



Integrated Impact Assessment

Stage 1A

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Contents

1. Introduction	3
2. Impacts on the Community	4
2.1. Social Impacts	4
2.2. Economic Impacts	4
2.3. Visual Impacts	4
2.4. Impacts on Neighbours	7
2.5. Impacts on Services Infrastructure	7
2.6. Impacts on Traffic & Transportation	10
2.7. Impacts on Indigenous Archeology	10
Summary of Impacts on the Community	10
3. Impacts on the Village Residents	11
3.1. Amenities	11
3.2. Display Home	14
3.3. Workshop & Header Tank	16
3.4. Plant Shed	18
3.5. Landscaping Strategy	19
3.6. Bushfire Management	21
3.7. Internal Car Circulation	21
3.8. Pedestrian Circulation	22
Summary of Impacts on the Residents	22
4. Impacts on the Environment	23
4.1. Waste Management	23
4.2. Material Usage	23
4.3. Thermal & Acoustic Performance	23
4.4. Energy Efficiency	23
4.5. Geological Impact	23
4.6. Water Usage & Management	23
4.7. Flora & Fauna Impacts	23
Summary of Impacts on the Environment	23
5. Conclusions	24
6. Compliance Table	24
7. Appendices	

Architectural Drawings for Stage 1A can be accessed at:

<https://www.dropbox.com/sh/wyix5lvm19uktxv/AAA8pCpua3llsYNTKMAp3XYJa?dl=0>

Engineering Drawings for Stage 1A can be accessed at:

<https://www.dropbox.com/sh/cjryv8ewlxsc641/AAAD6S3rQuoHDV4HKRrGxJT6a?dl=0>

Stage 1A, Integrated Impact Assessment

1. Introduction

Stage 1A of Tempus would consist of establishing a basic presence on the site for the purpose of attracting sales and responding to community enquiries.

For these purposes, it is proposed to construct the following elements:

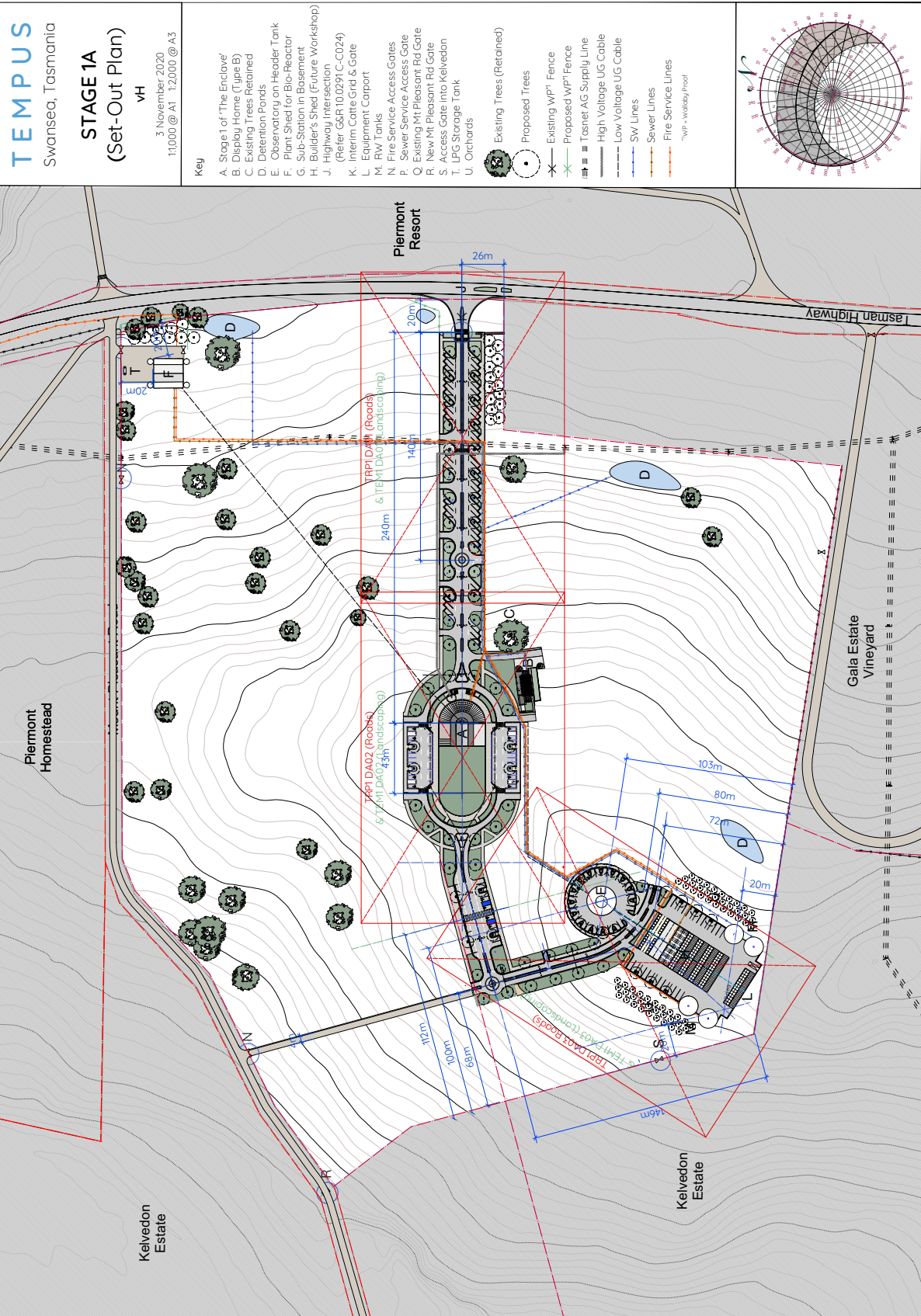
- The eastern portion of The Enclave Communal Facilities, for use as the project office and display centre.
- A Type B2, Independent Living Unit, for use as a Display Home. (The home would not be occupied during this stage).
- The shell of the Workshops Building, for use as the Builder's Shed, during construction of the early stages.
- A Header Tank, to supply potable water & fire water reservoir.
- An Astronomical Observatory & Lookout on the roof of the Header Tank.
- A Utility Shed, to ultimately house the Bio-Reactor Sewerage System.
- An underground LPG Tank
- A Substation in the Basement of The Enclave.
- The main road spine, including its intersection with the Tasman Highway
- An Entry Signage Wall.
- Wallaby Proof Fencing around the boundary.

In addition to this construction work, the site would be cleared of weeds, but none of the existing trees would be removed. The site would continue to be grazed by sheep from Kelvedon during this stage, in order to manage the grass & weeds. Areas of vegetation identified in the Fauna & Flora Study for preservation would be fenced to protect them from grazing damage, while this is occurring. Trees identified in the Landscaping Plan for Stage 1A would be planted and irrigated with harvested storm water, including the orchard & olive grove on either side of the Workshops building.

Once the facilities are established, staff would operate them during business hours (9am to 5pm Monday to Friday). Visitors would mostly be admitted during these periods, with the exception of occasional special events on weekends and evenings, for small groups of around ten to twenty people.

The Construction Manager would operate out of the Workshop Building and receive sub-contractors and suppliers there involved in the construction of this and later stages. The Workshops Shed would be used as his office and for the storage of building materials, components & construction waste, during this stage.

Security Guards would also patrol the site regularly outside Business Hours.



2. Impacts on the Community

2.1. Social Impacts

The limited level of activity during this Stage would have virtually no impact on the Community, with the exception of some disruption to traffic during the construction of the proposed intersection with the highway and, once completed, this improvement would enhance road safety and the appearance of the highway.

2.2. Economic Impacts

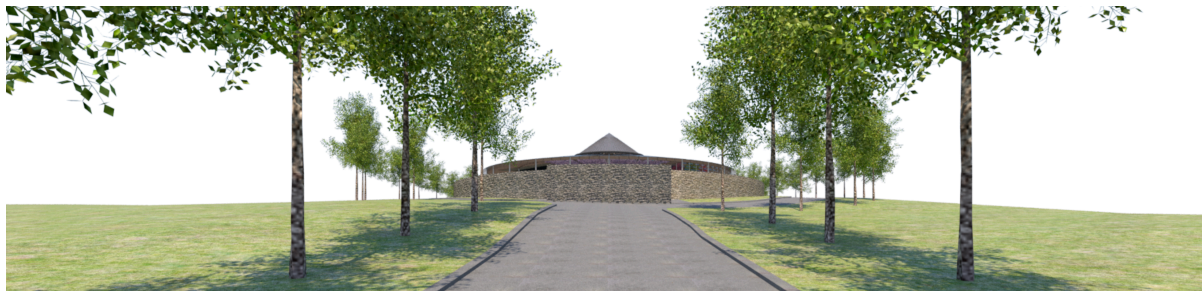
The creation of the facilities & Infrastructure is estimated to cost \$8 million and create 60 construction jobs at its peak. Approximately half of this investment would be spent with local services & suppliers.

A Swansea resident has already been appointed to advise the proponents on construction costs and would become the Construction Manager once the Project is approved. It is intended to give first preference to locals when employing staff.

2.3. Visual Impacts

It would be intended to clear the weeds from the site, while retaining all the existing trees, which would greatly improve the view from the highway. In time, the vegetation that is planned would conceal virtually all of the buildings on the site. During Stage 1A, however, they would all still be visible from the Highway, except the Workshops Building, which is located over the ridge. For this reason, particular care has been taken to give all the buildings a rural character and to use dark tones and rural forms to allow them to fit in to this agricultural landscape.

The largest of these would be the first stage of The Enclave, sitting at the top of the entry avenue, on top of a base of stone recovered from the site. It's cross-section would take the form of the historic Kelvedon Shearing Shed, with a steep central gable, flanked by low-angled lean-to's on either side.



At the very top of the hill, to its south, would be the Header Tank, surmounted by the white dome of the Astronomical Observatory. As it would be 350m from the highway, though, the dome would be a tiny spot on top of the familiar sight of a water tank on a hill and this would be clad in stone like The Enclave.

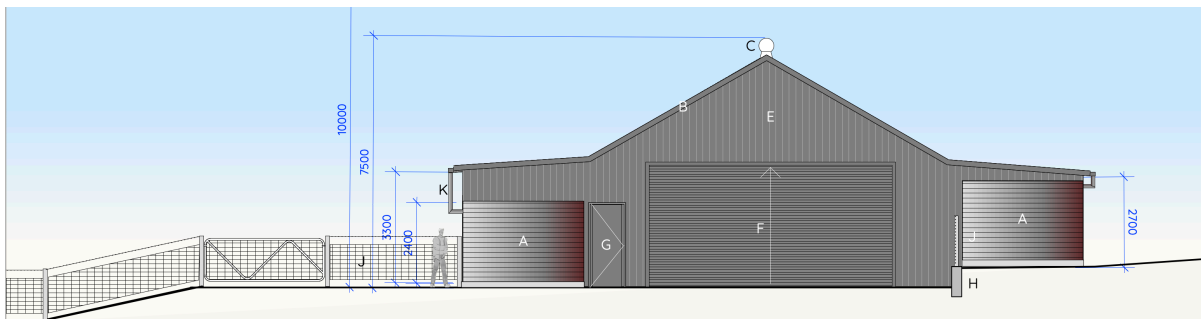


The Workshops shell behind the Header Tank has been located so that it would not be seen from the Highway, as it would be over the ridge of the hill.

On the Highway, it is proposed to construct a wall, setback 20m from the road, to carry the Tempus signage. This follows the historic East Coast tradition of stone walls at the entry to properties.



The only other element near the Highway would be a Plant Shed, which would ultimately house the Bio-Reactor Sewerage Plant. Like The Enclave, it would have the familiar profile of a rural shed:



The Plant Shed would eventually be screened from the Highway by a copse of Casuarinas planted amongst the existing Eucalypts along the fence line. In the interim, its dark shading, ('Basalt' Colorbond), and rural form, would allow it to sit comfortably in the rustic landscape. The roof would be a lighter grey, ('Slate Grey' Colorbond), in order to reduce the solar gain in the Shed.

In summary, because these early elements will take some time to be concealed by the proposed screen planting, particular care has been taken to minimise their visual impact by using local materials & a dark or traditional colour palette; reflecting rural building forms, or siting them out of public view.

It is proposed to install an underground LPG tank on the NE corner of the site, to the north of the Plant Shed. It would be supplied by trucks using Mt Pleasant Rd. From here it would be piped underground to the facilities as they are developed.

There is a mobile tower on the top of Kelvedon Hill, within view of the village, which is currently broadcasting all 3 mobile networks at '5 bars' of the G4 network.

The infrastructure would typically be sized for a 5% AEP Storm event, with safe overland flow paths provided for a 1% AEP Storm event.



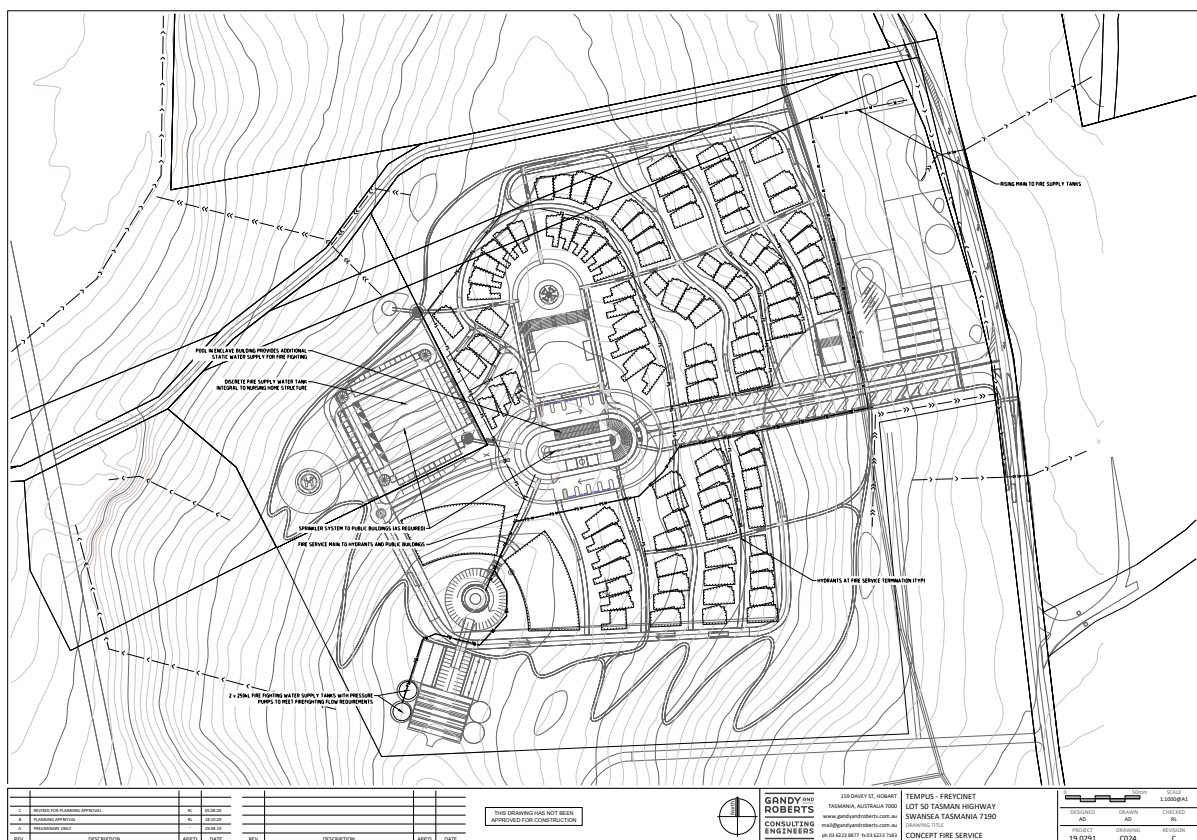
Potable Water:

A 150mm water supply line would be brought down the highway from Francis Street, with the supply being brought to the proposed Header Tank at the top of the hill. (Refer G&R C024).

Fire Services:

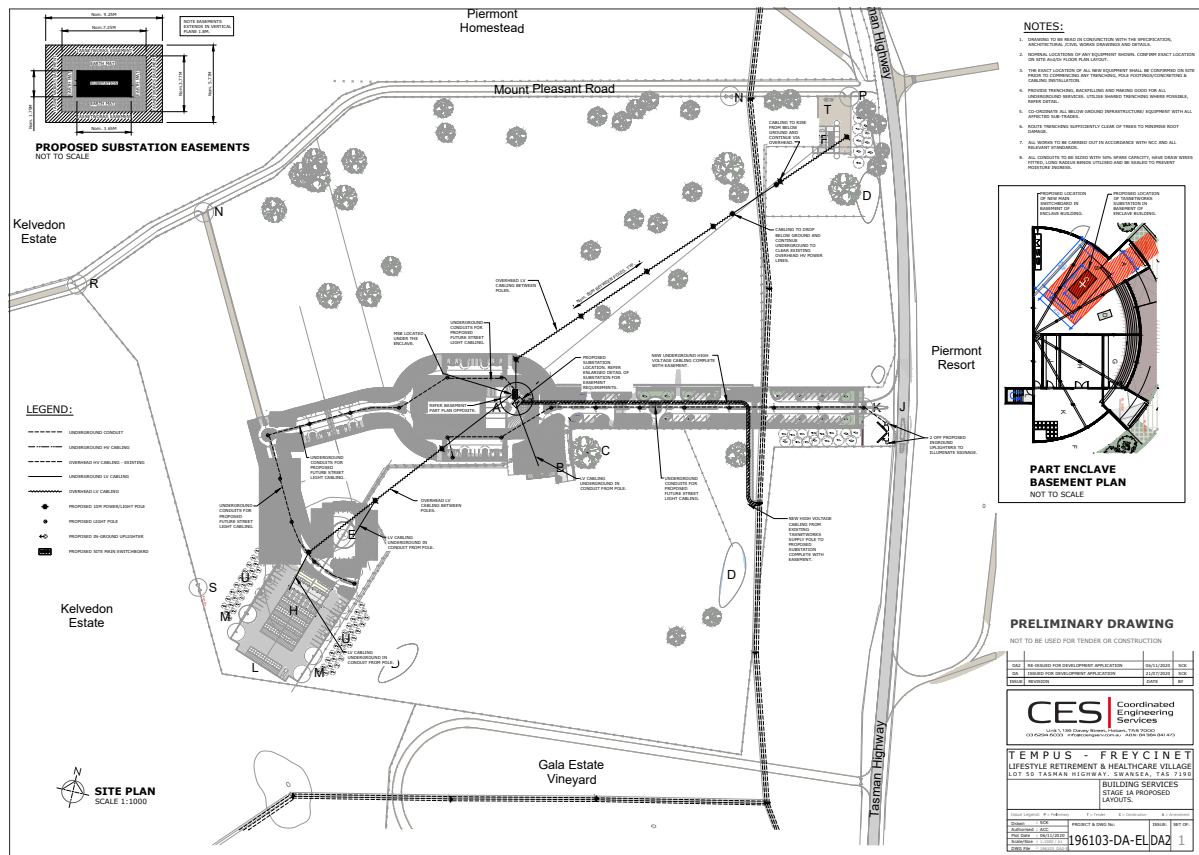
To establish protection for the site, all of the required hydrants would be installed in Stage 1A, connected by underground lines. The required pressure would be provided by the Header Tank at the top of the hill and the internal fire systems in the all the main buildings would be installed and made operational, prior to occupation.

Connection points would be installed and capped for all of the buildings not being built in Stage 1A.



Electricity:

In Stage 1A, an HV take-off from the existing HV overhead line running through the site would be connected by an underground link to a Substation in the Basement of The Enclave. From here, an underground LV line would feed the Display Home and temporary LV overhead lines will run to the Plant Shed for the Sewer and the Workshops Building shell for the Contractor. These overhead lines would be replaced by underground lines as the service trenches around the site are extended in later stages. Eventually the only overhead line would be the existing HV line running N/S across the site, parallel to and setback 100m from, the Highway.



2.6. Impacts on Traffic & Transport

It The Stage 1A Addendum to the Traffic Impact Study (Appendix 7.5) concludes:

“The proposed development of Stage 1A together with the construction of the junction onto the Tasman Highway will not create any adverse traffic impacts “

Staff & Visitors would generally use private cars to get to Tempus in Stage 1A, but there would be a minibus stationed on site in order to take groups of potential residents to view the surrounding amenities.

2.7. Impacts on Indigenous Archeology

The Indigenous Archeology Impact Study (Appendix 7.11) did not find any evidence of Indigenous artefacts on the site. All excavations would be monitored for potential artefacts in accordance with the Aboriginal Heritage Guidelines.

In summary, the impacts of Stage 1A on the Swansea community would be minimal or beneficial. There is sufficient infrastructure capacity for all the services required. These would be established on the site in Stage 1A and be progressively reticulated in underground trenches throughout the subsequent stages.

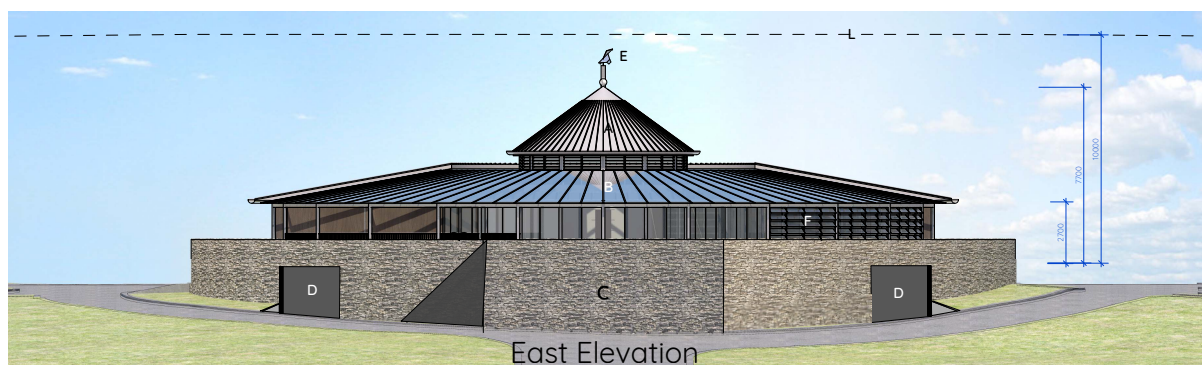
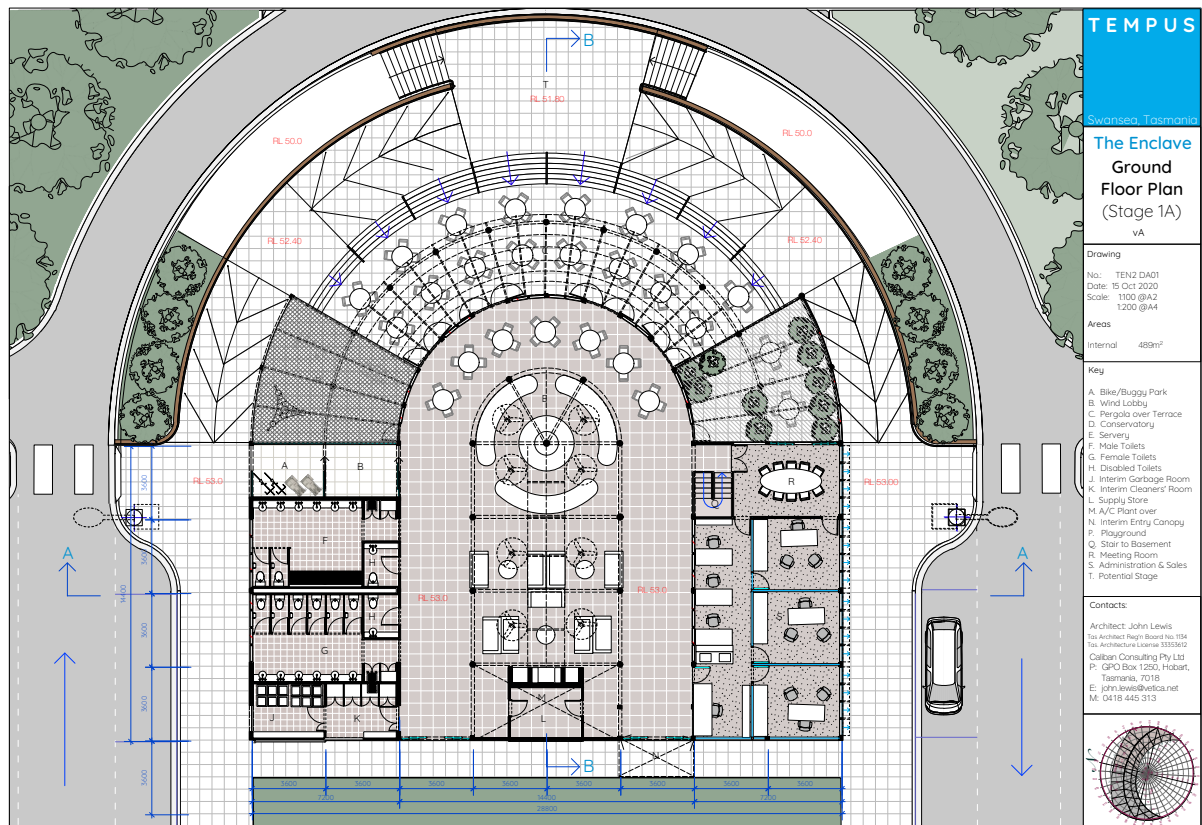
3. Impacts on Village Residents

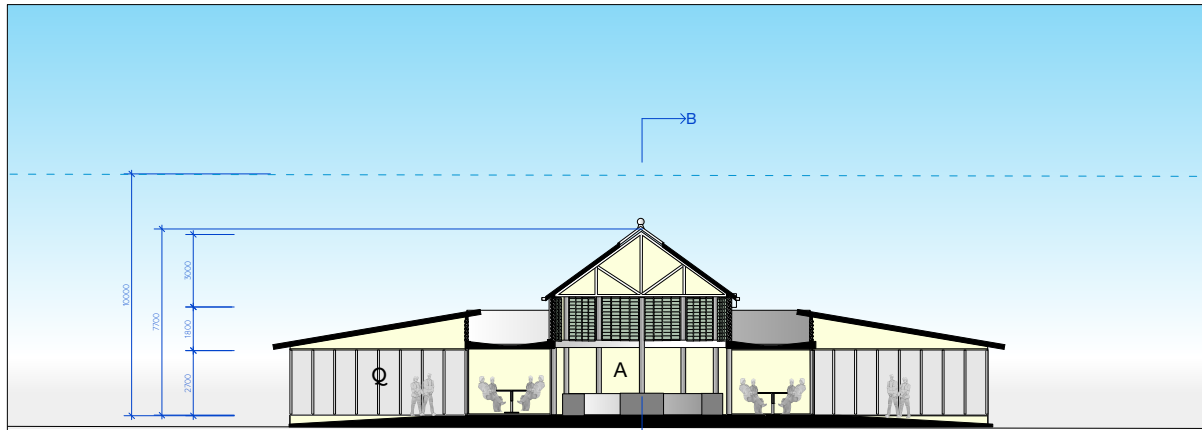
Only one residence would be constructed in Stage 1A, which would be used as an unoccupied Display Home. There would therefore be no residents to have any effect on during this establishment phase.

The only aspects that could affect the staff & visitors using the site, are the amenities being constructed, the Landscaping Strategy, the Internal car circulation and the Bush-Fire Management Plan.

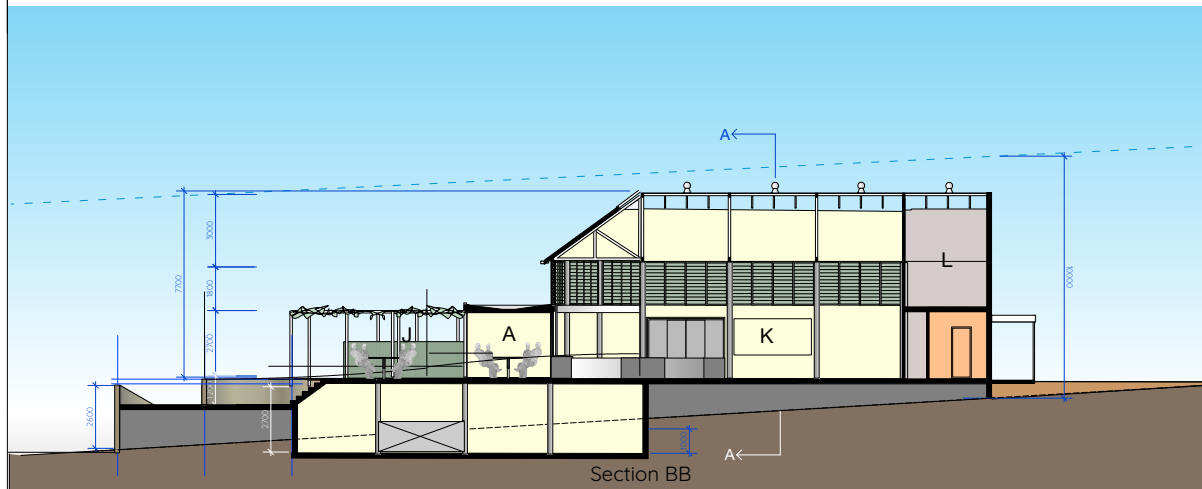
3.1. Amenities

The first stage of The Enclave would be used to receive visitors to the site, such as prospective residents, media and those from the community seeking information about the project. It would consist of the entertaining lounge, administration, a conservatory, terrace and a playground. It is not proposed to have any commercial operations within it.

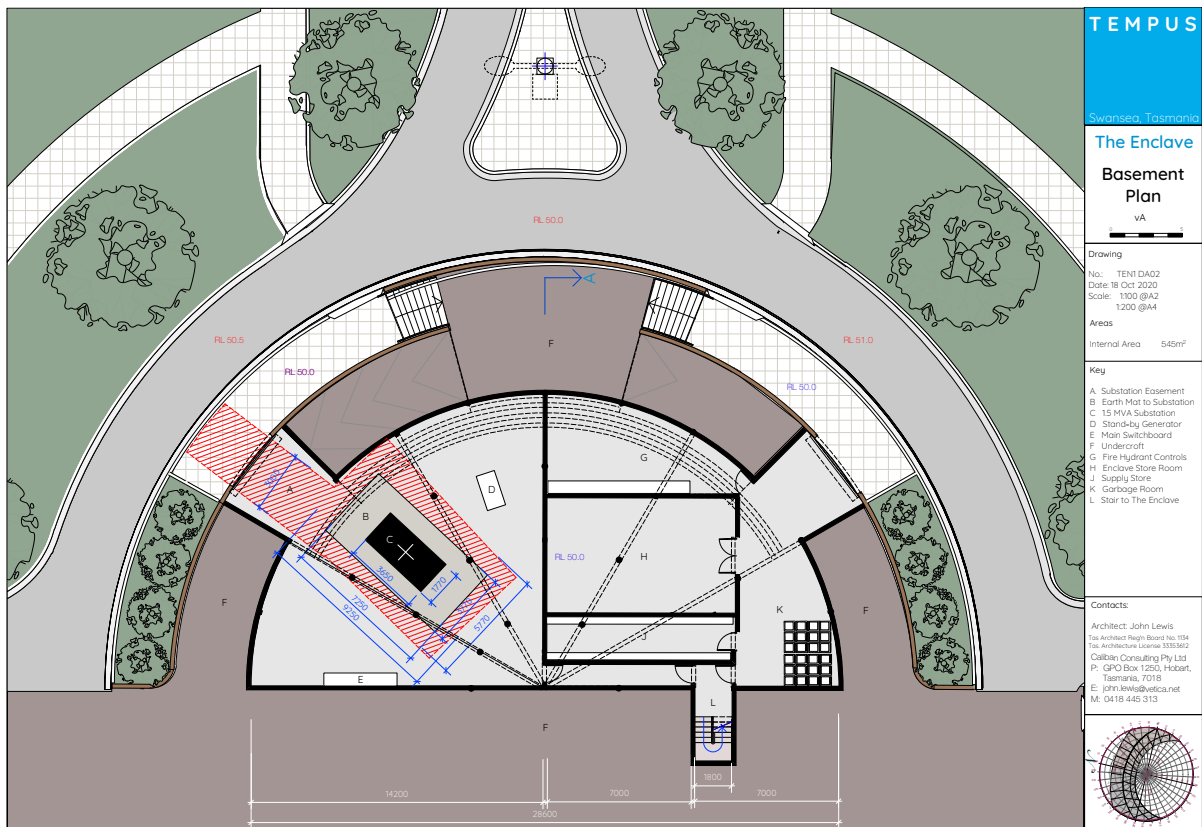




Section AA



Section BB



The Basement would house Plant and Storage



Interior of the Entertainment Lounge, looking East



The Wisteria Terrace, looking West

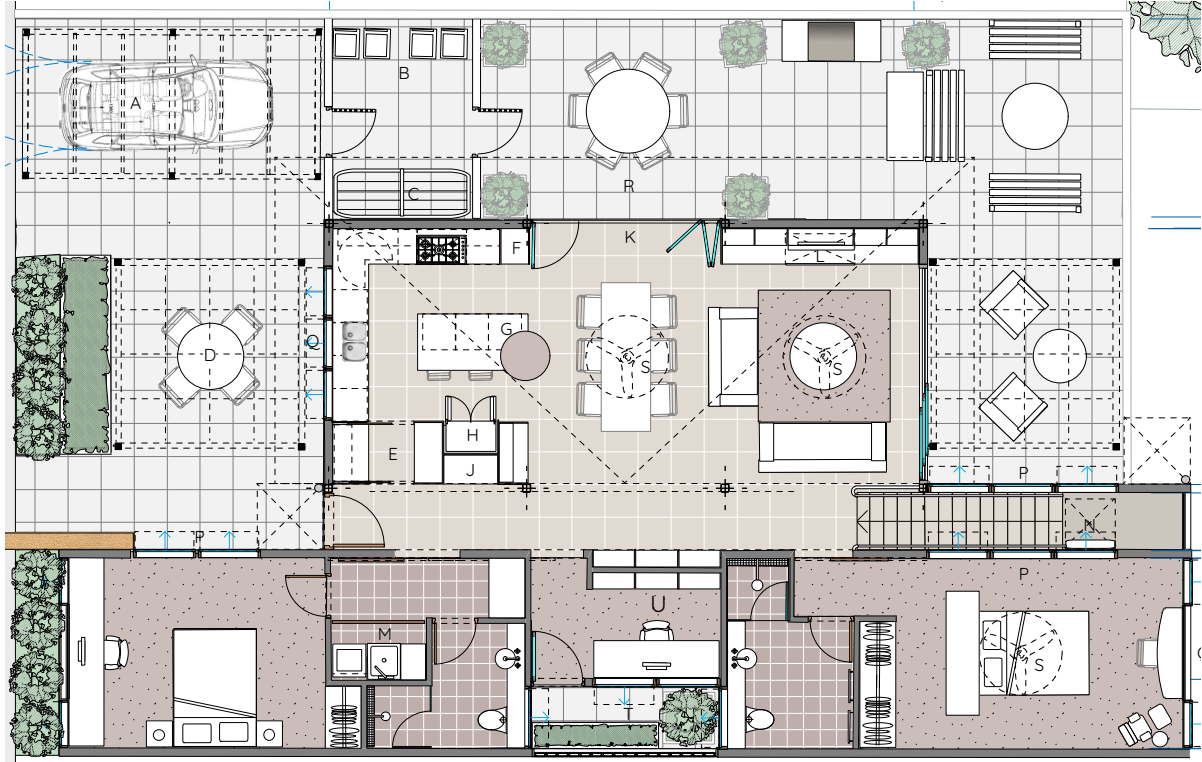


South Elevation

3.2. Display Home

The B type of Independent Living Unit (ILU) would be the most typical in the completed village, making up just over 50% of the total ILU's. As the most representative, it has been chosen for the Display Home, which is intended to become the Manager's residence in the completed village.

The Living Area is surrounded by private courtyards on three sides...



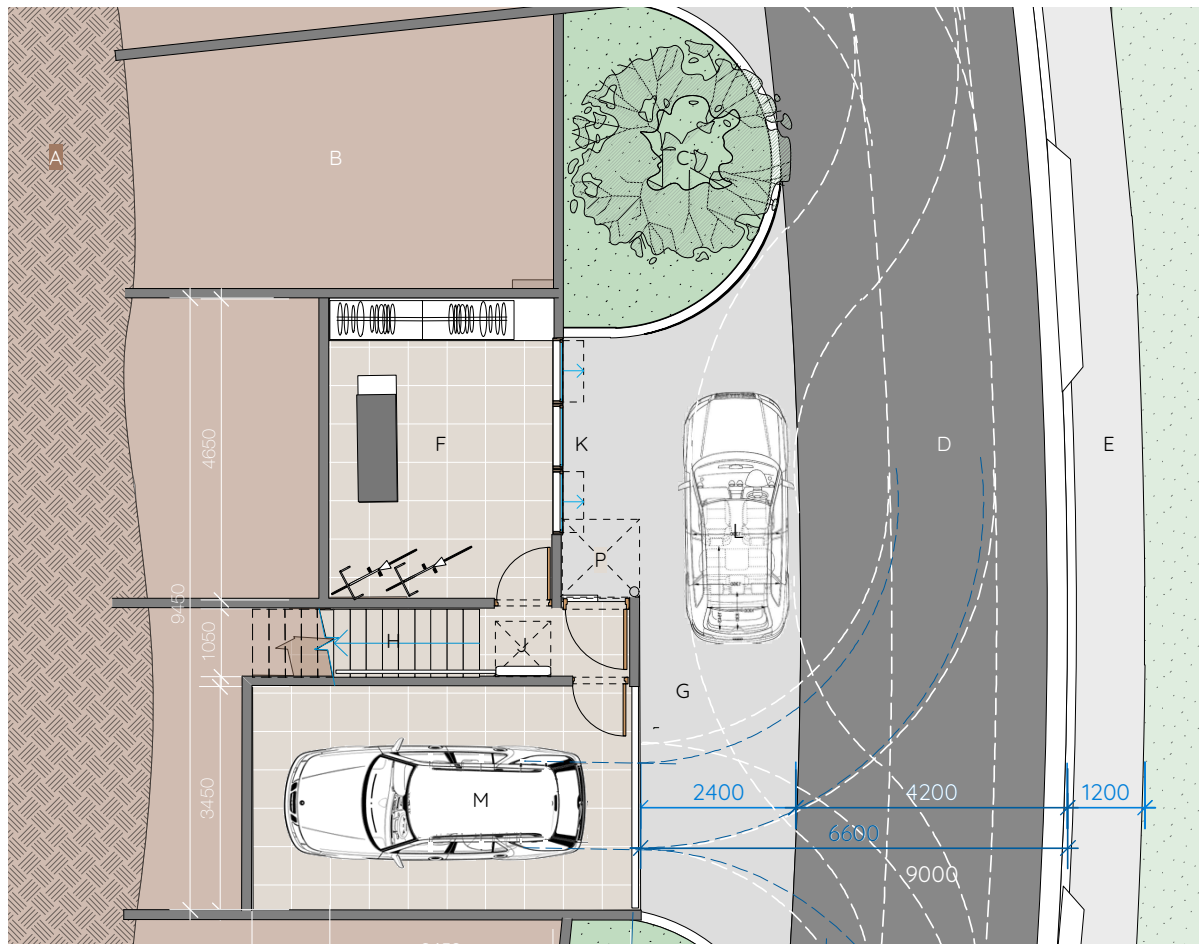
...and is surmounted by a north facing clerestory to flood the interior with sunlight. The Bedroom Wing would have a turf roof for acoustic & thermal insulation.



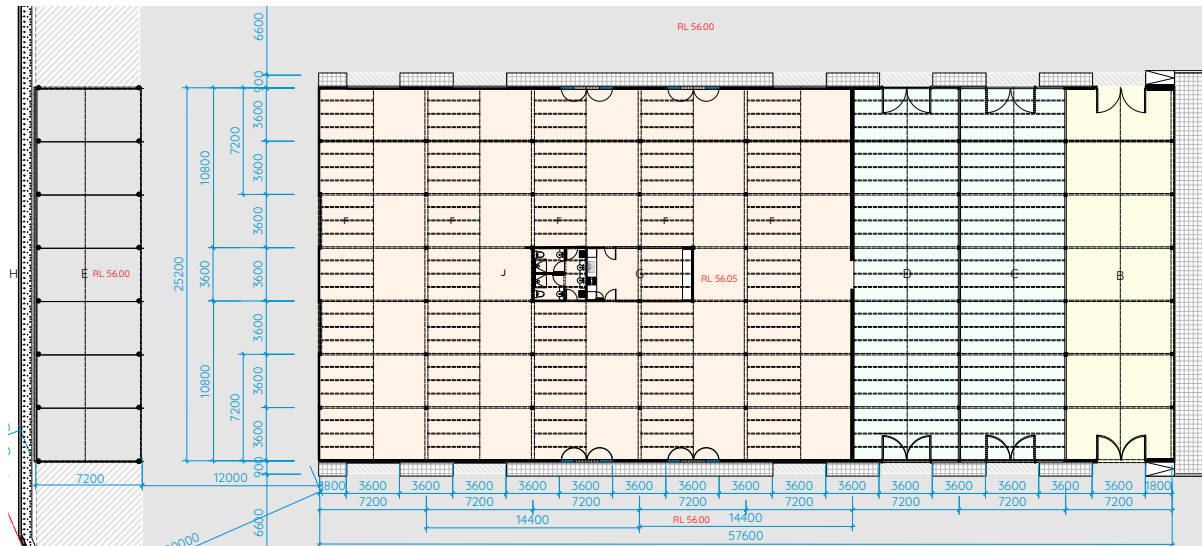
The interior of the Living Area, looking NE



There is a carport and visitor parking space on the Entry Level, as well as a Garage and Storage Room underneath.

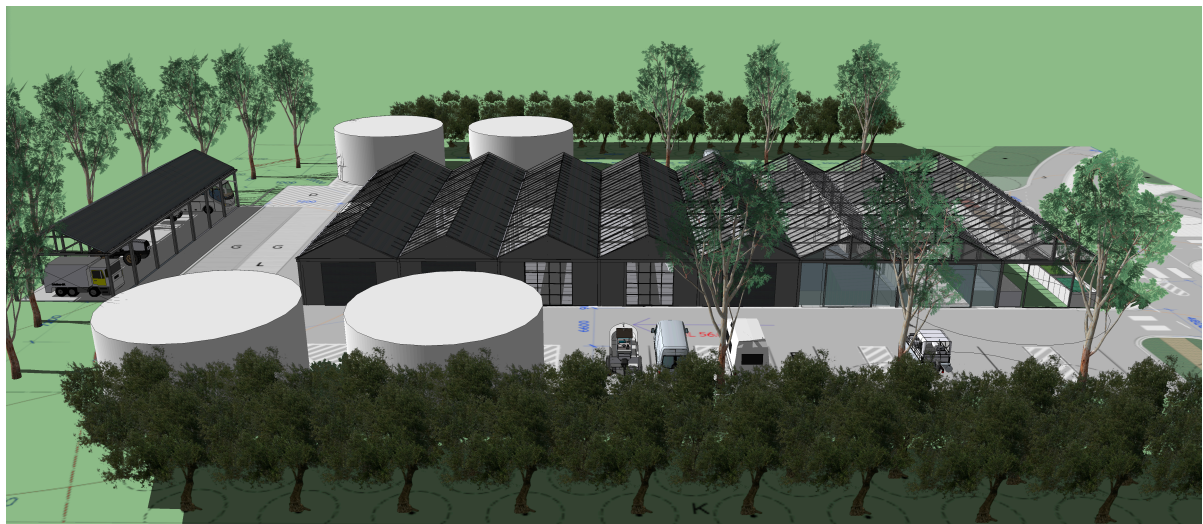


In Stage 1A, what would ultimately be the Workshops building would be erected as a shell, with minimal fit-out, as a base for the Contractor throughout the early stages of the project. The core of toilets and kitchen would be established as the contractor's amenities.



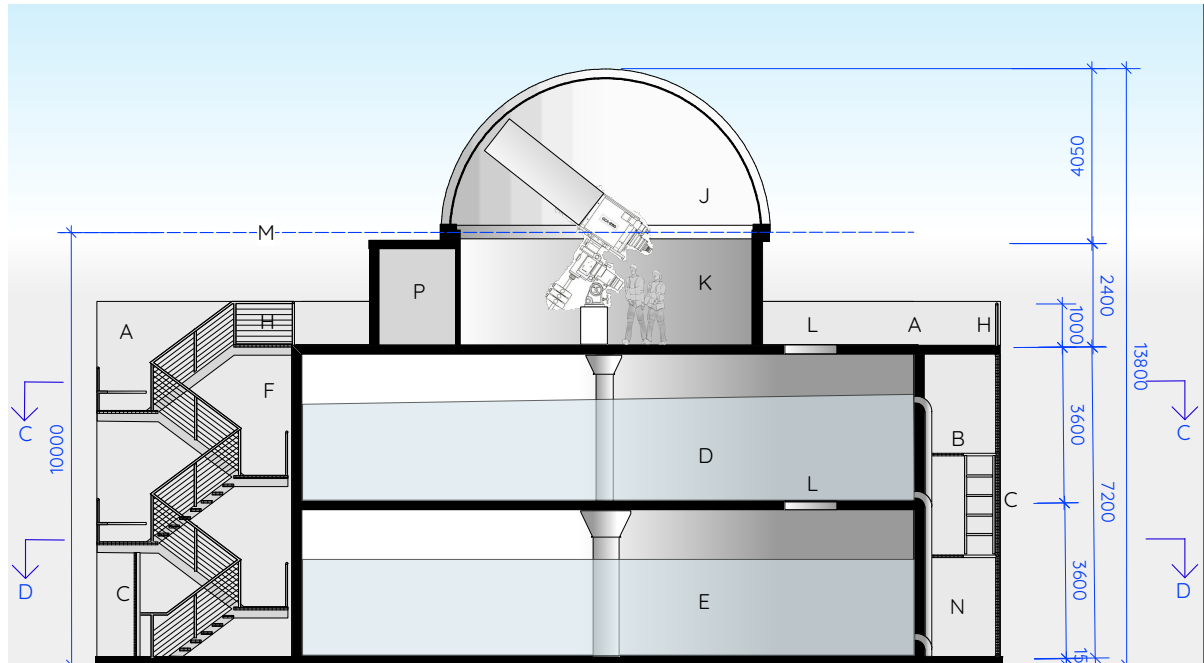
The Carport would also be established to house the Contractor's Equipment and the four rainwater tanks would be installed to irrigate the initial landscaping.

The Workshops and the Carport would clad in 'Basalt' dark coloured matt Colorbond, to make them recessive in the landscape.

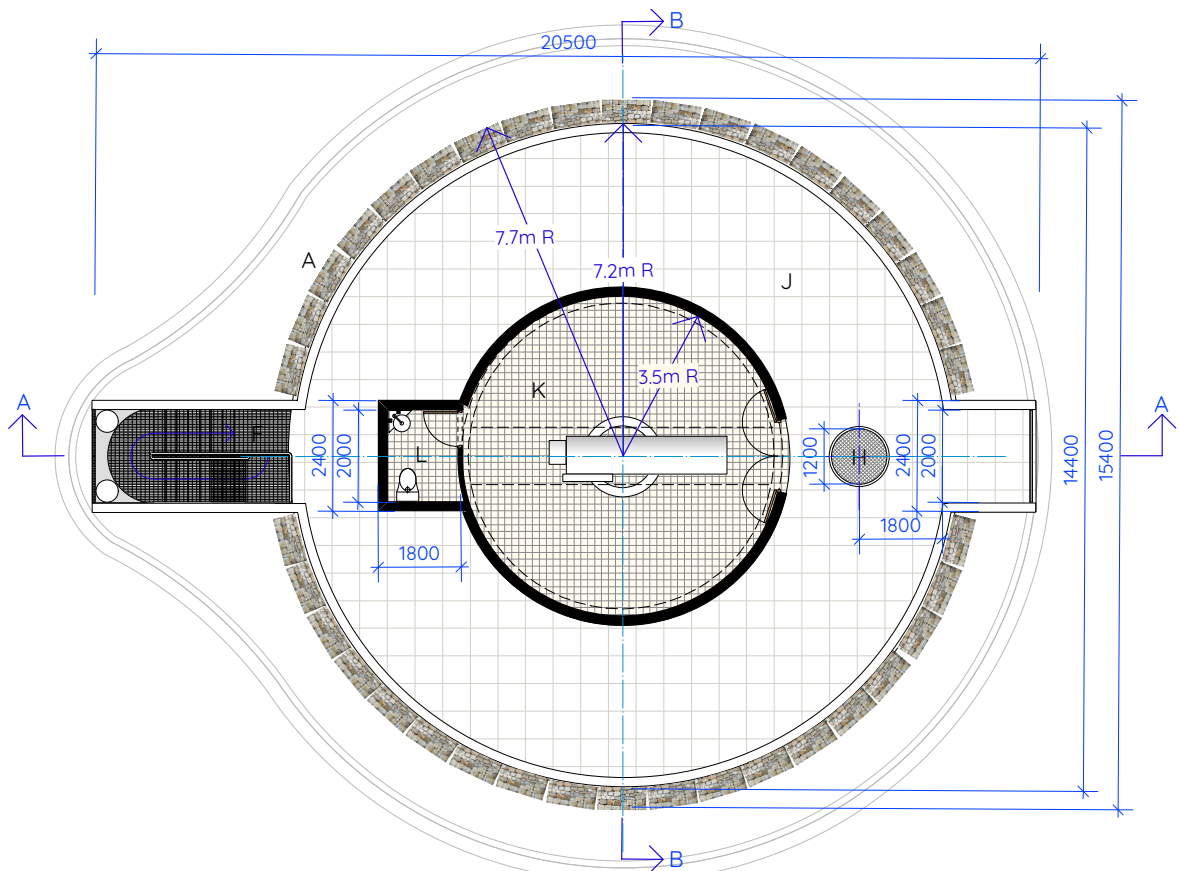


The Header Tank, which would have separate chambers for Potable Water the Fire Fighting supply, would be made fully operational and the Astronomical Observatory installed on its roof. The roof would also provide a lookout for the prospective residents to view the site and its surroundings.

It is proposed to clad the tank in stone recovered from the site to minimise its impact when viewed from the village and the highway.



Section through the Header Tank, showing its upper & lower chambers, for potable water & fire supply respectively, and the Observatory & Lookout on the top.



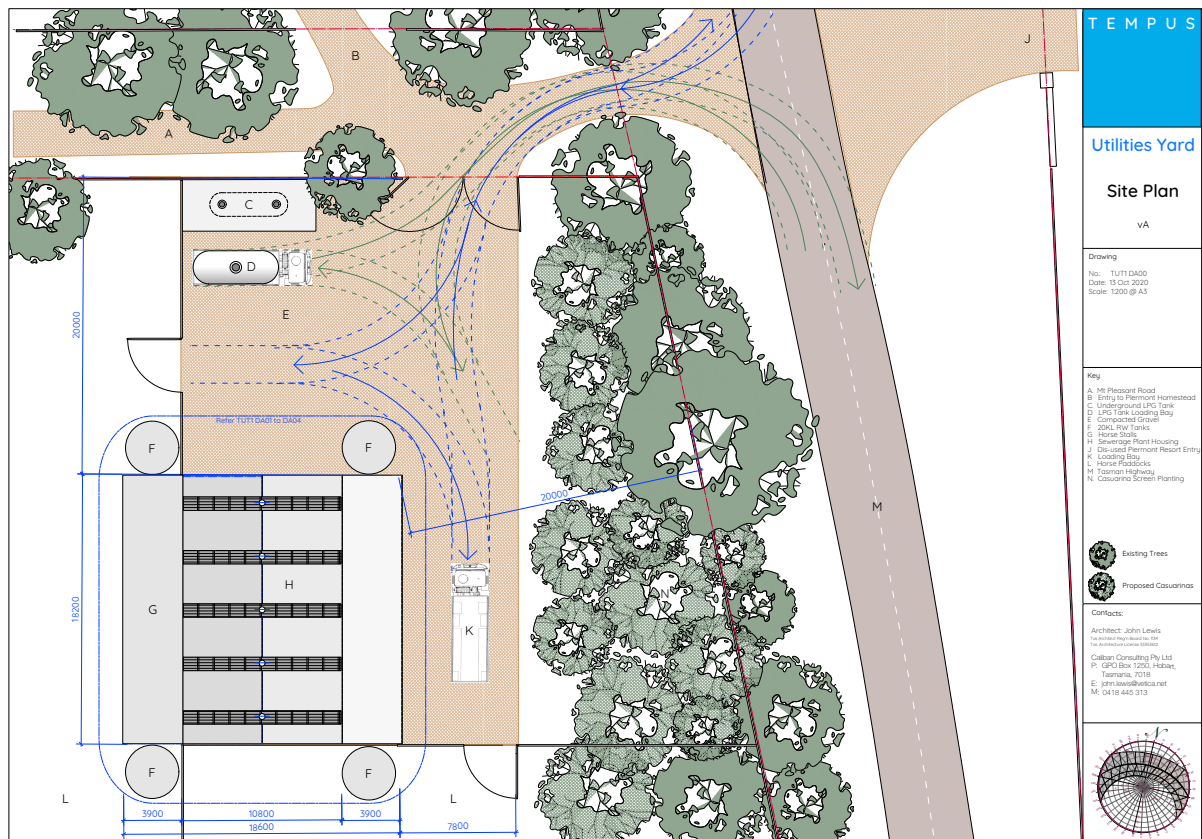
Roof Plan of the Header Tank, showing the access stair, Observatory and surrounding lookout. The extension opposite the stair would ultimately connect via a bridge to a lift within the unit complex in a later stage.

3.4. Utility Building

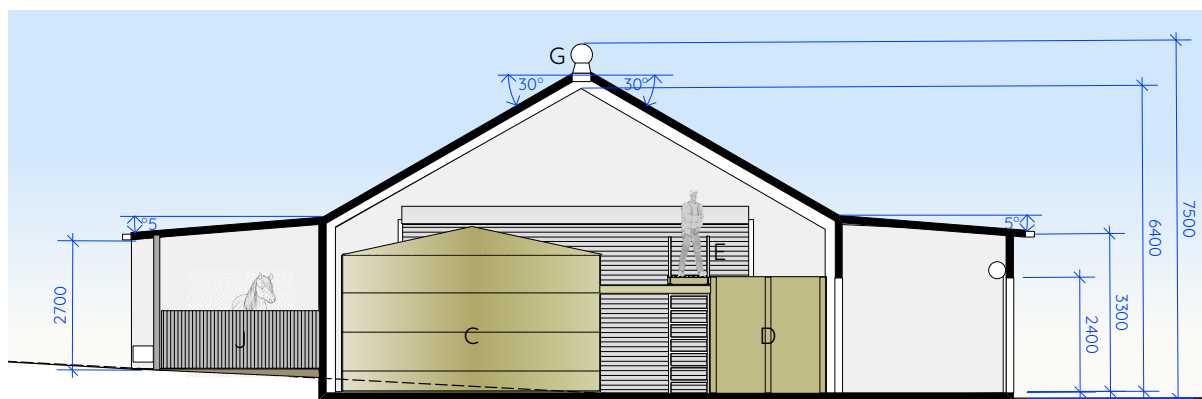
In Stage 1A, a shed would be constructed on the NE corner of the site that would ultimately house the Bio-reactor Sewerage Treatment Plant for the Village.

To the north of the Utility shed an underground LPG gas tank would be installed for reticulation to the other buildings in Stage 1A, then ultimately throughout the Village as it is developed. The tank would be filled by trucks using the Mt Pleasant Road access.

The 'lean-to' on the western side would be used as horse stalls in later stages.



Site Plan of the Utility Shed, showing the location of the the underground LPG Tank.



Cross Section of the Utility Shed, showing the bio-reactor & horse stalls on the west side.

3.5. Landscaping Strategy

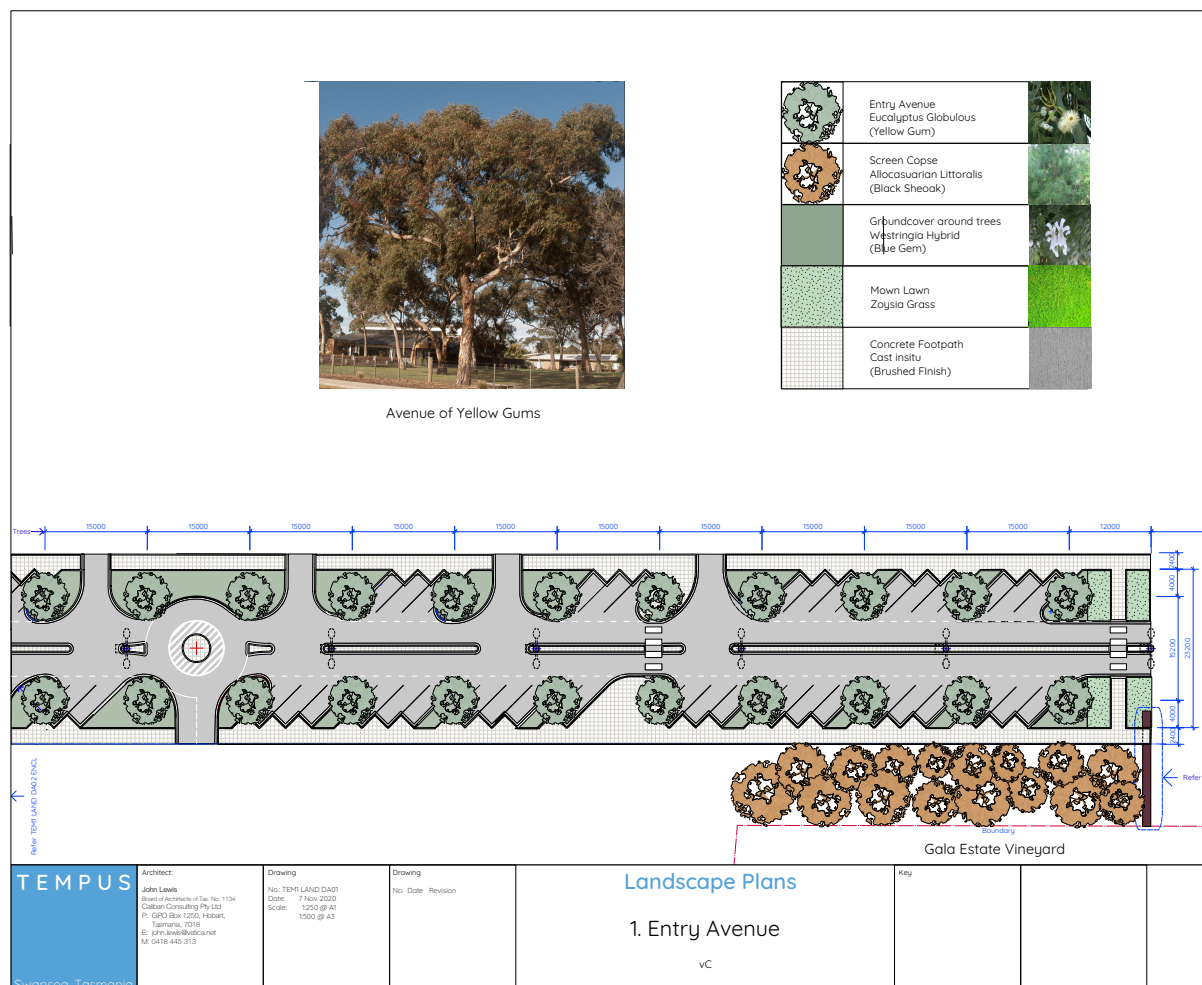
The site would be cleared of weeds and all existing trees retained in Stage 1A. It is then planned to plant the trees along the main road spine, in order that they may be well established for the later stages:

The Entry Avenue

Flanking both sides of the Entry Avenue it is proposed to have an avenue of Yellow Gums at 15m intervals. These would be pollarded to eventually provide a shady canopy, both for the road and the footpaths on either side.

Native Blue Gem ground cover would be planted around the base of the trees between the parking spaces, as this is both decorative & hardy.

It is also proposed to plant a thick copse of Casuarinas on the southern side of the avenue to screen from sight the place where the adjacent Gala Estate Vineyard intends to construct a large storage shed.



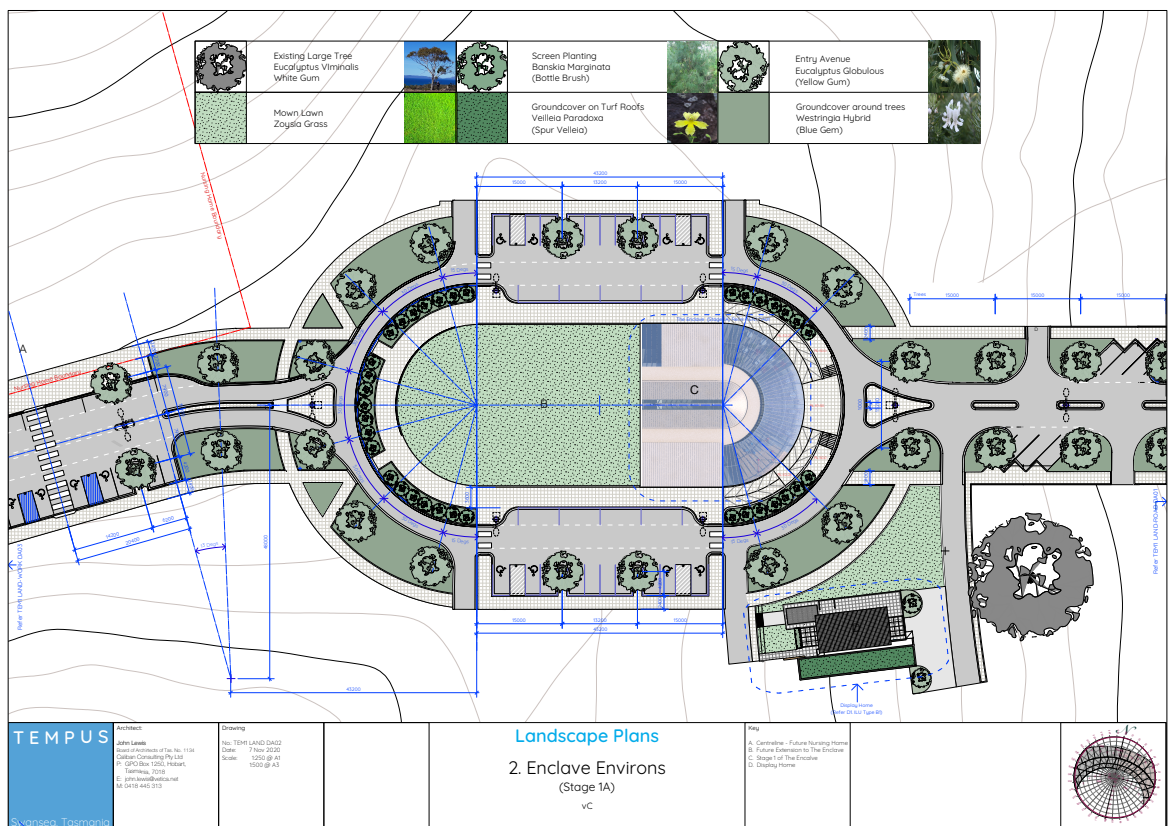
The Enclave Environs

The avenue of Yellow Gums would continue around either side of The Enclave and on past the future site of the Nursing Home.

On the side closest to the building, it is proposed to have low hedges of Bottle Brush to create a clear demarcation between pedestrians and cars.

The Bedroom Wing of the Display Home would have a Turf Roof, covered in the native ground cover 'Spur Velleia', selected for its low maintenance needs.

On the level below the Display Home, a Pepper Berry Tree would be planted as the first of the small trees that would eventually characterise each of the future residential Lanes.

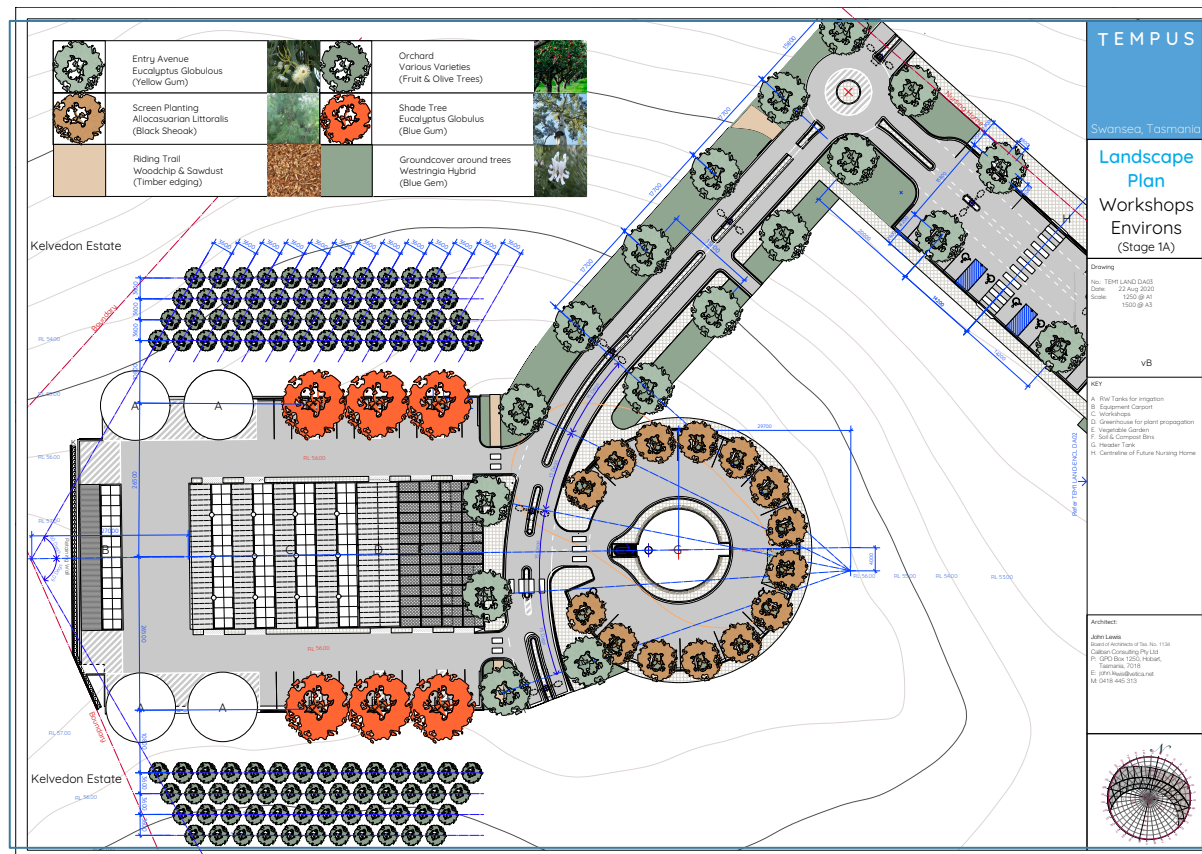


The Workshop Environs

The Header Tank Car Park is proposed to be surrounded by a circle of Black Sheoaks to screen the cars from view.

On either side of the Workshops building would be Blue Gums, which would eventually provide shade for the residents' caravan & boat parking area.

Behind these, it is proposed to plant a grove of Olive Trees on one side and an orchard of fruit trees on the other, the produce of which would be consumed by the residents in the future. These would be irrigated by the harvested storm water held in the tanks beside the southern end of the workshops.



3.6. Bushfire Management Plan

There would be no 'sensitive' uses on the site in Stage 1A. That is, no-one would be sleeping there, but there would be some visitors that would be less ambulant.

The proponents therefore propose to implement fully the Strategy in the Bush Fire Risk Assessment (Appendix 7.10), namely:

- Install Fire Hydrants throughout the site in their ultimate configuration
- Maintain the vegetation in a Low-Risk state.
- Establish The Enclave as an Evacuation Centre
- Acquire Fire Fighting Equipment and store in the Workshops' Carport.
- Train all staff in the use of the equipment. Internal Car Circulation

3.7. Internal Car Circulation

It is proposed to construct the central road spine in Stage 1A, including its intersection with the Tasman Highway. This would lead from the entry to a perimeter loop around The Enclave, then on to The Workshops, as a two-way main thoroughfare.

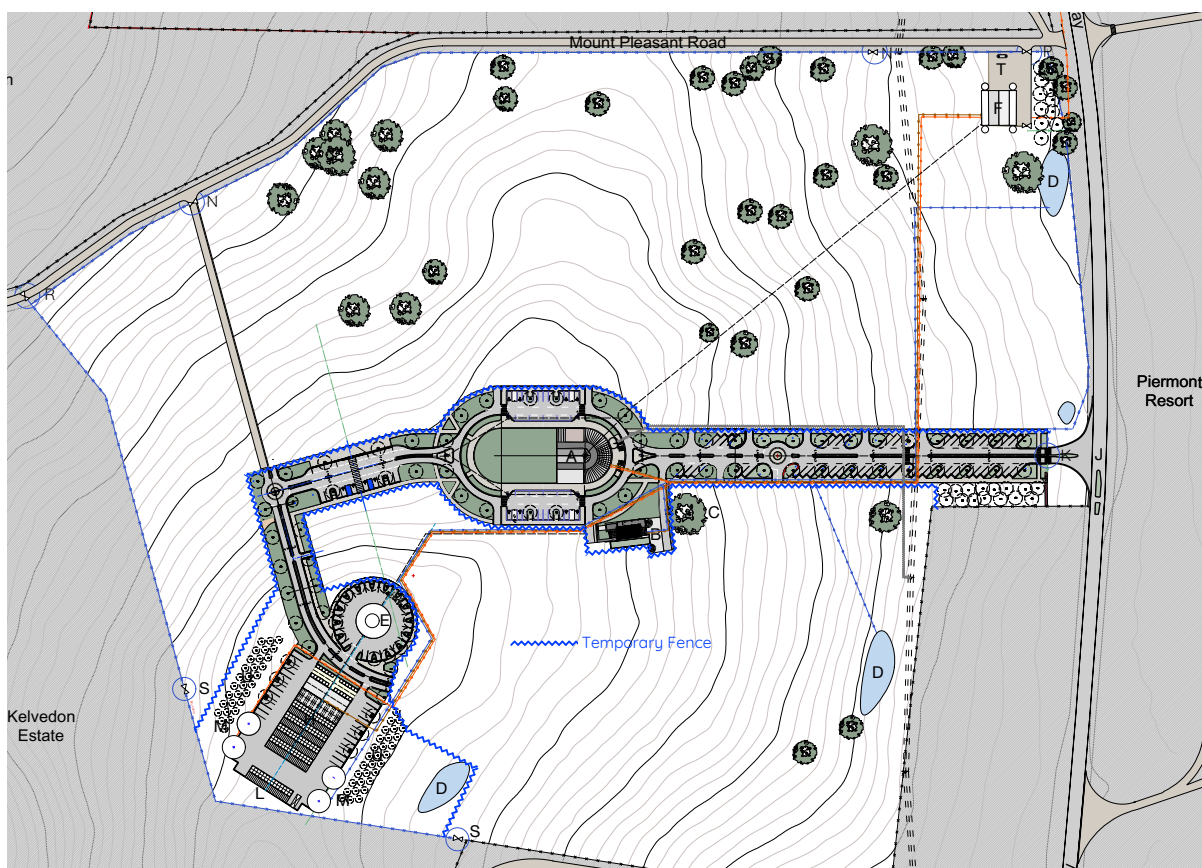
Parking would be created along both sides of this main thoroughfare; around the Header Tank and on either side of the Workshops.

This would lead to a parking capacity far in excess of the anticipated demand, simply because it would be a construction convenience to build them at the same time as the roads.

Stage 1A		The Enclave		Display	Works	Required	Proposed	Diff
		Café	Offices	Home	Area	Totals	Totals	
Area	(m2)	80	100	130	900			
Cars	Staff		1/30m ²	1/30m ²	1/50m ²			
	Visitor	1/100m ²						
	Subtotal Cars	1	4	5	18	28	125	97
	+ Disabled	1	1	1	1	4	14	10
		2	5	6	19	32	139	107
Motorbikes		1/20 Cars	1/20 Cars	1/20 Cars	1/20 Cars			
	Subtotal MBs	0	0	0	0	0	0	0
Bicycles	Staff	1/100m ²	1/250m ²	1/500m ²	1/1,000m ²			
	Visitor	1/200m ²	0	0	N/A			
	Subtotal Bikes	2	1	1	1	5	5	0

3.8 Pedestrian Circulation

Both sides of the main road artery would have footpaths along their whole length. Around this central corridor, temporary fencing would be installed, to separate visitors to the site from the construction in the later stages for their safety.



In summary, there will be no residents on the site in Stage 1A, but all necessary measures would be put in place to protect the safety, security & convenience of staff & visitors to the site, during this establishment phase.

4. Impacts on the Environment

4.1. Waste Management

The quantity of waste produced by the limited usage in Stage 1A would not warrant the full scale waste management system proposed for the Village when it is in full operation. However, the following measures would be instigated:

- The modest amount of organic waste produced in the entertaining facilities would be separated & composted in the area in front of the Workshops.
- Waste produced during the construction would be sorted and stored in bins in the Workshop shell under the supervision of the Construction Manager.
- The design of the facilities would seek to utilise this waste material in the construction wherever possible. For example, Sawdust would be used for trails; off-cuts would be used in the fire in The Enclave Lounge, and so on.
- The residual waste would be stored and taken to landfill as required.

4.2. Material usage

The same criteria for minimising environmental impact through material selection throughout the project would be applied in Stage 1A as well (Refer IIA 4.2).

4.3. Thermal & Acoustic Performance

The same criteria for Thermal & Acoustic Performance would apply in Stage 1A as throughout the project (Refer IIA 4.3).

4.4. Energy Efficiency

The same criteria for Energy Efficiency would apply in Stage 1A as would throughout the project (Refer IIA 4.4).

4.5. Geological Impact

Test excavations on the site have determined that it has a base of dolerite, which is solid between 0.5m & 1.8m below the surface. This is covered by fractured rock to between 0.3m & 0.5m of clay soil.

Excavation for roads & buildings in Stage 1A would not exceed a depth of 2.0m and the material removed would be used for fill on-site to a maximum depth of 2.0m.

Stone would be sifted from the material excavated and used in the construction of the buildings, as described in the architectural drawings.

4.6. Water Usage & Management

The Water Usage & Management outlined in paragraph 4.6 of the IIA would be implemented in Stage 1A, to the extent described in paragraph 2.5 of this Appendix.

4.7. Flora & Fauna Impact

The recommendations in the Natural Values Assessment (Appendix 7.5), would be implemented in Stage 1A.

In summary, as with all stages of the Tempus project, it is the firm intention of the proponents to achieve carbon neutrality in Stage 1A, in all its aspects.

6. Conclusions

In summary, the impacts from Stage 1A of Tempus are assessed as being minimal or beneficial.

The only element that is not completely compliant with the Planning Scheme is the height of the Observatory on top of the Header Tank, which would be visible from the Highway. As it is essential to its function that the Observatory be above all obstructions and for the Header Tank to provide the required water pressure, it is submitted that this exception can be justified.

With this being the only element requiring exemption, it is submitted that this first establishment phase of a project with many benefits for the community, should be approved.

6. Compliance Table

6.1 Particular Purpose Zoning Provisions

	Requirement	Proposed	✓
39.2	Zoning - Significant Agriculture	PPZ to convert to Special Purpose	Yes
39.3.1	Discretionary uses not to dominate	All Discretionary uses are minor	Yes
39.3.2	Non-Res uses not to affect residents	No residents in this stage	Yes
39.4.1	Residential < 8.5m; Other < 10.0m	Observatory Exceeds height	No
39.4.2	A1 - 20m from frontage	All enclosed spaces $\geq$ 20m	Yes
	A2 - Res > 80m from Sig, Ag.	All res > 80m from Sig. Ag.	Yes
39.4.3	A1 - Roofed $\leq$ 30% of Dev. Area	Roof area < 30% of Devel't Area	Yes
	A2 - Colours to blend or match exist.	All external colours match existing	Yes
	A3 - Depth of excavation $\leq$ 2m	All excavation $\leq$ 2m	Yes
39.4.4	A1 - Subdivision only for O.S./ NH	One lot being created for the NH	Yes