

Date of submission: 28th of July 2022 MB Document No. 2122 DOC 1.001

Document Revision: REV-B





Table of Contents

1.	Executive Summary		3
1.1	Document Purpose Objectives	3	
1.3	Project Budget	4	
1.4	Project Program	4	
1.5	Project Scope	4	
1.6	Design Approach	5	
2.	Project Definition		7
2.1	Primary Objectives	7	
3.	Need for the Project		8
3.1	Existing Facility	8	
3.2	The Service	9	
4.	Consultation and Governance		11
4.1	Consultation	11	
4.2	Governance	12	
4.3	Community Consultation	13	
4.4	Design Approval	13	
5.	Addressing the Need		14
5.1	Design Philosophy	14	
5.2	Design & Functionality	15	
5.3	Exterior Colour Palette	24	
6.	Project Schedule and Budget		25
6.1	Project Schedule	25	
6.2	Project Cost	25	
7.	Recommendations		26
8.	Appendix A - Proposed Design		27



1.1 Document Purpose

The purpose of this document is to inform the Parliamentary Standing Committee on Public Works (PSCPW) of the need for the proposed ambulance station at Glenorchy and to demonstrate how the design of the proposed works addresses this need.

This document includes the following:

- Confirmation that the proposed investment in infrastructure is the most appropriate means to support an improved ambulance service delivery for the region.
- Confirmation that the project is in accordance with the Department of Health (DoH) Strategic Asset Management Plan.
- Evaluation of the suitability of the proposed design.
- Evaluation of 'Value for Money' considerations for the design and construction of this project.

1.2 Objectives

The proposal for the new Glenorchy Ambulance Station is developed as a high-quality multi-resource dispatch facility to meet the needs of Hobart's Northern Suburbs as determined in the *Rapid Review of Glenorchy and Burnie Ambulance Infrastructure Proposals, October 2020* (rapid review) report prepared for the DoH and Ambulance Tasmania by the independent consultant KPH. As stated in the report, and based on modelling undertaken by KPH, the Glenorchy Ambulance Station will require garaging for 18 vehicles by 2034/35 and this facility is designed to meet this requirement.

1.2.1 Site Selection

The Ambulance Service in Glenorchy is currently colocated with the Fire Service at Goodwood Road and does not provide a fit for purpose facility that meets the needs of Ambulance Tasmania. A new site needed to be selected for the provision of a large station that increases Ambulance Tasmania's capacity and presence in the Northern Suburbs of Hobart now and into the future. The site is required to have close access to a major road and be of sufficient size to accommodate the proposed garaging requirements and associated vehicle circulation.

1.2.2 11 Timsbury Road

The current proposed site is the preferred available site for the new Glenorchy Station due to its proximity to the Brooker Highway, a major road offering improved access from the station to the surrounding areas.

Initially, a new station located on the empty plot of land adjacent to the existing station site was investigated in considerable detail, however this site was determined not to be feasible due to influences that were out of the control of the Department of Health. Once the new site at Timsbury Road had been identified as an option that meets the criteria for access and size the project, mostly in its initial form from the forme site, was able to be developed.

The site at 11 Timsbury Road has been identified as a suitable location for the new station and has the following benefits:

- · Greenfield site devoid of services and/or existing buildings
- Direct access to a major road (Brooker Highway)
- Ample open space available to develop the ambulance station and associated car parking requirements, allowing a most efficient site layout to be developed
- The site has been acquired by the DoH and will not be subject to lease agreements or other long-term land constraints.

1.3 Project Budget

The construction budget for the project is \$10.465m. Current cost planning shows that although the construction cost is generally in accordance with the construction budget, the costs for this project are at risk due to current market conditions and escalation that has occurred since the limit of cost assessment (on the previous site / April 2021). This is in addition to the further projected escalation during the project documentation and tendering period to the commencement of construction in late 2022. Some of this risk can be mitigated through the facilitation of early purchases of materials as may be allowed under the conditions of the construction contract, with appropriate bank guarantees in place by the contractor, to limit escalation to the 'front end' of the project.

1.4 Project Program

Design and tender documents are scheduled for completion in September 2022 to be advertised for tender in October 2022. Subject to the required approvals process, construction is programmed to commence in December 2022. The construction program is scheduled to take approximately 12 months, with practical completion to be reached by December 2023 and final completion of the defects 12 months after this time.

1.5 Project Scope

The proposed development is for a new ambulance station to meet operational and functional requirements to support the provision of multiple ambulance

services to the community. The development is required to meet the primary operational needs of the ambulance service including the safe garaging of vehicles, storage and provision of medical supplies, facilities to wash and decontaminate vehicles and paramedics, administration, paramedic training, paramedic recreational areas and paramedic rest and recline areas.

There is also a requirement for secure personal vehicle parking, landscaped external areas and ambulance vehicle circulation that improves security and



efficiency of access to and egress from the garage.

1.6 Design Approach

The initial approach to the siting of the Glenorchy Ambulance Station building has been through careful evaluation of traffic flow and access, optimising vehicle circulation and car parking, allowing for future flexibility and expansion and use of the site and working with the topography of the site to minimise siteworks and improve station usability. Most importantly, however, the location of the building allows for direct, safe and rapid ambulance egress directly onto the Brooker Highway, the main road connecting the station to greater Northern Hobart and, in the other direction, the Royal Hobart Hospital.

A series of ten key design principles have identified for the project to define the design approach for the Glenorchy Ambulance Station project and these are as follows:

- PRINCIPLE 1: Improve response time performance
- PRINCIPLE 2: Support improved workplace satisfaction
- PRINCIPLE 3: Promote community pride & confidence in our AT emergency services
- PRINCIPLE 4: Deliver a safe and secure facility and environment addressing WHS and community safety

- PRINCIPLE 5: Incorporate security features for safety of users in the facility
- PRINCIPLE 6: Incorporate Environmentally Sustainable Design (ESD)
- PRINCIPLE 7: Reduce operating costs
- PRINCIPLE 8: Utilise timber where appropriate for structural and interior application
- PRINCIPLE 9: Best use of the site for best project outcomes
- PRINCIPLE 10: Address budget and incorporate value management

These principles have guided the design process of the Glenorchy Ambulance Station and have been continuously referred to and cross-checked throughout the design process to ensure that they are being met with the design of the project.

Due to the critical nature of the service and, in particular, response times, principle 1 has been the main design driver used throughout this project, heavily influencing the internal layout of the facility and constantly used as an evaluating tool when undertaking project design decisions. Ambulance response times are the main performance criteria that the ambulance service is assessed on due to the enormous influence they can have on patient outcomes and it is critical that the new station improves this measure at every opportunity.

Other key considerations for the design of the building have been to find opportunities to improve the user's experience and enhance wellbeing through natural daylight, use of timber and other natural materials, and through maximising opportunities for external views from within the facility. These design drivers also then influence the facility's presence in the community as a high-quality service that will attract a sense of pride and ownership in the station.



2. Project Definition

"detailed construction cost analysis and life cycle costing analysis informs decision-making, response to budget and value management"

2.1 Primary Objectives

The Glenorchy Ambulance Station project is being developed to provide improved service to Hobart's greater Northern Suburbs community through the provision of a single large-scale ambulance station on a new greenfield site. The development of this station is an opportunity to provide a facility that provides sufficient garaging facilities, improved station amenity for paramedics and has capacity to expand and meet the expectations of future demand in the region.

This project will provide a contemporary and best-practice ambulance station facility for the Department of Heath and Ambulance Tasmania that:

- Meets current and projected needs for the provision of the ambulance service to the Southern Region.
- Is consistent with DoH Strategic Asset Management Plan and DoH Strategic Objectives
- Meets the requirements set out in the initial project design brief and accommodation schedule provided by the DoH and Ambulance Tasmania for this type of facility
- Addresses the needs outlined in the KPH Rapid Review of Glenorchy and Burnie Ambulance Infrastructure Proposals 2020
- Delivers a purpose-built facility that is developed around the priorities and needs of Ambulance Tasmania and the DoH
- Meets all statutory development requirements for approval
- Has an efficient and functional spatial arrangement that optimises the ambulance service delivery
- · Provides a high level of user amenity
- Enables supervision, safety and security in a positive work environment
- Reduces incidents of personal injury through safety in design
- · Maximises opportunities for flexibility and adaptability
- · Uses natural light and ventilation to habitable areas
- Develops a desirable aesthetic for the service
- Incorporates universal accessibility
- Reduces opportunity for vandalism
- Provides acoustic treatment to sensitive areas
- Provides opportunities for ongoing paramedic training and research
- Provides required infrastructure and building services including an emergency generator for continuous operation
- Incorporates effective lifecycle costing;
- Manages building risk and complies with applicable standards and regulations including the Australasian Facility Guideline standards, Work Place Health and Safety Standards, Universal Access Standards, the National Construction Code (NCC), Relevant Australian Standards and the DoH-specific building standards.
- Is an efficient asset that supports effective services and is responsive to change with the evolving requirements of the service
- Incorporates appropriate design and detailing, selection and use of materials and provision of fit-out and furnishings
- Facilitates flexibility and adaptability of internal living spaces, allowing reconfiguration
 of future internal layouts while incorporating acoustic privacy as required
- Provides standards of accommodation that promote the recruitment and retention of staff and recognises that the physical environment plays a disproportionately large part in the public perception of the quality of service provided.



3. Need for the Project

"a multi-resource dispatch facility to provide best practice, high quality facilities and efficient ambulance response times"

3.1 Existing Facility

The existing Glenorchy Ambulance Station is currently co-located within the fire station at 1 Goodwood Road in a facility that has primarily been designed and built for the fire service. Over recent years, the greater Glenorchy area has gone through a substantial population increase, meaning that the Glenorchy station is required to play an increasingly important role for the service. The current station does not provide a fit for purpose facility that is capable of meeting the current or future needs of Ambulance Tasmania.

Currently, at the existing Glenorchy Ambulance Station, there is not sufficient garage space to accommodate the five (standard allocation) ambulances in the fleet that service the region, with only three vehicle bays available to the ambulance service within the shared garage. This does not provide any allowance for future expansion and, between ambulance and fire service requirements, the station's capacity has been exceeded. The consultants for the rapid review report in September 2020 made note of 10 additional vehicles that cannot be accommodated at the Hobart station, and it is anticipated that the new Glenorchy Station will provide additional garaging space for these vehicles in addition to the expanding fleet to service the area.

Although the shared arrangements with the fire service have been workable, the different demands and priorities of the two services are not always compatible and the ambulance service paramedics have been experiencing some operational difficulties with this arrangement.



3.2 The Service

3.2.1 Statewide Overview

Ambulance Tasmania provides emergency ambulance care and transport services and a non-emergency patient transport service through a network of 53 urban, rural and remote ambulance stations across the state.

The service is made up of a range of staff from highly trained salaried paramedics, ambulance officers and students in training as well as 600+ volunteer ambulance officers (VAOs). Collectively, the Ambulance Tasmania personnel work closely with public and private hospitals and health facilities providers, intrastate and interstate organisations to provide the service.

The rapid report sets out that the Glenorchy-based ambulance service is set to expand by an additional 3-5 vehicles by 2034/35 to meet the growing demand on the service into the future. The increased demand will be due to a projected increase in chronic disease across the state and an aging population demographic, placing an ever increasing burden on the ambulance service. As stated in the rapid report, according to the 2019 Tasmanian Population Health Survey, the prevalence of most chronic conditions is higher in people aged 65 and over. This is a population demographic that the Treasury projections have indicated is likely to increase substantially in Tasmania between now and the year 2050.



3.2.2 Service Description

The mission for Ambulance Tasmania is to provide excellence in ambulance and health transport care. Building a high quality, and safe, health care system that is responsible for the best patient outcomes possible is the number one priority for the service.

A number of ambulance and support vehicles to suit different needs operate as a part of the ambulance service. These include first responder vehicles (light vehicles), responder vehicles (ambulances), special operations vehicles as well as other support vehicles such as remote access vehicles and the successful Community Emergency Response Team vehicles (CERT) that operate solely in remote areas and without the requirement for a station. Other than the CERT vehicles, all of these vehicles, and their crew, need to be accommodated within branch stations (smaller outpost stations) or major centres (larger

and centrally located dispatch stations).

3.2.3 The Stations

Ambulance stations are operational facilities that are required to safely and securely garage, maintain and rapidly dispatch ambulance vehicles, provide comfortable paramedic accommodation and provide areas for training. The stations are not considered as medical facilities for the treatment of patients and are not open to the public. Public access within these operational premises is discouraged and signage or other indicators that may suggest a public interface to the building should be avoided. The stations will be required to facilitate associated operational requirements such as paramedic training and administrative tasks and may also be combined with other functions such as broader regional administrative facilities.

Across Tasmania the different types of ambulance stations serve different functions for the specific locations in which they are situated and as determined by the operational requirements and staffing arrangements for each location. In some locations the ambulance service is co-located with other emergency services or within other facilities such as hospitals. In these instances, space is generally limited and the tenancy is negotiated through a lease or licence agreement, creating potential problems for the service and should be avoided unless specific associated benefits can be demonstrated. It is Ambulance Tasmania's preference for their stations to be purpose-built standalone facilities in order to provide the optimum functional outcomes for the service.

The station types provided in each location are determined by the community's needs and population reach and form part of Ambulance Tasmania's statewide plan. Investigative reports such as the rapid review are undertaken in order to assist Ambulance Tasmania in prioritising infrastructure upgrades and new builds. Station types are defined by their operational structure and service that is being provided, with actual station infrastructure requirements, other than scale and multiplication of available facilities, varying very little between station typologies.

3.2.4 Staffing Profile

Paramedics at the Glenorchy Ambulance Station will typically be salaried 'full time' paramedics that work on rotation of various shifts including day shifts, night shifts and in some circumstances afternoon shifts. Because of the metro-based nature of this station, it would generally be expected that paramedics live within commutable proximity to the station and therefore greater flexibility in rosters and increased availability of paramedics to fill a roster may be possible.

Generally, 8-12 paramedics would be expected to fill a roster for a single 24hr ambulance service from the station, however the flexibility offered in these stations means that it may not be the same 12 paramedics for a single vehicle and the rosters may be spread across multiple service positions. These rosters will be determined by the branch manager for the station

Paramedics on rostered shift will be primarily based at the station where they can prepare meals, research and train between callouts. Generally, there is very little downtime when a paramedic is on shift, however, and the efficiency of food and drink prep areas and resting facilities for off-shift paramedics are a priority.



4. Consultation and Governance

"sound client input with regular project review and feedback will determine a successful project outcome as it informs the overall, and detailed approach"



4.1 Consultation

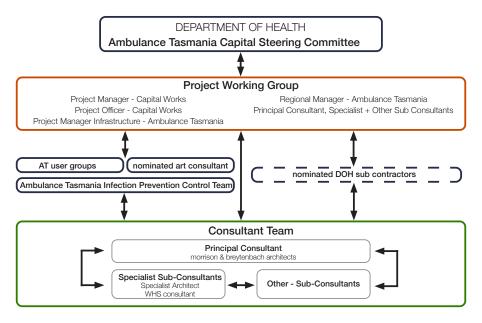
Detailed stakeholder engagement was commenced immediately upon appointment of the project architect, Morrison & Breytenbach Architects, to the project. Much of the background work regarding the design and user group input has been undertaken for the Glenorchy Ambulance Station. A number of alternative site options were investigated in the area prior to settling on the current location due to its proximity to the main road and having a seperate safe entry point to the facility without having to turn off the highway.

A community engagement team from Pitt & Sherry was appointed by the DoH to liaise with community stakeholders during the lead up to the lodgement of the planning application. The team met with local community groups including Timsbury Road residents and businesses as well as the local authorities, conducting a community information session where the proposed plans were presented for community feedback to be documented and addressed throughout the development of the project. Generally, the community has been very supportive of the development, however there have been some concerns raised around the traffic conditions at the Timsbury Road / Howard road junction where it intersects with the main Bunnings access causing traffic buildup and difficulty in turning out of Timsbury Road.

The Project Working Group, made up of stakeholders from Ambulance Tasmania and the Department of Health, worked together in close consultation with the consultant team through the developmental stages of the design brief and detailed design for the station.

4.2 Governance

The following diagram sets out the project structure and relationships between the project control group, project working group (including the user group) and the project consultant team.



Ambulance Tasmania Capital Steering Committee (ATCSC)

ATCSC oversees Ambulance Tasmania infrastructure projects within the State. The ATCSC involvement in the Glenorchy Ambulance Station has been to oversee the direction of the project, via the Project Manager, to make health planning, architectural, building brief, scope, time, quality and cost decisions as required by the DoH.

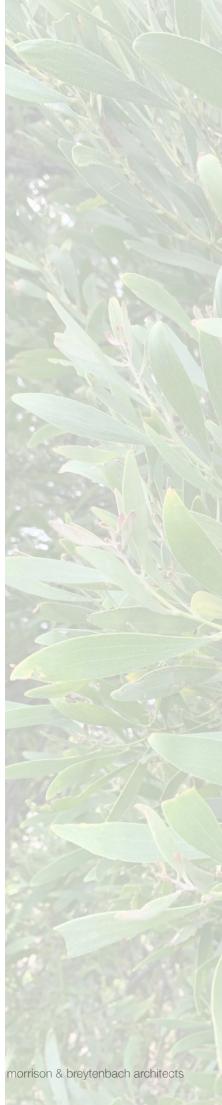
Project Working Group

The Project Working Group (PWG) is formed to test and refine the project brief, provide input into critical operational decisions and to review project issues as they arise. The PWG comprises of the following members from DoH, Ambulance Tasmania and the consultant team outlined in the diagram on the previous page and as follows:

Department of Health

- Program Manager Capital Works
- Project Officer Capital Works
- Project Manager Infrastructure

Primarily forming the project control group, the DoH provides oversight for the project, manages the project costs and makes critical project decisions on behalf of the government's budgetary allocation to the project to see that it is delivered within time and cost requirements.



Ambulance Tasmania

- Regional Manager
- Technical Services
- Internal stakeholders as required

Ambulance Tasmania itself forms the user group for the project and, as such, have been integral throughout the design process for the station typology, providing valuable information and detailed technical requirements to assist in the development of the design for the project users.

Consultant Team

- Architect
- Sub-consultants
- Specialist sub-consultants

Ministry

As a significant public project, the Minister for Health will be involved in the process and will be the public face for the announcement of the project commencement.

4.3 Community Consultation

Pitt & Sherry have undertaken a thorough community engagement process with local stakeholders to receive feedback on the impact of the proposal from a number of different community perspectives.

Stakeholders engaged with were:

- · Local residents along both sides of Timsbury Road
- Local residents adjacent to the site on the Brooker Highway
- The Southern Presbyterian Church of Tasmania (immediate neighbour)
- Key staff members at the Kennerley Children's Homes (immediate neighbour)
- Key staff members at the Professional Learning Institute
- Key staff members at Goodwood Primary School
- Glenorchy City Council
- Ambulance Tasmania key stakeholders / paramedic staff

The community were generally supportive of the project, its location and agreed with the need for a new station in the communuty. The main issue that was raised by most was around the increase in traffic at the Timsbury Road / Howard Road intersection, where the Bunnings entrance causes issues for traffic exiting Timsbury Road. Ambulance vehicles, the main traffic generation for the site, will not be required to exit in this direction, so the increase in right-turn traffic as a result of this development will be minimal.

4.4 Design Approval

Ambulance Tasmania have endorsed the design for the Ambulance Station on the proposed Timsbury Road site. The project has gone through a review process with design meetings and the circulation of documentation to the PWG.

The capital works project manager for DoH and the project manager infrastructure for Ambulance Tasmania have been instrumental in providing approvals of the design stages, including coordinating various approvals from senior personnel within both organisations.



Addressing the Need

"new station facilities should provide a healthy environment that exceeds expectations for the level of comfort and amenity provided for paramedics whilst based at the station during their shifts"

5.1 Design Philosophy

Together with Morrison & Brevtenbach Architects and the PWG, the following principles have been developed to form part of the project brief for the station and initial design concepts. The key principles are expanded upon to define the vision and priorities, and guide decision making during the project development.

These principles address the specific needs of the ambulance service, respond to past issues where identified and look for opportunities within the design of the station that can improve the provision of the service and wellbeing of the paramedics that provide it.

PRINCIPLE 1: Improve response time performance

- Design for optimised workflow and functionality including relevant design features (such as high speed doors) and free-flowing circulation paths
- Designing for reduced travel distances from the operational stand-down areas and accommodation to the ambulance garage.
- Design travel paths that are free of obstacles or obstructions between operational stand-down areas and garage areas
- Detailing the design in a way that helps to minimise the turn out time from first notification to an ambulance commencing its journey

PRINCIPLE 2: Support improved workplace satisfaction

- Acknowledge the value of the paramedics (and others) who work at the station through high-quality design, material selection and fit-out
- Design a respectful and supportive workplace environment that allows all users of the station to feel comfort and support within their workplace
- Design in a 'homely', 'welcoming', and 'non-institutional' way for stand down areas to achieve positive user responses to the provided facilities and an improvement in workplace wellbeing

PRINCIPLE 3: Promote community pride & confidence in our AT emergency services

- Provide a visible, distinctive and recognisable landmark facility in clear view from public areas that will signify the presence of the ambulance service within the community
- Develop a contemporary high quality facility with a strong architectural aesthetic and identity within the community

PRINCIPLE 4: Deliver a safe and secure facility and environs addressing WHS and community safety

- Prioritise direct and level travel paths within the facility
- Locate staff living areas, working areas and after hours parking areas within a secure enclosure
- Provide a safe and dedicated access road for ambulance vehicles responding to emergency situations that is located away from the immediate vicinity of car parking and pedestrian accesses for residential, commercial and school properties

PRINCIPLE 5: Incorporate security features for safety of users in the facility

• Efficient, effective and appropriate spatial relationships with access control and alarm button systems for safe 24-hour use by paramedics and other



- personnel
- Crime Prevention Through Environmental Design (CPTED) design principles applied to external areas of the facility
- Designed for improved passive visual surveillance of the facility and surrounding areas
- CCTV at appropriate locations throughout the interior and exterior of the facility as required operationally, and for security

PRINCIPLE 6: Incorporate Environmentally Sustainable Design (ESD)

- Design for energy efficient operation
- Design using low toxicity materials for healthy internal environments
- Design comfortable interiors with consistent operating temperatures
- Design healthy, emotionally uplifting workplace and user environments through the use of natural daylighting and ventilation
- Efficient design to reduce running and maintenance costs
- Consideration of the construction and operational carbon footprint

PRINCIPLE 7: Reduce operating costs

• Energy efficient Environmentally Sustainable Design (ESD) to improve building efficiency and reliance on mechanical systems

PRINCIPLE 8: Utilise timber where appropriate for structural and interior application

- Clear structural spans for future adaptability
- Low maintenance
- Aesthetically pleasing
- Improvement of workplace atmosphere and user wellbeing

PRINCIPLE 9: Best use of the site for best project outcomes

- Site use, building footprint and considerations for the site's future flexibility and expansion.
- Building form to be considerate of the local community's desires and concerns
- Careful consideration of road access points for ambulance access and egress as well as personal vehicle access to provide safe and visible entry and egress points.
- Be considerate of the impact on adjacent sites

PRINCIPLE 10: Address budget and incorporate value management

- Maintain clarity on project essentials
- Test whether priorities are correctly perceived and are being efficiency met
- Initiate innovation where opportunity is presented
- Maximise cost benefits and end-product value for money

5.2 Design & Functionality

5.2.1 Design Approach

The architectural design of the Glenorchy Ambulance Station has been developed around addressing the above principles, with a primary focus on developing spatial relationships in a way that will improve response times, the use of timber for structural and wellbeing



purposes and defining a tectonic response that is aspirational, uplifting and provides a comfortable and efficient design that enhances a positive workplace experience of the users of the station.

Every aspect of the station layout has been designed around efficiency of the operational aspects of the building, convenience to the paramedics that will be using the station and the safety of their workplace through both minimising risk in design and, importantly, the control and management of contamination.

5.2.2 Design Implementation

The siting of the Glenorchy Ambulance Station has been carefully selected to address a number of operational and community parameters around the selected site.

- Direct access onto the Brooker Highway, a main highway that links to the greater Glenorchy and Hobart areas
- Central and prominent location in the Glenorchy community with an elevated building position that will promote community awareness
- Ability for site arrival to take place away from the highway in a safe and controlled low-speed manner

5.2.3 Height / Bulk / Scale

Due to the nature of the ambulance station main garage being required to accommodate up to 18 vehicles, a reasonably substantial garage structure is needed. The bulk of this building has been addressed through a number of design measures:

- Placement on the mid-range contours of the site to minimise building height, excavation and mediate the fall in the site.
- A stepped building form toward the upper side of the garage building to minimise the perceived bulk
- Architectural detailing and depth of facade to create areas of shade, rhythm and relief on the facades
- Landscaping greenery will be provided in the foreground to soften the building as viewed from the highway and Timsbury Road
- The highest point in relation to the falling terrain is on the North Eastern corner facing the Brooker Highway. At this point, there are no houses in the vicinity and its adjacency to the road mean that overshadowing or other issues with taller buildings will not be an issue. This frontage will be a primary facade for the ambulance station, becoming a key marker to the community of its presence, which is generally seen as a positive contribution.

5.2.4 Arrival from Timsbury Road

The access to the site is from Timsbury Road, which branches off Howard Road. Howard Road is a primary link between the showgrounds an associated retail developments and the Brooker Highway. The point of access is close to the high-pont of the site and arriving vehicles will ramp downwards to the car park and building floor level. This provides level access to the site and building for pedestrians and vehicles alike.

Part of the access is via Crown owned land that has been designated as an acquired road and Crown authorisation has been required. This access way will be shared, as it is the





main access for the professional learning institute that is located next door. Due also to its recent re-zoning as an 'accquired road' (previously part of the site Lot 177859/2, its use for both facilities is secure.

The entry for ambulance vehicles is through the visitor car parking area where the driveway will then drop gradually downward to the ambulance hardstand area. Ambulances will then be able to enter the garage through the large entry door in the South facade where they will then have exclusive access directly to the Brooker Highway and will not be required to use Timbsury Road or the right-hand-turn onto Howard Road. The extensive landscaping proposed throughout the entry area will provide a pleasant arrival for the paramedics upon return from a call out.

The main arrival by private vehicle for paramedics is via the same access off Timsbury Road and through the visitor car parking where the driveway will ramp down, separately to the garage entry ramp, to a swipe access point and gates where secure car parking is provided. This area is entirely fenced for pedestrian safety and security, particularly for paramedics that are arriving or departing their shift at night. Bicycle access is provided from within this parking area, sharing the security benefits.

The paramedics have their own entrance to the building from this car park and can be separated from the entrance to the training and admin part of the building entrance, arriving directly into the main operations area. This separation is important to provide a clear delineation between different functions of the station that is essential for the management of infection within the premises. Pedestrian access to the site will be via a pathway that runs at a low gradient to allow fully accessible pedestrian and disabled access from the site boundary to the building entries. The landscaping will work with the path to provide a 'promenade' of trees as one makes their way through the site.

5.2.5 Ambulance Rapid Egress to Brooker Highway

The ambulance garage is designed in a way that allows for any response vehicle within the garage to exit in a forward direction from their parking position directly onto the Brooker Highway at a moment's notice and without obstruction. The Brooker Highway is a major arterial route connecting Hobart's Northern suburbs with the CBD and links to all other areas of the state. This direct access is critical to the operation of the ambulance service and, as such, has been a key driver behind the placement of the station and orientation of the garage.

A new exit driveway is provided to carry the ambulances directly from the station exit response door onto the Brooker Highway. As the station is elevated, the driveway will be built on an emnbankment, allowing fall at approximately 10% to meet the Brooker Highway as the ambulances makes their way to the crossover. This exit driveway will be a one way egress and is only to be used for ambulances and other operational vehicles with lights, high visibility graphics and driven by trained paramedics only.



As there is only single direction access onto the Brooker Highway available, it is proposed that if an ambulance is required to head South that they would turn at the traffic lights approximately 230m away. It is noted that this road can get backed up with traffic and to counter this it is also proposed that the traffic lights may be controlled so that exiting ambulances can activate a certain sequence to ensure that they have access through the lights and can turn if required, and without delay.

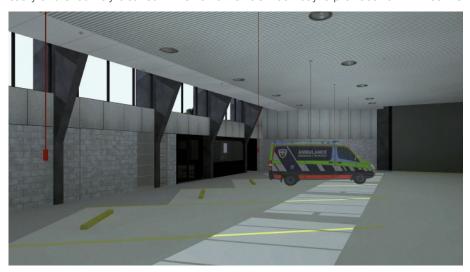
5.2.6 Operations - The Ambulance Garage

The ambulance garage for the station is required to hold up to 18 vehicles, which will be amongst the largest stations, in terms of vehicle storage capacity, in Tasmania.

The garage is the primary operational function of the station and it is to be used for storage and maintenance of the ambulance vehicles, along with keeping their contents clean, stocked and ready for an emergency call out. The garage is for operational response vehicle use only and paramedic private vehicle parking is provided separately on the site. At Glenorchy, it is intended that the garage will accommodate the storage of some overflow vehicle parking that is desperately required for the Hobart Station.

The rapid exit from the garage is designed to allow for timely and safe exit in an emergency situation onto the Brooker Highway and the entry doors are positioned with clear vehicle circulation for a safe return. The garage position is prioritised on the site to provide the most direct egress to the street.

The garage is considered a 'non-contaminated' area, although fit-out and finish selections are chosen with consideration for contamination and infection control and the ability to be easily and effectively cleaned. An external vehicle wash bay is provided to minimise the





risk of contamination to this area and proper vehicle and personnel decontamination will be required to have occurred prior to entering the garage after a call out.

The garage has been designed to make use of high level natural daylighting and cross-ventilation that reduces the operational load of the mechanical exhaust extraction system and also provides opportunity for natural ventilation to cool the space during summer months, as this will be an unconditioned zone, placing reliance on natural systems for the comfort of paramedics and other personnel that may be required to spend sustained periods of time within the garage restocking, maintaining and tending to the vehicles.

Kerbs to the garage area are eliminated, with the space making use of graphic line marking to ensure user safety and define pedestrian and vehicle travel paths and parking areas. This addresses the issue of kerb edging becoming trip hazards as identified in other stations and improves workflow around the ambulance vehicles.

5.2.7 Operations - Living Areas

The internal operational areas of the station are designed to respond to Ambulance Tasmania's requirements, but also to allow for future flexibility and change in operations models for the service.

Internal living spaces, rest areas, training areas area all carefully designed to address Ambulance Tasmania's requirements and desires for a progressive and contemporary station that meets current needs and has the flexibility for future requirements.

The station's living spaces are all designed and oriented in a way that offer views outward across Prince of Wales Bay to the Meehan Ranges beyond, and will be filled with natural daylight and opportunities for natural ventilation, will make use of timber finishes and will have a direct physical connection to the secure outdoor patio area. All of these measures have been implemented to contribute in a positive way to the overall comfort and emotional wellbeing of the paramedics, a highly important aspect of the service given the enormity the situations that the paramedics are faced with on a daily basis.

Spatially, the living areas of the station are designed to enable different users to occupy different areas and take part in different activities such as eating, reading or watching





TV at the same time, whilst still occupying the one overall interior volume. This has been achieved through a number of spatial devices that compartmentalise the space, providing flexibility for the area and to allow paramedics to occupy the space as they individually require or, alternatively, as groups or teams when necessary.

The kitchen is specifically designed for flexibility, to accommodate multiple users preparing individual meals at the same time and for a number of casual seating options where meals can be consumed. The nature of paramedic operations means that between shifts, if meals are being prepared, there is likely to be the two crew of a returned ambulance, at a minimum, trying to do so at once. This has been taken into consideration through the specific design of a well-flowing and flexible kitchen area that can accommodate multiple returned crew preparing food or drinks simultaneously.

5.2.8 Operations - Stores, preparation and supplies

The operations support areas are the primary areas associated with the dispatch of ambulances from the station. These areas include stores for the resupply of ambulance consumables including classified medications, areas for the preparation of paramedic personnel and areas for specific requirements such as charging bays, PPE stores and the like.

In addition to these areas that paramedics would use in the day to day preparation and maintenance of the service, Ambulance Tasmania intend to use a specific 'clean team' and 'make ready' personnel that maintain the ambulance provisions, clean and decontaminate vehicles and assist paramedics with the preparation for the service. Specific areas have been provided for these personnel in order to maintain separation of potential contamination for paramedics and provide staff areas in accordance with workplace requirements. These areas have been designed with thorough consideration of interactions, travel paths and proximities to enhance efficiencies and user experience at every opportunity.

5.2.9 Infection Control

A critical design outcome for the ambulance station is in its ability to accommodate the contamination and infection control management strategies for the ambulance service, protecting the provision of service and limiting the spread of infection through the station and the community. The proposed responses to this requirement have been developed in close consultation with the PWG and addresses the requirements for separation, containment and management through spatial arrangement, entry sequencing and provision of multiple tiers of decontamination upon entry.

5.2.10 The Floor Plan

The floor plan layout is a tri-function linear arrangement made up of two main internal 'corridors' that run adjacent to each other to connect the three main internal functions of the building; Garage and supply areas and Operations areas. The primary access paths draw a line in the most direct route between these areas to minimise travel paths to the ambulance garage from any point in the building as well as allowing a 'sectioning off' of the building as may be required for infection control. An important aspect of these intersecting linear travel zones is that it directs foot traffic from all areas of the station to



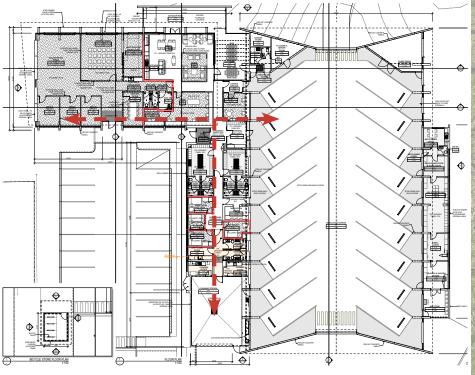
enter the garage past the duty office, assisting with the tracking and management of paramedics' arrivals and departures from the station.

The requirement for some areas to remain quiet as opposed to those that may see more action and the relationship between living spaces and operations spaces and education and administration areas of the building are also primary design drivers for the layout of internal spaces.

The two-direction linear plan allows for substantial light penetration from two sides into all habitable areas of the building, reducing reliance on electrical lighting and improving user experience and wellbeing throughout all habitable areas within the station.

Two main pedestrian entries are provided for different functions of the station and to allow for future flexibility:

- 1. The primary entry is the paramedic entry that is accessed directly from the secure car parking area, allowing paramedics on night shift to come and go from the station with direct and secure access to their private vehicles. Internally, this entrance is adjacent to the duty office, change and personal storage locker rooms and the main living areas of the station.
- 2. The alternative entry to the facility is provided as a public interface, should it be required, and for direct access into administration and training areas of the station. This entrance is designed to be fully AS1428.1 (disabled access) compliant and connects directly to office and administration areas and the training facilities. There is a connection through to the operational areas of the station for paramedic access to the training areas.



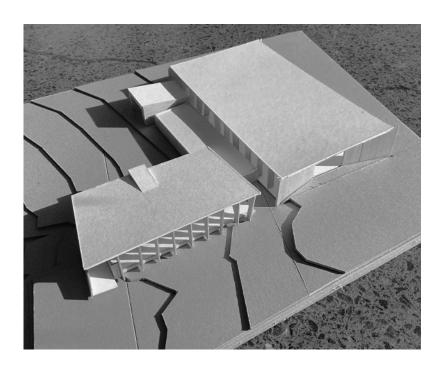


5.2.11 Building Form

The building form has been developed in response to a number of influences such as daylight, sun penetration and cross ventilation as well as developing a system where timber is used for multiple functions (principle 6, principle 8). Factors such as naturally lit working and living internal environments, outlook and ventilation that improve the health and wellbeing of operational and non-operational staff have informed the sculpted roof forms for the building (principle 2).

Stronger formal elements have been used to express the structural system, in particular for the ambulance garage, solidly grounding the building, providing shadow play on the facades and alternating between solid and transparent materials.

Angled end facades of the ambulance garage have been developed in response to the angled parking bays within and to visually emphasise the transit of ambulances as they enter and exit the garage, the main function of the station. Emphasising this function is one of the architectural devices used to assist with promoting the new facility and the improved service it provides to the greater community (principle 3).



















5.2.12 Materials

The exterior materials selected for the project have been considered with three main objectives:

- 1. To express the civic nature of the building typology and its importance as a placemarker and provider of service to the greater community.
- 2. The implementation of timber wherever possible for structural and aesthetic purposes provides a sense of warmth and softness to the station.
- 3. Longevity, with pre-finished or natural materials selected that are hard wearing and easy to clean for longevity and usability of the station. Applied finishes such as paints and renders have been avoided wherever possible throughout the exterior of the station.

Materials will be sourced through local suppliers where possible and many of these suppliers have been consulted during the design process to ensure correct specification and material availability. These local suppliers, or products, are nominated within the project specification so that the information is transferred to the tenderers for consideration. In every case, local Tasmanian suppliers have been preferenced to provide materials or services, followed by suppliers across Australia where specific local items are not available.

Careful consideration has been given to providing materials, internally and externally, that suit the purpose for which they are being used such as anti-microbial or easily cleanable for particular internal finishes through to high-impact resistant and hardy materials used for external surfaces and areas of increased activity and the movement of bulk materials.



5.3 Exterior Colour Palette



6. Project Schedule and Budget

6.1 Project Schedule

6.1.1 A summary of the development timeline is as follows:

Community and stakeholder consultation and engagement	May / June 2022
Lodgement of Development Application with Glenorchy City Council	July 2022
Completion of Design Development	July 2022
Completion of construction documentation for tender	September 2022
Construction tender (advertising, closing and assessment)	October 2022
Construction start	December 2022
Practical completion of construction	December 2023
Final completion (completion of defects liability period)	December 2024

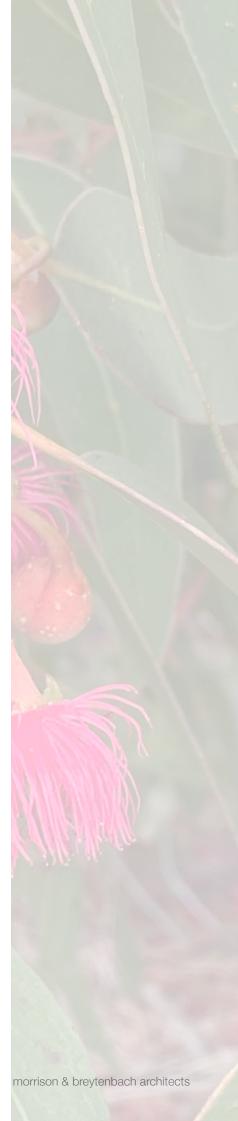
6.2 Project Cost

6.2.1 Estimate of Likely Cost for the project

WT Partnership Hobart have been engaged for cost control services on the project and have provided a measured estimate based on current (July 2022) rates. Attention should be drawn to the fact that this breakdown includes a 13% market loading to account for the construction industry in Tasmania currently being under pressure, resulting in high tender prices across the state. In addition to this, a 6% escalation rate for materials is applied due to their rapidly rising costs in Tasmania. The projected increases are applied to cover the period from the cost estimate being provided to the commencement of construction, at which point it will be captured in the contract price. The applied percentage is in accordance with current escalation rates.

Construction Breakdown (ex. GST)				
Construction costs	\$9,067,808			
Head contractor preliminaries, margins, offsite & overhead (16%)	\$1,450,850			
Design & construction contingency (8%)	\$841,500			
Escalation (6%)	\$689,842			
CONSTRUCTION SUBTOTAL	\$12,050,000			
Market loading (13%)	\$1,550,000			
CONSTRUCTION COSTS	\$13,600,000			

Construction, Furnishing & Fit Out (ex. GST)				
Construction	\$13,600,000			
Consultants Fees	509,000			
Post-occupancy allowance	\$110,000			
Tasmanian Government Site Art Scheme	\$80,000			
ICT Infrastructure (inc. 20% contingency)	\$ 225,000			
Furniture and Equipment (inc. 20% contingency)	\$ 226,000			
TOTAL COSTS	\$ 14,750,000			



7. Recommendations

The Department of Health and Ambulance Tasmania, along with the project team have carefully assessed various project possibilities and design alternatives and have agreed that the proposal for the Glenorchy Ambulance Station addresses the criteria set out in the initial project functional brief. The design is consistent with the long-term strategic development of the services offered by Ambulance Tasmania and meets the requirements as set out in the rapid review report.

It is recommended that this submission is viewed favourably given the many benefits that it will offer to the local ambulance service and paramedics, the broader community and Ambulance Tasmania's presence in the Northern Suburbs through the delivery of a contemporary, purpose-built Ambulance Station. The project, once completed, will address the current issues that the ambulance service faces in this area and will improve the health, wellbeing and general workplace positivity of the paramedics, provide suitable garaging for Ambulance Tasmania's vehicle fleet into the future and improve response times throughout the area.

8. Appendix A - Proposed Design





AMBULANCE TASMANIA

PROPOSED GLENORCHY AMBULANCE STATION

Drawing Register - DA COSTING									
Number	Title	Issue ID	Revision	Issue Name	Transmitted to	Date Issued	Reason for Issue		
DA 1.101	COVER PAGE & LOCATION PLAN	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.102	SITE PLAN	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.103	FLOOR PLAN	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.104	ROOF PLAN	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.105	ELEVATIONS	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.106	ELEVATIONS	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.107	SECTIONS	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.108	SHADOW DIAGRAMS	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		
DA 1.109	3D IMAGES	DA-01	DA-01	ISSUE FOR DEVELOPMENT APPLICATION	AUTHORITY	8/7/22, 4:32 pm	APPLICATION FOR PLANNING PERMIT WITH LOCAL AUTHORITY		

SITE INFORMATION

ADDRESS 11 TIMSBURY ROAD GLENORCHY TAS 7010 AUS

PROPERTY ID

TITLE REFERENCE 177859/2

THE CROWN IN RIGHT OF TASMANIA REPRESENTED BY THE DEPARTMENT OF HEALTH (177859/2) LAND OWNERSHIP

THE CROWN IN RIGHT OF TASMANIA REPRESENTED BY THE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

(169753/1 - ACQUIRED ROAD)

THE CROWN IN RIGHT OF TASMANIA REPRESENTED BY THE DEPARTMENT OF STATE GROWTH

(BROOKER HIGHWAY ACQUIRED ROAD PROPERTY ID 0)

GLENORCHY CITY COUNCIL AUTHORITY

SITE AREA 10,290M2 PROPOSED SITE WORKS AREA 7,250M2 (APPROX.)

BUILDING INFORMATION

EXISTING BUILDING AREA

PROPOSED BUILDING AREA 2,075sqm GROSS FLOOR AREA

PROPOSED GROUND FLOOR LEVEL AHD 20.500M (3.8M ABOVE NATURAL GROUND LEVEL AT HIGHEST POINT)

AHD 28.250M (9.6M ABOVE NATURAL GROUND LEVEL) PROPOSED HIGHEST POINT

SERVICES INFORMATION

SEWER POWER PROPOSED NEW CONNECTION TO EXISTING SEWER ON TIMSBURY ROAD - REFER CIVIL & HYDRAULIC ENGINEER DOCUMENTATION PROPOSED NEW SUB-STATION TO BE PROVIDED ON SITE, HV CONNECTION FROM TIMSBURY ROAD - BY TASNETWORKS - REFER ELECTRICAL

ENGINEER DOCUMENTATION NO NEW CONNECTION REQUIRED GAS

STORMWATER ON-SITE RETENTION AND FILTRATION, CONNECT TO UPGRADED EXISTING COUNCIL SYSTEM ON THE BROOKER HIGHWAY - REFER CIVIL &

HYDRAULIC ENGINEER DOCUMENTATION

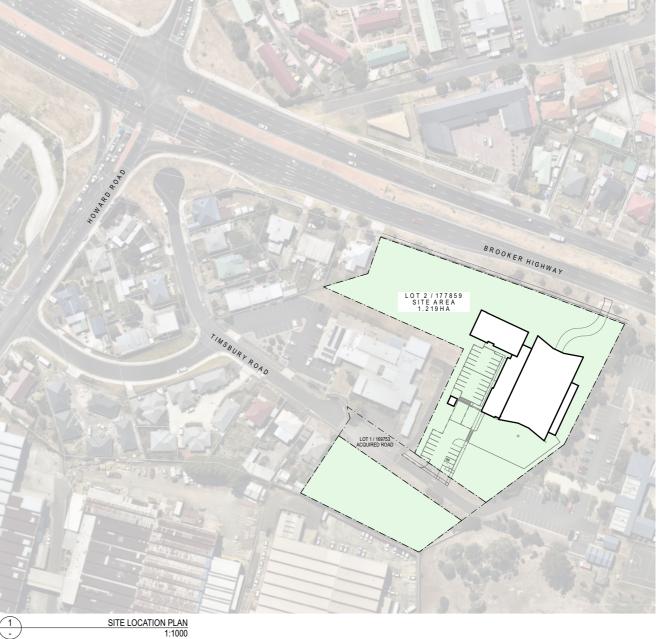
WATER CONNECT TO 100DIA WATER MAINS ON TIMSBURY ROAD - REFER HYDRAULIC ENGINEER DOCUMENTATION

TO BE CONSTRUCTED. REFER CIVIL ENGINEER DOCUMENTATION FOR WORK METHOD FOR PROTECTION OF THE WATER MAIN.

NOTE: THE 'FENTON' WATER MAIN RUNS BENEATH THE NATURE STRIP OF THE BROOKER HIGHWAY WHERE THE PROPOSED AMBULANCE EXIT IS



CLIENT, CONSULTANTS INFORMATION & REVIEW

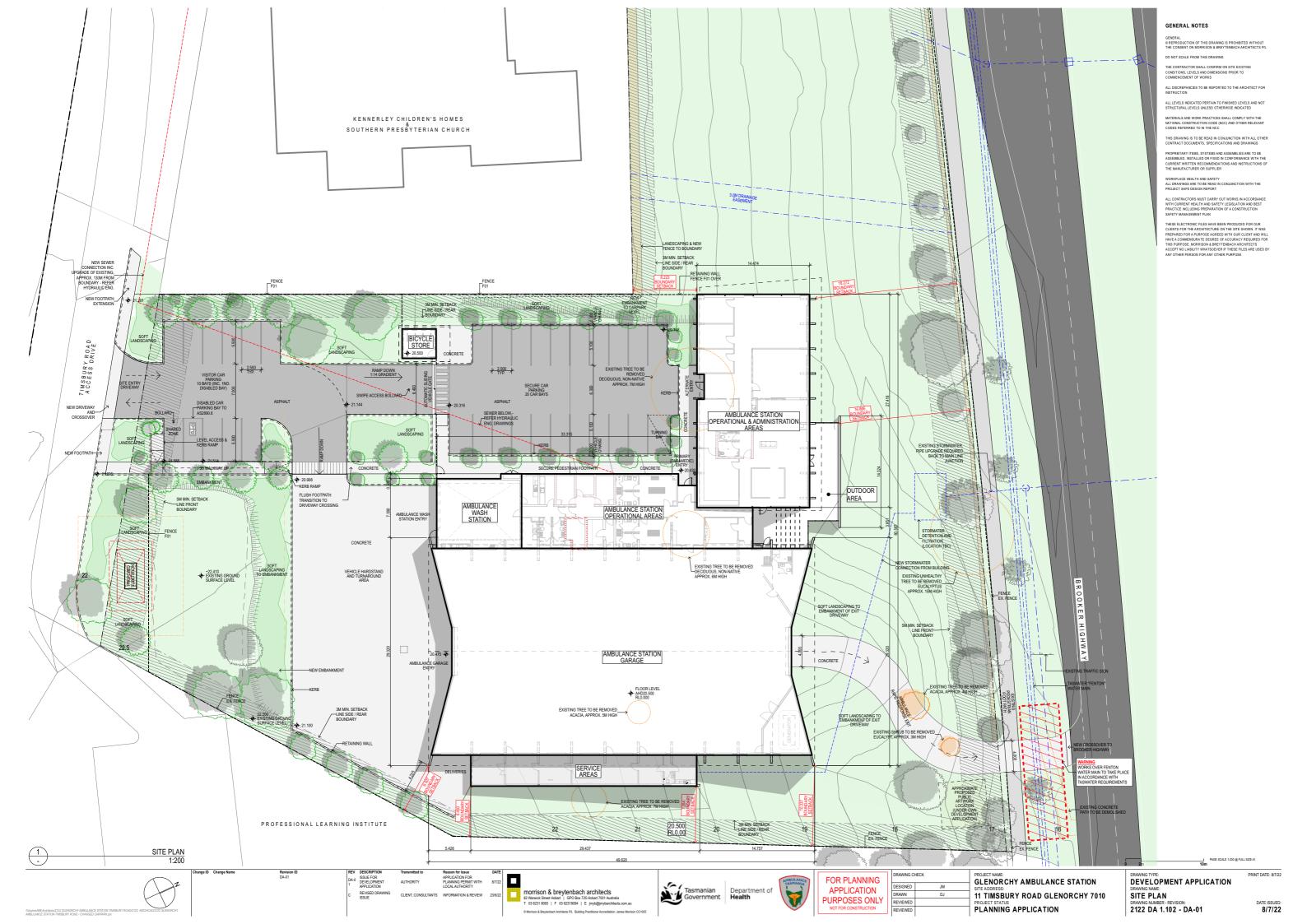


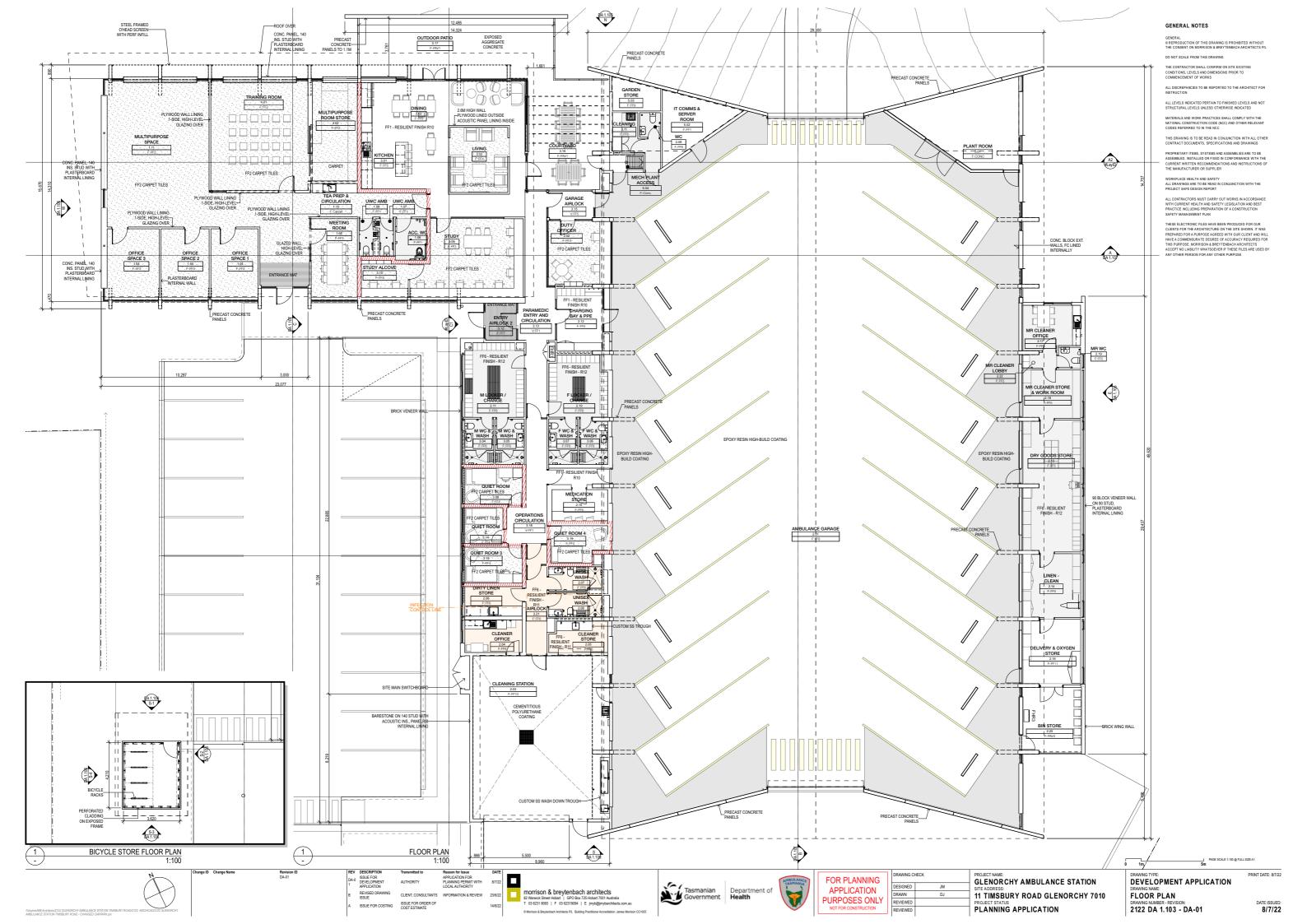
morrison & brevtenbach architects

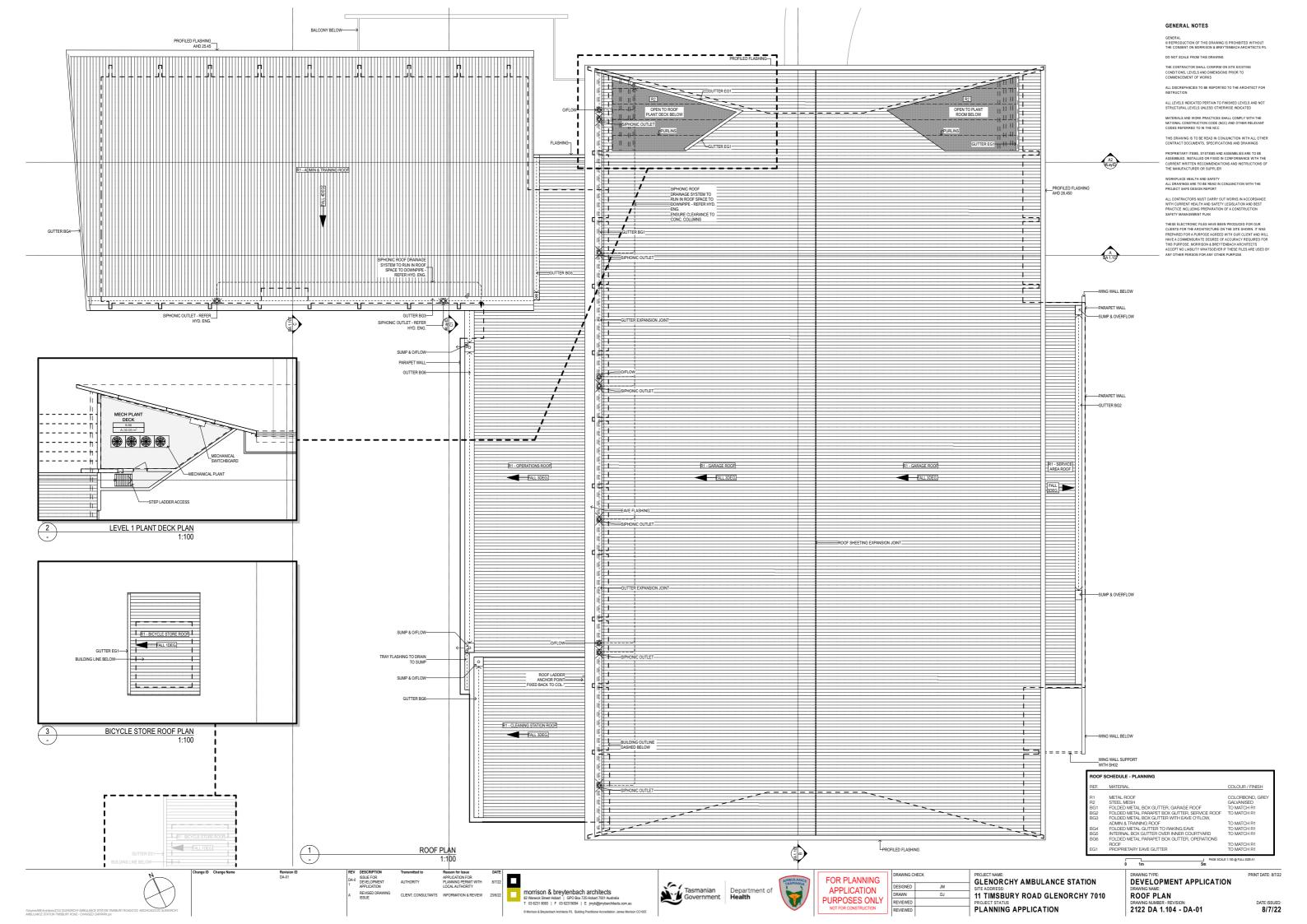


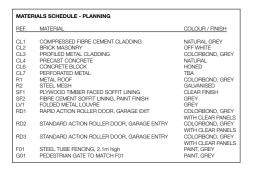


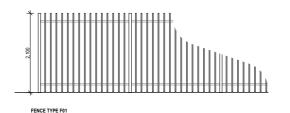
GENERAL NOTES



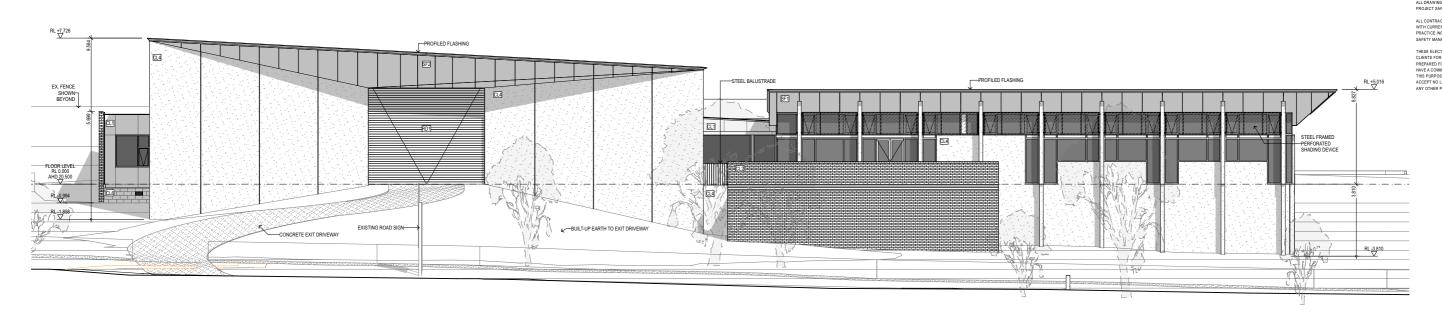












GENERAL NOTES

DO NOT SCALE FROM THIS DRAWING

THE CONTRACTOR SHALL CONFRM ON SITE EXISTING
CONDITIONS, LEVELS AND DIMENSIONS PRIOR TO
COMMERCEMENT OF WORKS

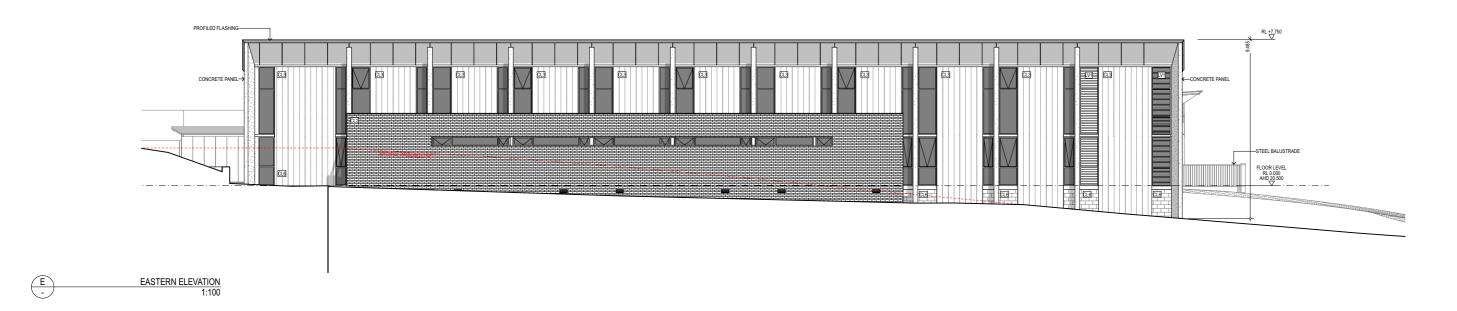
ALL DISCREPANCIES TO BE REPORTED TO THE ARCHITECT FOR
INSTRUCTION

ALL LEVELS INDICATED PERTAIN TO FINISHED LEVELS AND NOT
STRUCTURAL LEVELS UNLESS OTHERWISE RIDICATED

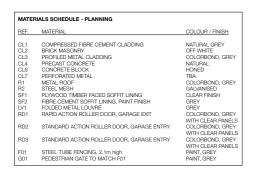
MATERIALS AND WORK PRACTICES SHALL COMPLY WITH THE NATIONAL CONSTRUCTION CODE (NCC) AND OTHER RELEVANT CODES REFERRED TO IN THE NCC

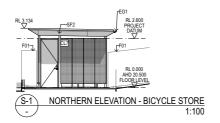
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, SPECEFICATIONS AND DRAWNISS PROPRIETERY TIEMS, SYSTEMS AND ASSEMBLES ARE TO BE ASSEMBLED, INSTALLED OF FIXED IN CONFORMANCE WITH THE CURRENT WRITTEN RECOMMENDATIONS AND INSTRUCTIONS OF THE MANUFACTURE OF SUPPLIER.

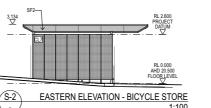
NORTHERN ELEVATION 1:100

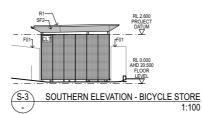


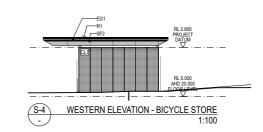












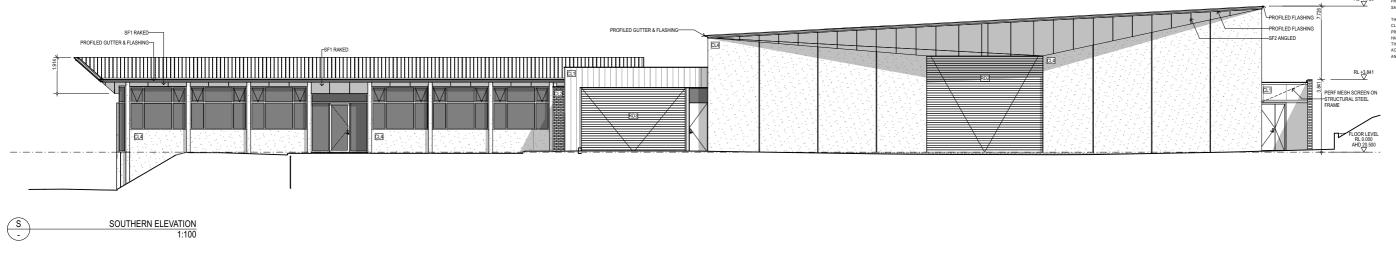
GENERAL NOTES

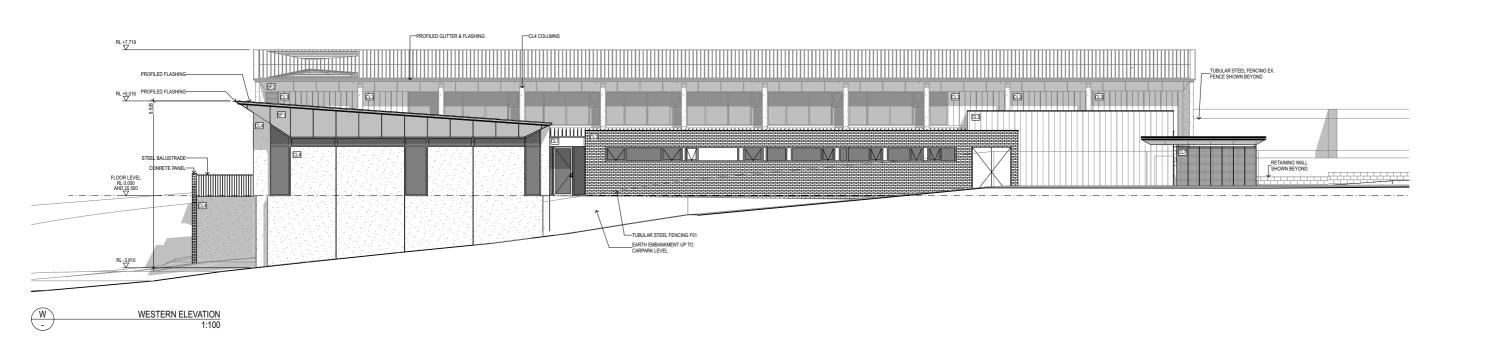
DO NOT SCALE FROM THIS DRAWING

THE CONTRACTOR SHALL CONFIRM ON SITE EXISTIN CONDITIONS, LEVELS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORKS

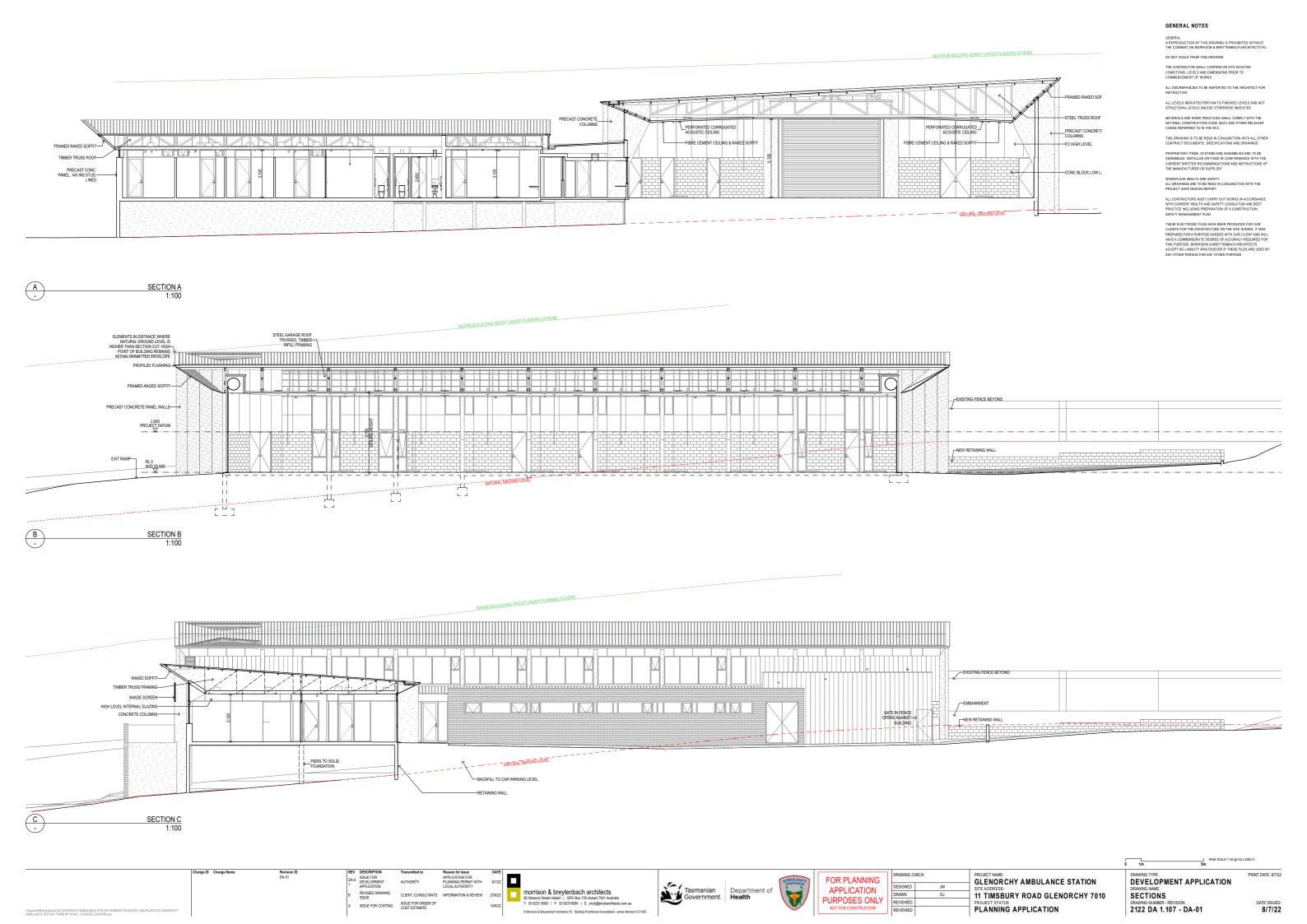
ALL DISCREPANCIES TO BE REPORTED TO THE ARCHITECT FOR INSTRUCTION

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS, SPECIFICATIONS AND DRAWINGS











DEVELOPMENT APPLICATION

11 TIMSBURY ROAD GLENORCHY 7010

PLANNING APPLICATION

APPLICATION

PURPOSES ONLY
NOT FOR CONSTRUCTION

DATE ISSUED: 8/7/22

CLIENT, CONSULTANTS INFORMATION & REVIEW 23/6/2





VIEW FROM BROOKER HIGHWAY

1 ENTRY DRIVEWAY FROM TIMSBURY ROAD
-





BROOKER HIGHWAY OVERVIEW

| Change ID Change Name | Revision ID DA-01 | DA-01 | DA-01 | DA-02 | DA-02 | DA-03 | DA-03

Tasmanian Government

ent of

FOR PLANNING
APPLICATION
PURPOSES ONLY

DEVELOPMENT APPLICATION
DRAWING NAME:
3D IMAGES
DRAWING NUMBER - REVISION:
2122 DA 1.109 - DA-01

DATE ISSUED: 8/7/22