Shire of Dardanup

Sustainable Development Directorate

APPENDICES

Item 12.2.1 – 12.2.3

ORDINARY COUNCIL MEETING

To Be Held

Wednesday, 22nd May 2024
Commencing at 5.00pm

At

Shire of Dardanup
ADMINISTRATION CENTRE EATON
1 Council Drive - EATON

This document is available in alternative formats such as:
~ Large Print
~ Electronic Format [disk or emailed]
Upon request.

COUNCIL POLICY NO:-
SDev CP0510 – Road and Thoroughfare Naming

GOVERNANCE INFORMATION			
Procedure Link:	PR0?? – or NA	**Administrative Policy Link:**	NA

ADMINISTRATION INFORMATION					
Version:		New	OCM 22/05/2024 Res: ???/??	**Synopsis:**	Policy created.
Version:					

1. RESPONSIBLE DIRECTORATE

Sustainable Development

2. PURPOSE OR OBJECTIVE

1. Formalise a standard procedure for local road naming within the Shire of Dardanup (Shire).
2. Provide Shire staff, the local community and developers with clear guidance on the requirements for the naming of roads.
3. Ensure that road names comply with relevant legislation and requirements.
4. Encourage the application of themes to areas of new subdivision.
5. Ensure consideration to the history, natural environment, culture and character of the area is duly given when determining road names.

3. DEFINITIONS

Road: refers to a local government-controlled road and does not include state-controlled roads.

Thoroughfares: a course navigable by vehicle or foot that can be used for assigning addresses or allowing access between points or to a feature. Examples include alleyways, roads, streets, highways, fire tracks, bike paths and walking tracks.

Theme: refers to a consistent or unifying subject that may be and not limited to physical, historical, cultural or other character or characteristics.

4. BACKGROUND

The naming of roads is a key component of the creation of new subdivisions, and in turn contribute towards a sense of place. Roads are also critical in directing emergency services, mail delivery and road transport. These names form an important part of the Shire's historic and cultural heritage.

The Land Administration Act 1997 (section 26A) requires developers of new subdivisions to submit road and thoroughfare names for approval by the Shire. This Policy seeks to detail the provisions and procedures the Shire will follow in considering the approval road names and in forming a recommendation to the Geographic Names Committee. This Policy applies to all proposed public roads in the Shire that are created through the subdivision process.

The responsibility for proposing road names created through subdivision rests with the subdivider, in accordance with the requirements set out in the Land Administration Act 1997. To the extent of any inconsistency between this policy and the Land Administration Act 1997(the Act), the Act shall prevail. The following provisions apply to road naming applications.

5. POLICY

1. Proponents are required to put forward an overall theme for road names for approval by Council at structure plan stage as part of a proposed new estate (residential, rural, commercial or industrial). Or where this has not yet occurred, and a Structure Plan is approved prior to the commencement of site works and in parallel with the lodgement of engineering drawings for approval under Section 170 of the Planning and Development Act2005.
2. Where no overall theme has been approved yet and five (5) or more new roads are proposed to be created as part of a new estate (residential, rural, commercial or industrial), the proponent shall submit an overall theme for approval by Council.

3. Where a road name theme has been approved by Council, the proponent shall submit road names consistent with the theme approved.

4. Where no overall theme has been approved and four (4) or less new roads are proposed to be created, the proponent will still be required to submit road names for approval that are generally consistent with the theme established for the surrounding areas, or to nominate a theme for the estate.

5. The completion of the attached Appendix 1 – Application for New Road Names are required to accompany applications for new road names.

6. Road names and themes are to be prepared consistent with the requirements of the 'Geographical Names Committee Western Australia – Principles, Guidelines and Procedures' which provides requirements and guidelines not limited to:

   i) Consideration of current and future street names.
   ii) Consideration shall be given to current and future street numbering to ensure numbering is sequential, easy to follow and considers future density increases.
   iii) The origin of each name shall be clearly stated and subsequently recorded.
   iv) Names shall not be offensive or likely to give offence, incongruous or commercial in nature.
   v) Names shall be easy to read, spell and pronounce in order to assist emergency services, service providers and the travelling public.
   vi) Unduly long names and names comprised of two or more words should generally be avoided.
   vii) Proposals for road names shall include an appropriate road type suffix.
   viii) Practical application of road names to maps and plans shall be considered such as the long street names should not be allocated to short roads.

   <u>Preferred Themes for Road Names</u>

   In accordance with the Geographic Names Committee Guidelines suitable sources of road names suitable sources of names include:

   a) Aboriginal languages currently or formerly identified with the general area,
   b) Pioneers of the State or area,
   c) Citizens who have made a significant community contribution,
   d) War casualty lists and thematic names (e.g. nautical, sporting etc).
   e) Ethnic and gender diversity is encouraged.
   f) Given/first and surname combinations are suitable only if the surname alone cannot be used because of duplication. All name proposals must clearly identify the origin of the name and provide relevant references to allow for the verification of the name.

APPENDIX 1: Application for New Road Names

Shire of Dardanup

Attention: ####
Ph: ####
Email: ####

Applicant Name:	
Notification Address:	
Telephone Number:	
Site Address:	Estate Name and Stage:

Proposed New Names (only four (4) names permitted per application. If you are applying for more than four (4) new road names please use additional forms and highlight the road/numbers on the site plan that apply to each):

Road Number:	**Road Number:**
1st Preference:	1st Preference:
2nd Preference:	2nd Preference:
3rd Preference:	3rd Preference:

Road Number:	**Road Number:**
1st Preference:	1st Preference:
2nd Preference:	2nd Preference:
3rd Preference:	3rd Preference:

Significance of Preferred Names:

Road Number		

Required Information:
This form must be fully completed and accompanied by a road layout plan, including future road extensions. Please provide 2 copies with the new roads numbered (1,2,3 etc) for identification.

Certification:
I hereby certify that the information contained in this application (including the information contained in the attachment) is correct in all particulars:

Applicants Signature:	**Date:**

6. REFERENCE DOCUMENTS

Name of Policy	
Previous Policy	
Date of Adoption and Resolution Number	
Review dates and Resolution Numbers	
Next review date	
Related documents	**Acts/Regulations** **Plans/Strategies** **Policies** **References** **Delegations** **Work Procedures**

RISK ASSESSMENT TOOL

OVERALL RISK EVENT: Local Planning Policy for Naming of Roads

RISK THEME PROFILE:

4 - Document Management Processes

RISK ASSESSMENT CONTEXT: Operational

CONSEQUENCE CATEGORY	RISK EVENT	PRIOR TO TREATMENT OR CONTROL			RISK ACTION PLAN (Treatment or controls proposed)	AFTER TREATEMENT OR CONTROL		
		CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
HEALTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	If the developer not naming the street in sub-division stage, it can cause a delay in the approval.	Minor (2)	Rare (1)	Low (1 - 4)	To consider and adopt the Council Policy	Insignificant (1)	Rare (1)	Low (1 - 4)
LEGAL AND COMPLIANCE	The Land Administration Act 1997 (section 26A) requires developers of new subdivisions to submit street names for approval by the Shire.	Moderate (3)	Rare (1)	Low (1 - 4)	To consider and adopt the Council Policy	Insignificant (1)	Rare (1)	Low (1 - 4)
REPUTATIONAL	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
PROPERTY	Land Titles cannot be registered with Landgate.	Major (4)	Unlikely (2)	Moderate (5 - 11)	To consider and adopt the Council Policy	Insignificant (1)	Rare (1)	Low (1 - 4)

(Appendix ORD: 12.2.1B)

RISK ASSESSMENT TOOL

OVERALL RISK EVENT: *Bushfire Risk Management Coordinator Shared Role*

RISK THEME PROFILE:

13 - Project Management
7 - Environment Management

RISK ASSESSMENT CONTEXT: Project

CONSEQUENCE CATEGORY	RISK EVENT	PRIOR TO TREATMENT OR CONTROL			RISK ACTION PLAN (Treatment or controls proposed)	AFTER TREATEMENT OR CONTROL		
		CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
HEALTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required	Not required.	Not required.	Not required.
FINANCIAL IMPACT	Costs of BRMC exceed grant allocation.	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	Failure to meet obligations of grant risks future grants.	Insignificant (1)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Failure to meet obligations has impact on cooperation with Shires of Capel and Collie	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	Lack of BRMC may exacerbate bushfire impact due to reduced/no mitigation	Major (4)	Possible (3)	High (12 - 19)	Engage BRMC to seek and implement MAF	Moderate (3)	Unlikely (2)	Moderate (5 - 11)
PROPERTY	Lack of BRMC may exacerbate bushfire impact due to reduced/no mitigation	Major (4)	Possible (3)	High (12 - 19)	Engage BRMC to seek and implement MAF	Moderate (3)	Unlikely (2)	Moderate (5 - 11)

(Appendix ORD: 12.2.2)

(Appendix ORD: 12.2.3A)

MakerSpace (Make It Space) Service Models Report

PROJECT NAME:	***Shire of Dardanup Makerspace (Make It Space) Concept***
RESPONSIBLE DIRECTORATE:	***Sustainable Development***
DOCUMENT PREPARED BY:	***Kelly Bedford-Johnson***
DATE:	***17 January 2023***
VERSION:	***1.2***
TARDIS LINK:	*PRJ-R1330116*

TABLE OF CONTENTS

1. Executive Summary

This Makerspace Business Report will outline potential community benefits received through the development of a flexible makerspace in the new Shire of Dardanup (Shire) building.

This Report, developed by the Community Development Team, is in response to the Business Case that, as a part of the Eaton Civic and Community Centre Business Case, Naja Business Consulting Services developed, on behalf of the Shire. Naja Business Consulting Services conducted a review of a number of makerspace designs as a part of the bigger Business Case for the Shire of Dardanup.

Projects of this nature need to be fully justified both on a financial level and a community benefits level. Although increasingly more local governments and libraries are interested in creating a makerspace, many factors need to be considered including sustainability, staffing, funding, ongoing maintenance of the technology and hardware, operational model and future directions of the space. The success of a library makerspace is not just about providing technologies such as 3D printers but about building a great community that embraces the maker movement and advocates for learning by making or doing.

2. Background

The Shire of Dardanup is seeking to create a landmark and flexible, yet functional building, the Shire of Dardanup Civic and Community Centre (CCC), that demonstrates and celebrates sustainable building practices and technology in a multi-storey commercial building. It is to be an exemplar Administration, Library and Community Building with innovative and cutting-edge technology.

The overarching aim of this project is to anchor the Activity Centre or central business area of Eaton to realise the community-driven vision of a hub that serves Shire of Dardanup and the surrounding community through shared sport and community spaces, commercial activity, public services, and better pedestrian access.

The current Council-endorsed concept design provides growth for the Shire's administration for at least the next 20 years and fulfils the need for a centrally located community library. It will also provide community meeting spaces; training and workshop facilities; and arts, culture and technology production spaces.

The four major areas identified in this project were:

- Library relocation
- Community spaces/meeting rooms
- Shire administration relocation
- Dardanup Shire promotion/liveability/employment

The CCC has been developed and planned, aligning with several key development and strategic plans at a Federal, State, Regional, Local and community level. These include, among others:

- Make it Happen – The Australian Government's Modern Manufacturing Strategy; Department of Industry, Science, Energy and Resources
- The Australian Government's Regional University Centres promotion
- Western Australian Government STEM Skills Strategy
- Western Australia Public Libraries Strategy
- An Age-friendly WA: The Seniors Strategic Planning Framework 2012-2017
- Western Australian Science and Innovation Framework

3. Report Outline

This Report outlines a number of benefits and challenges which have been identified with the introduction of makerspaces in public libraries and buildings plus structural models to consider; with estimates of initial outlay costs, potential membership fee structure and ongoing considerations.

The MakerSpace (Make It Space) will be designed to promote innovation and manufacturing by individuals or small groups at all levels of expertise. A wide range of activities can be promoted that will appeal to all ages and demographics. At one level, technology and installed equipment will allow for experimentation and initial designs that can provide a launch pad for projects that lead to employment and business ventures in the Shire. For example, this equipment can include personal computers, specialised software, and 3D printers, where the beginnings of small manufacturing concepts can be created and prepared, ready for presenting to prospective commercial interests.

Other computers and 2D printing can provide access to software such as technical drawing, 3D art and design, software creation, and other endeavours in the IT-based skills that again can serve as a driver for setting up careers and job opportunities in the wider community. Electronics servicing, and encouraging skills in IT hardware development, manufacturing, and robotics can be supported by equipment such as soldering irons, dedicated workspaces, and specialised hand tools.

A different side of the Makerspace spectrum will be to provide for more crafts-orientated pursuits and offer opportunities for local artists to engage in collaborative projects where extra space and equipment are needed. With this in mind, tools such as professional overlockers, sewing machines, tools for creating canvas framing, and large workbench areas can cater for artistic tasks that are otherwise difficult in the home and, importantly, allow members of the community to come together and work in groups.

The Makerspace will offer a facility not currently available in the Shire – one with hard working surfaces, flooring resistant to chemical spills, excellent lighting and good ventilation. It will be a place where people enjoy creativity and cooperation, and access to semi-professional equipment.

Circuit hacking days at Noisebridge

4. Project Outcomes

Makerspaces serve as gathering points where communities of new and experienced makers connect. The Shire of Dardanup Civic and Community Centre Makerspace will:-

- Provide facilities enabled with cutting edge technology and tools which foster a community culture of multi-disciplinary innovation.
- Provide access to a flexible and responsive space for local collaborative maker networks to meet and share ideas, insights and best practices.
- Enable equity of access to specialised, state-of-the-art equipment and technologies to community groups and residents.
- Create opportunities for social engagement, participation and volunteerism.
- Capture economic opportunities which emerge through the provision of next generation digitally enabled technologies.
- Enable collaborative partnerships with internal and external stakeholders to contribute to the future-proofing of our local library services.

5. Recommendations

That the Working Group:

1. Receives the Makerspace Report.
2. Request that a report be presented to the February OCM to:
    a. Endorse a change of name from “Makerspace” to “Make IT “ Space
    b. Endorse three “Make It” streams – Mechatronics Engineering (coding, robotics, electrical circuitry) Arts/Crafts/Textiles and Media (podcasting, digital music production, film/photography).
    c. Endorse a 5 year plan to transition from Model 1 to Model 2 subject to available financial and staffing resources.
    d. Endorse the establishment of a Governance Group/Steering Committee to support the implementation and long term sustainability of the Make It Space.
    e. Note that a suitable funding sources and fee structures are identified and developed to ensure a viable and sustainable service model.

6. Models of Makerspaces

As technology evolves and consumer groups needs change, so does the role of the Makerspace. In Australia, makerspaces are becoming more prevalent, however, to date there are few programs hosted by Australian public libraries as compared to overseas counterparts, with the majority occurring in the community sector outside the public-library domain.

Model One – Concept: Connect & Collaborate	
	Focus is on creating a publicly-accessible programmable space in which community members can connect, design and create. Simplest of models, the space offers working surfaces such as tables, counters, or desks and a limited organic collection of tools that reflect the interests of the individuals and community groups who use the space and the projects they develop. The flexibility of space and its primary maker-stream (for example: mechatronics, textile arts/crafts, media etc.) become more refined as the space is used and a shared sense of agency and community ownership is developed. Storage of items is limited to the makerspace tool collection, with users having to supply their own consumable resources, specialised tools and equipment for each visit to the makerspace. Space is managed with "leave no trace" philosophy, with a minimal or no fee attached to the use of the space.
	Organisational Impact: • No additional support required to provide access to specialist technicians. • No additional support required as patrons access own equipment and consumables. • Initial fit-out of space approximately: **$36,280.94** **(see appendix 1: Resources required for Model 1)** • Initial expenditure for tool collection: **$10 000.00** • Limited, zero ongoing costs. **Considerations:** **Workforce Impact:** • Development and ongoing management of an online booking system • Development of a Shire usage policy • Additional responsibility to manage the space and tool collection, which is not collocated within the library precinct • Cleaning of space after patron usage

Model One – Concept: Connect & Collaborate	
	• On-going communication strategy to notify community of space availability • Responsibility to develop programs or workshops to draw activity and build interest • Current capacity of staff to support the Makerspace concept **Insurance considerations:** • 24/7 access: Safety management Monitoring space usage Responsibility for call outs to address issues that may arise • Theft of tools from tool collection • Inappropriate and potentially hazardous use of materials used in the space. • Damage to fixtures • Lighting and parking access • Loss of access cards/keys **Ongoing costs:** • Utilities cost (water, power, rubbish) • Heating and cooling costs • Tool replacement and repair costs • Rubbish removal • General cleaning schedule • Delivery costs for workshops developed by Shire staff (resources, consumables and program development time)
Recommendation *Initial foundation Model*	Identified as an initial interim model until the building construction, management, operations and long term available resourcing and ongoing viability is more certain. Initial outlay of approximately $38 000.00 would be achievable and see the space opened as a flexible programmable space for the Shire and a suitable meeting space for community groups. It is recommended that during this initial stage that the focus of the Governance Group/Steering Committee is to drive the development of programs and specialist interest workshops to draw activity, source local champions and build a local sustainable culture that encourages connection, collaboration and creation.

Model Two – Concept: Connect, Centralise and Develop	
	Focused on providing the public access to a variety of craft/STEAM streams with supporting equipment infrastructure the founding principle (based on the *FabLab* model and similar to *Canning Libraries MakerSpace*) is to enhance the work and abilities of the home hobbyist. This model provides access to a core set of tools (including basic electronics equipment, a lasercutter, a vinyl cutter, a CNC router, a CNC milling machine, overlockers, etc.) which allow novice makers to make almost anything on a small scale, given a brief introduction to engineering and design development. Offering public access to standard manufacturing equipment and initial training to use the equipment, this model relies on patron's access to experience volunteers and paid technicians to provide assistance as needed. Conditions of access to use the space (when experienced volunteers or paid technicians are unavailable) are usual with this model; with patrons required to be aged 16+. Model Two sees individuals and groups given access to hardware, reusable tools and limited consumables plus storage facilities- such as lockers, in exchange for set (often monthly) membership fee, or hourly machinery fee and detailed Terms of Use agreement. Model Two relies heavily on external funding sources for its initial set up. The sustainability of the space is supported by affordable membership fees plus regularly community workshops to provide an income. Additionally costs of individual project consumables lies with patrons.
	Organisational Impact: • Ongoing support required to provide access to specialist technicians and/or experienced volunteers. • Ongoing support required as patrons access Makerspace equipment and general consumables. • Initial fit-out of space approximately: **$114,129.05** *although this could be scaled down to two maker streams (electronics & textiles) rather than three maker streams (electronic, textiles and media)* (see Resources outlined on pages 18-22 required for Model 2- three maker streams) • Initial expenditure for tool collection and basic consumables $15 000.00 (see Reusable Tool List page 23 and Consumable Materials List pages 23-24 as a reference point)

Model Two – Concept: Connect, Centralise and Develop	
	• Moderate ongoing costs, however a sliding scale membership/usage policy could offset some costs. • Potential to off-set costs further by running well designed workshops for wider community groups/ ratepayers/youth groups and school holiday programs **Considerations:** **Workforce Impact:** • Development and ongoing management of an online booking system • Development of a Shire usage policy – including WHS, copyright, 24/7 access, liability, etc. • Coordination of ongoing training/induction for new patrons • Additional recordkeeping to record training/inductions/usage, etc. • Additional responsibility to manage the space, tool collection and specialist equipment which is not co-located within the library precinct • Initial and ongoing staff training to trouble shoot equipment issues and daily maintenance requirements • Ongoing management of consumables • Cleaning of space after patron usage • On-going communication strategy to notify community of space availability • Responsibility to develop programs or workshops to draw activity and build interest • Current capacity (time, knowledge, interest and skills) of staff to support the Makerspace concept, and deliver interest/specialist skills workshops • Management of gallery/display space • Additional time required to source ongoing funding streams • Additional time to manage extension of MakerSpace (Make It Space) streams (from 2 – 3 or 3-4, etc.) • Management of storage spaces and co-ordinating patron storage. • Management of IT including dedicated laptops to run machine software and internet access. **Insurance considerations:** • 24/7 access: Safety management of patrons (potentially unskilled) and use of specialist equipment Monitoring space usage by untrained patrons or non-registered patrons

Model Two – Concept: Connect, Centralise and Develop	
	Responsibility for call outs to address issues that may arise outside of work hours • Theft of tools and or equipment • Damage to fixtures • Damage to equipment through misuse • Inappropriate and potentially hazardous use of materials used in the space. • Lighting and parking access • Loss of access cards/keys **Ongoing costs:** • Utilities cost (water, power, rubbish) • Heating and cooling costs • Tool replacement and repair costs • Rubbish removal: including recycling and possible hazardous materials • General cleaning schedule • Delivery costs for workshops developed by Shire staff (resources, consumables, program development time, sourcing specialist facilitators) • Ongoing communication strategy • Internet connectivity
Recommendation *Ideal aspirational target*	A transitional, carefully staged approach to this model would be prudent as the initial investment would require an additional $80 000.00 (approx.) on top of the Model 1 start-up outlay. Ideally a 5 year plan to transition from Model 1 to Model 2 would enable the Governance Group/Steering Committee to establish the required policies and processes required (as highlighted in Appendix 5). The recommended timeline also allows for the emergence of community trends and preferred Maker Streams; which may not align to the maker streams identified in this Report (Mechatronics Engineering (coding, robotics, electrical circuitry) Arts/Crafts/Textiles and Media (podcasting, digital music production, film/photography). Sustainable HR and resourcing models will need to be established for this model to experience long term success.

Model Three – Concept: Entrepreneurial Incubators	
	The focus of Model Three is to enable as many creative maker-streams as possible within the space (see *UQ Innovate* makerspace model). "Streams" are represented through well-considered workshop layouts, significant manufacturing infrastructure such as high-voltage electricity and ventilation, lots of supporting tools dedicated to each maker stream, and appropriate tooling to accomplish a variety of projects. Each area could be used both by hobbyists, students and semi-professional craftsmen alike, and the ability to access multiple types of maker-streams in the same space is a magnetic attractor to individuals and community groups alike. Due to the significant expense and energy involved in maintaining multiple types of semi-professional-grade maker areas, training new members to use the tools responsibly and overall resource management, Model Three is structured along the lines of traditional business /training spaces to ensure its sustainability and ensure ongoing costs are covered. Access to the space is generally prohibited to: 1. Anyone under the age of 16 years 2. Anyone who hasn't undertaken the training, or 3. Is not under direct supervision of experienced, trained staff. This model combines fee for service for access to specialist workshops, set user fees (daily or monthly rates), access to purchase consumable resources on site and detailed Terms of Use agreements.
	Organisational Impact: • Development of a Makerspace Business Model that aligns to the Shire of Dardanup – Council Plan 2022-2032 plus Strategic Community Plan 2020-2030 requires time for staff to develop a Business Case plus a sustainable Business Model. • Additional funding support required to provide access to specialist technicians and/or experienced volunteers. • Additional support required as patrons access Makerspace equipment and general consumables. • Initial fit-out of space approximately: $114,129.05 although this could be scaled down to two maker streams (Mechatronics Engineering & Arts/Craft/Textiles) rather than three maker streams (Mechatronics Engineering , Arts/Craft/Textiles and Media) (see Resources outlined in Appendix 2 required for Model 2-three maker streams)

Model Three – Concept: Entrepreneurial Incubators	
	• Initial expenditure for tool collection and basic consumables $10 000.00 (see Appendix 3 Reusable Tool List and Consumable Materials List as a reference point) • Considerable ongoing costs, however the model requires on sliding scales for membership to accommodate community access. • There is potential to offset running costs by establishing a user pay system where patrons pay per hour access to specialist machines (eg laser cutter) to buy machine compatible consumables plus payment to access to specialist/high interest skills workshops and youth holiday programs. **Considerations:** **Workforce Impact:** • Development and ongoing management of an online booking system • Development of a Shire usage policy – including WHS, copyright, 24/7 access, liability etc • Coordination of ongoing training/induction for new patrons • Additional recordkeeping to record training/inductions/usage etc • Additional responsibility to manage the space, tool collection and specialist equipment which is not co-located within the library precinct • Initial and ongoing staff training to trouble shoot equipment issues and daily maintenance requirements • Ongoing management of consumables • Cleaning of space after patron usage • On-going communication strategy to notify community of space availability • Responsibility to develop programs or workshops to draw activity and build interest • Current capacity (time, knowledge, interest and skills) of staff to support the Makerspace concept, and deliver interest/specialist skills workshops • Management of gallery/display space • Additional time required to source ongoing funding streams • Additional time to manage extension of MakerSpace (Make It Space) streams (from 2 – 3 or 3-4 etc) • Management of storage spaces and co-ordinating patron storage. • Management of IT including dedicated laptops to run machine software and internet access. • Requires additional support through access to specialist technicians.

Model Three – Concept: Entrepreneurial Incubators	
	• Requires consideration of HR for position number and additional funding (which may or may not be additional to the projected additional FTE outline in the 2020-2050 plan) **Insurance considerations:** • 24/7 access: Safety management of patrons (potentially unskilled) and use of specialist equipment Monitoring space usage Responsibility for call outs to address issues that may arise • Theft of tools and or equipment • Damage to fixtures • Inappropriate and potentially hazardous use of materials used in the space. • Damage to equipment through misuse • Lighting and parking access • Loss of access cards/keys **Ongoing costs:** • Utilities cost (water, power, rubbish) • Heating and cooling costs • Tool replacement and repair costs • Rubbish removal: including recycling and possible hazardous materials • General cleaning schedule • Delivery costs for workshops developed by Shire staff (resources, consumables and program development time) • Communication strategy • Internet connectivity • Requires additional support through access to consumables that are hardware compatible **Space:** • The size allocated in the new precinct has not been designed to support co-located multi maker streams, it is simply too small. • Generally speaking a well-designed 500 to 1000m2 community workshop is required to easily support educational programs, multi maker streams, membership access to shared tools/workspaces/semi-professional machinery, storage facilities, kitchen facilities, co-creation spaces/labs plus studio rental space and recording booths, with the focus and capacity to grow start-up ecosystems that enable economic benefits for the community.

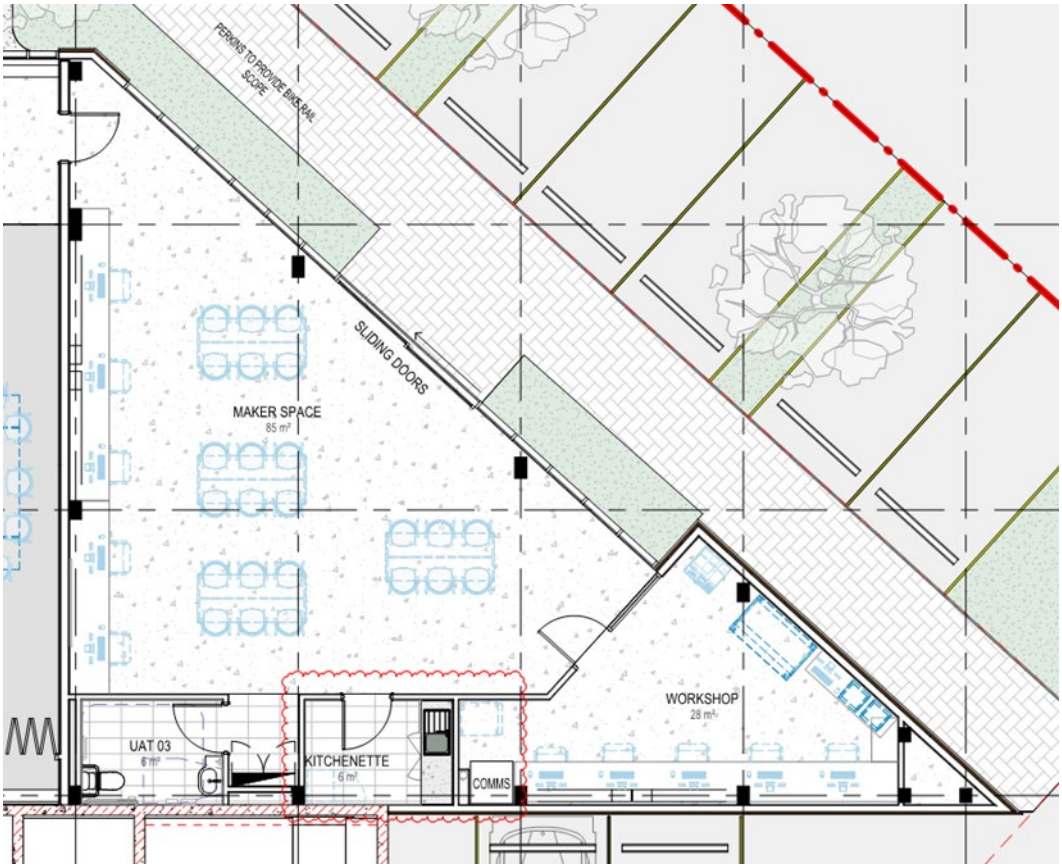
Model Three – Concept: Entrepreneurial Incubators	
Recommendation: *Not a viable model*	Critical factors such as: • the size of floor space allocated • limited breakout creation zones and space for "start-ups" • Limited storage space for equipment and projects • ongoing cost of resourcing • limited access to technical expertise required to manage a multi- streamed MakerSpace (Make It Space) • limited resourcing to pay competitive wages to attract specialist staff • ongoing training requirements of Shire staff • population size and socio- economic impacts which limit community members and residents ability to high fees for service contribute to this not being a viable model.

Model Four - MakerSpace (Make It Space) Franchise (Tech Shop, Makers Hub, Maker Media)	
	While there is a range of commercial platforms which offers education programs for people interested in learning how to use the tools, many of these are based off shore (predominately USA, Canada and China). To buy a Makerspace franchise, such as MakerKids, interested parties need to have at least liquid capital of $100,000 and a minimum net worth of $1,000,000. Franchisees are expected to make a total investment of $150,000 - $550,000. The primary advantage of this model is that the Shire does not have to bear the development cost and risks of opening a new venture on its own, as the franchisee is typically responsible for those costs and risks, putting the onus on them to build a profitable operation as quickly as possible. Franchised makerspaces are general co-located with a retail space where customers can buy drone kits, welding rods, t-shirts, and maker books. The primary risk is that Makerspaces are generally not profit making and there is a growing trend of insolvency, here and overseas (Techshop, MakerPlace, Vocademy).
Recommendation: *Not a viable model*	Critical factors such as: • the size of floor space allocated • limited breakout creation zones and space for "start-ups" • limited storage space for equipment and projects • ongoing cost of resourcing • population size and socio- economic impacts which limit community members and residents ability to high fees for service • off shore franchises (no local support) • a growing trend of insolvency, here and overseas • level of capital required to buy a franchise and establish the space contribute to a high level of risk for the Shire and this not being a viable model.

It is important to note that in the research completed to develop this report, it was evident that each model of makerspace has seen successes and failures, and no single set of best practices has yet emerged from the global movement.

7. Proposed Floorplan

Proposed Floorplan = 113 sq metres



8. Space and Fixture Considerations

Further additions to the space for consideration:

Workshop fixtures:

- A recommendation would be to increase the size of the personnel door into the workshop to ensure machinery can be moved in and out with ease – a one and a half size door with a viewing panel would improve access and safety aspects.
- Access to water is required in the workshop, particularly if soldering stations are being installed. Water is a requirement for keeping a cleaning sponge wet during the soldering process and for washing hands after using cleaning solvents etc. Using the kitchenette sink would not be appropriate as it could lead to cross contamination of food and food utensils and potentially toxic by-products from activities such as soldering, textile dying, etc.
- Additionally an eyewash fixture should be included as a part of the water trough (see as example) as solder can "spit". With it included into the water trough, no additional space for fittings are required: although additional costs will need to be factored in.

- Individual tip extraction fans should be installed at each soldering station to ensure that the fumes generated from the soldering flux are removed quickly. Exposure to rosin (an ingredient in solder) can cause eye, throat and lung irritation, nose bleeds and headaches. Repeated exposure can cause respiratory and skin sensitisation, causing and aggravating asthma.
- Extraction and ventilation is highly important. Engineering and fabrication equipment such as the 3D printers, CNC router and laser cutter can create excessive airborne dust or toxic vapours when in use. Exhaust systems must be installed properly, be ducted to the outside of the building and meet all manufacturer specifications. Appropriate ducting is a core requirement if Mechatronics Engineering is going to be a maker stream offered in the space.
- A water trough should also be considered in the main makerspace. There has been no provision for a wet space in either the library or makerspace. This will inhibit the flexibility to run craft/arts activities in any of these zones. These types of activities (painting, gluing, textile dyeing, acrylic pouring and resin crafts) are popular during the school holiday program and would be used by community craft groups using the makerspace. Consideration to include a tap fitting with a flexible pull-out hose to improve use. Again using the kitchenette sink is not an appropriate solution.

- Data points and IT connectivity is critical if the maker stream supported is STEM focused. Each specialist machine requires individual software. Machines (both production machines (3D printer, laser cutter and CNC router, etc,) and computers will need power sources (depending on the model, a medium sized laser cutter may require 3 phase power)

- Security Cameras will be required to enhance specified building access control as established elsewhere in the main building project and this will allow management to the door level. CCTV in the makers spaces itself has not been included as yet and is highly recommended to be included in the broader buildings CCTV install. This will be a critical inclusion required if the space is to be opened 24/7.
- Location of the Makerspace, next to Council Chambers, will require additional consideration for sound proofing or panelling to be installed. Most of the identified machines for the Mechatronics Engineering stream will create a level of noise pollution that will impact collaboration and discussion within the space and potentially create acoustic issues in that end of the building.

Important to note that these additional requirements have not been costed as a part of the Report or in the original scope of the building project and funds will need to be secured to enable a variation to be submitted if any of the above considerations are adopted.

9. Considerations

Current ICT Hardware and Software Costs

All models will require consideration of both hardware and specialist software costs to be factored. Using the Asset Management Plan, the cost under the current strategy for hardware is insufficient.

It is important to note that in a five year time span, it would be safe to predict there will be new 3D printers developments capable of going way beyond the current technology and replacement costs would drop.

Each specialist machine will require a designated laptop to run the specialist software.

Consideration of wireless vs direct cabling needs to be factored into the project as connectivity is critical.

Make magazine

10. Cost Analysis

The calculation used in this Report is based on a number of factors. These include:-

1. This cost of initial outlay for hobbyist/semi-professional standard hardware to ensure longevity of equipment;
2. The cost of general fit out of furnishings that enable flexible use of space and purpose;
3. Staffing;
4. Consumables.

The calculation is based on a five year lifecycle and an inflation rate of 3%. For the purposes of this exercise, it does not include an allowance for the time value of money.

Technology is moving at a fast pace. Accelerating change is seen not just in the evolution of computers but in the improvement of all technology, including access to affordable industrial equipment. The demand for access to technology is ever-growing. This demand is at the consumer level, where patrons to the Makerspace will want the equipment and tools maintained at an appropriate technological level. The hardware replacement schedule should reflect a timeline that is responsive to this.

11. Project Funding

IT infrastructure and software licensing/replacement is funded from a dedicated IT Asset Management Reserve and annually through Council's Municipal fund.

Hardware replacement will need to be considered and funded from a dedicated Asset Management Reserve through Council's Municipal fund and will be an additional cost to previous budget allocations. Depending on the maker model selected this could see a considerable increase in funding allocation.

Appendix 2 provides an estimated equipment list and approximate cost for initial start-up of three potential maker streams – Mechatronics Engineering, Arts/Craft/Textiles and Media. Each area can be scaled down as required or "parked" for further consideration when expansion of the maker concept and take up is evident.

Addition to the above, there is a need to provide access it additional reusable tools and consumable items which need to be factored into the scope of the project. This would see an additional $10 000.00 factored into both models. (See appendix 3).

Model	Maker Streams	Start-up estimates for initial set-up only
1	**Concept: Connect & Collaborate** No provision of Maker streams. Individuals and community groups are limited to the limited makerspace tool collection, with users having to supply their own consumable resources, specialised tools and equipment for each visit to the makerspace. No storage for community groups.	**$32 731.94** for furniture *(not including freight or installation costs)* Plus **$5 000.00** approx. required for reusable (makerspace tool collection) tools
	Total	**$37 731.94**
2	**Concept: Connect, Centralise and Develop** Provision for individuals and community groups to access hardware, reusable tools and limited consumables equipment for 3 Maker streams – Mechatronics Engineering, Arts/Craft/Textiles & Media. Model Two sees individuals and groups given access to limited storage facilities- such as lockers, in exchange for set membership fee, or hourly machinery fee and detailed Terms of Use agreement.	**$110,580.05** for furniture and maker stream equipment *(not including freight or installation costs)* Plus **$10 000.00** approx. required for reusable (makerspace tool collection) tools plus consumable items.
	Total	**$120 580.05**

It is important to note the amounts listed are estimated costs which are subject to price increases, do not include freight or installation costs, training costs for specialist equipment or future consumable costs or equipment loses. Additionally costs for changes to the building scope, which may occur with the additional fixture requirements, has not been costed or included in this Report.

12. Risks and Issues

The recent movement of creating makerspaces in libraries or public buildings presents new challenges and considerations. Therefore, it's important to consider the potential long term organisational impact which may occur when creating a makerspace.
By nature makerspaces are an evolving concept. The risks highlighted below need extensive consideration (in conjunction with the potential model of Makerspace) prior to "doors opening" at the Shire of Dardanup Civic and Community Centre.

Implementing any new program has risks that need to be mitigated.

12.1 Project Costs Overruns

The risk of any project cost increases is high, particularly in today's market. This risk is best mitigated by ensuring that the agreement of what is in scope is clearly defined and understood by all stakeholders. This starts with a clearly defined initial model, which has provision for any future developments as Makerspaces are highly evolving spaces, which reflect the interests of the maker community in which they are based. Once a model is selected, due diligence has to be undertaken to ensure all risks to the Council/Shire are considered and responses developed.

Of all the three models presented, Model One has the least potential to suffer project cost overrun as it has no outlay for specialist machinery and could open the doors with a minimum investment of $50,000.00. Model Two and Model Three have an estimated start-up requirement of $125,000.00 excluding staffing, training, freight and installation of equipment.

12.2 Project Delays

Project delays occur due to lack of resources to complete the tasks, lack of commitment within the organisation to deliver the project and vendors inability to provide equipment within expected timeframes. The mitigation strategy will need to ensure that a realistic timeline is established after taking into account the model identified by Council, success of grant applications and availability of resources.

The executive, management and procurement team will need to assist the project team to ensure resources, or alternative products, are available when needed. This will be mitigated by sourcing suitable suppliers, placing orders and identifying suitable storage arrangements for goods purchased prior to the space being completed. This will ensure that a suitable lead in time is clearly managed and clearly communicated to all involved to enable cataloguing of assets, fit out of the Makerspace, suitable training on machinery and policies and processes established.

12.3 Poor User Adoption

Although some of the expected outcomes of the Makerspace are:

- Establishing a regional, purpose built space for the varied makers community of the south west
- Enabling grassroots economic growth
- Supporting meaningful community programming
- Extending educational opportunities to reconnect disaffected youth
- Extending community access to a wide range of semi-professional specialist equipment

There is a risk of poor adoption from the community if staff and community engagement in the co-creation of multiple maker streams is not established from the beginning. Five factors that will influence the positive uptake of using the Makerspace are:

- Underutilising community communication platforms and social media strategies to promote the space and generate interest in the Maker community
- Failure to source/identify/engage a community or shire staff champion to promote and develop the new space and targeted programs
- Adopting a rigid fee structure that prices community groups or individuals out of accessing the space
- Inability to access or use specialist equipment due to lack of training, machinery breakdowns, technical support and/or over subscription to the space or equipment.
- Inadequate workshop design which limits the flexibility of developing multiple maker streams within the space.

These points will need to be explored further when the Business Case is developed and a full risk assessment completed.

12.4 Scope Creep

Scope creep is a risk that can be a major issue if not mitigated correctly as it will impact on the resource and financial positions. Scope creep can be mitigated through clearly defining what is being delivered to the community/ Maker Model. Once the decision about what Model has been chosen of Makerspace, it needs to be clearly communicated to the organisation, the project team and community. This is the responsibility of the project manager. Any requests for change or additions to what has been agreed should be documented. This document then can be used as systems enhancements post the implementation.

12.5 Lack of Resources

The current climate with its shortages of skilled people and funding is a major risk to the success of the Makerspace. The mitigation of this risk is to identify key community groups, expert volunteers and Shire staff to create a governance group or specialist team to manage the space and develop creative solutions to ongoing funding sources. Locking in of resources that support the Makerspace model chosen, well in advance of the larger Shire of Dardanup Civic and Community Centre project will create a level of certainty for the executive, management and procurement team.

12.6 Inadequate Long Term Financial Support

Long term financial costs from original equipment purchases, staff training, replacement and maintenance expenditures as well as future development funding, form a significant aspect to the planning and final implementation of Makerspaces; particularly those hosted by libraries and not-for-profit organisations. Careful consideration of pricing structures will need to consider a range of additional expenditures not previously covered by the Shire (equipment replacement schedules, additional insurances, employment of additional staff, etc.)

12.7 Staffing Considerations

Makerspaces add new demands onto staff, over and above their regular work load responsibilities. For example, a library makerspace may require staff to test out new equipment, source out and purchase new products, or design new projects, programmes or classes. Making connections with community members, other makers and technical experts is another necessary makerspace task that takes time and commitment. Makerspaces have the potential to be time-consuming ventures with added planning, preparation, training, maintenance and purchasing responsibilities for library staff.

The following staffing considerations are directly impacted by the Makerspace Model selected by Council:

- Identification of staff who have the capacity and/or interest in managing the daily operational aspects of the Makerspace
- Successional planning to ensure minimal impact to the daily operations of the Makerspace occurs as a result of staff turnover
- Potential increase in FTE required to manage the Makerspace and budget implications to increasing Shire FTE

- Additional costs of accessing technical support staff who specialise in the maker steams that are catered for
- Additional programming costs and relief cover for staff to attend training opportunities to ensure that staff can use the equipment properly and safely and can offer support to patrons using the equipment.

Additional workload of library staff to be factored into staff workload and responsibilities includes:

- Managing booking systems of the space and/or booking of individual resources
- Checking equipment and coordinate maintenance schedules, organise machinery repairs, fix technical problems and provide assistance to patrons using the space
- Developing community workshops and educational programs to ensure maximum utilisation of the space and resources
- Coordinating daily maintenance and cleaning schedules
- Following up on potential theft and damage of resources
- Leading patron training which requires time for planning and consistency to ensure that the space and equipment are well used.
- Managing patron training records for safety requirements
- Developing annual budget requests and reports to Council
- Developing, maintaining and implementing policies (WHS, copyright, etc.) related to each maker stream
- Maintaining safety data sheets as per Safe Work Australia requirements
- Maintaining and reporting any injuries that occur in the Makerspace

These realities (of which the list above is not exhausted in all tasks that may arise) then beg the question: who becomes responsible for the upkeep of the space, ensuring order, tidiness and damage control.

12.8 Sustainability and the role of a Governance Group /Steering Committee

The belief that “If you build it, they will come” is not true and will not happen. Concepts such as Makerspaces are successful when resources and space is coupled with champions who have the ability to mobilise the community. Unfortunately this factor alone can have a long term impact on the sustainability of a program. We have all seen the challenges faced when key staff leave, creating a structural hole in the organisation.

The consideration of a Makerspace Governance/Advisory group is an attempt to minimise the impact of staff/champion turn over. The question of how the Shire of Dardanup Civic and Community Centre Makerspace is governed is important because this will steer and guide what factors motivate the space and its future development.

Existing research highlights the tensions and absences in relation to policy and planning for creative precincts, including makerspaces. As a generalisation each Makerspace develops a governance structure that is unique to its context and

community needs. A proportion of the governance models reflect a “Do-ocracy” which is a governing model that assumes that the decision making power is in the hands of those who ‘do’ versus those who ‘don’t’. In creating a governance/advisory group, it will be critical that it includes representatives from a variety of sectors, both local government and non-government and has a clear scope of its purpose.

12.9 Establishment of Makerspace Polices and Processes

Patron safety becomes a primary consideration when makerspaces provide potentially hazardous equipment that could cause harm when used incorrectly or without proper supervision. Many of the current Makerspaces have adopted access policies which generally prohibits access to the space to:

1. Anyone under the age of 16 years
2. Anyone who hasn’t undertaken the required safety training, or
3. Is not under direct supervision of experienced, trained staff.

Other areas that will need a policy guide to be establish include:

1. Fee structure for use of space
2. Policies that outline general expectations of what should be made within the space. All spaces have guidelines which prohibit the creation of items that could be perceived as weapons, or used commercially.
3. Safety protocols – including evacuation plans, safety data sheets and injury reporting.
4. Guidelines addressing copyright infringement, liability and intellectual property. General practice is to place the onus on the patron to ensure that he/she is respecting copyright law when creating products in the makerspace.
5. Governance of the Makerspace
6. Budget guidelines and funding streams

13. Risk Assessment

A full risk management plan will be delivered on the recommendation of Makerspace Model prior to the implementation of the project.

Risk Matrix						
Consequence / Likelihood		Insignificant	Minor	Moderate	Major	Catastrophic
		1	2	3	4	5
Almost Certain	5	Moderate (5)	Moderate (10)	High (15)	Extreme (20)	Extreme (25)
Likely	4	Low (4)	Moderate (8)	High (12)	High (16)	Extreme (20)
Possible	3	Low (3)	Moderate (6)	Moderate (9)	High (12)	High (15)
Unlikely	2	Low (2)	Low (4)	Moderate (6)	Moderate (8)	Moderate (10)
Rare	1	Low (1)	Low (2)	Low (3)	Low (4)	Moderate (5)

RISK ACCEPTANCE CRITERIA

Risk Rank	Description	Criteria	Responsibility	Entered on Risk Register
LOW (1 – 4)	Acceptable	Risk acceptable with adequate controls, managed by routine procedures and subject to annual monitoring	Staff Member / Supervisor	No
MODERATE (5 – 11)	Monitor	Risk acceptable with adequate controls, managed by specific procedures and subject to semi-annual monitoring	Supervisor / Manager	No
HIGH (12 – 19)	Urgent Attention Required	Risk acceptable with excellent controls, managed by senior management / executive and subject to monthly monitoring	Manager / Director / EMT	Yes
EXTREME (20 – 25)	Unacceptable	Risk only acceptable with excellent controls and all treatment plans to be explored and implemented where possible, managed by highest level of authority and subject to continuous monitoring	EMT / CEO / Council	Yes

Appendix 1 – Resource List for Model 1

Resources required for Model 1:

FURNITURE		UNIT PRICE	NO REQUIRED	TOTAL
Interactive Screen *(instead of data projector)*	SmartBoard 86" Interactive Screen w/iQ & Learning Suite *(not including installation)*	$11,250.00	1	$11,250.00
Mobile Meeting Table	Axis Mobile Meeting Table 1800x600	$585.00	8	$4,680.00
Heavy Duty Steel Industrial Mobile Work Bench	Industrial mobile work bench 2.4m length steel top	$1,998.97	2	$3,997.94
Lab Stool	Lab Gas Lift Drafting Stool Ergonomic Chemical Resistant Industrial Seating *(consideration for back support required)*	$367.00	8	$2,936.00
Office Chair	Office Chair Veer Drafting Stool Mesh Chairs Flip Up Armrest Black *(more suitable for craft streams)*	$193.00	8	$1,544.00
Noticeboard Display Case	Weather Resistant Display Case *(notice board with cover to ensure notices are protected from random removal)*	$499.00	1	$499.00
Porcelain Whiteboard (Wall mounted)	LX8 Slim Edge Magnetic Porcelain Whiteboard *(not including installation)*	$727.00	1	$727.00
Storage	MAXIM 12 Piece Garage Storage System & Mounting Kit - Stainless Top Workbench, Tall Upright Storage Cabinet, Rolling Cabinets	$3,549.00	2	$7,098.00
TOTAL (approx.) Expenditure for furniture	*(not including installation or freight costs or cost for basic tool collection)*	**$22,105.92**		**$32,731.94**

Appendix 2 – Resource List for Model 2 (Three Make It Space Streams)

Resources required for Model 2 (Three Make It Streams):

GROUP	ITEM	APPROXIMATE COST PER *SINGLE UNIT PRICE*	UNITS REQUIRED	APPROXIMATE TOTAL
STEAM Machinery				
3D Printers	Makerbot Replicator +	$3,999.00	2	$7,998.00
3D Scanner	Makerbot Digitizer Scanner	$1,523.50	1	$1,523.50
Laser Cutter	Epilog Zing 24-40W Laser cutter	$15,000.00	1	$15,000.00
CNC Router	Pocket NC V2-10	$11,563.00 *(not including shipping from USA)*	1	$11,563.00
Bench drill	Bosch DIY 710W Bench Drill	$429.00	1	$429.00
Soldering	60W ESD Safe Lead-Free Soldering Station	$159.99	2	$319.98
Soldering	ESD Safe Solder/Desolder Rework Station	$249.00	2	$498.00
Dremel	Dremel 4000 Rotary Tool 175 W, Rotary Multi Tool Kit with 6 Attachments 128 Accessories Variable Speed 5000-35000 rpm	$333.30	2	$666.60
Sewing Machine	Elna HD1000 (manual machine = not computerised)	$599.00	2	$1,198.00
Overlocker	Janome 8004D Overlocker Machine	$599.00	2	$1,198.00
Portable Dust/fume Collector	Fanmaster Portable Fume Collector	$5,000 *(Installation of a permanent extraction system would remove need for this)*	1	$5,000.00
Cricut Machine	Cricut Maker 3 Machine	$628.00	2	$1,256.00
TOTAL (approx..)		**$40,082.79**		**$46,650.08**

GROUP	ITEM	APPROXIMATE COST PER *SINGLE UNIT PRICE*	UNITS REQUIRED	APPROXIMATE TOTAL
Expenditure for Machinery		*(excluding freight and technical support/initial training)*		
IT EQUIPMENT				
Desktop PCs	Desktop PCs with adaptable hdmi monitors for raspberri pi + better graphics cards for 3D rendering *(Need to consider higher specification machines for more intensive applications, ie: graphics, sounds, modelling, rendering etc)*	$3,500.00	2	$7,000.00
Interactive Screen *(instead of data projector)*	SmartBoard 86" Interactive Screen w/iQ & Learning Suite	$11,250.00	1	$11,250.00
Mac Studio	Apple Mac Studio (2022) M1 Max/32GB SSD	$3,099.00	1	$3,099.00
	Apple Studio Display = tilt & height adjustable stand	$3,099.00	1	$3,099.00
Top of Form	Punch! ViaCAD 2D/3D v9	$331.00	(2) to be confirmed by IT	$662.00
Raspberry Pi	Raspberry Pi Starter Kit - 8GB	$284.96	3	$569.92
TOTAL (approx..) Expenditure for IT Equipment		**$21,563.96**		$25,679.92

GROUP	ITEM	APPROXIMATE COST PER *SINGLE UNIT PRICE*	UNITS REQUIRED	APPROXIMATE TOTAL
Media Equipment				
Video Camera	Panasonic HC X2000	$2,889.15	2	$5,778.30
Video Camera Tripod	Professional Benro A3573FS6 Video Tripod	$495.00	2	$990.00
Audio Mixer-USB	Yamaha MG12XU	$560.00	2	$1,120.00
Microphone	Rode NT-USB Studio Condenser USB Microphone	$200.00	2	$400.00
Teleprompter	DESVIEW T12 Teleprompter for Smartphone/Tablet/DSLR with Remote Controller	$390.00	1	$390.00
LED Video Light with Adjustable Tripod Stand	Dimmable USB LED Video Light with Adjustable Tripod Stand for Tabletop/Low-Angle Shooting	$50.00	1	$50.00
Studio lighting Kit	Studio lighting Kit Bi-Color Dimmable 2x 85W Softbox Continuous Lighting Background Support System Black ,White & Green Backdrop Cloth with Stand For Portrait Product Photography Video Shooting	$200.00	1	$200.00
Photo and Movie Editing Software	Elements 2023 or alternatively Adobe CS be appropriate here which would allow manipulation and creation of photos, illustrations, film, graphic design, animation, etc.? *Approx. $960 annual subscription*	$219.99		$219.99
Movie, Green screen, Multi track Audio recording and more	Director Suite 365	$120 *(annual prescription cost)*	1	$120.00

GROUP	ITEM	APPROXIMATE COST PER *SINGLE UNIT PRICE*	UNITS REQUIRED	APPROXIMATE TOTAL
TOTAL (approx..) Expenditure for Media Works		**$5,124.14** *(excluding software costs and desktop computer listed in IT equipment)*		**$9,267.30**
ELECTRONICS				
Power Supply	Regulated Variable Laboratory Power Supply	$209.00	(2) to be confirmed by IT	$418.00
Power Supply for Soldering Stations	Clipsal Pneumatic Time Delay Switch W/Proof, 250V 10amp 319HP White	$131.94 *(excluding installation by electrician)*	2	$263.88
Test Equipment	Oscilloscope	$549.00	1	$549.00
TOTAL (approx..) Expenditure for Electronics		**$889.94** *(excluding installation by electrician)*		**$1,230.88**
FURNITURE				
Mobile Meeting Table	Axis Mobile Meeting Table 1800x600	$585.00	8	$4,680.00
5 Drawer Tool Trolley	Craftright 5 Drawer Tool Trolley	$198.00	4	$792.00
Heavy Duty Steel Industrial Mobile Work Bench	Industrial mobile work bench 2.4m length steel top	$1,998.97	2	$3,997.94
Lab Stool	Lab Gas Lift Drafting Stool Ergonomic Chemical	$367.00	8	$2,936.00

GROUP	ITEM	APPROXIMATE COST PER *SINGLE UNIT PRICE*	UNITS REQUIRED	APPROXIMATE TOTAL
	Resistant Industrial Seating *(consideration for back support required)*			
Office Chair	Office Chair Veer Drafting Stool Mesh Chairs Flip Up Armrest Black *(more suitable for craft streams)*	$193.00	8	$1,544.00
Noticeboard Display Case	Weather Resistant Display Case *(notice board with cover to ensure notices are protected from random removal)*	$499.00	1	$499.00
Display Case	1800mm Aluminium Framed Glass Display Cabinet	$2,738.95	2	$5,477.90
Porcelain Whiteboard (Wall mounted)	LX8 Slim Edge Magnetic Porcelain Whiteboard *(not including installation)*	$727.00	1	$727.00
Storage	MAXIM 12 Piece Garage Storage System & Mounting Kit - Stainless Top Workbench, Tall Upright Storage Cabinet, Rolling Cabinets *(this would remove the need for the 5 Drawer Tool Trolley)*	$3,549.00	2	$7,098.00
TOTAL (approx..) Expenditure for furniture		**$10,855.92**		**$27,751.84**
Grand TOTAL				**$110,580.05**

Appendix 3 – Reusable Tools List & Consumables List

Reusable Tools List

JOINING
- staple gun
- hot glue gun
- hot glue gun
- pop riveter
- box rivets
- big sewing needles
- paint brushes (1" and 3")
- straight pins
- splice set
- tap and die (SAE + Metric)

MECHANICAL
- screwdriver set (precision)
- screwdriver set (big)
- allen (SAE + metric)
- claw hammer
- mallet
- combination wrench
- ratchet set
- joint pliers (channel locks)
- miter box
- PVC pipe cutter
- socket set
- driver bits
- hollow-shaft nut drivers

CUTTING
- hole saw
- metal file(s)
- file card
- chisel/rasp set
- tin snips
- box knives
- X-acto knife
- scissors
- drill bits
- sanding block
- hacksaw
- wood-saw
- block plane
- deburring tool
- countersink
- awl
- cutting mat
- hand-crank (rotary) craft drill

FIXTURING
- vise
- C-clamps
- bar clamps
- needlenose
- locking pliers
- adjustable wrench
- binder clips
- locking pliers

BATTERIES / POWER
- AA NiMH and charger
- AA NiMH
- 9V battery clip
- 4 AA battery holder
- 3 AA battery holder
- 2 AA battery holder
- alligator clips

TEXTILE/SOFT CIRCUIT
- Fabric scissors
- pinking shears
- seam ripper
- cloth tape measure
- sewing needles
- iron
- embroidery needles
- needle threader
- snap setter
- Serger

Consumable Materials List

ADHESIVES
- wood glue
- white glue
- epoxy
- hot glue sticks
- super glue (CA) medium + debond
- CA glue thin
- spray adhesive
- PVC cement

TAPE
- packing tape
- paper Kraft tape 2"
- electrical tape
- duct tape
- masking tape
- scotch tape
- blue painter's tape

ELECTRONICS
- conductive thread 2ply
- conductive thread 4ply
- breadboarding pins
- batteries AA
- batteries 9V
- 9V battery snaps
- battery holders
- heat shrink tubing
- breadboards
- resistors
- switches
- buzzers
- motors
- photoresistors
- jumper wires
- wire
- crimps
- beeswax
- LEDs
- batteries

WOOD
- 2"x4"x96" wood
- 4'x8' 1/4" plywood
- balsa wood

FLUIDS
- small plastic syringe
- plastic tubing
- Luer connectors
- 1-way valve
- T-connector

HARDWARE
- hack saw blades
- jig saw blades
- jewelers' saw blades + lubricant
- X-acto and utility knife blades
- lubricant
- acid brushes
- popsicle sticks
- paper mixing cups (Solo)
- plastic mixing cups (medicine)
- toothpicks
- caliper battery

ABRASIVES
- sandpaper (80/200/400/600)
- sandpaper (80/200/400/600)

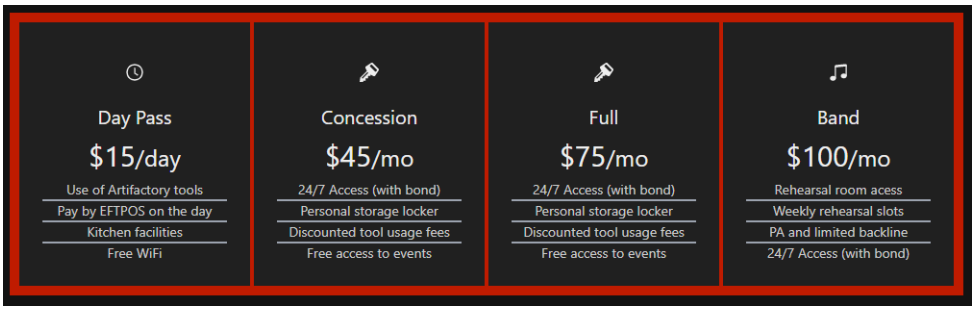
FASTENERS
- fasteners (screws, nails, etc.)
- staple gun staples
- pop rivets
- Mr. McGroovy's Box Rivets
- zip tie assortment
- binder clips

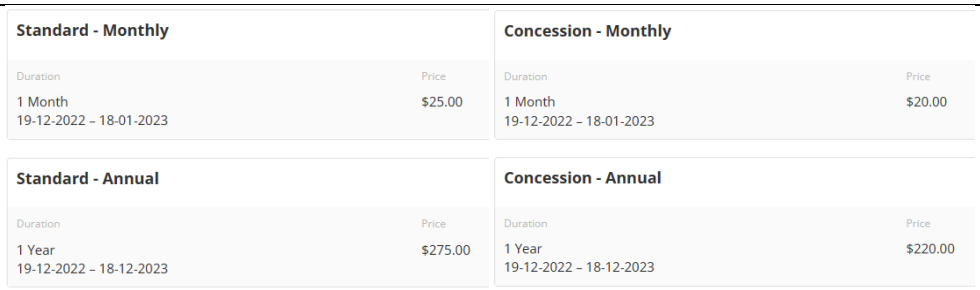
TEXTILES
- thread
- adhesive tape
- sewing machine needles
- felt
- fabric
- sewable battery holder
- snaps
- bobbins
- metal beads
- plastic beads

FIRST AID KIT
- gloves
- dust masks
- safety glasses

MISC
- Shapelock (or Instamorph)
- Nichrome wire
- string
- rope

Appendix 4 – Examples of current pricing models (Australian spaces) :

Current Pricing Models	Examples for pricing currently being applied to similar spaces to Model Two and Model Three : *Artifactory Perth*: https://artifactory.org.au/  *Hackerspace Brisbane*: https://hsbne.org/join Membership at HSBNE Benefits • A warm fuzzy feeling and the opportunity to support a unique community focused organisation • 24/7 access to the HSBNE campus via an RFID access card • Voting rights in the group • One 55L storage tub in member storage (if required) • Discounted classes Fee Structure **Standard Member**: • $100 per month. Rates can be reduced to $60 per month by becoming a 'Volunteer Member.' **Volunteer Member**: • $60 per month. • To be on this rate you must become a volunteer by signing an agreement. Each month you fulfill your agreement we will discount your membership fees to this level. Don't be shy! There's always plenty to do. **Concessional Volunteer Member**: • $30 per month, no further discounts • To be on this rate you must become a volunteer by signing an agreement. Each month you fulfill your agreement we will discount your membership fees to this level. • The volunteer workload for this rate is higher than for the 'Volunteer Member' rate. You can fulfill these expectations by attending the monthly working bee. • To be eligible for this rate you must be genuinely unable to afford the standard tier. Being a student or unemployed generally makes you eligible. Proof of eligibility will be required during the sign-up process. **Lifetime Member**: • $0 per month, for life • Available to those who have been a member for at least 10 years as a thank you for supporting and volunteering for HSBNE since the beginning. *Hobart Hackerspace :* Hobart Hackerspace | TidyHQ



Standard - Monthly

Duration	Price
1 Month 19-12-2022 – 18-01-2023	$25.00

Concession - Monthly

Duration	Price
1 Month 19-12-2022 – 18-01-2023	$20.00

Standard - Annual

Duration	Price
1 Year 19-12-2022 – 18-12-2023	$275.00

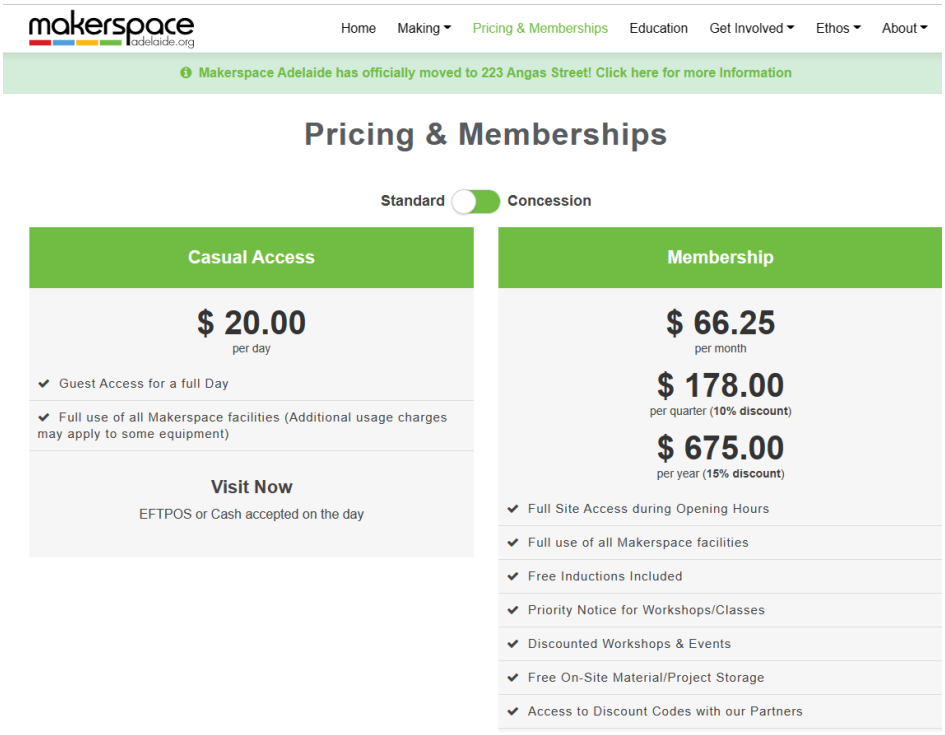
Concession - Annual

Duration	Price
1 Year 19-12-2022 – 18-12-2023	$220.00

Basic facilities, 24 hour access

Supported by a successful crowd funding campaign and workshop site provided by the Tasmanian Department of Health and Human Services, the Hobart Hackerspace is governed as a not-for –profit association.

Makerspace Adelaide:



makerspace adelaide.org

Home | Making | Pricing & Memberships | Education | Get Involved | Ethos | About

Makerspace Adelaide has officially moved to 223 Angas Street! Click here for more Information

Pricing & Memberships

Standard / Concession

Casual Access

$ 20.00
per day

- Guest Access for a full Day
- Full use of all Makerspace facilities (Additional usage charges may apply to some equipment)

Visit Now
EFTPOS or Cash accepted on the day

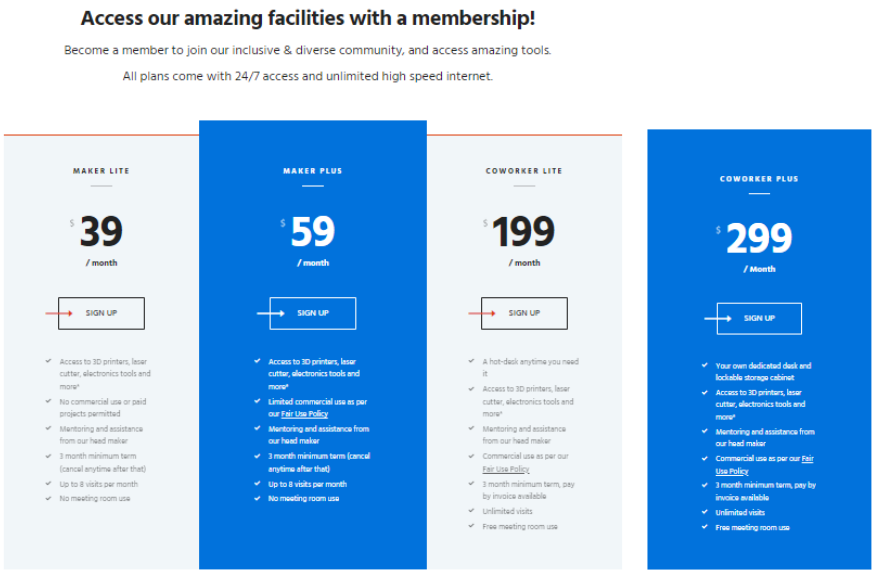
Membership

$ 66.25
per month

$ 178.00
per quarter (**10% discount**)

$ 675.00
per year (**15% discount**)

- Full Site Access during Opening Hours
- Full use of all Makerspace facilities
- Free Inductions Included
- Priority Notice for Workshops/Classes
- Discounted Workshops & Events
- Free On-Site Material/Project Storage
- Access to Discount Codes with our Partners

	Brisbane Makerspace: Pricing - Brisbane Makerspace 

Appendix 5 - Example of Make It Space Action Plan Required

ACTION	DELEGATED AREA OF RESPONSIBILITY	NOT STARTED	ON TRACK	COMPLETED	DATE DUE
Development of Project Plan					
Working Party to identity Make It Model					
Development of Business Case					
Business Case presented to Shire Council					
Identification of Department responsible for the Make It Space : Bookings Program development and delivery Maintenance & repairs etc Community technical support and trouble shooting Safety planning and evacuation plans IT – connectivity and hardware Communication Strategy Budget and funding sources Program analysis, reports and updates					
Establishment of Steering Committee/Governance Group					
Identify members (Shire staff, Councillors, Industry, Community Groups)					
Establishment of Steering Committee/Governance Group Terms of Reference					
Review Business Case					
Establishing key deliverables of Governance Group					
Establishing key deliverables of the Make It Space					
Identify additional key stakeholders which can be co-opted to support funding, Make It Space development etc					
Review Implementation Plan					
Identify and establish operational policies required for Make It Space					
Communication					
Development of communication plan for Make It Space					
Agreed key messages for the space					
Webpage for Make It Space					
FB posts – who is responsible & how will this be managed					
Develop a Program of Use for the Make It Space (see example Appendix ^^^^)					

ACTION	DELEGATED AREA OF RESPONSIBILITY	NOT STARTED	ON TRACK	COMPLETED	DATE DUE
Communication of Program					
Policies and Processes					
Develop a preliminary assessment of the space for code compliance and existing infrastructure support for the proposed equipment uses. *(exclusion areas etc)*					
Risk Assessment of Operational Plan					
Development of Budget					
Development of Operational Plan					
Development of Sustainability Plan					
Development of Asset Management Plan					
Development of Safety Plans *(including but not limited to: evacuation plan, after hours emergency contacts, safety data sheets etc)*					
Copyright					
Security					
Responsible Use of Space & Equipment Agreement					
Fees and service structures					
Liability					
Maintenance and replacement schedules					
Booking policies					
Identification of monitoring and reporting processes					
Development of evaluation strategy which enables feedback mechanisms and set success measures to inform Steering Committee/Governance Group, key stakeholders, sponsors, users and residents.					
HR Requirements					
Recruitment of additional Community Development Officer/Librarian					
Development and oversite of Training Program:					
Shire Induction					
Payroll Process					
Financial Systems Induction					
Library Systems					
Safety Plans					
Speciality Equipment					
Identification and recruitment of community volunteers and community members with specialist skills					
Development of a policy stance for reciprocal benefits for volunteers which could be					

ACTION	DELEGATED AREA OF RESPONSIBILITY	NOT STARTED	ON TRACK	COMPLETED	DATE DUE
rewarded with to support sustainable participation.					
Roster of staff to the Make It Space *(including out of hours support if open 24/7)*					
Budget					
Separate Asset Management Plan for the Makerspace established					
Development of Budget					
Identification of long term funding sources – grants and sponsorship					
Shire of Dardanup Budget commitment					
Identification and application for seed funding					
Grant writing & acquittals					
Development of fee structures for:					
Use of space only					
Equipment access					
Specialist workshops and/or holiday programs					
Community groups v Individual access					
Consumable use (3D printer filament etc)					
Training Budget for staff					
Procurement					
Asset Management Plan					
Identification of equipment required					
Purchasing of equipment					
Management of equipment *(daily maintenance checks, booking, maintenance schedules, repairs, replacement etc)*					

Appendix 6 - Example of Make It Space Implementation Strategy: (requires review and editing)

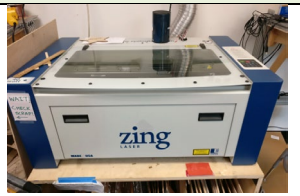
Transition from Model 1 to Model 2:

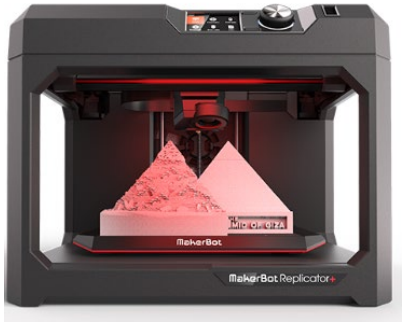
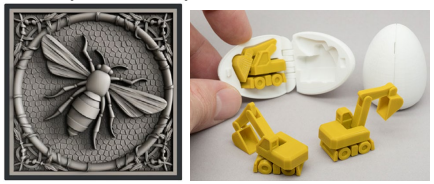
Year 1 2023		Year 2 2024		Year 3 2025		Year 4 2026		Year 5 2027	
Jan- June	**July - Dec**	**Jan- June**	**July - Dec**	**Jan- June**	**July - Dec**	**Jan- June**	**July - Dec**	**Jan- June**	**July - Dec**
Work stream group to review Report – edit and refine as required for presentation to Working Party	Governance Group/steering committee established (regular meetings established)	New Shire of Dardanup Civic and Community Centre building completed	**Model 1** Booking sheet open	Review of first 6 months of operations	Review of first 12 months of operations		New maker streams come on line	**Model 2** Booking sheet open	Review of first 6 months of multi maker stream operations
Working Party to review recommendations and ratify an aspirational target model	Funding to be sourced for approved model – including potential sponsorship or industry/higher education partnerships identified	Furniture purchased for delivery to align with building completion		Funding for transition into Model two to be sourced and secured	Expansion of MakerSpace (Make It Space) reusable tools as a response to community maker feedback	New equipment purchased as funding is secured	Training for library/maker space staff on new machines and equipment to support implementation of Model 2 (multi maker streams)	NEW programmed community workshops established in Make It Space to utilise new maker stream technologies	Maker stream public exhibition to highlight the work created and generate further community interest
Working Party to present recommendations to Council	Identification MakerSpace (Make It Space) project led	Workshop facilitators sourced to develop programs ready for July-Dec delivery	Christmas holidays programs developed	School holiday programs established in Make It Space (April holidays, June/July holidays)		Workshop facilitators sourced to develop new programs ready for new equipment and maker streams	Change expected in fee structure to reflect access to increasingly more technologies.	NEW School holiday programs established in Make It Space to utilise new maker stream technologies	Planning to host a Make It Space regional/state conference to show case the work completed by the Shire in developing the space
Business Case developed	Communication plan established to ensure interest and excitement is generated in the community	Policies and processes developed	Programs promoted and published			Review of policies and processes to reflect the transition from model 1 (flexible space) to model 2 (multi maker streams)			Celebration of new “start-ups” grown from the MakerSpace (Make It Space) programs

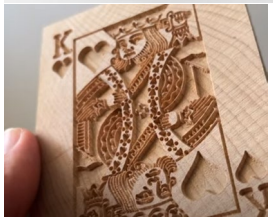
Appendix 7 - Example of Weekly Schedule for a Programmable Make It Space

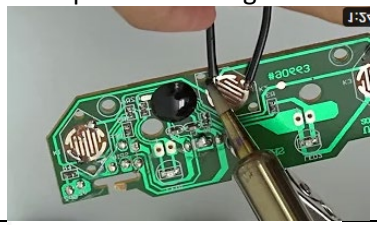
times	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
8-9	*Closed for maintenance and daily start-up*	*Closed for maintenance and daily start-up*	*Closed for maintenance and daily start-up*	*Closed for maintenance and daily start-up*	*Closed for maintenance and daily start-up*	*Closed for maintenance and daily start-up*	*Closed for maintenance and daily start-up*
9-11	**Make, Create & Connect** *Arts/Craft activities for community* *Ages: 18-88*	**Little Learners** *STEM activities for Tots* *Ages: 2-4*	**Tech StartUPS – 3D Printing** *Facilitated have a go classes (5 weeks)* *Ages: 18-88*	*Available for individual bookings or community group bookings*	**Tech Savvy Seniors** *Tech based activities for interested seniors.* *Ages: 18-88*	*Available for individual bookings or community group bookings*	*Available for individual bookings or community group bookings*
11-12	*Closed for clean up*	*Closed for clean up*	*Closed for clean up*	*Closed for clean up*	*Closed for clean up*		
1-3	*Safety Training and Equipment Training for new Make It members and/or key community groups*	**Tech LevelUPS – CAD and Design** *Facilitated intermediate classes (5 weeks)*	**Make, Create & Connect** *Arts/Craft activities for community* *Ages: 18-88*	**Tea & Tech.** *Connect through a cup of tea and improve your technology skills.* *Ages: 18-88*	*Available for individual bookings or community group bookings*	**E-Sports** *Ages:13-17* *Eaton Community College Team & Individuals*	
3- 4	*Closed for clean-up & afternoon set up*	*Closed for clean-up & afternoon set up*	*Closed for clean-up & afternoon set up*	*Closed for clean-up & afternoon set up*	*Closed for clean-up & afternoon set up*		
4-5.30	**Lego League** *Are you a lego master?* *Ages: 7-12*	**Coder Dojo** *Ages: 7-12*	**Instructables STEM Tech Club** *Ages: 7-12*	**Tech StartUPS – Laser Cutters** *Facilitated have a go classes (5 weeks)* *Ages: 18-88*	**Media Stars** *Ages: 7-12*	*Available for individual bookings or community group bookings*	
6.00-8.30	*Available for individual bookings or community group bookings*	**Media Moguls** *Social media, podcasts, film production & digital audio production.* *Ages: 13-24*	**Tech StartUPS - CAD and Design** *Facilitated have a go classes (5 weeks)* *Ages: 18-88*	*Available for individual bookings or community group bookings*	**Dungeons and Dragons LAN Party** *Ages: 13-24*		*Closed for maintenance and deep cleaning*

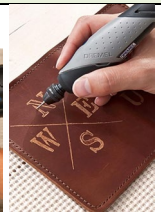
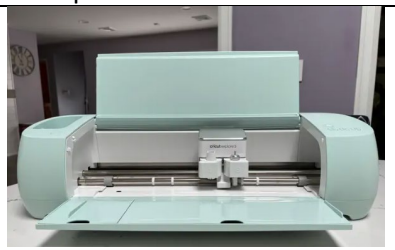
Appendix 8 - Illustration of Proposed Equipment and Potential Applications

MAKERSPACE STREAM	ITEM OF EQUIPMENT	PRACTICAL USES	ADDITIONAL INFORMATION
Mechatronics Engineering	Laser Cutter	Laser cutters can cut and engrave a wide variety of materials – anything from paper, wood, cork, acrylic and foam to different types of metals. Still, there are some materials that should never be cut using a laser cutter. Cutting material such as polyvinyl chloride, polycarbonate and polystyrene results in the emission of acids and toxic fumes. These are harmful to both the operator of the machine but also the laser cutter itself as they can be a source of corrosion. Examples of laser cutting projects can be viewed on YouTube: This New CNC laser is amazing! - The cost effective LONGER RAY5 10W - New!August 2022 - YouTube 3D Laser Cut Cardboard Art - YouTube	 Standard example of a laser cutter. Generally bench mounted and requires fume extraction and ventilation systems.   Example of the potential projects that can be enabled with a laser cutter.

MAKERSPACE STREAM	ITEM OF EQUIPMENT	PRACTICAL USES	ADDITIONAL INFORMATION
Mechatronics Engineering	3D Scanner	3D scanners help preserve history by capturing delicate artifacts and objects into 3D digital form. Non-contact 3D scanners, such as structured-light systems, are especially great for this type of application because they capture the object without causing any disturbance to the original.	 Example of 3D scanner.
Mechatronics Engineering	3D Printers	As their name suggests, 3D printers can build three-dimensional objects, out of a variety of materials. 3D printing is a manufacturing process in which material is laid down, layer by layer, to form a three-dimensional object. The most commonly known is fused deposition modeling (FDM), also known as fused filament fabrication (FFF). In it, a filament—composed of acrylonitrile butadiene styrene (ABS), polylactic acid (PLA), or another thermoplastic—is melted and deposited through a heated extrusion nozzle in layers. The Ultimate Beginner's Guide to 3D Printing - Part 1 - YouTube What Is 3D Printing and How Does It Work? | Mashable Explains - YouTube	 Example of 3D printer  Example of 3D projects

MAKERSPACE STREAM	ITEM OF EQUIPMENT	PRACTICAL USES	ADDITIONAL INFORMATION
Mechatronics Engineering	CNC Router	CNC routers are often used for to precisely cut out intricate shapes from cardboard, foam, and plywood. A CNC router is a computer-operated cutting tool that acts as a combination panel saw, spindle moulder, and boring machine, carving complex shapes out of materials like wood, metals, plastics, and glass. CNC stands for "computer numerical control"—a fancy way of saying the device operates using programmable automation, similar to 3D printing, allowing builders to design complex parts that can be cut cleanly, quickly, and on a massive scale. 70 woodworking projects with CNC Router - YouTube	  Example of CNC router projects.
Mechatronics Engineering	Bench drill	The bench drill is used for drilling holes through materials including a range of woods, plastics and metals. It is normally bolted to a bench so that it cannot be pushed over. Unlike handheld drills which rely on arm strength and the steadiness of the operator to drill an accurate, clean hole, drill presses are precise by design.	

MAKERSPACE STREAM	ITEM OF EQUIPMENT	PRACTICAL USES	ADDITIONAL INFORMATION
Mechatronics Engineering	Soldering	A soldering iron is a hand tool used to heat solder, usually from an electrical supply at high temperatures above the melting point of the metal alloy. This allows for the solder to flow between the work pieces needing to be joined. Soldering irons are most often used for installation, repairs, and limited production work in electronics assembly. High-volume production lines use other soldering methods. Large irons may be used for soldering joints in sheet metal objects. Basic Soldering Technique - YouTube	 Example of soldering station 
Mechatronics Engineering	Dremel	Developed for creative makers, this range opens a world of possibilities for your next DIY project. It includes extensive tools and attachments, perfect for both professional and personal use. Dremel tools can be used for a variety of applications – carving, cleaning and polishing, cutting, engraving, drilling and sanding. A tool for precision work and cleaning up projects. Power Carving a Wooden Bear with a Dremel - YouTube Carving a small Owl with Foredom and Dremel - YouTube	 Dremel set

MAKERSPACE STREAM	ITEM OF EQUIPMENT	PRACTICAL USES	ADDITIONAL INFORMATION
			  Examples of use.
Arts/Craft/Textiles	Cricut Machine	A Cricut is an electronic cutting machine that can cut all sorts of designs from materials like paper, vinyl, card stock, and iron-on transfers. Some Cricut machines can even cut leather and wood! Cricut Australia & New Zealand | Personalise almost anything New to Cricut? Try these EASY Beginner-Friendly Cricut Explore + Maker Decor DIYs! | Whiskey & Whit - YouTube How To Make Custom Stickers w/ Cricut | Teacher Holiday Gift - YouTube	 Cricut machine

References

Diane Slatter & Zaana Howard (2013) A place to make, hack and learn: makerspacers in Australian public libraries, The Australian Library Journal , 62:4,272-284, DOI:10.1080/00049670.2013.85335

https://makezine.com/article/education/the-difference-between-hackerspaces-makerspaces-techshops-and-fablabs/

https://makered.org/wp-content/uploads/2014/09/Makerspace-Playbook-Feb-2013.pdf

Makerspace: Towards a New Civic Infrastructure (placesjournal.org)

https://curiositycommons.wordpress.com/makerspaces-the-challenges/

Emerging Health and Safety Issues in Makerspaces

https://ijamm.pubpub.org/pub/07vlibe4/release/2

Makerspaces: Space and Design Considerations - Digital Pedagogy - A Guide for Librarians, Faculty, and Students - Research guides at University of Toronto (utoronto.ca)

Making Makerspaces: Creating a Business Model (makezine.com)

CNC Router : Air-Cooled or Water-Cooled … Which Is Better? | American Machinist

Safety data sheets | Safe Work Australia

MakerSpace Program | Australian Army Research Centre (AARC)

Building a Makerspace Facilitation Team | Australian Army Research Centre (AARC)

Who Makes a Makerspace? Makerspace Governance in Toronto, Ontario, and London, Ontario

Top Do's & Dont's of Makerspaces in Libraries | by Jane Cowell | Medium

RISK ASSESSMENT TOOL

OVERALL RISK EVENT: *Risk Assessment – Make-It Space*

RISK THEME PROFILE:

6 - Community Engagement

10 - Management of Facilities, Venues, Events and Services

RISK ASSESSMENT CONTEXT: Operational

CONSEQUENCE CATEGORY	RISK EVENT	PRIOR TO TREATMENT OR CONTROL			RISK ACTION PLAN (Treatment or controls proposed)	AFTER TREATEMENT OR CONTROL		
		CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
HEALTH	Failure to ensure the safety of children/young people	Major (4)	Possible (3)	High (12 - 19)	Minimum ages transparent for all facilitated events - All Minors underage of 16 to be supervised - Ensure parents sign-in and out when arriving on site for the event, emergency contact name and number to be collated - No minors are to leave facilities under any circumstances. - If event is facilitated by officer to have up to date first aid and CPR training and a first aid kit at meetings, activities or events. - Officer supervising to have access to all emergency contact details at each meeting, activity or event.	Minor (2)	Unlikely (2)	Low (1 - 4)
HEALTH	Purchasing of poor quality equipment and no additional support from the supplier of the items could result in community or user injury.	Major (4)	Possible (3)	High (12 - 19)	Ensure some off-site support is available in the event of a malfunction. Space operates under warranty and maintenance plan through the chosen suppliers to ensure well maintained and quality equipment. Community Groups - Only pre-qualified users will be accessing equipment who have been checked and hold own Public Liability Insurances.	Minor (2)	Possible (3)	Moderate (5 - 11)

(Appendix ORD: 12.2.3B)

CONSEQUENCE CATEGORY	RISK EVENT	PRIOR TO TREATMENT OR CONTROL			RISK ACTION PLAN (Treatment or controls proposed)	AFTER TREATEMENT OR CONTROL		
		CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
					All other community members will only access the space through facilitated programs that will provide supervised direction for equipment.			
HEALTH	Unskilled or trained users incorrectly using equipment causing harm to themselves and others in the space	Major (4)	Possible (3)	High (12 - 19)	Ensure that users receive the relevant induction to the more advanced equipment. Safe operating procedure cards attached to all machines. Fabrication room locked when there is not an experienced operator present. Manuals for all equipment available on the Make-It space website.	Minor (2)	Possible (3)	Moderate (5 - 11)
FINANCIAL IMPACT	Supply interruptions could cause increase in costs since original scope of projects	Moderate (3)	Possible (3)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	Ineffective contract management for supply of space equipment / Poor vendor selection	Major (4)	Possible (3)	High (12 - 19)	Seeking specialist support and consultation in the items and procurement of suppliers	Minor (2)	Unlikely (2)	Low (1 - 4)
SERVICE INTERRUPTION	IT can provide limited support to this space in addition to current operational requirements. This leaves equipment without support and will impact delivery of the space.	Moderate (3)	Likely (4)	High (12 - 19)	Seek suppliers who can supply in-house support such as delivery, installation and training as well as on-call support within their service. Seek qualified and highly skilled facilitators and volunteers to fill any support gaps.	Minor (2)	Unlikely (2)	Low (1 - 4)
LEGAL AND COMPLIANCE	Failure to ensure that all people involved directly with the minors has a Working with Children (WWC) check.	Major (4)	Possible (3)	High (12 - 19)	All user groups with volunteers are to provide a valid WWCs for all volunteers who will facilitate or run meetings in space.	Minor (2)	Unlikely (2)	Low (1 - 4)

(Appendix ORD: 12.2.3B)

CONSEQUENCE CATEGORY	RISK EVENT	PRIOR TO TREATMENT OR CONTROL			RISK ACTION PLAN (Treatment or controls proposed)	AFTER TREATEMENT OR CONTROL		
		CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
					Any and all hired facilitators to provide valid WWC for any programs open to Minors and children. All Shire programs will be overseen by a qualifies identified officer (Library) who have current WWC within their current roles.			
LEGAL AND COMPLIANCE	If quotes and research phase not thorough quotes and procurement process may be in breach of LG Act.	Major (4)	Possible (3)	High (12 - 19)	Sought advice from procurement officer, finance manager, DCEO and CEO on best way forward to deliver space which resulted in proposed procurement plan and the appointment of a technical officer and subject matter expert for the final stages of fit out.	Minor (2)	Unlikely (2)	Low (1 - 4)
REPUTATIONAL	Poor quality equipment and machinery resulting in poor review and public opinion of the space and service delivery.	Major (4)	Possible (3)	High (12 - 19)	Assessment of all proposed machinery items by subject matter expert and advisory group to ensure machinery and all are fit for purpose of the proposed Hybrid Model and services. Proposed WA specialist suppliers appointed who can also provide on-call support to the machinery and or programs.	Minor (2)	Unlikely (2)	Low (1 - 4)
PROPERTY	Purchasing of poor quality equipment and no additional support from the supplier of the items could result in failure and property damage.	Major (4)	Possible (3)	High (12 - 19)	Ensure some off-site support is available in the event of a malfunction and maintenance through the chosen suppliers and ensure quality equipment and review of quotes. Assessment of all proposed machinery items by subject matter expert and advisory group to ensure machinery and all are fit for purpose of the proposed Hybrid Model and services.	Insignificant (1)	Rare (1)	Low (1 - 4)
PROPERTY	Community access to facility could cause	Moderate (3)	Possible (3)	Moderate (5 - 11)	Assessment of all proposed machinery items by subject matter expert and advisory group to ensure	Minor (2)	Unlikely (2)	Low (1 - 4)

CONSEQUENCE CATEGORY	RISK EVENT	PRIOR TO TREATMENT OR CONTROL			RISK ACTION PLAN (Treatment or controls proposed)	AFTER TREATEMENT OR CONTROL		
		CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING		CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
	damage to assets and or property.				machinery and all are fit for purpose of the proposed Hybrid Model and services. Proposed WA specialist suppliers appointed who can also provide on-call support.			
PROPERTY	Community Groups getting access cards and sharing them between members.	Major (4)	Possible (3)	High (12 - 19)	Any community group users to sign a Facility User Agreement that outlines consequences for key sharing as immediate termination of agreement and possible legal action.	Minor (2)	Possible (3)	Moderate (5 - 11)