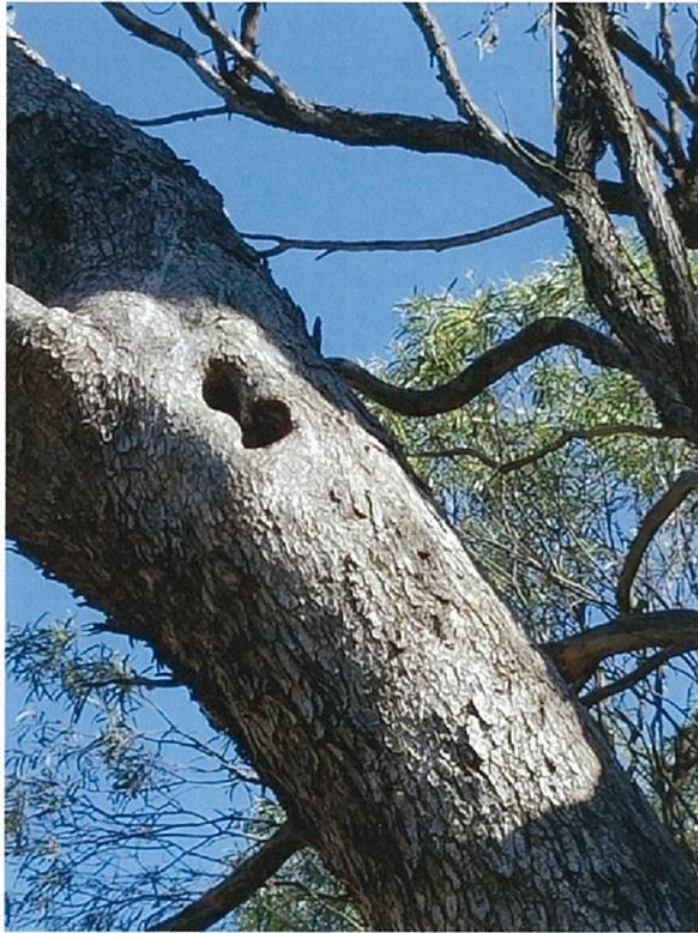


Photo 12: Hollow in a habitat tree

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5. TRACKS, SIGNAGE AND RECREATIONAL ACTIVITIES

5.1 TRACKS

There are numerous tracks throughout MBR. Most tracks are narrow and well defined which appear to be primarily used for mountain bike riding. It is recommended that some of the current tracks are widened and additional wider tracks are introduced to the reserve. This may increase the use from walkers and reduce the conflict between different user groups of the reserve. Increasing the width of some of the tracks and applying additional tracks will also aid in immediate weed control by removing the current weeds directly, these areas can then be used as buffers for future weed control. The retention of the current narrow tracks can be utilised for mountain bikes. The wider tracks created for walkers could provide self-guided interpretive walk trails around the reserve, which will promote the existing flora, fauna and vegetation communities.

Fire breaks are currently around the boundary of MBR can be broadly described as Attfield Road to the east, the fence lines of the private properties to the south, Chandos Road to the north and west, the eastern fence line of the cemetery and the eastern fence lines of the properties lining the western boundary of the reserve.



Photo 13: Well formed tracks

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5.2 SIGNAGE

During the site visit it was noted that there were limited signs to describe the site. It is suggested that numerous interpretive signs are used on the site to describe the vegetation, flora and fauna, the history and Aboriginal stories. It is also important to promote the protection of the site. It is recommended that areas such as the Granite Outcrops would benefit from interpretive signs promoting their importance and encouraging people to stay off these areas to protect the habitats. Signs should be used to encourage people to stay on tracks, to promote weed control and rehabilitation and provide information on flora and fauna species that are found on the reserve.



Photo 14: *Ptilopus* at MBR

5.3 RECREATIONAL ACTIVITY

Mt Brown Reserve appears to be popular for a number of recreational activities. The site is used for bush walking, bike riding, horse riding and 4WD driving. There are historic signs of wood cutting and rubbish dumping, including garden waste, however these areas are limited. Due to the site not being fenced it will be hard to control these activities. However it is important to promote the right activities in the right areas. To limit further degradation to the site it is suggested that current tracks are utilised as much as possible, as well as adding new tracks where necessary. Some of the current track could be widened to cater for bush walking while the narrow tracks can be maintained for mountain bikes.

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6. FIRE

Prior to European settlement, fires occurred through lightning strikes and Indigenous burning of the landscape. Indigenous burning practices had been adopted for up to 60 000 years and likely comprised a mosaic of frequent, small-scale fires, often during summer months in the more mesic woodlands of the western Wheatbelt. Since European settlement, fires still occur through lightning strikes. However, they now also originate from prescribed burning operations (including escapes from planned fires), arson or accidental ignition due to a range of sources. The nature and impacts of fire is influenced by other threats in the landscape. Fragmentation into small remnants and the surrounding modified land use can affect the intensity and impact of fires across a patch. The type of understorey may promote or suppress fire spread. Frequency of fire is one important consideration in addition to fire intensity and season. Too frequent fires may eliminate sensitive species (Watson, 2008).

The main concern for natural remnants in the Wheatbelt is a lack of fire or much longer intervals between fire events. The lack of fire limits recruitment of plant species, especially those that require heat, smoke or other features of a fire to stimulate germination and establishment of seedlings. It also impacts on fauna by limiting the development of habitat diversity, especially opportunities for new tree hollows and logs, or not allowing the regeneration of dense thickets of trees and shrubs, that give shelter to many kinds of fauna. It is important to develop appropriate fire management, such as the use of mosaic burning to maintain the diversity of habitats for flora and fauna (Weaving, 1994).

One of the prerequisites for burning is the need for a sufficient amount of seed on the ground or on surrounding vegetation for the fire to aid in germination. In the case of Mt Brown, Watson's report suggests it is highly unlikely that any seed remains on the reserve except for that of weeds. Of the two remaining common native species on the reserve *Acacia acuminata* and *Eucalyptus loxophleba* neither require smoke to aid in germination, although York Gums do benefit from occasional burns which encourage growth of lignotubers, but fires kill off new plants if they are not protected. *Acacia acuminata* seed will remain viable in the soil for up to 25 years, and it will germinate with or without fire (Watson, 2008).

Fires that are too frequent or not frequent enough will not produce the effects we as land managers are looking for. If fires are used as a management tool then it must be realised that many native plants need to have reached maturity and have set seed before a burn could help with re-establishment of local native species, in some cases this could take up to 8 to 10 yrs. Fires that are too frequent also add to the degradation of soils, poor growth of annuals and a poorly formulated fire regime will completely devastate stands of *Allocasuarina*, Wandoo and other fire susceptible species. This could explain to some degree why only fire tolerant native species have continued to spread and survive at Mt Brown Reserve,

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while others no longer exist in the reserve or are few in number. While *Allocasuarina* will germinate easily after fire, any subsequent fires, too soon, will wipe out any new seedlings (Watson, 2008).

To date the fire regime at MBR has done little to control weeds, it has just intensified the situation and stimulated even more weed growth. It is important that future management is put in place after a fire to ensure weed control and rehabilitation measures are properly achieved.

It is important to maintain firebreaks around the reserve and enable access throughout the reserve, however any burn offs require immediate and follow up weed control to prevent the forecast of additional weeds. Due to the size and intensity of weeds at MBR it is recommended that fire and weed control are undertaken together in small selected areas to ensure weed control across the site is successfully achieved.



Photo 15: High density of weed species at MBR

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7. MEMORIAL GROVE

There appears to be some inappropriate use of the memorial grove which needs to be tackled as soon as possible. The original plan for the memorial grove was the Men of the Trees planting a variety of species in the allocated site and local residents were invited to adopt a tree in memory of family members. However local residents have include small plaques and crosses next to some of the trees which eventually has led to a large number of commemorative signs and other personal items being placed at the base of the trees (Watson, 2008).

The Shire of York has now installed a sign to inform people that all memorial plaques and signs are to be removed and guidelines have been formulated to prevent any other misconceptions about the uses of the memorial grove. The Shire of York will now attempt to make it clear that only previously planted trees will be offered to the public for memorial purposes and no personal effects will be permitted (Watson, 2008).



Photo 16: Memorial site at Mt Brown Reserve

It is important to provide residents of the shire with appropriate guidelines and flora species suggestions. It is recommended that an appropriate list of trees and shrubs that are locally endemic to the area are provided to residents prior to planting. A suggested planting list will offer residents local flora species options which will benefit the reserve by rehabilitating with local endemic flora species and aid in reducing the potential of adding more weeds species into the reserve. It is recommended that a list is developed as part of a management plan for the reserve.

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8. CONCLUSION

A site survey at Mt Brown Reserve was undertaken in September 2019. During the site visit a majority of the vegetation within Mt Brown Reserve has been described as "Degraded" condition. Vegetation communities were broadly mapped and described by recording the dominant tree species and upper level flora species. The vegetation described on site can be categorised into three broad vegetation communities. The Granite Outcrops should be protected as important habitats on this reserve.

An adjustment on some of the current tracks, possibly increasing the width and the number of tracks may increase the use from walkers and reduce the conflict between different user groups of the reserve. Increasing the width of some of the tracks and applying additional tracks will also aid in immediate weed control by removing weeds, while the retention of the current narrow tracks can be utilised for mountain bikes.

Immediate weed control is recommended and undertaken over multiple years starting with small manageable areas. This will need to be followed through with a rehabilitation plan that uses local endemic species. To aid in weed control it is suggested to limit fire use and use fire as an opportunity to undertake weed control. A recommended species list must be provided to shire residents for the Tree Memorial area; to establish the local endemic species to be used on the site.

Due to the site being dominated by weed species with a very low diversity of native understorey, its recommended that a Level 2 Flora and Vegetation Assessment is not necessary, however there are number of recommendations that should be considered for future planning.

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9. RECOMMENDATIONS

Based on the results of this assessment, Del Botanics proposes the following management recommendations:

- Implement a weed management plan;
- Prepare a rehabilitation plan;
- Prepare guidelines and flora species lists for the memorial planting area;
- Prepare a fire action plan and undertake a fire break maintenance program;
- Design a bush walk interpretive trail and add signage around the lookout and across the site;
- Upgrade of walking trails to better suit bush walkers;
- Retain current tracks as bike trails and promote events;
- Create protection zones for the Granite Outcrops; and
- Undertake a Threatened Ecological Community Assessment for *Eucalypt Woodlands of the Western Australian Wheatbelt*;

Mt Brown Reserve Reconnaissance survey
Shire of York 2019

10. REFERENCES

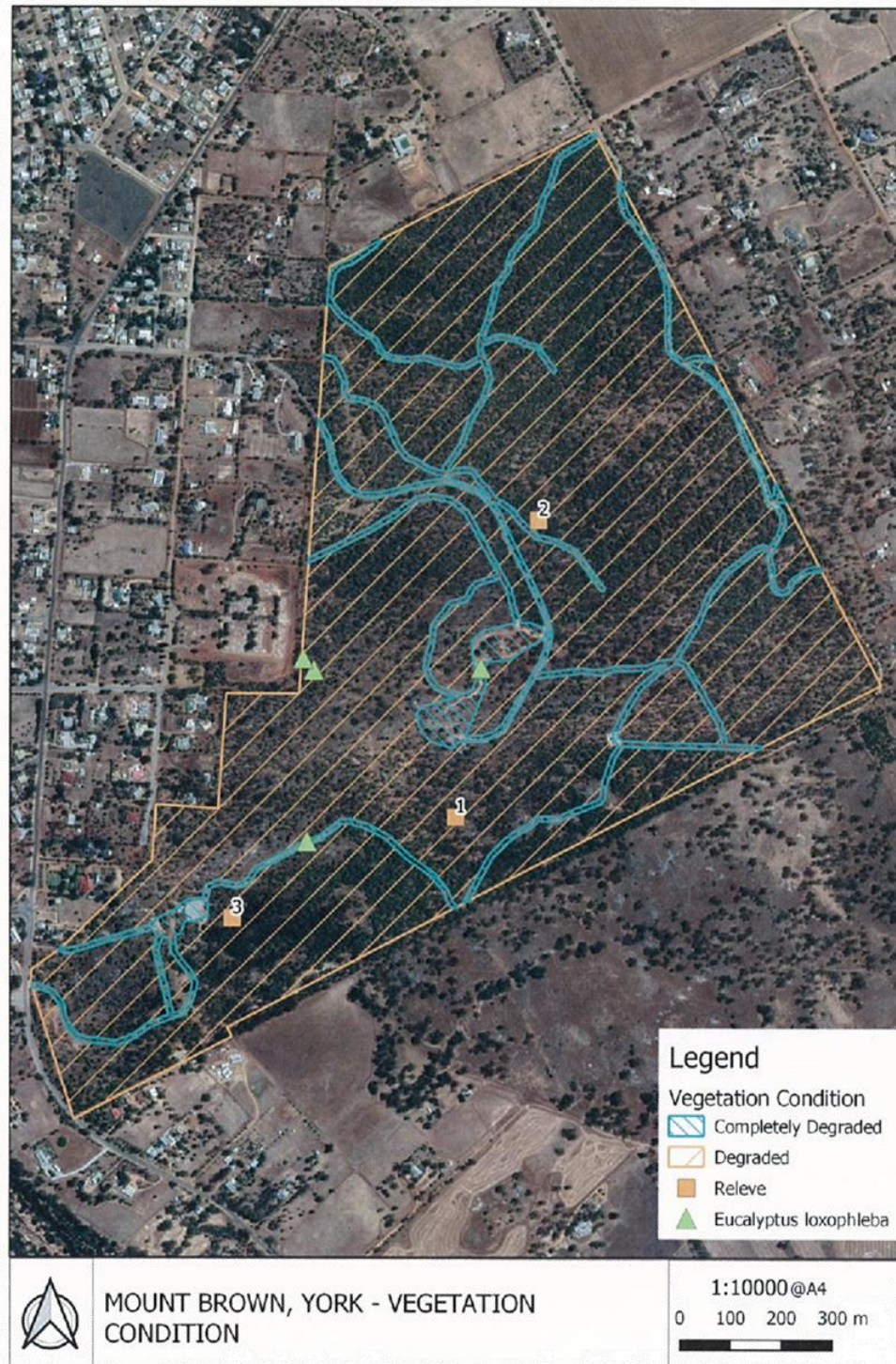
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FIGURES

Figure 3: Mt Brown Reserve Vegetation Communities



Figure 4: Mt Brown Reserve Vegetation Condition



**APPENDIX A
FLORA SPECIES RECORDED**

Appendix A: Flora species recorded at Mt Brown Reserve October 2019

Family	Genus/Species
Amaranthaceae	<i>Ptilotus</i> sp
Anacardiaceae	* <i>Schinus molle</i>
Asparagaceae	<i>Dichopogon</i> sp
Asteraceae	* <i>Arctotheca calendula</i>
	* <i>Ursinia anthemoides</i>
	<i>Podolepis lessonii</i>
	<i>Rhodanthe manglesii</i>
	<i>Waitzia ?nitida</i>
Boraginaceae	* <i>Echium plantagineum</i>
Boryaceae	<i>Borya</i> sp
Brassicaceae	* <i>Raphanus raphanistrum</i>
Casuarinaceae	<i>Allocasuarina campestris</i>
	<i>Allocasuarina huegeliana</i>
Colchicaceae	<i>Burchardia congesta</i>
Dennstaedtiaceae	<i>Pteridium esculentum</i>
Droseraceae	<i>Drosera glanduligera</i>
	<i>Drosera ?menziesii</i>
Fabaceae	* <i>Lupinus cosentinii</i>
	* <i>Lupinus angustifolius</i>
	* <i>Trifolium</i> sp (pink)
	<i>Acacia acuminata</i>
	<i>Acacia microbotrya</i>
Geraniaceae	* <i>Erodium</i> sp
Hemerocallidaceae	<i>Caesia micrantha</i>
	<i>Dianella revoluta</i>
Iridaceae	* <i>Homeria miniata</i>
	* <i>Romulea rosea</i>
Malvaceae	* <i>Brachychiton populneus</i>
Myrtaceae	<i>Eucalyptus loxophelba</i>
Oleaceae	* <i>Olea europaea</i>
Orchidiaceae	<i>Caladenia flava</i>
Oxalidaceae	* <i>Oxalis pes-caprae</i>
Poaceae	* <i>Aira caryophyllea</i>
	* <i>Avena barbata</i>
	* <i>Briza maxima</i>
	* <i>Bromus diandrus</i>
	* <i>Ehrharta calycina</i>
	* <i>Lolium</i> sp
	<i>Austrostip</i> sp
	<i>Austrostipa elegnatissima</i>
	<i>Neurachne alopecuroidea</i>
Pteridaceae	<i>Cheilanthes austrotenuifolia</i>
Solanaceae	* <i>Lycium ferocissimum</i>

**APPENDIX B
RELEVE DATA**

Appendix A: Releve data recorded at Mt Brown Reserve October 2019

<i>Del Botanics</i>				
FIELD SHEET – FLORA AND VEGETATION SURVEY				
Level 1 Assessment				
Job Code: Shire of York	Date: 30/09/2019	Site: Mt Brown Reserve		
Location: 50 478674 6479674				
Vegetation Description: York Gum Woodland				
Vegetation Condition: Degraded				
Observations: High weed cover, low species diversity, lack of structure				
Taxon	Ht (cm)	% Alive	% Dead	% Cover
* <i>Lupinus cosentinii</i>	30	100		20
* <i>Avena barbata</i>	50	100		90
<i>Acacia acuminata</i>	600	100		10
<i>Eucalyptus loxophelba</i>	800	100		10
* <i>Arctotheca calendula</i>	20	100		5

<i>Del Botanics</i>				
FIELD SHEET – FLORA AND VEGETATION SURVEY				
Level 1 Assessment				
Job Code: Shire of York	Date: 30/09/2019	Site: Mt Brown Reserve		
Location: 50 479237 6471643				
Vegetation Description: Sheoak Woodland				
Vegetation Condition: Degraded				
Observations: High weed cover, low species diversity, lack of structure				
Taxon	Ht (cm)	% Alive	% Dead	% Cover
<i>Allocasuarina huegeliana</i>	600	100		30
* <i>Lolium sp</i>	50	100		80
* <i>Avena barbata</i>	50	100		50

<i>Del Botanics</i>				
FIELD SHEET – FLORA AND VEGETATION SURVEY				
Level 1 Assessment				
Job Code: Shire of York		Date: 30/09/2019		Site: Mt Brown Reserve
Location: 50 479674 6471840				
Vegetation Description: Granite outcrop				
Vegetation Condition: Degraded				
Observations: High weed cover, low species diversity, lack of structure				
Taxon	Ht (cm)	% Alive	% Dead	% Cover
<i>Rhodanthe manglesii</i>	20	100		10
Lichens		100		20
* <i>Avena barbata</i>	50	100		20
Mosses		100		10
<i>Borya</i> sp	15	100		15



REQUEST FOR QUOTATION

Request for Quotation (RFQ):03-1920	FLORA & FAUNA ASSESSMENT MT BROWN RESERVE YORK
Deadline:	29 AUGUST 2019
Address for Delivery:	SHIRE OF YORK JOAQUINA STREET YORK WA 6302 e: records@york.wa.gov.au
RFQ Number:	RFQ 03-1920

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1 PRINCIPAL'S REQUEST

Below is a summary of some of the important defined terms used in this Request.

Attachments:	The documents you attach as part of your Response;
Contractor:	Means the person or persons, corporation or corporations whose Response is accepted by the Principal, and includes the executors or administrators, successors and assigns of such person or persons, corporation or corporations;
Deadline:	The deadline for lodgement of your Response;
General Conditions of Contract:	Means the General Conditions of Contract nominated in Part 1 and incorporated in a Contract in accordance with clause 1.8.9;
Offer:	Your offer to be selected to supply the Requirements;
Principal:	Shire of York
Response:	Completed Offer, response to Selection Criteria and Attachments;
Request:	This document;
Requirements:	The work requested by the Principal;
Selection Criteria:	The criteria used by the Principal in evaluating your Response;
Special Conditions:	The additional contractual terms;
Specification:	The statement of Requirements that the Principal requests you to provide if selected.

HOW TO PREPARE YOUR RESPONSE

- (a) Carefully read all parts of this document.
- (b) Ensure you understand the Requirements. (See clauses 2.1 and 2.2).
- (c) Complete, sign and return the Offer (Part 3) in all respects and include all Attachments.
- (d) Make sure you have responded to all of the Selection Criteria.
- (e) Lodge your Response before the Deadline.

CONTACT PERSONS

Respondents should not rely on any information provided by any person(s) other than those listed below:

Contractual and Specification Enquiries

Name: Carol Littlefair

Telephone 08 9641 0520

Email: carol.littlefair@york.wa.gov.au

SELECTION CRITERIA

The Contract may be awarded to the Respondent who best demonstrates the ability to provide quality products and/or services at a competitive price. The quoted prices will be assessed together with the qualitative and compliance criteria to determine the most advantageous outcome to the Principal.

The Principal has adopted a best value for money approach to this Request.

This means that, although price is considered, the Response containing the lowest price will not necessarily be accepted, nor will the offer ranked the highest on the qualitative criteria.

A scoring system will be used as part of the assessment of the qualitative criteria. Unless otherwise stated, a Response that provides all the information requested will be assessed as satisfactory. The extent to which a Respondent demonstrates greater satisfaction of each of these criteria will result in a greater score. The aggregate score of each Response will be used as one of the factors in the final assessment of the qualitative criteria and in the overall assessment of value for money.

1.1.1 COMPLIANCE CRITERIA

These criteria are detailed within Part 3 of this document and will not be point scored. Each Response will be assessed on a Yes/No basis as to whether the criterion is satisfactorily met. An assessment of “No” against any criterion may eliminate the Response from consideration.

1.1.2 QUALITATIVE CRITERIA

In determining the most advantageous Response, the Evaluation Panel will score each Response against the qualitative criteria as detailed within Part 3 of this document. Each criterion will be weighted to indicate the relative degree of importance that the Principal places on the technical aspects of the goods or services being purchased.

NOTE: It is essential that Respondents address each qualitative criterion. Information that you provide addressing each qualitative criterion will be point scored by the Evaluation Panel.

Failure to provide the specified information may result in elimination from the evaluation process or a low score.

1.1.3 PRICE CONSIDERATIONS

The weighted price method is used where price is considered to be crucial to the outcome of the contract. The price is then assessed with quality.

Criteria	Weighting
Quoted price	40%

PRICE BASIS

All prices for services offered under this Request are to be fixed for the term of the Contract. Quoted prices must include Goods and Services Tax (GST).

Any charge not stated in the Response, as being additional will not be allowed as a charge for any transaction under any resultant Contract.

THE PRINCIPAL'S POLICIES AND PLANS THAT MAY AFFECT SELECTION

The following policies/plans (copies of which are available at www.york.wa.gov.au) may affect this selection:

- o Strategic Community Plan 2018-2028
- o Corporate Business Plan 2018-2022
- o Trails Master Plan developed 2019 by Common Ground

[see https://www.york.wa.gov.au/profiles/york/assets/clientdata/document-centre/corporate_documents/190520_york_trails_master_plan_vision.pdf]

- o 2018 Disability and Access Inclusion Plan, which highlights the need for safe walking and cycling routes and interpretation accessible to all.
- o 2018 Local Planning Strategy and Local Planning Scheme No. 3 which highlights encouragement of arts culture and tourism land uses[which relates to walk/bike trails] and consolidates areas of rural residential and rural smallholdings land uses [which relate to equestrian trails use]
- o SOY Bushfire Risk Management Plan 2018-2023, which identifies areas of high bushfire risk, along Avon River, Mt. Brown and other areas where trails exist/are likely to exist in future
- o Community Engagement and Consultation Policy
- o 2017 Aged Friendly Community Plan

Respondents should be aware that an Arts and Culture Plan will be in concurrent development progress, which will overlap and have natural synergy with trails by interpretation of the natural landscape, built heritage, social and intangible heritage through stories unique to York.

CONDITIONS OF RESPONDING

1.1.4 LODGEMENT OF RESPONSE AND DELIVERY METHOD

The Response must be lodged by the Deadline. The Deadline for this Request is 2pm Tuesday 27 August Western Australian Standard Time.

Responses will only be accepted if submitted electronically to: records@york.wa.gov.au

1.1.5 REJECTION OF RESPONSES

A Response may be rejected without consideration of its merits in the event that:

- (a) the Response is not submitted at the time and at the place specified in the Request; or
- (b) the Respondent does not submit an Offer form which has been completed and signed together with all the required Attachments; or
- (c) the Response fails to comply with any other requirements of the Request.

1.1.6 LATE RESPONSES

Responses received after the Deadline will not be accepted for evaluation.

1.1.7 ACCEPTANCE OF RESPONSES

Unless otherwise stated in this Request, Responses may be for all or part of the Requirement and may be accepted by the Principal either wholly or in part. The Principal is not bound to accept the lowest Response and may reject any or all Responses submitted.

1.1.8 DISCLOSURE OF CONTRACT INFORMATION AND DOCUMENTS

Documents and other information relevant to the contract may be disclosed when required by law under the *Freedom of Information Act 1992* or under a Court order.

1.1.9 ALTERNATIVE RESPONSES

All Alternative Responses MUST be accompanied by a conforming Response.

Responses may be submitted as Alternative Responses or made subject to conditions other than the General and Special Conditions of Contract must in all cases arising be clearly marked "ALTERNATIVE RESPONSE".

The Principal may in its absolute discretion reject any such Alternative Response as invalid.

If the Response is marked as an Alternative Response, any printed "General Conditions of Contract" shown on the reverse of a Respondent's letter or quotation form will not be binding on the Principal in the event of a Contract being awarded.

1.1.10 RESPONSE VALIDITY PERIOD

All Responses will remain valid and open for acceptance for a minimum period of three (3) months from the Deadline.

1.1.11 GENERAL CONDITIONS OF CONTRACT

Responses will be deemed to have been made on the basis of and to incorporate the WALGA General Conditions of Contract for the Supply of Goods or Provision of Services.

1.1.12 PRECEDENCE OF DOCUMENTS

In the event of there being any conflict or inconsistency between the terms and conditions herein and those in the General Conditions of Contract the terms and conditions appearing in this Request will have precedence.

1.1.13 RESPONDENTS TO INFORM THEMSELVES

Respondents will be deemed to have:

- (a) examined the Request and any other information available in writing to Respondents for the purpose of responding;
- (b) examined all further information relevant to the risks; contingencies, and other circumstances having an effect on their Response which is obtainable by the making of reasonable enquires;
- (c) satisfied themselves as to the correctness and sufficiency of their Responses including quoted prices which will be deemed to cover the cost of complying with all the Conditions of Responding and of all matters and things necessary for the due and proper performance and completion of the work described therein;
- (d) acknowledged that the Principal may enter into negotiations with a chosen Respondent and that negotiations are to be carried out in good faith; and
- (e) satisfied themselves they have a full set of the Request documents and all relevant Attachments.

1.1.14 ALTERATIONS

The Respondent must not alter or add to the Request documents unless required by these Conditions of Responding.

The Principal will issue an addendum to all registered Respondents where matters of significance make it necessary to amend the issued Request documents before the Deadline.

1.1.15 OWNERSHIP OF RESPONSES

All documents, materials, articles and information submitted by the Respondent as part of or in support of a Response will become upon submission the absolute property of Principal and will not be returned to the Respondent at the conclusion of the Response process PROVIDED that the Respondent is entitled to retain copyright and other intellectual property rights therein, unless otherwise provided by the Contract.

1.1.16 CANVASSING OF OFFICERS

If a Respondent, whether personally or by an agent, canvasses any of the Principal's Commissioners or Councillors (as the case may be), or Officers with a view to influencing the acceptance of any Respondent made to it or any other Respondent, then regardless of such canvassing having any influence on the acceptance of such Response, the Principal may at its discretion omit the Respondent from consideration.

1.1.17 IDENTITY OF THE RESPONDENT

The identity of the Respondent and the Contractor is fundamental to the Principal.

The Respondent is the person, persons, corporation or corporations named as the Respondent in Part 3 and whose execution appears on the Offer Form in Part 3 of this Request. Upon acceptance of the Response, the Respondent will become the Contractor.

2 SPECIFICATION AND SCOPE OF WORK

SPECIFICATION

The Shire of York is seeking to appoint suitably qualified consultants to undertake a Level 1 Flora and Fauna survey on Mt Brown Nature Reserve, Shire of York

This is anticipated to include:

A desktop study to identify the potential range of flora and fauna likely to be affected by increased recreational use of Mt Brown.

A reconnaissance survey to verify the accuracy of the background study, to further characterise, describe and map the flora and vegetation, fauna and faunal assemblages.

The survey should include the sampling technique of traverses along existing tracks especially those that may be further developed for recreational use.

Liaison with local environmental groups [York River Conservation Society, Wildflower Society] with encouragement given to member participation, where appropriate.

Identification of the need for a level 2 survey for either flora or fauna.

The survey should follow the EPA Guidelines which can be downloaded at:

http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf

and

http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf

A full statement of the services required under the proposed Contract appears in the Scope of Work (Part 2.2).

Background:

Mt Brown Reserve is a Class A Reserve vested in the Shire of York with the classified use of Parklands. There is a long history of unofficial recreational use of this area for walking, horseriding and more recently for mountain biking. Formal cycling events and the unofficial use of Mt. Brown for mountain biking have created conflict between cyclists and walkers and a demand and pressure for public access to trails, especially for mountain bike trails, identified in the recent Trails Master Plan 2019 for the Shire of York. Many areas of Mt Brown are degraded or weed infested but it is believed that there are still areas which may contain significant or priority flora. Before applying to vary the vesting Order to Parklands and Recreation, the Shire Council has determined to commission a flora and fauna survey to identify and locate vulnerable species or habitats, to protect these areas and guide future recreational use of Mt. Brown.

Several local community and environmental groups take interest in the development and maintenance of trails and public open spaces and it is envisaged that the selected consultants will liaise with such groups in line with the Shire's Community Engagement and Consultation Policy.

2.2. SCOPE OF WORKS

The scope of work is to prepare a Flora & Fauna Survey for the Shire of York which can be adopted by Council and will guide future use of Mt Brown, preservation of species and habitats and recreational trail development in York over the coming years.

The scope of the works is expected to include:

- A desktop study to identify the potential range of flora and fauna likely to be affected by increased recreational use of Mt Brown. The study is to:
- Provide contextual information from existing surveys, literature, database searches and spatial information; determine the potential values and if there are any existing known values at the site and identify vegetation complexes, structural characteristics, composition and soil/landform associations; provide information on dominant flora species, typical families and potential diversity.
- Search and report on information from databases (e.g. Naturemap, Birds Australia etc.), including an indication of the likelihood of each species occurring based on the presence of suitable habitat; provide background information on the study area and surrounding region; a comprehensive listing of species that are known from or likely to occur based on habitats present; list the species of conservation significance, habitats, ecosystems or communities of conservation significance which may occur in the area.
- Information gathered should be put into a regional context.
- A search of the EPBC Act list of threatened ecological communities and Parks and Wildlife's threatened and priority ecological communities databases is essential for all surveys.
- A search of the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) threatened flora list and Parks and Wildlife's threatened and priority flora database is essential.
- A reconnaissance survey to verify the accuracy of the background study, to further characterise, describe and map the flora and vegetation, fauna and faunal assemblages. It is anticipated that this will include threatened and priority species and ecological communities, weed and vegetation condition mapping, locally and regionally significant species and declared rare flora/fauna
- The survey should include the sampling technique of traverses along existing tracks especially those that may be further developed for recreational use.
- Liaison with local environmental groups [eg, York River Conservation Society, Wildflower Society] with encouragement given to member participation, where appropriate.
- Identification of the need for a level 2 survey for flora and/or fauna.

The consultants engaged as a result of this project will provide recommendations on the final scope of works to be undertaken at Level 2, if this is required from the findings of this survey.

The requirements of this project are to:

1. Produce a Flora and Fauna Survey including lists of known species, identification of any Threatened or Priority species and location mapping of species.
2. In consultation with Shire staff, to: Prepare and implement a Community Engagement Plan in accordance with Council Policy G 2.9 "Community Engagement and Consultation" to guide engagement with the Shire, community, users and stakeholders in the development of the Survey
3. Define the final scope of any Level 2 survey work required as a result of findings from this level 1 survey.
4. Produce a Survey Report for Council and community information.

Purpose:

The Survey report will provide strategic guidance to assist the Shire of York to identify sensitive areas of Mt Brown to be avoided in any future program of sustainable trail infrastructure development over a ten-year period (2019-2029) and in the longer term.

Provide a baseline of sound research and information to enable the Shire of York to enhance, showcase and interpret York's natural environment.

It will focus on enabling a practical balance between the demands for recreational use of this public open space and the need to protect the natural environment, whilst driving the economy forward.

The Survey report should be a realistic, practical document that enables the Shire of York to access external funding sources.

Key Outcomes and Content of the Survey Report:

It is expected that the Survey Report will include (but not be limited to) the following:

- Lists of known F&F species
- Identification of rare, threatened or priority F&F species
- Location mapping, with spatial referencing, of F&F species

Study Area:

The study area is the Mt Brown Reserve in the Shire of York. A map is provided as a separate Appendix.

Context:

The Survey should review previous literature and take into account recent factors arising which include, but are not limited to:

- The Principal's Policies that may affect selection, as defined in section 1.7
- The 2019 Trails Master Plan by Common Ground
- Usage of social/unofficial trails on Mt Brown.
- Exploration by the Shire of York in the possibility of increased formal public access to Mt. Brown for recreational purposes.

The Survey report will be an attractively presented document for a public readership. The Executive Summary is to be included and should contain a clear statement of the key findings and recommendations, and the document should include infographics for easy digestion by a general readership.

2.3 MANAGEMENT AND REPORTING

The day to day contact for the project will be Carol Littlefair, Arts & Cultural Heritage Officer, who can be contacted on 08 9641 0520 (Tuesdays, Wednesdays and Thursdays) or at carol.littlefair@york.wa.gov.au.

The project will be managed by a Project Management Group (PMG) consisting of the Shire of York

- Chief Executive Officer
- Executive Manager Development and Infrastructure
- Arts & Cultural Heritage Officer
- In consultation with a Representative of the Department of Biodiversity, Conservation and Attractions

2.4 TIMEFRAME

It is envisaged that the consultant would be appointed in early September 2019 and would commence work as soon as practicable after appointment.

The Shire would like to have the plan presented to Council at the December 2019 Council meeting, deadline 2 December. Respondents should provide as part of their submission a detailed methodology and timeline to achieve this deadline.

3 RESPONDENT'S OFFER

OFFER FORM

The Chief Executive Officer
Shire of York
Joaquina Street
York WA 6302

I/We _____
(BLOCK LETTERS)

of _____
(ADDRESS)

ABN/GST Status _____ ACN (if any) _____

Telephone No: _____ Facsimile No: _____

E-mail (if any): _____

In response to RFQ Mt Brown Flora & Fauna Survey

I/We agree that I am/We are bound by, and will comply with this Request and its associated schedules, Attachments, all in accordance with the Conditions of Responding contained in this Request signed and completed.

The quoted price is valid up to three (3) months from the date of the Request closing unless extended on mutual agreement between the Principal and the Respondent in writing.

I/We agree that there shall be no cost payable by the Principal towards the preparation or submission of this Response irrespective of its outcome.

The quoted consideration is as provided under the schedule of rates of prices in the prescribed format and submitted with this Response.

Dated this _____ day of _____ 20____

Signature of authorised signatory of Respondent: _____

Name of authorised signatory (BLOCK LETTERS): _____

Position: _____

Address: _____

Witness Signature: _____

Name of witness: (BLOCK LETTERS): _____

Address: _____

RESPONSE

The following checklist has been provided to assist you with your submission. Where it is necessary to provide additional information please ensure that all documents are clearly marked with the relevant Attachment title to assist the evaluation panel with their assessment.

(NOTE: All pages within Part 3 are to be completed and returned to the Principal as they form part of your Response).

3.1.1 ORGANISATION PROFILE

Attach a copy of your organisation structure and provide background information on your company and label it “Organisation Structure” .	“Organisation Structure”	Tick if attached <input type="checkbox"/>
If companies are involved, attach their current ASC company extracts search including latest annual return and label it “ASC Company Extracts” .	“ASC Company Extracts”	Tick if attached <input type="checkbox"/>

3.1.2 REFEREES

Attach details of your referees, and label it “Referees” . You should give examples of work provided for your referees where possible.	“Referees”	Tick if attached <input type="checkbox"/>
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3.1.3 AGENTS

Are you acting as an agent for another party?	Yes / No	
If Yes, attach details (including name and address) of your principal and label it “Agents” .	“Agents”	Tick if attached <input type="checkbox"/>

3.1.4 TRUSTS

Are you acting as a trustee of a trust?	Yes / No	
If Yes, in an attachment labelled “Trusts” :	“Trusts”	Tick if attached <input type="checkbox"/>
(a) give the name of the trust and include a copy of the trust deed (and any related documents);and		
(b) if there is no trust deed, provide the names and addresses of beneficiaries.		

3.1.5 SUBCONTRACTORS

Do you intend to subcontract any of the Requirements?	Yes / No	
If Yes, in an attachment labelled “Subcontractors” provide details of the subcontractor(s) including:	“Subcontractors”	Tick if attached <input type="checkbox"/>
(a) the name, address and the number of people employed; and		
(b) the Requirements that will be subcontracted.		

3.1.6 CONFLICTS OF INTEREST

Will any actual or potential conflict of interest in the performance of your obligations under the Contract exist if you are awarded the Contract, or are any such conflicts of interest likely to arise during the Contract?	Yes / No	
If Yes, please supply in an attachment details of any actual or potential conflict of interest and the way in which any conflict will be dealt with and label it “Conflicts of Interest” .	“Conflicts of Interest”	Tick if attached <input type="checkbox"/>

3.1.7 FINANCIAL POSITION

Are you presently able to pay all your debts in full as and when they fall due?	Yes / No	
Are you currently engaged in litigation as a result of which you may be liable for \$50,000 or more?	Yes / No	
If you are awarded the Contract, will you be able to fulfil the Requirements from your own resources or from resources readily available to you and remain able to pay all of your debts in full as and when they fall due?	Yes / No	
In order to demonstrate your financial ability to undertake this contract, in an attachment labelled “Financial Position” include a profit and loss statement and the latest financial return for you and each of the other proposed contracting entities, together with a list of financial referees from your bank and/or accountant.	“Financial Position”	Tick if attached <input type="checkbox"/>

3.1.8 INSURANCE COVERAGE

The insurance requirements for this Request are stipulated in the Special Conditions. Respondents are to supply evidence of their insurance coverage in a format as outlined below or in an attachment labelled “Insurance Coverage” . A copy of the Certificate of Currency is to be provided to the Principal within 14 days of acceptance.				“Insurance Coverage”	Tick if attached <input type="checkbox"/>
Type	Insurer – Broker	Policy Number	Value (\$)	Expiry Date	
Public Liability					
Professional Indemnity					
Workers Compensation or Personal Accident Insurance Cover					

SELECTION CRITERIA**3.1.9 COMPLIANCE CRITERIA**

Please select with a yes or no whether you have complied with the following compliance criteria:

Description of Compliance Criteria	
(a) Compliance with the Specification contained in the Request.	Yes / No
(b) Compliance with the Conditions of Responding contained in this Request.	Yes / No
(c) Compliance with all necessary Licences and Registrations.	Yes / No
(d) Compliance with and completion of the Price Schedule.	Yes / No

3.1.10 QUALITATIVE CRITERIA

Before responding to the following qualitative criteria, Respondents must note the following:

- all information relevant to your answers are to be contained within your response to each criterion;
- Respondents are to assume that the Evaluation Panel has no previous knowledge of your organisation, its activities or experience;
- Respondents are to provide full details for any claims, statements or examples used to address the qualitative criteria; and
- Respondents are to address each issue outlined within a qualitative criterion.

A) Relevant Experience Describe your experience in completing /supplying similar Requirements.	Weighting <20_%>
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<p>Respondents must, as a minimum, address the following information in an attachment and label it “Relevant Experience”:</p> <ul style="list-style-type: none"> (a) Provide details of similar work; (b) Provide scope of the Respondent’s involvement including details of outcomes; (c) Provide details of issues that arose during the project and how these were managed; (d) Demonstrate competency and proven track record of achieving outcomes; and (e) Demonstrate sound judgement and discretion. 	“Relevant Experience”	Tick if attached <input type="checkbox"/>
<p>B) Key Personnel skills and experience</p> <p>Respondents should provide as a minimum information of proposed personnel to be allocated to this project, such as:</p> <ul style="list-style-type: none"> (a) Their role in the performance of the Contract; (b) Curriculum vitae; (c) Membership to any professional or business association; (d) Qualifications, with particular emphasis on experience of personnel in projects of a similar requirement; and (e) Any additional information. <p>Supply details in an attachment and label it “Key Personnel”.</p>	Weighting <20_%>	
	“Key Personnel”	Tick if attached <input type="checkbox"/>
<p>C) Respondent’s Resources</p> <p>Respondents should demonstrate their ability to supply and sustain the necessary:</p> <ul style="list-style-type: none"> (a) Any contingency measures or back up of resources including personnel (where applicable). <p>As a minimum, Respondents should provide a current commitment schedule and plant/equipment schedule in an attachment and label it “Respondent’s Resources”.</p>	Weighting <10_%>	
	“Respondent’s Resources”	Tick if attached <input type="checkbox"/>
<p>D) Methodology</p> <p>Respondents should detail the process they intend to use to achieve the Requirements of the Specification. Areas that you may wish to cover include:</p> <ul style="list-style-type: none"> (a) A project schedule/timeline (b) The process for the delivery of the goods/services; (c) Community Engagement Plan; and (d) A demonstrated understanding of the scope of work <p>Supply details and provide an outline of your proposed methodology in an attachment labelled “Methodology”.</p>	Weighting <10_%>	
	“Methodology”	Tick if attached <input type="checkbox"/>

PRICE INFORMATION

Respondents **must** complete the following “Price Schedule”. Before completing the Price Schedule, Respondents should ensure they have read this entire Request for Quotation.

<p>Are you prepared to allow a discount for prompt settlement of accounts?</p>	Yes / No	
<p>If you are offering different discounts for different periods, or other discounts such as volume discounts, detail them in an attachment labelled “Discounts”.</p>	“Discounts”	Tick if attached <input type="checkbox"/>

3.1.11 PRICE BASIS

Are you prepared to offer a fixed price?	Yes / No
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Please provide a breakdown of costings to undertake the work in accordance with the methodology proposed:

stage	stage	Unit	Price Offered (ex GST)	GST Component	Price Offered (inc GST)

4 APPENDIX A – SPECIAL CONDITIONS OF CONTRACT

SPECIAL CONDITIONS

4.1.1 PERIOD OF CONTRACT AND TERMINATION

The Contract will be in force until 30 June 2020. However, in the event of the Contractor failing in any manner to carry out the Contract to the Principal's satisfaction, the Principal may forthwith determine the Contract by written notice to the Contractor.

4.1.2 INSURANCES

The Contractor and its subcontractor(s) (if any) will be required to effect and maintain:

- (a) Public liability insurance in the sum of at least \$10,000,000 Ten million in respect of any one occurrence and for an unlimited number of claims.
- (b) Workers Compensation or Personal Accident Insurance cover as required by law (whichever may apply).
- (c) Professional indemnity insurance in the sum of at least \$1,000,000 One Million in respect of any one occurrence and for an unlimited number of claims.

5 APPENDIX B – GENERAL CONDITIONS OF CONTRACT

AS 4122–2010 General Conditions of Contract for Consultants is to be used for this contract

MT. BROWN/WONGBOREL FLORA AND FAUNA SURVEY STAKEHOLDER & COMMUNITY ENGAGEMENT PLAN

1. Stakeholder engagement objectives

- Understand the reasons for undertaking the survey
- Understand the values and objectives of land managers, agencies, industry organisations and community groups
- Understand the key issues impacting land managers, community groups and general trail users
- Identify potential opportunities for future community involvement

2. Engagement framework

The level of engagement and consultation approach for the Strategy is detailed below based on the following framework.

Level of engagement	Inform	Consult	Involve	Collaborate	Empower
Description of engagement	One way communication providing balanced and objective information to assist understanding about the project and potential outcomes.	Two way communications designed to obtain feedback, information and proposals to inform the survey process.	Participatory process designed to help identify issues and views to ensure that concerns and aspirations of interested parties are consistently understood and considered in the survey process.	To partner with stakeholders to identify sites and habitats of flora and fauna	N/A The consultant is being hired for their expertise and to provide a Level 1 Flora and Fauna survey of Mt Brown/Wongborel Reserve
Actions	Keep informed	Keep informed Listen, Acknowledge Information provided, concerns and aspirations	Work with stakeholders to ensure concerns and aspirations are acknowledged Provide feedback on how input influenced survey process	Look to stakeholders for direct advice regarding sites and habitats of flora and fauna Provide feedback on how input influenced survey process	

Methods / Activities	Brief project introduction on Council website	Brief project introduction on Council website	Invitation to meet consultant on fieldwork days and/or participate in survey	Invitation to meet consultant on fieldwork days and/or participate in survey
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Groups	Local and Shire Community	Local and Shire Community	Interested community members/ organisations	Shire of York, Interested community members/ organisations	Shire of York,
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3. Engagement process and activities

3.1. Inform

A brief outline of the project will be developed and made available on the Shire website and Facebook page to inform the community of the project and indicate timing for the survey.

3.2. Consult

Local residents of the Shire of York and identified stakeholders will be invited to submit information to:

- Assist the consultant to identify flora or fauna
- Raise any concerns about rare flora or fauna

This will form part of the outline of the project to be made available on the Shire website and Facebook page

Email – specific environmental/trails groups and stakeholders to email to their membership.

3.3. Involve

All stakeholders will be emailed informing them of the options for submitting information and meeting with the consultant.

Anyone that cannot make the allocated days and times for fieldwork will be offered a telephone discussion with the consultant.

All external input will be recorded by the consultant. The information gathered will be collated by the consultant and incorporated or actioned as considered appropriate.

3.4. Collaborate

Interagency collaboration may be required to develop a successful Flora and Fauna Survey. Agencies that are likely to be directly approached and informed of progress throughout the planning and development of the survey may include:

- Department of Biodiversity, Conservation & Attractions (DBCA)
- WA Herbarium

Stakeholders

	Surname		Association	Contact
Suzie	Haslehurst	Int	Shire of York – Acting CEO	ceo@york.wa.gov.au
Darren	Wallace	Int	Shire of York - Executive Manager Infrastructure	emids@york.wa.gov.au
Carol	Littlefair	Int	Shire of York - Arts & Cultural Heritage Officer	carol.littlefair@york.wa.gov.au
Jack	Nunn	Int	Shire of York Development Services Coordinator	dsc@york.wa.gov.au
Jethro	Sleer	Int	Shire of York Works Coordinator	works@york.wa.gov.au
Esmeral	Harmer	Int	Shire of York Events Economic Development	cedo@york.wa.gov.au
John	Hansen	Int	Bushfire Risk Management Planning Co-	BRPC@toodyay.wa.gov.au
Andrew	Wherrett	Ext	Avon Valley Track & Trails Group -President	avtat.wa@gmail.com
Liz	Christmas	Ext	Avon Valley Track & Trails Group - Secretary	lizchristmas@westnet.com.au
Roger	Underwood	Ext	Environmentalist	yorkgum@westnet.com.au
Eric	Ayling	Ext	Avon Branch of the Wildflower Society of WA -	ayfo@wn.com.au
Janet	Wilkinson	Ext	Avon Valley Environmental Society Inc -	richard.wilkinson8@bigpond.com
Trevor	Moffat	Ext	River Conservation Society Inc - President	moffattrevor1@gmail.com
Jamie	Ridley	Ext	DBCA Perth Hills District	Jamie.Ridley@dbca.wa.gov.au
Chris	Stewart	Ext	DBCA Central Wheatbelt District	Chris.stewart@dbca.wa.gov.au
Peter	Weatherly	Ext	Avon Valley Environmental Society Inc.	fibretec@bigpond.net.au
David	Hovell	Ext	Bushwalking	laoshi1950@gmail.com
Rebecca	Palumbo	Ext	Wheatbelt NRM	RPalumbo@wheatbeltnrm.org.au
Craig	Wilkinson	Ext	Mountain Biking	nudgewilko@gmail.com
Audrey	Sole	Ext	River Conservation Society	info@RiverConservationSociety
Kathy	Boladeros	Ext	York Branch — Wildflower Society of Western	carlee@activ8.net.au
Simon	Saint	Ext	Concerned resident	simonsaint91161@gmail.com